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Automated Report

Technical Report for

Anderson, Mulholland & Associates

BMSMC, Building 5 Area, PR

SM04.00.06

SGS Accutest Job Number: JC19996

Sampling Dates: 05/09/16 - 05/10/16

Report to:

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Total number of pages in report: **1157**

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

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Sample Summary

Anderson, Mulholland & Associates

Job No: JC19996

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

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JC19996-1	05/09/16	15:21	NR	05/11/16	AQ	Ground Water	S-35D
JC19996-2	05/10/16	11:50	TT	05/11/16	SO	Soil	RA-20 (6.5-7.5)
JC19996-3	05/09/16	16:45	TT	05/11/16	AQ	Ground Water	RA-6-GWS
JC19996-4	05/10/16	11:48	NR	05/11/16	AQ	Ground Water	S41D
JC19996-5	05/10/16	14:28	NR	05/11/16	AQ	Ground Water	S42D
JC19996-6	05/10/16	14:00	TT	05/11/16	AQ	Ground Water	RA20-GWS

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

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Anderson, Mulholland & Associates	**Job No**	JC19996
Site:	BMSMC, Building 5 Area, PR	**Report Date**	5/26/2016 1:43:41 PM

On 05/11/2016, 6 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at Accutest Laboratories at a maximum corrected temperature of 3.1 C. Samples were intact and chemically preserved, unless noted below. An Accutest Job Number of JC19996 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:** OP93820

- All samples were extracted within the recommended method holding time.
- Sample(s) JC19996-4MS, JC19996-4MSD were used as the QC samples indicated.
- Sample(s) JC19996-1, JC19996-3, JC19996-5, JC19996-6 have compound(s) reported with a "B" qualifier, indicating analyte is found in the associated method blank.
- JC19996-4: There is no sample left to reextract.
- JC19996-5 for 2-Fluorobiphenyl: Outside control limits due to dilution.
- JC19996-5 for 2-Fluorophenol: Outside control limits due to dilution.
- JC19996-5 for Nitrobenzene-d5: Outside control limits due to dilution.
- JC19996-5 for Phenol-d5: Outside control limits due to dilution.
- JC19996-5 for Terphenyl-d14: Outside control limits due to dilution.
- JC19996-5 for 2,4,6-Tribromophenol: Outside control limits due to dilution.

Matrix: SO **Batch ID:** OP93830

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC19983-15QMS, JC19983-15QMSD were used as the QC samples indicated.
- Blank Spike Recovery(s) for 1,2,4,5-Tetrachlorobenzene are outside control limits. Outside of in house control limits, but within reasonable method recovery limits.
- Matrix Spike Recovery(s) for bis(2-Chloroethyl)ether are outside control limits. Outside control limits due to matrix interference.
- RPD(s) for MS/MSD for bis(2-Chloroethyl)ether are outside of in house control limits.
- OP93830-MB1 for 2-Fluorobiphenyl: High percent recoveries and no positive found.
- OP93830-MB1 for Phenol-d5: High percent recoveries and no positive found.
- OP93830-MB1 for 2-Fluorobiphenyl: High percent recoveries and no positive found.

Extractables by GCMS By Method SW846 8270D BY SIM

Matrix: AQ **Batch ID:** OP93820A

- All samples were extracted within the recommended method holding time.
- Sample(s) JC19949-1MS, JC19949-1MSD were used as the QC samples indicated.
- Sample(s) JC19996-4 have compound(s) reported with a "B" qualifier, indicating analyte is found in the associated method blank.
- JC19996-4: There is no sample left to reextract.

Matrix: SO **Batch ID:** OP93830A

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC19996-2MS, JC19996-2MSD were used as the QC samples indicated.
- Blank Spike Recovery(s) for 1,4-Dioxane are outside control limits. High percent recoveries and no associated positive found in the QC batch.
- Matrix Spike Recovery(s) for 1,4-Dioxane are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for 1,4-Dioxane are outside control limits. Outside control limits due to matrix interference.
- JC19996-2 for 1,4-Dioxane: Not accredited for this compound at the time of analysis, but all method requirements were followed.
- OP93830A-BS12 for 1,4-Dioxane: High percent recoveries and no associated positive found in the QC batch.

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

Matrix: AQ **Batch ID:** GGH5286

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC20184-3MS, JC20184-3MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for Isobutyl Alcohol, n-Butyl Alcohol, n-Propyl Alcohol are outside control limits. High percent recoveries and no associated positive found in the QC batch.
- GGH5286-BS: Reported from 1st Signal. %RSD of initial calibration on 2nd signal excess method criteria (20%) so using for confirmation only.
- GGH5286-MB2: Reported from 1st Signal. %RSD of initial calibration on 2nd signal excess method criteria (20%) so using for confirmation only.

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.

Extractables by GC By Method SW846 8081B

Matrix: AQ **Batch ID:** OP93822

- All samples were extracted within the recommended method holding time.
- Sample(s) JC19996-5MS, JC19996-5MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: SO **Batch ID:** OP93857

- All samples were extracted within the recommended method holding time.
- Sample(s) JC19931-1MS, JC19931-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Wet Chemistry By Method SM2540 G-97

Matrix: SO	**Batch ID:** GN45745

- 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: JC19996
Account: Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Collected: 05/09/16 thru 05/10/16

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC19996-1	**S-35D**					
1,4-Dioxane		39.3 B	1.0	0.66	ug/l	SW846 8270D
JC19996-2	**RA-20 (6.5-7.5)**					
No hits reported in this sample.						
JC19996-3	**RA-6-GWS**					
1,4-Dioxane		514 B	12	7.6	ug/l	SW846 8270D
bis(2-Ethylhexyl)phthalate		2.8	2.3	1.9	ug/l	SW846 8270D
1-Methylnaphthalene		0.74 J	1.2	0.31	ug/l	SW846 8270D
JC19996-4	**S41D**					
1,4-Dioxane [a]		1.79 B	0.11	0.052	ug/l	SW846 8270D BY SIM
JC19996-5	**S42D**					
1,4-Dioxane		6800 B	100	68	ug/l	SW846 8270D
JC19996-6	**RA20-GWS**					
1,4-Dioxane		72.4 B	1.1	0.73	ug/l	SW846 8270D

(a) There is no sample left to reextract.

Sample Results

Report of Analysis

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Report of Analysis

Client Sample ID:	S-35D		
Lab Sample ID:	JC19996-1	**Date Sampled:**	05/09/16
Matrix:	AQ - Ground Water	**Date Received:**	05/11/16
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	M124369.D	1	05/12/16	JJ	05/11/16	OP93820	EM5261
Run #2							

	Initial Volume	Final Volume
Run #1	990 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	0.83	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.1	0.90	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	0.90	ug/l	
	3&4-Methylphenol	ND	2.0	0.89	ug/l	
88-75-5	2-Nitrophenol	ND	5.1	0.97	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	1.3	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.1	0.93	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	5.1	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	0.34	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	0.41	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	5.1	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-35D		
Lab Sample ID:	JC19996-1	**Date Sampled:**	05/09/16
Matrix:	AQ - Ground Water	**Date Received:**	05/11/16
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	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.51	ug/l	
123-91-1	1,4-Dioxane	39.3	1.0	0.66	ug/l	B
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.33	ug/l	
132-64-9	Dibenzofuran	ND	5.1	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	0.24	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	0.50	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	0.34	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	0.44	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.65	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	0.22	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	42%		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:	S-35D		
Lab Sample ID:	JC19996-1	**Date Sampled:**	05/09/16
Matrix:	AQ - Ground Water	**Date Received:**	05/11/16
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	28%		10-110%
118-79-6	2,4,6-Tribromophenol	93%		39-149%
4165-60-0	Nitrobenzene-d5	78%		32-128%
321-60-8	2-Fluorobiphenyl	77%		35-119%
1718-51-0	Terphenyl-d14	71%		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-35D		
Lab Sample ID:	JC19996-1	**Date Sampled:**	05/09/16
Matrix:	AQ - Ground Water	**Date Received:**	05/11/16
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	3M61256.D	1	05/12/16	JJ	05/11/16	OP93820A	E3M2880
Run #2							

	Initial Volume	Final Volume
Run #1	990 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	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	86%		24-125%
321-60-8	2-Fluorobiphenyl	101%		19-127%
1718-51-0	Terphenyl-d14	97%		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-35D		
Lab Sample ID:	JC19996-1	**Date Sampled:**	05/09/16
Matrix:	AQ - Ground Water	**Date Received:**	05/11/16
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	GH105000.D	1	05/17/16	XPL	n/a	n/a	GGH5286
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	102%		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-35D		
Lab Sample ID:	JC19996-1	**Date Sampled:**	05/09/16
Matrix:	AQ - Ground Water	**Date Received:**	05/11/16
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	4G68173.D	1	05/12/16	DS	05/11/16	OP93822	G4G1787
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	92%		26-132%
877-09-8	Tetrachloro-m-xylene	94%		26-132%
2051-24-3	Decachlorobiphenyl	78%		10-118%
2051-24-3	Decachlorobiphenyl	71%		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:	RA-20 (6.5-7.5)		
Lab Sample ID:	JC19996-2	**Date Sampled:**	05/10/16
Matrix:	SO - Soil	**Date Received:**	05/11/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	76.2
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M124435.D	1	05/13/16	AD	05/12/16	OP93830	EM5264
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	87	30	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	220	39	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	220	43	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	220	110	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	220	170	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	220	64	ug/kg	
95-48-7	2-Methylphenol	ND	87	49	ug/kg	
	3&4-Methylphenol	ND	87	49	ug/kg	
88-75-5	2-Nitrophenol	ND	220	38	ug/kg	
100-02-7	4-Nitrophenol	ND	440	120	ug/kg	
87-86-5	Pentachlorophenol	ND	220	37	ug/kg	
108-95-2	Phenol	ND	87	34	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	220	57	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	220	62	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	220	48	ug/kg	
83-32-9	Acenaphthene	ND	44	8.2	ug/kg	
208-96-8	Acenaphthylene	ND	44	6.0	ug/kg	
98-86-2	Acetophenone	ND	220	22	ug/kg	
120-12-7	Anthracene	ND	44	19	ug/kg	
1912-24-9	Atrazine	ND	87	14	ug/kg	
56-55-3	Benzo(a)anthracene	ND	44	6.7	ug/kg	
50-32-8	Benzo(a)pyrene	ND	44	11	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	44	9.2	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	44	12	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	44	12	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	87	20	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	87	25	ug/kg	
92-52-4	1,1'-Biphenyl	ND	87	12	ug/kg	
100-52-7	Benzaldehyde	ND	220	11	ug/kg	
91-58-7	2-Chloronaphthalene	ND	87	8.2	ug/kg	
106-47-8	4-Chloroaniline	ND	220	12	ug/kg	
86-74-8	Carbazole	ND	87	8.5	ug/kg	

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

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

Report of Analysis

Client Sample ID:	RA-20 (6.5-7.5)		
Lab Sample ID:	JC19996-2	**Date Sampled:**	05/10/16
Matrix:	SO - Soil	**Date Received:**	05/11/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	76.2
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	87	32	ug/kg	
218-01-9	Chrysene	ND	44	11	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	87	9.2	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	87	25	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	87	17	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	87	12	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	44	16	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	44	13	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	87	59	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	44	16	ug/kg	
132-64-9	Dibenzofuran	ND	87	7.9	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	87	27	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	87	28	ug/kg	
84-66-2	Diethyl phthalate	ND	87	9.8	ug/kg	
131-11-3	Dimethyl phthalate	ND	87	8.9	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	87	9.5	ug/kg	
206-44-0	Fluoranthene	ND	44	20	ug/kg	
86-73-7	Fluorene	ND	44	17	ug/kg	
118-74-1	Hexachlorobenzene	ND	87	11	ug/kg	
87-68-3	Hexachlorobutadiene	ND	44	17	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	440	26	ug/kg	
67-72-1	Hexachloroethane	ND	220	33	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	44	15	ug/kg	
78-59-1	Isophorone	ND	87	9.7	ug/kg	
90-12-0	1-Methylnaphthalene	ND	87	7.8	ug/kg	
91-57-6	2-Methylnaphthalene	ND	87	35	ug/kg	
88-74-4	2-Nitroaniline	ND	220	32	ug/kg	
99-09-2	3-Nitroaniline	ND	220	15	ug/kg	
100-01-6	4-Nitroaniline	ND	220	17	ug/kg	
98-95-3	Nitrobenzene	ND	87	19	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	87	20	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	220	25	ug/kg	
85-01-8	Phenanthrene	ND	44	10	ug/kg	
129-00-0	Pyrene	ND	44	7.6	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	220	9.8	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	81%		30-106%
4165-62-2	Phenol-d5	77%		30-106%

ND = Not detected MDL = Method Detection Limit
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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-20 (6.5-7.5)		
Lab Sample ID:	JC19996-2	**Date Sampled:**	05/10/16
Matrix:	SO - Soil	**Date Received:**	05/11/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	76.2
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	93%		24-140%
4165-60-0	Nitrobenzene-d5	70%		26-122%
321-60-8	2-Fluorobiphenyl	85%		36-112%
1718-51-0	Terphenyl-d14	81%		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-20 (6.5-7.5)		
Lab Sample ID:	JC19996-2	**Date Sampled:**	05/10/16
Matrix:	SO - Soil	**Date Received:**	05/11/16
Method:	SW846 8270D BY SIM SW846 3546	**Percent Solids:**	76.2
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M65272.D	1	05/13/16	AD	05/12/16	OP93830A	E4M2919
Run #2							

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

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane [a]	ND	4.4	0.88	ug/kg	
91-20-3	Naphthalene	ND	4.4	0.53	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	77%		15-138%
321-60-8	2-Fluorobiphenyl	101%		12-148%
1718-51-0	Terphenyl-d14	88%		10-157%

(a) Not accredited for this compound at the time of analysis, but all method requirements were followed.

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-20 (6.5-7.5)		
Lab Sample ID:	JC19996-2	**Date Sampled:**	05/10/16
Matrix:	SO - Soil	**Date Received:**	05/11/16
Method:	SW846-8015C (DAI)	**Percent Solids:**	76.2
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GH105061.D	1	05/18/16	XPL	n/a	n/a	GGH5290
Run #2							

	Initial Weight
Run #1	4.8 g
Run #2	

Low Molecular Alcohol List

CAS No.	Compound	Result	RL	MDL	Units	Q
64-17-5	Ethanol	ND	140	94	ug/kg	
78-83-1	Isobutyl Alcohol	ND	140	80	ug/kg	
67-63-0	Isopropyl Alcohol	ND	140	78	ug/kg	
71-23-8	n-Propyl Alcohol	ND	140	55	ug/kg	
71-36-3	n-Butyl Alcohol	ND	140	74	ug/kg	
78-92-2	sec-Butyl Alcohol	ND	140	73	ug/kg	
67-56-1	Methanol	ND	270	65	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
111-27-3	Hexanol	97%		52-141%
111-27-3	Hexanol	100%		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-20 (6.5-7.5)		
Lab Sample ID:	JC19996-2	**Date Sampled:**	05/10/16
Matrix:	SO - Soil	**Date Received:**	05/11/16
Method:	SW846 8081B SW846 3546	**Percent Solids:**	76.2
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G35052.D	1	05/13/16	DS	05/12/16	OP93857	G6G1010
Run #2							

	Initial Weight	Final Volume
Run #1	9.2 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	1.4	1.3	ug/kg	
319-84-6	alpha-BHC	ND	1.4	0.95	ug/kg	
319-85-7	beta-BHC	ND	1.4	0.88	ug/kg	
319-86-8	delta-BHC	ND	1.4	0.56	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	1.4	0.65	ug/kg	
5103-71-9	alpha-Chlordane	ND	1.4	0.76	ug/kg	
5103-74-2	gamma-Chlordane	ND	1.4	1.1	ug/kg	
60-57-1	Dieldrin	ND	1.4	1.1	ug/kg	
72-54-8	4,4'-DDD	ND	1.4	0.53	ug/kg	
72-55-9	4,4'-DDE	ND	1.4	0.48	ug/kg	
50-29-3	4,4'-DDT	ND	1.4	0.54	ug/kg	
72-20-8	Endrin	ND	1.4	0.50	ug/kg	
1031-07-8	Endosulfan sulfate	ND	1.4	0.81	ug/kg	
7421-93-4	Endrin aldehyde	ND	1.4	1.1	ug/kg	
959-98-8	Endosulfan-I	ND	1.4	0.47	ug/kg	
33213-65-9	Endosulfan-II	ND	1.4	1.3	ug/kg	
76-44-8	Heptachlor	ND	1.4	1.2	ug/kg	
1024-57-3	Heptachlor epoxide	ND	1.4	0.59	ug/kg	
72-43-5	Methoxychlor	ND	2.9	0.79	ug/kg	
53494-70-5	Endrin ketone	ND	1.4	0.75	ug/kg	
8001-35-2	Toxaphene	ND	36	25	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	81%		24-136%
877-09-8	Tetrachloro-m-xylene	80%		24-136%
2051-24-3	Decachlorobiphenyl	83%		10-153%
2051-24-3	Decachlorobiphenyl	88%		10-153%

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-GWS		
Lab Sample ID:	JC19996-3	**Date Sampled:**	05/09/16
Matrix:	AQ - Ground Water	**Date Received:**	05/11/16
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	M124370.D	1	05/12/16	JJ	05/11/16	OP93820	EM5261
Run #2	M124393.D	10	05/12/16	AD	05/11/16	OP93820	EM5262

	Initial Volume	Final Volume
Run #1	860 ml	1.0 ml
Run #2	860 ml	1.0 ml

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.8	0.95	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.8	1.0	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.3	1.5	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.8	2.8	ug/l	
51-28-5	2,4-Dinitrophenol	ND	12	1.8	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.8	1.5	ug/l	
95-48-7	2-Methylphenol	ND	2.3	1.0	ug/l	
	3&4-Methylphenol	ND	2.3	1.0	ug/l	
88-75-5	2-Nitrophenol	ND	5.8	1.1	ug/l	
100-02-7	4-Nitrophenol	ND	12	1.3	ug/l	
87-86-5	Pentachlorophenol	ND	5.8	1.6	ug/l	
108-95-2	Phenol	ND	2.3	0.46	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.8	1.7	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.8	1.5	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.8	1.1	ug/l	
83-32-9	Acenaphthene	ND	1.2	0.22	ug/l	
208-96-8	Acenaphthylene	ND	1.2	0.16	ug/l	
98-86-2	Acetophenone	ND	2.3	0.24	ug/l	
120-12-7	Anthracene	ND	1.2	0.25	ug/l	
1912-24-9	Atrazine	ND	2.3	0.52	ug/l	
100-52-7	Benzaldehyde	ND	5.8	0.34	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.2	0.24	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.2	0.25	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.2	0.24	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.2	0.40	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.2	0.24	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.3	0.47	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.3	0.53	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.2	0.25	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.3	0.27	ug/l	
106-47-8	4-Chloroaniline	ND	5.8	0.40	ug/l	
86-74-8	Carbazole	ND	1.2	0.27	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-6-GWS		
Lab Sample ID:	JC19996-3	**Date Sampled:**	05/09/16
Matrix:	AQ - Ground Water	**Date Received:**	05/11/16
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	2.3	0.75	ug/l	
218-01-9	Chrysene	ND	1.2	0.20	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.3	0.32	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.3	0.29	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.3	0.47	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.3	0.43	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.2	0.64	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.2	0.55	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.3	0.59	ug/l	
123-91-1	1,4-Dioxane	514 [a]	12	7.6	ug/l	B
53-70-3	Dibenzo(a,h)anthracene	ND	1.2	0.38	ug/l	
132-64-9	Dibenzofuran	ND	5.8	0.26	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.3	0.58	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.3	0.27	ug/l	
84-66-2	Diethyl phthalate	ND	2.3	0.30	ug/l	
131-11-3	Dimethyl phthalate	ND	2.3	0.25	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	2.8	2.3	1.9	ug/l	
206-44-0	Fluoranthene	ND	1.2	0.20	ug/l	
86-73-7	Fluorene	ND	1.2	0.20	ug/l	
118-74-1	Hexachlorobenzene	ND	1.2	0.38	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.2	0.57	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	12	3.2	ug/l	
67-72-1	Hexachloroethane	ND	2.3	0.45	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.2	0.39	ug/l	
78-59-1	Isophorone	ND	2.3	0.32	ug/l	
90-12-0	1-Methylnaphthalene	0.74	1.2	0.31	ug/l	J
91-57-6	2-Methylnaphthalene	ND	1.2	0.24	ug/l	
88-74-4	2-Nitroaniline	ND	5.8	0.32	ug/l	
99-09-2	3-Nitroaniline	ND	5.8	0.45	ug/l	
100-01-6	4-Nitroaniline	ND	5.8	0.51	ug/l	
98-95-3	Nitrobenzene	ND	2.3	0.75	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.3	0.56	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.8	0.26	ug/l	
85-01-8	Phenanthrene	ND	1.2	0.20	ug/l	
129-00-0	Pyrene	ND	1.2	0.25	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.3	0.43	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	35%	23%	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-6-GWS		
Lab Sample ID:	JC19996-3	**Date Sampled:**	05/09/16
Matrix:	AQ - Ground Water	**Date Received:**	05/11/16
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	26%	19%	10-110%
118-79-6	2,4,6-Tribromophenol	75%	79%	39-149%
4165-60-0	Nitrobenzene-d5	76%	72%	32-128%
321-60-8	2-Fluorobiphenyl	68%	86%	35-119%
1718-51-0	Terphenyl-d14	65%	78%	10-126%

(a) Result is from Run# 2

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-GWS		
Lab Sample ID:	JC19996-3	**Date Sampled:**	05/09/16
Matrix:	AQ - Ground Water	**Date Received:**	05/11/16
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	3M61257.D	1	05/12/16	JJ	05/11/16	OP93820A	E3M2880
Run #2							

	Initial Volume	Final Volume
Run #1	860 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	ND	0.12	0.034	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	81%		24-125%
321-60-8	2-Fluorobiphenyl	84%		19-127%
1718-51-0	Terphenyl-d14	81%		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-6-GWS		
Lab Sample ID:	JC19996-3	**Date Sampled:**	05/09/16
Matrix:	AQ - Ground Water	**Date Received:**	05/11/16
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	GH105001.D	1	05/17/16	XPL	n/a	n/a	GGH5286
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	103%		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:	S41D		
Lab Sample ID:	JC19996-4	**Date Sampled:**	05/10/16
Matrix:	AQ - Ground Water	**Date Received:**	05/11/16
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 [a]	M124371.D	1	05/12/16	JJ	05/11/16	OP93820	EM5261
Run #2							

	Initial Volume	Final Volume
Run #1	930 ml	1.0 ml
Run #2		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.4	0.88	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.4	0.96	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.2	1.4	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.4	2.6	ug/l	
51-28-5	2,4-Dinitrophenol	ND	11	1.7	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.4	1.4	ug/l	
95-48-7	2-Methylphenol	ND	2.2	0.95	ug/l	
	3&4-Methylphenol	ND	2.2	0.95	ug/l	
88-75-5	2-Nitrophenol	ND	5.4	1.0	ug/l	
100-02-7	4-Nitrophenol	ND	11	1.2	ug/l	
87-86-5	Pentachlorophenol	ND	5.4	1.5	ug/l	
108-95-2	Phenol	ND	2.2	0.42	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.4	1.6	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.4	1.4	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.4	0.99	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	0.22	ug/l	
120-12-7	Anthracene	ND	1.1	0.23	ug/l	
1912-24-9	Atrazine	ND	2.2	0.48	ug/l	
100-52-7	Benzaldehyde	ND	5.4	0.31	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.1	0.22	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.1	0.23	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.1	0.22	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.1	0.37	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.1	0.22	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.2	0.43	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.2	0.49	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.1	0.23	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.2	0.25	ug/l	
106-47-8	4-Chloroaniline	ND	5.4	0.37	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:	S41D		
Lab Sample ID:	JC19996-4	**Date Sampled:**	05/10/16
Matrix:	AQ - Ground Water	**Date Received:**	05/11/16
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	0.70	ug/l	
218-01-9	Chrysene	ND	1.1	0.19	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.2	0.30	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.2	0.27	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.2	0.43	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.2	0.39	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.1	0.59	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.1	0.51	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.2	0.55	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.1	0.36	ug/l	
132-64-9	Dibenzofuran	ND	5.4	0.24	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.2	0.53	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.2	0.25	ug/l	
84-66-2	Diethyl phthalate	ND	2.2	0.28	ug/l	
131-11-3	Dimethyl phthalate	ND	2.2	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	1.8	ug/l	
206-44-0	Fluoranthene	ND	1.1	0.18	ug/l	
86-73-7	Fluorene	ND	1.1	0.18	ug/l	
118-74-1	Hexachlorobenzene	ND	1.1	0.35	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.1	0.53	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	3.0	ug/l	
67-72-1	Hexachloroethane	ND	2.2	0.42	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.1	0.36	ug/l	
78-59-1	Isophorone	ND	2.2	0.30	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.1	0.28	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.1	0.23	ug/l	
88-74-4	2-Nitroaniline	ND	5.4	0.30	ug/l	
99-09-2	3-Nitroaniline	ND	5.4	0.42	ug/l	
100-01-6	4-Nitroaniline	ND	5.4	0.47	ug/l	
98-95-3	Nitrobenzene	ND	2.2	0.69	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.2	0.52	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.4	0.24	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	0.40	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	43%		14-88%
4165-62-2	Phenol-d5	28%		10-110%

ND = Not detected MDL = Method Detection Limit
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B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	S41D		
Lab Sample ID:	JC19996-4	**Date Sampled:**	05/10/16
Matrix:	AQ - Ground Water	**Date Received:**	05/11/16
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	85%		39-149%
4165-60-0	Nitrobenzene-d5	69%		32-128%
321-60-8	2-Fluorobiphenyl	71%		35-119%
1718-51-0	Terphenyl-d14	68%		10-126%

(a) There is no sample left to reextract.

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:	S41D		
Lab Sample ID:	JC19996-4	**Date Sampled:**	05/10/16
Matrix:	AQ - Ground Water	**Date Received:**	05/11/16
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 [a]	3M61258.D	1	05/12/16	JJ	05/11/16	OP93820A	E3M2880
Run #2							

	Initial Volume	Final Volume
Run #1	930 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	ND	0.11	0.032	ug/l	
123-91-1	1,4-Dioxane	1.79	0.11	0.052	ug/l	B

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	74%		24-125%
321-60-8	2-Fluorobiphenyl	87%		19-127%
1718-51-0	Terphenyl-d14	93%		10-119%

(a) There is no sample left to reextract.

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:	S41D		
Lab Sample ID:	JC19996-4	**Date Sampled:**	05/10/16
Matrix:	AQ - Ground Water	**Date Received:**	05/11/16
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	GH105002.D	1	05/17/16	XPL	n/a	n/a	GGH5286
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	102%		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:	S41D		
Lab Sample ID:	JC19996-4	**Date Sampled:**	05/10/16
Matrix:	AQ - Ground Water	**Date Received:**	05/11/16
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	4G68174.D	1	05/12/16	DS	05/11/16	OP93822	G4G1787
Run #2							

	Initial Volume	Final Volume
Run #1	930 ml	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.011	0.0065	ug/l	
319-84-6	alpha-BHC	ND	0.011	0.0065	ug/l	
319-85-7	beta-BHC	ND	0.011	0.0061	ug/l	
319-86-8	delta-BHC	ND	0.011	0.0049	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.011	0.0030	ug/l	
5103-71-9	alpha-Chlordane	ND	0.011	0.0050	ug/l	
5103-74-2	gamma-Chlordane	ND	0.011	0.0049	ug/l	
60-57-1	Dieldrin	ND	0.011	0.0039	ug/l	
72-54-8	4,4'-DDD	ND	0.011	0.0041	ug/l	
72-55-9	4,4'-DDE	ND	0.011	0.0066	ug/l	
50-29-3	4,4'-DDT	ND	0.011	0.0053	ug/l	
72-20-8	Endrin	ND	0.011	0.0054	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.011	0.0056	ug/l	
7421-93-4	Endrin aldehyde	ND	0.011	0.0055	ug/l	
53494-70-5	Endrin ketone	ND	0.011	0.0055	ug/l	
959-98-8	Endosulfan-I	ND	0.011	0.0053	ug/l	
33213-65-9	Endosulfan-II	ND	0.011	0.0046	ug/l	
76-44-8	Heptachlor	ND	0.011	0.0041	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.011	0.0070	ug/l	
72-43-5	Methoxychlor	ND	0.022	0.0061	ug/l	
8001-35-2	Toxaphene	ND	0.27	0.20	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	87%		26-132%
877-09-8	Tetrachloro-m-xylene	86%		26-132%
2051-24-3	Decachlorobiphenyl	67%		10-118%
2051-24-3	Decachlorobiphenyl	58%		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:	S42D		
Lab Sample ID:	JC19996-5	**Date Sampled:**	05/10/16
Matrix:	AQ - Ground Water	**Date Received:**	05/11/16
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	M124372.D	1	05/12/16	JJ	05/11/16	OP93820	EM5261
Run #2	M124394.D	100	05/12/16	AD	05/11/16	OP93820	EM5262

	Initial Volume	Final Volume
Run #1	960 ml	1.0 ml
Run #2	960 ml	1.0 ml

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.2	0.85	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.2	0.93	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.1	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.2	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	5.2	1.4	ug/l	
95-48-7	2-Methylphenol	ND	2.1	0.93	ug/l	
	3&4-Methylphenol	ND	2.1	0.92	ug/l	
88-75-5	2-Nitrophenol	ND	5.2	1.0	ug/l	
100-02-7	4-Nitrophenol	ND	10	1.2	ug/l	
87-86-5	Pentachlorophenol	ND	5.2	1.4	ug/l	
108-95-2	Phenol	ND	2.1	0.41	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.2	1.5	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.2	1.4	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.2	0.96	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.20	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.14	ug/l	
98-86-2	Acetophenone	ND	2.1	0.22	ug/l	
120-12-7	Anthracene	ND	1.0	0.22	ug/l	
1912-24-9	Atrazine	ND	2.1	0.47	ug/l	
100-52-7	Benzaldehyde	ND	5.2	0.30	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	0.36	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.21	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.1	0.42	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.1	0.48	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.0	0.22	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.1	0.25	ug/l	
106-47-8	4-Chloroaniline	ND	5.2	0.35	ug/l	
86-74-8	Carbazole	ND	1.0	0.24	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:	S42D		
Lab Sample ID:	JC19996-5	**Date Sampled:**	05/10/16
Matrix:	AQ - Ground Water	**Date Received:**	05/11/16
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	2.1	0.68	ug/l	
218-01-9	Chrysene	ND	1.0	0.18	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.1	0.29	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.1	0.26	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.1	0.42	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.1	0.38	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.58	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.50	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.1	0.53	ug/l	
123-91-1	1,4-Dioxane	6800 [a]	100	68	ug/l	B
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.34	ug/l	
132-64-9	Dibenzofuran	ND	5.2	0.23	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.1	0.52	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.1	0.24	ug/l	
84-66-2	Diethyl phthalate	ND	2.1	0.27	ug/l	
131-11-3	Dimethyl phthalate	ND	2.1	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.1	1.7	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.18	ug/l	
86-73-7	Fluorene	ND	1.0	0.18	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.34	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.51	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	2.9	ug/l	
67-72-1	Hexachloroethane	ND	2.1	0.41	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.35	ug/l	
78-59-1	Isophorone	ND	2.1	0.29	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.0	0.27	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.22	ug/l	
88-74-4	2-Nitroaniline	ND	5.2	0.29	ug/l	
99-09-2	3-Nitroaniline	ND	5.2	0.40	ug/l	
100-01-6	4-Nitroaniline	ND	5.2	0.46	ug/l	
98-95-3	Nitrobenzene	ND	2.1	0.67	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.1	0.50	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.2	0.23	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.18	ug/l	
129-00-0	Pyrene	ND	1.0	0.23	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.1	0.39	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	39%	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:	S42D		
Lab Sample ID:	JC19996-5	**Date Sampled:**	05/10/16
Matrix:	AQ - Ground Water	**Date Received:**	05/11/16
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	28%	0% [b]	10-110%
118-79-6	2,4,6-Tribromophenol	89%	0% [b]	39-149%
4165-60-0	Nitrobenzene-d5	71%	0% [b]	32-128%
321-60-8	2-Fluorobiphenyl	70%	0% [b]	35-119%
1718-51-0	Terphenyl-d14	68%	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:	S42D		
Lab Sample ID:	JC19996-5	**Date Sampled:**	05/10/16
Matrix:	AQ - Ground Water	**Date Received:**	05/11/16
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	3M61259.D	1	05/12/16	JJ	05/11/16	OP93820A	E3M2880
Run #2							

	Initial Volume	Final Volume
Run #1	960 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	ND	0.10	0.031	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	72%		24-125%
321-60-8	2-Fluorobiphenyl	85%		19-127%
1718-51-0	Terphenyl-d14	89%		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:	S42D		
Lab Sample ID:	JC19996-5	**Date Sampled:**	05/10/16
Matrix:	AQ - Ground Water	**Date Received:**	05/11/16
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	GH105003.D	1	05/17/16	XPL	n/a	n/a	GGH5286
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	95%		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:	S42D		
Lab Sample ID:	JC19996-5	**Date Sampled:**	05/10/16
Matrix:	AQ - Ground Water	**Date Received:**	05/11/16
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	4G68175.D	1	05/12/16	DS	05/11/16	OP93822	G4G1787
Run #2							

	Initial Volume	Final Volume
Run #1	940 ml	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.011	0.0064	ug/l	
319-84-6	alpha-BHC	ND	0.011	0.0064	ug/l	
319-85-7	beta-BHC	ND	0.011	0.0061	ug/l	
319-86-8	delta-BHC	ND	0.011	0.0049	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.011	0.0030	ug/l	
5103-71-9	alpha-Chlordane	ND	0.011	0.0049	ug/l	
5103-74-2	gamma-Chlordane	ND	0.011	0.0049	ug/l	
60-57-1	Dieldrin	ND	0.011	0.0038	ug/l	
72-54-8	4,4'-DDD	ND	0.011	0.0040	ug/l	
72-55-9	4,4'-DDE	ND	0.011	0.0066	ug/l	
50-29-3	4,4'-DDT	ND	0.011	0.0053	ug/l	
72-20-8	Endrin	ND	0.011	0.0054	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.011	0.0056	ug/l	
7421-93-4	Endrin aldehyde	ND	0.011	0.0055	ug/l	
53494-70-5	Endrin ketone	ND	0.011	0.0054	ug/l	
959-98-8	Endosulfan-I	ND	0.011	0.0053	ug/l	
33213-65-9	Endosulfan-II	ND	0.011	0.0046	ug/l	
76-44-8	Heptachlor	ND	0.011	0.0041	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.011	0.0069	ug/l	
72-43-5	Methoxychlor	ND	0.021	0.0060	ug/l	
8001-35-2	Toxaphene	ND	0.27	0.20	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	84%		26-132%
877-09-8	Tetrachloro-m-xylene	80%		26-132%
2051-24-3	Decachlorobiphenyl	87%		10-118%
2051-24-3	Decachlorobiphenyl	71%		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:	RA20-GWS		
Lab Sample ID:	JC19996-6	**Date Sampled:**	05/10/16
Matrix:	AQ - Ground Water	**Date Received:**	05/11/16
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	M124373.D	1	05/12/16	JJ	05/11/16	OP93820	EM5261
Run #2							

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

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.6	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:	RA20-GWS		
Lab Sample ID:	JC19996-6	**Date Sampled:**	05/10/16
Matrix:	AQ - Ground Water	**Date Received:**	05/11/16
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	72.4	1.1	0.73	ug/l	B
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	45%		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:	RA20-GWS		
Lab Sample ID:	JC19996-6	**Date Sampled:**	05/10/16
Matrix:	AQ - Ground Water	**Date Received:**	05/11/16
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	31%		10-110%
118-79-6	2,4,6-Tribromophenol	90%		39-149%
4165-60-0	Nitrobenzene-d5	76%		32-128%
321-60-8	2-Fluorobiphenyl	75%		35-119%
1718-51-0	Terphenyl-d14	71%		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:	RA20-GWS		
Lab Sample ID:	JC19996-6	**Date Sampled:**	05/10/16
Matrix:	AQ - Ground Water	**Date Received:**	05/11/16
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	3M61260.D	1	05/12/16	JJ	05/11/16	OP93820A	E3M2880
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	74%		24-125%
321-60-8	2-Fluorobiphenyl	88%		19-127%
1718-51-0	Terphenyl-d14	90%		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:	RA20-GWS		
Lab Sample ID:	JC19996-6	**Date Sampled:**	05/10/16
Matrix:	AQ - Ground Water	**Date Received:**	05/11/16
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	GH105004.D	1	05/17/16	XPL	n/a	n/a	GGH5286
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	100%		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:	RA20-GWS		
Lab Sample ID:	JC19996-6	**Date Sampled:**	05/10/16
Matrix:	AQ - Ground Water	**Date Received:**	05/11/16
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	4G68176.D	1	05/12/16	DS	05/11/16	OP93822	G4G1787
Run #2							

	Initial Volume	Final Volume
Run #1	910 ml	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.011	0.0066	ug/l	
319-84-6	alpha-BHC	ND	0.011	0.0066	ug/l	
319-85-7	beta-BHC	ND	0.011	0.0063	ug/l	
319-86-8	delta-BHC	ND	0.011	0.0050	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.011	0.0031	ug/l	
5103-71-9	alpha-Chlordane	ND	0.011	0.0051	ug/l	
5103-74-2	gamma-Chlordane	ND	0.011	0.0050	ug/l	
60-57-1	Dieldrin	ND	0.011	0.0040	ug/l	
72-54-8	4,4'-DDD	ND	0.011	0.0042	ug/l	
72-55-9	4,4'-DDE	ND	0.011	0.0068	ug/l	
50-29-3	4,4'-DDT	ND	0.011	0.0054	ug/l	
72-20-8	Endrin	ND	0.011	0.0055	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.011	0.0058	ug/l	
7421-93-4	Endrin aldehyde	ND	0.011	0.0056	ug/l	
53494-70-5	Endrin ketone	ND	0.011	0.0056	ug/l	
959-98-8	Endosulfan-I	ND	0.011	0.0055	ug/l	
33213-65-9	Endosulfan-II	ND	0.011	0.0047	ug/l	
76-44-8	Heptachlor	ND	0.011	0.0042	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.011	0.0072	ug/l	
72-43-5	Methoxychlor	ND	0.022	0.0062	ug/l	
8001-35-2	Toxaphene	ND	0.27	0.20	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	92%		26-132%
877-09-8	Tetrachloro-m-xylene	92%		26-132%
2051-24-3	Decachlorobiphenyl	55%		10-118%
2051-24-3	Decachlorobiphenyl	47%		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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

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

GW
SO - Foreign

SGS ACCUTEST - NJ

CHAIN OF CUSTODY

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

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L/SO3

801219536073

SGS Accutest Quote #

Bottle Order Control #

SGS Accutest Job # JC19996

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)

Matrix Codes

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

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	SVOC - Method 8270D	LMA - Method 8015B	Pesticides - Method 8081B	1,4 Dioxane + Naphthalene by Method 8270D SIM	LAB USE ONLY
1	S-35D		5/9/16	1521	NR	GW	6	3				3				X	X	X	X	E12
2	RA-20 (6.5-7.5)		5/10/16	1150	TT	SO	2					2				X	X	X	X	FJ1
3	RA-6-GWS		5/9/16	1645	TT	GW	4	3				1				X	X		X	SUB
4	S41D		5/10/16	1148	NR	GW	6	3				3				X	X	X	X	
5	S42D		5/10/16	1428	NR	GW	6	3				3				X	X	X	X	
6	RA20-GWS		5/10/16	1400	TT	GW	6	3				3				X	X	X	X	

INITIAL ASSESSMENT 2 Bot
LABEL VERIFICATION

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

Sample inventory is verified upon receipt in the Laboratory

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

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 [signature]	05/10/16 1500	1 Fed Ex	2 [signature]	5/11/16 0940	2 [signature]
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # 466/782 [ ] Intact [ ] Not intact	Preserved where applicable [ ]	On ice [x] Cooler Temp. 2.7°C IP

SGS Accutest Sample Receipt Summary

Job Number: JC19996 **Client:** Anderson Mulholland **Project:** BMS Release

Date / Time Received: 5/11/2016 9:40:00 AM **Delivery Method:** FedEx **Airbill #'s:** 801219536073

Cooler Temps (Raw Measured) °C: Cooler 1: (2.7); Cooler 2: (2.5);

Cooler Temps (Corrected) °C: Cooler 1: (3.1); Cooler 2: (2.9);

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:	Broken / Leaking		

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) -1: 1 of 3 950ml bottles for SVOC/PEST rec'd broken, limited volume.

2) -3: Rec'd only 1 950ml bottle for EXT, limited volume.

3) -4 thru -6: Rec'd 3 x 950ml for EXT, limited volume.

SGS Accutest Sample Receipt Summary

5/11/2016

Problem Note Response: Proceed with analysis

JC19996: Chain of Custody
Page 3 of 3

Internal Sample Tracking Chronicle

Anderson, Mulholland & Associates

Job No: JC19996

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

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC19996-1 S-35D	Collected: 09-MAY-16 15:21 By: NR		Received: 11-MAY-16 By: DDH			
JC19996-1	SW846 8270D	12-MAY-16 01:56	JJ	11-MAY-16	AC	AB8270SL
JC19996-1	SW846 8270D BY SIM	12-MAY-16 06:50	JJ	11-MAY-16	AC	BSIM + NAP
JC19996-1	SW846 8081B	12-MAY-16 12:13	DS	11-MAY-16	SD	P8081PESTTCL
JC19996-1	SW846-8015C (DAI)	17-MAY-16 02:46	XPL			D8015LMA
JC19996-2 RA-20 (6.5-7.5)	Collected: 10-MAY-16 11:50 By: TT		Received: 11-MAY-16 By: DDH			
JC19996-2	SM2540 G-97	12-MAY-16 14:00	PV			SOL104
JC19996-2	SW846 8081B	13-MAY-16 15:29	DS	12-MAY-16	RG	P8081PESTTCL
JC19996-2	SW846 8270D	13-MAY-16 16:56	AD	12-MAY-16	TM	AB8270SL
JC19996-2	SW846 8270D BY SIM	13-MAY-16 17:41	AD	12-MAY-16	TM	B8270SIM14DIOX,BSIM + NAP
JC19996-2	SW846-8015C (DAI)	18-MAY-16 17:44	XPL			D8015LMA
JC19996-3 RA-6-GWS	Collected: 09-MAY-16 16:45 By: TT		Received: 11-MAY-16 By: DDH			
JC19996-3	SW846 8270D	12-MAY-16 02:24	JJ	11-MAY-16	AC	AB8270SL
JC19996-3	SW846 8270D BY SIM	12-MAY-16 07:22	JJ	11-MAY-16	AC	BSIM + NAP
JC19996-3	SW846 8270D	12-MAY-16 13:20	AD	11-MAY-16	AC	AB8270SL
JC19996-3	SW846-8015C (DAI)	17-MAY-16 03:08	XPL			D8015LMA
JC19996-4 S41D	Collected: 10-MAY-16 11:48 By: NR		Received: 11-MAY-16 By: DDH			
JC19996-4	SW846 8270D	12-MAY-16 02:53	JJ	11-MAY-16	AC	AB8270SL
JC19996-4	SW846 8270D BY SIM	12-MAY-16 07:54	JJ	11-MAY-16	AC	B8270SIM14DIOX,BSIM + NAP
JC19996-4	SW846 8081B	12-MAY-16 12:28	DS	11-MAY-16	SD	P8081PESTTCL
JC19996-4	SW846-8015C (DAI)	17-MAY-16 03:22	XPL			D8015LMA
JC19996-5 S42D	Collected: 10-MAY-16 14:28 By: NR		Received: 11-MAY-16 By: DDH			
JC19996-5	SW846 8270D	12-MAY-16 03:22	JJ	11-MAY-16	AC	AB8270SL
JC19996-5	SW846 8270D BY SIM	12-MAY-16 08:26	JJ	11-MAY-16	AC	BSIM + NAP
JC19996-5	SW846 8081B	12-MAY-16 12:43	DS	11-MAY-16	SD	P8081PESTTCL
JC19996-5	SW846 8270D	12-MAY-16 13:49	AD	11-MAY-16	AC	AB8270SL

Internal Sample Tracking Chronicle

Anderson, Mulholland & Associates

Job No: JC19996

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

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC19996-5	SW846-8015C (DAI)	17-MAY-16 03:37	XPL			D8015LMA
JC19996-6	Collected: 10-MAY-16 14:00 By: TT		Received: 11-MAY-16 By: DDH			
RA20-GWS						
JC19996-6	SW846 8270D	12-MAY-16 03:50	JJ	11-MAY-16	AC	AB8270SL
JC19996-6	SW846 8270D BY SIM	12-MAY-16 08:58	JJ	11-MAY-16	AC	BSIM+NAP
JC19996-6	SW846 8081B	12-MAY-16 12:58	DS	11-MAY-16	SD	P8081PESTTCL
JC19996-6	SW846-8015C (DAI)	17-MAY-16 03:51	XPL			D8015LMA

SGS Accutest Internal Chain of Custody

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 05/11/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC19996-1.1	Secured Storage	Dawan Currie	05/11/16 16:08	Retrieve from Storage
JC19996-1.1	Dawan Currie	Secured Staging Area	05/11/16 16:08	Return to Storage
JC19996-1.1	Secured Staging Area	Ryan Fantasia	05/11/16 16:27	Retrieve from Storage
JC19996-1.1	Max Ponce		05/11/16 23:31	Depleted
Analyst unavailable for custody transfer.				
JC19996-1.2	Secured Storage	Luis Villanueva	05/11/16 12:57	Retrieve from Storage
JC19996-1.2	Luis Villanueva	Secured Staging Area	05/11/16 12:57	Return to Storage
JC19996-1.2	Secured Staging Area	Ryan Fantasia	05/11/16 15:09	Retrieve from Storage
JC19996-1.2	Max Ponce		05/11/16 23:30	Depleted
Analyst unavailable for custody transfer.				
JC19996-1.2.1	Ryan Fantasia	Organics Prep	05/11/16 15:21	Extract from JC19996-1.2
JC19996-1.2.1	Organics Prep	Allan Chung-yew	05/11/16 21:28	Extract from JC19996-1.2
JC19996-1.2.1	Allan Chung-yew	Extract Storage	05/11/16 21:28	Return to Storage
JC19996-1.2.1	Extract Storage	Julius Johnson	05/12/16 00:05	Retrieve from Storage
JC19996-1.2.1	Julius Johnson	GCMSM	05/12/16 00:05	Load on Instrument
JC19996-1.2.2	Ryan Fantasia	Organics Prep	05/11/16 15:28	Extract from JC19996-1.2
JC19996-1.2.2	Organics Prep	Stephen Domke	05/11/16 22:38	Extract from JC19996-1.2
JC19996-1.2.2	Stephen Domke	Extract Storage	05/11/16 22:38	Return to Storage
JC19996-1.2.2	Extract Storage	Humarah Bano	05/12/16 11:26	Retrieve from Storage
JC19996-1.2.2	Humarah Bano	GC4G	05/12/16 11:26	Load on Instrument
JC19996-1.3	Secured Storage	Xu Liu	05/16/16 13:36	Retrieve from Storage
JC19996-1.3	Xu Liu	Secured Storage	05/16/16 13:54	Return to Storage
JC19996-2.1	Secured Storage	Sauvelson Auguste	05/12/16 06:26	Retrieve from Storage
JC19996-2.1	Sauvelson Auguste	Steven Zarchy	05/12/16 06:37	Custody Transfer
JC19996-2.1	Steven Zarchy	Secured Storage	05/12/16 11:08	Return to Storage
JC19996-2.1	Secured Storage	Sahara Feliciano	05/12/16 11:35	Retrieve from Storage
JC19996-2.1	Sahara Feliciano	Secured Staging Area	05/12/16 11:35	Return to Storage
JC19996-2.1	Secured Staging Area	Albert Quayson	05/12/16 11:39	Retrieve from Storage
JC19996-2.1	Albert Quayson	Paula Velatesgui	05/12/16 11:58	Custody Transfer
JC19996-2.1	Paula Velatesgui	Secured Storage	05/12/16 12:43	Return to Storage
JC19996-2.1	Secured Storage	Todd Shoemaker	05/12/16 14:25	Retrieve from Storage
JC19996-2.1	Todd Shoemaker	Rebecca Gluckman	05/12/16 14:28	Custody Transfer
JC19996-2.1	Rebecca Gluckman	Secured Storage	05/12/16 18:36	Return to Storage
JC19996-2.1	Secured Storage	Xu Liu	05/18/16 10:45	Retrieve from Storage
JC19996-2.1	Xu Liu	Secured Storage	05/18/16 14:09	Return to Storage
JC19996-2.1.1	Sauvelson Auguste	Organics Prep	05/12/16 06:28	Extract from JC19996-2.1
JC19996-2.1.1	Organics Prep	Tin Marlar	05/12/16 12:51	Extract from JC19996-2.1
JC19996-2.1.1	Tin Marlar	Extract Storage	05/12/16 12:51	Return to Storage

SGS Accutest Internal Chain of Custody

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 05/11/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC19996-2.1.2	Rebecca Gluckman	Organics Prep	05/12/16 14:53	Extract from JC19996-2.1
JC19996-2.1.2	Organics Prep	Rebecca Gluckman	05/12/16 18:36	Extract from JC19996-2.1
JC19996-2.1.2	Rebecca Gluckman	Extract Storage	05/12/16 18:36	Return to Storage
JC19996-2.1.2	Extract Storage	Dhara Saparia	05/13/16 10:07	Retrieve from Storage
JC19996-2.1.2	Dhara Saparia	GC6G	05/13/16 10:07	Load on Instrument
JC19996-2.1.2	GC6G	Rebecca Krug	05/22/16 09:23	Unload from Instrument
JC19996-2.1.2	Rebecca Krug	Extract Freezer	05/22/16 09:23	Return to Storage
JC19996-3.1	Secured Storage	Luis Villanueva	05/11/16 12:57	Retrieve from Storage
JC19996-3.1	Luis Villanueva	Secured Staging Area	05/11/16 12:57	Return to Storage
JC19996-3.1	Secured Staging Area	Ryan Fantasia	05/11/16 15:09	Retrieve from Storage
JC19996-3.1	Max Ponce		05/11/16 23:30	Depleted
Analyst unavailable for custody transfer.				
JC19996-3.1.1	Ryan Fantasia	Organics Prep	05/11/16 15:21	Extract from JC19996-3.1
JC19996-3.1.1	Organics Prep	Allan Chung-yew	05/11/16 21:28	Extract from JC19996-3.1
JC19996-3.1.1	Allan Chung-yew	Extract Storage	05/11/16 21:28	Return to Storage
JC19996-3.1.1	Extract Storage	Julius Johnson	05/12/16 00:05	Retrieve from Storage
JC19996-3.1.1	Julius Johnson	GCMSM	05/12/16 00:05	Load on Instrument
JC19996-3.3	Secured Storage	Xu Liu	05/16/16 13:36	Retrieve from Storage
JC19996-3.3	Xu Liu	Secured Storage	05/16/16 13:54	Return to Storage
JC19996-4.1	Secured Storage	Dawan Currie	05/11/16 16:08	Retrieve from Storage
JC19996-4.1	Dawan Currie	Secured Staging Area	05/11/16 16:08	Return to Storage
JC19996-4.1	Secured Staging Area	Ryan Fantasia	05/11/16 16:27	Retrieve from Storage
JC19996-4.1	Max Ponce		05/11/16 23:31	Depleted
Analyst unavailable for custody transfer.				
JC19996-4.2	Secured Storage	Luis Villanueva	05/11/16 12:57	Retrieve from Storage
JC19996-4.2	Luis Villanueva	Secured Staging Area	05/11/16 12:57	Return to Storage
JC19996-4.2	Secured Staging Area	Ryan Fantasia	05/11/16 15:09	Retrieve from Storage
JC19996-4.2	Max Ponce		05/11/16 23:30	Depleted
Analyst unavailable for custody transfer.				
JC19996-4.3	Secured Storage	Luis Villanueva	05/11/16 12:57	Retrieve from Storage
JC19996-4.3	Luis Villanueva	Secured Staging Area	05/11/16 12:57	Return to Storage
JC19996-4.3	Secured Staging Area	Ryan Fantasia	05/11/16 15:09	Retrieve from Storage
JC19996-4.3	Max Ponce		05/11/16 23:30	Depleted
Analyst unavailable for custody transfer.				
JC19996-4.3.1	Ryan Fantasia	Organics Prep	05/11/16 15:21	Extract from JC19996-4.3
JC19996-4.3.1	Organics Prep	Allan Chung-yew	05/11/16 21:28	Extract from JC19996-4.3

SGS Accutest Internal Chain of Custody

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 05/11/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC19996-4.3.1	Allan Chung-yew	Extract Storage	05/11/16 21:28	Return to Storage
JC19996-4.3.1	Extract Storage	Julius Johnson	05/12/16 00:05	Retrieve from Storage
JC19996-4.3.1	Julius Johnson	GCMSM	05/12/16 00:05	Load on Instrument
JC19996-4.3.2	Ryan Fantasia	Organics Prep	05/11/16 15:28	Extract from JC19996-4.3
JC19996-4.3.2	Organics Prep	Stephen Domke	05/11/16 22:38	Extract from JC19996-4.3
JC19996-4.3.2	Stephen Domke	Extract Storage	05/11/16 22:38	Return to Storage
JC19996-4.3.2	Extract Storage	Humarah Bano	05/12/16 11:26	Retrieve from Storage
JC19996-4.3.2	Humarah Bano	GC4G	05/12/16 11:26	Load on Instrument
JC19996-4.5	Secured Storage	Xu Liu	05/16/16 13:36	Retrieve from Storage
JC19996-4.5	Xu Liu	Secured Storage	05/16/16 13:54	Return to Storage
JC19996-5.1	Secured Storage	Dawan Currie	05/11/16 16:08	Retrieve from Storage
JC19996-5.1	Dawan Currie	Secured Staging Area	05/11/16 16:08	Return to Storage
JC19996-5.1	Secured Staging Area	Ryan Fantasia	05/11/16 16:27	Retrieve from Storage
JC19996-5.1	Max Ponce		05/11/16 23:31	Depleted
Analyst unavailable for custody transfer.				
JC19996-5.2	Secured Storage	Dawan Currie	05/11/16 16:08	Retrieve from Storage
JC19996-5.2	Dawan Currie	Secured Staging Area	05/11/16 16:08	Return to Storage
JC19996-5.2	Secured Staging Area	Ryan Fantasia	05/11/16 16:27	Retrieve from Storage
JC19996-5.2	Max Ponce		05/11/16 23:31	Depleted
Analyst unavailable for custody transfer.				
JC19996-5.3	Secured Storage	Luis Villanueva	05/11/16 12:57	Retrieve from Storage
JC19996-5.3	Luis Villanueva	Secured Staging Area	05/11/16 12:57	Return to Storage
JC19996-5.3	Secured Staging Area	Ryan Fantasia	05/11/16 15:09	Retrieve from Storage
JC19996-5.3	Max Ponce		05/11/16 23:30	Depleted
Analyst unavailable for custody transfer.				
JC19996-5.3.1	Ryan Fantasia	Organics Prep	05/11/16 15:21	Extract from JC19996-5.3
JC19996-5.3.1	Organics Prep	Allan Chung-yew	05/11/16 21:28	Extract from JC19996-5.3
JC19996-5.3.1	Allan Chung-yew	Extract Storage	05/11/16 21:28	Return to Storage
JC19996-5.3.1	Extract Storage	Julius Johnson	05/12/16 00:05	Retrieve from Storage
JC19996-5.3.1	Julius Johnson	GCMSM	05/12/16 00:05	Load on Instrument
JC19996-5.3.2	Ryan Fantasia	Organics Prep	05/11/16 15:28	Extract from JC19996-5.3
JC19996-5.3.2	Organics Prep	Stephen Domke	05/11/16 22:38	Extract from JC19996-5.3
JC19996-5.3.2	Stephen Domke	Extract Storage	05/11/16 22:38	Return to Storage
JC19996-5.3.2	Extract Storage	Humarah Bano	05/12/16 11:26	Retrieve from Storage
JC19996-5.3.2	Humarah Bano	GC4G	05/12/16 11:26	Load on Instrument
JC19996-5.5	Secured Storage	Xu Liu	05/16/16 13:36	Retrieve from Storage

SGS Accutest Internal Chain of Custody

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 05/11/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC19996-5.5	Xu Liu	Secured Storage	05/16/16 13:54	Return to Storage
JC19996-6.1	Secured Storage	Dawan Currie	05/11/16 16:08	Retrieve from Storage
JC19996-6.1	Dawan Currie	Secured Staging Area	05/11/16 16:08	Return to Storage
JC19996-6.1	Secured Staging Area	Ryan Fantasia	05/11/16 16:27	Retrieve from Storage
JC19996-6.1	Max Ponce		05/11/16 23:31	Depleted
Analyst unavailable for custody transfer.				
JC19996-6.3	Secured Storage	Luis Villanueva	05/11/16 12:57	Retrieve from Storage
JC19996-6.3	Luis Villanueva	Secured Staging Area	05/11/16 12:57	Return to Storage
JC19996-6.3	Secured Staging Area	Ryan Fantasia	05/11/16 15:09	Retrieve from Storage
JC19996-6.3	Max Ponce		05/11/16 23:30	Depleted
Analyst unavailable for custody transfer.				
JC19996-6.3.1	Ryan Fantasia	Organics Prep	05/11/16 15:21	Extract from JC19996-6.3
JC19996-6.3.1	Organics Prep	Allan Chung-yew	05/11/16 21:28	Extract from JC19996-6.3
JC19996-6.3.1	Allan Chung-yew	Extract Storage	05/11/16 21:28	Return to Storage
JC19996-6.3.1	Extract Storage	Julius Johnson	05/12/16 00:05	Retrieve from Storage
JC19996-6.3.1	Julius Johnson	GCMSM	05/12/16 00:05	Load on Instrument
JC19996-6.3.2	Ryan Fantasia	Organics Prep	05/11/16 15:28	Extract from JC19996-6.3
JC19996-6.3.2	Organics Prep	Stephen Domke	05/11/16 22:38	Extract from JC19996-6.3
JC19996-6.3.2	Stephen Domke	Extract Storage	05/11/16 22:38	Return to Storage
JC19996-6.3.2	Extract Storage	Humarah Bano	05/12/16 11:26	Retrieve from Storage
JC19996-6.3.2	Humarah Bano	GC4G	05/12/16 11:26	Load on Instrument
JC19996-6.5	Secured Storage	Xu Liu	05/16/16 13:36	Retrieve from Storage
JC19996-6.5	Xu Liu	Secured Storage	05/16/16 13:54	Return to Storage

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: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93820-MB1	M124365.D	1	05/12/16	JJ	05/11/16	OP93820	EM5261

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

JC19996-1, JC19996-3, JC19996-4, JC19996-5, JC19996-6

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: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93820-MB1	M124365.D	1	05/12/16	JJ	05/11/16	OP93820	EM5261

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

JC19996-1, JC19996-3, JC19996-4, JC19996-5, JC19996-6

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: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93820-MB1	M124365.D	1	05/12/16	JJ	05/11/16	OP93820	EM5261

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

JC19996-1, JC19996-3, JC19996-4, JC19996-5, JC19996-6

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	45%	14-88%
4165-62-2	Phenol-d5	27%	10-110%
118-79-6	2,4,6-Tribromophenol	96%	39-149%
4165-60-0	Nitrobenzene-d5	85%	32-128%
321-60-8	2-Fluorobiphenyl	80%	35-119%
1718-51-0	Terphenyl-d14	76%	10-126%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Semi-Volatile		0	ug/l	

Method Blank Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93830-MB1	M124427.D	1	05/13/16	AD	05/12/16	OP93830	EM5264

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

JC19996-2

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: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93830-MB1	M124427.D	1	05/13/16	AD	05/12/16	OP93830	EM5264

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

JC19996-2

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	
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	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	120%* [a]	30-106%

Method Blank Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93830-MB1	M124427.D	1	05/13/16	AD	05/12/16	OP93830	EM5264

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

JC19996-2

CAS No.	Surrogate Recoveries		Limits
4165-62-2	Phenol-d5	114%* [a]	30-106%
118-79-6	2,4,6-Tribromophenol	137%	24-140%
4165-60-0	Nitrobenzene-d5	117%	26-122%
321-60-8	2-Fluorobiphenyl	123%* [a]	36-112%
1718-51-0	Terphenyl-d14	109%	36-132%

(a) High percent recoveries and no positive found.

Method Blank Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93830-MB1	2P59337.D	1	05/19/16	RL	05/12/16	OP93830	E2P2592

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

JC19996-2

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: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93830-MB1	2P59337.D	1	05/19/16	RL	05/12/16	OP93830	E2P2592

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

JC19996-2

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	
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	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	87%	30-106%

Method Blank Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93830-MB1	2P59337.D	1	05/19/16	RL	05/12/16	OP93830	E2P2592

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

JC19996-2

CAS No.	Surrogate Recoveries		Limits
4165-62-2	Phenol-d5	87%	30-106%
118-79-6	2,4,6-Tribromophenol	130%	24-140%
4165-60-0	Nitrobenzene-d5	111%	26-122%
321-60-8	2-Fluorobiphenyl	135%* [a]	36-112%
1718-51-0	Terphenyl-d14	119%	36-132%

(a) High percent recoveries and no positive found.

Method Blank Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93820A-MB1	3M61252.D	1	05/12/16	JJ	05/11/16	OP93820A	E3M2880

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

JC19996-1, JC19996-3, JC19996-4, JC19996-5, JC19996-6

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	0.133	0.10	0.049	ug/l	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	91%	24-125%
321-60-8	2-Fluorobiphenyl	99%	19-127%
1718-51-0	Terphenyl-d14	98%	10-119%

Method Blank Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93830A-MB1	4M65271.D	1	05/13/16	AD	05/12/16	OP93830A	E4M2919

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

JC19996-2

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane	ND	3.3	0.67	ug/kg	
91-20-3	Naphthalene	ND	3.3	0.41	ug/kg	

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	98%	15-138%
321-60-8	2-Fluorobiphenyl	114%	12-148%
1718-51-0	Terphenyl-d14	98%	10-157%

Blank Spike Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93820-BS1	M124366.D	1	05/12/16	JJ	05/11/16	OP93820	EM5261

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

JC19996-1, JC19996-3, JC19996-4, JC19996-5, JC19996-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-57-8	2-Chlorophenol	50	39.5	79	48-106
59-50-7	4-Chloro-3-methyl phenol	50	38.7	77	49-113
120-83-2	2,4-Dichlorophenol	50	42.0	84	49-111
105-67-9	2,4-Dimethylphenol	50	39.9	80	42-117
51-28-5	2,4-Dinitrophenol	100	86.3	86	37-132
534-52-1	4,6-Dinitro-o-cresol	50	44.6	89	49-119
95-48-7	2-Methylphenol	50	35.3	71	42-103
	3&4-Methylphenol	50	31.1	62	39-110
88-75-5	2-Nitrophenol	50	41.5	83	49-114
100-02-7	4-Nitrophenol	50	14.4	29	16-95
87-86-5	Pentachlorophenol	50	41.1	82	30-136
108-95-2	Phenol	50	20.9	42	10-110
58-90-2	2,3,4,6-Tetrachlorophenol	50	40.2	80	47-118
95-95-4	2,4,5-Trichlorophenol	50	37.4	75	55-116
88-06-2	2,4,6-Trichlorophenol	50	39.9	80	56-115
83-32-9	Acenaphthene	50	37.2	74	54-112
208-96-8	Acenaphthylene	50	34.8	70	49-99
98-86-2	Acetophenone	50	40.9	82	52-111
120-12-7	Anthracene	50	37.1	74	58-112
1912-24-9	Atrazine	50	54.7	109	62-134
100-52-7	Benzaldehyde	50	44.4	89	40-129
56-55-3	Benzo(a)anthracene	50	36.8	74	44-120
50-32-8	Benzo(a)pyrene	50	35.7	71	41-127
205-99-2	Benzo(b)fluoranthene	50	37.6	75	41-129
191-24-2	Benzo(g,h,i)perylene	50	36.5	73	34-128
207-08-9	Benzo(k)fluoranthene	50	37.9	76	42-122
101-55-3	4-Bromophenyl phenyl ether	50	44.4	89	54-121
85-68-7	Butyl benzyl phthalate	50	36.1	72	20-143
92-52-4	1,1'-Biphenyl	50	38.9	78	51-106
91-58-7	2-Chloronaphthalene	50	36.8	74	48-104
106-47-8	4-Chloroaniline	50	26.2	52	10-110
86-74-8	Carbazole	50	41.4	83	56-110
105-60-2	Caprolactam	50	11.0	22	10-110
218-01-9	Chrysene	50	35.9	72	45-125
111-91-1	bis(2-Chloroethoxy)methane	50	40.8	82	47-117
111-44-4	bis(2-Chloroethyl)ether	50	44.0	88	48-115

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93820-BS1	M124366.D	1	05/12/16	JJ	05/11/16	OP93820	EM5261

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

JC19996-1, JC19996-3, JC19996-4, JC19996-5, JC19996-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
108-60-1	bis(2-Chloroisopropyl)ether	50	37.2	74	44-112
7005-72-3	4-Chlorophenyl phenyl ether	50	39.0	78	50-117
121-14-2	2,4-Dinitrotoluene	50	40.5	81	57-122
606-20-2	2,6-Dinitrotoluene	50	40.7	81	58-122
91-94-1	3,3'-Dichlorobenzidine	100	58.6	59	10-110
123-91-1	1,4-Dioxane	50	20.4	41	10-110
53-70-3	Dibenzo(a,h)anthracene	50	38.0	76	36-130
132-64-9	Dibenzofuran	50	38.8	78	55-108
84-74-2	Di-n-butyl phthalate	50	39.9	80	45-123
117-84-0	Di-n-octyl phthalate	50	35.2	70	37-144
84-66-2	Diethyl phthalate	50	37.9	76	23-130
131-11-3	Dimethyl phthalate	50	38.8	78	10-140
117-81-7	bis(2-Ethylhexyl)phthalate	50	35.6	71	36-138
206-44-0	Fluoranthene	50	40.5	81	58-116
86-73-7	Fluorene	50	37.7	75	57-113
118-74-1	Hexachlorobenzene	50	42.7	85	49-122
87-68-3	Hexachlorobutadiene	50	37.5	75	24-112
77-47-4	Hexachlorocyclopentadiene	100	53.5	54	14-119
67-72-1	Hexachloroethane	50	35.1	70	31-107
193-39-5	Indeno(1,2,3-cd)pyrene	50	44.7	89	34-128
78-59-1	Isophorone	50	43.1	86	52-119
90-12-0	1-Methylnaphthalene	50	39.8	80	46-103
91-57-6	2-Methylnaphthalene	50	39.5	79	45-107
88-74-4	2-Nitroaniline	50	40.5	81	51-127
99-09-2	3-Nitroaniline	50	27.3	55	10-110
100-01-6	4-Nitroaniline	50	38.5	77	50-112
98-95-3	Nitrobenzene	50	41.8	84	44-116
621-64-7	N-Nitroso-di-n-propylamine	50	38.1	76	49-117
86-30-6	N-Nitrosodiphenylamine	50	39.2	78	51-113
85-01-8	Phenanthrene	50	38.7	77	56-111
129-00-0	Pyrene	50	36.9	74	47-120
95-94-3	1,2,4,5-Tetrachlorobenzene	50	47.4	95	36-114

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93820-BS1	M124366.D	1	05/12/16	JJ	05/11/16	OP93820	EM5261

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

JC19996-1, JC19996-3, JC19996-4, JC19996-5, JC19996-6

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	52%	14-88%
4165-62-2	Phenol-d5	34%	10-110%
118-79-6	2,4,6-Tribromophenol	97%	39-149%
4165-60-0	Nitrobenzene-d5	84%	32-128%
321-60-8	2-Fluorobiphenyl	78%	35-119%
1718-51-0	Terphenyl-d14	78%	10-126%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93830-BS1	M124428.D	1	05/13/16	AD	05/12/16	OP93830	EM5264

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

JC19996-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
95-57-8	2-Chlorophenol	1670	1520	91	54-98
59-50-7	4-Chloro-3-methyl phenol	1670	1490	89	52-107
120-83-2	2,4-Dichlorophenol	1670	1570	94	53-105
105-67-9	2,4-Dimethylphenol	1670	1490	89	49-115
51-28-5	2,4-Dinitrophenol	3330	3380	101	30-127
534-52-1	4,6-Dinitro-o-cresol	1670	1670	100	41-114
95-48-7	2-Methylphenol	1670	1480	89	53-103
	3&4-Methylphenol	1670	1460	88	53-102
88-75-5	2-Nitrophenol	1670	1520	91	52-104
100-02-7	4-Nitrophenol	1670	1090	65	36-143
87-86-5	Pentachlorophenol	1670	1700	102	29-128
108-95-2	Phenol	1670	1530	92	45-106
58-90-2	2,3,4,6-Tetrachlorophenol	1670	1610	97	47-113
95-95-4	2,4,5-Trichlorophenol	1670	1410	85	55-112
88-06-2	2,4,6-Trichlorophenol	1670	1440	86	57-108
83-32-9	Acenaphthene	1670	1360	82	60-108
208-96-8	Acenaphthylene	1670	1280	77	54-94
98-86-2	Acetophenone	1670	1370	82	53-110
120-12-7	Anthracene	1670	1420	85	59-109
1912-24-9	Atrazine	1670	1910	115	59-126
56-55-3	Benzo(a)anthracene	1670	1370	82	52-113
50-32-8	Benzo(a)pyrene	1670	1380	83	56-122
205-99-2	Benzo(b)fluoranthene	1670	1360	82	53-119
191-24-2	Benzo(g,h,i)perylene	1670	1390	83	48-117
207-08-9	Benzo(k)fluoranthene	1670	1410	85	52-115
101-55-3	4-Bromophenyl phenyl ether	1670	1660	100	58-114
85-68-7	Butyl benzyl phthalate	1670	1320	79	44-132
92-52-4	1,1'-Biphenyl	1670	1390	83	54-101
100-52-7	Benzaldehyde	1670	1600	96	39-117
91-58-7	2-Chloronaphthalene	1670	1380	83	54-103
106-47-8	4-Chloroaniline	1670	736	44	10-110
86-74-8	Carbazole	1670	1530	92	55-105
105-60-2	Caprolactam	1670	1380	83	42-111
218-01-9	Chrysene	1670	1380	83	51-119
111-91-1	bis(2-Chloroethoxy)methane	1670	1470	88	51-106
111-44-4	bis(2-Chloroethyl)ether	1670	1530	92	48-107

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93830-BS1	M124428.D	1	05/13/16	AD	05/12/16	OP93830	EM5264

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

JC19996-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
108-60-1	bis(2-Chloroisopropyl)ether	1670	1340	80	46-103
7005-72-3	4-Chlorophenyl phenyl ether	1670	1470	88	54-112
121-14-2	2,4-Dinitrotoluene	1670	1500	90	56-116
606-20-2	2,6-Dinitrotoluene	1670	1480	89	56-115
91-94-1	3,3'-Dichlorobenzidine	3330	1720	52	22-103
53-70-3	Dibenzo(a,h)anthracene	1670	1450	87	49-118
132-64-9	Dibenzofuran	1670	1380	83	55-103
84-74-2	Di-n-butyl phthalate	1670	1510	91	56-117
117-84-0	Di-n-octyl phthalate	1670	1280	77	47-137
84-66-2	Diethyl phthalate	1670	1380	83	54-112
131-11-3	Dimethyl phthalate	1670	1390	83	56-108
117-81-7	bis(2-Ethylhexyl)phthalate	1670	1340	80	45-130
206-44-0	Fluoranthene	1670	1530	92	58-110
86-73-7	Fluorene	1670	1400	84	59-108
118-74-1	Hexachlorobenzene	1670	1620	97	55-114
87-68-3	Hexachlorobutadiene	1670	1580	95	44-118
77-47-4	Hexachlorocyclopentadiene	3330	2390	72	41-137
67-72-1	Hexachloroethane	1670	1370	82	50-107
193-39-5	Indeno(1,2,3-cd)pyrene	1670	1690	101	48-120
78-59-1	Isophorone	1670	1490	89	54-109
90-12-0	1-Methylnaphthalene	1670	1470	88	50-110
91-57-6	2-Methylnaphthalene	1670	1380	83	48-104
88-74-4	2-Nitroaniline	1670	1430	86	49-124
99-09-2	3-Nitroaniline	1670	825	50	22-110
100-01-6	4-Nitroaniline	1670	1460	88	50-107
98-95-3	Nitrobenzene	1670	1450	87	47-108
621-64-7	N-Nitroso-di-n-propylamine	1670	1300	78	49-106
86-30-6	N-Nitrosodiphenylamine	1670	1510	91	53-112
85-01-8	Phenanthrene	1670	1450	87	57-105
129-00-0	Pyrene	1670	1350	81	50-117
95-94-3	1,2,4,5-Tetrachlorobenzene	1670	1830	110* [a]	52-109

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	94%	30-106%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93830-BS1	M124428.D	1	05/13/16	AD	05/12/16	OP93830	EM5264

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

JC19996-2

CAS No.	Surrogate Recoveries	BSP	Limits
4165-62-2	Phenol-d5	85%	30-106%
118-79-6	2,4,6-Tribromophenol	114%	24-140%
4165-60-0	Nitrobenzene-d5	89%	26-122%
321-60-8	2-Fluorobiphenyl	89%	36-112%
1718-51-0	Terphenyl-d14	88%	36-132%

(a) Outside of in house control limits, but within reasonable method recovery limits.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93820A-BS12	3M61253.D	1	05/12/16	JJ	05/11/16	OP93820A	E3M2880

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

JC19996-1, JC19996-3, JC19996-4, JC19996-5, JC19996-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
91-20-3	Naphthalene	1	0.866	87	40-119
123-91-1	1,4-Dioxane	1	0.594	59	20-160

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	91%	24-125%
321-60-8	2-Fluorobiphenyl	101%	19-127%
1718-51-0	Terphenyl-d14	99%	10-119%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93830A-BS12	4M65268.D	1	05/13/16	AD	05/12/16	OP93830A	E4M2919

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

JC19996-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
123-91-1	1,4-Dioxane	33.3	41.2	124* [a]	10-100
91-20-3	Naphthalene	33.3	33.4	100	35-142

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	104%	15-138%
321-60-8	2-Fluorobiphenyl	115%	12-148%
1718-51-0	Terphenyl-d14	91%	10-157%

(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: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93820-MS	M124367.D	1	05/12/16	JJ	05/11/16	OP93820	EM5261
OP93820-MSD	M124368.D	1	05/12/16	JJ	05/11/16	OP93820	EM5261
JC19996-4 [a]	M124371.D	1	05/12/16	JJ	05/11/16	OP93820	EM5261

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

JC19996-1, JC19996-3, JC19996-4, JC19996-5, JC19996-6

CAS No.	Compound	JC19996-4 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		109	89.8	83	109	86.7	80	4	49-110/20
59-50-7	4-Chloro-3-methyl phenol	ND		109	86.9	80	109	83.0	76	5	44-121/18
120-83-2	2,4-Dichlorophenol	ND		109	92.8	85	109	88.5	81	5	42-120/19
105-67-9	2,4-Dimethylphenol	ND		109	89.8	83	109	86.0	79	4	33-132/23
51-28-5	2,4-Dinitrophenol	ND		217	194	89	217	187	86	4	21-145/26
534-52-1	4,6-Dinitro-o-cresol	ND		109	96.9	89	109	95.4	88	2	25-134/27
95-48-7	2-Methylphenol	ND		109	87.0	80	109	86.4	79	1	47-112/18
	3&4-Methylphenol	ND		109	80.9	74	109	80.0	74	1	44-113/19
88-75-5	2-Nitrophenol	ND		109	93.2	86	109	89.0	82	5	45-118/20
100-02-7	4-Nitrophenol	ND		109	59.2	54	109	52.7	48	12	23-144/28
87-86-5	Pentachlorophenol	ND		109	90.9	84	109	88.7	82	2	25-151/25
108-95-2	Phenol	ND		109	70.4	65	109	69.8	64	1	22-100/22
58-90-2	2,3,4,6-Tetrachlorophenol	ND		109	85.8	79	109	83.5	77	3	44-122/21
95-95-4	2,4,5-Trichlorophenol	ND		109	80.7	74	109	76.3	70	6	51-124/20
88-06-2	2,4,6-Trichlorophenol	ND		109	84.9	78	109	82.2	76	3	53-120/21
83-32-9	Acenaphthene	ND		109	81.6	75	109	80.2	74	2	52-120/23
208-96-8	Acenaphthylene	ND		109	75.5	69	109	73.5	68	3	50-101/22
98-86-2	Acetophenone	ND		109	86.2	79	109	83.8	77	3	31-141/23
120-12-7	Anthracene	ND		109	80.3	74	109	78.9	73	2	54-117/22
1912-24-9	Atrazine	ND		109	117	108	109	111	102	5	42-152/23
100-52-7	Benzaldehyde	ND		109	97.7	90	109	90.0	83	8	10-164/30
56-55-3	Benzo(a)anthracene	ND		109	81.1	75	109	78.5	72	3	40-123/24
50-32-8	Benzo(a)pyrene	ND		109	78.7	72	109	76.5	70	3	41-127/25
205-99-2	Benzo(b)fluoranthene	ND		109	81.6	75	109	80.8	74	1	39-127/27
191-24-2	Benzo(g,h,i)perylene	ND		109	79.8	73	109	76.6	70	4	34-128/28
207-08-9	Benzo(k)fluoranthene	ND		109	83.1	76	109	79.8	73	4	39-122/26
101-55-3	4-Bromophenyl phenyl ether	ND		109	93.9	86	109	92.5	85	2	51-124/23
85-68-7	Butyl benzyl phthalate	ND		109	79.2	73	109	76.5	70	3	21-146/28
92-52-4	1,1'-Biphenyl	ND		109	83.4	77	109	80.8	74	3	27-142/23
91-58-7	2-Chloronaphthalene	ND		109	79.9	74	109	77.8	72	3	51-109/23
106-47-8	4-Chloroaniline	ND		109	58.1	53	109	54.9	51	6	10-110/55
86-74-8	Carbazole	ND		109	88.3	81	109	87.7	81	1	52-116/22
105-60-2	Caprolactam	ND		109	42.8	39	109	42.3	39	1	10-106/34
218-01-9	Chrysene	ND		109	78.8	72	109	76.3	70	3	41-128/24
111-91-1	bis(2-Chloroethoxy)methane	ND		109	87.6	81	109	85.4	79	3	46-120/24
111-44-4	bis(2-Chloroethyl)ether	ND		109	94.7	87	109	91.8	84	3	42-123/28

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93820-MS	M124367.D	1	05/12/16	JJ	05/11/16	OP93820	EM5261
OP93820-MSD	M124368.D	1	05/12/16	JJ	05/11/16	OP93820	EM5261
JC19996-4 [a]	M124371.D	1	05/12/16	JJ	05/11/16	OP93820	EM5261

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

JC19996-1, JC19996-3, JC19996-4, JC19996-5, JC19996-6

CAS No.	Compound	JC19996-4 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		109	80.3	74	109	78.8	72	2	41-117/25
7005-72-3	4-Chlorophenyl phenyl ether	ND		109	84.3	78	109	81.8	75	3	48-121/21
121-14-2	2,4-Dinitrotoluene	ND		109	85.9	79	109	84.3	78	2	54-123/27
606-20-2	2,6-Dinitrotoluene	ND		109	88.1	81	109	85.6	79	3	55-125/26
91-94-1	3,3'-Dichlorobenzidine	ND		217	122	56	217	118	54	3	10-107/47
123-91-1	1,4-Dioxane	1.4	B	109	63.4	57	109	63.0	57	1	10-119/31
53-70-3	Dibenzo(a,h)anthracene	ND		109	83.2	77	109	79.3	73	5	35-130/27
132-64-9	Dibenzofuran	ND		109	82.2	76	109	79.6	73	3	53-112/22
84-74-2	Di-n-butyl phthalate	ND		109	86.8	80	109	86.5	80	0	38-129/23
117-84-0	Di-n-octyl phthalate	ND		109	78.5	72	109	73.5	68	7	35-145/26
84-66-2	Diethyl phthalate	ND		109	81.3	75	109	78.8	72	3	16-136/30
131-11-3	Dimethyl phthalate	ND		109	83.0	76	109	80.6	74	3	10-143/39
117-81-7	bis(2-Ethylhexyl)phthalate	ND		109	77.1	71	109	74.9	69	3	34-141/28
206-44-0	Fluoranthene	ND		109	87.8	81	109	86.5	80	1	47-123/24
86-73-7	Fluorene	ND		109	81.8	75	109	79.5	73	3	56-117/22
118-74-1	Hexachlorobenzene	ND		109	91.6	84	109	90.8	84	1	46-125/24
87-68-3	Hexachlorobutadiene	ND		109	85.1	78	109	83.5	77	2	26-121/24
77-47-4	Hexachlorocyclopentadiene	ND		217	126	58	217	119	55	6	10-133/31
67-72-1	Hexachloroethane	ND		109	78.9	73	109	77.7	71	2	35-111/26
193-39-5	Indeno(1,2,3-cd)pyrene	ND		109	98.0	90	109	93.8	86	4	32-130/30
78-59-1	Isophorone	ND		109	93.0	86	109	89.2	82	4	47-126/23
90-12-0	1-Methylnaphthalene	ND		109	85.2	78	109	80.7	74	5	34-124/25
91-57-6	2-Methylnaphthalene	ND		109	83.4	77	109	80.2	74	4	34-123/24
88-74-4	2-Nitroaniline	ND		109	85.0	78	109	83.2	77	2	46-137/23
99-09-2	3-Nitroaniline	ND		109	59.6	55	109	57.4	53	4	10-110/50
100-01-6	4-Nitroaniline	ND		109	79.8	73	109	76.6	70	4	38-118/25
98-95-3	Nitrobenzene	ND		109	90.9	84	109	86.5	80	5	35-130/25
621-64-7	N-Nitroso-di-n-propylamine	ND		109	81.0	75	109	78.6	72	3	45-123/22
86-30-6	N-Nitrosodiphenylamine	ND		109	82.8	76	109	83.0	76	0	46-123/24
85-01-8	Phenanthrene	ND		109	84.3	78	109	83.0	76	2	48-121/23
129-00-0	Pyrene	ND		109	81.4	75	109	77.4	71	5	43-124/26
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		109	103	95	109	100	92	3	25-142/24

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93820-MS	M124367.D	1	05/12/16	JJ	05/11/16	OP93820	EM5261
OP93820-MSD	M124368.D	1	05/12/16	JJ	05/11/16	OP93820	EM5261
JC19996-4 [a]	M124371.D	1	05/12/16	JJ	05/11/16	OP93820	EM5261

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

JC19996-1, JC19996-3, JC19996-4, JC19996-5, JC19996-6

CAS No.	Surrogate Recoveries	MS	MSD	JC19996-4	Limits
367-12-4	2-Fluorophenol	70%	67%	43%	14-88%
4165-62-2	Phenol-d5	57%	56%	28%	10-110%
118-79-6	2,4,6-Tribromophenol	94%	94%	85%	39-149%
4165-60-0	Nitrobenzene-d5	83%	78%	69%	32-128%
321-60-8	2-Fluorobiphenyl	78%	74%	71%	35-119%
1718-51-0	Terphenyl-d14	80%	76%	68%	10-126%

(a) There is no sample left to reextract.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93830-MS	M124432.D	1	05/13/16	AD	05/12/16	OP93830	EM5264
OP93830-MSD	M124433.D	1	05/13/16	AD	05/12/16	OP93830	EM5264
JC19983-15Q [a]	M124434.D	1	05/13/16	AD	05/12/16	OP93830	EM5264

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

JC19996-2

CAS No.	Compound	JC19983-15Q 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		2020	1480	73	2020	1380	68	7	33-106/35
59-50-7	4-Chloro-3-methyl phenol	ND		2020	1500	74	2020	1560	77	4	27-124/34
120-83-2	2,4-Dichlorophenol	ND		2020	1480	73	2020	1530	76	3	25-122/34
105-67-9	2,4-Dimethylphenol	ND		2020	1200	60	2020	1190	59	1	23-133/34
51-28-5	2,4-Dinitrophenol	ND		4030	3040	75	4040	2970	73	2	10-110/51
534-52-1	4,6-Dinitro-o-cresol	ND		2020	1850	92	2020	1780	88	4	10-113/49
95-48-7	2-Methylphenol	ND		2020	1470	73	2020	1380	68	6	32-111/34
	3&4-Methylphenol	ND		2020	1490	74	2020	1290	64	14	32-113/34
88-75-5	2-Nitrophenol	ND		2020	1370	68	2020	1330	66	3	17-118/37
100-02-7	4-Nitrophenol	ND		2020	1350	67	2020	1280	63	5	14-154/39
87-86-5	Pentachlorophenol	ND		2020	1950	97	2020	1730	86	12	10-131/43
108-95-2	Phenol	ND		2020	1540	76	2020	1420	70	8	25-112/33
58-90-2	2,3,4,6-Tetrachlorophenol	ND		2020	1770	88	2020	1740	86	2	19-125/37
95-95-4	2,4,5-Trichlorophenol	ND		2020	1590	79	2020	1540	76	3	30-125/35
88-06-2	2,4,6-Trichlorophenol	ND		2020	1680	83	2020	1580	78	6	26-126/35
83-32-9	Acenaphthene	ND		2020	1510	75	2020	1390	69	8	34-125/36
208-96-8	Acenaphthylene	ND		2020	1400	69	2020	1310	65	7	28-113/34
98-86-2	Acetophenone	ND		2020	1390	69	2020	1290	64	7	26-120/34
120-12-7	Anthracene	ND		2020	1550	77	2020	1550	77	0	31-131/41
1912-24-9	Atrazine	ND		2020	1920	95	2020	2040	101	6	34-138/36
56-55-3	Benzo(a)anthracene	ND		2020	1510	75	2020	1530	76	1	23-136/43
50-32-8	Benzo(a)pyrene	ND		2020	1540	76	2020	1520	75	1	22-144/42
205-99-2	Benzo(b)fluoranthene	ND		2020	1540	76	2020	1460	72	5	18-145/43
191-24-2	Benzo(g,h,i)perylene	ND		2020	1590	79	2020	1520	75	5	20-138/43
207-08-9	Benzo(k)fluoranthene	ND		2020	1610	80	2020	1610	80	0	27-129/43
101-55-3	4-Bromophenyl phenyl ether	ND		2020	1790	89	2020	1800	89	1	39-124/33
85-68-7	Butyl benzyl phthalate	ND		2020	1470	73	2020	1470	73	0	27-143/35
92-52-4	1,1'-Biphenyl	ND		2020	1560	77	2020	1410	70	10	33-116/32
100-52-7	Benzaldehyde	ND		2020	1520	75	2020	1440	71	5	20-129/34
91-58-7	2-Chloronaphthalene	ND		2020	1490	74	2020	1340	66	11	38-110/32
106-47-8	4-Chloroaniline	ND		2020	706	35	2020	708	35	0	10-110/49
86-74-8	Carbazole	ND		2020	1650	82	2020	1660	82	1	27-129/38
105-60-2	Caprolactam	ND		2020	1260	63	2020	1490	74	17	18-127/35
218-01-9	Chrysene	ND		2020	1570	78	2020	1550	77	1	21-142/43
111-91-1	bis(2-Chloroethoxy)methane	ND		2020	1320	66	2020	1360	67	3	32-116/33
111-44-4	bis(2-Chloroethyl)ether	ND		2020	2560	127* [b]	2020	1550	77	49* [c]	30-113/37

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93830-MS	M124432.D	1	05/13/16	AD	05/12/16	OP93830	EM5264
OP93830-MSD	M124433.D	1	05/13/16	AD	05/12/16	OP93830	EM5264
JC19983-15Q [a]	M124434.D	1	05/13/16	AD	05/12/16	OP93830	EM5264

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

JC19996-2

CAS No.	Compound	JC19983-15Q 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		2020	1270	63	2020	1170	58	8	28-110/33
7005-72-3	4-Chlorophenyl phenyl ether	ND		2020	1640	81	2020	1580	78	4	38-119/33
121-14-2	2,4-Dinitrotoluene	ND		2020	1600	79	2020	1560	77	3	28-126/36
606-20-2	2,6-Dinitrotoluene	ND		2020	1610	80	2020	1570	78	3	31-126/34
91-94-1	3,3'-Dichlorobenzidine	ND		4030	2300	57	4040	2470	61	7	10-115/44
53-70-3	Dibenzo(a,h)anthracene	ND		2020	1630	81	2020	1550	77	5	25-135/41
132-64-9	Dibenzofuran	ND		2020	1570	78	2020	1490	74	5	30-125/35
84-74-2	Di-n-butyl phthalate	ND		2020	1610	80	2020	1660	82	3	32-131/34
117-84-0	Di-n-octyl phthalate	ND		2020	1430	71	2020	1420	70	1	28-144/35
84-66-2	Diethyl phthalate	ND		2020	1520	75	2020	1550	77	2	35-124/32
131-11-3	Dimethyl phthalate	ND		2020	1550	77	2020	1520	75	2	36-121/33
117-81-7	bis(2-Ethylhexyl)phthalate	ND		2020	1510	75	2020	1540	76	2	25-146/35
206-44-0	Fluoranthene	ND		2020	1640	81	2020	1680	83	2	15-143/46
86-73-7	Fluorene	ND		2020	1570	78	2020	1510	75	4	30-129/37
118-74-1	Hexachlorobenzene	ND		2020	1780	88	2020	1770	88	1	34-125/34
87-68-3	Hexachlorobutadiene	ND		2020	1360	67	2020	1380	68	1	29-120/34
77-47-4	Hexachlorocyclopentadiene	ND		4030	2900	72	4040	2400	59	19	10-127/46
67-72-1	Hexachloroethane	ND		2020	1330	66	2020	1190	59	11	21-109/38
193-39-5	Indeno(1,2,3-cd)pyrene	ND		2020	1930	96	2020	1840	91	5	23-141/44
78-59-1	Isophorone	ND		2020	1350	67	2020	1410	70	4	31-124/32
90-12-0	1-Methylnaphthalene	ND		2020	1370	68	2020	1360	67	1	24-122/33
91-57-6	2-Methylnaphthalene	ND		2020	1310	65	2020	1320	65	1	21-125/33
88-74-4	2-Nitroaniline	ND		2020	1600	79	2020	1500	74	6	29-138/33
99-09-2	3-Nitroaniline	ND		2020	1280	64	2020	1340	66	5	12-112/38
100-01-6	4-Nitroaniline	ND		2020	1460	72	2020	1440	71	1	21-117/38
98-95-3	Nitrobenzene	ND		2020	1340	66	2020	1350	67	1	28-118/32
621-64-7	N-Nitroso-di-n-propylamine	ND		2020	1310	65	2020	1200	59	9	26-121/34
86-30-6	N-Nitrosodiphenylamine	ND		2020	1620	80	2020	1640	81	1	24-142/35
85-01-8	Phenanthrene	ND		2020	1600	79	2020	1600	79	0	14-144/44
129-00-0	Pyrene	ND		2020	1550	77	2020	1540	76	1	16-147/46
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		2020	1970	98	2020	1720	85	14	37-115/32

CAS No.	Surrogate Recoveries	MS	MSD	JC19983-15Q	Limits
367-12-4	2-Fluorophenol	74%	65%		30-106%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93830-MS	M124432.D	1	05/13/16	AD	05/12/16	OP93830	EM5264
OP93830-MSD	M124433.D	1	05/13/16	AD	05/12/16	OP93830	EM5264
JC19983-15Q [a]	M124434.D	1	05/13/16	AD	05/12/16	OP93830	EM5264

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

JC19996-2

CAS No.	Surrogate Recoveries	MS	MSD	JC19983-15Q	Limits
4165-62-2	Phenol-d5	70%	66%		30-106%
118-79-6	2,4,6-Tribromophenol	104%	100%		24-140%
4165-60-0	Nitrobenzene-d5	65%	66%		26-122%
321-60-8	2-Fluorobiphenyl	82%	72%		36-112%
1718-51-0	Terphenyl-d14	82%	82%		36-132%

(a) Sample used for QC purposes only.
(b) Outside control limits due to matrix interference.
(c) Outside of in house control limits.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93820A-MS	3M61254.D	1	05/12/16	JJ	05/11/16	OP93820A	E3M2880
OP93820A-MSD	3M61255.D	1	05/12/16	JJ	05/11/16	OP93820A	E3M2880
JC19949-1 [a]	3M61268.D	1	05/12/16	JJ	05/11/16	OP93820A	E3M2880

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

JC19996-1, JC19996-3, JC19996-4, JC19996-5, JC19996-6

CAS No.	Compound	JC19949-1 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		2.11	1.84	87	2.11	1.80	86	2	23-140/36
123-91-1	1,4-Dioxane	2.00	B	2.11	5.25	154	2.11	4.72	129	11	20-160/30

CAS No.	Surrogate Recoveries	MS	MSD	JC19949-1	Limits
4165-60-0	Nitrobenzene-d5	92%	87%	87%	24-125%
321-60-8	2-Fluorobiphenyl	104%	101%	90%	19-127%
1718-51-0	Terphenyl-d14	103%	97%	89%	10-119%

(a) There is compound contamination in MB. There's no sample left to re-extract.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93830A-MS	4M65364.D	1	05/18/16	LK	05/12/16	OP93830A	E4M2925
OP93830A-MSD	4M65270.D	1	05/13/16	AD	05/12/16	OP93830A	E4M2919
JC19996-2	4M65272.D	1	05/13/16	AD	05/12/16	OP93830A	E4M2919

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

JC19996-2

CAS No.	Compound	JC19996-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
123-91-1	1,4-Dioxane	ND		43	19.6	46* [a]	43.2	16.9	39* [a]	15	50-150/30
91-20-3	Naphthalene	ND		43	40.3	94	43.2	31.6	73	24	10-190/36

CAS No.	Surrogate Recoveries	MS	MSD	JC19996-2	Limits
4165-60-0	Nitrobenzene-d5	97%	76%	77%	15-138%
321-60-8	2-Fluorobiphenyl	101%	89%	101%	12-148%
1718-51-0	Terphenyl-d14	86%	74%	88%	10-157%

(a) Outside control limits due to matrix interference.

* = Outside of Control Limits.

Instrument Performance Check (DFTPP)

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E2P2547-DFTPP
Lab File ID: 2P58363.D
Instrument ID: GCMS2P
Injection Date: 04/19/16
Injection Time: 15:12

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	31943	49.9		Pass
68	Less than 2.0% of mass 69	547	0.85	(1.87) [a]	Pass
69	Mass 69 relative abundance	29233	45.6		Pass
70	Less than 2.0% of mass 69	136	0.21	(0.47) [a]	Pass
127	40.0 - 60.0% of mass 198	32846	51.3		Pass
197	Less than 1.0% of mass 198	212	0.33		Pass
198	Base peak, 100% relative abundance	64058	100.0		Pass
199	5.0 - 9.0% of mass 198	4365	6.81		Pass
275	10.0 - 30.0% of mass 198	14145	22.1		Pass
365	1.0 - 100.0% of mass 198	1814	2.83		Pass
441	Present, but less than mass 443	6462	10.1	(81.6) [b]	Pass
442	40.0 - 100.0% of mass 198	42236	65.9		Pass
443	17.0 - 23.0% of mass 442	7923	12.4	(18.8) [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
E2P2547-ICC2547	2P58365.D	04/19/16	16:33	01:21	Initial cal 50
E2P2547-IC2547	2P58366.D	04/19/16	16:57	01:45	Initial cal 25
E2P2547-IC2547	2P58367.D	04/19/16	17:21	02:09	Initial cal 80
E2P2547-IC2547	2P58368.D	04/19/16	17:45	02:33	Initial cal 10
E2P2547-IC2547	2P58369.D	04/19/16	18:09	02:57	Initial cal 100
E2P2547-IC2547	2P58370.D	04/19/16	18:33	03:21	Initial cal 5
E2P2547-IC2547	2P58371.D	04/19/16	18:57	03:45	Initial cal 2
E2P2547-IC2547	2P58372.D	04/19/16	19:21	04:09	Initial cal 1

Instrument Performance Check (DFTPP)

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E2P2548-DFTPP
Lab File ID: 2P58373.D
Instrument ID: GCMS2P
Injection Date: 04/19/16
Injection Time: 19:47

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	45494	47.2		Pass
68	Less than 2.0% of mass 69	713	0.74	(1.66) [a]	Pass
69	Mass 69 relative abundance	42984	44.6		Pass
70	Less than 2.0% of mass 69	141	0.15	(0.33) [a]	Pass
127	40.0 - 60.0% of mass 198	47459	49.2		Pass
197	Less than 1.0% of mass 198	230	0.24		Pass
198	Base peak, 100% relative abundance	96445	100.0		Pass
199	5.0 - 9.0% of mass 198	6569	6.81		Pass
275	10.0 - 30.0% of mass 198	19621	20.3		Pass
365	1.0 - 100.0% of mass 198	2274	2.36		Pass
441	Present, but less than mass 443	9130	9.47	(88.4) [b]	Pass
442	40.0 - 100.0% of mass 198	55443	57.5		Pass
443	17.0 - 23.0% of mass 442	10326	10.7	(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
E2P2548-IC2548	2P58374.D	04/19/16	20:00	00:13	Initial cal 100
E2P2548-IC2548	2P58375.D	04/19/16	20:24	00:37	Initial cal 80
E2P2548-ICC2548	2P58376.D	04/19/16	20:47	01:00	Initial cal 50
E2P2548-IC2548	2P58377.D	04/19/16	21:11	01:24	Initial cal 25
E2P2548-IC2548	2P58378.D	04/19/16	21:34	01:47	Initial cal 10
E2P2548-IC2548	2P58379.D	04/19/16	21:57	02:10	Initial cal 5
E2P2548-IC2548	2P58380.D	04/19/16	22:21	02:34	Initial cal 2
E2P2548-IC2548	2P58381.D	04/19/16	22:44	02:57	Initial cal 1
E2P2548-ICV2547	2P58384.D	04/19/16	23:51	04:04	Initial cal verification 50
E2P2548-ICV2547	2P58385.D	04/20/16	00:14	04:27	Initial cal verification 50
E2P2548-ICV2548	2P58385A.D	04/20/16	00:14	04:27	Initial cal verification 50
E2P2548-ICV2547	2P58386.D	04/20/16	00:36	04:49	Initial cal verification 50
E2P2548-ICV2548	2P58386A.D	04/20/16	00:36	04:49	Initial cal verification 50
E2P2548-ICV2548	2P58387.D	04/20/16	00:59	05:12	Initial cal verification 50
E2P2548-ICV2548	2P58388A.D	04/20/16	01:21	05:34	Initial cal verification 50
E2P2548-ICV2547	2P58388.D	04/20/16	01:21	05:34	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E2P2549-DFTPP
Lab File ID: 2P58390.D
Instrument ID: GCMS2P
Injection Date: 04/20/16
Injection Time: 09:38

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	41165	43.0		Pass
68	Less than 2.0% of mass 69	692	0.72	(1.70) [a]	Pass
69	Mass 69 relative abundance	40655	42.5		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	47048	49.2		Pass
197	Less than 1.0% of mass 198	453	0.47		Pass
198	Base peak, 100% relative abundance	95659	100.0		Pass
199	5.0 - 9.0% of mass 198	6243	6.53		Pass
275	10.0 - 30.0% of mass 198	19408	20.3		Pass
365	1.0 - 100.0% of mass 198	2357	2.46		Pass
441	Present, but less than mass 443	8730	9.13	(88.9) [b]	Pass
442	40.0 - 100.0% of mass 198	53344	55.8		Pass
443	17.0 - 23.0% of mass 442	9817	10.3	(18.4) [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
E2P2549-ICV2547	2P58391.D	04/20/16	09:53	00:15	Initial cal verification 50
E2P2549-ICV2547	2P58392.D	04/20/16	10:16	00:38	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E2P2592-DFTPP
Lab File ID: 2P59335.D
Instrument ID: GCMS2P
Injection Date: 05/19/16
Injection Time: 11:41

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	40267	59.0		Pass
68	Less than 2.0% of mass 69	112	0.16	(0.38) [a]	Pass
69	Mass 69 relative abundance	29567	43.3		Pass
70	Less than 2.0% of mass 69	204	0.30	(0.69) [a]	Pass
127	40.0 - 60.0% of mass 198	32920	48.2		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	68251	100.0		Pass
199	5.0 - 9.0% of mass 198	4944	7.24		Pass
275	10.0 - 30.0% of mass 198	16315	23.9		Pass
365	1.0 - 100.0% of mass 198	1328	1.95		Pass
441	Present, but less than mass 443	9668	14.2	(86.5) [b]	Pass
442	40.0 - 100.0% of mass 198	57336	84.0		Pass
443	17.0 - 23.0% of mass 442	11180	16.4	(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
E2P2592-CC2547	2P59336.D	05/19/16	11:53	00:12	Continuing cal 25
OP93830-MB1	2P59337.D	05/19/16	13:00	01:19	Method Blank
ZZZZZZ	2P59338.D	05/19/16	13:31	01:50	(unrelated sample)
ZZZZZZ	2P59339.D	05/19/16	13:55	02:14	(unrelated sample)
ZZZZZZ	2P59340.D	05/19/16	14:19	02:38	(unrelated sample)
ZZZZZZ	2P59341.D	05/19/16	14:43	03:02	(unrelated sample)
ZZZZZZ	2P59342.D	05/19/16	15:07	03:26	(unrelated sample)
ZZZZZZ	2P59343.D	05/19/16	15:31	03:50	(unrelated sample)
ZZZZZZ	2P59344.D	05/19/16	15:55	04:14	(unrelated sample)
ZZZZZZ	2P59345.D	05/19/16	16:19	04:38	(unrelated sample)
ZZZZZZ	2P59346.D	05/19/16	16:43	05:02	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC19996
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: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E3M2880-DFTPP
Lab File ID: 3M61243.D
Instrument ID: GCMS3M
Injection Date: 05/11/16
Injection Time: 23:22

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	314942	39.8		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	406395	51.4		Pass
70	Less than 2.0% of mass 69	2682	0.34	(0.66) [a]	Pass
127	40.0 - 60.0% of mass 198	400878	50.7		Pass
197	Less than 1.0% of mass 198	1251	0.16		Pass
198	Base peak, 100% relative abundance	791162	100.0		Pass
199	5.0 - 9.0% of mass 198	51512	6.51		Pass
275	10.0 - 30.0% of mass 198	182595	23.1		Pass
365	1.0 - 100.0% of mass 198	22518	2.85		Pass
441	Present, but less than mass 443	92468	11.7	(82.6) [b]	Pass
442	40.0 - 100.0% of mass 198	553341	69.9		Pass
443	17.0 - 23.0% of mass 442	111970	14.2	(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
E3M2880-CC2855	3M61244.D	05/11/16	23:49	00:27	Continuing cal 1
OP93813A-MB1	3M61245.D	05/12/16	00:56	01:34	Method Blank
OP93813A-BS12	3M61246.D	05/12/16	01:28	02:06	Blank Spike
OP93813A-MS	3M61247.D	05/12/16	02:00	02:38	Matrix Spike
OP93813A-MSD	3M61248.D	05/12/16	02:33	03:11	Matrix Spike Duplicate
ZZZZZZ	3M61249.D	05/12/16	03:05	03:43	(unrelated sample)
JC19935-2	3M61250.D	05/12/16	03:37	04:15	(used for QC only; not part of job JC19996)
ZZZZZZ	3M61251.D	05/12/16	04:09	04:47	(unrelated sample)
OP93820A-MB1	3M61252.D	05/12/16	04:42	05:20	Method Blank
OP93820A-BS12	3M61253.D	05/12/16	05:14	05:52	Blank Spike
OP93820A-MS	3M61254.D	05/12/16	05:46	06:24	Matrix Spike
OP93820A-MSD	3M61255.D	05/12/16	06:18	06:56	Matrix Spike Duplicate
JC19996-1	3M61256.D	05/12/16	06:50	07:28	S-35D
JC19996-3	3M61257.D	05/12/16	07:22	08:00	RA-6-GWS
JC19996-4	3M61258.D	05/12/16	07:54	08:32	S41D
JC19996-5	3M61259.D	05/12/16	08:26	09:04	S42D
JC19996-6	3M61260.D	05/12/16	08:58	09:36	RA20-GWS
OP93815A-MB1	3M61263.D	05/12/16	09:42	10:20	Method Blank
OP93815A-BS12	3M61264.D	05/12/16	10:15	10:53	Blank Spike

Instrument Performance Check (DFTPP)

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample:	E3M2880-DFTPP	**Injection Date:**	05/11/16
Lab File ID:	3M61243.D	**Injection Time:**	23:22
Instrument ID:	GCMS3M		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
C45739-7	3M61265.D	05/12/16	10:47	11:25	(used for QC only; not part of job JC19996)
JC19949-1	3M61268.D	05/12/16	11:19	11:57	(used for QC only; not part of job JC19996)

Instrument Performance Check (DFTPP)

Job Number: JC19996
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: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E4M2919-DFTPP
Lab File ID: 4M65259.D
Instrument ID: GCMS4M
Injection Date: 05/13/16
Injection Time: 10:46

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	267568	45.0		Pass
68	Less than 2.0% of mass 69	3011	0.51	(1.17) [a]	Pass
69	Mass 69 relative abundance	258244	43.4		Pass
70	Less than 2.0% of mass 69	958	0.16	(0.37) [a]	Pass
127	40.0 - 60.0% of mass 198	275968	46.4		Pass
197	Less than 1.0% of mass 198	2955	0.50		Pass
198	Base peak, 100% relative abundance	594795	100.0		Pass
199	5.0 - 9.0% of mass 198	40837	6.87		Pass
275	10.0 - 30.0% of mass 198	155237	26.1		Pass
365	1.0 - 100.0% of mass 198	22048	3.71		Pass
441	Present, but less than mass 443	73187	12.3	(73.6) [b]	Pass
442	40.0 - 100.0% of mass 198	503552	84.7		Pass
443	17.0 - 23.0% of mass 442	99483	16.7	(19.8) [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
E4M2919-CC2881	4M65260.D	05/13/16	11:15	00:29	Continuing cal 1.0
OP93631A-MB1	4M65261.D	05/13/16	12:05	01:19	Method Blank
OP93631A-BS12	4M65262.D	05/13/16	12:35	01:49	Blank Spike
OP93631A-MS	4M65263.D	05/13/16	13:06	02:20	Matrix Spike
OP93631A-MSD	4M65264.D	05/13/16	13:36	02:50	Matrix Spike Duplicate
ZZZZZZ	4M65265.D	05/13/16	14:07	03:21	(unrelated sample)
JC19535-3	4M65266.D	05/13/16	14:37	03:51	(used for QC only; not part of job JC19996)
ZZZZZZ	4M65267.D	05/13/16	15:08	04:22	(unrelated sample)
OP93830A-BS12	4M65268.D	05/13/16	15:38	04:52	Blank Spike
OP93830A-MSD	4M65270.D	05/13/16	16:39	05:53	Matrix Spike Duplicate
OP93830A-MB1	4M65271.D	05/13/16	17:10	06:24	Method Blank
JC19996-2	4M65272.D	05/13/16	17:41	06:55	RA-20 (6.5-7.5)
OP93835A-MB1	4M65273.D	05/13/16	18:11	07:25	Method Blank
OP93835A-BS12	4M65274.D	05/13/16	18:42	07:56	Blank Spike
OP93835A-MS	4M65275.D	05/13/16	19:12	08:26	Matrix Spike
OP93835A-MSD	4M65276.D	05/13/16	19:43	08:57	Matrix Spike Duplicate
JC19950-3	4M65277.D	05/13/16	20:13	09:27	(used for QC only; not part of job JC19996)
ZZZZZZ	4M65278.D	05/13/16	20:44	09:58	(unrelated sample)
ZZZZZZ	4M65279.D	05/13/16	21:14	10:28	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E4M2919-DFTPP
Lab File ID: 4M65259.D
Instrument ID: GCMS4M
Injection Date: 05/13/16
Injection Time: 10:46

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	4M65280.D	05/13/16	21:45	10:59	(unrelated sample)
ZZZZZZ	4M65281.D	05/13/16	22:15	11:29	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E4M2925-DFTPP
Lab File ID: 4M65348.D
Instrument ID: GCMS4M
Injection Date: 05/18/16
Injection Time: 12:41

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	452251	45.2		Pass
68	Less than 2.0% of mass 69	6586	0.66	(1.51) [a]	Pass
69	Mass 69 relative abundance	436557	43.6		Pass
70	Less than 2.0% of mass 69	887	0.09	(0.20) [a]	Pass
127	40.0 - 60.0% of mass 198	475349	47.5		Pass
197	Less than 1.0% of mass 198	3754	0.37		Pass
198	Base peak, 100% relative abundance	1001067	100.0		Pass
199	5.0 - 9.0% of mass 198	68275	6.82		Pass
275	10.0 - 30.0% of mass 198	248811	24.9		Pass
365	1.0 - 100.0% of mass 198	33336	3.33		Pass
441	Present, but less than mass 443	127885	12.8	(73.0) [b]	Pass
442	40.0 - 100.0% of mass 198	882304	88.1		Pass
443	17.0 - 23.0% of mass 442	175221	17.5	(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
E4M2925-CC2881	4M65349.D	05/18/16	12:52	00:11	Continuing cal 1
OP93756A-MB1	4M65350.D	05/18/16	13:24	00:43	Method Blank
ZZZZZZ	4M65351.D	05/18/16	13:54	01:13	(unrelated sample)
ZZZZZZ	4M65352.D	05/18/16	14:24	01:43	(unrelated sample)
OP93884A-MB1	4M65353.D	05/18/16	14:55	02:14	Method Blank
OP93884A-BS12	4M65354.D	05/18/16	15:25	02:44	Blank Spike
ZZZZZZ	4M65355.D	05/18/16	15:55	03:14	(unrelated sample)
ZZZZZZ	4M65356.D	05/18/16	16:26	03:45	(unrelated sample)
ZZZZZZ	4M65357.D	05/18/16	16:56	04:15	(unrelated sample)
ZZZZZZ	4M65359.D	05/18/16	17:57	05:16	(unrelated sample)
ZZZZZZ	4M65360.D	05/18/16	18:27	05:46	(unrelated sample)
ZZZZZZ	4M65361.D	05/18/16	18:58	06:17	(unrelated sample)
ZZZZZZ	4M65363.D	05/18/16	19:58	07:17	(unrelated sample)
OP93830A-MS	4M65364.D	05/18/16	20:29	07:48	Matrix Spike
OP93986A-MB1	4M65365.D	05/18/16	20:59	08:18	Method Blank
OP93986A-BS12	4M65366.D	05/18/16	21:29	08:48	Blank Spike
ZZZZZZ	4M65367.D	05/18/16	22:00	09:19	(unrelated sample)
ZZZZZZ	4M65368.D	05/18/16	22:30	09:49	(unrelated sample)
JC20109-2	4M65369.D	05/18/16	23:01	10:20	(used for QC only; not part of job JC19996)

Instrument Performance Check (DFTPP)

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E4M2925-DFTPP
Lab File ID: 4M65348.D
Instrument ID: GCMS4M
Injection Date: 05/18/16
Injection Time: 12:41

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	4M65370.D	05/18/16	23:31	10:50	(unrelated sample)
ZZZZZZ	4M65371.D	05/19/16	00:01	11:20	(unrelated sample)
OP93986A-MS	4M65372.D	05/19/16	00:32	11:51	Matrix Spike

Instrument Performance Check (DFTPP)

Job Number: JC19996
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: JC19996
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: JC19996
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: JC19996
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: JC19996
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: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EM5261-DFTPP
Lab File ID: M124362.D
Instrument ID: GCMSM
Injection Date: 05/11/16
Injection Time: 22:21

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	39010	35.7		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	53949	49.4		Pass
70	Less than 2.0% of mass 69	277	0.25	(0.51) [a]	Pass
127	40.0 - 60.0% of mass 198	54322	49.7		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	109258	100.0		Pass
199	5.0 - 9.0% of mass 198	7439	6.81		Pass
275	10.0 - 30.0% of mass 198	29306	26.8		Pass
365	1.0 - 100.0% of mass 198	4166	3.81		Pass
441	Present, but less than mass 443	13733	12.6	(81.9) [b]	Pass
442	40.0 - 100.0% of mass 198	85296	78.1		Pass
443	17.0 - 23.0% of mass 442	16777	15.4	(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
EM5261-CC5217	M124363.D	05/11/16	22:37	00:16	Continuing cal 25
EM5261-CC5239	M124364.D	05/11/16	23:06	00:45	Continuing cal 25
OP93820-MB1	M124365.D	05/12/16	00:01	01:40	Method Blank
OP93820-BS1	M124366.D	05/12/16	00:29	02:08	Blank Spike
OP93820-MS	M124367.D	05/12/16	00:58	02:37	Matrix Spike
OP93820-MSD	M124368.D	05/12/16	01:27	03:06	Matrix Spike Duplicate
JC19996-1	M124369.D	05/12/16	01:56	03:35	S-35D
JC19996-3	M124370.D	05/12/16	02:24	04:03	RA-6-GWS
JC19996-4	M124371.D	05/12/16	02:53	04:32	S41D
JC19996-5	M124372.D	05/12/16	03:22	05:01	S42D
JC19996-6	M124373.D	05/12/16	03:50	05:29	RA20-GWS
ZZZZZZ	M124374.D	05/12/16	04:19	05:58	(unrelated sample)
ZZZZZZ	M124376.D	05/12/16	05:15	06:54	(unrelated sample)
ZZZZZZ	M124377.D	05/12/16	05:44	07:23	(unrelated sample)
ZZZZZZ	M124378.D	05/12/16	06:12	07:51	(unrelated sample)
ZZZZZZ	M124379.D	05/12/16	06:41	08:20	(unrelated sample)
ZZZZZZ	M124380.D	05/12/16	07:09	08:48	(unrelated sample)
ZZZZZZ	M124383.D	05/12/16	08:45	10:24	(unrelated sample)
ZZZZZZ	M124384.D	05/12/16	09:14	10:53	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample:	EM5261-DFTPP	**Injection Date:**	05/11/16
Lab File ID:	M124362.D	**Injection Time:**	22:21
Instrument ID:	GCMSM		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	M124385.D	05/12/16	09:43	11:22	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EM5262-DFTPP
Lab File ID: M124390.D
Instrument ID: GCMSM
Injection Date: 05/12/16
Injection Time: 12:08

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	55711	38.3		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	73476	50.5		Pass
70	Less than 2.0% of mass 69	596	0.41	(0.81) [a]	Pass
127	40.0 - 60.0% of mass 198	72864	50.1		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	145386	100.0		Pass
199	5.0 - 9.0% of mass 198	9825	6.76		Pass
275	10.0 - 30.0% of mass 198	39410	27.1		Pass
365	1.0 - 100.0% of mass 198	6151	4.23		Pass
441	Present, but less than mass 443	19498	13.4	(81.9) [b]	Pass
442	40.0 - 100.0% of mass 198	123432	84.9		Pass
443	17.0 - 23.0% of mass 442	23808	16.4	(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
EM5262-CC5217	M124391.D	05/12/16	12:22	00:14	Continuing cal 50
EM5262-CC5239	M124392.D	05/12/16	12:51	00:43	Continuing cal 50
JC19996-3	M124393.D	05/12/16	13:20	01:12	RA-6-GWS
JC19996-5	M124394.D	05/12/16	13:49	01:41	S42D
ZZZZZZ	M124395.D	05/12/16	14:18	02:10	(unrelated sample)
ZZZZZZ	M124396.D	05/12/16	14:47	02:39	(unrelated sample)
ZZZZZZ	M124397.D	05/12/16	15:16	03:08	(unrelated sample)
OP93827A-MB1	M124398.D	05/12/16	15:46	03:38	Method Blank
OP93827A-BS1	M124399.D	05/12/16	16:15	04:07	Blank Spike
OP93827A-BSD	M124400.D	05/12/16	16:44	04:36	Blank Spike Duplicate
ZZZZZZ	M124401.D	05/12/16	17:12	05:04	(unrelated sample)
ZZZZZZ	M124402.D	05/12/16	17:42	05:34	(unrelated sample)
ZZZZZZ	M124403.D	05/12/16	18:11	06:03	(unrelated sample)
ZZZZZZ	M124404.D	05/12/16	18:40	06:32	(unrelated sample)
ZZZZZZ	M124405.D	05/12/16	19:09	07:01	(unrelated sample)
ZZZZZZ	M124406.D	05/12/16	19:38	07:30	(unrelated sample)
ZZZZZZ	M124407.D	05/12/16	20:07	07:59	(unrelated sample)
ZZZZZZ	M124408.D	05/12/16	20:36	08:28	(unrelated sample)
ZZZZZZ	M124409.D	05/12/16	21:05	08:57	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EM5262-DFTPP
Lab File ID: M124390.D
Instrument ID: GCMSM
Injection Date: 05/12/16
Injection Time: 12:08

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	M124410.D	05/12/16	21:34	09:26	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC19996
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
ZZZZZZ	M124424.D	05/13/16	11:10	01:50	(unrelated sample)
ZZZZZZ	M124425.D	05/13/16	11:38	02:18	(unrelated sample)
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 JC19996)
JC19996-2	M124435.D	05/13/16	16:56	07:36	RA-20 (6.5-7.5)
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: JC19996
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)

Semivolatile Internal Standard Area Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E2P2592-CC2547	**Injection Date:**	05/19/16
Lab File ID:	2P59336.D	**Injection Time:**	11:53
Instrument ID:	GCMS2P	**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	206714	4.79	705269	5.84	415134	7.29	724519	8.62	777261	11.96	669693	13.98
Upper Limit [a]	413428	5.29	1410538	6.34	830268	7.79	1449038	9.12	1554522	12.46	1339386	14.48
Lower Limit [b]	103357	4.29	352635	5.34	207567	6.79	362260	8.12	388631	11.46	334847	13.48

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
OP93830-MB1	157070	4.79	567230	5.84	323321	7.29	542544	8.61	555343	11.96	459186	13.97
ZZZZZZ	163598	4.79	544466	5.84	320561	7.29	539329	8.62	543154	11.97	487021	13.99
ZZZZZZ	197177	4.79	665226	5.84	372893	7.29	614430	8.62	573064	11.98	496866	14.00
ZZZZZZ	181352	4.79	608427	5.84	349145	7.29	591382	8.62	557819	11.98	474339	14.00
ZZZZZZ	201917	4.79	679161	5.85	379691	7.29	647598	8.63	602192	11.98	506801	14.00
ZZZZZZ	177811	4.79	619100	5.85	332442	7.29	559604	8.63	513599	11.99	440026	14.01
ZZZZZZ	171925	4.79	618642	5.85	364444	7.29	618071	8.63	561229	11.99	468504	14.01
ZZZZZZ	184949	4.79	610139	5.85	343168	7.30	574008	8.63	517044	12.00	441415	14.02
ZZZZZZ	212601	4.80	723228	5.85	417105	7.30	713952	8.63	624823	12.00	507693	14.02
ZZZZZZ	191627	4.80	652449	5.86	375479	7.30	646295	8.63	579719	12.00	492328	14.02

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: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E3M2880-CC2855	**Injection Date:**	05/11/16
Lab File ID:	3M61244.D	**Injection Time:**	23:49
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	663509	10.34	996885	13.35	1797179	17.56	1441174	22.17
Upper Limit [a]	1327018	10.84	1993770	13.85	3594358	18.06	2882348	22.67
Lower Limit [b]	331755	9.84	498443	12.85	898590	17.06	720587	21.67

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP93813A-MB1	609386	10.34	834798	13.34	1399075	17.56	1150338	22.17
OP93813A-BS12	663892	10.34	898459	13.34	1453845	17.56	1185633	22.17
OP93813A-MS	645093	10.34	915715	13.35	1532313	17.56	1185918	22.17
OP93813A-MSD	667253	10.34	938171	13.34	1516232	17.56	1171122	22.17
ZZZZZZ	636280	10.34	860006	13.34	1410080	17.56	1150080	22.17
JC19935-2	625009	10.34	898793	13.34	1454157	17.56	1167640	22.17
ZZZZZZ	619157	10.34	857926	13.34	1384486	17.56	1105533	22.17
OP93820A-MB1	553385	10.34	754196	13.34	1257521	17.56	1041913	22.17
OP93820A-BS12	600604	10.34	799813	13.34	1303660	17.56	1026573	22.17
OP93820A-MS	599503	10.34	785767	13.34	1281247	17.56	999586	22.17
OP93820A-MSD	660408	10.34	873084	13.34	1403374	17.56	1130229	22.17
JC19996-1	526719	10.34	686466	13.34	1114241	17.56	905718	22.17
JC19996-3	583336	10.34	788644	13.34	1282655	17.56	1040616	22.17
JC19996-4 [c]	497146	10.34	680694	13.34	1078896	17.56	910076	22.17
JC19996-5	515738	10.34	706993	13.34	1141477	17.56	924629	22.17
JC19996-6	510913	10.34	691515	13.34	1120992	17.56	895142	22.17
OP93815A-MB1	643824	10.34	860065	13.34	1370829	17.56	1050274	22.17
OP93815A-BS12	623214	10.34	815319	13.34	1248932	17.56	981419	22.17
C45739-7	597568	10.34	784687	13.34	1274752	17.56	989519	22.17
JC19949-1	508755	10.34	696192	13.35	1143665	17.56	902523	22.17

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.
(c) There is no sample left to reextract.

Semivolatile Internal Standard Area Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E4M2919-CC2881	**Injection Date:**	05/13/16
Lab File ID:	4M65260.D	**Injection Time:**	11:15
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	320073	10.51	608916	13.49	1032609	17.69	795233	22.28
Upper Limit [a]	640146	11.01	1217832	13.99	2065218	18.19	1590466	22.78
Lower Limit [b]	160037	10.01	304458	12.99	516305	17.19	397617	21.78

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP93631A-MB1	205963	10.51	378182	13.49	611646	17.69	468548	22.28
OP93631A-BS12	299276	10.51	575785	13.49	1009900	17.69	765596	22.28
OP93631A-MS	256178	10.51	463987	13.49	767383	17.69	582791	22.28
OP93631A-MSD	278637	10.51	501271	13.49	830863	17.69	635342	22.28
ZZZZZZ	297461	10.51	473643	13.49	802689	17.69	627022	22.28
JC19535-3	275777	10.51	505240	13.49	830818	17.69	641885	22.28
ZZZZZZ	250168	10.51	455135	13.49	744021	17.69	575917	22.28
OP93830A-BS12	332814	10.51	591197	13.49	964656	17.69	749180	22.28
OP93830A-MSD	298048	10.51	523336	13.49	837060	17.69	632446	22.28
OP93830A-MB1	284161	10.51	487690	13.49	779249	17.69	579284	22.28
JC19996-2	311324	10.51	547407	13.49	857853	17.69	640626	22.28
OP93835A-MB1	199396	10.51	368828	13.49	583787	17.69	464417	22.28
OP93835A-BS12	182971	10.51	338551	13.49	578548	17.69	452474	22.28
OP93835A-MS	232395	10.51	420935	13.49	693315	17.69	531801	22.28
OP93835A-MSD	231880	10.51	425262	13.49	723630	17.69	553876	22.28
JC19950-3	228173	10.51	417580	13.49	674200	17.69	524142	22.28
ZZZZZZ	246768	10.51	436958	13.49	733010	17.69	563703	22.28
ZZZZZZ	218003	10.51	389024	13.49	669659	17.69	513989	22.28
ZZZZZZ	250919	10.51	439952	13.49	731690	17.69	568055	22.28
ZZZZZZ	245771	10.51	447820	13.49	728821	17.69	562047	22.28

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: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E4M2925-CC2881	**Injection Date:**	05/18/16
Lab File ID:	4M65349.D	**Injection Time:**	12:52
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	305320	10.58	571450	13.56	909134	17.74	716654	22.34
Upper Limit [a]	610640	11.08	1142900	14.06	1818268	18.24	1433308	22.84
Lower Limit [b]	152660	10.08	285725	13.06	454567	17.24	358327	21.84

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP93756A-MB1	339447	10.58	592764	13.56	998648	17.74	813319	22.34
ZZZZZZ	334305	10.58	520337	13.56	438679*	17.74	9213*	22.34
ZZZZZZ	284719	10.58	488642	13.56	847096	17.74	94861*	22.34
OP93884A-MB1	315909	10.58	586856	13.56	905910	17.74	610730	22.34
OP93884A-BS12	274406	10.58	460803	13.56	686343	17.74	533687	22.34
ZZZZZZ	281451	10.58	460956	13.56	625943	17.74	506981	22.34
ZZZZZZ	301079	10.58	513159	13.56	778106	17.74	642653	22.34
ZZZZZZ	293809	10.58	559621	13.56	839461	17.74	655884	22.34
ZZZZZZ	355212	10.58	692666	13.56	1098320	17.76	926280	22.34
ZZZZZZ	284574	10.58	611466	13.56	931370	17.74	748075	22.34
ZZZZZZ	311872	10.58	593251	13.56	977020	17.74	220770*	22.34
ZZZZZZ	299448	10.58	571374	13.56	824437	17.74	670281	22.34
OP93830A-MS	387267	10.58	748486	13.56	908694	17.76	702400	22.34
OP93986A-MB1	324289	10.58	684265	13.56	926544	17.74	765594	22.34
OP93986A-BS12	301327	10.58	567871	13.56	909154	17.74	686444	22.34
ZZZZZZ	276350	10.58	488640	13.56	747734	17.74	634588	22.34
ZZZZZZ	308945	10.58	582513	13.56	893244	17.74	719050	22.34
JC20109-2	311534	10.58	461053	13.56	754668	17.74	637277	22.34
ZZZZZZ	276128	10.58	542669	13.56	857427	17.74	748814	22.34
ZZZZZZ	269829	10.58	549190	13.56	842244	17.74	681130	22.34
OP93986A-MS	261257	10.58	486176	13.56	772179	17.74	623989	22.34

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: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	EM5261-CC5217	**Injection Date:**	05/11/16
Lab File ID:	M124363.D	**Injection Time:**	22:37
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	360297	4.67	1373183	5.79	884401	8.12	1526256	10.75	1789923	15.92	1850721	18.56
Upper Limit [a]	720594	5.17	2746366	6.29	1768802	8.62	3052512	11.25	3579846	16.42	3701442	19.06
Lower Limit [b]	180149	4.17	686592	5.29	442201	7.62	763128	10.25	894962	15.42	925361	18.06

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
OP93820-MB1	400011	4.66	1512422	5.79	985313	8.12	1800015	10.74	2041723	15.92	1989376	18.55
OP93820-BS1	343116	4.67	1257971	5.79	794318	8.12	1363778	10.74	1526236	15.92	1557312	18.55
OP93820-MS	355859	4.66	1287671	5.79	819324	8.12	1397691	10.74	1555851	15.92	1598249	18.55
OP93820-MSD	343057	4.66	1266994	5.79	793594	8.12	1318060	10.74	1500818	15.92	1531623	18.55
JC19996-1	390287	4.66	1511969	5.79	966530	8.12	1744579	10.74	2051417	15.91	2028432	18.55
JC19996-3	416229	4.66	1585727	5.79	1008350	8.12	1811934	10.74	2103071	15.92	2093351	18.55
JC19996-4 [c]	377879	4.66	1445655	5.79	935206	8.12	1682991	10.74	1953629	15.92	1946389	18.55
JC19996-5	382673	4.66	1463201	5.79	955240	8.12	1719168	10.74	2000733	15.91	1971376	18.55
JC19996-6	391638	4.66	1509986	5.79	958859	8.11	1738947	10.74	2028532	15.91	1998566	18.55
ZZZZZZ	396547	4.66	1487577	5.79	978856	8.12	1763566	10.74	2051403	15.91	2043881	18.55
ZZZZZZ	423052	4.66	1636349	5.79	1045398	8.12	1875827	10.74	2165474	15.91	2172877	18.55
ZZZZZZ	412251	4.66	1565788	5.79	1010664	8.12	1811103	10.74	2088605	15.91	2115160	18.54
ZZZZZZ	366933	4.66	1393773	5.79	888380	8.11	1603974	10.74	1820240	15.91	1829724	18.55
ZZZZZZ	367402	4.66	1345413	5.79	806330	8.11	1391007	10.74	1528472	15.91	1514599	18.54
ZZZZZZ	438293	4.66	1676169	5.79	1031236	8.11	1727972	10.73	1912741	15.91	1901546	18.54
ZZZZZZ	405758	4.66	1549521	5.79	996553	8.12	1790899	10.73	2079232	15.91	2095074	18.54
ZZZZZZ	331336	4.66	1198019	5.79	776327	8.11	1324872	10.74	1479199	15.91	1478150	18.55
ZZZZZZ	315233	4.67	1161504	5.79	667608	8.22	1001449	10.91	905730	16.08	1086593	18.72

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.
(c) There is no sample left to reextract.

Semivolatile Internal Standard Area Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	EM5262-CC5217	**Injection Date:**	05/12/16
Lab File ID:	M124391.D	**Injection Time:**	12:22
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	310314	4.65	1149492	5.78	735657	8.11	1298130	10.73	1511737	15.90	1629456	18.53
Upper Limit [a]	620628	5.15	2298984	6.28	1471314	8.61	2596260	11.23	3023474	16.40	3258912	19.03
Lower Limit [b]	155157	4.15	574746	5.28	367829	7.61	649065	10.23	755869	15.40	814728	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
JC19996-3	297313	4.65	1153709	5.78	709096	8.10	1266812	10.73	1476108	15.90	1539634	18.53
JC19996-5	277024	4.65	1047379	5.78	652359	8.10	1164297	10.72	1362384	15.90	1430302	18.53
ZZZZZZ	285959	4.65	1120298	5.78	728672	8.10	1338893	10.72	1584262	15.90	1664822	18.53
ZZZZZZ	267781	4.66	1051039	5.78	685291	8.10	1255554	10.72	1508483	15.90	1595606	18.53
ZZZZZZ	289635	4.65	1152370	5.78	751540	8.10	1384750	10.73	1643743	15.90	1721922	18.53
OP93827A-MB1	331858	4.65	1262875	5.78	794220	8.10	1434100	10.73	1728834	15.90	1812342	18.53
OP93827A-BS1	336170	4.66	1244965	5.78	805603	8.11	1430112	10.72	1704636	15.90	1866763	18.53
OP93827A-BSD	297039	4.65	1101229	5.78	708286	8.10	1226961	10.73	1461683	15.90	1605797	18.53
ZZZZZZ	303705	4.65	1131152	5.78	747087	8.10	1377804	10.73	1628789	15.90	1674411	18.53
ZZZZZZ	329781	4.65	1257447	5.78	804541	8.10	1446043	10.73	1738667	15.90	1800836	18.53
ZZZZZZ	291162	4.66	1090779	5.78	735112	8.10	1337258	10.72	1583880	15.90	1680593	18.53
ZZZZZZ	334547	4.65	1251276	5.78	797002	8.11	1449892	10.73	1823419	15.90	1912196	18.54
ZZZZZZ	328360	4.66	1193675	5.78	740092	8.11	1301687	10.73	1644920	15.90	1746098	18.53
ZZZZZZ	298864	4.66	1131729	5.78	715584	8.11	1276913	10.73	1613411	15.90	1697096	18.53
ZZZZZZ	302280	4.66	1124730	5.78	717893	8.10	1333612	10.72	1592767	15.90	1660944	18.53
ZZZZZZ	357278	4.66	1352409	5.79	784949	8.12	1329114	10.75	1516560	15.91	1583345	18.54
ZZZZZZ	306363	4.65	1142051	5.78	736920	8.11	1342569	10.73	1588904	15.90	1632548	18.53
ZZZZZZ	273194	4.66	1033177	5.78	658672	8.11	1176126	10.73	1458553	15.90	1457778	18.53

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: JC19996
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
ZZZZZZ	446652	4.65	1580069	5.78	934809	8.11	1723748	10.72	1963305	15.89	1915572	18.53
ZZZZZZ	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
JC19996-2	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 Surrogate Recovery Summary

Job Number: JC19996
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
JC19996-1	M124369.D	42	28	93	78	77	71
JC19996-3	M124393.D	23	19	79	72	86	78
JC19996-3	M124370.D	35	26	75	76	68	65
JC19996-4	M124371.D	43	28	85	69	71	68
JC19996-5	M124394.D	0* [a]	0* [a]	0* [a]	0* [a]	0* [a]	0* [a]
JC19996-5	M124372.D	39	28	89	71	70	68
JC19996-6	M124373.D	45	31	90	76	75	71
OP93820-BS1	M124366.D	52	34	97	84	78	78
OP93820-MB1	M124365.D	45	27	96	85	80	76
OP93820-MS	M124367.D	70	57	94	83	78	80
OP93820-MSD	M124368.D	67	56	94	78	74	76

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: JC19996
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
JC19996-2	M124435.D	81	77	93	70	85	81
OP93830-BS1	M124428.D	94	85	114	89	89	88
OP93830-MB1	M124427.D	120* [a]	114* [a]	137	117	123* [a]	109
OP93830-MB1	2P59337.D	87	87	130	111	135* [a]	119
OP93830-MS	M124432.D	74	70	104	65	82	82
OP93830-MSD	M124433.D	65	66	100	66	72	82

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) High percent recoveries and no positive found.

Semivolatile Surrogate Recovery Summary

Job Number: JC19996
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
JC19996-1	3M61256.D	86	101	97
JC19996-3	3M61257.D	81	84	81
JC19996-4	3M61258.D	74	87	93
JC19996-5	3M61259.D	72	85	89
JC19996-6	3M61260.D	74	88	90
OP93820A-BS12	3M61253.D	91	101	99
OP93820A-MB1	3M61252.D	91	99	98
OP93820A-MS	3M61254.D	92	104	103
OP93820A-MSD	3M61255.D	87	101	97

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: JC19996
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
JC19996-2	4M65272.D	77	101	88
OP93830A-BS12	4M65268.D	104	115	91
OP93830A-MB1	4M65271.D	98	114	98
OP93830A-MS	4M65364.D	97	101	86
OP93830A-MSD	4M65270.D	76	89	74

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

Initial Calibration Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E2P2547-ICC2547
Lab FileID: 2P58365.D

Response Factor Report MS2P

Method : C:\MSDCHEM\1\METHODS\M2P2547.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Apr 20 08:52:16 2016
Response via : Initial Calibration

Calibration Files
2 =2p58371.D 5 =2p58370.D 25 =2p58366.D 80 =2p58367.D
100 =2p58369.D 50 =2p58365.D 1 =2p58372.D 10 =2p58368.D

Compound	2	5	25	80	100	50	1	10	Avg	%RSD
1) I 1,4-Dichlorobenzene-d					ISTD					
2) 1,4-Dioxane	0.656	0.747	0.701	0.766	0.749	0.768	0.858	0.634	0.735	9.64
3) Pyridine	1.763	1.833	1.816	1.925	1.896	1.936	1.684	1.690	1.818	5.47
4) N-Nitrosodim	1.000	1.052	1.055	1.168	1.143	1.157	1.040	0.982	1.075	6.73
5) 2-Fluorophen	1.620	1.636	1.605	1.704	1.646	1.673	1.577	1.500	1.620	3.85
6) Indene	2.596	2.570	2.156	1.908	1.795	2.059	2.633	2.252	2.246	14.45
7) Cumene	3.687	3.745	3.502	3.479	3.366	3.583	3.642	3.370	3.547	3.98
8) Phenol-d5	1.894	2.007	1.873	1.918	1.867	1.937	1.910	1.782	1.899	3.39
9) Phenol	2.075	2.078	1.968	2.025	1.921	2.104	2.048	1.877	2.012	4.05
10) Aniline	2.529	2.523	2.295	2.124	2.053	2.207	2.506	2.248	2.311	8.13
11) bis(2-Chloro	1.493	1.527	1.389	1.298	1.242	1.382	1.641	1.372	1.418	9.12
12) 2-Chlorophen	1.622	1.609	1.450	1.332	1.301	1.419	1.565	1.443	1.468	8.26
13) Decane	2.481	2.498	2.171	1.851	1.724	2.058	2.539	2.167	2.186	13.97
14) 1,3-Dichloro	1.776	1.777	1.569	1.475	1.433	1.540	1.791	1.541	1.613	9.05
15) 1,4-Dichloro	1.753	1.731	1.527	1.454	1.403	1.491	1.810	1.531	1.588	9.69
16) Benzyl alcoh	1.009	1.035	0.902	0.827	0.782	0.889	1.035	0.875	0.919	10.51
17) 1,2-Dichloro	1.603	1.652	1.407	1.300	1.248	1.370	1.703	1.453	1.467	11.44
18) Acetophenone	2.136	2.088	1.717	1.489		1.584		1.799	1.802	14.60
19) 2-Methylphen	1.435	1.471	1.229	1.078	1.018	1.154	1.425	1.266	1.259	13.63
20) 2,2'-oxybis(	0.467	0.462	0.391	0.361	0.350	0.379	0.500	0.398	0.413	13.37
21) 3&4-Methylph	1.493	1.532	1.273	1.108	1.053	1.181	1.536	1.337	1.314	14.65
22) n-Nitroso-di	1.086	1.104	0.878	0.776		0.821	1.097	0.938	0.957	14.52
23) Hexachloroet	0.528	0.513	0.461	0.452	0.447	0.454	0.537	0.463	0.482	7.79
24) I Naphthalene-d8					ISTD					
25) Nitrobenzene	0.414	0.444	0.381	0.369	0.353	0.375	0.435	0.383	0.394	8.37
26) Nitrobenzene	0.453	0.450	0.381	0.357	0.340	0.370	0.439	0.394	0.398	11.05
27) Quinoline	0.779	0.769	0.671	0.681	0.664	0.660	0.773	0.677	0.709	7.57
28) Isophorone	0.756	0.802	0.684	0.670	0.653	0.671	0.776	0.688	0.713	7.94
29) 2-Nitropheno	0.198	0.215	0.196	0.192	0.182	0.193	0.203	0.195	0.197	4.79
30) 2,4-Dimethyl	0.379	0.390	0.335	0.327	0.306	0.320	0.388	0.354	0.350	9.32
31) Benzoic acid	0.249	0.272	0.287	0.308	0.303	0.297	0.211	0.265	0.274	11.82
32) bis(2-Chloro	0.496	0.508	0.421	0.397	0.378	0.406	0.505	0.436	0.443	11.79
33) 2,4-Dichloro	0.312	0.334	0.293	0.288	0.278	0.288	0.322	0.293	0.301	6.46
34) 2,6-Dichloro	0.318	0.321	0.266	0.261	0.250	0.260	0.316	0.277	0.284	10.45
35) 1,3,5-Trichl	0.382	0.385	0.326	0.313	0.307	0.320	0.394	0.339	0.346	10.28
36) 1,2,4-Trichl	0.364	0.367	0.312	0.306	0.298	0.310	0.372	0.325	0.332	9.29
37) 1,2,3-Trichl	0.337	0.342	0.294	0.277	0.271	0.283	0.365	0.299	0.309	11.27
38) Naphthalene	1.171	1.169	0.978	0.908	0.871	0.931	1.199	1.016	1.030	12.75
39) 4-Chloroanil	0.492	0.525	0.429	0.391	0.368	0.406	0.513	0.439	0.445	13.11
40) 2,3-Dichloro	0.408	0.418	0.350	0.332	0.319	0.335	0.429	0.361	0.369	11.66
41) Caprolactam	0.118	0.125	0.112	0.117	0.115	0.112	0.114	0.110	0.115	3.93
42) Hexachlorobu	0.178	0.175	0.154	0.158	0.156	0.156	0.181	0.154	0.164	7.14
43) 4-Chloro-3-m	0.327	0.345	0.297	0.297	0.285	0.296	0.328	0.297	0.309	6.95
44) 2-Methylnaph	0.622	0.632	0.556	0.540	0.521	0.542	0.634	0.558	0.576	8.00
45) 1-Methylnaph	0.639	0.661	0.568	0.545	0.520	0.558	0.648	0.582	0.590	8.91

```
46) Dimethylnaph 0.662 0.652 0.550 0.520 0.505 0.522 0.678 0.562 0.581  12.19

47) I   Acenaphthene-d10      ----------------ISTD---------------------
48) Hexachlorocy 0.284 0.323 0.333 0.346 0.349 0.349 0.279 0.312 0.322   8.80
49) 2,4,6-Trichl 0.391 0.406 0.358 0.347 0.339 0.365 0.391 0.362 0.370   6.41
50) 2,4,5-Trichl 0.421 0.442 0.383 0.379 0.375 0.388 0.413 0.387 0.398   5.99
51) 2-Fluorobiph 1.380 1.374 1.174 1.118 1.109 1.183 1.432 1.186 1.245  10.37
52) 2-Chloronaph 1.348 1.321 1.099 1.010 0.996 1.091 1.370 1.156 1.174  12.95
53) Biphenyl     1.662 1.640 1.409 1.293 1.279 1.389 1.679 1.437 1.473  11.13
54) 2-Nitroanili 0.429 0.446 0.401 0.379 0.384 0.399 0.433 0.392 0.408   6.06
55) Dimethylphth 1.385 1.369 1.208 1.169 1.177 1.221 1.459 1.208 1.275   8.77
56) Acenaphthyle 2.101 2.136 1.810 1.744 1.694 1.838 2.107 1.857 1.911   9.24
57) 2,6-Dinitrot 0.261 0.284 0.279 0.274 0.271 0.283 0.247 0.265 0.270   4.64
58) 3-Nitroanili 0.365 0.395 0.350 0.347 0.344 0.354 0.351 0.350 0.357   4.68
59) Acenaphthene 1.295 1.284 1.123 1.063 1.042 1.112 1.332 1.114 1.171   9.77
60) 2,4-Dinitrop 0.055 0.084 0.128 0.151 0.156 0.146 0.040 0.099 0.107  41.83
         ----- Quadratic regression -----                Coefficient =  0.9997
              Response Ratio = -0.01173 + 0.13704 *A + 0.00428 *A^2

61) 4-Nitropheno 0.161 0.172 0.168 0.165 0.165 0.174 0.132 0.155 0.162   8.21
62) Dibenzofuran 1.722 1.739 1.464 1.367 1.334 1.443 1.806 1.505 1.547  11.76
63) 2,4-Dinitrot 0.351 0.379 0.363 0.359 0.355 0.367 0.305 0.357 0.354   6.20
64) 2,3,4,6-Tetr 0.308 0.314 0.288 0.308 0.316 0.305 0.301 0.285 0.303   3.67
65) Diethylphtha 1.405 1.403 1.242 1.193 1.178 1.237 1.456 1.230 1.293   8.48
66) Fluorene     1.413 1.441 1.223 1.166 1.132 1.217 1.457 1.235 1.285  10.15
67) 4-Chlorophen 0.622 0.615 0.522 0.518 0.513 0.526 0.642 0.538 0.562   9.67
68) 4-Nitroanili 0.368 0.406 0.353 0.337 0.331 0.346 0.326 0.354 0.353   7.19

69) I   Phenanthrene-d10      ----------------ISTD---------------------
70) 4,6-Dinitro-       0.097 0.122 0.129 0.127 0.125       0.101 0.117  11.88
71) n-Nitrosodip 0.619 0.605 0.520 0.491 0.477 0.502 0.604 0.515 0.542  10.67
72) 1,2-Diphenyl 1.001 1.010 0.848 0.738 0.698 0.802 0.995 0.874 0.871  14.01
73) 2,4,6-Tribro 0.091 0.091 0.087 0.093 0.094 0.088 0.084 0.082 0.089   4.89
74) 4-Bromopheny 0.217 0.207 0.191 0.204 0.204 0.195 0.220 0.190 0.204   5.56
75) Hexachlorobe 0.232 0.229 0.203 0.215 0.214 0.208 0.242 0.202 0.218   6.80
76) Pentachlorop 0.132 0.147 0.149 0.164 0.162 0.155 0.130 0.139 0.147   8.77
77) Phenanthrene 1.311 1.294 1.114 1.092 1.047 1.093 1.360 1.087 1.175  10.60
78) Anthracene   1.286 1.284 1.131 1.085 1.033 1.097 1.296 1.110 1.165   9.09
79) Carbazole    1.185 1.188 1.056 1.029 0.999 1.036 1.235 1.037 1.096   8.32
80) Di-n-butylph 1.522 1.566 1.460 1.426 1.394 1.446 1.446 1.403 1.458   4.04
81) Fluoranthene 1.295 1.297 1.256 1.317 1.286 1.286 1.300 1.170 1.276   3.62
82) Octadecane   0.574 0.600 0.530 0.438 0.395 0.493 0.549 0.535 0.514  13.38

83) I   Chrysene-d12          ----------------ISTD---------------------
84) Pyrene       1.440 1.476 1.342 1.331 1.302 1.345 1.513 1.297 1.381   6.02
85) Terphenyl-d1 0.823 0.831 0.782 0.809 0.819 0.792 0.839 0.746 0.805   3.81
86) Butylbenzylp 0.659 0.708 0.691 0.694 0.683 0.700 0.642 0.642 0.677   3.86
87) Butyl steara 0.577 0.628 0.629 0.560 0.524 0.609 0.512 0.594 0.579   7.69
88) Benzo[a]anth 1.321 1.347 1.224 1.271 1.250 1.241 1.391 1.164 1.276   5.74
89) 3,3'-Dichlor 0.415 0.454 0.423 0.461 0.457 0.437 0.405 0.403 0.432   5.47
90) Chrysene     1.215 1.254 1.096 1.101 1.083 1.107 1.301 1.075 1.154   7.68
91) bis(2-Ethylh 0.854 0.924 0.873 0.829 0.800 0.864 0.791 0.842 0.847   5.04

92) I   Perylene-d12          ----------------ISTD---------------------
93) Di-n-octylph 1.631 1.928 1.945 1.931 1.896 1.956 1.476 1.791 1.819   9.73
94) Benzo[b]fluo 1.349 1.453 1.340 1.446 1.469 1.399 1.380 1.281 1.390   4.68
95) Benzo[k]fluo 1.294 1.334 1.207 1.145 1.098 1.163 1.289 1.182 1.214   6.85
96) Benzo[a]pyre 1.183 1.261 1.165 1.217 1.205 1.171 1.144 1.088 1.179   4.38
97) Indeno[1,2,3 0.958 1.041 1.012 1.106 1.128 1.036 0.956 0.922 1.020   7.17
98) Dibenz(a,h)a 0.863 1.018 0.897 0.980 1.005 0.931 0.873 0.872 0.930   6.82
```

Initial Calibration Summary

Job Number: JC19996 **Sample:** E2P2547-ICC2547
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2P58365.D
Project: BMSMC, Building 5 Area, PR

```
 99) Dibenz[a,h]a 0.985 1.044 1.019 1.065 1.074 1.040 1.019 0.924 1.021   4.71
100) 7,12-Dimethy 0.550 0.576 0.577 0.599 0.598 0.586 0.514 0.532 0.566   5.55
101) Benzo[g,h,i] 1.061 1.113 1.056 1.123 1.129 1.091 1.072 0.981 1.078   4.48
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          M2P2547.M         Wed Apr 20 16:49:58 2016   RPT1
```

Initial Calibration Verification

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E2P2548-ICV2547
Lab FileID: 2P58384.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\2P2548\2p58384.D          Vial: 12
Acq On    : 19 Apr 2016  11:51 pm                   Operator: sarad
Sample    : icv2547-50                              Inst    : MS2P
Misc      : op92038,e2p2548                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M2P2547.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Wed Apr 20 08:52:16 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	4.91
5	S	2-Fluorophenol	1.620	1.522	6.0	99	0.00	3.80
8	S	Phenol-d5	1.899	1.747	8.0	98	0.00	4.60
24	I	Naphthalene-d8	1.000	1.000	0.0	111	0.00	5.97
25	S	Nitrobenzene-d5	0.394	0.391	0.8	116	0.00	5.37
47	I	Acenaphthene-d10	1.000	1.000	0.0	105	0.00	7.41
51	S	2-Fluorobiphenyl	1.245	1.365	-9.6	121	0.00	6.86
		----------	AvgRF	CCRF	% Dev	----------		
69	I	Phenanthrene-d10	1.000	1.000	0.0	98	0.00	8.76
73	S	2,4,6-Tribromophenol	0.089	0.085	4.5	94	0.00	8.09
83	I	Chrysene-d12	1.000	1.000	0.0	91	0.00	12.13
85	S	Terphenyl-d14	0.805	0.870	-8.1	100	0.00	10.68
92	I	Perylene-d12	1.000	1.000	0.0	85	0.00	14.14

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2p58365aa.D M2P2547.M Wed Apr 20 16:36:21 2016 RPT1

Initial Calibration Verification

Job Number: JC19996 **Sample:** E2P2548-ICV2547
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2P58385.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\2P2548\2p58385.D Vial: 13
Acq On : 20 Apr 2016 12:14 am Operator: sarad
Sample : icv2547-50 Inst : MS2P
Misc : op92038,e2p2548 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M2P2547.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Apr 20 08:52:16 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	4.92
4	t	N-Nitrosodimethylamine	1.075	1.016	5.5	81	-0.02	2.56
11	t	bis(2-Chloroethyl)ether	1.418	1.548	-9.2	103	0.00	4.70
14	t	1,3-Dichlorobenzene	1.613	1.691	-4.8	101	0.00	4.86
15	t	1,4-Dichlorobenzene	1.588	1.647	-3.7	102	0.00	4.93
17	t	1,2-Dichlorobenzene	1.467	1.526	-4.0	102	0.00	5.05
20	t	2,2'-oxybis(1-Chloropropa	0.413	0.394	4.6	95	0.00	5.15
22	t	n-Nitroso-di-n-propylamin	0.957	0.928	3.0	104	0.00	5.25
23	t	Hexachloroethane	0.482	0.480	0.4	97	0.00	5.33
24	I	Naphthalene-d8	1.000	1.000	0.0	88	0.00	5.97
26	t	Nitrobenzene	0.398	0.389	2.3	92	0.00	5.39
28	t	Isophorone	0.713	0.721	-1.1	94	0.00	5.59
32	t	bis(2-Chloroethoxy)methan	0.443	0.442	0.2	96	0.00	5.77
36	t	1,2,4-Trichlorobenzene	0.332	0.339	-2.1	96	0.00	5.92
38	t	Naphthalene	1.030	1.055	-2.4	100	0.00	5.99
42	t	Hexachlorobutadiene	0.164	0.172	-4.9	97	0.00	6.09
47	I	Acenaphthene-d10	1.000	1.000	0.0	85	0.00	7.41
48	t	Hexachlorocyclopentadiene	0.322	0.304	5.6	74	0.00	6.69
52	t	2-Chloronaphthalene	1.174	1.278	-8.9	99	0.00	6.96
55	t	Dimethylphthalate	1.275	1.307	-2.5	91	0.00	7.19
56	t	Acenaphthylene	1.911	1.888	1.2	87	0.00	7.30
57	t	2,6-Dinitrotoluene	0.270	0.279	-3.3	83	0.00	7.24
59	t	Acenaphthene	1.171	1.201	-2.6	91	0.00	7.44
		----------	AvgRF	CCRF	% Dev	----------		
63	t	2,4-Dinitrotoluene	0.354	0.339	4.2	78	0.00	7.57
65	t	Diethylphthalate	1.293	1.290	0.2	88	0.00	7.78
66	t	Fluorene	1.285	1.221	5.0	85	0.00	7.88
67	t	4-Chlorophenyl-phenylethe	0.562	0.538	4.3	87	0.00	7.88
69	I	Phenanthrene-d10	1.000	1.000	0.0	83	0.00	8.76
71	t	n-Nitrosodiphenylamine	0.542	0.551	-1.7	91	0.00	7.98
72	t	1,2-Diphenylhydrazine	0.871	0.846	2.9	87	0.00	8.02
74	t	4-Bromophenyl-phenylether	0.204	0.207	-1.5	88	0.00	8.32
75	t	Hexachlorobenzene	0.218	0.211	3.2	84	0.00	8.37
77	t	Phenanthrene	1.175	1.182	-0.6	90	0.00	8.79
78	t	Anthracene	1.165	1.146	1.6	86	0.00	8.84
80	t	Di-n-butylphthalate	1.458	1.426	2.2	82	0.00	9.42
81	t	Fluoranthene	1.276	1.260	1.3	81	0.00	10.15

Initial Calibration Verification

Job Number: JC19996 **Sample:** E2P2548-ICV2547
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2P58385.D
Project: BMSMC, Building 5 Area, PR

83	I	Chrysene-d12	1.000	1.000	0.0	77	0.00	12.14
84	t	Pyrene	1.381	1.451	-5.1	83	0.00	10.44
86	t	Butylbenzylphthalate	0.677	0.694	-2.5	76	0.00	11.40
88	t	Benzo[a]anthracene	1.276	1.274	0.2	79	0.00	12.12
90	t	Chrysene	1.154	1.169	-1.3	81	0.00	12.17
91	t	bis(2-Ethylhexyl)phthalat	0.847	0.874	-3.2	78	0.00	12.28
92	I	Perylene-d12	1.000	1.000	0.0	76	0.00	14.14
93	t	Di-n-octylphthalate	1.819	1.855	-2.0	72	0.00	13.23
94	t	Benzo[b]fluoranthene	1.390	1.380	0.7	75	0.00	13.64
95	t	Benzo[k]fluoranthene	1.214	1.325	-9.1	87	0.01	13.68
96	t	Benzo[a]pyrene	1.179	1.276	-8.2	83	0.01	14.07
97	t	Indeno[1,2,3-cd]pyrene	1.020	1.135	-11.3	83	0.01	15.69
99	t	Dibenz[a,h]anthracene	1.021	1.133	-11.0	83	0.00	15.74
101	t	Benzo[g,h,i]perylene	1.078	1.182	-9.6	83	0.02	16.13

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2p58365aa.D M2P2547.M Wed Apr 20 16:36:23 2016 RPT1

6.7.3

6

Initial Calibration Verification

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E2P2548-ICV2547
Lab FileID: 2P58386.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\2P2548\2p58386.D          Vial: 14
Acq On    : 20 Apr 2016  12:36 am                   Operator: sarad
Sample    : icv2547-50                              Inst    : MS2P
Misc      : op92038,e2p2548                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M2P2547.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Wed Apr 20 08:52:16 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	100	0.00	4.91
2	t	1,4-Dioxane	0.735	0.634	13.7	83	0.00	2.26
6	t	Indene	2.246	2.335	-4.0	113	0.00	5.12
7	t	Cumene	3.547	3.280	7.5	92	0.00	4.24
13	t	Decane	2.186	1.991	8.9	97	0.00	4.78
18	t	Acetophenone	1.802	1.785	0.9	113	0.00	5.25
24	I	Naphthalene-d8	1.000	1.000	0.0	104	0.00	5.97
27	t	Quinoline	0.709	0.640	9.7	101	0.00	6.26
40	t	2,3-Dichloroaniline	0.369	0.279	24.4	87	0.00	6.79
41	t	Caprolactam	0.115	0.100	13.0	92	0.01	6.31
45	t	1-Methylnaphthalene	0.590	0.522	11.5	98	0.00	6.64
46	t	Dimethylnaphthalene	0.581	0.506	12.9	101	0.00	7.07
47	I	Acenaphthene-d10	1.000	1.000	0.0	97	0.00	7.41
53	t	Biphenyl	1.473	1.457	1.1	102	0.00	6.94
		----------	AvgRF	CCRF	% Dev	----------		
69	I	Phenanthrene-d10	1.000	1.000	0.0	93	0.00	8.76
82	t	Octadecane	0.514	0.477	7.2	90	0.00	8.66
83	I	Chrysene-d12	1.000	1.000	0.0	92	0.00	12.13
92	I	Perylene-d12	1.000	1.000	0.0	85	0.00	14.14
100	t	7,12-Dimethylbenz(a)anthr	0.566	0.539	4.8	78	0.00	13.64

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2p58365aa.D M2P2547.M Wed Apr 20 16:36:27 2016 RPT1

Initial Calibration Verification

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E2P2548-ICV2547
Lab FileID: 2P58388.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\2P2548\2p58388.D          Vial: 16
Acq On    : 20 Apr 2016   1:21 am                   Operator: sarad
Sample    : icv2547-50                              Inst    : MS2P
Misc      : op92038,e2p2548                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M2P2547.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Wed Apr 20 08:52:16 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	127	0.00	12.13
89 t	3,3'-Dichlorobenzidine	0.432	0.379	12.3	110	0.00	12.12

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2p58365aa.D M2P2547.M Wed Apr 20 16:36:33 2016 RPT1

Initial Calibration Verification

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E2P2549-ICV2547
Lab FileID: 2P58391.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\2P2549\2p58391.D          Vial: 2
Acq On    : 20 Apr 2016   9:53 am                   Operator: robertl1
Sample    : ICV2547-50                              Inst    : MS2P
Misc      : op92038,e2p2549                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M2P2547.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Wed Apr 20 08:52:16 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	-0.02	4.89
9	t	Phenol	2.012	1.745	13.3	85	-0.01	4.60
12	t	2-Chlorophenol	1.468	1.387	5.5	100	-0.02	4.71
19	t	2-Methylphenol	1.259	1.217	3.3	108	-0.02	5.10
21	t	3&4-Methylphenol	1.314	1.257	4.3	109	-0.02	5.23
24	I	Naphthalene-d8	1.000	1.000	0.0	97	-0.02	5.95
29	t	2-Nitrophenol	0.197	0.198	-0.5	100	-0.02	5.63
30	t	2,4-Dimethylphenol	0.350	0.349	0.3	106	-0.02	5.67
31	t	Benzoic acid	0.274	0.290	-5.8	95	0.05	5.77
33	t	2,4-Dichlorophenol	0.301	0.299	0.7	101	-0.02	5.83
34	t	2,6-Dichlorophenol	0.284	0.285	-0.4	107	-0.02	6.02
43	t	4-Chloro-3-methylphenol	0.309	0.290	6.1	95	-0.02	6.40
47	I	Acenaphthene-d10	1.000	1.000	0.0	105	-0.02	7.40
49	t	2,4,6-Trichlorophenol	0.370	0.365	1.4	105	-0.02	6.77
50	t	2,4,5-Trichlorophenol	0.398	0.363	8.8	99	-0.02	6.79
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	50.000	57.451	-14.9	112	-0.02	7.44
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.162	0.165	-1.9	100	-0.02	7.49
64		2,3,4,6-Tetrachlorophenol	0.303	0.290	4.3	100	-0.02	7.67
69	I	Phenanthrene-d10	1.000	1.000	0.0	103	-0.02	8.74
70	t	4,6-Dinitro-2-methylpheno	0.117	0.132	-12.8	108	-0.02	7.90
76	t	Pentachlorophenol	0.147	0.146	0.7	96	-0.02	8.54

```
(#) = Out of Range                SPCC's out = 0  CCC's out = 0
 2p58365aa.D M2P2547.M        Wed Apr 20 17:38:45 2016   RPT1
```

Initial Calibration Verification

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E2P2549-ICV2547
Lab FileID: 2P58392.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\2P2549\2p58392.D          Vial: 3
Acq On    : 20 Apr 2016  10:16 am                   Operator: robertl1
Sample    : ICV2547-50                              Inst    : MS2P
Misc      : op92038,e2p2549                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M2P2547.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Wed Apr 20 08:52:16 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	-0.02	4.89
3	t	Pyridine	1.818	1.589	12.6	89	0.05	2.67
10		Aniline	2.311	2.060	10.9	102	-0.01	4.63
16	t	Benzyl alcohol	0.919	0.860	6.4	105	-0.01	5.01
24	I	Naphthalene-d8	1.000	1.000	0.0	114	-0.02	5.95
39	t	4-Chloroaniline	0.445	0.395	11.2	111	-0.02	6.01
44	t	2-Methylnaphthalene	0.576	0.496	13.9	104	-0.02	6.54
47	I	Acenaphthene-d10	1.000	1.000	0.0	112	-0.02	7.40
54	t	2-Nitroaniline	0.408	0.368	9.8	103	-0.02	7.02
58	t	3-Nitroaniline	0.357	0.330	7.6	104	-0.02	7.36
		----------	AvgRF	CCRF	% Dev	----------		
62	t	Dibenzofuran	1.547	1.417	8.4	110	-0.02	7.56
68	t	4-Nitroaniline	0.353	0.301	14.7	97	-0.02	7.87
69	I	Phenanthrene-d10	1.000	1.000	0.0	113	-0.02	8.74
79	t	Carbazole	1.096	0.997	9.0	109	-0.02	8.99

```
(#) = Out of Range              SPCC's out = 0  CCC's out = 0
 2p58365aa.D M2P2547.M        Wed Apr 20 17:38:47 2016   RPT1
```

Continuing Calibration Summary

Job Number: JC19996 **Sample:** E2P2592-CC2547
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2P59336.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\2P2592\2p59336.D          Vial: 2
Acq On    : 19 May 2016  11:53 am                   Operator: robertl1
Sample    : CC2547-25                               Inst    : MS2P
Misc      : op93859a,e2p2592                        Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M2P2557.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Mon Apr 25 15:59:04 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	71	-0.05	4.79
2	t	1,4-Dioxane	0.735	0.506	31.2#	51	-0.17	2.10
3	t	Pyridine	1.818	1.156	36.4#	45#	-0.01	2.44
4	t	N-Nitrosodimethylamine	1.075	0.665	38.1#	45#	0.01	2.42
5	S	2-Fluorophenol	1.620	1.285	20.7#	57	-0.02	3.72
6	t	Indene	2.246	2.066	8.0	68	-0.05	5.00
7	t	Cumene	3.547	3.297	7.0	67	-0.07	4.11
8	S	Phenol-d5	1.899	1.500	21.0#	57	-0.05	4.53
9	t	Phenol	2.012	1.639	18.5	59	-0.05	4.54
10		Aniline	2.311	1.557	32.6#	48#	-0.05	4.52
11	t	bis(2-Chloroethyl)ether	1.418	1.093	22.9#	56	-0.05	4.58
12	t	2-Chlorophenol	1.468	1.356	7.6	67	-0.04	4.62
13	t	Decane	2.186	1.986	9.1	65	-0.05	4.65
14	t	1,3-Dichlorobenzene	1.613	1.577	2.2	71	-0.05	4.74
15	t	1,4-Dichlorobenzene	1.588	1.524	4.0	71	-0.05	4.80
16	t	Benzyl alcohol	0.919	0.762	17.1	60	-0.03	4.92
17	t	1,2-Dichlorobenzene	1.467	1.417	3.4	72	-0.05	4.92
18	t	Acetophenone	1.802	1.624	9.9	67	-0.04	5.13
19	t	2-Methylphenol	1.259	1.002	20.4#	58	-0.03	5.03
20	t	2,2'-oxybis(1-Chloropropa	0.413	0.376	9.0	69	-0.04	5.02
21	t	3&4-Methylphenol	1.314	1.054	19.8	59	-0.03	5.16
22	t	n-Nitroso-di-n-propylamin	0.957	0.812	15.2	66	-0.05	5.13
23	t	Hexachloroethane	0.482	0.535	-11.0	83	-0.05	5.20
24	I	Naphthalene-d8	1.000	1.000	0.0	68	-0.05	5.84
25	S	Nitrobenzene-d5	0.394	0.363	7.9	65	0.01	5.26
26	t	Nitrobenzene	0.398	0.339	14.8	61	-0.04	5.27
27	t	Quinoline	0.709	0.648	8.6	66	-0.04	6.14
28	t	Isophorone	0.713	0.589	17.4	59	-0.05	5.46
29	t	2-Nitrophenol	0.197	0.200	-1.5	70	-0.04	5.53
30	t	2,4-Dimethylphenol	0.350	0.310	11.4	63	-0.03	5.59
31	t	Benzoic acid	0.274	0.182	33.6#	43#	0.06	5.70
32	t	bis(2-Chloroethoxy)methan	0.443	0.343	22.6#	56	-0.04	5.65
33	t	2,4-Dichlorophenol	0.301	0.311	-3.3	73	-0.02	5.75
34	t	2,6-Dichlorophenol	0.284	0.299	-5.3	77	-0.03	5.92
35		1,3,5-Trichlorobenzene	0.346	0.379	-9.5	79	-0.05	5.53
36	t	1,2,4-Trichlorobenzene	0.332	0.345	-3.9	75	-0.05	5.80
37		1,2,3-Trichlorobenzene	0.309	0.331	-7.1	77	-0.05	5.98
38	t	Naphthalene	1.030	0.998	3.1	70	-0.05	5.86
39	t	4-Chloroaniline	0.445	0.387	13.0	62	-0.03	5.92
40	t	2,3-Dichloroaniline	0.369	0.374	-1.4	73	-0.03	6.67
41	t	Caprolactam	0.115	0.095	17.4	58	0.00	6.22

Continuing Calibration Summary

Job Number: JC19996 **Sample:** E2P2592-CC2547
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2P59336.D
Project: BMSMC, Building 5 Area, PR

42	t	Hexachlorobutadiene	0.164	0.209	-27.4#	92	-0.05	5.96
43	t	4-Chloro-3-methylphenol	0.309	0.305	1.3	70	0.00	6.34
44	t	2-Methylnaphthalene	0.576	0.603	-4.7	74	-0.04	6.43
45	t	1-Methylnaphthalene	0.590	0.605	-2.5	73	-0.04	6.51
46	t	Dimethylnaphthalene	0.581	0.637	-9.6	79	-0.03	6.95
47	I	Acenaphthene-d10	1.000	1.000	0.0	74	-0.05	7.29
48	t	Hexachlorocyclopentadiene	0.322	0.248	23.0#	55	-0.07	6.56
49	t	2,4,6-Trichlorophenol	0.370	0.382	-3.2	79	-0.05	6.68
50	t	2,4,5-Trichlorophenol	0.398	0.399	-0.3	77	-0.05	6.72
51	S	2-Fluorobiphenyl	1.245	1.283	-3.1	81	-0.06	6.73
52	t	2-Chloronaphthalene	1.174	1.112	5.3	75	-0.05	6.83
53	t	Biphenyl	1.473	1.510	-2.5	79	-0.05	6.82
54	t	2-Nitroaniline	0.408	0.414	-1.5	76	-0.04	6.93
55	t	Dimethylphthalate	1.275	1.285	-0.8	79	-0.05	7.07
56	t	Acenaphthylene	1.911	1.790	6.3	73	-0.06	7.17
57	t	2,6-Dinitrotoluene	0.270	0.292	-8.1	77	-0.04	7.13
58	t	3-Nitroaniline	0.357	0.300	16.0	63	-0.04	7.27
59	t	Acenaphthene	1.171	1.137	2.9	75	-0.05	7.32
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	50.000	36.212	27.6#	54	-0.04	7.36
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.162	0.198	-22.2#	87	-0.04	7.45
62	t	Dibenzofuran	1.547	1.614	-4.3	82	-0.05	7.46
63	t	2,4-Dinitrotoluene	0.354	0.411	-16.1	84	0.00	7.46
64		2,3,4,6-Tetrachlorophenol	0.303	0.320	-5.6	82	-0.04	7.57
65	t	Diethylphthalate	1.293	1.314	-1.6	78	-0.06	7.65
66	t	Fluorene	1.285	1.349	-5.0	82	-0.05	7.74
67	t	4-Chlorophenyl-phenylethe	0.562	0.654	-16.4	93	-0.06	7.74
68	t	4-Nitroaniline	0.353	0.267	24.4#	56	-0.05	7.78
69	I	Phenanthrene-d10	1.000	1.000	0.0	83	-0.06	8.62
70	t	4,6-Dinitro-2-methylpheno	0.117	0.111	5.1	75	0.00	7.81
71	t	n-Nitrosodiphenylamine	0.542	0.530	2.2	84	-0.05	7.85
72	t	1,2-Diphenylhydrazine	0.871	0.641	26.4#	62	-0.05	7.88
73	S	2,4,6-Tribromophenol	0.089	0.095	-6.7	90	-0.05	7.96
74	t	4-Bromophenyl-phenylether	0.204	0.218	-6.9	94	-0.07	8.18
75	t	Hexachlorobenzene	0.218	0.228	-4.6	93	-0.06	8.24
76	t	Pentachlorophenol	0.147	0.111	24.5#	61	-0.04	8.44
77	t	Phenanthrene	1.175	1.085	7.7	80	-0.06	8.64
78	t	Anthracene	1.165	1.099	5.7	80	-0.06	8.69
79	t	Carbazole	1.096	0.979	10.7	77	-0.05	8.87
80	t	Di-n-butylphthalate	1.458	1.351	7.3	76	-0.08	9.25
81	t	Fluoranthene	1.276	1.348	-5.6	89	-0.07	9.99
82	t	Octadecane	0.514	0.691	-34.4#	108	-0.06	8.50
83	I	Chrysene-d12	1.000	1.000	0.0	91	-0.09	11.96
84	t	Pyrene	1.381	1.303	5.6	88	-0.09	10.28
85	S	Terphenyl-d14	0.805	0.827	-2.7	96	0.00	10.50
86	t	Butylbenzylphthalate	0.677	0.597	11.8	78	-0.11	11.21
87		Butyl stearate	0.579	0.476	17.8	69	-0.02	11.34
88	t	Benzo[a]anthracene	1.276	1.207	5.4	90	-0.08	11.95
89	t	3,3'-Dichlorobenzidine	0.432	0.419	3.0	90	-0.03	11.95
90	t	Chrysene	1.154	1.102	4.5	91	-0.08	12.00
91	t	bis(2-Ethylhexyl)phthalat	0.847	0.764	9.8	79	-0.12	12.08
92	I	Perylene-d12	1.000	1.000	0.0	93	-0.09	13.98
93	t	Di-n-octylphthalate	1.819	1.645	9.6	79	0.00	13.03

Continuing Calibration Summary

Job Number: JC19996 **Sample:** E2P2592-CC2547
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2P59336.D
Project: BMSMC, Building 5 Area, PR

94	t	Benzo[b]fluoranthene	1.390	1.322	4.9	92	-0.09	13.47
95	t	Benzo[k]fluoranthene	1.214	1.207	0.6	93	-0.09	13.51
96	t	Benzo[a]pyrene	1.179	1.154	2.1	92	-0.09	13.90
97	t	Indeno[1,2,3-cd]pyrene	1.020	1.134	-11.2	104	0.00	15.47
98	t	Dibenz(a,h)acridine	0.930	0.959	-3.1	99	-0.13	15.12
99	t	Dibenz[a,h]anthracene	1.021	1.092	-7.0	100	-0.03	15.50
100	t	7,12-Dimethylbenz(a)anthr	0.566	0.535	5.5	86	-0.10	13.46
101	t	Benzo[g,h,i]perylene	1.078	1.090	-1.1	96	-0.13	15.89

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2p58526a.D M2P2557.M Fri May 20 15:32:53 2016 RPT1

6.7.8

6

Initial Calibration Summary

Job Number: JC19996
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: JC19996 **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: JC19996
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: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E3M2855-ICV2855
Lab FileID: 3M60773.D

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: JC19996
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: JC19996 **Sample:** E3M2880-CC2855
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3M61244.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E3M2880\3m61244.D          Vial: 2
Acq On    : 11 May 2016  11:49 pm                    Operator: juliusj
Sample    : cc2855-1                                 Inst    : MS3M
Misc      : op93756a,e3m2880                         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  : Thu May 12 09:16:05 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	166	0.00	10.34
2	t	1,4-dioxane	0.207	0.219	-5.8	174	0.00	2.10
3	S	2-Fluorophenol	0.500	0.512	-2.4	167	0.00	4.31
4	S	Phenol-d5	0.828	0.822	0.7	159	0.00	5.92
5		Phenol	0.893	0.863	3.4	154	0.00	5.93
6	t	bis(2-Chloroethyl)ether	0.675	0.607	10.1	142	0.00	6.04
7	S	Nitrobenzene-d5	0.770	0.708	8.1	145	0.00	7.47
8	t	Nitrobenzene	0.836	0.745	10.9	143	0.00	7.49
9	t	Naphthalene	2.223	2.054	7.6	155	0.00	8.85
10	t	Hexachlorobutadiene	0.387	0.409	-5.7	168	0.00	9.15
11	t	2-Methylnaphthalene	1.158	1.137	1.8	156	0.00	10.22
12	t	1-Methylnaphthalene	1.559	1.184	24.1#	140	0.00	10.43
13		Hexachlorocyclopentadiene	0.308	0.330	-7.1	154	0.00	10.57
14	I	Fluorene-d10	1.000	1.000	0.0	159	0.00	13.35
15	S	2-Fluorobiphenyl	1.099	1.145	-4.2	164	0.00	11.02
16	t	Acenaphthylene	1.385	1.460	-5.4	151	0.00	12.00
17	t	Acenaphthene	0.925	0.953	-3.0	154	0.00	12.35
		----------	True	Calc.	% Drift	----------		
18	t	4,6-dinitro-2-methylpheno	5.000	2.678	46.4#	72	0.00	13.58
		----------	AvgRF	CCRF	% Dev	----------		
19	t	Fluorene	1.110	1.101	0.8	148	0.00	13.39
20	S	2,4,6-Tribromophenol	0.125	0.123	1.6	149	0.00	13.90
21	I	Fluoranthene-d10	1.000	1.000	0.0	167	0.00	17.56
22	t	Hexachlorobenzene	0.189	0.175	7.4	154	0.00	14.49
		----------	True	Calc.	% Drift	----------		
23	t	Pentachlorophenol	5.000	3.413	31.7#	108	0.00	14.93
		----------	AvgRF	CCRF	% Dev	----------		
24	t	Phenanthrene	0.980	0.929	5.2	155	0.00	15.30
25	t	Anthracene	0.865	0.881	-1.8	156	0.00	15.41
26	t	Fluoranthene	1.231	1.070	13.1	155	0.00	17.59
27	t	Pyrene	1.144	1.064	7.0	150	0.00	17.98
28	S	Terphenyl-d14	0.580	0.567	2.2	168	0.00	18.38
29	t	Benzo[a]anthracene	1.097	1.007	8.2	157	0.00	20.08
30	t	Chrysene	1.051	0.961	8.6	149	0.00	20.14
31	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	165	0.00	22.17

Continuing Calibration Summary

Job Number: JC19996 **Sample:** E3M2880-CC2855
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3M61244.D
Project: BMSMC, Building 5 Area, PR

32	t	Benzo[b]fluoranthene	1.331	1.240	6.8	153	0.00	21.75
33	t	Benzo[k]fluoranthene	1.232	1.101	10.6	147	0.00	21.80
34	t	Benzo[a]pyrene	1.240	1.135	8.5	154	0.00	22.20
35	t	Indeno[1,2,3-cd]pyrene	1.260	1.336	-6.0	165	0.00	23.66
36	t	Dibenz[a,h]anthracene	1.039	1.003	3.5	155	0.00	23.69
37	t	Benzo[g,h,i]perylene	1.095	1.125	-2.7	163	0.00	24.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3m61244.D M3M2855SIM.M Thu May 12 09:17:12 2016 RPT1

Initial Calibration Summary

Job Number: JC19996
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: JC19996 **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
```

Initial Calibration Verification

Job Number: JC19996
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: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E4M2881-ICV2881
Lab FileID: 4M64733.D

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: JC19996
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: JC19996
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: JC19996 **Sample:** E4M2919-CC2881
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4M65260.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E4M2919\4m65260.D          Vial: 2
Acq On    : 13 May 2016  11:15 am                    Operator: ashleyd
Sample    : cc2881-1.0                               Inst    : GCMS4M
Misc      : op93743a,e4m2919                         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	102	0.00	10.51
2	S	2-Fluorophenol	0.524	0.519	1.0	95	-0.09	4.55
3	S	Phenol-d5	0.881	0.891	-1.1	97	-0.06	6.14
4	t	Phenol	0.902	0.934	-3.5	98	-0.05	6.16
5	t	bis(2-Chloroethyl)ether	0.680	0.676	0.6	95	0.00	6.23
6	S	Nitrobenzene-d5	0.790	0.870	-10.1	106	-0.06	7.65
7	t	Naphthalene	2.251	2.266	-0.7	98	-0.03	9.03
8	t	Hexachlorobutadiene	0.556	0.606	-9.0	105	-0.02	9.34
9	t	2-Methylnaphthalene	0.979	1.263	-29.0#	133	0.00	10.39
		----------	True	Calc.	% Drift	----------		
10	t	Hexachlorocyclopentadiene	2.000	2.504	-25.2#	139	0.00	10.75
		----------	AvgRF	CCRF	% Dev	----------		
11	S	2-Fluorobiphenyl	1.155	1.337	-15.8	125	0.01	11.18
12	I	Fluorene-d10	1.000	1.000	0.0	106	0.00	13.49
13	t	Acenaphthylene	0.917	0.990	-8.0	115	-0.03	12.15
14	t	Acenaphthene	0.590	0.622	-5.4	113	-0.02	12.50
15	t	Dibenzofuran	0.879	0.757	13.9	84	-0.02	12.86
16	t	Fluorene	1.067	1.114	-4.4	104	0.00	13.54
17	S	2,4,6-Tribromophenol	0.213	0.231	-8.5	103	0.00	14.04
18	t	Hexachlorobenzene	0.418	0.414	1.0	103	0.03	14.66
19	t	Pentachlorophenol	0.171	0.222	-29.8#	120	0.03	15.09
20	t	Phenanthrene	1.438	1.467	-2.0	106	0.03	15.44
21	t	Anthracene	1.362	1.436	-5.4	105	0.03	15.54
22	I	Fluoranthene-d10	1.000	1.000	0.0	115	0.02	17.69
23	t	Fluoranthene	1.080	0.984	8.9	111	0.00	17.70
24	t	Pyrene	1.065	1.106	-3.8	118	0.00	18.10
25	S	Terphenyl-d14	0.540	0.579	-7.2	123	0.03	18.49
26	t	Benzo[a]anthracene	0.987	0.959	2.8	111	0.00	20.21
27	t	Chrysene	0.966	0.932	3.5	112	0.02	20.26
28	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	119	0.01	22.28
29	t	Benzo[b]fluoranthene	1.439	1.492	-3.7	119	0.00	21.86
30	t	Benzo[k]fluoranthene	1.205	1.090	9.5	111	0.02	21.90
31	t	Benzo[a]pyrene	1.193	1.208	-1.3	118	0.02	22.31
32	t	Indeno[1,2,3-cd]pyrene	1.492	1.488	0.3	118	0.00	23.80
33	t	Dibenz[a,h]anthracene	1.201	1.130	5.9	120	0.00	23.84
34	t	Benzo[g,h,i]perylene	1.260	1.262	-0.2	119	0.00	24.17

Continuing Calibration Summary

Job Number: JC19996 **Sample:** E4M2919-CC2881
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4M65260.D
Project: BMSMC, Building 5 Area, PR

35	I	1-Methylnaphthalene-d10a	1.000	1.000	0.0	102	0.00	10.51
36	t	1,4-Dioxane	0.260	0.242	6.9	100	0.00	2.30
37	t	1-Methylnaphthalene	0.935	1.141	-22.0#	129	0.00	10.58
38	I	Fluorene-d10a	1.000	1.000	0.0	106	0.00	13.49
		----------	True	Calc.	% Drift	----------		
39	t	4,6-dinitro-2-methylpheno	5.000	7.669	-53.4#	180	0.00	13.73
		----------	AvgRF	CCRF	% Dev	----------		
40	t	1,2-Diphenylhydrazine	0.947	0.910	3.9	88	0.00	13.90
41	t	n-nitrosodiphenylamine	0.702	0.594	15.4	79	0.00	13.85

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m64724.D M4M2881SIM.M Tue May 24 13:01:44 2016 MANAGER

Continuing Calibration Summary

Job Number: JC19996 **Sample:** E4M2925-CC2881
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4M65349.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E4M2925\4m65349.D          Vial: 2
Acq On    : 18 May 2016  12:52 pm                    Operator: linseyk
Sample    : cc2881-1                                 Inst    : GCMS4M
Misc      : op93986a,e4m2925                         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	97	0.07	10.58
2	S	2-Fluorophenol	0.524	0.521	0.6	91	-0.02	4.62
3	S	Phenol-d5	0.881	0.920	-4.4	96	0.02	6.22
4	t	Phenol	0.902	0.965	-7.0	96	0.02	6.23
5	t	bis(2-Chloroethyl)ether	0.680	0.699	-2.8	94	0.07	6.30
6	S	Nitrobenzene-d5	0.790	0.904	-14.4	105	0.02	7.73
7	t	Naphthalene	2.251	2.481	-10.2	102	0.05	9.11
8	t	Hexachlorobutadiene	0.556	0.627	-12.8	104	0.06	9.41
9	t	2-Methylnaphthalene	0.979	1.183	-20.8#	119	0.07	10.46
		----------	True	Calc.	% Drift	----------		
10	t	Hexachlorocyclopentadiene	2.000	2.707	-35.3#	144	0.08	10.82
		----------	AvgRF	CCRF	% Dev	----------		
11	S	2-Fluorobiphenyl	1.155	1.369	-18.5	122	0.09	11.25
12	I	Fluorene-d10	1.000	1.000	0.0	99	0.07	13.56
13	t	Acenaphthylene	0.917	0.889	3.1	97	0.04	12.21
14	t	Acenaphthene	0.590	0.539	8.6	92	0.04	12.57
15	t	Dibenzofuran	0.879	0.820	6.7	85	0.07	12.95
16	t	Fluorene	1.067	1.072	-0.5	94	0.07	13.61
17	S	2,4,6-Tribromophenol	0.213	0.224	-5.2	93	0.08	14.11
18	t	Hexachlorobenzene	0.418	0.422	-1.0	99	0.09	14.72
19	t	Pentachlorophenol	0.171	0.143	16.4	72	0.11	15.17
20	t	Phenanthrene	1.438	1.499	-4.2	102	0.09	15.51
21	t	Anthracene	1.362	1.510	-10.9	104	0.10	15.61
22	I	Fluoranthene-d10	1.000	1.000	0.0	101	0.08	17.74
23	t	Fluoranthene	1.080	1.145	-6.0	114	0.08	17.78
24	t	Pyrene	1.065	1.136	-6.7	107	0.08	18.17
25	S	Terphenyl-d14	0.540	0.582	-7.8	109	0.09	18.55
26	t	Benzo[a]anthracene	0.987	1.080	-9.4	110	0.08	20.26
27	t	Chrysene	0.966	1.018	-5.4	108	0.08	20.32
28	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	107	0.07	22.34
29	t	Benzo[b]fluoranthene	1.439	1.477	-2.6	106	0.06	21.91
30	t	Benzo[k]fluoranthene	1.205	1.218	-1.1	112	0.07	21.95
31	t	Benzo[a]pyrene	1.193	1.262	-5.8	111	0.08	22.37
32	t	Indeno[1,2,3-cd]pyrene	1.492	1.579	-5.8	113	0.07	23.87
33	t	Dibenz[a,h]anthracene	1.201	1.299	-8.2	124	0.06	23.90
34	t	Benzo[g,h,i]perylene	1.260	1.346	-6.8	114	0.08	24.24

Continuing Calibration Summary

Job Number: JC19996 **Sample:** E4M2925-CC2881
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4M65349.D
Project: BMSMC, Building 5 Area, PR

35	I	1-Methylnaphthalene-d10a	1.000	1.000	0.0	97	0.07	10.58
36	t	1,4-Dioxane	0.260	0.290	-11.5	114	0.13	2.36
37	t	1-Methylnaphthalene	0.935	1.213	-29.7#	131	0.07	10.65
38	I	Fluorene-d10a	1.000	1.000	0.0	99	0.07	13.56
		----------	True	Calc.	% Drift	----------		
39	t	4,6-dinitro-2-methylpheno	5.000	6.742	-34.8#	144	0.08	13.80
		----------	AvgRF	CCRF	% Dev	----------		
40	t	1,2-Diphenylhydrazine	0.947	0.959	-1.3	87	0.08	13.97
41	t	n-nitrosodiphenylamine	0.702	0.623	11.3	78	0.08	13.92

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m64724.D M4M2881SIM.M Thu May 19 09:10:07 2016 MANAGER

Initial Calibration Summary

Job Number: JC19996 **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

```
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: JC19996 **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
```

6.7.20

6

Initial Calibration Verification

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EM5218-ICV5217
Lab FileID: M123523.D

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: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EM5218-ICV5217
Lab FileID: M123524.D

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: JC19996 **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: JC19996 **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

6.7.23

6

Initial Calibration Verification

Job Number: JC19996
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: JC19996
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: JC19996
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: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EM5239-ICC5239
Lab FileID: M123931.D

```
                          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: JC19996
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: JC19996
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: JC19996
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: JC19996
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: JC19996 **Sample:** EM5261-CC5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M124363.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5261\M124363.D          Vial: 2
Acq On    : 11 May 2016  10:37 pm                   Operator: juliusj
Sample    : cc5217-25                               Inst    : Instrument #1
Misc      : op93478,em5261                          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 09:45:47 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	116	-0.04	4.67
2	t	1,4-Dioxane	0.555	0.533	4.0	121	-0.02	2.22
3	t	Pyridine	1.350	1.353	-0.2	117	-0.01	2.58
4	t	N-Nitrosodimethylamine	0.591	0.687	-16.2	136	-0.01	2.54
5	S	2-Fluorophenol	1.223	1.315	-7.5	126	-0.02	3.73
6	t	Indene	2.275	2.358	-3.6	123	-0.04	4.87
7	t	Cumene	3.052	3.228	-5.8	125	-0.04	4.06
8	S	Phenol-d5	1.536	1.622	-5.6	120	-0.03	4.44
9	t	Phenol	1.646	1.931	-17.3	138	-0.03	4.45
10	t	Aniline	1.915	1.607	16.1	95	-0.05	4.43
11	t	bis(2-Chloroethyl)ether	1.282	1.594	-24.3#	152	-0.04	4.47
12	t	2-Chlorophenol	1.371	1.463	-6.7	126	-0.04	4.53
13	t	Decane	1.300	1.511	-16.2	143	-0.05	4.53
14	t	1,3-Dichlorobenzene	1.563	1.571	-0.5	121	-0.04	4.62
15	t	1,4-Dichlorobenzene	1.549	1.574	-1.6	122	-0.04	4.68
16	t	Benzyl alcohol	0.794	0.843	-6.2	122	-0.04	4.79
17	t	1,2-Dichlorobenzene	1.458	1.509	-3.5	123	-0.04	4.80
18	t	Acetophenone	1.821	1.906	-4.7	126	-0.04	4.99
19	t	2-Methylphenol	1.136	1.234	-8.6	126	-0.06	4.89
20	t	2,2'-oxybis(1-Chloropropa	0.424	0.456	-7.5	128	-0.04	4.87
21	t	3&4-Methylphenol	1.245	1.328	-6.7	124	-0.06	5.02
22	t	n-Nitroso-di-n-propylamin	0.983	1.020	-3.8	125	-0.04	4.99
23	t	Hexachloroethane	0.586	0.597	-1.9	124	-0.05	5.07
24	I	Naphthalene-d8	1.000	1.000	0.0	114	-0.05	5.79
25	S	Nitrobenzene-d5	0.356	0.369	-3.7	124	-0.05	5.12
26	t	Nitrobenzene	0.360	0.395	-9.7	131	-0.05	5.14
27	t	Quinoline	0.763	0.769	-0.8	119	-0.04	6.19
28	t	Isophorone	0.647	0.690	-6.6	126	-0.04	5.34
29	t	2-Nitrophenol	0.204	0.222	-8.8	123	-0.05	5.42
30	t	2,4-Dimethylphenol	0.333	0.329	1.2	119	-0.05	5.48
31	t	Benzoic acid	0.219	0.254	-16.0	137	-0.04	5.62
32	t	bis(2-Chloroethoxy)methan	0.393	0.413	-5.1	125	-0.05	5.54
33	t	2,4-Dichlorophenol	0.305	0.327	-7.2	123	-0.04	5.69
34	t	2,6-Dichlorophenol	0.308	0.322	-4.5	125	-0.05	5.89
35	t	1,3,5-Trichlorobenzene	0.364	0.386	-6.0	125	-0.05	5.43
36	t	1,2,4-Trichlorobenzene	0.358	0.370	-3.4	122	-0.05	5.73
37	t	1,2,3-Trichlorobenzene	0.346	0.356	-2.9	121	-0.05	5.97
38	t	Naphthalene	1.048	1.060	-1.1	119	-0.05	5.81
39	t	4-Chloroaniline	0.451	0.448	0.7	114	-0.05	5.88
40	t	2,3-Dichloroaniline	0.397	0.399	-0.5	118	-0.06	7.00
41	t	Caprolactam	0.165	0.173	-4.8	130	-0.04	6.29

Continuing Calibration Summary

Job Number: JC19996 **Sample:** EM5261-CC5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M124363.D
Project: BMSMC, Building 5 Area, PR

42	t	Hexachlorobutadiene	0.206	0.221	-7.3	127	-0.05	5.94
43	t	4-Chloro-3-methylphenol	0.305	0.320	-4.9	126	-0.04	6.49
44	t	2-Methylnaphthalene	0.626	0.638	-1.9	121	-0.06	6.61
45	t	1-Methylnaphthalene	0.728	0.765	-5.1	124	-0.06	6.74
46	t	Dimethylnaphthalene	0.676	0.690	-2.1	122	-0.07	7.49
47	I	Acenaphthene-d10	1.000	1.000	0.0	120	-0.07	8.12
		----------	True	Calc.	% Drift	----------		
48	t	Hexachlorocyclopentadiene	50.000	43.537	12.9	106	-0.06	6.82
		----------	AvgRF	CCRF	% Dev	----------		
49	t	2,4,6-Trichlorophenol	0.382	0.387	-1.3	125	-0.05	7.03
50	t	2,4,5-Trichlorophenol	0.415	0.442	-6.5	136	-0.04	7.11
51	S	2-Fluorobiphenyl	1.313	1.316	-0.2	125	-0.06	7.11
52	t	2-Chloronaphthalene	1.165	1.128	3.2	121	-0.06	7.28
53	t	Biphenyl	1.488	1.451	2.5	122	-0.06	7.26
54	t	2-Nitroaniline	0.332	0.345	-3.9	128	-0.05	7.46
55	t	Dimethylphthalate	1.362	1.364	-0.1	124	-0.06	7.74
56	t	Acenaphthylene	1.927	1.873	2.8	120	-0.06	7.90
57	t	2,6-Dinitrotoluene	0.303	0.317	-4.6	128	-0.06	7.83
58	t	3-Nitroaniline	0.335	0.327	2.4	120	-0.05	8.12
59	t	Acenaphthene	1.161	1.120	3.5	119	-0.06	8.17
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	50.000	61.761	-23.5#	175	-0.04	8.32
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.123	0.107	13.0	103	-0.10	8.57
62	t	Dibenzofuran	1.726	1.705	1.2	122	-0.07	8.46
63	t	2,4-Dinitrotoluene	0.397	0.427	-7.6	127	-0.06	8.51
64	t	2,3,4,6-Tetrachlorophenol	0.321	0.371	-15.6	145	-0.06	8.72
65	t	Diethylphthalate	1.356	1.345	0.8	124	-0.07	8.92
66	t	Fluorene	1.396	1.409	-0.9	125	-0.08	9.04
67	t	4-Chlorophenyl-phenylethe	0.666	0.693	-4.1	129	-0.07	9.07
68	t	4-Nitroaniline	0.326	0.344	-5.5	125	-0.04	9.17
69	I	Phenanthrene-d10	1.000	1.000	0.0	116	-0.07	10.75
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	25.000	30.457	-21.8#	148	-0.05	9.24
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.537	0.550	-2.4	123	-0.06	9.30
72	t	1,2-Diphenylhydrazine	0.688	0.724	-5.2	126	-0.07	9.35
73	S	2,4,6-Tribromophenol	0.138	0.179	-29.7#	152	-0.07	9.49
74	t	4-Bromophenyl-phenylether	0.247	0.270	-9.3	131	-0.07	9.95
75	t	Hexachlorobenzene	0.291	0.332	-14.1	139	-0.07	10.05
		----------	True	Calc.	% Drift	----------		
76	t	Pentachlorophenol	50.000	66.519	-33.0#	169	-0.06	10.47
		----------	AvgRF	CCRF	% Dev	----------		
77	t	Phenanthrene	1.115	1.110	0.4	120	-0.07	10.79
78	t	Anthracene	1.155	1.184	-2.5	122	-0.08	10.89
79	t	Carbazole	1.064	1.087	-2.2	121	-0.07	11.25
80	t	Di-n-butylphthalate	1.321	1.396	-5.7	125	-0.09	12.01
81	t	Fluoranthene	1.307	1.390	-6.4	126	-0.09	13.08
82	t	Octadecane	0.430	0.473	-10.0	131	-0.08	10.71

Continuing Calibration Summary

Job Number: JC19996 **Sample:** EM5261-CC5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M124363.D
Project: BMSMC, Building 5 Area, PR

83	I	Chrysene-d12	1.000	1.000	0.0	130	-0.09	15.92
84	t	Pyrene	1.304	1.210	7.2	125	-0.08	13.51
85		Butyl stearate	0.298	0.305	-2.3	137	-0.11	15.18
86	S	Terphenyl-d14	0.897	0.897	0.0	136	-0.09	13.91
87	t	Butylbenzylphthalate	0.567	0.529	6.7	123	-0.10	14.95
88	t	Benzo[a]anthracene	1.223	1.192	2.5	134	-0.09	15.91
89	t	3,3'-Dichlorobenzidine	0.447	0.482	-7.8	144	-0.09	15.93
90	t	Chrysene	1.142	1.129	1.1	136	-0.09	15.97
91	t	bis(2-Ethylhexyl)phthalat	0.765	0.722	5.6	126	-0.11	16.15
92	I	Perylene-d12	1.000	1.000	0.0	132	-0.09	18.56
93	t	Di-n-octylphthalate	1.298	1.205	7.2	124	-0.11	17.38
94	t	Benzo[b]fluoranthene	1.229	1.231	-0.2	137	-0.09	17.92
95	t	Benzo[k]fluoranthene	1.185	1.222	-3.1	143	-0.09	17.96
96	t	Benzo[a]pyrene	1.135	1.152	-1.5	138	-0.09	18.46
97	t	Indeno[1,2,3-cd]pyrene	1.149	1.410	-22.7#	168	-0.09	20.29
98	t	Dibenz(a,h)acridine	1.018	1.071	-5.2	141	-0.10	19.91
99	t	Dibenz[a,h]anthracene	1.168	1.212	-3.8	139	-0.09	20.32
100	t	7,12-Dimethylbenz(a)anthr	0.553	0.582	-5.2	142	-0.10	17.90
101	t	Benzo[g,h,i]perylene	1.197	1.210	-1.1	137	-0.08	20.75

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M123947.D MM5239.M Thu May 12 09:57:40 2016 MSM

Continuing Calibration Summary

Job Number: JC19996 **Sample:** EM5261-CC5239
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M124364.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5261\M124364.D          Vial: 3
Acq On    : 11 May 2016  11:06 pm                   Operator: juliusj
Sample    : cc5239-25                               Inst    : Instrument #1
Misc      : op93478,em5261                          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 09:45:47 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	164	-0.04	4.66
103	t	Benzaldehyde	0.904	0.924	-2.2	160	-0.04	4.34
104	I	Acenaphthene-d10a	1.000	1.000	0.0	159	-0.07	8.12
105	I	1,2,4,5-Tetrachlorobenzen	0.516	0.621	-20.3#	186	0.00	6.84
106	t	Atrazine	0.169	0.247	-46.2#	221#	-0.07	10.35
107	I	Chrysene-d12a	1.000	1.000	0.0	176	-0.10	15.92
		----------	True	Calc.	% Drift	----------		
108	t	Benzidine	25.000	20.924	16.3	183	-0.07	13.43
		----------	AvgRF	CCRF	% Dev	----------		
109	s	1-chlorooctadecane	0.258	0.258	0.0	167	-0.07	13.04
110	I	Phenanthrene-d10a	1.000	1.000	0.0	169	-0.08	10.74
111	s	o-terphenyl	0.540	0.677	-25.4#	196	0.01	11.53
112	I	Naphthalene-d8a	1.000	1.000	0.0	160	-0.05	5.79
113		Hydroquinone	0.310	0.300	3.2	155	-0.03	6.33

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M123947.D MM5239.M Thu May 12 09:57:42 2016 MSM

Continuing Calibration Summary

Job Number: JC19996 **Sample:** EM5262-CC5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M124391.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5262\M124391.D          Vial: 2
Acq On    : 12 May 2016  12:22 pm                   Operator: ashleyd
Sample    : cc5217-50                               Inst    : Instrument #1
Misc      : op93478,em5262                          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	100	-0.06	4.65
2	t	1,4-Dioxane	0.555	0.544	2.0	106	-0.04	2.20
3	t	Pyridine	1.350	1.277	5.4	94	-0.03	2.56
4	t	N-Nitrosodimethylamine	0.591	0.638	-8.0	107	-0.03	2.53
5	S	2-Fluorophenol	1.223	1.227	-0.3	100	-0.03	3.72
6	t	Indene	2.275	2.273	0.1	107	-0.06	4.85
7	t	Cumene	3.052	3.143	-3.0	107	-0.05	4.05
8	S	Phenol-d5	1.536	1.596	-3.9	104	-0.04	4.43
9	t	Phenol	1.646	1.796	-9.1	104	-0.04	4.44
10	t	Aniline	1.915	1.610	15.9	86	-0.06	4.42
11	t	bis(2-Chloroethyl)ether	1.282	1.319	-2.9	114	-0.05	4.45
12	t	2-Chlorophenol	1.371	1.383	-0.9	106	-0.05	4.51
13	t	Decane	1.300	1.352	-4.0	119	-0.06	4.52
14	t	1,3-Dichlorobenzene	1.563	1.516	3.0	103	-0.06	4.61
15	t	1,4-Dichlorobenzene	1.549	1.523	1.7	104	-0.05	4.67
16	t	Benzyl alcohol	0.794	0.799	-0.6	100	-0.05	4.78
17	t	1,2-Dichlorobenzene	1.458	1.422	2.5	105	-0.06	4.78
18	t	Acetophenone	1.821	1.798	1.3	104	-0.05	4.98
19	t	2-Methylphenol	1.136	1.167	-2.7	105	-0.07	4.89
20	t	2,2'-oxybis(1-Chloropropa	0.424	0.427	-0.7	114	-0.05	4.86
21	t	3&4-Methylphenol	1.245	1.242	0.2	102	-0.08	5.01
22	t	n-Nitroso-di-n-propylamin	0.983	0.952	3.2	105	-0.05	4.98
23	t	Hexachloroethane	0.586	0.562	4.1	102	-0.06	5.06
24	I	Naphthalene-d8	1.000	1.000	0.0	97	-0.07	5.78
25	S	Nitrobenzene-d5	0.356	0.362	-1.7	102	-0.06	5.11
26	t	Nitrobenzene	0.360	0.373	-3.6	106	-0.06	5.13
27	t	Quinoline	0.763	0.743	2.6	99	-0.05	6.18
28	t	Isophorone	0.647	0.663	-2.5	105	-0.06	5.33
29	t	2-Nitrophenol	0.204	0.212	-3.9	103	-0.06	5.41
30	t	2,4-Dimethylphenol	0.333	0.326	2.1	103	-0.05	5.47
31	t	Benzoic acid	0.219	0.264	-20.5#	110	-0.04	5.62
32	t	bis(2-Chloroethoxy)methan	0.393	0.389	1.0	102	-0.07	5.53
33	t	2,4-Dichlorophenol	0.305	0.323	-5.9	104	-0.06	5.67
34	t	2,6-Dichlorophenol	0.308	0.311	-1.0	105	-0.07	5.88
35	t	1,3,5-Trichlorobenzene	0.364	0.381	-4.7	108	-0.06	5.41
36	t	1,2,4-Trichlorobenzene	0.358	0.365	-2.0	104	-0.06	5.72
37	t	1,2,3-Trichlorobenzene	0.346	0.345	0.3	101	-0.07	5.96
38	t	Naphthalene	1.048	1.053	-0.5	104	-0.07	5.80
39	t	4-Chloroaniline	0.451	0.437	3.1	96	-0.06	5.87
40	t	2,3-Dichloroaniline	0.397	0.393	1.0	100	-0.07	6.99
41	t	Caprolactam	0.165	0.165	0.0	106	-0.04	6.29

Continuing Calibration Summary

Job Number: JC19996 **Sample:** EM5262-CC5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M124391.D
Project: BMSMC, Building 5 Area, PR

42	t	Hexachlorobutadiene	0.206	0.216	-4.9	108	-0.07	5.93
43	t	4-Chloro-3-methylphenol	0.305	0.307	-0.7	103	-0.06	6.48
44	t	2-Methylnaphthalene	0.626	0.618	1.3	101	-0.07	6.60
45	t	1-Methylnaphthalene	0.728	0.728	0.0	102	-0.07	6.73
46	t	Dimethylnaphthalene	0.676	0.679	-0.4	103	-0.08	7.47
47	I	Acenaphthene-d10	1.000	1.000	0.0	100	-0.08	8.11
		----------	True	Calc.	% Drift	----------		
48	t	Hexachlorocyclopentadiene	100.000	79.571	20.4#	78	-0.07	6.80
		----------	AvgRF	CCRF	% Dev	----------		
49	t	2,4,6-Trichlorophenol	0.382	0.376	1.6	103	-0.06	7.01
50	t	2,4,5-Trichlorophenol	0.415	0.407	1.9	101	-0.05	7.09
51	S	2-Fluorobiphenyl	1.313	1.279	2.6	106	-0.07	7.10
52	t	2-Chloronaphthalene	1.165	1.095	6.0	102	-0.07	7.26
53	t	Biphenyl	1.488	1.422	4.4	103	-0.08	7.24
54	t	2-Nitroaniline	0.332	0.332	0.0	104	-0.06	7.45
55	t	Dimethylphthalate	1.362	1.330	2.3	102	-0.08	7.72
56	t	Acenaphthylene	1.927	1.817	5.7	101	-0.08	7.88
57	t	2,6-Dinitrotoluene	0.303	0.312	-3.0	103	-0.07	7.82
58	t	3-Nitroaniline	0.335	0.324	3.3	96	-0.06	8.10
59	t	Acenaphthene	1.161	1.100	5.3	103	-0.08	8.15
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	100.000	108.911	-8.9	111	-0.06	8.30
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.123	0.104	15.4	86	-0.12	8.56
62	t	Dibenzofuran	1.726	1.666	3.5	102	-0.08	8.45
63	t	2,4-Dinitrotoluene	0.397	0.420	-5.8	104	-0.07	8.50
64	t	2,3,4,6-Tetrachlorophenol	0.321	0.355	-10.6	110	-0.08	8.70
65	t	Diethylphthalate	1.356	1.316	2.9	102	-0.09	8.90
66	t	Fluorene	1.396	1.376	1.4	104	-0.09	9.03
67	t	4-Chlorophenyl-phenylethe	0.666	0.665	0.2	106	-0.09	9.05
68	t	4-Nitroaniline	0.326	0.333	-2.1	98	-0.06	9.15
69	I	Phenanthrene-d10	1.000	1.000	0.0	98	-0.09	10.73
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	50.000	56.157	-12.3	113	-0.07	9.22
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.537	0.529	1.5	103	-0.08	9.28
72	t	1,2-Diphenylhydrazine	0.688	0.664	3.5	100	-0.09	9.34
73	S	2,4,6-Tribromophenol	0.138	0.162	-17.4	116	-0.09	9.47
74	t	4-Bromophenyl-phenylether	0.247	0.261	-5.7	108	-0.09	9.93
75	t	Hexachlorobenzene	0.291	0.307	-5.5	110	-0.09	10.03
		----------	True	Calc.	% Drift	----------		
76	t	Pentachlorophenol	100.000	118.204	-18.2	117	-0.08	10.45
		----------	AvgRF	CCRF	% Dev	----------		
77	t	Phenanthrene	1.115	1.108	0.6	104	-0.09	10.77
78	t	Anthracene	1.155	1.175	-1.7	106	-0.09	10.87
79	t	Carbazole	1.064	1.089	-2.3	105	-0.09	11.23
80	t	Di-n-butylphthalate	1.321	1.322	-0.1	101	-0.11	12.00
81	t	Fluoranthene	1.307	1.349	-3.2	107	-0.11	13.06
82	t	Octadecane	0.430	0.438	-1.9	104	-0.10	10.69

Continuing Calibration Summary

Job Number: JC19996 **Sample:** EM5262-CC5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M124391.D
Project: BMSMC, Building 5 Area, PR

83	I	Chrysene-d12	1.000	1.000	0.0	114	-0.12	15.90
84	t	Pyrene	1.304	1.178	9.7	108	-0.10	13.49
85		Butyl stearate	0.298	0.284	4.7	112	-0.13	15.16
86	S	Terphenyl-d14	0.897	0.902	-0.6	118	-0.11	13.89
87	t	Butylbenzylphthalate	0.567	0.527	7.1	105	-0.12	14.93
88	t	Benzo[a]anthracene	1.223	1.170	4.3	115	-0.11	15.88
89	t	3,3'-Dichlorobenzidine	0.447	0.473	-5.8	123	-0.12	15.90
90	t	Chrysene	1.142	1.117	2.2	116	-0.11	15.95
91	t	bis(2-Ethylhexyl)phthalat	0.765	0.700	8.5	107	-0.13	16.13
92	I	Perylene-d12	1.000	1.000	0.0	114	-0.12	18.53
93	t	Di-n-octylphthalate	1.298	1.178	9.2	106	-0.13	17.36
94	t	Benzo[b]fluoranthene	1.229	1.197	2.6	121	-0.11	17.90
95	t	Benzo[k]fluoranthene	1.185	1.177	0.7	122	-0.11	17.94
96	t	Benzo[a]pyrene	1.135	1.131	0.4	121	-0.11	18.44
97	t	Indeno[1,2,3-cd]pyrene	1.149	1.427	-24.2#	150	-0.11	20.26
98	t	Dibenz(a,h)acridine	1.018	1.082	-6.3	131	-0.12	19.88
99	t	Dibenz[a,h]anthracene	1.168	1.234	-5.7	131	-0.12	20.29
100	t	7,12-Dimethylbenz(a)anthr	0.553	0.577	-4.3	128	-0.12	17.88
101	t	Benzo[g,h,i]perylene	1.197	1.247	-4.2	130	-0.12	20.72

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M123931a.D MM5239.M Thu May 12 14:23:53 2016 MSM

6.7.34

6

Continuing Calibration Summary

Job Number: JC19996 **Sample:** EM5262-CC5239
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M124392.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5262\M124392.D          Vial: 3
Acq On    : 12 May 2016  12:51 pm                   Operator: ashleyd
Sample    : cc5239-50                               Inst    : Instrument #1
Misc      : op93478,em5262                          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	124	-0.01	4.65
103	t	Benzaldehyde	0.904	0.755	16.5	94	0.00	4.33
104	I	Acenaphthene-d10a	1.000	1.000	0.0	114	-0.01	8.10
105	I	1,2,4,5-Tetrachlorobenzen	0.516	0.595	-15.3	126	0.06	6.83
106	t	Atrazine	0.169	0.228	-34.9#	151	0.00	10.33
107	I	Chrysene-d12a	1.000	1.000	0.0	132	-0.02	15.90
		----------	True	Calc.	% Drift	----------		
108	t	Benzidine	50.000	46.402	7.2	117	0.00	13.42
		----------	AvgRF	CCRF	% Dev	----------		
109	s	1-chlorooctadecane	0.258	0.234	9.3	115	0.00	13.02
110	I	Phenanthrene-d10a	1.000	1.000	0.0	123	-0.02	10.72
111	s	o-terphenyl	0.540	0.632	-17.0	144	0.08	11.51
112	I	Naphthalene-d8a	1.000	1.000	0.0	117	-0.01	5.78
113		Hydroquinone	0.310	0.309	0.3	111	0.01	6.32
114		Chrysene-d12b	1.000	1.000	0.0	132	-0.02	15.90
115		2,3,7,8-TCDD		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M123931a.D MM5239.M Thu May 12 17:37:56 2016 MSM

Continuing Calibration Summary

Job Number: JC19996 **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: JC19996 **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: JC19996 **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

6.7.36

6

Continuing Calibration Summary

Job Number: JC19996 **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

GC/MS Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5261\
Data File : M124369.D
Acq On : 12 May 2016 1:56 am
Operator : juliusj
Sample : jc19996-1
Misc : op93820,em5261,990
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 12 09:50:54 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 09:45:47 2016
Response via : Initial Calibration

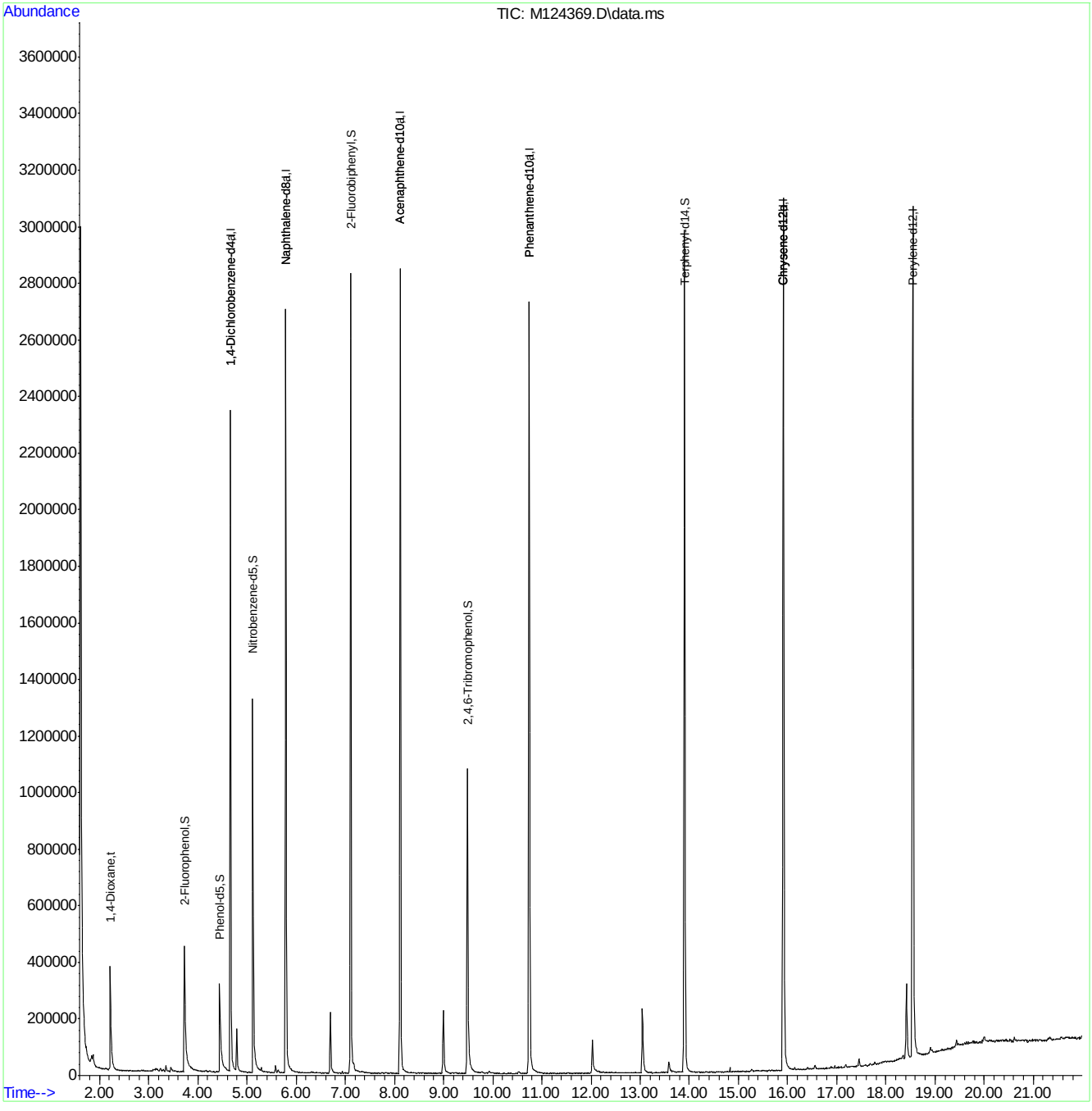
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.665	152	390287	40.00	ppm	-0.04
24) Naphthalene-d8	5.792	136	1511969	40.00	ppm	-0.05
47) Acenaphthene-d10	8.120	164	966530	40.00	ppm	-0.07
69) Phenanthrene-d10	10.743	188	1744579	40.00	ppm	-0.08
83) Chrysene-d12	15.913	240	2051417	40.00	ppm	-0.10
92) Perylene-d12	18.551	264	2028432	40.00	ppm	-0.10
102) 1,4-Dichlorobenzene-d4a	4.665	152	390287	40.00	ppm	-0.04
104) Acenaphthene-d10a	8.120	164	966530	40.00	ppm	-0.07
107) Chrysene-d12a	15.913	240	2051417	40.00	ppm	-0.10
110) Phenanthrene-d10a	10.743	188	1744579	40.00	ppm	-0.08
112) Naphthalene-d8a	5.792	136	1511969	40.00	ppm	-0.05
114) Chrysene-d12b	15.913	240	2051417	40.00	ppm	-0.10
System Monitoring Compounds						
5) 2-Fluorophenol	3.730	112	250203	20.96	ppm	-0.02
Spiked Amount 50.000			Recovery	=	41.92%	
8) Phenol-d5	4.446	99	213423	14.24	ppm	-0.02
Spiked Amount 50.000			Recovery	=	28.48%	
25) Nitrobenzene-d5	5.119	82	524854	39.03	ppm	-0.05
Spiked Amount 50.000			Recovery	=	78.06%	
51) 2-Fluorobiphenyl	7.111	172	1227382	38.67	ppm	-0.06
Spiked Amount 50.000			Recovery	=	77.34%	
73) 2,4,6-Tribromophenol	9.488	330	280595	46.53	ppm	-0.07
Spiked Amount 50.000			Recovery	=	93.06%	
86) Terphenyl-d14	13.905	244	1626452	35.35	ppm	-0.09
Spiked Amount 50.000			Recovery	=	70.70%	
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	2.218	88	210507	38.90	ppm	91

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

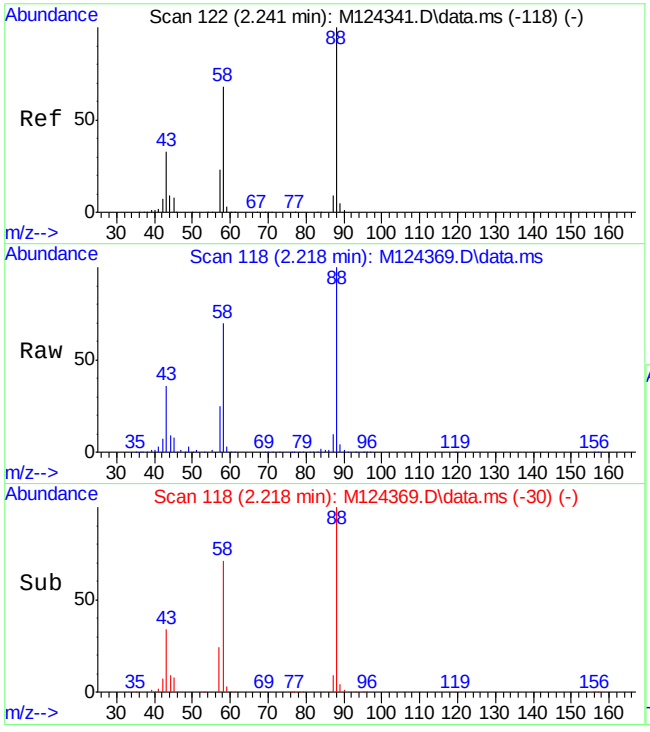
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5261\
Data File : M124369.D
Acq On : 12 May 2016 1:56 am
Operator : juliusj
Sample : jc19996-1
Misc : op93820,em5261,990
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 12 09:50:54 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 09:45:47 2016
Response via : Initial Calibration



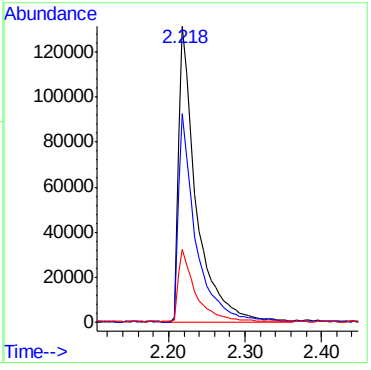
MM5239.M Thu May 12 09:51:03 2016 MSM



#2
1,4-Dioxane
Concen: 38.90 ppm
RT: 2.218 min Scan# 118
Delta R.T. -0.031 min
Lab File: M124369.D
Acq: 12 May 2016 1:56 am

Tgt Ion: 88 Resp: 210507

Ion	Ratio	Lower	Upper
88	100		
58	70.3	33.2	93.2
57	24.3	0.0	50.5



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124435.D
Acq On : 13 May 2016 4:56 pm
Operator : ashleyd
Sample : JC19996-2
Misc : op93830,em5264,30.1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: May 16 16:11:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri May 13 16:16:56 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	4.649	152	419929	40.00 ppm	-0.02
24) Naphthalene-d8	5.776	136	1581318	40.00 ppm	-0.01
47) Acenaphthene-d10	8.099	164	947763	40.00 ppm	-0.12
69) Phenanthrene-d10	10.722	188	1644414	40.00 ppm	-0.19
83) Chrysene-d12	15.892	240	1759806	40.00 ppm	-0.19
92) Perylene-d12	18.530	264	1754277	40.00 ppm	-0.19
102) 1,4-Dichlorobenzene-d4a	4.649	152	419929	40.00 ppm	-0.02
104) Acenaphthene-d10a	8.099	164	947763	40.00 ppm	-0.12
107) Chrysene-d12a	15.892	240	1761532	40.00 ppm	-0.19
110) Phenanthrene-d10a	10.722	188	1644414	40.00 ppm	-0.19
112) Naphthalene-d8a	5.776	136	1581318	40.00 ppm	-0.01
114) Chrysene-d12b	15.892	240	1763806	40.00 ppm	-0.19
System Monitoring Compounds					
5) 2-Fluorophenol	3.720	112	518277	40.36 ppm	0.00
Spiked Amount 50.000			Recovery	= 80.72%	
8) Phenol-d5	4.435	99	623202	38.64 ppm	0.00
Spiked Amount 50.000			Recovery	= 77.28%	
25) Nitrobenzene-d5	5.108	82	491646	34.96 ppm	0.00
Spiked Amount 50.000			Recovery	= 69.92%	
51) 2-Fluorobiphenyl	7.090	172	1317205	42.32 ppm	-0.10
Spiked Amount 50.000			Recovery	= 84.64%	
73) 2,4,6-Tribromophenol	9.467	330	265311	46.67 ppm	-0.17
Spiked Amount 50.000			Recovery	= 93.34%	
86) Terphenyl-d14	13.884	244	1596923	40.45 ppm	-0.17
Spiked Amount 50.000			Recovery	= 80.90%	
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

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

7.1.2

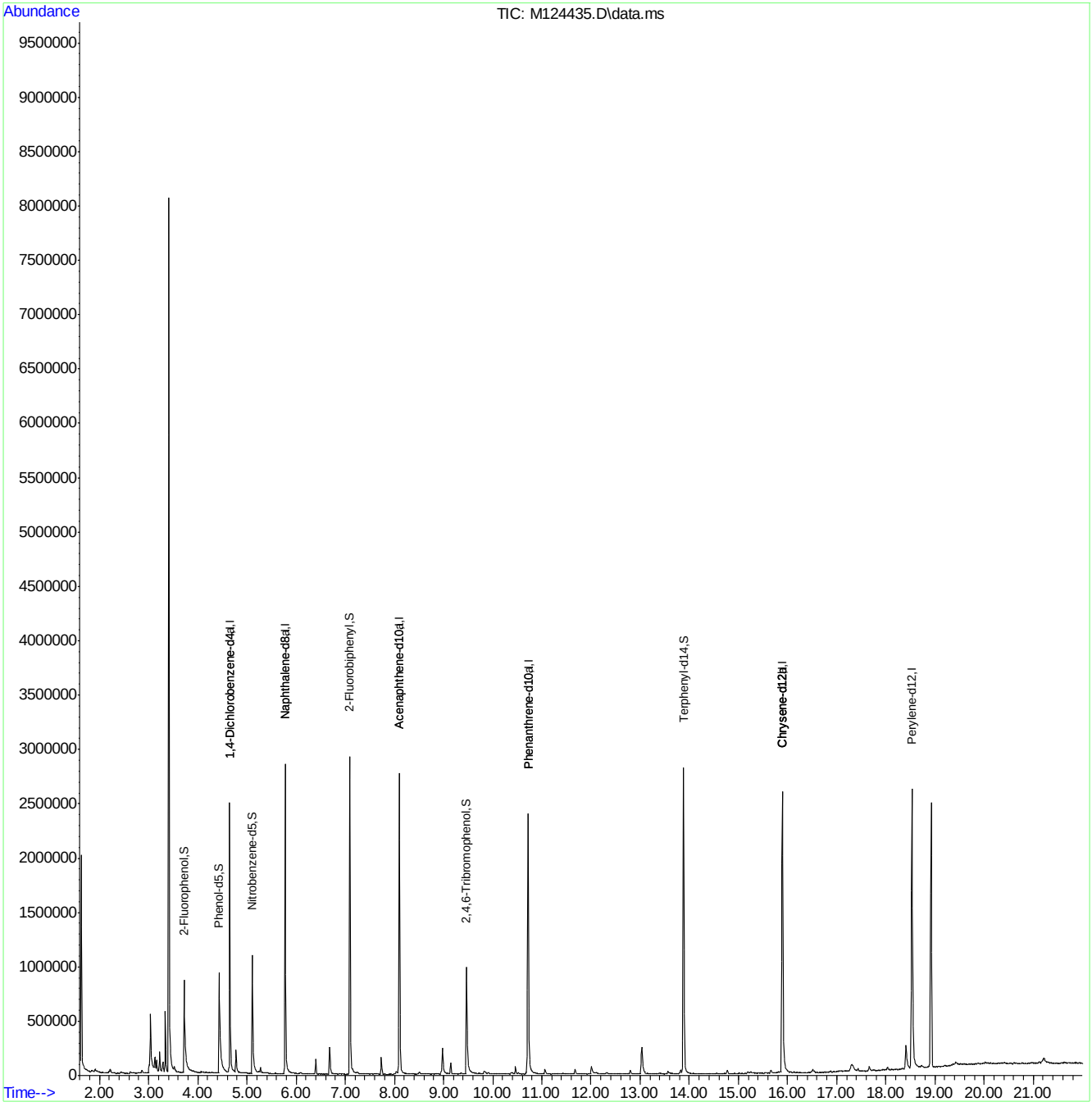
7

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124435.D
Acq On : 13 May 2016 4:56 pm
Operator : ashleyd
Sample : JC19996-2
Misc : op93830,em5264,30.1
ALS Vial : 16 Sample Multiplier: 1

Quant Time: May 16 16:11:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri May 13 16:16:56 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5261\
Data File : M124370.D
Acq On : 12 May 2016 2:24 am
Operator : juliusj
Sample : jc19996-3
Misc : op93820,em5261,860
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 12 09:52:42 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 09:45:47 2016
Response via : Initial Calibration

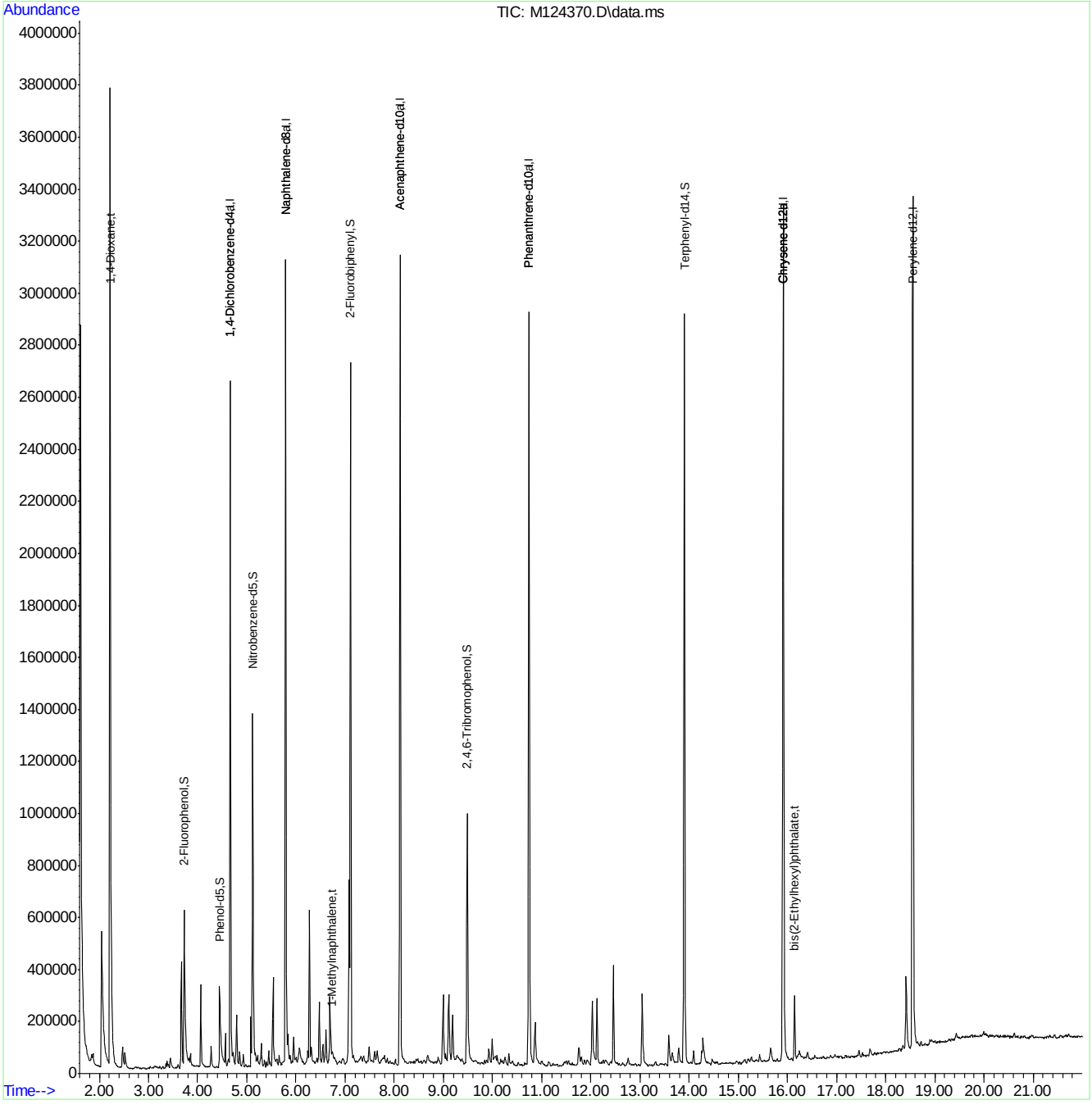
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.663	152	416229	40.00	ppm	-0.04
24) Naphthalene-d8	5.790	136	1585727	40.00	ppm	-0.06
47) Acenaphthene-d10	8.118	164	1008350	40.00	ppm	-0.07
69) Phenanthrene-d10	10.741	188	1811934	40.00	ppm	-0.08
83) Chrysene-d12	15.916	240	2103071	40.00	ppm	-0.10
92) Perylene-d12	18.549	264	2093351	40.00	ppm	-0.10
102) 1,4-Dichlorobenzene-d4a	4.663	152	416229	40.00	ppm	-0.04
104) Acenaphthene-d10a	8.118	164	1008350	40.00	ppm	-0.07
107) Chrysene-d12a	15.916	240	2102983	40.00	ppm	-0.10
110) Phenanthrene-d10a	10.741	188	1811934	40.00	ppm	-0.08
112) Naphthalene-d8a	5.790	136	1585727	40.00	ppm	-0.06
114) Chrysene-d12b	15.916	240	2103071	40.00	ppm	-0.10
System Monitoring Compounds						
5) 2-Fluorophenol	3.728	112	222316	17.47	ppm	-0.02
Spiked Amount 50.000			Recovery	=	34.94%	
8) Phenol-d5	4.449	99	210703	13.18	ppm	-0.02
Spiked Amount 50.000			Recovery	=	26.36%	
25) Nitrobenzene-d5	5.117	82	537508	38.12	ppm	-0.05
Spiked Amount 50.000			Recovery	=	76.24%	
51) 2-Fluorobiphenyl	7.109	172	1128311	34.08	ppm	-0.06
Spiked Amount 50.000			Recovery	=	68.16%	
73) 2,4,6-Tribromophenol	9.486	330	233525	37.28	ppm	-0.07
Spiked Amount 50.000			Recovery	=	74.56%	
86) Terphenyl-d14	13.903	244	1529104	32.41	ppm	-0.09
Spiked Amount 50.000			Recovery	=	64.82%	
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	2.216	88	1968694	341.12	ppm	95
45) 1-Methylnaphthalene	6.740	142	18252	0.63	ppm	95
91) bis(2-Ethylhexyl)phtha...	16.146	149	97047	2.41	ppm	97

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

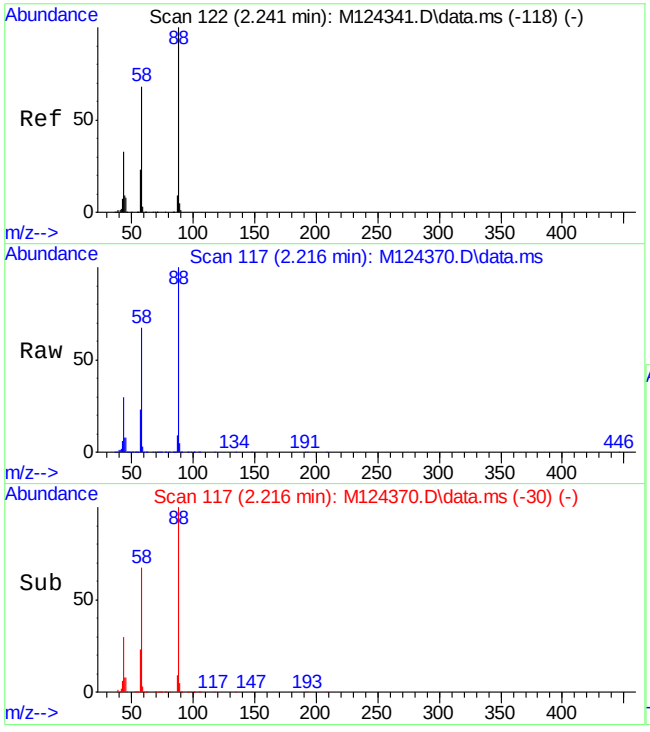
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5261\
Data File : M124370.D
Acq On : 12 May 2016 2:24 am
Operator : juliusj
Sample : jc19996-3
Misc : op93820,em5261,860
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 12 09:52:42 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 09:45:47 2016
Response via : Initial Calibration



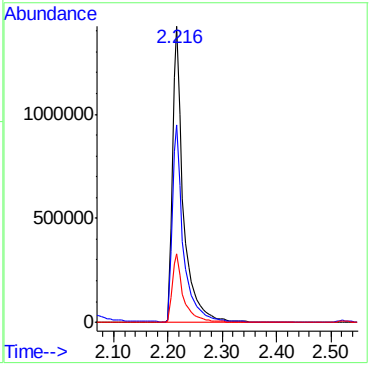
MM5239.M Thu May 12 09:53:05 2016 MSM

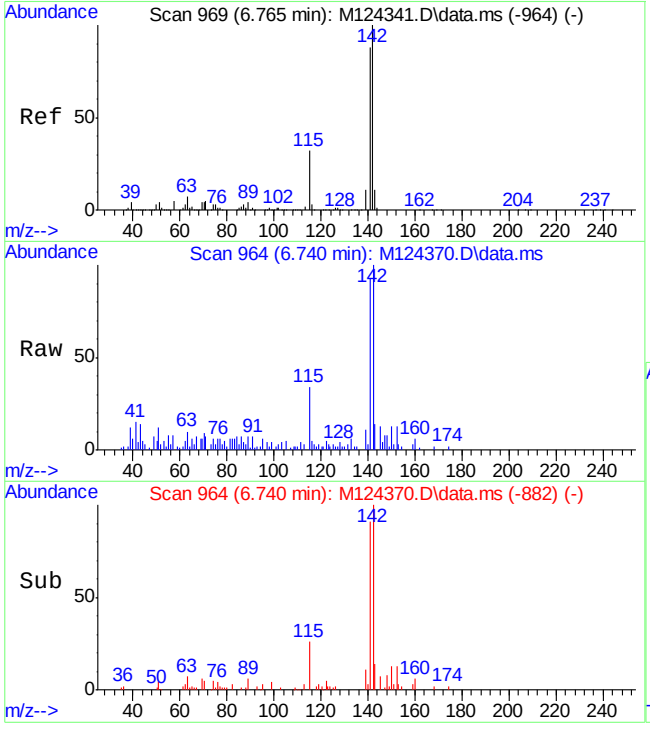


#2
1,4-Dioxane
Concen: 341.12 ppm
RT: 2.216 min Scan# 117
Delta R.T. -0.033 min
Lab File: M124370.D
Acq: 12 May 2016 2:24 am

Tgt Ion: 88 Resp: 1968694

Ion	Ratio	Lower	Upper
88	100		
58	66.6	33.2	93.2
57	23.0	0.0	50.5

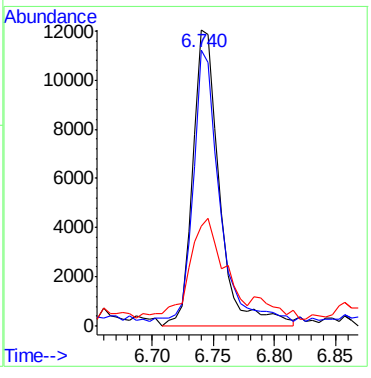


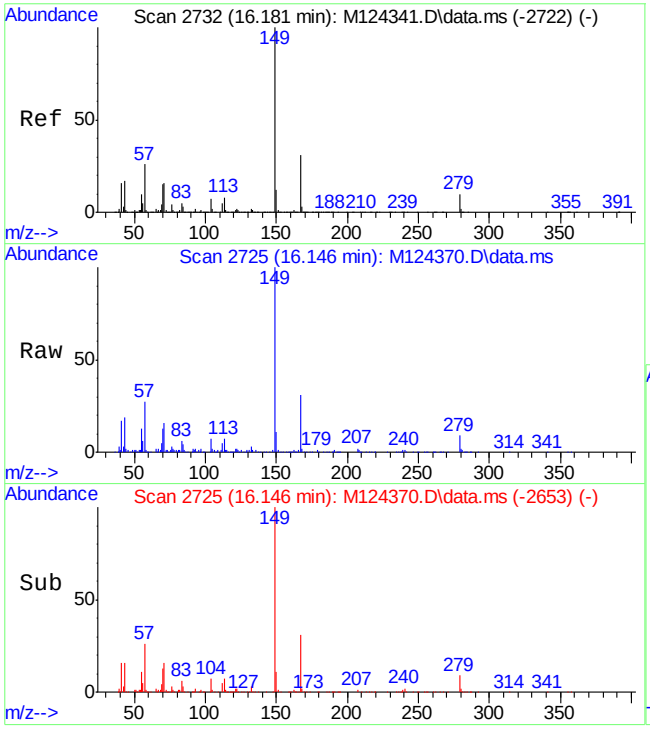


#45
1-Methylnaphthalene
Concen: 0.63 ppm
RT: 6.740 min Scan# 964
Delta R.T. -0.063 min
Lab File: M124370.D
Acq: 12 May 2016 2:24 am

Tgt Ion:142 Resp: 18252

Ion	Ratio	Lower	Upper
142	100		
141	91.9	56.8	116.8
115	29.2	1.2	61.2

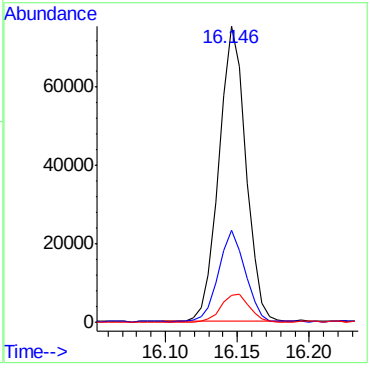




#91
bis(2-Ethylhexyl)phthalate
Concen: 2.41 ppm
RT: 16.146 min Scan# 2725
Delta R.T. -0.116 min
Lab File: M124370.D
Acq: 12 May 2016 2:24 am

Tgt Ion:149 Resp: 97047

Ion	Ratio	Lower	Upper
149	100		
167	30.8	0.0	59.7
279	9.3	0.0	37.0



7.1.3

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5262\
Data File : M124393.D
Acq On : 12 May 2016 1:20 pm
Operator : ashleyd
Sample : jc19996-3
Misc : op93820,em5262,860,,,1,10
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 12 14:22:36 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	4.653	152	297313	40.00	ppm	-0.05
24) Naphthalene-d8	5.780	136	1153709	40.00	ppm	-0.07
47) Acenaphthene-d10	8.103	164	709096	40.00	ppm	-0.09
69) Phenanthrene-d10	10.726	188	1266812	40.00	ppm	-0.10
83) Chrysene-d12	15.896	240	1476108	40.00	ppm	-0.12
92) Perylene-d12	18.529	264	1539634	40.00	ppm	-0.12
102) 1,4-Dichlorobenzene-d4a	4.653	152	297313	40.00	ppm	-0.05
104) Acenaphthene-d10a	8.103	164	709096	40.00	ppm	-0.09
107) Chrysene-d12a	15.896	240	1480896	40.00	ppm	-0.12
110) Phenanthrene-d10a	10.726	188	1266812	40.00	ppm	-0.10
112) Naphthalene-d8a	5.780	136	1153709	40.00	ppm	-0.07
114) Chrysene-d12b	15.896	240	1476108	40.00	ppm	-0.12
System Monitoring Compounds						
5) 2-Fluorophenol	3.804	112	10455	1.15	ppm	0.05
Spiked Amount 50.000			Recovery	=	2.30%	
8) Phenol-d5	4.520	99	10957	0.96	ppm	0.05
Spiked Amount 50.000			Recovery	=	1.92%	
25) Nitrobenzene-d5	5.139	82	37179	3.62	ppm	-0.03
Spiked Amount 50.000			Recovery	=	7.24%	
51) 2-Fluorobiphenyl	7.099	172	99802	4.29	ppm	-0.07
Spiked Amount 50.000			Recovery	=	8.58%	
73) 2,4,6-Tribromophenol	9.497	330	17325	3.96	ppm	-0.06
Spiked Amount 50.000			Recovery	=	7.92%	
86) Terphenyl-d14	13.888	244	128935	3.89	ppm	-0.11
Spiked Amount 50.000			Recovery	=	7.78%	
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	2.201	88	182252	44.21	ppm	94

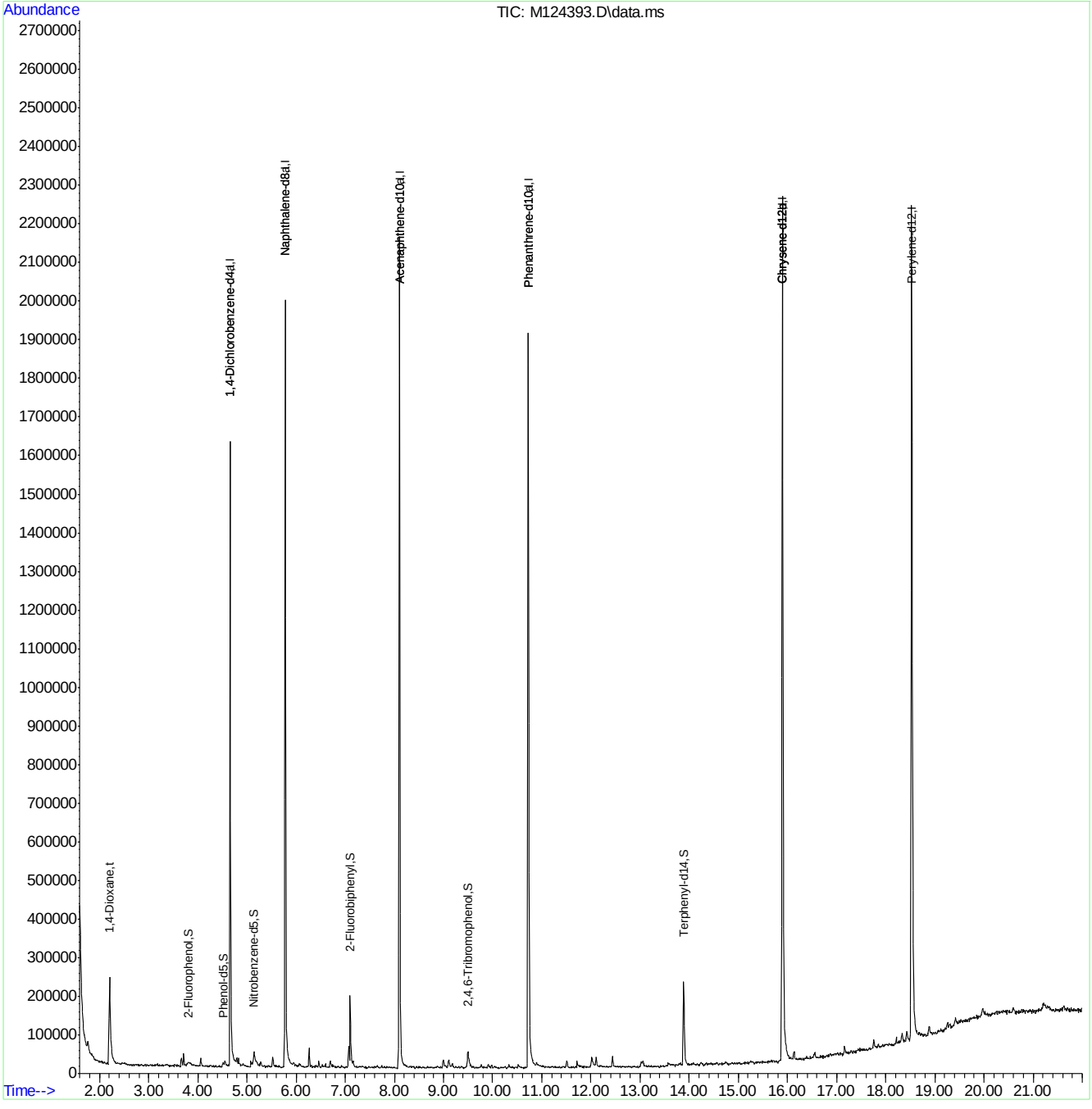
(#) = qualifier out of range (m) = manual integration (+) = signals summed

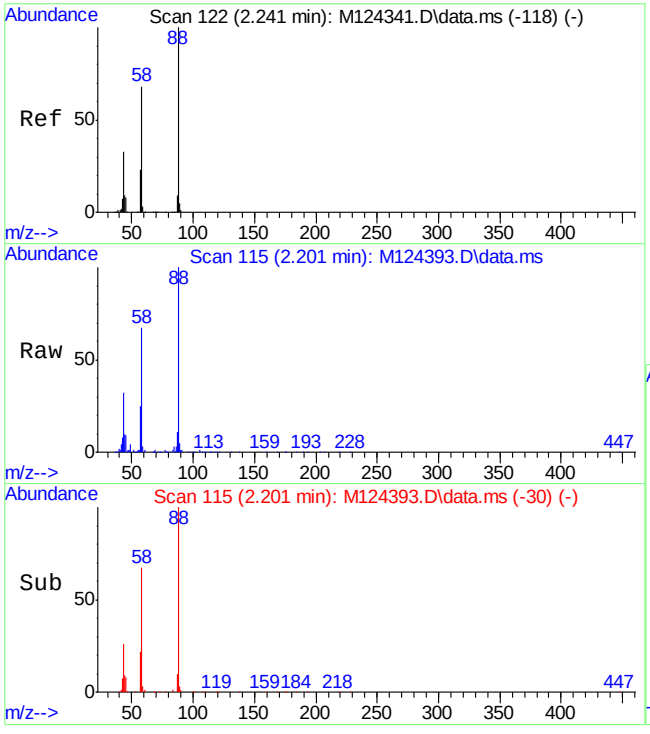
SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5262\
Data File : M124393.D
Acq On : 12 May 2016 1:20 pm
Operator : ashleyd
Sample : jc19996-3
Misc : op93820,em5262,860,,,1,10
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 12 14:22:36 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

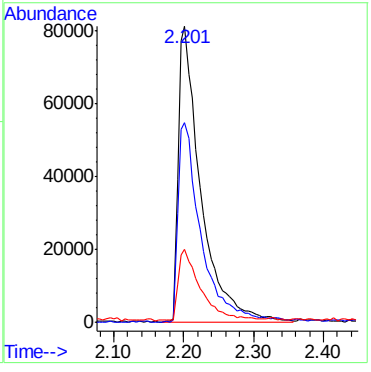




#2
1,4-Dioxane
Concen: 44.21 ppm
RT: 2.201 min Scan# 115
Delta R.T. -0.048 min
Lab File: M124393.D
Acq: 12 May 2016 1:20 pm

Tgt Ion: 88 Resp: 182252

Ion	Ratio	Lower	Upper
88	100		
58	67.3	33.2	93.2
57	23.7	0.0	50.5



7.1.4

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5261\
Data File : M124371.D
Acq On : 12 May 2016 2:53 am
Operator : juliusj
Sample : jc19996-4
Misc : op93820,em5261,930
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 12 09:54:03 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 09:45:47 2016
Response via : Initial Calibration

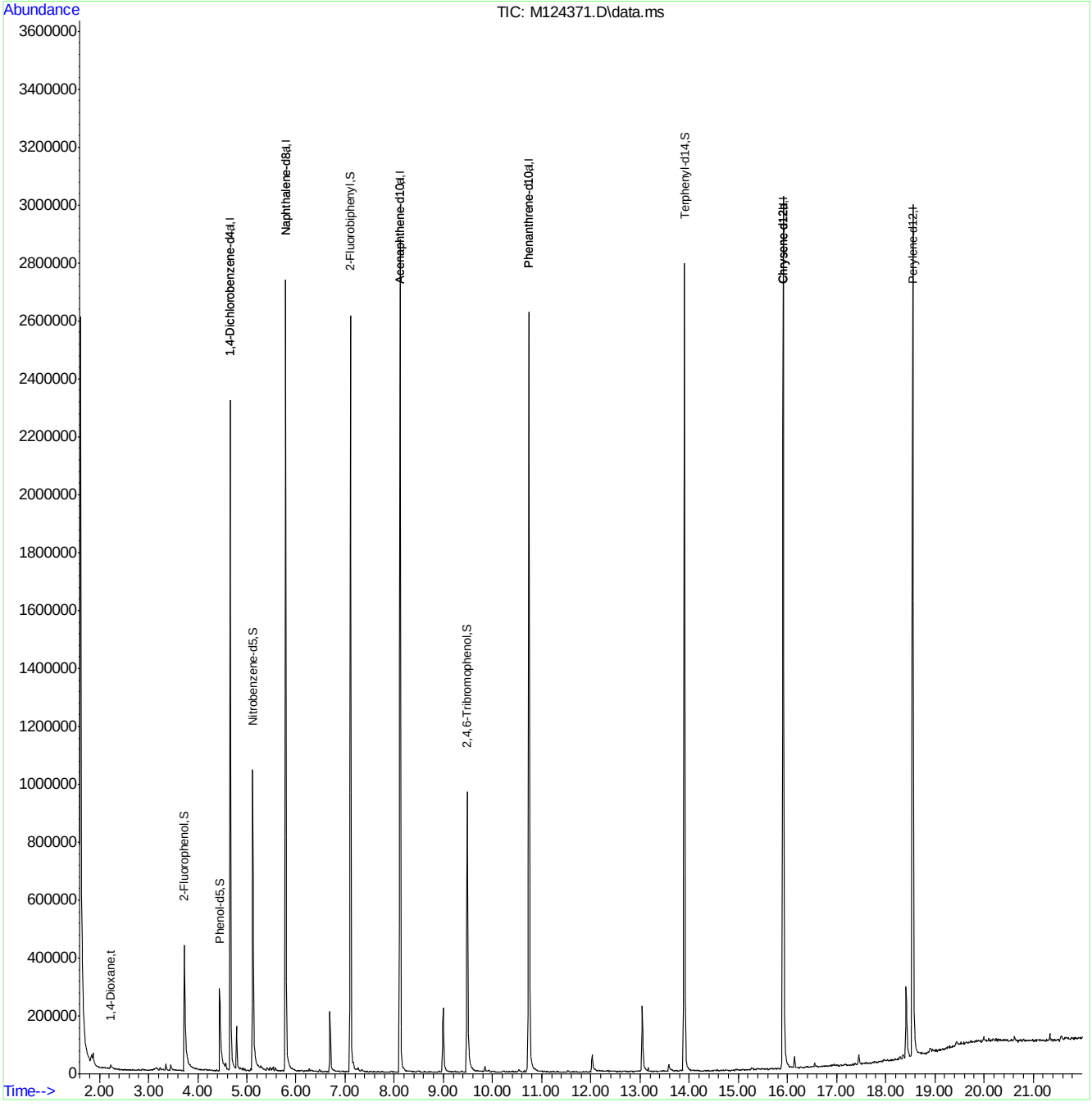
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.662	152	377879	40.00	ppm	-0.05
24) Naphthalene-d8	5.789	136	1445655	40.00	ppm	-0.06
47) Acenaphthene-d10	8.118	164	935206	40.00	ppm	-0.07
69) Phenanthrene-d10	10.740	188	1682991	40.00	ppm	-0.08
83) Chrysene-d12	15.916	240	1953629	40.00	ppm	-0.10
92) Perylene-d12	18.549	264	1946389	40.00	ppm	-0.10
102) 1,4-Dichlorobenzene-d4a	4.662	152	377879	40.00	ppm	-0.05
104) Acenaphthene-d10a	8.118	164	935206	40.00	ppm	-0.07
107) Chrysene-d12a	15.916	240	1953629	40.00	ppm	-0.10
110) Phenanthrene-d10a	10.740	188	1682991	40.00	ppm	-0.08
112) Naphthalene-d8a	5.789	136	1445655	40.00	ppm	-0.06
114) Chrysene-d12b	15.916	240	1953629	40.00	ppm	-0.10
System Monitoring Compounds						
5) 2-Fluorophenol	3.727	112	247757	21.44	ppm	-0.02
Spiked Amount 50.000			Recovery	=	42.88%	
8) Phenol-d5	4.448	99	202273	13.94	ppm	-0.02
Spiked Amount 50.000			Recovery	=	27.88%	
25) Nitrobenzene-d5	5.121	82	445677	34.67	ppm	-0.05
Spiked Amount 50.000			Recovery	=	69.34%	
51) 2-Fluorobiphenyl	7.108	172	1094489	35.64	ppm	-0.06
Spiked Amount 50.000			Recovery	=	71.28%	
73) 2,4,6-Tribromophenol	9.485	330	248657	42.74	ppm	-0.07
Spiked Amount 50.000			Recovery	=	85.48%	
86) Terphenyl-d14	13.902	244	1495375	34.12	ppm	-0.09
Spiked Amount 50.000			Recovery	=	68.24%	
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	2.232	88	6687	1.28	ppm	98

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

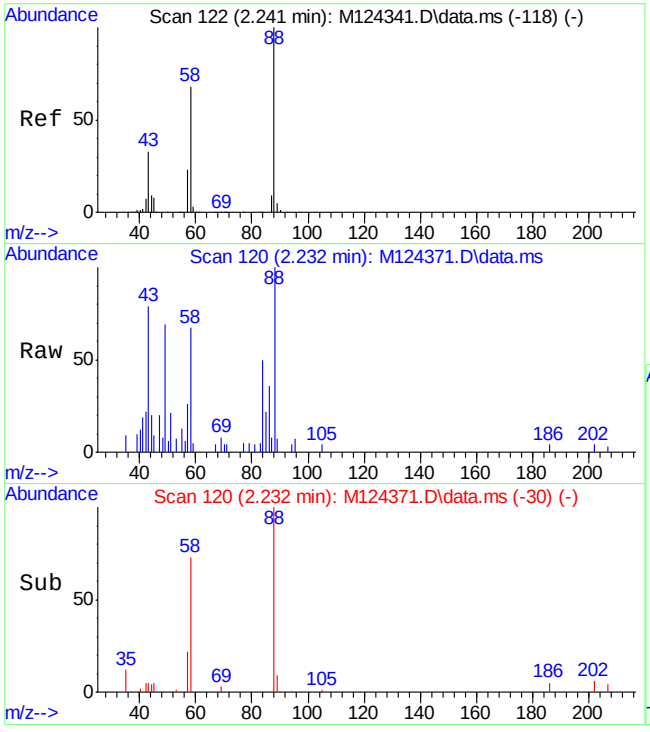
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5261\
Data File : M124371.D
Acq On : 12 May 2016 2:53 am
Operator : juliusj
Sample : jc19996-4
Misc : op93820,em5261,930
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 12 09:54:03 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 09:45:47 2016
Response via : Initial Calibration



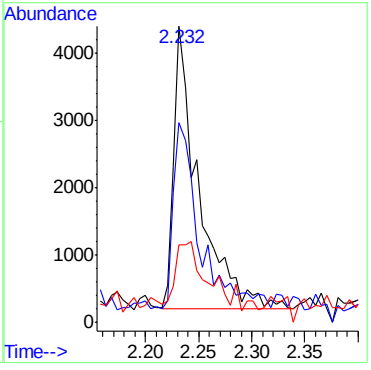
MM5239.M Thu May 12 09:54:16 2016 MSM



#2
1,4-Dioxane
Concen: 1.28 ppm
RT: 2.232 min Scan# 120
Delta R.T. -0.017 min
Lab File: M124371.D
Acq: 12 May 2016 2:53 am

Tgt Ion: 88 Resp: 6687

Ion	Ratio	Lower	Upper
88	100		
58	63.6	33.2	93.2
57	24.4	0.0	50.5



SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5261\
Data File : M124372.D
Acq On : 12 May 2016 3:22 am
Operator : juliusj
Sample : jc19996-5
Misc : op93820,em5261,960
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 12 09:55:13 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 09:45:47 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.665	152	382673	40.00	ppm	-0.04
24) Naphthalene-d8	5.786	136	1463201	40.00	ppm	-0.06
47) Acenaphthene-d10	8.115	164	955240	40.00	ppm	-0.07
69) Phenanthrene-d10	10.738	188	1719168	40.00	ppm	-0.09
83) Chrysene-d12	15.913	240	2000733	40.00	ppm	-0.10
92) Perylene-d12	18.546	264	1971376	40.00	ppm	-0.10
102) 1,4-Dichlorobenzene-d4a	4.665	152	382673	40.00	ppm	-0.04
104) Acenaphthene-d10a	8.115	164	955240	40.00	ppm	-0.07
107) Chrysene-d12a	15.913	240	2000733	40.00	ppm	-0.10
110) Phenanthrene-d10a	10.738	188	1719168	40.00	ppm	-0.09
112) Naphthalene-d8a	5.786	136	1463201	40.00	ppm	-0.06
114) Chrysene-d12b	15.913	240	2000733	40.00	ppm	-0.10
System Monitoring Compounds						
5) 2-Fluorophenol	3.730	112	229789	19.64	ppm	-0.02
Spiked Amount 50.000			Recovery	=	39.28%	
8) Phenol-d5	4.446	99	206111	14.02	ppm	-0.02
Spiked Amount 50.000			Recovery	=	28.04%	
25) Nitrobenzene-d5	5.119	82	464070	35.66	ppm	-0.05
Spiked Amount 50.000			Recovery	=	71.32%	
51) 2-Fluorobiphenyl	7.106	172	1104844	35.22	ppm	-0.06
Spiked Amount 50.000			Recovery	=	70.44%	
73) 2,4,6-Tribromophenol	9.482	330	265710	44.71	ppm	-0.08
Spiked Amount 50.000			Recovery	=	89.42%	
86) Terphenyl-d14	13.899	244	1535473	34.21	ppm	-0.10
Spiked Amount 50.000			Recovery	=	68.42%	
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	2.251	88	15153360	2855.87	ppm	94

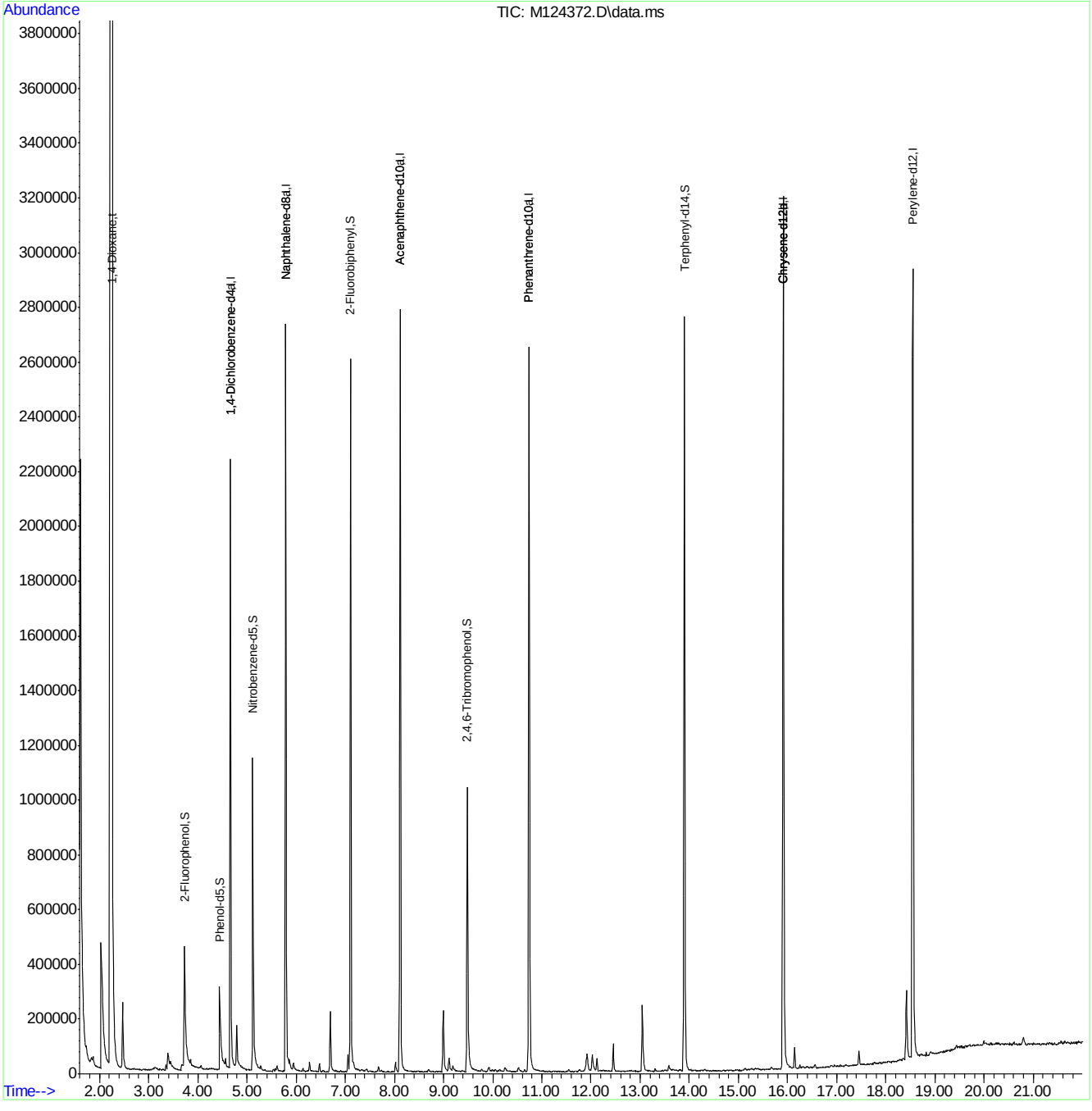
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

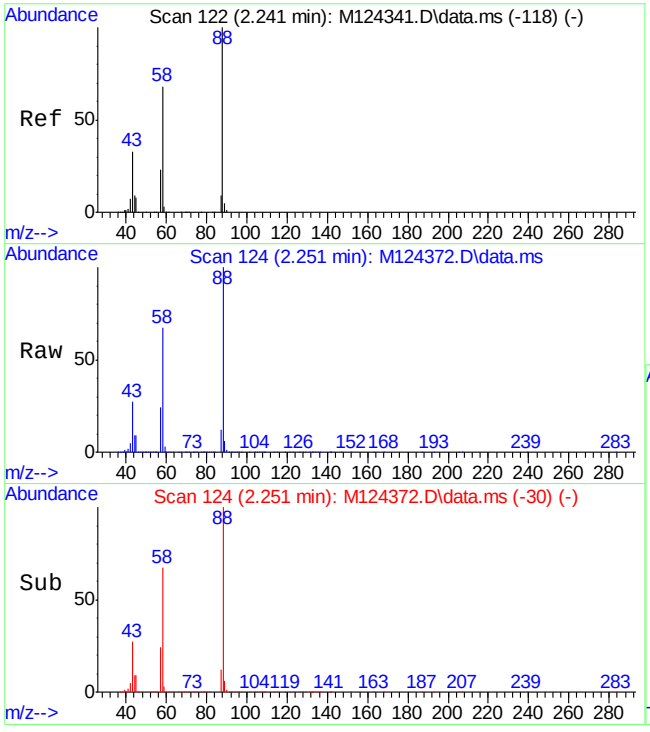
Data Path : C:\msdchem\1\DATA\EM5261\
Data File : M124372.D
Acq On : 12 May 2016 3:22 am
Operator : juliusj
Sample : jc19996-5
Misc : op93820,em5261,960
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 12 09:55:13 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 09:45:47 2016
Response via : Initial Calibration



MM5239.M Thu May 12 09:55:33 2016 MSM

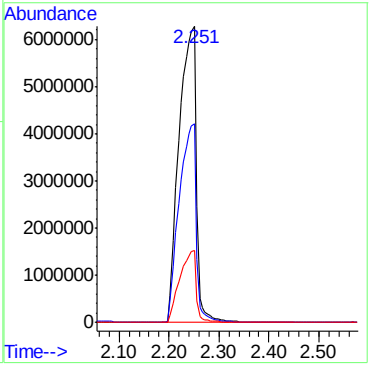
SGS ACCUTEST JC19996



#2
1,4-Dioxane
Concen: 2855.87 ppm
RT: 2.251 min Scan# 124
Delta R.T. 0.001 min
Lab File: M124372.D
Acq: 12 May 2016 3:22 am

Tgt Ion: 88 Resp:15153360

Ion	Ratio	Lower	Upper
88	100		
58	67.2	33.2	93.2
57	24.2	0.0	50.5



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5262\
Data File : M124394.D
Acq On : 12 May 2016 1:49 pm
Operator : ashleyd
Sample : jc19996-5
Misc : op93820,em5262,960,,,1,100
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 12 14:23:10 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

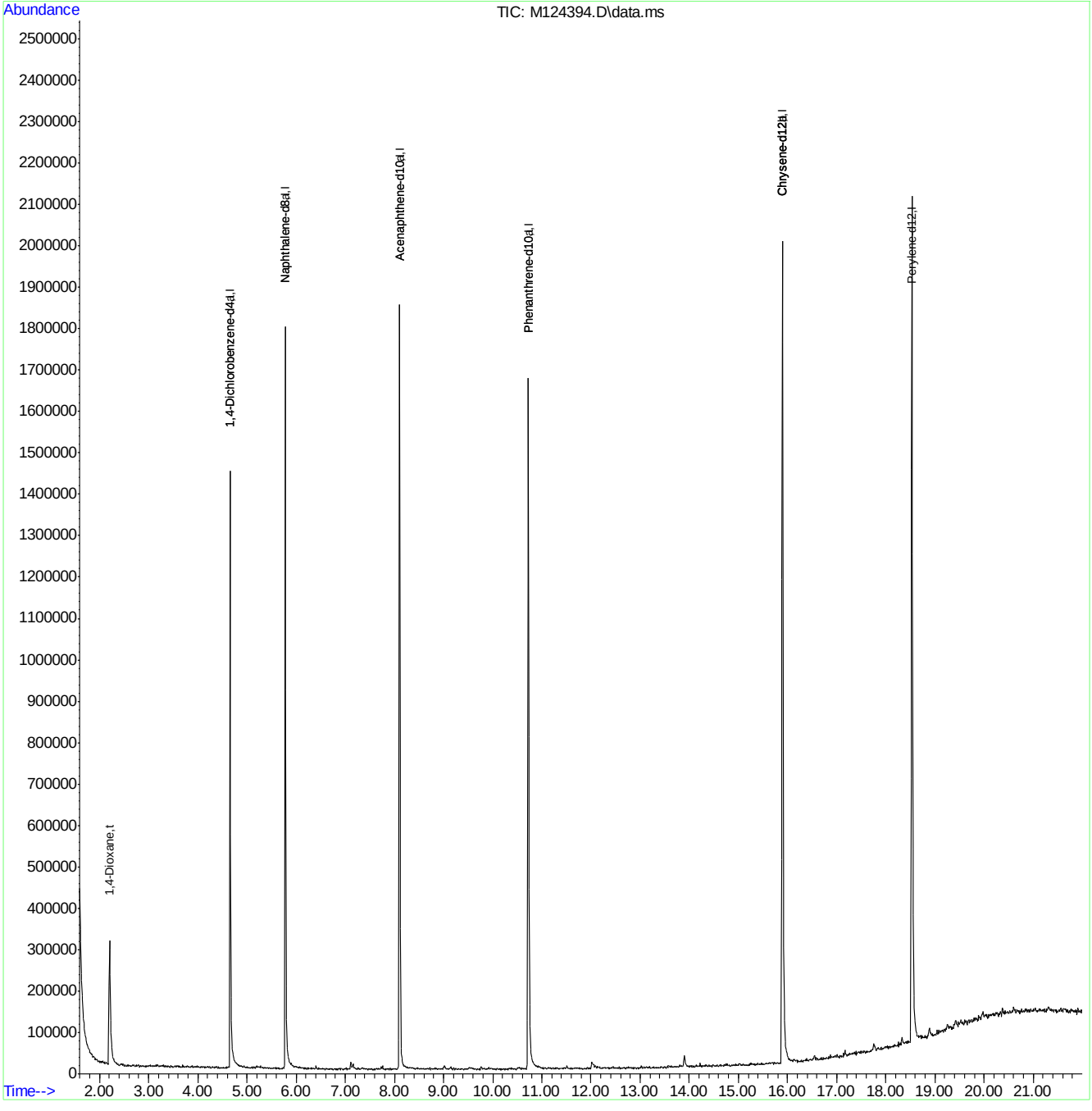
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.655	152	277024	40.00	ppm	-0.05
24) Naphthalene-d8	5.776	136	1047379	40.00	ppm	-0.07
47) Acenaphthene-d10	8.105	164	652359	40.00	ppm	-0.08
69) Phenanthrene-d10	10.722	188	1164297	40.00	ppm	-0.10
83) Chrysene-d12	15.898	240	1362384	40.00	ppm	-0.12
92) Perylene-d12	18.531	264	1430302	40.00	ppm	-0.12
102) 1,4-Dichlorobenzene-d4a	4.655	152	277024	40.00	ppm	-0.05
104) Acenaphthene-d10a	8.105	164	652359	40.00	ppm	-0.08
107) Chrysene-d12a	15.898	240	1362320	40.00	ppm	-0.12
110) Phenanthrene-d10a	10.722	188	1164297	40.00	ppm	-0.10
112) Naphthalene-d8a	5.776	136	1047379	40.00	ppm	-0.07
114) Chrysene-d12b	15.898	240	1362384	40.00	ppm	-0.12
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	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.203	88	250856	65.31	ppm	95

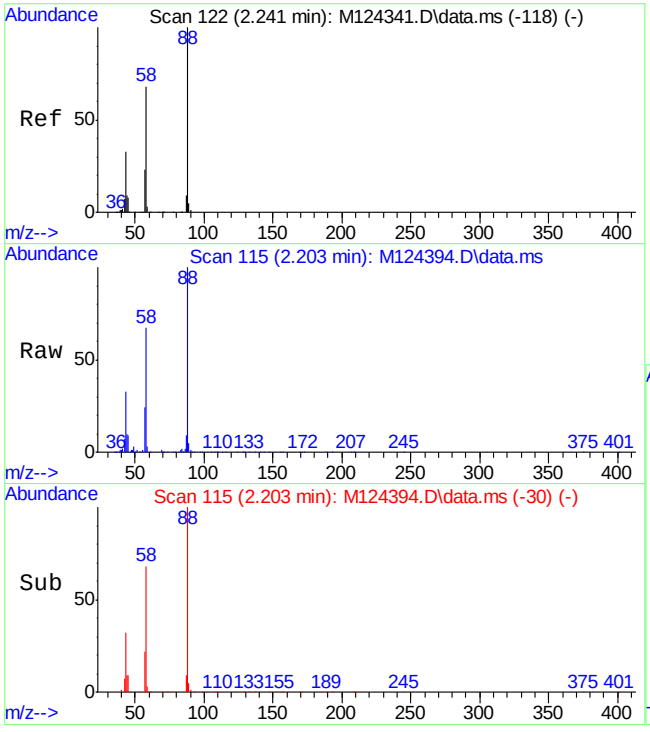
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5262\
Data File : M124394.D
Acq On : 12 May 2016 1:49 pm
Operator : ashleyd
Sample : jc19996-5
Misc : op93820,em5262,960,,,1,100
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 12 14:23:10 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

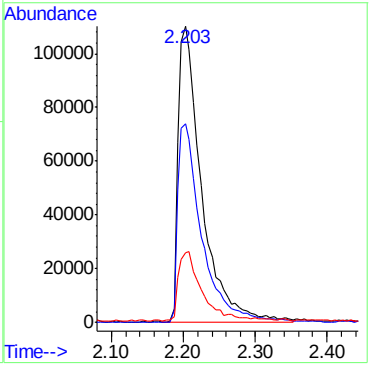




#2
1,4-Dioxane
Concen: 65.31 ppm
RT: 2.203 min Scan# 115
Delta R.T. -0.046 min
Lab File: M124394.D
Acq: 12 May 2016 1:49 pm

Tgt Ion: 88 Resp: 250856

Ion	Ratio	Lower	Upper
88	100		
58	67.2	33.2	93.2
57	23.1	0.0	50.5



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5261\
Data File : M124373.D
Acq On : 12 May 2016 3:50 am
Operator : juliusj
Sample : jc19996-6
Misc : op93820,em5261,900
ALS Vial : 12 Sample Multiplier: 1

Quant Time: May 12 09:56:36 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 09:45:47 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.664	152	391638	40.00	ppm	-0.04
24) Naphthalene-d8	5.786	136	1509986	40.00	ppm	-0.06
47) Acenaphthene-d10	8.114	164	958859	40.00	ppm	-0.08
69) Phenanthrene-d10	10.737	188	1738947	40.00	ppm	-0.09
83) Chrysene-d12	15.912	240	2028532	40.00	ppm	-0.10
92) Perylene-d12	18.551	264	1998566	40.00	ppm	-0.10
102) 1,4-Dichlorobenzene-d4a	4.664	152	391638	40.00	ppm	-0.04
104) Acenaphthene-d10a	8.114	164	958859	40.00	ppm	-0.08
107) Chrysene-d12a	15.912	240	2028532	40.00	ppm	-0.10
110) Phenanthrene-d10a	10.737	188	1738947	40.00	ppm	-0.09
112) Naphthalene-d8a	5.786	136	1509986	40.00	ppm	-0.06
114) Chrysene-d12b	15.912	240	2028532	40.00	ppm	-0.10
System Monitoring Compounds						
5) 2-Fluorophenol	3.729	112	268560	22.42	ppm	-0.02
Spiked Amount 50.000			Recovery = 44.84%			
8) Phenol-d5	4.445	99	235266	15.64	ppm	-0.02
Spiked Amount 50.000			Recovery = 31.28%			
25) Nitrobenzene-d5	5.118	82	508964	37.90	ppm	-0.05
Spiked Amount 50.000			Recovery = 75.80%			
51) 2-Fluorobiphenyl	7.105	172	1183909	37.60	ppm	-0.06
Spiked Amount 50.000			Recovery = 75.20%			
73) 2,4,6-Tribromophenol	9.482	330	271878	45.23	ppm	-0.08
Spiked Amount 50.000			Recovery = 90.46%			
86) Terphenyl-d14	13.904	244	1605735	35.29	ppm	-0.09
Spiked Amount 50.000			Recovery = 70.58%			
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	2.218	88	353763	65.15	ppm	91

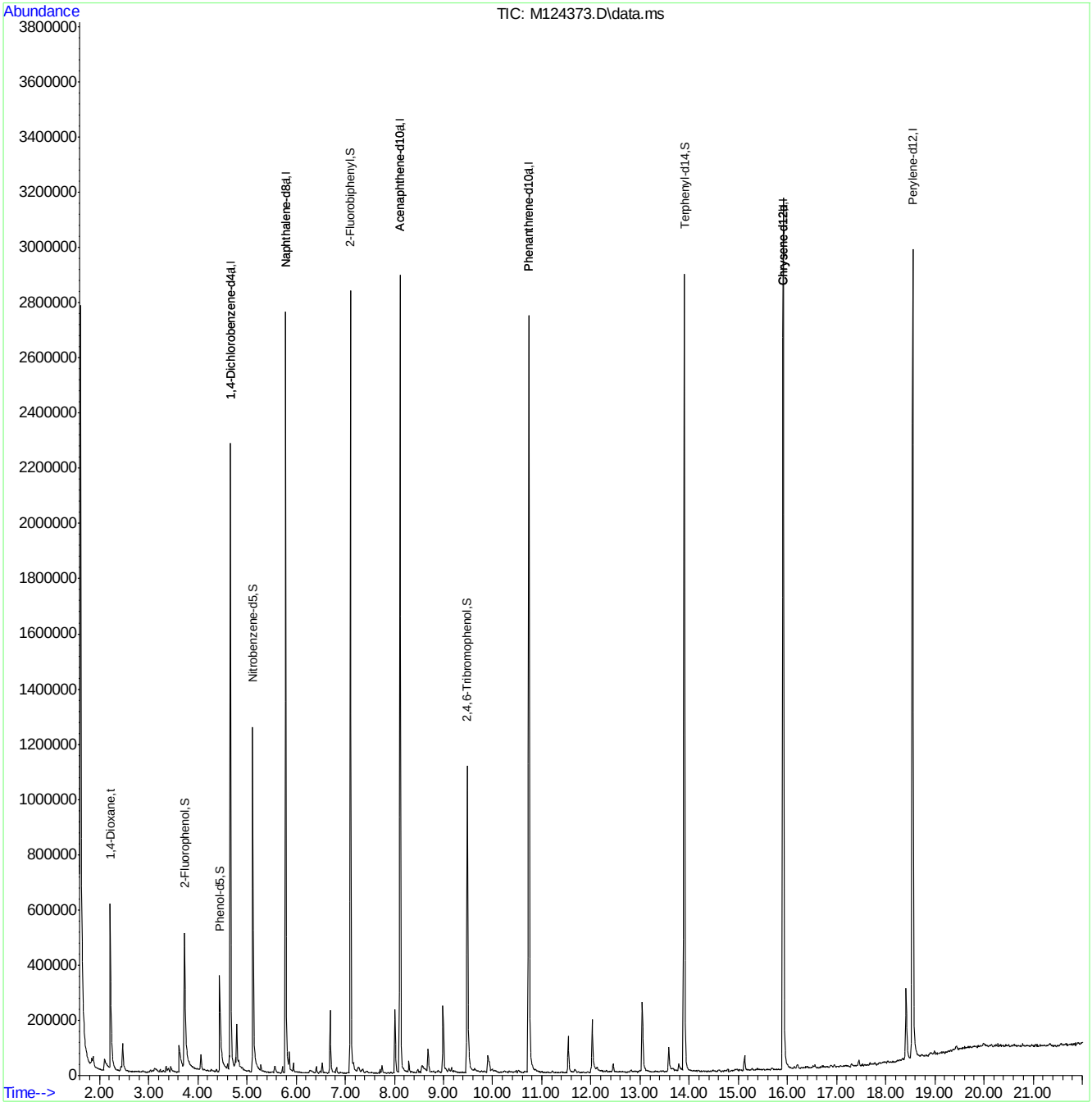
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19996

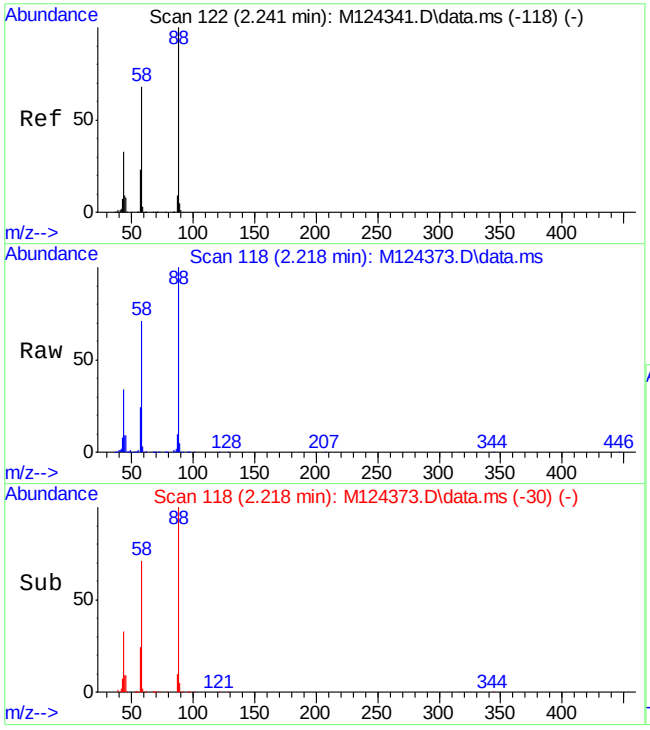
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5261\
Data File : M124373.D
Acq On : 12 May 2016 3:50 am
Operator : juliusj
Sample : jc19996-6
Misc : op93820,em5261,900
ALS Vial : 12 Sample Multiplier: 1

Quant Time: May 12 09:56:36 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 09:45:47 2016
Response via : Initial Calibration



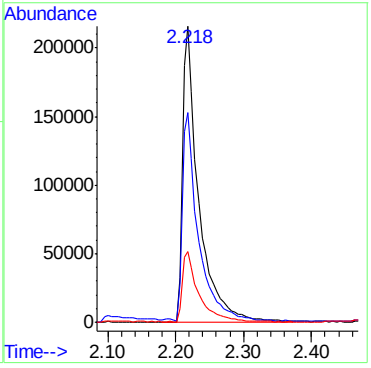
MM5239.M Thu May 12 09:56:50 2016 MSM



#2
1,4-Dioxane
Concen: 65.15 ppm
RT: 2.218 min Scan# 118
Delta R.T. -0.031 min
Lab File: M124373.D
Acq: 12 May 2016 3:50 am

Tgt Ion: 88 Resp: 353763

Ion	Ratio	Lower	Upper
88	100		
58	70.3	33.2	93.2
57	24.0	0.0	50.5



7.1.8

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2880\
Data File : 3m61256.D
Acq On : 12 May 2016 6:50 am
Operator : juliusj
Sample : jc19996-1
Misc : op93820a,e3m2880,990
ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 12 09:09:14 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	10.344	150	526719	4.00	ppm	-0.08
14) Fluorene-d10	13.336	176	686466	4.00	ppm	-0.11
21) Fluoranthene-d10	17.561	212	1114241	4.00	ppm	-0.08
31) Benzo(a)pyrene-d12	22.166	264	905718	4.00	ppm	-0.01
System Monitoring Compounds						
3) 2-Fluorophenol	4.307	112	1706377	25.89	ppm	-0.12
Spiked Amount 50.000			Recovery = 51.78%			
4) Phenol-d5	5.903	99	1658429	15.21	ppm	-0.08
Spiked Amount 50.000			Recovery = 30.42%			
7) Nitrobenzene-d5	7.474	82	4372717	43.13	ppm	-0.10
Spiked Amount 50.000			Recovery = 86.26%			
15) 2-Fluorobiphenyl	11.021	172	9523297	50.49	ppm	-0.12
Spiked Amount 50.000			Recovery = 100.98%			
20) 2,4,6-Tribromophenol	13.901	330	1039027	48.36	ppm	-0.07
Spiked Amount 50.000			Recovery = 96.72%			
28) Terphenyl-d14	18.380	244	7799318	48.25	ppm	-0.05
Spiked Amount 50.000			Recovery = 96.50%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.097	88	1392778	51.18	ppm #	22

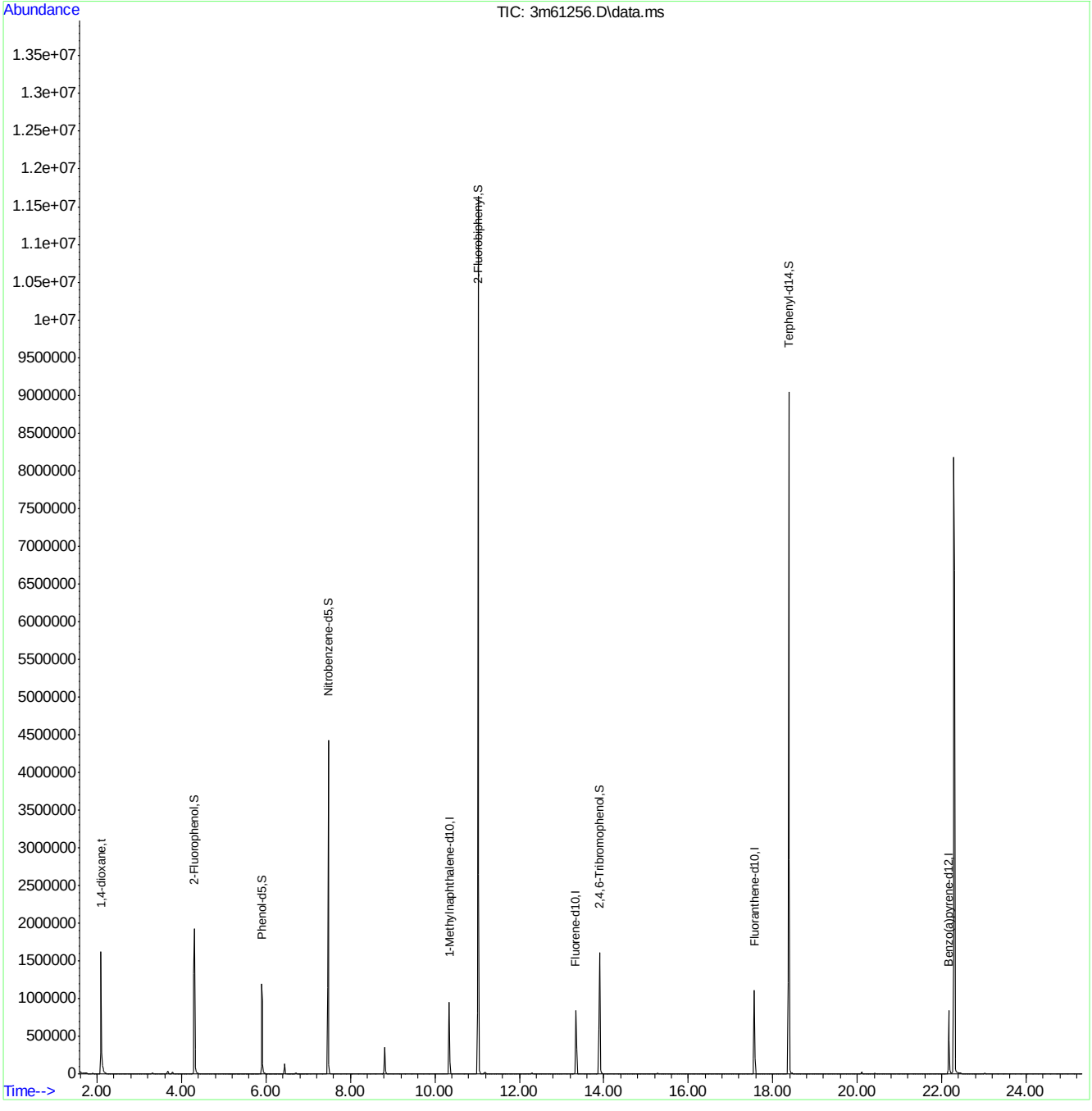
(#) = qualifier out of range (m) = manual integration (+) = signals summed

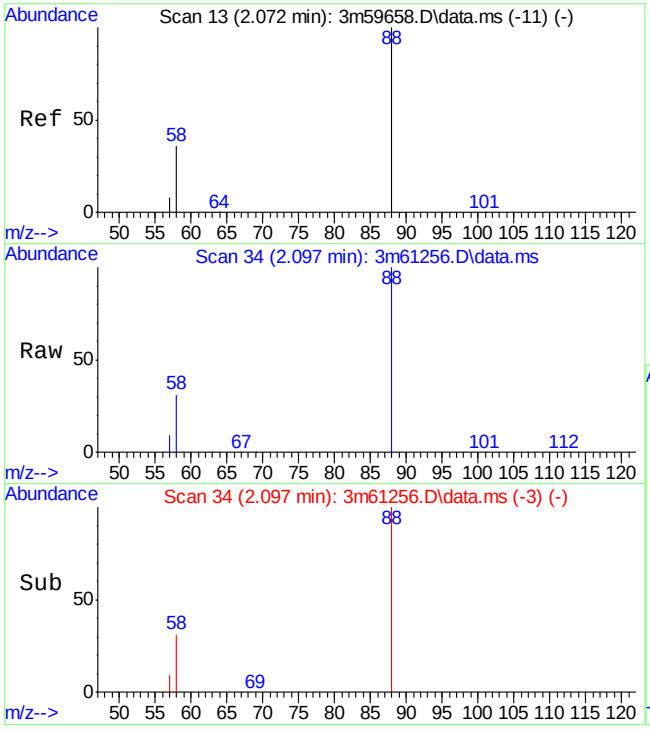
SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2880\
Data File : 3m61256.D
Acq On : 12 May 2016 6:50 am
Operator : juliusj
Sample : jc19996-1
Misc : op93820a,e3m2880,990
ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 12 09:09:14 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

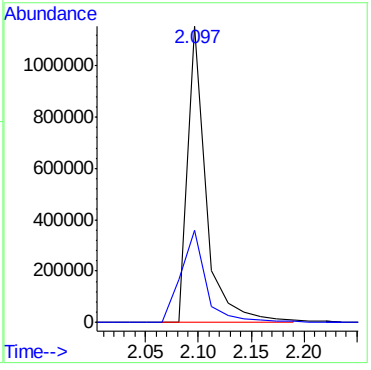




#2
1,4-dioxane
Concen: 51.18 ppm
RT: 2.097 min Scan# 34
Delta R.T. -0.016 min
Lab File: 3m61256.D
Acq: 12 May 2016 6:50 am

Tgt Ion: 88 Resp: 1392778

Ion	Ratio	Lower	Upper
88	100		
58	31.1	95.4	135.4#



SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2919\
Data File : 4m65272.D
Acq On : 13 May 2016 5:41 pm
Operator : ashleyd
Sample : jc19996-2
Misc : op93830a,e4m2919,30.1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 17 09:09:23 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	10.511	152	311324	4.00	ppm	# 0.00
12) Fluorene-d10	13.489	176	547407	4.00	ppm	0.00
22) Fluoranthene-d10	17.685	212	857853	4.00	ppm	0.02
28) Benzo(a)pyrene-d12	22.285	264	640626	4.00	ppm	0.01
35) 1-Methylnaphthalene-d10a	10.511	152	311324	4.00	ppm	# 0.00
38) Fluorene-d10a	13.489	176	547407	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	4.579	112	1575993	38.66	ppm	-0.06
Spiked Amount 50.000	Range 11 - 58		Recovery = 77.32%#			
3) Phenol-d5	6.150	99	2655920	38.74	ppm	-0.05
Spiked Amount 50.000			Recovery = 77.48%			
6) Nitrobenzene-d5	7.651	82	2366512	38.50	ppm	-0.06
Spiked Amount 50.000			Recovery = 77.00%			
11) 2-Fluorobiphenyl	11.179	172	4543921	50.57	ppm	0.02
Spiked Amount 50.000			Recovery = 101.14%			
17) 2,4,6-Tribromophenol	14.038	330	1173826	40.20	ppm	0.00
Spiked Amount 50.000			Recovery = 80.40%			
25) Terphenyl-d14	18.495	244	5100817	44.01	ppm	0.03
Spiked Amount 50.000			Recovery = 88.02%			
Target Compounds						Qvalue

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

7.1.10

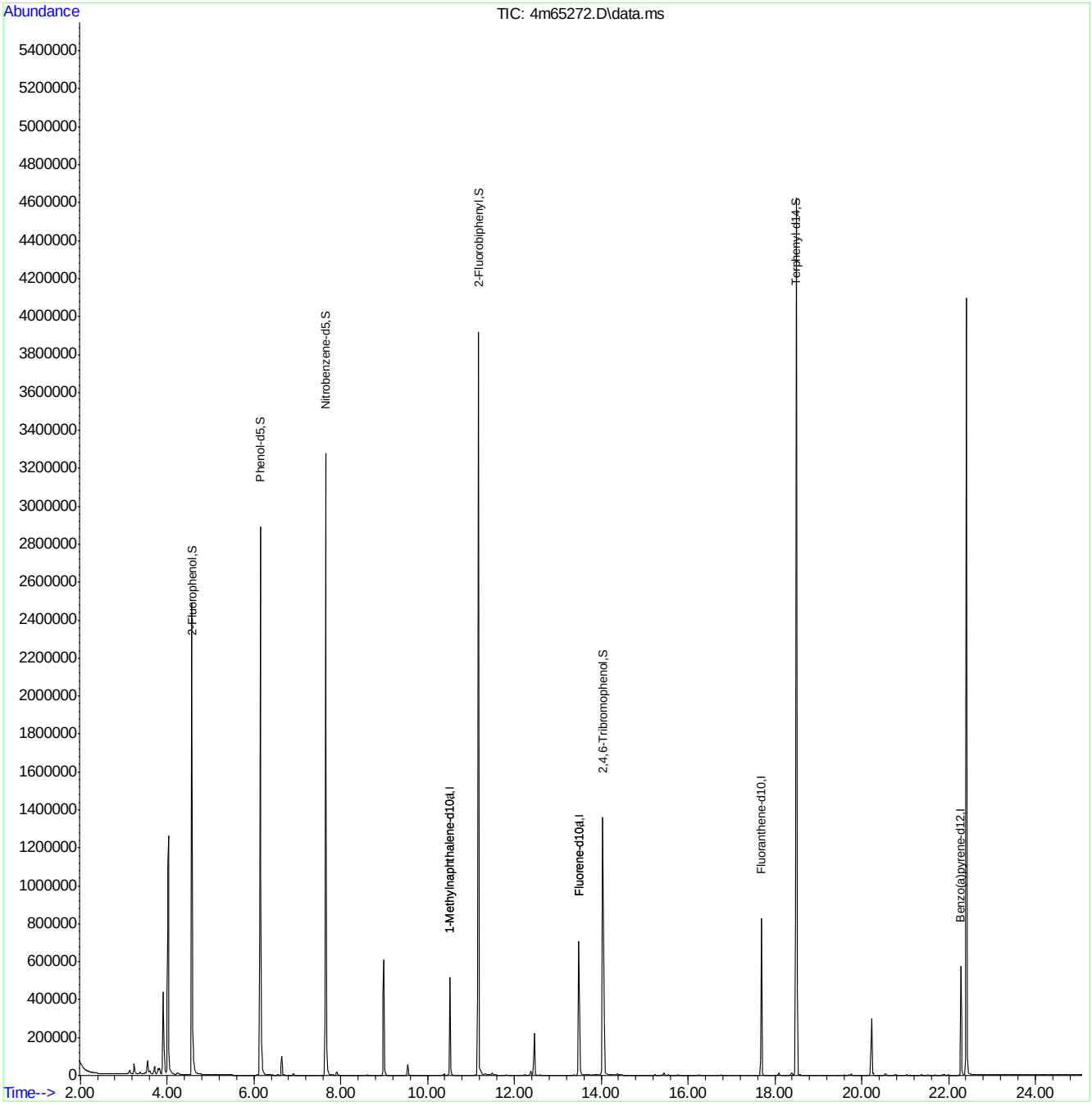
7

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2919\
Data File : 4m65272.D
Acq On : 13 May 2016 5:41 pm
Operator : ashleyd
Sample : jc19996-2
Misc : op93830a,e4m2919,30.1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 17 09:09:23 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



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2880\
Data File : 3m61257.D
Acq On : 12 May 2016 7:22 am
Operator : juliusj
Sample : jc19996-3
Misc : op93820a,e3m2880,860
ALS Vial : 15 Sample Multiplier: 1

Quant Time: May 12 09:10:15 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

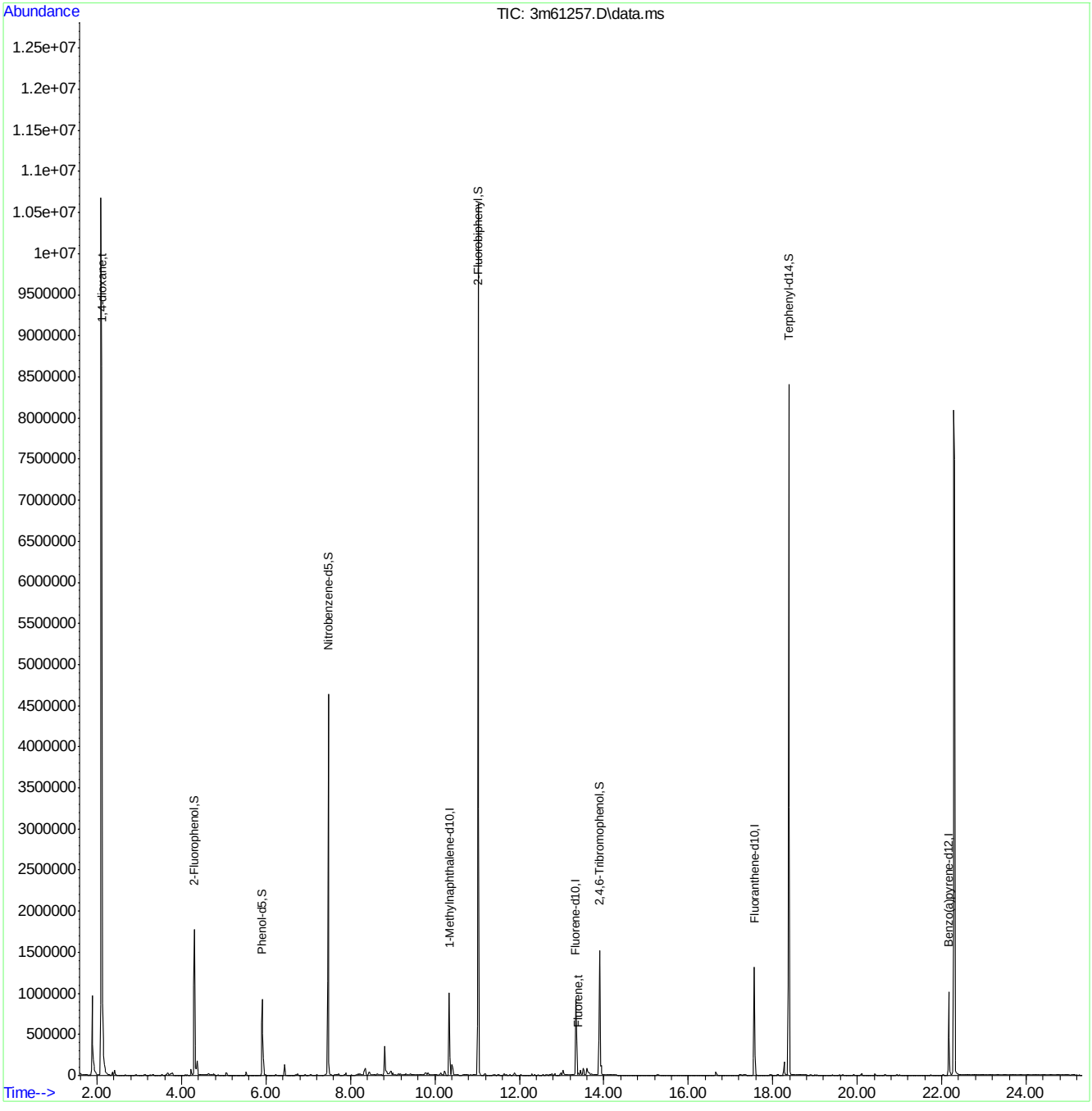
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.344	150	583336	4.00	ppm	-0.08
14) Fluorene-d10	13.336	176	788644	4.00	ppm	-0.11
21) Fluoranthene-d10	17.562	212	1282655	4.00	ppm	-0.08
31) Benzo(a)pyrene-d12	22.166	264	1040616	4.00	ppm	-0.01
System Monitoring Compounds						
3) 2-Fluorophenol	4.307	112	1531673	20.99	ppm	-0.12
Spiked Amount 50.000			Recovery = 41.98%			
4) Phenol-d5	5.915	99	1631893	13.51	ppm	-0.07
Spiked Amount 50.000			Recovery = 27.02%			
7) Nitrobenzene-d5	7.474	82	4556975	40.58	ppm	-0.10
Spiked Amount 50.000			Recovery = 81.16%			
15) 2-Fluorobiphenyl	11.021	172	9112439	42.05	ppm	-0.12
Spiked Amount 50.000			Recovery = 84.10%			
20) 2,4,6-Tribromophenol	13.901	330	933570	37.82	ppm	-0.07
Spiked Amount 50.000			Recovery = 75.64%			
28) Terphenyl-d14	18.380	244	7556797	40.61	ppm	-0.05
Spiked Amount 50.000			Recovery = 81.22%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.112	88	11743243	389.64	ppm	# 1
19) Fluorene	13.392	166	21641	0.10	ppm	# 63

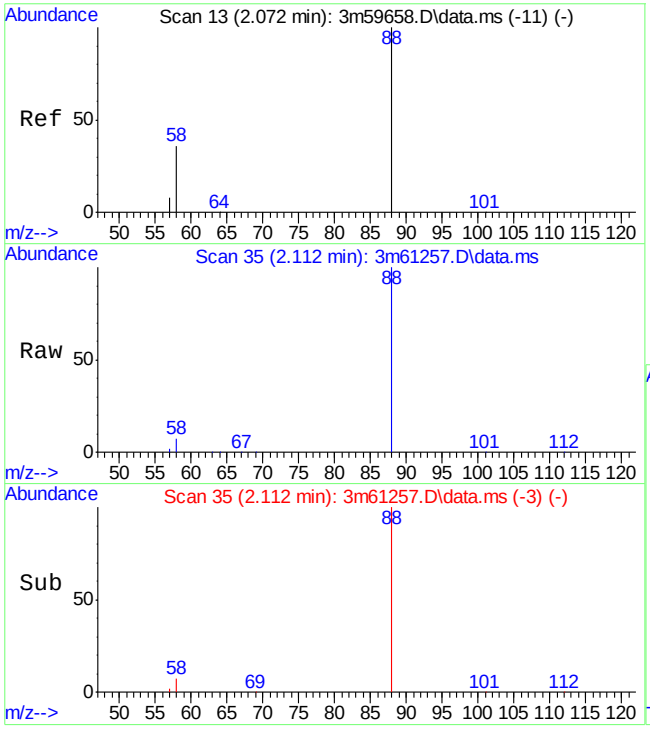
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2880\
Data File : 3m61257.D
Acq On : 12 May 2016 7:22 am
Operator : juliusj
Sample : jc19996-3
Misc : op93820a,e3m2880,860
ALS Vial : 15 Sample Multiplier: 1

Quant Time: May 12 09:10:15 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

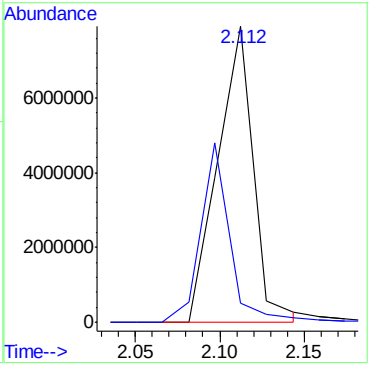


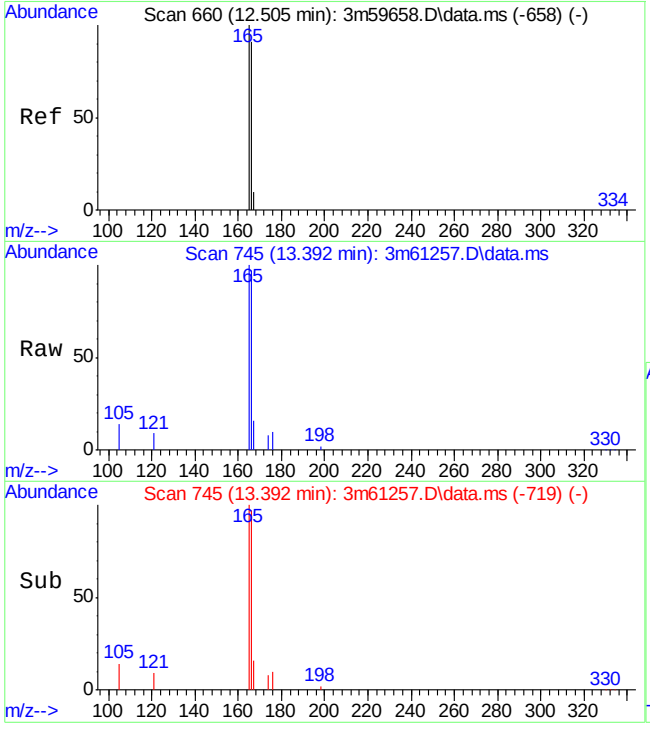


#2
1,4-dioxane
Concen: 389.64 ppm
RT: 2.112 min Scan# 35
Delta R.T. -0.000 min
Lab File: 3m61257.D
Acq: 12 May 2016 7:22 am

Tgt Ion: 88 Resp:11743243

Ion	Ratio	Lower	Upper
88	100		
58	6.0	95.4	135.4#

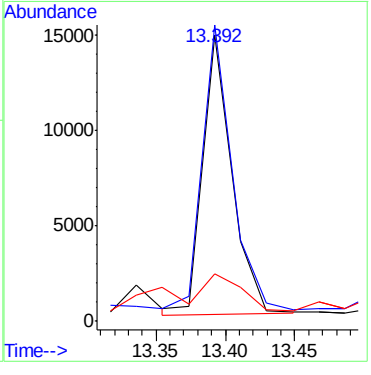




#19
Fluorene
Concen: 0.10 ppm
RT: 13.392 min Scan# 745
Delta R.T. -0.038 min
Lab File: 3m61257.D
Acq: 12 May 2016 7:22 am

Tgt Ion:166 Resp: 21641

Ion	Ratio	Lower	Upper
166	100		
165	103.1	98.1	158.1
167	9.0	31.2	91.2#



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2880\
Data File : 3m61258.D
Acq On : 12 May 2016 7:54 am
Operator : juliusj
Sample : jc19996-4
Misc : op93820a,e3m2880,930
ALS Vial : 16 Sample Multiplier: 1

Quant Time: May 12 09:11:17 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	10.344	150	497146	4.00	ppm	-0.08
14) Fluorene-d10	13.335	176	680694	4.00	ppm	-0.11
21) Fluoranthene-d10	17.561	212	1078896	4.00	ppm	-0.08
31) Benzo(a)pyrene-d12	22.166	264	910076	4.00	ppm	-0.01
System Monitoring Compounds						
3) 2-Fluorophenol	4.306	112	1581131	25.42	ppm	-0.12
Spiked Amount 50.000			Recovery = 50.84%			
4) Phenol-d5	5.903	99	1587689	15.43	ppm	-0.08
Spiked Amount 50.000			Recovery = 30.86%			
7) Nitrobenzene-d5	7.474	82	3551829	37.12	ppm	-0.10
Spiked Amount 50.000			Recovery = 74.24%			
15) 2-Fluorobiphenyl	11.021	172	8121582	43.42	ppm	-0.12
Spiked Amount 50.000			Recovery = 86.84%			
20) 2,4,6-Tribromophenol	13.901	330	894617	41.99	ppm	-0.07
Spiked Amount 50.000			Recovery = 83.98%			
28) Terphenyl-d14	18.380	244	7311533	46.72	ppm	-0.05
Spiked Amount 50.000			Recovery = 93.44%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.097	88	42668	1.66	ppm #	26

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

7.1.12

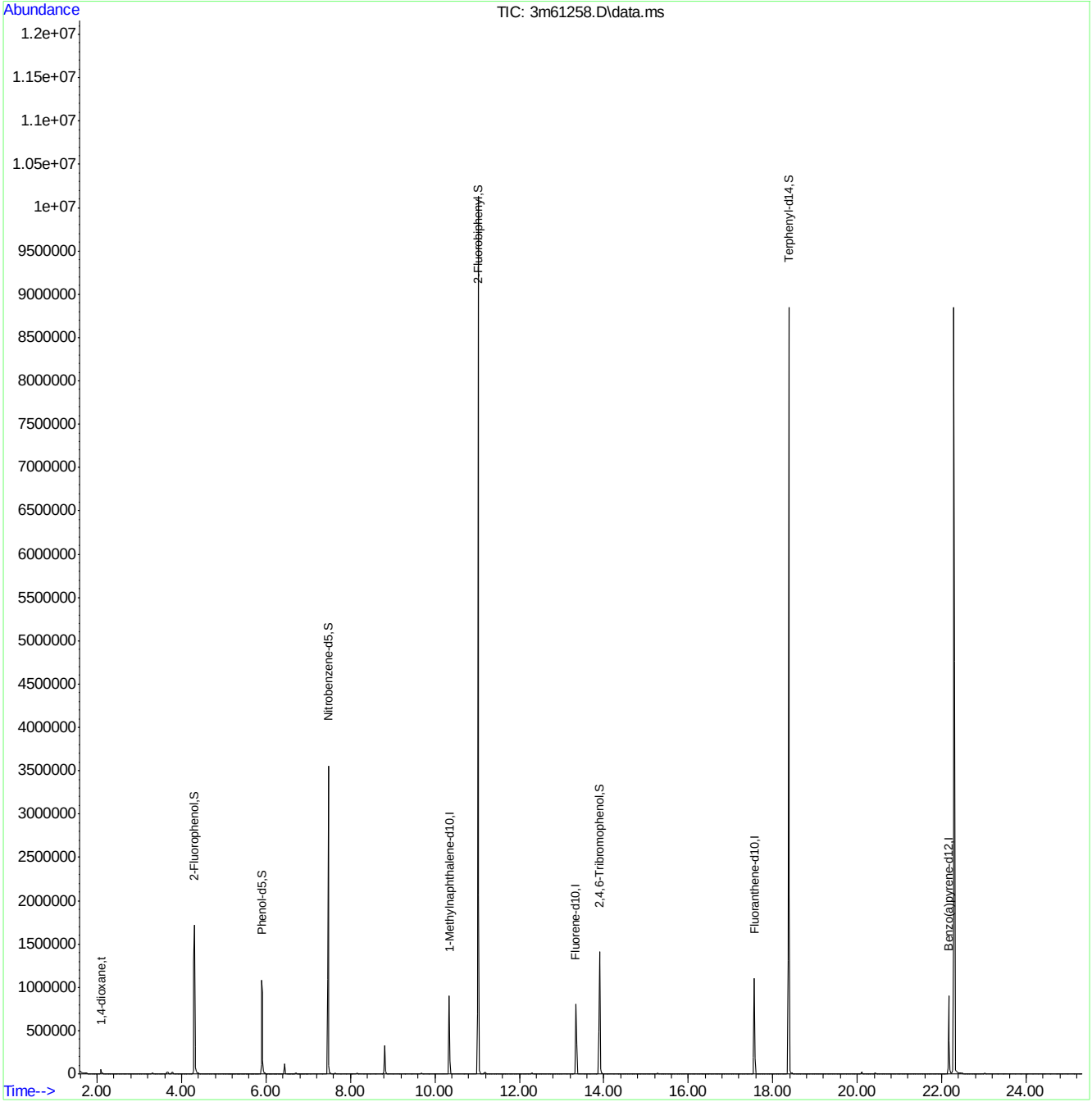
7

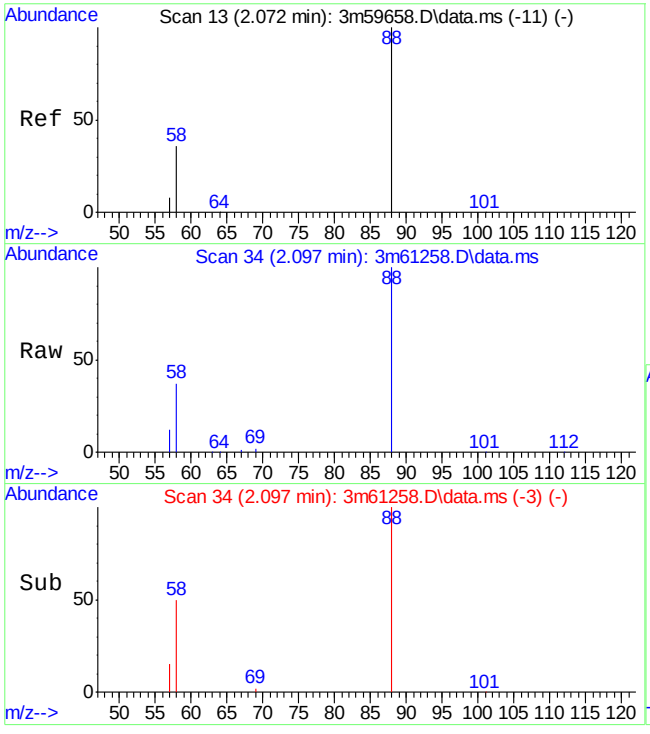
SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2880\
Data File : 3m61258.D
Acq On : 12 May 2016 7:54 am
Operator : juliusj
Sample : jc19996-4
Misc : op93820a,e3m2880,930
ALS Vial : 16 Sample Multiplier: 1

Quant Time: May 12 09:11:17 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

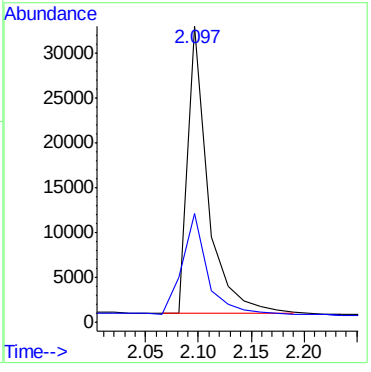




#2
1,4-dioxane
Concen: 1.66 ppm
RT: 2.097 min Scan# 34
Delta R.T. -0.016 min
Lab File: 3m61258.D
Acq: 12 May 2016 7:54 am

Tgt Ion: 88 Resp: 42668

Ion	Ratio	Lower	Upper
88	100		
58	35.3	95.4	135.4#



7.1.12

7

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
05/12/16 09:51

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2880\
Data File : 3m61259.D
Acq On : 12 May 2016 8:26 am
Operator : juliusj
Sample : jc19996-5
Misc : op93820a,e3m2880,960
ALS Vial : 17 Sample Multiplier: 1

Quant Time: May 12 09:12:47 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	10.344	150	515738	4.00	ppm	-0.08
14) Fluorene-d10	13.335	176	706993	4.00	ppm	-0.11
21) Fluoranthene-d10	17.561	212	1141477	4.00	ppm	-0.08
31) Benzo(a)pyrene-d12	22.166	264	924629	4.00	ppm	-0.01
System Monitoring Compounds						
3) 2-Fluorophenol	4.306	112	1517223	23.51	ppm	-0.12
Spiked Amount 50.000			Recovery = 47.02%			
4) Phenol-d5	5.915	99	1618837	15.16	ppm	-0.07
Spiked Amount 50.000			Recovery = 30.32%			
7) Nitrobenzene-d5	7.474	82	3563824	35.90	ppm	-0.10
Spiked Amount 50.000			Recovery = 71.80%			
15) 2-Fluorobiphenyl	11.021	172	8295618	42.70	ppm	-0.12
Spiked Amount 50.000			Recovery = 85.40%			
20) 2,4,6-Tribromophenol	13.901	330	903658	40.84	ppm	-0.07
Spiked Amount 50.000			Recovery = 81.68%			
28) Terphenyl-d14	18.380	244	7394048	44.65	ppm	-0.05
Spiked Amount 50.000			Recovery = 89.30%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.112	88	38723350m	1453.24	ppm	

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

7.1.13

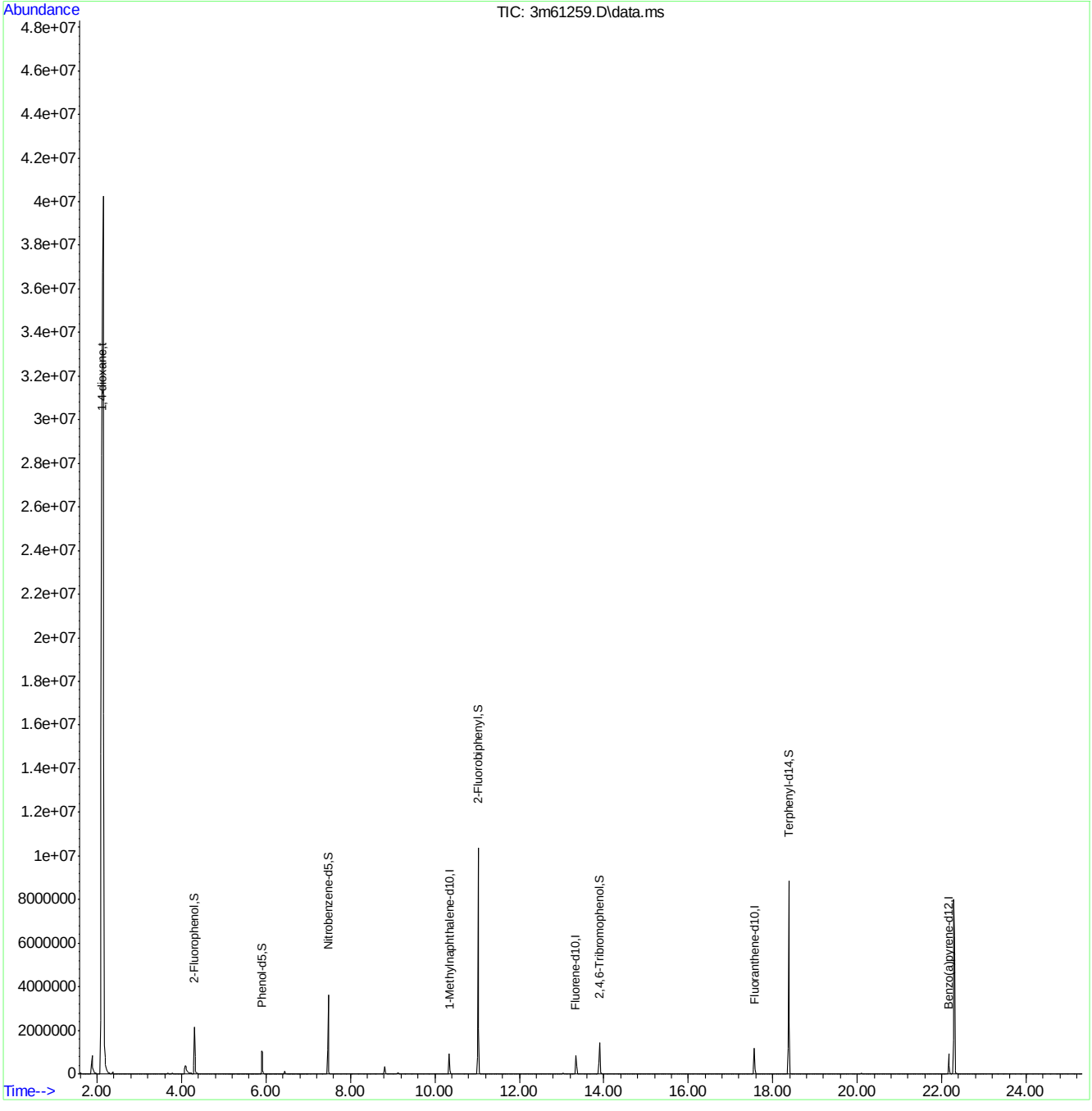
7

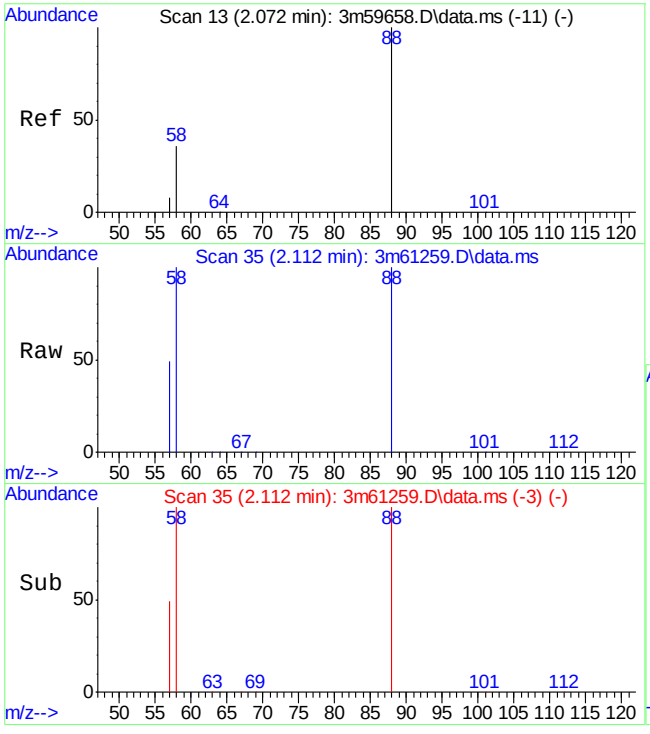
SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2880\
Data File : 3m61259.D
Acq On : 12 May 2016 8:26 am
Operator : juliusj
Sample : jc19996-5
Misc : op93820a,e3m2880,960
ALS Vial : 17 Sample Multiplier: 1

Quant Time: May 12 09:12:47 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

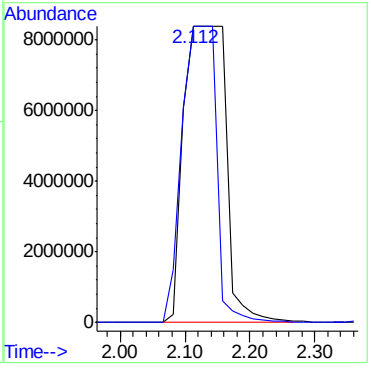




#2
1,4-dioxane
Concen: 1453.24 ppm m
RT: 2.112 min Scan# 35
Delta R.T. -0.000 min
Lab File: 3m61259.D
Acq: 12 May 2016 8:26 am

Tgt Ion: 88 Resp:38723350

Ion	Ratio	Lower	Upper
88	100		
58	100.0	95.4	135.4



Manual Integration Approval Summary

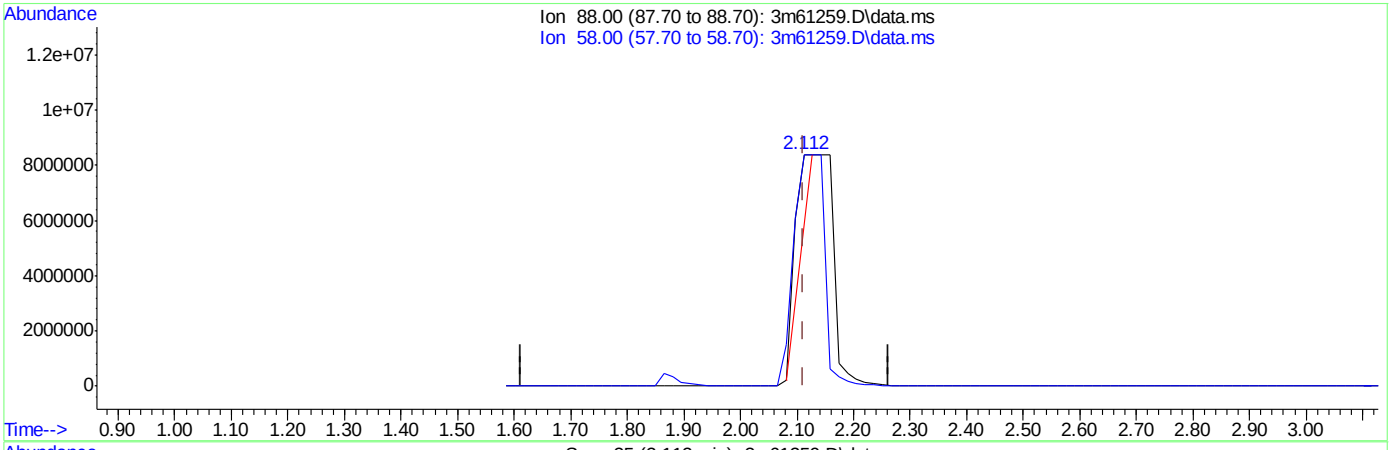
Sample Number:	JC19996-5	**Method:**	SW846 8270D BY SIM
Lab FileID:	3M61259.D	**Analyst approved:**	05/12/16 09:15 Kristi Schollenberger
Injection Time:	05/12/16 08:26	**Supervisor approved:**	05/12/16 09:51 Nina Pandya

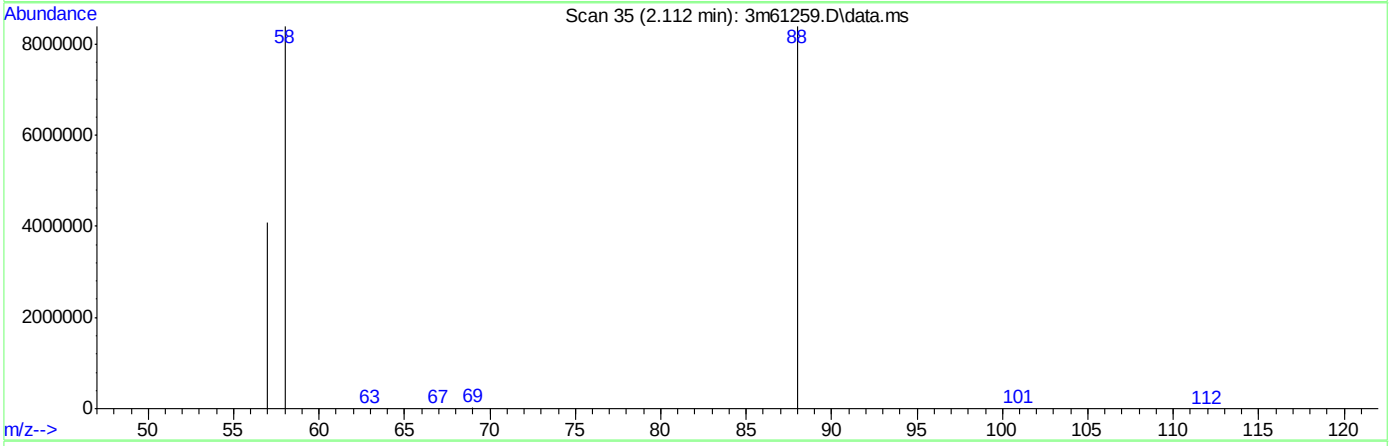
Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dioxane	123-91-1		2.11	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2880\
Data File : 3m61259.D
Acq On : 12 May 2016 8:26 am
Operator : juliusj
Sample : jc19996-5
Misc : op93820a,e3m2880,960
ALS Vial : 17 Sample Multiplier: 1

Quant Time: May 12 08:51:39 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: 3m61259.D\data.ms

(2) 1,4-dioxane (t)

2.112min (-0.000) 353.62ppm

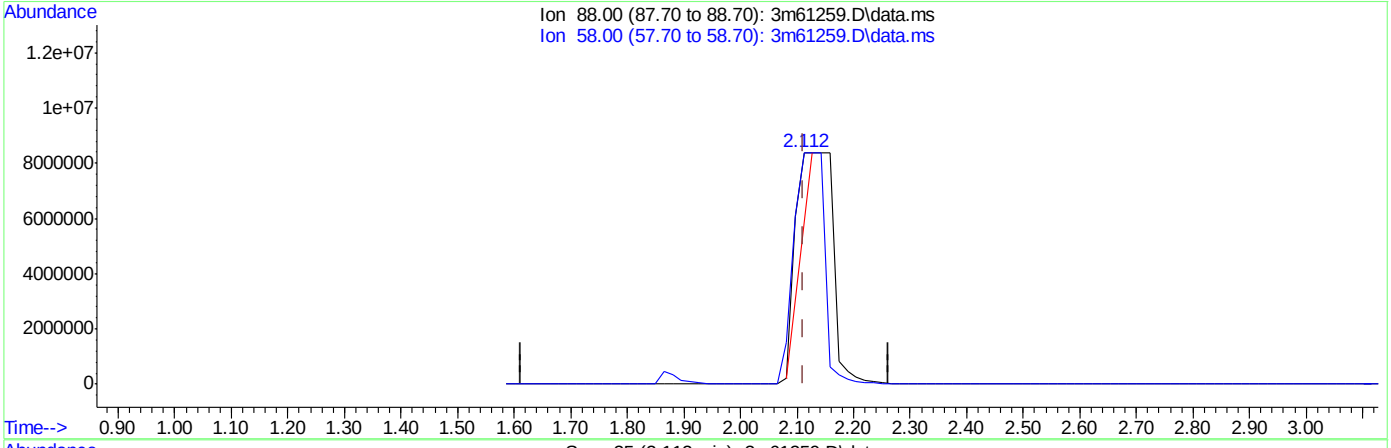
response 9422689

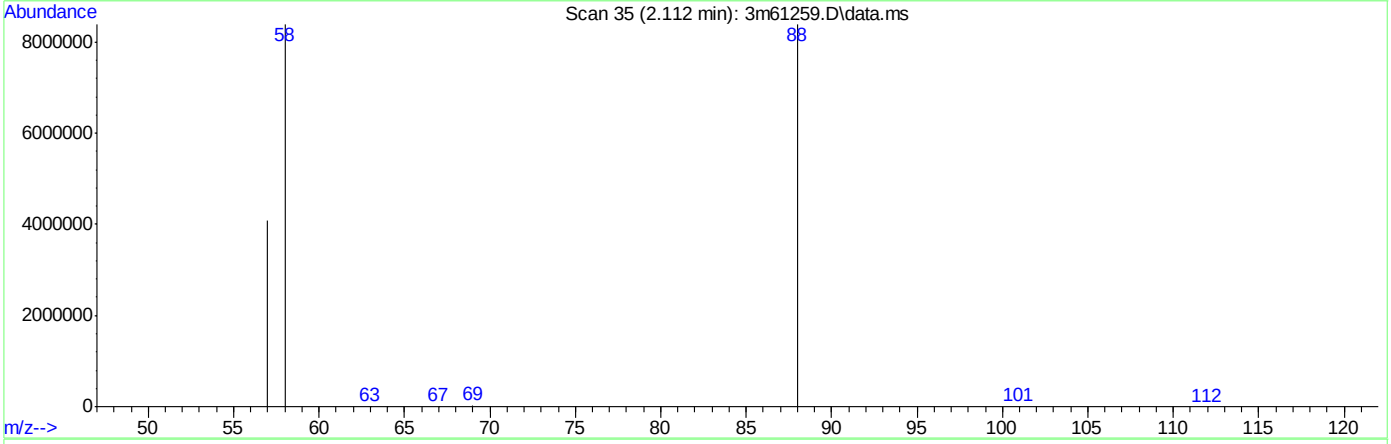
Ion	Exp%	Act%
88.00	100	100
58.00	115.40	84.33#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2880\
Data File : 3m61259.D
Acq On : 12 May 2016 8:26 am
Operator : juliusj
Sample : jc19996-5
Misc : op93820a,e3m2880,960
ALS Vial : 17 Sample Multiplier: 1

Quant Time: May 12 08:51:39 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: 3m61259.D\data.ms

(2) 1,4-dioxane (t)

2.112min (-0.000) 353.62ppm

response 9422689

Ion	Exp%	Act%
88.00	100	100
58.00	115.40	84.33#
0.00	0.00	0.00
0.00	0.00	0.00

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2880\
Data File : 3m61260.D
Acq On : 12 May 2016 8:58 am
Operator : juliusj
Sample : jc19996-6
Misc : op93820a,e3m2880,900
ALS Vial : 18 Sample Multiplier: 1

Quant Time: May 12 09:24:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu May 12 09:16:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.344	150	510913	4.00	ppm	0.00
14) Fluorene-d10	13.335	176	691515	4.00	ppm	-0.02
21) Fluoranthene-d10	17.561	212	1120992	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.166	264	895142	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	4.307	112	1562372	24.44	ppm	0.00
Spiked Amount 50.000			Recovery = 48.88%			
4) Phenol-d5	5.915	99	1712532	16.19	ppm	0.00
Spiked Amount 50.000			Recovery = 32.38%			
7) Nitrobenzene-d5	7.474	82	3639590	37.01	ppm	0.00
Spiked Amount 50.000			Recovery = 74.02%			
15) 2-Fluorobiphenyl	11.021	172	8317407	43.77	ppm	0.00
Spiked Amount 50.000			Recovery = 87.54%			
20) 2,4,6-Tribromophenol	13.901	330	923375	42.66	ppm	0.00
Spiked Amount 50.000			Recovery = 85.32%			
28) Terphenyl-d14	18.380	244	7312913	44.97	ppm	0.00
Spiked Amount 50.000			Recovery = 89.94%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.097	88	2068941	78.38	ppm	76

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

7.1.14

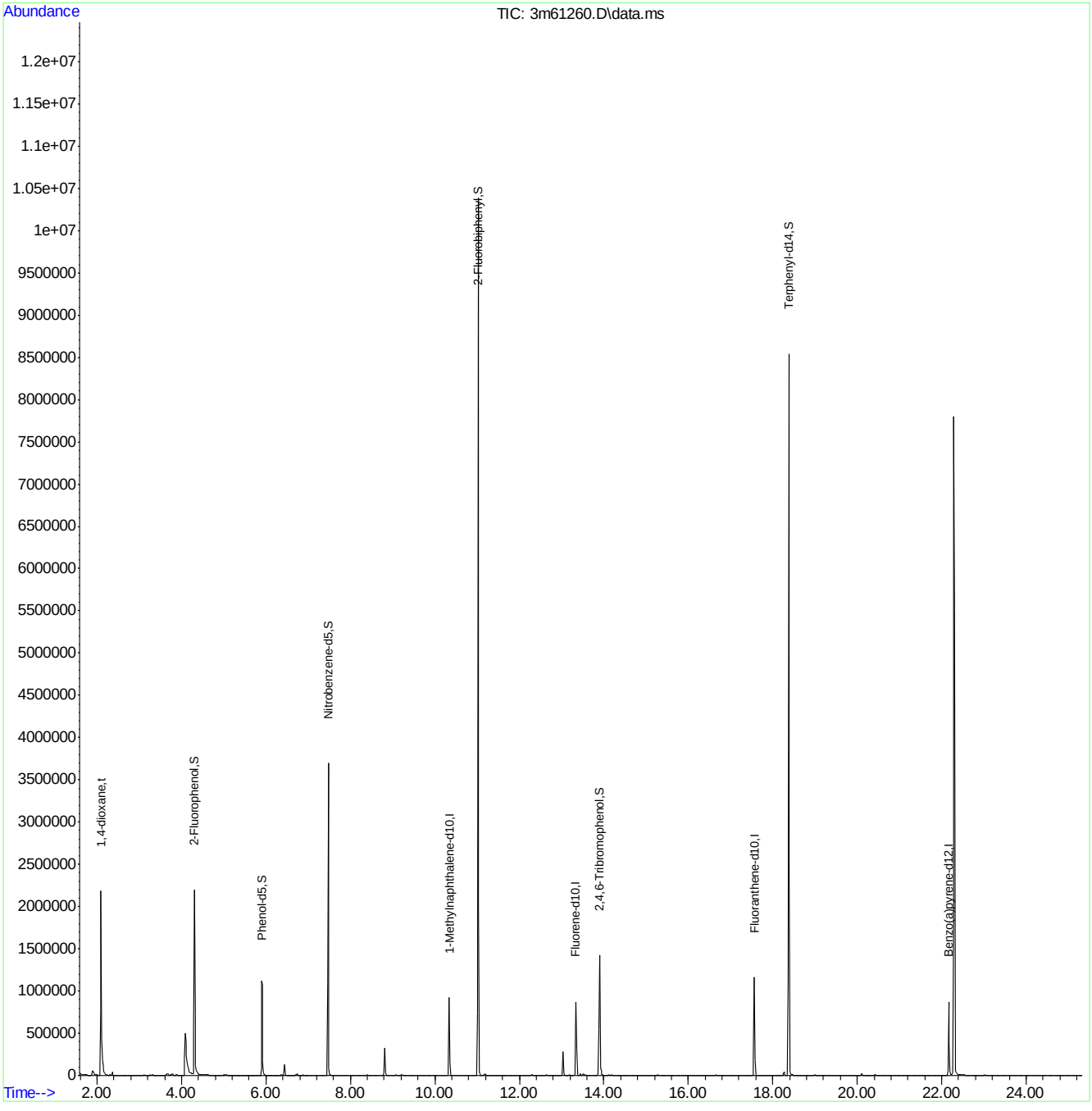
7

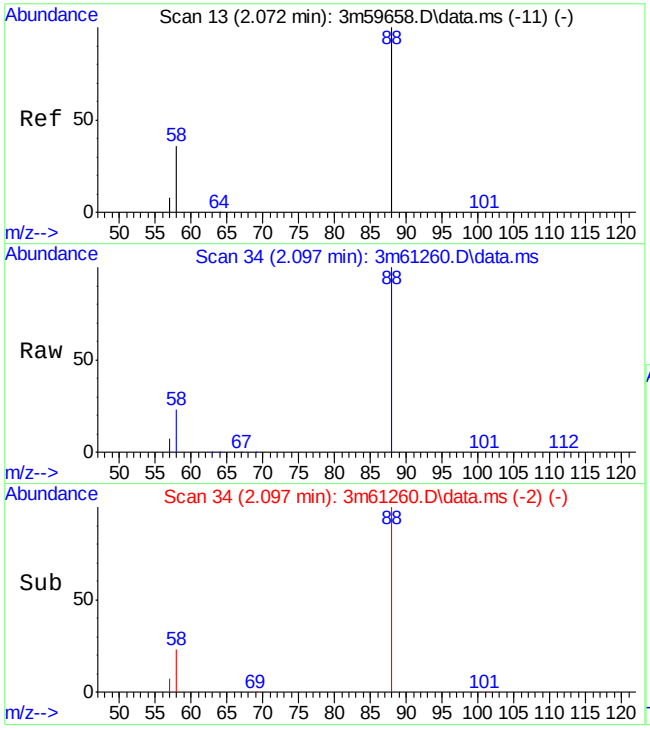
SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2880\
Data File : 3m61260.D
Acq On : 12 May 2016 8:58 am
Operator : juliusj
Sample : jc19996-6
Misc : op93820a,e3m2880,900
ALS Vial : 18 Sample Multiplier: 1

Quant Time: May 12 09:24:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu May 12 09:16:05 2016
Response via : Initial Calibration

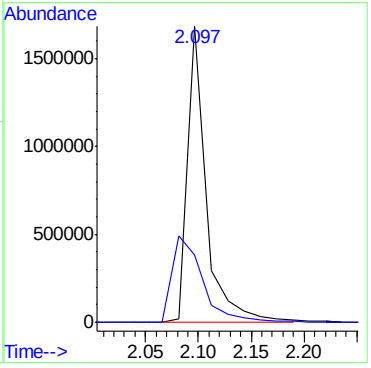




#2
1,4-dioxane
Concen: 78.38 ppm
RT: 2.097 min Scan# 34
Delta R.T. -0.000 min
Lab File: 3m61260.D
Acq: 12 May 2016 8:58 am

Tgt Ion: 88 Resp: 2068941

Ion	Ratio	Lower	Upper
88	100		
58	22.5	16.7	56.7



7.1.14

7

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5261\
Data File : M124365.D
Acq On : 12 May 2016 12:01 am
Operator : juliusj
Sample : op93820-mb1
Misc : op93820,em5261,1000
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 12 09:43:33 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	4.664	152	400011	40.00	ppm	-0.04
24) Naphthalene-d8	5.791	136	1512422	40.00	ppm	-0.05
47) Acenaphthene-d10	8.120	164	985313	40.00	ppm	-0.07
69) Phenanthrene-d10	10.742	188	1800015	40.00	ppm	-0.08
83) Chrysene-d12	15.918	240	2041723	40.00	ppm	-0.10
92) Perylene-d12	18.551	264	1989376	40.00	ppm	-0.10
102) 1,4-Dichlorobenzene-d4a	4.664	152	400011	40.00	ppm	-0.04
104) Acenaphthene-d10a	8.120	164	985313	40.00	ppm	-0.07
107) Chrysene-d12a	15.918	240	2041723	40.00	ppm	-0.10
110) Phenanthrene-d10a	10.742	188	1800015	40.00	ppm	-0.08
112) Naphthalene-d8a	5.791	136	1512422	40.00	ppm	-0.05
114) Chrysene-d12b	15.918	240	2041398	40.00	ppm	-0.10
System Monitoring Compounds						
5) 2-Fluorophenol	3.724	112	272660	22.29	ppm	-0.03
Spiked Amount 50.000			Recovery	=	44.58%	
8) Phenol-d5	4.445	99	205309	13.36	ppm	-0.02
Spiked Amount 50.000			Recovery	=	26.72%	
25) Nitrobenzene-d5	5.118	82	569933	42.37	ppm	-0.05
Spiked Amount 50.000			Recovery	=	84.74%	
51) 2-Fluorobiphenyl	7.110	172	1292770	39.96	ppm	-0.06
Spiked Amount 50.000			Recovery	=	79.92%	
73) 2,4,6-Tribromophenol	9.487	330	297438	47.80	ppm	-0.07
Spiked Amount 50.000			Recovery	=	95.60%	
86) Terphenyl-d14	13.904	244	1729935	37.77	ppm	-0.09
Spiked Amount 50.000			Recovery	=	75.54%	
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

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

7.2.1

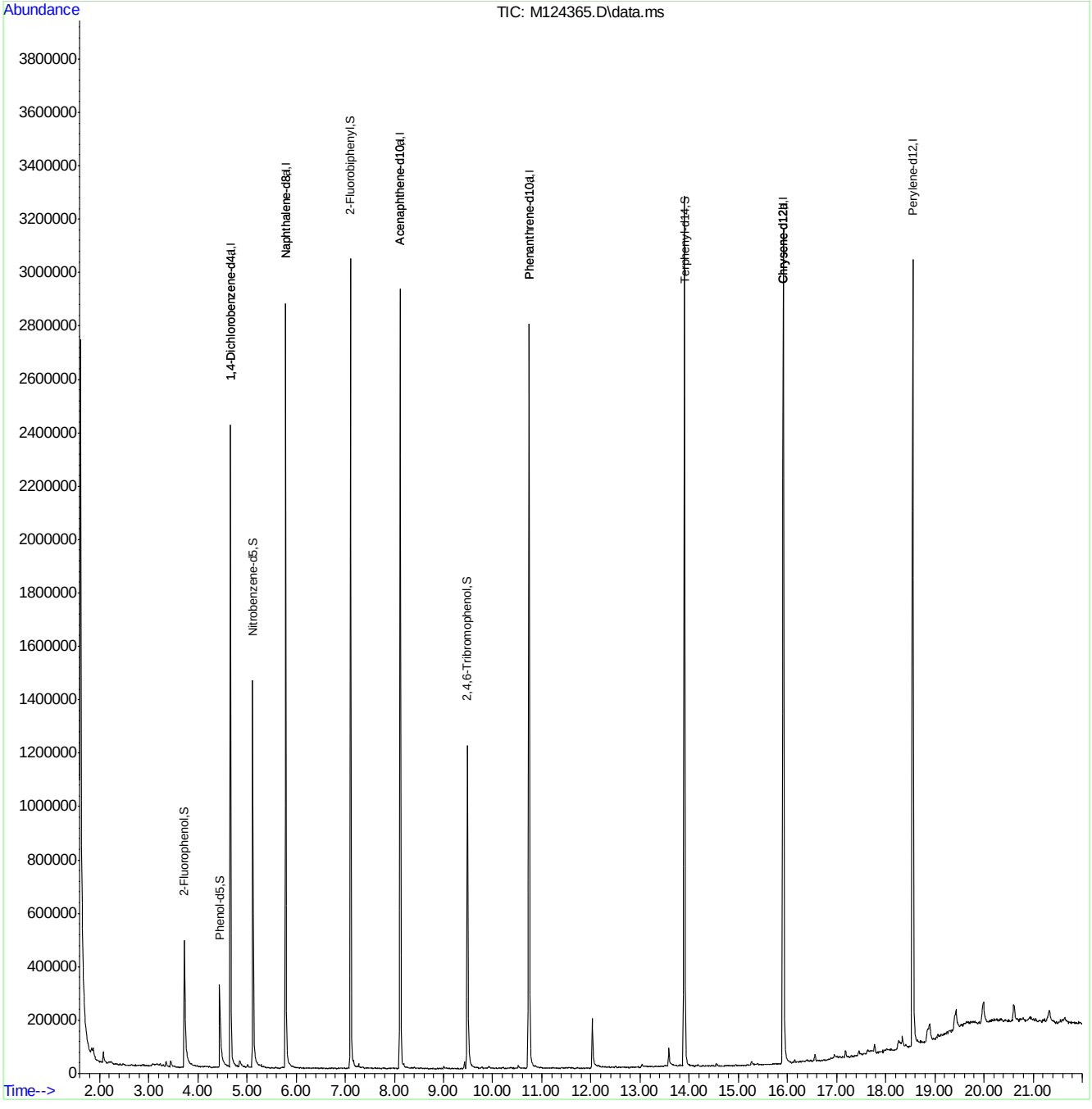
7

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5261\
Data File : M124365.D
Acq On : 12 May 2016 12:01 am
Operator : juliusj
Sample : op93820-mb1
Misc : op93820,em5261,1000
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 12 09:43:33 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 Thu May 12 09:43:38 2016 MSM

Page: 2

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124427.D
Acq On : 13 May 2016 12:36 pm
Operator : ashleyd
Sample : OP93830-MB1
Misc : op93830,em5264,30.0
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 13 15:04:45 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	4.654	152	295334	40.00	ppm	-0.01
24) Naphthalene-d8	5.775	136	1131691	40.00	ppm	-0.01
47) Acenaphthene-d10	8.099	164	675653	40.00	ppm	-0.02
69) Phenanthrene-d10	10.716	188	1162529	40.00	ppm	-0.02
83) Chrysene-d12	15.891	240	1310024	40.00	ppm	-0.02
92) Perylene-d12	18.530	264	1292236	40.00	ppm	-0.02
102) 1,4-Dichlorobenzene-d4a	4.654	152	295334	40.00	ppm	-0.01
104) Acenaphthene-d10a	8.099	164	675653	40.00	ppm	-0.02
107) Chrysene-d12a	15.891	240	1309932	40.00	ppm	-0.02
110) Phenanthrene-d10a	10.716	188	1162529	40.00	ppm	-0.02
112) Naphthalene-d8a	5.775	136	1131691	40.00	ppm	-0.01
114) Chrysene-d12b	15.891	240	1310024	40.00	ppm	-0.02
System Monitoring Compounds						
5) 2-Fluorophenol	3.714	112	542603	60.08	ppm	0.00
Spiked Amount 50.000			Recovery	=	120.16%	
8) Phenol-d5	4.429	99	644609	56.83	ppm	0.00
Spiked Amount 50.000			Recovery	=	113.66%	
25) Nitrobenzene-d5	5.108	82	590812	58.71	ppm	0.00
Spiked Amount 50.000			Recovery	=	117.42%	
51) 2-Fluorobiphenyl	7.089	172	1363068	61.44	ppm	-0.01
Spiked Amount 50.000			Recovery	=	122.88%	
73) 2,4,6-Tribromophenol	9.466	330	275560	68.57	ppm	-0.02
Spiked Amount 50.000			Recovery	=	137.14%	
86) Terphenyl-d14	13.883	244	1605994	54.65	ppm	-0.02
Spiked Amount 50.000			Recovery	=	109.30%	
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

