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Automated Report

Technical Report for

Anderson, Mulholland & Associates

BMSMC, Building 5 Area, PR

SM04.00.06

SGS Accutest Job Number: JC19644

Sampling Dates: 05/03/16 - 05/04/16

Report to:

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Total number of pages in report: **1305**

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

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Sample Summary

Anderson, Mulholland & Associates

Job No: JC19644

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

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JC19644-1	05/03/16	11:00	TT	05/05/16	AQ	Ground Water	RA-16 GWD
JC19644-2	05/03/16	15:35	NR	05/05/16	AQ	Ground Water	S-42S
JC19644-3	05/03/16	16:45	TT	05/05/16	AQ	Ground Water	RA-11 GWS
JC19644-4	05/04/16	11:00	TT	05/05/16	SO	Soil	RA-11 (10-11)
JC19644-5	05/04/16	12:35	NR	05/05/16	SO	Soil	RA-10 (5.5-6.5)

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

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Anderson, Mulholland & Associates	**Job No**	JC19644
Site:	BMSMC, Building 5 Area, PR	**Report Date**	5/19/2016 4:52:26 PM

On 05/05/2016, 5 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at Accutest Laboratories at a maximum corrected temperature of 4 C. Samples were intact and chemically preserved, unless noted below. An Accutest Job Number of JC19644 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:** OP93662

- All samples were extracted within the recommended method holding time.
- Sample(s) JC19633-1MS, JC19633-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- JC19644-2 for 2,4,6-Tribromophenol: Outside control limits due to dilution.
- JC19644-2 for 2-Fluorophenol: Outside control limits due to dilution.
- JC19644-2 for Phenol-d5: Outside control limits due to dilution.

Matrix: SO **Batch ID:** OP93678

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC19596-12AMS, JC19596-12AMSD 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 Hexachlorocyclopentadiene are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for Hexachlorocyclopentadiene are outside control limits. Outside control limits due to matrix interference.
- OP93678-MSD: Dilution required due to viscosity of the extract matrix
- OP93678-MS: Dilution required due to viscosity of the extract matrix
- JC19644-5: Confirmation run for internal standard areas.

Extractables by GCMS By Method SW846 8270D BY SIM

Matrix: AQ **Batch ID:** OP93662A

- All samples were extracted within the recommended method holding time.
- Sample(s) JC19639-1MS, JC19639-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: SO **Batch ID:** OP93678A

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC19644-4MS, JC19644-4MSD were used as the QC samples indicated.
- JC19644-5 for 1,4-Dioxane: Not accredited for this compound at the time of analysis, but all method requirements were followed.
- JC19644-4 for 1,4-Dioxane: Not accredited for this compound at the time of analysis, but all method requirements were followed.

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

Matrix: AQ **Batch ID:** GGH5285

- All samples were analyzed within the recommended method holding time.
- Sample(s) JC19644-1MS, JC19644-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Blank Spike Recovery(s) for Isopropyl Alcohol, n-Butyl Alcohol are outside control limits. High percent recoveries and no associated positive found in the QC batch.
- Matrix Spike Recovery(s) for n-Butyl Alcohol are outside control limits. High percent recoveries and no associated positive found in the QC batch.
- Matrix Spike Duplicate Recovery(s) for Isobutyl Alcohol, n-Butyl Alcohol are outside control limits. High percent recoveries and no associated positive found in the QC batch.
- GGH5285-BS: Reported from 1st Signal. %RSD of initial calibration on 2nd signal excess method criteria (20%) so using for confirmation only.
- GGH5285-MB1: 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:** OP93665

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC19644-1MS, JC19644-1MSD, OP93665-MSMSD were used as the QC samples indicated.

Matrix: SO **Batch ID:** OP93736

- All samples were extracted within the recommended method holding time.
- Sample(s) JC19823-1MS, JC19823-1MSD, OP93736-MSMSD 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:** GN45529

- 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: JC19644
Account: Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Collected: 05/03/16 thru 05/04/16

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC19644-1	**RA-16 GWD**					
1,4-Dioxane		26.7	1.1	0.73	ug/l	SW846 8270D
JC19644-2	**S-42S**					
1,4-Dioxane		3890	50	33	ug/l	SW846 8270D
JC19644-3	**RA-11 GWS**					
1,4-Dioxane		67.1	1.1	0.73	ug/l	SW846 8270D
JC19644-4	**RA-11 (10-11)**					
1,4-Dioxane [a]		8.07	4.2	0.85	ug/kg	SW846 8270D BY SIM
JC19644-5	**RA-10 (5.5-6.5)**					
1,4-Dioxane [a]		136	4.0	0.81	ug/kg	SW846 8270D BY SIM

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

Sample Results

Report of Analysis

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Report of Analysis

Client Sample ID:	RA-16 GWD		
Lab Sample ID:	JC19644-1	**Date Sampled:**	05/03/16
Matrix:	AQ - Ground Water	**Date Received:**	05/05/16
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	F156860.D	1	05/06/16	LK	05/05/16	OP93662	EF6604
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:	RA-16 GWD		
Lab Sample ID:	JC19644-1	**Date Sampled:**	05/03/16
Matrix:	AQ - Ground Water	**Date Received:**	05/05/16
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	26.7	1.1	0.73	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.1	0.37	ug/l	
132-64-9	Dibenzofuran	ND	5.6	0.24	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.2	0.55	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.2	0.26	ug/l	
84-66-2	Diethyl phthalate	ND	2.2	0.29	ug/l	
131-11-3	Dimethyl phthalate	ND	2.2	0.24	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	1.8	ug/l	
206-44-0	Fluoranthene	ND	1.1	0.19	ug/l	
86-73-7	Fluorene	ND	1.1	0.19	ug/l	
118-74-1	Hexachlorobenzene	ND	1.1	0.36	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.1	0.55	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	3.1	ug/l	
67-72-1	Hexachloroethane	ND	2.2	0.43	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.1	0.37	ug/l	
78-59-1	Isophorone	ND	2.2	0.31	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.1	0.29	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.1	0.23	ug/l	
88-74-4	2-Nitroaniline	ND	5.6	0.31	ug/l	
99-09-2	3-Nitroaniline	ND	5.6	0.43	ug/l	
100-01-6	4-Nitroaniline	ND	5.6	0.49	ug/l	
98-95-3	Nitrobenzene	ND	2.2	0.71	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.2	0.53	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.6	0.25	ug/l	
85-01-8	Phenanthrene	ND	1.1	0.19	ug/l	
129-00-0	Pyrene	ND	1.1	0.24	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.2	0.41	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	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:	RA-16 GWD		
Lab Sample ID:	JC19644-1	**Date Sampled:**	05/03/16
Matrix:	AQ - Ground Water	**Date Received:**	05/05/16
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	93%		39-149%
4165-60-0	Nitrobenzene-d5	78%		32-128%
321-60-8	2-Fluorobiphenyl	68%		35-119%
1718-51-0	Terphenyl-d14	73%		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:	RA-16 GWD		
Lab Sample ID:	JC19644-1	**Date Sampled:**	05/03/16
Matrix:	AQ - Ground Water	**Date Received:**	05/05/16
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	3M61128.D	1	05/06/16	LK	05/05/16	OP93662A	E3M2874
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	70%		24-125%
321-60-8	2-Fluorobiphenyl	72%		19-127%
1718-51-0	Terphenyl-d14	84%		10-119%

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

SGS Accutest

Report of Analysis

Client Sample ID:	RA-16 GWD		
Lab Sample ID:	JC19644-1	**Date Sampled:**	05/03/16
Matrix:	AQ - Ground Water	**Date Received:**	05/05/16
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	GH104963.D	1	05/16/16	XPL	n/a	n/a	GGH5285
Run #2							

Low Molecular Alcohol List

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
111-27-3	Hexanol	104%		56-145%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	RA-16 GWD		
Lab Sample ID:	JC19644-1	**Date Sampled:**	05/03/16
Matrix:	AQ - Ground Water	**Date Received:**	05/05/16
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	4G67960.D	1	05/06/16	BP	05/05/16	OP93665	G4G1782
Run #2							

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

Pesticide TCL List

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	67%		26-132%
877-09-8	Tetrachloro-m-xylene	68%		26-132%
2051-24-3	Decachlorobiphenyl	107%		10-118%
2051-24-3	Decachlorobiphenyl	95%		10-118%

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

SGS Accutest

Report of Analysis

Client Sample ID:	S-42S		
Lab Sample ID:	JC19644-2	**Date Sampled:**	05/03/16
Matrix:	AQ - Ground Water	**Date Received:**	05/05/16
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	F156861.D	1	05/06/16	LK	05/05/16	OP93662	EF6604
Run #2	F156880.D	50	05/06/16	LK	05/05/16	OP93662	EF6604

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

ABN TCL Special List

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

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

Report of Analysis

Client Sample ID:	S-42S		
Lab Sample ID:	JC19644-2	**Date Sampled:**	05/03/16
Matrix:	AQ - Ground Water	**Date Received:**	05/05/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	2.0	0.65	ug/l	
218-01-9	Chrysene	ND	1.0	0.18	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.28	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.25	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.40	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.37	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.51	ug/l	
123-91-1	1,4-Dioxane	3890 [a]	50	33	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.33	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.22	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.50	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.23	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.7	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.17	ug/l	
86-73-7	Fluorene	ND	1.0	0.17	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.49	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	2.8	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.39	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.33	ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.0	0.26	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.21	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.28	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.39	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.44	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.48	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.18	ug/l	
129-00-0	Pyrene	ND	1.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.37	ug/l	

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

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

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

Report of Analysis

Client Sample ID:	S-42S		
Lab Sample ID:	JC19644-2	**Date Sampled:**	05/03/16
Matrix:	AQ - Ground Water	**Date Received:**	05/05/16
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	27%	0% [b]	10-110%
118-79-6	2,4,6-Tribromophenol	98%	0% [b]	39-149%
4165-60-0	Nitrobenzene-d5	74%	70%	32-128%
321-60-8	2-Fluorobiphenyl	67%	63%	35-119%
1718-51-0	Terphenyl-d14	82%	71%	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:	S-42S		
Lab Sample ID:	JC19644-2	**Date Sampled:**	05/03/16
Matrix:	AQ - Ground Water	**Date Received:**	05/05/16
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	3M61129.D	1	05/06/16	LK	05/05/16	OP93662A	E3M2874
Run #2							

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

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	ND	0.10	0.029	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	66%		24-125%
321-60-8	2-Fluorobiphenyl	67%		19-127%
1718-51-0	Terphenyl-d14	91%		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-42S		
Lab Sample ID:	JC19644-2	**Date Sampled:**	05/03/16
Matrix:	AQ - Ground Water	**Date Received:**	05/05/16
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	GH104966.D	1	05/16/16	XPL	n/a	n/a	GGH5285
Run #2							

Low Molecular Alcohol List

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
111-27-3	Hexanol	90%		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-42S		
Lab Sample ID:	JC19644-2	**Date Sampled:**	05/03/16
Matrix:	AQ - Ground Water	**Date Received:**	05/05/16
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	4G67961.D	1	05/06/16	BP	05/05/16	OP93665	G4G1782
Run #2							

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

Pesticide TCL List

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	62%		26-132%
877-09-8	Tetrachloro-m-xylene	57%		26-132%
2051-24-3	Decachlorobiphenyl	107%		10-118%
2051-24-3	Decachlorobiphenyl	88%		10-118%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	RA-11 GWS		
Lab Sample ID:	JC19644-3	**Date Sampled:**	05/03/16
Matrix:	AQ - Ground Water	**Date Received:**	05/05/16
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	F156862.D	1	05/06/16	LK	05/05/16	OP93662	EF6604
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:	RA-11 GWS		
Lab Sample ID:	JC19644-3	**Date Sampled:**	05/03/16
Matrix:	AQ - Ground Water	**Date Received:**	05/05/16
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	67.1	1.1	0.73	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.1	0.37	ug/l	
132-64-9	Dibenzofuran	ND	5.6	0.24	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.2	0.55	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.2	0.26	ug/l	
84-66-2	Diethyl phthalate	ND	2.2	0.29	ug/l	
131-11-3	Dimethyl phthalate	ND	2.2	0.24	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	1.8	ug/l	
206-44-0	Fluoranthene	ND	1.1	0.19	ug/l	
86-73-7	Fluorene	ND	1.1	0.19	ug/l	
118-74-1	Hexachlorobenzene	ND	1.1	0.36	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.1	0.55	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	3.1	ug/l	
67-72-1	Hexachloroethane	ND	2.2	0.43	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.1	0.37	ug/l	
78-59-1	Isophorone	ND	2.2	0.31	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.1	0.29	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.1	0.23	ug/l	
88-74-4	2-Nitroaniline	ND	5.6	0.31	ug/l	
99-09-2	3-Nitroaniline	ND	5.6	0.43	ug/l	
100-01-6	4-Nitroaniline	ND	5.6	0.49	ug/l	
98-95-3	Nitrobenzene	ND	2.2	0.71	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.2	0.53	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.6	0.25	ug/l	
85-01-8	Phenanthrene	ND	1.1	0.19	ug/l	
129-00-0	Pyrene	ND	1.1	0.24	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.2	0.41	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	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:	RA-11 GWS		
Lab Sample ID:	JC19644-3	**Date Sampled:**	05/03/16
Matrix:	AQ - Ground Water	**Date Received:**	05/05/16
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	29%		10-110%
118-79-6	2,4,6-Tribromophenol	89%		39-149%
4165-60-0	Nitrobenzene-d5	73%		32-128%
321-60-8	2-Fluorobiphenyl	64%		35-119%
1718-51-0	Terphenyl-d14	64%		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:	RA-11 GWS		
Lab Sample ID:	JC19644-3	**Date Sampled:**	05/03/16
Matrix:	AQ - Ground Water	**Date Received:**	05/05/16
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	3M61130.D	1	05/06/16	LK	05/05/16	OP93662A	E3M2874
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	66%		24-125%
321-60-8	2-Fluorobiphenyl	66%		19-127%
1718-51-0	Terphenyl-d14	78%		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-11 GWS		
Lab Sample ID:	JC19644-3	**Date Sampled:**	05/03/16
Matrix:	AQ - Ground Water	**Date Received:**	05/05/16
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	GH104967.D	1	05/16/16	XPL	n/a	n/a	GGH5285
Run #2							