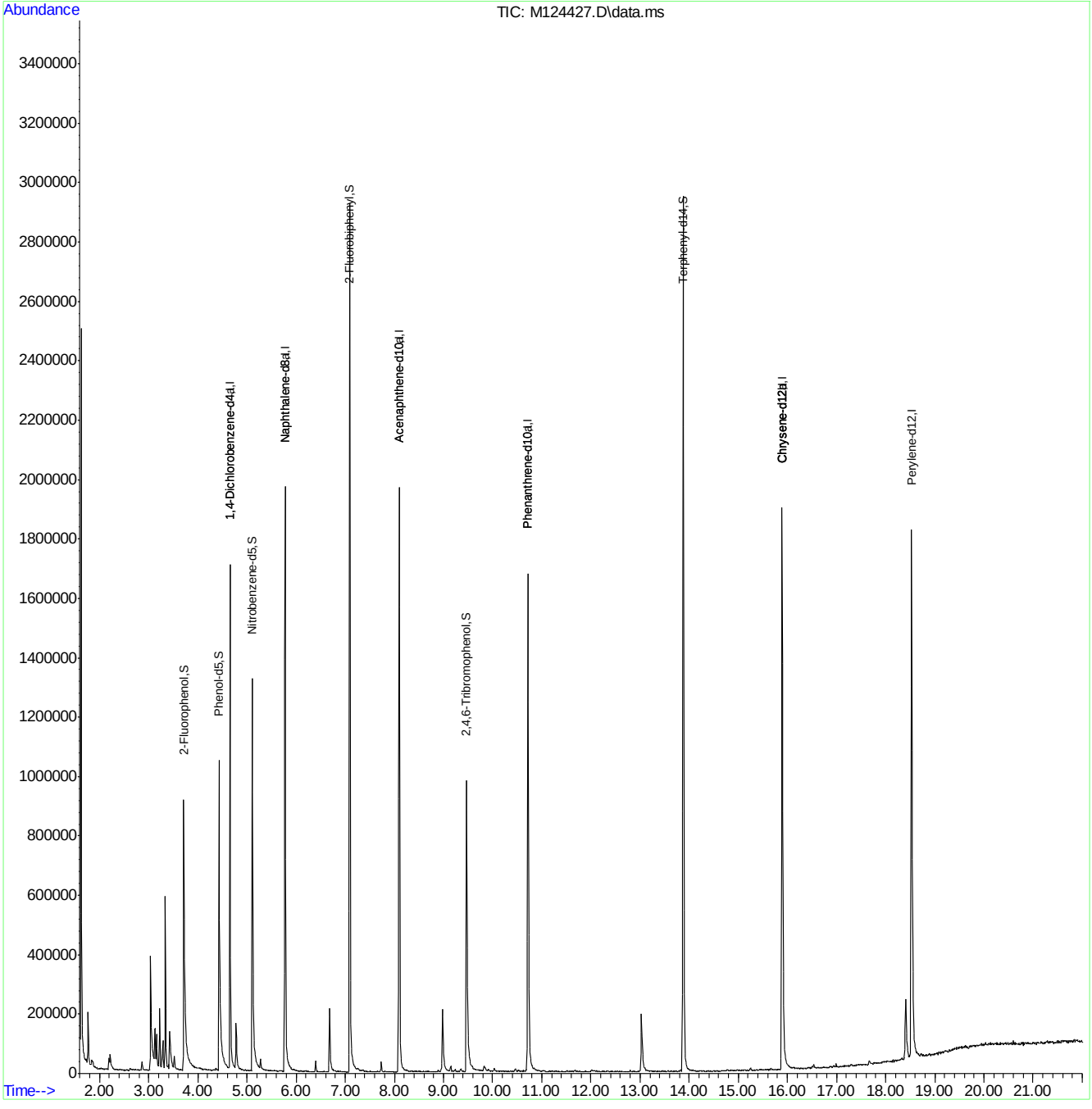
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124427.D
Acq On : 13 May 2016 12:36 pm
Operator : ashleyd
Sample : OP93830-MB1
Misc : op93830,em5264,30.0
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 13 15:04:45 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 15:04:53 2016 MSM

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2592\
Data File : 2p59337.D
Acq On : 19 May 2016 1:00 pm
Operator : robertl1
Sample : OP93830-MB1
Misc : op93830,e2p2592,30.0
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 20 15:43:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2557.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 18 11:19:29 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.785	152	157070	40.00	ppm	-0.05
24) Naphthalene-d8	5.839	136	567230	40.00	ppm	-0.05
47) Acenaphthene-d10	7.288	164	323321	40.00	ppm	-0.05
69) Phenanthrene-d10	8.615	188	542544	40.00	ppm	-0.06
83) Chrysene-d12	11.958	240	555343	40.00	ppm	-0.09
92) Perylene-d12	13.974	264	459186	40.00	ppm	-0.10
102) 1,4-Dichlorobenzene-d4a	4.785	152	157070	40.00	ppm	-0.05
104) Naphthalene-d8a	5.839	136	567230	40.00	ppm	-0.05
106) Acenaphthene-d10a	7.288	164	323321	40.00	ppm	-0.05
109) Chrysene-d12a	11.958	240	555343	40.00	ppm	-0.09
System Monitoring Compounds						
5) 2-Fluorophenol	3.716	112	276753	43.50	ppm	-0.02
Spiked Amount 50.000	Range 11 - 58		Recovery = 87.00%#			
8) Phenol-d5	4.534	99	324696	43.55	ppm	-0.05
Spiked Amount 50.000	Range 10 - 59		Recovery = 87.10%#			
25) Nitrobenzene-d5	5.251	82	310803	55.57	ppm	0.06
Spiked Amount 50.000	Range 19 - 61		Recovery = 111.14%#			
51) 2-Fluorobiphenyl	6.732	172	680302	67.63	ppm	-0.06
Spiked Amount 50.000	Range 21 - 58		Recovery = 135.26%#			
73) 2,4,6-Tribromophenol	7.957	330	78047	64.80	ppm	-0.05
Spiked Amount 50.000	Range 12 - 68		Recovery = 129.60%#			
85) Terphenyl-d14	10.503	244	663895	59.39	ppm	-0.10
Spiked Amount 50.000	Range 16 - 65		Recovery = 118.78%#			
Target Compounds						Qvalue

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

7.2.3

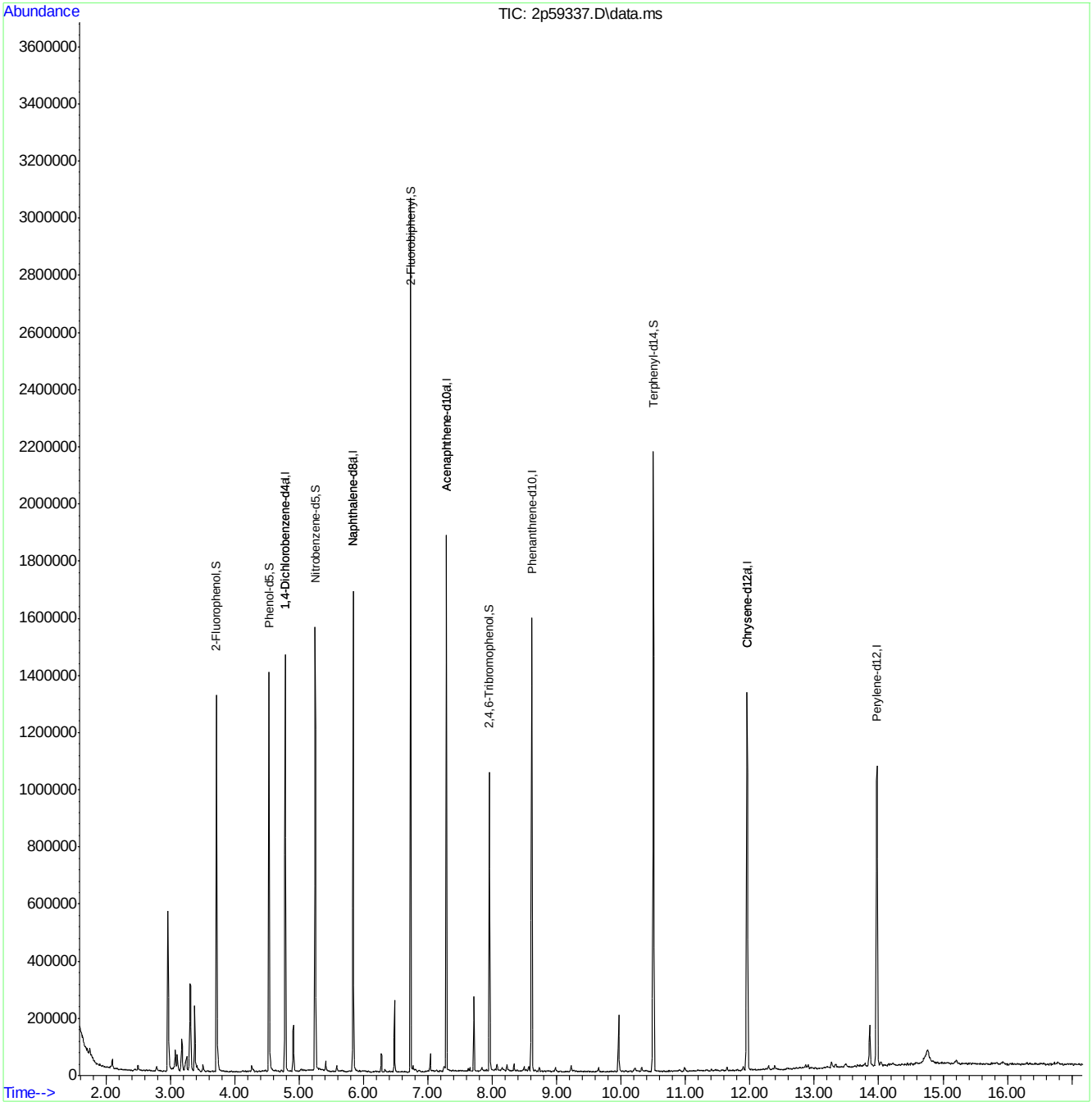
7

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2592\
Data File : 2p59337.D
Acq On : 19 May 2016 1:00 pm
Operator : robertl1
Sample : OP93830-MB1
Misc : op93830,e2p2592,30.0
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 20 15:43:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2557.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 18 11:19:29 2016
Response via : Initial Calibration



SGS ACCUTEST JC19996

Manual Integrations
APPROVED
(compounds with "m" flag)
Nina Pandya
05/12/16 09:51

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2880\
Data File : 3m61252.D
Acq On : 12 May 2016 4:42 am
Operator : juliusj
Sample : op93820a-mb1
Misc : op93820a,e3m2880,1000
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 12 09:02:14 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	10.344	150	553385	4.00	ppm	-0.08
14) Fluorene-d10	13.336	176	754196	4.00	ppm	-0.11
21) Fluoranthene-d10	17.562	212	1257521	4.00	ppm	-0.08
31) Benzo(a)pyrene-d12	22.166	264	1041913	4.00	ppm	-0.01
System Monitoring Compounds						
3) 2-Fluorophenol	4.307	112	1718368	24.82	ppm	-0.12
Spiked Amount 50.000			Recovery = 49.64%			
4) Phenol-d5	5.915	99	1673903	14.61	ppm	-0.07
Spiked Amount 50.000			Recovery = 29.22%			
7) Nitrobenzene-d5	7.474	82	4854125	45.57	ppm	-0.10
Spiked Amount 50.000			Recovery = 91.14%			
15) 2-Fluorobiphenyl	11.021	172	10216792	49.30	ppm	-0.12
Spiked Amount 50.000			Recovery = 98.60%			
20) 2,4,6-Tribromophenol	13.901	330	1168962	49.52	ppm	-0.07
Spiked Amount 50.000			Recovery = 99.04%			
28) Terphenyl-d14	18.380	244	8939931	49.01	ppm	-0.05
Spiked Amount 50.000			Recovery = 98.02%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.097	88	3794m	0.13	ppm	

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

7.2.4

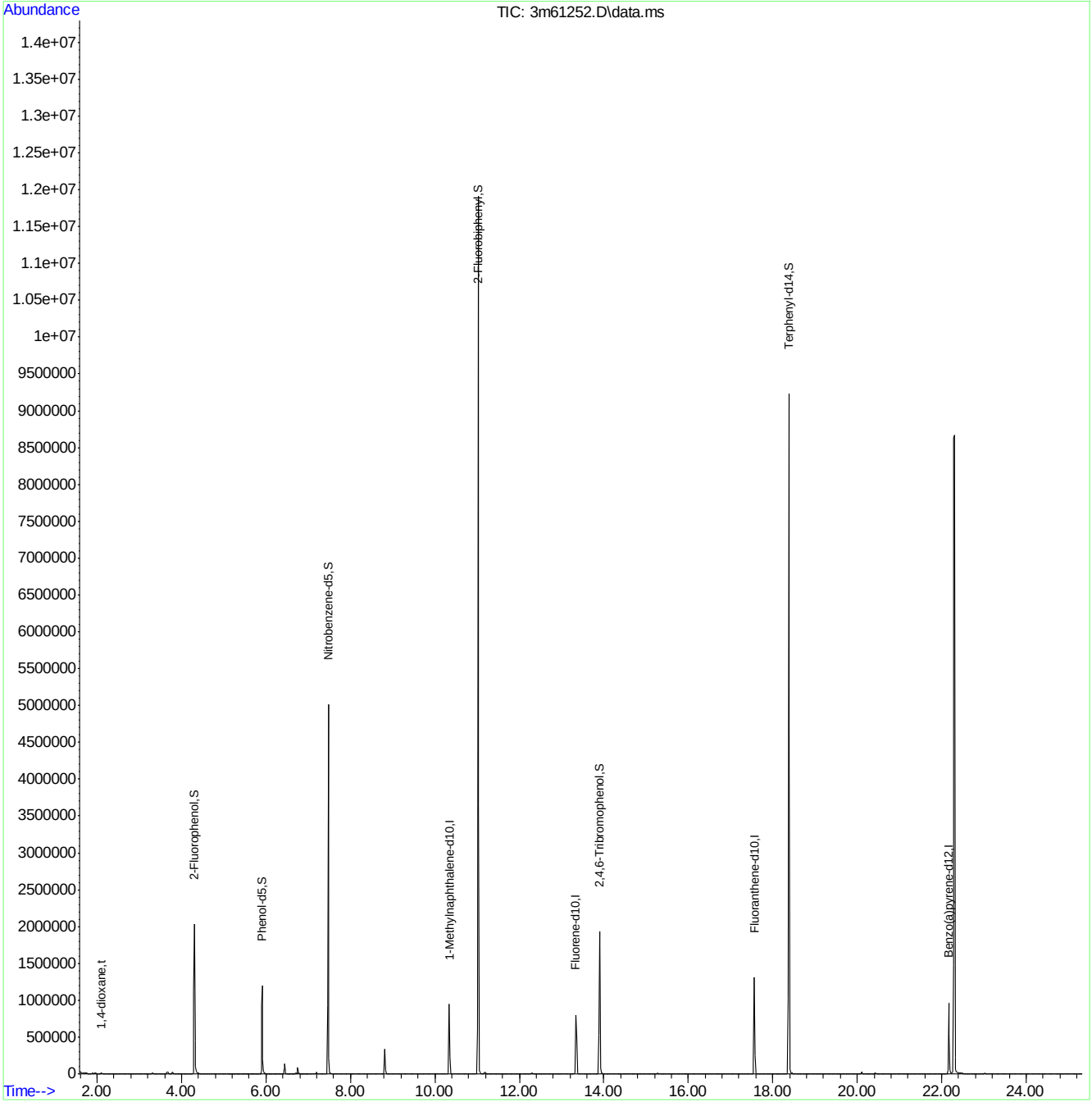
7

SGS ACCUTEST JC19996

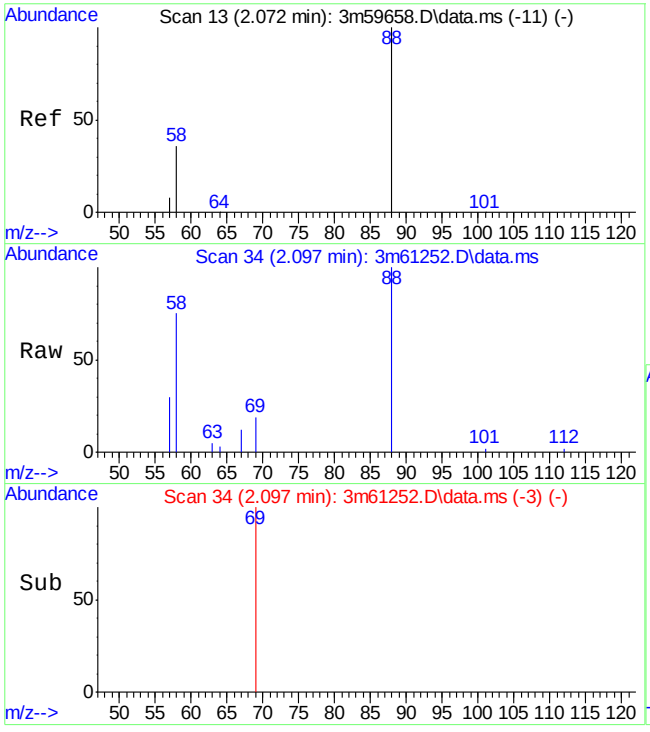
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2880\
Data File : 3m61252.D
Acq On : 12 May 2016 4:42 am
Operator : juliusj
Sample : op93820a-mb1
Misc : op93820a,e3m2880,1000
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 12 09:02:14 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



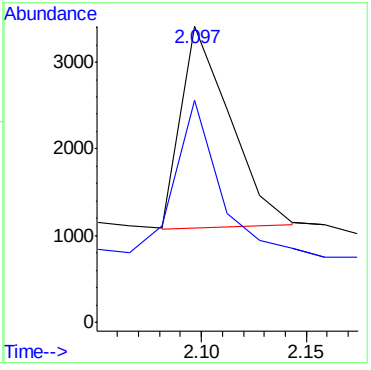
SGS ACCUTEST JC19996



#2
1,4-dioxane
Concen: 0.13 ppm m
RT: 2.097 min Scan# 34
Delta R.T. -0.015 min
Lab File: 3m61252.D
Acq: 12 May 2016 4:42 am

Tgt Ion: 88 Resp: 3794

Ion	Ratio	Lower	Upper
88	100		
58	75.0	95.4	135.4#



7.2.4

7

SGS ACCUTEST JC19996

Manual Integration Approval Summary

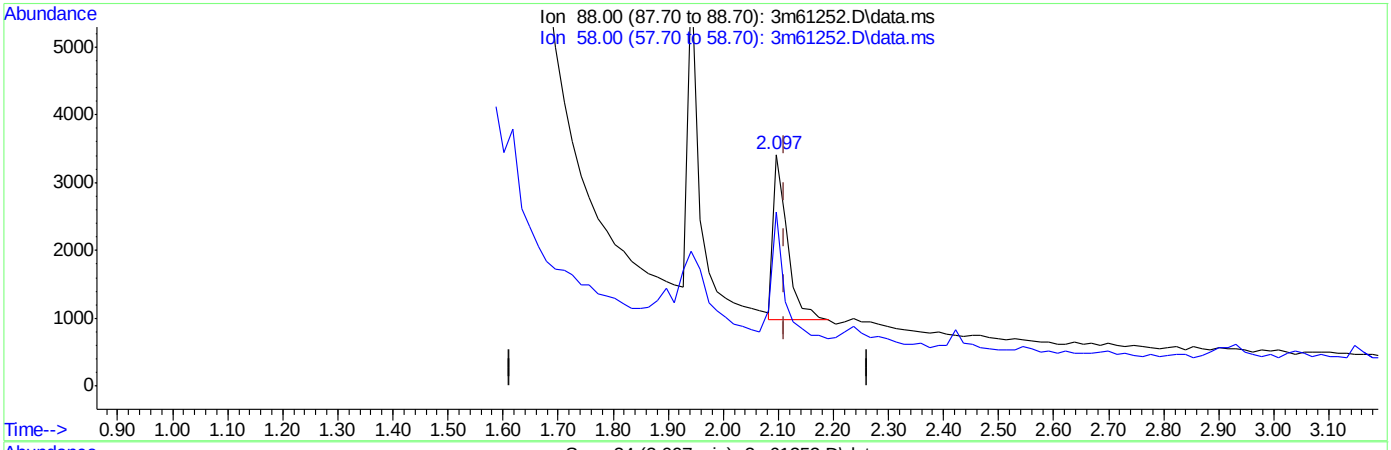
Sample Number:	OP93820A-MB1	**Method:**	SW846 8270D BY SIM
Lab FileID:	3M61252.D	**Analyst approved:**	05/12/16 09:15 Kristi Schollenberger
Injection Time:	05/12/16 04:42	**Supervisor approved:**	05/12/16 09:51 Nina Pandya

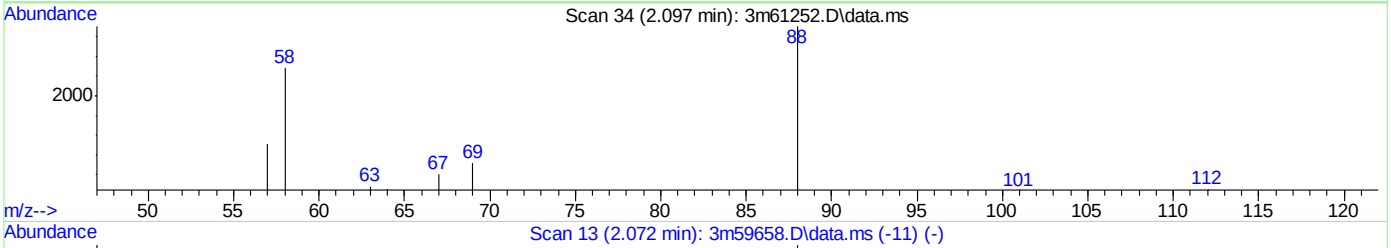
Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dioxane	123-91-1		2.10	Poor instrument integration

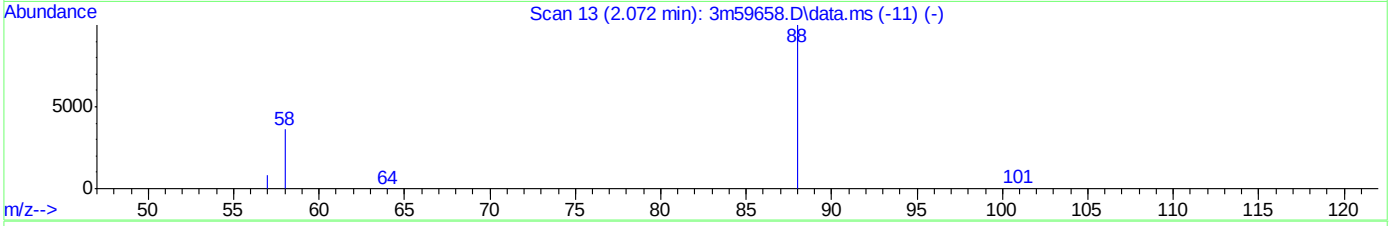
Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\E3M2880\
Data File : 3m61252.D
Acq On    : 12 May 2016   4:42 am
Operator  : juliusj
Sample    : op93820a-mb1
Misc      : op93820a,e3m2880,1000
ALS Vial  : 10   Sample Multiplier: 1

Quant Time: May 12 08:51:18 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: 3m61252.D\data.ms

(2) 1,4-dioxane (t)

2.097min (-0.015) 0.15ppm

response 4396

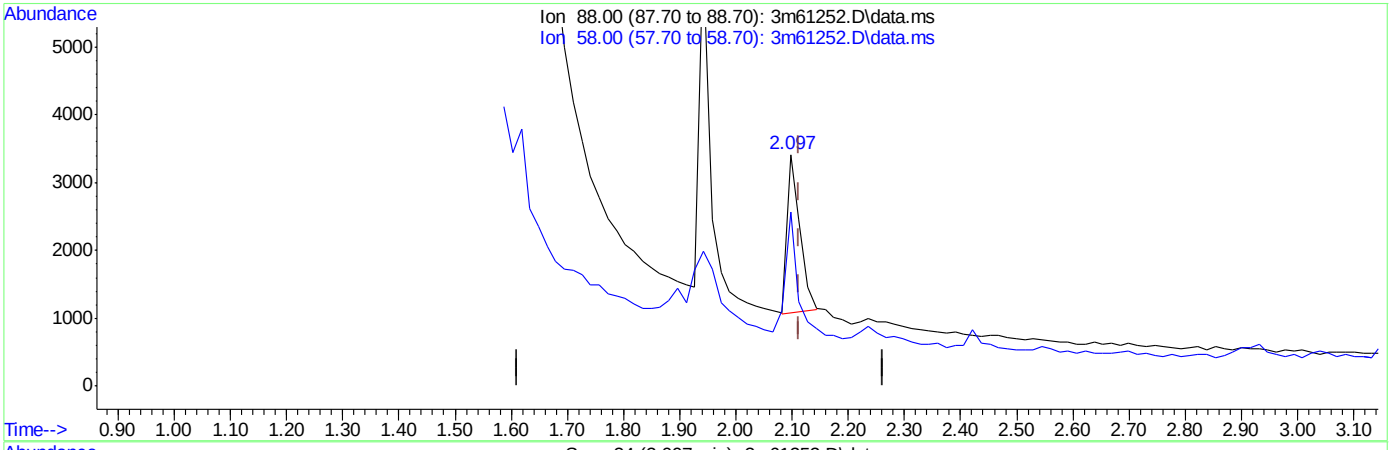
Ion	Exp%	Act%
88.00	100	100
58.00	115.40	69.28#
0.00	0.00	0.00
0.00	0.00	0.00

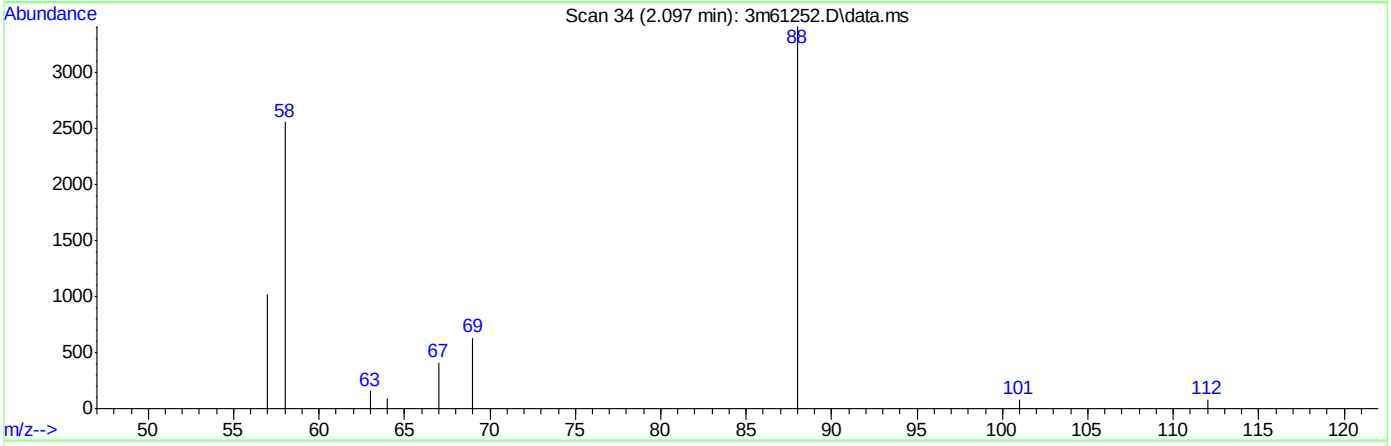
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2880\
Data File : 3m61252.D
Acq On : 12 May 2016 4:42 am
Operator : juliusj
Sample : op93820a-mb1
Misc : op93820a,e3m2880,1000
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 12 09:02:14 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: 3m61252.D\data.ms

(2) 1,4-dioxane (t)

2.097min (-0.015) 0.13ppm m

response 3794

Ion	Exp%	Act%
88.00	100	100
58.00	115.40	74.99#
0.00	0.00	0.00
0.00	0.00	0.00

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2919\
Data File : 4m65271.D
Acq On : 13 May 2016 5:10 pm
Operator : ashleyd
Sample : op93830a-mb1
Misc : op93830a,e4m2919,30.0
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 17 09:08:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Fri May 13 11:56:24 2016
Response via : Initial Calibration

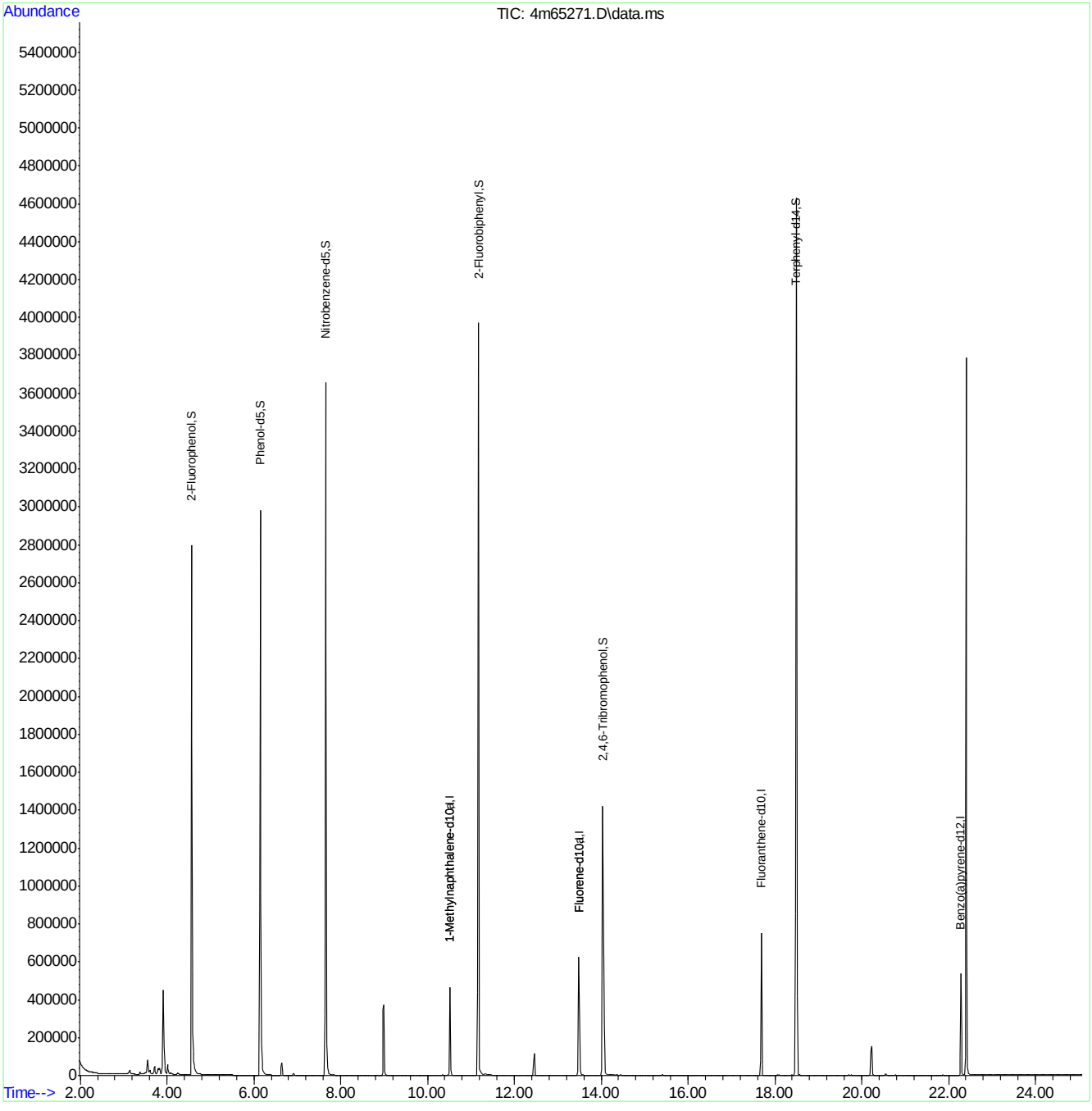
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.511	152	284161	4.00	ppm	# 0.00
12) Fluorene-d10	13.489	176	487690	4.00	ppm	0.00
22) Fluoranthene-d10	17.685	212	779249	4.00	ppm	0.02
28) Benzo(a)pyrene-d12	22.284	264	579284	4.00	ppm	0.01
35) 1-Methylnaphthalene-d10a	10.511	152	284161	4.00	ppm	# 0.00
38) Fluorene-d10a	13.489	176	487690	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	4.568	112	1628531	43.77	ppm	-0.07
Spiked Amount 50.000	Range 11 - 58		Recovery = 87.54%#			
3) Phenol-d5	6.149	99	2725773	43.56	ppm	-0.05
Spiked Amount 50.000			Recovery = 87.12%			
6) Nitrobenzene-d5	7.651	82	2750973	49.03	ppm	-0.06
Spiked Amount 50.000			Recovery = 98.06%			
11) 2-Fluorobiphenyl	11.179	172	4659192	56.81	ppm	0.01
Spiked Amount 50.000			Recovery = 113.62%			
17) 2,4,6-Tribromophenol	14.038	330	1216532	46.77	ppm	0.00
Spiked Amount 50.000			Recovery = 93.54%			
25) Terphenyl-d14	18.495	244	5139817	48.82	ppm	0.03
Spiked Amount 50.000			Recovery = 97.64%			
Target Compounds						Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2919\
Data File : 4m65271.D
Acq On : 13 May 2016 5:10 pm
Operator : ashleyd
Sample : op93830a-mb1
Misc : op93830a,e4m2919,30.0
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 17 09:08:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Fri May 13 11:56:24 2016
Response via : Initial Calibration



SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5261\
Data File : M124366.D
Acq On : 12 May 2016 12:29 am
Operator : juliusj
Sample : op93820-bs1
Misc : op93820,em5261,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 12 09:46:53 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 09:45:47 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.665	152	343116	40.00	ppm	-0.04
24) Naphthalene-d8	5.792	136	1257971	40.00	ppm	-0.05
47) Acenaphthene-d10	8.121	164	794318	40.00	ppm	-0.07
69) Phenanthrene-d10	10.743	188	1363778	40.00	ppm	-0.08
83) Chrysene-d12	15.919	240	1526236	40.00	ppm	-0.10
92) Perylene-d12	18.552	264	1557312	40.00	ppm	-0.10
102) 1,4-Dichlorobenzene-d4a	4.665	152	343116	40.00	ppm	-0.04
104) Acenaphthene-d10a	8.121	164	794318	40.00	ppm	-0.07
107) Chrysene-d12a	15.919	240	1526236	40.00	ppm	-0.10
110) Phenanthrene-d10a	10.743	188	1363778	40.00	ppm	-0.08
112) Naphthalene-d8a	5.792	136	1257971	40.00	ppm	-0.05
114) Chrysene-d12b	15.919	240	1526236	40.00	ppm	-0.10
System Monitoring Compounds						
5) 2-Fluorophenol	3.731	112	271935	25.92	ppm	-0.02
Spiked Amount 50.000			Recovery	=	51.84%	
8) Phenol-d5	4.441	99	220787	16.75	ppm	-0.02
Spiked Amount 50.000			Recovery	=	33.50%	
25) Nitrobenzene-d5	5.119	82	468247	41.86	ppm	-0.05
Spiked Amount 50.000			Recovery	=	83.72%	
51) 2-Fluorobiphenyl	7.111	172	1020424	39.12	ppm	-0.06
Spiked Amount 50.000			Recovery	=	78.24%	
73) 2,4,6-Tribromophenol	9.488	330	229303	48.64	ppm	-0.07
Spiked Amount 50.000			Recovery	=	97.28%	
86) Terphenyl-d14	13.905	244	1340469	39.15	ppm	-0.09
Spiked Amount 50.000			Recovery	=	78.30%	
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	2.224	88	97089	20.41	ppm	90
3) Pyridine	2.577	79	192920	16.66	ppm	95
4) N-Nitrosodimethylamine	2.540	42	136666	26.94	ppm	80
6) Indene	4.863	116	808181	41.41	ppm	99
7) Cumene	4.062	105	1015000	38.77	ppm	98
9) Phenol	4.452	94	295432	20.92	ppm	82
10) Aniline	4.430	93	435278	26.50	ppm	85
11) bis(2-Chloroethyl)ether	4.462	93	484399	44.05	ppm	99
12) 2-Chlorophenol	4.526	128	464343	39.48	ppm	96
13) Decane	4.532	43	420089	37.68	ppm	91
14) 1,3-Dichlorobenzene	4.623	146	473316	35.30	ppm	98
15) 1,4-Dichlorobenzene	4.676	146	483081	36.35	ppm	97
16) Benzyl alcohol	4.788	108	248662	36.51	ppm	94
17) 1,2-Dichlorobenzene	4.799	146	465657	37.22	ppm	97
18) Acetophenone	4.991	105	638446	40.88	ppm	85
19) 2-Methylphenol	4.895	108	343730	35.27	ppm	94
20) 2,2'-oxybis(1-Chloropr...	4.874	121	135176	37.21	ppm	95

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5261\
Data File : M124366.D
Acq On : 12 May 2016 12:29 am
Operator : juliusj
Sample : op93820-bs1
Misc : op93820,em5261,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 12 09:46:53 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 09:45:47 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21)	3&4-Methylphenol	5.023	108	332430	31.13	ppm	#	85
22)	n-Nitroso-di-n-propyla...	4.991	70	321749	38.15	ppm		91
23)	Hexachloroethane	5.066	201	176430	35.12	ppm		92
26)	Nitrobenzene	5.135	77	473235	41.79	ppm		97
27)	Quinoline	6.193	129	898227	37.45	ppm		100
28)	Isophorone	5.344	82	877182	43.09	ppm		96
29)	2-Nitrophenol	5.424	139	266172	41.54	ppm	#	69
30)	2,4-Dimethylphenol	5.477	107	418580	39.91	ppm		99
31)	Benzoic acid	5.616	105	122332	17.78	ppm		99
32)	bis(2-Chloroethoxy)met...	5.541	93	504444	40.81	ppm		99
33)	2,4-Dichlorophenol	5.680	162	403025	42.03	ppm		99
34)	2,6-Dichlorophenol	5.894	162	381766	39.40	ppm		100
36)	1,2,4-Trichlorobenzene	5.733	180	422039	37.52	ppm		99
38)	Naphthalene	5.814	128	1286140	39.04	ppm		99
39)	4-Chloroaniline	5.888	127	371625	26.19	ppm		98
40)	2,3-Dichloroaniline	7.005	161	456639	36.55	ppm		99
41)	Caprolactam	6.294	55	57027	11.00	ppm		95
42)	Hexachlorobutadiene	5.936	225	242733	37.52	ppm		99
43)	4-Chloro-3-methylphenol	6.481	107	370766	38.69	ppm		67
44)	2-Methylnaphthalene	6.615	141	777781	39.48	ppm		99
45)	1-Methylnaphthalene	6.738	142	912248	39.85	ppm		99
46)	Dimethylnaphthalene	7.485	156	829051	39.01	ppm		100
48)	Hexachlorocyclopentadiene	6.818	237	266696	53.50	ppm		99
49)	2,4,6-Trichlorophenol	7.021	196	302744	39.94	ppm		97
50)	2,4,5-Trichlorophenol	7.101	196	308449	37.39	ppm		97
52)	2-Chloronaphthalene	7.277	162	851109	36.78	ppm		99
53)	Biphenyl	7.250	154	1148718	38.86	ppm		100
54)	2-Nitroaniline	7.464	65	266950	40.47	ppm		99
55)	Dimethylphthalate	7.736	163	1049737	38.80	ppm		99
56)	Acenaphthylene	7.897	152	1331713	34.81	ppm		99
57)	2,6-Dinitrotoluene	7.833	165	244511	40.66	ppm		97
58)	3-Nitroaniline	8.116	138	181745	27.31	ppm		95
59)	Acenaphthene	8.174	153	857794	37.22	ppm		99
60)	2,4-Dinitrophenol	8.313	184	237036	86.29	ppm		96
61)	4-Nitrophenol	8.591	109	35136	14.44	ppm		98
62)	Dibenzofuran	8.463	168	1328720	38.76	ppm		98
63)	2,4-Dinitrotoluene	8.511	165	319734	40.53	ppm		98
64)	2,3,4,6-Tetrachlorophenol	8.719	232	256495	40.20	ppm		97
65)	Diethylphthalate	8.922	149	1021063	37.91	ppm		97
66)	Fluorene	9.045	166	1045414	37.72	ppm		99
67)	4-Chlorophenyl-phenyle...	9.066	204	515196	38.97	ppm		97
68)	4-Nitroaniline	9.173	138	248944	38.47	ppm		98
70)	4,6-Dinitro-2-methylph...	9.232	198	198111	44.57	ppm	#	68
71)	n-Nitrosodiphenylamine	9.296	169	717691	39.18	ppm		97
72)	1,2-Diphenylhydrazine	9.349	77	925114	39.43	ppm		98
74)	4-Bromophenyl-phenylether	9.942	248	374443	44.39	ppm		94
75)	Hexachlorobenzene	10.044	284	424628	42.75	ppm		96
76)	Pentachlorophenol	10.466	266	171394	41.08	ppm		96
77)	Phenanthrene	10.786	178	1471206	38.69	ppm		100
78)	Anthracene	10.888	178	1459064	37.06	ppm		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5261\
Data File : M124366.D
Acq On : 12 May 2016 12:29 am
Operator : juliusj
Sample : op93820-bs1
Misc : op93820,em5261,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 12 09:46:53 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 09:45:47 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
79)	Carbazole	11.251	167	1500797	41.38	ppm		99
80)	Di-n-butylphthalate	12.015	149	1796168	39.89	ppm		100
81)	Fluoranthene	13.083	202	1805083	40.52	ppm		99
82)	Octadecane	10.706	57	570865	38.91	ppm		95
84)	Pyrene	13.510	202	1835268	36.88	ppm		99
87)	Butylbenzylphthalate	14.947	149	781517	36.12	ppm		97
88)	Benzo[a]anthracene	15.903	228	1719022	36.84	ppm		99
89)	3,3'-Dichlorobenzidine	15.924	252	998480	58.60	ppm		99
90)	Chrysene	15.972	228	1566387	35.94	ppm		100
91)	bis(2-Ethylhexyl)phtha...	16.149	149	1038079	35.58	ppm		96
93)	Di-n-octylphthalate	17.377	149	1780656	35.23	ppm		98
94)	Benzo[b]fluoranthene	17.916	252	1801389	37.65	ppm		92
95)	Benzo[k]fluoranthene	17.959	252	1748041	37.90	ppm		98
96)	Benzo[a]pyrene	18.456	252	1577451	35.70	ppm		98
97)	Indeno[1,2,3-cd]pyrene	20.283	276	1998620	44.70	ppm		99
99)	Dibenz[a,h]anthracene	20.315	278	1726629	37.97	ppm		97
100)	7,12-Dimethylbenz(a)an...	17.895	256	795734	36.95	ppm		97
101)	Benzo[g,h,i]perylene	20.742	276	1702119	36.52	ppm		97
103)	Benzaldehyde	4.345	105	344398	44.41	ppm		96
105)	1,2,4,5-Tetrachloroben...	6.839	216	485747	47.44	ppm		95
106)	Atrazine	10.348	215	183606	54.72	ppm	#	64
108)	Benzidine	13.435	184	475338	26.00	ppm		98

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

7.3.1

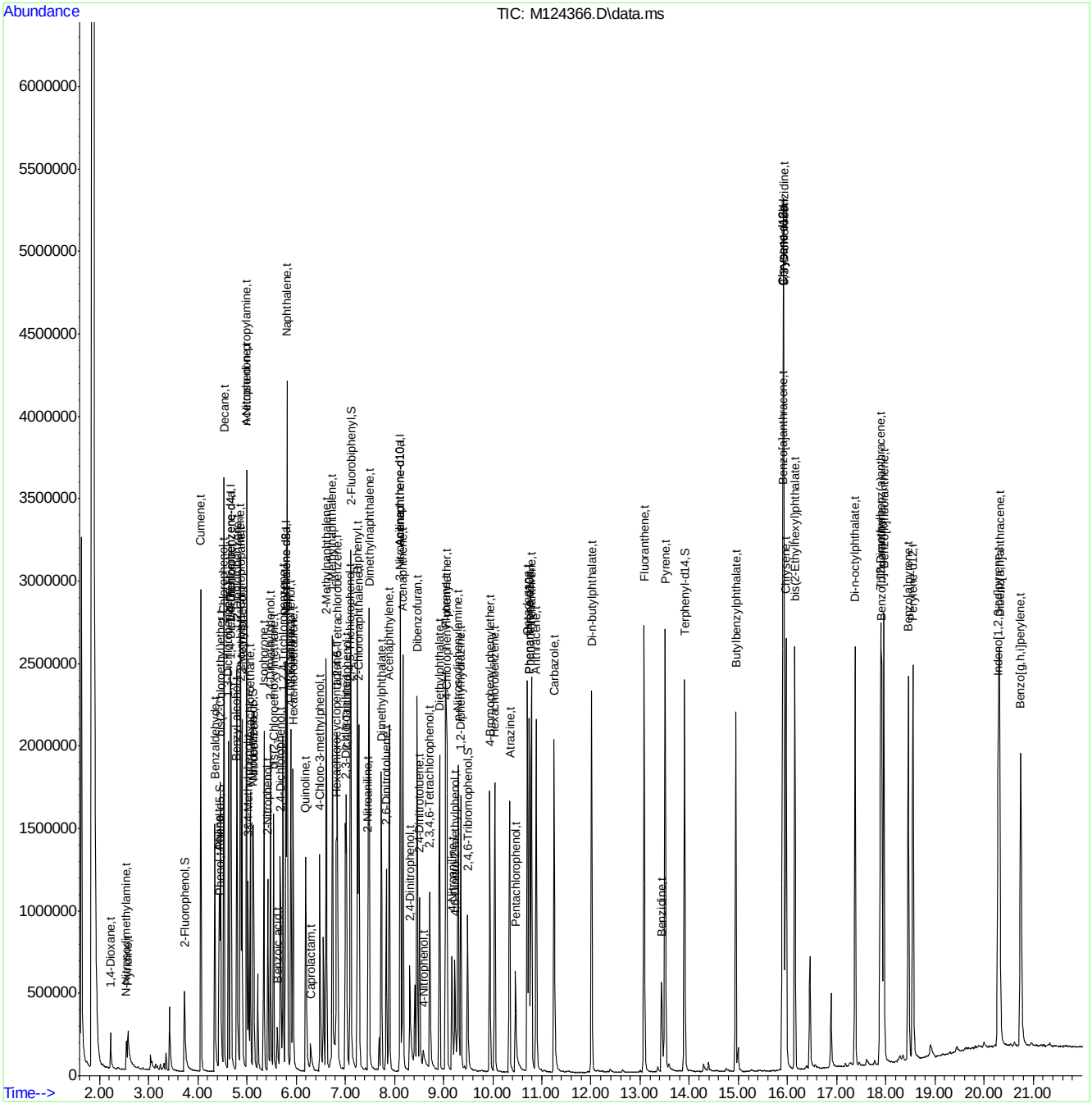
7

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5261\
Data File : M124366.D
Acq On : 12 May 2016 12:29 am
Operator : juliusj
Sample : op93820-bs1
Misc : op93820,em5261,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 12 09:46:53 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 09:45:47 2016
Response via : Initial Calibration



SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124428.D
Acq On : 13 May 2016 1:05 pm
Operator : ashleyd
Sample : OP93830-BS1
Misc : op93830,em5264,30.0
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 13 15:05:35 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	4.654	152	392654	40.00	ppm	-0.01
24) Naphthalene-d8	5.775	136	1426474	40.00	ppm	-0.01
47) Acenaphthene-d10	8.099	164	897029	40.00	ppm	-0.02
69) Phenanthrene-d10	10.721	188	1476385	40.00	ppm	-0.02
83) Chrysene-d12	15.902	240	1677785	40.00	ppm	-0.01
92) Perylene-d12	18.530	264	1747579	40.00	ppm	-0.02
102) 1,4-Dichlorobenzene-d4a	4.654	152	392654	40.00	ppm	-0.01
104) Acenaphthene-d10a	8.099	164	897029	40.00	ppm	-0.02
107) Chrysene-d12a	15.902	240	1677868	40.00	ppm	-0.01
110) Phenanthrene-d10a	10.721	188	1476385	40.00	ppm	-0.02
112) Naphthalene-d8a	5.775	136	1426474	40.00	ppm	-0.01
114) Chrysene-d12b	15.902	240	1677785	40.00	ppm	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.713	112	566007	47.14	ppm	0.00
Spiked Amount 50.000			Recovery	=	94.28%	
8) Phenol-d5	4.424	99	643761	42.69	ppm	0.00
Spiked Amount 50.000			Recovery	=	85.38%	
25) Nitrobenzene-d5	5.107	82	562786	44.36	ppm	0.00
Spiked Amount 50.000			Recovery	=	88.72%	
51) 2-Fluorobiphenyl	7.094	172	1314403	44.62	ppm	0.00
Spiked Amount 50.000			Recovery	=	89.24%	
73) 2,4,6-Tribromophenol	9.471	330	290802	56.98	ppm	-0.01
Spiked Amount 50.000			Recovery	=	113.96%	
86) Terphenyl-d14	13.883	244	1661083	44.14	ppm	-0.02
Spiked Amount 50.000			Recovery	=	88.28%	
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	2.207	88	151004	27.74	ppm	93
3) Pyridine	2.554	79	462928	34.93	ppm	92
4) N-Nitrosodimethylamine	2.522	42	278191	47.93	ppm	83
6) Indene	4.851	116	955928	42.80	ppm	99
7) Cumene	4.050	105	1236111	41.26	ppm	99
9) Phenol	4.435	94	742253	45.93	ppm	90
10) Aniline	4.419	93	418432	22.26	ppm	78
11) bis(2-Chloroethyl)ether	4.451	93	579279	46.03	ppm	98
12) 2-Chlorophenol	4.515	128	611990	45.47	ppm	98
13) Decane	4.520	43	536455	42.05	ppm	93
14) 1,3-Dichlorobenzene	4.611	146	620943	40.46	ppm	98
15) 1,4-Dichlorobenzene	4.664	146	629808	41.42	ppm	99
16) Benzyl alcohol	4.776	108	332587	42.67	ppm	96
17) 1,2-Dichlorobenzene	4.787	146	615617	43.00	ppm	98
18) Acetophenone	4.979	105	733052	41.01	ppm	91
19) 2-Methylphenol	4.883	108	493842	44.28	ppm	95
20) 2,2'-oxybis(1-Chloropr...	4.862	121	166986	40.16	ppm	99

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124428.D
Acq On : 13 May 2016 1:05 pm
Operator : ashleyd
Sample : OP93830-BS1
Misc : op93830,em5264,30.0
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 13 15:05:35 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	5.011	108	534580	43.75	ppm		92
22) n-Nitroso-di-n-propyla...	4.974	70	377673	39.13	ppm		91
23) Hexachloroethane	5.054	201	236441	41.13	ppm		98
26) Nitrobenzene	5.124	77	558151	43.46	ppm		99
27) Quinoline	6.181	129	1135682	41.76	ppm		99
28) Isophorone	5.326	82	1033577	44.77	ppm		95
29) 2-Nitrophenol	5.412	139	330593	45.50	ppm	#	70
30) 2,4-Dimethylphenol	5.465	107	533210	44.84	ppm		96
31) Benzoic acid	5.615	105	361872	46.39	ppm		96
32) bis(2-Chloroethoxy)met...	5.529	93	620090	44.24	ppm		97
33) 2,4-Dichlorophenol	5.668	162	512588	47.14	ppm		99
34) 2,6-Dichlorophenol	5.882	162	502451	45.73	ppm		98
36) 1,2,4-Trichlorobenzene	5.722	180	564825	44.28	ppm		98
38) Naphthalene	5.797	128	1645224	44.04	ppm		99
39) 4-Chloroaniline	5.877	127	355490	22.09	ppm		97
40) 2,3-Dichloroaniline	6.988	161	508103	35.87	ppm		97
41) Caprolactam	6.288	55	243651	41.43	ppm		95
42) Hexachlorobutadiene	5.925	225	348610	47.52	ppm		97
43) 4-Chloro-3-methylphenol	6.469	107	485523	44.68	ppm		97
44) 2-Methylnaphthalene	6.598	141	924471	41.38	ppm		99
45) 1-Methylnaphthalene	6.726	142	1141982	43.99	ppm		100
46) Dimethylnaphthalene	7.463	156	1018635	42.27	ppm		99
48) Hexachlorocyclopentadiene	6.801	237	415052	71.60	ppm		99
49) 2,4,6-Trichlorophenol	7.009	196	370367	43.27	ppm		98
50) 2,4,5-Trichlorophenol	7.089	196	394201	42.31	ppm		96
52) 2-Chloronaphthalene	7.260	162	1082103	41.41	ppm		98
53) Biphenyl	7.233	154	1392796	41.72	ppm		100
54) 2-Nitroaniline	7.447	65	319877	42.94	ppm		97
55) Dimethylphthalate	7.714	163	1274169	41.71	ppm		99
56) Acenaphthylene	7.874	152	1654944	38.30	ppm		100
57) 2,6-Dinitrotoluene	7.815	165	302173	44.49	ppm		99
58) 3-Nitroaniline	8.104	138	186062	24.76	ppm		95
59) Acenaphthene	8.152	153	1063490	40.86	ppm		99
60) 2,4-Dinitrophenol	8.296	184	323014	101.44	ppm		93
61) 4-Nitrophenol	8.558	109	90072	32.78	ppm		92
62) Dibenzofuran	8.446	168	1601410	41.36	ppm		99
63) 2,4-Dinitrotoluene	8.494	165	402068	45.13	ppm		97
64) 2,3,4,6-Tetrachlorophenol	8.702	232	348063	48.30	ppm		96
65) Diethylphthalate	8.900	149	1260065	41.43	ppm		98
66) Fluorene	9.023	166	1317865	42.11	ppm		99
67) 4-Chlorophenyl-phenyle...	9.049	204	660177	44.21	ppm		96
68) 4-Nitroaniline	9.156	138	319676	43.74	ppm		98
70) 4,6-Dinitro-2-methylph...	9.215	198	243215	49.98	ppm		97
71) n-Nitrosodiphenylamine	9.279	169	898729	45.32	ppm		99
72) 1,2-Diphenylhydrazine	9.332	77	1142206	44.97	ppm		94
74) 4-Bromophenyl-phenylether	9.920	248	455192	49.85	ppm		95
75) Hexachlorobenzene	10.021	284	522481	48.59	ppm		95
76) Pentachlorophenol	10.443	266	235350	51.15	ppm		99
77) Phenanthrene	10.764	178	1786222	43.40	ppm		99
78) Anthracene	10.865	178	1818100	42.65	ppm		99

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124428.D
Acq On : 13 May 2016 1:05 pm
Operator : ashleyd
Sample : OP93830-BS1
Misc : op93830,em5264,30.0
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 13 15:05:35 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)
79) Carbazole	11.228	167	1797167	45.77	ppm		100
80) Di-n-butylphthalate	11.992	149	2213096	45.40	ppm		100
81) Fluoranthene	13.060	202	2214276	45.91	ppm		99
82) Octadecane	10.684	57	753994	47.48	ppm		95
84) Pyrene	13.488	202	2218831	40.56	ppm		98
87) Butylbenzylphthalate	14.924	149	942076	39.61	ppm		97
88) Benzo[a]anthracene	15.880	228	2109797	41.13	ppm		98
89) 3,3'-Dichlorobenzidine	15.902	252	966320	51.59	ppm		98
90) Chrysene	15.950	228	1989351	41.53	ppm		99
91) bis(2-Ethylhexyl)phtha...	16.131	149	1291647	40.28	ppm		96
93) Di-n-octylphthalate	17.355	149	2171300	38.28	ppm		97
94) Benzo[b]fluoranthene	17.894	252	2195740	40.90	ppm		93
95) Benzo[k]fluoranthene	17.937	252	2181684	42.15	ppm		99
96) Benzo[a]pyrene	18.439	252	2058838	41.52	ppm		98
97) Indeno[1,2,3-cd]pyrene	20.260	276	2537887	50.58	ppm		97
99) Dibenz[a,h]anthracene	20.287	278	2214593	43.40	ppm		98
100) 7,12-Dimethylbenz(a)an...	17.873	256	1118973	46.31	ppm		97
101) Benzo[g,h,i]perylene	20.714	276	2178762	41.66	ppm		97
103) Benzaldehyde	4.333	105	426252	48.03	ppm		98
105) 1,2,4,5-Tetrachloroben...	6.827	216	634617	54.88	ppm		97
106) Atrazine	10.320	215	217664	57.44	ppm	#	64
108) Benzidine	13.413	184	1070279	54.52	ppm		99

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

7.3.2

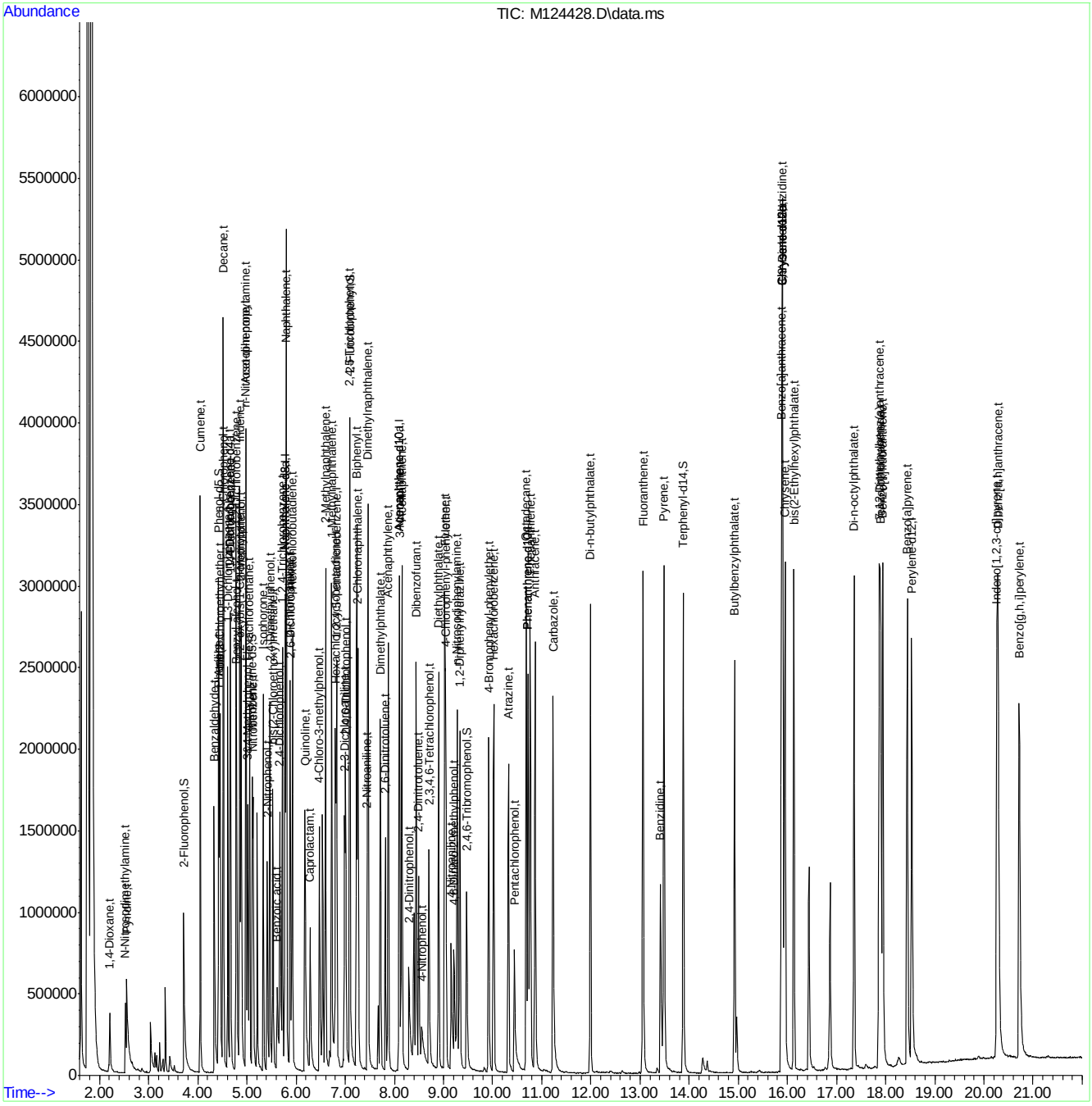
7

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124428.D
Acq On : 13 May 2016 1:05 pm
Operator : ashleyd
Sample : OP93830-BS1
Misc : op93830,em5264,30.0
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 13 15:05:35 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 JC19996

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
05/12/16 09:51

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2880\
Data File : 3m61253.D
Acq On : 12 May 2016 5:14 am
Operator : juliusj
Sample : op93820a-bs12
Misc : op93820a,e3m2880,1000
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 12 09:04:03 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

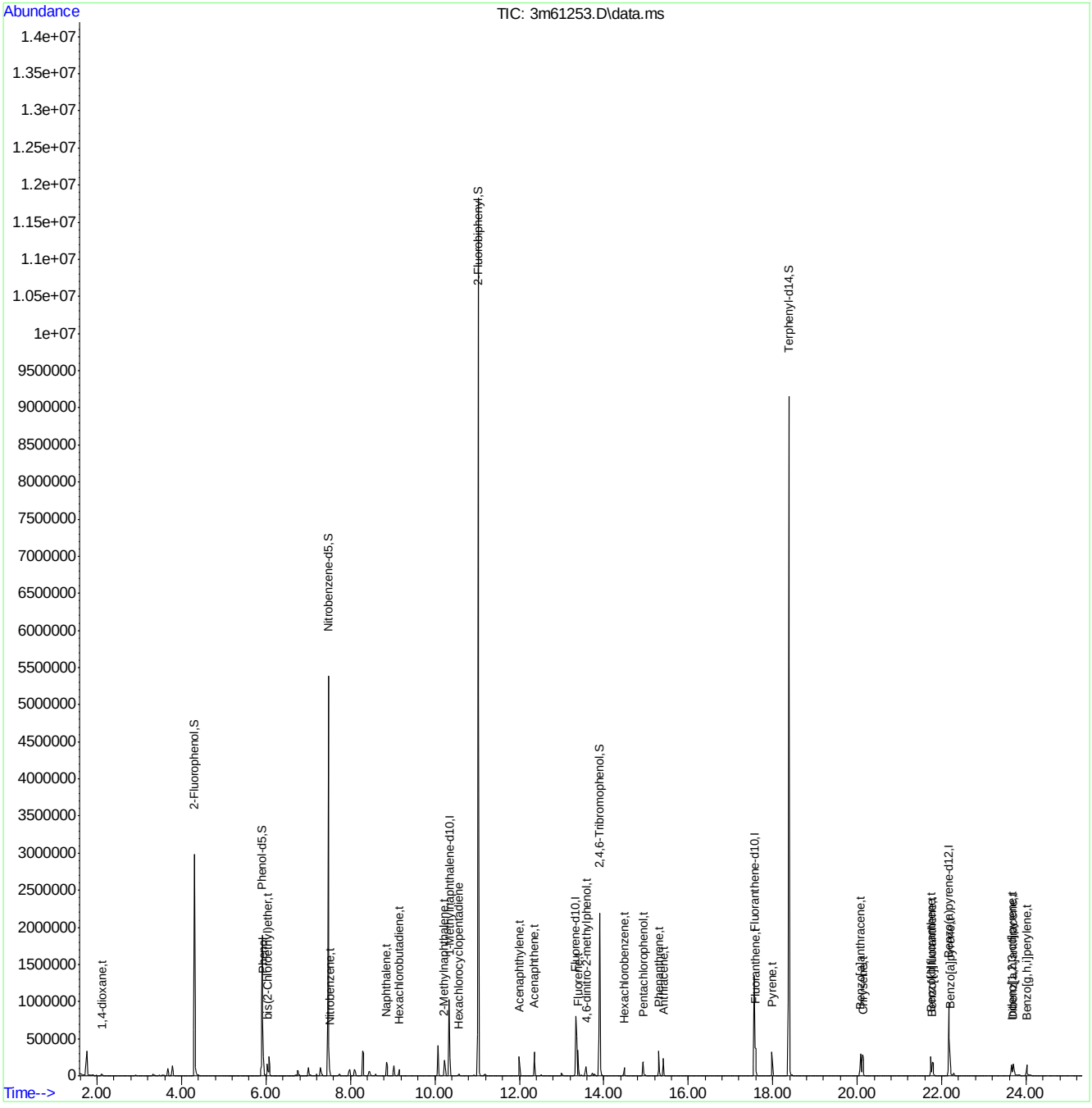
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	10.344	150	600604	4.00 ppm	-0.08
14) Fluorene-d10	13.336	176	799813	4.00 ppm	-0.11
21) Fluoranthene-d10	17.561	212	1303660	4.00 ppm	-0.08
31) Benzo(a)pyrene-d12	22.166	264	1026573	4.00 ppm	-0.01
System Monitoring Compounds					
3) 2-Fluorophenol	4.307	112	2055507	27.36 ppm	-0.12
Spiked Amount 50.000			Recovery	= 54.72%	
4) Phenol-d5	5.915	99	2175158	17.49 ppm	-0.07
Spiked Amount 50.000			Recovery	= 34.98%	
7) Nitrobenzene-d5	7.474	82	5250369	45.42 ppm	-0.10
Spiked Amount 50.000			Recovery	= 90.84%	
15) 2-Fluorobiphenyl	11.021	172	11067928	50.36 ppm	-0.12
Spiked Amount 50.000			Recovery	= 100.72%	
20) 2,4,6-Tribromophenol	13.901	330	1295003	51.73 ppm	-0.07
Spiked Amount 50.000			Recovery	= 103.46%	
28) Terphenyl-d14	18.380	244	9405065	49.73 ppm	-0.05
Spiked Amount 50.000			Recovery	= 99.46%	
Target Compounds					Qvalue
2) 1,4-dioxane	2.112	88	18440	0.59 ppm #	12
5) Phenol	5.927	94	325878	2.43 ppm #	90
6) bis(2-Chloroethyl)ether	6.036	93	85538	0.84 ppm #	63
8) Nitrobenzene	7.512	77	109655	0.87 ppm #	60
9) Naphthalene	8.849	128	289002	0.87 ppm	89
10) Hexachlorobutadiene	9.150	225	53306	0.92 ppm	80
11) 2-Methylnaphthalene	10.221	141	156446	0.90 ppm #	54
13) Hexachlorocyclopentadiene	10.570	237	23760	0.51 ppm	81
16) Acenaphthylene	11.995	152	281766	1.02 ppm	89
17) Acenaphthene	12.351	153	195026	1.05 ppm	83
18) 4,6-dinitro-2-methylph...	13.580	198	130198	4.99 ppm	77
19) Fluorene	13.392	166	235799	1.06 ppm #	64
22) Hexachlorobenzene	14.485	284	63087	1.02 ppm	95
23) Pentachlorophenol	14.934	266	171799	4.06 ppm	85
24) Phenanthrene	15.305	178	321412	1.01 ppm	96
25) Anthracene	15.413	178	283487	1.01 ppm	91
26) Fluoranthene	17.592	202	356535	0.89 ppm	93
27) Pyrene	17.979	202	359174	0.96 ppm	85
29) Benzo[a]anthracene	20.080	228	274258	0.77 ppm	92
30) Chrysene	20.142	228	290557m	0.85 ppm	
32) Benzo[b]fluoranthene	21.749	252	234474m	0.69 ppm	
33) Benzo[k]fluoranthene	21.779	252	230424	0.73 ppm	89
34) Benzo[a]pyrene	22.197	252	222788	0.70 ppm	94
35) Indeno[1,2,3-cd]pyrene	23.655	276	208725	0.65 ppm	98
36) Dibenz[a,h]anthracene	23.693	278	172469	0.65 ppm	69
37) Benzo[g,h,i]perylene	24.012	276	176946	0.63 ppm	94

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2880\
Data File : 3m61253.D
Acq On : 12 May 2016 5:14 am
Operator : juliusj
Sample : op93820a-bs12
Misc : op93820a,e3m2880,1000
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 12 09:04:03 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 JC19996

Manual Integration Approval Summary

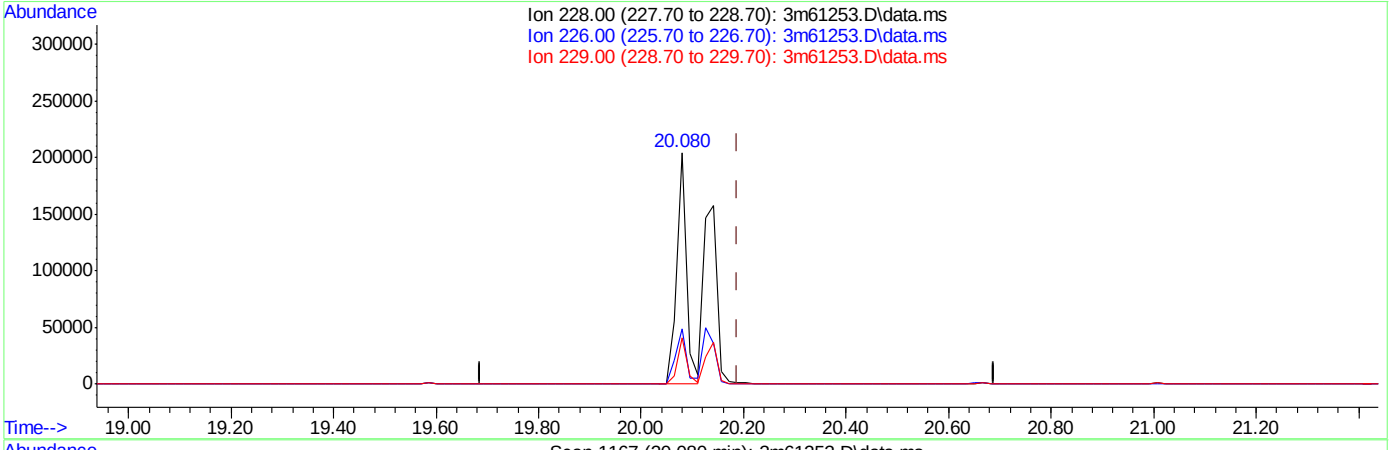
Sample Number:	OP93820A-BS12	**Method:**	SW846 8270D BY SIM
Lab FileID:	3M61253.D	**Analyst approved:**	05/12/16 09:15 Kristi Schollenberger
Injection Time:	05/12/16 05:14	**Supervisor approved:**	05/12/16 09:51 Nina Pandya

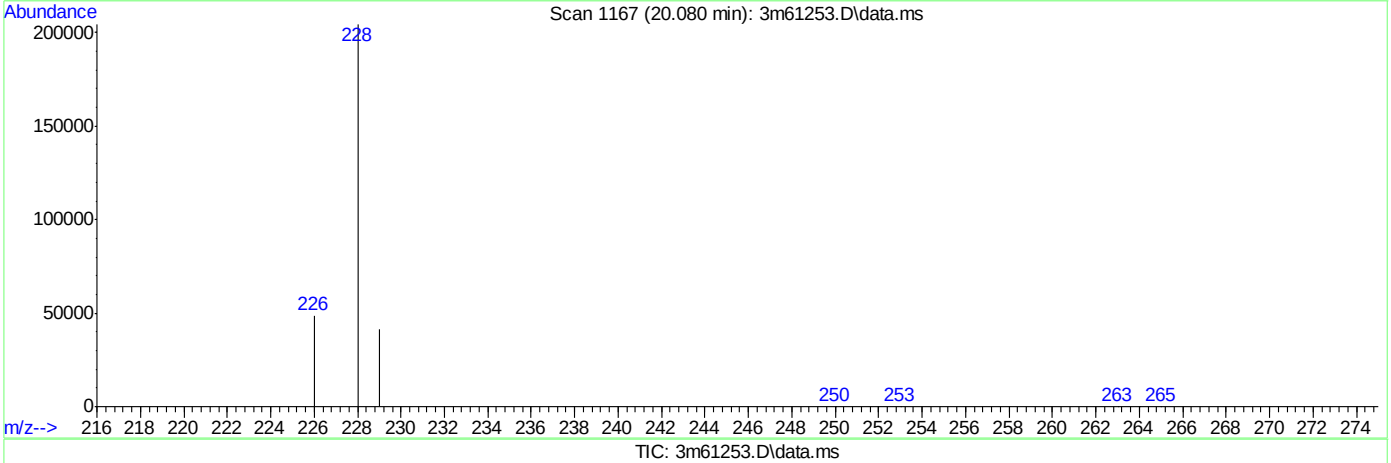
Parameter	CAS	Sig#	R.T. (min.)	Reason
Chrysene	218-01-9		20.14	Overlapping peak
Benzo(b)fluoranthene	205-99-2		21.75	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2880\
Data File : 3m61253.D
Acq On : 12 May 2016 5:14 am
Operator : juliusj
Sample : op93820a-bs12
Misc : op93820a,e3m2880,1000
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 12 09:03:01 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: 3m61253.D\data.ms

(30) Chrysene (t)

20.080min (-0.108) 0.80ppm

response 274258

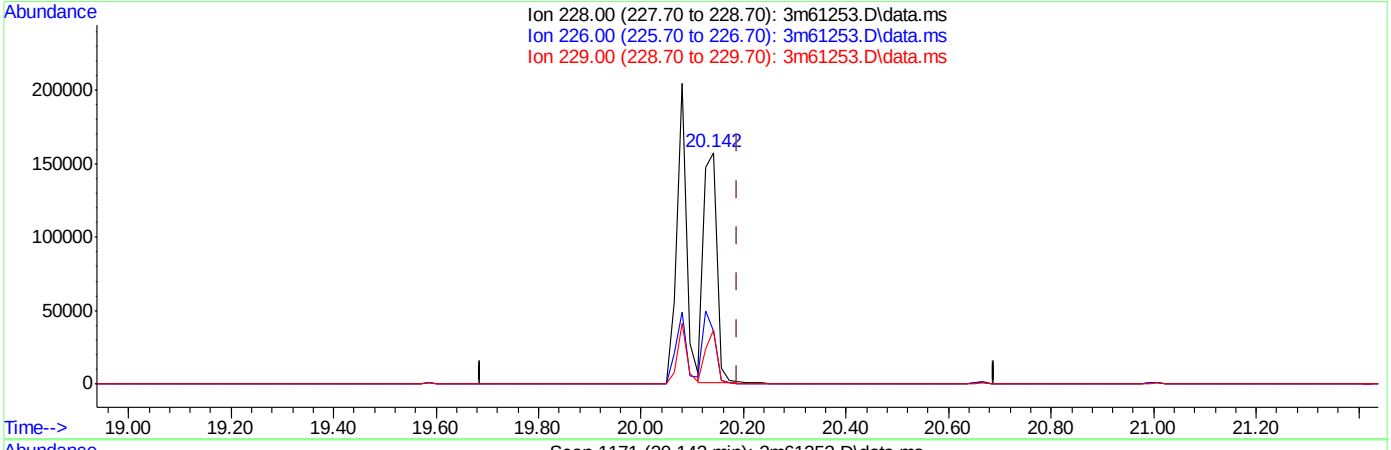
Ion	Exp%	Act%
228.00	100	100
226.00	29.30	23.05
229.00	21.70	20.16
0.00	0.00	0.00

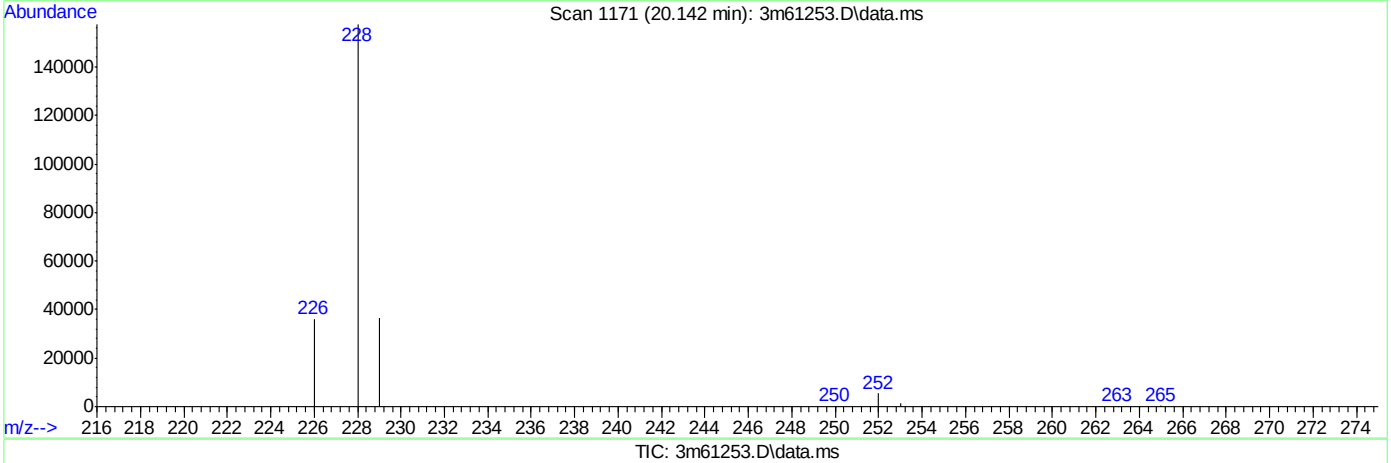
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2880\
Data File : 3m61253.D
Acq On : 12 May 2016 5:14 am
Operator : juliusj
Sample : op93820a-bs12
Misc : op93820a,e3m2880,1000
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 12 09:03:01 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: 3m61253.D\data.ms

(30) Chrysene (t)

20.142min (-0.046) 0.85ppm m

response 290557

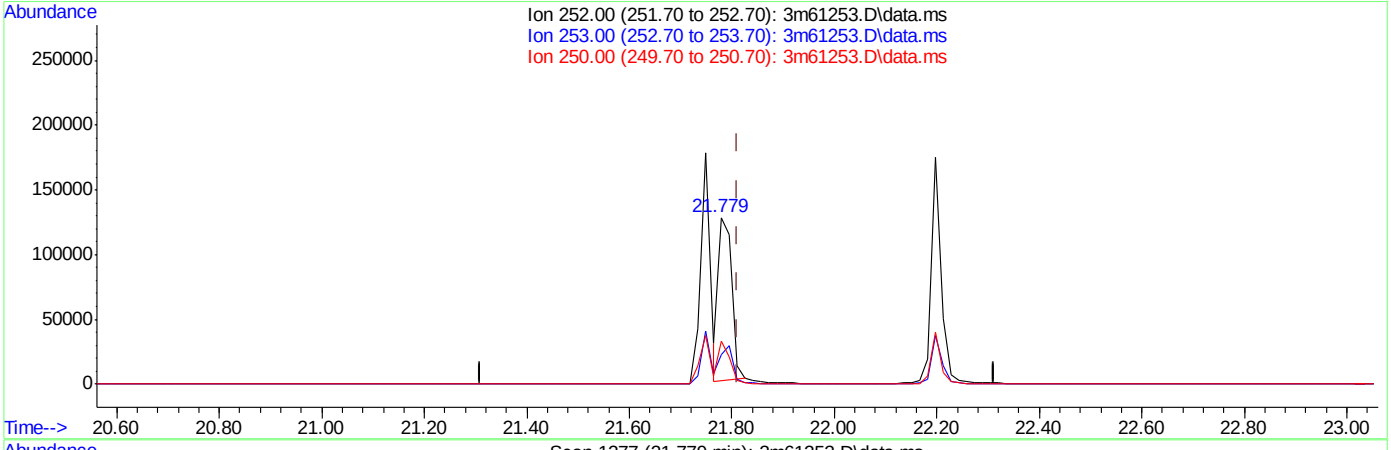
Ion	Exp%	Act%
228.00	100	100
226.00	29.30	22.88
229.00	21.70	23.19
0.00	0.00	0.00

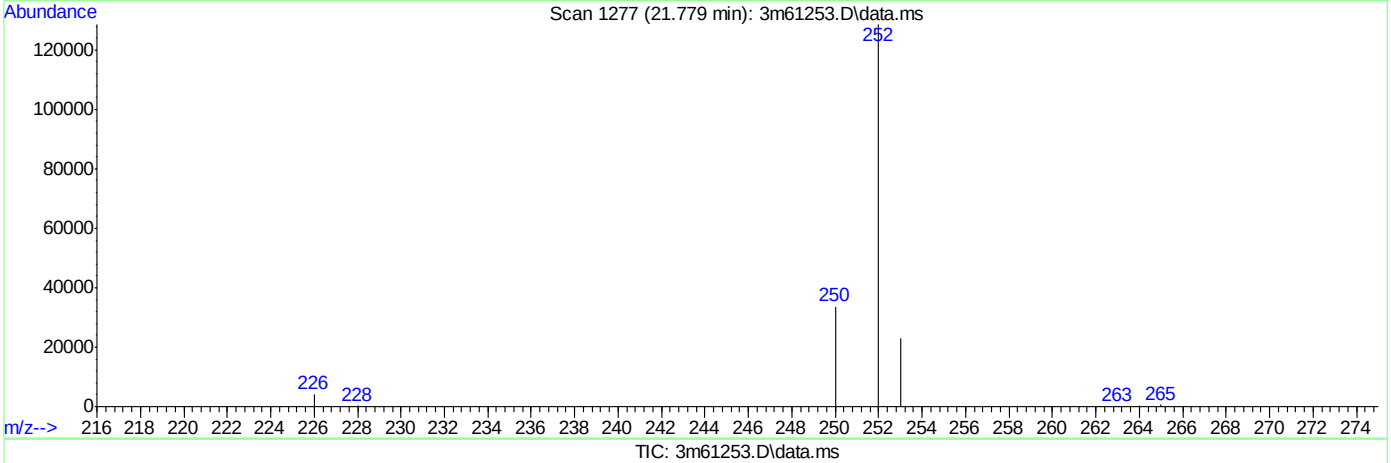
M3M2855SIM.M Thu May 12 09:03:53 2016 RPT1 Page: 1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2880\
Data File : 3m61253.D
Acq On : 12 May 2016 5:14 am
Operator : juliusj
Sample : op93820a-bs12
Misc : op93820a,e3m2880,1000
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 12 09:03:01 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: 3m61253.D\data.ms

(32) Benzo[b]fluoranthene (t)

21.779min (-0.032) 0.67ppm

response 230424

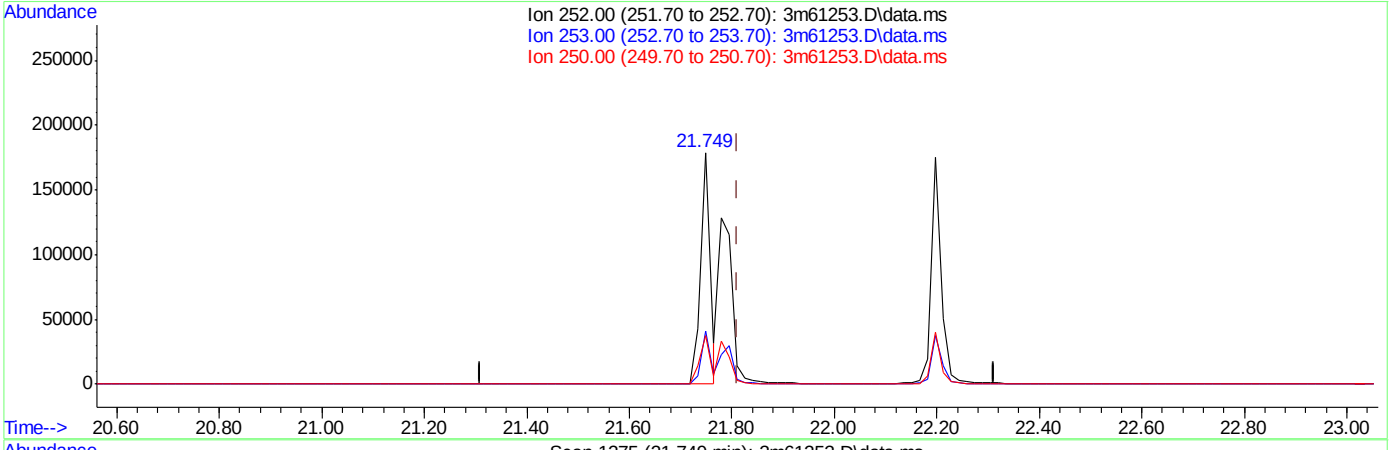
Ion	Exp%	Act%
252.00	100	100
253.00	19.40	16.57
250.00	26.40	27.05
0.00	0.00	0.00

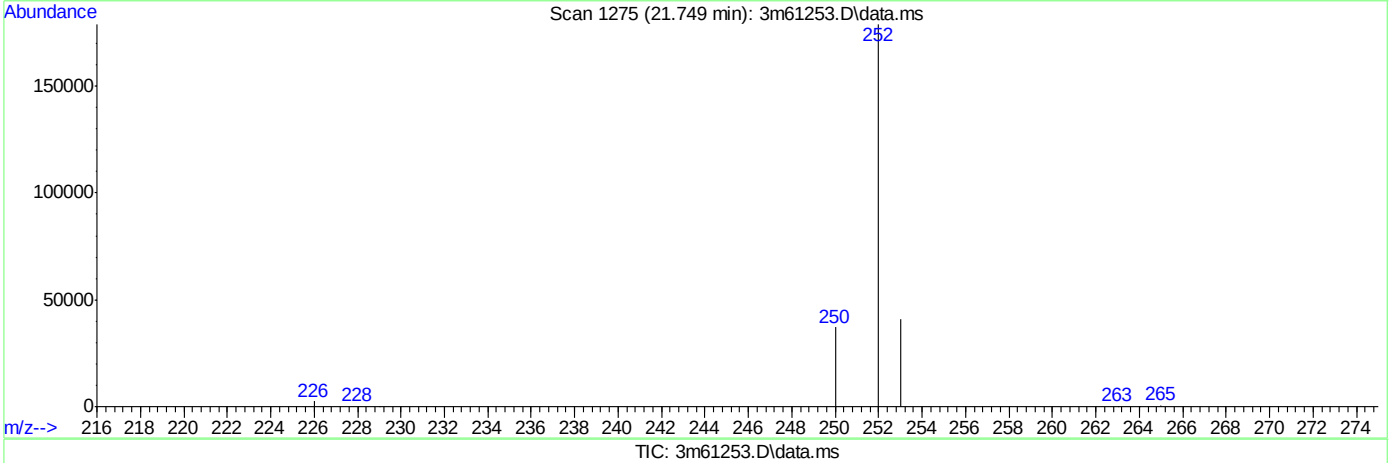
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\E3M2880\
Data File : 3m61253.D
Acq On    : 12 May 2016   5:14 am
Operator  : juliusj
Sample    : op93820a-bs12
Misc      : op93820a,e3m2880,1000
ALS Vial  : 11   Sample Multiplier: 1

Quant Time: May 12 09:03:01 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: 3m61253.D\data.ms

(32) Benzo[b]fluoranthene (t)

21.749min (-0.063) 0.69ppm m

response 234474

Ion	Exp%	Act%
252.00	100	100
253.00	19.40	22.79
250.00	26.40	20.74
0.00	0.00	0.00

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2919\
Data File : 4m65268.D
Acq On : 13 May 2016 3:38 pm
Operator : ashleyd
Sample : op93830a-bs12
Misc : op93830a,e4m2919,30.0
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 17 08:57:34 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	10.511	152	332814	4.00	ppm	# 0.00
12) Fluorene-d10	13.489	176	591197	4.00	ppm	0.00
22) Fluoranthene-d10	17.685	212	964656	4.00	ppm	0.02
28) Benzo(a)pyrene-d12	22.284	264	749180	4.00	ppm	0.01
35) 1-Methylnaphthalene-d10a	10.511	152	332814	4.00	ppm	# 0.00
38) Fluorene-d10a	13.489	176	591197	4.00	ppm	# 0.00
System Monitoring Compounds						
2) 2-Fluorophenol	4.589	112	1988902	45.64	ppm	-0.05
Spiked Amount 50.000	Range 11 - 58		Recovery = 91.28%#			
3) Phenol-d5	6.163	99	3444327	47.00	ppm	-0.04
Spiked Amount 50.000			Recovery = 94.00%			
6) Nitrobenzene-d5	7.667	82	3425344	52.13	ppm	-0.04
Spiked Amount 50.000			Recovery = 104.26%			
11) 2-Fluorobiphenyl	11.179	172	5505109	57.31	ppm	0.01
Spiked Amount 50.000			Recovery = 114.62%			
17) 2,4,6-Tribromophenol	14.038	330	1365249	43.29	ppm	0.00
Spiked Amount 50.000			Recovery = 86.58%			
25) Terphenyl-d14	18.495	244	5915916	45.39	ppm	0.03
Spiked Amount 50.000			Recovery = 90.78%			
Target Compounds						Qvalue
4) Phenol	6.177	94	523741	6.98	ppm	62
5) bis(2-Chloroethyl)ether	6.232	93	54819	0.97	ppm	78
7) Naphthalene	9.028	128	187462	1.00	ppm	97
8) Hexachlorobutadiene	9.337	225	48386	1.05	ppm	86
9) 2-Methylnaphthalene	10.392	142	92685	1.14	ppm	77
10) Hexachlorocyclopentadiene	10.750	237	24348	0.98	ppm	80
13) Acenaphthylene	12.148	152	142285	1.05	ppm	92
14) Acenaphthene	12.503	153	90547	1.04	ppm	84
15) Dibenzofuran	12.880	168	115255	0.89	ppm	71
16) Fluorene	13.537	166	157564	1.00	ppm	96
18) Hexachlorobenzene	14.655	284	61476	1.00	ppm	85
19) Pentachlorophenol	15.088	266	218847	8.65	ppm	98
20) Phenanthrene	15.444	178	226664	1.07	ppm	97
21) Anthracene	15.536	178	216410	1.08	ppm	96
23) Fluoranthene	17.723	202	256819	0.99	ppm	96
24) Pyrene	18.099	202	281940	1.10	ppm	85
26) Benzo[a]anthracene	20.208	228	245882	1.03	ppm	96
27) Chrysene	20.265	228	244407	1.05	ppm	96
29) Benzo[b]fluoranthene	21.871	252	242860	0.90	ppm	93
30) Benzo[k]fluoranthene	21.899	252	221246	0.98	ppm	91
31) Benzo[a]pyrene	22.312	252	214627	0.96	ppm	99
32) Indeno[1,2,3-cd]pyrene	23.813	276	247873	0.89	ppm	98
33) Dibenz[a,h]anthracene	23.840	278	185721	0.83	ppm	73
34) Benzo[g,h,i]perylene	24.171	276	210246	0.89	ppm	100
36) 1,4-Dioxane	2.299	88	26706	1.24	ppm #	1
39) 4,6-dinitro-2-methylph...	13.728	198	206779	10.56	ppm	52
40) 1,2-Diphenylhydrazine	13.919	77	128110	0.92	ppm	85

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2919\
Data File : 4m65268.D
Acq On : 13 May 2016 3:38 pm
Operator : ashleyd
Sample : op93830a-bs12
Misc : op93830a,e4m2919,30.0
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 17 08:57:34 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)
41) n-nitrosodiphenylamine	13.871	169	90795	0.87	ppm #	74

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

7.3.4

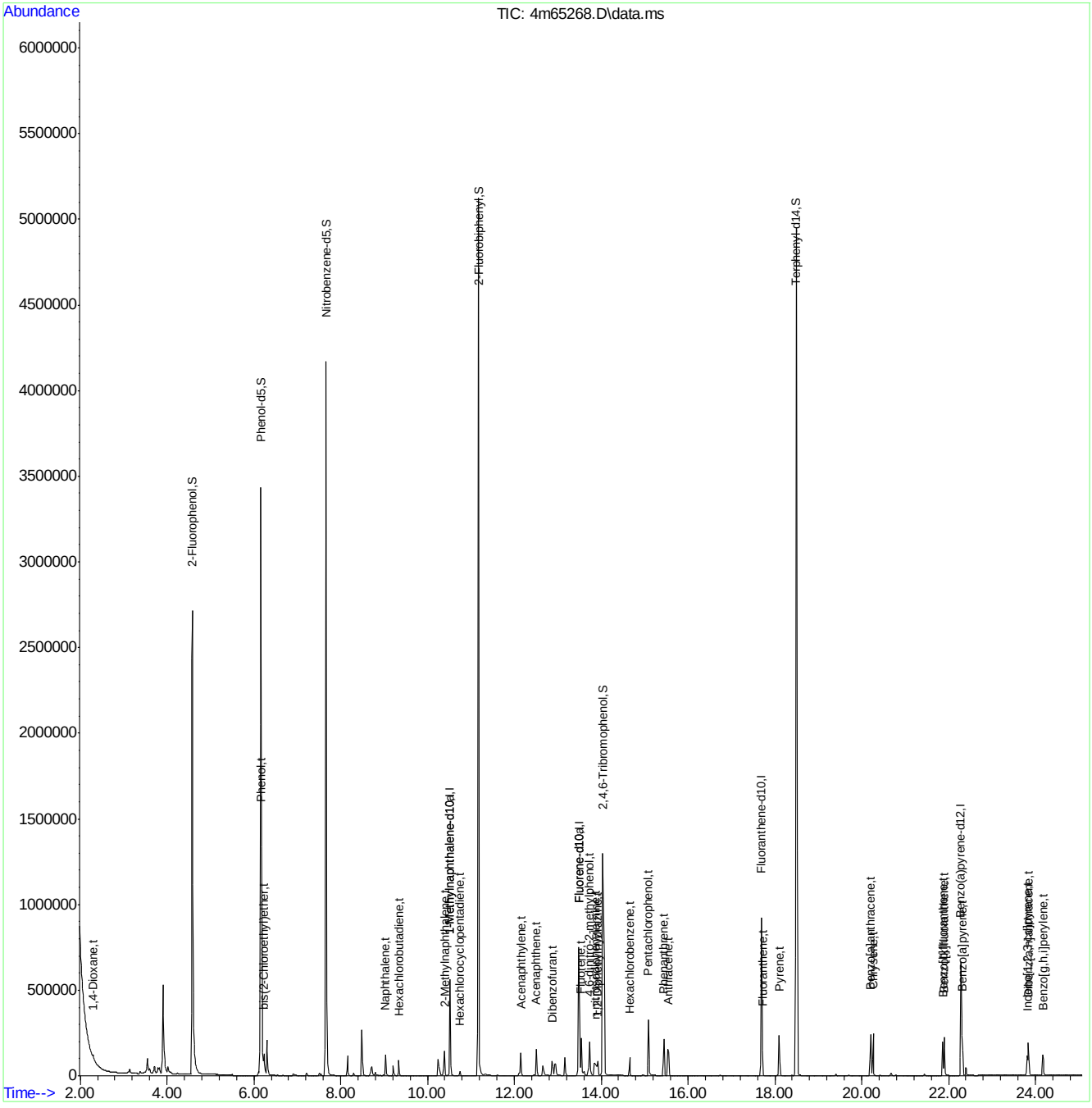
7

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2919\
Data File : 4m65268.D
Acq On : 13 May 2016 3:38 pm
Operator : ashleyd
Sample : op93830a-bs12
Misc : op93830a,e4m2919,30.0
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 17 08:57:34 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 JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5261\
Data File : M124367.D
Acq On : 12 May 2016 12:58 am
Operator : juliusj
Sample : op93820-ms
Misc : op93820,em5261,460
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 12 09:47:48 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 09:45:47 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.664	152	355859	40.00	ppm	-0.04
24) Naphthalene-d8	5.791	136	1287671	40.00	ppm	-0.05
47) Acenaphthene-d10	8.120	164	819324	40.00	ppm	-0.07
69) Phenanthrene-d10	10.742	188	1397691	40.00	ppm	-0.08
83) Chrysene-d12	15.923	240	1555851	40.00	ppm	-0.09
92) Perylene-d12	18.551	264	1598249	40.00	ppm	-0.10
102) 1,4-Dichlorobenzene-d4a	4.664	152	355859	40.00	ppm	-0.04
104) Acenaphthene-d10a	8.120	164	819324	40.00	ppm	-0.07
107) Chrysene-d12a	15.923	240	1555851	40.00	ppm	-0.09
110) Phenanthrene-d10a	10.742	188	1397691	40.00	ppm	-0.08
112) Naphthalene-d8a	5.791	136	1287671	40.00	ppm	-0.05
114) Chrysene-d12b	15.923	240	1555851	40.00	ppm	-0.09
System Monitoring Compounds						
5) 2-Fluorophenol	3.724	112	378524	34.78	ppm	-0.03
Spiked Amount 50.000			Recovery	=	69.56%	
8) Phenol-d5	4.440	99	389413	28.49	ppm	-0.03
Spiked Amount 50.000			Recovery	=	56.98%	
25) Nitrobenzene-d5	5.123	82	475241	41.50	ppm	-0.04
Spiked Amount 50.000			Recovery	=	83.00%	
51) 2-Fluorobiphenyl	7.110	172	1046380	38.89	ppm	-0.06
Spiked Amount 50.000			Recovery	=	77.78%	
73) 2,4,6-Tribromophenol	9.492	330	226375	46.85	ppm	-0.07
Spiked Amount 50.000			Recovery	=	93.70%	
86) Terphenyl-d14	13.904	244	1388290	39.78	ppm	-0.09
Spiked Amount 50.000			Recovery	=	79.56%	
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	2.223	88	143966	29.18	ppm	90
3) Pyridine	2.570	79	228605	19.03	ppm	93
4) N-Nitrosodimethylamine	2.538	42	207415	39.43	ppm	84
6) Indene	4.867	116	825537	40.78	ppm	99
7) Cumene	4.060	105	1050358	38.68	ppm	98
9) Phenol	4.445	94	474247	32.38	ppm	84
10) Aniline	4.429	93	459688	26.98	ppm	78
11) bis(2-Chloroethyl)ether	4.466	93	496688	43.55	ppm	98
12) 2-Chlorophenol	4.525	128	504135	41.33	ppm	96
13) Decane	4.536	43	450754	38.99	ppm	95
14) 1,3-Dichlorobenzene	4.621	146	497147	35.75	ppm	99
15) 1,4-Dichlorobenzene	4.675	146	505488	36.68	ppm	98
16) Benzyl alcohol	4.787	108	293427	41.54	ppm	95
17) 1,2-Dichlorobenzene	4.797	146	488362	37.64	ppm	98
18) Acetophenone	4.990	105	642479	39.66	ppm	97
19) 2-Methylphenol	4.894	108	404357	40.00	ppm	94
20) 2,2'-oxybis(1-Chloropr...	4.878	121	139213	36.94	ppm	98

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5261\
Data File : M124367.D
Acq On : 12 May 2016 12:58 am
Operator : juliusj
Sample : op93820-ms
Misc : op93820,em5261,460
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 12 09:47:48 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 09:45:47 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21)	3&4-Methylphenol	5.022	108	412370	37.23	ppm		90
22)	n-Nitroso-di-n-propyla...	4.990	70	326093	37.28	ppm		88
23)	Hexachloroethane	5.070	201	189105	36.30	ppm		97
26)	Nitrobenzene	5.139	77	484923	41.83	ppm		99
27)	Quinoline	6.197	129	937412	38.19	ppm		100
28)	Isophorone	5.342	82	891292	42.77	ppm		94
29)	2-Nitrophenol	5.422	139	281115	42.86	ppm	#	69
30)	2,4-Dimethylphenol	5.476	107	443534	41.31	ppm		98
31)	Benzoic acid	5.631	105	232940	33.08	ppm		98
32)	bis(2-Chloroethoxy)met...	5.540	93	509917	40.30	ppm		98
33)	2,4-Dichlorophenol	5.679	162	419189	42.71	ppm		99
34)	2,6-Dichlorophenol	5.892	162	399173	40.25	ppm		99
36)	1,2,4-Trichlorobenzene	5.737	180	445278	38.67	ppm		97
38)	Naphthalene	5.812	128	1341205	39.77	ppm		99
39)	4-Chloroaniline	5.887	127	387930	26.70	ppm		98
40)	2,3-Dichloroaniline	7.003	161	451600	35.31	ppm		99
41)	Caprolactam	6.293	55	104487	19.68	ppm		96
42)	Hexachlorobutadiene	5.940	225	259357	39.16	ppm		98
43)	4-Chloro-3-methylphenol	6.485	107	391932	39.96	ppm		62
44)	2-Methylnaphthalene	6.613	141	773653	38.36	ppm		97
45)	1-Methylnaphthalene	6.742	142	918490	39.19	ppm		98
46)	Dimethylnaphthalene	7.484	156	858721	39.47	ppm		99
48)	Hexachlorocyclopentadiene	6.822	237	301093	58.06	ppm		98
49)	2,4,6-Trichlorophenol	7.025	196	305486	39.08	ppm		99
50)	2,4,5-Trichlorophenol	7.105	196	315953	37.13	ppm		96
52)	2-Chloronaphthalene	7.276	162	876876	36.74	ppm		100
53)	Biphenyl	7.249	154	1169327	38.35	ppm		99
54)	2-Nitroaniline	7.463	65	266105	39.11	ppm		100
55)	Dimethylphthalate	7.735	163	1065617	38.19	ppm		99
56)	Acenaphthylene	7.895	152	1370127	34.72	ppm		100
57)	2,6-Dinitrotoluene	7.831	165	251481	40.54	ppm		95
58)	3-Nitroaniline	8.114	138	188302	27.44	ppm		94
59)	Acenaphthene	8.173	153	891851	37.52	ppm		99
60)	2,4-Dinitrophenol	8.312	184	254789	89.41	ppm		95
61)	4-Nitrophenol	8.574	109	68362	27.24	ppm		90
62)	Dibenzofuran	8.461	168	1337286	37.81	ppm		99
63)	2,4-Dinitrotoluene	8.509	165	321505	39.51	ppm		98
64)	2,3,4,6-Tetrachlorophenol	8.723	232	259850	39.48	ppm		96
65)	Diethylphthalate	8.921	149	1038974	37.40	ppm		98
66)	Fluorene	9.049	166	1076102	37.64	ppm		100
67)	4-Chlorophenyl-phenyle...	9.070	204	529046	38.79	ppm		96
68)	4-Nitroaniline	9.172	138	244953	36.70	ppm		97
70)	4,6-Dinitro-2-methylph...	9.231	198	203048	44.58	ppm		86
71)	n-Nitrosodiphenylamine	9.300	169	715356	38.10	ppm		99
72)	1,2-Diphenylhydrazine	9.353	77	935074	38.88	ppm		95
74)	4-Bromophenyl-phenylether	9.941	248	373512	43.20	ppm		96
75)	Hexachlorobenzene	10.048	284	429138	42.15	ppm		93
76)	Pentachlorophenol	10.464	266	179152	41.83	ppm		97
77)	Phenanthrene	10.790	178	1511268	38.78	ppm		100
78)	Anthracene	10.886	178	1489696	36.92	ppm		99

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5261\
Data File : M124367.D
Acq On : 12 May 2016 12:58 am
Operator : juliusj
Sample : op93820-ms
Misc : op93820,em5261,460
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 12 09:47:48 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 09:45:47 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
79) Carbazole	11.249	167	1509403	40.61	ppm		99
80) Di-n-butylphthalate	12.013	149	1841861	39.92	ppm		100
81) Fluoranthene	13.081	202	1844962	40.41	ppm		99
82) Octadecane	10.705	57	581311	38.66	ppm		95
84) Pyrene	13.509	202	1899794	37.45	ppm		98
87) Butylbenzylphthalate	14.945	149	803225	36.42	ppm		96
88) Benzo[a]anthracene	15.902	228	1775009	37.32	ppm		99
89) 3,3'-Dichlorobenzidine	15.923	252	971577	55.94	ppm		99
90) Chrysene	15.971	228	1610029	36.24	ppm		100
91) bis(2-Ethylhexyl)phtha...	16.153	149	1055086	35.48	ppm		96
93) Di-n-octylphthalate	17.376	149	1872628	36.10	ppm		98
94) Benzo[b]fluoranthene	17.915	252	1842098	37.51	ppm		93
95) Benzo[k]fluoranthene	17.958	252	1809347	38.23	ppm		99
96) Benzo[a]pyrene	18.455	252	1641586	36.20	ppm		99
97) Indeno[1,2,3-cd]pyrene	20.287	276	2068465	45.07	ppm		98
99) Dibenz[a,h]anthracene	20.313	278	1786666	38.29	ppm		98
100) 7,12-Dimethylbenz(a)an...	17.894	256	835662	37.81	ppm		98
101) Benzo[g,h,i]perylene	20.746	276	1756006	36.71	ppm		97
103) Benzaldehyde	4.343	105	361623	44.96	ppm		98
105) 1,2,4,5-Tetrachloroben...	6.843	216	501781	47.51	ppm		93
106) Atrazine	10.347	215	186455	53.87	ppm	#	67
108) Benzidine	13.434	184	490188	26.29	ppm		98

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

7.4.1

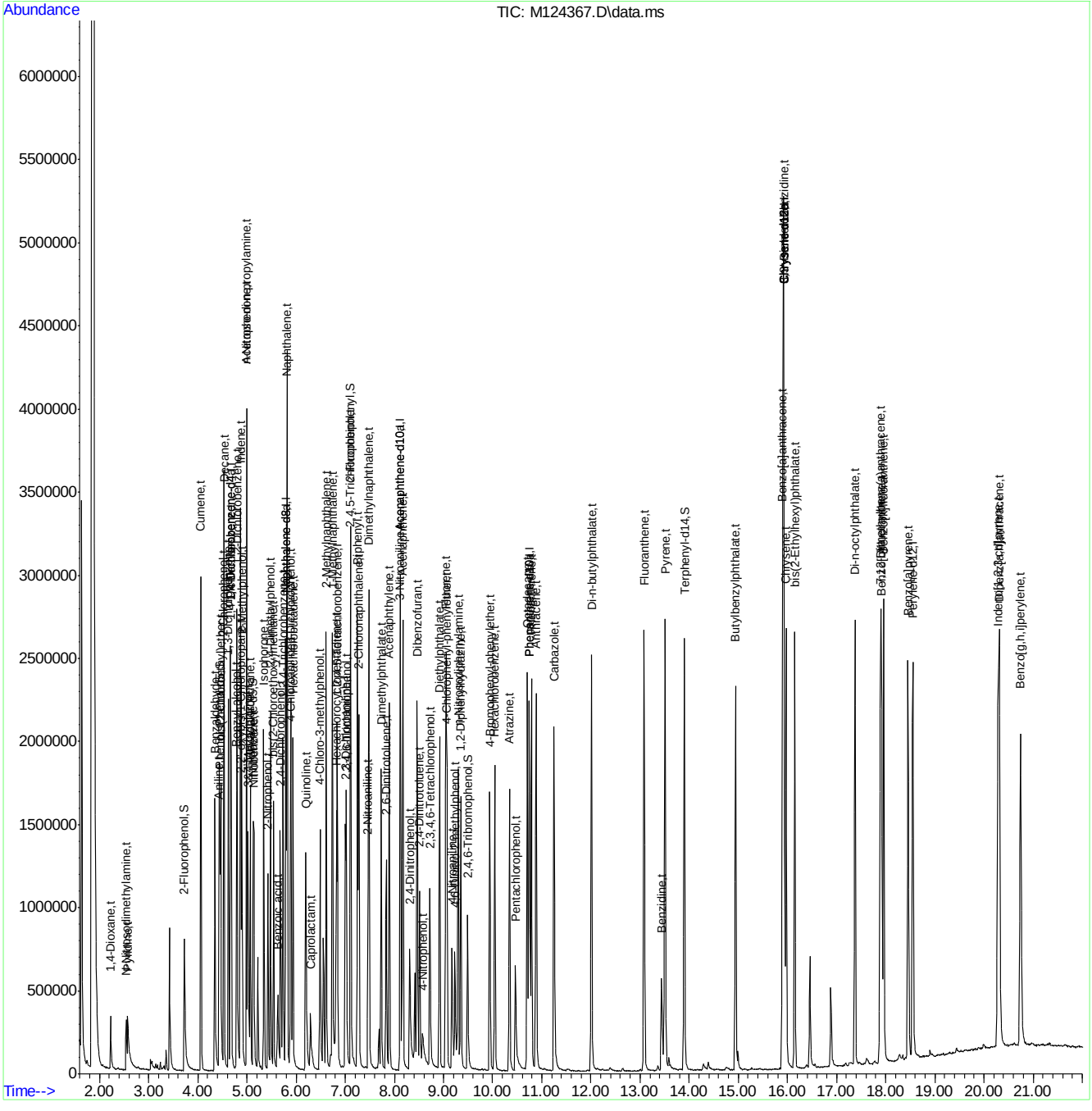
7

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5261\
Data File : M124367.D
Acq On : 12 May 2016 12:58 am
Operator : juliusj
Sample : op93820-ms
Misc : op93820,em5261,460
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 12 09:47:48 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 09:45:47 2016
Response via : Initial Calibration



SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5261\
Data File : M124368.D
Acq On : 12 May 2016 1:27 am
Operator : juliusj
Sample : op93820-msd
Misc : op93820,em5261,460
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 12 09:49:25 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 09:45:47 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.665	152	343057	40.00	ppm	-0.04
24) Naphthalene-d8	5.792	136	1266994	40.00	ppm	-0.05
47) Acenaphthene-d10	8.120	164	793594	40.00	ppm	-0.07
69) Phenanthrene-d10	10.743	188	1318060	40.00	ppm	-0.08
83) Chrysene-d12	15.918	240	1500818	40.00	ppm	-0.10
92) Perylene-d12	18.551	264	1531623	40.00	ppm	-0.10
102) 1,4-Dichlorobenzene-d4a	4.665	152	343057	40.00	ppm	-0.04
104) Acenaphthene-d10a	8.120	164	793594	40.00	ppm	-0.07
107) Chrysene-d12a	15.918	240	1500818	40.00	ppm	-0.10
110) Phenanthrene-d10a	10.743	188	1318060	40.00	ppm	-0.08
112) Naphthalene-d8a	5.792	136	1266994	40.00	ppm	-0.05
114) Chrysene-d12b	15.918	240	1500818	40.00	ppm	-0.10
System Monitoring Compounds						
5) 2-Fluorophenol	3.725	112	353518	33.70	ppm	-0.03
Spiked Amount 50.000			Recovery	=	67.40%	
8) Phenol-d5	4.435	99	368401	27.96	ppm	-0.03
Spiked Amount 50.000			Recovery	=	55.92%	
25) Nitrobenzene-d5	5.119	82	441726	39.20	ppm	-0.05
Spiked Amount 50.000			Recovery	=	78.40%	
51) 2-Fluorobiphenyl	7.111	172	969344	37.20	ppm	-0.06
Spiked Amount 50.000			Recovery	=	74.40%	
73) 2,4,6-Tribromophenol	9.488	330	214246	47.02	ppm	-0.07
Spiked Amount 50.000			Recovery	=	94.04%	
86) Terphenyl-d14	13.905	244	1275832	37.90	ppm	-0.09
Spiked Amount 50.000			Recovery	=	75.80%	
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	2.224	88	137768	28.96	ppm	92
3) Pyridine	2.571	79	299606	25.87	ppm	96
4) N-Nitrosodimethylamine	2.539	42	194108	38.27	ppm	83
6) Indene	4.868	116	780242	39.98	ppm	100
7) Cumene	4.061	105	998934	38.16	ppm	99
9) Phenol	4.446	94	453186	32.10	ppm	88
10) Aniline	4.430	93	433458	26.39	ppm	80
11) bis(2-Chloroethyl)ether	4.467	93	464315	42.23	ppm	95
12) 2-Chlorophenol	4.526	128	469025	39.89	ppm	97
13) Decane	4.531	43	428661	38.46	ppm	91
14) 1,3-Dichlorobenzene	4.622	146	478165	35.66	ppm	99
15) 1,4-Dichlorobenzene	4.675	146	487518	36.69	ppm	98
16) Benzyl alcohol	4.787	108	273712	40.19	ppm	93
17) 1,2-Dichlorobenzene	4.798	146	466076	37.26	ppm	98
18) Acetophenone	4.990	105	601946	38.55	ppm #	72
19) 2-Methylphenol	4.894	108	387439	39.76	ppm	93
20) 2,2'-oxybis(1-Chloropr...	4.873	121	131722	36.26	ppm	94

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5261\
Data File : M124368.D
Acq On : 12 May 2016 1:27 am
Operator : juliusj
Sample : op93820-msd
Misc : op93820,em5261,460
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 12 09:49:25 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 09:45:47 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.022	108	393103	36.82	ppm	#	85
22) n-Nitroso-di-n-propyla...	4.990	70	304839	36.15	ppm		91
23) Hexachloroethane	5.065	201	179491	35.74	ppm		94
26) Nitrobenzene	5.140	77	453662	39.77	ppm		99
27) Quinoline	6.192	129	892454	36.95	ppm		99
28) Isophorone	5.343	82	840994	41.02	ppm		95
29) 2-Nitrophenol	5.423	139	264108	40.92	ppm	#	69
30) 2,4-Dimethylphenol	5.476	107	417840	39.56	ppm		99
31) Benzoic acid	5.626	105	221108	31.91	ppm		98
32) bis(2-Chloroethoxy)met...	5.540	93	489118	39.28	ppm		97
33) 2,4-Dichlorophenol	5.679	162	393290	40.72	ppm		99
34) 2,6-Dichlorophenol	5.893	162	372959	38.22	ppm		100
36) 1,2,4-Trichlorobenzene	5.733	180	420195	37.09	ppm		99
38) Naphthalene	5.813	128	1276158	38.46	ppm		99
39) 4-Chloroaniline	5.888	127	360718	25.24	ppm		98
40) 2,3-Dichloroaniline	7.004	161	421423	33.49	ppm		100
41) Caprolactam	6.294	55	101664	19.46	ppm		99
42) Hexachlorobutadiene	5.941	225	250314	38.41	ppm		100
43) 4-Chloro-3-methylphenol	6.486	107	368329	38.16	ppm		69
44) 2-Methylnaphthalene	6.614	141	732405	36.91	ppm		98
45) 1-Methylnaphthalene	6.737	142	856113	37.13	ppm		99
46) Dimethylnaphthalene	7.485	156	795143	37.14	ppm		100
48) Hexachlorocyclopentadiene	6.817	237	274322	54.93	ppm		97
49) 2,4,6-Trichlorophenol	7.020	196	286339	37.81	ppm		100
50) 2,4,5-Trichlorophenol	7.100	196	289361	35.11	ppm		97
52) 2-Chloronaphthalene	7.276	162	827654	35.80	ppm		99
53) Biphenyl	7.250	154	1097300	37.16	ppm		100
54) 2-Nitroaniline	7.463	65	252086	38.25	ppm		99
55) Dimethylphthalate	7.730	163	1002082	37.08	ppm		99
56) Acenaphthylene	7.896	152	1292904	33.83	ppm		99
57) 2,6-Dinitrotoluene	7.832	165	236645	39.39	ppm		97
58) 3-Nitroaniline	8.115	138	175383	26.38	ppm		97
59) Acenaphthene	8.174	153	849172	36.88	ppm		99
60) 2,4-Dinitrophenol	8.313	184	235739	85.95	ppm		95
61) 4-Nitrophenol	8.574	109	58923	24.24	ppm		95
62) Dibenzofuran	8.462	168	1253872	36.61	ppm		98
63) 2,4-Dinitrotoluene	8.510	165	305658	38.78	ppm		97
64) 2,3,4,6-Tetrachlorophenol	8.718	232	244931	38.42	ppm		97
65) Diethylphthalate	8.921	149	975441	36.25	ppm		99
66) Fluorene	9.044	166	1012009	36.55	ppm		100
67) 4-Chlorophenyl-phenyle...	9.066	204	497214	37.64	ppm		97
68) 4-Nitroaniline	9.172	138	227932	35.25	ppm		98
70) 4,6-Dinitro-2-methylph...	9.231	198	188181	43.87	ppm	#	68
71) n-Nitrosodiphenylamine	9.295	169	675608	38.16	ppm		100
72) 1,2-Diphenylhydrazine	9.349	77	887484	39.14	ppm		98
74) 4-Bromophenyl-phenylether	9.942	248	346851	42.54	ppm		96
75) Hexachlorobenzene	10.043	284	400971	41.77	ppm		95
76) Pentachlorophenol	10.465	266	164336	40.79	ppm		99
77) Phenanthrene	10.785	178	1403600	38.20	ppm		99
78) Anthracene	10.882	178	1380722	36.28	ppm		99

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5261\
Data File : M124368.D
Acq On : 12 May 2016 1:27 am
Operator : juliusj
Sample : op93820-msd
Misc : op93820,em5261,460
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 12 09:49:25 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 09:45:47 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
79) Carbazole	11.250	167	1413275	40.32	ppm		99
80) Di-n-butylphthalate	12.014	149	1730548	39.77	ppm		100
81) Fluoranthene	13.082	202	1713647	39.80	ppm		99
82) Octadecane	10.705	57	538374	37.97	ppm		96
84) Pyrene	13.509	202	1742797	35.62	ppm		98
87) Butylbenzylphthalate	14.946	149	748788	35.20	ppm		98
88) Benzo[a]anthracene	15.902	228	1656767	36.11	ppm		99
89) 3,3'-Dichlorobenzidine	15.924	252	910852	54.36	ppm		98
90) Chrysene	15.972	228	1504985	35.12	ppm		100
91) bis(2-Ethylhexyl)phtha...	16.148	149	988786	34.47	ppm		96
93) Di-n-octylphthalate	17.376	149	1680163	33.80	ppm		98
94) Benzo[b]fluoranthene	17.916	252	1749427	37.18	ppm		92
95) Benzo[k]fluoranthene	17.958	252	1665376	36.72	ppm		99
96) Benzo[a]pyrene	18.455	252	1530209	35.21	ppm		99
97) Indeno[1,2,3-cd]pyrene	20.282	276	1898210	43.16	ppm		99
99) Dibenz[a,h]anthracene	20.309	278	1630998	36.47	ppm		98
100) 7,12-Dimethylbenz(a)an...	17.889	256	779385	36.80	ppm		98
101) Benzo[g,h,i]perylene	20.741	276	1615377	35.24	ppm		98
103) Benzaldehyde	4.344	105	321152	41.42	ppm		98
105) 1,2,4,5-Tetrachloroben...	6.838	216	471740	46.11	ppm		93
106) Atrazine	10.347	215	170608	50.89	ppm	#	62
108) Benzidine	13.435	184	526231	29.13	ppm		98

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

7.4.2

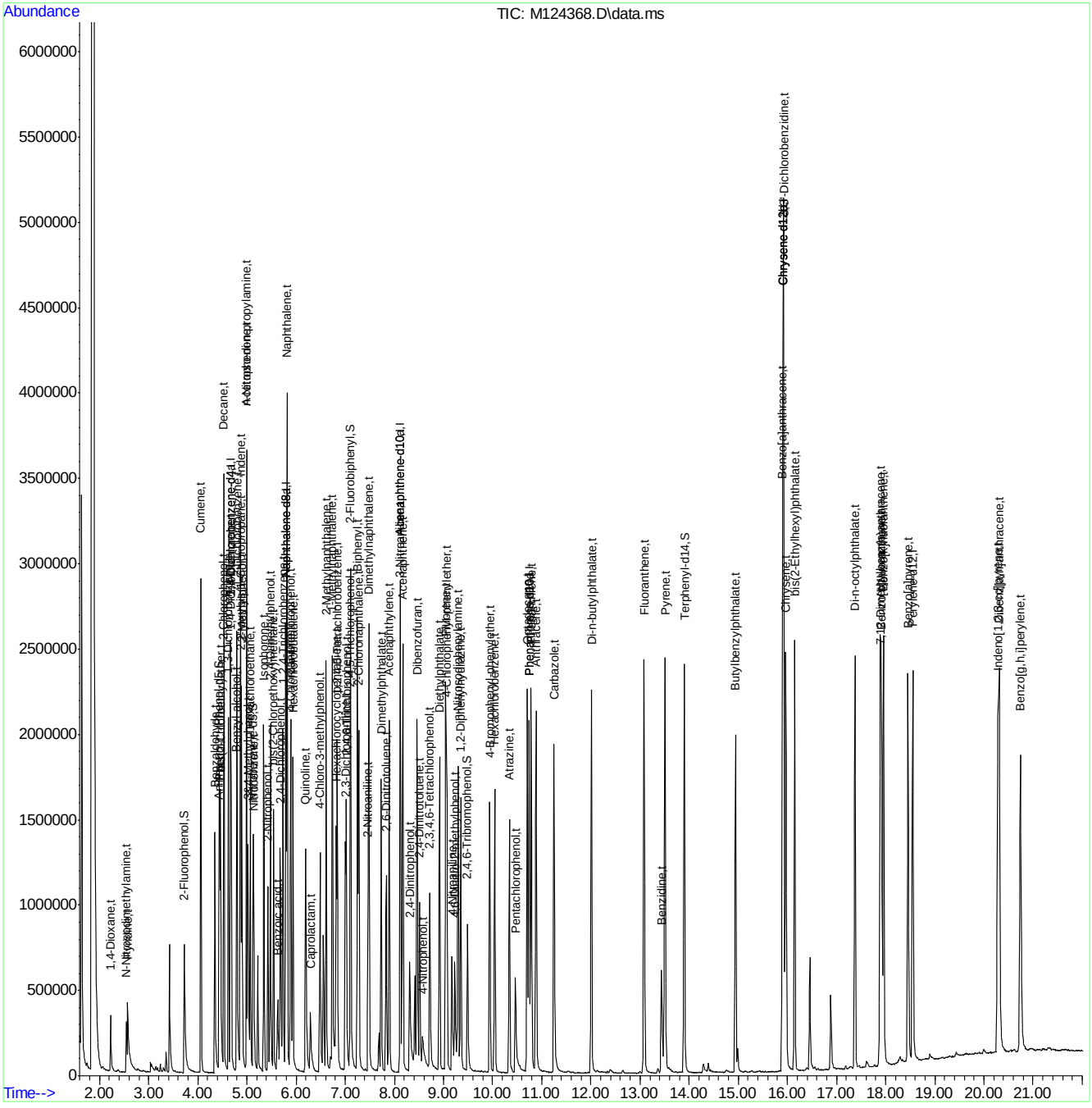
7

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5261\
Data File : M124368.D
Acq On : 12 May 2016 1:27 am
Operator : juliusj
Sample : op93820-msd
Misc : op93820,em5261,460
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 12 09:49:25 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 09:45:47 2016
Response via : Initial Calibration



SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124432.D
Acq On : 13 May 2016 3:01 pm
Operator : ashleyd
Sample : OP93830-MS
Misc : op93830,em5264,30.9
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 13 16:54:53 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	378115	40.00	ppm	-0.01
24) Naphthalene-d8	5.778	136	1526203	40.00	ppm	0.00
47) Acenaphthene-d10	8.101	164	832655	40.00	ppm	-0.01
69) Phenanthrene-d10	10.723	188	1378601	40.00	ppm	-0.01
83) Chrysene-d12	15.899	240	1499255	40.00	ppm	-0.01
92) Perylene-d12	18.532	264	1544780	40.00	ppm	-0.02
102) 1,4-Dichlorobenzene-d4a	4.651	152	378115	40.00	ppm	-0.01
104) Acenaphthene-d10a	8.101	164	832655	40.00	ppm	-0.01
107) Chrysene-d12a	15.899	240	1499424	40.00	ppm	-0.01
110) Phenanthrene-d10a	10.723	188	1378601	40.00	ppm	-0.01
112) Naphthalene-d8a	5.778	136	1526203	40.00	ppm	0.00
114) Chrysene-d12b	15.899	240	1499255	40.00	ppm	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.727	112	426734	36.90	ppm	0.01
Spiked Amount 50.000			Recovery	=	73.80%	
8) Phenol-d5	4.432	99	507855	34.97	ppm	0.00
Spiked Amount 50.000			Recovery	=	69.94%	
25) Nitrobenzene-d5	5.110	82	441709	32.54	ppm	0.00
Spiked Amount 50.000			Recovery	=	65.08%	
51) 2-Fluorobiphenyl	7.092	172	1115350	40.79	ppm	-0.01
Spiked Amount 50.000			Recovery	=	81.58%	
73) 2,4,6-Tribromophenol	9.468	330	248069	52.06	ppm	-0.02
Spiked Amount 50.000			Recovery	=	104.12%	
86) Terphenyl-d14	13.880	244	1372186	40.80	ppm	-0.03
Spiked Amount 50.000			Recovery	=	81.60%	
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	2.215	88	115510	22.03	ppm	95
3) Pyridine	2.626	79	261025	20.45	ppm	98
4) N-Nitrosodimethylamine	2.530	42	212532	38.02	ppm	81
6) Indene	4.854	116	755391	35.12	ppm	99
7) Cumene	4.052	105	954920	33.10	ppm	99
9) Phenol	4.448	94	593216	38.12	ppm	86
11) bis(2-Chloroethyl)ether	4.453	93	770678	63.59	ppm	91
12) 2-Chlorophenol	4.523	128	476459	36.76	ppm	99
13) Decane	4.523	43	417308	33.97	ppm	95
14) 1,3-Dichlorobenzene	4.608	146	473967	32.07	ppm	99
15) 1,4-Dichlorobenzene	4.667	146	491603	33.57	ppm	99
16) Benzyl alcohol	4.779	108	273890	36.49	ppm	96
17) 1,2-Dichlorobenzene	4.784	146	487196	35.34	ppm	98
18) Acetophenone	4.976	105	592419	34.42	ppm	94
19) 2-Methylphenol	4.886	108	392738	36.57	ppm	96
20) 2,2'-oxybis(1-Chloropr...	4.864	121	126551	31.61	ppm	95
21) 3&4-Methylphenol	5.019	108	436213	37.07	ppm	97

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124432.D
Acq On : 13 May 2016 3:01 pm
Operator : ashleyd
Sample : OP93830-MS
Misc : op93830,em5264,30.9
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 13 16:54:53 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)
22) n-Nitroso-di-n-propyla...	4.976	70	301380	32.42	ppm		91
23) Hexachloroethane	5.051	201	182020	32.88	ppm		94
26) Nitrobenzene	5.126	77	456172	33.20	ppm		98
27) Quinoline	6.221	129	982559	33.77	ppm		98
28) Isophorone	5.329	82	825240	33.41	ppm		96
29) 2-Nitrophenol	5.409	139	265193	34.11	ppm	#	71
30) 2,4-Dimethylphenol	5.468	107	378227	29.73	ppm		97
31) Benzoic acid	5.607	105	177622	21.28	ppm		95
32) bis(2-Chloroethoxy)met...	5.527	93	491998	32.80	ppm		97
33) 2,4-Dichlorophenol	5.676	162	426088	36.62	ppm		97
34) 2,6-Dichlorophenol	5.879	162	413376	35.17	ppm		98
36) 1,2,4-Trichlorobenzene	5.719	180	441013	32.32	ppm		98
38) Naphthalene	5.799	128	1310626	32.79	ppm		100
39) 4-Chloroaniline	5.917	127	301513	17.51	ppm		96
40) 2,3-Dichloroaniline	6.990	161	451872	29.81	ppm		99
41) Caprolactam	6.274	55	195920	31.14	ppm		98
42) Hexachlorobutadiene	5.922	225	265121	33.78	ppm		98
43) 4-Chloro-3-methylphenol	6.477	107	432651	37.21	ppm		99
44) 2-Methylnaphthalene	6.600	141	776556	32.49	ppm		97
45) 1-Methylnaphthalene	6.723	142	947469	34.11	ppm		99
46) Dimethylnaphthalene	7.465	156	869185	33.71	ppm		99
48) Hexachlorocyclopentadiene	6.803	237	387015	71.90	ppm		98
49) 2,4,6-Trichlorophenol	7.006	196	331620	41.74	ppm		99
50) 2,4,5-Trichlorophenol	7.092	196	341431	39.48	ppm		98
52) 2-Chloronaphthalene	7.262	162	899634	37.09	ppm		95
53) Biphenyl	7.230	154	1198772	38.69	ppm		100
54) 2-Nitroaniline	7.449	65	275210	39.80	ppm		97
55) Dimethylphthalate	7.716	163	1088799	38.40	ppm		98
56) Acenaphthylene	7.877	152	1397594	34.85	ppm		100
57) 2,6-Dinitrotoluene	7.813	165	252538	40.06	ppm		96
58) 3-Nitroaniline	8.101	138	222334	31.88	ppm		96
59) Acenaphthene	8.149	153	903009	37.38	ppm		100
60) 2,4-Dinitrophenol	8.299	184	212543	75.45	ppm		91
61) 4-Nitrophenol	8.566	109	85629	33.57	ppm		98
62) Dibenzofuran	8.443	168	1398268	38.91	ppm		100
63) 2,4-Dinitrotoluene	8.491	165	327641	39.62	ppm		95
64) 2,3,4,6-Tetrachlorophenol	8.699	232	293815	43.92	ppm		95
65) Diethylphthalate	8.897	149	1061975	37.61	ppm		98
66) Fluorene	9.025	166	1129734	38.89	ppm		99
67) 4-Chlorophenyl-phenyle...	9.046	204	562332	40.57	ppm		96
68) 4-Nitroaniline	9.159	138	245515	36.19	ppm		98
70) 4,6-Dinitro-2-methylph...	9.212	198	206616	45.86	ppm		97
71) n-Nitrosodiphenylamine	9.276	169	745116	40.24	ppm		99
72) 1,2-Diphenylhydrazine	9.329	77	971354	40.95	ppm		95
74) 4-Bromophenyl-phenylether	9.922	248	378231	44.36	ppm		94
75) Hexachlorobenzene	10.024	284	442815	44.10	ppm		94
76) Pentachlorophenol	10.440	266	207066	48.40	ppm		99
77) Phenanthrene	10.766	178	1523824	39.65	ppm		99
78) Anthracene	10.862	178	1528281	38.40	ppm		99
79) Carbazole	11.231	167	1498573	40.88	ppm		99

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124432.D
Acq On : 13 May 2016 3:01 pm
Operator : ashleyd
Sample : OP93830-MS
Misc : op93830,em5264,30.9
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 13 16:54:53 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)
80)	Di-n-butylphthalate	11.989	149	1819424	39.97	ppm		99
81)	Fluoranthene	13.063	202	1835554	40.76	ppm		99
82)	Octadecane	10.686	57	652441	44.00	ppm		96
84)	Pyrene	13.485	202	1876638	38.39	ppm		99
87)	Butylbenzylphthalate	14.922	149	776427	36.53	ppm		97
88)	Benzo[a]anthracene	15.878	228	1722860	37.59	ppm		98
89)	3,3'-Dichlorobenzidine	15.904	252	954893	57.05	ppm		99
90)	Chrysene	15.947	228	1663076	38.85	ppm		99
91)	bis(2-Ethylhexyl)phtha...	16.129	149	1073056	37.45	ppm		97
93)	Di-n-octylphthalate	17.352	149	1778999	35.48	ppm		97
94)	Benzo[b]fluoranthene	17.891	252	1808127	38.10	ppm		93
95)	Benzo[k]fluoranthene	17.934	252	1825157	39.90	ppm		99
96)	Benzo[a]pyrene	18.436	252	1672739	38.16	ppm		97
97)	Indeno[1,2,3-cd]pyrene	20.263	276	2121633	47.83	ppm		98
99)	Dibenz[a,h]anthracene	20.289	278	1827761	40.52	ppm		98
100)	7,12-Dimethylbenz(a)an...	17.870	256	928348	43.46	ppm		97
101)	Benzo[g,h,i]perylene	20.717	276	1828953	39.56	ppm		97
103)	Benzaldehyde	4.336	105	323296	37.83	ppm		97
105)	1,2,4,5-Tetrachloroben...	6.824	216	525819	48.99	ppm		95
106)	Atrazine	10.323	215	167926	47.74	ppm	#	64
108)	Benzidine	13.442	184	233767	14.21	ppm		99

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

7.4.3

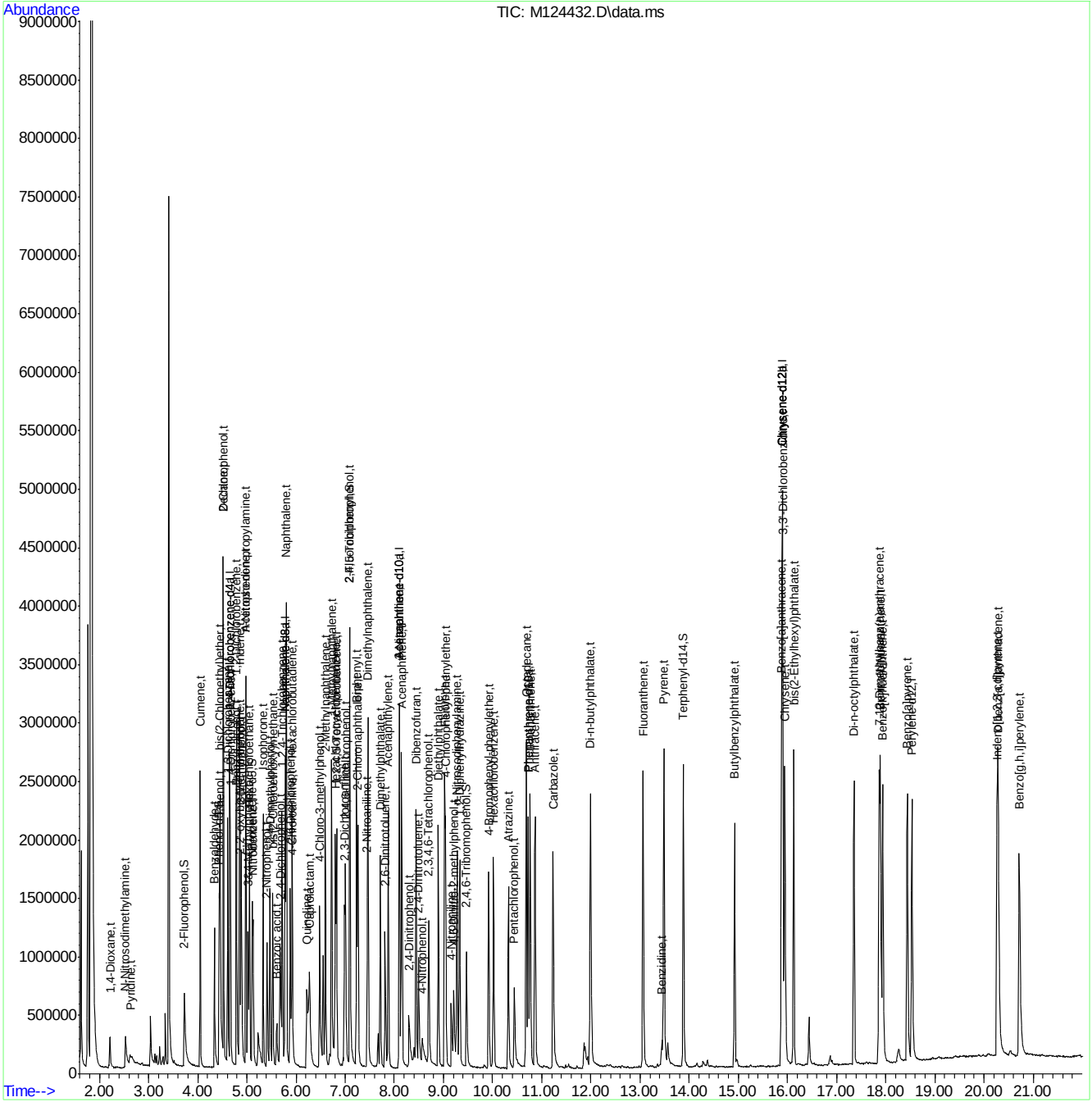
7

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124432.D
Acq On : 13 May 2016 3:01 pm
Operator : ashleyd
Sample : OP93830-MS
Misc : op93830,em5264,30.9
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 13 16:54:53 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 16:55:04 2016 MSM

Page: 4

SGS ACCUTEST JC19996

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 05/20/16 11:35

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124433.D
Acq On : 13 May 2016 3:29 pm
Operator : ashleyd
Sample : OP93830-MSD
Misc : op93830,em5264,30.8
ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 13 16:59:28 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	4.654	152	351067	40.00	ppm	-0.01
24) Naphthalene-d8	5.775	136	1267466	40.00	ppm	-0.01
47) Acenaphthene-d10	8.098	164	798173	40.00	ppm	-0.02
69) Phenanthrene-d10	10.721	188	1325343	40.00	ppm	-0.02
83) Chrysene-d12	15.896	240	1467039	40.00	ppm	-0.02
92) Perylene-d12	18.530	264	1527205	40.00	ppm	-0.02
102) 1,4-Dichlorobenzene-d4a	4.654	152	351067	40.00	ppm	-0.01
104) Acenaphthene-d10a	8.098	164	798173	40.00	ppm	-0.02
107) Chrysene-d12a	15.896	240	1467039	40.00	ppm	-0.02
110) Phenanthrene-d10a	10.721	188	1325343	40.00	ppm	-0.02
112) Naphthalene-d8a	5.775	136	1267466	40.00	ppm	-0.01
114) Chrysene-d12b	15.896	240	1467039	40.00	ppm	-0.02
System Monitoring Compounds						
5) 2-Fluorophenol	3.729	112	350632	32.66	ppm	0.01
Spiked Amount 50.000			Recovery	=	65.32%	
8) Phenol-d5	4.435	99	442574	32.82	ppm	0.01
Spiked Amount 50.000			Recovery	=	65.64%	
25) Nitrobenzene-d5	5.107	82	374299	33.21	ppm	0.00
Spiked Amount 50.000			Recovery	=	66.42%	
51) 2-Fluorobiphenyl	7.094	172	940541	35.89	ppm	0.00
Spiked Amount 50.000			Recovery	=	71.78%	
73) 2,4,6-Tribromophenol	9.471	330	228630	49.90	ppm	-0.01
Spiked Amount 50.000			Recovery	=	99.80%	
86) Terphenyl-d14	13.883	244	1347027	40.93	ppm	-0.02
Spiked Amount 50.000			Recovery	=	81.86%	
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	2.213	88	94139	19.34	ppm	90
3) Pyridine	2.592	79	222122m	18.75	ppm	
4) N-Nitrosodimethylamine	2.533	42	159047	30.65	ppm	85
6) Indene	4.851	116	647534	32.43	ppm	99
7) Cumene	4.050	105	805209	30.06	ppm	99
9) Phenol	4.445	94	507733	35.14	ppm	76
10) Aniline	4.435	93	199699m	11.88	ppm	
11) bis(2-Chloroethyl)ether	4.456	93	432023m	38.39	ppm	
12) 2-Chlorophenol	4.520	128	411306	34.18	ppm	97
13) Decane	4.520	43	357370	31.33	ppm	94
14) 1,3-Dichlorobenzene	4.611	146	404083	29.45	ppm	99
15) 1,4-Dichlorobenzene	4.664	146	415470	30.56	ppm	97
16) Benzyl alcohol	4.782	108	237047	34.01	ppm	98
17) 1,2-Dichlorobenzene	4.787	146	399533	31.21	ppm	98
18) Acetophenone	4.979	105	510205	31.93	ppm #	71
19) 2-Methylphenol	4.889	108	339196	34.01	ppm	98
20) 2,2'-oxybis(1-Chloropr...	4.862	121	107179	28.83	ppm	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124433.D
Acq On : 13 May 2016 3:29 pm
Operator : ashleyd
Sample : OP93830-MSD
Misc : op93830,em5264,30.8
ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 13 16:59:28 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)
21) 3&4-Methylphenol	5.017	108	348740	31.92	ppm		91
22) n-Nitroso-di-n-propyla...	4.974	70	256349	29.70	ppm		89
23) Hexachloroethane	5.054	201	151180	29.41	ppm		97
26) Nitrobenzene	5.124	77	379827	33.29	ppm		98
27) Quinoline	6.197	129	885527m	36.65	ppm		
28) Isophorone	5.326	82	715258	34.87	ppm		92
29) 2-Nitrophenol	5.412	139	211797	32.80	ppm	#	69
30) 2,4-Dimethylphenol	5.465	107	311749	29.50	ppm		96
31) Benzoic acid	5.604	105	98715	14.24	ppm		98
32) bis(2-Chloroethoxy)met...	5.529	93	417782	33.54	ppm		98
33) 2,4-Dichlorophenol	5.679	162	366580	37.94	ppm		99
34) 2,6-Dichlorophenol	5.882	162	337955	34.62	ppm		99
36) 1,2,4-Trichlorobenzene	5.722	180	371273	32.76	ppm		97
38) Naphthalene	5.797	128	1123616	33.85	ppm		100
39) 4-Chloroaniline	5.887	127	250243	17.50	ppm		96
40) 2,3-Dichloroaniline	6.988	161	422978	33.60	ppm		99
41) Caprolactam	6.277	55	192687	36.88	ppm		98
42) Hexachlorobutadiene	5.925	225	222888	34.19	ppm		97
43) 4-Chloro-3-methylphenol	6.480	107	373214	38.65	ppm		85
44) 2-Methylnaphthalene	6.598	141	650139	32.75	ppm		99
45) 1-Methylnaphthalene	6.726	142	775899	33.64	ppm		98
46) Dimethylnaphthalene	7.463	156	758719	35.43	ppm		100
48) Hexachlorocyclopentadiene	6.801	237	299928	59.25	ppm		96
49) 2,4,6-Trichlorophenol	7.009	196	296749	38.96	ppm		97
50) 2,4,5-Trichlorophenol	7.089	196	315418	38.05	ppm		99
52) 2-Chloronaphthalene	7.260	162	769579	33.10	ppm		99
53) Biphenyl	7.233	154	1035177	34.85	ppm		100
54) 2-Nitroaniline	7.447	65	245725	37.07	ppm		98
55) Dimethylphthalate	7.714	163	1022070	37.60	ppm		99
56) Acenaphthylene	7.874	152	1244486	32.37	ppm		99
57) 2,6-Dinitrotoluene	7.815	165	234959	38.88	ppm		98
58) 3-Nitroaniline	8.104	138	221180	33.08	ppm		96
59) Acenaphthene	8.152	153	796404	34.39	ppm		99
60) 2,4-Dinitrophenol	8.301	184	197801	73.56	ppm	#	64
61) 4-Nitrophenol	8.569	109	77492m	31.69	ppm		
62) Dibenzofuran	8.440	168	1273545	36.97	ppm		99
63) 2,4-Dinitrotoluene	8.494	165	305512	38.54	ppm		97
64) 2,3,4,6-Tetrachlorophenol	8.702	232	275988	43.04	ppm		93
65) Diethylphthalate	8.900	149	1034183	38.21	ppm		98
66) Fluorene	9.023	166	1042136	37.42	ppm		99
67) 4-Chlorophenyl-phenyle...	9.049	204	519037	39.07	ppm		94
68) 4-Nitroaniline	9.156	138	231294	35.57	ppm		97
70) 4,6-Dinitro-2-methylph...	9.215	198	189523	43.94	ppm	#	68
71) n-Nitrosodiphenylamine	9.274	169	722767	40.60	ppm		99
72) 1,2-Diphenylhydrazine	9.327	77	904128	39.65	ppm		99
74) 4-Bromophenyl-phenylether	9.920	248	364181	44.43	ppm		94
75) Hexachlorobenzene	10.021	284	422852	43.80	ppm		95
76) Pentachlorophenol	10.443	266	174310	42.83	ppm		97
77) Phenanthrene	10.764	178	1465642	39.67	ppm		100
78) Anthracene	10.865	178	1464566	38.27	ppm		99

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124433.D
Acq On : 13 May 2016 3:29 pm
Operator : ashleyd
Sample : OP93830-MSD
Misc : op93830,em5264,30.8
ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 13 16:59:28 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)
79) Carbazole	11.228	167	1450880	41.16	ppm		99
80) Di-n-butylphthalate	11.992	149	1796885	41.07	ppm		99
81) Fluoranthene	13.060	202	1800699	41.59	ppm		99
82) Octadecane	10.684	57	620625	43.53	ppm		96
84) Pyrene	13.488	202	1816567	37.98	ppm		98
87) Butylbenzylphthalate	14.924	149	755542	36.33	ppm		97
88) Benzo[a]anthracene	15.880	228	1696778	37.83	ppm		99
89) 3,3'-Dichlorobenzidine	15.902	252	999112	61.01	ppm		98
90) Chrysene	15.950	228	1603925	38.29	ppm		100
91) bis(2-Ethylhexyl)phtha...	16.131	149	1067397	38.07	ppm		96
93) Di-n-octylphthalate	17.355	149	1742226	35.15	ppm		98
94) Benzo[b]fluoranthene	17.894	252	1699935	36.23	ppm		93
95) Benzo[k]fluoranthene	17.937	252	1799163	39.78	ppm		98
96) Benzo[a]pyrene	18.439	252	1627508	37.56	ppm		98
97) Indeno[1,2,3-cd]pyrene	20.265	276	1998505	45.58	ppm		98
99) Dibenz[a,h]anthracene	20.287	278	1710119	38.35	ppm		97
100) 7,12-Dimethylbenz(a)an...	17.867	256	923598	43.74	ppm		97
101) Benzo[g,h,i]perylene	20.714	276	1723108	37.70	ppm		97
103) Benzaldehyde	4.333	105	282706	35.63	ppm		97
105) 1,2,4,5-Tetrachloroben...	6.822	216	438660	42.63	ppm		96
106) Atrazine	10.320	215	170450	50.55	ppm	#	70
108) Benzidine	13.440	184	166504	11.15	ppm		98

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

7.4.4

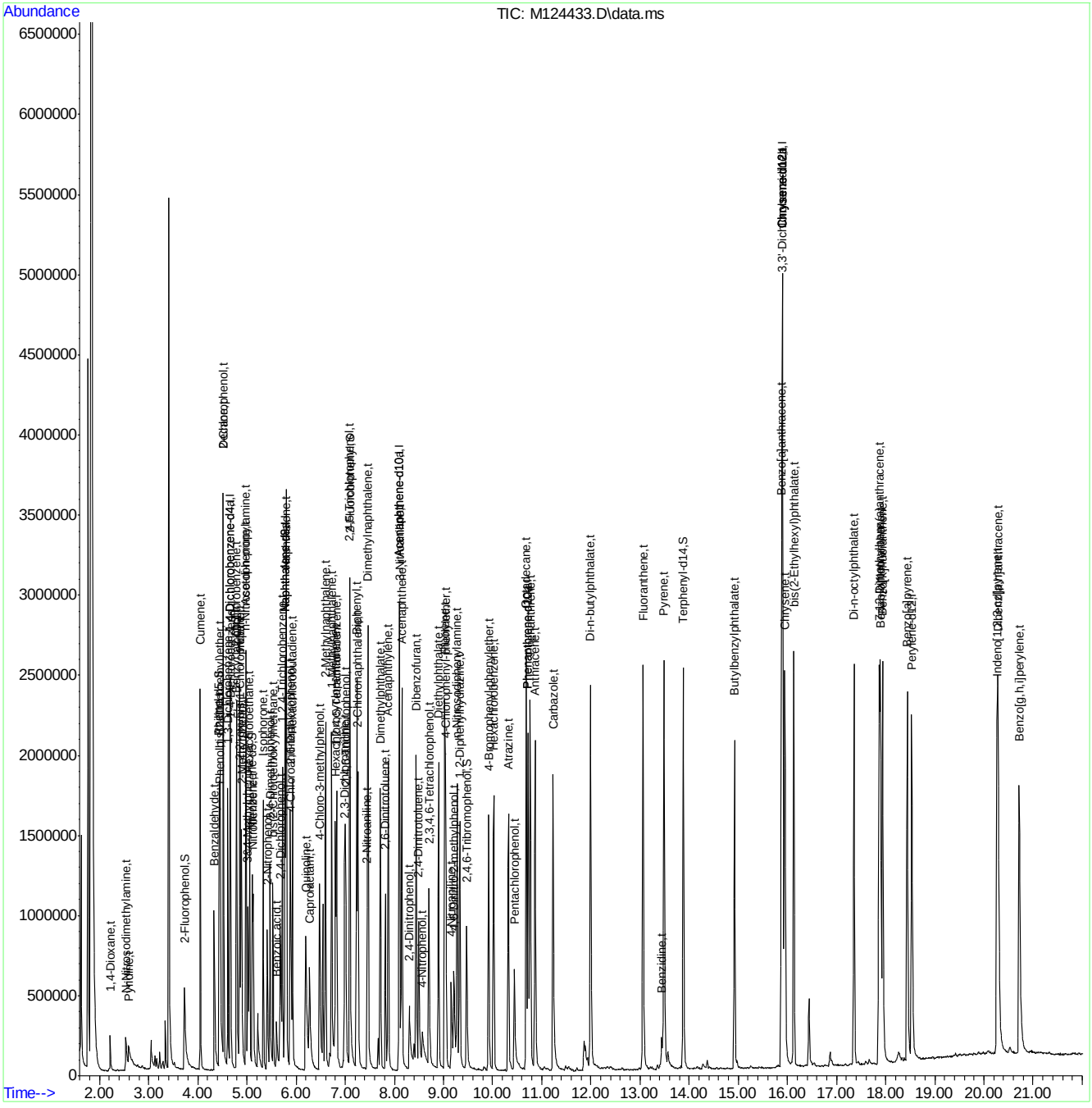
7

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124433.D
Acq On : 13 May 2016 3:29 pm
Operator : ashleyd
Sample : OP93830-MSD
Misc : op93830,em5264,30.8
ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 13 16:59:28 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



SGS ACCUTEST JC19996

Manual Integration Approval Summary

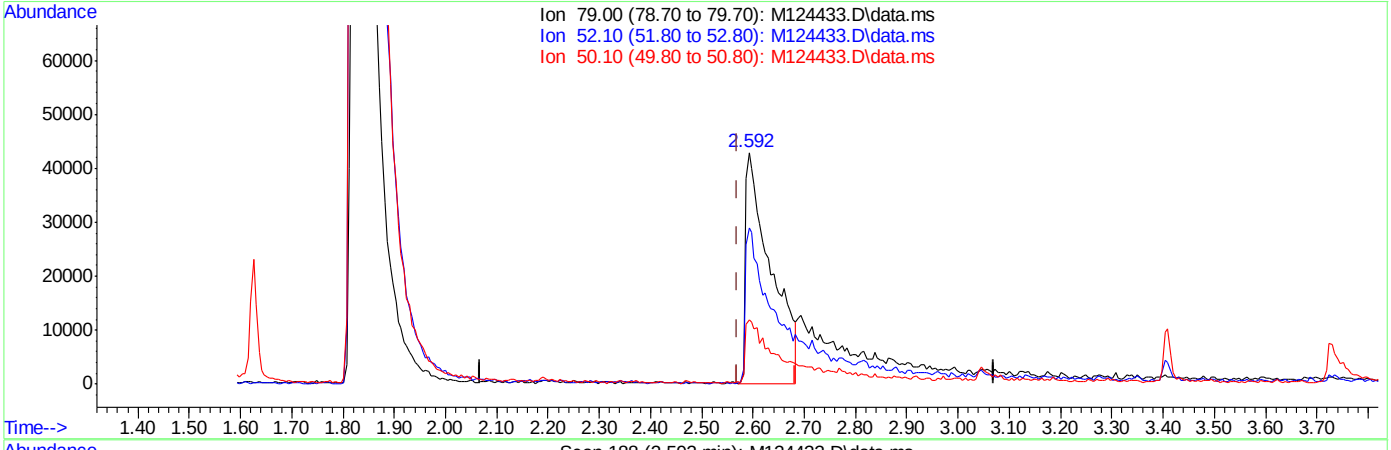
Sample Number:	OP93830-MSD	**Method:**	SW846 8270D
Lab FileID:	M124433.D	**Analyst approved:**	05/20/16 11:31 Kristi Schollenberger
Injection Time:	05/13/16 15:29	**Supervisor approved:**	05/20/16 11:35 Kristi Schollenberger

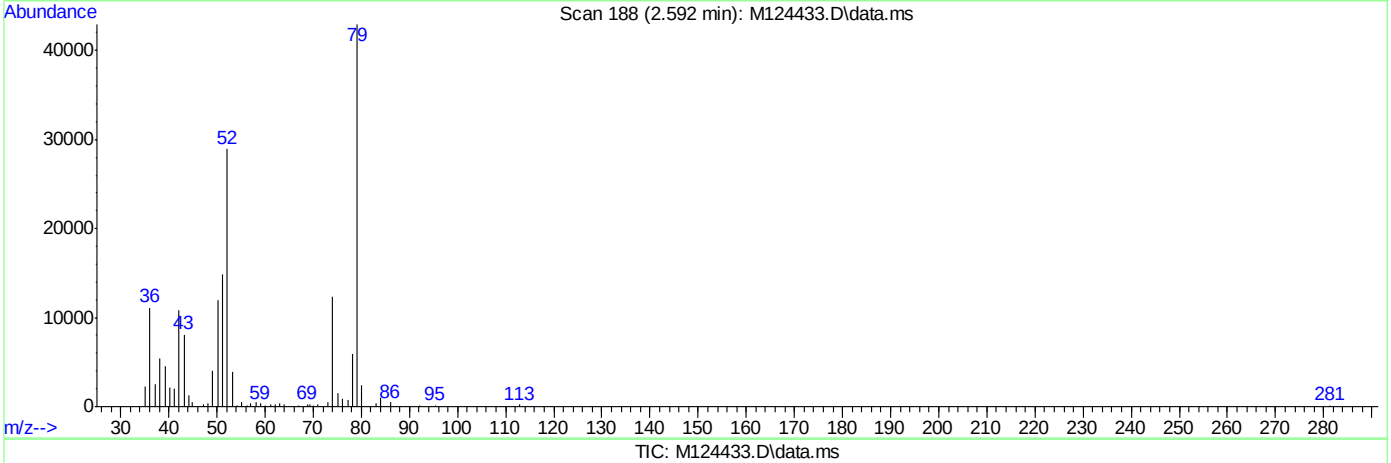
Parameter	CAS	Sig#	R.T. (min.)	Reason
Pyridine	110-86-1		2.59	Poor instrument integration
Aniline	62-53-3		4.43	Poor instrument integration
bis(2-Chloroethyl)ether	111-44-4		4.46	Poor instrument integration
Quinoline	91-22-5		6.20	Poor instrument integration
4-Nitrophenol	100-02-7		8.57	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124433.D
Acq On : 13 May 2016 3:29 pm
Operator : ashleyd
Sample : OP93830-MSD
Misc : op93830,em5264,30.8
ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 13 15:51:58 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





TIC: M124433.D\data.ms

(3) Pyridine (t)

2.592min (+0.022) 12.38ppm

response 146708

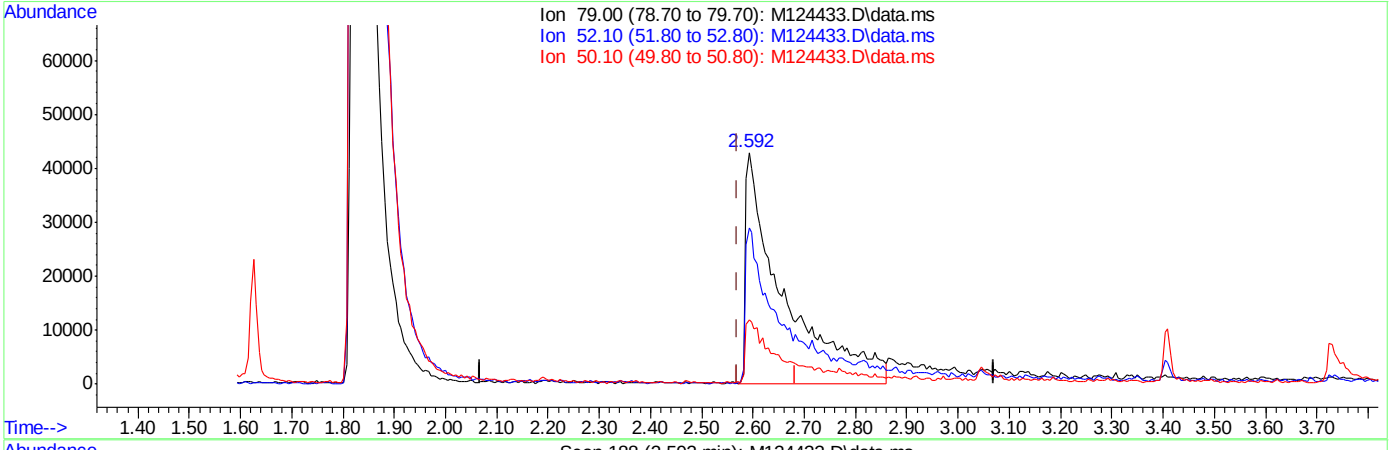
Ion	Exp%	Act%
79.00	100	100
52.10	62.90	64.89
50.10	23.60	26.69
0.00	0.00	0.00

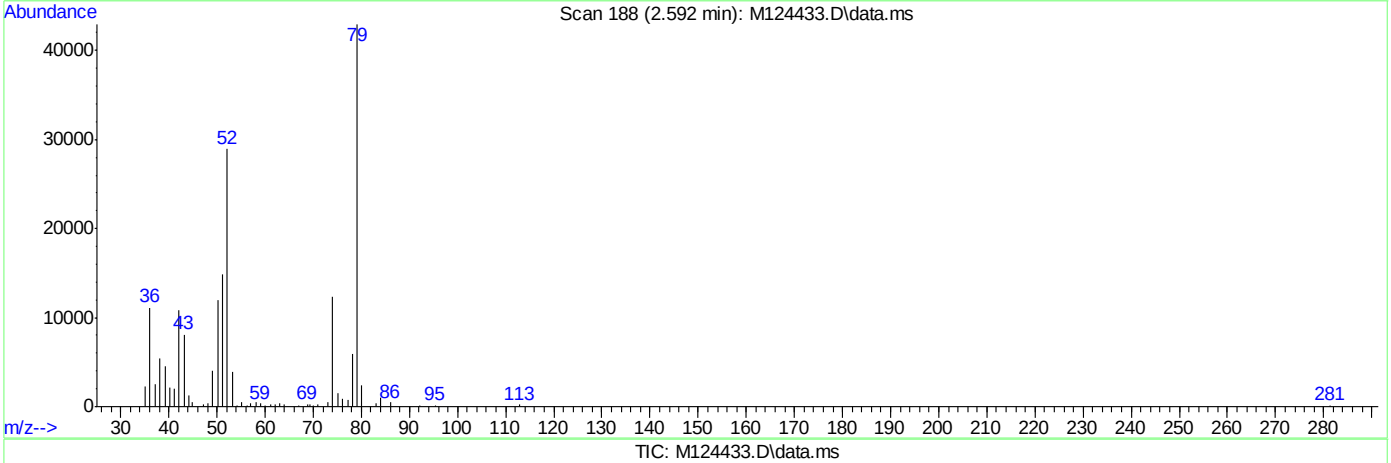
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124433.D
Acq On : 13 May 2016 3:29 pm
Operator : ashleyd
Sample : OP93830-MSD
Misc : op93830,em5264,30.8
ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 13 15:51:58 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





TIC: M124433.D\data.ms

(3) Pyridine (t)

2.592min (+0.022) 18.75ppm m

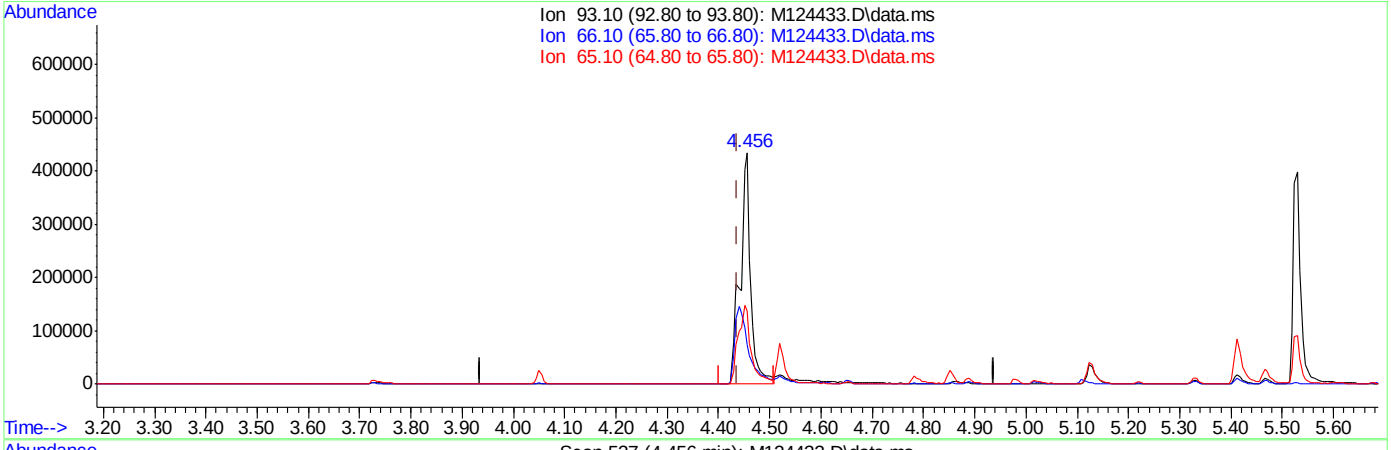
response 222122

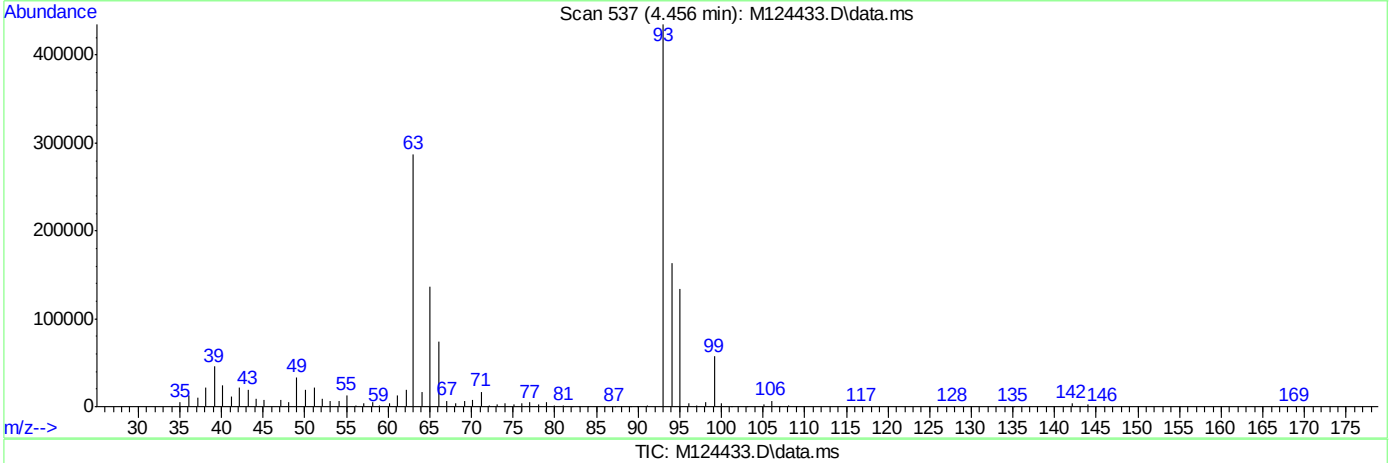
Ion	Exp%	Act%
79.00	100	100
52.10	62.90	67.36
50.10	23.60	27.99
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124433.D
Acq On : 13 May 2016 3:29 pm
Operator : ashleyd
Sample : OP93830-MSD
Misc : op93830,em5264,30.8
ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 13 15:51:58 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





TIC: M124433.D\data.ms

(10) Aniline (t)

4.456min (+0.019) 37.84ppm

response 635979

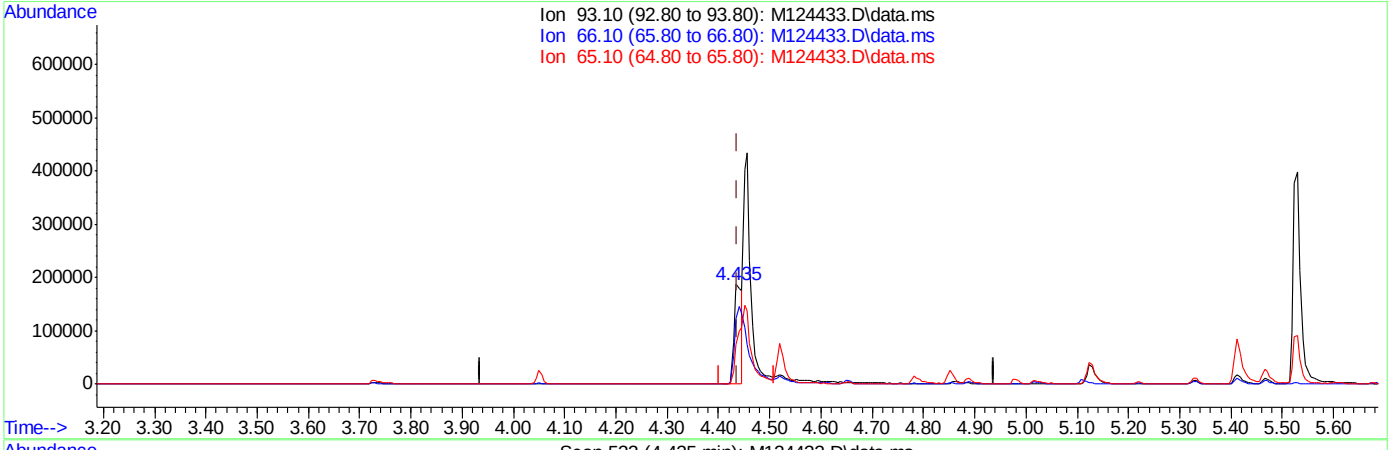
Ion	Exp%	Act%
93.10	100	100
66.10	39.40	16.03
65.10	20.30	30.61
0.00	0.00	0.00

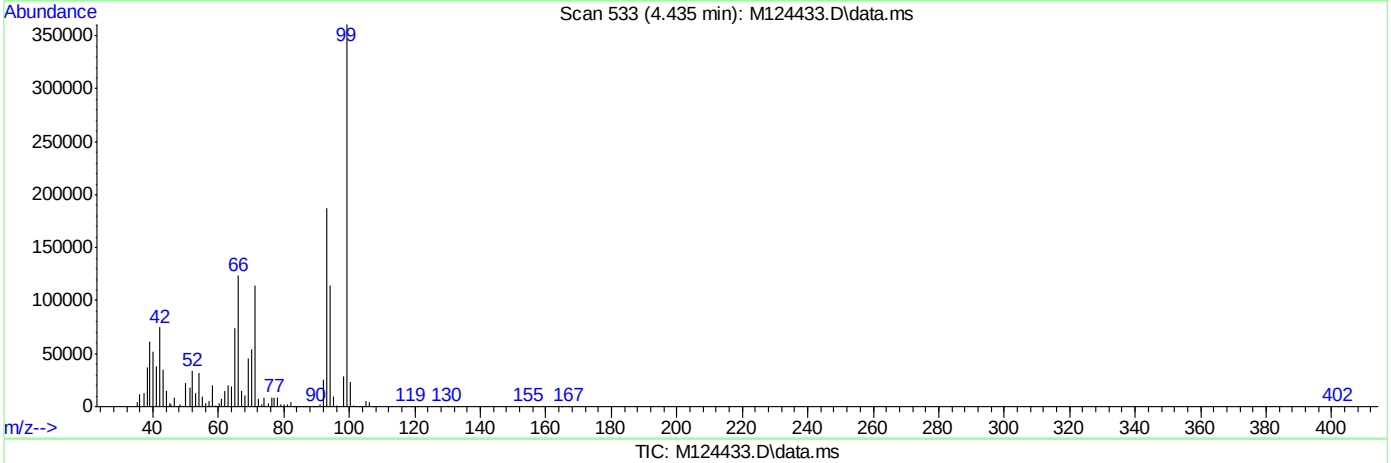
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124433.D
Acq On : 13 May 2016 3:29 pm
Operator : ashleyd
Sample : OP93830-MSD
Misc : op93830,em5264,30.8
ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 13 15:51:58 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





TIC: M124433.D\data.ms

(10) Aniline (t)

4.435min (-0.003) 11.88ppm m

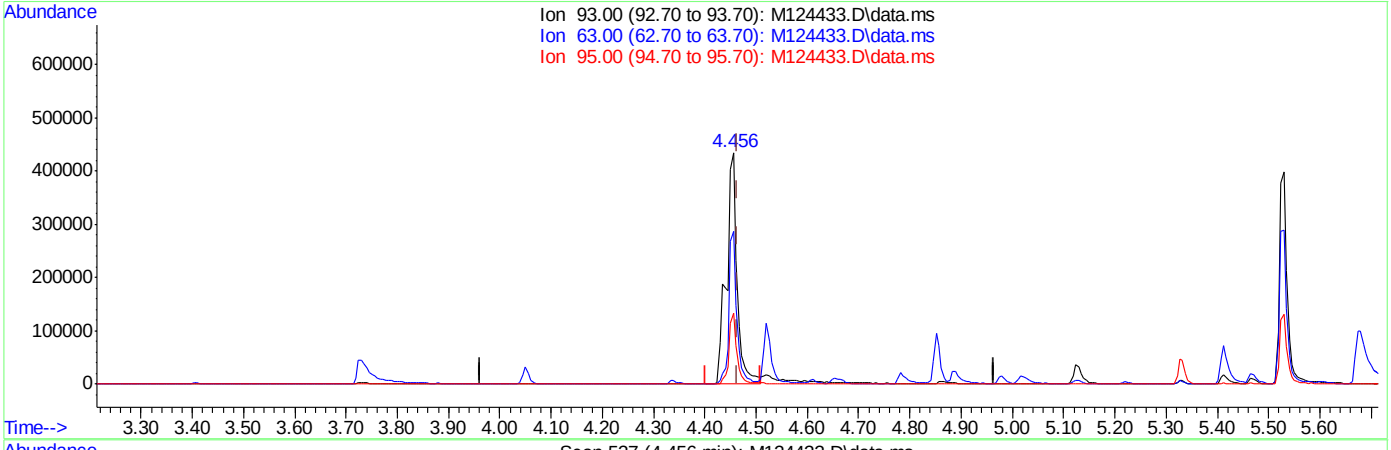
response 199699

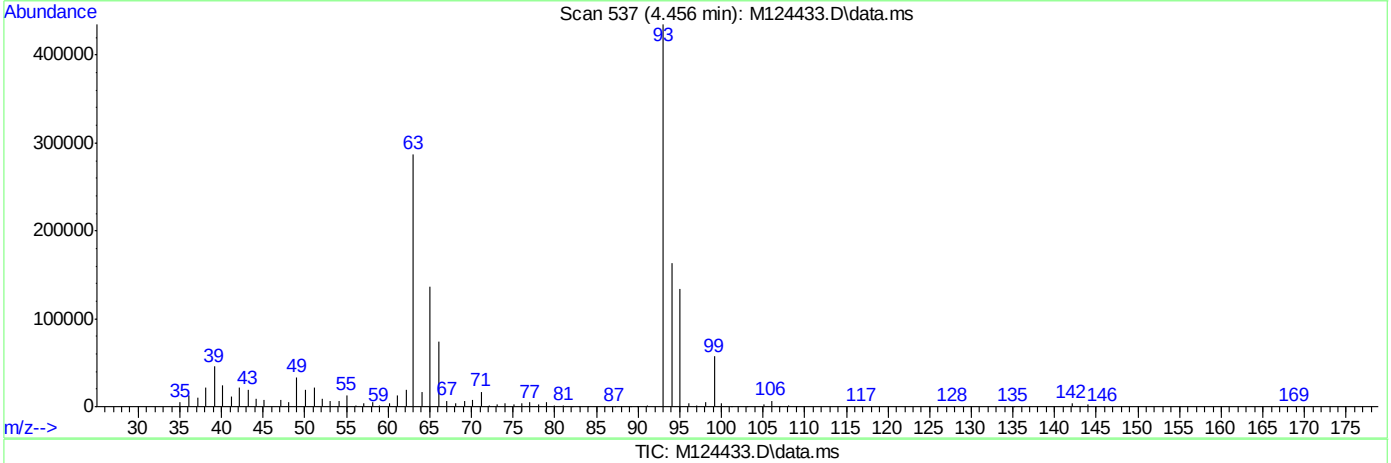
Ion	Exp%	Act%
93.10	100	100
66.10	39.40	66.10
65.10	20.30	39.39
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124433.D
Acq On : 13 May 2016 3:29 pm
Operator : ashleyd
Sample : OP93830-MSD
Misc : op93830,em5264,30.8
ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 13 15:51:58 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





TIC: M124433.D\data.ms

(11) bis(2-Chloroethyl)ether (t)

4.456min (-0.008) 56.52ppm

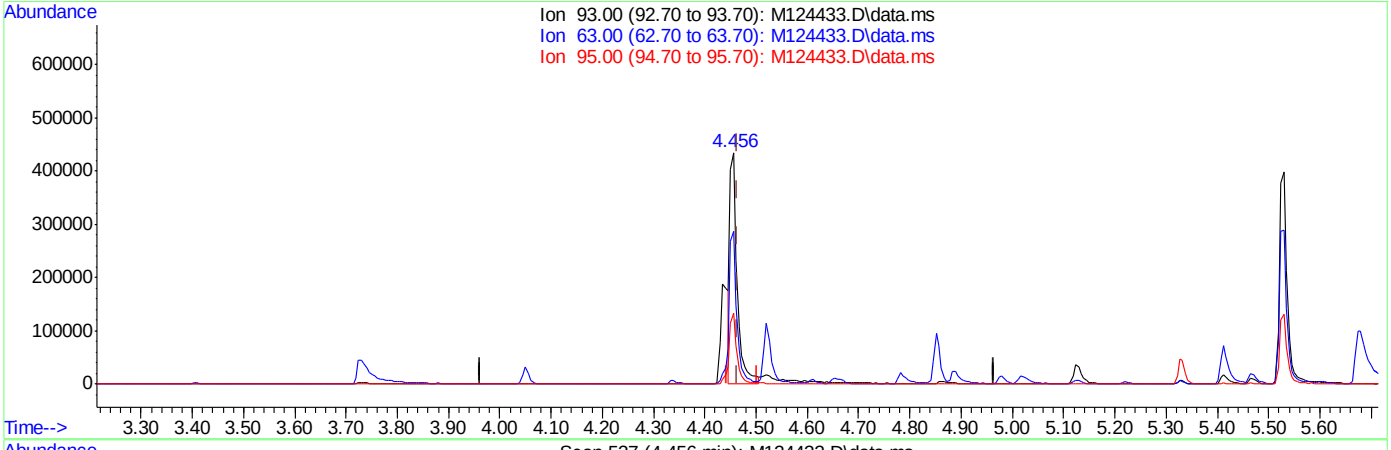
response 635979

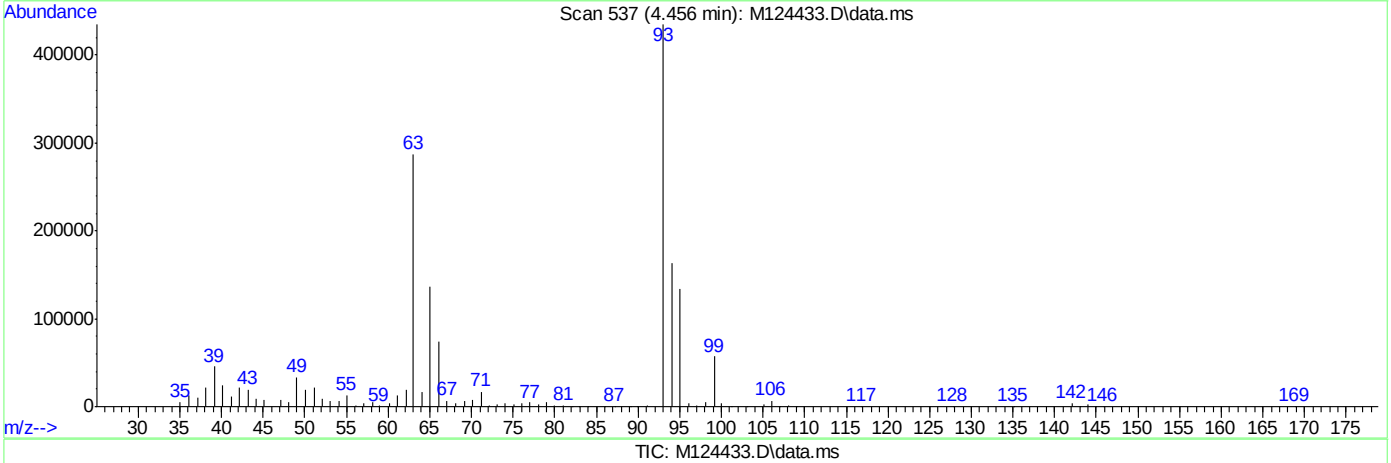
Ion	Exp%	Act%
93.00	100	100
63.00	77.10	65.77
95.00	33.30	31.02
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124433.D
Acq On : 13 May 2016 3:29 pm
Operator : ashleyd
Sample : OP93830-MSD
Misc : op93830,em5264,30.8
ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 13 15:51:58 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





TIC: M124433.D\data.ms

(11) bis(2-Chloroethyl)ether (t)

4.456min (-0.008) 38.39ppm m

response 432023

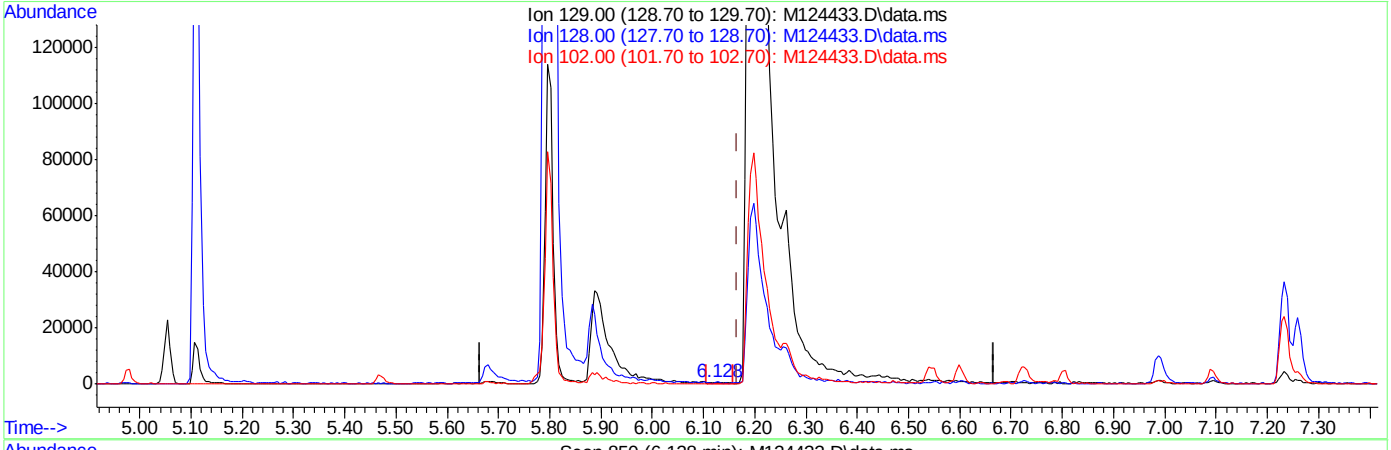
Ion	Exp%	Act%
93.00	100	100
63.00	77.10	66.05
95.00	33.30	30.84
0.00	0.00	0.00

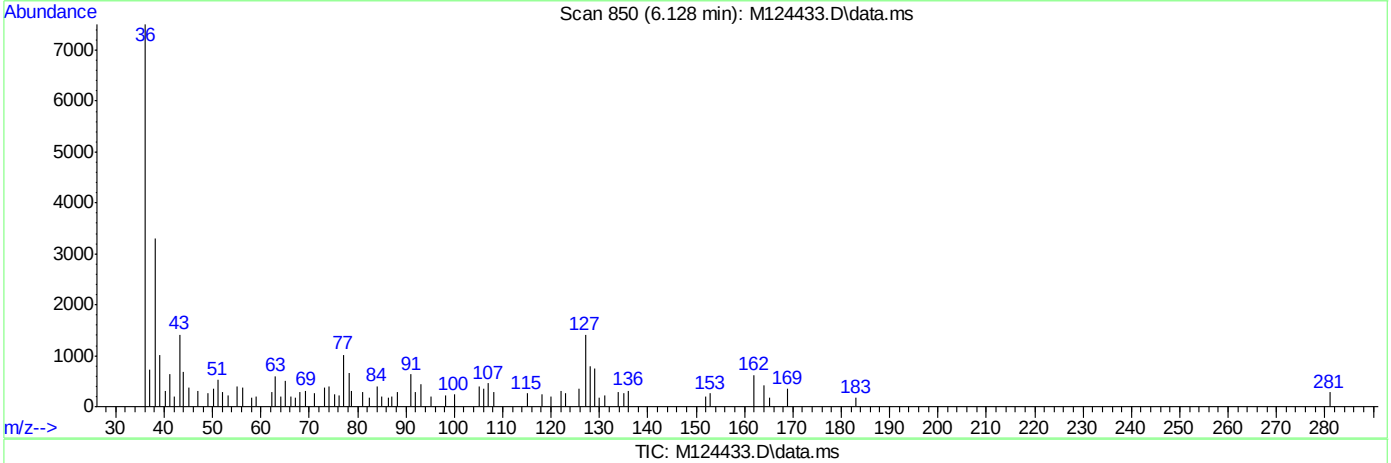
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124433.D
Acq On : 13 May 2016 3:29 pm
Operator : ashleyd
Sample : OP93830-MSD
Misc : op93830,em5264,30.8
ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 13 15:51:58 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





TIC: M124433.D\data.ms

(27) Quinoline (t)

6.128min (-0.039) 0.05ppm

response 1130

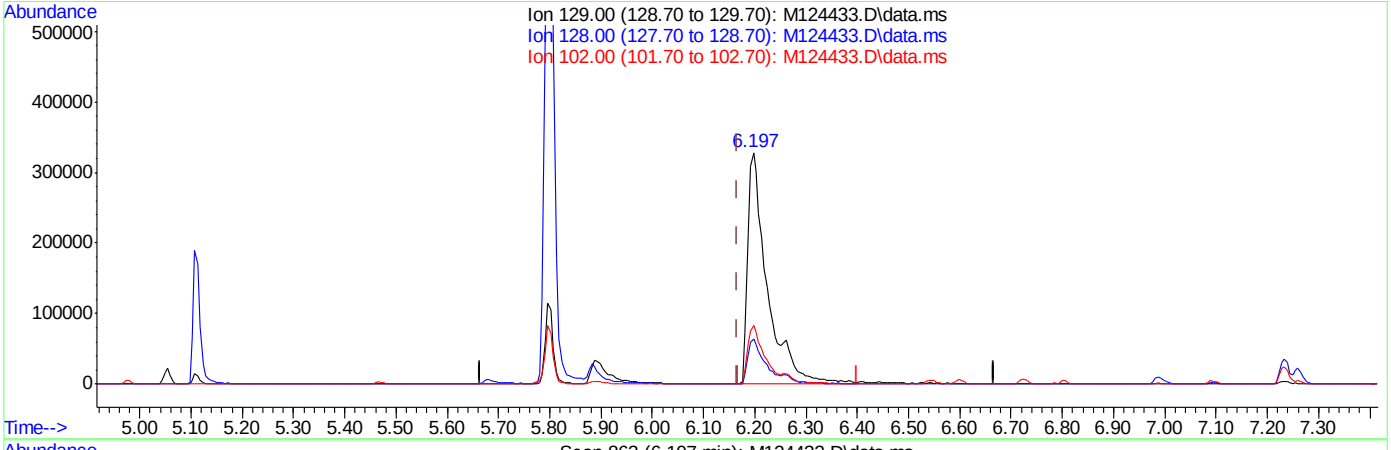
Ion	Exp%	Act%
129.00	100	100
128.00	19.00	35.16
102.00	24.40	0.00
0.00	0.00	0.00

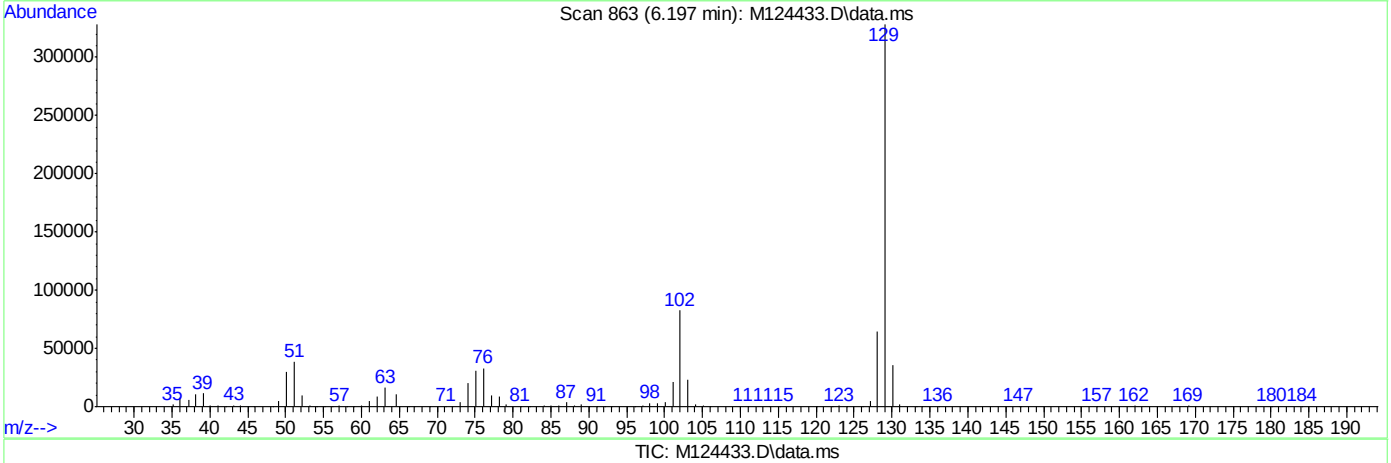
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124433.D
Acq On    : 13 May 2016   3:29 pm
Operator  : ashleyd
Sample    : OP93830-MSD
Misc      : op93830,em5264,30.8
ALS Vial  : 14   Sample Multiplier: 1

Quant Time: May 13 15:51:58 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
```





TIC: M124433.D\data.ms

(27) Quinoline (t)

6.197min (+0.031) 36.65ppm m

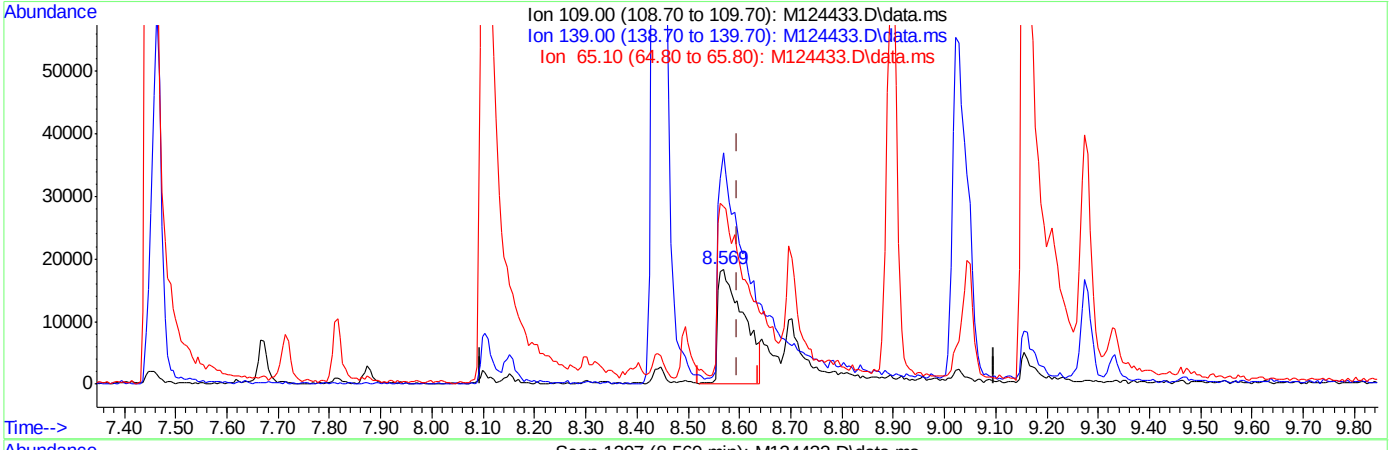
response 885527

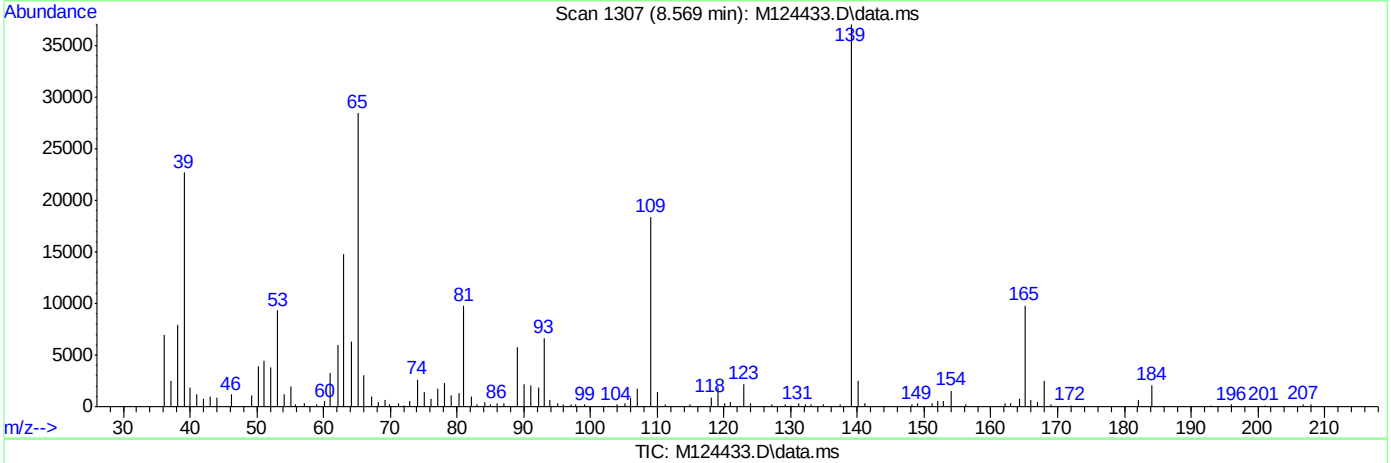
Ion	Exp%	Act%
129.00	100	100
128.00	19.00	19.66
102.00	24.40	25.17
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124433.D
Acq On : 13 May 2016 3:29 pm
Operator : ashleyd
Sample : OP93830-MSD
Misc : op93830,em5264,30.8
ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 13 15:51:58 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





TIC: M124433.D\data.ms

(61) 4-Nitrophenol (t)

8.569min (-0.028) 26.23ppm

response 64145

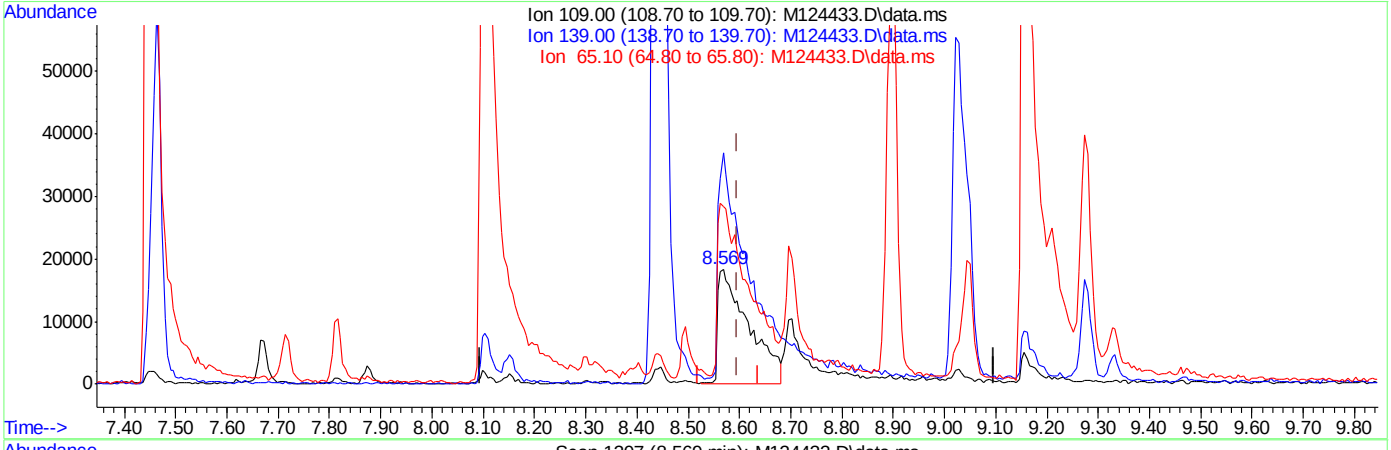
Ion	Exp%	Act%
109.00	100	100
139.00	175.10	197.85
65.10	150.20	142.68
0.00	0.00	0.00

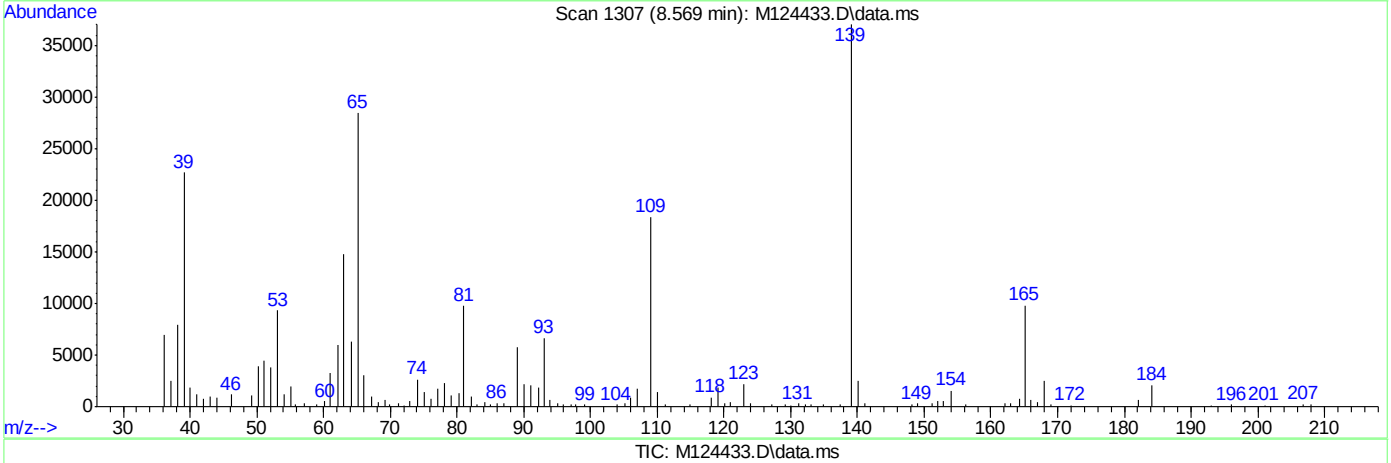
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5264\
Data File : M124433.D
Acq On : 13 May 2016 3:29 pm
Operator : ashleyd
Sample : OP93830-MSD
Misc : op93830,em5264,30.8
ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 13 15:51:58 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





TIC: M124433.D\data.ms

(61) 4-Nitrophenol (t)

8.569min (-0.028) 31.69ppm m

response 77492

Ion	Exp%	Act%
109.00	100	100
139.00	175.10	201.70
65.10	150.20	154.70
0.00	0.00	0.00

SGS ACCUTEST JC19996

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
05/24/16 23:03

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2880\
Data File : 3m61254.D
Acq On : 12 May 2016 5:46 am
Operator : juliusj
Sample : op93820a-ms
Misc : op93820a,e3m2880,475
ALS Vial : 12 Sample Multiplier: 1

Quant Time: May 12 09:06:53 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

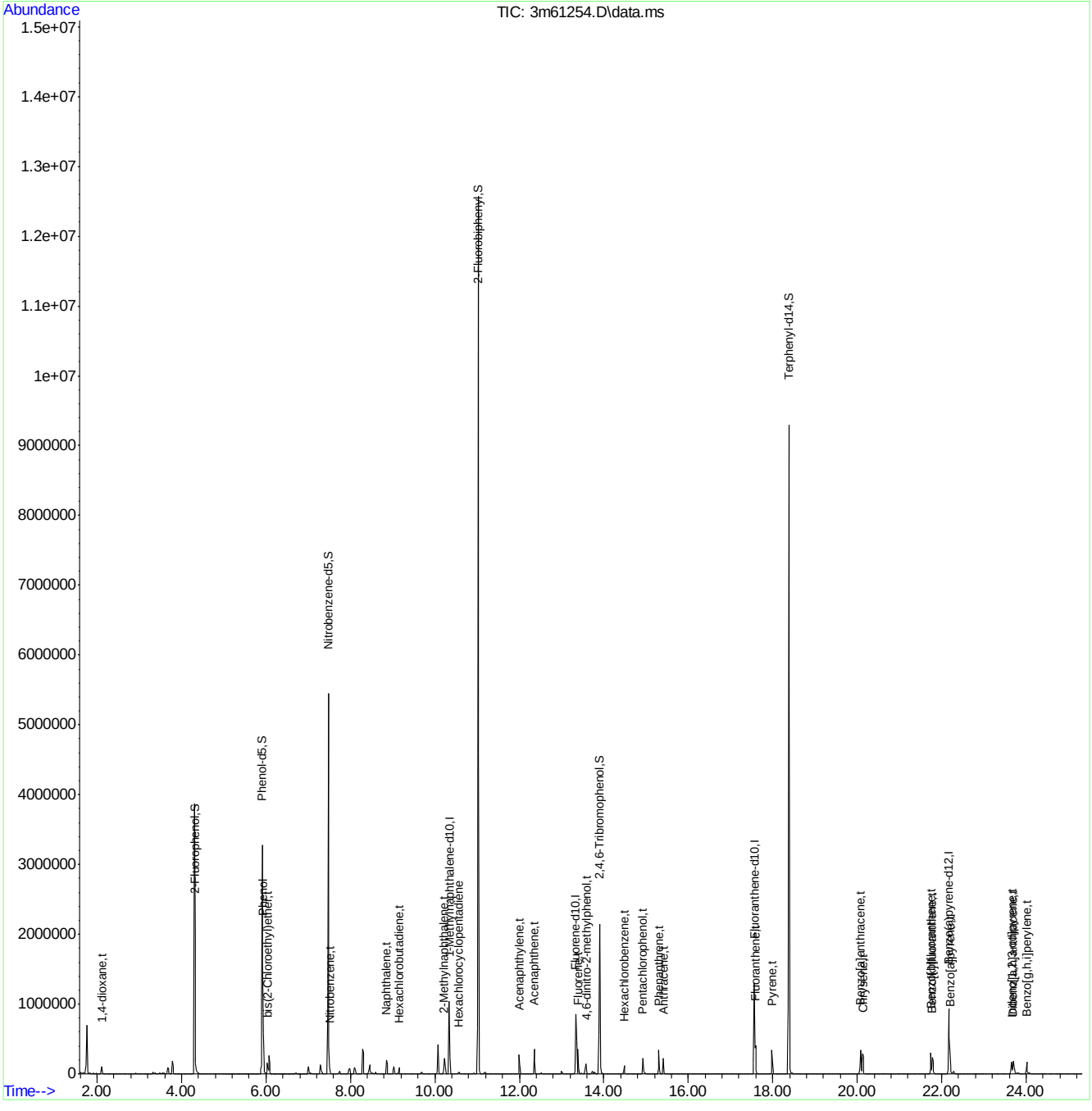
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	10.344	150	599503	4.00 ppm	-0.08
14) Fluorene-d10	13.336	176	785767	4.00 ppm	-0.11
21) Fluoranthene-d10	17.561	212	1281247	4.00 ppm	-0.08
31) Benzo(a)pyrene-d12	22.166	264	999586	4.00 ppm	-0.08
System Monitoring Compounds					
3) 2-Fluorophenol	4.322	112	2800614	37.34 ppm	-0.10
Spiked Amount 50.000			Recovery	= 74.68%	
4) Phenol-d5	5.915	99	3533156	28.47 ppm	-0.07
Spiked Amount 50.000			Recovery	= 56.94%	
7) Nitrobenzene-d5	7.474	82	5314175	46.05 ppm	-0.10
Spiked Amount 50.000			Recovery	= 92.10%	
15) 2-Fluorobiphenyl	11.021	172	11233541	52.03 ppm	-0.12
Spiked Amount 50.000			Recovery	= 104.06%	
20) 2,4,6-Tribromophenol	13.901	330	1291458	52.51 ppm	-0.07
Spiked Amount 50.000			Recovery	= 105.02%	
28) Terphenyl-d14	18.380	244	9581708	51.55 ppm	-0.05
Spiked Amount 50.000			Recovery	= 103.10%	
Target Compounds					Qvalue
2) 1,4-dioxane	2.112	88	77214	2.49 ppm #	24
5) Phenol	5.927	94	595634	4.45 ppm #	67
6) bis(2-Chloroethyl)ether	6.036	93	87740	0.87 ppm #	72
8) Nitrobenzene	7.512	77	111561	0.89 ppm	65
9) Naphthalene	8.849	128	291214	0.87 ppm	89
10) Hexachlorobutadiene	9.150	225	55165	0.95 ppm	77
11) 2-Methylnaphthalene	10.221	141	162824	0.94 ppm #	55
13) Hexachlorocyclopentadiene	10.570	237	26866	0.58 ppm	81
16) Acenaphthylene	11.995	152	286588	1.05 ppm	90
17) Acenaphthene	12.351	153	198949	1.10 ppm	83
18) 4,6-dinitro-2-methylph...	13.580	198	152891	5.80 ppm	80
19) Fluorene	13.392	166	239205	1.10 ppm #	64
22) Hexachlorobenzene	14.485	284	65372	1.08 ppm	97
23) Pentachlorophenol	14.918	266	208758	4.98 ppm	84
24) Phenanthrene	15.305	178	331105	1.05 ppm	96
25) Anthracene	15.413	178	293370	1.06 ppm	90
26) Fluoranthene	17.592	202	382572	0.97 ppm	94
27) Pyrene	17.979	202	368387	1.01 ppm	86
29) Benzo[a]anthracene	20.080	228	307571	0.88 ppm	91
30) Chrysene	20.142	228	313113m	0.93 ppm	
32) Benzo[b]fluoranthene	21.749	252	274011	0.82 ppm	91
33) Benzo[k]fluoranthene	21.780	252	263423	0.86 ppm	91
34) Benzo[a]pyrene	22.197	252	249798	0.81 ppm	95
35) Indeno[1,2,3-cd]pyrene	23.655	276	244311	0.78 ppm	98
36) Dibenz[a,h]anthracene	23.693	278	197014	0.76 ppm	69
37) Benzo[g,h,i]perylene	24.012	276	210086	0.77 ppm	93

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2880\
Data File : 3m61254.D
Acq On : 12 May 2016 5:46 am
Operator : juliusj
Sample : op93820a-ms
Misc : op93820a,e3m2880,475
ALS Vial : 12 Sample Multiplier: 1

Quant Time: May 12 09:06:53 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 JC19996

Manual Integration Approval Summary

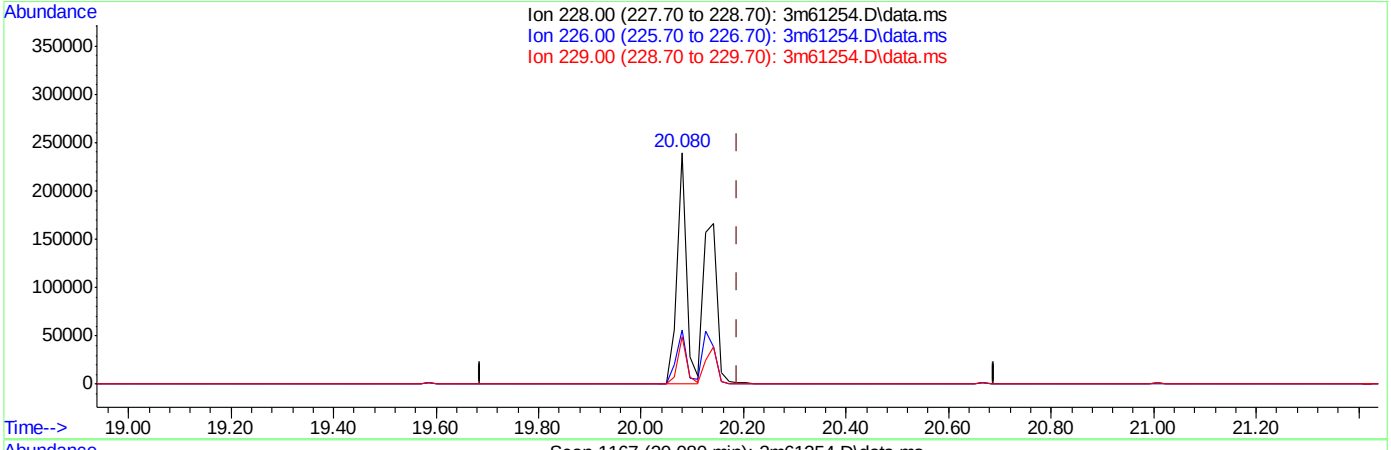
Sample Number:	OP93820A-MS	**Method:**	SW846 8270D BY SIM
Lab FileID:	3M61254.D	**Analyst approved:**	05/12/16 09:15 Kristi Schollenberger
Injection Time:	05/12/16 05:46	**Supervisor approved:**	05/24/16 23:03 Nina Pandya

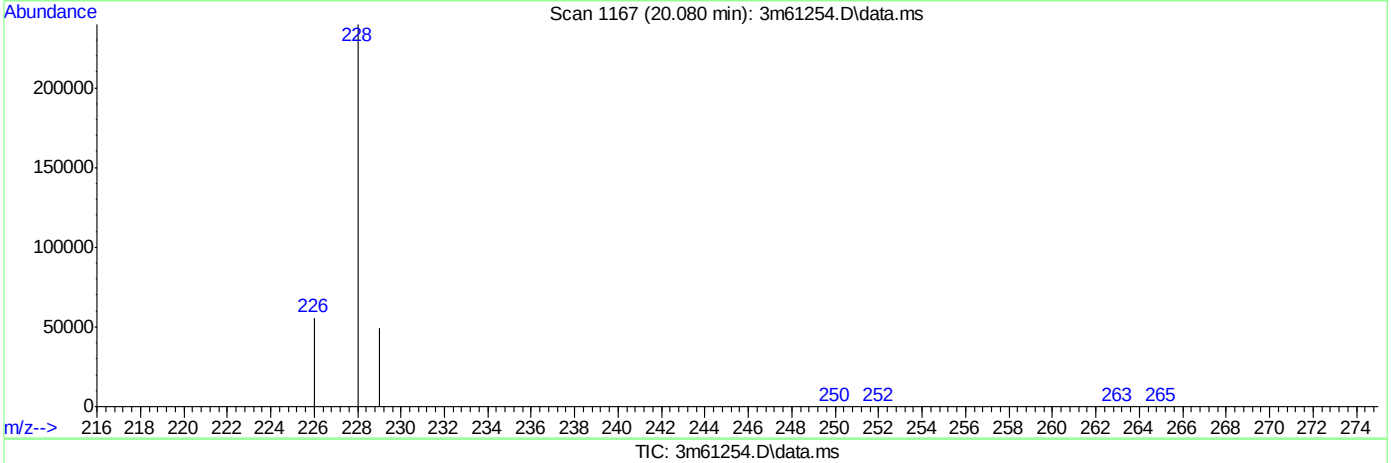
Parameter	CAS	Sig#	R.T. (min.)	Reason
Chrysene	218-01-9		20.14	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2880\
Data File : 3m61254.D
Acq On : 12 May 2016 5:46 am
Operator : juliusj
Sample : op93820a-ms
Misc : op93820a,e3m2880,475
ALS Vial : 12 Sample Multiplier: 1

Quant Time: May 12 06:10:03 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: 3m61254.D\data.ms

(30) Chrysene (t)

20.080min (-0.108) 0.91ppm

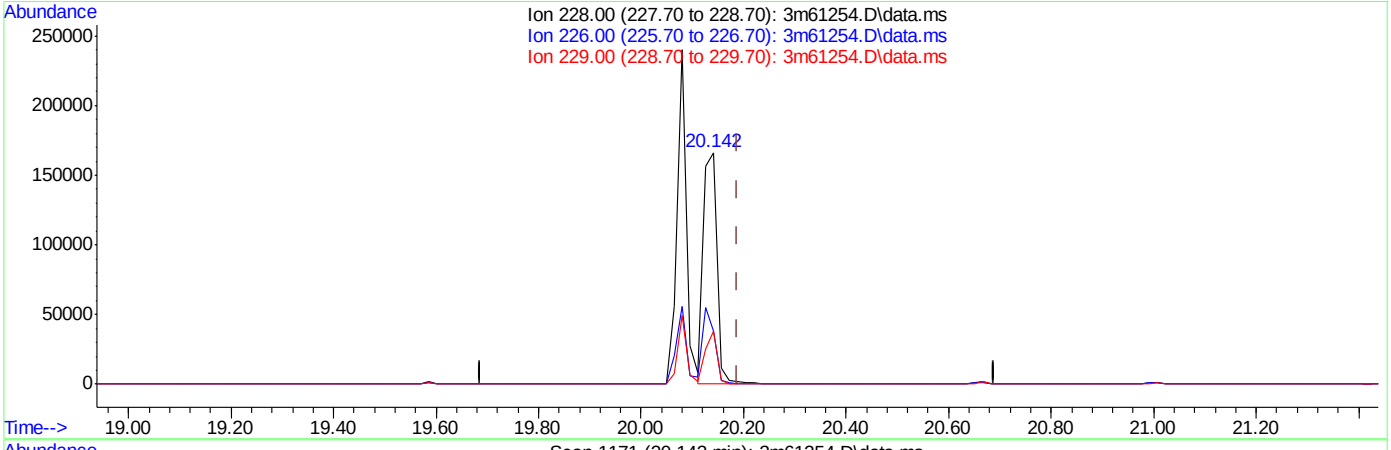
response 307571

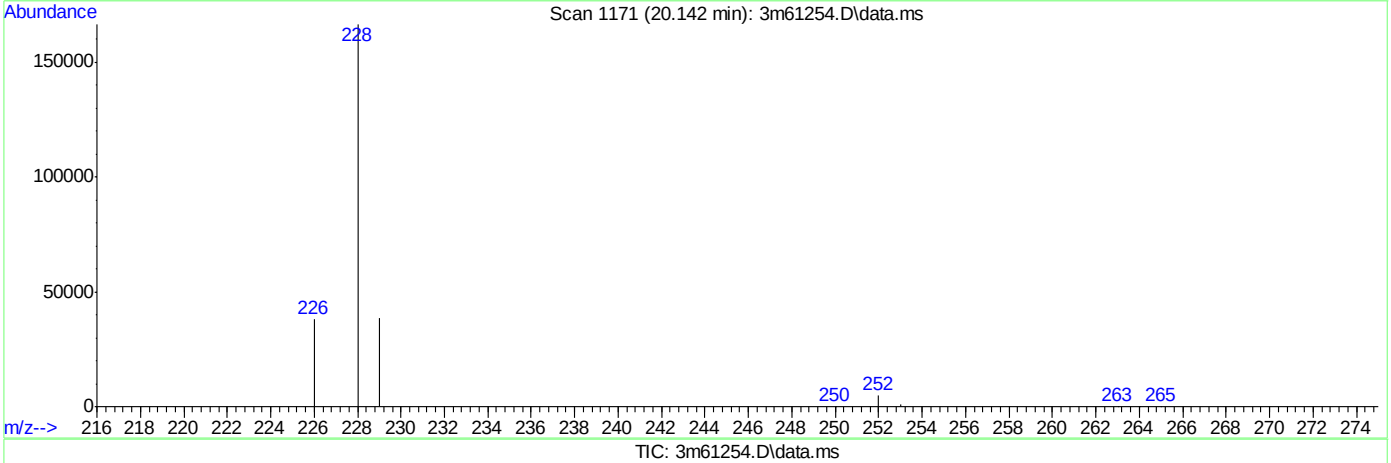
Ion	Exp%	Act%
228.00	100	100
226.00	29.30	22.62
229.00	21.70	20.57
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2880\
Data File : 3m61254.D
Acq On : 12 May 2016 5:46 am
Operator : juliusj
Sample : op93820a-ms
Misc : op93820a,e3m2880,475
ALS Vial : 12 Sample Multiplier: 1

Quant Time: May 12 06:10:03 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: 3m61254.D\data.ms

(30) Chrysene (t)

20.142min (-0.046) 0.93ppm m

response 313113

Ion	Exp%	Act%
228.00	100	100
226.00	29.30	22.97
229.00	21.70	23.10
0.00	0.00	0.00

SGS ACCUTEST JC19996

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
05/24/16 23:03

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2880\
Data File : 3m61255.D
Acq On : 12 May 2016 6:18 am
Operator : juliusj
Sample : op93820a-msd
Misc : op93820a,e3m2880,475
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 12 09:07:37 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

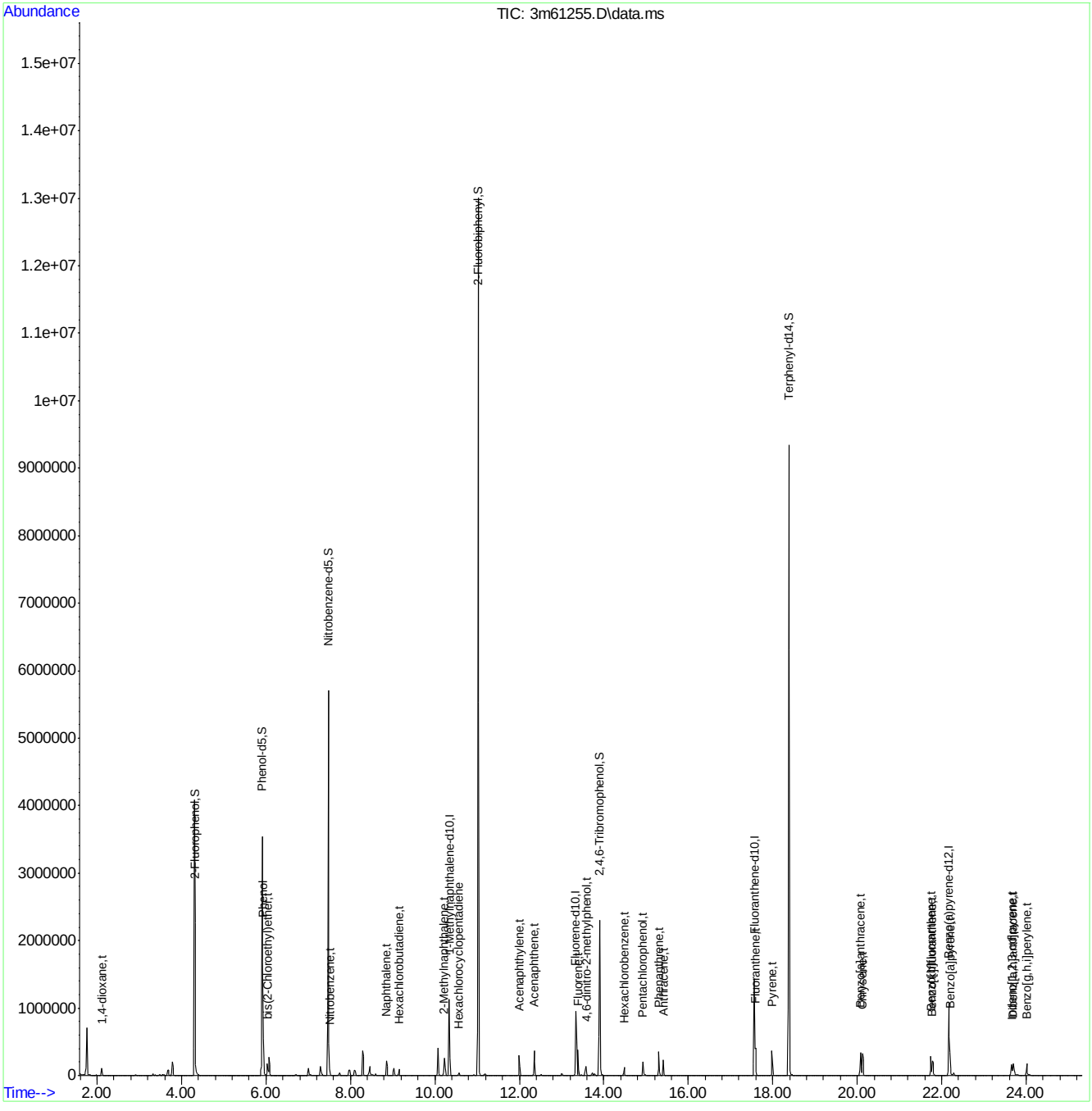
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	10.344	150	660408	4.00 ppm	-0.08
14) Fluorene-d10	13.335	176	873084	4.00 ppm	-0.11
21) Fluoranthene-d10	17.561	212	1403374	4.00 ppm	-0.08
31) Benzo(a)pyrene-d12	22.166	264	1130229	4.00 ppm	-0.08
System Monitoring Compounds					
3) 2-Fluorophenol	4.322	112	3073306	37.20 ppm	-0.10
Spiked Amount 50.000			Recovery	= 74.40%	
4) Phenol-d5	5.915	99	3911409	28.61 ppm	-0.07
Spiked Amount 50.000			Recovery	= 57.22%	
7) Nitrobenzene-d5	7.474	82	5558004	43.72 ppm	-0.10
Spiked Amount 50.000			Recovery	= 87.44%	
15) 2-Fluorobiphenyl	11.021	172	12123272	50.53 ppm	-0.12
Spiked Amount 50.000			Recovery	= 101.06%	
20) 2,4,6-Tribromophenol	13.901	330	1388866	50.83 ppm	-0.07
Spiked Amount 50.000			Recovery	= 101.66%	
28) Terphenyl-d14	18.380	244	9921305	48.74 ppm	-0.05
Spiked Amount 50.000			Recovery	= 97.48%	
Target Compounds					Qvalue
2) 1,4-dioxane	2.112	88	76524	2.24 ppm #	29
5) Phenol	5.927	94	525189	3.56 ppm #	69
6) bis(2-Chloroethyl)ether	6.036	93	94325	0.85 ppm	73
8) Nitrobenzene	7.512	77	119786	0.87 ppm #	62
9) Naphthalene	8.849	128	313220	0.85 ppm	89
10) Hexachlorobutadiene	9.150	225	59409	0.93 ppm	78
11) 2-Methylnaphthalene	10.221	141	176893	0.93 ppm #	54
13) Hexachlorocyclopentadiene	10.570	237	29531	0.58 ppm	83
16) Acenaphthylene	11.995	152	314251	1.04 ppm	90
17) Acenaphthene	12.351	153	214183	1.06 ppm	82
18) 4,6-dinitro-2-methylph...	13.580	198	151414	5.27 ppm	82
19) Fluorene	13.392	166	253902	1.05 ppm #	63
22) Hexachlorobenzene	14.485	284	70152	1.06 ppm	96
23) Pentachlorophenol	14.918	266	182995	4.02 ppm	83
24) Phenanthrene	15.305	178	352785	1.03 ppm	97
25) Anthracene	15.413	178	308962	1.02 ppm	89
26) Fluoranthene	17.592	202	386539	0.89 ppm	94
27) Pyrene	17.979	202	397619	0.99 ppm	87
29) Benzo[a]anthracene	20.080	228	307895	0.80 ppm	92
30) Chrysene	20.126	228	320977m	0.87 ppm	
32) Benzo[b]fluoranthene	21.749	252	267613	0.71 ppm	90
33) Benzo[k]fluoranthene	21.779	252	258428	0.74 ppm	90
34) Benzo[a]pyrene	22.197	252	247656	0.71 ppm	96
35) Indeno[1,2,3-cd]pyrene	23.655	276	239345	0.67 ppm	98
36) Dibenz[a,h]anthracene	23.693	278	194295	0.66 ppm	69
37) Benzo[g,h,i]perylene	24.012	276	209842	0.68 ppm	93

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2880\
Data File : 3m61255.D
Acq On : 12 May 2016 6:18 am
Operator : juliusj
Sample : op93820a-msd
Misc : op93820a,e3m2880,475
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 12 09:07:37 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



Manual Integration Approval Summary

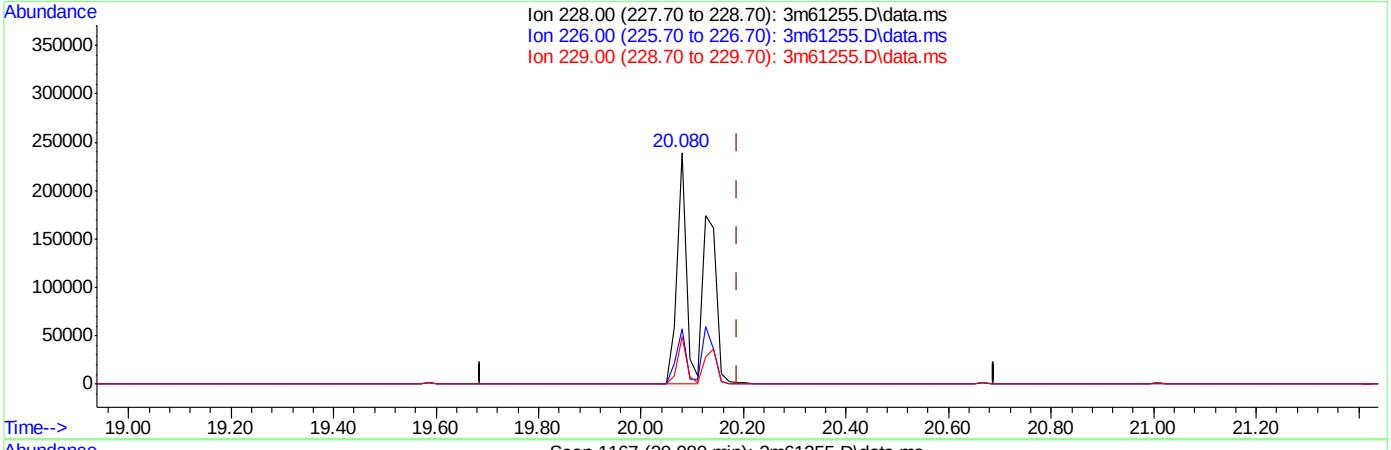
Sample Number:	OP93820A-MSD	**Method:**	SW846 8270D BY SIM
Lab FileID:	3M61255.D	**Analyst approved:**	05/12/16 09:15 Kristi Schollenberger
Injection Time:	05/12/16 06:18	**Supervisor approved:**	05/24/16 23:03 Nina Pandya

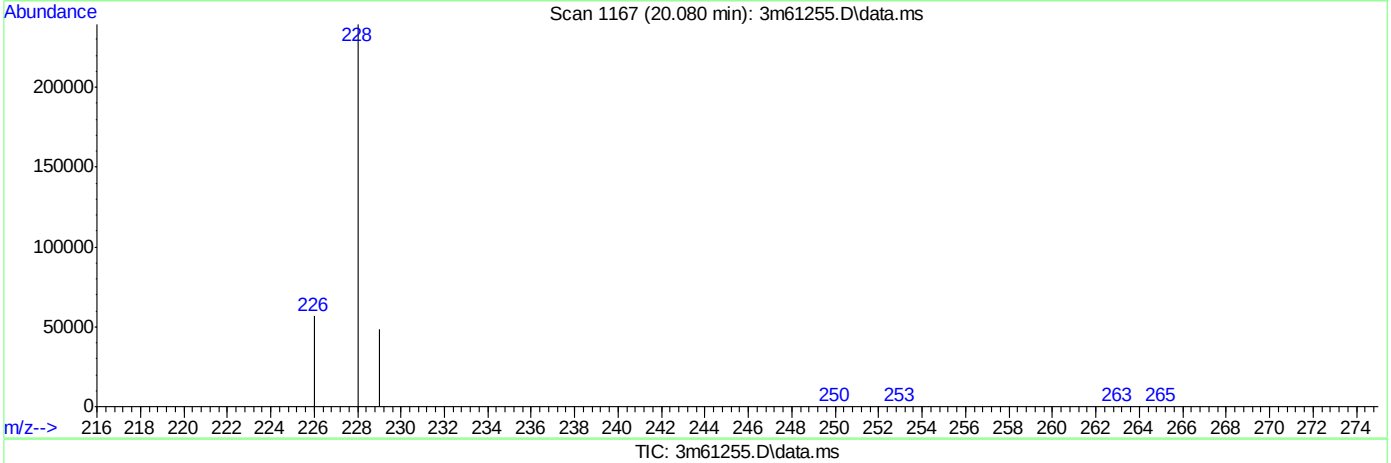
Parameter	CAS	Sig#	R.T. (min.)	Reason
Chrysene	218-01-9		20.13	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2880\
Data File : 3m61255.D
Acq On : 12 May 2016 6:18 am
Operator : juliusj
Sample : op93820a-msd
Misc : op93820a,e3m2880,475
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 12 06:41:57 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: 3m61255.D\data.ms

(30) Chrysene (t)

20.080min (-0.108) 0.83ppm

response 307895

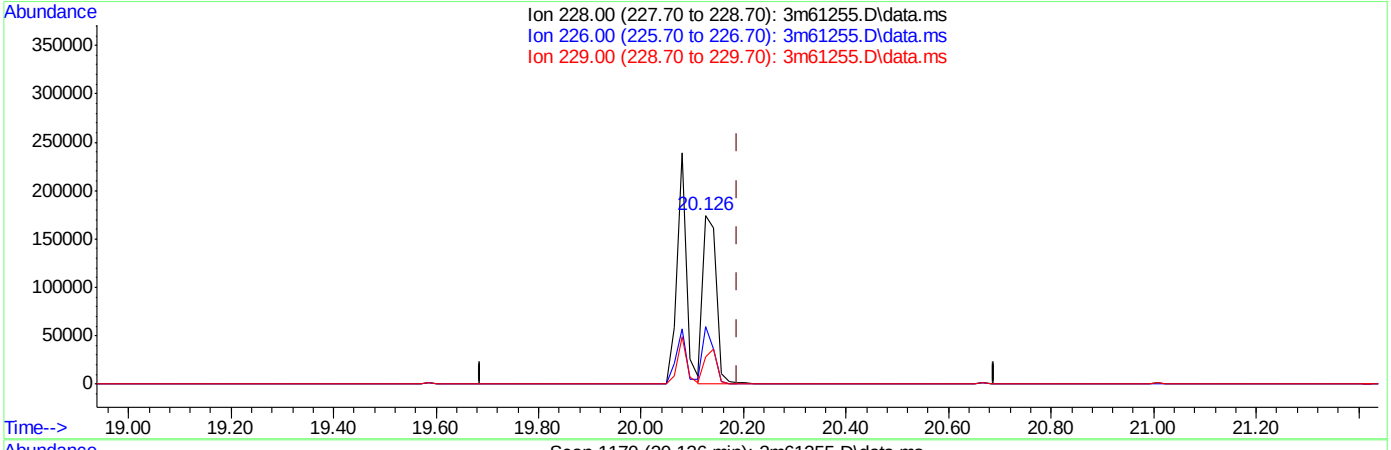
Ion	Exp%	Act%
228.00	100	100
226.00	29.30	23.07
229.00	21.70	20.29
0.00	0.00	0.00

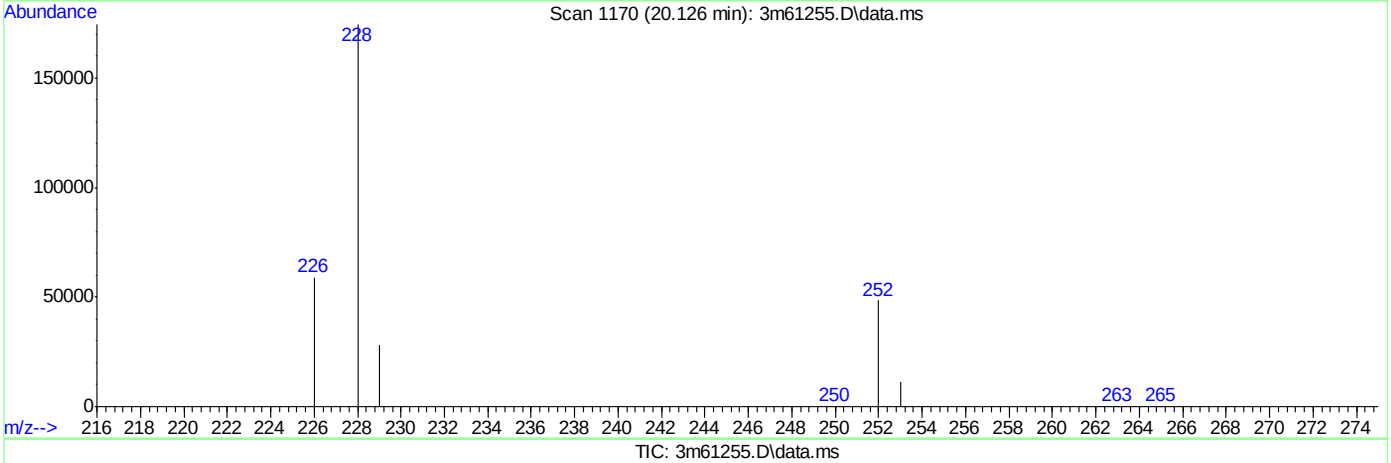
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2880\
Data File : 3m61255.D
Acq On : 12 May 2016 6:18 am
Operator : juliusj
Sample : op93820a-msd
Misc : op93820a,e3m2880,475
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 12 06:41:57 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: 3m61255.D\data.ms

(30) Chrysene (t)

20.126min (-0.062) 0.87ppm m

response 320977

Ion	Exp%	Act%
228.00	100	100
226.00	29.30	33.80
229.00	21.70	16.08
0.00	0.00	0.00

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2919\
Data File : 4m65270.D
Acq On : 13 May 2016 4:39 pm
Operator : ashleyd
Sample : op93830a-msd
Misc : op93830a,e4m2919,30.4
ALS Vial : 12 Sample Multiplier: 1

Quant Time: May 17 09:02:16 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	10.511	152	298048	4.00	ppm	#	0.00
12) Fluorene-d10	13.489	176	523336	4.00	ppm		0.00
22) Fluoranthene-d10	17.685	212	837060	4.00	ppm		0.02
28) Benzo(a)pyrene-d12	22.285	264	632446	4.00	ppm		0.01
35) 1-Methylnaphthalene-d10a	10.511	152	298048	4.00	ppm	#	0.00
38) Fluorene-d10a	13.489	176	523336	4.00	ppm	#	0.00
System Monitoring Compounds							
2) 2-Fluorophenol	4.579	112	1334760	34.20	ppm		-0.06
Spiked Amount 50.000	Range 11 - 58		Recovery = 68.40%#				
3) Phenol-d5	6.150	99	2259980	34.44	ppm		-0.05
Spiked Amount 50.000			Recovery = 68.88%				
6) Nitrobenzene-d5	7.651	82	2233899	37.96	ppm		-0.06
Spiked Amount 50.000			Recovery = 75.92%				
11) 2-Fluorobiphenyl	11.179	172	3829522	44.52	ppm		0.02
Spiked Amount 50.000			Recovery = 89.04%				
17) 2,4,6-Tribromophenol	14.038	330	1011603	36.24	ppm		0.00
Spiked Amount 50.000			Recovery = 72.48%				
25) Terphenyl-d14	18.495	244	4206502	37.20	ppm		0.03
Spiked Amount 50.000			Recovery = 74.40%				
Target Compounds							Qvalue
4) Phenol	6.177	94	310568	4.62	ppm		88
5) bis(2-Chloroethyl)ether	6.232	93	38214	0.75	ppm	#	43
7) Naphthalene	9.028	128	122686	0.73	ppm		98
8) Hexachlorobutadiene	9.338	225	29618	0.72	ppm		90
9) 2-Methylnaphthalene	10.392	142	64827	0.89	ppm		79
10) Hexachlorocyclopentadiene	10.750	237	15106	0.73	ppm		85
13) Acenaphthylene	12.148	152	92993	0.78	ppm		93
14) Acenaphthene	12.503	153	60145	0.78	ppm		85
15) Dibenzofuran	12.880	168	74197	0.64	ppm		71
16) Fluorene	13.537	166	103717	0.74	ppm		96
18) Hexachlorobenzene	14.655	284	40447	0.74	ppm		86
19) Pentachlorophenol	15.088	266	119800	5.35	ppm		98
20) Phenanthrene	15.444	178	149628	0.80	ppm		97
21) Anthracene	15.537	178	143983	0.81	ppm		97
23) Fluoranthene	17.723	202	170458	0.75	ppm		95
24) Pyrene	18.100	202	185339	0.83	ppm		85
26) Benzo[a]anthracene	20.208	228	154998	0.75	ppm		96
27) Chrysene	20.265	228	157135	0.78	ppm		96
29) Benzo[b]fluoranthene	21.871	252	155529	0.68	ppm		93
30) Benzo[k]fluoranthene	21.899	252	141938	0.75	ppm		91
31) Benzo[a]pyrene	22.312	252	136454	0.72	ppm		99
32) Indeno[1,2,3-cd]pyrene	23.813	276	157070	0.67	ppm		99
33) Dibenz[a,h]anthracene	23.840	278	127165	0.67	ppm		73
34) Benzo[g,h,i]perylene	24.171	276	130180	0.65	ppm		99
36) 1,4-Dioxane	2.299	88	7593	0.39	ppm	#	1
39) 4,6-dinitro-2-methylph...	13.728	198	111879	7.12	ppm		51
40) 1,2-Diphenylhydrazine	13.895	77	85305	0.69	ppm		95

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2919\
Data File : 4m65270.D
Acq On : 13 May 2016 4:39 pm
Operator : ashleyd
Sample : op93830a-msd
Misc : op93830a,e4m2919,30.4
ALS Vial : 12 Sample Multiplier: 1

Quant Time: May 17 09:02:16 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)
41) n-nitrosodiphenylamine	13.871	169	58920	0.64	ppm #	73

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

7.4.7

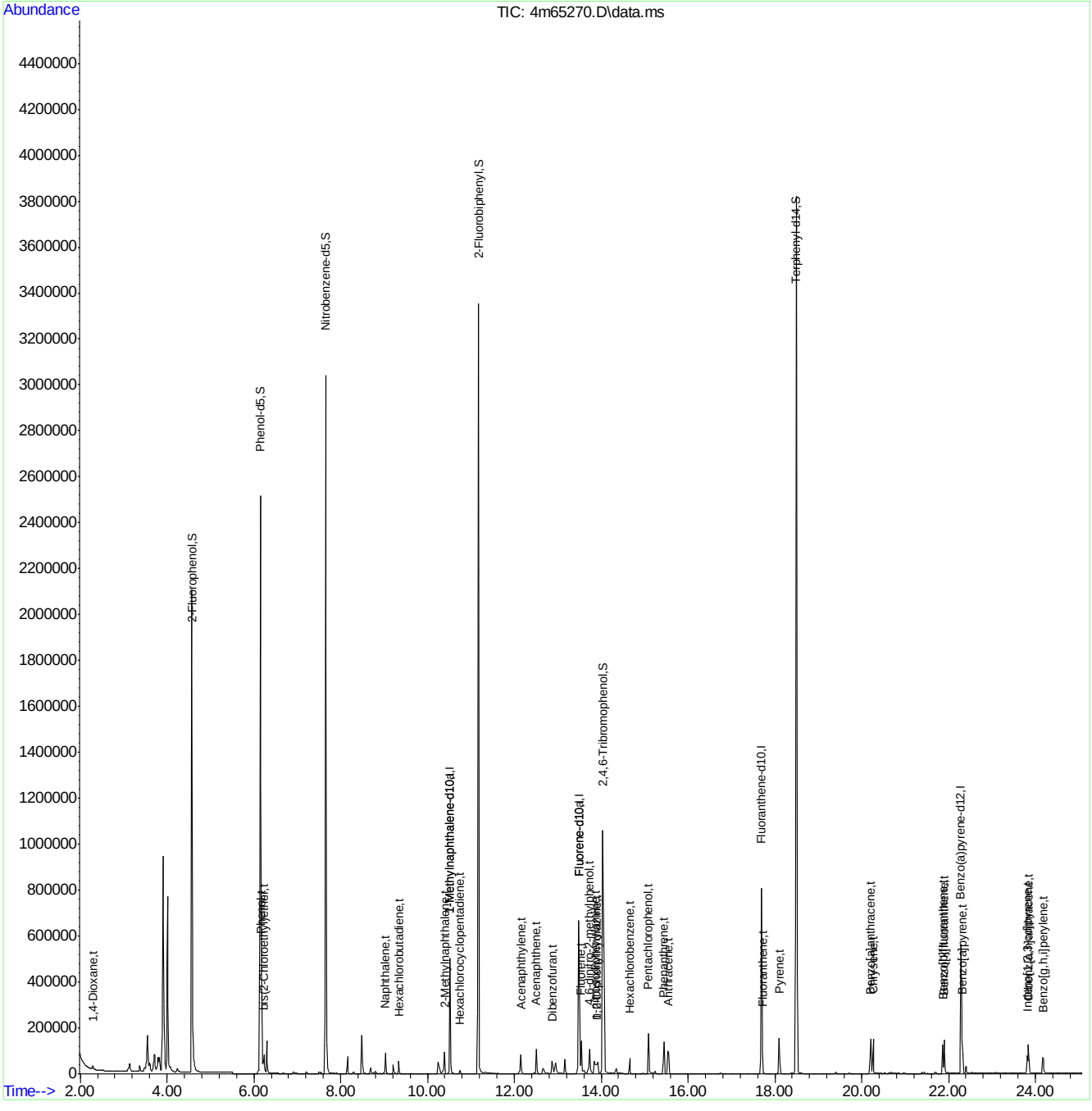
7

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2919\
Data File : 4m65270.D
Acq On : 13 May 2016 4:39 pm
Operator : ashleyd
Sample : op93830a-msd
Misc : op93830a,e4m2919,30.4
ALS Vial : 12 Sample Multiplier: 1

Quant Time: May 17 09:02:16 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



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2925\
Data File : 4m65364.D
Acq On : 18 May 2016 8:29 pm
Operator : linseyk
Sample : op93830a-ms
Misc : op93830a,e4m2925,30.5
ALS Vial : 17 Sample Multiplier: 1

Quant Time: May 19 10:28:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : 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	10.583	152	387267	4.00	ppm	# 0.07
12) Fluorene-d10	13.561	176	748486	4.00	ppm	0.07
22) Fluoranthene-d10	17.761	212	908694	4.00	ppm	0.09
28) Benzo(a)pyrene-d12	22.340	264	702400	4.00	ppm	0.07
35) 1-Methylnaphthalene-d10a	10.583	152	387267	4.00	ppm	# 0.07
38) Fluorene-d10a	13.561	176	748486	4.00	ppm	# 0.07
System Monitoring Compounds						
2) 2-Fluorophenol	4.652	112	2248333	44.34	ppm	0.01
Spiked Amount 50.000	Range 11 - 58		Recovery	=	88.68%#	
3) Phenol-d5	6.232	99	3848396	45.13	ppm	0.03
Spiked Amount 50.000			Recovery	=	90.26%	
6) Nitrobenzene-d5	7.729	82	3715082	48.59	ppm	0.02
Spiked Amount 50.000			Recovery	=	97.18%	
11) 2-Fluorobiphenyl	11.251	172	5632471	50.39	ppm	0.09
Spiked Amount 50.000			Recovery	=	100.78%	
17) 2,4,6-Tribromophenol	14.110	330	1409940	35.32	ppm	0.08
Spiked Amount 50.000			Recovery	=	70.64%	
25) Terphenyl-d14	18.551	244	5283335	43.04	ppm	0.09
Spiked Amount 50.000			Recovery	=	86.08%	
Target Compounds						Qvalue
4) Phenol	6.246	94	512971	5.87	ppm	58
5) bis(2-Chloroethyl)ether	6.301	93	63518	0.96	ppm #	69
7) Naphthalene	9.105	128	204391	0.94	ppm	98
8) Hexachlorobutadiene	9.399	225	45984	0.85	ppm	70
9) 2-Methylnaphthalene	10.463	142	90290	0.95	ppm	77
10) Hexachlorocyclopentadiene	10.821	237	20617	0.76	ppm	86
13) Acenaphthylene	12.214	152	120465	0.70	ppm	88
14) Acenaphthene	12.569	153	78725	0.71	ppm	75
15) Dibenzofuran	12.946	168	134669	0.82	ppm	87
16) Fluorene	13.608	166	156629	0.78	ppm	96
18) Hexachlorobenzene	14.717	284	61093	0.78	ppm	99
19) Pentachlorophenol	15.165	266	151362	4.72	ppm	91
20) Phenanthrene	15.521	178	214296	0.80	ppm	99
21) Anthracene	15.614	178	204004	0.80	ppm	99
23) Fluoranthene	17.779	202	222934	0.91	ppm	98
24) Pyrene	18.175	202	226033	0.93	ppm	95
26) Benzo[a]anthracene	20.265	228	196367	0.88	ppm	96
27) Chrysene	20.321	228	194157	0.88	ppm	98
29) Benzo[b]fluoranthene	21.913	252	197263	0.78	ppm	91
30) Benzo[k]fluoranthene	21.954	252	164948	0.78	ppm	90
31) Benzo[a]pyrene	22.367	252	173003	0.83	ppm	96
32) Indeno[1,2,3-cd]pyrene	23.868	276	202038	0.77	ppm	100
33) Dibenz[a,h]anthracene	23.895	278	163831	0.78	ppm	93
34) Benzo[g,h,i]perylene	24.240	276	169689	0.77	ppm	99
36) 1,4-Dioxane	2.382	88	11465	0.46	ppm	89
39) 4,6-dinitro-2-methylph...	13.799	198	117067	5.51	ppm	47
40) 1,2-Diphenylhydrazine	13.967	77	137470	0.78	ppm	95

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2925\
Data File : 4m65364.D
Acq On : 18 May 2016 8:29 pm
Operator : linseyk
Sample : op93830a-ms
Misc : op93830a,e4m2925,30.5
ALS Vial : 17 Sample Multiplier: 1

Quant Time: May 19 10:28:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Fri May 13 11:56:24 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) n-nitrosodiphenylamine	13.943	169	93622	0.71	ppm #	73

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

7.4.8

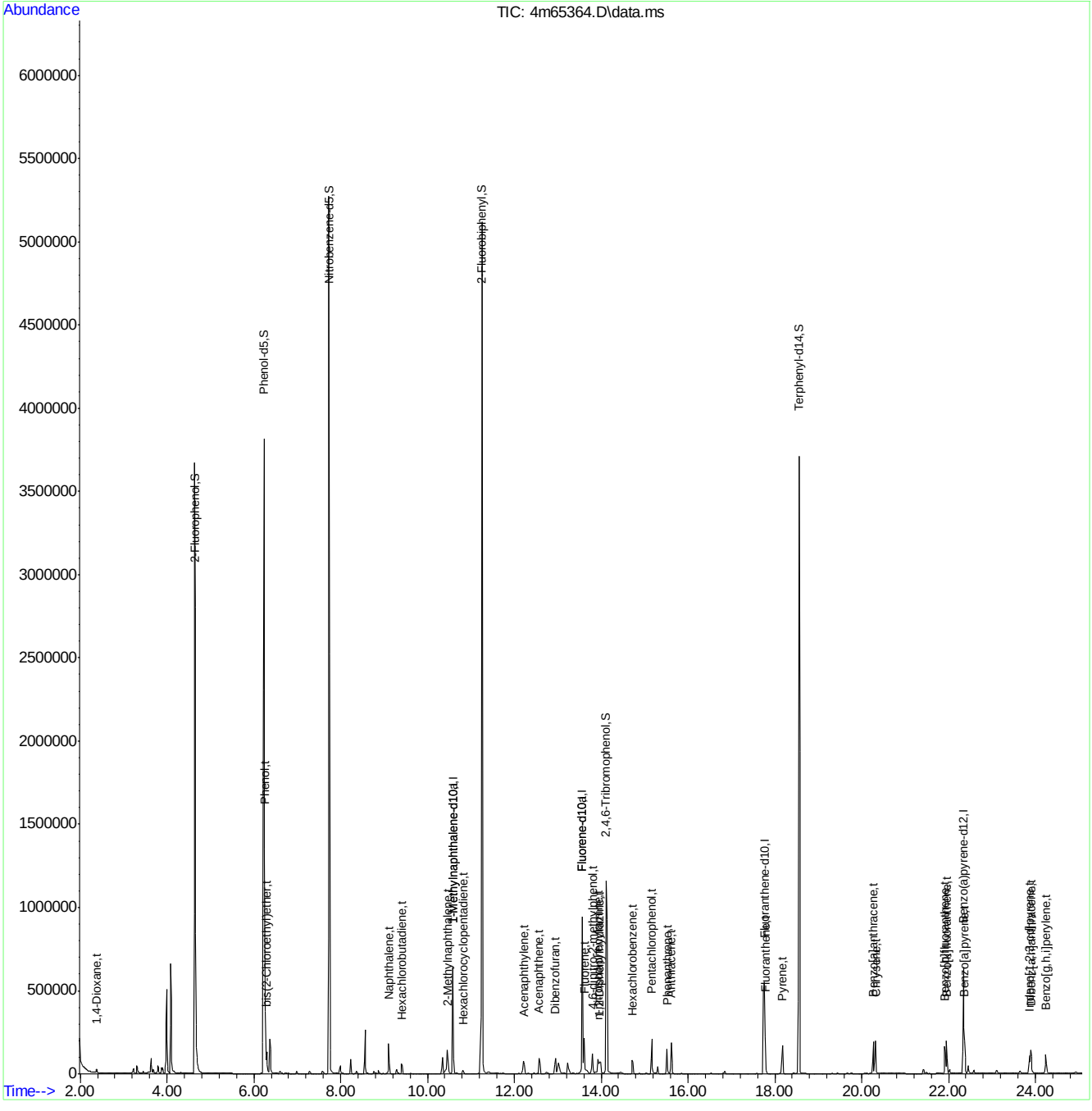
7

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2925\
Data File : 4m65364.D
Acq On : 18 May 2016 8:29 pm
Operator : linseyk
Sample : op93830a-ms
Misc : op93830a,e4m2925,30.5
ALS Vial : 17 Sample Multiplier: 1

Quant Time: May 19 10:28:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Fri May 13 11:56:24 2016
Response via : Initial Calibration



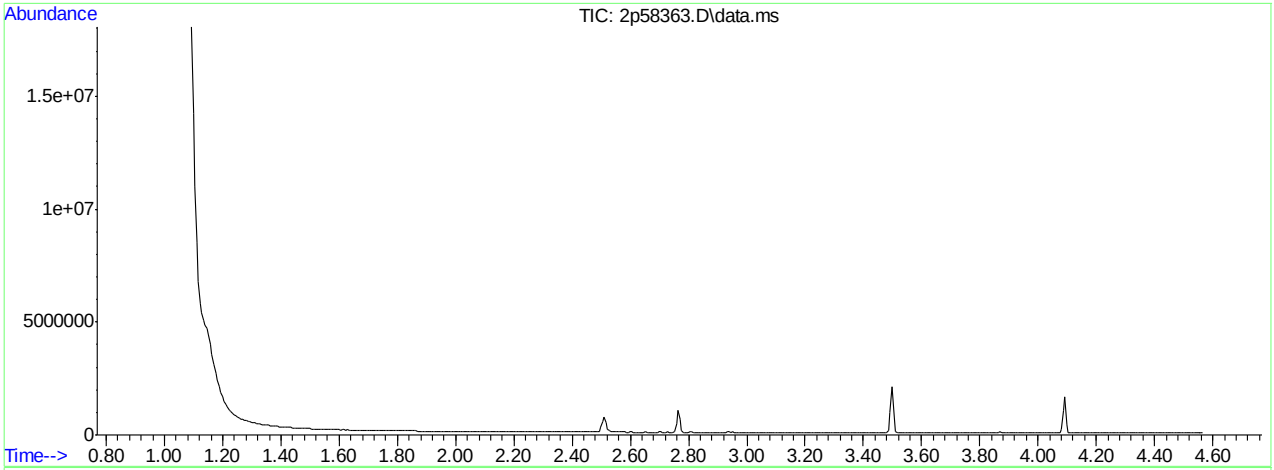
M4M2881SIM.M Thu May 19 10:28:24 2016 MANAGER Page: 3

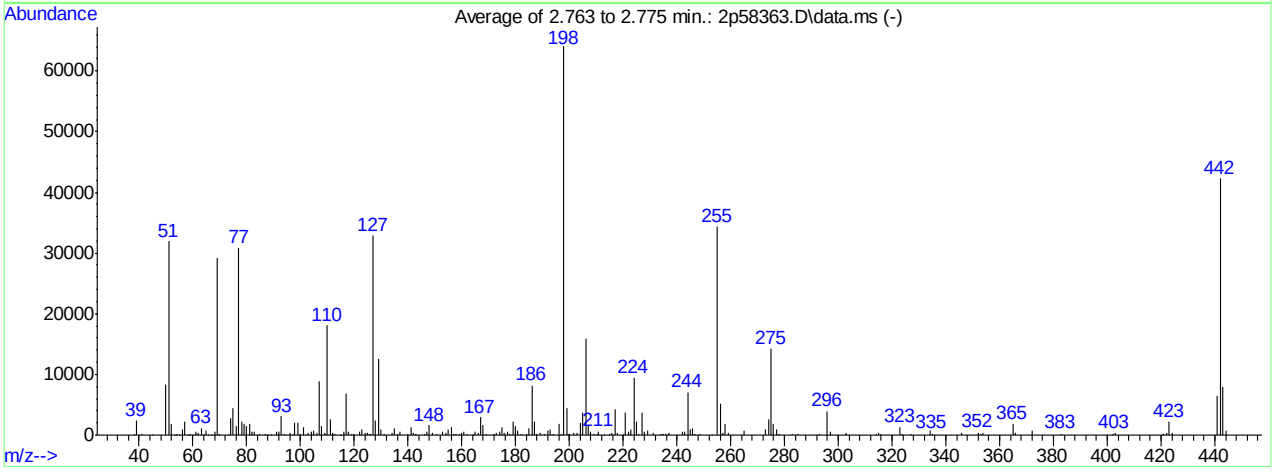
SGS ACCUTEST JC19996

DFTPP

Data File : C:\msdchem\1\DATA\2P2547\2p58363.D Vial: 1
Acq On : 19 Apr 2016 3:12 pm Operator: robertl1
Sample : DFTPP Inst : MS2P
Misc : op92038,e2p2547 Multiplr: 1.00
MS Integration Params: events.e

Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M (ChemStation Integrator)
Title :





AutoFind: Scans 285, 286, 287; Background Corrected with Scan 281

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	49.9	31943	PASS
68	69	0.00	2	1.9	547	PASS
69	198	0.00	100	45.6	29233	PASS
70	69	0.00	2	0.5	136	PASS
127	198	40	60	51.3	32846	PASS
197	198	0.00	1	0.3	212	PASS
198	198	100	100	100.0	64058	PASS
199	198	5	9	6.8	4365	PASS
275	198	10	30	22.1	14145	PASS
365	198	1	100	2.8	1814	PASS
441	443	0.01	100	81.6	6462	PASS
442	198	40	100	65.9	42236	PASS
443	442	17	23	18.8	7923	PASS

2p58363.D DFTPP2P.M Tue Apr 19 15:21:33 2016 RPT1

Average of 2.763 to 2.775 min.: 2p58363.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
38.00	60	57.00	2308	68.00	547	81.00	1947
39.00	2378	58.00	5	69.00	29233	82.00	495
41.00	218	58.95	205	69.95	136	83.00	499
45.00	75	59.90	26	73.00	99	85.00	237
50.00	8247	61.00	601	74.00	2714	86.95	262
51.00	31943	61.95	361	75.00	4379	87.90	94
52.00	1779	63.00	1146	76.00	1455	88.90	94
53.00	24	64.00	96	77.00	30801	91.00	642
54.00	177	65.00	659	78.05	2168	91.90	537
55.00	63	65.90	89	79.00	1899	93.00	3090
56.00	1000	67.00	22	80.00	1502	93.95	253

Average of 2.763 to 2.775 min.: 2p58363.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
96.00	391	108.00	1455	120.00	113	131.00	205
97.00	57	109.00	305	121.95	481	134.00	293
98.00	2009	110.00	18024	122.95	895	135.00	1089
99.00	1954	111.00	2656	123.95	431	135.95	262
100.00	139	112.05	397	125.00	354	137.00	489
101.00	1255	113.00	139	125.80	136	139.90	104
102.95	417	115.00	88	126.10	138	141.00	1334
103.90	648	115.95	508	127.00	32846	141.95	464
105.00	665	117.00	6904	128.00	2329	142.70	95
105.95	285	117.90	518	129.00	12516	143.00	188
107.00	8888	118.90	132	130.00	840	146.00	222

Average of 2.763 to 2.775 min.: 2p58363.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
147.00	626	159.95	388	174.00	534	186.00	8223
148.00	1633	160.95	617	175.00	1215	187.00	2135
148.95	399	161.90	172	175.95	362	187.95	241
150.90	122	164.00	90	176.90	502	188.90	467
152.90	505	164.95	595	177.80	123	190.90	142
153.95	328	166.00	427	178.95	2204	191.90	787
154.95	945	167.00	2941	180.00	1524	193.00	868
156.00	1358	168.00	1639	180.95	698	193.90	230
157.05	230	168.90	156	181.95	178	196.00	1916
158.00	216	172.00	166	183.90	130	197.00	212
158.90	183	172.95	333	185.00	1111	197.90	64058

Average of 2.763 to 2.775 min.: 2p58363.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
198.95	4365	210.30	219	224.00	9406	236.95	286
199.90	219	210.95	607	225.00	2163	241.85	482
200.10	123	213.00	59	225.95	212	243.00	497
201.40	446	215.00	102	227.00	3698	244.00	7115
203.00	317	215.95	411	228.00	565	244.95	919
204.00	2093	216.90	4178	228.90	837	245.95	1061
205.00	3769	217.90	388	231.00	363	246.80	210
206.00	15923	220.00	85	234.00	111	248.90	230
207.00	1744	220.95	3792	234.80	177	252.80	89
207.95	545	221.95	555	235.00	103	255.00	34366
208.90	134	223.00	885	235.90	120	256.00	5175

Average of 2.763 to 2.775 min.: 2p58363.D\data.ms
DFTPP
Modified:subtracted

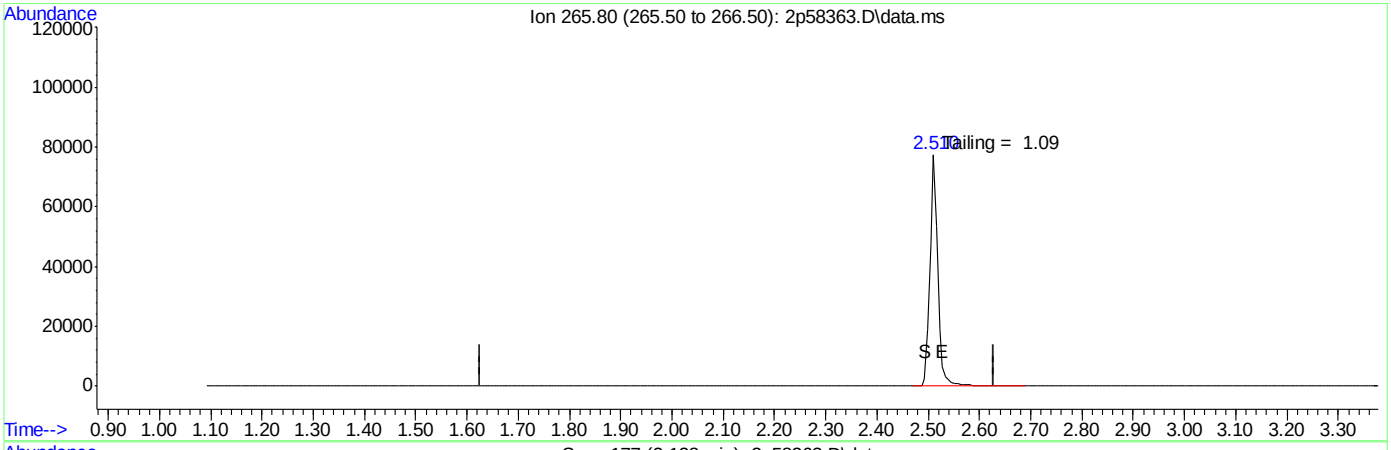
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
256.95	319	285.00	136	334.00	701	402.90	323
258.00	1945	292.90	211	334.90	197	420.80	103
258.95	306	296.00	3958	345.90	324	421.00	192
264.90	760	296.90	580	352.00	433	421.90	320

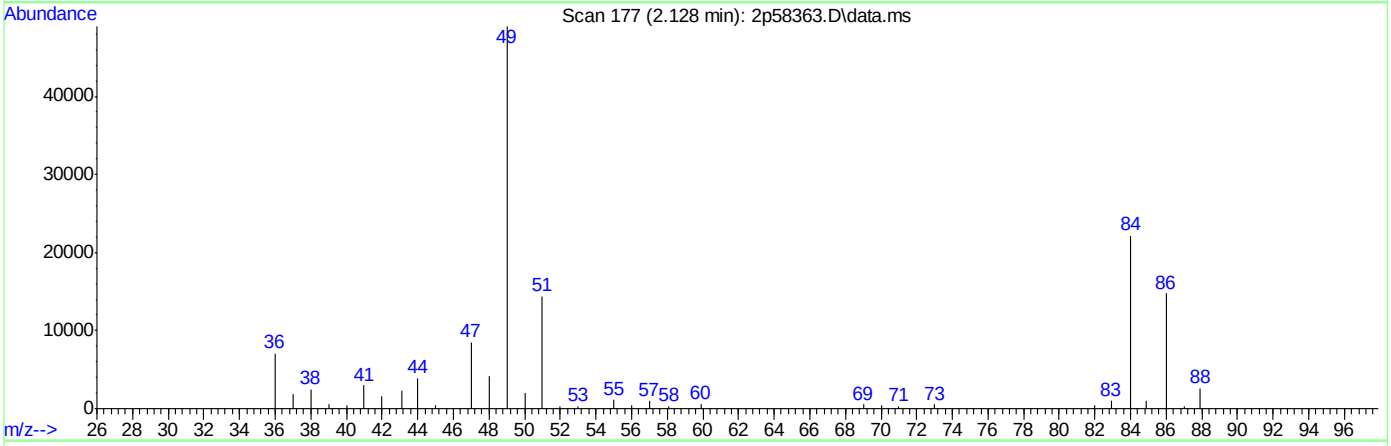
272.95	937	302.95	444	353.00	238	423.00	2169
274.00	2601	313.95	200	353.90	339	424.00	454
275.00	14145	314.85	366	364.95	1814	441.00	6462
276.00	1828	316.00	134	365.95	297	442.00	42236
277.00	974	323.00	1326	371.95	677	443.00	7923
277.90	189	323.90	205	382.85	223	444.00	714
283.00	152	326.90	245	401.90	185		

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58363.D
Acq On : 19 Apr 2016 3:12 pm
Operator : robertl1
Sample : DFTPP
Misc : op92038,e2p2547
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 19 15:16:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M
Quant Title :
QLast Update : Tue Aug 11 08:57:54 2015
Response via : Initial Calibration





TIC: 2p58363.D\data.ms

(1) Pentacholorphenol

2.128min (-2.128) 0.00ppb

response 0

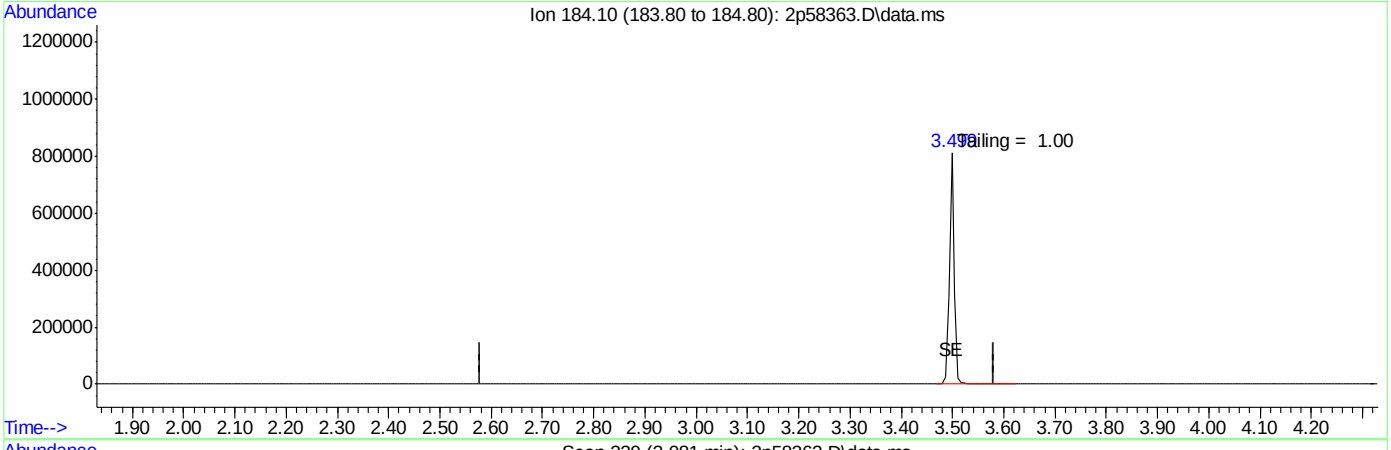
Ion	Exp%	Act%
265.80	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

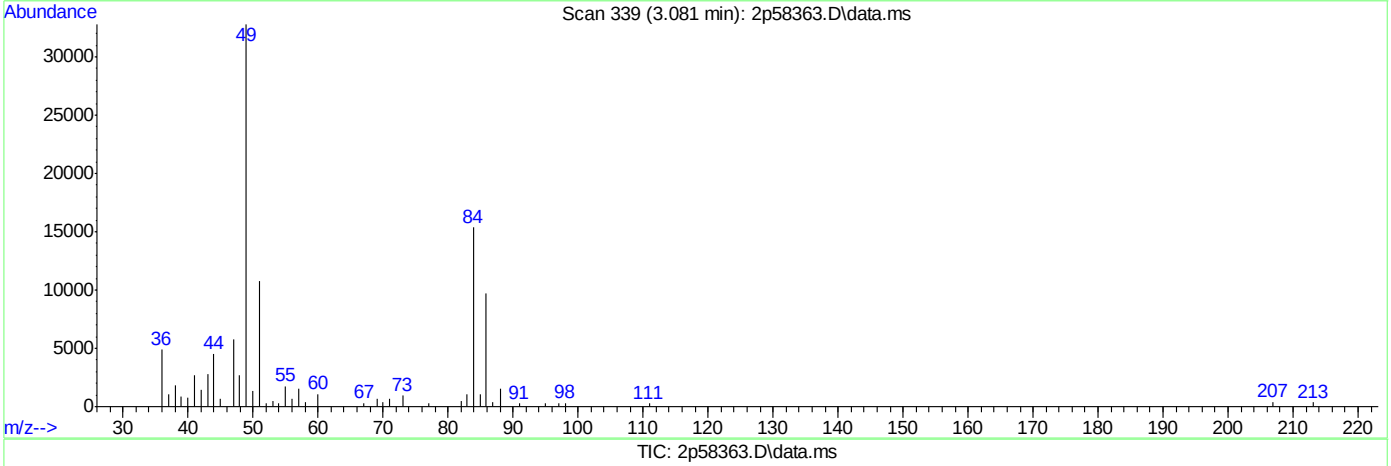
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58363.D
Acq On : 19 Apr 2016 3:12 pm
Operator : robertl1
Sample : DFTPP
Misc : op92038,e2p2547
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 19 15:16:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M
Quant Title :
QLast Update : Tue Aug 11 08:57:54 2015
Response via : Initial Calibration





TIC: 2p58363.D\data.ms

(2) Benzidine

3.081min (-3.081) 0.00ppb

response 0

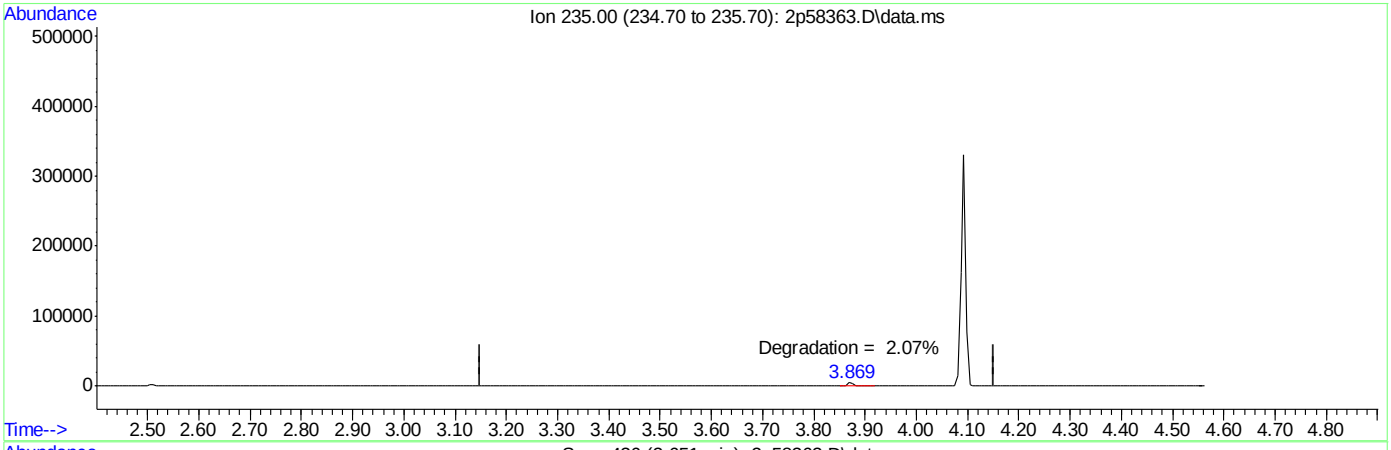
Ion	Exp%	Act%
184.10	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

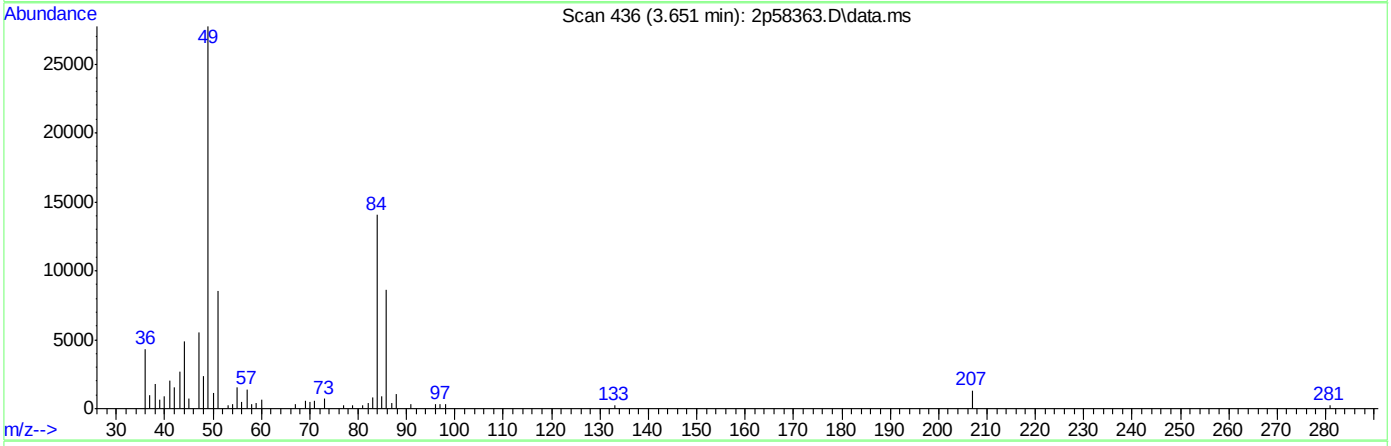
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58363.D
Acq On : 19 Apr 2016 3:12 pm
Operator : robertl1
Sample : DFTPP
Misc : op92038,e2p2547
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 19 15:16:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M
Quant Title :
QLast Update : Tue Aug 11 08:57:54 2015
Response via : Initial Calibration





TIC: 2p58363.D\data.ms

(3) PP-DDT

3.651min (-3.651) 0.00ppb

response 0

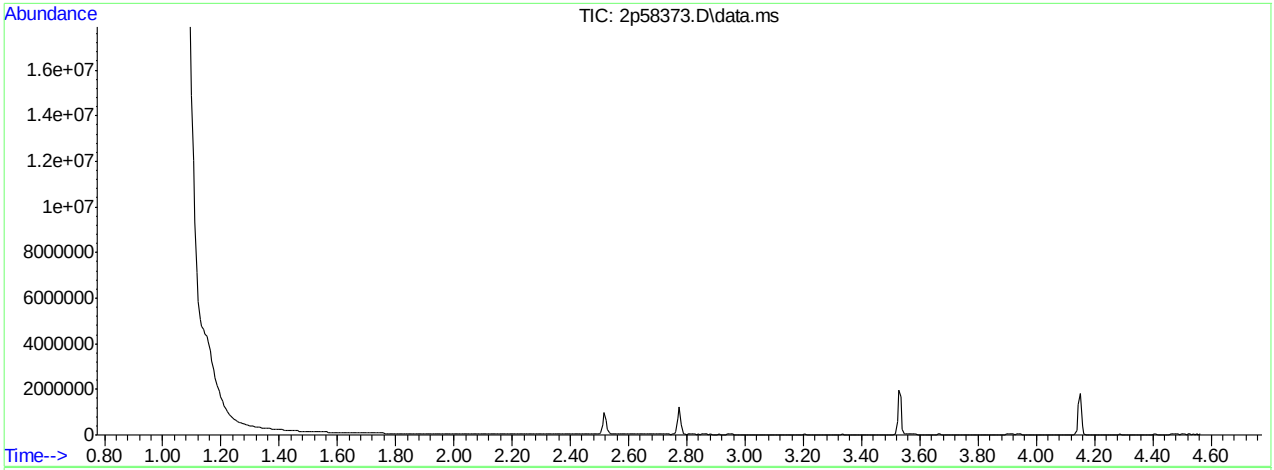
Ion	Exp%	Act%
235.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

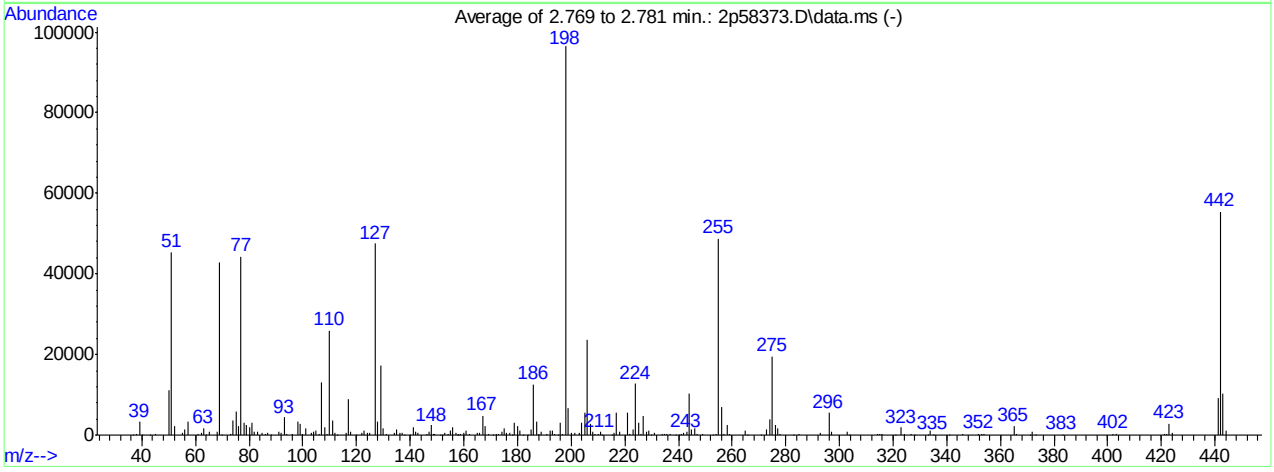
SGS ACCUTEST JC19996

DFTPP

Data File : C:\msdchem\1\DATA\2P2548\2p58373.D Vial: 1
Acq On : 19 Apr 2016 7:47 pm Operator: sarad
Sample : DFTPP Inst : MS2P
Misc : op92038,e2p2548 Multiplr: 1.00
MS Integration Params: events.e

Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M (ChemStation Integrator)
Title :





AutoFind: Scans 286, 287, 288; Background Corrected with Scan 282

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	47.2	45494	PASS
68	69	0.00	2	1.7	713	PASS
69	198	0.00	100	44.6	42984	PASS
70	69	0.00	2	0.3	141	PASS
127	198	40	60	49.2	47459	PASS
197	198	0.00	1	0.2	230	PASS
198	198	100	100	100.0	96445	PASS
199	198	5	9	6.8	6569	PASS
275	198	10	30	20.3	19621	PASS
365	198	1	100	2.4	2274	PASS
441	443	0.01	100	88.4	9130	PASS
442	198	40	100	57.5	55443	PASS
443	442	17	23	18.6	10326	PASS

2p58373.D DFTPP2P.M Tue Apr 19 19:52:01 2016 RPT1

Average of 2.769 to 2.781 min.: 2p58373.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.90	142	57.00	3357	75.00	5966	86.95	435
38.00	239	60.95	416	76.00	2168	87.90	107
39.05	3273	62.00	526	77.00	44264	91.00	742
40.00	53	63.00	1778	78.00	3011	91.95	683
43.00	81	63.90	87	79.00	2619	93.00	4360
45.00	281	65.00	872	80.00	1988	94.05	319
50.00	11124	67.95	713	81.00	3023	96.00	237
51.05	45494	69.00	42984	82.00	736	98.00	3333
52.05	2355	69.90	141	83.00	804	99.00	2744
54.95	458	73.05	293	84.90	560	99.90	247
56.00	1451	74.00	3652	85.95	384	101.00	1682

Average of 2.769 to 2.781 min.: 2p58373.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
103.00	614	115.95	537	129.95	1603	146.00	295
103.95	844	117.00	9017	131.00	261	147.00	941
104.95	1073	117.90	735	134.00	437	148.00	2436
106.00	330	120.00	122	135.00	1310	148.80	158
107.00	13003	121.90	658	135.95	509	149.00	404
108.00	1895	122.95	1038	136.95	638	151.00	136
108.90	153	124.00	459	137.90	93	152.10	120
110.00	26001	124.90	561	140.00	85	153.00	588
110.95	3494	127.00	47459	141.00	1931	154.00	408
111.90	437	128.00	3402	141.95	723	155.00	1235
112.90	88	129.00	17366	143.00	456	156.00	1894

Average of 2.769 to 2.781 min.: 2p58373.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
156.95	434	169.00	289	180.95	1089	193.95	299
157.70	171	170.80	91	182.00	83	195.00	86
158.00	88	171.95	303	184.00	124	195.95	2957
158.90	257	172.95	376	185.00	1515	196.90	230
160.00	588	174.00	877	186.00	12586	198.00	96445
161.00	1052	175.00	1740	187.00	3441	198.95	6569
162.00	273	176.00	507	188.00	288	199.95	561
165.00	667	176.95	680	188.95	767	201.40	431
165.95	516	178.00	128	190.90	279	202.90	655
167.00	4844	178.95	3170	191.95	1026	204.00	3134
168.00	2205	180.00	2215	193.00	1193	205.00	5520

Average of 2.769 to 2.781 min.: 2p58373.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
206.00	23752	221.00	5509	233.90	189	245.90	1567
207.00	2817	221.80	167	234.95	283	246.90	300
208.00	870	222.90	1328	235.80	210	249.00	209
208.95	252	224.00	12744	236.90	311	252.90	131
210.30	256	225.00	3195	238.90	111	253.95	251
210.90	770	225.90	274	240.00	120	255.00	48736
211.30	112	227.00	4817	241.00	150	256.00	7044
215.00	106	227.95	732	242.00	685	257.00	391
216.00	495	229.00	1070	243.00	783	258.00	2639
216.95	5602	229.90	117	244.00	10182	258.90	331
217.95	739	231.00	488	245.00	1352	264.95	1029

Average of 2.769 to 2.781 min.: 2p58373.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
265.90	142	296.00	5500	327.90	109	370.90	108
270.90	88	296.90	793	333.00	84	371.95	808
273.00	1385	303.00	775	334.00	1083	372.90	96
274.00	3895	303.90	105	334.90	116	383.00	131

275.00	19621	314.00	156	341.00	101	401.95	391
276.00	2531	314.90	421	345.90	197	403.00	375
277.00	1543	316.00	176	351.95	408	420.95	290
277.90	153	320.90	92	353.00	277	421.95	276
282.90	145	323.00	1842	354.00	402	423.00	2849
284.90	153	324.10	200	364.95	2274	423.90	526
292.95	459	326.90	195	365.90	152	441.00	9130

Average of 2.769 to 2.781 min.: 2p58373.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
442.00	55443						
443.00	10326						
443.95	1050						

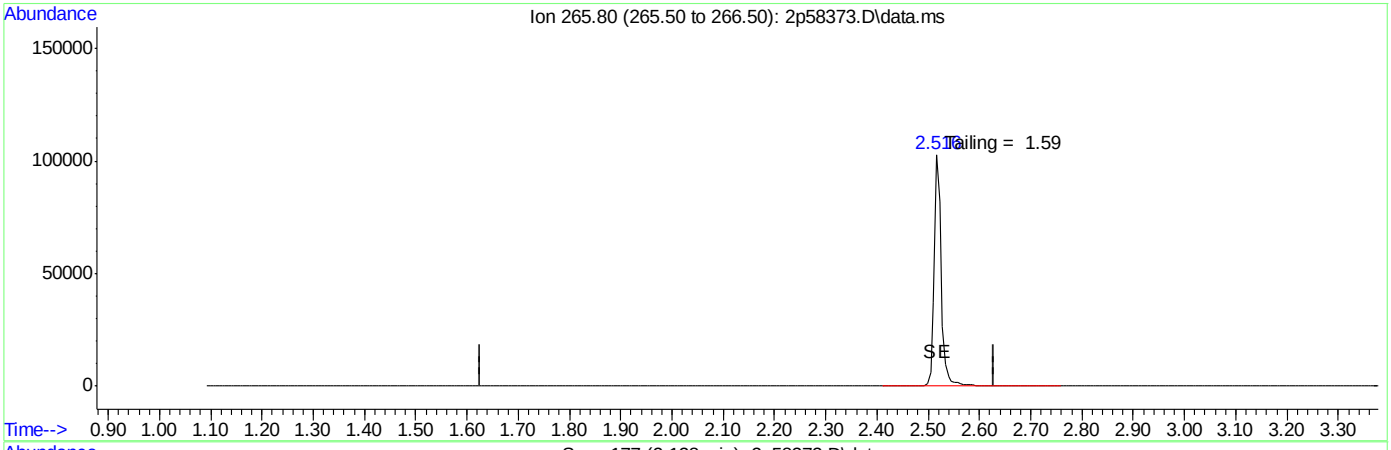
7.5.2

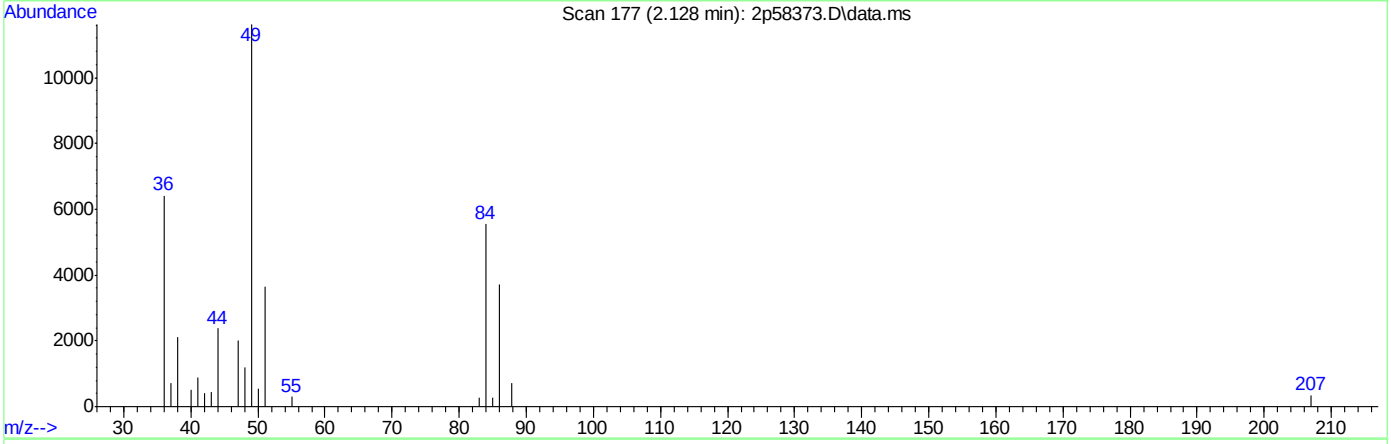
7

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58373.D
Acq On : 19 Apr 2016 7:47 pm
Operator : sarad
Sample : DFTPP
Misc : op92038,e2p2548
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 19 19:50:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M
Quant Title :
QLast Update : Tue Aug 11 08:57:54 2015
Response via : Initial Calibration





TIC: 2p58373.D\data.ms

(1) Pentacholorphenol

2.128min (-2.128) 0.00ppb

response 0

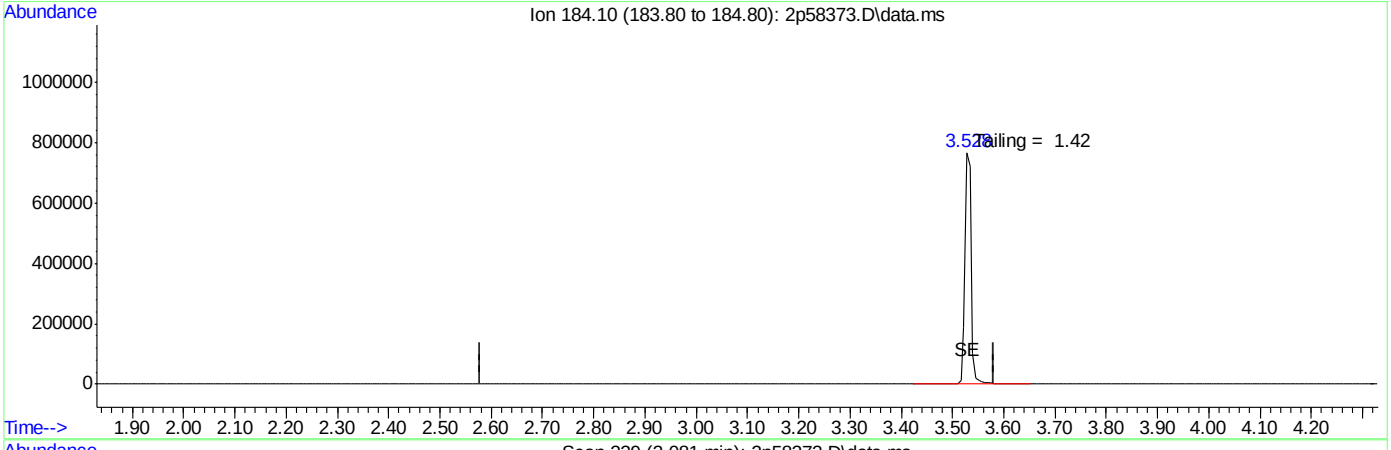
Ion	Exp%	Act%
265.80	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

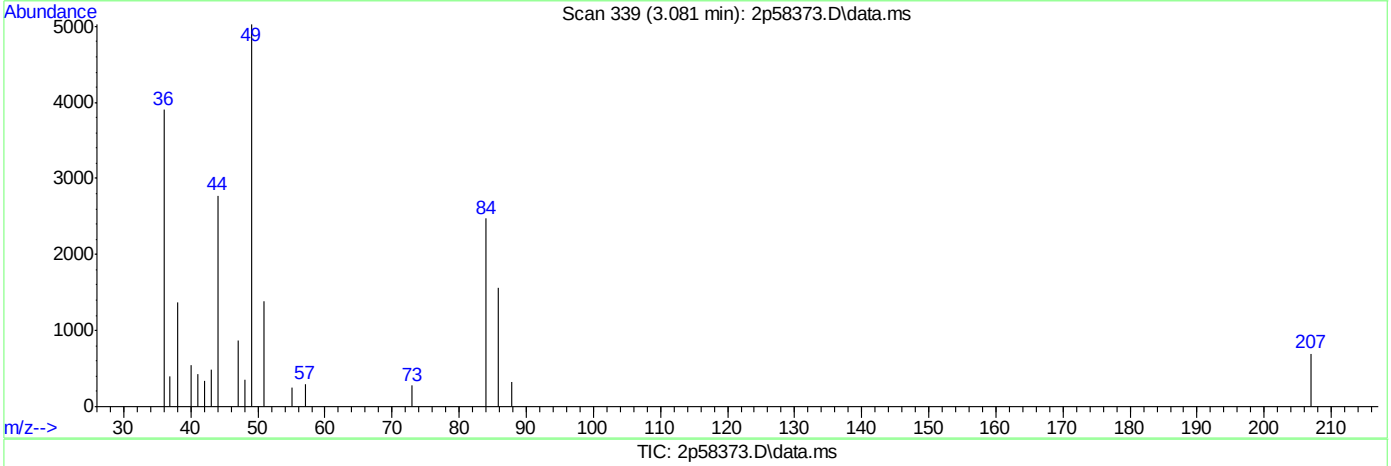
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58373.D
Acq On : 19 Apr 2016 7:47 pm
Operator : sarad
Sample : DFTPP
Misc : op92038,e2p2548
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 19 19:50:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M
Quant Title :
QLast Update : Tue Aug 11 08:57:54 2015
Response via : Initial Calibration





TIC: 2p58373.D\data.ms

(2) Benzidine

3.081min (-3.081) 0.00ppb

response 0

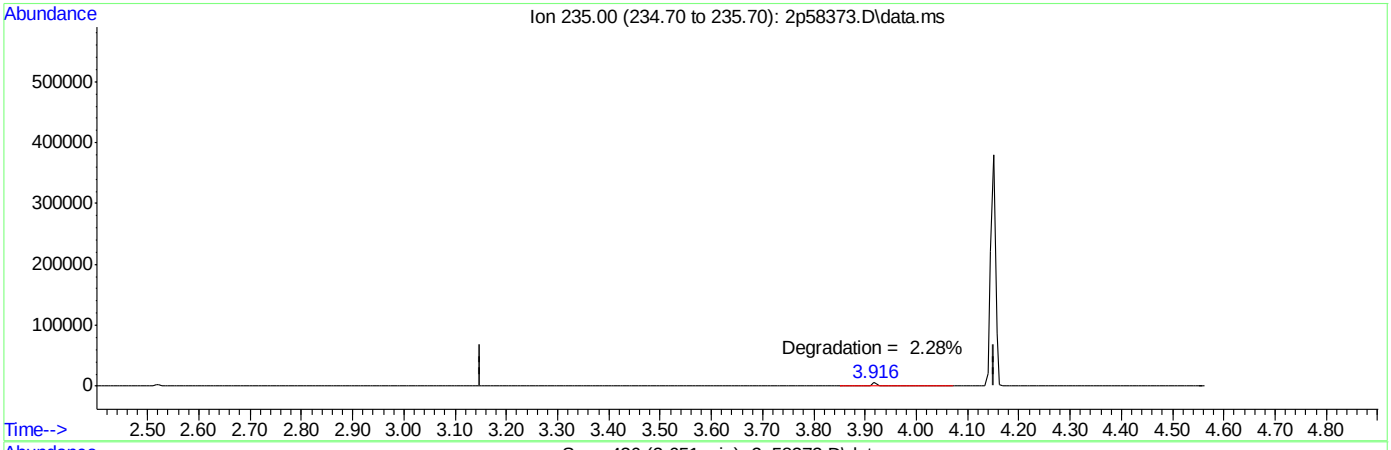
Ion	Exp%	Act%
184.10	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

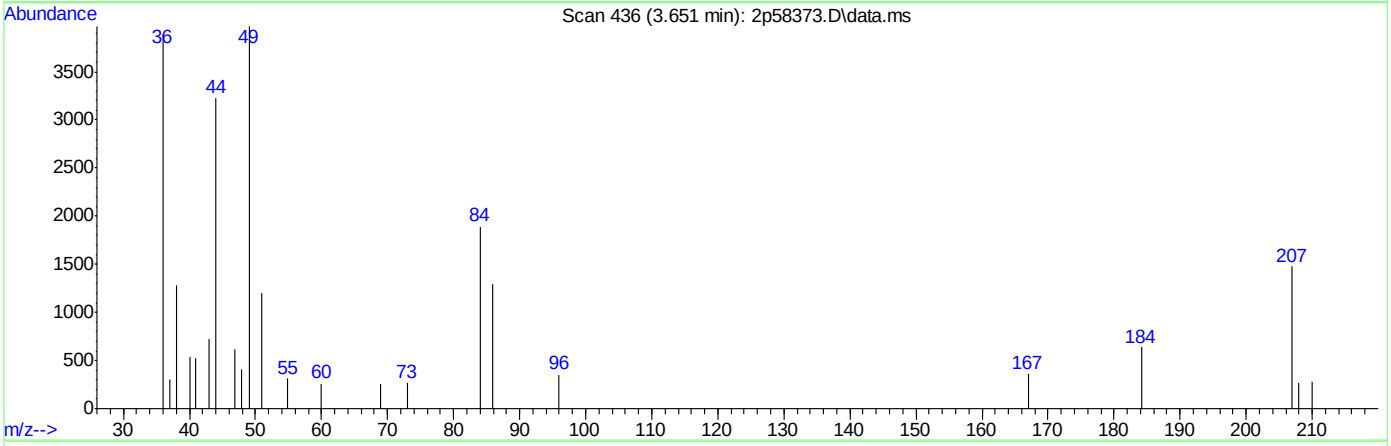
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58373.D
Acq On : 19 Apr 2016 7:47 pm
Operator : sarad
Sample : DFTPP
Misc : op92038,e2p2548
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 19 19:50:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M
Quant Title :
QLast Update : Tue Aug 11 08:57:54 2015
Response via : Initial Calibration





TIC: 2p58373.D\data.ms

(3) PP-DDT

3.651min (-3.651) 0.00ppb

response 0

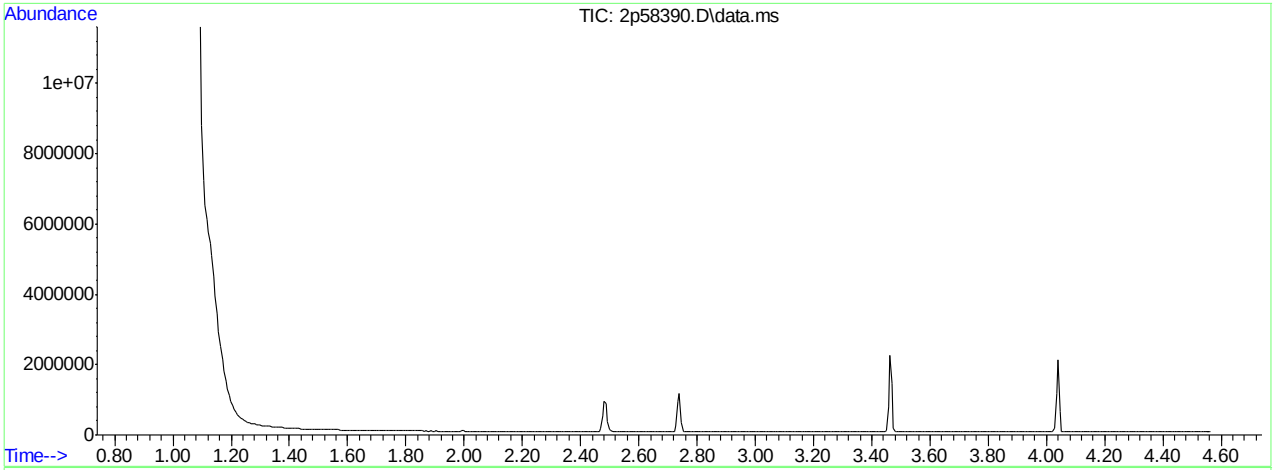
Ion	Exp%	Act%
235.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

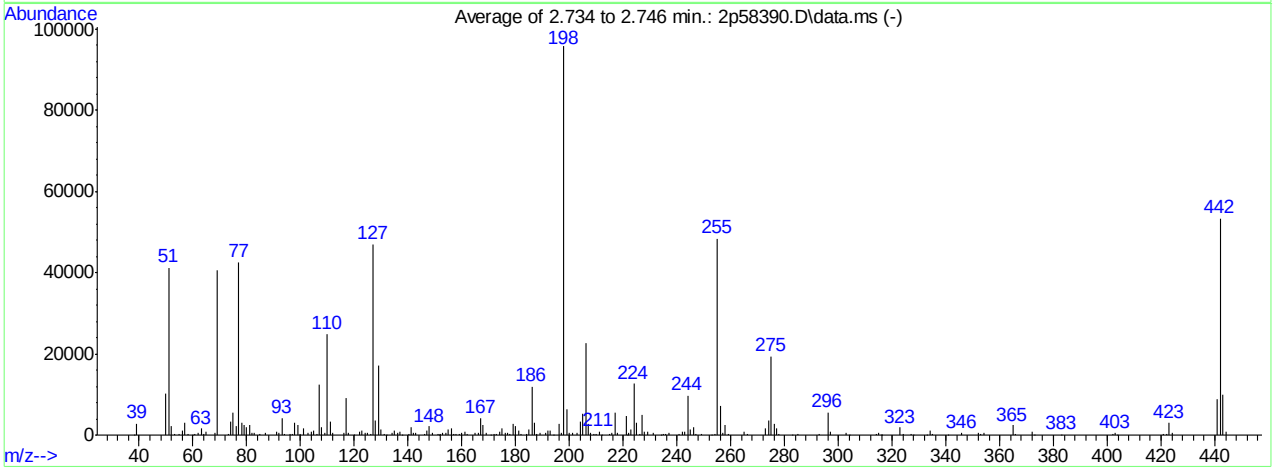
SGS ACCUTEST JC19996

DFTPP

```
Data File : C:\msdchem\1\DATA\2P2549\2p58390.D          Vial: 1
Acq On    : 20 Apr 2016   9:38 am                   Operator: robertl1
Sample    : DFTPP                                   Inst    : MS2P
Misc      : op92038,e2p2549                         Multiplr: 1.00
MS Integration Params: events.e

Method    : C:\msdchem\1\METHODS\dftpp2p.M (ChemStation Integrator)
Title     :
```





AutoFind: Scans 280, 281, 282; Background Corrected with Scan 276

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	43.0	41165	PASS
68	69	0.00	2	1.7	692	PASS
69	198	0.00	100	42.5	40655	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	49.2	47048	PASS
197	198	0.00	1	0.5	453	PASS
198	198	100	100	100.0	95659	PASS
199	198	5	9	6.5	6243	PASS
275	198	10	30	20.3	19408	PASS
365	198	1	100	2.5	2357	PASS
441	443	0.01	100	88.9	8730	PASS
442	198	40	100	55.8	53344	PASS
443	442	17	23	18.4	9817	PASS

2p58390.D dftpp2p.M Wed Apr 20 16:05:27 2016 RPT1

Average of 2.734 to 2.746 min.: 2p58390.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
38.00	137	60.90	369	77.10	42503	93.00	4147
39.10	2795	62.00	573	78.05	3154	93.95	296
50.00	10090	63.00	1533	79.00	2400	96.00	152
51.05	41165	64.05	272	80.00	2047	97.05	189
52.05	2270	65.00	898	81.00	2623	98.00	2963
53.00	193	68.00	692	82.00	653	99.00	2614
54.95	270	69.00	40655	82.95	594	99.95	298
56.00	1134	73.00	213	84.95	288	101.00	1640
57.00	3006	74.00	3345	87.00	430	102.95	479
58.00	217	75.00	5538	91.00	794	104.00	956
59.95	21	76.05	2109	92.00	591	105.00	992

Average of 2.734 to 2.746 min.: 2p58390.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
105.95	324	121.95	870	133.95	449	148.00	2167
107.00	12332	123.00	1085	134.95	1250	148.90	587
108.00	1942	123.95	457	135.95	512	151.00	272
108.95	455	125.05	579	137.00	896	151.70	103
110.00	24964	126.00	191	138.00	91	151.95	231
111.00	3455	127.00	47048	140.10	209	153.00	499
112.00	433	128.00	3701	141.00	1909	153.95	495
116.00	475	129.00	17244	142.00	674	155.00	1318
117.00	9208	130.00	1436	142.95	458	156.05	1586
118.00	640	131.05	240	145.95	364	157.00	338
120.00	88	132.10	115	147.00	1154	157.95	302

Average of 2.734 to 2.746 min.: 2p58390.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
158.90	251	172.95	400	185.00	1427	198.00	95659
160.00	535	174.00	917	186.00	12008	199.00	6243
161.00	866	175.00	1711	187.00	3176	199.95	440
161.95	269	176.00	511	187.95	286	201.35	426
164.95	648	177.00	652	188.95	519	202.95	485
165.95	527	177.90	223	191.00	450	204.00	3214
167.00	4243	179.00	2894	192.00	1061	205.00	5358
168.00	2379	180.00	2171	193.00	1195	206.00	22608
169.00	431	180.95	1082	194.00	105	207.00	2825
170.90	84	181.90	176	196.00	2760	207.95	675
171.90	309	183.95	207	196.90	453	208.95	183

Average of 2.734 to 2.746 min.: 2p58390.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
209.95	288	224.00	12641	240.90	293	256.00	7139
211.05	949	225.00	3109	242.00	777	256.95	512
211.80	132	226.00	241	243.00	798	258.00	2522
214.95	194	227.00	5005	244.00	9766	259.00	333
215.95	477	227.95	789	245.00	1435	264.95	972
217.00	5523	229.00	975	246.00	1807	266.00	151
217.95	681	231.00	450	246.95	317	273.00	1698
221.00	4757	234.00	113	248.90	264	274.00	3543
221.60	90	235.00	193	252.80	127	275.00	19408
221.90	452	235.90	214	254.05	366	276.00	2657
223.00	1339	237.00	564	255.00	48405	277.00	1573

Average of 2.734 to 2.746 min.: 2p58390.D\data.ms
DFTPP
Modified:subtracted

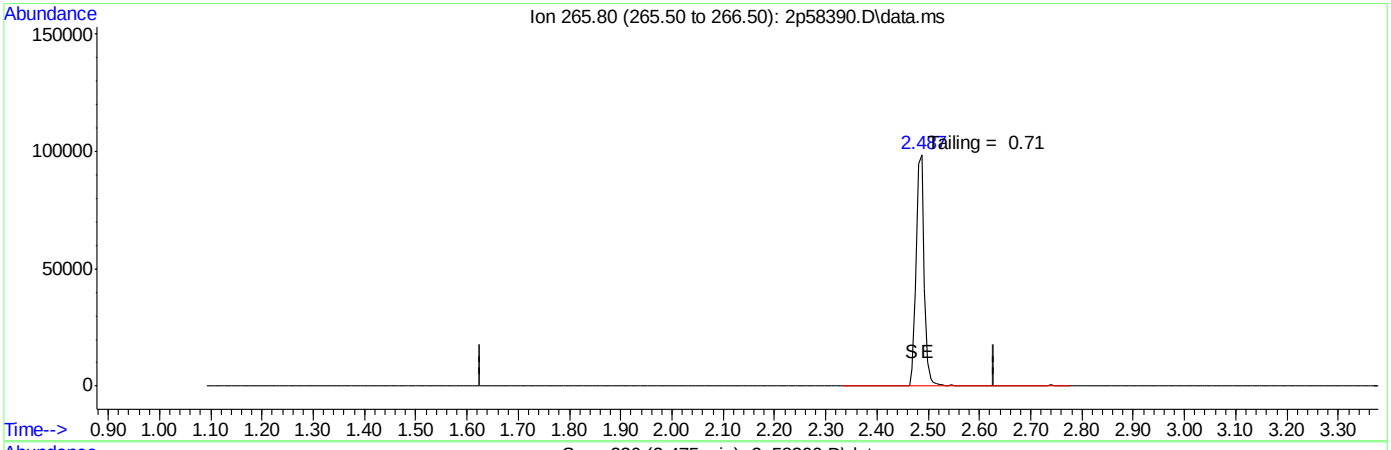
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
278.00	156	316.10	88	353.00	298	421.90	277
282.80	125	323.00	1828	354.00	589	423.00	2987
284.95	269	324.00	332	364.95	2357	423.95	635
293.00	230	326.90	165	366.00	172	441.00	8730

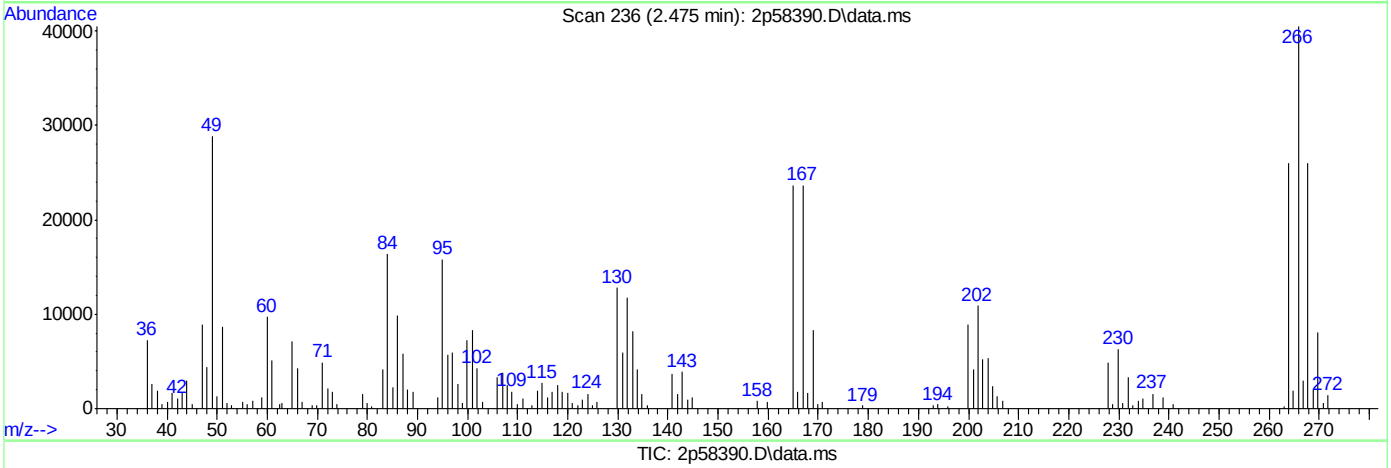
296.00	5657	327.90	101	372.00	931	442.00	53344
297.00	739	333.00	86	373.00	134	443.00	9817
302.95	688	334.00	1031	382.90	147	443.95	909
303.90	142	335.00	304	402.00	294		
314.00	229	340.90	105	402.95	530		
314.90	524	345.90	486	403.90	93		
315.90	126	351.95	478	420.90	361		

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P2549\
Data File : 2p58390.D
Acq On : 20 Apr 2016 9:38 am
Operator : robertl1
Sample : DFTPP
Misc : op92038,e2p2549
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 20 09:41:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M
Quant Title :
QLast Update : Tue Aug 11 08:57:54 2015
Response via : Initial Calibration





TIC: 2p58390.D\data.ms

(1) Pentacholorphenol

2.128min (-2.128) 0.00ppb

response 0

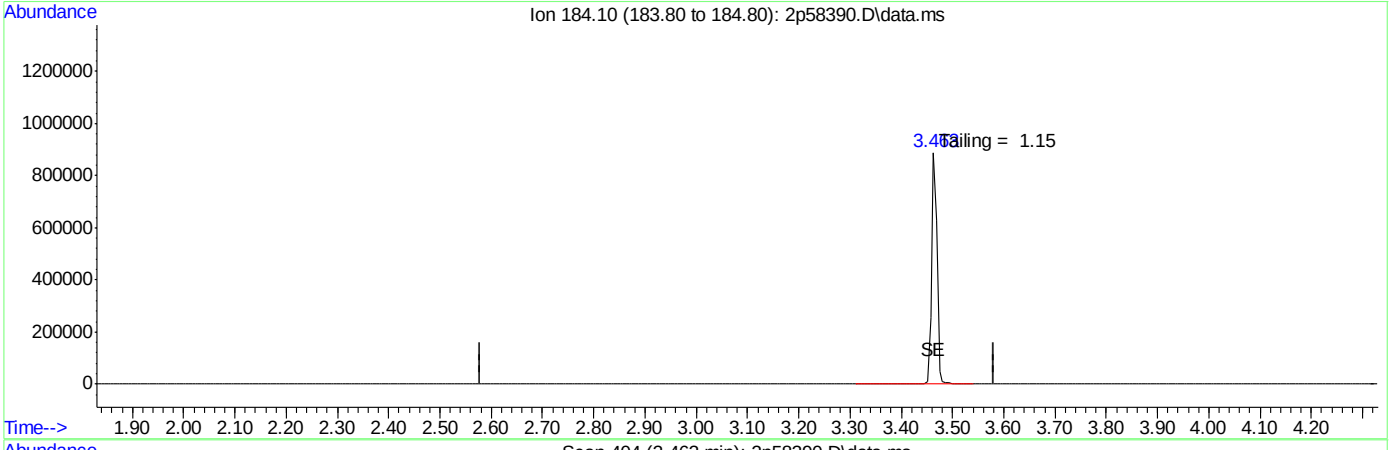
Ion	Exp%	Act%
265.80	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

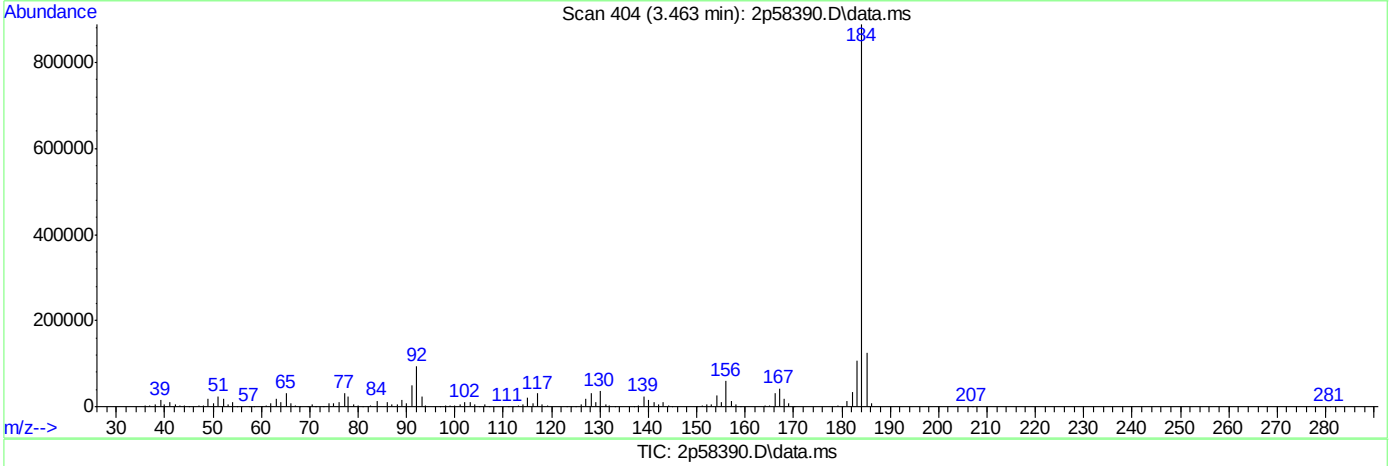
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\2P2549\
Data File : 2p58390.D
Acq On    : 20 Apr 2016   9:38 am
Operator  : robertl1
Sample    : DFTPP
Misc      : op92038,e2p2549
ALS Vial  : 1   Sample Multiplier: 1

Quant Time: Apr 20 09:41:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M
Quant Title  :
QLast Update : Tue Aug 11 08:57:54 2015
Response via : Initial Calibration
```





TIC: 2p58390.D\data.ms

(2) Benzidine

3.081min (-3.081) 0.00ppb

response 0

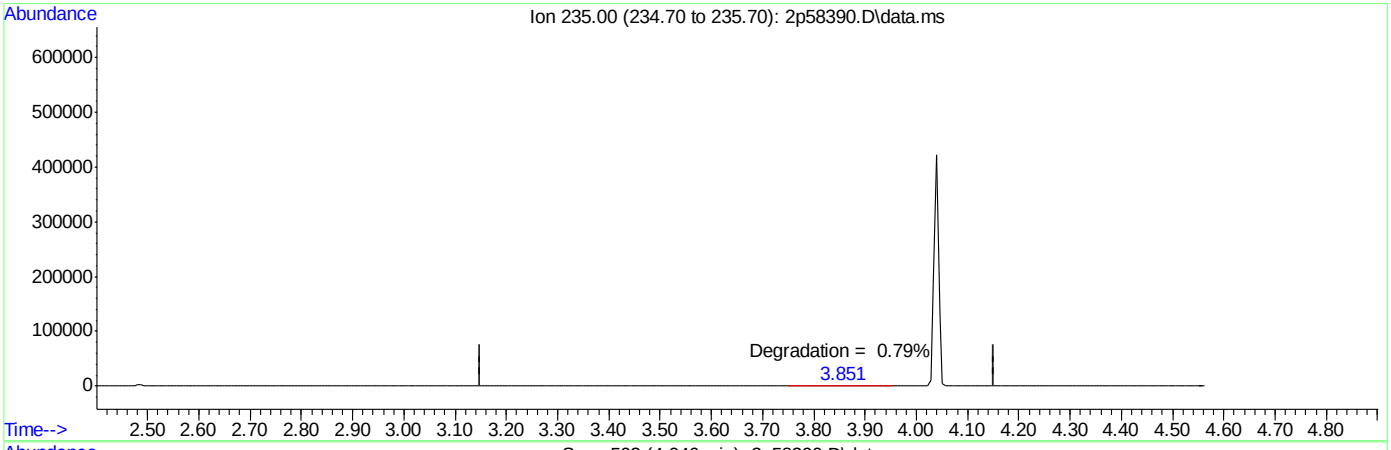
Ion	Exp%	Act%
184.10	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

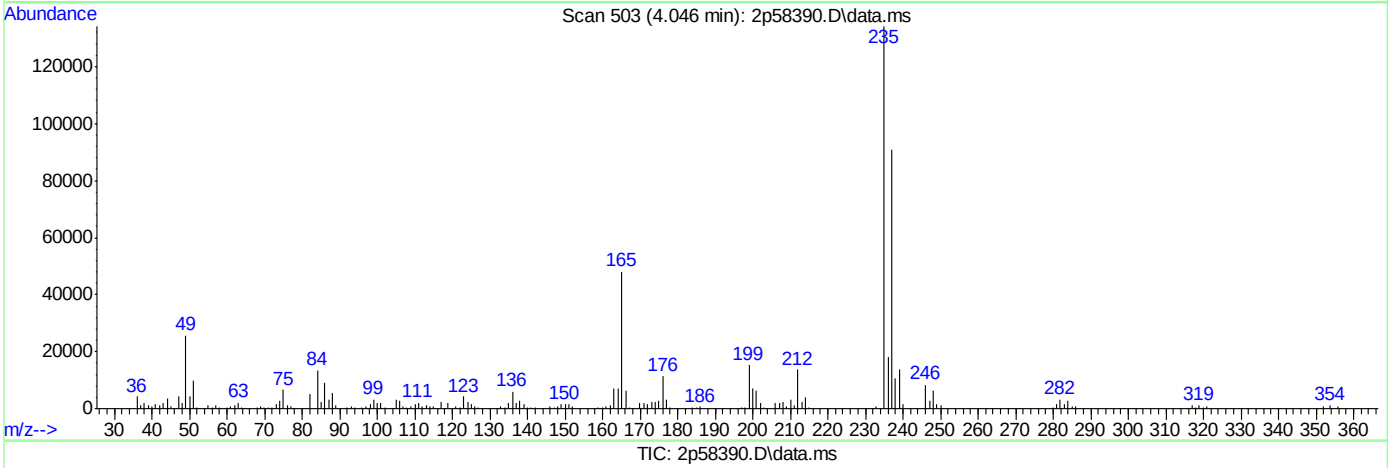
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P2549\
Data File : 2p58390.D
Acq On : 20 Apr 2016 9:38 am
Operator : robertl1
Sample : DFTPP
Misc : op92038,e2p2549
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 20 09:41:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M
Quant Title :
QLast Update : Tue Aug 11 08:57:54 2015
Response via : Initial Calibration





TIC: 2p58390.D\data.ms

(3) PP-DDT

3.651min (-3.651) 0.00ppb

response 0

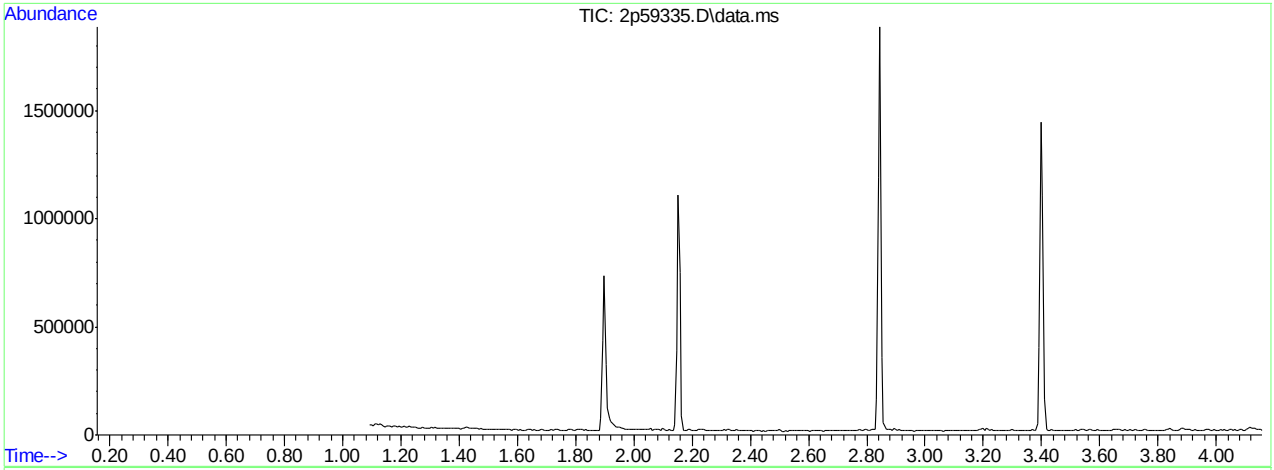
Ion	Exp%	Act%
235.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

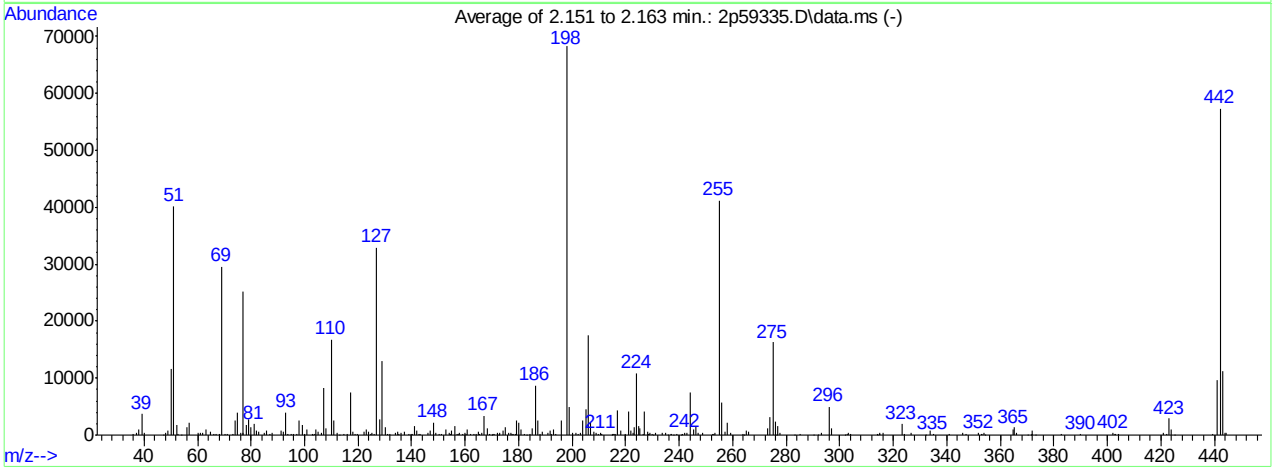
SGS ACCUTEST JC19996

DFTPP

Data File : C:\msdchem\1\DATA\2P2592\2p59335.D Vial: 1
Acq On : 19 May 2016 11:41 am Operator: robertl1
Sample : dftpp Inst : MS2P
Misc : op93859a,e2p2592 Multiplr: 1.00
MS Integration Params: events.e

Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M (ChemStation Integrator)
Title :





AutoFind: Scans 181, 182, 183; Background Corrected with Scan 177

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	59.0	40267	PASS
68	69	0.00	2	0.4	112	PASS
69	198	0.00	100	43.3	29567	PASS
70	69	0.00	2	0.7	204	PASS
127	198	40	60	48.2	32920	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	68251	PASS
199	198	5	9	7.2	4944	PASS
275	198	10	30	23.9	16315	PASS
365	198	1	100	1.9	1328	PASS
441	443	0.01	100	86.5	9668	PASS
442	198	40	100	84.0	57336	PASS
443	442	17	23	19.5	11180	PASS

2p59335.D DFTPP2P.M Thu May 19 11:45:19 2016 RPT1

Average of 2.151 to 2.163 min.: 2p59335.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	299	52.80	130	67.00	247	78.05	1724
36.95	323	53.90	101	68.00	112	78.95	2746
38.05	1044	56.05	1404	69.00	29567	79.95	1323
39.10	3727	57.00	2244	70.10	204	80.95	1900
40.00	324	60.00	324	70.90	129	82.00	792
47.00	20	60.20	96	73.20	161	83.00	560
48.15	408	60.95	455	74.00	2486	84.95	482
49.00	782	61.95	412	75.00	3859	85.90	741
50.10	11689	63.00	1090	76.20	488	87.05	229
51.00	40267	65.00	614	76.80	368	87.85	362
52.05	1795	65.90	115	77.10	25307	91.10	733

Average of 2.151 to 2.163 min.: 2p59335.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
92.00	653	103.10	222	114.70	108	125.90	244
92.95	3972	103.70	263	116.00	232	127.00	32920
93.85	230	104.05	946	117.00	7509	128.05	2782
95.10	196	105.00	528	117.95	507	129.00	13053
96.00	122	106.10	308	118.80	128	130.05	1314
96.90	112	107.00	8255	119.70	118	131.10	274
97.95	2562	108.05	1166	122.00	608	131.85	208
98.95	1815	110.00	16760	122.95	1062	133.95	386
100.10	207	111.05	2550	124.00	664	134.80	533
101.00	913	112.05	378	124.70	146	135.00	284
102.80	87	113.10	105	125.10	331	135.95	465

Average of 2.151 to 2.163 min.: 2p59335.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
137.10	567	148.90	406	159.10	189	168.10	1219
138.85	232	150.10	111	159.85	403	169.00	187
140.00	287	150.90	172	160.20	166	169.90	85
140.30	242	152.95	913	160.95	985	170.20	125
140.95	1616	153.85	404	162.00	179	171.00	108
142.05	749	154.50	114	163.05	267	172.05	308
142.90	216	155.00	852	164.10	122	172.50	102
143.20	166	156.05	1500	164.95	539	173.10	357
146.00	424	157.00	147	165.50	209	174.00	847
146.95	868	157.50	123	166.05	385	175.05	1454
148.00	2204	158.00	396	167.00	3444	176.05	355

Average of 2.151 to 2.163 min.: 2p59335.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
177.00	496	186.10	8724	199.00	4944	209.90	266
177.60	163	187.00	2519	200.00	359	210.70	359
178.00	243	188.00	236	201.30	486	210.90	291
178.70	123	188.90	686	202.10	148	214.70	103
179.05	2598	191.05	388	203.00	481	215.00	182
180.05	2099	191.95	706	204.05	2516	215.30	112
181.05	1081	192.30	148	205.05	4549	215.70	141
182.00	115	193.00	939	206.00	17442	215.90	239
182.90	104	194.00	252	207.00	2086	217.00	4262
184.10	163	196.05	2474	208.05	607	218.05	715
185.05	1103	198.00	68251	208.90	331	219.90	179

Average of 2.151 to 2.163 min.: 2p59335.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
221.05	4057	228.80	275	238.90	196	253.00	237
221.75	840	229.10	413	240.70	106	253.50	310
222.80	488	229.80	134	241.00	179	255.00	41186
223.15	1312	230.20	87	242.10	465	256.05	5728

224.05	10836	231.05	468	243.00	346	256.95	587
224.90	1652	233.80	403	244.00	7517	258.00	2147
225.10	1264	235.10	343	245.20	974	259.05	471
226.70	123	235.80	86	246.05	1602	263.95	298
227.00	4118	236.80	165	247.00	344	264.30	101
228.00	616	237.00	139	248.90	392	265.00	713
228.60	236	238.00	86	252.35	194	266.00	672

Average of 2.151 to 2.163 min.: 2p59335.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
273.10	1279	293.05	335	316.05	410	352.90	153
274.05	3190	296.00	4951	323.10	1918	353.10	260
275.05	16315	297.00	1099	324.30	110	354.00	448
276.05	2285	302.00	84	326.85	407	354.30	97
276.40	88	302.80	171	332.30	84	364.80	921
277.00	1497	303.00	418	333.90	878	365.00	1328
277.75	314	304.00	136	334.90	152	365.85	465
283.00	85	313.90	203	341.10	113	370.20	83
285.00	142	314.10	97	345.85	311	371.30	101
290.10	103	314.85	458	347.20	187	371.90	857
292.00	99	315.10	131	351.95	387	372.10	144

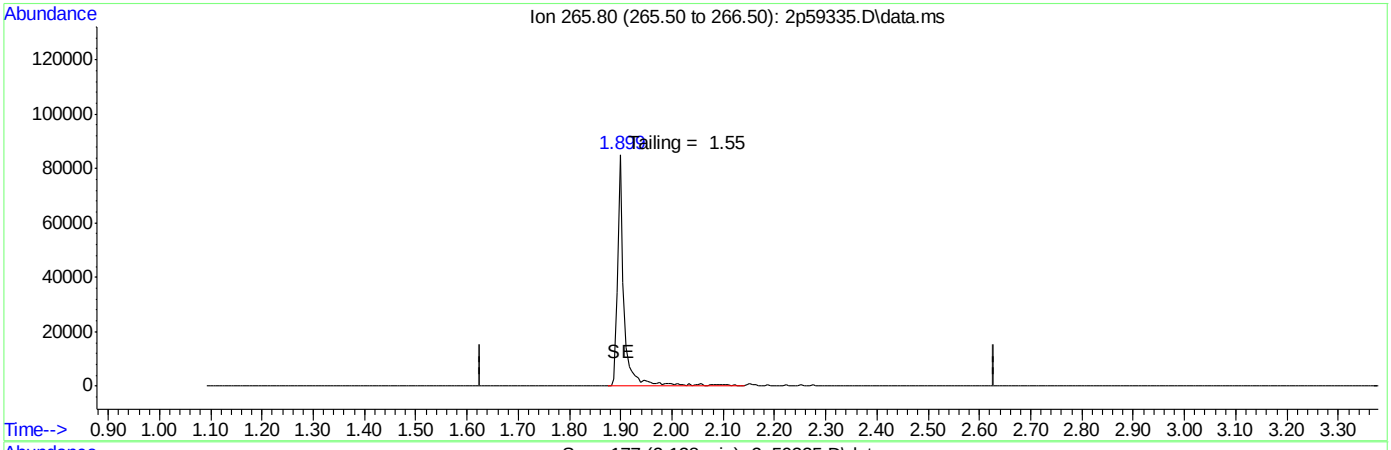
Average of 2.151 to 2.163 min.: 2p59335.D\data.ms
dftpp
Modified:subtracted

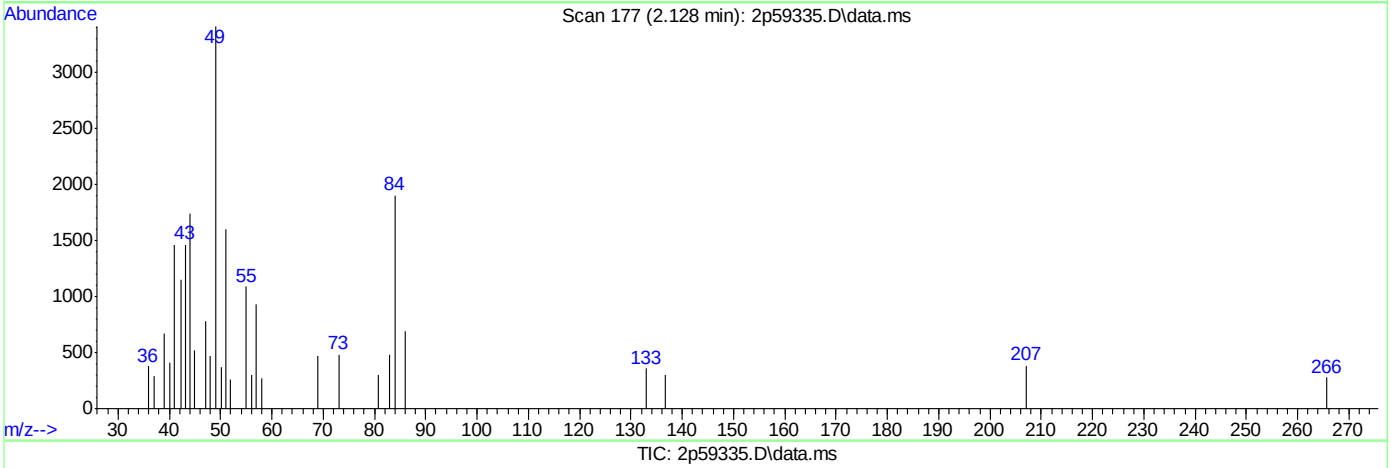
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
373.10	93	425.00	102				
383.00	160	439.50	116				
390.05	179	441.10	9668				
402.15	341	442.10	57336				
402.90	192	443.05	11180				
403.10	271	444.00	324				
404.00	138	444.20	478				
421.00	488						
422.05	186						
423.10	2929						
424.05	938						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P2592\
Data File : 2p59335.D
Acq On : 19 May 2016 11:41 am
Operator : robertl1
Sample : dftpp
Misc : op93859a,e2p2592
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 19 11:44:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M
Quant Title :
QLast Update : Tue Aug 11 08:57:54 2015
Response via : Initial Calibration





TIC: 2p59335.D\data.ms

(1) Pentacholorphenol

2.128min (-2.128) 0.00ppb

response 0

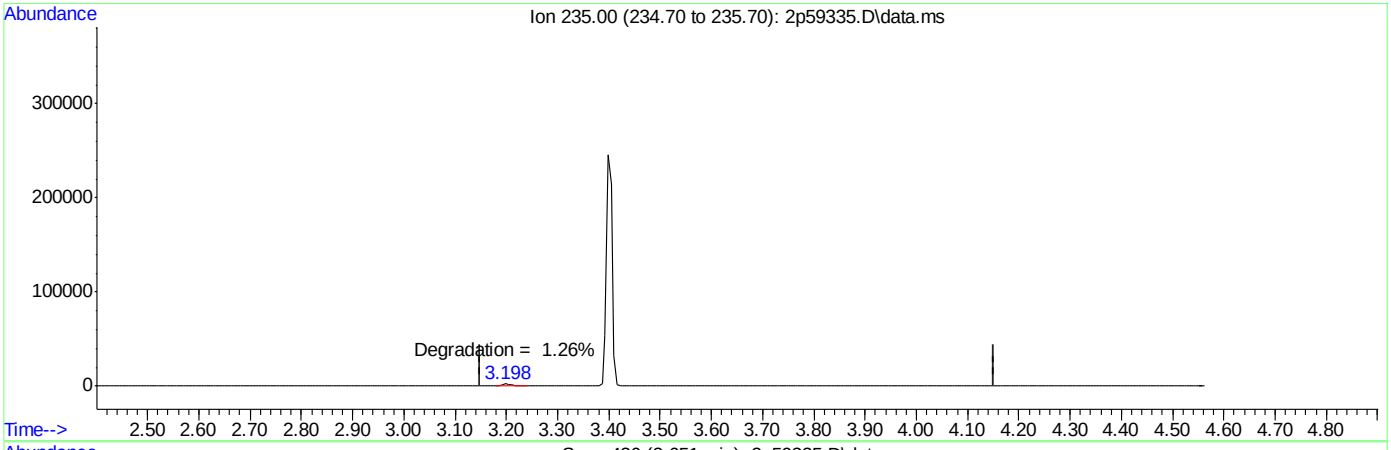
Ion	Exp%	Act%
265.80	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

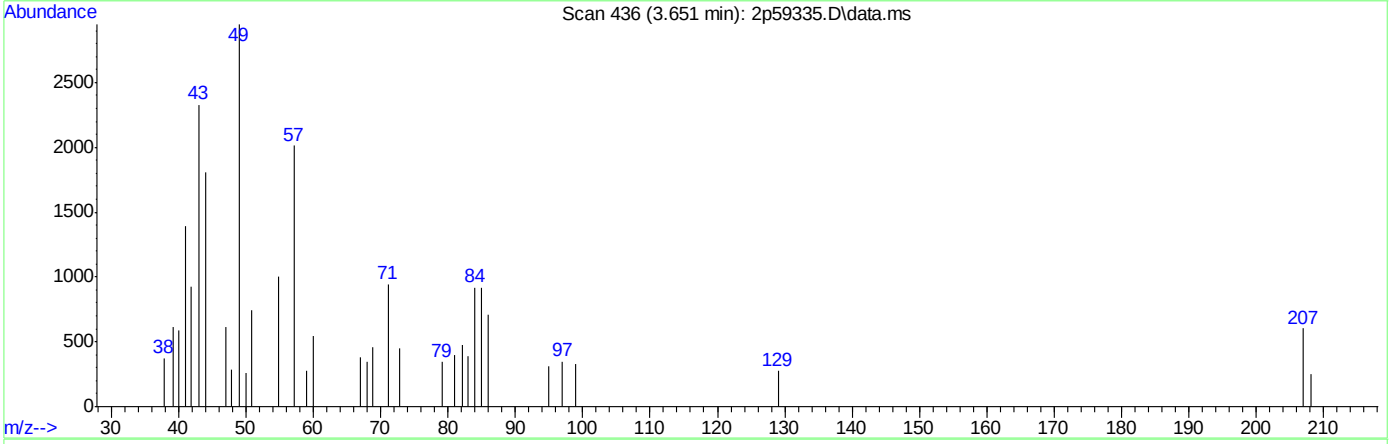
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P2592\
Data File : 2p59335.D
Acq On : 19 May 2016 11:41 am
Operator : robertl1
Sample : dftpp
Misc : op93859a,e2p2592
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 19 11:44:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M
Quant Title :
QLast Update : Tue Aug 11 08:57:54 2015
Response via : Initial Calibration





TIC: 2p59335.D\data.ms

(3) PP-DDT

3.651min (-3.651) 0.00ppb

response 0

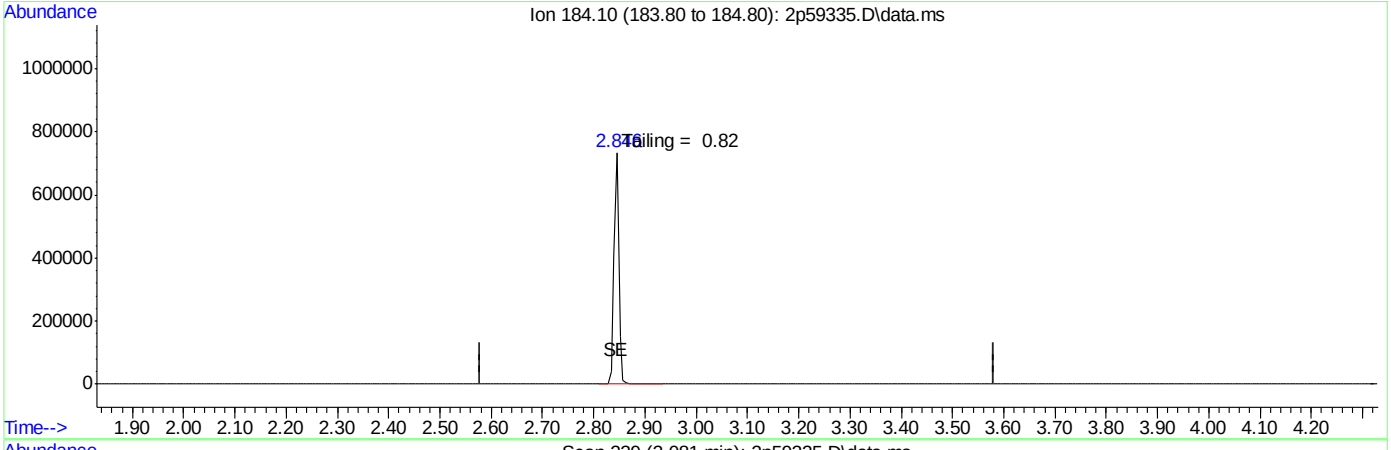
Ion	Exp%	Act%
235.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

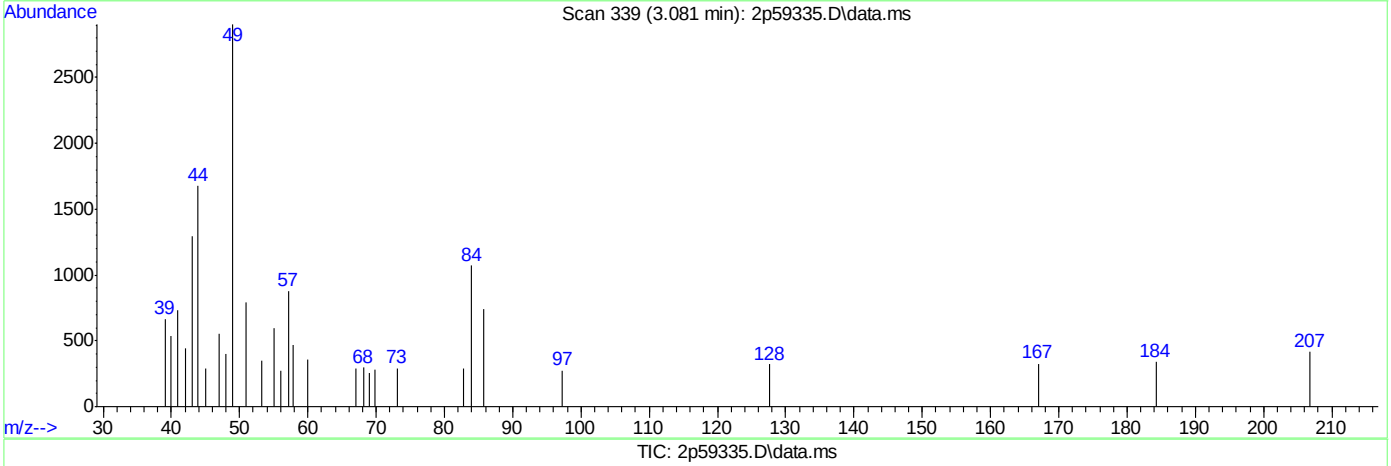
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P2592\
Data File : 2p59335.D
Acq On : 19 May 2016 11:41 am
Operator : robertl1
Sample : dftpp
Misc : op93859a,e2p2592
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 19 11:44:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M
Quant Title :
QLast Update : Tue Aug 11 08:57:54 2015
Response via : Initial Calibration





TIC: 2p59335.D\data.ms

(2) Benzidine

3.081min (-3.081) 0.00ppb

response 0

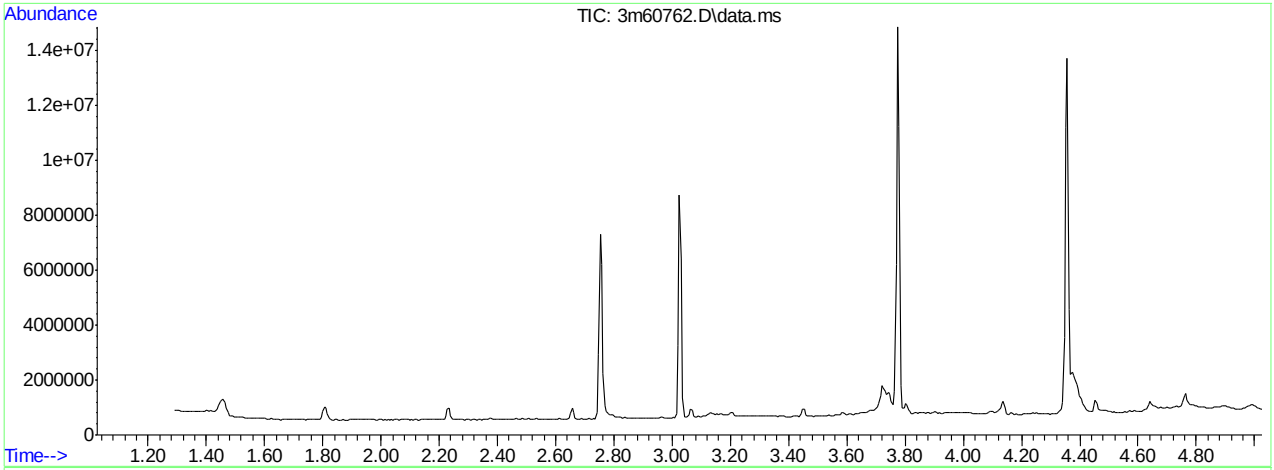
Ion	Exp%	Act%
184.10	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

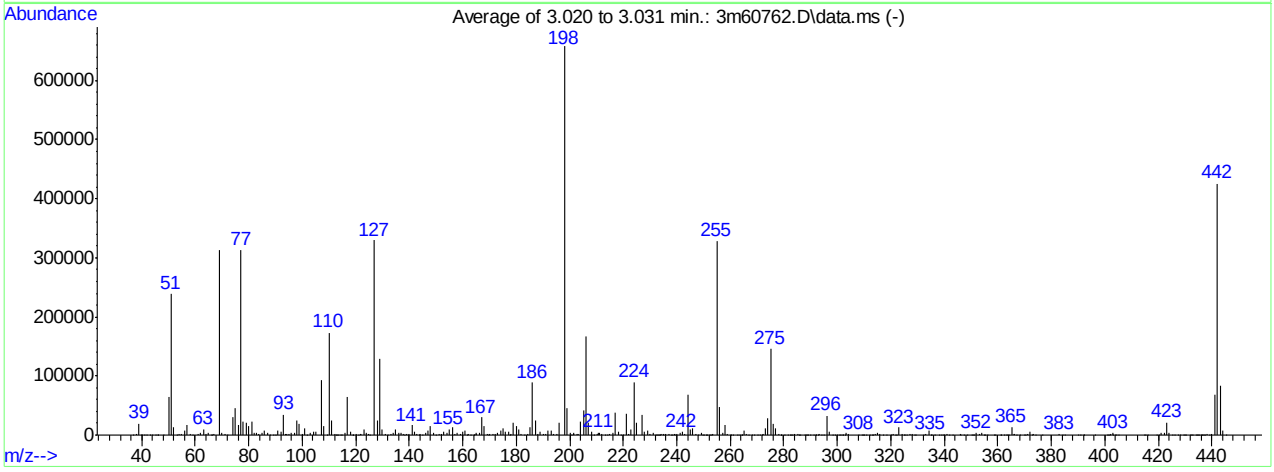
SGS ACCUTEST JC19996

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

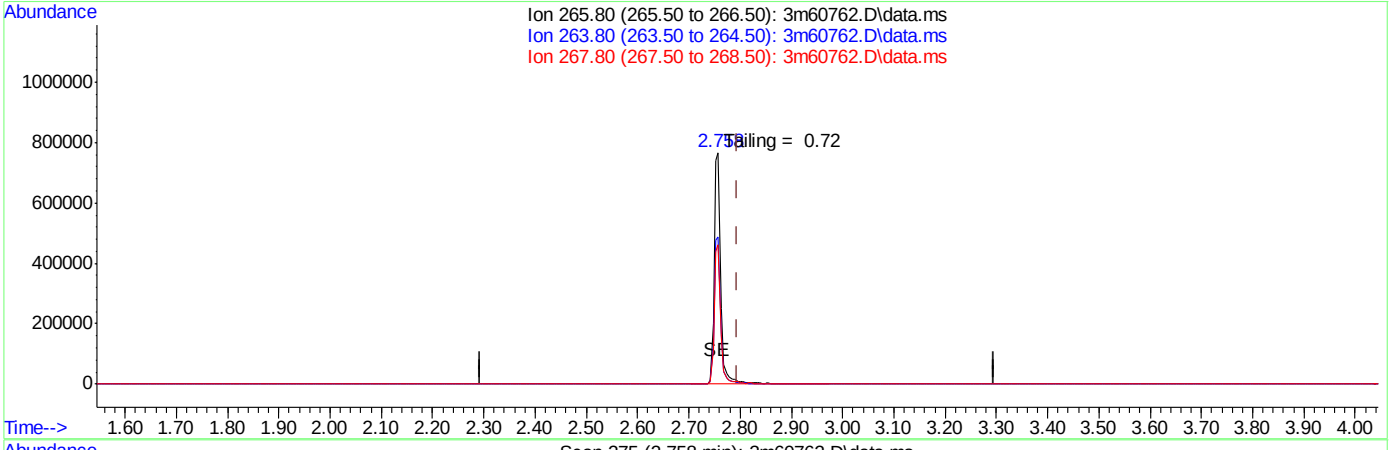
dftpp
Modified:subtracted

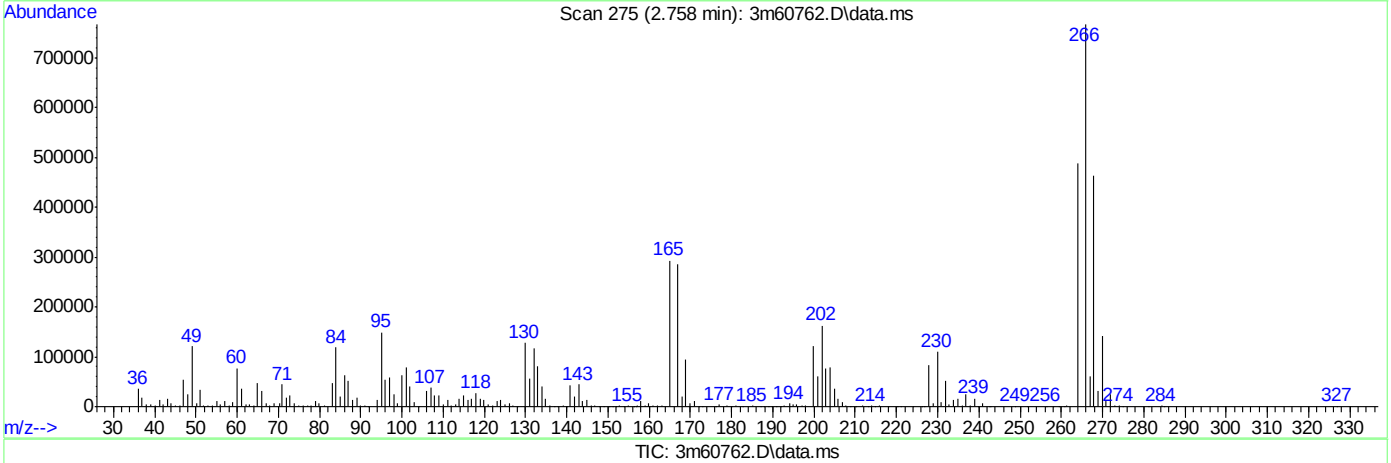
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
423.10	21736	432.90	494	438.80	912		
424.10	4461	433.85	400	439.90	2031		
425.00	512	434.50	189	441.10	68134		
426.10	183	434.80	226	442.10	425304		
427.20	203	435.40	731	443.10	83298		
428.30	259	435.90	455	444.10	7637		
429.50	82	436.25	476	445.10	306		
429.70	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

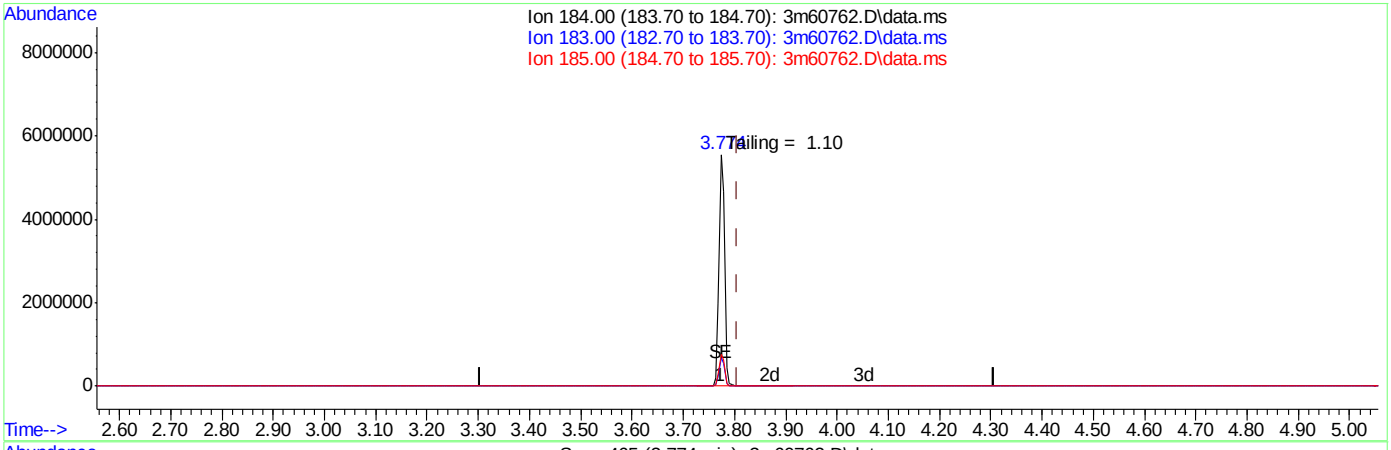
Ion	Exp%	Act%
265.80	100	100
263.80	62.80	63.64
267.80	64.10	60.34
0.00	0.00	0.00

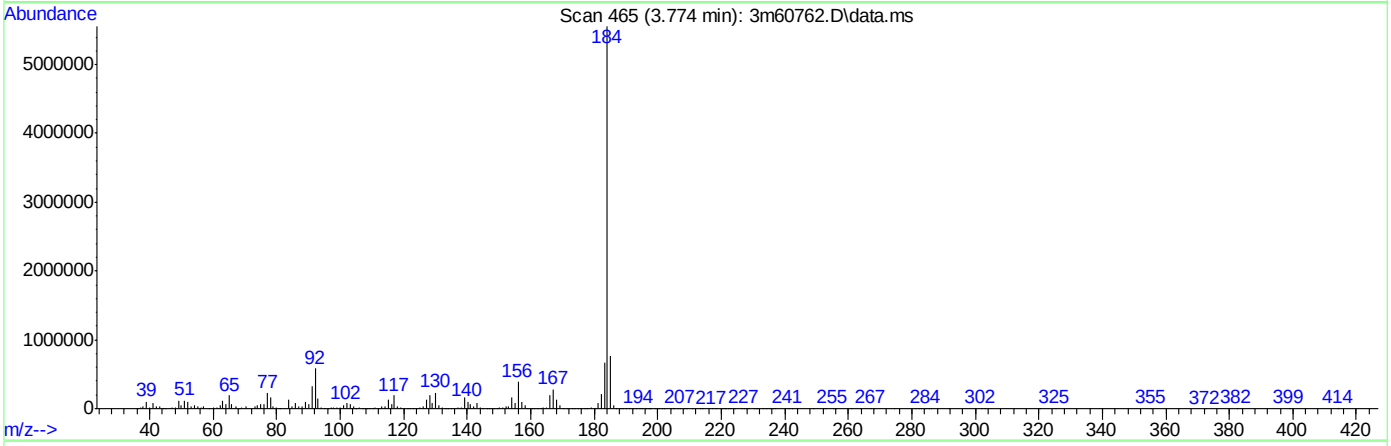
SGS ACCUTEST JC19996

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

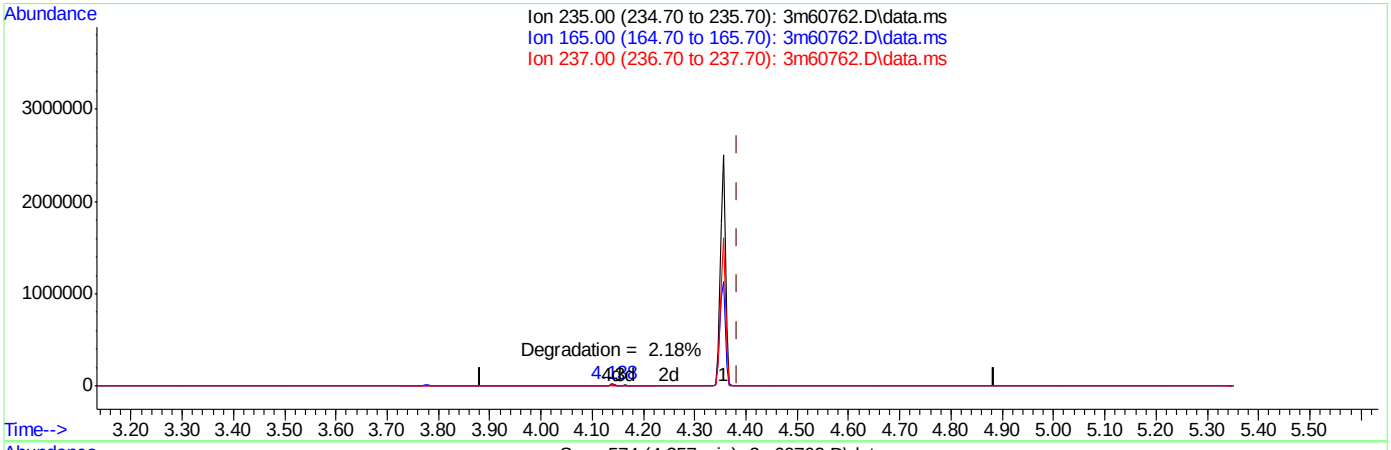
response 4170192

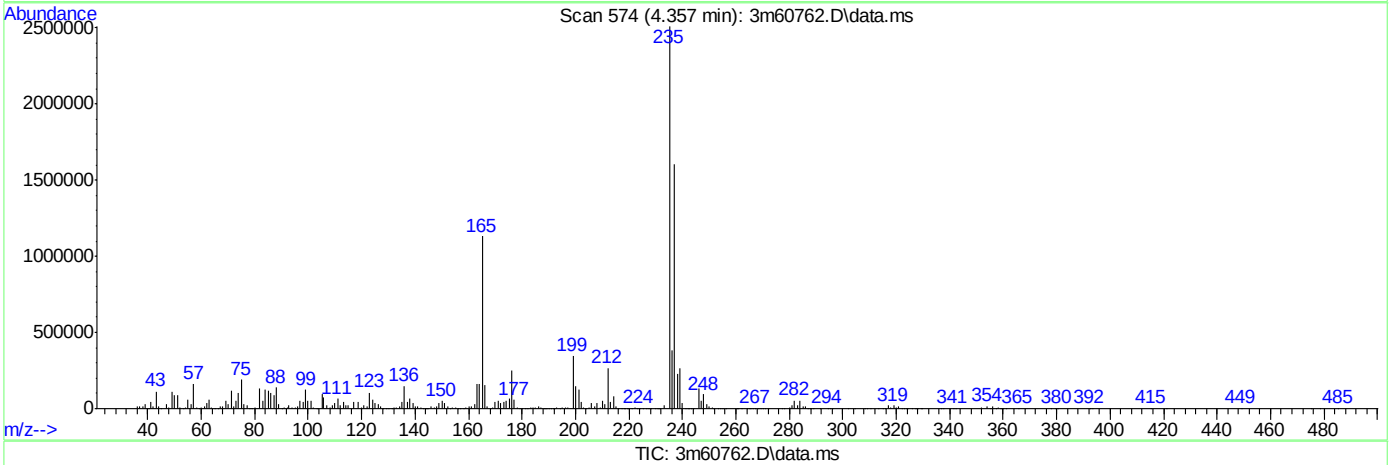
Ion	Exp%	Act%
184.00	100	100
183.00	11.50	12.07
185.00	14.40	13.67
0.00	0.00	0.00

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

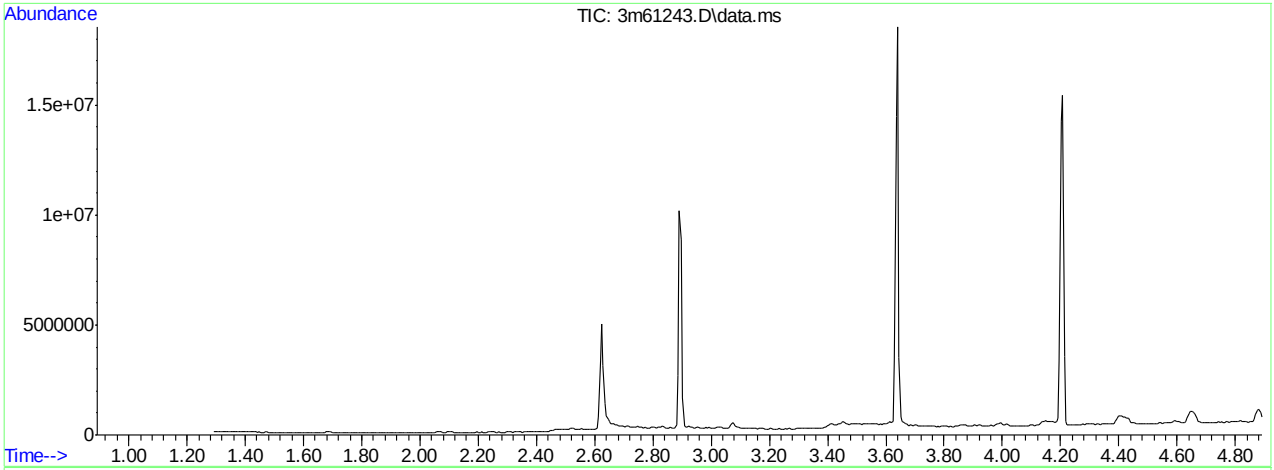
Ion	Exp%	Act%
235.00	100	100
165.00	0.00	48.45#
237.00	0.00	63.48#
0.00	0.00	0.00

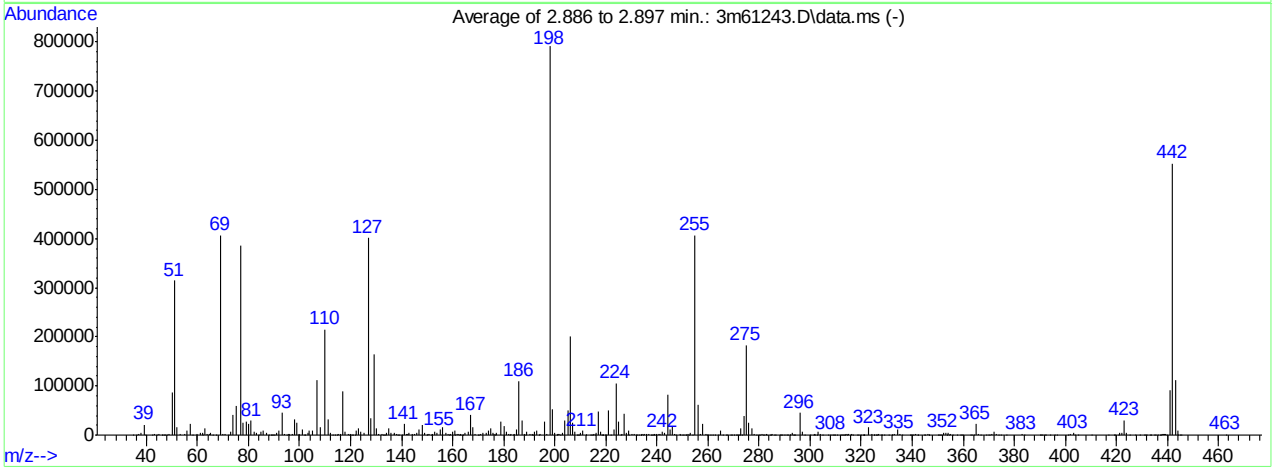
SGS ACCUTEST JC19996

DFTPP

Data File : C:\msdchem\1\DATA\E3M2880\3m61243.D Vial: 1
Acq On : 11 May 2016 11:22 pm Operator: juliusj
Sample : dftpp Inst : MS3M
Misc : op93756a,e3m2880 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 299, 300, 301; 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	39.8	314942	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	51.4	406395	PASS
70	69	0.00	2	0.7	2682	PASS
127	198	40	60	50.7	400878	PASS
197	198	0.00	1	0.2	1251	PASS
198	198	100	100	100.0	791162	PASS
199	198	5	9	6.5	51512	PASS
275	198	10	30	23.1	182595	PASS
365	198	1	100	2.8	22518	PASS
441	443	0.10	100	82.6	92468	PASS
442	198	40	100	69.9	553341	PASS
443	442	17	23	20.2	111970	PASS

3m61243.D DFTPP3M.M Thu May 12 09:14:42 2016 RPT1

Average of 2.886 to 2.897 min.: 3m61243.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.00	690	46.30	102	57.05	22286	67.20	1054
35.90	186	46.90	117	58.05	449	69.00	406395
36.95	1362	47.20	1112	60.00	2029	70.00	2682
38.05	5470	47.80	302	61.00	4523	70.90	2235
39.00	20913	49.00	3488	61.80	636	72.10	463
39.80	625	50.00	87132	62.00	3914	73.05	7690
42.10	1	51.00	314942	63.05	12842	74.00	41555
43.05	2297	52.05	15995	63.95	1646	75.00	59681
44.00	579	53.05	1249	64.80	1411	76.95	386124
45.05	2254	55.00	1555	65.05	5635	78.00	25228
46.00	258	56.00	9267	66.15	569	79.00	27084

Average of 2.886 to 2.897 min.: 3m61243.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
79.90	22658	89.90	244	98.00	32918	108.00	15662
80.95	28921	90.20	280	98.95	25684	109.95	215369
82.05	7189	91.00	5522	99.80	230	111.00	33165
83.10	4493	92.05	8651	99.95	1930	112.00	4248
84.00	317	93.00	45469	100.90	11794	113.10	645
85.00	7087	94.05	2869	101.90	763	114.05	888
85.95	8493	94.80	767	102.20	174	114.70	821
86.95	4109	95.80	583	103.10	5080	115.20	2175
87.95	1008	95.90	1851	103.95	9535	116.10	3161
88.95	727	96.05	2689	105.05	10046	116.95	89296
89.15	195	97.00	3069	107.00	111685	118.00	6638

Average of 2.886 to 2.897 min.: 3m61243.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
119.05	1850	128.00	35226	136.90	4385	144.90	1880
119.75	640	129.00	163831	137.05	1627	146.00	3984
120.00	1531	130.00	14415	138.05	1314	146.95	11222
120.25	137	131.05	2197	138.60	533	147.95	20533
121.05	797	132.10	2144	139.05	423	148.95	4107
121.60	408	132.75	49	140.00	768	149.90	385
122.00	9138	133.00	141	140.95	21879	150.15	1394
123.00	13241	133.70	369	142.00	2606	150.90	2786
124.05	6309	133.95	4410	142.20	3199	151.60	365
125.05	4630	135.00	12738	142.90	3780	151.90	1688
127.00	400878	135.90	4179	144.00	2061	153.05	6279

Average of 2.886 to 2.897 min.: 3m61243.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
153.90	4823	162.15	1583	169.85	1004	177.05	5145
155.00	11064	162.70	308	170.10	876	178.95	27298
156.05	16587	162.90	1338	170.90	1377	180.10	19426
157.20	3651	163.20	528	171.95	3773	181.05	7315
158.00	3130	163.90	565	172.95	3920	181.95	1725
158.80	1054	164.10	609	174.05	9096	182.35	151
159.15	1798	164.90	5108	175.00	14354	182.90	1692
159.95	5989	165.95	7318	175.95	5210	183.80	271
160.80	428	167.00	40732	176.40	1975	184.05	2623
161.05	8384	167.95	17044	176.80	823	184.80	1207
161.70	2265	168.75	1865	176.90	2790	185.10	11634

Average of 2.886 to 2.897 min.: 3m61243.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
186.00	110546	193.70	333	202.30	312	210.15	4119
187.00	29315	194.10	1416	202.95	3868	210.90	8871
188.00	1739	196.00	27603	203.20	2536	212.10	474
188.70	566	196.90	1251	204.05	28800	212.40	505

189.00	5923	198.00	791162	205.00	51067	213.90	438
190.05	2156	198.90	51512	206.10	201323	214.40	249
191.00	992	199.95	3860	207.05	25473	214.90	424
191.20	1745	200.60	65	208.00	6074	215.10	2430
191.70	962	201.20	1714	208.90	243	215.90	683
191.90	6841	201.40	2232	209.05	652	216.10	4490
193.00	8955	201.70	3178	209.75	1	217.00	48583

Average of 2.886 to 2.897 min.: 3m61243.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
217.95	6010	225.90	662	233.70	564	239.20	751
218.20	378	226.10	1822	233.90	1117	240.10	1964
218.80	454	227.00	42592	234.15	1220	240.80	1849
219.00	231	228.00	5619	234.80	280	241.10	2549
219.60	275	228.80	805	235.00	2705	242.10	6398
220.00	165	229.00	8761	235.90	2427	243.00	4180
221.10	51313	230.15	1371	237.00	3246	244.10	81528
222.00	1028	230.95	3281	237.80	87	245.10	10861
223.10	12126	231.80	265	238.00	388	246.00	17552
224.00	105344	232.00	684	238.40	424	246.95	3464
225.05	26954	232.90	873	238.95	1749	247.50	255

Average of 2.886 to 2.897 min.: 3m61243.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
248.90	167	256.00	62252	265.90	145	273.20	790
249.05	2748	257.10	2450	267.20	612	274.00	38587
250.05	1003	258.00	22809	267.50	389	275.00	182595
250.60	301	259.10	3484	268.90	310	276.05	24840
251.10	191	259.80	201	269.40	188	277.00	14495
251.40	361	260.10	760	270.20	372	278.00	3110
252.00	1235	260.90	763	270.90	1030	278.95	1200
252.40	440	261.80	309	271.35	381	279.70	115
253.25	4113	262.90	162	271.90	852	280.30	325
253.90	899	263.90	869	272.20	1043	281.20	1362
255.00	406736	265.05	10197	273.00	13056	281.80	128

Average of 2.886 to 2.897 min.: 3m61243.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
282.15	698	289.90	563	297.85	1149	309.00	233
282.80	112	290.85	471	300.25	526	309.20	316
283.00	2314	291.10	124	301.40	495	309.90	1002
284.05	1004	292.00	716	301.70	274	310.70	95
284.60	272	292.20	466	301.95	1299	312.05	428
285.10	2992	293.00	3672	302.70	175	312.45	372
285.80	377	293.60	387	303.05	5930	312.90	183
286.40	210	293.80	854	303.95	1828	313.40	488
288.05	434	294.10	443	305.00	142	313.70	654
288.80	302	296.00	45425	307.05	182	314.10	1791
289.10	635	297.00	7585	308.05	1081	314.70	475

Average of 2.886 to 2.897 min.: 3m61243.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
314.90	2496	323.05	15317	330.80	473	341.15	1980
315.10	2791	324.05	2881	331.90	603	342.00	899
315.80	119	324.90	257	332.10	552	342.40	111
316.10	3402	325.30	347	333.05	1813	344.80	108
316.95	993	325.80	73	334.10	10572	345.05	212
318.30	276	326.10	155	335.10	2946	346.05	3401
318.80	89	326.50	627	336.00	379	346.40	136
319.90	106	327.00	2683	339.10	581	346.80	437
320.50	189	327.90	116	339.70	118	350.20	295
321.00	605	328.10	1106	340.20	199	350.50	150
321.20	798	329.15	457	340.60	291	351.10	310

Average of 2.886 to 2.897 min.: 3m61243.D\data.ms

dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
351.60	110	359.90	106	372.05	7489	392.10	584
352.10	4668	363.00	179	373.10	2220	393.90	134
353.10	4167	363.50	428	373.90	126	395.90	90
353.80	239	364.00	695	374.85	168	396.80	154
354.15	4354	365.00	22518	377.05	154	401.10	581
354.50	186	366.00	3482	383.05	2217	402.10	3410
355.05	1789	366.70	154	384.15	674	403.10	4307
355.80	289	369.20	75	390.05	1081	403.90	1196
357.40	90	370.00	596	390.70	110	405.00	340
358.75	427	370.30	84	391.15	1011	410.20	80
359.20	572	371.05	1612	391.70	275	416.90	108

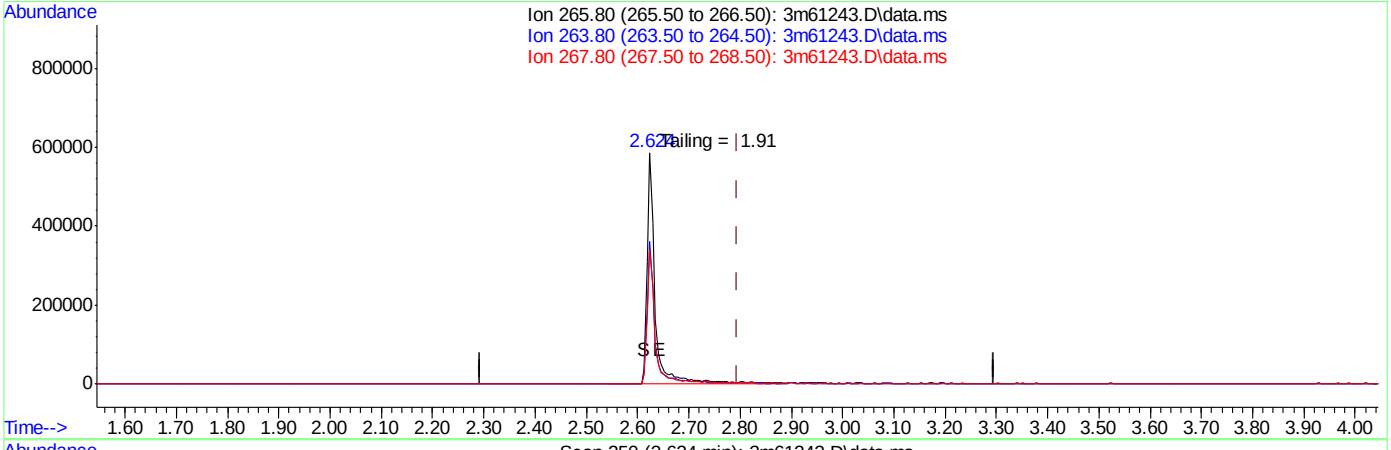
Average of 2.886 to 2.897 min.: 3m61243.D\data.ms
dftpp
Modified:subtracted

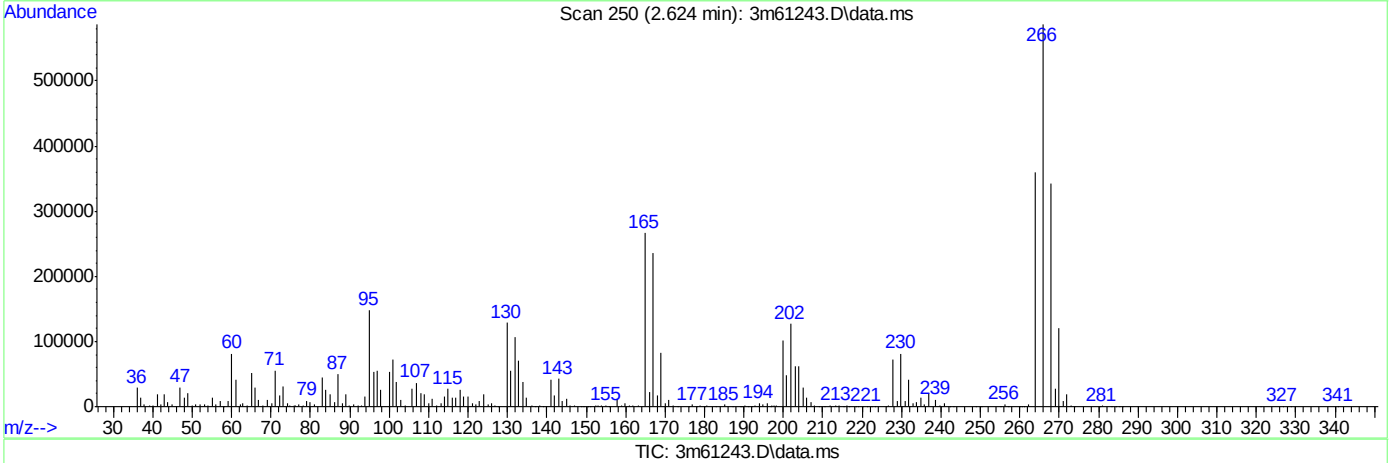
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
419.20	111	431.30	228	438.70	1439		
419.55	269	431.90	548	439.10	1434		
420.80	153	432.95	507	439.70	343		
421.05	3734	433.60	430	441.10	92468		
422.05	3759	434.75	646	442.10	553341		
423.05	30704	435.40	392	443.10	111970		
424.05	5753	436.00	707	443.90	261		
425.05	906	437.00	366	444.10	9436		
427.30	229	437.45	562	445.00	401		
429.30	314	437.90	1314	445.40	497		
430.80	478	438.35	1760	462.80	100		

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\E3M2880\
Data File : 3m61243.D
Acq On    : 11 May 2016  11:22 pm
Operator  : juliusj
Sample    : dftpp
Misc      : op93756a,e3m2880
ALS Vial  : 1   Sample Multiplier: 1

Quant Time: May 11 23:26:48 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)

2.624min (-0.171) 163.90ppb

response 604519

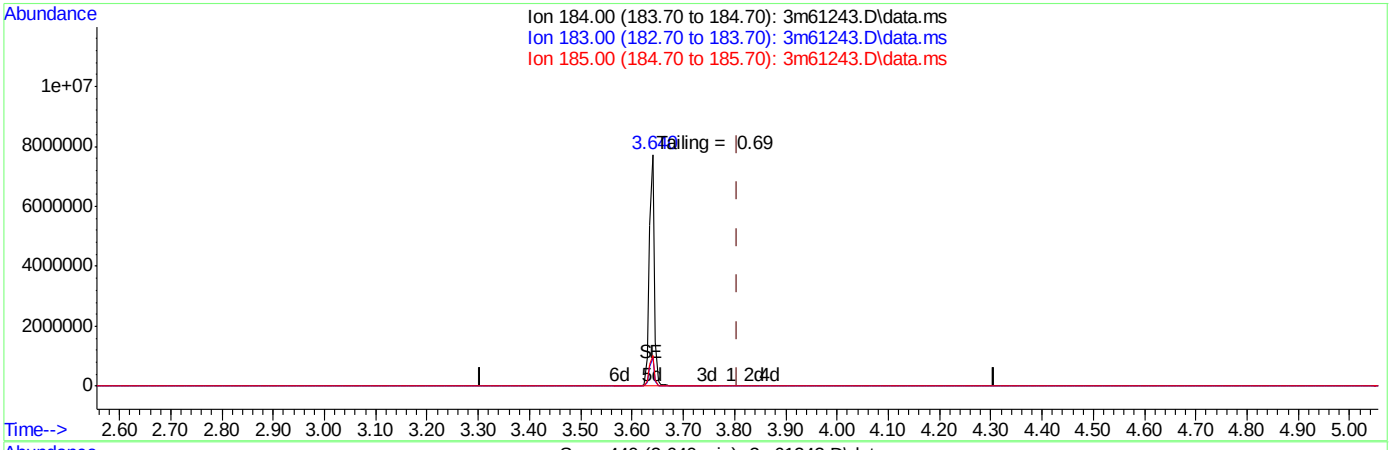
Ion	Exp%	Act%
265.80	100	100
263.80	62.80	61.32
267.80	64.10	58.27
0.00	0.00	0.00

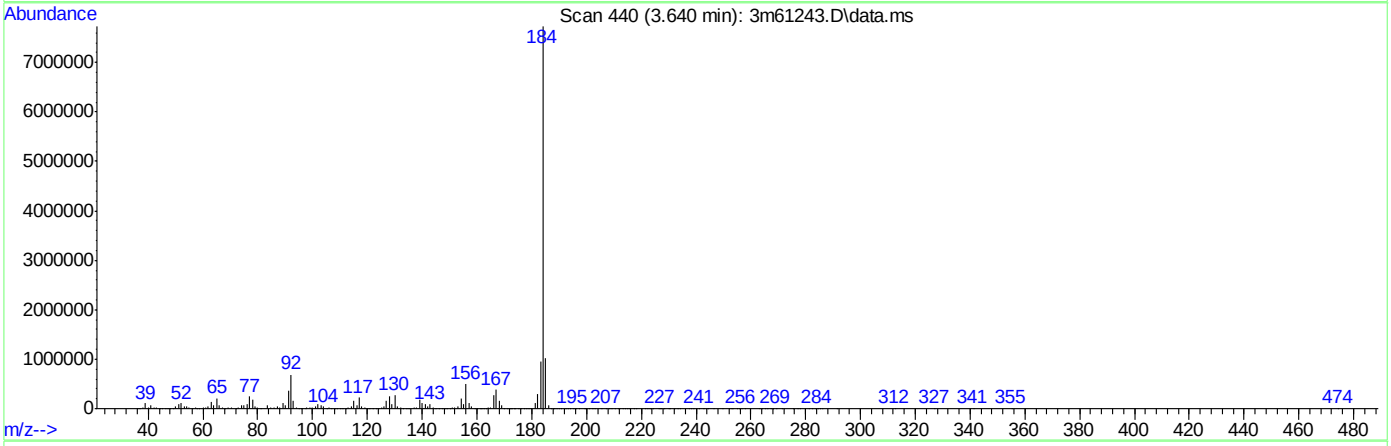
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2880\
Data File : 3m61243.D
Acq On : 11 May 2016 11:22 pm
Operator : juliusj
Sample : dftpp
Misc : op93756a,e3m2880
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 11 23:26:48 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: 3m61243.D\data.ms

(2) Benzidine (t)

3.640min (-0.166) 282.91ppb m

response 5148224

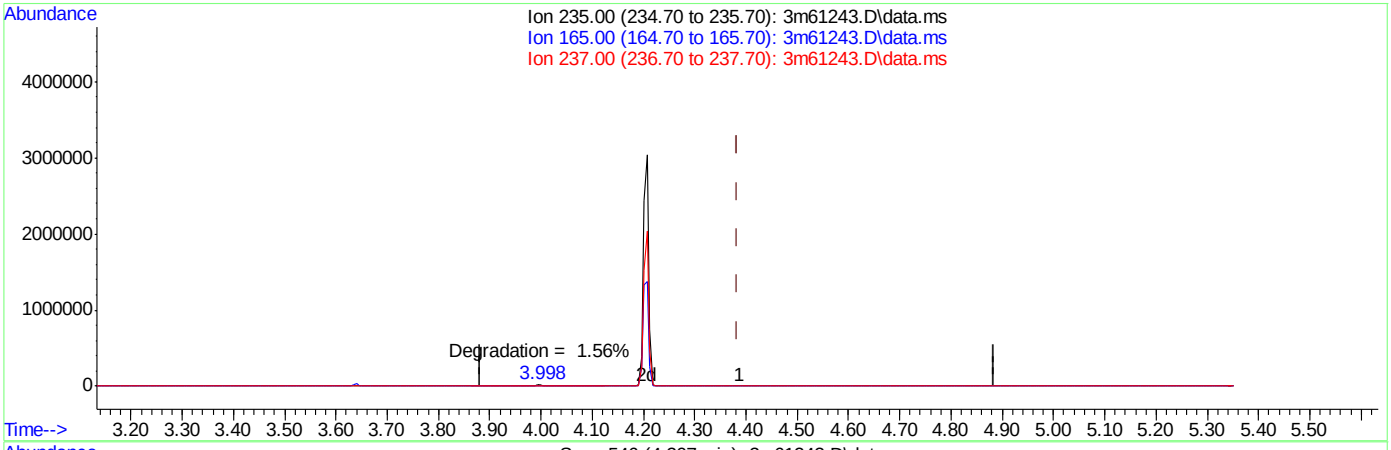
Ion	Exp%	Act%
184.00	100	100
183.00	11.50	12.30
185.00	14.40	13.19
0.00	0.00	0.00

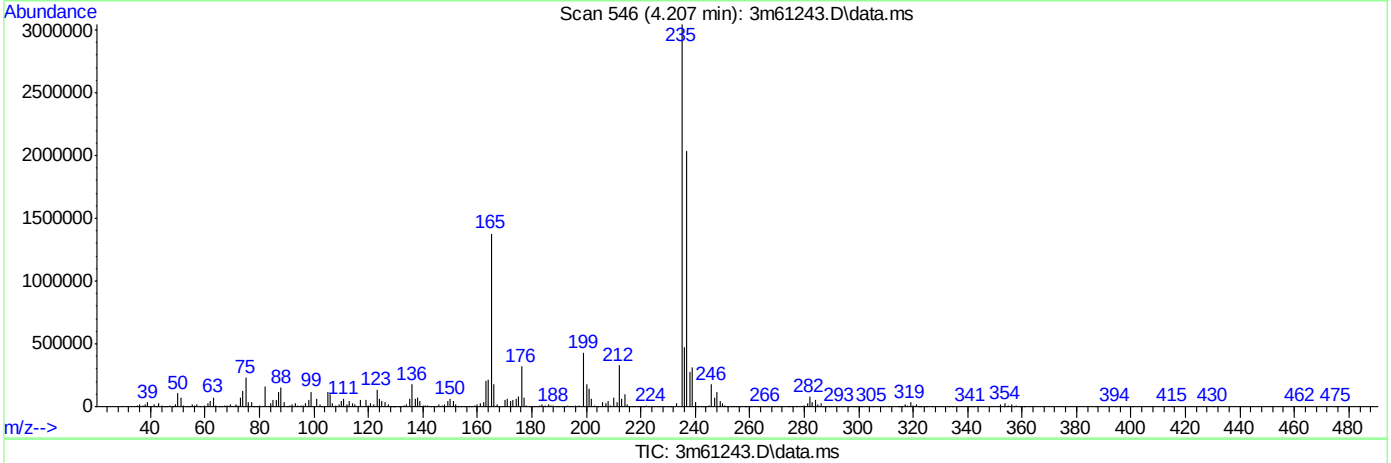
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2880\
Data File : 3m61243.D
Acq On : 11 May 2016 11:22 pm
Operator : juliusj
Sample : dftpp
Misc : op93756a,e3m2880
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 11 23:26:48 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: 3m61243.D\data.ms

(3) PP-DDT (t)

4.207min (-0.176) 287.65ppb m

response 2142618

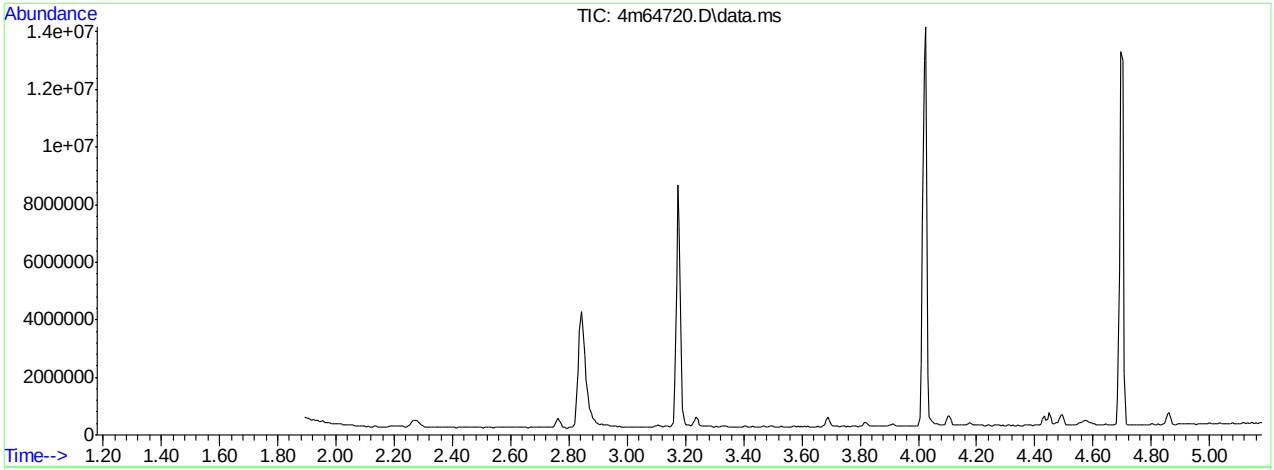
Ion	Exp%	Act%
235.00	100	100
165.00	0.00	0.20#
237.00	0.00	0.00
0.00	0.00	0.00

SGS ACCUTEST JC19996

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

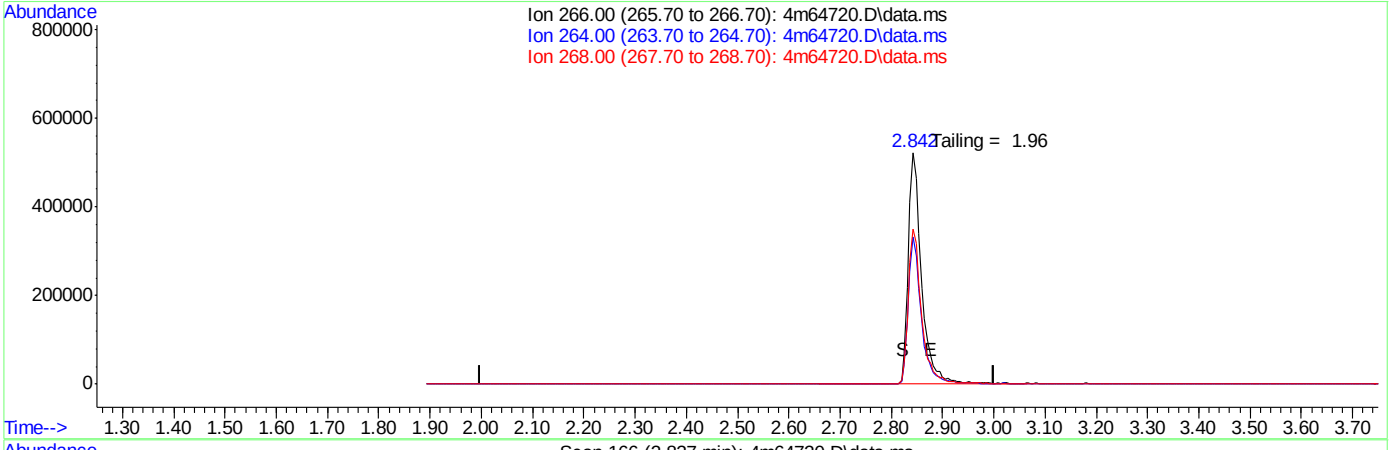
dftpp
Modified:subtracted

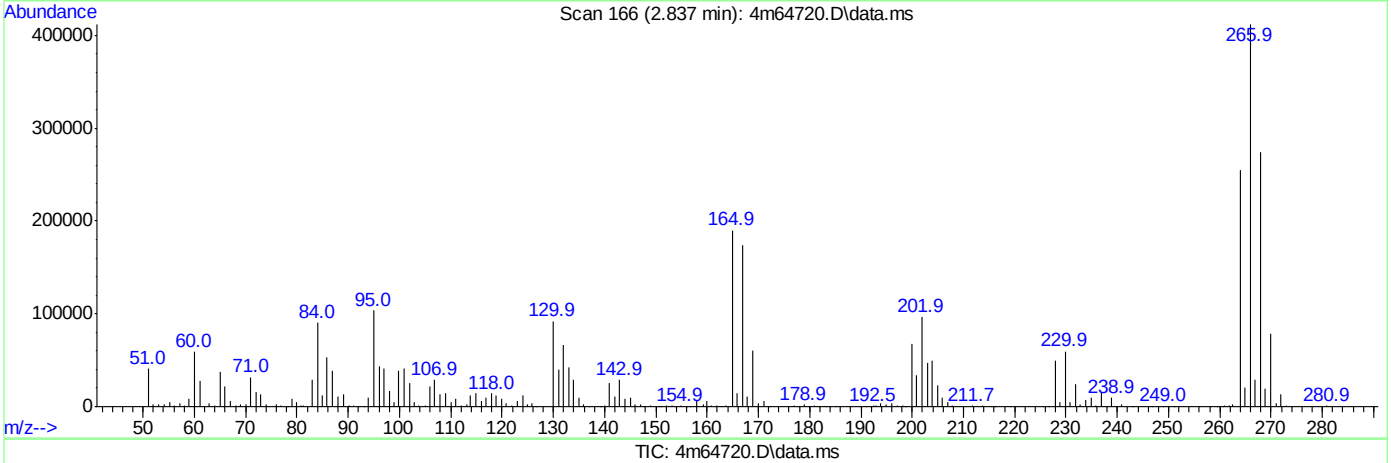
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
434.90	128	459.15	493				
435.30	158	503.00	77				
435.95	261	504.00	208				
436.40	88	535.90	70				
438.00	91						
439.15	323						
441.10	100995						
442.10	687531						
443.10	130315						
444.10	11143						
445.10	553						

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

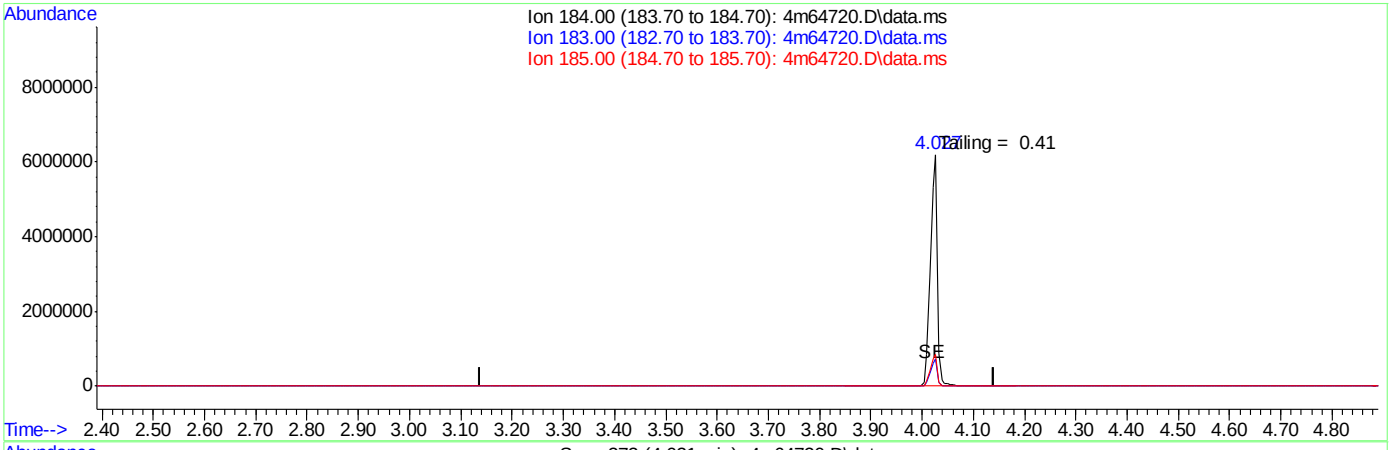
Ion	Exp%	Act%
266.00	100	0.00
264.00	58.00	0.00#
268.00	62.00	0.00#
0.00	0.00	0.00

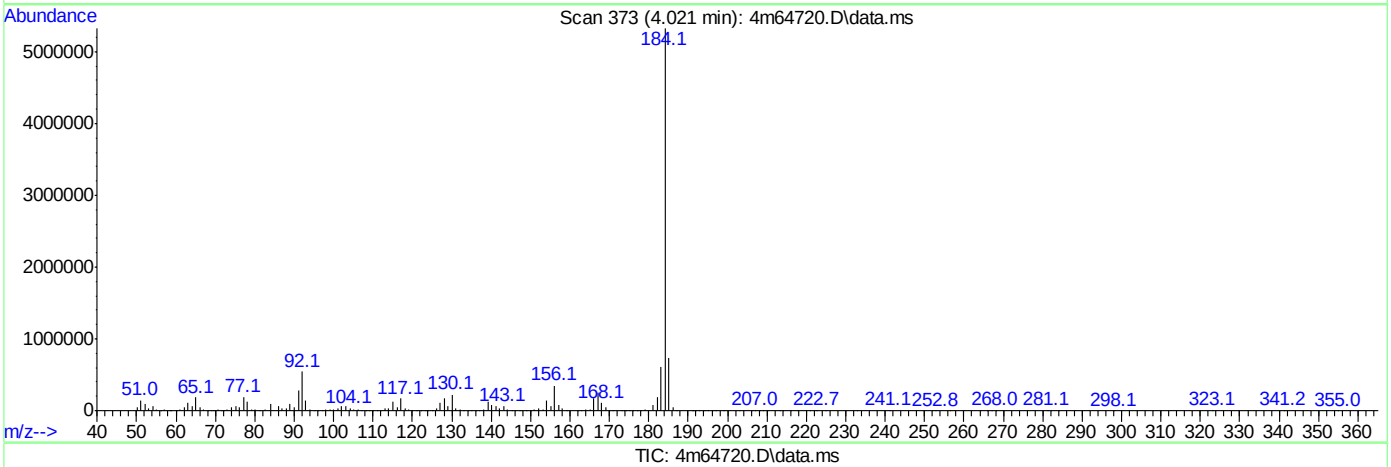
SGS ACCUTEST JC19996

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

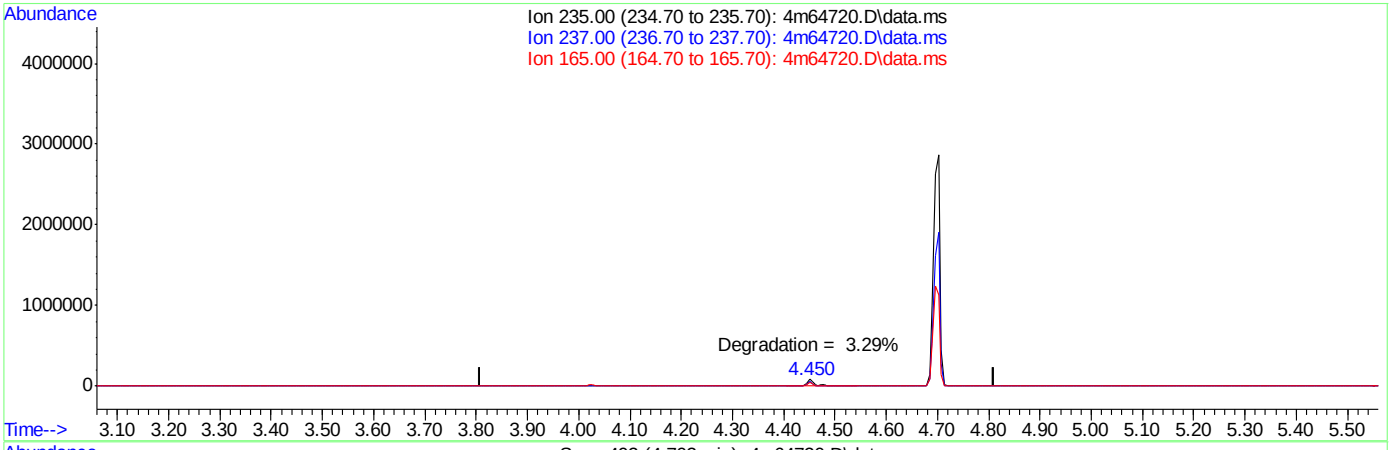
response 0

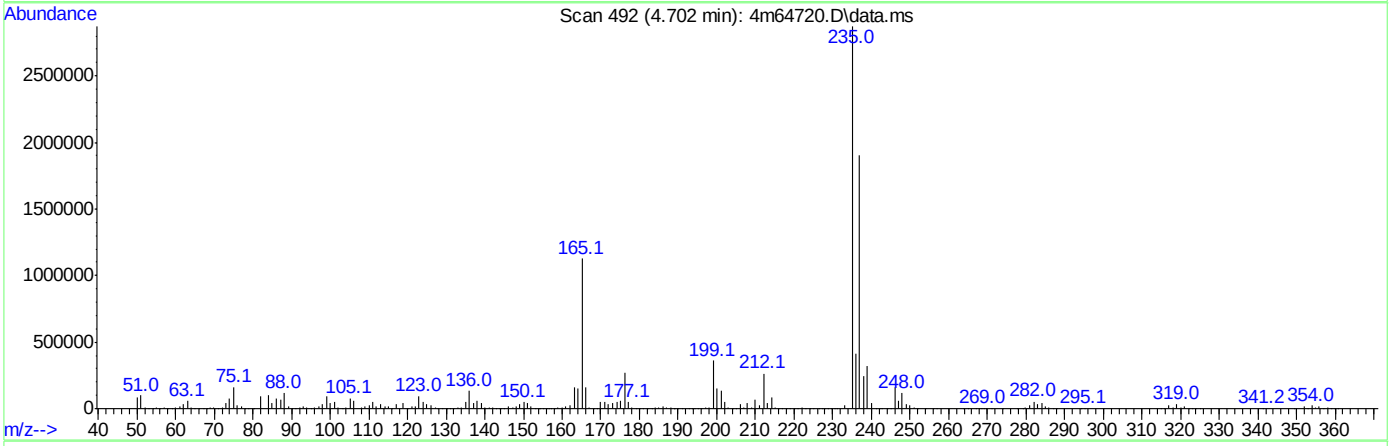
Ion	Exp%	Act%
184.00	100	0.00
183.00	10.60	0.00#
185.00	13.40	0.00#
0.00	0.00	0.00

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

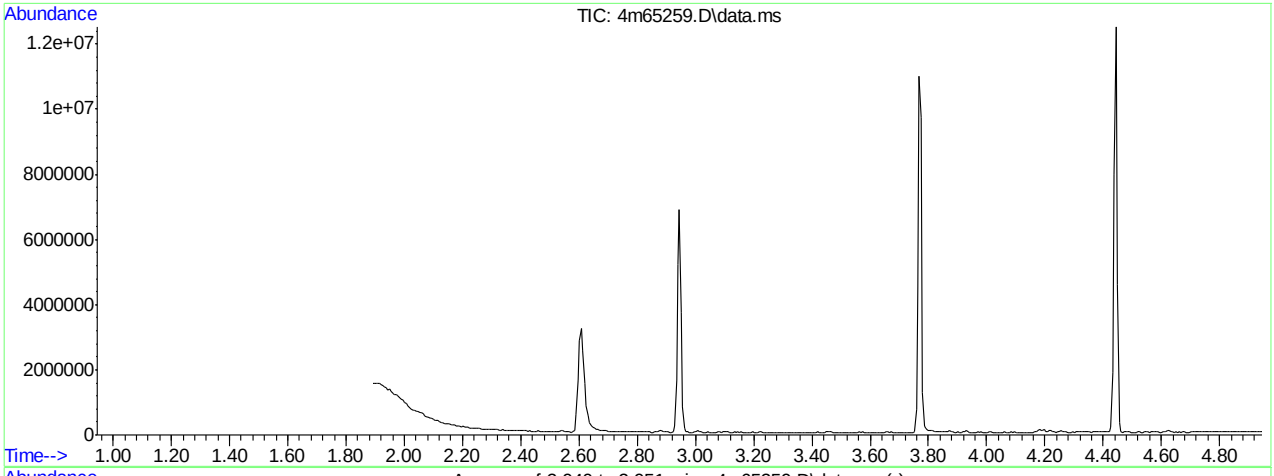
Ion	Exp%	Act%
235.00	100	0.00
237.00	63.70	0.00#
165.00	48.70	0.00#
0.00	0.00	0.00

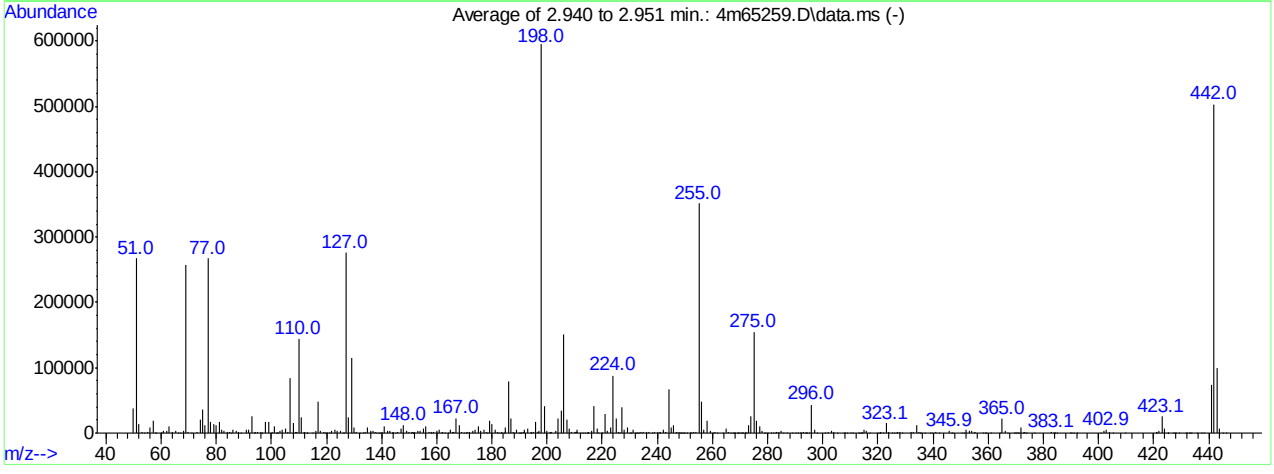
SGS ACCUTEST JC19996

DFTPP

Data File : C:\msdchem\1\DATA\E4M2919\4m65259.D Vial: 1
Acq On : 13 May 2016 10:46 am Operator: ashleyd
Sample : dftpp Inst : GCMS4M
Misc : op93743a,e4m2919 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 184, 185, 186; Background Corrected with Scan 180

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	45.0	267568	PASS
68	69	0.00	2	1.2	3011	PASS
69	198	0.00	100	43.4	258244	PASS
70	69	0.00	2	0.4	958	PASS
127	198	40	60	46.4	275968	PASS
197	198	0.00	1	0.5	2955	PASS
198	198	100	100	100.0	594795	PASS
199	198	5	9	6.9	40837	PASS
275	198	10	30	26.1	155237	PASS
365	198	1	100	3.7	22048	PASS
441	443	0.01	100	73.6	73187	PASS
442	198	40	100	84.7	503552	PASS
443	442	17	23	19.8	99483	PASS

4m65259.D DFTPP4M.M Fri May 13 15:42:38 2016 MANAGER

Average of 2.940 to 2.951 min.: 4m65259.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
50.05	36984	60.10	18	70.95	13	82.95	4113
51.00	267568	61.00	3069	73.10	1102	83.90	1600
52.05	13169	62.00	3039	74.05	20991	84.90	2537
53.05	1175	63.00	10649	75.00	36016	85.10	748
54.05	398	64.05	1373	76.05	11368	85.95	5001
55.00	1347	65.10	3129	77.05	267515	87.10	2893
56.00	8647	66.05	340	78.05	17027	87.90	994
57.00	18514	66.90	219	79.00	13366	88.80	218
57.85	167	68.00	3011	79.90	12824	91.05	4622
58.10	472	69.00	258244	81.00	16937	91.90	4657
60.00	108	69.95	958	82.05	4436	93.00	25636

Average of 2.940 to 2.951 min.: 4m65259.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
93.95	875	102.20	167	111.70	433	120.05	442
94.20	1000	103.00	3167	112.00	1740	121.10	361
95.00	1634	104.05	5060	112.70	363	121.95	4289
96.15	1708	105.05	6989	113.00	746	123.00	5572
96.80	134	106.05	2157	115.05	660	123.95	3160
97.95	16997	106.95	84401	115.95	3803	125.05	2860
99.00	17908	108.00	15003	117.00	48856	125.70	271
100.10	1360	108.90	1668	117.95	3663	126.20	503
100.95	10483	109.05	1156	118.90	1340	127.00	275968
101.70	213	110.00	143787	119.30	216	128.00	23370
102.00	216	111.00	23928	119.80	319	129.00	114643

Average of 2.940 to 2.951 min.: 4m65259.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
130.05	8950	139.10	234	149.00	4047	157.05	2204
130.90	1783	140.10	1336	150.05	998	157.90	1315
132.05	707	140.95	11063	150.60	454	158.10	360
133.30	247	141.95	3615	151.05	1448	158.95	1522
134.00	2401	143.00	3528	151.30	558	160.00	3286
135.00	9210	143.70	141	151.60	611	161.00	6053
136.00	3685	144.05	1283	152.05	1191	161.80	707
137.05	3896	144.85	588	152.95	3195	162.00	1404
137.75	1421	145.90	1867	153.90	3486	162.95	362
138.10	480	147.00	7206	155.10	7047	164.15	804
138.85	479	148.00	12292	156.05	10079	165.00	5032

Average of 2.940 to 2.951 min.: 4m65259.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
165.90	1573	175.10	10167	183.80	1254	191.15	1861
166.05	2590	176.05	3570	184.30	408	191.95	6026
167.00	22352	177.00	4712	185.00	8963	193.05	7124
168.05	12312	178.00	1906	186.00	79077	194.00	1826
168.95	2398	178.20	813	187.00	22736	194.20	750
169.80	643	179.00	19659	187.80	1297	194.95	1139
170.50	291	180.05	13431	188.00	597	195.95	16856
170.95	1701	181.10	5809	188.95	5085	196.70	1117
172.00	2431	181.95	1245	189.70	179	197.10	2955
172.95	3182	182.55	293	190.20	780	198.00	594795
174.00	5737	183.15	574	190.70	389	198.95	40837

Average of 2.940 to 2.951 min.: 4m65259.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
200.00	3878	210.05	2212	216.95	41592	226.20	672
200.90	562	210.30	1275	218.05	6275	227.00	39968
201.30	972	210.80	1178	218.70	238	227.95	5333
201.65	2477	211.05	4901	219.80	453	229.05	8574

DFTPP4M.M Fri May 13 15:42:35 2016 MANAGER Page: 0

SGS ACCUTEST JC19996

203.05	3792	212.15	340	220.00	558	229.90	174
204.05	22102	212.85	595	221.00	29664	230.20	381
205.00	34637	213.90	406	221.85	4170	231.00	4683
206.05	151496	214.60	426	222.95	9169	232.00	921
207.05	21281	214.90	1703	224.00	87712	232.30	216
207.90	6306	215.10	325	225.00	22874	232.90	319
209.00	1744	216.00	3130	226.00	1874	233.20	466

Average of 2.940 to 2.951 min.: 4m65259.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
233.90	2412	243.00	2445	249.95	240	259.05	4090
234.95	2611	244.05	67701	250.65	894	259.90	523
236.05	2195	245.10	8674	251.80	293	260.95	1043
237.05	1811	245.95	12612	252.00	486	261.80	315
238.05	381	246.80	304	252.50	157	263.70	64
238.95	1554	247.05	1640	253.05	2429	265.00	6294
239.95	1346	247.75	999	253.85	2448	265.95	1960
240.90	1444	248.10	234	255.00	351445	266.70	466
241.10	883	248.75	474	256.00	47341	267.30	84
242.05	4746	249.10	712	257.00	5175	267.90	612
242.80	1979	249.60	136	258.00	19760	268.20	139

Average of 2.940 to 2.951 min.: 4m65259.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
268.90	126	275.00	155237	284.00	1572	293.95	504
269.40	241	276.00	18361	284.95	3596	294.20	145
269.60	121	277.05	10938	285.80	227	294.90	446
270.05	624	277.90	3171	287.00	289	296.00	43387
270.75	628	278.70	270	289.10	380	297.10	5668
271.10	286	279.05	712	290.00	74	297.85	517
271.70	368	279.90	139	290.90	733	300.85	603
272.00	744	281.20	269	291.75	722	302.10	1204
272.30	168	281.90	45	292.15	361	303.10	3461
273.00	12268	282.70	223	292.95	2462	304.05	1052
274.05	26496	283.05	1512	293.70	357	305.00	144

Average of 2.940 to 2.951 min.: 4m65259.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
307.80	270	315.90	3314	326.80	460	339.10	266
308.00	468	316.85	343	326.95	1639	339.70	215
309.00	657	319.85	164	328.00	1162	341.00	1932
309.90	605	320.60	257	328.90	285	342.05	658
310.70	393	320.80	337	332.00	1518	345.95	3128
313.00	166	321.10	1196	333.00	1236	346.70	394
313.20	317	321.90	686	334.05	11811	347.00	232
313.85	852	323.05	14994	334.90	1604	350.20	116
314.00	772	324.05	2619	335.30	471	351.10	75
314.20	196	325.00	471	335.80	480	351.95	4642
314.95	5603	326.00	95	336.80	96	353.00	3188

Average of 2.940 to 2.951 min.: 4m65259.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
354.05	4153	369.60	249	383.05	1527	402.95	5062
354.80	500	369.85	754	383.65	349	403.85	1628
355.15	1558	370.30	325	383.90	88	405.10	112
357.90	88	370.80	370	384.10	103	409.80	209
358.80	124	370.95	879	384.85	253	420.90	711
359.15	354	372.05	7852	389.80	378	421.05	2524
360.85	244	372.80	349	390.10	659	422.00	4351
364.10	203	373.00	1300	391.10	384	423.05	25728
365.00	22048	373.30	284	392.00	411	424.00	6214
366.00	2822	374.00	273	400.85	704	424.95	667
366.80	219	376.90	429	401.95	3784	425.20	115

Average of 2.940 to 2.951 min.: 4m65259.D\data.ms

DFTPP4M.M Fri May 13 15:42:35 2016 MANAGER Page: 1

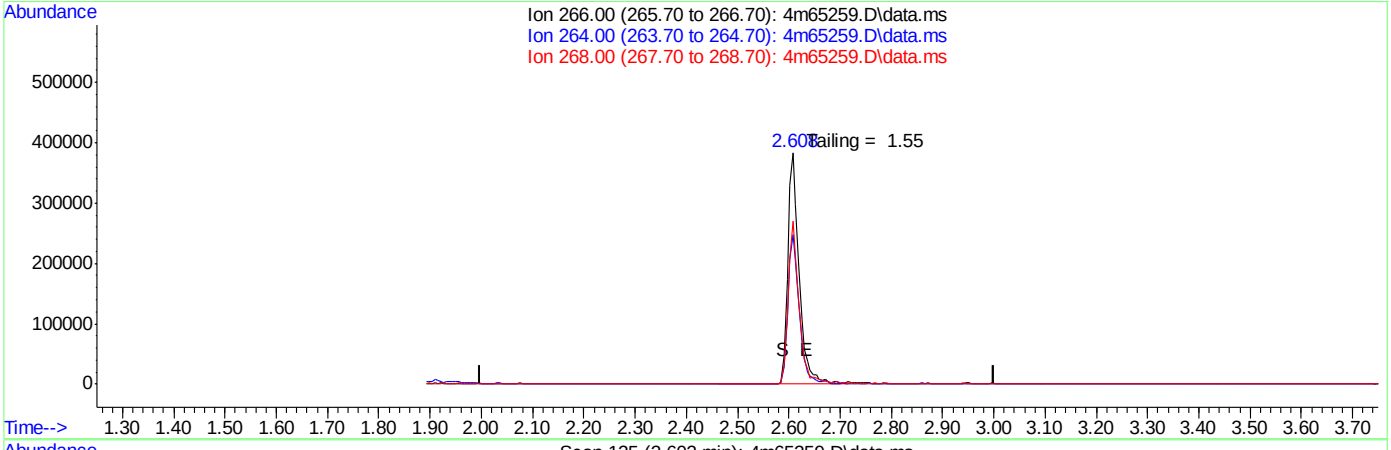
dftpp
Modified:subtracted

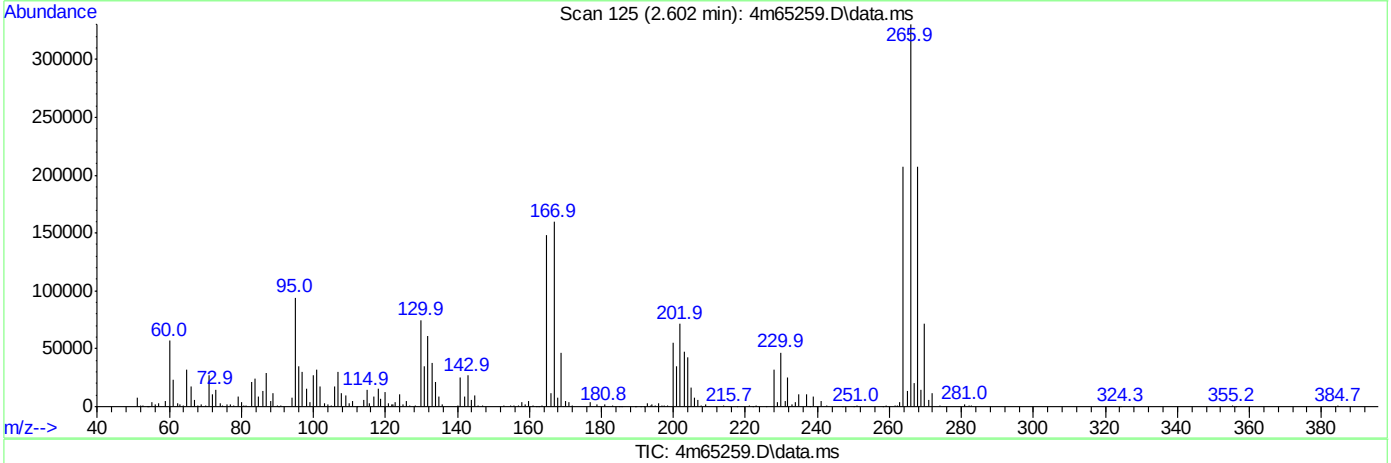
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
427.00	401	438.30	141				
427.75	350	441.10	73187				
428.10	144	442.00	503552				
429.15	491	443.05	99483				
431.50	67	444.00	7445				
432.05	288	445.00	660				
432.70	109	446.10	435				
433.10	114						
433.60	114						
435.80	145						
437.20	94						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2919\
Data File : 4m65259.D
Acq On : 13 May 2016 10:46 am
Operator : ashleyd
Sample : dftpp
Misc : op93743a,e4m2919
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 13 10:52:09 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: 4m65259.D\data.ms

(1) pentachlorophenol (t)

2.500min (-2.500) 0.00ppb

response 0

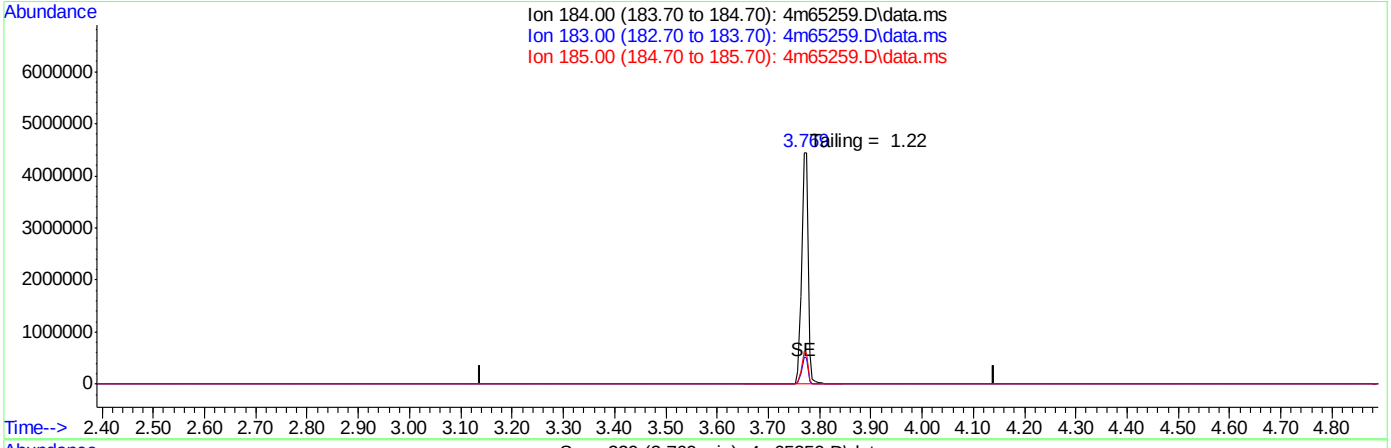
Ion	Exp%	Act%
266.00	100	0.00
264.00	58.00	0.00#
268.00	62.00	0.00#
0.00	0.00	0.00

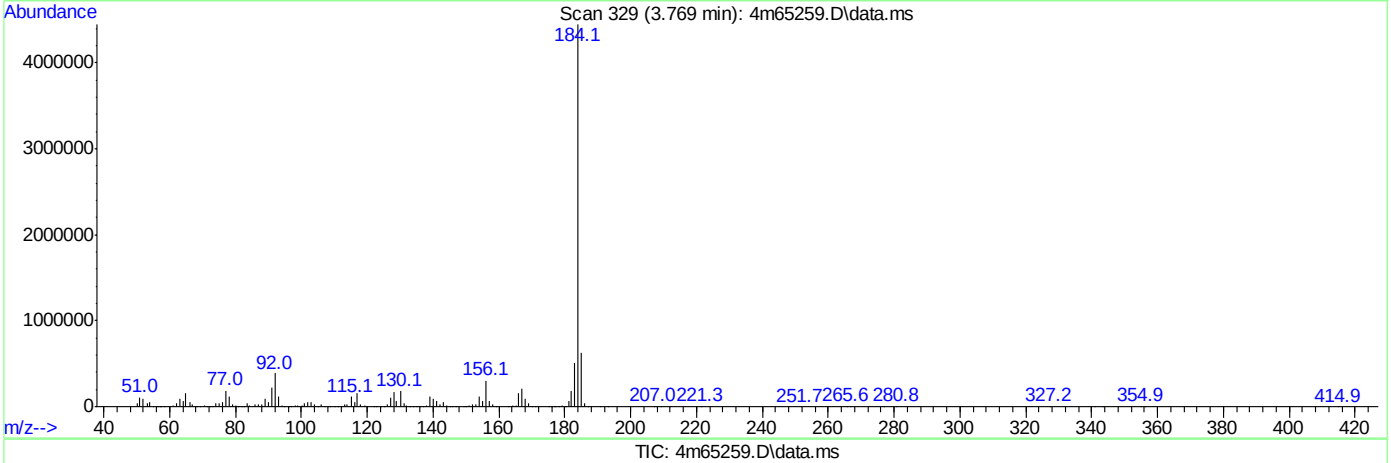
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2919\
Data File : 4m65259.D
Acq On : 13 May 2016 10:46 am
Operator : ashleyd
Sample : dftpp
Misc : op93743a,e4m2919
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 13 10:52:09 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

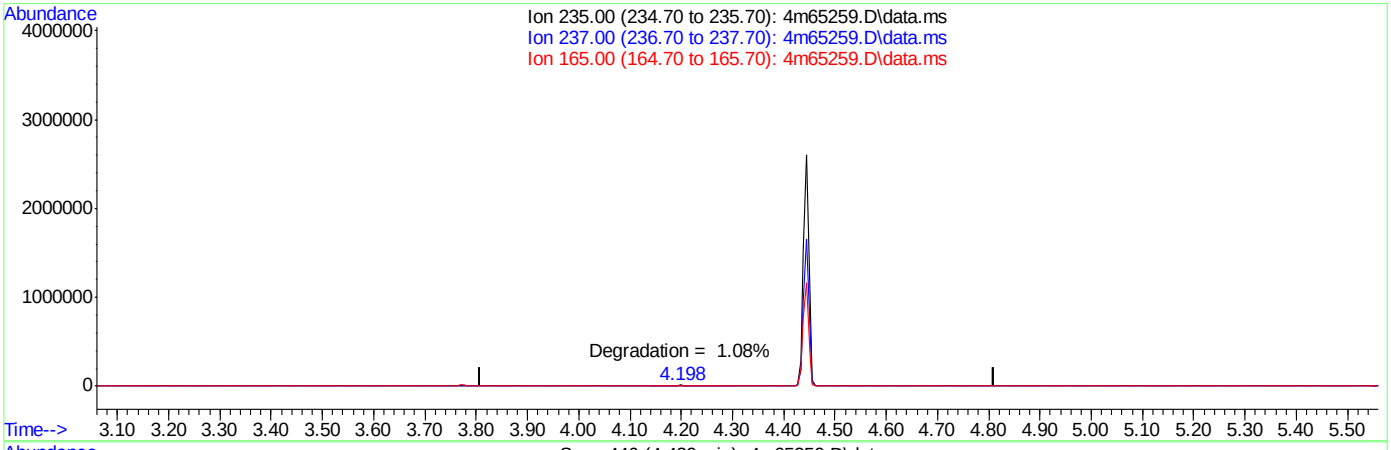
Ion	Exp%	Act%
184.00	100	0.00
183.00	10.60	0.00#
185.00	13.40	0.00#
0.00	0.00	0.00

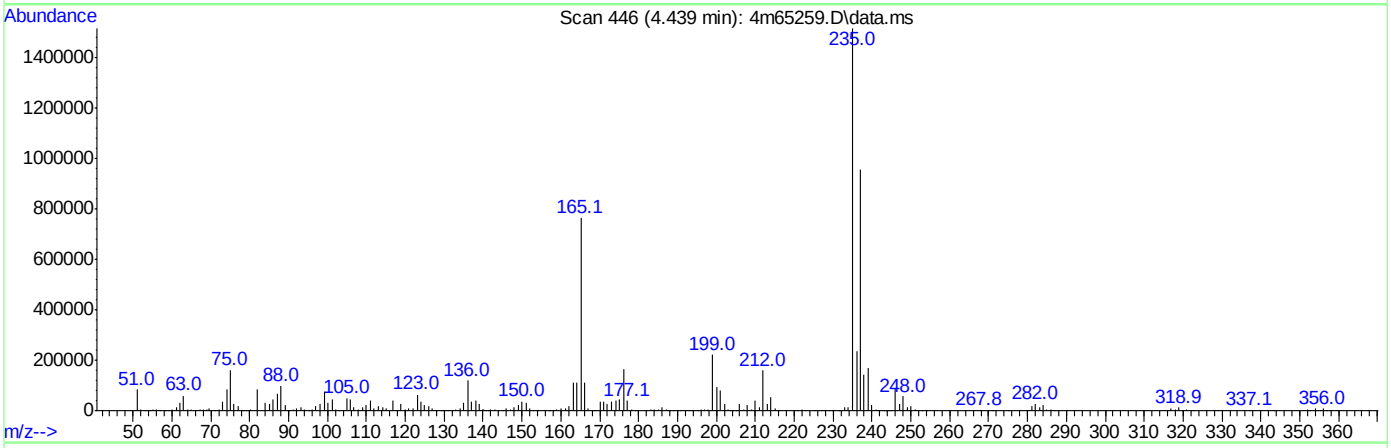
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2919\
Data File : 4m65259.D
Acq On : 13 May 2016 10:46 am
Operator : ashleyd
Sample : dftpp
Misc : op93743a,e4m2919
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 13 10:52:09 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: 4m65259.D\data.ms

(3) ddt (t)

4.310min (-4.310) 0.00ppb

response 0

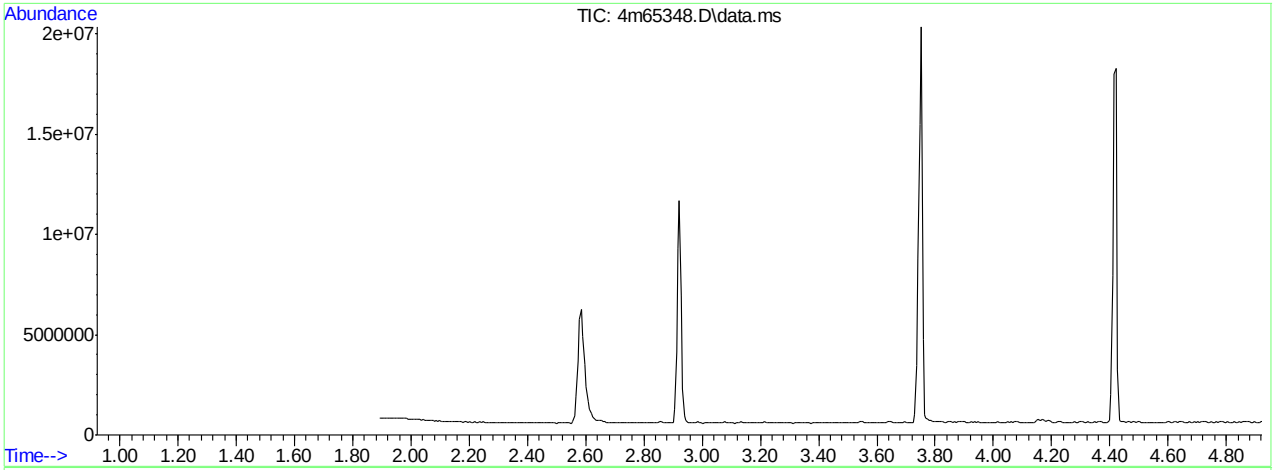
Ion	Exp%	Act%
235.00	100	0.00
237.00	63.70	0.00#
165.00	48.70	0.00#
0.00	0.00	0.00

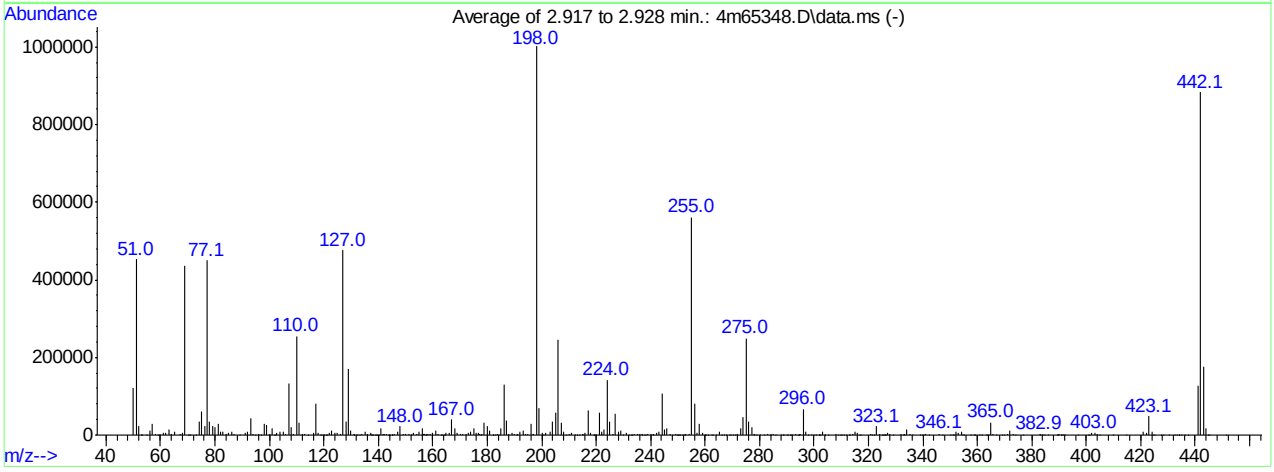
SGS ACCUTEST JC19996

DFTPP

Data File : C:\msdchem\1\DATA\E4M2925\4m65348.D Vial: 1
Acq On : 18 May 2016 12:41 pm Operator: linseyk
Sample : dftpp Inst : GCMS4M
Misc : op93986a,e4m2925 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 180, 181, 182; Background Corrected with Scan 174

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	45.2	452251	PASS
68	69	0.00	2	1.5	6586	PASS
69	198	0.00	100	43.6	436557	PASS
70	69	0.00	2	0.2	887	PASS
127	198	40	60	47.5	475349	PASS
197	198	0.00	1	0.4	3754	PASS
198	198	100	100	100.0	1001067	PASS
199	198	5	9	6.8	68275	PASS
275	198	10	30	24.9	248811	PASS
365	198	1	100	3.3	33336	PASS
441	443	0.01	100	73.0	127885	PASS
442	198	40	100	88.1	882304	PASS
443	442	17	23	19.9	175221	PASS

4m65348.D DFTPP4M.M Thu May 19 09:09:16 2016 MANAGER

Average of 2.917 to 2.928 min.: 4m65348.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
50.10	122069	59.90	1101	71.05	419	83.00	9196
51.00	452251	61.00	5274	73.05	1434	84.00	2496
52.00	22778	62.00	6520	74.00	34635	84.95	5802
52.90	1018	63.05	15192	75.00	61197	85.95	8192
53.10	205	63.95	2049	76.10	22441	86.90	3882
55.00	1107	65.00	8112	77.10	450031	88.95	547
56.00	10661	67.05	1682	78.10	33529	91.00	5562
57.05	29257	68.05	6586	79.00	22031	92.10	7447
58.00	1926	69.00	436557	80.00	20431	93.00	42842
58.85	457	69.95	887	81.00	29844	94.00	3881
59.20	159	70.70	375	82.00	7623	94.95	1249

Average of 2.917 to 2.928 min.: 4m65348.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
96.05	2374	105.95	2652	117.95	5537	126.05	2146
96.80	597	107.00	131544	118.70	478	127.00	475349
98.00	27977	108.00	21503	119.00	701	128.05	35797
99.00	27404	108.95	2759	119.90	986	128.95	170025
99.95	2189	110.00	254626	120.10	511	129.95	12230
101.05	16302	110.95	32104	120.65	282	130.90	1741
101.90	326	111.95	4104	121.10	752	131.10	872
102.05	1376	112.95	2704	121.90	7013	131.90	345
102.80	4634	114.15	558	122.95	11853	132.15	1526
103.95	9338	116.05	5416	124.00	5462	133.05	1161
105.00	9715	116.95	82307	125.00	5153	134.05	3573

Average of 2.917 to 2.928 min.: 4m65348.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
135.00	10171	141.90	2900	149.05	4302	157.55	1501
136.05	3500	142.05	3828	150.10	1656	157.90	1867
137.00	4932	142.95	4363	151.10	3766	158.10	2032
137.40	438	143.70	184	151.95	1058	158.95	3277
137.70	818	143.95	902	152.20	509	160.00	6283
138.10	386	144.30	408	152.95	5217	161.00	11005
138.75	563	144.95	1063	153.95	3725	162.00	3252
139.20	909	145.15	632	155.05	10162	163.00	645
139.80	317	146.00	3032	156.00	18524	163.20	220
140.05	1341	147.05	9012	156.75	2477	163.95	1091
141.00	17351	148.00	22030	157.10	2396	164.20	328

Average of 2.917 to 2.928 min.: 4m65348.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
164.90	6376	176.00	6086	183.85	2471	193.00	12619
165.95	5919	176.90	6911	184.20	541	194.00	2855
167.00	40011	177.10	1560	185.00	16716	195.00	1547
168.00	17304	177.70	303	186.00	130145	196.05	30336
169.00	4539	178.05	1738	187.00	36605	196.70	3754
170.10	2355	178.95	32344	188.00	3838	197.10	2738
171.00	2458	180.00	23806	188.95	5667	198.00	1.00107e+006
172.00	3352	181.00	10566	189.95	1911	199.00	68275
173.00	4863	181.90	1534	190.90	1286	200.00	5739
174.00	9499	182.10	882	191.15	2055	200.75	1177
175.05	16468	182.95	1063	192.05	9749	201.35	4487

Average of 2.917 to 2.928 min.: 4m65348.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
203.00	7767	213.00	1360	221.00	57688	231.10	5666
204.00	34555	213.70	570	221.85	8502	232.10	896
205.00	58568	214.90	1749	222.10	1771	232.80	545
206.05	246059	215.10	879	222.95	13141	233.10	429

M4M2881SIM.M Wed May 18 12:19:10 2016 MANAGER Page: 0

207.00	30695	216.05	5488	224.00	141651	233.95	2642
208.00	7445	217.00	62563	225.00	34301	235.05	4328
208.90	1431	218.00	7089	226.00	3579	236.00	2473
210.20	2434	218.95	209	227.00	55149	236.70	1015
210.90	2737	219.20	620	228.00	7778	236.95	3655
211.10	7003	219.50	244	229.00	12276	237.70	266
212.05	1525	220.00	342	229.95	1210	238.15	401

Average of 2.917 to 2.928 min.: 4m65348.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
239.05	1920	249.05	4160	256.00	80909	265.05	8646
240.00	2638	249.80	254	257.05	6017	265.95	1249
240.80	808	250.10	451	258.00	28219	266.95	670
240.95	2861	250.60	283	258.95	4570	267.65	1001
242.00	6243	250.95	685	259.70	133	269.00	158
243.10	8170	251.70	541	259.95	713	269.50	79
244.05	106371	252.00	1002	260.20	307	270.05	667
245.00	14061	252.30	615	261.00	1334	271.05	1444
246.00	17921	253.00	1603	262.30	89	271.80	1790
247.00	4028	254.05	3766	262.85	555	273.00	18332
247.90	821	255.00	560747	263.85	561	274.00	46088

Average of 2.917 to 2.928 min.: 4m65348.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
275.00	248811	285.05	3868	293.90	1024	302.30	296
276.00	33939	285.95	1161	294.60	254	303.05	9411
277.00	21000	288.00	262	295.00	1759	303.90	562
278.00	2345	288.55	264	296.00	66576	304.10	1111
278.20	972	288.85	478	296.95	10228	305.10	135
278.95	1504	290.00	828	297.90	1037	308.05	1596
280.10	297	290.50	79	298.90	181	308.75	499
281.80	151	291.00	276	299.90	78	309.65	321
282.90	1979	291.70	190	300.85	706	310.15	903
283.95	1344	291.95	909	301.70	165	310.95	299
284.20	372	293.05	3869	301.90	947	311.90	158

Average of 2.917 to 2.928 min.: 4m65348.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
313.00	145	324.10	3932	333.00	1583	347.05	1217
313.20	87	324.80	349	333.20	378	349.90	146
314.05	3780	325.20	119	334.00	14851	350.80	554
314.95	8229	325.70	289	335.05	3961	351.20	254
316.05	5065	326.10	248	335.90	185	352.05	7448
316.90	487	326.30	187	339.10	779	352.95	5089
317.10	387	326.95	4790	339.90	70	354.05	8103
320.90	2035	327.95	2101	340.20	78	354.70	186
321.10	536	329.10	1008	340.85	2988	354.90	1086
322.05	1483	332.05	1653	342.05	938	357.30	187
323.05	22539	332.70	202	346.05	4287	358.90	315

Average of 2.917 to 2.928 min.: 4m65348.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
359.20	89	371.00	1931	389.10	298	402.05	4858
360.90	86	372.00	12234	389.70	256	403.00	5637
361.40	192	373.05	3085	390.05	2417	404.05	2269
363.10	161	373.90	435	390.85	893	404.70	661
363.60	278	377.00	614	391.00	443	409.70	400
364.20	441	382.90	2795	391.20	421	414.90	481
365.00	33336	383.10	1337	391.80	141	421.05	7811
365.90	2894	383.80	379	392.00	687	422.05	6327
367.00	313	384.00	1066	397.10	242	423.10	48203
369.10	110	384.80	264	400.90	291	424.05	8459
370.00	224	386.05	189	401.10	730	424.80	721

Average of 2.917 to 2.928 min.: 4m65348.D\data.ms

M4M2881SIM.M Wed May 18 12:19:10 2016 MANAGER

SGS ACCUTEST JC19996

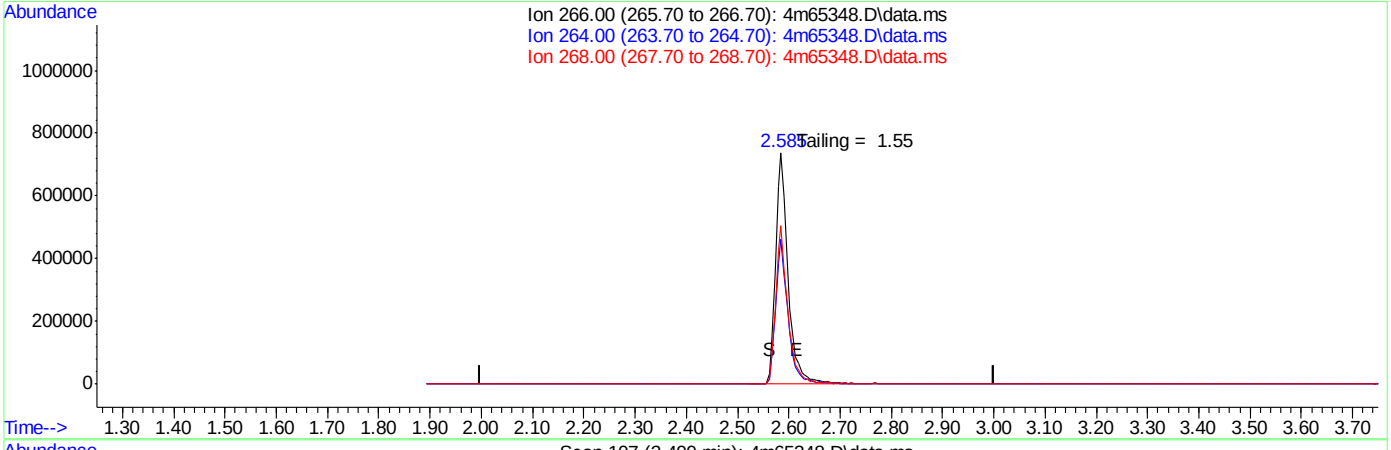
dftpp
Modified:subtracted

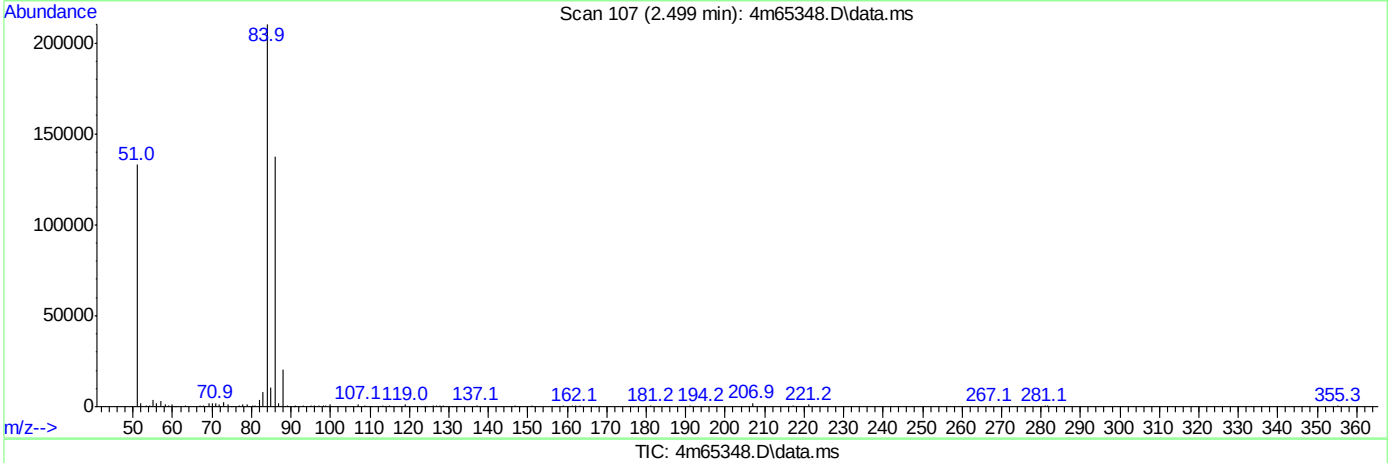
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
425.10	727	441.05	127885				
427.50	131	442.05	882304				
428.10	183	443.10	175221				
430.50	224	444.05	16419				
432.40	212	444.80	196				
433.10	87	445.05	742				
433.90	150	451.20	106				
434.10	170						
434.80	173						
436.00	177						
437.30	107						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2925\
Data File : 4m65348.D
Acq On : 18 May 2016 12:41 pm
Operator : linseyk
Sample : dftpp
Misc : op93986a,e4m2925
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 18 12:47:30 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: 4m65348.D\data.ms

(1) pentachlorophenol (t)

2.500min (-2.500) 0.00ppb

response 0

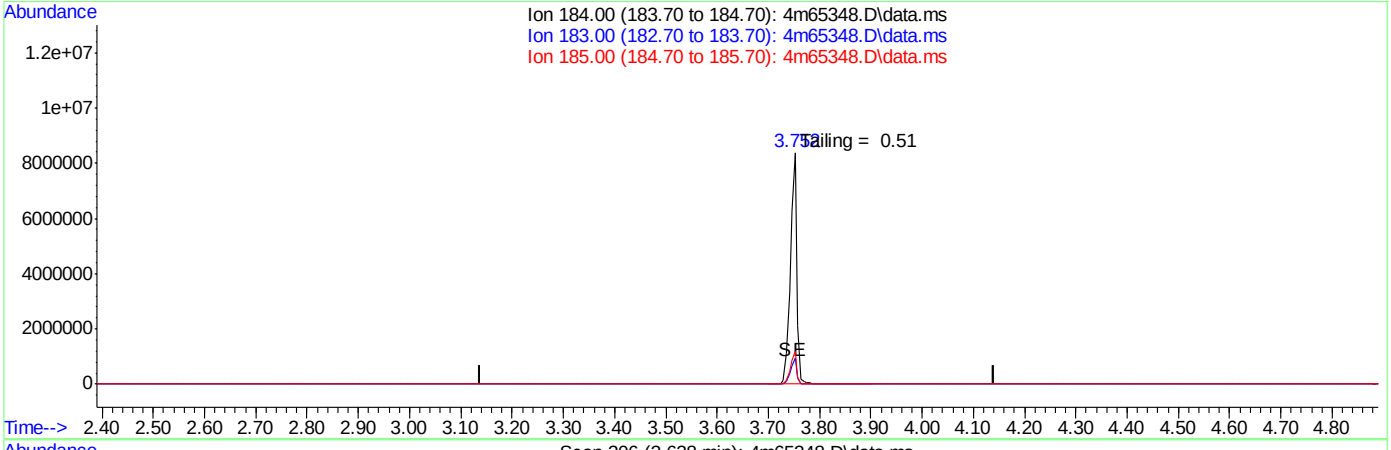
Ion	Exp%	Act%
266.00	100	0.00
264.00	58.00	0.00#
268.00	62.00	0.00#
0.00	0.00	0.00

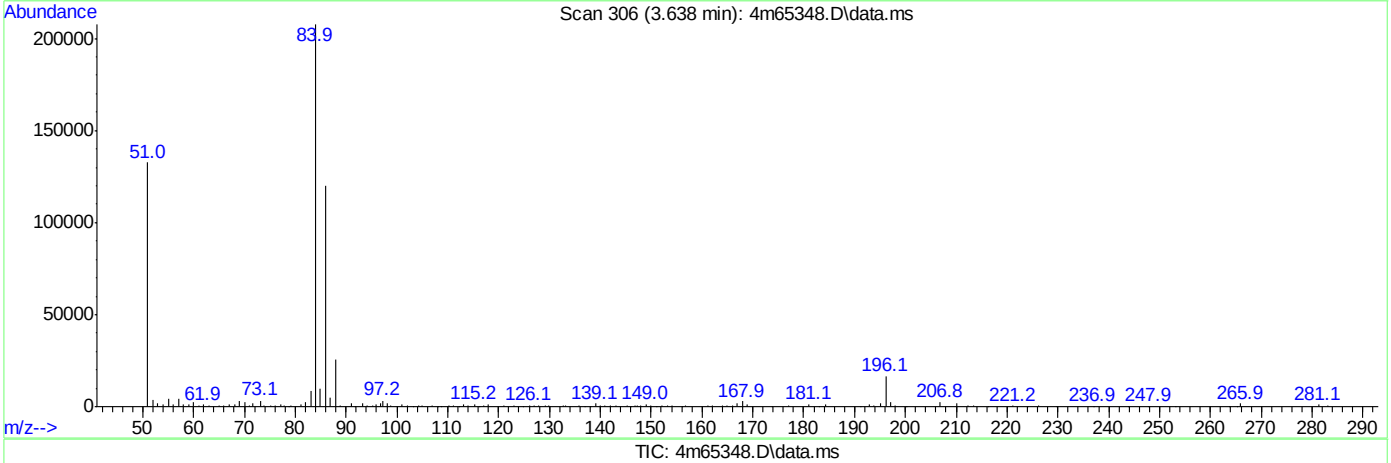
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\E4M2925\
Data File : 4m65348.D
Acq On    : 18 May 2016  12:41 pm
Operator  : linseyk
Sample    : dftpp
Misc      : op93986a,e4m2925
ALS Vial  : 1   Sample Multiplier: 1

Quant Time: May 18 12:47:30 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: 4m65348.D\data.ms

(2) benzidine (t)

3.640min (-3.640) 0.00ppb

response 0

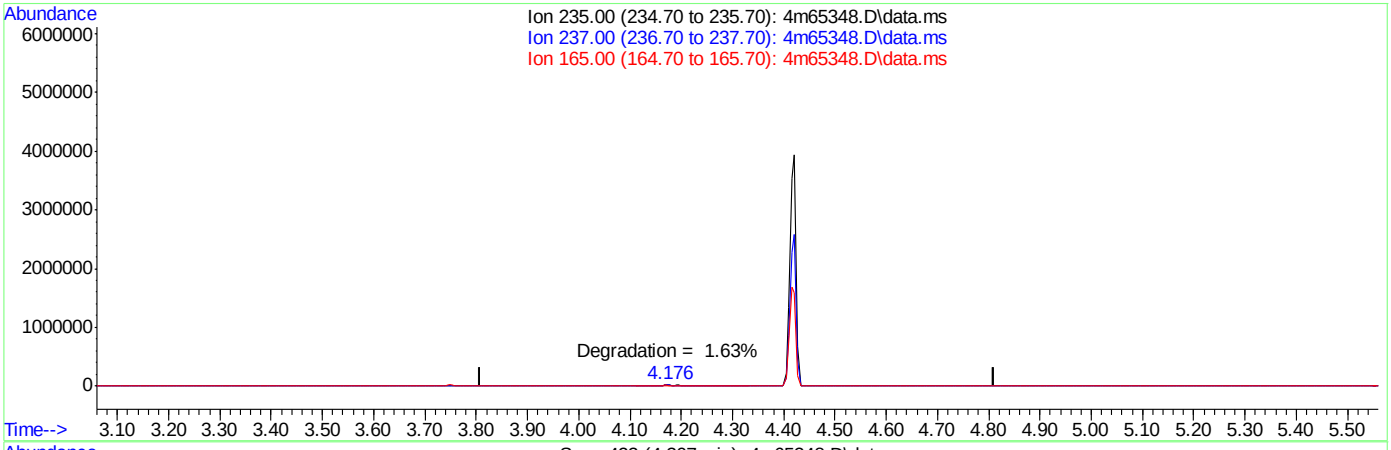
Ion	Exp%	Act%
184.00	100	0.00
183.00	10.60	0.00#
185.00	13.40	0.00#
0.00	0.00	0.00

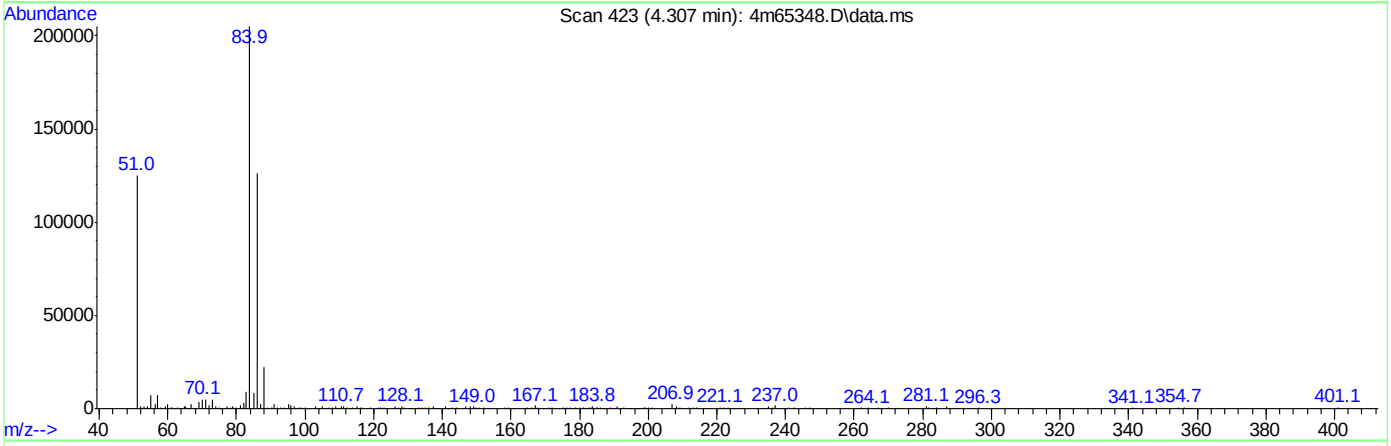
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2925\
Data File : 4m65348.D
Acq On : 18 May 2016 12:41 pm
Operator : linseyk
Sample : dftpp
Misc : op93986a,e4m2925
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 18 12:47:30 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: 4m65348.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

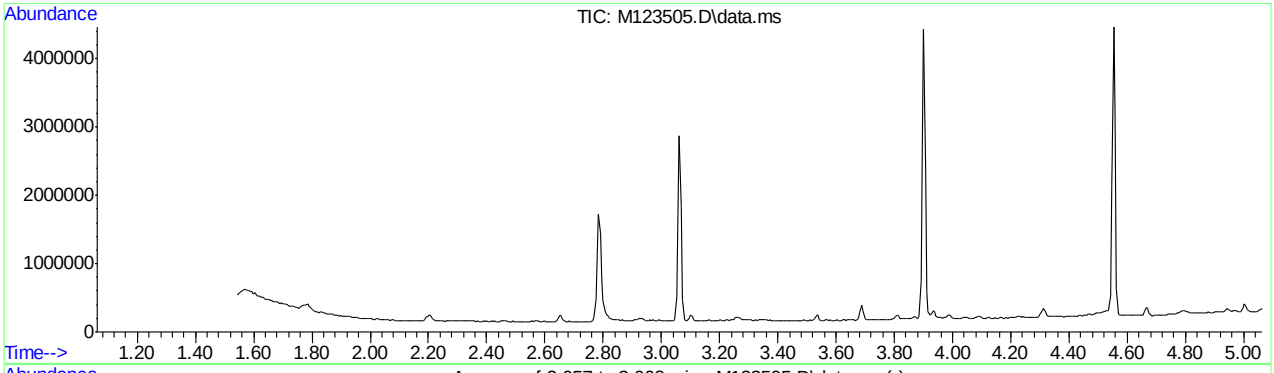
SGS ACCUTEST JC19996

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 JC19996

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

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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						

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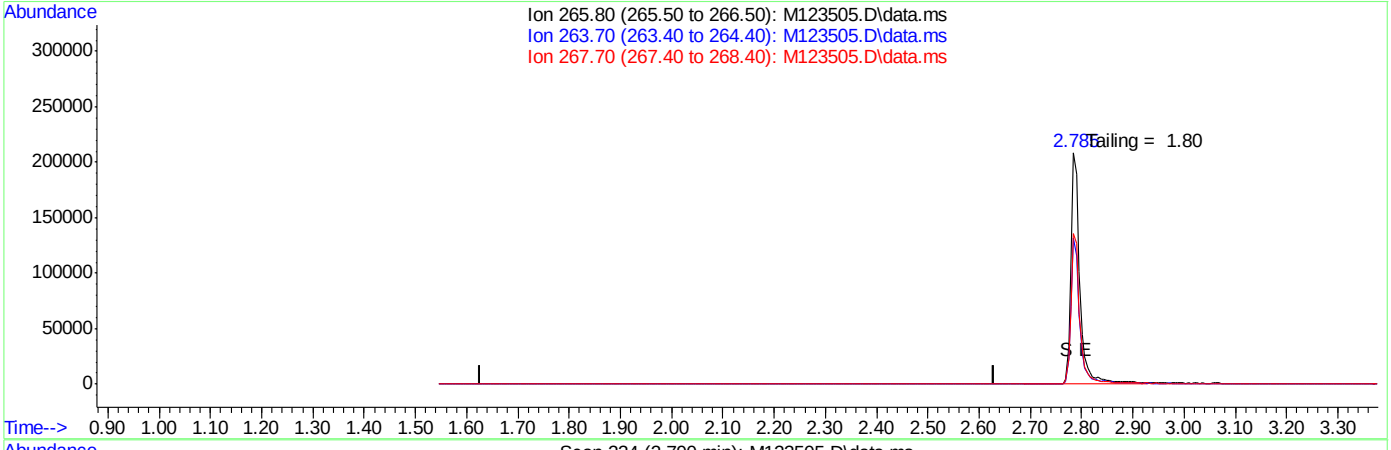
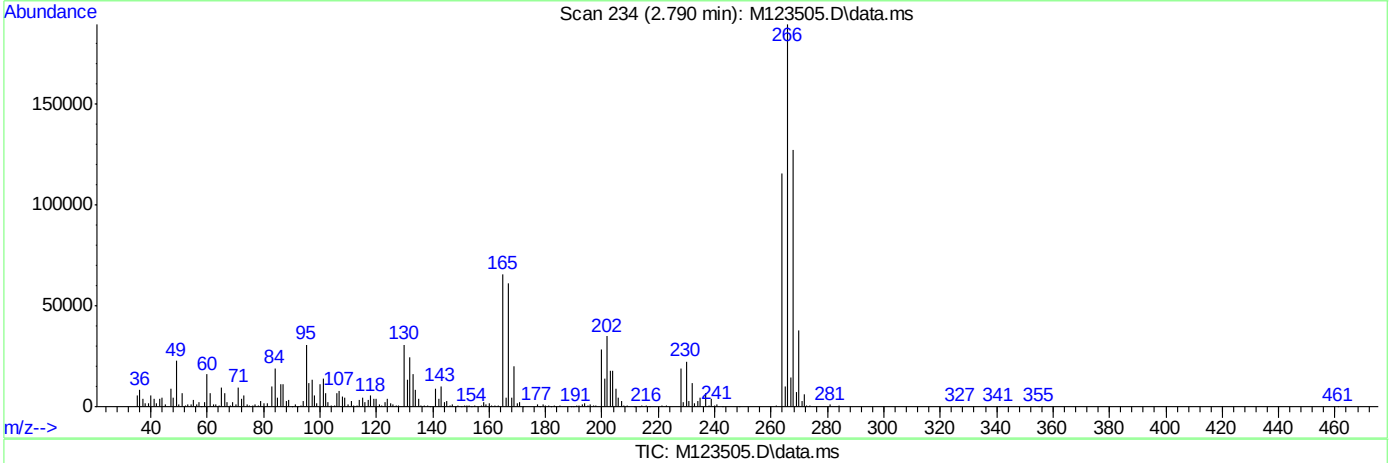
Quantitation Report (Qedit)

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

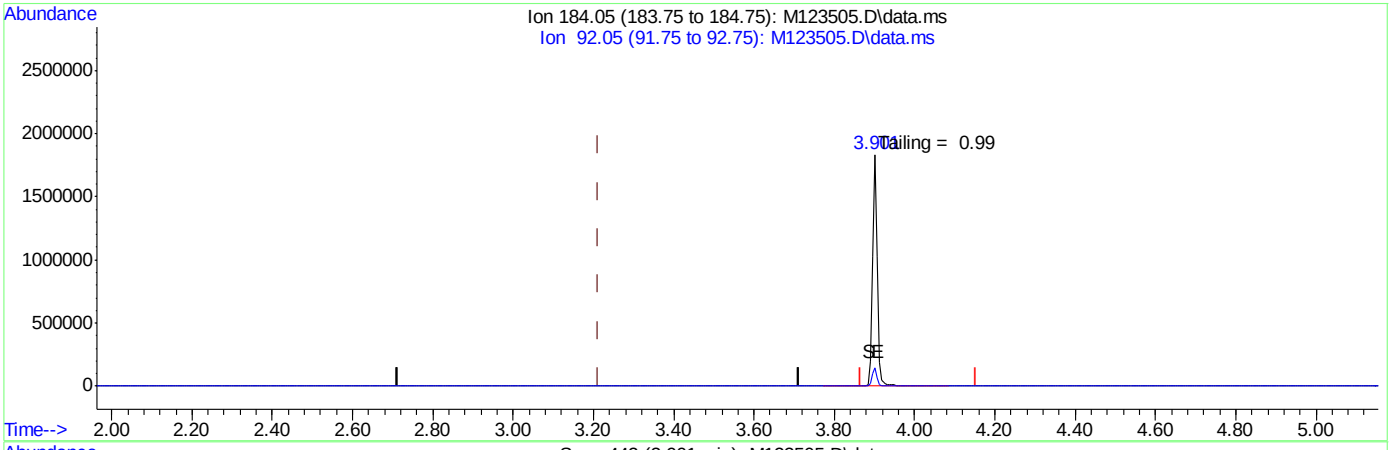
Ion	Exp%	Act%
265.80	100	0.00
263.70	61.60	0.00#
267.70	61.70	0.00#
0.00	0.00	0.00

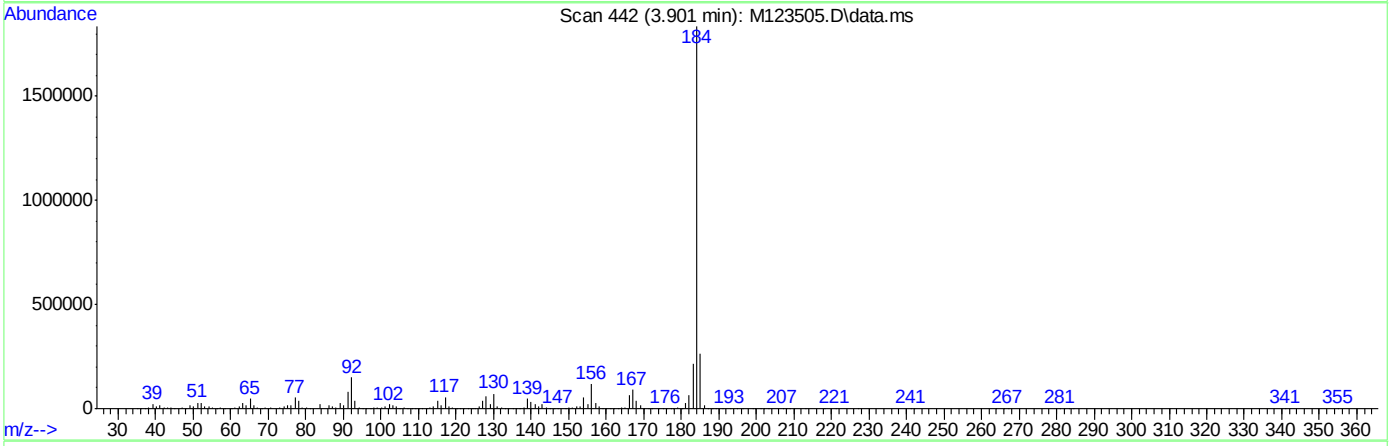
SGS ACCUTEST JC19996

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

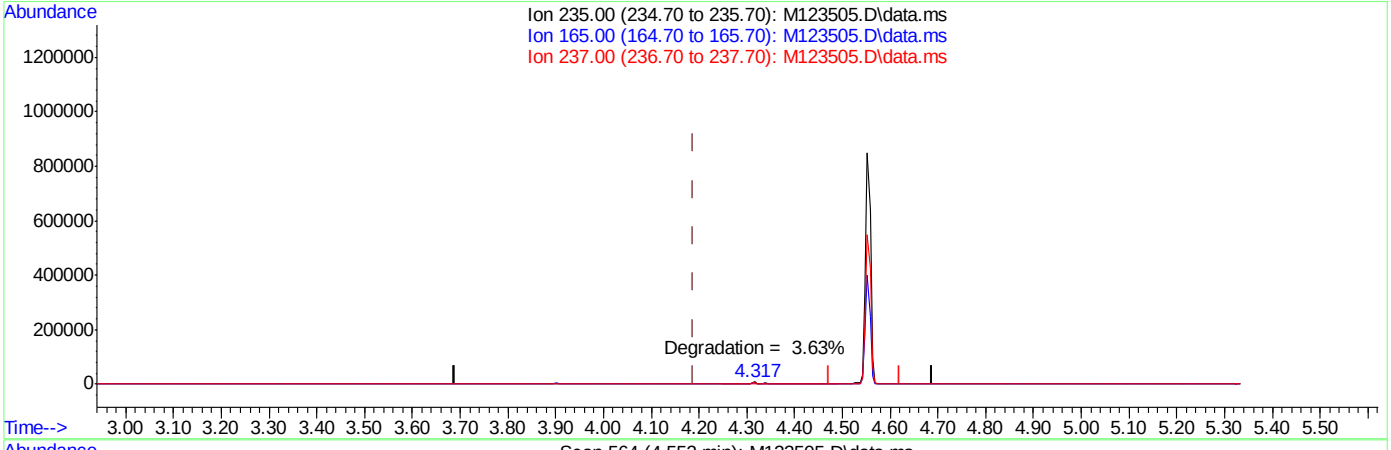
Ion	Exp%	Act%
184.05	100	100
92.05	10.70	8.15
0.00	0.00	0.00
0.00	0.00	0.00

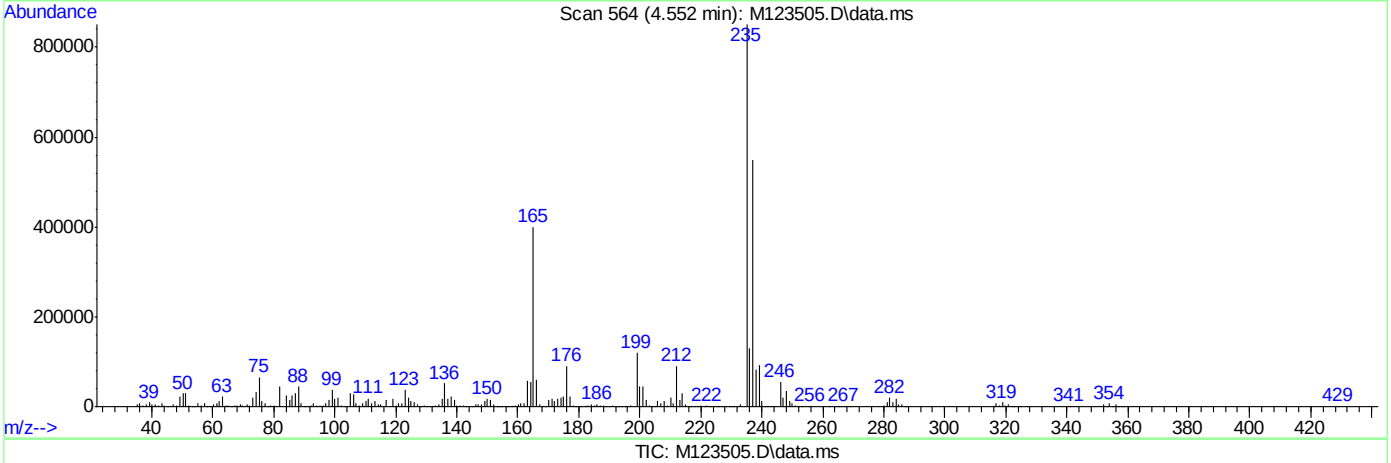
SGS ACCUTEST JC19996

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

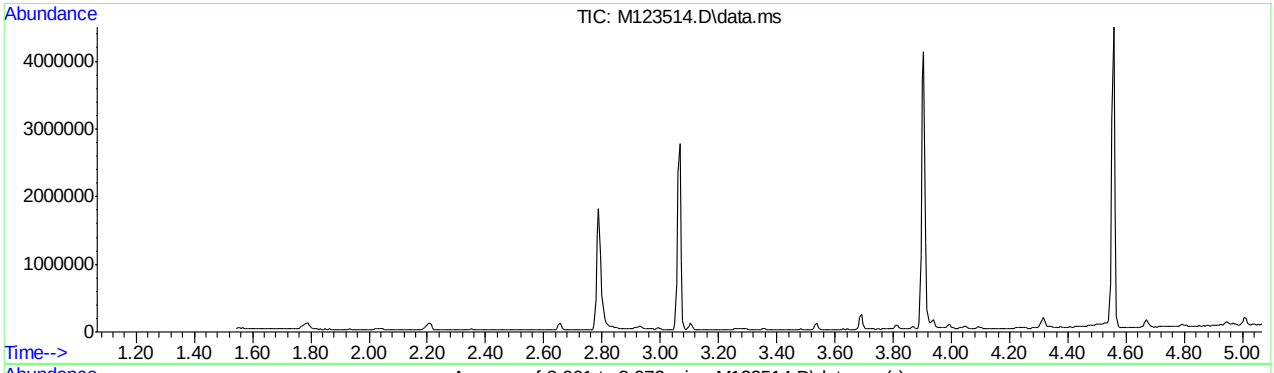
SGS ACCUTEST JC19996

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

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

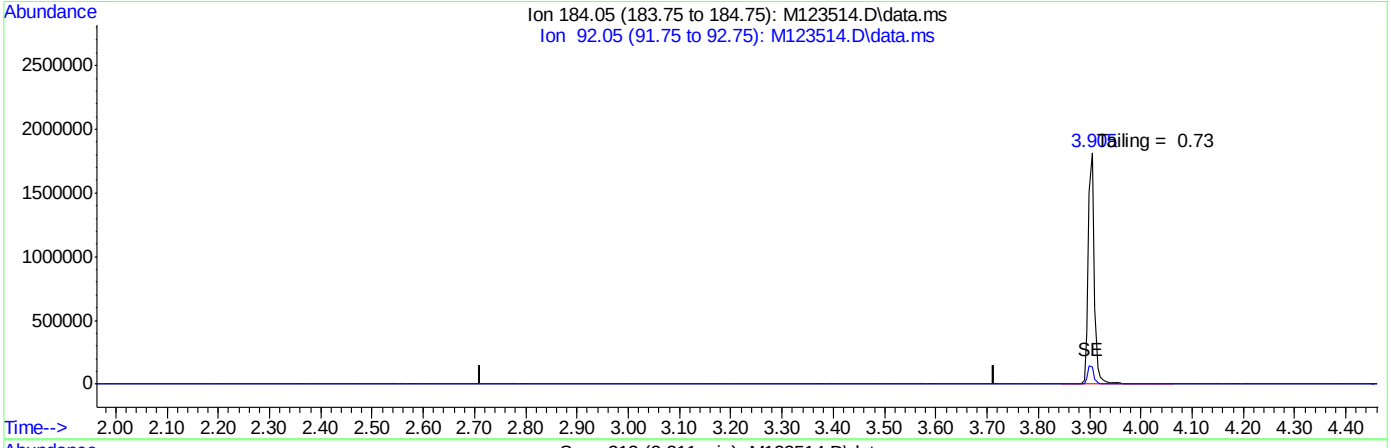
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
424.80	173	444.05	3985				
425.15	223	445.05	127				
433.85	84						
436.05	70						
437.05	96						
438.35	168						
439.25	81						
439.85	112						
441.05	31349						
442.05	214165						
443.05	40010						

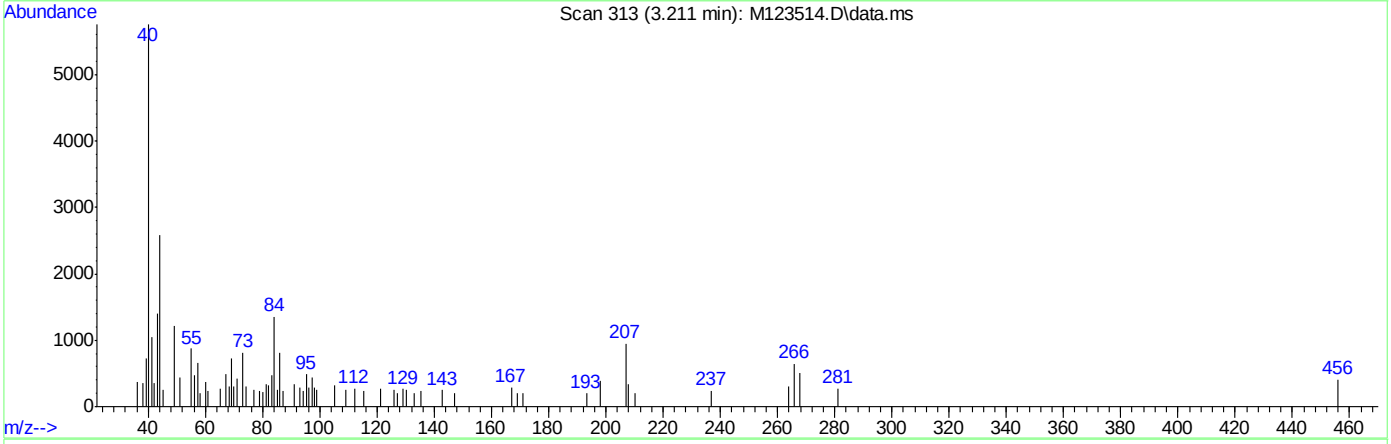
SGS ACCUTEST JC19996

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

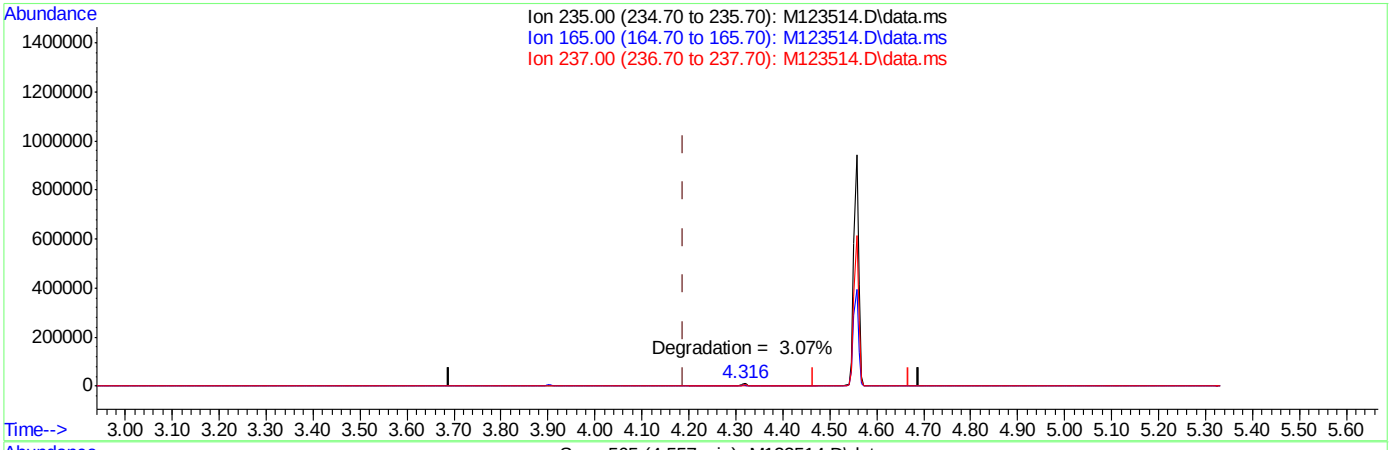
Ion	Exp%	Act%
184.05	100	0.00
92.05	10.70	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

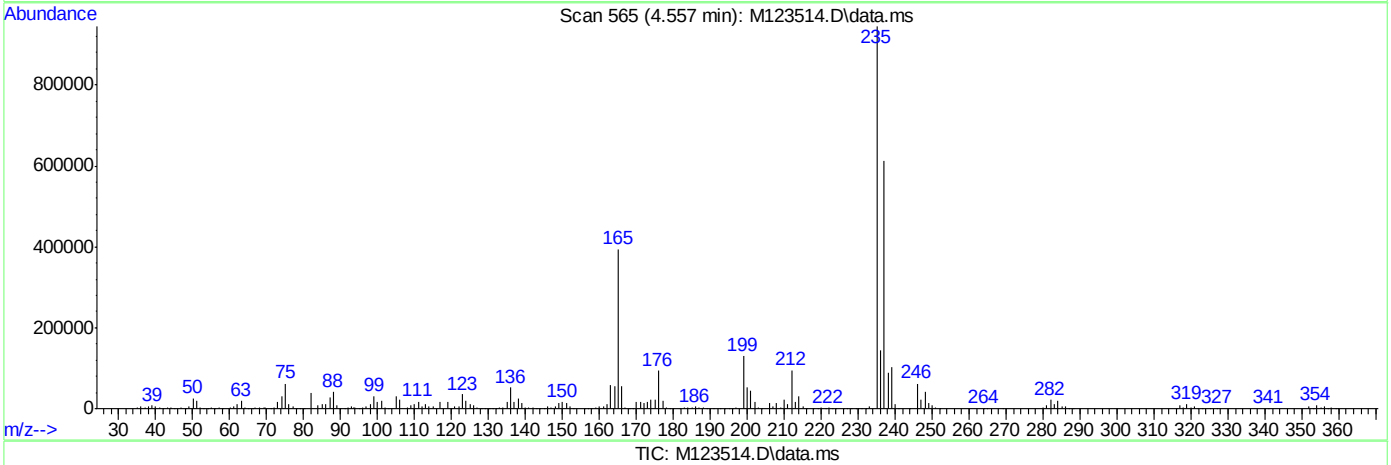
SGS ACCUTEST JC19996

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

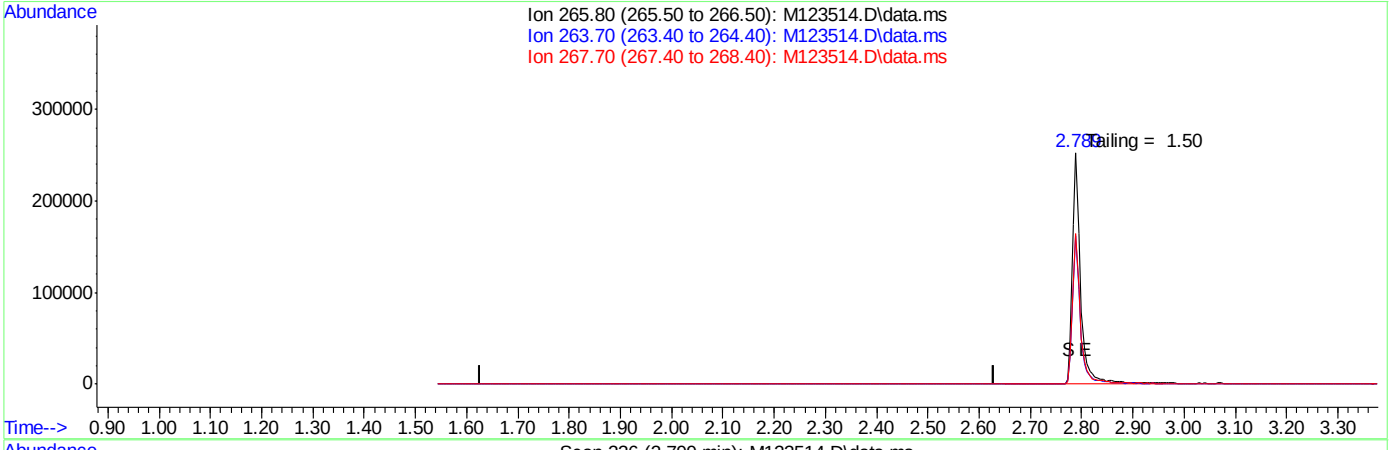
response 682383

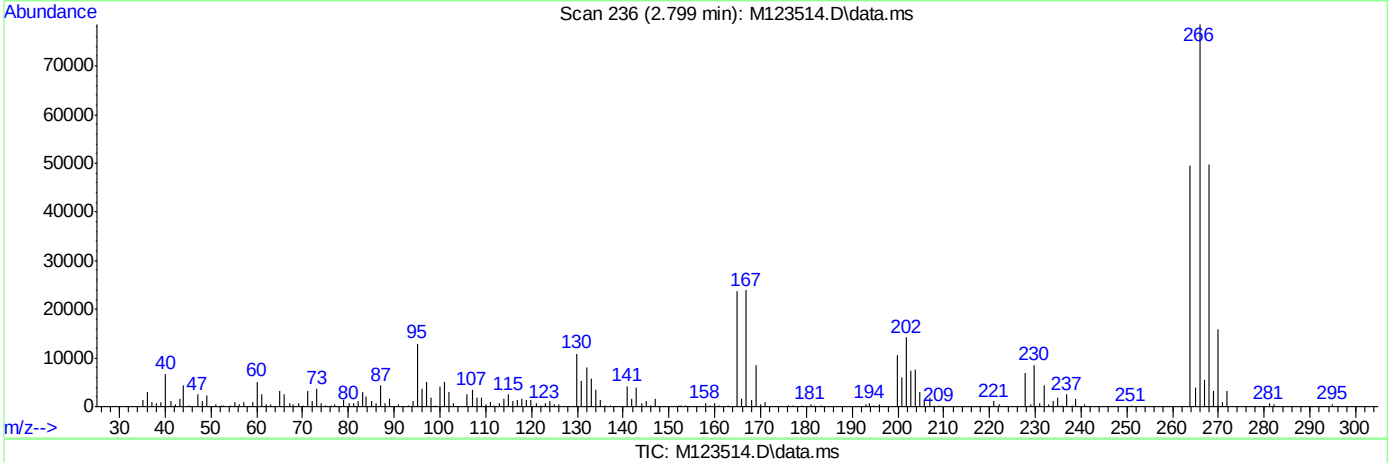
Ion	Exp%	Act%
235.00	100	100
165.00	46.90	41.76
237.00	64.20	64.83
0.00	0.00	0.00

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:





TIC: M123514.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

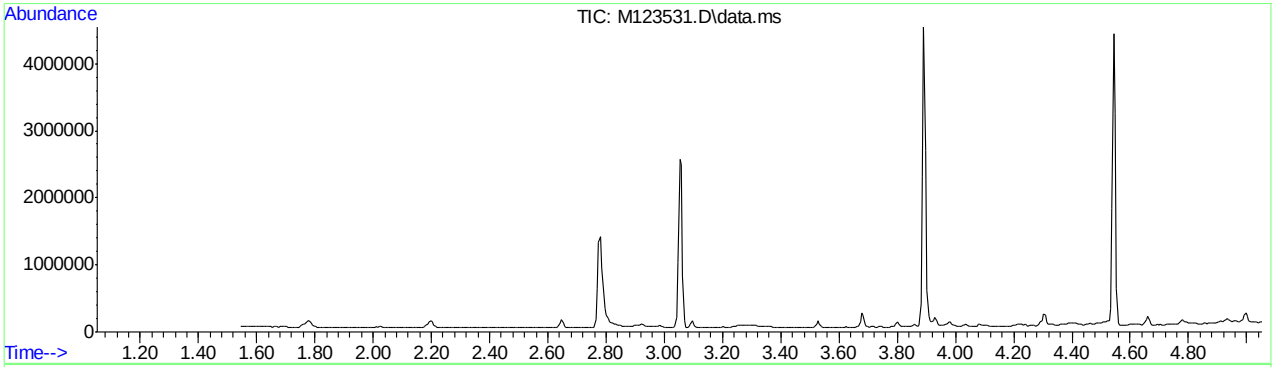
SGS ACCUTEST JC19996

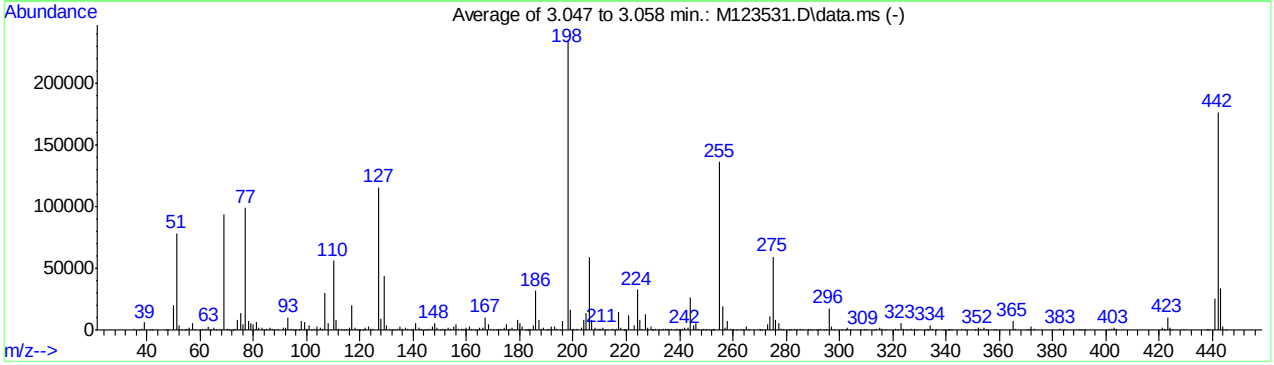
DFTPPR

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 JC19996

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

DFTPPM.M Wed Apr 13 13:00:17 2016 MSM Page: 2

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

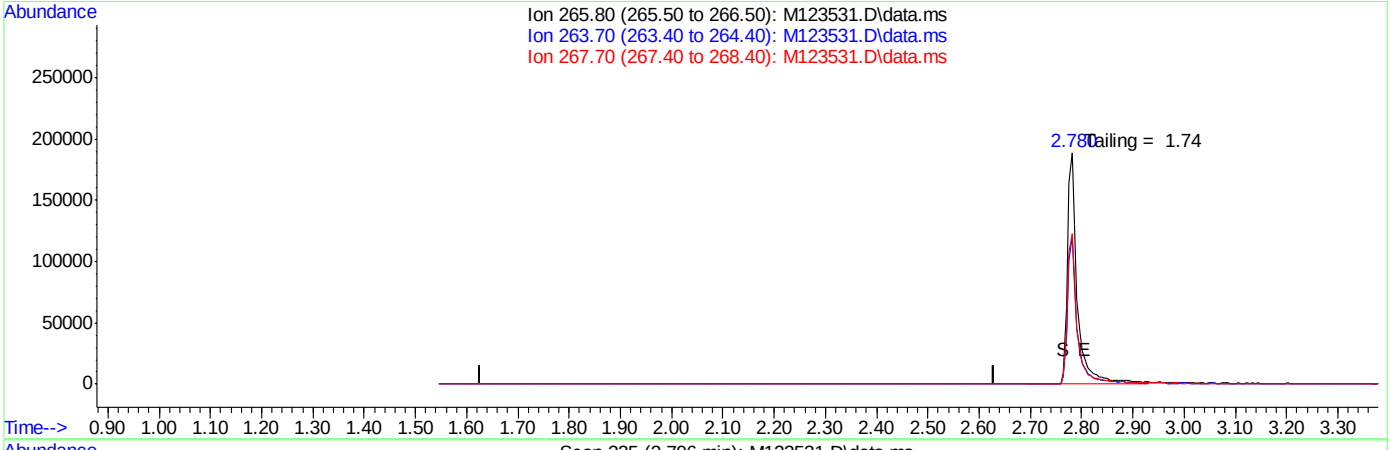
Average of 3.047 to 3.058 min.: M123531.D\data.ms
DFTPP
Modified:subtracted

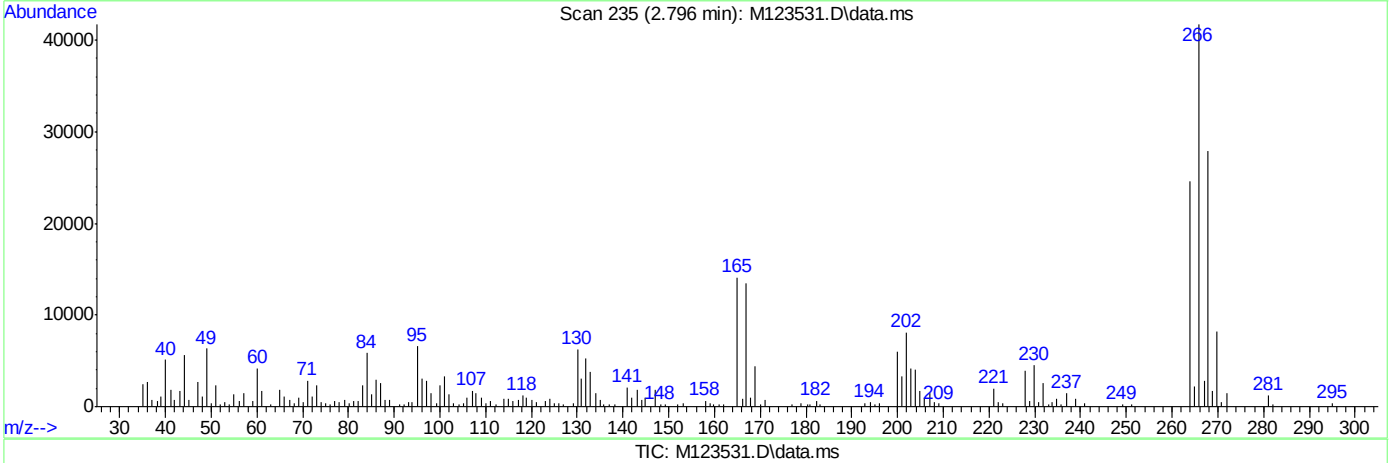
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
423.05	10276						
424.00	1908						
425.05	231						
429.25	67						
437.95	107						
438.55	101						
441.05	25886						
442.05	176602						
443.05	33324						
444.05	3133						
444.95	87						

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:





(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

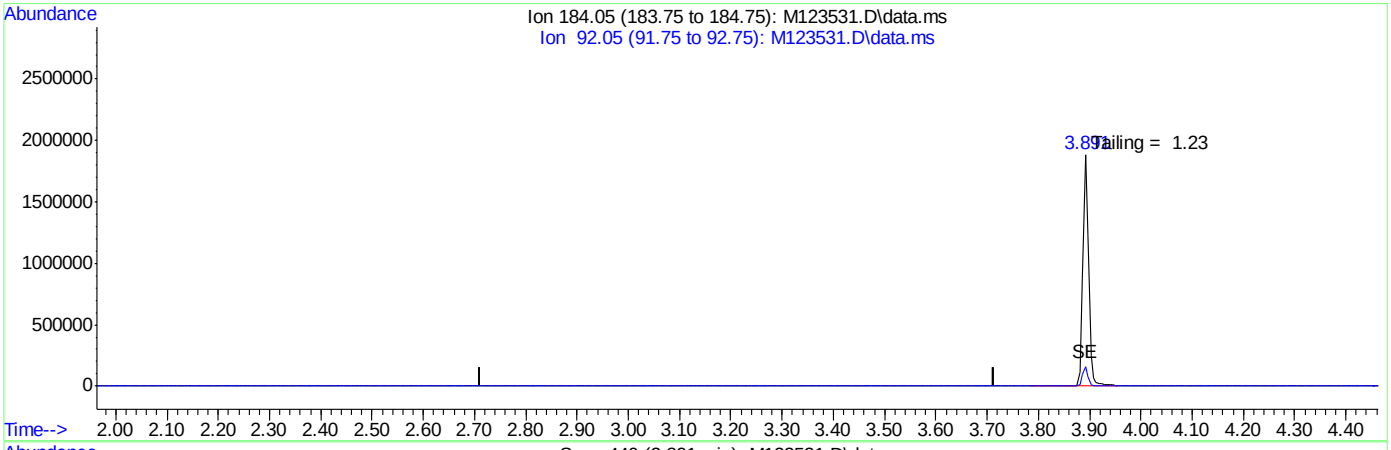
DFTPPM.M Wed Apr 13 12:28:24 2016 MSM

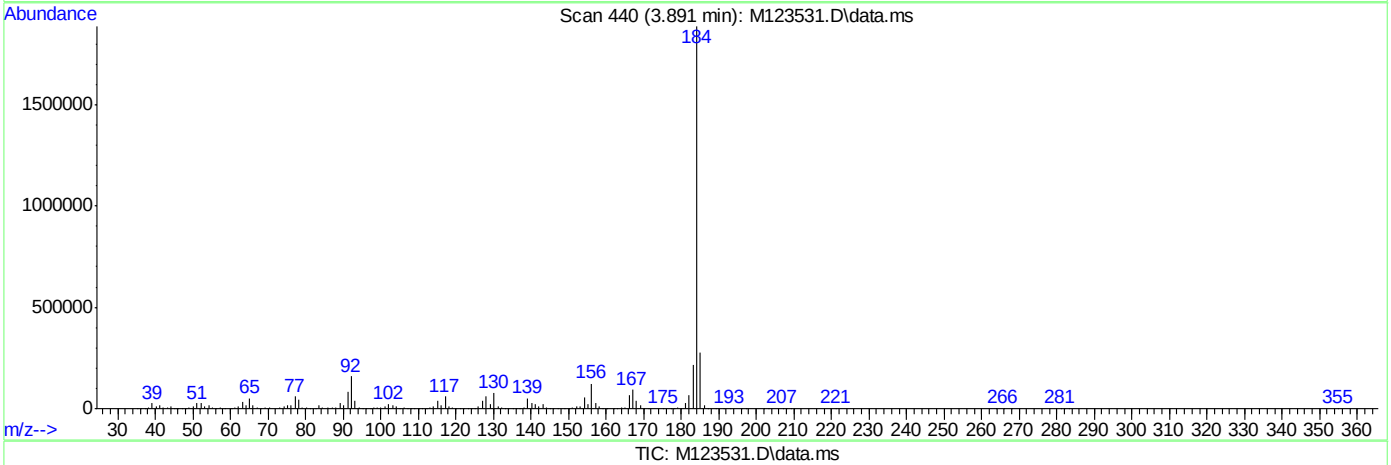
SGS ACCUTEST JC19996

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

(2) Benzidine (M)

3.213min (-3.213) 0.00ppm

response 0

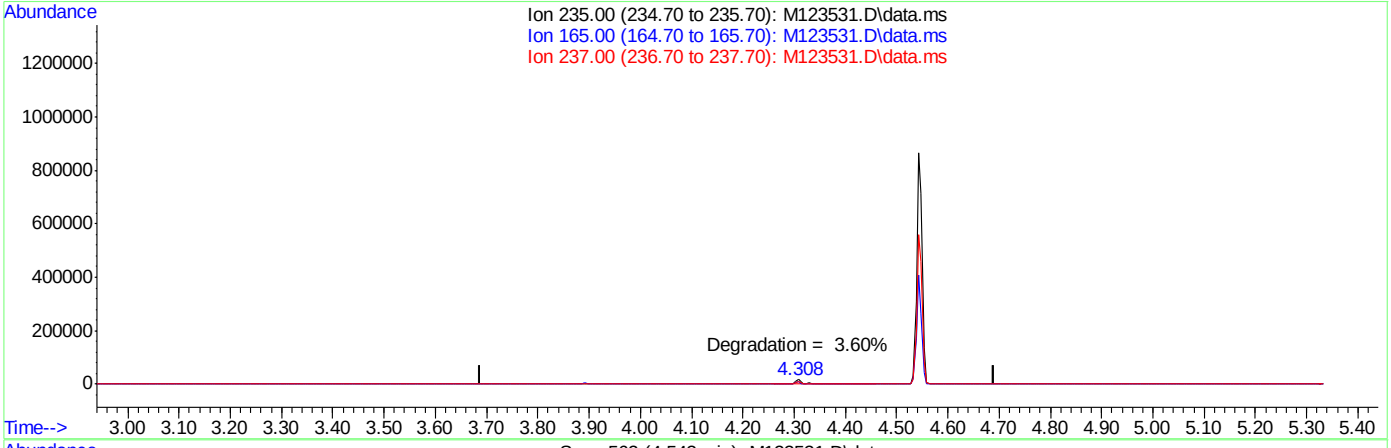
Ion	Exp%	Act%
184.05	100	0.00
92.05	10.70	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

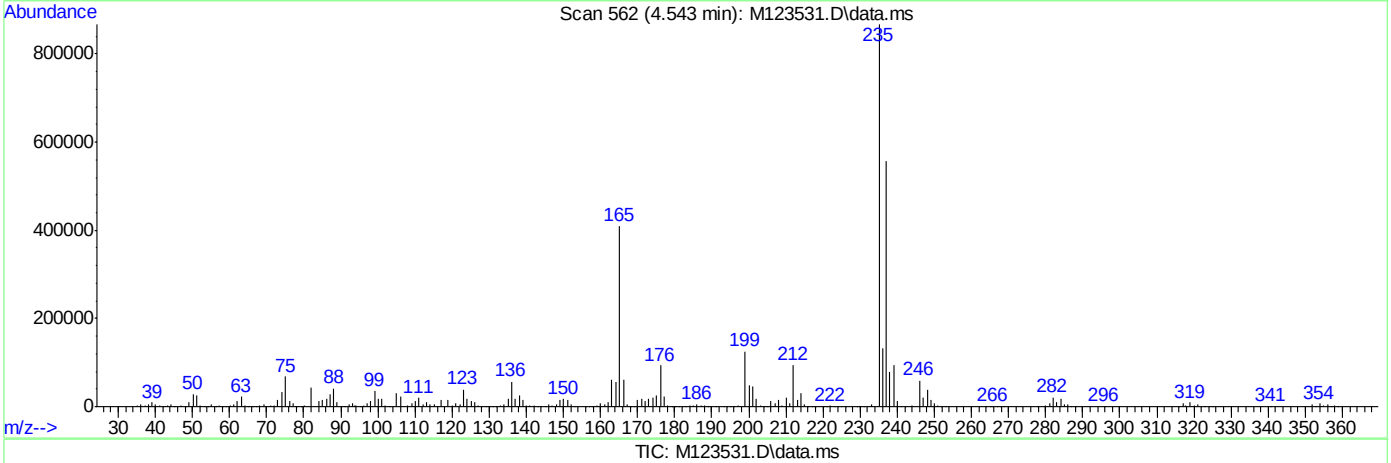
SGS ACCUTEST JC19996

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

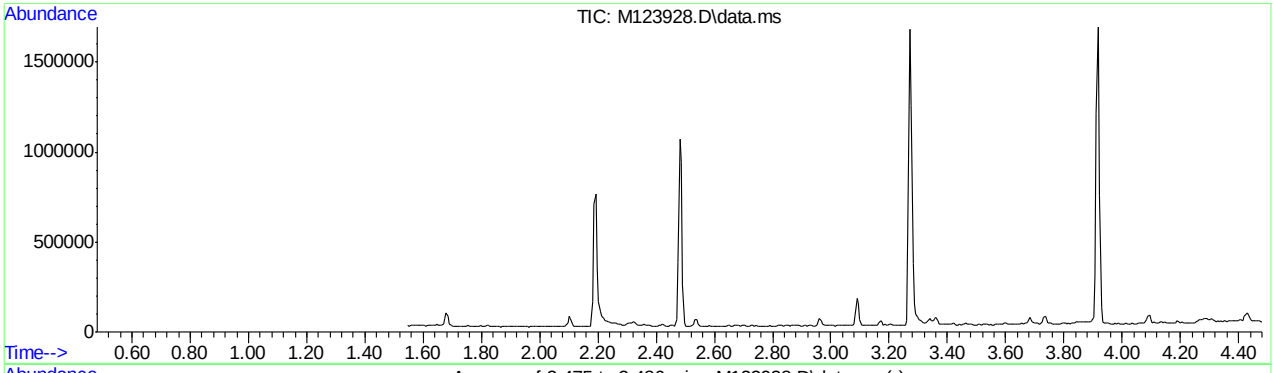
SGS ACCUTEST JC19996

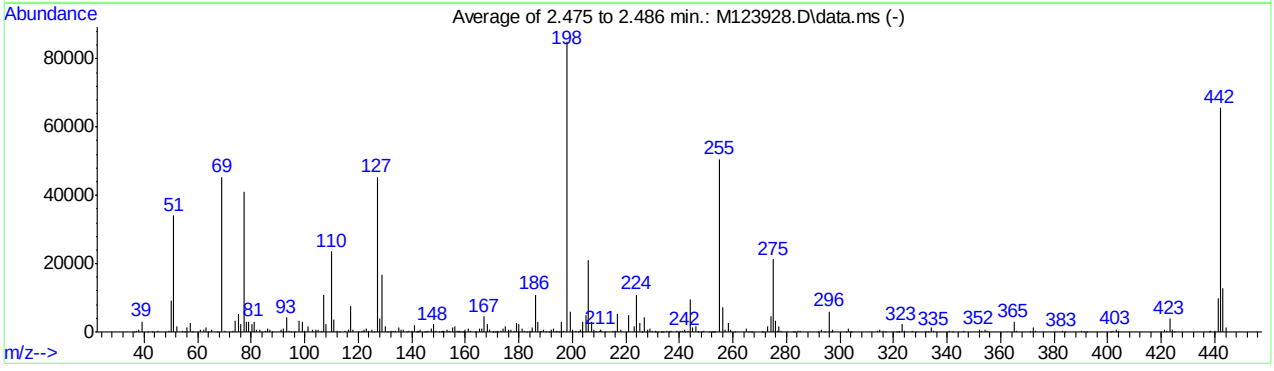
DFTPPR

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

SGS ACCUTEST JC19996

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

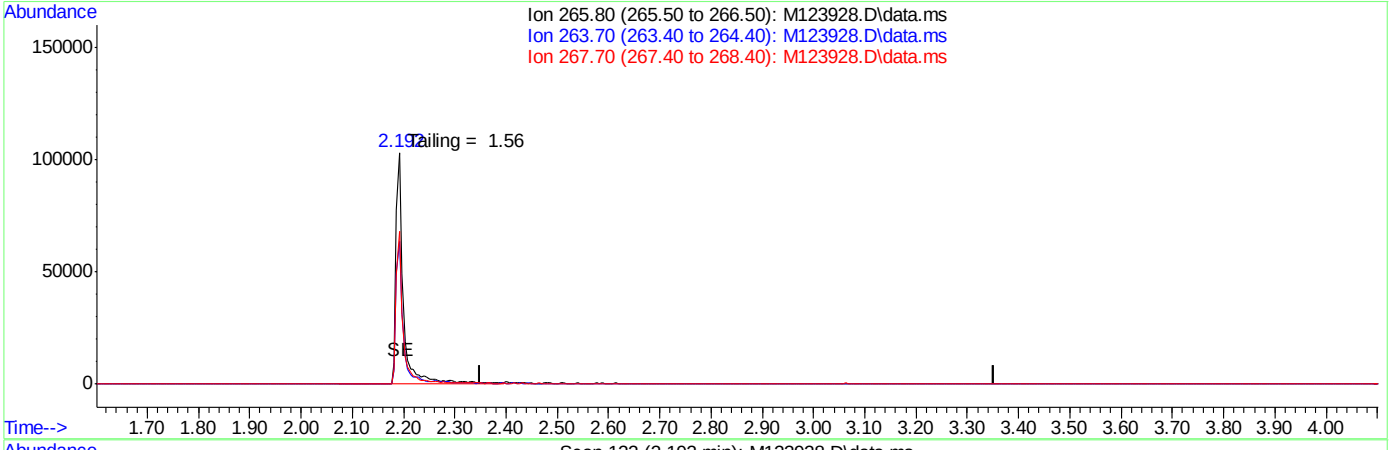
Average of 2.475 to 2.486 min.: M123928.D\data.ms
dftpp
Modified:subtracted

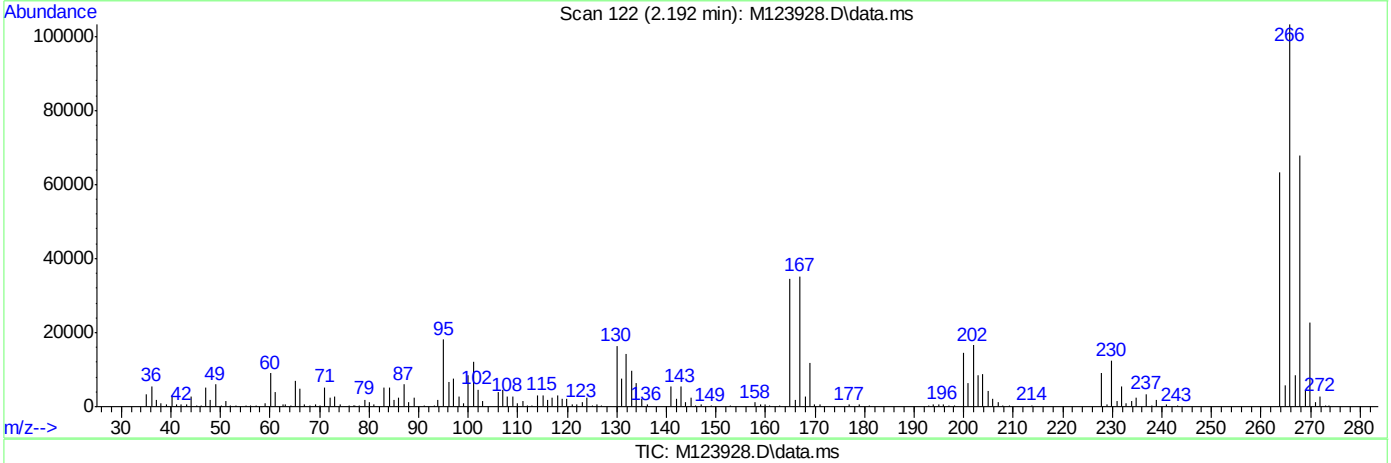
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
354.05	791	392.25	91	438.35	179		
354.90	178	401.15	75	439.95	292		
365.05	2923	401.90	356	441.05	9960		
366.00	434	403.00	804	442.05	65516		
371.00	156	403.95	348	443.05	12724		
372.00	1307	420.95	582	444.05	1182		
373.10	372	422.00	417				
383.00	274	423.05	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:





(1) Pentachlorophenol (MC)

2.852min (-2.852) 0.00ppm

response 0

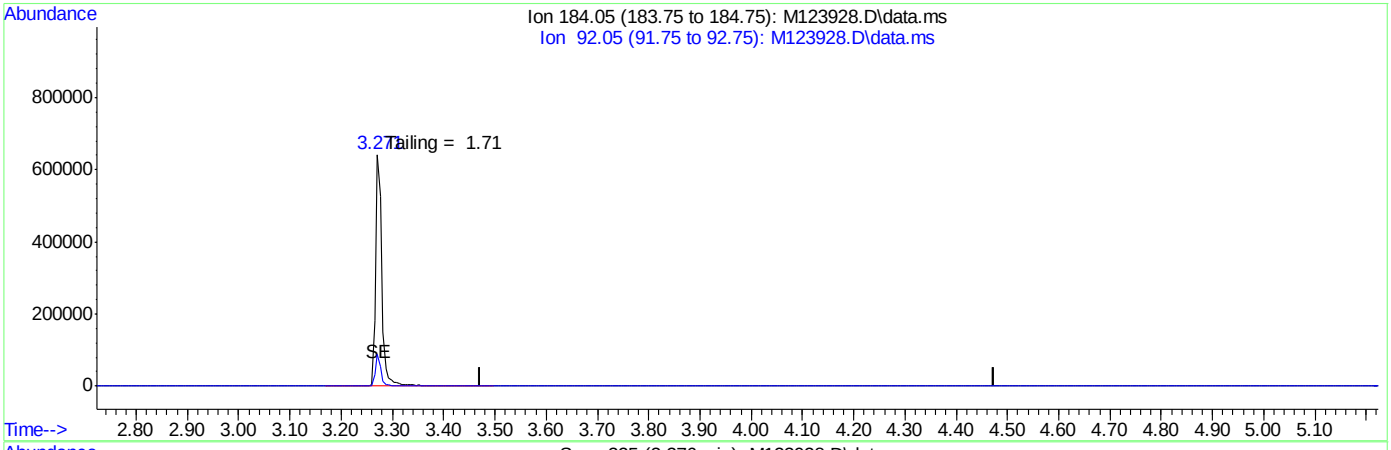
Ion	Exp%	Act%
265.80	100	0.00
263.70	61.60	0.00#
267.70	61.70	0.00#
0.00	0.00	0.00

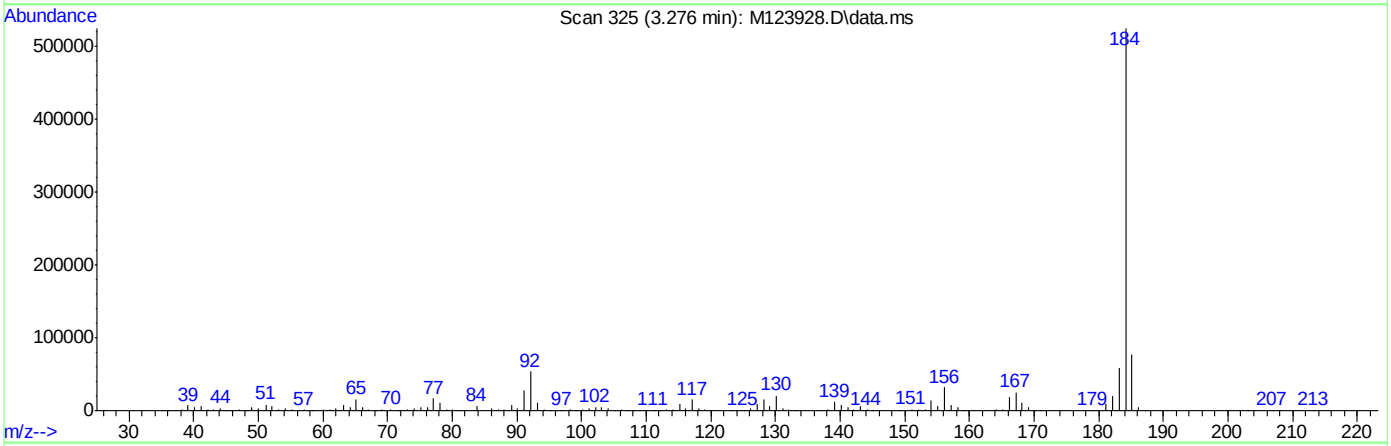
SGS ACCUTEST JC19996

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

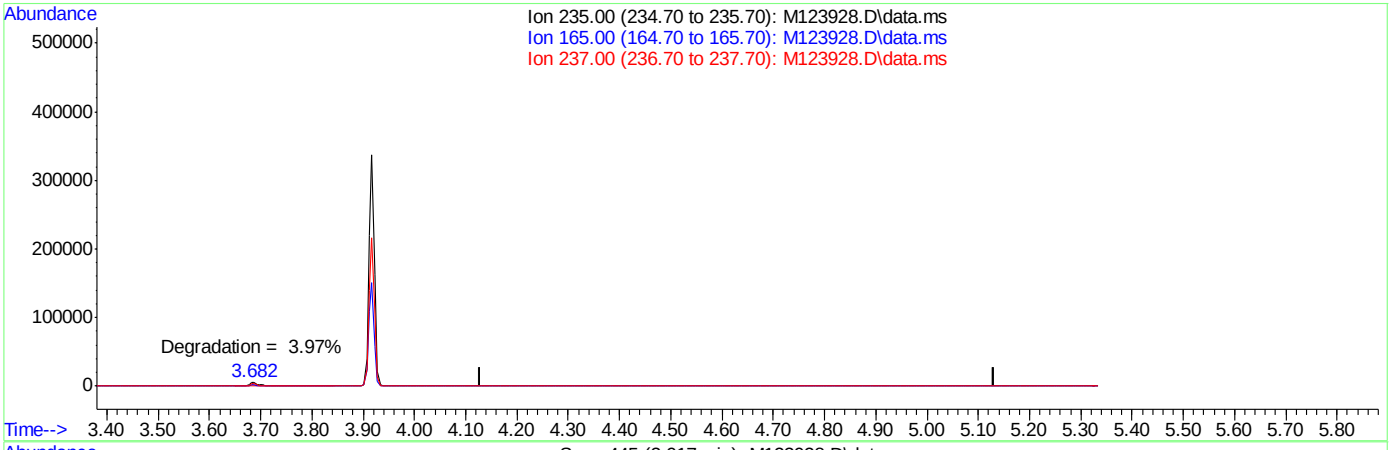
response 0

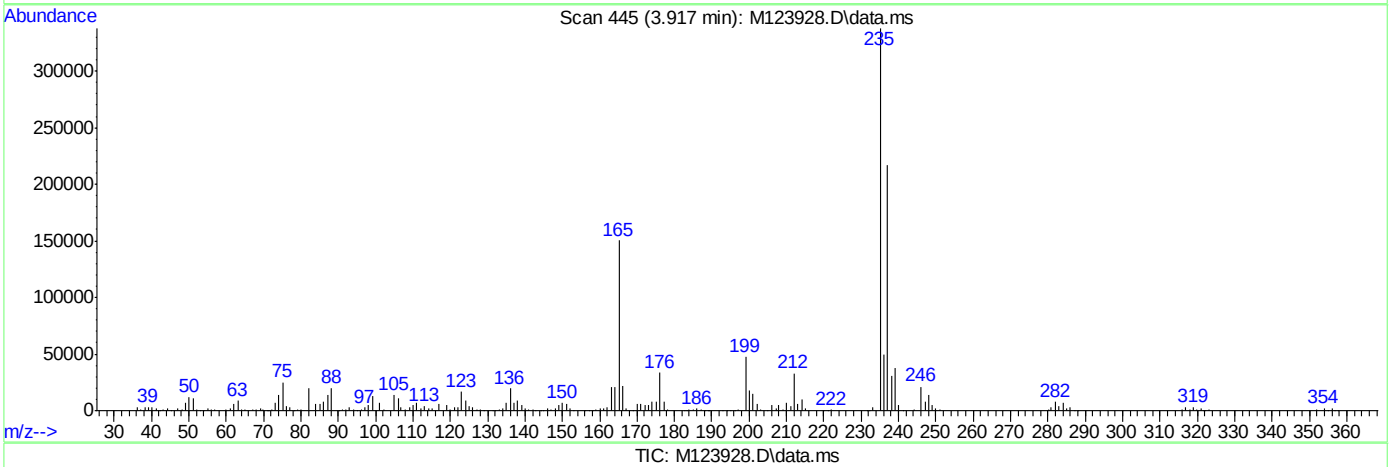
Ion	Exp%	Act%
184.05	100	0.00
92.05	10.70	0.00
0.00	0.00	0.00
0.00	0.00	0.00

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

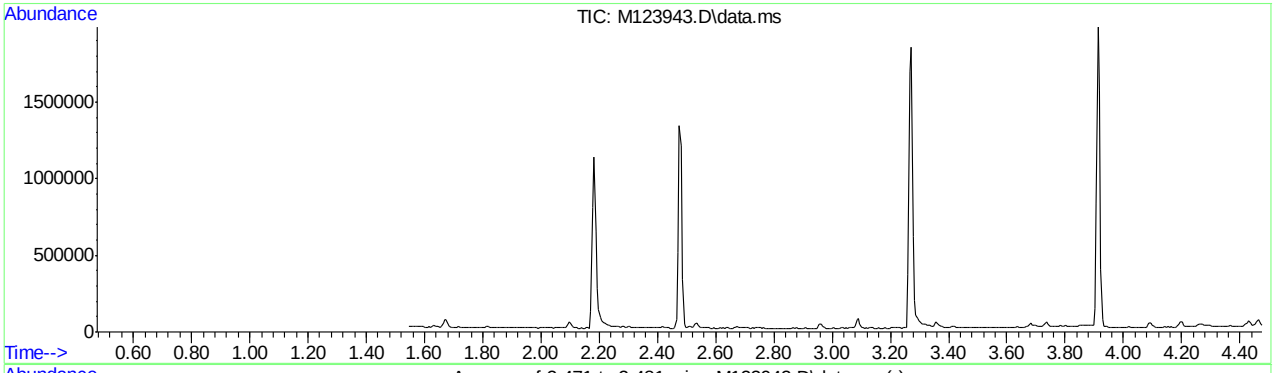
SGS ACCUTEST JC19996

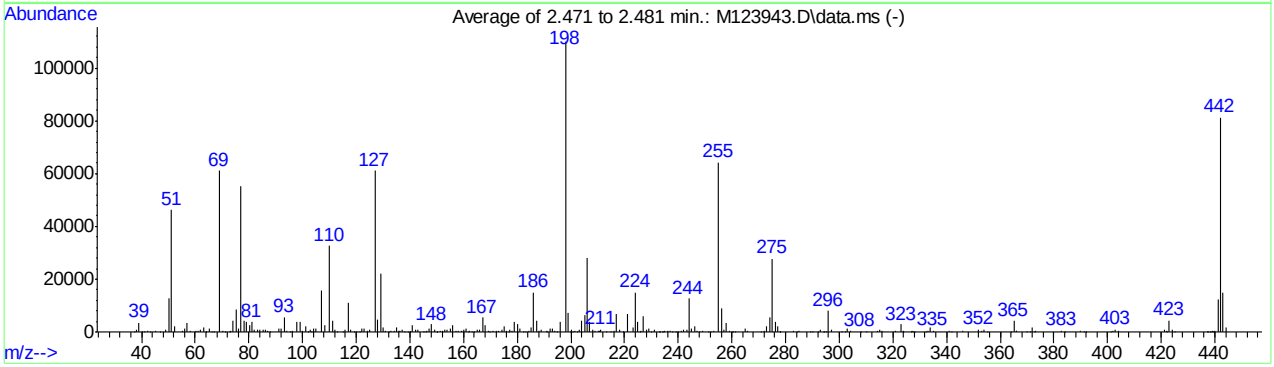
DFTPPR

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 JC19996

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

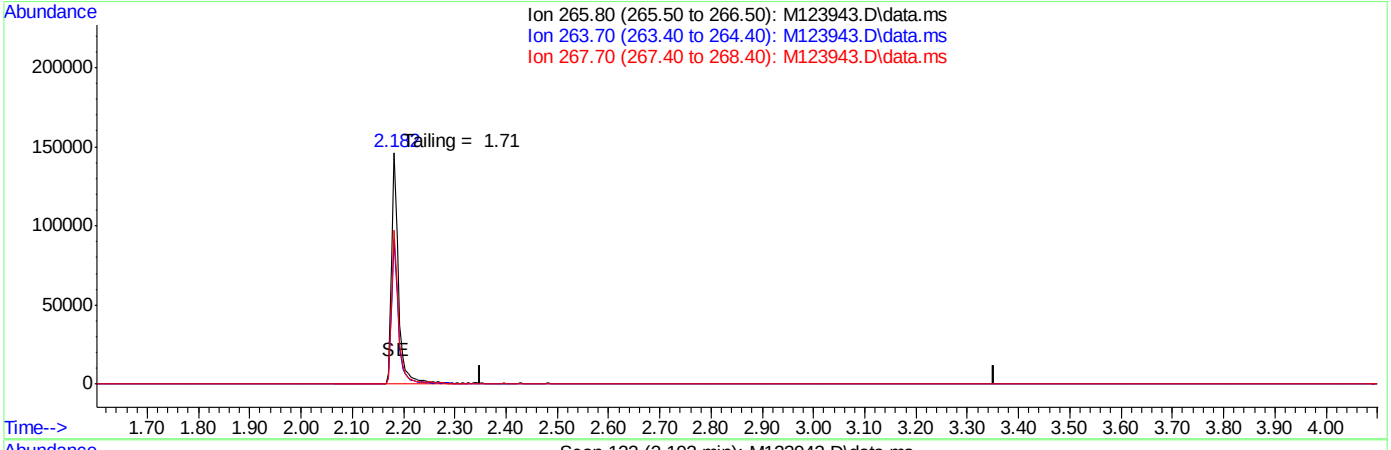
Average of 2.471 to 2.481 min.: M123943.D\data.ms
dftpp
Modified:subtracted

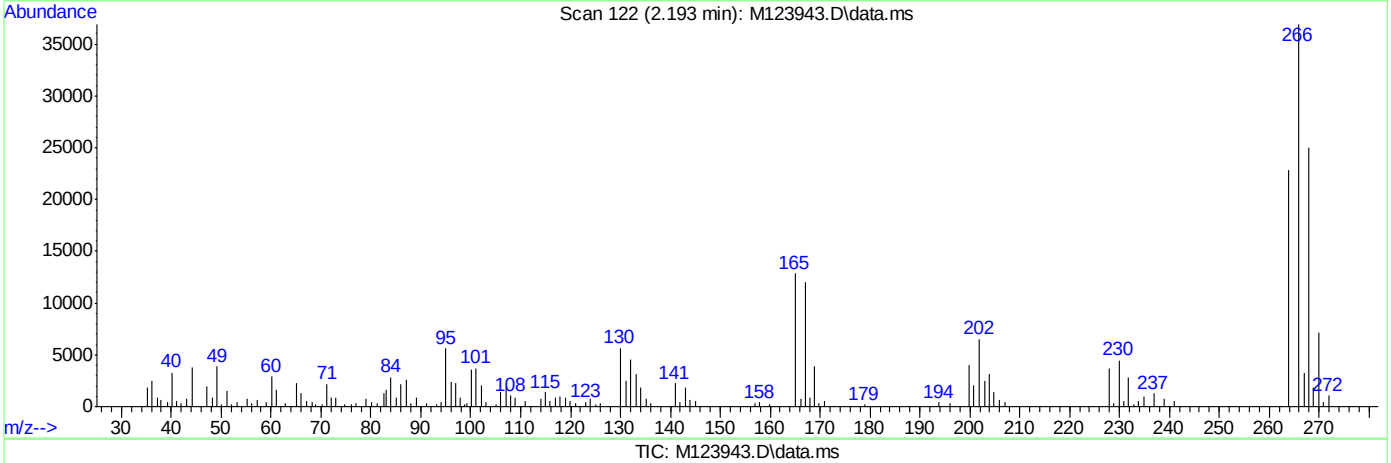
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
352.05	914	372.85	116	421.00	667	439.25	117
353.05	560	373.05	250	421.95	76	439.45	173
354.05	963	382.95	435	422.10	611	439.90	283
355.10	194	384.05	96	423.05	4450	441.05	12499
363.95	83	389.95	231	424.00	977	442.05	81226
365.05	4073	391.05	68	425.05	76	443.05	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		

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

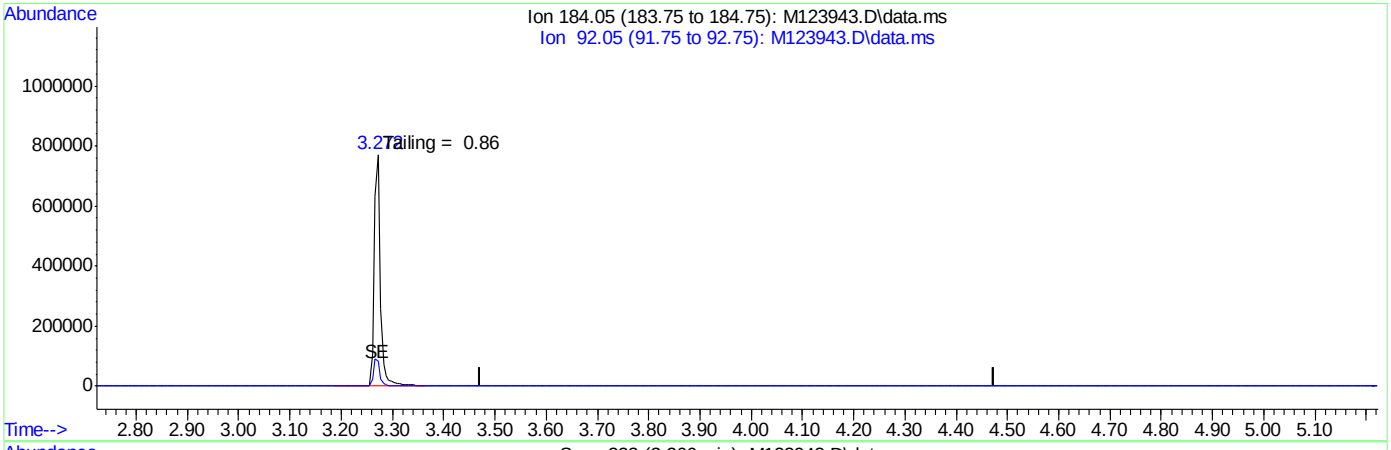
Ion	Exp%	Act%
265.80	100	0.00
263.70	61.60	0.00#
267.70	61.70	0.00#
0.00	0.00	0.00

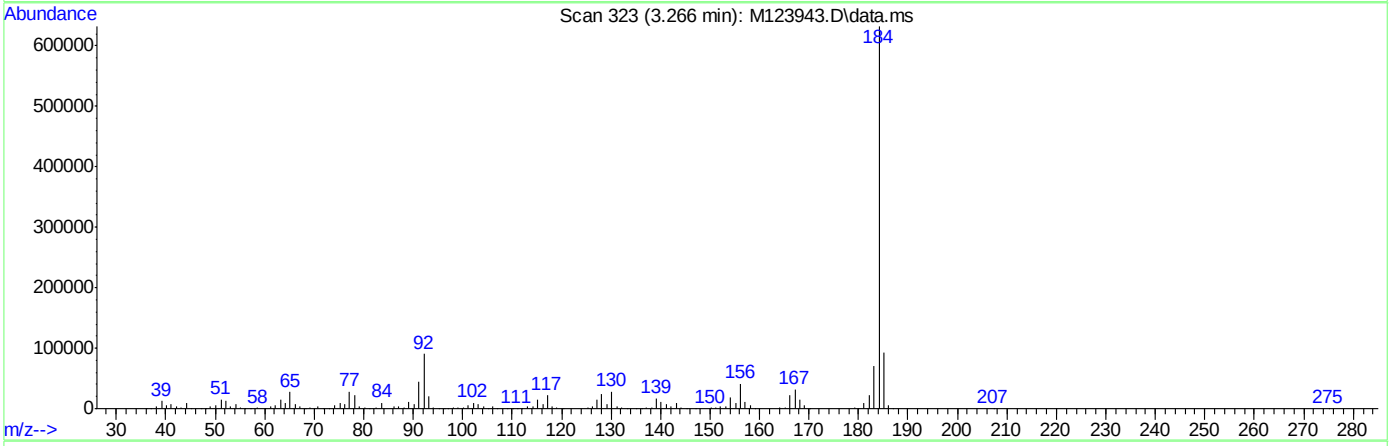
SGS ACCUTEST JC19996

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:





(2) Benzidine (M)

3.973min 0.00ppm d

response 0

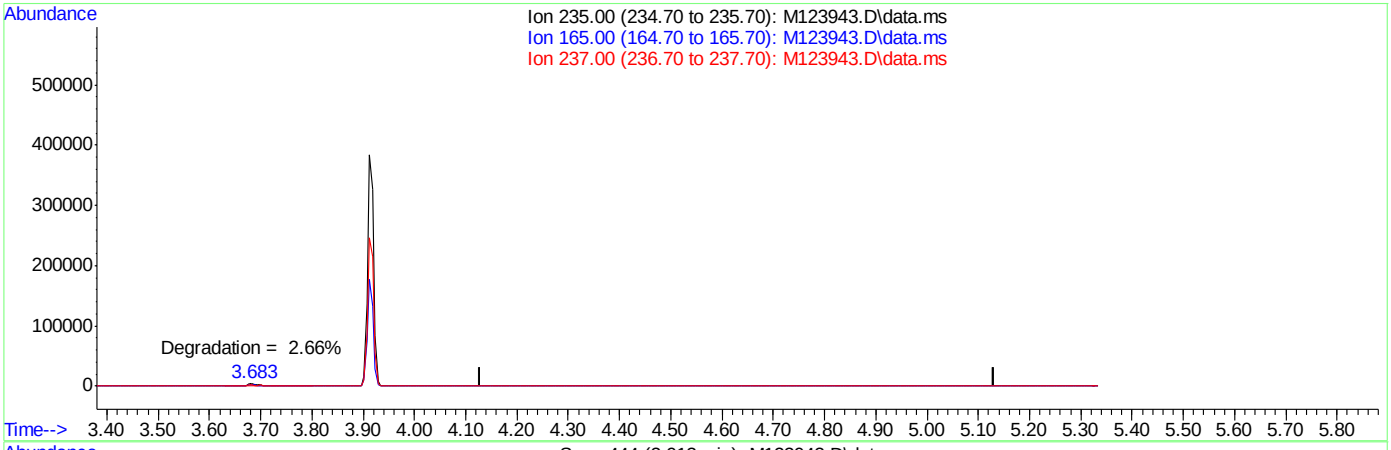
Ion	Exp%	Act%
184.05	100	0.00
92.05	10.70	0.00
0.00	0.00	0.00
0.00	0.00	0.00

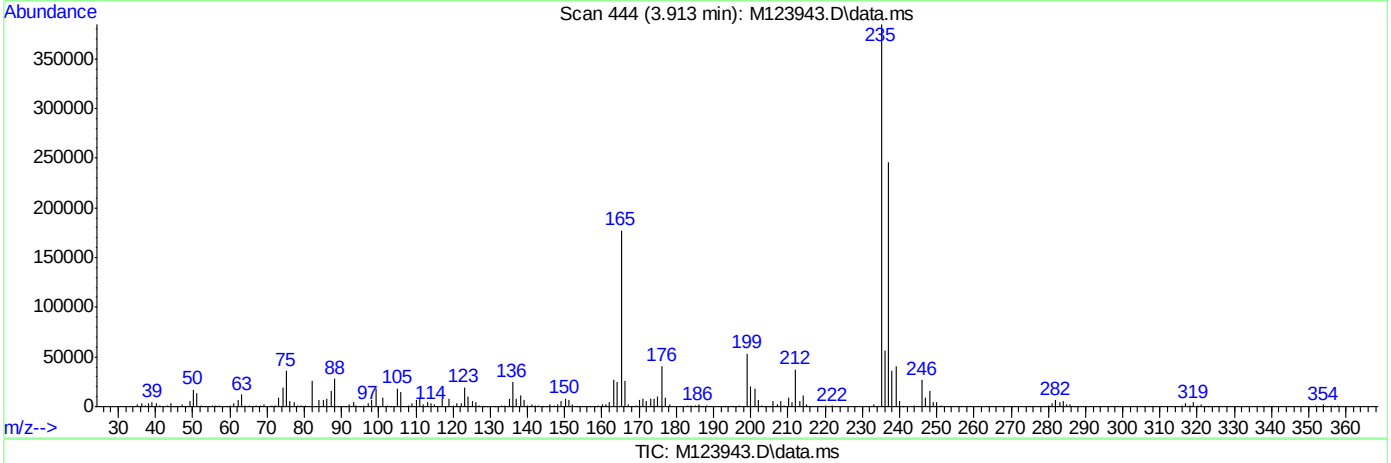
SGS ACCUTEST JC19996

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

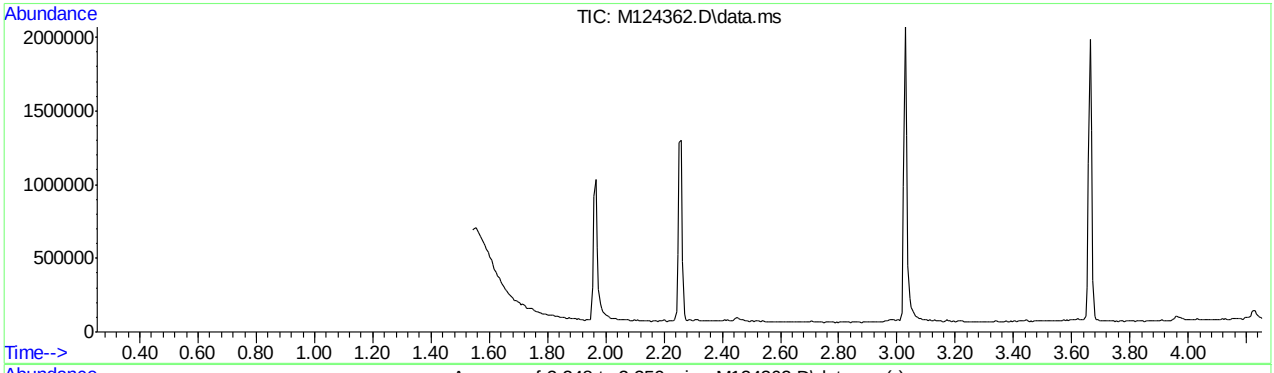
SGS ACCUTEST JC19996

DFTPPR

Data Path : C:\msdchem\1\DATA\EM5261\
Data File : M124362.D
Acq On : 11 May 2016 10:21 pm
Operator : juliusj
Sample : dftpp
Misc : op93478,em5261
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 133, 134, 135; Background Corrected with Scan 128

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	35.7	39010	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	49.4	53949	PASS
70	69	0.00	2	0.5	277	PASS
127	198	40	60	49.7	54322	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	109258	PASS
199	198	5	9	6.8	7439	PASS
275	198	10	30	26.8	29306	PASS
365	198	1	100	3.8	4166	PASS
441	443	0.10	100	81.9	13733	PASS
442	198	40	100	78.1	85296	PASS
443	442	17	23	19.7	16777	PASS

SGS ACCUTEST JC19996

Average of 2.248 to 2.259 min.: M124362.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.05	1840	50.15	10831	60.05	245	70.10	277
36.05	126	51.05	39010	61.15	816	71.05	304
37.05	221	52.05	1905	62.10	627	73.10	1070
38.05	352	53.15	228	63.10	2135	74.10	4181
39.15	3782	54.20	195	63.95	123	75.05	6998
40.05	76	55.10	662	64.25	145	77.10	47125
41.15	569	56.05	1540	65.05	980	78.10	3736
42.10	32	57.10	3526	65.85	85	79.10	3087
43.10	640	58.05	102	66.15	82	80.00	2619
44.15	34	58.95	91	67.00	92	81.05	3092
46.25	67	59.25	100	69.00	53949	82.05	406

Average of 2.248 to 2.259 min.: M124362.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
83.05	472	98.05	3497	110.05	27649	121.85	118
85.05	773	99.05	3105	111.05	4163	122.05	744
86.05	562	100.10	272	112.00	431	123.05	1264
87.00	584	101.05	1270	113.10	207	124.05	634
91.10	721	103.00	691	115.05	576	125.00	616
92.10	1025	104.00	947	116.10	995	127.05	54322
93.10	5071	105.00	938	117.05	9030	128.05	4504
94.00	388	106.05	130	118.05	821	129.05	19859
95.05	8	107.05	13348	118.75	68	130.05	1589
96.10	419	108.05	2430	119.05	236	130.95	487
97.10	216	108.85	146	121.05	96	132.10	329

Average of 2.248 to 2.259 min.: M124362.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
132.75	97	144.25	131	154.00	664	165.00	623
134.00	529	144.55	68	155.05	1237	166.10	985
135.05	1179	145.10	205	156.05	1868	167.00	4833
136.00	655	146.05	472	157.05	532	167.85	411
137.10	864	147.00	1136	158.00	480	168.00	1786
138.10	278	148.05	2790	158.85	72	168.85	426
139.15	68	149.00	551	159.00	246	170.05	69
140.10	189	150.00	175	160.00	764	170.30	183
141.05	2011	151.10	452	161.05	1160	171.10	364
142.05	907	152.05	430	162.00	363	172.00	411
142.95	545	153.00	846	164.10	276	172.95	415

Average of 2.248 to 2.259 min.: M124362.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
174.10	898	184.10	285	193.05	1261	203.00	672
175.05	1753	185.10	1905	194.10	346	204.05	3719
176.05	770	186.05	14165	194.85	145	205.05	6181
177.05	861	187.05	4304	196.00	4588	206.05	26669
178.00	286	188.00	386	197.95	109258	207.05	3679
179.00	3370	188.25	103	199.00	7439	207.95	964
180.05	2562	189.00	867	200.00	604	208.95	301
181.05	1275	190.05	126	200.95	119	210.15	375
182.00	195	191.00	429	201.55	871	210.75	361
182.65	80	191.65	106	202.05	15	211.00	1096
183.15	123	192.05	1213	202.85	159	212.05	76

Average of 2.248 to 2.259 min.: M124362.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
213.20	282	225.05	3868	238.15	68	249.00	436
214.85	133	226.05	249	238.95	196	249.95	188
215.05	116	227.05	5979	239.95	206	250.85	74
216.15	144	228.00	952	241.00	413	251.95	153

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217.00	6379	229.00	1454	241.75	142	253.00	447
217.95	973	229.95	239	242.10	917	255.05	66725
219.05	75	231.00	592	243.10	1133	256.00	10149
221.05	7634	234.05	379	244.05	12623	257.05	751
222.15	167	235.00	510	245.10	1911	258.00	3291
223.00	1725	235.90	273	246.00	2138	258.85	355
224.05	15498	236.95	560	247.00	511	259.05	199

Average of 2.248 to 2.259 min.: M124362.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
259.95	102	277.05	2231	297.05	1295	316.00	461
260.90	144	277.90	408	298.05	67	316.95	74
265.00	1505	281.00	165	301.10	175	320.95	124
265.95	754	282.95	69	302.05	222	321.15	117
268.05	85	283.10	364	303.05	1024	321.75	137
269.95	91	284.15	173	303.90	212	322.10	168
272.05	89	285.05	450	304.25	198	323.05	3388
273.00	2235	292.10	165	307.95	71	324.05	690
274.05	5706	293.05	588	313.15	68	326.05	74
275.05	29306	294.05	124	314.10	516	326.95	729
276.05	4108	296.05	7938	315.05	998	327.95	281

Average of 2.248 to 2.259 min.: M124362.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
328.95	79	346.85	76	371.05	186	405.15	68
332.00	252	350.35	80	372.05	1787	421.05	805
333.05	135	351.25	114	373.05	523	421.95	358
333.25	201	351.95	925	383.05	527	422.15	488
334.05	2144	353.05	732	384.10	185	423.05	5306
335.00	402	354.05	1175	390.15	266	424.05	1062
336.05	74	354.95	225	390.85	80	435.45	69
340.05	86	364.95	4166	401.05	117	438.05	186
340.35	71	366.00	705	401.90	549	438.45	85
341.00	397	369.85	69	403.00	958	438.80	200
345.95	553	370.85	124	404.10	504	439.75	154

Average of 2.248 to 2.259 min.: M124362.D\data.ms
dftpp
Modified:subtracted

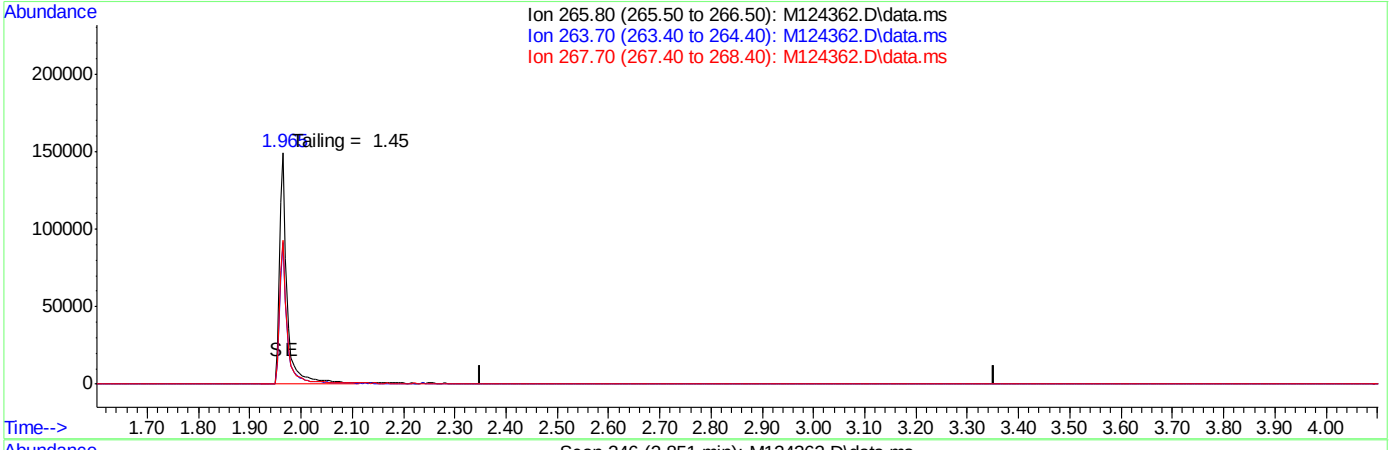
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
441.05	13733						
442.05	85296						
443.05	16777						
444.05	1654						

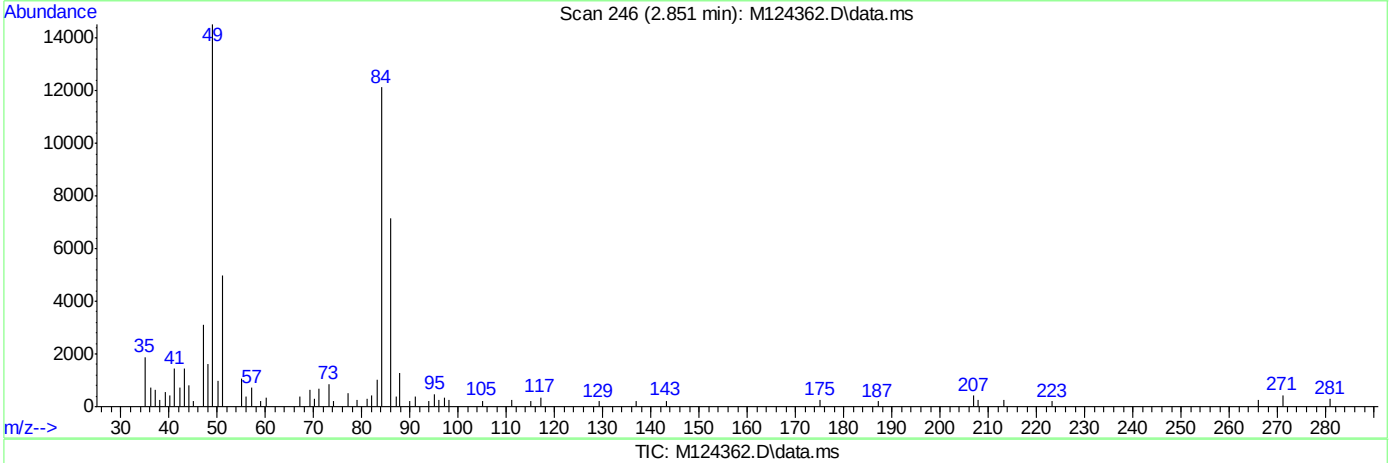
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5261\
Data File : M124362.D
Acq On : 11 May 2016 10:21 pm
Operator : juliusj
Sample : dftpp
Misc : op93478,em5261
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 11 22:27:14 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: M124362.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\EM5261\
Data File : M124362.D
Acq On    : 11 May 2016  10:21 pm
Operator  : juliusj
Sample    : dftpp
Misc      : op93478,em5261
ALS Vial  : 1   Sample Multiplier: 1

Quant Time: May 11 22:27:14 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:
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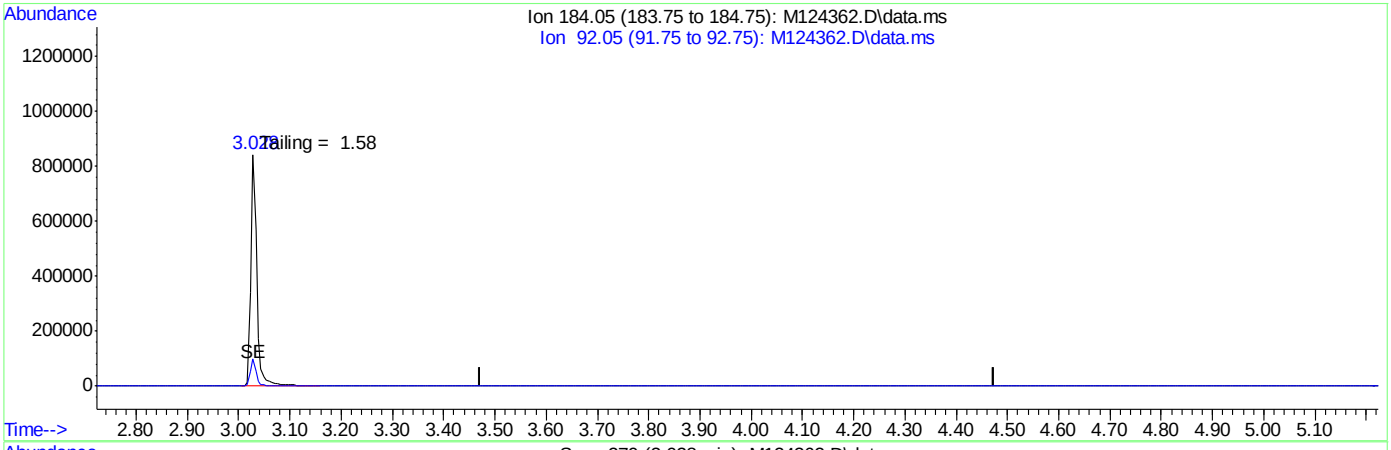
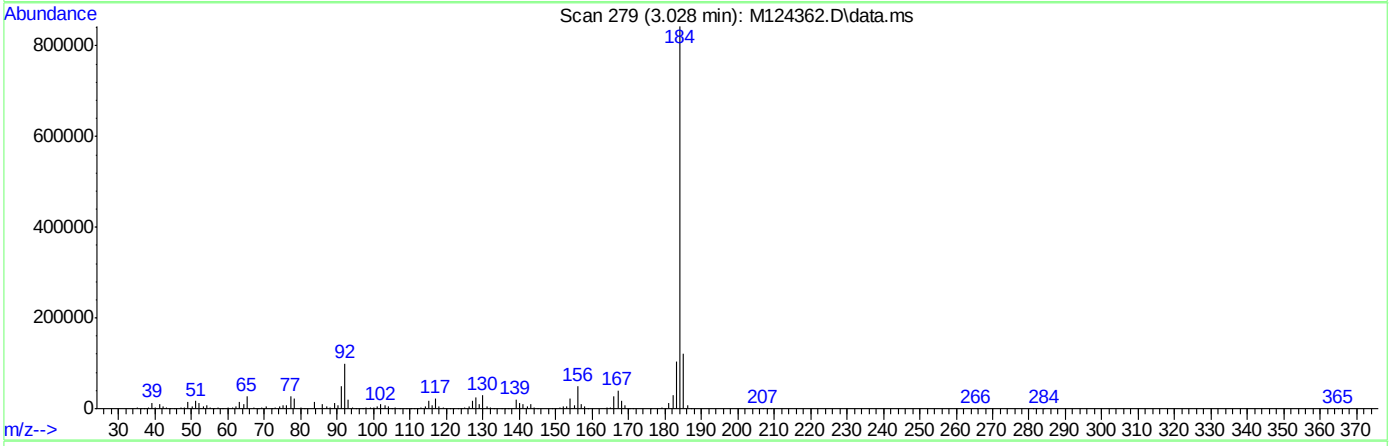




(2) Benzidine (M)

3.028min (-0.946) 0.00ppm m

response 677841

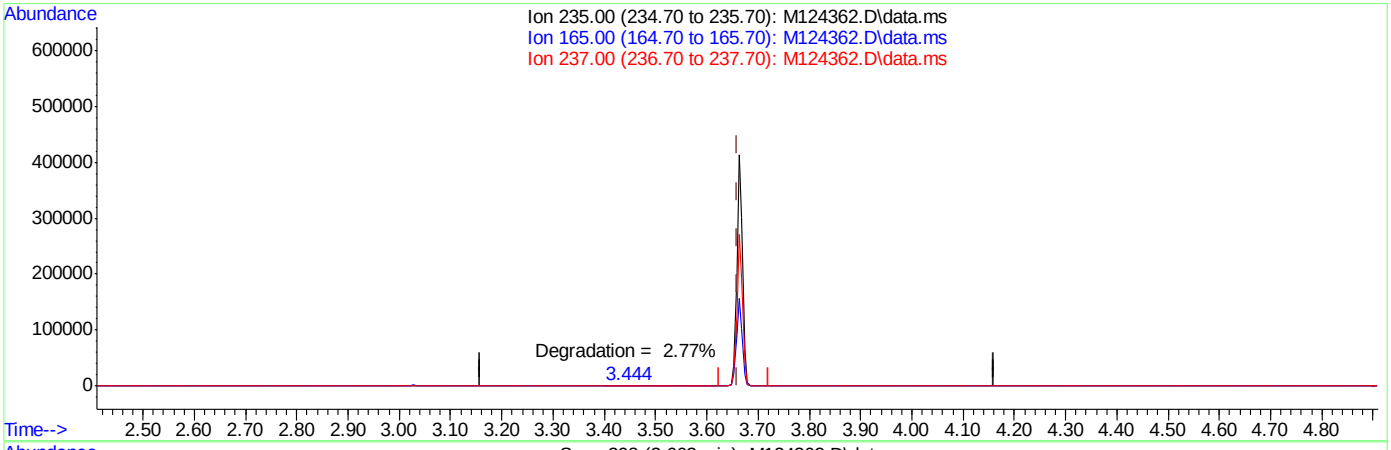
Ion	Exp%	Act%
184.05	100	100
92.05	10.70	11.77
0.00	0.00	0.00
0.00	0.00	0.00

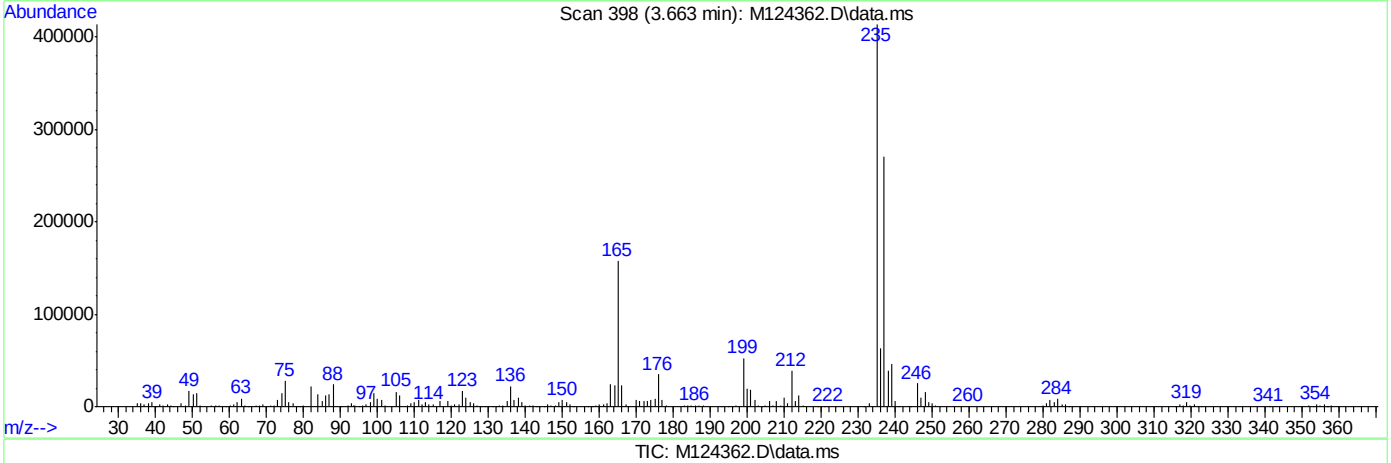
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5261\
Data File : M124362.D
Acq On : 11 May 2016 10:21 pm
Operator : juliusj
Sample : dftpp
Misc : op93478,em5261
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 12 09:34:35 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: M124362.D\data.ms

(3) PP-DDT (MC)

3.663min (+0.003) 0.00ppm

response 332103

Ion	Exp%	Act%
235.00	100	100
165.00	46.90	38.06
237.00	64.20	65.34
0.00	0.00	0.00

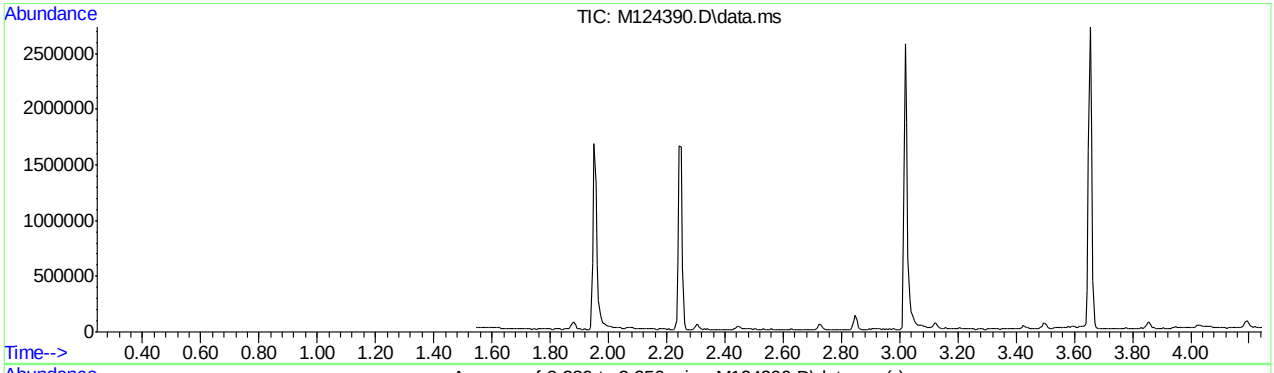
SGS ACCUTEST JC19996

DFTPPR

Data Path : C:\msdchem\1\DATA\EM5262\
Data File : M124390.D
Acq On : 12 May 2016 12:08 pm
Operator : ashleyd
Sample : dftpp
Misc : op93478,em5262
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 131, 132, 133; Background Corrected with Scan 126

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	38.3	55711	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	50.5	73476	PASS
70	69	0.00	2	0.8	596	PASS
127	198	40	60	50.1	72864	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	145386	PASS
199	198	5	9	6.8	9825	PASS
275	198	10	30	27.1	39410	PASS
365	198	1	100	4.2	6151	PASS
441	443	0.10	100	81.9	19498	PASS
442	198	40	100	84.9	123432	PASS
443	442	17	23	19.3	23808	PASS

SGS ACCUTEST JC19996

Average of 2.239 to 2.250 min.: M124390.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.10	207	50.15	15294	61.05	809	71.15	115
36.05	129	51.10	55711	62.00	868	73.05	566
37.15	496	52.10	2842	63.10	2536	74.05	5614
38.10	881	53.10	333	64.10	326	75.05	9205
39.10	4713	54.15	68	65.10	1217	77.15	63607
40.10	204	55.05	120	65.75	89	78.10	4559
41.15	541	56.10	1636	66.05	93	79.05	4229
42.15	67	57.10	3934	66.35	102	80.05	3271
46.95	74	58.10	211	67.30	214	81.00	4117
48.20	182	59.15	121	69.05	73476	82.05	1049
49.20	1336	60.10	28	70.10	596	83.05	796

Average of 2.239 to 2.250 min.: M124390.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
84.05	43	94.85	110	105.05	1304	120.05	239
85.10	890	95.10	75	107.05	18405	121.25	10
86.00	1211	96.05	487	108.05	3097	122.05	1129
87.00	431	97.25	50	110.05	36306	123.05	1545
87.80	13	98.05	4918	111.05	4891	124.00	796
88.10	200	99.05	3832	112.10	701	124.95	129
88.90	233	99.95	85	112.95	113	125.10	746
91.00	777	100.15	264	113.15	132	127.05	72864
92.10	1169	101.10	2257	117.05	12210	128.10	5677
93.05	7114	103.05	998	118.05	855	129.05	26970
94.00	624	104.00	1301	119.15	117	130.05	2128

Average of 2.239 to 2.250 min.: M124390.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
131.00	332	139.95	208	148.00	3109	158.65	102
131.55	73	140.15	224	149.05	904	158.95	216
131.75	80	141.00	2944	150.00	296	159.15	181
132.15	418	141.95	219	151.10	671	159.95	470
133.25	82	142.15	908	151.85	114	160.15	406
134.05	936	143.10	550	153.05	1163	161.00	1434
135.00	2006	144.10	311	154.05	743	161.75	95
136.00	875	145.10	215	155.00	1918	162.00	456
137.10	1208	146.00	475	156.05	2712	162.85	97
138.10	317	146.35	135	157.10	807	163.05	101
139.00	112	147.00	1284	157.90	626	164.05	141

Average of 2.239 to 2.250 min.: M124390.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
164.25	98	173.10	815	183.15	121	191.15	344
164.95	1141	174.05	1327	184.10	604	192.00	1714
166.05	1249	175.05	2543	184.45	106	193.00	1760
167.05	8393	176.10	993	185.10	2220	194.05	580
168.00	3533	177.00	1144	186.05	18781	194.75	240
169.10	645	177.75	310	187.05	5480	194.95	121
170.05	259	178.05	201	188.05	387	196.00	5066
170.65	75	179.05	5147	188.85	202	197.95	145386
170.95	155	180.00	3484	189.05	767	199.00	9825
171.25	148	181.05	1680	189.95	126	200.05	780
172.00	459	182.05	217	190.85	326	201.25	408

Average of 2.239 to 2.250 min.: M124390.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
201.60	1060	210.15	462	221.05	9526	232.95	184
202.85	226	210.85	575	222.95	335	234.00	574
203.05	1106	211.05	957	223.10	2109	234.95	548
204.05	5172	212.05	87	224.05	20337	235.95	435

DFTPPM.M Thu May 12 14:20:08 2016 MSM

Page: 2

SGS ACCUTEST JC19996

205.05	8793	213.05	79	225.05	4914	237.00	639
206.05	36509	215.00	310	227.05	7262	237.95	93
207.00	4284	215.85	300	228.00	969	238.95	263
208.05	1035	216.10	723	229.00	1569	239.95	250
208.85	154	216.95	8515	229.90	367	240.75	126
208.95	205	218.05	1156	231.00	1142	241.00	499
209.10	289	218.65	125	231.95	147	242.00	1084

Average of 2.239 to 2.250 min.: M124390.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
243.00	640	253.20	235	264.95	2204	276.95	3326
244.05	16541	255.05	89018	265.85	146	277.85	70
245.05	2602	256.00	13168	267.95	176	278.05	531
246.00	2763	257.10	999	269.95	106	278.85	73
246.90	644	257.95	4825	270.25	91	282.75	80
248.15	187	259.10	820	271.10	282	283.10	525
249.00	587	260.10	227	272.15	301	284.00	163
250.15	116	260.95	109	273.00	2906	285.00	464
251.00	160	261.25	102	274.05	7809	286.15	68
252.00	239	263.95	367	275.05	39410	287.45	68
252.85	211	264.25	121	276.05	5524	287.95	68

Average of 2.239 to 2.250 min.: M124390.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
288.85	71	303.00	1348	315.95	1127	331.75	75
289.95	82	303.85	67	316.80	142	331.90	322
291.35	74	304.00	479	321.00	697	333.00	230
291.95	78	307.45	126	321.90	264	334.05	2594
293.05	659	308.10	358	323.05	4159	334.95	732
294.00	302	308.90	164	324.05	688	336.15	82
296.05	11772	309.95	92	325.85	85	340.85	137
297.00	1685	310.25	77	327.00	1067	341.00	375
300.95	150	313.15	182	327.75	140	341.75	69
301.75	154	314.05	597	328.00	400	342.05	112
301.95	144	314.95	1167	330.05	88	346.05	811

Average of 2.239 to 2.250 min.: M124390.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
346.75	74	366.05	864	400.95	126	433.55	68
347.05	93	369.75	156	402.00	946	434.25	78
350.85	78	371.10	509	403.05	1320	437.05	90
351.75	106	372.05	1986	404.05	446	437.35	107
351.95	991	373.05	391	420.85	83	438.15	109
353.05	965	373.65	73	421.10	918	438.75	183
354.05	1413	379.05	74	422.05	1078	439.40	286
355.10	433	383.05	668	423.05	7712	441.05	19498
359.05	76	390.05	385	423.85	76	442.05	123432
363.45	155	390.95	290	424.00	1556	443.05	23808
364.95	6151	392.05	204	425.05	73	444.05	2098

Average of 2.239 to 2.250 min.: M124390.D\data.ms
dftpp
Modified:subtracted

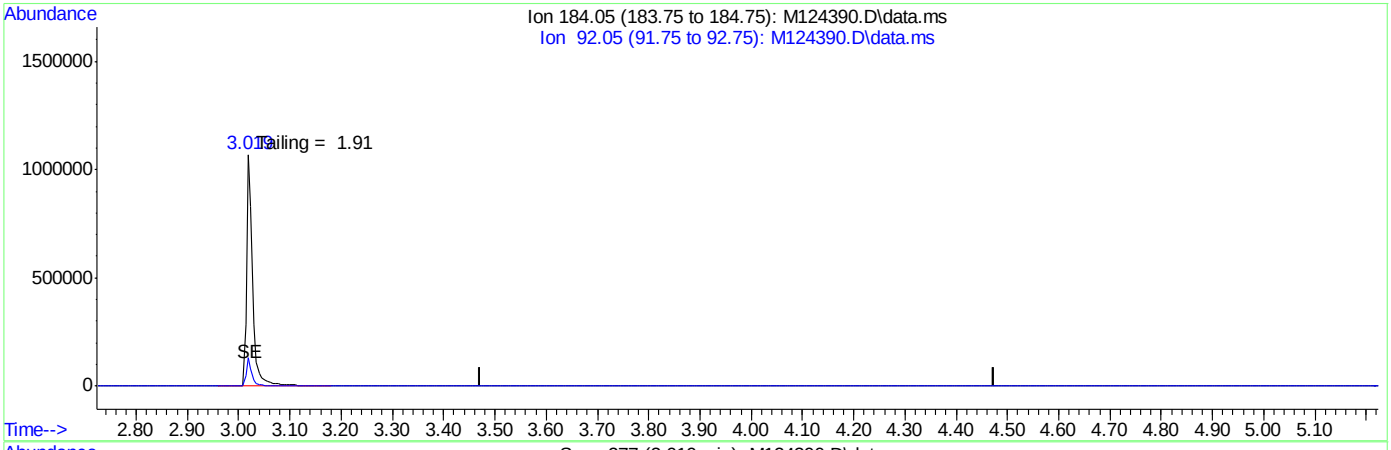
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
444.95	107						
476.15	86						

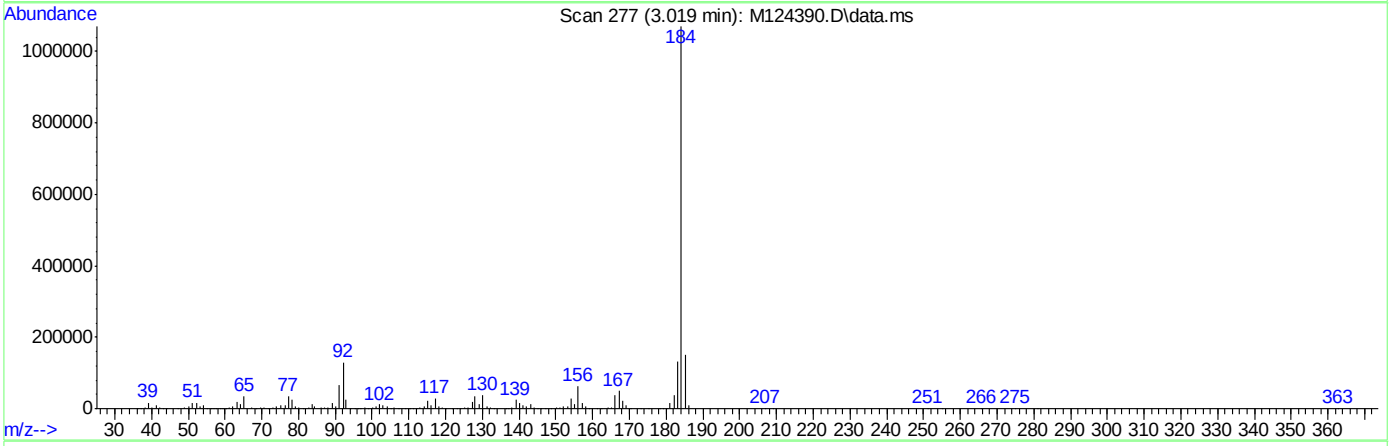
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5262\
Data File : M124390.D
Acq On : 12 May 2016 12:08 pm
Operator : ashleyd
Sample : dftpp
Misc : op93478,em5262
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 12 12:13:53 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: M124390.D\data.ms

(2) Benzidine (M)

3.973min 0.00ppm d

response 0

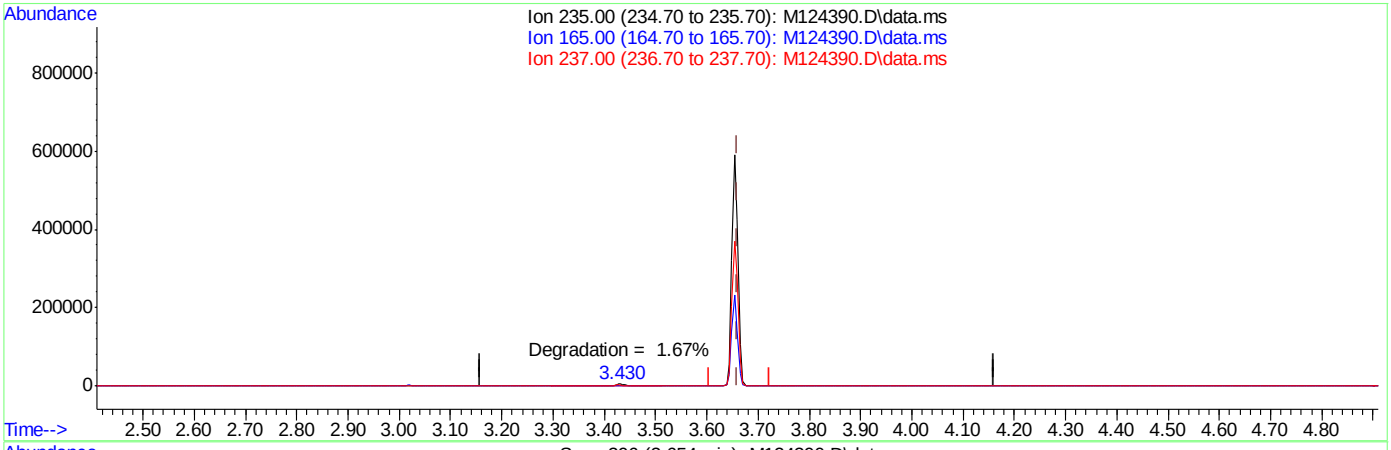
Ion	Exp%	Act%
184.05	100	0.00
92.05	10.70	0.00
0.00	0.00	0.00
0.00	0.00	0.00

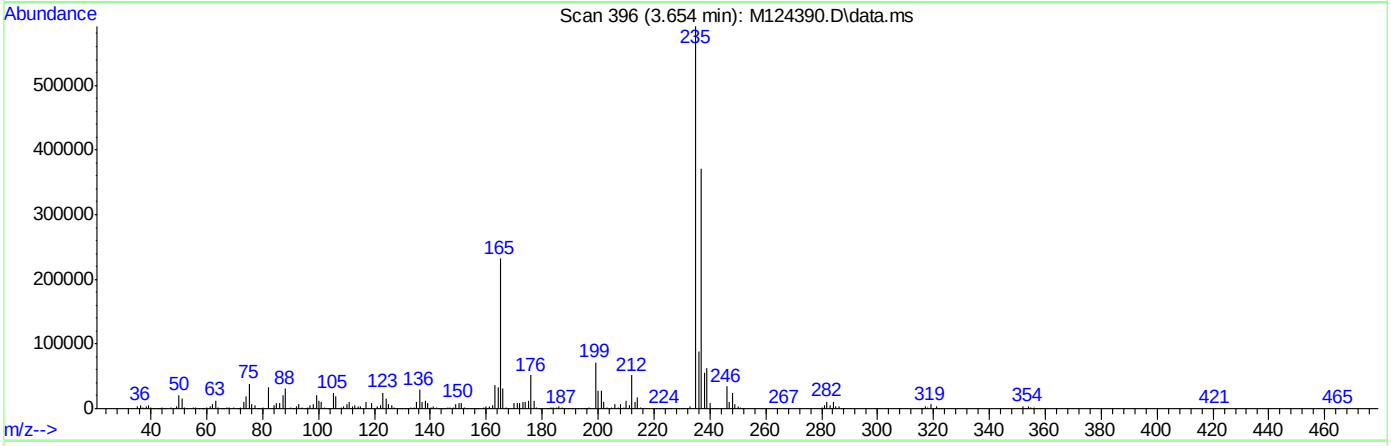
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5262\
Data File : M124390.D
Acq On : 12 May 2016 12:08 pm
Operator : ashleyd
Sample : dftpp
Misc : op93478,em5262
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 12 12:13:53 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: M124390.D\data.ms

(3) PP-DDT (MC)

3.654min (-0.006) 0.00ppm

response 490183

Ion	Exp%	Act%
235.00	100	100
165.00	46.90	39.19
237.00	64.20	62.64
0.00	0.00	0.00

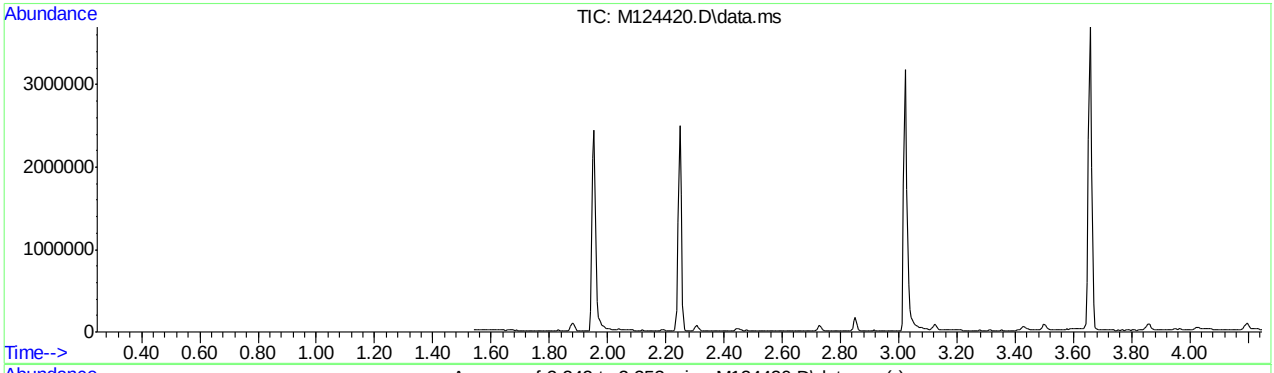
SGS ACCUTEST JC19996

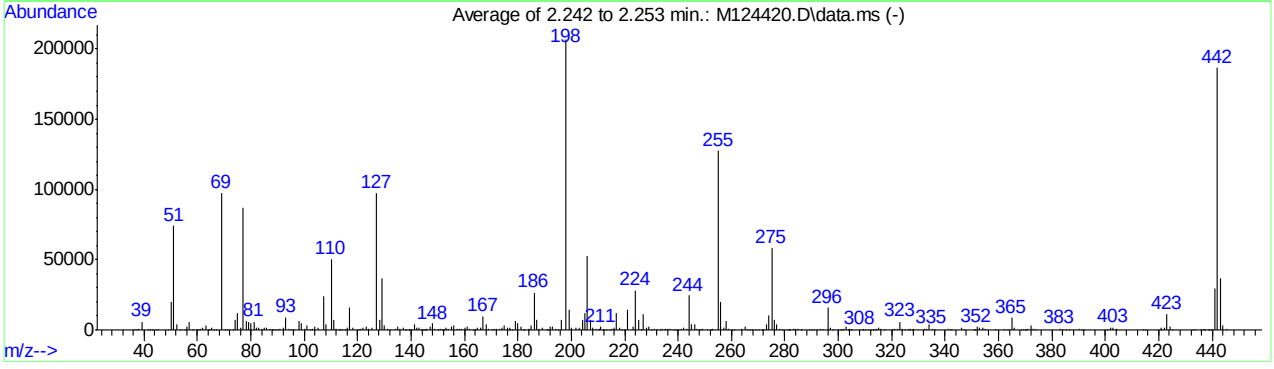
DFTPPR

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 JC19996

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

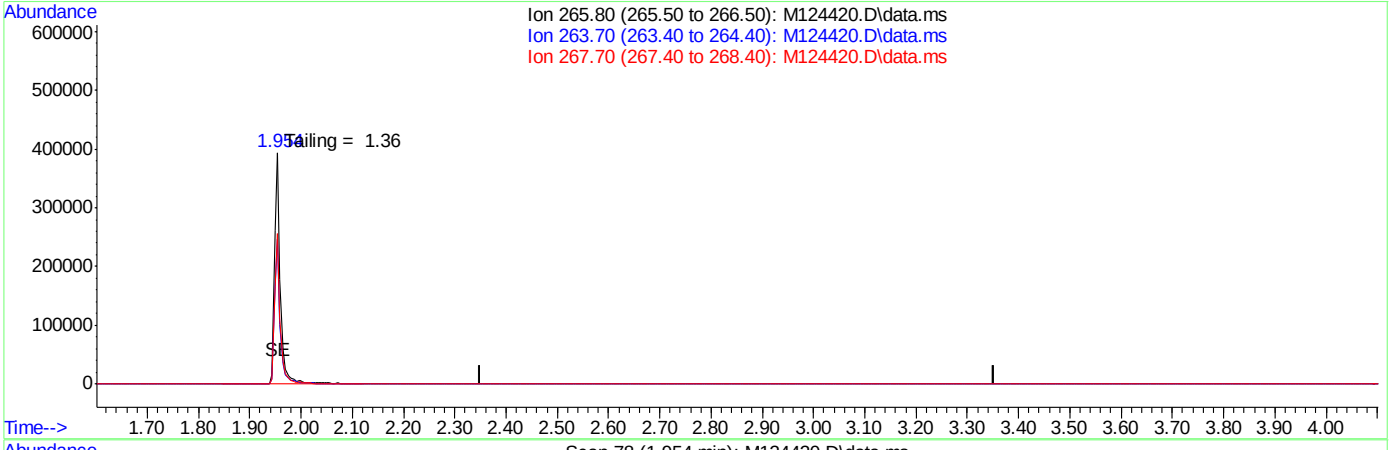
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
439.75	287						
441.05	29605						
442.05	186490						
443.05	36682						
444.00	3284						
445.05	89						

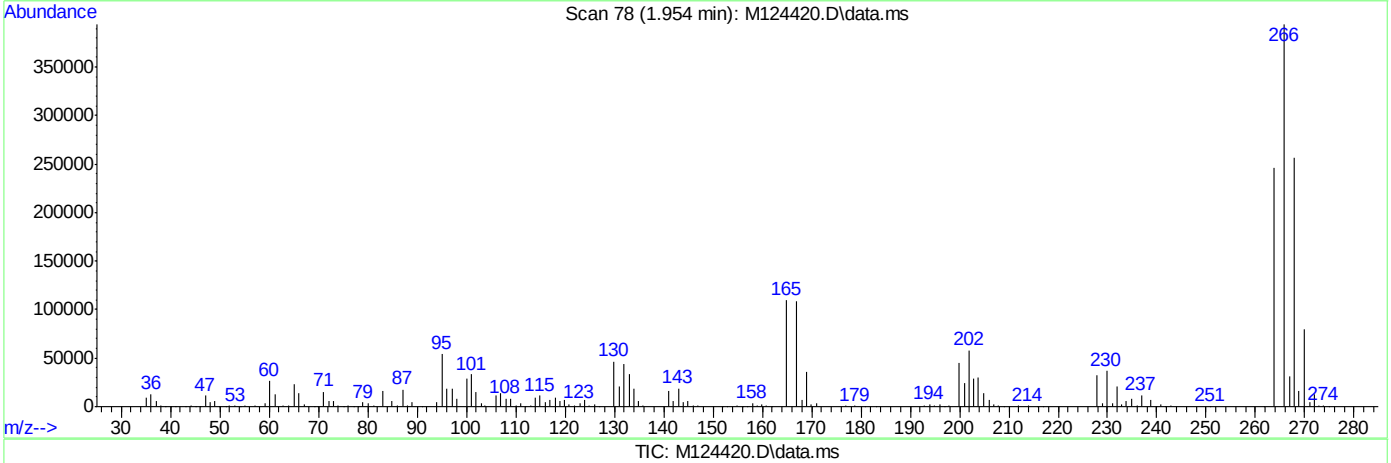
SGS ACCUTEST JC19996

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

SGS ACCUTEST JC19996

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:
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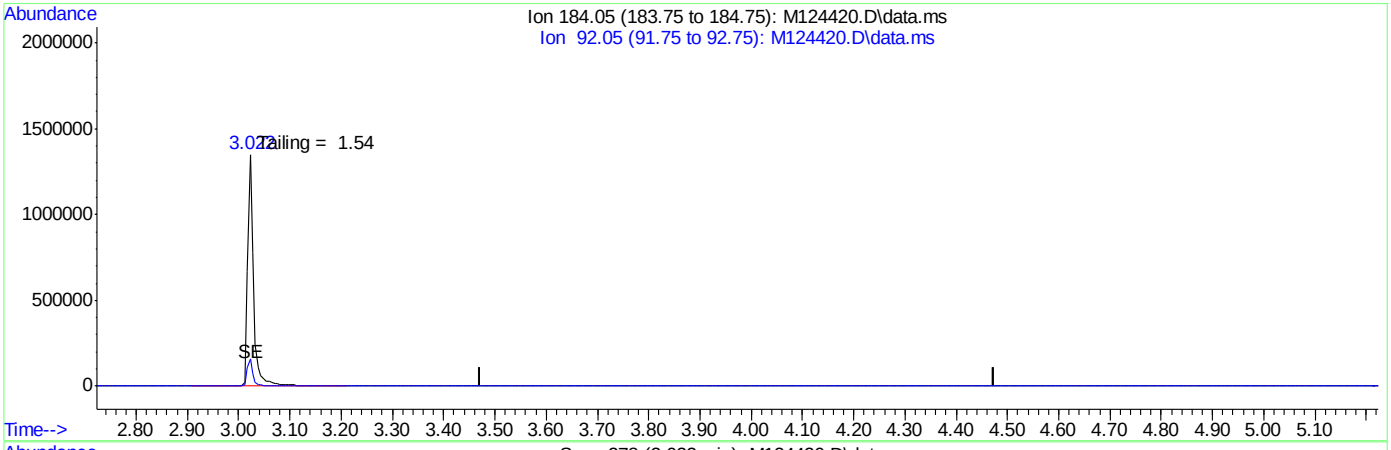
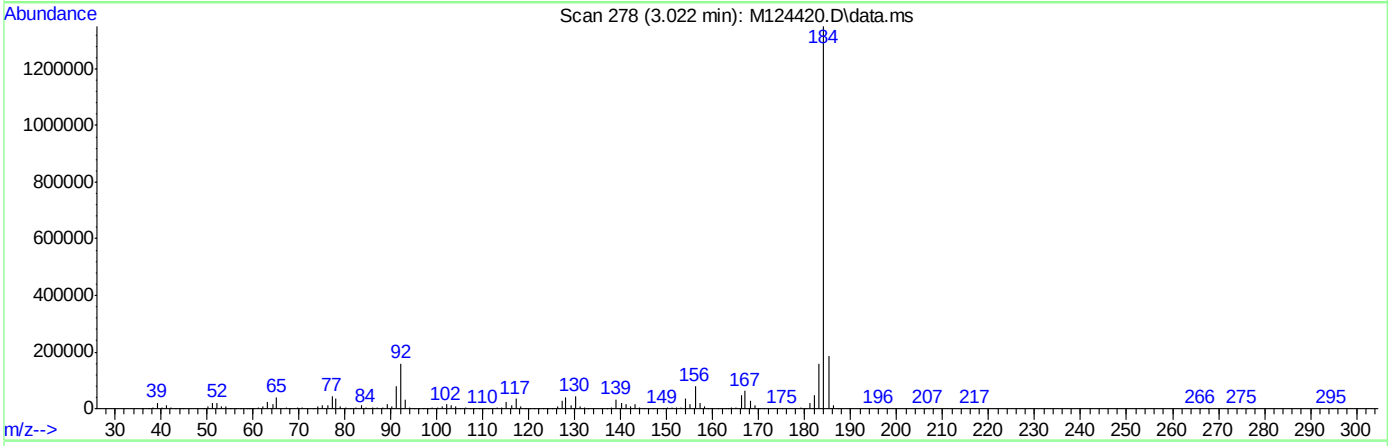




TIC: M124420.D\data.ms

(2) Benzidine (M)

3.973min 0.00ppm d

response 0

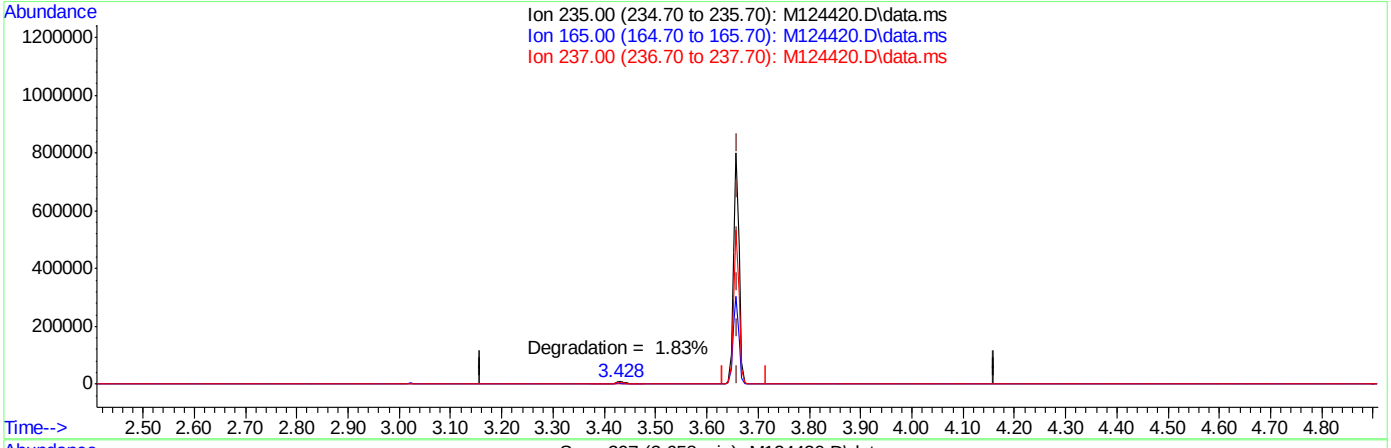
Ion	Exp%	Act%
184.05	100	0.00
92.05	10.70	0.00
0.00	0.00	0.00
0.00	0.00	0.00

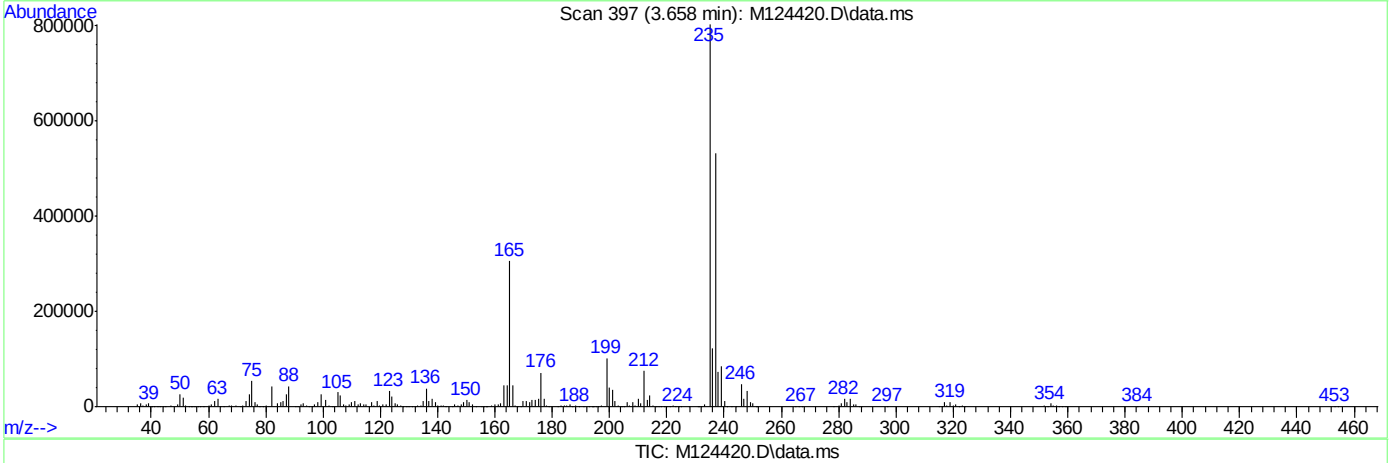
SGS ACCUTEST JC19996

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58365.D
Acq On : 19 Apr 2016 4:33 pm
Operator : robertl1
Sample : ICC2547-50
Misc : op92038,e2p2547
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 20 08:22:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.916	152	245634	40.00	ppm	0.00
24) Naphthalene-d8	5.970	136	869529	40.00	ppm	0.00
47) Acenaphthene-d10	7.419	164	458604	40.00	ppm	0.00
69) Phenanthrene-d10	8.767	188	737031	40.00	ppm	0.00
83) Chrysene-d12	12.142	240	717096	40.00	ppm	0.00
92) Perylene-d12	14.153	264	610565	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.916	152	245634	40.00	ppm	0.00
104) Naphthalene-d8a	5.970	136	869529	40.00	ppm	0.00
106) Acenaphthene-d10a	7.419	164	458604	40.00	ppm	0.00
109) Chrysene-d12a	12.142	240	717096	40.00	ppm	0.00
111) Phenanthrene-d10a	8.767	188	737031	40.00	ppm	0.00
114) Chrysene-d12b	12.142	240	717096	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.798	112	513785	51.64	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 103.28%#			
8) Phenol-d5	4.606	99	594747	51.01	ppm	0.00
Spiked Amount 50.000	Range 10 - 59		Recovery = 102.02%#			
25) Nitrobenzene-d5	5.376	82	407341	47.51	ppm	0.00
Spiked Amount 50.000	Range 19 - 61		Recovery = 95.02%#			
51) 2-Fluorobiphenyl	6.863	172	677983	47.51	ppm	0.00
Spiked Amount 50.000	Range 21 - 58		Recovery = 95.02%#			
73) 2,4,6-Tribromophenol	8.093	330	81361	49.72	ppm	0.00
Spiked Amount 50.000	Range 12 - 68		Recovery = 99.44%#			
85) Terphenyl-d14	10.682	244	710354	49.21	ppm	0.00
Spiked Amount 50.000	Range 16 - 65		Recovery = 98.42%#			
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
113) O-terphenyl	0.000	230	0	0.00	ppm	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.263	88	235894	52.26	ppm	100
3) Pyridine	2.595	79	594573	53.26	ppm	100
4) N-Nitrosodimethylamine	2.557	74	355360	53.85	ppm	100
6) Indene	5.130	116	632154	45.83	ppm	100
7) Cumene	4.242	105	1100056	50.51	ppm	100
9) Phenol	4.617	94	645938	53.57	ppm	100
10) Aniline	4.638	93	677517	47.75	ppm	100
11) bis(2-Chloroethyl)ether	4.697	93	424372	48.74	ppm	100
12) 2-Chlorophenol	4.734	128	435745	48.35	ppm	100
13) Decane	4.782	57	631836	47.07	ppm	100
14) 1,3-Dichlorobenzene	4.863	146	472746	47.73	ppm	100
15) 1,4-Dichlorobenzene	4.927	146	457927	46.97	ppm	100
16) Benzyl alcohol	5.034	108	273019	48.37	ppm	100
17) 1,2-Dichlorobenzene	5.055	146	420592	46.69	ppm	100
18) Acetophenone	5.253	105	486358	43.94	ppm	100
19) 2-Methylphenol	5.119	108	354191	45.80	ppm	100
20) 2,2'-oxybis(1-Chloropr...	5.146	121	116449	45.87	ppm	100
21) 3&4-Methylphenol	5.253	108	362574	44.94	ppm	100
22) n-Nitroso-di-n-propyla...	5.259	70	252105	44.11	ppm	100

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58365.D
Acq On : 19 Apr 2016 4:33 pm
Operator : robertl1
Sample : ICC2547-50
Misc : op92038,e2p2547
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 20 08:22:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
23) Hexachloroethane	5.333	201	139416	47.12	ppm	100
26) Nitrobenzene	5.392	77	402329	46.51	ppm	100
27) Quinoline	6.275	129	717616	46.54	ppm	100
28) Isophorone	5.595	82	729826	47.11	ppm	100
29) 2-Nitrophenol	5.654	139	210112	49.13	ppm	100
30) 2,4-Dimethylphenol	5.692	107	348002	45.76	ppm	100
31) Benzoic acid	5.793	105	322320	54.11	ppm	100
32) bis(2-Chloroethoxy)met...	5.777	93	441050	45.77	ppm	100
33) 2,4-Dichlorophenol	5.852	162	313151	47.84	ppm	100
34) 2,6-Dichlorophenol	6.039	162	283012	45.91	ppm	100
35) 1,3,5-Trichlorobenzene	5.665	180	348293	46.32	ppm	100
36) 1,2,4-Trichlorobenzene	5.922	180	336840	46.70	ppm	100
37) 1,2,3-Trichlorobenzene	6.109	180	307839	45.88	ppm	100
38) Naphthalene	5.991	128	1011803	45.17	ppm	100
39) 4-Chloroaniline	6.034	127	441043	45.54	ppm	100
40) 2,3-Dichloroaniline	6.788	161	364577	45.46	ppm	100
41) Caprolactam	6.344	113	122245	48.70	ppm	100
42) Hexachlorobutadiene	6.093	225	169483	47.51	ppm	100
43) 4-Chloro-3-methylphenol	6.430	107	321905	47.92	ppm	100
44) 2-Methylnaphthalene	6.558	141	589148	47.09	ppm	100
45) 1-Methylnaphthalene	6.638	141	606827	47.31	ppm	100
46) Dimethylnaphthalene	7.072	156	567288	44.90	ppm	100
48) Hexachlorocyclopentadiene	6.687	237	400022	108.47	ppm	100
49) 2,4,6-Trichlorophenol	6.788	196	209413	49.37	ppm	100
50) 2,4,5-Trichlorophenol	6.820	196	222546	48.72	ppm	100
52) 2-Chloronaphthalene	6.959	162	625208	46.45	ppm	100
53) Biphenyl	6.943	154	796306	47.14	ppm	100
54) 2-Nitroaniline	7.045	65	228487	41.35	ppm	100
55) Dimethylphthalate	7.200	163	700088	47.91	ppm	100
56) Acenaphthylene	7.302	152	1053521	48.09	ppm	100
57) 2,6-Dinitrotoluene	7.248	165	162165	52.31	ppm	100
58) 3-Nitroaniline	7.382	138	202751	43.10	ppm	100
59) Acenaphthene	7.446	153	637695	47.52	ppm	100
60) 2,4-Dinitrophenol	7.468	184	167289	101.54	ppm	100
61) 4-Nitrophenol	7.510	109	99601	53.79	ppm	100
62) Dibenzofuran	7.591	168	827253	46.63	ppm	100
63) 2,4-Dinitrotoluene	7.574	165	210594	51.83	ppm	100
64) 2,3,4,6-Tetrachlorophenol	7.687	232	174594	50.24	ppm	100
65) Diethylphthalate	7.783	149	708998	47.82	ppm	100
66) Fluorene	7.879	166	697748	47.34	ppm	100
67) 4-Chlorophenyl-phenyle...	7.879	204	301273	46.78	ppm	100
68) 4-Nitroaniline	7.901	138	198248	49.03	ppm	100
70) 4,6-Dinitro-2-methylph...	7.922	198	115500	53.58	ppm	100
71) n-Nitrosodiphenylamine	7.986	169	462112	46.31	ppm	100
72) 1,2-Diphenylhydrazine	8.018	77	738766	46.05	ppm	100
74) 4-Bromophenyl-phenylether	8.323	248	179997	47.98	ppm	100
75) Hexachlorobenzene	8.377	284	191423	47.66	ppm	100
76) Pentachlorophenol	8.569	266	285342	105.10	ppm	100
77) Phenanthrene	8.794	178	1006875	46.52	ppm	100
78) Anthracene	8.842	178	1010955	47.09	ppm	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58365.D
Acq On : 19 Apr 2016 4:33 pm
Operator : robertl1
Sample : ICC2547-50
Misc : op92038,e2p2547
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 20 08:22:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

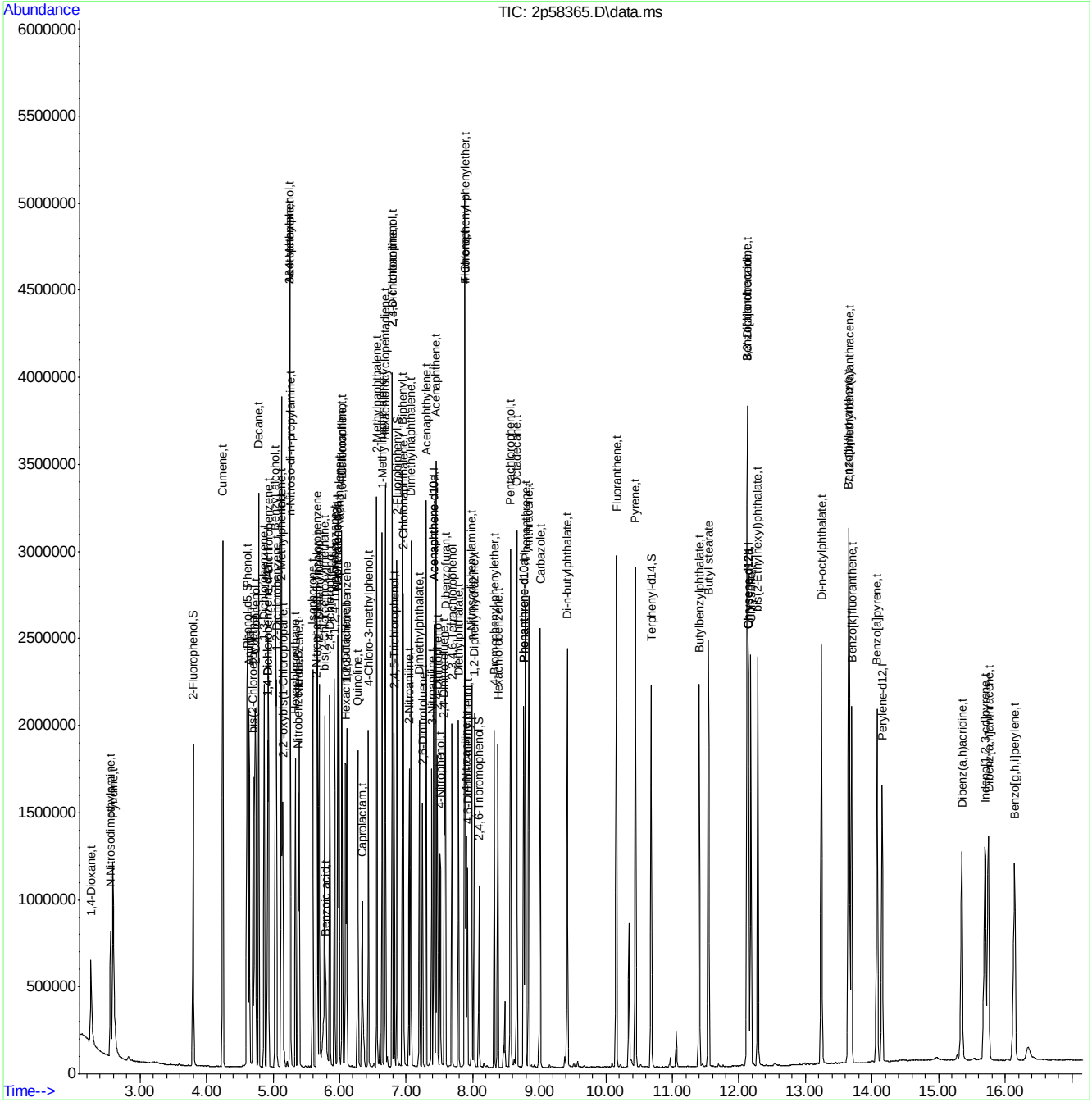
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
79)	Carbazole	9.013	167	954538	47.28	ppm	100
80)	Di-n-butylphthalate	9.425	149	1331901	49.59	ppm	100
81)	Fluoranthene	10.158	202	1184507	50.38	ppm	100
82)	Octadecane	8.660	43	453965	47.91	ppm	100
84)	Pyrene	10.447	202	1205348	50.69	ppm	100
86)	Butylbenzylphthalate	11.404	149	627533	51.67	ppm	100
87)	Butyl stearate	11.543	56	545740	52.56	ppm	100
88)	Benzo[a]anthracene	12.126	228	1112378	48.63	ppm	100
89)	3,3'-Dichlorobenzidine	12.126	252	391294	50.55	ppm	100
90)	Chrysene	12.185	228	992310	47.97	ppm	100
91)	bis(2-Ethylhexyl)phtha...	12.281	149	774542	50.99	ppm	100
93)	Di-n-octylphthalate	13.239	149	1492858	53.76	ppm	100
94)	Benzo[b]fluoranthene	13.651	252	1068083	50.35	ppm	100
95)	Benzo[k]fluoranthene	13.693	252	887846	47.91	ppm	100
96)	Benzo[a]pyrene	14.078	252	893391	49.63	ppm	100
97)	Indeno[1,2,3-cd]pyrene	15.699	276	790519	50.78	ppm	100
98)	Dibenz(a,h)acridine	15.351	279	710198	50.03	ppm	100
99)	Dibenz[a,h]anthracene	15.753	278	793665	50.92	ppm	100
100)	7,12-Dimethylbenz(a)an...	13.656	256	447541	51.76	ppm	100
101)	Benzo[g,h,i]perylene	16.148	276	832485	50.58	ppm	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58365.D
Acq On : 19 Apr 2016 4:33 pm
Operator : robertl1
Sample : ICC2547-50
Misc : op92038,e2p2547
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 20 08:22:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration



SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58366.D
Acq On : 19 Apr 2016 4:57 pm
Operator : robertl1
Sample : IC2547-25
Misc : op92038,e2p2547
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 20 08:23:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.916	152	290544	40.00	ppm	0.00
24) Naphthalene-d8	5.970	136	1033350	40.00	ppm	0.00
47) Acenaphthene-d10	7.414	164	560340	40.00	ppm	0.00
69) Phenanthrene-d10	8.762	188	877948	40.00	ppm	0.00
83) Chrysene-d12	12.142	240	855767	40.00	ppm	0.00
92) Perylene-d12	14.148	264	720892	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.916	152	290544	40.00	ppm	0.00
104) Naphthalene-d8a	5.970	136	1033350	40.00	ppm	0.00
106) Acenaphthene-d10a	7.414	164	560340	40.00	ppm	0.00
109) Chrysene-d12a	12.142	240	855767	40.00	ppm	0.00
111) Phenanthrene-d10a	8.762	188	877948	40.00	ppm	0.00
114) Chrysene-d12b	12.142	240	855767	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.799	112	291532	24.77	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 49.54%			
8) Phenol-d5	4.601	99	340206	24.67	ppm	0.00
Spiked Amount 50.000	Range 10 - 59		Recovery = 49.34%			
25) Nitrobenzene-d5	5.376	82	246101	24.15	ppm	0.00
Spiked Amount 50.000	Range 19 - 61		Recovery = 48.30%			
51) 2-Fluorobiphenyl	6.858	172	411297	23.59	ppm	0.00
Spiked Amount 50.000	Range 21 - 58		Recovery = 47.18%			
73) 2,4,6-Tribromophenol	8.088	330	47803	24.53	ppm	0.00
Spiked Amount 50.000	Range 12 - 68		Recovery = 49.06%			
85) Terphenyl-d14	10.677	244	418192	24.28	ppm	0.00
Spiked Amount 50.000	Range 16 - 65		Recovery = 48.56%			
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
113) O-terphenyl	0.000	230	0	0.00	ppm	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.269	88	127385	23.86	ppm	98
3) Pyridine	2.595	79	329843	24.98	ppm	97
4) N-Nitrosodimethylamine	2.563	74	191600	24.55	ppm	97
6) Indene	5.130	116	391428	23.99	ppm	99
7) Cumene	4.242	105	635909	24.68	ppm	99
9) Phenol	4.612	94	357409	25.06	ppm	84
10) Aniline	4.638	93	416830	24.84	ppm	100
11) bis(2-Chloroethyl)ether	4.697	93	252242	24.49	ppm	99
12) 2-Chlorophenol	4.735	128	263280	24.70	ppm	98
13) Decane	4.783	57	394167	24.82	ppm	98
14) 1,3-Dichlorobenzene	4.863	146	284945	24.32	ppm	99
15) 1,4-Dichlorobenzene	4.927	146	277268	24.05	ppm	99
16) Benzyl alcohol	5.029	108	163752	24.53	ppm	97
17) 1,2-Dichlorobenzene	5.050	146	255533	23.98	ppm	98
18) Acetophenone	5.253	105	311784	23.81	ppm	87
19) 2-Methylphenol	5.120	108	223221	24.40	ppm	100
20) 2,2'-oxybis(1-Chloropr...	5.146	121	70926	23.62	ppm #	93
21) 3&4-Methylphenol	5.248	108	231223	24.23	ppm	99
22) n-Nitroso-di-n-propyla...	5.253	70	159519	23.60	ppm	99

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58366.D
Acq On : 19 Apr 2016 4:57 pm
Operator : robertl1
Sample : IC2547-25
Misc : op92038,e2p2547
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 20 08:23:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
23) Hexachloroethane	5.334	201	83693	23.92	ppm	97
26) Nitrobenzene	5.392	77	245920	23.92	ppm	96
27) Quinoline	6.264	129	433623	23.66	ppm	98
28) Isophorone	5.590	82	441768	23.99	ppm	97
29) 2-Nitrophenol	5.654	139	126486	24.89	ppm	95
30) 2,4-Dimethylphenol	5.687	107	216637	23.97	ppm	95
31) Benzoic acid	5.772	105	185586	26.22	ppm	92
32) bis(2-Chloroethoxy)met...	5.772	93	271793	23.73	ppm	99
33) 2,4-Dichlorophenol	5.847	162	189198	24.32	ppm	96
34) 2,6-Dichlorophenol	6.040	162	171758	23.44	ppm	99
35) 1,3,5-Trichlorobenzene	5.660	180	210808	23.59	ppm	99
36) 1,2,4-Trichlorobenzene	5.922	180	201752	23.53	ppm	98
37) 1,2,3-Trichlorobenzene	6.104	180	189775	23.80	ppm	99
38) Naphthalene	5.986	128	631872	23.74	ppm	99
39) 4-Chloroaniline	6.034	127	277257	24.09	ppm	97
40) 2,3-Dichloroaniline	6.788	161	225848	23.69	ppm	99
41) Caprolactam	6.323	113	72582	24.33	ppm	91
42) Hexachlorobutadiene	6.088	225	99671	23.51	ppm	98
43) 4-Chloro-3-methylphenol	6.430	107	191557	23.99	ppm	90
44) 2-Methylnaphthalene	6.558	141	358872	24.14	ppm	99
45) 1-Methylnaphthalene	6.639	141	366607	24.05	ppm	97
46) Dimethylnaphthalene	7.072	156	354953	23.64	ppm	99
48) Hexachlorocyclopentadiene	6.687	237	233097	51.73	ppm	100
49) 2,4,6-Trichlorophenol	6.788	196	125464	24.21	ppm	97
50) 2,4,5-Trichlorophenol	6.815	196	134206	24.05	ppm	98
52) 2-Chloronaphthalene	6.960	162	384740	23.40	ppm	98
53) Biphenyl	6.944	154	493377	23.90	ppm	99
54) 2-Nitroaniline	7.040	65	140399	20.80	ppm	96
55) Dimethylphthalate	7.195	163	422988	23.69	ppm	99
56) Acenaphthylene	7.297	152	633755	23.68	ppm	99
57) 2,6-Dinitrotoluene	7.243	165	97674	25.78	ppm	96
58) 3-Nitroaniline	7.377	138	122575	21.32	ppm	100
59) Acenaphthene	7.441	153	393198	23.98	ppm	99
60) 2,4-Dinitrophenol	7.462	184	89806	48.50	ppm	74
61) 4-Nitrophenol	7.505	109	58702	25.95	ppm	99
62) Dibenzofuran	7.585	168	512633	23.65	ppm	99
63) 2,4-Dinitrotoluene	7.569	165	126983	25.58	ppm	97
64) 2,3,4,6-Tetrachlorophenol	7.682	232	101027	23.79	ppm	95
65) Diethylphthalate	7.783	149	435061	24.02	ppm	99
66) Fluorene	7.880	166	428169	23.78	ppm	99
67) 4-Chlorophenyl-phenyle...	7.880	204	182837	23.23	ppm	96
68) 4-Nitroaniline	7.890	138	123647	25.03	ppm	99
70) 4,6-Dinitro-2-methylph...	7.917	198	66905	26.06	ppm	95
71) n-Nitrosodiphenylamine	7.981	169	285126	23.99	ppm	98
72) 1,2-Diphenylhydrazine	8.019	77	465194	24.34	ppm	95
74) 4-Bromophenyl-phenylether	8.323	248	104759	23.44	ppm	95
75) Hexachlorobenzene	8.372	284	111201	23.24	ppm	91
76) Pentachlorophenol	8.564	266	163938	50.69	ppm	99
77) Phenanthrene	8.789	178	611137	23.70	ppm	99
78) Anthracene	8.842	178	620544	24.26	ppm	100

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58366.D
Acq On : 19 Apr 2016 4:57 pm
Operator : robertl1
Sample : IC2547-25
Misc : op92038,e2p2547
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 20 08:23:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
79)	Carbazole	9.008	167	579371	24.09 ppm	99
80)	Di-n-butylphthalate	9.420	149	801074	25.04 ppm	100
81)	Fluoranthene	10.153	202	689258	24.61 ppm	97
82)	Octadecane	8.660	43	290585	25.75 ppm	99
84)	Pyrene	10.442	202	717805	25.29 ppm	99
86)	Butylbenzylphthalate	11.399	149	369767	25.51 ppm	96
87)	Butyl stearate	11.538	56	336273	27.14 ppm	97
88)	Benzo[a]anthracene	12.121	228	654572	23.98 ppm	100
89)	3,3'-Dichlorobenzidine	12.121	252	225980	24.46 ppm	98
90)	Chrysene	12.174	228	586170	23.74 ppm	99
91)	bis(2-Ethylhexyl)phtha...	12.281	149	467088	25.77 ppm	99
93)	Di-n-octylphthalate	13.233	149	876288	26.73 ppm	99
94)	Benzo[b]fluoranthene	13.640	252	603901	24.11 ppm	96
95)	Benzo[k]fluoranthene	13.683	252	543848	24.86 ppm	98
96)	Benzo[a]pyrene	14.073	252	525111	24.71 ppm	98
97)	Indeno[1,2,3-cd]pyrene	15.689	276	455806	24.80 ppm	97
98)	Dibenz(a,h)acridine	15.341	279	403966	24.10 ppm	97
99)	Dibenz[a,h]anthracene	15.737	278	459334	24.96 ppm	95
100)	7,12-Dimethylbenz(a)an...	13.645	256	259974	25.47 ppm	99
101)	Benzo[g,h,i]perylene	16.132	276	475707	24.48 ppm	96

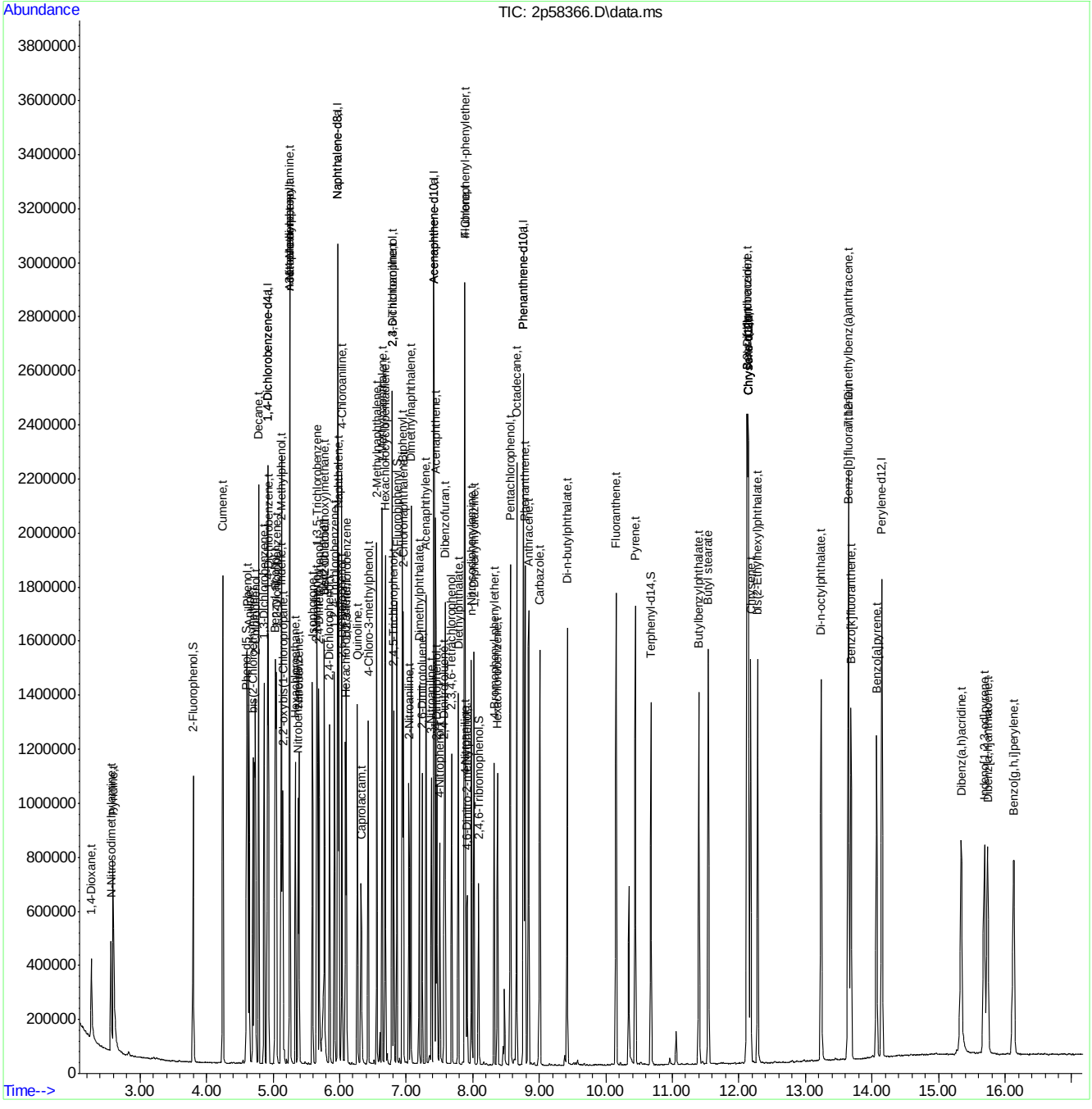
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58366.D
Acq On : 19 Apr 2016 4:57 pm
Operator : robertl1
Sample : IC2547-25
Misc : op92038,e2p2547
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 20 08:23:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration



SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58367.D
Acq On : 19 Apr 2016 5:21 pm
Operator : robertl1
Sample : IC2547-80
Misc : op92038,e2p2547
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 20 08:24:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.916	152	247249	40.00	ppm	0.00
24) Naphthalene-d8	5.975	136	875838	40.00	ppm	0.00
47) Acenaphthene-d10	7.419	164	487244	40.00	ppm	0.00
69) Phenanthrene-d10	8.767	188	771797	40.00	ppm	0.00
83) Chrysene-d12	12.148	240	766396	40.00	ppm	0.00
92) Perylene-d12	14.159	264	666794	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.916	152	247249	40.00	ppm	0.00
104) Naphthalene-d8a	5.975	136	875838	40.00	ppm	0.00
106) Acenaphthene-d10a	7.419	164	487225	40.00	ppm	0.00
109) Chrysene-d12a	12.148	240	766396	40.00	ppm	0.01
111) Phenanthrene-d10a	8.767	188	771797	40.00	ppm	0.00
114) Chrysene-d12b	12.148	240	766396	40.00	ppm	0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.798	112	842746	84.14	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 168.28%#			
8) Phenol-d5	4.611	99	948201	80.80	ppm	0.00
Spiked Amount 50.000	Range 10 - 59		Recovery = 161.60%#			
25) Nitrobenzene-d5	5.382	82	645867	74.79	ppm	0.00
Spiked Amount 50.000	Range 19 - 61		Recovery = 149.58%#			
51) 2-Fluorobiphenyl	6.863	172	1089401	71.86	ppm	0.00
Spiked Amount 50.000	Range 21 - 58		Recovery = 143.72%#			
73) 2,4,6-Tribromophenol	8.093	330	143480	83.74	ppm	0.00
Spiked Amount 50.000	Range 12 - 68		Recovery = 167.48%#			
85) Terphenyl-d14	10.687	244	1240763	80.43	ppm	0.00
Spiked Amount 50.000	Range 16 - 65		Recovery = 160.86%#			
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
113) O-terphenyl	0.000	230	0d	0.00	ppm	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.263	88	378610	83.33	ppm	97
3) Pyridine	2.595	79	951736	84.70	ppm	99
4) N-Nitrosodimethylamine	2.563	74	577794	86.99	ppm	97
6) Indene	5.130	116	943657	67.97	ppm	100
7) Cumene	4.248	105	1720289	78.47	ppm	97
9) Phenol	4.622	94	1001574	82.51	ppm	98
10) Aniline	4.644	93	1050302	73.54	ppm	99
11) bis(2-Chloroethyl)ether	4.702	93	641718	73.21	ppm	98
12) 2-Chlorophenol	4.740	128	658701	72.61	ppm	96
13) Decane	4.783	57	915183	67.73	ppm	98
14) 1,3-Dichlorobenzene	4.868	146	729551	73.18	ppm	99
15) 1,4-Dichlorobenzene	4.932	146	719052	73.28	ppm	98
16) Benzyl alcohol	5.039	108	408808	71.95	ppm	99
17) 1,2-Dichlorobenzene	5.055	146	642897	70.90	ppm	99
18) Acetophenone	5.259	105	736207	66.08	ppm	97
19) 2-Methylphenol	5.125	108	532883	68.46	ppm	100
20) 2,2'-oxybis(1-Chloropr...	5.152	121	178508	69.86	ppm	97
21) 3&4-Methylphenol	5.259	108	547834	67.46	ppm	98
22) n-Nitroso-di-n-propyla...	5.264	70	383586	66.68	ppm	99

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58367.D
Acq On : 19 Apr 2016 5:21 pm
Operator : robertl1
Sample : IC2547-80
Misc : op92038,e2p2547
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 20 08:24:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
23)	Hexachloroethane	5.339	201	223423	75.02	ppm	84
26)	Nitrobenzene	5.398	77	624832	71.71	ppm	96
27)	Quinoline	6.280	129	1192947	76.81	ppm	100
28)	Isophorone	5.601	82	1174481	75.26	ppm	100
29)	2-Nitrophenol	5.660	139	336390	78.09	ppm	84
30)	2,4-Dimethylphenol	5.697	107	572547	74.74	ppm	99
31)	Benzoic acid	5.815	105	539466	89.92	ppm	100
32)	bis(2-Chloroethoxy)met...	5.777	93	695557	71.66	ppm	99
33)	2,4-Dichlorophenol	5.858	162	505174	76.62	ppm	99
34)	2,6-Dichlorophenol	6.045	162	457711	73.71	ppm	98
35)	1,3,5-Trichlorobenzene	5.665	180	548848	72.47	ppm	97
36)	1,2,4-Trichlorobenzene	5.927	180	536023	73.77	ppm	98
37)	1,2,3-Trichlorobenzene	6.109	180	485855	71.88	ppm	98
38)	Naphthalene	5.991	128	1590839	70.51	ppm	99
39)	4-Chloroaniline	6.040	127	685504	70.28	ppm	96
40)	2,3-Dichloroaniline	6.794	161	581606	71.99	ppm	97
41)	Caprolactam	6.360	113	204880	81.03	ppm	93
42)	Hexachlorobutadiene	6.093	225	276764	77.03	ppm	98
43)	4-Chloro-3-methylphenol	6.441	107	519606	76.79	ppm	96
44)	2-Methylnaphthalene	6.558	141	946367	75.10	ppm	99
45)	1-Methylnaphthalene	6.644	141	953813	73.83	ppm	97
46)	Dimethylnaphthalene	7.077	156	911170	71.60	ppm	99
48)	Hexachlorocyclopentadiene	6.687	237	673971	172.01	ppm	98
49)	2,4,6-Trichlorophenol	6.794	196	338355	75.08	ppm	98
50)	2,4,5-Trichlorophenol	6.826	196	369193	76.07	ppm	97
52)	2-Chloronaphthalene	6.965	162	984342	68.84	ppm	97
53)	Biphenyl	6.949	154	1260093	70.21	ppm	98
54)	2-Nitroaniline	7.050	65	369511	62.95	ppm	95
55)	Dimethylphthalate	7.200	163	1139412	73.39	ppm	99
56)	Acenaphthylene	7.302	152	1699894	73.03	ppm	100
57)	2,6-Dinitrotoluene	7.248	165	266948	81.04	ppm	91
58)	3-Nitroaniline	7.387	138	338545	67.73	ppm	95
59)	Acenaphthene	7.446	153	1035606	72.63	ppm	99
60)	2,4-Dinitrophenol	7.473	184	294895	159.90	ppm	83
61)	4-Nitrophenol	7.521	109	160935	81.81	ppm	89
62)	Dibenzofuran	7.591	168	1331830	70.65	ppm	100
63)	2,4-Dinitrotoluene	7.580	165	349617	80.99	ppm	97
64)	2,3,4,6-Tetrachlorophenol	7.687	232	300226	81.31	ppm	98
65)	Diethylphthalate	7.789	149	1162614	73.81	ppm	98
66)	Fluorene	7.885	166	1135938	72.54	ppm	99
67)	4-Chlorophenyl-phenyle...	7.879	204	504520	73.73	ppm	99
68)	4-Nitroaniline	7.912	138	328549	76.49	ppm	96
70)	4,6-Dinitro-2-methylph...	7.928	198	198991	88.15	ppm	98
71)	n-Nitrosodiphenylamine	7.986	169	758468	72.59	ppm	100
72)	1,2-Diphenylhydrazine	8.024	77	1139191	67.81	ppm	93
74)	4-Bromophenyl-phenylether	8.329	248	315407	80.29	ppm	91
75)	Hexachlorobenzene	8.377	284	331387	78.79	ppm	99
76)	Pentachlorophenol	8.569	266	506022	177.99	ppm	98
77)	Phenanthrene	8.794	178	1685742	74.38	ppm	98
78)	Anthracene	8.848	178	1675034	74.50	ppm	99

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58367.D
Acq On : 19 Apr 2016 5:21 pm
Operator : robertl1
Sample : IC2547-80
Misc : op92038,e2p2547
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 20 08:24:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
79)	Carbazole	9.019	167	1588718	75.15	ppm	100
80)	Di-n-butylphthalate	9.425	149	2201462	78.27	ppm	99
81)	Fluoranthene	10.163	202	2032827	82.57	ppm	98
82)	Octadecane	8.666	43	676632	68.20	ppm	92
84)	Pyrene	10.452	202	2040742	80.30	ppm	100
86)	Butylbenzylphthalate	11.404	149	1064308	81.99	ppm	96
87)	Butyl stearate	11.543	56	858640	77.38	ppm	99
88)	Benzo[a]anthracene	12.132	228	1947656	79.66	ppm	99
89)	3,3'-Dichlorobenzidine	12.132	252	706496	85.40	ppm	97
90)	Chrysene	12.190	228	1686922	76.30	ppm	100
91)	bis(2-Ethylhexyl)phtha...	12.287	149	1271108	78.30	ppm	97
93)	Di-n-octylphthalate	13.244	149	2575082	84.92	ppm	97
94)	Benzo[b]fluoranthene	13.661	252	1928664	83.25	ppm	97
95)	Benzo[k]fluoranthene	13.704	252	1526954	75.46	ppm	98
96)	Benzo[a]pyrene	14.089	252	1623246	82.57	ppm	96
97)	Indeno[1,2,3-cd]pyrene	15.715	276	1475482	86.79	ppm	94
98)	Dibenz(a,h)acridine	15.362	279	1307412	84.34	ppm	98
99)	Dibenz[a,h]anthracene	15.769	278	1419779	83.40	ppm	97
100)	7,12-Dimethylbenz(a)an...	13.667	256	798874	84.60	ppm	99
101)	Benzo[g,h,i]perylene	16.164	276	1497424	83.31	ppm	100

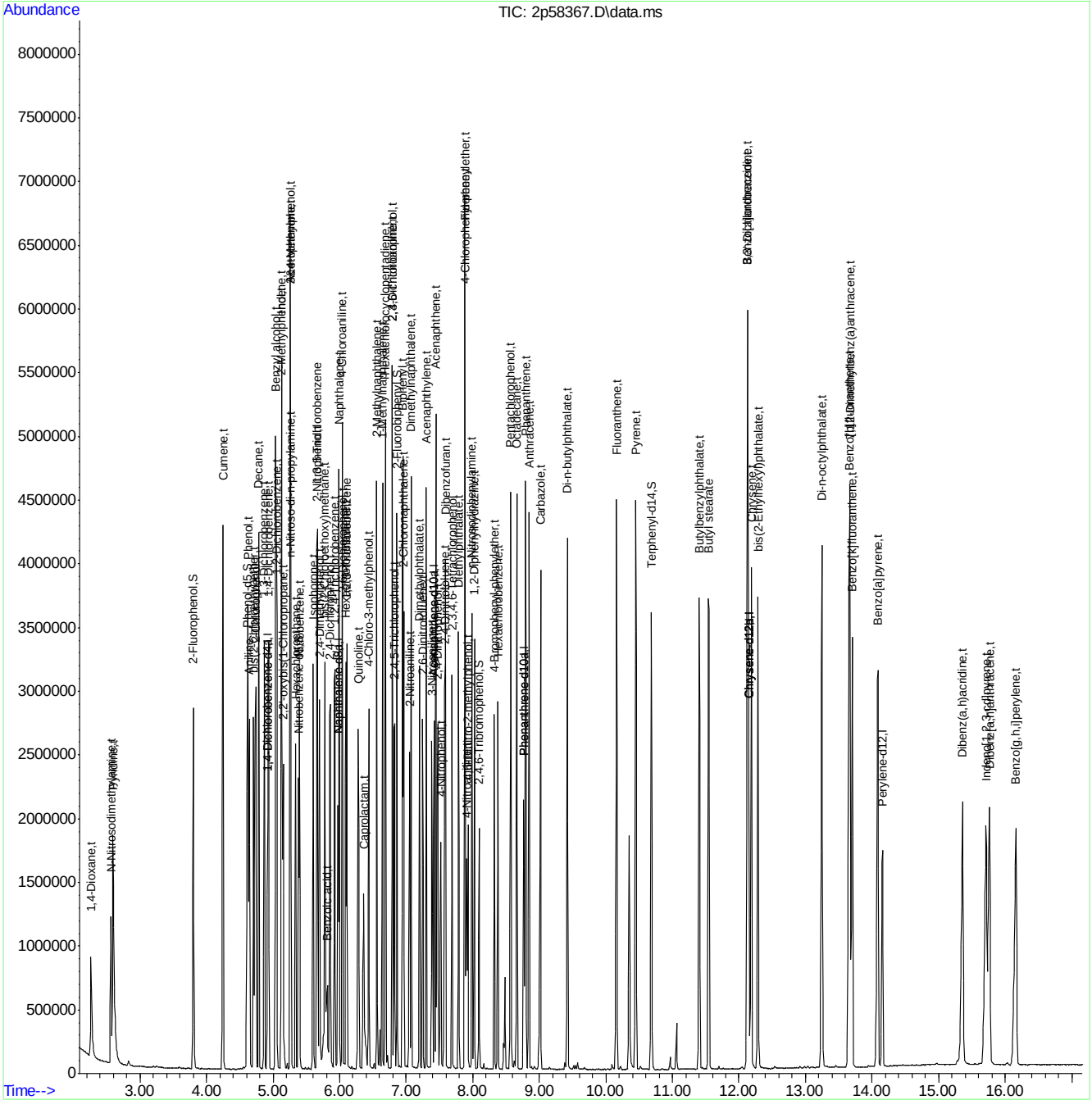
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58367.D
Acq On : 19 Apr 2016 5:21 pm
Operator : robertl1
Sample : IC2547-80
Misc : op92038,e2p2547
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 20 08:24:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration



SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58368.D
Acq On : 19 Apr 2016 5:45 pm
Operator : robertl1
Sample : IC2547-10
Misc : op92038,e2p2547
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 20 08:25:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.916	152	322262	40.00	ppm	0.00
24) Naphthalene-d8	5.970	136	1135036	40.00	ppm	0.00
47) Acenaphthene-d10	7.414	164	620256	40.00	ppm	0.00
69) Phenanthrene-d10	8.762	188	978345	40.00	ppm	0.00
83) Chrysene-d12	12.137	240	939414	40.00	ppm	0.00
92) Perylene-d12	14.148	264	782964	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.916	152	322262	40.00	ppm	0.00
104) Naphthalene-d8a	5.970	136	1135036	40.00	ppm	0.00
106) Acenaphthene-d10a	7.414	164	620256	40.00	ppm	0.00
109) Chrysene-d12a	12.137	240	939414	40.00	ppm	0.00
111) Phenanthrene-d10a	8.762	188	978345	40.00	ppm	0.00
114) Chrysene-d12b	12.137	240	939414	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.798	112	120860	9.26	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery	=	18.52%	
8) Phenol-d5	4.601	99	143565	9.39	ppm	0.00
Spiked Amount 50.000	Range 10 - 59		Recovery	=	18.78%	
25) Nitrobenzene-d5	5.371	82	108797	9.72	ppm	0.00
Spiked Amount 50.000	Range 19 - 61		Recovery	=	19.44%	
51) 2-Fluorobiphenyl	6.858	172	183977	9.53	ppm	0.00
Spiked Amount 50.000	Range 21 - 58		Recovery	=	19.06%#	
73) 2,4,6-Tribromophenol	8.088	330	19976	9.20	ppm	0.00
Spiked Amount 50.000	Range 12 - 68		Recovery	=	18.40%	
85) Terphenyl-d14	10.677	244	175097	9.26	ppm	0.00
Spiked Amount 50.000	Range 16 - 65		Recovery	=	18.52%	
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
113) O-terphenyl	0.000	230	0	0.00	ppm	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.269	88	51080	8.63	ppm	93
3) Pyridine	2.600	79	136123	9.29	ppm	97
4) N-Nitrosodimethylamine	2.563	74	79088	9.14	ppm	99
6) Indene	5.125	116	181468	10.03	ppm	99
7) Cumene	4.242	105	271517	9.50	ppm	99
9) Phenol	4.611	94	151257	9.56	ppm	95
10) Aniline	4.638	93	181125	9.73	ppm	98
11) bis(2-Chloroethyl)ether	4.697	93	110553	9.68	ppm	98
12) 2-Chlorophenol	4.734	128	116252	9.83	ppm	94
13) Decane	4.783	57	174620	9.91	ppm	97
14) 1,3-Dichlorobenzene	4.863	146	124112	9.55	ppm	100
15) 1,4-Dichlorobenzene	4.927	146	123321	9.64	ppm	99
16) Benzyl alcohol	5.029	108	70502	9.52	ppm	96
17) 1,2-Dichlorobenzene	5.050	146	117083	9.91	ppm	97
18) Acetophenone	5.248	105	144959	9.98	ppm	98
19) 2-Methylphenol	5.120	108	102006	10.05	ppm	98
20) 2,2'-oxybis(1-Chloropr...	5.146	121	32053	9.62	ppm #	93
21) 3&4-Methylphenol	5.243	108	107743	10.18	ppm	100
22) n-Nitroso-di-n-propyla...	5.248	70	75571	10.08	ppm	95

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58368.D
Acq On : 19 Apr 2016 5:45 pm
Operator : robertl1
Sample : IC2547-10
Misc : op92038,e2p2547
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 20 08:25:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
23) Hexachloroethane	5.334	201	37264	9.60	ppm	95
26) Nitrobenzene	5.387	77	111804	9.90	ppm	98
27) Quinoline	6.264	129	192134	9.55	ppm	100
28) Isophorone	5.590	82	195147	9.65	ppm	99
29) 2-Nitrophenol	5.654	139	55233	9.89	ppm	88
30) 2,4-Dimethylphenol	5.687	107	100320	10.11	ppm	96
31) Benzoic acid	5.745	105	75261	9.68	ppm	99
32) bis(2-Chloroethoxy)met...	5.772	93	123776	9.84	ppm	98
33) 2,4-Dichlorophenol	5.847	162	83023	9.72	ppm	97
34) 2,6-Dichlorophenol	6.034	162	78552	9.76	ppm	97
35) 1,3,5-Trichlorobenzene	5.660	180	96194	9.80	ppm	97
36) 1,2,4-Trichlorobenzene	5.922	180	92093	9.78	ppm	98
37) 1,2,3-Trichlorobenzene	6.104	180	84864	9.69	ppm	98
38) Naphthalene	5.986	128	288184	9.86	ppm	98
39) 4-Chloroaniline	6.029	127	124483	9.85	ppm	98
40) 2,3-Dichloroaniline	6.788	161	102517	9.79	ppm	100
41) Caprolactam	6.312	113	31263	9.54	ppm	97
42) Hexachlorobutadiene	6.088	225	43807	9.41	ppm	99
43) 4-Chloro-3-methylphenol	6.425	107	84291	9.61	ppm	94
44) 2-Methylnaphthalene	6.558	141	158256	9.69	ppm	100
45) 1-Methylnaphthalene	6.639	141	165050	9.86	ppm	99
46) Dimethylnaphthalene	7.072	156	159350	9.66	ppm	99
48) Hexachlorocyclopentadiene	6.687	237	96647	19.38	ppm	99
49) 2,4,6-Trichlorophenol	6.788	196	56138	9.78	ppm	100
50) 2,4,5-Trichlorophenol	6.815	196	60018	9.71	ppm	98
52) 2-Chloronaphthalene	6.960	162	179294	9.85	ppm	95
53) Biphenyl	6.943	154	222863	9.75	ppm	98
54) 2-Nitroaniline	7.040	65	60850	8.14	ppm	96
55) Dimethylphthalate	7.195	163	187354	9.48	ppm	100
56) Acenaphthylene	7.296	152	287974	9.72	ppm	99
57) 2,6-Dinitrotoluene	7.243	165	41037	9.79	ppm	96
58) 3-Nitroaniline	7.377	138	54266	8.53	ppm	97
59) Acenaphthene	7.441	153	172753	9.52	ppm	99
60) 2,4-Dinitrophenol	7.462	184	30698	18.21	ppm	93
61) 4-Nitrophenol	7.505	109	23973	9.57	ppm	93
62) Dibenzofuran	7.585	168	233370	9.73	ppm	99
63) 2,4-Dinitrotoluene	7.569	165	55364	10.07	ppm	95
64) 2,3,4,6-Tetrachlorophenol	7.682	232	44226	9.41	ppm	93
65) Diethylphthalate	7.778	149	190793	9.52	ppm	100
66) Fluorene	7.874	166	191465	9.61	ppm	99
67) 4-Chlorophenyl-phenyle...	7.879	204	83369	9.57	ppm	100
68) 4-Nitroaniline	7.885	138	54922	10.04	ppm	99
70) 4,6-Dinitro-2-methylph...	7.912	198	24798	8.67	ppm	95
71) n-Nitrosodiphenylamine	7.981	169	126006	9.51	ppm	99
72) 1,2-Diphenylhydrazine	8.019	77	213831	10.04	ppm	95
74) 4-Bromophenyl-phenylether	8.323	248	46367	9.31	ppm	95
75) Hexachlorobenzene	8.372	284	49373	9.26	ppm	92
76) Pentachlorophenol	8.564	266	68144	18.91	ppm	99
77) Phenanthrene	8.789	178	265779	9.25	ppm	99
78) Anthracene	8.837	178	271589	9.53	ppm	100

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58368.D
Acq On : 19 Apr 2016 5:45 pm
Operator : robertl1
Sample : IC2547-10
Misc : op92038,e2p2547
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 20 08:25:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
79)	Carbazole	9.008	167	253649	9.46	ppm	99
80)	Di-n-butylphthalate	9.420	149	343049	9.62	ppm	99
81)	Fluoranthene	10.153	202	286158	9.17	ppm	96
82)	Octadecane	8.660	43	130781	10.40	ppm	96
84)	Pyrene	10.441	202	304609	9.78	ppm	99
86)	Butylbenzylphthalate	11.399	149	150827	9.48	ppm	95
87)	Butyl stearate	11.538	56	139606	10.26	ppm	97
88)	Benzo[a]anthracene	12.121	228	273258	9.12	ppm	100
89)	3,3'-Dichlorobenzidine	12.116	252	94688	9.34	ppm	96
90)	Chrysene	12.174	228	252582	9.32	ppm	99
91)	bis(2-Ethylhexyl)phtha...	12.281	149	197799	9.94	ppm	99
93)	Di-n-octylphthalate	13.233	149	350508	9.84	ppm	99
94)	Benzo[b]fluoranthene	13.640	252	250741	9.22	ppm	98
95)	Benzo[k]fluoranthene	13.677	252	231336	9.74	ppm	98
96)	Benzo[a]pyrene	14.068	252	213062	9.23	ppm	98
97)	Indeno[1,2,3-cd]pyrene	15.678	276	180477	9.04	ppm	94
98)	Dibenz(a,h)acridine	15.335	279	170729	9.38	ppm	99
99)	Dibenz[a,h]anthracene	15.731	278	180925	9.05	ppm	94
100)	7,12-Dimethylbenz(a)an...	13.640	256	104110	9.39	ppm	98
101)	Benzo[g,h,i]perylene	16.122	276	191939	9.09	ppm	95

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

7.6.4

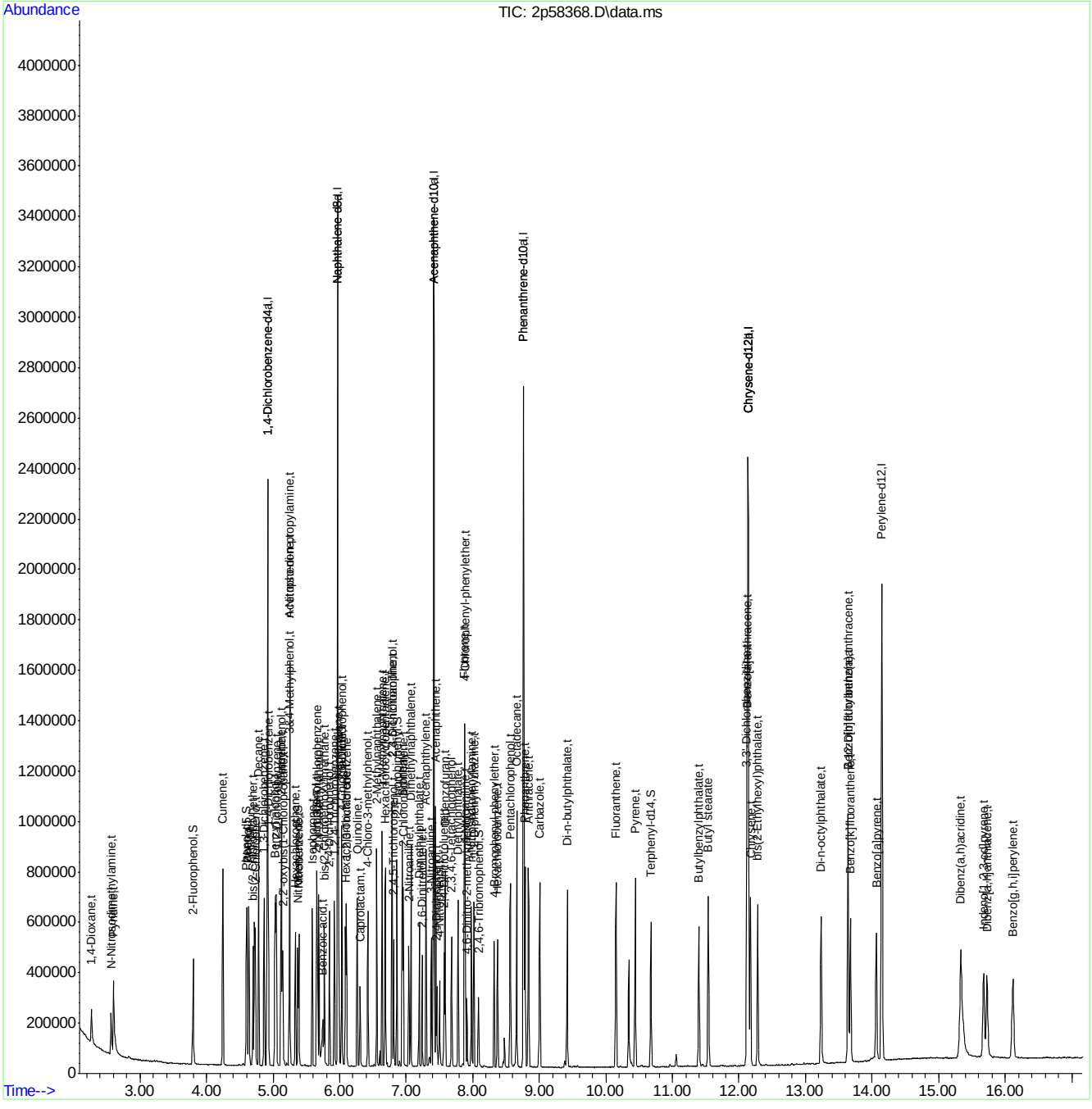
7

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58368.D
Acq On : 19 Apr 2016 5:45 pm
Operator : robertl1
Sample : IC2547-10
Misc : op92038,e2p2547
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 20 08:25:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration



SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58369.D
Acq On : 19 Apr 2016 6:09 pm
Operator : robertl1
Sample : IC2547-100
Misc : op92038,e2p2547
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 20 08:28:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.916	152	247515	40.00	ppm	0.00
24) Naphthalene-d8	5.975	136	885088	40.00	ppm	0.00
47) Acenaphthene-d10	7.420	164	480319	40.00	ppm	0.00
69) Phenanthrene-d10	8.767	188	779453	40.00	ppm	0.00
83) Chrysene-d12	12.153	240	760159	40.00	ppm	0.01
92) Perylene-d12	14.159	264	655418	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.916	152	247515	40.00	ppm	0.00
104) Naphthalene-d8a	5.975	136	885088	40.00	ppm	0.00
106) Acenaphthene-d10a	7.420	164	480319	40.00	ppm	0.00
109) Chrysene-d12a	12.153	240	760159	40.00	ppm	0.02
111) Phenanthrene-d10a	8.767	188	779453	40.00	ppm	0.00
114) Chrysene-d12b	12.153	240	760159	40.00	ppm	0.02
System Monitoring Compounds						
5) 2-Fluorophenol	3.804	112	1018564	101.59	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery	=	203.18%#	
8) Phenol-d5	4.617	99	1155357	98.34	ppm	0.01
Spiked Amount 50.000	Range 10 - 59		Recovery	=	196.68%#	
25) Nitrobenzene-d5	5.382	82	781232	89.52	ppm	0.00
Spiked Amount 50.000	Range 19 - 61		Recovery	=	179.04%#	
51) 2-Fluorobiphenyl	6.869	172	1331836	89.12	ppm	0.00
Spiked Amount 50.000	Range 21 - 58		Recovery	=	178.24%#	
73) 2,4,6-Tribromophenol	8.099	330	183604	106.10	ppm	0.00
Spiked Amount 50.000	Range 12 - 68		Recovery	=	212.20%#	
85) Terphenyl-d14	10.688	244	1555775	101.68	ppm	0.00
Spiked Amount 50.000	Range 16 - 65		Recovery	=	203.36%#	
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
113) O-terphenyl	0.000	230	0	0.00	ppm	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.263	88	463781	101.96	ppm	97
3) Pyridine	2.595	79	1173315	104.30	ppm	99
4) N-Nitrosodimethylamine	2.563	74	707056	106.33	ppm	100
6) Indene	5.130	116	1110882	79.93	ppm	99
7) Cumene	4.248	105	2082807	94.90	ppm	98
9) Phenol	4.628	94	1188975	97.85	ppm	97
10) Aniline	4.644	93	1270259	88.84	ppm	99
11) bis(2-Chloroethyl)ether	4.708	93	768294	87.56	ppm	93
12) 2-Chlorophenol	4.740	128	804807	88.62	ppm	96
13) Decane	4.788	57	1066570	78.85	ppm	94
14) 1,3-Dichlorobenzene	4.868	146	886725	88.85	ppm	98
15) 1,4-Dichlorobenzene	4.932	146	868117	88.37	ppm	99
16) Benzyl alcohol	5.039	108	483981	85.09	ppm	98
17) 1,2-Dichlorobenzene	5.055	146	772408	85.09	ppm	99
18) Acetophenone	5.259	105	876144	78.56	ppm #	68
19) 2-Methylphenol	5.125	108	630153	80.87	ppm	99
20) 2,2'-oxybis(1-Chloropr...	5.152	121	216513	84.64	ppm	94
21) 3&4-Methylphenol	5.259	108	651747	80.17	ppm	100
22) n-Nitroso-di-n-propyla...	5.269	70	461015	80.05	ppm	99

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58369.D
Acq On : 19 Apr 2016 6:09 pm
Operator : robertl1
Sample : IC2547-100
Misc : op92038,e2p2547
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 20 08:28:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
23) Hexachloroethane	5.339	201	276481	92.74	ppm	#	81
26) Nitrobenzene	5.398	77	752742	85.48	ppm		99
27) Quinoline	6.286	129	1469247	93.61	ppm		99
28) Isophorone	5.606	82	1445380	91.65	ppm		99
29) 2-Nitrophenol	5.660	139	402892	92.55	ppm		89
30) 2,4-Dimethylphenol	5.697	107	677224	87.48	ppm		99
31) Benzoic acid	5.831	105	669372	110.41	ppm		99
32) bis(2-Chloroethoxy)met...	5.783	93	835707	85.20	ppm		98
33) 2,4-Dichlorophenol	5.858	162	616206	92.48	ppm		100
34) 2,6-Dichlorophenol	6.045	162	552440	88.04	ppm		97
35) 1,3,5-Trichlorobenzene	5.665	180	678554	88.66	ppm		99
36) 1,2,4-Trichlorobenzene	5.927	180	659600	89.83	ppm		98
37) 1,2,3-Trichlorobenzene	6.109	180	600190	87.87	ppm		98
38) Naphthalene	5.991	128	1926828	84.51	ppm		99
39) 4-Chloroaniline	6.040	127	814964	82.68	ppm		98
40) 2,3-Dichloroaniline	6.794	161	704988	86.35	ppm		95
41) Caprolactam	6.371	113	253825	99.33	ppm		97
42) Hexachlorobutadiene	6.093	225	345147	95.06	ppm		98
43) 4-Chloro-3-methylphenol	6.441	107	630387	92.18	ppm		95
44) 2-Methylnaphthalene	6.564	141	1152169	90.47	ppm		100
45) 1-Methylnaphthalene	6.644	141	1150450	88.12	ppm		98
46) Dimethylnaphthalene	7.077	156	1118289	86.95	ppm		98
48) Hexachlorocyclopentadiene	6.692	237	838630	217.12	ppm		99
49) 2,4,6-Trichlorophenol	6.794	196	406617	91.52	ppm		97
50) 2,4,5-Trichlorophenol	6.826	196	449873	94.03	ppm		99
52) 2-Chloronaphthalene	6.965	162	1196370	84.87	ppm		98
53) Biphenyl	6.949	154	1535295	86.78	ppm		100
54) 2-Nitroaniline	7.051	65	460888	79.64	ppm		100
55) Dimethylphthalate	7.206	163	1412746	92.31	ppm		99
56) Acenaphthylene	7.307	152	2033952	88.65	ppm		99
57) 2,6-Dinitrotoluene	7.254	165	325187	100.14	ppm		96
58) 3-Nitroaniline	7.393	138	412511	83.72	ppm		91
59) Acenaphthene	7.452	153	1250908	89.00	ppm		98
60) 2,4-Dinitrophenol	7.478	184	374178	199.81	ppm		87
61) 4-Nitrophenol	7.521	109	198632	102.43	ppm		96
62) Dibenzofuran	7.591	168	1602437	86.24	ppm		97
63) 2,4-Dinitrotoluene	7.580	165	426108	100.13	ppm		98
64) 2,3,4,6-Tetrachlorophenol	7.692	232	379247	104.19	ppm		95
65) Diethylphthalate	7.789	149	1414647	91.10	ppm		99
66) Fluorene	7.885	166	1359053	88.05	ppm		98
67) 4-Chlorophenyl-phenyle...	7.885	204	615561	91.25	ppm		92
68) 4-Nitroaniline	7.917	138	397393	93.85	ppm		97
70) 4,6-Dinitro-2-methylph...	7.933	198	247449	108.54	ppm		94
71) n-Nitrosodiphenylamine	7.992	169	929054	88.04	ppm		99
72) 1,2-Diphenylhydrazine	8.024	77	1360980	80.21	ppm		94
74) 4-Bromophenyl-phenylether	8.329	248	398465	100.43	ppm		94
75) Hexachlorobenzene	8.382	284	416259	97.99	ppm		92
76) Pentachlorophenol	8.575	266	633253	220.55	ppm		99
77) Phenanthrene	8.800	178	2039390	89.10	ppm		99
78) Anthracene	8.853	178	2012036	88.61	ppm		99

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58369.D
Acq On : 19 Apr 2016 6:09 pm
Operator : robertl1
Sample : IC2547-100
Misc : op92038,e2p2547
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 20 08:28:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
79)	Carbazole	9.019	167	1947431	91.21	ppm	99
80)	Di-n-butylphthalate	9.425	149	2715780	95.60	ppm	99
81)	Fluoranthene	10.163	202	2506606	100.81	ppm	98
82)	Octadecane	8.666	43	770653	76.91	ppm	87
84)	Pyrene	10.458	202	2474108	98.15	ppm	100
86)	Butylbenzylphthalate	11.410	149	1297972	100.81	ppm	98
87)	Butyl stearate	11.549	56	995197	90.42	ppm	94
88)	Benzo[a]anthracene	12.137	228	2375786	97.97	ppm	98
89)	3,3'-Dichlorobenzidine	12.137	252	869044	105.91	ppm	98
90)	Chrysene	12.196	228	2058102	93.85	ppm	100
91)	bis(2-Ethylhexyl)phtha...	12.287	149	1519439	94.37	ppm	98
93)	Di-n-octylphthalate	13.250	149	3106671	104.22	ppm	96
94)	Benzo[b]fluoranthene	13.667	252	2406826	105.69	ppm	96
95)	Benzo[k]fluoranthene	13.710	252	1798356	90.41	ppm	97
96)	Benzo[a]pyrene	14.089	252	1973917	102.15	ppm	97
97)	Indeno[1,2,3-cd]pyrene	15.721	276	1848282	110.61	ppm	95
98)	Dibenz(a,h)acridine	15.368	279	1647170	108.10	ppm	99
99)	Dibenz[a,h]anthracene	15.774	278	1759100	105.13	ppm	96
100)	7,12-Dimethylbenz(a)an...	13.667	256	980255	105.61	ppm	99
101)	Benzo[g,h,i]perylene	16.170	276	1850570	104.75	ppm	99

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

7.6.5

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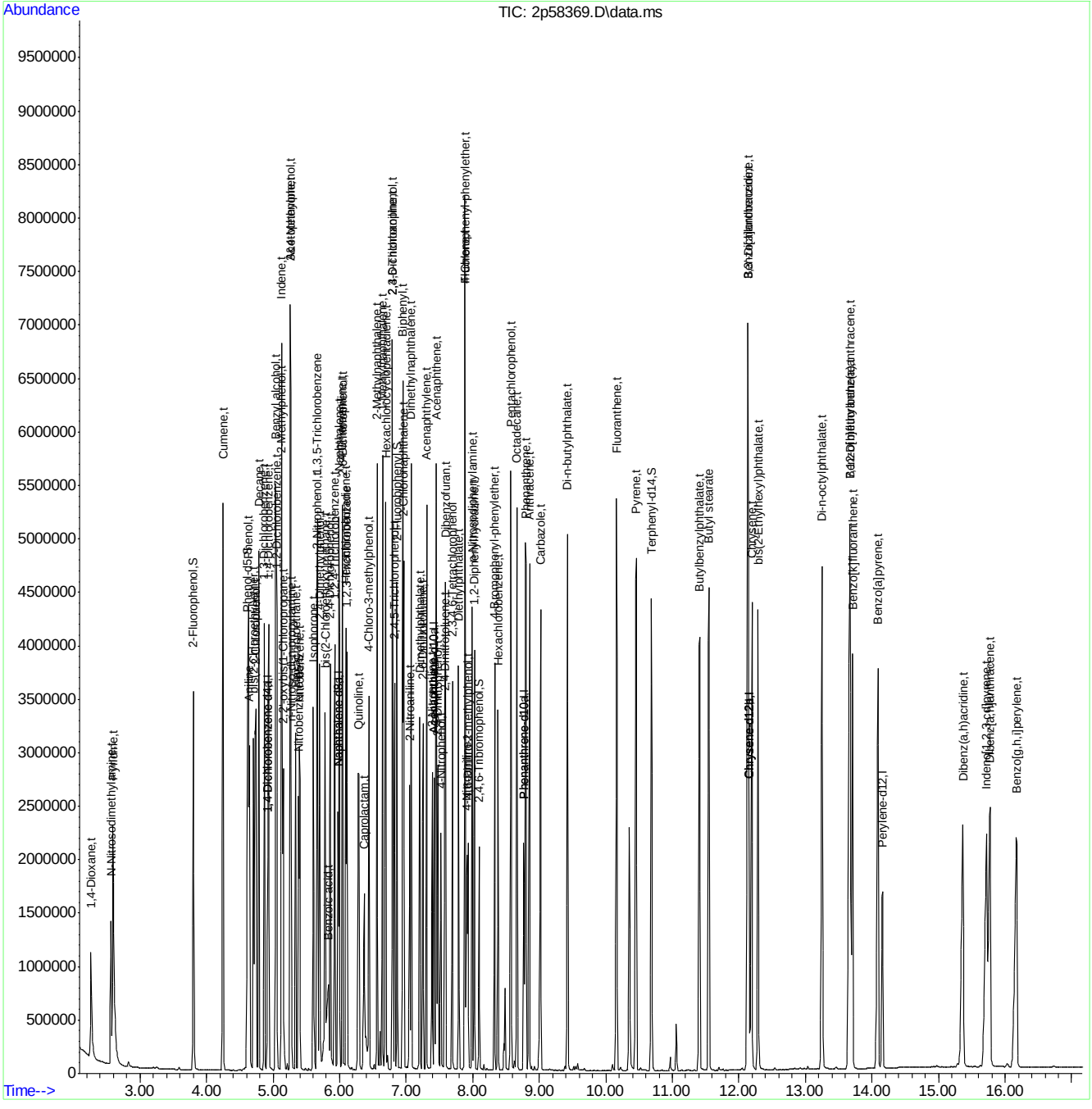
SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58369.D
Acq On : 19 Apr 2016 6:09 pm
Operator : robertl1
Sample : IC2547-100
Misc : op92038,e2p2547
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 20 08:28:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58370.D
Acq On : 19 Apr 2016 6:33 pm
Operator : robertl1
Sample : IC2547-5
Misc : op92038,e2p2547
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 20 08:29:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.911	152	281504	40.00	ppm	0.00
24) Naphthalene-d8	5.970	136	989523	40.00	ppm	0.00
47) Acenaphthene-d10	7.414	164	539577	40.00	ppm	0.00
69) Phenanthrene-d10	8.762	188	835173	40.00	ppm	0.00
83) Chrysene-d12	12.137	240	777613	40.00	ppm	0.00
92) Perylene-d12	14.148	264	648321	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.911	152	281504	40.00	ppm	0.00
104) Naphthalene-d8a	5.970	136	989523	40.00	ppm	0.00
106) Acenaphthene-d10a	7.414	164	539577	40.00	ppm	0.00
109) Chrysene-d12a	12.137	240	777613	40.00	ppm	0.00
111) Phenanthrene-d10a	8.762	188	835173	40.00	ppm	0.00
114) Chrysene-d12b	12.137	240	777613	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.793	112	57559	5.05	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery	=	10.10%#	
8) Phenol-d5	4.595	99	70626	5.29	ppm	-0.01
Spiked Amount 50.000	Range 10 - 59		Recovery	=	10.58%	
25) Nitrobenzene-d5	5.371	82	54953	5.63	ppm	0.00
Spiked Amount 50.000	Range 19 - 61		Recovery	=	11.26%#	
51) 2-Fluorobiphenyl	6.858	172	92661	5.52	ppm	0.00
Spiked Amount 50.000	Range 21 - 58		Recovery	=	11.04%#	
73) 2,4,6-Tribromophenol	8.088	330	9517	5.13	ppm	0.00
Spiked Amount 50.000	Range 12 - 68		Recovery	=	10.26%#	
85) Terphenyl-d14	10.677	244	80782	5.16	ppm	0.00
Spiked Amount 50.000	Range 16 - 65		Recovery	=	10.32%#	
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
113) O-terphenyl	0.000	230	0	0.00	ppm	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.269	88	26300	5.08	ppm	98
3) Pyridine	2.600	79	64496	5.04	ppm	99
4) N-Nitrosodimethylamine	2.563	74	37027	4.90	ppm	98
6) Indene	5.125	116	90434	5.72	ppm	99
7) Cumene	4.242	105	131773	5.28	ppm	99
9) Phenol	4.611	94	73133	5.29	ppm	91
10) Aniline	4.638	93	88763	5.46	ppm	99
11) bis(2-Chloroethyl)ether	4.697	93	53728	5.38	ppm	96
12) 2-Chlorophenol	4.734	128	56616	5.48	ppm	96
13) Decane	4.782	57	87899	5.71	ppm	97
14) 1,3-Dichlorobenzene	4.863	146	62537	5.51	ppm	97
15) 1,4-Dichlorobenzene	4.927	146	60921	5.45	ppm	99
16) Benzyl alcohol	5.029	108	36423	5.63	ppm	96
17) 1,2-Dichlorobenzene	5.050	146	58121	5.63	ppm	98
18) Acetophenone	5.248	105	73468	5.79	ppm	95
19) 2-Methylphenol	5.114	108	51752	5.84	ppm	98
20) 2,2'-oxybis(1-Chloropr...	5.146	121	16267	5.59	ppm #	86
21) 3&4-Methylphenol	5.242	108	53902	5.83	ppm	100
22) n-Nitroso-di-n-propyla...	5.248	70	38857	5.93	ppm	95

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58370.D
Acq On : 19 Apr 2016 6:33 pm
Operator : robertl1
Sample : IC2547-5
Misc : op92038,e2p2547
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 20 08:29:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
23)	Hexachloroethane	5.333	201	18063	5.33	ppm		97
26)	Nitrobenzene	5.387	77	55711	5.66	ppm		99
27)	Quinoline	6.259	129	95124	5.42	ppm		98
28)	Isophorone	5.585	82	99254	5.63	ppm		94
29)	2-Nitrophenol	5.654	139	26575	5.46	ppm		88
30)	2,4-Dimethylphenol	5.686	107	48203	5.57	ppm		97
31)	Benzoic acid	5.729	105	33624	4.96	ppm		87
32)	bis(2-Chloroethoxy)met...	5.772	93	62806	5.73	ppm		98
33)	2,4-Dichlorophenol	5.847	162	41359	5.55	ppm		96
34)	2,6-Dichlorophenol	6.034	162	39661	5.65	ppm		99
35)	1,3,5-Trichlorobenzene	5.660	180	47599	5.56	ppm		99
36)	1,2,4-Trichlorobenzene	5.922	180	45448	5.54	ppm		99
37)	1,2,3-Trichlorobenzene	6.104	180	42358	5.55	ppm		94
38)	Naphthalene	5.986	128	144639	5.67	ppm		99
39)	4-Chloroaniline	6.029	127	64937	5.89	ppm		98
40)	2,3-Dichloroaniline	6.788	161	51670	5.66	ppm		100
41)	Caprolactam	6.301	113	15434	5.40	ppm		98
42)	Hexachlorobutadiene	6.088	225	21702	5.35	ppm		99
43)	4-Chloro-3-methylphenol	6.425	107	42724	5.59	ppm		95
44)	2-Methylnaphthalene	6.558	141	78184	5.49	ppm		99
45)	1-Methylnaphthalene	6.638	141	81765	5.60	ppm		99
46)	Dimethylnaphthalene	7.072	156	80589	5.60	ppm		100
48)	Hexachlorocyclopentadiene	6.687	237	43524	10.03	ppm		96
49)	2,4,6-Trichlorophenol	6.783	196	27404	5.49	ppm		96
50)	2,4,5-Trichlorophenol	6.810	196	29787	5.54	ppm		95
52)	2-Chloronaphthalene	6.959	162	89092	5.63	ppm		97
53)	Biphenyl	6.943	154	110586	5.56	ppm		99
54)	2-Nitroaniline	7.040	65	30069	4.63	ppm		97
55)	Dimethylphthalate	7.195	163	92340	5.37	ppm		99
56)	Acenaphthylene	7.296	152	144053	5.59	ppm		99
57)	2,6-Dinitrotoluene	7.237	165	19161	5.25	ppm		81
58)	3-Nitroaniline	7.377	138	26675	4.82	ppm		88
59)	Acenaphthene	7.441	153	86627	5.49	ppm		98
60)	2,4-Dinitrophenol	7.462	184	11266	10.19	ppm	#	39
61)	4-Nitrophenol	7.505	109	11624	5.34	ppm		89
62)	Dibenzofuran	7.585	168	117322	5.62	ppm		99
63)	2,4-Dinitrotoluene	7.569	165	25585	5.35	ppm		88
64)	2,3,4,6-Tetrachlorophenol	7.681	232	21184	5.18	ppm		93
65)	Diethylphthalate	7.778	149	94655	5.43	ppm		99
66)	Fluorene	7.874	166	97217	5.61	ppm		99
67)	4-Chlorophenyl-phenyle...	7.879	204	41471	5.47	ppm		95
68)	4-Nitroaniline	7.885	138	27353	5.75	ppm		99
70)	4,6-Dinitro-2-methylph...	7.911	198	10165	4.16	ppm		95
71)	n-Nitrosodiphenylamine	7.981	169	63135	5.58	ppm		98
72)	1,2-Diphenylhydrazine	8.013	77	105422	5.80	ppm		97
74)	4-Bromophenyl-phenylether	8.323	248	21587	5.08	ppm		97
75)	Hexachlorobenzene	8.371	284	23878	5.25	ppm		95
76)	Pentachlorophenol	8.564	266	30678	9.97	ppm		98
77)	Phenanthrene	8.783	178	135049	5.51	ppm		98
78)	Anthracene	8.837	178	134043	5.51	ppm		98

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58370.D
Acq On : 19 Apr 2016 6:33 pm
Operator : robertl1
Sample : IC2547-5
Misc : op92038,e2p2547
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 20 08:29:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
79)	Carbazole	9.008	167	123992	5.42	ppm	97
80)	Di-n-butylphthalate	9.420	149	163440	5.37	ppm	99
81)	Fluoranthene	10.153	202	135434	5.08	ppm	96
82)	Octadecane	8.660	43	62680	5.84	ppm	98
84)	Pyrene	10.441	202	143455	5.56	ppm	99
86)	Butylbenzylphthalate	11.399	149	68815	5.22	ppm	99
87)	Butyl stearate	11.538	56	61058	5.42	ppm	95
88)	Benzo[a]anthracene	12.121	228	130953	5.28	ppm	97
89)	3,3'-Dichlorobenzidine	12.115	252	44100	5.25	ppm	93
90)	Chrysene	12.169	228	121882	5.43	ppm	99
91)	bis(2-Ethylhexyl)phtha...	12.281	149	89849	5.46	ppm	99
93)	Di-n-octylphthalate	13.233	149	156247	5.30	ppm	98
94)	Benzo[b]fluoranthene	13.634	252	117790	5.23	ppm	97
95)	Benzo[k]fluoranthene	13.672	252	108110	5.49	ppm	98
96)	Benzo[a]pyrene	14.062	252	102229	5.35	ppm	95
97)	Indeno[1,2,3-cd]pyrene	15.678	276	84342	5.10	ppm	91
98)	Dibenz(a,h)acridine	15.330	279	82522	5.48	ppm	98
99)	Dibenz[a,h]anthracene	15.726	278	84619	5.11	ppm	94
100)	7,12-Dimethylbenz(a)an...	13.640	256	46657	5.08	ppm	99
101)	Benzo[g,h,i]perylene	16.111	276	90215	5.16	ppm	91

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

7.6.6

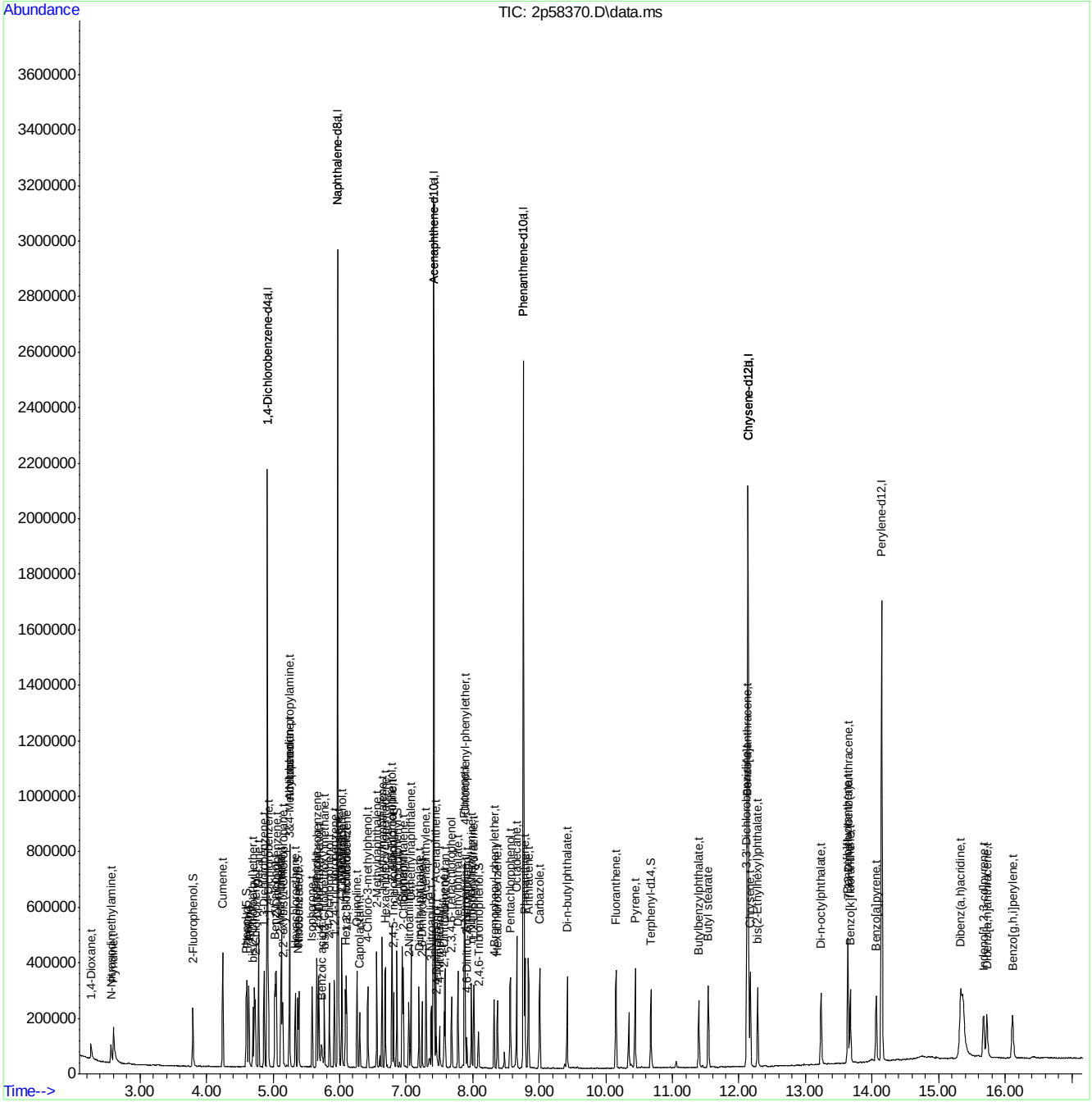
7

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58370.D
Acq On : 19 Apr 2016 6:33 pm
Operator : robertl1
Sample : IC2547-5
Misc : op92038,e2p2547
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 20 08:29:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration



SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58371.D
Acq On : 19 Apr 2016 6:57 pm
Operator : robertl1
Sample : IC2547-2
Misc : op92038,e2p2547
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 20 08:32:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.916	152	331615	40.00	ppm	0.00
24) Naphthalene-d8	5.970	136	1201853	40.00	ppm	0.00
47) Acenaphthene-d10	7.414	164	656341	40.00	ppm	0.00
69) Phenanthrene-d10	8.762	188	1016880	40.00	ppm	0.00
83) Chrysene-d12	12.137	240	976541	40.00	ppm	0.00
92) Perylene-d12	14.148	264	822786	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.916	152	331615	40.00	ppm	0.00
104) Naphthalene-d8a	5.970	136	1201853	40.00	ppm	0.00
106) Acenaphthene-d10a	7.414	164	656341	40.00	ppm	0.00
109) Chrysene-d12a	12.137	240	976541	40.00	ppm	0.00
111) Phenanthrene-d10a	8.762	188	1016880	40.00	ppm	0.00
114) Chrysene-d12b	12.137	240	976541	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.798	112	26869	2.00	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery	=	4.00%#	
8) Phenol-d5	4.595	99	31404	2.00	ppm	-0.01
Spiked Amount 50.000	Range 10 - 59		Recovery	=	4.00%#	
25) Nitrobenzene-d5	5.371	82	24905	2.10	ppm	0.00
Spiked Amount 50.000	Range 19 - 61		Recovery	=	4.20%#	
51) 2-Fluorobiphenyl	6.858	172	45301	2.22	ppm	0.00
Spiked Amount 50.000	Range 21 - 58		Recovery	=	4.44%#	
73) 2,4,6-Tribromophenol	8.088	330	4620	2.05	ppm	0.00
Spiked Amount 50.000	Range 12 - 68		Recovery	=	4.10%#	
85) Terphenyl-d14	10.677	244	40203	2.05	ppm	0.00
Spiked Amount 50.000	Range 16 - 65		Recovery	=	4.10%#	
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
113) O-terphenyl	0.000	230	0	0.00	ppm	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.274	88	10877	1.78	ppm	92
3) Pyridine	2.611	79	29237	1.94	ppm	96
4) N-Nitrosodimethylamine	2.568	74	16574	1.86	ppm	94
6) Indene	5.125	116	43040	2.31	ppm	99
7) Cumene	4.242	105	61131	2.08	ppm	99
9) Phenol	4.611	94	34405	2.11	ppm	88
10) Aniline	4.638	93	41937	2.19	ppm	99
11) bis(2-Chloroethyl)ether	4.697	93	24761	2.11	ppm	99
12) 2-Chlorophenol	4.734	128	26897	2.21	ppm	95
13) Decane	4.782	57	41136	2.27	ppm	96
14) 1,3-Dichlorobenzene	4.863	146	29450	2.20	ppm	100
15) 1,4-Dichlorobenzene	4.927	146	29070	2.21	ppm	96
16) Benzyl alcohol	5.028	108	16729	2.20	ppm	94
17) 1,2-Dichlorobenzene	5.050	146	26572	2.18	ppm	98
18) Acetophenone	5.248	105	35412	2.37	ppm	94
19) 2-Methylphenol	5.114	108	23798	2.28	ppm	99
20) 2,2'-oxybis(1-Chloropr...	5.146	121	7736	2.26	ppm #	94
21) 3&4-Methylphenol	5.242	108	24760	2.27	ppm	93
22) n-Nitroso-di-n-propyla...	5.248	70	18005	2.33	ppm	97

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58371.D
Acq On : 19 Apr 2016 6:57 pm
Operator : robertl1
Sample : IC2547-2
Misc : op92038,e2p2547
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 20 08:32:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
23) Hexachloroethane	5.333	201	8755	2.19	ppm		93
26) Nitrobenzene	5.387	77	27198	2.27	ppm		96
27) Quinoline	6.259	129	46817	2.20	ppm		98
28) Isophorone	5.585	82	45456	2.12	ppm		95
29) 2-Nitrophenol	5.654	139	11926	2.02	ppm		84
30) 2,4-Dimethylphenol	5.686	107	22765	2.17	ppm		94
31) Benzoic acid	5.718	105	14990	1.82	ppm		93
32) bis(2-Chloroethoxy)met...	5.772	93	29828	2.24	ppm		99
33) 2,4-Dichlorophenol	5.847	162	18742	2.07	ppm		98
34) 2,6-Dichlorophenol	6.034	162	19092	2.24	ppm		98
35) 1,3,5-Trichlorobenzene	5.660	180	22969	2.21	ppm		98
36) 1,2,4-Trichlorobenzene	5.922	180	21881	2.19	ppm		98
37) 1,2,3-Trichlorobenzene	6.104	180	20268	2.19	ppm		93
38) Naphthalene	5.986	128	70355	2.27	ppm		99
39) 4-Chloroaniline	6.029	127	29573	2.21	ppm		97
40) 2,3-Dichloroaniline	6.788	161	24500	2.21	ppm		99
41) Caprolactam	6.296	113	7095	2.04	ppm		97
42) Hexachlorobutadiene	6.088	225	10675	2.17	ppm		98
43) 4-Chloro-3-methylphenol	6.424	107	19671	2.12	ppm		89
44) 2-Methylnaphthalene	6.558	141	37387	2.16	ppm		98
45) 1-Methylnaphthalene	6.638	141	38426	2.17	ppm		99
46) Dimethylnaphthalene	7.072	156	39763	2.28	ppm		95
48) Hexachlorocyclopentadiene	6.687	237	18625	3.53	ppm		99
49) 2,4,6-Trichlorophenol	6.783	196	12836	2.11	ppm		97
50) 2,4,5-Trichlorophenol	6.810	196	13803	2.11	ppm		100
52) 2-Chloronaphthalene	6.954	162	44245	2.30	ppm		98
53) Biphenyl	6.943	154	54536	2.26	ppm		98
54) 2-Nitroaniline	7.040	65	14066	1.78	ppm		92
55) Dimethylphthalate	7.189	163	45461	2.17	ppm		98
56) Acenaphthylene	7.296	152	68944	2.20	ppm		98
57) 2,6-Dinitrotoluene	7.237	165	8577	1.93	ppm		79
58) 3-Nitroaniline	7.377	138	11962	1.78	ppm		90
59) Acenaphthene	7.441	153	42499	2.21	ppm		97
60) 2,4-Dinitrophenol	7.462	184	3602	5.84	ppm	#	19
61) 4-Nitrophenol	7.500	109	5277	1.99	ppm		93
62) Dibenzofuran	7.585	168	56497	2.23	ppm		98
63) 2,4-Dinitrotoluene	7.569	165	11503	1.98	ppm		90
64) 2,3,4,6-Tetrachlorophenol	7.681	232	10096	2.03	ppm		92
65) Diethylphthalate	7.778	149	46107	2.17	ppm		99
66) Fluorene	7.874	166	46383	2.20	ppm		98
67) 4-Chlorophenyl-phenyle...	7.879	204	20399	2.21	ppm		93
68) 4-Nitroaniline	7.885	138	12083	2.09	ppm		97
70) 4,6-Dinitro-2-methylph...	7.911	198	3484	1.17	ppm		91
71) n-Nitrosodiphenylamine	7.976	169	31464	2.29	ppm		97
72) 1,2-Diphenylhydrazine	8.013	77	50879	2.30	ppm		98
74) 4-Bromophenyl-phenylether	8.323	248	11036	2.13	ppm		94
75) Hexachlorobenzene	8.371	284	11817	2.13	ppm		97
76) Pentachlorophenol	8.564	266	13413	3.58	ppm		94
77) Phenanthrene	8.783	178	66660	2.23	ppm		98
78) Anthracene	8.837	178	65383	2.21	ppm		99

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58371.D
Acq On : 19 Apr 2016 6:57 pm
Operator : robertl1
Sample : IC2547-2
Misc : op92038,e2p2547
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 20 08:32:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
79)	Carbazole	9.008	167	60230	2.16	ppm	99
80)	Di-n-butylphthalate	9.420	149	77404	2.09	ppm	98
81)	Fluoranthene	10.152	202	65864	2.03	ppm	96
82)	Octadecane	8.660	43	29167	2.23	ppm	99
84)	Pyrene	10.441	202	70308	2.17	ppm	99
86)	Butylbenzylphthalate	11.399	149	32157	1.94	ppm	96
87)	Butyl stearate	11.538	56	28155	1.99	ppm	96
88)	Benzo[a]anthracene	12.121	228	64501	2.07	ppm	97
89)	3,3'-Dichlorobenzidine	12.115	252	20285	1.92	ppm	96
90)	Chrysene	12.169	228	59309	2.11	ppm	99
91)	bis(2-Ethylhexyl)phtha...	12.281	149	41703	2.02	ppm	98
93)	Di-n-octylphthalate	13.233	149	67081	1.79	ppm	99
94)	Benzo[b]fluoranthene	13.634	252	55488	1.94	ppm	94
95)	Benzo[k]fluoranthene	13.672	252	53226	2.13	ppm	94
96)	Benzo[a]pyrene	14.062	252	48664	2.01	ppm	97
97)	Indeno[1,2,3-cd]pyrene	15.672	276	39399	1.88	ppm	90
98)	Dibenz(a,h)acridine	15.335	279	35499	1.86	ppm	97
99)	Dibenz[a,h]anthracene	15.726	278	40520	1.93	ppm	98
100)	7,12-Dimethylbenz(a)an...	13.640	256	22608	1.94	ppm	98
101)	Benzo[g,h,i]perylene	16.111	276	43653	1.97	ppm	91

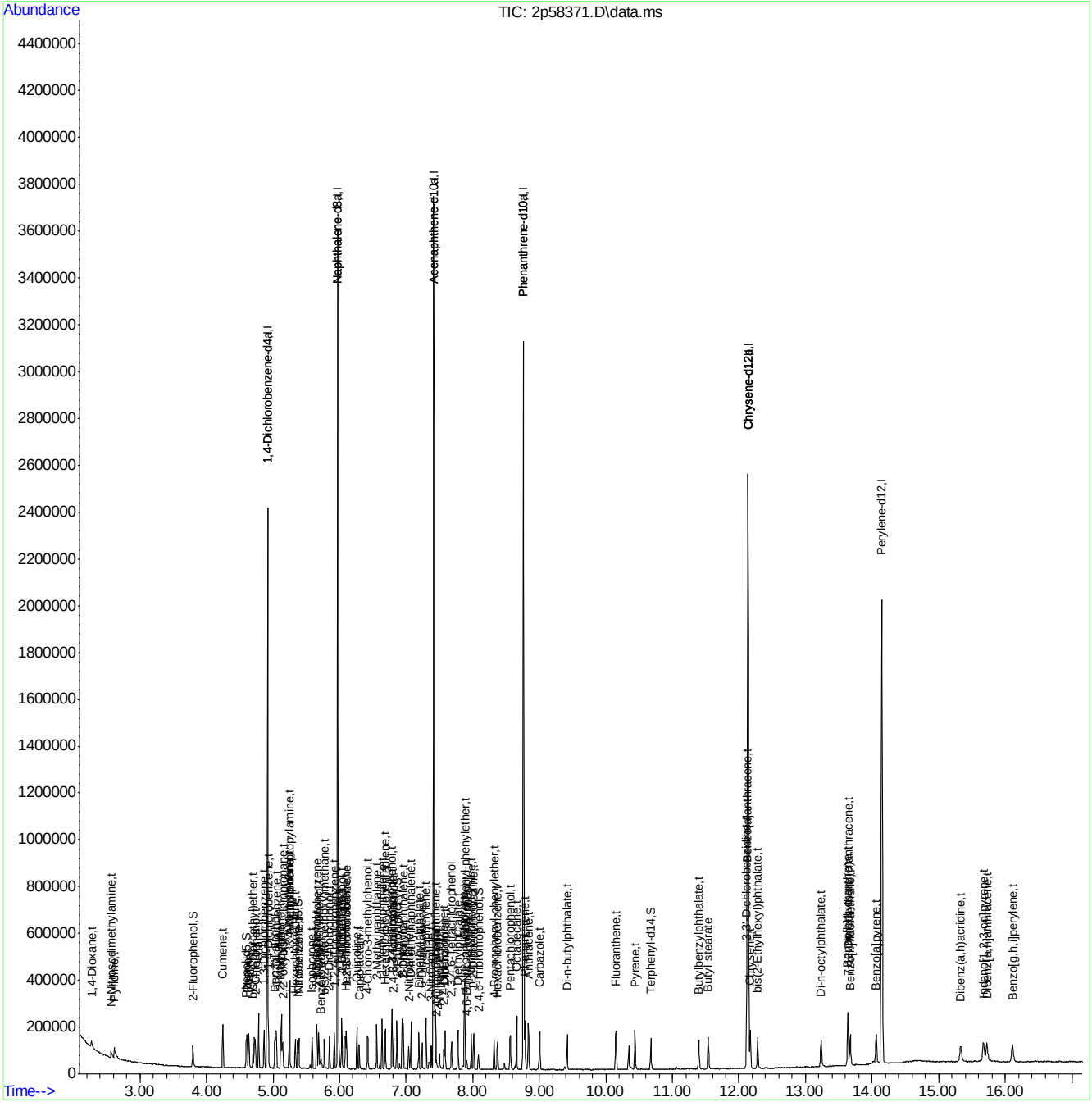
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58371.D
Acq On : 19 Apr 2016 6:57 pm
Operator : robertl1
Sample : IC2547-2
Misc : op92038,e2p2547
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 20 08:32:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration



M2P2547.M Wed Apr 20 08:32:24 2016 RPT1 Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58372.D
Acq On : 19 Apr 2016 7:21 pm
Operator : robertl1
Sample : IC2547-1
Misc : op92038,e2p2547
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 20 08:33:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.911	152	332188	40.00	ppm	0.00
24) Naphthalene-d8	5.970	136	1193650	40.00	ppm	0.00
47) Acenaphthene-d10	7.414	164	647880	40.00	ppm	0.00
69) Phenanthrene-d10	8.762	188	997127	40.00	ppm	0.00
83) Chrysene-d12	12.137	240	945418	40.00	ppm	0.00
92) Perylene-d12	14.148	264	807991	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.911	152	332188	40.00	ppm	0.00
104) Naphthalene-d8a	5.970	136	1193650	40.00	ppm	0.00
106) Acenaphthene-d10a	7.414	164	647880	40.00	ppm	0.00
109) Chrysene-d12a	12.137	240	945418	40.00	ppm	0.00
111) Phenanthrene-d10a	8.762	188	997127	40.00	ppm	0.00
114) Chrysene-d12b	12.137	240	945418	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.793	112	13097	0.97	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery	=	1.94%#	
8) Phenol-d5	4.595	99	15866	1.01	ppm	-0.01
Spiked Amount 50.000	Range 10 - 59		Recovery	=	2.02%#	
25) Nitrobenzene-d5	5.371	82	12994	1.10	ppm	0.00
Spiked Amount 50.000	Range 19 - 61		Recovery	=	2.20%#	
51) 2-Fluorobiphenyl	6.858	172	23189	1.15	ppm	0.00
Spiked Amount 50.000	Range 21 - 58		Recovery	=	2.30%#	
73) 2,4,6-Tribromophenol	8.088	330	2097	0.95	ppm	0.00
Spiked Amount 50.000	Range 12 - 68		Recovery	=	1.90%#	
85) Terphenyl-d14	10.677	244	19825	1.04	ppm	0.00
Spiked Amount 50.000	Range 16 - 65		Recovery	=	2.08%#	
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
113) O-terphenyl	0.000	230	0	0.00	ppm	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.269	88	7127	1.17	ppm	97
3) Pyridine	2.622	79	13983	0.93	ppm	98
4) N-Nitrosodimethylamine	2.574	74	8633	0.97	ppm	89
6) Indene	5.125	116	21864	1.17	ppm	98
7) Cumene	4.242	105	30249	1.03	ppm	96
9) Phenol	4.606	94	17006	1.04	ppm	91
10) Aniline	4.638	93	20813	1.08	ppm	92
11) bis(2-Chloroethyl)ether	4.697	93	13627	1.16	ppm	93
12) 2-Chlorophenol	4.729	128	12999	1.07	ppm	99
13) Decane	4.783	57	21089	1.16	ppm	96
14) 1,3-Dichlorobenzene	4.863	146	14876	1.11	ppm	97
15) 1,4-Dichlorobenzene	4.927	146	15029	1.14	ppm	98
16) Benzyl alcohol	5.023	108	8592	1.13	ppm	94
17) 1,2-Dichlorobenzene	5.050	146	14145	1.16	ppm	97
18) Acetophenone	5.248	105	18195	1.22	ppm	96
19) 2-Methylphenol	5.114	108	11831	1.13	ppm	95
20) 2,2'-oxybis(1-Chloropr...	5.146	121	4150	1.21	ppm #	70
21) 3&4-Methylphenol	5.242	108	12759	1.17	ppm	97
22) n-Nitroso-di-n-propyla...	5.248	70	9113	1.18	ppm	94

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58372.D
Acq On : 19 Apr 2016 7:21 pm
Operator : robertl1
Sample : IC2547-1
Misc : op92038,e2p2547
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 20 08:33:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
23)	Hexachloroethane	5.333	201	4458	1.11	ppm		98
26)	Nitrobenzene	5.387	77	13097	1.10	ppm		99
27)	Quinoline	6.259	129	23053	1.09	ppm		97
28)	Isophorone	5.585	82	23146	1.09	ppm		98
29)	2-Nitrophenol	5.649	139	6049	1.03	ppm		94
30)	2,4-Dimethylphenol	5.686	107	11584	1.11	ppm		96
31)	Benzoic acid	5.713	105	6288	0.77	ppm		95
32)	bis(2-Chloroethoxy)met...	5.772	93	15055	1.14	ppm		95
33)	2,4-Dichlorophenol	5.847	162	9613	1.07	ppm		94
34)	2,6-Dichlorophenol	6.034	162	9437	1.12	ppm		99
35)	1,3,5-Trichlorobenzene	5.660	180	11765	1.14	ppm		99
36)	1,2,4-Trichlorobenzene	5.922	180	11107	1.12	ppm		99
37)	1,2,3-Trichlorobenzene	6.104	180	10892	1.18	ppm		95
38)	Naphthalene	5.986	128	35787	1.16	ppm		99
39)	4-Chloroaniline	6.029	127	15319	1.15	ppm		99
40)	2,3-Dichloroaniline	6.788	161	12807	1.16	ppm		95
41)	Caprolactam	6.296	113	3411	0.99	ppm		85
42)	Hexachlorobutadiene	6.088	225	5403	1.10	ppm		96
43)	4-Chloro-3-methylphenol	6.419	107	9797	1.06	ppm		98
44)	2-Methylnaphthalene	6.558	141	18907	1.10	ppm		95
45)	1-Methylnaphthalene	6.638	141	19325	1.10	ppm		95
46)	Dimethylnaphthalene	7.072	156	20227	1.17	ppm		95
48)	Hexachlorocyclopentadiene	6.687	237	9022	1.73	ppm		94
49)	2,4,6-Trichlorophenol	6.783	196	6334	1.06	ppm		99
50)	2,4,5-Trichlorophenol	6.810	196	6691	1.04	ppm		98
52)	2-Chloronaphthalene	6.954	162	22191	1.17	ppm		99
53)	Biphenyl	6.938	154	27187	1.14	ppm		96
54)	2-Nitroaniline	7.040	65	7013	0.90	ppm		96
55)	Dimethylphthalate	7.189	163	23625	1.14	ppm		100
56)	Acenaphthylene	7.296	152	34124	1.10	ppm		99
57)	2,6-Dinitrotoluene	7.238	165	3996	0.91	ppm		75
58)	3-Nitroaniline	7.377	138	5691	0.86	ppm		84
59)	Acenaphthene	7.441	153	21575	1.14	ppm		98
60)	2,4-Dinitrophenol	7.462	184	1300	4.85	ppm	#	19
61)	4-Nitrophenol	7.505	109	2144	0.82	ppm		92
62)	Dibenzofuran	7.585	168	29248	1.17	ppm		96
63)	2,4-Dinitrotoluene	7.569	165	4934	0.86	ppm		90
64)	2,3,4,6-Tetrachlorophenol	7.681	232	4878	0.99	ppm		93
65)	Diethylphthalate	7.778	149	23583	1.13	ppm		96
66)	Fluorene	7.874	166	23599	1.13	ppm		97
67)	4-Chlorophenyl-phenyle...	7.879	204	10400	1.14	ppm		98
68)	4-Nitroaniline	7.885	138	5284	0.93	ppm		93
70)	4,6-Dinitro-2-methylph...	7.911	198	1436	0.49	ppm		97
71)	n-Nitrosodiphenylamine	7.981	169	15057	1.12	ppm		95
72)	1,2-Diphenylhydrazine	8.013	77	24797	1.14	ppm		99
74)	4-Bromophenyl-phenylether	8.323	248	5492	1.08	ppm		99
75)	Hexachlorobenzene	8.371	284	6037	1.11	ppm		90
76)	Pentachlorophenol	8.564	266	6480	1.76	ppm		99
77)	Phenanthrene	8.783	178	33908	1.16	ppm		98
78)	Anthracene	8.837	178	32296	1.11	ppm		98

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58372.D
Acq On : 19 Apr 2016 7:21 pm
Operator : robertl1
Sample : IC2547-1
Misc : op92038,e2p2547
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 20 08:33:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

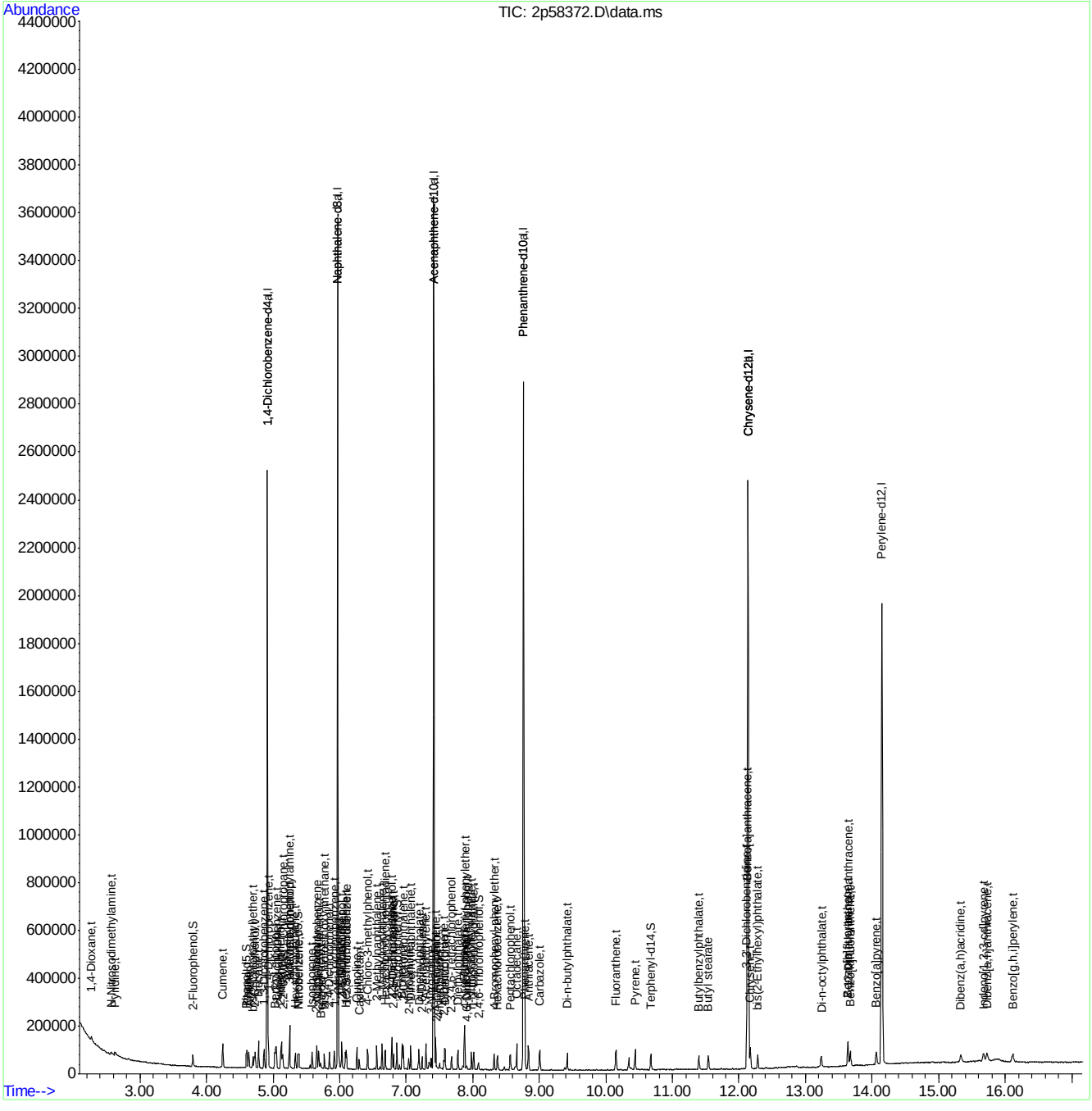
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
79)	Carbazole	9.008	167	30798	1.13	ppm	98
80)	Di-n-butylphthalate	9.420	149	36053	0.99	ppm	99
81)	Fluoranthene	10.153	202	32405	1.02	ppm	96
82)	Octadecane	8.660	43	13680	1.07	ppm	97
84)	Pyrene	10.441	202	35754	1.14	ppm	98
86)	Butylbenzylphthalate	11.399	149	15181	0.95	ppm	91
87)	Butyl stearate	11.538	56	12111	0.88	ppm	94
88)	Benzo[a]anthracene	12.121	228	32870	1.09	ppm	99
89)	3,3'-Dichlorobenzidine	12.116	252	9565	0.94	ppm	97
90)	Chrysene	12.169	228	30750	1.13	ppm	99
91)	bis(2-Ethylhexyl)phtha...	12.281	149	18696	0.93	ppm	97
93)	Di-n-octylphthalate	13.239	149	29809	0.81	ppm	98
94)	Benzo[b]fluoranthene	13.635	252	27873	0.99	ppm	95
95)	Benzo[k]fluoranthene	13.672	252	26037	1.06	ppm	91
96)	Benzo[a]pyrene	14.062	252	23100	0.97	ppm	96
97)	Indeno[1,2,3-cd]pyrene	15.678	276	19314	0.94	ppm	95
98)	Dibenz(a,h)acridine	15.335	279	17641	0.94	ppm	95
99)	Dibenz[a,h]anthracene	15.731	278	20577	1.00	ppm	97
100)	7,12-Dimethylbenz(a)an...	13.640	256	10380	0.91	ppm	98
101)	Benzo[g,h,i]perylene	16.111	276	21653	0.99	ppm	95

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58372.D
Acq On : 19 Apr 2016 7:21 pm
Operator : robertl1
Sample : IC2547-1
Misc : op92038,e2p2547
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 20 08:33:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration



SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58384.D
Acq On : 19 Apr 2016 11:51 pm
Operator : sarad
Sample : icv2547-50
Misc : op92038,e2p2548
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 20 00:10:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Apr 19 23:30:49 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.911	152	267111	40.00	ppm	0.00
24) Naphthalene-d8	5.970	136	961794	40.00	ppm	0.00
47) Acenaphthene-d10	7.414	164	480383	40.00	ppm	0.00
69) Phenanthrene-d10	8.762	188	719769	40.00	ppm	0.00
83) Chrysene-d12	12.132	240	653538	40.00	ppm	-0.01
92) Perylene-d12	14.143	264	521135	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.911	152	267111	40.00	ppm	0.00
104) Naphthalene-d8a	5.970	136	961794	40.00	ppm	0.00
106) Acenaphthene-d10a	7.414	164	480383	40.00	ppm	0.00
109) Chrysene-d12a	12.132	240	653538	40.00	ppm	0.00
111) Phenanthrene-d10a	8.762	188	719769	40.00	ppm	0.00
114) Chrysene-d12b	12.132	240	653538	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.798	112	508314	46.98	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 93.96%#			
8) Phenol-d5	4.601	99	583443	46.02	ppm	0.00
Spiked Amount 50.000	Range 10 - 59		Recovery = 92.04%#			
25) Nitrobenzene-d5	5.371	82	470626	49.63	ppm	0.00
Spiked Amount 50.000	Range 19 - 61		Recovery = 99.26%#			
51) 2-Fluorobiphenyl	6.858	172	819463	54.83	ppm	0.00
Spiked Amount 50.000	Range 21 - 58		Recovery = 109.66%#			
73) 2,4,6-Tribromophenol	8.088	330	76367	47.79	ppm	0.00
Spiked Amount 50.000	Range 12 - 68		Recovery = 95.58%#			
85) Terphenyl-d14	10.677	244	711010	54.05	ppm	0.00
Spiked Amount 50.000	Range 16 - 65		Recovery = 108.10%#			
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
113) O-terphenyl	0.000	230	0	0.00	ppm	

Target Compounds Qvalue

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

7.6.9

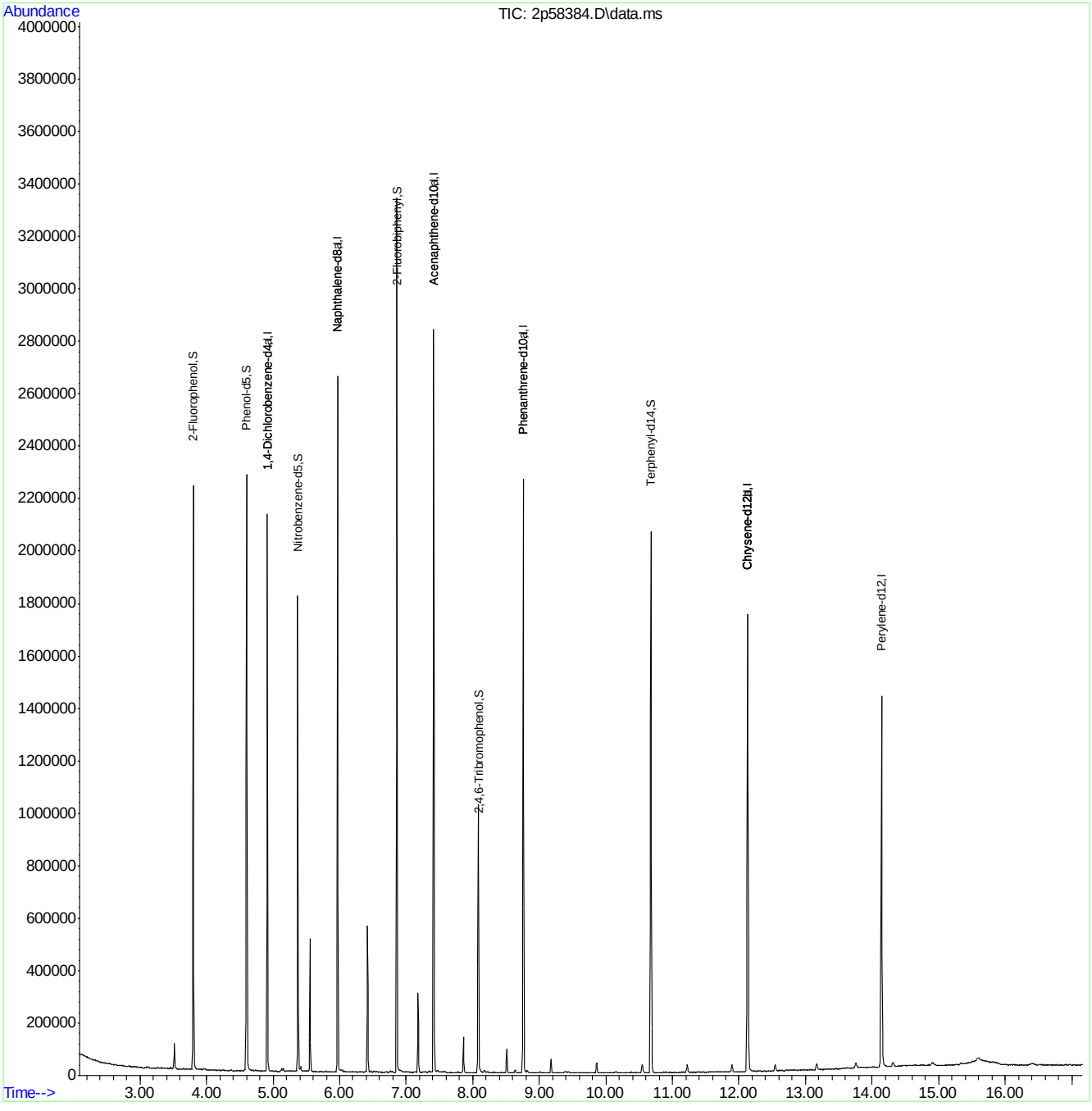
7

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58384.D
Acq On : 19 Apr 2016 11:51 pm
Operator : sarad
Sample : icv2547-50
Misc : op92038,e2p2548
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 20 00:10:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Apr 19 23:30:49 2016
Response via : Initial Calibration



M2P2547.M Wed Apr 20 08:51:49 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58385.D
Acq On : 20 Apr 2016 12:14 am
Operator : sarad
Sample : icv2547-50
Misc : op92038,e2p2548
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 20 16:29:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.916	152	225854	40.00	ppm	0.00
24) Naphthalene-d8	5.970	136	763841	40.00	ppm	0.00
47) Acenaphthene-d10	7.414	164	387809	40.00	ppm	0.00
69) Phenanthrene-d10	8.762	188	610662	40.00	ppm	0.00
83) Chrysene-d12	12.137	240	551633	40.00	ppm	0.00
92) Perylene-d12	14.143	264	465132	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.916	152	225854	40.00	ppm	0.00
104) Naphthalene-d8a	5.970	136	763841	40.00	ppm	0.00
106) Acenaphthene-d10a	7.414	164	387809	40.00	ppm	0.00
109) Chrysene-d12a	12.137	240	551633	40.00	ppm	0.00
111) Phenanthrene-d10a	8.762	188	610662	40.00	ppm	0.00
114) Chrysene-d12b	12.137	240	551633	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery = 0.00%#			
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000	Range 10 - 59		Recovery = 0.00%#			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 19 - 61		Recovery = 0.00%#			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000	Range 21 - 58		Recovery = 0.00%#			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000	Range 12 - 68		Recovery = 0.00%#			
85) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery = 0.00%#			
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
113) O-terphenyl	0.000	230	0d	0.00	ppm	
Target Compounds						Qvalue
4) N-Nitrosodimethylamine	2.558	74	286861	47.28	ppm	92
11) bis(2-Chloroethyl)ether	4.697	93	436997	54.58	ppm	97
14) 1,3-Dichlorobenzene	4.863	146	477470	52.43	ppm	97
15) 1,4-Dichlorobenzene	4.927	146	465111	51.89	ppm	98
17) 1,2-Dichlorobenzene	5.050	146	430676	51.99	ppm	96
20) 2,2'-oxybis(1-Chloropr...	5.146	121	111129	47.61	ppm #	88
22) n-Nitroso-di-n-propyla...	5.253	70	261955	48.47	ppm	88
23) Hexachloroethane	5.333	201	135517	49.82	ppm	94
26) Nitrobenzene	5.387	77	371208	48.85	ppm	97
28) Isophorone	5.590	82	688745	50.61	ppm	96
32) bis(2-Chloroethoxy)met...	5.772	93	421673	49.81	ppm	94
36) 1,2,4-Trichlorobenzene	5.922	180	323985	51.13	ppm	99
38) Naphthalene	5.986	128	1007035	51.18	ppm	99
42) Hexachlorobutadiene	6.088	225	164321	52.44	ppm	97
48) Hexachlorocyclopentadiene	6.687	237	146998	47.14	ppm	94
52) 2-Chloronaphthalene	6.959	162	619562	54.44	ppm	97
55) Dimethylphthalate	7.195	163	633804	51.29	ppm	99
56) Acenaphthylene	7.296	152	915017	49.39	ppm	99
57) 2,6-Dinitrotoluene	7.243	165	135363	51.63	ppm	84