Low Molecular Alcohol List

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
111-27-3	Hexanol	105%		56-145%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	RA-11 GWS		
Lab Sample ID:	JC19644-3	**Date Sampled:**	05/03/16
Matrix:	AQ - Ground Water	**Date Received:**	05/05/16
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	4G67962.D	1	05/06/16	BP	05/05/16	OP93665	G4G1782
Run #2							

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

Pesticide TCL List

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	64%		26-132%
877-09-8	Tetrachloro-m-xylene	64%		26-132%
2051-24-3	Decachlorobiphenyl	97%		10-118%
2051-24-3	Decachlorobiphenyl	85%		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-11 (10-11)		
Lab Sample ID:	JC19644-4	**Date Sampled:**	05/04/16
Matrix:	SO - Soil	**Date Received:**	05/05/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	77.4
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3E83008.D	1	05/09/16	AN	05/06/16	OP93678	E3E3639
Run #2							

	Initial Weight	Final Volume
Run #1	30.5 g	1.0 ml
Run #2		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	85	29	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	210	38	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	210	42	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	210	100	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	210	170	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	210	62	ug/kg	
95-48-7	2-Methylphenol	ND	85	48	ug/kg	
	3&4-Methylphenol	ND	85	48	ug/kg	
88-75-5	2-Nitrophenol	ND	210	37	ug/kg	
100-02-7	4-Nitrophenol	ND	420	120	ug/kg	
87-86-5	Pentachlorophenol	ND	210	36	ug/kg	
108-95-2	Phenol	ND	85	33	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	210	55	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	210	61	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	210	47	ug/kg	
83-32-9	Acenaphthene	ND	42	8.0	ug/kg	
208-96-8	Acenaphthylene	ND	42	5.8	ug/kg	
98-86-2	Acetophenone	ND	210	22	ug/kg	
120-12-7	Anthracene	ND	42	18	ug/kg	
1912-24-9	Atrazine	ND	85	14	ug/kg	
56-55-3	Benzo(a)anthracene	ND	42	6.5	ug/kg	
50-32-8	Benzo(a)pyrene	ND	42	10	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	42	8.9	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	42	11	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	42	12	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	85	19	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	85	24	ug/kg	
92-52-4	1,1'-Biphenyl	ND	85	12	ug/kg	
100-52-7	Benzaldehyde	ND	210	10	ug/kg	
91-58-7	2-Chloronaphthalene	ND	85	8.0	ug/kg	
106-47-8	4-Chloroaniline	ND	210	12	ug/kg	
86-74-8	Carbazole	ND	85	8.3	ug/kg	

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

Report of Analysis

Client Sample ID:	RA-11 (10-11)		
Lab Sample ID:	JC19644-4	**Date Sampled:**	05/04/16
Matrix:	SO - Soil	**Date Received:**	05/05/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	77.4
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	85	31	ug/kg	
218-01-9	Chrysene	ND	42	11	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	85	8.9	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	85	24	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	85	17	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	85	11	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	42	15	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	42	13	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	85	57	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	42	16	ug/kg	
132-64-9	Dibenzofuran	ND	85	7.7	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	85	26	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	85	27	ug/kg	
84-66-2	Diethyl phthalate	ND	85	9.5	ug/kg	
131-11-3	Dimethyl phthalate	ND	85	8.7	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	85	9.2	ug/kg	
206-44-0	Fluoranthene	ND	42	20	ug/kg	
86-73-7	Fluorene	ND	42	17	ug/kg	
118-74-1	Hexachlorobenzene	ND	85	11	ug/kg	
87-68-3	Hexachlorobutadiene	ND	42	17	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	420	25	ug/kg	
67-72-1	Hexachloroethane	ND	210	32	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	42	14	ug/kg	
78-59-1	Isophorone	ND	85	9.4	ug/kg	
90-12-0	1-Methylnaphthalene	ND	85	7.5	ug/kg	
91-57-6	2-Methylnaphthalene	ND	85	34	ug/kg	
88-74-4	2-Nitroaniline	ND	210	31	ug/kg	
99-09-2	3-Nitroaniline	ND	210	15	ug/kg	
100-01-6	4-Nitroaniline	ND	210	17	ug/kg	
98-95-3	Nitrobenzene	ND	85	19	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	85	19	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	210	24	ug/kg	
85-01-8	Phenanthrene	ND	42	10	ug/kg	
129-00-0	Pyrene	ND	42	7.4	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	210	9.5	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	70%		30-106%
4165-62-2	Phenol-d5	69%		30-106%

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

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

Report of Analysis

Client Sample ID:	RA-11 (10-11)		
Lab Sample ID:	JC19644-4	**Date Sampled:**	05/04/16
Matrix:	SO - Soil	**Date Received:**	05/05/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	77.4
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	83%		24-140%
4165-60-0	Nitrobenzene-d5	81%		26-122%
321-60-8	2-Fluorobiphenyl	89%		36-112%
1718-51-0	Terphenyl-d14	91%		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-11 (10-11)		
Lab Sample ID:	JC19644-4	**Date Sampled:**	05/04/16
Matrix:	SO - Soil	**Date Received:**	05/05/16
Method:	SW846 8270D BY SIM SW846 3546	**Percent Solids:**	77.4
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M65183.D	1	05/09/16	LK	05/06/16	OP93678A	E4M2910
Run #2							

	Initial Weight	Final Volume
Run #1	30.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane [a]	8.07	4.2	0.85	ug/kg	
91-20-3	Naphthalene	ND	4.2	0.52	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	103%		15-138%
321-60-8	2-Fluorobiphenyl	74%		12-148%
1718-51-0	Terphenyl-d14	91%		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-11 (10-11)		
Lab Sample ID:	JC19644-4	**Date Sampled:**	05/04/16
Matrix:	SO - Soil	**Date Received:**	05/05/16
Method:	SW846-8015C (DAI)	**Percent Solids:**	77.4
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GH105052.D	1	05/18/16	XPL	n/a	n/a	GGH5290
Run #2							

	Initial Weight
Run #1	5.0 g
Run #2	

Low Molecular Alcohol List

CAS No.	Compound	Result	RL	MDL	Units	Q
64-17-5	Ethanol	ND	130	89	ug/kg	
78-83-1	Isobutyl Alcohol	ND	130	76	ug/kg	
67-63-0	Isopropyl Alcohol	ND	130	74	ug/kg	
71-23-8	n-Propyl Alcohol	ND	130	52	ug/kg	
71-36-3	n-Butyl Alcohol	ND	130	70	ug/kg	
78-92-2	sec-Butyl Alcohol	ND	130	69	ug/kg	
67-56-1	Methanol	ND	260	62	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
111-27-3	Hexanol	73%		52-141%
111-27-3	Hexanol	78%		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-11 (10-11)		
Lab Sample ID:	JC19644-4	**Date Sampled:**	05/04/16
Matrix:	SO - Soil	**Date Received:**	05/05/16
Method:	SW846 8081B SW846 3546	**Percent Solids:**	77.4
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G34906.D	1	05/10/16	RK	05/09/16	OP93736	G6G1007
Run #2							

	Initial Weight	Final Volume
Run #1	16.3 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.79	0.71	ug/kg	
319-84-6	alpha-BHC	ND	0.79	0.53	ug/kg	
319-85-7	beta-BHC	ND	0.79	0.49	ug/kg	
319-86-8	delta-BHC	ND	0.79	0.31	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.79	0.36	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.79	0.42	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.79	0.60	ug/kg	
60-57-1	Dieldrin	ND	0.79	0.62	ug/kg	
72-54-8	4,4'-DDD	ND	0.79	0.29	ug/kg	
72-55-9	4,4'-DDE	ND	0.79	0.26	ug/kg	
50-29-3	4,4'-DDT	ND	0.79	0.30	ug/kg	
72-20-8	Endrin	ND	0.79	0.28	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.79	0.45	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.79	0.59	ug/kg	
959-98-8	Endosulfan-I	ND	0.79	0.26	ug/kg	
33213-65-9	Endosulfan-II	ND	0.79	0.75	ug/kg	
76-44-8	Heptachlor	ND	0.79	0.65	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.79	0.33	ug/kg	
72-43-5	Methoxychlor	ND	1.6	0.44	ug/kg	
53494-70-5	Endrin ketone	ND	0.79	0.42	ug/kg	
8001-35-2	Toxaphene	ND	20	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	109%		24-136%
877-09-8	Tetrachloro-m-xylene	107%		24-136%
2051-24-3	Decachlorobiphenyl	106%		10-153%
2051-24-3	Decachlorobiphenyl	120%		10-153%

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-10 (5.5-6.5)		
Lab Sample ID:	JC19644-5	**Date Sampled:**	05/04/16
Matrix:	SO - Soil	**Date Received:**	05/05/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	79.8
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3E83007.D	1	05/09/16	AN	05/06/16	OP93678	E3E3639
Run #2 [a]	3E83020.D	1	05/09/16	AN	05/06/16	OP93678	E3E3639

	Initial Weight	Final Volume
Run #1	31.0 g	1.0 ml
Run #2	31.0 g	1.0 ml

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	81	28	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	200	36	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	200	40	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	200	97	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	200	160	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	200	59	ug/kg	
95-48-7	2-Methylphenol	ND	81	46	ug/kg	
	3&4-Methylphenol	ND	81	46	ug/kg	
88-75-5	2-Nitrophenol	ND	200	35	ug/kg	
100-02-7	4-Nitrophenol	ND	400	110	ug/kg	
87-86-5	Pentachlorophenol	ND	200	34	ug/kg	
108-95-2	Phenol	ND	81	31	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	200	53	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	200	58	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	200	44	ug/kg	
83-32-9	Acenaphthene	ND	40	7.6	ug/kg	
208-96-8	Acenaphthylene	ND	40	5.6	ug/kg	
98-86-2	Acetophenone	ND	200	21	ug/kg	
120-12-7	Anthracene	ND	40	18	ug/kg	
1912-24-9	Atrazine	ND	81	13	ug/kg	
56-55-3	Benzo(a)anthracene	ND	40	6.2	ug/kg	
50-32-8	Benzo(a)pyrene	ND	40	9.9	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	40	8.5	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	40	11	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	40	11	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	81	18	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	81	23	ug/kg	
92-52-4	1,1'-Biphenyl	ND	81	11	ug/kg	
100-52-7	Benzaldehyde	ND	200	9.8	ug/kg	
91-58-7	2-Chloronaphthalene	ND	81	7.6	ug/kg	
106-47-8	4-Chloroaniline	ND	200	12	ug/kg	
86-74-8	Carbazole	ND	81	7.9	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-10 (5.5-6.5)		
Lab Sample ID:	JC19644-5	**Date Sampled:**	05/04/16
Matrix:	SO - Soil	**Date Received:**	05/05/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	79.8
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	81	29	ug/kg	
218-01-9	Chrysene	ND	40	10	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	81	8.5	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	81	23	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	81	16	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	81	11	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	40	15	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	40	12	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	81	55	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	40	15	ug/kg	
132-64-9	Dibenzofuran	ND	81	7.3	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	81	25	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	81	26	ug/kg	
84-66-2	Diethyl phthalate	ND	81	9.1	ug/kg	
131-11-3	Dimethyl phthalate	ND	81	8.3	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	81	8.8	ug/kg	
206-44-0	Fluoranthene	ND	40	19	ug/kg	
86-73-7	Fluorene	ND	40	16	ug/kg	
118-74-1	Hexachlorobenzene	ND	81	10	ug/kg	
87-68-3	Hexachlorobutadiene	ND	40	16	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	400	24	ug/kg	
67-72-1	Hexachloroethane	ND	200	31	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	40	14	ug/kg	
78-59-1	Isophorone	ND	81	9.0	ug/kg	
90-12-0	1-Methylnaphthalene	ND	81	7.2	ug/kg	
91-57-6	2-Methylnaphthalene	ND	81	33	ug/kg	
88-74-4	2-Nitroaniline	ND	200	29	ug/kg	
99-09-2	3-Nitroaniline	ND	200	14	ug/kg	
100-01-6	4-Nitroaniline	ND	200	16	ug/kg	
98-95-3	Nitrobenzene	ND	81	18	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	81	18	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	200	23	ug/kg	
85-01-8	Phenanthrene	ND	40	9.7	ug/kg	
129-00-0	Pyrene	ND	40	7.1	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	200	9.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	70%	66%	30-106%
4165-62-2	Phenol-d5	68%	66%	30-106%

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

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

Report of Analysis

Client Sample ID:	RA-10 (5.5-6.5)		
Lab Sample ID:	JC19644-5	**Date Sampled:**	05/04/16
Matrix:	SO - Soil	**Date Received:**	05/05/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	79.8
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	64%	62%	24-140%
4165-60-0	Nitrobenzene-d5	80%	79%	26-122%
321-60-8	2-Fluorobiphenyl	80%	79%	36-112%
1718-51-0	Terphenyl-d14	84%	90%	36-132%

(a) Confirmation run for internal standard areas.

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-10 (5.5-6.5)		
Lab Sample ID:	JC19644-5	**Date Sampled:**	05/04/16
Matrix:	SO - Soil	**Date Received:**	05/05/16
Method:	SW846 8270D BY SIM SW846 3546	**Percent Solids:**	79.8
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M65184.D	1	05/09/16	LK	05/06/16	OP93678A	E4M2910
Run #2							

	Initial Weight	Final Volume
Run #1	31.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane [a]	136	4.0	0.81	ug/kg	
91-20-3	Naphthalene	ND	4.0	0.49	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	91%		15-138%
321-60-8	2-Fluorobiphenyl	79%		12-148%
1718-51-0	Terphenyl-d14	90%		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-10 (5.5-6.5)		
Lab Sample ID:	JC19644-5	**Date Sampled:**	05/04/16
Matrix:	SO - Soil	**Date Received:**	05/05/16
Method:	SW846-8015C (DAI)	**Percent Solids:**	79.8
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GH105053.D	1	05/18/16	XPL	n/a	n/a	GGH5290
Run #2							

	Initial Weight
Run #1	5.0 g
Run #2	

Low Molecular Alcohol List

CAS No.	Compound	Result	RL	MDL	Units	Q
64-17-5	Ethanol	ND	130	86	ug/kg	
78-83-1	Isobutyl Alcohol	ND	130	74	ug/kg	
67-63-0	Isopropyl Alcohol	ND	130	72	ug/kg	
71-23-8	n-Propyl Alcohol	ND	130	50	ug/kg	
71-36-3	n-Butyl Alcohol	ND	130	68	ug/kg	
78-92-2	sec-Butyl Alcohol	ND	130	67	ug/kg	
67-56-1	Methanol	ND	250	60	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
111-27-3	Hexanol	84%		52-141%
111-27-3	Hexanol	88%		52-141%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	RA-10 (5.5-6.5)		
Lab Sample ID:	JC19644-5	**Date Sampled:**	05/04/16
Matrix:	SO - Soil	**Date Received:**	05/05/16
Method:	SW846 8081B SW846 3546	**Percent Solids:**	79.8
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G34907.D	1	05/10/16	RK	05/09/16	OP93736	G6G1007
Run #2							

	Initial Weight	Final Volume
Run #1	15.1 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.83	0.74	ug/kg	
319-84-6	alpha-BHC	ND	0.83	0.55	ug/kg	
319-85-7	beta-BHC	ND	0.83	0.51	ug/kg	
319-86-8	delta-BHC	ND	0.83	0.33	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.83	0.38	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.83	0.44	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.83	0.63	ug/kg	
60-57-1	Dieldrin	ND	0.83	0.65	ug/kg	
72-54-8	4,4'-DDD	ND	0.83	0.31	ug/kg	
72-55-9	4,4'-DDE	ND	0.83	0.28	ug/kg	
50-29-3	4,4'-DDT	ND	0.83	0.32	ug/kg	
72-20-8	Endrin	ND	0.83	0.29	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.83	0.47	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.83	0.62	ug/kg	
959-98-8	Endosulfan-I	ND	0.83	0.27	ug/kg	
33213-65-9	Endosulfan-II	ND	0.83	0.79	ug/kg	
76-44-8	Heptachlor	ND	0.83	0.68	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.83	0.34	ug/kg	
72-43-5	Methoxychlor	ND	1.7	0.46	ug/kg	
53494-70-5	Endrin ketone	ND	0.83	0.44	ug/kg	
8001-35-2	Toxaphene	ND	21	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	104%		24-136%
877-09-8	Tetrachloro-m-xylene	107%		24-136%
2051-24-3	Decachlorobiphenyl	109%		10-153%
2051-24-3	Decachlorobiphenyl	119%		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

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

PAGE ___ OF ___ SUB

801219536007

Bottle Order Control #

SGS Accutest Quote #

SGS Accutest Job # JC19644

Client / Reporting Information

Company Name: Anderson Mulholland Assoc Inc.
Street Address: 2700 Westchester
City: Purchase State: NY Zip:
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: Humacao State: 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)

SVOC - Method 8270D
LMA - Method 8015B
Pesticides - Method 8081B
1,4 Dioxane + Naphthalene by Method 8270D SIM

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	RA-16 GWD		5/3/16	1100	TT	GW	7	3				4				X	X	X	X	E8
2	S-42S		5/3/16	1535	NR	GW	7	3				4				X	X	X	X	V3
3	RA-11 GWS		5/3/16	1645	TT	GW	7	3				4				X	X	X	X	FS1
4	RA-11 (10-11)		5/4/16	1100	TT	SO	~~3~~ 2					2		~~1~~ 8		X	X	X	X	SUB
5	RA-10 (5.5-6.5)		5/4/16	1235	NR	SO	~~3~~ 2					2		~~1~~ 8		X	X	X	X	
							DL													

INITIAL ASESSMENT 2/33

LABEL VERIFICATION TW

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)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

NJ Data of Known Quality Protocol Reporting

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

Comments / Special Instructions

Add to Report: 1-methylnaphthalene with SVOC by 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]	5/3/16 1500	1 Fed~~EX~~ Ex	2 FEDEX	5-5-16 9:40	2 [signature]
3		3	4		4
5		5			

Custody Seal # 278 [x] Intact [ ] Not intact Preserved where applicable [ ] On Ice [x] Cooler Temp. 3.6°C IP

JC19644: Chain of Custody
Page 1 of 2

SGS Accutest Sample Receipt Summary

Job Number: JC19644 **Client:** _____ **Project:** _____

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

Cooler Temps (Raw Measured) °C: Cooler 1: (3.6);

Cooler Temps (Corrected) °C: Cooler 1: (4.0);

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:	1		

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

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

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

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

Comments

Internal Sample Tracking Chronicle

Anderson, Mulholland & Associates

Job No: JC19644

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

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC19644-1	Collected: 03-MAY-16 11:00 By: TT		Received: 05-MAY-16 By: DDH			
RA-16 GWD						
JC19644-1	SW846 8081B	06-MAY-16 09:58	BP	05-MAY-16	SD	P8081PESTTCL
JC19644-1	SW846 8270D	06-MAY-16 11:35	LK	05-MAY-16	RF	AB8270SL
JC19644-1	SW846 8270D BY SIM	06-MAY-16 13:19	LK	05-MAY-16	RF	BSIM + NAP
JC19644-1	SW846-8015C (DAI)	16-MAY-16 16:45	XPL			D8015LMA
JC19644-2	Collected: 03-MAY-16 15:35 By: NR		Received: 05-MAY-16 By: DDH			
S-42S						
JC19644-2	SW846 8081B	06-MAY-16 10:13	BP	05-MAY-16	SD	P8081PESTTCL
JC19644-2	SW846 8270D	06-MAY-16 12:04	LK	05-MAY-16	RF	AB8270SL
JC19644-2	SW846 8270D BY SIM	06-MAY-16 13:51	LK	05-MAY-16	RF	BSIM + NAP
JC19644-2	SW846 8270D	06-MAY-16 13:59	LK	05-MAY-16	RF	AB8270SL
JC19644-2	SW846-8015C (DAI)	16-MAY-16 17:30	XPL			D8015LMA
JC19644-3	Collected: 03-MAY-16 16:45 By: TT		Received: 05-MAY-16 By: DDH			
RA-11 GWS						
JC19644-3	SW846 8081B	06-MAY-16 10:28	BP	05-MAY-16	SD	P8081PESTTCL
JC19644-3	SW846 8270D	06-MAY-16 12:33	LK	05-MAY-16	RF	AB8270SL
JC19644-3	SW846 8270D BY SIM	06-MAY-16 14:24	LK	05-MAY-16	RF	BSIM + NAP
JC19644-3	SW846-8015C (DAI)	16-MAY-16 17:45	XPL			D8015LMA
JC19644-4	Collected: 04-MAY-16 11:00 By: TT		Received: 05-MAY-16 By: DDH			
RA-11 (10-11)						
JC19644-4	SW846 8270D	09-MAY-16 15:12	AN	06-MAY-16	AQ	AB8270SL
JC19644-4	SW846 8270D BY SIM	09-MAY-16 17:47	LK	06-MAY-16	SA	B8270SIM14DIOX,BSIM + NAP
JC19644-4	SM2540 G-97	09-MAY-16 18:24	RK			SOL104
JC19644-4	SW846 8081B	10-MAY-16 12:55	RK	09-MAY-16	SZ	P8081PESTTCL
JC19644-4	SW846-8015C (DAI)	18-MAY-16 15:13	XPL			D8015LMA
JC19644-5	Collected: 04-MAY-16 12:35 By: NR		Received: 05-MAY-16 By: DDH			
RA-10 (5.5-6.5)						
JC19644-5	SW846 8270D	09-MAY-16 14:46	AN	06-MAY-16	AQ	AB8270SL
JC19644-5	SW846 8270D BY SIM	09-MAY-16 18:20	LK	06-MAY-16	SA	B8270SIM14DIOX,BSIM + NAP
JC19644-5	SM2540 G-97	09-MAY-16 18:24	RK			SOL104

Internal Sample Tracking Chronicle

Anderson, Mulholland & Associates

Job No: JC19644

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

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC19644-5	SW846 8270D	09-MAY-16 18:42	AN	06-MAY-16	AQ	AB8270SL
JC19644-5	SW846 8081B	10-MAY-16 13:11	RK	09-MAY-16	SZ	P8081PESTTCL
JC19644-5	SW846-8015C (DAI)	18-MAY-16 15:27	XPL			D8015LMA

SGS Accutest Internal Chain of Custody

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 05/05/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC19644-1.1	Secured Storage	Alfredo Crespo	05/05/16 15:01	Retrieve from Storage
JC19644-1.1	Alfredo Crespo	Secured Staging Area	05/05/16 15:01	Return to Storage
JC19644-1.1	Secured Staging Area	Ryan Fantasia	05/05/16 15:12	Retrieve from Storage
JC19644-1.1	Ryan Fantasia		05/05/16 20:57	Depleted
JC19644-1.1.1	Ryan Fantasia	Organics Prep	05/05/16 15:15	Extract from JC19644-1.1
JC19644-1.1.1	Organics Prep	Ryan Fantasia	05/05/16 19:15	Extract from JC19644-1.1
JC19644-1.1.1	Ryan Fantasia	Extract Storage	05/05/16 19:15	Return to Storage
JC19644-1.1.1	Extract Storage	Sean Block	05/06/16 00:07	Retrieve from Storage
JC19644-1.1.1	Sean Block	GCMS3P	05/06/16 00:07	Load on Instrument
JC19644-1.1.1	GCMS3P	Linsey Kirschmann	05/06/16 11:11	Unload from Instrument
JC19644-1.1.1	Linsey Kirschmann	GCMSF	05/06/16 11:11	Load on Instrument
JC19644-1.1.1	GCMSF	Kristi Schollenberger	05/07/16 13:58	Unload from Instrument
JC19644-1.1.1	Kristi Schollenberger	Extract Freezer	05/07/16 13:58	Return to Storage
JC19644-1.3	Secured Storage	Alfredo Crespo	05/05/16 15:01	Retrieve from Storage
JC19644-1.3	Alfredo Crespo	Secured Staging Area	05/05/16 15:01	Return to Storage
JC19644-1.3	Secured Staging Area	Ryan Fantasia	05/05/16 15:12	Retrieve from Storage
JC19644-1.3	Ryan Fantasia		05/05/16 20:57	Depleted
JC19644-1.4	Secured Storage	Alfredo Crespo	05/05/16 15:01	Retrieve from Storage
JC19644-1.4	Alfredo Crespo	Secured Staging Area	05/05/16 15:01	Return to Storage
JC19644-1.4	Secured Staging Area	Ryan Fantasia	05/05/16 15:12	Retrieve from Storage
JC19644-1.4	Ryan Fantasia		05/05/16 20:57	Depleted
JC19644-1.4.1	Ryan Fantasia	Organics Prep	05/05/16 15:24	Extract from JC19644-1.4
JC19644-1.4.1	Organics Prep	Stephen Domke	05/05/16 21:49	Extract from JC19644-1.4
JC19644-1.4.1	Stephen Domke	Extract Storage	05/05/16 21:49	Return to Storage
JC19644-1.4.1	Extract Storage	Brittany Piercy	05/06/16 09:22	Retrieve from Storage
JC19644-1.4.1	Brittany Piercy	GC4G	05/06/16 09:22	Load on Instrument
JC19644-1.4.1	GC4G	Brittany Piercy	05/09/16 08:05	Unload from Instrument
JC19644-1.4.1	Brittany Piercy	Extract Freezer	05/09/16 08:06	Return to Storage
JC19644-1.6	Secured Storage	Xu Liu	05/16/16 11:51	Retrieve from Storage
JC19644-1.6	Xu Liu	Secured Storage	05/16/16 13:54	Return to Storage
JC19644-2.2	Secured Storage	Alfredo Crespo	05/05/16 15:01	Retrieve from Storage
JC19644-2.2	Alfredo Crespo	Secured Staging Area	05/05/16 15:01	Return to Storage
JC19644-2.2	Secured Staging Area	Ryan Fantasia	05/05/16 15:12	Retrieve from Storage
JC19644-2.2	Ryan Fantasia		05/05/16 20:57	Depleted
JC19644-2.2.1	Ryan Fantasia	Organics Prep	05/05/16 15:15	Extract from JC19644-2.2
JC19644-2.2.1	Organics Prep	Ryan Fantasia	05/05/16 19:15	Extract from JC19644-2.2
JC19644-2.2.1	Ryan Fantasia	Extract Storage	05/05/16 19:15	Return to Storage