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58385.D
Acq On : 20 Apr 2016 12:14 am
Operator : sarad
Sample : icv2547-50
Misc : op92038,e2p2548
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 20 16:29:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
59)	Acenaphthene	7.441	153	581998	51.28	ppm	97
63)	2,4-Dinitrotoluene	7.569	165	164157	47.78	ppm	91
65)	Diethylphthalate	7.778	149	625135	49.86	ppm	97
66)	Fluorene	7.879	166	592126	47.51	ppm	97
67)	4-Chlorophenyl-phenyle...	7.879	204	260882	47.90	ppm	98
71)	n-Nitrosodiphenylamine	7.981	169	420594	50.88	ppm	98
72)	1,2-Diphenylhydrazine	8.018	77	646084	48.60	ppm	91
74)	4-Bromophenyl-phenylether	8.323	248	158338	50.94	ppm	95
75)	Hexachlorobenzene	8.371	284	160954	48.36	ppm	98
77)	Phenanthrene	8.789	178	902063	50.30	ppm	98
78)	Anthracene	8.842	178	874452	49.16	ppm	98
80)	Di-n-butylphthalate	9.420	149	1088435	48.91	ppm	99
81)	Fluoranthene	10.153	202	961548	49.36	ppm	98
84)	Pyrene	10.441	202	1000368	52.54	ppm	99
86)	Butylbenzylphthalate	11.399	149	478818	51.25	ppm	95
88)	Benzo[a]anthracene	12.121	228	878319	49.91	ppm	99
90)	Chrysene	12.174	228	806337	50.67	ppm	99
91)	bis(2-Ethylhexyl)phtha...	12.281	149	602451	51.56	ppm	100
93)	Di-n-octylphthalate	13.233	149	1078604	50.99	ppm	97
94)	Benzo[b]fluoranthene	13.640	252	802156	49.64	ppm	94
95)	Benzo[k]fluoranthene	13.683	252	770641	54.59	ppm	91
96)	Benzo[a]pyrene	14.073	252	742121	54.12	ppm	94
97)	Indeno[1,2,3-cd]pyrene	15.688	276	659722	55.63	ppm	95
99)	Dibenz[a,h]anthracene	15.737	278	658502	55.45	ppm	100
101)	Benzo[g,h,i]perylene	16.132	276	687171	54.81	ppm	96

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

7.6.10

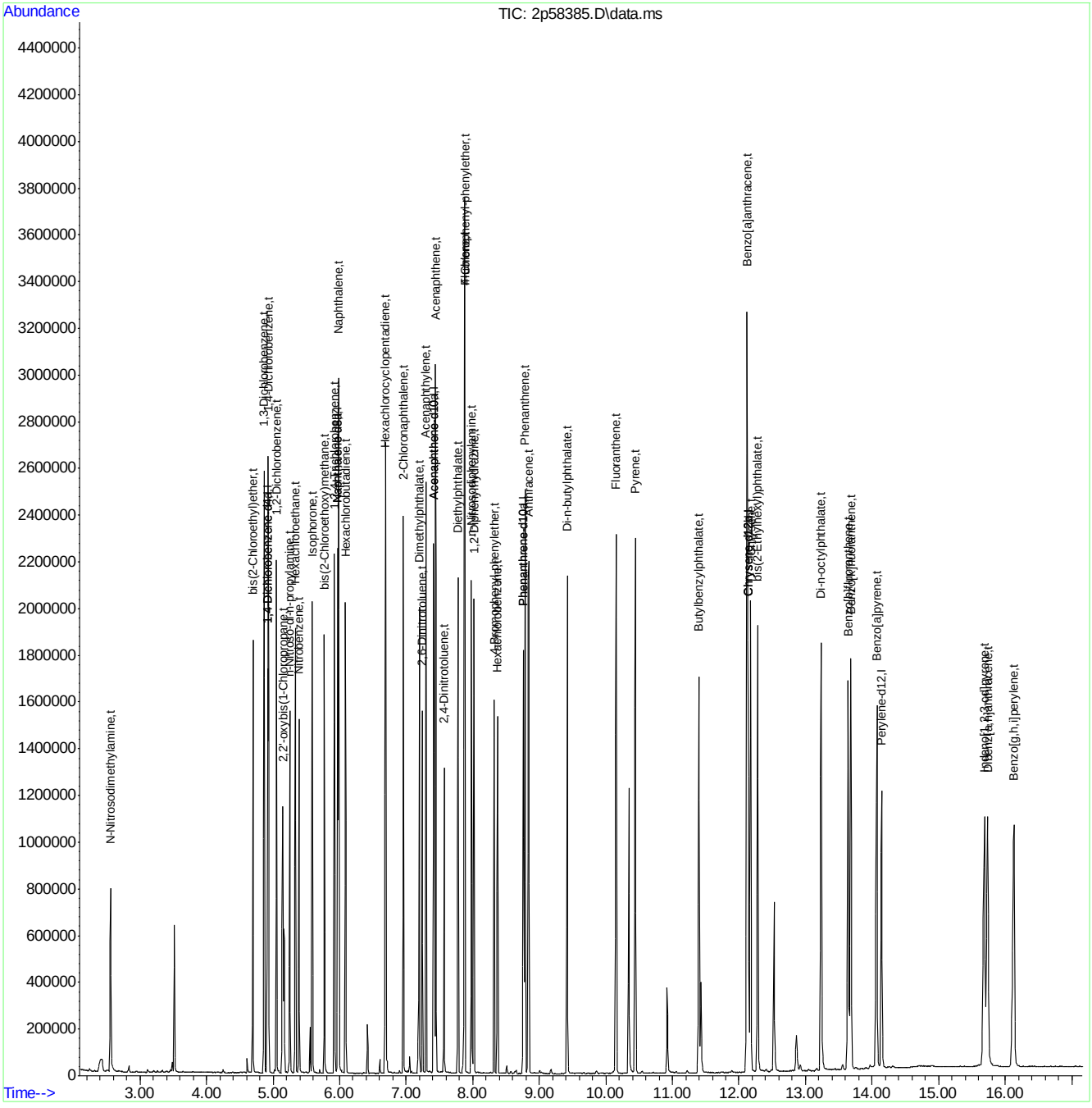
7

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58385.D
Acq On : 20 Apr 2016 12:14 am
Operator : sarad
Sample : icv2547-50
Misc : op92038,e2p2548
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 20 16:29:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration



SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58386.D
Acq On : 20 Apr 2016 12:36 am
Operator : sarad
Sample : icv2547-50
Misc : op92038,e2p2548
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 20 16:30:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.911	152	245515	40.00	ppm	0.00
24) Naphthalene-d8	5.970	136	908347	40.00	ppm	0.00
47) Acenaphthene-d10	7.414	164	443733	40.00	ppm	0.00
69) Phenanthrene-d10	8.762	188	683512	40.00	ppm	0.00
83) Chrysene-d12	12.132	240	658206	40.00	ppm	0.00
92) Perylene-d12	14.143	264	517102	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.911	152	245515	40.00	ppm	0.00
104) Naphthalene-d8a	5.970	136	908347	40.00	ppm	0.00
106) Acenaphthene-d10a	7.414	164	443733	40.00	ppm	0.00
109) Chrysene-d12a	12.132	240	658206	40.00	ppm	0.00
111) Phenanthrene-d10a	8.762	188	683512	40.00	ppm	0.00
114) Chrysene-d12b	12.132	240	658206	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery = 0.00%#			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000	Range 10 - 59		Recovery = 0.00%#			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 19 - 61		Recovery = 0.00%#			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000	Range 21 - 58		Recovery = 0.00%#			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000	Range 12 - 68		Recovery = 0.00%#			
85) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery = 0.00%#			
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
113) O-terphenyl	0.000	230	0	0.00	ppm	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.263	88	194635	43.14	ppm	96
6) Indene	5.125	116	716444	51.97	ppm	98
7) Cumene	4.242	105	1006568	46.24	ppm	97
13) Decane	4.783	57	611167	45.55	ppm	93
18) Acetophenone	5.248	105	547775	49.52	ppm	86
27) Quinoline	6.259	129	726989	45.13	ppm	99
40) 2,3-Dichloroaniline	6.788	161	316984	37.83	ppm	94
41) Caprolactam	6.307	113	113060	43.11	ppm	88
45) 1-Methylnaphthalene	6.639	141	592550	44.23	ppm	95
46) Dimethylnaphthalene	7.072	156	574509	43.53	ppm	95
53) Biphenyl	6.943	154	808328	49.46	ppm	98
82) Octadecane	8.660	43	407374	46.36	ppm	90
100) 7,12-Dimethylbenz(a)an...	13.640	256	348571	47.60	ppm	99

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

7.6.11

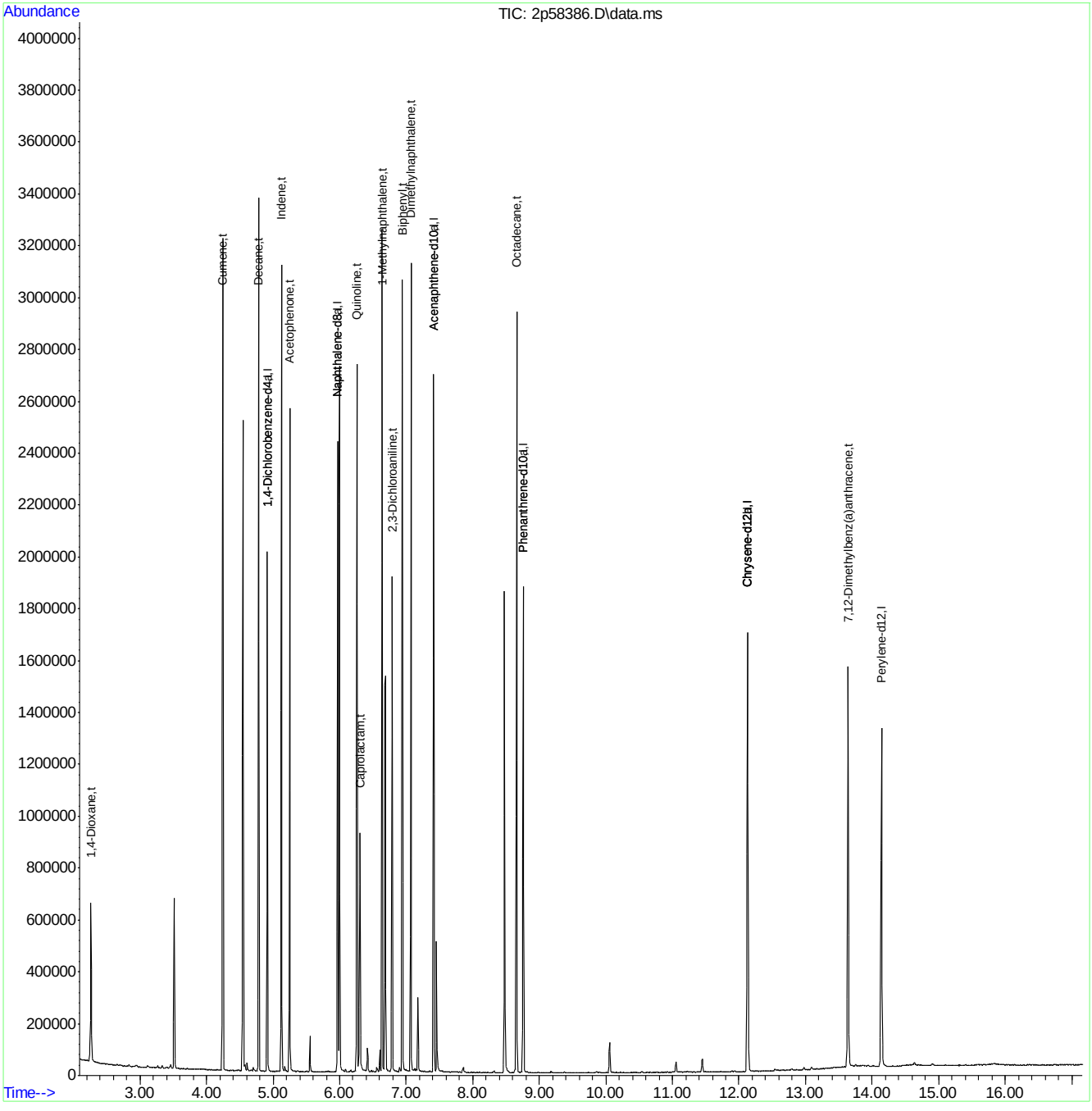
7

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58386.D
Acq On : 20 Apr 2016 12:36 am
Operator : sarad
Sample : icv2547-50
Misc : op92038,e2p2548
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 20 16:30:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration



SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58388.D
Acq On : 20 Apr 2016 1:21 am
Operator : sarad
Sample : icv2547-50
Misc : op92038,e2p2548
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 20 16:34:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.911	152	312896	40.00	ppm	0.00
24) Naphthalene-d8	5.970	136	1140968	40.00	ppm	0.00
47) Acenaphthene-d10	7.414	164	612864	40.00	ppm	0.00
69) Phenanthrene-d10	8.762	188	955638	40.00	ppm	0.00
83) Chrysene-d12	12.132	240	907422	40.00	ppm	0.00
92) Perylene-d12	14.148	264	739431	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.911	152	312896	40.00	ppm	0.00
104) Naphthalene-d8a	5.970	136	1140968	40.00	ppm	0.00
106) Acenaphthene-d10a	7.414	164	612864	40.00	ppm	0.00
109) Chrysene-d12a	12.132	240	907422	40.00	ppm	0.00
111) Phenanthrene-d10a	8.762	188	955638	40.00	ppm	0.00
114) Chrysene-d12b	12.132	240	907422	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery = 0.00%#			
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000	Range 10 - 59		Recovery = 0.00%#			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 19 - 61		Recovery = 0.00%#			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000	Range 21 - 58		Recovery = 0.00%#			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000	Range 12 - 68		Recovery = 0.00%#			
85) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery = 0.00%#			
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
113) O-terphenyl	0.000	230	0	0.00	ppm	
Target Compounds						Qvalue
89) 3,3'-Dichlorobenzidine	12.121	252	429331	43.83	ppm	96

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

7.6.12

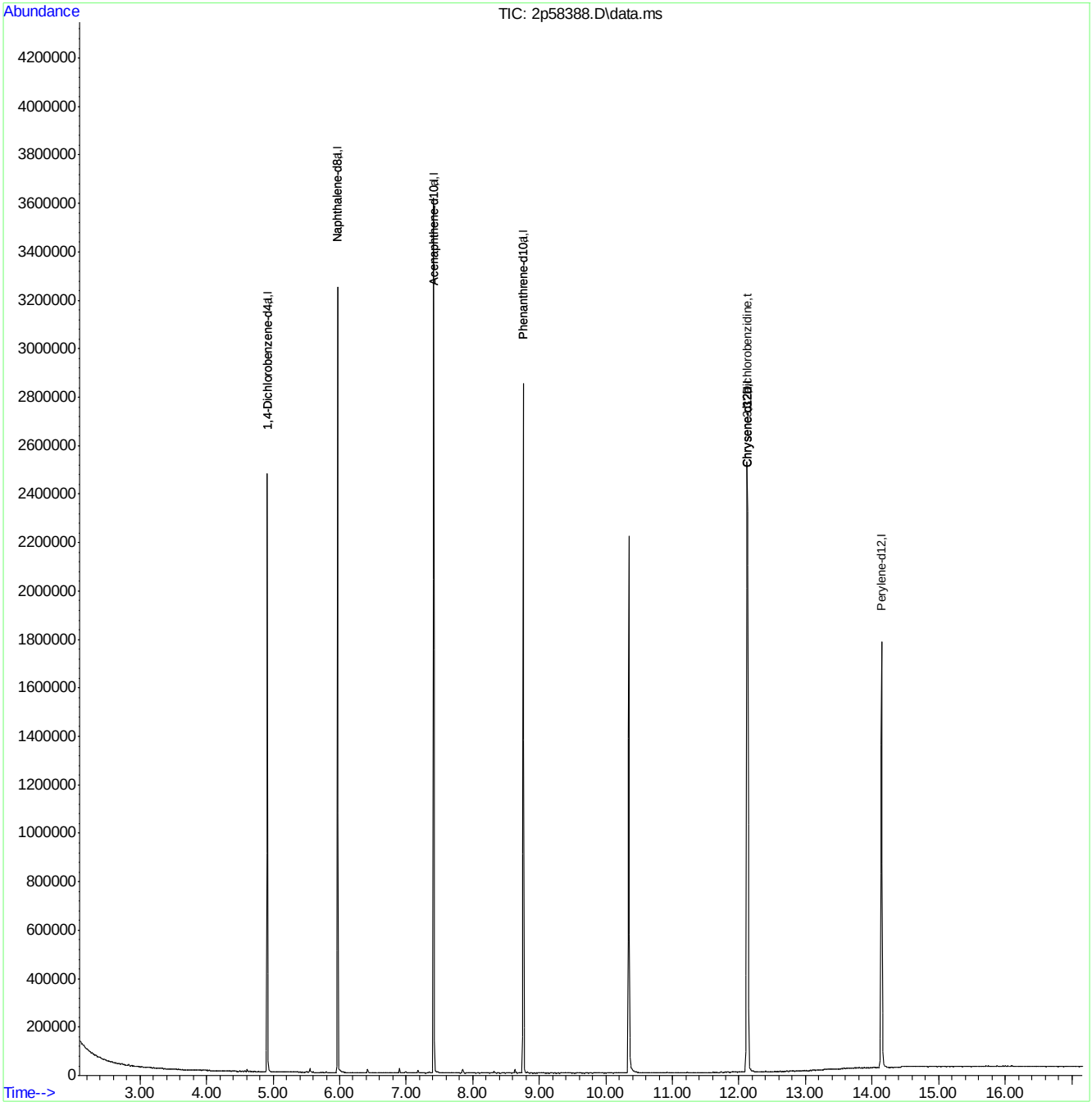
7

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58388.D
Acq On : 20 Apr 2016 1:21 am
Operator : sarad
Sample : icv2547-50
Misc : op92038,e2p2548
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 20 16:34:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration



M2P2547.M Wed Apr 20 16:37:12 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2549\
Data File : 2p58391.D
Acq On : 20 Apr 2016 9:53 am
Operator : robertl1
Sample : ICV2547-50
Misc : op92038,e2p2549
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 20 17:37:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.895	152	250697	40.00	ppm	-0.02
24) Naphthalene-d8	5.949	136	846929	40.00	ppm	-0.02
47) Acenaphthene-d10	7.398	164	483791	40.00	ppm	-0.02
69) Phenanthrene-d10	8.741	188	755620	40.00	ppm	-0.02
83) Chrysene-d12	12.105	240	777389	40.00	ppm	-0.03
92) Perylene-d12	14.116	264	663496	40.00	ppm	-0.03
102) 1,4-Dichlorobenzene-d4a	4.895	152	250697	40.00	ppm	-0.02
104) Naphthalene-d8a	5.949	136	846929	40.00	ppm	-0.02
106) Acenaphthene-d10a	7.398	164	483791	40.00	ppm	-0.02
109) Chrysene-d12a	12.105	240	777389	40.00	ppm	-0.03
111) Phenanthrene-d10a	8.741	188	755620	40.00	ppm	-0.02
114) Chrysene-d12b	12.105	240	777389	40.00	ppm	-0.03
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery = 0.00%#			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000	Range 10 - 59		Recovery = 0.00%#			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 19 - 61		Recovery = 0.00%#			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 21 - 58		Recovery = 0.00%#			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000	Range 12 - 68		Recovery = 0.00%#			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery = 0.00%#			
112) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
113) O-terphenyl	0.000	230	0	0.00	ppm	
Target Compounds						Qvalue
9) Phenol	4.595	94	546786	43.36	ppm	91
12) 2-Chlorophenol	4.713	128	434642	47.25	ppm	94
19) 2-Methylphenol	5.098	108	381267	48.30	ppm	93
21) 3&4-Methylphenol	5.226	108	393831	47.81	ppm	97
29) 2-Nitrophenol	5.633	139	209449	50.28	ppm	93
30) 2,4-Dimethylphenol	5.670	107	369843	49.93	ppm	95
31) Benzoic acid	5.767	105	306865	52.90	ppm	97
33) 2,4-Dichlorophenol	5.831	162	316947	49.71	ppm	92
34) 2,6-Dichlorophenol	6.018	162	301441	50.20	ppm	98
43) 4-Chloro-3-methylphenol	6.403	107	306909	46.90	ppm	96
49) 2,4,6-Trichlorophenol	6.767	196	220919	49.37	ppm	98
50) 2,4,5-Trichlorophenol	6.794	196	219478	45.55	ppm	98
60) 2,4-Dinitrophenol	7.441	184	93822	57.45	ppm #	100
61) 4-Nitrophenol	7.489	109	99985	51.19	ppm	90
64) 2,3,4,6-Tetrachlorophenol	7.665	232	175320	47.82	ppm	91
70) 4,6-Dinitro-2-methylph...	7.895	198	124899	56.51	ppm	90
76) Pentachlorophenol	8.543	266	138342	49.70	ppm	98

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2549\
Data File : 2p58391.D
Acq On : 20 Apr 2016 9:53 am
Operator : robertl1
Sample : ICV2547-50
Misc : op92038,e2p2549
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 20 17:37:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration

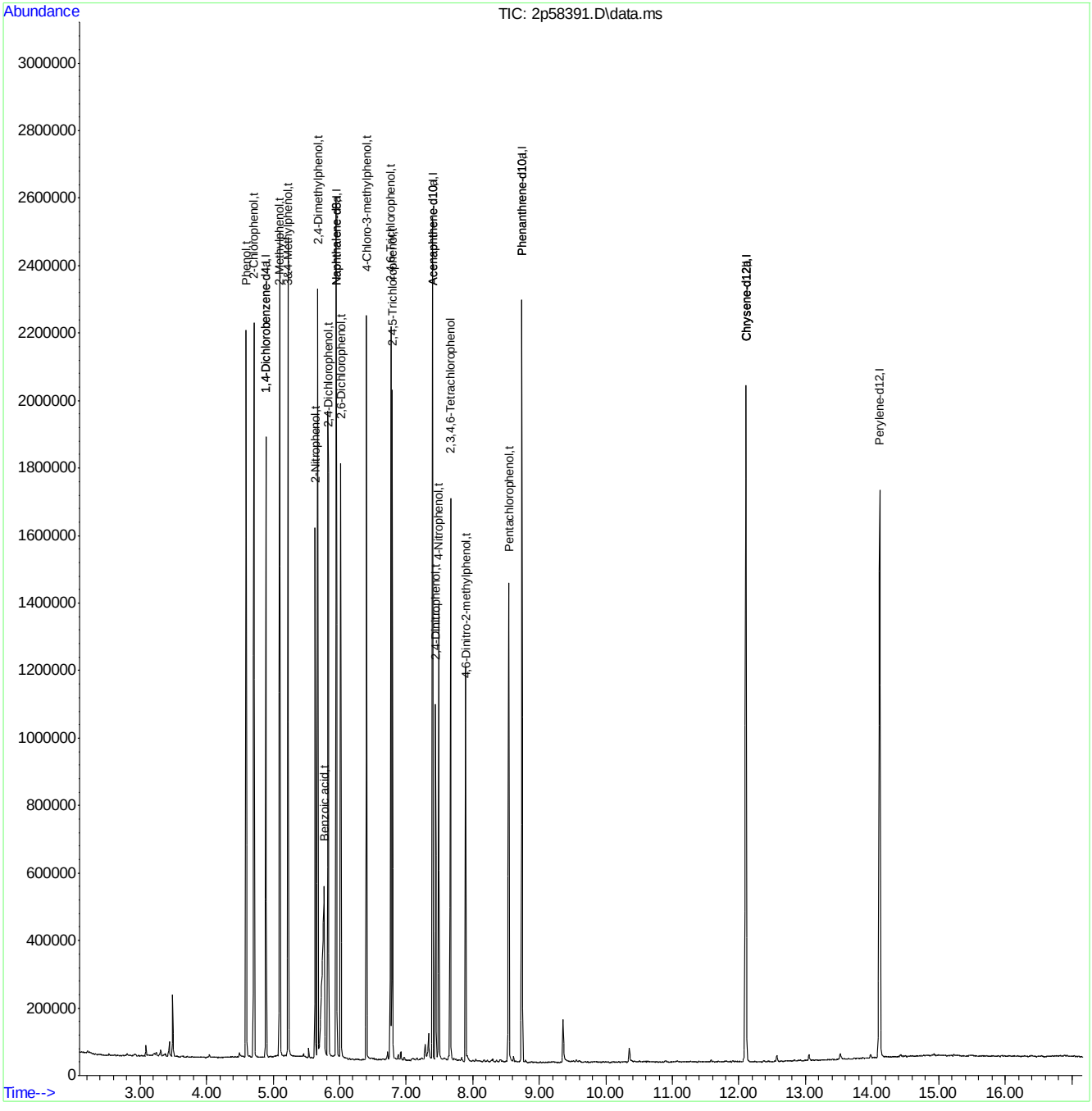
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2549\
Data File : 2p58391.D
Acq On : 20 Apr 2016 9:53 am
Operator : robertl1
Sample : ICV2547-50
Misc : op92038,e2p2549
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 20 17:37:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration



SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2549\
Data File : 2p58392.D
Acq On : 20 Apr 2016 10:16 am
Operator : robertl1
Sample : ICV2547-50
Misc : op92038,e2p2549
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 20 17:38:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.895	152	267380	40.00	ppm	-0.02
24) Naphthalene-d8	5.949	136	988207	40.00	ppm	-0.02
47) Acenaphthene-d10	7.398	164	513519	40.00	ppm	-0.02
69) Phenanthrene-d10	8.741	188	836003	40.00	ppm	-0.02
83) Chrysene-d12	12.105	240	818655	40.00	ppm	-0.03
92) Perylene-d12	14.116	264	708687	40.00	ppm	-0.03
102) 1,4-Dichlorobenzene-d4a	4.895	152	267380	40.00	ppm	-0.02
104) Naphthalene-d8a	5.949	136	988207	40.00	ppm	-0.02
106) Acenaphthene-d10a	7.398	164	513519	40.00	ppm	-0.02
109) Chrysene-d12a	12.105	240	818655	40.00	ppm	-0.03
111) Phenanthrene-d10a	8.741	188	836003	40.00	ppm	-0.02
114) Chrysene-d12b	12.105	240	818655	40.00	ppm	-0.03
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery = 0.00%#			
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000	Range 10 - 59		Recovery = 0.00%#			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 19 - 61		Recovery = 0.00%#			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 21 - 58		Recovery = 0.00%#			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000	Range 12 - 68		Recovery = 0.00%#			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery = 0.00%#			
112) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
113) O-terphenyl	0.000	230	0	0.00	ppm	
Target Compounds						Qvalue
3) Pyridine	2.670	79	530930	43.69	ppm	98
10) Aniline	4.627	93	688464	44.57	ppm	95
16) Benzyl alcohol	5.013	108	287413	46.78	ppm	97
39) 4-Chloroaniline	6.013	127	487804	44.32	ppm	97
44) 2-Methylnaphthalene	6.537	141	612699	43.09	ppm	95
54) 2-Nitroaniline	7.024	65	236031	45.09	ppm	87
58) 3-Nitroaniline	7.361	138	211847	46.22	ppm	89
62) Dibenzofuran	7.564	168	909511	45.78	ppm	93
68) 4-Nitroaniline	7.869	138	192915	42.61	ppm	94
79) Carbazole	8.987	167	1041876	45.50	ppm	98

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

7.6.14

7

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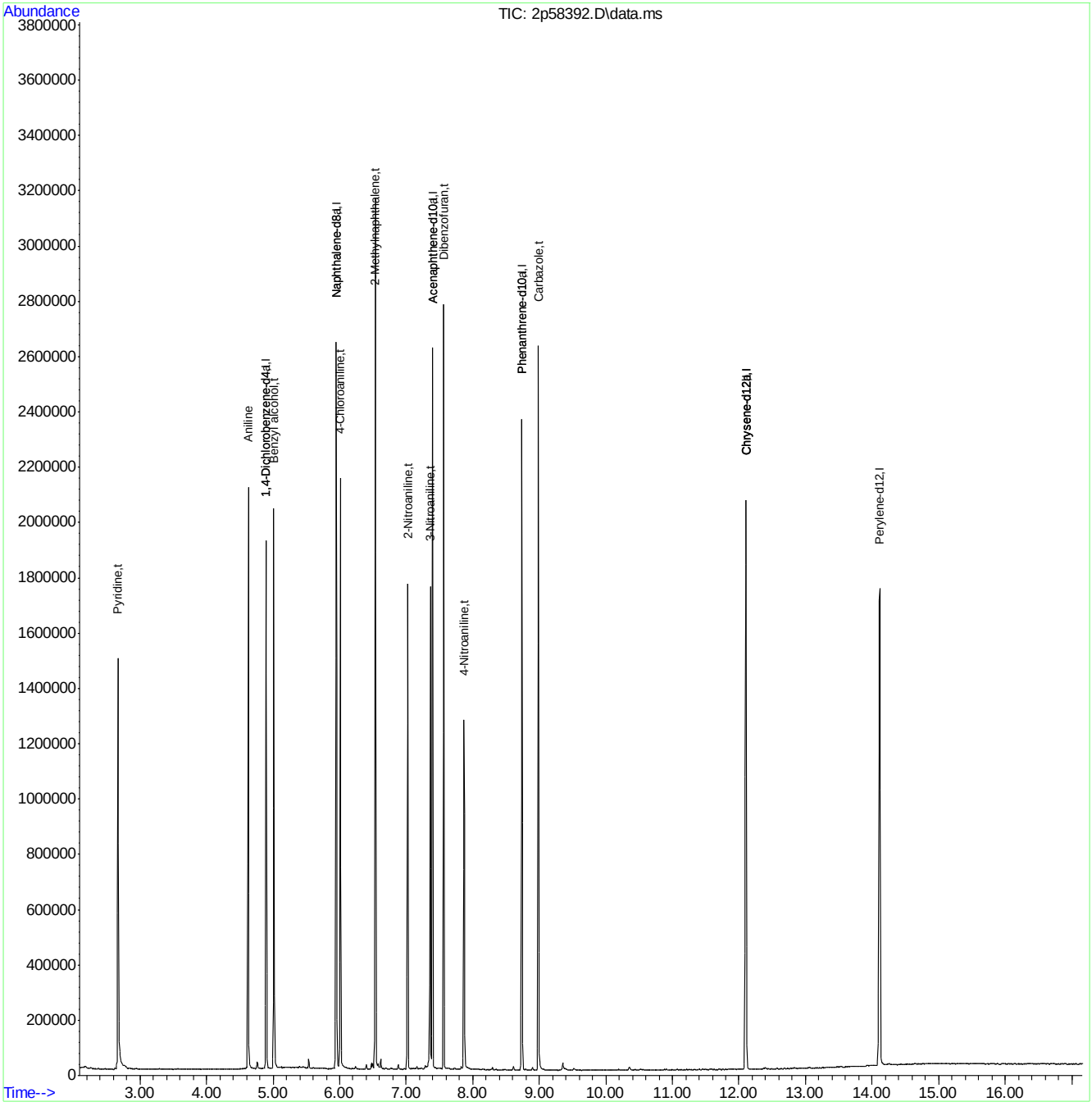
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2549\
Data File : 2p58392.D
Acq On : 20 Apr 2016 10:16 am
Operator : robertl1
Sample : ICV2547-50
Misc : op92038,e2p2549
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 20 17:38:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2592\
Data File : 2p59336.D
Acq On : 19 May 2016 11:53 am
Operator : robertl1
Sample : CC2547-25
Misc : op93859a,e2p2592
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 20 15:32:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2557.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 18 11:19:29 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.785	152	206714	40.00	ppm	-0.05
24) Naphthalene-d8	5.844	136	705269	40.00	ppm	-0.05
47) Acenaphthene-d10	7.289	164	415134	40.00	ppm	-0.05
69) Phenanthrene-d10	8.615	188	724519	40.00	ppm	-0.06
83) Chrysene-d12	11.963	240	777261	40.00	ppm	-0.09
92) Perylene-d12	13.980	264	669693	40.00	ppm	-0.09
102) 1,4-Dichlorobenzene-d4a	4.785	152	206714	40.00	ppm	-0.05
104) Naphthalene-d8a	5.844	136	705269	40.00	ppm	-0.05
106) Acenaphthene-d10a	7.289	164	415134	40.00	ppm	-0.05
109) Chrysene-d12a	11.963	240	777261	40.00	ppm	-0.09
System Monitoring Compounds						
5) 2-Fluorophenol	3.716	112	166005	19.82	ppm	-0.02
Spiked Amount 50.000	Range 11 - 58		Recovery = 39.64%			
8) Phenol-d5	4.534	99	193808	19.75	ppm	-0.05
Spiked Amount 50.000	Range 10 - 59		Recovery = 39.50%			
25) Nitrobenzene-d5	5.256	82	160042	23.01	ppm	0.06
Spiked Amount 50.000	Range 19 - 61		Recovery = 46.02%			
51) 2-Fluorobiphenyl	6.732	172	332827	25.77	ppm	-0.06
Spiked Amount 50.000	Range 21 - 58		Recovery = 51.54%			
73) 2,4,6-Tribromophenol	7.963	330	43069	26.78	ppm	-0.05
Spiked Amount 50.000	Range 12 - 68		Recovery = 53.56%			
85) Terphenyl-d14	10.498	244	401559	25.67	ppm	-0.10
Spiked Amount 50.000	Range 16 - 65		Recovery = 51.34%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.100	88	65421	17.22	ppm	# 75
3) Pyridine	2.437	79	149315	15.89	ppm	# 46
4) N-Nitrosodimethylamine	2.416	74	85890	15.47	ppm	# 1
6) Indene	4.999	116	266977	23.00	ppm	97
7) Cumene	4.106	105	425902	23.24	ppm	97
9) Phenol	4.545	94	211805	20.37	ppm	78
10) Aniline	4.518	93	201112	16.84	ppm	95
11) bis(2-Chloroethyl)ether	4.577	93	141255	19.28	ppm	96
12) 2-Chlorophenol	4.625	128	175127	23.09	ppm	99
13) Decane	4.646	57	256642	22.72	ppm	98
14) 1,3-Dichlorobenzene	4.737	146	203711	24.44	ppm	97
15) 1,4-Dichlorobenzene	4.801	146	196909	24.00	ppm	100
16) Benzyl alcohol	4.919	108	98412	20.72	ppm	92
17) 1,2-Dichlorobenzene	4.924	146	183027	24.14	ppm	96
18) Acetophenone	5.128	105	209786	22.53	ppm	90
19) 2-Methylphenol	5.031	108	129455	19.89	ppm	99
20) 2,2'-oxybis(1-Chloropr...	5.021	121	48602	22.75	ppm	# 43
21) 3&4-Methylphenol	5.160	108	136126	20.04	ppm	100
22) n-Nitroso-di-n-propyla...	5.133	70	104860	21.20	ppm	93
23) Hexachloroethane	5.203	201	69166	27.78	ppm	# 74
26) Nitrobenzene	5.272	77	149256	21.27	ppm	91
27) Quinoline	6.139	129	285578	22.83	ppm	98
28) Isophorone	5.465	82	259562	20.66	ppm	70

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2592\
Data File : 2p59336.D
Acq On : 19 May 2016 11:53 am
Operator : robertl1
Sample : CC2547-25
Misc : op93859a,e2p2592
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 20 15:32:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2557.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 18 11:19:29 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
29) 2-Nitrophenol	5.534	139	88155	25.41	ppm	#	57
30) 2,4-Dimethylphenol	5.588	107	136720	22.16	ppm		97
31) Benzoic acid	5.700	105	80325	16.63	ppm		98
32) bis(2-Chloroethoxy)met...	5.652	93	151111	19.33	ppm		95
33) 2,4-Dichlorophenol	5.748	162	137245	25.85	ppm		91
34) 2,6-Dichlorophenol	5.925	162	131882	26.38	ppm		99
35) 1,3,5-Trichlorobenzene	5.534	180	167115	27.40	ppm		97
36) 1,2,4-Trichlorobenzene	5.796	180	151909	25.96	ppm		99
37) 1,2,3-Trichlorobenzene	5.978	180	145990	26.82	ppm		95
38) Naphthalene	5.860	128	439806	24.21	ppm		98
39) 4-Chloroaniline	5.919	127	170747	21.74	ppm		98
40) 2,3-Dichloroaniline	6.668	161	164778	25.33	ppm		92
41) Caprolactam	6.219	113	42006	20.63	ppm	#	67
42) Hexachlorobutadiene	5.957	225	92127	31.84	ppm		95
43) 4-Chloro-3-methylphenol	6.342	107	134482	24.68	ppm		98
44) 2-Methylnaphthalene	6.433	141	265790	26.19	ppm		95
45) 1-Methylnaphthalene	6.513	141	266809	25.65	ppm		95
46) Dimethylnaphthalene	6.946	156	280647	27.39	ppm		93
48) Hexachlorocyclopentadiene	6.556	237	128635	38.53	ppm		97
49) 2,4,6-Trichlorophenol	6.679	196	99036	25.79	ppm		97
50) 2,4,5-Trichlorophenol	6.722	196	103412	25.01	ppm		95
52) 2-Chloronaphthalene	6.834	162	288581	23.69	ppm		100
53) Biphenyl	6.818	154	391874	25.63	ppm		95
54) 2-Nitroaniline	6.930	65	107364	25.37	ppm		98
55) Dimethylphthalate	7.069	163	333471	25.21	ppm		100
56) Acenaphthylene	7.171	152	464366	23.42	ppm		99
57) 2,6-Dinitrotoluene	7.128	165	75670	26.96	ppm		86
58) 3-Nitroaniline	7.267	138	77773	20.99	ppm		85
59) Acenaphthene	7.315	153	294937	24.28	ppm		99
60) 2,4-Dinitrophenol	7.363	184	48089	36.21	ppm	#	48
61) 4-Nitrophenol	7.449	109	51278	30.59	ppm	#	46
62) Dibenzofuran	7.460	168	418779	26.08	ppm		85
63) 2,4-Dinitrotoluene	7.460	165	106591	28.98	ppm	#	41
64) 2,3,4,6-Tetrachlorophenol	7.572	232	83031	26.39	ppm		92
65) Diethylphthalate	7.647	149	340925	25.40	ppm		92
66) Fluorene	7.743	166	350121	26.24	ppm		97
67) 4-Chlorophenyl-phenyle...	7.743	204	169629	29.09	ppm		91
68) 4-Nitroaniline	7.781	138	69153	18.90	ppm		78
70) 4,6-Dinitro-2-methylph...	7.807	198	50154	23.67	ppm		88
71) n-Nitrosodiphenylamine	7.850	169	240152	24.48	ppm		100
72) 1,2-Diphenylhydrazine	7.882	77	290303	18.41	ppm		83
74) 4-Bromophenyl-phenylether	8.176	248	98504	26.71	ppm		91
75) Hexachlorobenzene	8.235	284	103362	26.18	ppm		90
76) Pentachlorophenol	8.439	266	100633	37.71	ppm		99
77) Phenanthrene	8.642	178	491239	23.09	ppm		98
78) Anthracene	8.690	178	497711	23.58	ppm		97
79) Carbazole	8.872	167	443256	22.33	ppm		97
80) Di-n-butylphthalate	9.252	149	611546	23.16	ppm		98
81) Fluoranthene	9.990	202	610443	26.41	ppm		89
82) Octadecane	8.497	43	312676	33.57	ppm		97

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2592\
Data File : 2p59336.D
Acq On : 19 May 2016 11:53 am
Operator : robertl1
Sample : CC2547-25
Misc : op93859a,e2p2592
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 20 15:32:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2557.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 18 11:19:29 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
84) Pyrene	10.278	202	632848	23.59 ppm	99
86) Butylbenzylphthalate	11.209	149	289799	22.01 ppm	94
87) Butyl stearate	11.338	56	231067	20.53 ppm	88
88) Benzo[a]anthracene	11.947	228	586182	23.64 ppm	97
89) 3,3'-Dichlorobenzidine	11.947	252	203673	24.28 ppm	92
90) Chrysene	12.001	228	535233	23.87 ppm	97
91) bis(2-Ethylhexyl)phtha...	12.076	149	371213	22.55 ppm	98
93) Di-n-octylphthalate	13.028	149	688396	22.60 ppm	91
94) Benzo[b]fluoranthene	13.472	252	553193	23.78 ppm	89
95) Benzo[k]fluoranthene	13.509	252	505046	24.85 ppm	88
96) Benzo[a]pyrene	13.899	252	483139	24.47 ppm	89
97) Indeno[1,2,3-cd]pyrene	15.467	276	474764	27.81 ppm	72
98) Dibenz(a,h)acridine	15.124	279	401321	25.78 ppm	94
99) Dibenz[a,h]anthracene	15.504	278	457093	26.73 ppm	89
100) 7,12-Dimethylbenz(a)an...	13.461	256	223941	23.61 ppm	97
101) Benzo[g,h,i]perylene	15.889	276	456405	25.28 ppm	83

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

7.6.15

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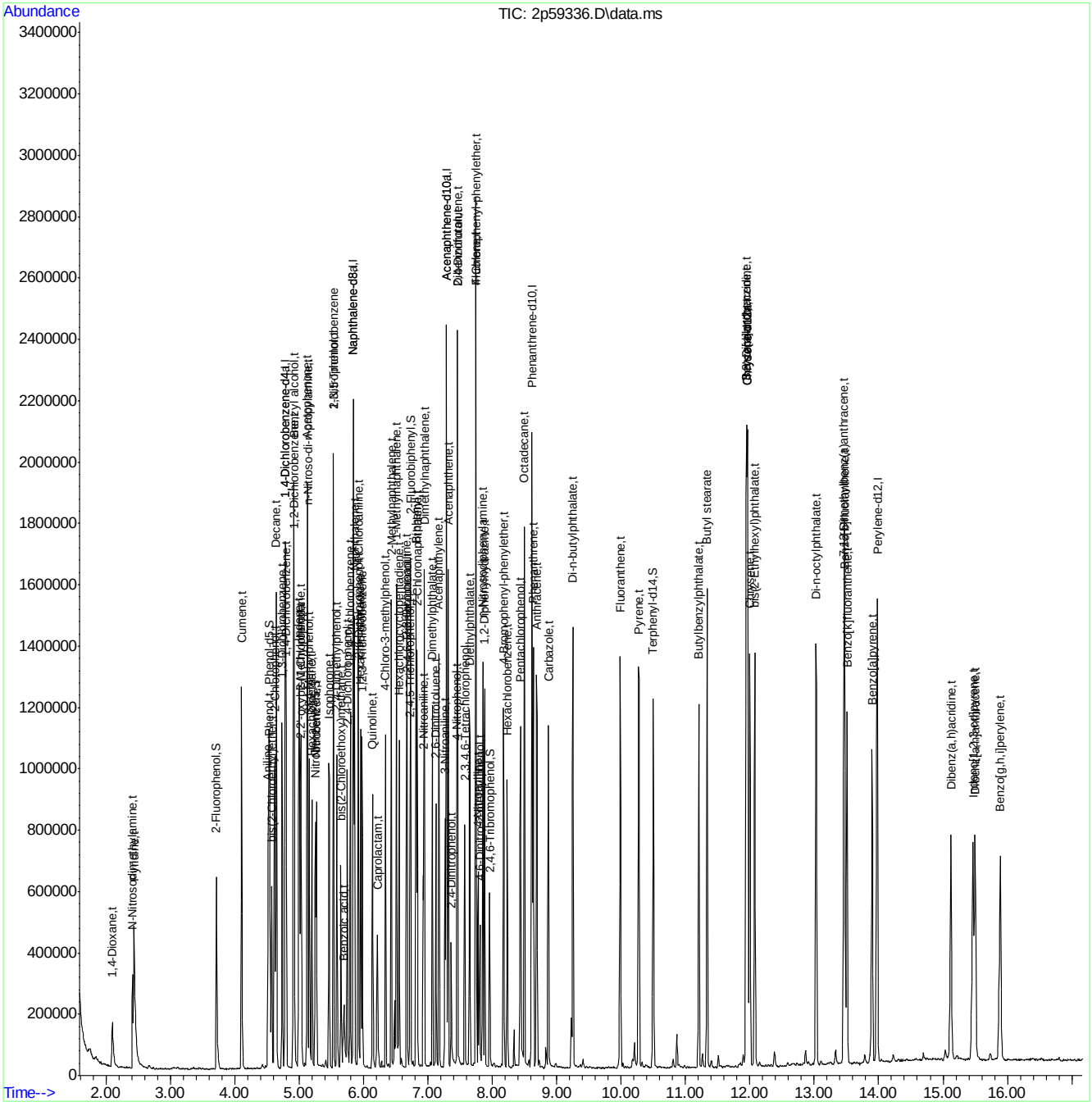
SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2592\
Data File : 2p59336.D
Acq On : 19 May 2016 11:53 am
Operator : robertl1
Sample : CC2547-25
Misc : op93859a,e2p2592
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 20 15:32:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2557.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed May 18 11:19:29 2016
Response via : Initial Calibration



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 JC19996

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

7.6.16

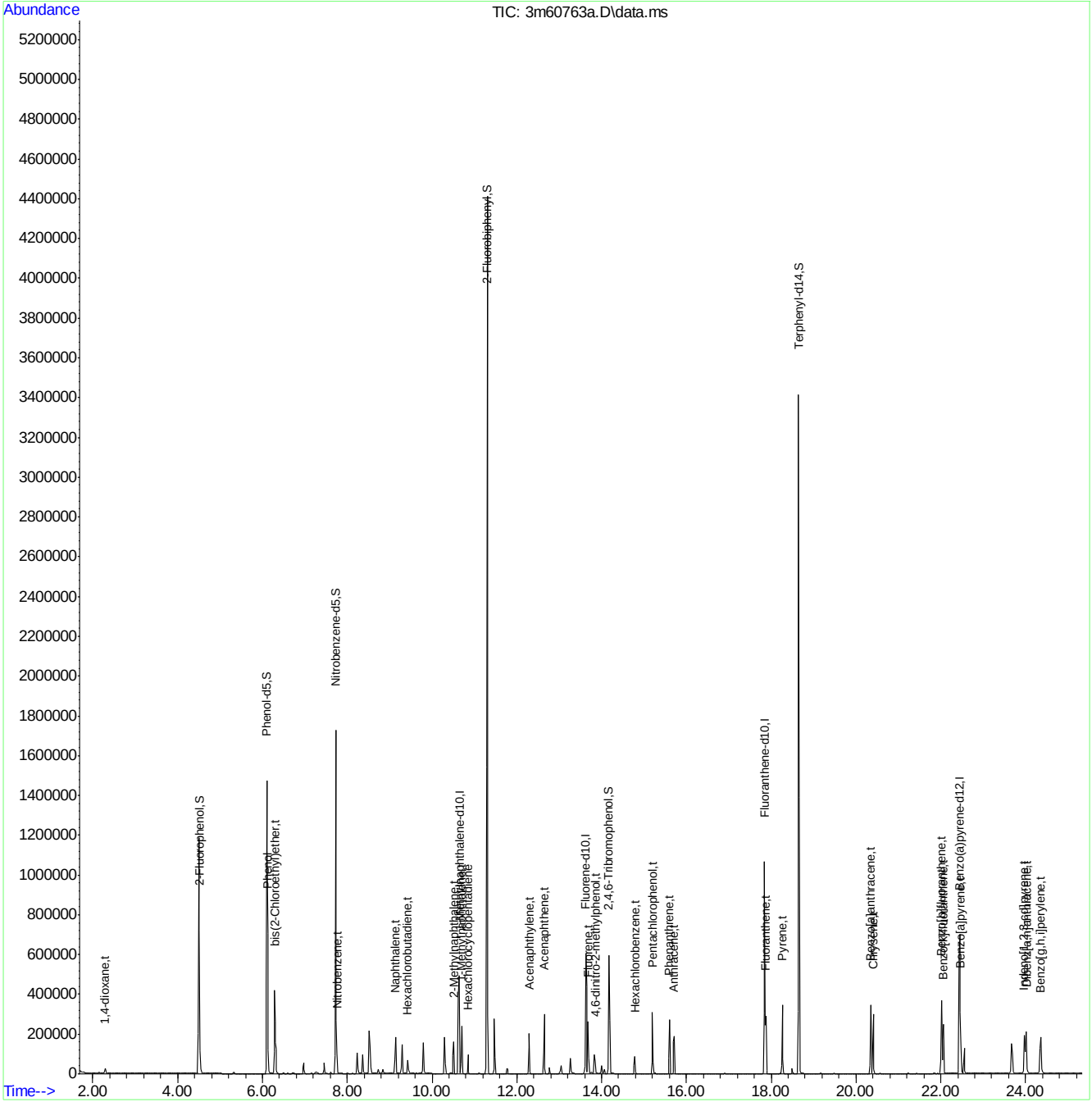
7

SGS ACCUTEST JC19996

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 JC19996

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 JC19996

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

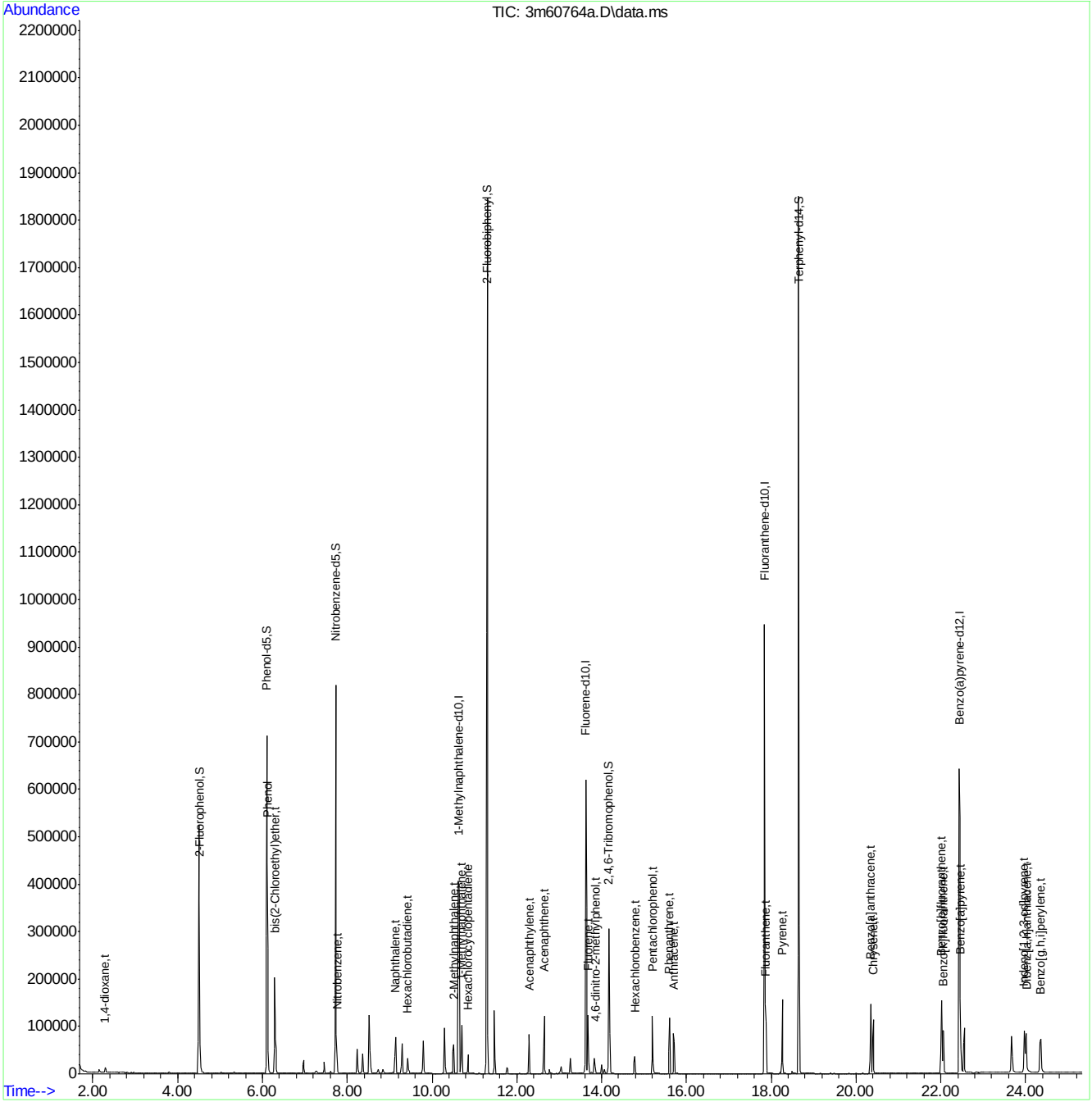
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = 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 JC19996

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 JC19996

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

7.6.18

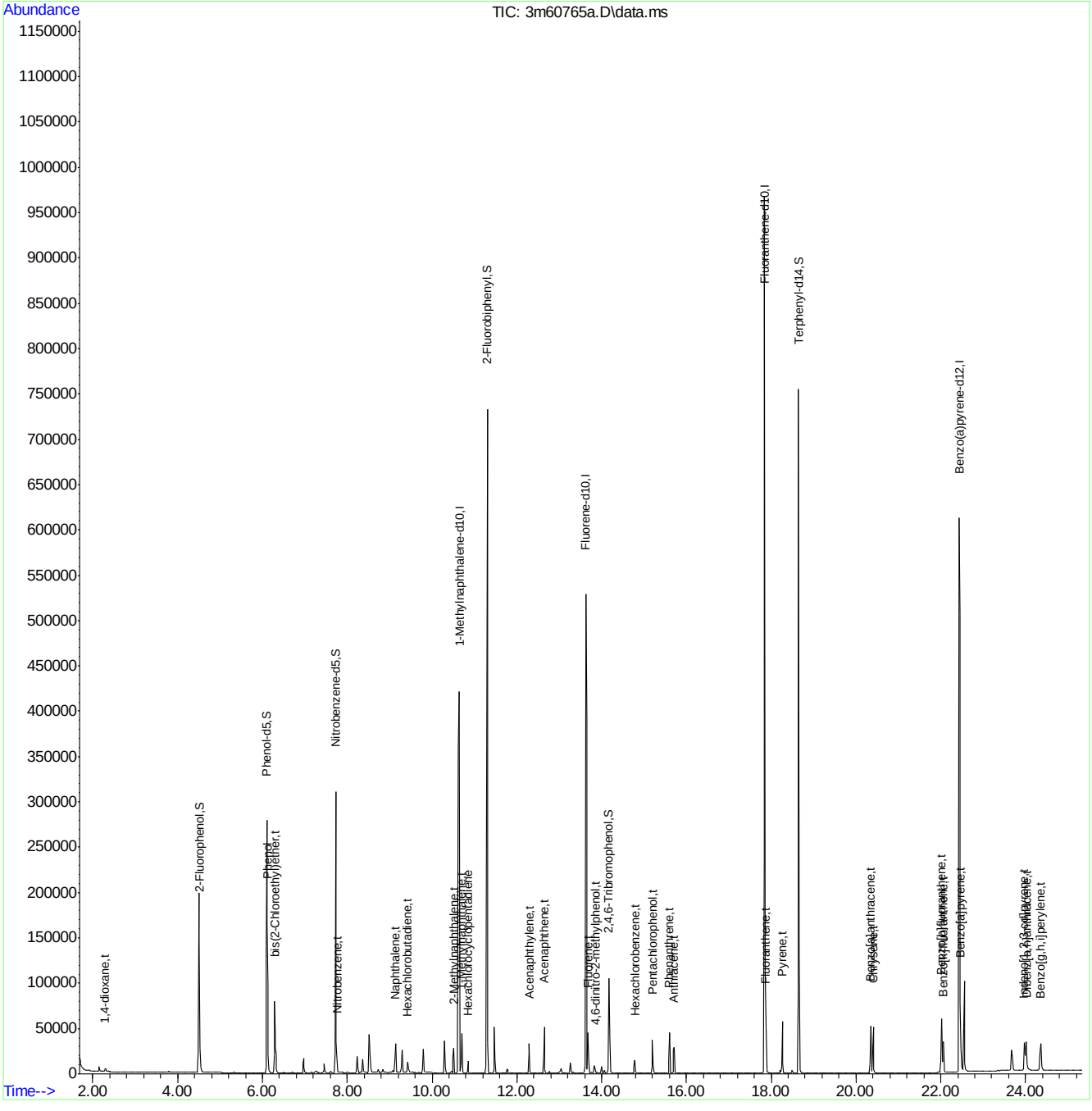
7

SGS ACCUTEST JC19996

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



M3M2855SIM.M Fri Apr 22 08:27:14 2016 RPT1 Page: 3

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 JC19996

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

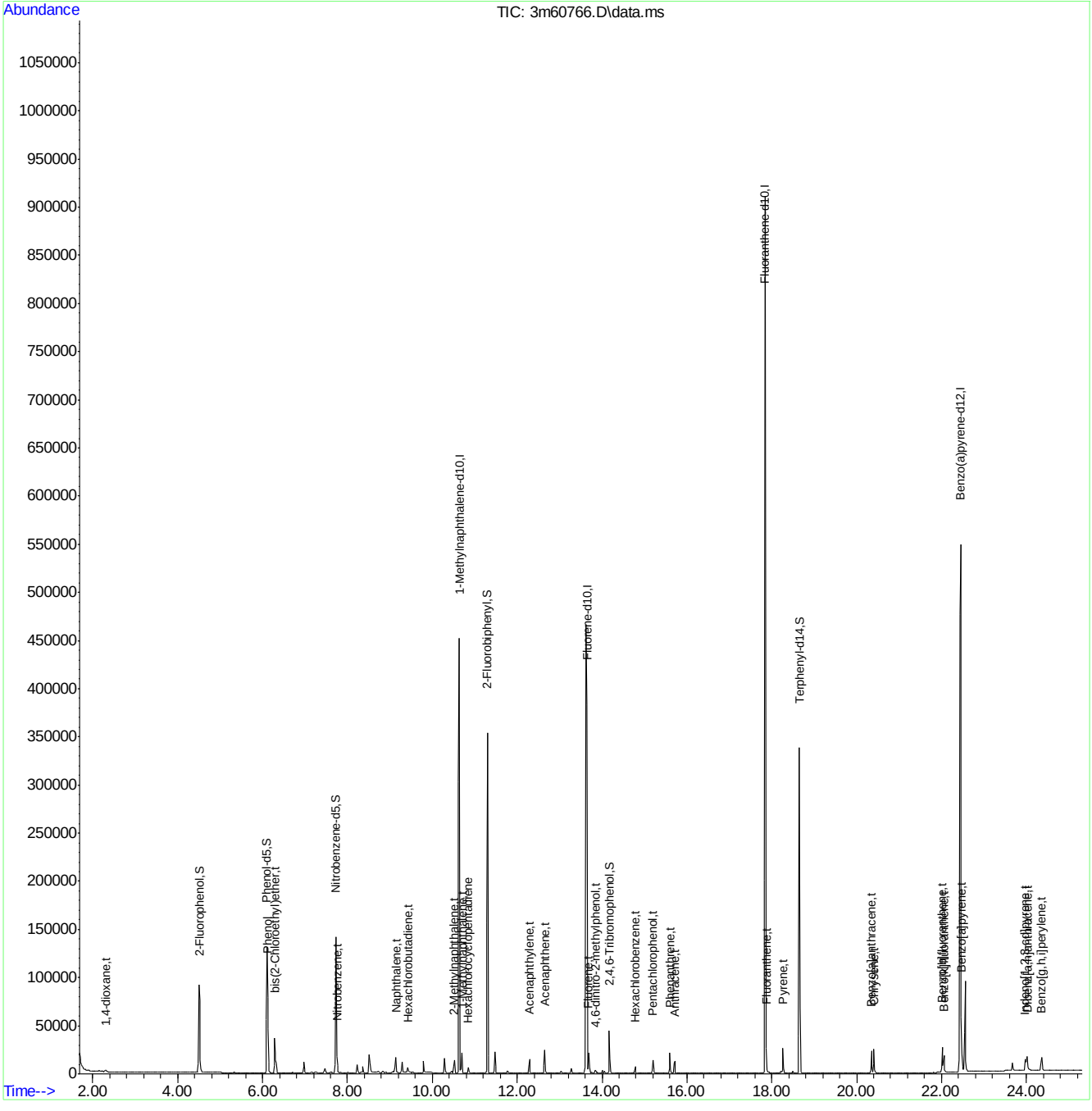
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

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



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

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

7.6.20

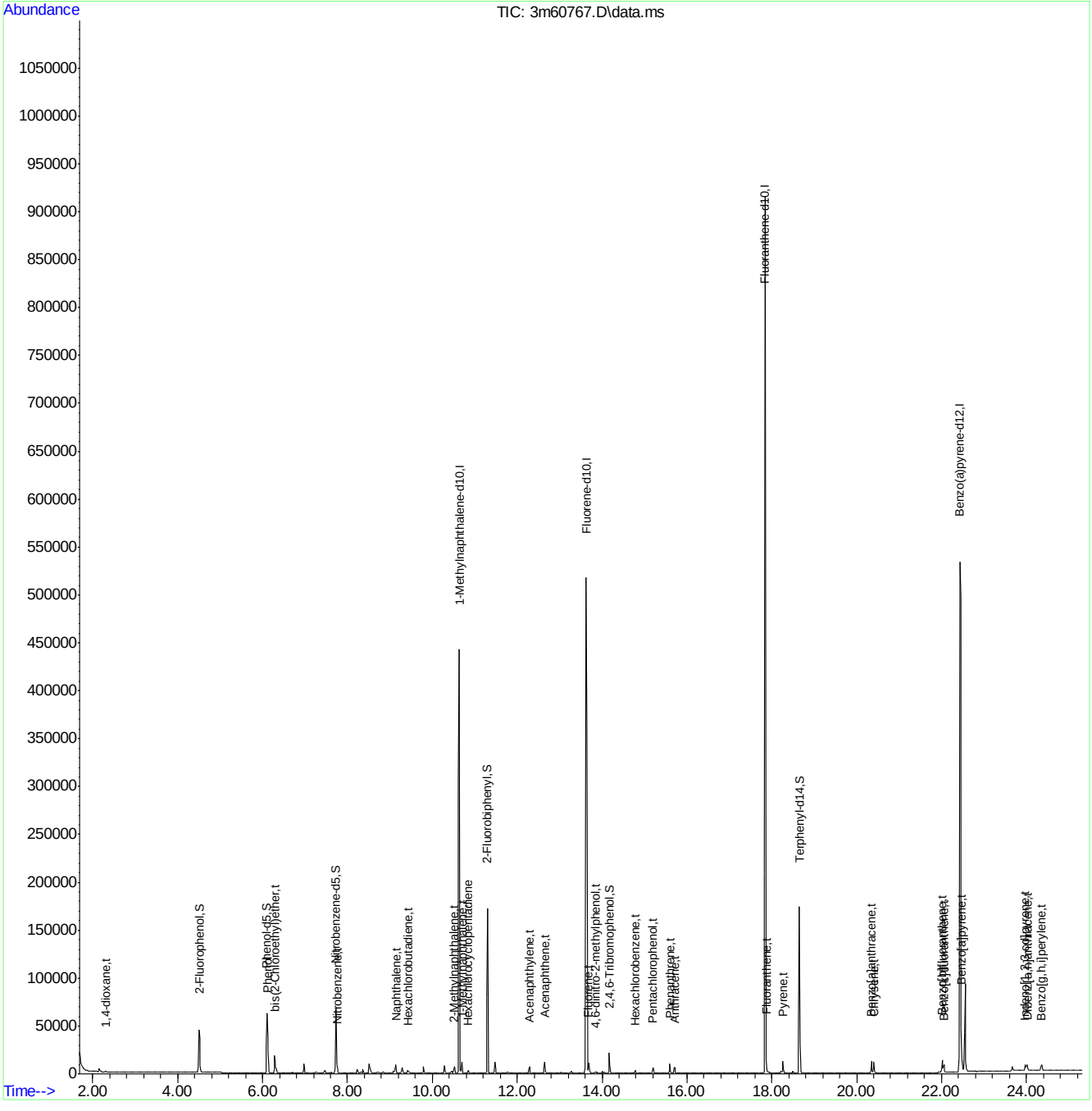
7

SGS ACCUTEST JC19996

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 JC19996

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)

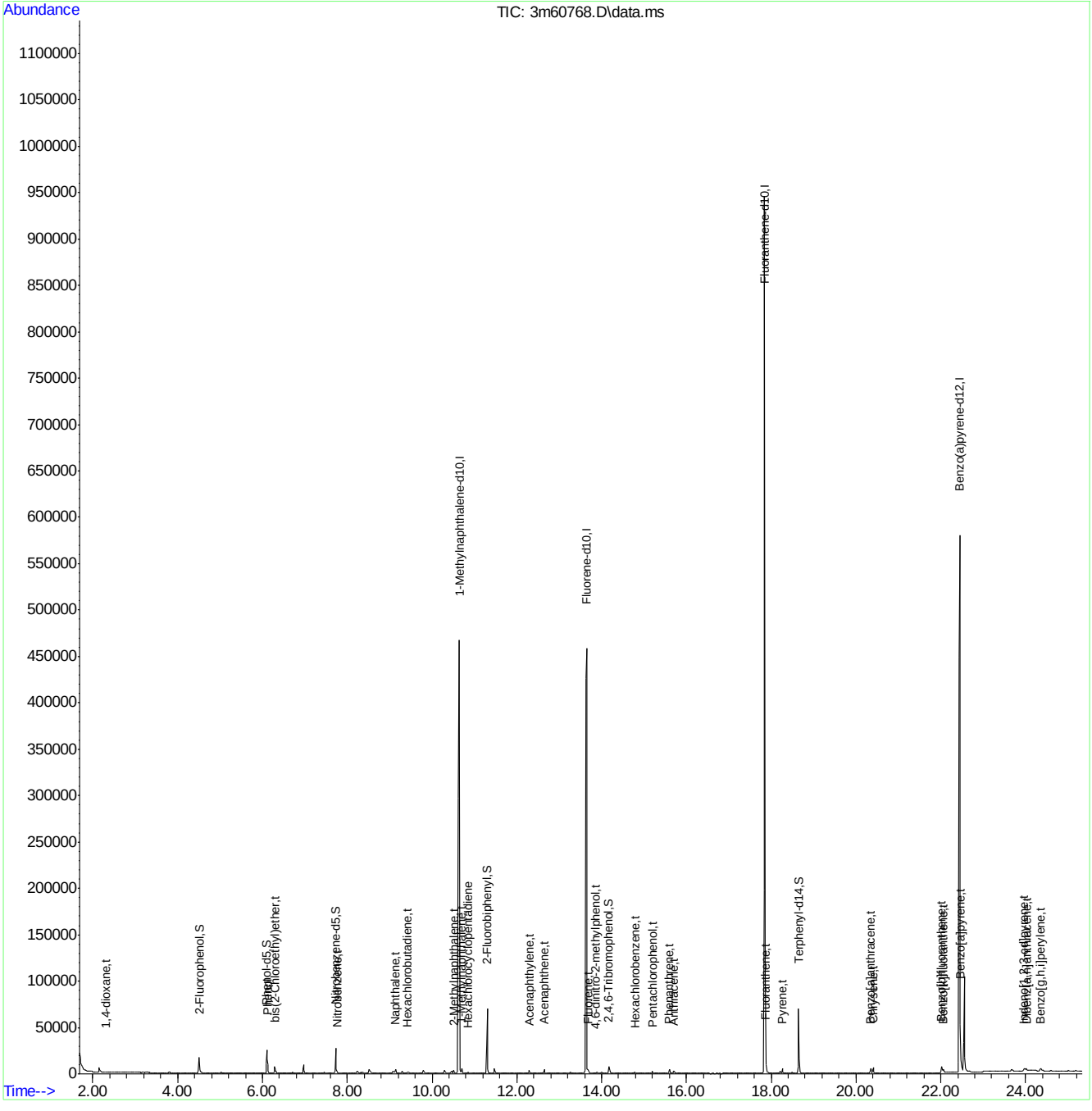
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19996

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

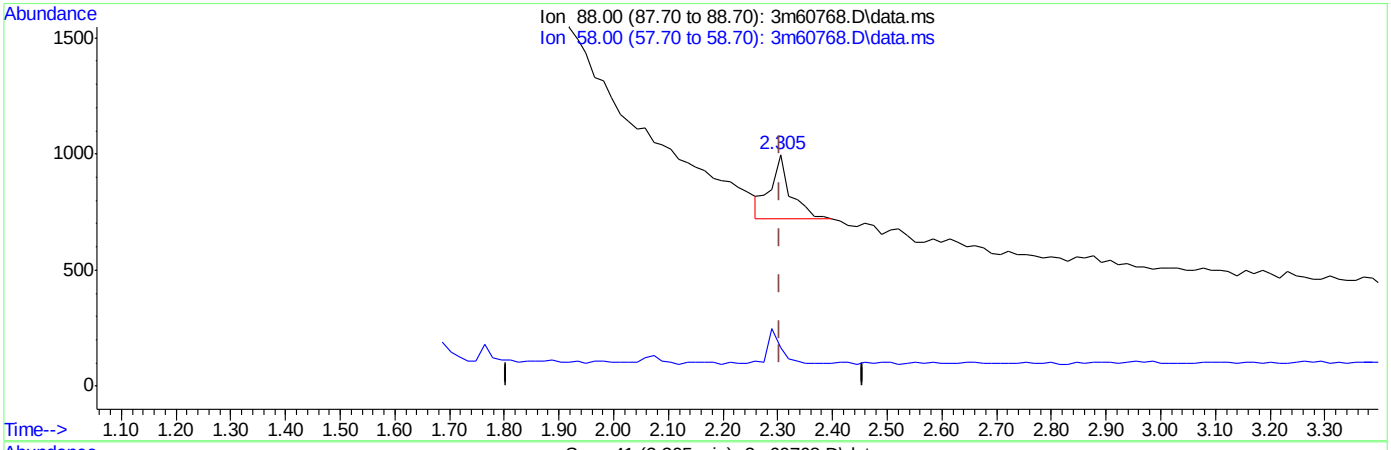
Sample Number:	E3M2855-IC2855	**Method:**	SW846 8270D BY SIM
Lab FileID:	3M60768.D	**Analyst approved:**	04/22/16 09:15 Linsey Kirschmann
Injection Time:	04/21/16 17:17	**Supervisor approved:**	04/22/16 12:27 Nina Pandya

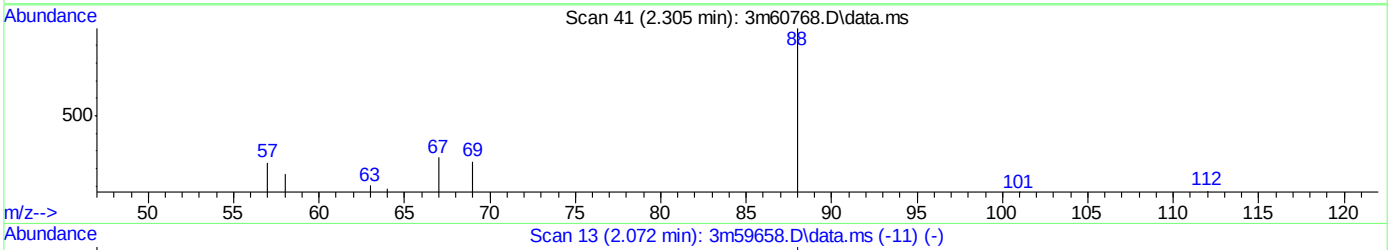
Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dioxane	123-91-1		2.30	Baseline ripple
Benzo(a)pyrene	50-32-8		22.46	Baseline ripple

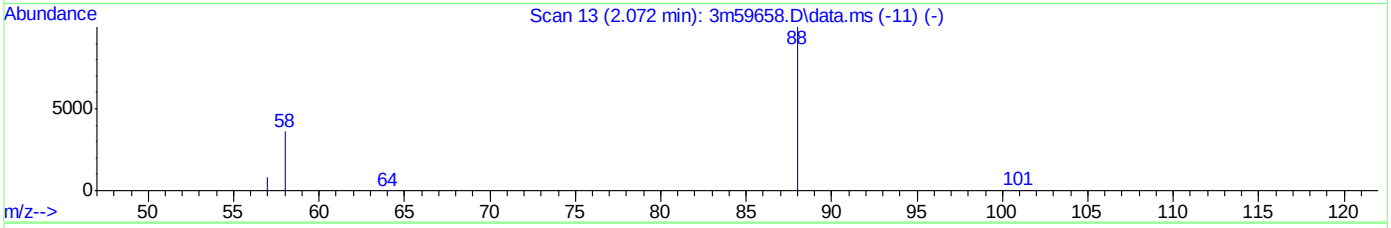
Quantitation Report (Qedit)

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

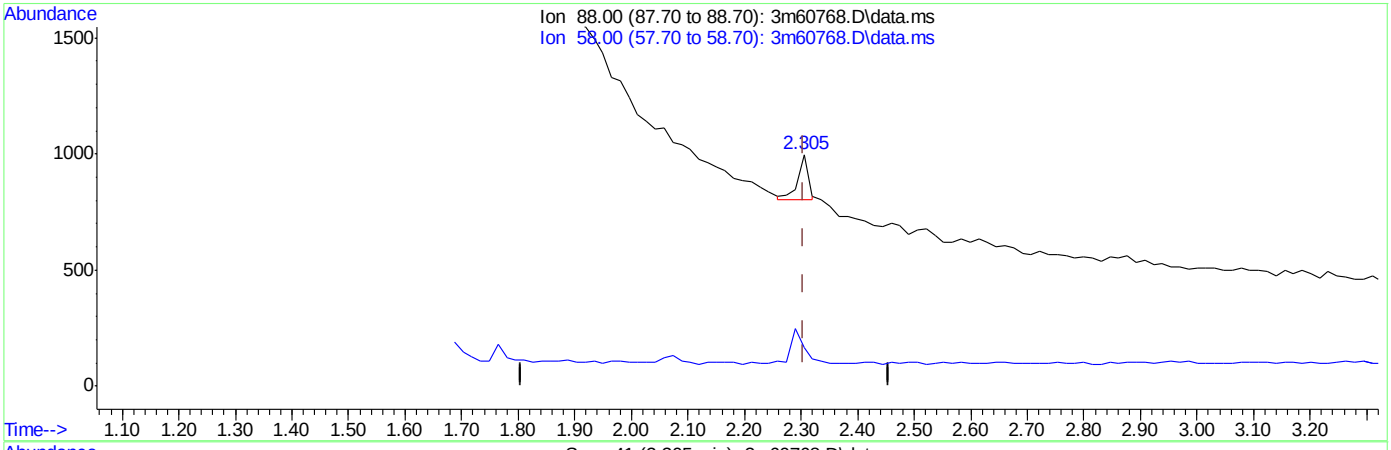
response 710

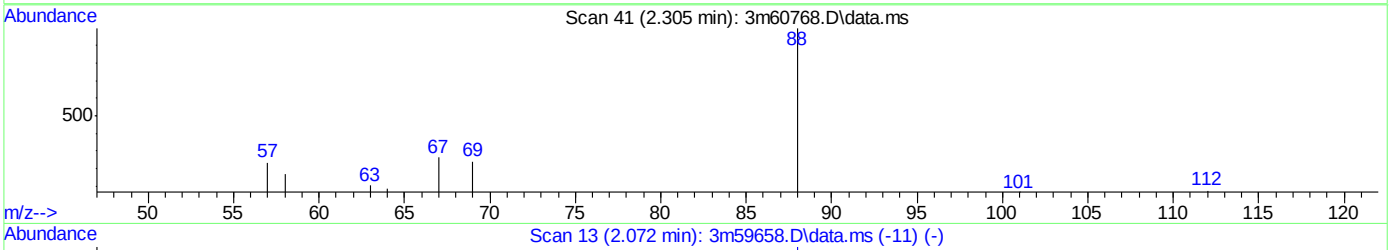
Ion	Exp%	Act%
88.00	100	100
58.00	32.40	28.23
0.00	0.00	0.00
0.00	0.00	0.00

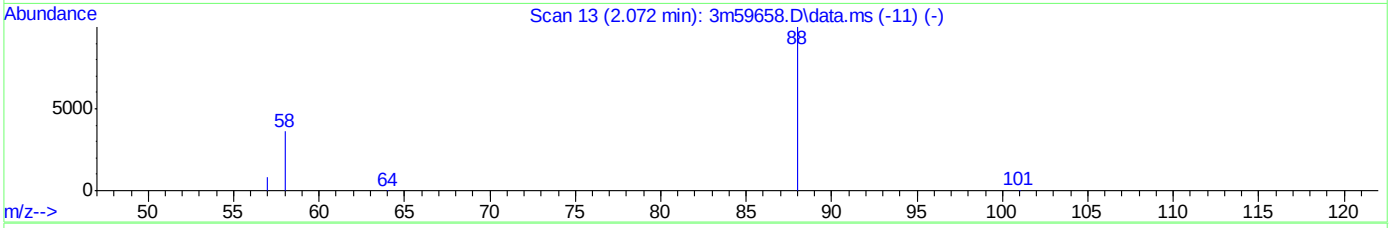
Quantitation Report (Qedit)

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

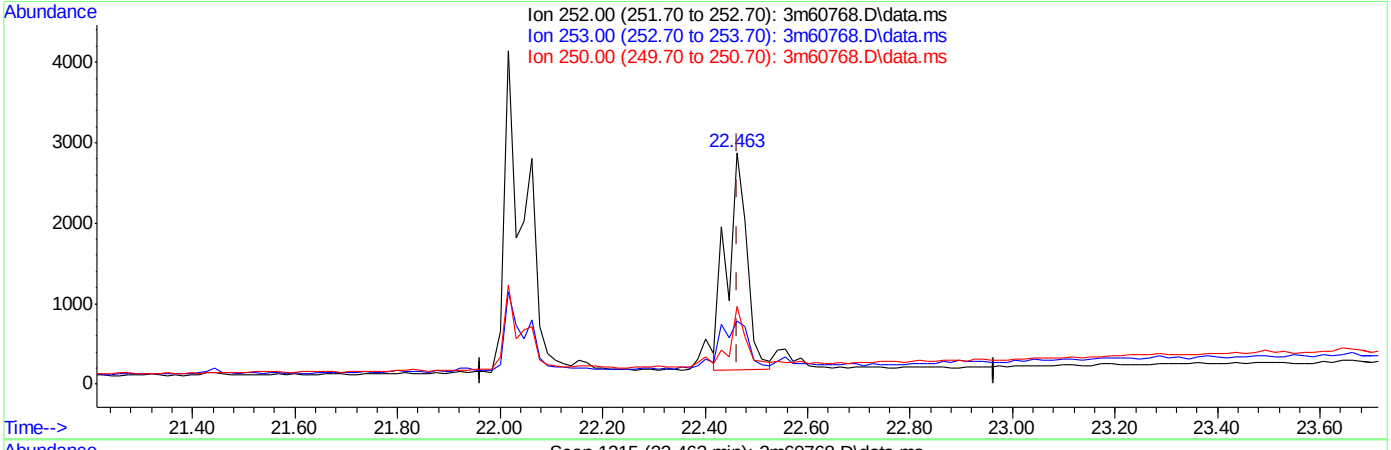
response 245

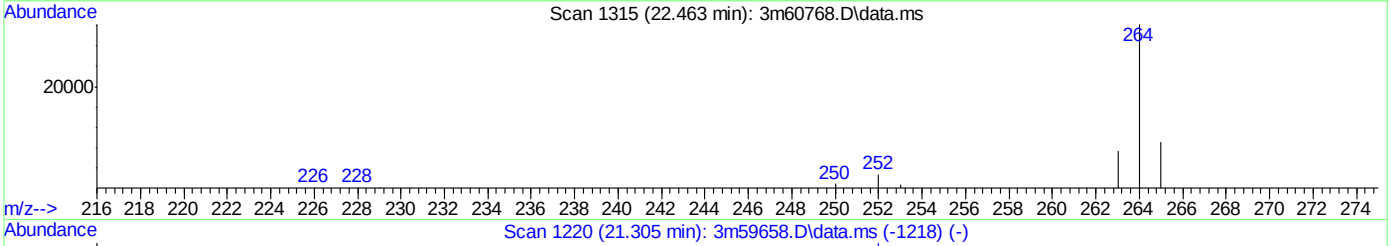
Ion	Exp%	Act%
88.00	100	100
58.00	32.40	16.63
0.00	0.00	0.00
0.00	0.00	0.00

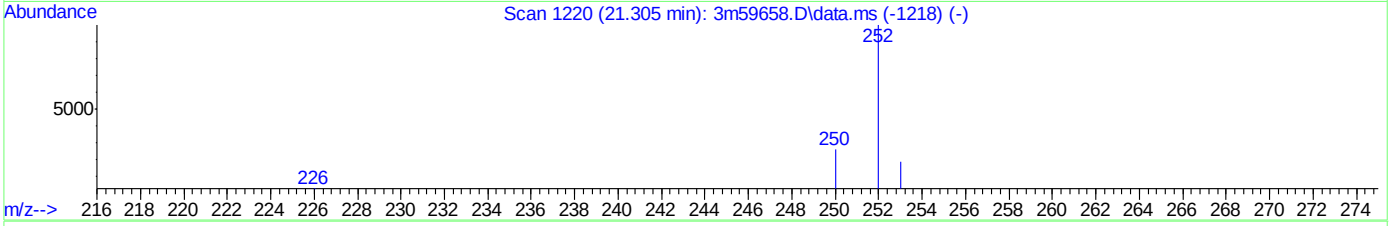
Quantitation Report (Qedit)

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

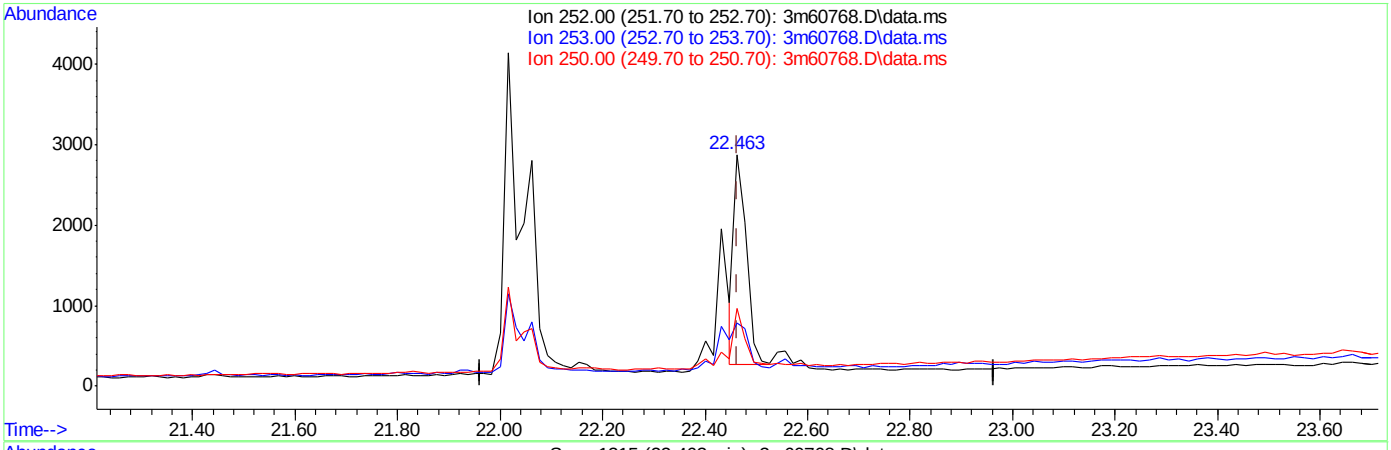
Ion	Exp%	Act%
252.00	100	100
253.00	18.80	20.93
250.00	26.10	27.47
0.00	0.00	0.00

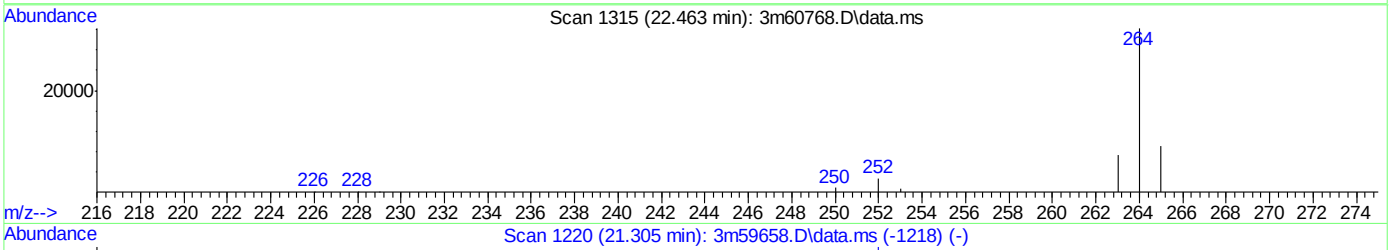
SGS ACCUTEST JC19996

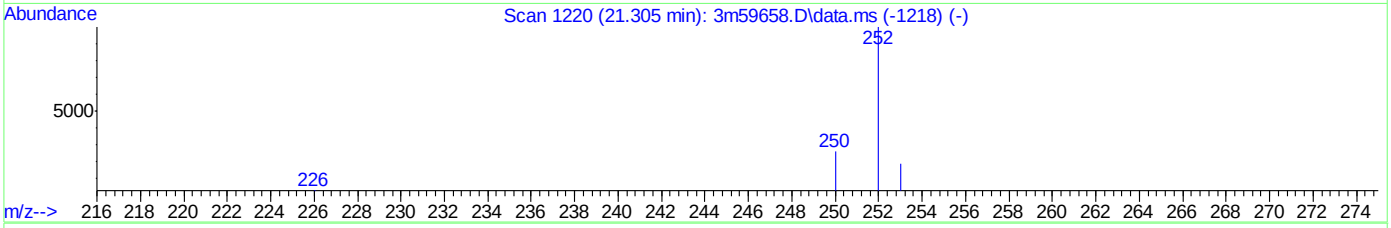
Quantitation Report (Qedit)

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 JC19996

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)

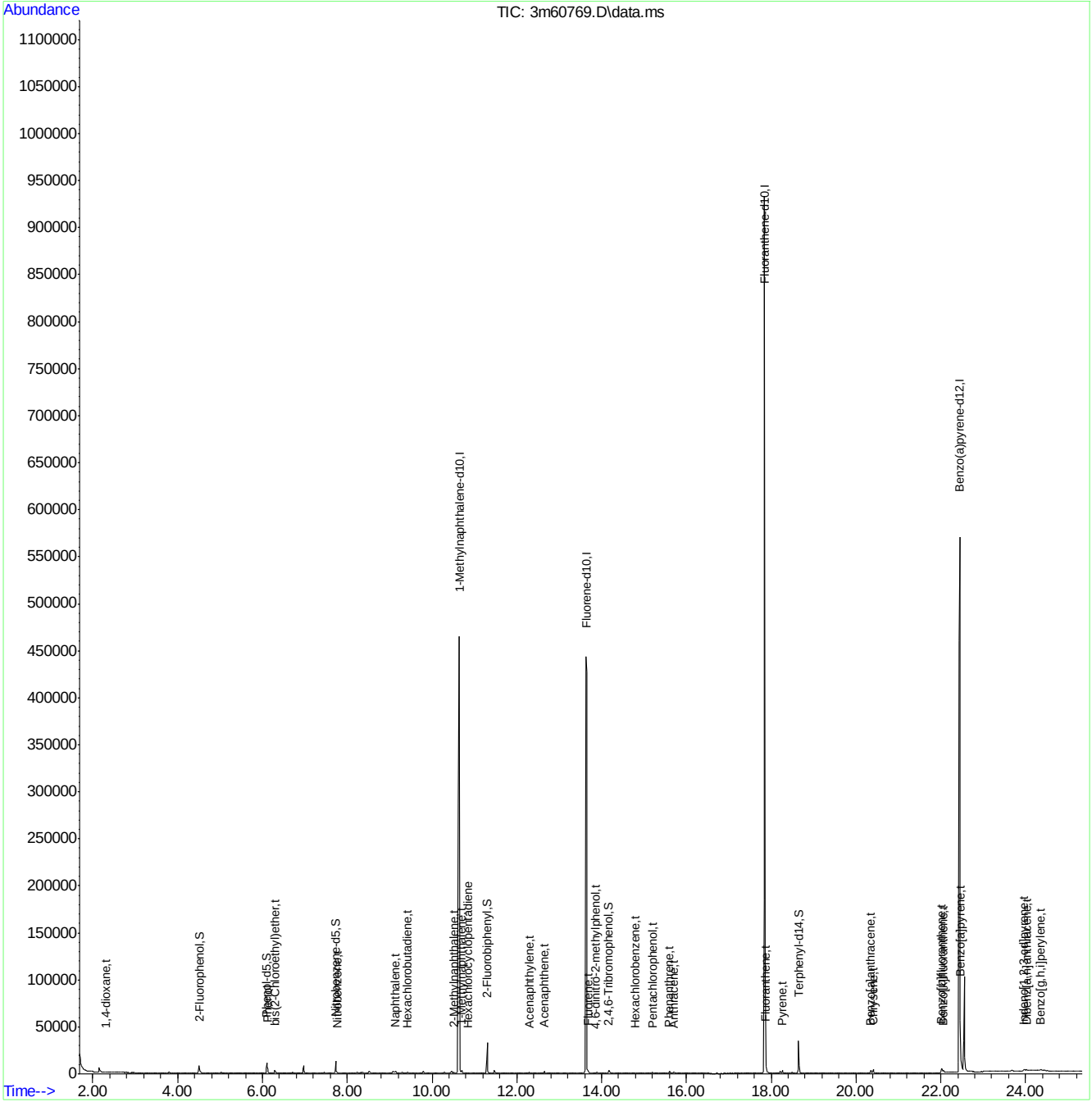
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19996

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 JC19996

Manual Integration Approval Summary

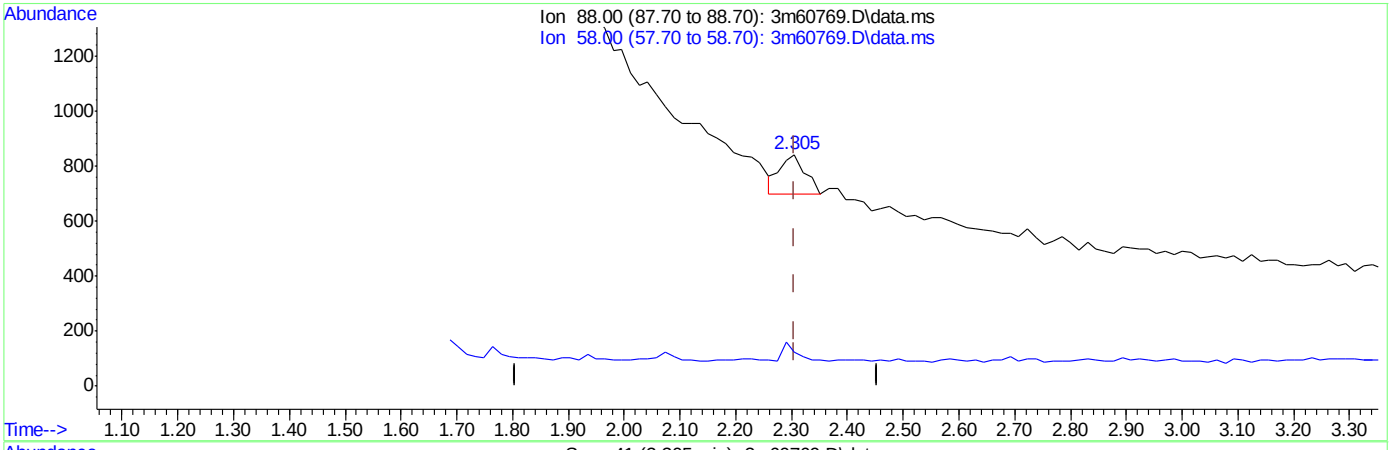
Sample Number:	E3M2855-IC2855	**Method:**	SW846 8270D BY SIM
Lab FileID:	3M60769.D	**Analyst approved:**	04/22/16 09:15 Linsey Kirschmann
Injection Time:	04/21/16 17:49	**Supervisor approved:**	04/22/16 12:27 Nina Pandya

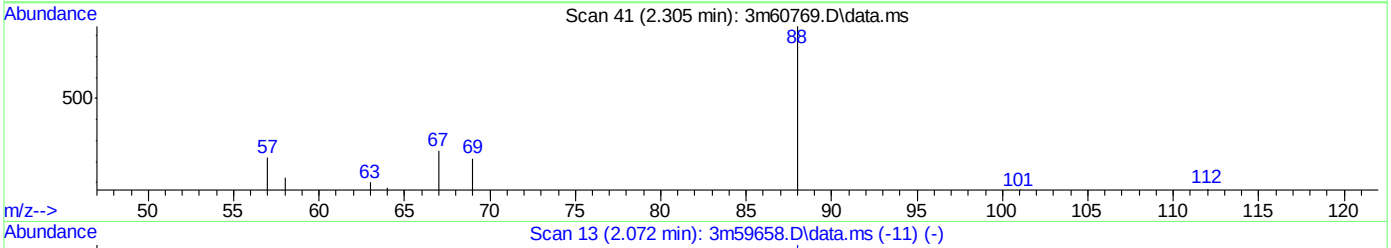
Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dioxane	123-91-1		2.31	Baseline ripple

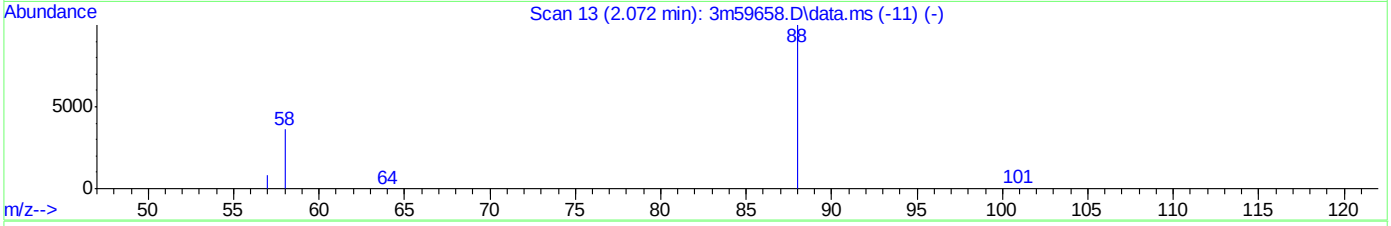
Quantitation Report (Qedit)

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

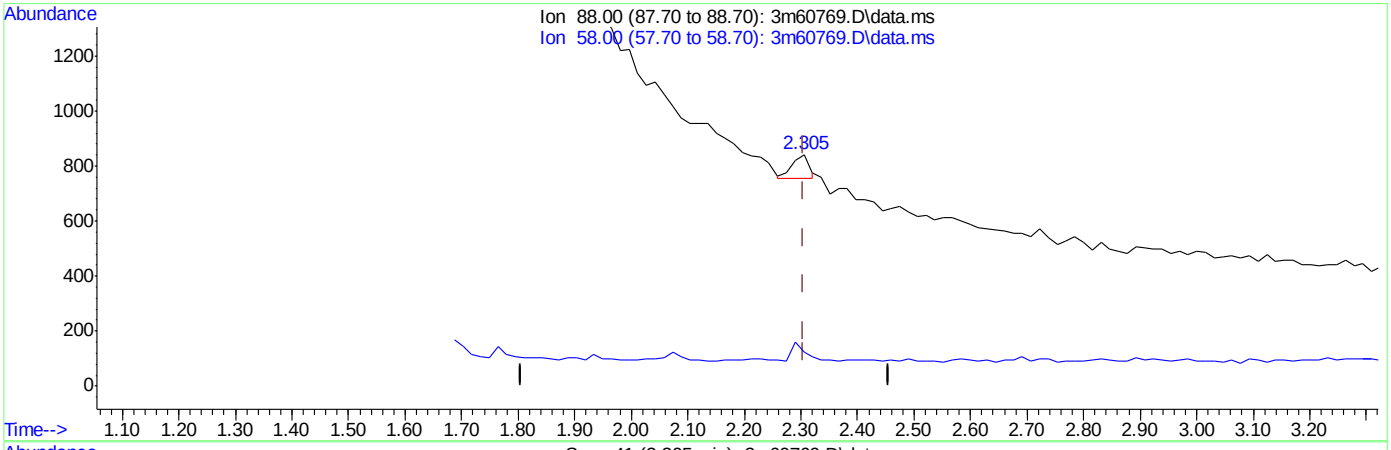
response 450

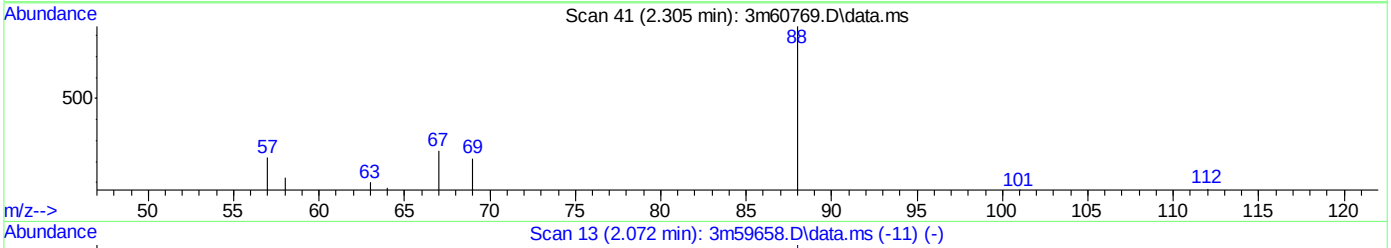
Ion	Exp%	Act%
88.00	100	100
58.00	32.40	25.45
0.00	0.00	0.00
0.00	0.00	0.00

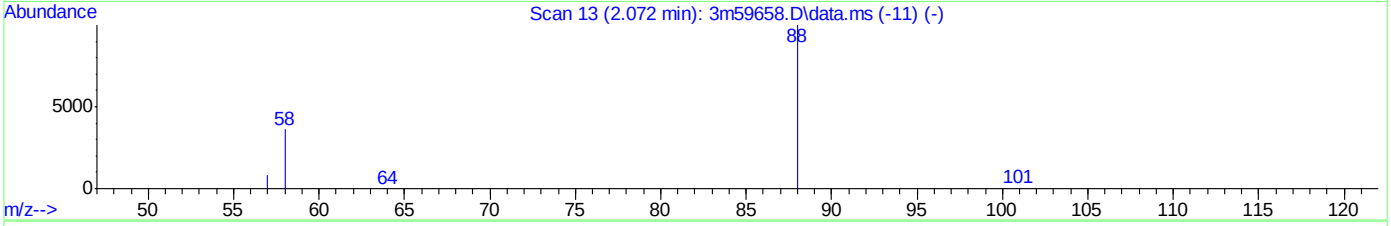
Quantitation Report (Qedit)

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 JC19996

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

SGS ACCUTEST JC19996

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

7.6.23

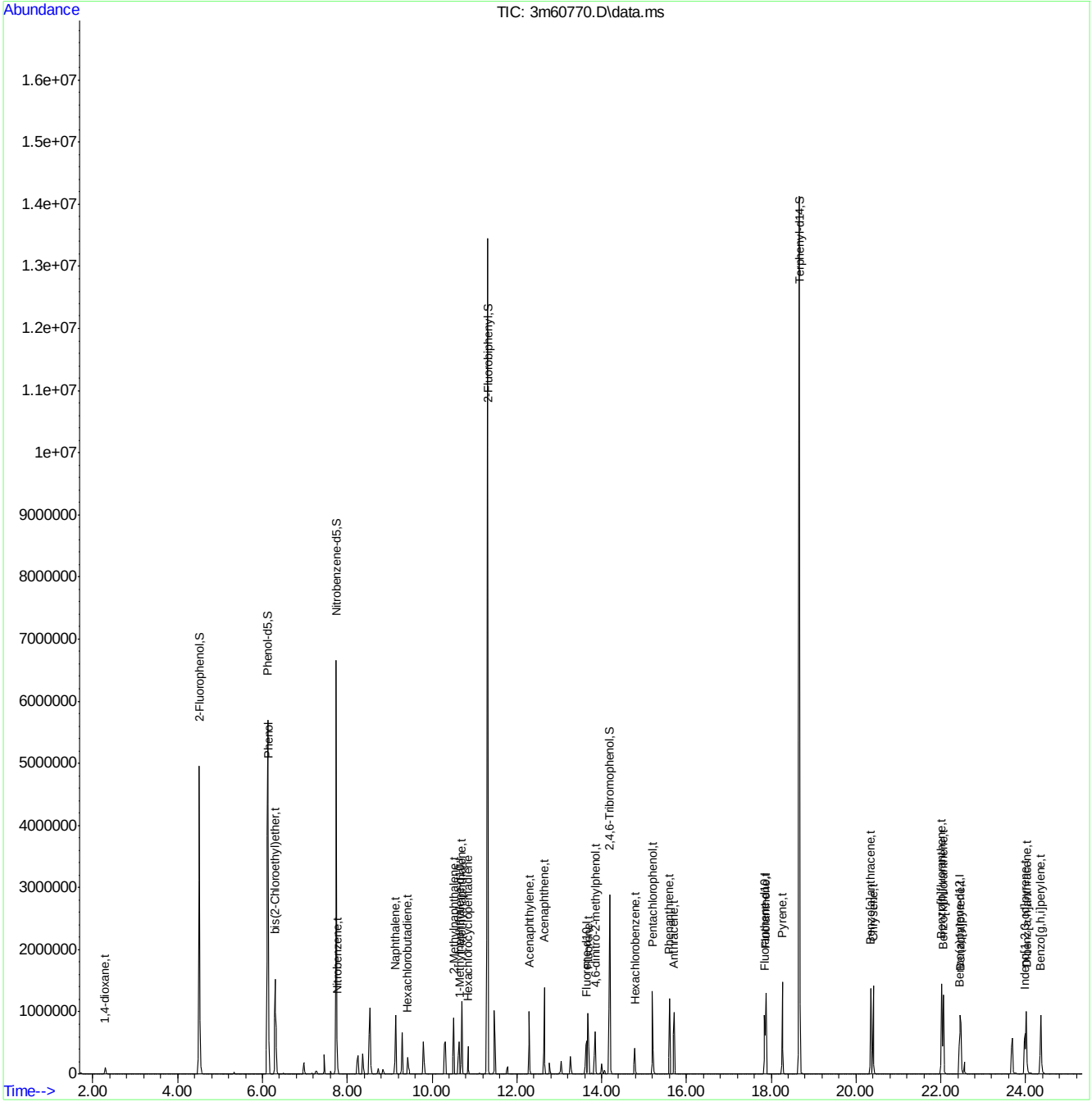
7

SGS ACCUTEST JC19996

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



SGS ACCUTEST JC19996

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 JC19996

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

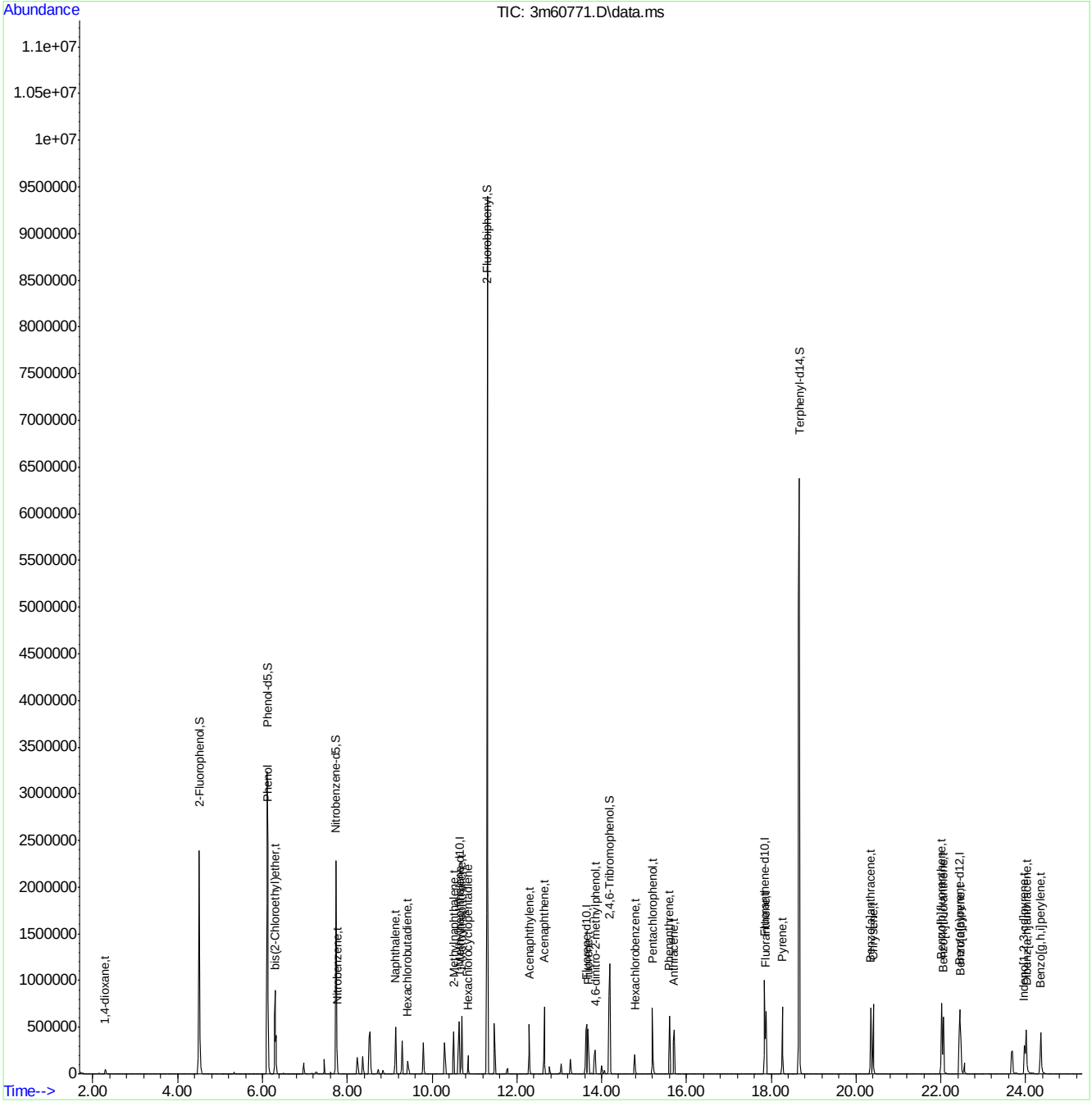
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

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 JC19996

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

7.6.25

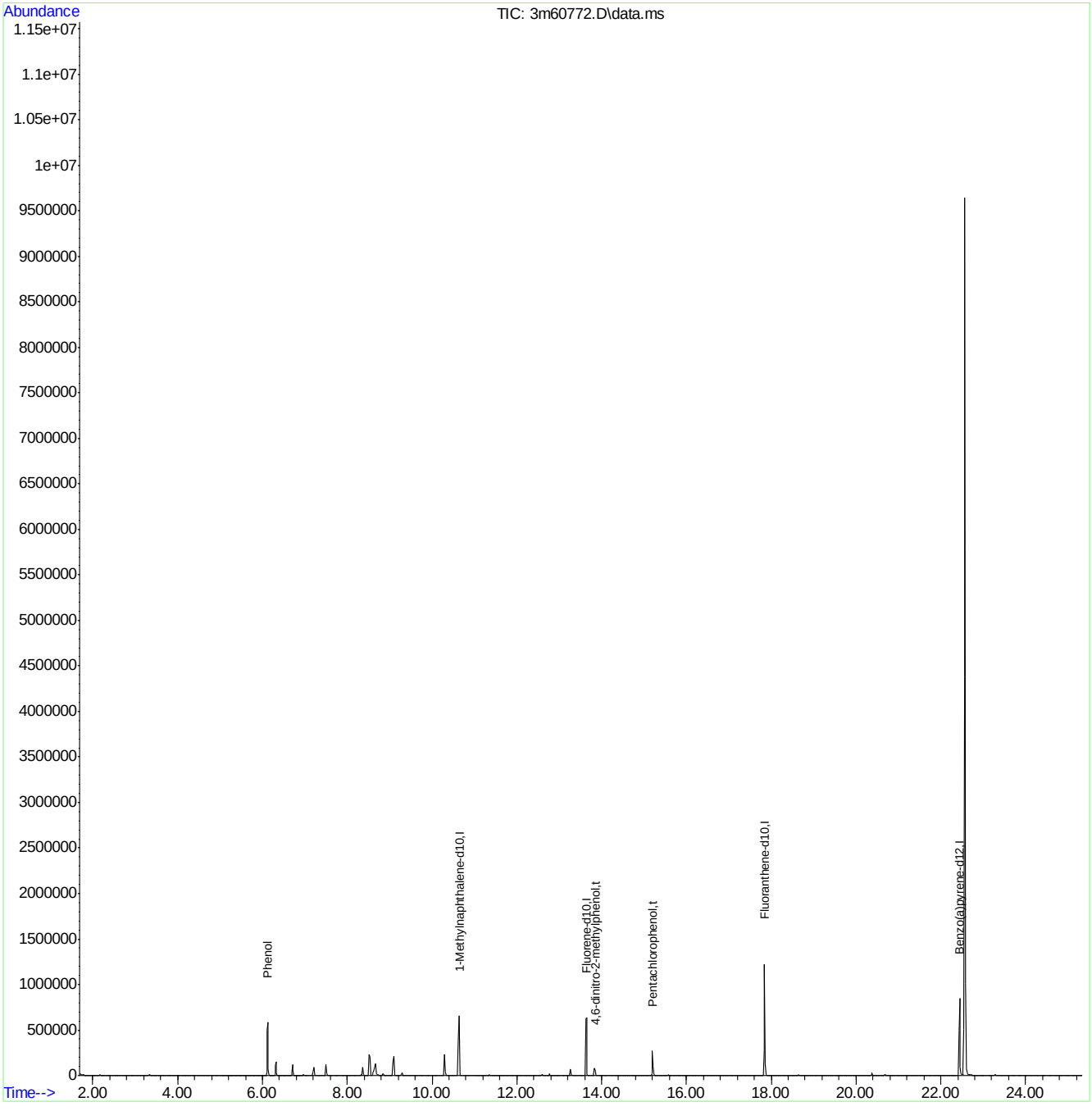
7

SGS ACCUTEST JC19996

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

7.6.26

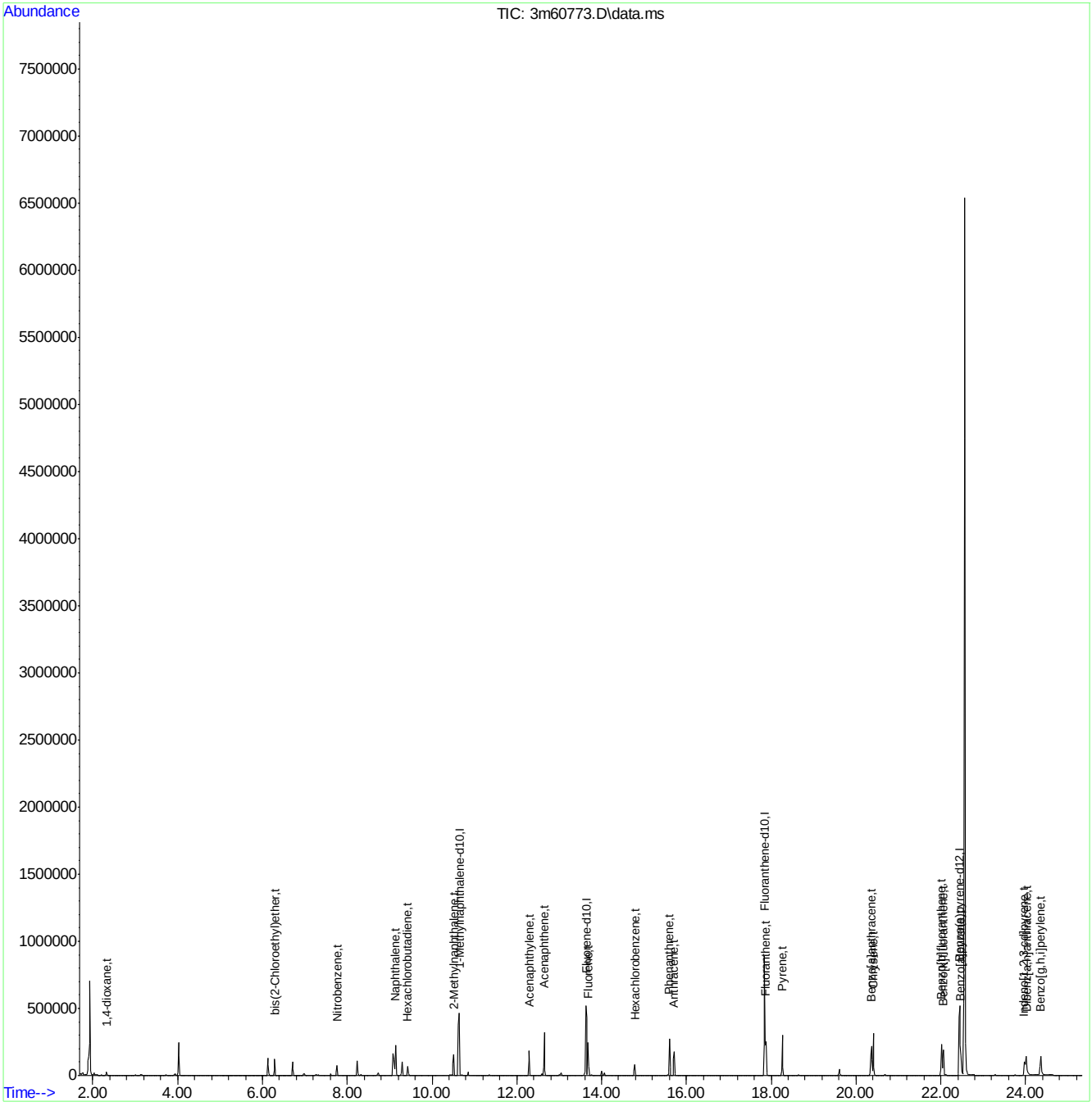
7

SGS ACCUTEST JC19996

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



SGS ACCUTEST JC19996

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

7.6.27

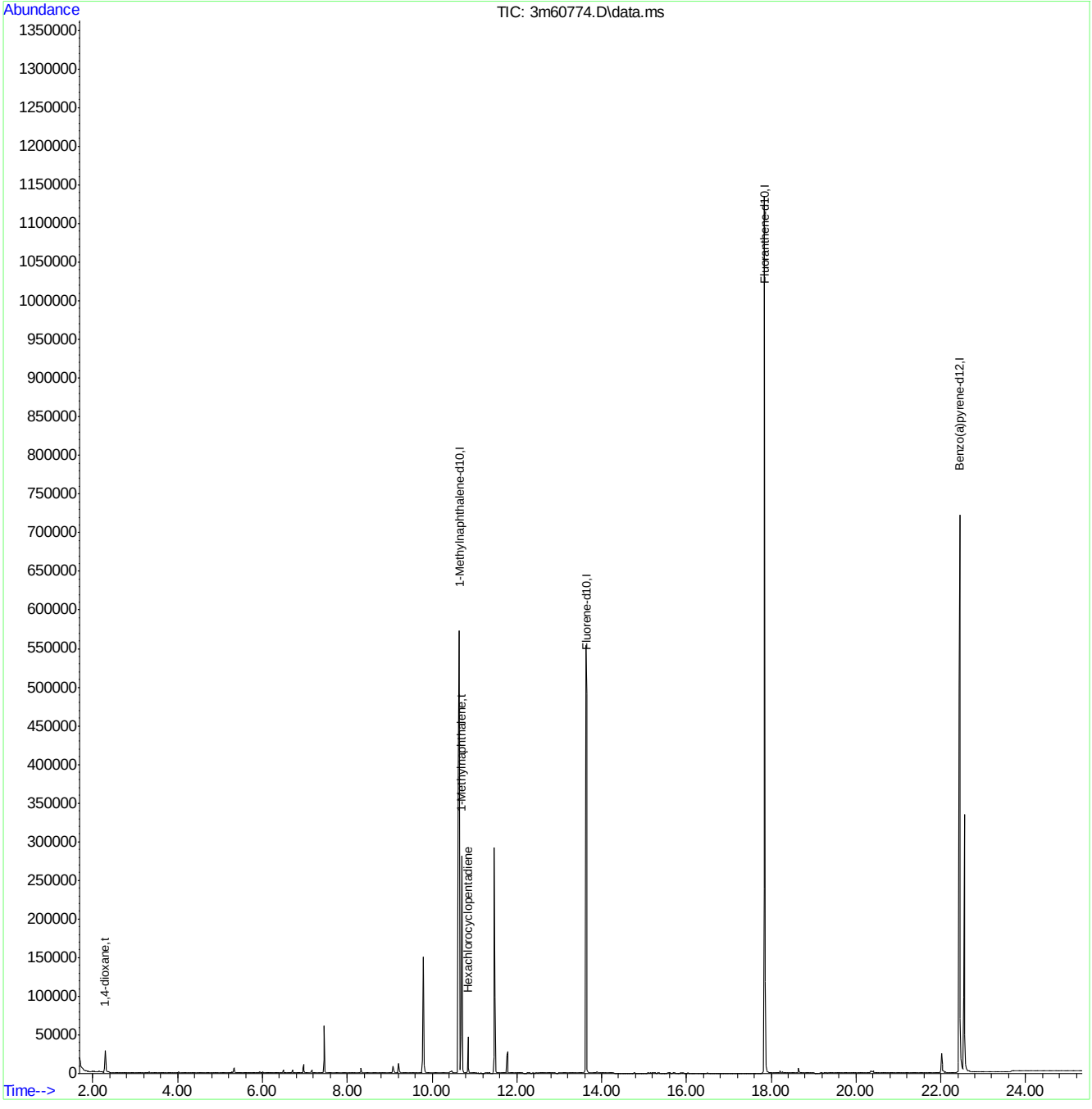
7

SGS ACCUTEST JC19996

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\E3M2880\
Data File : 3m61244.D
Acq On : 11 May 2016 11:49 pm
Operator : juliusj
Sample : cc2855-1
Misc : op93756a,e3m2880
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 12 09:16:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu May 12 09:16:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.345	150	663509	4.00	ppm	0.00
14) Fluorene-d10	13.354	176	996885	4.00	ppm	0.00
21) Fluoranthene-d10	17.562	212	1797179	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.166	264	1441174	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	4.307	112	1698812	20.46	ppm	0.00
Spiked Amount 50.000			Recovery = 40.92%			
4) Phenol-d5	5.915	99	2726954	19.85	ppm	0.00
Spiked Amount 50.000			Recovery = 39.70%			
7) Nitrobenzene-d5	7.474	82	2349273	18.39	ppm	0.00
Spiked Amount 50.000			Recovery = 36.78%			
15) 2-Fluorobiphenyl	11.021	172	5705609	20.83	ppm	0.00
Spiked Amount 50.000			Recovery = 41.66%			
20) 2,4,6-Tribromophenol	13.901	330	615284	19.72	ppm	0.00
Spiked Amount 50.000			Recovery = 39.44%			
28) Terphenyl-d14	18.380	244	5097597	19.55	ppm	0.00
Spiked Amount 50.000			Recovery = 39.10%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.097	88	36383	1.06	ppm	100
5) Phenol	5.928	94	715504	4.83	ppm	100
6) bis(2-Chloroethyl)ether	6.036	93	100615	0.90	ppm	100
8) Nitrobenzene	7.493	77	123561	0.89	ppm	100
9) Naphthalene	8.849	128	340702	0.92	ppm	100
10) Hexachlorobutadiene	9.150	225	67792	1.05	ppm	100
11) 2-Methylnaphthalene	10.221	141	188589	0.98	ppm	100
12) 1-Methylnaphthalene	10.427	141	196408	0.76	ppm	100
13) Hexachlorocyclopentadiene	10.570	237	109393	2.14	ppm	100
16) Acenaphthylene	11.995	152	363893	1.05	ppm	100
17) Acenaphthene	12.351	153	237463	1.03	ppm	100
18) 4,6-dinitro-2-methylph...	13.581	198	73921	2.68	ppm	100
19) Fluorene	13.392	166	274403	0.99	ppm	100
22) Hexachlorobenzene	14.485	284	78460	0.92	ppm	100
23) Pentachlorophenol	14.934	266	197208	3.41	ppm	100
24) Phenanthrene	15.305	178	417330	0.95	ppm	100
25) Anthracene	15.413	178	395965	1.02	ppm	100
26) Fluoranthene	17.592	202	480599	0.87	ppm	100
27) Pyrene	17.979	202	478242	0.93	ppm	100
29) Benzo[a]anthracene	20.080	228	452627	0.92	ppm	100
30) Chrysene	20.142	228	431591	0.91	ppm	100
32) Benzo[b]fluoranthene	21.749	252	446899	0.93	ppm	100
33) Benzo[k]fluoranthene	21.795	252	396815	0.89	ppm	100
34) Benzo[a]pyrene	22.197	252	408995	0.92	ppm	100
35) Indeno[1,2,3-cd]pyrene	23.655	276	481273	1.06	ppm	100
36) Dibenz[a,h]anthracene	23.693	278	361440	0.97	ppm	100
37) Benzo[g,h,i]perylene	24.013	276	405414	1.03	ppm	100

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2880\
Data File : 3m61244.D
Acq On : 11 May 2016 11:49 pm
Operator : juliusj
Sample : cc2855-1
Misc : op93756a,e3m2880
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 12 09:16:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu May 12 09:16:05 2016
Response via : Initial Calibration

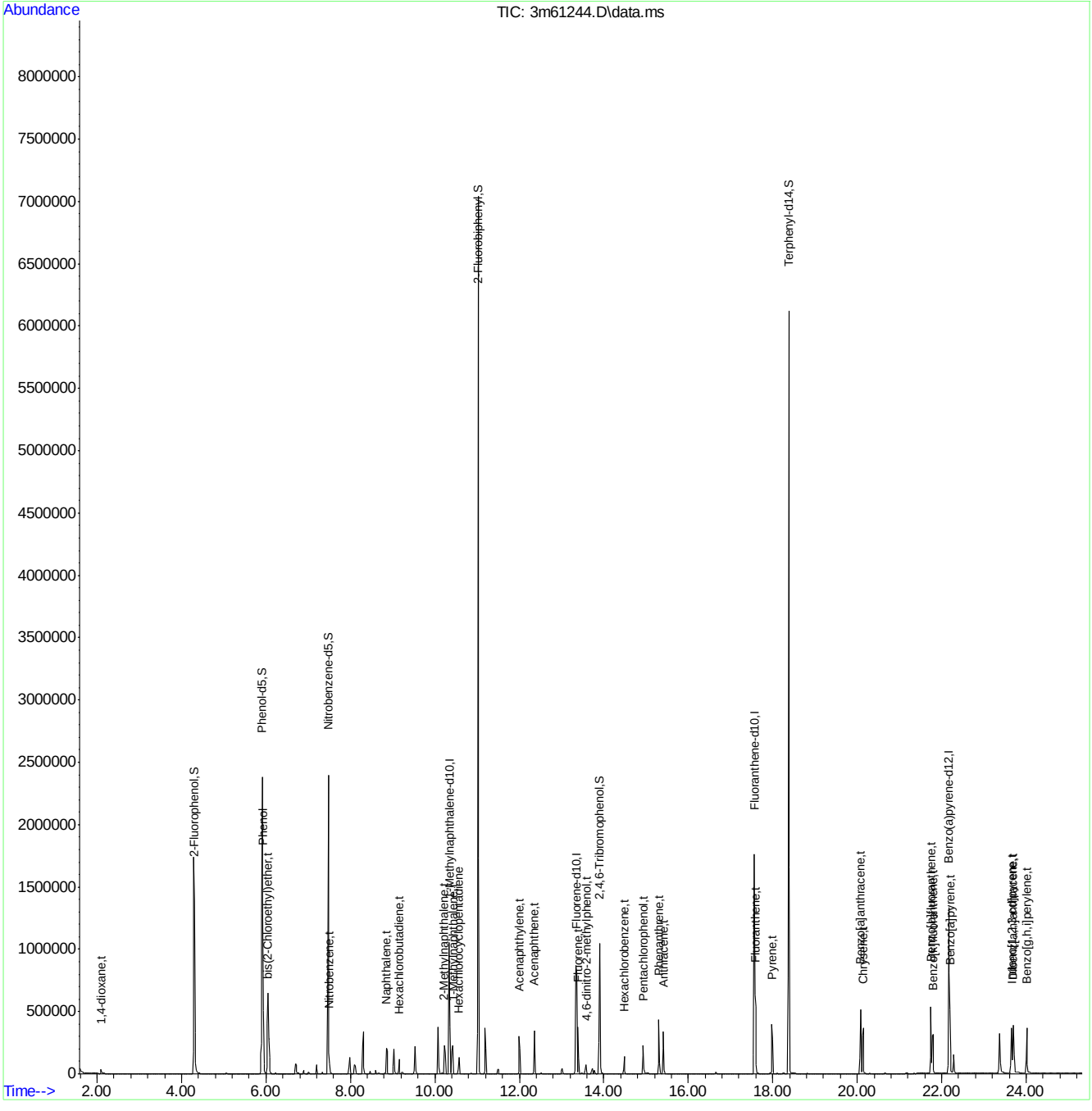
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2880\
Data File : 3m61244.D
Acq On : 11 May 2016 11:49 pm
Operator : juliusj
Sample : cc2855-1
Misc : op93756a,e3m2880
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 12 09:16:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu May 12 09:16:05 2016
Response via : Initial Calibration



SGS ACCUTEST JC19996

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 JC19996

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

7.6.29

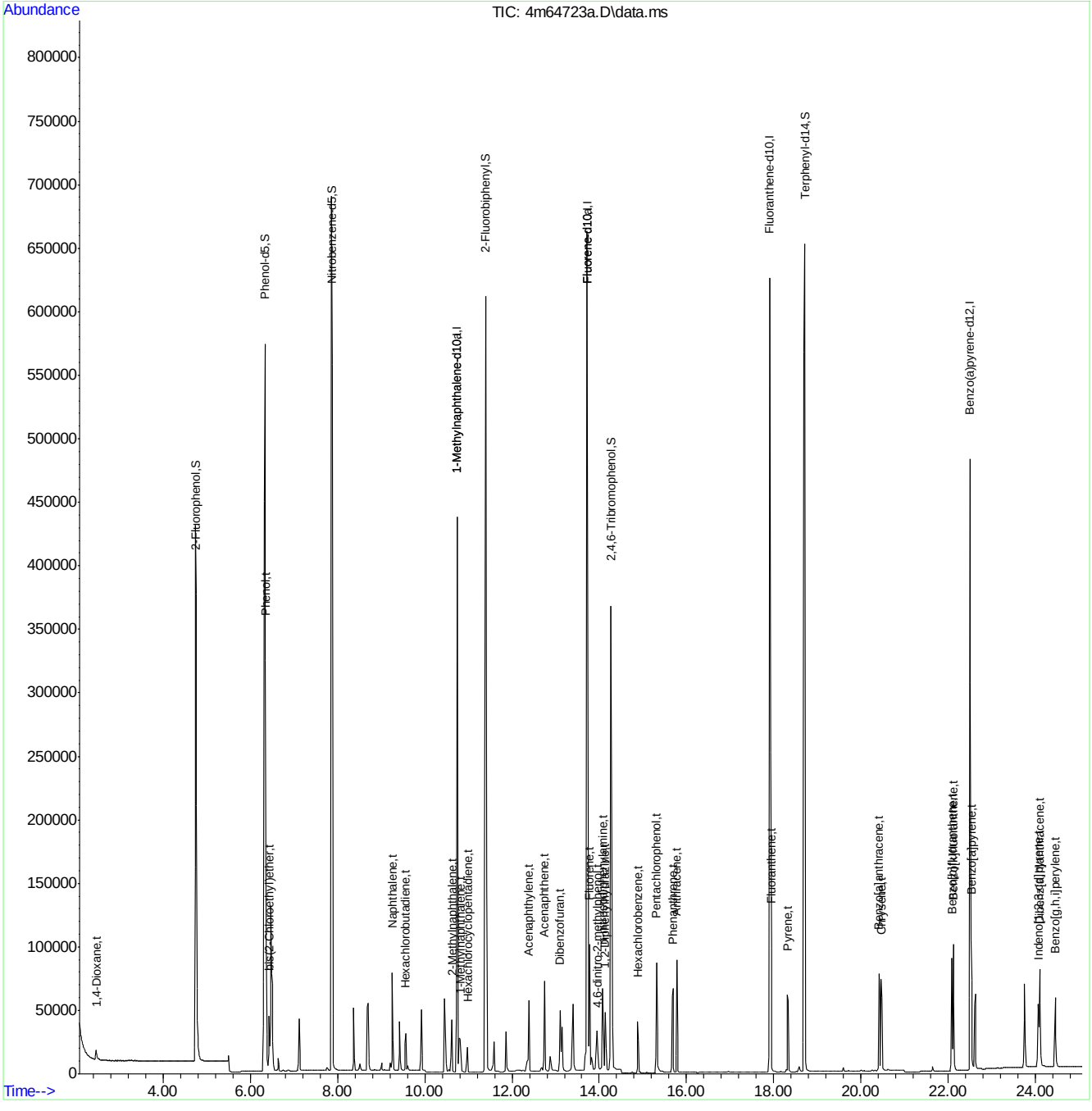
7

SGS ACCUTEST JC19996

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

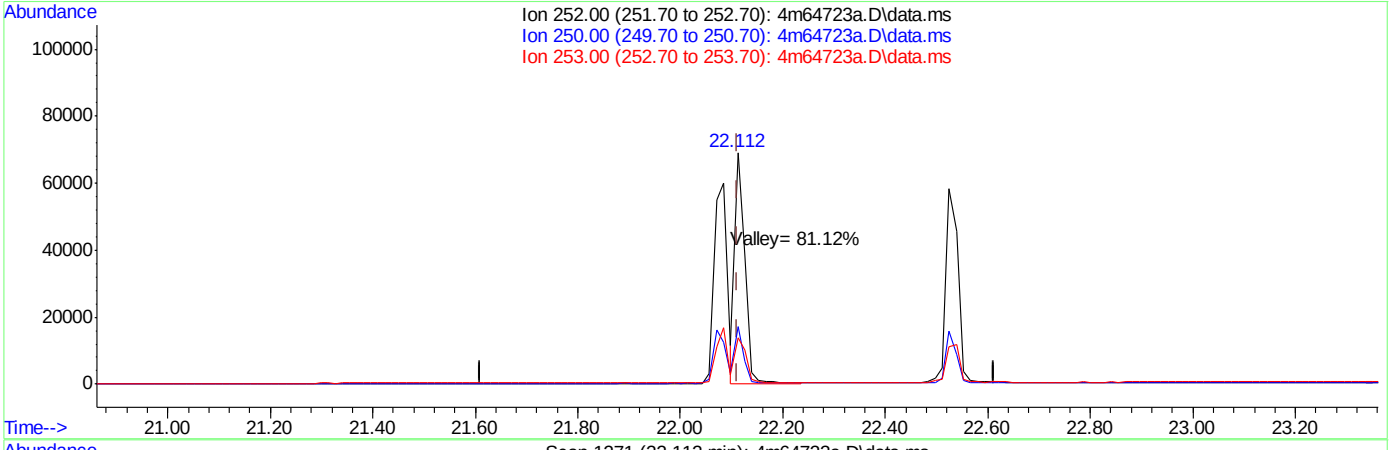


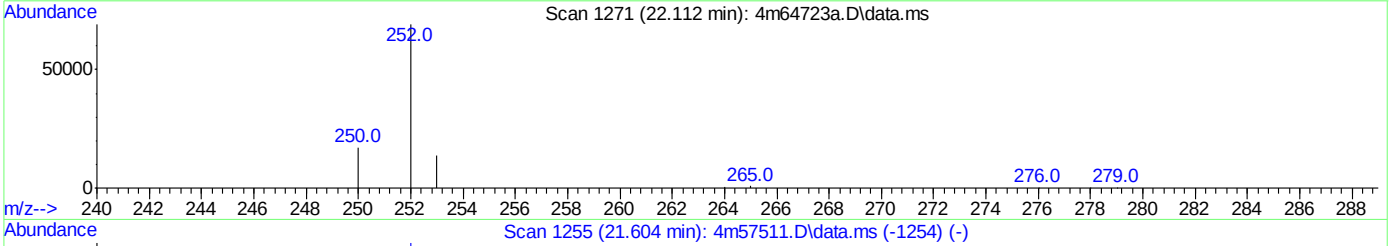
SGS ACCUTEST JC19996

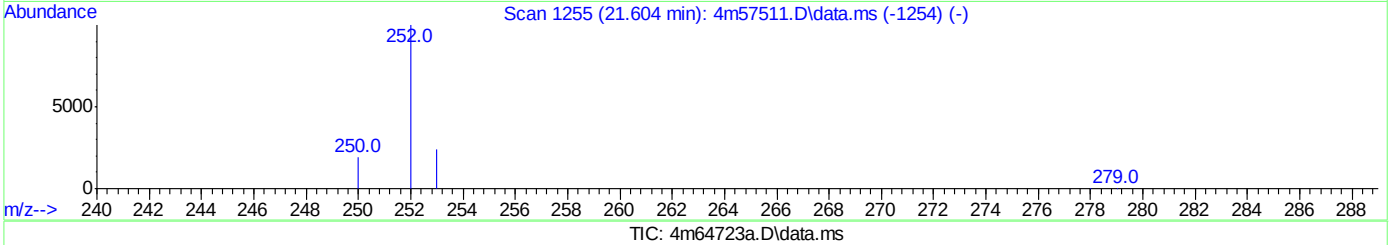
Quantitation Report (Qedit)

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

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

7.6.30

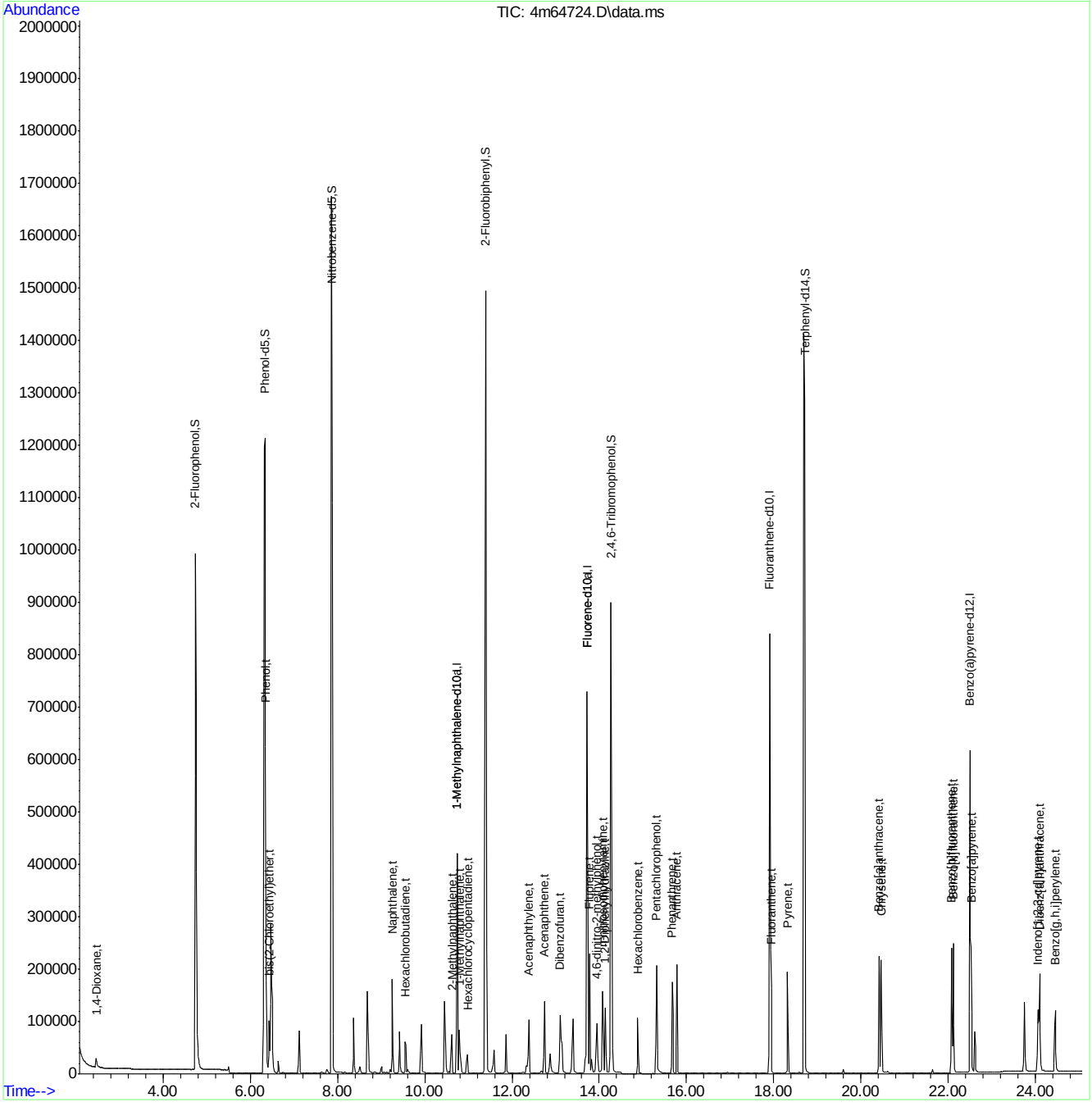
7

SGS ACCUTEST JC19996

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

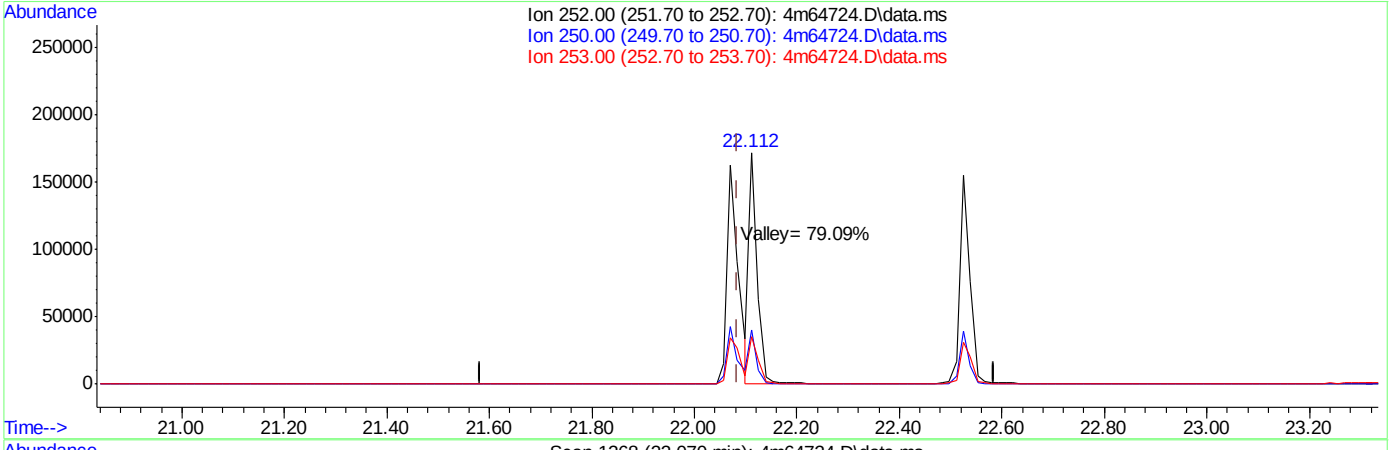


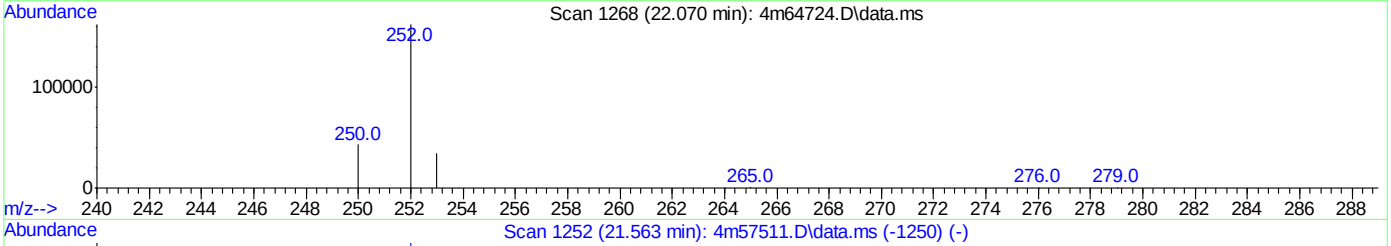
SGS ACCUTEST JC19996

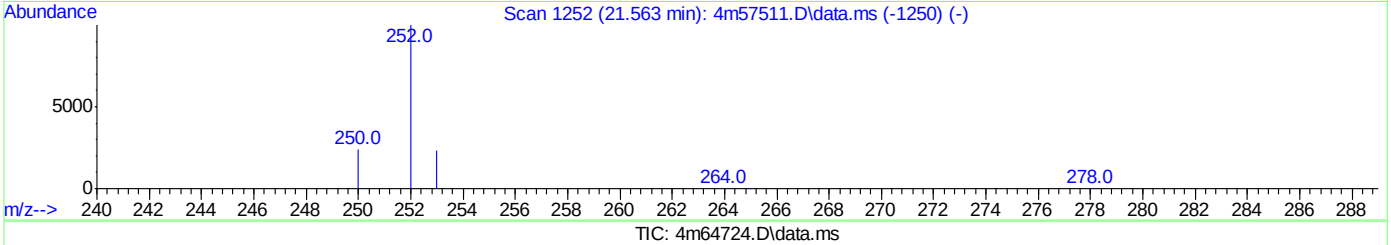
Quantitation Report (Qedit)

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

SGS ACCUTEST JC19996

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 JC19996

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

7.6.31

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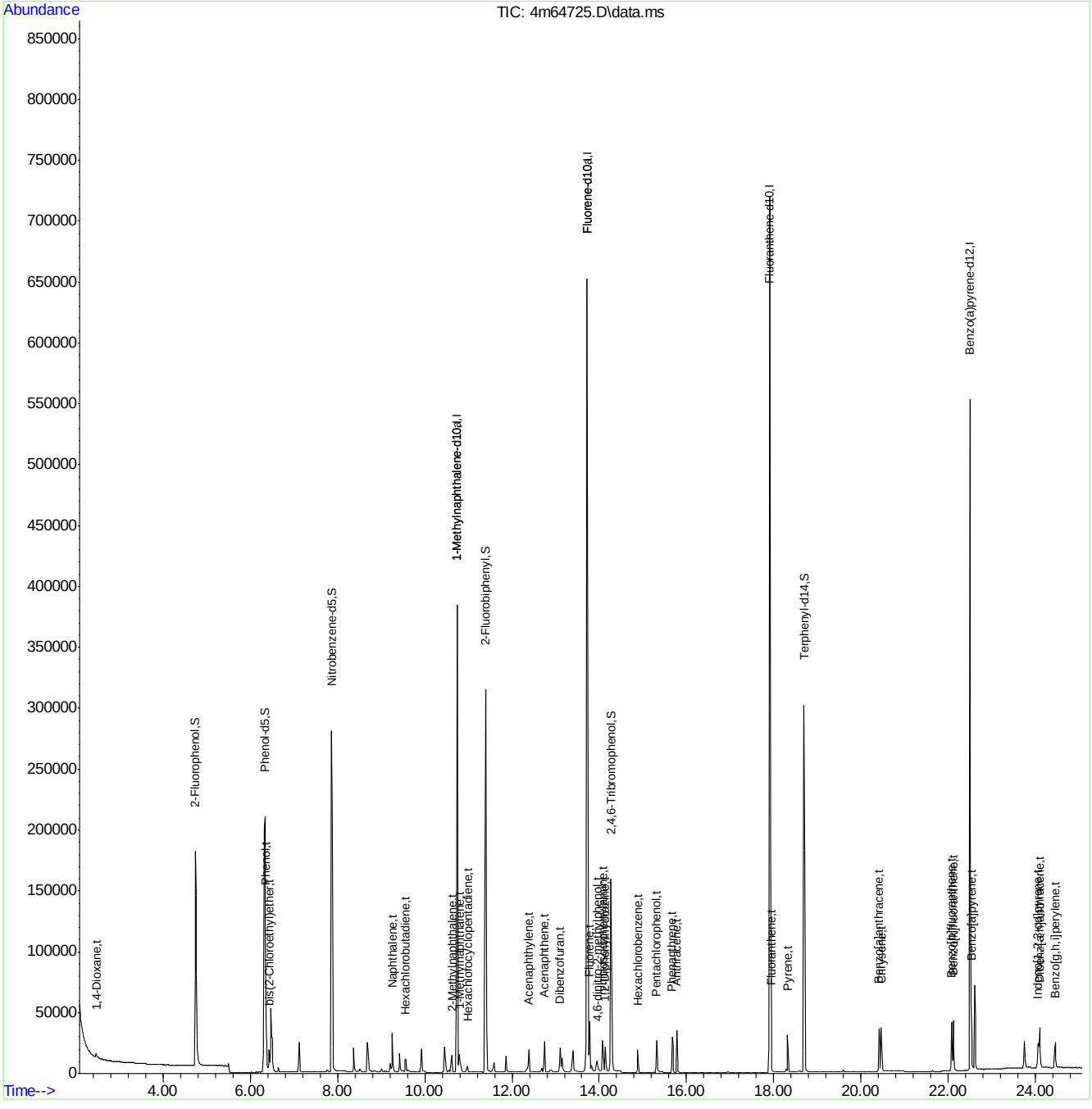
SGS ACCUTEST JC19996

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

7.6.32

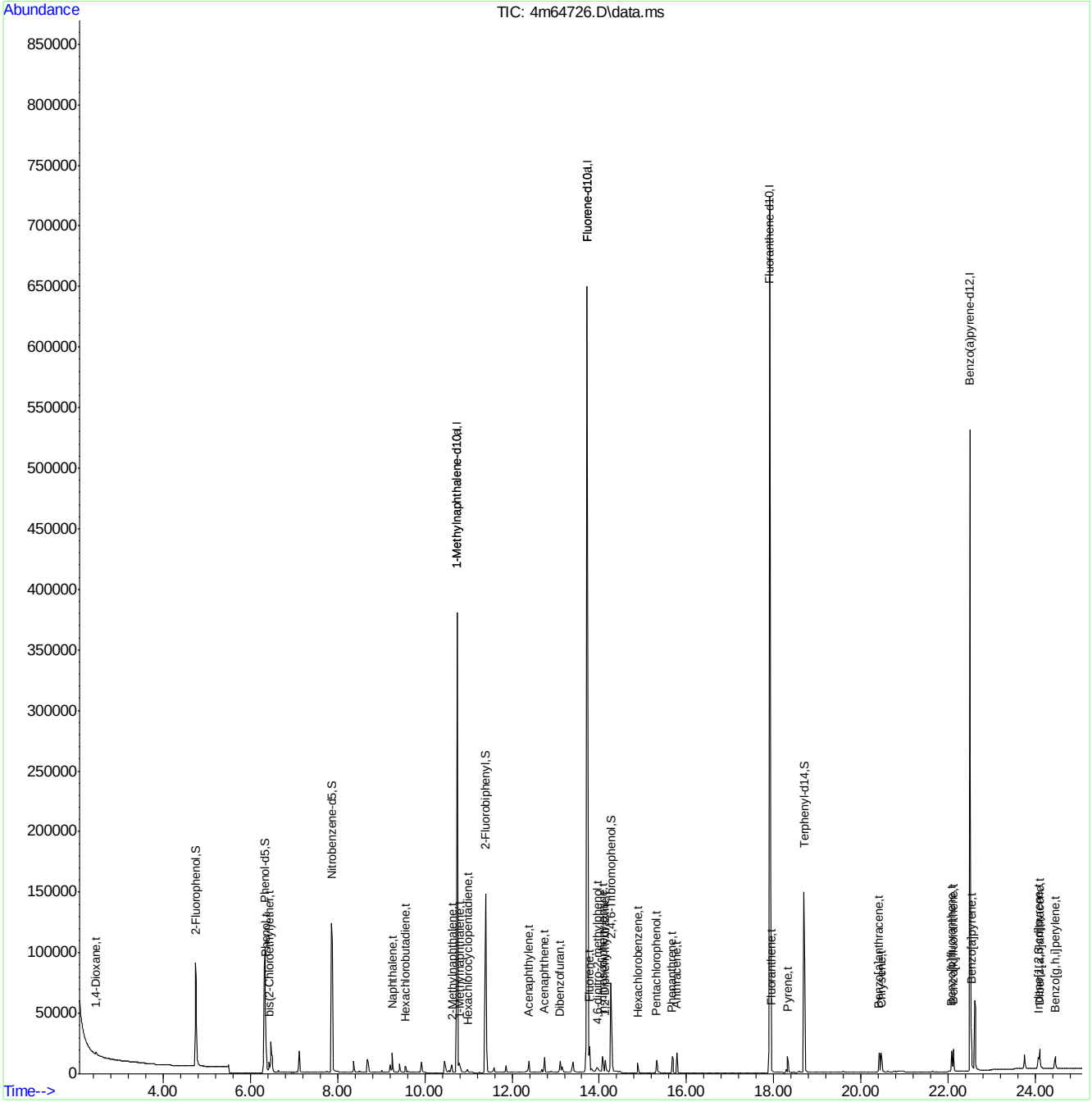
7

SGS ACCUTEST JC19996

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 JC19996

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

7.6.33

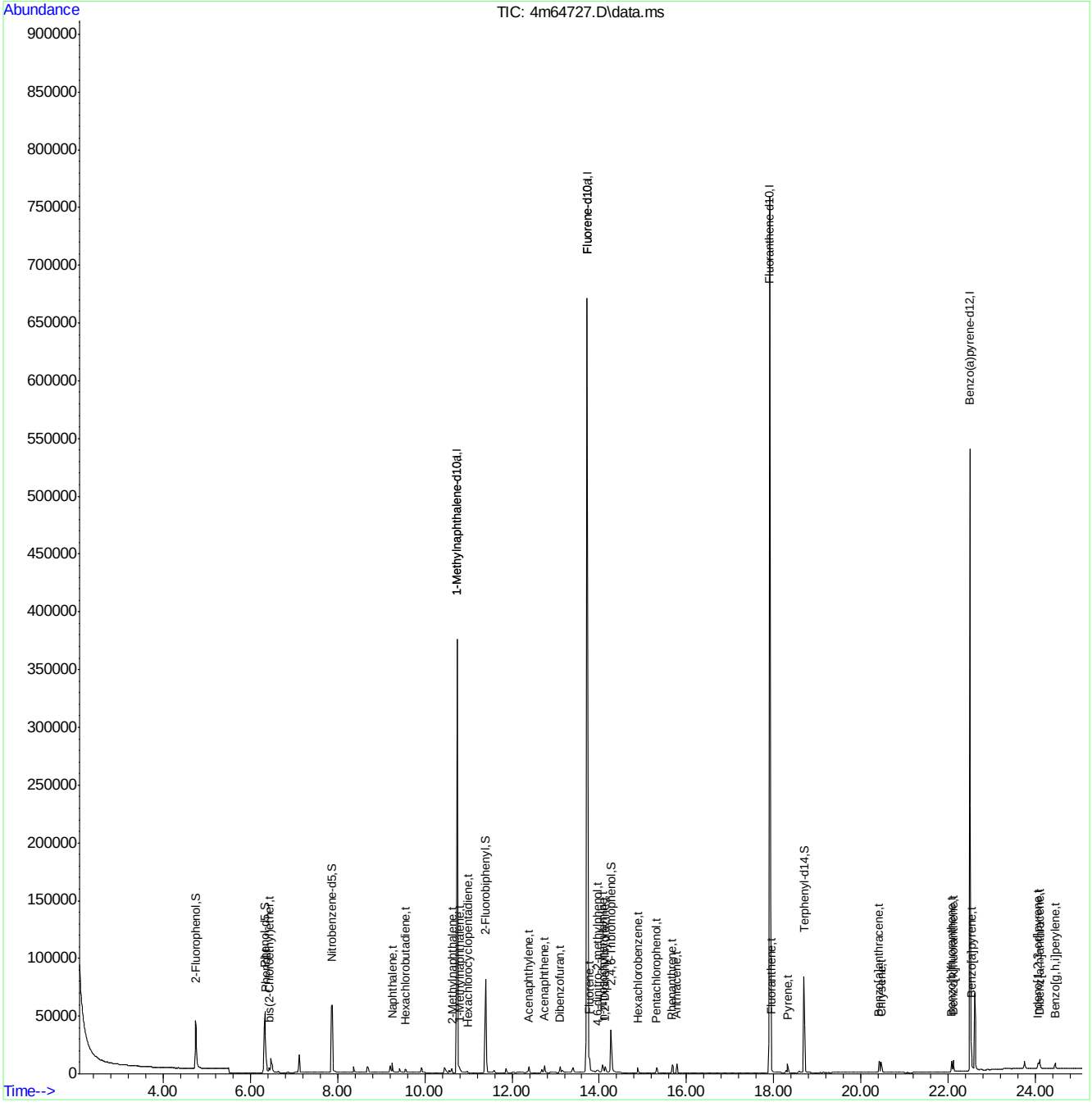
7

SGS ACCUTEST JC19996

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



M4M2881SIM.M Thu Apr 14 15:24:57 2016 MANAGER Page: 3

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 JC19996

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

7.6.34

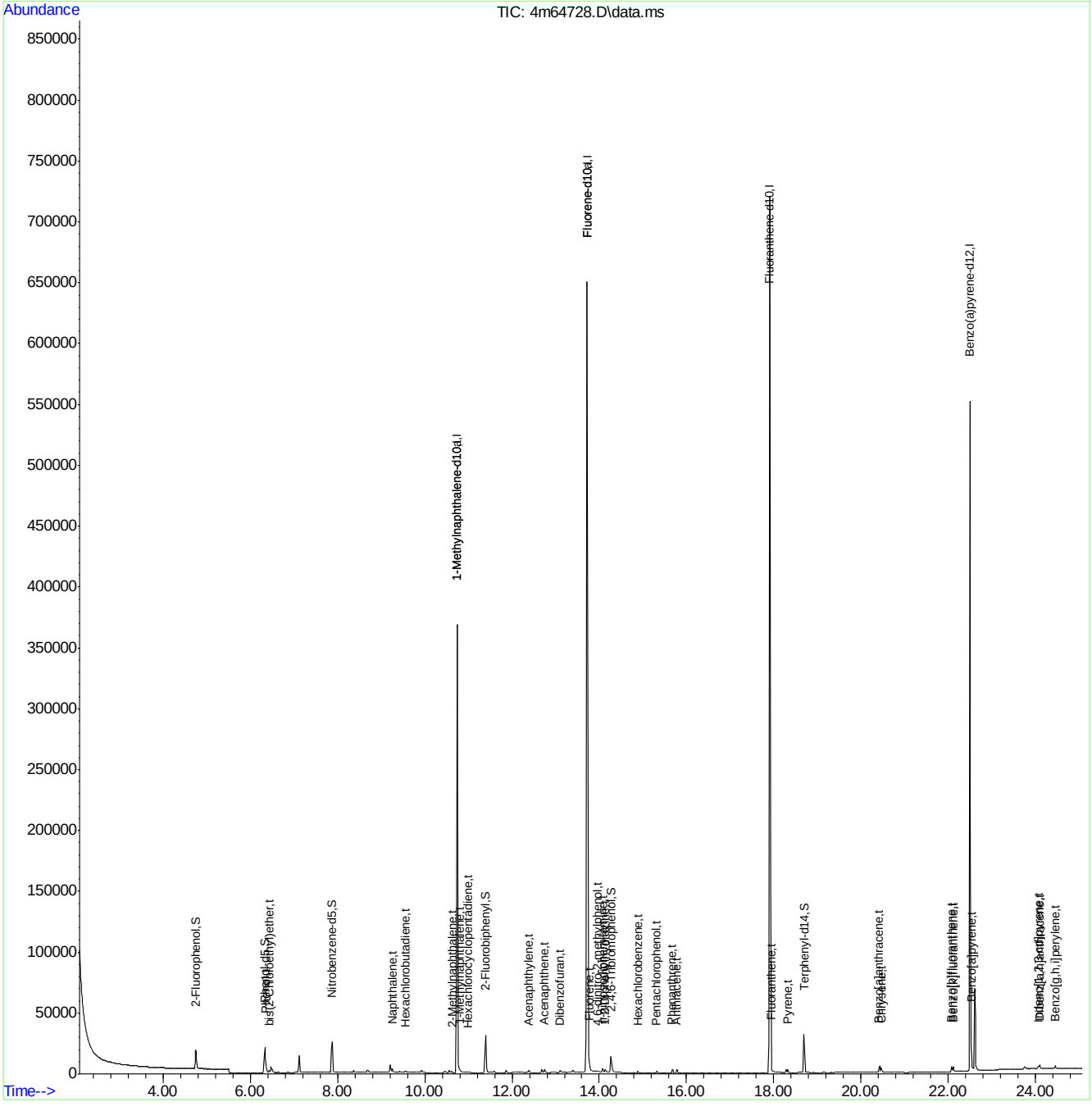
7

SGS ACCUTEST JC19996

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 JC19996

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 JC19996

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

7.6.35

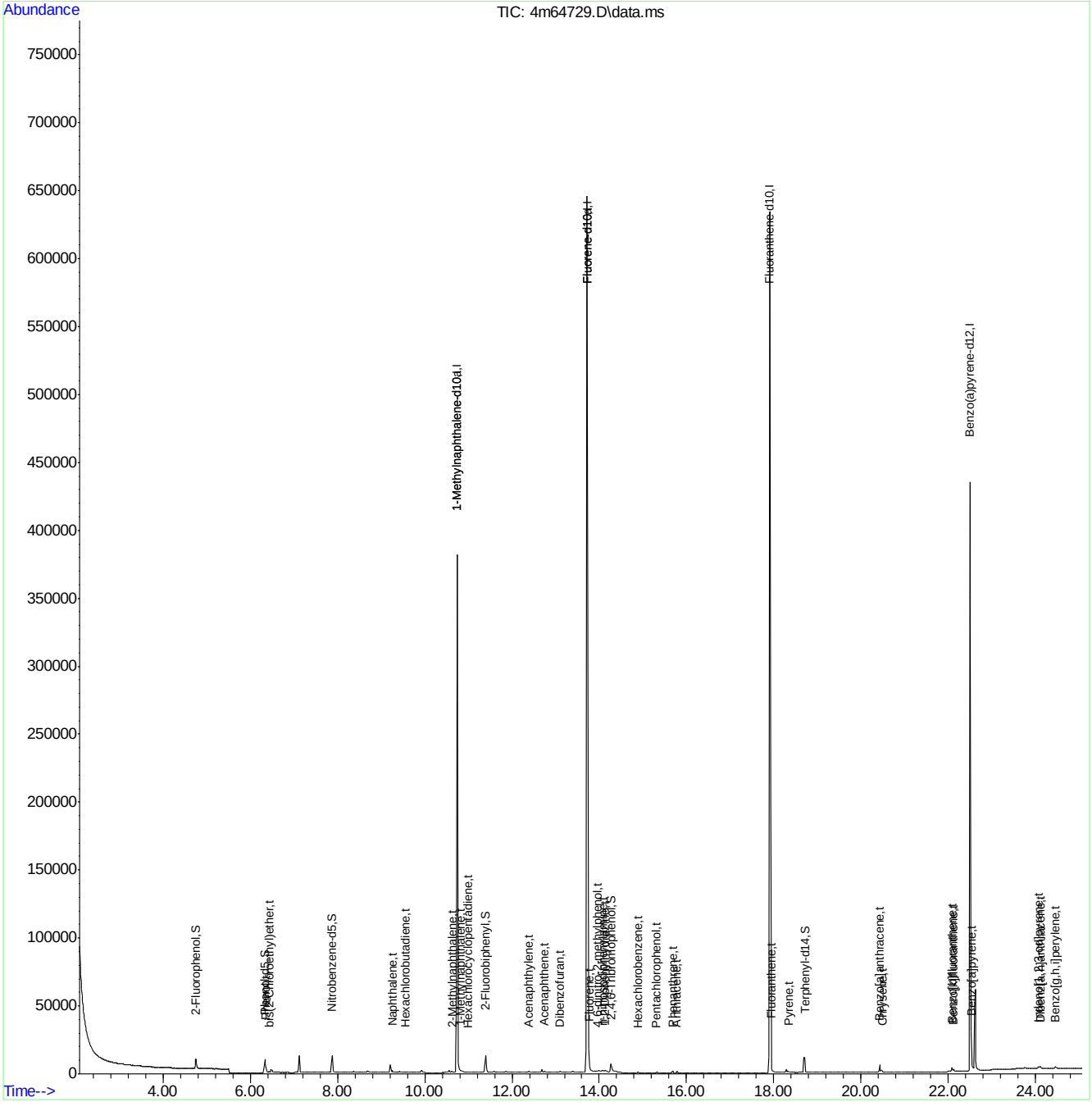
7

SGS ACCUTEST JC19996

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



SGS ACCUTEST JC19996

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

SGS ACCUTEST JC19996

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

7.6.36

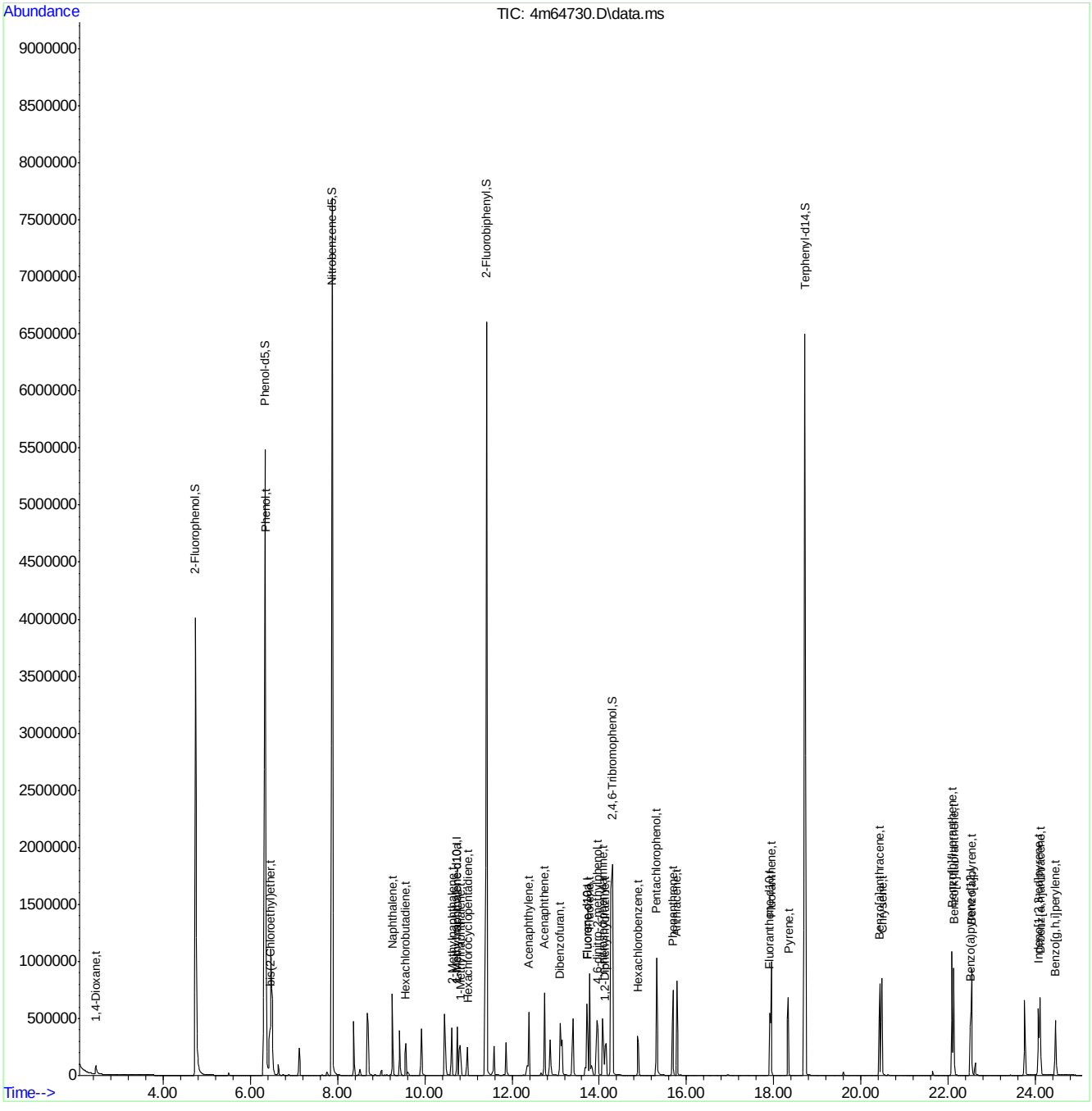
7

SGS ACCUTEST JC19996

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 JC19996

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

7.6.37

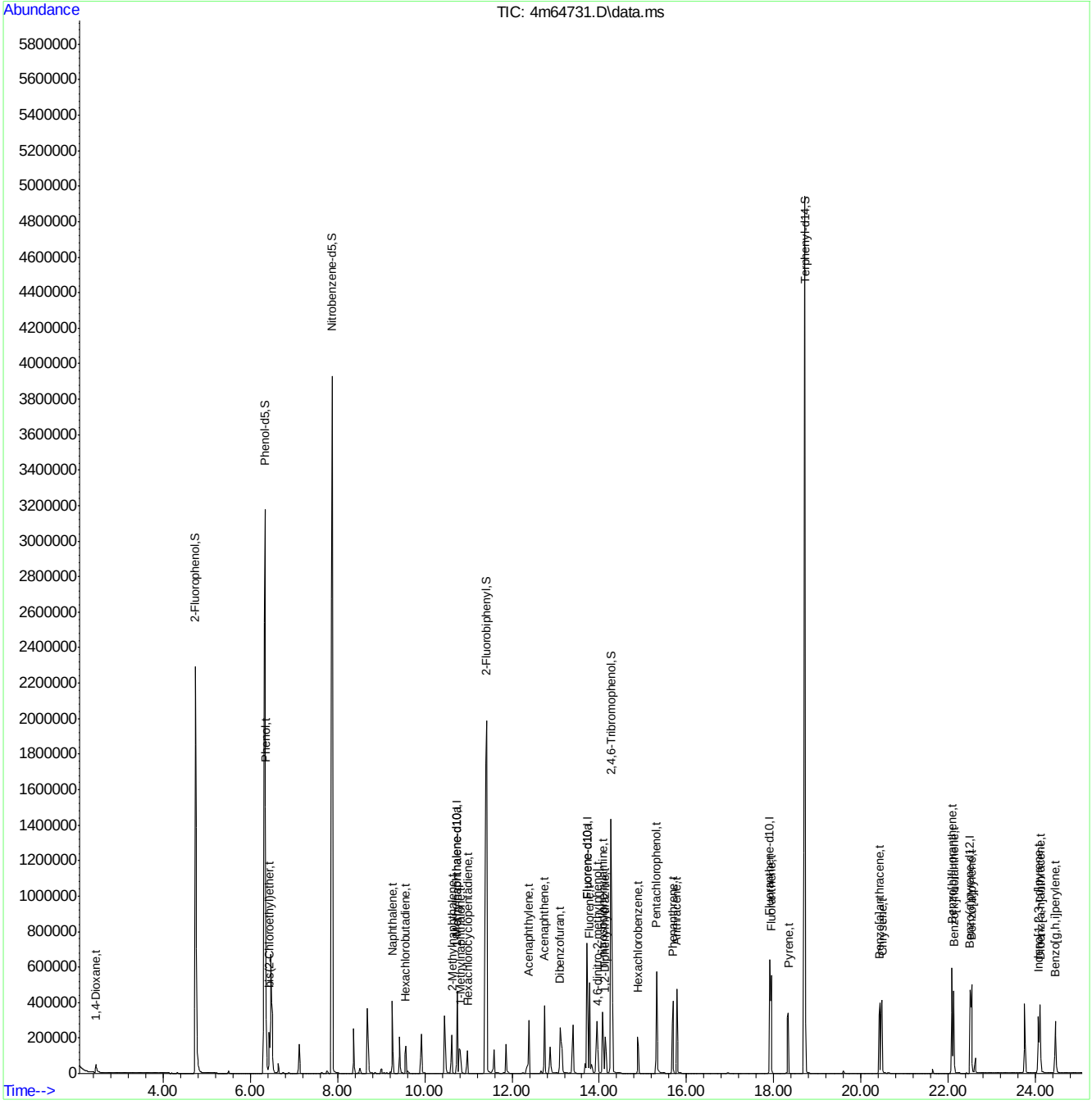
7

SGS ACCUTEST JC19996

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

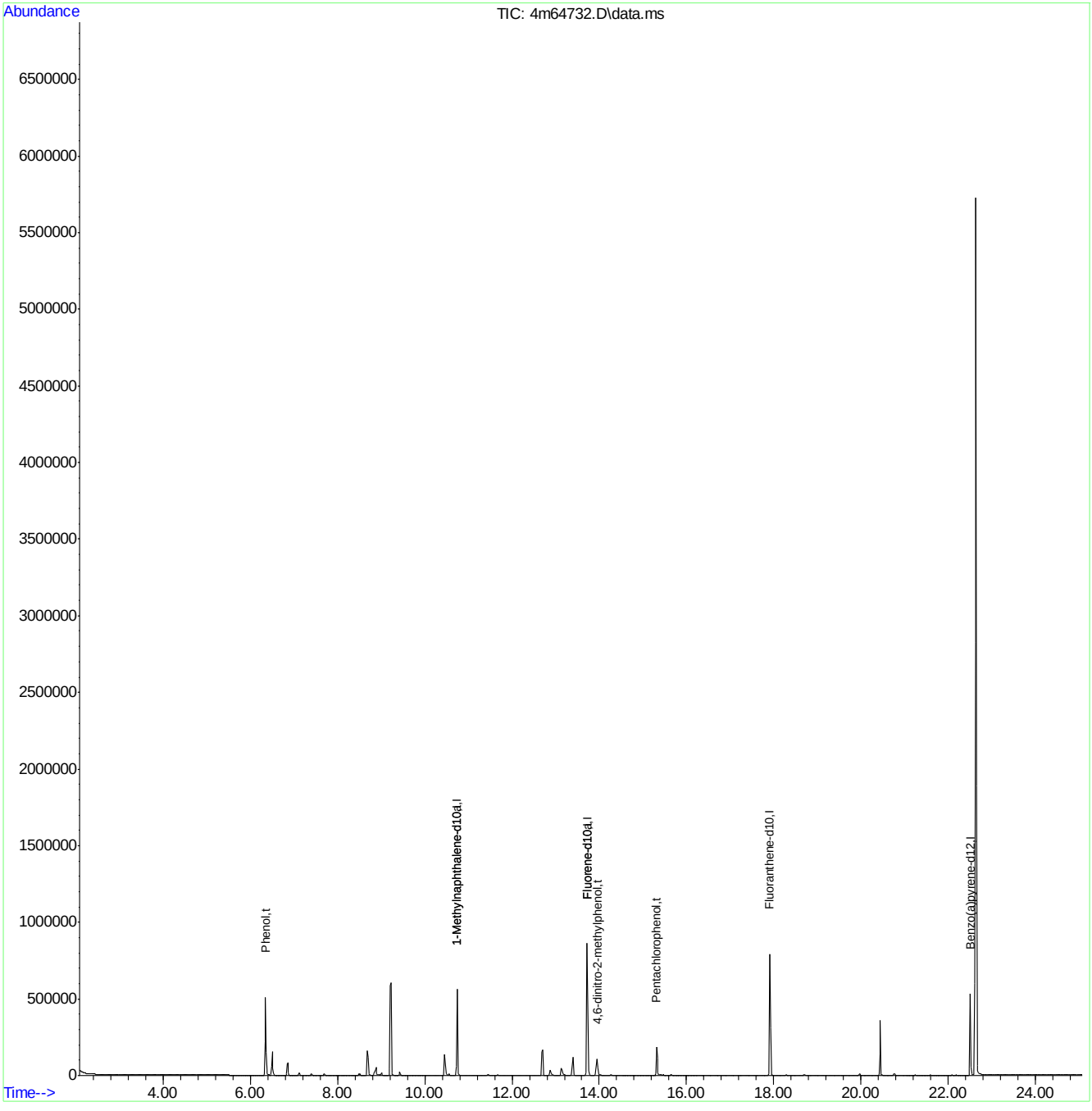
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19996

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 JC19996

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)

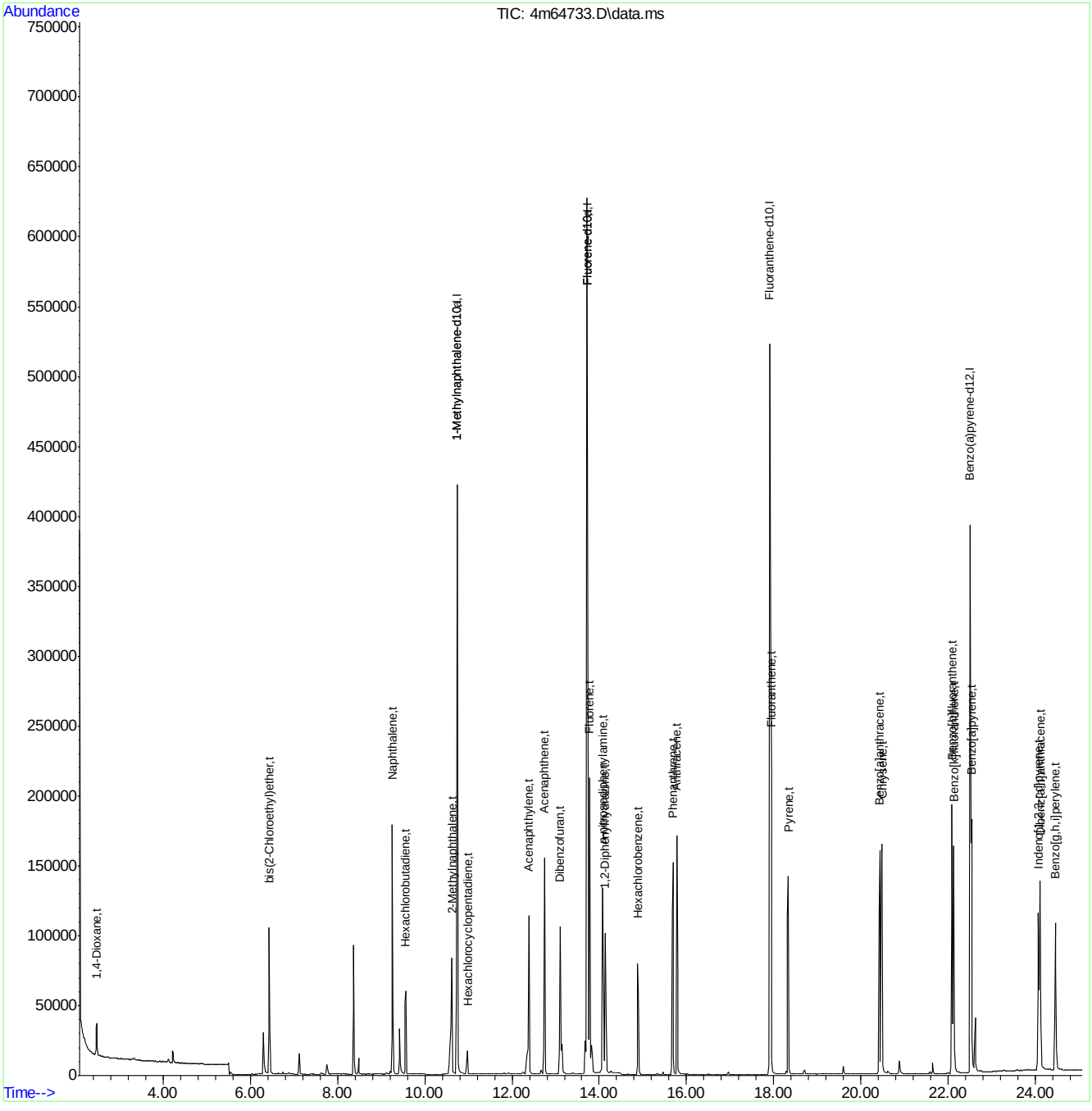
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19996

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



M4M2881SIM.M Thu Apr 14 16:31:43 2016 MANAGER Page: 3

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

7.6.40

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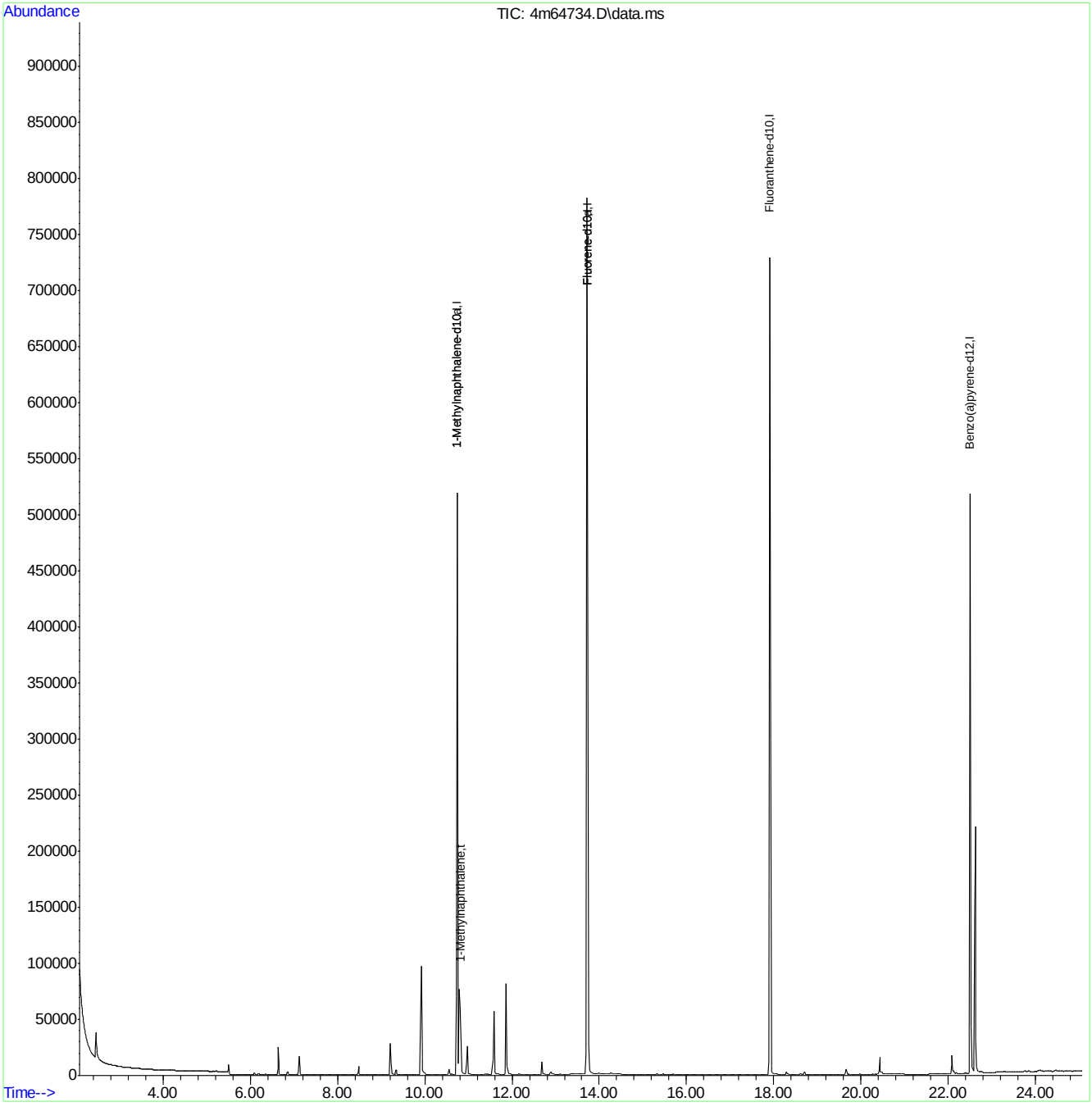
SGS ACCUTEST JC19996

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

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2919\
Data File : 4m65260.D
Acq On : 13 May 2016 11:15 am
Operator : ashleyd
Sample : cc2881-1.0
Misc : op93743a,e4m2919
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 24 13:01:08 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

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1-Methylnaphthalene-d10	10.511	152	320073	4.00	ppm	#	0.00
12) Fluorene-d10	13.489	176	608916	4.00	ppm		0.00
22) Fluoranthene-d10	17.685	212	1032609	4.00	ppm		0.02
28) Benzo(a)pyrene-d12	22.284	264	795233	4.00	ppm		0.01
35) 1-Methylnaphthalene-d10a	10.511	152	320073	4.00	ppm	#	0.00
38) Fluorene-d10a	13.489	176	608916	4.00	ppm		0.00
System Monitoring Compounds							
2) 2-Fluorophenol	4.548	112	830297	19.81	ppm		-0.09
Spiked Amount 50.000	Range 11 - 58		Recovery = 39.62%				
3) Phenol-d5	6.136	99	1426186	20.24	ppm		-0.06
Spiked Amount 50.000			Recovery = 40.48%				
6) Nitrobenzene-d5	7.651	82	1391546	22.02	ppm		-0.06
Spiked Amount 50.000			Recovery = 44.04%				
11) 2-Fluorobiphenyl	11.179	172	2139884	23.16	ppm		0.01
Spiked Amount 50.000			Recovery = 46.32%				
17) 2,4,6-Tribromophenol	14.038	330	704642	21.70	ppm		0.00
Spiked Amount 50.000			Recovery = 43.40%				
25) Terphenyl-d14	18.495	244	2988351	21.42	ppm		0.03
Spiked Amount 50.000			Recovery = 42.84%				
Target Compounds							Qvalue
4) Phenol	6.163	94	373670	5.18	ppm		73
5) bis(2-Chloroethyl)ether	6.232	93	54107	0.99	ppm	#	49
7) Naphthalene	9.028	128	181331	1.01	ppm		98
8) Hexachlorobutadiene	9.338	225	48526	1.09	ppm		90
9) 2-Methylnaphthalene	10.392	142	101079	1.29	ppm		82
10) Hexachlorocyclopentadiene	10.750	237	66544	2.50	ppm		87
13) Acenaphthylene	12.148	152	150685	1.08	ppm		94
14) Acenaphthene	12.503	153	94677	1.05	ppm		89
15) Dibenzofuran	12.858	168	115166	0.86	ppm		21
16) Fluorene	13.537	166	169538	1.04	ppm		97
18) Hexachlorobenzene	14.655	284	63030	0.99	ppm		78
19) Pentachlorophenol	15.088	266	168980	6.48	ppm		92
20) Phenanthrene	15.444	178	223298	1.02	ppm		99
21) Anthracene	15.536	178	218671	1.05	ppm		99
23) Fluoranthene	17.704	202	253971	0.91	ppm		92
24) Pyrene	18.099	202	285416	1.04	ppm		89
26) Benzo[a]anthracene	20.208	228	247639	0.97	ppm		100
27) Chrysene	20.265	228	240553	0.96	ppm		93
29) Benzo[b]fluoranthene	21.858	252	296646	1.04	ppm		94
30) Benzo[k]fluoranthene	21.899	252	216776	0.91	ppm		90
31) Benzo[a]pyrene	22.312	252	240088	1.01	ppm		95
32) Indeno[1,2,3-cd]pyrene	23.799	276	295758	1.00	ppm		98
33) Dibenz[a,h]anthracene	23.840	278	224626	0.94	ppm		74
34) Benzo[g,h,i]perylene	24.171	276	250950	1.00	ppm		100
36) 1,4-Dioxane	2.299	88	19392	0.93	ppm	#	41
37) 1-Methylnaphthalene	10.583	142	91309	1.22	ppm		85
39) 4,6-dinitro-2-methylph...	13.728	198	142666	7.67	ppm		76

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2919\
Data File : 4m65260.D
Acq On : 13 May 2016 11:15 am
Operator : ashleyd
Sample : cc2881-1.0
Misc : op93743a,e4m2919
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 24 13:01:08 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

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) 1,2-Diphenylhydrazine	13.895	77	138508	0.96	ppm	97
41) n-nitrosodiphenylamine	13.847	169	90491	0.85	ppm	92

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

7.6.41

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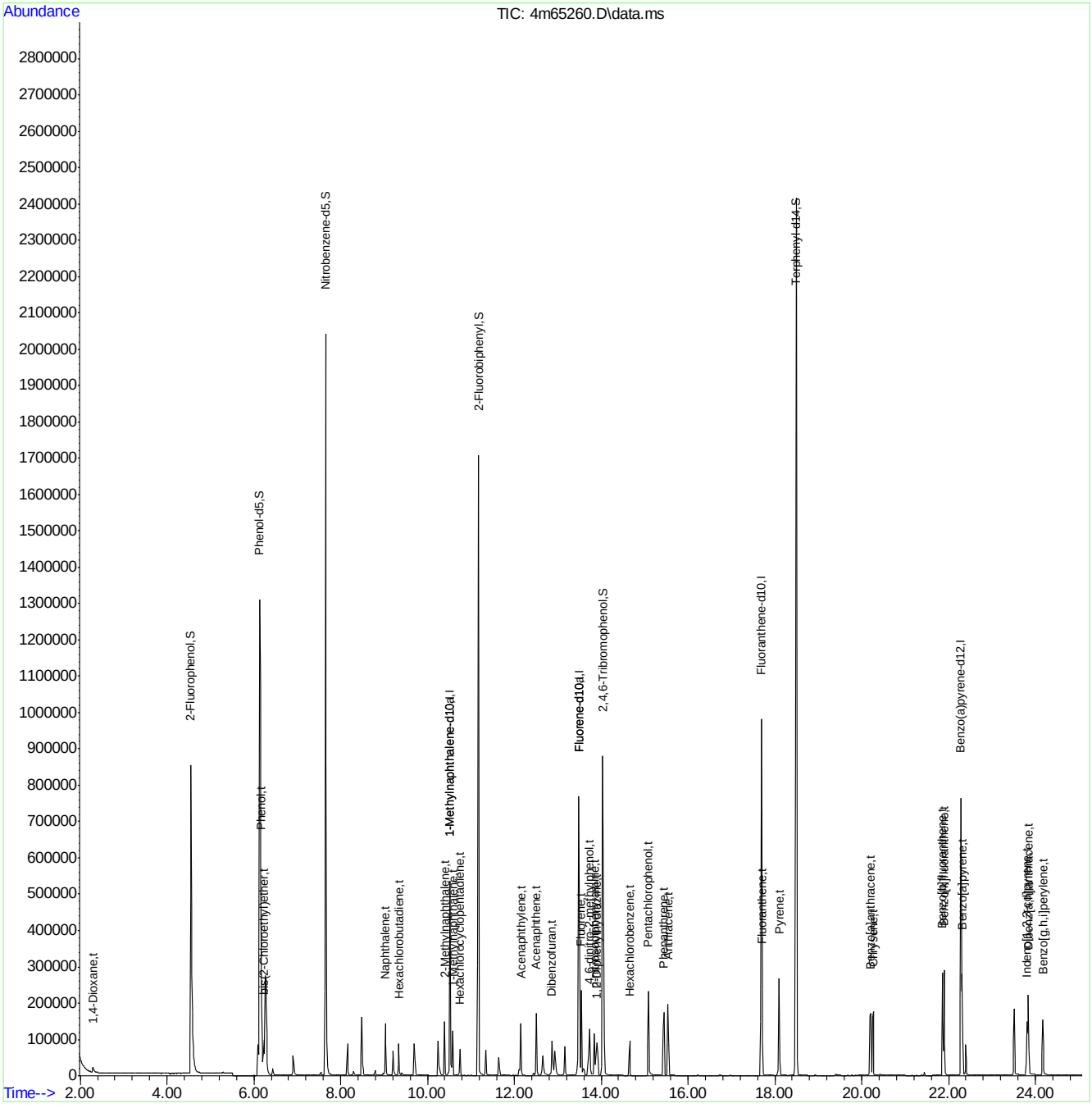
SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2919\
Data File : 4m65260.D
Acq On : 13 May 2016 11:15 am
Operator : ashleyd
Sample : cc2881-1.0
Misc : op93743a,e4m2919
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 24 13:01:08 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



M4M2881SIM.M Tue May 24 13:01:31 2016 MANAGER Page: 3

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2925\
Data File : 4m65349.D
Acq On : 18 May 2016 12:52 pm
Operator : linseyk
Sample : cc2881-1
Misc : op93986a,e4m2925
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 18 13:21:01 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	10.583	152	305320	4.00	ppm	# 0.07
12) Fluorene-d10	13.561	176	571450	4.00	ppm	0.07
22) Fluoranthene-d10	17.742	212	909134	4.00	ppm	0.08
28) Benzo(a)pyrene-d12	22.340	264	716654	4.00	ppm	0.07
35) 1-Methylnaphthalene-d10a	10.583	152	305320	4.00	ppm	# 0.07
38) Fluorene-d10a	13.561	176	571450	4.00	ppm	# 0.07
System Monitoring Compounds						
2) 2-Fluorophenol	4.621	112	794646	19.88	ppm	-0.02
Spiked Amount 50.000	Range 11 - 58		Recovery = 39.76%			
3) Phenol-d5	6.218	99	1405197	20.90	ppm	0.02
Spiked Amount 50.000			Recovery = 41.80%			
6) Nitrobenzene-d5	7.729	82	1380253	22.90	ppm	0.02
Spiked Amount 50.000			Recovery = 45.80%			
11) 2-Fluorobiphenyl	11.251	172	2090641	23.72	ppm	0.09
Spiked Amount 50.000			Recovery = 47.44%			
17) 2,4,6-Tribromophenol	14.110	330	640593	21.02	ppm	0.08
Spiked Amount 50.000			Recovery = 42.04%			
25) Terphenyl-d14	18.551	244	2644001	21.53	ppm	0.09
Spiked Amount 50.000			Recovery = 43.06%			
Target Compounds						Qvalue
4) Phenol	6.232	94	368478	5.35	ppm	73
5) bis(2-Chloroethyl)ether	6.301	93	53363	1.03	ppm	# 63
7) Naphthalene	9.106	128	189399	1.10	ppm	100
8) Hexachlorobutadiene	9.415	225	47868	1.13	ppm	99
9) 2-Methylnaphthalene	10.463	142	90336	1.21	ppm	76
10) Hexachlorocyclopentadiene	10.821	237	69037	2.71	ppm	85
13) Acenaphthylene	12.214	152	126975	0.97	ppm	88
14) Acenaphthene	12.569	153	77054	0.91	ppm	76
15) Dibenzofuran	12.946	168	117162	0.93	ppm	71
16) Fluorene	13.608	166	153170	1.00	ppm	98
18) Hexachlorobenzene	14.717	284	60351	1.01	ppm	100
19) Pentachlorophenol	15.165	266	102186	4.18	ppm	86
20) Phenanthrene	15.506	178	214111	1.04	ppm	91
21) Anthracene	15.614	178	215715	1.11	ppm	98
23) Fluoranthene	17.779	202	260183	1.06	ppm	98
24) Pyrene	18.175	202	258288	1.07	ppm	97
26) Benzo[a]anthracene	20.265	228	245539	1.10	ppm	98
27) Chrysene	20.321	228	231320	1.05	ppm	97
29) Benzo[b]fluoranthene	21.913	252	264627	1.03	ppm	91
30) Benzo[k]fluoranthene	21.954	252	218226	1.01	ppm	91
31) Benzo[a]pyrene	22.367	252	226062	1.06	ppm	98
32) Indeno[1,2,3-cd]pyrene	23.868	276	282975	1.06	ppm	99
33) Dibenz[a,h]anthracene	23.895	278	232772	1.08	ppm	90
34) Benzo[g,h,i]perylene	24.240	276	241067	1.07	ppm	100
36) 1,4-Dioxane	2.361	88	22173	1.12	ppm	# 79
37) 1-Methylnaphthalene	10.654	142	92571	1.30	ppm	80
39) 4,6-dinitro-2-methylph...	13.800	198	114270	6.74	ppm	75

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2925\
Data File : 4m65349.D
Acq On : 18 May 2016 12:52 pm
Operator : linseyk
Sample : cc2881-1
Misc : op93986a,e4m2925
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 18 13:21:01 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)
40) 1,2-Diphenylhydrazine	13.967	77	137067	1.01 ppm	99
41) n-nitrosodiphenylamine	13.919	169	89049	0.89 ppm	94

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

7.6.42

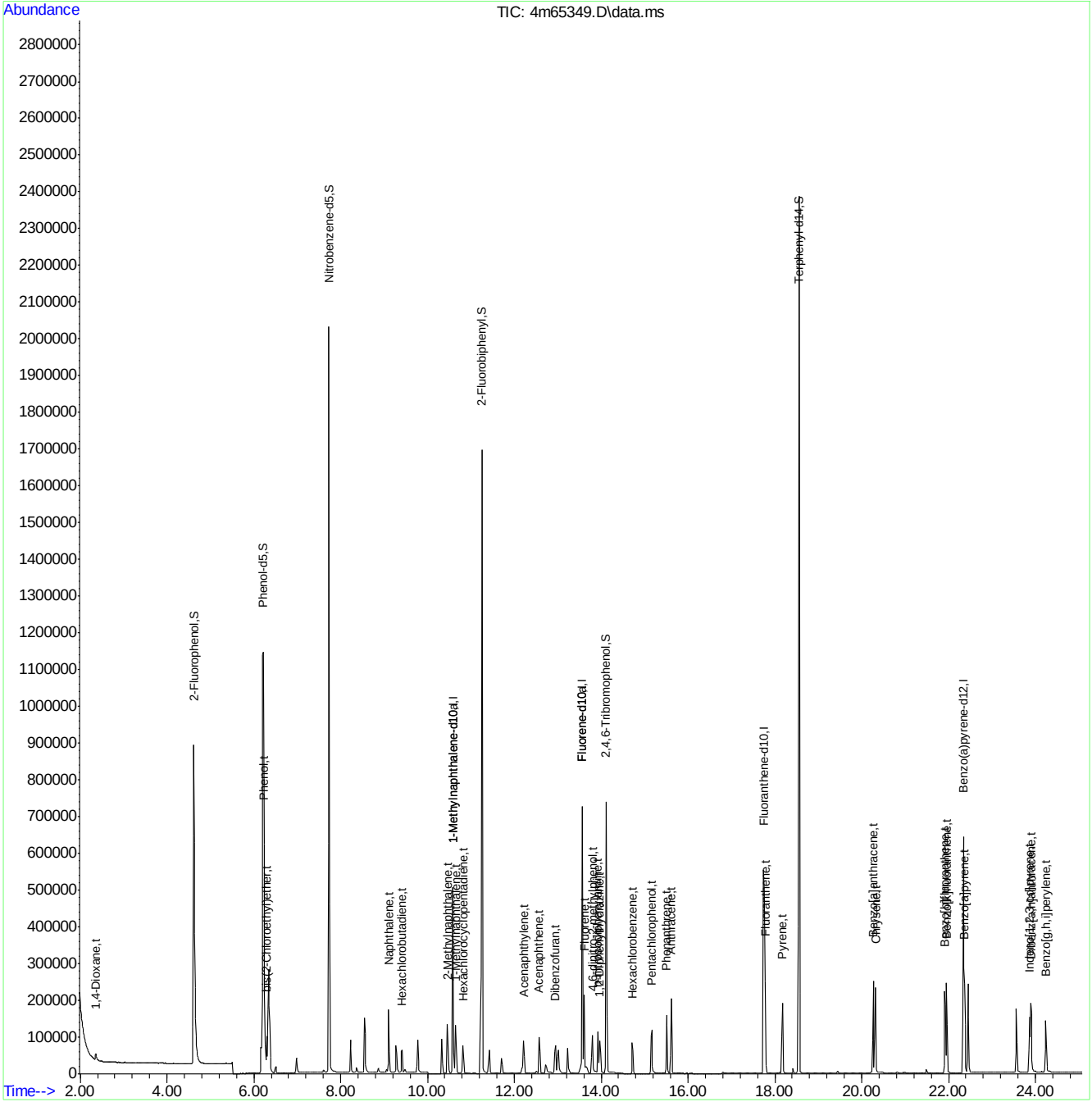
7

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2925\
Data File : 4m65349.D
Acq On : 18 May 2016 12:52 pm
Operator : linseyk
Sample : cc2881-1
Misc : op93986a,e4m2925
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 18 13:21:01 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



M4M2881SIM.M Thu May 19 09:09:45 2016 MANAGER Page: 3

SGS ACCUTEST JC19996

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

SGS ACCUTEST JC19996

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

7.6.43

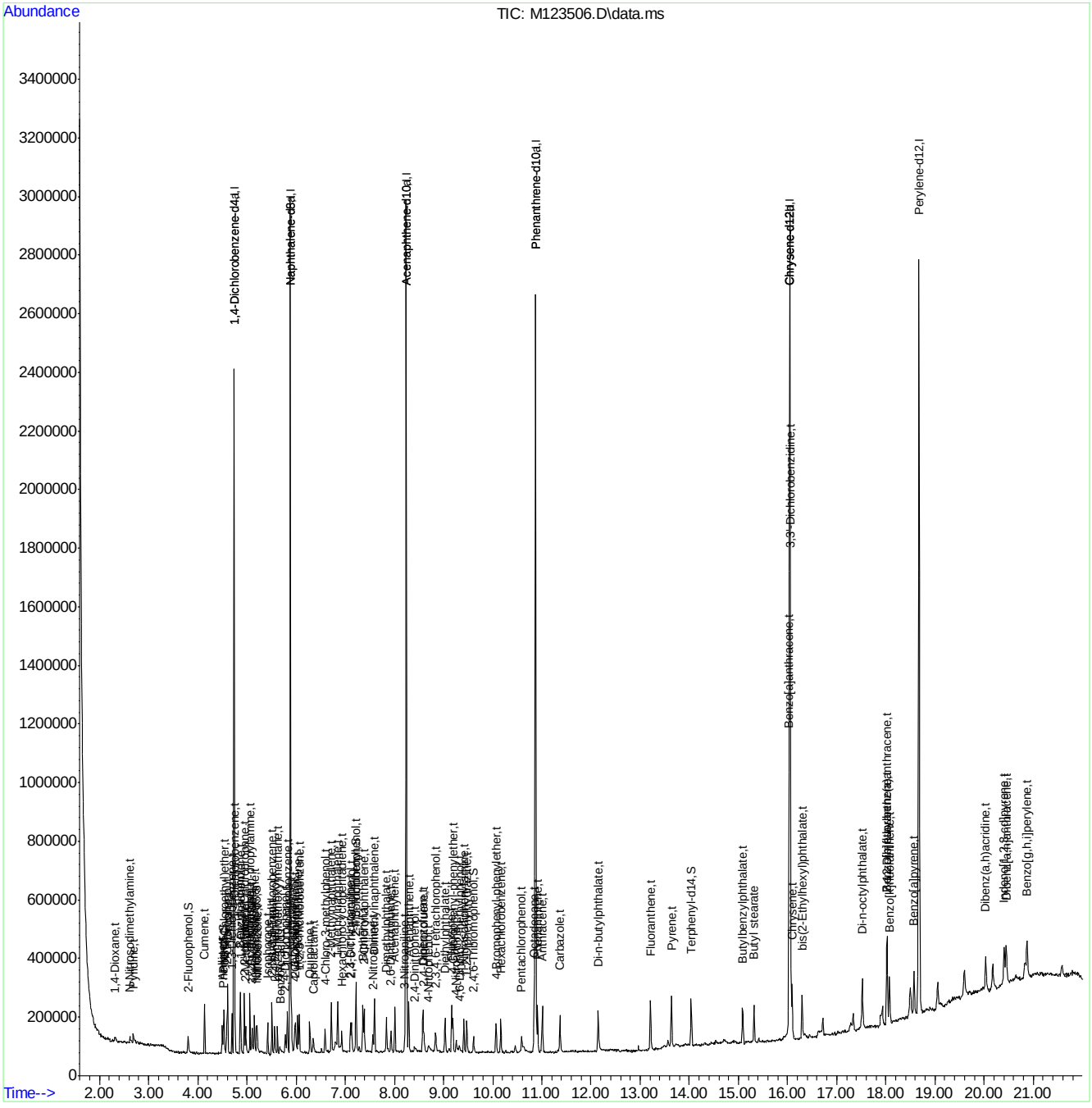
7

SGS ACCUTEST JC19996

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



SGS ACCUTEST JC19996

Manual Integration Approval Summary

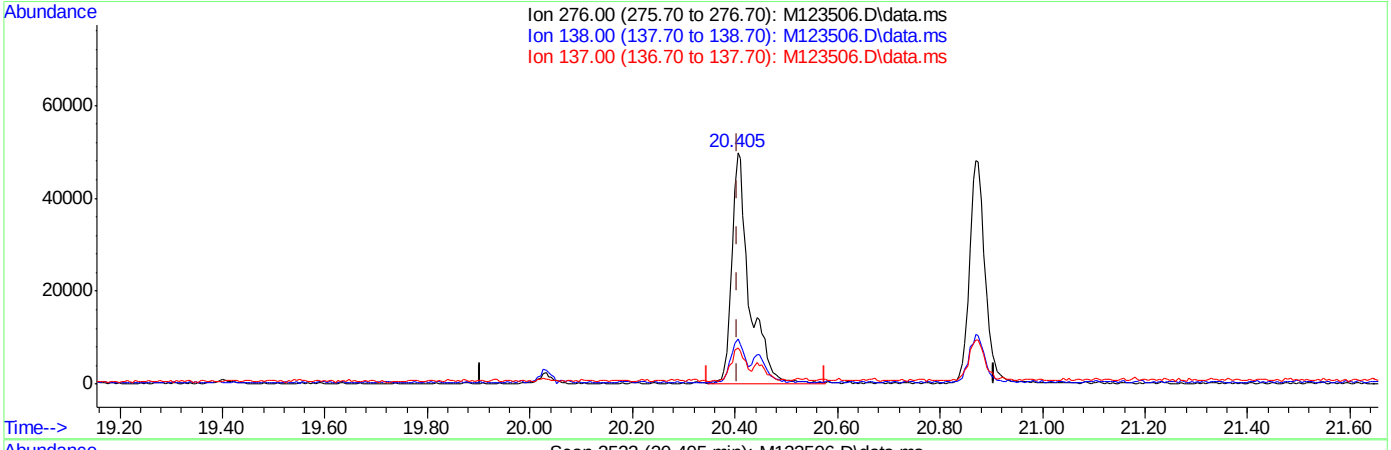
Sample Number:	EM5217-IC5217	**Method:**	SW846 8270D
Lab FileID:	M123506.D	**Analyst approved:**	04/13/16 13:03 Ashley Dye
Injection Time:	04/12/16 18:04	**Supervisor approved:**	04/13/16 13:43 Nina Pandya

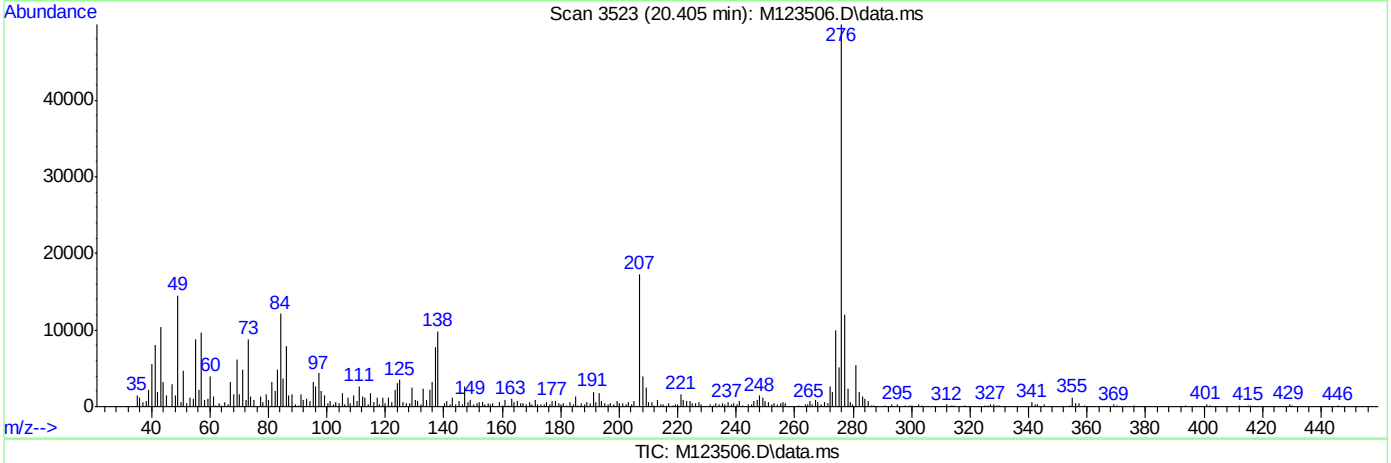
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		20.41	Overlapping peak

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

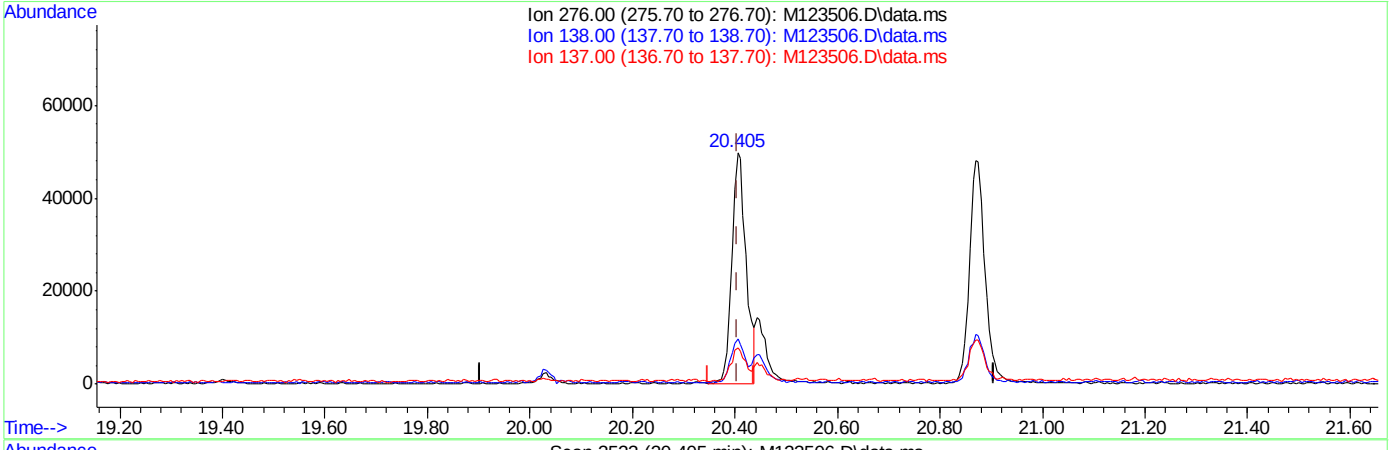
Ion	Exp%	Act%
276.00	100	100
138.00	15.30	18.78
137.00	12.70	13.78
0.00	0.00	0.00

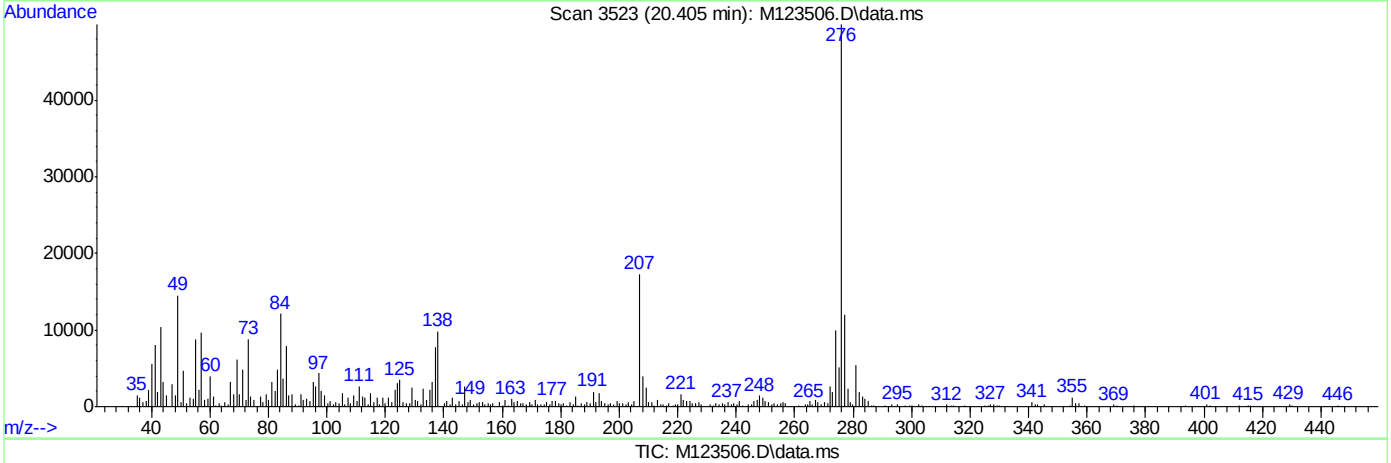
SGS ACCUTEST JC19996

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

SGS ACCUTEST JC19996

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

SGS ACCUTEST JC19996

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

7.6.44 7

SGS ACCUTEST JC19996

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

7.6.44

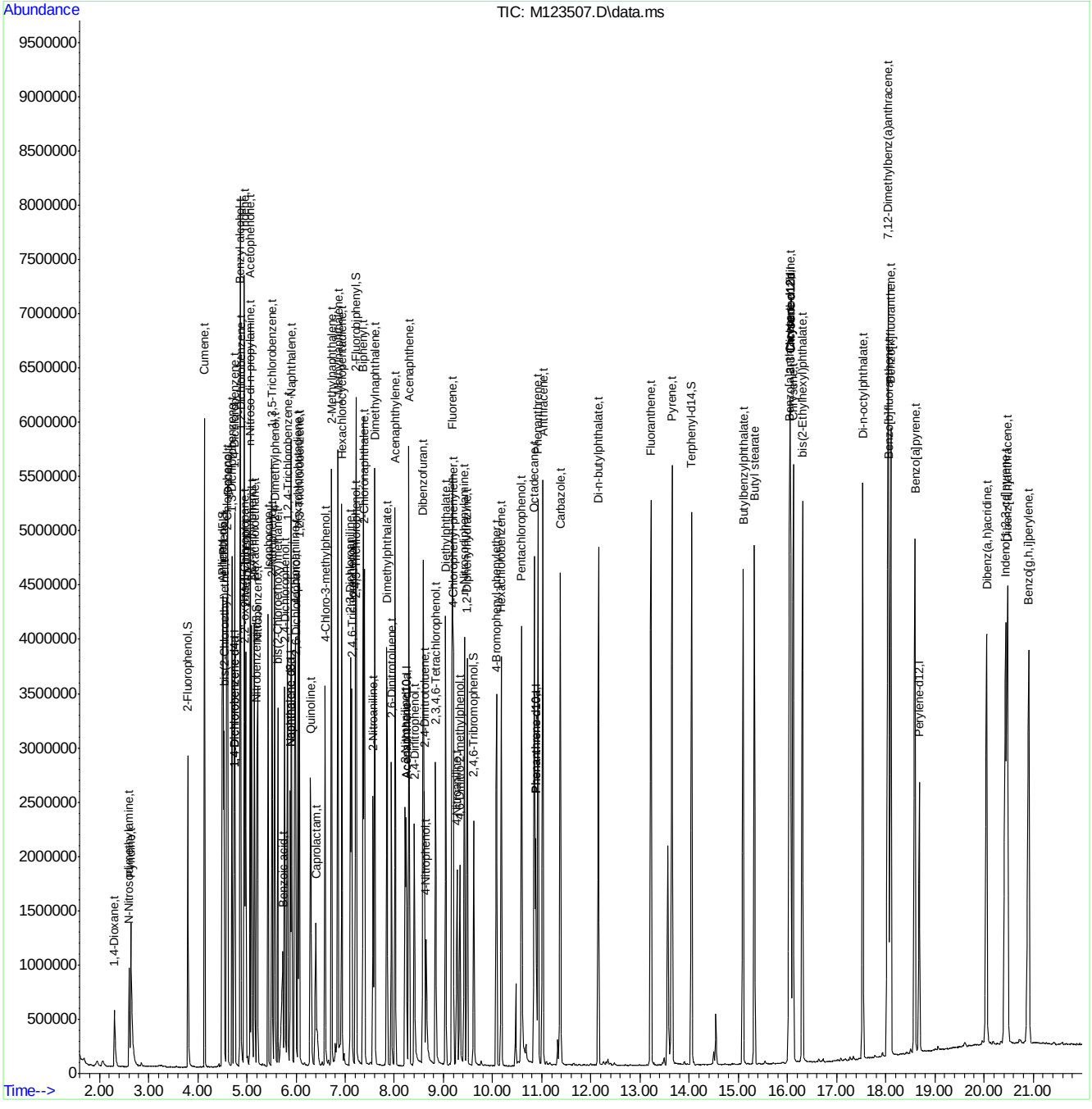
7

SGS ACCUTEST JC19996

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



SGS ACCUTEST JC19996

Manual Integration Approval Summary

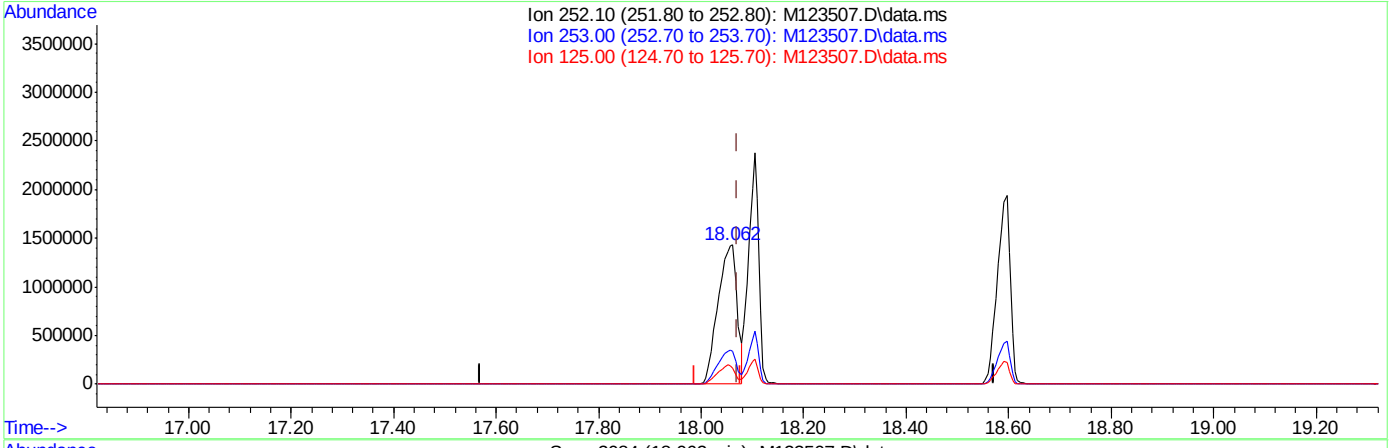
Sample Number:	EM5217-IC5217	**Method:**	SW846 8270D
Lab FileID:	M123507.D	**Analyst approved:**	04/13/16 13:03 Ashley Dye
Injection Time:	04/12/16 18:33	**Supervisor approved:**	04/13/16 13:43 Nina Pandya

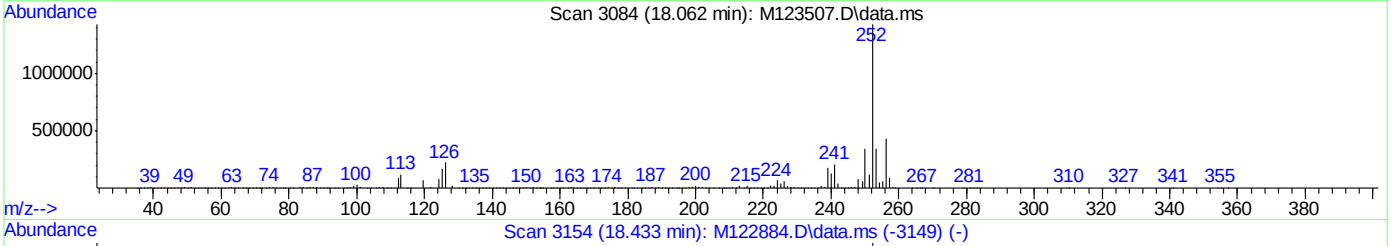
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		18.10	Poor instrument integration

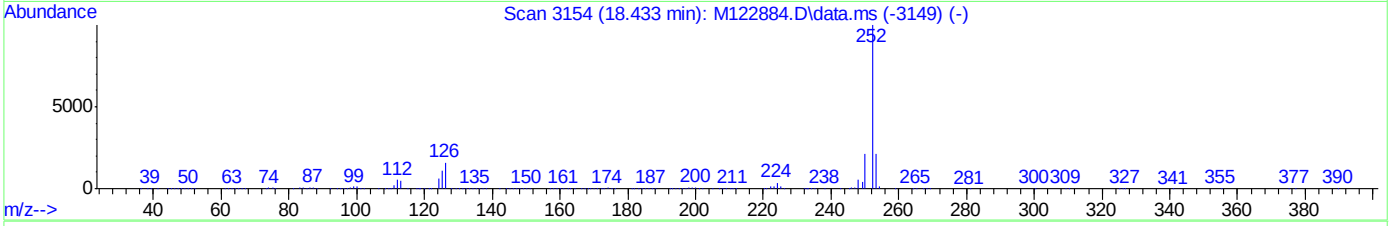
Quantitation Report (Qedit)

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

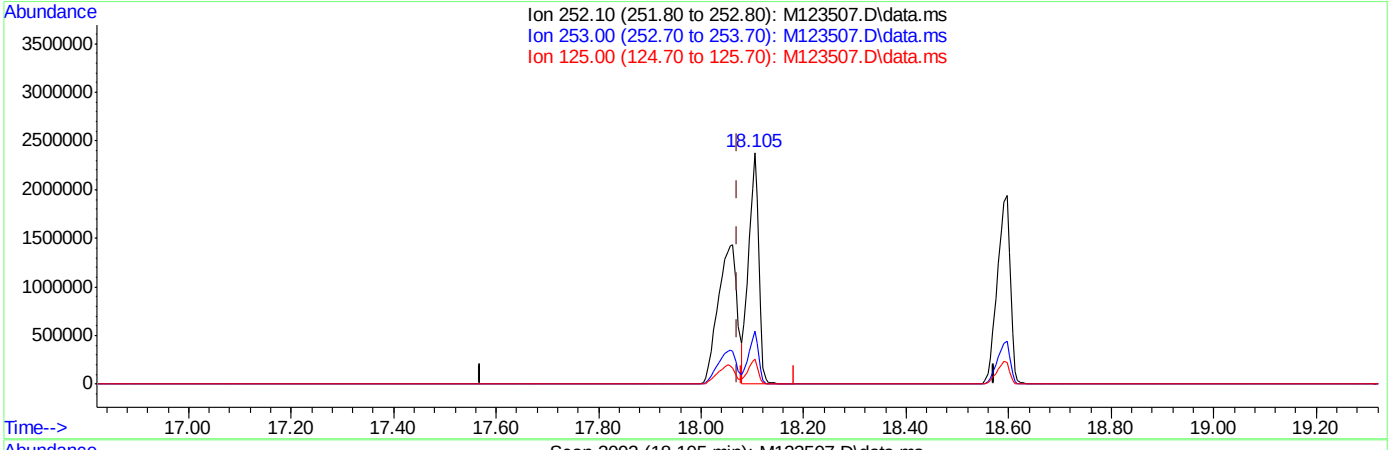
Ion	Exp%	Act%
252.10	100	100
253.00	20.70	23.89
125.00	9.70	11.62
0.00	0.00	0.00

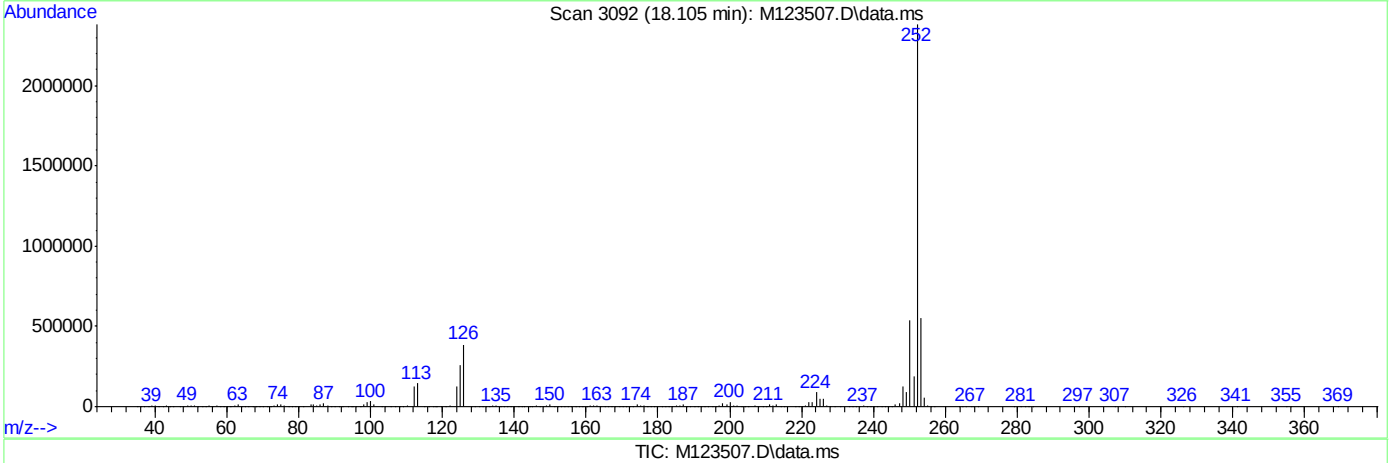
SGS ACCUTEST JC19996

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 JC19996

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

SGS ACCUTEST JC19996

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

SGS ACCUTEST JC19996

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

7.6.45

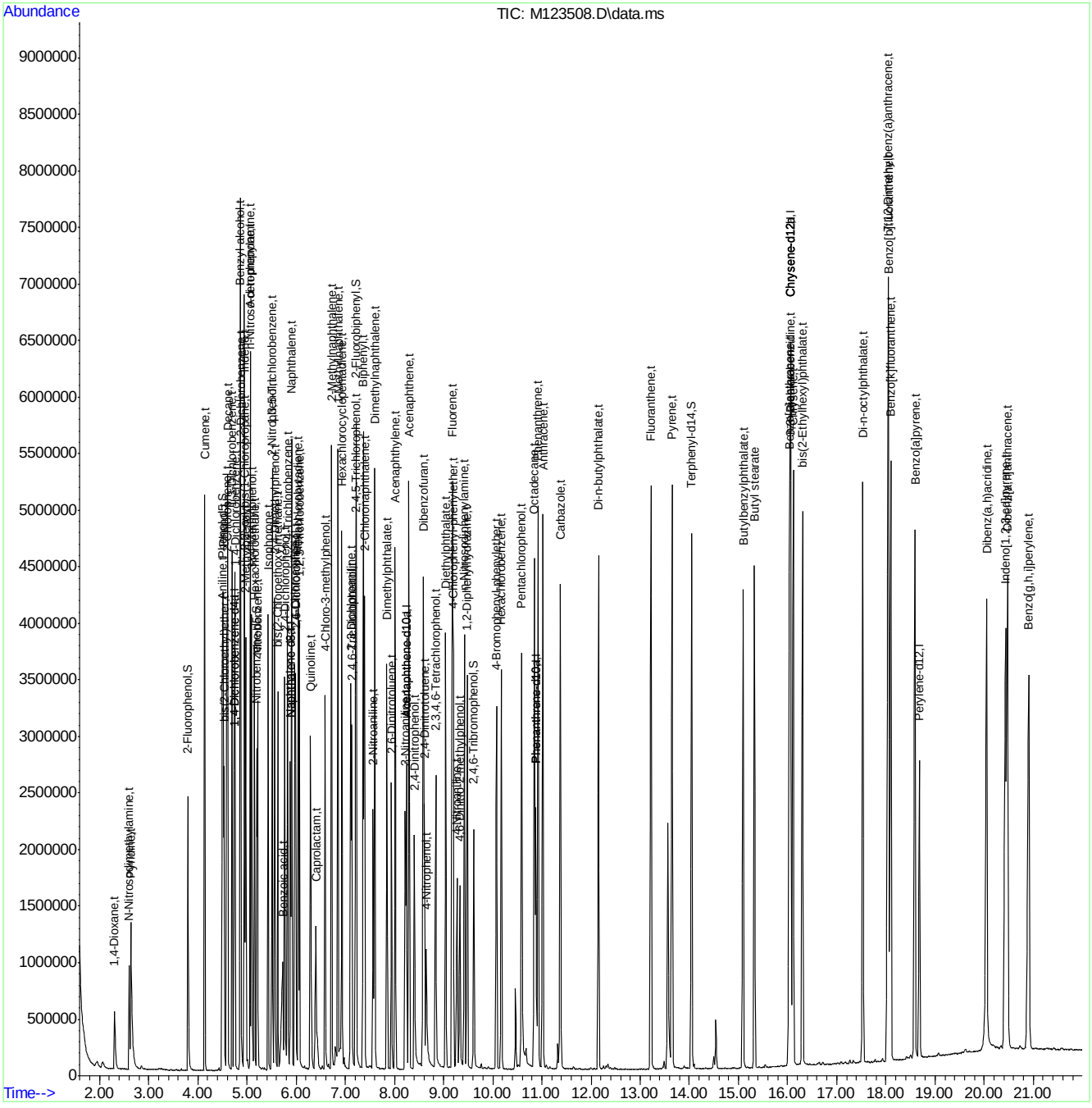
7

SGS ACCUTEST JC19996

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 JC19996

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

SGS ACCUTEST JC19996

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 JC19996

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

7.6.46

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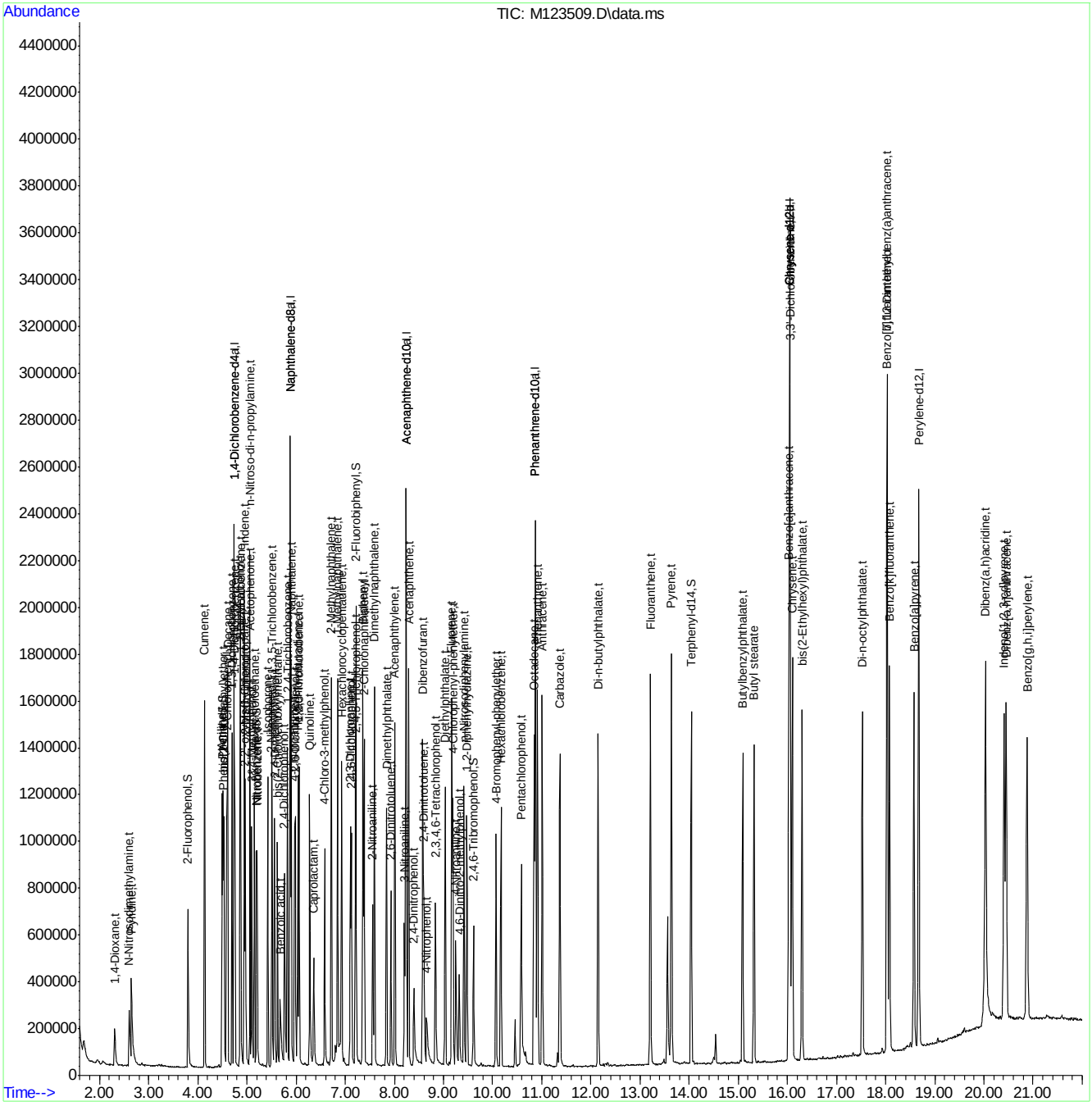
SGS ACCUTEST JC19996

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



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 JC19996

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 JC19996

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

7.6.47

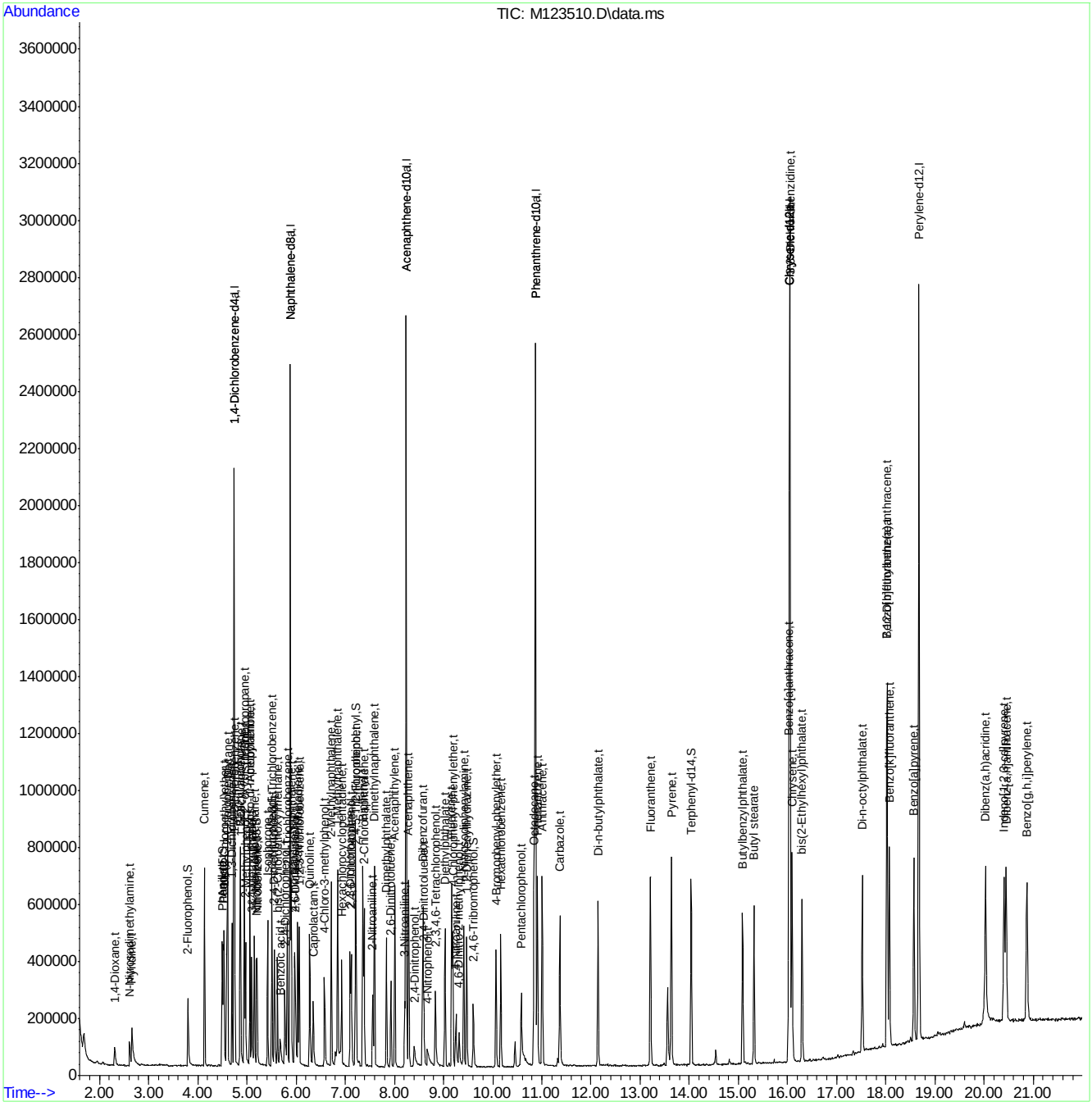
7

SGS ACCUTEST JC19996

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 JC19996

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

SGS ACCUTEST JC19996

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 JC19996

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

7.6.48

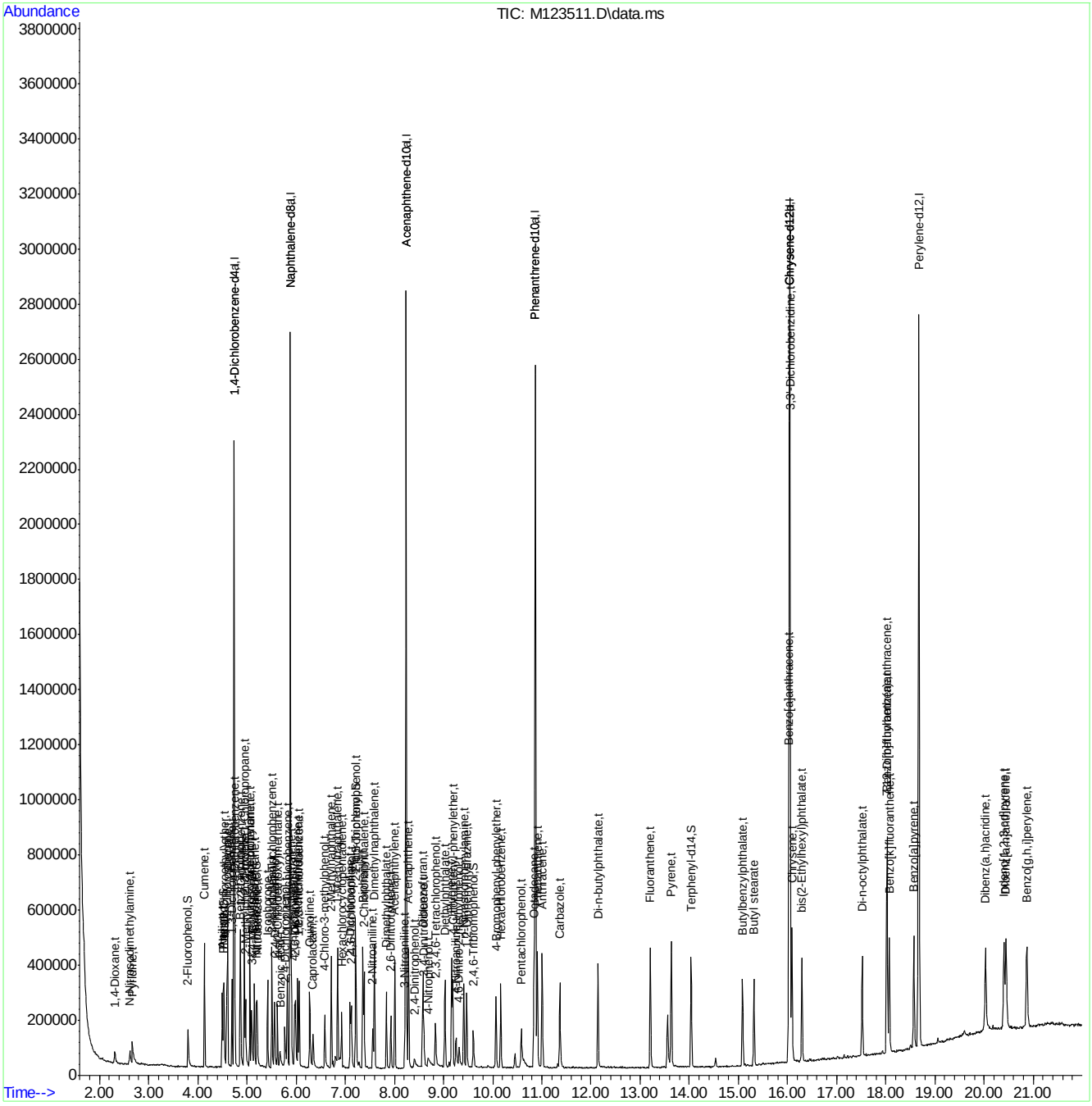
7

SGS ACCUTEST JC19996

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 JC19996

Manual Integration Approval Summary

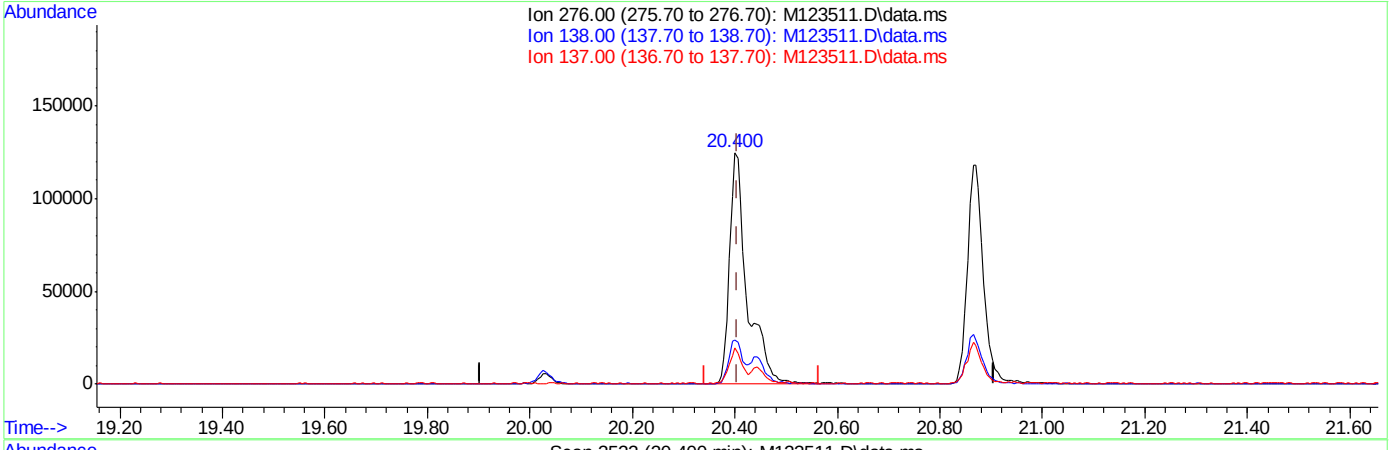
Sample Number:	EM5217-IC5217	**Method:**	SW846 8270D
Lab FileID:	M123511.D	**Analyst approved:**	04/13/16 13:03 Ashley Dye
Injection Time:	04/12/16 20:29	**Supervisor approved:**	04/13/16 13:43 Nina Pandya

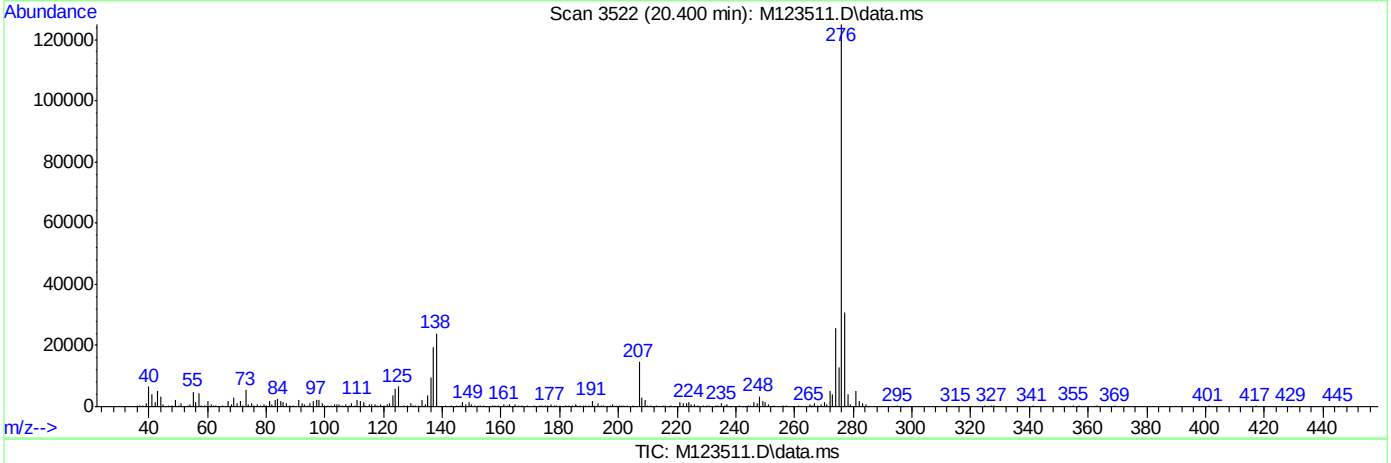
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		20.40	Overlapping peak

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

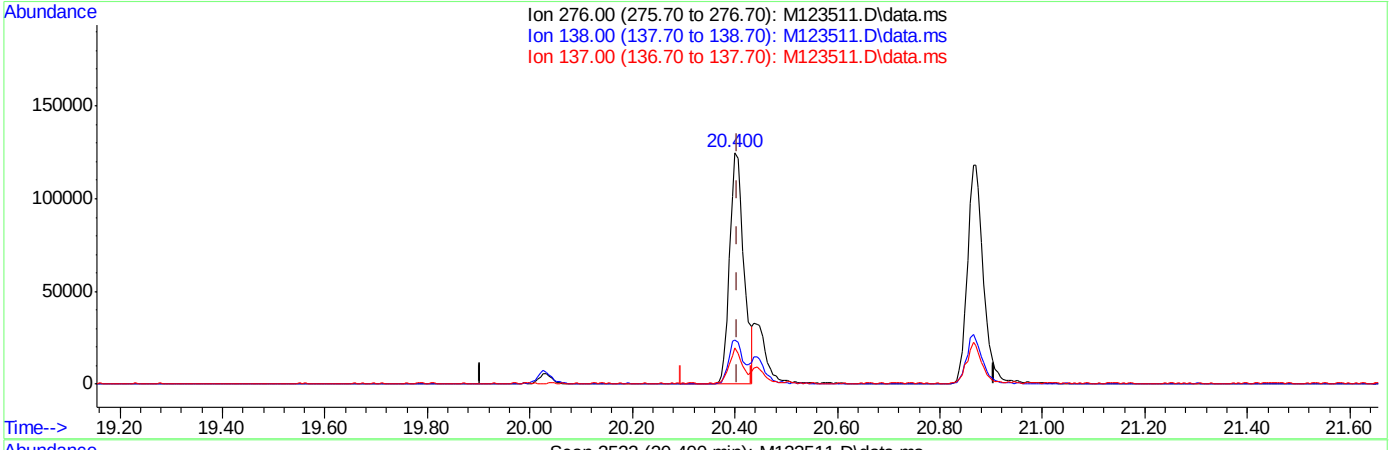
Ion	Exp%	Act%
276.00	100	100
138.00	17.80	19.00
137.00	12.90	15.19
0.00	0.00	0.00

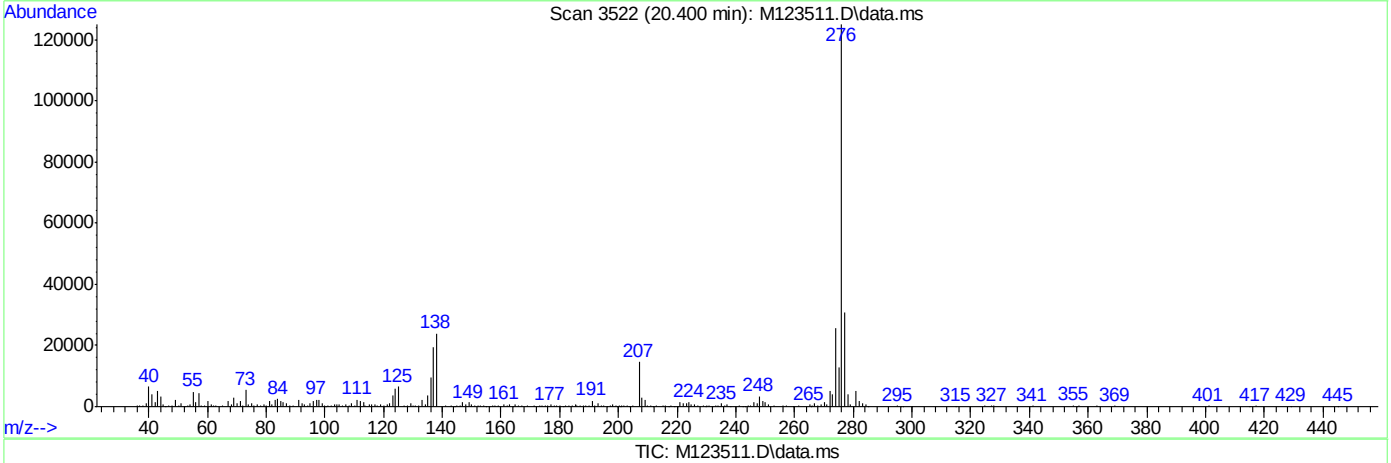
SGS ACCUTEST JC19996

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

SGS ACCUTEST JC19996

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

SGS ACCUTEST JC19996

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 JC19996

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

7.6.49

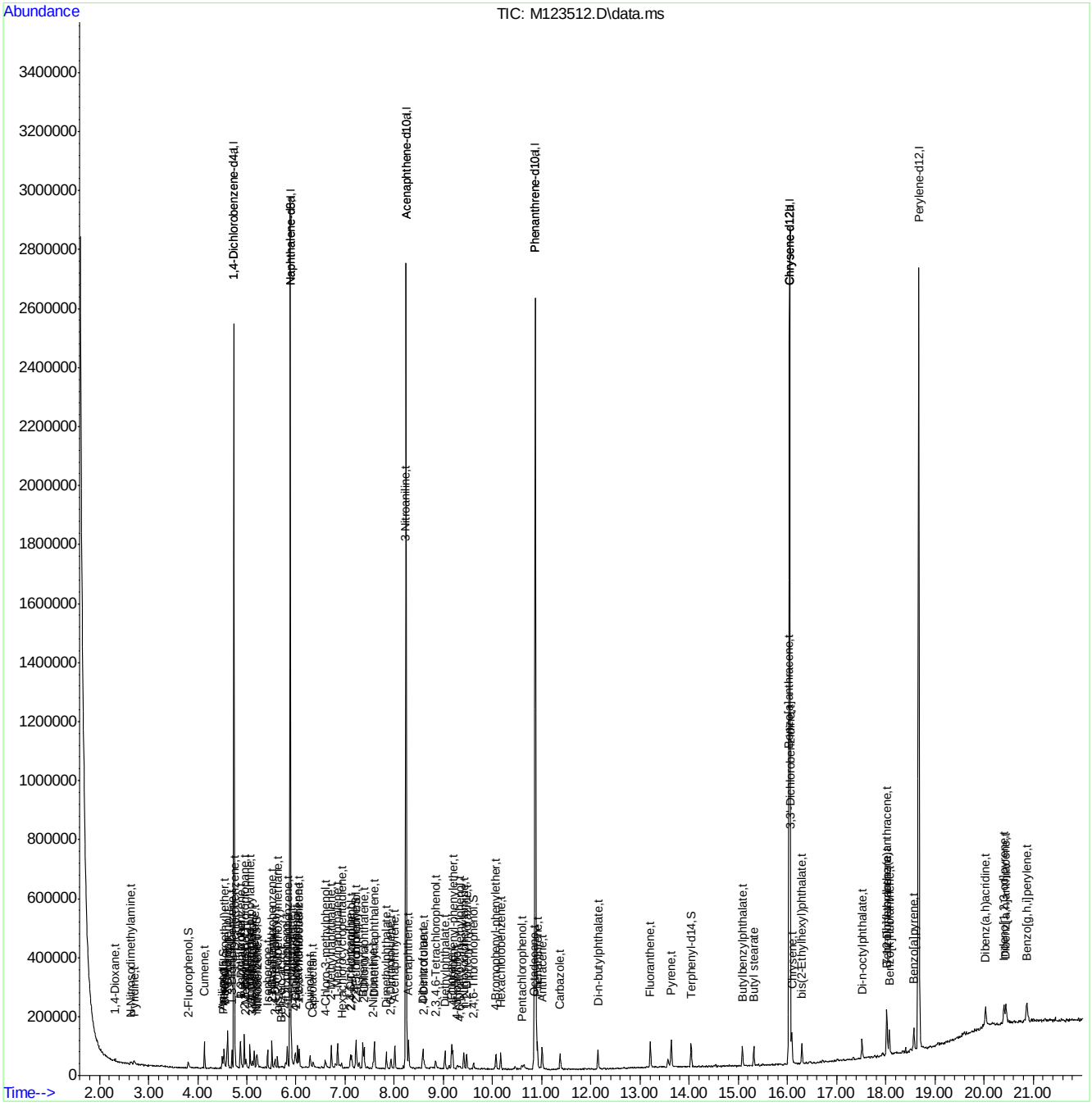
7

SGS ACCUTEST JC19996

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 JC19996

Manual Integration Approval Summary

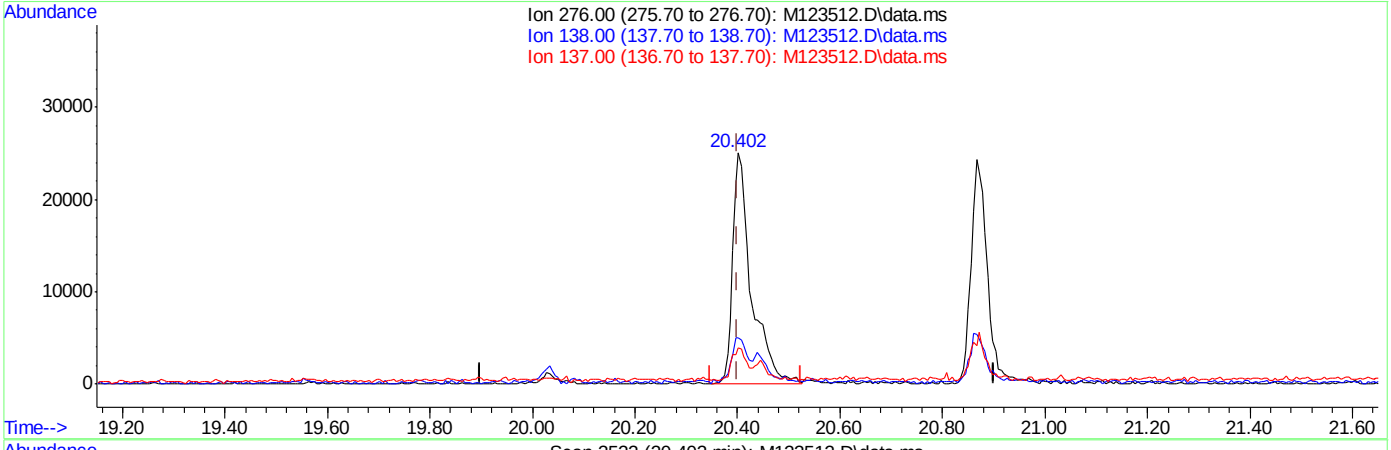
Sample Number:	EM5217-IC5217	**Method:**	SW846 8270D
Lab FileID:	M123512.D	**Analyst approved:**	04/13/16 13:03 Ashley Dye
Injection Time:	04/12/16 20:57	**Supervisor approved:**	04/13/16 13:43 Nina Pandya

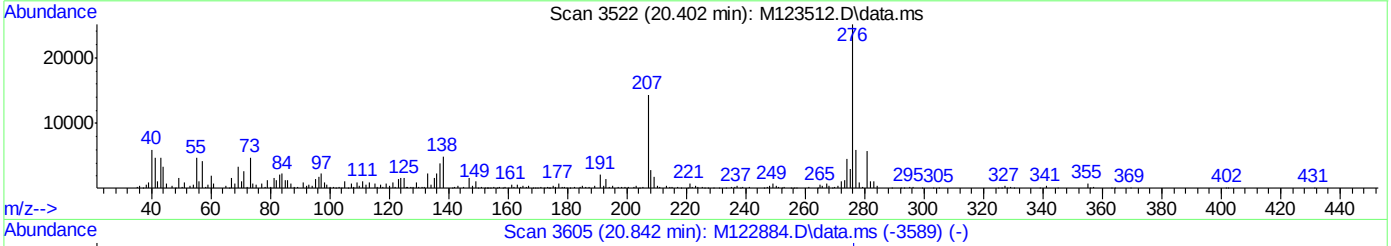
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		20.40	Overlapping peak

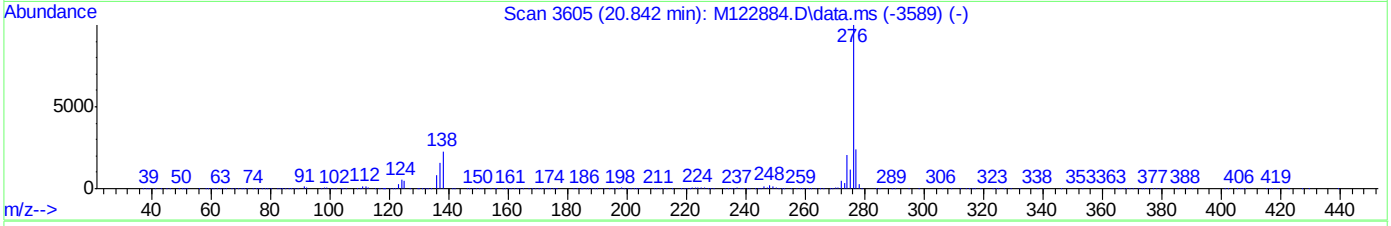
Quantitation Report (Qedit)

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

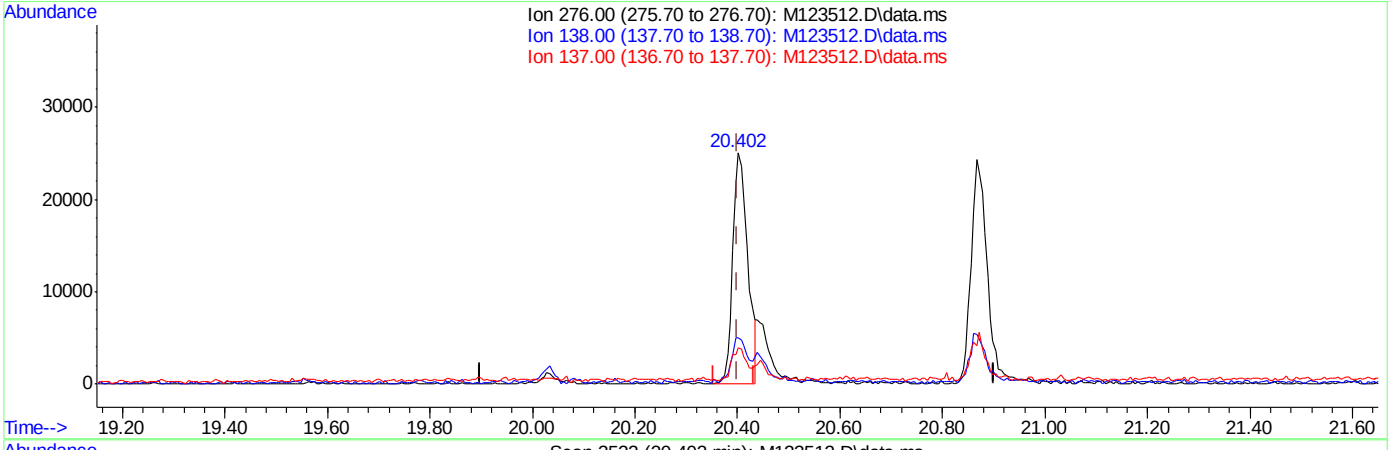
Ion	Exp%	Act%
276.00	100	100
138.00	19.20	19.27
137.00	15.50	14.26
0.00	0.00	0.00

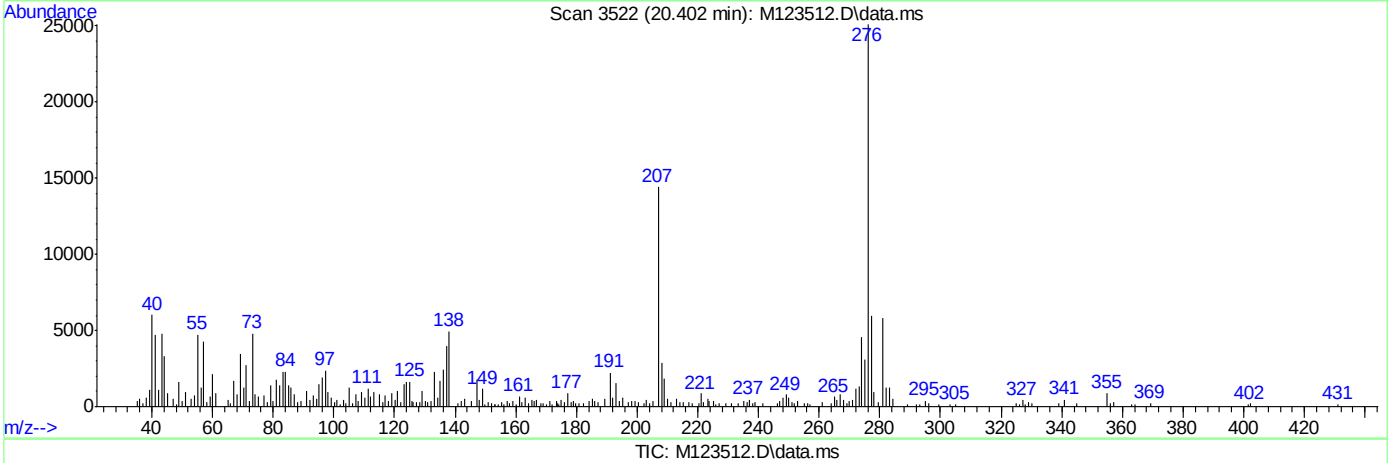
SGS ACCUTEST JC19996

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 JC19996

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 JC19996

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

7.6.50

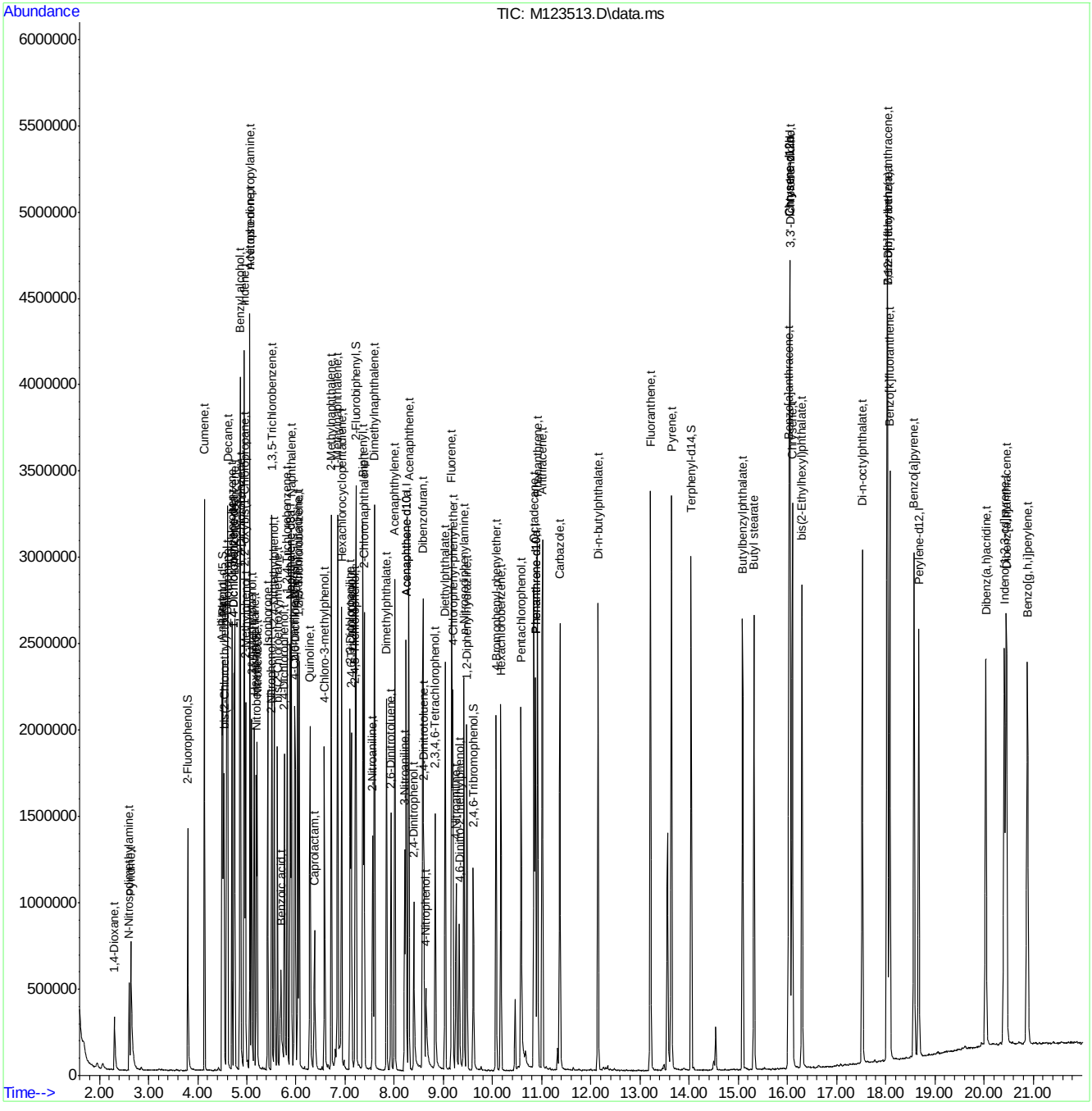
7

SGS ACCUTEST JC19996

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



MM5217.M Wed Apr 13 12:12:10 2016 MSM

Page: 4

SGS ACCUTEST JC19996

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

SGS ACCUTEST JC19996

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

7.6.51

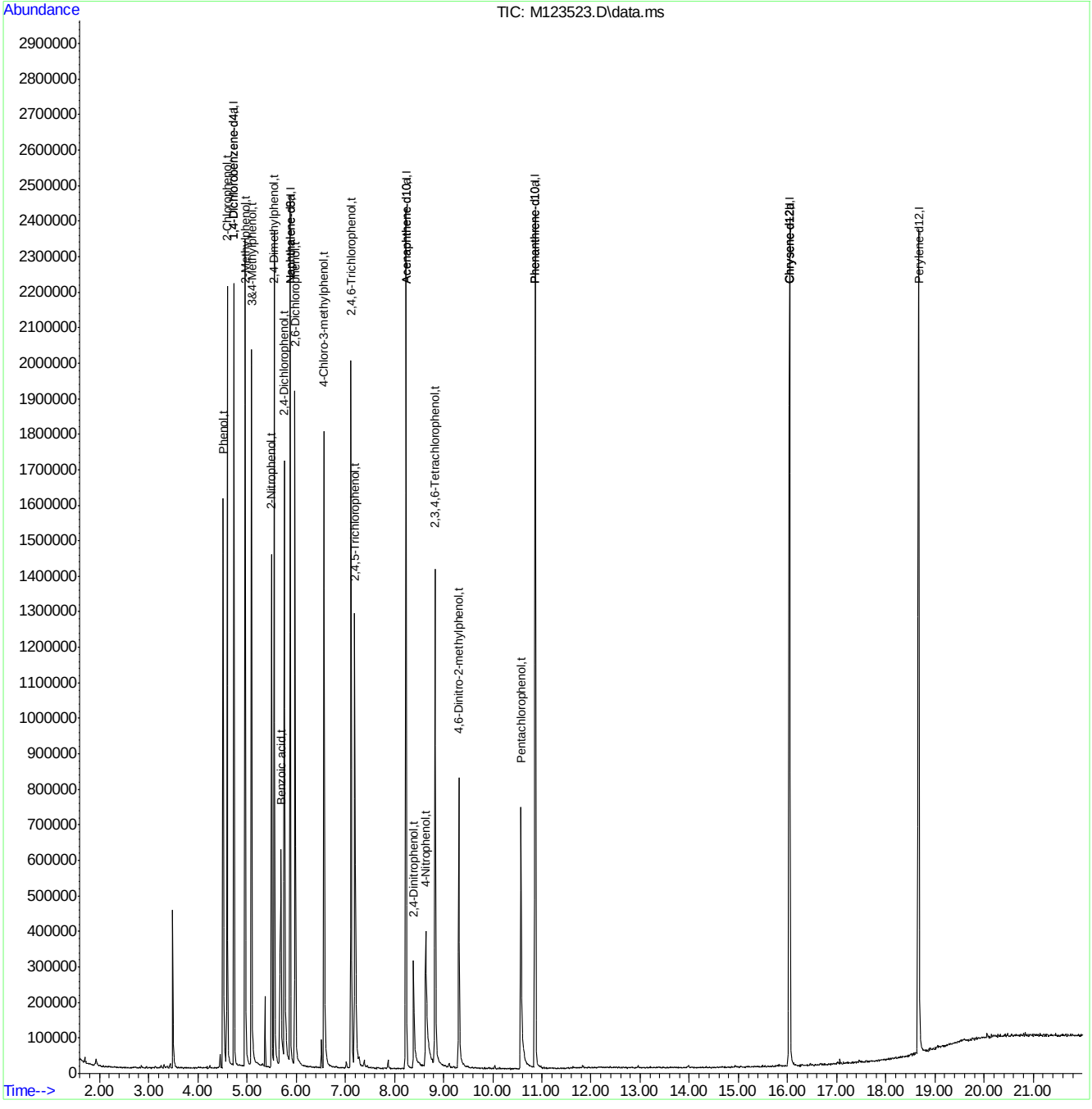
7

SGS ACCUTEST JC19996

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 JC19996

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

7.6.52

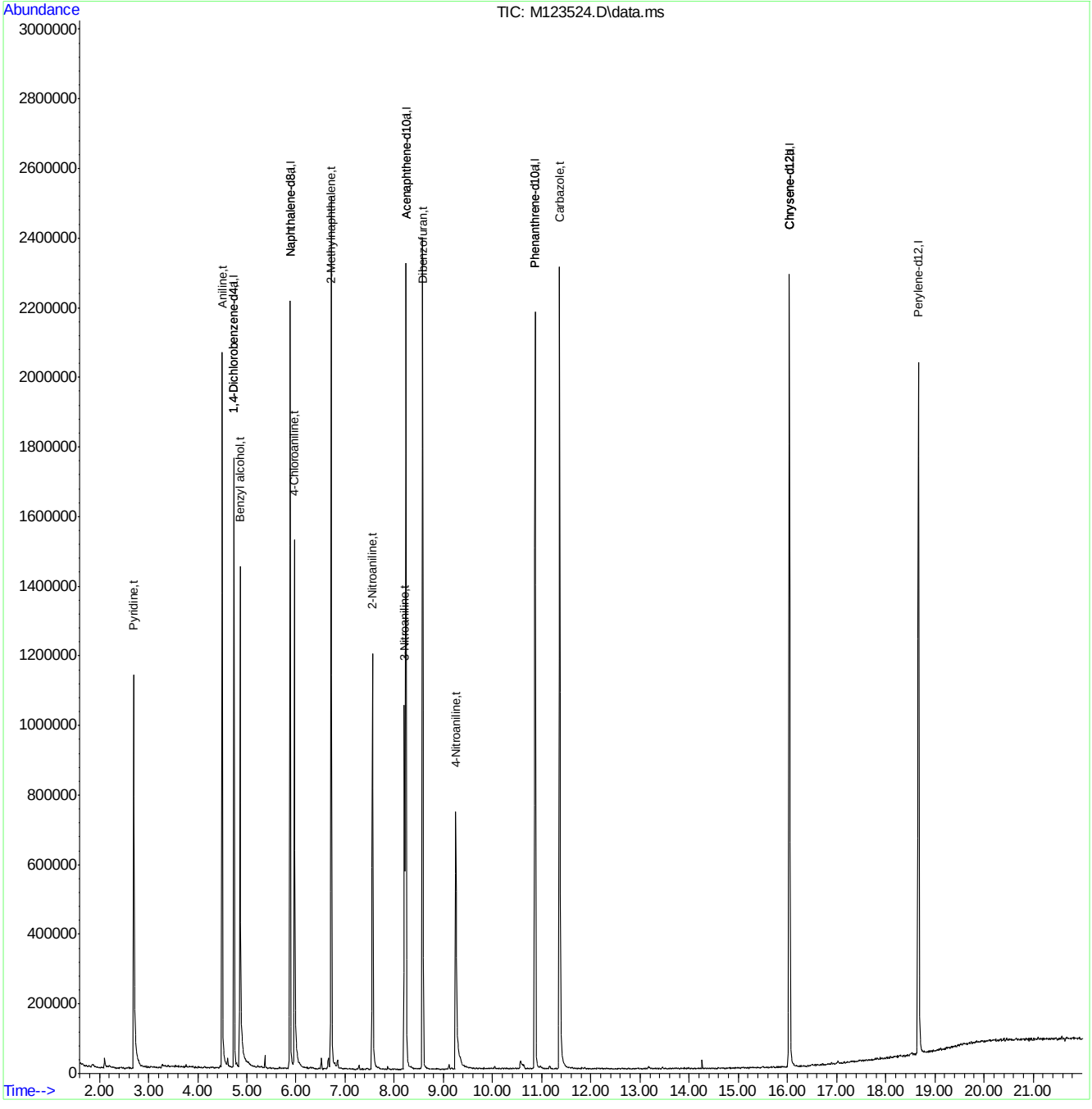
7

SGS ACCUTEST JC19996

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 JC19996

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

SGS ACCUTEST JC19996

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

7.6.53

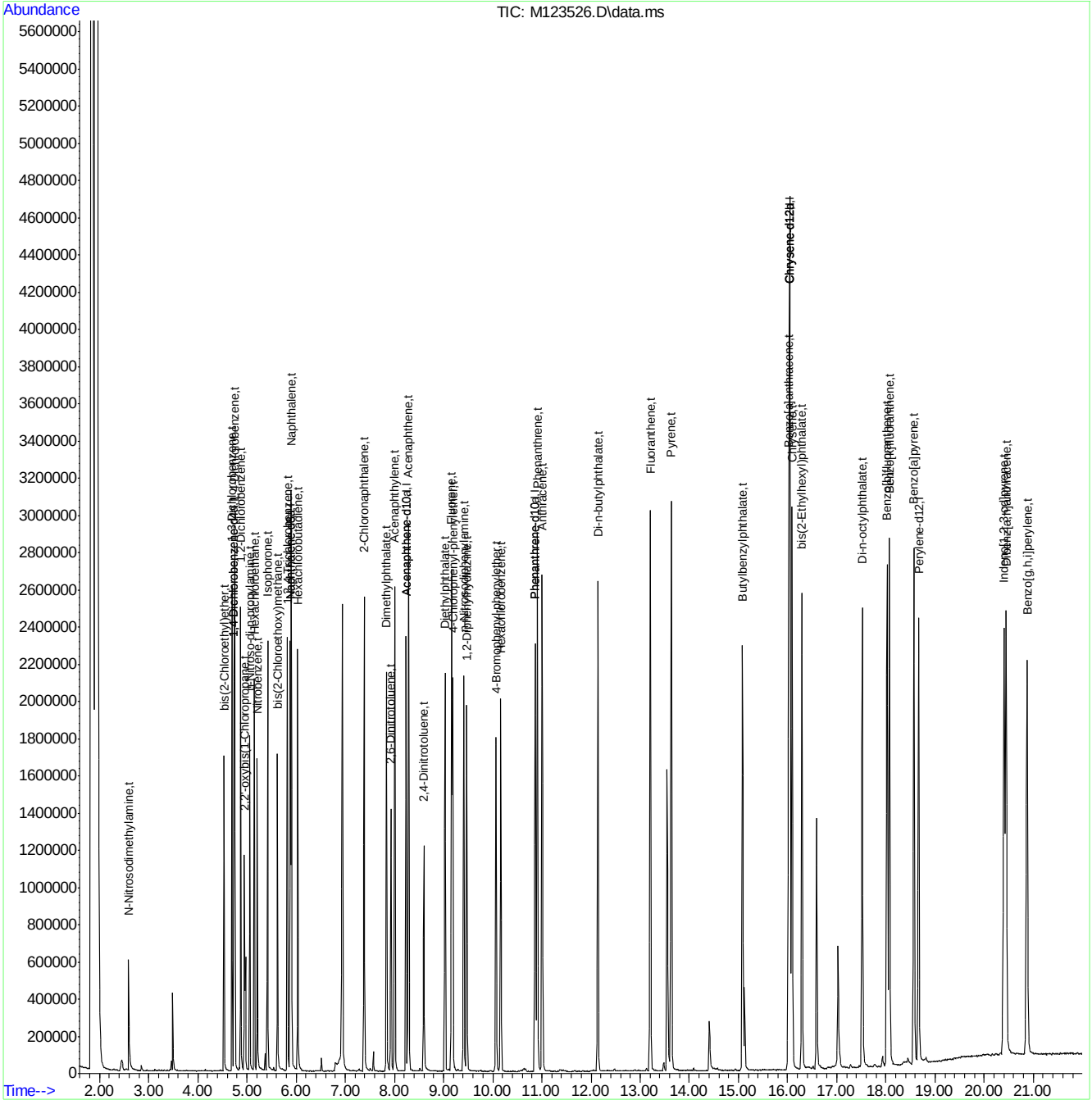
7

SGS ACCUTEST JC19996

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



Manual Integration Approval Summary

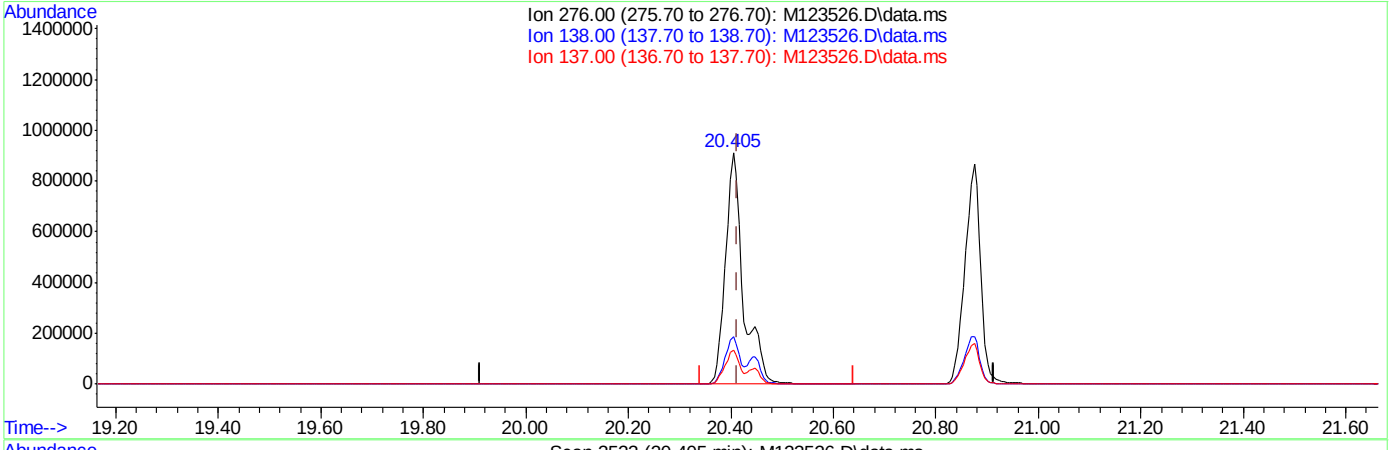
Sample Number:	EM5218-ICV5217	**Method:**	SW846 8270D
Lab FileID:	M123526.D	**Analyst approved:**	04/13/16 13:04 Ashley Dye
Injection Time:	04/13/16 03:31	**Supervisor approved:**	04/13/16 13:43 Nina Pandya

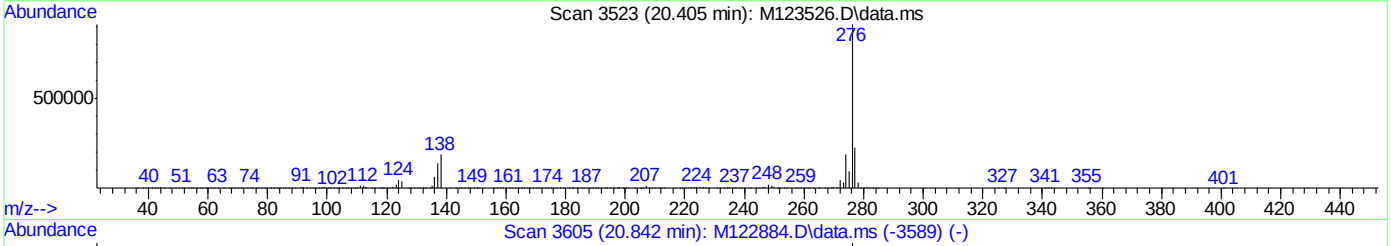
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		20.40	Overlapping peak

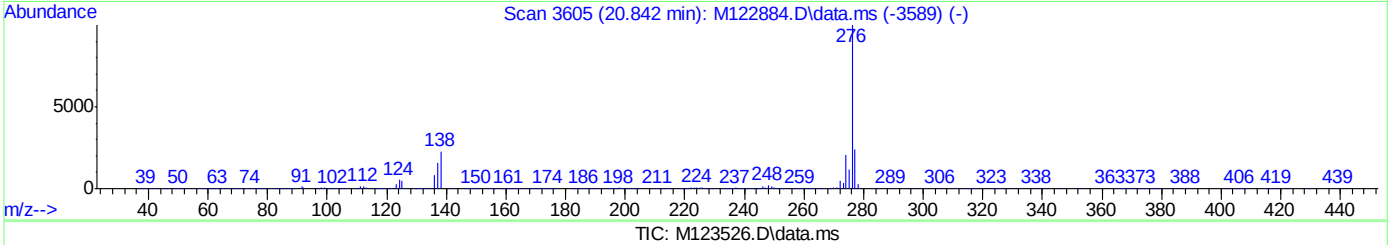
Quantitation Report (Qedit)

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

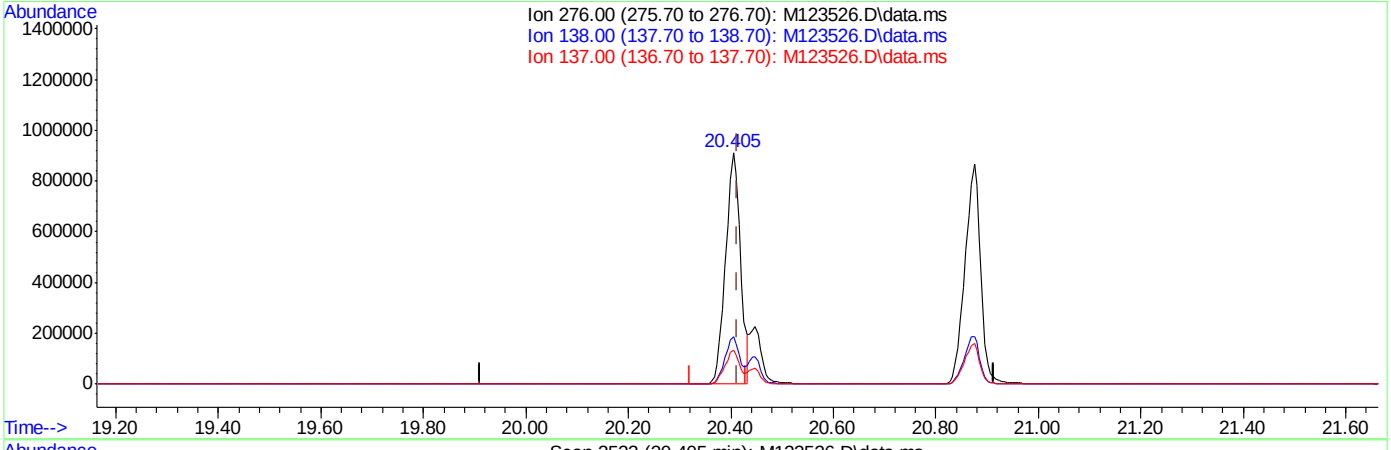
response 2202246

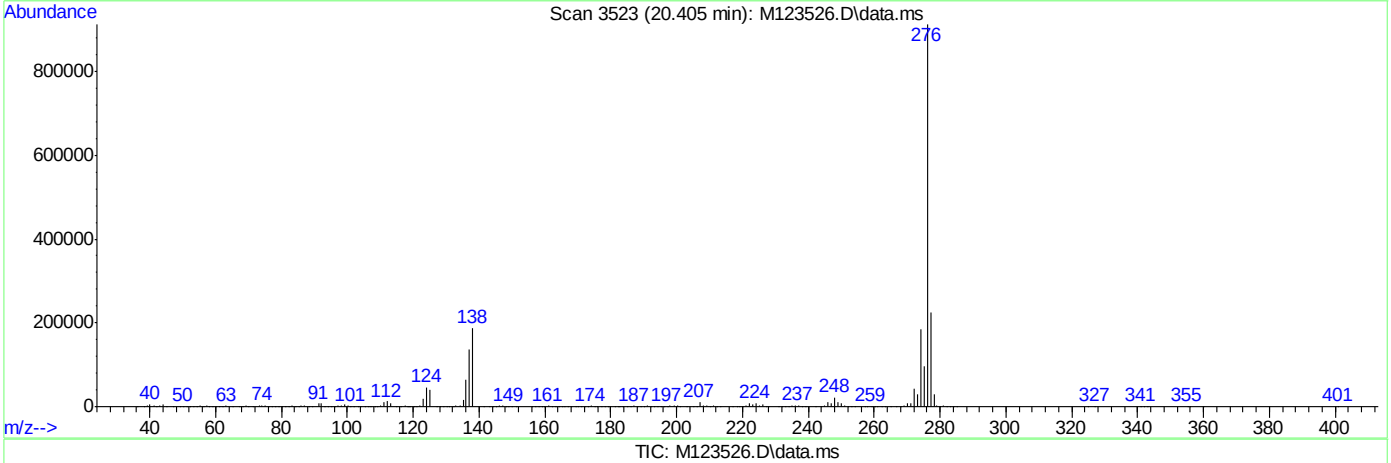
Ion	Exp%	Act%
276.00	100	100
138.00	17.70	20.52
137.00	13.00	14.84
0.00	0.00	0.00

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

SGS ACCUTEST JC19996

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

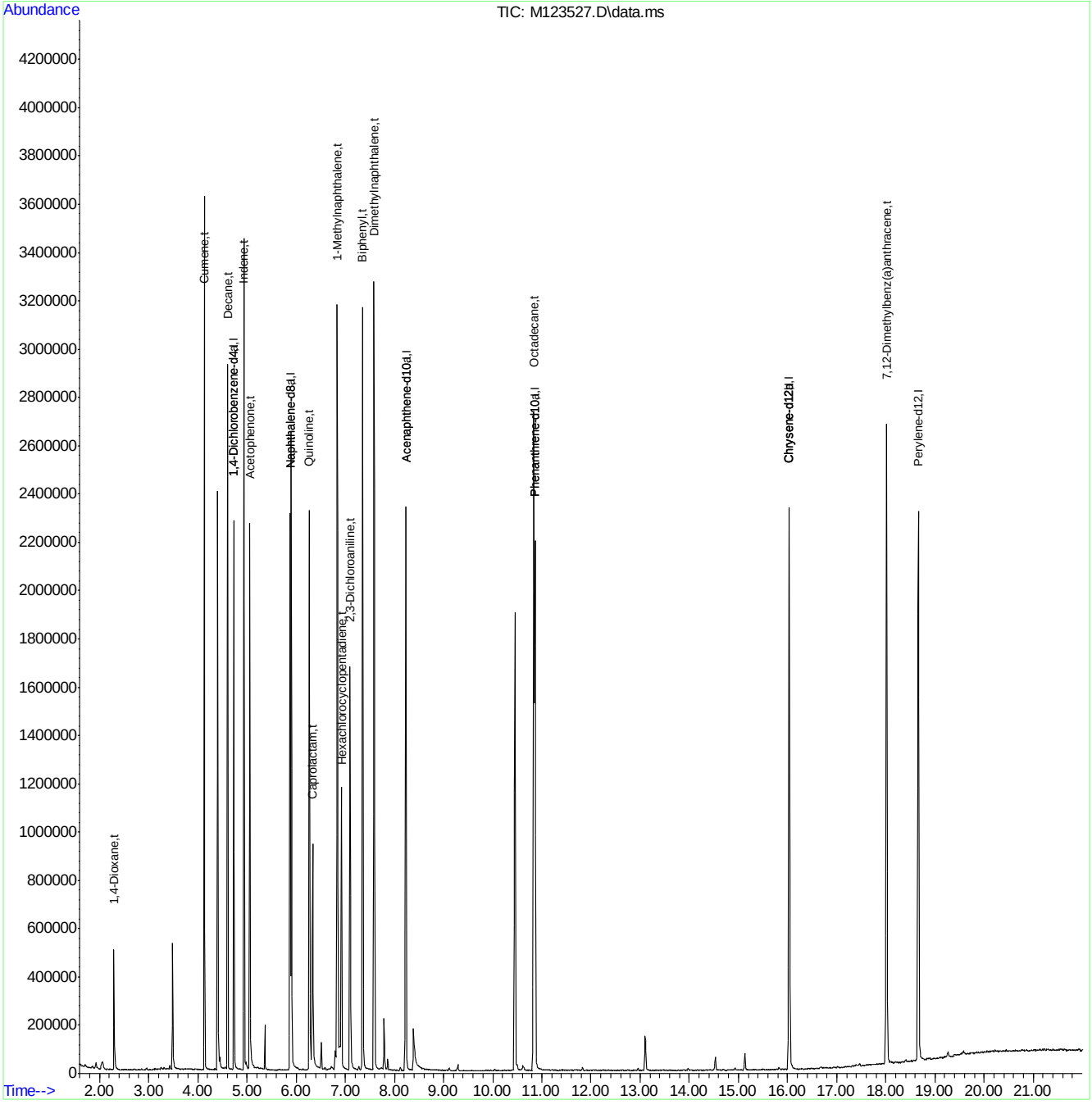
(#) = qualifier out of range (m) = manual integration (+) = signals summed

MM5217.M Wed Apr 13 12:17:33 2016 MSM

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 JC19996

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

7.6.55

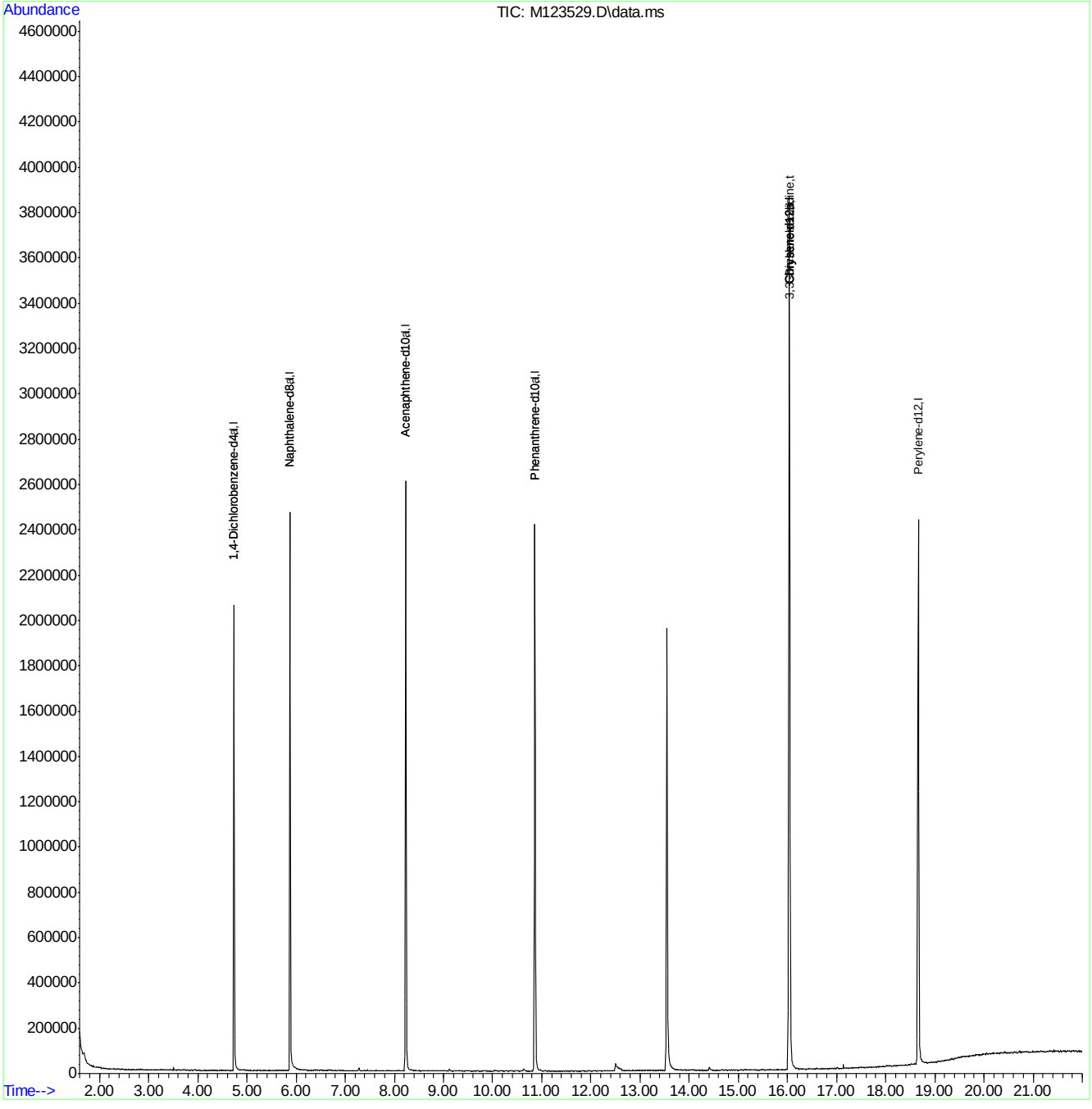
7

SGS ACCUTEST JC19996

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

SGS ACCUTEST JC19996

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

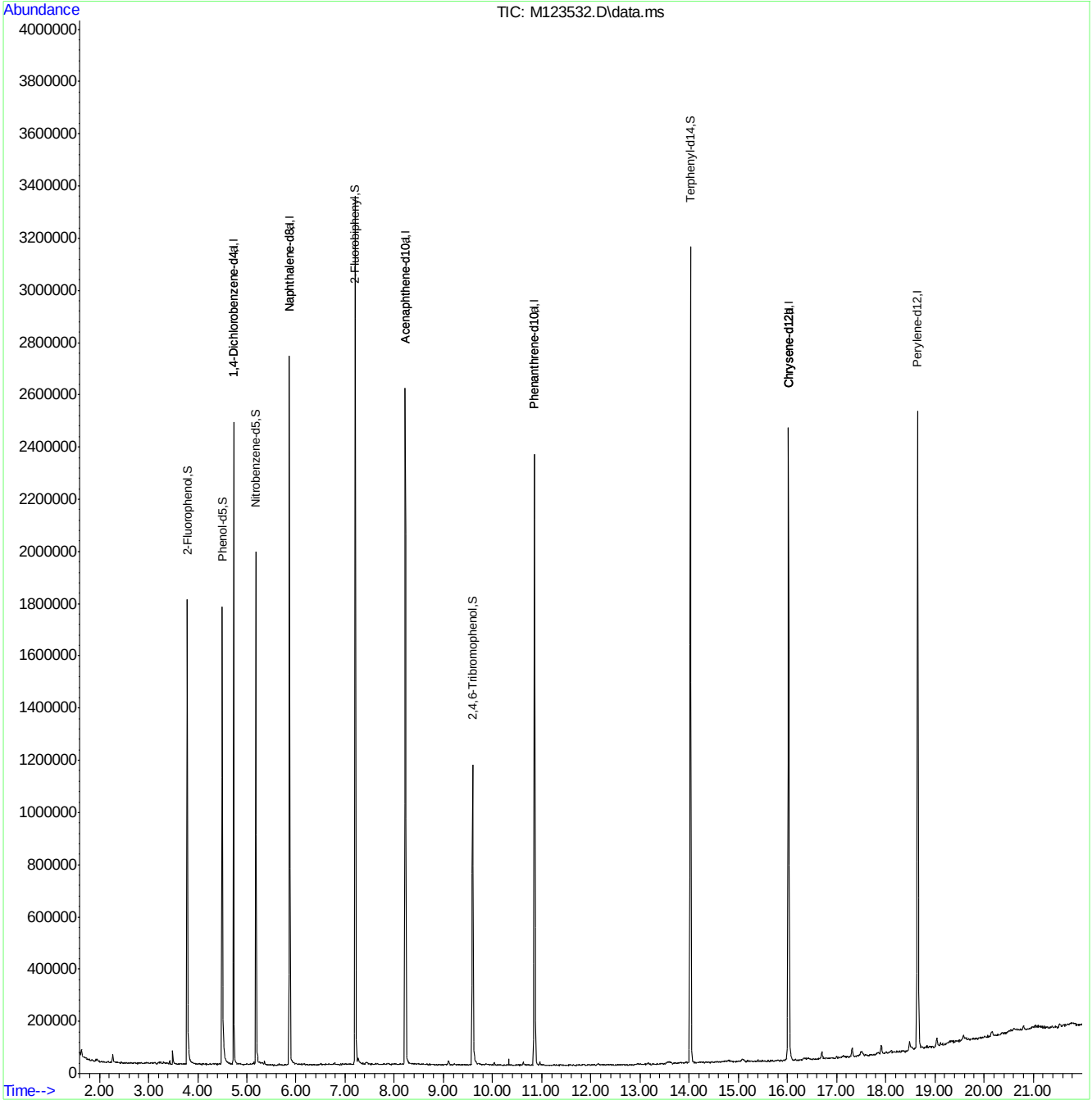
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19996

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



MM5217.M Wed Apr 13 13:00:52 2016 MSM

SGS ACCUTEST JC19996

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

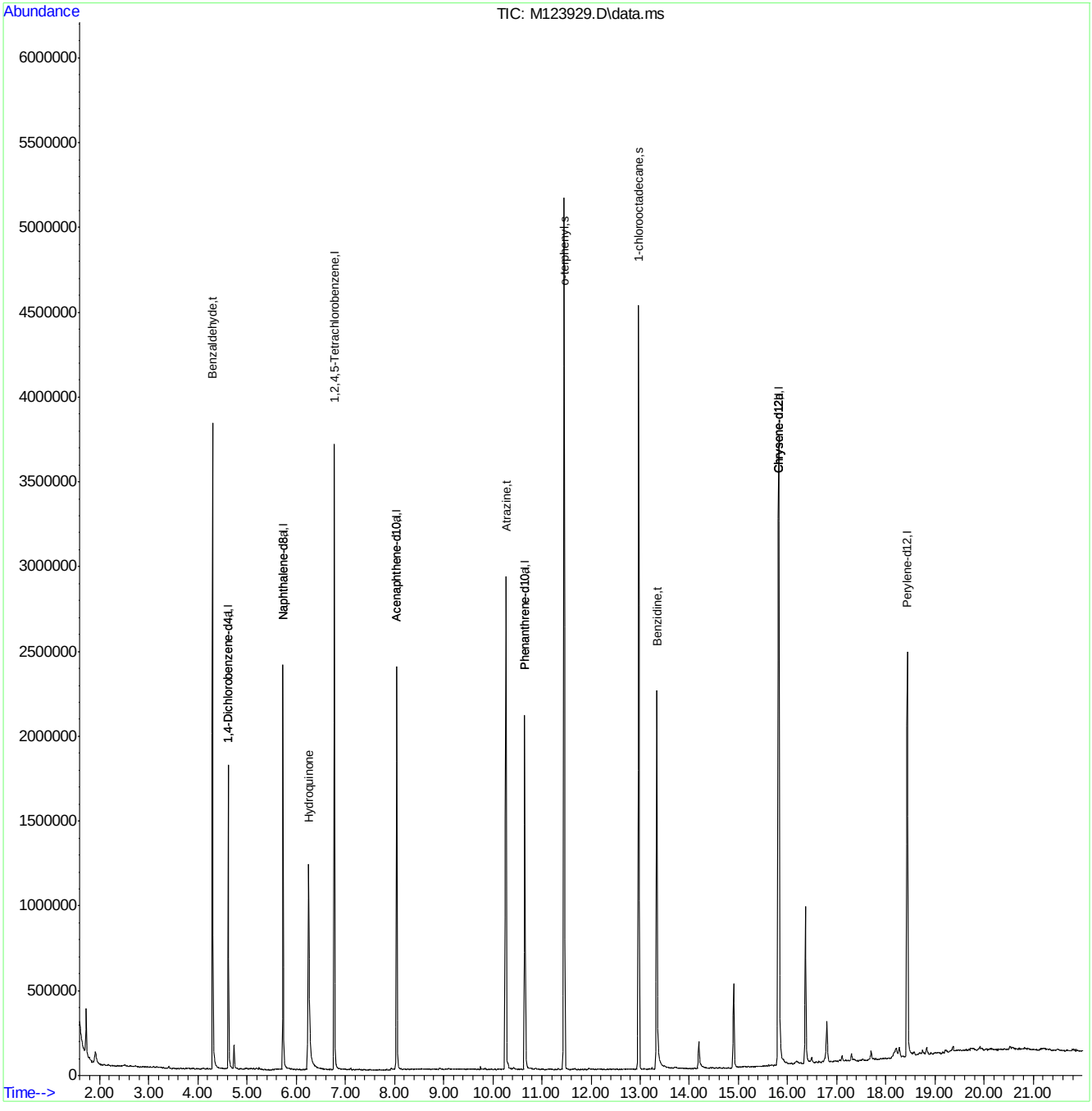
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.622	152	280584	40.00	ppm	0.00
24) Naphthalene-d8	5.733	136	1102460	40.00	ppm	0.00
47) Acenaphthene-d10	8.046	164	682132	40.00	ppm	0.00
69) Phenanthrene-d10	10.652	188	1214164	40.00	ppm	0.00
83) Chrysene-d12	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

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



SGS ACCUTEST JC19996

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

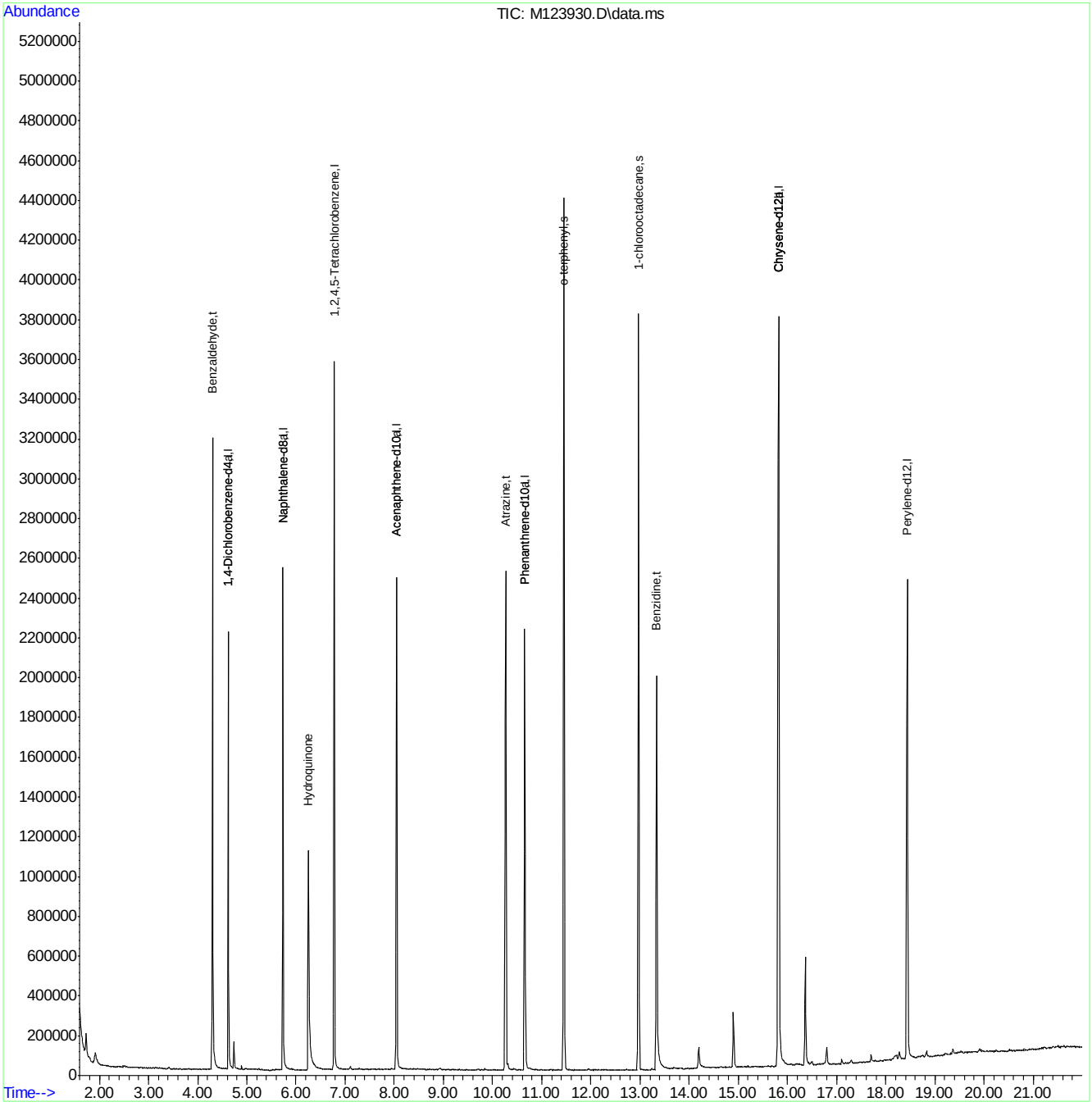
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.619	152	319656	40.00	ppm	0.00
24) Naphthalene-d8	5.736	136	1232857	40.00	ppm	0.00
47) Acenaphthene-d10	8.048	164	759328	40.00	ppm	0.00
69) Phenanthrene-d10	10.655	188	1258673	40.00	ppm	0.00
83) Chrysene-d12	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

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



SGS ACCUTEST JC19996

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

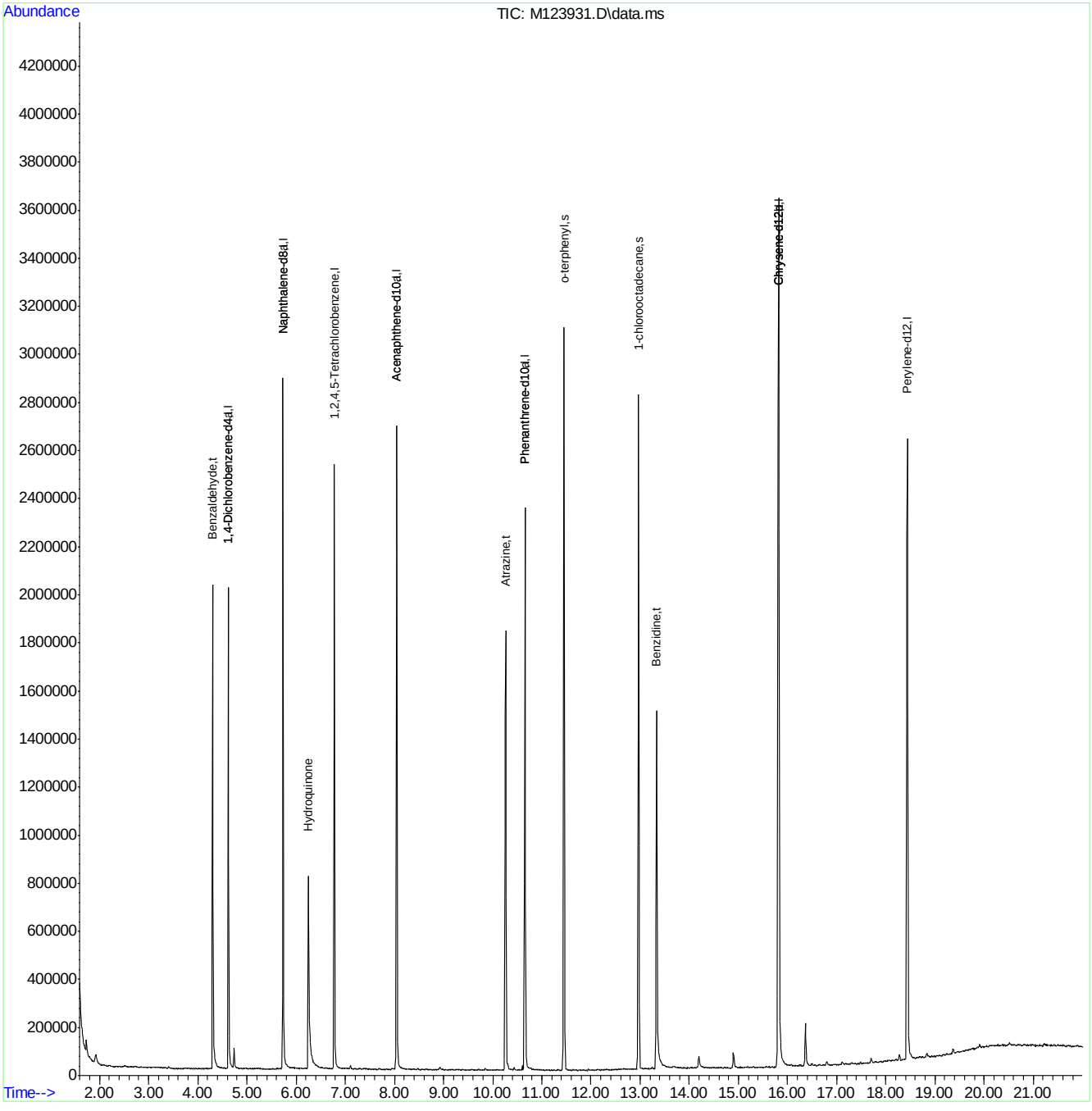
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19996

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 JC19996

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

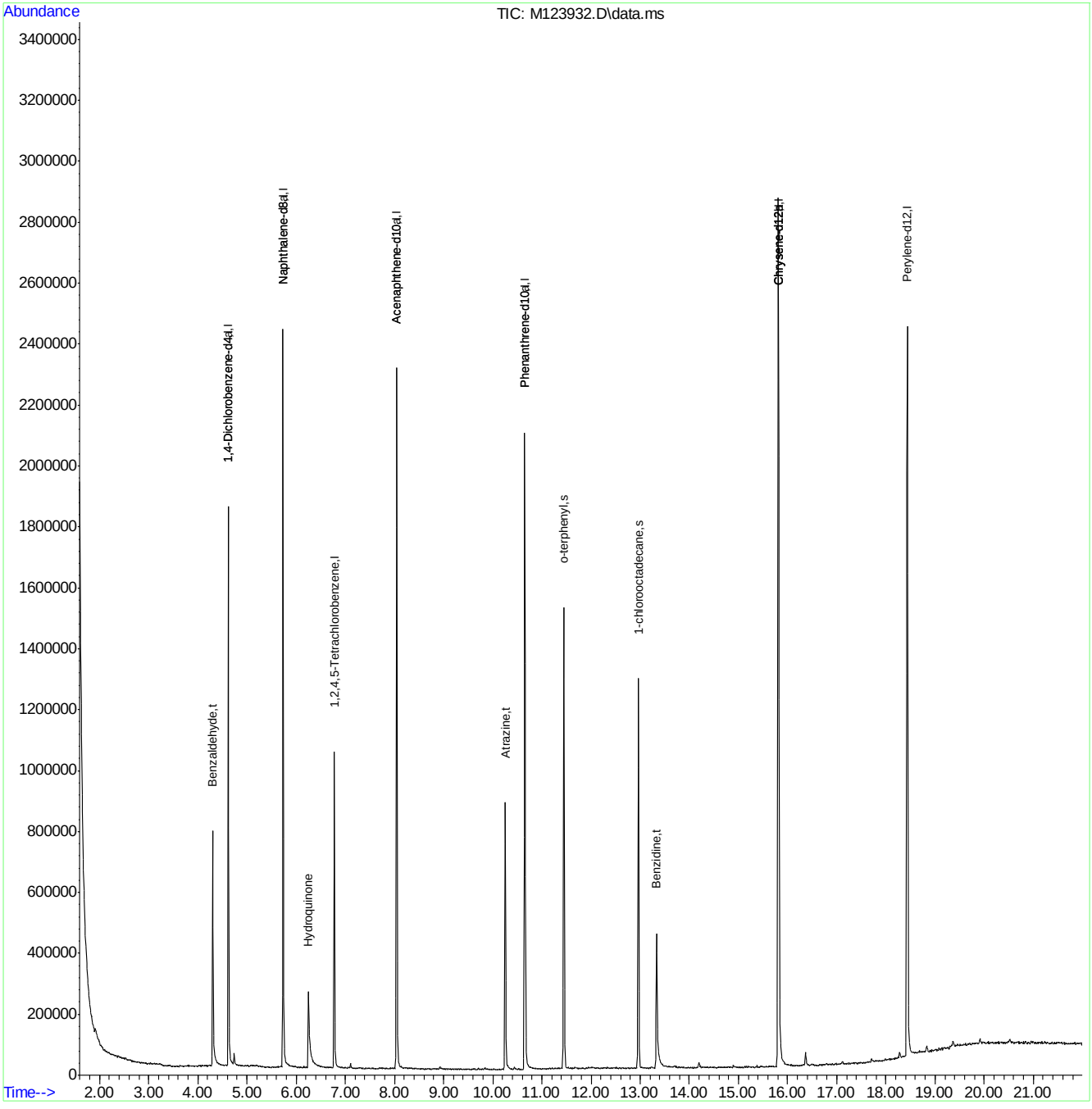
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19996

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 JC19996

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

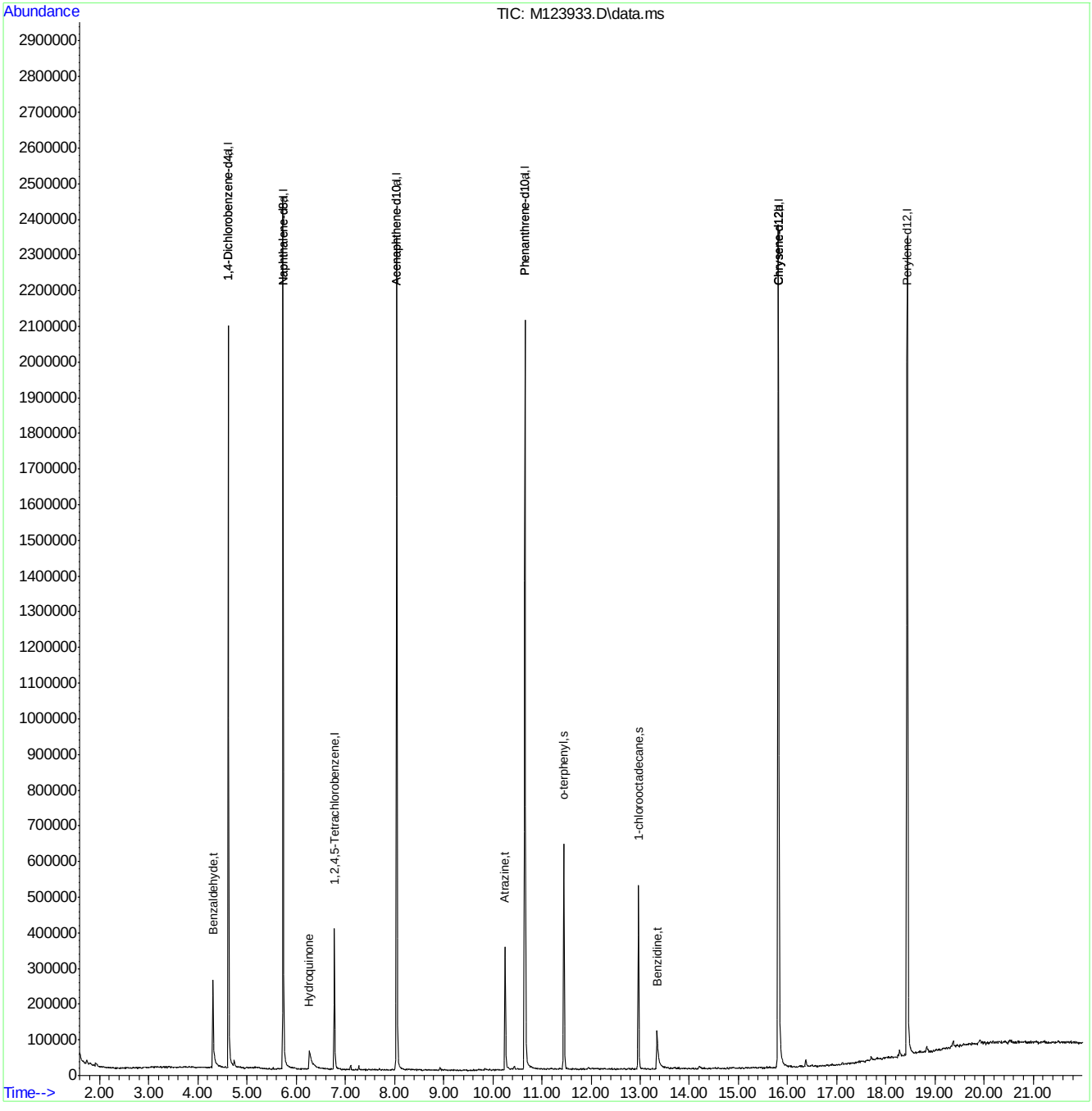
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19996

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 JC19996

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

7.6.62

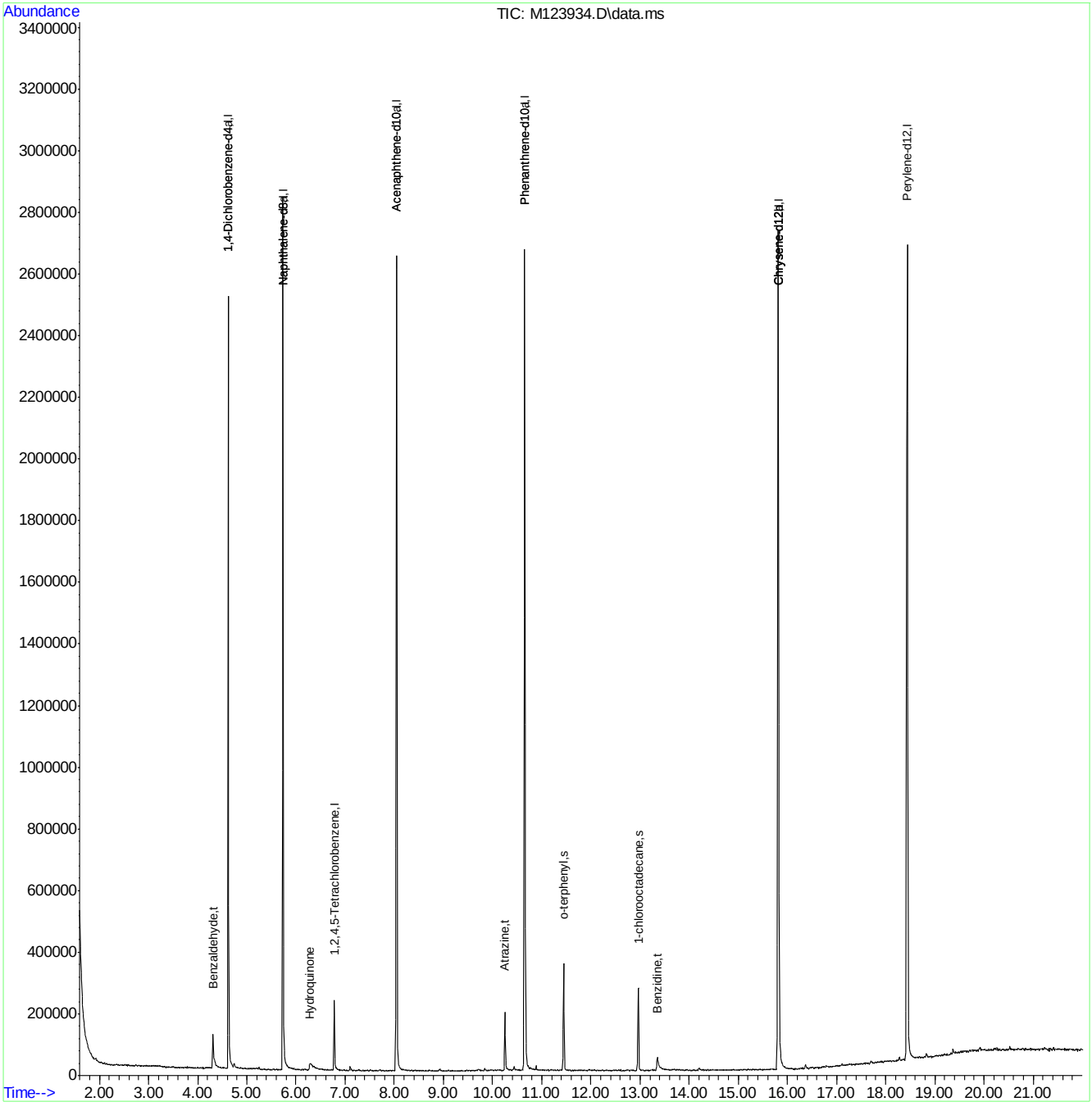
7

SGS ACCUTEST JC19996

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



SGS ACCUTEST JC19996

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

7.6.63

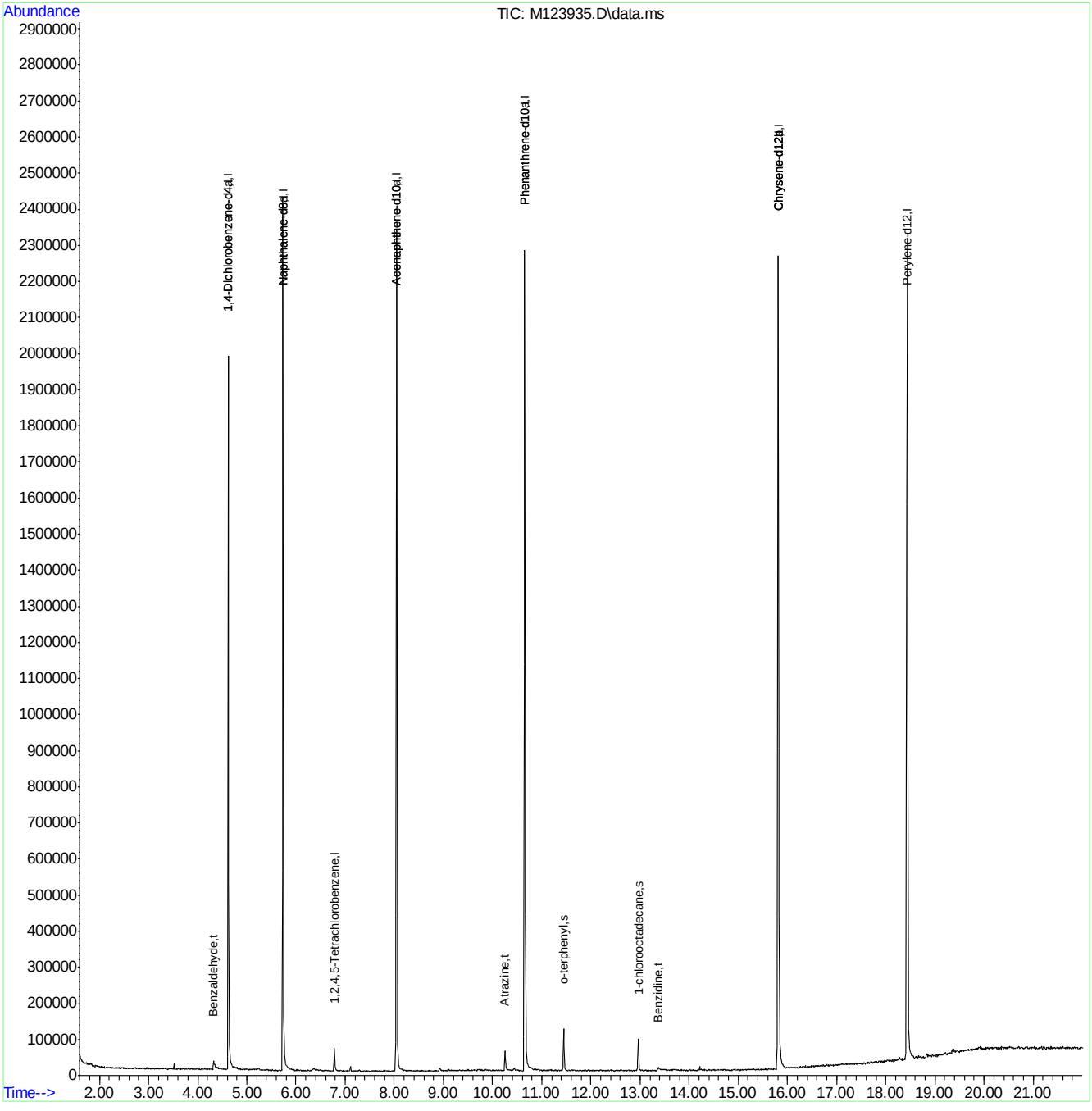
7

SGS ACCUTEST JC19996

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 JC19996

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

7.6.64

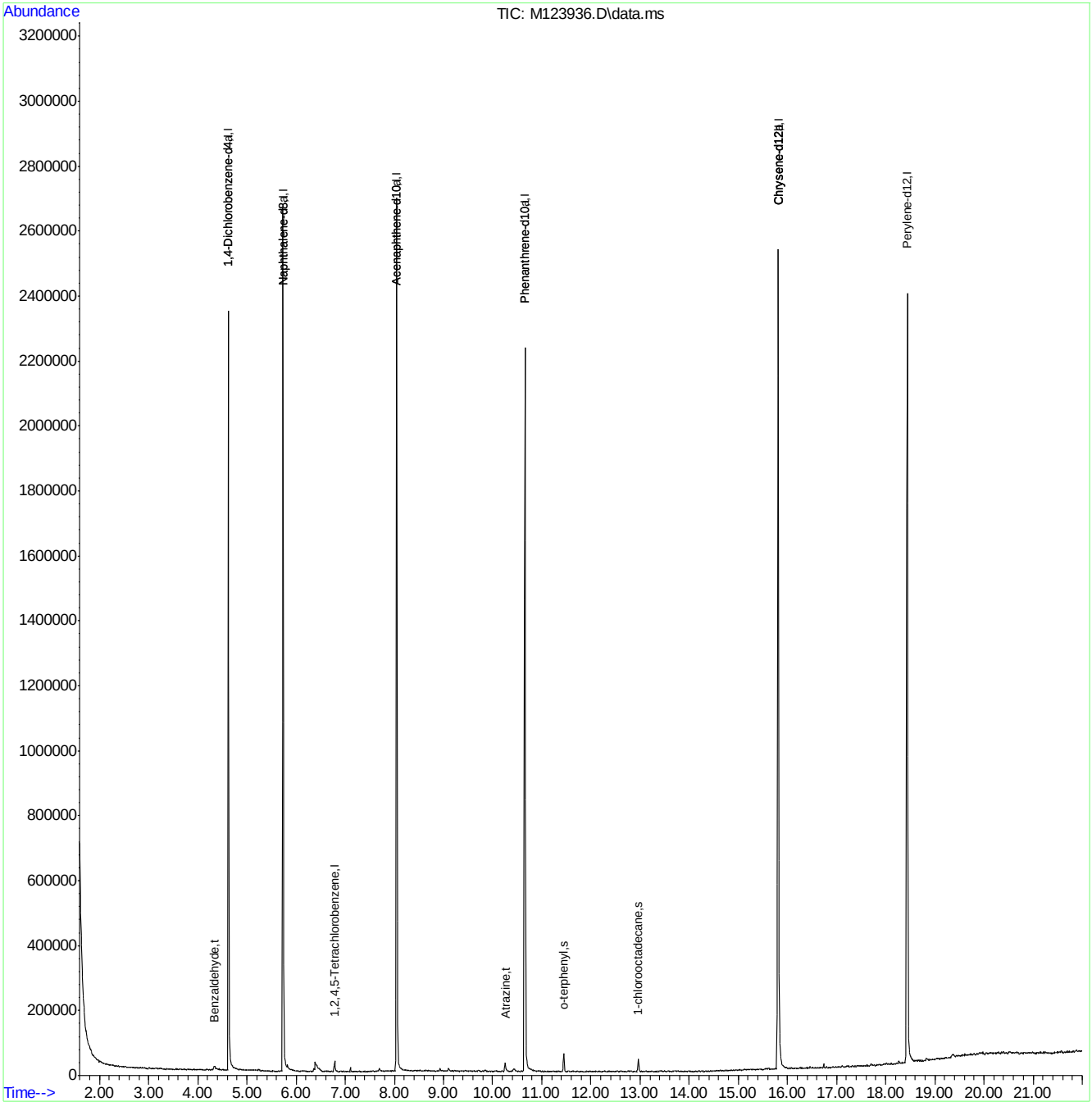
7

SGS ACCUTEST JC19996

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



SGS ACCUTEST JC19996

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

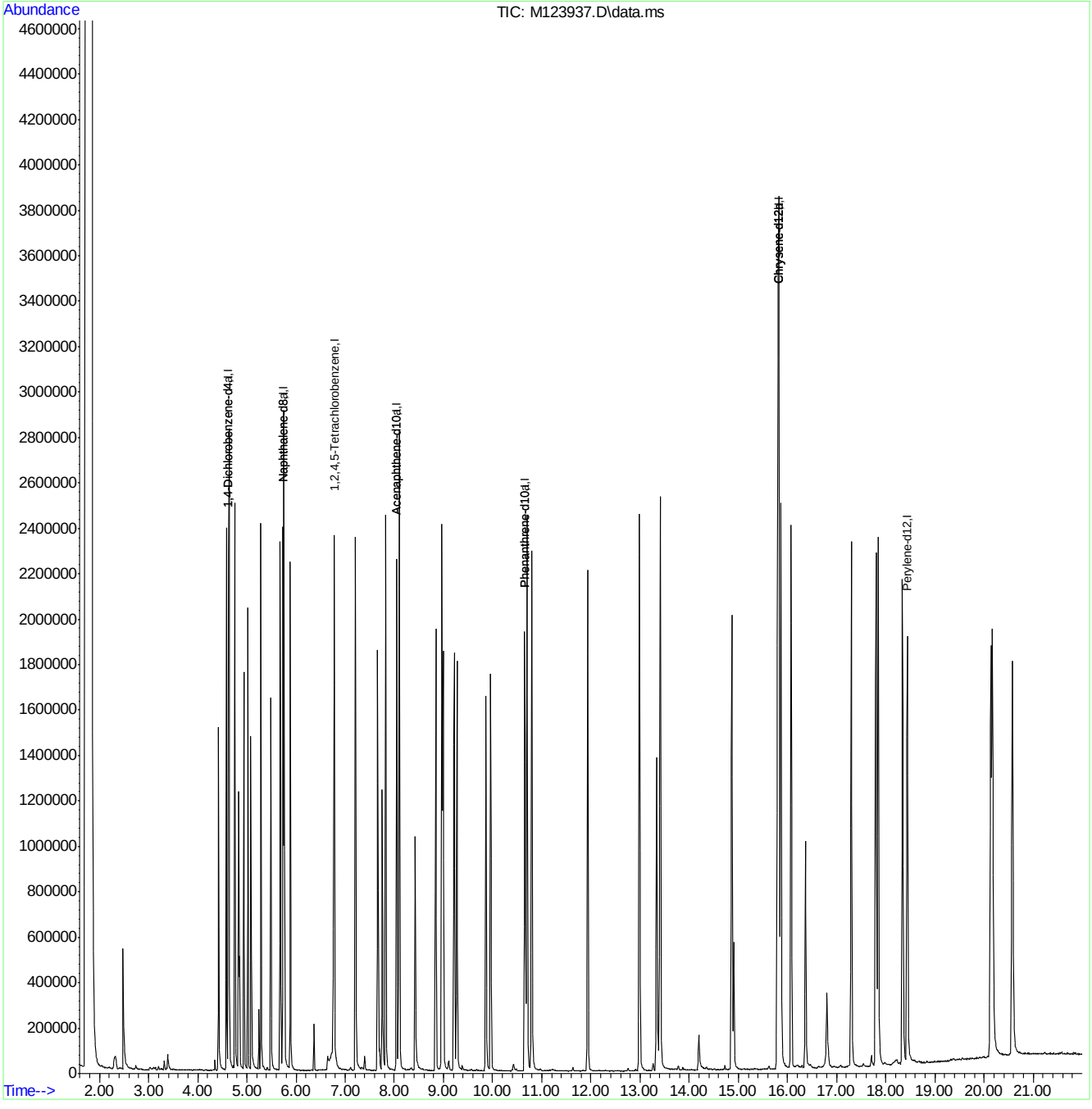
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19996

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

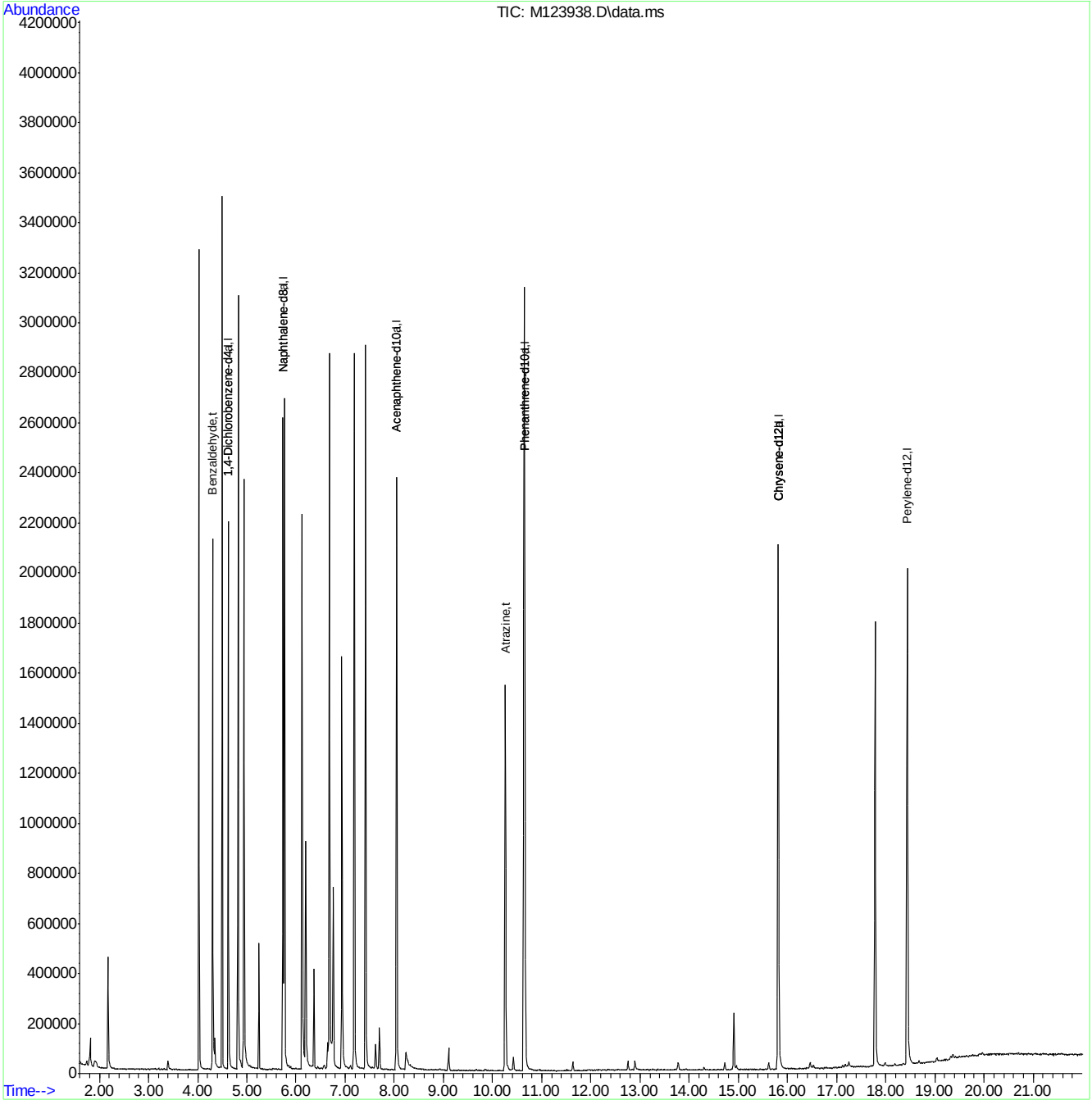
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19996

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 JC19996

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

7.6.67

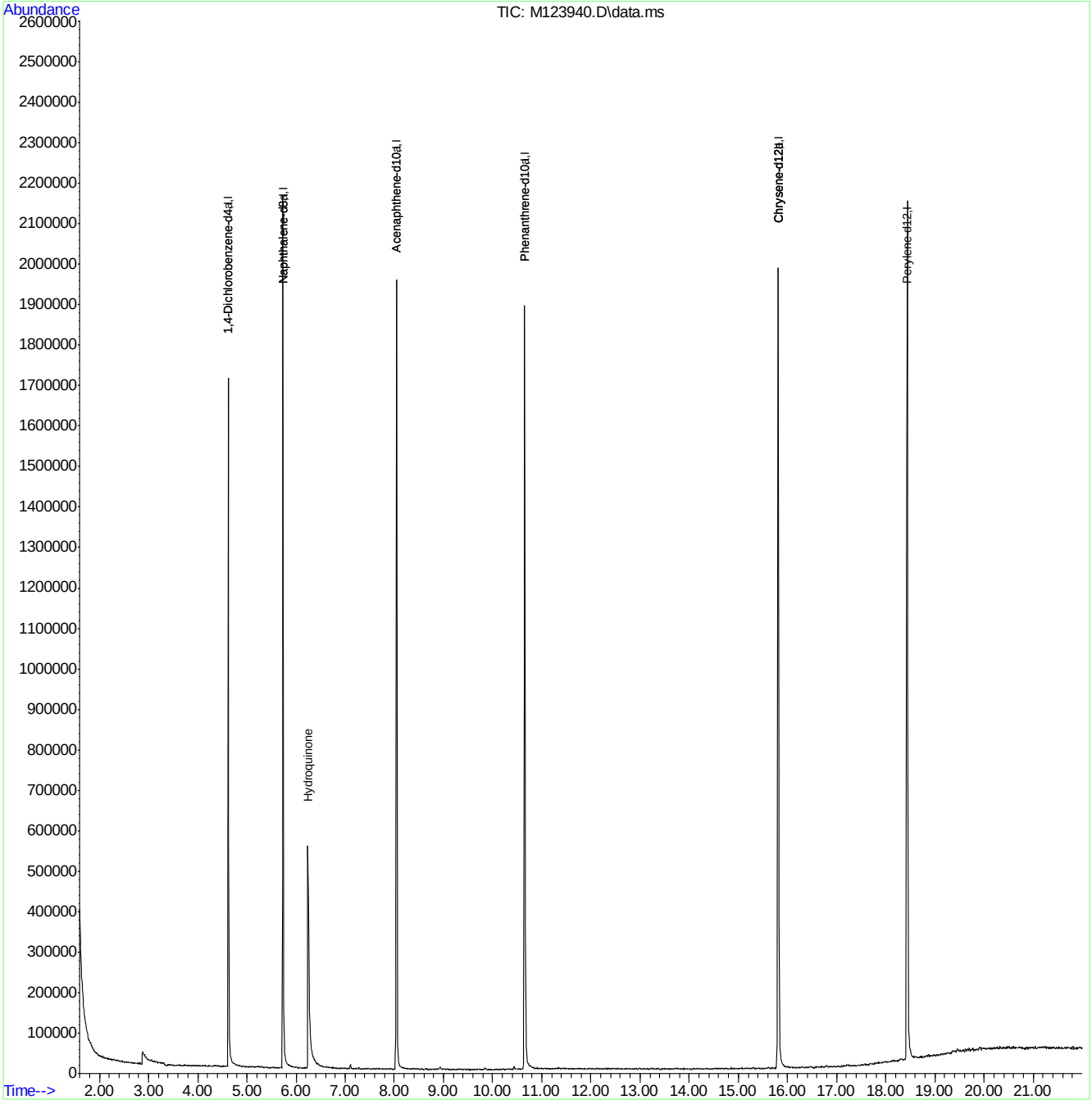
7

SGS ACCUTEST JC19996

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

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

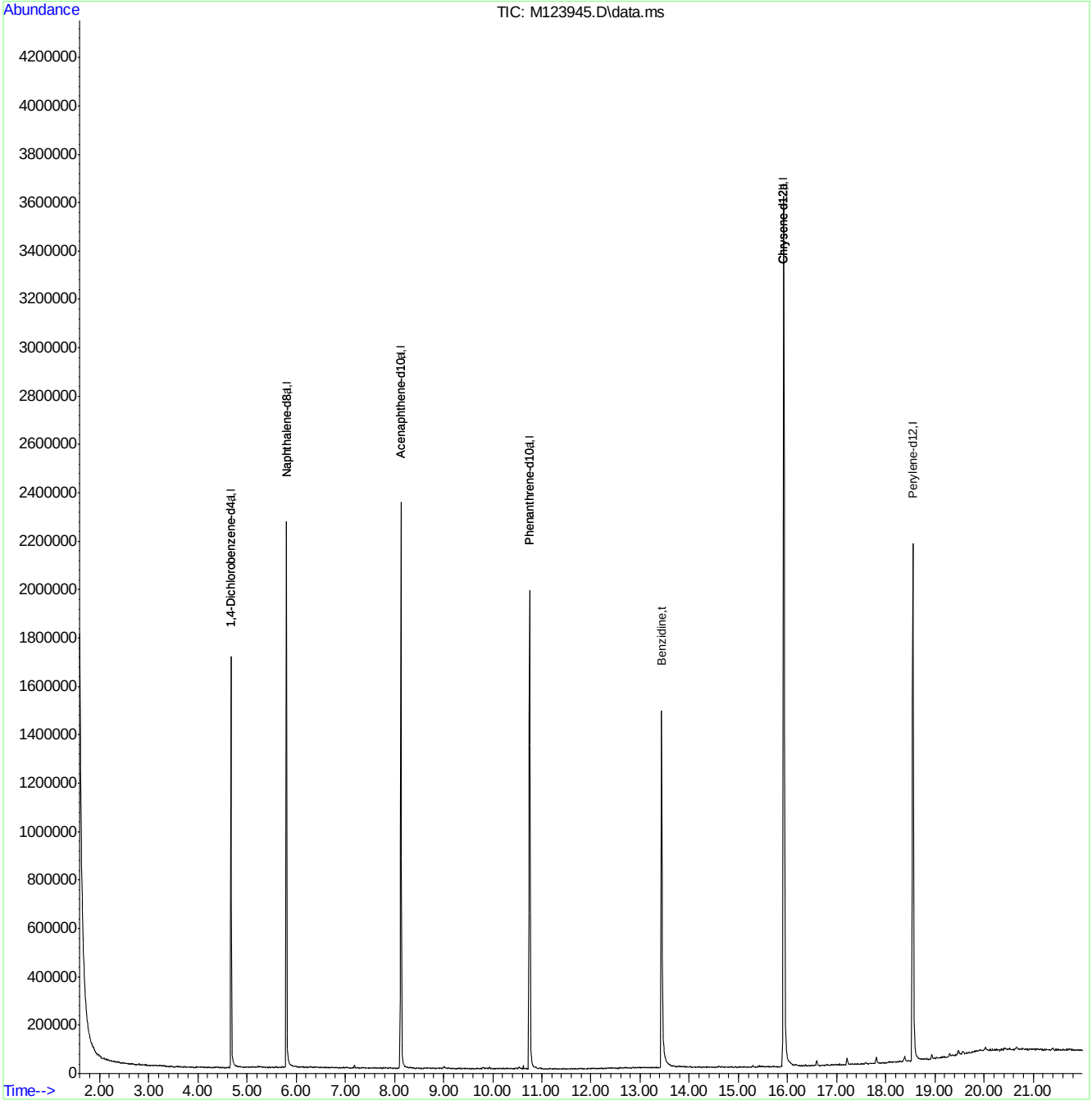
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19996

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

Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5261\
Data File : M124363.D
Acq On : 11 May 2016 10:37 pm
Operator : juliusj
Sample : cc5217-25
Misc : op93478,em5261
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 12 09:39:38 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	4.665	152	360297	40.00	ppm	-0.04
24) Naphthalene-d8	5.792	136	1373183	40.00	ppm	-0.05
47) Acenaphthene-d10	8.121	164	884401	40.00	ppm	-0.07
69) Phenanthrene-d10	10.749	188	1526256	40.00	ppm	-0.07
83) Chrysene-d12	15.924	240	1789923	40.00	ppm	-0.09
92) Perylene-d12	18.557	264	1850721	40.00	ppm	-0.09
102) 1,4-Dichlorobenzene-d4a	4.665	152	360297	40.00	ppm	-0.04
104) Acenaphthene-d10a	8.121	164	884401	40.00	ppm	-0.07
107) Chrysene-d12a	15.924	240	1789973	40.00	ppm	-0.09
110) Phenanthrene-d10a	10.749	188	1526256	40.00	ppm	-0.07
112) Naphthalene-d8a	5.792	136	1373183	40.00	ppm	-0.05
114) Chrysene-d12b	15.924	240	1789923	40.00	ppm	-0.09
System Monitoring Compounds						
5) 2-Fluorophenol	3.725	112	296120	26.88	ppm	-0.02
Spiked Amount 50.000			Recovery	=	53.76%	
8) Phenol-d5	4.436	99	365347	26.40	ppm	-0.03
Spiked Amount 50.000			Recovery	=	52.80%	
25) Nitrobenzene-d5	5.119	82	316681	25.93	ppm	-0.05
Spiked Amount 50.000			Recovery	=	51.86%	
51) 2-Fluorobiphenyl	7.111	172	727549	25.05	ppm	-0.06
Spiked Amount 50.000			Recovery	=	50.10%	
73) 2,4,6-Tribromophenol	9.494	330	171126	32.44	ppm	-0.07
Spiked Amount 50.000			Recovery	=	64.88%	
86) Terphenyl-d14	13.905	244	1003616	25.00	ppm	-0.09
Spiked Amount 50.000			Recovery	=	50.00%	
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	2.224	88	119998	24.02	ppm	91
3) Pyridine	2.582	79	304612	25.05	ppm	91
4) N-Nitrosodimethylamine	2.545	42	154722	29.05	ppm	76
6) Indene	4.868	116	531033	25.91	ppm	99
7) Cumene	4.062	105	726835	26.44	ppm	99
9) Phenol	4.446	94	434789	29.32	ppm	84
10) Aniline	4.430	93	361833	20.98	ppm	77
11) bis(2-Chloroethyl)ether	4.468	93	359053	31.09	ppm	100
12) 2-Chlorophenol	4.526	128	329468	26.68	ppm	96
13) Decane	4.532	43	340316	29.07	ppm	91
14) 1,3-Dichlorobenzene	4.623	146	353706	25.12	ppm	99
15) 1,4-Dichlorobenzene	4.676	146	354431	25.40	ppm	98
16) Benzyl alcohol	4.788	108	189919	26.55	ppm	98
17) 1,2-Dichlorobenzene	4.799	146	339743	25.86	ppm	99
18) Acetophenone	4.991	105	429264	26.17	ppm	97
19) 2-Methylphenol	4.895	108	277818	27.15	ppm	99
20) 2,2'-oxybis(1-Chloropr...	4.874	121	102704	26.92	ppm	95

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5261\
Data File : M124363.D
Acq On : 11 May 2016 10:37 pm
Operator : juliusj
Sample : cc5217-25
Misc : op93478,em5261
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 12 09:39:38 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)
21) 3&4-Methylphenol	5.023	108	299073	26.67	ppm	93
22) n-Nitroso-di-n-propyla...	4.991	70	229740	25.94	ppm	90
23) Hexachloroethane	5.066	201	134347	25.47	ppm	93
26) Nitrobenzene	5.135	77	339054	27.43	ppm	95
27) Quinoline	6.193	129	660280	25.22	ppm	100
28) Isophorone	5.344	82	592147	26.65	ppm	97
29) 2-Nitrophenol	5.424	139	190815	27.28	ppm	98
30) 2,4-Dimethylphenol	5.477	107	282085	24.64	ppm	96
31) Benzoic acid	5.621	105	217678	28.99	ppm	98
32) bis(2-Chloroethoxy)met...	5.541	93	354488	26.27	ppm	97
33) 2,4-Dichlorophenol	5.685	162	280866	26.83	ppm	98
34) 2,6-Dichlorophenol	5.894	162	276059	26.10	ppm	100
35) 1,3,5-Trichlorobenzene	5.429	180	330871	26.50	ppm	95
36) 1,2,4-Trichlorobenzene	5.733	180	317722	25.88	ppm	99
37) 1,2,3-Trichlorobenzene	5.974	180	305574	25.74	ppm	98
38) Naphthalene	5.814	128	909932	25.30	ppm	99
39) 4-Chloroaniline	5.883	127	384870	24.84	ppm	95
40) 2,3-Dichloroaniline	7.005	161	342204	25.09	ppm	99
41) Caprolactam	6.294	55	148744	26.28	ppm	98
42) Hexachlorobutadiene	5.942	225	189990	26.90	ppm	99
43) 4-Chloro-3-methylphenol	6.492	107	274814	26.27	ppm	99
44) 2-Methylnaphthalene	6.615	141	547554	25.46	ppm	99
45) 1-Methylnaphthalene	6.743	142	656823	26.28	ppm	99
46) Dimethylnaphthalene	7.485	156	592599	25.54	ppm	98
48) Hexachlorocyclopentadiene	6.818	237	236125	43.54	ppm	99
49) 2,4,6-Trichlorophenol	7.026	196	213924	25.35	ppm	100
50) 2,4,5-Trichlorophenol	7.106	196	244172	26.58	ppm	98
52) 2-Chloronaphthalene	7.277	162	623697	24.21	ppm	99
53) Biphenyl	7.256	154	801908	24.37	ppm	99
54) 2-Nitroaniline	7.464	65	190734	25.97	ppm	97
55) Dimethylphthalate	7.736	163	754102	25.04	ppm	99
56) Acenaphthylene	7.897	152	1035031	24.30	ppm	100
57) 2,6-Dinitrotoluene	7.832	165	175262	26.18	ppm	96
58) 3-Nitroaniline	8.116	138	180701	24.39	ppm	97
59) Acenaphthene	8.174	153	619336	24.14	ppm	99
60) 2,4-Dinitrophenol	8.319	184	178568	61.76	ppm	97
61) 4-Nitrophenol	8.575	109	59161	21.84	ppm	97
62) Dibenzofuran	8.463	168	942197	24.68	ppm	98
63) 2,4-Dinitrotoluene	8.511	165	235913	26.86	ppm	94
64) 2,3,4,6-Tetrachlorophenol	8.724	232	205280	28.89	ppm	97
65) Diethylphthalate	8.922	149	743389	24.79	ppm	98
66) Fluorene	9.045	166	778784	25.24	ppm	99
67) 4-Chlorophenyl-phenyle...	9.072	204	383110	26.02	ppm	95
68) 4-Nitroaniline	9.173	138	190283	26.41	ppm	97
70) 4,6-Dinitro-2-methylph...	9.237	198	146233	30.46	ppm	94
71) n-Nitrosodiphenylamine	9.301	169	524321	25.58	ppm	96
72) 1,2-Diphenylhydrazine	9.355	77	690428	26.29	ppm	95
74) 4-Bromophenyl-phenylether	9.948	248	257824	27.31	ppm	93
75) Hexachlorobenzene	10.049	284	316232	28.45	ppm	93
76) Pentachlorophenol	10.466	266	322382	66.52	ppm	99

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5261\
Data File : M124363.D
Acq On : 11 May 2016 10:37 pm
Operator : juliusj
Sample : cc5217-25
Misc : op93478,em5261
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 12 09:39:38 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)
77) Phenanthrene	10.791	178	1059096	24.89	ppm	99
78) Anthracene	10.888	178	1129205	25.63	ppm	99
79) Carbazole	11.251	167	1036958	25.55	ppm	100
80) Di-n-butylphthalate	12.015	149	1331506	26.42	ppm	100
81) Fluoranthene	13.083	202	1326103	26.60	ppm	99
82) Octadecane	10.711	57	451140	27.48	ppm	96
84) Pyrene	13.510	202	1353283	23.19	ppm	99
85) Butyl stearate	15.176	56	340713	25.54	ppm	94
87) Butylbenzylphthalate	14.952	149	591937	23.33	ppm	96
88) Benzo[a]anthracene	15.908	228	1333079	24.36	ppm	100
89) 3,3'-Dichlorobenzidine	15.930	252	538902	26.97	ppm	99
90) Chrysene	15.972	228	1262934	24.71	ppm	99
91) bis(2-Ethylhexyl)phtha...	16.154	149	807957	23.62	ppm	97
93) Di-n-octylphthalate	17.382	149	1393627	23.20	ppm	98
94) Benzo[b]fluoranthene	17.916	252	1423707	25.04	ppm	92
95) Benzo[k]fluoranthene	17.959	252	1413849	25.80	ppm	98
96) Benzo[a]pyrene	18.461	252	1332400	25.37	ppm	98
97) Indeno[1,2,3-cd]pyrene	20.288	276	1631343	30.70	ppm	99
98) Dibenz(a,h)acridine	19.909	279	1239279	26.31	ppm	99
99) Dibenz[a,h]anthracene	20.320	278	1401601	25.94	ppm	97
100) 7,12-Dimethylbenz(a)an...	17.895	256	673368	26.31	ppm	97
101) Benzo[g,h,i]perylene	20.747	276	1399887	25.27	ppm	97

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

7.6.69

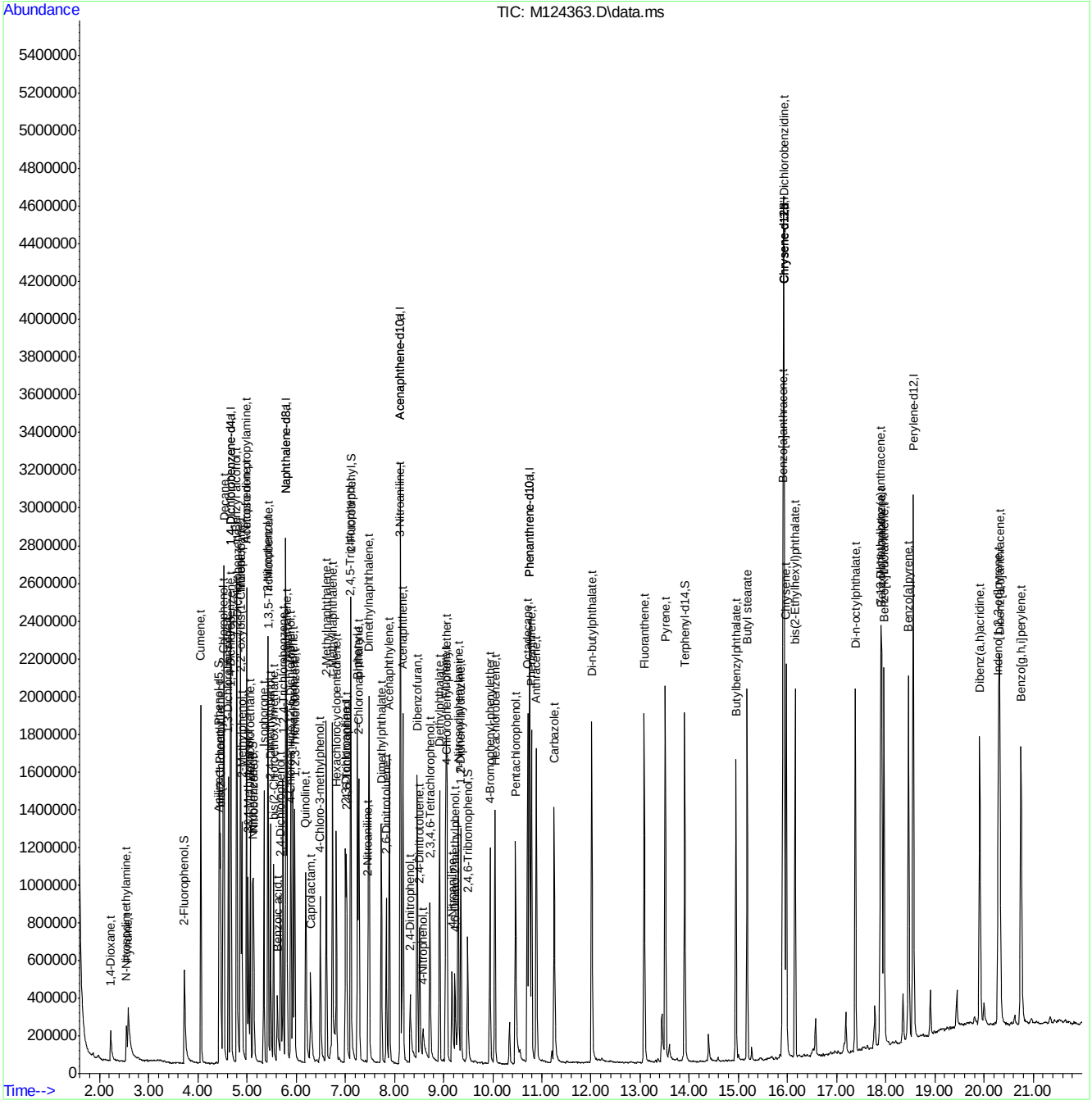
7

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5261\
Data File : M124363.D
Acq On : 11 May 2016 10:37 pm
Operator : juliusj
Sample : cc5217-25
Misc : op93478,em5261
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 12 09:39:38 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



SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5261\
Data File : M124364.D
Acq On : 11 May 2016 11:06 pm
Operator : juliusj
Sample : cc5239-25
Misc : op93478,em5261
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 12 09:41:57 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	4.665	152	481093	40.00	ppm	-0.04
24) Naphthalene-d8	5.792	136	1820851	40.00	ppm	-0.05
47) Acenaphthene-d10	8.120	164	1088813	40.00	ppm	-0.07
69) Phenanthrene-d10	10.743	188	2027160	40.00	ppm	-0.08
83) Chrysene-d12	15.918	240	2418457	40.00	ppm	-0.10
92) Perylene-d12	18.557	264	2540183	40.00	ppm	-0.09
102) 1,4-Dichlorobenzene-d4a	4.665	152	481093	40.00	ppm	-0.04
104) Acenaphthene-d10a	8.120	164	1088813	40.00	ppm	-0.07
107) Chrysene-d12a	15.918	240	2418457	40.00	ppm	-0.10
110) Phenanthrene-d10a	10.743	188	2027160	40.00	ppm	-0.08
112) Naphthalene-d8a	5.792	136	1820851	40.00	ppm	-0.05
114) Chrysene-d12b	15.918	240	2418457	40.00	ppm	-0.10
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	13.039	57	390090	24.98	ppm	-0.07
Spiked Amount 50.000			Recovery	=	49.96%	
111) o-terphenyl	11.533	230	857309	31.30	ppm	0.01
Spiked Amount 50.000			Recovery	=	62.60%	
Target Compounds						Qvalue
103) Benzaldehyde	4.344	105	277690	25.54	ppm	98
105) 1,2,4,5-Tetrachloroben...	6.838	216	422809	30.12	ppm	93
106) Atrazine	10.348	215	167764	36.47	ppm #	61
108) Benzidine	13.435	184	594713	20.92	ppm	99
113) Hydroquinone	6.331	110	341110	24.15	ppm	99

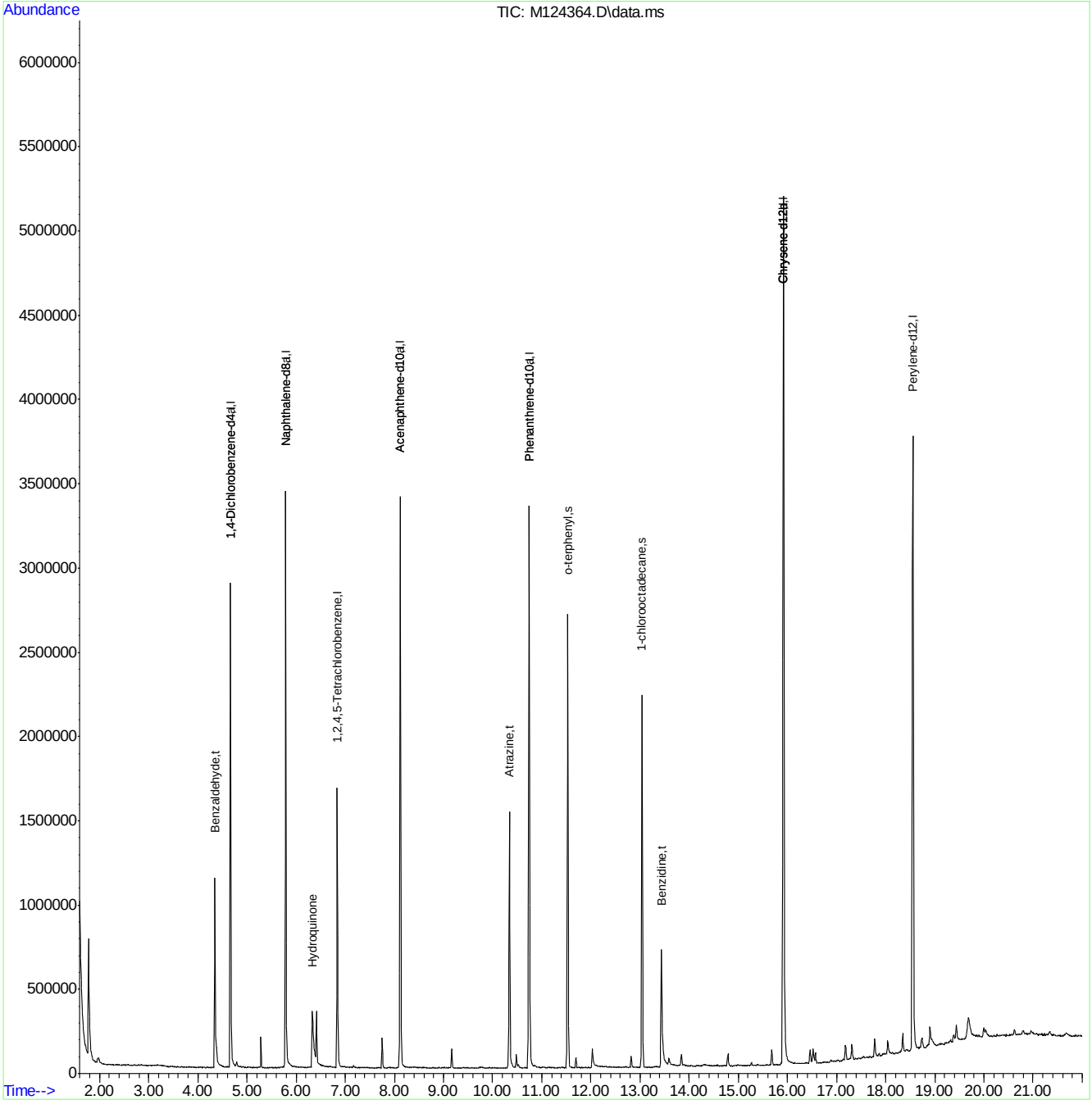
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5261\
Data File : M124364.D
Acq On : 11 May 2016 11:06 pm
Operator : juliusj
Sample : cc5239-25
Misc : op93478,em5261
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 12 09:41:57 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 Thu May 12 09:42:12 2016 MSM

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5262\
Data File : M124391.D
Acq On : 12 May 2016 12:22 pm
Operator : ashleyd
Sample : cc5217-50
Misc : op93478,em5262
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 12 14:21:06 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	4.651	152	310314	40.00	ppm	-0.06
24) Naphthalene-d8	5.778	136	1149492	40.00	ppm	-0.07
47) Acenaphthene-d10	8.107	164	735657	40.00	ppm	-0.08
69) Phenanthrene-d10	10.729	188	1298130	40.00	ppm	-0.09
83) Chrysene-d12	15.899	240	1511737	40.00	ppm	-0.12
92) Perylene-d12	18.532	264	1629456	40.00	ppm	-0.12
102) 1,4-Dichlorobenzene-d4a	4.651	152	310314	40.00	ppm	-0.06
104) Acenaphthene-d10a	8.107	164	735657	40.00	ppm	-0.08
107) Chrysene-d12a	15.899	240	1511737	40.00	ppm	-0.12
110) Phenanthrene-d10a	10.729	188	1298130	40.00	ppm	-0.09
112) Naphthalene-d8a	5.778	136	1149492	40.00	ppm	-0.07
114) Chrysene-d12b	15.899	240	1511737	40.00	ppm	-0.12
System Monitoring Compounds						
5) 2-Fluorophenol	3.716	112	475802	50.14	ppm	-0.03
Spiked Amount 50.000			Recovery	=	100.28%	
8) Phenol-d5	4.427	99	619109	51.94	ppm	-0.04
Spiked Amount 50.000			Recovery	=	103.88%	
25) Nitrobenzene-d5	5.110	82	520492	50.92	ppm	-0.06
Spiked Amount 50.000			Recovery	=	101.84%	
51) 2-Fluorobiphenyl	7.097	172	1175731	48.67	ppm	-0.07
Spiked Amount 50.000			Recovery	=	97.34%	
73) 2,4,6-Tribromophenol	9.474	330	263252	58.67	ppm	-0.09
Spiked Amount 50.000			Recovery	=	117.34%	
86) Terphenyl-d14	13.886	244	1704665	50.27	ppm	-0.11
Spiked Amount 50.000			Recovery	=	100.54%	
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	2.205	88	210863	49.01	ppm	93
3) Pyridine	2.563	79	495180	47.28	ppm	92
4) N-Nitrosodimethylamine	2.525	42	247621	53.98	ppm	87
6) Indene	4.854	116	881602	49.95	ppm	99
7) Cumene	4.053	105	1219134	51.49	ppm	99
9) Phenol	4.437	94	696566	54.54	ppm	88
10) Aniline	4.421	93	624599	42.05	ppm	85
11) bis(2-Chloroethyl)ether	4.453	93	511467	51.42	ppm	97
12) 2-Chlorophenol	4.512	128	536321	50.42	ppm	94
13) Decane	4.523	43	524363	52.01	ppm	96
14) 1,3-Dichlorobenzene	4.608	146	588212	48.50	ppm	99
15) 1,4-Dichlorobenzene	4.667	146	590632	49.15	ppm	99
16) Benzyl alcohol	4.779	108	310038	50.33	ppm	95
17) 1,2-Dichlorobenzene	4.785	146	551553	48.75	ppm	97
18) Acetophenone	4.982	105	697283	49.36	ppm	97
19) 2-Methylphenol	4.886	108	452825	51.37	ppm	99
20) 2,2'-oxybis(1-Chloropr...	4.865	121	165616	50.40	ppm	98

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5262\
Data File : M124391.D
Acq On : 12 May 2016 12:22 pm
Operator : ashleyd
Sample : cc5217-50
Misc : op93478,em5262
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 12 14:21:06 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)
21) 3&4-Methylphenol	5.009	108	481634	49.87 ppm	#	84
22) n-Nitroso-di-n-propyla...	4.977	70	369142	48.39 ppm		90
23) Hexachloroethane	5.057	201	217899	47.96 ppm		99
26) Nitrobenzene	5.126	77	535990	51.79 ppm		98
27) Quinoline	6.184	129	1068039	48.74 ppm		100
28) Isophorone	5.329	82	952475	51.20 ppm		95
29) 2-Nitrophenol	5.415	139	305220	52.13 ppm		91
30) 2,4-Dimethylphenol	5.468	107	468927	48.93 ppm		100
31) Benzoic acid	5.618	105	379969	60.45 ppm		98
32) bis(2-Chloroethoxy)met...	5.527	93	558261	49.42 ppm		98
33) 2,4-Dichlorophenol	5.671	162	464252	52.98 ppm		98
34) 2,6-Dichlorophenol	5.880	162	446816	50.47 ppm		98
35) 1,3,5-Trichlorobenzene	5.415	180	547658	52.40 ppm		97
36) 1,2,4-Trichlorobenzene	5.725	180	523896	50.97 ppm		98
37) 1,2,3-Trichlorobenzene	5.960	180	496344	49.94 ppm		96
38) Naphthalene	5.799	128	1512856	50.25 ppm		99
39) 4-Chloroaniline	5.874	127	628156	48.44 ppm		99
40) 2,3-Dichloroaniline	6.990	161	565050	49.50 ppm		99
41) Caprolactam	6.291	55	237152	50.05 ppm		97
42) Hexachlorobutadiene	5.928	225	309909	52.42 ppm		99
43) 4-Chloro-3-methylphenol	6.478	107	440553	50.31 ppm	#	27
44) 2-Methylnaphthalene	6.601	141	887542	49.30 ppm		98
45) 1-Methylnaphthalene	6.729	142	1046155	50.01 ppm		99
46) Dimethylnaphthalene	7.471	156	975153	50.21 ppm		99
48) Hexachlorocyclopentadiene	6.803	237	382109	79.57 ppm		98
49) 2,4,6-Trichlorophenol	7.012	196	345376	49.20 ppm		98
50) 2,4,5-Trichlorophenol	7.092	196	374620	49.03 ppm		96
52) 2-Chloronaphthalene	7.263	162	1007281	47.00 ppm		99
53) Biphenyl	7.236	154	1307625	47.77 ppm		98
54) 2-Nitroaniline	7.450	65	305625	50.03 ppm		98
55) Dimethylphthalate	7.717	163	1222754	48.80 ppm		99
56) Acenaphthylene	7.882	152	1670696	47.15 ppm		100
57) 2,6-Dinitrotoluene	7.818	165	287100	51.55 ppm		98
58) 3-Nitroaniline	8.101	138	297961	48.35 ppm		96
59) Acenaphthene	8.155	153	1011822	47.40 ppm		99
60) 2,4-Dinitrophenol	8.299	184	287691	108.91 ppm		80
61) 4-Nitrophenol	8.561	109	95983	42.59 ppm		97
62) Dibenzofuran	8.449	168	1531903	48.24 ppm		99
63) 2,4-Dinitrotoluene	8.497	165	386662	52.92 ppm		97
64) 2,3,4,6-Tetrachlorophenol	8.705	232	326520	55.25 ppm		95
65) Diethylphthalate	8.903	149	1210238	48.52 ppm		98
66) Fluorene	9.031	166	1265405	49.30 ppm		99
67) 4-Chlorophenyl-phenyle...	9.052	204	611513	49.94 ppm		96
68) 4-Nitroaniline	9.154	138	306362	51.12 ppm		97
70) 4,6-Dinitro-2-methylph...	9.218	198	243227	56.16 ppm		94
71) n-Nitrosodiphenylamine	9.282	169	858099	49.21 ppm		99
72) 1,2-Diphenylhydrazine	9.335	77	1077375	48.24 ppm		94
74) 4-Bromophenyl-phenylether	9.928	248	422798	52.66 ppm		94
75) Hexachlorobenzene	10.030	284	497660	52.63 ppm		95
76) Pentachlorophenol	10.446	266	503484	118.20 ppm		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5262\
Data File : M124391.D
Acq On : 12 May 2016 12:22 pm
Operator : ashleyd
Sample : cc5217-50
Misc : op93478,em5262
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 12 14:21:06 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)
77)	Phenanthrene	10.772	178	1798259	49.69	ppm	99
78)	Anthracene	10.868	178	1906593	50.87	ppm	99
79)	Carbazole	11.231	167	1767805	51.21	ppm	99
80)	Di-n-butylphthalate	11.995	149	2145770	50.07	ppm	100
81)	Fluoranthene	13.063	202	2189184	51.63	ppm	99
82)	Octadecane	10.692	57	710090	50.85	ppm	96
84)	Pyrene	13.491	202	2226813	45.18	ppm	99
85)	Butyl stearate	15.157	56	536373	47.60	ppm	92
87)	Butylbenzylphthalate	14.927	149	995324	46.45	ppm	97
88)	Benzo[a]anthracene	15.883	228	2210640	47.83	ppm	99
89)	3,3'-Dichlorobenzidine	15.905	252	893481	52.94	ppm	98
90)	Chrysene	15.953	228	2110928	48.91	ppm	99
91)	bis(2-Ethylhexyl)phtha...	16.134	149	1322319	45.76	ppm	94
93)	Di-n-octylphthalate	17.357	149	2399301	45.37	ppm	98
94)	Benzo[b]fluoranthene	17.897	252	2438818	48.72	ppm	93
95)	Benzo[k]fluoranthene	17.940	252	2397597	49.68	ppm	98
96)	Benzo[a]pyrene	18.436	252	2302665	49.80	ppm	99
97)	Indeno[1,2,3-cd]pyrene	20.263	276	2905955	62.11	ppm	98
98)	Dibenz(a,h)acridine	19.884	279	2203048	53.12	ppm	100
99)	Dibenz[a,h]anthracene	20.290	278	2512732	52.81	ppm	99
100)	7,12-Dimethylbenz(a)an...	17.876	256	1174490	52.13	ppm	97
101)	Benzo[g,h,i]perylene	20.717	276	2539260	52.07	ppm	97

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

7.6.71

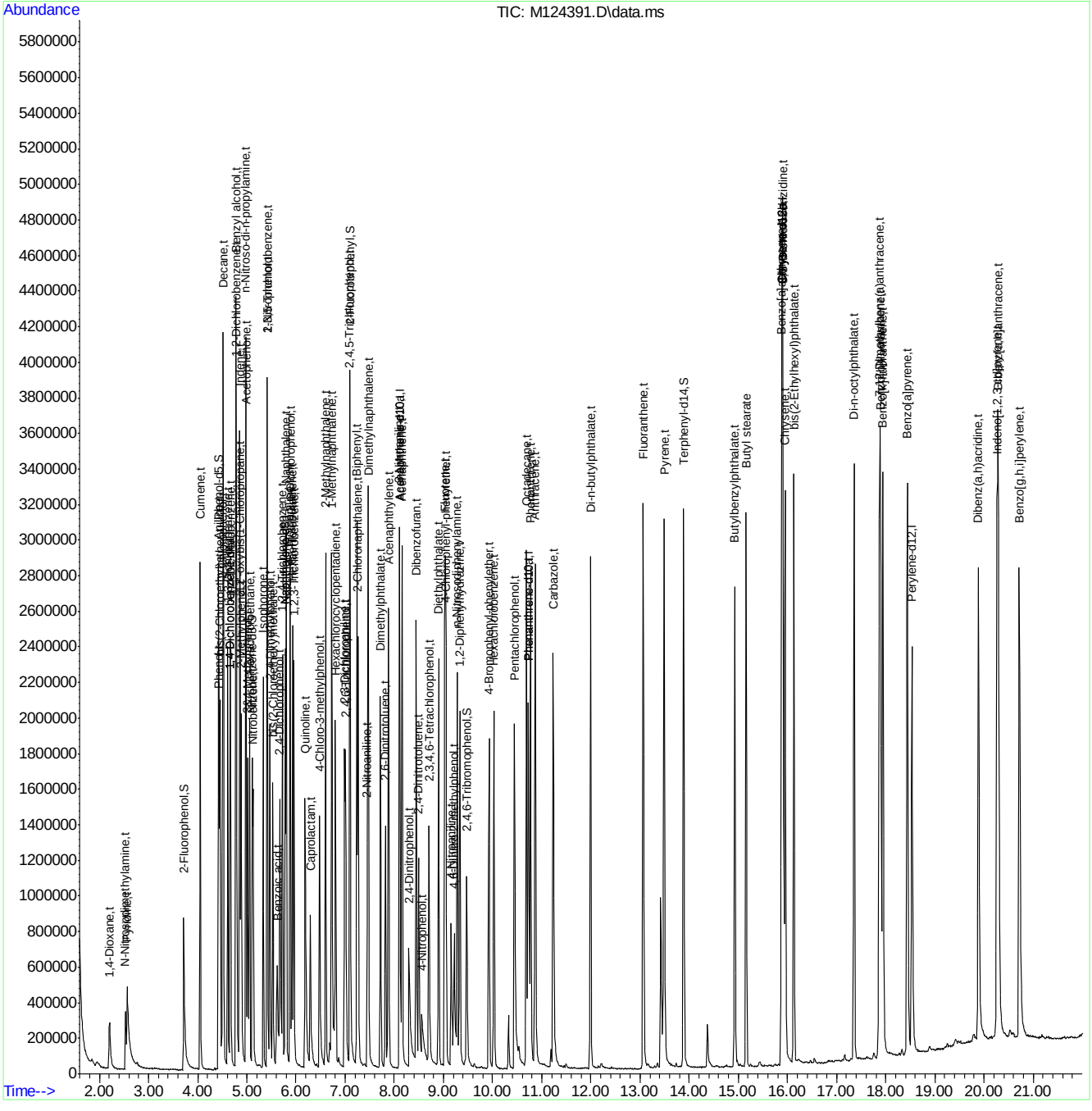
7

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5262\
Data File : M124391.D
Acq On : 12 May 2016 12:22 pm
Operator : ashleyd
Sample : cc5217-50
Misc : op93478,em5262
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 12 14:21:06 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 Thu May 12 14:21:13 2016 MSM

Page: 4

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5262\
Data File : M124392.D
Acq On : 12 May 2016 12:51 pm
Operator : ashleyd
Sample : cc5239-50
Misc : op93478,em5262
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 12 17:37:38 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	4.654	152	400999	40.00	ppm	-0.05
24) Naphthalene-d8	5.776	136	1530940	40.00	ppm	-0.07
47) Acenaphthene-d10	8.105	164	908104	40.00	ppm	-0.09
69) Phenanthrene-d10	10.722	188	1660425	40.00	ppm	-0.10
83) Chrysene-d12	15.897	240	2008660	40.00	ppm	-0.12
92) Perylene-d12	18.530	264	2184954	40.00	ppm	-0.12
102) 1,4-Dichlorobenzene-d4a	4.654	152	400999	40.00	ppm	-0.05
104) Acenaphthene-d10a	8.105	164	908104	40.00	ppm	-0.09
107) Chrysene-d12a	15.897	240	2008660	40.00	ppm	-0.12
110) Phenanthrene-d10a	10.722	188	1660425	40.00	ppm	-0.10
112) Naphthalene-d8a	5.776	136	1530940	40.00	ppm	-0.07
114) Chrysene-d12b	15.897	240	2008660	40.00	ppm	-0.12
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	588581	45.39	ppm	-0.09
Spiked Amount 50.000			Recovery	=	90.78%	
111) o-terphenyl	11.512	230	1312317	58.49	ppm	0.00
Spiked Amount 50.000			Recovery	=	116.98%	
Target Compounds						Qvalue
103) Benzaldehyde	4.334	105	378576	41.77	ppm	98
105) 1,2,4,5-Tetrachloroben...	6.828	216	675736	57.72	ppm	94
106) Atrazine	10.326	215	258581	67.40	ppm #	67
108) Benzidine	13.419	184	1108976	46.40	ppm	98
113) Hydroquinone	6.315	110	591867	49.84	ppm	99

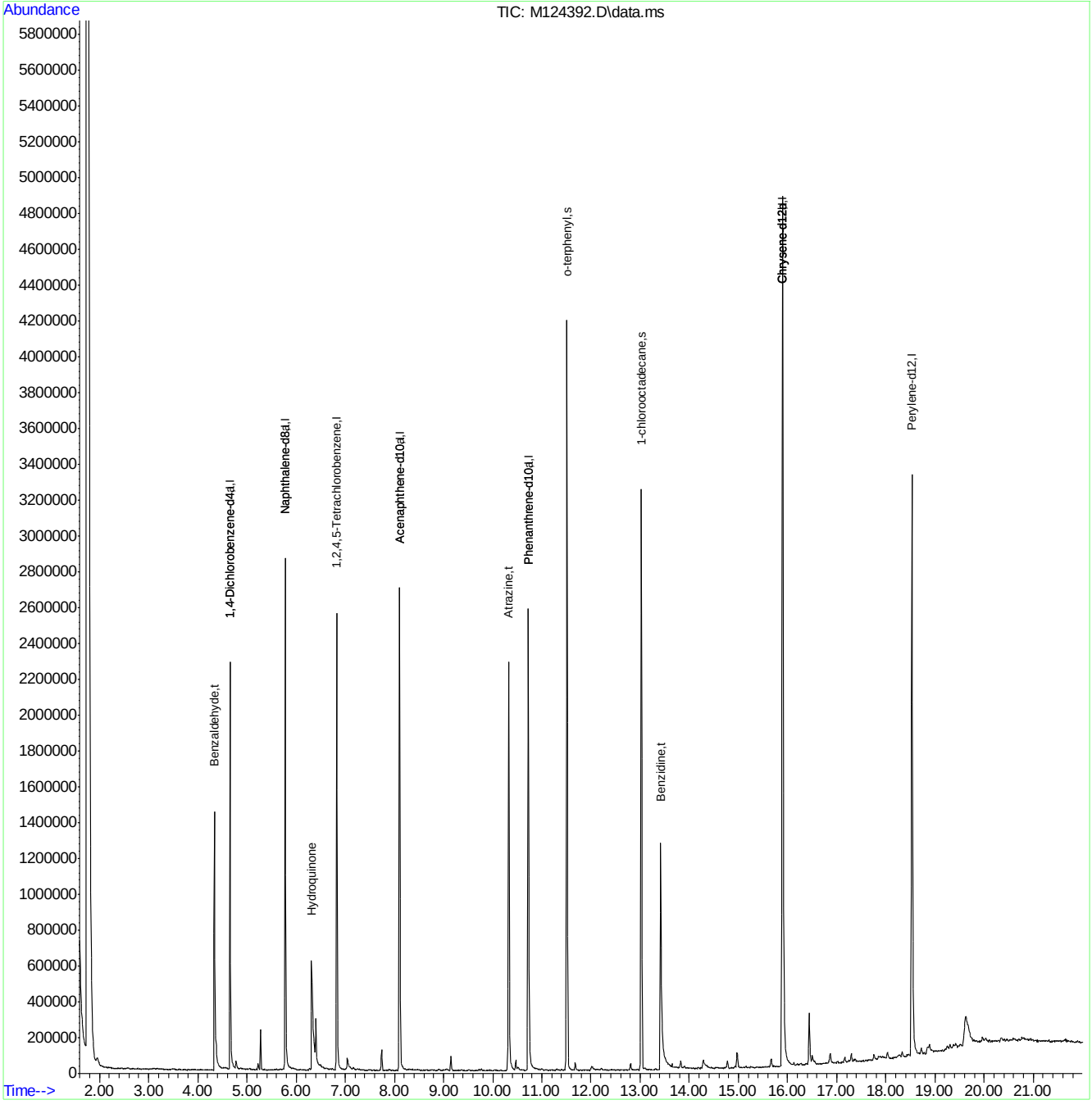
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5262\
Data File : M124392.D
Acq On : 12 May 2016 12:51 pm
Operator : ashleyd
Sample : cc5239-50
Misc : op93478,em5262
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 12 17:37:38 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 Thu May 12 17:37:48 2016 MSM

SGS ACCUTEST JC19996

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 JC19996

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

SGS ACCUTEST JC19996

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

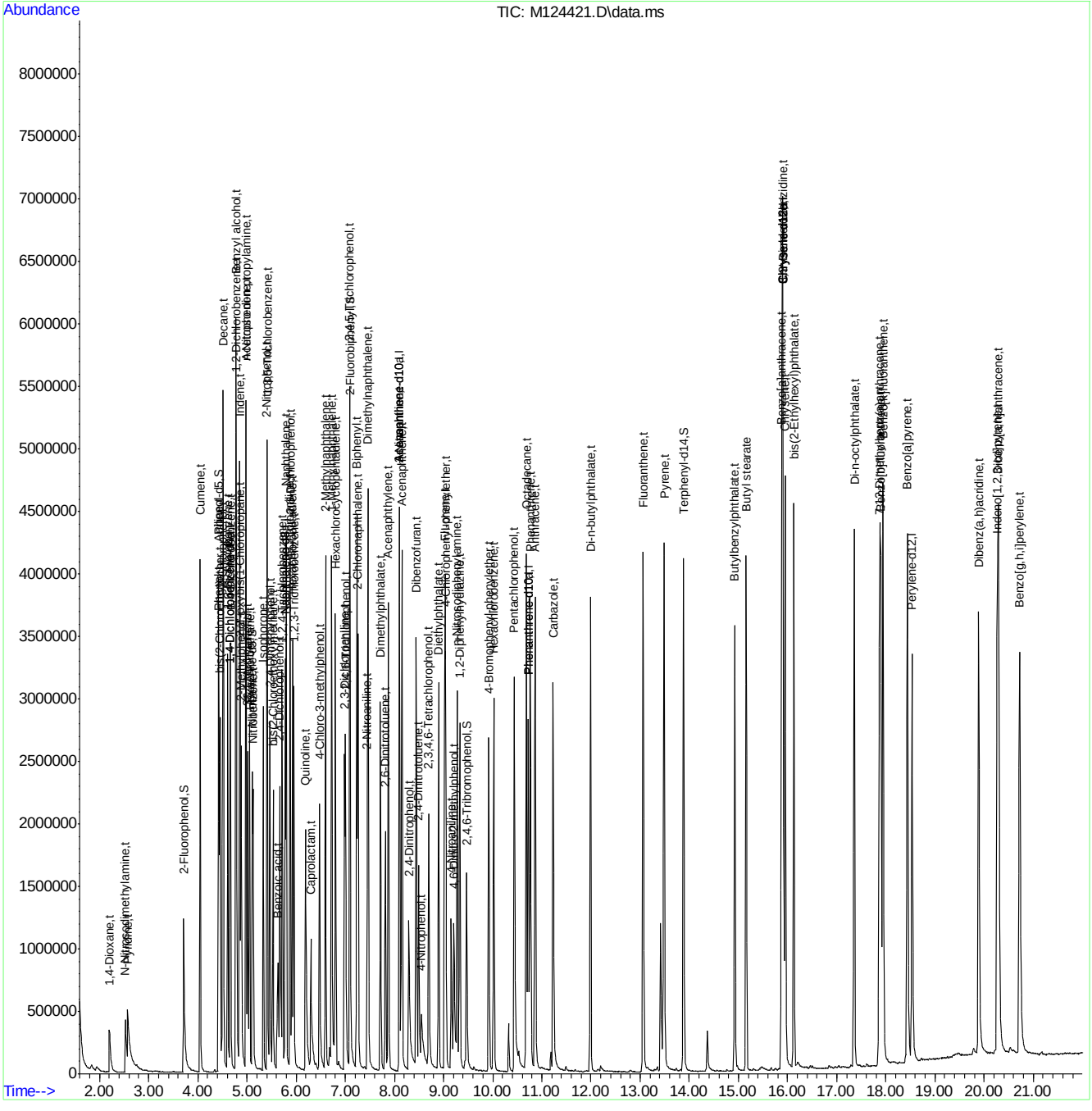
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19996

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 JC19996

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

7.6.74

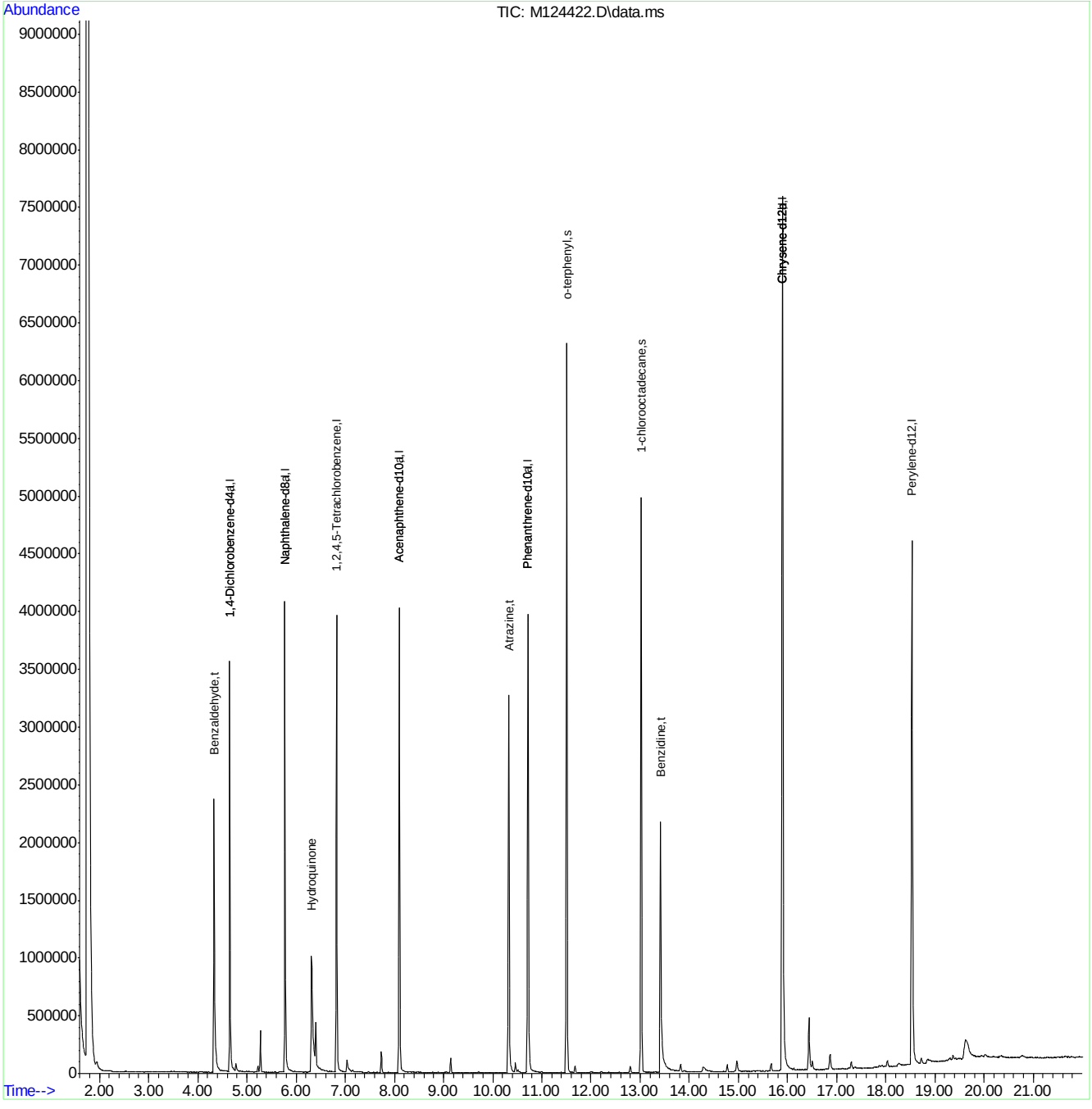
7

SGS ACCUTEST JC19996

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 JC19996

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: E2P2547

Print Analyst Name: ROBERT LA POSTA

Analyst Signature: [signature]

Date: 4/14/16

Columns: ZB-5MS+30m x 0.25mm x 0.25um

Method: 8270D/625

Initial Cal. Method: M2P2547

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
MIX1429608	8270	50ppm
SMI1827-67A	BNA	50ppm
	4/14/16	
CMS7132	DCA 1570	400ppm
167148	DAN (FROM)	—

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: AMG Date: 4/20/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	2P5836	DFZBP				1					OK	3:12pm
	5836	~~IC2547-50~~		BNA	W	2					NA	SMI1827-107A + DCA
	5836	IC2547-50		BNA	W	2					OK	SMI1827-106C
	5836	IC2547-5				3					OK	-106D
	5836	IC2547-80	AMG 4/20/16			4					OK	-106B
	5836	-10				5					OK	-106E
	5836	-100				6					OK	-106A
	5837	-5				7					OK	-106G
	5837	-2				8					OK	-106H
	5837	-1				9					OK	-106I 7:21pm

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.