SGS Accutest Internal Chain of Custody

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 05/05/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC19644-2.2.1	Extract Storage	Sean Block	05/06/16 00:07	Retrieve from Storage
JC19644-2.2.1	Sean Block	GCMS3P	05/06/16 00:07	Load on Instrument
JC19644-2.2.1	GCMS3P	Linsey Kirschmann	05/06/16 11:11	Unload from Instrument
JC19644-2.2.1	Linsey Kirschmann	GCMSF	05/06/16 11:11	Load on Instrument
JC19644-2.2.1	GCMSF	Kristi Schollenberger	05/07/16 13:58	Unload from Instrument
JC19644-2.2.1	Kristi Schollenberger	Extract Freezer	05/07/16 13:58	Return to Storage
JC19644-2.3	Secured Storage	Alfredo Crespo	05/05/16 15:01	Retrieve from Storage
JC19644-2.3	Alfredo Crespo	Secured Staging Area	05/05/16 15:01	Return to Storage
JC19644-2.3	Secured Staging Area	Ryan Fantasia	05/05/16 15:12	Retrieve from Storage
JC19644-2.3	Ryan Fantasia		05/05/16 20:57	Depleted
JC19644-2.3.1	Ryan Fantasia	Organics Prep	05/05/16 15:15	Extract from JC19644-2.3
JC19644-2.3.1	Organics Prep	Ryan Fantasia	05/05/16 19:15	Extract from JC19644-2.3
JC19644-2.3.1	Ryan Fantasia	Extract Storage	05/05/16 19:15	Return to Storage
JC19644-2.3.2	Ryan Fantasia	Organics Prep	05/05/16 15:24	Extract from JC19644-2.3
JC19644-2.3.2	Organics Prep	Stephen Domke	05/05/16 21:49	Extract from JC19644-2.3
JC19644-2.3.2	Stephen Domke	Extract Storage	05/05/16 21:49	Return to Storage
JC19644-2.3.2	Extract Storage	Brittany Piercy	05/06/16 09:22	Retrieve from Storage
JC19644-2.3.2	Brittany Piercy	GC4G	05/06/16 09:22	Load on Instrument
JC19644-2.3.2	GC4G	Brittany Piercy	05/09/16 08:05	Unload from Instrument
JC19644-2.3.2	Brittany Piercy	Extract Freezer	05/09/16 08:06	Return to Storage
JC19644-2.5	Secured Storage	Xu Liu	05/16/16 11:51	Retrieve from Storage
JC19644-2.5	Xu Liu	Secured Storage	05/16/16 13:54	Return to Storage
JC19644-3.1	Secured Storage	Alfredo Crespo	05/05/16 15:01	Retrieve from Storage
JC19644-3.1	Alfredo Crespo	Secured Staging Area	05/05/16 15:01	Return to Storage
JC19644-3.1	Secured Staging Area	Ryan Fantasia	05/05/16 15:12	Retrieve from Storage
JC19644-3.1	Ryan Fantasia		05/05/16 20:57	Depleted
JC19644-3.1.1	Ryan Fantasia	Organics Prep	05/05/16 15:23	Extract from JC19644-3.1
JC19644-3.1.1	Organics Prep	Ryan Fantasia	05/05/16 19:15	Extract from JC19644-3.1
JC19644-3.1.1	Ryan Fantasia	Extract Storage	05/05/16 19:15	Return to Storage
JC19644-3.1.1	Extract Storage	Sean Block	05/06/16 00:07	Retrieve from Storage
JC19644-3.1.1	Sean Block	GCMS3P	05/06/16 00:07	Load on Instrument
JC19644-3.1.1	GCMS3P	Linsey Kirschmann	05/06/16 11:11	Unload from Instrument
JC19644-3.1.1	Linsey Kirschmann	GCMSF	05/06/16 11:11	Load on Instrument
JC19644-3.1.1	GCMSF	Kristi Schollenberger	05/07/16 13:58	Unload from Instrument
JC19644-3.1.1	Kristi Schollenberger	Extract Freezer	05/07/16 13:58	Return to Storage
JC19644-3.4	Secured Storage	Alfredo Crespo	05/05/16 15:01	Retrieve from Storage
JC19644-3.4	Alfredo Crespo	Secured Staging Area	05/05/16 15:01	Return to Storage

SGS Accutest Internal Chain of Custody

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 05/05/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC19644-3.4	Secured Staging Area	Ryan Fantasia	05/05/16 15:12	Retrieve from Storage
JC19644-3.4	Ryan Fantasia		05/05/16 20:57	Depleted
JC19644-3.4.1	Ryan Fantasia	Organics Prep	05/05/16 15:24	Extract from JC19644-3.4
JC19644-3.4.1	Organics Prep	Stephen Domke	05/05/16 21:49	Extract from JC19644-3.4
JC19644-3.4.1	Stephen Domke	Extract Storage	05/05/16 21:49	Return to Storage
JC19644-3.4.1	Extract Storage	Brittany Piercy	05/06/16 09:22	Retrieve from Storage
JC19644-3.4.1	Brittany Piercy	GC4G	05/06/16 09:22	Load on Instrument
JC19644-3.4.1	GC4G	Brittany Piercy	05/09/16 08:05	Unload from Instrument
JC19644-3.4.1	Brittany Piercy	Extract Freezer	05/09/16 08:06	Return to Storage
JC19644-3.6	Secured Storage	Xu Liu	05/16/16 11:51	Retrieve from Storage
JC19644-3.6	Xu Liu	Secured Storage	05/16/16 13:54	Return to Storage
JC19644-4.1	Secured Storage	Sauvelson Auguste	05/06/16 06:45	Retrieve from Storage
JC19644-4.1	Sauvelson Auguste	Secured Storage	05/06/16 10:00	Return to Storage
JC19644-4.1	Secured Storage	Todd Shoemaker	05/06/16 10:22	Retrieve from Storage
JC19644-4.1	Todd Shoemaker	Secured Staging Area	05/06/16 10:23	Return to Storage
JC19644-4.1	Secured Staging Area	Krimesh Patel	05/06/16 13:42	Retrieve from Storage
JC19644-4.1	Krimesh Patel	Secured Storage	05/06/16 13:55	Return to Storage
JC19644-4.1	Secured Storage	Luis Villanueva	05/07/16 09:36	Retrieve from Storage
JC19644-4.1	Luis Villanueva	Secured Staging Area	05/07/16 09:36	Return to Storage
JC19644-4.1	Secured Staging Area	Shanice Grant	05/09/16 03:04	Retrieve from Storage
JC19644-4.1	Shanice Grant	Secured Storage	05/09/16 07:25	Return to Storage
JC19644-4.1	Secured Storage	Alfredo Crespo	05/09/16 09:25	Retrieve from Storage
JC19644-4.1	Alfredo Crespo	Secured Staging Area	05/09/16 09:25	Return to Storage
JC19644-4.1	Secured Staging Area	Rahul Kataria	05/09/16 13:03	Retrieve from Storage
JC19644-4.1	Rahul Kataria	Secured Storage	05/09/16 17:20	Return to Storage
JC19644-4.1	Secured Storage	Xu Liu	05/18/16 10:32	Retrieve from Storage
JC19644-4.1	Xu Liu	Secured Storage	05/18/16 14:09	Return to Storage
JC19644-4.1.1	Sauvelson Auguste	Organics Prep	05/06/16 06:47	Extract from JC19644-4.1
JC19644-4.1.1	Organics Prep	Albert Quayson	05/06/16 13:55	Extract from JC19644-4.1
JC19644-4.1.1	Albert Quayson	Extract Storage	05/06/16 13:55	Return to Storage
JC19644-4.1.1	Extract Storage	Ashley Noble	05/09/16 11:44	Retrieve from Storage
JC19644-4.1.1	Ashley Noble	GCMS3E	05/09/16 11:45	Load on Instrument
JC19644-4.1.1	GCMS3E	Ashley Noble	05/10/16 12:31	Unload from Instrument
JC19644-4.1.1	Ashley Noble	Extract Freezer	05/10/16 12:31	Return to Storage
JC19644-4.1.2	Shanice Grant	Organics Prep	05/09/16 03:04	Extract from JC19644-4.1
JC19644-4.1.2	Organics Prep	Steven Zarchy	05/09/16 12:06	Extract from JC19644-4.1
JC19644-4.1.2	Steven Zarchy	Extract Storage	05/09/16 12:06	Return to Storage
JC19644-4.1.2	Extract Storage	Dhara Saparia	05/10/16 10:31	Retrieve from Storage
JC19644-4.1.2	Dhara Saparia	GC6G	05/10/16 10:31	Load on Instrument

SGS Accutest Internal Chain of Custody

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 05/05/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC19644-5.1	Secured Storage	Sauvelson Auguste	05/06/16 06:45	Retrieve from Storage
JC19644-5.1	Sauvelson Auguste	Secured Storage	05/06/16 10:00	Return to Storage
JC19644-5.1	Secured Storage	Todd Shoemaker	05/06/16 10:22	Retrieve from Storage
JC19644-5.1	Todd Shoemaker	Secured Staging Area	05/06/16 10:23	Return to Storage
JC19644-5.1	Secured Staging Area	Krimesh Patel	05/06/16 13:42	Retrieve from Storage
JC19644-5.1	Krimesh Patel	Secured Storage	05/06/16 13:55	Return to Storage
JC19644-5.1	Secured Storage	Luis Villanueva	05/07/16 09:36	Retrieve from Storage
JC19644-5.1	Luis Villanueva	Secured Staging Area	05/07/16 09:36	Return to Storage
JC19644-5.1	Secured Staging Area	Shanice Grant	05/09/16 03:04	Retrieve from Storage
JC19644-5.1	Shanice Grant	Secured Storage	05/09/16 07:25	Return to Storage
JC19644-5.1	Secured Storage	Alfredo Crespo	05/09/16 09:25	Retrieve from Storage
JC19644-5.1	Alfredo Crespo	Secured Staging Area	05/09/16 09:25	Return to Storage
JC19644-5.1	Secured Staging Area	Rahul Kataria	05/09/16 13:03	Retrieve from Storage
JC19644-5.1	Rahul Kataria	Secured Storage	05/09/16 17:20	Return to Storage
JC19644-5.1	Secured Storage	Xu Liu	05/18/16 10:32	Retrieve from Storage
JC19644-5.1	Xu Liu	Secured Storage	05/18/16 14:09	Return to Storage
JC19644-5.1.1	Sauvelson Auguste	Organics Prep	05/06/16 06:47	Extract from JC19644-5.1
JC19644-5.1.1	Organics Prep	Albert Quayson	05/06/16 13:55	Extract from JC19644-5.1
JC19644-5.1.1	Albert Quayson	Extract Storage	05/06/16 13:55	Return to Storage
JC19644-5.1.1	Extract Storage	Ashley Noble	05/06/16 15:16	Retrieve from Storage
JC19644-5.1.1	Ashley Noble	GCMS3E	05/06/16 15:16	Load on Instrument
JC19644-5.1.1	GCMS3E	Ashley Noble	05/09/16 11:44	Unload from Instrument
JC19644-5.1.1	Ashley Noble	Extract Freezer	05/09/16 11:44	Return to Storage
JC19644-5.1.2	Shanice Grant	Organics Prep	05/09/16 03:04	Extract from JC19644-5.1
JC19644-5.1.2	Organics Prep	Steven Zarchy	05/09/16 12:06	Extract from JC19644-5.1
JC19644-5.1.2	Steven Zarchy	Extract Storage	05/09/16 12:06	Return to Storage
JC19644-5.1.2	Extract Storage	Dhara Saparia	05/10/16 10:31	Retrieve from Storage
JC19644-5.1.2	Dhara Saparia	GC6G	05/10/16 10:31	Load on Instrument

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: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93662-MB1	F156859.D	1	05/06/16	LK	05/05/16	OP93662	EF6604

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

JC19644-1, JC19644-2, JC19644-3

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: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93662-MB1	F156859.D	1	05/06/16	LK	05/05/16	OP93662	EF6604

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

JC19644-1, JC19644-2, JC19644-3

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: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93662-MB1	F156859.D	1	05/06/16	LK	05/05/16	OP93662	EF6604

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

JC19644-1, JC19644-2, JC19644-3

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	37%	14-88%
4165-62-2	Phenol-d5	25%	10-110%
118-79-6	2,4,6-Tribromophenol	71%	39-149%
4165-60-0	Nitrobenzene-d5	64%	32-128%
321-60-8	2-Fluorobiphenyl	57%	35-119%
1718-51-0	Terphenyl-d14	71%	10-126%

Method Blank Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93678-MB1	3E82981.D	1	05/06/16	AN	05/06/16	OP93678	E3E3637

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

JC19644-4, JC19644-5

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	67	25	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	170	30	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	170	27	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	170	61	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	170	150	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	170	63	ug/kg	
95-48-7	2-Methylphenol	ND	67	48	ug/kg	
	3&4-Methylphenol	ND	67	32	ug/kg	
88-75-5	2-Nitrophenol	ND	170	31	ug/kg	
100-02-7	4-Nitrophenol	ND	330	57	ug/kg	
87-86-5	Pentachlorophenol	ND	170	81	ug/kg	
108-95-2	Phenol	ND	67	25	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	170	31	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	170	30	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	170	27	ug/kg	
83-32-9	Acenaphthene	ND	33	31	ug/kg	
208-96-8	Acenaphthylene	ND	33	3.5	ug/kg	
98-86-2	Acetophenone	ND	170	5.7	ug/kg	
120-12-7	Anthracene	ND	33	2.9	ug/kg	
1912-24-9	Atrazine	ND	67	14	ug/kg	
56-55-3	Benzo(a)anthracene	ND	33	6.4	ug/kg	
50-32-8	Benzo(a)pyrene	ND	33	7.1	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	33	6.9	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	33	10	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	33	7.4	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	67	7.6	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	67	18	ug/kg	
92-52-4	1,1'-Biphenyl	ND	67	6.2	ug/kg	
100-52-7	Benzaldehyde	ND	170	8.3	ug/kg	
91-58-7	2-Chloronaphthalene	ND	67	4.8	ug/kg	
106-47-8	4-Chloroaniline	ND	170	8.8	ug/kg	
86-74-8	Carbazole	ND	67	3.7	ug/kg	
105-60-2	Caprolactam	ND	67	21	ug/kg	
218-01-9	Chrysene	ND	33	5.4	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	67	7.6	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	67	14	ug/kg	

Method Blank Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93678-MB1	3E82981.D	1	05/06/16	AN	05/06/16	OP93678	E3E3637

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

JC19644-4, JC19644-5

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	67	7.6	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	67	6.3	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	33	6.3	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	33	8.6	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	67	22	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	33	12	ug/kg	
132-64-9	Dibenzofuran	ND	67	4.6	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	67	3.9	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	67	4.5	ug/kg	
84-66-2	Diethyl phthalate	ND	67	4.2	ug/kg	
131-11-3	Dimethyl phthalate	ND	67	4.8	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	67	12	ug/kg	
206-44-0	Fluoranthene	ND	33	4.1	ug/kg	
86-73-7	Fluorene	ND	33	4.0	ug/kg	
118-74-1	Hexachlorobenzene	ND	67	6.6	ug/kg	
87-68-3	Hexachlorobutadiene	ND	33	8.8	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	330	53	ug/kg	
67-72-1	Hexachloroethane	ND	170	11	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	33	17	ug/kg	
78-59-1	Isophorone	ND	67	6.2	ug/kg	
90-12-0	1-Methylnaphthalene	ND	67	5.4	ug/kg	
91-57-6	2-Methylnaphthalene	ND	67	6.2	ug/kg	
88-74-4	2-Nitroaniline	ND	170	7.6	ug/kg	
99-09-2	3-Nitroaniline	ND	170	9.5	ug/kg	
100-01-6	4-Nitroaniline	ND	170	11	ug/kg	
98-95-3	Nitrobenzene	ND	67	11	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	67	9.9	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	170	18	ug/kg	
85-01-8	Phenanthrene	ND	33	3.7	ug/kg	
129-00-0	Pyrene	ND	33	4.2	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	170	8.0	ug/kg	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	59%	30-106%

Method Blank Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93678-MB1	3E82981.D	1	05/06/16	AN	05/06/16	OP93678	E3E3637

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

JC19644-4, JC19644-5

CAS No.	Surrogate Recoveries		Limits
4165-62-2	Phenol-d5	59%	30-106%
118-79-6	2,4,6-Tribromophenol	57%	24-140%
4165-60-0	Nitrobenzene-d5	64%	26-122%
321-60-8	2-Fluorobiphenyl	67%	36-112%
1718-51-0	Terphenyl-d14	59%	36-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	2.78	270	ug/kg	J
	system artifact	3.10	150	ug/kg	J
	system artifact/aldol-condensation	3.22	150	ug/kg	J
	Internal standard added for SIM test	6.29	150	ug/kg	J
	Internal standard added for SIM test	8.23	150	ug/kg	J
	Internal standard added for SIM test	11.52	150	ug/kg	J
	Internal standard added for SIM test	15.84	150	ug/kg	J
	Total TIC, Semi-Volatile		0	ug/kg	

Method Blank Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93678-MB1	6P26011.D	1	05/17/16	AC	05/06/16	OP93678	E6P1214

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

JC19644-4, JC19644-5

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: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93678-MB1	6P26011.D	1	05/17/16	AC	05/06/16	OP93678	E6P1214

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

JC19644-4, JC19644-5

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	79%	30-106%

Method Blank Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93678-MB1	6P26011.D	1	05/17/16	AC	05/06/16	OP93678	E6P1214

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

JC19644-4, JC19644-5

CAS No.	Surrogate Recoveries		Limits
4165-62-2	Phenol-d5	82%	30-106%
118-79-6	2,4,6-Tribromophenol	50%	24-140%
4165-60-0	Nitrobenzene-d5	56%	26-122%
321-60-8	2-Fluorobiphenyl	66%	36-112%
1718-51-0	Terphenyl-d14	59%	36-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	3.23	350	ug/kg	J
	system artifact/aldol-condensation	3.60	220	ug/kg	J
	Internal standard added for SIM test	4.97	130	ug/kg	J
	system artifact	6.53	460	ug/kg	J
	Internal standard added for SIM test	6.81	140	ug/kg	J
	system artifact	7.71	610	ug/kg	J
	Internal standard added for SIM test	8.81	140	ug/kg	J
	system artifact	8.90	420	ug/kg	J
	system artifact	9.98	250	ug/kg	J
	system artifact	10.97	160	ug/kg	J
	system artifact	12.70	140	ug/kg	J
	Total TIC, Semi-Volatile		0	ug/kg	

Method Blank Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93662A-MB1	3M61126.D	1	05/06/16	LK	05/05/16	OP93662A	E3M2874

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

JC19644-1, JC19644-2, JC19644-3

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	ND	0.10	0.029	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	41%	14-81%
4165-62-2	Phenol-d5	25%	11-54%
118-79-6	2,4,6-Tribromophenol	69%	35-145%
4165-60-0	Nitrobenzene-d5	56%	24-125%
321-60-8	2-Fluorobiphenyl	61%	19-127%
1718-51-0	Terphenyl-d14	91%	10-119%

Method Blank Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93662A-MB1	4M65171.D	1	05/09/16	LK	05/05/16	OP93662A	E4M2910

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

JC19644-1, JC19644-2, JC19644-3

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	ND	0.10	0.029	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	49%	14-81%
4165-62-2	Phenol-d5	34%	11-54%
118-79-6	2,4,6-Tribromophenol	63%	35-145%
4165-60-0	Nitrobenzene-d5	79%	24-125%
321-60-8	2-Fluorobiphenyl	68%	19-127%
1718-51-0	Terphenyl-d14	99%	10-119%

Method Blank Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93678A-MB1	4M65181.D	1	05/09/16	LK	05/06/16	OP93678A	E4M2910

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

JC19644-4, JC19644-5

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	88%	15-138%
321-60-8	2-Fluorobiphenyl	73%	12-148%
1718-51-0	Terphenyl-d14	71%	10-157%

Blank Spike Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93662-BS1	F156858.D	1	05/06/16	LK	05/05/16	OP93662	EF6604

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

JC19644-1, JC19644-2, JC19644-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-57-8	2-Chlorophenol	50	29.6	59	48-106
59-50-7	4-Chloro-3-methyl phenol	50	35.3	71	49-113
120-83-2	2,4-Dichlorophenol	50	25.8	52	49-111
105-67-9	2,4-Dimethylphenol	50	30.8	62	42-117
51-28-5	2,4-Dinitrophenol	100	86.9	87	37-132
534-52-1	4,6-Dinitro-o-cresol	50	45.9	92	49-119
95-48-7	2-Methylphenol	50	30.3	61	42-103
	3&4-Methylphenol	50	29.6	59	39-110
88-75-5	2-Nitrophenol	50	26.7	53	49-114
100-02-7	4-Nitrophenol	50	31.4	63	16-95
87-86-5	Pentachlorophenol	50	40.8	82	30-136
108-95-2	Phenol	50	17.7	35	10-110
58-90-2	2,3,4,6-Tetrachlorophenol	50	36.5	73	47-118
95-95-4	2,4,5-Trichlorophenol	50	33.7	67	55-116
88-06-2	2,4,6-Trichlorophenol	50	35.8	72	56-115
83-32-9	Acenaphthene	50	33.5	67	54-112
208-96-8	Acenaphthylene	50	31.7	63	49-99
98-86-2	Acetophenone	50	38.0	76	52-111
120-12-7	Anthracene	50	36.4	73	58-112
1912-24-9	Atrazine	50	42.2	84	62-134
100-52-7	Benzaldehyde	50	30.2	60	40-129
56-55-3	Benzo(a)anthracene	50	36.7	73	44-120
50-32-8	Benzo(a)pyrene	50	36.6	73	41-127
205-99-2	Benzo(b)fluoranthene	50	40.1	80	41-129
191-24-2	Benzo(g,h,i)perylene	50	39.5	79	34-128
207-08-9	Benzo(k)fluoranthene	50	39.8	80	42-122
101-55-3	4-Bromophenyl phenyl ether	50	37.8	76	54-121
85-68-7	Butyl benzyl phthalate	50	36.5	73	20-143
92-52-4	1,1'-Biphenyl	50	31.4	63	51-106
91-58-7	2-Chloronaphthalene	50	30.5	61	48-104
106-47-8	4-Chloroaniline	50	18.3	37	10-110
86-74-8	Carbazole	50	38.1	76	56-110
105-60-2	Caprolactam	50	8.6	17	10-110
218-01-9	Chrysene	50	36.7	73	45-125
111-91-1	bis(2-Chloroethoxy)methane	50	27.2	54	47-117
111-44-4	bis(2-Chloroethyl)ether	50	32.6	65	48-115

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93662-BS1	F156858.D	1	05/06/16	LK	05/05/16	OP93662	EF6604

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

JC19644-1, JC19644-2, JC19644-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
108-60-1	bis(2-Chloroisopropyl)ether	50	27.1	54	44-112
7005-72-3	4-Chlorophenyl phenyl ether	50	38.3	77	50-117
121-14-2	2,4-Dinitrotoluene	50	40.9	82	57-122
606-20-2	2,6-Dinitrotoluene	50	38.2	76	58-122
91-94-1	3,3'-Dichlorobenzidine	100	51.2	51	10-110
123-91-1	1,4-Dioxane	50	14.8	30	10-110
53-70-3	Dibenzo(a,h)anthracene	50	41.6	83	36-130
132-64-9	Dibenzofuran	50	34.8	70	55-108
84-74-2	Di-n-butyl phthalate	50	40.5	81	45-123
117-84-0	Di-n-octyl phthalate	50	37.6	75	37-144
84-66-2	Diethyl phthalate	50	39.5	79	23-130
131-11-3	Dimethyl phthalate	50	38.3	77	10-140
117-81-7	bis(2-Ethylhexyl)phthalate	50	36.7	73	36-138
206-44-0	Fluoranthene	50	39.2	78	58-116
86-73-7	Fluorene	50	38.6	77	57-113
118-74-1	Hexachlorobenzene	50	41.0	82	49-122
87-68-3	Hexachlorobutadiene	50	23.9	48	24-112
77-47-4	Hexachlorocyclopentadiene	100	51.7	52	14-119
67-72-1	Hexachloroethane	50	24.2	48	31-107
193-39-5	Indeno(1,2,3-cd)pyrene	50	39.6	79	34-128
78-59-1	Isophorone	50	32.9	66	52-119
90-12-0	1-Methylnaphthalene	50	27.3	55	46-103
91-57-6	2-Methylnaphthalene	50	27.7	55	45-107
88-74-4	2-Nitroaniline	50	46.5	93	51-127
99-09-2	3-Nitroaniline	50	24.6	49	10-110
100-01-6	4-Nitroaniline	50	34.0	68	50-112
98-95-3	Nitrobenzene	50	31.9	64	44-116
621-64-7	N-Nitroso-di-n-propylamine	50	37.3	75	49-117
86-30-6	N-Nitrosodiphenylamine	50	34.8	70	51-113
85-01-8	Phenanthrene	50	37.7	75	56-111
129-00-0	Pyrene	50	35.8	72	47-120
95-94-3	1,2,4,5-Tetrachlorobenzene	50	27.9	56	36-114

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93662-BS1	F156858.D	1	05/06/16	LK	05/05/16	OP93662	EF6604

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

JC19644-1, JC19644-2, JC19644-3

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	41%	14-88%
4165-62-2	Phenol-d5	31%	10-110%
118-79-6	2,4,6-Tribromophenol	92%	39-149%
4165-60-0	Nitrobenzene-d5	65%	32-128%
321-60-8	2-Fluorobiphenyl	66%	35-119%
1718-51-0	Terphenyl-d14	79%	10-126%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93678-BS1	3E82982.D	1	05/06/16	AN	05/06/16	OP93678	E3E3637