49

Form: OR015-07
Rev. Date: 1/19/16

SGS ACCUTEST JC19996

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E2P2548 4 SD ② 4/19/16

Print Analyst Name: Sara Davis

Date: 4/19/2016

Analyst Signature: SED

Standard Data

Lot #	Description	Conc.
SV151827-73A	TCL42	100 ppm
-73B	↓	80 ppm
-73C		50 ppm
-73D		25 ppm
-73E		10 ppm
-73G	↓	5 ppm

Standard Data

Lot #	Description	Conc.
SV151829-108	DFTPP	50 ppm
SV151827-73H	TCL42	2 ppm
-73I	↓	1 ppm
CM5732	Internal Std	4000 ppm
159146	DCM (Fisher)	—

Columns: ZB-5ms+ 30m x .25mm x .25 um

Method 8270 D/625

Initial Cal. Method M2P2547

Injection Volume: 1 µl

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: 4/20/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	2P58373	DFTPP			W	1					OK	H7PM
	58374	IC2548-100		TCL42	W	2					OK	
	58375	-80				3					OK	
	58376	ICC2548-50				4					OK	
	58377	IC2548-25				5					OK	
	58378	-10				6					OK	
	58379	-5				7					OK	
	58380	-2				8					OK	
	58381	-1				9					OK	
	58382	ICV2547-50		Acids		10	AMO 4/20/16				RR OK	SV151827 ~~87~~ 114 SD ② RR for DOO
	58383	-50		Aniline		11					RR OK	~~94~~ 115 4/19/16 RR for DOO
	58384	-50		ABN surr		12					OK	OP151624 20
	58385	-50		BN1		13					OK	SV151827-113
	58386	-50		BN2		14					OK	-95
	58387	ICV2548-50		HQ		15					OK	-98C
	58388	-50		Benzidine 3rd		16					OK	-38F BZD-1
	58389	aniline-test		extractions test		1					OK	SV151827130 passing 12/c am AMO 4/20/16

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.

51

Form: OR015-07
Rev. Date: 1/19/16

7.7.2 7

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E2P2549

Print Analyst Name: Robert LaPosta

Date: 4/20/16

Analyst Signature: [signature]

Columns: ~~RX-5ms~~ ZB-MS+ 30mX0.25mm 0.25um

Method YB70D/625

Initial Cal. Method M2P2547

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SMIX2	DFTPP	50ng
CMS732	75-70	400ng
SMIX1	Dim Cl benzenes	—

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: 4/20/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	E2P58390	DFTPP				1					OK	9:38am
	58391	IOV25470		ACID		2					OK	SVM127-129 passes
	58392	50		ANALINES		3					OK	-130 passes
												10:16am

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

53

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: E2P2592

Print Analyst Name: ROBERT LA ROSTA

Analyst Signature:

Date: 5/14/16

Columns: RTX-5MS 30m x 0.25mm x 0.25µ

Method: 8270D/625

Initial Cal. Method: M2P2557

Injection Volume: 1µl

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SMM827-91	D-16B	52ppm
-1073	BNA	20ppm
CM5732	13TD	60ppm
162641	DCM (RNA)	

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: 5/24/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	2P59334	D-16B				1					not using	JTP review
	59335	D-16B				1						11:41am
	59336	CM5547-25		BNA	W	2						PAH only
	59337	0803830-mg	93720	PAH	S	3			1.0			#JTP
	59338	JC99764				4						JC99564
	59339	-2				5						RRTX
	59340	-3				6						RRTX
	59341	-4				7						RRTX
	59342	-5				8						RRTX
	59343	-6				9						RRTX
	59344	-7				10						RRTX
	59345	-8				11						RRTX
	59346	-9				12						4:43pm RRTX

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.

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Form: OR015-07
Rev. Date: 1/19/16

7.7.4

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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.
		4/14/16

Standard Data		
Lot #	Description	Conc.
SVIS1827-08	DFTPP	50ppm
SVIS1827-03	SIM Internal	400ppm
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~~ 4/14/16		4/14/16 ~~BFB SIM~~	W	1					~~ok~~	deg ↑ reinstead
	60762	DFTPP			W	1					OK	1:31pm
	60763A	ICC2855-1.0			W	2					ok	SVIS1827-104C
	60764A	IC2855-0.5				3					ok	104D
	60765A	IC2855-0.2				4					OK	104E
	60766	IC2855-0.1				5					ok	104F
	60767	IC2855-0.05				6					OK	104G
	60768	IC2855-0.02				7					ok	104H
	60769	IC2855-0.01				8					ok	104I
	60770	IC2855-5.0				9					ok	104A
	60771	IC2855-2.5				10					OK	104B
	60772	ICV2855-1.0		Acid		11					ok	SVIS1827-27
	60773	ICV2855-1.0		BN1		12					ok	OP16A12-28
	60774	ICV2855-1.0		BN2		13					ok	SVIS1829-85 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.

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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 E3M2880

Print Analyst Name: Julius M. Johnson

Analyst Signature: JMJ

Date: 5/11/16

Columns: ZB5ms⊕ 30m x .25mm x .25µm

Method 8270D/625

Initial Cal. Method M3M2855SIM

Injection Volume: 1µl

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV151829108	DFTPP	50ppm
SV161935 9A	Sim Std	1.0ppm
-7	SimIS	400ppm
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: JM

Date: 5-17-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	3M61242	DFTPP				1					Not using	RCPT Reinject
	61243	DFTPP				1					ok	11:22 pm
	61244	CC2855-1				2					ok	2.N only!
	61245	OP93813-MB1	93813	B8270		3			/	/	ok	
	61246	-BS12				4			/	/	ok	
	61247	-MS				5			/	/	ok	
	61248	-MSD				6			/	/	ok	
	61249	JC19935-1		BSIMNJ 14DIOX		7			/	/	ok	
	61250	-2		↓		8			/	/	ok	
	61251	-3		↓		9			/	/	ok	
	61252	OP93820a-MB1	93820	B8270		10			/	/	ok	1,4dioxane=13
	61253	-BS12				11			/	/	ok	
	61254	-MS				12			/	/	ok	
	61255	-MSD				13			/	/	ok	
	61256	JC19996-1		BSIM14DIOX		14			/	/	ok	
	61257	-3		x NP		15			/	/	ok	
	61258	-4		↓		16			/	/	ok	Rx for 1,4dioxane

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.

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Form: OR015-07
Rev. Date: 1/19/16

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E3M2880

Print Analyst Name: Julius Johnson

Analyst Signature: JMJ

Date: 5/12/16

Columns: ZB5MS (30m x .25mm x .25µm)

Method 8270D/625

Initial Cal. Method M3M2855S1M

Injection Volume: 1µl

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	See page 57	

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: 5-17-2016

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	3M61259	JC19996-5	93SRUA	BSIM 14DIOX		17			✓	✓	ok	
	61260	-6		x VAP		18			✓	✓	ok	
	61261	JC19949-1		1,4dioxane		19					not run	Sequence changed
	61262	-3		↓		20					↓	↓
	61263	OP93815S-MB1	93815	B8270		21			✓	✓	ok	
	61264	-BS2				22			✓	✓	ok	
	61265	JC45739-7 (ID dm) 5/12/16		BSIM PAH		23			✓	✓	ok	
	61266	OP93815S-MS	93815			24					not ran	out from seq out of 12 hrs.
	61267	-MSD				25					↓	↓
	61268	JC19949-1	93SRUA	1,4dioxane (rx MBI nit)	W	19			✓	✓	OK	11:19am. rx MBI nit for 1,4DIOX

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.

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Form: OR015-07
Rev. Date: 1/19/16

SGS ACCUTEST JC19996

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	CC2881-05		BNAsim	W	2					not using	
	64722	1:400 x test				2					not using	test split changed. flow and oven temp
	64723A	IC2881-5		BNAsim	W	2					OK	SVS1827-104D varian 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.

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Form: OR015-07
Rev. Date: 1/19/16

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E4M2919

Print Analyst Name: Ashley Moye

Date: 5/13/16

Analyst Signature: AMO

Columns: Rxi5Si/ms30m x 25mm x 25µm

Method 8270D/625

Initial Cal. Method M4M2881sim

Injection Volume: 1 µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV162858	DFTPP	50 ppm
SV161935	Sim std.	1 ppm
SV164967	Sim internal	400 ppm
162061	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: AM

Date: 5-17-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	4M65259	DFTPP				1					OK	1046AM
	65260	CC2881-1.0		BMHsim	W	2					OK	
	65261	op93631-mbl	93631-1	AB8270	W	3			✓	✓	OK	
	65262	-bs12				4			✓	✓	OK	
	65263	-ms				5			✓	✓	OK	
AMO 5/13/16	65264	-msd				6			✓	✓	OK	
	65265	JC19535-1		ABsimpap		7			✓	✓	OK	
	65266	-3				8			✓	✓	OK	
	65267	-4				9			✓	✓	OK	
	65268	op93830-bs12	93830-1	AB8270	W	10			✓	✓	OK	
	65269	-ms				11			✓		N	bad injection
	65270	-msd				12			✓	✓	OK	
	65271	OP93830a MB1				13			✓	✓	OK	
	65272	JC19996-2		SIM 14DIOX+NAP	S	14			✓	✓	OK	
	65273	OP93835a-MB1	93835	B8270		15			✓	✓	OK	
	65274	-BS12				16			✓	✓	OK	
	65275	-MS				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.

Form: OR015-07
Rev. Date: 1/19/16

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E4M2925

Print Analyst Name: Linsey K

Analyst Signature: LK

Date: 5/18/16

Columns: Rxi-5Sil MS 30m x .25mm x .25um

Method 8270D/625

Initial Cal. Method M4M2881sim

Injection Volume: 1uL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
S15182-91	DFTPP	50ppm
S16935-41	SIMSTD	100ppm
-21	Sim Internal	400ppm
1162641	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: AMC

Date: 5/19/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	4M05348	DFTPP			W	1					OK	12:41pm
	05349	CC2881-10		BNAsim	W	2					OK	
	05350	OP93756-MB1	93756-1	B8270		3			/	/	OK	
	05351	JC19681-2		1,4dioxane		4			3,4 ↓	↑	OK	~~Fr. Contaminants~~ LK 5/19/16
	05352	JC19714-2	93782-1	ABSimNS 1,4dioxane	W	5			4 ↓	/	OK	Cfi.
	05353	OP93884-MB1	93884-1	AB8270	W	6			/	/	OK	
	05354	1812				7			/	/	OK	
	05355	JC20053-1		ABSimNS 1,4dioxane		8			/	/	OK	
	05356	-2				9			/	/	OK	
	05357	-3				10			/	/	OK	
	05358	-4				11			/	↑	OK	mfrsur
	05359	-5				12			/	/	OK	
	05360	JC19714-1	93782-1	BSimNS 1,4dioxane	W	13			/	/	OK	
R	05361	JC20047-2	93881-1	1,4dioxane		14			4↓	/	OK	8270 run! Cfi
R	05362	-4				15			/	2 ↑	OK	8270 run! Cfi
R	05363	-7				16			/	/	OK	8270 run!
R	05364	OP93820-MB	93820-1	B8270	S	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.

Form: OR015-07
Rev. Date: 1/19/16

SGS ACCUTEST JC19996

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E4M2925

Print Analyst Name: Linsey K

Analyst Signature: LK

Date: 5/18/16

Columns: Rxi-5sil MS 30m x .25mm x .25um

Method 8270D/625

Initial Cal. Method M4M2881SIM

Injection Volume: 1ul

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	SCP 25	

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: 5/19/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	4M65365	OP93980MB1	93980-1	BS270	W	18			/	/	OK	
	65366	-BS12				19			/	/	OK	
	65367	JC20191-1		BSIMNO +1,4dioxane		20			/	/	OK	
	65368	JC20191-1		BSIMNO +1,4dioxane		21			/	/	OK	
	65369	-2				22			/	/	OK	
	65370	-3				23			/	/	OK	
	65371	JC20250-8		1,4dioxane		24			/	/	OK	
	65372	OP93980-MS		BS270		25			/	/	OK	12:32AM
	65373	MBL				26					IN	at at Clock 1:02AM
	65374	OP93984a-MB	93984			27					Not signed	at at Clock/no bottles
	65375	-BS12		DCP		28						
	65376	JC20171-1		AAP + 1,4Dioxane		29						
	65377	-2				30						
	65378	-3				31						
	65379	OP93984a-MS				32						
	65380	-MSD				33						
	65381	OP93918-MB	93918			34						

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.

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Form: OR015-07
Rev. Date: 1/19/16

7.7.9

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SGS ACCUTEST JC19996

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: E4M2925

Print Analyst Name: Julius M. Johnson

Analyst Signature: JMJ

Date: 5/18/16

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	See Page 25	

Columns: Rxissilms 30m x 25mm x .25µm

Method: 8270D/625

Initial Cal. Method: M4M2881SIM

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: AMO

Date: 5/19/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	65382	OP93918-BS12	93918	~~non-validated~~		35					Meeting	Out of Clock/no batches
	65383	JC20098-2		~~ABSimpep~~		36						
	65384	-3		JK 5/19/16 ↓		37						
	65385	OP93918-MS				38						
	65386	-MSD				39					↓	↓
	65387	OP93641-BS12	93641-1	AB8270		40			/	/	OK	reference only.

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.

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Form: OR015-07
Rev. Date: 1/19/16

SGS ACCUTEST JC19996

7.7.9

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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	icc5217-50				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

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: AMO

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. 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

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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	IC5217-50		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 .25mm

Method 8270D/625

Initial Cal. Method MM5239

AMO 4/27/16

Injection Volume: 1µL

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	pep ↑, re-inject
	123917	DFTPP				1						pep ↑, re-install
	123918	DFTPP				1						pep ↑, re-inject
	123919	DFTPP				1						pep ↑, re-install
	123920	DFTPP				1						pep out, re-inject
	123921	DFTPP				1						pep 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 JC19996

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

SGS ACCUTEST JC19996

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EM5240

Print Analyst Name: Ashley M. Dyer

Date: 4/27/16

Analyst Signature: AMD

Columns: Rxi 5Sil MS 30m x 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 JC19996

7.7.14

7

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EM5261

Print Analyst Name: Julius M. Johnson

Analyst Signature: JMJ

Date: 5/11/16

Columns: Rxi 5sil ms 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.,
SV151127-91	DFTPP	50ppm
SV161935AF	BNA	25ppm
SV151201-7AN	TCL42	25ppm
CM5732	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: JM

Date: 5-26-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	M124362	DFTPP				1					ok	10:21pm
	124363	CC5217-25				2					ok	11T 60T 70,73,76T 97T
	124364	CC5239-25				3					ok	105, 106T
	124365	OP93820-MB1	93820	AB8270		4		x	/	/	ok	
	124366	-BS1				5			/	/	ok	
	124367	-MS				6			/	/	ok	
	124368	-MSD				7			/	/	ok	
	124369	JC19996-1		ABSL BMS(+2MNAP+MNAP)		8			/	/	ok	
	124370	-3		↓		9			/	/	ok	RR1:10 1,4dioxane
	124371	-4		↓		10			/	/	ok	
	124372	-5		↓		11			/	/	ok	RR1:100 1,4dioxane
	124373	-6		↓		12			/	/	ok	
	124374	JC19903-6		BAniline BMS+NBNZ		13			✓	✓	OK	RR 1:20
	124375	-7		↓		14			✓		RR	C/O.
	124376	-8		↓		15			✓	✓	OK	
	124377	-9		↓		16			✓	✓	OK	
	124378	-10		↓		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.

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Form: OR015-07

Rev. Date: 1/19/16

7.7.15

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EM5261

Print Analyst Name: Julius M. Johnson

Date: 5/11/16

Analyst Signature: JMJ

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	See Page 131	

Columns: Rxissilms 30m x .25mm x .25µm

Method 8270D/625

Initial Cal. Method MM5239

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: JM Date: 5-26-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	124379	JC19903-11	93820	BAniline BNS+NBNZ		18			✓	✓	ok	
	124380	-12		↓		19			✓	✓	ok	~~RR [illegible] 5/12/16~~ RR [illegible]
	124381	JC19949-1				20			✓		not ↓	[illegible]
	124382	-3				21			✓		↓	[illegible]
	124383	JC13380-49		ABTCL20+		22		+	✓	✓	ok	
	124384	JC19924-4		ABSL		23			✓	✓	ok	
	124385	JC19924-1		↓		24		✓	✓	✓	RR OK	943AM. Vf=20mL
								AMC 5/13/16			AMC	5/16/16

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 JC19996

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EM5262

Print Analyst Name: Ashley Mdyc

Date: 5/12/16.

Analyst Signature: AMO

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SW5182908	DFTPP	50ppm
SW6435916	BVA	50ppm
SW5187274K	TCLA2	50ppm
CH5732	Internal Std.	4000 ppm
K2661	PCH (Fisher)	— ppm

Columns: Rtx-5Silms 30m x 0.25mm x 0.25

Method 8270D/625

Initial Cal. Method EM5239

Injection Volume: 1 µL

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comp with the criteria of Accutest SOP EQA044.

Supervisor Signature: [illegible]

Date: 5/16/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	124386	DFTPP				1					not using	
	124387	DFTPP				1					↓	1057 HL
	124388	CC521750		BVA	W	2					↓	areas not same.
	124389	DFTPP				1					not using	poor tailing [illegible]
	124390	DFTPP				1					OK	BV only poor tailing
	124391	CC521750		BVA	W	2					OK	
	124392	CC523950		TCLA2	W	3					OK	
R	124393	JC19996-3	938201	ABSL+ mnap+2mnap	W	4	10		✓	✓	OK	
R	124394	-5				5	100		✓	✗	OK	
	124395	JC197324	938201	aniline+ nbz	W	6	10		✓	✓	OK	further dilutions ab[illegible]
	124396	-5				7	10		✓	✓	OK	↓
	124397	-8				8	10		✓	✓	OK	
	124398	op93827mbl	938271	B8270 ATH	S	9			✓	✓	OK	
	124399	-bsl				10			✓	✓	OK	
	124400	-bsd				11			✓	✓	OK	
	124401	JC19986-2		ATH napt+2mnap		12			✓	✓	OK	
	124402	-4				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.

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Form: OR015-07

Rev. Date: 1/19/16

7.7.16

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EM5262

Print Analyst Name: Ashley Mdyr

Analyst Signature: AMO.

Date: 5/12/16

Columns: Rxi5Silms30m×.25mm×.25µm

Method 8270D/625

Initial Cal. Method MM5239

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	see page 135	

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
	M124 403	JC19986-6	938271	EPH NaPrimaps	S	14			✓	✓	OK	
	124404	-7				15			✓	✓	OK	
	124405	-8				16			✓	✓	OK	
	124406	-9				17			✓	✓	OK	RR 1:5
	124407	-10				18			✓	✓	OK	
	124408	-11				19			✓	✓	OK	
	124409	-12				20			✓	✓	OK	
	124410	-13				21			✓	✓	OK	934PM
	~~124411~~	~~AMO 5/13/16~~				~~22~~	~~AMO 5/13/16~~				not used	

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 JC19996

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.
SV15182405	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			✓	3↑	OK	
	124428	-bs1				9			✓	✓	OK	
R	124429	JC19986-9	93827-1	EPA# nap+2mnap	S	10	5		✓	✓	OK	Vf=2mL
	124430	op93619-mb1	93619-1	AB8270	O	11			✓	✓	OK	Vf=2mL
	124431	JC15426-33		ABSL+HQ		12	2		✓	All ↑	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.

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Form: OR015-07
Rev. Date: 1/19/16

7.7.17

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EMS264

Print Analyst Name: Ashley Moyle

Analyst Signature: AMO

Date: 5/13/16

Columns: RtX5Sil ms 30m 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		AB5L+ 1mi ap 12mn ap		16			✓	✓	all	
	124436	JC19558-7	93634-1	AB5L+, 1DPH+NDVA+		17	5		✓	✓	all	
	124437	JC19573-15		8ZD		18	5		✓	✓	all	JC19573-13
	124438	JC19714-2	AMO 5/13/16 93782-1	ABNJTCUX+	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.

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Form: OR015-07
Rev. Date: 1/19/16

LOGBOOK ID: 6-1746

ABN Aqueous Extraction Logbook

Date Started: 5/11/16 Time Started: 4:00 pm
Date Finished: 5/11/16 Time Finished: 9:32 pm

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Separatory Funnel: SW846 3510C/CLP/other ✓ 3510C SIM ____
Continuous Liquid Liquid: SW846 3520C/CLP/other ____

BATCH # MS 93820	RACK# Julius
Extracted by:	KS, SD, ADC
Concentrated by:	ADC
Vialed by:	ADC
Relinquished by:	ADC
Accepted by:	
Supervisor Review:	S/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 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		
JC19996-4 MS		3	Yellow	~~480~~ 480	1	5	yellow	1		#60
↓ MSD		3	Yellow	480	1	5	yellow	1		
BS	12 SIM		DI H2O	1000	1	5	yellow	1		
JC19949-1 MS		2	clear	475	1	5	yellow	1		
↓ MSD		2	clear	475	1	5	yellow	1		
1 JC19996-1	ABN	2	clear	990	1	5	clear	1		
2 -3		1	Brown	860	1	5	yellow	1		
3 -4		2	Yellow	930	1	5	clear	1		
4 -5		3	Yellow	960	1	5	clear	1		
5 -6		3	Orange	900	1	5	clear	1		
6 JC19924-1		2	black	1000	1	5	black	20		*
7 ~~MS/SM -3~~										
8 -4		3	1-yellow	960	1	5	yellow	1		
9 JC13380-49		2	Clear	100	1	5	clear	1		
10 JC19903-6		2	Clear	1000	1	5	brown	1		
11 -7		2	Clear	1000	1	5	yellow	1		
12 -8		2	Clear	1000	1	5	clear	1		
13 -9		2	Clear	1000	1	5	clear	1		
14 -10		2	Clear	990	1	5	clear	1		
15 -11		2	Clear	1000	1	5	clear	1		
16 -12		1	Clear	990	1	5	clear	1		
17 JC19949-1		1	Clear	1000	1	5	clear	1		
18 -3		1	Clear	1000	1	5	clear	1		
19										
20			SIM MS/MSD *							

1dTAT
3dTAT
use 100ml

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	77, 75.5	-0.5, -0.1	77, 75	NA
Waterbath Chiller (GPM)	F2	4	—	—	2
NEVAP (32-38°C; LPM)					

SURROGATE	LOT #	CONC (ppm)	AMT (mL)
ABN OP	16171200	50	1

WITNESS SIGN: ADC SPIKE SIGN: KS

MATRIX SPIKE	LOT #	CONC (ppm)	AMT (mL)
Acid SU	16193521	50	Acid: 1
Acid (for SIM)			A(SIM): 0.1
Base #1 SU	16193525	50	1
Base #2 SU	16193522	50	1
Anilines SU	16193515	50	1
BSIM OP	16171286	1	1

WITNESS SIGN: ADC SPIKE SIGN: KS

SOLVENT	LOT #	BRAND	AMT (mL)
METH CHLOR	162661	Burd	6/60

REAGENT	LOT #	BRAND
NaOH	153803	Burd
H2SO4	2601910	Mall
Sodium Sulfate	157497	Burd
Glass Wool	02Q05-2	Lab
Filter Paper		
pH strips		

WITNESS SIGN: SPIKE SIGN:
Manager/Supervisor/Team Lead Approval:

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason: JC19924-3 OP93820 abn a

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other:

Comments: Okay to split MS/MSD, not enough bottles
* wouldn't concentrate to 10mL, adjusted to 20mL, sample was above 10mL.

SGS ACCUTEST INC.
Form: OP022A-08
Rev Date: 1/13/16

5

LOGBOOK ID: 6-1746

ABN Aqueous Extraction Logbook

Date Started: 5/11/16 Time Started: 4:00 pm
Date Finished: 5/11/16 Time Finished: 9:32 pm

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Separatory Funnel: SW846 3510C/CLP/other ✓ 3510C SIM ____
Continuous Liquid Liquid: SW846 3520C/CLP/other ____

BATCH # MS 93820	RACK# Julius
Extracted by:	KS, SD, ADC
Concentrated by:	ADC
Vialed by:	ADC
Relinquished by:	ADC
Accepted by:	
Supervisor Review:	S/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 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		
JC19996-4 MS		3	Yellow	~~480~~ 480	1	5	yellow	1		#60
↓ MSD		3	Yellow	480	1	5	yellow	1		
BS	12 SIM		DI H2O	1000	1	5	yellow	1		
JC19949-1 MS		2	clear	475	1	5	yellow	1		
↓ MSD		2	clear	475	1	5	yellow	1		
1 JC19996-1	ABN	2	clear	990	1	5	clear	1		
2 -3		1	Brown	860	1	5	yellow	1		
3 -4		2	Yellow	930	1	5	clear	1		
4 -5		3	Yellow	960	1	5	clear	1		
5 -6		3	Orange	900	1	5	clear	1		
6 JC19924-1		2	black	1000	1	5	black	20		*
7 ~~MS/SM -3~~										
8 -4		3	1-yellow	960	1	5	yellow	1		
9 JC13380-49		2	Clear	100	1	5	clear	1		
10 JC19903-6		2	Clear	1000	1	5	brown	1		
11 -7		2	Clear	1000	1	5	yellow	1		
12 -8		2	Clear	1000	1	5	clear	1		
13 -9		2	Clear	1000	1	5	clear	1		
14 -10		2	Clear	990	1	5	clear	1		
15 -11		2	Clear	1000	1	5	clear	1		
16 -12		1	Clear	990	1	5	clear	1		
17 JC19949-1		1	Clear	1000	1	5	clear	1		
18 -3		1	Clear	1000	1	5	clear	1		
19										
20			SIM MS/MSD *							

1dTAT
3dTAT
use 100ml

Comments: Okay to split MS/MSD, not enough bottles
* wouldn't concentrate to 10mL, adjusted to 20mL, sample was above 10mL.

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	77, 75.5	-0.5, -0.1	77, 75	NA
Waterbath Chiller (GPM)	F2	4	—	—	2
NEVAP (32-38°C; LPM)					

SURROGATE	LOT #	CONC (ppm)	AMT (mL)
ABN OP	16171200	50	1

WITNESS SIGN: ADC SPIKE SIGN: KS

MATRIX SPIKE	LOT #	CONC (ppm)	AMT (mL)
Acid SU	16193521	50	Acid: 1
Acid (for SIM)			A(SIM): 0.1
Base #1 SU	16193525	50	1
Base #2 SU	16193522	50	1
Anilines SU	16193515	50	1
BSIM OP	16171286	1	1

WITNESS SIGN: ADC SPIKE SIGN: KS

SOLVENT	LOT #	BRAND	AMT (mL)
METH CHLOR	162661	Burd	6/60

REAGENT	LOT #	BRAND
NaOH	153803	Burd
H2SO4	2601910	Mall
Sodium Sulfate	157497	Burd
Glass Wool	02Q05-2	Lab
Filter Paper		
pH strips		

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason: JC19924-3 OP93820 abn a

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other:

WITNESS SIGN: SPIKE SIGN:

Manager/Supervisor/Team Lead Approval:

SGS ACCUTEST INC.
Form: OP022A-08
Rev Date: 1/13/16

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6-1714

LOGBOOK ID:

ABN Extraction Log - Solids

Date started: 5/12/16 Time started: 9:10 am
Date finished: 05/12/16 Time finished: 1:00pm

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Microwave SW3546 √ Sonication SW3550C ____
Waste Dil. SW3580A ____ Soxhlet SW3540C ____

BATCH # MS 93830	RACK# D-20
Weighed/Extracted by:	SA FM
Concentrated by:	SA TM FM [illegible]
Vialed by:	TM SA
Relinquished by:	
Accepted by:	
Supervisor Review:	5/12/16

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	Microwave ID Semivator-CD	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		
JC19983-15 MS		2	Sand	30.9		/	3	Yellow	1		
MSD		2	Sand	30.8		/	3	Yellow	1		
BS	125IM		Sand	30.0			3	clear	1		
JC19996-2 MS	A	1	Soil	30.5		/	3	L-Yellow	1		
MSD	A	1	Soil	30.4		/	3	L-Yellow	1		
1 JC19983-15	ABN	2	Sand	30.2		/	3	Yellow	1		
2 JC19984-1		1	Rock/Soil	30.8		/	3	Yellow	1		
3 -2		1	Rock/Soil	31.0		/	3	Yellow	1		
4 JC19991-1		1	Crushed Rock	30.7		/	3	Yellow	1		
5 JC19956-1		1	Soil	31.4		/	3	Brown	1		
6 -2		1	Sand	30.4		/	3	Brown	1		
7 -3		1	Soil	32.2		/	3	Brown	1		
8 -4		1	Sand	31.6		/	3	Brown	1		
9 -5		1	Soil	32.4		/	3	Brown	1		
10 -6		1	Soil	30.9		/	3	Brown	1		
11 -7		1	Soil	30.8		/	3	Brown	1		
12 -8		1	Soil	33.0		/	3	Brown	1		
13 -9		1	Soil	30.9		/	3	Brown	1		
14 JC19962-2		1	Rock/Soil	32.2		/	3	Brown	1		
15 -3		1	Crushed Rock	30.2		/	3	Brown	1		
16 JC19996-2		1	Soil	30.1		/	3	L-Yellow	1		
17											
18											
19											
20											

30 day TAT
30 day TAT

Comments:

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	76.1, 77.0	0.6, 1.3	75.5, 78.3	N/A
Waterbath Chiller (GPM)	M, M	10, 5	—	—	1.6, 1.7
NEVAP (32-38°C, LPM)					
Balance	B-42	N/A	N/A	N/A	N/A

SURROGATE	LOT #	CONC (ppm)	AMT (mL)
ABN OP	16171200	50	1.0

WITNESS SIGN: SA SPIKE SIGN: FM

MATRIX SPIKE	LOT #	CONC (ppm)	AMT (mL)
Acid SV	161935-21	50	Acid: 1.0
Acid (for SIM) SV	161935-21		A(SIM): 0.1
Base #1 SV	161935 25	50ppm	1.0
Base #2 SV	161935-22	50	1.0
Aniline SV	161935-15	50	1.0
BSIM OP	16171286	1	1.0

WITNESS SIGN: SA SPIKE SIGN: FM

SOLVENT	LOT #	BRAND	AMT (mL)
1:1 METH CHLOR/ ACETONE	~~162489~~ 153571	~~Fisher~~ Fisher	30.0
METH CHLOR			

REAGENT	LOT #	BRAND
HYDROMATRIX	6280850	Agilent
SODIUM SULFATE	157497	Fisher
FILTER PAPER	96279994	Fisher

MATRIX	LOT #	BRAND
SAND 60/80	16011311A	Fisher

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason:

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other: please update batch

SGS ACCUTEST INC.
Form: OP019A-06
Rev Date: 11/20/15

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6-1714

LOGBOOK ID:

ABN Extraction Log - Solids

Date started: 5/12/16 Time started: 9:10 am
Date finished: 05/12/16 Time finished: 1:00pm

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Microwave SW3546 √ Sonication SW3550C ____
Waste Dil. SW3580A ____ Soxhlet SW3540C ____

BATCH # MS 93830	RACK# D-20
Weighed/Extracted by:	SA FM
Concentrated by:	SA TM FM [illegible]
Vialed by:	TM SA
Relinquished by:	
Accepted by:	
Supervisor Review:	5/12/16

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	Microwave ID Semivator-CD	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		
JC19983-15 MS		2	Sand	30.9		/	3	Yellow	1		
MSD		2	Sand	30.8		/	3	Yellow	1		
BS	125IM		Sand	30.0			3	clear	1		
JC19996-2 MS	A	1	Soil	30.5		/	3	L-Yellow	1		
MSD	A	1	Soil	30.4		/	3	L-Yellow	1		
1 JC19983-15	ABN	2	Sand	30.2		/	3	Yellow	1		
2 JC19984-1		1	Rock/Soil	30.8		/	3	Yellow	1		
3 -2		1	Rock/Soil	31.0		/	3	Yellow	1		
4 JC19991-1		1	Crushed Rock	30.7		/	3	Yellow	1		
5 JC19956-1		1	Soil	31.4		/	3	Brown	1		
6 -2		1	Sand	30.4		/	3	Brown	1		
7 -3		1	Soil	31.2		/	3	Brown	1		
8 -4		1	Sand	31.6		/	3	Brown	1		
9 -5		1	Soil	32.4		/	3	Brown	1		
10 -6		1	Soil	30.9		/	3	Brown	1		
11 -7		1	Soil	30.8		/	3	Brown	1		
12 -8		1	Soil	33.0		/	3	Brown	1		
13 -9		1	Soil	30.9		/	3	Brown	1		
14 JC19962-2		1	Rock/Soil	32.2		/	3	Brown	1		
15 -3		1	Crushed Rock	30.2		/	3	Brown	1		
16 JC19996-2		1	Soil	30.1		/	3	L-Yellow	1		
17											
18											
19											
20											

30day TAT
30day TAT

Comments:

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	76.1, 77.0	0.6, 1.3	75.5, 78.3	N/A
Waterbath Chiller (GPM)	M, M	10, 5	—	—	1.6, 1.7
NEVAP (32-38°C, LPM)					
Balance	B-42	N/A	N/A	N/A	N/A

SURROGATE	LOT #	CONC (ppm)	AMT (mL)
ABN OP	1617121200	50	1.0

WITNESS SIGN: SA SPIKE SIGN: FM

MATRIX SPIKE	LOT #	CONC (ppm)	AMT (mL)
Acid SV	161935-21	50	Acid: 1.0
Acid (for SIM) SV	161935-21		A(SIM): 0.1
Base #1 SV	161935 25	50ppm	1.0
Base #2 SV	161935-22	50	1.0
Aniline SV	161935-15	50	1.0
BSIM OP	1617121286	1	1.0

WITNESS SIGN: SA SPIKE SIGN: FM

SOLVENT	LOT #	BRAND	AMT (mL)
1:1 METH CHLOR/ ACETONE	~~162489~~ 153571	~~Fisher~~ Fisher	30.0
METH CHLOR			

REAGENT	LOT #	BRAND
HYDROMATRIX	6280850	Agilent
SODIUM SULFATE	157497	Fisher
FILTER PAPER	9627994	Fisher

MATRIX	LOT #	BRAND
SAND 60/80	1601131 1A	Fisher

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason:

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other: please update batch

SGS ACCUTEST INC.
Form: OP019A-06
Rev Date: 11/20/15

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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: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGH5286-MB2 [a]	GH104999.D	1	05/17/16	XPL	n/a	n/a	GGH5286

The QC reported here applies to the following samples: **Method:** SW846-8015C (DAI)

JC19996-1, JC19996-3, JC19996-4, JC19996-5, JC19996-6

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	96%	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: JC19996
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)

JC19996-2

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: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGH5286-MB1 [a]	GH104988.D	1	05/16/16	XPL	n/a	n/a	GGH5286

The QC reported here applies to the following samples: **Method:** SW846-8015C (DAI)

GGH5286-BS, JC20184-3MS, JC20184-3MSD

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	94%	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: JC19996
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: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGH5286-BS [a]	GH104989.D	1	05/16/16	XPL	n/a	n/a	GGH5286

The QC reported here applies to the following samples: **Method:** SW846-8015C (DAI)

JC19996-1, JC19996-3, JC19996-4, JC19996-5, JC19996-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
64-17-5	Ethanol	5000	5700	114	74-123
78-83-1	Isobutyl Alcohol	5000	6370	127* [b]	70-124
67-63-0	Isopropyl Alcohol	5000	5420	108	76-121
71-23-8	n-Propyl Alcohol	5000	6210	124* [b]	73-122
71-36-3	n-Butyl Alcohol	5000	6270	125* [b]	67-116
78-92-2	sec-Butyl Alcohol	5000	5640	113	74-118
67-56-1	Methanol	5000	5040	101	67-121

CAS No.	Surrogate Recoveries	BSP	Limits
111-27-3	Hexanol	114%	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: JC19996
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)

JC19996-2

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.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC20184-3MS	GH104991.D	1	05/17/16	XPL	n/a	n/a	GGH5286
JC20184-3MSD	GH104992.D	1	05/17/16	XPL	n/a	n/a	GGH5286
JC20184-3	GH104990.D	1	05/17/16	XPL	n/a	n/a	GGH5286

The QC reported here applies to the following samples: **Method:** SW846-8015C (DAI)

JC19996-1, JC19996-3, JC19996-4, JC19996-5, JC19996-6

CAS No.	Compound	JC20184-3 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	5920	118	5000	5690	114	4	58-145/27
78-83-1	Isobutyl Alcohol	ND		5000	5820	116	5000	6130	123	5	69-131/25
67-63-0	Isopropyl Alcohol	ND		5000	5190	104	5000	5320	106	2	70-133/28
71-23-8	n-Propyl Alcohol	ND		5000	6040	121	5000	6170	123	2	66-137/29
71-36-3	n-Butyl Alcohol	ND		5000	6130	123	5000	6200	124	1	63-131/25
78-92-2	sec-Butyl Alcohol	ND		5000	5550	111	5000	5610	112	1	64-136/25
67-56-1	Methanol	ND		5000	4440	89	5000	5080	102	13	48-148/34

CAS No.	Surrogate Recoveries	MS	MSD	JC20184-3	Limits
111-27-3	Hexanol	84%	91%	77%	56-145%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19996
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)

JC19996-2

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.

GC Identification Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5285-CC5269	**Injection Date:**	05/16/16
Lab File ID:	GH104987.D	**Injection Time:**	23:17
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

Sample ID:	GGH5286-BS	**Injection Date:**	05/16/16
Lab File ID:	GH104989.D	**Injection Time:**	23:46
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Ethanol	1 [a]	1.49	1.49	5700		ug/l	86.1
Ethanol	2	1.11	1.11	2270		ug/l	
Isobutyl Alcohol	1 [a]	3.36	3.36	6370		ug/l	113.0
Isobutyl Alcohol	2	2.89	2.89	1770		ug/l	
Isopropyl Alcohol	1 [a]	1.80	1.80	5420		ug/l	95.0
Isopropyl Alcohol	2	1.36	1.36	1930		ug/l	
n-Propyl Alcohol	1 [a]	2.56	2.56	6210		ug/l	106.3
n-Propyl Alcohol	2	1.94	1.94	1900		ug/l	
n-Butyl Alcohol	1 [a]	3.80	3.80	6270		ug/l	102.5
n-Butyl Alcohol	2	3.38	3.38	2020		ug/l	
sec-Butyl Alcohol	1 [a]	2.99	2.99	5640		ug/l	96.5
sec-Butyl Alcohol	2	2.51	2.51	1970		ug/l	
Methanol	1 [a]	1.15	1.15	5040		ug/l	54.9
Methanol	2	0.86	0.86	2870		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC19996
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: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5285-CC5269	**Injection Date:**	05/16/16
Lab File ID:	GH104987.D	**Injection Time:**	23:17
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

Sample ID:	JC20184-3MS	**Injection Date:**	05/17/16
Lab File ID:	GH104991.D	**Injection Time:**	00:22
Client ID:	Matrix Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Ethanol	1 [a]	1.49	1.49	5920		ug/l	93.1
Ethanol	2	1.11	1.11	2160		ug/l	
Isobutyl Alcohol	1 [a]	3.36	3.36	5820		ug/l	112.5
Isobutyl Alcohol	2	2.89	2.89	1630		ug/l	
Isopropyl Alcohol	1 [a]	1.80	1.80	5190		ug/l	95.7
Isopropyl Alcohol	2	1.36	1.36	1830		ug/l	
n-Propyl Alcohol	1 [a]	2.56	2.56	6040		ug/l	108.6
n-Propyl Alcohol	2	1.94	1.94	1790		ug/l	
n-Butyl Alcohol	1 [a]	3.80	3.80	6130		ug/l	93.3
n-Butyl Alcohol	2	3.38	3.38	2230		ug/l	
sec-Butyl Alcohol	1 [a]	2.99	2.99	5550		ug/l	99.6
sec-Butyl Alcohol	2	2.51	2.51	1860		ug/l	
Methanol	1 [a]	1.15	1.15	4440		ug/l	46.0
Methanol	2	0.86	0.86	2780		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC19996
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: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5285-CC5269	**Injection Date:**	05/16/16
Lab File ID:	GH104987.D	**Injection Time:**	23:17
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

Sample ID:	JC20184-3MSD	**Injection Date:**	05/17/16
Lab File ID:	GH104992.D	**Injection Time:**	00:36
Client ID:	Matrix Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Ethanol	1 [a]	1.49	1.49	5690		ug/l	86.6
Ethanol	2	1.11	1.11	2250		ug/l	
Isobutyl Alcohol	1 [a]	3.36	3.36	6130		ug/l	110.8
Isobutyl Alcohol	2	2.89	2.89	1760		ug/l	
Isopropyl Alcohol	1 [a]	1.80	1.80	5320		ug/l	93.9
Isopropyl Alcohol	2	1.36	1.36	1920		ug/l	
n-Propyl Alcohol	1 [a]	2.56	2.56	6170		ug/l	104.7
n-Propyl Alcohol	2	1.94	1.94	1930		ug/l	
n-Butyl Alcohol	1 [a]	3.80	3.80	6200		ug/l	102.1
n-Butyl Alcohol	2	3.38	3.38	2010		ug/l	
sec-Butyl Alcohol	1 [a]	2.99	2.99	5610		ug/l	96.0
sec-Butyl Alcohol	2	2.51	2.51	1970		ug/l	
Methanol	1 [a]	1.15	1.15	5080		ug/l	55.3
Methanol	2	0.86	0.86	2880		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC19996
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.

Volatile Surrogate Recovery Summary

Job Number: JC19996
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]
JC19996-1	GH105000.D	102
JC19996-3	GH105001.D	103
JC19996-4	GH105002.D	102
JC19996-5	GH105003.D	95
JC19996-6	GH105004.D	100
GGH5286-BS	GH104989.D	114
GGH5286-MB2	GH104999.D	96
JC20184-3MS	GH104991.D	84
JC20184-3MSD	GH104992.D	91
GGH5286-MB1	GH104988.D	94

Surrogate Compounds	Recovery Limits
S1 = Hexanol	56-145%

(a) Recovery from GC signal #1

Volatile Surrogate Recovery Summary

Job Number: JC19996
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]
JC19996-2	GH105061.D	97	100
GGH5290-BS	GH105051.D	95	98
GGH5290-MB2	GH105055.D	87	89
JC19914-2MS	GH105057.D	88	89
JC19914-2MSD	GH105058.D	91	92
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

GC Surrogate Retention Time Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5285-CC5269	**Injection Date:**	05/16/16
Lab File ID:	GH104987.D	**Injection Time:**	23:17
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**
GGH5286-MB1	GH104988.D	05/16/16	23:31	5.60
GGH5286-BS	GH104989.D	05/16/16	23:46	5.60
JC20184-3	GH104990.D	05/17/16	00:07	5.60
JC20184-3MS	GH104991.D	05/17/16	00:22	5.60
JC20184-3MSD	GH104992.D	05/17/16	00:36	5.60
ZZZZZZ	GH104993.D	05/17/16	00:51	5.60
ZZZZZZ	GH104994.D	05/17/16	01:12	5.60
ZZZZZZ	GH104995.D	05/17/16	01:27	5.60
ZZZZZZ	GH104996.D	05/17/16	01:41	5.60
ZZZZZZ	GH104997.D	05/17/16	01:56	5.60

Surrogate Compounds

S1 = Hexanol

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5286-CC5269	**Injection Date:**	05/17/16
Lab File ID:	GH104998.D	**Injection Time:**	02:17
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**
GGH5286-MB2	GH104999.D	05/17/16	02:32	5.60
JC19996-1	GH105000.D	05/17/16	02:46	5.60
JC19996-3	GH105001.D	05/17/16	03:08	5.61
JC19996-4	GH105002.D	05/17/16	03:22	5.61
JC19996-5	GH105003.D	05/17/16	03:37	5.61
JC19996-6	GH105004.D	05/17/16	03:51	5.61

Surrogate Compounds

S1 = Hexanol

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JC19996
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: JC19996
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
JC19996-2	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

Initial Calibration Summary

Job Number: JC19996
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: JC19996 **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: JC19996 **Sample:** GGH5285-CC5269
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** GH104987.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\GH104987.D\FID1A.CH        Vial: 95
Acq On    : 16 May 2016  11:17 pm                   Operator: XULIU
Sample    : CC5269-10000                            Inst    : GCGH
Misc      : GC48423,GGH5285,5.0,,,,1                Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104987.D\FID2B.CH        Vial: 95
Acq On    : 16 May 2016  11:31 pm                   Operator: XULIU
Sample    : CC5269-10000                            Inst    : GCGH
Misc      : GC48423,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	15.927	-7.8	114	0.00	1.12- 1.18
2	Ethanol	18.712	19.526	-4.4	101	0.00	1.45- 1.54
3	Tert-Butyl Alcohol	27.303	28.688	-5.1	100	0.00	2.01- 2.13
4	1-Propanol	22.287	26.535	-19.1	110	0.00	2.50- 2.62
5	2-Propanol	20.750	20.740	0.0	93	0.00	1.75- 1.85
6	Isobutanol	27.487	29.916	-8.8	107	0.00	3.31- 3.41
7	1-Butanol	24.487	28.850	-17.8	106	0.00	3.77- 3.83
8	2-Butanol	25.198	26.500	-5.2	107	0.00	2.93- 3.05
9 S	Hexanol	76.514	64.512	15.7	81	0.00	5.57- 5.63
*****	Signal #2 *****						
1	Methanol	20.329	11.614	42.9#	113	-0.03	0.83- 0.89
2	Ethanol	31.774	13.333	58.0#	63	-0.03	1.08- 1.14
3	Tert-Butyl Alcohol	65.293	21.428	67.2#	36#	-0.03	1.57- 1.63
4	1-Propanol	49.271	17.206	65.1#	39#	-0.02	1.91- 1.98
5	2-Propanol	41.806	15.020	64.1#	48#	-0.03	1.33- 1.39
6	Isobutanol	62.036	26.984	56.5#	56	-0.01	2.86- 2.92
7	1-Butanol	51.767	19.070	63.2#	46#	-0.01	3.35- 3.41
8	2-Butanol	49.414	18.319	62.9#	42#	-0.02	2.48- 2.54
9 S	Hexanol	164.574	45.374	72.4#	29#	0.05	5.45- 5.51

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GH104678.D MGH5269.M Tue May 17 08:52:13 2016 GCGH

Continuing Calibration Summary

Job Number: JC19996 **Sample:** GGH5286-CC5269
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** GH104998.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\GH104998.D\FID1A.CH        Vial: 90
Acq On    : 17 May 2016   2:17 am                   Operator: XULIU
Sample    : CC5269-5000                             Inst    : GCGH
Misc      : GC48421,GGH5286,5.0,,,,1                Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104998.D\FID2B.CH        Vial: 90
Acq On    : 17 May 2016   2:32 am                   Operator: XULIU
Sample    : CC5269-5000                             Inst    : GCGH
Misc      : GC48421,GGH5286,5.0,,,,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	14.450	2.2	104	0.00	1.12- 1.18
2	Ethanol	18.712	18.759	-0.3	102	0.00	1.45- 1.54
3	Tert-Butyl Alcohol	27.303	24.512	10.2	91	0.00	2.02- 2.14
4	1-Propanol	22.287	25.404	-14.0	105	0.00	2.51- 2.63
5	2-Propanol	20.750	19.127	7.8	97	0.00	1.76- 1.85
6	Isobutanol	27.487	29.917	-8.8	105	0.00	3.32- 3.41
7	1-Butanol	24.487	28.538	-16.5	100	0.00	3.78- 3.84
8	2-Butanol	25.198	26.962	-7.0	108	0.00	2.94- 3.06
9 S	Hexanol	76.514	74.781	2.3	94	0.00	5.57- 5.63
*****	Signal #2 *****						
1	Methanol	20.329	11.905	41.4#	86	-0.03	0.83- 0.89
2	Ethanol	31.774	13.277	58.2#	39#	-0.03	1.08- 1.14
3	Tert-Butyl Alcohol	65.293	21.186	67.6#	26#	-0.03	1.57- 1.63
4	1-Propanol	49.271	17.212	65.1#	22#	-0.02	1.90- 1.97
5	2-Propanol	41.806	14.725	64.8#	31#	-0.03	1.33- 1.39
6	Isobutanol	62.036	19.248	69.0#	35#	-0.01	2.86- 2.92
7	1-Butanol	51.767	23.097	55.4#	45#	-0.01	3.35- 3.41
8	2-Butanol	49.414	17.751	64.1#	30#	-0.02	2.48- 2.54
9 S	Hexanol	164.574	51.214	68.9#	30#	0.05	5.45- 5.51

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GH104677.D MGH5269.M Tue May 17 09:32:00 2016 GCGH

8.7.4

8

Continuing Calibration Summary

Job Number: JC19996 **Sample:** GGH5286-CC5269
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** GH105005.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\GH105005.D\FID1A.CH        Vial: 95
Acq On    : 17 May 2016   4:06 am                   Operator: XULIU
Sample    : CC5269-10000                            Inst    : GCGH
Misc      : GC48422,GGH5286,5.0,,,,1                Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105005.D\FID2B.CH        Vial: 95
Acq On    : 17 May 2016   4:27 am                   Operator: XULIU
Sample    : CC5269-10000                            Inst    : GCGH
Misc      : GC48422,GGH5286,5.0,,,,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	13.844	6.3	99	0.00	1.13- 1.19
2	Ethanol	18.712	19.810	-5.9	102	0.00	1.45- 1.55
3	Tert-Butyl Alcohol	27.303	27.705	-1.5	97	0.00	2.02- 2.14
4	1-Propanol	22.287	25.433	-14.1	105	0.00	2.51- 2.63
5	2-Propanol	20.750	20.192	2.7	91	0.00	1.76- 1.85
6	Isobutanol	27.487	30.161	-9.7	108	0.00	3.32- 3.41
7	1-Butanol	24.487	28.574	-16.7	105	0.00	3.78- 3.84
8	2-Butanol	25.198	26.180	-3.9	106	0.00	2.94- 3.06
9 S	Hexanol	76.514	63.345	17.2	79	0.00	5.58- 5.64
*****	Signal #2 *****						
1	Methanol	20.329	10.088	50.4#	98	-0.02	0.84- 0.90
2	Ethanol	31.774	11.609	63.5#	55	-0.02	1.09- 1.15
3	Tert-Butyl Alcohol	65.293	18.904	71.0#	32#	-0.02	1.58- 1.64
4	1-Propanol	49.271	14.697	70.2#	33#	-0.01	1.91- 1.98
5	2-Propanol	41.806	13.241	68.3#	42#	-0.02	1.34- 1.40
6	Isobutanol	62.036	16.309	73.7#	34#	0.00	2.87- 2.93
7	1-Butanol	51.767	19.066	63.2#	46#	0.00	3.36- 3.42
8	2-Butanol	49.414	15.366	68.9#	35#	-0.01	2.49- 2.55
9 S	Hexanol	164.574	38.374	76.7#	24#	0.05	5.45- 5.51

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GH104678.D MGH5269.M Tue May 17 09:44:36 2016 GCGH

Initial Calibration Summary

Job Number: JC19996
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: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: GGH5288-ICV5288
Lab FileID: GH105024.D

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: JC19996 **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: JC19996 **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

Continuing Calibration Summary

Job Number: JC19996 **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

GC Volatiles

Raw Data

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105000.D\FID1A.CH          Vial: 51
Acq On    : 17 May 2016   2:46 am                     Operator: XULIU
Sample    : JC19996-1                                 Inst    : GCGH
Misc      : GC48422,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105000.D\FID2B.CH          Vial: 51
Acq On    : 17 May 2016   3:08 am                     Operator: XULIU
Sample    : JC19996-1                                 Inst    : GCGH
Misc      : GC48422,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  9:32 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 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	388488	196342	5077.349	1193.032 #
Spiked Amount 5000.000			Recovery	=	101.55%	23.86%
Target Compounds						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

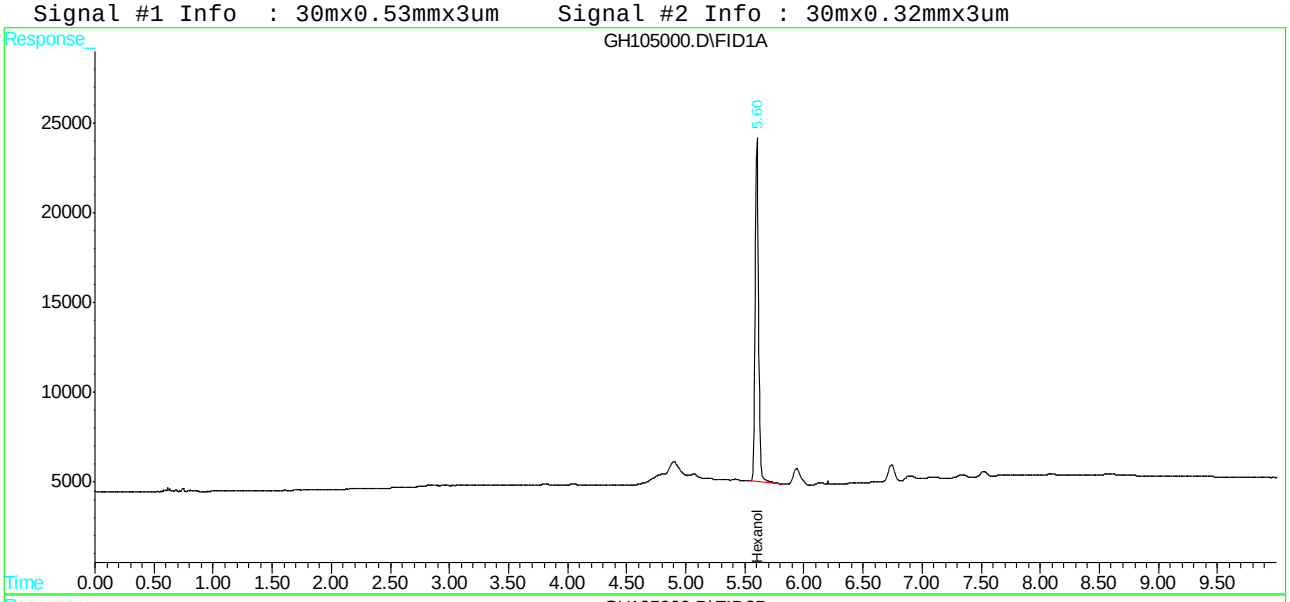
Quantitation Report (QT Reviewed)

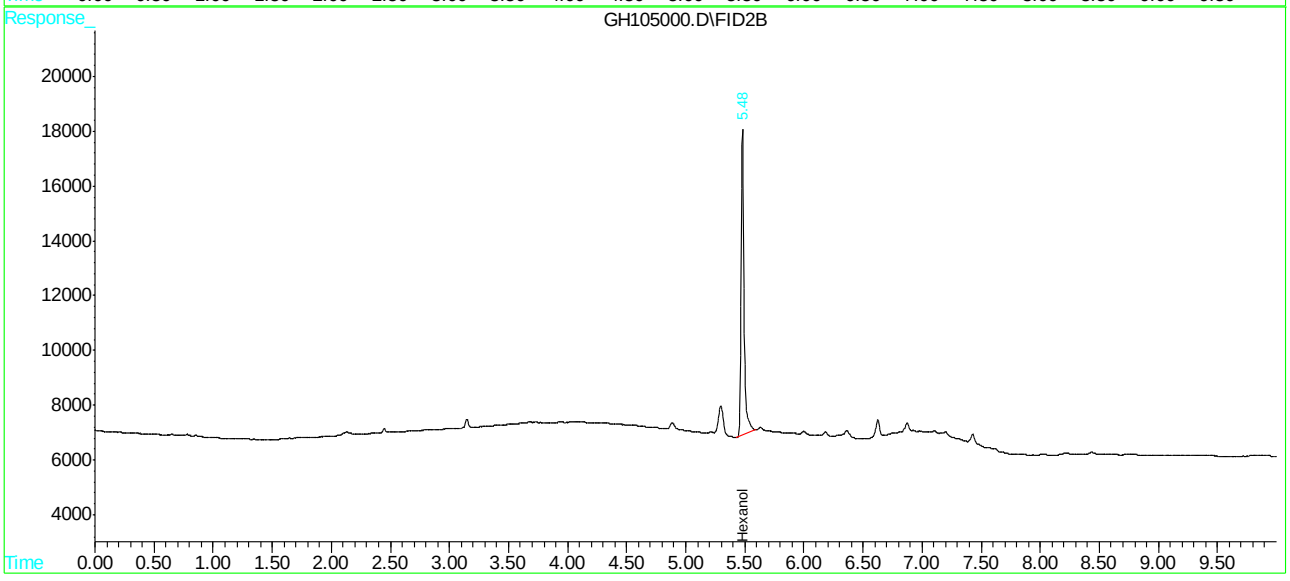
```
Data File : C:\HPCHEM\1\DATA\GH105000.D\FID1A.CH          Vial: 51
Acq On    : 17 May 2016   2:46 am                     Operator: XULIU
Sample    : JC19996-1                                 Inst    : GCGH
Misc      : GC48422,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105000.D\FID2B.CH          Vial: 51
Acq On    : 17 May 2016   3:08 am                     Operator: XULIU
Sample    : JC19996-1                                 Inst    : GCGH
Misc      : GC48422,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  9:32 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 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\GH105061.D\FID1A.CH          Vial: 6
Acq On    : 18 May 2016   5:44 pm                     Operator: XULIU
Sample    : JC19996-2                                 Inst    : GCGH
Misc      : GC48426,GGH5290,4.8,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105061.D\FID2B.CH          Vial: 6
Acq On    : 18 May 2016   5:59 pm                     Operator: XULIU
Sample    : JC19996-2                                 Inst    : GCGH
Misc      : GC48426,GGH5290,4.8,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 19  7:35 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    339424   755299 5021.305  4861.994
 Spiked Amount   5000.000                 Recovery     =  100.43%    97.24%

Target Compounds
```

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

GH105061.D MGH5288.M Thu May 19 07:36:03 2016 GCGH

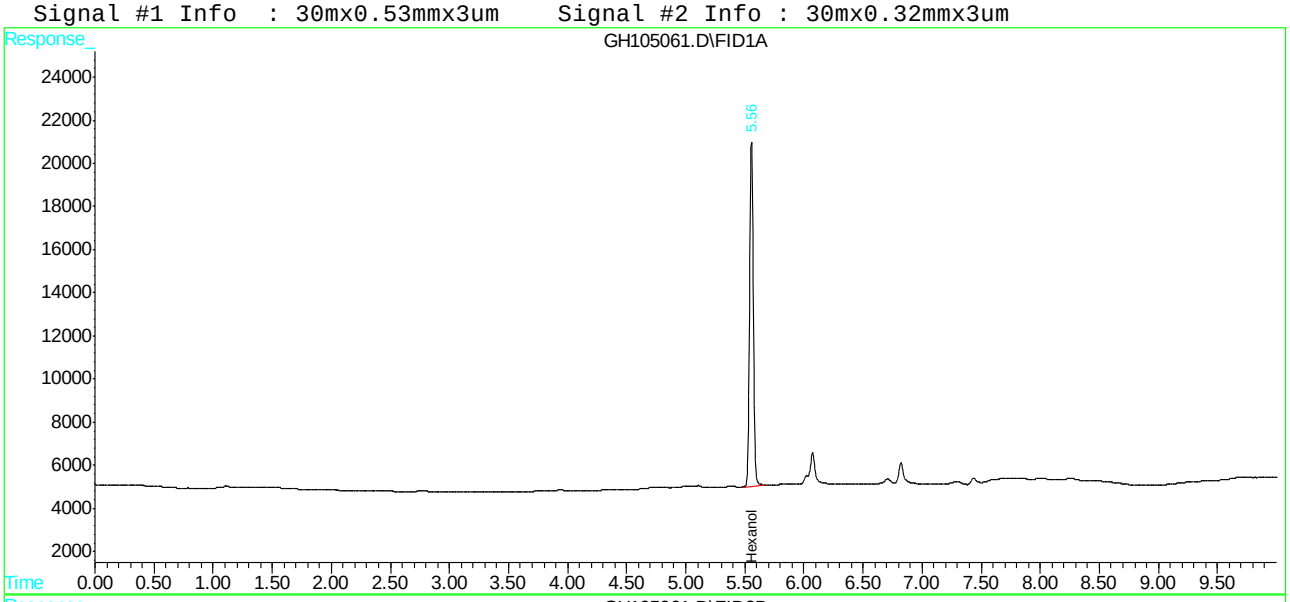
Quantitation Report (QT Reviewed)

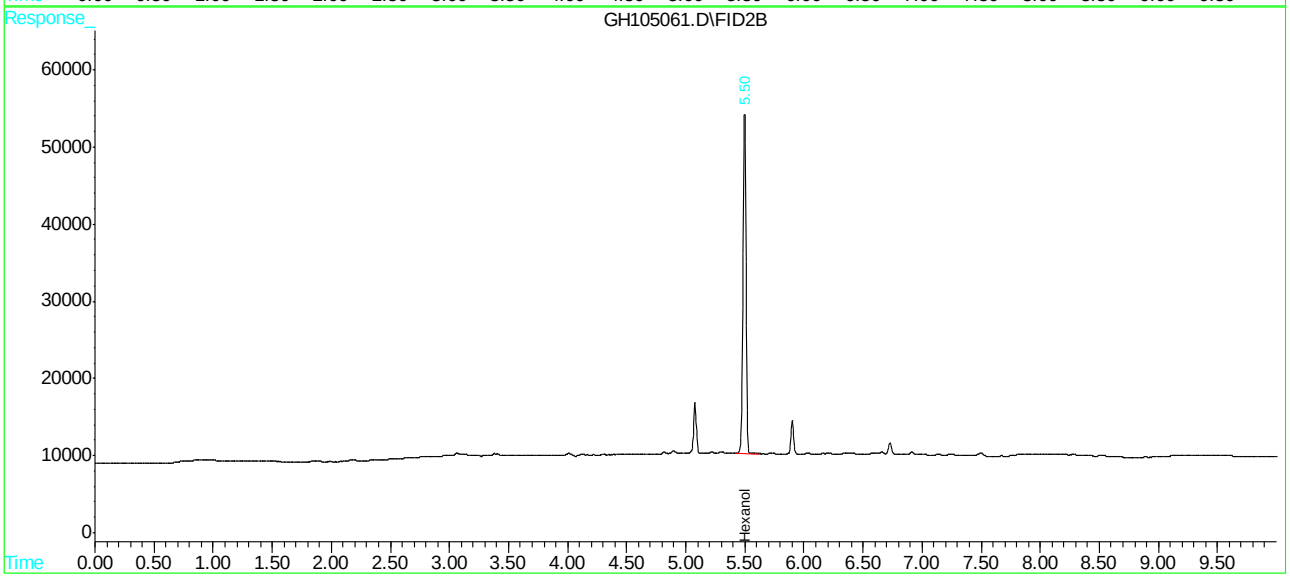
```
Data File : C:\HPCHEM\1\DATA\GH105061.D\FID1A.CH          Vial: 6
Acq On    : 18 May 2016   5:44 pm                     Operator: XULIU
Sample    : JC19996-2                                 Inst    : GCGH
Misc      : GC48426,GGH5290,4.8,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105061.D\FID2B.CH          Vial: 6
Acq On    : 18 May 2016   5:59 pm                     Operator: XULIU
Sample    : JC19996-2                                 Inst    : GCGH
Misc      : GC48426,GGH5290,4.8,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 19  7:35 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\GH105001.D\FID1A.CH          Vial: 52
Acq On    : 17 May 2016   3:08 am                     Operator: XULIU
Sample    : JC19996-3                                 Inst    : GCGH
Misc      : GC48422,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105001.D\FID2B.CH          Vial: 52
Acq On    : 17 May 2016   3:22 am                     Operator: XULIU
Sample    : JC19996-3                                 Inst    : GCGH
Misc      : GC48422,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  9:35 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           5.61   5.48    392158   261945 5125.312  1591.656 #
 Spiked Amount   5000.000                  Recovery     =  102.51%    31.83%

Target Compounds
```

9.1.3

9

```
---------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40%  (m)=manual int.
GH105001.D  MGH5269.M      Tue May 17 09:35:40 2016      GCGH
```


SGS ACCUTEST JC19996

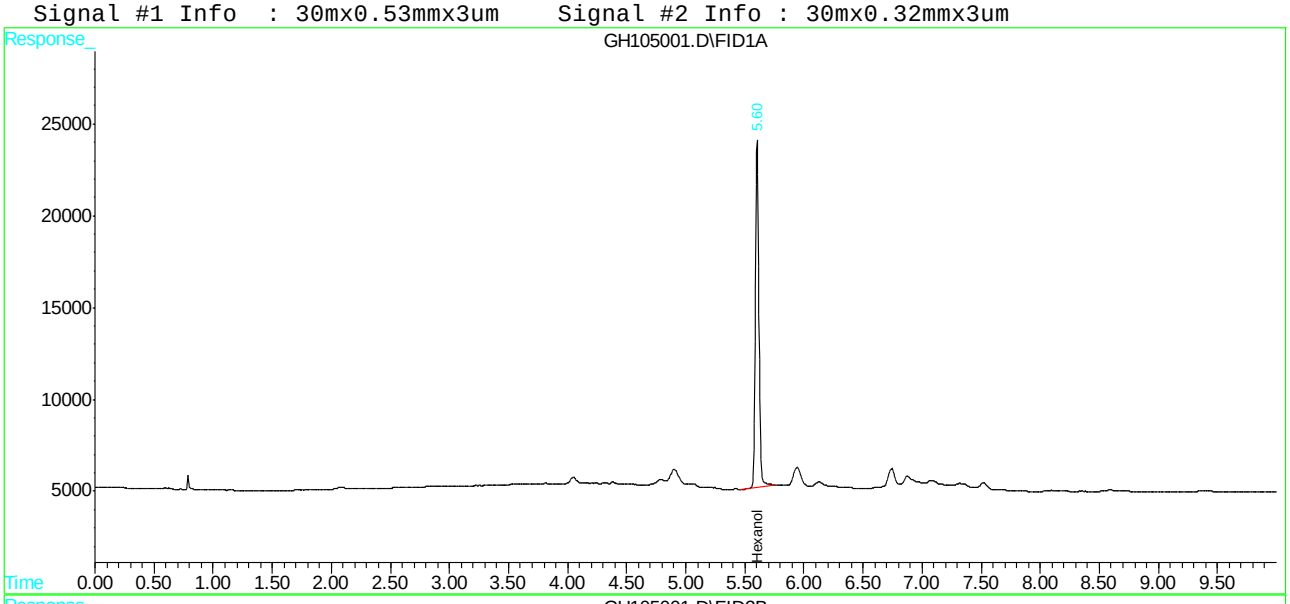
Quantitation Report (QT Reviewed)

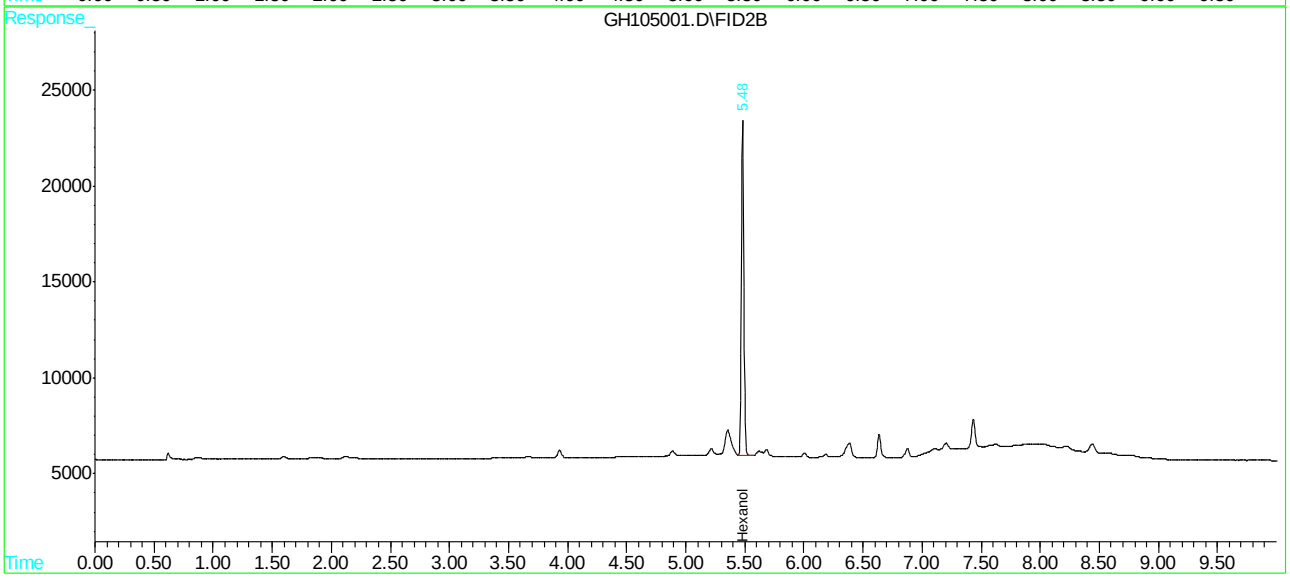
```
Data File : C:\HPCHEM\1\DATA\GH105001.D\FID1A.CH          Vial: 52
Acq On    : 17 May 2016   3:08 am                     Operator: XULIU
Sample    : JC19996-3                                 Inst    : GCGH
Misc      : GC48422,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105001.D\FID2B.CH          Vial: 52
Acq On    : 17 May 2016   3:22 am                     Operator: XULIU
Sample    : JC19996-3                                 Inst    : GCGH
Misc      : GC48422,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  9:35 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\GH105002.D\FID1A.CH          Vial: 53
Acq On    : 17 May 2016   3:22 am                     Operator: XULIU
Sample    : JC19996-4                                 Inst    : GCGH
Misc      : GC48422,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105002.D\FID2B.CH          Vial: 53
Acq On    : 17 May 2016   3:37 am                     Operator: XULIU
Sample    : JC19996-4                                 Inst    : GCGH
Misc      : GC48422,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  9:35 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           5.61   5.48    389392   274540 5089.156  1668.186 #
 Spiked Amount   5000.000                  Recovery     =  101.78%    33.36%

Target Compounds
```

9.1.4

9

```
---------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40%  (m)=manual int.
GH105002.D  MGH5269.M      Tue May 17 09:35:58 2016      GCGH
```


SGS ACCUTEST JC19996

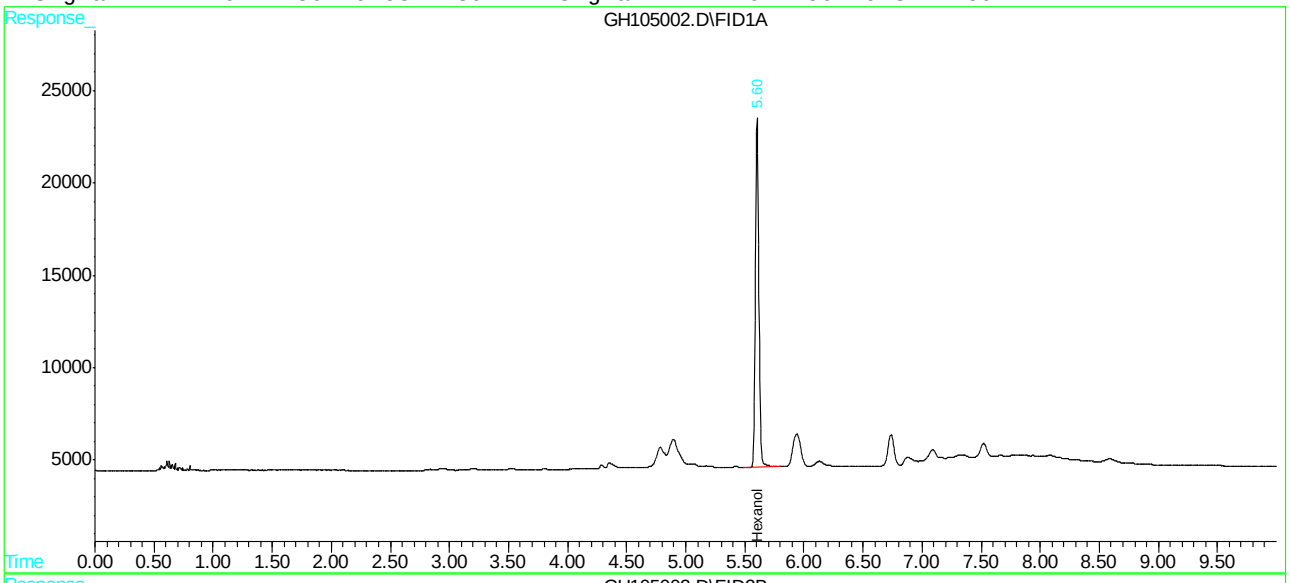
Quantitation Report (QT Reviewed)

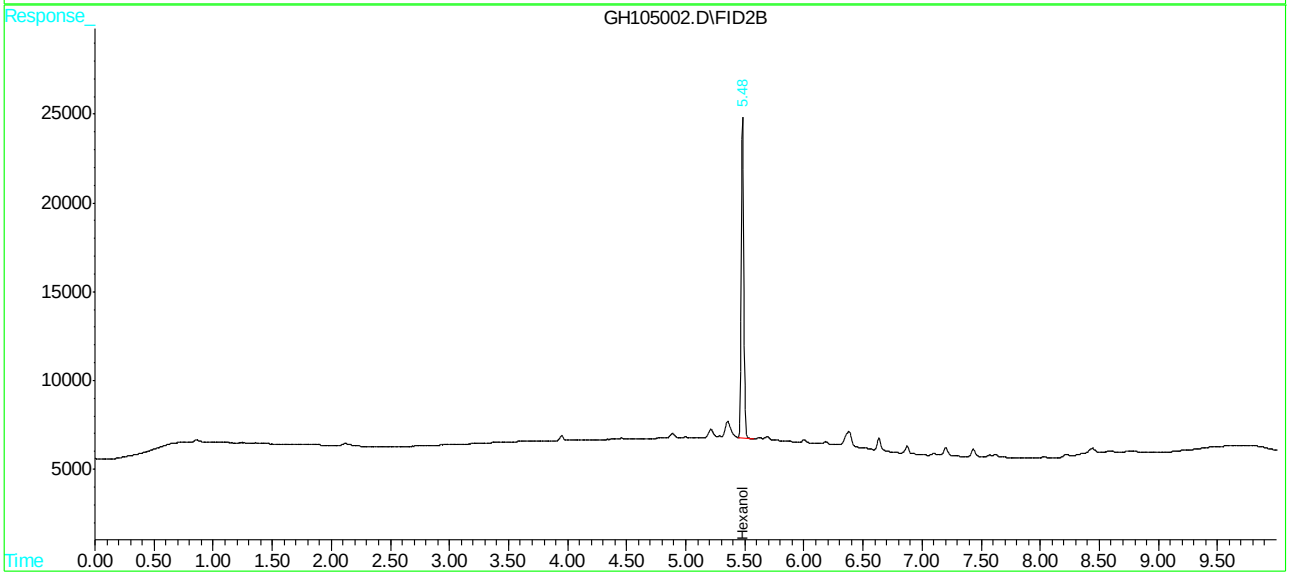
```
Data File : C:\HPCHEM\1\DATA\GH105002.D\FID1A.CH          Vial: 53
Acq On    : 17 May 2016   3:22 am                     Operator: XULIU
Sample    : JC19996-4                                 Inst    : GCGH
Misc      : GC48422,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105002.D\FID2B.CH          Vial: 53
Acq On    : 17 May 2016   3:37 am                     Operator: XULIU
Sample    : JC19996-4                                 Inst    : GCGH
Misc      : GC48422,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  9:35 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\GH105003.D\FID1A.CH          Vial: 54
Acq On    : 17 May 2016   3:37 am                     Operator: XULIU
Sample    : JC19996-5                                 Inst    : GCGH
Misc      : GC48422,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105003.D\FID2B.CH          Vial: 54
Acq On    : 17 May 2016   3:51 am                     Operator: XULIU
Sample    : JC19996-5                                 Inst    : GCGH
Misc      : GC48422,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  9:36 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	5.61	5.48	362953	196103	4743.621	1191.578 #
Spiked Amount 5000.000			Recovery	=	94.87%	23.83%
Target Compounds						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

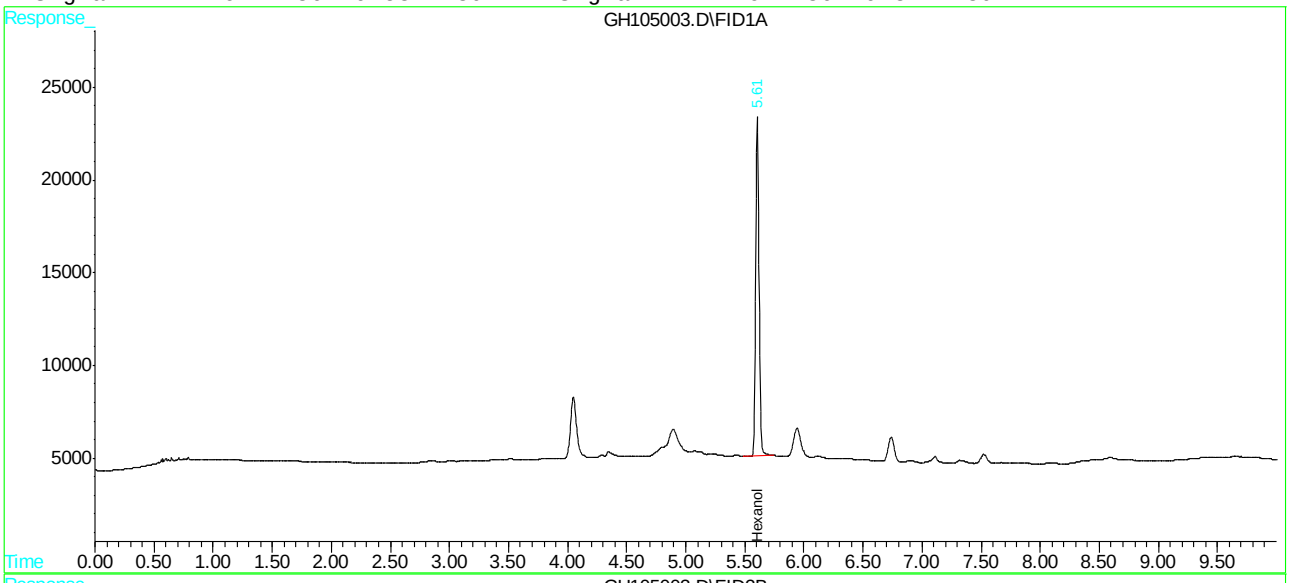
Quantitation Report (QT Reviewed)

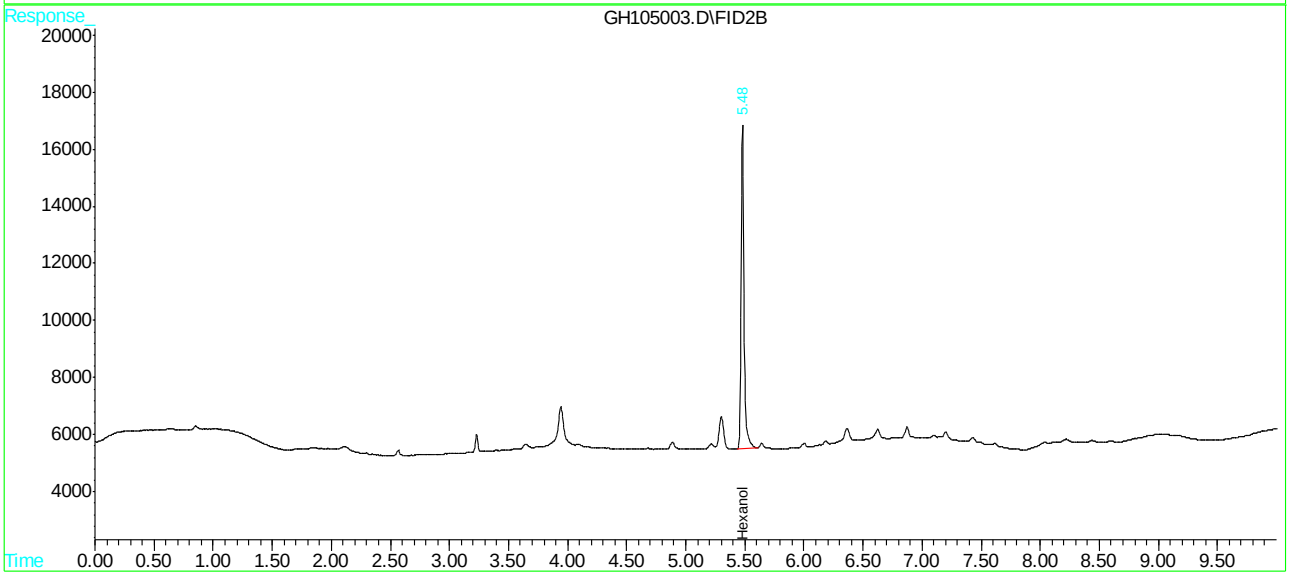
```
Data File : C:\HPCHEM\1\DATA\GH105003.D\FID1A.CH          Vial: 54
Acq On    : 17 May 2016   3:37 am                     Operator: XULIU
Sample    : JC19996-5                                 Inst    : GCGH
Misc      : GC48422,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105003.D\FID2B.CH          Vial: 54
Acq On    : 17 May 2016   3:51 am                     Operator: XULIU
Sample    : JC19996-5                                 Inst    : GCGH
Misc      : GC48422,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  9:36 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\GH105004.D\FID1A.CH          Vial: 55
Acq On    : 17 May 2016   3:51 am                     Operator: XULIU
Sample    : JC19996-6                                 Inst    : GCGH
Misc      : GC48422,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105004.D\FID2B.CH          Vial: 55
Acq On    : 17 May 2016   4:06 am                     Operator: XULIU
Sample    : JC19996-6                                 Inst    : GCGH
Misc      : GC48422,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  9:33 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           5.61   5.48    381462   218583 4985.522  1328.175 #
 Spiked Amount   5000.000                  Recovery     =   99.71%    26.56%

Target Compounds
```

9.1.6

9

```
---------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40%  (m)=manual int.
GH105004.D  MGH5269.M      Tue May 17 09:36:32 2016      GCGH
```


SGS ACCUTEST JC19996

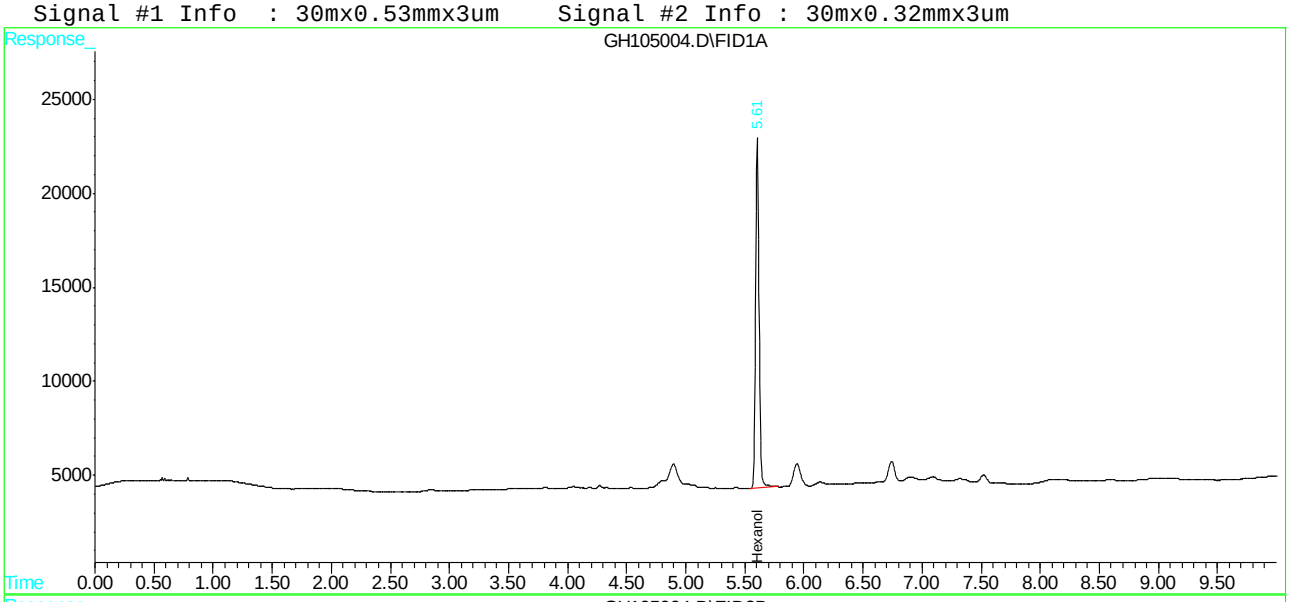
Quantitation Report (QT Reviewed)

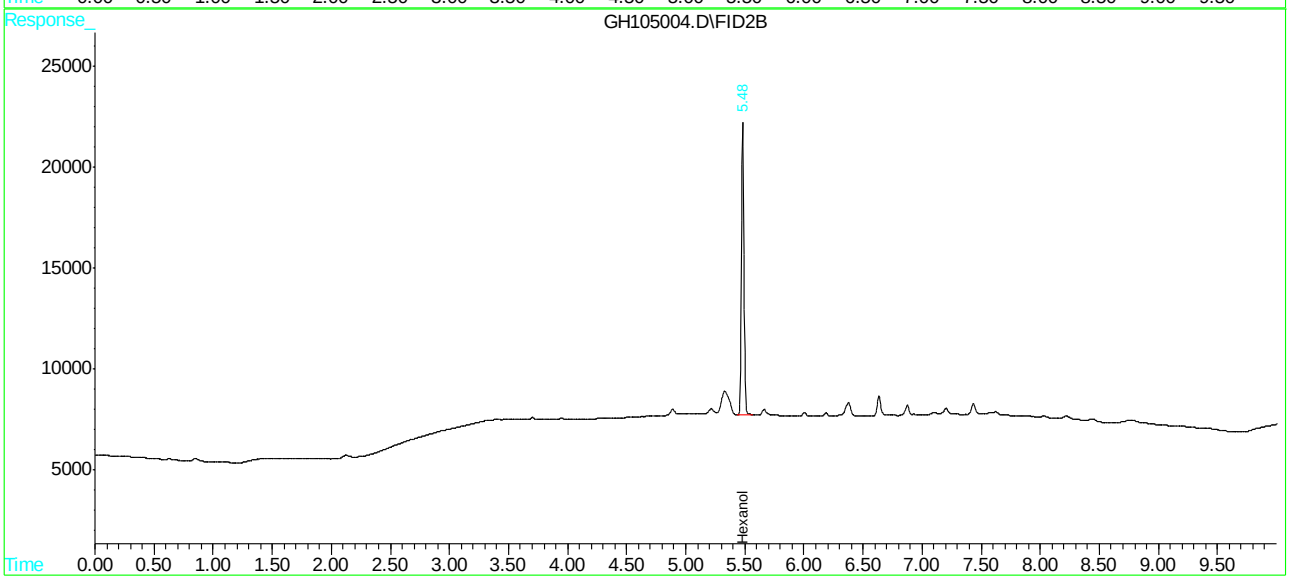
```
Data File : C:\HPCHEM\1\DATA\GH105004.D\FID1A.CH          Vial: 55
Acq On    : 17 May 2016   3:51 am                     Operator: XULIU
Sample    : JC19996-6                                 Inst    : GCGH
Misc      : GC48422,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105004.D\FID2B.CH          Vial: 55
Acq On    : 17 May 2016   4:06 am                     Operator: XULIU
Sample    : JC19996-6                                 Inst    : GCGH
Misc      : GC48422,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  9:33 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\GH104999.D\FID1A.CH          Vial: 91
Acq On    : 17 May 2016   2:32 am                     Operator: XULIU
Sample    : MB2                                       Inst    : GCGH
Misc      : GC48422,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104999.D\FID2B.CH          Vial: 91
Acq On    : 17 May 2016   2:46 am                     Operator: XULIU
Sample    : MB2                                       Inst    : GCGH
Misc      : GC48422,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  9:32 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 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    368954   255342 4822.046  1551.537 #
 Spiked Amount   5000.000                  Recovery     =   96.44%    31.03%

Target Compounds
```

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

GH104999.D MGH5269.M Tue May 17 09:35:13 2016 GCGH

SGS ACCUTEST JC19996

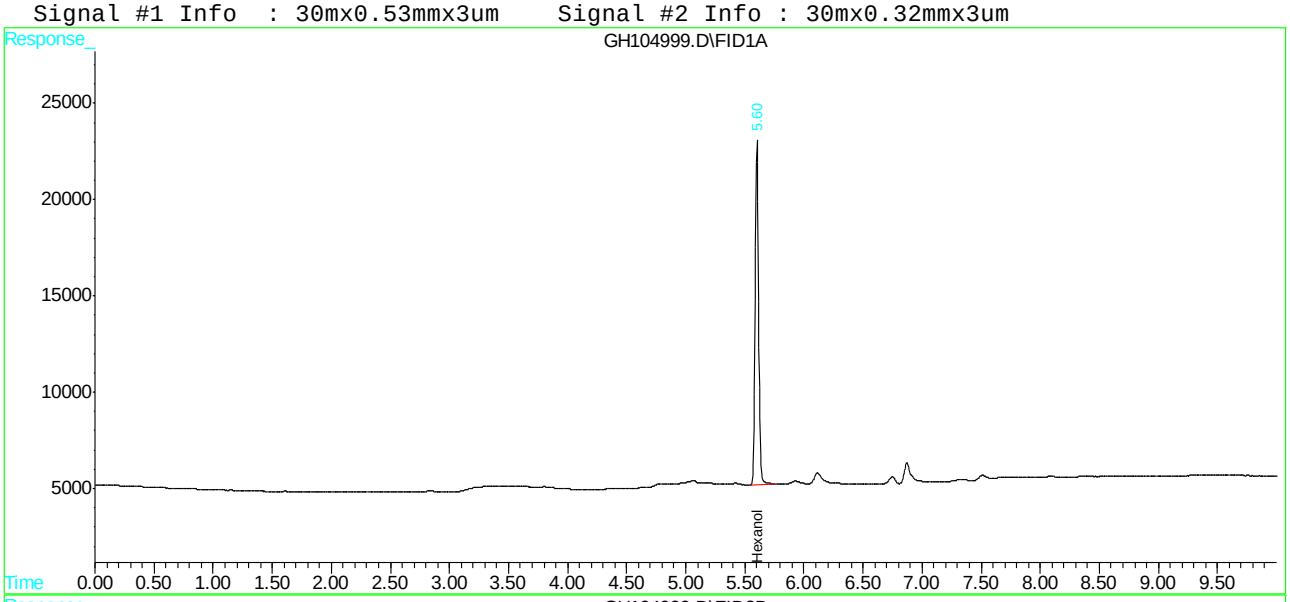
Quantitation Report (QT Reviewed)

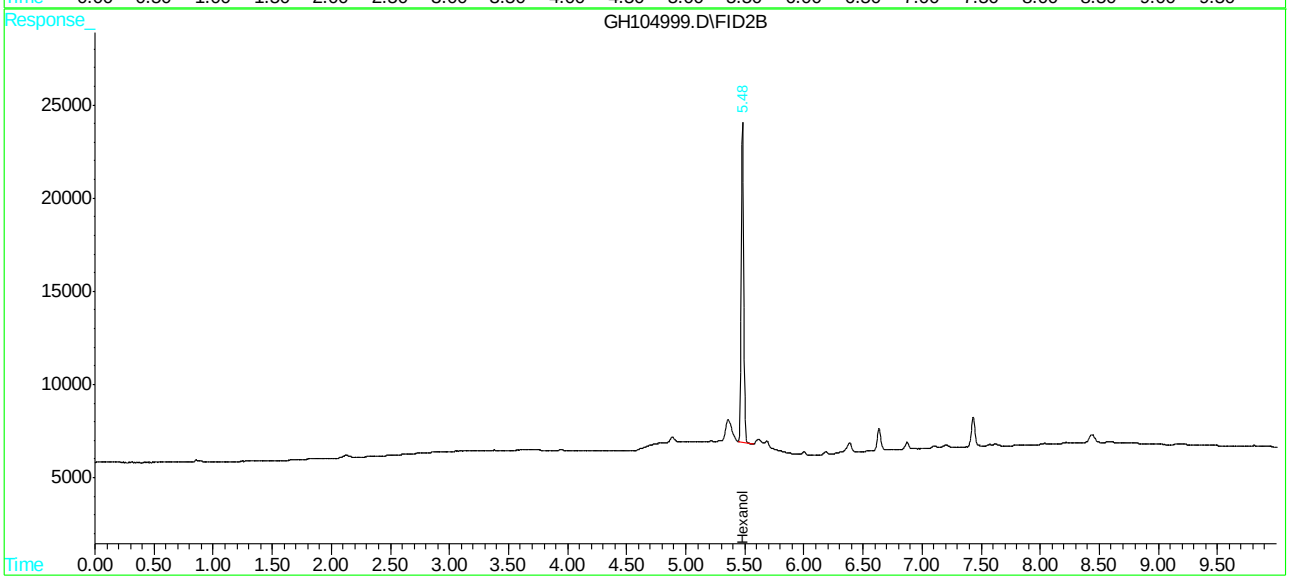
```
Data File : C:\HPCHEM\1\DATA\GH104999.D\FID1A.CH          Vial: 91
Acq On    : 17 May 2016   2:32 am                     Operator: XULIU
Sample    : MB2                                       Inst    : GCGH
Misc      : GC48422,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104999.D\FID2B.CH          Vial: 91
Acq On    : 17 May 2016   2:46 am                     Operator: XULIU
Sample    : MB2                                       Inst    : GCGH
Misc      : GC48422,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  9:32 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 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 JC19996

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 JC19996

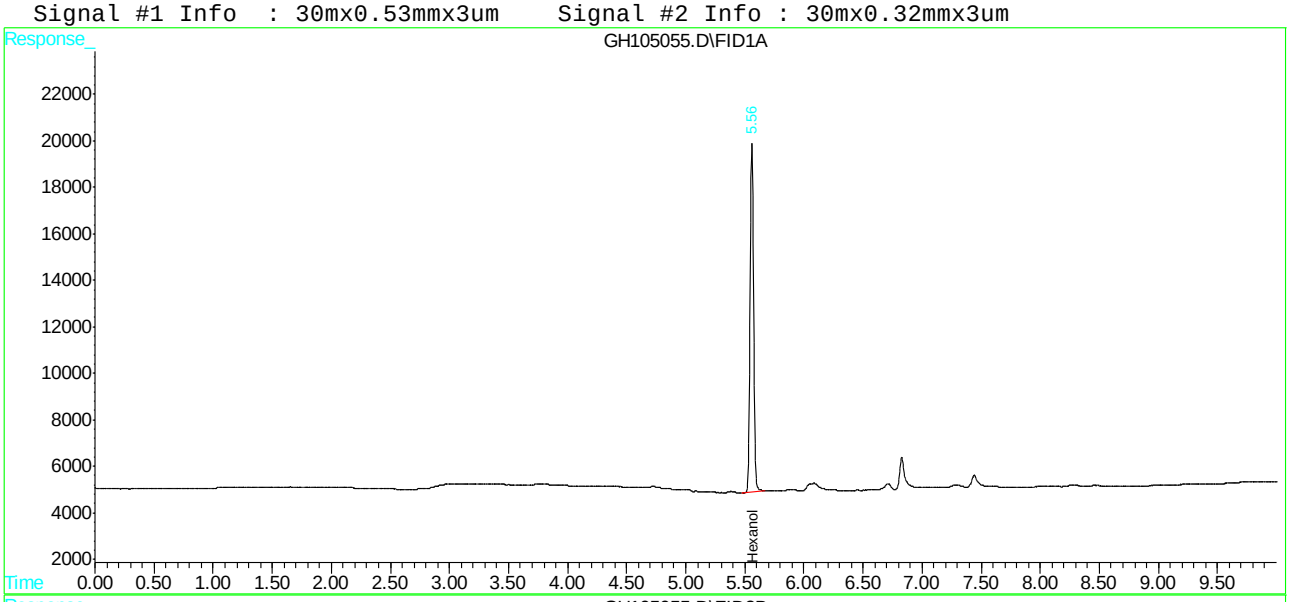
Quantitation Report (QT Reviewed)

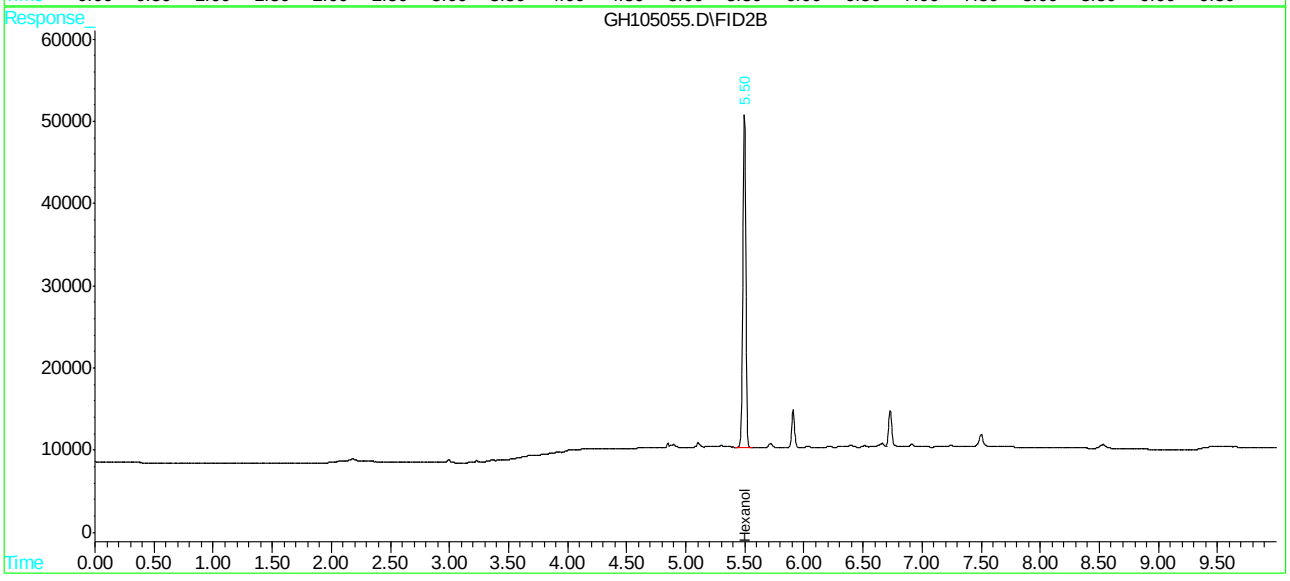
```
Data File : C:\HPCHEM\1\DATA\GH105055.D\FID1A.CH          Vial: 91
Acq On    : 18 May 2016   4:03 pm                     Operator: XULIU
Sample    : MB2                                       Inst    : GCGH
Misc      : GC48426,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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\GH104988.D\FID1A.CH          Vial: 91
Acq On    : 16 May 2016  11:31 pm                     Operator: XULIU
Sample    : MB1                                       Inst    : GCGH
Misc      : GC48421,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104988.D\FID2B.CH          Vial: 91
Acq On    : 16 May 2016  11:46 pm                     Operator: XULIU
Sample    : MB1                                       Inst    : GCGH
Misc      : GC48421,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  9:11 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	359010	266100	4692.087	1616.903 #
Spiked Amount 5000.000			Recovery	=	93.84%	32.34%
Target Compounds						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC19996

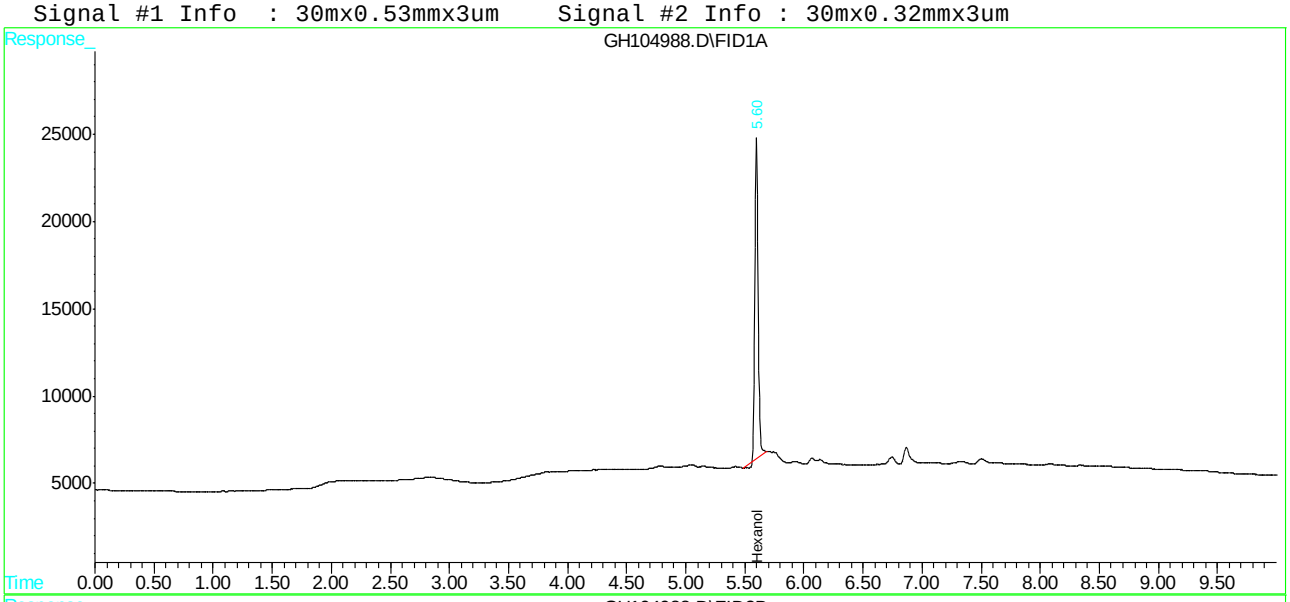
Quantitation Report (QT Reviewed)

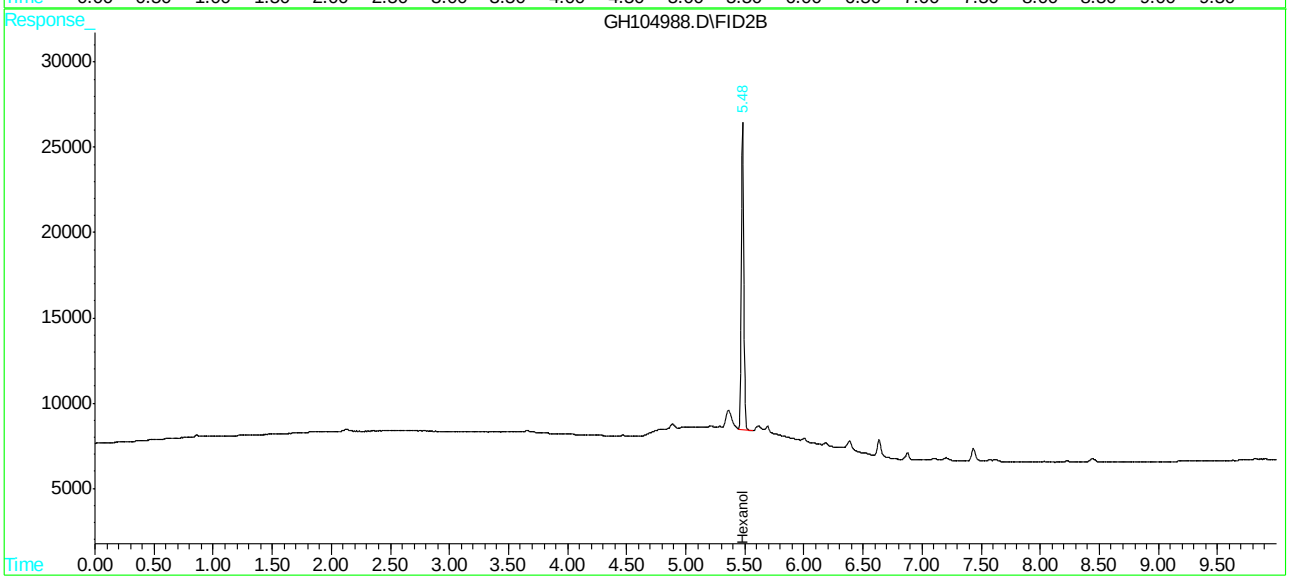
```
Data File : C:\HPCHEM\1\DATA\GH104988.D\FID1A.CH          Vial: 91
Acq On    : 16 May 2016  11:31 pm                     Operator: XULIU
Sample    : MB1                                       Inst    : GCGH
Misc      : GC48421,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104988.D\FID2B.CH          Vial: 91
Acq On    : 16 May 2016  11:46 pm                     Operator: XULIU
Sample    : MB1                                       Inst    : GCGH
Misc      : GC48421,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  9:11 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\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
```

9.2.4

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 JC19996

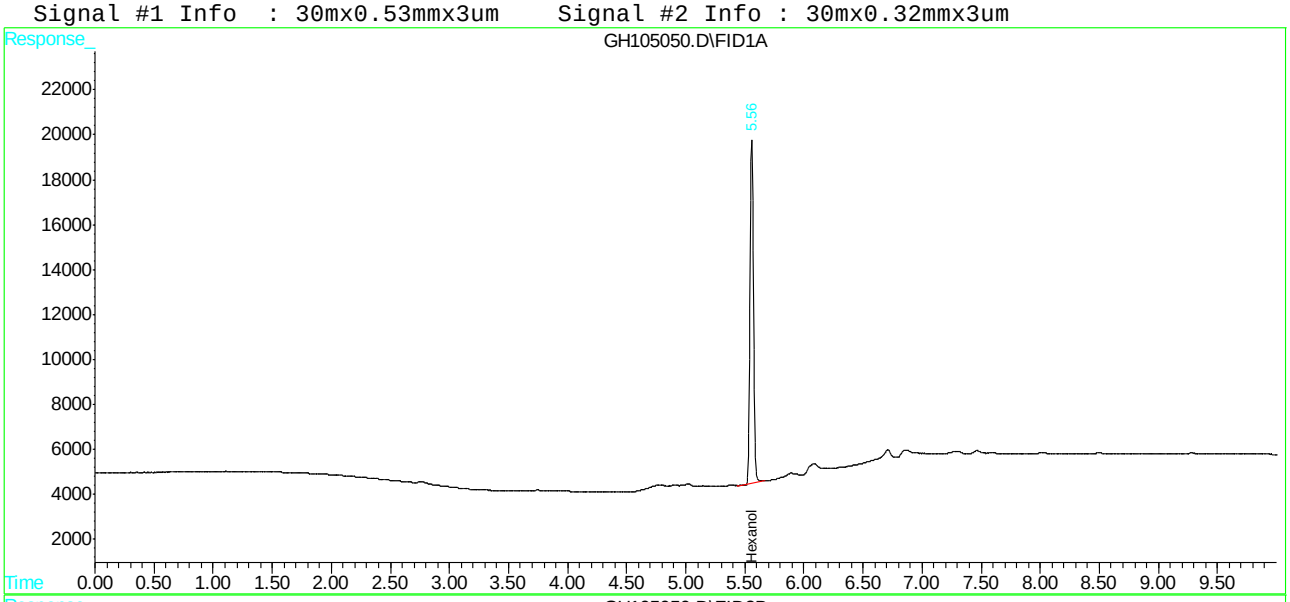
Quantitation Report (QT Reviewed)

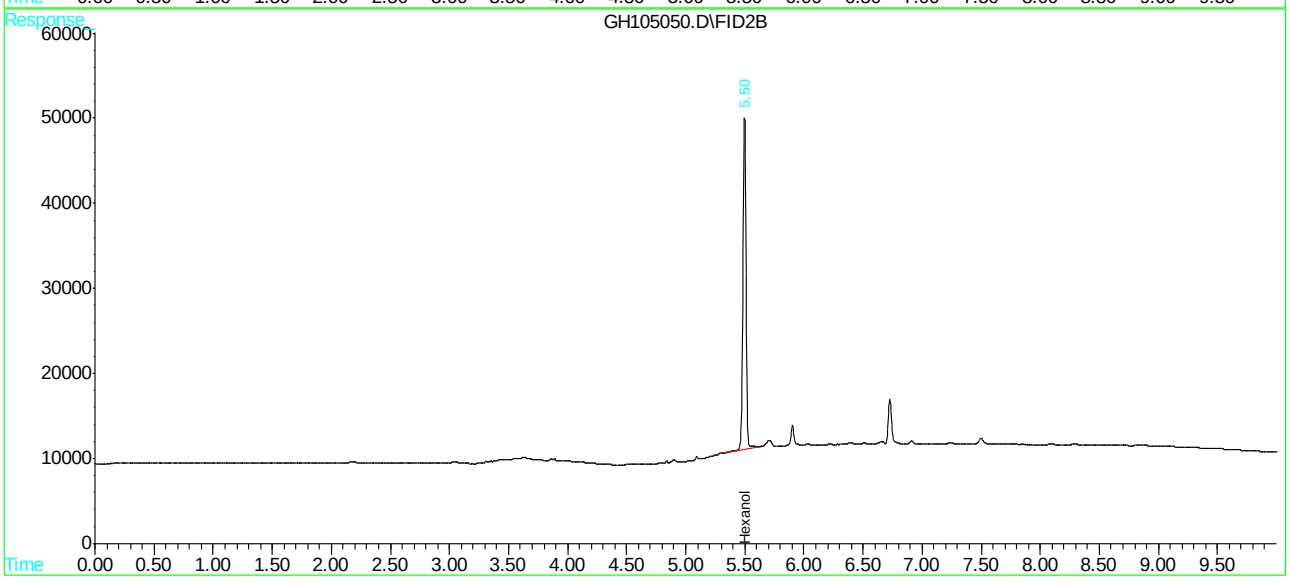
```
Data File : C:\HPCHEM\1\DATA\GH105050.D\FID1A.CH          Vial: 91
Acq On    : 18 May 2016   2:42 pm                     Operator: XULIU
Sample    : MB1                                       Inst    : GCGH
Misc      : GC48425,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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\GH104989.D\FID1A.CH          Vial: 92
Acq On    : 16 May 2016  11:46 pm                     Operator: XULIU
Sample    : BS                                        Inst    : GCGH
Misc      : GC48421,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104989.D\FID2B.CH          Vial: 92
Acq On    : 17 May 2016  12:07 am                     Operator: XULIU
Sample    : BS                                        Inst    : GCGH
Misc      : GC48421,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  9:11 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	435010	301376	5685.362	1831.249	#
Spiked Amount	5000.000			Recovery	=	113.71%	36.62%	
	Target Compounds							
1)	Methanol	1.15	0.86	74402	58255	5037.745	2865.645	#
2)	Ethanol	1.49	1.11	106677	72147	5700.871	2270.610	#
3)	Tert-Butyl Alcoh	2.07	1.60	157891	118448	5782.834	1814.097	#
4)	1-Propanol	2.56	1.94f	138496	93610	6214.089	1899.922	#
5)	2-Propanol	1.80	1.36f	112509	80729	5422.080	1931.018	#
6)	Isobutanol	3.36	2.89	175221	109539	6374.801	1765.734	#
7)	1-Butanol	3.80	3.38	153567	104615	6271.482	2020.884	#
8)	2-Butanol	2.99	2.51f	142151	97520	5641.271	1973.520	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC19996

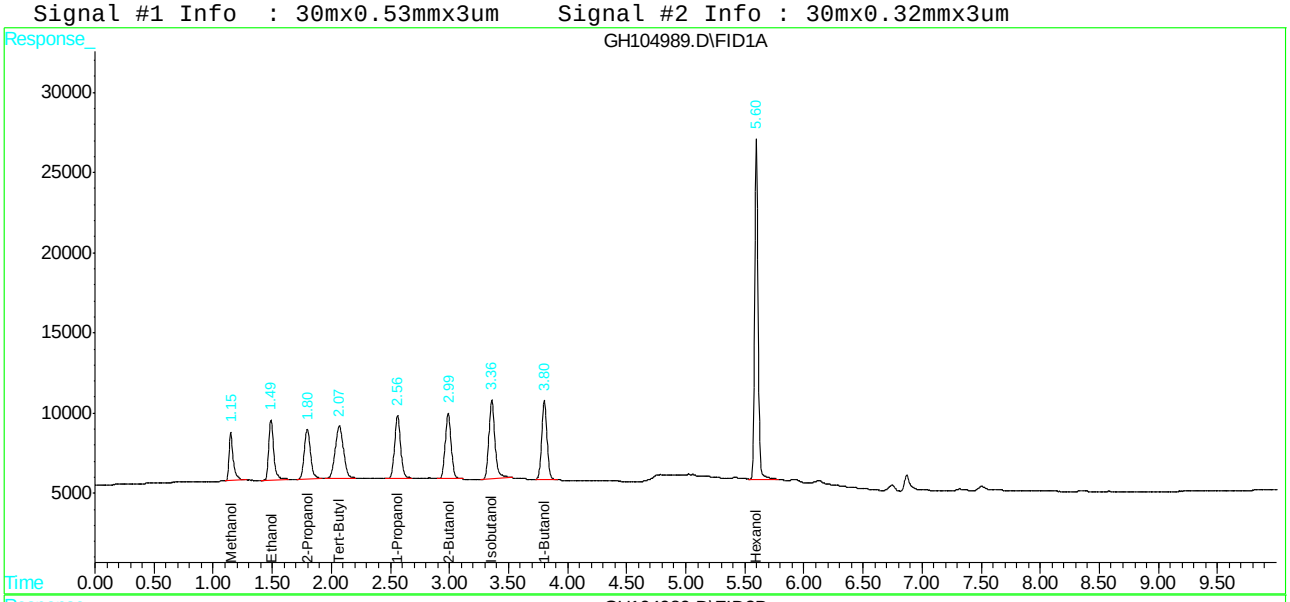
Quantitation Report (QT Reviewed)

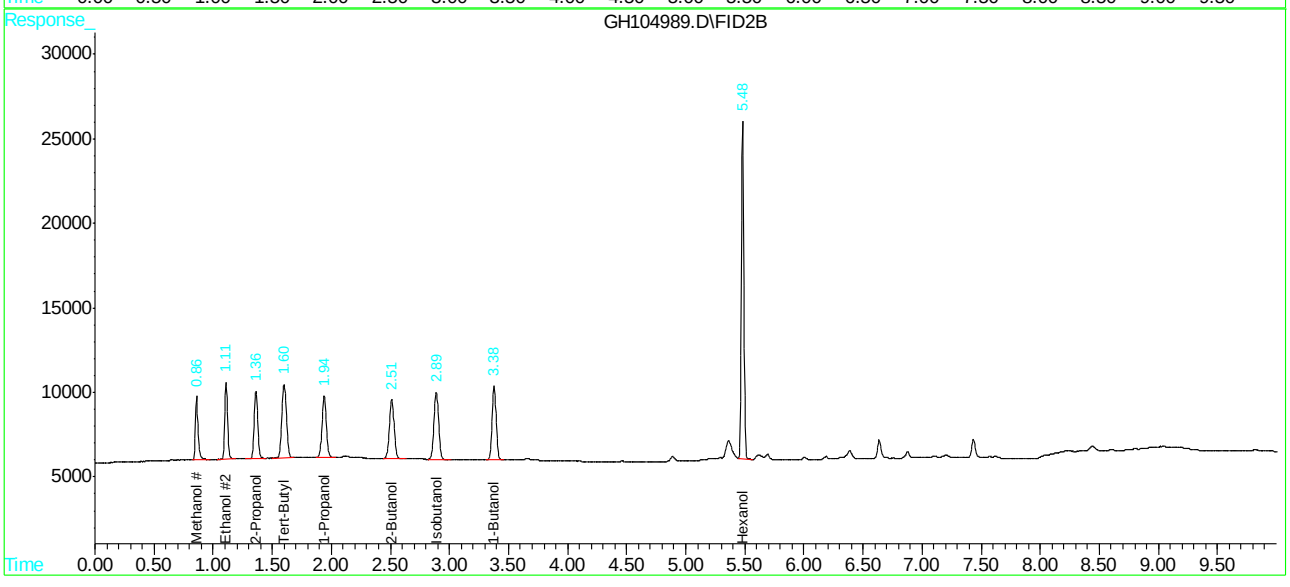
```
Data File : C:\HPCHEM\1\DATA\GH104989.D\FID1A.CH          Vial: 92
Acq On    : 16 May 2016  11:46 pm                     Operator: XULIU
Sample    : BS                                        Inst    : GCGH
Misc      : GC48421,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104989.D\FID2B.CH          Vial: 92
Acq On    : 17 May 2016  12:07 am                     Operator: XULIU
Sample    : BS                                        Inst    : GCGH
Misc      : GC48421,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  9:11 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\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

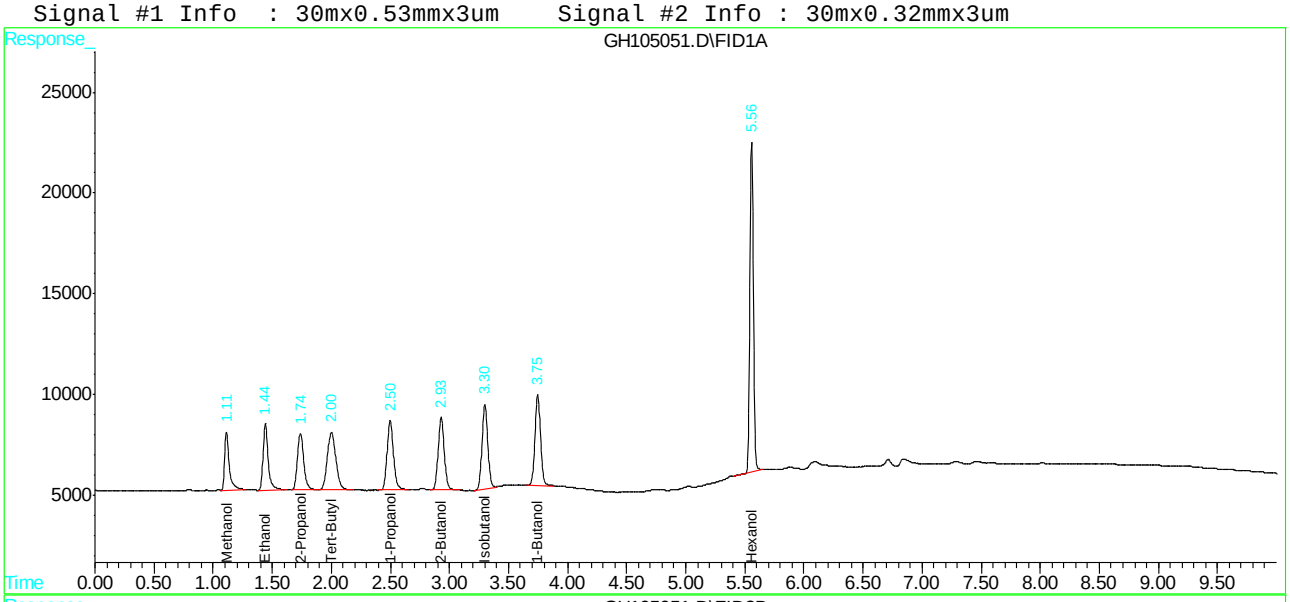
Quantitation Report (QT Reviewed)

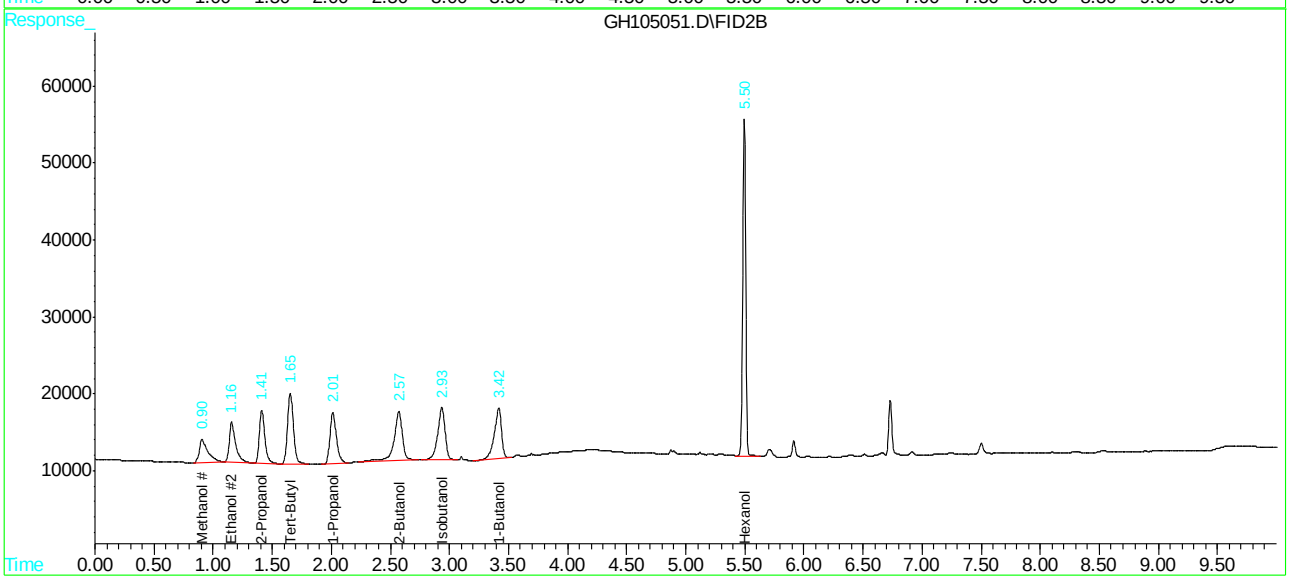
```
Data File : C:\HPCHEM\1\DATA\GH105051.D\FID1A.CH          Vial: 92
Acq On    : 18 May 2016   2:58 pm                     Operator: XULIU
Sample    : BS                                        Inst    : GCGH
Misc      : GC48425,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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 JC19996

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104991.D\FID1A.CH          Vial: 25
Acq On    : 17 May 2016  12:22 am                     Operator: XULIU
Sample    : JC20184-3MS                               Inst    : GCGH
Misc      : GC48421,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104991.D\FID2B.CH          Vial: 25
Acq On    : 17 May 2016  12:36 am                     Operator: XULIU
Sample    : JC20184-3MS                               Inst    : GCGH
Misc      : GC48421,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  9:12 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	322529	220855	4215.290	1341.983	#
Spiked Amount	5000.000			Recovery	=	84.31%	26.84%	
	Target Compounds							
1)	Methanol	1.15	0.86	65501	56583	4435.009	2783.383	
2)	Ethanol	1.49	1.11	110854	68685	5924.098	2161.654	#
3)	Tert-Butyl Alcoh	2.07	1.60	149970	112664	5492.723	1725.503	#
4)	1-Propanol	2.56	1.94f	134624	88203	6040.366	1790.176	#
5)	2-Propanol	1.80	1.36f	107746	76317	5192.523	1825.482	#
6)	Isobutanol	3.36	2.89	159931	101298	5818.508	1632.893	#
7)	1-Butanol	3.80	3.38	150090	115450	6129.471	2230.190	#
8)	2-Butanol	2.99	2.51f	139835	92094	5549.366	1863.710	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC19996

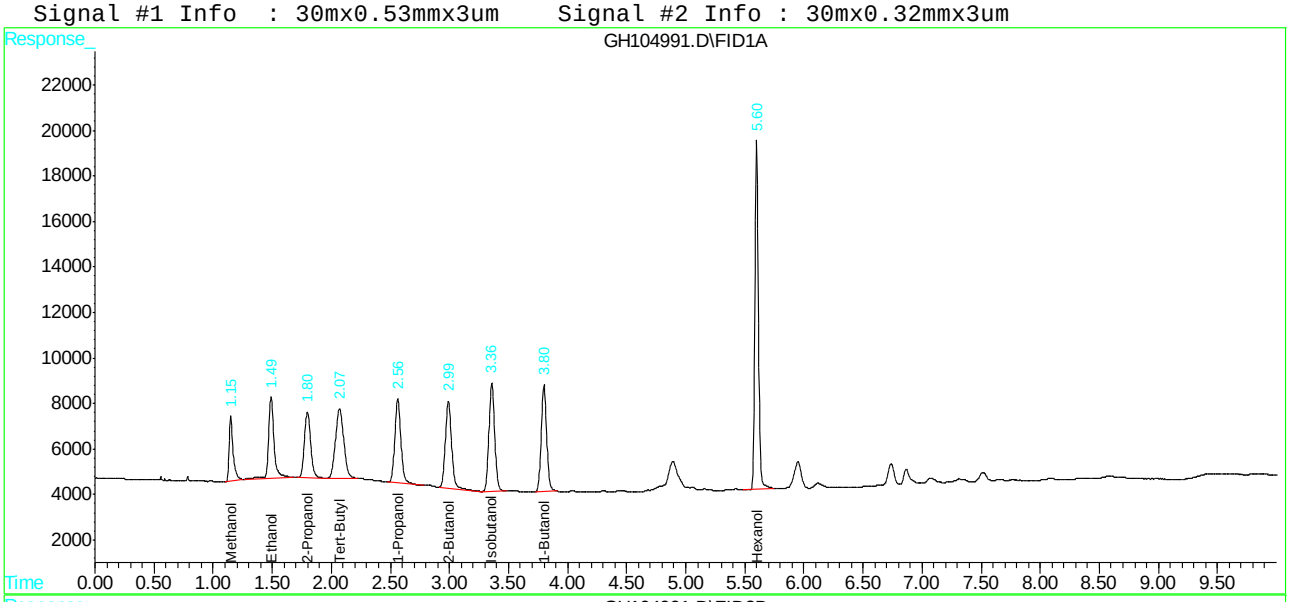
Quantitation Report (QT Reviewed)

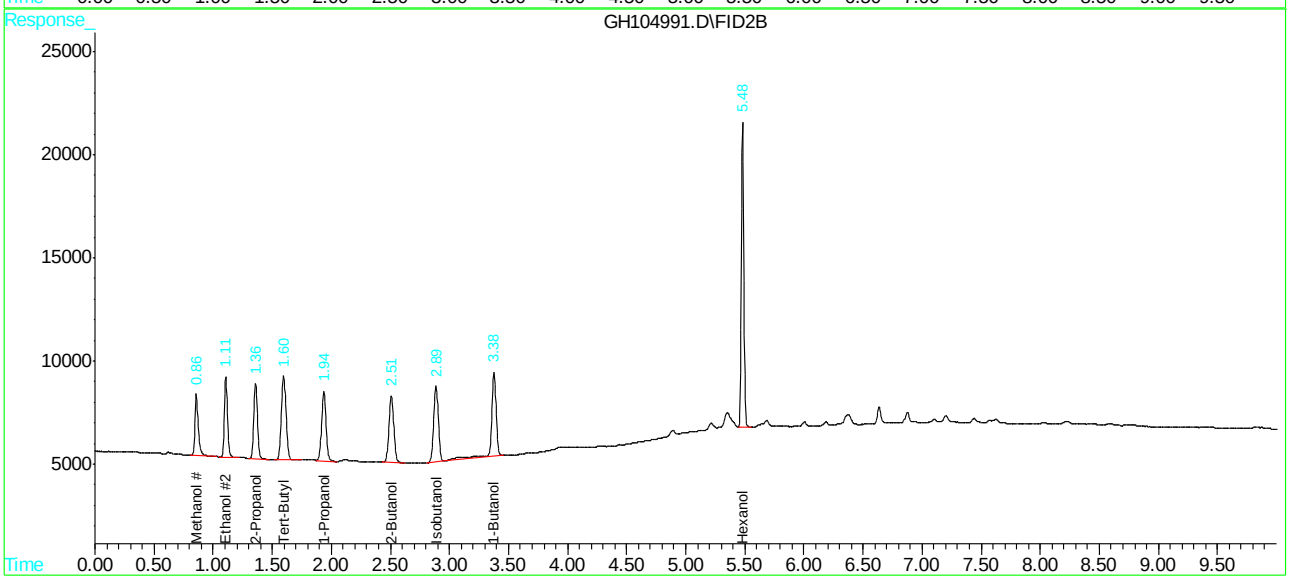
```
Data File : C:\HPCHEM\1\DATA\GH104991.D\FID1A.CH          Vial: 25
Acq On    : 17 May 2016  12:22 am                     Operator: XULIU
Sample    : JC20184-3MS                               Inst    : GCGH
Misc      : GC48421,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104991.D\FID2B.CH          Vial: 25
Acq On    : 17 May 2016  12:36 am                     Operator: XULIU
Sample    : JC20184-3MS                               Inst    : GCGH
Misc      : GC48421,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  9:12 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\GH104992.D\FID1A.CH          Vial: 26
Acq On    : 17 May 2016  12:36 am                     Operator: XULIU
Sample    : JC20184-3MSD                              Inst    : GCGH
Misc      : GC48421,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104992.D\FID2B.CH          Vial: 26
Acq On    : 17 May 2016  12:51 am                     Operator: XULIU
Sample    : JC20184-3MSD                              Inst    : GCGH
Misc      : GC48421,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  9:12 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	348108	246842	4549.601	1499.887	#
Spiked Amount	5000.000			Recovery	=	90.99%	30.00%	
	Target Compounds							
1)	Methanol	1.15	0.86	75053	58569	5081.799	2881.068	#
2)	Ethanol	1.49	1.11	106517	71579	5692.364	2252.737	#
3)	Tert-Butyl Alcoh	2.07	1.60	155997	117914	5713.481	1805.917	#
4)	1-Propanol	2.56	1.94f	137430	95056	6166.268	1929.268	#
5)	2-Propanol	1.80	1.36f	110482	80252	5324.391	1919.622	#
6)	Isobutanol	3.36	2.89	168420	109294	6127.363	1761.794	#
7)	1-Butanol	3.80	3.38	151863	103917	6201.905	2007.399	#
8)	2-Butanol	2.99	2.51f	141346	97137	5609.316	1965.766	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC19996

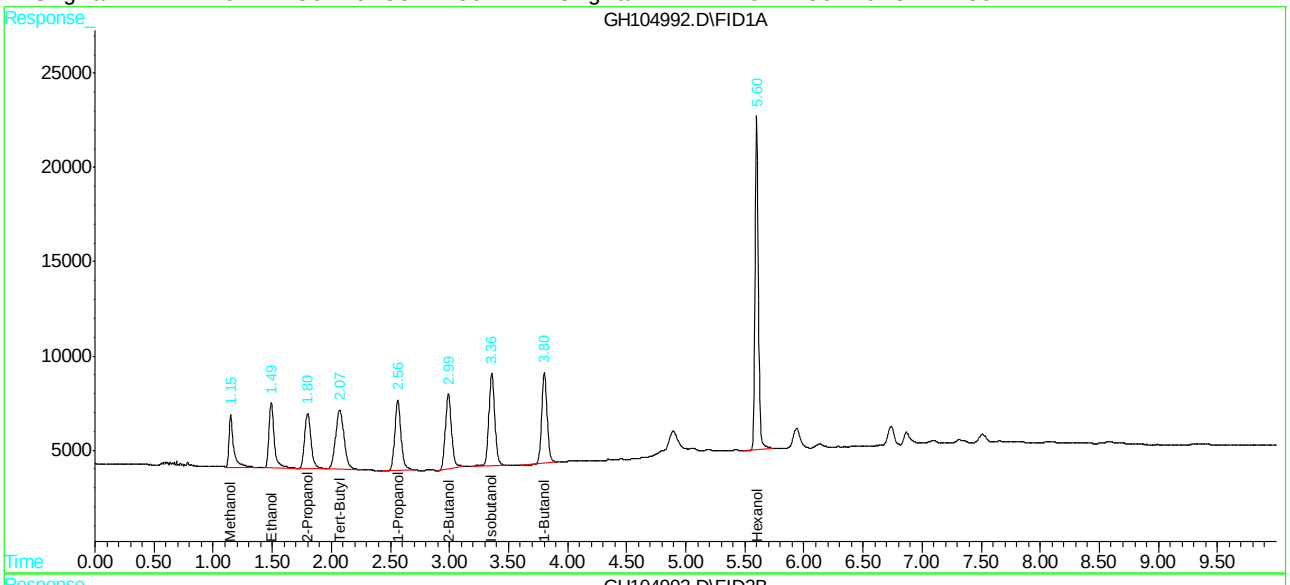
Quantitation Report (QT Reviewed)

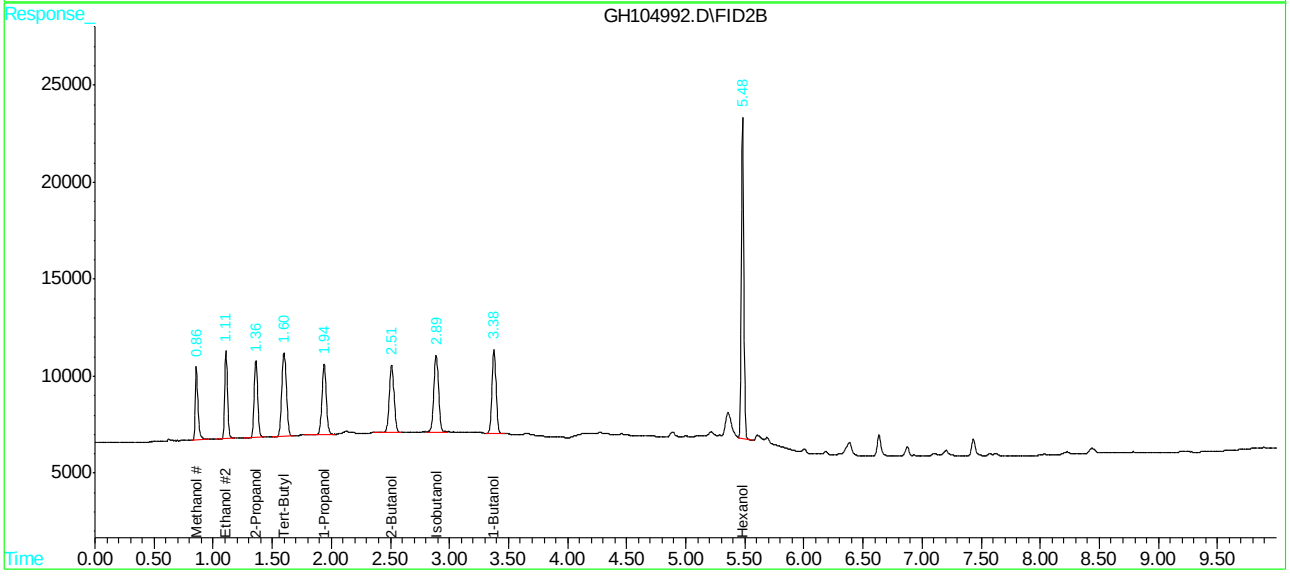
```
Data File : C:\HPCHEM\1\DATA\GH104992.D\FID1A.CH          Vial: 26
Acq On    : 17 May 2016  12:36 am                     Operator: XULIU
Sample    : JC20184-3MSD                              Inst    : GCGH
Misc      : GC48421,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104992.D\FID2B.CH          Vial: 26
Acq On    : 17 May 2016  12:51 am                     Operator: XULIU
Sample    : JC20184-3MSD                              Inst    : GCGH
Misc      : GC48421,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  9:12 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 JC19996

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.

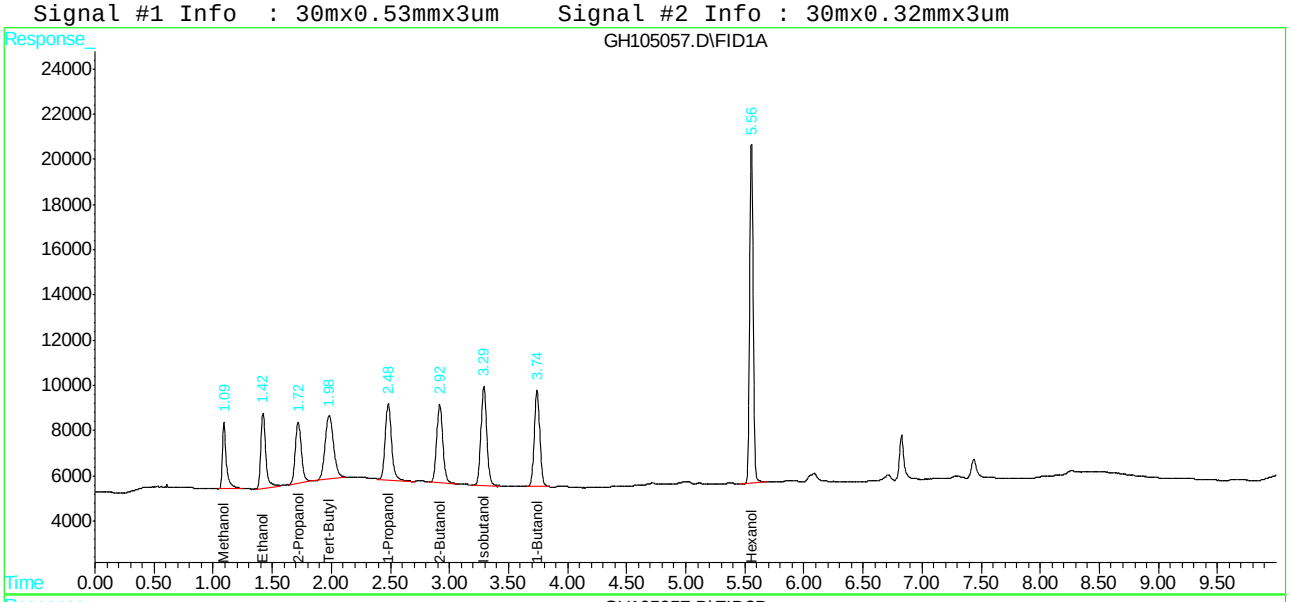
Quantitation Report (QT Reviewed)

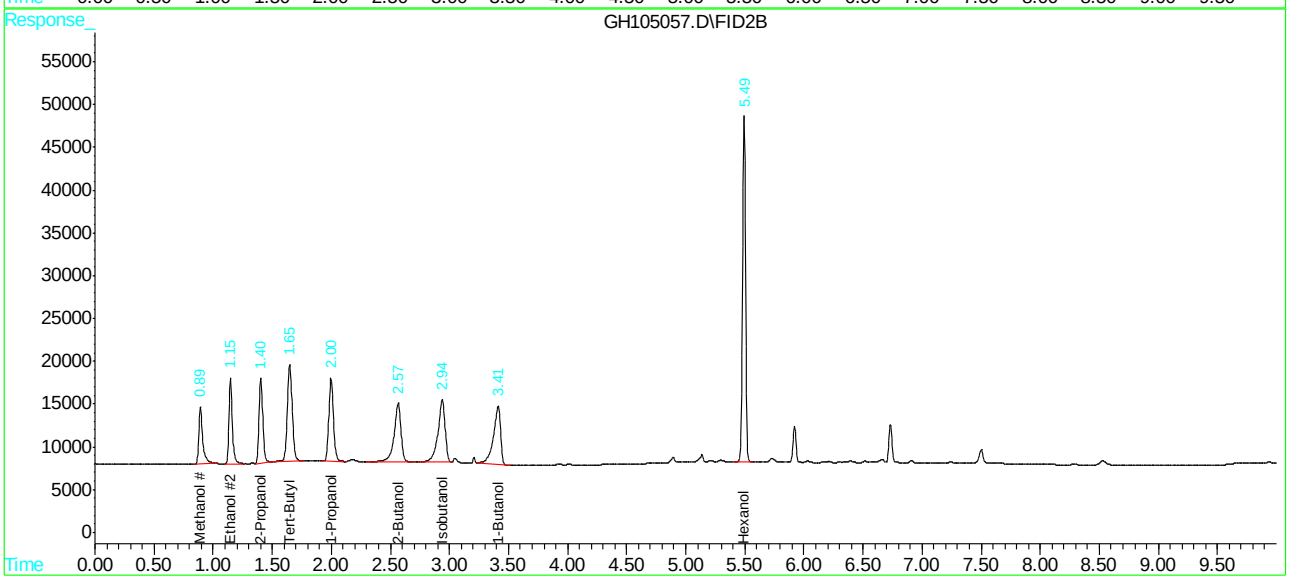
```
Data File : C:\HPCHEM\1\DATA\GH105057.D\FID1A.CH          Vial: 2
Acq On    : 18 May 2016   4:40 pm                     Operator: XULIU
Sample    : JC19914-2MS                               Inst    : GCGH
Misc      : GC48426,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC19996

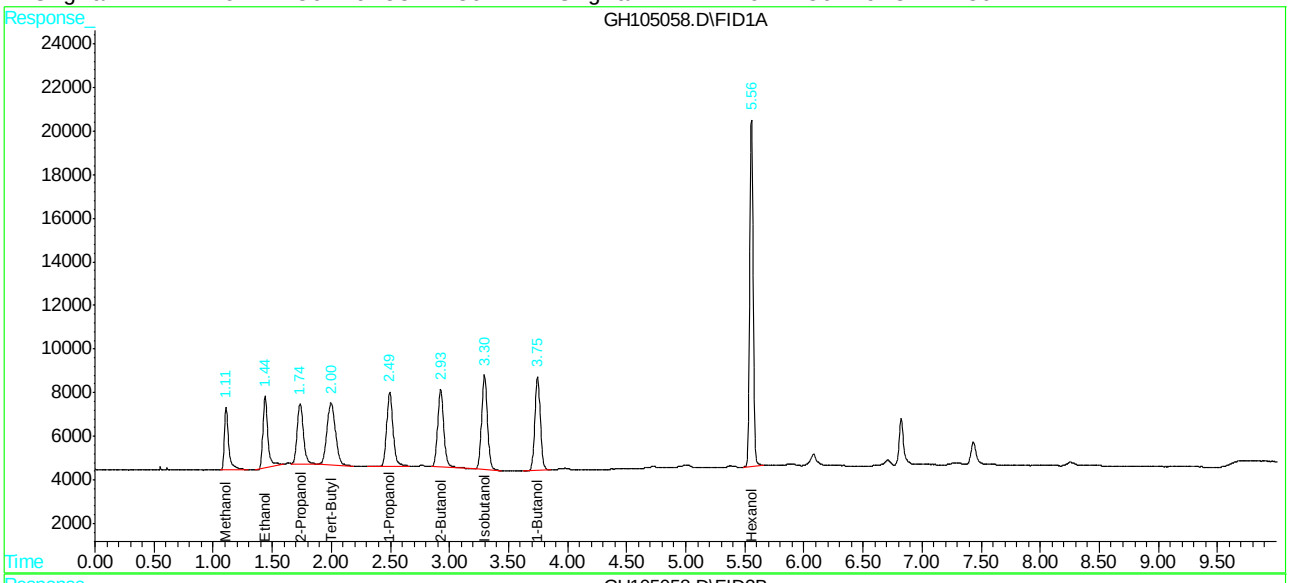
Quantitation Report (QT Reviewed)

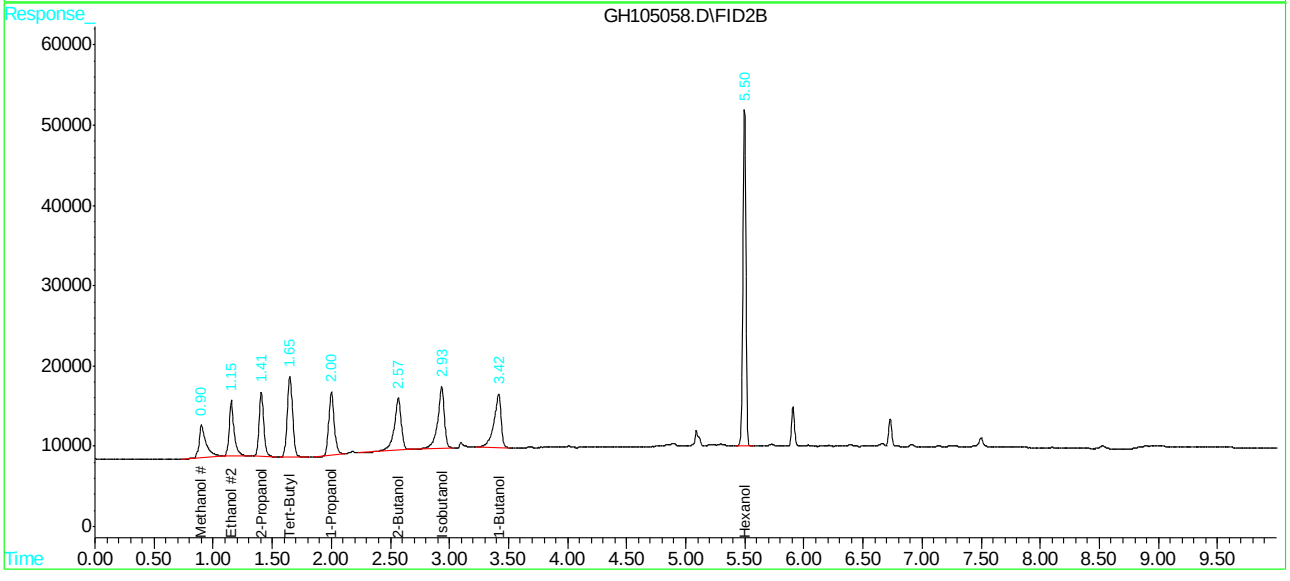
```
Data File : C:\HPCHEM\1\DATA\GH105058.D\FID1A.CH          Vial: 3
Acq On    : 18 May 2016   4:54 pm                     Operator: XULIU
Sample    : JC19914-2MSD                              Inst    : GCGH
Misc      : GC48426,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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
```





SGS ACCUTEST JC19996

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.

SGS ACCUTEST JC19996

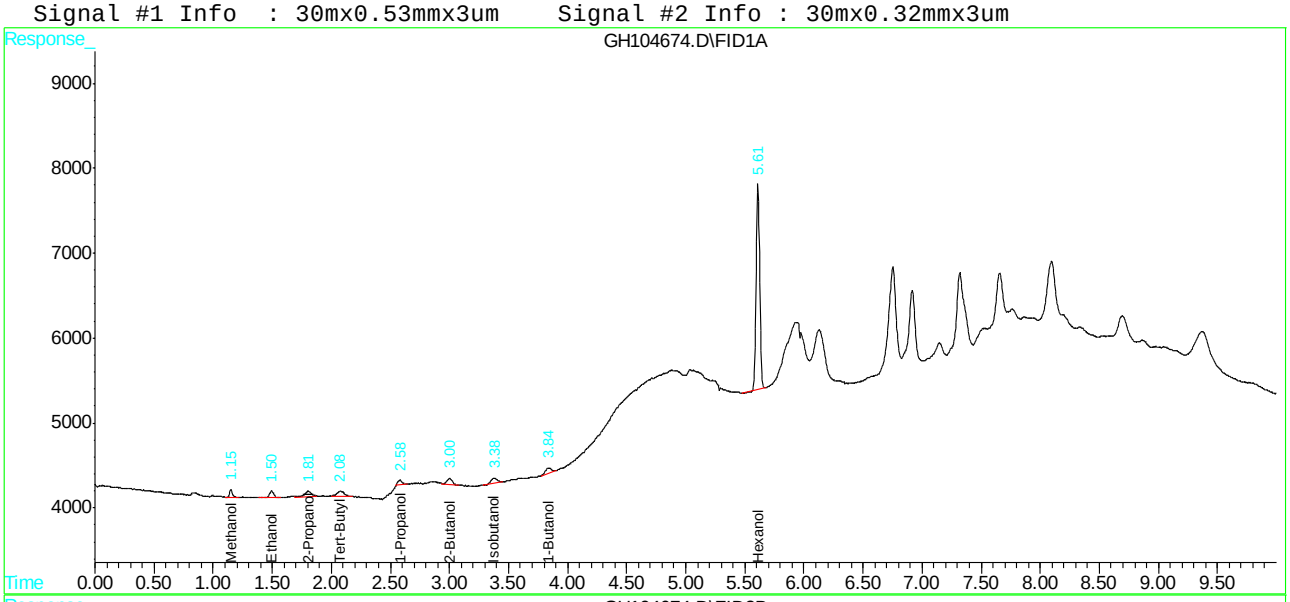
Quantitation Report (QT Reviewed)

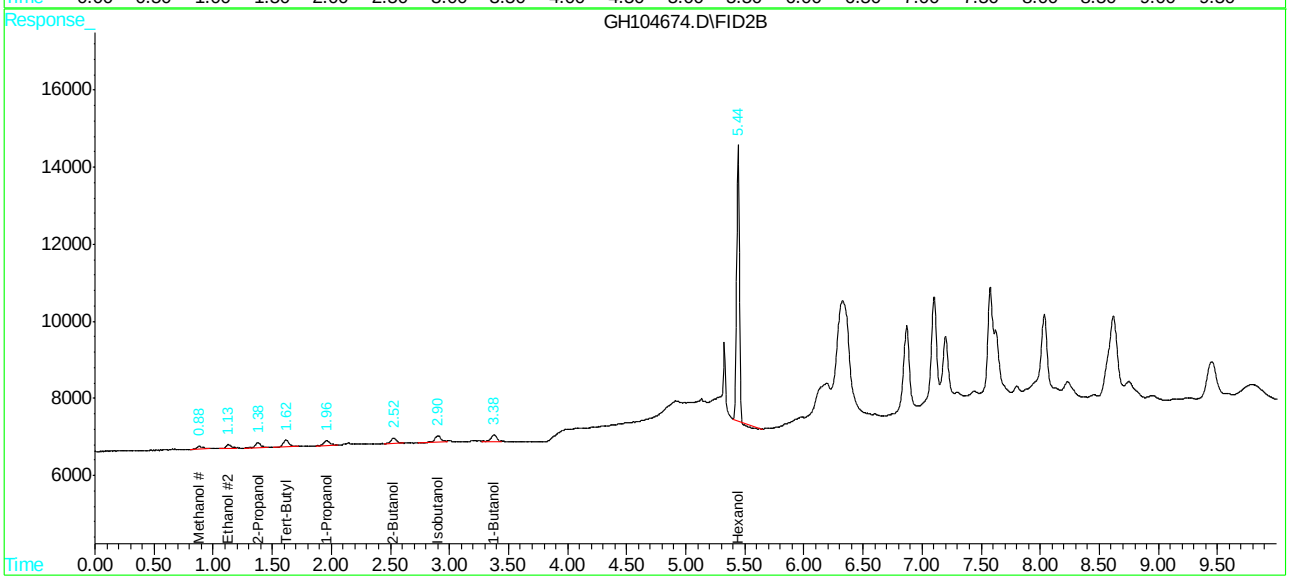
```
Data File : C:\HPCHEM\1\DATA\GH104674.D\FID1A.CH          Vial: 2
Acq On    :  9 May 2016   1:28 pm                     Operator: XULIU
Sample    : IC5269-100                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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
```





SGS ACCUTEST JC19996

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

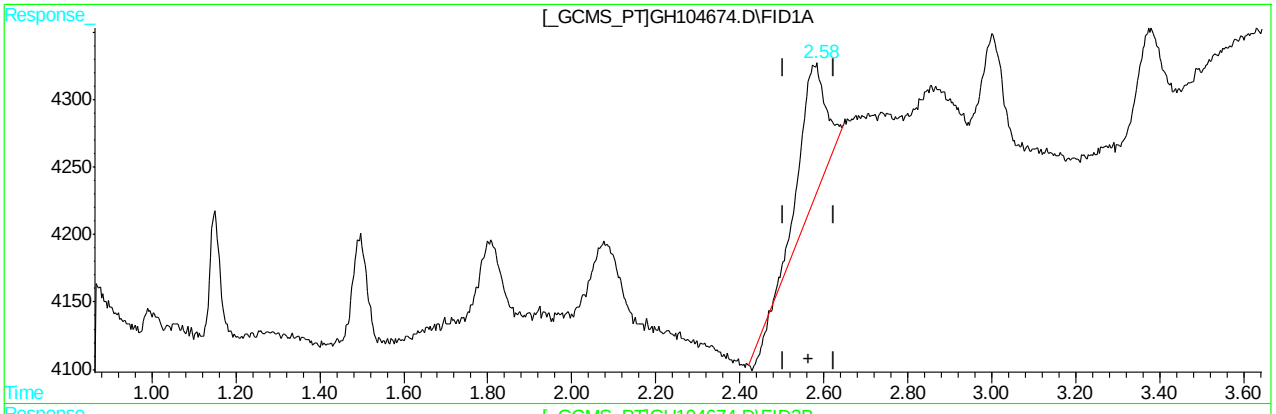
Parameter	CAS	Sig#	R.T. (min.)	Reason
n-Propyl Alcohol	71-23-8	1	2.58	Poor instrument integration
n-Butyl Alcohol	71-36-3	1	3.84	Poor instrument integration

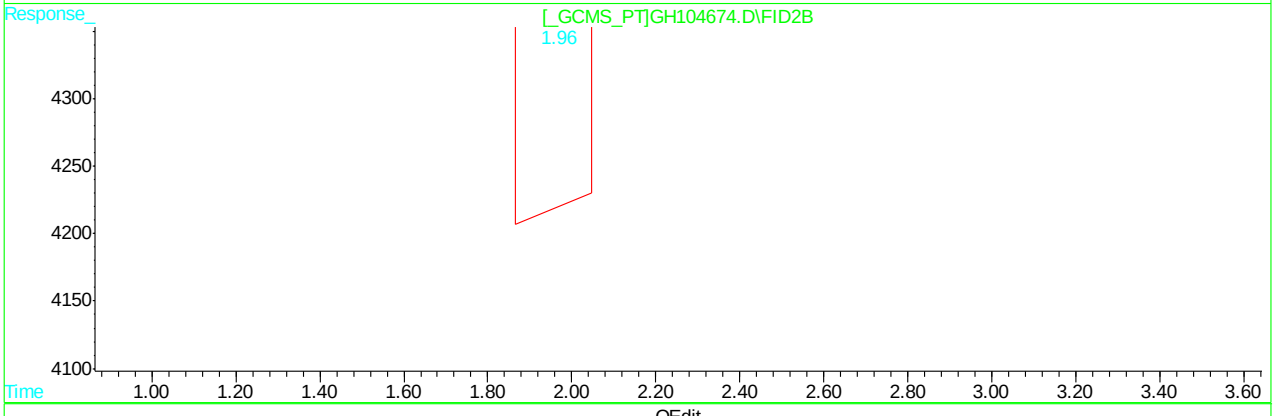
Quantitation Report (Qedit)

```
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

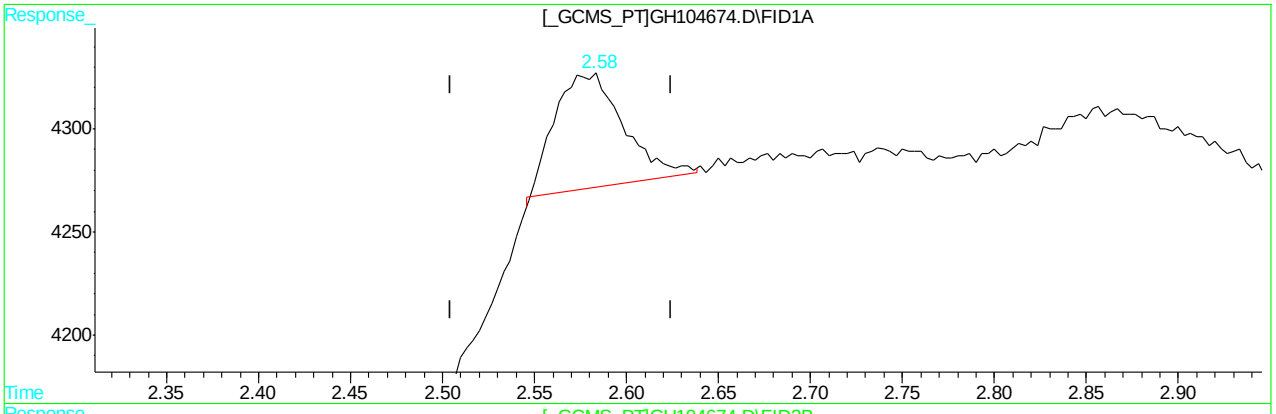
GH104674.D MGH5269.M Tue May 10 10:24:42 2016 GCGH

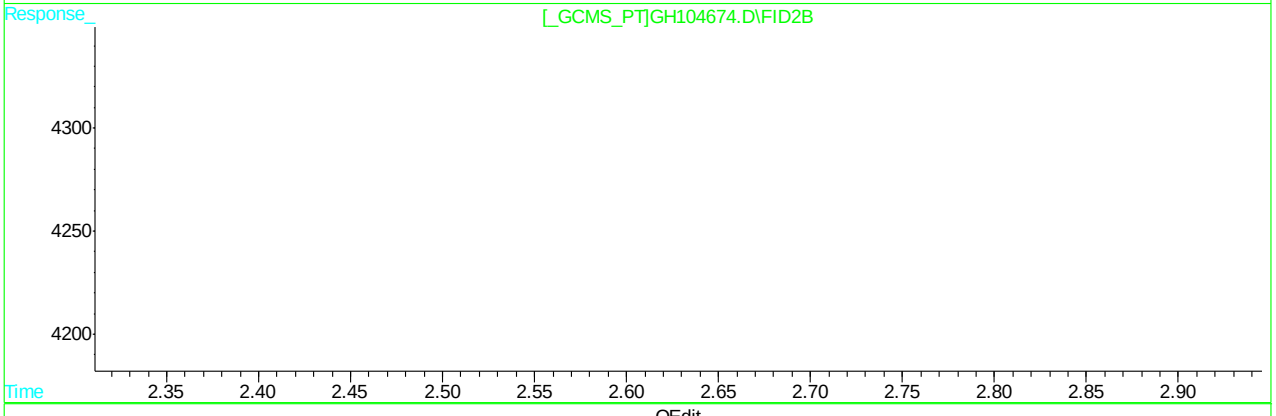
Quantitation Report (Qedit)

```
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

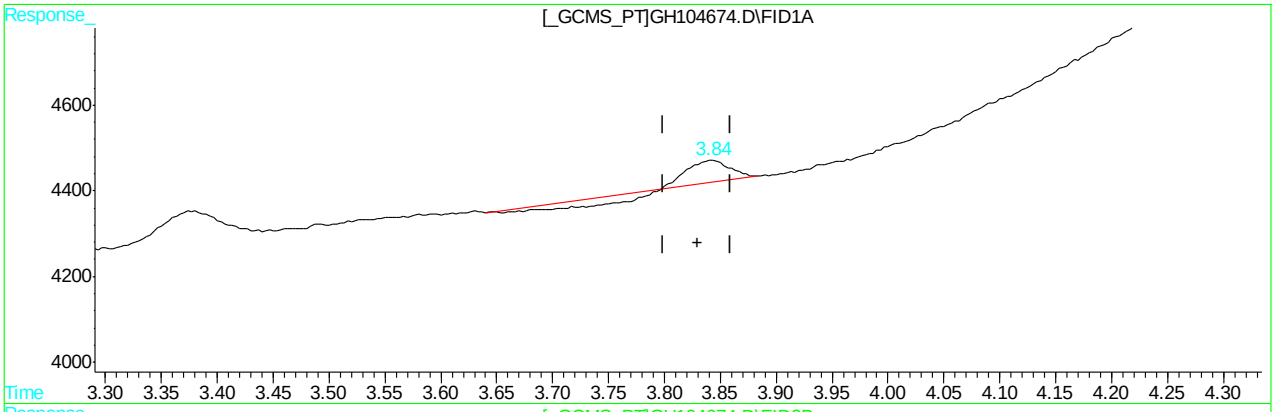
GH104674.D MGH5269.M Tue May 10 10:26:13 2016 GCGH

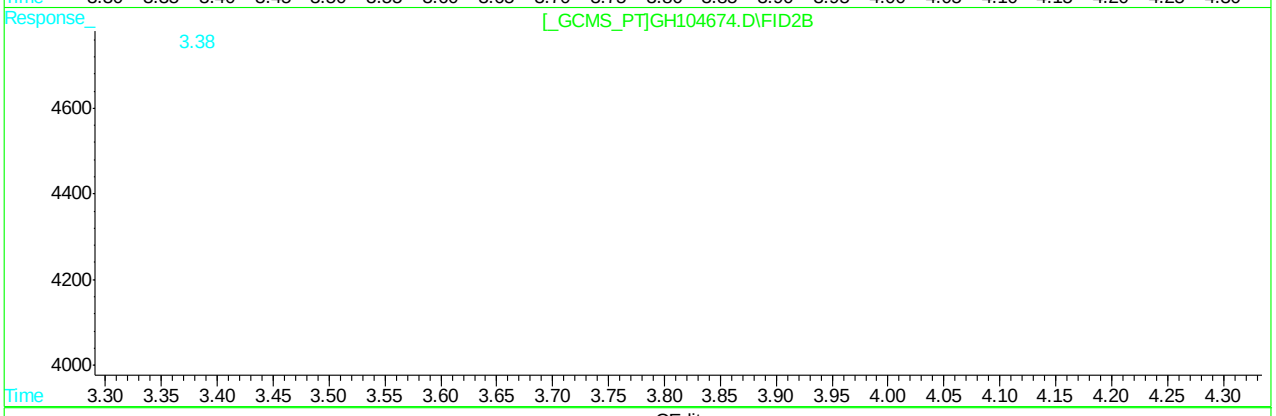
Quantitation Report (Qedit)

```
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

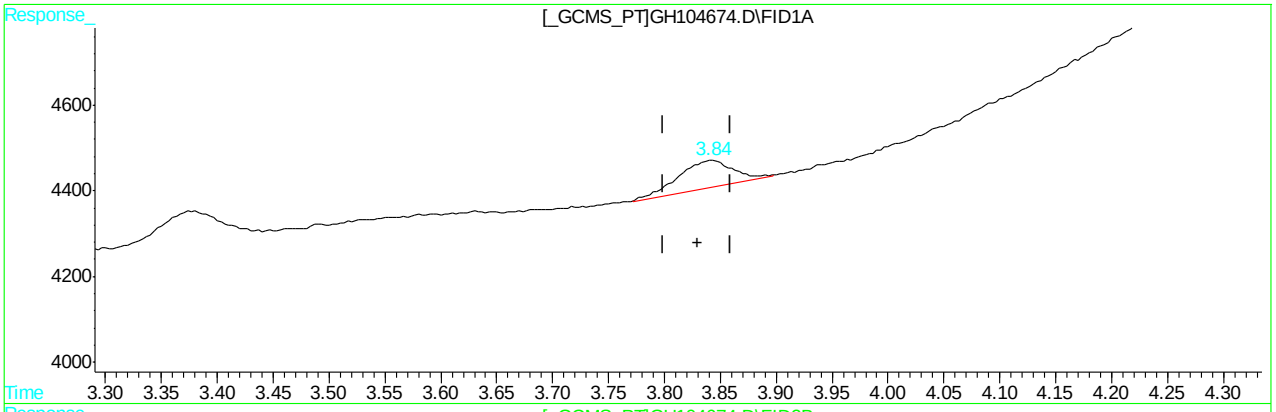
GH104674.D MGH5269.M Tue May 10 10:28:49 2016 GCGH

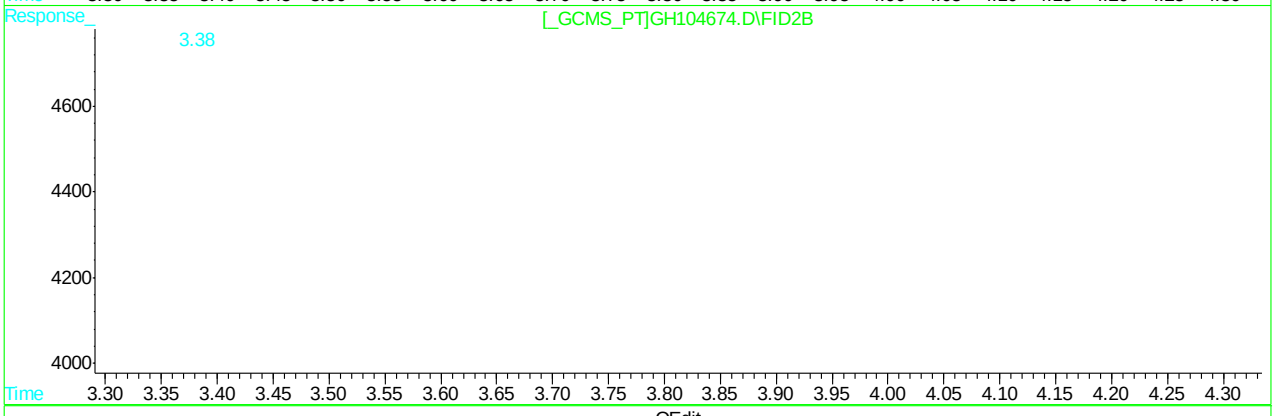
Quantitation Report (Qedit)

```
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 JC19996

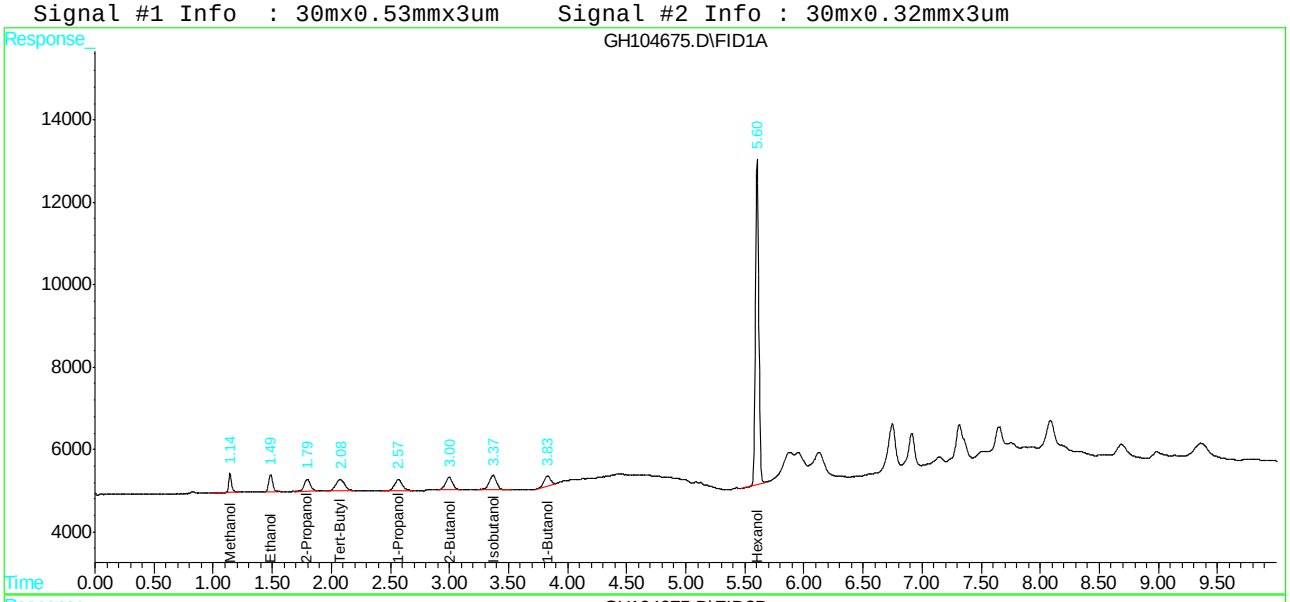
Quantitation Report (QT Reviewed)

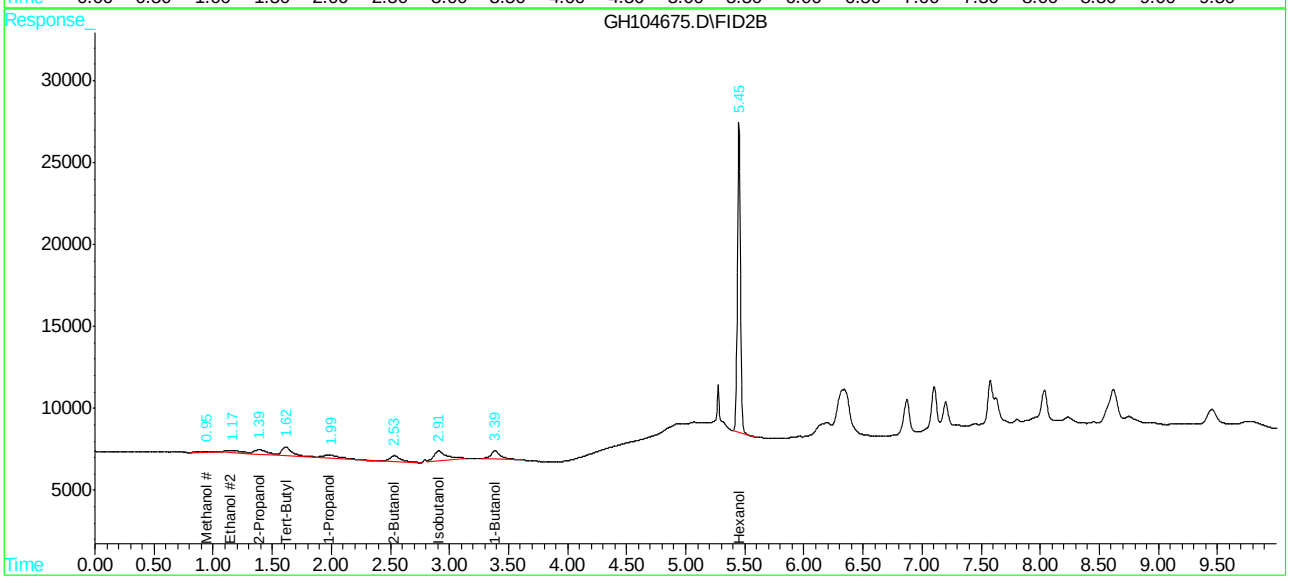
```
Data File : C:\HPCHEM\1\DATA\GH104675.D\FID1A.CH          Vial: 3
Acq On    :  9 May 2016   1:49 pm                     Operator: XULIU
Sample    : IC5269-500                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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 JC19996

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

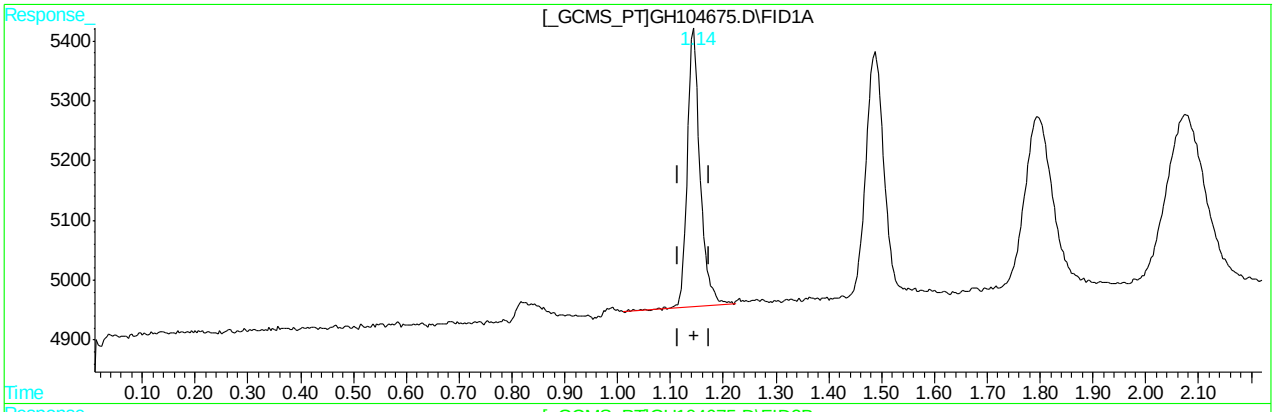
Parameter	CAS	Sig#	R.T. (min.)	Reason
Methanol	67-56-1	2	0.95	Missed peak

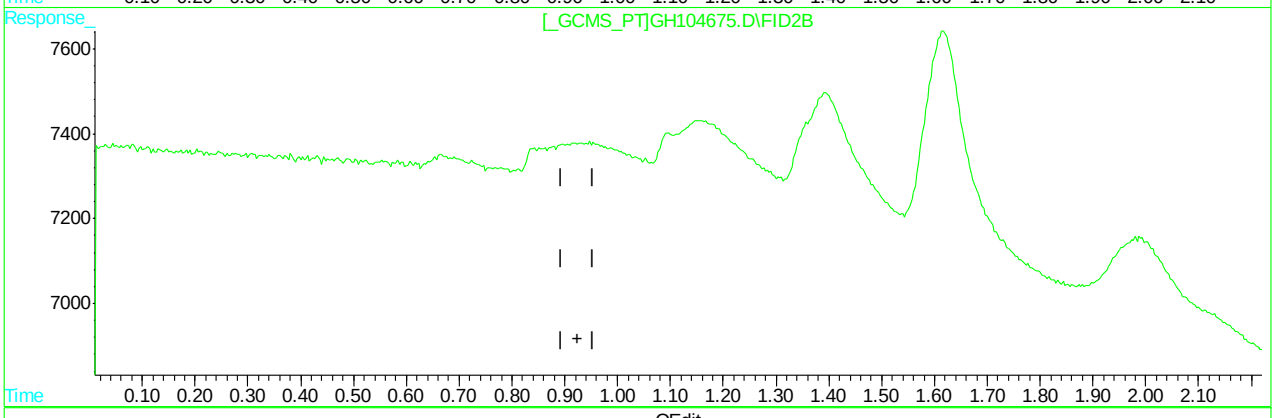
Quantitation Report (Qedit)

```
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

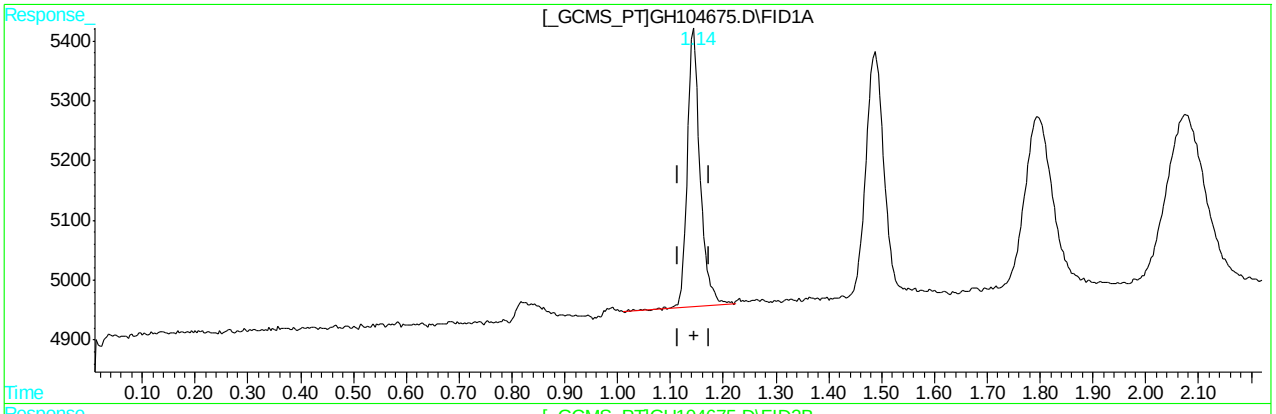
GH104675.D MGH5269.M Tue May 10 11:06:18 2016 GCGH

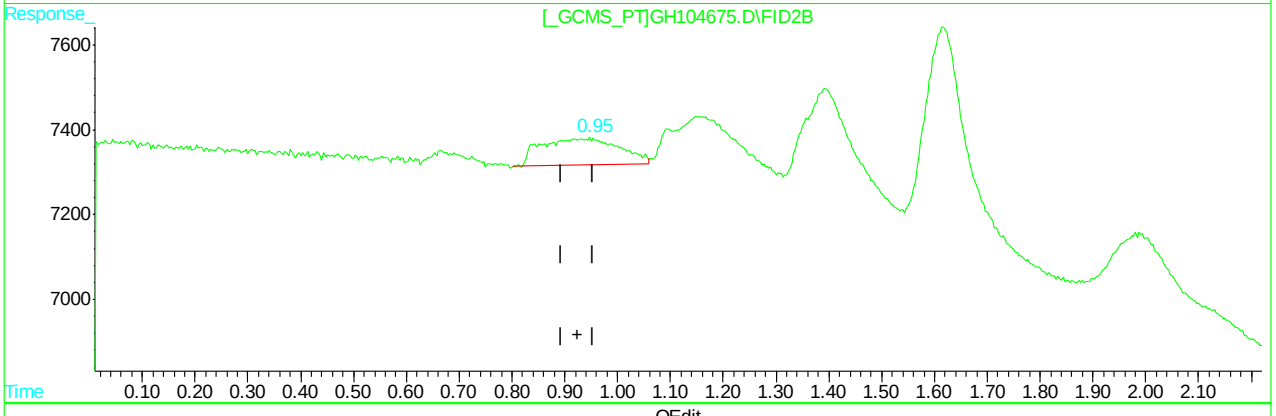
Quantitation Report (Qedit)

```
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

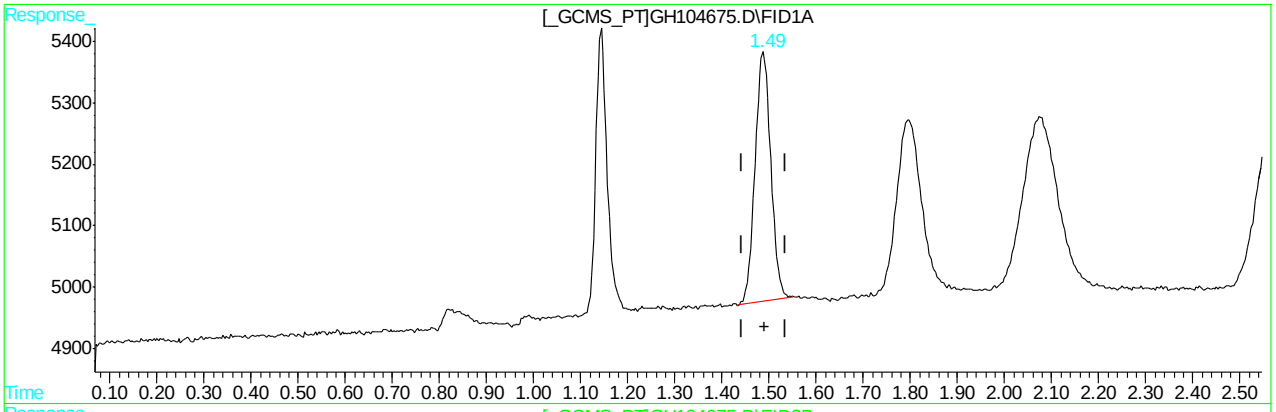
GH104675.D MGH5269.M Tue May 10 11:06:25 2016 GCGH

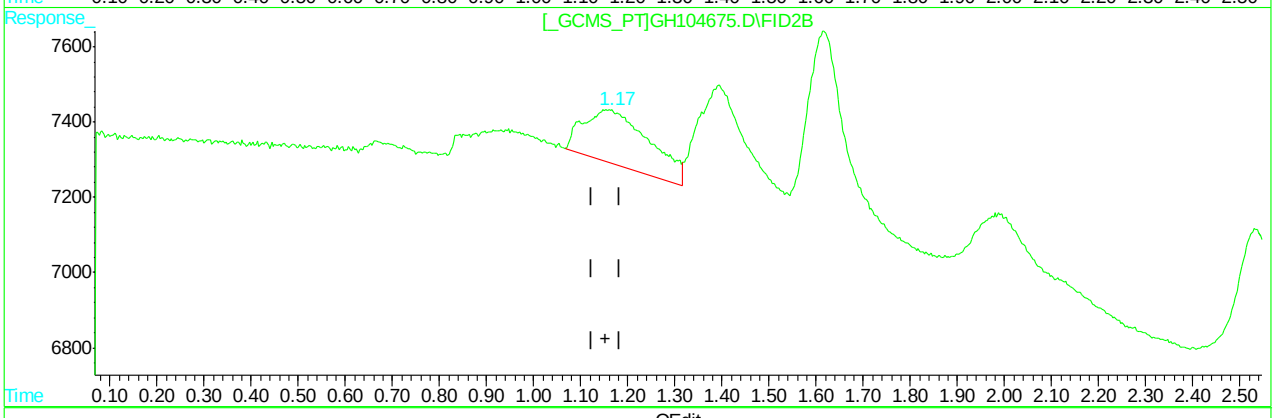
Quantitation Report (Qedit)

```
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.

SGS ACCUTEST JC19996

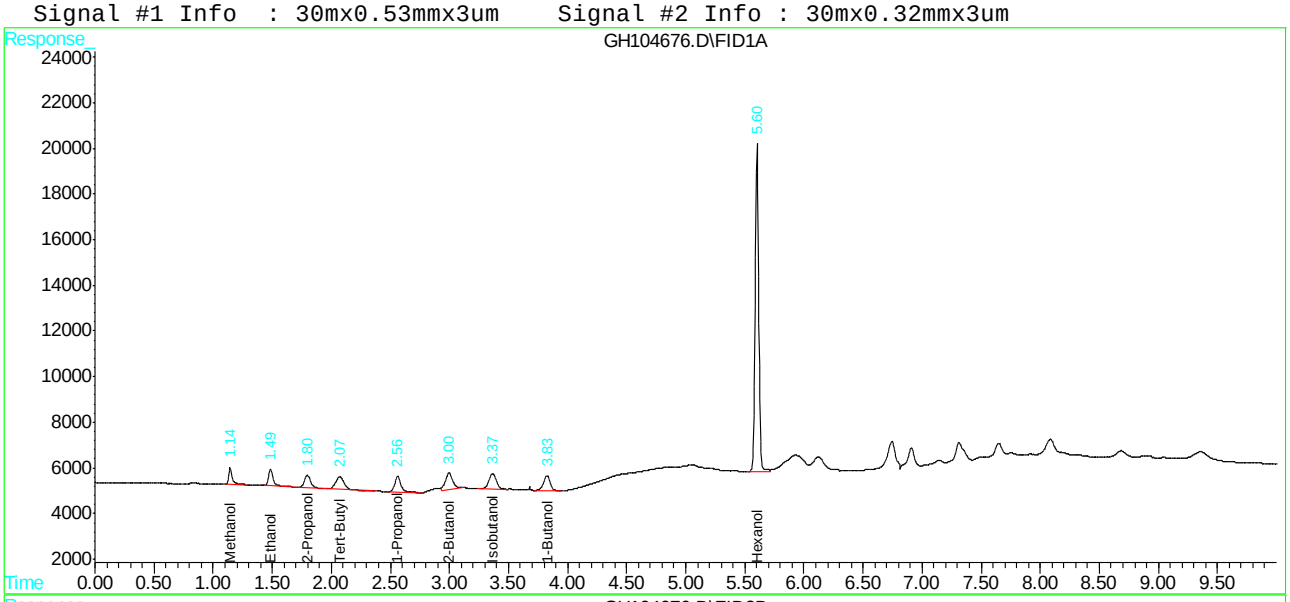
Quantitation Report (QT Reviewed)

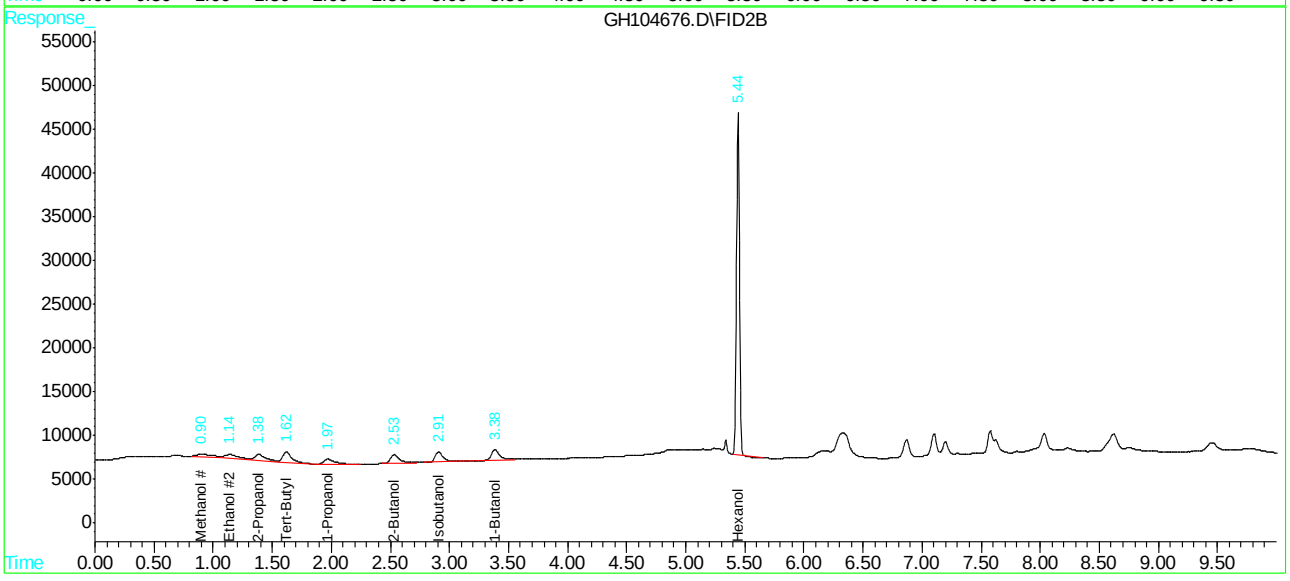
```
Data File : C:\HPCHEM\1\DATA\GH104676.D\FID1A.CH          Vial: 4
Acq On    :  9 May 2016   2:04 pm                     Operator: XULIU
Sample    : IC5269-1000                               Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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 JC19996

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 JC19996

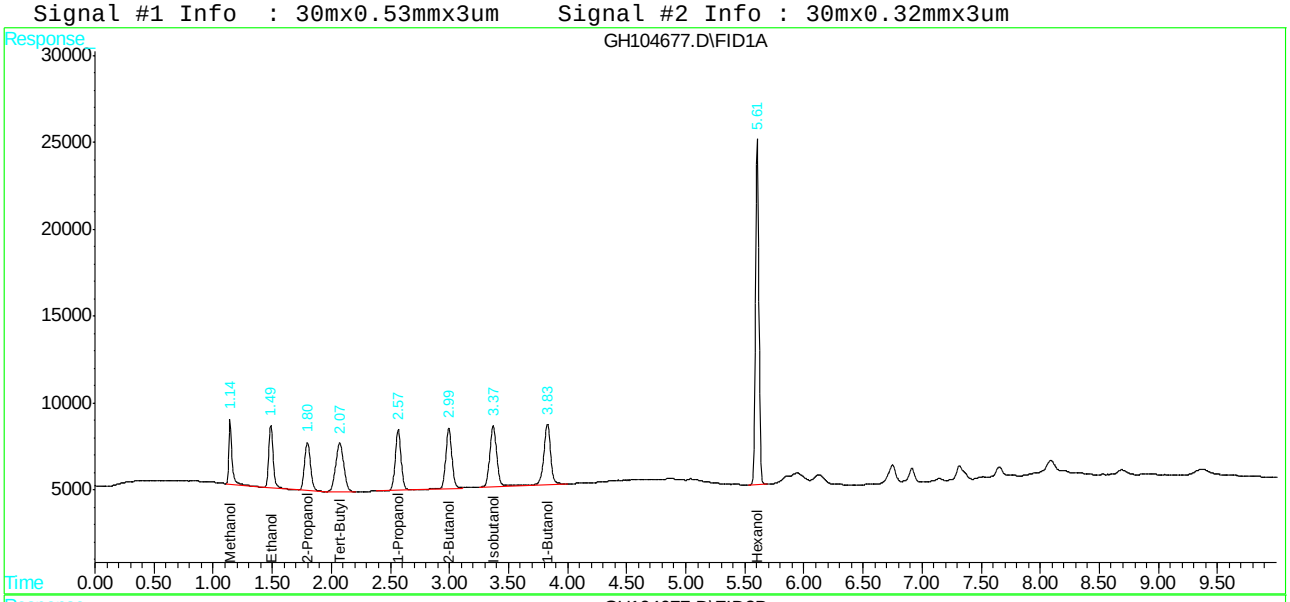
Quantitation Report (QT Reviewed)

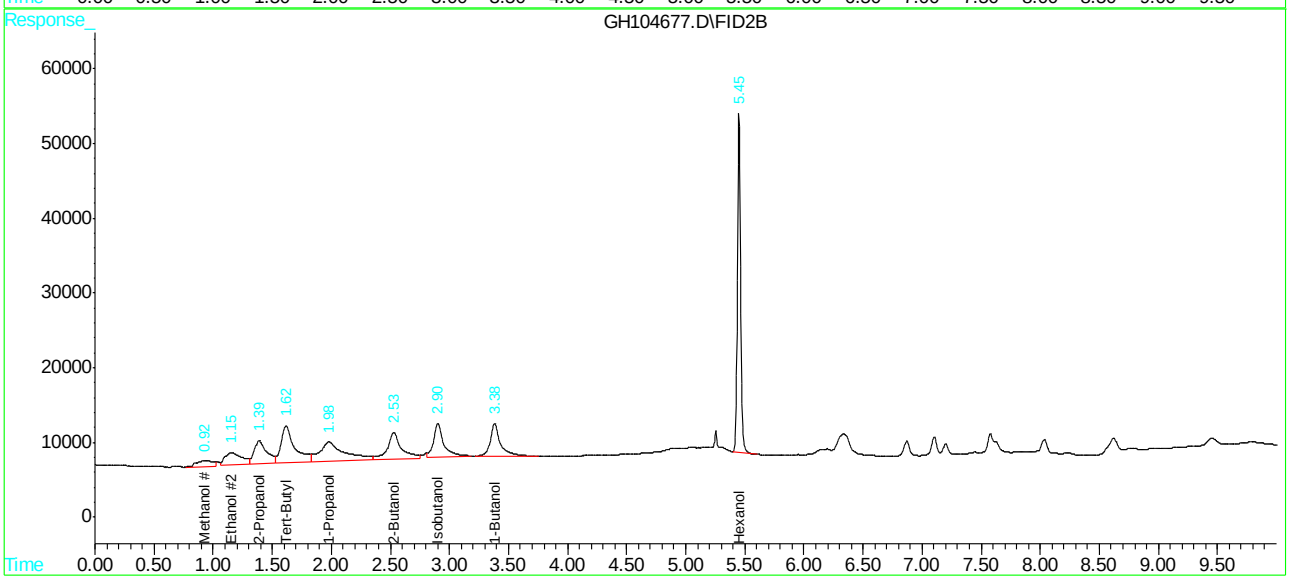
```
Data File : C:\HPCHEM\1\DATA\GH104677.D\FID1A.CH          Vial: 5
Acq On    :  9 May 2016   2:18 pm                     Operator: XULIU
Sample    : ICC5269-5000                              Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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 JC19996

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.
GH104678.D MGH5269.M Tue May 10 10:17:11 2016 GCGH

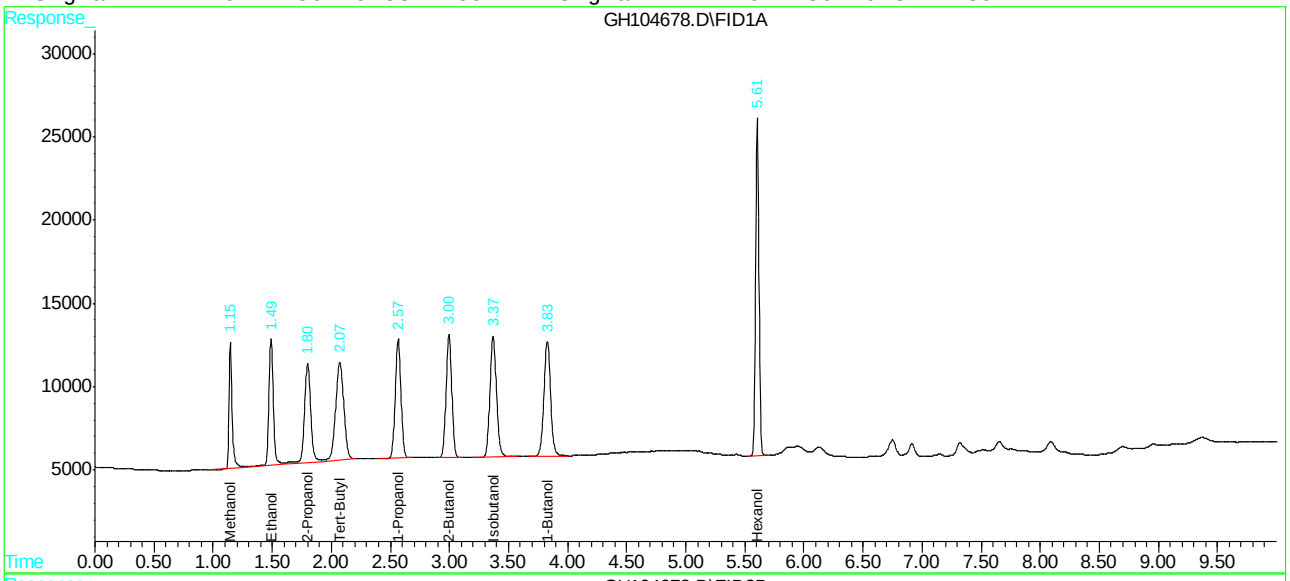
Quantitation Report (QT Reviewed)

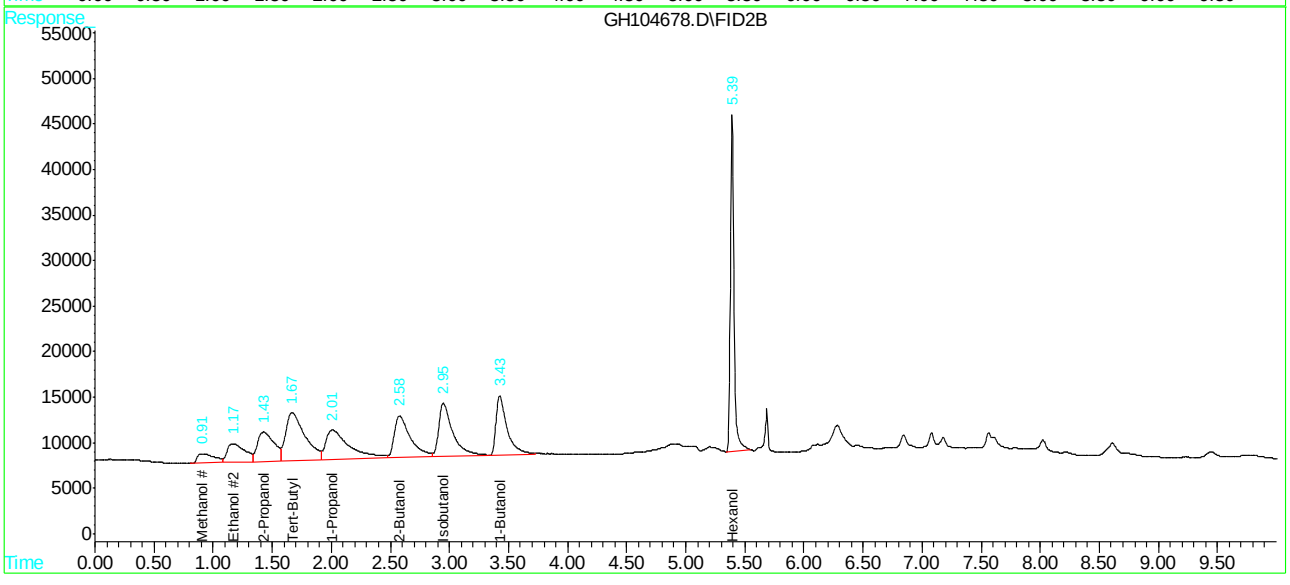
```
Data File : C:\HPCHEM\1\DATA\GH104678.D\FID1A.CH          Vial: 6
Acq On    :  9 May 2016   2:33 pm                     Operator: XULIU
Sample    : IC5269-10000                              Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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 JC19996

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

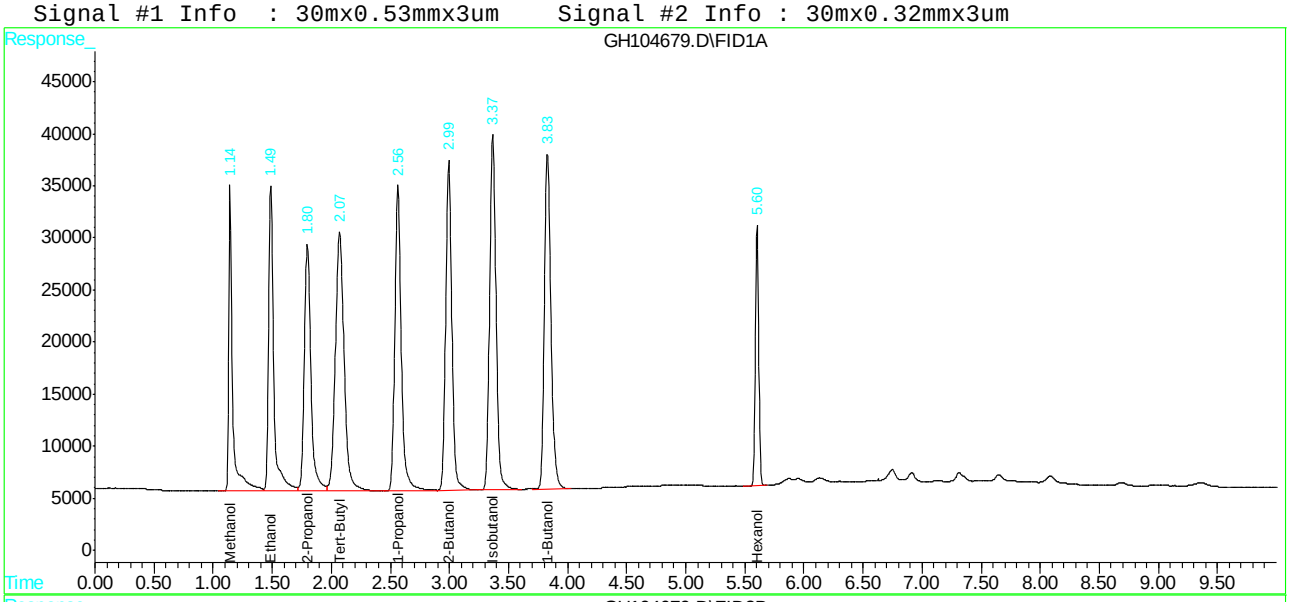
Quantitation Report (QT Reviewed)

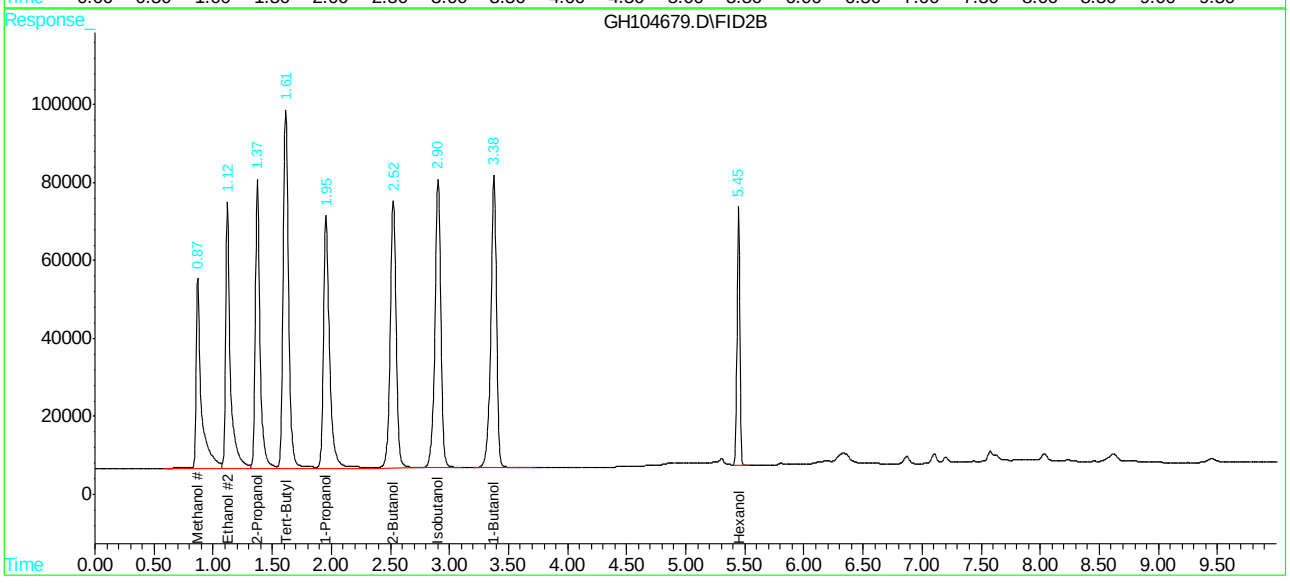
Data File : C:\HPCHEM\1\DATA\GH104679.D\FID1A.CH Vial: 7
Acq On : 9 May 2016 2:54 pm Operator: XULIU
Sample : IC5269-50000 Inst : GCGH
Misc : GC48342,GGH5269,5.0,,,,1 Multiplr: 1.00
IntFile : AUTOINT1.E

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





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.

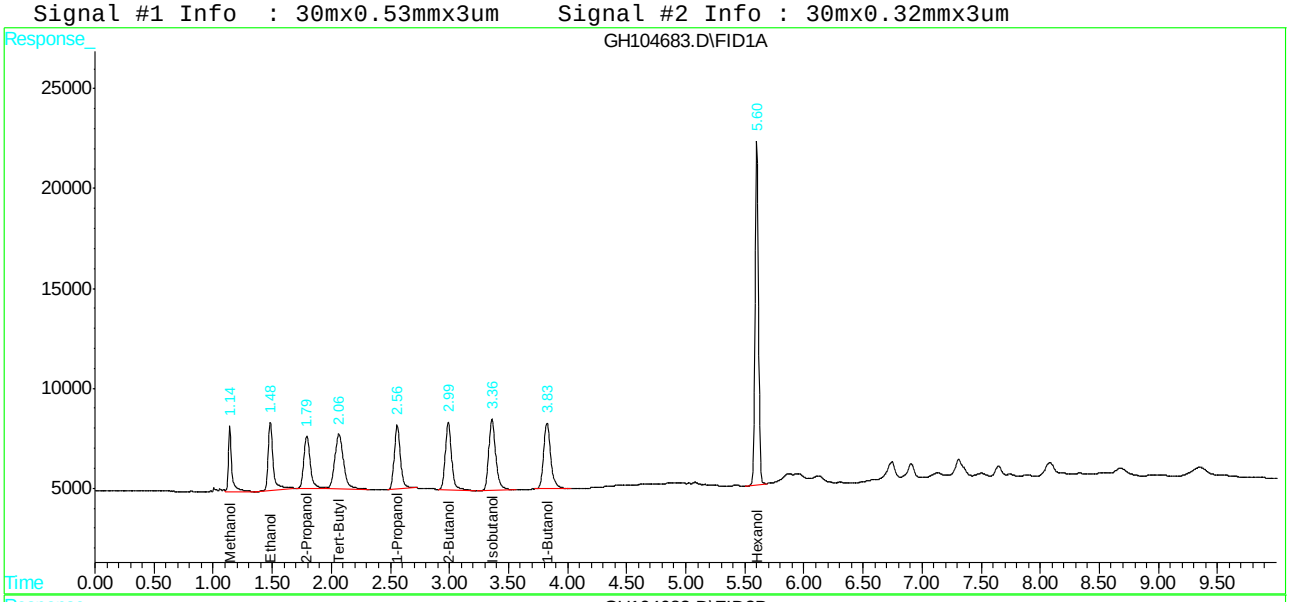
Quantitation Report (QT Reviewed)

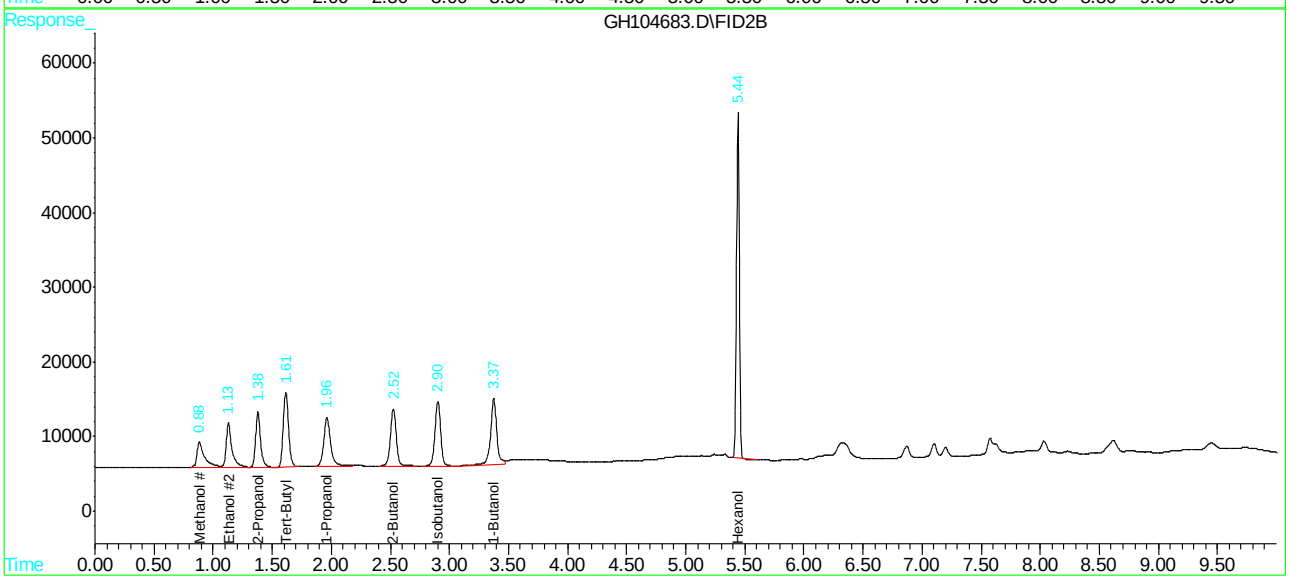
```
Data File : C:\HPCHEM\1\DATA\GH104683.D\FID1A.CH          Vial: 10
Acq On    :  9 May 2016   5:42 pm                     Operator: XULIU
Sample    : ICV5269-5000                              Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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\GH104987.D\FID1A.CH          Vial: 95
Acq On    : 16 May 2016  11:17 pm                     Operator: XULIU
Sample    : CC5269-10000                              Inst    : GCGH
Misc      : GC48423,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104987.D\FID2B.CH          Vial: 95
Acq On    : 16 May 2016  11:31 pm                     Operator: XULIU
Sample    : CC5269-10000                              Inst    : GCGH
Misc      : GC48423,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  8:25 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	322562	226870	4215.726	1378.532 #
	Spiked Amount 5000.000			Recovery	=	84.31%	27.57%
	Target Compounds						
1)	Methanol	1.15	0.86	159266	116138	10783.835	5712.929 #
2)	Ethanol	1.49	1.11	195256	133332	10434.606	4196.215 #
3)	Tert-Butyl Alcoh	2.07	1.60	286883	214282	10507.232	3281.842 #
4)	1-Propanol	2.56	1.94f	265353	172058	11905.946	3492.111 #
5)	2-Propanol	1.80	1.36f	207401	150196	9995.159	3592.663 #
6)	Isobutanol	3.36	2.89	299158	269838	10883.820	4349.707 #
7)	1-Butanol	3.80	3.38	288496	190698	11781.823	3683.795 #
8)	2-Butanol	2.99	2.51f	264998	183195	10516.460	3707.332 #

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC19996

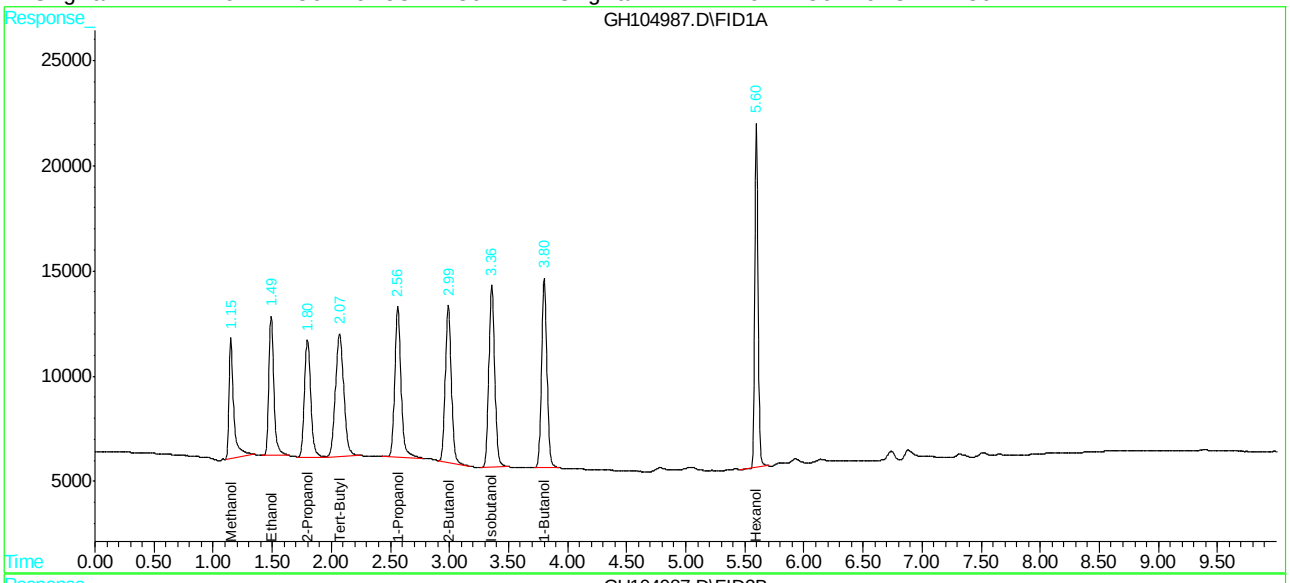
Quantitation Report (QT Reviewed)

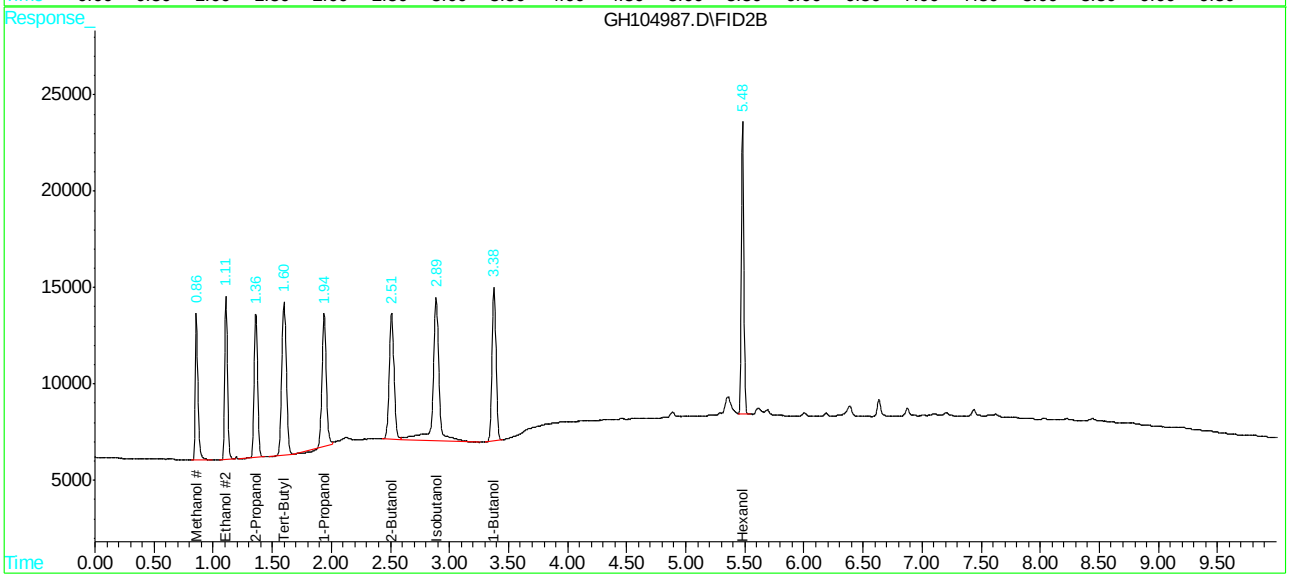
Data File : C:\HPCHEM\1\DATA\GH104987.D\FID1A.CH Vial: 95
Acq On : 16 May 2016 11:17 pm Operator: XULIU
Sample : CC5269-10000 Inst : GCGH
Misc : GC48423,GGH5285,5.0,,,,1 Multiplr: 1.00
IntFile : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104987.D\FID2B.CH Vial: 95
Acq On : 16 May 2016 11:31 pm Operator: XULIU
Sample : CC5269-10000 Inst : GCGH
Misc : GC48423,GGH5285,5.0,,,,1 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 17 8:25 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\GH104998.D\FID1A.CH          Vial: 90
Acq On    : 17 May 2016   2:17 am                     Operator: XULIU
Sample    : CC5269-5000                               Inst    : GCGH
Misc      : GC48421,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104998.D\FID2B.CH          Vial: 90
Acq On    : 17 May 2016   2:32 am                     Operator: XULIU
Sample    : CC5269-5000                               Inst    : GCGH
Misc      : GC48421,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  9:14 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	373905	256068	4886.758	1555.948 #
Spiked Amount	5000.000			Recovery	=	97.74%	31.12%
	Target Compounds						
1)	Methanol	1.15	0.86	72251	59526	4892.071	2928.140 #
2)	Ethanol	1.49	1.11	93797	66386	5012.573	2089.288 #
3)	Tert-Butyl Alcoh	2.08	1.60	122560	105931	4488.836	1622.390 #
4)	1-Propanol	2.57	1.94f	127019	86060	5699.120	1746.685 #
5)	2-Propanol	1.80	1.36f	95636	73624	4608.935	1761.087 #
6)	Isobutanol	3.36	2.89	149587	96240	5442.211	1551.366 #
7)	1-Butanol	3.81	3.38	142688	115485	5827.206	2230.873 #
8)	2-Butanol	3.00	2.51f	134809	88757	5349.897	1796.190 #

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.
GH104998.D MGH5269.M Tue May 17 09:19:06 2016 GCGH

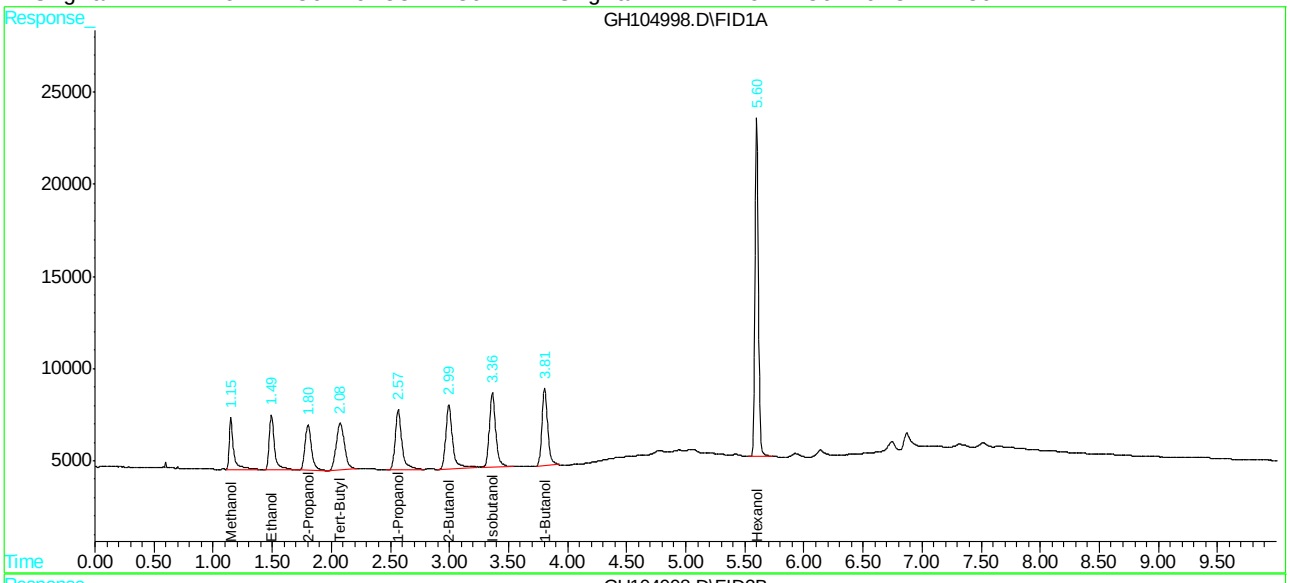
Quantitation Report (QT Reviewed)

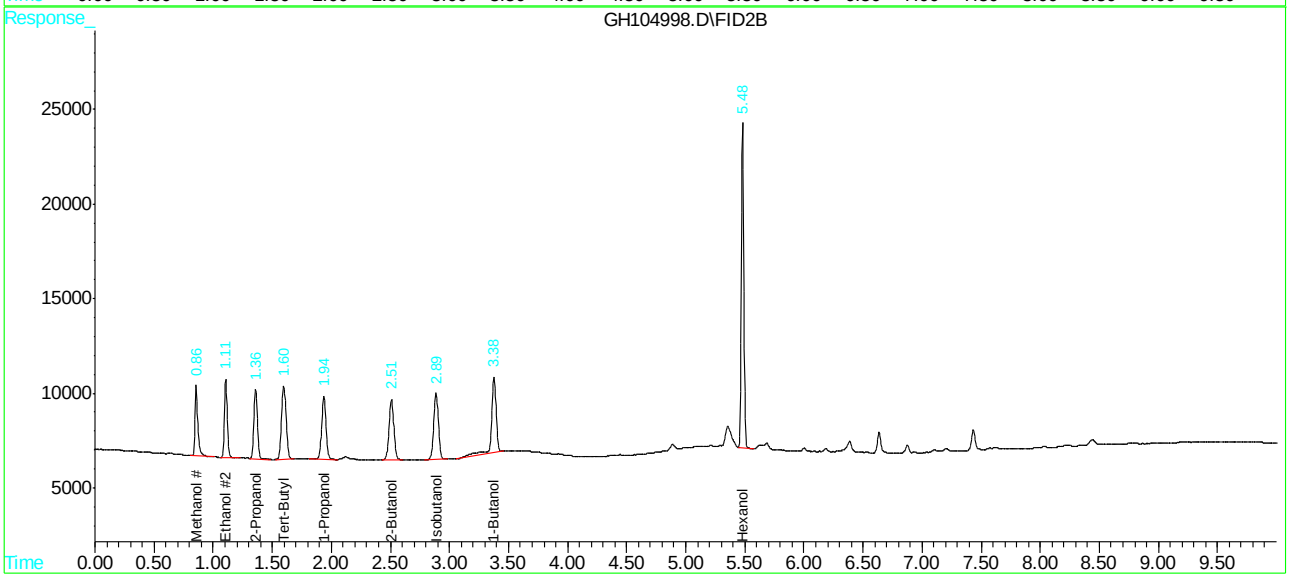
```
Data File : C:\HPCHEM\1\DATA\GH104998.D\FID1A.CH          Vial: 90
Acq On    : 17 May 2016   2:17 am                     Operator: XULIU
Sample    : CC5269-5000                               Inst    : GCGH
Misc      : GC48421,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104998.D\FID2B.CH          Vial: 90
Acq On    : 17 May 2016   2:32 am                     Operator: XULIU
Sample    : CC5269-5000                               Inst    : GCGH
Misc      : GC48421,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  9:14 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\GH105005.D\FID1A.CH          Vial: 95
Acq On    : 17 May 2016   4:06 am                     Operator: XULIU
Sample    : CC5269-10000                              Inst    : GCGH
Misc      : GC48422,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105005.D\FID2B.CH          Vial: 95
Acq On    : 17 May 2016   4:27 am                     Operator: XULIU
Sample    : CC5269-10000                              Inst    : GCGH
Misc      : GC48422,GGH5286,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  9:33 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	5.61	5.48	316724	191869	4139.420	1165.851 #
	Spiked Amount 5000.000			Recovery	=	82.79%	23.32%
	Target Compounds						
1)	Methanol	1.16	0.87	138440	100885	9373.661	4962.622 #
2)	Ethanol	1.50	1.12	198103	116085	10586.747	3653.427 #
3)	Tert-Butyl Alcoh	2.08	1.61	277051	189043	10147.148	2895.295 #
4)	1-Propanol	2.57	1.95	254332	146974	11411.456	2982.995 #
5)	2-Propanol	1.81	1.37f	201919	132415	9730.938	3167.345 #
6)	Isobutanol	3.37	2.90	301607	163090	10972.890	2628.957 #
7)	1-Butanol	3.81	3.39f	285743	190664	11669.398	3683.132 #
8)	2-Butanol	3.00	2.52	261803	153660	10389.672	3109.635 #

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

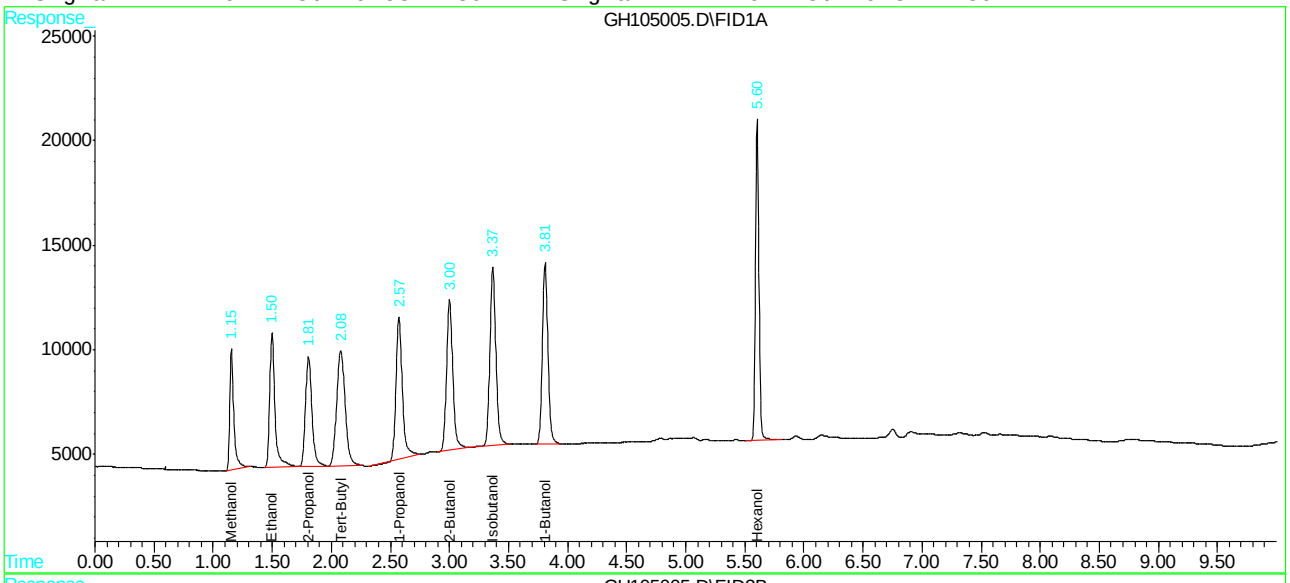
Quantitation Report (QT Reviewed)

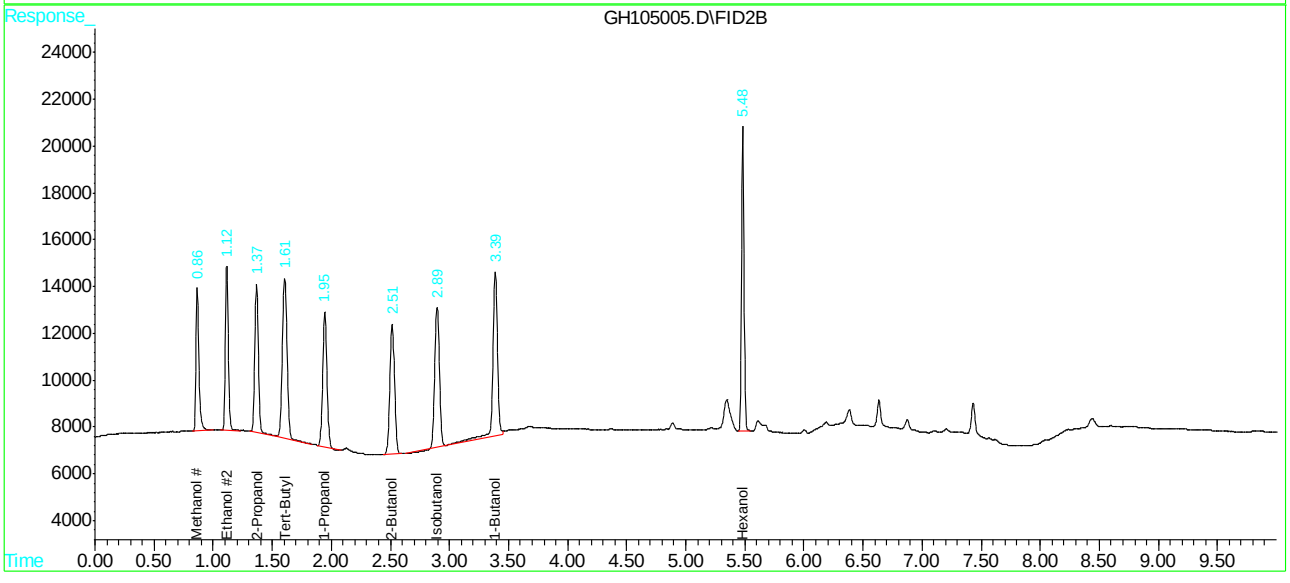
Data File : C:\HPCHEM\1\DATA\GH105005.D\FID1A.CH Vial: 95
Acq On : 17 May 2016 4:06 am Operator: XULIU
Sample : CC5269-10000 Inst : GCGH
Misc : GC48422,GGH5286,5.0,,,,1 Multiplr: 1.00
IntFile : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105005.D\FID2B.CH Vial: 95
Acq On : 17 May 2016 4:27 am Operator: XULIU
Sample : CC5269-10000 Inst : GCGH
Misc : GC48422,GGH5286,5.0,,,,1 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 17 9:33 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.

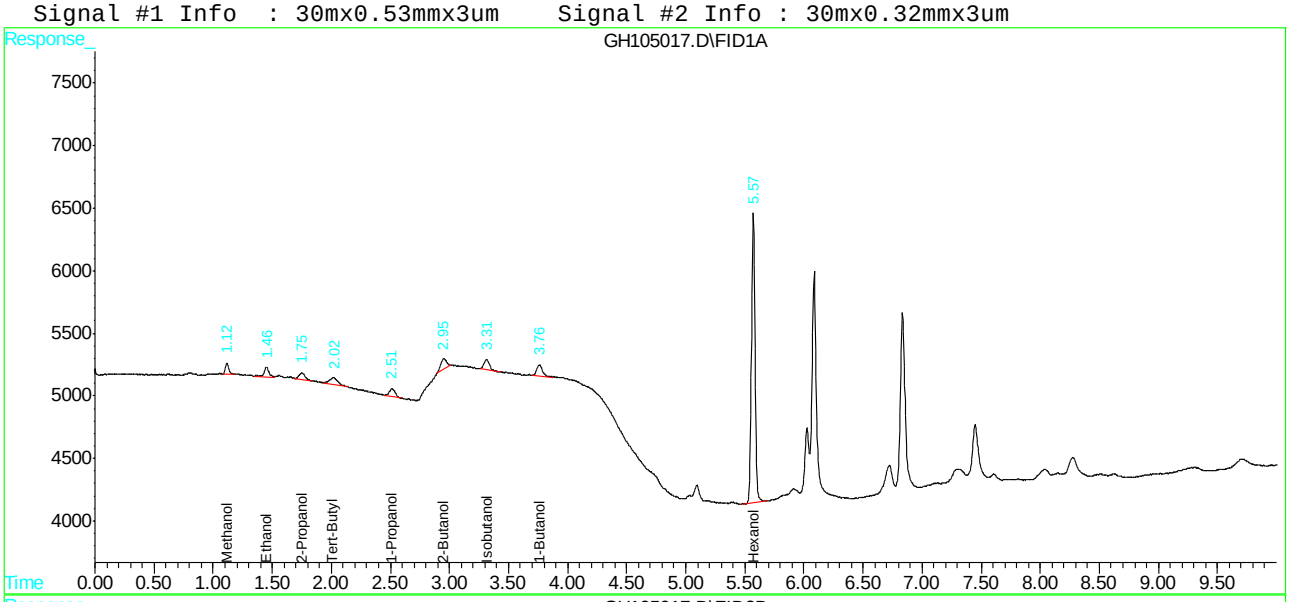
Quantitation Report (QT Reviewed)

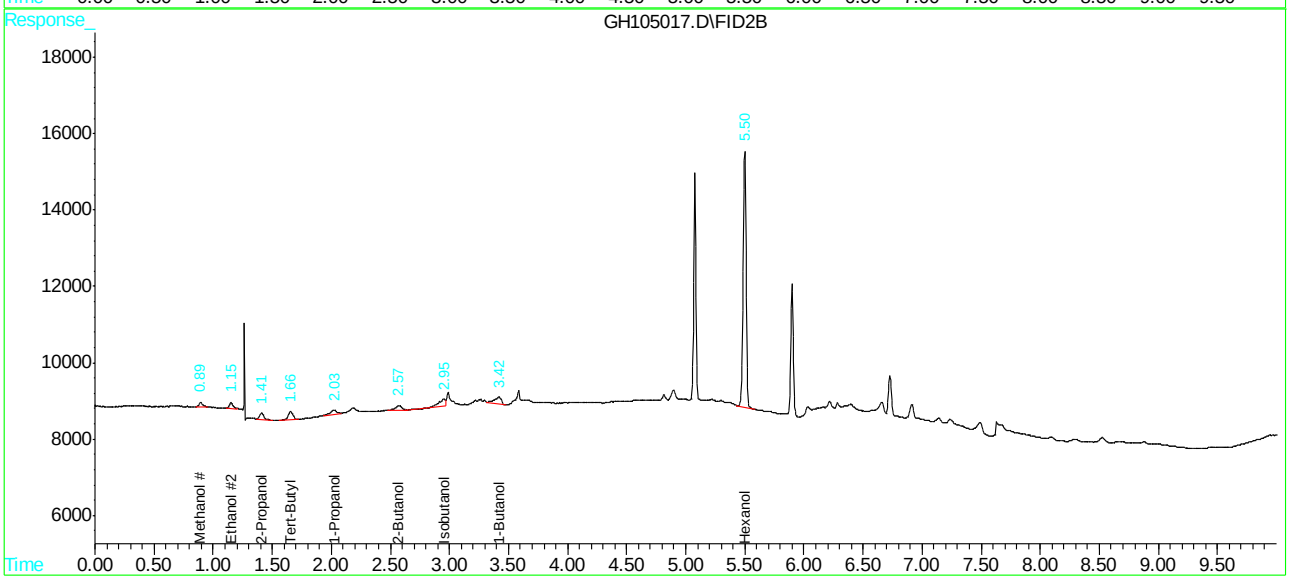
```
Data File : C:\HPCHEM\1\DATA\GH105017.D\FID1A.CH          Vial: 2
Acq On    : 17 May 2016   4:14 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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 JC19996

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

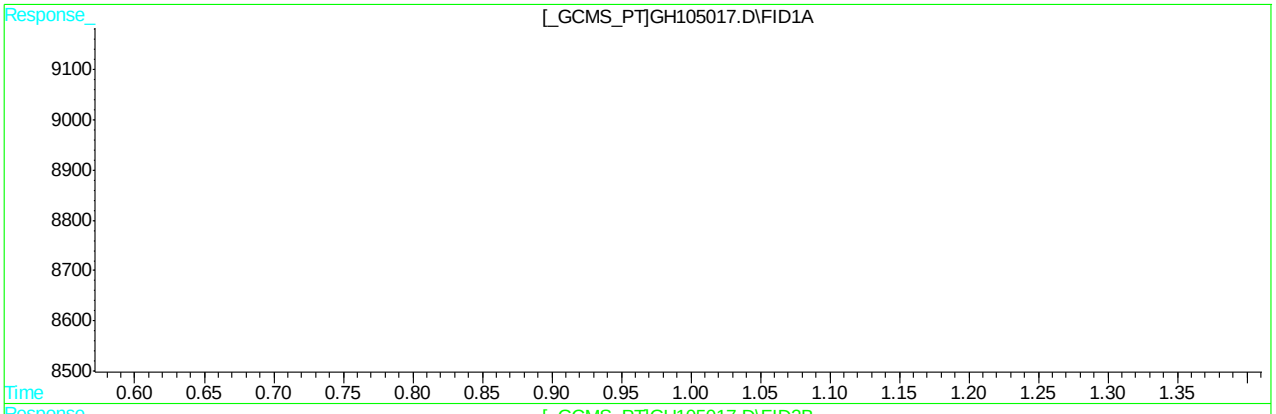
Parameter	CAS	Sig#	R.T. (min.)	Reason
Methanol	67-56-1	2	0.89	Poor instrument integration
Ethanol	64-17-5	2	1.15	Poor instrument integration
n-Propyl Alcohol	71-23-8	2	2.03	Poor instrument integration
sec-Butyl Alcohol	78-92-2	2	2.57	Poor instrument integration
sec-Butyl Alcohol	78-92-2	1	2.95	Poor instrument integration
n-Butyl Alcohol	71-36-3	2	3.42	Poor instrument integration

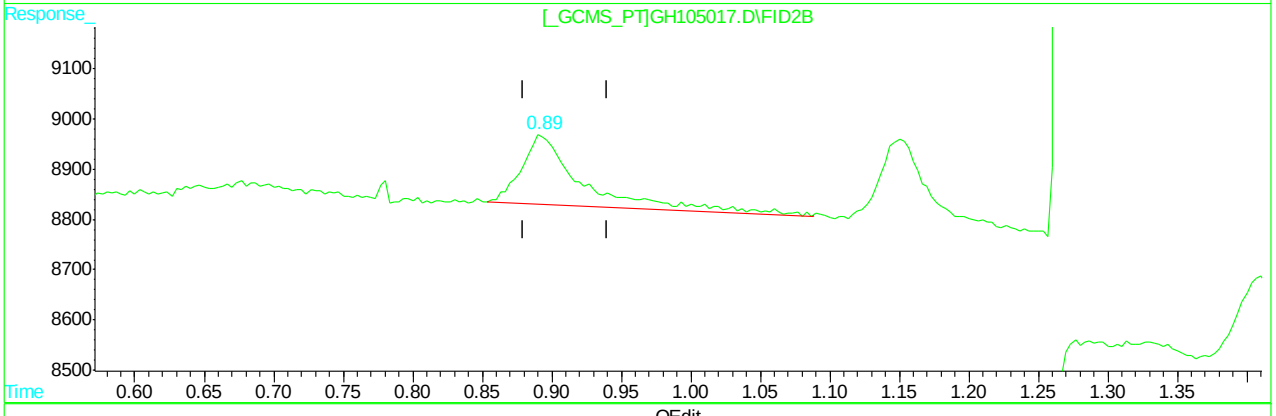
Quantitation Report (Qedit)

```
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

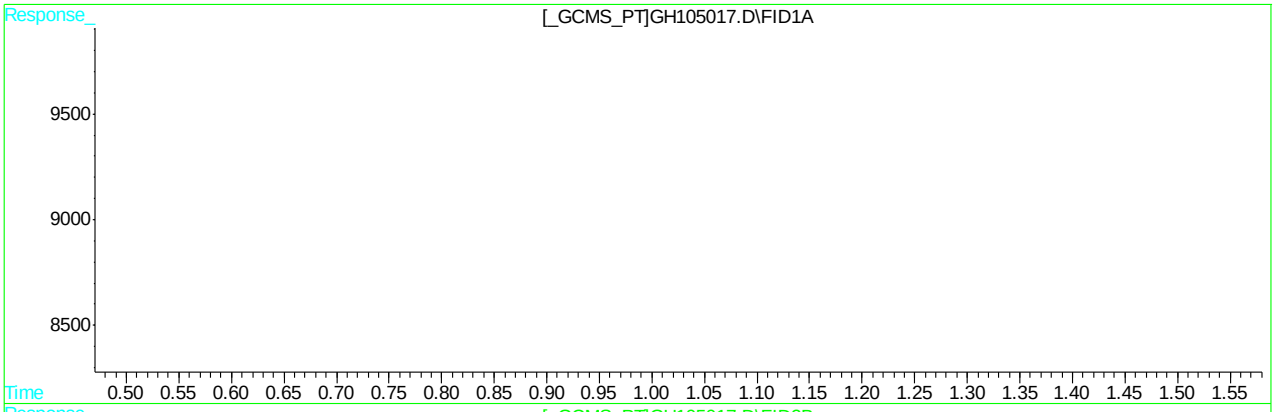
GH105017.D MGH5288.M Wed May 18 08:43:56 2016 GCGH

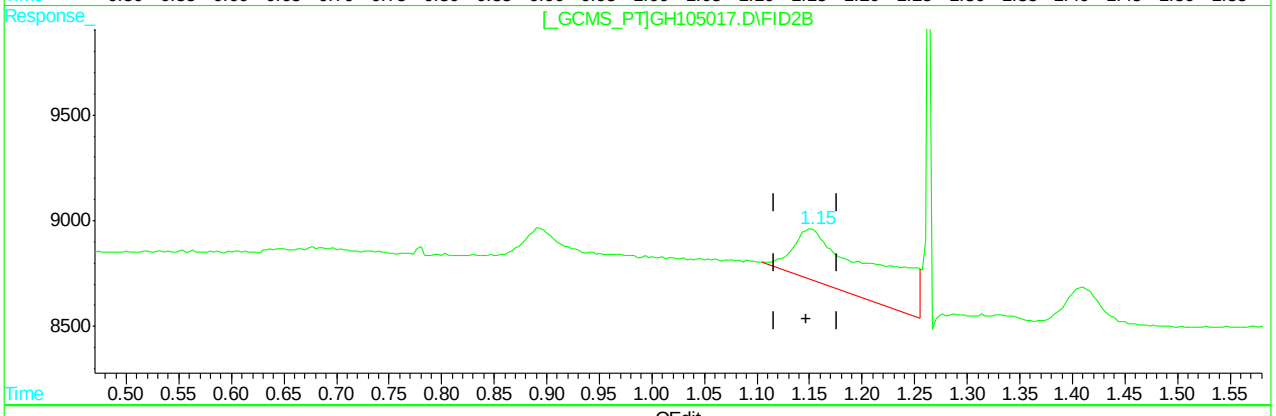
Quantitation Report (Qedit)

```
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

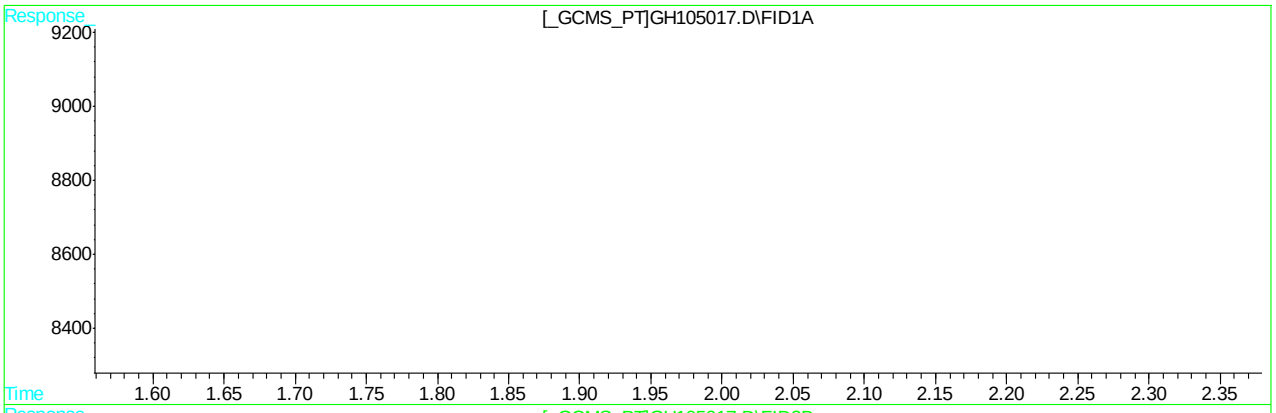
GH105017.D MGH5288.M Wed May 18 08:44:26 2016 GCGH

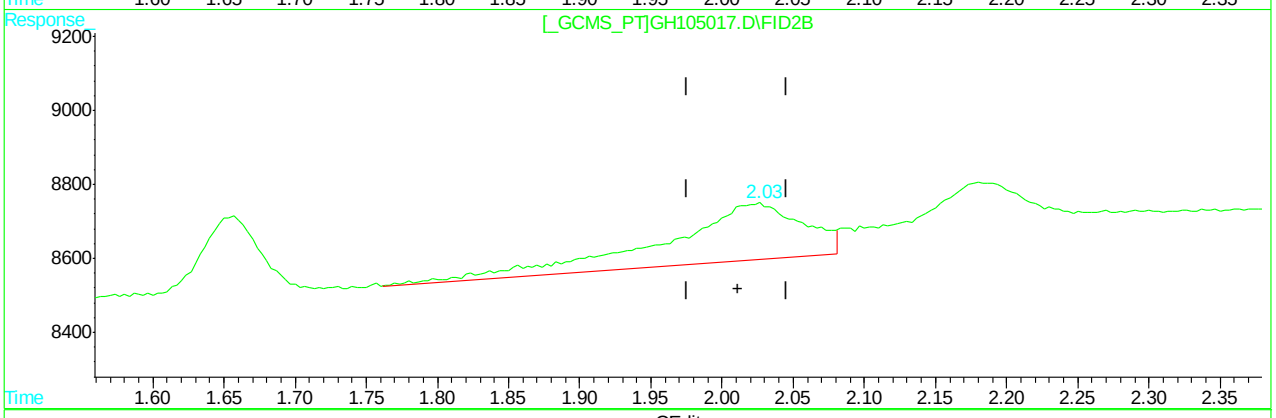
Quantitation Report (Qedit)

```
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

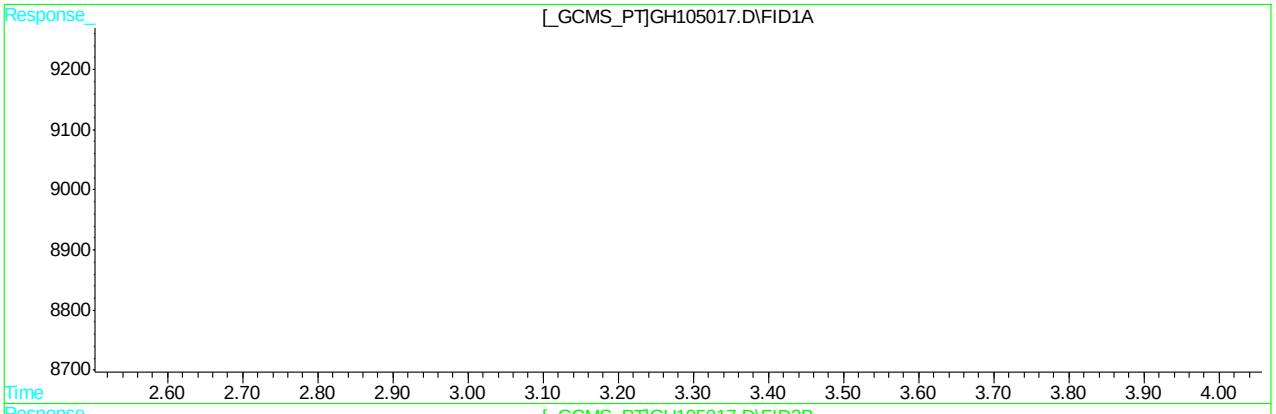
GH105017.D MGH5288.M Wed May 18 08:44:42 2016 GCGH

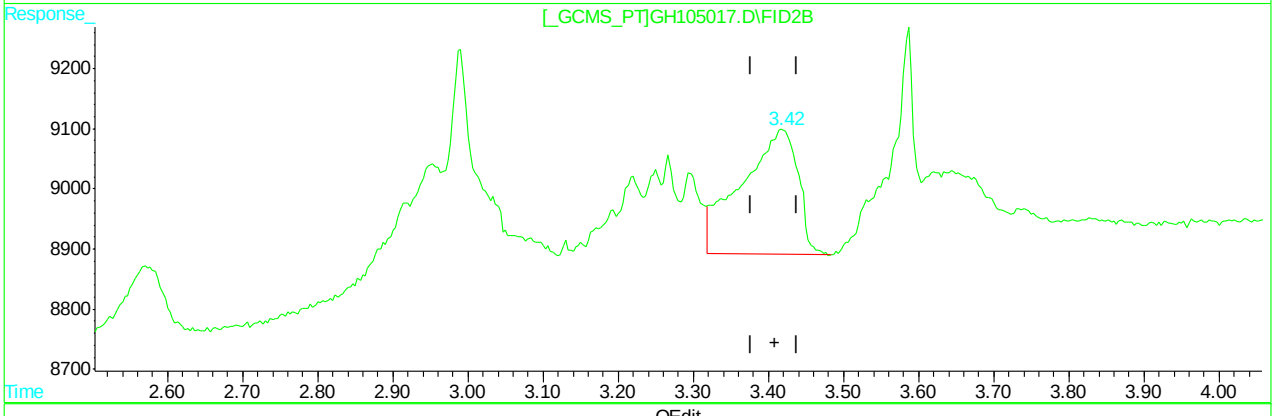
Quantitation Report (Qedit)

```
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

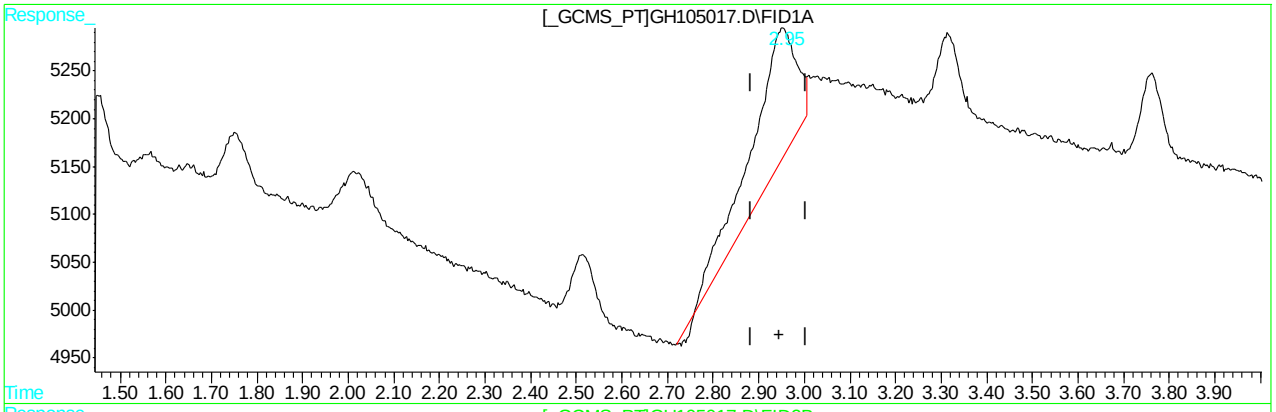
GH105017.D MGH5288.M Wed May 18 08:45:02 2016 GCGH

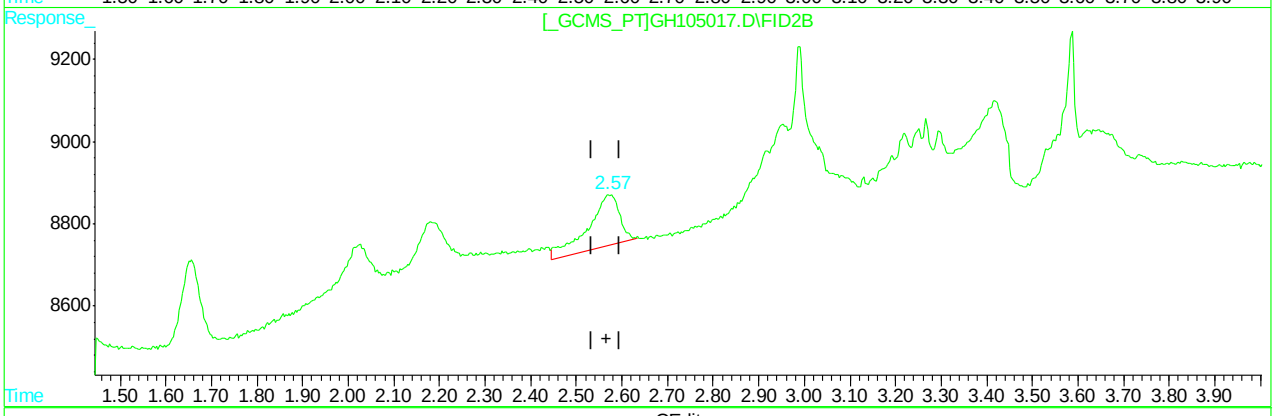
Quantitation Report (Qedit)

```
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

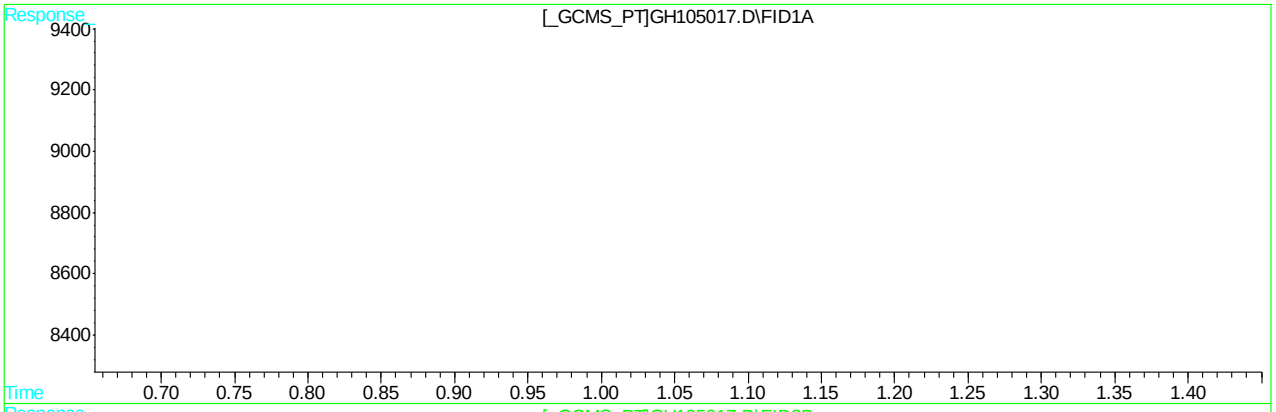
GH105017.D MGH5288.M Wed May 18 08:45:09 2016 GCGH

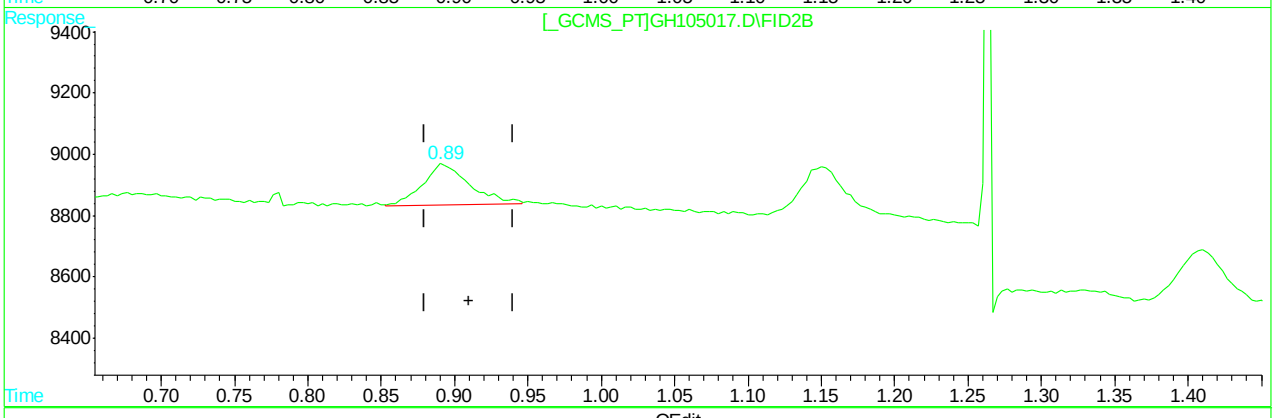
Quantitation Report (Qedit)

```
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

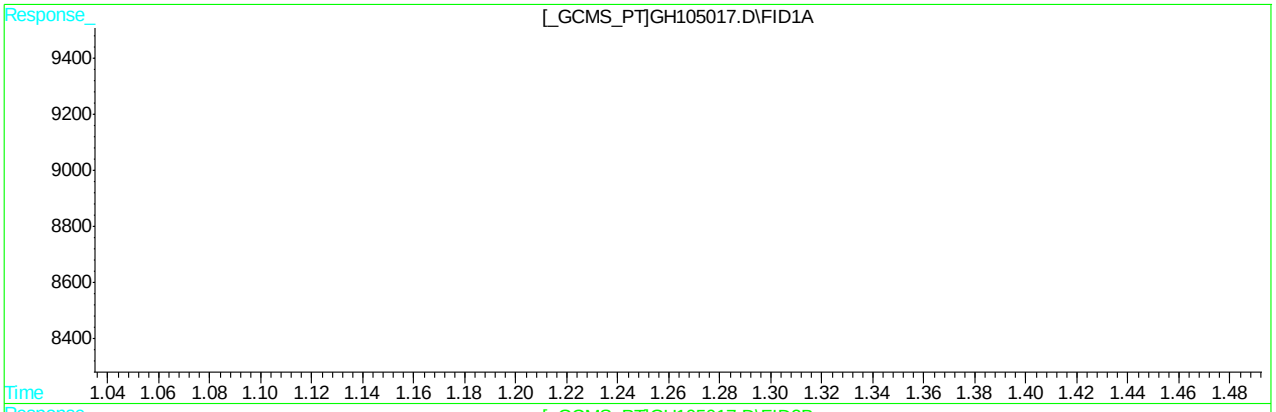
GH105017.D MGH5288.M Wed May 18 08:46:19 2016 GCGH

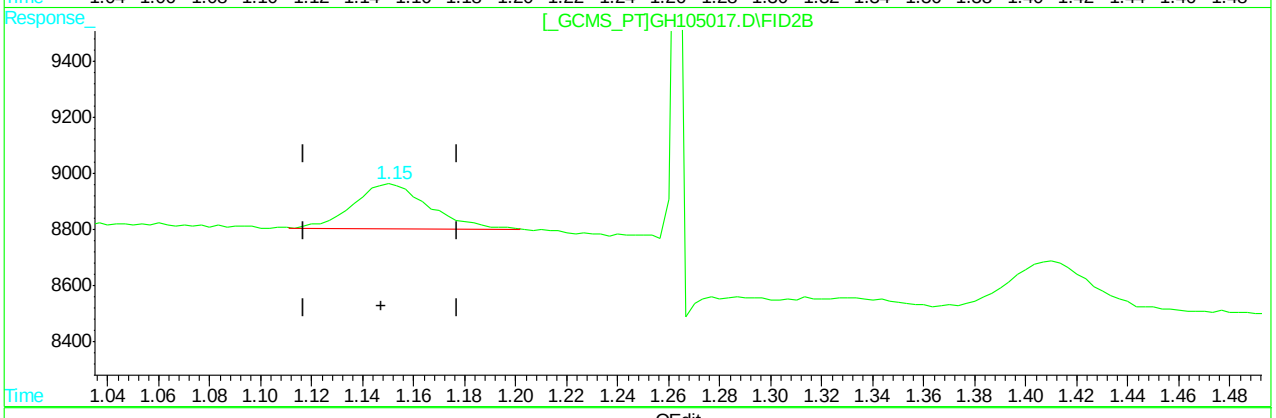
Quantitation Report (Qedit)

```
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

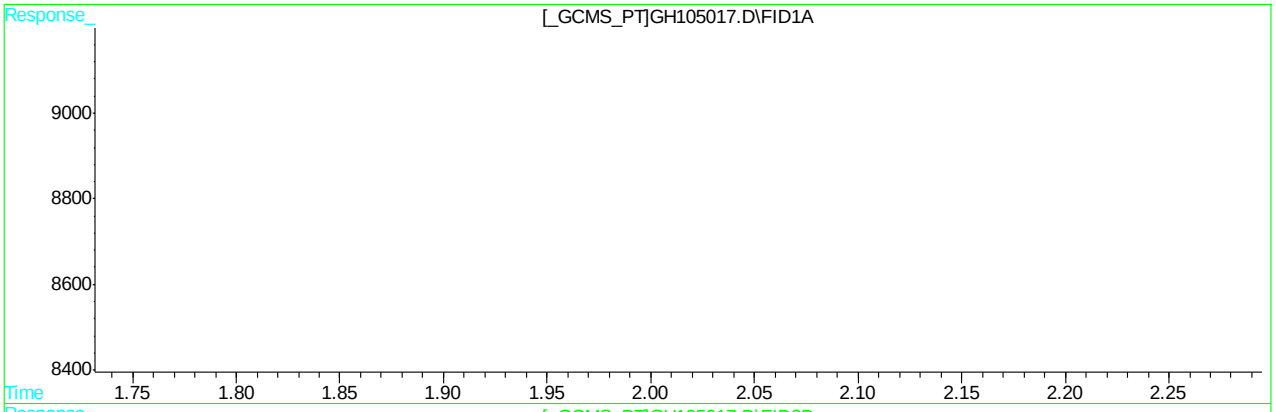
GH105017.D MGH5288.M Wed May 18 08:46:55 2016 GCGH

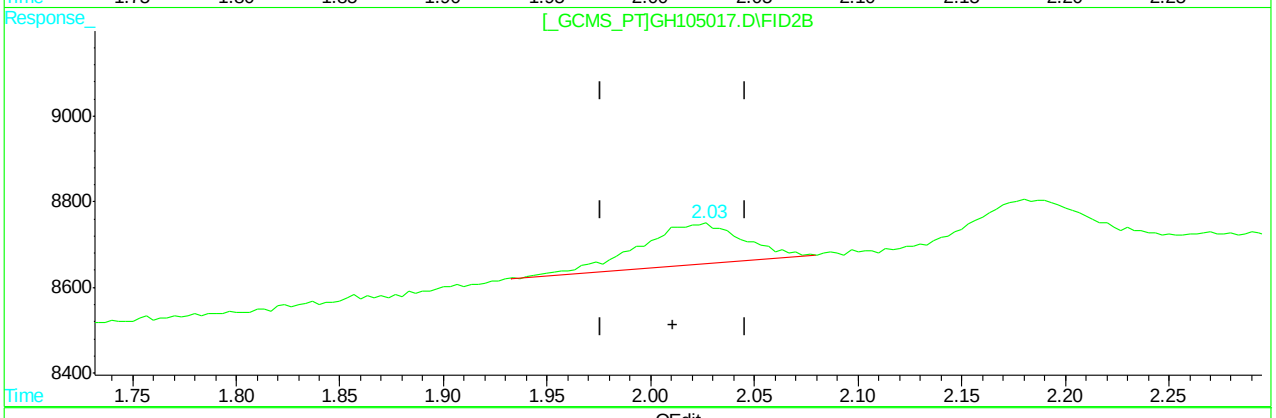
Quantitation Report (Qedit)

```
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

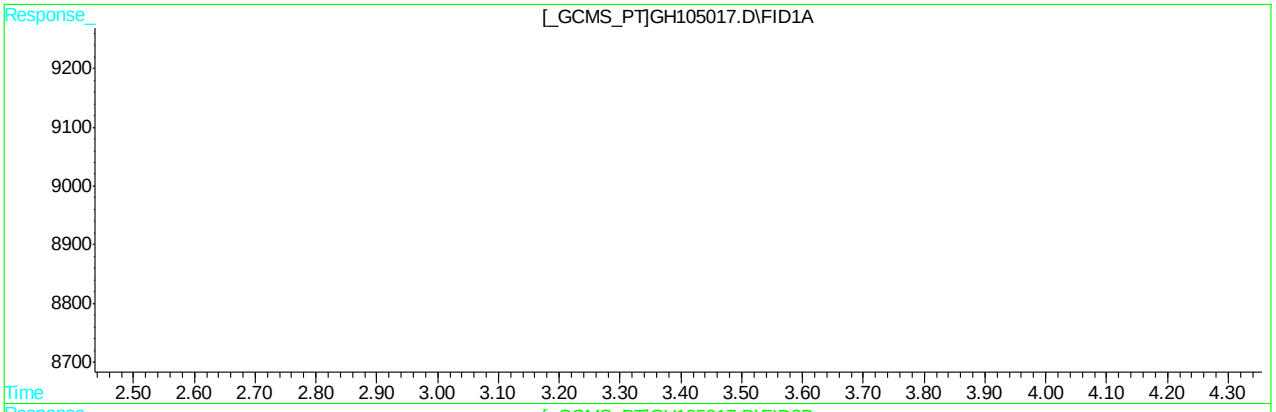
GH105017.D MGH5288.M Wed May 18 08:48:45 2016 GCGH

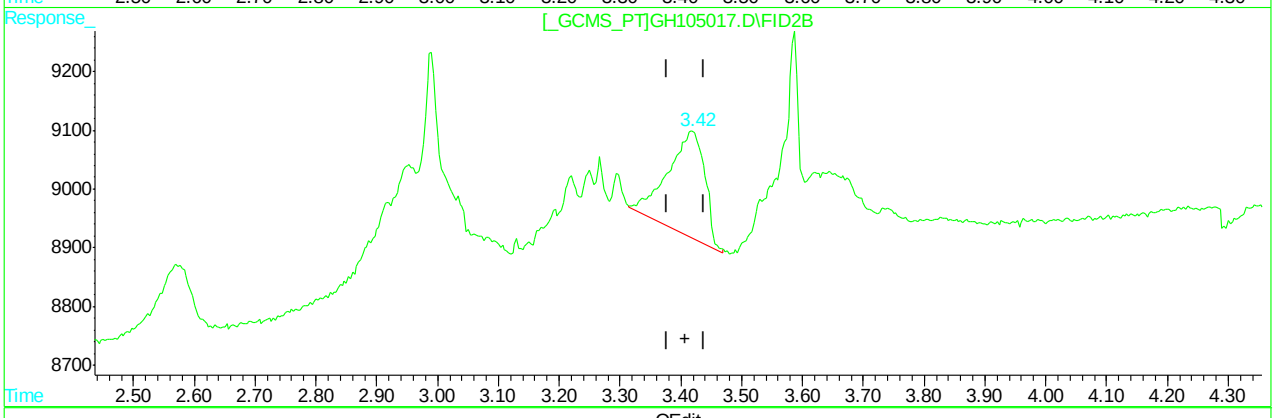
Quantitation Report (Qedit)

```
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

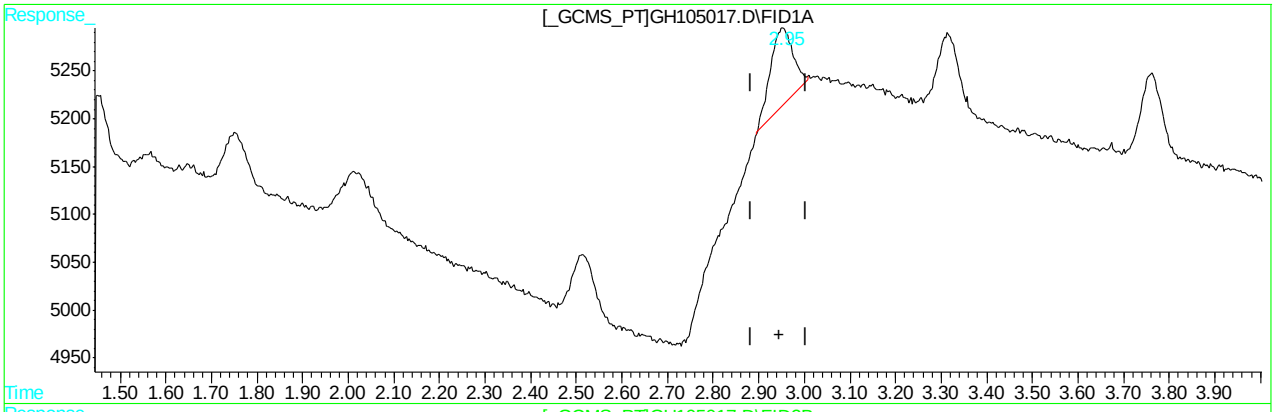
GH105017.D MGH5288.M Wed May 18 08:49:10 2016 GCGH

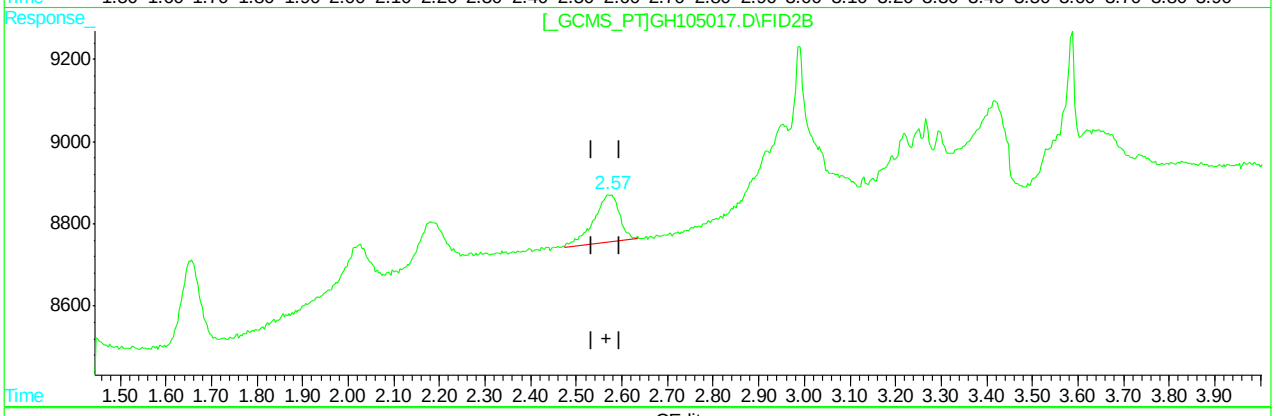
Quantitation Report (Qedit)

```
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 JC19996

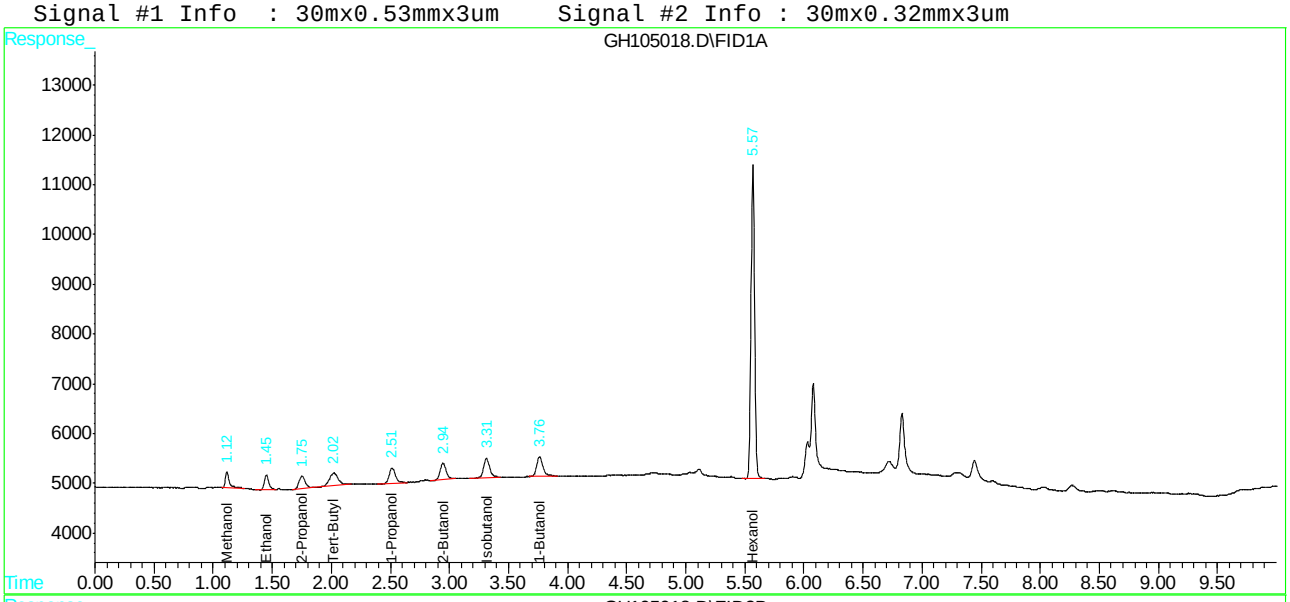
Quantitation Report (QT Reviewed)

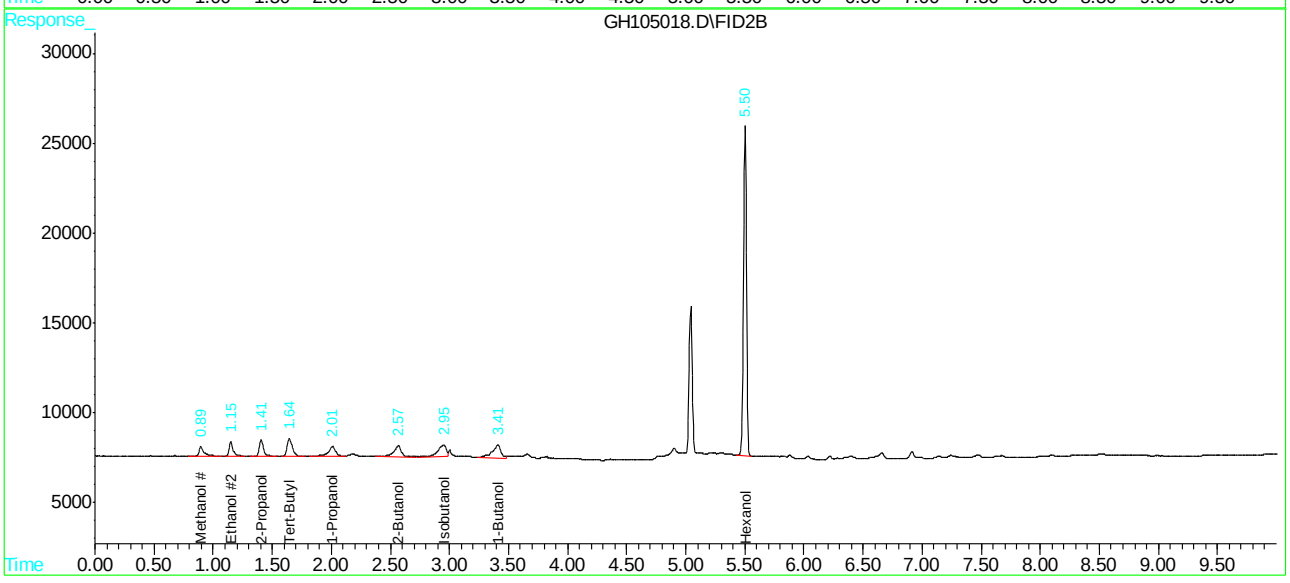
```
Data File : C:\HPCHEM\1\DATA\GH105018.D\FID1A.CH          Vial: 3
Acq On    : 17 May 2016   4:28 pm                     Operator: XULIU
Sample    : IC5288-500                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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
```





SGS ACCUTEST JC19996

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.
GH105019.D MGH5288.M Wed May 18 08:51:52 2016 GCGH

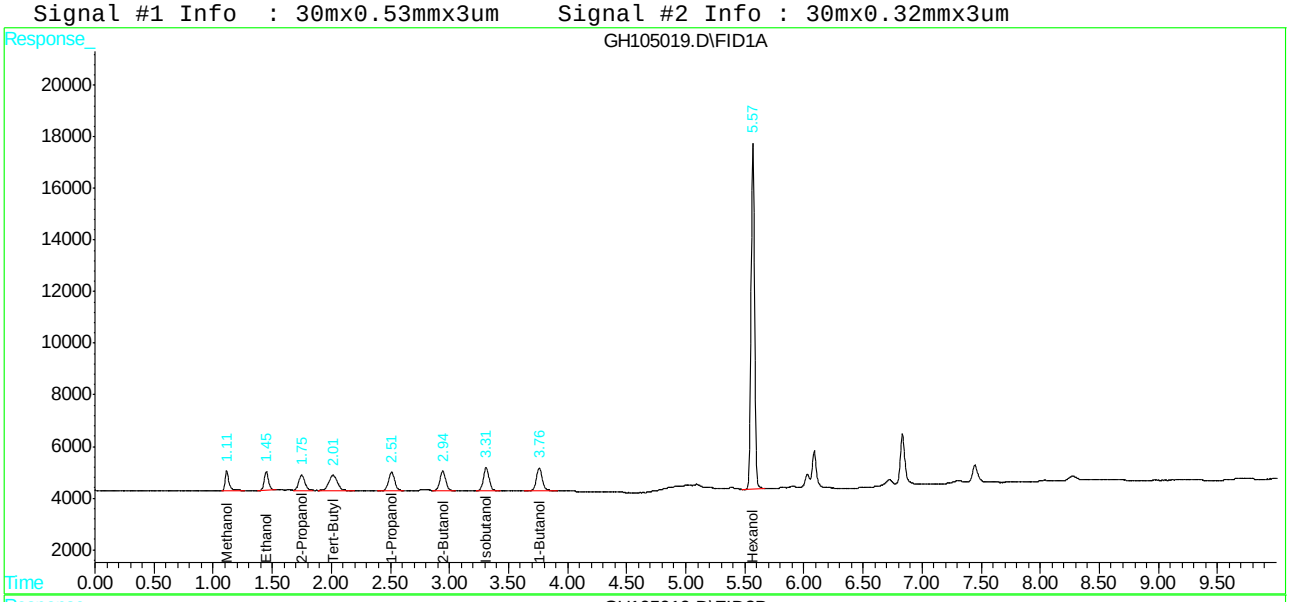
Quantitation Report (QT Reviewed)

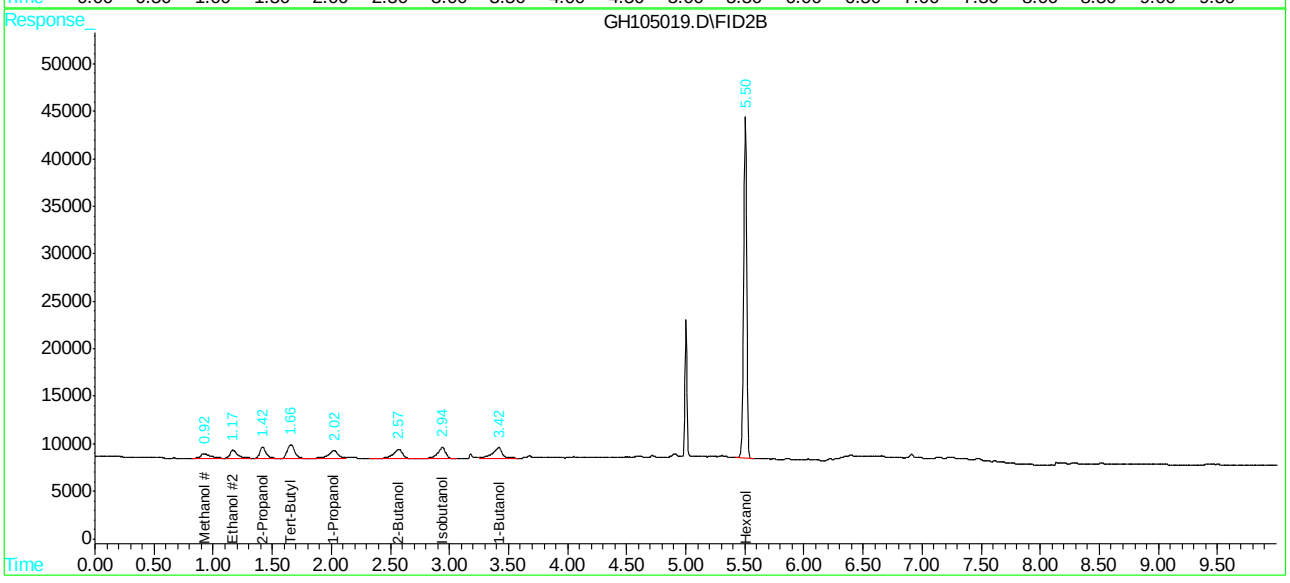
```
Data File : C:\HPCHEM\1\DATA\GH105019.D\FID1A.CH          Vial: 4
Acq On    : 17 May 2016   4:43 pm                     Operator: XULIU
Sample    : IC5288-1000                               Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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 JC19996

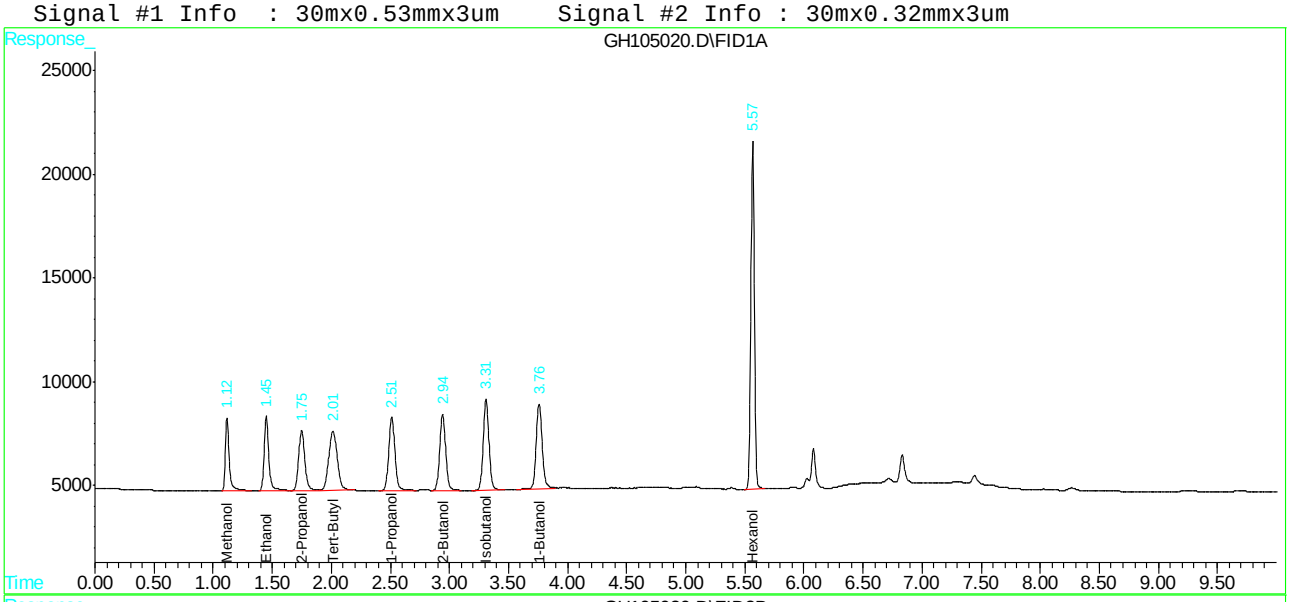
Quantitation Report (QT Reviewed)

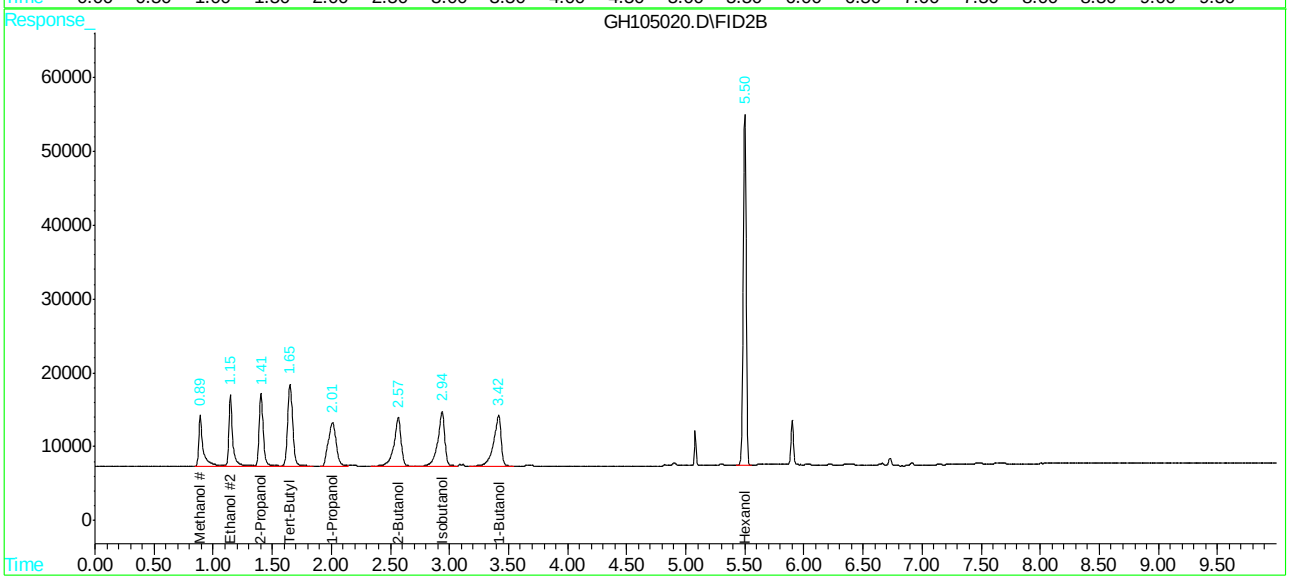
```
Data File : C:\HPCHEM\1\DATA\GH105020.D\FID1A.CH          Vial: 5
Acq On    : 17 May 2016   4:57 pm                     Operator: XULIU
Sample    : ICC5288-5000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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 JC19996

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.
GH105021.D MGH5288.M Wed May 18 08:52:42 2016 GCGH

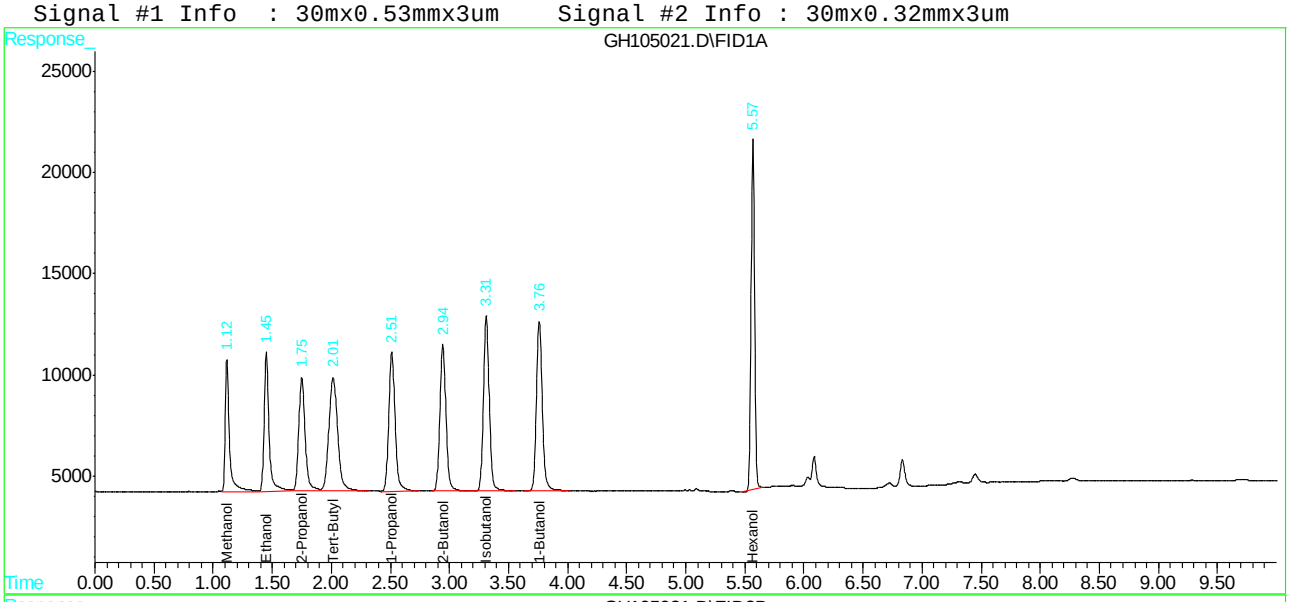
Quantitation Report (QT Reviewed)

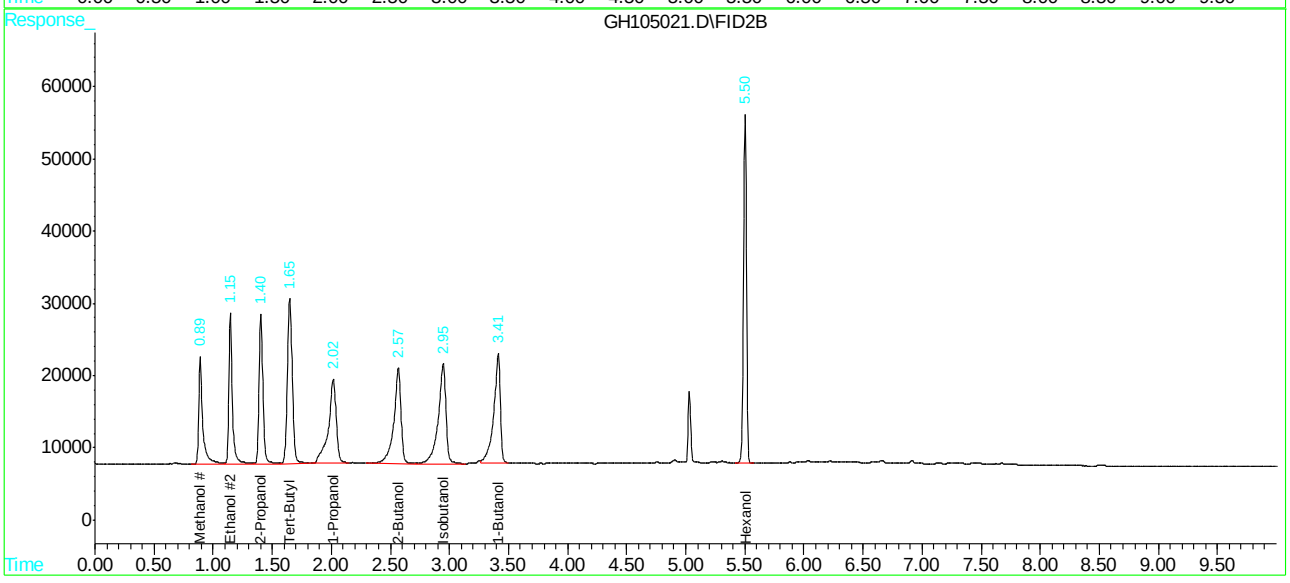
```
Data File : C:\HPCHEM\1\DATA\GH105021.D\FID1A.CH          Vial: 6
Acq On    : 17 May 2016   5:19 pm                     Operator: XULIU
Sample    : IC5288-10000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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
```





SGS ACCUTEST JC19996

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.
GH105022.D MGH5288.M Wed May 18 08:53:10 2016 GCGH

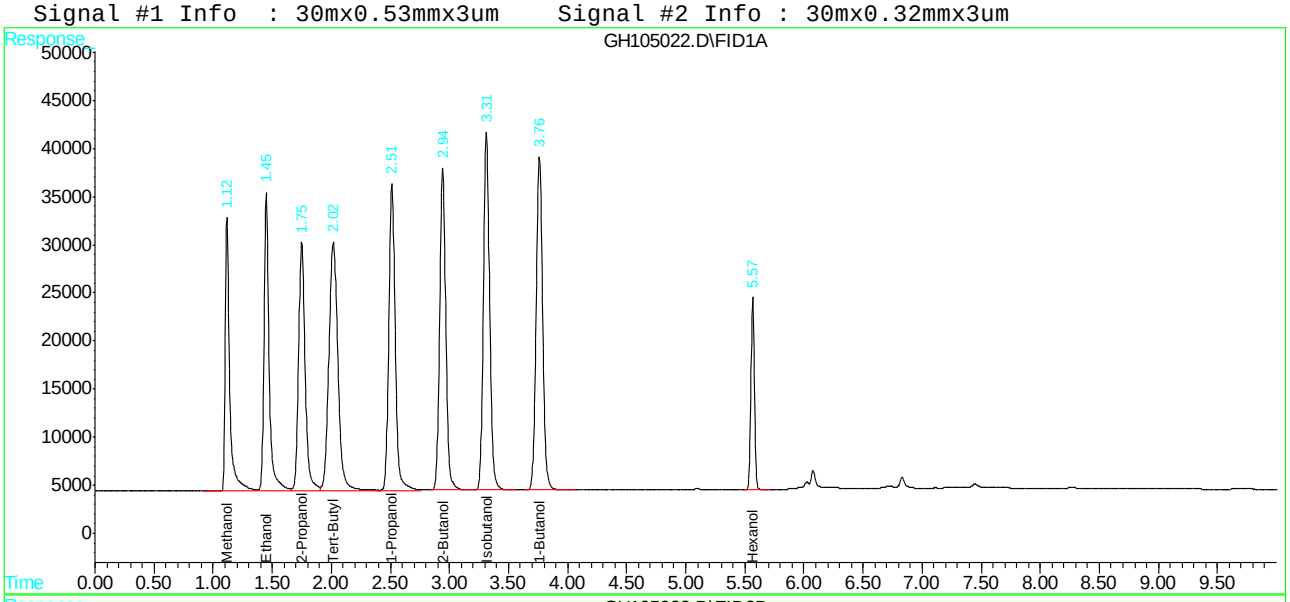
Quantitation Report (QT Reviewed)

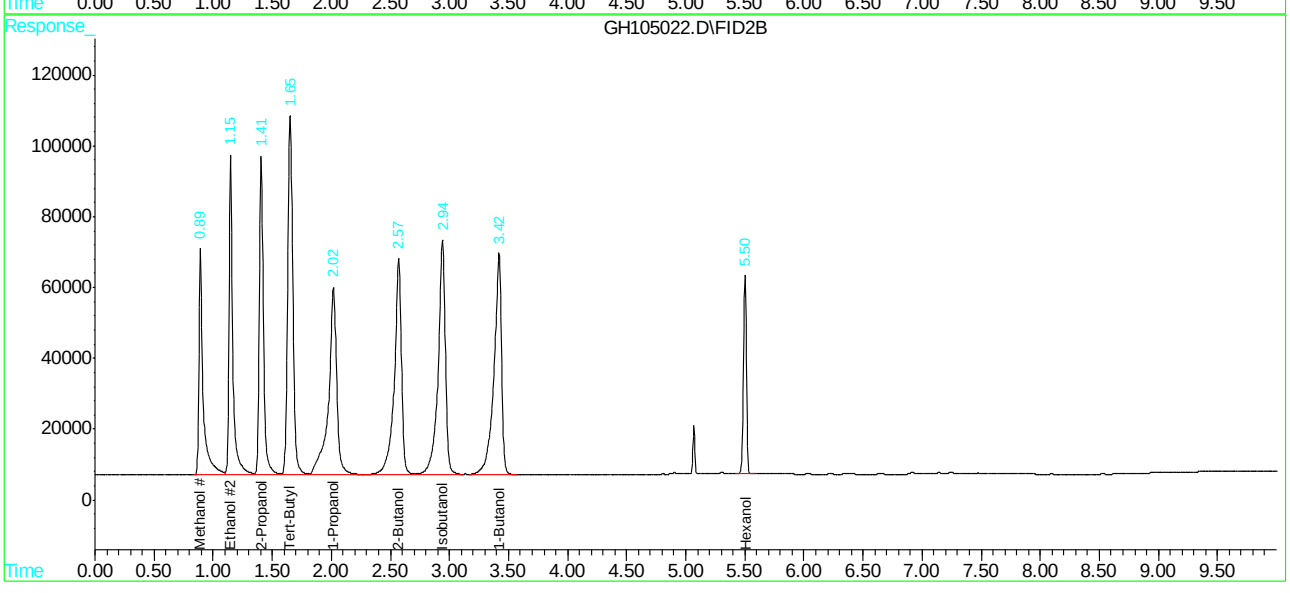
```
Data File : C:\HPCHEM\1\DATA\GH105022.D\FID1A.CH          Vial: 7
Acq On    : 17 May 2016   5:33 pm                     Operator: XULIU
Sample    : IC5288-50000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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
```





SGS ACCUTEST JC19996

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.

SGS ACCUTEST JC19996

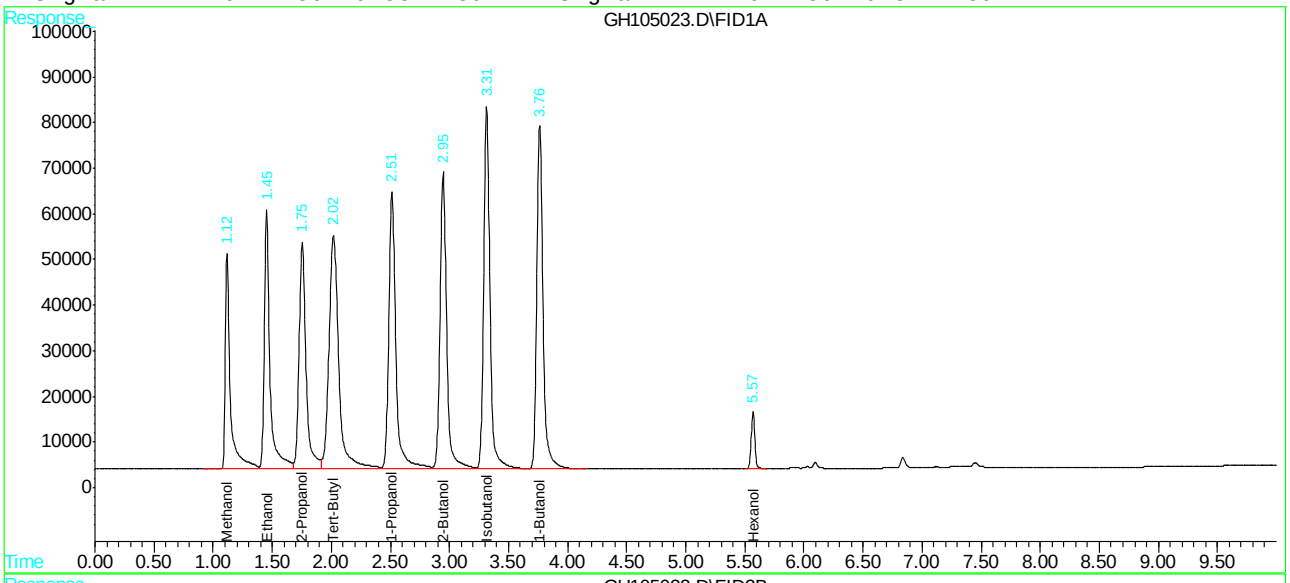
Quantitation Report (QT Reviewed)

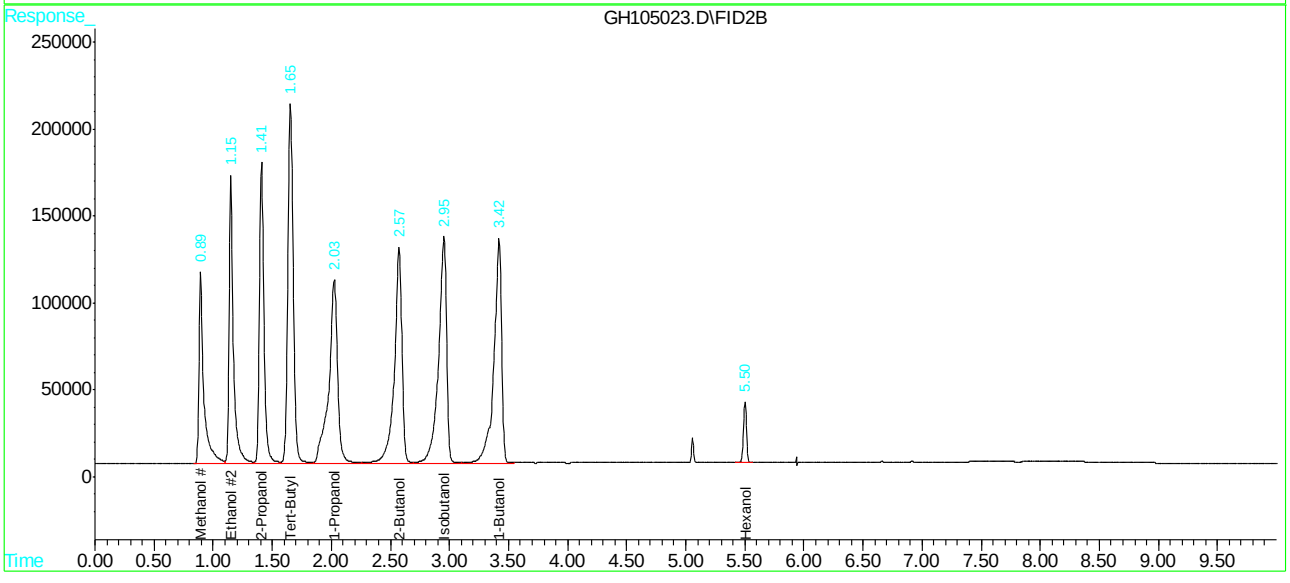
```
Data File : C:\HPCHEM\1\DATA\GH105023.D\FID1A.CH          Vial: 8
Acq On    : 17 May 2016   5:48 pm                     Operator: XULIU
Sample    : IC5288-100000                             Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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

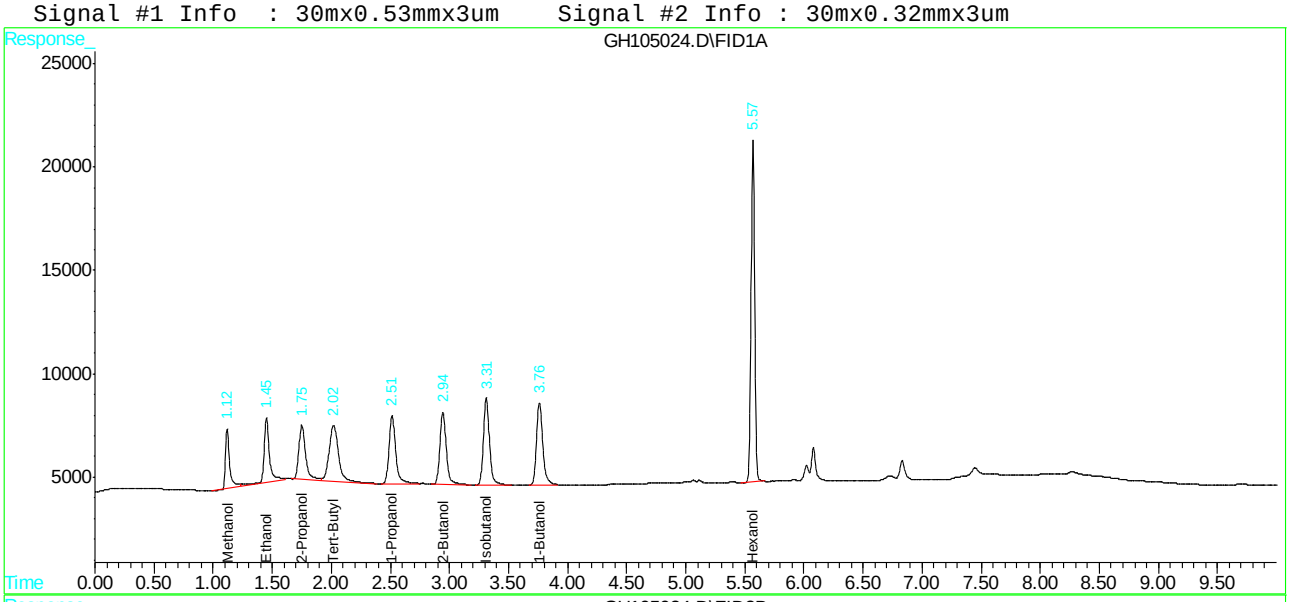
Quantitation Report (QT Reviewed)

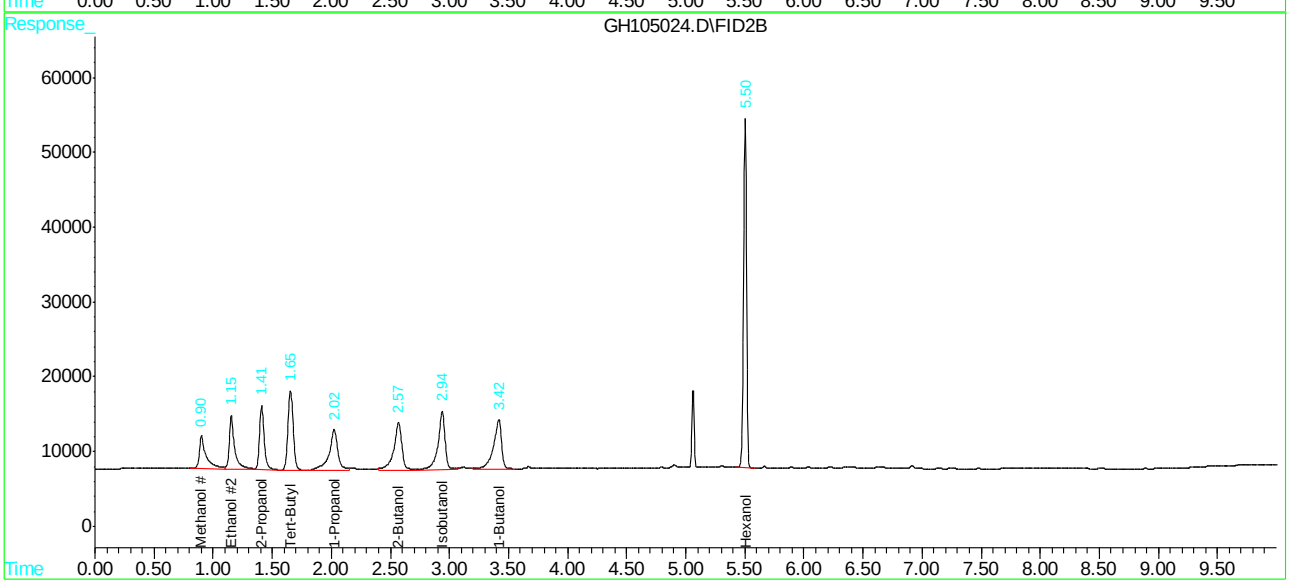
```
Data File : C:\HPCHEM\1\DATA\GH105024.D\FID1A.CH          Vial: 9
Acq On    : 17 May 2016   6:02 pm                     Operator: XULIU
Sample    : ICV5288-5000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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.

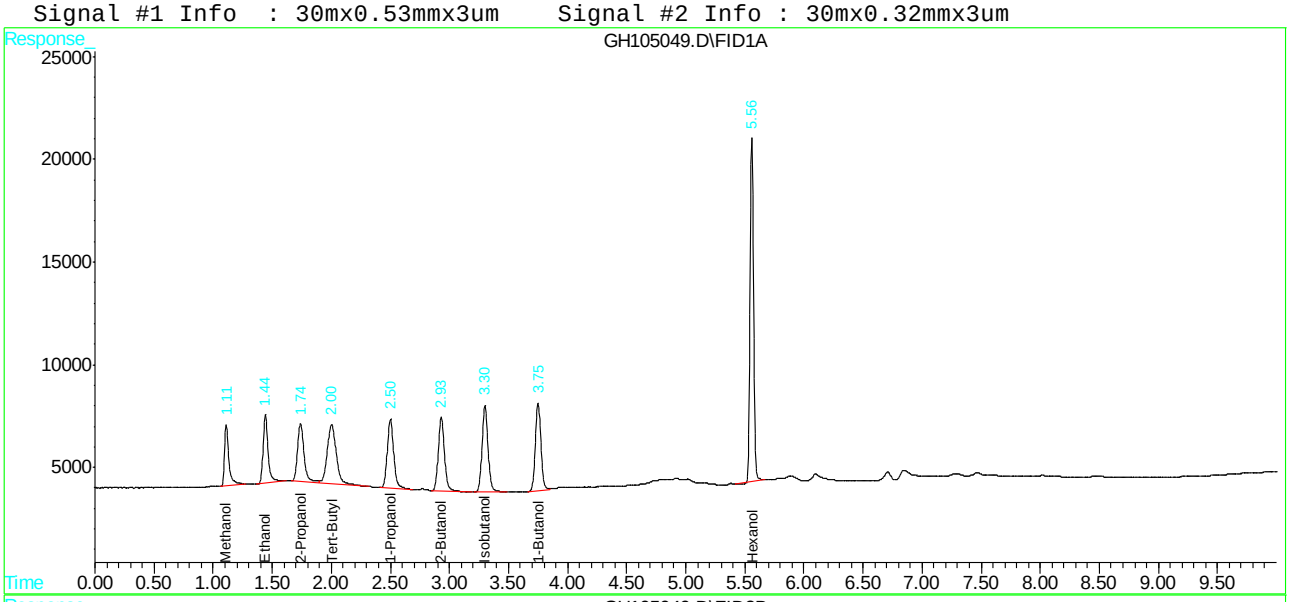
Quantitation Report (QT Reviewed)

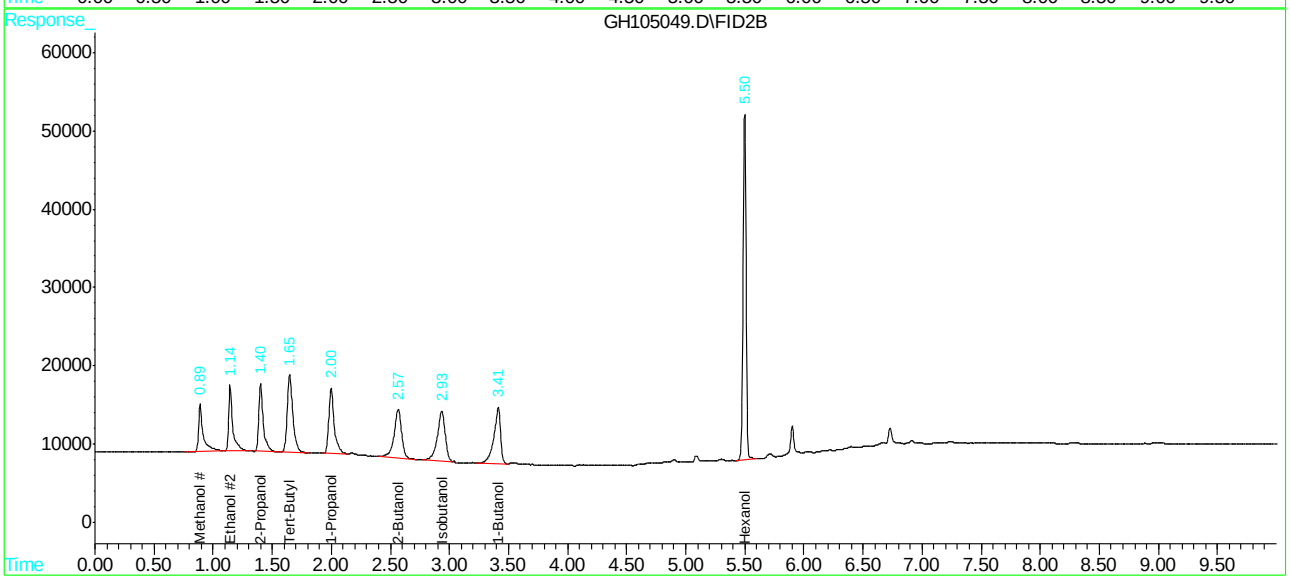
```
Data File : C:\HPCHEM\1\DATA\GH105049.D\FID1A.CH          Vial: 95
Acq On    : 18 May 2016   2:28 pm                     Operator: XULIU
Sample    : CC5288-5000                               Inst    : GCGH
Misc      : GC48428,GGH5289,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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.