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

JC19644-4, JC19644-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
95-57-8	2-Chlorophenol	1670	1180	71	54-98
59-50-7	4-Chloro-3-methyl phenol	1670	1360	82	52-107
120-83-2	2,4-Dichlorophenol	1670	1550	93	53-105
105-67-9	2,4-Dimethylphenol	1670	1300	78	49-115
51-28-5	2,4-Dinitrophenol	3330	2620	79	30-127
534-52-1	4,6-Dinitro-o-cresol	1670	1370	82	41-114
95-48-7	2-Methylphenol	1670	1150	69	53-103
	3&4-Methylphenol	1670	1170	70	53-102
88-75-5	2-Nitrophenol	1670	1220	73	52-104
100-02-7	4-Nitrophenol	1670	1310	79	36-143
87-86-5	Pentachlorophenol	1670	745	45	29-128
108-95-2	Phenol	1670	1040	62	45-106
58-90-2	2,3,4,6-Tetrachlorophenol	1670	1260	76	47-113
95-95-4	2,4,5-Trichlorophenol	1670	1300	78	55-112
88-06-2	2,4,6-Trichlorophenol	1670	1510	91	57-108
83-32-9	Acenaphthene	1670	1400	84	60-108
208-96-8	Acenaphthylene	1670	1330	80	54-94
98-86-2	Acetophenone	1670	1140	68	53-110
120-12-7	Anthracene	1670	1350	81	59-109
1912-24-9	Atrazine	1670	1790	107	59-126
56-55-3	Benzo(a)anthracene	1670	1430	86	52-113
50-32-8	Benzo(a)pyrene	1670	1400	84	56-122
205-99-2	Benzo(b)fluoranthene	1670	1510	91	53-119
191-24-2	Benzo(g,h,i)perylene	1670	1380	83	48-117
207-08-9	Benzo(k)fluoranthene	1670	1510	91	52-115
101-55-3	4-Bromophenyl phenyl ether	1670	1500	90	58-114
85-68-7	Butyl benzyl phthalate	1670	1440	86	44-132
92-52-4	1,1'-Biphenyl	1670	1400	84	54-101
100-52-7	Benzaldehyde	1670	1070	64	39-117
91-58-7	2-Chloronaphthalene	1670	1380	83	54-103
106-47-8	4-Chloroaniline	1670	966	58	10-110
86-74-8	Carbazole	1670	1440	86	55-105
105-60-2	Caprolactam	1670	1270	76	42-111
218-01-9	Chrysene	1670	1390	83	51-119
111-91-1	bis(2-Chloroethoxy)methane	1670	1260	76	51-106
111-44-4	bis(2-Chloroethyl)ether	1670	1160	70	48-107

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93678-BS1	3E82982.D	1	05/06/16	AN	05/06/16	OP93678	E3E3637

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

JC19644-4, JC19644-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
108-60-1	bis(2-Chloroisopropyl)ether	1670	1050	63	46-103
7005-72-3	4-Chlorophenyl phenyl ether	1670	1480	89	54-112
121-14-2	2,4-Dinitrotoluene	1670	1420	85	56-116
606-20-2	2,6-Dinitrotoluene	1670	1440	86	56-115
91-94-1	3,3'-Dichlorobenzidine	3330	2370	71	22-103
53-70-3	Dibenzo(a,h)anthracene	1670	1360	82	49-118
132-64-9	Dibenzofuran	1670	1490	89	55-103
84-74-2	Di-n-butyl phthalate	1670	1450	87	56-117
117-84-0	Di-n-octyl phthalate	1670	1450	87	47-137
84-66-2	Diethyl phthalate	1670	1470	88	54-112
131-11-3	Dimethyl phthalate	1670	1440	86	56-108
117-81-7	bis(2-Ethylhexyl)phthalate	1670	1480	89	45-130
206-44-0	Fluoranthene	1670	1410	85	58-110
86-73-7	Fluorene	1670	1420	85	59-108
118-74-1	Hexachlorobenzene	1670	1310	79	55-114
87-68-3	Hexachlorobutadiene	1670	1530	92	44-118
77-47-4	Hexachlorocyclopentadiene	3330	2590	78	41-137
67-72-1	Hexachloroethane	1670	1400	84	50-107
193-39-5	Indeno(1,2,3-cd)pyrene	1670	1360	82	48-120
78-59-1	Isophorone	1670	1330	80	54-109
90-12-0	1-Methylnaphthalene	1670	1420	85	50-110
91-57-6	2-Methylnaphthalene	1670	1430	86	48-104
88-74-4	2-Nitroaniline	1670	1500	90	49-124
99-09-2	3-Nitroaniline	1670	1150	69	22-110
100-01-6	4-Nitroaniline	1670	1430	86	50-107
98-95-3	Nitrobenzene	1670	1330	80	47-108
621-64-7	N-Nitroso-di-n-propylamine	1670	1120	67	49-106
86-30-6	N-Nitrosodiphenylamine	1670	1450	87	53-112
85-01-8	Phenanthrene	1670	1380	83	57-105
129-00-0	Pyrene	1670	1570	94	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	68%	30-106%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93678-BS1	3E82982.D	1	05/06/16	AN	05/06/16	OP93678	E3E3637

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

JC19644-4, JC19644-5

CAS No.	Surrogate Recoveries	BSP	Limits
4165-62-2	Phenol-d5	67%	30-106%
118-79-6	2,4,6-Tribromophenol	76%	24-140%
4165-60-0	Nitrobenzene-d5	82%	26-122%
321-60-8	2-Fluorobiphenyl	90%	36-112%
1718-51-0	Terphenyl-d14	90%	36-132%

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

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93662A-BS12	3M61127.D	1	05/06/16	LK	05/05/16	OP93662A	E3M2874

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

JC19644-1, JC19644-2, JC19644-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
91-20-3	Naphthalene	1	0.513	51	40-119

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	36%	14-81%
4165-62-2	Phenol-d5	23%	11-54%
118-79-6	2,4,6-Tribromophenol	57%	35-145%
4165-60-0	Nitrobenzene-d5	53%	24-125%
321-60-8	2-Fluorobiphenyl	49%	19-127%
1718-51-0	Terphenyl-d14	71%	10-119%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93678A-BS12	4M65182.D	1	05/09/16	LK	05/06/16	OP93678A	E4M2910

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

JC19644-4, JC19644-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
123-91-1	1,4-Dioxane	33.3	20.2	61	10-100
91-20-3	Naphthalene	33.3	32.4	97	35-142

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	99%	15-138%
321-60-8	2-Fluorobiphenyl	86%	12-148%
1718-51-0	Terphenyl-d14	98%	10-157%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93662-MS	F156863.D	1	05/06/16	LK	05/05/16	OP93662	EF6604
OP93662-MSD	F156864.D	1	05/06/16	LK	05/05/16	OP93662	EF6604
JC19633-1	F156865.D	1	05/06/16	LK	05/05/16	OP93662	EF6604

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

JC19644-1, JC19644-2, JC19644-3

CAS No.	Compound	JC19633-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-57-8	2-Chlorophenol	ND		100	73.2	73	100	64.8	65	12	49-110/20
59-50-7	4-Chloro-3-methyl phenol	ND		100	80.2	80	100	74.6	75	7	44-121/18
120-83-2	2,4-Dichlorophenol	ND		100	64.9	65	100	59.8	60	8	42-120/19
105-67-9	2,4-Dimethylphenol	ND		100	85.8	86	100	81.5	82	5	33-132/23
51-28-5	2,4-Dinitrophenol	ND		200	175	88	200	149	75	16	21-145/26
534-52-1	4,6-Dinitro-o-cresol	ND		100	94.2	94	100	87.5	88	7	25-134/27
95-48-7	2-Methylphenol	ND		100	81.5	82	100	74.4	74	9	47-112/18
	3&4-Methylphenol	ND		100	83.0	83	100	76.3	76	8	44-113/19
88-75-5	2-Nitrophenol	ND		100	64.5	65	100	59.0	59	9	45-118/20
100-02-7	4-Nitrophenol	ND		100	98.1	98	100	84.4	84	15	23-144/28
87-86-5	Pentachlorophenol	ND		100	92.4	92	100	86.2	86	7	25-151/25
108-95-2	Phenol	ND		100	62.2	62	100	58.6	59	6	22-100/22
58-90-2	2,3,4,6-Tetrachlorophenol	ND		100	81.9	82	100	73.4	73	11	44-122/21
95-95-4	2,4,5-Trichlorophenol	ND		100	77.5	78	100	70.3	70	10	51-124/20
88-06-2	2,4,6-Trichlorophenol	ND		100	84.7	85	100	75.1	75	12	53-120/21
83-32-9	Acenaphthene	ND		100	81.3	81	100	71.8	72	12	52-120/23
208-96-8	Acenaphthylene	ND		100	75.5	76	100	67.8	68	11	50-101/22
98-86-2	Acetophenone	ND		100	92.4	92	100	82.4	82	11	31-141/23
120-12-7	Anthracene	ND		100	78.9	79	100	72.1	72	9	54-117/22
1912-24-9	Atrazine	ND		100	88.1	88	100	81.2	81	8	42-152/23
100-52-7	Benzaldehyde	ND		100	67.4	67	100	63.8	64	5	10-164/30
56-55-3	Benzo(a)anthracene	ND		100	78.2	78	100	71.1	71	10	40-123/24
50-32-8	Benzo(a)pyrene	ND		100	77.8	78	100	70.9	71	9	41-127/25
205-99-2	Benzo(b)fluoranthene	ND		100	81.6	82	100	74.9	75	9	39-127/27
191-24-2	Benzo(g,h,i)perylene	ND		100	80.5	81	100	72.1	72	11	34-128/28
207-08-9	Benzo(k)fluoranthene	ND		100	83.7	84	100	73.7	74	13	39-122/26
101-55-3	4-Bromophenyl phenyl ether	ND		100	83.2	83	100	76.6	77	8	51-124/23
85-68-7	Butyl benzyl phthalate	ND		100	77.3	77	100	71.2	71	8	21-146/28
92-52-4	1,1'-Biphenyl	ND		100	77.4	77	100	70.8	71	9	27-142/23
91-58-7	2-Chloronaphthalene	ND		100	76.0	76	100	68.0	68	11	51-109/23
106-47-8	4-Chloroaniline	ND		100	36.8	37	100	36.7	37	0	10-110/55
86-74-8	Carbazole	ND		100	80.8	81	100	74.7	75	8	52-116/22
105-60-2	Caprolactam	ND		100	30.5	31	100	29.5	30	3	10-106/34
218-01-9	Chrysene	ND		100	77.1	77	100	68.8	69	11	41-128/24
111-91-1	bis(2-Chloroethoxy)methane	ND		100	66.1	66	100	61.8	62	7	46-120/24
111-44-4	bis(2-Chloroethyl)ether	ND		100	80.0	80	100	72.0	72	11	42-123/28

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93662-MS	F156863.D	1	05/06/16	LK	05/05/16	OP93662	EF6604
OP93662-MSD	F156864.D	1	05/06/16	LK	05/05/16	OP93662	EF6604
JC19633-1	F156865.D	1	05/06/16	LK	05/05/16	OP93662	EF6604

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

JC19644-1, JC19644-2, JC19644-3

CAS No.	Compound	JC19633-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
108-60-1	bis(2-Chloroisopropyl)ether	ND		100	68.5	69	100	59.5	60	14	41-117/25
7005-72-3	4-Chlorophenyl phenyl ether	ND		100	84.6	85	100	76.7	77	10	48-121/21
121-14-2	2,4-Dinitrotoluene	ND		100	89.2	89	100	77.8	78	14	54-123/27
606-20-2	2,6-Dinitrotoluene	ND		100	83.5	84	100	77.0	77	8	55-125/26
91-94-1	3,3'-Dichlorobenzidine	ND		200	116	58	200	115	58	1	10-107/47
123-91-1	1,4-Dioxane	ND		100	45.1	45	100	37.7	38	18	10-119/31
53-70-3	Dibenzo(a,h)anthracene	ND		100	84.1	84	100	76.5	77	9	35-130/27
132-64-9	Dibenzofuran	ND		100	80.0	80	100	72.6	73	10	53-112/22
84-74-2	Di-n-butyl phthalate	ND		100	86.0	86	100	78.5	79	9	38-129/23
117-84-0	Di-n-octyl phthalate	ND		100	77.5	78	100	73.3	73	6	35-145/26
84-66-2	Diethyl phthalate	ND		100	85.8	86	100	77.4	77	10	16-136/30
131-11-3	Dimethyl phthalate	ND		100	84.6	85	100	74.2	74	13	10-143/39
117-81-7	bis(2-Ethylhexyl)phthalate	ND		100	79.2	79	100	72.3	72	9	34-141/28
206-44-0	Fluoranthene	ND		100	83.3	83	100	76.1	76	9	47-123/24
86-73-7	Fluorene	ND		100	85.8	86	100	76.9	77	11	56-117/22
118-74-1	Hexachlorobenzene	ND		100	89.8	90	100	82.5	83	8	46-125/24
87-68-3	Hexachlorobutadiene	ND		100	63.8	64	100	54.6	55	16	26-121/24
77-47-4	Hexachlorocyclopentadiene	ND		200	136	68	200	118	59	14	10-133/31
67-72-1	Hexachloroethane	ND		100	61.9	62	100	56.6	57	9	35-111/26
193-39-5	Indeno(1,2,3-cd)pyrene	ND		100	82.1	82	100	73.2	73	11	32-130/30
78-59-1	Isophorone	ND		100	78.9	79	100	73.2	73	7	47-126/23
90-12-0	1-Methylnaphthalene	ND		100	65.6	66	100	61.0	61	7	34-124/25
91-57-6	2-Methylnaphthalene	ND		100	65.9	66	100	60.9	61	8	34-123/24
88-74-4	2-Nitroaniline	ND		100	105	105	100	91.8	92	13	46-137/23
99-09-2	3-Nitroaniline	ND		100	53.2	53	100	44.6	45	18	10-110/50
100-01-6	4-Nitroaniline	ND		100	75.3	75	100	63.5	64	17	38-118/25
98-95-3	Nitrobenzene	ND		100	78.9	79	100	72.3	72	9	35-130/25
621-64-7	N-Nitroso-di-n-propylamine	ND		100	93.1	93	100	83.6	84	11	45-123/22
86-30-6	N-Nitrosodiphenylamine	ND		100	76.6	77	100	69.2	69	10	46-123/24
85-01-8	Phenanthrene	ND		100	82.4	82	100	73.8	74	11	48-121/23
129-00-0	Pyrene	ND		100	78.5	79	100	71.6	72	9	43-124/26
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		100	74.4	74	100	63.6	64	16	25-142/24

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93662-MS	F156863.D	1	05/06/16	LK	05/05/16	OP93662	EF6604
OP93662-MSD	F156864.D	1	05/06/16	LK	05/05/16	OP93662	EF6604
JC19633-1	F156865.D	1	05/06/16	LK	05/05/16	OP93662	EF6604

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

JC19644-1, JC19644-2, JC19644-3

CAS No.	Surrogate Recoveries	MS	MSD	JC19633-1	Limits
367-12-4	2-Fluorophenol	63%	57%	42%	14-88%
4165-62-2	Phenol-d5	57%	53%	29%	10-110%
118-79-6	2,4,6-Tribromophenol	98%	93%	94%	39-149%
4165-60-0	Nitrobenzene-d5	79%	71%	81%	32-128%
321-60-8	2-Fluorobiphenyl	80%	72%	72%	35-119%
1718-51-0	Terphenyl-d14	79%	73%	68%	10-126%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93678-MS [a]	3E83015.D	2	05/09/16	AN	05/06/16	OP93678	E3E3639
OP93678-MSD [a]	3E83016.D	2	05/09/16	AN	05/06/16	OP93678	E3E3639
JC19596-12A [a]	3E83014.D	2	05/09/16	AN	05/06/16	OP93678	E3E3639

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

JC19644-4, JC19644-5

CAS No.	Compound	JC19596-12A 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		1850	1350	73	1910	1010	53	29	33-106/35
59-50-7	4-Chloro-3-methyl phenol	ND		1850	1500	81	1910	1160	61	26	27-124/34
120-83-2	2,4-Dichlorophenol	ND		1850	1710	92	1910	1230	65	33	25-122/34
105-67-9	2,4-Dimethylphenol	ND		1850	1490	81	1910	1280	67	15	23-133/34
51-28-5	2,4-Dinitrophenol	ND		3700	807	22	3810	584	15	32	10-110/51
534-52-1	4,6-Dinitro-o-cresol	ND		1850	548	30	1910	358	19	42	10-113/49
95-48-7	2-Methylphenol	ND		1850	1320	71	1910	991	52	28	32-111/34
	3&4-Methylphenol	ND		1850	1320	71	1910	1030	54	25	32-113/34
88-75-5	2-Nitrophenol	ND		1850	1210	65	1910	997	52	19	17-118/37
100-02-7	4-Nitrophenol	ND		1850	1420	77	1910	1380	72	3	14-154/39
87-86-5	Pentachlorophenol	ND		1850	972	53	1910	651	34	40	10-131/43
108-95-2	Phenol	ND		1850	1220	66	1910	904	47	30	25-112/33
58-90-2	2,3,4,6-Tetrachlorophenol	ND		1850	1590	86	1910	1190	62	29	19-125/37
95-95-4	2,4,5-Trichlorophenol	ND		1850	1410	76	1910	1030	54	31	30-125/35
88-06-2	2,4,6-Trichlorophenol	ND		1850	1650	89	1910	1210	64	31	26-126/35
83-32-9	Acenaphthene	55.7	J	1850	1530	80	1910	1220	61	23	34-125/36
208-96-8	Acenaphthylene	96.5		1850	1530	77	1910	1170	56	27	28-113/34
98-86-2	Acetophenone	ND		1850	1210	65	1910	1020	54	17	26-120/34
120-12-7	Anthracene	250		1850	1650	76	1910	1260	53	27	31-131/41
1912-24-9	Atrazine	ND		1850	2080	112	1910	1620	85	25	34-138/36
56-55-3	Benzo(a)anthracene	817		1850	2110	70	1910	1660	44	24	23-136/43
50-32-8	Benzo(a)pyrene	667		1850	2040	74	1910	1510	44	30	22-144/42
205-99-2	Benzo(b)fluoranthene	722		1850	2030	71	1910	1560	44	26	18-145/43
191-24-2	Benzo(g,h,i)perylene	421		1850	1930	82	1910	1350	49	35	20-138/43
207-08-9	Benzo(k)fluoranthene	266		1850	1750	80	1910	1270	53	32	27-129/43
101-55-3	4-Bromophenyl phenyl ether	ND		1850	1620	88	1910	1260	66	25	39-124/33
85-68-7	Butyl benzyl phthalate	ND		1850	1540	83	1910	1230	65	22	27-143/35
92-52-4	1,1'-Biphenyl	ND		1850	1510	82	1910	1210	64	22	33-116/32
100-52-7	Benzaldehyde	ND		1850	1150	62	1910	1020	54	12	20-129/34
91-58-7	2-Chloronaphthalene	ND		1850	1510	82	1910	1170	61	25	38-110/32
106-47-8	4-Chloroaniline	ND		1850	998	54	1910	720	38	32	10-110/49
86-74-8	Carbazole	36.7	J	1850	1540	81	1910	1150	58	29	27-129/38
105-60-2	Caprolactam	ND		1850	1250	68	1910	1060	56	16	18-127/35
218-01-9	Chrysene	902		1850	2140	67	1910	1630	38	27	21-142/43
111-91-1	bis(2-Chloroethoxy)methane	ND		1850	1340	72	1910	1110	58	19	32-116/33
111-44-4	bis(2-Chloroethyl)ether	ND		1850	1230	66	1910	1010	53	20	30-113/37

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93678-MS [a]	3E83015.D	2	05/09/16	AN	05/06/16	OP93678	E3E3639
OP93678-MSD [a]	3E83016.D	2	05/09/16	AN	05/06/16	OP93678	E3E3639
JC19596-12A [a]	3E83014.D	2	05/09/16	AN	05/06/16	OP93678	E3E3639

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

JC19644-4, JC19644-5

CAS No.	Compound	JC19596-12A 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		1850	1150	62	1910	963	51	18	28-110/33
7005-72-3	4-Chlorophenyl phenyl ether	ND		1850	1570	85	1910	1230	65	24	38-119/33
121-14-2	2,4-Dinitrotoluene	ND		1850	1390	75	1910	1020	54	31	28-126/36
606-20-2	2,6-Dinitrotoluene	ND		1850	1440	78	1910	1100	58	27	31-126/34
91-94-1	3,3'-Dichlorobenzidine	ND		3700	2050	55	3810	1730	45	17	10-115/44
53-70-3	Dibenzo(a,h)anthracene	130		1850	1530	76	1910	1140	53	29	25-135/41
132-64-9	Dibenzofuran	ND		1850	1610	87	1910	1180	62	31	30-125/35
84-74-2	Di-n-butyl phthalate	ND		1850	1370	74	1910	1040	55	27	32-131/34
117-84-0	Di-n-octyl phthalate	ND		1850	1470	79	1910	1200	63	20	28-144/35
84-66-2	Diethyl phthalate	ND		1850	1520	82	1910	1240	65	20	35-124/32
131-11-3	Dimethyl phthalate	ND		1850	1540	83	1910	1250	66	21	36-121/33
117-81-7	bis(2-Ethylhexyl)phthalate	ND		1850	1590	86	1910	1280	67	22	25-146/35
206-44-0	Fluoranthene	958		1850	2080	61	1910	1610	34	25	15-143/46
86-73-7	Fluorene	72.0	J	1850	1510	78	1910	1210	60	22	30-129/37
118-74-1	Hexachlorobenzene	ND		1850	1520	82	1910	1080	57	34	34-125/34
87-68-3	Hexachlorobutadiene	ND		1850	1610	87	1910	1300	68	21	29-120/34
77-47-4	Hexachlorocyclopentadiene	ND		3700	ND	0* [b]	3810	ND	0* [b]	nc	10-127/46
67-72-1	Hexachloroethane	ND		1850	1010	55	1910	794	42	24	21-109/38
193-39-5	Indeno(1,2,3-cd)pyrene	399		1850	1810	76	1910	1350	50	29	23-141/44
78-59-1	Isophorone	ND		1850	1400	76	1910	1190	62	16	31-124/32
90-12-0	1-Methylnaphthalene	ND		1850	1580	85	1910	1250	66	23	24-122/33
91-57-6	2-Methylnaphthalene	67.9	J	1850	1630	84	1910	1250	62	26	21-125/33
88-74-4	2-Nitroaniline	ND		1850	1520	82	1910	1210	64	23	29-138/33
99-09-2	3-Nitroaniline	ND		1850	1170	63	1910	873	46	29	12-112/38
100-01-6	4-Nitroaniline	ND		1850	1250	68	1910	1050	55	17	21-117/38
98-95-3	Nitrobenzene	ND		1850	1330	72	1910	1130	59	16	28-118/32
621-64-7	N-Nitroso-di-n-propylamine	ND		1850	1220	66	1910	1060	56	14	26-121/34
86-30-6	N-Nitrosodiphenylamine	ND		1850	1690	91	1910	1340	70	23	24-142/35
85-01-8	Phenanthrene	914		1850	2280	74	1910	1750	44	26	14-144/44
129-00-0	Pyrene	1440		1850	2800	73	1910	2170	38	25	16-147/46
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		1850	2000	108	1910	1480	78	30	37-115/32

CAS No.	Surrogate Recoveries	MS	MSD	JC19596-12A	Limits
367-12-4	2-Fluorophenol	65%	51%	61%	30-106%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93678-MS [a]	3E83015.D	2	05/09/16	AN	05/06/16	OP93678	E3E3639
OP93678-MSD [a]	3E83016.D	2	05/09/16	AN	05/06/16	OP93678	E3E3639
JC19596-12A [a]	3E83014.D	2	05/09/16	AN	05/06/16	OP93678	E3E3639

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

JC19644-4, JC19644-5

CAS No.	Surrogate Recoveries	MS	MSD	JC19596-12A	Limits
4165-62-2	Phenol-d5	68%	50%	63%	30-106%
118-79-6	2,4,6-Tribromophenol	87%	61%	71%	24-140%
4165-60-0	Nitrobenzene-d5	74%	63%	77%	26-122%
321-60-8	2-Fluorobiphenyl	86%	66%	80%	36-112%
1718-51-0	Terphenyl-d14	80%	60%	78%	36-132%

(a) Dilution required due to viscosity of the extract matrix
(b) Outside control limits due to matrix interference.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93662A-MS	3M61138.D	1	05/06/16	LK	05/05/16	OP93662A	E3M2874
OP93662A-MSD	3M61139.D	1	05/06/16	LK	05/05/16	OP93662A	E3M2874
JC19639-1 [a]	3M61131.D	1	05/06/16	LK	05/05/16	OP93662A	E3M2874

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

JC19644-1, JC19644-2, JC19644-3

CAS No.	Compound	JC19639-1 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	1.02	51	2	0.947	47	7	23-140/36

CAS No.	Surrogate Recoveries	MS	MSD	JC19639-1	Limits
367-12-4	2-Fluorophenol	45%	44%		14-81%
4165-62-2	Phenol-d5	36%	35%		11-54%
118-79-6	2,4,6-Tribromophenol	60%	63%		35-145%
4165-60-0	Nitrobenzene-d5	52%	47%		24-125%
321-60-8	2-Fluorobiphenyl	52%	51%		19-127%
1718-51-0	Terphenyl-d14	65%	68%		10-119%

(a) Sample used for QC purposes only.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93678A-MS	4M65185.D	1	05/09/16	LK	05/06/16	OP93678A	E4M2910
OP93678A-MSD	4M65186.D	1	05/09/16	LK	05/06/16	OP93678A	E4M2910
JC19644-4	4M65183.D	1	05/09/16	LK	05/06/16	OP93678A	E4M2910

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

JC19644-4, JC19644-5

CAS No.	Compound	JC19644-4 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	8.07		41.5	28.3	68	41.4	28.5	69	1	50-150/30
91-20-3	Naphthalene	ND		41.5	39.8	96	41.4	37.5	91	6	10-190/36

CAS No.	Surrogate Recoveries	MS	MSD	JC19644-4	Limits
4165-60-0	Nitrobenzene-d5	98%	95%	103%	15-138%
321-60-8	2-Fluorobiphenyl	81%	76%	74%	12-148%
1718-51-0	Terphenyl-d14	101%	94%	91%	10-157%

* = Outside of Control Limits.