SGS ACCUTEST JC19996

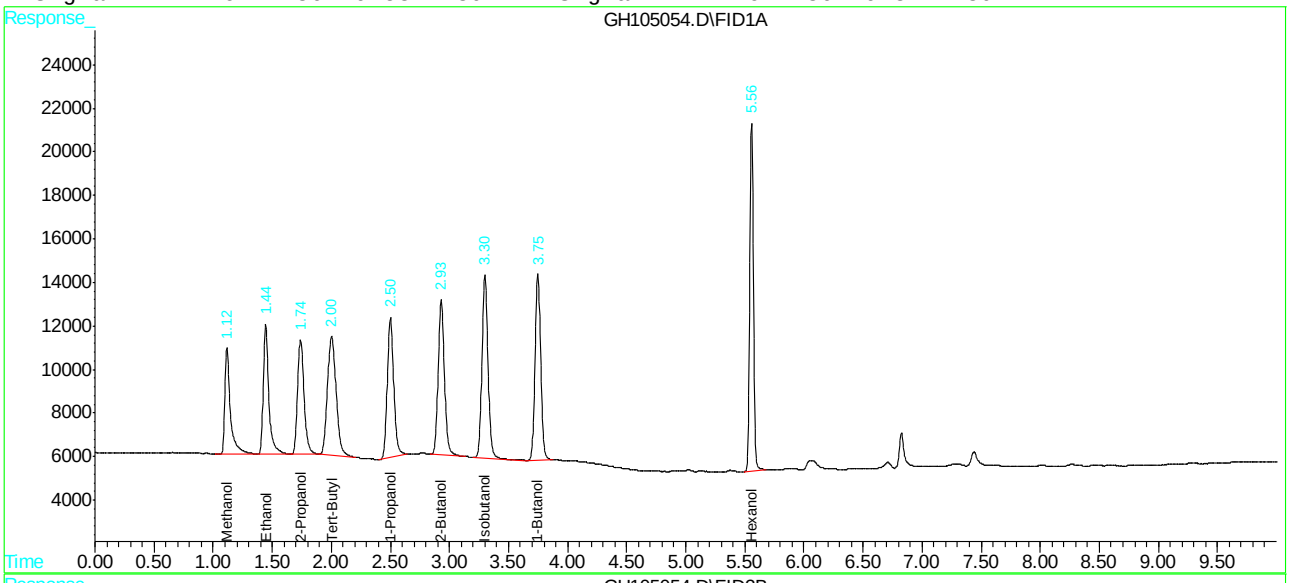
Quantitation Report (QT Reviewed)

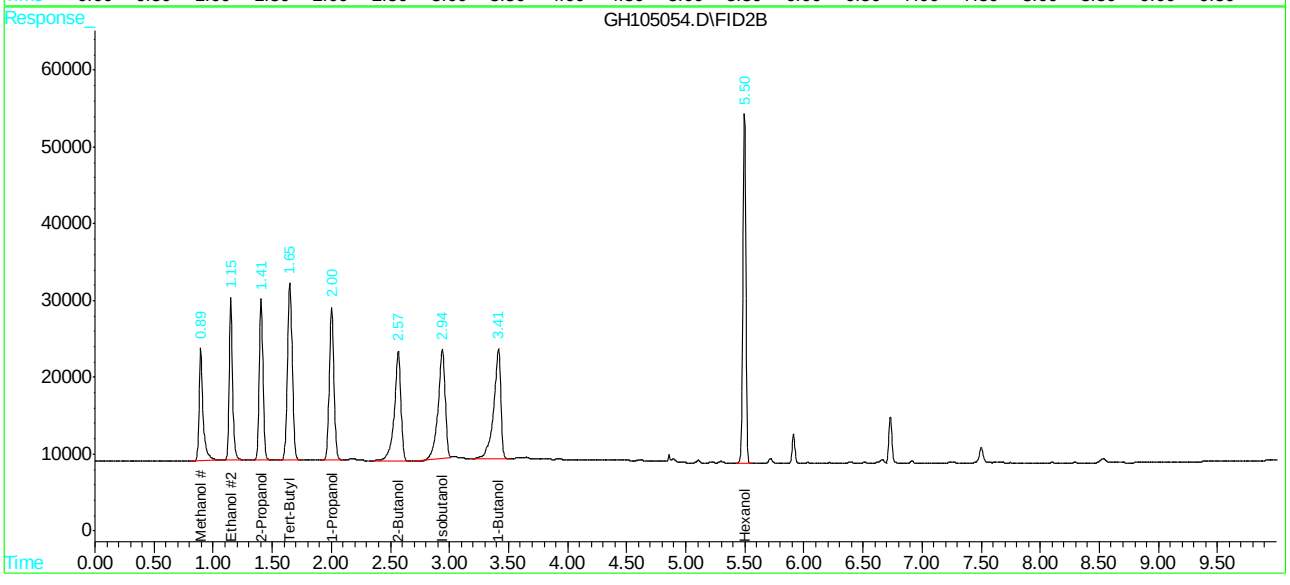
```
Data File : C:\HPCHEM\1\DATA\GH105054.D\FID1A.CH          Vial: 95
Acq On    : 18 May 2016   3:49 pm                     Operator: XULIU
Sample    : CC5288-10000                              Inst    : GCGH
Misc      : GC48425,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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.

SGS ACCUTEST JC19996

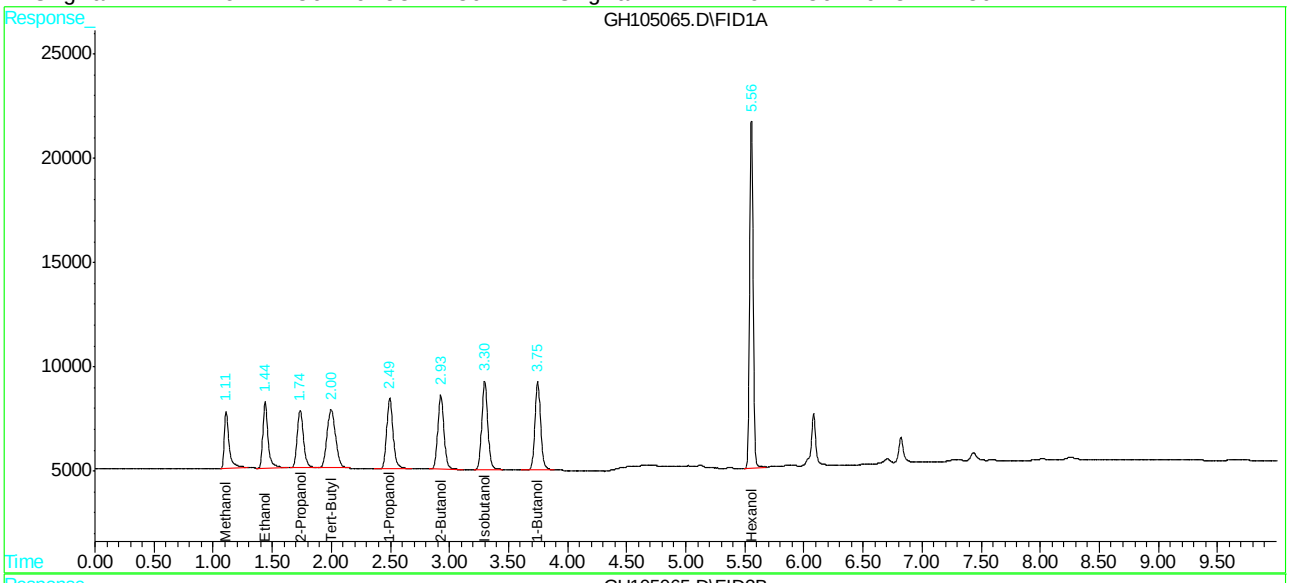
Quantitation Report (QT Reviewed)

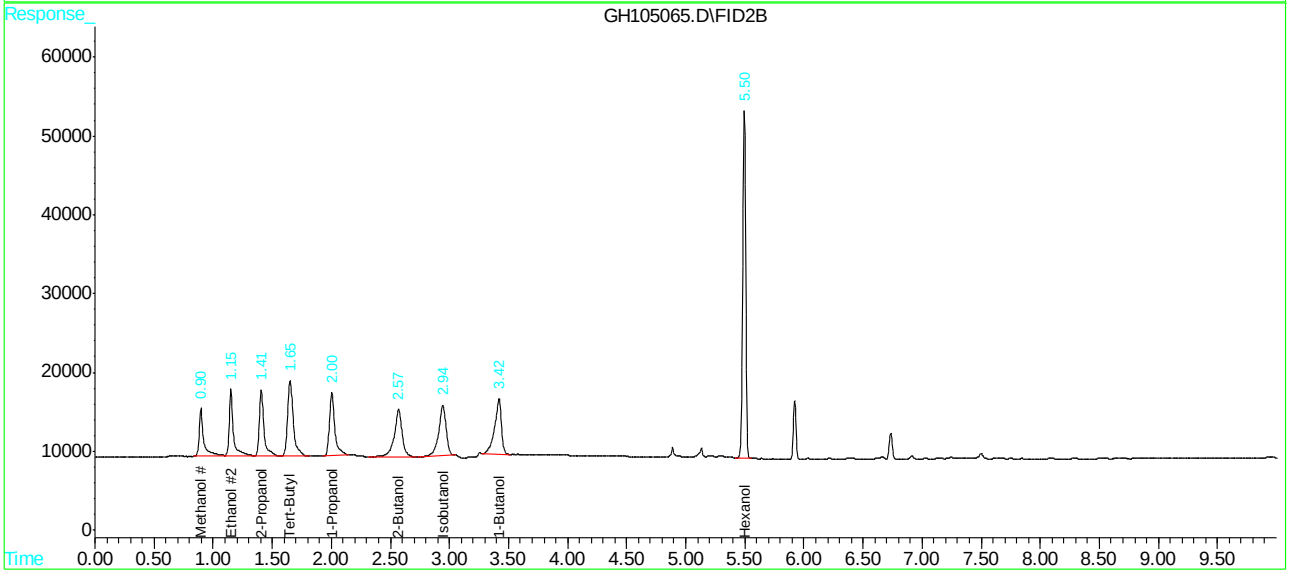
```
Data File : C:\HPCHEM\1\DATA\GH105065.D\FID1A.CH          Vial: 10
Acq On    : 18 May 2016   6:49 pm                     Operator: XULIU
Sample    : CC5288-5000                               Inst    : GCGH
Misc      : GC48426,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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
```





SGS ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: GGH 5269

Print Analyst Name: Xielin

Date: 5/9/16

Analyst Signature:

Columns: ZB624 / RTX-1 (30m x0.25mm x 3um) (30m x0.32mm x

Method 8015C ALC

Initial Cal. Method MGH 5269

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
015MX-18	ALL SUR	2000 ppm
015MX-19	ALL STD	100 ppm
015MX-30	ALL STD(2)	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:** 5/12/16

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 Area 2nd signal NG		
	104681	2G5269-100,000					1						NG	1000ul STD, 4ul sur/ml 1/20	
	104682	2G5269-5000					1						NG		
	104683	2G5269-5000					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 JC19996

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.
015MMX428	ALL SWF (5/15)	2000 ppm
015MMX(5)	ALL SWF (5/15)	100 ppm
015MMX430	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 CMTS	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	5/16 ✓	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	MBX 5/16					1					✓	ok		
	104982	JC20098-1 ~~JC19914-3~~ 5/16	48422 CMB	G W	5		1					✓	ok	JC20098-1	✓
	104983	JC20098-4 5/16	✓	G W	5		1					✓	ok	JC20098-4	✓
	104984	JC20098-5 5/16	✓	G W	5		1					✓	ok	JC20098-5	✓
	104985	JC20314-2 5/16	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 JC19996

SGS ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: GGH5286

Print Analyst Name: Xulin

Analyst Signature:

Date: 5/16/16

Columns: ZB624 / RTX-1 (30m x0.5mm x3um) (30m x0.32mm x3um)

Method 8015C ALL

Initial Cal. Method MCH5269

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
015mix48	ALL SUR (5/15)	2000 ppm
015mix48	ALL STD (5/15)	100 ppm
015mix131	ALL 8010(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:** 5/17/16

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
	GH104988	MB					1					✓	ok		
	104989	BS					1					✓	ok	50ul 8010(2)/1ml/20	
	104990	JC20184-3	48422 CMB	G W	17		1					✓	ok		✓
	104991	JC20184-3MS	✓	G W	17		1					✓	ok	50ul 8010(2) /1ml sample	✓
	104992	JC20184-3MSD	✓	G W	17		1					✓	ok	50ul 8010(2)/1ml sample	✓
	104993	JC20184-4	✓	G W	4		1					✓	ok		✓
	104994	JC20184-5	✓	G W	6		1					✓	ok		✓
	104995	JC20184-6	✓	G W	5		1					✓	ok		✓
	104996	JC20184-1	✓	G W	6		1					✓	ok		✓
	104997	JC20184-2	✓	G W	6		1					✓	ok		✓
	104998	CC5269-5000					1					✓	ok	50ul 8010/1ml/20	
	104999	a1B2					1					✓	ok		
	105000	JC19996-1	48422 CMB	G W	3		1					✓	ok		✓
	105001	JC19996-3	✓	G W	3		1					✓	ok		✓
	105002	JC19996-4	✓	G W	5		1					✓	ok		✓
	105003	JC19996-5	✓	G W	5		1					✓	ok		✓
	105004	JC19996-6	✓	G W	5		1					✓	ok		✓
	105005	CC5269-10,000					1					✓	ok	100ul/ml/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

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Form: OR001-10
Rev. Date: 1/19/16

SGS ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: GGH 5288

Print Analyst Name: Xu Gu

Analyst Signature:

Date: 5/17/16

Columns: ZB624 / RTX-1 (30m x0.53mm x3μm) (30m x0.32mm x3μm)

Method 8015C All

Initial Cal. Method mCal 5288

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

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
	Cal 105015	ZB					1					✓	not well		
	105016	ZB					1					✓	ok		
	105017	ZC5288-100					1					✓	ok	10μl STD, 4μl SW / 10 ml / 20	
	105018	ZC5288-500					1					✓	ok	5μl STD, 1μl SW / 10ml / 20	
	105019	ZC5288-1000					1					✓	ok	10μl STD, 2.5μl SW / 10ml / 20	
	105020	ZC5288-5000					1					✓	ok	50μl STD, 2.5μl SW / 10ml / 20	
	105021	ZC5288-10,000					1					✓	ok	100μl STD, 2.5μl SW / 10ml / 20	
	105022	ZC5288-50,000					1					✓	ok	500μl STD, 3μl SW / 10ml / 20	
	105023	ZC5288-100,000					1					✓	ok	1000μl STD, 4μl SW / 10ml / 20	
	105024	ZC5288-5000					1					✓	ok	50μl STD (1:10) / 10ml 2.5μl SW / 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

VOLATILE ANALYSIS LOG

Batch ID: GGH5289

Print Analyst Name: Xulin

Analyst Signature:

Date: 5/18/16

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 sple	✓
	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		✓
5/18	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/5m/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 JC19996

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 F	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/mid	
												(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

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Form: OR001-10
Rev. Date: 1/19/16

9.6.5

9

SGS ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: GGH5290

Print Analyst Name: Xu Lei

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.
015mix418	ALL SUR (5/15)	2000 ppm
015mix419	ALL STD (5/15)	100 ppm
015mix420	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 MeH	S	1		5.0/5			5/18		✓	ok	~~5/18~~ (x) 5/19	✓ ok
	1050 60	JC ~~19914-7~~ 19492-29	5/19 (x)	S	1		5.0/5					✓	ok	JC19492-29 5/19	
	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

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: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93822-MB1	4G68171.D	1	05/12/16	DS	05/11/16	OP93822	G4G1787

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC19996-1, JC19996-4, JC19996-5, JC19996-6

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	101%	26-132%
877-09-8	Tetrachloro-m-xylene	102%	26-132%
2051-24-3	Decachlorobiphenyl	74%	10-118%
2051-24-3	Decachlorobiphenyl	66%	10-118%

Method Blank Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93857-MB1	6G35036.D	1	05/13/16	DS	05/12/16	OP93857	G6G1010

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC19996-2

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.67	0.59	ug/kg	
319-84-6	alpha-BHC	ND	0.67	0.44	ug/kg	
319-85-7	beta-BHC	ND	0.67	0.41	ug/kg	
319-86-8	delta-BHC	ND	0.67	0.26	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.67	0.30	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.67	0.36	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.67	0.51	ug/kg	
60-57-1	Dieldrin	ND	0.67	0.52	ug/kg	
72-54-8	4,4'-DDD	ND	0.67	0.25	ug/kg	
72-55-9	4,4'-DDE	ND	0.67	0.22	ug/kg	
50-29-3	4,4'-DDT	ND	0.67	0.25	ug/kg	
72-20-8	Endrin	ND	0.67	0.24	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.67	0.38	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.67	0.50	ug/kg	
959-98-8	Endosulfan-I	ND	0.67	0.22	ug/kg	
33213-65-9	Endosulfan-II	ND	0.67	0.63	ug/kg	
76-44-8	Heptachlor	ND	0.67	0.55	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.67	0.28	ug/kg	
72-43-5	Methoxychlor	ND	1.3	0.37	ug/kg	
53494-70-5	Endrin ketone	ND	0.67	0.35	ug/kg	
8001-35-2	Toxaphene	ND	17	12	ug/kg	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	72%	24-136%
877-09-8	Tetrachloro-m-xylene	72%	24-136%
2051-24-3	Decachlorobiphenyl	73%	10-153%
2051-24-3	Decachlorobiphenyl	83%	10-153%

Blank Spike Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93822-BS1	4G68172.D	1	05/12/16	DS	05/11/16	OP93822	G4G1787

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC19996-1, JC19996-4, JC19996-5, JC19996-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
309-00-2	Aldrin	0.25	0.25	100	38-138
319-84-6	alpha-BHC	0.25	0.27	108	51-144
319-85-7	beta-BHC	0.25	0.26	104	55-137
319-86-8	delta-BHC	0.25	0.24	96	33-148
58-89-9	gamma-BHC (Lindane)	0.25	0.27	108	53-142
5103-71-9	alpha-Chlordane	0.25	0.26	104	52-137
5103-74-2	gamma-Chlordane	0.25	0.27	108	52-140
60-57-1	Dieldrin	0.25	0.28	112	54-144
72-54-8	4,4'-DDD	0.25	0.28	112	46-151
72-55-9	4,4'-DDE	0.25	0.25	100	51-142
50-29-3	4,4'-DDT	0.25	0.23	92	53-158
72-20-8	Endrin	0.25	0.30	120	53-149
1031-07-8	Endosulfan sulfate	0.25	0.29	116	49-148
7421-93-4	Endrin aldehyde	0.25	0.29	116	45-137
53494-70-5	Endrin ketone	0.25	0.28	112	48-142
959-98-8	Endosulfan-I	0.25	0.26	104	54-139
33213-65-9	Endosulfan-II	0.25	0.28	112	54-142
76-44-8	Heptachlor	0.25	0.25	100	45-137
1024-57-3	Heptachlor epoxide	0.25	0.27	108	54-140
72-43-5	Methoxychlor	0.25	0.26	104	51-157

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	96%	26-132%
877-09-8	Tetrachloro-m-xylene	95%	26-132%
2051-24-3	Decachlorobiphenyl	89%	10-118%
2051-24-3	Decachlorobiphenyl	79%	10-118%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93857-BS1	6G35037.D	1	05/13/16	DS	05/12/16	OP93857	G6G1010

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC19996-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
309-00-2	Aldrin	16.7	12.8	77	40-135
319-84-6	alpha-BHC	16.7	13.3	80	37-134
319-85-7	beta-BHC	16.7	12.7	76	37-131
319-86-8	delta-BHC	16.7	12.7	76	34-132
58-89-9	gamma-BHC (Lindane)	16.7	13.3	80	36-128
5103-71-9	alpha-Chlordane	16.7	12.6	76	40-131
5103-74-2	gamma-Chlordane	16.7	12.5	75	41-133
60-57-1	Dieldrin	16.7	13.2	79	33-133
72-54-8	4,4'-DDD	16.7	13.0	78	37-132
72-55-9	4,4'-DDE	16.7	13.0	78	39-133
50-29-3	4,4'-DDT	16.7	12.6	76	26-150
72-20-8	Endrin	16.7	13.8	83	41-134
1031-07-8	Endosulfan sulfate	16.7	13.4	80	38-138
7421-93-4	Endrin aldehyde	16.7	12.8	77	37-129
959-98-8	Endosulfan-I	16.7	12.5	75	39-130
33213-65-9	Endosulfan-II	16.7	12.8	77	40-134
76-44-8	Heptachlor	16.7	12.7	76	36-132
1024-57-3	Heptachlor epoxide	16.7	12.9	77	39-131
72-43-5	Methoxychlor	16.7	12.8	77	28-149
53494-70-5	Endrin ketone	16.7	13.0	78	31-138

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	70%	24-136%
877-09-8	Tetrachloro-m-xylene	70%	24-136%
2051-24-3	Decachlorobiphenyl	71%	10-153%
2051-24-3	Decachlorobiphenyl	75%	10-153%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93822-MS	4G68177.D	1	05/12/16	DS	05/11/16	OP93822	G4G1787
OP93822-MSD	4G68178.D	1	05/12/16	DS	05/11/16	OP93822	G4G1787
JC19996-5	4G68175.D	1	05/12/16	DS	05/11/16	OP93822	G4G1787

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC19996-1, JC19996-4, JC19996-5, JC19996-6

CAS No.	Compound	JC19996-5 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		0.5	0.55	110	0.5	0.50	100	10	37-159/40
319-84-6	alpha-BHC	ND		0.5	0.59	118	0.5	0.53	106	11	37-164/37
319-85-7	beta-BHC	ND		0.5	0.57	114	0.5	0.51	102	11	46-151/36
319-86-8	delta-BHC	ND		0.5	0.54	108	0.5	0.49	98	10	32-168/36
58-89-9	gamma-BHC (Lindane)	ND		0.5	0.59	118	0.5	0.53	106	11	44-160/37
5103-71-9	alpha-Chlordane	ND		0.5	0.61	122	0.5	0.56	112	9	38-160/35
5103-74-2	gamma-Chlordane	ND		0.5	0.72	144	0.5	0.66	132	9	39-157/37
60-57-1	Dieldrin	ND		0.5	0.62	124	0.5	0.56	112	10	42-161/36
72-54-8	4,4'-DDD	ND		0.5	0.62	124	0.5	0.55	110	12	40-161/36
72-55-9	4,4'-DDE	ND		0.5	0.55	110	0.5	0.50	100	10	34-158/36
50-29-3	4,4'-DDT	ND		0.5	0.56	112	0.5	0.51	102	9	41-173/33
72-20-8	Endrin	ND		0.5	0.67	134	0.5	0.60	120	11	44-166/35
1031-07-8	Endosulfan sulfate	ND		0.5	0.64	128	0.5	0.57	114	12	46-161/36
7421-93-4	Endrin aldehyde	ND		0.5	0.65	130	0.5	0.57	114	13	34-149/36
53494-70-5	Endrin ketone	ND		0.5	0.62	124	0.5	0.56	112	10	44-157/36
959-98-8	Endosulfan-I	ND		0.5	0.58	116	0.5	0.52	104	11	43-154/35
33213-65-9	Endosulfan-II	ND		0.5	0.67	134	0.5	0.61	122	9	40-162/35
76-44-8	Heptachlor	ND		0.5	0.59	118	0.5	0.53	106	11	33-153/37
1024-57-3	Heptachlor epoxide	ND		0.5	0.61	122	0.5	0.56	112	9	45-154/37
72-43-5	Methoxychlor	ND		0.5	0.60	120	0.5	0.54	108	11	48-169/32
8001-35-2	Toxaphene	ND			ND			ND		nc	50-150/30

CAS No.	Surrogate Recoveries	MS	MSD	JC19996-5	Limits
877-09-8	Tetrachloro-m-xylene	99%	92%	84%	26-132%
877-09-8	Tetrachloro-m-xylene	96%	91%	80%	26-132%
2051-24-3	Decachlorobiphenyl	84%	73%	87%	10-118%
2051-24-3	Decachlorobiphenyl	69%	61%	71%	10-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93857-MS	6G35041A.D	1	05/13/16	DS	05/12/16	OP93857	G6G1010
OP93857-MSD	6G35042.D	1	05/13/16	DS	05/12/16	OP93857	G6G1010
JC19931-1	6G35039.D	1	05/13/16	DS	05/12/16	OP93857	G6G1010

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC19996-2

CAS No.	Compound	JC19931-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
309-00-2	Aldrin	ND		19	16.3	86	18.7	17.2	92	5	19-147/48
319-84-6	alpha-BHC	ND		19	15.8	83	18.7	15.8	84	0	13-155/50
319-85-7	beta-BHC	ND		19	20.6	109	18.7	16.4	88	23	10-145/53
319-86-8	delta-BHC	ND		19	17.3	91	18.7	18.9	101	9	11-148/51
58-89-9	gamma-BHC (Lindane)	ND		19	17.9	94	18.7	17.7	95	1	16-143/47
5103-71-9	alpha-Chlordane	ND		19	15.3	81	18.7	15.3	82	0	15-151/50
5103-74-2	gamma-Chlordane	ND		19	14.7	78	18.7	15.0	80	2	13-151/50
60-57-1	Dieldrin	ND		19	16.6	88	18.7	16.2	87	2	10-157/54
72-54-8	4,4'-DDD	ND		19	17.1	90	18.7	16.7	89	2	10-157/52
72-55-9	4,4'-DDE	ND		19	15.8	83	18.7	15.7	84	1	10-155/49
50-29-3	4,4'-DDT	ND		19	15.5	82	18.7	15.5	83	0	10-187/49
72-20-8	Endrin	ND		19	17.4	92	18.7	17.8	95	2	14-154/53
1031-07-8	Endosulfan sulfate	ND		19	15.3	81	18.7	15.9	85	4	16-140/55
7421-93-4	Endrin aldehyde	ND		19	16.1	85	18.7	16.1	86	0	10-156/51
959-98-8	Endosulfan-I	ND		19	15.3	81	18.7	14.9	80	3	12-142/47
33213-65-9	Endosulfan-II	ND		19	15.5	82	18.7	15.7	84	1	10-150/52
76-44-8	Heptachlor	ND		19	15.9	84	18.7	19.2	103	19	10-159/49
1024-57-3	Heptachlor epoxide	ND		19	18.5	98	18.7	15.1	81	20	16-150/51
72-43-5	Methoxychlor	ND		19	14.8	78	18.7	14.7	79	1	10-166/52
53494-70-5	Endrin ketone	ND		19	17.1	90	18.7	16.4	88	4	10-171/52
8001-35-2	Toxaphene	ND			ND			ND		nc	50-150/30

CAS No.	Surrogate Recoveries	MS	MSD	JC19931-1	Limits
877-09-8	Tetrachloro-m-xylene	73%	73%	84%	24-136%
877-09-8	Tetrachloro-m-xylene	75%	80%	80%	24-136%
2051-24-3	Decachlorobiphenyl	70%	73%	85%	10-153%
2051-24-3	Decachlorobiphenyl	86%	86%	100%	10-153%

* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G4G1787-CC1778	**Injection Date:**	05/12/16
Lab File ID:	4G68169.D	**Injection Time:**	11:12
Instrument ID:	GC4G	**Method:**	SW846 8081B

	IS 1 AREA	RT	IS 2 AREA	RT
Check Std	365314206	2.06	432203467	1.79
Upper Limit [a]	730628412	2.56	864406934	2.29
Lower Limit [b]	182657103	1.56	216101734	1.29

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
OP93822-MB1	355298947	2.06	415484237	1.78
OP93822-BS1	367768536	2.07	427027510	1.80
JC19996-1	389544769	2.07	461592483	1.80
JC19996-4	382347509	2.06	436494078	1.78
JC19996-5	382831724	2.07	415919858	1.80
JC19996-6	372794150	2.07	431624087	1.79
OP93822-MS	389242031	2.06	435737037	1.80
OP93822-MSD	376149785	2.07	433861265	1.79
ZZZZZZ	384777045	2.06	424686959	1.80
ZZZZZZ	398933707	2.07	467365649	1.80
OP93485-LB22	383022680	2.07	433252868	1.80
OP93485-BS13	386649269	2.07	436086205	1.80
ZZZZZZ	409335388	2.07	489092192	1.80

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.

Semivolatile Internal Standard Area Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G1010-CC987	**Injection Date:**	05/13/16
Lab File ID:	6G35034.D	**Injection Time:**	09:21
Instrument ID:	GC6G	**Method:**	SW846 8081B

	IS 1 AREA	RT	IS 2 AREA	RT
Check Std	49527034	1.57	134085773	1.29
Upper Limit [a]	99054068	2.07	268171546	1.79
Lower Limit [b]	24763517	1.07	67042887	0.79

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
OP93857-MB1	55620982	1.56	153522112	1.29
OP93857-BS1	55143117	1.57	152633632	1.29
OP93857-BS13	56613016	1.57	156949817	1.29
JC19931-1	54984497	1.57	144551137	1.29
JC19951-1	50884308	1.56	135851435	1.29
OP93857-MS	55334485	1.57	157280003	1.30
OP93857-MSD	55729038	1.57	153308826	1.30
ZZZZZZ	46745597	1.57	111270589	1.30
ZZZZZZ	56520575	1.57	152137225	1.29
ZZZZZZ	49672848	1.57	124346051	1.29
ZZZZZZ	58935973	1.57	162169803	1.29
ZZZZZZ	48821512	1.57	120938265	1.30
ZZZZZZ	55430056	1.56	152950948	1.29
OP93870-BS1	52615384	1.57	141152600	1.29
ZZZZZZ	49399060	1.56	122007871	1.29
ZZZZZZ	57716165	1.57	161363098	1.30
ZZZZZZ	59502920	1.57	153945504	1.29
JC19996-2	58575842	1.57	160780596	1.29

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: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: G4G1778-DDT
Lab File ID: 4G67830.D
Instrument ID: GC4G
Injection Date: 05/02/16
Injection Time: 13:55

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	10193689	13113095
4,4'-DDE	4928073	5619299
4,4'-DDT	619882928	599939835
DDT Breakdown [a]	2.4 %	3 %
Endrin aldehyde	4622381	4711235
Endrin ketone	15245220	18350578
Endrin	357925656	324995826
Endrin Breakdown [b]	5.3 %	6.6 %

(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
G4G1778-IC1778	4G67832.D	05/02/16	14:26	00:31	Initial cal 1
G4G1778-IC1778	4G67833.D	05/02/16	14:41	00:46	Initial cal 2
G4G1778-IC1778	4G67834.D	05/02/16	14:56	01:01	Initial cal 5
G4G1778-IC1778	4G67835.D	05/02/16	15:11	01:16	Initial cal 10
G4G1778-ICC1778	4G67836.D	05/02/16	15:26	01:31	Initial cal 25
G4G1778-IC1778	4G67837.D	05/02/16	15:41	01:46	Initial cal 50
G4G1778-IC1778	4G67838.D	05/02/16	15:57	02:02	Initial cal 75
G4G1778-IC1778	4G67839.D	05/02/16	16:12	02:17	Initial cal 100
G4G1778-IC1778	4G67840.D	05/02/16	16:27	02:32	Initial cal 500
G4G1778-IC1778	4G67841.D	05/02/16	16:42	02:47	Initial cal 500
G4G1778-ICV1778	4G67842.D	05/02/16	16:57	03:02	Initial cal verification 25
G4G1778-ICV1778	4G67843.D	05/02/16	17:12	03:17	Initial cal verification 25
G4G1778-ICV1778	4G67844.D	05/02/16	17:27	03:32	Initial cal verification 500
G4G1778-ICV1778	4G67845.D	05/02/16	17:43	03:48	Initial cal verification 500

DDT/Endrin Breakdown Check

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: G4G1787-DDT
Lab File ID: 4G68168.D
Instrument ID: GC4G
Injection Date: 05/12/16
Injection Time: 10:57

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	3275396	5987164
4,4'-DDE	2236344	3851617
4,4'-DDT	562897678	650985115
DDT Breakdown [a]	1 %	1.5 %
Endrin aldehyde	4121460	2773256
Endrin ketone	16278492	12568249
Endrin	421228311	377192834
Endrin Breakdown [b]	4.6 %	3.9 %

(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
G4G1787-CC1778	4G68169.D	05/12/16	11:12	00:15	Continuing cal 50
OP93822-MB1	4G68171.D	05/12/16	11:43	00:46	Method Blank
OP93822-BS1	4G68172.D	05/12/16	11:58	01:01	Blank Spike
JC19996-1	4G68173.D	05/12/16	12:13	01:16	S-35D
JC19996-4	4G68174.D	05/12/16	12:28	01:31	S41D
JC19996-5	4G68175.D	05/12/16	12:43	01:46	S42D
JC19996-6	4G68176.D	05/12/16	12:58	02:01	RA20-GWS
OP93822-MS	4G68177.D	05/12/16	13:14	02:17	Matrix Spike
OP93822-MSD	4G68178.D	05/12/16	13:29	02:32	Matrix Spike Duplicate
ZZZZZZ	4G68179.D	05/12/16	13:50	02:53	(unrelated sample)
ZZZZZZ	4G68180.D	05/12/16	14:05	03:08	(unrelated sample)
OP93485-LB22	4G68181.D	05/12/16	14:20	03:23	Leachate Blank
OP93485-BS13	4G68182.D	05/12/16	14:35	03:38	Blank Spike
ZZZZZZ	4G68183.D	05/12/16	14:50	03:53	(unrelated sample)

DDT/Endrin Breakdown Check

Job Number: JC19996
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 JC19996)
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: JC19996
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: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: G6G1010-DDT
Lab File ID: 6G35033.D
Instrument ID: GC6G
Injection Date: 05/13/16
Injection Time: 09:04

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	913107	1118577
4,4'-DDE	873583	362417
4,4'-DDT	269957616	89052964
DDT Breakdown [a]	0.7 %	1.6 %
Endrin aldehyde	1118465	515702
Endrin ketone	6002712	2461035
Endrin	146264457	52675190
Endrin Breakdown [b]	4.6 %	5.3 %

(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
G6G1010-CC987	6G35034.D	05/13/16	09:21	00:17	Continuing cal 25
OP93857-MB1	6G35036.D	05/13/16	09:53	00:49	Method Blank
OP93857-BS1	6G35037.D	05/13/16	10:10	01:06	Blank Spike
OP93857-BS13	6G35038.D	05/13/16	10:26	01:22	Blank Spike
JC19931-1	6G35039.D	05/13/16	10:43	01:39	(used for QC only; not part of job JC19996)
JC19951-1	6G35040.D	05/13/16	10:59	01:55	(used for QC only; not part of job JC19996)
OP93857-MS	6G35041A.D	05/13/16	11:25	02:21	Matrix Spike
OP93857-MSD	6G35042.D	05/13/16	11:41	02:37	Matrix Spike Duplicate
ZZZZZZ	6G35043.D	05/13/16	11:57	02:53	(unrelated sample)
ZZZZZZ	6G35044.D	05/13/16	12:14	03:10	(unrelated sample)
ZZZZZZ	6G35045.D	05/13/16	12:30	03:26	(unrelated sample)
ZZZZZZ	6G35046.D	05/13/16	12:47	03:43	(unrelated sample)
ZZZZZZ	6G35047.D	05/13/16	13:03	03:59	(unrelated sample)
ZZZZZZ	6G35048.D	05/13/16	13:19	04:15	(unrelated sample)
OP93870-BS1	6G35053.D	05/13/16	13:49	04:45	Blank Spike
ZZZZZZ	6G35049A.D	05/13/16	14:40	05:36	(unrelated sample)
ZZZZZZ	6G35050.D	05/13/16	14:57	05:53	(unrelated sample)
ZZZZZZ	6G35051.D	05/13/16	15:13	06:09	(unrelated sample)
JC19996-2	6G35052.D	05/13/16	15:29	06:25	RA-20 (6.5-7.5)

GC Identification Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G4G1787-CC1778	**Injection Date:**	05/12/16
Lab File ID:	4G68169.D	**Injection Time:**	11:12
Instrument ID:	GC4G	**Method:**	SW846 8081B

Sample ID:	OP93822-BS1	**Injection Date:**	05/12/16
Lab File ID:	4G68172.D	**Injection Time:**	11:58
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1	4.42	4.42	0.25		ug/l	0.0
Aldrin	2 [a]	5.45	5.45	0.25		ug/l	
alpha-BHC	1	3.14	3.14	0.27		ug/l	0.0
alpha-BHC	2 [a]	3.86	3.86	0.27		ug/l	
beta-BHC	1 [a]	3.58	3.58	0.26		ug/l	3.8
beta-BHC	2	4.43	4.43	0.27		ug/l	
delta-BHC	1 [a]	4.05	4.05	0.24		ug/l	15.4
delta-BHC	2	4.86	4.86	0.28		ug/l	
gamma-BHC (Lindane)	1	3.49	3.48	0.27		ug/l	0.0
gamma-BHC (Lindane)	2 [a]	4.34	4.33	0.27		ug/l	
alpha-Chlordane	1 [a]	5.55	5.54	0.26		ug/l	3.8
alpha-Chlordane	2	6.84	6.84	0.27		ug/l	
gamma-Chlordane	1 [a]	5.37	5.36	0.27		ug/l	0.0
gamma-Chlordane	2	6.61	6.60	0.27		ug/l	
Dieldrin	1	6.07	6.07	0.28		ug/l	0.0
Dieldrin	2 [a]	7.39	7.39	0.28		ug/l	
4,4'-DDD	1	6.55	6.54	0.28		ug/l	0.0
4,4'-DDD	2 [a]	8.07	8.07	0.28		ug/l	
4,4'-DDE	1 [a]	5.67	5.67	0.25		ug/l	7.7
4,4'-DDE	2	7.09	7.10	0.27		ug/l	
4,4'-DDT	1 [a]	6.98	6.97	0.23		ug/l	19.6
4,4'-DDT	2	8.61	8.61	0.28		ug/l	
Endrin	1 [a]	6.41	6.40	0.30		ug/l	0.0
Endrin	2	7.91	7.91	0.30		ug/l	
Endosulfan sulfate	1	8.07	8.07	0.29		ug/l	0.0
Endosulfan sulfate	2 [a]	9.32	9.32	0.29		ug/l	
Endrin aldehyde	1	7.38	7.38	0.29		ug/l	0.0
Endrin aldehyde	2 [a]	8.84	8.84	0.29		ug/l	
Endrin ketone	1	8.54	8.53	0.28		ug/l	0.0
Endrin ketone	2 [a]	10.18	10.18	0.28		ug/l	
Endosulfan-I	1 [a]	5.73	5.73	0.26		ug/l	3.8
Endosulfan-I	2	6.94	6.94	0.27		ug/l	
Endosulfan-II	1	6.74	6.74	0.30		ug/l	6.9
Endosulfan-II	2 [a]	8.27	8.27	0.28		ug/l	
Heptachlor	1	3.80	3.79	0.27		ug/l	7.7
Heptachlor	2 [a]	4.96	4.96	0.25		ug/l	
Heptachlor epoxide	1	5.19	5.18	0.27		ug/l	0.0
Heptachlor epoxide	2 [a]	6.31	6.31	0.27		ug/l	
Methoxychlor	1 [a]	7.79	7.78	0.26		ug/l	3.8
Methoxychlor	2	9.82	9.82	0.27		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G1010-CC987	**Injection Date:**	05/13/16
Lab File ID:	6G35034.D	**Injection Time:**	09:21
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP93857-BS1	**Injection Date:**	05/13/16
Lab File ID:	6G35037.D	**Injection Time:**	10:10
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	3.67	3.67	12.8		ug/kg	4.6
Aldrin	2	4.69	4.69	13.4		ug/kg	
alpha-BHC	1	2.48	2.48	13.4		ug/kg	0.7
alpha-BHC	2 [a]	3.16	3.16	13.3		ug/kg	
beta-BHC	1	2.88	2.88	13.8		ug/kg	8.3
beta-BHC	2 [a]	3.70	3.70	12.7		ug/kg	
delta-BHC	1 [a]	3.07	3.07	12.7		ug/kg	2.3
delta-BHC	2	4.12	4.12	13.0		ug/kg	
gamma-BHC (Lindane)	1 [a]	2.80	2.80	13.3		ug/kg	0.7
gamma-BHC (Lindane)	2	3.61	3.61	13.4		ug/kg	
alpha-Chlordane	1 [a]	4.77	4.77	12.6		ug/kg	6.2
alpha-Chlordane	2	6.11	6.11	13.4		ug/kg	
gamma-Chlordane	1 [a]	4.59	4.59	12.5		ug/kg	6.9
gamma-Chlordane	2	5.87	5.87	13.4		ug/kg	
Dieldrin	1	5.30	5.30	13.3		ug/kg	0.8
Dieldrin	2 [a]	6.68	6.68	13.2		ug/kg	
4,4'-DDD	1	5.79	5.79	13.0		ug/kg	0.0
4,4'-DDD	2 [a]	7.44	7.45	13.0		ug/kg	
4,4'-DDE	1 [a]	4.91	4.90	13.0		ug/kg	3.0
4,4'-DDE	2	6.41	6.41	13.4		ug/kg	
4,4'-DDT	1 [a]	6.24	6.24	12.6		ug/kg	5.4
4,4'-DDT	2	8.02	8.02	13.3		ug/kg	
Endrin	1 [a]	5.64	5.64	13.8		ug/kg	0.0
Endrin	2	7.22	7.22	13.8		ug/kg	
Endosulfan sulfate	1	7.38	7.38	13.9		ug/kg	3.7
Endosulfan sulfate	2 [a]	8.75	8.75	13.4		ug/kg	
Endrin aldehyde	1	6.65	6.65	13.1		ug/kg	2.3
Endrin aldehyde	2 [a]	8.23	8.23	12.8		ug/kg	
Endosulfan-I	1 [a]	4.96	4.95	12.5		ug/kg	3.9
Endosulfan-I	2	6.21	6.21	13.0		ug/kg	
Endosulfan-II	1	5.98	5.98	13.1		ug/kg	2.3
Endosulfan-II	2 [a]	7.61	7.61	12.8		ug/kg	
Heptachlor	1	3.32	3.32	12.9		ug/kg	1.6
Heptachlor	2 [a]	4.21	4.21	12.7		ug/kg	
Heptachlor epoxide	1 [a]	4.42	4.42	12.9		ug/kg	3.8
Heptachlor epoxide	2	5.57	5.57	13.4		ug/kg	
Methoxychlor	1	7.10	7.11	12.9		ug/kg	0.8
Methoxychlor	2 [a]	9.40	9.40	12.8		ug/kg	
Endrin ketone	1	7.86	7.86	13.6		ug/kg	4.5
Endrin ketone	2 [a]	9.79	9.79	13.0		ug/kg	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G4G1787-CC1778	**Injection Date:**	05/12/16
Lab File ID:	4G68169.D	**Injection Time:**	11:12
Instrument ID:	GC4G	**Method:**	SW846 8081B

Sample ID:	OP93822-MS	**Injection Date:**	05/12/16
Lab File ID:	4G68177.D	**Injection Time:**	13:14
Client ID:	Matrix Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	4.42	4.42	0.55		ug/l	3.7
Aldrin	2	5.45	5.45	0.53		ug/l	
alpha-BHC	1 [a]	3.14	3.14	0.59		ug/l	8.8
alpha-BHC	2	3.86	3.86	0.54		ug/l	
beta-BHC	1 [a]	3.59	3.58	0.57		ug/l	1.8
beta-BHC	2	4.43	4.43	0.56		ug/l	
delta-BHC	1 [a]	4.05	4.05	0.54		ug/l	5.4
delta-BHC	2	4.86	4.86	0.57		ug/l	
gamma-BHC (Lindane)	1 [a]	3.49	3.48	0.59		ug/l	7.0
gamma-BHC (Lindane)	2	4.34	4.33	0.55		ug/l	
alpha-Chlordane	1 [a]	5.55	5.54	0.61		ug/l	8.5
alpha-Chlordane	2	6.84	6.84	0.56		ug/l	
gamma-Chlordane	1 [a]	5.37	5.36	0.72		ug/l	23.3
gamma-Chlordane	2	6.61	6.60	0.57		ug/l	
Dieldrin	1 [a]	6.07	6.07	0.62		ug/l	5.0
Dieldrin	2	7.39	7.39	0.59		ug/l	
4,4'-DDD	1 [a]	6.55	6.54	0.62		ug/l	3.3
4,4'-DDD	2	8.07	8.07	0.60		ug/l	
4,4'-DDE	1 [a]	5.67	5.67	0.55		ug/l	5.3
4,4'-DDE	2	7.10	7.10	0.58		ug/l	
4,4'-DDT	1 [a]	6.98	6.97	0.56		ug/l	6.9
4,4'-DDT	2	8.61	8.61	0.60		ug/l	
Endrin	1 [a]	6.41	6.40	0.67		ug/l	6.2
Endrin	2	7.91	7.91	0.63		ug/l	
Endosulfan sulfate	1 [a]	8.07	8.07	0.64		ug/l	8.1
Endosulfan sulfate	2	9.32	9.32	0.59		ug/l	
Endrin aldehyde	1 [a]	7.38	7.38	0.65		ug/l	8.0
Endrin aldehyde	2	8.84	8.84	0.60		ug/l	
Endrin ketone	1 [a]	8.54	8.53	0.62		ug/l	8.4
Endrin ketone	2	10.18	10.18	0.57		ug/l	
Endosulfan-I	1 [a]	5.73	5.73	0.58		ug/l	3.5
Endosulfan-I	2	6.94	6.94	0.56		ug/l	
Endosulfan-II	1 [a]	6.75	6.74	0.67		ug/l	12.7
Endosulfan-II	2	8.27	8.27	0.59		ug/l	
Heptachlor	1 [a]	3.80	3.79	0.59		ug/l	8.8
Heptachlor	2	4.96	4.96	0.54		ug/l	
Heptachlor epoxide	1 [a]	5.18	5.18	0.61		ug/l	44.6
Heptachlor epoxide	2	6.31	6.31	0.96		ug/l	
Methoxychlor	1 [a]	7.79	7.78	0.60		ug/l	3.4
Methoxychlor	2	9.82	9.82	0.58		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G1010-CC987	**Injection Date:**	05/13/16
Lab File ID:	6G35034.D	**Injection Time:**	09:21
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP93857-MS	**Injection Date:**	05/13/16
Lab File ID:	6G35041A.D	**Injection Time:**	11:25
Client ID:	Matrix Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	3.68	3.67	16.3		ug/kg	0.6
Aldrin	2	4.69	4.69	16.2		ug/kg	
alpha-BHC	1 [a]	2.49	2.48	15.8		ug/kg	3.1
alpha-BHC	2	3.16	3.16	16.3		ug/kg	
beta-BHC	1 [a]	2.88	2.88	20.6		ug/kg	11.3
beta-BHC	2	3.70	3.70	18.4		ug/kg	
delta-BHC	1 [a]	3.08	3.07	17.3		ug/kg	4.7
delta-BHC	2	4.12	4.12	16.5		ug/kg	
gamma-BHC (Lindane)	1 [a]	2.80	2.80	17.9		ug/kg	1.1
gamma-BHC (Lindane)	2	3.61	3.61	17.7		ug/kg	
alpha-Chlordane	1 [a]	4.78	4.77	15.3		ug/kg	13.4
alpha-Chlordane	2	6.12	6.11	17.5		ug/kg	
gamma-Chlordane	1 [a]	4.60	4.59	14.7		ug/kg	66.1
gamma-Chlordane	2	5.87	5.87	29.2		ug/kg	
Dieldrin	1 [a]	5.31	5.30	16.6		ug/kg	1.2
Dieldrin	2	6.68	6.68	16.4		ug/kg	
4,4'-DDD	1 [a]	5.80	5.79	17.1		ug/kg	1.8
4,4'-DDD	2	7.44	7.45	16.8		ug/kg	
4,4'-DDE	1 [a]	4.91	4.90	15.8		ug/kg	30.1
4,4'-DDE	2	6.41	6.41	21.4		ug/kg	
4,4'-DDT	1 [a]	6.25	6.24	15.5		ug/kg	22.9
4,4'-DDT	2	8.03	8.02	19.5		ug/kg	
Endrin	1 [a]	5.65	5.64	17.4		ug/kg	1.7
Endrin	2	7.23	7.22	17.1		ug/kg	
Endosulfan sulfate	1 [a]	7.39	7.38	15.3		ug/kg	14.0
Endosulfan sulfate	2	8.75	8.75	17.6		ug/kg	
Endrin aldehyde	1 [a]	6.66	6.65	16.1		ug/kg	5.4
Endrin aldehyde	2	8.24	8.23	17.0		ug/kg	
Endosulfan-I	1 [a]	4.96	4.95	15.3		ug/kg	5.7
Endosulfan-I	2	6.21	6.21	16.2		ug/kg	
Endosulfan-II	1 [a]	5.99	5.98	15.5		ug/kg	0.6
Endosulfan-II	2	7.61	7.61	15.4		ug/kg	
Heptachlor	1 [a]	3.33	3.32	15.9		ug/kg	9.0
Heptachlor	2	4.22	4.21	17.4		ug/kg	
Heptachlor epoxide	1 [a]	4.43	4.42	18.5		ug/kg	7.3
Heptachlor epoxide	2	5.57	5.57	17.2		ug/kg	
Methoxychlor	1 [a]	7.11	7.11	14.8		ug/kg	14.4
Methoxychlor	2	9.40	9.40	17.1		ug/kg	
Endrin ketone	1 [a]	7.86	7.86	17.1		ug/kg	6.6
Endrin ketone	2	9.80	9.79	16.0		ug/kg	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G4G1787-CC1778	**Injection Date:**	05/12/16
Lab File ID:	4G68169.D	**Injection Time:**	11:12
Instrument ID:	GC4G	**Method:**	SW846 8081B

Sample ID:	OP93822-MSD	**Injection Date:**	05/12/16
Lab File ID:	4G68178.D	**Injection Time:**	13:29
Client ID:	Matrix Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	4.42	4.42	0.50		ug/l	0.0
Aldrin	2	5.45	5.45	0.50		ug/l	
alpha-BHC	1 [a]	3.14	3.14	0.53		ug/l	5.8
alpha-BHC	2	3.86	3.86	0.50		ug/l	
beta-BHC	1 [a]	3.59	3.58	0.51		ug/l	3.8
beta-BHC	2	4.43	4.43	0.53		ug/l	
delta-BHC	1 [a]	4.05	4.05	0.49		ug/l	7.8
delta-BHC	2	4.86	4.86	0.53		ug/l	
gamma-BHC (Lindane)	1 [a]	3.49	3.48	0.53		ug/l	1.9
gamma-BHC (Lindane)	2	4.34	4.33	0.52		ug/l	
alpha-Chlordane	1 [a]	5.55	5.54	0.56		ug/l	7.4
alpha-Chlordane	2	6.84	6.84	0.52		ug/l	
gamma-Chlordane	1 [a]	5.37	5.36	0.66		ug/l	20.0
gamma-Chlordane	2	6.61	6.60	0.54		ug/l	
Dieldrin	1 [a]	6.07	6.07	0.56		ug/l	1.8
Dieldrin	2	7.39	7.39	0.55		ug/l	
4,4'-DDD	1 [a]	6.55	6.54	0.55		ug/l	3.7
4,4'-DDD	2	8.07	8.07	0.53		ug/l	
4,4'-DDE	1 [a]	5.67	5.67	0.50		ug/l	7.7
4,4'-DDE	2	7.10	7.10	0.54		ug/l	
4,4'-DDT	1 [a]	6.98	6.97	0.51		ug/l	9.3
4,4'-DDT	2	8.61	8.61	0.56		ug/l	
Endrin	1 [a]	6.41	6.40	0.60		ug/l	3.4
Endrin	2	7.91	7.91	0.58		ug/l	
Endosulfan sulfate	1 [a]	8.07	8.07	0.57		ug/l	3.6
Endosulfan sulfate	2	9.32	9.32	0.55		ug/l	
Endrin aldehyde	1 [a]	7.38	7.38	0.57		ug/l	1.8
Endrin aldehyde	2	8.84	8.84	0.56		ug/l	
Endrin ketone	1 [a]	8.54	8.53	0.56		ug/l	5.5
Endrin ketone	2	10.18	10.18	0.53		ug/l	
Endosulfan-I	1 [a]	5.73	5.73	0.52		ug/l	0.0
Endosulfan-I	2	6.94	6.94	0.52		ug/l	
Endosulfan-II	1 [a]	6.74	6.74	0.61		ug/l	12.2
Endosulfan-II	2	8.27	8.27	0.54		ug/l	
Heptachlor	1 [a]	3.80	3.79	0.53		ug/l	3.8
Heptachlor	2	4.96	4.96	0.51		ug/l	
Heptachlor epoxide	1 [a]	5.19	5.18	0.56		ug/l	47.6
Heptachlor epoxide	2	6.31	6.31	0.91		ug/l	
Methoxychlor	1 [a]	7.79	7.78	0.54		ug/l	0.0
Methoxychlor	2	9.82	9.82	0.54		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G1010-CC987	**Injection Date:**	05/13/16
Lab File ID:	6G35034.D	**Injection Time:**	09:21
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP93857-MSD	**Injection Date:**	05/13/16
Lab File ID:	6G35042.D	**Injection Time:**	11:41
Client ID:	Matrix Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	3.67	3.67	17.2		ug/kg	6.6
Aldrin	2	4.69	4.69	16.1		ug/kg	
alpha-BHC	1 [a]	2.48	2.48	15.8		ug/kg	1.3
alpha-BHC	2	3.16	3.16	15.6		ug/kg	
beta-BHC	1 [a]	2.88	2.88	16.4		ug/kg	8.9
beta-BHC	2	3.70	3.70	15.0		ug/kg	
delta-BHC	1 [a]	3.07	3.07	18.9		ug/kg	10.6
delta-BHC	2	4.12	4.12	17.0		ug/kg	
gamma-BHC (Lindane)	1 [a]	2.80	2.80	17.7		ug/kg	4.6
gamma-BHC (Lindane)	2	3.61	3.61	16.9		ug/kg	
alpha-Chlordane	1 [a]	4.77	4.77	15.3		ug/kg	3.2
alpha-Chlordane	2	6.11	6.11	15.8		ug/kg	
gamma-Chlordane	1 [a]	4.59	4.59	15.0		ug/kg	101.0
gamma-Chlordane	2	5.87	5.87	45.6		ug/kg	
Dieldrin	1 [a]	5.30	5.30	16.2		ug/kg	3.1
Dieldrin	2	6.68	6.68	15.7		ug/kg	
4,4'-DDD	1 [a]	5.79	5.79	16.7		ug/kg	0.6
4,4'-DDD	2	7.44	7.45	16.6		ug/kg	
4,4'-DDE	1 [a]	4.90	4.90	15.7		ug/kg	1.9
4,4'-DDE	2	6.41	6.41	16.0		ug/kg	
4,4'-DDT	1 [a]	6.24	6.24	15.5		ug/kg	4.4
4,4'-DDT	2	8.02	8.02	16.2		ug/kg	
Endrin	1 [a]	5.64	5.64	17.8		ug/kg	9.4
Endrin	2	7.22	7.22	16.2		ug/kg	
Endosulfan sulfate	1 [a]	7.38	7.38	15.9		ug/kg	3.7
Endosulfan sulfate	2	8.75	8.75	16.5		ug/kg	
Endrin aldehyde	1 [a]	6.65	6.65	16.1		ug/kg	4.4
Endrin aldehyde	2	8.23	8.23	15.4		ug/kg	
Endosulfan-I	1 [a]	4.96	4.95	14.9		ug/kg	2.6
Endosulfan-I	2	6.21	6.21	15.3		ug/kg	
Endosulfan-II	1 [a]	5.98	5.98	15.7		ug/kg	0.6
Endosulfan-II	2	7.61	7.61	15.8		ug/kg	
Heptachlor	1 [a]	3.32	3.32	19.2		ug/kg	3.2
Heptachlor	2	4.21	4.21	18.6		ug/kg	
Heptachlor epoxide	1 [a]	4.42	4.42	15.1		ug/kg	0.0
Heptachlor epoxide	2	5.56	5.57	15.1		ug/kg	
Methoxychlor	1 [a]	7.10	7.11	14.7		ug/kg	7.2
Methoxychlor	2	9.40	9.40	15.8		ug/kg	
Endrin ketone	1 [a]	7.86	7.86	16.4		ug/kg	4.4
Endrin ketone	2	9.79	9.79	15.7		ug/kg	

(a) QC results reported from this column.

Semivolatile Surrogate Recovery Summary

Job Number: JC19996
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]
JC19996-1	4G68173.D	92	94	78	71
JC19996-4	4G68174.D	87	86	67	58
JC19996-5	4G68175.D	84	80	87	71
JC19996-6	4G68176.D	92	92	55	47
OP93822-BS1	4G68172.D	96	95	89	79
OP93822-MB1	4G68171.D	101	102	74	66
OP93822-MS	4G68177.D	99	96	84	69
OP93822-MSD	4G68178.D	92	91	73	61

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

Semivolatile Surrogate Recovery Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Method: SW846 8081B **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]	S2 [a]	S2 [b]
JC19996-2	6G35052.D	81	80	83	88
OP93857-BS1	6G35037.D	70	70	71	75
OP93857-MB1	6G35036.D	72	72	73	83
OP93857-MS	6G35041A.D	73	75	70	86
OP93857-MSD	6G35042.D	73	80	73	86

Surrogate Compounds	Recovery Limits
S1 = Tetrachloro-m-xylene	24-136%
S2 = Decachlorobiphenyl	10-153%

(a) Recovery from GC signal #1
(b) Recovery from GC signal #2

GC Surrogate Retention Time Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G4G1787-CC1778	**Injection Date:**	05/12/16
Lab File ID:	4G68169.D	**Injection Time:**	11:12
Instrument ID:	GC4G	**Method:**	SW846 8081B

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	2.57	3.10	10.23	11.64

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP93822-MB1	4G68171.D	05/12/16	11:43	2.57	3.09	10.23	11.64
OP93822-BS1	4G68172.D	05/12/16	11:58	2.57	3.10	10.23	11.64
JC19996-1	4G68173.D	05/12/16	12:13	2.58	3.10	10.23	11.64
JC19996-4	4G68174.D	05/12/16	12:28	2.57	3.09	10.23	11.64
JC19996-5	4G68175.D	05/12/16	12:43	2.58	3.10	10.23	11.64
JC19996-6	4G68176.D	05/12/16	12:58	2.58	3.10	10.23	11.64
OP93822-MS	4G68177.D	05/12/16	13:14	2.58	3.10	10.23	11.64
OP93822-MSD	4G68178.D	05/12/16	13:29	2.58	3.10	10.23	11.64
ZZZZZZ	4G68179.D	05/12/16	13:50	2.59	3.10	10.24	11.64
ZZZZZZ	4G68180.D	05/12/16	14:05	2.58	3.10	10.24	11.64
OP93485-LB22	4G68181.D	05/12/16	14:20	2.58	3.10	10.23	11.64
OP93485-BS13	4G68182.D	05/12/16	14:35	2.58	3.10	10.23	11.64
ZZZZZZ	4G68183.D	05/12/16	14:50	2.58	3.10	10.23	11.64

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G1010-CC987	**Injection Date:**	05/13/16
Lab File ID:	6G35034.D	**Injection Time:**	09:21
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
OP93857-MB1	6G35036.D	05/13/16	09:53	1.97	2.46	9.89	11.74
OP93857-BS1	6G35037.D	05/13/16	10:10	1.97	2.46	9.89	11.74
OP93857-BS13	6G35038.D	05/13/16	10:26	1.97	2.46	9.89	11.74
JC19931-1	6G35039.D	05/13/16	10:43	1.97	2.46	9.89	11.73
JC19951-1	6G35040.D	05/13/16	10:59	1.97	2.46	9.89	11.74
OP93857-MS	6G35041A.D	05/13/16	11:25	1.98	2.46	9.90	11.74
OP93857-MSD	6G35042.D	05/13/16	11:41	1.97	2.46	9.89	11.74
ZZZZZZ	6G35043.D	05/13/16	11:57	1.97	2.46	9.89	11.74
ZZZZZZ	6G35044.D	05/13/16	12:14	1.97	2.46	9.89	11.74
ZZZZZZ	6G35045.D	05/13/16	12:30	1.97	2.46	9.89	11.74
ZZZZZZ	6G35046.D	05/13/16	12:47	1.97	2.46	9.89	11.74
ZZZZZZ	6G35047.D	05/13/16	13:03	1.97	2.46	9.89	11.74
ZZZZZZ	6G35048.D	05/13/16	13:19	1.97	2.46	9.89	11.74
OP93870-BS1	6G35053.D	05/13/16	13:49	1.97	2.46	9.89	11.74
ZZZZZZ	6G35049A.D	05/13/16	14:40	1.97	2.46	9.89	11.73
ZZZZZZ	6G35050.D	05/13/16	14:57	1.97	2.46	9.89	11.74
ZZZZZZ	6G35051.D	05/13/16	15:13	1.97	2.46	9.89	11.74
JC19996-2	6G35052.D	05/13/16	15:29	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: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G4G1778-ICC1778
Lab FileID: 4G67836.D

Response Factor Report GC4G

Method : C:\MSDCHEM\1\METHODS\4PST1778.M (ChemStation Integrator)
Title : PEST/PCB
Last Update : Tue May 03 15:20:09 2016
Response via : Initial Calibration

Calibration Files
2 =4g67833.D 5 =4g67834.D 10 =4g67835.D 25 =4g67836.D
50 =4g67837.D 100 =4g67839.D 1 =4g67832.D 75 =4g67838.D

Compound	2	5	10	25	50	100	1	75	Avg	%RSD
1) I 1-bromo-2-nitrobenzen	ISTD									
2) Tetrachloro-	0.874	0.852	0.846	0.862	0.858	0.889	0.860	0.854	0.862	1.59
3) alpha-BHC	1.097	1.061	1.094	1.157	1.230	1.321	1.166	1.312	1.180	8.42
4) gamma-BHC	0.955	0.931	0.975	1.022	1.086	1.165	0.960	1.159	1.032	9.08
5) Heptachlor	0.867	0.848	0.880	0.938	1.060	1.151	0.871	1.133	0.968	13.05
6) beta-BHC	0.452	0.450	0.484	0.485	0.524	0.537	0.475	0.547	0.494	7.54
7) delta-BHC	0.866	0.845	0.875	0.904	0.988	1.071	0.917	1.051	0.940	9.20
8) Aldrin	0.916	0.887	0.925	0.971	1.033	1.114	0.953	1.106	0.988	8.78
9) Heptachlor E	0.823	0.784	0.824	0.860	0.931	1.000	0.859	0.982	0.883	8.94
10) gamma-Chlord	0.789	0.793	0.807	0.873	0.941	1.026	0.824	1.007	0.883	10.97
11) alpha-Chlord	0.960	0.876	0.862	0.897	0.952	1.020	1.036	1.008	0.952	7.07
12) Endosulfan I	0.941	0.886	0.899	0.940	0.992	1.056	1.065	1.050	0.979	7.39
13) 4,4'-DDE	0.876	0.782	0.755	0.811	0.886	0.979	1.016	0.954	0.882	10.82
14) Dieldrin	0.799	0.819	0.852	0.923	1.004	1.097	0.853	1.077	0.928	12.65
15) Endrin	0.853	0.769	0.804	0.849	0.923	1.009	0.861	1.000	0.883	9.85
16) 4,4'-DDD	0.689	0.624	0.657	0.729	0.790	0.881	0.747	0.867	0.748	12.49
17) Endosulfan I	0.782	0.750	0.784	0.850	0.910	1.002	0.727	0.995	0.850	12.70
18) 4,4'-DDT	0.360	0.374	0.438	0.520	0.606	0.722	0.369	0.685	0.509	28.81
----- Quadratic regression ----- Coefficient = 0.9995										
Response Ratio = -0.01241 + 0.51421 *A + 0.10940 *A^2										
19) Endrin Aldeh	0.669	0.627	0.665	0.702	0.755	0.796	0.727	0.800	0.718	8.83
20) Endosulfan S	0.743	0.697	0.731	0.763	0.812	0.863	0.768	0.858	0.779	7.70
21) Methoxychlor	0.287	0.262	0.310	0.337	0.370	0.402	0.302	0.396	0.333	15.53
22) Mirex	0.757	0.744	0.768	0.767	0.781	0.797	0.793	0.808	0.777	2.77
23) Endrin Keton	0.871	0.787	0.839	0.904	0.969	1.026	0.783	1.030	0.901	10.98
24) Decachlorobi	0.832	0.761	0.795	0.807	0.799	0.835	0.833	0.837	0.812	3.31
25) I 1-bromo-2-nitrobenzen	ISTD									
26) Toxaphene{A}					0.032				0.032	0.00
27) Toxaphene{B}					0.033				0.033	0.00
28) Toxaphene{C}					0.045				0.045	0.00
29) Toxaphene{D}					0.030				0.030	0.00
30) Toxaphene{E}					0.020				0.020	0.00
31) I 1-bromo-2-nitrobenzen	ISTD									
32) Chlordane {A					0.028				0.028	0.00
33) Chlordane {B					0.036				0.036	0.00
34) Chlordane {C					0.122				0.122	0.00
35) Chlordane {D					0.199				0.199	0.00
36) Chlordane {E					0.030				0.030	0.00

Signal #2

1) I 1-bromo-2-nitrobenzen ----------ISTD----------

Initial Calibration Summary

Job Number: JC19996 **Sample:** G4G1778-ICC1778
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4G67836.D
Project: BMSMC, Building 5 Area, PR

2)	Tetrachloro-	0.938	0.839	0.878	0.882	0.874	0.911	0.871	0.851	0.881	3.58
3)	alpha-BHC	1.239	1.156	1.205	1.261	1.307	1.406	1.375	1.349	1.287	6.75
4)	gamma-BHC	1.114	1.064	1.098	1.127	1.168	1.253	1.127	1.203	1.144	5.33
5)	Heptachlor	1.156	1.125	1.139	1.156	1.175	1.251	1.217	1.210	1.179	3.67
6)	beta-BHC	0.529	0.506	0.510	0.508	0.514	0.531	0.532	0.516	0.518	2.12
7)	delta-BHC	1.054	0.990	1.028	1.067	1.105	1.201	0.997	1.100	1.068	6.42
8)	Aldrin	1.213	1.077	1.089	1.113	1.135	1.208	1.287	1.166	1.161	6.17
9)	Heptachlor E	1.092	0.992	1.009	1.012	1.022	1.072	1.151	1.039	1.049	5.06
10)	gamma-Chlord	1.019	0.969	0.988	0.999	1.020	1.082	0.985	1.044	1.013	3.60
11)	alpha-Chlord	1.109	0.964	0.983	0.978	0.984	1.040	1.111	0.972	1.018	6.05
12)	Endosulfan I	1.029	0.936	0.948	0.947	0.961	1.011	0.963	0.978	0.972	3.37
13)	4,4'-DDE	1.001	0.964	0.989	1.003	1.028	1.092	0.991	1.052	1.015	4.00
14)	Dieldrin	0.962	0.946	0.977	1.008	1.037	1.105	1.008	1.064	1.013	5.27
15)	Endrin	0.868	0.859	0.890	0.893	0.918	0.978	0.881	0.940	0.903	4.42
16)	4,4'-DDD	0.831	0.768	0.787	0.808	0.831	0.886	0.797	0.852	0.820	4.64
17)	Endosulfan I	0.893	0.848	0.879	0.880	0.898	0.944	0.890	0.911	0.893	3.09
18)	4,4'-DDT	0.628	0.638	0.680	0.713	0.749	0.825	0.720	0.782	0.717	9.51
19)	Endrin Aldeh	0.672	0.654	0.664	0.671	0.673	0.705	0.724	0.665	0.678	3.46
20)	Endosulfan S	0.773	0.737	0.730	0.728	0.732	0.761	0.778	0.739	0.747	2.71
21)	Methoxychlor	0.413	0.381	0.383	0.378	0.379	0.403	0.389	0.390	0.390	3.21
22)	Mirex	0.661	0.603	0.624	0.598	0.598	0.609	0.723	0.599	0.627	7.09
23)	Endrin Keton	0.801	0.766	0.792	0.806	0.830	0.870	0.850	0.848	0.820	4.27
24)	Decachlorobi	0.672	0.614	0.626	0.613	0.603	0.604	0.661	0.602	0.625	4.39

25) I 1-bromo-2-nitrobenzen ----------ISTD----------

26)	Toxaphene{A}	0.018	0.018	0.00
27)	Toxaphene{B}	0.021	0.021	0.00
28)	Toxaphene{C}	0.036	0.036	0.00
29)	Toxaphene{D}	0.021	0.021	0.00
30)	Toxaphene{E}	0.017	0.017	0.00

31) I 1-bromo-2-nitrobenzen ----------ISTD----------

32)	Chlordane {A	0.037	0.037	0.00
33)	Chlordane {B	0.035	0.035	0.00
34)	Chlordane {C	0.128	0.128	0.00
35)	Chlordane {D	0.208	0.208	0.00
36)	Chlordane {E	0.033	0.033	0.00

(#) = Out of Range ### Number of calibration levels exceeded format ###

4PST1778.M Tue May 03 15:34:49 2016 RPT1

10.9.1

10

Initial Calibration Verification

Job Number: JC19996 **Sample:** G4G1778-ICV1778
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4G67842.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\4G1778\4g67842.D\ECD1A.ch  Vial: 13
Signal #2 : C:\msdchem\1\DATA\4G1778\4g67842.D\ECD2B.ch
Acq On    :  2 May 2016   4:57 pm                    Operator: dharas
Sample    : icv1778-25                               Inst    : GC4G
Misc      : op93464,g4g1778,100,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\4PST1778.M (ChemStation Integrator)
Title        : PEST/PCB
Last Update  : Tue May 03 15:20:09 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	104	0.00	1.77- 1.83
2	SAB	Tetrachloro-m-xylene	0.862	0.804	6.7	97	0.00	2.56- 2.62
3	A	alpha-BHC	1.180	1.032	12.5	93	0.00	3.13- 3.19
4	MA	gamma-BHC	1.032	0.946	8.3	96	0.00	3.47- 3.53
5	MA	Heptachlor	0.968	0.938	3.1	104	0.00	3.79- 3.85
6	B	beta-BHC	0.494	0.477	3.4	102	0.01	3.58- 3.64
7	B	delta-BHC	0.940	0.845	10.1	97	0.00	4.03- 4.09
8	MB	Aldrin	0.988	0.890	9.9	95	0.00	4.41- 4.47
9	B	Heptachlor Epoxide	0.883	0.810	8.3	98	0.00	5.18- 5.24
10	B	gamma-Chlordane	0.883	0.836	5.3	99	0.00	5.36- 5.42
11	B	alpha-Chlordane	0.952	0.832	12.6	96	0.00	5.54- 5.60
12	A	Endosulfan I	0.979	0.873	10.8	96	0.00	5.72- 5.78
13	B	4,4'-DDE	0.882	0.722	18.1	92	0.00	5.67- 5.73
14	MA	Dieldrin	0.928	0.857	7.7	96	0.00	6.06- 6.12
15	MA	Endrin	0.883	0.810	8.3	99	0.00	6.40- 6.46
16	A	4,4'-DDD	0.748	0.667	10.8	95	0.01	6.55- 6.61
17	B	Endosulfan II	0.850	0.781	8.1	95	0.00	6.74- 6.80
		----------	True	Calc.	% Drift		----------	
18	MA	4,4'-DDT	25.000	21.374	14.5	91	0.00	6.97- 7.03
		----------	AvgRF	CCRF	% Dev		----------	
19	B	Endrin Aldehyde	0.718	0.719	-0.1	106	0.00	7.38- 7.44
20	B	Endosulfan Sulfate	0.779	0.707	9.2	96	0.00	8.07- 8.13
21	A	Methoxychlor	0.333	0.298	10.5	92	0.00	7.79- 7.85
23	B	Endrin Ketone	0.901	0.832	7.7	95	0.00	8.54- 8.60
24	SA	Decachlorobiphenyl	0.812	0.720	11.3	93	0.00	10.22-10.28

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	105	0.00	2.04- 2.10
2	SAB	Tetrachloro-m-xylene	0.881	0.786	10.8	94	0.00	3.08- 3.14
3	A	alpha-BHC	1.287	1.115	13.4	93	0.00	3.84- 3.90
4	MA	gamma-BHC	1.144	1.014	11.4	95	0.00	4.32- 4.38
5	MA	Heptachlor	1.179	1.029	12.7	94	0.00	4.95- 5.01
6	B	beta-BHC	0.518	0.465	10.2	96	0.00	4.42- 4.48
7	B	delta-BHC	1.068	0.975	8.7	96	0.00	4.85- 4.91
8	MB	Aldrin	1.161	0.986	15.1	93	0.00	5.44- 5.50
9	B	Heptachlor Epoxide	1.049	0.921	12.2	96	0.00	6.30- 6.36
10	B	gamma-Chlordane	1.013	0.919	9.3	97	0.00	6.60- 6.66

Initial Calibration Verification

Job Number: JC19996 **Sample:** G4G1778-ICV1778
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4G67842.D
Project: BMSMC, Building 5 Area, PR

11	B	alpha-Chlordane	1.018	0.869	14.6	94	0.00	6.83- 6.89
12	A	Endosulfan I	0.972	0.843	13.3	94	0.00	6.94- 7.00
13	B	4,4'-DDE	1.015	0.921	9.3	97	0.00	7.09- 7.15
14	MA	Dieldrin	1.013	0.921	9.1	96	0.00	7.38- 7.44
15	MA	Endrin	0.903	0.837	7.3	99	0.00	7.91- 7.97
16	A	4,4'-DDD	0.820	0.752	8.3	98	0.00	8.07- 8.13
17	B	Endosulfan II	0.893	0.804	10.0	96	0.00	8.26- 8.32
18	MA	4,4'-DDT	0.717	0.632	11.9	93	0.00	8.61- 8.67
19	B	Endrin Aldehyde	0.678	0.620	8.6	97	0.00	8.84- 8.90
20	B	Endosulfan Sulfate	0.747	0.658	11.9	95	0.00	9.32- 9.38
21	A	Methoxychlor	0.390	0.340	12.8	95	0.00	9.82- 9.88
23	B	Endrin Ketone	0.820	0.720	12.2	94	0.00	10.17-10.23
24	SA	Decachlorobiphenyl	0.625	0.593	5.1	102	0.00	11.63-11.69

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4g67836.D 4PST1778.M Tue May 03 15:57:39 2016 RPT1

10.9.2

10

Initial Calibration Verification

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G4G1778-ICV1778
Lab FileID: 4G67843.D

```
                    Evaluate Continuing Calibration Report

 Signal #1 : C:\msdchem\1\DATA\4G1778\4g67843.D\ECD1A.ch  Vial: 14
 Signal #2 : C:\msdchem\1\DATA\4G1778\4g67843.D\ECD2B.ch
 Acq On    :  2 May 2016   5:12 pm                    Operator: dharas
 Sample    : icv1778-25                               Inst    : GC4G
 Misc      : op93464,g4g1778,100,,,10,1               Multiplr: 1.00
 IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

 Method       : C:\MSDCHEM\1\METHODS\4PST1778.M (ChemStation Integrator)
 Title        : PEST/PCB
 Last Update  : Tue May 03 15:20:09 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  110   0.00    1.77- 1.83
22     Mirex                    0.777   0.802     -3.2  115   0.00    7.97- 8.03

*****  Signal #2   *****

 1 I   1-bromo-2-nitrobenzene   1.000   1.000      0.0  111   0.00    2.05- 2.11
22     Mirex                    0.627   0.642     -2.4  119   0.00   10.13-10.19

---------------------------------------------------------------------------
---------------------------------------------------------------------------

   (#) = Out of Range              SPCC's out = 0  CCC's out = 0
    4g67836.D  4PST1778.M       Tue May 03 15:57:41 2016   RPT1
```

10.9.3 10

Initial Calibration Verification

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G4G1778-ICV1778
Lab FileID: 4G67844.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\4G1778\4g67844.D\ECD1A.ch  Vial: 15
Signal #2 : C:\msdchem\1\DATA\4G1778\4g67844.D\ECD2B.ch
Acq On    :  2 May 2016   5:27 pm                    Operator: dharas
Sample    : icv1778-500                              Inst    : GC4G
Misc      : op93464,g4g1778,100,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\4PST1778.M (ChemStation Integrator)
Title        : PEST/PCB
Last Update  : Tue May 03 15:20:09 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
31 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.70- 1.90
32	Chlordane {A}	0.028	0.033	-17.9	121	0.00	3.86- 4.06
33	Chlordane {B}	0.036	0.036	0.0	103	0.00	4.49- 4.69
34	Chlordane {C}	0.122	0.118	3.3	100	0.00	5.29- 5.49
35	Chlordane {D}	0.199	0.195	2.0	102	0.00	5.46- 5.66
36	Chlordane {E}	0.030	0.025	16.7	87	0.00	6.58- 6.78

***** Signal #2 *****

31 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	103	0.00	1.98- 2.18
32	Chlordane {A}	0.037	0.040	-8.1	112	0.00	4.67- 4.87
33	Chlordane {B}	0.035	0.035	0.0	104	0.00	5.57- 5.77
34	Chlordane {C}	0.128	0.122	4.7	99	0.00	6.53- 6.73
35	Chlordane {D}	0.208	0.201	3.4	100	0.00	6.76- 6.96
36	Chlordane {E}	0.033	0.032	3.0	99	0.00	8.27- 8.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4g67837.D 4PST1778.M Tue May 03 15:57:54 2016 RPT1

Initial Calibration Verification

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G4G1778-ICV1778
Lab FileID: 4G67845.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\4G1778\4g67845.D\ECD1A.ch  Vial: 16
Signal #2 : C:\msdchem\1\DATA\4G1778\4g67845.D\ECD2B.ch
Acq On    :  2 May 2016   5:43 pm                    Operator: dharas
Sample    : icv1778-500                              Inst    : GC4G
Misc      : op93464,g4g1778,100,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\4PST1778.M (ChemStation Integrator)
Title        : PEST/PCB
Last Update  : Tue May 03 15:20:09 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
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	100	0.00	1.70- 1.90
26	L8	Toxaphene{A}	0.032	0.031	3.1	95	0.00	6.38- 6.58
27	L8	Toxaphene{B}	0.033	0.032	3.0	98	0.00	6.66- 6.86
28	L8	Toxaphene{C}	0.045	0.044	2.2	99	0.00	6.82- 7.02
29	L8	Toxaphene{D}	0.030	0.030	0.0	100	0.00	7.20- 7.40
30	L8	Toxaphene{E}	0.020	0.020	0.0	100	0.00	7.87- 8.07

***** Signal #2 *****

25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.98- 2.18
26	L8	Toxaphene{A}	0.018	0.018	0.0	105	0.00	7.27- 7.47
27	L8	Toxaphene{B}	0.021	0.023	-9.5	109	0.00	8.16- 8.36
28	L8	Toxaphene{C}	0.036	0.036	0.0	103	0.00	8.33- 8.53
29	L8	Toxaphene{D}	0.021	0.022	-4.8	106	0.00	8.77- 8.97
30	L8	Toxaphene{E}	0.017	0.017	0.0	103	0.00	9.67- 9.87

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4g67837.D 4PST1778.M Tue May 03 15:57:56 2016 RPT1

10.9.5 10

Continuing Calibration Summary

Job Number: JC19996 **Sample:** G4G1787-CC1778
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4G68169.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\4G1787\4g68169.D\ECD1A.ch  Vial: 4
Signal #2 : C:\msdchem\1\DATA\4G1787\4g68169.D\ECD2B.ch
Acq On    : 12 May 2016  11:12 am                    Operator: dharas
Sample    : cc1778-50                                Inst    : GC4G
Misc      : op93795,g4g1787,16.2,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\4PST1778.M (ChemStation Integrator)
Title        : PEST/PCB
Last Update  : Thu May 12 13:37:46 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	103	0.00	1.76- 1.82
2	SAB	Tetrachloro-m-xylene	0.862	0.845	2.0	101	0.00	2.54- 2.60
3	A	alpha-BHC	1.180	1.188	-0.7	99	0.00	3.11- 3.17
4	MA	gamma-BHC	1.032	1.014	1.7	96	0.00	3.45- 3.51
5	MA	Heptachlor	0.968	0.975	-0.7	95	0.00	3.76- 3.82
6	B	beta-BHC	0.494	0.470	4.9	93	0.00	3.55- 3.61
7	B	delta-BHC	0.940	0.848	9.8	88	0.00	4.02- 4.08
8	MB	Aldrin	0.988	0.978	1.0	98	0.00	4.39- 4.45
9	B	Heptachlor Epoxide	0.883	0.848	4.0	94	0.00	5.15- 5.21
10	B	gamma-Chlordane	0.883	0.856	3.1	94	0.00	5.33- 5.39
11	B	alpha-Chlordane	0.952	0.878	7.8	95	0.00	5.51- 5.57
12	A	Endosulfan I	0.979	0.928	5.2	96	0.00	5.70- 5.76
13	B	4,4'-DDE	0.882	0.835	5.3	97	0.00	5.64- 5.70
14	MA	Dieldrin	0.928	0.948	-2.2	97	0.00	6.04- 6.10
15	MA	Endrin	0.883	0.907	-2.7	101	0.00	6.37- 6.43
16	A	4,4'-DDD	0.748	0.779	-4.1	102	0.00	6.51- 6.57
17	B	Endosulfan II	0.850	0.923	-8.6	105	0.00	6.71- 6.77
		----------	True	Calc.	% Drift	----------		
18	MA	4,4'-DDT	50.000	41.147	17.7	82	0.00	6.94- 7.00
		----------	AvgRF	CCRF	% Dev	----------		
19	B	Endrin Aldehyde	0.718	0.741	-3.2	101	0.00	7.35- 7.41
20	B	Endosulfan Sulfate	0.779	0.821	-5.4	104	0.00	8.04- 8.10
21	A	Methoxychlor	0.333	0.370	-11.1	103	0.00	7.75- 7.81
22		Mirex	0.777	0.755	2.8	100	0.00	7.94- 8.00
23	B	Endrin Ketone	0.901	0.915	-1.6	97	0.00	8.50- 8.56
24	SA	Decachlorobiphenyl	0.812	0.894	-10.1	115	0.00	10.20-10.26
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.69- 1.89
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	102	0.00	1.69- 1.89
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				

10.9.6 10

Continuing Calibration Summary

Job Number: JC19996 **Sample:** G4G1787-CC1778
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4G68169.D
Project: BMSMC, Building 5 Area, PR

36		Chlordane {E}			----------NA----------			
*****		Signal #2 *****						
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	2.03- 2.09
2	SAB	Tetrachloro-m-xylene	0.881	0.876	0.6	99	0.00	3.07- 3.13
3	A	alpha-BHC	1.287	1.282	0.4	97	0.00	3.83- 3.89
4	MA	gamma-BHC	1.144	1.130	1.2	95	0.00	4.30- 4.36
5	MA	Heptachlor	1.179	1.151	2.4	97	0.00	4.93- 4.99
6	B	beta-BHC	0.518	0.490	5.4	94	0.00	4.40- 4.46
7	B	delta-BHC	1.068	1.114	-4.3	99	0.00	4.83- 4.89
8	MB	Aldrin	1.161	1.122	3.4	97	0.00	5.42- 5.48
9	B	Heptachlor Epoxide	1.049	1.001	4.6	97	0.00	6.28- 6.34
10	B	gamma-Chlordane	1.013	1.003	1.0	97	0.00	6.57- 6.63
11	B	alpha-Chlordane	1.018	0.969	4.8	97	0.00	6.81- 6.87
12	A	Endosulfan I	0.972	0.947	2.6	97	0.00	6.91- 6.97
13	B	4,4'-DDE	1.015	1.011	0.4	97	0.00	7.07- 7.13
14	MA	Dieldrin	1.013	1.023	-1.0	97	0.00	7.36- 7.42
15	MA	Endrin	0.903	0.941	-4.2	101	0.00	7.88- 7.94
16	A	4,4'-DDD	0.820	0.805	1.8	95	0.00	8.04- 8.10
17	B	Endosulfan II	0.893	0.878	1.7	96	0.00	8.24- 8.30
18	MA	4,4'-DDT	0.717	0.746	-4.0	98	0.00	8.58- 8.64
19	B	Endrin Aldehyde	0.678	0.667	1.6	98	0.00	8.81- 8.87
20	B	Endosulfan Sulfate	0.747	0.755	-1.1	102	0.00	9.29- 9.35
21	A	Methoxychlor	0.390	0.376	3.6	98	0.00	9.79- 9.85
22		Mirex	0.627	0.597	4.8	98	0.00	10.11-10.17
23	B	Endrin Ketone	0.820	0.836	-2.0	99	0.00	10.15-10.21
24	SA	Decachlorobiphenyl	0.625	0.632	-1.1	103	0.00	11.61-11.67
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	95	0.00	1.96- 2.16
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	1.96- 2.16
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
4g67837.D 4PST1778.M Thu May 12 14:16:16 2016 RPT1

10.9.6

10

Continuing Calibration Summary

Job Number: JC19996 **Sample:** G4G1787-CC1778
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4G68185.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\4G1787\4g68185.D\ECD1A.ch  Vial: 2
Signal #2 : C:\msdchem\1\DATA\4G1787\4g68185.D\ECD2B.ch
Acq On    : 12 May 2016   4:52 pm                    Operator: dharas
Sample    : cc1778-25                                Inst    : GC4G
Misc      : op93485,g4g1787,500,,,5,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\4PST1778.M (ChemStation Integrator)
Title        : PEST/PCB
Last Update  : Fri May 13 11:39:02 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	103	0.00	1.80- 1.86
2	SAB	Tetrachloro-m-xylene	0.862	0.843	2.2	101	0.00	2.57- 2.63
3	A	alpha-BHC	1.180	1.152	2.4	102	0.00	3.13- 3.19
4	MA	gamma-BHC	1.032	1.009	2.2	102	0.00	3.47- 3.53
5	MA	Heptachlor	0.968	0.975	-0.7	107	-0.02	3.79- 3.85
6	B	beta-BHC	0.494	0.496	-0.4	105	-0.01	3.57- 3.63
7	B	delta-BHC	0.940	0.887	5.6	101	0.00	4.03- 4.09
8	MB	Aldrin	0.988	0.949	3.9	100	0.00	4.40- 4.46
9	B	Heptachlor Epoxide	0.883	0.813	7.9	97	-0.01	5.16- 5.22
10	B	gamma-Chlordane	0.883	0.837	5.2	99	-0.01	5.34- 5.40
11	B	alpha-Chlordane	0.952	0.886	6.9	102	0.00	5.52- 5.58
12	A	Endosulfan I	0.979	0.925	5.5	101	-0.01	5.70- 5.76
13	B	4,4'-DDE	0.882	0.813	7.8	103	-0.02	5.65- 5.71
14	MA	Dieldrin	0.928	0.889	4.2	99	-0.01	6.04- 6.10
15	MA	Endrin	0.883	0.845	4.3	102	-0.01	6.38- 6.44
16	A	4,4'-DDD	0.748	0.694	7.2	98	-0.03	6.52- 6.58
17	B	Endosulfan II	0.850	0.830	2.4	100	-0.02	6.72- 6.78
		----------	True	Calc.	% Drift		----------	
18	MA	4,4'-DDT	25.000	23.164	7.3	99	-0.02	6.95- 7.01
		----------	AvgRF	CCRF	% Dev		----------	
19	B	Endrin Aldehyde	0.718	0.684	4.7	100	-0.02	7.35- 7.41
20	B	Endosulfan Sulfate	0.779	0.769	1.3	104	-0.02	8.05- 8.11
21	A	Methoxychlor	0.333	0.337	-1.2	103	-0.03	7.76- 7.82
22		Mirex	0.777	0.740	4.8	99	0.00	7.94- 8.00
23	B	Endrin Ketone	0.901	0.904	-0.3	103	-0.02	8.51- 8.57
24	SA	Decachlorobiphenyl	0.812	0.901	-11.0	115	0.00	10.20-10.26
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.73- 1.93
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	0#	0.00	1.73- 1.93
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				

10.9.7 10

Continuing Calibration Summary

Job Number: JC19996 **Sample:** G4G1787-CC1778
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4G68185.D
Project: BMSMC, Building 5 Area, PR

36		Chlordane {E}			----------NA----------			
*****		Signal #2 *****						
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	98	0.00	2.07- 2.13
2	SAB	Tetrachloro-m-xylene	0.881	0.880	0.1	98	0.00	3.08- 3.14
3	A	alpha-BHC	1.287	1.257	2.3	98	0.00	3.84- 3.90
4	MA	gamma-BHC	1.144	1.133	1.0	99	0.00	4.31- 4.37
5	MA	Heptachlor	1.179	1.173	0.5	100	0.00	4.94- 5.00
6	B	beta-BHC	0.518	0.511	1.4	99	0.00	4.41- 4.47
7	B	delta-BHC	1.068	1.080	-1.1	100	0.00	4.84- 4.90
8	MB	Aldrin	1.161	1.112	4.2	98	0.00	5.42- 5.48
9	B	Heptachlor Epoxide	1.049	1.013	3.4	99	0.00	6.28- 6.34
10	B	gamma-Chlordane	1.013	1.001	1.2	99	0.00	6.58- 6.64
11	B	alpha-Chlordane	1.018	0.984	3.3	99	0.00	6.81- 6.87
12	A	Endosulfan I	0.972	0.947	2.6	98	-0.01	6.91- 6.97
13	B	4,4'-DDE	1.015	1.007	0.8	99	-0.01	7.07- 7.13
14	MA	Dieldrin	1.013	1.010	0.3	99	-0.01	7.36- 7.42
15	MA	Endrin	0.903	0.939	-4.0	103	-0.01	7.88- 7.94
16	A	4,4'-DDD	0.820	0.811	1.1	99	-0.01	8.04- 8.10
17	B	Endosulfan II	0.893	0.894	-0.1	100	-0.01	8.24- 8.30
18	MA	4,4'-DDT	0.717	0.736	-2.6	102	-0.01	8.58- 8.64
19	B	Endrin Aldehyde	0.678	0.683	-0.7	100	-0.01	8.81- 8.87
20	B	Endosulfan Sulfate	0.747	0.770	-3.1	104	-0.01	9.29- 9.35
21	A	Methoxychlor	0.390	0.398	-2.1	104	-0.01	9.79- 9.85
22		Mirex	0.627	0.615	1.9	101	0.00	10.11-10.17
23	B	Endrin Ketone	0.820	0.855	-4.3	104	-0.01	10.15-10.21
24	SA	Decachlorobiphenyl	0.625	0.661	-5.8	106	0.00	11.61-11.67
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	2.00- 2.20
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	0#	0.00	2.00- 2.20
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
4g67836.D 4PST1778.M Fri May 13 11:47:10 2016 RPT1

10.9.7 10

Initial Calibration Summary

Job Number: JC19996
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: JC19996 **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

10.9.8 10

Initial Calibration Verification

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G6G987-ICV987
Lab FileID: 6G34140.D

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 *****

10.9.9 10

Initial Calibration Verification

Job Number: JC19996 **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

10.9.9 10

Initial Calibration Verification

Job Number: JC19996 **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: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G6G987-ICV987
Lab FileID: 6G34141.D

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

10.9.10 10

Initial Calibration Verification

Job Number: JC19996 **Sample:** G6G987-ICV987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34142.D
Project: BMSMC, Building 5 Area, PR

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: JC19996
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

10.9.11

10

Initial Calibration Verification

Job Number: JC19996 **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: JC19996
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

Continuing Calibration Summary

Job Number: JC19996 **Sample:** G6G1010-CC987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G35034.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\1010\6g35034.D\ECD1A.CH    Vial: 2
Signal #2 : C:\msdchem\1\DATA\1010\6g35034.D\ECD2B.CH
Acq On    : 13 May 2016   9:21 am                    Operator: dharas
Sample    : cc987-25                                 Inst    : HP G1530A
Misc      : op93838,g6g1010,15.8,,,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  : 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	93	0.00	1.26- 1.32
2	SAB	Tetrachloro-m-xylene	0.916	0.913	0.3	96	0.00	1.94- 2.00
3	A	alpha-BHC	1.181	1.214	-2.8	96	0.00	2.45- 2.51
4	MA	gamma-BHC	1.100	1.121	-1.9	96	0.00	2.77- 2.83
5	MA	Heptachlor	1.104	1.027	7.0	89	0.00	3.29- 3.35
6	B	beta-BHC	0.540	0.556	-3.0	98	0.00	2.85- 2.91
7	B	delta-BHC	1.025	0.953	7.0	86	0.00	3.04- 3.10
8	MB	Aldrin	1.020	0.972	4.7	91	0.00	3.64- 3.71
9	B	Heptachlor Epoxide	0.955	0.885	7.3	88	0.00	4.39- 4.45
10	B	gamma-Chlordane	0.961	0.835	13.1	83	0.00	4.56- 4.62
11	B	alpha-Chlordane	0.954	0.861	9.7	86	0.00	4.74- 4.80
12	A	Endosulfan I	0.941	0.892	5.2	91	0.00	4.92- 4.98
13	B	4,4'-DDE	0.790	0.732	7.3	89	0.00	4.87- 4.93
14	MA	Dieldrin	0.931	0.883	5.2	91	0.00	5.27- 5.33
15	MA	Endrin	0.844	0.816	3.3	92	0.00	5.61- 5.67
16	A	4,4'-DDD	0.668	0.627	6.1	92	0.00	5.76- 5.82
17	B	Endosulfan II	0.833	0.794	4.7	93	0.00	5.95- 6.01
18	MA	4,4'-DDT	0.727	0.632	13.1	83	0.00	6.21- 6.27
19	B	Endrin Aldehyde	0.679	0.649	4.4	92	0.00	6.62- 6.68
20	B	Endosulfan Sulfate	0.732	0.729	0.4	96	0.00	7.35- 7.41
21	A	Methoxychlor	0.436	0.386	11.5	83	0.00	7.08- 7.14
22		Mirex	0.746	0.720	3.5	92	0.00	7.20- 7.26
23	B	Endrin Ketone	0.870	0.861	1.0	94	0.00	7.83- 7.89
24	SAB	Decachlorobiphenyl	0.797	0.748	6.1	90	0.00	9.86- 9.92
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	89	0.00	1.26- 1.32
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	89	0.00	1.26- 1.32
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

***** Signal #2 *****

10.9.13 10

Continuing Calibration Summary

Job Number: JC19996 **Sample:** G6G1010-CC987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G35034.D
Project: BMSMC, Building 5 Area, PR

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	105	0.00	1.54- 1.60
2	SAB	Tetrachloro-m-xylene	0.903	0.899	0.4	109	0.00	2.43- 2.49
3	A	alpha-BHC	1.177	1.199	-1.9	111	0.00	3.13- 3.19
4	MA	gamma-BHC	1.102	1.101	0.1	109	0.00	3.58- 3.64
5	MA	Heptachlor	1.114	1.058	5.0	107	0.00	4.18- 4.24
6	B	beta-BHC	0.537	0.502	6.5	104	0.00	3.67- 3.73
7	B	delta-BHC	1.027	1.016	1.1	108	0.00	4.09- 4.15
8	MB	Aldrin	1.036	0.997	3.8	107	0.00	4.66- 4.72
9	B	Heptachlor Epoxide	0.965	0.910	5.7	103	0.00	5.54- 5.60
10	B	gamma-Chlordane	0.944	0.905	4.1	107	0.00	5.84- 5.90
11	B	alpha-Chlordane	0.937	0.903	3.6	107	0.00	6.08- 6.14
12	A	Endosulfan I	0.911	0.861	5.5	106	0.00	6.18- 6.24
13	B	4,4'-DDE	0.808	0.776	4.0	115	0.00	6.38- 6.44
14	MA	Dieldrin	0.930	0.890	4.3	107	0.00	6.65- 6.71
15	MA	Endrin	0.845	0.816	3.4	109	0.00	7.19- 7.25
16	A	4,4'-DDD	0.698	0.686	1.7	106	0.00	7.42- 7.48
17	B	Endosulfan II	0.827	0.779	5.8	107	0.00	7.58- 7.64
18	MA	4,4'-DDT	0.633	0.593	6.3	105	0.00	7.99- 8.05
19	B	Endrin Aldehyde	0.670	0.641	4.3	106	0.00	8.20- 8.26
20	B	Endosulfan Sulfate	0.727	0.718	1.2	112	0.00	8.72- 8.78
21	A	Methoxychlor	0.349	0.330	5.4	102	0.00	9.37- 9.43
22		Mirex	0.716	0.684	4.5	109	0.00	9.68- 9.74
23	B	Endrin Ketone	0.850	0.835	1.8	111	0.00	9.76- 9.82
24	SAB	Decachlorobiphenyl	0.679	0.729	-7.4	113	0.00	11.71-11.77
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	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	99	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
6g34134.D 6PST987.M Fri May 13 11:10:38 2016

10.9.13 10

Continuing Calibration Summary

Job Number: JC19996 **Sample:** G6G1010-CC987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G35055.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\1010\6g35055.D\ECD1A.CH    Vial: 4
Signal #2 : C:\msdchem\1\DATA\1010\6g35055.D\ECD2B.CH
Acq On    : 13 May 2016   5:21 pm                    Operator: thomasl
Sample    : cc987-50                                 Inst    : HP G1530A
Misc      : op93857,g6g1010,9.2,,,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 May 16 10:05:37 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	104	0.00	1.26- 1.32
2	SAB	Tetrachloro-m-xylene	0.916	0.894	2.4	103	0.00	1.94- 2.00
3	A	alpha-BHC	1.181	1.268	-7.4	103	0.00	2.45- 2.51
4	MA	gamma-BHC	1.100	1.152	-4.7	102	0.00	2.76- 2.82
5	MA	Heptachlor	1.104	1.096	0.7	101	0.00	3.29- 3.35
6	B	beta-BHC	0.540	0.513	5.0	100	0.00	2.85- 2.91
7	B	delta-BHC	1.025	1.074	-4.8	99	0.00	3.04- 3.10
8	MB	Aldrin	1.020	1.036	-1.6	102	0.00	3.64- 3.71
9	B	Heptachlor Epoxide	0.955	0.967	-1.3	103	0.00	4.39- 4.45
10	B	gamma-Chlordane	0.961	0.902	6.1	95	0.00	4.56- 4.62
11	B	alpha-Chlordane	0.954	0.893	6.4	96	0.00	4.74- 4.80
12	A	Endosulfan I	0.941	0.947	-0.6	104	0.00	4.92- 4.98
13	B	4,4'-DDE	0.790	0.737	6.7	93	0.00	4.87- 4.93
14	MA	Dieldrin	0.931	0.930	0.1	101	0.00	5.27- 5.33
15	MA	Endrin	0.844	0.863	-2.3	103	0.00	5.61- 5.67
16	A	4,4'-DDD	0.668	0.670	-0.3	100	0.00	5.76- 5.82
17	B	Endosulfan II	0.833	0.830	0.4	101	0.00	5.95- 6.01
18	MA	4,4'-DDT	0.727	0.690	5.1	96	0.00	6.21- 6.27
19	B	Endrin Aldehyde	0.679	0.672	1.0	103	0.00	6.62- 6.68
20	B	Endosulfan Sulfate	0.732	0.763	-4.2	109	0.00	7.35- 7.41
21	A	Methoxychlor	0.436	0.397	8.9	94	0.00	7.08- 7.14
22		Mirex	0.746	0.714	4.3	103	0.00	7.20- 7.26
23	B	Endrin Ketone	0.870	0.834	4.1	97	0.00	7.83- 7.89
24	SAB	Decachlorobiphenyl	0.797	0.733	8.0	100	0.00	9.86- 9.92
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	102	0.00	1.26- 1.32
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	105	0.00	1.26- 1.32
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

***** Signal #2 *****

10.9.14 10

Continuing Calibration Summary

Job Number: JC19996 **Sample:** G6G1010-CC987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G35055.D
Project: BMSMC, Building 5 Area, PR

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	111	0.00	1.53- 1.59
2	SAB	Tetrachloro-m-xylene	0.903	0.847	6.2	109	0.00	2.43- 2.49
3	A	alpha-BHC	1.177	1.191	-1.2	111	0.00	3.13- 3.19
4	MA	gamma-BHC	1.102	1.088	1.3	110	0.00	3.58- 3.64
5	MA	Heptachlor	1.114	1.059	4.9	110	0.00	4.18- 4.24
6	B	beta-BHC	0.537	0.489	8.9	103	0.00	3.67- 3.73
7	B	delta-BHC	1.027	0.988	3.8	107	0.00	4.09- 4.15
8	MB	Aldrin	1.036	0.981	5.3	110	0.00	4.66- 4.72
9	B	Heptachlor Epoxide	0.965	0.902	6.5	108	0.00	5.53- 5.59
10	B	gamma-Chlordane	0.944	0.875	7.3	108	0.00	5.84- 5.90
11	B	alpha-Chlordane	0.937	0.866	7.6	108	0.00	6.08- 6.14
12	A	Endosulfan I	0.911	0.840	7.8	109	0.00	6.18- 6.24
13	B	4,4'-DDE	0.808	0.704	12.9	96	0.00	6.38- 6.44
14	MA	Dieldrin	0.930	0.872	6.2	110	0.00	6.65- 6.71
15	MA	Endrin	0.845	0.815	3.6	114	0.00	7.19- 7.25
16	A	4,4'-DDD	0.698	0.680	2.6	107	0.00	7.42- 7.48
17	B	Endosulfan II	0.827	0.806	2.5	112	0.00	7.58- 7.64
18	MA	4,4'-DDT	0.633	0.597	5.7	106	0.00	7.99- 8.05
19	B	Endrin Aldehyde	0.670	0.631	5.8	109	0.00	8.20- 8.26
20	B	Endosulfan Sulfate	0.727	0.686	5.6	112	0.00	8.72- 8.78
21	A	Methoxychlor	0.349	0.328	6.0	104	0.00	9.37- 9.43
22		Mirex	0.716	0.664	7.3	115	0.00	9.67- 9.73
23	B	Endrin Ketone	0.850	0.786	7.5	109	0.00	9.76- 9.82
24	SAB	Decachlorobiphenyl	0.679	0.697	-2.7	116	0.00	11.70-11.76
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	109	0.00	1.53- 1.59
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	112	0.00	1.46- 1.66
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 May 16 10:52:05 2016

10.9.14 10

GC Semi-volatiles

Raw Data

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
05/12/16 15:06

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68173.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 12:13 pm
Operator : dharas
Sample : jc19996-1
Misc : op93822,g4g1787,1000,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 14:09:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 13:37:46 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	1.796	2.067	461.6E6	389.5E6	50.000	50.000
25) I 1-bromo-2...	1.796	2.067	461.6E6	389.5E6	50.000	50.000
31) I 1-bromo-2...	1.796	2.067	461.6E6	389.5E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.577	3.102	294.5E6	256.7E6	36.998	37.421
Spiked Amount	40.000	Range	30 - 150	Recovery	= 92.49%	93.55%
24) SA Decachlor...	10.234	11.637	235.2E6	138.8E6	31.364	28.521m
Spiked Amount	40.000			Recovery	= 78.41%	71.30%

Target Compounds

SemiQuant Compounds - Not Calibrated on this Instrument

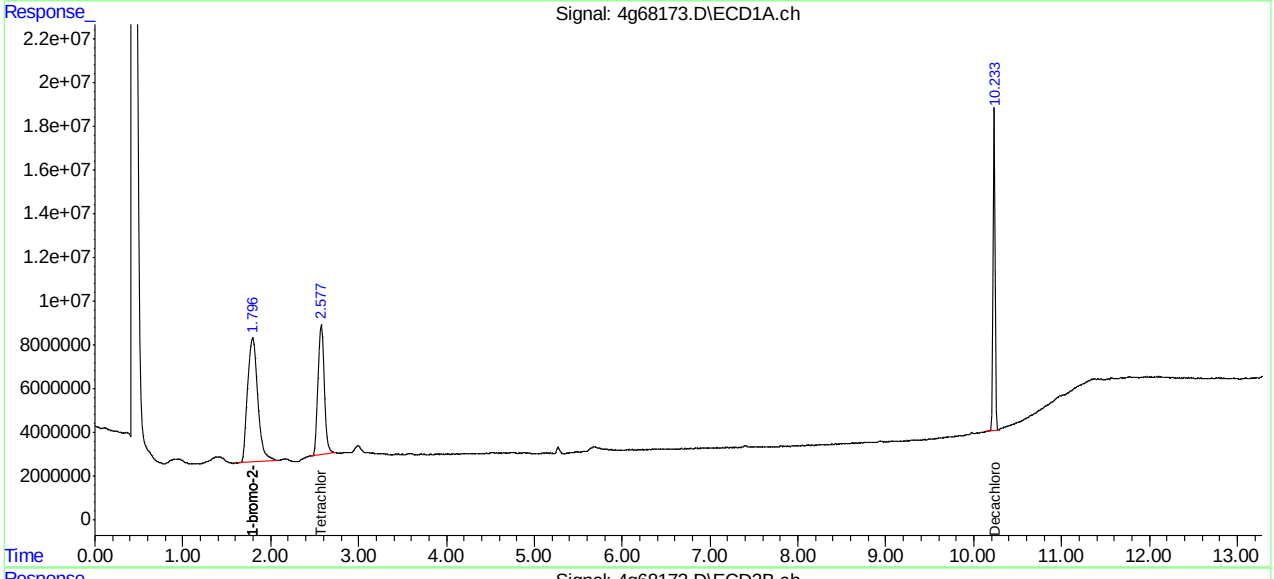
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

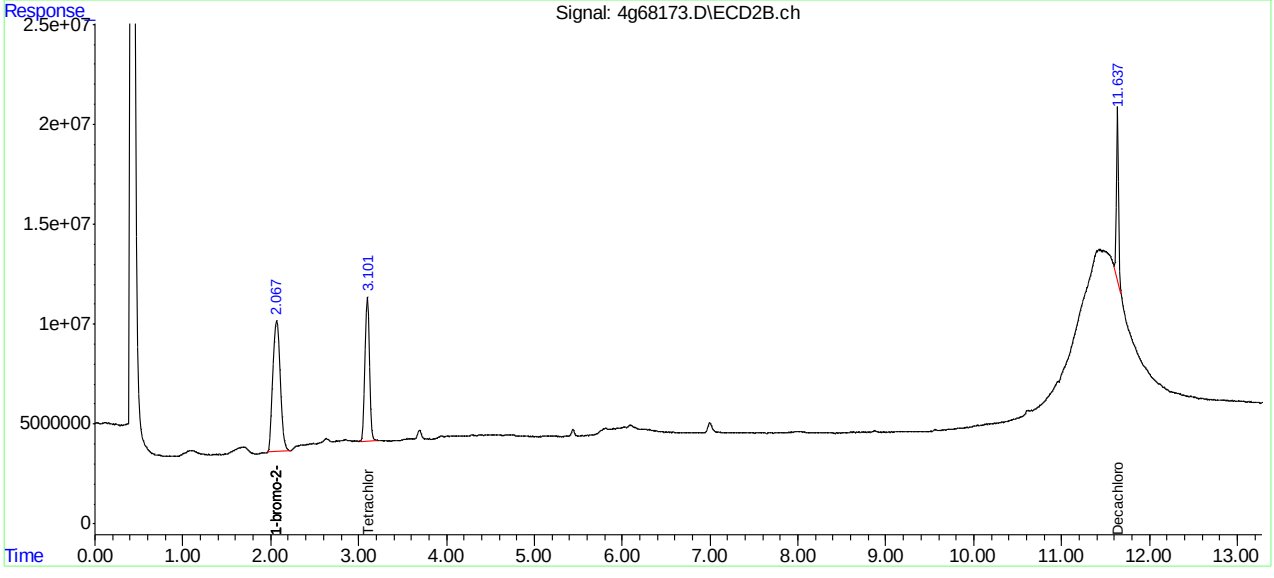
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68173.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 12:13 pm
Operator : dharas
Sample : jc19996-1
Misc : op93822,g4g1787,1000,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 14:09:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 13:37:46 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC19996

Manual Integration Approval Summary

Sample Number:	JC19996-1	**Method:**	SW846 8081B
Lab FileID:	4G68173.D	**Analyst approved:**	05/12/16 14:18 Dhara Saparia
Injection Time:	05/12/16 12:13	**Supervisor approved:**	05/12/16 15:06 Gwendolyn Burns

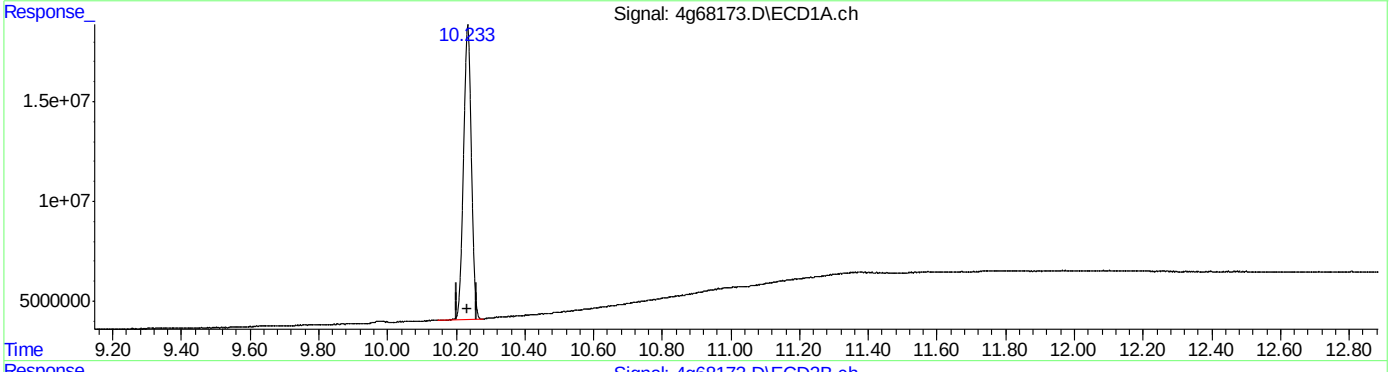
Parameter	CAS	Sig#	R.T. (min.)	Reason
Decachlorobiphenyl	2051-24-3	2	11.64	Poorly defined baseline

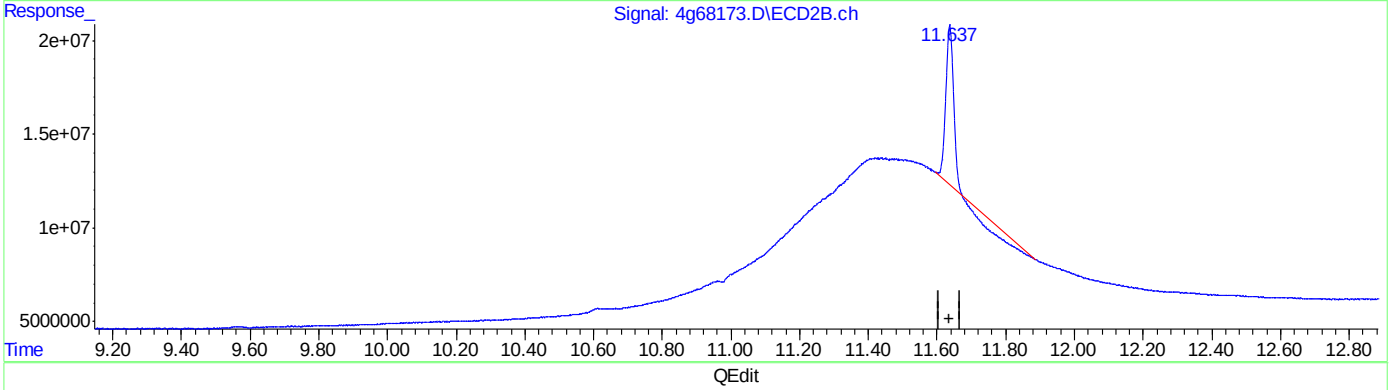
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68173.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 12:13 pm
Operator : dharas
Sample : jc19996-1
Misc : op93822,g4g1787,1000,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 14:09:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 13:37:46 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(24) Decachlorobiphenyl (SA)
10.234min 31.364 PPB
response 235238266

(24) Decachlorobiphenyl #2 (SA)
11.637min 19.186 PPB
response 93355134

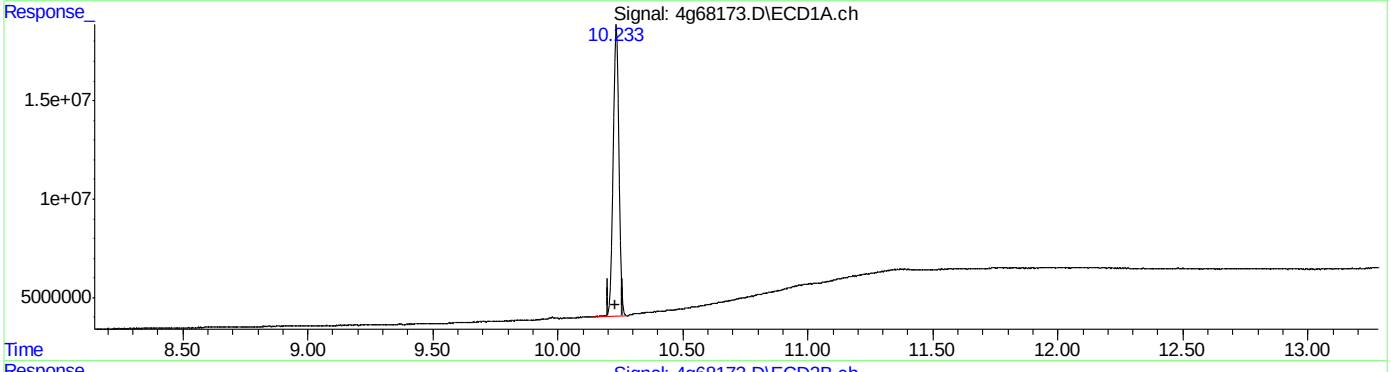
(+) = Expected Retention Time

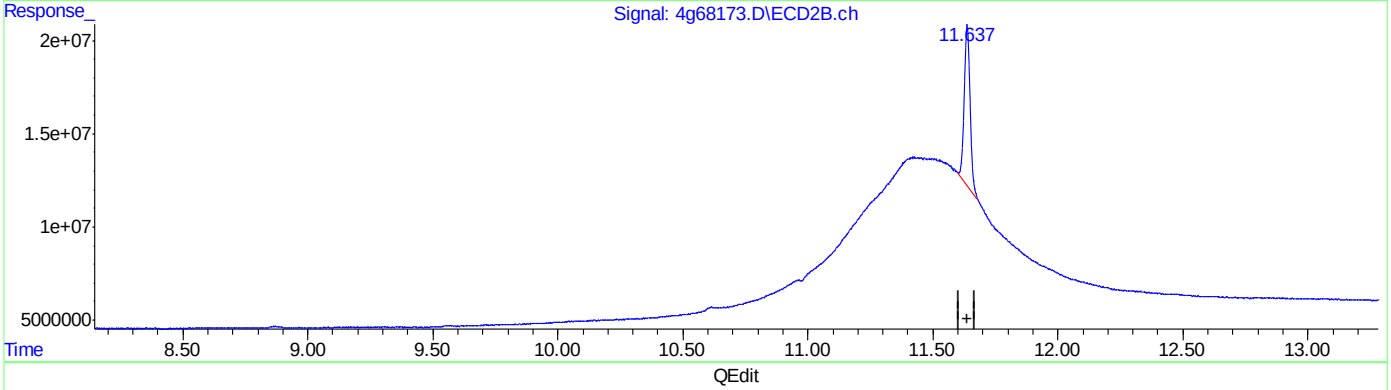
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68173.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 12:13 pm
Operator : dharas
Sample : jc19996-1
Misc : op93822,g4g1787,1000,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 14:09:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 13:37:46 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(24) Decachlorobiphenyl (SA)
10.234min 31.364 PPB
response 235238266

(24) Decachlorobiphenyl #2 (SA)
11.637min 28.521 PPB m
response 138771967

(+) = Expected Retention Time

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1010\
Data File : 6g35052.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 May 2016 3:29 pm
Operator : dharas
Sample : jc19996-2
Misc : op93857,g6g1010,9.2,,,10,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 13 16:55:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Fri May 13 16:30:54 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...	1.294	1.565	160.8E6	58575842	50.000	50.000
25) I 1-bromo-2...	1.294	1.565	160.8E6	58575842	50.000	50.000
31) I 1-bromo-2...	1.294	1.565	160.8E6	58575842	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	1.971	2.458	95515253	33770578	32.411	31.911
Spiked Amount	40.000	Range	30 - 150	Recovery	= 81.03%	79.78%
24) SAB Decachlor...	9.889	11.736	85222832	28042372	33.257	35.242
Spiked Amount	40.000			Recovery	= 83.14%	88.10%

Target Compounds

SemiQuant Compounds - Not Calibrated on this Instrument

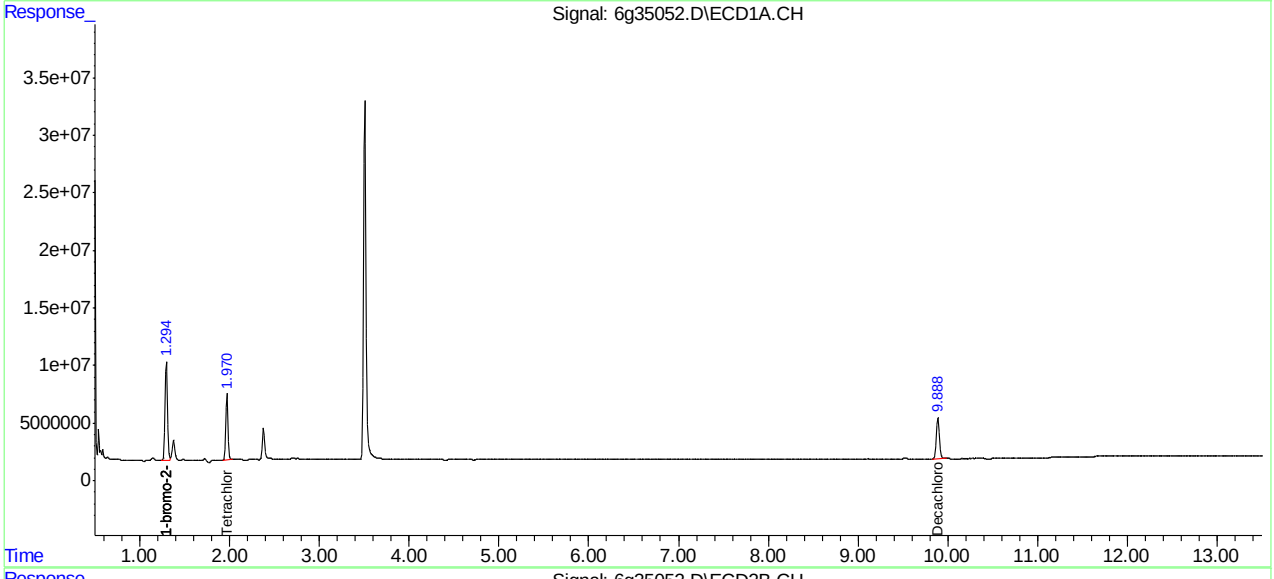
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

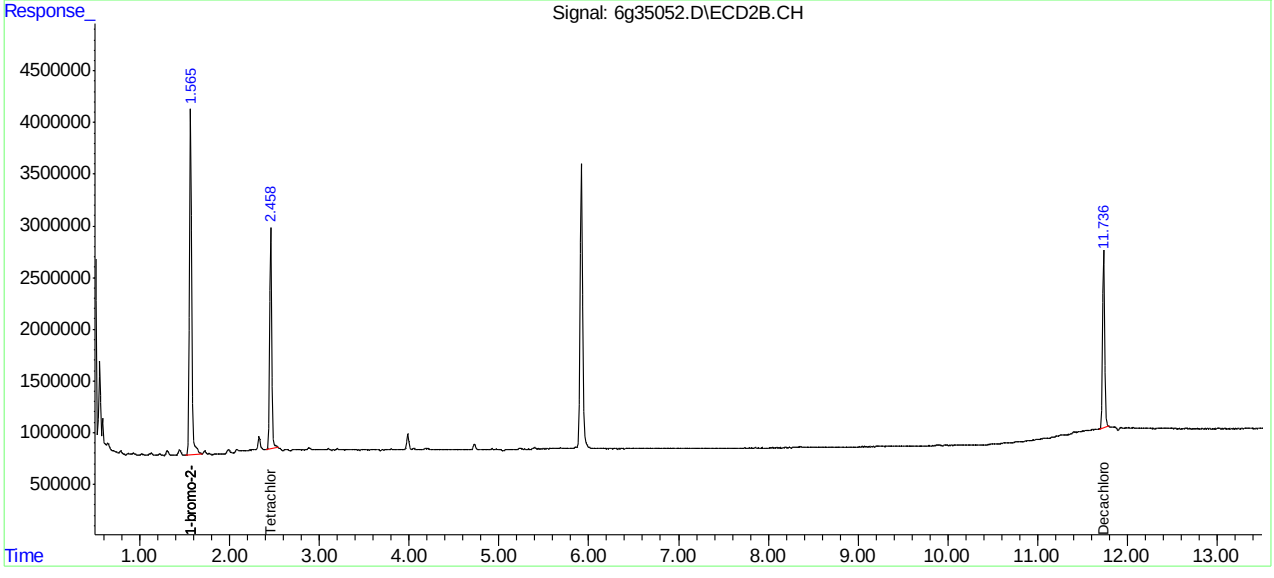
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1010\
Data File : 6g35052.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 May 2016 3:29 pm
Operator : dharas
Sample : jc19996-2
Misc : op93857,g6g1010,9.2,,,10,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 13 16:55:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Fri May 13 16:30:54 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\4G1787\
Data File : 4g68174.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 12:28 pm
Operator : dharas
Sample : jc19996-4
Misc : op93822,g4g1787,930,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 14:10:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 13:37:46 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	1.782	2.060	436.5E6	382.3E6	50.000	50.000
25) I 1-bromo-2...	1.782	2.060	436.5E6	382.3E6	50.000	50.000
31) I 1-bromo-2...	1.782	2.060	436.5E6	382.3E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.569	3.094	260.6E6	231.1E6	34.624	34.316
Spiked Amount	40.000	Range	30 - 150	Recovery	= 86.56%	85.79%
24) SA Decachlor...	10.232	11.640	191.2E6	111.0E6	26.965	23.233
Spiked Amount	40.000			Recovery	= 67.41%	58.08%
Target Compounds						
SemiQuant Compounds - Not Calibrated on this Instrument						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

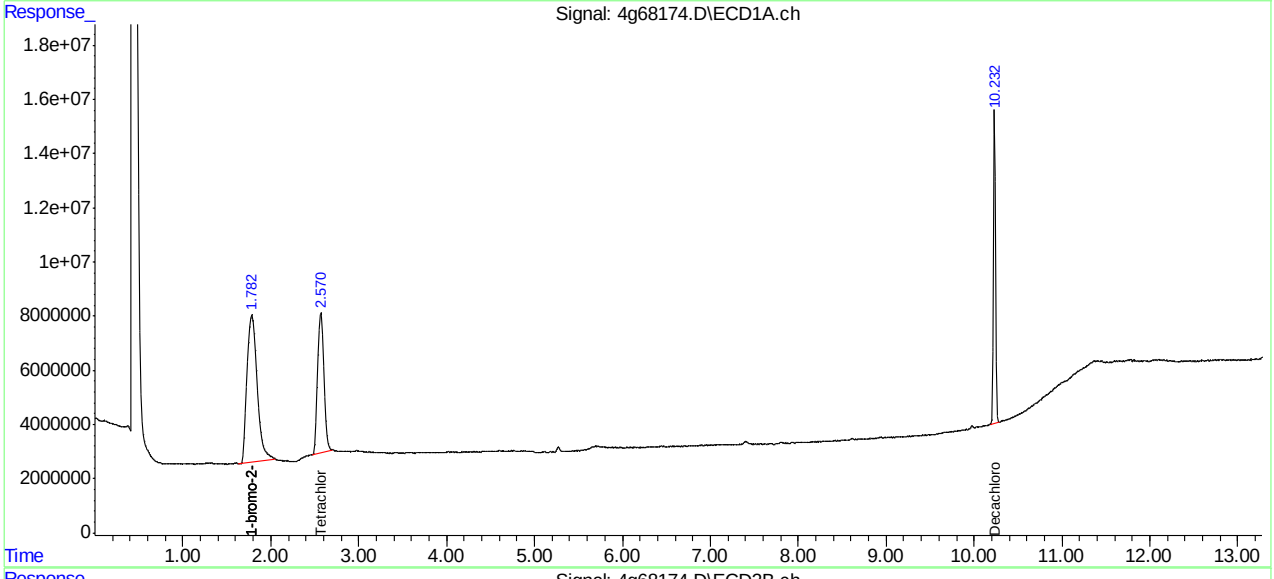
SGS ACCUTEST JC19996

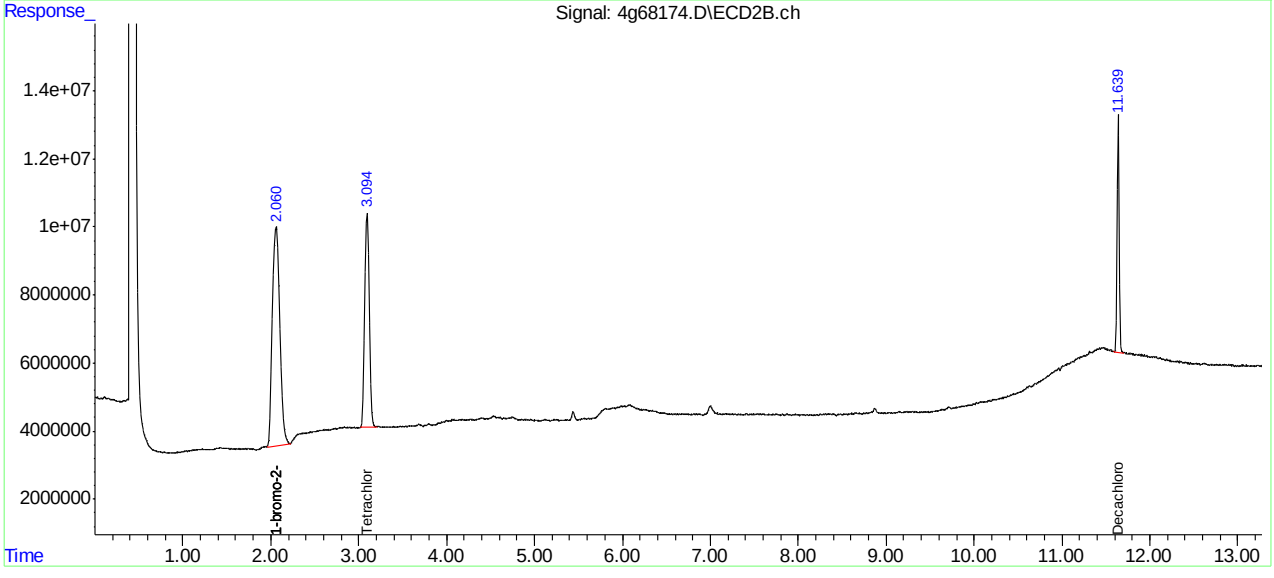
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68174.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 12:28 pm
Operator : dharas
Sample : jc19996-4
Misc : op93822,g4g1787,930,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 14:10:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 13:37:46 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68175.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 12:43 pm
Operator : dharas
Sample : jc19996-5
Misc : op93822,g4g1787,940,,,10,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 14:11:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 13:37:46 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	1.797	2.067	415.9E6	382.8E6	50.000	50.000
25) I 1-bromo-2...	1.797	2.067	415.9E6	382.8E6	50.000	50.000
31) I 1-bromo-2...	1.797	2.067	415.9E6	382.8E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.578	3.100	242.1E6	216.0E6	33.754	32.035
Spiked Amount	40.000	Range	30 - 150	Recovery	= 84.39%	80.09%
24) SA Decachlor...	10.233	11.636	236.0E6	135.0E6	34.915	28.233
Spiked Amount	40.000			Recovery	= 87.29%	70.58%

Target Compounds

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

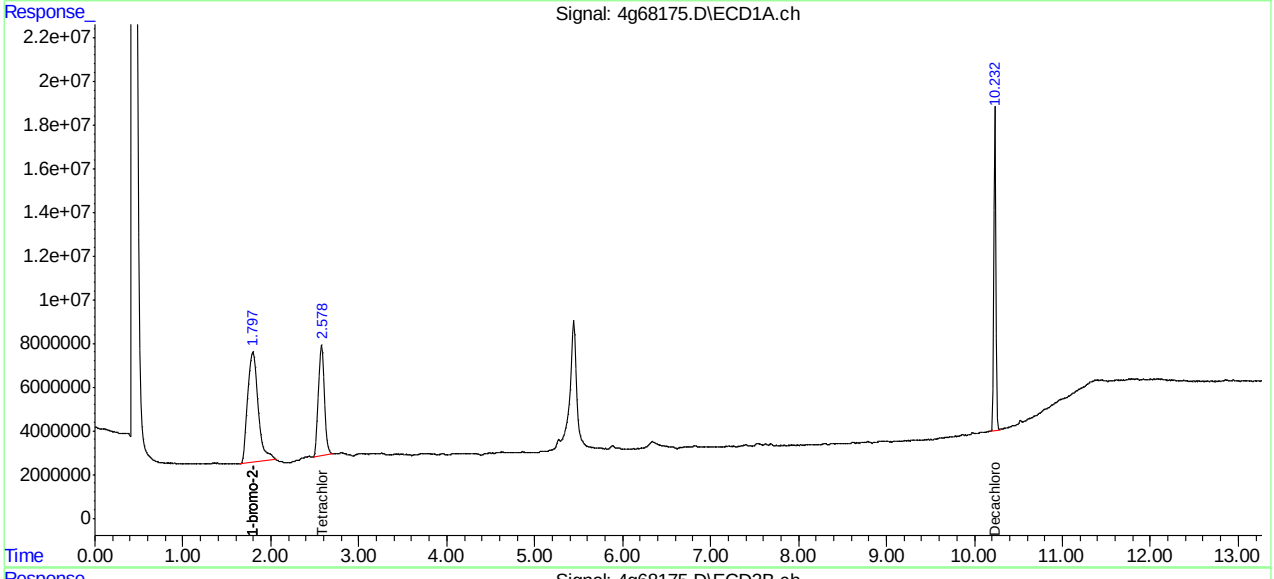
SGS ACCUTEST JC19996

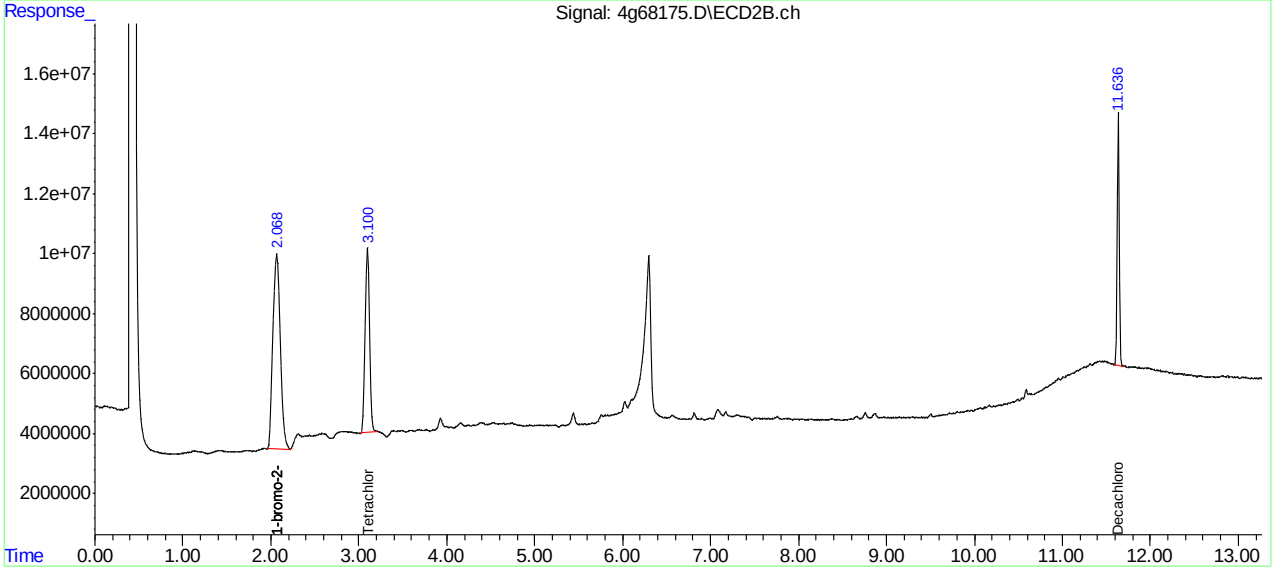
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68175.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 12:43 pm
Operator : dharas
Sample : jc19996-5
Misc : op93822,g4g1787,940,,,10,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 14:11:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 13:37:46 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68176.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 12:58 pm
Operator : dharas
Sample : jc19996-6
Misc : op93822,g4g1787,910,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 14:12:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 13:37:46 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	1.793	2.069	431.6E6	372.8E6	50.000	50.000
25) I 1-bromo-2...	1.793	2.069	431.6E6	372.8E6	50.000	50.000
31) I 1-bromo-2...	1.793	2.069	431.6E6	372.8E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.582	3.101	272.7E6	240.6E6	36.638	36.642
Spiked Amount	40.000	Range	30 - 150	Recovery	= 91.59%	91.61%
24) SA Decachlor...	10.234	11.638	155.4E6	88244178	22.164	18.951
Spiked Amount	40.000		Recovery		= 55.41%	47.38%

Target Compounds

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

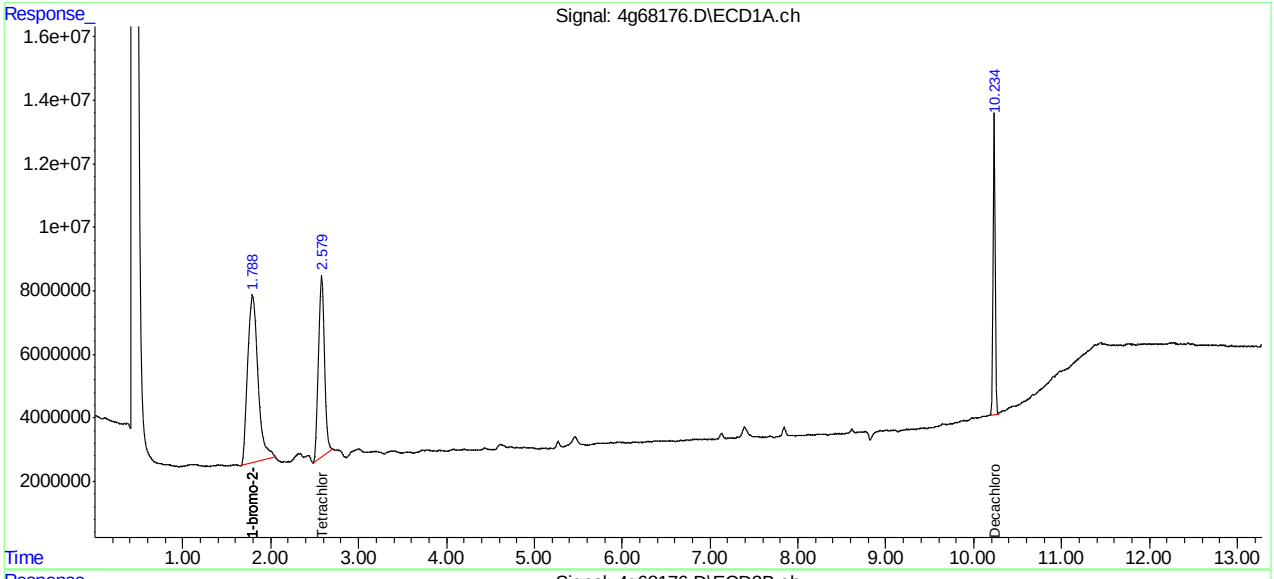
SGS ACCUTEST JC19996

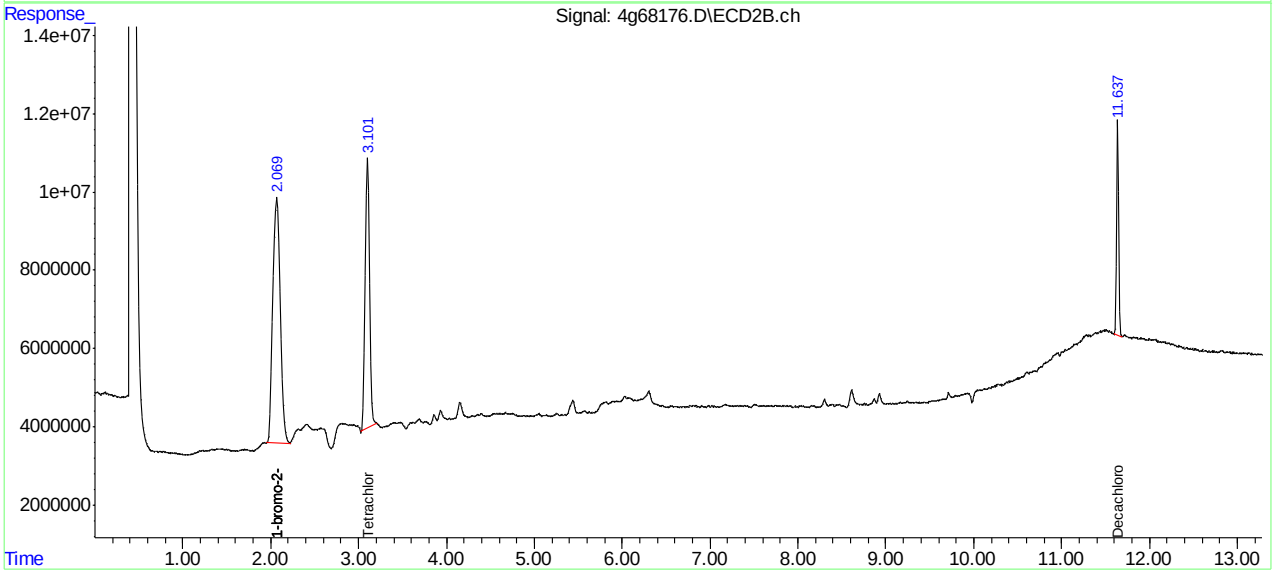
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68176.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 12:58 pm
Operator : dharas
Sample : jc19996-6
Misc : op93822,g4g1787,910,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 14:12:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 13:37:46 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68171.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 11:43 am
Operator : dharas
Sample : op93822-mb1
Misc : op93822,g4g1787,1000,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 14:00:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 13:37:46 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	1.781	2.058	415.5E6	355.3E6	50.000	50.000
25) I	1-bromo-2...	1.781	2.058	415.5E6	355.3E6	50.000	50.000
31) I	1-bromo-2...	1.781	2.058	415.5E6	355.3E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.568	3.094	290.7E6	256.1E6	40.577	40.929
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 101.44%	102.32%
24) SA	Decachlor...	10.232	11.638	199.8E6	117.4E6	29.593	26.450
	Spiked Amount	40.000			Recovery	= 73.98%	66.13%

Target Compounds

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

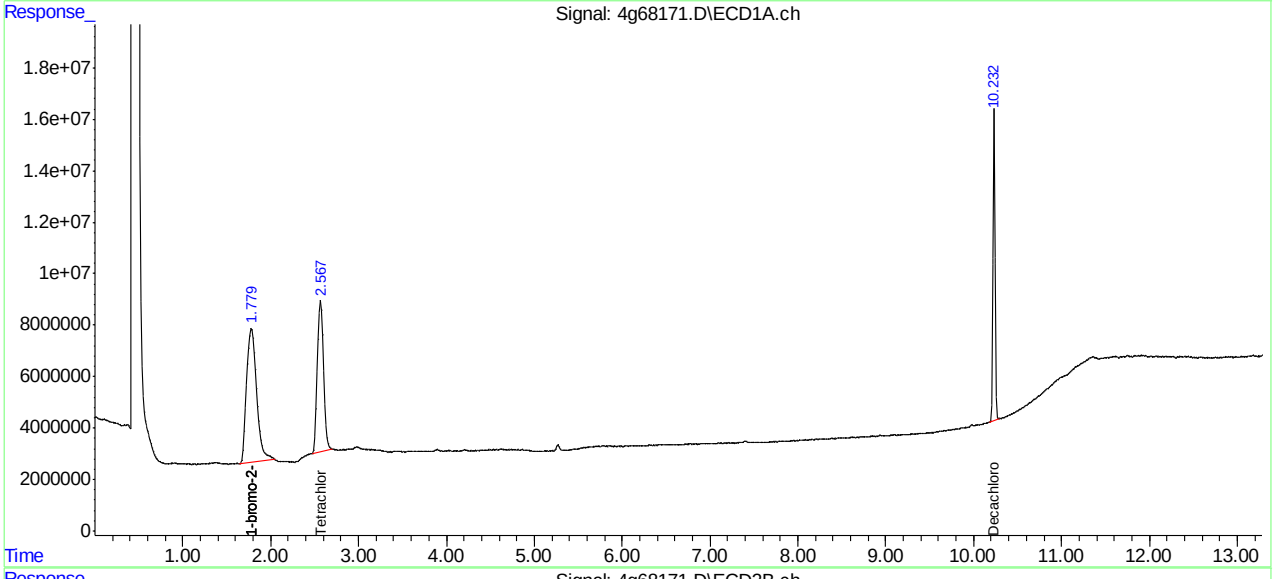
SGS ACCUTEST JC19996

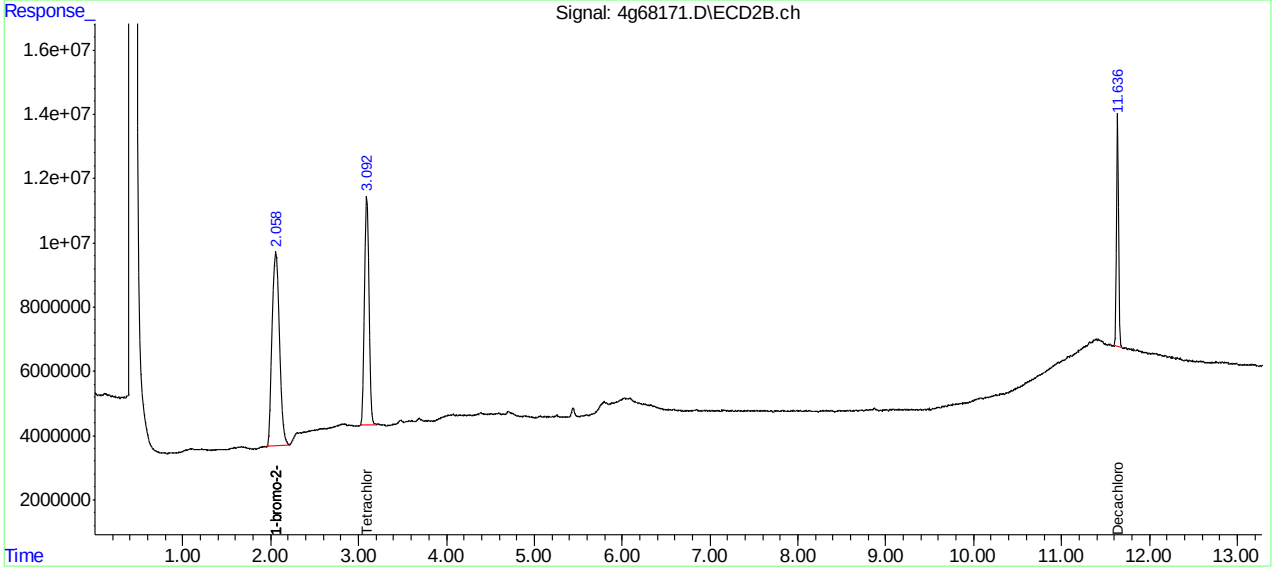
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68171.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 11:43 am
Operator : dharas
Sample : op93822-mb1
Misc : op93822,g4g1787,1000,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 14:00:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 13:37:46 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1010\
Data File : 6g35036.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 May 2016 9:53 am
Operator : dharas
Sample : op93857-mb1
Misc : op93857,g6g1010,15.0,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 13 11:01:20 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...	1.294	1.565	153.5E6	55620982	50.000	50.000
25) I	1-bromo-2...	1.294	1.565	153.5E6	55620982	50.000	50.000
31) I	1-bromo-2...	1.294	1.565	153.5E6	55620982	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.970	2.458	80864433	28866051	28.737	28.725
Spiked Amount		40.000	Range	30 - 150	Recovery	= 71.84%	71.81%
24) SAB	Decachlor...	9.890	11.736	71354534	25078233	29.162	33.191
Spiked Amount		40.000			Recovery	= 72.91%	82.98%

Target Compounds

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

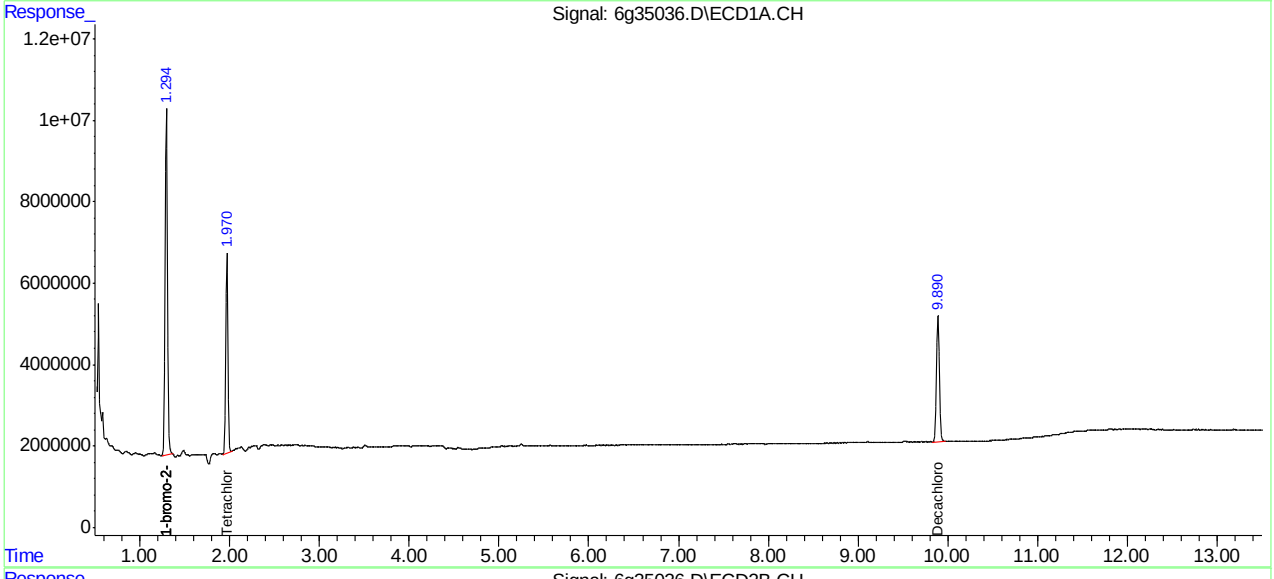
SGS ACCUTEST JC19996

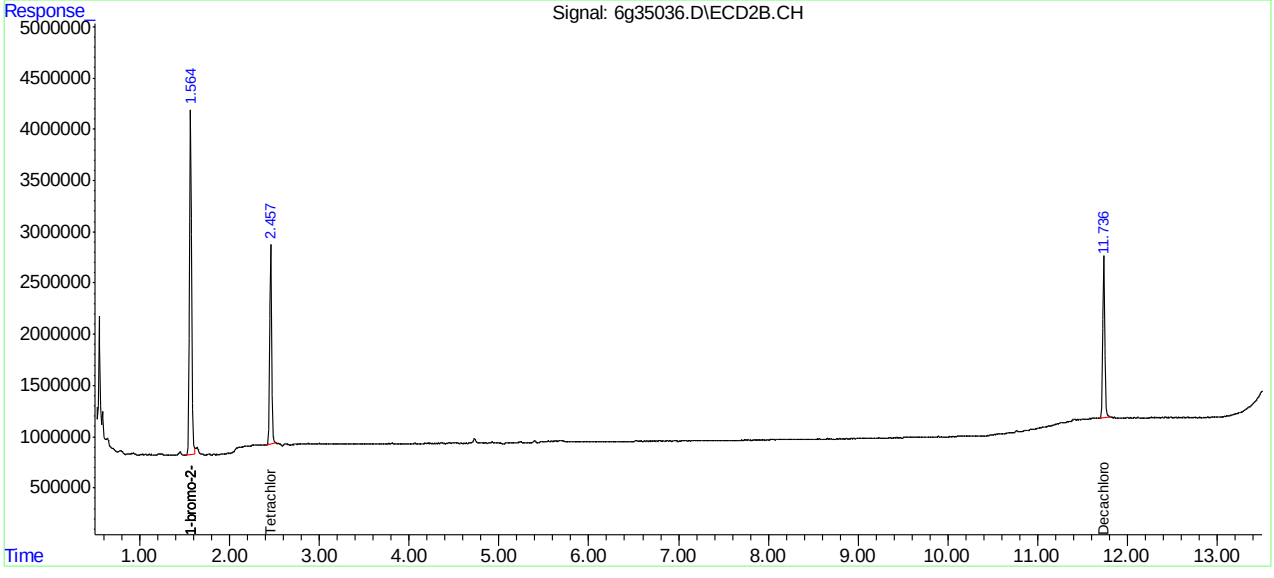
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1010\
Data File : 6g35036.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 May 2016 9:53 am
Operator : dharas
Sample : op93857-mb1
Misc : op93857,g6g1010,15.0,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 13 11:01:20 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 JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68172.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 11:58 am
Operator : dharas
Sample : op93822-bs1
Misc : op93822,g4g1787,1000,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 14:00:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 13:37:46 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	1.796	2.071	427.0E6	367.8E6	50.000	50.000
25) I	1-bromo-2...	1.796	2.071	427.0E6	367.8E6	50.000	50.000
31) I	1-bromo-2...	1.796	2.071	427.0E6	367.8E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.574	3.099	281.3E6	247.0E6	38.199	38.138
Spiked Amount		40.000 Range	30 - 150	Recovery	=	95.50%	95.34%
24) SA	Decachlor...	10.233	11.638	247.3E6	145.2E6	35.648	31.613
Spiked Amount		40.000		Recovery	=	89.12%	79.03%
	Target Compounds						
3) A	alpha-BHC	3.140	3.858	272.9E6	250.9E6	27.085	26.501
4) MA	gamma-BHC	3.486	4.336	241.9E6	228.0E6	27.451	27.088
5) MA	Heptachlor	3.801	4.961	223.3E6	217.9E6	27.006	25.134
6) B	beta-BHC	3.584	4.433	111.8E6	101.3E6	26.498	26.584
7) B	delta-BHC	4.050	4.862	193.8E6	216.7E6	24.149	27.595
8) MB	Aldrin	4.423	5.446	211.9E6	209.7E6	25.106	24.556
9) B	Heptachlo...	5.186	6.308	205.7E6	208.8E6	27.279	27.079
10) B	gamma-Chl...	5.367	6.606	202.9E6	203.6E6	26.915	27.322
11) B	alpha-Chl...	5.548	6.837	208.8E6	198.4E6	25.693	26.505
12) A	Endosulfan I	5.731	6.942	218.6E6	193.5E6	26.151	27.068
13) B	4,4'-DDE	5.672	7.095	186.9E6	202.4E6	24.806	27.105
14) MA	Dieldrin	6.070	7.389	225.3E6	210.2E6	28.433	28.203
15) MA	Endrin	6.408	7.910	223.9E6	199.7E6	29.674	30.058
16) A	4,4'-DDD	6.547	8.070	180.5E6	166.2E6	28.257	27.551
17) B	Endosulfa...	6.744	8.266	217.9E6	183.1E6	30.012	27.885
18) MA	4,4'-DDT	6.976	8.612	106.7E6	146.6E6	23.204	27.803
19) B	Endrin Al...	7.380	8.844	180.1E6	143.9E6	29.392	28.836
20) B	Endosulfa...	8.074	9.320	196.2E6	157.0E6	29.485	28.553
21) A	Methoxychlor	7.786	9.824	74836585	77668492	26.305	27.106
23) B	Endrin Ke...	8.536	10.183	216.1E6	167.3E6	28.085	27.719

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

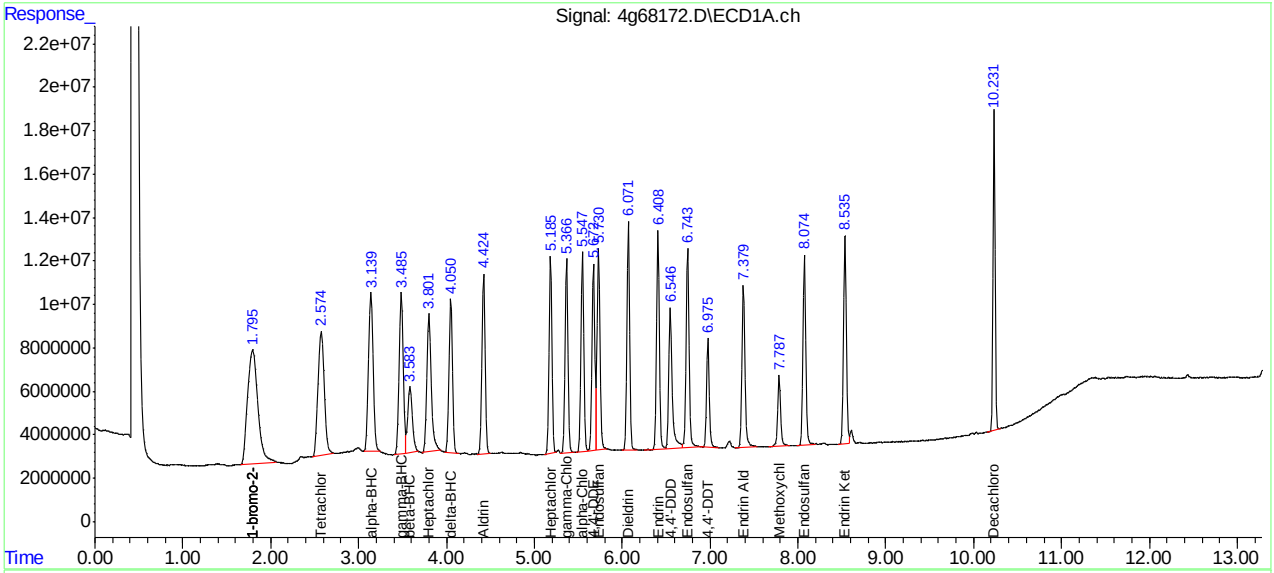
SGS ACCUTEST JC19996

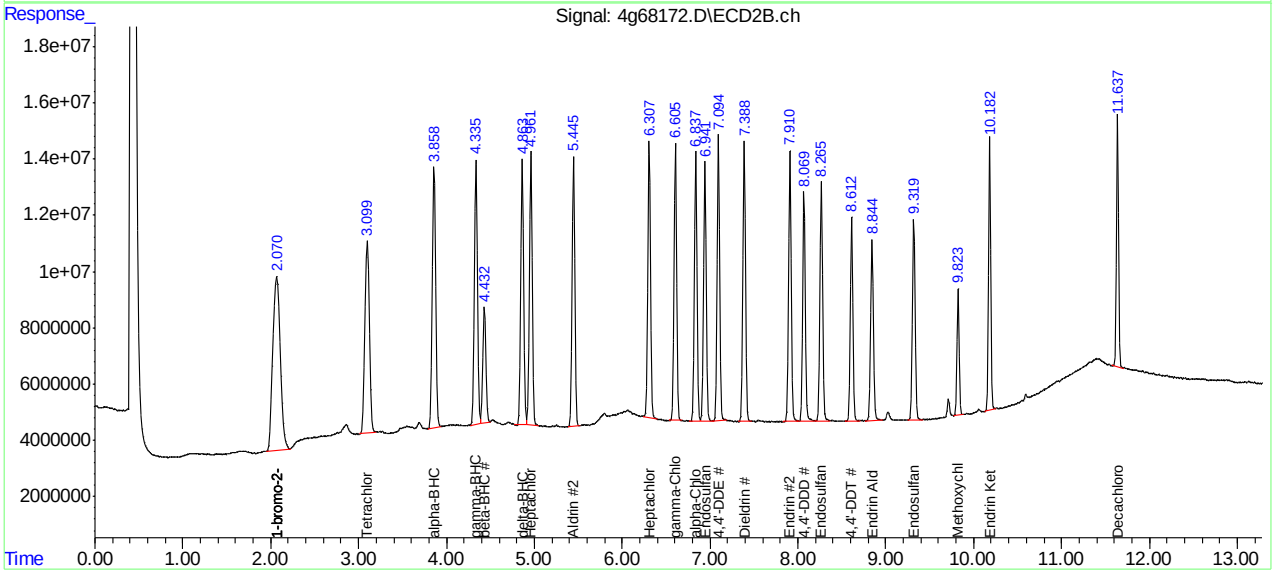
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68172.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 11:58 am
Operator : dharas
Sample : op93822-bs1
Misc : op93822,g4g1787,1000,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 14:00:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 13:37:46 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC19996

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
05/13/16 11:19

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1010\
Data File : 6g35037.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 May 2016 10:10 am
Operator : dharas
Sample : op93857-bs1
Misc : op93857,g6g1010,15.0,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 13 11:02:34 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...	1.295	1.565	152.6E6	55143117	50.000	50.000
25) I	1-bromo-2...	1.295	1.565	152.6E6	55143117	50.000	50.000
31) I	1-bromo-2...	1.295	1.565	152.6E6	55143117	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.970	2.458	78381908	27877441	28.017	27.982
	Spiked Amount 40.000	Range	30 - 150	Recovery	=	70.04%	69.95%
24)	SAB Decachlor...	9.888	11.737	68608381	22530446	28.202	30.078
	Spiked Amount 40.000			Recovery	=	70.51%	75.20%
	Target Compounds						
3) A	alpha-BHC	2.482	3.159	72578723	25918200	20.124m	19.968
4) MA	gamma-BHC	2.797	3.609	67227688	24470722	20.022	20.136
5) MA	Heptachlor	3.322	4.213	65256323	23460604	19.361	19.102
6) B	beta-BHC	2.878	3.703	34104382	11318675	20.692	19.116
7) B	delta-BHC	3.072	4.118	59806710	22048905	19.112	19.469
8) MB	Aldrin	3.673	4.688	59945304	22958748	19.257	20.103
9) B	Heptachlo...	4.419	5.566	56427255	21319033	19.361	20.028
10) B	gamma-Chl...	4.593	5.870	54830329	20866594	18.695	20.053
11) B	alpha-Chl...	4.773	6.113	55124414	20781684	18.937	20.102
12) A	Endosulfan I	4.955	6.212	53792265	19574355	18.719	19.490
13) B	4,4'-DDE	4.906	6.411	46907747	17884881	19.446	20.062
14) MA	Dieldrin	5.298	6.681	56482855	20358995	19.878	19.845
15) MA	Endrin	5.638	7.223	53216291	19295144	20.646	20.701
16) A	4,4'-DDD	5.790	7.443	39880373	14983580	19.556	19.476
17) B	Endosulfa...	5.980	7.606	49898430	17514605	19.620	19.212
18) MA	4,4'-DDT	6.240	8.023	41773429	13975112	18.833	20.013
19) B	Endrin Al...	6.649	8.233	40733426	14186796	19.650	19.193
20) B	Endosulfa...	7.383	8.748	46671986	16069257	20.897	20.030
21) A	Methoxychlor	7.104	9.399	25749719	7375028	19.368	19.168
23) B	Endrin Ke...	7.858	9.794	54122462	18309961	20.378	19.527

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

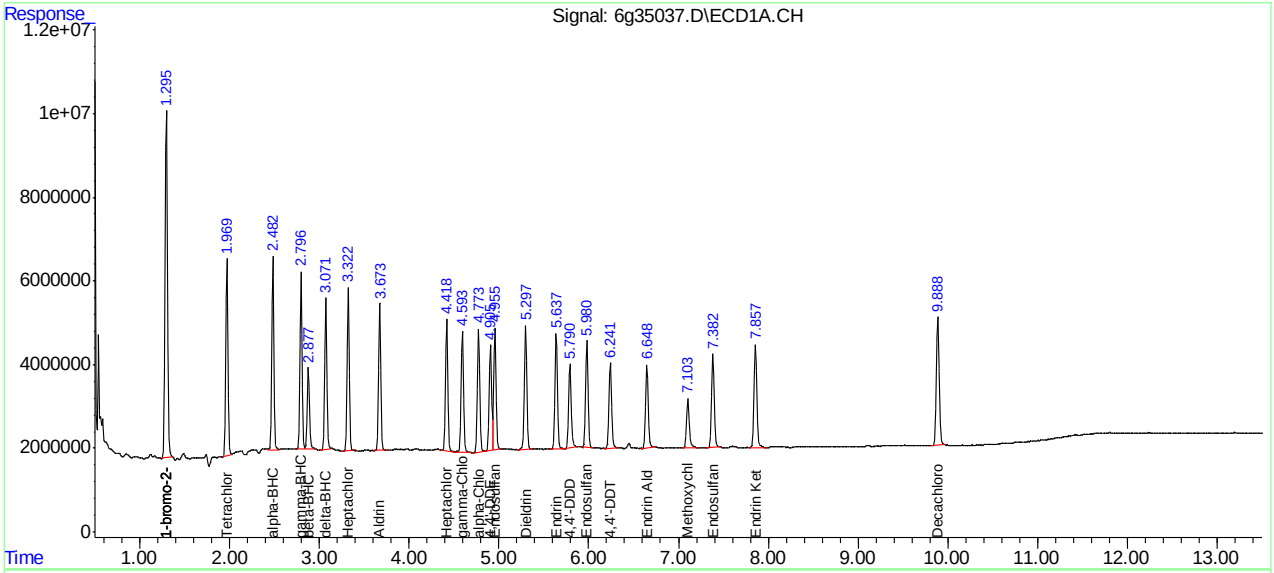
SGS ACCUTEST JC19996

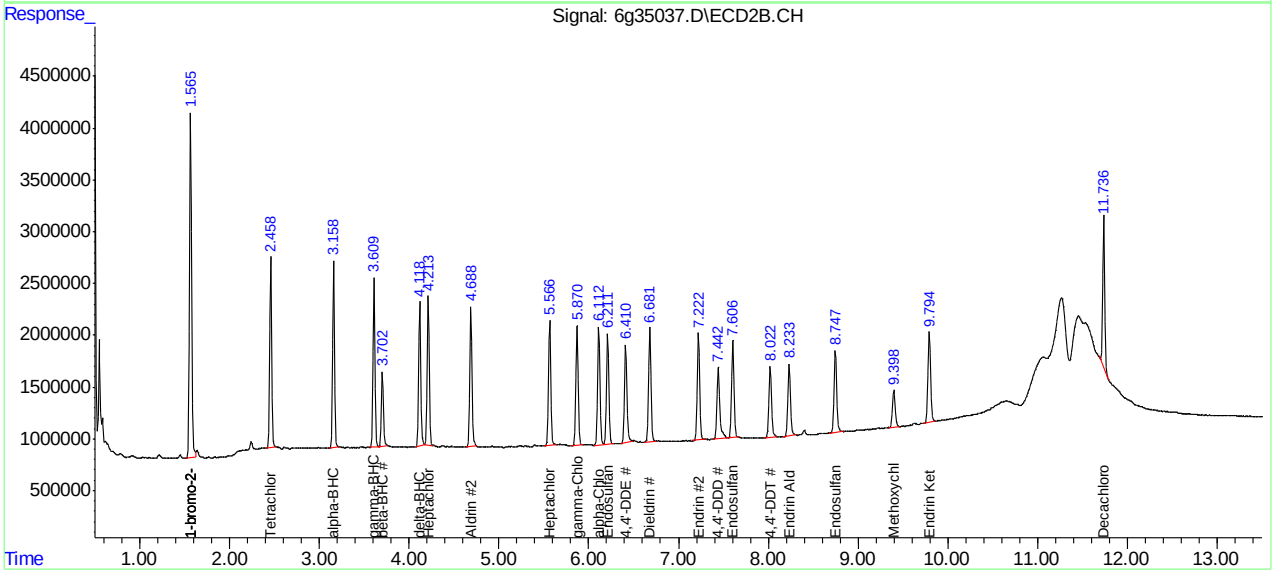
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1010\
Data File : 6g35037.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 May 2016 10:10 am
Operator : dharas
Sample : op93857-bs1
Misc : op93857,g6g1010,15.0,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 13 11:02:34 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 JC19996

Manual Integration Approval Summary

Sample Number:	OP93857-BS1	**Method:**	SW846 8081B
Lab FileID:	6G35037.D	**Analyst approved:**	05/13/16 11:12 Dhara Saparia
Injection Time:	05/13/16 10:10	**Supervisor approved:**	05/13/16 11:19 Gwendolyn Burns

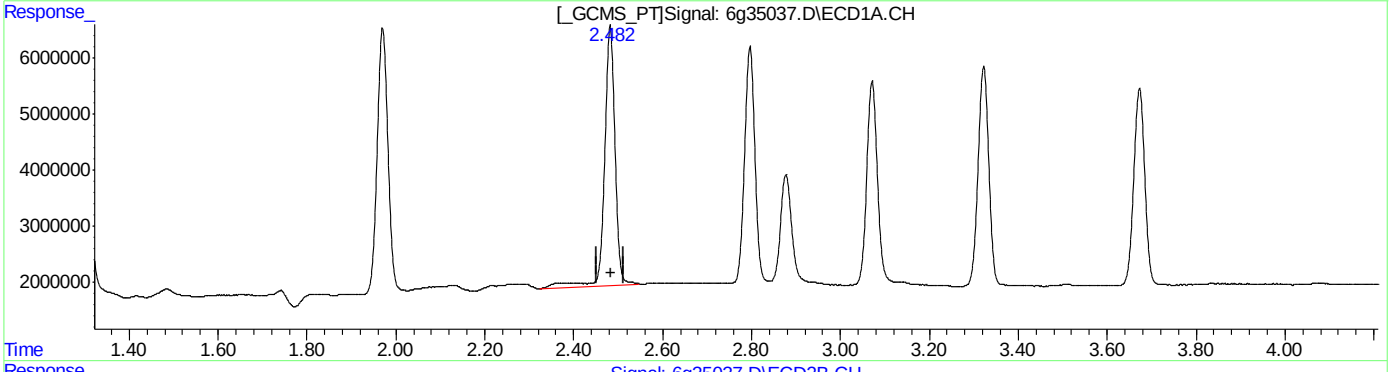
Parameter	CAS	Sig#	R.T. (min.)	Reason
alpha-BHC	319-84-6	1	2.48	Poor instrument integration

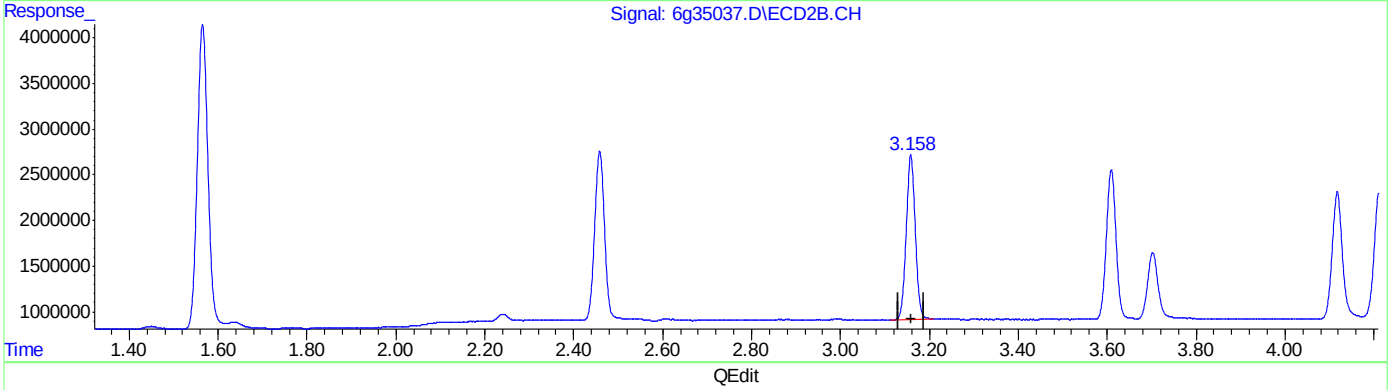
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1010\
Data File : 6g35037.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 May 2016 10:10 am
Operator : dharas
Sample : op93857-bs1
Misc : op93857,g6g1010,15.0,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 13 11:01:54 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





QEdit

(3) alpha-BHC (A)
2.482min 21.447PPB
response 77349804

(3) alpha-BHC #2 (A)
3.159min 19.968PPB
response 25918200

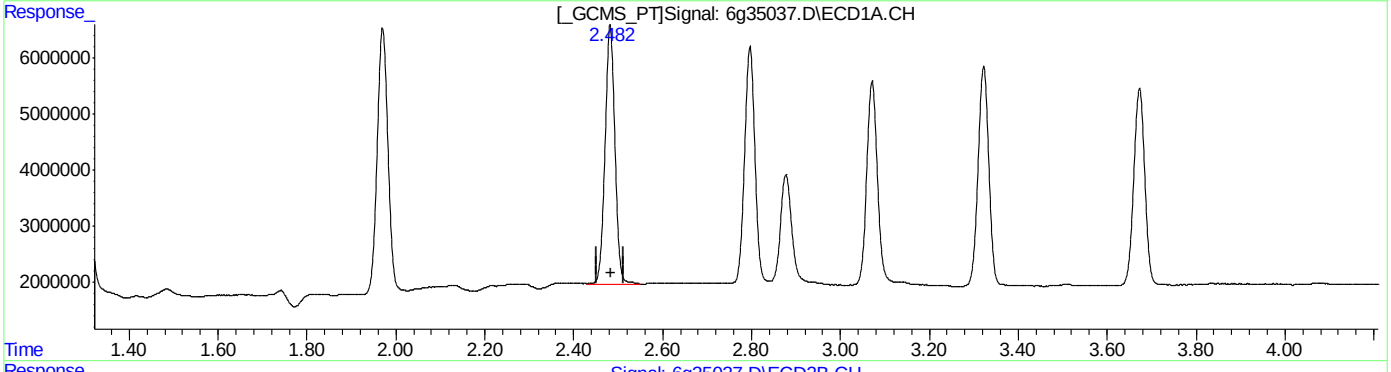
(+) = Expected Retention Time
6PST987.M Fri May 13 11:01:59 2016

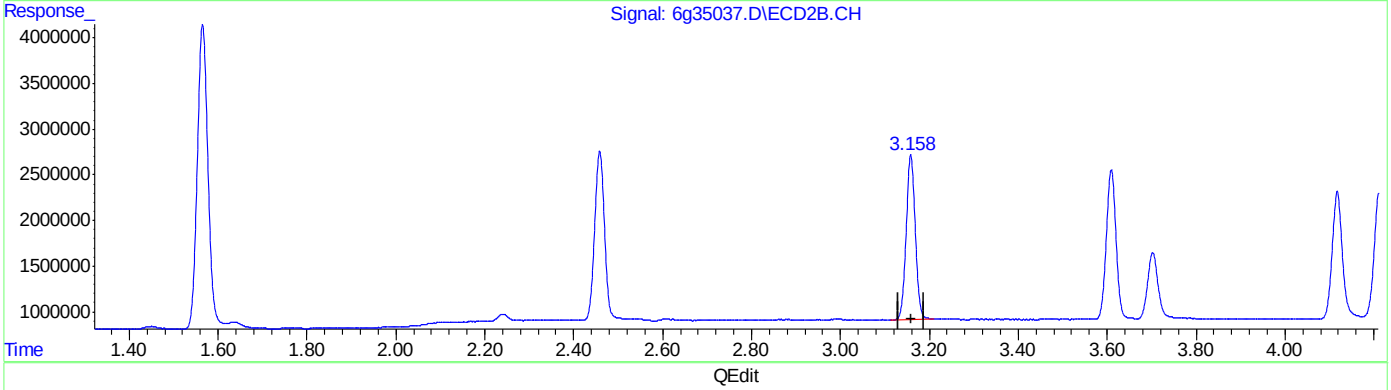
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1010\
Data File : 6g35037.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 May 2016 10:10 am
Operator : dharas
Sample : op93857-bs1
Misc : op93857,g6g1010,15.0,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 13 11:01:54 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





QEdit

(3) alpha-BHC (A)
2.482min 20.124PPB m
response 72578723

(3) alpha-BHC #2 (A)
3.159min 19.968PPB
response 25918200

(+) = Expected Retention Time
6PST987.M Fri May 13 11:02:06 2016

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
05/13/16 14:51

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68177.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 1:14 pm
Operator : dharas
Sample : op93822-ms
Misc : op93822,g4g1787,500,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 15:27:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 13:37:46 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	1.798	2.065	435.7E6	389.2E6	50.000	50.000	
25) I	1-bromo-2...	1.798	2.065	435.7E6	389.2E6	50.000	50.000	
31) I	1-bromo-2...	1.798	2.065	435.7E6	389.2E6	50.000	50.000	
	System Monitoring Compounds							
2) SAB	Tetrachlo...	2.578	3.102	298.7E6	263.4E6	39.752	38.419	
Spiked Amount		40.000 Range	30 - 150	Recovery	=	99.38%	96.05%	
24) SA	Decachlor...	10.233	11.637	237.8E6	134.5E6	33.581	27.667	
Spiked Amount		40.000		Recovery	=	83.95%	69.17%	
	Target Compounds							
3) A	alpha-BHC	3.140	3.859	301.2E6	268.3E6	29.295	26.772	
4) MA	gamma-BHC	3.487	4.337	264.8E6	244.5E6	29.457	27.452	
5) MA	Heptachlor	3.802	4.962	249.6E6	248.0E6	29.580	27.034	
6) B	beta-BHC	3.588	4.433	121.9E6	113.8E6	28.304	28.211	
7) B	delta-BHC	4.049	4.863	221.3E6	236.6E6	27.022	28.457	
8) MB	Aldrin	4.423	5.447	236.3E6	239.7E6	27.438	26.515	
9) B	Heptachlo...	5.185	6.307	234.9E6	391.6E6	30.535	47.970	#
10) B	gamma-Chl...	5.367	6.606	278.5E6	226.0E6	36.199	28.649	
11) B	alpha-Chl...	5.547	6.837	253.7E6	221.1E6	30.599	27.908	
12) A	Endosulfan I	5.731	6.942	247.5E6	211.7E6	29.016	27.988	
13) B	4,4'-DDE	5.672	7.096	213.1E6	229.7E6	27.708	29.070	
14) MA	Dieldrin	6.070	7.390	250.4E6	231.3E6	30.964	29.317	
15) MA	Endrin	6.406	7.909	259.4E6	221.9E6	33.690	31.562	
16) A	4,4'-DDD	6.548	8.069	202.3E6	191.7E6	31.048	30.025	
17) B	Endosulfa...	6.745	8.267	248.4E6	204.9E6	33.538	29.472	
18) MA	4,4'-DDT	6.975	8.612	135.6E6	168.5E6	28.107	30.188	
19) B	Endrin Al...	7.380	8.843	203.3E6	157.5E6	32.509	29.824	
20) B	Endosulfa...	8.074	9.319	216.7E6	171.4E6	31.909	29.464	
21) A	Methoxychlor	7.787	9.823	87568625	88398717	30.165m	29.148m	
23) B	Endrin Ke...	8.535	10.183	243.3E6	182.4E6	30.976	28.555	

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

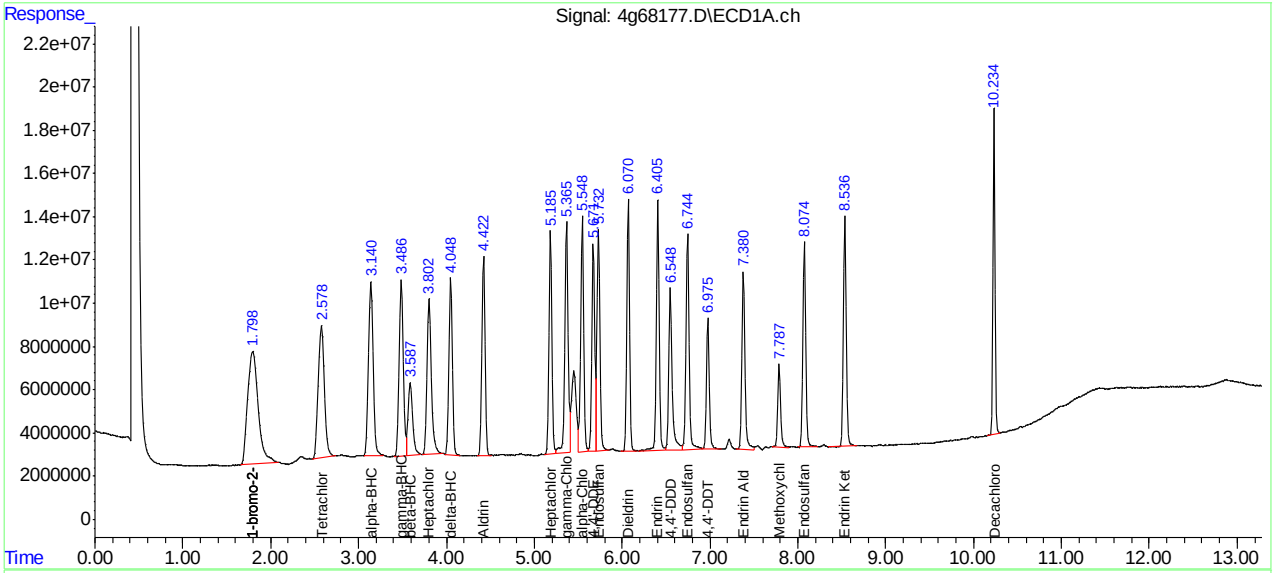
SGS ACCUTEST JC19996

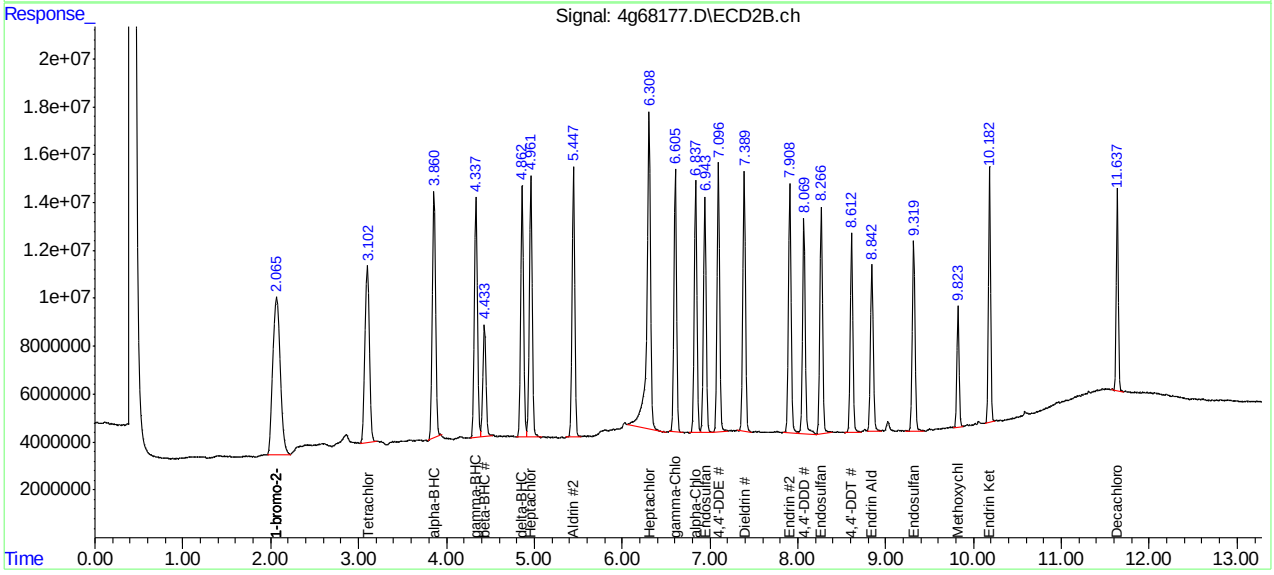
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68177.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 1:14 pm
Operator : dharas
Sample : op93822-ms
Misc : op93822,g4g1787,500,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 15:27:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 13:37:46 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	OP93822-MS	**Method:**	SW846 8081B
Lab FileID:	4G68177.D	**Analyst approved:**	05/12/16 15:30 Dhara Saparia
Injection Time:	05/12/16 13:14	**Supervisor approved:**	05/13/16 14:51 Gwendolyn Burns

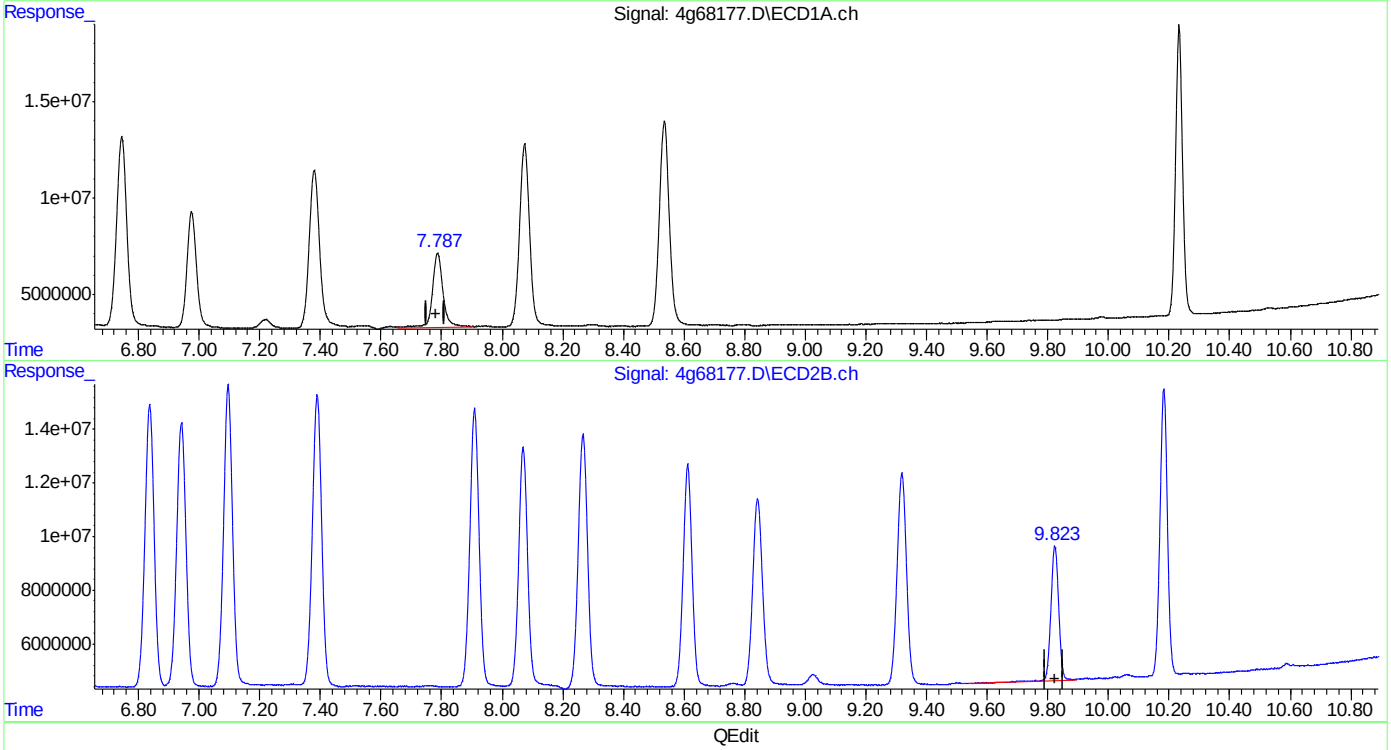
Parameter	CAS	Sig#	R.T. (min.)	Reason
Methoxychlor	72-43-5	1	7.79	Poor instrument integration
Methoxychlor	72-43-5	2	9.82	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68177.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 1:14 pm
Operator : dharas
Sample : op93822-ms
Misc : op93822,g4g1787,500,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 15:26:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 13:37:46 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(21) Methoxychlor (A)
7.787min 32.925 PPB
response 95581035

(21) Methoxychlor #2 (A)
9.824min 29.689 PPB
response 90037596

(+) = Expected Retention Time

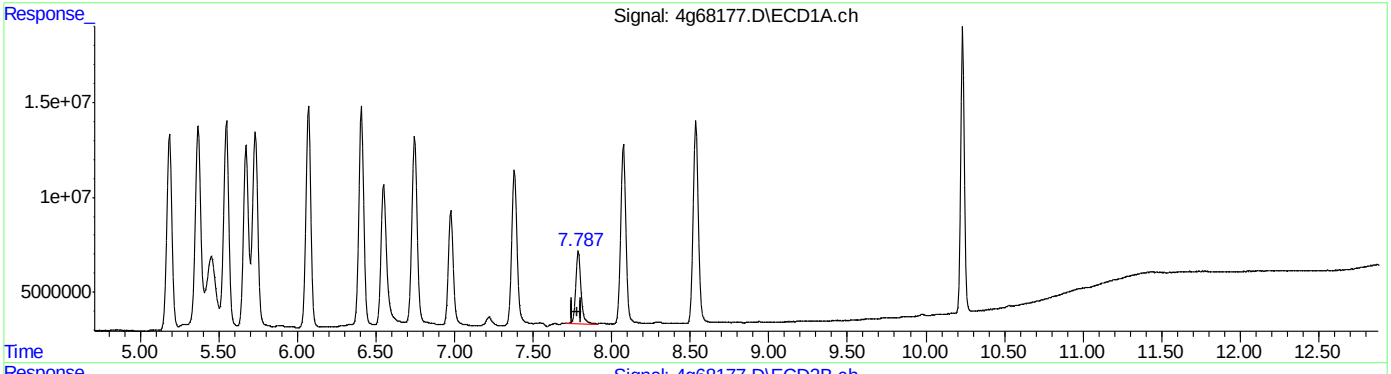
SGS ACCUTEST JC19996

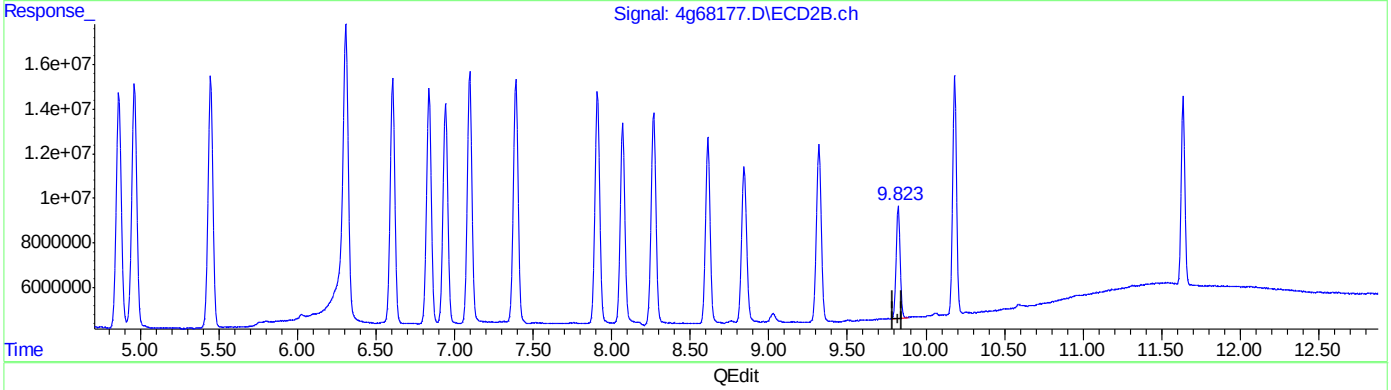
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68177.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 1:14 pm
Operator : dharas
Sample : op93822-ms
Misc : op93822,g4g1787,500,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 15:26:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 13:37:46 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(21) Methoxychlor (A)
7.787min 30.165 PPB m
response 87568625

(21) Methoxychlor #2 (A)
9.823min 29.148 PPB m
response 88398717

(+) = Expected Retention Time
4PST1778.M Thu May 12 15:26:43 2016 RPT1

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68178.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 1:29 pm
Operator : dharas
Sample : op93822-msd
Misc : op93822,g4g1787,500,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 15:27:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 13:37:46 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	1.791	2.068	433.9E6	376.1E6	50.000	50.000	
25) I	1-bromo-2...	1.791	2.068	433.9E6	376.1E6	50.000	50.000	
31) I	1-bromo-2...	1.791	2.068	433.9E6	376.1E6	50.000	50.000	
	System Monitoring Compounds							
2) SAB	Tetrachlo...	2.577	3.100	275.3E6	242.1E6	36.794	36.537	
Spiked Amount		40.000 Range	30 - 150	Recovery	=	91.98%	91.34%	
24) SA	Decachlor...	10.234	11.637	205.8E6	115.4E6	29.193	24.556	
Spiked Amount		40.000		Recovery	=	72.98%	61.39%	
	Target Compounds							
3) A	alpha-BHC	3.142	3.860	271.9E6	240.6E6	26.566	24.839	
4) MA	gamma-BHC	3.487	4.337	238.8E6	221.7E6	26.677	25.761	
5) MA	Heptachlor	3.804	4.962	222.2E6	225.7E6	26.446	25.451	
6) B	beta-BHC	3.590	4.434	109.9E6	103.7E6	25.635	26.603	
7) B	delta-BHC	4.051	4.864	201.0E6	212.7E6	24.650	26.475	
8) MB	Aldrin	4.424	5.447	215.0E6	218.1E6	25.073	24.966	
9) B	Heptachlo...	5.186	6.307	212.7E6	358.5E6	27.764	45.445	#
10) B	gamma-Chl...	5.368	6.606	250.9E6	205.9E6	32.759	27.005	
11) B	alpha-Chl...	5.547	6.837	232.3E6	200.2E6	28.136	26.147	
12) A	Endosulfan I	5.731	6.942	222.0E6	190.5E6	26.136	26.053	
13) B	4,4'-DDE	5.672	7.096	190.9E6	206.8E6	24.925	27.079	
14) MA	Dieldrin	6.070	7.389	224.2E6	208.0E6	27.843	27.289	
15) MA	Endrin	6.407	7.909	230.3E6	196.6E6	30.046	28.938	
16) A	4,4'-DDD	6.548	8.069	179.5E6	163.4E6	27.659	26.483	
17) B	Endosulfa...	6.744	8.266	223.8E6	180.6E6	30.341	26.886	
18) MA	4,4'-DDT	6.977	8.612	121.2E6	151.2E6	25.586	28.033	
19) B	Endrin Al...	7.380	8.844	178.1E6	142.8E6	28.600	27.981	
20) B	Endosulfa...	8.074	9.319	193.9E6	154.4E6	28.680	27.464	
21) A	Methoxychlor	7.787	9.823	78526158	79418990	27.167	27.099	
23) B	Endrin Ke...	8.535	10.182	218.0E6	163.5E6	27.876	26.486	

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

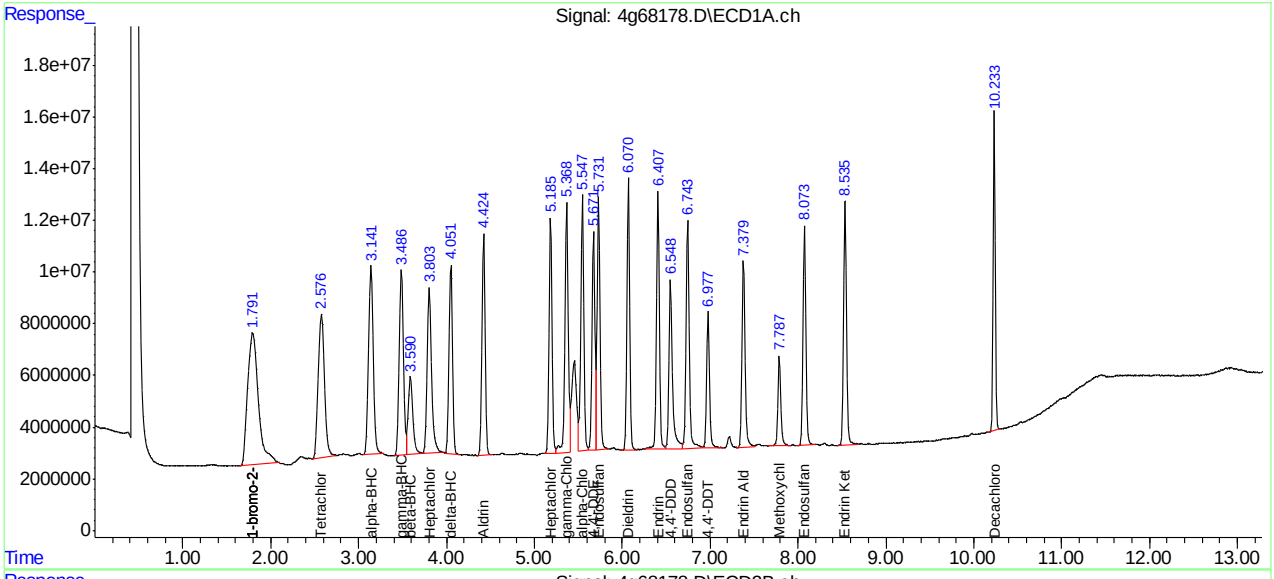
SGS ACCUTEST JC19996

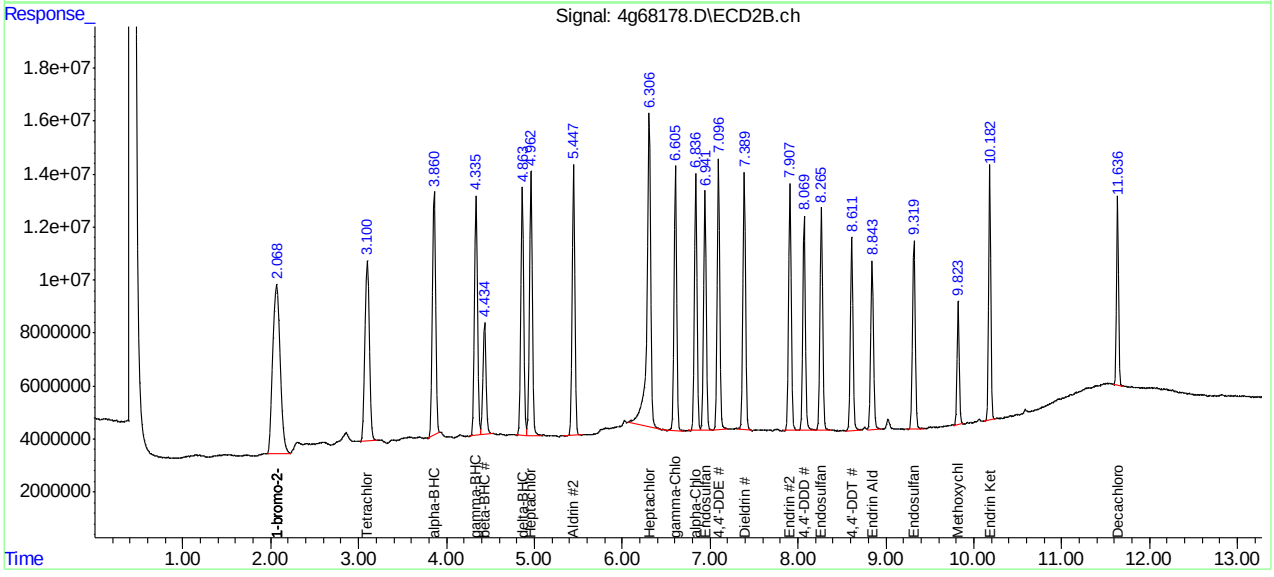
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68178.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 1:29 pm
Operator : dharas
Sample : op93822-msd
Misc : op93822,g4g1787,500,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 15:27:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 13:37:46 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC19996

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
05/16/16 07:13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1010\
Data File : 6g35041a.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 May 2016 11:25 am
Operator : dharas
Sample : op93857-ms
Misc : op93857,g6g1010,15.5,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 13 12:24:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Fri May 13 12:22:26 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	1.566	157.3E6	55334485	50.000	50.000	
25) I	1-bromo-2...	1.298	1.566	157.3E6	55334485	50.000	50.000	
31) I	1-bromo-2...	1.298	1.566	157.3E6	55334485	50.000	50.000	
	System Monitoring Compounds							
2) SAB	Tetrachlo...	1.975	2.459	83762216	30157560	29.055	30.166	
Spiked Amount		40.000	Range	30 - 150	Recovery	=	72.64%	75.41%
24) SAB	Decachlor...	9.895	11.742	69883149	25902170	27.878	34.459	
Spiked Amount		40.000			Recovery	=	69.69%	86.15%
	Target Compounds							
3) A	alpha-BHC	2.487	3.160	77215050	27931219	20.777m	21.445	
4) MA	gamma-BHC	2.802	3.610	81522607	28448544	23.562	23.328	
5) MA	Heptachlor	3.330	4.215	72871292	28355046	20.981m	23.007	
6) B	beta-BHC	2.881	3.703	46050053	14432610	27.114	24.291	
7) B	delta-BHC	3.077	4.118	73716402	24782354	22.861	21.807	
8) MB	Aldrin	3.680	4.690	68819927	24485760	21.455	21.366	
9) B	Heptachlo...	4.426	5.568	73246754	24256301	24.389	22.709	
10) B	gamma-Chl...	4.600	5.874	58631557	40227777	19.400	38.525	#
11) B	alpha-Chl...	4.781	6.115	60401198	23944800	20.137	23.082	
12) A	Endosulfan I	4.963	6.214	59930832	21517897	20.239	21.351	
13) B	4,4'-DDE	4.912	6.412	51744702	25276558	20.818	28.256m	#
14) MA	Dieldrin	5.306	6.683	64294874	22234436	21.959	21.598	
15) MA	Endrin	5.645	7.226	61013008	21126696	22.971	22.587	
16) A	4,4'-DDD	5.796	7.443	47272567	17086909	22.496	22.133	
17) B	Endosulfa...	5.986	7.608	53729368	18629894	20.503	20.365	
18) MA	4,4'-DDT	6.247	8.026	46765025	18067350	20.460m	25.784	#
19) B	Endrin Al...	6.656	8.235	45414411	16604335	21.261	22.387	
20) B	Endosulfa...	7.391	8.750	46326031	18636455	20.129	23.150	
21) A	Methoxychlor	7.110	9.399	26700067	8728937	19.490	22.608	
23) B	Endrin Ke...	7.864	9.796	61631540	19896604	22.520	21.145	

SemiQuant Compounds - Not Calibrated on this Instrument

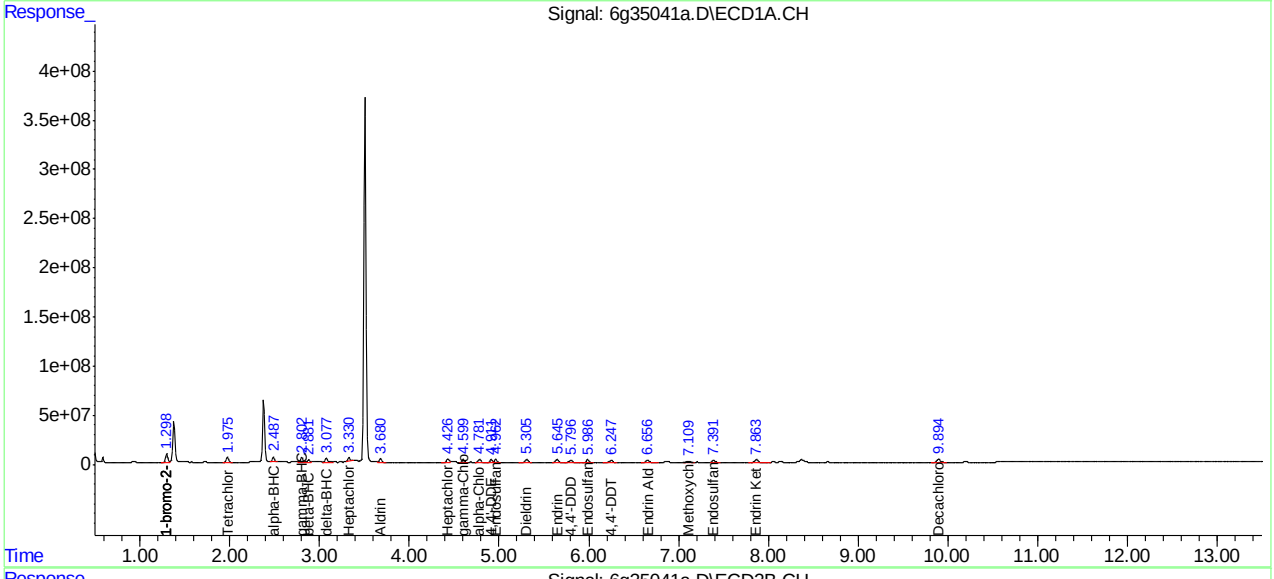
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

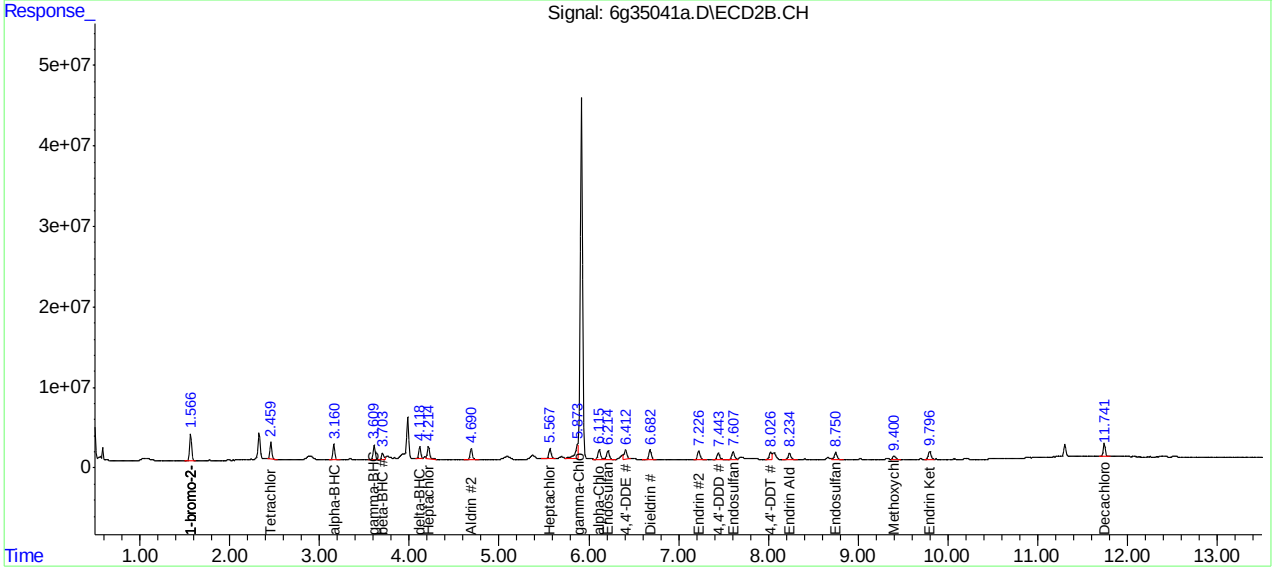
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1010\
Data File : 6g35041a.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 May 2016 11:25 am
Operator : dharas
Sample : op93857-ms
Misc : op93857,g6g1010,15.5,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 13 12:24:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Fri May 13 12:22:26 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 JC19996

Manual Integration Approval Summary

Sample Number:	OP93857-MS	**Method:**	SW846 8081B
Lab FileID:	6G35041A.D	**Analyst approved:**	05/13/16 14:10 Dhara Saparia
Injection Time:	05/13/16 11:25	**Supervisor approved:**	05/16/16 07:13 Gwendolyn Burns

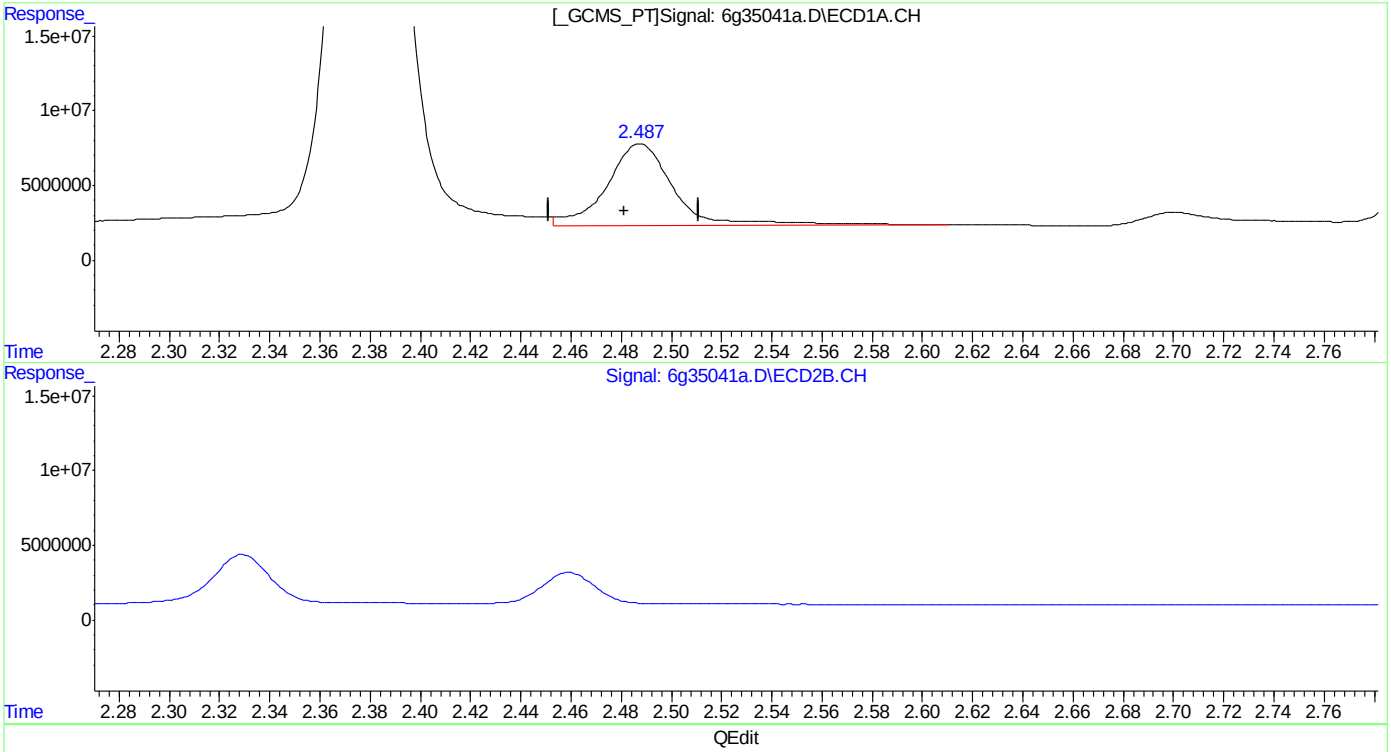
Parameter	CAS	Sig#	R.T. (min.)	Reason
alpha-BHC	319-84-6	1	2.49	Poor instrument integration
Heptachlor	76-44-8	1	3.33	Poor instrument integration
4,4'-DDT	50-29-3	1	6.25	Poor instrument integration
4,4'-DDE	72-55-9	2	6.41	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1010\
Data File : 6g35041a.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 May 2016 11:25 am
Operator : dharas
Sample : op93857-ms
Misc : op93857,g6g1010,15.5,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 13 12:23:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Fri May 13 12:22:26 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)
2.488min 27.223PPB
response 101171677

(3) alpha-BHC #2 (A)
3.160min 21.445PPB
response 27931219

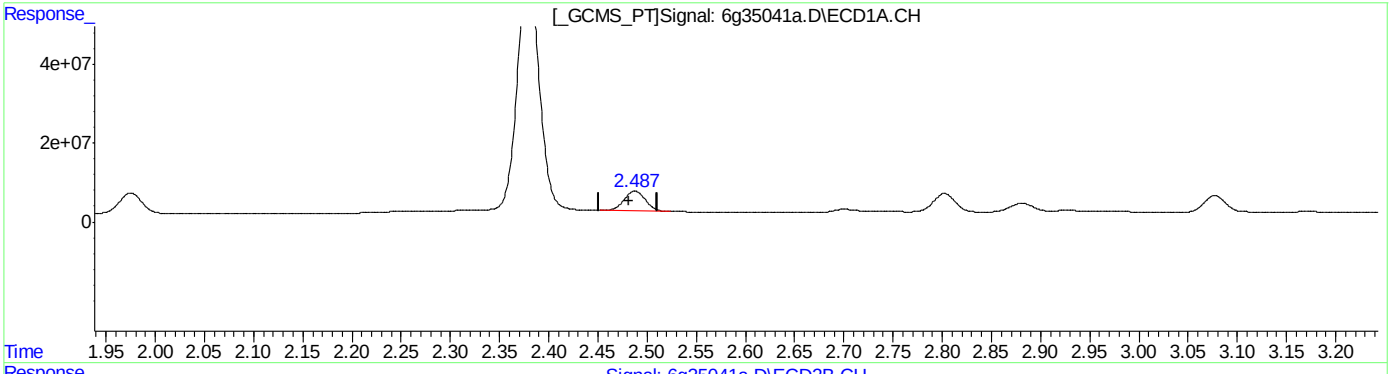
(+) = Expected Retention Time
6PST987.M Fri May 13 12:23:25 2016

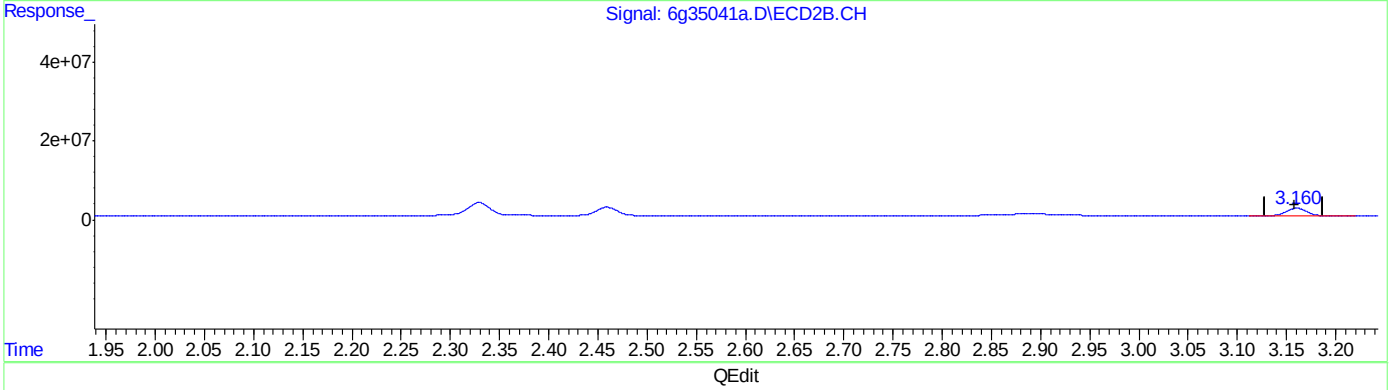
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1010\
Data File : 6g35041a.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 May 2016 11:25 am
Operator : dharas
Sample : op93857-ms
Misc : op93857,g6g1010,15.5,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 13 12:23:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Fri May 13 12:22:26 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)
2.487min 20.777PPB m
response 77215050

(3) alpha-BHC #2 (A)
3.160min 21.445PPB
response 27931219

(+) = Expected Retention Time
6PST987.M Fri May 13 12:23:34 2016

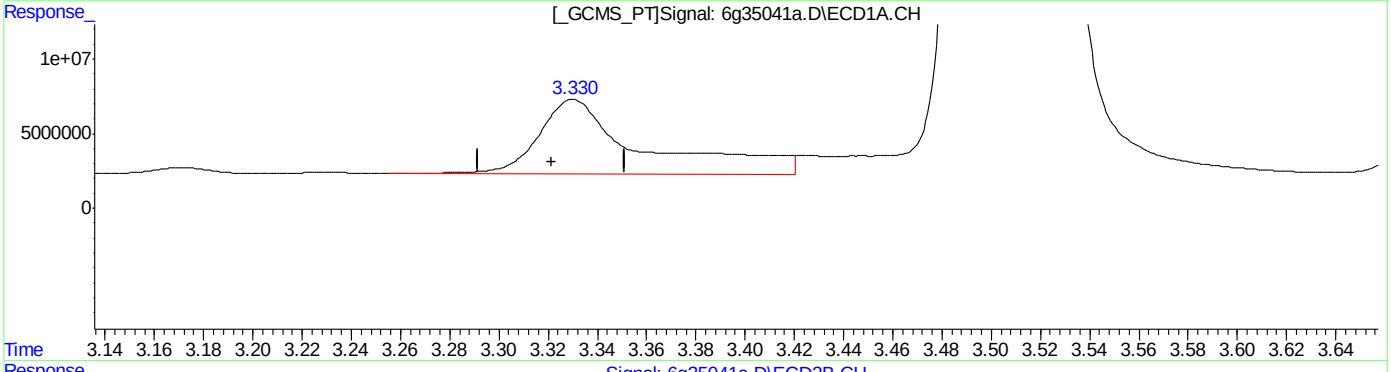
SGS ACCUTEST JC19996

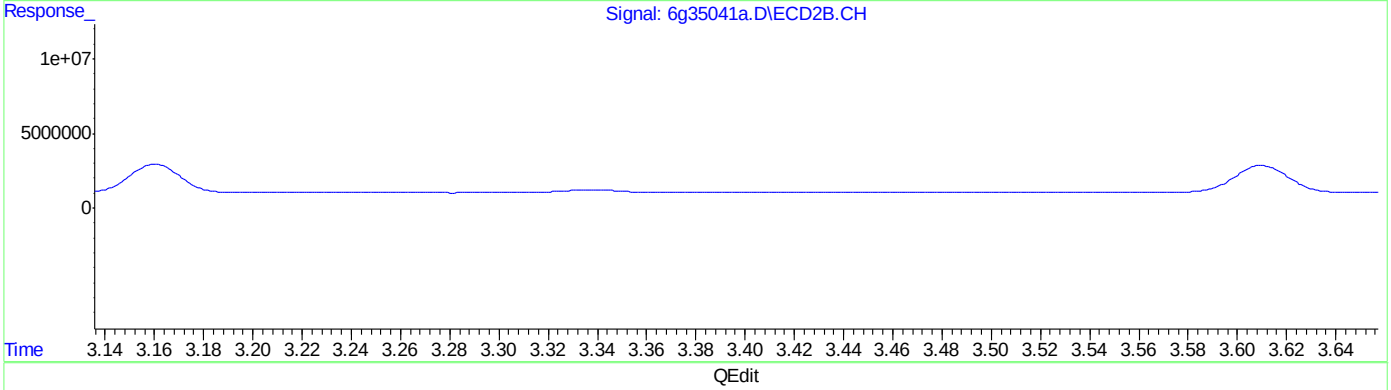
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1010\
Data File : 6g35041a.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 May 2016 11:25 am
Operator : dharas
Sample : op93857-ms
Misc : op93857,g6g1010,15.5,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 13 12:23:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Fri May 13 12:22:26 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

(5) Heptachlor (MA)
3.330min 42.067PPB
response 146107338

(5) Heptachlor #2 (MA)
4.215min 23.007PPB
response 28355046

(+) = Expected Retention Time
6PST987.M Fri May 13 12:23:41 2016

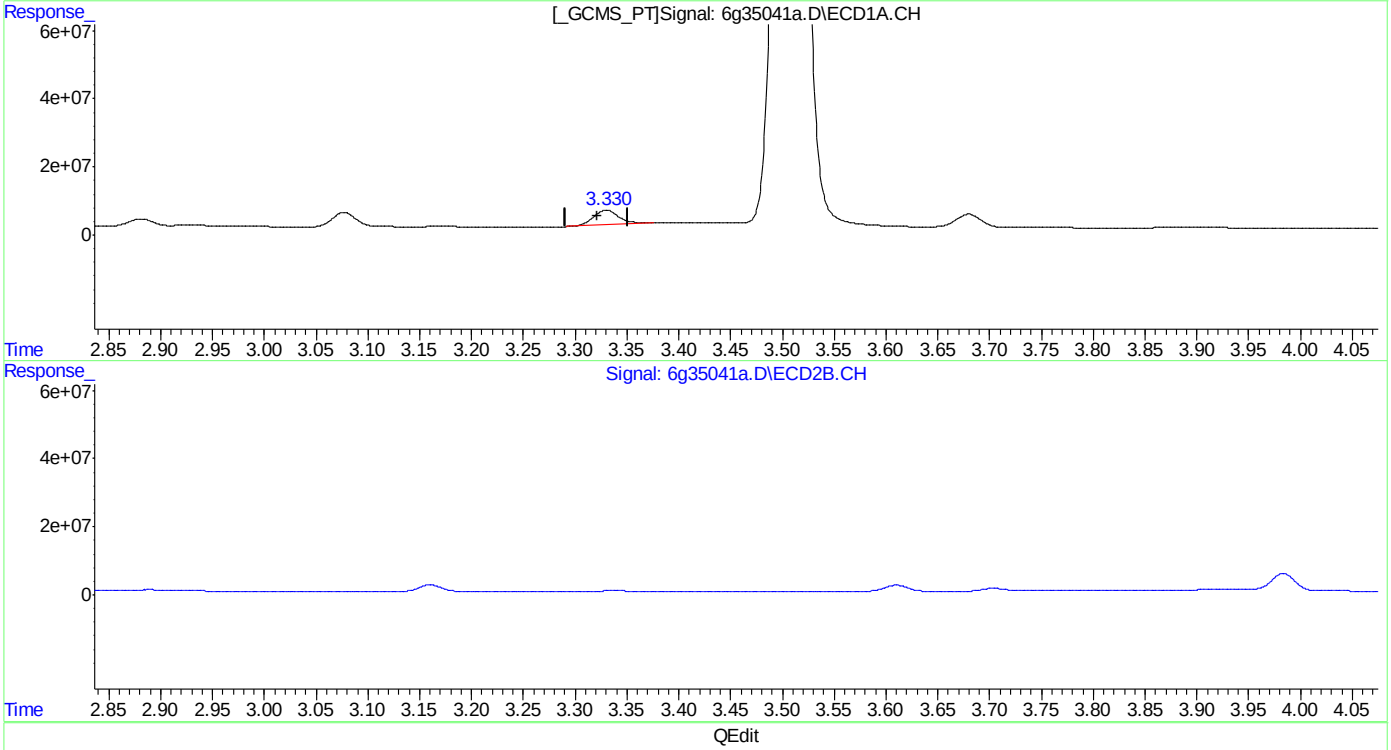
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1010\
Data File : 6g35041a.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 May 2016 11:25 am
Operator : dharas
Sample : op93857-ms
Misc : op93857,g6g1010,15.5,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 13 12:23:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Fri May 13 12:22:26 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

(5) Heptachlor (MA)
3.330min 20.981PPB m
response 72871292

(5) Heptachlor #2 (MA)
4.215min 23.007PPB
response 28355046

(+) = Expected Retention Time
6PST987.M Fri May 13 12:23:53 2016

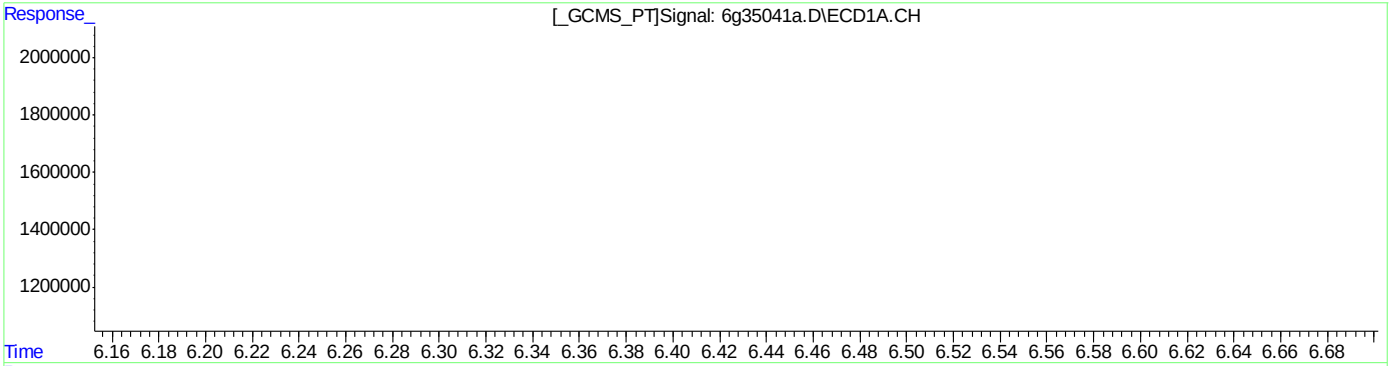
SGS ACCUTEST JC19996

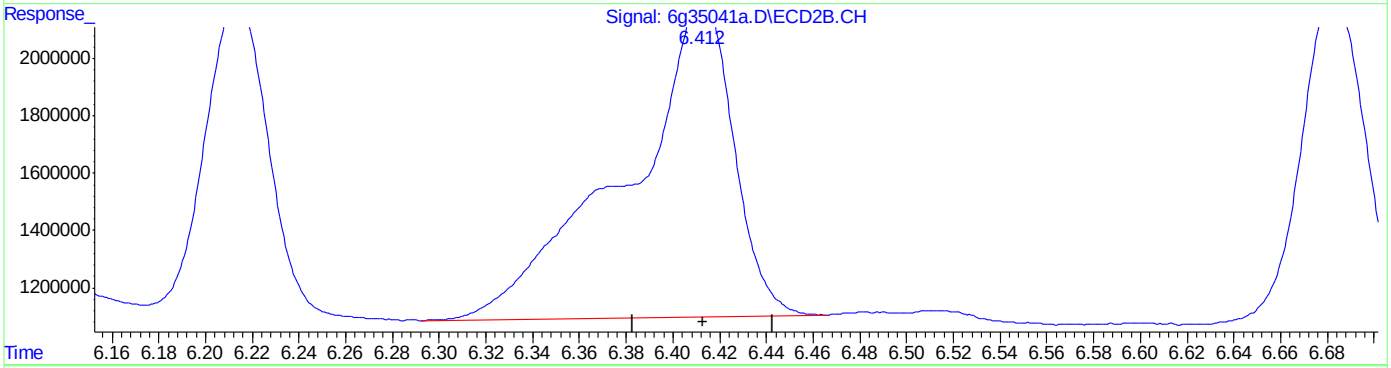
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1010\
Data File : 6g35041a.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 May 2016 11:25 am
Operator : dharas
Sample : op93857-ms
Misc : op93857,g6g1010,15.5,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 13 12:23:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Fri May 13 12:22:26 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)
4.912min 20.818PPB
response 51744702

(13) 4,4'-DDE #2 (B)
6.412min 39.375PPB
response 35223056

(+) = Expected Retention Time

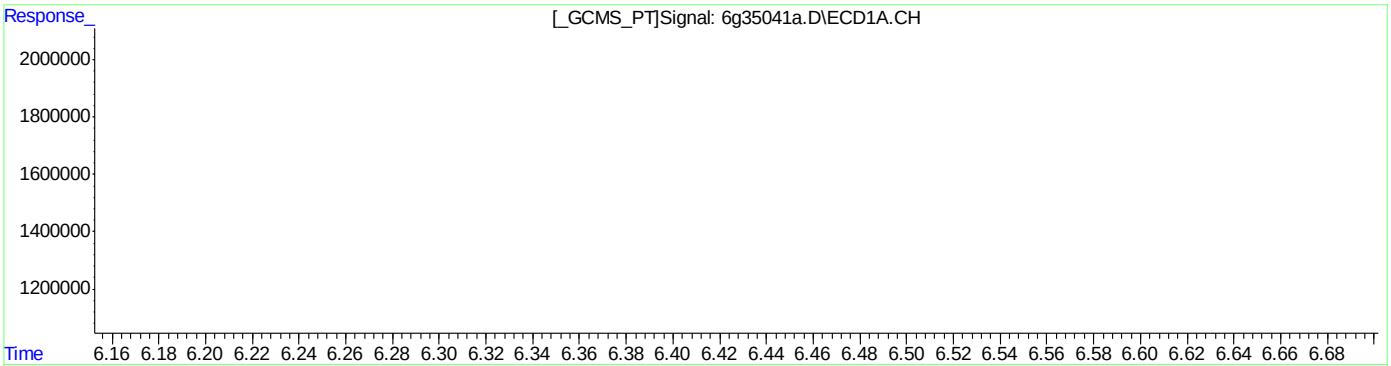
SGS ACCUTEST JC19996

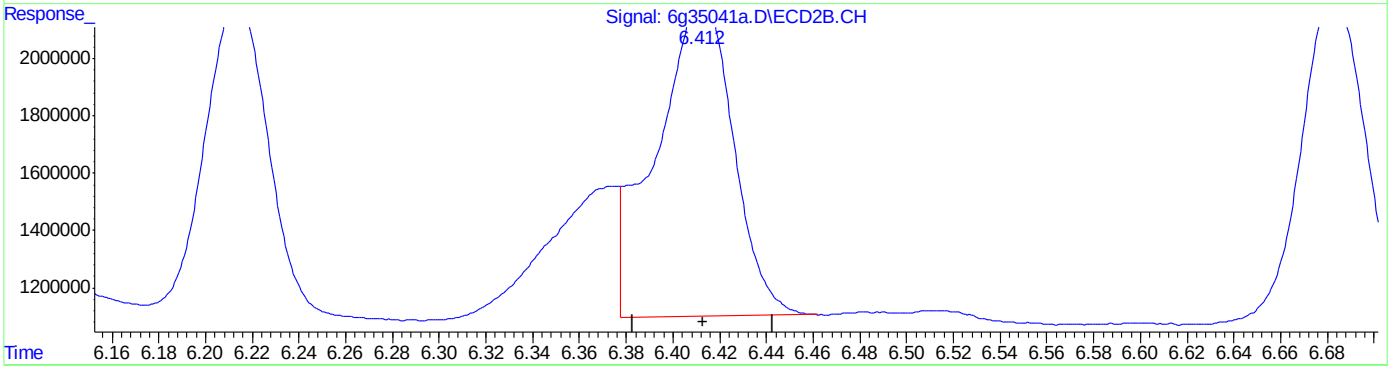
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1010\
Data File : 6g35041a.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 May 2016 11:25 am
Operator : dharas
Sample : op93857-ms
Misc : op93857,g6g1010,15.5,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 13 12:23:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Fri May 13 12:22:26 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)
4.912min 20.818PPB
response 51744702

(13) 4,4'-DDE #2 (B)
6.412min 28.256PPB m
response 25276558

(+) = Expected Retention Time

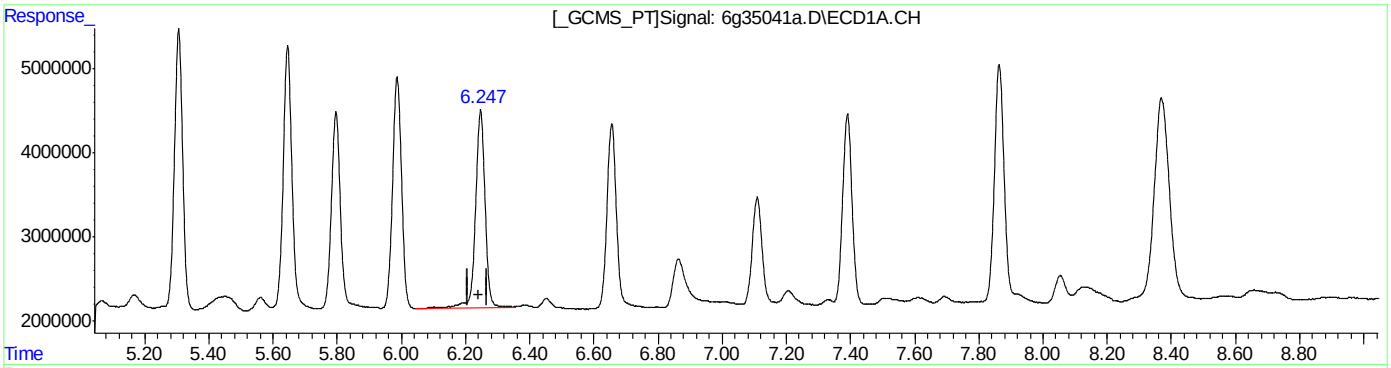
SGS ACCUTEST JC19996

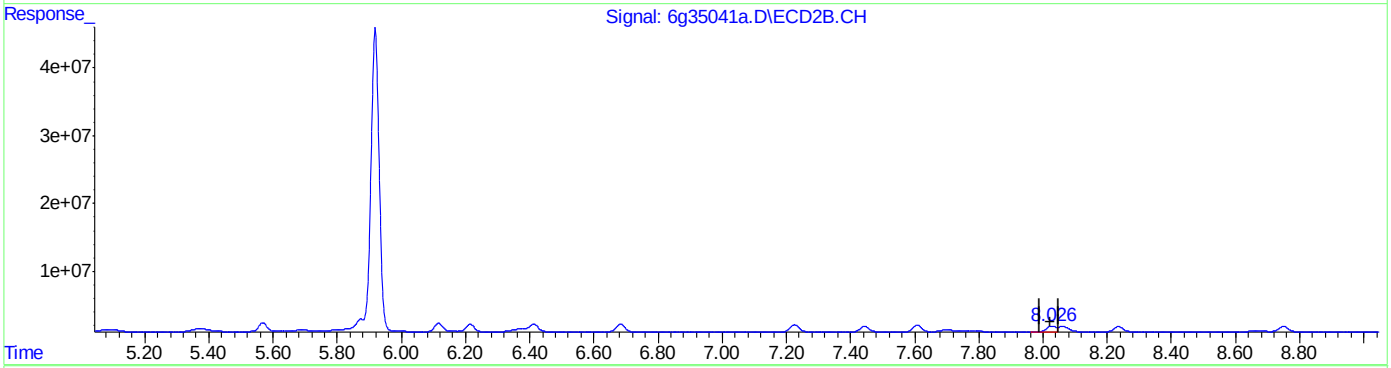
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1010\
Data File : 6g35041a.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 May 2016 11:25 am
Operator : dharas
Sample : op93857-ms
Misc : op93857,g6g1010,15.5,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 13 12:23:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Fri May 13 12:22:26 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

(18) 4,4'-DDT (MA)
6.247min 21.394PPB
response 48899244

(18) 4,4'-DDT #2 (MA)
8.026min 25.784PPB
response 18067350

(+) = Expected Retention Time

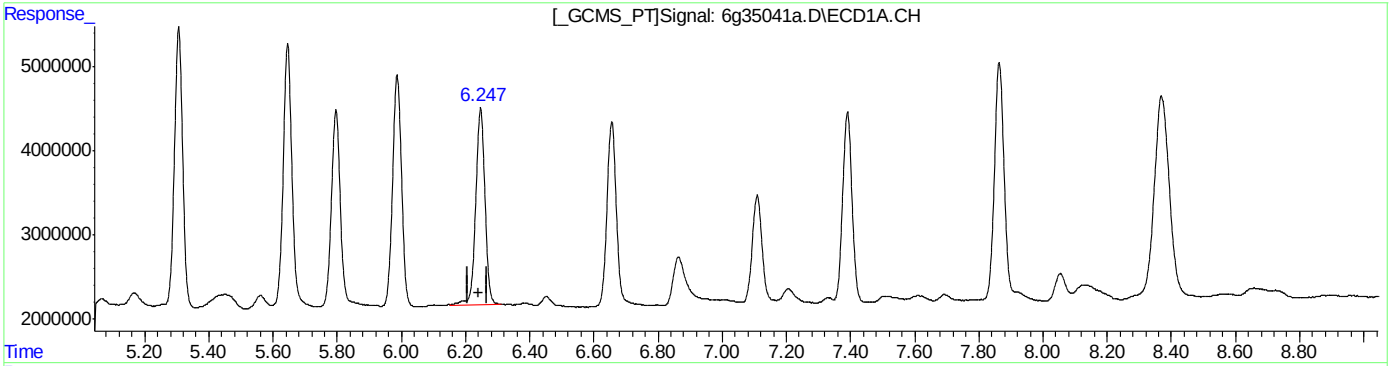
SGS ACCUTEST JC19996

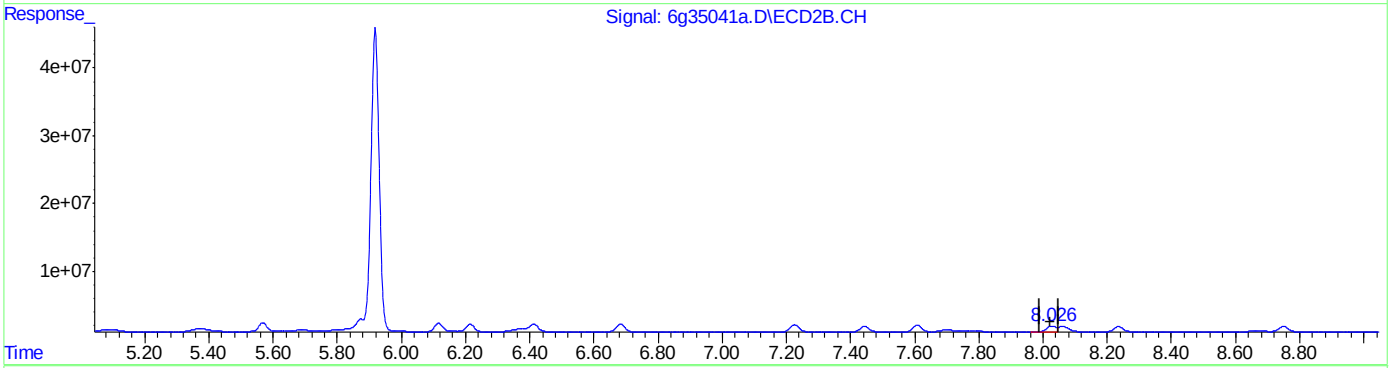
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1010\
Data File : 6g35041a.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 May 2016 11:25 am
Operator : dharas
Sample : op93857-ms
Misc : op93857,g6g1010,15.5,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 13 12:23:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Fri May 13 12:22:26 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

(18) 4,4'-DDT (MA)
6.247min 20.460PPB m
response 46765025

(18) 4,4'-DDT #2 (MA)
8.026min 25.784PPB
response 18067350

(+) = Expected Retention Time

SGS ACCUTEST JC19996

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 05/16/16 07:13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1010\
Data File : 6g35042.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 May 2016 11:41 am
Operator : dharas
Sample : op93857-msd
Misc : op93857,g6g1010,15.7,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 13 12:26:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Fri May 13 12:22:26 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...	1.295	1.566	153.3E6	55729038	50.000	50.000
25) I	1-bromo-2...	1.295	1.566	153.3E6	55729038	50.000	50.000
31) I	1-bromo-2...	1.295	1.566	153.3E6	55729038	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.971	2.459	82561568	32355315	29.381	32.135
Spiked Amount		40.000	Range	30 - 150	Recovery	= 73.45%	80.34%
24) SAB	Decachlor...	9.888	11.740	71747487	25949746	29.363m	34.278
Spiked Amount		40.000			Recovery	= 73.41%	85.69%
	Target Compounds						
3) A	alpha-BHC	2.482	3.159	76288912	27425872	21.059m	20.908
4) MA	gamma-BHC	2.798	3.609	79748702	27717501	23.646	22.568
5) MA	Heptachlor	3.323	4.213	87010677	30779492	25.701	24.797
6) B	beta-BHC	2.876	3.702	36202238	11982384	21.868	20.024
7) B	delta-BHC	3.071	4.117	79527353	25958702	25.302	22.680
8) MB	Aldrin	3.673	4.688	71992228	24801609	23.025	21.488
9) B	Heptachlo...	4.419	5.565	59175476	21763319	20.214	20.230m
10) B	gamma-Chl...	4.593	5.871	58851043	64084186	19.977	60.937 #
11) B	alpha-Chl...	4.774	6.114	59743695	22093496	20.434	21.146
12) A	Endosulfan I	4.956	6.212	57537673	20683776	19.934	20.378
13) B	4,4'-DDE	4.905	6.412	50983487	19281468	21.043	21.401
14) MA	Dieldrin	5.298	6.681	61611146	21758015	21.587	20.986
15) MA	Endrin	5.639	7.222	61504316	20434783	23.756	21.693
16) A	4,4'-DDD	5.789	7.441	45686912	17212920	22.305	22.138
17) B	Endosulfa...	5.979	7.605	53579170	19415714	20.975	21.074
18) MA	4,4'-DDT	6.241	8.021	46227832	15271692	20.749	21.640
19) B	Endrin Al...	6.648	8.233	44722965	15388052	21.480	20.600
20) B	Endosulfa...	7.384	8.746	47663358	17911298	21.247	22.092
21) A	Methoxychlor	7.103	9.398	26233419	8208430	19.645	21.109
23) B	Endrin Ke...	7.857	9.792	58453944	19841598	21.912	20.937

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

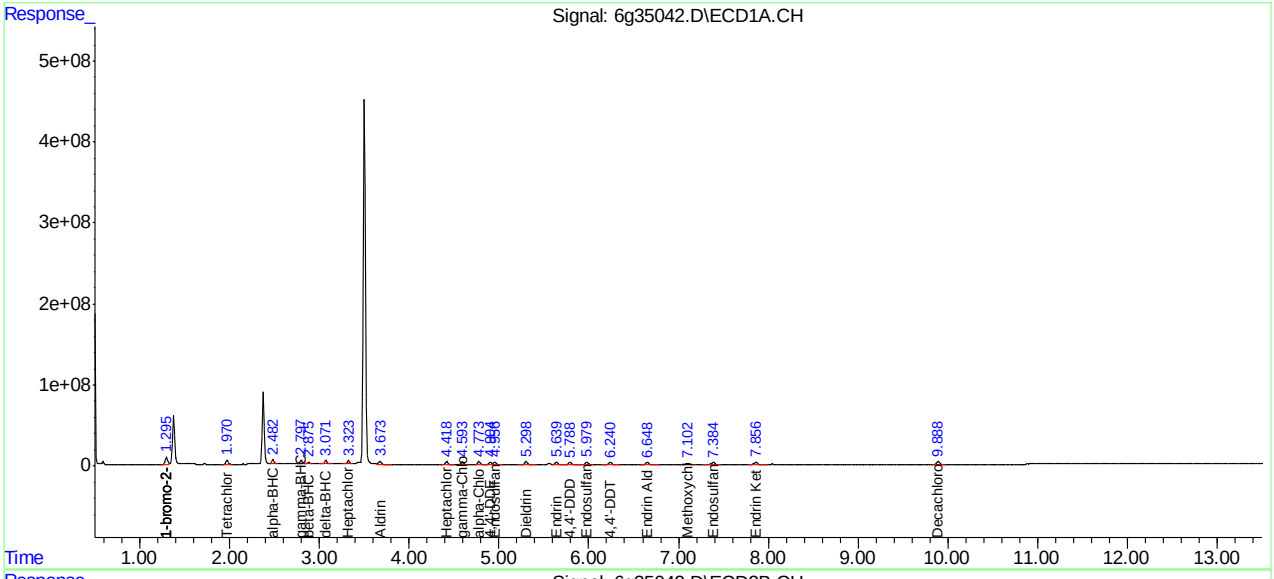
SGS ACCUTEST JC19996

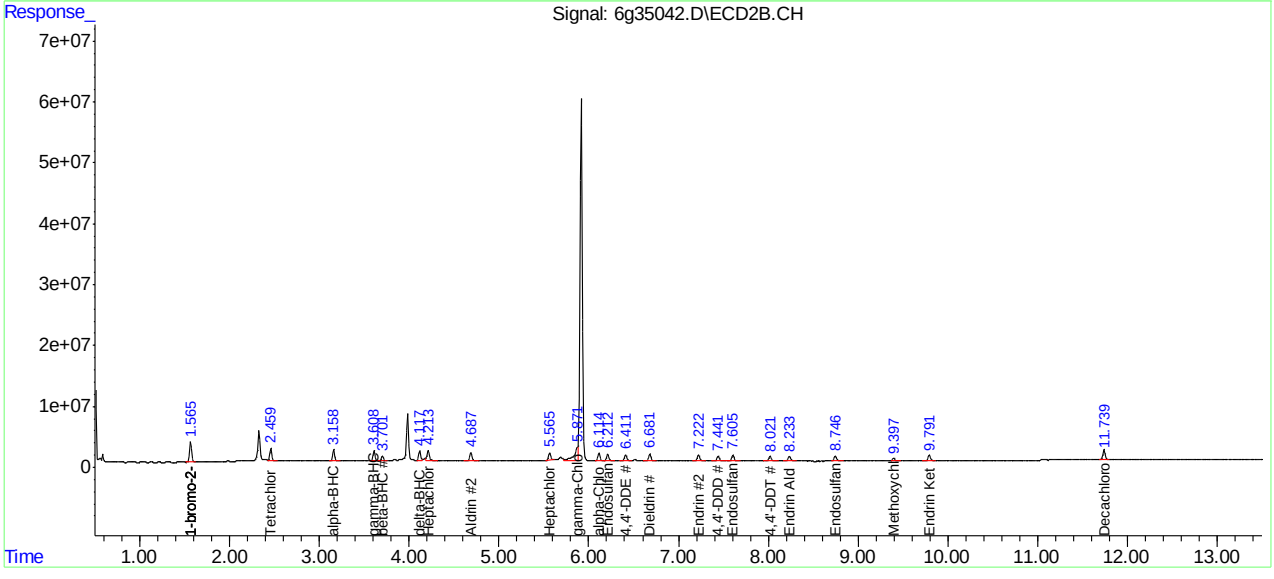
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1010\
Data File : 6g35042.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 May 2016 11:41 am
Operator : dharas
Sample : op93857-msd
Misc : op93857,g6g1010,15.7,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 13 12:26:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Fri May 13 12:22:26 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 JC19996

Manual Integration Approval Summary

Sample Number:	OP93857-MSD	**Method:**	SW846 8081B
Lab FileID:	6G35042.D	**Analyst approved:**	05/13/16 14:10 Dhara Saparia
Injection Time:	05/13/16 11:41	**Supervisor approved:**	05/16/16 07:13 Gwendolyn Burns

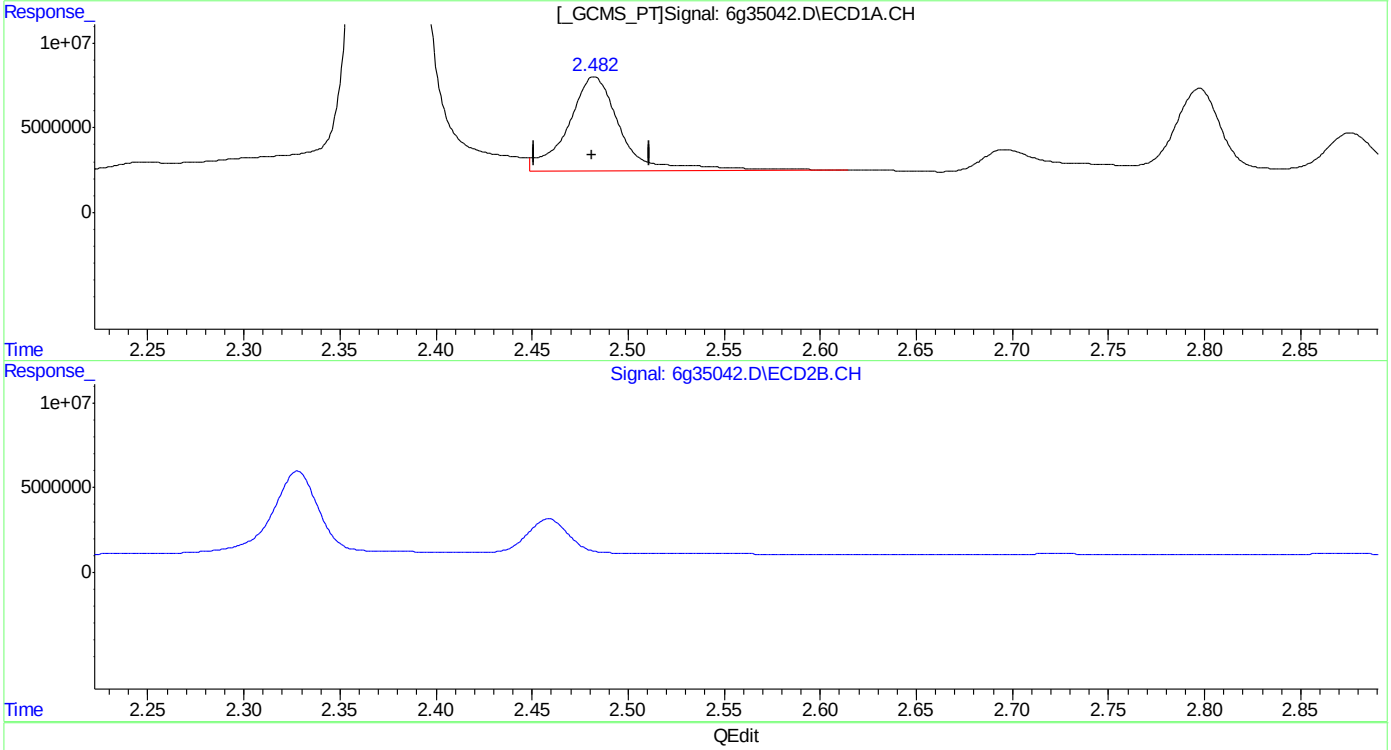
Parameter	CAS	Sig#	R.T. (min.)	Reason
alpha-BHC	319-84-6	1	2.48	Poor instrument integration
Heptachlor epoxide	1024-57-3	2	5.56	Poor instrument integration
Decachlorobiphenyl	2051-24-3	1	9.89	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1010\
Data File : 6g35042.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 May 2016 11:41 am
Operator : dharas
Sample : op93857-msd
Misc : op93857,g6g1010,15.7,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 13 12:25:41 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Fri May 13 12:22:26 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)
2.482min 29.627PPB
response 107327111

(3) alpha-BHC #2 (A)
3.159min 20.908PPB
response 27425872

(+) = Expected Retention Time

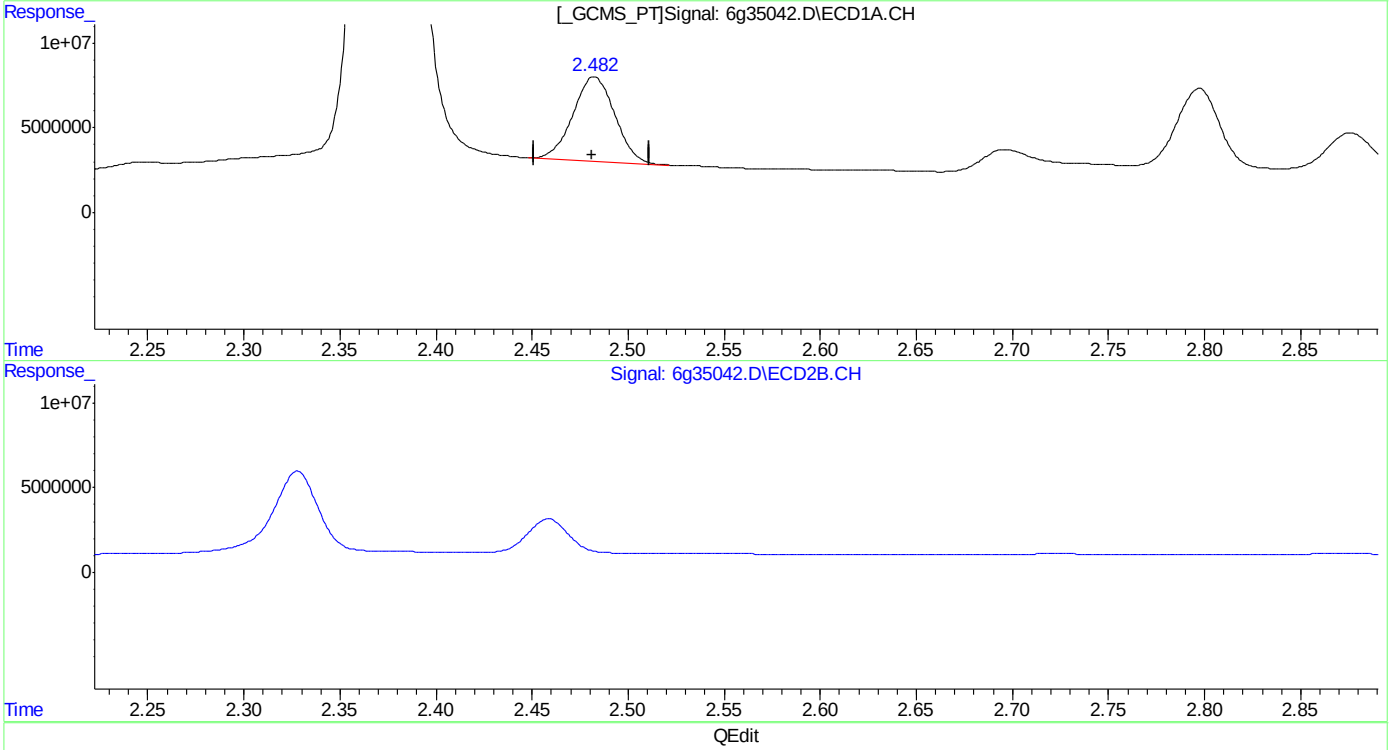
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1010\
Data File : 6g35042.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 May 2016 11:41 am
Operator : dharas
Sample : op93857-msd
Misc : op93857,g6g1010,15.7,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 13 12:25:41 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Fri May 13 12:22:26 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)
2.482min 21.059PPB m
response 76288912

(3) alpha-BHC #2 (A)
3.159min 20.908PPB
response 27425872

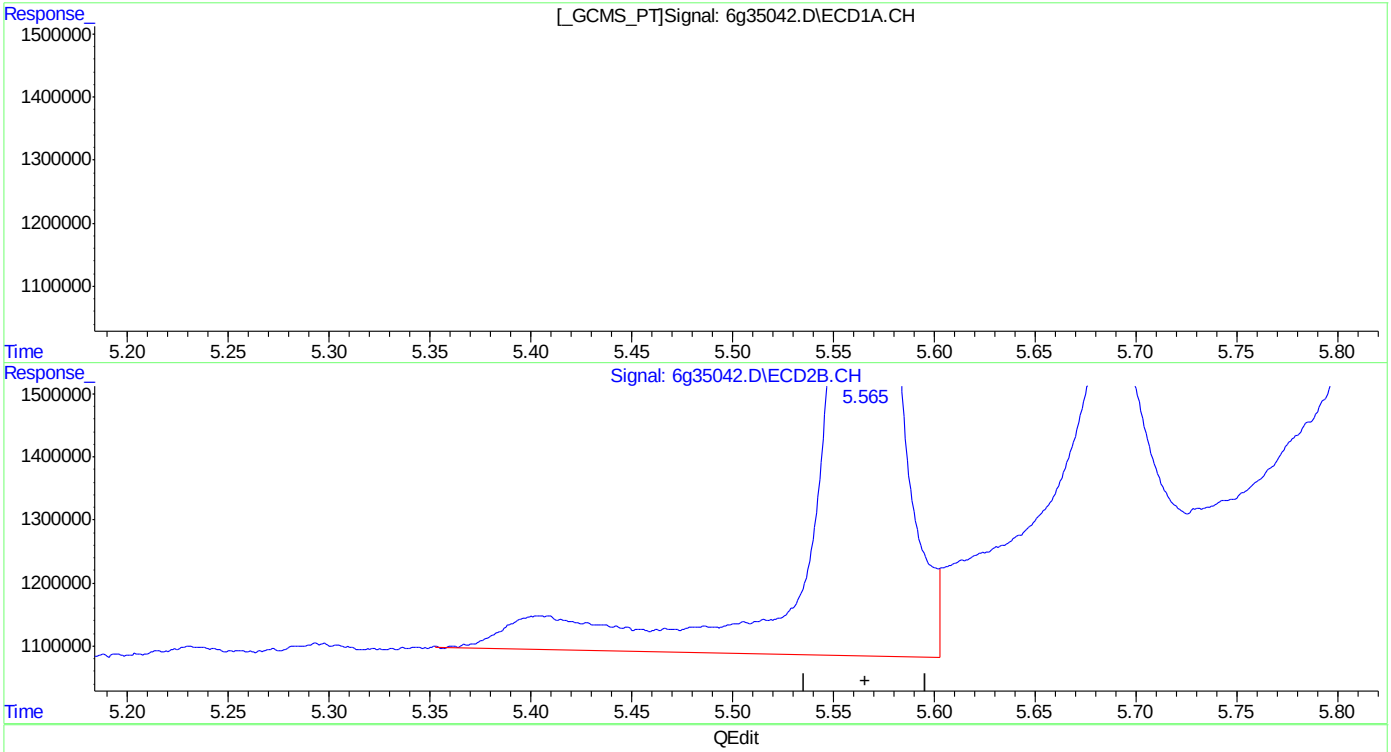
(+) = Expected Retention Time
6PST987.M Fri May 13 12:25:55 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1010\
Data File : 6g35042.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 May 2016 11:41 am
Operator : dharas
Sample : op93857-msd
Misc : op93857,g6g1010,15.7,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 13 12:25:41 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Fri May 13 12:22:26 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)
4.419min 20.214PPB
response 59175476

(9) Heptachlor Epoxide #2 (B)
5.565min 27.937PPB
response 30054279

(+) = Expected Retention Time

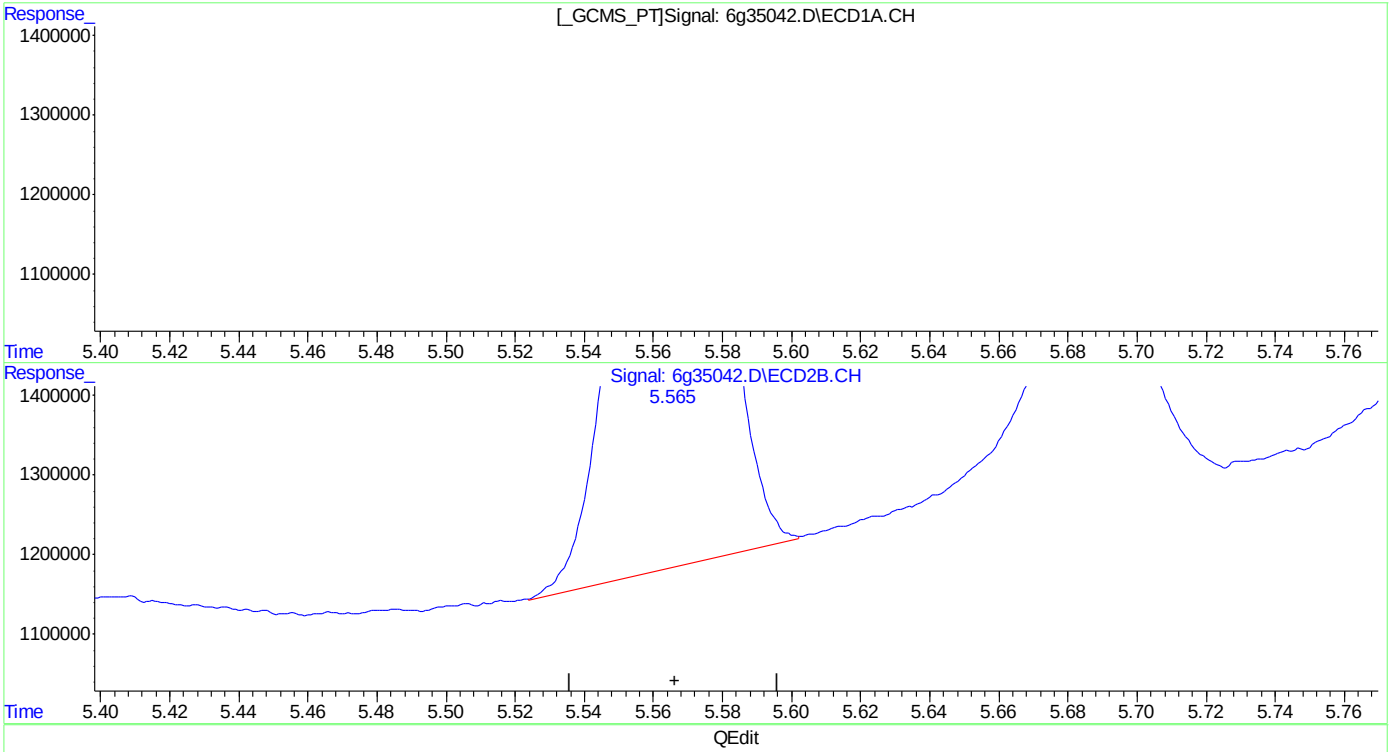
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1010\
Data File : 6g35042.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 May 2016 11:41 am
Operator : dharas
Sample : op93857-msd
Misc : op93857,g6g1010,15.7,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 13 12:25:41 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Fri May 13 12:22:26 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)
4.419min 20.214PPB
response 59175476

(9) Heptachlor Epoxide #2 (B)
5.565min 20.230PPB m
response 21763319

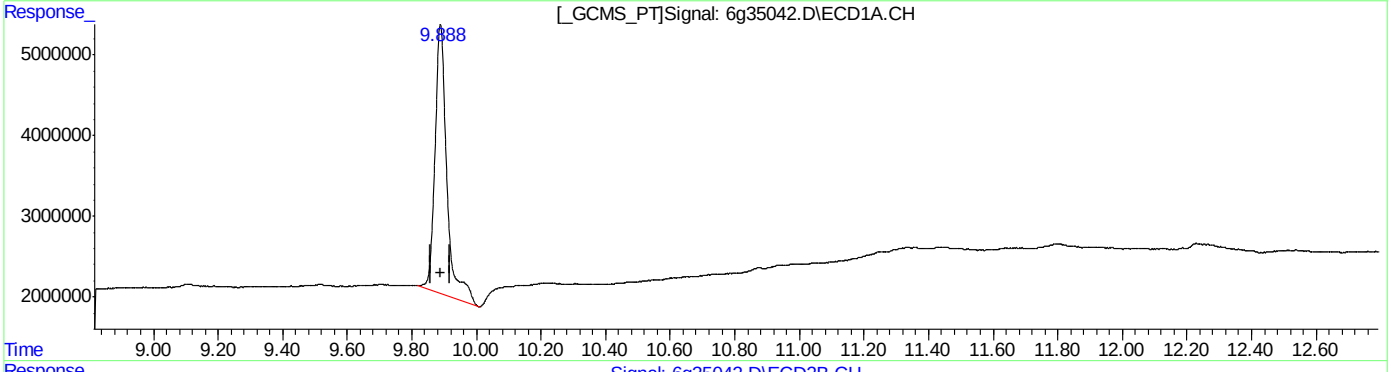
(+) = Expected Retention Time

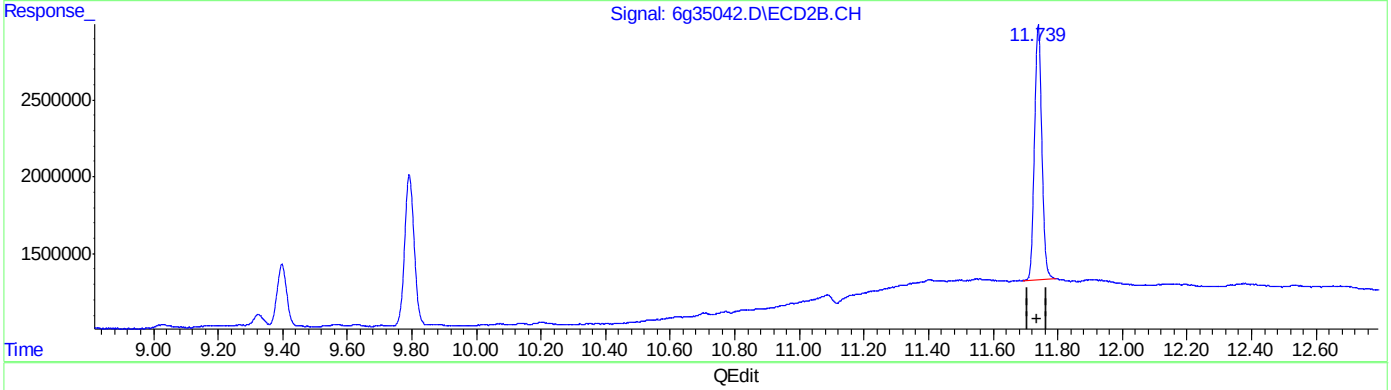
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1010\
Data File : 6g35042.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 May 2016 11:41 am
Operator : dharas
Sample : op93857-msd
Misc : op93857,g6g1010,15.7,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 13 12:25:41 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Fri May 13 12:22:26 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)
9.889min 34.656PPB
response 84681410

(24) Decachlorobiphenyl #2 (SAB)
11.740min 34.278PPB
response 25949746

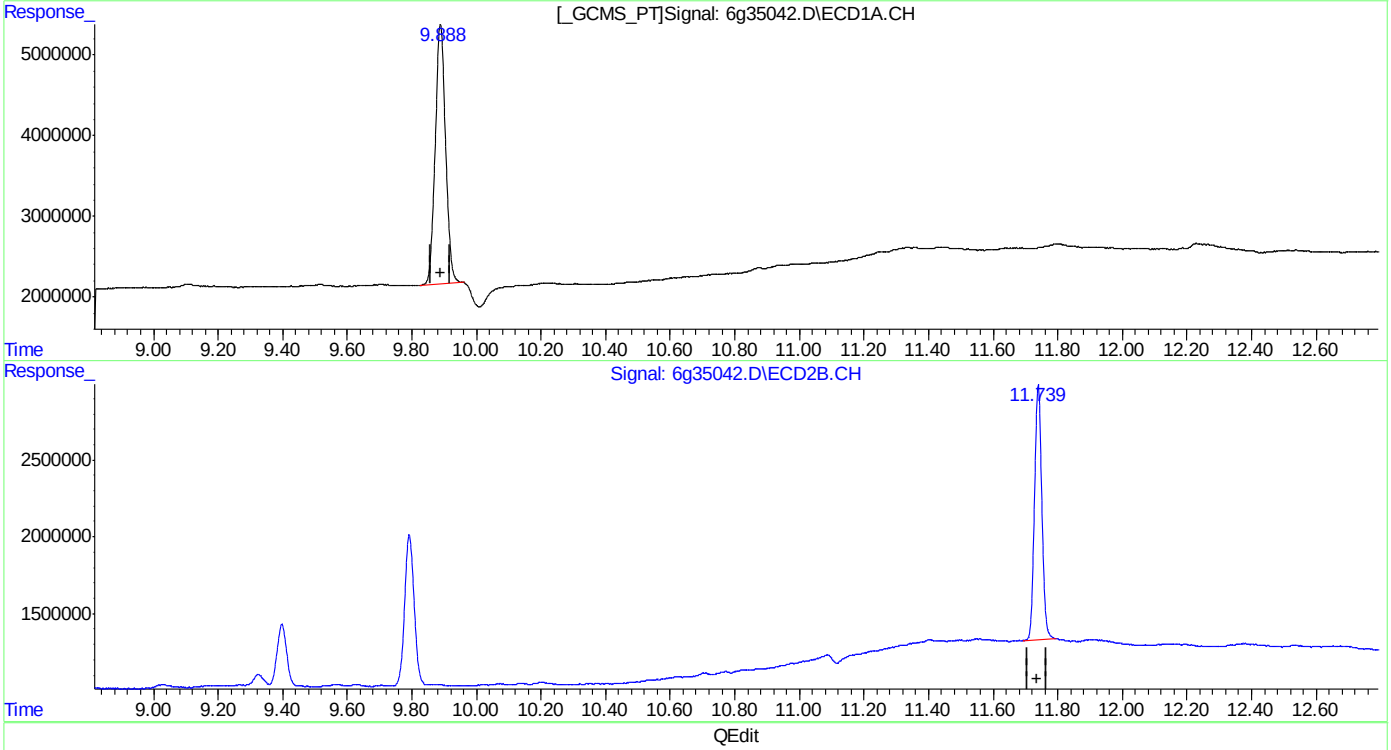
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1010\
Data File : 6g35042.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 May 2016 11:41 am
Operator : dharas
Sample : op93857-msd
Misc : op93857,g6g1010,15.7,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 13 12:25:41 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Fri May 13 12:22:26 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)
9.888min 29.363PPB m
response 71747487

(24) Decachlorobiphenyl #2 (SAB)
11.740min 34.278PPB
response 25949746

(+) = Expected Retention Time

SGS ACCUTEST JC19996

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
05/04/16 11:11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67830.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 1:55 pm
Operator : dharas
Sample : ddt
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:31:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:20:10 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	1.785f	2.062	328.2E6	300.2E6	50.000	50.000
25) I	1-bromo-2...	1.785	2.062	328.2E6	300.2E6	50.000	50.000
31) I	1-bromo-2...	1.785	2.062	328.2E6	300.2E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.586	3.101	126.8E6	120.2E6	22.413m	22.735m
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 56.03%	56.84%
24) SA	Decachlor...	10.262	11.666	153.3E6	107.1E6	28.756m	28.560
	Spiked Amount	40.000			Recovery	= 71.89%	71.40%
	Target Compounds						
13) B	4,4'-DDE	5.705	7.115	4928073	5619299	0.851	0.922m
15) MA	Endrin	6.446f	7.932	357.9E6	325.0E6	61.726	59.920
16) A	4,4'-DDD	6.578	8.089	10193689	13113095	2.077	2.663 #
18) MA	4,4'-DDT	7.006	8.635	619.9E6	599.9E6	121.777	139.372
19) B	Endrin Al...	7.417	8.867	4622381	4711235	0.981m	1.157m
23) B	Endrin Ke...	8.571	10.201	15245220	18350578	2.578	3.725m#
	SemiQuant Compounds - Not Calibrated on this Instrument						

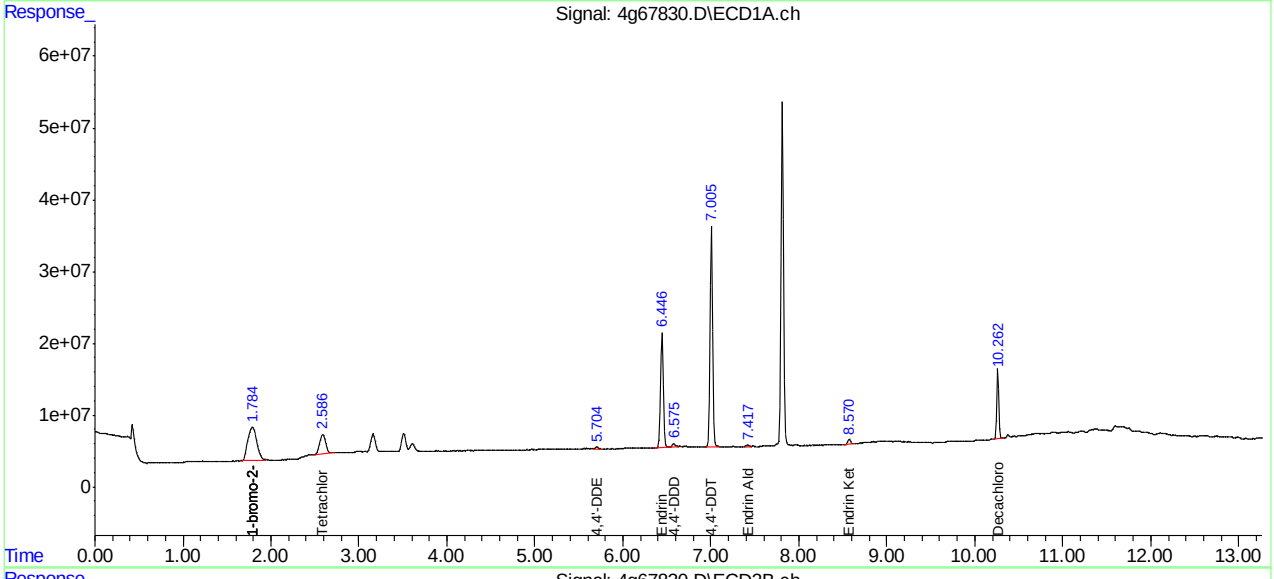
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

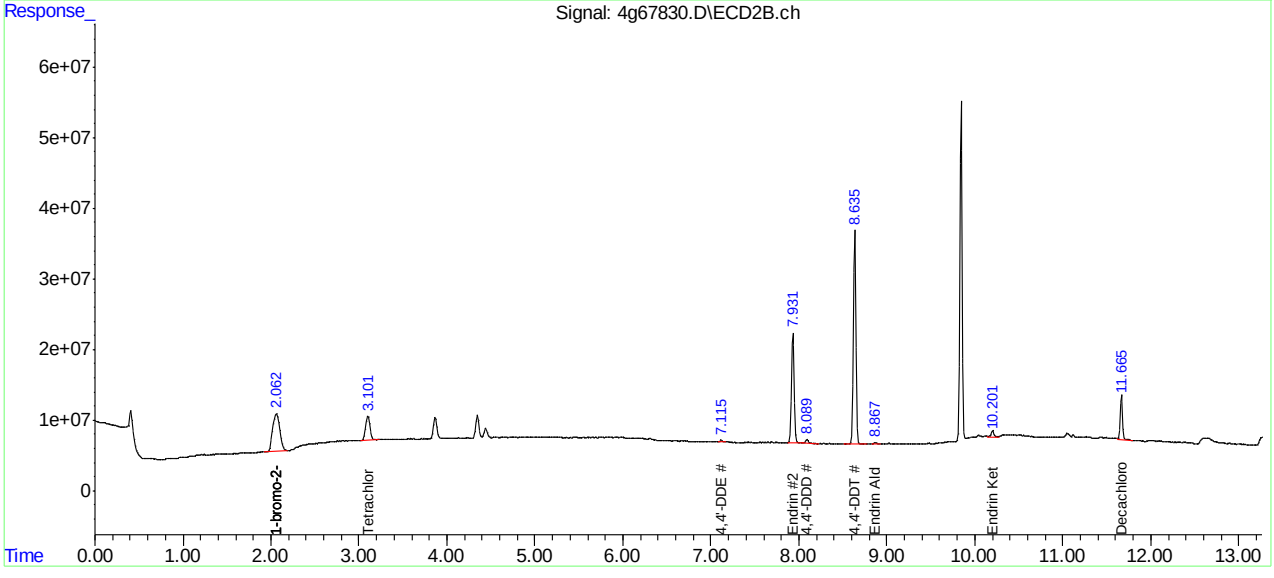
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67830.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 1:55 pm
Operator : dharas
Sample : ddt
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:31:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:20:10 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G4G1778-DDT	**Method:**	SW846 8081B
Lab FileID:	4G67830.D	**Analyst approved:**	05/03/16 15:32 Joseph Ravino
Injection Time:	05/02/16 13:55	**Supervisor approved:**	05/04/16 11:11 Gwendolyn Burns

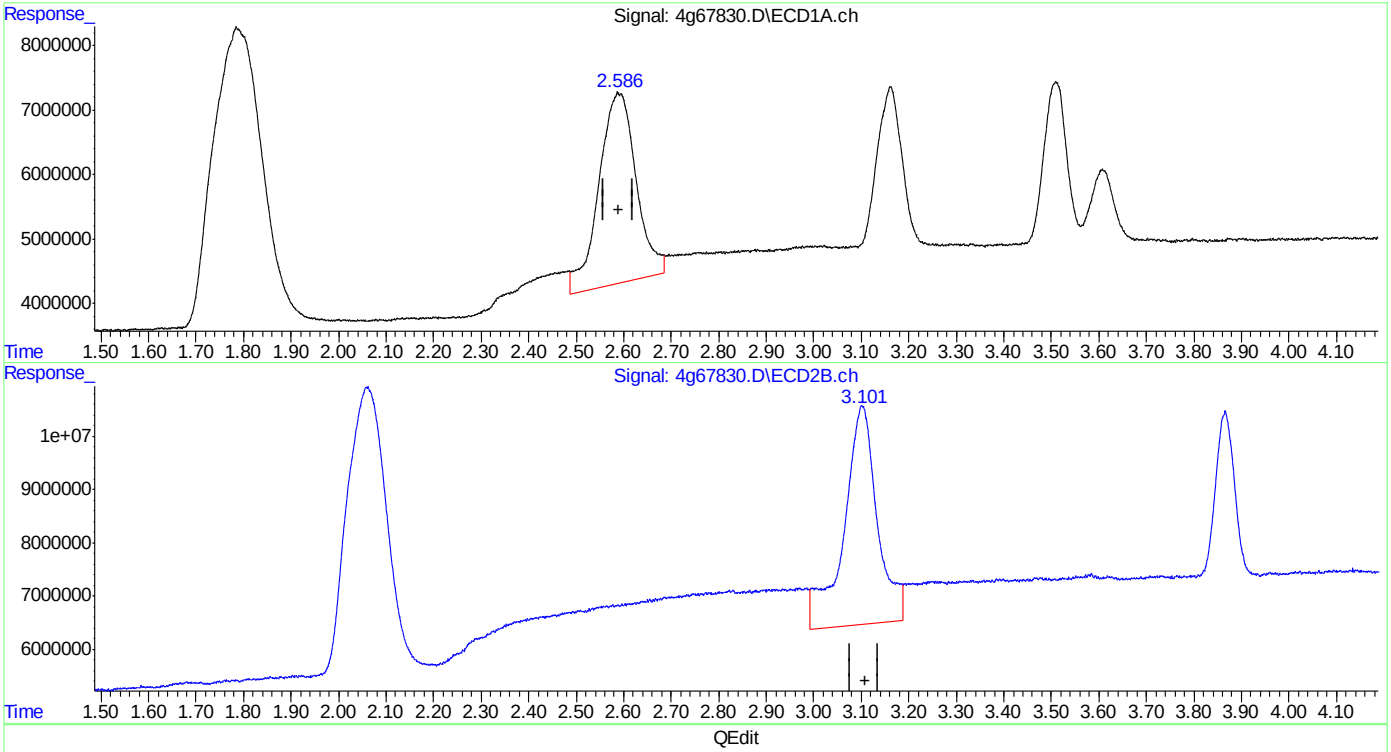
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	2.59	Poorly defined baseline
Tetrachloro-m-xylene	877-09-8	2	3.10	Poorly defined baseline
4,4'-DDE	72-55-9	2	7.12	Poorly defined baseline
Endrin aldehyde	7421-93-4	1	7.42	Poorly defined baseline
Endrin aldehyde	7421-93-4	2	8.87	Poorly defined baseline
Endrin ketone	53494-70-5	2	10.20	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	1	10.26	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67830.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 1:55 pm
Operator : dharas
Sample : ddt
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:28:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:20:10 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(2) Tetrachloro-m-xylene (SAB)
2.587min 28.485 PPB
response 161188028

(2) Tetrachloro-m-xylene #2 (SAB)
3.101min 38.318 PPB
response 202621898

(+) = Expected Retention Time
4PST1778.M Tue May 03 15:29:00 2016 RPT1

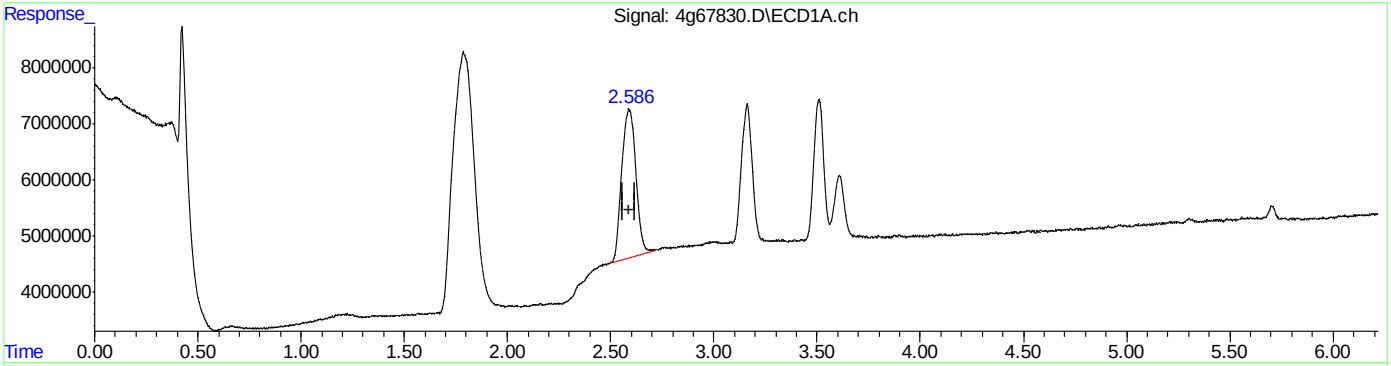
SGS ACCUTEST JC19996

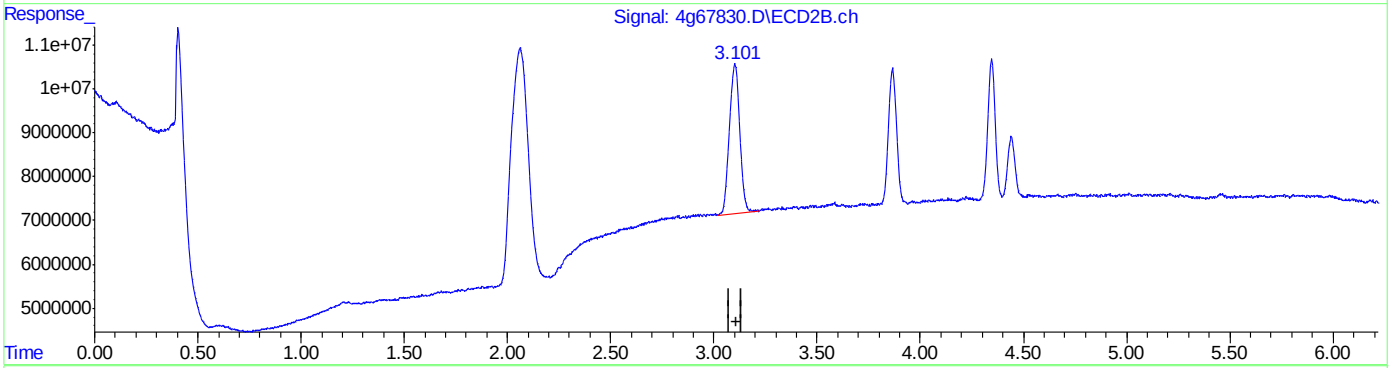
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67830.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 1:55 pm
Operator : dharas
Sample : ddt
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:28:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:20:10 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(2) Tetrachloro-m-xylene (SAB)
2.586min 22.413 PPB m
response 126825495

(2) Tetrachloro-m-xylene #2 (SAB)
3.101min 22.735 PPB m
response 120220429

(+) = Expected Retention Time
4PST1778.M Tue May 03 15:29:10 2016 RPT1

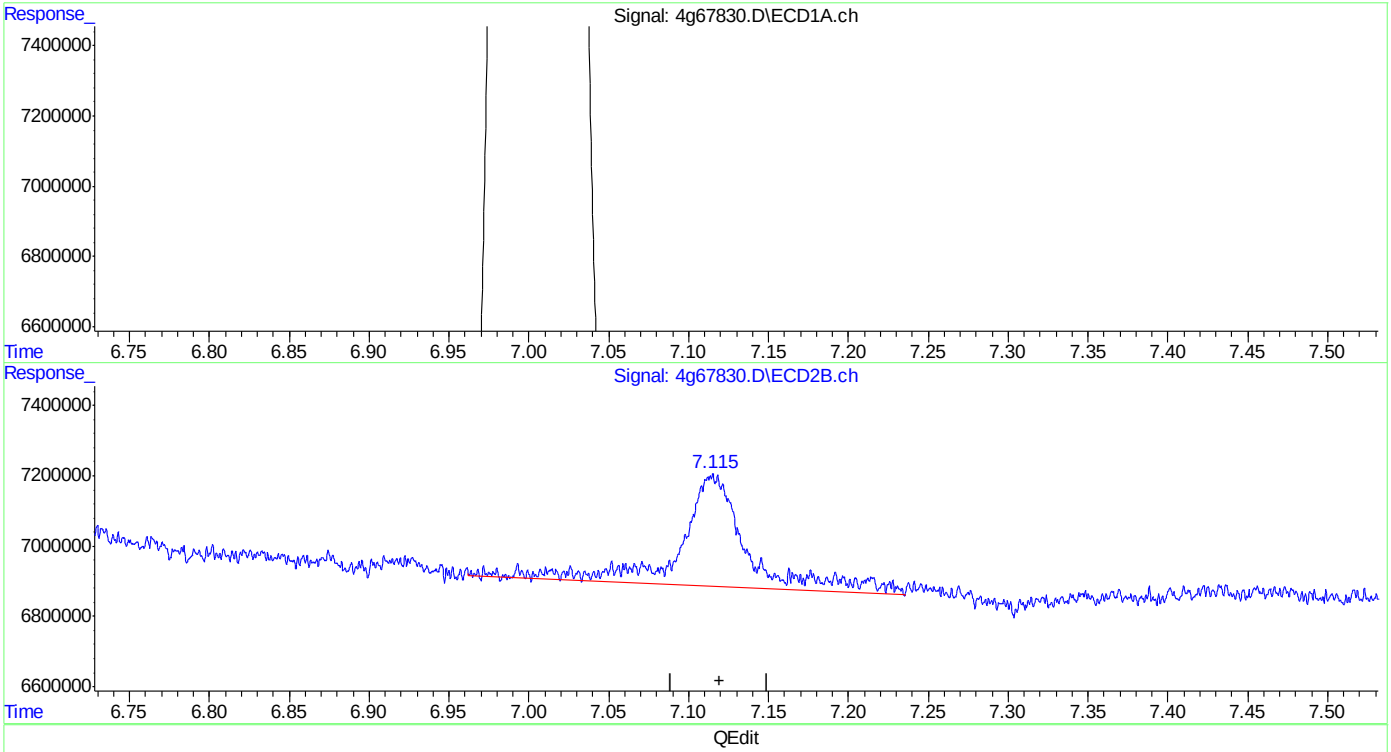
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67830.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    :  2 May 2016   1:55 pm
Operator  : dharas
Sample    : ddt
Misc      : op93464,g4g1778,100,,,10,1
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:28:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title  : PEST/PCB
QLast Update : Tue May 03 15:20:10 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```



(13) 4,4'-DDE (B)
5.705min 0.851 PPB
response 4928073

(13) 4,4'-DDE #2 (B)
7.115min 1.548 PPB
response 9432058

(+) = Expected Retention Time

4PST1778.M Tue May 03 15:29:22 2016 RPT1

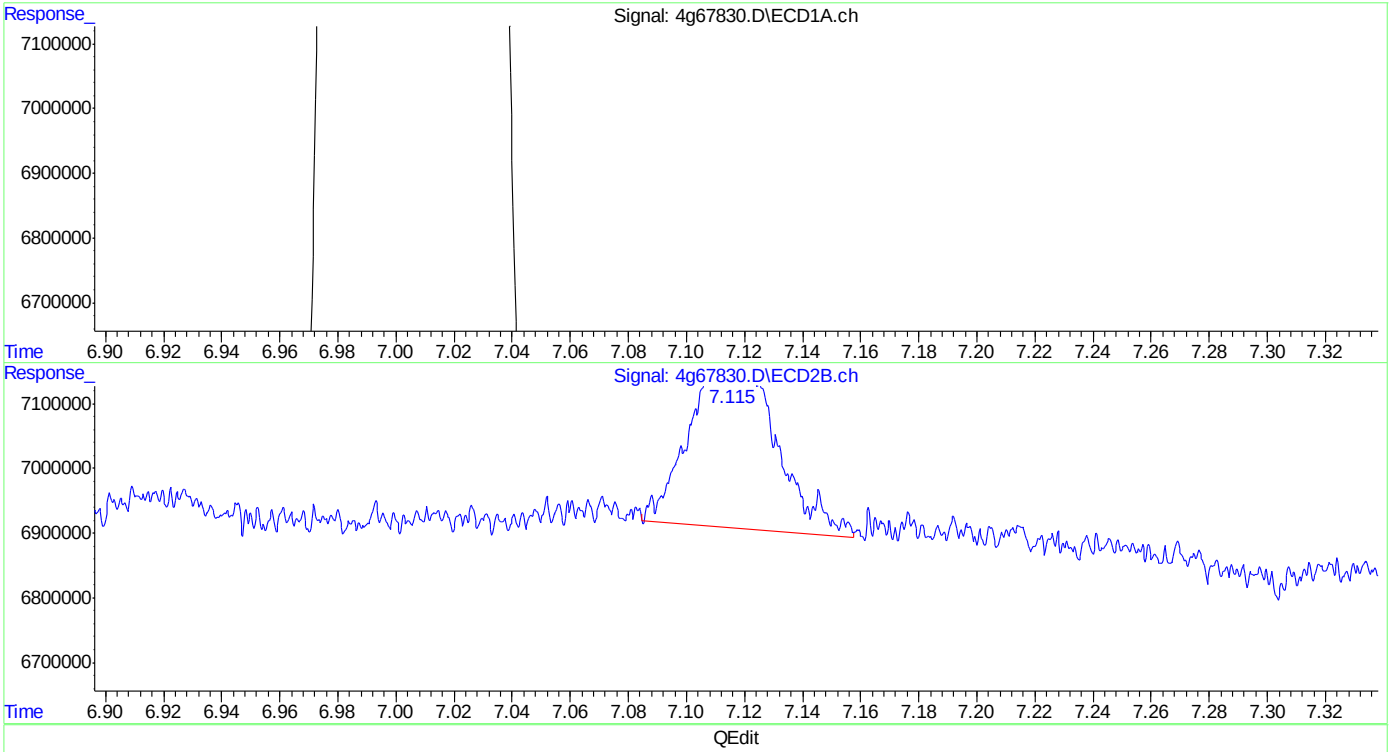
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67830.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    :  2 May 2016   1:55 pm
Operator  : dharas
Sample    : ddt
Misc      : op93464,g4g1778,100,,,10,1
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:28:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title  : PEST/PCB
QLast Update : Tue May 03 15:20:10 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```



QEdit

(13) 4,4'-DDE (B)
5.705min 0.851 PPB
response 4928073

(13) 4,4'-DDE #2 (B)
7.115min 0.922 PPB m
response 5619299

(+) = Expected Retention Time

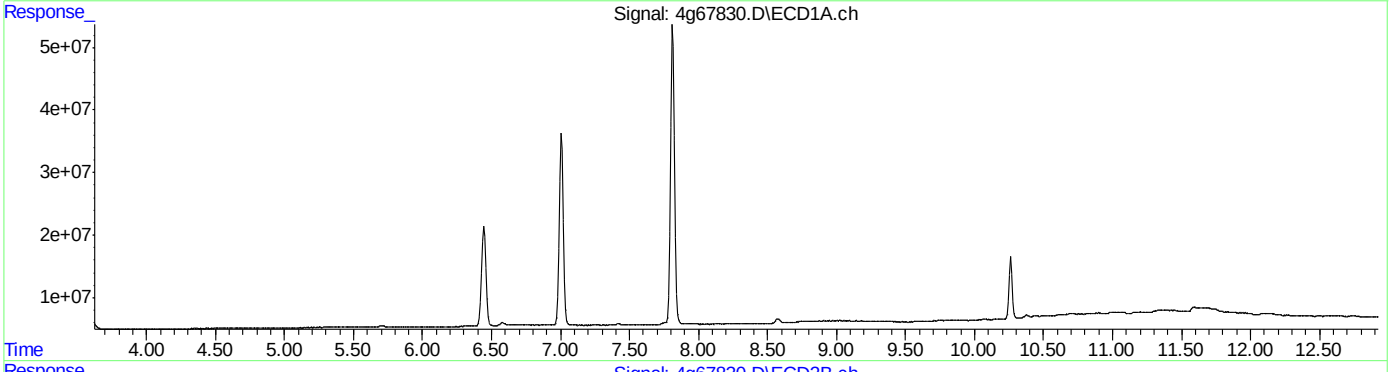
SGS ACCUTEST JC19996

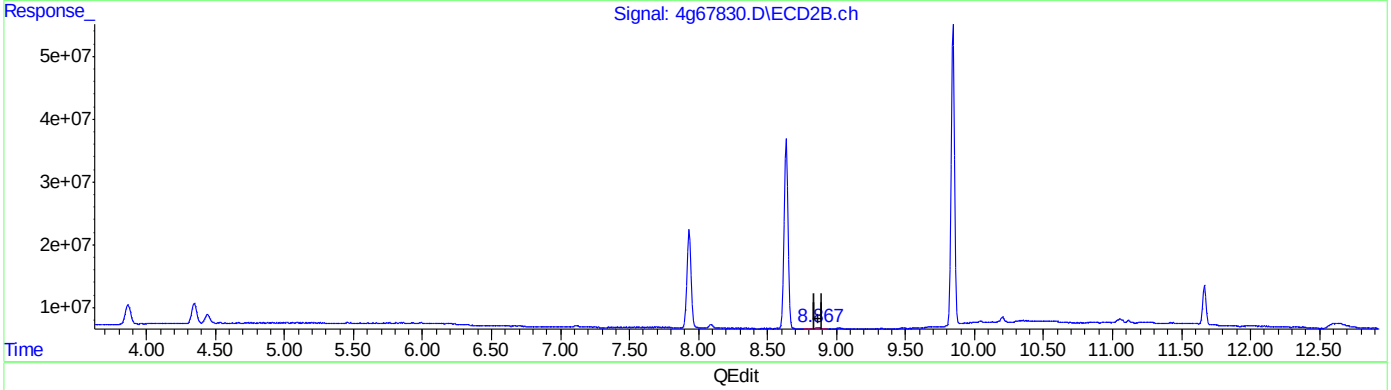
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67830.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 1:55 pm
Operator : dharas
Sample : ddt
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:28:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:20:10 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(19) Endrin Aldehyde (B)
0.000min 0.000 PPB
response 0

(19) Endrin Aldehyde #2 (B)
8.867min 1.311 PPB
response 5341379

(+) = Expected Retention Time
4PST1778.M Tue May 03 15:30:09 2016 RPT1

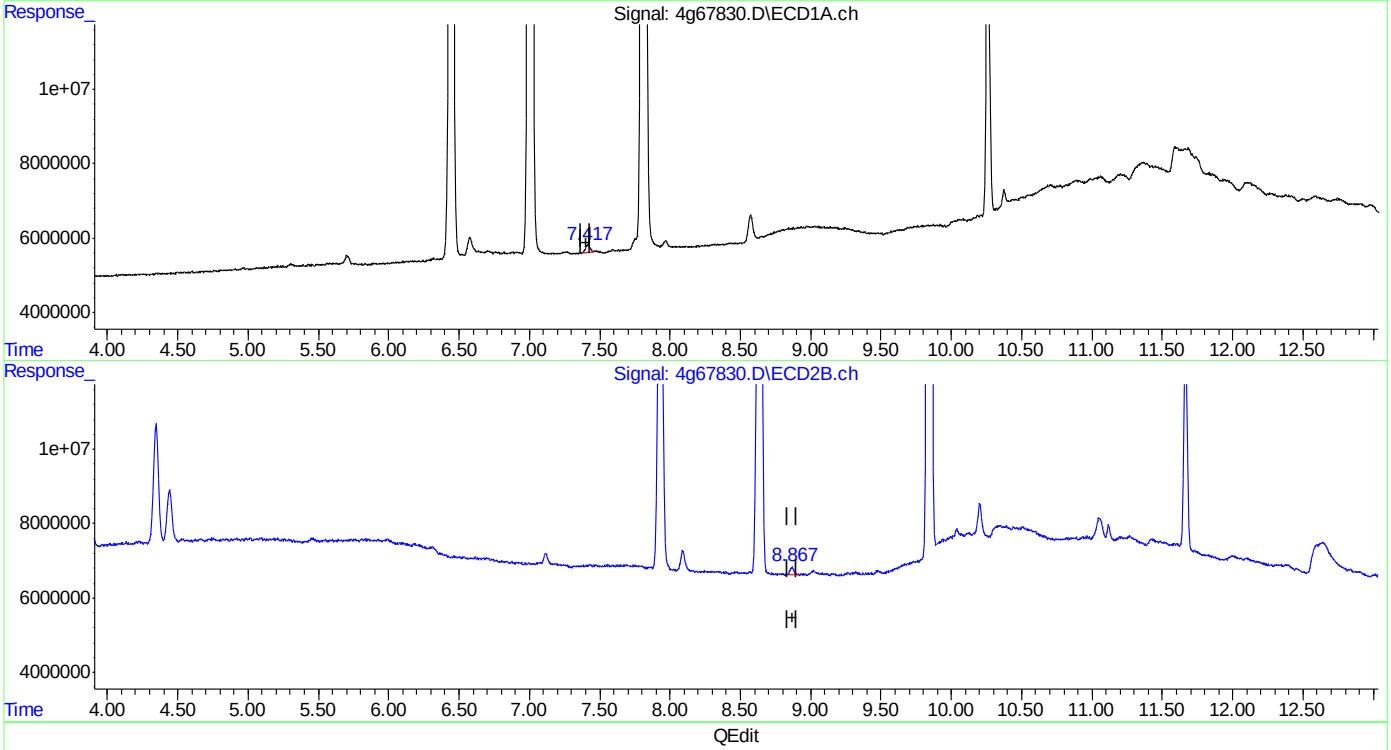
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67830.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 1:55 pm
Operator : dharas
Sample : ddt
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:28:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:20:10 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(19) Endrin Aldehyde (B)
7.417min 0.981 PPB m
response 4622381

(19) Endrin Aldehyde #2 (B)
8.867min 1.157 PPB m
response 4711235

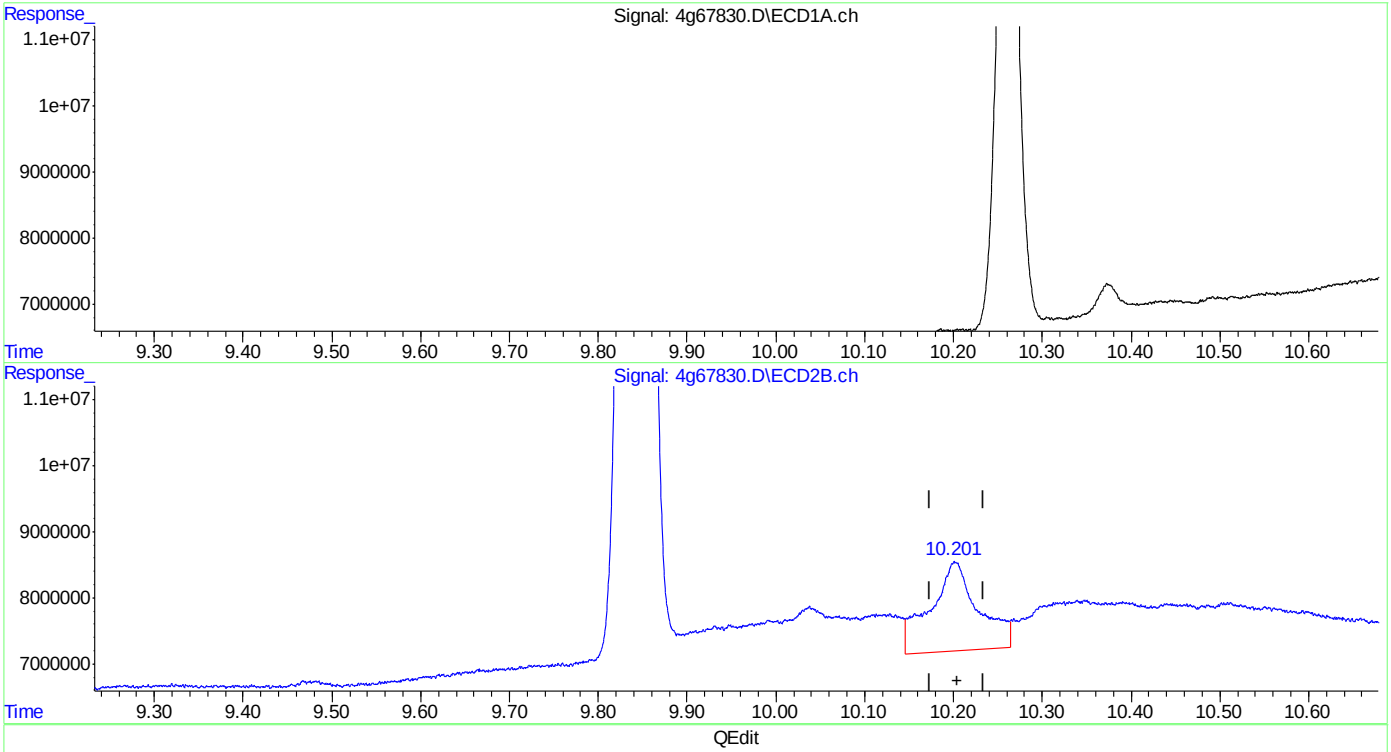
(+) = Expected Retention Time
4PST1778.M Tue May 03 15:30:41 2016 RPT1

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67830.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    :  2 May 2016   1:55 pm
Operator  : dharas
Sample    : ddt
Misc      : op93464,g4g1778,100,,,10,1
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:28:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title  : PEST/PCB
QLast Update : Tue May 03 15:20:10 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```



(23) Endrin Ketone (B)
8.571min 2.578 PPB
response 15245220

(23) Endrin Ketone #2 (B)
10.202min 10.275 PPB
response 50617081

(+) = Expected Retention Time

4PST1778.M Tue May 03 15:30:49 2016 RPT1

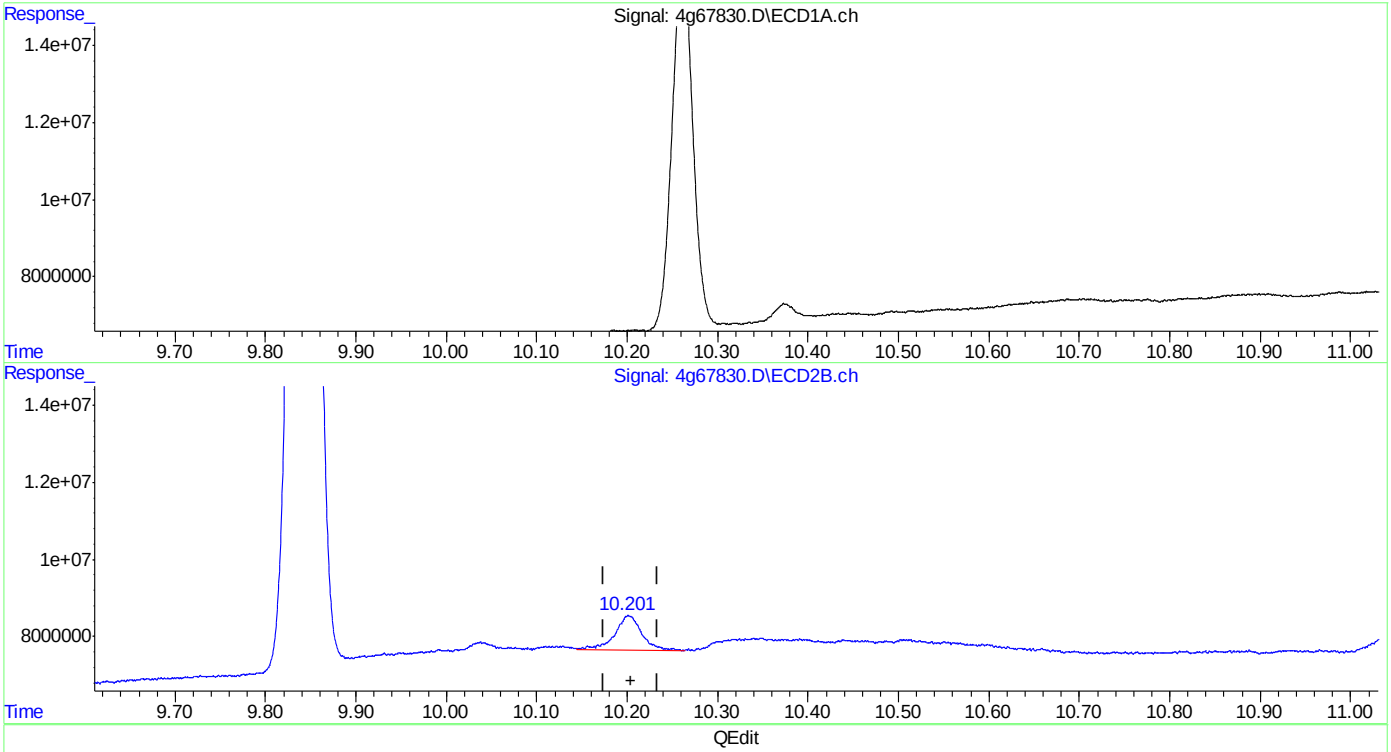
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67830.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 1:55 pm
Operator : dharas
Sample : ddt
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:28:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:20:10 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(23) Endrin Ketone (B)
8.571min 2.578 PPB
response 15245220

(23) Endrin Ketone #2 (B)
10.201min 3.725 PPB m
response 18350578

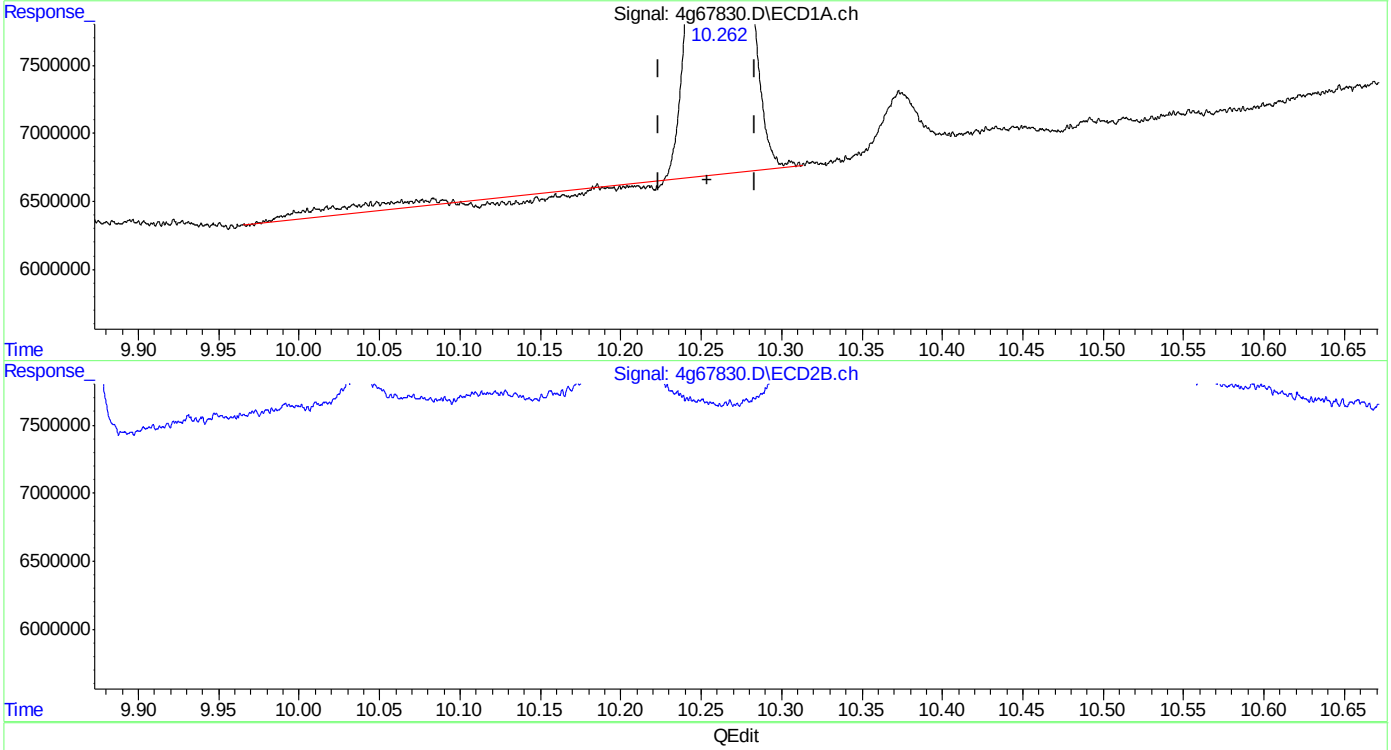
(+) = Expected Retention Time
4PST1778.M Tue May 03 15:30:56 2016 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67830.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 1:55 pm
Operator : dharas
Sample : ddt
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:28:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:20:10 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(24) Decachlorobiphenyl (SA)
10.262min 28.644 PPB
response 152738547

(24) Decachlorobiphenyl #2 (SA)
11.666min 28.560 PPB
response 107104234

(+) = Expected Retention Time

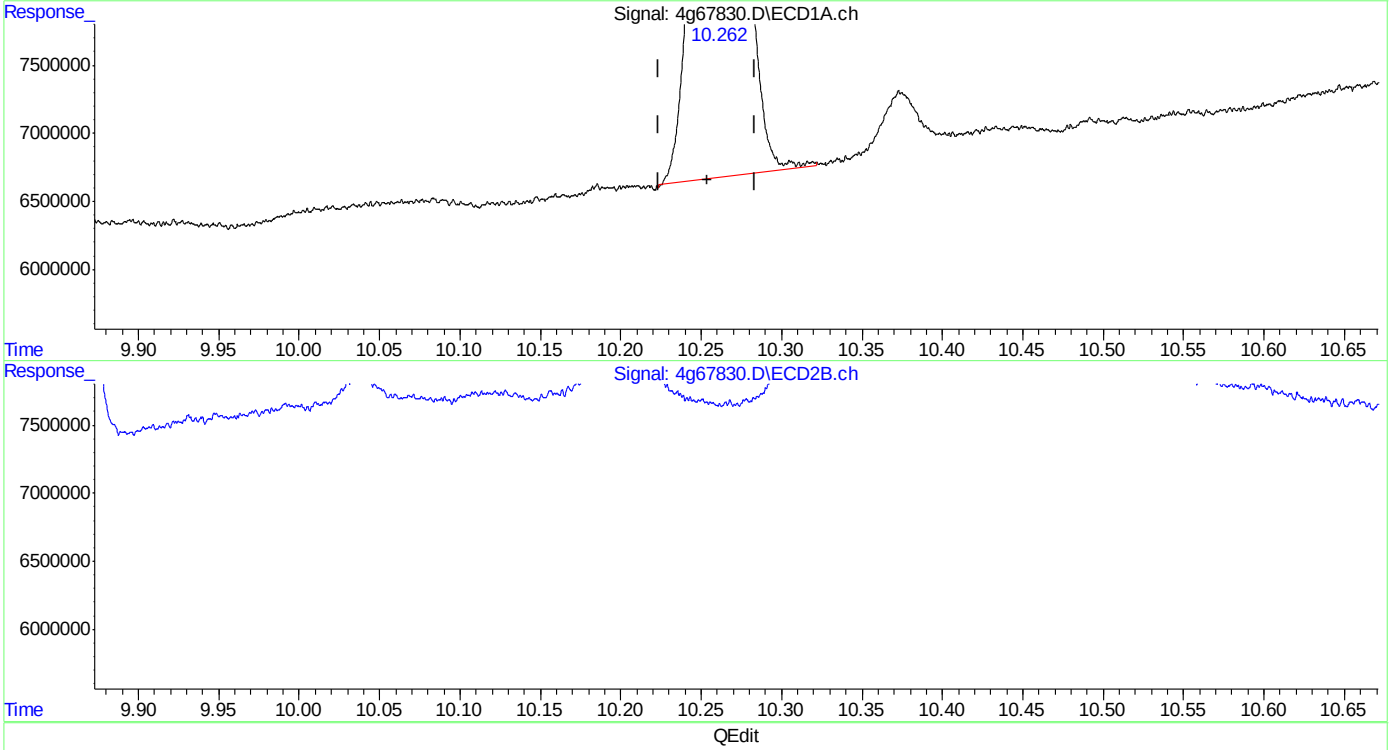
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67830.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    :  2 May 2016   1:55 pm
Operator  : dharas
Sample    : ddt
Misc      : op93464,g4g1778,100,,,10,1
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:28:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title  : PEST/PCB
QLast Update : Tue May 03 15:20:10 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```



QEdit

(24) Decachlorobiphenyl (SA)

10.262min 28.756 PPB m

response 153337754

(24) Decachlorobiphenyl #2 (SA)

11.666min 28.560 PPB

response 107104234

(+) = Expected Retention Time

4PST1778.M Tue May 03 15:31:12 2016 RPT1

SGS ACCUTEST JC19996

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
05/12/16 15:01

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68168.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 10:57 am
Operator : dharas
Sample : ddt
Misc : op93795,g4g1787,16.2,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 13:58:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 13:37:46 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	1.773	2.053	436.6E6	371.8E6	50.000	50.000
25) I	1-bromo-2...	1.773	2.053	436.6E6	371.8E6	50.000	50.000
31) I	1-bromo-2...	1.773	2.053	436.6E6	371.8E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.567	3.093	159.6E6	142.1E6	21.197	21.699
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 52.99%	54.25%
24) SA	Decachlor...	10.227	11.634	177.3E6	106.7E6	24.999	22.966
	Spiked Amount	40.000			Recovery	= 62.50%	57.42%
	Target Compounds						
13) B	4,4'-DDE	5.667	7.092	2236344	3851617	0.290m	0.510m#
15) MA	Endrin	6.396	7.905	421.2E6	377.2E6	54.601	56.161
16) A	4,4'-DDD	6.546	8.068	3275396	5987164	0.502m	0.982 #
18) MA	4,4'-DDT	6.962	8.608	562.9E6	651.0E6	91.188	122.129m#
19) B	Endrin Al...	7.368	8.839	4121460	2773256	0.658m	0.550m
23) B	Endrin Ke...	8.526	10.180	16278492	12568249	2.069	2.060m

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

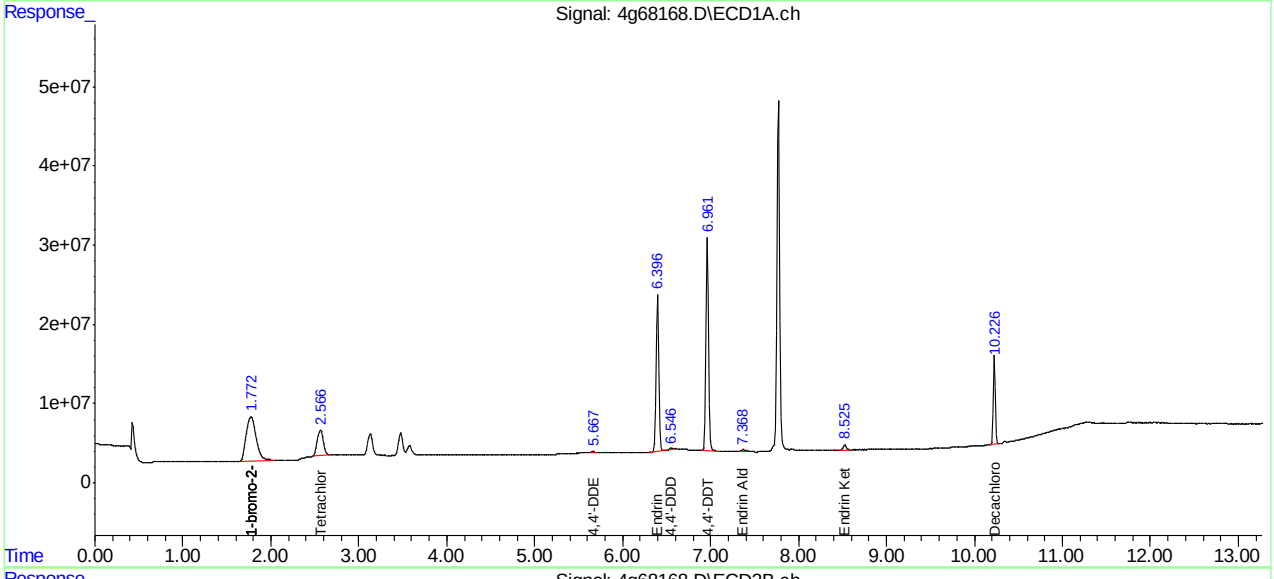
SGS ACCUTEST JC19996

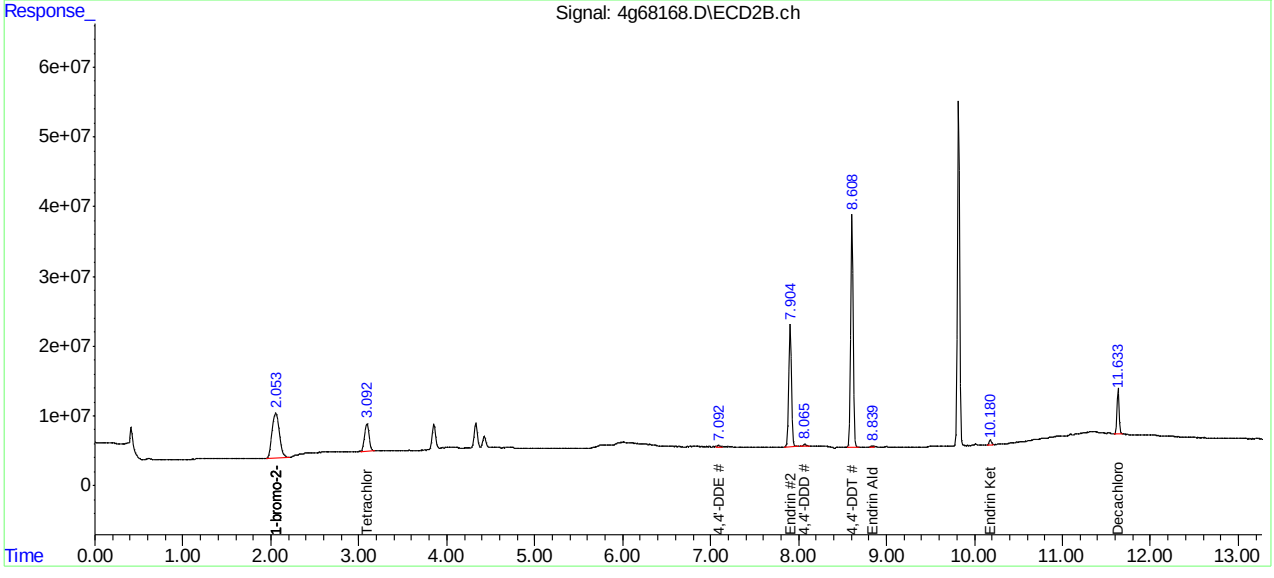
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68168.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 10:57 am
Operator : dharas
Sample : ddt
Misc : op93795,g4g1787,16.2,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 13:58:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 13:37:46 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G4G1787-DDT	**Method:**	SW846 8081B
Lab FileID:	4G68168.D	**Analyst approved:**	05/12/16 14:18 Dhara Saparia
Injection Time:	05/12/16 10:57	**Supervisor approved:**	05/12/16 15:01 Gwendolyn Burns

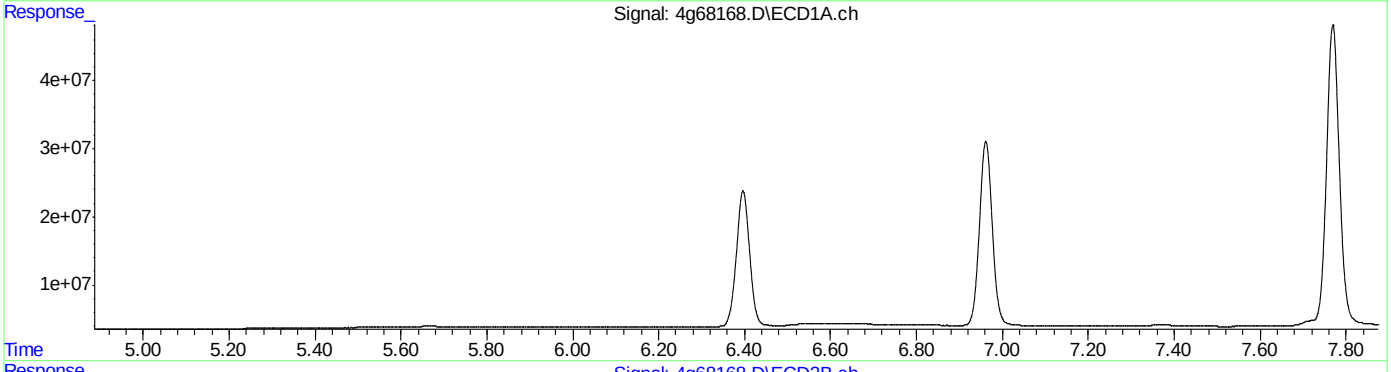
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	1	5.67	Poor instrument integration
4,4'-DDD	72-54-8	1	6.55	Poor instrument integration
4,4'-DDE	72-55-9	2	7.09	Poor instrument integration
Endrin aldehyde	7421-93-4	1	7.37	Poor instrument integration
4,4'-DDT	50-29-3	2	8.61	Poor instrument integration
Endrin aldehyde	7421-93-4	2	8.84	Poor instrument integration
Endrin ketone	53494-70-5	2	10.18	Poor instrument integration

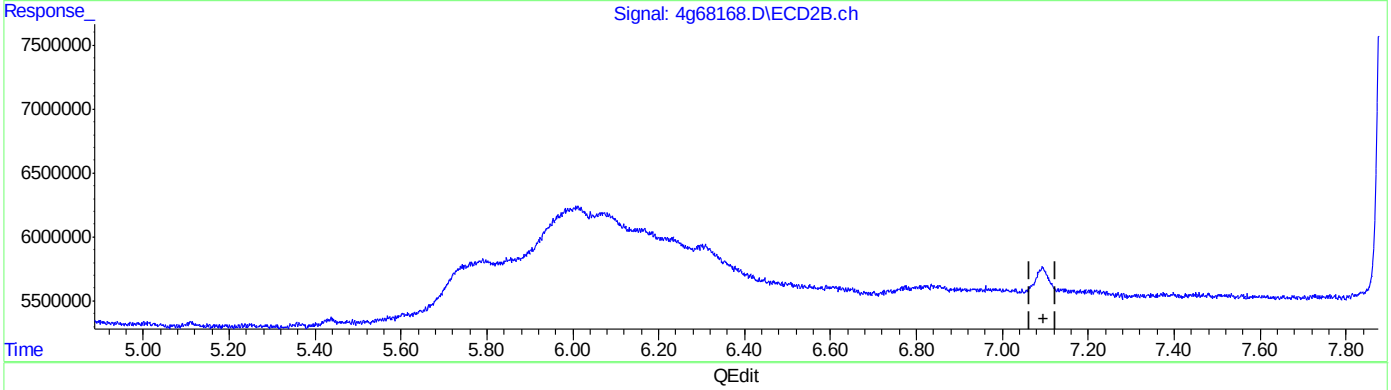
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68168.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 10:57 am
Operator : dharas
Sample : ddt
Misc : op93795,g4g1787,16.2,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 13:56:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 13:37:46 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(13) 4,4'-DDE (B)
0.000min 0.000 PPB
response 0

(13) 4,4'-DDE #2 (B)
0.000min 0.000 PPB
response 0

(+) = Expected Retention Time

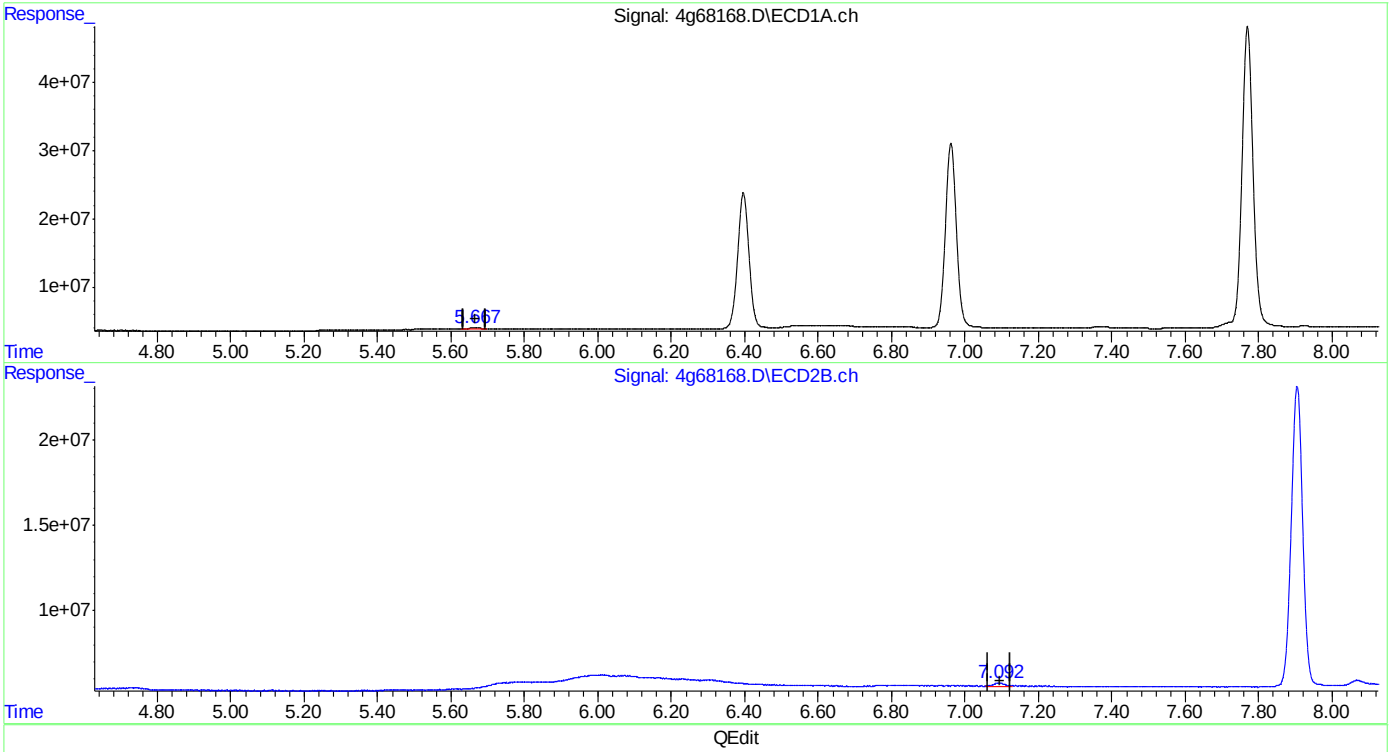
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68168.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    : 12 May 2016  10:57 am
Operator  : dharas
Sample    : ddt
Misc      : op93795,g4g1787,16.2,,,10,1
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 13:56:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title  : PEST/PCB
QLast Update : Thu May 12 13:37:46 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```



QEdit

(13) 4,4'-DDE (B)

5.667min 0.290 PPB m

response 2236344

(13) 4,4'-DDE #2 (B)

7.092min 0.510 PPB m

response 3851617

(+) = Expected Retention Time

4PST1778.M Thu May 12 13:57:39 2016 RPT1

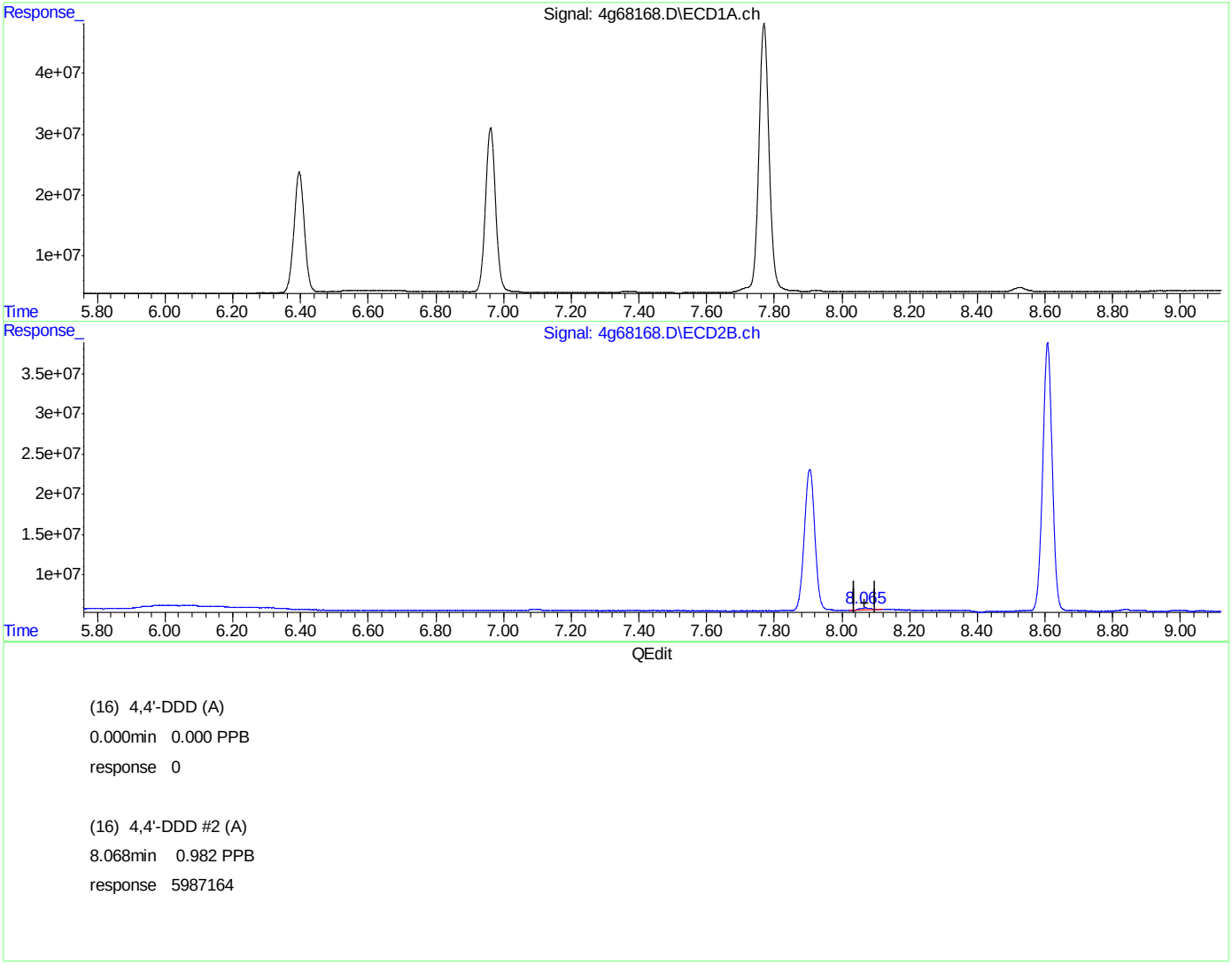
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68168.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 10:57 am
Operator : dharas
Sample : ddt
Misc : op93795,g4g1787,16.2,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 13:56:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 13:37:46 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(16) 4,4'-DDD (A)
0.000min 0.000 PPB
response 0

(16) 4,4'-DDD #2 (A)
8.068min 0.982 PPB
response 5987164

(+) = Expected Retention Time
4PST1778.M Thu May 12 13:57:42 2016 RPT1

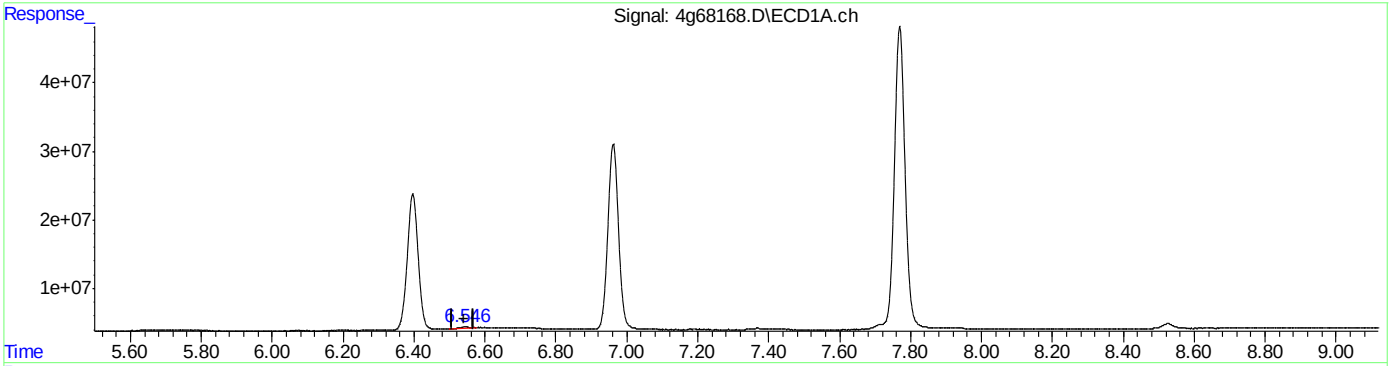
SGS ACCUTEST JC19996

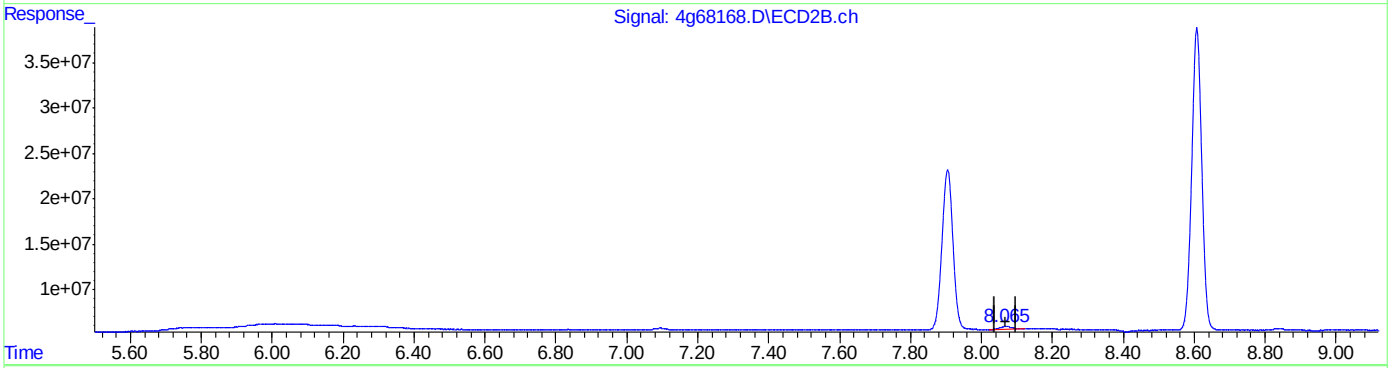
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68168.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 10:57 am
Operator : dharas
Sample : ddt
Misc : op93795,g4g1787,16.2,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 13:56:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 13:37:46 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(16) 4,4'-DDD (A)
6.546min 0.502 PPB m
response 3275396

(16) 4,4'-DDD #2 (A)
8.068min 0.982 PPB
response 5987164

(+) = Expected Retention Time
4PST1778.M Thu May 12 13:57:58 2016 RPT1

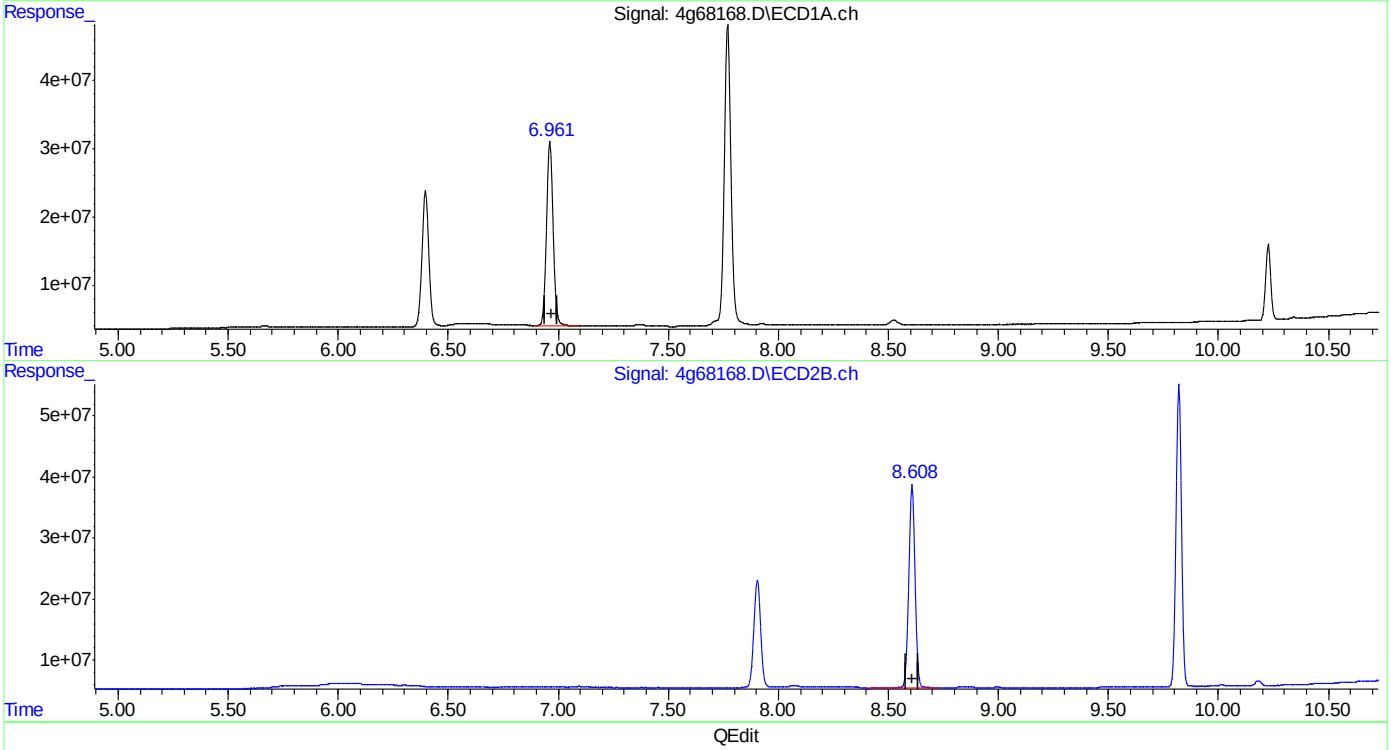
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68168.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 10:57 am
Operator : dharas
Sample : ddt
Misc : op93795,g4g1787,16.2,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 13:56:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 13:37:46 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(18) 4,4'-DDT (MA)
6.962min 91.188 PPB
response 562897678

(18) 4,4'-DDT #2 (MA)
8.607min 124.326 PPB
response 662694932

(+) = Expected Retention Time

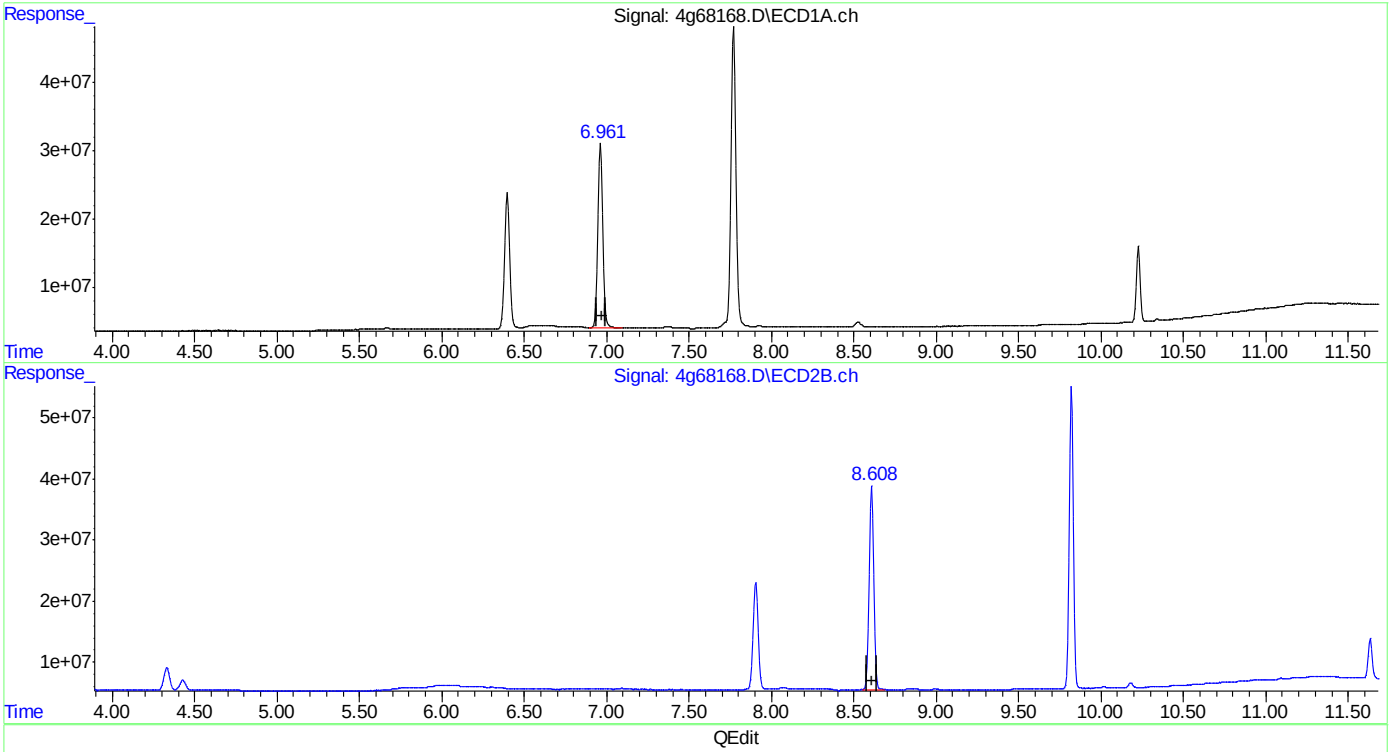
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68168.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 10:57 am
Operator : dharas
Sample : ddt
Misc : op93795,g4g1787,16.2,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 13:56:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 13:37:46 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(18) 4,4'-DDT (MA)
6.962min 91.188 PPB
response 562897678

(18) 4,4'-DDT #2 (MA)
8.608min 122.129 PPB m
response 650985115

(+) = Expected Retention Time
4PST1778.M Thu May 12 13:58:15 2016 RPT1

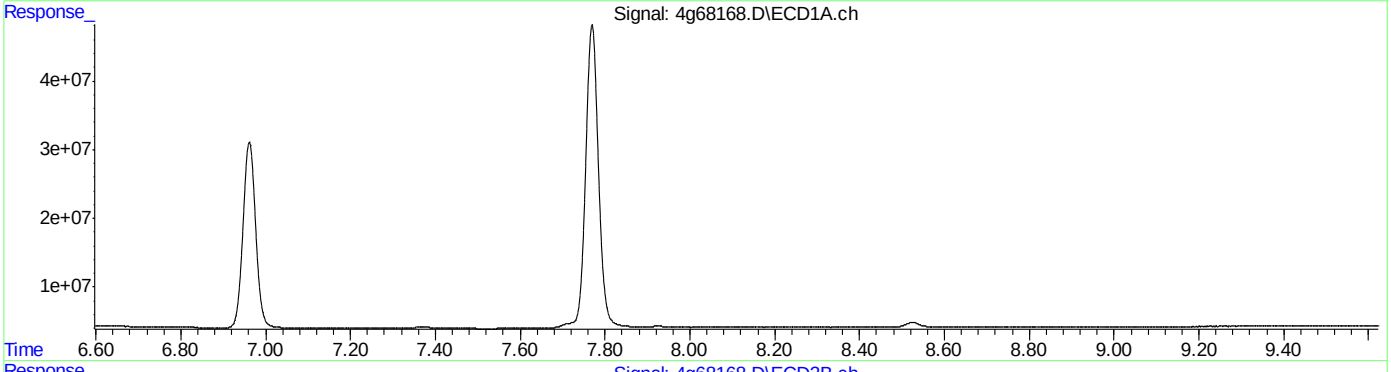
SGS ACCUTEST JC19996

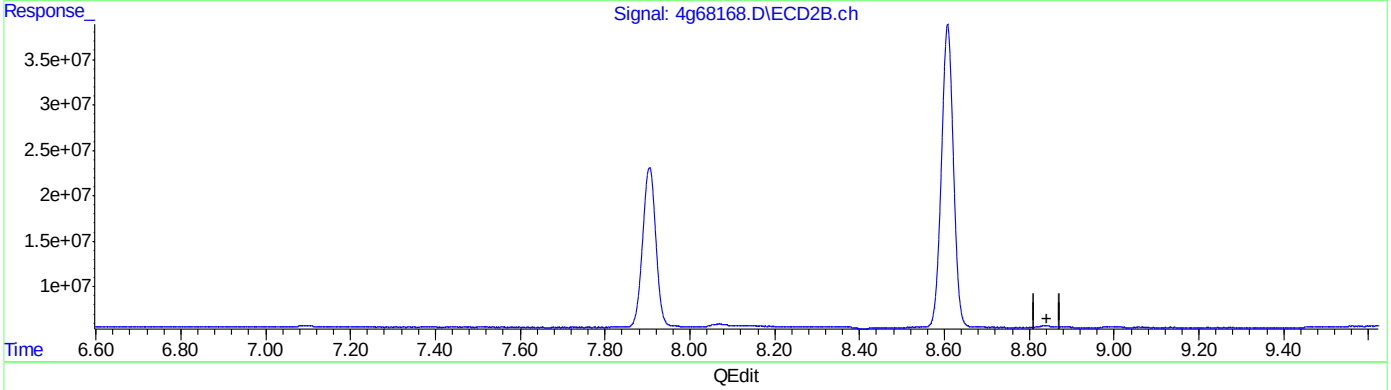
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68168.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 10:57 am
Operator : dharas
Sample : ddt
Misc : op93795,g4g1787,16.2,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 13:56:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 13:37:46 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(19) Endrin Aldehyde (B)
0.000min 0.000 PPB
response 0

(19) Endrin Aldehyde #2 (B)
0.000min 0.000 PPB
response 0

(+) = Expected Retention Time

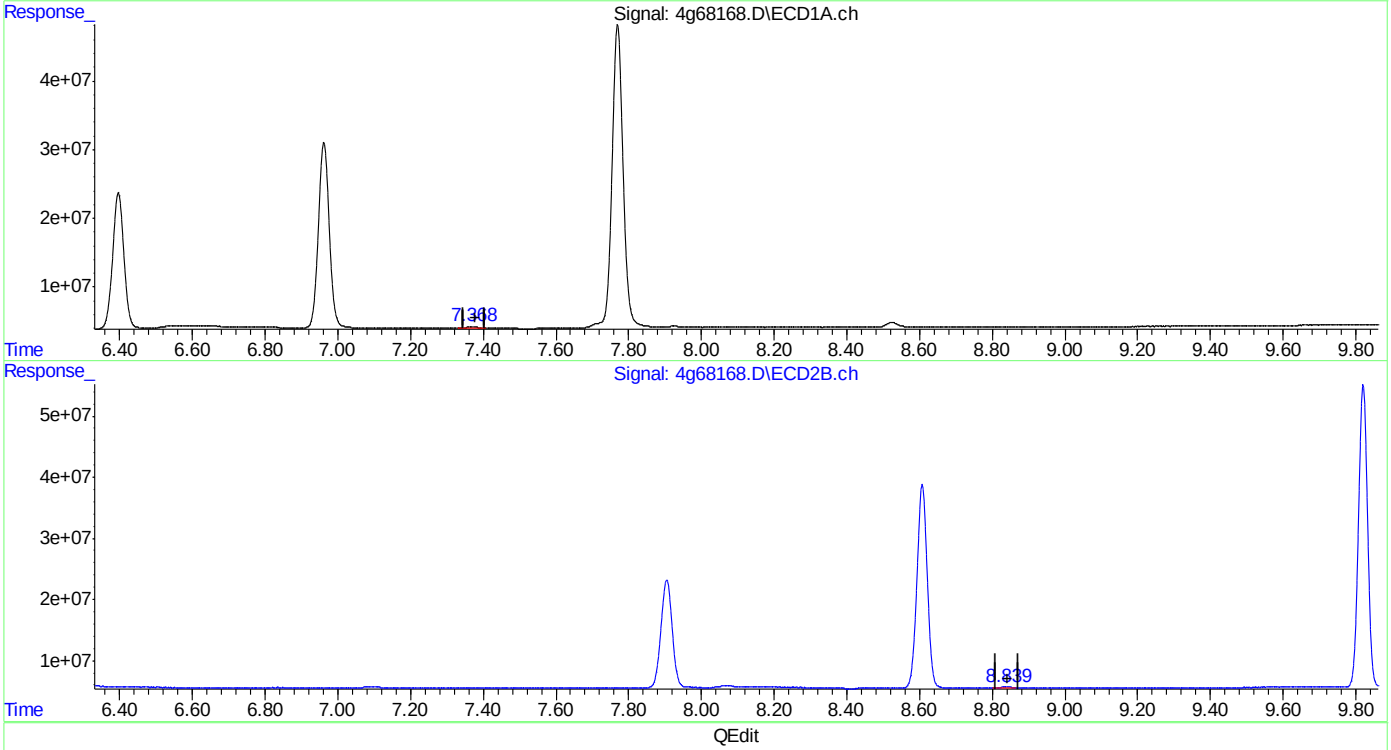
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68168.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 10:57 am
Operator : dharas
Sample : ddt
Misc : op93795,g4g1787,16.2,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 13:56:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 13:37:46 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(19) Endrin Aldehyde (B)
7.368min 0.658 PPB m
response 4121460

(19) Endrin Aldehyde #2 (B)
8.839min 0.550 PPB m
response 2773256

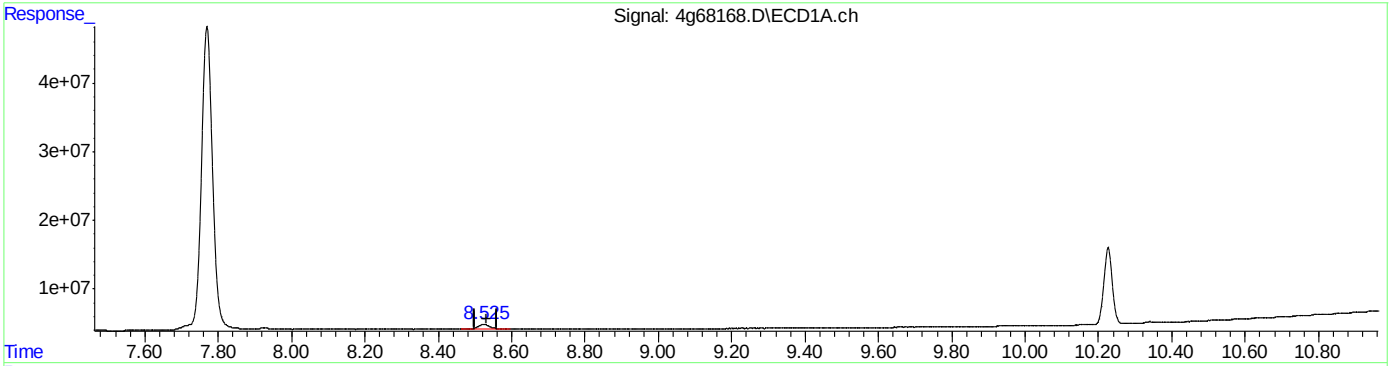
(+) = Expected Retention Time
4PST1778.M Thu May 12 13:58:42 2016 RPT1

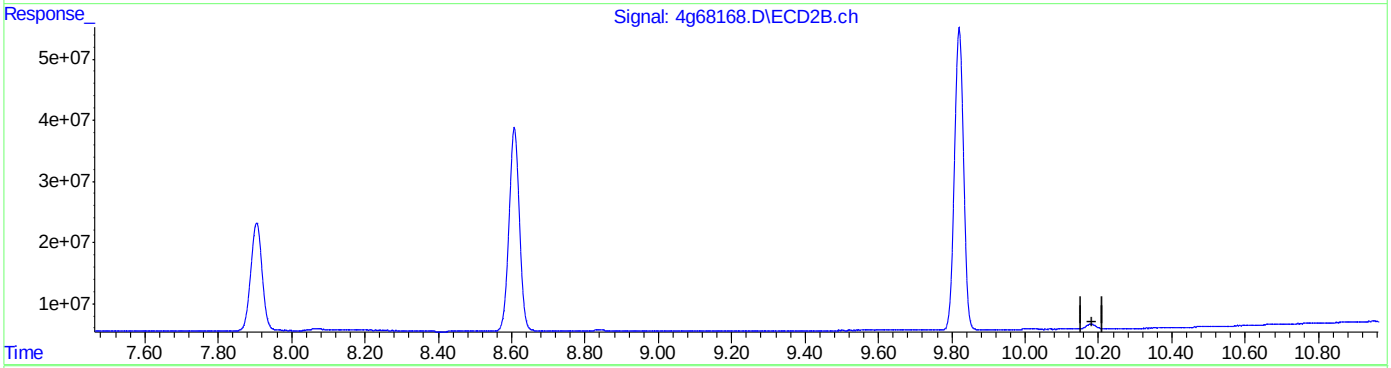
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68168.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 10:57 am
Operator : dharas
Sample : ddt
Misc : op93795,g4g1787,16.2,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 13:56:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 13:37:46 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(23) Endrin Ketone (B)
8.526min 2.069 PPB
response 16278492

(23) Endrin Ketone #2 (B)
0.000min 0.000 PPB
response 0

(+) = Expected Retention Time

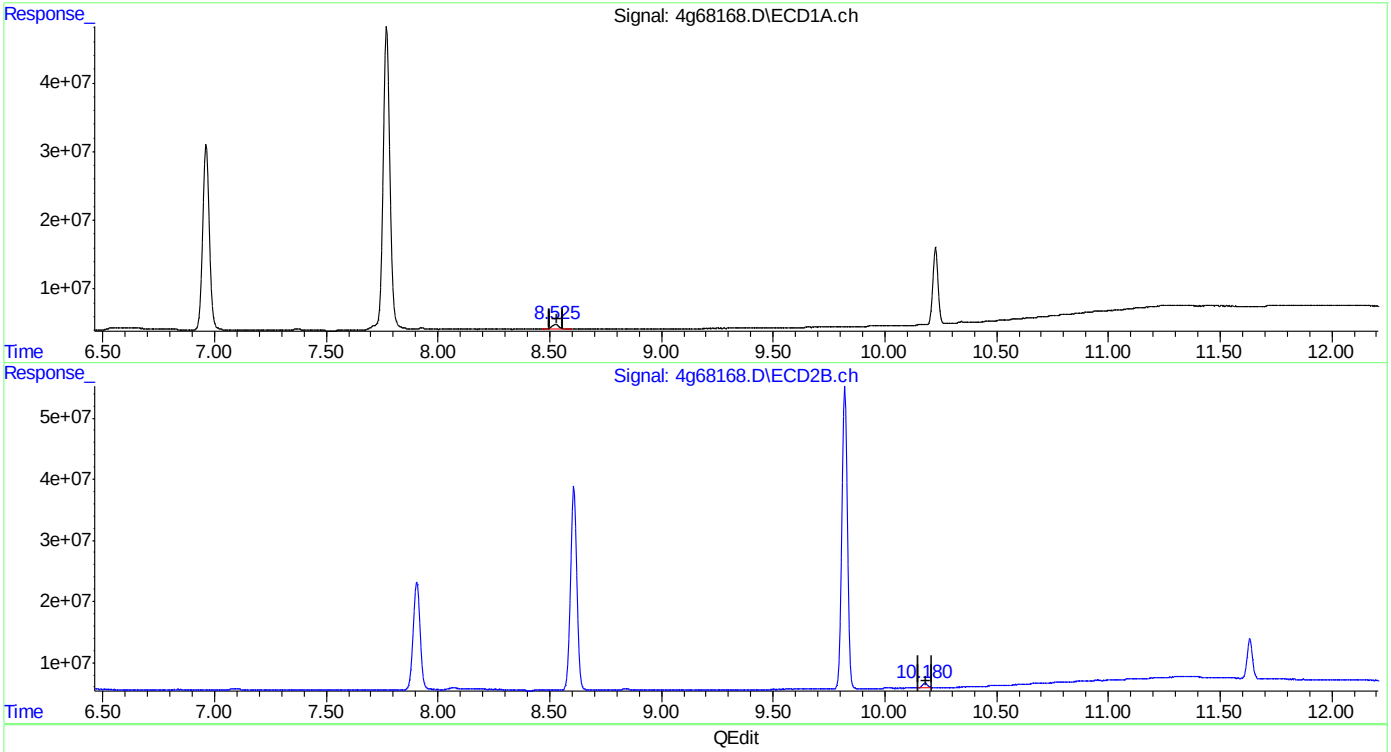
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68168.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 10:57 am
Operator : dharas
Sample : ddt
Misc : op93795,g4g1787,16.2,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 13:56:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 13:37:46 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(23) Endrin Ketone (B)
8.526min 2.069 PPB
response 16278492

(23) Endrin Ketone #2 (B)
10.180min 2.060 PPB m
response 12568249

(+) = Expected Retention Time
4PST1778.M Thu May 12 13:58:53 2016 RPT1

SGS ACCUTEST JC19996

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

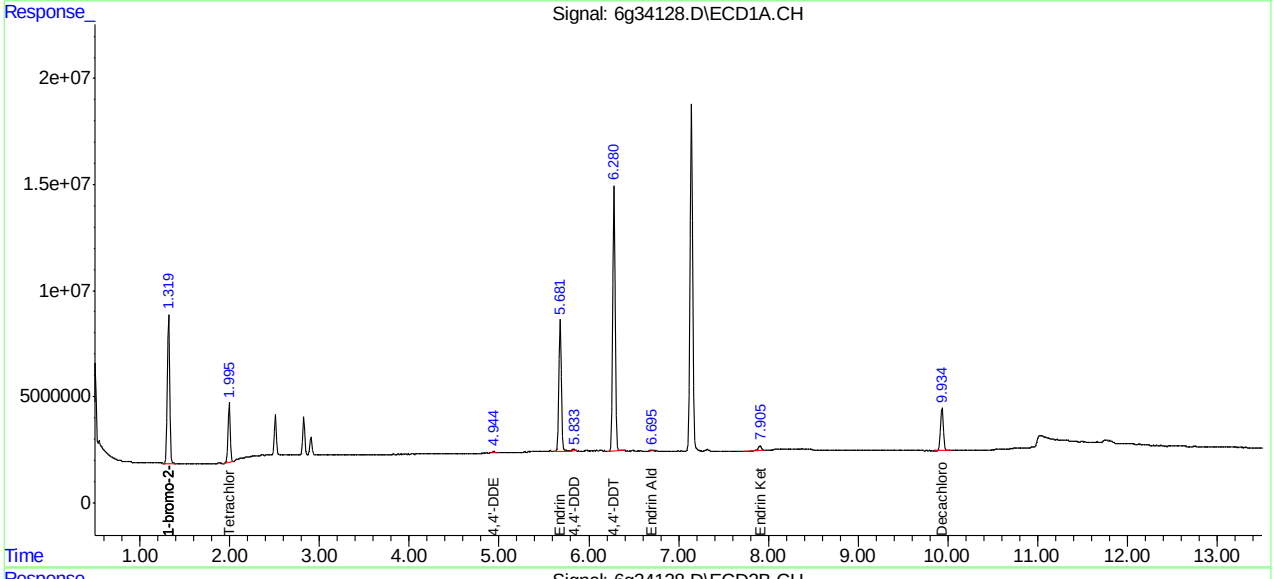
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

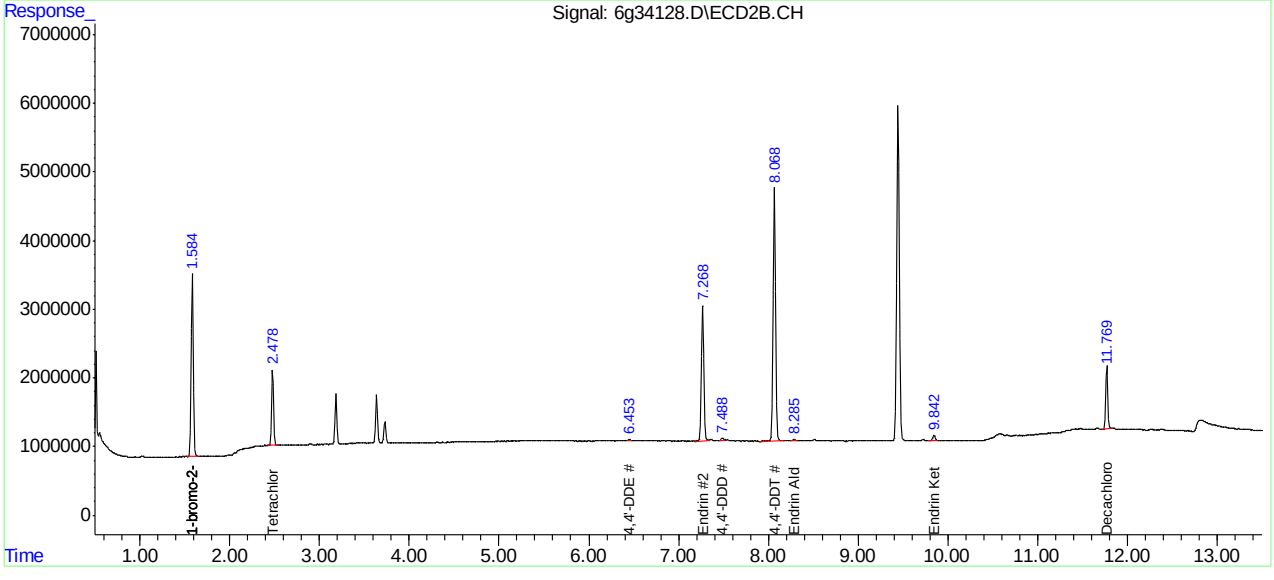
Quantitation Report (QT Reviewed)

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





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

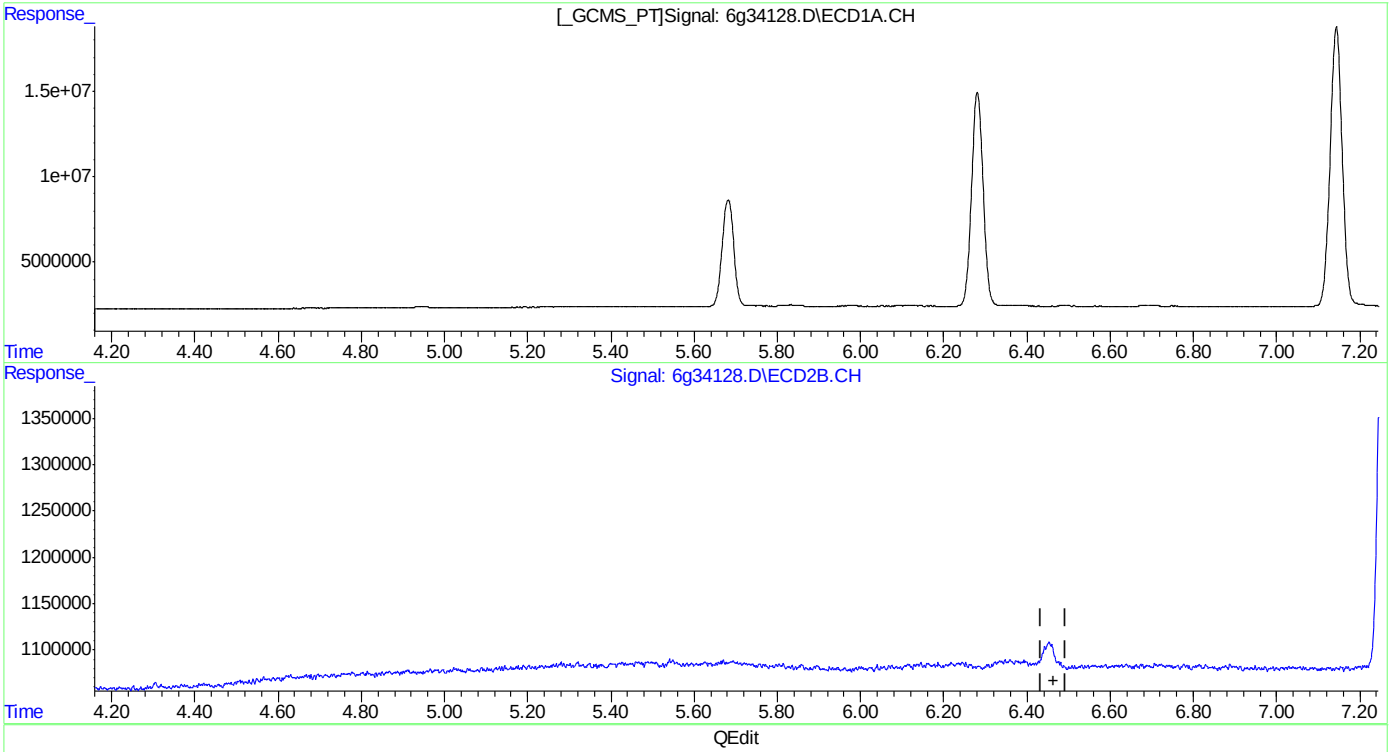
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	1	4.94	Poor instrument integration
4,4'-DDD	72-54-8	1	5.83	Poor instrument integration
4,4'-DDE	72-55-9	2	6.45	Poor instrument integration
Endrin aldehyde	7421-93-4	1	6.70	Poor instrument integration
4,4'-DDD	72-54-8	2	7.49	Poor instrument integration
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



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
6PST987.M Mon Apr 18 11:41:26 2016

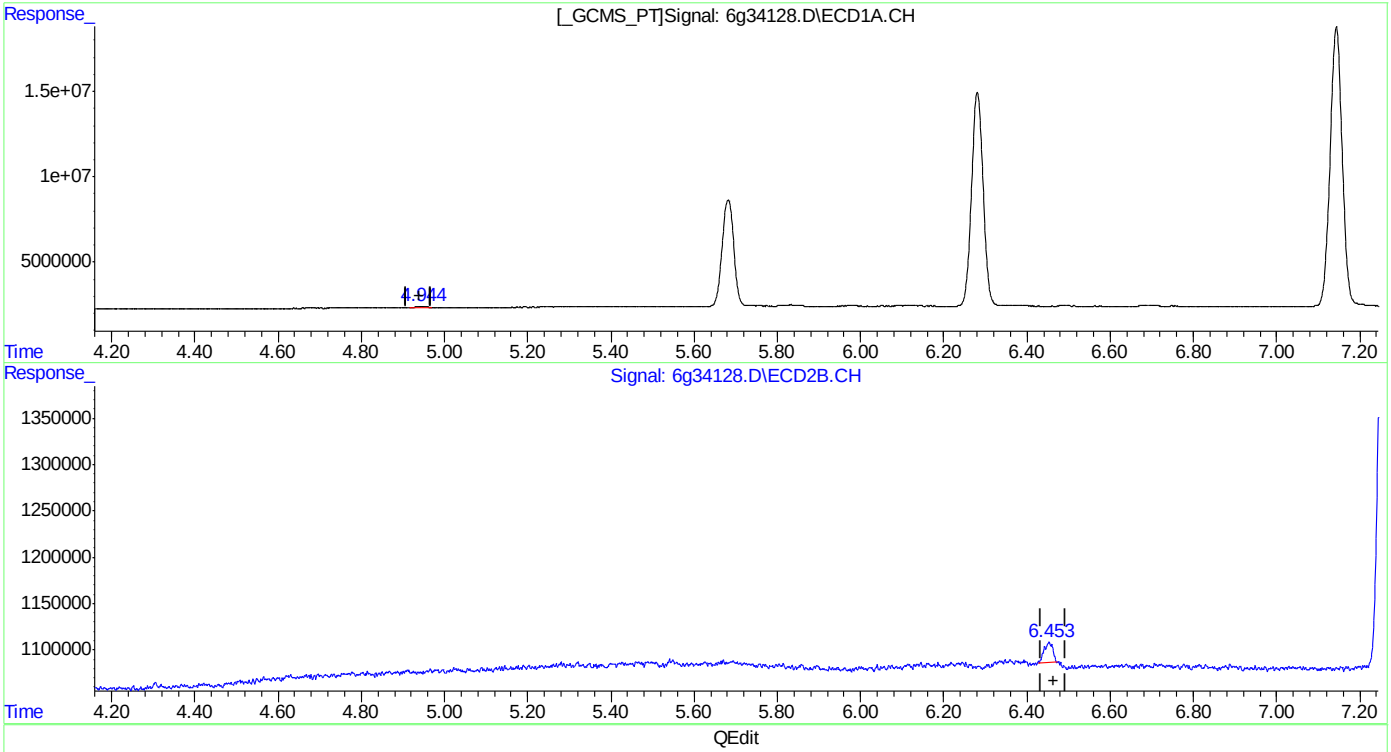
SGS ACCUTEST JC19996

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

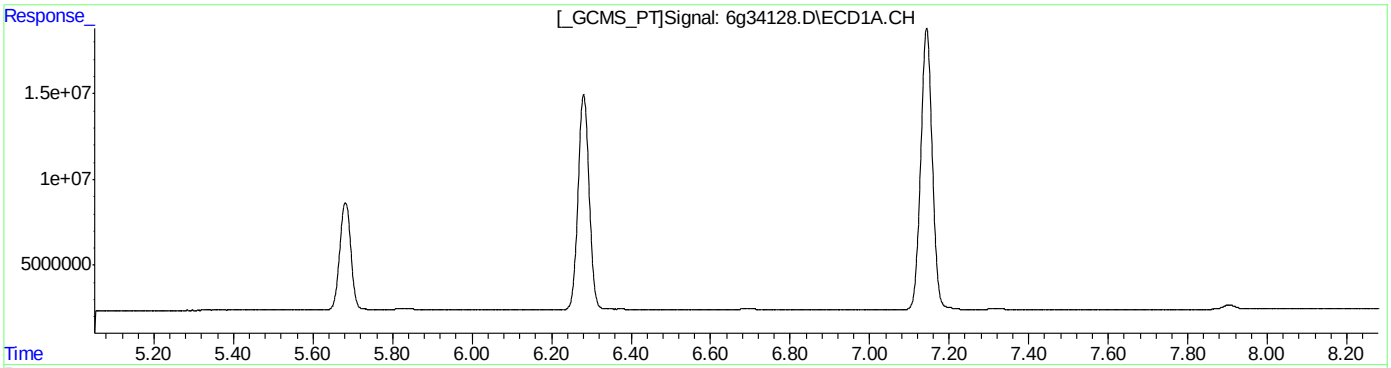
(+) = Expected Retention Time
6PST987.M Mon Apr 18 11:41:43 2016

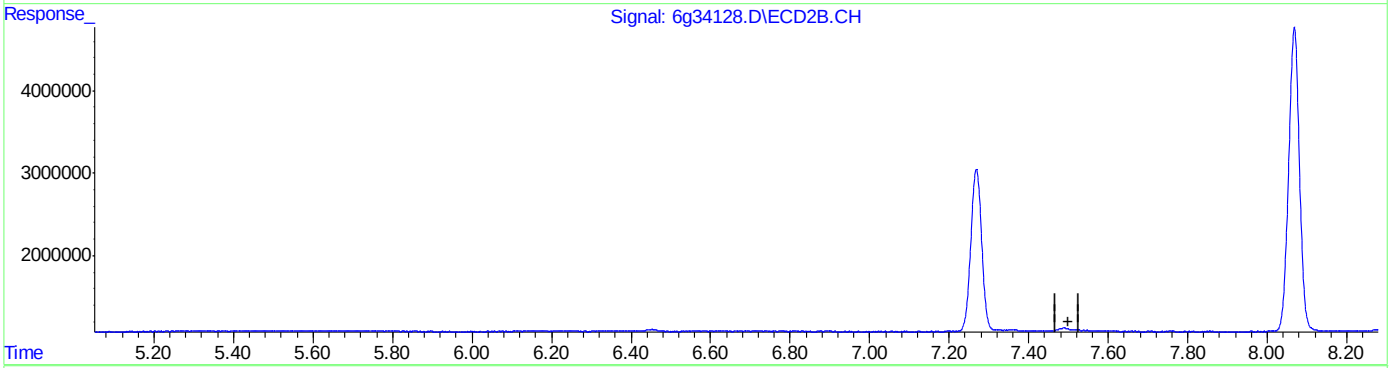
Quantitation Report (Qedit)

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

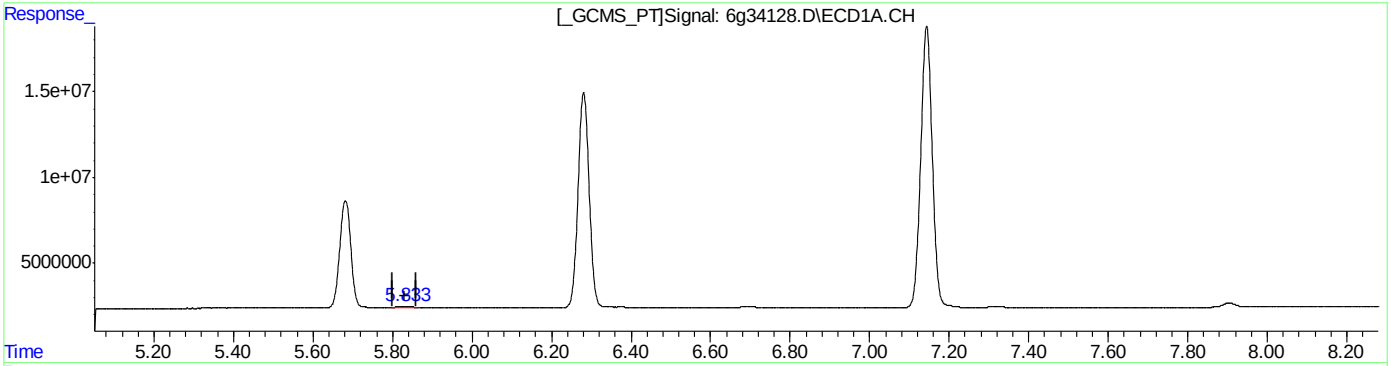
(+) = Expected Retention Time

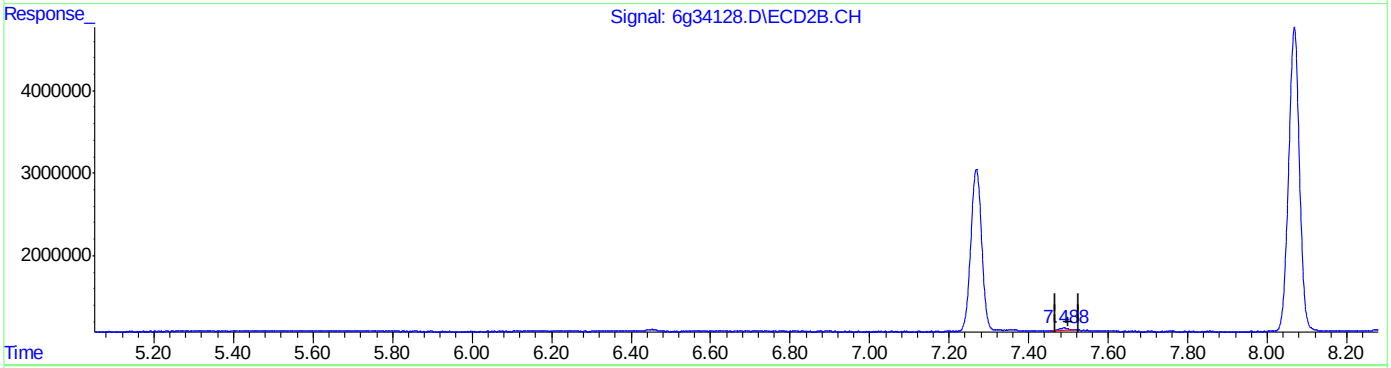
Quantitation Report (Qedit)

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

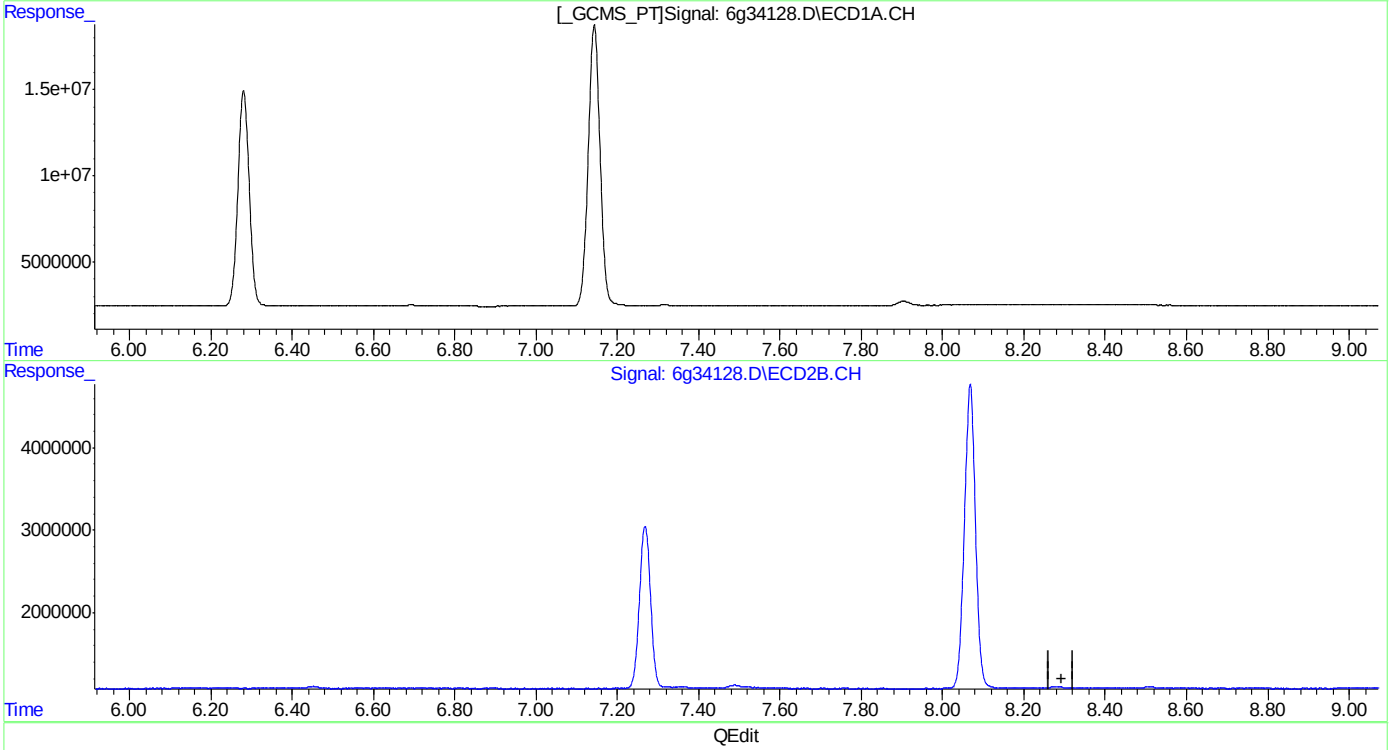
SGS ACCUTEST JC19996

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

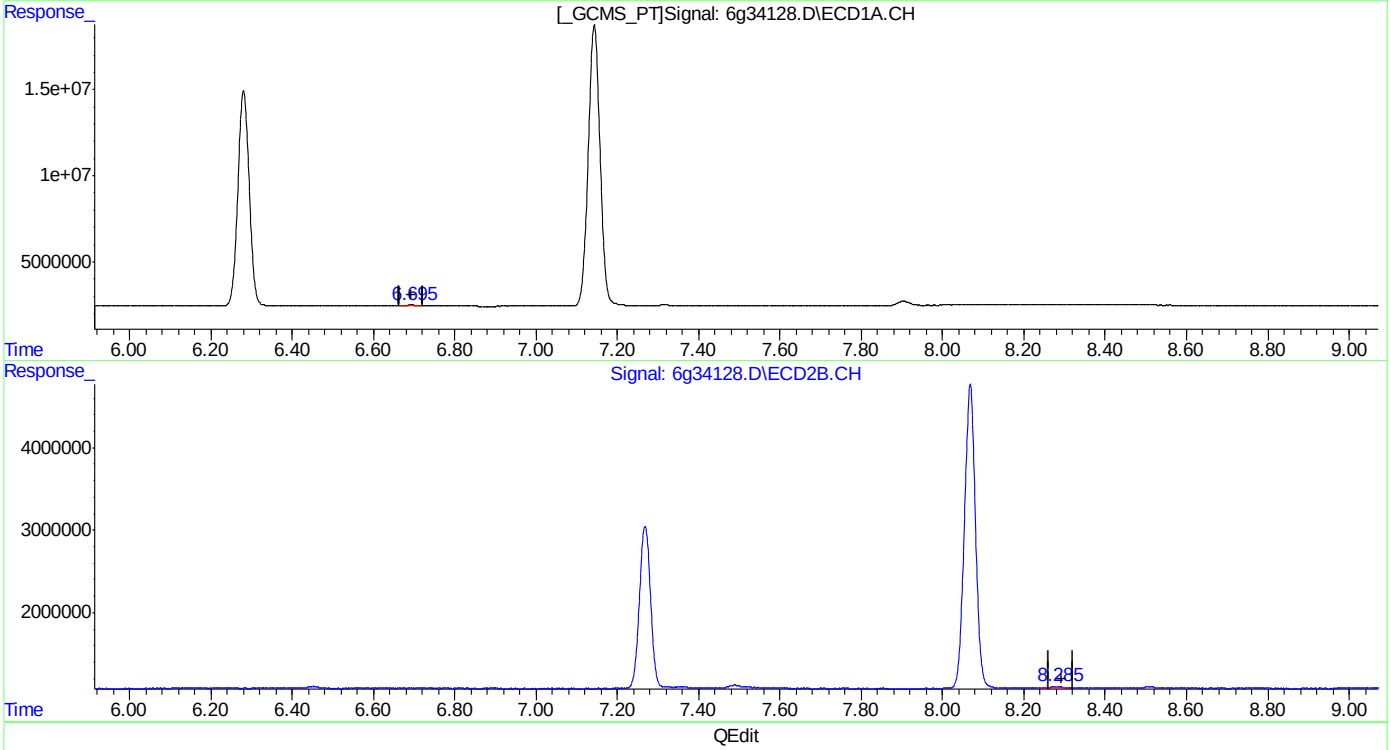
SGS ACCUTEST JC19996

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 JC19996

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 05/13/16 11:16

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1010\
Data File : 6g35033.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 May 2016 9:04 am
Operator : dharas
Sample : ddt
Misc : op93838,g6g1010,15.8,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 13 10:43:33 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...	1.293	1.565	164.6E6	61533504	50.000	50.000
25) I	1-bromo-2...	1.293	1.565	164.6E6	61533504	50.000	50.000
31) I	1-bromo-2...	1.293	1.565	164.6E6	61533504	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.968	2.457	62535306	23475579	20.728	21.116
Spiked Amount		40.000	Range	30 - 150	Recovery	= 51.82%	52.79%
24) SAB	Decachlor...	9.884	11.733	53006888	19741917	20.206	23.618
Spiked Amount		40.000			Recovery	= 50.52%	59.04%
	Target Compounds						
13) B	4,4'-DDE	4.904	6.405	873583	362417	0.336m	0.364m
15) MA	Endrin	5.633	7.221	146.3E6	52675190	52.621	50.644
16) A	4,4'-DDD	5.785	7.451	913107	1118577	0.415m	1.303m#
18) MA	4,4'-DDT	6.234	8.020	270.0E6	89052964	112.860	114.284
19) B	Endrin Al...	6.643	8.231	1118465	515702	0.500m	0.625m
23) B	Endrin Ke...	7.852	9.790	6002712	2461035	2.096	2.352m

SemiQuant Compounds - Not Calibrated on this Instrument

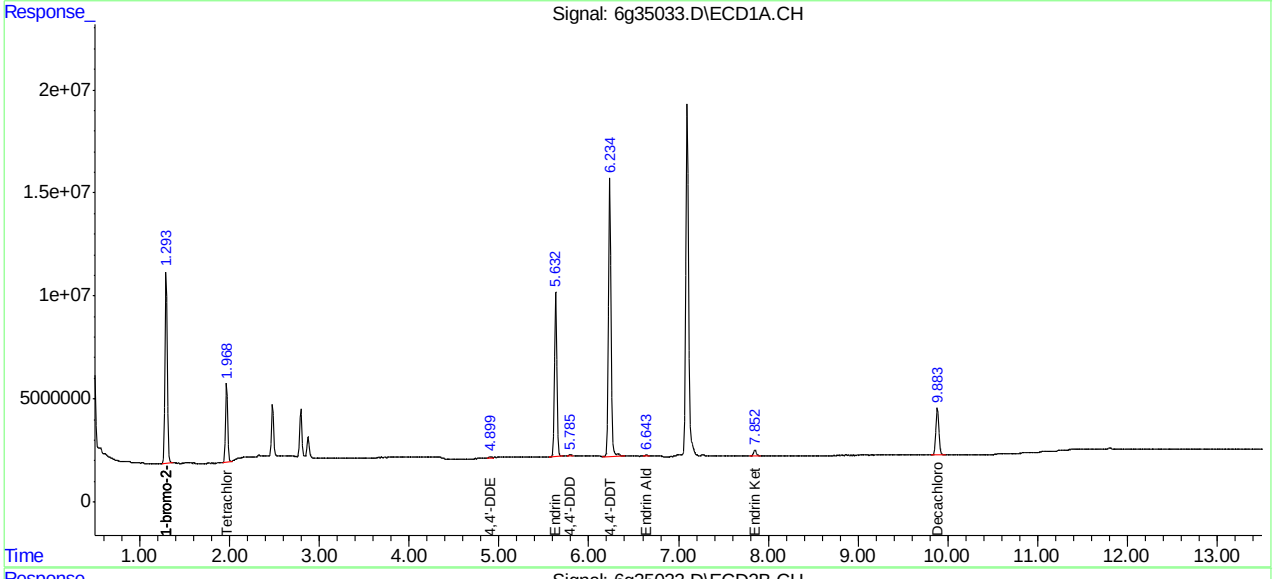
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

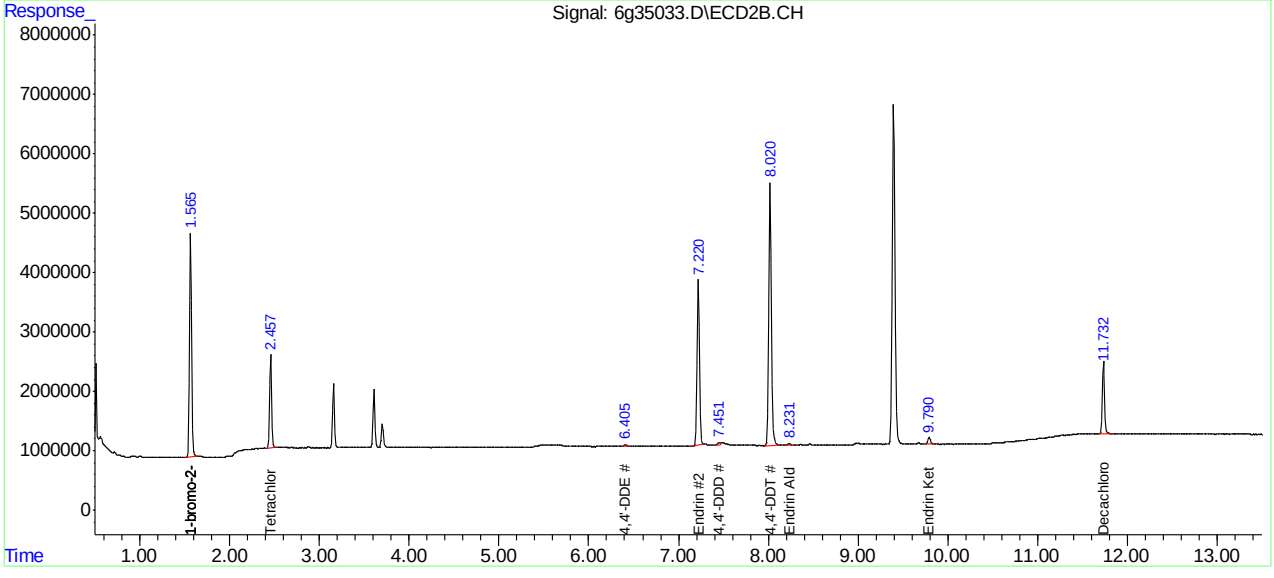
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1010\
Data File : 6g35033.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 May 2016 9:04 am
Operator : dharas
Sample : ddt
Misc : op93838,g6g1010,15.8,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 13 10:43:33 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 JC19996

Manual Integration Approval Summary

Sample Number:	G6G1010-DDT	**Method:**	SW846 8081B
Lab FileID:	6G35033.D	**Analyst approved:**	05/13/16 11:12 Dhara Saparia
Injection Time:	05/13/16 09:04	**Supervisor approved:**	05/13/16 11:16 Gwendolyn Burns

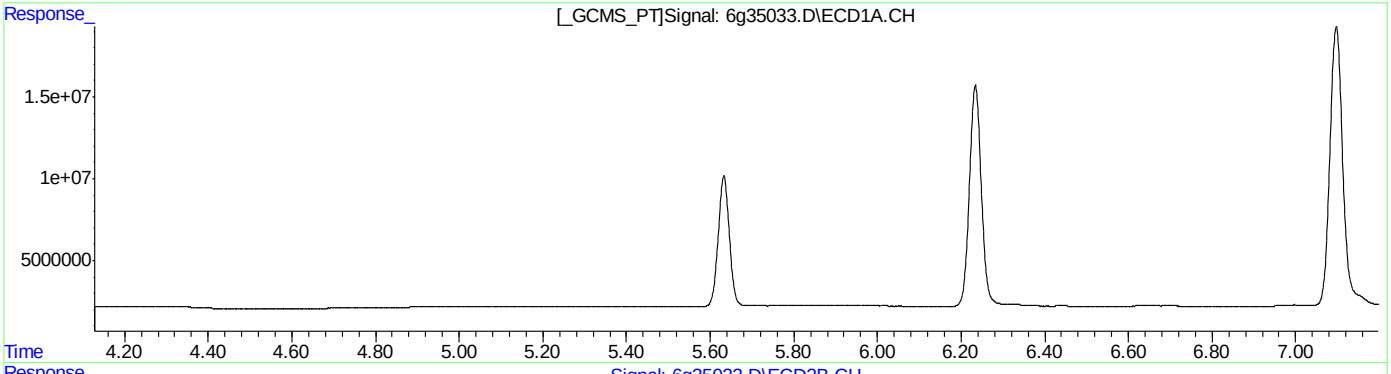
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	1	4.90	Poor instrument integration
4,4'-DDD	72-54-8	1	5.78	Poor instrument integration
4,4'-DDE	72-55-9	2	6.40	Poor instrument integration
Endrin aldehyde	7421-93-4	1	6.64	Poor instrument integration
4,4'-DDD	72-54-8	2	7.45	Poor instrument integration
Endrin aldehyde	7421-93-4	2	8.23	Poor instrument integration
Endrin ketone	53494-70-5	2	9.79	Poor instrument integration

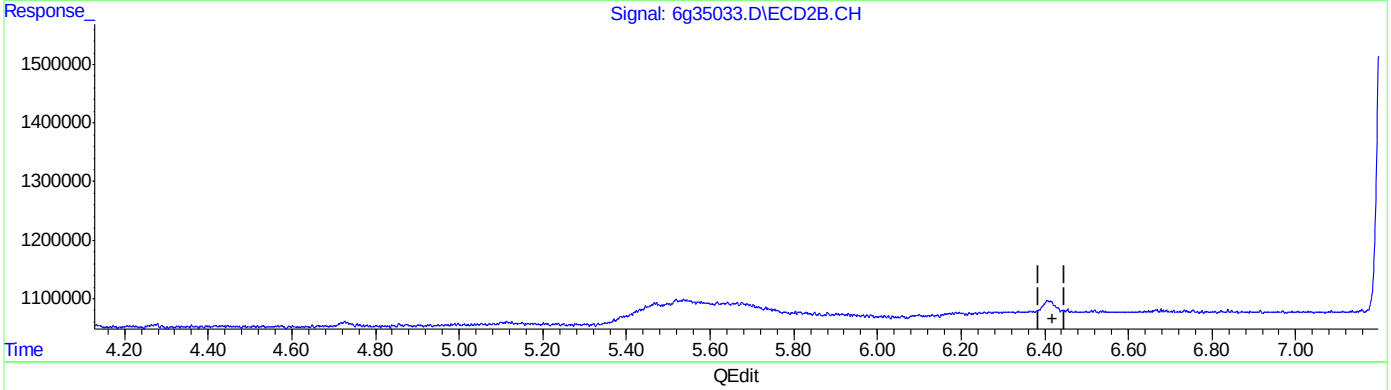
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1010\
Data File : 6g35033.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 May 2016 9:04 am
Operator : dharas
Sample : ddt
Misc : op93838,g6g1010,15.8,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 13 10:41:21 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





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

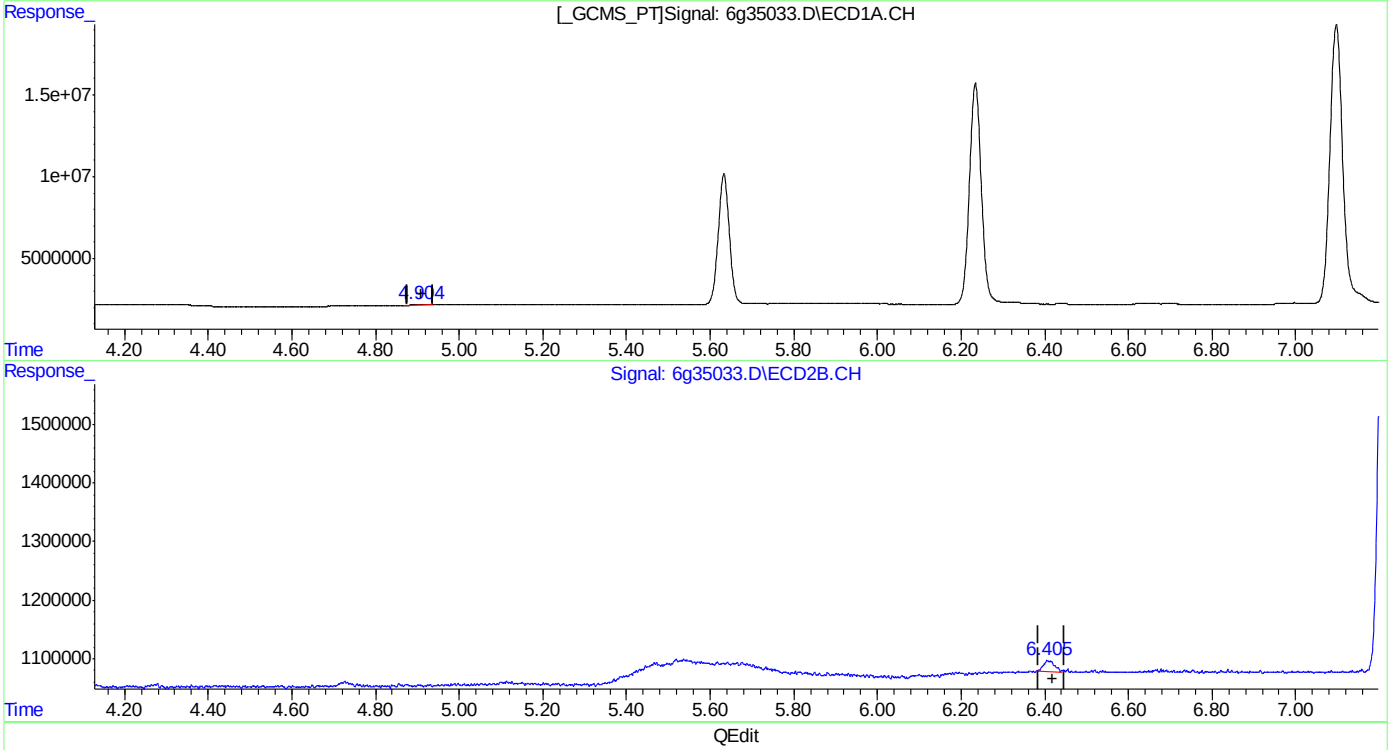
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1010\
Data File : 6g35033.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 May 2016 9:04 am
Operator : dharas
Sample : ddt
Misc : op93838,g6g1010,15.8,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 13 10:41:21 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



QEdit

(13) 4,4'-DDE (B)
4.904min 0.336PPB m
response 873583

(13) 4,4'-DDE #2 (B)
6.405min 0.364PPB m
response 362417

(+) = Expected Retention Time
6PST987.M Fri May 13 10:42:28 2016

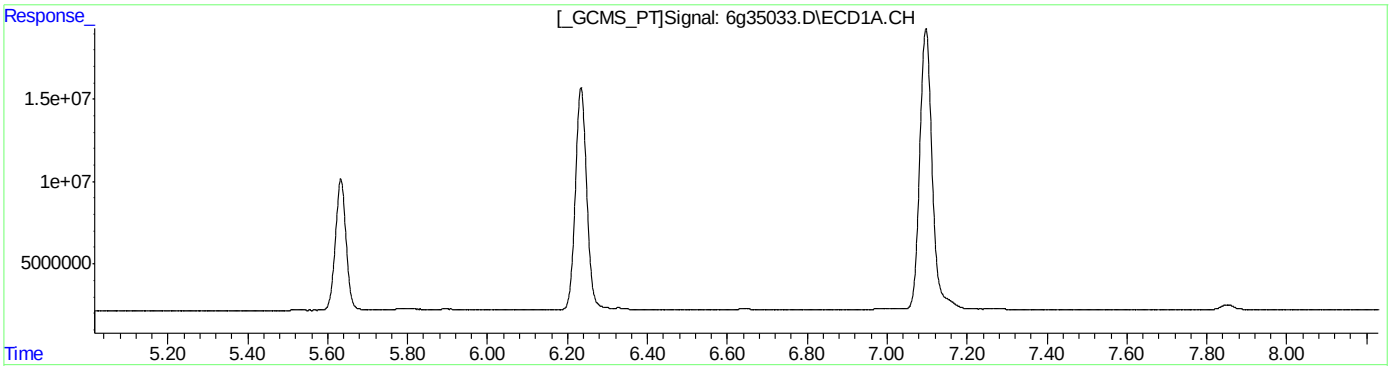
SGS ACCUTEST JC19996

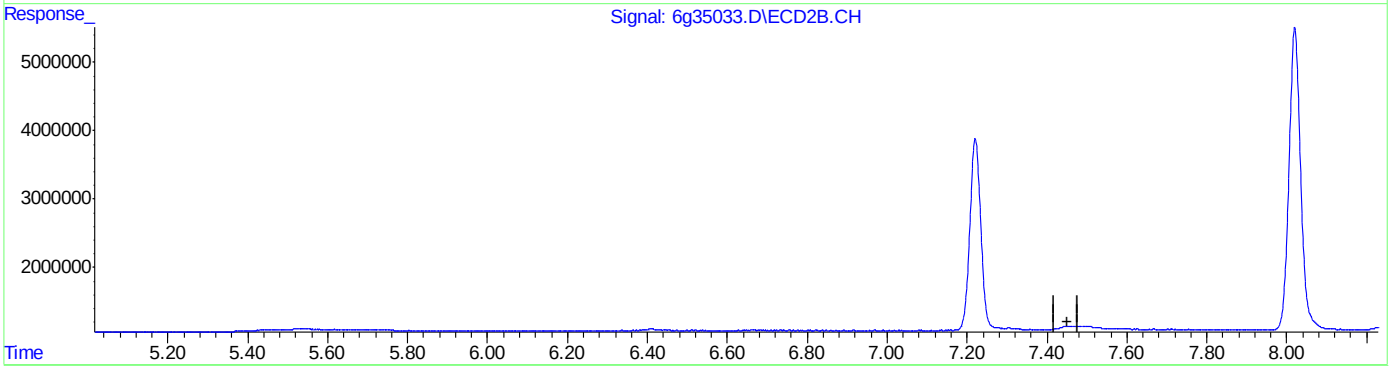
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1010\
Data File : 6g35033.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 May 2016 9:04 am
Operator : dharas
Sample : ddt
Misc : op93838,g6g1010,15.8,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 13 10:41:21 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





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
6PST987.M Fri May 13 10:42:31 2016

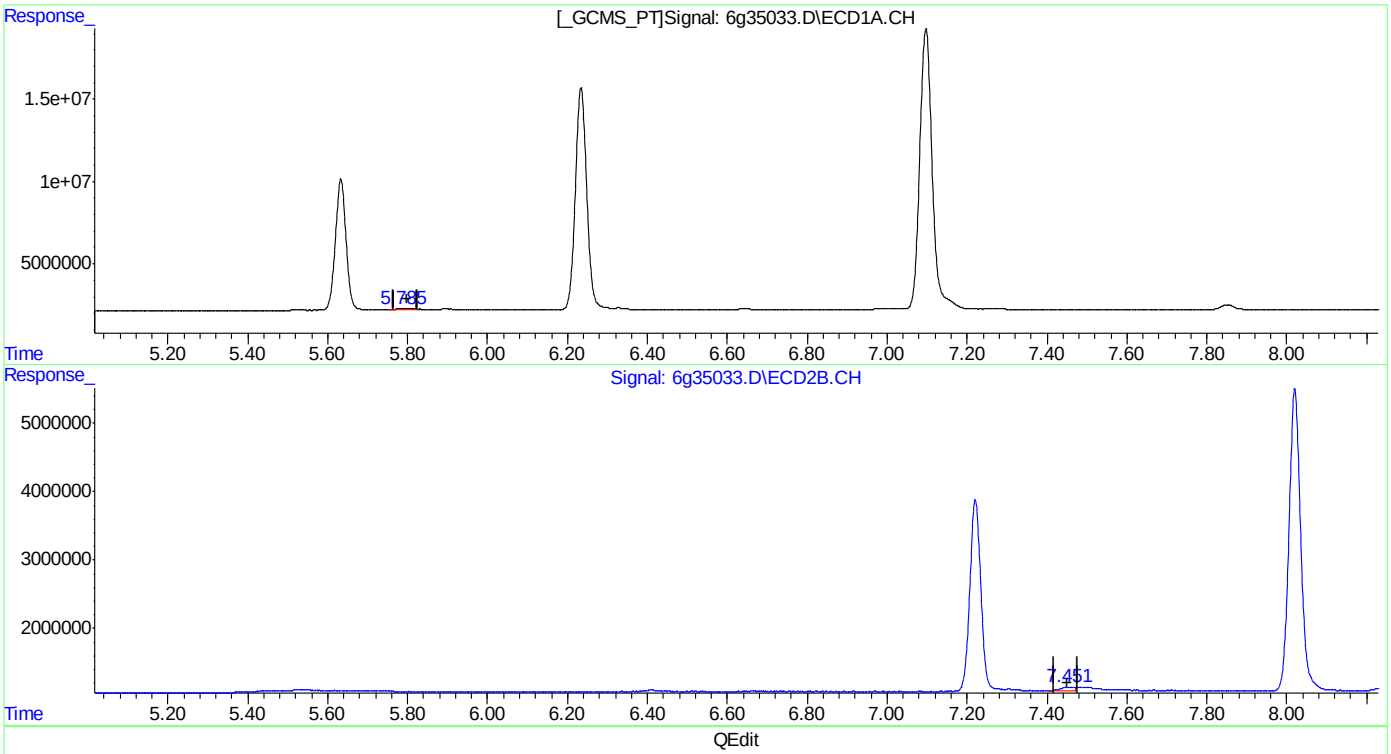
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\1010\
Data File : 6g35033.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 13 May 2016   9:04 am
Operator  : dharas
Sample    : ddt
Misc      : op93838,g6g1010,15.8,,,10,1
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 13 10:41:21 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
```



QEdit

(16) 4,4'-DDD (A)
5.785min 0.415PPB m
response 913107

(16) 4,4'-DDD #2 (A)
7.451min 1.303PPB m
response 1118577

(+) = Expected Retention Time

6PST987.M Fri May 13 10:42:51 2016

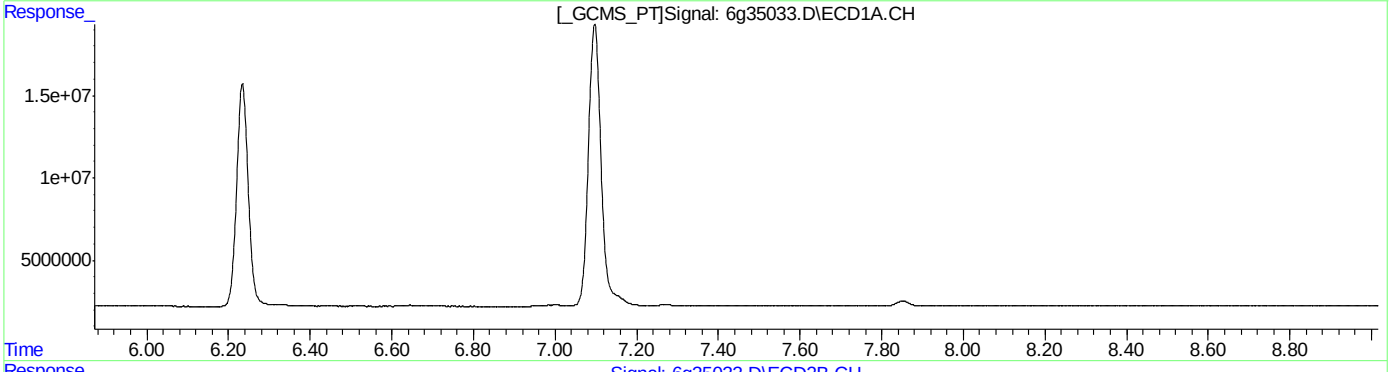
SGS ACCUTEST JC19996

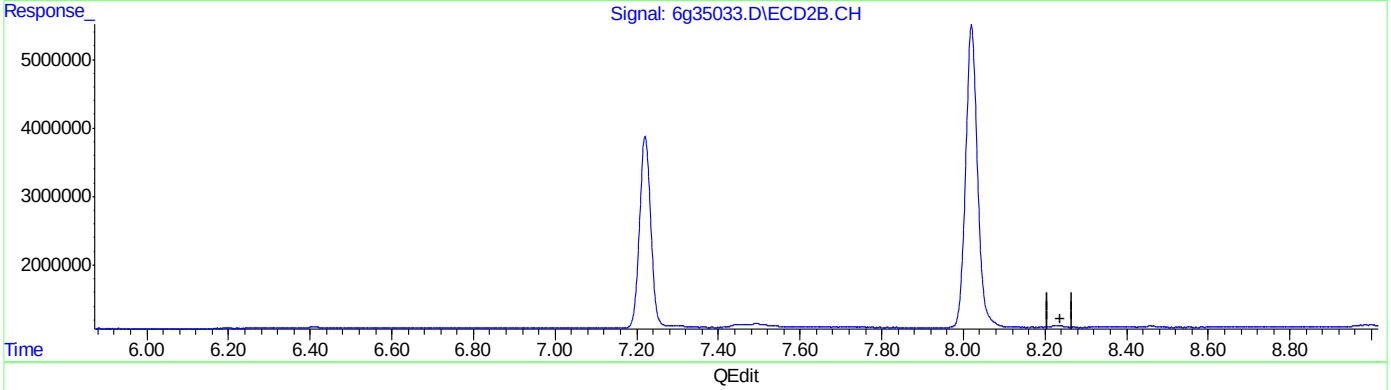
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1010\
Data File : 6g35033.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 May 2016 9:04 am
Operator : dharas
Sample : ddt
Misc : op93838,g6g1010,15.8,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 13 10:41:21 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





QEdit

(19) Endrin Aldehyde (B)
0.000min 0.000PPB
response 0

(19) Endrin Aldehyde #2 (B)
0.000min 0.000PPB
response 0

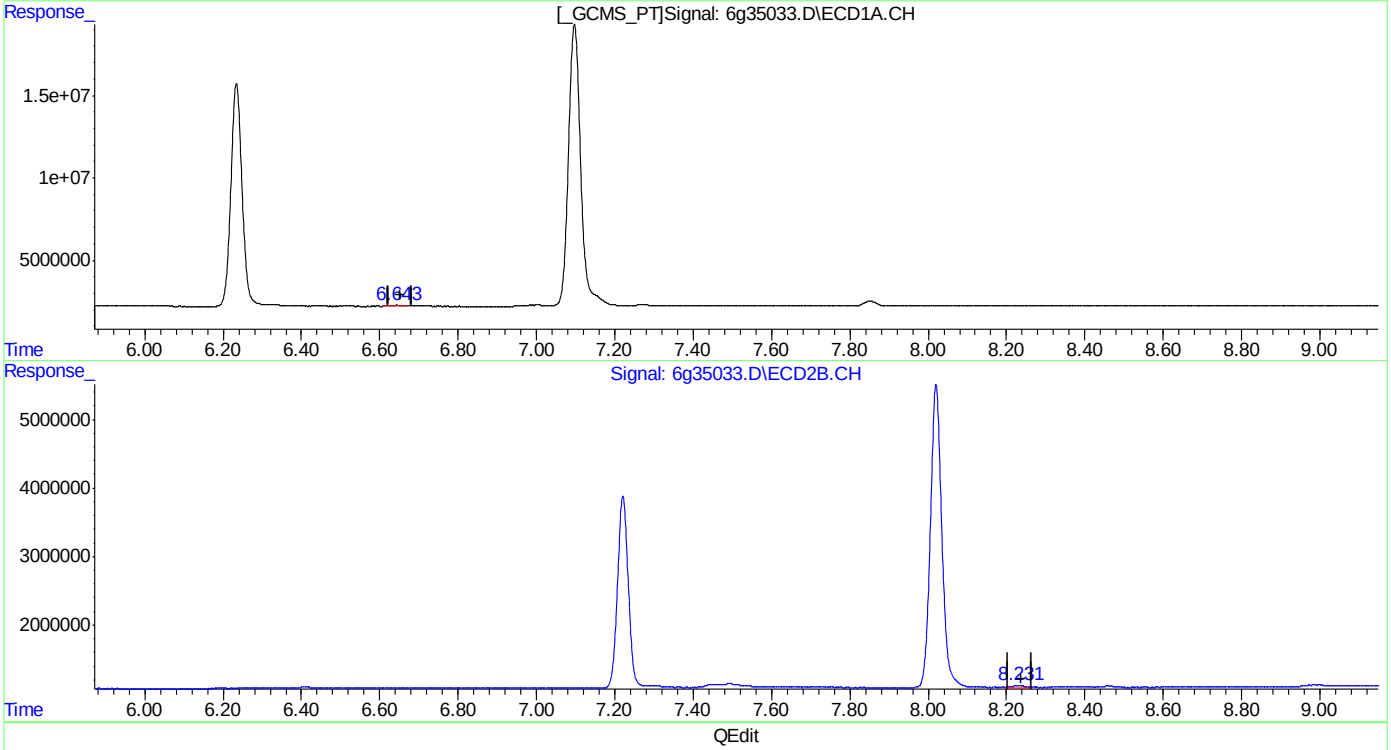
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1010\
Data File : 6g35033.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 May 2016 9:04 am
Operator : dharas
Sample : ddt
Misc : op93838,g6g1010,15.8,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 13 10:41:21 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



QEdit

(19) Endrin Aldehyde (B)
6.643min 0.500PPB m
response 1118465

(19) Endrin Aldehyde #2 (B)
8.231min 0.625PPB m
response 515702

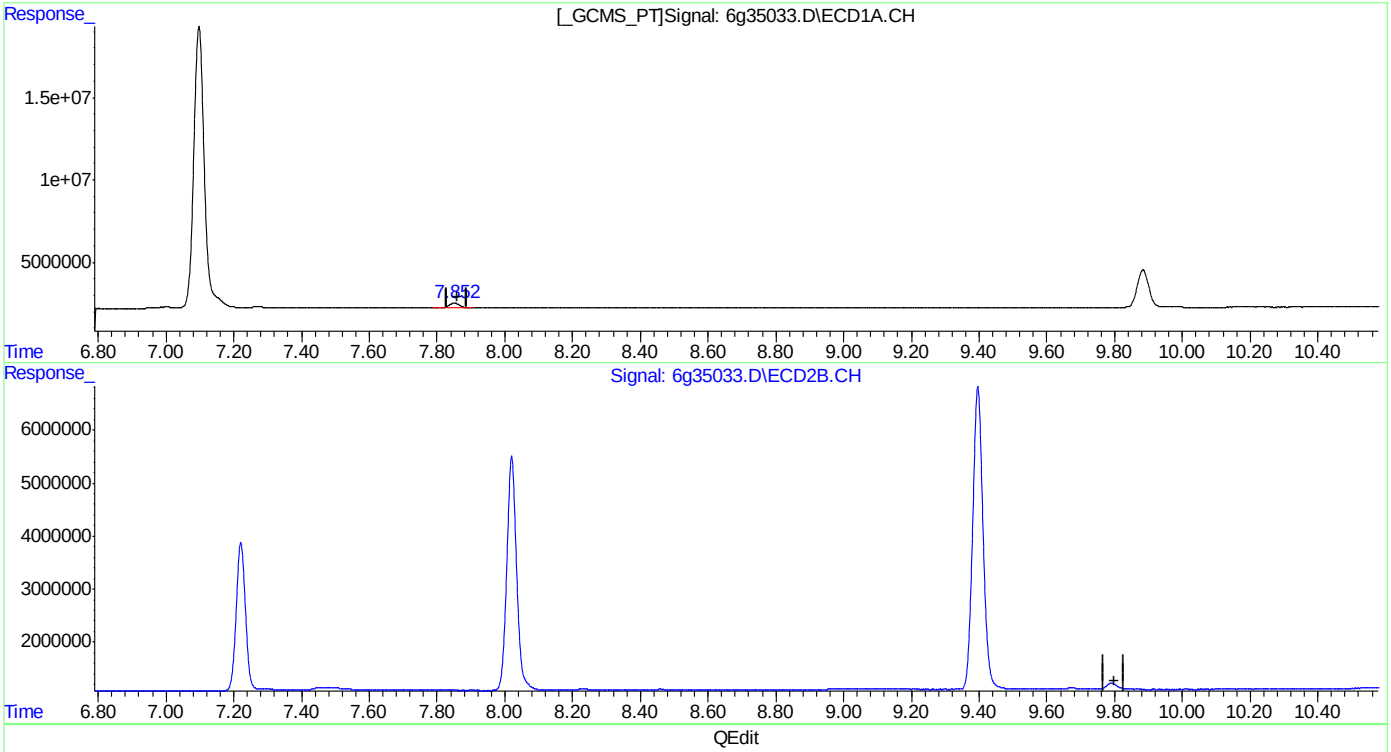
(+) = Expected Retention Time
6PST987.M Fri May 13 10:43:20 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1010\
Data File : 6g35033.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 May 2016 9:04 am
Operator : dharas
Sample : ddt
Misc : op93838,g6g1010,15.8,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 13 10:41:21 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



QEdit

(23) Endrin Ketone (B)
7.852min 2.096PPB
response 6002712

(23) Endrin Ketone #2 (B)
0.000min 0.000PPB
response 0

(+) = Expected Retention Time
6PST987.M Fri May 13 10:43:26 2016

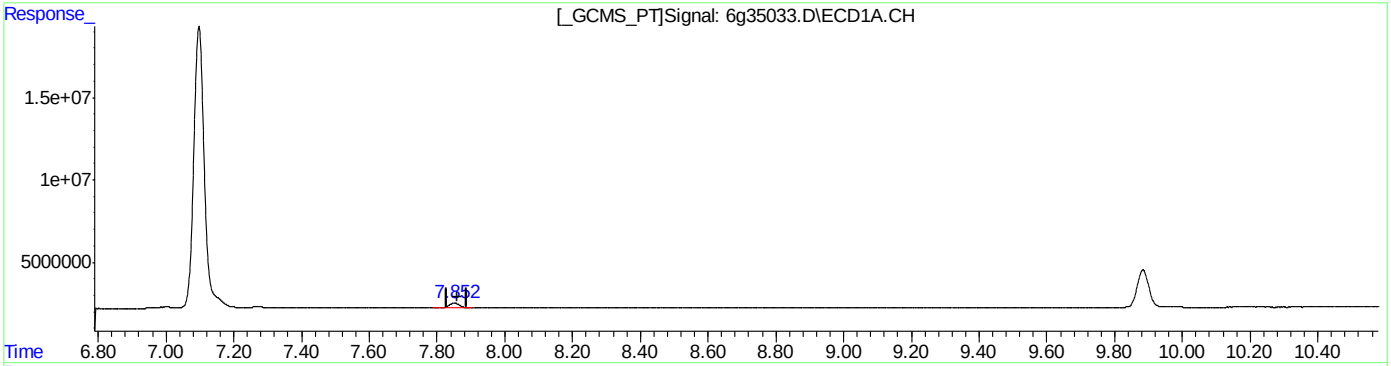
SGS ACCUTEST JC19996

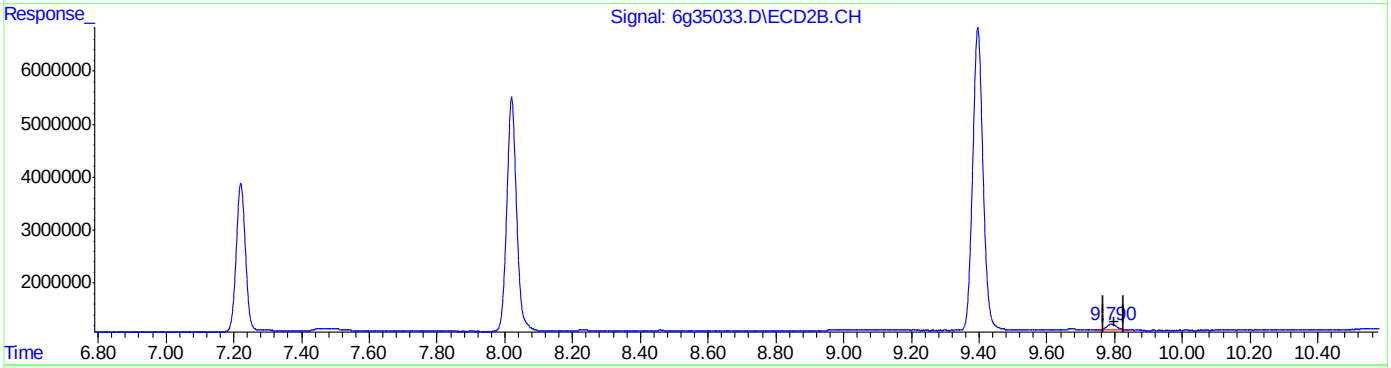
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1010\
Data File : 6g35033.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 May 2016 9:04 am
Operator : dharas
Sample : ddt
Misc : op93838,g6g1010,15.8,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 13 10:41:21 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





QEdit

(23) Endrin Ketone (B)
7.852min 2.096PPB
response 6002712

(23) Endrin Ketone #2 (B)
9.790min 2.352PPB m
response 2461035

(+) = Expected Retention Time
6PST987.M Fri May 13 10:43:35 2016

SGS ACCUTEST JC19996

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
05/04/16 11:11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67832.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 2:26 pm
Operator : dharas
Sample : ic1778-1
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:18:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	1.798	2.074	404.6E6	350.7E6	50.000	50.000	
	System Monitoring Compounds							
2) SAB	Tetrachlo...	2.586	3.109	6962584	6110595	0.922m	0.964	
	Spiked Amount 40.000 Range 30 - 150 Recovery =					2.31%#	2.41%#	
24) SA	Decachlor...	10.251	11.660	6737480	4639115	0.857m	0.824	
	Spiked Amount 40.000 Recovery =					2.14%	2.06%	
	Target Compounds							
3) A	alpha-BHC	3.154	3.871	9435652	9644001	1.001	1.141	
4) MA	gamma-BHC	3.501	4.355	7770516	7902276	0.961	1.030	
5) MA	Heptachlor	3.819	4.979	7052339	8539292	0.812	1.079	#
6) B	beta-BHC	3.610	4.450	3847992	3733076	0.987	1.065	
7) B	delta-BHC	4.063	4.881	7421452	6995438	0.936	0.997	
8) MB	Aldrin	4.438	5.463	7708909	9027664	0.913	1.177	#
9) B	Heptachlo...	5.205	6.326	6953341	8070682	0.945	1.147	
10) B	gamma-Chl...	5.384	6.627	6671076	6909544	0.935m	0.997	
11) B	alpha-Chl...	5.567	6.860	8387247	7793341	1.135	1.133	
12) A	Endosulfan I	5.753	6.966	8617919	6752682	1.072	1.023	
13) B	4,4'-DDE	5.693	7.121	8224968	6954461	1.403	1.061	
14) MA	Dieldrin	6.091	7.414	6900266	7069632	0.925m	1.032	
15) MA	Endrin	6.428	7.935	6964797	6178520	1.002m	1.002	
16) A	4,4'-DDD	6.572	8.094	6042117	5592972	1.098	1.011	
17) B	Endosulfa...	6.769	8.293	5885684	6240514	0.870	1.015	
18) MA	4,4'-DDT	6.998	8.637	2984622	5047828	1.377	1.067	
19) B	Endrin Al...	7.405	8.867	5880255	5075556	1.029	1.030	
20) B	Endosulfa...	8.099	9.341	6211467	5458341	1.068	1.073	
21) A	Methoxychlor	7.807	9.844	2446157	2727859	0.820m	1.017	
22)	Mirex	7.997	10.161	6420057	5072743	1.034	1.092	
23) B	Endrin Ke...	8.563	10.202	6337010	5962417	0.938m	1.092	

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

11.6.1 11

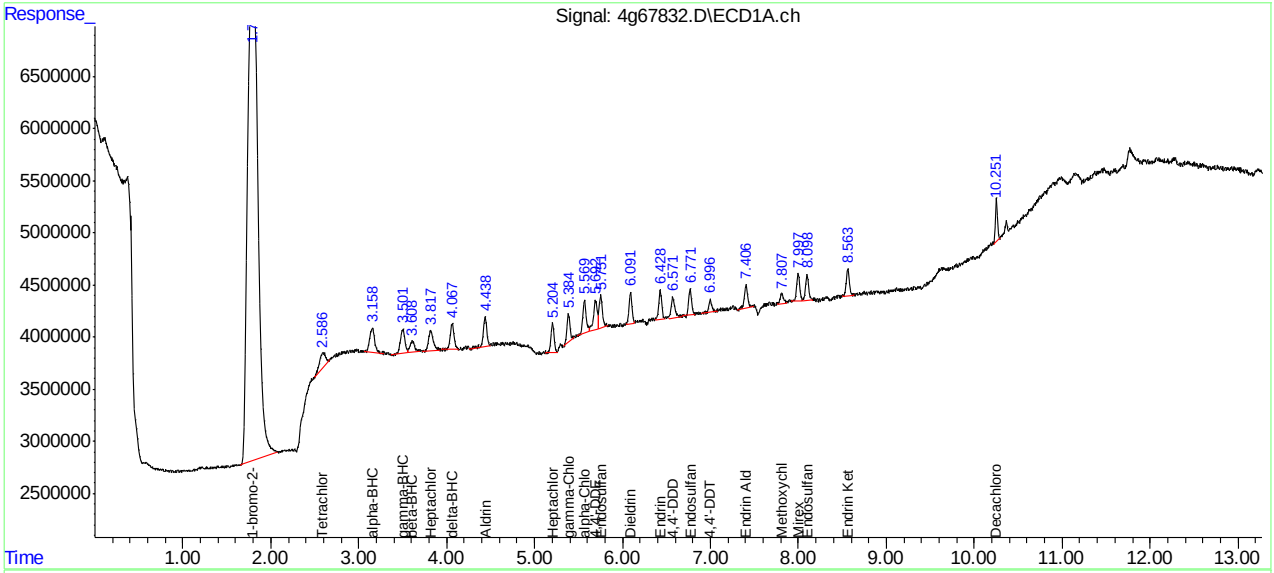
SGS ACCUTEST JC19996

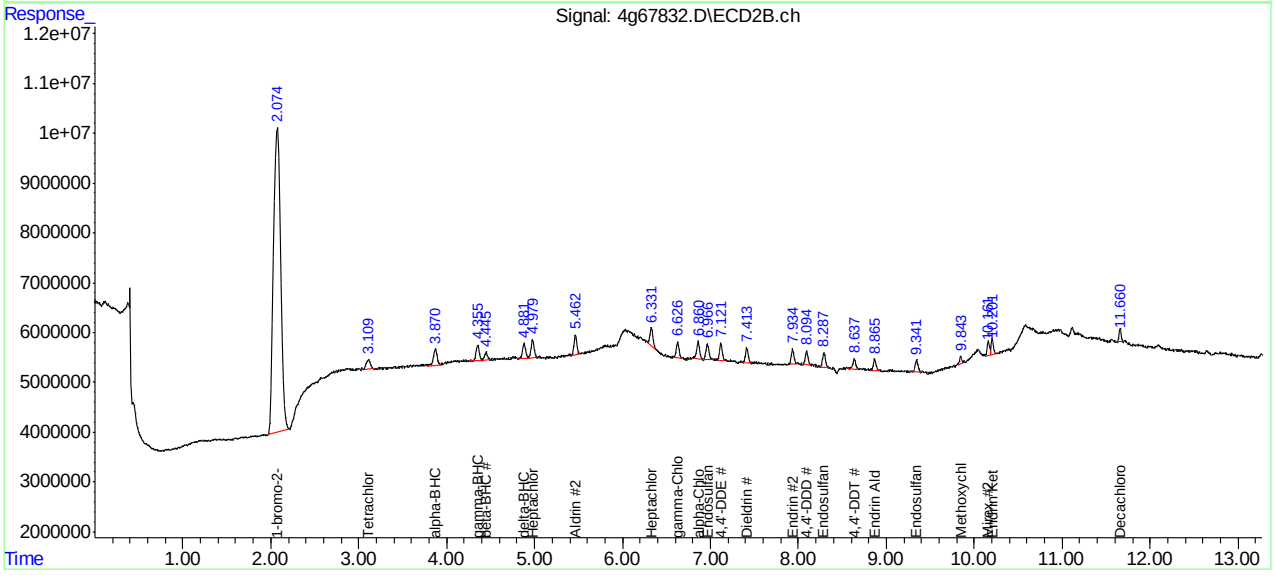
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67832.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 2:26 pm
Operator : dharas
Sample : ic1778-1
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:18:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G4G1778-IC1778	**Method:**	SW846 8081B
Lab FileID:	4G67832.D	**Analyst approved:**	05/03/16 15:16 Rebecca Krug
Injection Time:	05/02/16 14:26	**Supervisor approved:**	05/04/16 11:11 Gwendolyn Burns

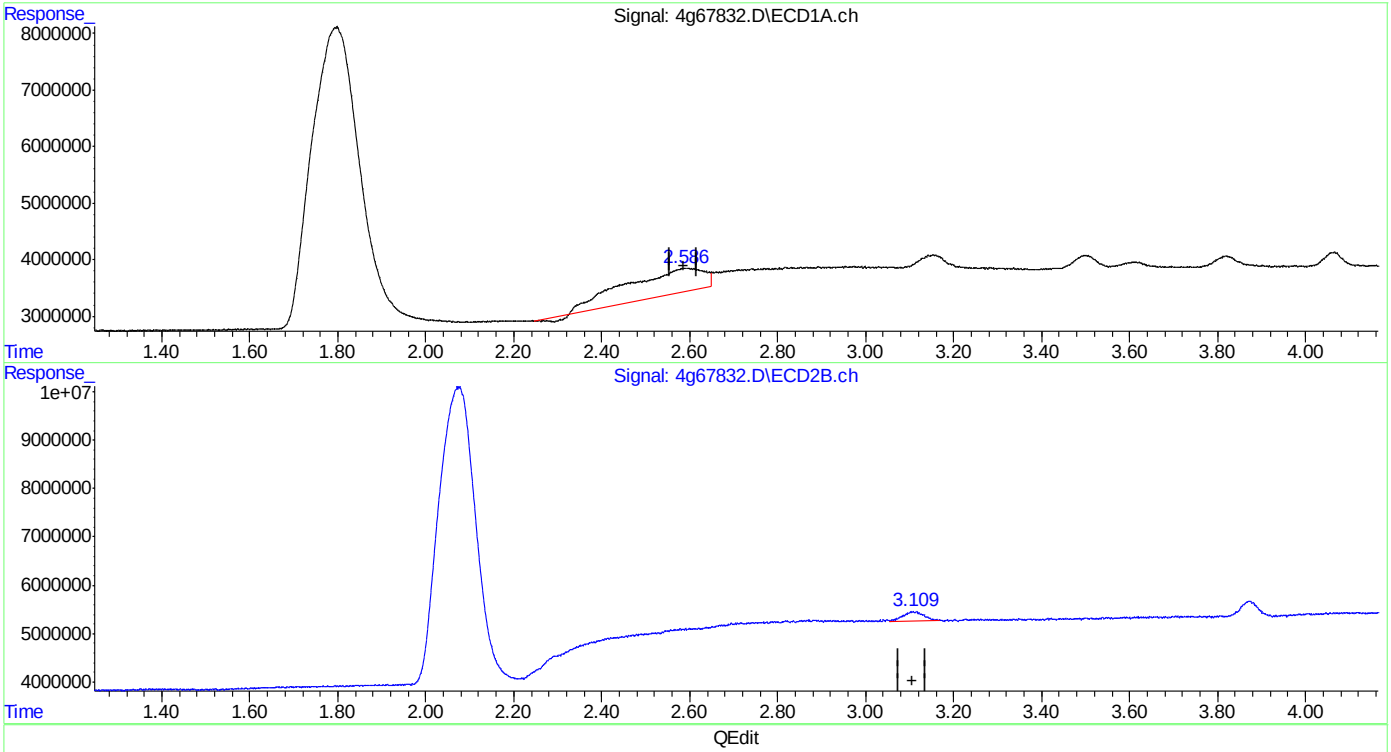
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	2.59	Poorly defined baseline
gamma-Chlordane	5103-74-2	1	5.38	Poorly defined baseline
Dieldrin	60-57-1	1	6.09	Poorly defined baseline
Endrin	72-20-8	1	6.43	Poorly defined baseline
Methoxychlor	72-43-5	1	7.81	Poorly defined baseline
Endrin ketone	53494-70-5	1	8.56	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	1	10.25	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67832.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 2:26 pm
Operator : dharas
Sample : ic1778-1
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:00:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(2) Tetrachloro-m-xylene (SAB)
2.587min 7.286 PPB
response 55021137

(2) Tetrachloro-m-xylene #2 (SAB)
3.109min 0.964 PPB
response 6110595

(+) = Expected Retention Time
4PST1778.M Tue May 03 15:00:24 2016 RPT1

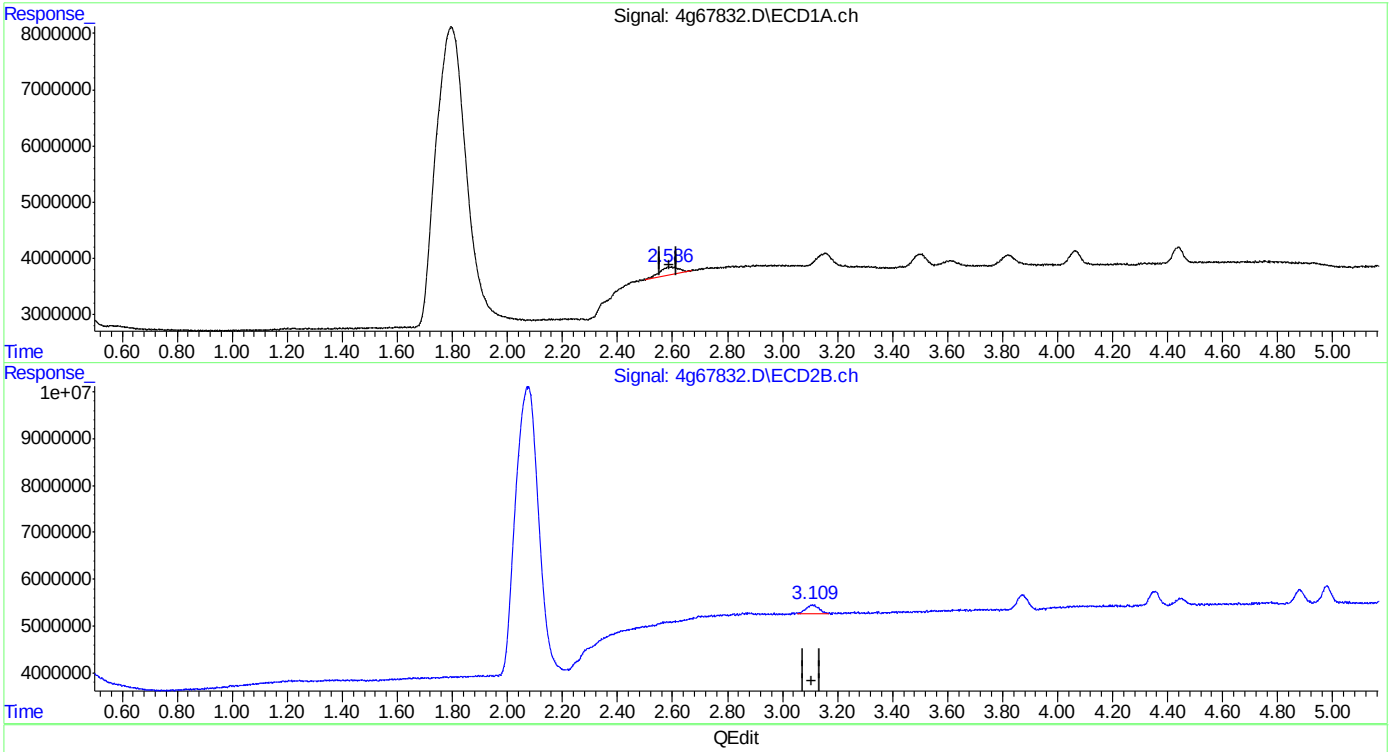
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67832.D
Signal(s) : Signal #1: ECD1A.ch  Signal #2: ECD2B.ch
Acq On    :  2 May 2016   2:26 pm
Operator  : dharas
Sample    : ic1778-1
Misc      : op93464,g4g1778,100,,,10,1
ALS Vial  : 3   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:00:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title  : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.32um   Signal #2 Info : 30m x .32mm x .25um
```



(2) Tetrachloro-m-xylene (SAB)

2.586min 0.922 PPB m

response 6962584

(2) Tetrachloro-m-xylene #2 (SAB)

3.109min 0.964 PPB

response 6110595

(+) = Expected Retention Time

4PST1778.M Tue May 03 15:00:29 2016 RPT1

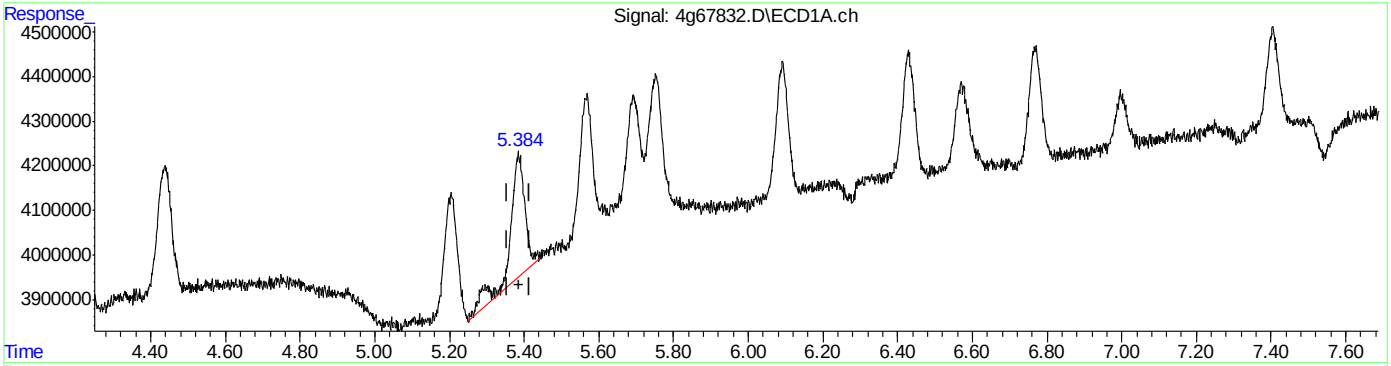
SGS ACCUTEST JC19996

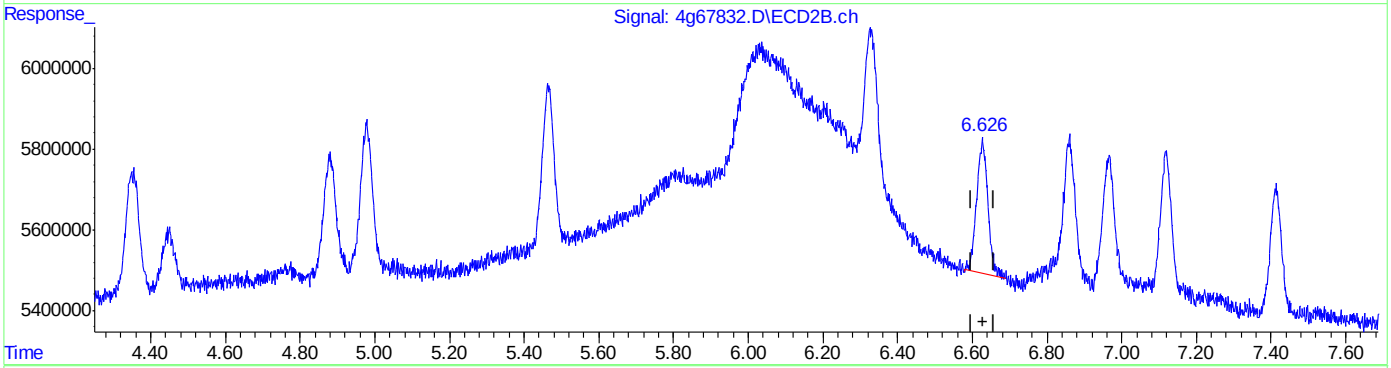
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67832.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 2:26 pm
Operator : dharas
Sample : ic1778-1
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:00:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(10) gamma-Chlordane (B)
5.385min 1.073 PPB
response 7652075

(10) gamma-Chlordane #2 (B)
6.627min 0.997 PPB
response 6909544

(+) = Expected Retention Time

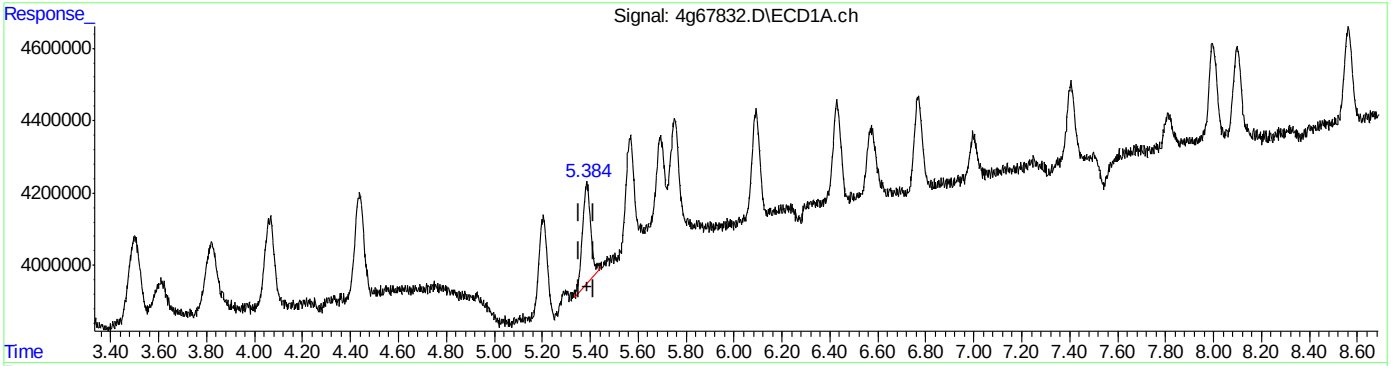
SGS ACCUTEST JC19996

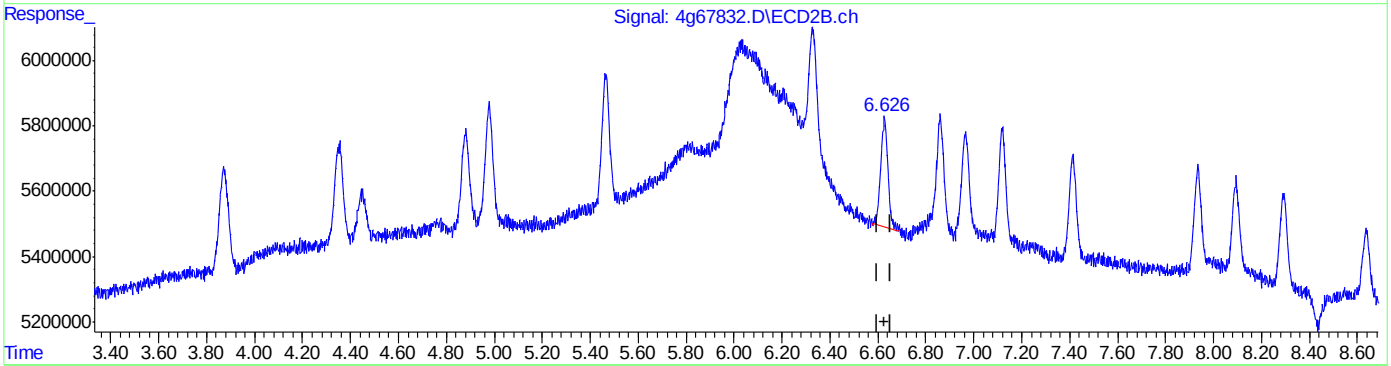
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67832.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 2:26 pm
Operator : dharas
Sample : ic1778-1
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:00:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(10) gamma-Chlordane (B)
5.384min 0.935 PPB m
response 6671076

(10) gamma-Chlordane #2 (B)
6.627min 0.997 PPB
response 6909544

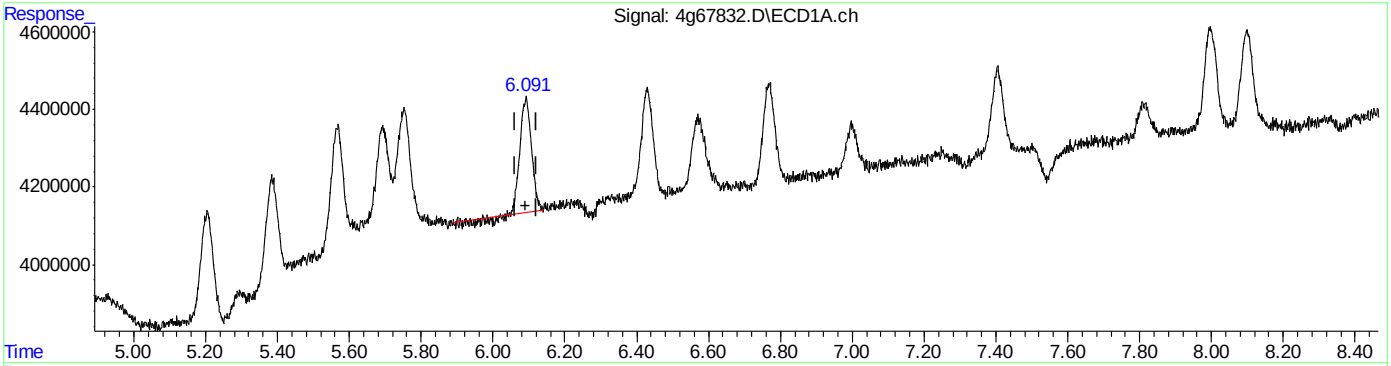
(+) = Expected Retention Time
4PST1778.M Tue May 03 15:00:44 2016 RPT1

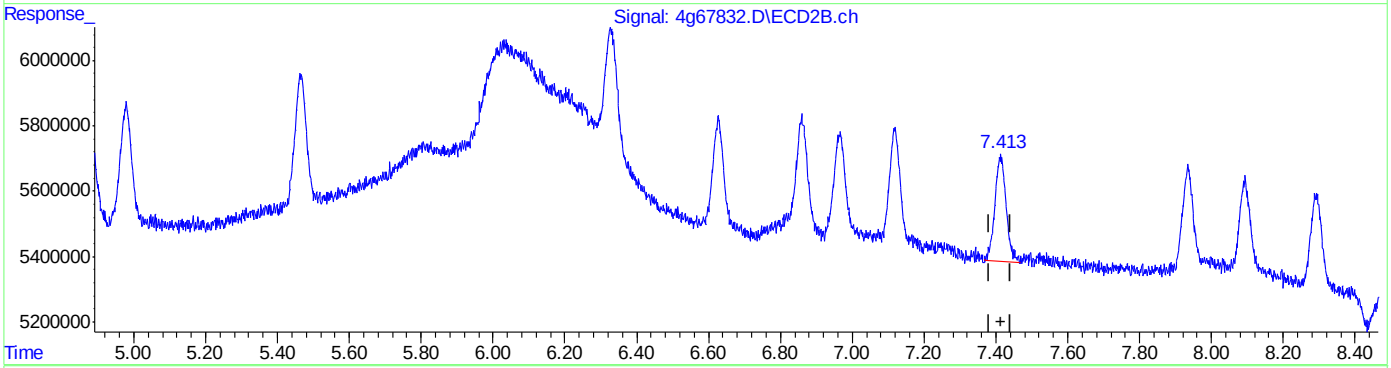
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67832.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 2:26 pm
Operator : dharas
Sample : ic1778-1
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:00:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(14) Dieldrin (MA)
6.092min 0.853 PPB
response 6362395

(14) Dieldrin #2 (MA)
7.414min 1.032 PPB
response 7069632

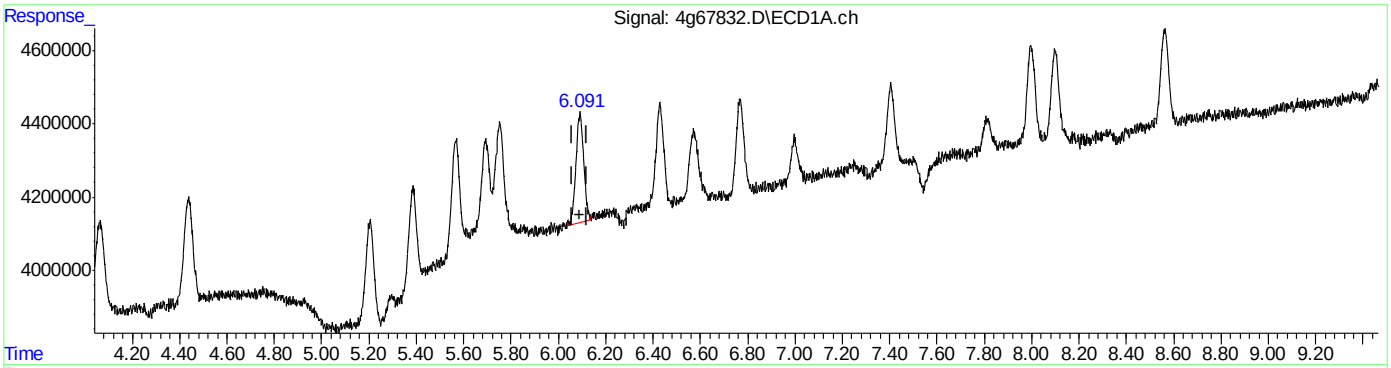
(+) = Expected Retention Time
4PST1778.M Tue May 03 15:00:55 2016 RPT1

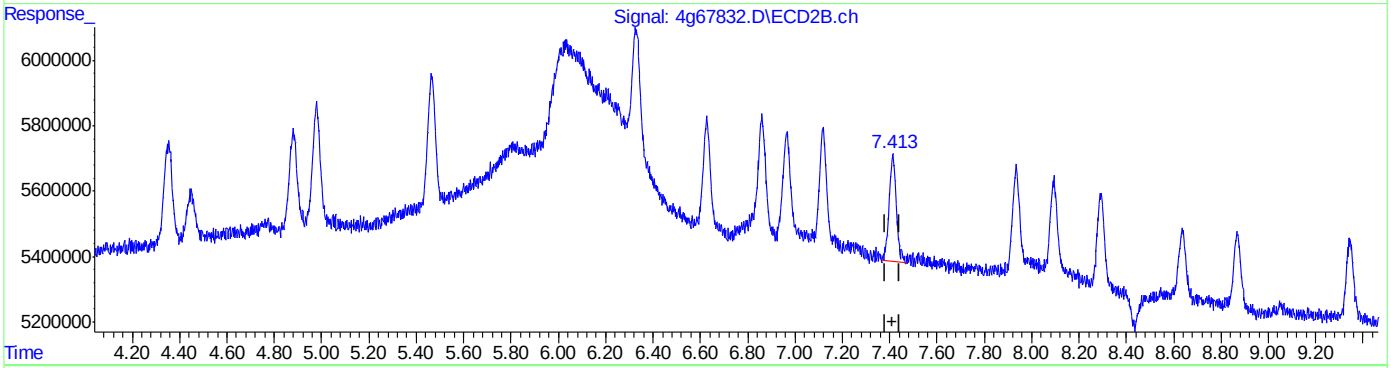
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67832.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 2:26 pm
Operator : dharas
Sample : ic1778-1
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:00:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(14) Dieldrin (MA)
6.091min 0.925 PPB m
response 6900266

(14) Dieldrin #2 (MA)
7.414min 1.032 PPB
response 7069632

(+) = Expected Retention Time

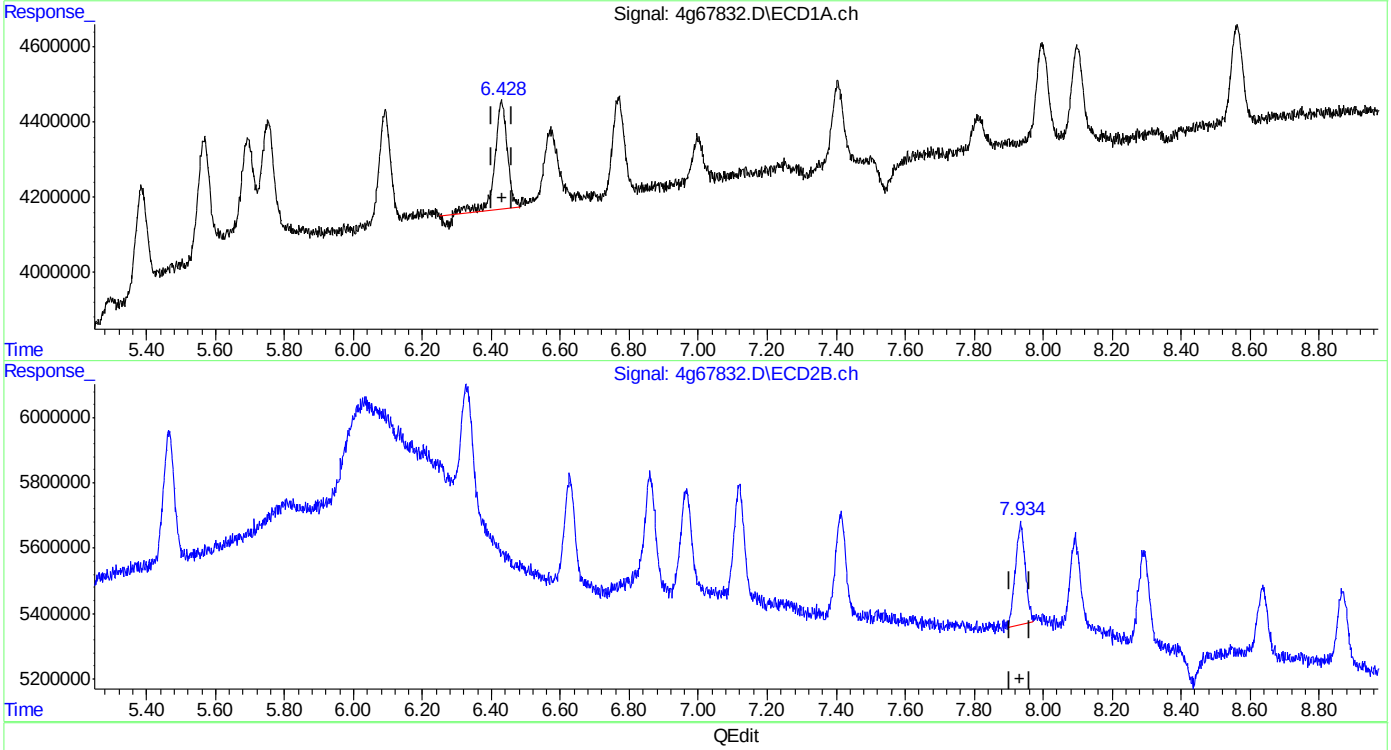
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67832.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 2:26 pm
Operator : dharas
Sample : ic1778-1
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:00:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(15) Endrin (MA)
6.429min 1.047 PPB
response 7280251

(15) Endrin #2 (MA)
7.935min 1.002 PPB
response 6178520

(+) = Expected Retention Time
4PST1778.M Tue May 03 15:01:03 2016 RPT1

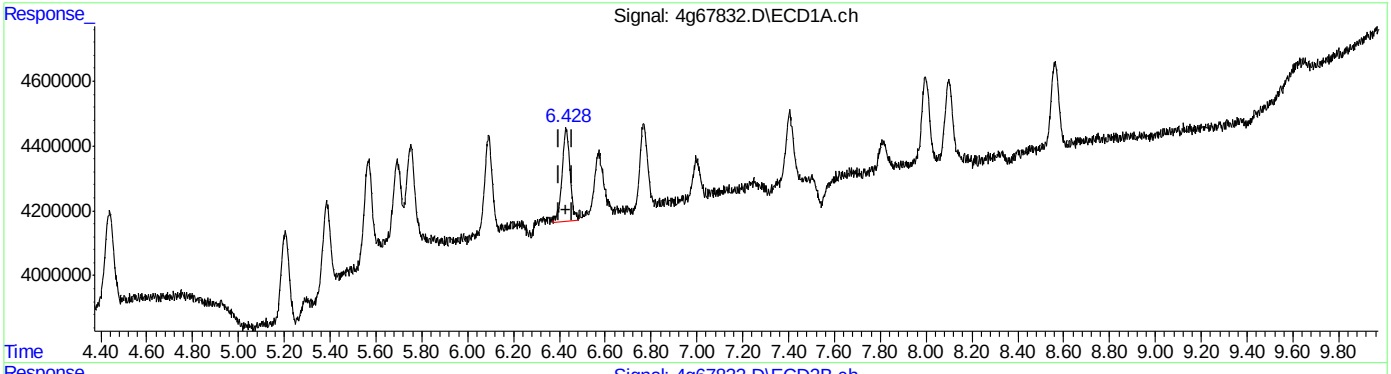
SGS ACCUTEST JC19996

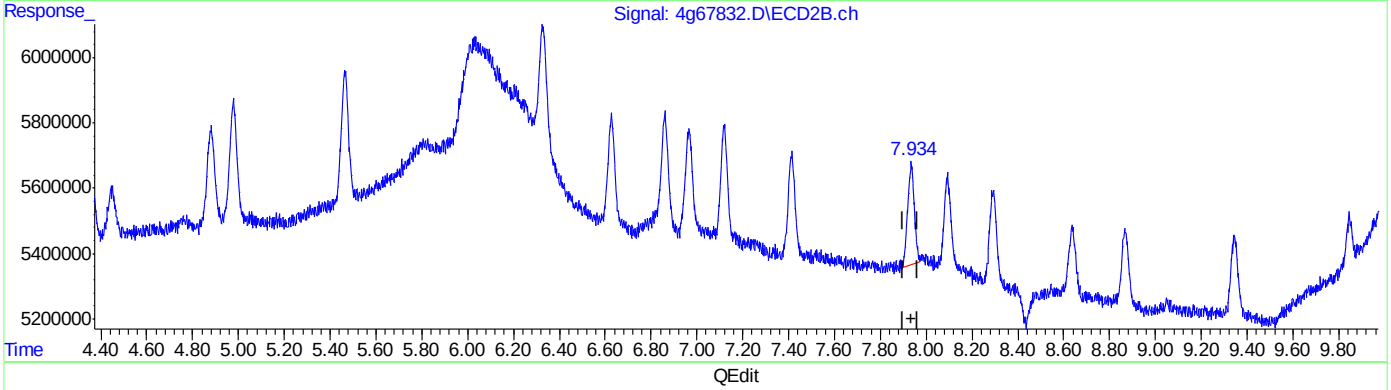
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67832.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 2:26 pm
Operator : dharas
Sample : ic1778-1
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:00:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(15) Endrin (MA)
6.428min 1.002 PPB m
response 6964797

(15) Endrin #2 (MA)
7.935min 1.002 PPB
response 6178520

(+) = Expected Retention Time
4PST1778.M Tue May 03 15:01:08 2016 RPT1

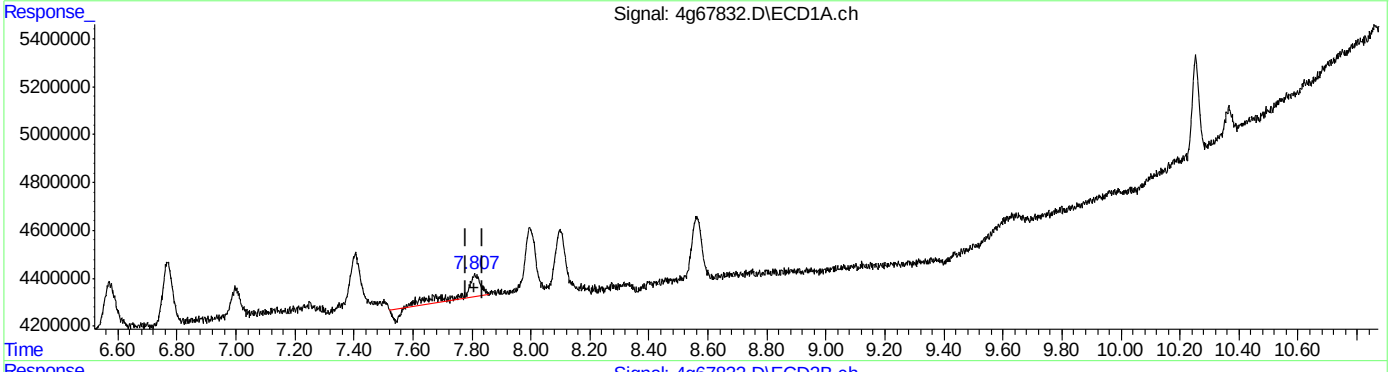
SGS ACCUTEST JC19996

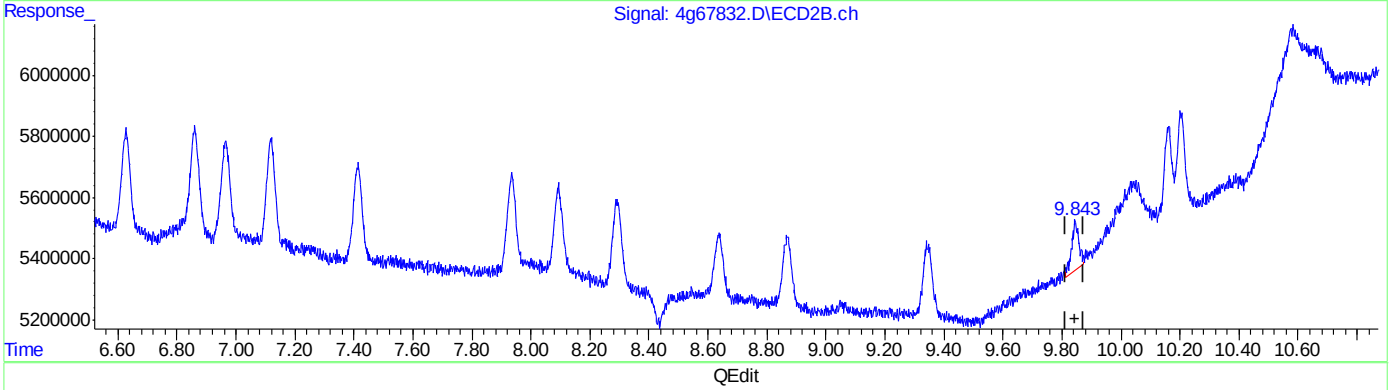
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67832.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 2:26 pm
Operator : dharas
Sample : ic1778-1
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:00:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(21) Methoxychlor (A)
7.811min 1.186 PPB
response 3539759

(21) Methoxychlor #2 (A)
9.844min 1.017 PPB
response 2727859

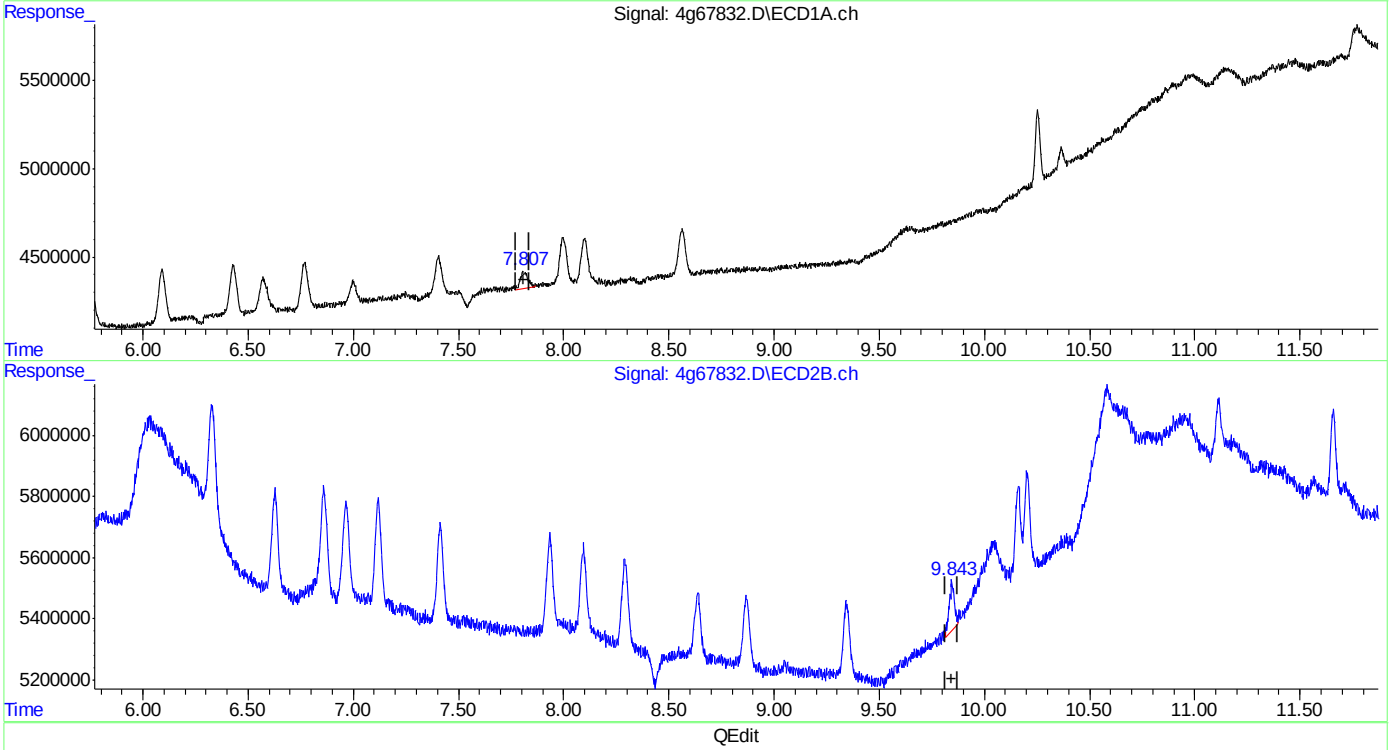
(+) = Expected Retention Time
4PST1778.M Tue May 03 15:01:16 2016 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67832.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 2:26 pm
Operator : dharas
Sample : ic1778-1
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:00:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(21) Methoxychlor (A)
7.807min 0.820 PPB m
response 2446157

(21) Methoxychlor #2 (A)
9.844min 1.017 PPB
response 2727859

(+) = Expected Retention Time

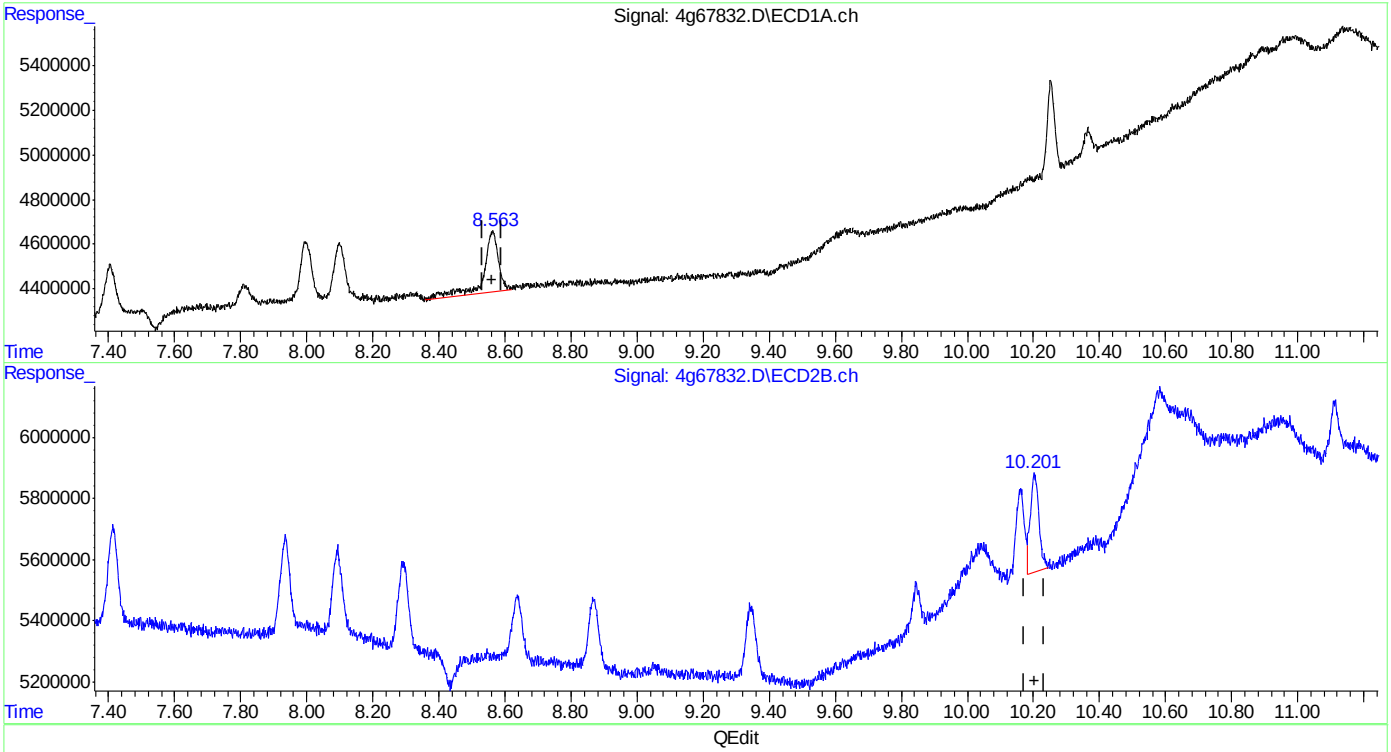
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67832.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 2:26 pm
Operator : dharas
Sample : ic1778-1
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:00:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(23) Endrin Ketone (B)
8.562min 1.247 PPB
response 8417859

(23) Endrin Ketone #2 (B)
10.202min 1.092 PPB
response 5962417

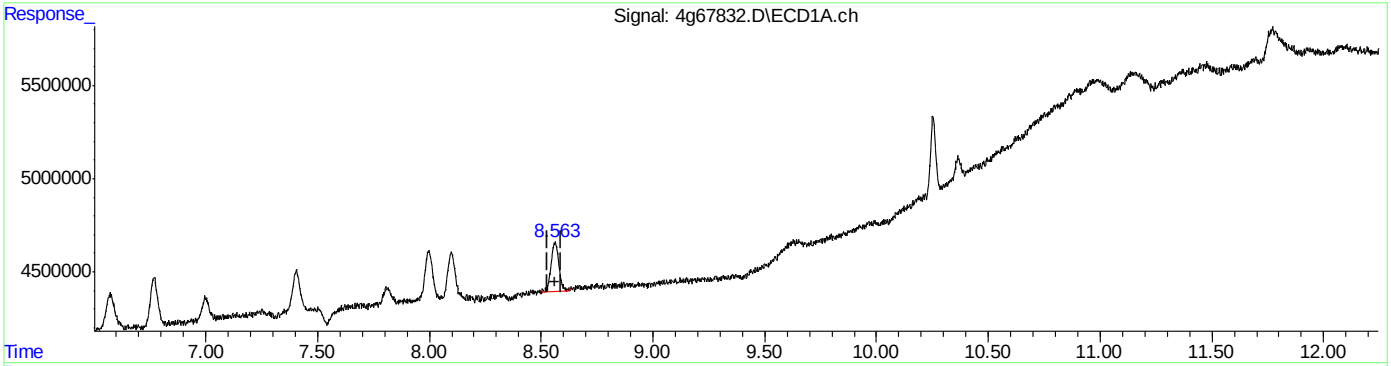
(+) = Expected Retention Time

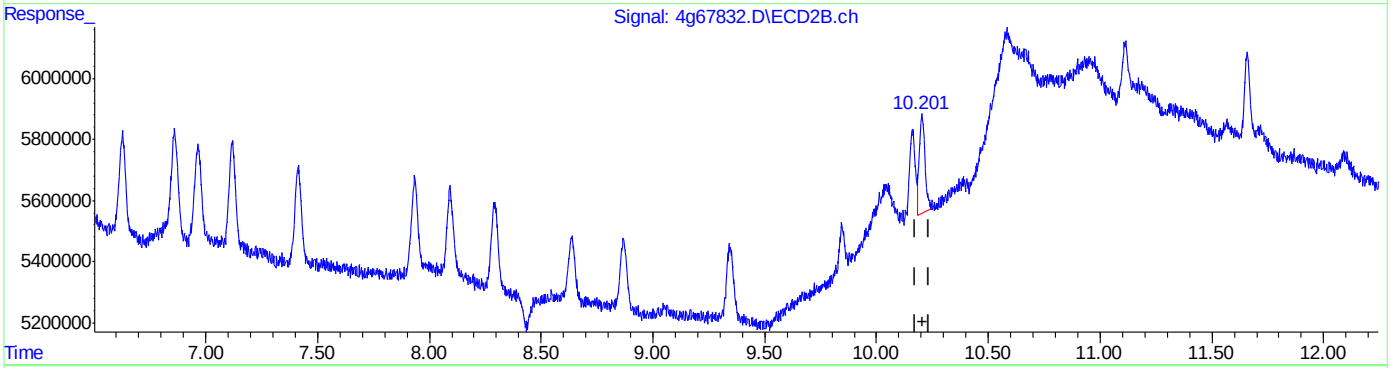
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67832.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 2:26 pm
Operator : dharas
Sample : ic1778-1
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:00:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(23) Endrin Ketone (B)
8.563min 0.938 PPB m
response 6337010

(23) Endrin Ketone #2 (B)
10.202min 1.092 PPB
response 5962417

(+) = Expected Retention Time

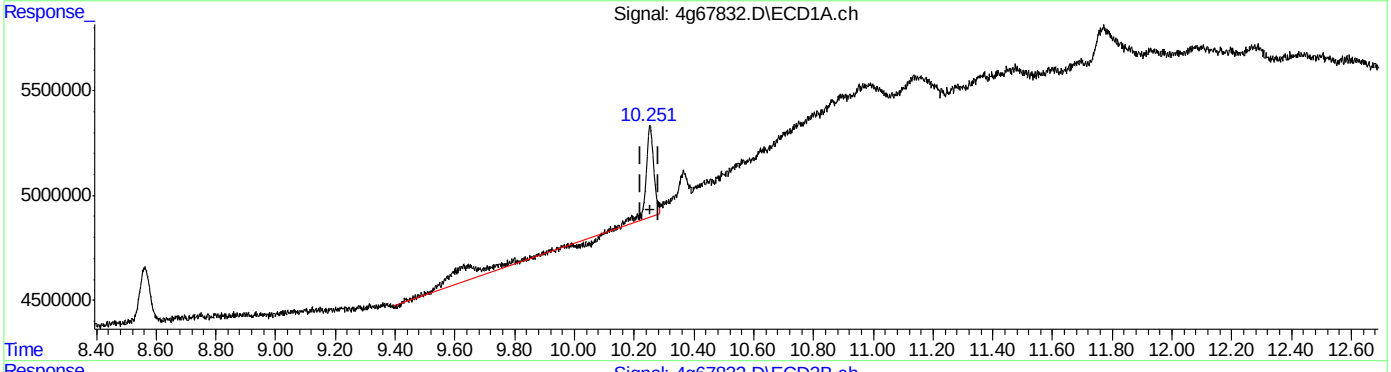
SGS ACCUTEST JC19996

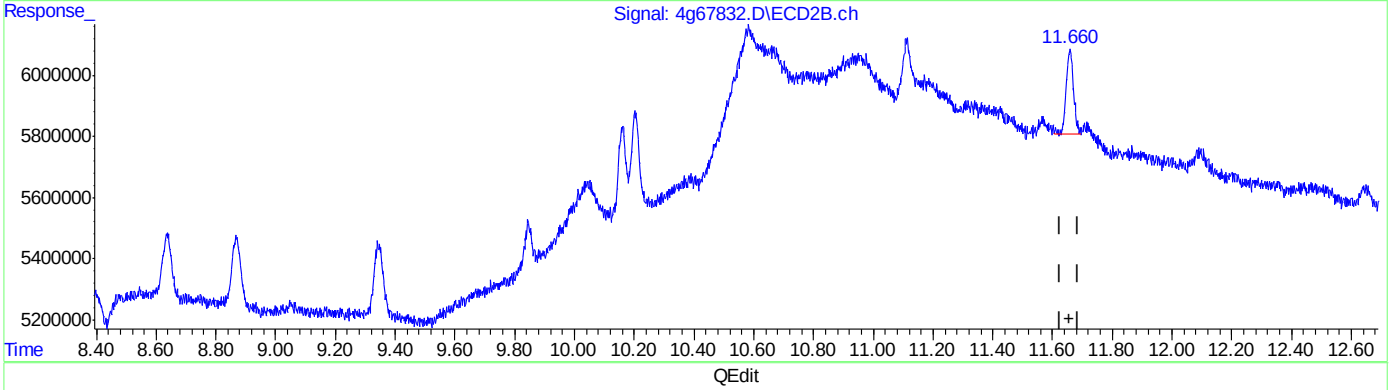
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67832.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 2:26 pm
Operator : dharas
Sample : ic1778-1
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:00:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(24) Decachlorobiphenyl (SA)
10.253min 1.525 PPB
response 11996237

(24) Decachlorobiphenyl #2 (SA)
11.660min 0.824 PPB
response 4639115

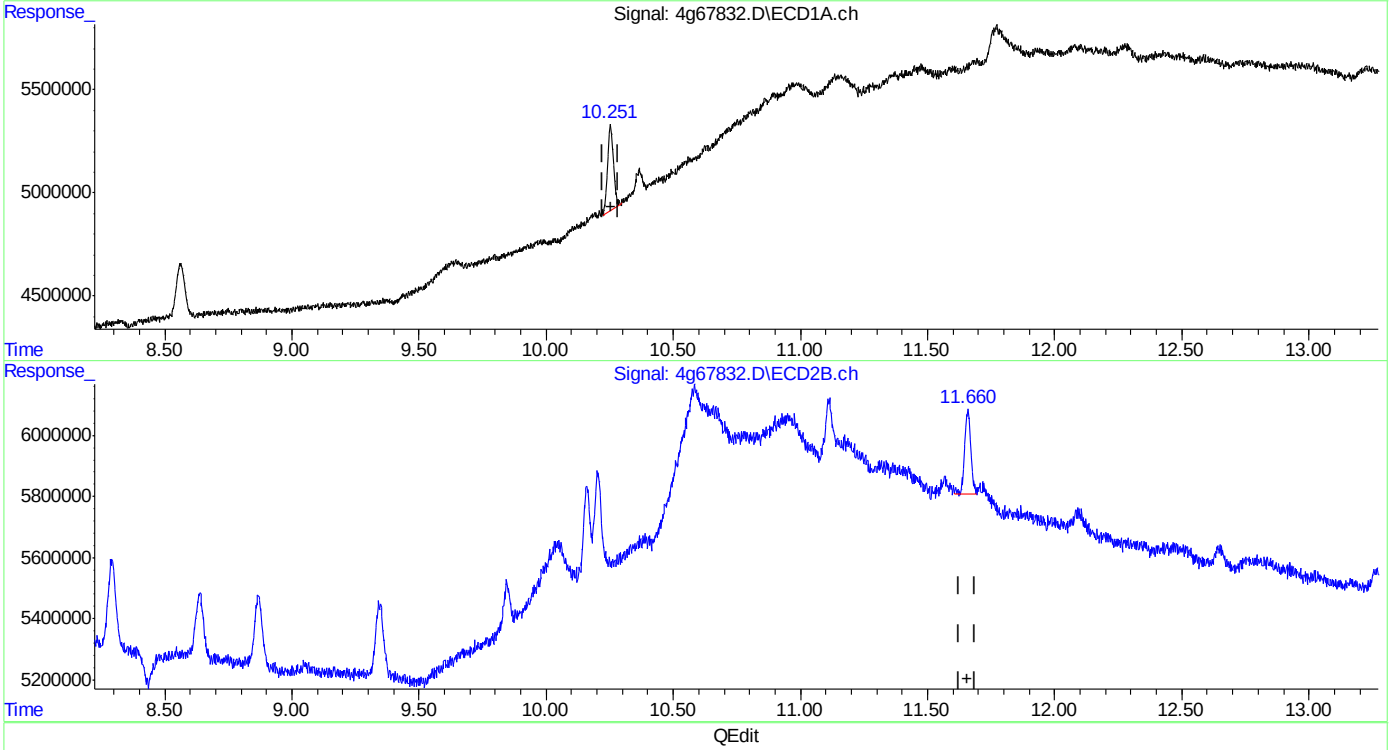
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67832.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 2:26 pm
Operator : dharas
Sample : ic1778-1
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:00:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(24) Decachlorobiphenyl (SA)
10.251min 0.857 PPB m
response 6737480

(24) Decachlorobiphenyl #2 (SA)
11.660min 0.824 PPB
response 4639115

(+) = Expected Retention Time

SGS ACCUTEST JC19996

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
05/04/16 11:11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67833.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 2:41 pm
Operator : dharas
Sample : ic1778-2
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:18:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	1.786	2.071	418.4E6	360.6E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.589	3.104	14628969	13534834	1.873m	2.076
	Spiked Amount 40.000	Range	30 - 150	Recovery	=	4.68%#	5.19%#
24) SA	Decachlor...	10.254	11.659	13928632	9697016	1.713m	1.676
	Spiked Amount 40.000			Recovery	=	4.28%	4.19%
	Target Compounds						
3) A	alpha-BHC	3.149	3.871	18365386	17879927	1.884	2.057
4) MA	gamma-BHC	3.498	4.350	15983959	16073254	1.912	2.037
5) MA	Heptachlor	3.822	4.975	14504205	16672961	1.616	2.048m#
6) B	beta-BHC	3.604	4.451	7565271	7627540	1.877	2.116
7) B	delta-BHC	4.062	4.880	14498248	15211216	1.768	2.108
8) MB	Aldrin	4.435	5.465	15323190	17494835	1.756	2.218 #
9) B	Heptachlo...	5.203	6.328	13774021	15746249	1.810	2.176
10) B	gamma-Chl...	5.382	6.628	13205173	14703573	1.791m	2.062
11) B	alpha-Chl...	5.567	6.860	16075989	16003308	2.104	2.262
12) A	Endosulfan I	5.750	6.965	15751275	14847420	1.895	2.188
13) B	4,4'-DDE	5.692	7.118	14669445	14441000	2.420	2.143
14) MA	Dieldrin	6.090	7.412	13366340	13877451	1.732	1.970
15) MA	Endrin	6.428	7.935	14271815	12518166	1.986	1.975
16) A	4,4'-DDD	6.572	8.093	11537678	11992111	2.028	2.108
17) B	Endosulfa...	6.768	8.291	13096497	12886995	1.871	2.039
18) MA	4,4'-DDT	6.997	8.638	6033350	9053134	1.984	1.860
19) B	Endrin Al...	7.407	8.869	11203774	9693232	1.896	1.913
20) B	Endosulfa...	8.099	9.347	12437414	11156263	2.067	2.133
21) A	Methoxychlor	7.813	9.845	4797125	5960684	1.555	2.162 #
22)	Mirex	7.998	10.159	12673452	9535377	1.974	1.996
23) B	Endrin Ke...	8.564	10.203	14581660	11550849	2.088	2.058

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

11.6.2 11

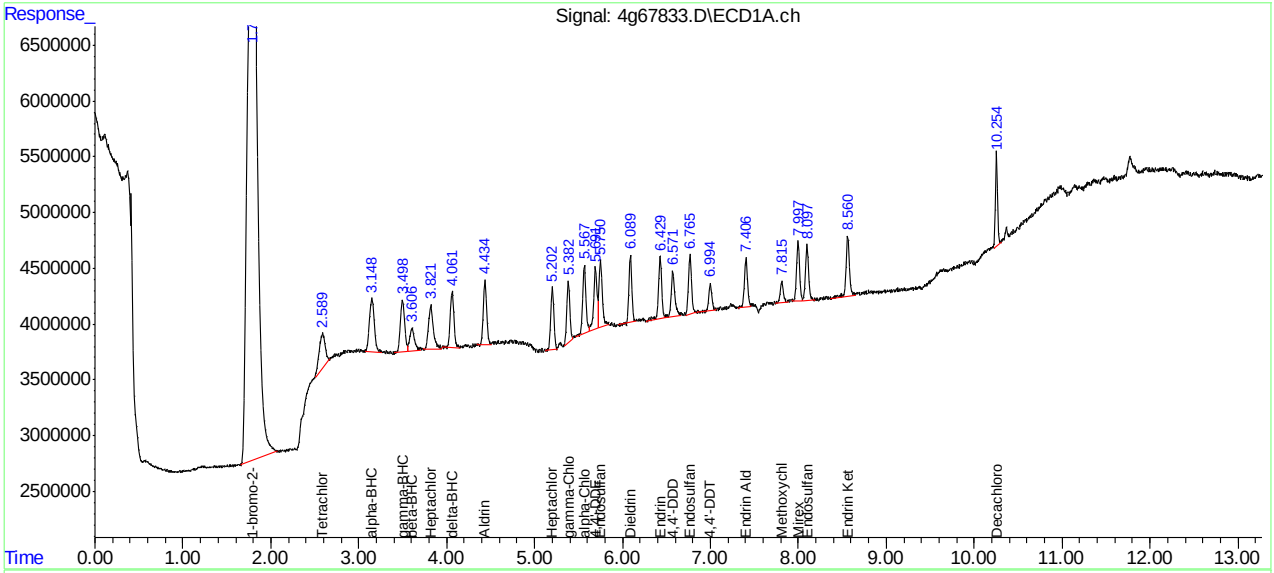
SGS ACCUTEST JC19996

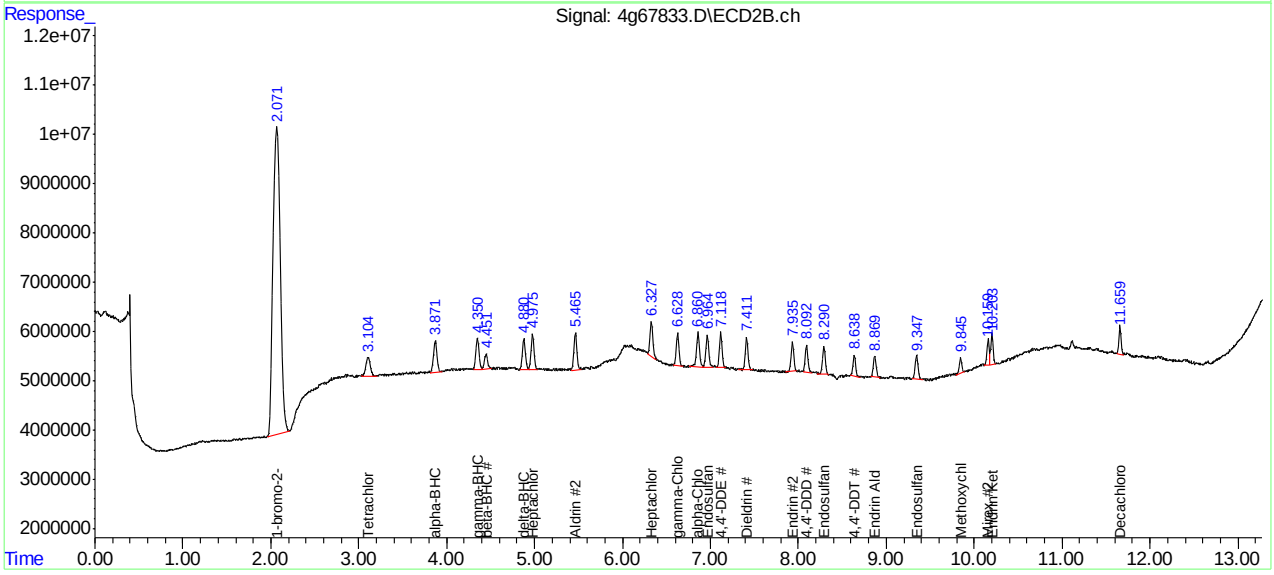
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67833.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 2:41 pm
Operator : dharas
Sample : ic1778-2
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:18:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC19996

Manual Integration Approval Summary

Sample Number:	G4G1778-IC1778	**Method:**	SW846 8081B
Lab FileID:	4G67833.D	**Analyst approved:**	05/03/16 15:16 Rebecca Krug
Injection Time:	05/02/16 14:41	**Supervisor approved:**	05/04/16 11:11 Gwendolyn Burns

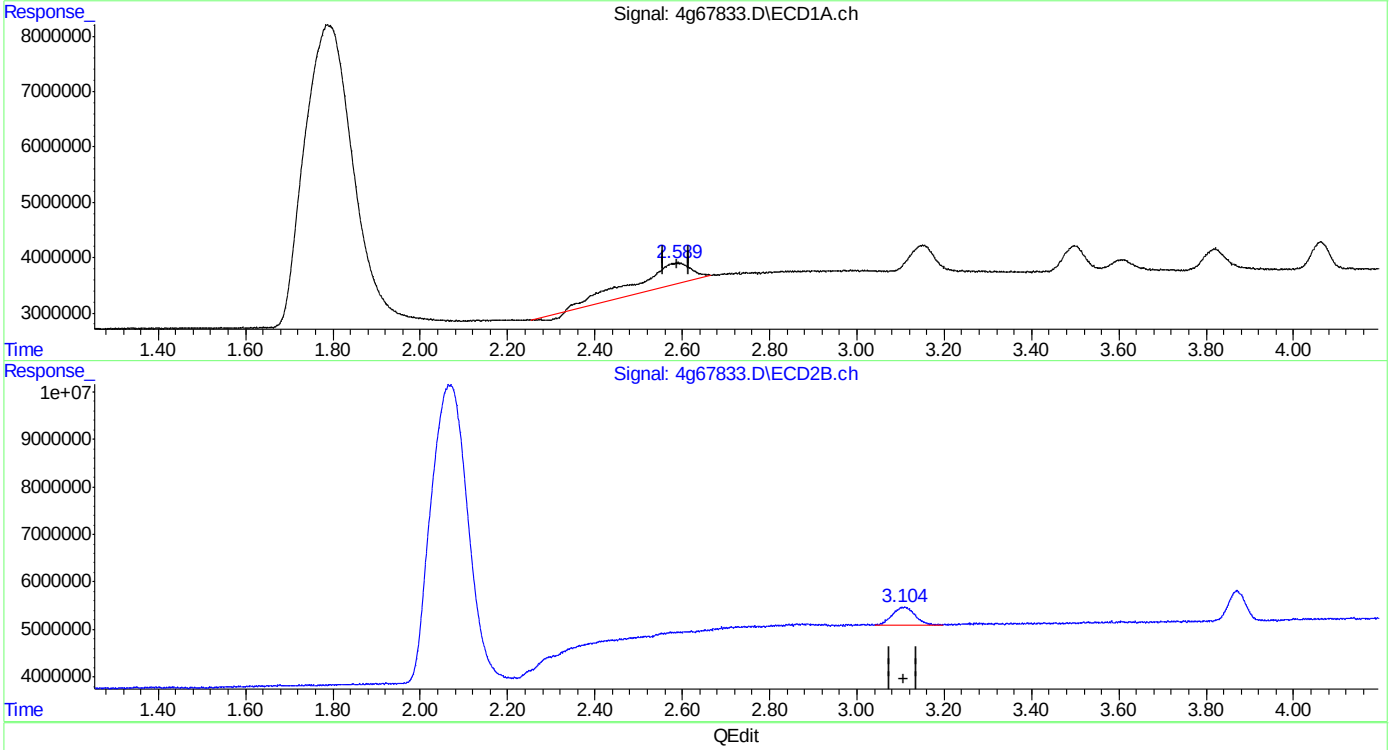
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	2.59	Poorly defined baseline
Heptachlor	76-44-8	2	4.98	Poorly defined baseline
gamma-Chlordane	5103-74-2	1	5.38	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	1	10.25	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67833.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 2:41 pm
Operator : dharas
Sample : ic1778-2
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 14:57:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(2) Tetrachloro-m-xylene (SAB)
2.589min 4.638 PPB
response 36214055

(2) Tetrachloro-m-xylene #2 (SAB)
3.104min 2.076 PPB
response 13534834

(+) = Expected Retention Time

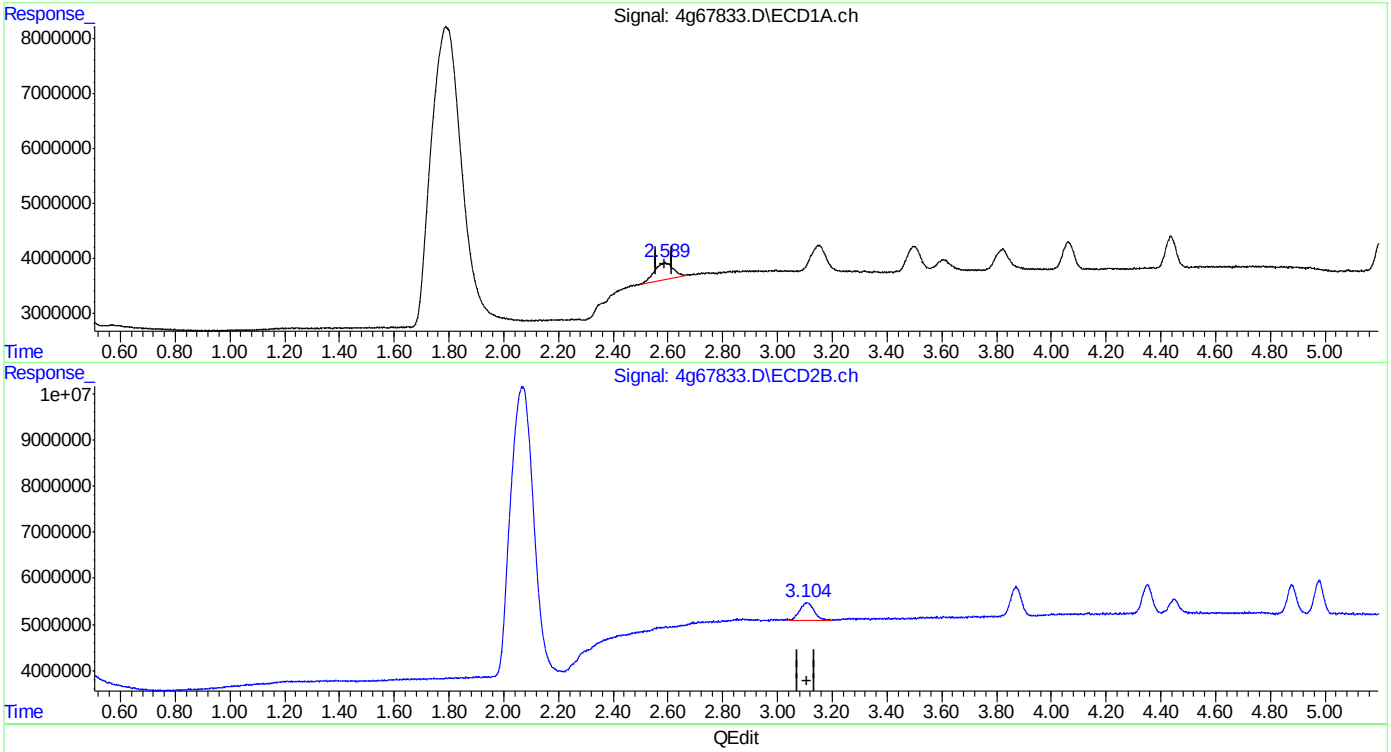
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67833.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 2:41 pm
Operator : dharas
Sample : ic1778-2
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 14:57:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(2) Tetrachloro-m-xylene (SAB)
2.589min 1.873 PPB m
response 14628969

(2) Tetrachloro-m-xylene #2 (SAB)
3.104min 2.076 PPB
response 13534834

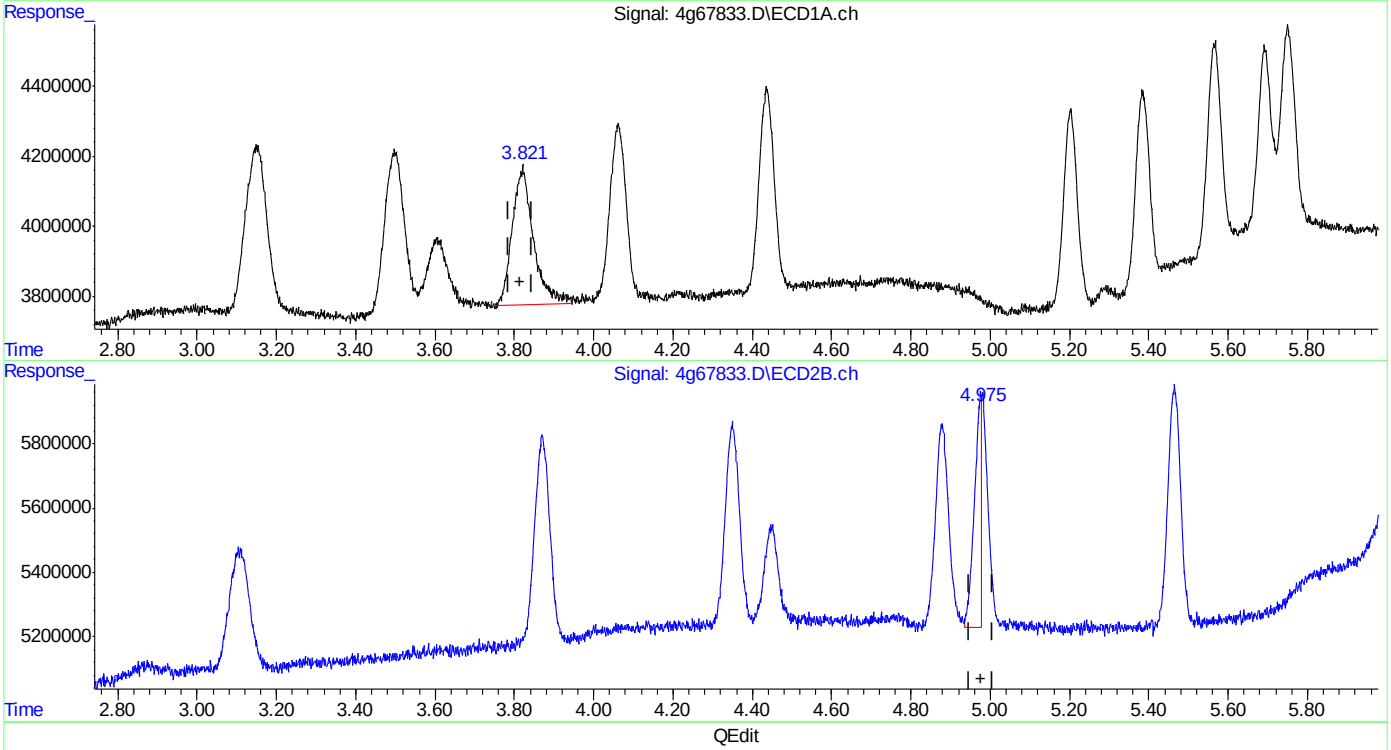
(+) = Expected Retention Time
4PST1778.M Tue May 03 14:58:05 2016 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67833.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 2:41 pm
Operator : dharas
Sample : ic1778-2
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 14:57:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(5) Heptachlor (MA)
3.822min 1.616 PPB
response 14504205

(5) Heptachlor #2 (MA)
4.976min 1.088 PPB
response 8859133

(+) = Expected Retention Time

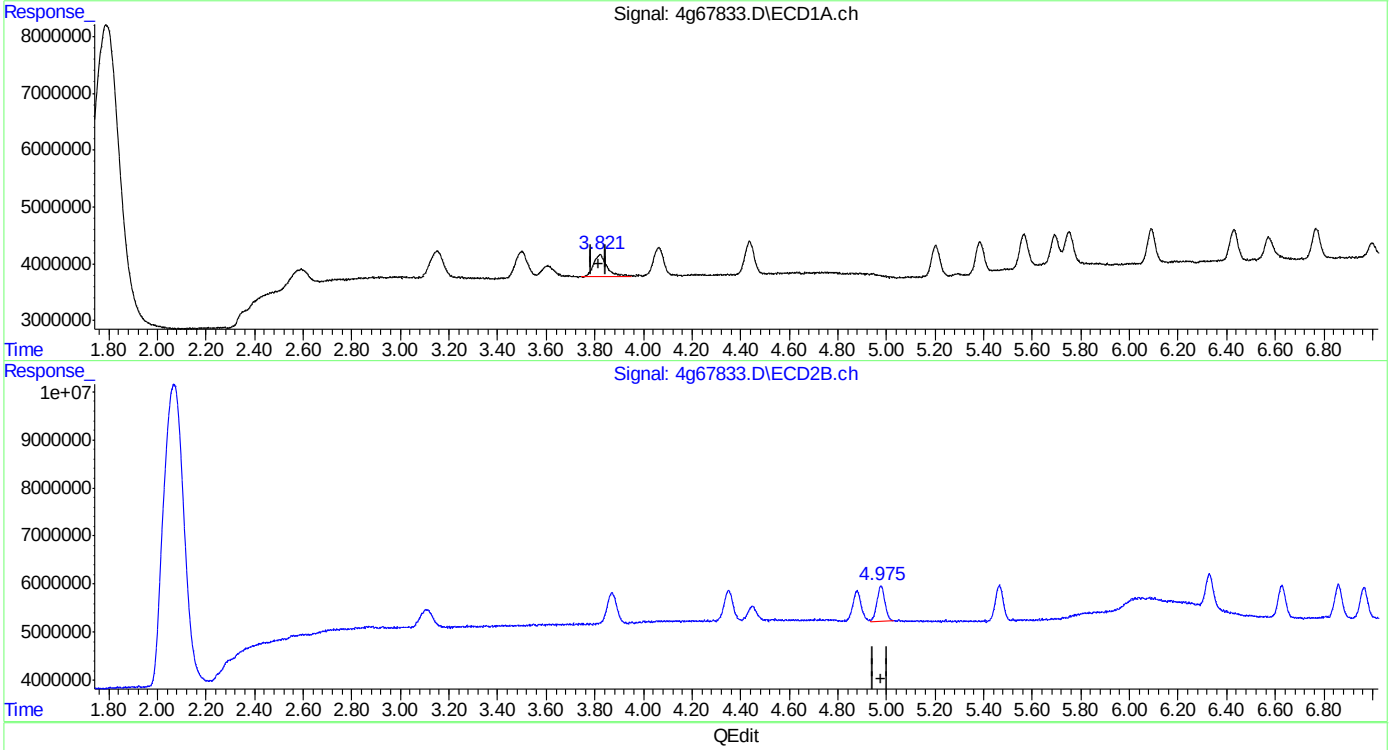
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67833.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 2:41 pm
Operator : dharas
Sample : ic1778-2
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 14:57:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(5) Heptachlor (MA)
3.822min 1.616 PPB
response 14504205

(5) Heptachlor #2 (MA)
4.975min 2.048 PPB m
response 16672961

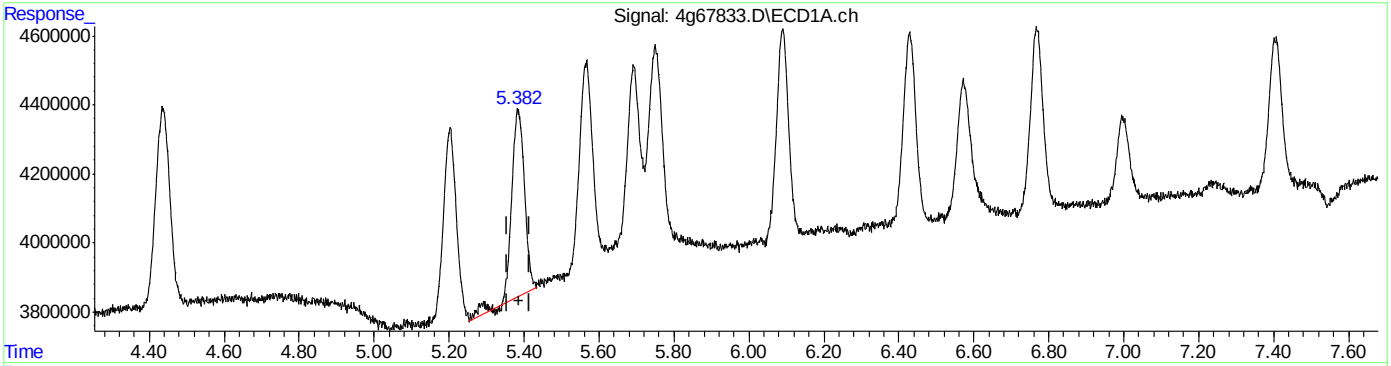
(+) = Expected Retention Time
4PST1778.M Tue May 03 14:58:17 2016 RPT1

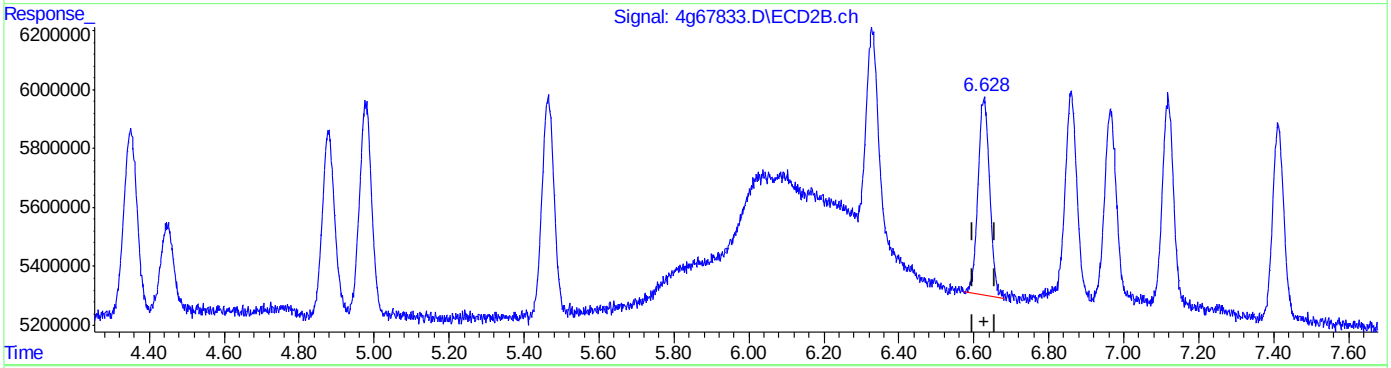
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67833.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 2:41 pm
Operator : dharas
Sample : ic1778-2
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 14:57:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(10) gamma-Chlordane (B)
5.384min 1.794 PPB
response 13233389

(10) gamma-Chlordane #2 (B)
6.628min 2.062 PPB
response 14703573

(+) = Expected Retention Time
4PST1778.M Tue May 03 14:58:25 2016 RPT1

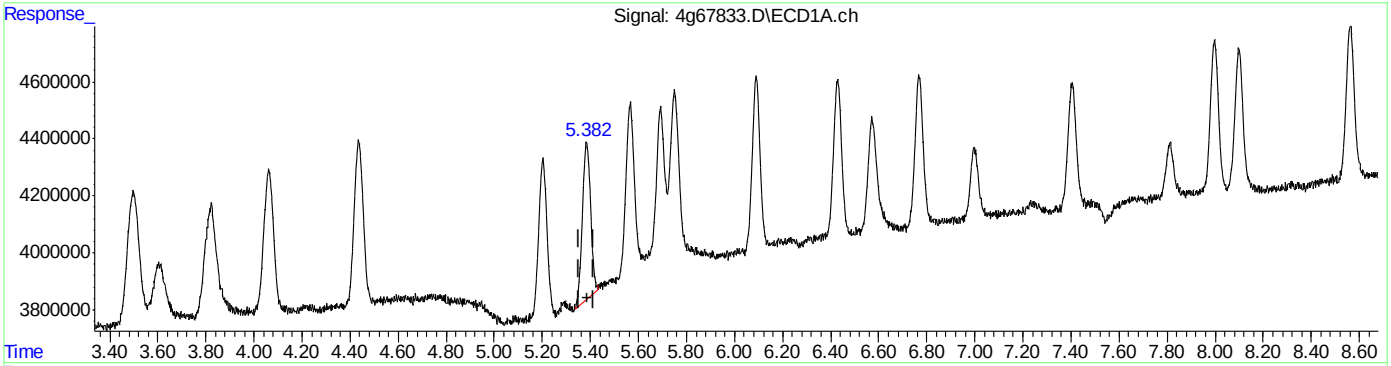
SGS ACCUTEST JC19996

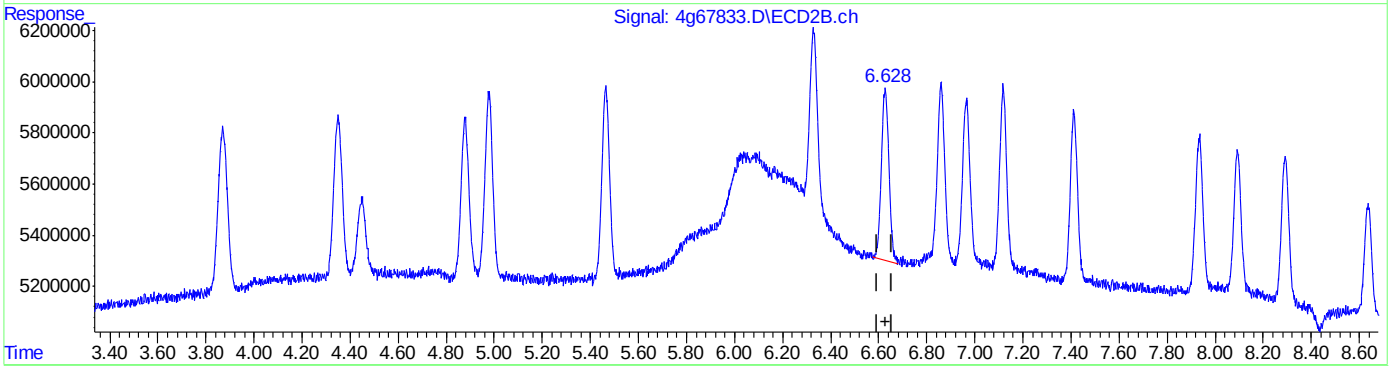
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67833.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 2:41 pm
Operator : dharas
Sample : ic1778-2
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 14:57:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(10) gamma-Chlordane (B)
5.382min 1.791 PPB m
response 13205173

(10) gamma-Chlordane #2 (B)
6.628min 2.062 PPB
response 14703573

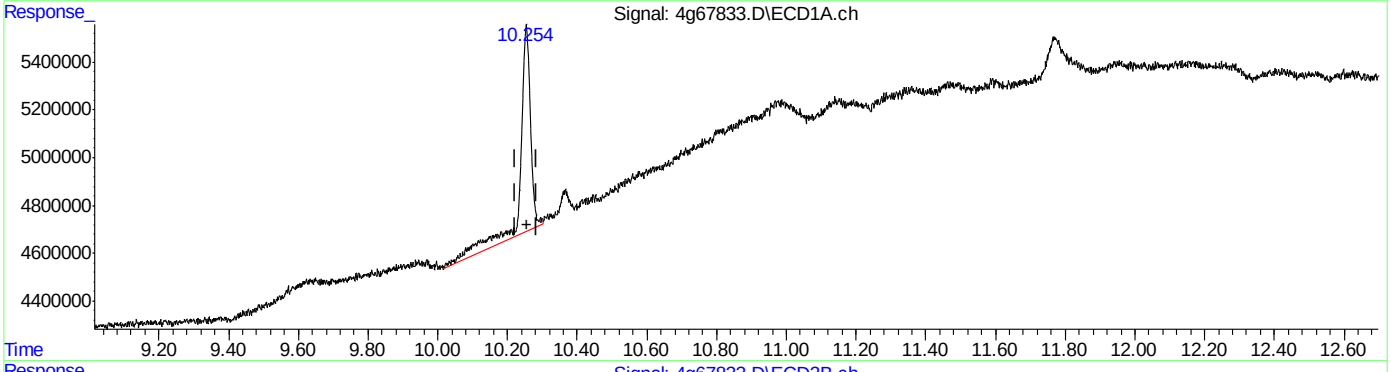
(+) = Expected Retention Time
4PST1778.M Tue May 03 14:58:30 2016 RPT1

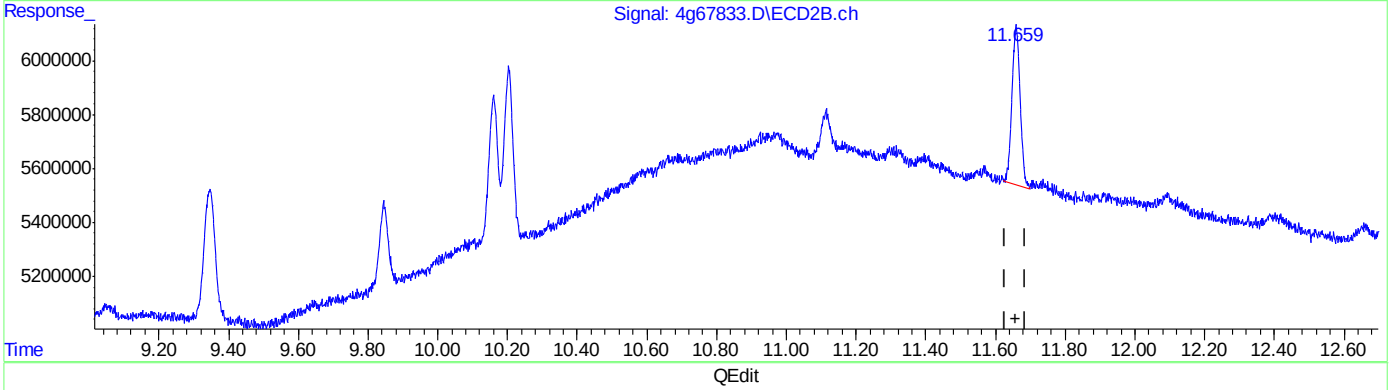
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67833.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 2:41 pm
Operator : dharas
Sample : ic1778-2
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 14:57:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(24) Decachlorobiphenyl (SA)
10.255min 2.237 PPB
response 18196219

(24) Decachlorobiphenyl #2 (SA)
11.659min 1.676 PPB
response 9697016

(+) = Expected Retention Time

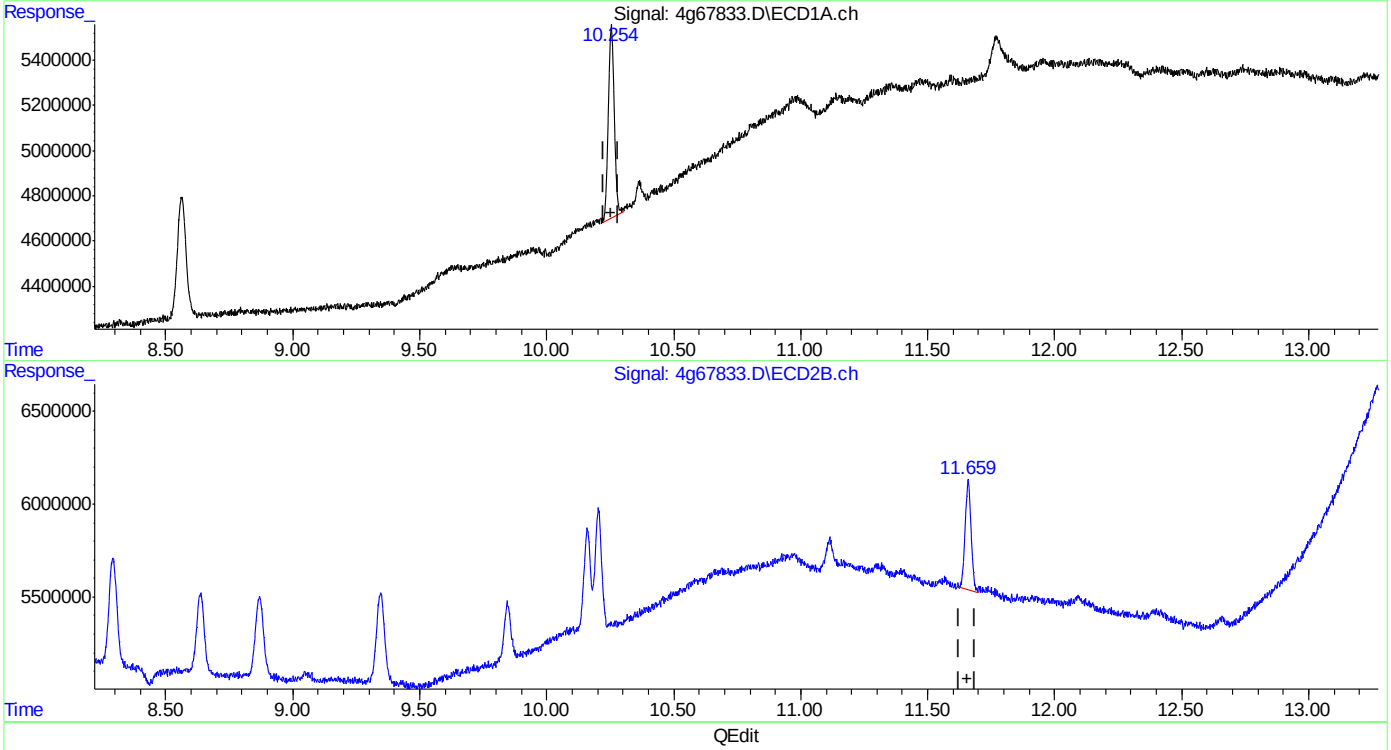
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67833.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 2:41 pm
Operator : dharas
Sample : ic1778-2
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 14:57:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(24) Decachlorobiphenyl (SA)
10.254min 1.713 PPB m
response 13928632

(24) Decachlorobiphenyl #2 (SA)
11.659min 1.676 PPB
response 9697016

(+) = Expected Retention Time

SGS ACCUTEST JC19996

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 05/04/16 11:11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67834.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 2:56 pm
Operator : dharas
Sample : ic1778-5
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:19:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	1.797	2.075	435.6E6	375.6E6	50.000	50.000	
	System Monitoring Compounds							
2) SAB	Tetrachlo...	2.589	3.110	37120423	31510534	4.566m	4.642	
	Spiked Amount 40.000	Range	30 - 150	Recovery	=	11.42%#	11.61%#	
24) SA	Decachlor...	10.254	11.657	33146111	23062577	3.915	3.827	
	Spiked Amount 40.000			Recovery	=	9.79%	9.57%	
	Target Compounds							
3) A	alpha-BHC	3.153	3.874	46219553	43431583	4.553	4.798	
4) MA	gamma-BHC	3.504	4.351	40547275	39948855	4.659	4.861	
5) MA	Heptachlor	3.818	4.979	36931170	42263285	3.952	4.986	#
6) B	beta-BHC	3.606	4.449	19597202	18993035	4.670	5.060	
7) B	delta-BHC	4.064	4.881	36808299	37184195	4.312	4.949	
8) MB	Aldrin	4.439	5.466	38643434	40469208	4.253	4.926	
9) B	Heptachlo...	5.202	6.330	34168170	37267227	4.314	4.945	
10) B	gamma-Chl...	5.386	6.627	34551843	36408537	4.500	4.904	
11) B	alpha-Chl...	5.566	6.860	38177274	36218841	4.799m	4.916	
12) A	Endosulfan I	5.753	6.965	38581346	35170488	4.459	4.976	
13) B	4,4'-DDE	5.694	7.119	34073143	36221405	5.400	5.160	
14) MA	Dieldrin	6.091	7.413	35667338	35546228	4.440	4.846	
15) MA	Endrin	6.429	7.935	33499994	32244532	4.477	4.884	
16) A	4,4'-DDD	6.572	8.093	27165840	28835872	4.587	4.868	
17) B	Endosulfa...	6.770	8.293	32658172	31838628	4.482	4.837	
18) MA	4,4'-DDT	6.998	8.637	16296273	23974623	3.946	4.731	
19) B	Endrin Al...	7.405	8.868	27297036	24559300	4.438	4.654	
20) B	Endosulfa...	8.100	9.345	30350970	27674564	4.846	5.081	
21) A	Methoxychlor	7.812	9.844	11400355	14306289	3.549	4.982	#
22)	Mirex	7.998	10.159	32427661	22642104	4.853	4.551	
23) B	Endrin Ke...	8.563	10.203	34261066	28771653	4.713	4.923	

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

11.6.3 11

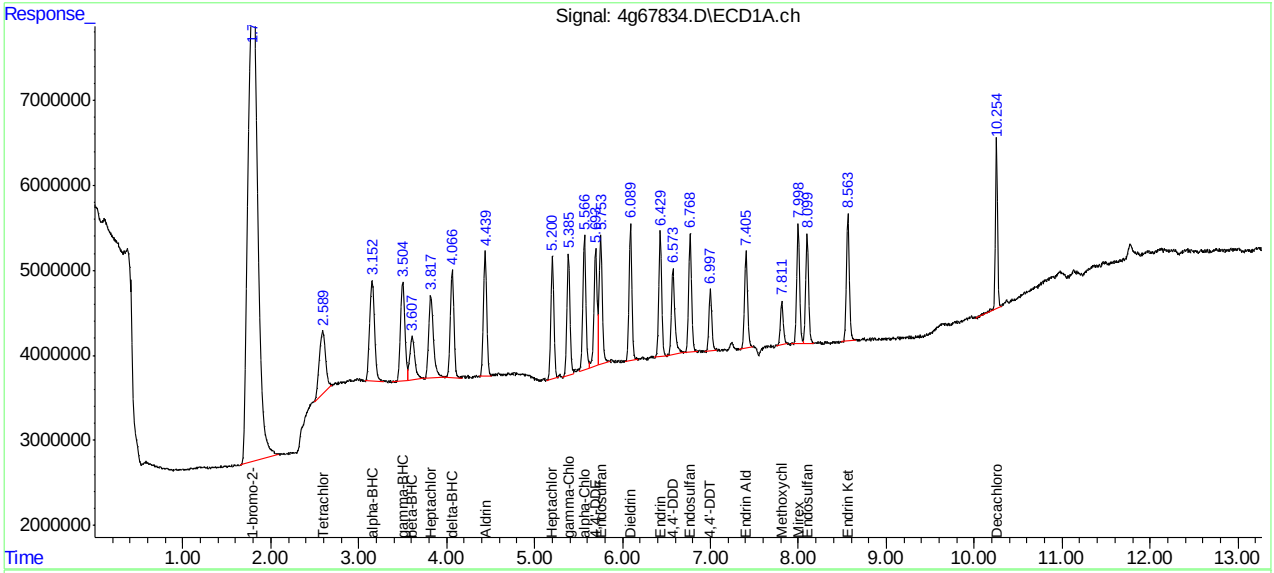
SGS ACCUTEST JC19996

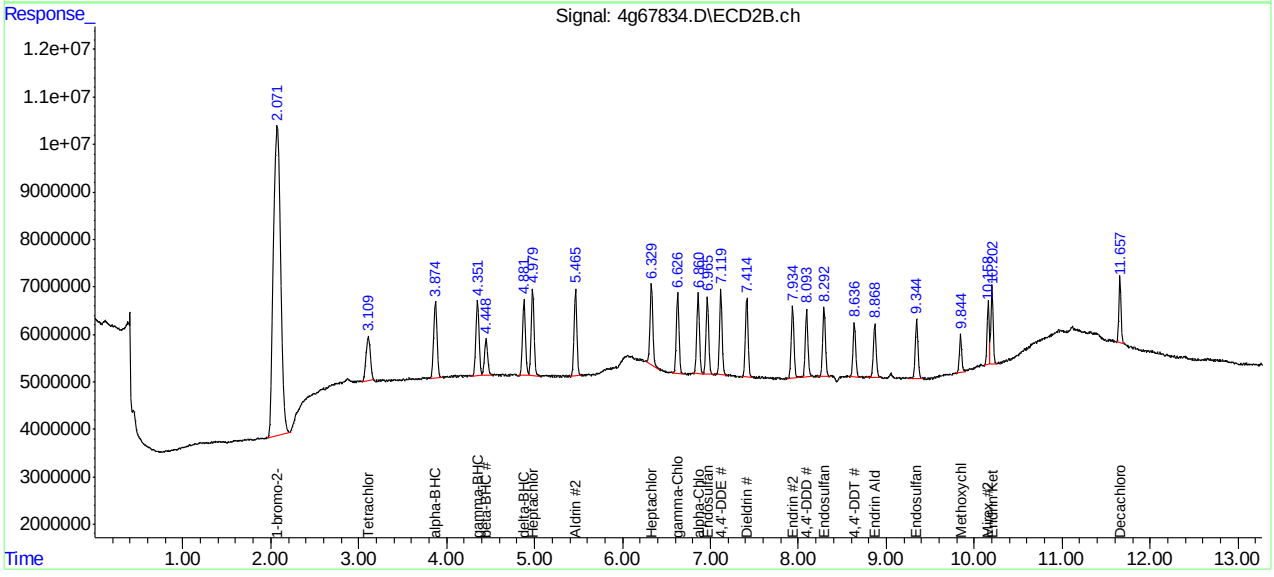
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67834.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 2:56 pm
Operator : dharas
Sample : ic1778-5
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:19:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G4G1778-IC1778	**Method:**	SW846 8081B
Lab FileID:	4G67834.D	**Analyst approved:**	05/03/16 15:16 Rebecca Krug
Injection Time:	05/02/16 14:56	**Supervisor approved:**	05/04/16 11:11 Gwendolyn Burns

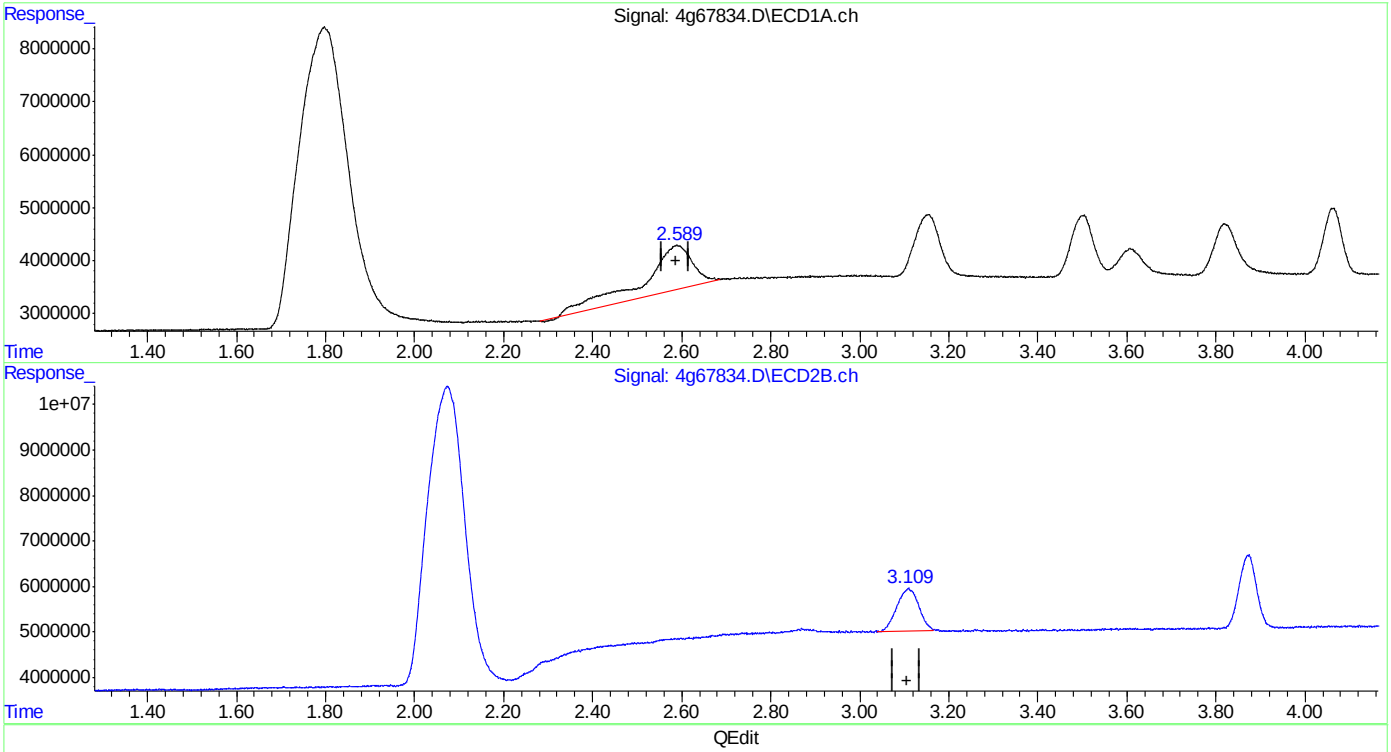
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	2.59	Poorly defined baseline
alpha-Chlordane	5103-71-9	1	5.57	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67834.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 2:56 pm
Operator : dharas
Sample : ic1778-5
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 14:55:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(2) Tetrachloro-m-xylene (SAB)
2.589min 8.082 PPB
response 65701446

(2) Tetrachloro-m-xylene #2 (SAB)
3.110min 4.642 PPB
response 31510534

(+) = Expected Retention Time
4PST1778.M Tue May 03 14:55:54 2016 RPT1

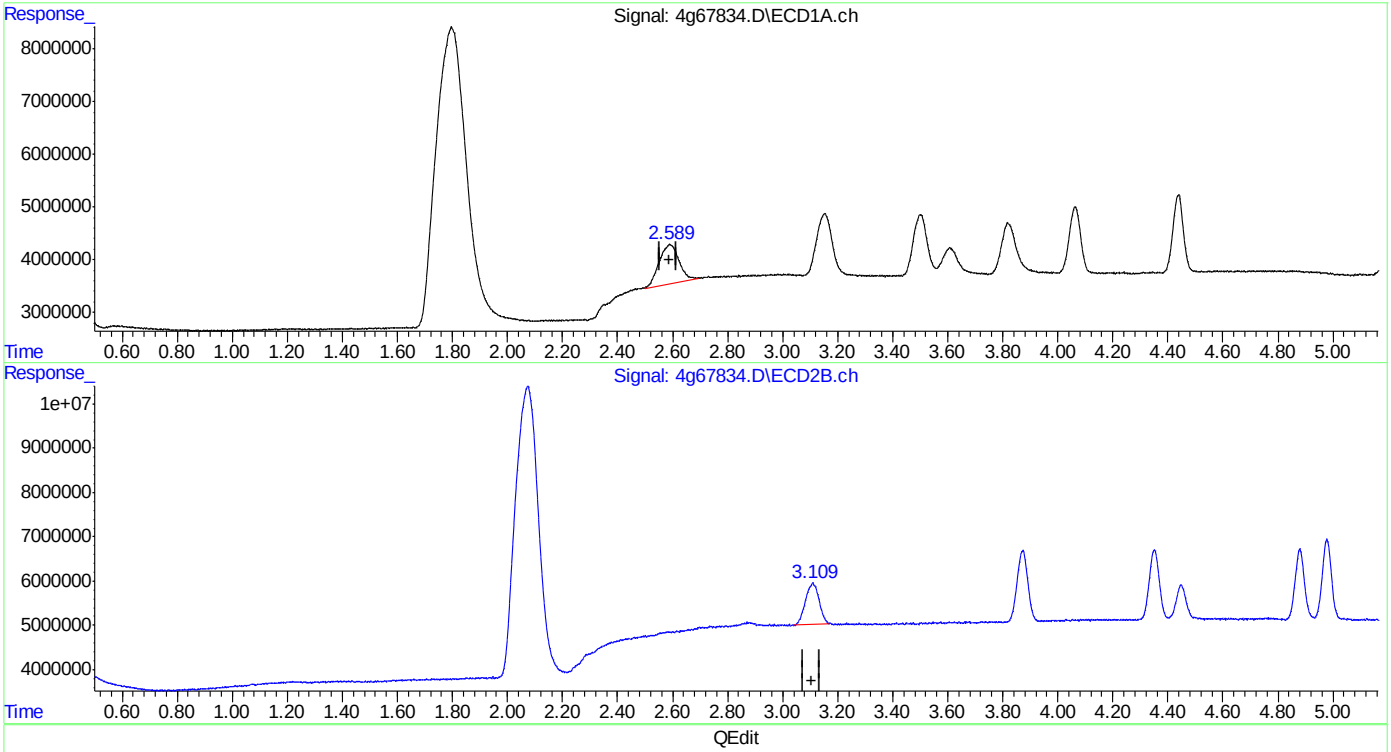
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67834.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 2:56 pm
Operator : dharas
Sample : ic1778-5
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 14:55:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(2) Tetrachloro-m-xylene (SAB)
2.589min 4.566 PPB m
response 37120423

(2) Tetrachloro-m-xylene #2 (SAB)
3.110min 4.642 PPB
response 31510534

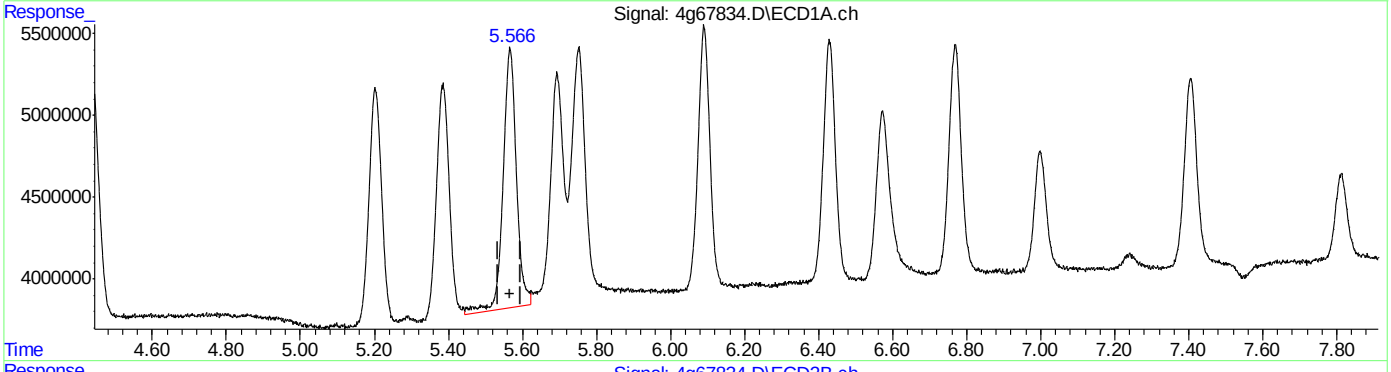
(+) = Expected Retention Time
4PST1778.M Tue May 03 14:56:00 2016 RPT1

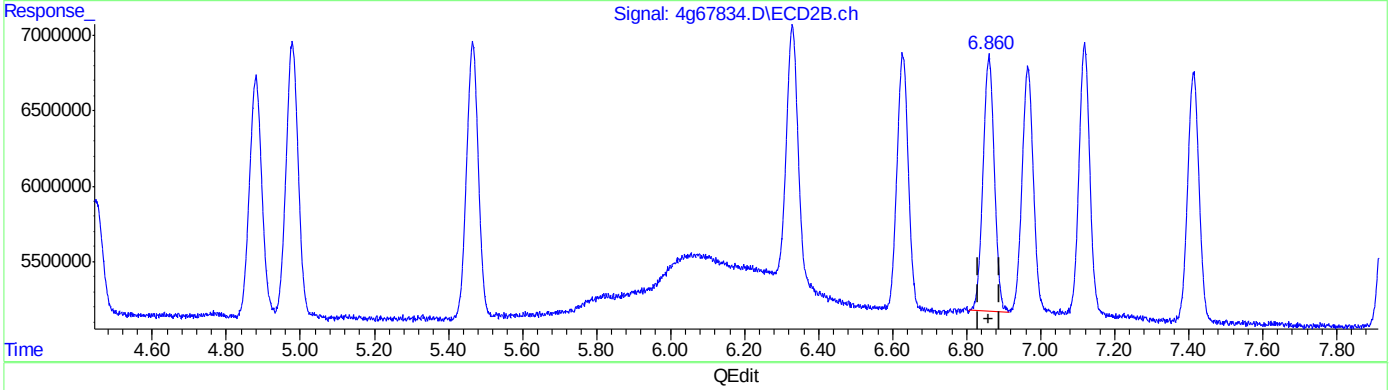
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67834.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 2:56 pm
Operator : dharas
Sample : ic1778-5
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 14:55:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(11) alpha-Chlordane (B)
5.566min 4.945 PPB
response 39336194

(11) alpha-Chlordane #2 (B)
6.860min 4.916 PPB
response 36218841

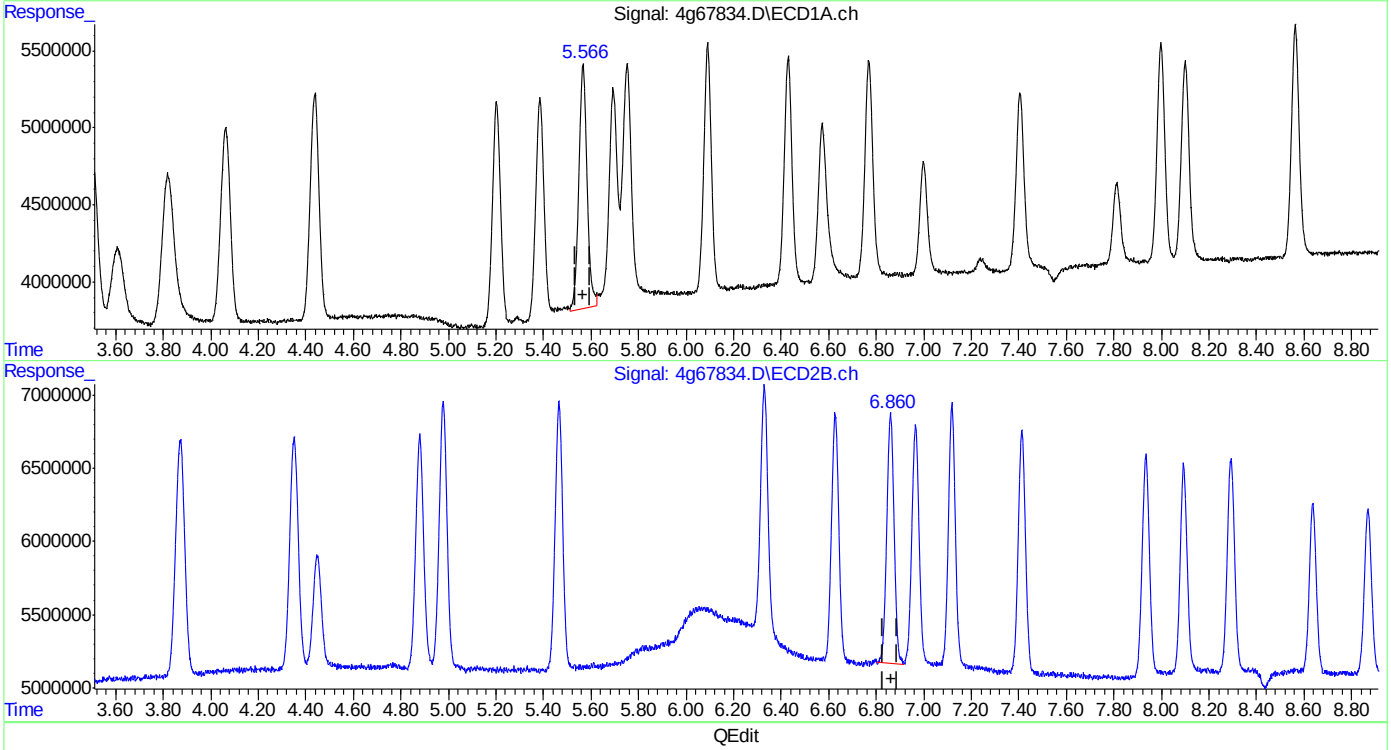
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67834.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 2:56 pm
Operator : dharas
Sample : ic1778-5
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 14:55:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(11) alpha-Chlordane (B)
5.566min 4.799 PPB m
response 38177274

(11) alpha-Chlordane #2 (B)
6.860min 4.916 PPB
response 36218841

(+) = Expected Retention Time
4PST1778.M Tue May 03 14:56:26 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 05/04/16 11:11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67835.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 3:11 pm
Operator : dharas
Sample : ic1778-10
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:19:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	1.786	2.065	411.1E6	356.4E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.586	3.105	69594232	62600360	9.072m	9.719
	Spiked Amount 40.000 Range 30 - 150 Recovery =					22.68%#	24.30%#
24) SA	Decachlor...	10.253	11.658	65389757	44644072	8.183m	7.809
	Spiked Amount 40.000 Recovery =					20.46%	19.52%
	Target Compounds						
3) A	alpha-BHC	3.150	3.870	89915281	85888233	9.386	9.999
4) MA	gamma-BHC	3.499	4.351	80147947	78252821	9.758	10.035
5) MA	Heptachlor	3.819	4.977	72318460	81192861	8.200	10.095
6) B	beta-BHC	3.607	4.447	39757995	36316888	10.040	10.198
7) B	delta-BHC	4.061	4.879	71938995	73286371	8.931	10.280
8) MB	Aldrin	4.436	5.464	76050120	77604763	8.869	9.955
9) B	Heptachlo...	5.204	6.329	67773826	71904390	9.067	10.057
10) B	gamma-Chl...	5.385	6.627	66349566	70400286	9.157	9.993
11) B	alpha-Chl...	5.566	6.859	70879047	70047048	9.442	10.020
12) A	Endosulfan I	5.752	6.965	73933198	67583347	9.053	10.078
13) B	4,4'-DDE	5.694	7.118	62035845	70477191	10.419	10.582
14) MA	Dieldrin	6.091	7.413	70073829	69640743	9.244	10.006
15) MA	Endrin	6.430	7.934	66080818	63398145	9.358	10.122
16) A	4,4'-DDD	6.573	8.094	53993241	56062249	9.661	9.974
17) B	Endosulfa...	6.768	8.292	64484515	62683056	9.377	10.038
18) MA	4,4'-DDT	6.998	8.637	36008378	48486712	8.137	10.084
19) B	Endrin Al...	7.405	8.869	54665173	47318705	9.418	9.451
20) B	Endosulfa...	8.100	9.346	60063043	52034402	10.163	10.069
21) A	Methoxychlor	7.811	9.845	25471597	27319112	8.402	10.027
22)	Mirex	7.998	10.160	63168824	44456767	10.017	9.418
23) B	Endrin Ke...	8.564	10.204	69012051	56428001	10.059	10.176

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

11.6.4 11

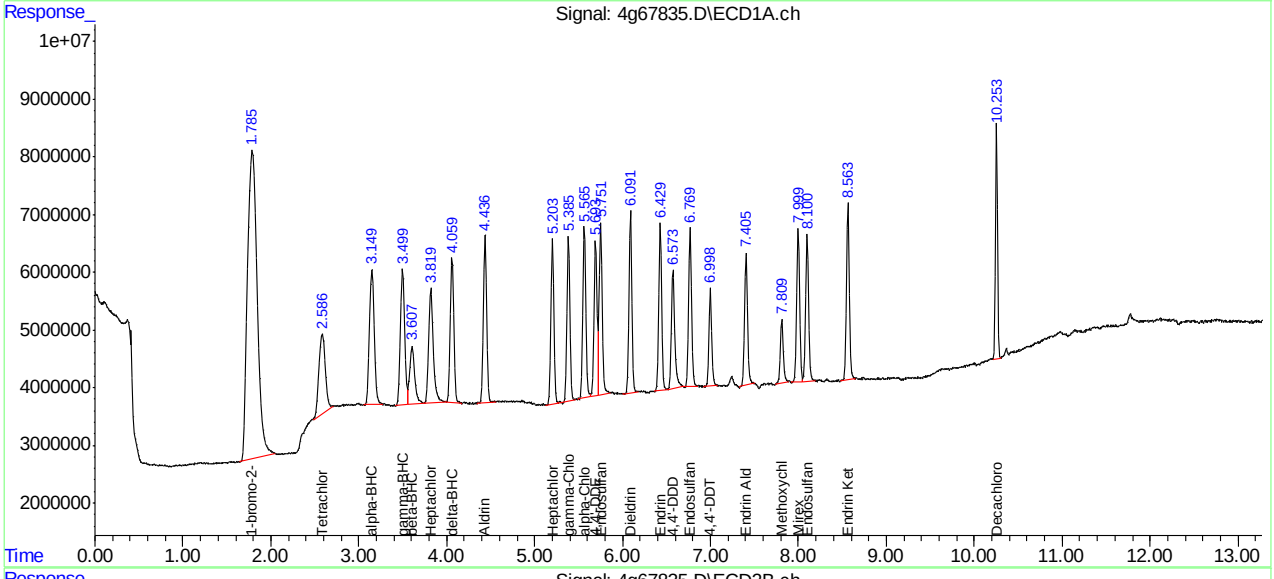
SGS ACCUTEST JC19996

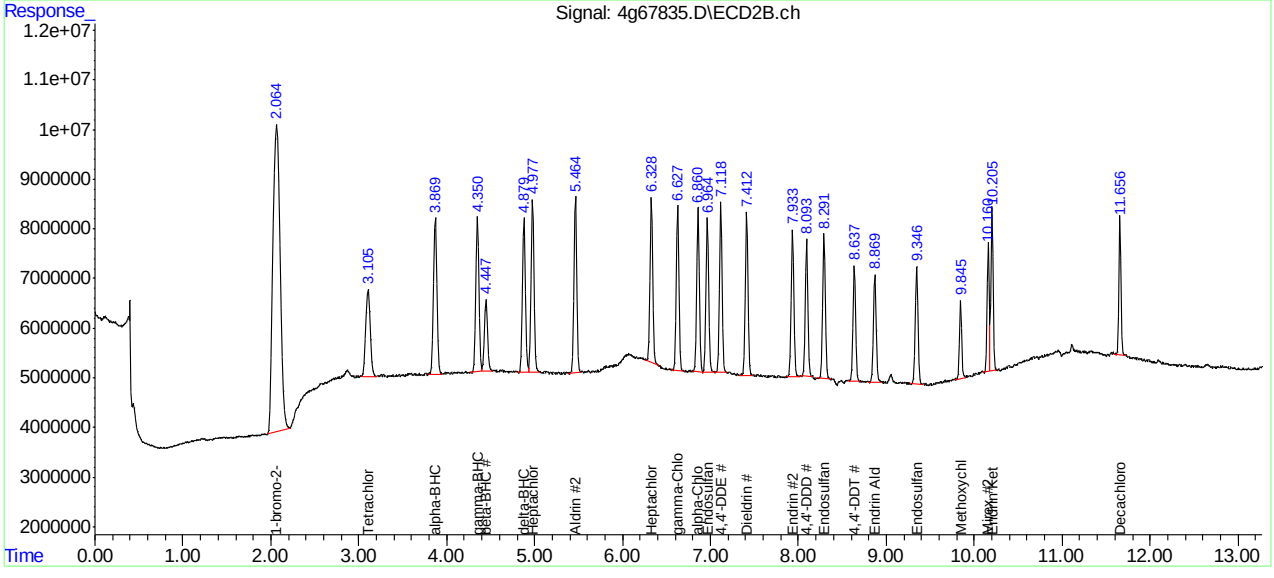
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67835.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 3:11 pm
Operator : dharas
Sample : ic1778-10
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:19:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC19996

Manual Integration Approval Summary

Sample Number:	G4G1778-IC1778	**Method:**	SW846 8081B
Lab FileID:	4G67835.D	**Analyst approved:**	05/03/16 15:16 Rebecca Krug
Injection Time:	05/02/16 15:11	**Supervisor approved:**	05/04/16 11:11 Gwendolyn Burns

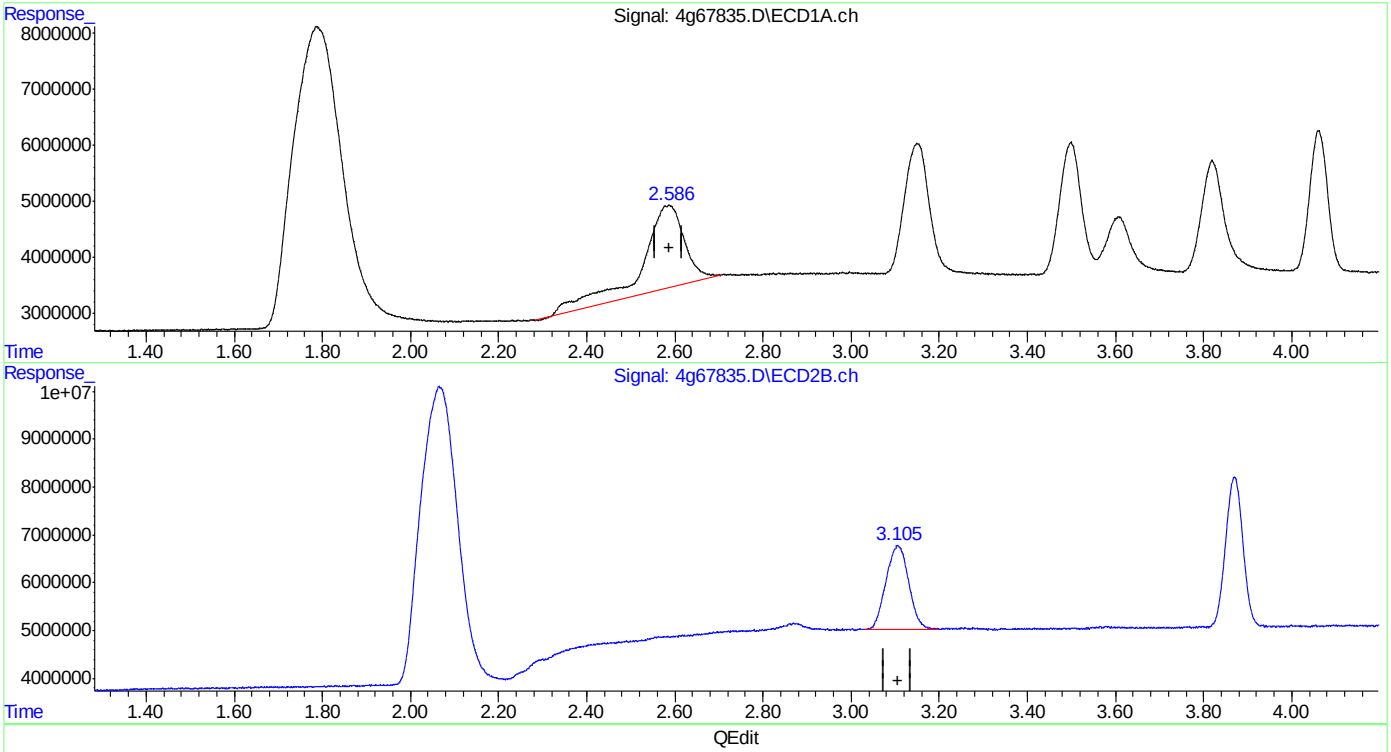
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	2.59	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	1	10.25	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67835.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 3:11 pm
Operator : dharas
Sample : ic1778-10
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 14:54:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(2) Tetrachloro-m-xylene (SAB)
2.587min 13.216 PPB
response 101384592

(2) Tetrachloro-m-xylene #2 (SAB)
3.105min 9.719 PPB
response 62600360

(+) = Expected Retention Time
4PST1778.M Tue May 03 14:54:27 2016 RPT1

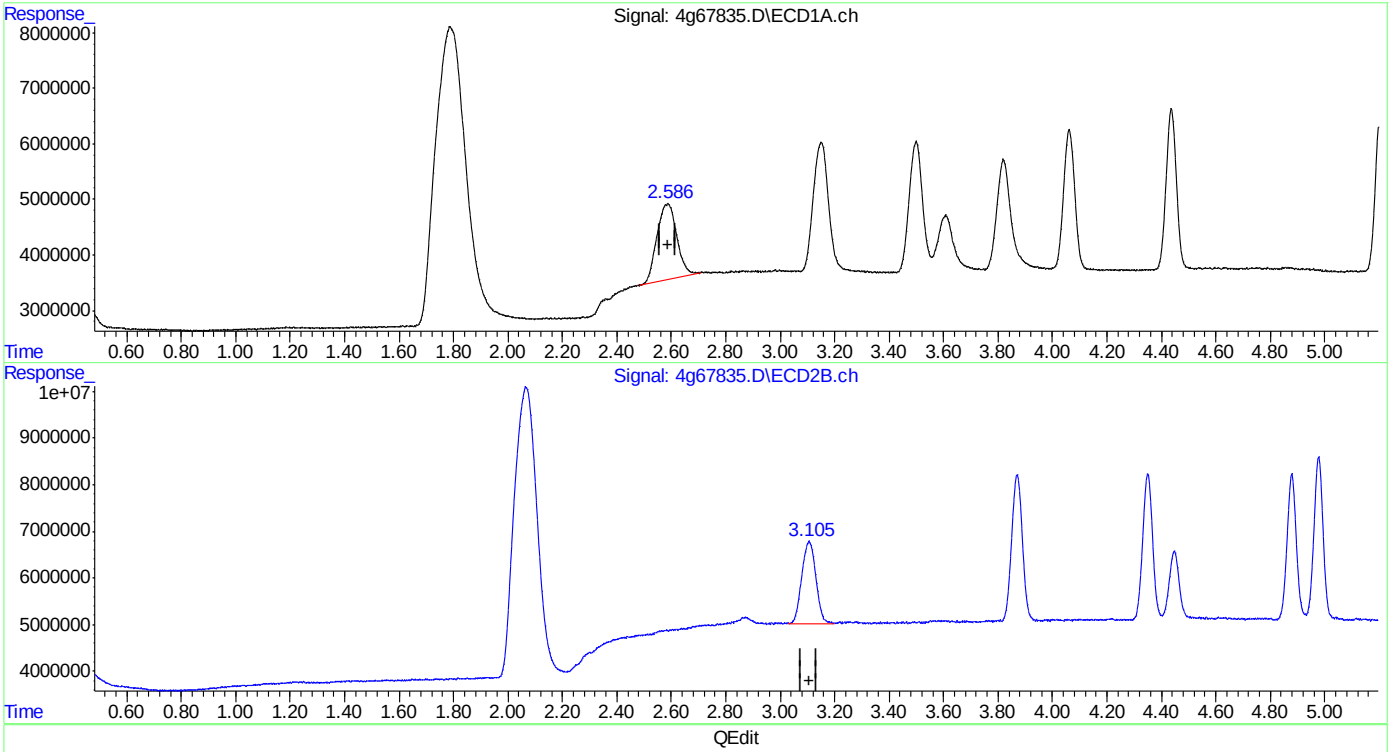
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67835.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 3:11 pm
Operator : dharas
Sample : ic1778-10
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 14:54:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(2) Tetrachloro-m-xylene (SAB)
2.586min 9.072 PPB m
response 69594232

(2) Tetrachloro-m-xylene #2 (SAB)
3.105min 9.719 PPB
response 62600360

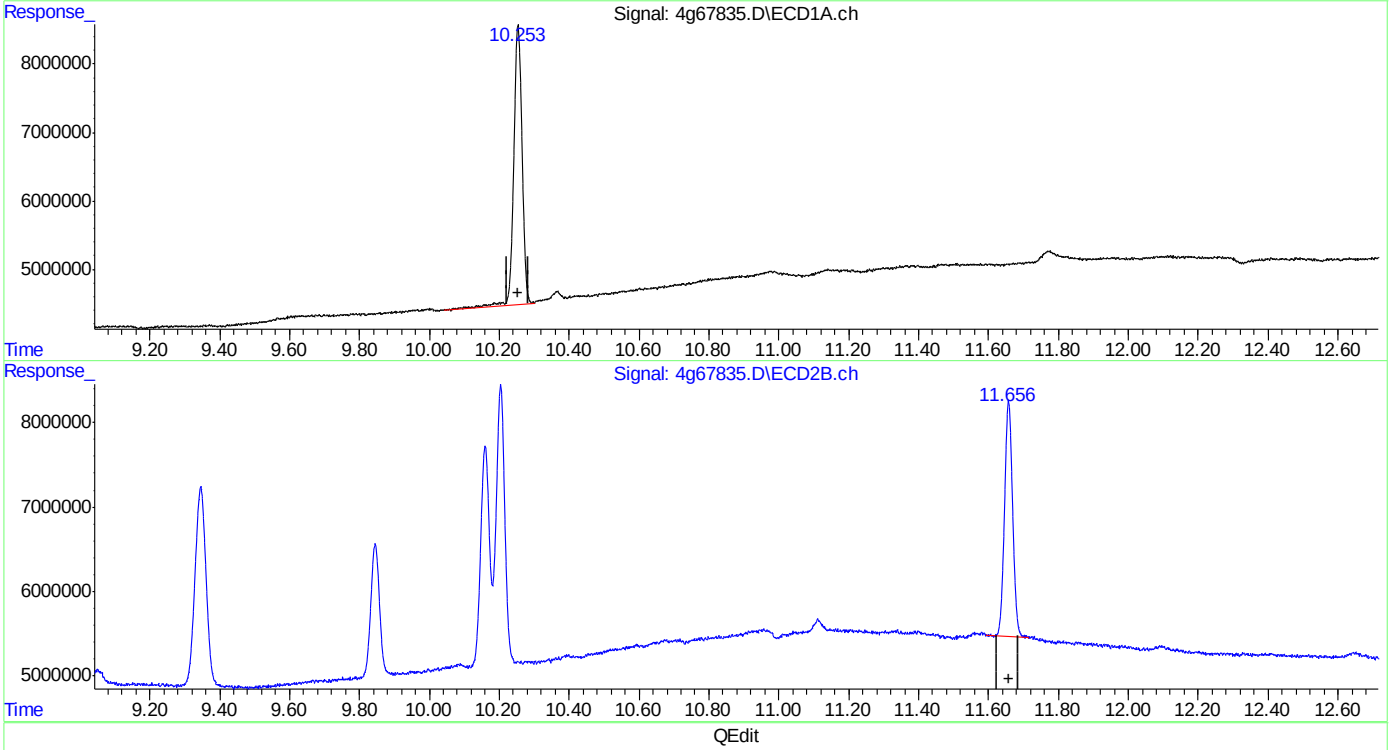
(+) = Expected Retention Time
4PST1778.M Tue May 03 14:54:33 2016 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67835.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 3:11 pm
Operator : dharas
Sample : ic1778-10
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 14:54:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(24) Decachlorobiphenyl (SA)
10.254min 8.450 PPB
response 67519126

(24) Decachlorobiphenyl #2 (SA)
11.658min 7.809 PPB
response 44644072

(+) = Expected Retention Time

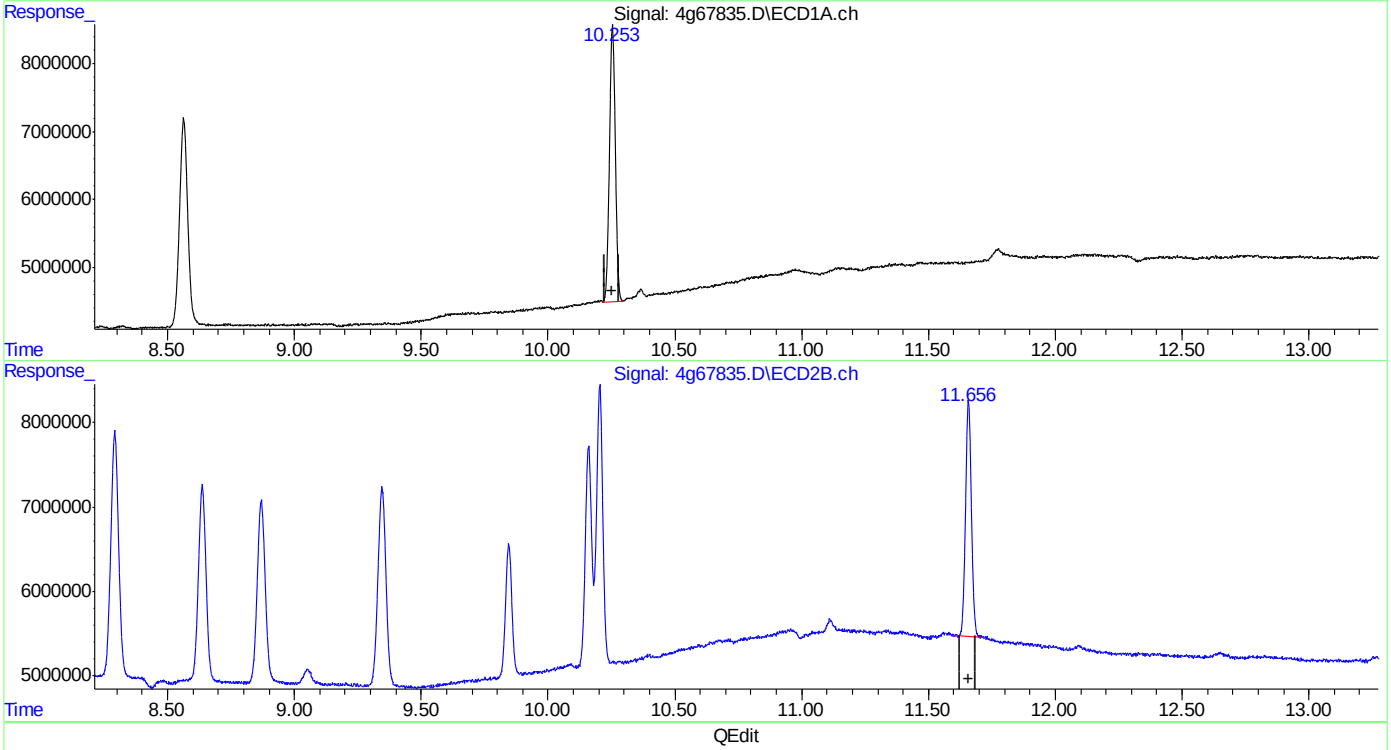
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67835.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 3:11 pm
Operator : dharas
Sample : ic1778-10
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 14:54:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(24) Decachlorobiphenyl (SA)
10.253min 8.183 PPB m
response 65389757

(24) Decachlorobiphenyl #2 (SA)
11.658min 7.809 PPB
response 44644072

(+) = Expected Retention Time
4PST1778.M Tue May 03 14:54:58 2016 RPT1

SGS ACCUTEST JC19996

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 05/04/16 11:11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67836.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 3:26 pm
Operator : dharas
Sample : icc1778-25
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:19:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	1.797	2.073	431.7E6	375.9E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.592	3.108	186.1E6	165.7E6	23.099m	24.393
	Spiked Amount 40.000 Range 30 - 150 Recovery = 57.75% 60.98%						
24) SA	Decachlor...	10.253	11.656	174.3E6	115.1E6	20.768m	19.090
	Spiked Amount 40.000 Recovery = 51.92% 47.73%						
	Target Compounds						
3) A	alpha-BHC	3.154	3.873	249.7E6	237.0E6	24.827	26.162
4) MA	gamma-BHC	3.501	4.352	220.5E6	211.8E6	25.572	25.754
5) MA	Heptachlor	3.820	4.979	202.4E6	217.3E6	21.860	25.620
6) B	beta-BHC	3.606	4.448	104.7E6	95390450	25.175	25.395
7) B	delta-BHC	4.064	4.880	195.1E6	200.5E6	23.071	26.669
8) MB	Aldrin	4.439	5.466	209.7E6	209.2E6	23.287	25.448
9) B	Heptachlo...	5.203	6.330	185.5E6	190.2E6	23.638	25.224
10) B	gamma-Chl...	5.386	6.628	188.5E6	187.8E6	24.772	25.269
11) B	alpha-Chl...	5.567	6.861	193.7E6	183.7E6	24.568	24.917
12) A	Endosulfan I	5.753	6.966	202.9E6	178.0E6	23.666	25.164
13) B	4,4'-DDE	5.694	7.119	175.1E6	188.4E6	28.001	26.822
14) MA	Dieldrin	6.091	7.413	199.3E6	189.4E6	25.037	25.797
15) MA	Endrin	6.430	7.935	183.3E6	167.9E6	24.726	25.411
16) A	4,4'-DDD	6.571	8.093	157.3E6	151.9E6	26.802	25.623
17) B	Endosulfa...	6.769	8.292	183.5E6	165.5E6	25.415	25.120
18) MA	4,4'-DDT	6.998	8.637	112.2E6	134.0E6	21.697	26.428
19) B	Endrin Al...	7.405	8.869	151.5E6	126.0E6	24.863	23.863
20) B	Endosulfa...	8.099	9.346	164.7E6	136.9E6	26.535	25.108
21) A	Methoxychlor	7.809	9.845	72837603	71070940	22.880	24.731
22)	Mirex	7.997	10.160	165.5E6	112.4E6	24.989	22.570
23) B	Endrin Ke...	8.563	10.203	195.2E6	151.5E6	27.097	25.906

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

11.6.5 11

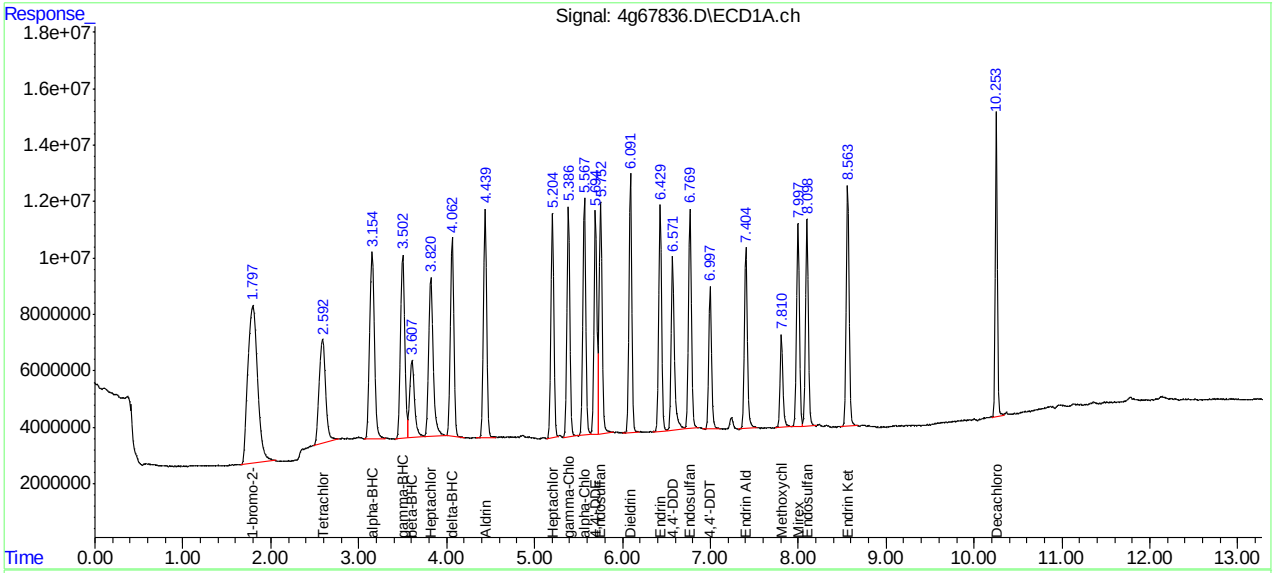
SGS ACCUTEST JC19996

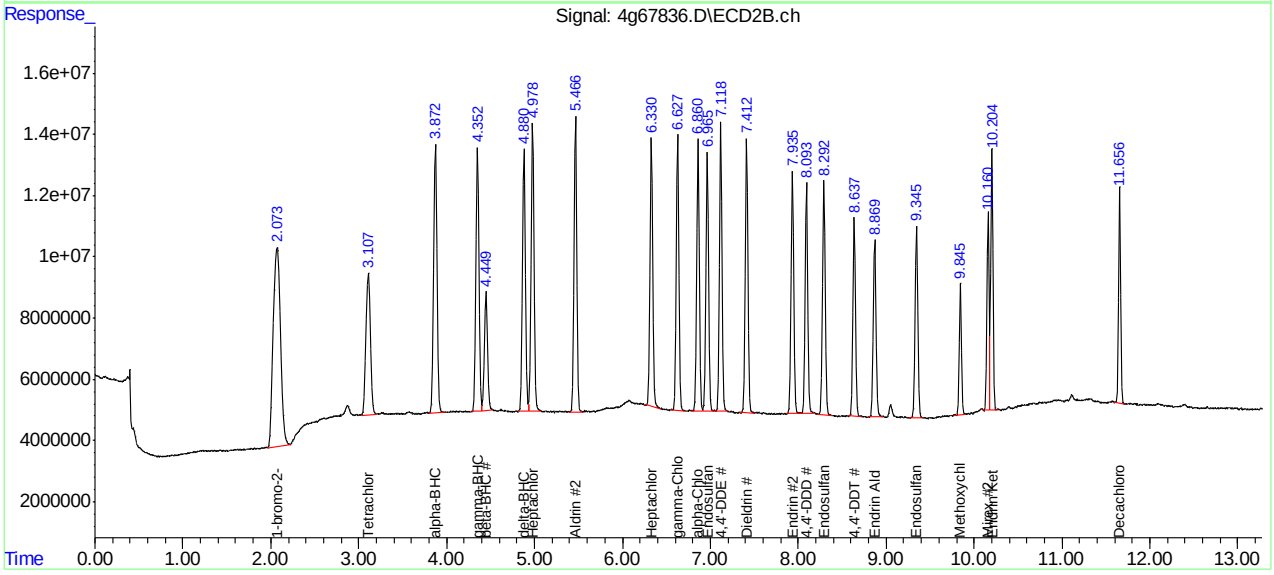
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67836.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 3:26 pm
Operator : dharas
Sample : icc1778-25
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:19:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G4G1778-ICC1778	**Method:**	SW846 8081B
Lab FileID:	4G67836.D	**Analyst approved:**	05/03/16 15:16 Rebecca Krug
Injection Time:	05/02/16 15:26	**Supervisor approved:**	05/04/16 11:11 Gwendolyn Burns

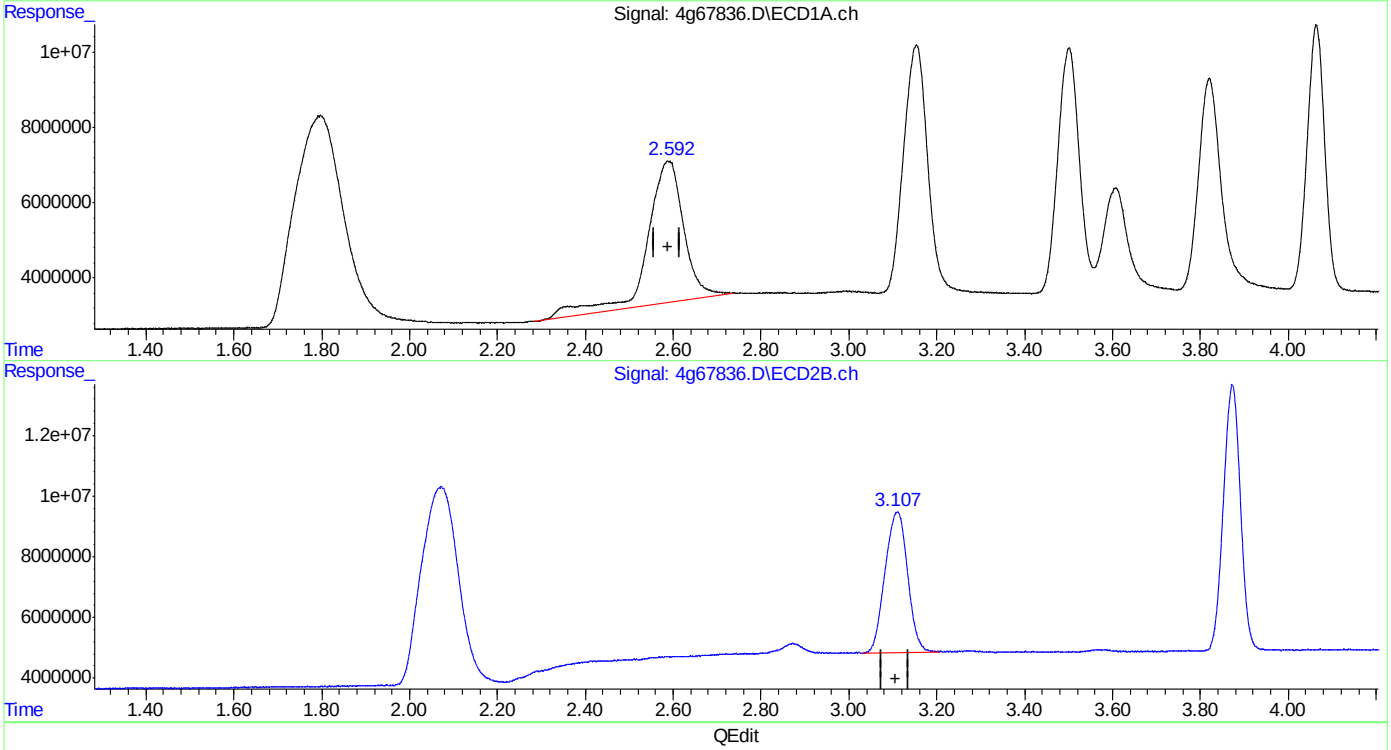
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	2.59	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	1	10.25	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67836.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 3:26 pm
Operator : dharas
Sample : icc1778-25
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 14:53:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(2) Tetrachloro-m-xylene (SAB)
2.588min 27.139 PPB
response 218617775

(2) Tetrachloro-m-xylene #2 (SAB)
3.108min 24.393 PPB
response 165722496

(+) = Expected Retention Time

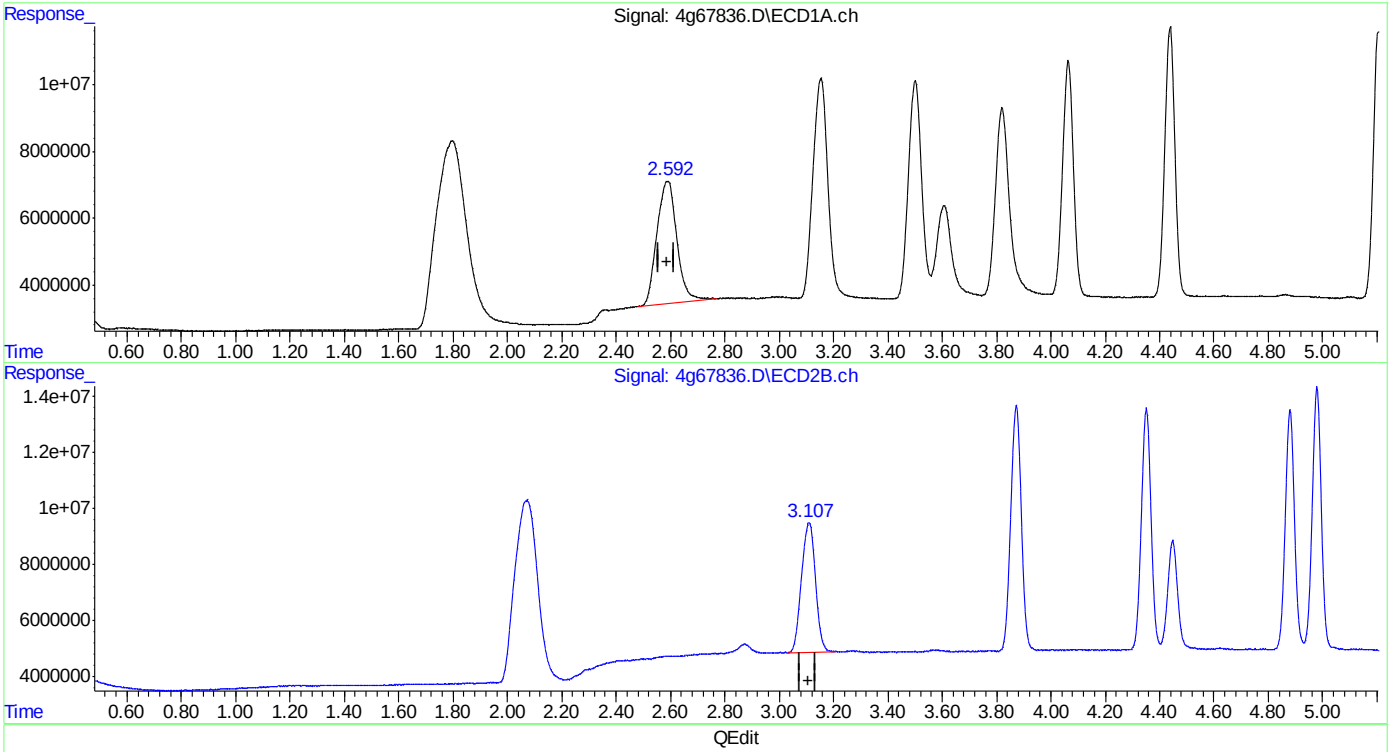
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67836.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 3:26 pm
Operator : dharas
Sample : icc1778-25
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 14:53:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(2) Tetrachloro-m-xylene (SAB)
2.592min 23.099 PPB m
response 186077076

(2) Tetrachloro-m-xylene #2 (SAB)
3.108min 24.393 PPB
response 165722496

(+) = Expected Retention Time
4PST1778.M Tue May 03 14:53:30 2016 RPT1

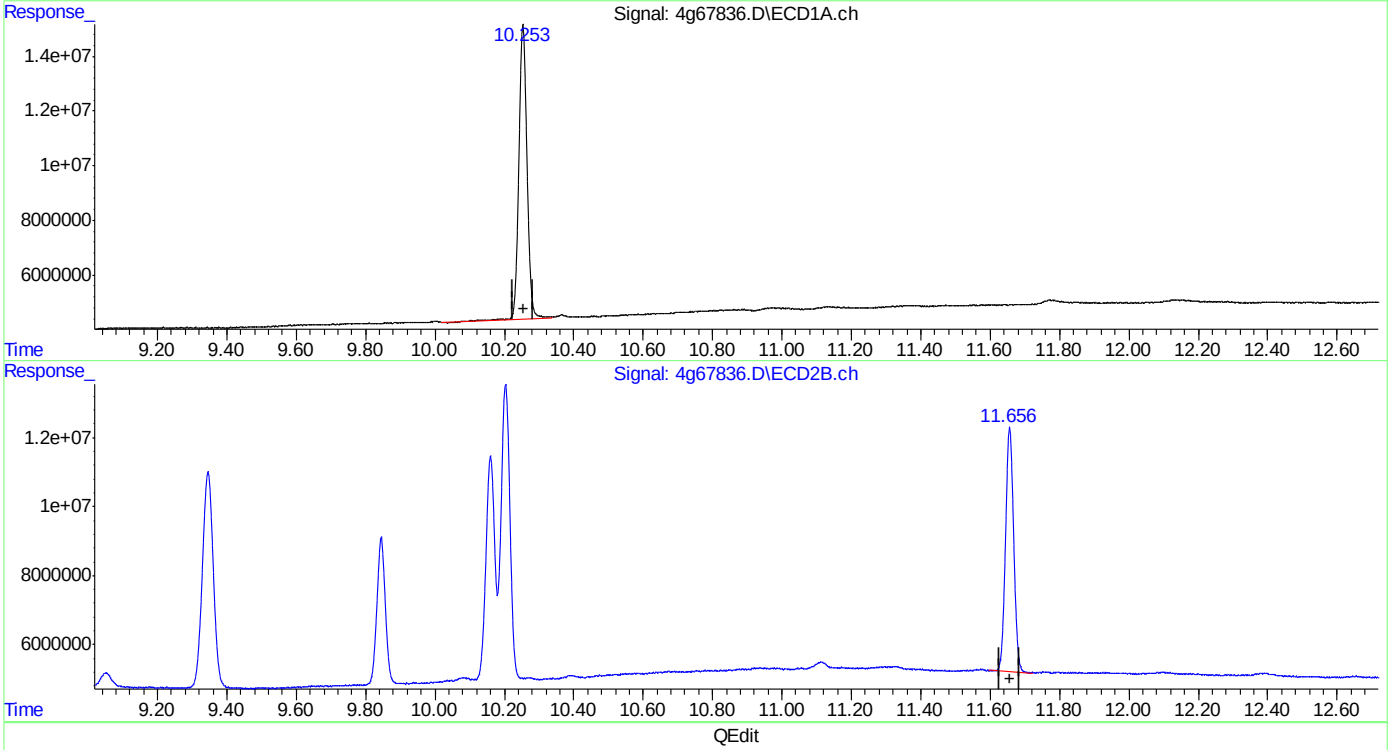
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67836.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 3:26 pm
Operator : dharas
Sample : icc1778-25
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 14:53:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(24) Decachlorobiphenyl (SA)
10.253min 20.863 PPB
response 175049871

(24) Decachlorobiphenyl #2 (SA)
11.656min 19.090 PPB
response 115123212

(+) = Expected Retention Time

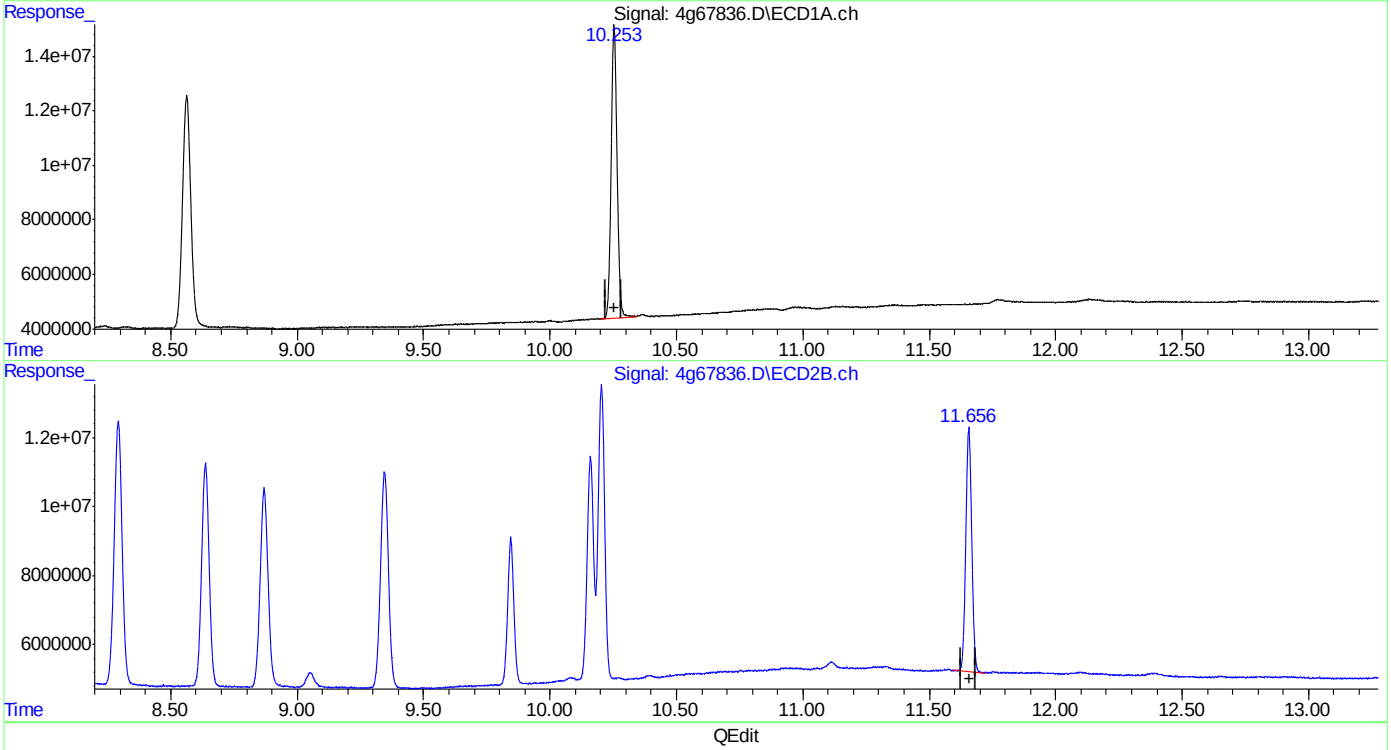
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67836.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 3:26 pm
Operator : dharas
Sample : icc1778-25
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 14:53:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(24) Decachlorobiphenyl (SA)
10.253min 20.768 PPB m
response 174257754

(24) Decachlorobiphenyl #2 (SA)
11.656min 19.090 PPB
response 115123212

(+) = Expected Retention Time
4PST1778.M Tue May 03 14:53:55 2016 RPT1

SGS ACCUTEST JC19996

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 05/04/16 11:11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67837.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 3:41 pm
Operator : dharas
Sample : ic1778-50
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:19:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	1.791	2.069	419.5E6	370.7E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.587	3.108	360.1E6	324.0E6	46.003	48.360
	Spiked Amount 40.000	Range	30 - 150	Recovery	=	115.01%	120.90%
24) SA	Decachlor...	10.255	11.658	335.2E6	223.6E6	41.113	37.600
	Spiked Amount 40.000			Recovery	=	102.78%	94.00%
	Target Compounds						
3) A	alpha-BHC	3.153	3.872	515.9E6	484.4E6	52.777	54.214
4) MA	gamma-BHC	3.500	4.351	455.6E6	432.9E6	54.355	53.362
5) MA	Heptachlor	3.817	4.979	444.5E6	435.4E6	49.387	52.041
6) B	beta-BHC	3.603	4.447	219.6E6	190.4E6	54.352	51.402
7) B	delta-BHC	4.064	4.880	414.3E6	409.6E6	50.407	55.235
8) MB	Aldrin	4.438	5.466	433.3E6	420.7E6	49.515	51.882
9) B	Heptachlo...	5.204	6.329	390.4E6	378.7E6	51.183	50.915
10) B	gamma-Chl...	5.386	6.628	395.0E6	378.2E6	53.418	51.602
11) B	alpha-Chl...	5.568	6.861	399.2E6	364.6E6	52.114	50.133
12) A	Endosulfan I	5.752	6.966	416.3E6	356.3E6	49.954	51.077
13) B	4,4'-DDE	5.693	7.119	371.7E6	380.9E6	61.172	54.983
14) MA	Dieldrin	6.092	7.414	421.3E6	384.5E6	54.464	53.107
15) MA	Endrin	6.431	7.934	387.4E6	340.5E6	53.756	52.253
16) A	4,4'-DDD	6.570	8.094	331.2E6	308.2E6	58.075	52.708
17) B	Endosulfa...	6.769	8.293	381.6E6	332.8E6	54.383	51.235
18) MA	4,4'-DDT	6.998	8.638	254.1E6	277.5E6	45.953	55.478
19) B	Endrin Al...	7.404	8.871	316.8E6	249.5E6	53.489m	47.903
20) B	Endosulfa...	8.101	9.346	340.5E6	271.4E6	56.456	50.486
21) A	Methoxychlor	7.809	9.846	155.0E6	140.6E6	50.111m	49.602
22)	Mirex	7.999	10.161	327.7E6	221.7E6	50.921	45.152
23) B	Endrin Ke...	8.563	10.205	406.4E6	307.8E6	58.042	53.351

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

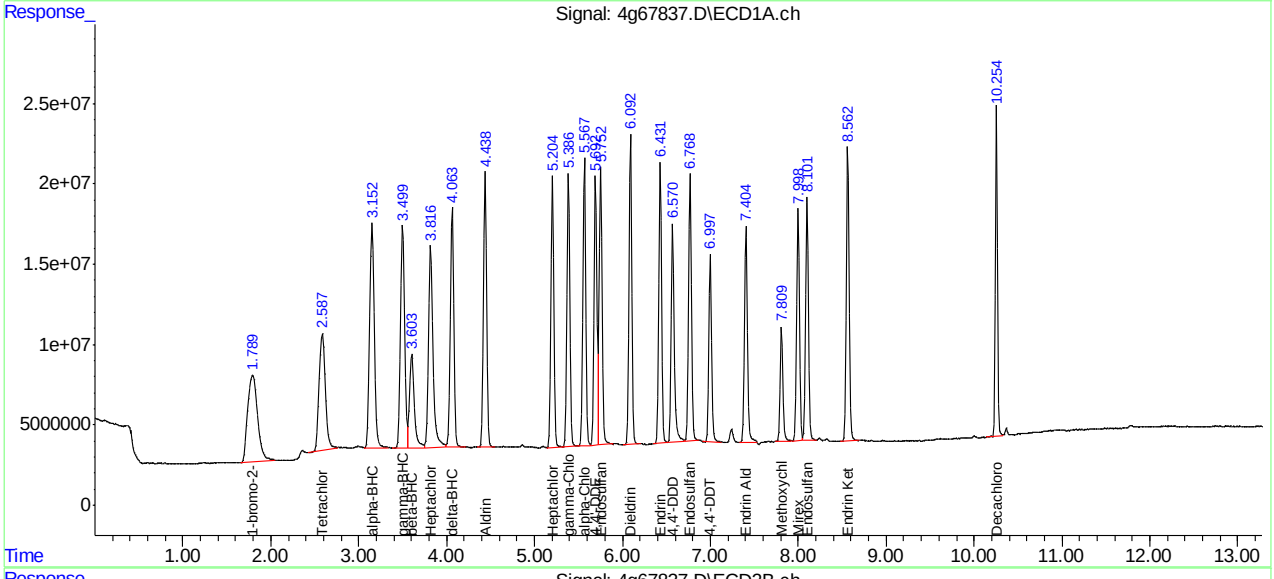
11.6.6 11

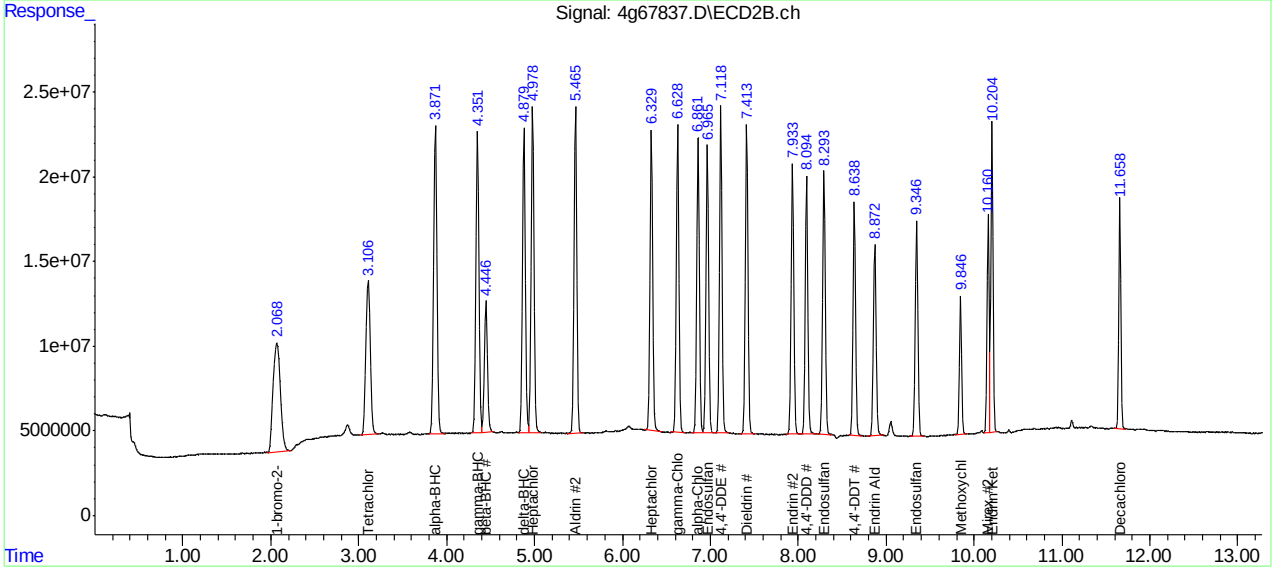
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67837.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 3:41 pm
Operator : dharas
Sample : ic1778-50
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:19:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G4G1778-IC1778	**Method:**	SW846 8081B
Lab FileID:	4G67837.D	**Analyst approved:**	05/03/16 15:16 Rebecca Krug
Injection Time:	05/02/16 15:41	**Supervisor approved:**	05/04/16 11:11 Gwendolyn Burns

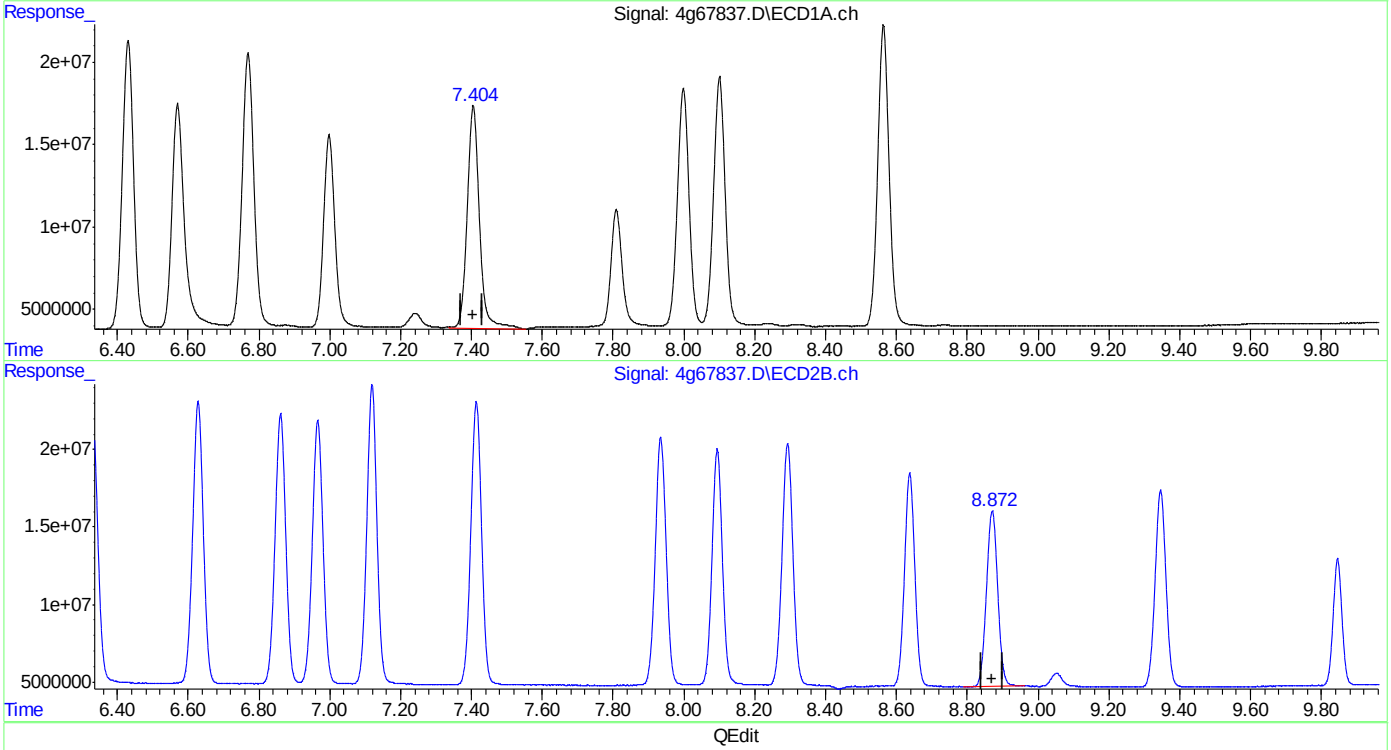
Parameter	CAS	Sig#	R.T. (min.)	Reason
Endrin aldehyde	7421-93-4	1	7.40	Poorly defined baseline
Methoxychlor	72-43-5	1	7.81	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67837.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 3:41 pm
Operator : dharas
Sample : ic1778-50
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 14:43:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(19) Endrin Aldehyde (B)
7.405min 54.582 PPB
response 323282330

(19) Endrin Aldehyde #2 (B)
8.871min 47.903 PPB
response 249500342

(+) = Expected Retention Time
4PST1778.M Tue May 03 14:43:33 2016 RPT1

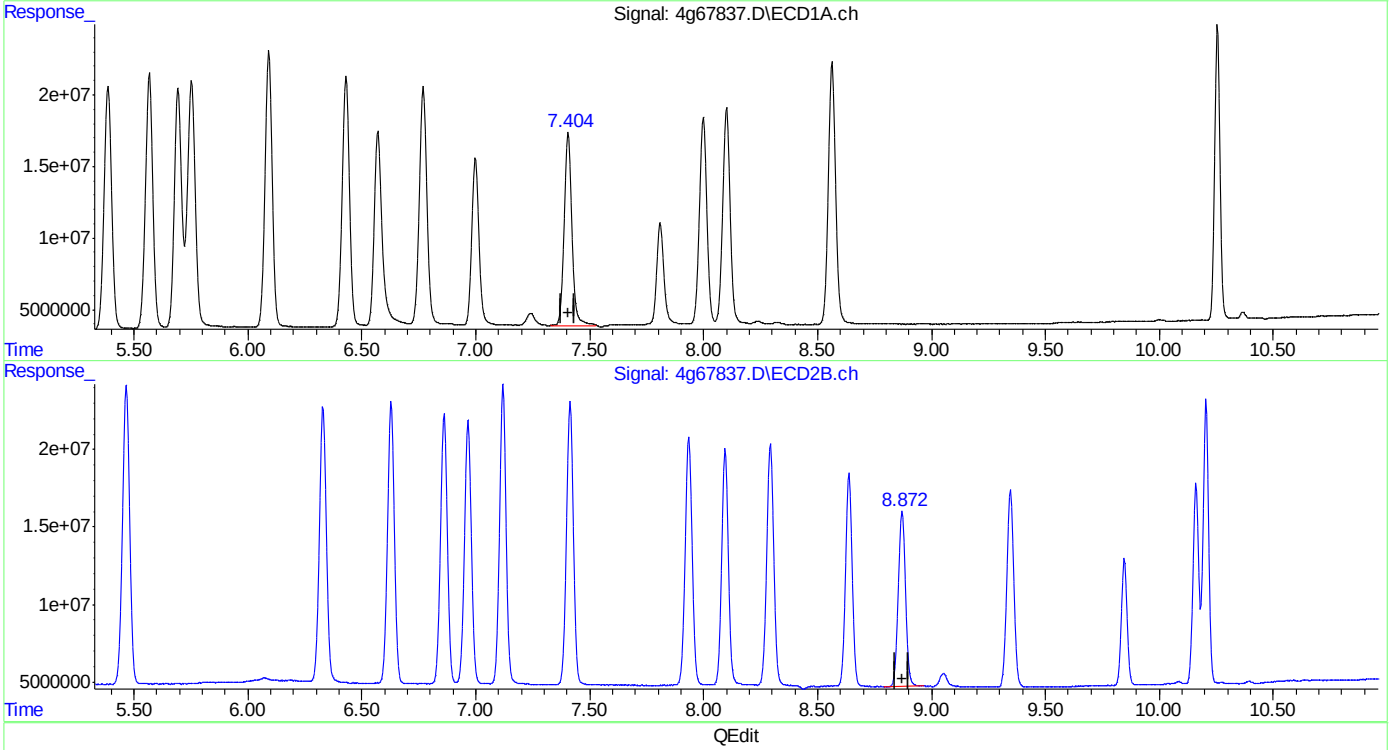
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67837.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 3:41 pm
Operator : dharas
Sample : ic1778-50
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 14:43:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(19) Endrin Aldehyde (B)
7.404min 53.489 PPB m
response 316808768

(19) Endrin Aldehyde #2 (B)
8.871min 47.903 PPB
response 249500342

(+) = Expected Retention Time

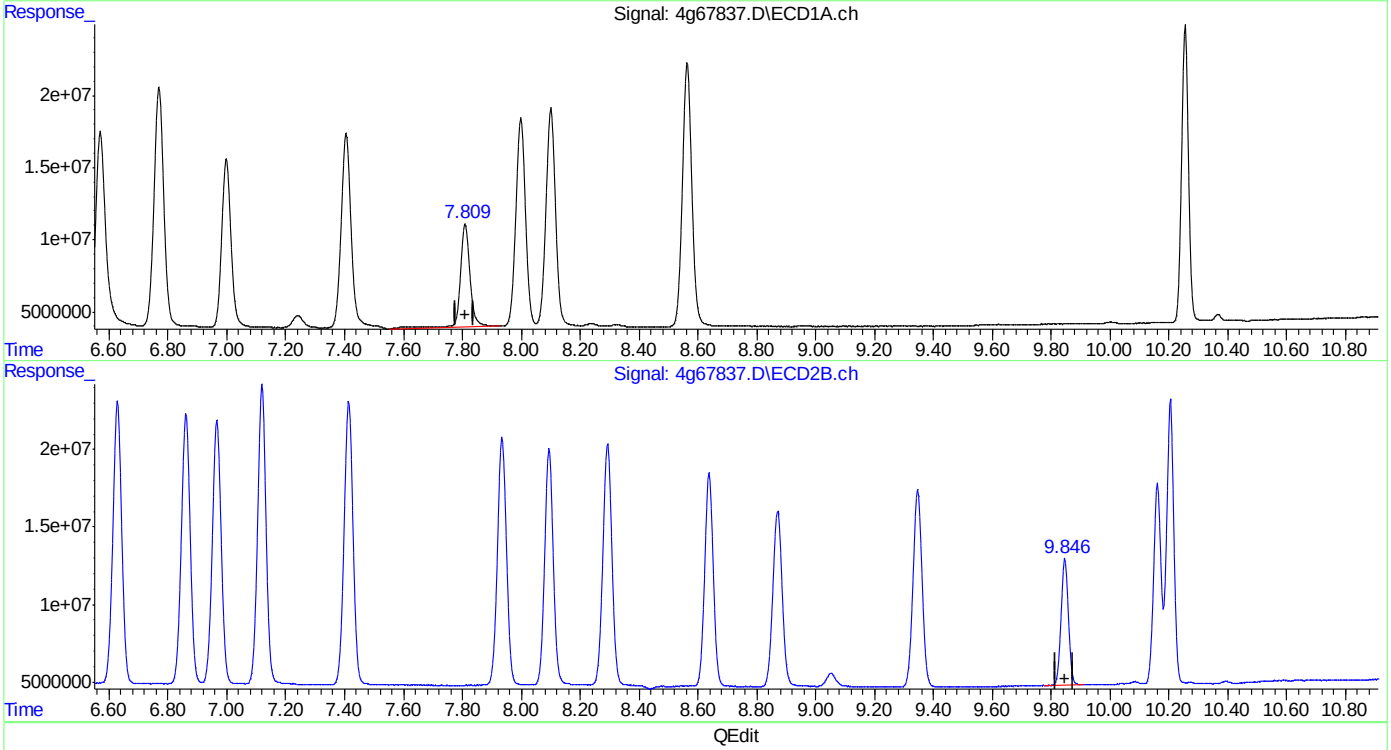
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67837.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 3:41 pm
Operator : dharas
Sample : ic1778-50
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 14:43:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(21) Methoxychlor (A)
7.809min 54.026 PPB
response 167139311

(21) Methoxychlor #2 (A)
9.846min 49.602 PPB
response 140581662

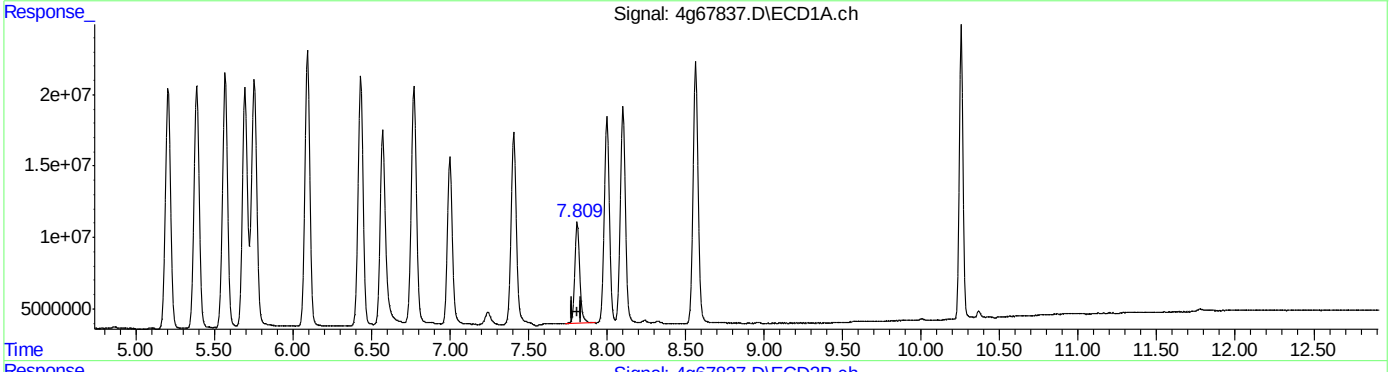
(+) = Expected Retention Time
4PST1778.M Tue May 03 14:43:43 2016 RPT1

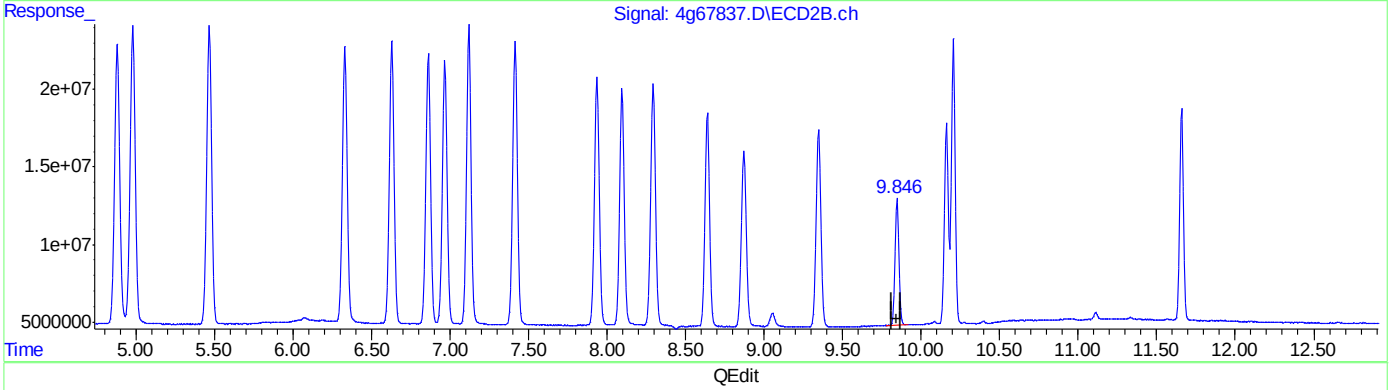
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67837.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 3:41 pm
Operator : dharas
Sample : ic1778-50
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 14:43:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(21) Methoxychlor (A)
7.809min 50.111 PPB m
response 155027769

(21) Methoxychlor #2 (A)
9.846min 49.602 PPB
response 140581662

(+) = Expected Retention Time
4PST1778.M Tue May 03 14:43:51 2016 RPT1

4G67838.D

Manual Integrations APPROVED (compounds with "m" flag)

Gwendolyn Burns 05/04/16 11:11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67838.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 3:57 pm
Operator : dharas
Sample : ic1778-75
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:19:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	1.793	2.070	415.3E6	374.7E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.584	3.106	532.1E6	478.6E6	68.652	70.660
	Spiked Amount 40.000 Range 30 - 150 Recovery = 171.63%# 176.65%#						
24) SA	Decachlor...	10.253	11.658	521.7E6	338.4E6	64.623	56.282
	Spiked Amount 40.000 Recovery = 161.56% 140.70%						
	Target Compounds						
3) A	alpha-BHC	3.152	3.872	817.5E6	758.2E6	84.477	83.940
4) MA	gamma-BHC	3.498	4.350	721.8E6	676.4E6	86.994	82.490
5) MA	Heptachlor	3.816	4.978	705.9E6	679.9E6	79.227	80.393
6) B	beta-BHC	3.600	4.447	340.5E6	290.2E6	85.114	77.493
7) B	delta-BHC	4.063	4.879	654.8E6	618.2E6	80.470	82.470
8) MB	Aldrin	4.438	5.465	688.8E6	655.6E6	79.512	79.980
9) B	Heptachlo...	5.203	6.329	611.8E6	583.9E6	81.021	77.666
10) B	gamma-Chl...	5.385	6.628	627.3E6	586.9E6	85.701	79.228
11) B	alpha-Chl...	5.566	6.860	627.7E6	546.6E6	82.774	74.357
12) A	Endosulfan I	5.752	6.965	654.1E6	549.7E6	79.288	77.957
13) B	4,4'-DDE	5.691	7.118	594.4E6	591.4E6	98.809	84.449
14) MA	Dieldrin	6.091	7.413	670.7E6	597.8E6	87.574	81.686
15) MA	Endrin	6.429	7.935	623.1E6	528.5E6	87.351	80.243
16) A	4,4'-DDD	6.567	8.094	540.1E6	479.0E6	95.654	81.051
17) B	Endosulfa...	6.767	8.292	619.8E6	511.9E6	89.216	77.947
18) MA	4,4'-DDT	6.997	8.637	426.8E6	439.5E6	71.798	86.926
19) B	Endrin Al...	7.404	8.870	498.5E6	373.7E6	85.019	70.978
20) B	Endosulfa...	8.099	9.346	534.6E6	415.5E6	89.535	76.458
21) A	Methoxychlor	7.807	9.846	246.7E6	219.0E6	80.541	76.438
22)	Mirex	7.997	10.160	503.1E6	336.5E6	78.969	67.792
23) B	Endrin Ke...	8.560	10.204	641.5E6	476.5E6	92.558m	81.713
	SemiQuant Compounds - Not Calibrated on this Instrument						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

11.6.7

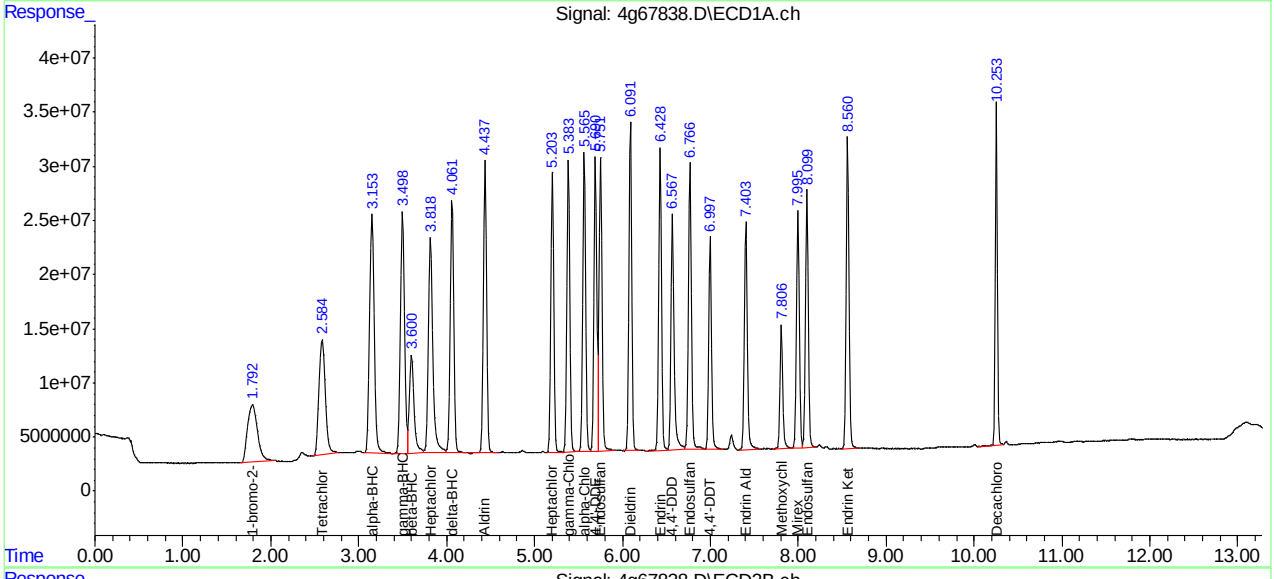
11

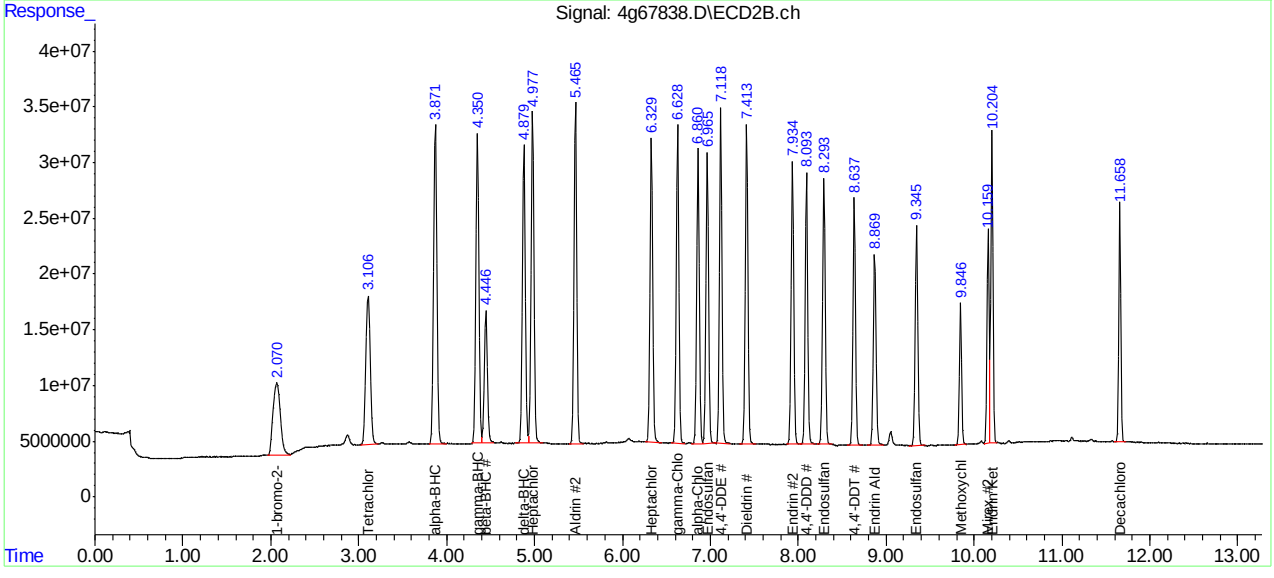
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67838.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 3:57 pm
Operator : dharas
Sample : ic1778-75
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:19:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G4G1778-IC1778	**Method:**	SW846 8081B
Lab FileID:	4G67838.D	**Analyst approved:**	05/03/16 15:16 Rebecca Krug
Injection Time:	05/02/16 15:57	**Supervisor approved:**	05/04/16 11:11 Gwendolyn Burns

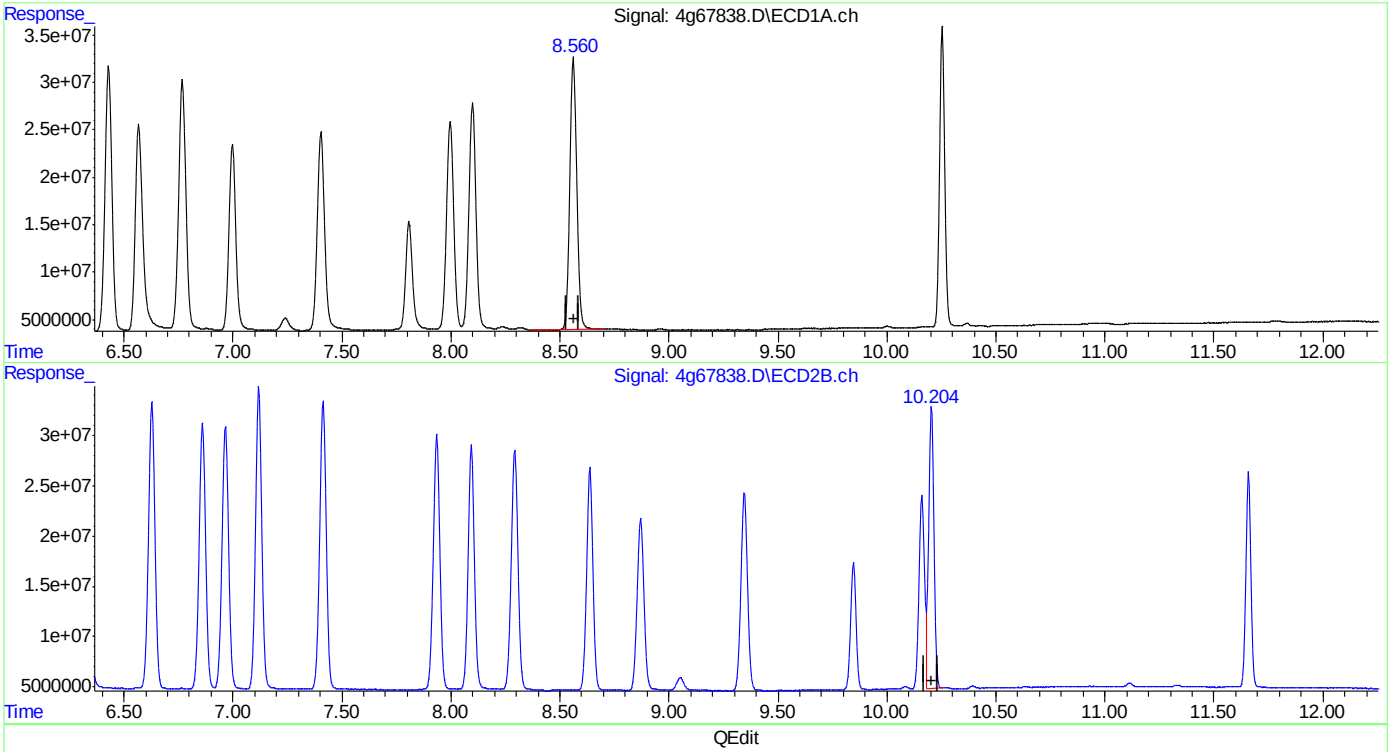
Parameter	CAS	Sig#	R.T. (min.)	Reason
Endrin ketone	53494-70-5	1	8.56	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67838.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 3:57 pm
Operator : dharas
Sample : ic1778-75
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 14:51:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(23) Endrin Ketone (B)
8.561min 93.275 PPB
response 646481914

(23) Endrin Ketone #2 (B)
10.204min 81.713 PPB
response 476495180

(+) = Expected Retention Time

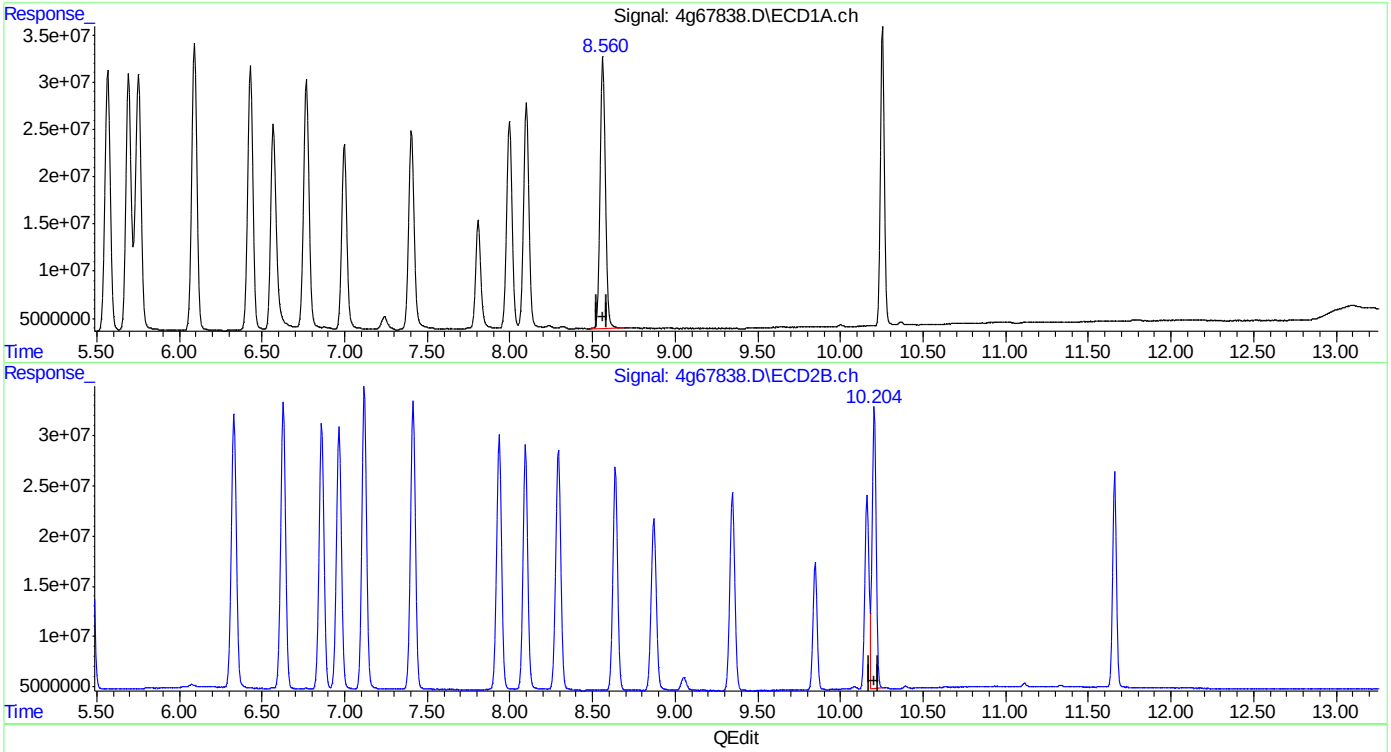
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67838.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 3:57 pm
Operator : dharas
Sample : ic1778-75
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 14:51:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(23) Endrin Ketone (B)
8.560min 92.558 PPB m
response 641511204

(23) Endrin Ketone #2 (B)
10.204min 81.713 PPB
response 476495180

(+) = Expected Retention Time

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67839.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 4:12 pm
Operator : dharas
Sample : ic1778-100
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:20:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	1.800	2.071	428.6E6	373.8E6	50.000	50.000	
	System Monitoring Compounds							
2) SAB	Tetrachlo...	2.590	3.108	762.3E6	681.0E6	95.315	100.796	
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 238.29%#	251.99%#	
24) SA	Decachlor...	10.254	11.659	715.3E6	451.9E6	85.866	75.353	
	Spiked Amount	40.000			Recovery	= 214.67%	188.38%	
	Target Compounds							
3) A	alpha-BHC	3.155	3.873	1132.1E6	1051.3E6	113.363	116.683	
4) MA	gamma-BHC	3.500	4.351	998.9E6	936.7E6	116.662	114.526	
5) MA	Heptachlor	3.818	4.980	986.2E6	935.0E6	107.263	110.834	
6) B	beta-BHC	3.602	4.448	460.1E6	397.0E6	111.447	106.286	
7) B	delta-BHC	4.066	4.879	918.0E6	897.8E6	109.319	120.062	
8) MB	Aldrin	4.440	5.466	955.0E6	902.8E6	106.828	110.419	
9) B	Heptachlo...	5.205	6.331	856.9E6	801.6E6	109.968	106.889	
10) B	gamma-Chl...	5.388	6.629	879.8E6	808.8E6	116.475	109.453	
11) B	alpha-Chl...	5.568	6.861	874.3E6	777.6E6	111.722	106.037	
12) A	Endosulfan I	5.753	6.967	905.6E6	755.8E6	106.366	107.447	
13) B	4,4'-DDE	5.692	7.120	838.9E6	816.1E6	135.140	116.821	
14) MA	Dieldrin	6.092	7.414	940.0E6	826.2E6	118.944	113.170	
15) MA	Endrin	6.431	7.935	864.5E6	730.8E6	117.437	111.235	
16) A	4,4'-DDD	6.568	8.095	754.7E6	662.2E6	129.537	112.316	
17) B	Endosulfa...	6.769	8.293	858.5E6	705.6E6	119.744	107.729	
18) MA	4,4'-DDT	6.998	8.638	618.5E6	617.0E6	94.482	122.335	#
19) B	Endrin Al...	7.404	8.871	682.4E6	526.9E6	112.778	100.329	
20) B	Endosulfa...	8.100	9.347	739.7E6	568.8E6	120.051	104.922	
21) A	Methoxychlor	7.809	9.846	344.1E6	301.5E6	108.887	105.483	
22)	Mirex	7.999	10.161	682.7E6	455.3E6	103.844	91.945	
23) B	Endrin Ke...	8.562	10.204	879.5E6	650.7E6	122.964	111.871	

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

11.6.8 11

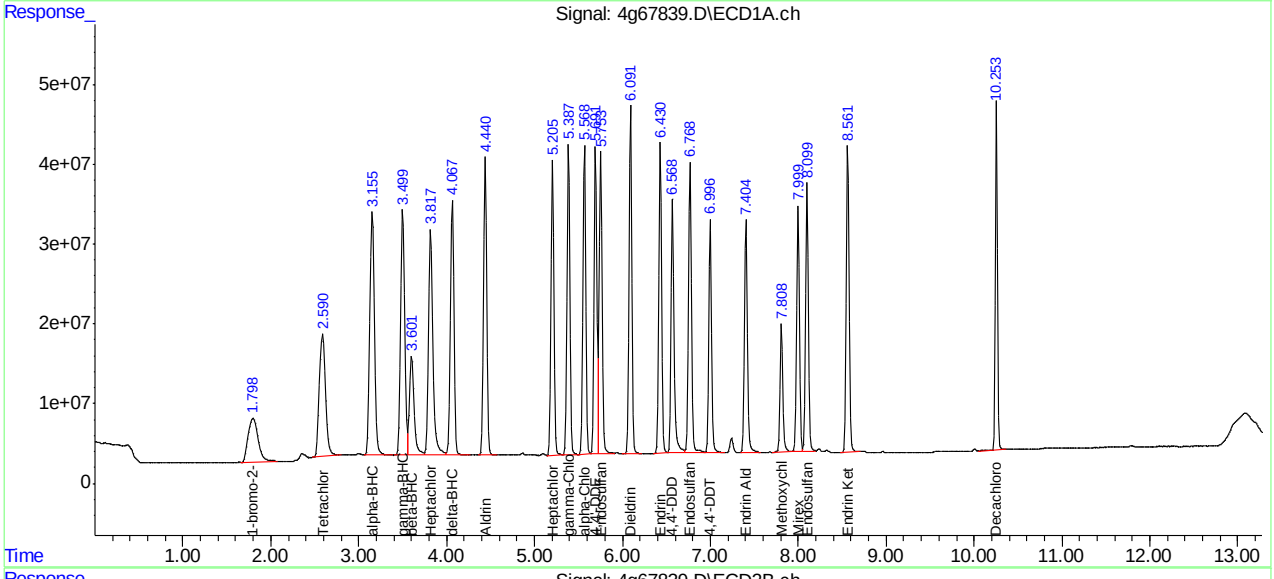
SGS ACCUTEST JC19996

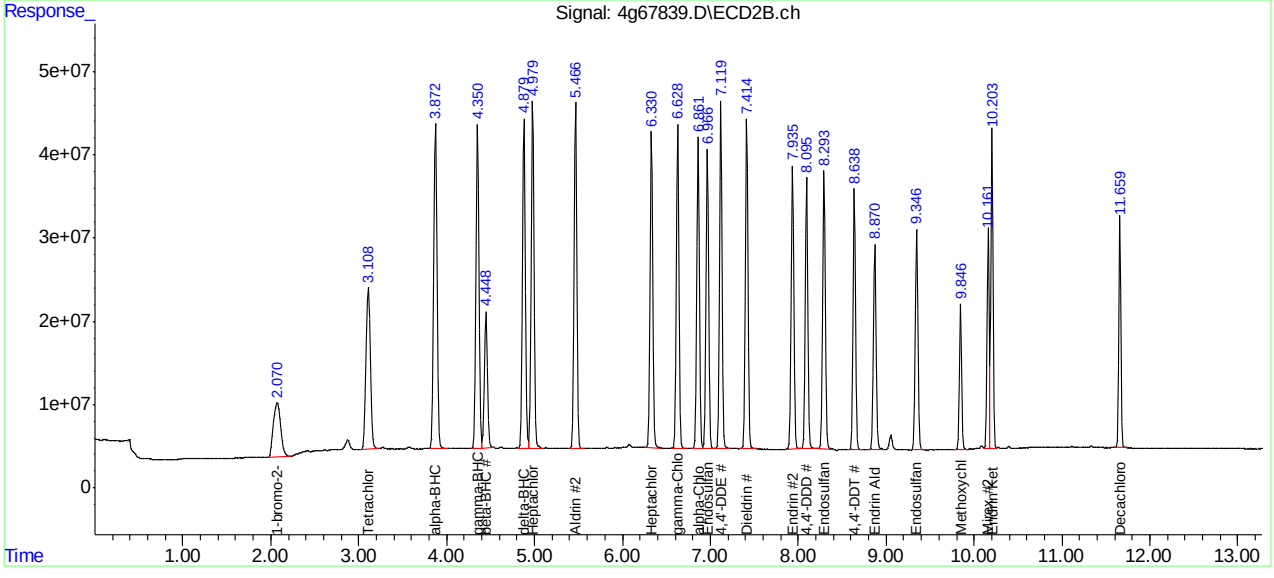
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67839.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 4:12 pm
Operator : dharas
Sample : ic1778-100
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:20:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 14:43:03 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
05/04/16 11:11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67840.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 4:27 pm
Operator : dharas
Sample : ic1778-500
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:18:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:09:54 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	1.803	2.075	424.0E6	370.6E6	50.000	50.000
	System Monitoring Compounds						
	Target Compounds						
32)	Chlordane...	3.963	4.768	119.9E6	138.0E6	549.150	581.233
33)	Chlordane...	4.595	5.669	153.9E6	129.0E6	509.420	572.820
34)	Chlordane...	5.389	6.629	518.8E6	474.6E6	575.261	553.319
35)	Chlordane...	5.561	6.862	842.6E6	770.3E6	579.366	552.743m
36)	Chlordane...	6.682	8.375	127.3E6	123.2E6	598.874	585.066
	SemiQuant Compounds - Not Calibrated on this Instrument						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

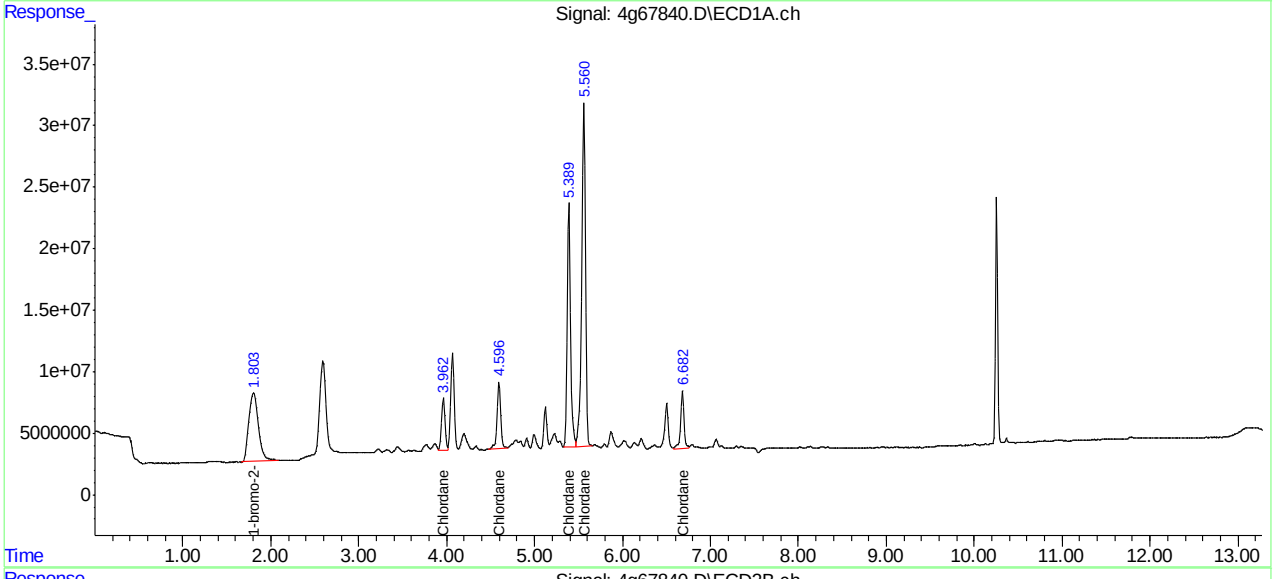
11.6.9 11

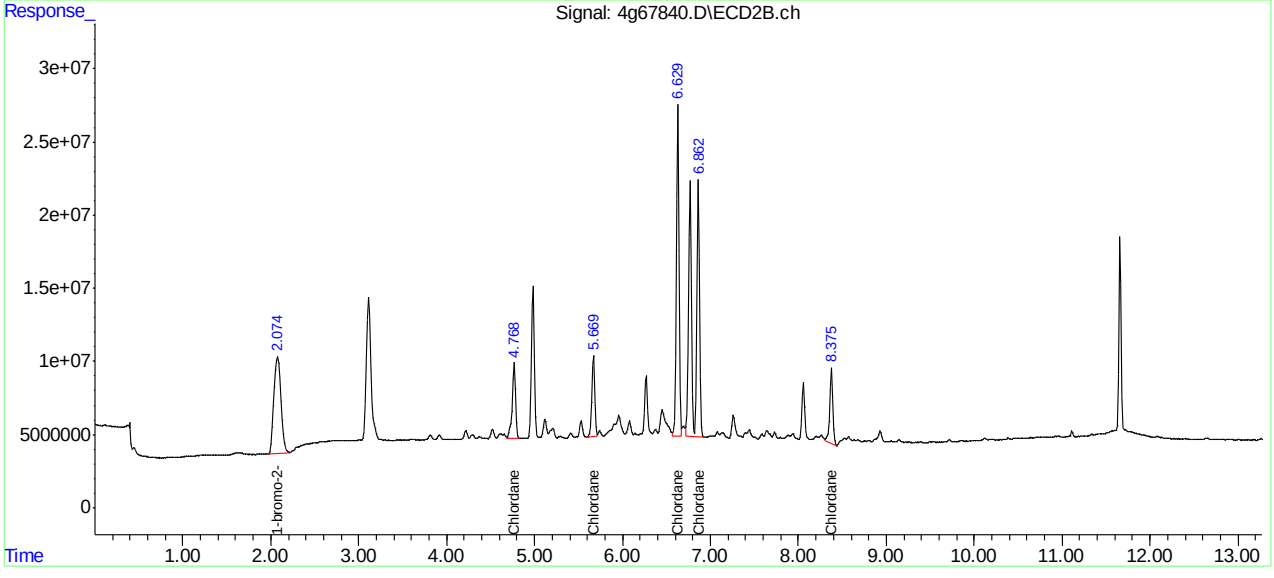
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67840.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 4:27 pm
Operator : dharas
Sample : ic1778-500
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:18:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:09:54 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC19996

Manual Integration Approval Summary

Sample Number:	G4G1778-IC1778	**Method:**	SW846 8081B
Lab FileID:	4G67840.D	**Analyst approved:**	05/03/16 15:16 Rebecca Krug
Injection Time:	05/02/16 16:27	**Supervisor approved:**	05/04/16 11:11 Gwendolyn Burns

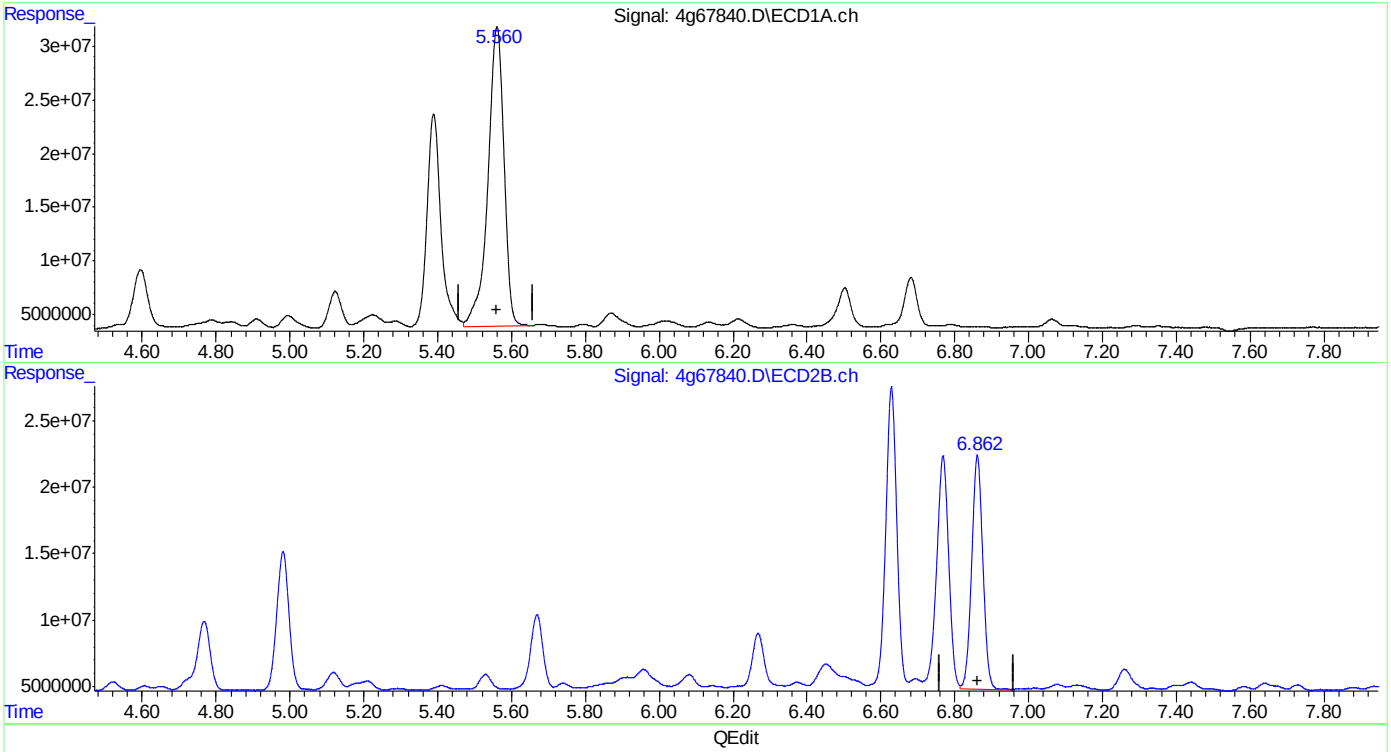
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	2.59	Poorly defined baseline
Chlordane-D		2	6.86	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	2	11.66	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67840.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 4:27 pm
Operator : dharas
Sample : ic1778-500
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:09:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:09:54 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(35) Chlordane {D}
5.561min 579.366 PPB
response 842595879

(35) Chlordane {D} #2
6.862min 264.113 PPB
response 368069999

(+) = Expected Retention Time
4PST1778.M Tue May 03 15:10:33 2016 RPT1

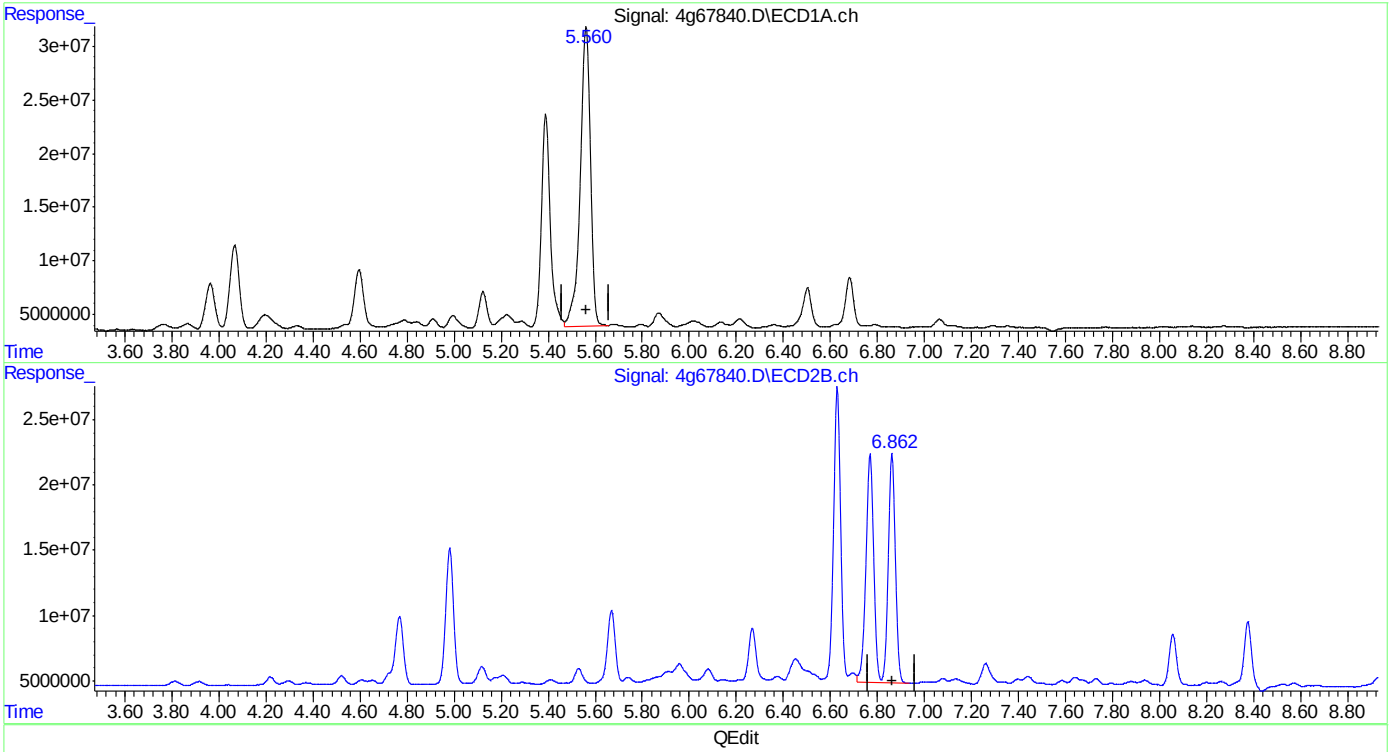
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67840.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 4:27 pm
Operator : dharas
Sample : ic1778-500
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:09:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:09:54 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(35) Chlordane {D}
5.561min 579.366 PPB
response 842595879

(35) Chlordane {D} #2
6.862min 552.743 PPB m
response 770308138

(+) = Expected Retention Time

SGS ACCUTEST JC19996

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 05/04/16 11:11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67841.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 4:42 pm
Operator : dharas
Sample : ic1778-500
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:17:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:14:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	1.797	2.074	438.0E6	383.1E6	50.000	50.000
	System Monitoring Compounds						
	Target Compounds						
26) L8	Toxaphene{A}	6.486	7.373	142.2E6	68329507	516.971	487.897
27) L8	Toxaphene{B}	6.756	8.261	146.0E6	80885233	511.480	467.993
28) L8	Toxaphene{C}	6.932	8.427	195.7E6	137.9E6	497.287	481.889
29) L8	Toxaphene{D}	7.293	8.870	130.7E6	81210154	544.384	453.381
30) L8	Toxaphene{E}	7.971	9.773	87027325	64276056	421.747	431.824
	SemiQuant Compounds - Not Calibrated on this Instrument						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

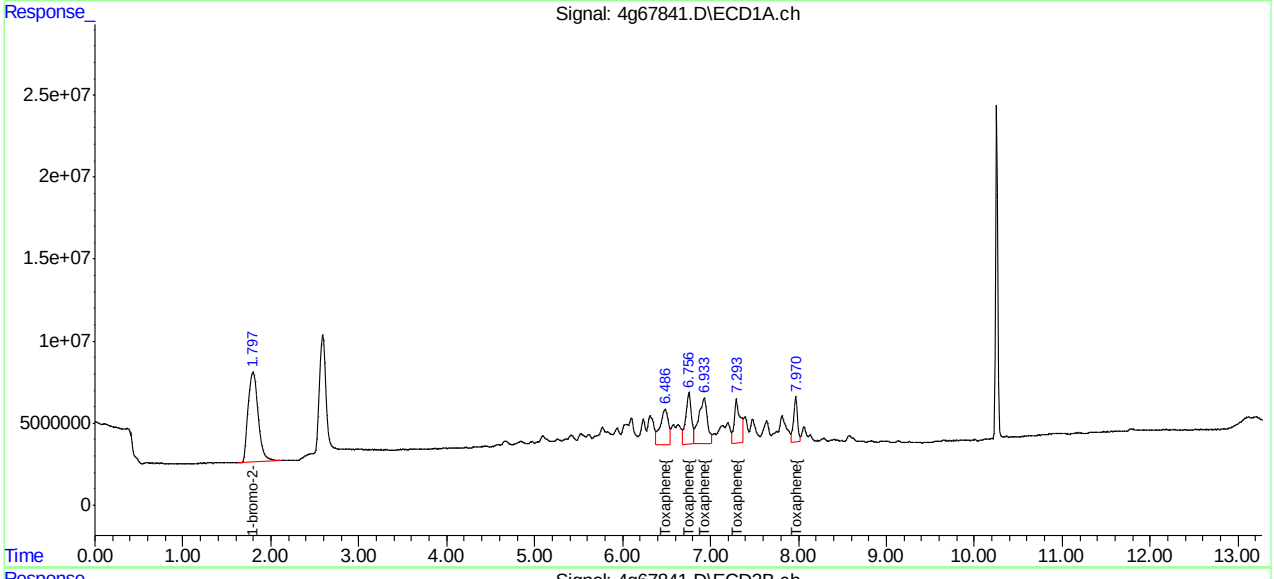
11.6.10 11

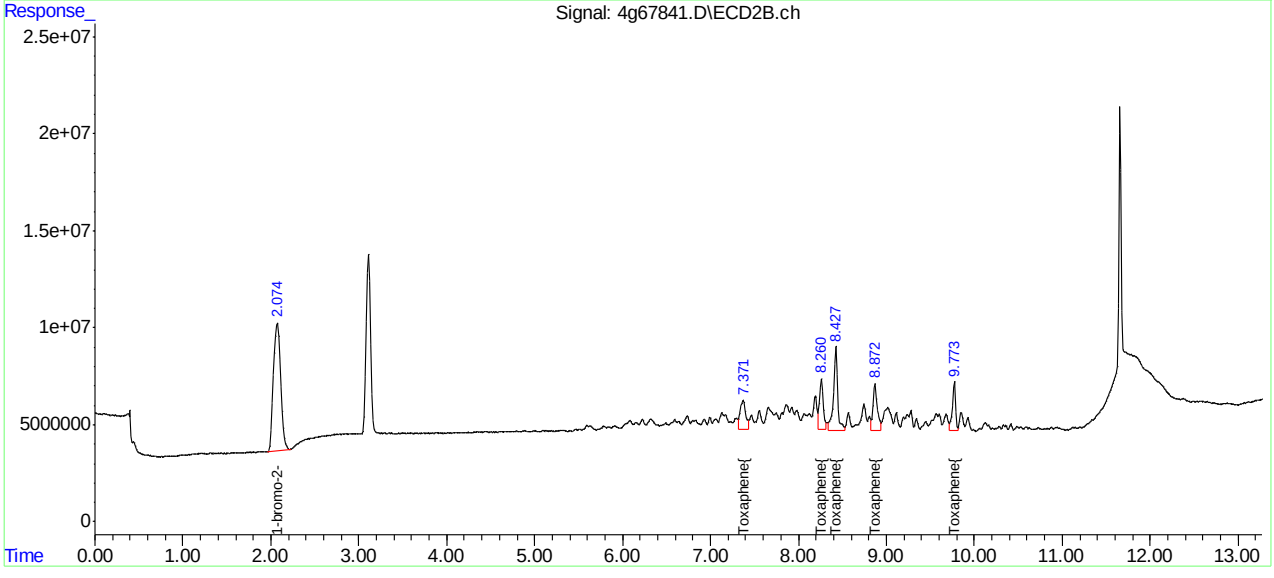
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67841.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 4:42 pm
Operator : dharas
Sample : ic1778-500
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:17:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:14:48 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC19996

Manual Integration Approval Summary

Sample Number:	G4G1778-IC1778	**Method:**	SW846 8081B
Lab FileID:	4G67841.D	**Analyst approved:**	05/03/16 15:16 Rebecca Krug
Injection Time:	05/02/16 16:42	**Supervisor approved:**	05/04/16 11:11 Gwendolyn Burns

Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	2.59	Poorly defined baseline
Tetrachloro-m-xylene	877-09-8	2	3.11	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	1	10.25	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	2	11.66	Poorly defined baseline

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
05/04/16 11:11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67842.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 4:57 pm
Operator : dharas
Sample : icv1778-25
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:45:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:20:10 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	1.797	2.070	447.9E6	395.6E6	50.000	50.000
25) I	1-bromo-2...	1.797	2.070	447.9E6	395.6E6	50.000	50.000
31) I	1-bromo-2...	1.797	2.070	447.9E6	395.6E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.590	3.108	180.0E6	155.5E6	23.306m	22.318
Spiked Amount		40.000 Range	30 - 150	Recovery	=	58.27%	55.80%
24) SA	Decachlor...	10.254	11.658	161.3E6	117.3E6	22.161m	23.749m
Spiked Amount		40.000		Recovery	=	55.40%	59.37%
	Target Compounds						
3) A	alpha-BHC	3.157	3.874	231.1E6	220.6E6	21.865	21.663
4) MA	gamma-BHC	3.504	4.352	211.8E6	200.5E6	22.924	22.153
5) MA	Heptachlor	3.824	4.979	210.1E6	203.5E6	24.217	21.822
6) B	beta-BHC	3.612	4.449	106.8E6	91892610	24.139	22.418
7) B	delta-BHC	4.064	4.881	189.3E6	192.9E6	22.486	22.832
8) MB	Aldrin	4.438	5.466	199.4E6	195.1E6	22.525	21.240
9) B	Heptachlo...	5.206	6.331	181.4E6	182.2E6	22.939	21.967
10) B	gamma-Chl...	5.388	6.629	187.1E6	181.9E6	23.668	22.684
11) B	alpha-Chl...	5.569	6.862	186.3E6	172.0E6	21.854	21.359
12) A	Endosulfan I	5.754	6.967	195.4E6	166.8E6	22.287	21.698
13) B	4,4'-DDE	5.699	7.121	161.7E6	182.2E6	20.456	22.688
14) MA	Dieldrin	6.093	7.414	191.9E6	182.2E6	23.091	22.721
15) MA	Endrin	6.433	7.935	181.5E6	165.6E6	22.929	23.169
16) A	4,4'-DDD	6.579	8.096	149.4E6	148.7E6	22.306	22.914
17) B	Endosulfa...	6.772	8.295	175.0E6	159.0E6	22.978	22.502
18) MA	4,4'-DDT	7.003	8.639	101.9E6	125.0E6	21.374	22.033m
19) B	Endrin Al...	7.409	8.871	161.1E6	122.6E6	25.053	22.836
20) B	Endosulfa...	8.103	9.348	158.3E6	130.1E6	22.675	22.009
21) A	Methoxychlor	7.816	9.846	66800291	67219438	22.387	21.810m
23) B	Endrin Ke...	8.567	10.205	186.3E6	142.4E6	23.077	21.947

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

11.6.11
11

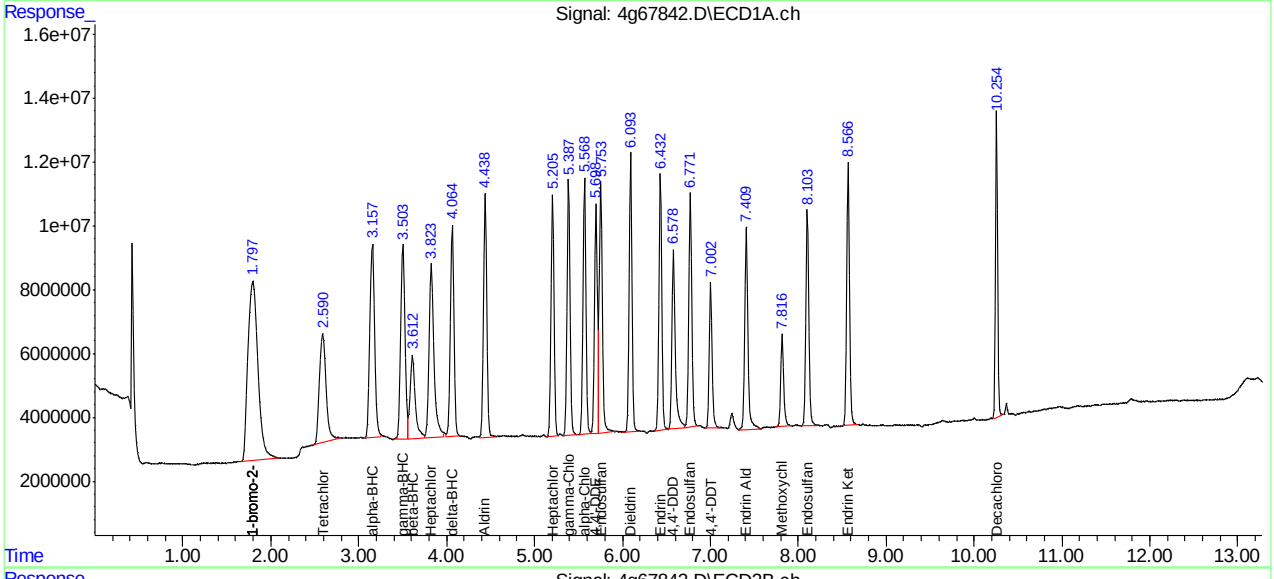
SGS ACCUTEST JC19996

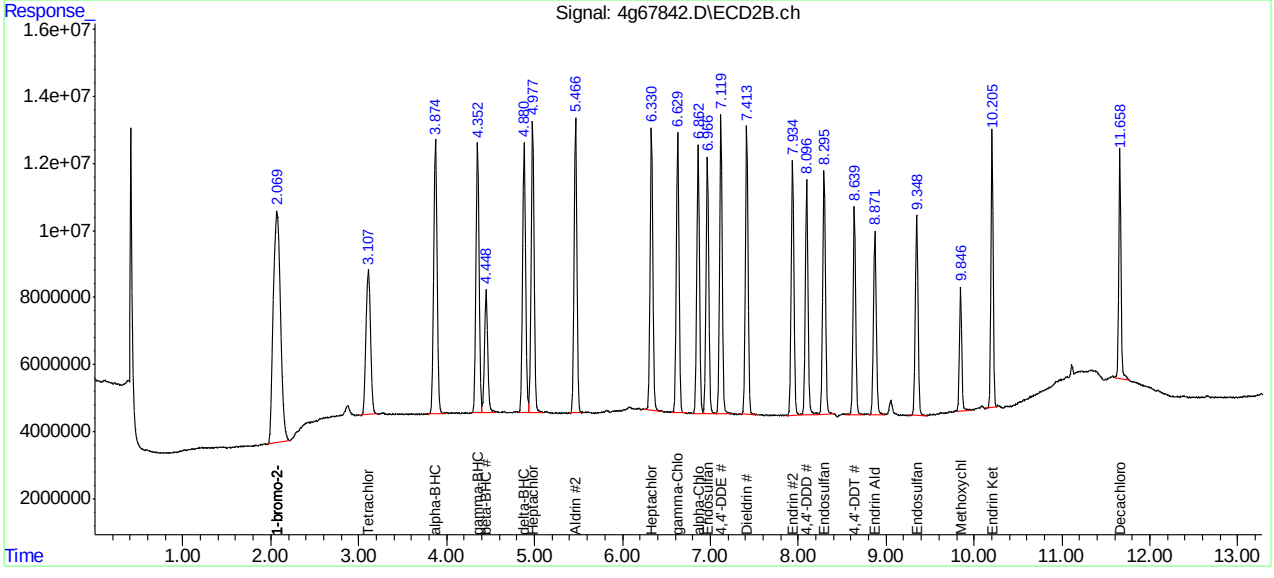
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67842.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 4:57 pm
Operator : dharas
Sample : icv1778-25
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:45:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:20:10 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G4G1778-ICV1778	**Method:**	SW846 8081B
Lab FileID:	4G67842.D	**Analyst approved:**	05/03/16 16:01 Joseph Ravino
Injection Time:	05/02/16 16:57	**Supervisor approved:**	05/04/16 11:11 Gwendolyn Burns

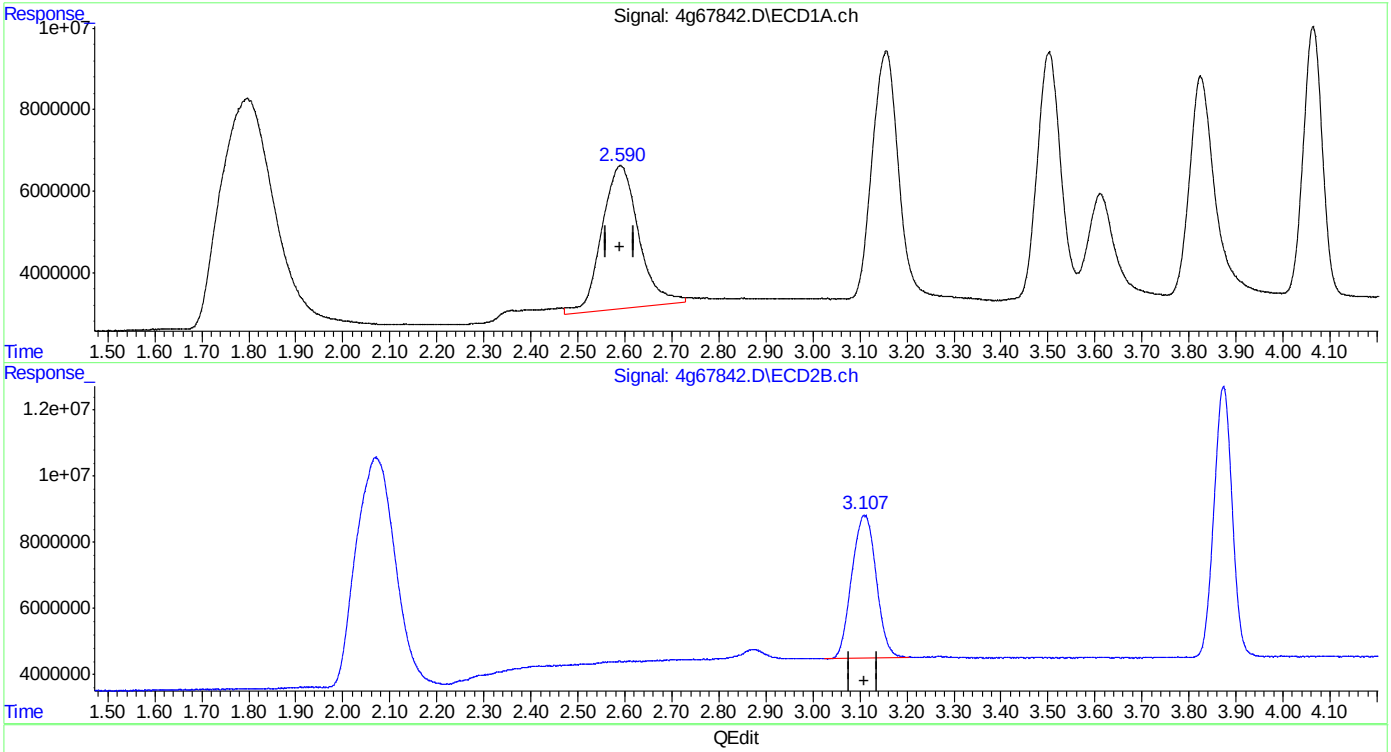
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	2.59	Poor instrument integration
4,4'-DDT	50-29-3	2	8.64	Poor instrument integration
Methoxychlor	72-43-5	2	9.85	Poor instrument integration
Decachlorobiphenyl	2051-24-3	1	10.25	Poor instrument integration
Decachlorobiphenyl	2051-24-3	2	11.66	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67842.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 4:57 pm
Operator : dharas
Sample : icv1778-25
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:40:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:20:10 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(2) Tetrachloro-m-xylene (SAB)
2.591min 25.008 PPB
response 193134554

(2) Tetrachloro-m-xylene #2 (SAB)
3.108min 22.318 PPB
response 155495357

(+) = Expected Retention Time

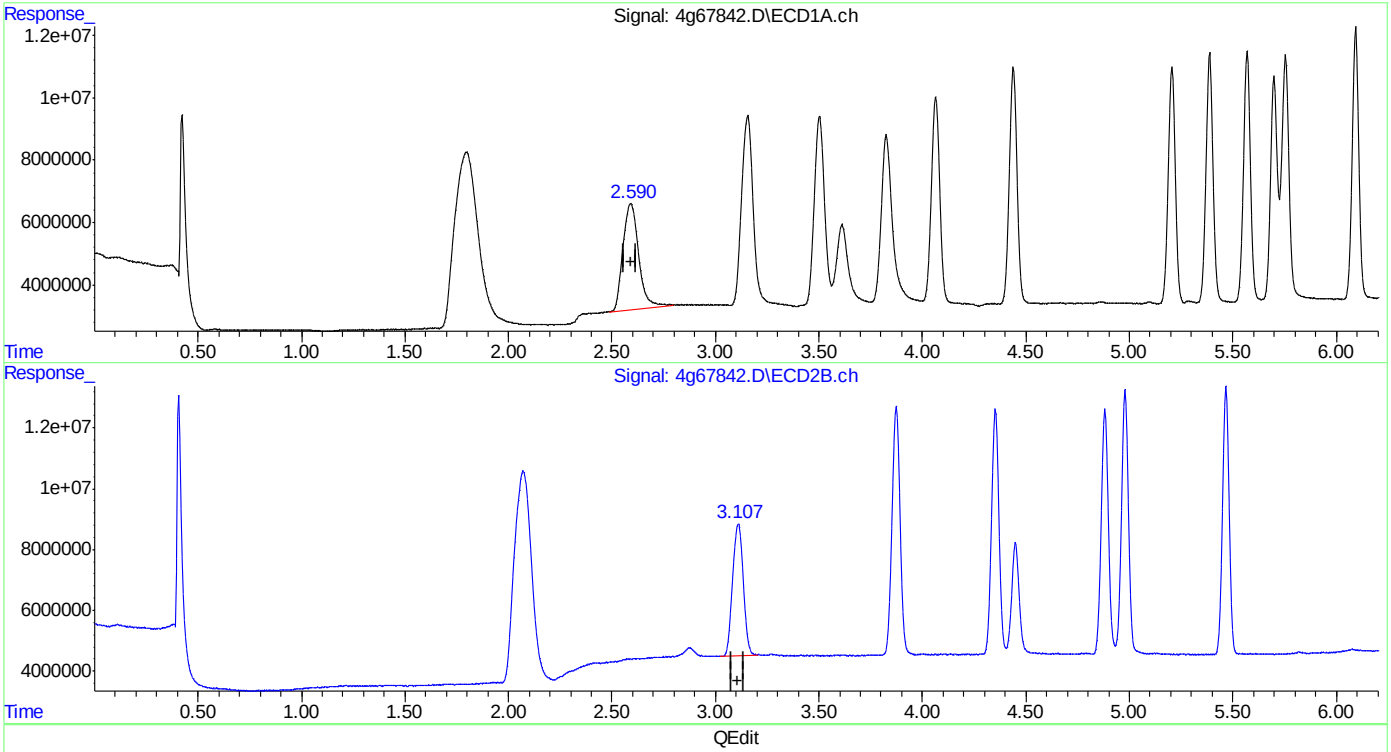
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67842.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 4:57 pm
Operator : dharas
Sample : icv1778-25
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:40:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:20:10 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(2) Tetrachloro-m-xylene (SAB)
2.590min 23.306 PPB m
response 179985359

(2) Tetrachloro-m-xylene #2 (SAB)
3.108min 22.318 PPB
response 155495357

(+) = Expected Retention Time
4PST1778.M Tue May 03 15:44:02 2016 RPT1

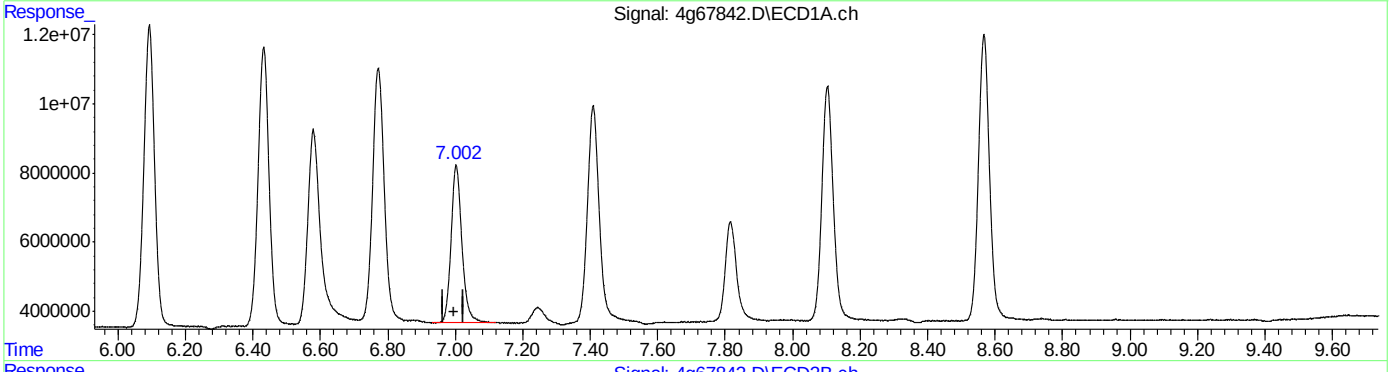
SGS ACCUTEST JC19996

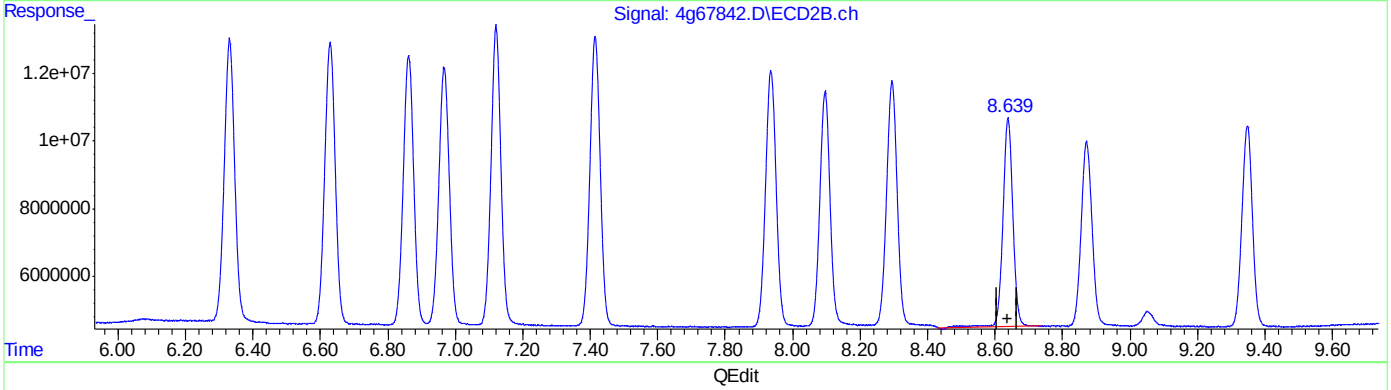
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67842.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 4:57 pm
Operator : dharas
Sample : icv1778-25
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:40:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:20:10 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(18) 4,4'-DDT (MA)
7.003min 21.374 PPB
response 101850530

(18) 4,4'-DDT #2 (MA)
8.639min 22.461 PPB
response 127387090

(+) = Expected Retention Time

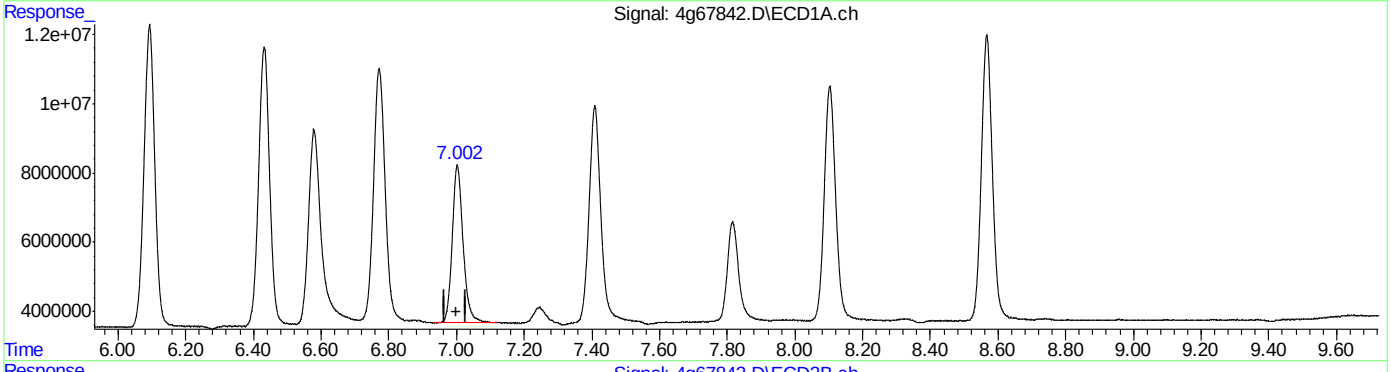
SGS ACCUTEST JC19996

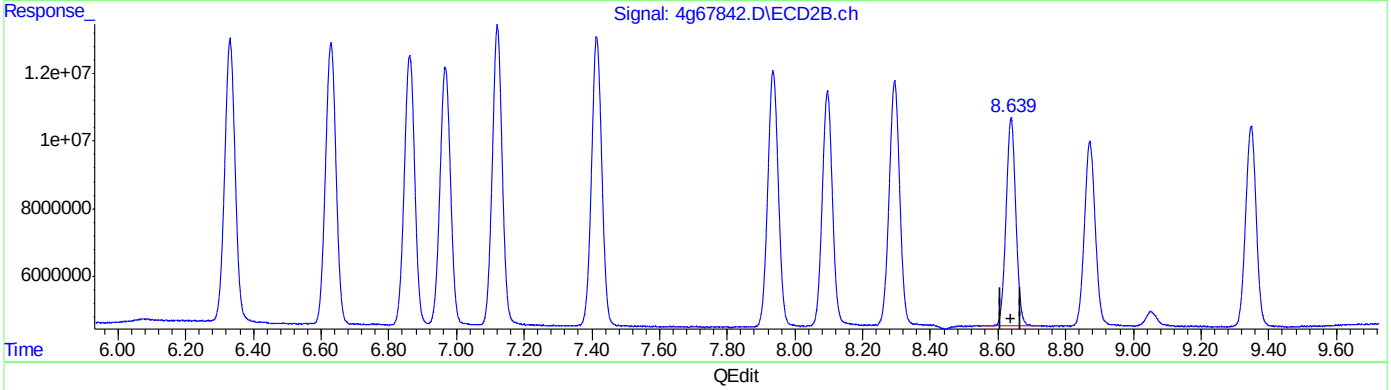
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67842.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 4:57 pm
Operator : dharas
Sample : icv1778-25
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:40:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:20:10 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(18) 4,4'-DDT (MA)
7.003min 21.374 PPB
response 101850530

(18) 4,4'-DDT #2 (MA)
8.639min 22.033 PPB m
response 124961944

(+) = Expected Retention Time

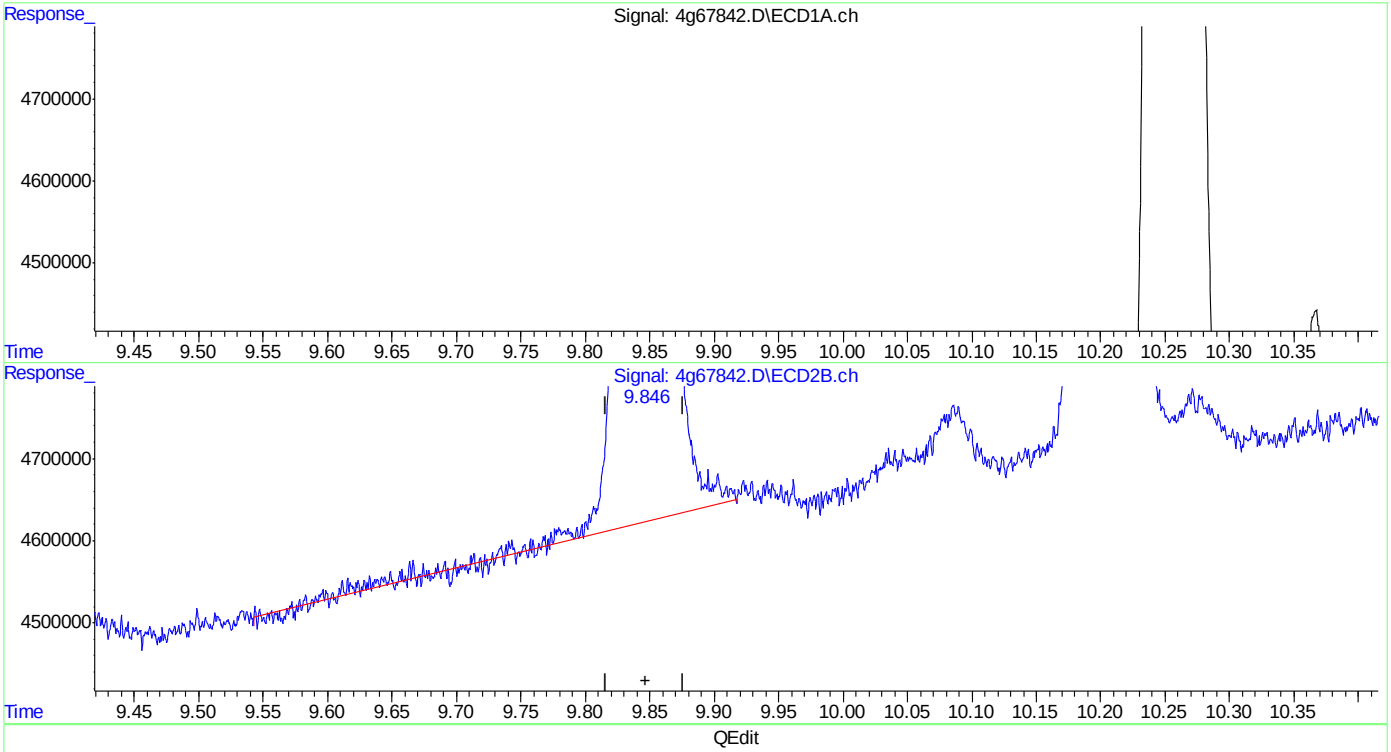
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67842.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 4:57 pm
Operator : dharas
Sample : icv1778-25
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:40:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:20:10 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(21) Methoxychlor (A)
7.816min 22.387 PPB
response 66800291

(21) Methoxychlor #2 (A)
9.847min 21.412 PPB
response 65994725

(+) = Expected Retention Time

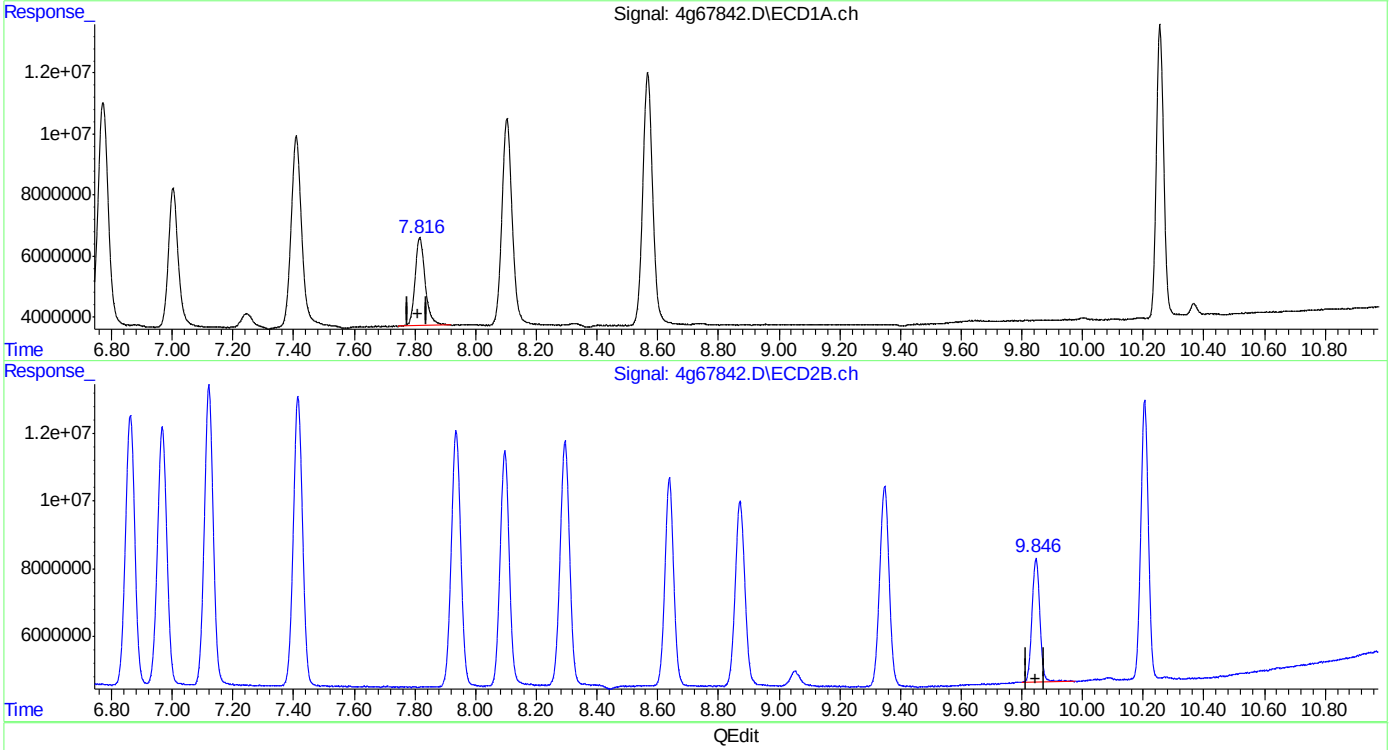
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67842.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 4:57 pm
Operator : dharas
Sample : icv1778-25
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:40:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:20:10 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(21) Methoxychlor (A)
7.816min 22.387 PPB
response 66800291

(21) Methoxychlor #2 (A)
9.846min 21.810 PPB m
response 67219438

(+) = Expected Retention Time
4PST1778.M Tue May 03 15:44:44 2016 RPT1

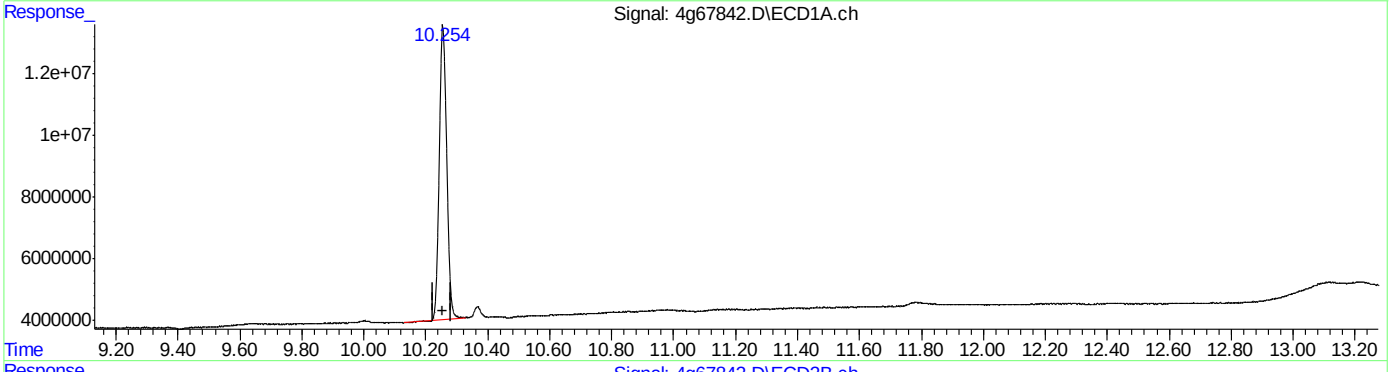
SGS ACCUTEST JC19996

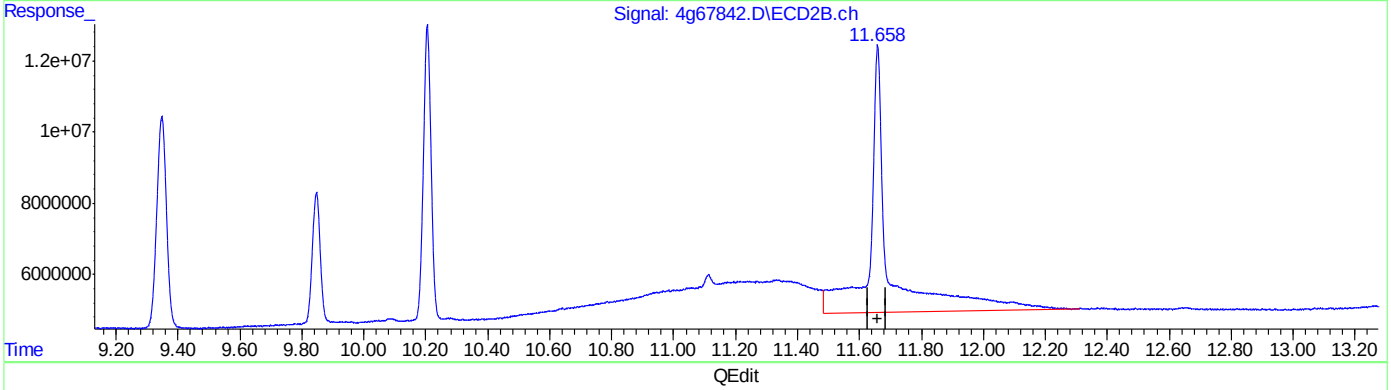
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67842.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 4:57 pm
Operator : dharas
Sample : icv1778-25
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:40:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:20:10 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(24) Decachlorobiphenyl (SA)
10.255min 21.851 PPB
response 159017875

(24) Decachlorobiphenyl #2 (SA)
11.659min 65.026 PPB
response 321299025

(+) = Expected Retention Time

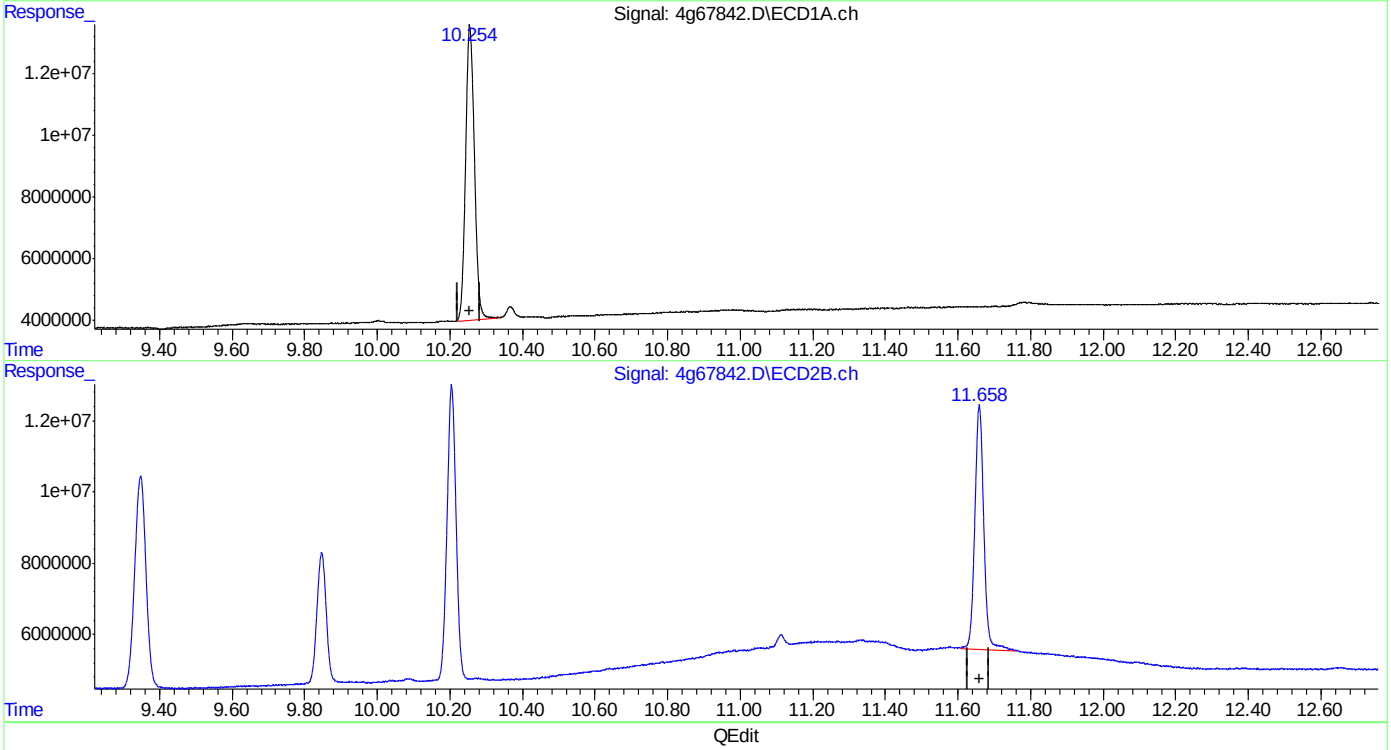
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67842.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 4:57 pm
Operator : dharas
Sample : icv1778-25
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:40:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:20:10 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(24) Decachlorobiphenyl (SA)
10.254min 22.161 PPB m
response 161275990

(24) Decachlorobiphenyl #2 (SA)
11.658min 23.749 PPB m
response 117342933

(+) = Expected Retention Time

SGS ACCUTEST JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67843.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 5:12 pm
Operator : dharas
Sample : icv1778-25
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:46:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:20:10 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	1.798	2.076	476.0E6	416.5E6	50.000	50.000
25) I	1-bromo-2...	1.798	2.076	476.0E6	416.5E6	50.000	50.000
31) I	1-bromo-2...	1.798	2.076	476.0E6	416.5E6	50.000	50.000
	System Monitoring Compounds						
	Target Compounds						
22)	Mirex	8.000	10.161	190.9E6	133.7E6	25.818	25.608
	SemiQuant Compounds - Not Calibrated on this Instrument						

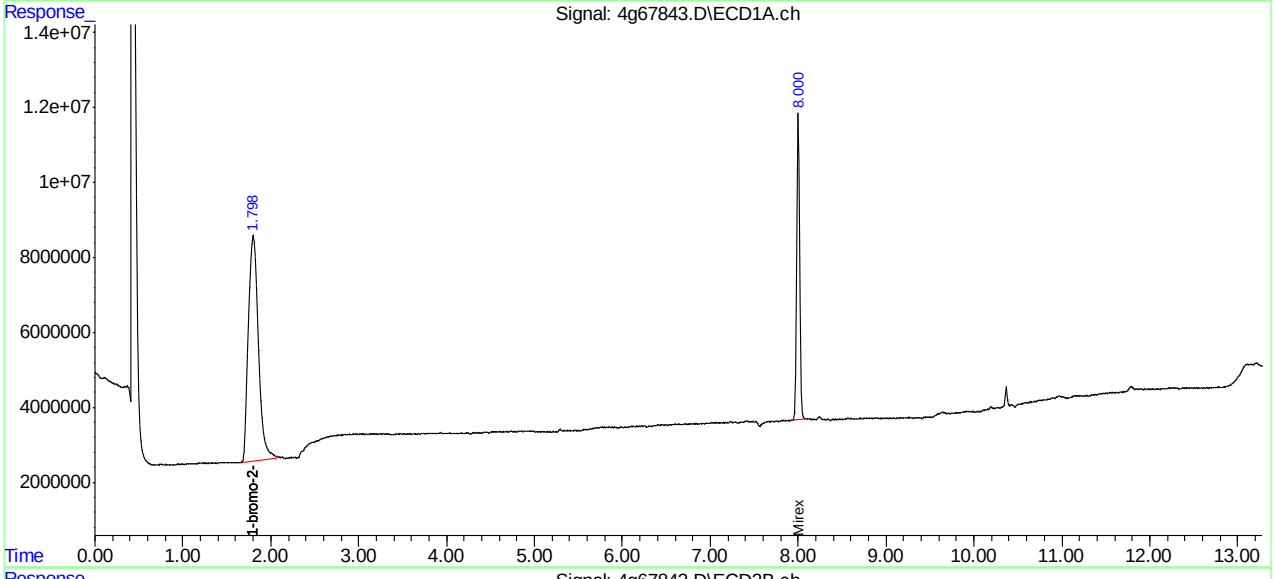
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

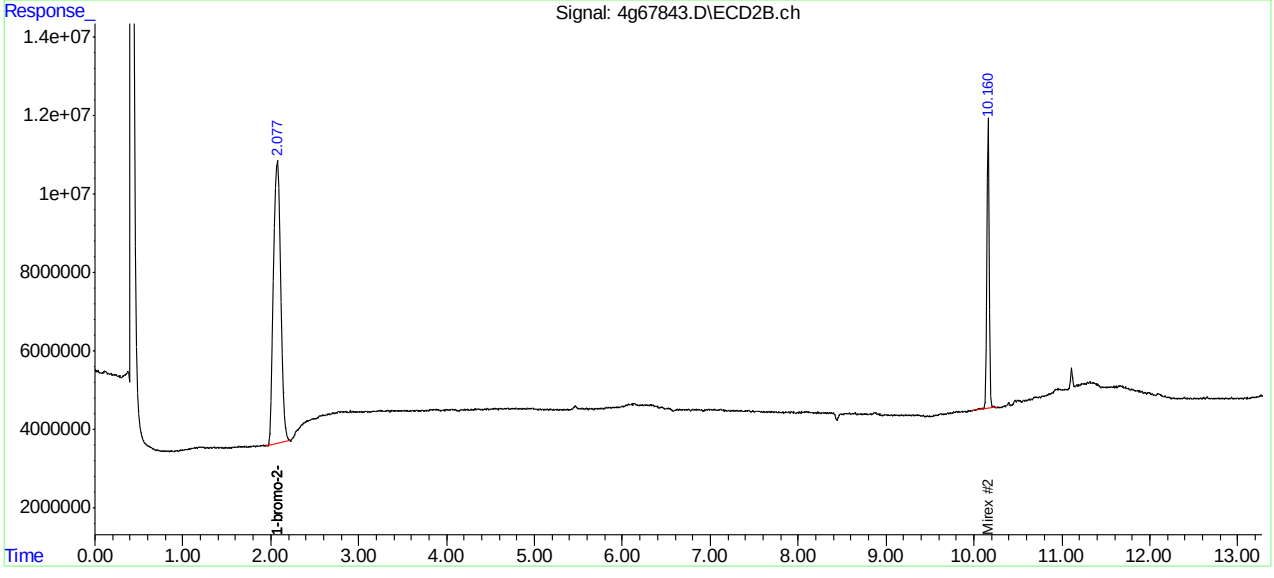
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67843.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 5:12 pm
Operator : dharas
Sample : icv1778-25
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:46:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:20:10 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
05/04/16 11:11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67844.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 5:27 pm
Operator : dharas
Sample : icv1778-500
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:49:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:20:10 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	1.803	2.077	439.5E6	383.3E6	50.000	50.000
25) I	1-bromo-2...	1.803	2.077	439.5E6	383.3E6	50.000	50.000
31) I	1-bromo-2...	1.803	2.077	439.5E6	383.3E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.593	3.113	359.8E6	329.5E6	47.476m	48.809
Spiked Amount		40.000 Range	30 - 150	Recovery	=	118.69%	122.02%
24) SA	Decachlor...	10.255	11.658	328.6E6	215.7E6	46.017m	45.043
Spiked Amount		40.000		Recovery	=	115.04%	112.61%
	Target Compounds						
32)	Chlordane...	3.962	4.767	145.4E6	154.4E6	584.851	540.811
33)	Chlordane...	4.595	5.667	159.1E6	134.0E6	498.659	502.048
34)	Chlordane...	5.389	6.628	516.8E6	468.5E6	480.429	477.267
35)	Chlordane...	5.561	6.861	857.8E6	770.4E6	491.023	483.494m
36)	Chlordane...	6.682	8.374	110.1E6	122.4E6	417.425	480.465m

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

11.6.13 11

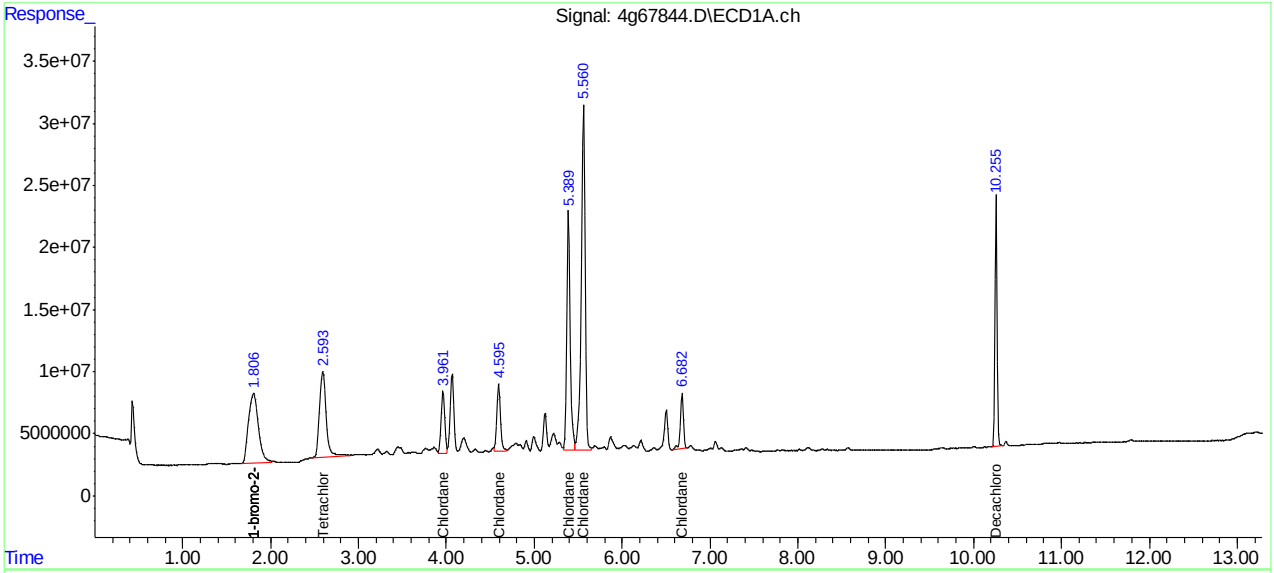
SGS ACCUTEST JC19996

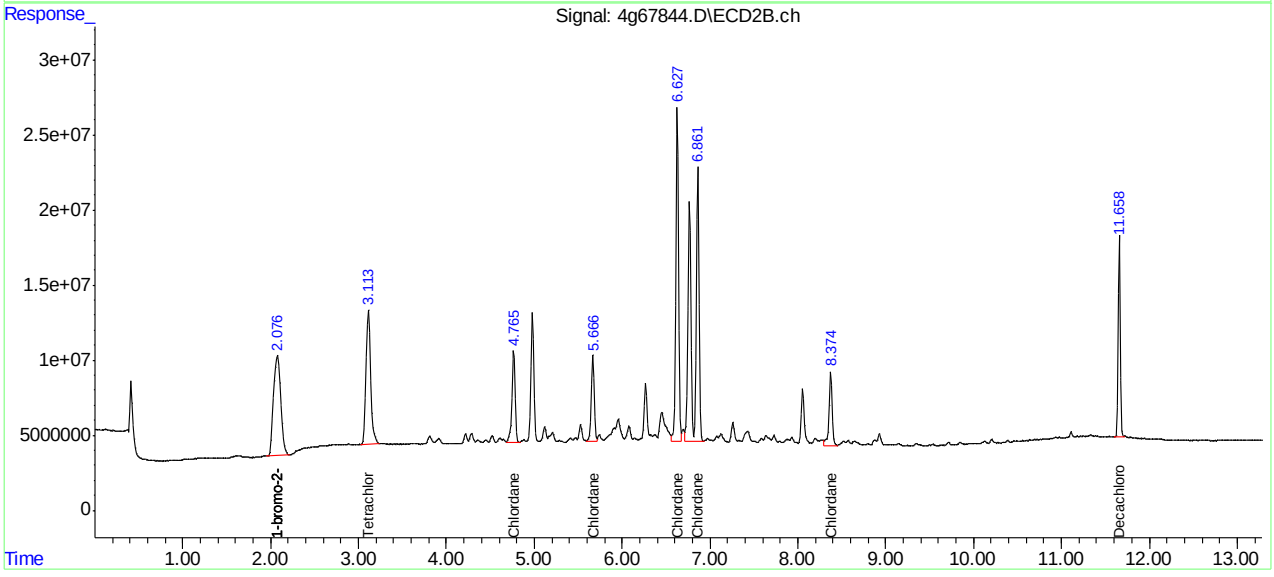
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67844.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 5:27 pm
Operator : dharas
Sample : icv1778-500
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:49:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:20:10 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC19996

Manual Integration Approval Summary

Sample Number:	G4G1778-ICV1778	**Method:**	SW846 8081B
Lab FileID:	4G67844.D	**Analyst approved:**	05/03/16 16:01 Joseph Ravino
Injection Time:	05/02/16 17:27	**Supervisor approved:**	05/04/16 11:11 Gwendolyn Burns

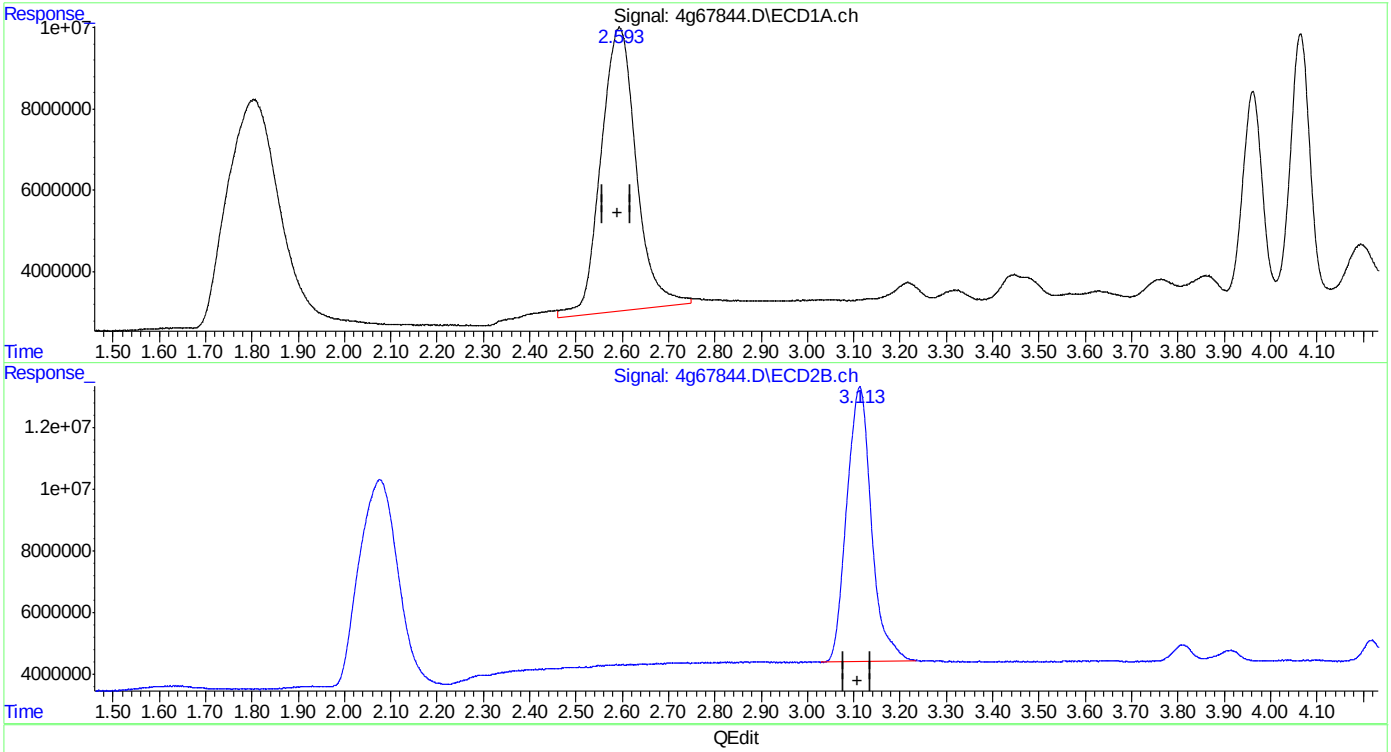
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	2.59	Poor instrument integration
Chlordane-D		2	6.86	Split peak
Chlordane-E		2	8.37	Poor instrument integration
Decachlorobiphenyl	2051-24-3	1	10.26	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67844.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 5:27 pm
Operator : dharas
Sample : icv1778-500
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:46:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:20:10 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(2) Tetrachloro-m-xylene (SAB)
2.594min 48.835 PPB
response 370119696

(2) Tetrachloro-m-xylene #2 (SAB)
3.113min 48.809 PPB
response 329519867

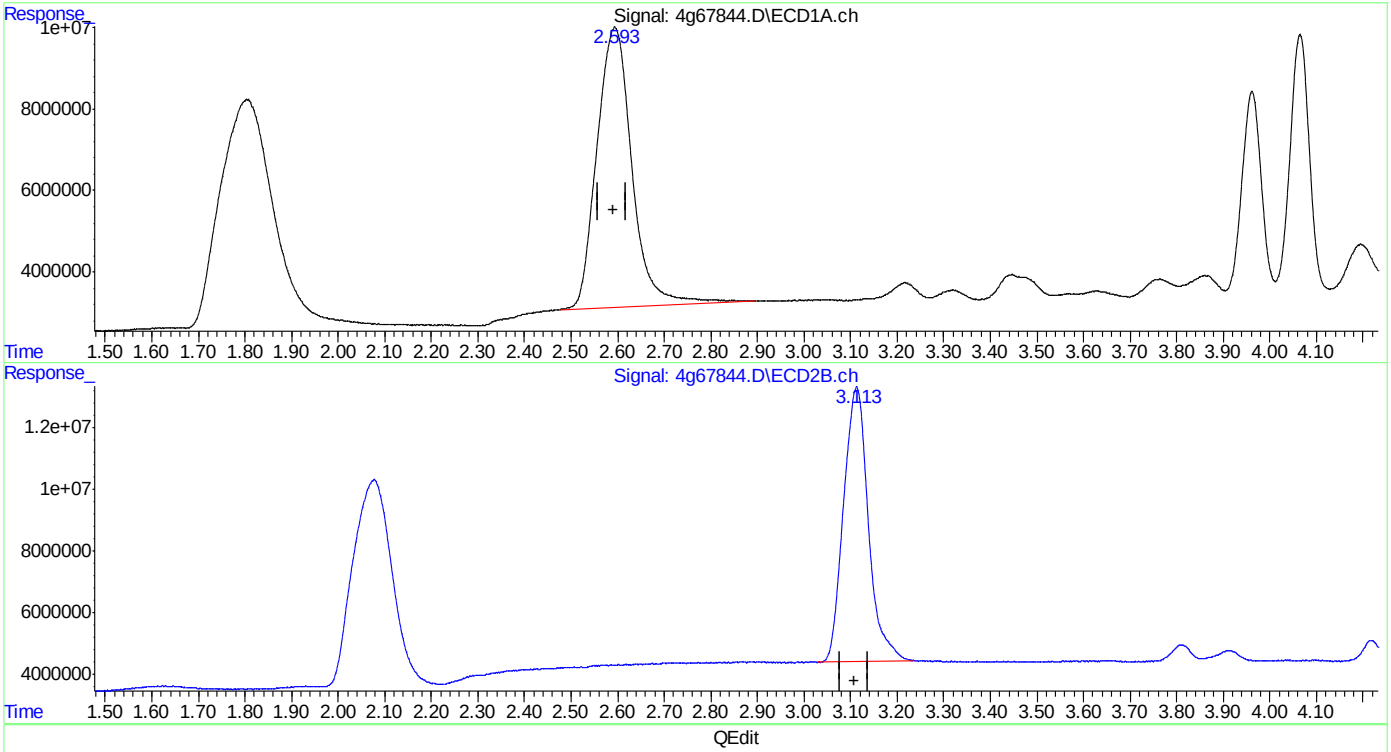
(+) = Expected Retention Time
4PST1778.M Tue May 03 15:47:00 2016 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67844.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 5:27 pm
Operator : dharas
Sample : icv1778-500
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:46:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:20:10 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(2) Tetrachloro-m-xylene (SAB)
2.593min 47.476 PPB m
response 359820827

(2) Tetrachloro-m-xylene #2 (SAB)
3.113min 48.809 PPB
response 329519867

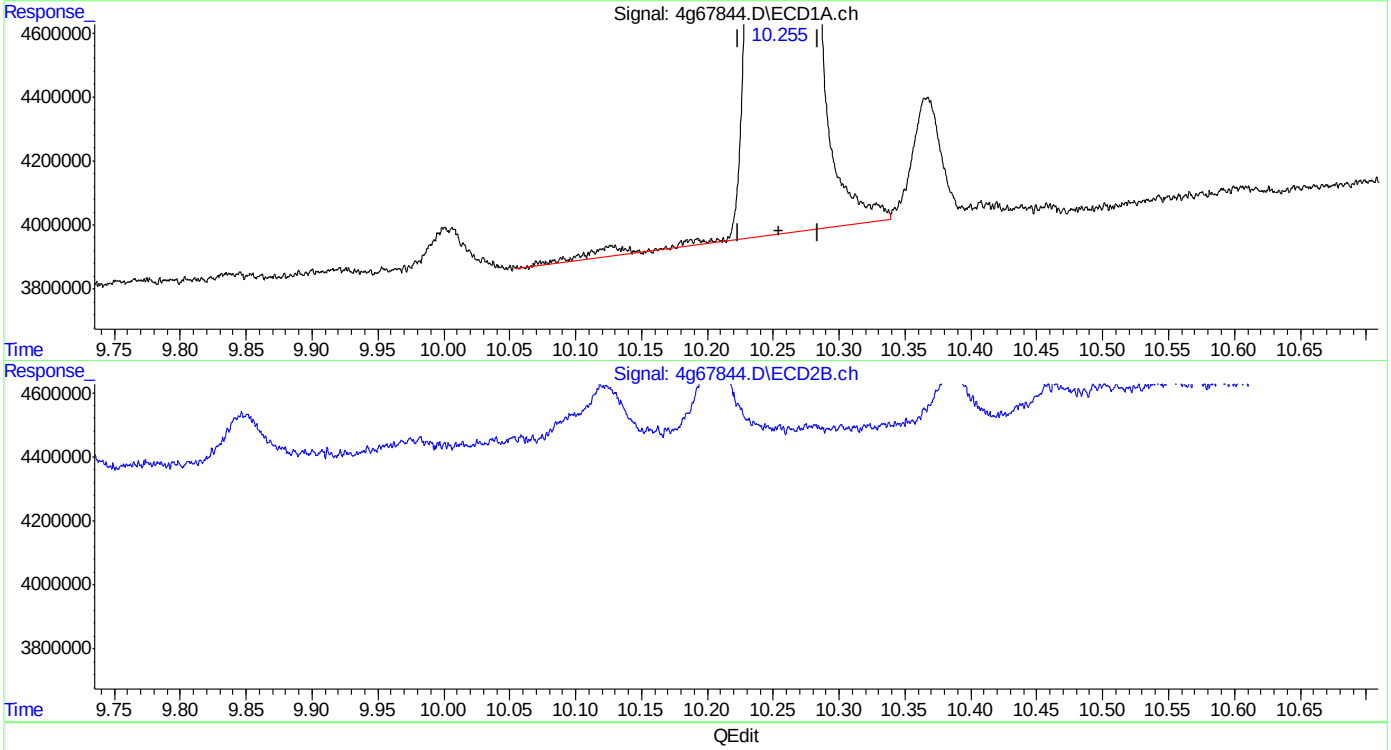
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67844.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 5:27 pm
Operator : dharas
Sample : icv1778-500
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:46:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:20:10 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(24) Decachlorobiphenyl (SA)
10.256min 46.239 PPB
response 330233091

(24) Decachlorobiphenyl #2 (SA)
11.658min 45.043 PPB
response 215658476

(+) = Expected Retention Time

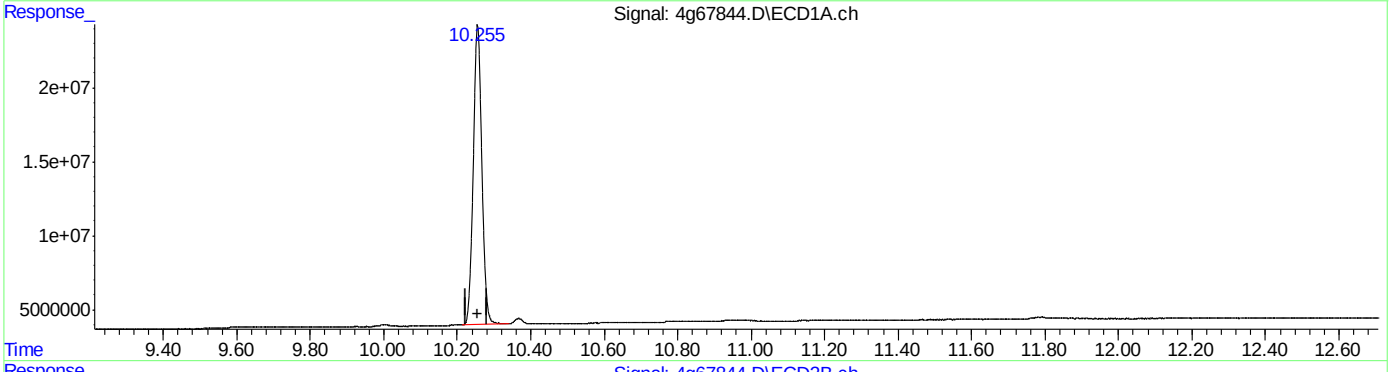
SGS ACCUTEST JC19996

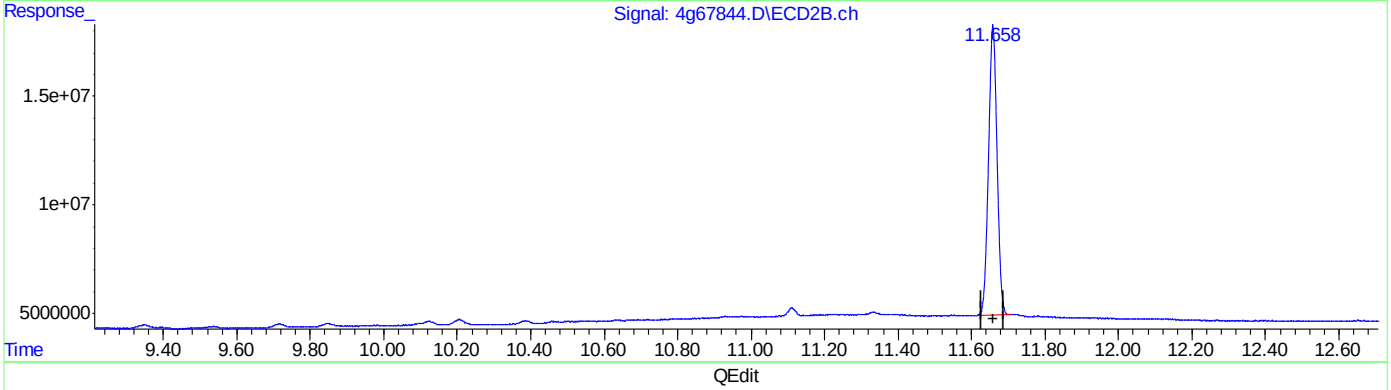
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67844.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 5:27 pm
Operator : dharas
Sample : icv1778-500
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:46:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:20:10 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(24) Decachlorobiphenyl (SA)
10.255min 46.017 PPB m
response 328647279

(24) Decachlorobiphenyl #2 (SA)
11.658min 45.043 PPB
response 215658476

(+) = Expected Retention Time

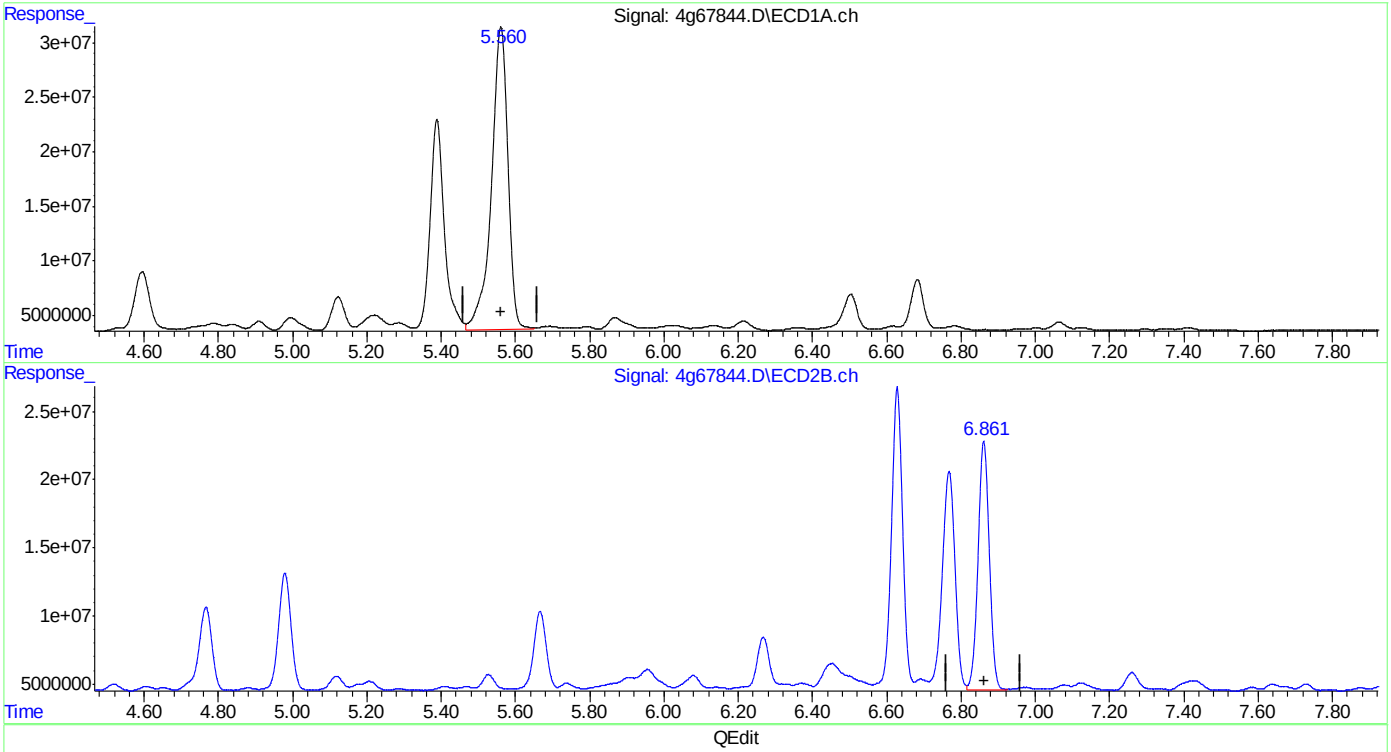
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67844.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 5:27 pm
Operator : dharas
Sample : icv1778-500
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:46:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:20:10 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(35) Chlordane {D}
5.561min 491.023 PPB
response 857819158

(35) Chlordane {D} #2
6.861min 241.391 PPB
response 384618387

(+) = Expected Retention Time

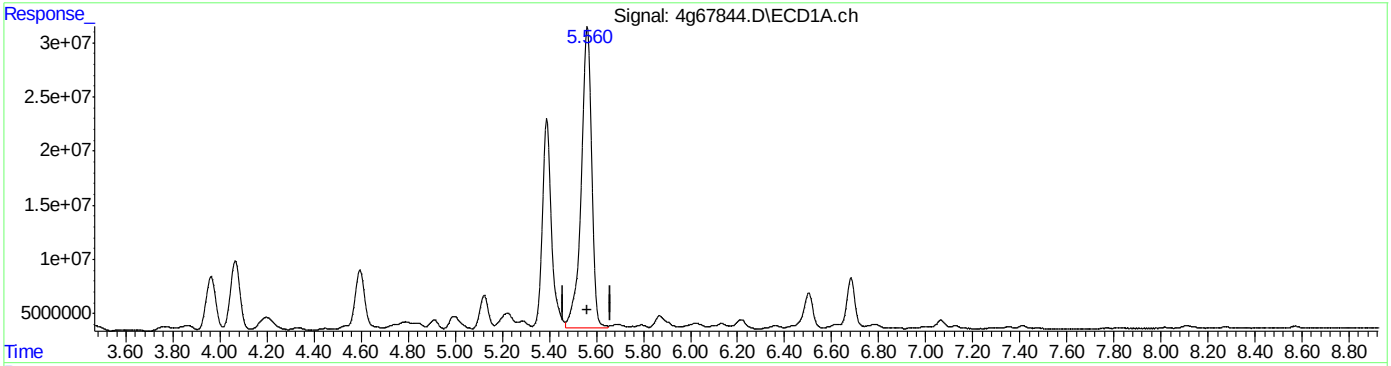
SGS ACCUTEST JC19996

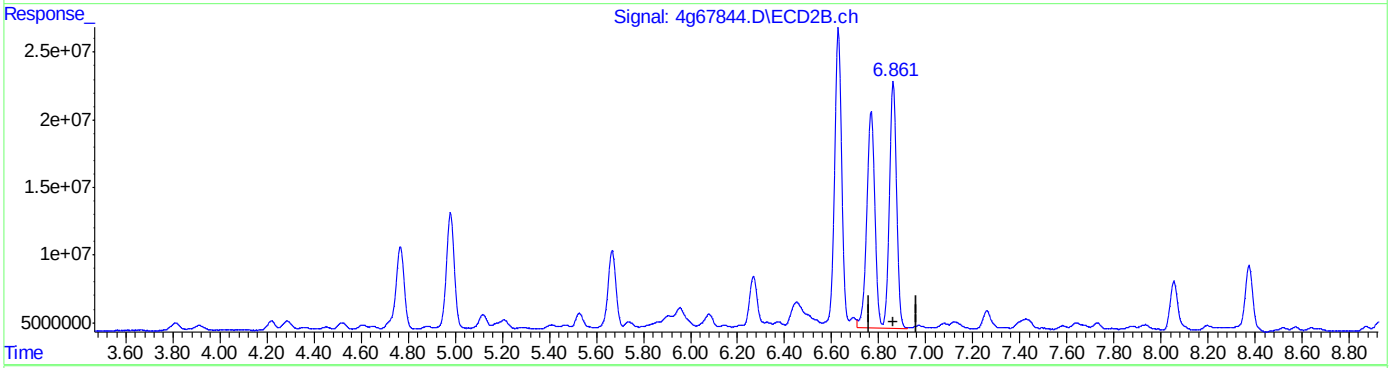
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67844.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 5:27 pm
Operator : dharas
Sample : icv1778-500
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:46:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:20:10 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(35) Chlordane {D}
5.561min 491.023 PPB
response 857819158

(35) Chlordane {D} #2
6.861min 483.494 PPB m
response 770372391

(+) = Expected Retention Time
4PST1778.M Tue May 03 15:49:08 2016 RPT1

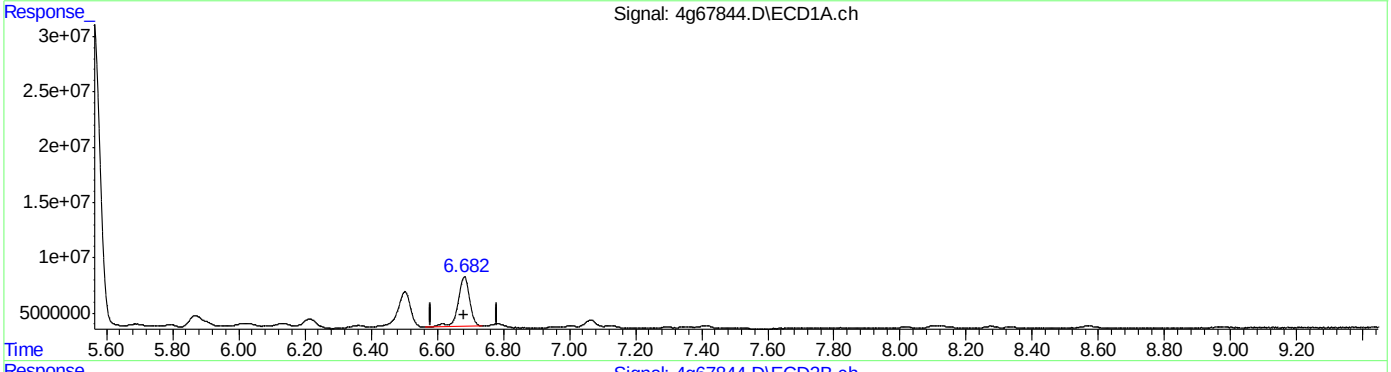
SGS ACCUTEST JC19996

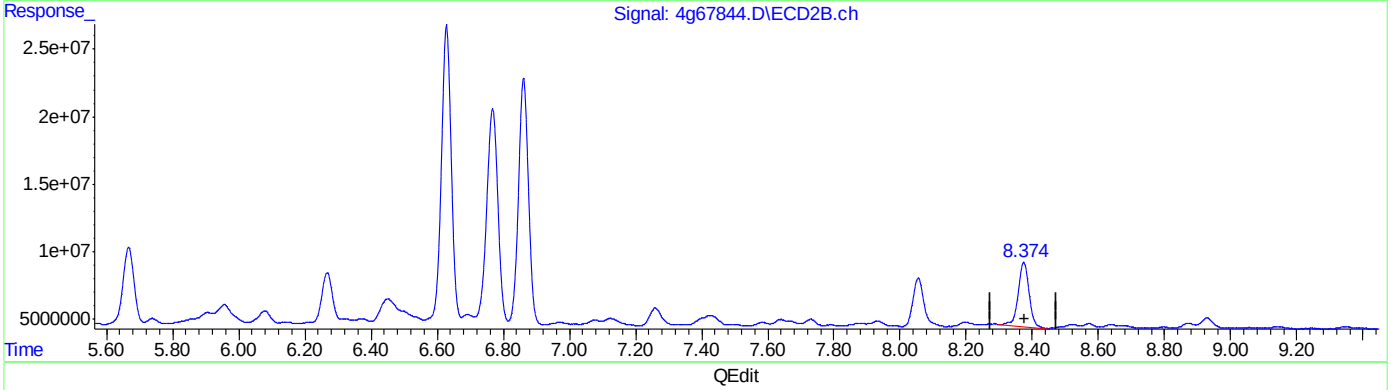
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67844.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 5:27 pm
Operator : dharas
Sample : icv1778-500
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:46:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:20:10 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(36) Chlordane {E}
6.682min 417.425 PPB
response 110145191

(36) Chlordane {E} #2
8.374min 424.264 PPB
response 108125507

(+) = Expected Retention Time
4PST1778.M Tue May 03 15:49:13 2016 RPT1

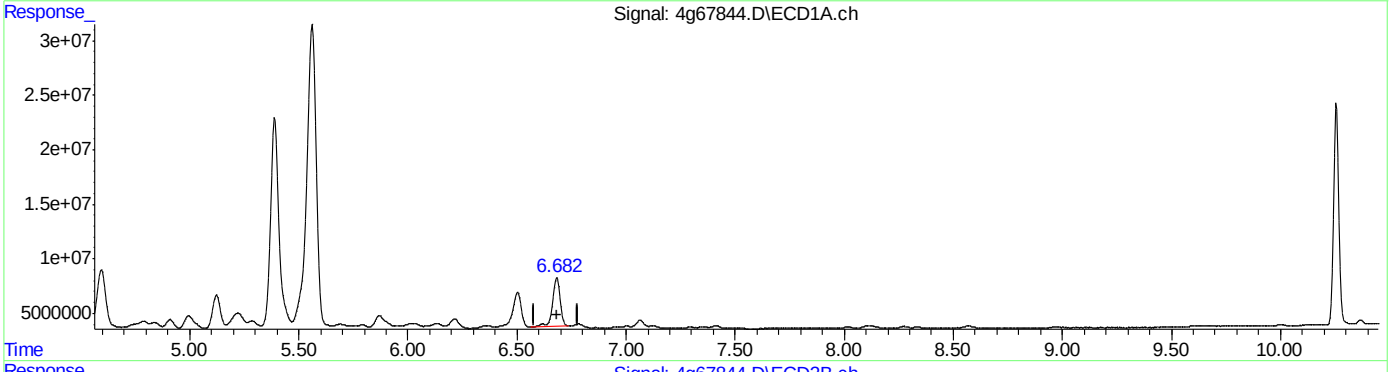
SGS ACCUTEST JC19996

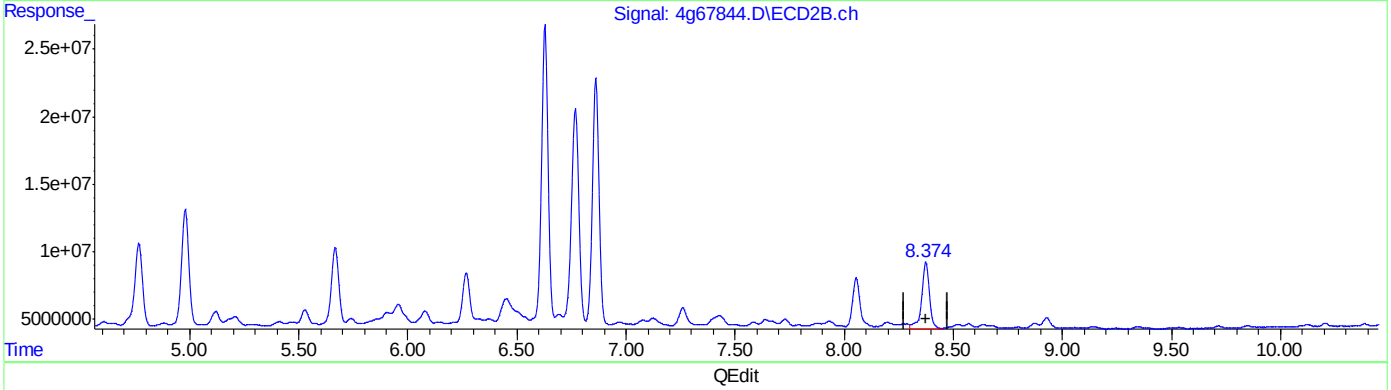
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67844.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 5:27 pm
Operator : dharas
Sample : icv1778-500
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:46:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:20:10 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(36) Chlordane {E}
6.682min 417.425 PPB
response 110145191

(36) Chlordane {E} #2
8.374min 480.465 PPB m
response 122448490

(+) = Expected Retention Time
4PST1778.M Tue May 03 15:49:25 2016 RPT1

SGS ACCUTEST JC19996

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
05/04/16 11:11

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67845.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 5:43 pm
Operator : dharas
Sample : icv1778-500
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:57:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:20:10 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	1.802	2.078	439.8E6	388.8E6	50.000	50.000
25) I	1-bromo-2...	1.802	2.078	439.8E6	388.8E6	50.000	50.000
31) I	1-bromo-2...	1.802	2.078	439.8E6	388.8E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.596	3.112	339.7E6	304.8E6	44.795m	44.512
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 111.99%	111.28%
24) SA	Decachlor...	10.256	11.658	317.4E6	216.6E6	44.418	44.611
	Spiked Amount	40.000			Recovery	= 111.04%	111.53%
	Target Compounds						
26) L8	Toxaphene{A}	6.480	7.374	134.8E6	71828526	471.946	517.994
27) L8	Toxaphene{B}	6.757	8.262	142.9E6	87910102	487.368	535.557
28) L8	Toxaphene{C}	6.925	8.425	193.6E6	141.4E6	492.678	505.345
29) L8	Toxaphene{D}	7.297	8.868	130.3E6	86061044	496.434m	522.195
30) L8	Toxaphene{E}	7.971	9.772	86943512	66083312	497.486	506.616
	SemiQuant Compounds - Not Calibrated on this Instrument						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

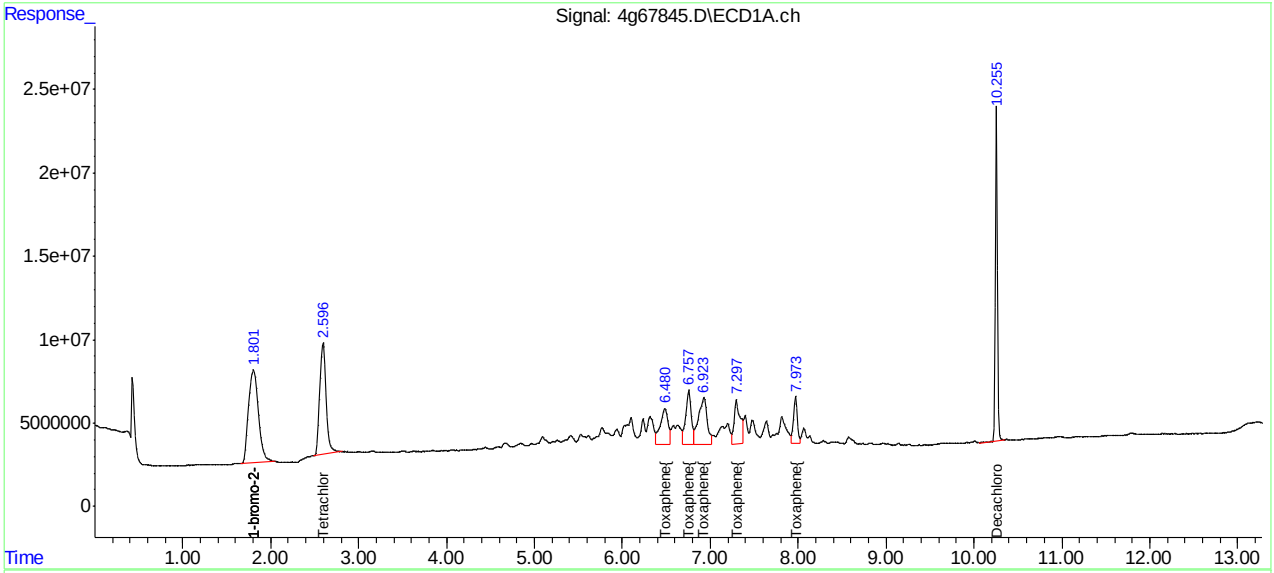
11.6.14 11

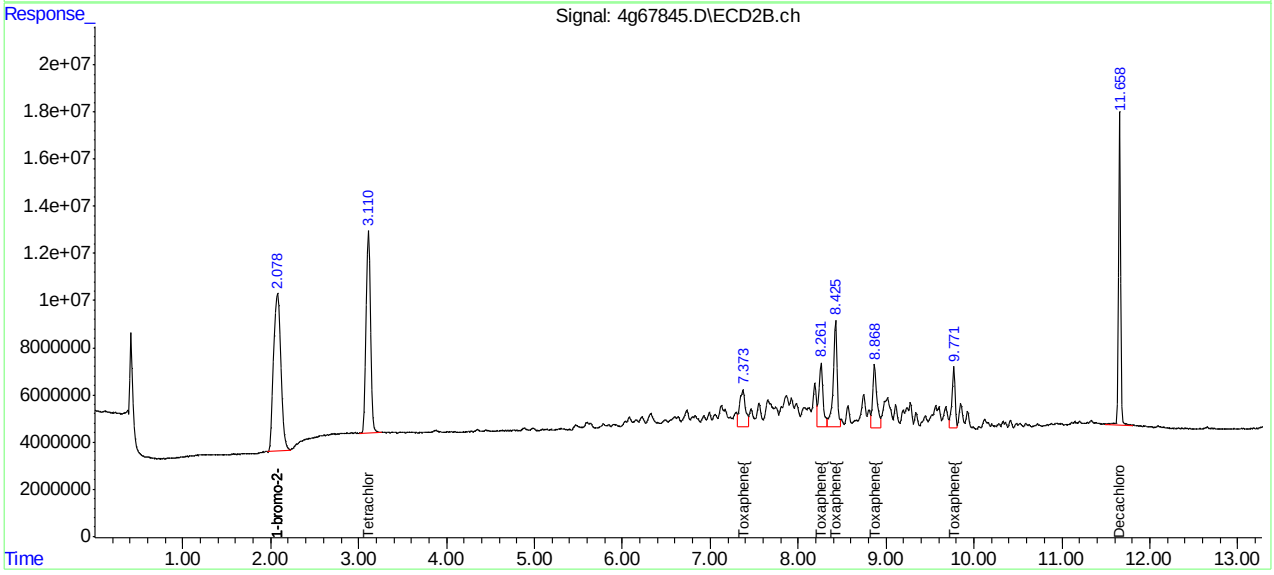
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67845.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 5:43 pm
Operator : dharas
Sample : icv1778-500
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:57:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:20:10 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G4G1778-ICV1778	**Method:**	SW846 8081B
Lab FileID:	4G67845.D	**Analyst approved:**	05/03/16 16:01 Joseph Ravino
Injection Time:	05/02/16 17:43	**Supervisor approved:**	05/04/16 11:11 Gwendolyn Burns

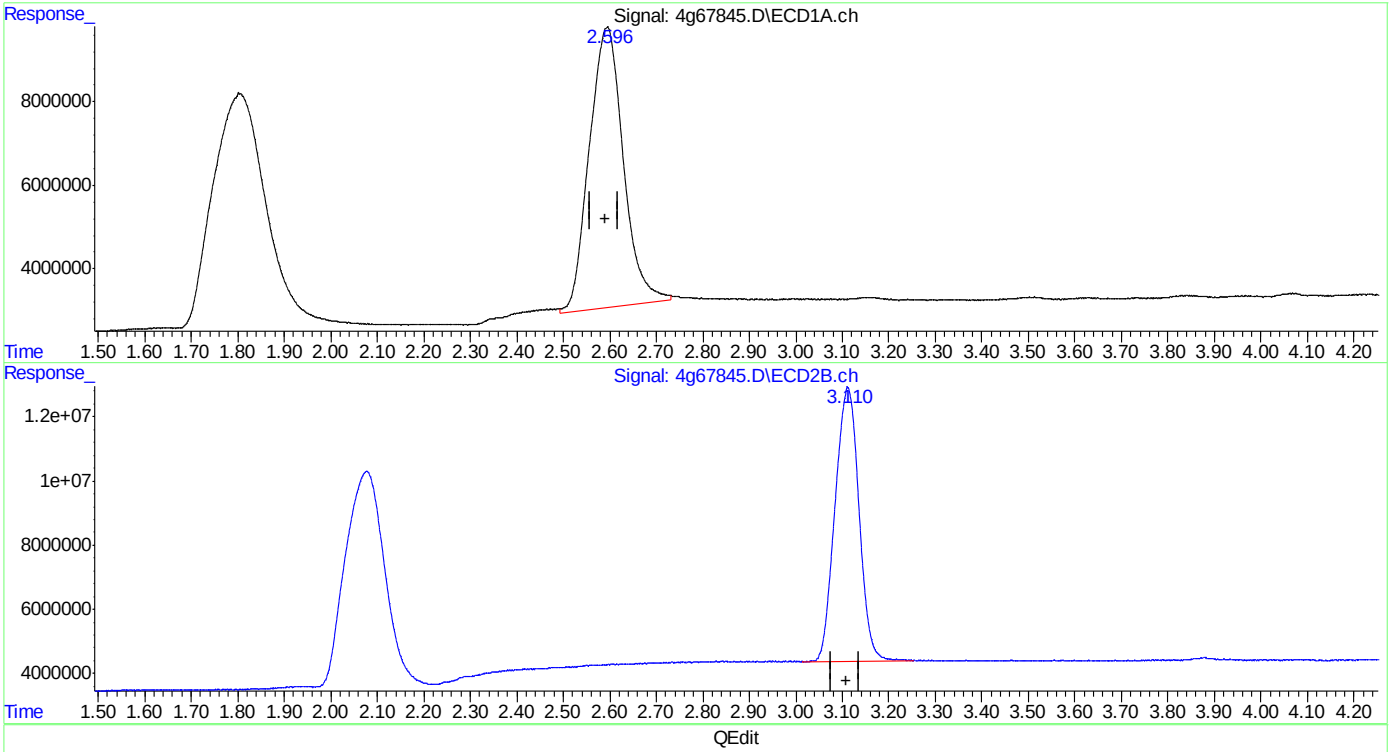
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	2.60	Poor instrument integration
Toxaphene-D		1	7.30	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67845.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 5:43 pm
Operator : dharas
Sample : icv1778-500
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:51:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:20:10 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(2) Tetrachloro-m-xylene (SAB)
2.596min 45.130 PPB
response 342259313

(2) Tetrachloro-m-xylene #2 (SAB)
3.112min 44.512 PPB
response 304771635

(+) = Expected Retention Time

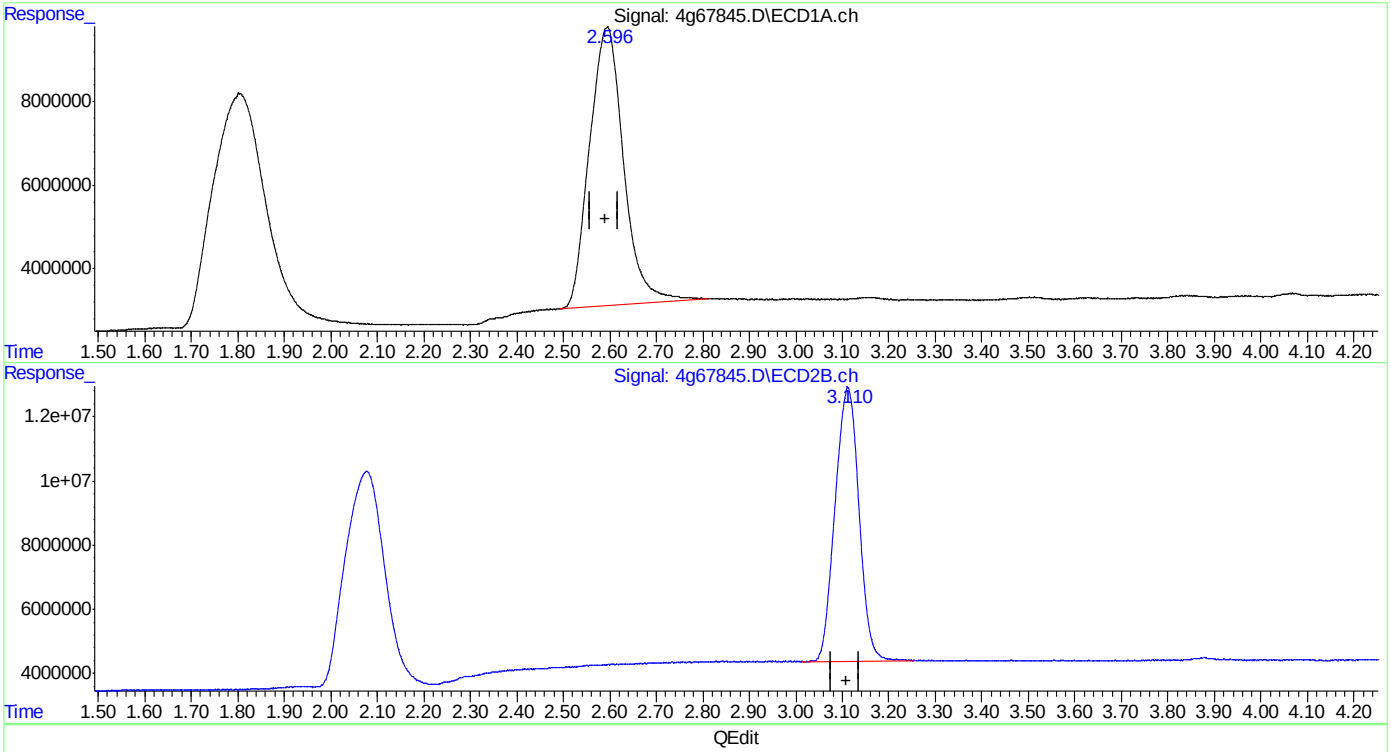
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67845.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 5:43 pm
Operator : dharas
Sample : icv1778-500
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:51:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:20:10 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(2) Tetrachloro-m-xylene (SAB)
2.596min 44.795 PPB m
response 339720589

(2) Tetrachloro-m-xylene #2 (SAB)
3.112min 44.512 PPB
response 304771635

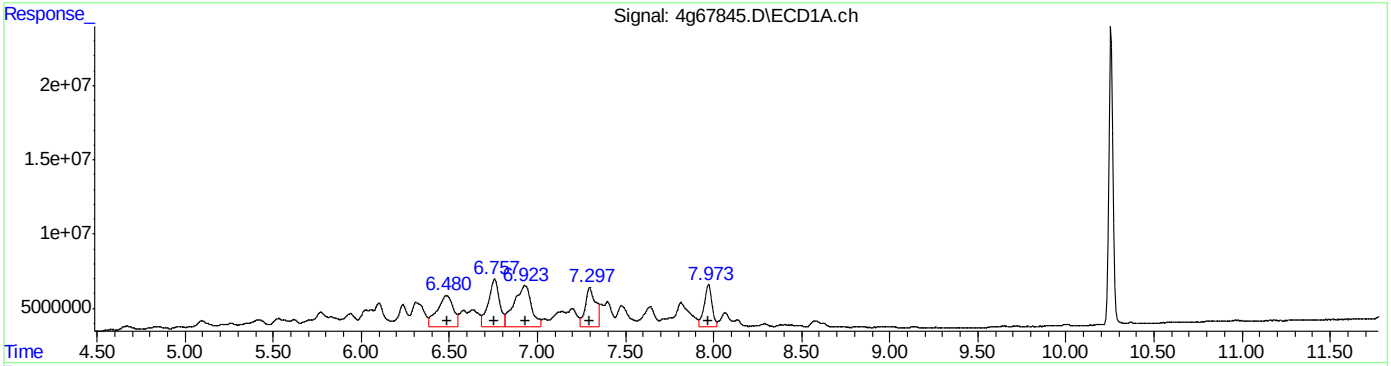
(+) = Expected Retention Time

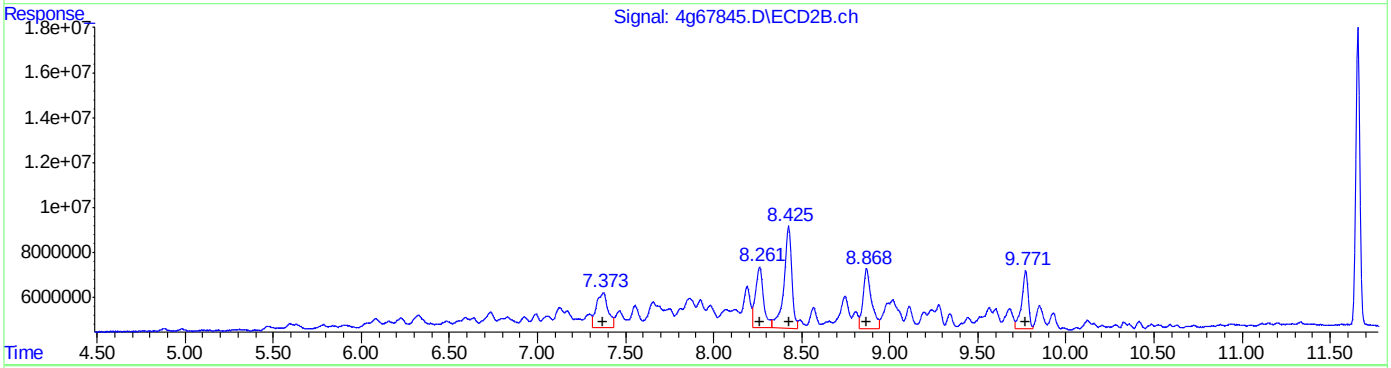
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67845.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 5:43 pm
Operator : dharas
Sample : icv1778-500
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:51:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:20:10 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(26) Toxaphene{A} (L8)

R.T.	Response	Conc
6.48	134779811	471.95
6.76	142940362	487.37
6.92	193629010	492.68
7.30	110917152	422.69
7.97	86943512	497.49

(26) Toxaphene{A} #2 (L8)

R.T.	Response	Conc
7.37	71828526	517.99
8.26	87910102	535.56
8.43	141404945	505.35
8.87	86061044	522.19
9.77	66083312	506.62

(+) = Expected Retention Time

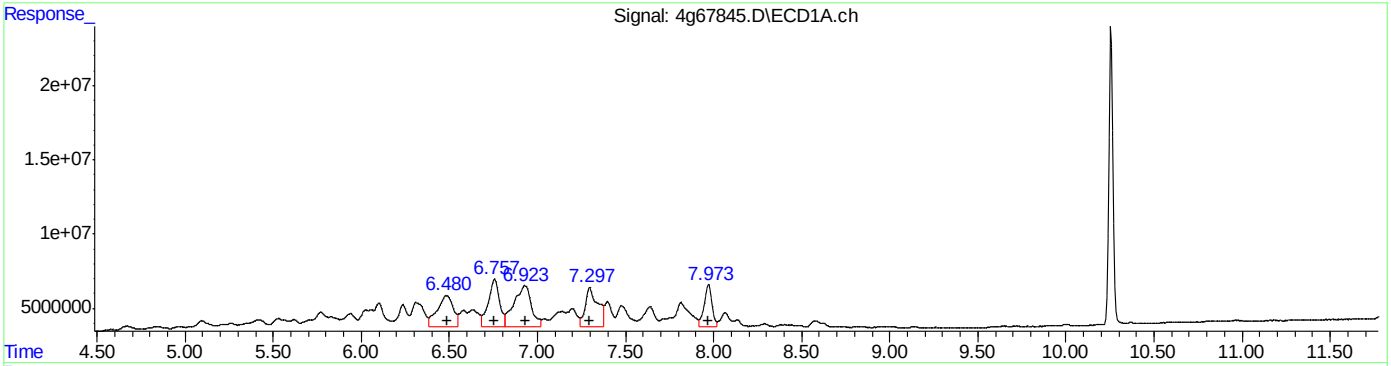
SGS ACCUTEST JC19996

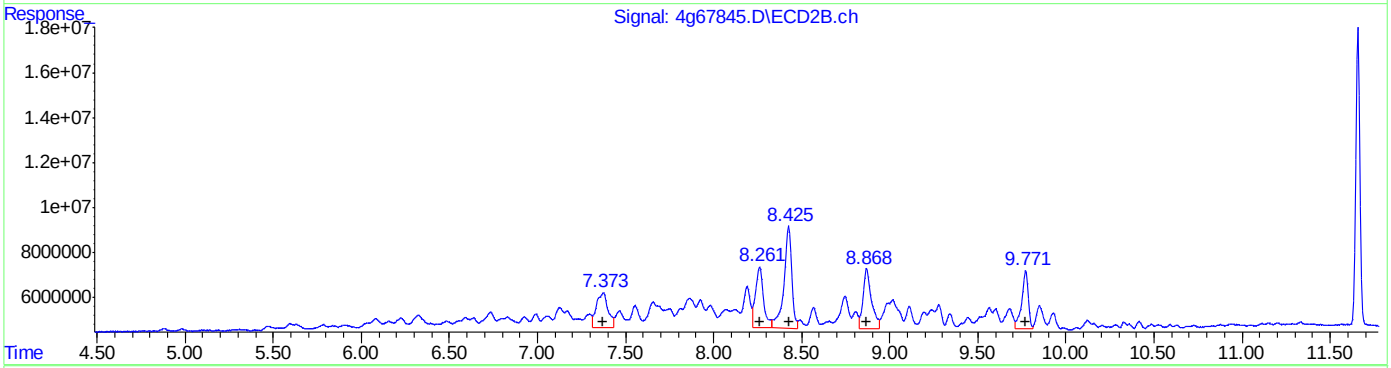
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1778\
Data File : 4g67845.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 2 May 2016 5:43 pm
Operator : dharas
Sample : icv1778-500
Misc : op93464,g4g1778,100,,,10,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 03 15:51:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Tue May 03 15:20:10 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(26) Toxaphene{A} (L8)

R.T.	Response	Conc
6.48	134779811	471.95
6.76	142940362	487.37
6.92	193629010	492.68
7.30	130268171	496.43
7.97	86943512	497.49

(26) Toxaphene{A} #2 (L8)

R.T.	Response	Conc
7.37	71828526	517.99
8.26	87910102	535.56
8.43	141404945	505.35
8.87	86061044	522.19
9.77	66083312	506.62

(+) = Expected Retention Time

SGS ACCUTEST JC19996

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 05/12/16 15:01

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68169.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 11:12 am
Operator : dharas
Sample : cc1778-50
Misc : op93795,g4g1787,16.2,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 13:36:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 13:28:34 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	1.786	2.061	432.2E6	365.3E6	50.000	50.000	
25) I	1-bromo-2...	1.786	2.061	432.2E6	365.3E6	50.000	50.000	
31) I	1-bromo-2...	1.786	2.061	432.2E6	365.3E6	50.000	50.000	
	System Monitoring Compounds							
2) SAB	Tetrachlo...	2.567f	3.097	365.0E6	319.9E6	48.980m	49.715	
Spiked Amount		40.000 Range	30 - 150	Recovery	=	122.45%	124.29%	
24) SA	Decachlor...	10.232	11.637	386.4E6	230.8E6	55.025	50.578	
Spiked Amount		40.000		Recovery	=	137.56%	126.45%	
	Target Compounds							
3) A	alpha-BHC	3.135	3.858	513.3E6	468.3E6	50.333	49.792	
4) MA	gamma-BHC	3.479	4.335	438.3E6	413.0E6	49.153	49.398	
5) MA	Heptachlor	3.793f	4.961	421.2E6	420.3E6	50.323m	48.808	
6) B	beta-BHC	3.576f	4.431	203.3E6	179.0E6	47.588m	47.287	
7) B	delta-BHC	4.047	4.861	366.3E6	407.0E6	45.100	52.168	
8) MB	Aldrin	4.421	5.446	422.9E6	409.8E6	49.514	48.306	
9) B	Heptachlo...	5.182	6.307	366.5E6	365.7E6	48.030	47.739	
10) B	gamma-Chl...	5.364	6.605	369.8E6	366.6E6	48.464	49.513	
11) B	alpha-Chl...	5.544	6.837	379.5E6	353.9E6	46.144	47.600	
12) A	Endosulfan I	5.729	6.942	401.2E6	345.9E6	47.421	48.713	
13) B	4,4'-DDE	5.667	7.095	360.8E6	369.4E6	47.301	49.816	
14) MA	Dieldrin	6.068	7.389	409.7E6	373.8E6	51.080	50.482	
15) MA	Endrin	6.404	7.909	392.0E6	343.8E6	51.331	52.088	
16) A	4,4'-DDD	6.540	8.069	336.5E6	294.0E6	52.062	49.072	
17) B	Endosulfa...	6.741	8.267	399.0E6	320.7E6	54.296	49.168	
18) MA	4,4'-DDT	6.972	8.612	209.6E6	272.5E6	41.147	52.036	#
19) B	Endrin Al...	7.377	8.843	320.4E6	243.6E6	51.645	49.148	
20) B	Endosulfa...	8.070	9.319	354.8E6	275.7E6	52.671	50.484	
21) A	Methoxychlor	7.781	9.823	160.0E6	137.3E6	55.552	48.242	
22)	Mirex	7.970	10.138	326.5E6	218.2E6	48.622	47.642	
23) B	Endrin Ke...	8.532	10.183	395.6E6	305.5E6	50.780	50.968	

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

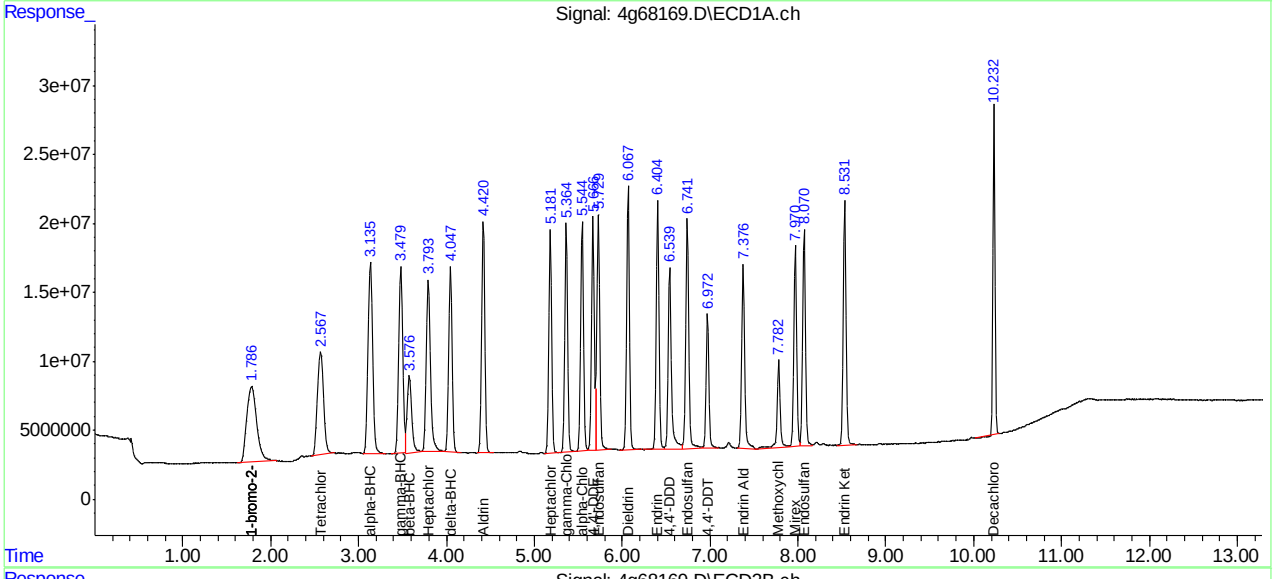
SGS ACCUTEST JC19996

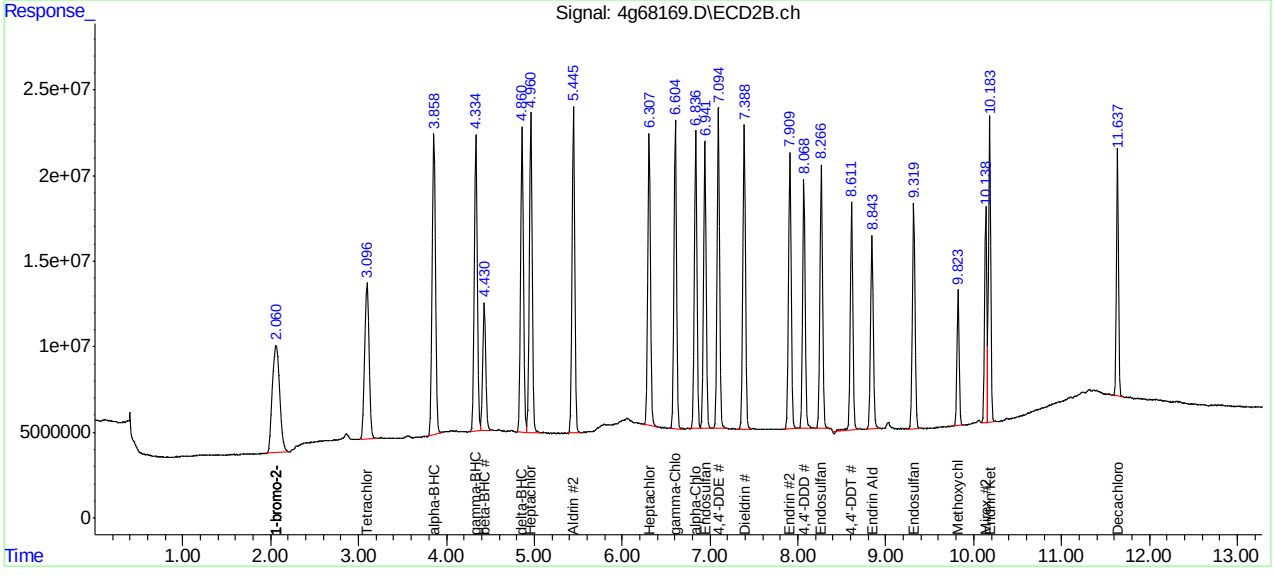
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68169.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 11:12 am
Operator : dharas
Sample : cc1778-50
Misc : op93795,g4g1787,16.2,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 13:36:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 13:28:34 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G4G1787-CC1778	**Method:**	SW846 8081B
Lab FileID:	4G68169.D	**Analyst approved:**	05/12/16 14:18 Dhara Saparia
Injection Time:	05/12/16 11:12	**Supervisor approved:**	05/12/16 15:01 Gwendolyn Burns

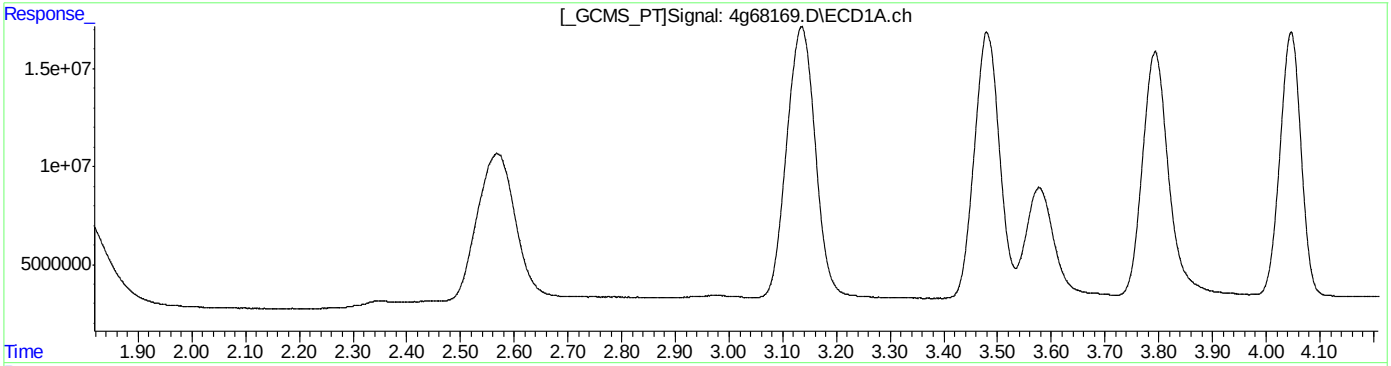
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	2.57	Poor instrument integration
beta-BHC	319-85-7	1	3.58	Poor instrument integration
Heptachlor	76-44-8	1	3.79	Poor instrument integration

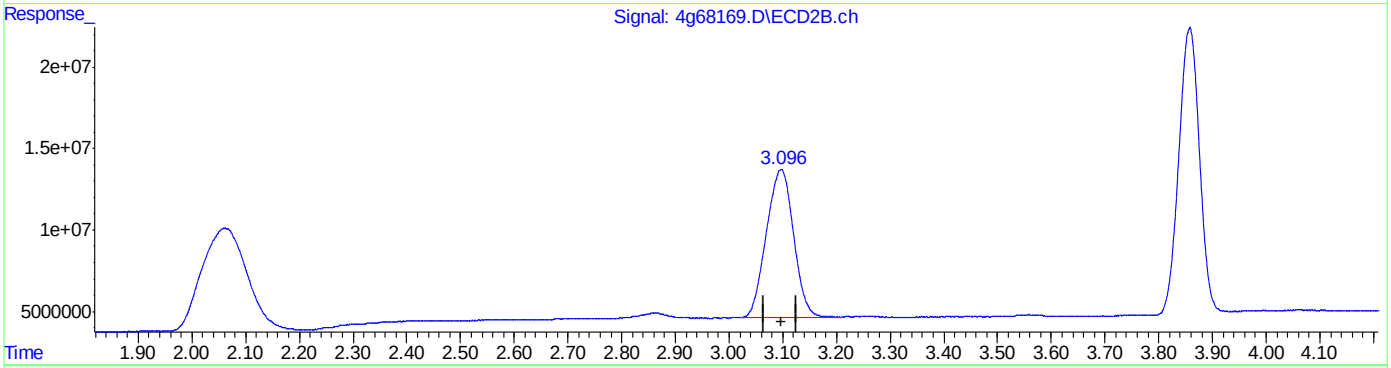
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68169.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 11:12 am
Operator : dharas
Sample : cc1778-50
Misc : op93795,g4g1787,16.2,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 13:34:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 13:28:34 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(2) Tetrachloro-m-xylene (SAB)
0.000min 0.000 PPB
response 0

(2) Tetrachloro-m-xylene #2 (SAB)
3.097min 49.715 PPB
response 319873222

(+) = Expected Retention Time

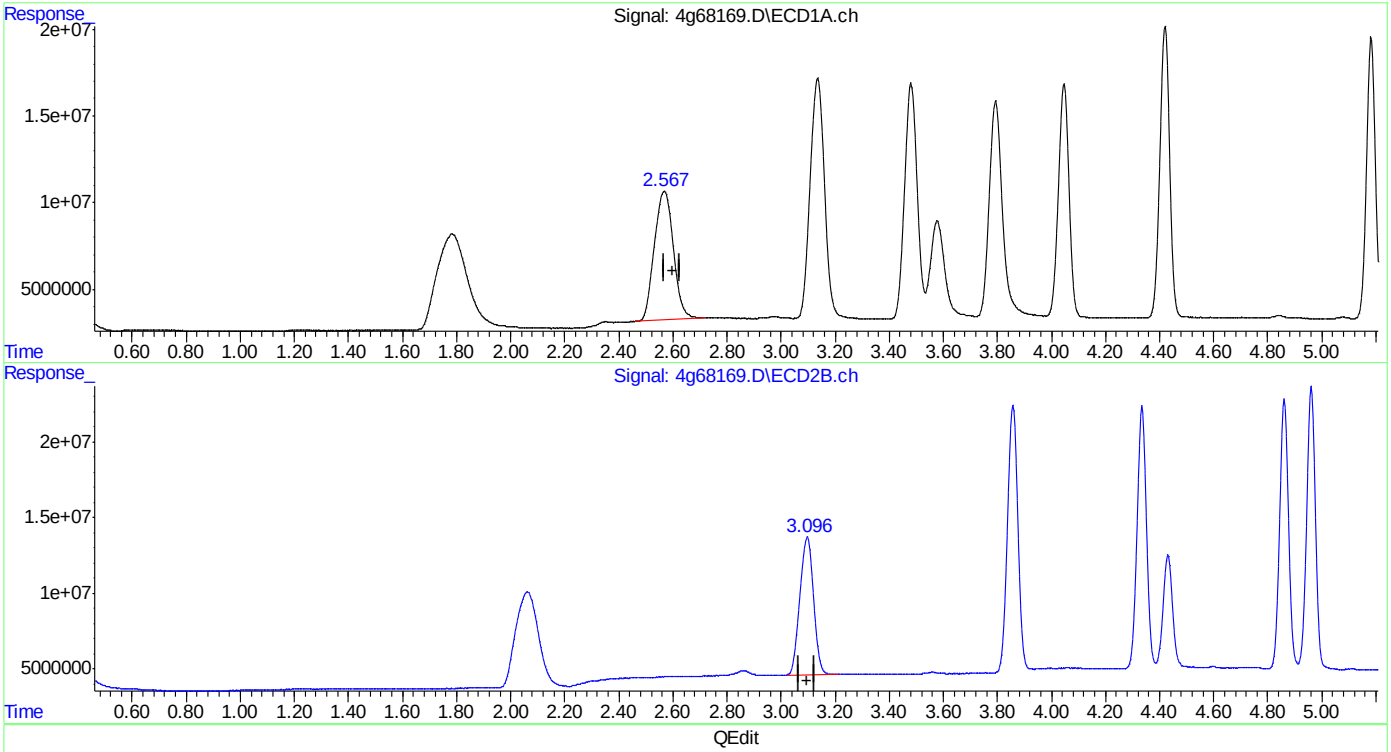
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68169.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 11:12 am
Operator : dharas
Sample : cc1778-50
Misc : op93795,g4g1787,16.2,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 13:34:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 13:28:34 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(2) Tetrachloro-m-xylene (SAB)
2.567min 48.980 PPB m
response 365018642

(2) Tetrachloro-m-xylene #2 (SAB)
3.097min 49.715 PPB
response 319873222

(+) = Expected Retention Time
4PST1778.M Thu May 12 13:35:24 2016 RPT1

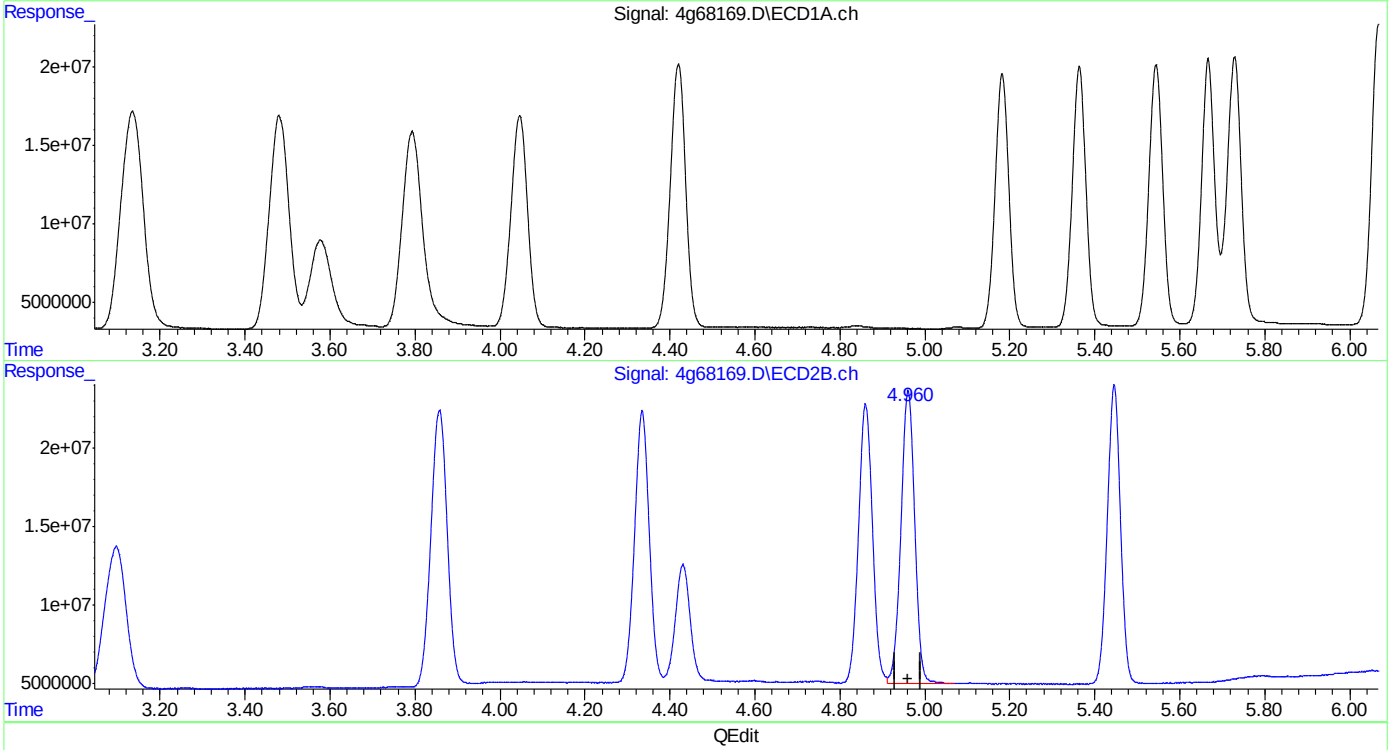
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68169.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 11:12 am
Operator : dharas
Sample : cc1778-50
Misc : op93795,g4g1787,16.2,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 13:34:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 13:28:34 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(5) Heptachlor (MA)
0.000min 0.000 PPB
response 0

(5) Heptachlor #2 (MA)
4.961min 48.808 PPB
response 420305772

(+) = Expected Retention Time

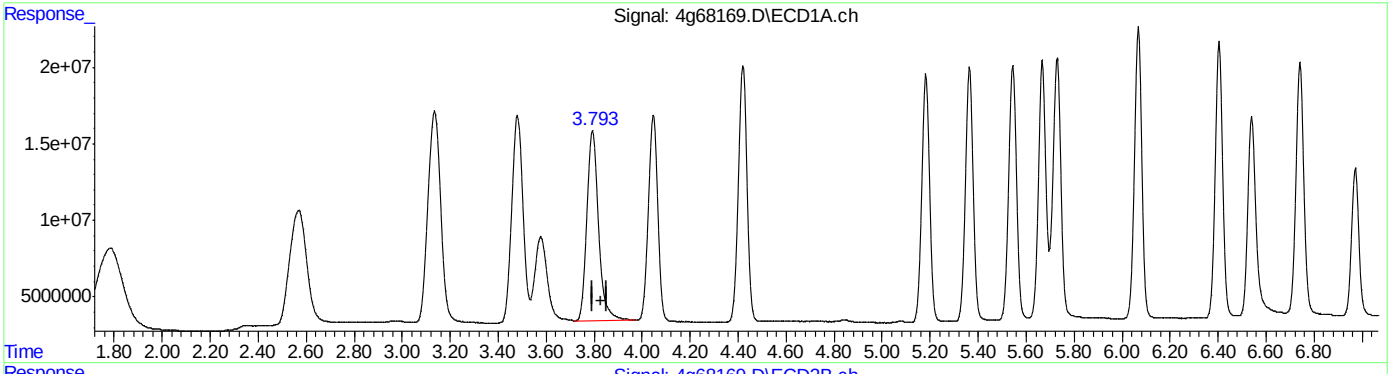
SGS ACCUTEST JC19996

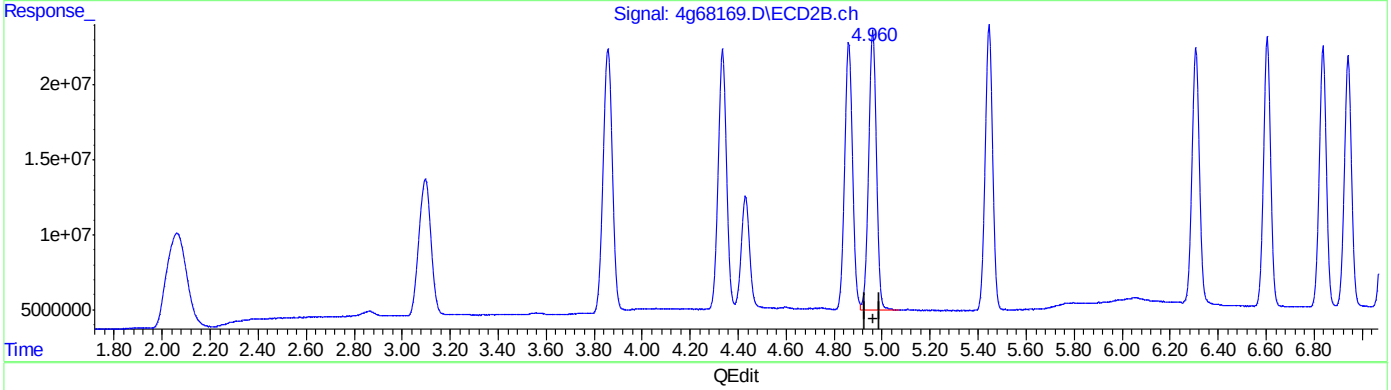
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68169.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 11:12 am
Operator : dharas
Sample : cc1778-50
Misc : op93795,g4g1787,16.2,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 13:34:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 13:28:34 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(5) Heptachlor (MA)
3.793min 50.323 PPB m
response 421216347

(5) Heptachlor #2 (MA)
4.961min 48.808 PPB
response 420305772

(+) = Expected Retention Time
4PST1778.M Thu May 12 13:35:39 2016 RPT1

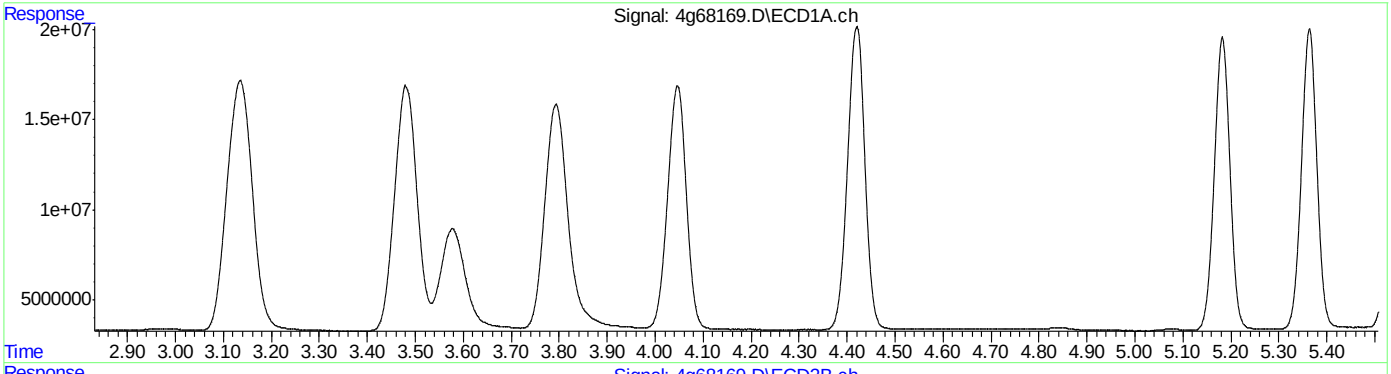
SGS ACCUTEST JC19996

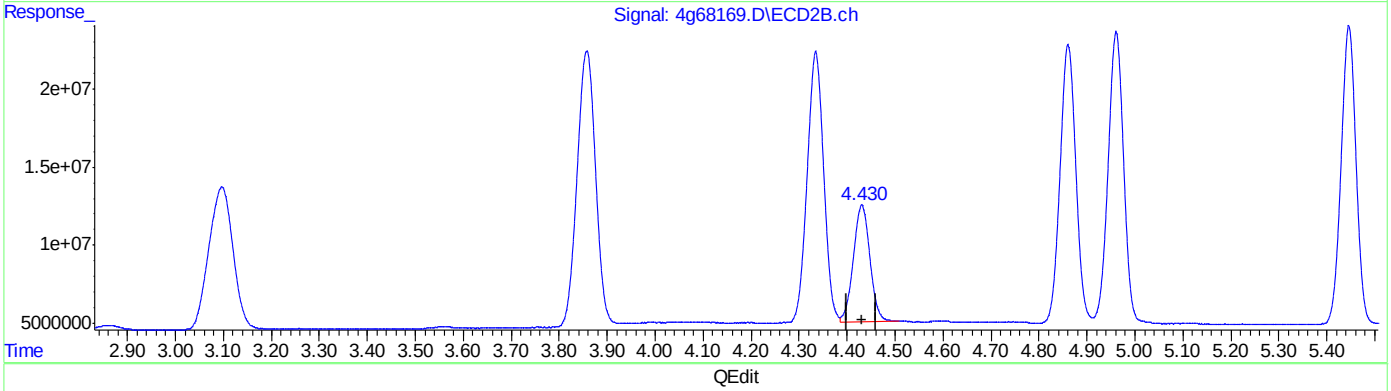
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68169.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 11:12 am
Operator : dharas
Sample : cc1778-50
Misc : op93795,g4g1787,16.2,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 13:34:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 13:28:34 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(6) beta-BHC (B)
0.000min 0.000 PPB
response 0

(6) beta-BHC #2 (B)
4.431min 47.287 PPB
response 179000190

(+) = Expected Retention Time

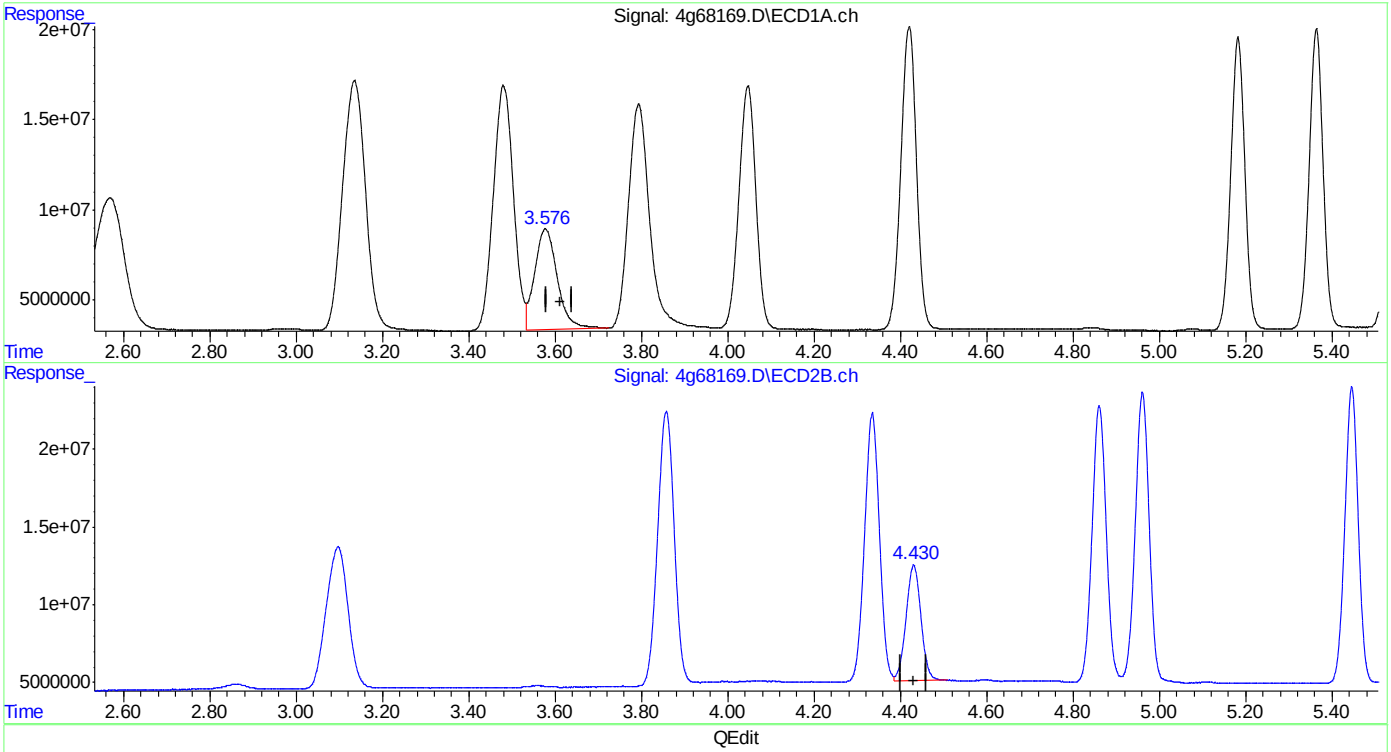
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68169.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 11:12 am
Operator : dharas
Sample : cc1778-50
Misc : op93795,g4g1787,16.2,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 13:34:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 13:28:34 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(6) beta-BHC (B)
3.576min 47.588 PPB m
response 203251480

(6) beta-BHC #2 (B)
4.431min 47.287 PPB
response 179000190

(+) = Expected Retention Time
4PST1778.M Thu May 12 13:36:10 2016 RPT1

SGS ACCUTEST JC19996

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 05/13/16 12:49

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68185.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 4:52 pm
Operator : dharas
Sample : cc1778-25
Misc : op93485,g4g1787,500,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 17:27:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 17:22:36 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um 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...	1.830	2.098	443.9E6	370.0E6	50.000	50.000
25) I	1-bromo-2...	1.830	2.098	443.9E6	370.0E6	50.000	50.000
31) I	1-bromo-2...	1.830	2.098	443.9E6	370.0E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.598f	3.112	187.1E6	162.8E6	24.439m	24.979
Spiked Amount		40.000 Range	30 - 150	Recovery	=	61.10%	62.45%
24) SA	Decachlor...	10.232	11.636	200.0E6	122.2E6	27.723	26.442
Spiked Amount		40.000		Recovery	=	69.31%	66.11%
	Target Compounds						
3) A	alpha-BHC	3.157	3.867	255.6E6	232.5E6	24.404	24.405
4) MA	gamma-BHC	3.498	4.343	223.9E6	209.6E6	24.445	24.756
5) MA	Heptachlor	3.816	4.967	216.4E6	217.0E6	25.178	24.875
6) B	beta-BHC	3.604	4.439	110.2E6	94596772	25.119	24.672
7) B	delta-BHC	4.057	4.868	196.9E6	199.8E6	23.597	25.276
8) MB	Aldrin	4.429	5.451	210.6E6	205.7E6	24.007	23.942
9) B	Heptachlo...	5.188	6.310	180.5E6	187.4E6	23.034	24.157
10) B	gamma-Chl...	5.371	6.608	185.7E6	185.2E6	23.692	24.693
11) B	alpha-Chl...	5.551	6.840	196.7E6	182.1E6	23.282	24.180
12) A	Endosulfan I	5.734	6.944	205.4E6	175.3E6	23.637	24.374
13) B	4,4'-DDE	5.676	7.097	180.4E6	186.4E6	23.027	24.813
14) MA	Dieldrin	6.072	7.391	197.4E6	186.9E6	23.956	24.917
15) MA	Endrin	6.409	7.911	187.5E6	173.6E6	23.905	25.977
16) A	4,4'-DDD	6.552	8.071	154.0E6	150.0E6	23.195	24.722
17) B	Endosulfa...	6.748	8.269	184.3E6	165.5E6	24.418	25.043
18) MA	4,4'-DDT	6.979	8.613	110.7E6	136.1E6	23.164	25.657m
19) B	Endrin Al...	7.382	8.845	151.8E6	126.3E6	23.818m	25.169
20) B	Endosulfa...	8.076	9.320	170.7E6	142.4E6	24.674	25.752
21) A	Methoxychlor	7.788	9.824	74742365	73666289	25.273m	25.552
22)	Mirex	7.974	10.138	164.3E6	113.7E6	23.820	24.514
23) B	Endrin Ke...	8.538	10.184	200.6E6	158.3E6	25.076	26.068

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

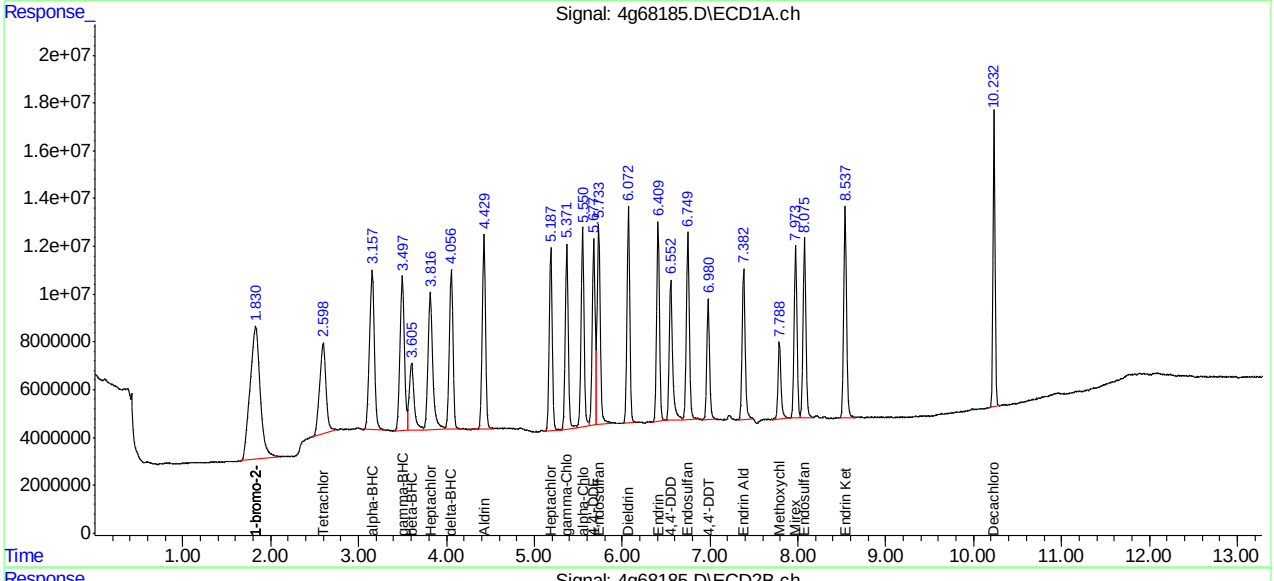
11.6.16 11

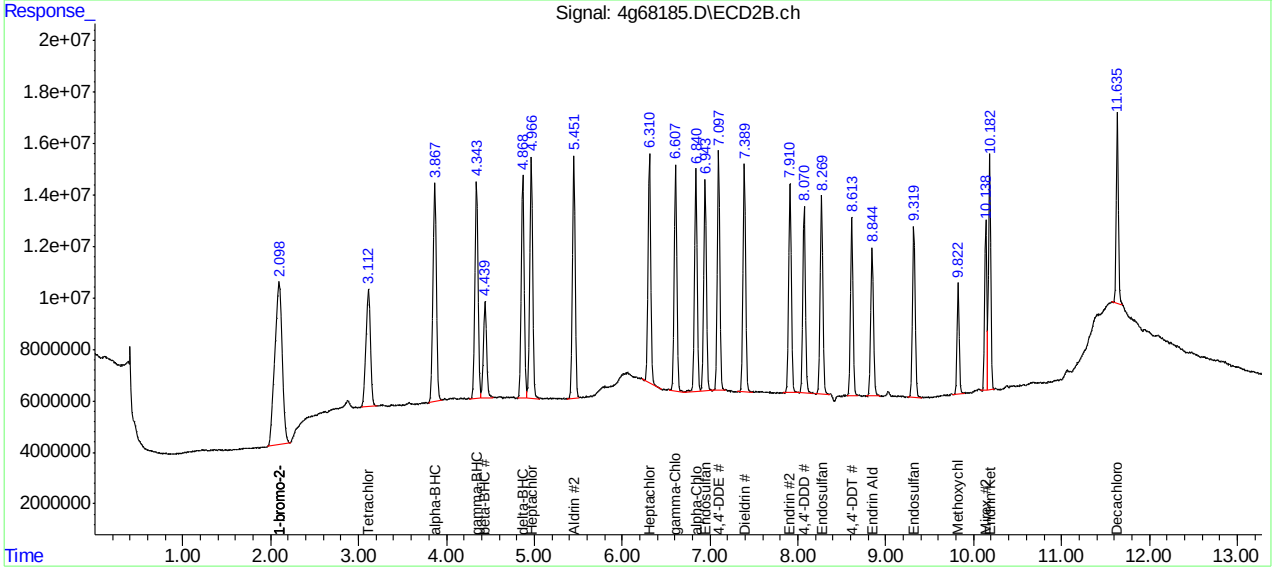
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68185.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 4:52 pm
Operator : dharas
Sample : cc1778-25
Misc : op93485,g4g1787,500,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 17:27:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 17:22:36 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G4G1787-CC1778	**Method:**	SW846 8081B
Lab FileID:	4G68185.D	**Analyst approved:**	05/13/16 11:48 Thomas Lally
Injection Time:	05/12/16 16:52	**Supervisor approved:**	05/13/16 12:49 Gwendolyn Burns

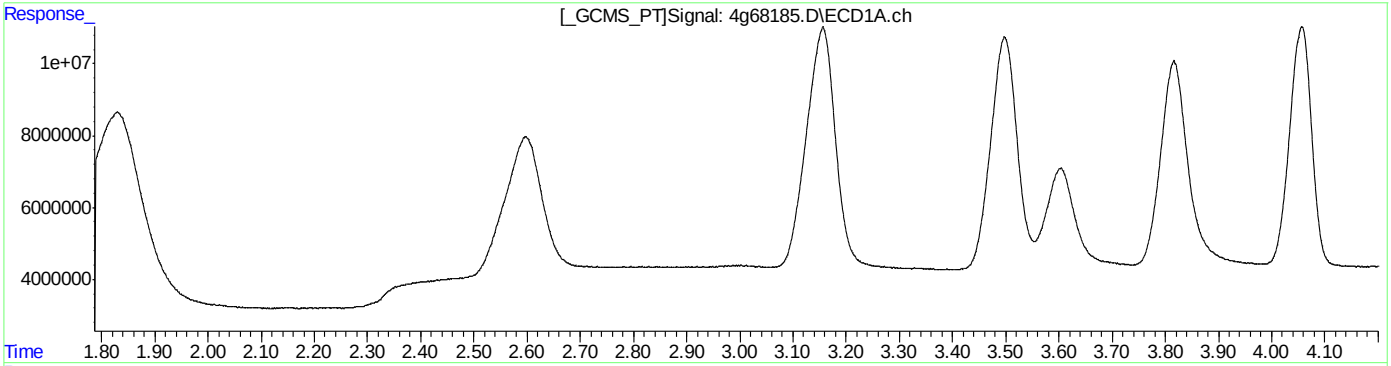
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	2.60	Poorly defined baseline
Endrin aldehyde	7421-93-4	1	7.38	Poorly defined baseline
Methoxychlor	72-43-5	1	7.79	Poorly defined baseline
4,4'-DDT	50-29-3	2	8.61	Poorly defined baseline

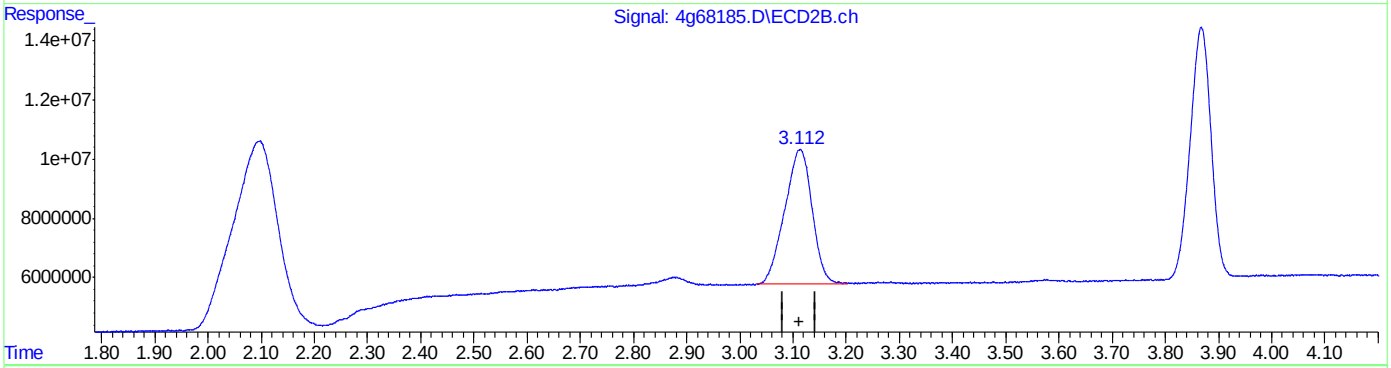
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68185.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 4:52 pm
Operator : dharas
Sample : cc1778-25
Misc : op93485,g4g1787,500,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 17:25:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 17:22:36 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





(2) Tetrachloro-m-xylene (SAB)
0.000min 0.000 PPB
response 0

(2) Tetrachloro-m-xylene #2 (SAB)
3.112min 24.979 PPB
response 162794376

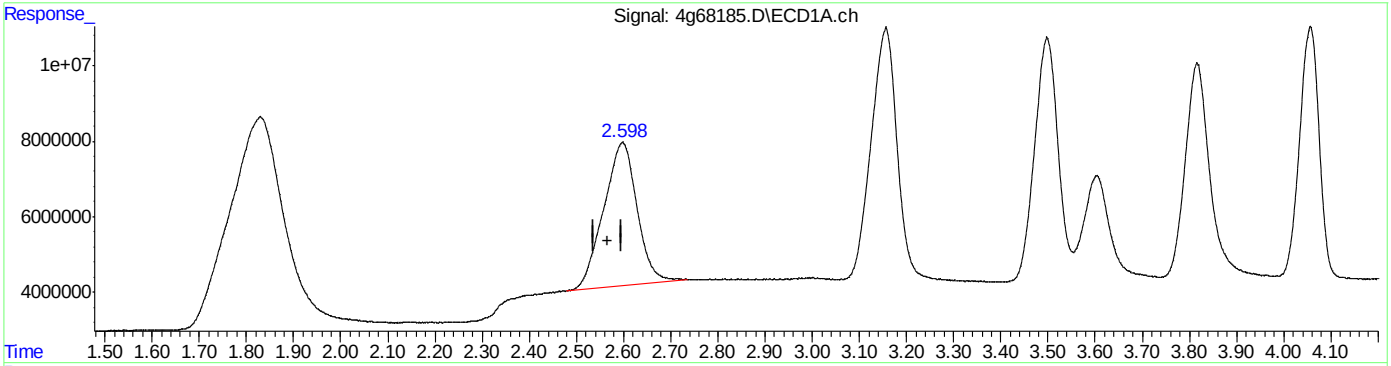
(+) = Expected Retention Time

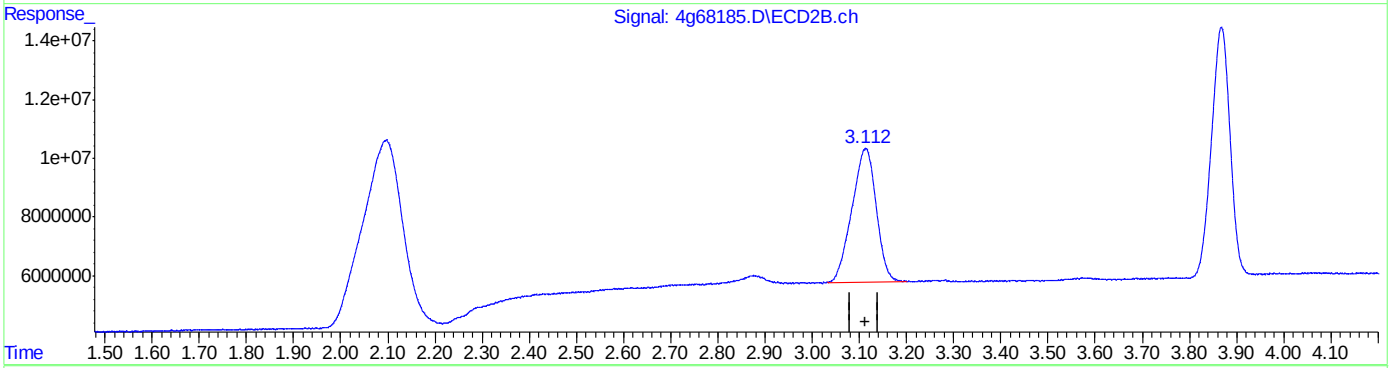
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68185.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 4:52 pm
Operator : dharas
Sample : cc1778-25
Misc : op93485,g4g1787,500,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 17:25:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 17:22:36 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(2) Tetrachloro-m-xylene (SAB)
2.598min 24.439 PPB m
response 187057730

(2) Tetrachloro-m-xylene #2 (SAB)
3.112min 24.979 PPB
response 162794376

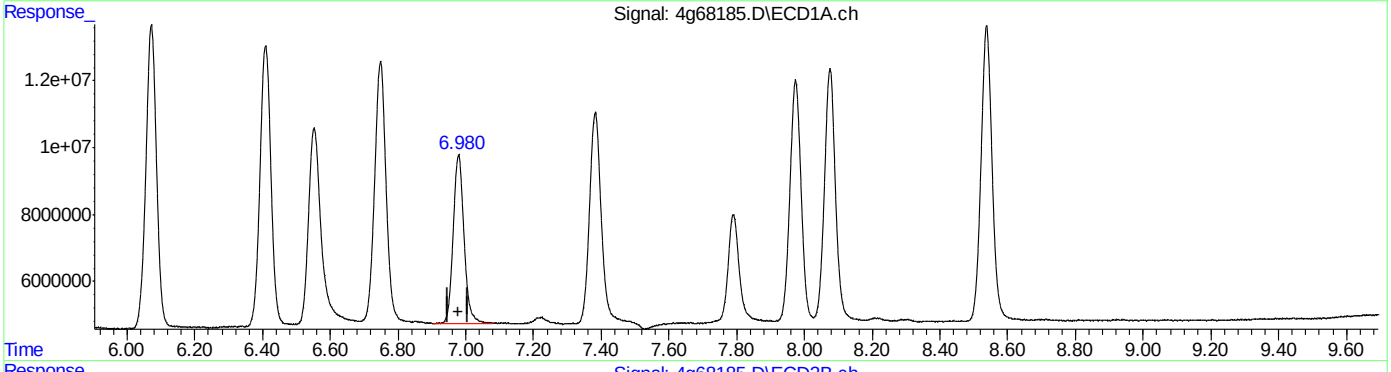
(+) = Expected Retention Time
4PST1778.M Thu May 12 17:26:17 2016 RPT1

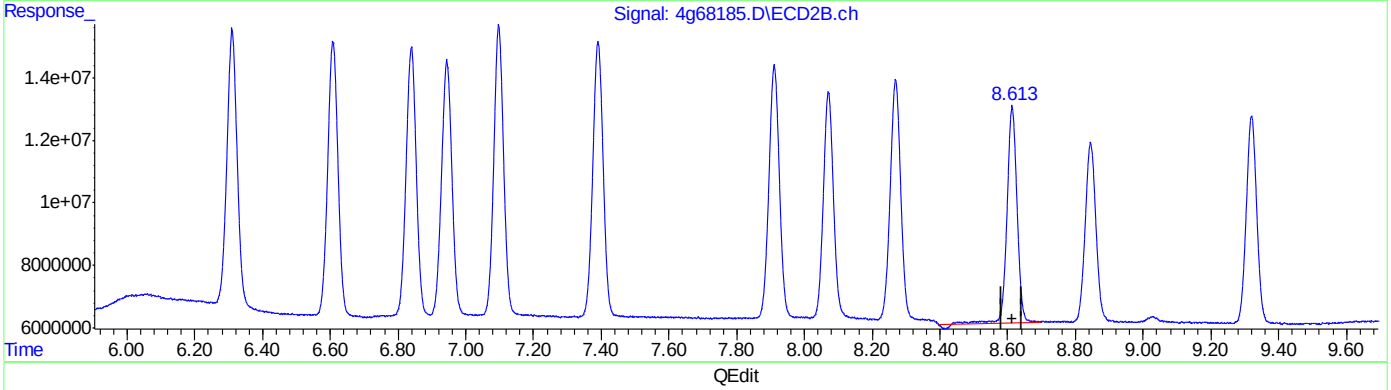
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68185.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 4:52 pm
Operator : dharas
Sample : cc1778-25
Misc : op93485,g4g1787,500,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 17:25:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 17:22:36 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(18) 4,4'-DDT (MA)
6.979min 23.164 PPB
response 110664237

(18) 4,4'-DDT #2 (MA)
8.613min 26.710 PPB
response 141704026

(+) = Expected Retention Time

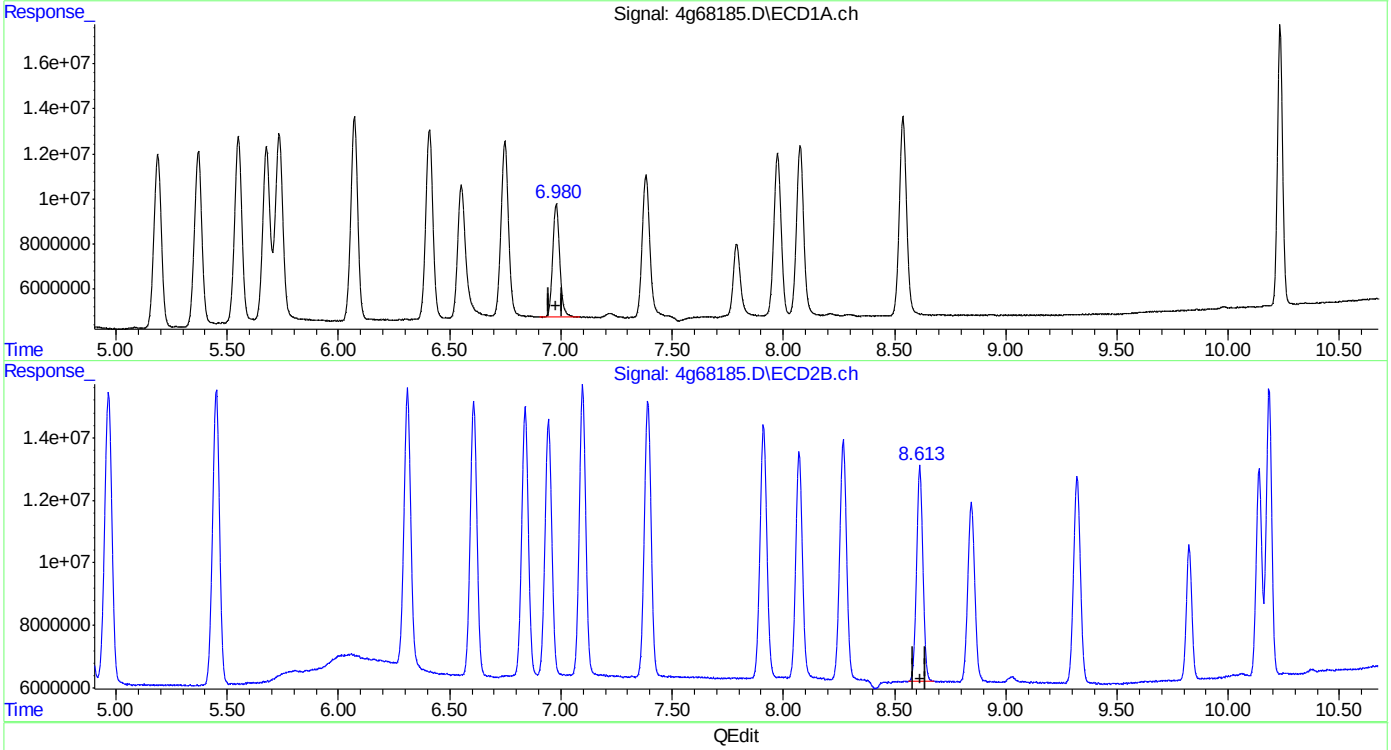
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68185.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 4:52 pm
Operator : dharas
Sample : cc1778-25
Misc : op93485,g4g1787,500,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 17:25:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 17:22:36 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(18) 4,4'-DDT (MA)
6.979min 23.164 PPB
response 110664237

(18) 4,4'-DDT #2 (MA)
8.613min 25.657 PPB m
response 136116496

(+) = Expected Retention Time

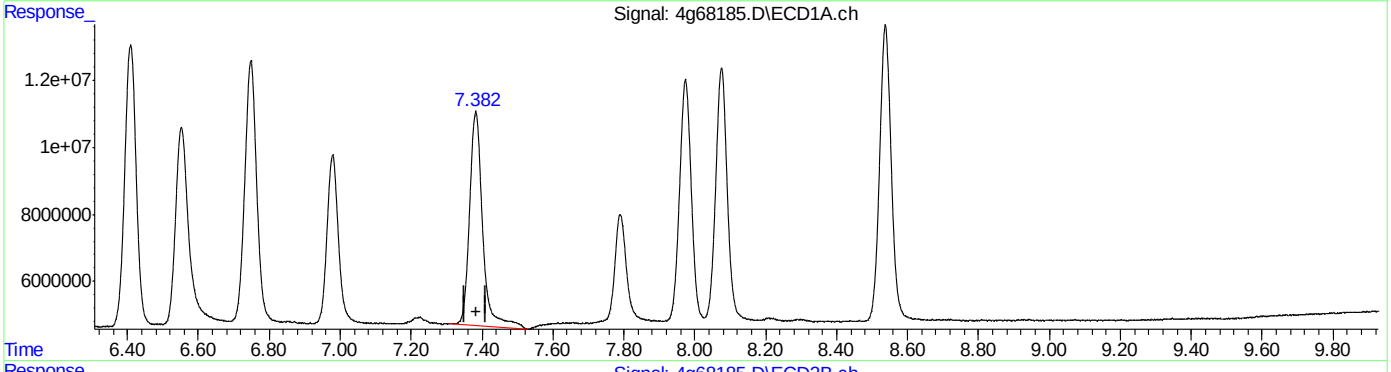
SGS ACCUTEST JC19996

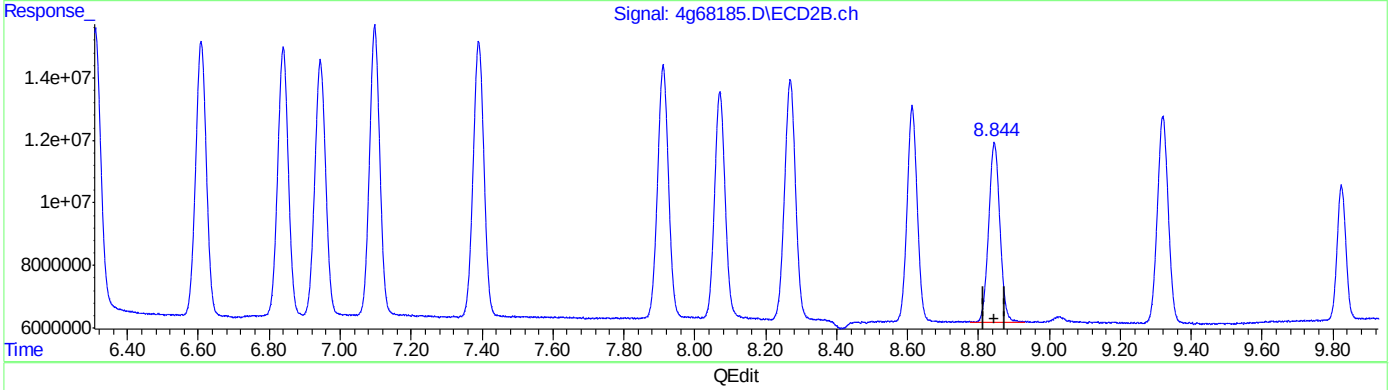
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68185.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 4:52 pm
Operator : dharas
Sample : cc1778-25
Misc : op93485,g4g1787,500,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 17:25:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 17:22:36 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(19) Endrin Aldehyde (B)
7.383min 25.512 PPB
response 162544791

(19) Endrin Aldehyde #2 (B)
8.845min 25.169 PPB
response 126346090

(+) = Expected Retention Time
4PST1778.M Thu May 12 17:26:42 2016 RPT1

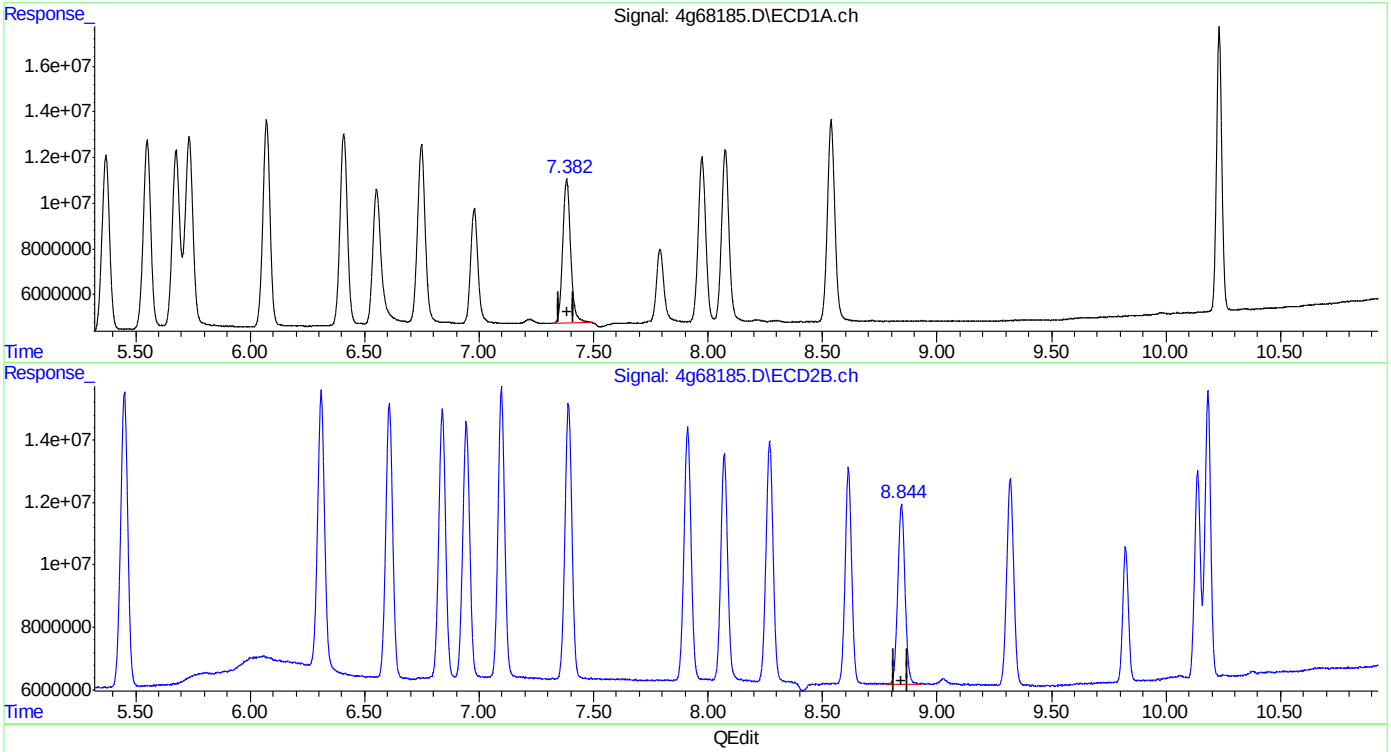
SGS ACCUTEST JC19996

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68185.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 4:52 pm
Operator : dharas
Sample : cc1778-25
Misc : op93485,g4g1787,500,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 17:25:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 17:22:36 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



QEdit

(19) Endrin Aldehyde (B)
7.382min 23.818 PPB m
response 151754409

(19) Endrin Aldehyde #2 (B)
8.845min 25.169 PPB
response 126346090

(+) = Expected Retention Time

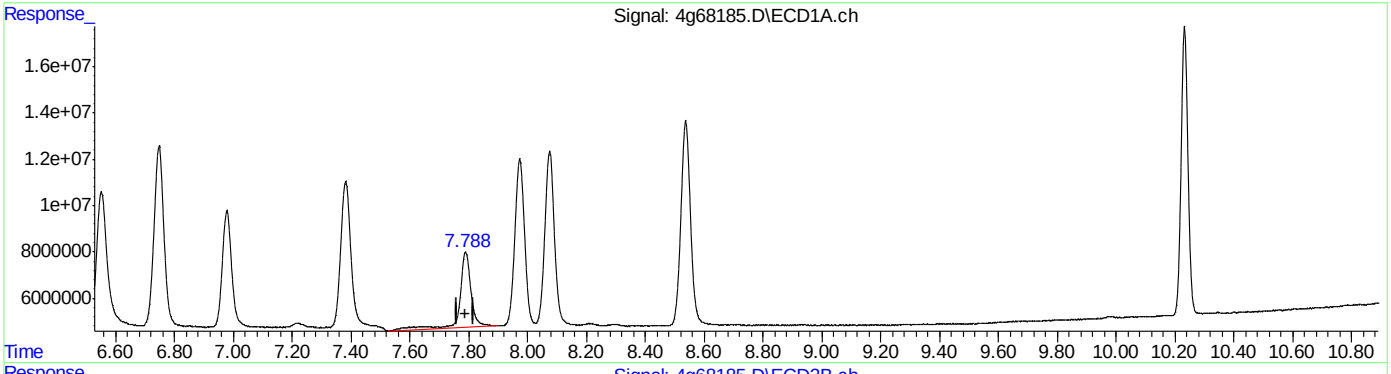
SGS ACCUTEST JC19996

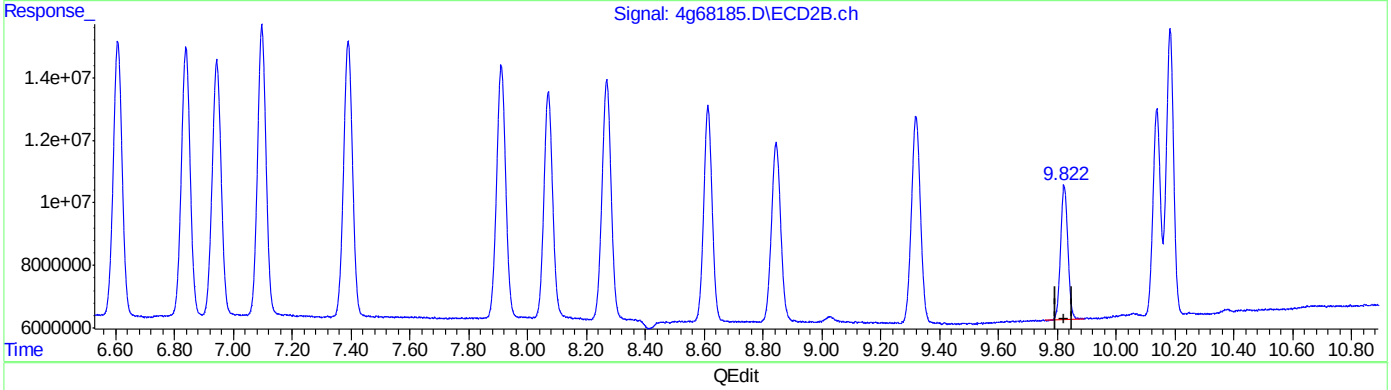
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68185.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 4:52 pm
Operator : dharas
Sample : cc1778-25
Misc : op93485,g4g1787,500,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 17:25:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 17:22:36 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(21) Methoxychlor (A)
7.790min 29.176 PPB
response 86283276

(21) Methoxychlor #2 (A)
9.824min 25.552 PPB
response 73666289

(+) = Expected Retention Time

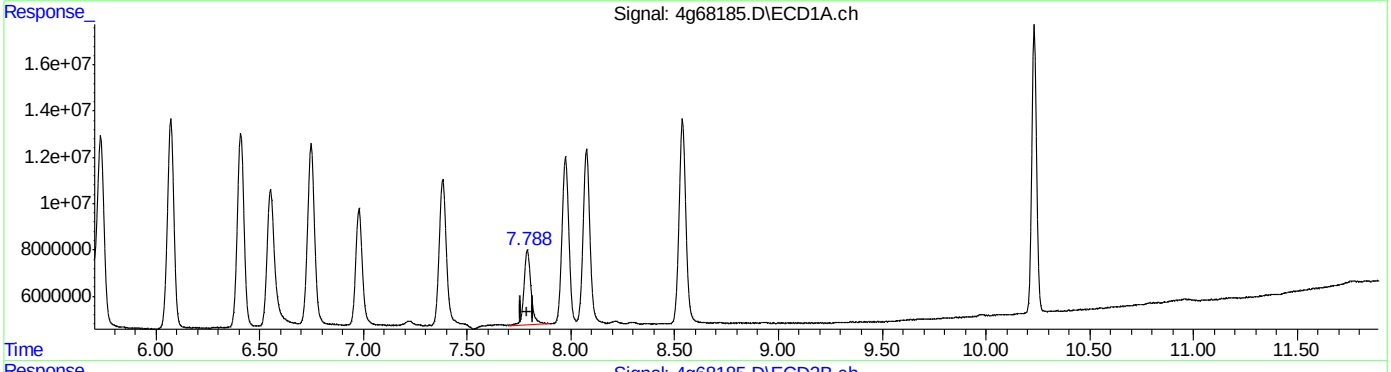
SGS ACCUTEST JC19996

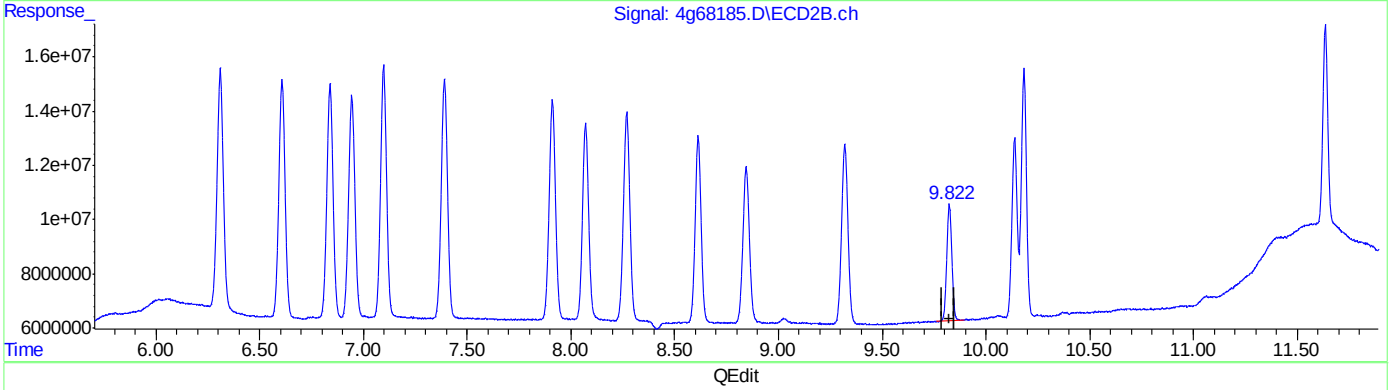
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1787\
Data File : 4g68185.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 12 May 2016 4:52 pm
Operator : dharas
Sample : cc1778-25
Misc : op93485,g4g1787,500,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 12 17:25:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Thu May 12 17:22:36 2016
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(21) Methoxychlor (A)
7.788min 25.273 PPB m
response 74742365

(21) Methoxychlor #2 (A)
9.824min 25.552 PPB
response 73666289

(+) = Expected Retention Time

SGS ACCUTEST JC19996

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.

11.6.17 11

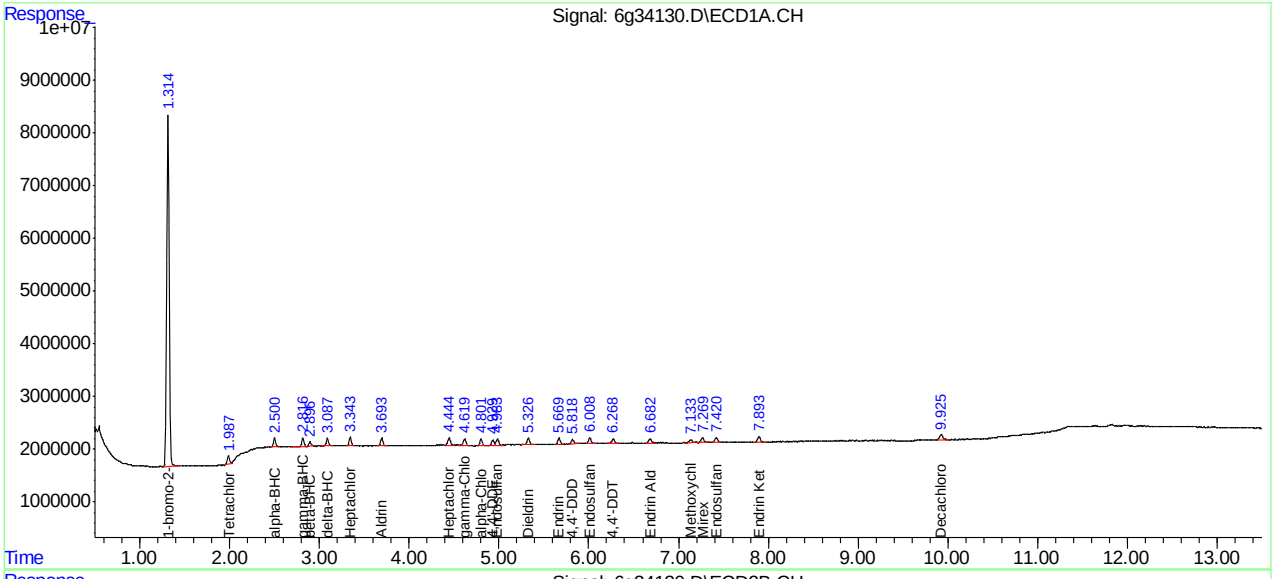
SGS ACCUTEST JC19996

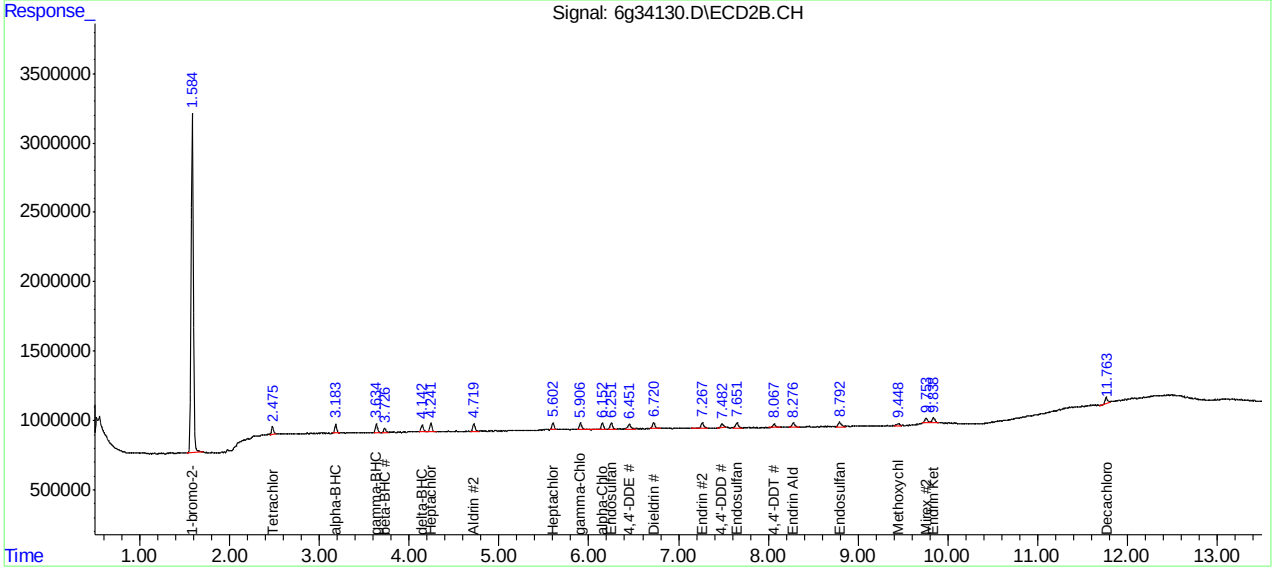
Quantitation Report (QT Reviewed)

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

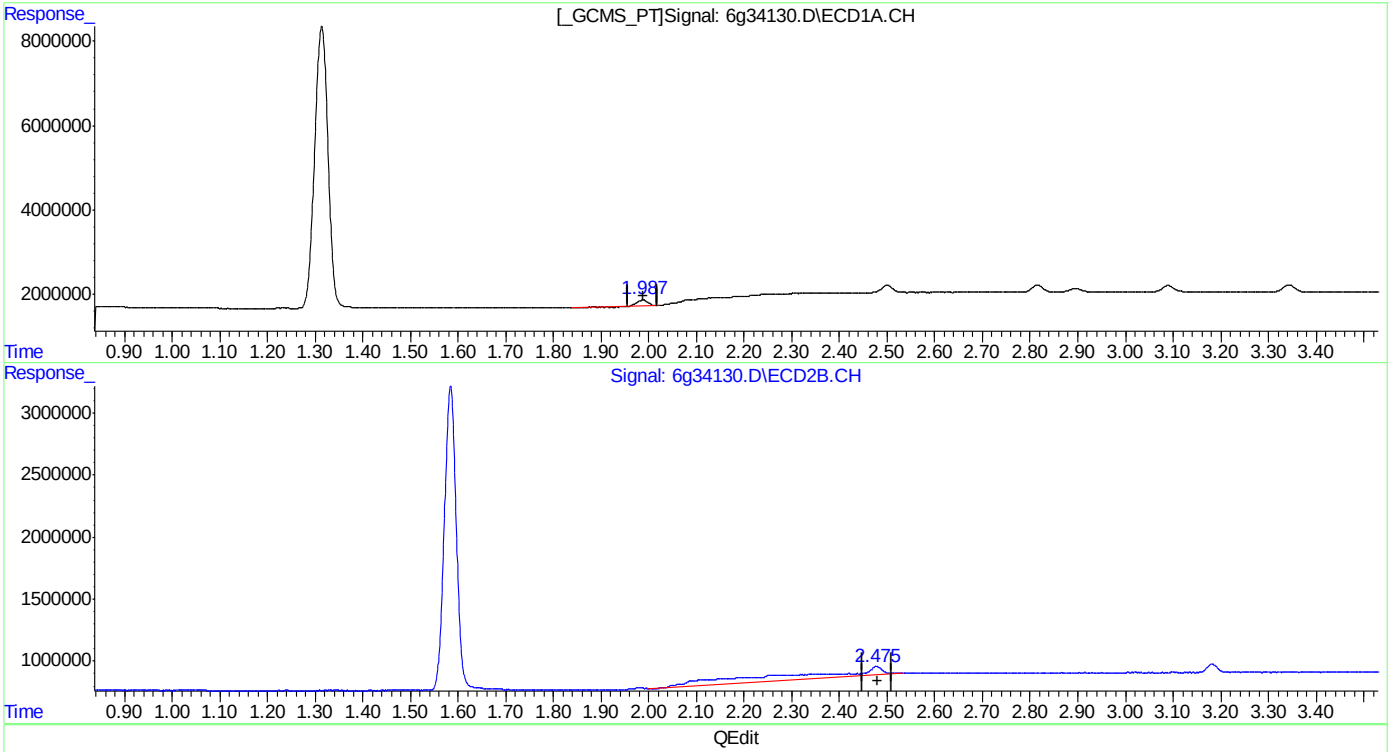
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	1.99	Poor instrument integration
Tetrachloro-m-xylene	877-09-8	2	2.48	Poor instrument integration
alpha-BHC	319-84-6	1	2.50	Poor instrument integration
beta-BHC	319-85-7	1	2.90	Poor instrument integration
beta-BHC	319-85-7	2	3.73	Poor 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

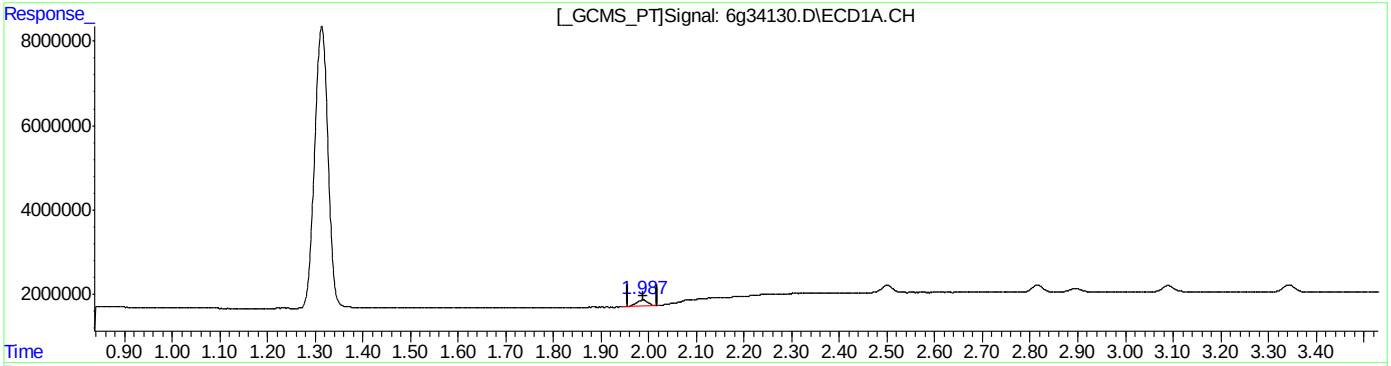
SGS ACCUTEST JC19996

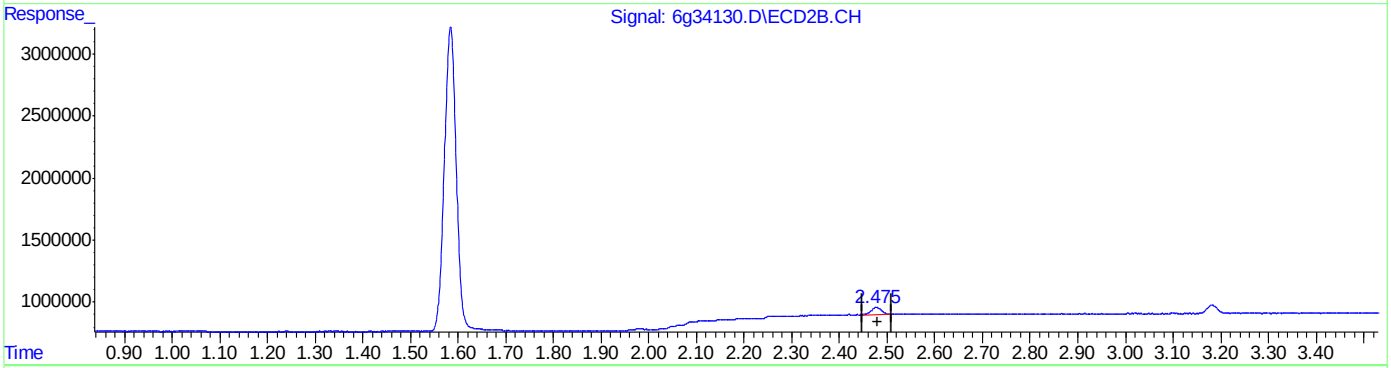
Quantitation Report (Qedit)

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

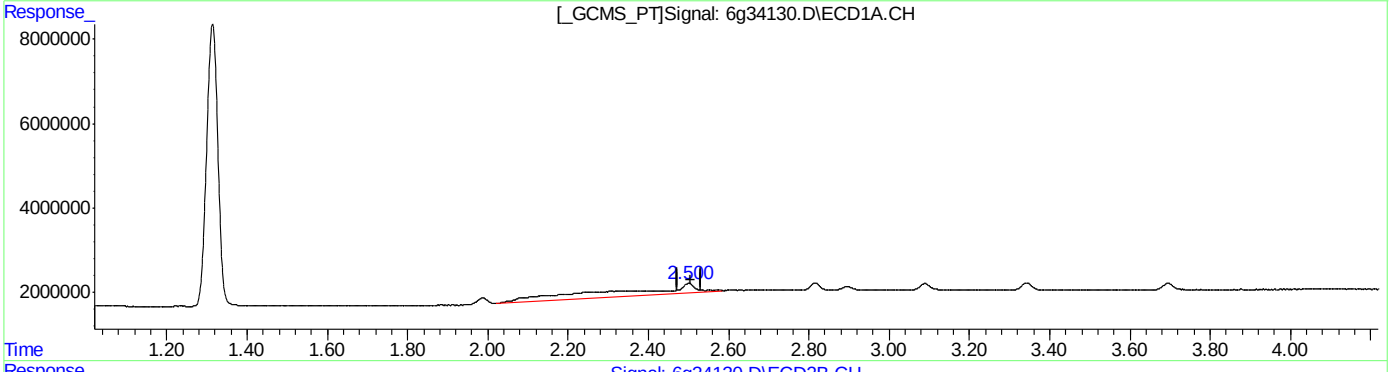
SGS ACCUTEST JC19996

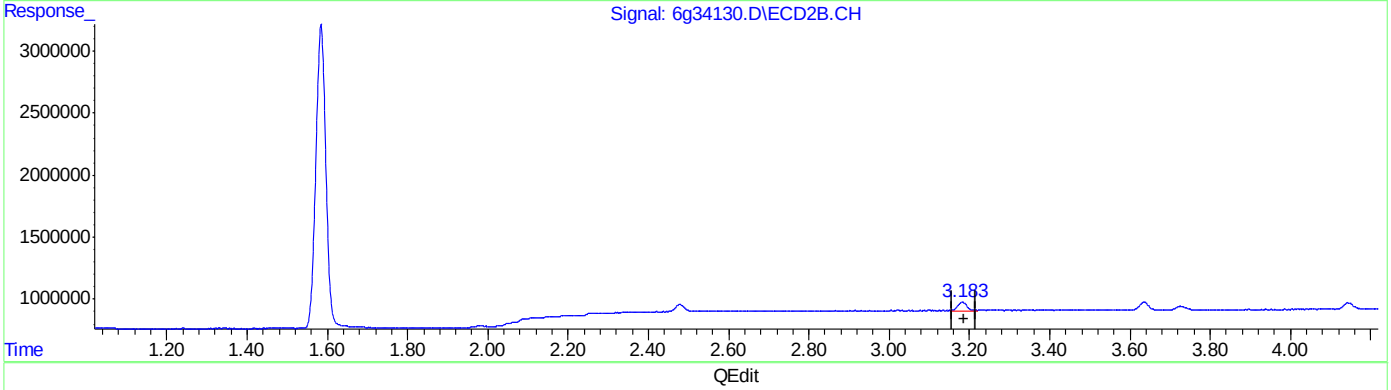
Quantitation Report (Qedit)

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
6PST987.M Mon Apr 18 10:52:32 2016

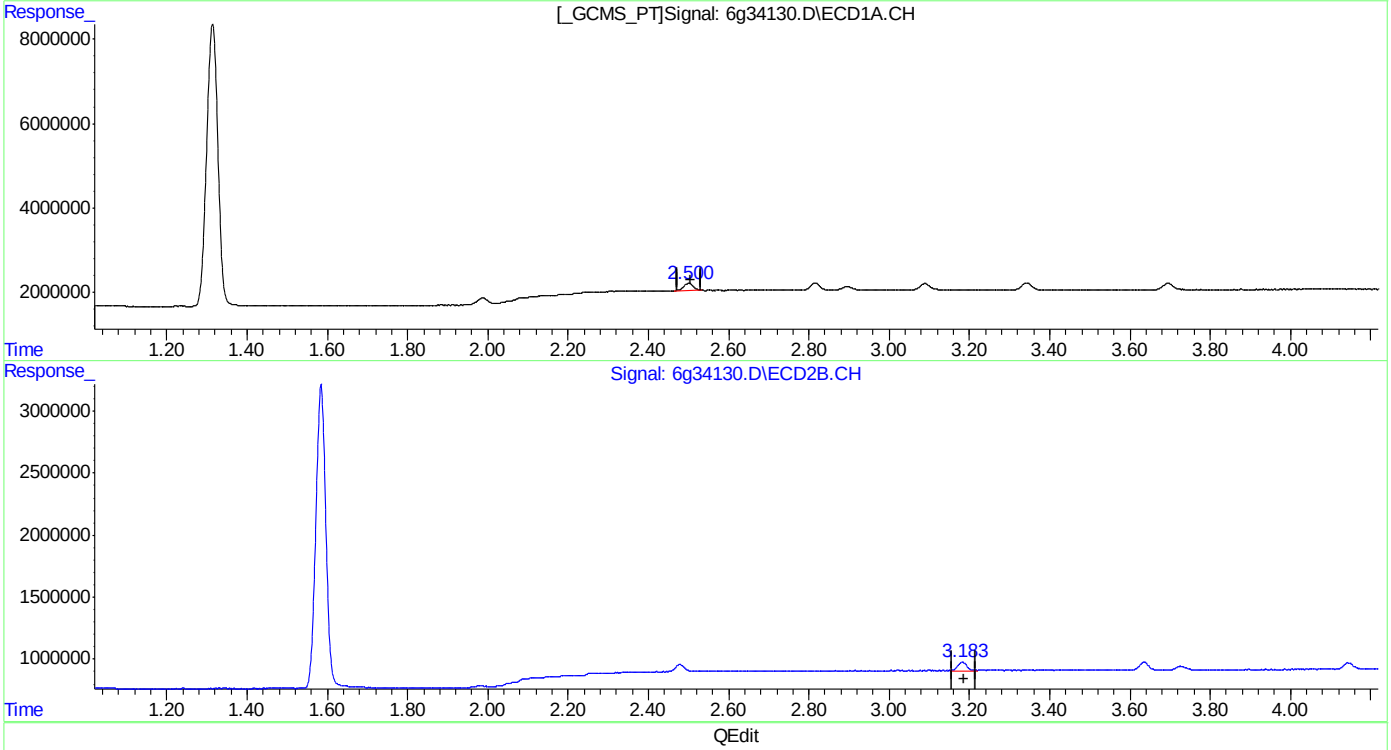
SGS ACCUTEST JC19996

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

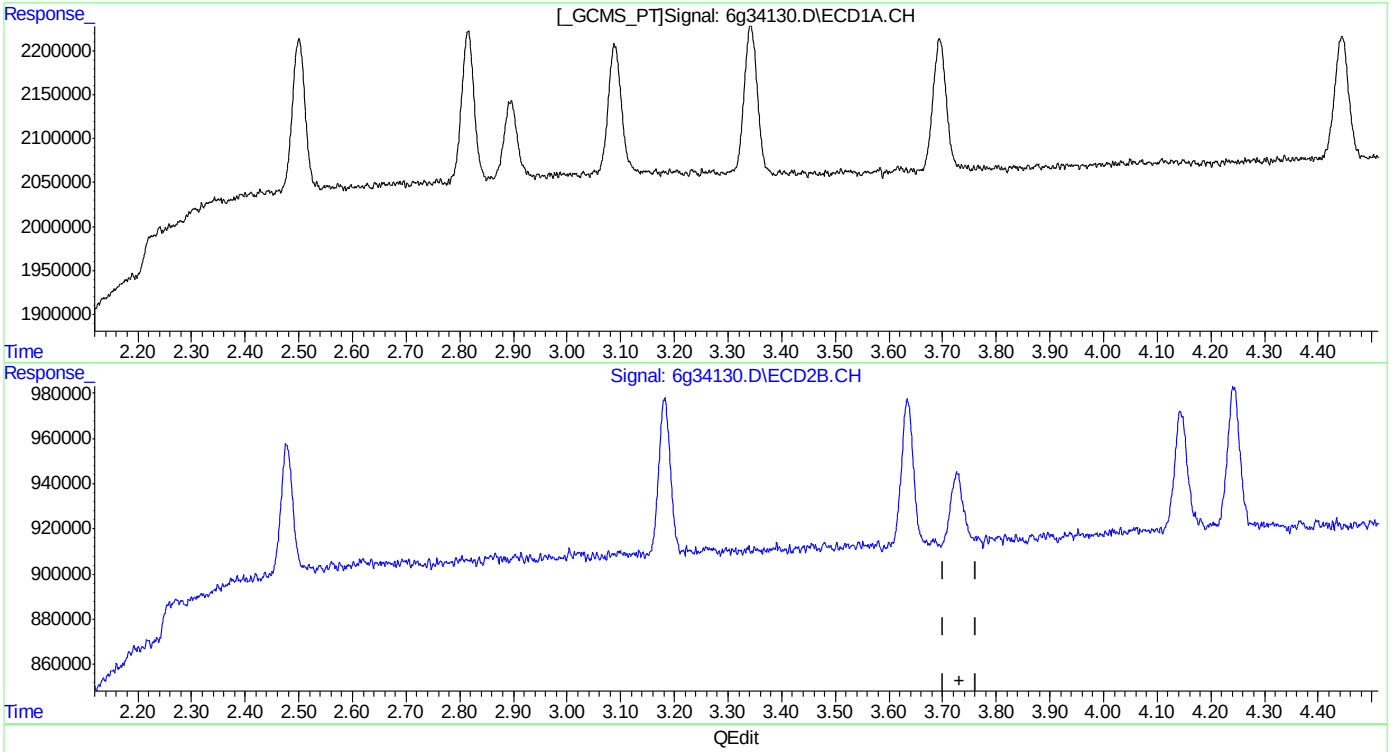
SGS ACCUTEST JC19996

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

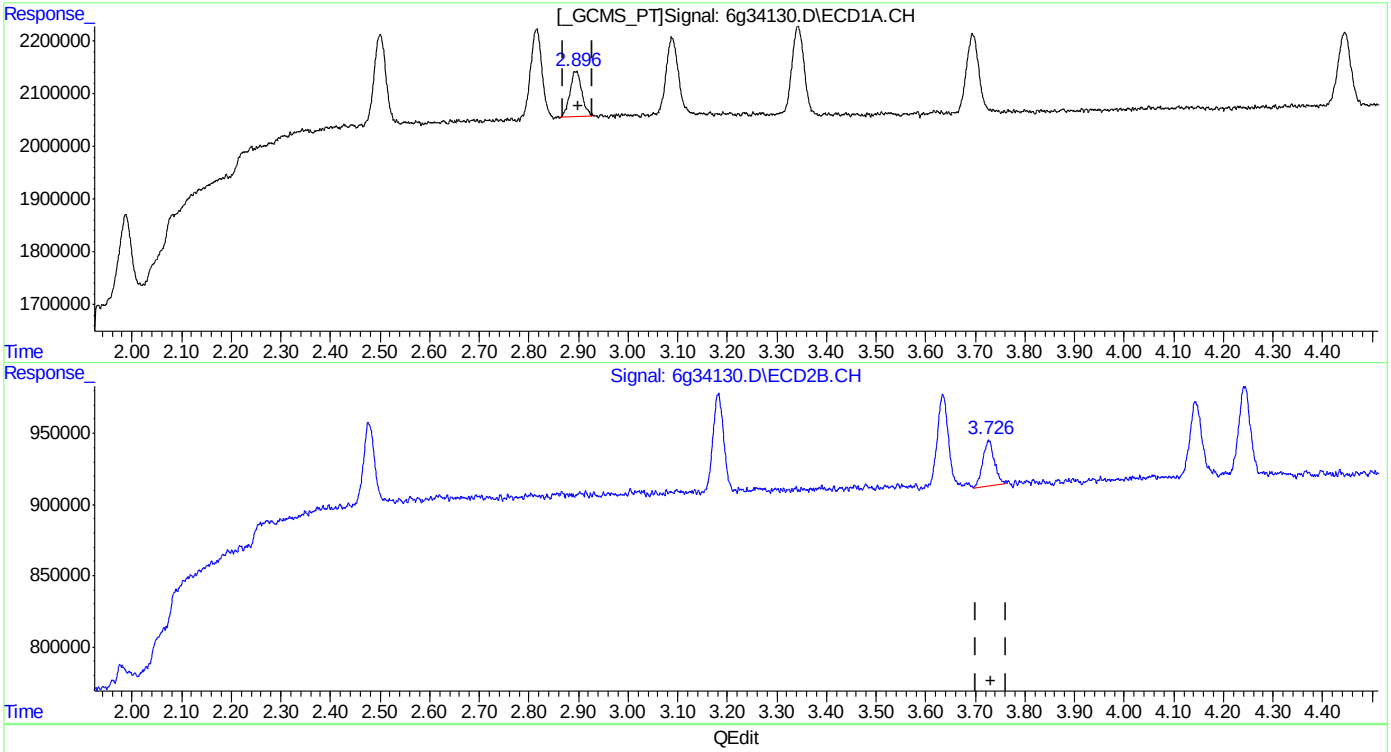
SGS ACCUTEST JC19996

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
6PST987.M Mon Apr 18 10:53:05 2016

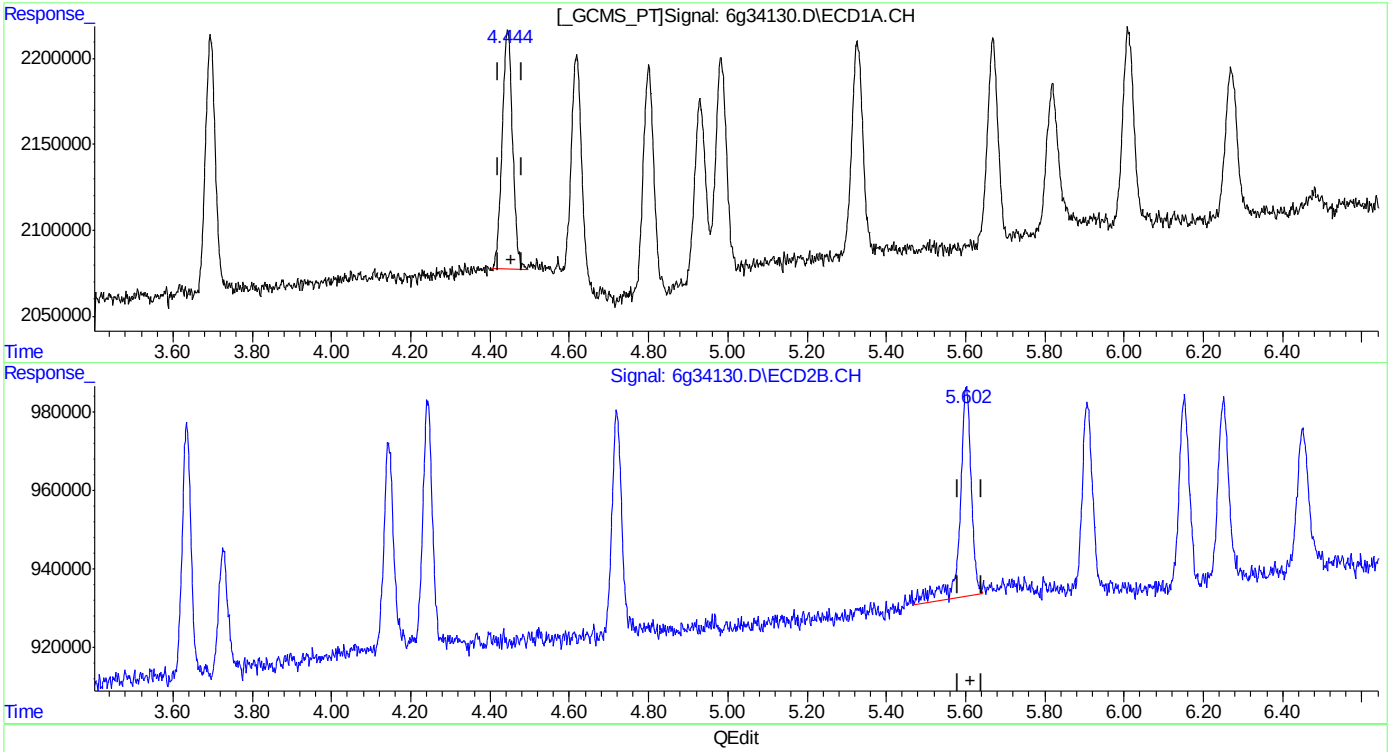
SGS ACCUTEST JC19996

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

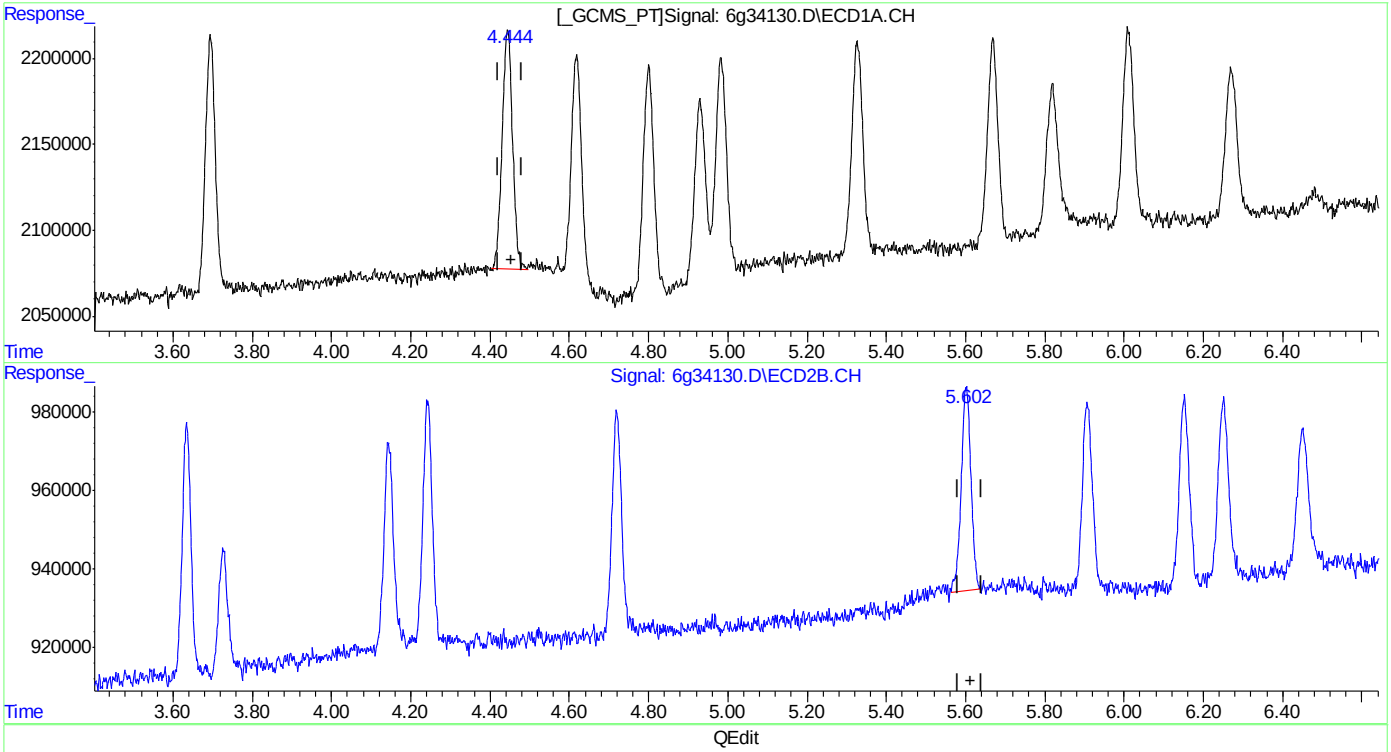
SGS ACCUTEST JC19996

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

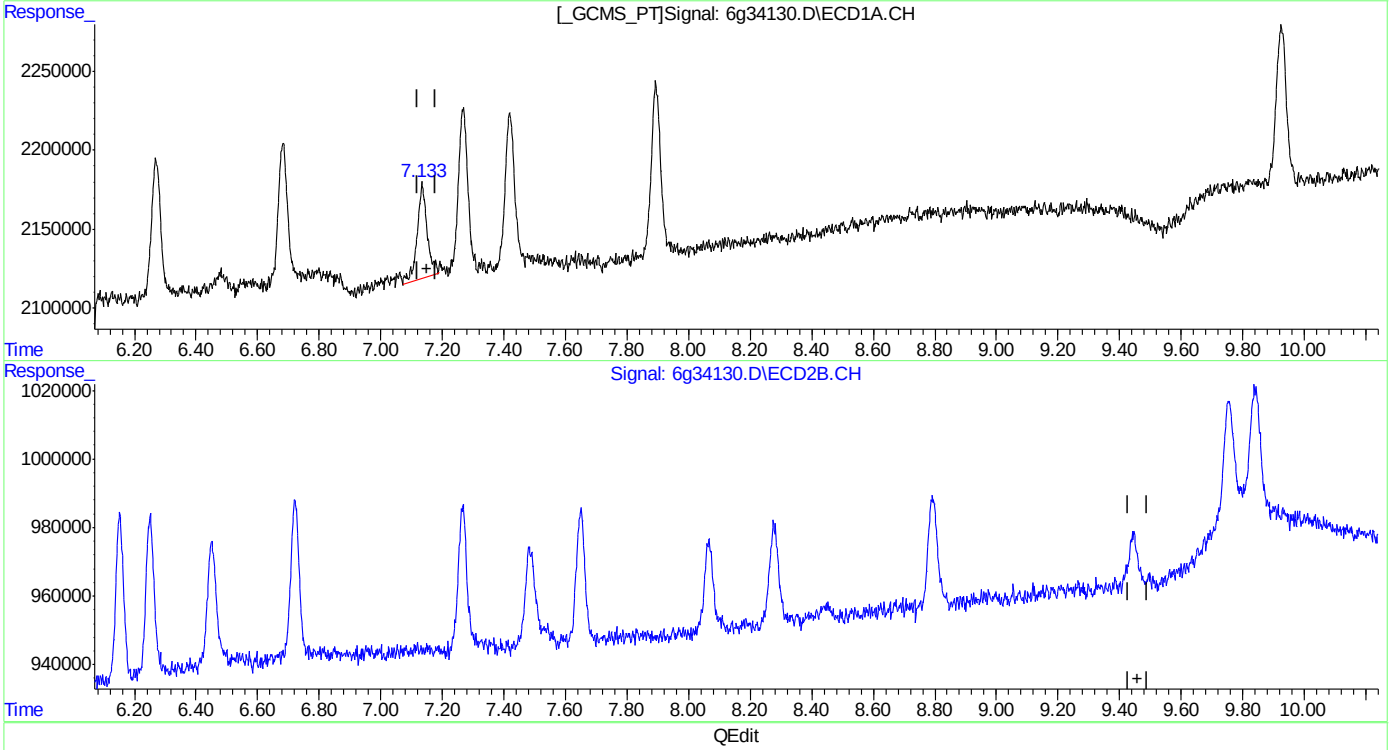
SGS ACCUTEST JC19996

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)
0.000min 0.000PPB
response 0

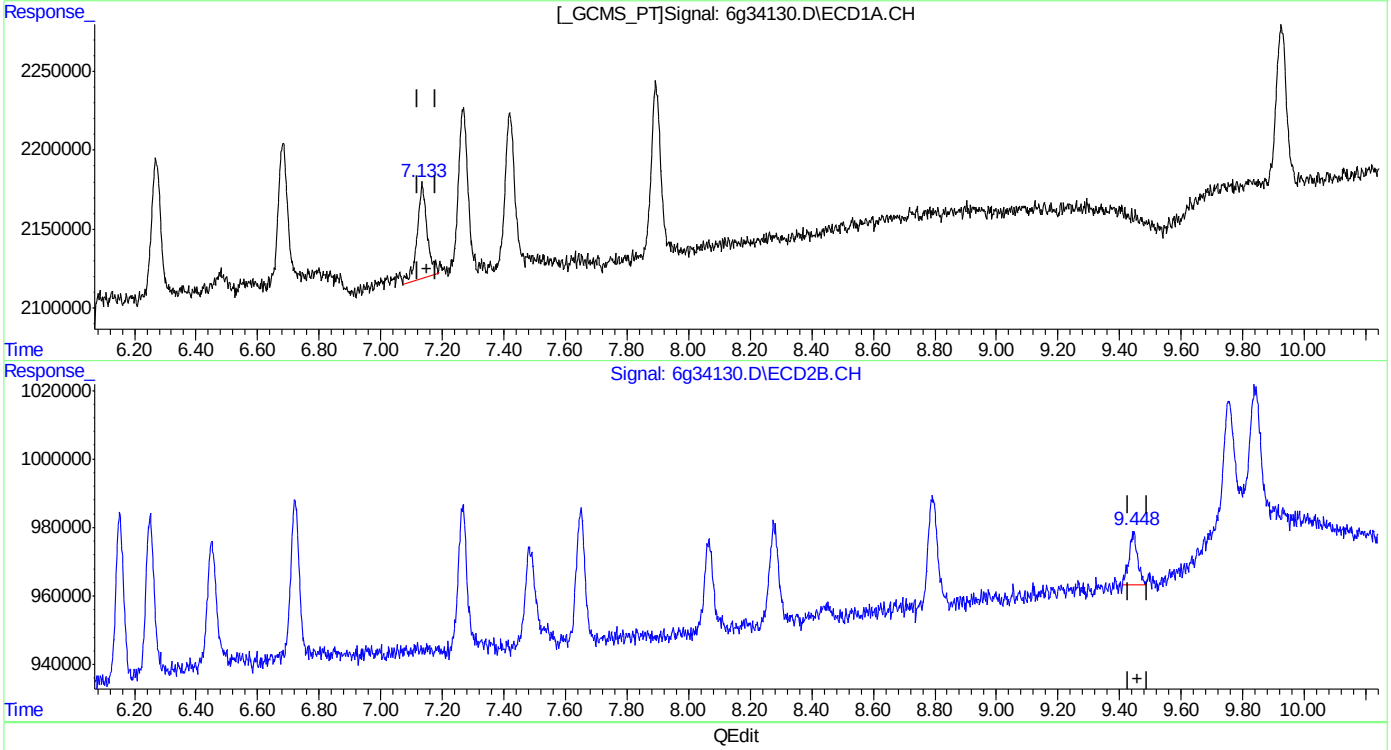
(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:53:36 2016

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

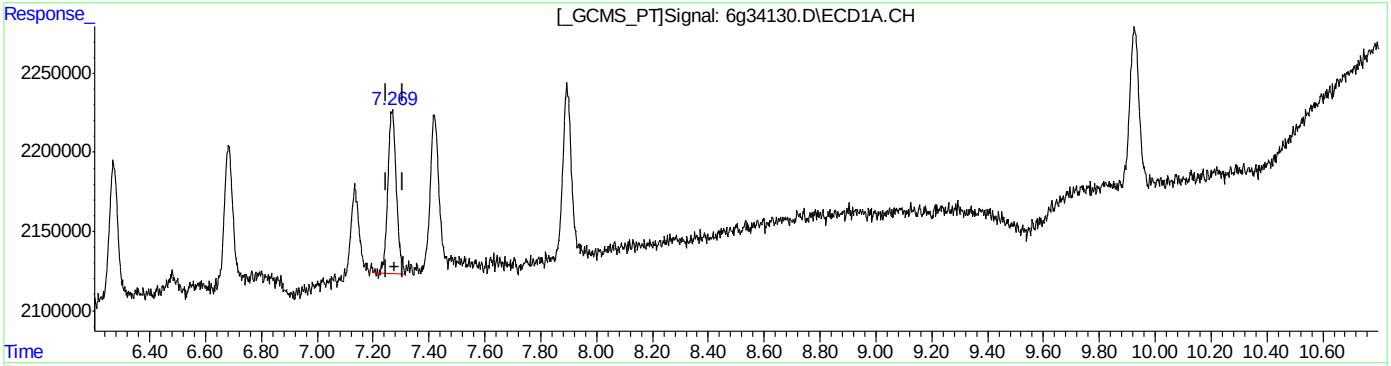
SGS ACCUTEST JC19996

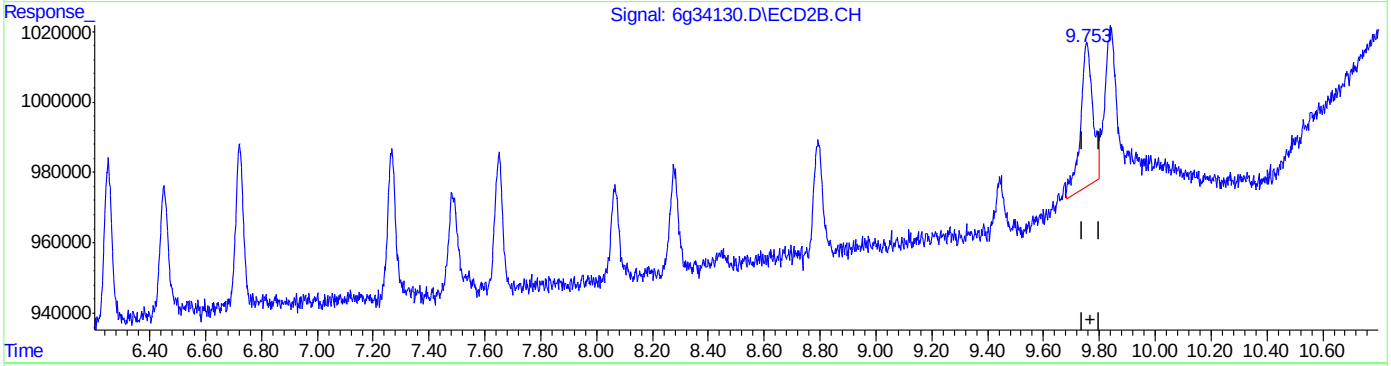
Quantitation Report (Qedit)

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
6PST987.M Mon Apr 18 10:53:55 2016

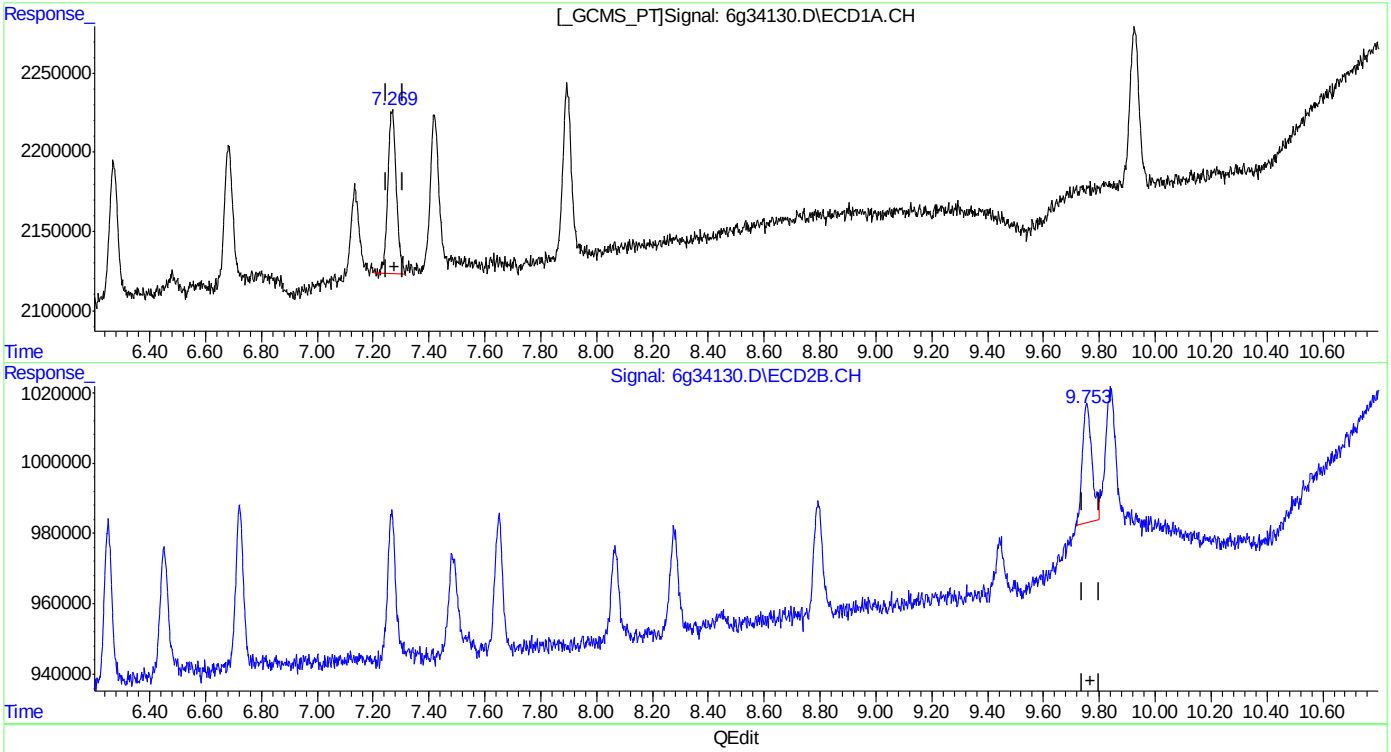
SGS ACCUTEST JC19996

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

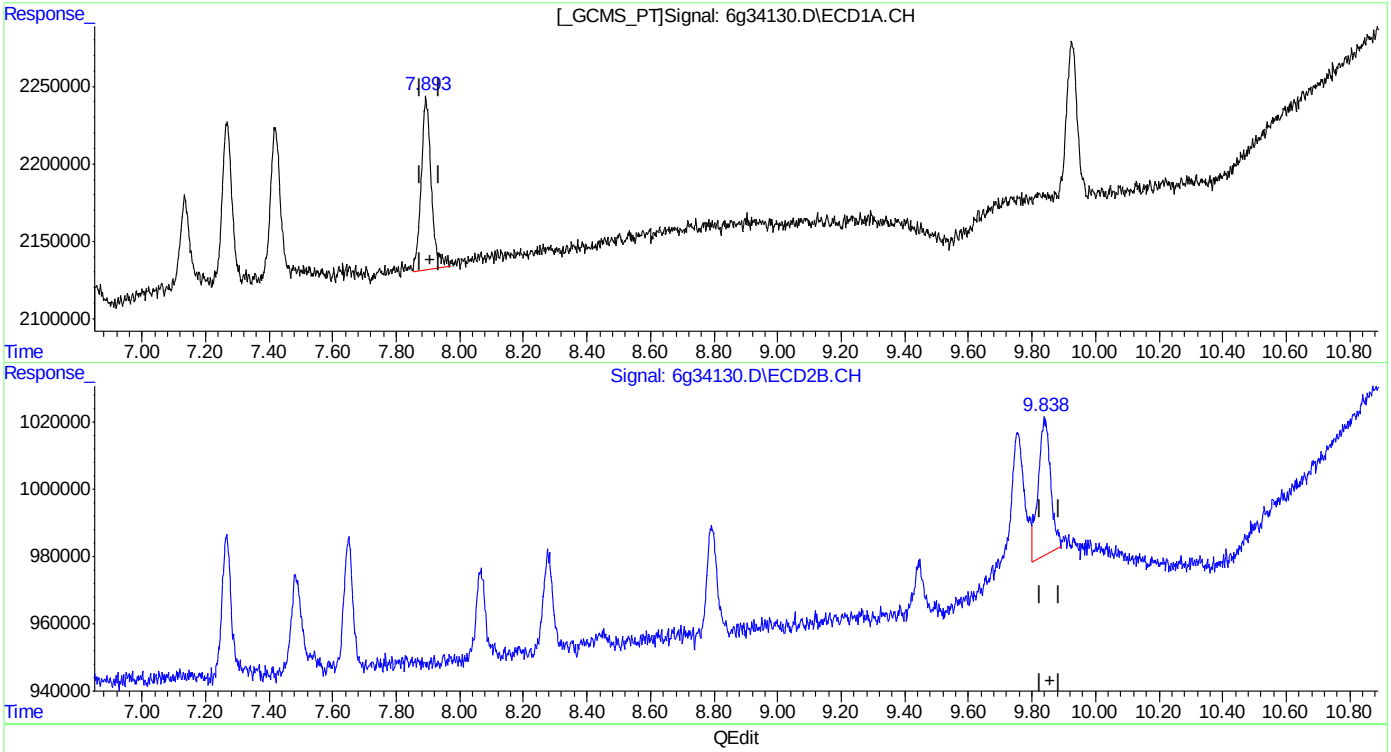
(+) = Expected Retention Time

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

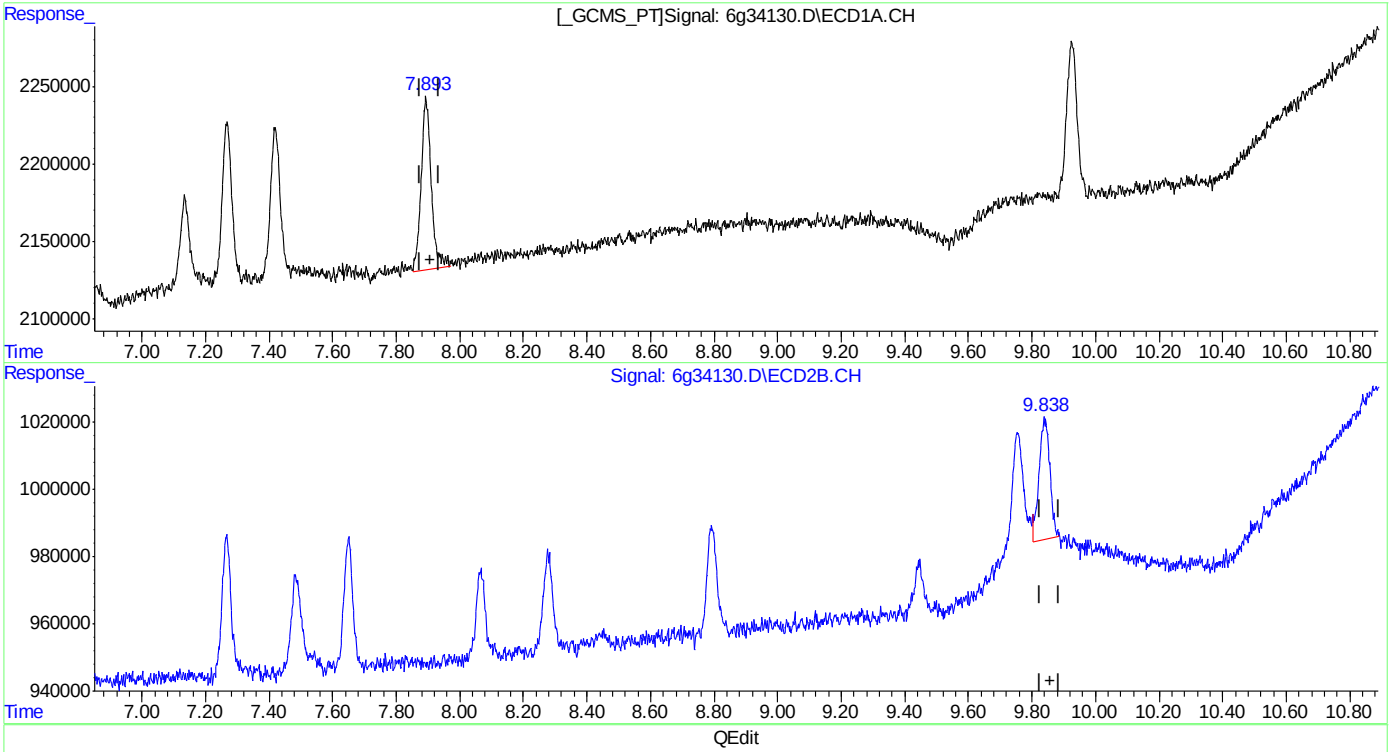
SGS ACCUTEST JC19996

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 JC19996

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.

11.6.18 11

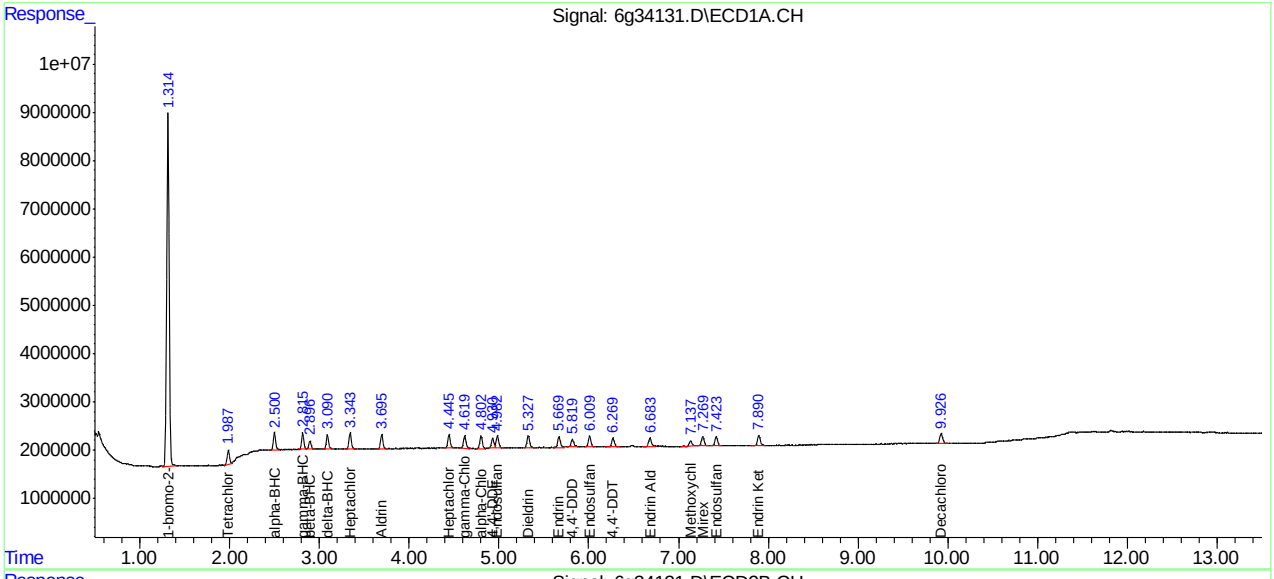
SGS ACCUTEST JC19996

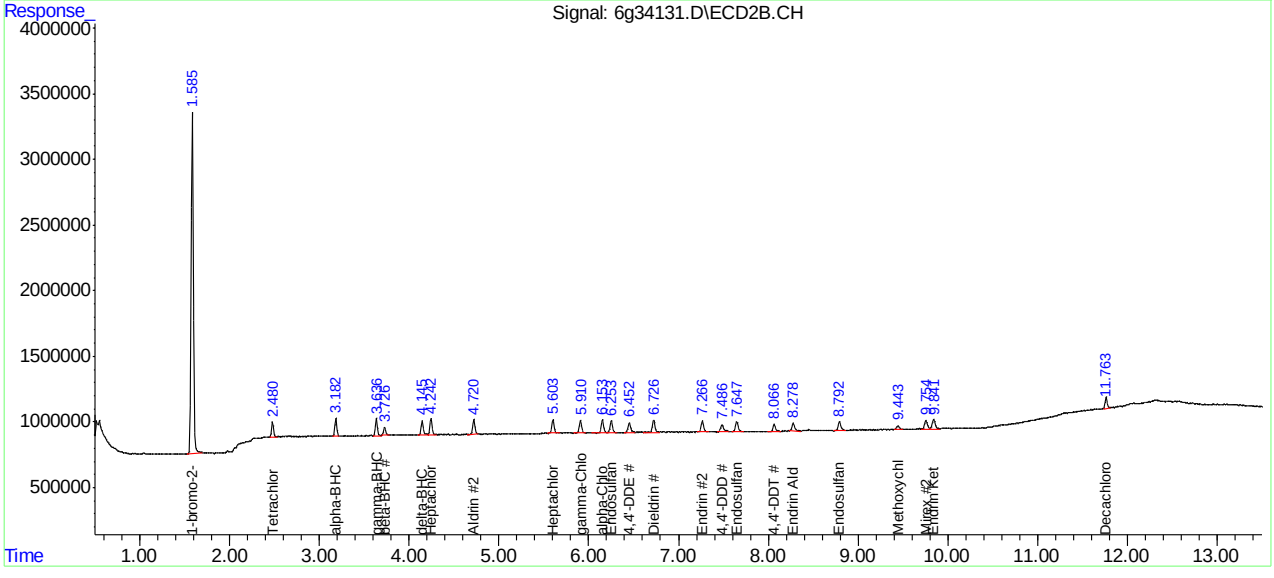
Quantitation Report (QT Reviewed)

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

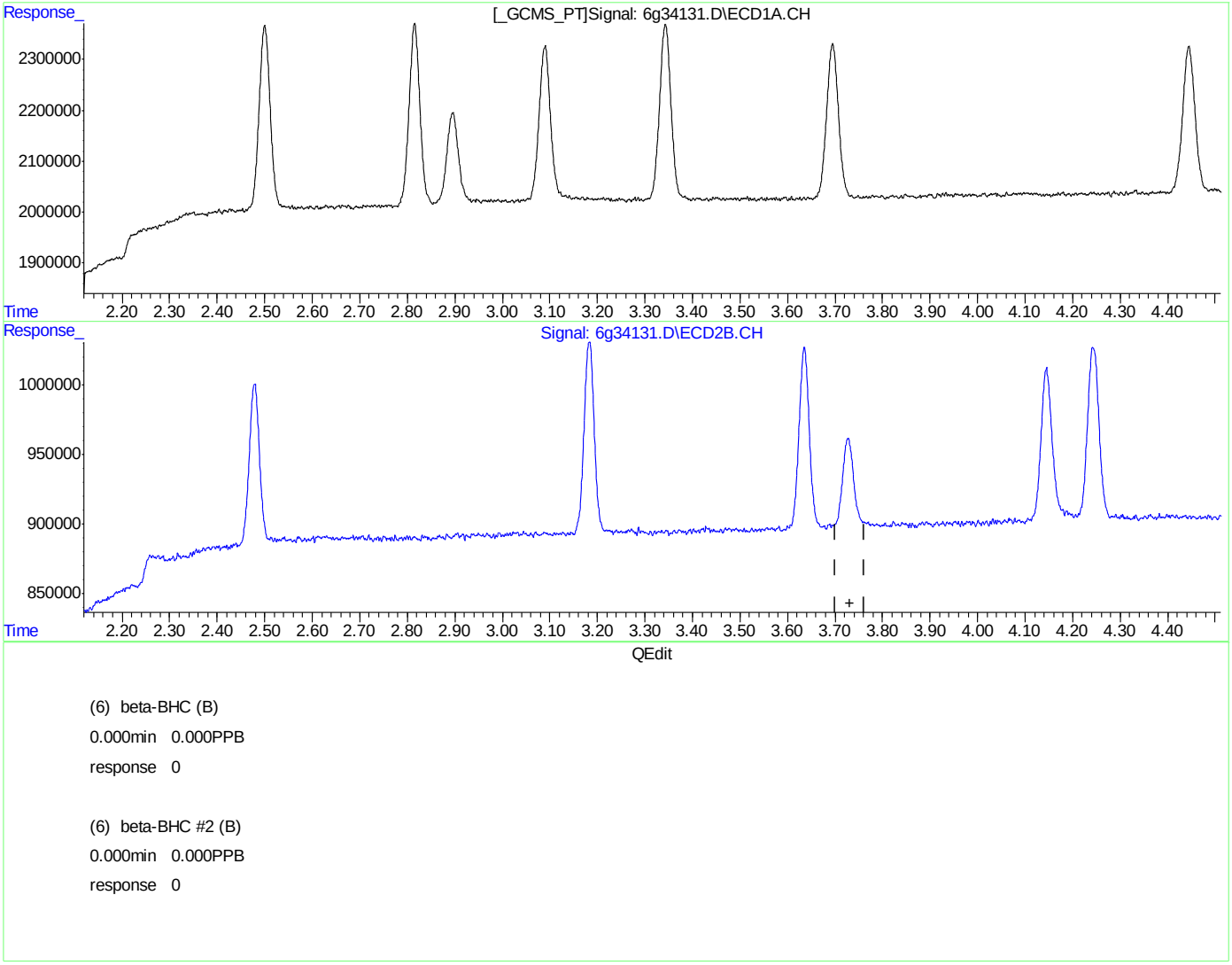
Parameter	CAS	Sig#	R.T. (min.)	Reason
beta-BHC	319-85-7	1	2.90	Poor instrument integration
beta-BHC	319-85-7	2	3.73	Poor instrument integration
Methoxychlor	72-43-5	2	9.44	Poor instrument integration
Decachlorobiphenyl	2051-24-3	2	11.76	Poor instrument integration

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

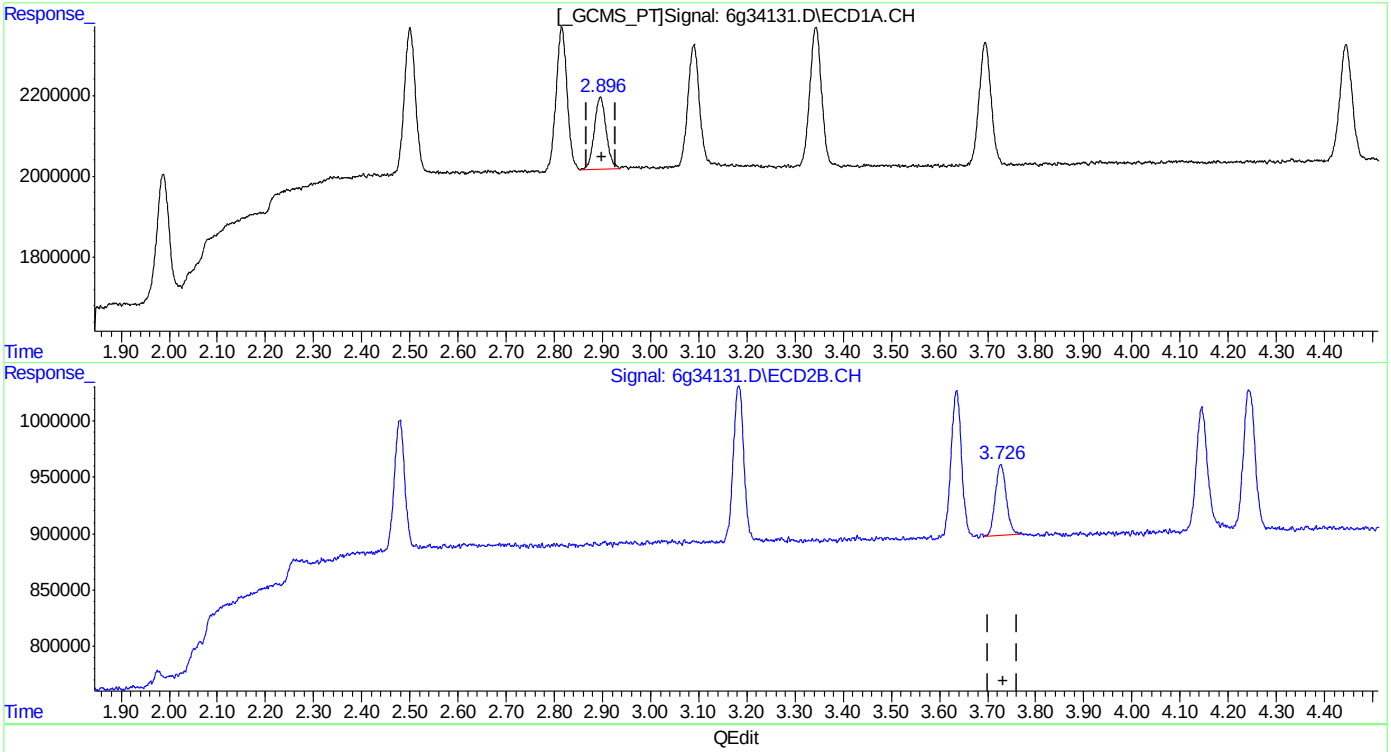
SGS ACCUTEST JC19996

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

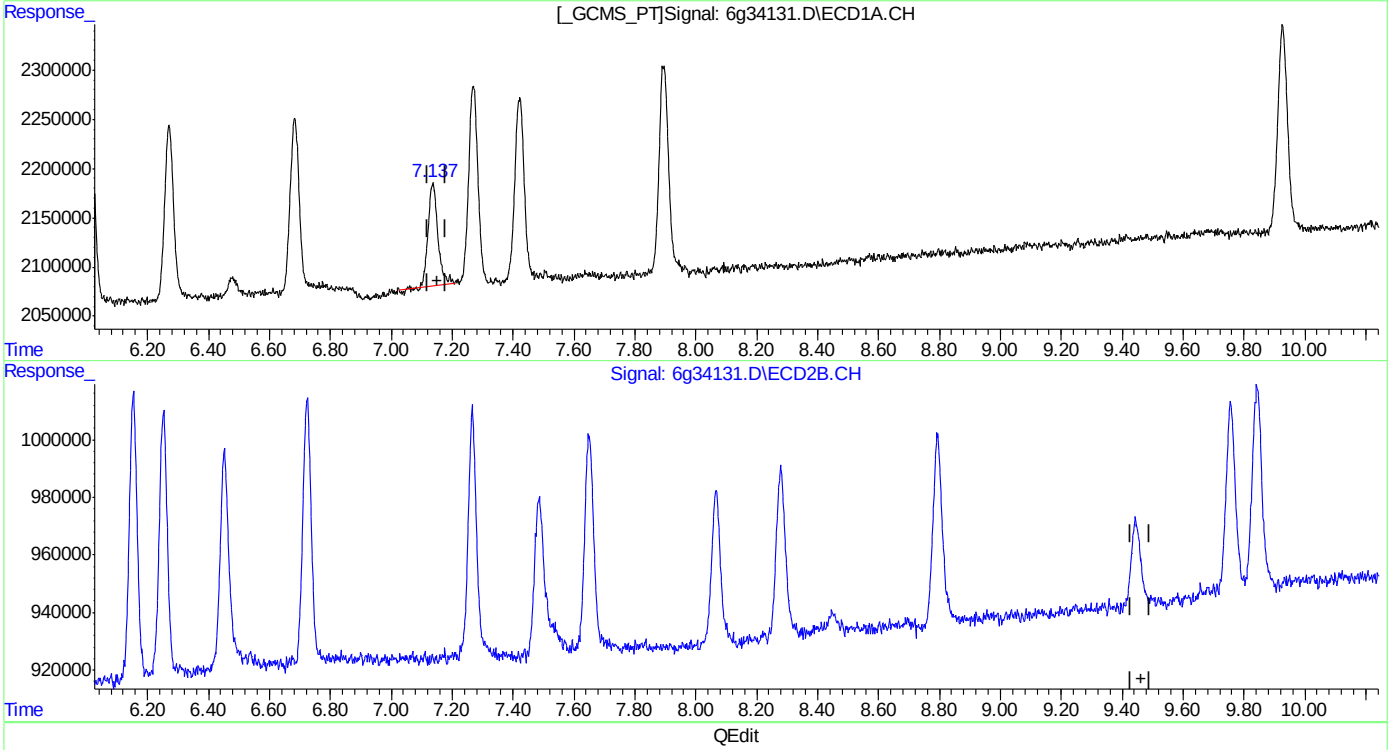
(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:41:59 2016

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
6PST987.M Mon Apr 18 10:42:14 2016

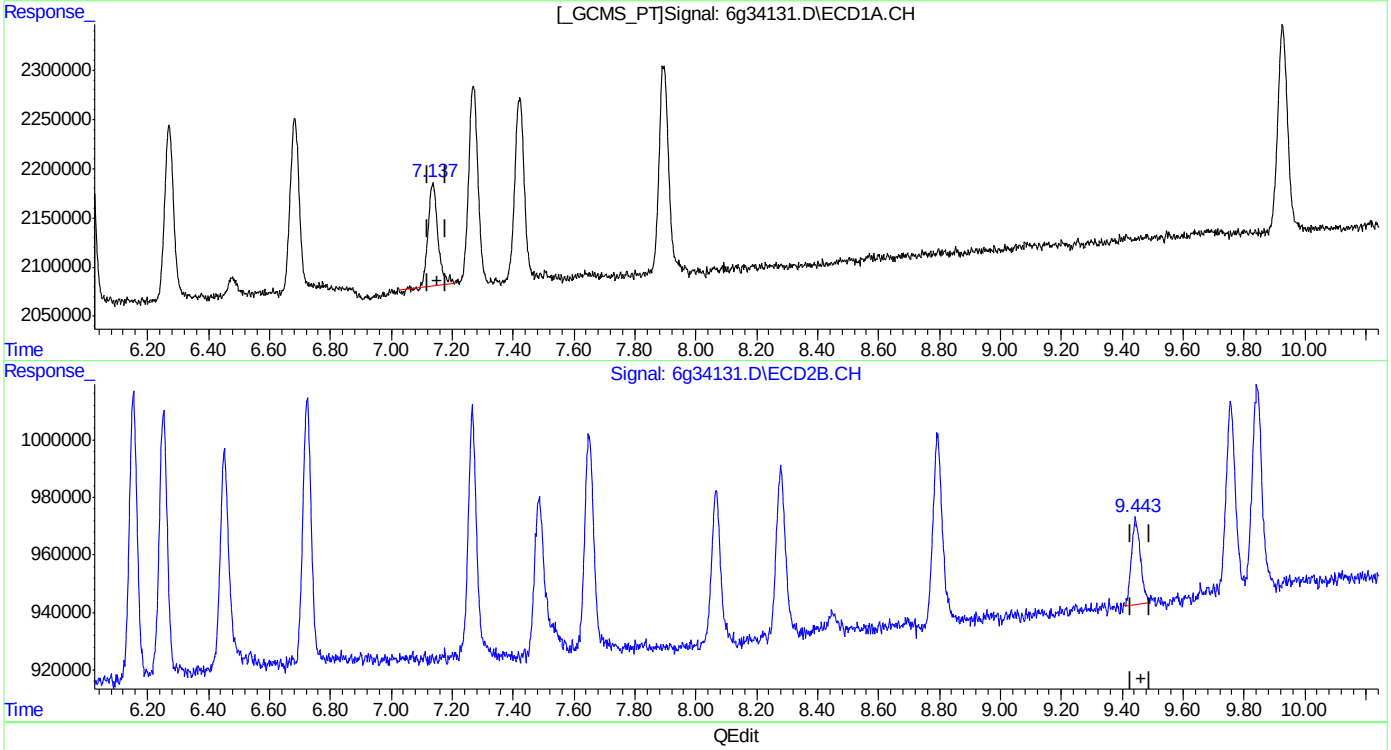
SGS ACCUTEST JC19996

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

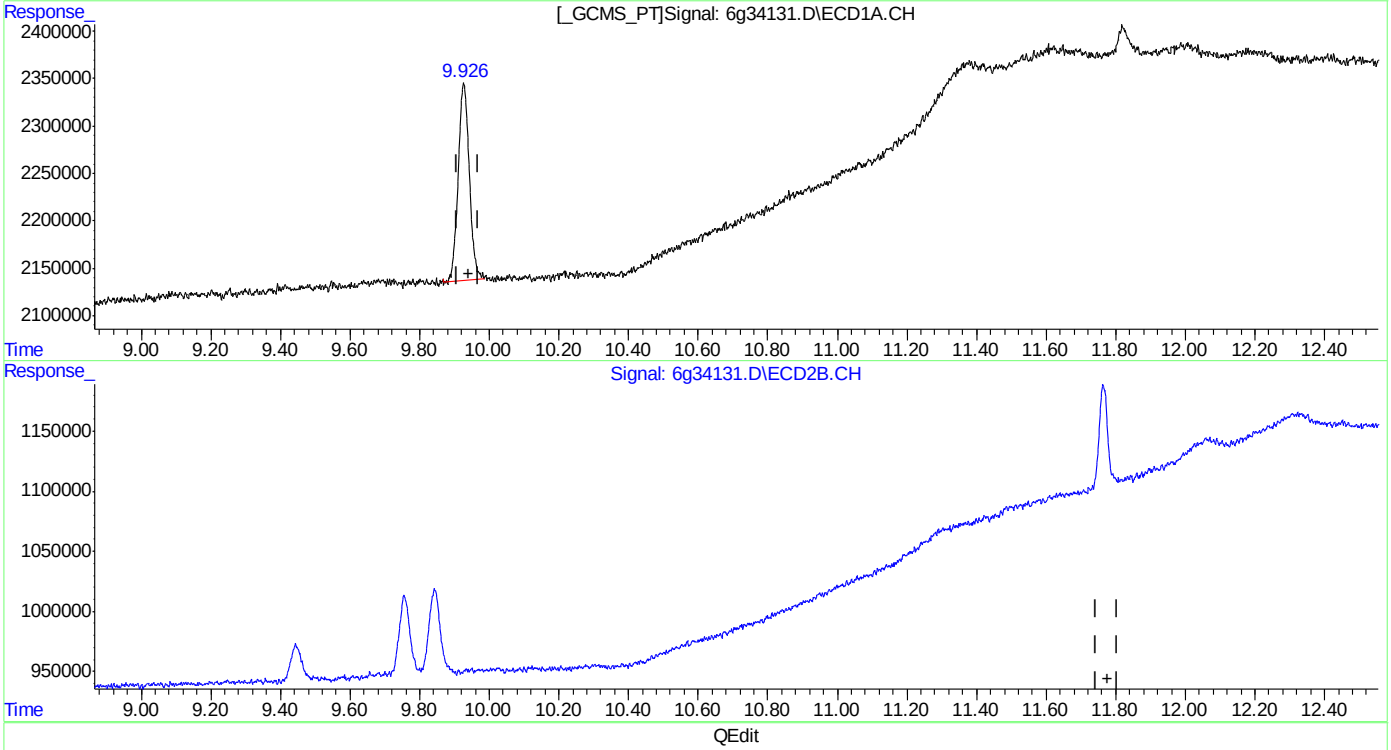
SGS ACCUTEST JC19996

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

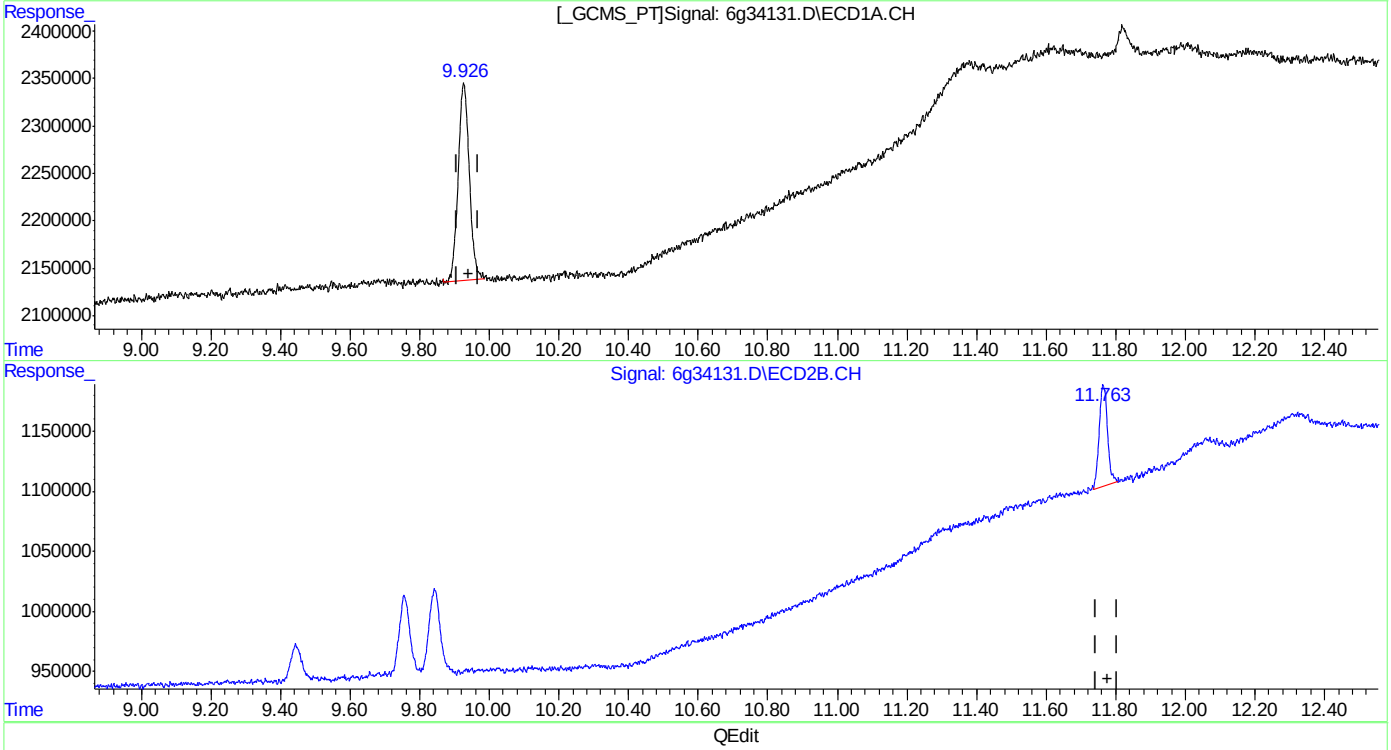
(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:42:27 2016

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 JC19996

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.

11.6.19 11

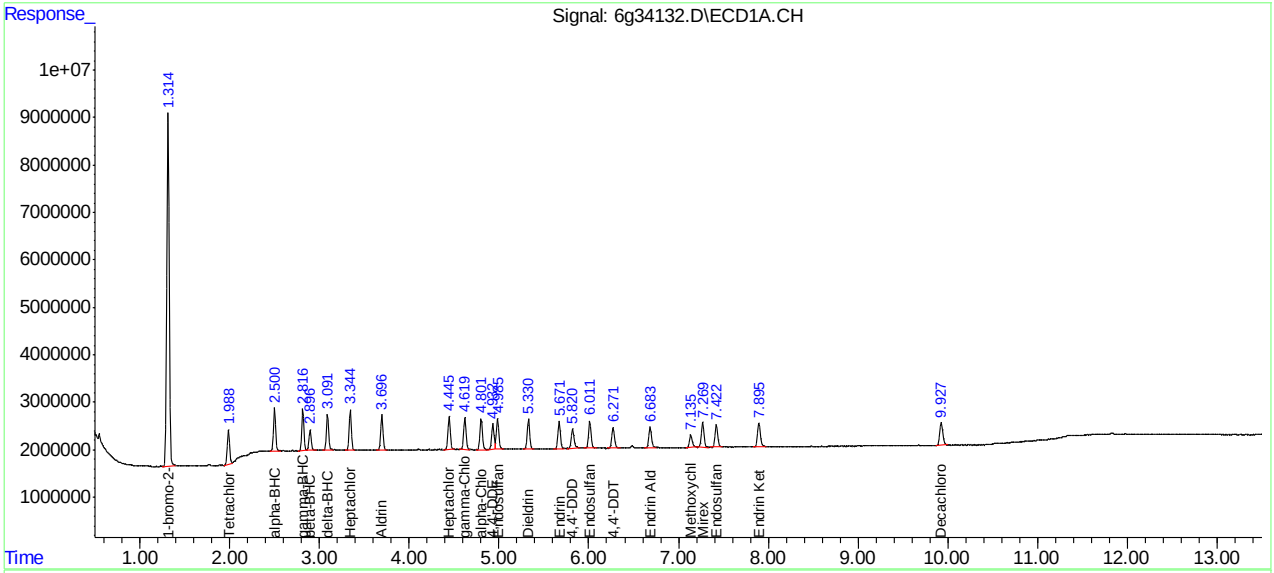
SGS ACCUTEST JC19996

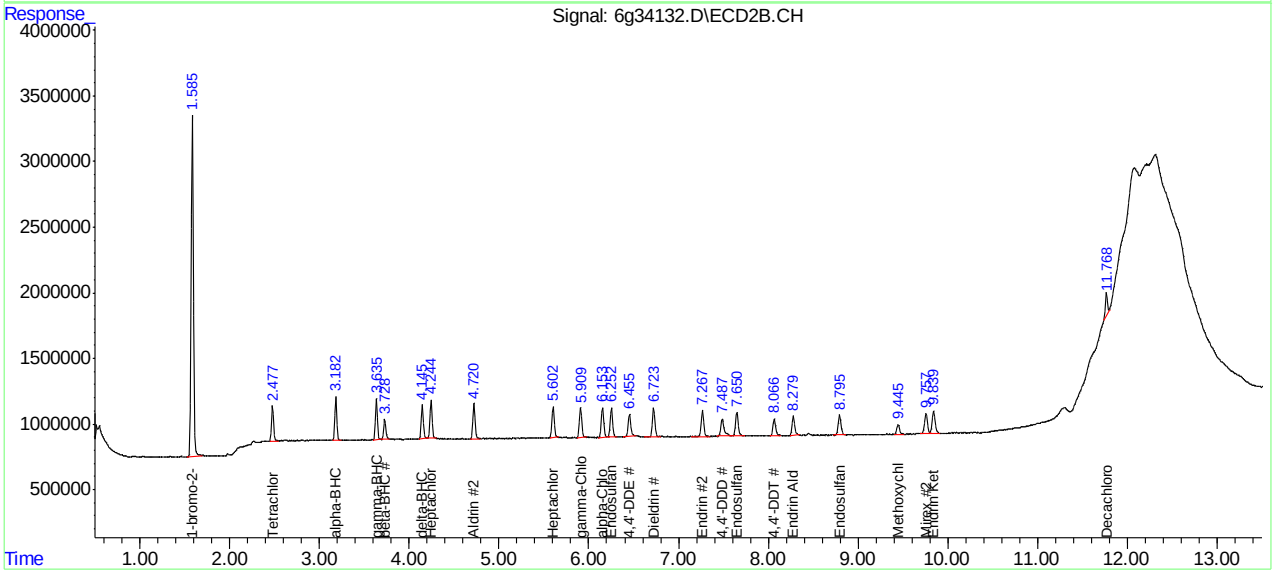
Quantitation Report (QT Reviewed)

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 JC19996

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

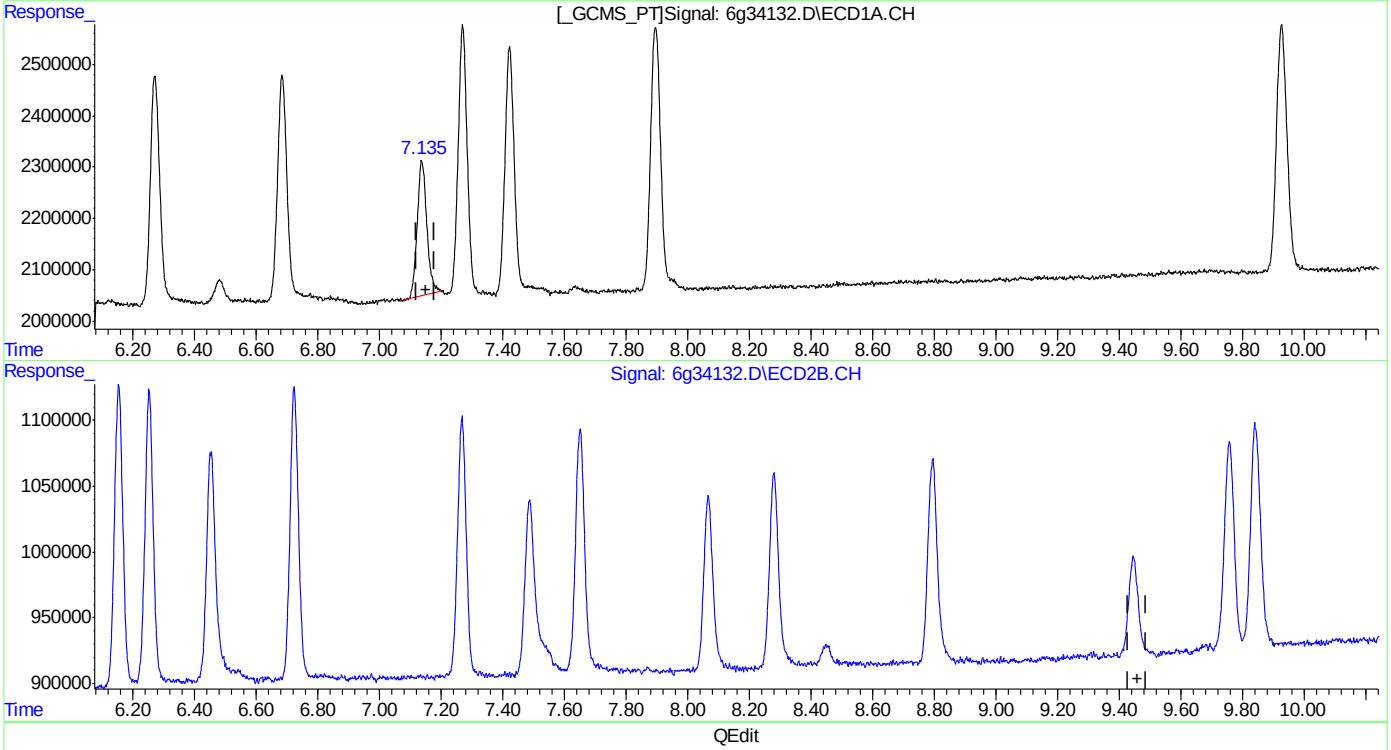
Parameter	CAS	Sig#	R.T. (min.)	Reason
Methoxychlor	72-43-5	2	9.44	Poor instrument integration
Decachlorobiphenyl	2051-24-3	2	11.77	Poor instrument integration

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

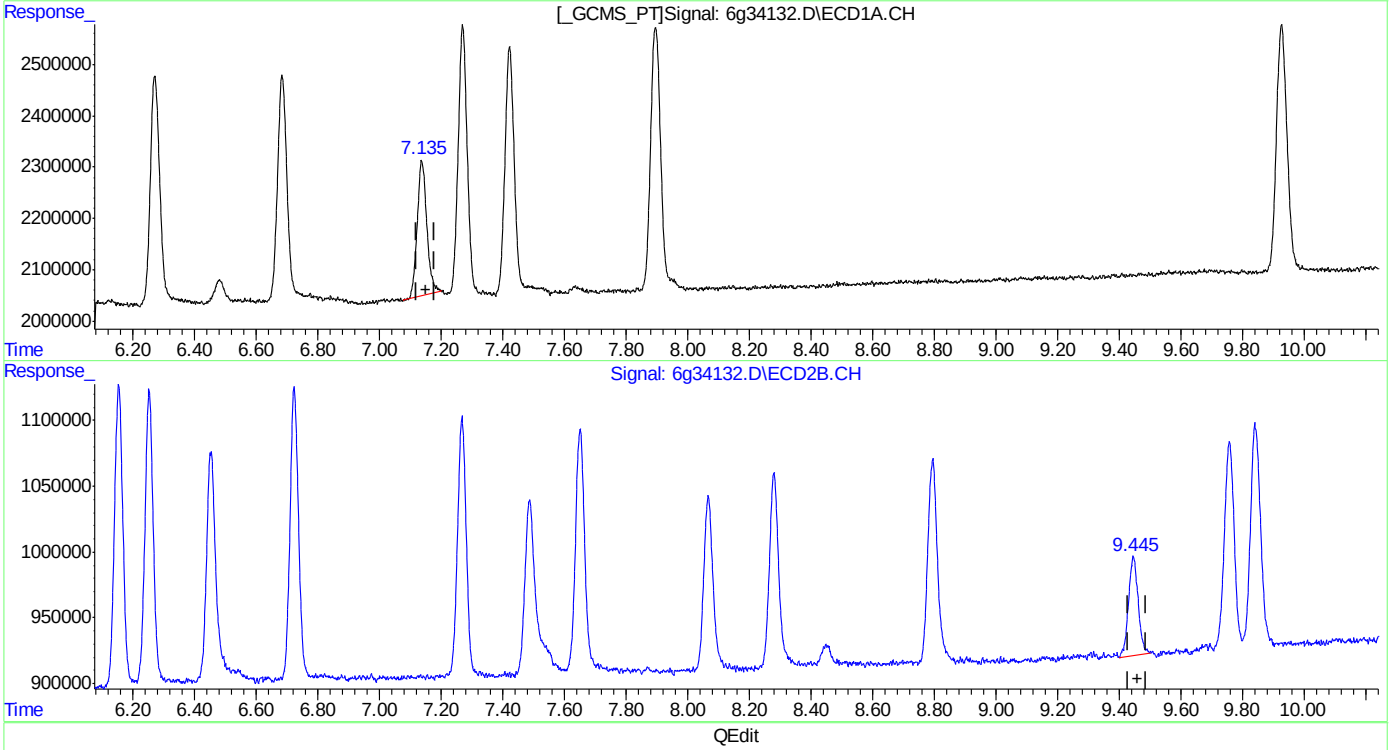
(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:36:47 2016

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

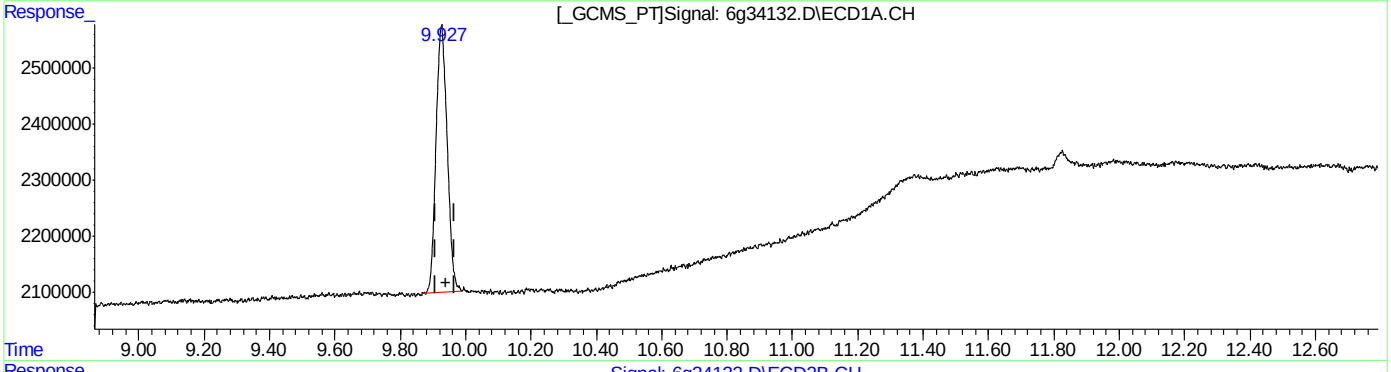
SGS ACCUTEST JC19996

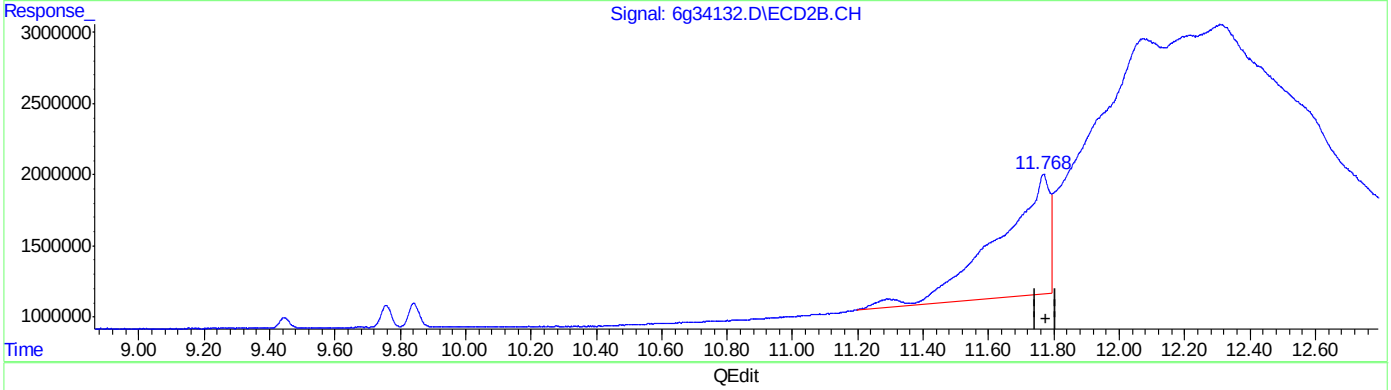
Quantitation Report (Qedit)

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

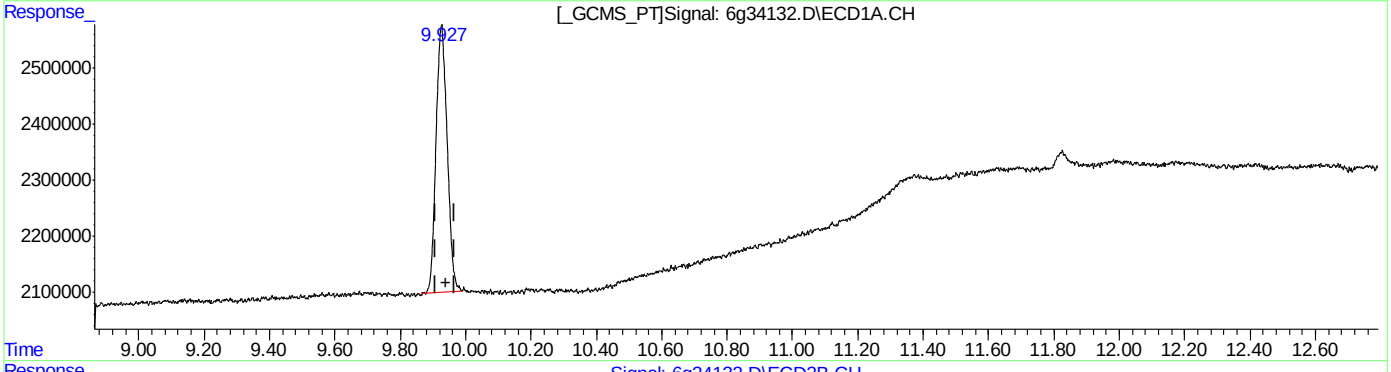
SGS ACCUTEST JC19996

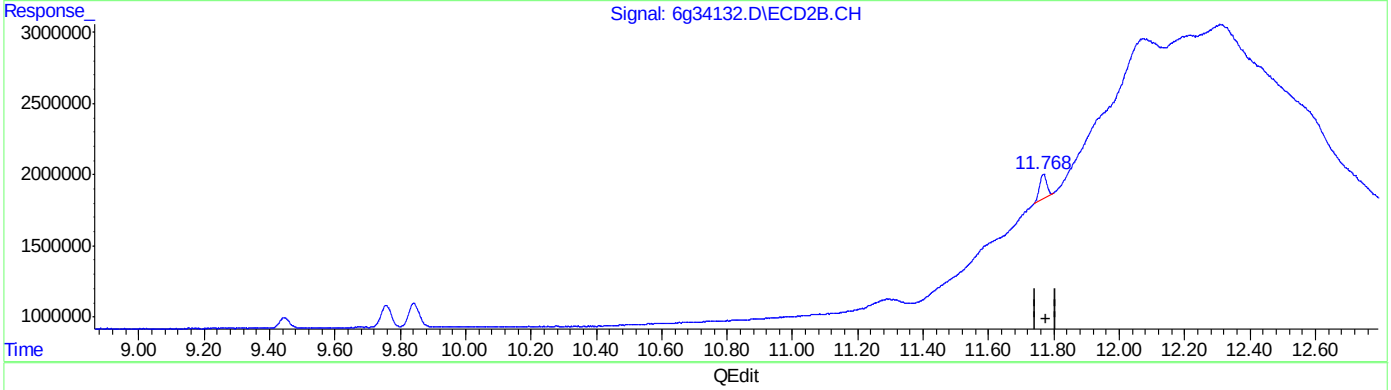
Quantitation Report (Qedit)

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 JC19996

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.

11.6.20 11

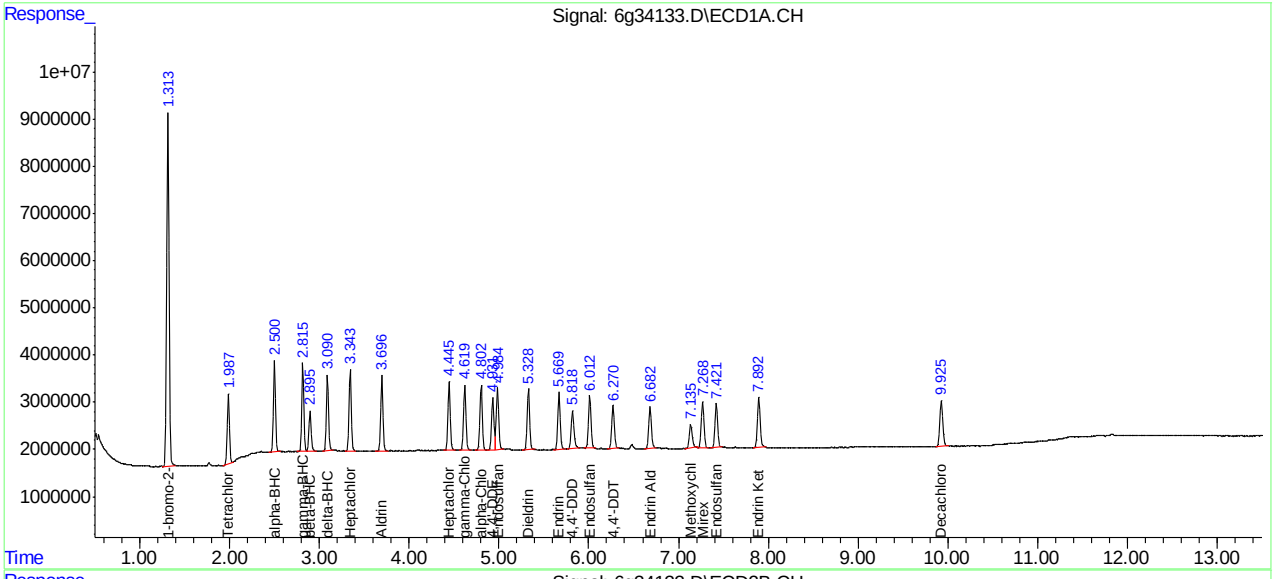
SGS ACCUTEST JC19996

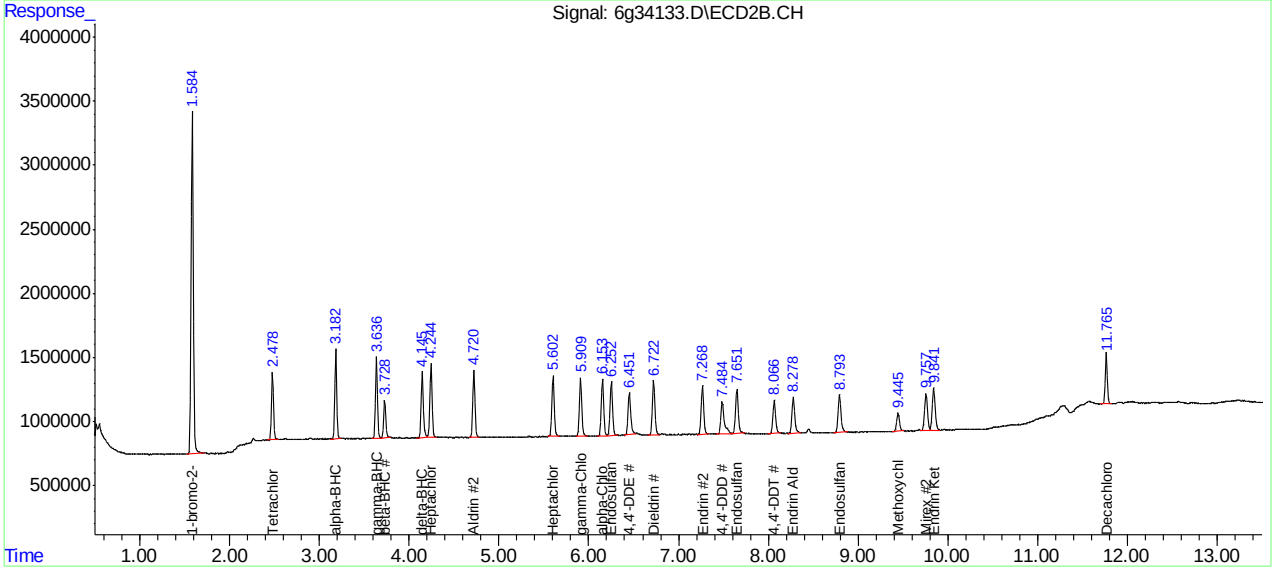
Quantitation Report (QT Reviewed)

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 JC19996

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.

11.6.21 11

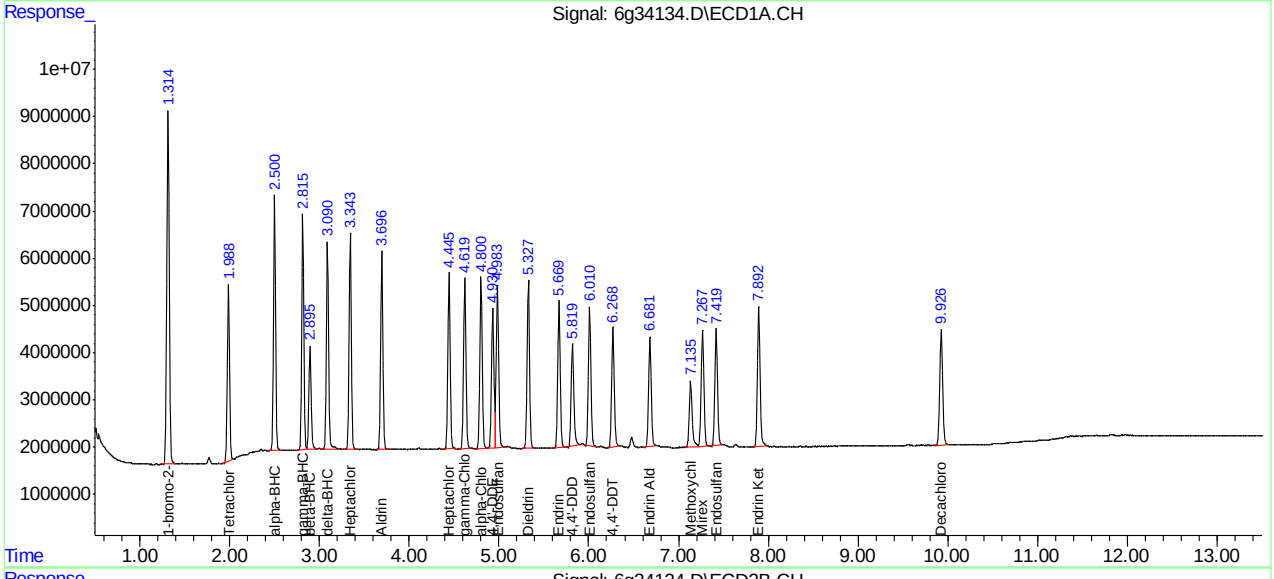
SGS ACCUTEST JC19996

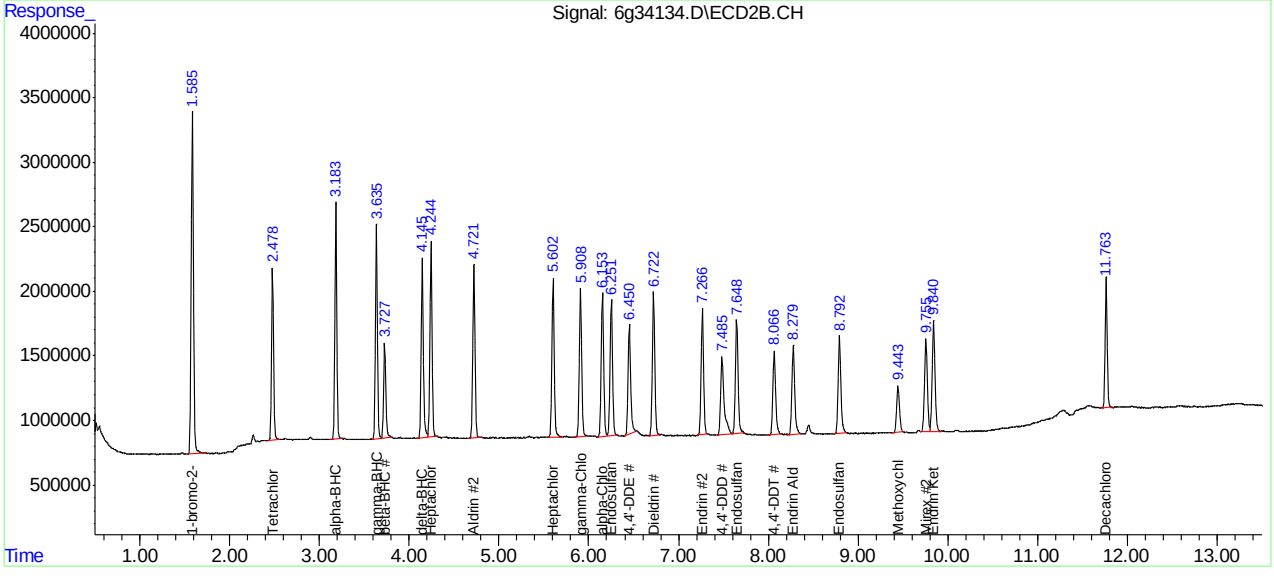
Quantitation Report (QT Reviewed)

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





SGS ACCUTEST JC19996

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.

11.6.22 11

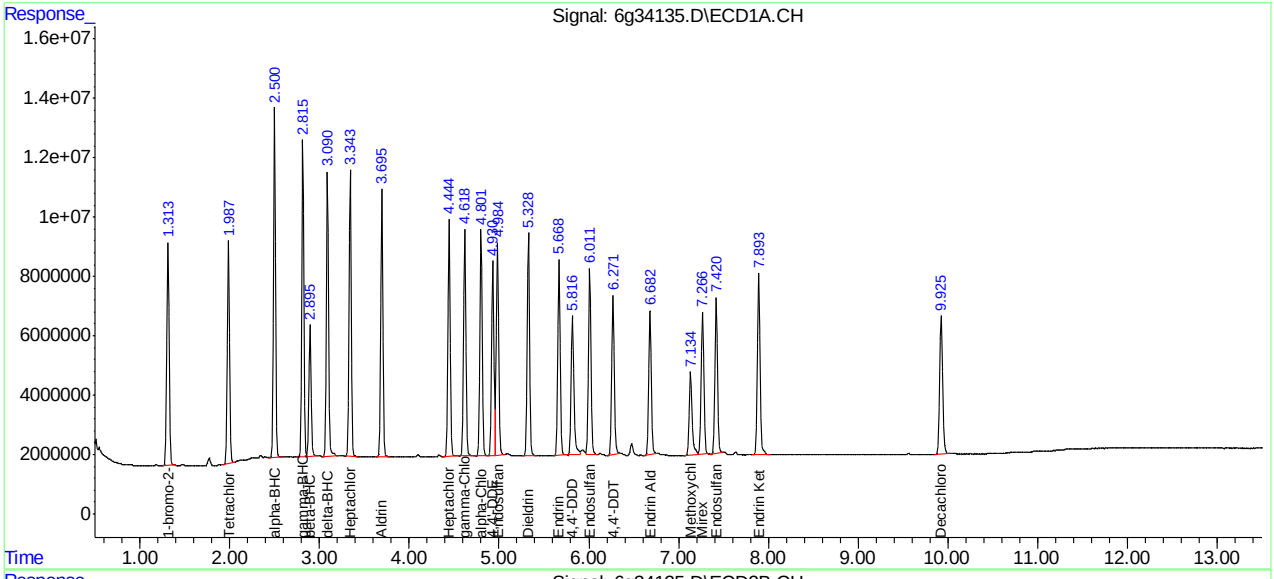
SGS ACCUTEST JC19996

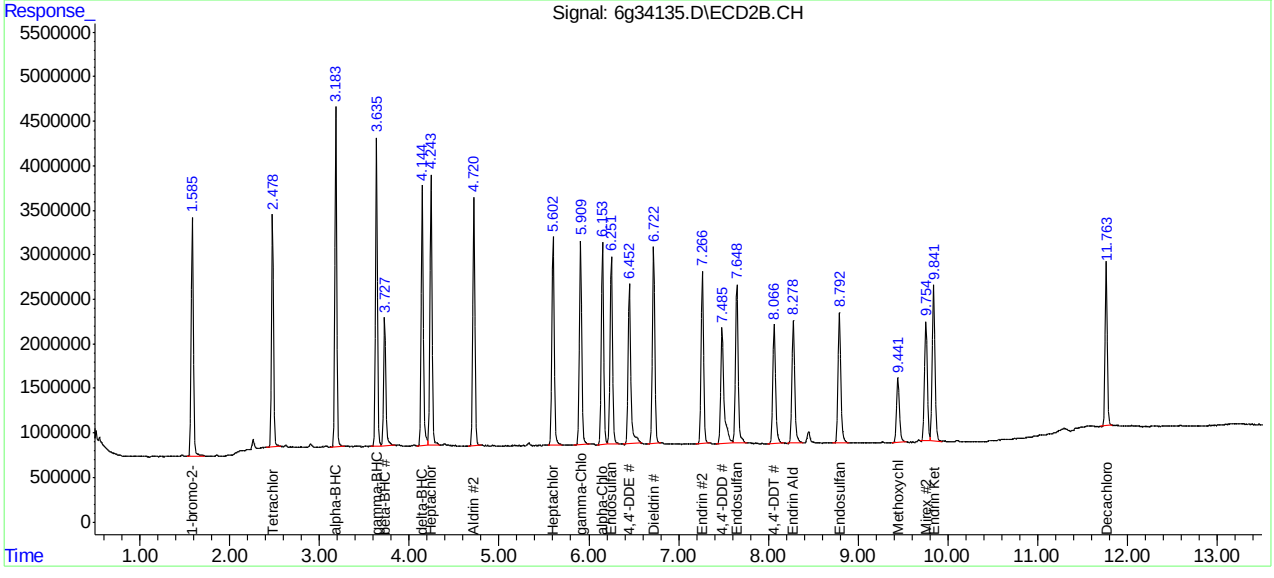
Quantitation Report (QT Reviewed)

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





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.

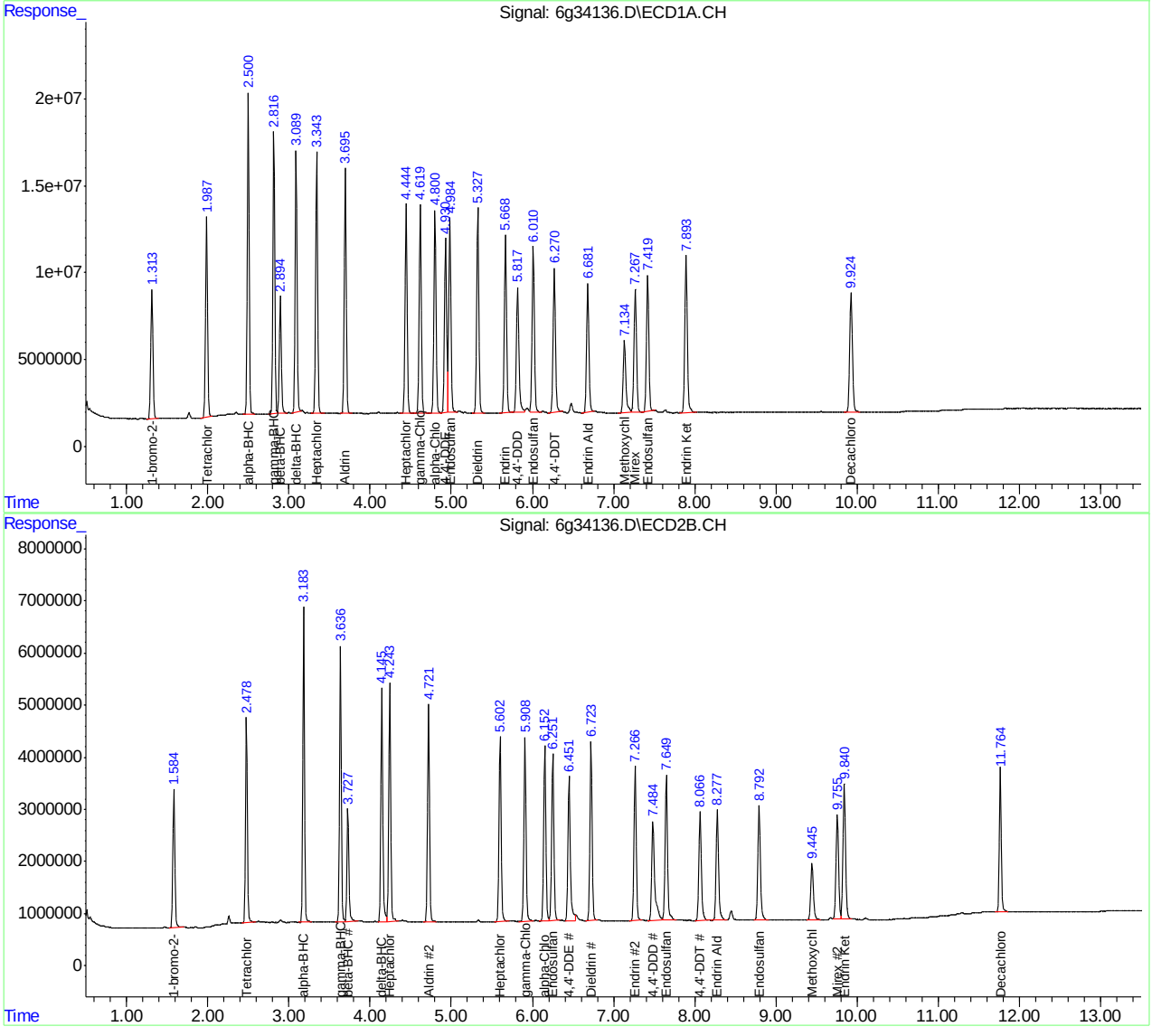
11.6.23 11

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

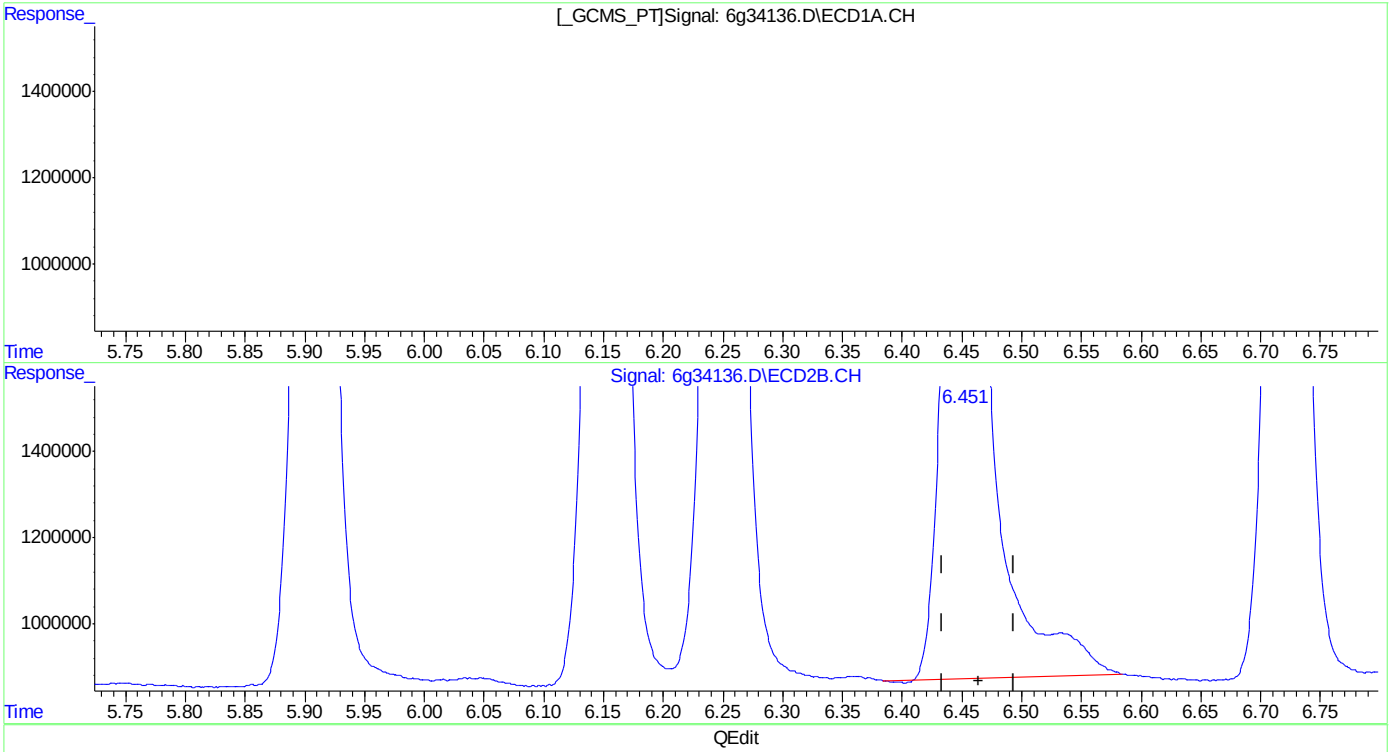
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	2	6.45	Poor instrument integration

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

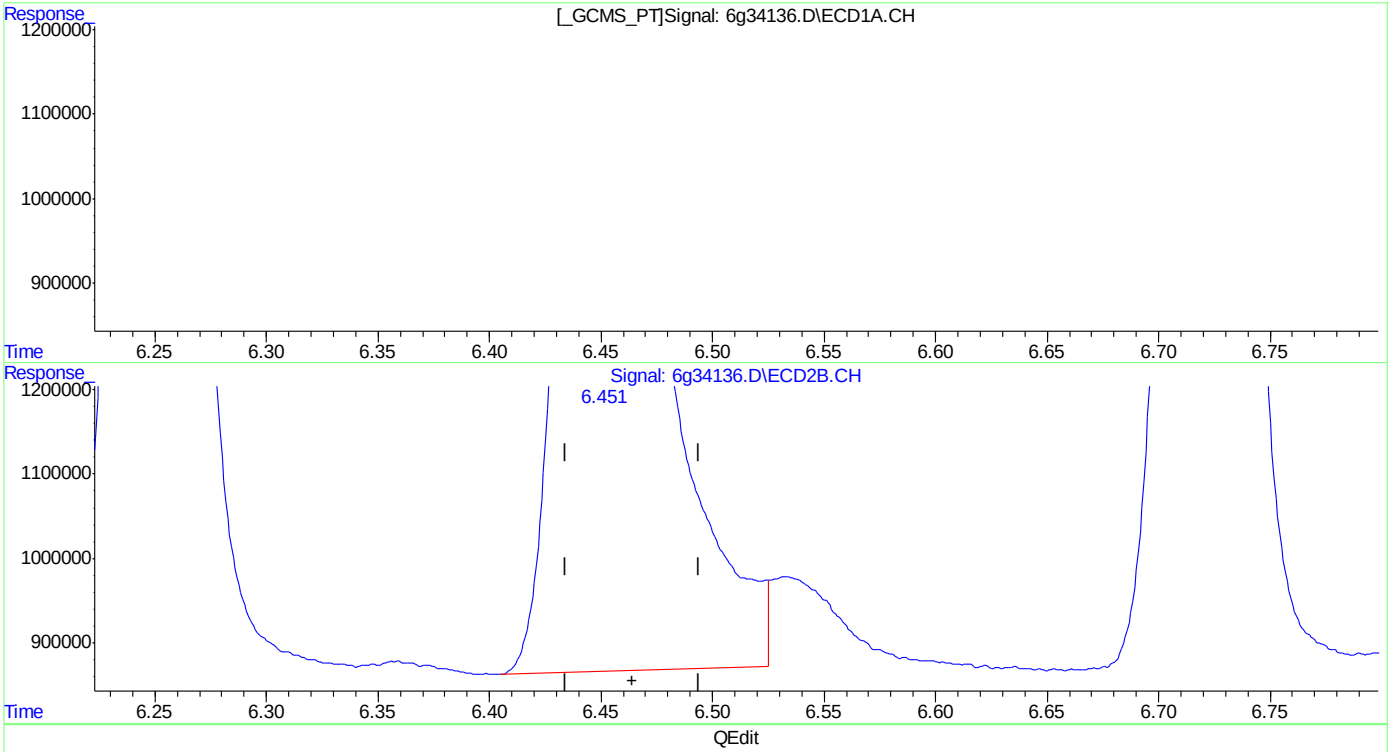
(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:25:21 2016

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
6PST987.M Mon Apr 18 10:25:34 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 : 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.

11.6.24 11

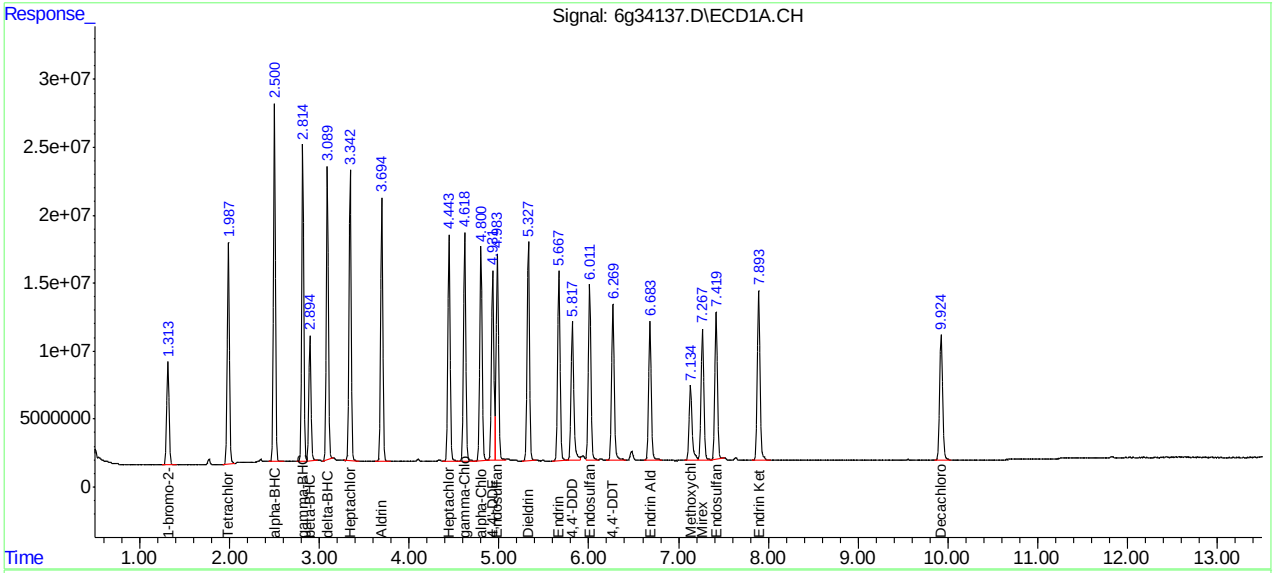
SGS ACCUTEST JC19996

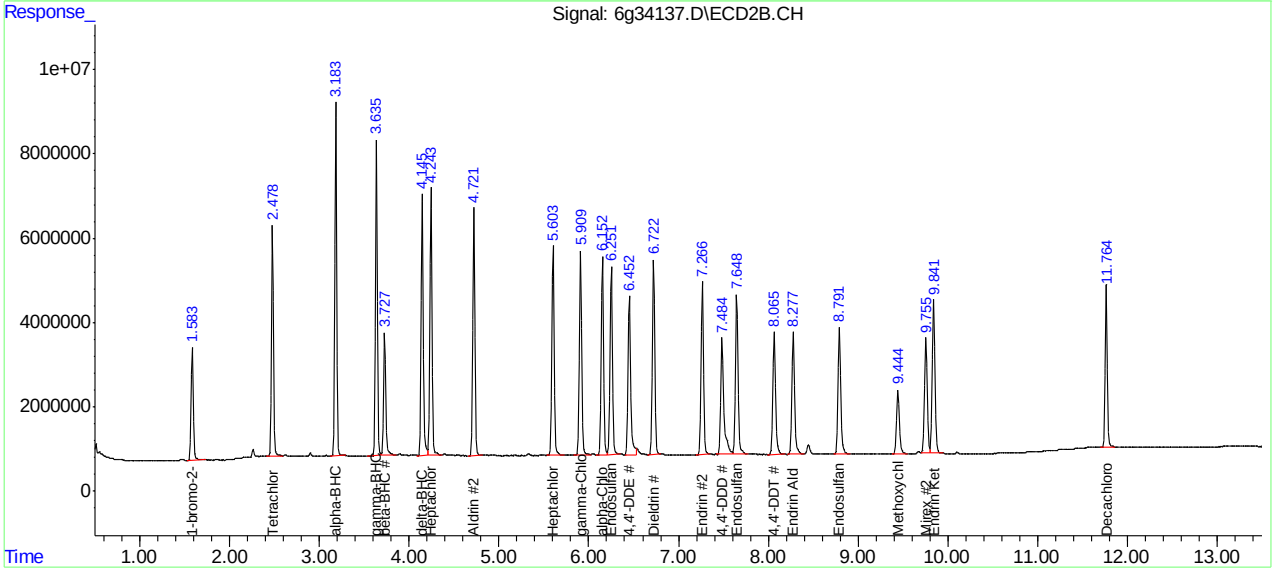
Quantitation Report (QT Reviewed)

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

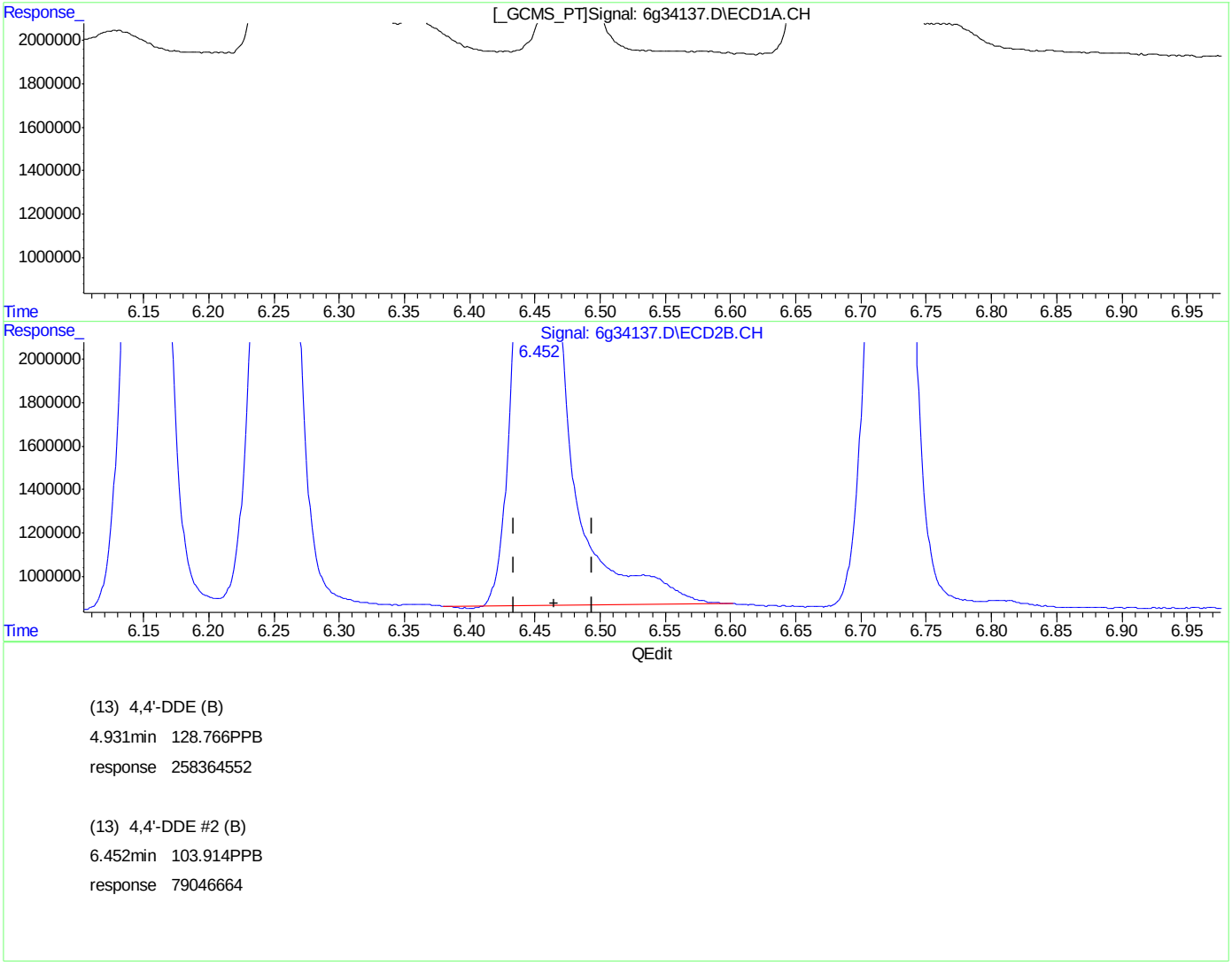
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	2	6.45	Poor instrument integration

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



(13) 4,4'-DDE (B)
4.931min 128.766PPB
response 258364552

(13) 4,4'-DDE #2 (B)
6.452min 103.914PPB
response 79046664

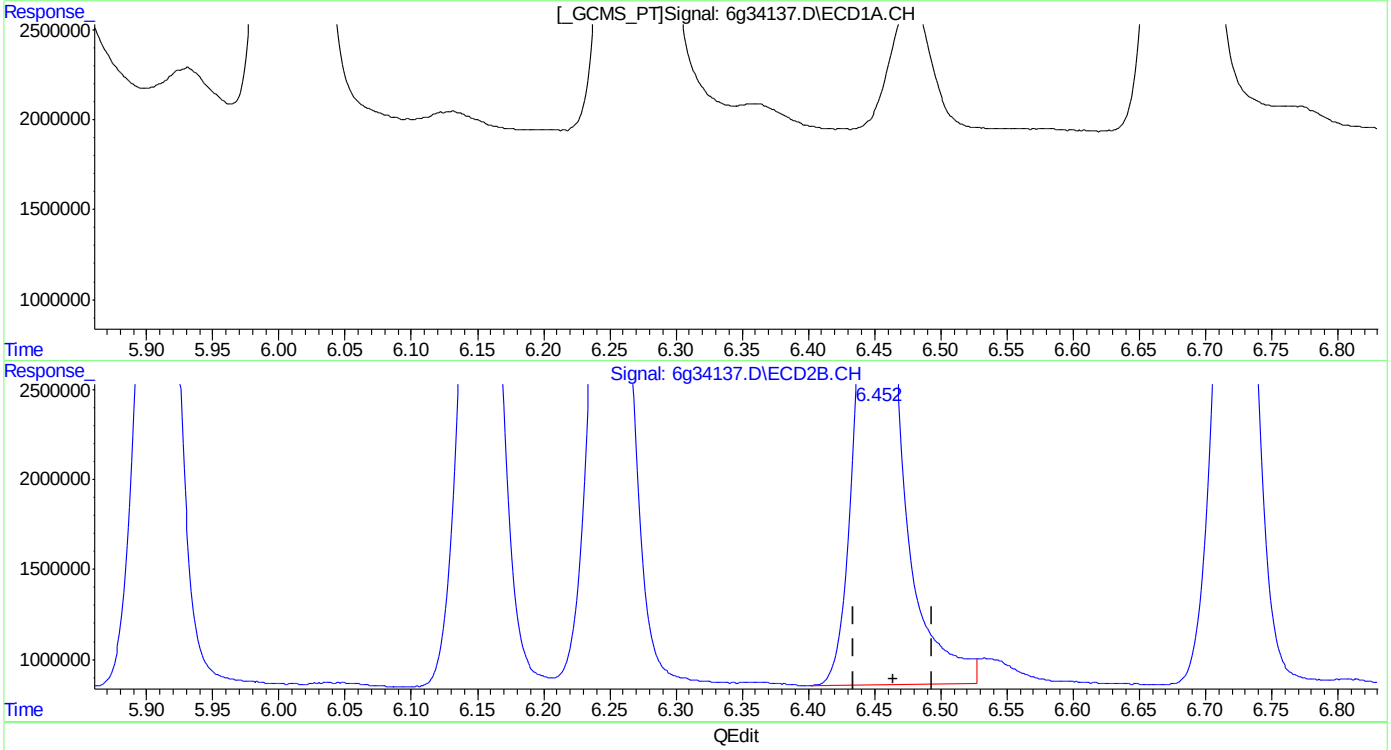
(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:27:05 2016

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.

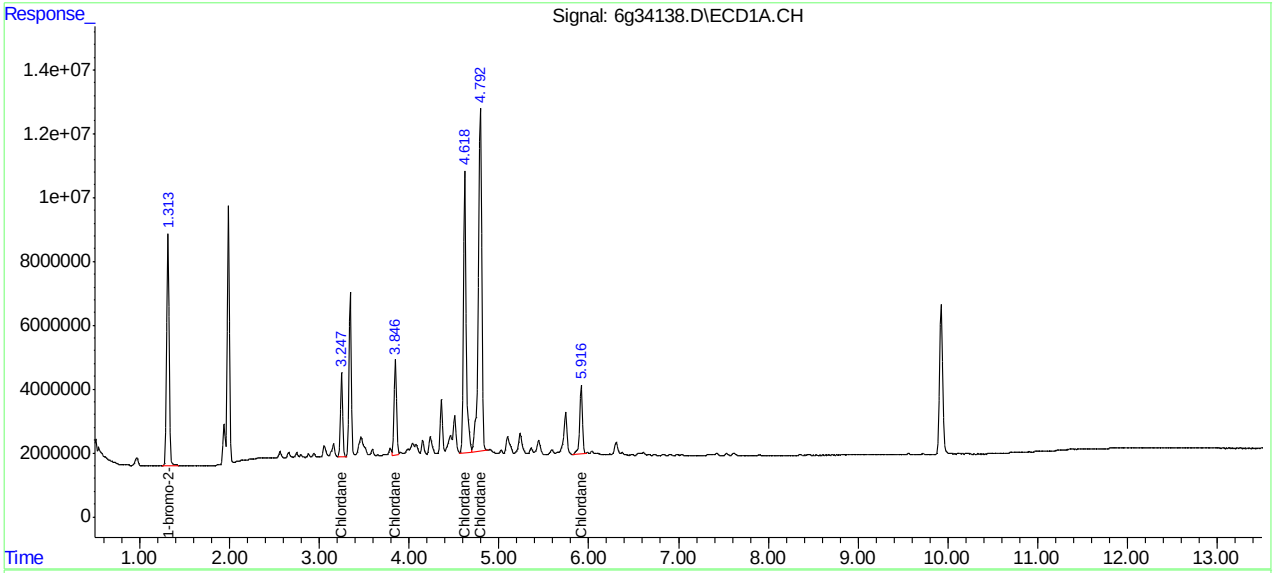
11.6.25
11

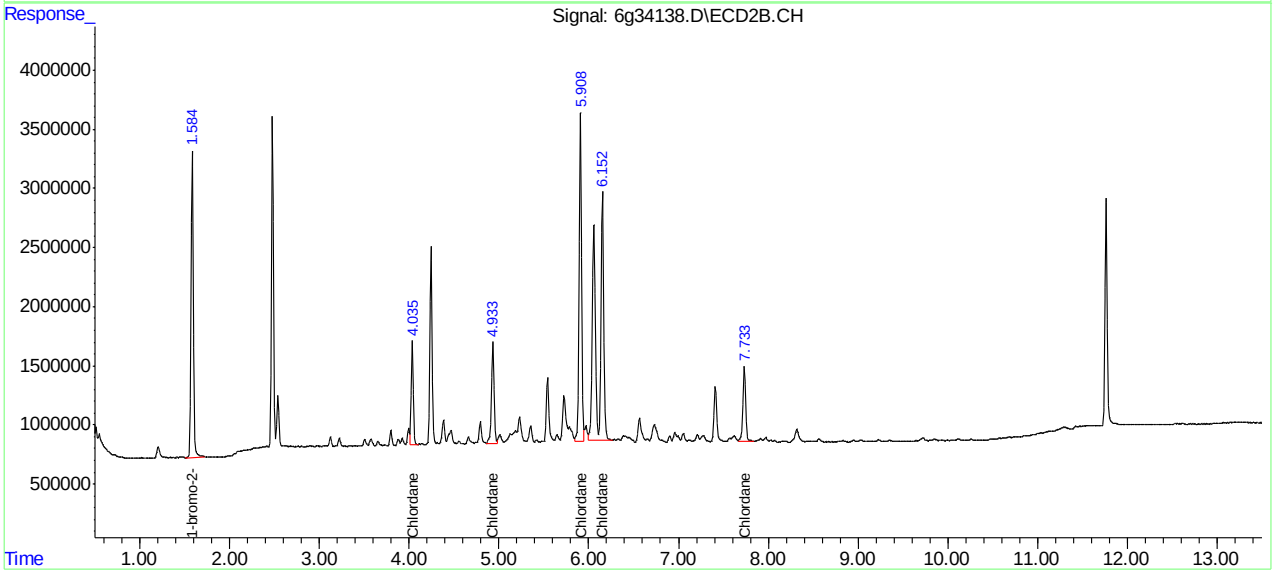
Quantitation Report (QT Reviewed)

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 JC19996

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

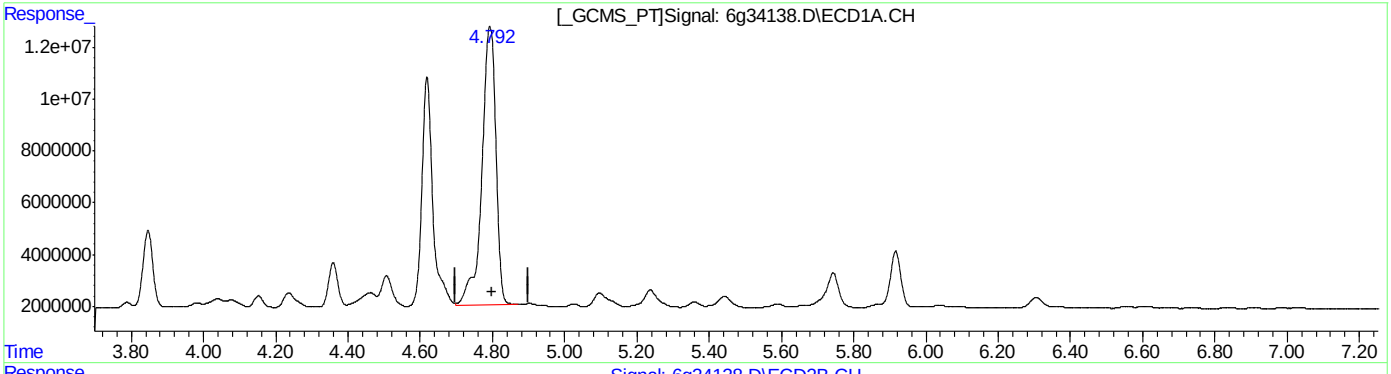
Parameter	CAS	Sig#	R.T. (min.)	Reason
Chlordane-D		2	6.15	Poor instrument integration

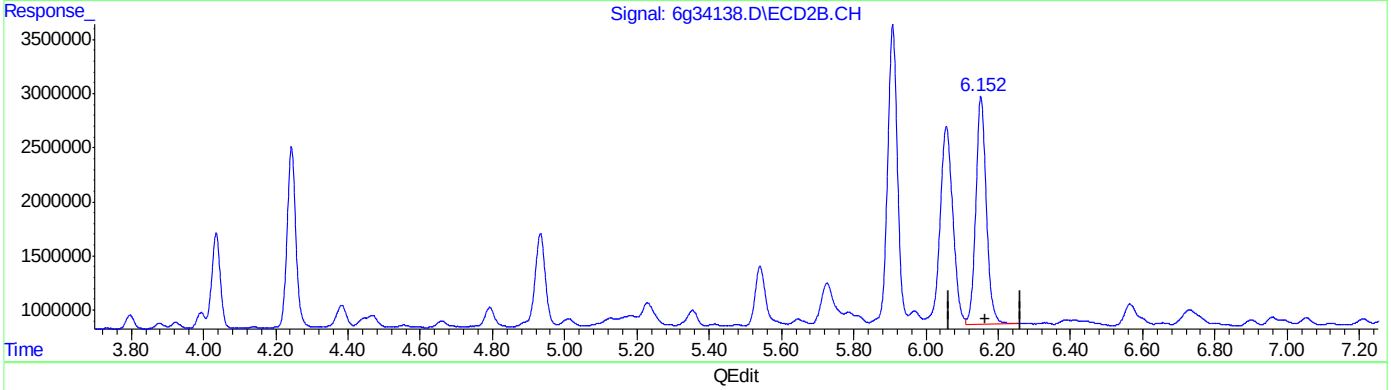
Quantitation Report (Qedit)

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

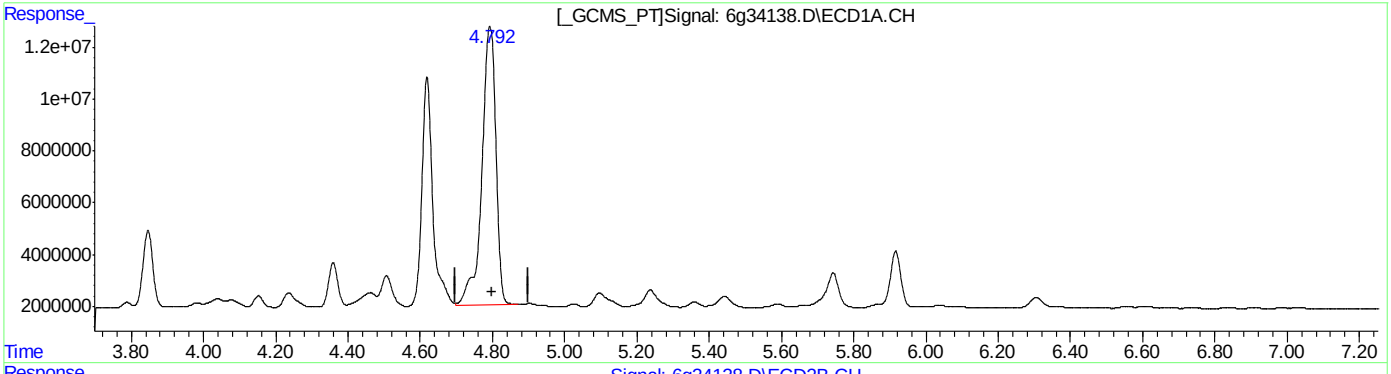
(+) = Expected Retention Time

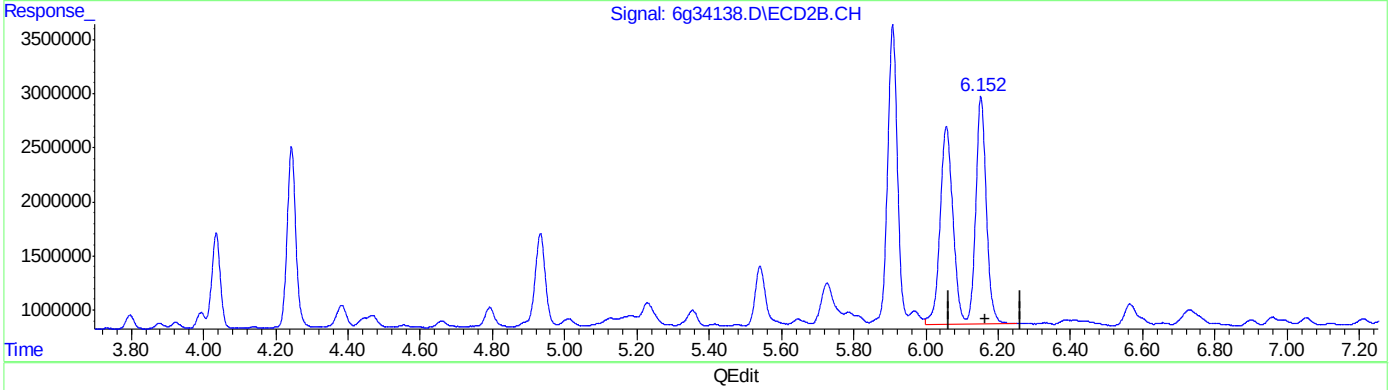
Quantitation Report (Qedit)

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

SGS ACCUTEST JC19996

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.

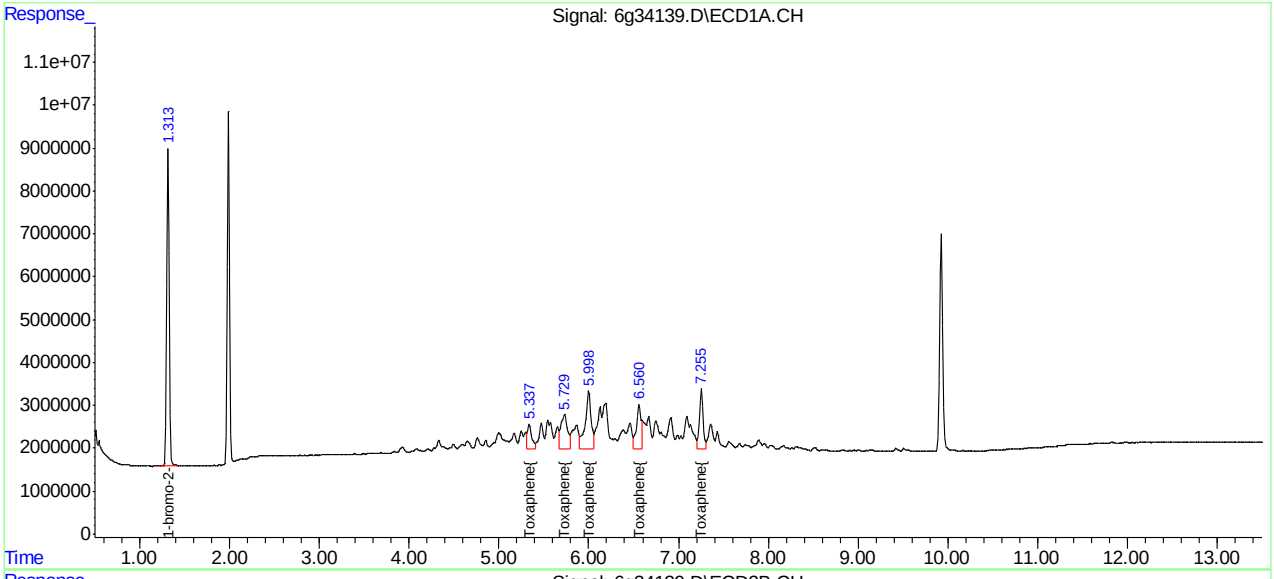
SGS ACCUTEST JC19996

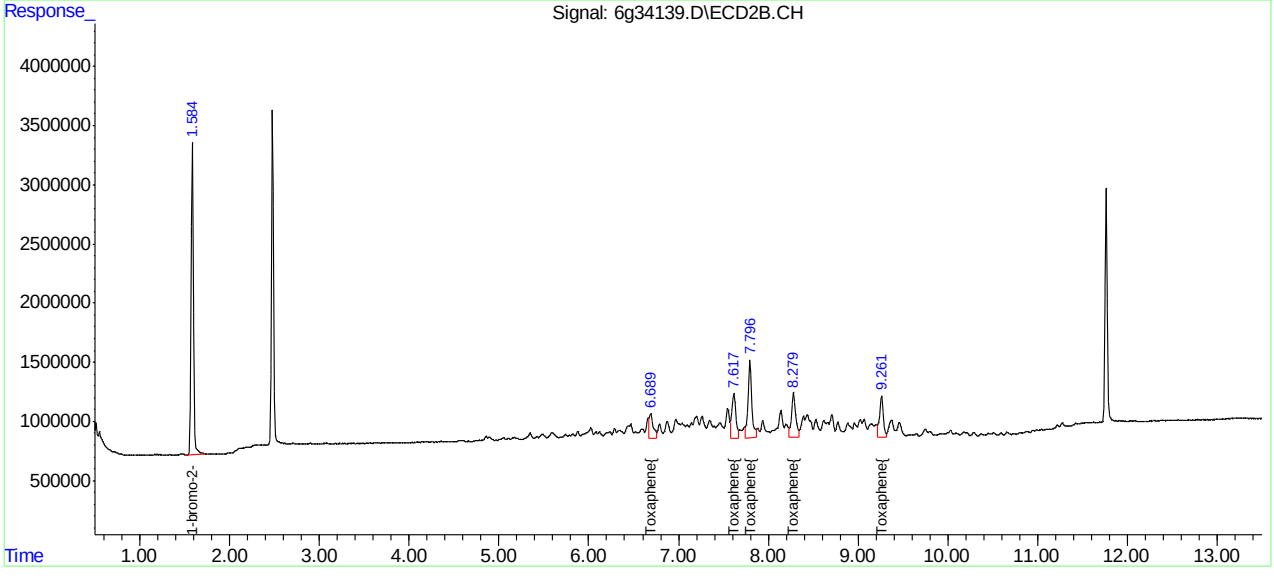
Quantitation Report (QT Reviewed)

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 JC19996

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.

11.6.27 11

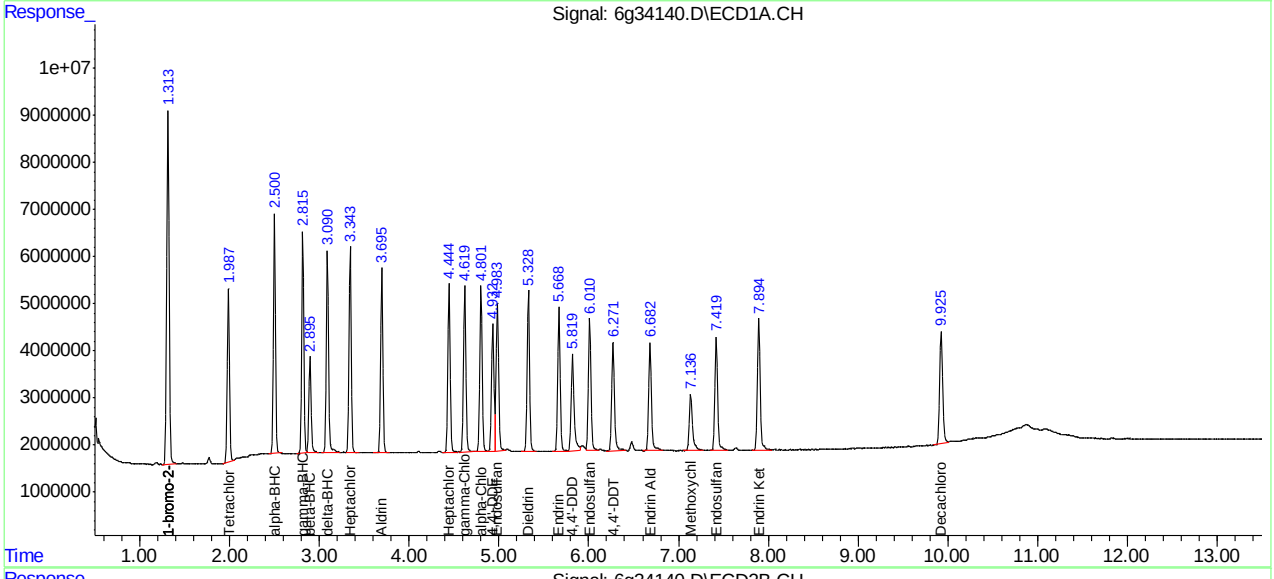
SGS ACCUTEST JC19996

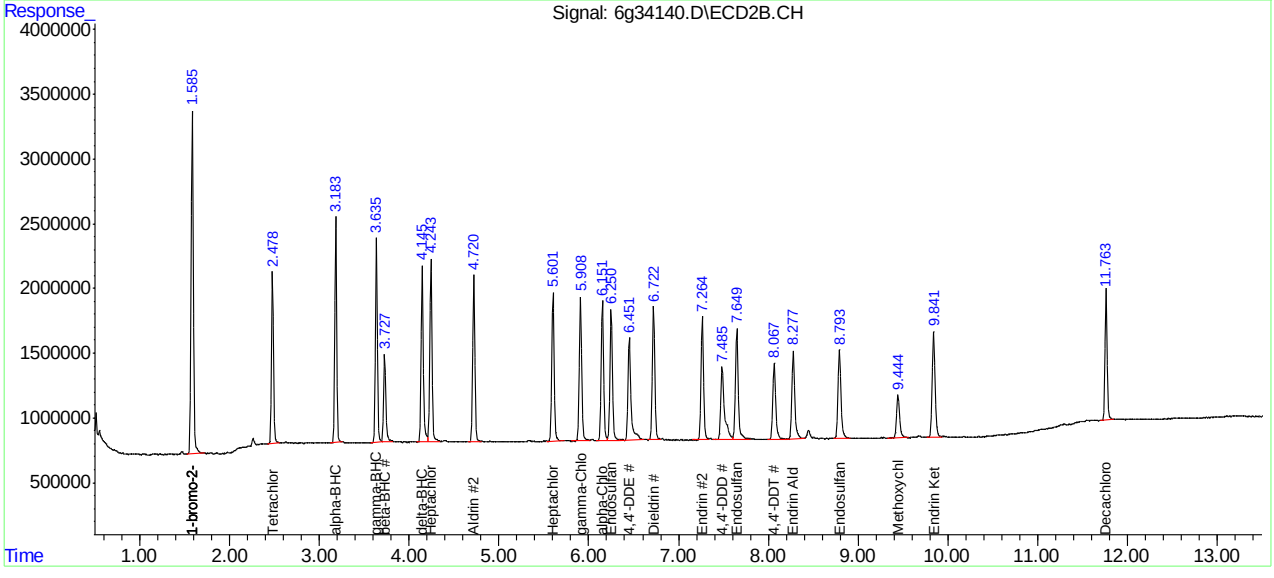
Quantitation Report (QT Reviewed)

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





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.

11.6.28 11

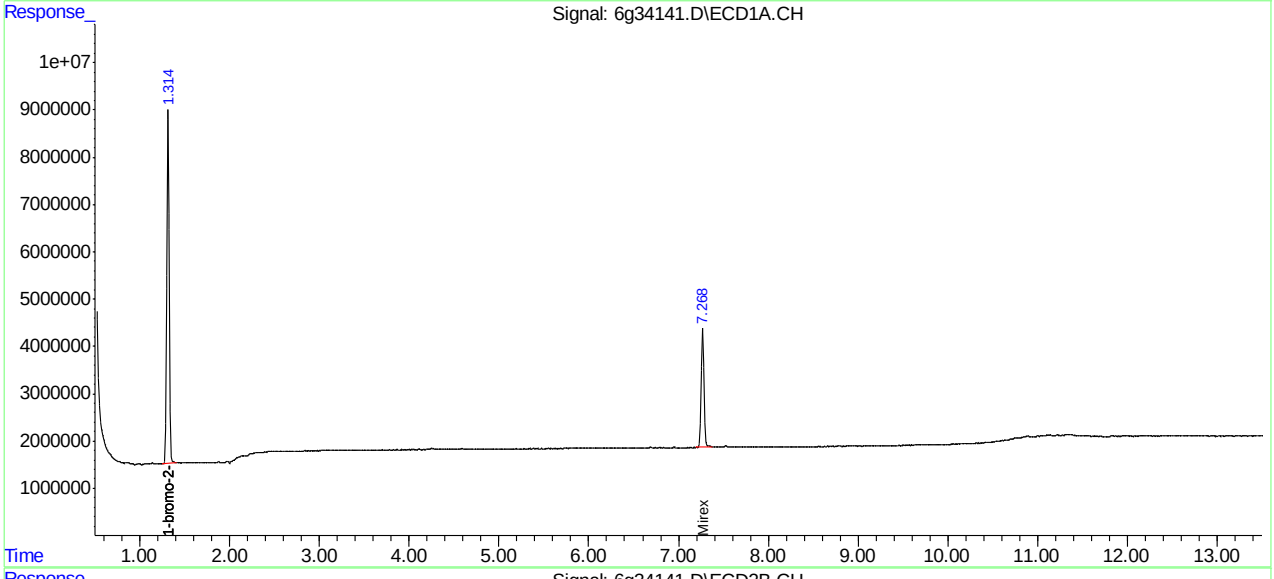
SGS ACCUTEST JC19996

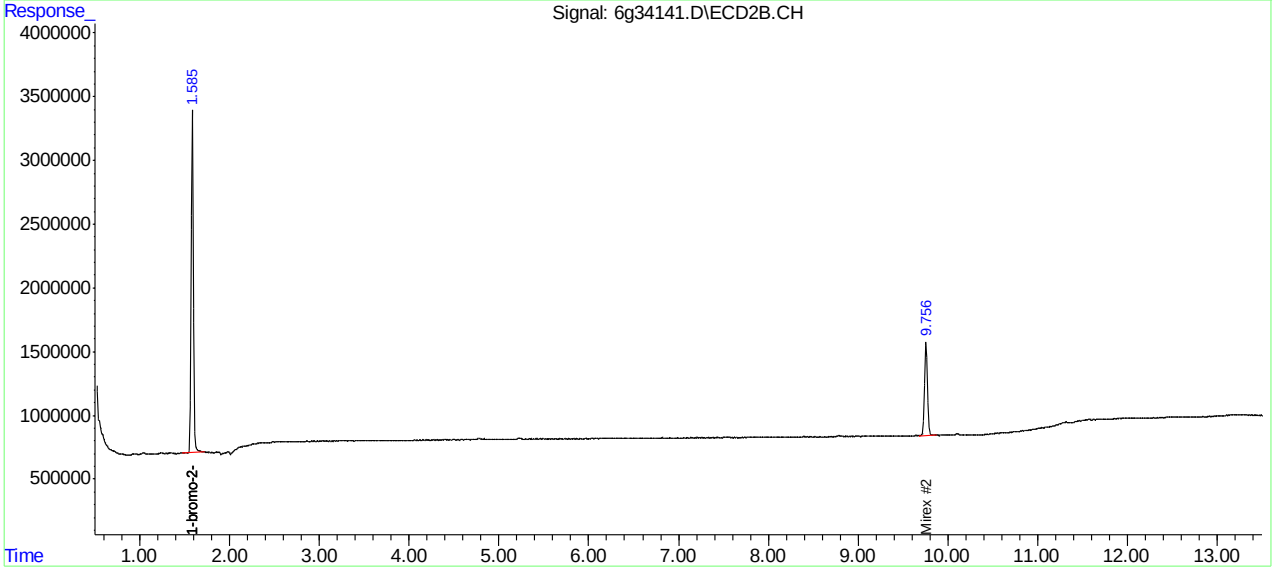
Quantitation Report (QT Reviewed)

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





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.

11.6.29 11

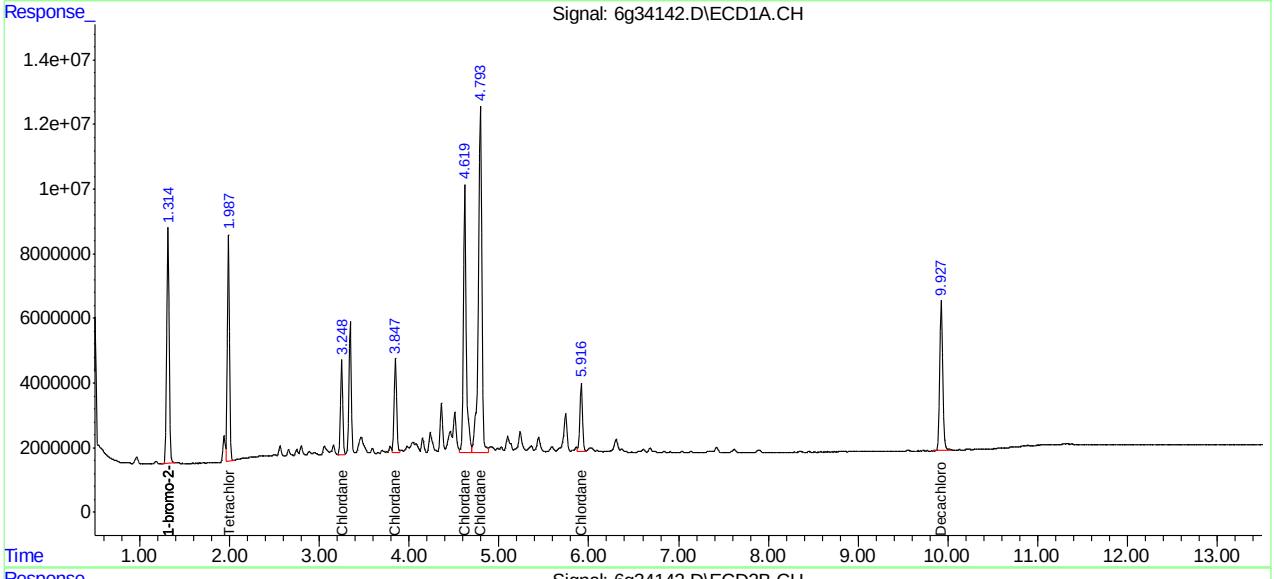
SGS ACCUTEST JC19996

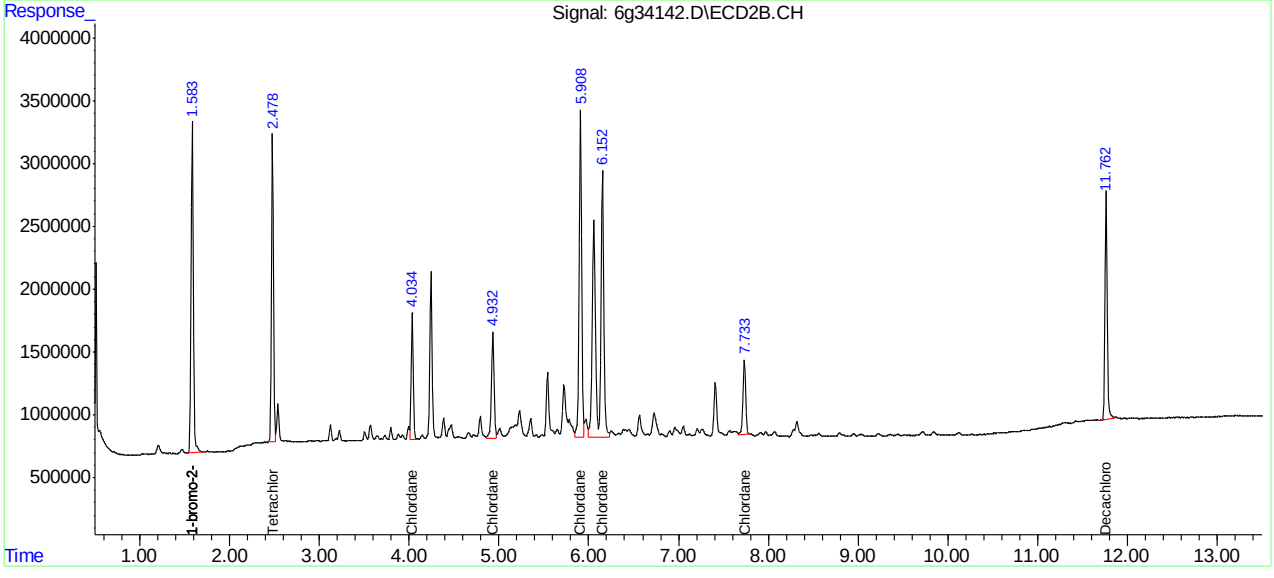
Quantitation Report (QT Reviewed)

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 JC19996

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

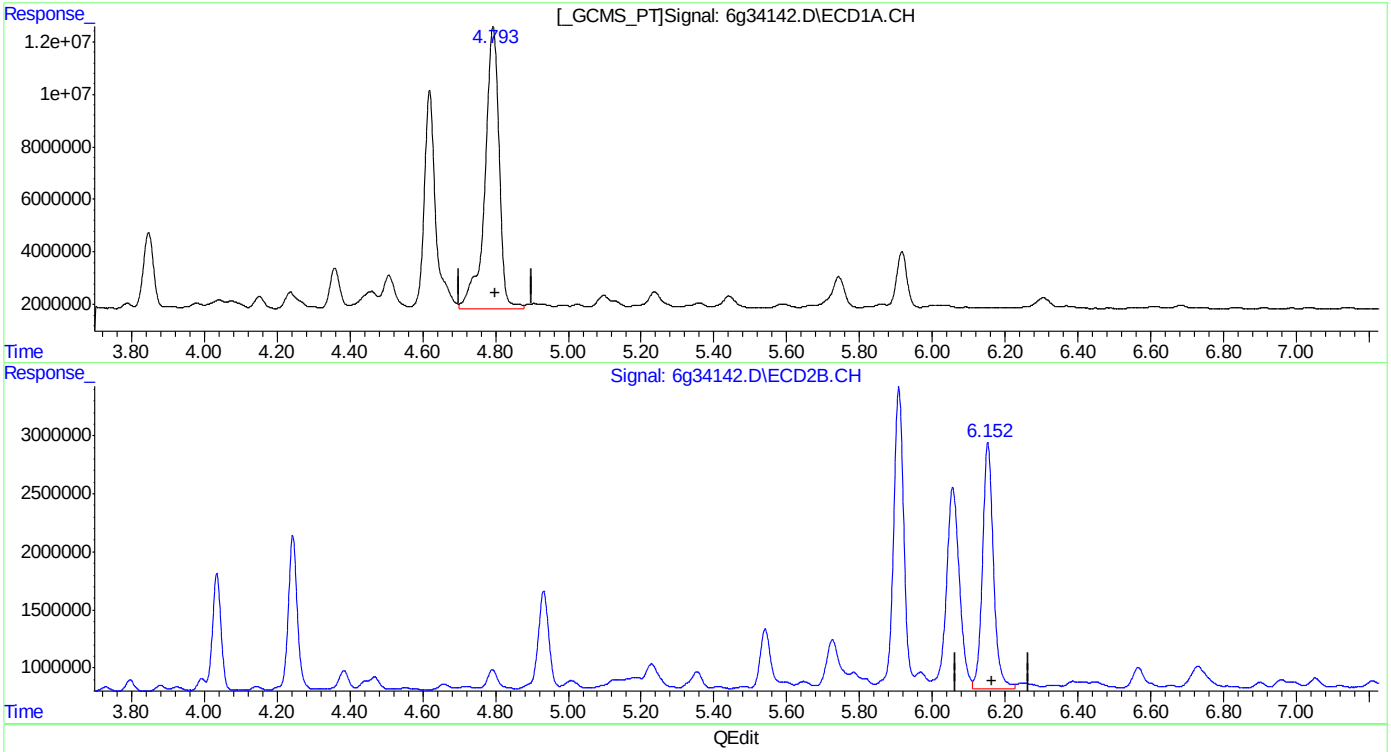
Parameter	CAS	Sig#	R.T. (min.)	Reason
Chlordane-D		2	6.15	Poor instrument integration

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



(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

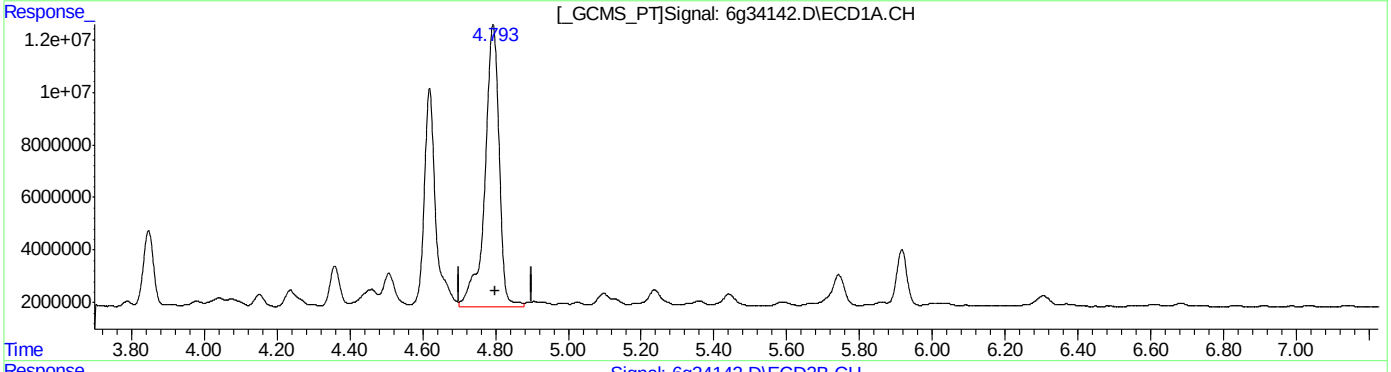
SGS ACCUTEST JC19996

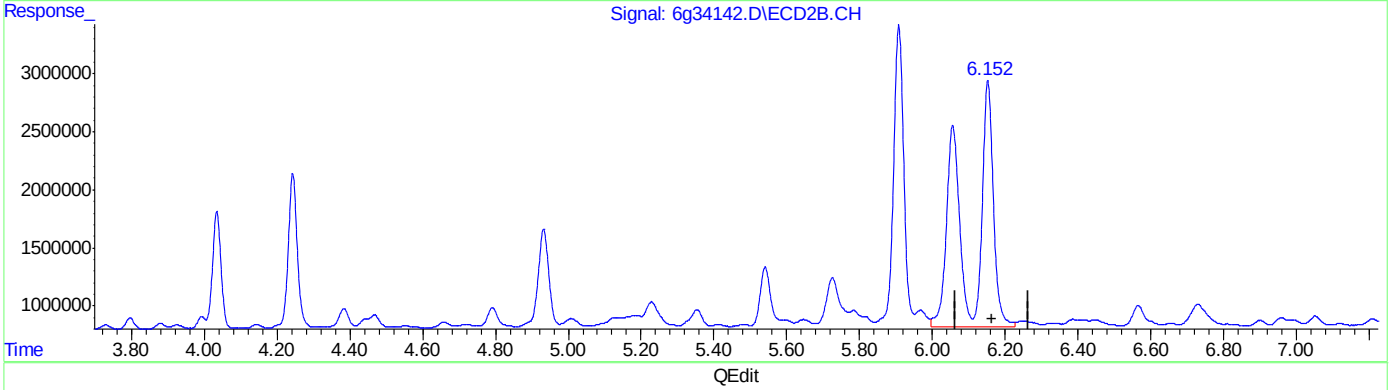
Quantitation Report (Qedit)

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 JC19996

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.

11.6.30 11

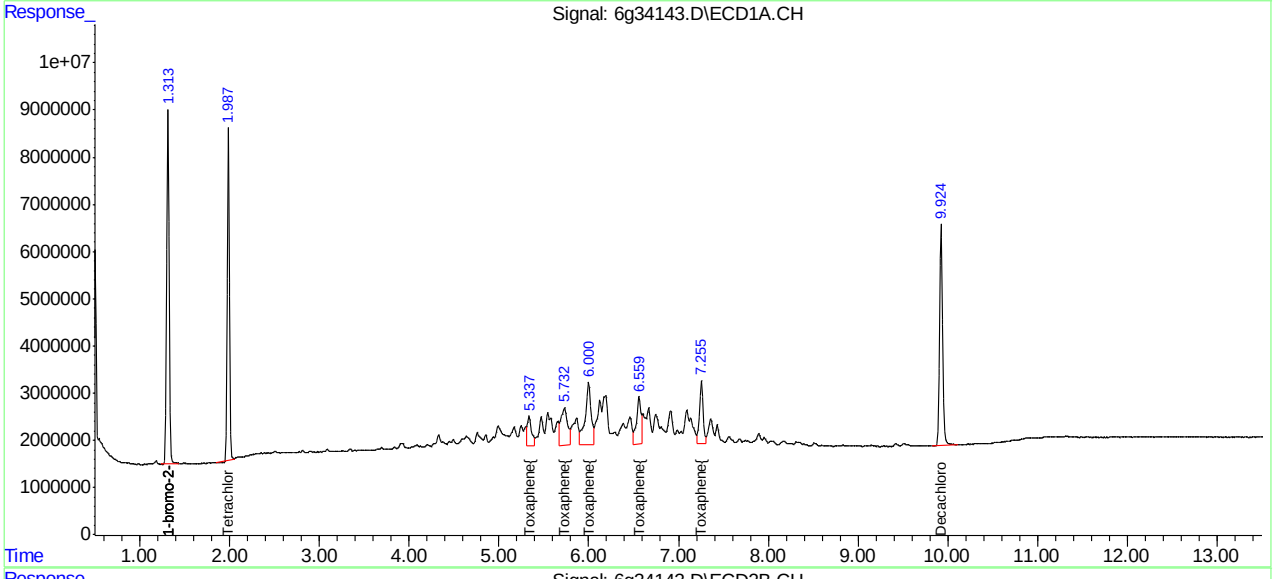
SGS ACCUTEST JC19996

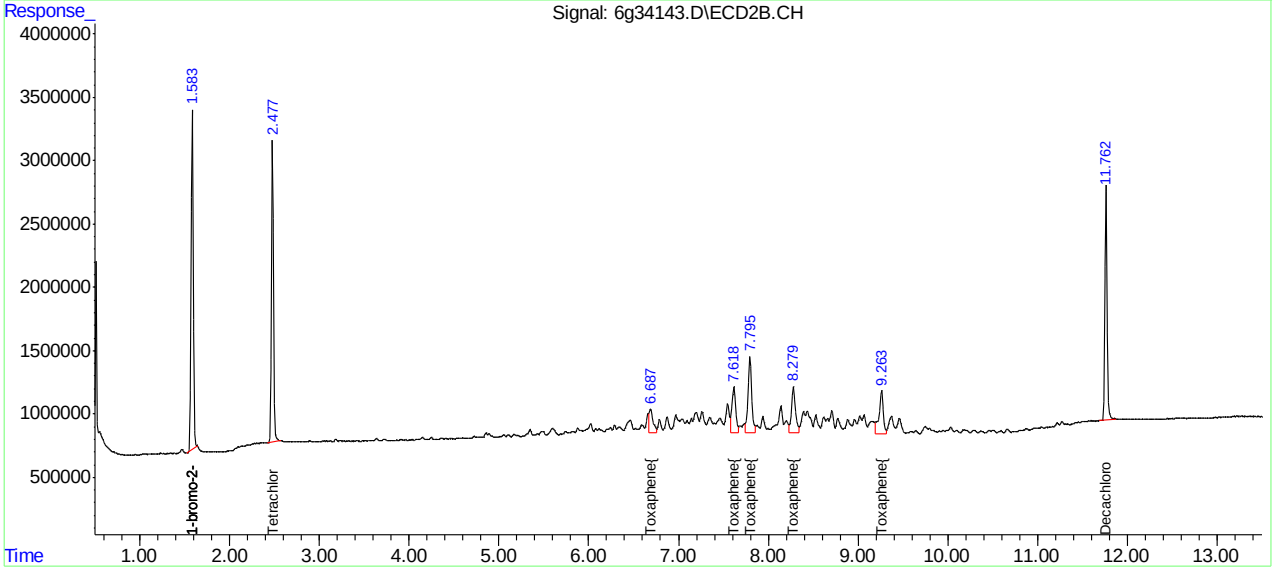
Quantitation Report (QT Reviewed)

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





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

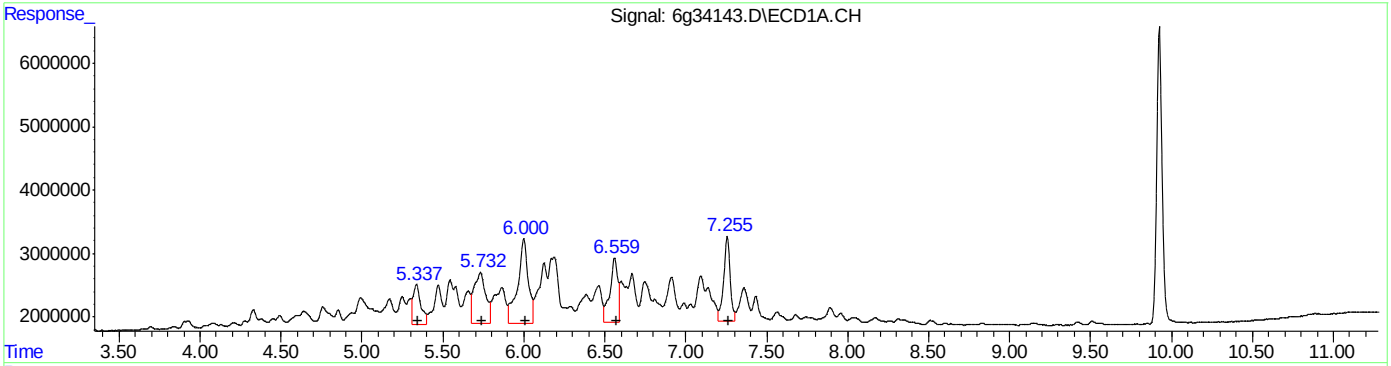
Parameter	CAS	Sig#	R.T. (min.)	Reason
Toxaphene-A		2	6.69	Poor instrument integration

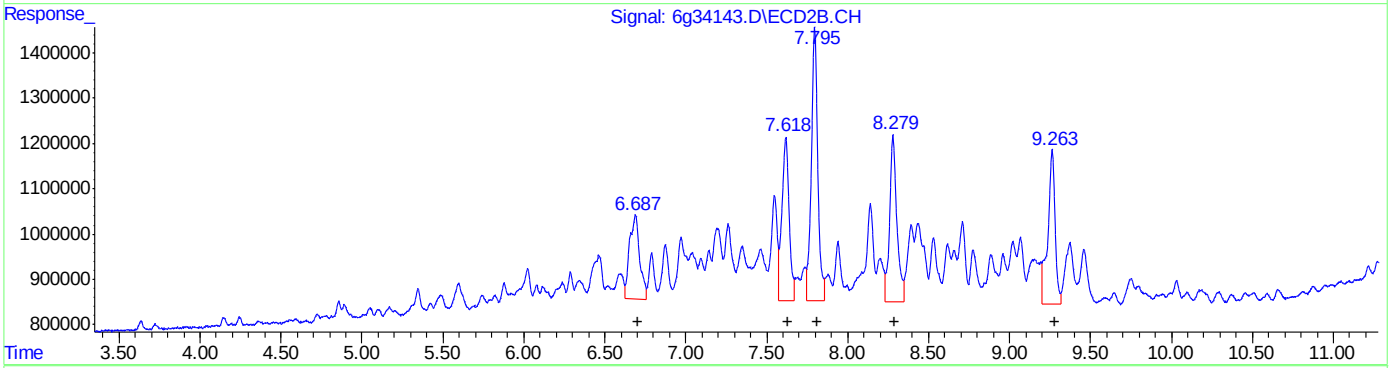
Quantitation Report (Qedit)

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

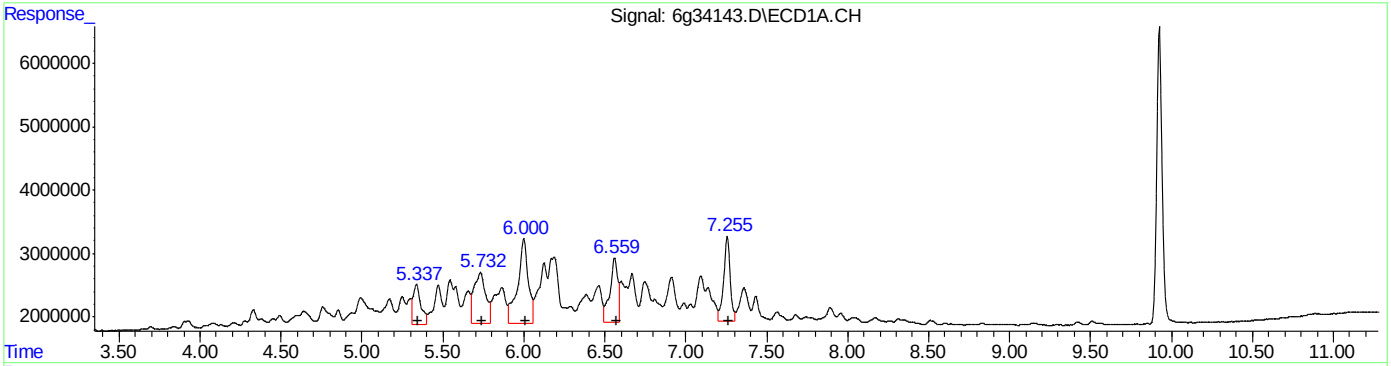
SGS ACCUTEST JC19996

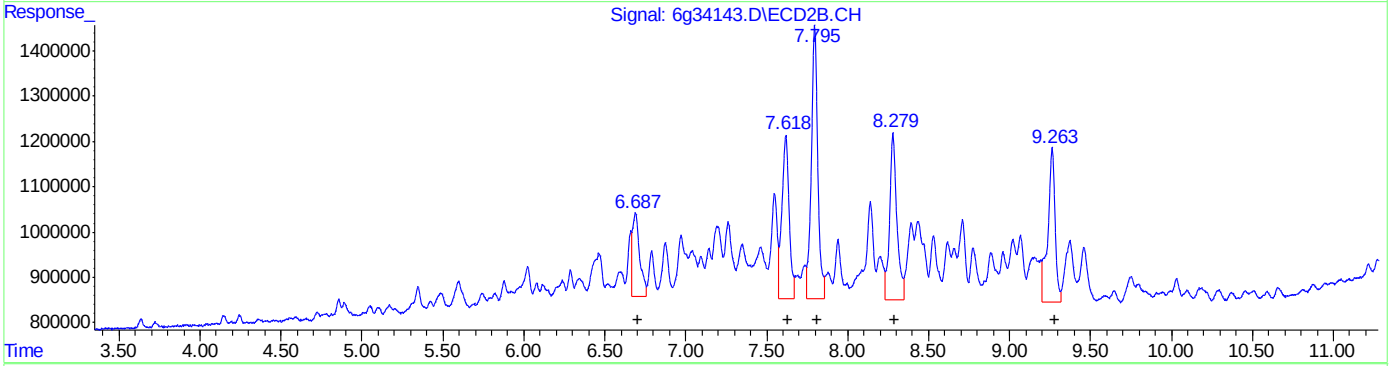
Quantitation Report (Qedit)

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 JC19996

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1010\
Data File : 6g35034.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 May 2016 9:21 am
Operator : dharas
Sample : cc987-25
Misc : op93838,g6g1010,15.8,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 13 09:38:26 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...	1.294	1.565	134.1E6	49527034	50.000	50.000
25) I	1-bromo-2...	1.294	1.565	134.1E6	49527034	50.000	50.000
31) I	1-bromo-2...	1.294	1.565	134.1E6	49527034	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.969	2.458	61184755	22257538	24.895	24.874
	Spiked Amount 40.000	Range	30 - 150	Recovery	=	62.24%	62.19%
24)	SAB Decachlor...	9.890	11.737	50129201	18050621	23.457	26.830
	Spiked Amount 40.000			Recovery	=	58.64%	67.07%
	Target Compounds						
3) A	alpha-BHC	2.481	3.158	81393040	29683260	25.689	25.462
4) MA	gamma-BHC	2.796	3.609	75176247	27261367	25.486	24.976
5) MA	Heptachlor	3.322	4.213	68862236	26192567	23.257	23.744
6) B	beta-BHC	2.877	3.702	37284611	12433180	25.750	23.379
7) B	delta-BHC	3.071	4.117	63887029	25148809	23.240	24.724
8) MB	Aldrin	3.672	4.688	65135499	24681536	23.818	24.062
9) B	Heptachlo...	4.417	5.566	59318900	22525111	23.168	23.561
10) B	gamma-Chl...	4.593	5.871	55999379	22413892	21.734	23.982
11) B	alpha-Chl...	4.773	6.114	57721943	22370356	22.572	24.093
12) A	Endosulfan I	4.955	6.213	59815859	21313157	23.694	23.627
13) B	4,4'-DDE	4.904	6.413	49055701	19227723	23.150	24.014
14) MA	Dieldrin	5.298	6.682	59223280	22032929	23.726	23.912
15) MA	Endrin	5.638	7.223	54685139	20213764	24.150	24.145
16) A	4,4'-DDD	5.791	7.445	42030309	16978016	23.462	24.571
17) B	Endosulfa...	5.979	7.606	53210088	19278920	23.817	23.545
18) MA	4,4'-DDT	6.240	8.023	42401454	14683496	21.760	23.412
19) B	Endrin Al...	6.648	8.233	43489288	15864845	23.882	23.898
20) B	Endosulfa...	7.383	8.748	48864639	17775640	24.905	24.670
21) A	Methoxychlor	7.106	9.399	25854393	8169701	22.137	23.641
22)	Mirex	7.234	9.707	48300806	16938809	24.145	23.875
23) B	Endrin Ke...	7.856	9.794	57726595	20677891	24.741	24.552

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

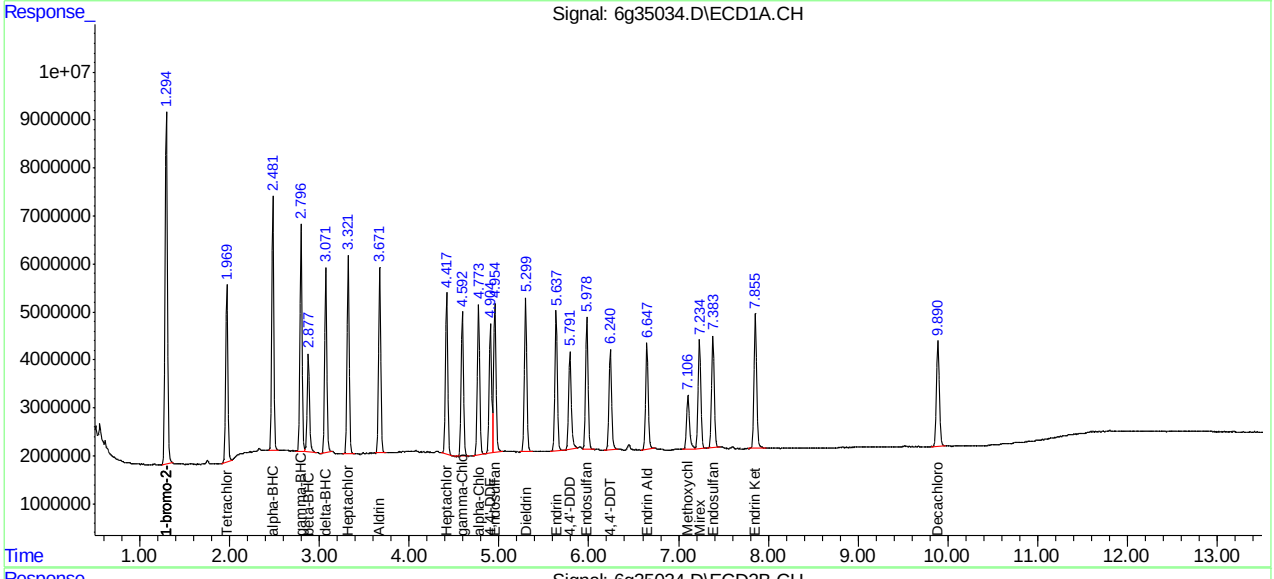
SGS ACCUTEST JC19996

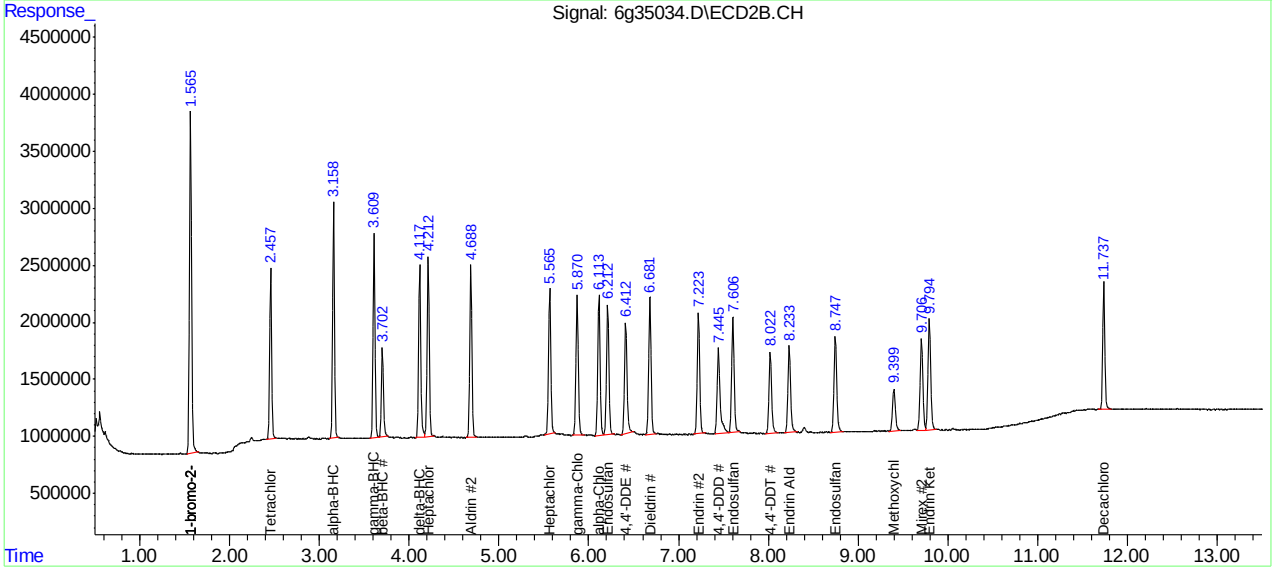
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1010\
Data File : 6g35034.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 May 2016 9:21 am
Operator : dharas
Sample : cc987-25
Misc : op93838,g6g1010,15.8,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 13 09:38:26 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





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1010\
Data File : 6g35055.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 May 2016 5:21 pm
Operator : thomasl
Sample : cc987-50
Misc : op93857,g6g1010,9.2,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 16 10:07:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon May 16 10:05:37 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...	1.292	1.564	148.0E6	51864562	50.000	50.000
25) I	1-bromo-2...	1.292	1.564	148.0E6	51864562	50.000	50.000
31) I	1-bromo-2...	1.292	1.564	148.0E6	51864562	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.968	2.457	132.4E6	43926649	48.795	46.878
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 121.99%	117.20%
24)	SAB Decachlor...	9.890	11.734	108.5E6	36168238	46.010	51.336
	Spiked Amount	40.000			Recovery	= 115.03%	128.34%
	Target Compounds						
3) A	alpha-BHC	2.480	3.158	187.6E6	61746472	53.643	50.579
4) MA	gamma-BHC	2.794	3.608	170.6E6	56432267	52.380	49.371
5) MA	Heptachlor	3.319	4.212	162.2E6	54922717	49.633	47.545
6) B	beta-BHC	2.877	3.702	75991960	25352832	47.544	45.525
7) B	delta-BHC	3.071	4.117	159.0E6	51245899	52.381	48.110
8) MB	Aldrin	3.671	4.686	153.3E6	50868364	50.785	47.356
9) B	Heptachlo...	4.416	5.565	143.2E6	46800005	50.656	46.745
10) B	gamma-Chl...	4.590	5.869	133.5E6	45390988	46.941	46.378
11) B	alpha-Chl...	4.771	6.112	132.2E6	44892493	46.833	46.170
12) A	Endosulfan I	4.953	6.210	140.1E6	43545463	50.280	46.098
13) B	4,4'-DDE	4.905	6.412	109.1E6	36494594	46.638	43.525
14) MA	Dieldrin	5.296	6.679	137.6E6	45230571	49.941	46.876
15) MA	Endrin	5.635	7.222	127.7E6	42245701	51.077	48.188
16) A	4,4'-DDD	5.794	7.446	99147447	35267709	50.136	48.739
17) B	Endosulfa...	5.978	7.606	122.9E6	41819915	49.827	48.773
18) MA	4,4'-DDT	6.241	8.023	102.2E6	30980425	47.490	47.170
19) B	Endrin Al...	6.647	8.233	99496593	32741984	49.496	47.097
20) B	Endosulfa...	7.383	8.746	112.9E6	35587424	52.130	47.164
21) A	Methoxychlor	7.109	9.401	58755669	17026113	45.574	47.048
22)	Mirex	7.233	9.705	105.7E6	34419429	47.843	46.328
23) B	Endrin Ke...	7.857	9.793	123.4E6	40745602	47.910	46.200

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

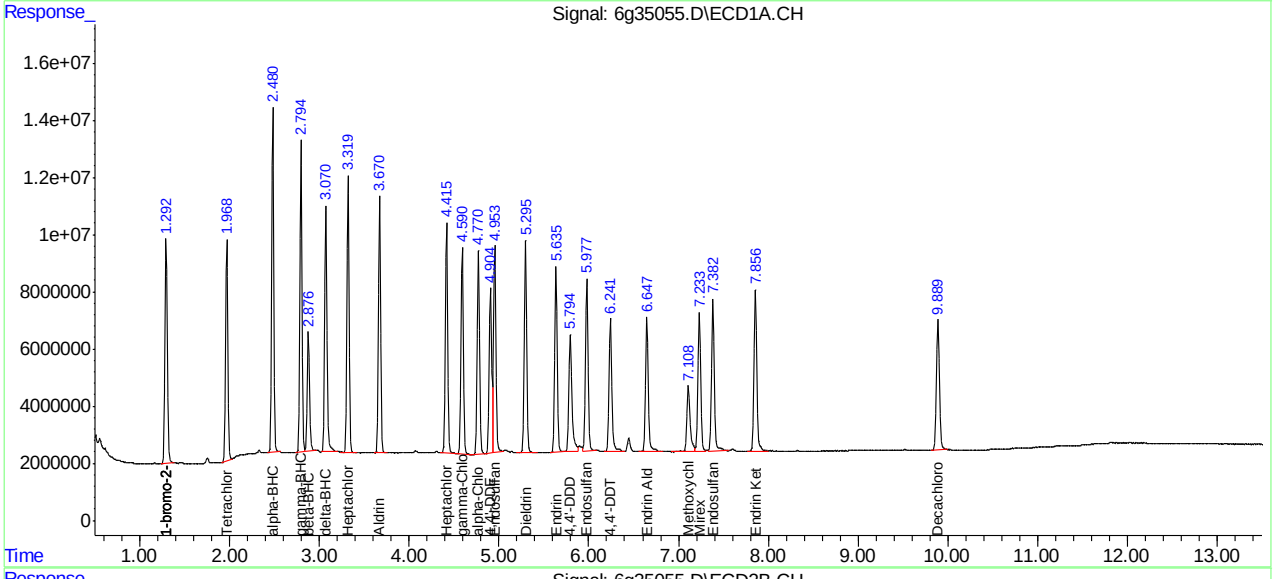
SGS ACCUTEST JC19996

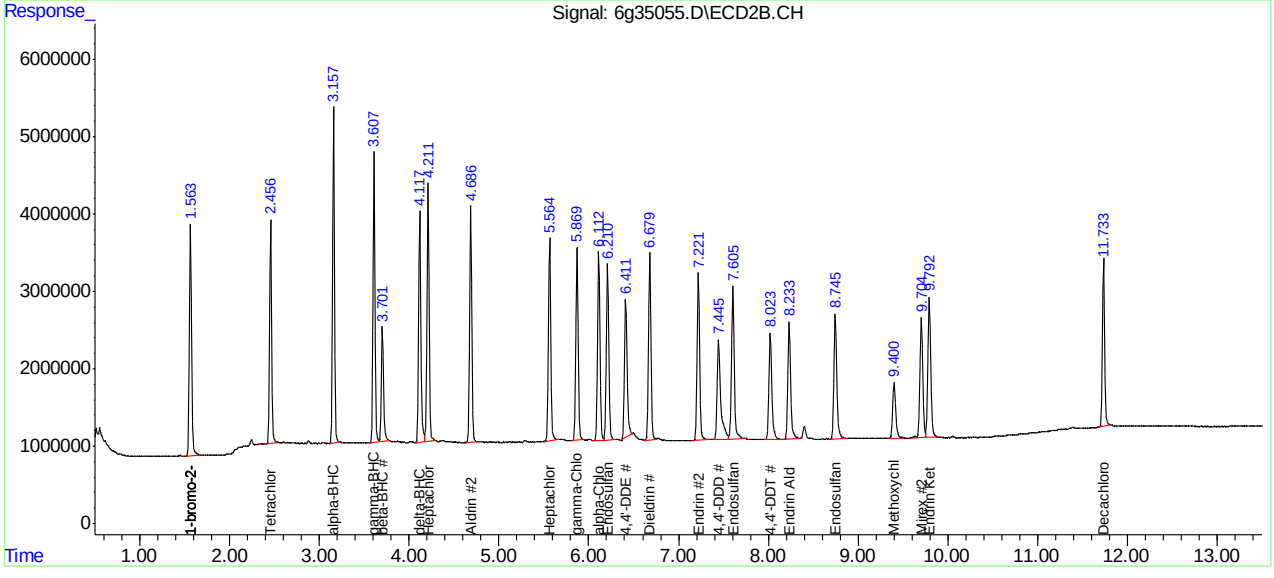
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1010\
Data File : 6g35055.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 13 May 2016 5:21 pm
Operator : thomasl
Sample : cc987-50
Misc : op93857,g6g1010,9.2,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 16 10:07:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon May 16 10:05:37 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: anc-1778

Print Analyst Name: Dhara Sapara

Analyst Signature:

Date: 05/02/16

Columns: 2ncLPT | 2nCLPT

Method 8081, 608

Initial Cal. Method MPST 1778

Injection Volume: 1.0ul

Date Archived:

Standard Data

Lot #	Description	Conc.
SV 1615724-1H8A	Pest mix 1st source	25 ppb
-1H8B		50
-1H8C		1
-1H8D		2
-1H8E		5
-1H8F		10
-1H8G		25
-1H8H		100
615624-137	mix + 2nd source	250 ppb

Standard Data

Lot #	Description	Conc.
SV 1615724-125	Pest IS/SD	5 ppm
-71	PCM	10-250 ppb
-87	IB	200 ppb
-20	chlordane 1st	10 ppm
-31	Toxaphene 1st	10 ppm
-95	Pest mix 2nd source	250 ppb
-96	chlordane 2nd source	500 ppb
-97	Toxaphene 2nd source	500 ppb

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: 5/4/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	h2678-30	ddet				1			/	ok	
	831	IB				2			/	ok	
	832	IC 1778-1	1st source	Pest mix		3			/	ok	
	833	-2				4			/	ok	
	834	-5				5			/	ok	
	835	-10				6			/	ok	
	836	IC 1778-25				7			/	ok	
	837	IC 1778-50				8			/	ok	
	838	-75				9			/	ok	
	839	-100				10			/	ok	
	840	-500		CHL		11	20		/	ok	
	841	-500		TOX		12	20		/	ok	
	842	IC 1778-25	2nd source	Pest		13	10		/	ok	
	843	-25		mix		14	10		/	ok	
	844	-500		CHL		15			/	ok	
	845	-500		TOX		16			/	ok	

JR 5/3/16

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

SGS ACCUTEST JC19996

11.7.1 11

RETENTION TIME WINDOW DETERMINATION

Instrument ID: GC4G
Method: SW846 8081B

	Lab FileID	Date/Time	Sample Number	Analyst
Std#1	4G67836.D	05/02/16 15:26	G4G1778-ICC1778	DHARAS
Std#2	4G67851.D	05/03/16 17:05	G4G1779-CC1778	DHARAS
Std#3	4G67868.D	05/04/16 08:33	G4G1780-CC1778	BRITTANP

Compound	Sig#	Type	RT#1	RT#2	RT#3	Mean	Actual StdDev	Window (+ /- 3*StdDev)
1-Bromo-2-nitrobenzene	1	ISTD	1.80	1.78	1.78	1.79	0.012	+/- 0.035
1-Bromo-2-nitrobenzene	2	ISTD	2.07	2.06	2.05	2.06	0.010	+/- 0.030
Tetrachloro-m-xylene	1	SURR	2.59	2.58	2.57	2.58	0.010	+/- 0.030
Decachlorobiphenyl	1	SURR	10.25	10.25	10.25	10.25	0.000	+/- 0.030 [a]
Tetrachloro-m-xylene	2	SURR	3.11	3.10	3.10	3.10	0.006	+/- 0.030 [a]
Decachlorobiphenyl	2	SURR	11.66	11.65	11.65	11.65	0.006	+/- 0.030 [a]
alpha-BHC	1	REG	3.15	3.14	3.14	3.14	0.006	+/- 0.030 [a]
gamma-BHC (Lindane)	1	REG	3.50	3.49	3.49	3.49	0.006	+/- 0.030 [a]
beta-BHC	1	REG	3.61	3.60	3.60	3.60	0.006	+/- 0.030 [a]
Heptachlor	1	REG	3.82	3.81	3.81	3.81	0.006	+/- 0.030 [a]
delta-BHC	1	REG	4.06	4.05	4.05	4.05	0.006	+/- 0.030 [a]
Aldrin	1	REG	4.44	4.43	4.43	4.43	0.006	+/- 0.030 [a]
Heptachlor epoxide	1	REG	5.20	5.20	5.19	5.20	0.006	+/- 0.030 [a]
gamma-Chlordane	1	REG	5.39	5.38	5.38	5.38	0.006	+/- 0.030 [a]
alpha-Chlordane	1	REG	5.57	5.56	5.56	5.56	0.006	+/- 0.030 [a]
4,4'-DDE	1	REG	5.69	5.69	5.69	5.69	0.000	+/- 0.030 [a]
Endosulfan-I	1	REG	5.75	5.75	5.74	5.75	0.006	+/- 0.030 [a]
Dieldrin	1	REG	6.09	6.09	6.08	6.09	0.006	+/- 0.030 [a]
Endrin	1	REG	6.43	6.43	6.42	6.43	0.006	+/- 0.030 [a]
4,4'-DDD	1	REG	6.57	6.57	6.57	6.57	0.000	+/- 0.030 [a]
Endosulfan-II	1	REG	6.77	6.77	6.76	6.77	0.006	+/- 0.030 [a]
4,4'-DDT	1	REG	7.00	7.00	6.99	7.00	0.006	+/- 0.030 [a]
Endrin aldehyde	1	REG	7.40	7.40	7.40	7.40	0.000	+/- 0.030 [a]
Methoxychlor	1	REG	7.81	7.81	7.81	7.81	0.000	+/- 0.030 [a]
Mirex	1	REG	8.00	7.99	7.99	7.99	0.006	+/- 0.030 [a]
Endosulfan sulfate	1	REG	8.10	8.10	8.09	8.10	0.006	+/- 0.030 [a]
Endrin ketone	1	REG	8.56	8.56	8.56	8.56	0.000	+/- 0.030 [a]
alpha-BHC	2	REG	3.87	3.87	3.86	3.87	0.006	+/- 0.030 [a]
gamma-BHC (Lindane)	2	REG	4.35	4.35	4.34	4.35	0.006	+/- 0.030 [a]
beta-BHC	2	REG	4.45	4.44	4.44	4.44	0.006	+/- 0.030 [a]
delta-BHC	2	REG	4.88	4.87	4.87	4.87	0.006	+/- 0.030 [a]
Heptachlor	2	REG	4.98	4.97	4.97	4.97	0.006	+/- 0.030 [a]
Aldrin	2	REG	5.47	5.46	5.46	5.46	0.006	+/- 0.030 [a]
Heptachlor epoxide	2	REG	6.33	6.33	6.32	6.33	0.006	+/- 0.030 [a]
gamma-Chlordane	2	REG	6.63	6.62	6.62	6.62	0.006	+/- 0.030 [a]
alpha-Chlordane	2	REG	6.86	6.86	6.85	6.86	0.006	+/- 0.030 [a]
Endosulfan-I	2	REG	6.97	6.96	6.96	6.96	0.006	+/- 0.030 [a]
4,4'-DDE	2	REG	7.12	7.12	7.11	7.12	0.006	+/- 0.030 [a]
Dieldrin	2	REG	7.41	7.41	7.41	7.41	0.000	+/- 0.030 [a]
Endrin	2	REG	7.93	7.93	7.93	7.93	0.000	+/- 0.030 [a]

RETENTION TIME WINDOW DETERMINATION

Instrument ID: GC4G
Method: SW846 8081B

	Lab FileID	Date/Time	Sample Number	Analyst
Std#1	4G67836.D	05/02/16 15:26	G4G1778-ICC1778	DHARAS
Std#2	4G67851.D	05/03/16 17:05	G4G1779-CC1778	DHARAS
Std#3	4G67868.D	05/04/16 08:33	G4G1780-CC1778	BRITTANP

Compound	Sig#	Type	RT#1	RT#2	RT#3	Mean	Actual StdDev	Window (+ /- 3*StdDev)
4,4'-DDD	2	REG	8.09	8.09	8.09	8.09	0.000	+/- 0.030 [a]
Endosulfan-II	2	REG	8.29	8.29	8.28	8.29	0.006	+/- 0.030 [a]
4,4'-DDT	2	REG	8.64	8.63	8.63	8.63	0.006	+/- 0.030 [a]
Endrin aldehyde	2	REG	8.87	8.87	8.86	8.87	0.006	+/- 0.030 [a]
Endosulfan sulfate	2	REG	9.35	9.34	9.34	9.34	0.006	+/- 0.030 [a]
Methoxychlor	2	REG	9.84	9.84	9.84	9.84	0.000	+/- 0.030 [a]
Mirex	2	REG	10.16	10.16	10.15	10.16	0.006	+/- 0.030 [a]
Endrin ketone	2	REG	10.20	10.20	10.20	10.20	0.000	+/- 0.030 [a]

(a) Default minimum StdDev of .01 minutes employed.

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G-hc 1787

Print Analyst Name: Dharu Saponig

Date: 5/12/16

Analyst Signature:

Columns: 2DCLPI / 2DCLPII

Method 8081

Initial Cal. Method hPST 17A-F

Injection Volume: 1.0 uL

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV 161872-135	Pest ISTD	5 ppm
-74	PGM	10-250ppb
-148A	Pest Mix	25 ppb
-148B	Pest Mix	50 ppb
161933-09	EB	20 ppb
160863	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: Date: 5/17/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	MALS #	Dilution	IS	SU	Status (Data)	Comments
	h2681 68	dclt				1				OK	
	169	CC1778-50				4				OK	
	170	EB				3				OK	
	171	OP93822-MB1	93827	TCL 8081	W	5				OK	
	172	-BS1				6				OK	
	173	JC19996-1				7				OK	
	174	-4				8				OK	
	175	-5				9				OK	
	176	-6				10				OK	
	177	OP93822-MS				11				OK	
	178	-MSD				12				OK	
	~~179~~	~~JC19980-hr~~				~~13~~				~~OK~~	
	180	-hq				14				OK	
	181	OP93485-MB2	93485-2	8081 CHL	W	15				OK	
	182	-BS13				16				OK	
	183	JC19268-25				17				OK	
	184	dclt				1				OK	
	185	CC1778-25				2				OK	
	186	EB				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

Form: OR016-08
Rev. Date: 1/19/16

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: GMC 1787

Print Analyst Name: Dhara Saparia

Date: 5/12/16

Analyst Signature:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
161874-135	Pest DSTD	5 ppm
-79	PEM	10-250 ppb
-144A	Pest mix	25 ppb
-144B	Pest mix	50 ↓
161933-09	DB	20 ↓
160863	Hexane (tissue)	-

Columns: 20CLPD / 20CLPD

Method 8081

Initial Cal. Method GPST 1778

Injection Volume: 1.0ul

Date Archived:

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
	in2681787	Pest spike	OP161712953			5	10	/	/	ok	
	188	florisil check std	OP161712273			6	2			OK	
	189	florisil check #1	5/11/16			7				OK	
	190	check #2	5/11/16			8				ok	
	191	OP93826-MD1	93826	Soil TCLP	W	9		/	/	OK	OP 93785-4
	192	-DS1				10		/	/	ok	
	193	JC19947-5				11		/	/	OK	
	194	JC19951-1A				12		/	/	ok	
	195	-3A				13		/	/	ok	
	196	-5A				14		/	/	ok	
	197	-7A				15		/	/	ok	
	198	-9A				16		/	/	ok	
	199	-11A				17		/	/	OK	
	200	JC19976-1A				18		/	/	ok	
	201	JC19891-1	93765			19		/	/	OK	
	202	-2				20		/	/	OK	
	203	-3				21		/	/	ok	
	204	-4				22		/	/	OK	
	205	-5				23		/	/	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

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Form: OR016-08
Rev. Date: 1/19/16

11.7.2 11

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: GHC 1787

Print Analyst Name: Dhaval Saparia

Analyst Signature:

Date: 5/12/16

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
161874-03	Pest IRTD	5 ppm
-79	PCM	10-250 ppb
-1WA	Pest mix	25 ppb
-1WA	↓	50 ↓
161933-07	IB	20
160563	Herbicide Mix	—

Columns: 20CLPD1 20CLPD

Method 8081

Initial Cal. Method MPST 1772

Injection Volume: 1.00 ul

Date Archived:

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
	n2 65206	CC 1778-50				4		/	/	ok	
	207	IB				3		/	/	ok	
	208	JC19462-NOR	93785	Pest TCLP	W	24		/	/	ok	
	209	OP93826-25H				25		/	/	ok	+ms
	210	-MSD				26		/	/	ok	
	211	-LB11				27		/	/	ok	

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G6G1010

Print Analyst Name: Dhara Saporia

Date: 5/13/16

Analyst Signature: [signature]

Columns: 2ncLPI / 2ncLPII

Method 8081

Initial Cal. Method 8857 987

Injection Volume: 1.0uL

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV16K2-135	Rest IS/SD	5000
-74	PEM	10-250 ppb
-1MM	Rest mix	25 ppb
-1MM	↓	50
162933-09	IS	20
160863	Hexazinone (Pi) 1mL	—

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: 5/27/16 5/19/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	6235033	ddw				1		/	/	OK	
	034	CC987-25				2		/	/	OK	
	035	IB				3		/	/	OK	
	036	08 ~~93870-MD1~~ 93857-MD1	~~93870~~ DK518	8081	S	5		/	/	OK	
	037	08 93857-MS1	93857			6		/	/	OK	
	038	-MS13				7		/	/	OK	
	039	JC19951-1		TCL/PAL		8		/	/	OK	
	040	JC19951-1	93838	8081 PAL	S	9		/	/	OK	
	041A	08 93857-MS	93857	TCL		10		/	/	OK	
	042	-MSD				11		/	/	OK	
	043	JC20045-1				12		/	/	OK	
	044	-2				13		/	/	OK	
	045	-3				14		/	/	OK	
	046	-4				15		/	/	OK	
	047	-5				16		/	/	OK	
	048	-6				17		/	/	OK	
	049	-7				18		/	/	OK	
	050	-8				19		/	/	OK	
	051	-9				20		/	/	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

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Form: OR016-08
Rev. Date: 1/19/16

11.7.3 11

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G6G1010

Print Analyst Name: Dhara Suparia

Analyst Signature: [signature]

Date: 5/10/16

Columns: 2nCLPD / 2nCLPD

Method 8081

Initial Cal. Method GPST 9/17

Injection Volume: 1.0 uL

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV161[illegible]	Pest DSTD	500 ppb
-70	PEM	10-250 ppb
-1MX	Pest mix	25 ppb
-1MX	Pest mix	50
161933-04	IB	20
160863	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: [signature] Date: 5/17/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	6g35052	JC19996-2	93857	8081 TCL		21		/	/	ok	
	053	OP93870-BS1	93870			22		/	/	ok	
	054	blk				1		/	/	OK	
	055	cc 987-50				4		/	/	OK	
	056	IB				3		/	/	OK	
	057	OP93831-MB1	93831	Pest 608	W	5		/	/	OK	
	058	-BS1		PPL		6		/	/	OK	
	059	-BSD				7		/	/	OK	
TL 5/17	060	TC85062-1				8		/	/	OK	
	061	-2				9		/	/	OK	
	062	-3				10		/	/	OK	
	063	-4				11		/	/	OK	
	064	-5				12		/	/	OK	
	065	cc987-25				2		/	/	OK	
	066	IB				3		/	/	OK	
	067	OP93772-MB1	93772	Pest 608	W	13		/	/	OK	Had TBA
	068	-BS1				14		/	/	OK	
	069	JC19815-1				15		/	/	OK	CF
	070	-2				16		/	/	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

Form: OR016-08
Rev. Date: 1/19/16

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G6g 1010

Print Analyst Name: Thomas Lally

Analyst Signature: TL

Date: 5/13/16

Columns: ZBCLPI/ZBCLPII

Method 8081

Initial Cal. Method 6PST987

Injection Volume: 1.0uL

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV7614-7W-05	Pest ISTD	5 ppm
-79	PCM	10-250 ppb
-Mm	Pest mix	25 ppb
-Mm	Pest mix	50
161932-09	IB	20
160863	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
	6g35071	JC19815-3	93772	~~PBL~~ Pest 608	W	17				RR	
	072	OP93772 -MS				18				ok	cf
	073	-MSD				19				ok	cf
	074	JC19815-4				20				Not usin	Need TBA
	075	CC987-50				4				ok	methoxychlor ↓ ↓ RR with better cc
	076	IB				3				ok	
	077	JC19815-5	93772	Pest 608	W	21				not using	
	078	-6				22				not using	
	079	-7				23				not using	
	080	-8				24				not using	Need TBA
	081	-9				25				not using	
	082	-10				26				not using	Need TBA
	083	-11				27				not using	↓
	084	CC987-25				2				NO	DDT, methoxychlor ↓ better
	085	IB				3				Not usin	

RK 5/16/16

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

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G6G 987

Print Analyst Name: Dhara Sapania

Date: 04/14/16

Analyst Signature: [signature]

Columns: 2BCLPD / 2DCLPD

Method 8081, 608

Initial Cal. Method G PST 987

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	PCM	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	dblt				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	ICV 987-25	Pest			13	10			OK	
	141	-25	mirex			14	10			OK	OP152564137 - 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

6-1734

LOGBOOK ID:

Pest/PCB Extraction Log - Aqueous

Date Started: 5/11/16 Time Started: 6:45 pm
Date Finished: 5/11/16 Time Finished: 11:00 pm

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Separatory Funnel: SW846 3510C/CLP/other ✓
Continuous Liquid Liquid: SW846 3520C/CLP/other

BATCH # GC 93822	RACK# Pest-3
Extracted by:	KS, RF
Concentrated by:	KS, AOL
Vialed by:	KS, AOL
Relinquished by:	SD
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 #	pH	Sample Description	Sample Volume (mL)	Final Extract Color	Final Extract Vol(mL)	GPC	Copper	H2SO4	Florisil	Comments
MB1	Pest			DI H2O	1000	clear	10		✓			
BS1				DI H2O	1000	clear	10		✓			
JC19996-5 MS		2		Yellow	500	clear	10		✓			
MSD		2		Yellow	500	clear	10		✓			
BS												
MS												
MSD												
1 JC19996-1	Pest	1		Clear	1000	clear	10		✓			
2 -4		1		Clear	930	clear	10		✓			
3 -5		1		yellow	940	clear	10		✓			
4 -6		1		yellow	910	clear	10		✓			
5 ~~JC19924-1~~												
6 ~~3~~												
7 ~~4~~												
8 JC13380-48		2	2	clear	100	clear	10		✓			
9 -49		2	2	clear	70	clear	10		✓			*
10			9 Spike									
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												

1d TAT
cl 5/11/16
use 100ml

Comments: okay to split MS/MSD, not enough bottles
Line 5-7; written incorrectly
* only volume left in bottle

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)	3	65	N/A	N/A	OK
Buchi Chiller	B-3	1.0	N/A	N/A	4
Waterbath (70-80°C)	6/7		0.5/0.1		N/A
Waterbath Chiller (GPM)	F-2		N/A	N/A	2
NEVAP (32-38°C, LPM)					

SURROGATE	LOT #	CONC (ppb)	AMT (mL)
PPCB	16171291	400	1

WITNESS SIGN: MP/SD SPIKE SIGN: KS/RF

MATRIX SPIKE	LOT #	CONC	AMT (mL)
PEST	16171295A	250	1
PCB			

WITNESS SIGN: MP SPIKE SIGN: KS

SOLVENT	LOT #	BRAND	AMT (mL)
METH CHLOR	162661	Fisher	3X60
HEXANE	160563	Fisher	50

REAGENT	LOT #	BRAND
Sodium Sulfate	157477	Fisher
Glass Wool	02905-2	lab
Filter Paper		
Copper	16121266	Alfa Aesar
Florisil		
1:1 Sulfuric Acid		
Chlorine Strips		

SGS ACCUTEST INC.
Form: OP021A-06
Rev Date: 1/13/16

6-1750

LOGBOOK ID:

Pest / PCB Extraction Log - Soils

Date Started: 5/12/16 Time Started: 4:00
Date Finished: 5/12/16 Time Finished: 6:45

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Microwave SW3546 √ Sonication SW3550C ____
Waste Dilution SW3580A ____ Soxhlet SW3540 ____

BATCH # GC 93857 RACK# Dest-1
Weighed/Extracted by: RG
Concentrated by: RG
Vialed by: RG
Relinquished by:
Accepted by:
Supervisor Review: DA 5/13/16

Special Client Spike Instructions

QC ID# for Special Spike	Amt to Spike	Spike ID	Lot #	ppb Conc.	Amt. Spiked
BS13	1ml	CHL	OP16171297	5000	1.0

WITNESS SIGN: DAL SPIKE SIGN: RG
Manager/Supervisor/Team Lead Approval:

SPECIAL PROCESSING INSTRUCTIONS
Rx Reason:
Spiking:
Weights/Volumes:
Required MS/MSD:
Final Volume:
Other:

30day TAT

	Sample #	Analysis Type	Sample Bottle #	Sample Description	Sample Wet Wt. (g) Oil (g) Liq (mL)	Decant Y	Decant N	Microwave/ Sonicator ID	Final Extract* Color	Final Extract* Vol (mL)	Extract Cleanup H2SO4	Florisil	Cu	GPC	Comment
	MB1	Pest		Sand	15.0		/	4	clear	10	✓	/	/		
	BS1			Sand	15.0		/	4	clear	10		/	/		
	JC19931-1 MS		1	Sand	15.5	/		4	clear	10		/	/		
	MSD		1	Sand	15.7	/		4	clear	10		/	/		
	BS 13 CHL			Sand	15.0		/	4	clear	10		/	/		
	MS														
	MSD														
1	JC19931-1	Pest	1	Sand	15.2			4	Lyellow	10		/	/		
2	JC20045-1		1	Sand	5.7		/	4	clear	10		/	/		Δ
3	-2		1	Sand	5.0		/	4	clear	10		/	/		Δ
4	-3		1	Sand	5.2		/	4	clear	10		/	/		Δ
5	-4		1	Sand	5.3		/	4	clear	10		/	/		Δ
6	-5		1	Sand	5.9		/	4	clear	10		/	/		Δ
7	-6		1	Sand	5.4		/	4	clear	10		/	/		Δ
8	-7		1	Sand	5.3		/	4	clear	10		/	/		Δ
9	-8		1	Sand	5.6		/	4	clear	10		/	/		Δ
10	-9		1	Sand	5.4		/	4	clear	10		/	/		Δ
11	JC19996-2		1	Soil	9.2		/	4	clear	10		/	/		*
12															
13															
14															
15															
16															
17															
18															
19															
20															

Comments: *weight reduced due to limited volume.
Δweight reduced due to gas odor.

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)	3,4	63	—	—	ok
Buchi Chiller	B3,B4	11	—	—	ok
Waterbath (70-80°C)					
Waterbath Chiller (GPM)					
NEVAP (32-38°C, LPM)					
Balance	345	N/A	N/A	N/A	N/A

SURROGATE	LOT #	CONC (ppb)	AMT (mL)
PPCB	OP16171291	400	1.0

WITNESS SIGN: DAL SPIKE SIGN: RG

MATRIX SPIKE	LOT #	CONC	AMT (mL)
PEST	OP16171295A	250 ppb	1.0
PCB			

WITNESS SIGN: DAL SPIKE SIGN: RG

SOLVENT	LOT #	BRAND	AMT (mL)
2:1 HEXANE/ ACETONE	160863 ~~158571~~	Fisher	30
1:1 METH CHLOR/ ACETONE			
HEXANE			

REAGENT	LOT #	BRAND
HYDROMATRIX	6250550	Agilent
SODIUM SULFATE	147577	Fisher
FILTER PAPER	4627994	Fisher
FLORISIL	5213-057	Phenomenex
1:1 SULFURIC ACID		
COPPER	OP16171260	Aldrich

MATRIX	LOT #	BRAND
SAND	160416913 1A	Fisher

SGS ACCUTEST INC.
Form: OP018A-05
Rev Date: 11/20/15

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Percent Solids Raw Data Summary

Percent Solids Raw Data Summary

Job Number: JC19996
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: JC19996-2 **Analyzed:** 12-MAY-16 by PV **Method:** SM2540 G-97
ClientID: RA-20 (6.5-7.5)

Wet Weight (Total)	33.75	g
Tare Weight	27.07	g
Dry Weight (Total)	32.16	g
Solids, Percent	76.2	%