Instrument Performance Check (DFTPP)

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E3E3621-DFTPP
Lab File ID: 3E82668.D
Instrument ID: GCMS3E
Injection Date: 04/26/16
Injection Time: 13:15

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	36856	41.3		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	41596	46.6		Pass
70	Less than 2.0% of mass 69	473	0.53	(1.14) [a]	Pass
127	40.0 - 60.0% of mass 198	53290	59.7		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	89282	100.0		Pass
199	5.0 - 9.0% of mass 198	6277	7.03		Pass
275	10.0 - 30.0% of mass 198	24445	27.4		Pass
365	1.0 - 100.0% of mass 198	3823	4.28		Pass
441	Present, but less than mass 443	11945	13.4	(81.7) [b]	Pass
442	40.0 - 100.0% of mass 198	75784	84.9		Pass
443	17.0 - 23.0% of mass 442	14615	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
E3E3621-IC3621	3E82669.D	04/26/16	13:34	00:19	Initial cal 100
E3E3621-IC3621	3E82670.D	04/26/16	14:00	00:45	Initial cal 80
E3E3621-ICC3621	3E82671.D	04/26/16	14:26	01:11	Initial cal 50
E3E3621-IC3621	3E82672.D	04/26/16	14:52	01:37	Initial cal 25
E3E3621-IC3621	3E82673.D	04/26/16	15:19	02:04	Initial cal 10
E3E3621-IC3621	3E82674.D	04/26/16	15:45	02:30	Initial cal 5
E3E3621-IC3621	3E82675.D	04/26/16	16:11	02:56	Initial cal 2
E3E3621-IC3621	3E82676.D	04/26/16	16:37	03:22	Initial cal 1
E3E3621-ICV3620	3E82677.D	04/26/16	17:03	03:48	Initial cal verification 50
E3E3621-ICV3620	3E82678.D	04/26/16	17:30	04:15	Initial cal verification 50
E3E3621-ICV3620	3E82679.D	04/26/16	17:56	04:41	Initial cal verification 50
E3E3621-ICV3620	3E82680.D	04/26/16	18:22	05:07	Initial cal verification 50
E3E3621-ICV3621	3E82680A.D	04/26/16	18:22	05:07	Initial cal verification 50
E3E3621-ICV3621	3E82681A.D	04/26/16	18:48	05:33	Initial cal verification 50
E3E3621-ICV3620	3E82681.D	04/26/16	18:48	05:33	Initial cal verification 50
E3E3621-ICV3621	3E82683.D	04/26/16	19:40	06:25	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E3E3622-DFTPP
Lab File ID: 3E82684.D
Instrument ID: GCMS3E
Injection Date: 04/27/16
Injection Time: 09:39

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	35061	37.6		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	40730	43.7		Pass
70	Less than 2.0% of mass 69	367	0.39	(0.90) [a]	Pass
127	40.0 - 60.0% of mass 198	55168	59.1		Pass
197	Less than 1.0% of mass 198	108	0.12		Pass
198	Base peak, 100% relative abundance	93304	100.0		Pass
199	5.0 - 9.0% of mass 198	6394	6.85		Pass
275	10.0 - 30.0% of mass 198	24591	26.4		Pass
365	1.0 - 100.0% of mass 198	3692	3.96		Pass
441	Present, but less than mass 443	8486	9.10	(76.4) [b]	Pass
442	40.0 - 100.0% of mass 198	56685	60.8		Pass
443	17.0 - 23.0% of mass 442	11103	11.9	(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
E3E3622-ICV3621	3E82685A.D	04/27/16	11:46	02:07	Initial cal verification 50
E3E3622-ICV3620	3E82685.D	04/27/16	11:46	02:07	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E3E3623-DFTPP
Lab File ID: 3E82694.D
Instrument ID: GCMS3E
Injection Date: 04/27/16
Injection Time: 15:21

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	53138	49.8		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	52572	49.3		Pass
70	Less than 2.0% of mass 69	250	0.23	(0.48) [a]	Pass
127	40.0 - 60.0% of mass 198	57610	54.0		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	106714	100.0		Pass
199	5.0 - 9.0% of mass 198	6685	6.26		Pass
275	10.0 - 30.0% of mass 198	29152	27.3		Pass
365	1.0 - 100.0% of mass 198	4414	4.14		Pass
441	Present, but less than mass 443	15379	14.4	(85.2) [b]	Pass
442	40.0 - 100.0% of mass 198	92170	86.4		Pass
443	17.0 - 23.0% of mass 442	18045	16.9	(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
E3E3623-IC3623	3E82702.D	04/27/16	16:10	00:49	Initial cal 2
E3E3623-IC3623	3E82696.D	04/27/16	16:35	01:14	Initial cal 100
E3E3623-ICC3623	3E82697.D	04/27/16	17:01	01:40	Initial cal 50
E3E3623-IC3623	3E82698.D	04/27/16	17:27	02:06	Initial cal 80
E3E3623-IC3623	3E82699.D	04/27/16	17:53	02:32	Initial cal 25
E3E3623-IC3623	3E82700.D	04/27/16	18:18	02:57	Initial cal 10
E3E3623-IC3623	3E82701.D	04/27/16	18:44	03:23	Initial cal 5
E3E3623-IC3623	3E82703.D	04/27/16	19:10	03:49	Initial cal 1
E3E3623-ICV3623	3E82704.D	04/27/16	19:36	04:15	Initial cal verification 50
E3E3623-ICV3623	3E82705.D	04/27/16	20:01	04:40	Initial cal verification 50
E3E3623-ICV3623	3E82706.D	04/27/16	20:27	05:06	Initial cal verification 50
E3E3623-ICV3623	3E82707.D	04/27/16	20:53	05:32	Initial cal verification 50
E3E3623-ICV3623	3E82708.D	04/27/16	21:18	05:57	Initial cal verification 50
E3E3623-ICV3623	3E82709.D	04/27/16	21:44	06:23	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E3E3637-DFTPP
Lab File ID: 3E82972.D
Instrument ID: GCMS3E
Injection Date: 05/06/16
Injection Time: 12:18

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	66022	57.1		Pass
68	Less than 2.0% of mass 69	190	0.16	(0.33) [a]	Pass
69	Mass 69 relative abundance	57650	49.9		Pass
70	Less than 2.0% of mass 69	456	0.39	(0.79) [a]	Pass
127	40.0 - 60.0% of mass 198	66356	57.4		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	115589	100.0		Pass
199	5.0 - 9.0% of mass 198	8839	7.65		Pass
275	10.0 - 30.0% of mass 198	30761	26.6		Pass
365	1.0 - 100.0% of mass 198	5530	4.78		Pass
441	Present, but less than mass 443	8343	7.22	(86.2) [b]	Pass
442	40.0 - 100.0% of mass 198	49734	43.0		Pass
443	17.0 - 23.0% of mass 442	9682	8.38	(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
E3E3637-CC3623	3E82973.D	05/06/16	12:32	00:14	Continuing cal 50
E3E3637-CC3621	3E82974.D	05/06/16	13:01	00:43	Continuing cal 50
OP93678-MB1	3E82981.D	05/06/16	14:52	02:34	Method Blank
OP93678-BS1	3E82982.D	05/06/16	15:18	03:00	Blank Spike
ZZZZZZ	3E82983.D	05/06/16	15:44	03:26	(unrelated sample)
ZZZZZZ	3E82984.D	05/06/16	16:10	03:52	(unrelated sample)
ZZZZZZ	3E82986.D	05/06/16	17:05	04:47	(unrelated sample)
ZZZZZZ	3E82987.D	05/06/16	17:31	05:13	(unrelated sample)
ZZZZZZ	3E82988.D	05/06/16	17:57	05:39	(unrelated sample)
ZZZZZZ	3E82989.D	05/06/16	18:23	06:05	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E3E3639-DFTPP
Lab File ID: 3E82996.D
Instrument ID: GCMS3E
Injection Date: 05/09/16
Injection Time: 09:27

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	57766	40.9		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	54758	38.7		Pass
70	Less than 2.0% of mass 69	546	0.39	(1.00) [a]	Pass
127	40.0 - 60.0% of mass 198	71293	50.4		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	141402	100.0		Pass
199	5.0 - 9.0% of mass 198	9843	6.96		Pass
275	10.0 - 30.0% of mass 198	40909	28.9		Pass
365	1.0 - 100.0% of mass 198	7668	5.42		Pass
441	Present, but less than mass 443	14728	10.4	(69.5) [b]	Pass
442	40.0 - 100.0% of mass 198	100440	71.0		Pass
443	17.0 - 23.0% of mass 442	21187	15.0	(21.1) [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
E3E3639-CC3623	3E82997.D	05/09/16	09:40	00:13	Continuing cal 25
E3E3639-CC3621	3E82998.D	05/09/16	10:06	00:39	Continuing cal 25
ZZZZZZ	3E83000.D	05/09/16	11:11	01:44	(unrelated sample)
ZZZZZZ	3E83001.D	05/09/16	11:38	02:11	(unrelated sample)
ZZZZZZ	3E83004.D	05/09/16	12:04	02:37	(unrelated sample)
ZZZZZZ	3E83005.D	05/09/16	12:30	03:03	(unrelated sample)
ZZZZZZ	3E83006.D	05/09/16	13:00	03:33	(unrelated sample)
ZZZZZZ	3E83017.D	05/09/16	13:27	04:00	(unrelated sample)
JC19644-5	3E83007.D	05/09/16	14:46	05:19	RA-10 (5.5-6.5)
JC19644-4	3E83008.D	05/09/16	15:12	05:45	RA-11 (10-11)
ZZZZZZ	3E83009.D	05/09/16	15:38	06:11	(unrelated sample)
ZZZZZZ	3E83011.D	05/09/16	16:30	07:03	(unrelated sample)
ZZZZZZ	3E83012.D	05/09/16	16:57	07:30	(unrelated sample)
ZZZZZZ	3E83013.D	05/09/16	17:23	07:56	(unrelated sample)
JC19644-5	3E83020.D	05/09/16	18:42	09:15	RA-10 (5.5-6.5)
JC19596-12A	3E83014.D	05/09/16	19:08	09:41	(used for QC only; not part of job JC19644)
OP93678-MS	3E83015.D	05/09/16	19:35	10:08	Matrix Spike
OP93678-MSD	3E83016.D	05/09/16	20:01	10:34	Matrix Spike Duplicate

Instrument Performance Check (DFTPP)

Job Number: JC19644
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: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E3M2874-DFTPP
Lab File ID: 3M61120.D
Instrument ID: GCMS3M
Injection Date: 05/06/16
Injection Time: 09:12

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	174615	37.1		Pass
68	Less than 2.0% of mass 69	971	0.21	(0.43) [a]	Pass
69	Mass 69 relative abundance	226769	48.2		Pass
70	Less than 2.0% of mass 69	434	0.09	(0.19) [a]	Pass
127	40.0 - 60.0% of mass 198	245269	52.2		Pass
197	Less than 1.0% of mass 198	1647	0.35		Pass
198	Base peak, 100% relative abundance	470251	100.0		Pass
199	5.0 - 9.0% of mass 198	32030	6.81		Pass
275	10.0 - 30.0% of mass 198	111349	23.7		Pass
365	1.0 - 100.0% of mass 198	13182	2.80		Pass
441	Present, but less than mass 443	57951	12.3	(82.8) [b]	Pass
442	40.0 - 100.0% of mass 198	356808	75.9		Pass
443	17.0 - 23.0% of mass 442	69960	14.9	(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
E3M2874-CC2855	3M61121.D	05/06/16	09:29	00:17	Continuing cal 1
OP93597A-MB1	3M61122.D	05/06/16	10:06	00:54	Method Blank
OP93597A-BS12	3M61123.D	05/06/16	10:38	01:26	Blank Spike
ZZZZZZ	3M61125.D	05/06/16	11:10	01:58	(unrelated sample)
JC19423-1	3M61124.D	05/06/16	11:42	02:30	(used for QC only; not part of job JC19644)
OP93662A-MB1	3M61126.D	05/06/16	12:15	03:03	Method Blank
OP93662A-BS12	3M61127.D	05/06/16	12:47	03:35	Blank Spike
JC19644-1	3M61128.D	05/06/16	13:19	04:07	RA-16 GWD
JC19644-2	3M61129.D	05/06/16	13:51	04:39	S-42S
JC19644-3	3M61130.D	05/06/16	14:24	05:12	RA-11 GWS
ZZZZZZ	3M61145.D	05/06/16	15:28	06:16	(unrelated sample)
OP93677A-MB1	3M61146.D	05/06/16	16:00	06:48	Method Blank
OP93677A-BS12	3M61144A.D	05/06/16	16:33	07:21	Blank Spike
JC19639-1	3M61131.D	05/06/16	17:05	07:53	(used for QC only; not part of job JC19644)
ZZZZZZ	3M61132.D	05/06/16	17:37	08:25	(unrelated sample)
OP93662A-MS	3M61138.D	05/06/16	18:42	09:30	Matrix Spike
OP93662A-MSD	3M61139.D	05/06/16	19:14	10:02	Matrix Spike Duplicate
ZZZZZZ	3M61140.D	05/06/16	19:46	10:34	(unrelated sample)
ZZZZZZ	3M61142.D	05/06/16	20:51	11:39	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC19644
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: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E4M2910-DFTPP
Lab File ID: 4M65169.D
Instrument ID: GCMS4M
Injection Date: 05/09/16
Injection Time: 10:19

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	440259	44.7		Pass
68	Less than 2.0% of mass 69	6860	0.70	(1.65) [a]	Pass
69	Mass 69 relative abundance	414779	42.2		Pass
70	Less than 2.0% of mass 69	2282	0.23	(0.55) [a]	Pass
127	40.0 - 60.0% of mass 198	456555	46.4		Pass
197	Less than 1.0% of mass 198	6380	0.65		Pass
198	Base peak, 100% relative abundance	983872	100.0		Pass
199	5.0 - 9.0% of mass 198	65024	6.61		Pass
275	10.0 - 30.0% of mass 198	240288	24.4		Pass
365	1.0 - 100.0% of mass 198	34339	3.49		Pass
441	Present, but less than mass 443	133227	13.5	(82.3) [b]	Pass
442	40.0 - 100.0% of mass 198	846165	86.0		Pass
443	17.0 - 23.0% of mass 442	161859	16.5	(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
E4M2910-CC2881	4M65170.D	05/09/16	10:32	00:13	Continuing cal 1
OP93662A-MB1	4M65171.D	05/09/16	11:08	00:49	Method Blank
ZZZZZZ	4M65172.D	05/09/16	11:41	01:22	(unrelated sample)
ZZZZZZ	4M65173.D	05/09/16	12:14	01:55	(unrelated sample)
ZZZZZZ	4M65174.D	05/09/16	12:48	02:29	(unrelated sample)
ZZZZZZ	4M65175.D	05/09/16	13:22	03:03	(unrelated sample)
ZZZZZZ	4M65176.D	05/09/16	13:55	03:36	(unrelated sample)
OP93718A-MB1	4M65177.D	05/09/16	14:28	04:09	Method Blank
ZZZZZZ	4M65179.D	05/09/16	15:34	05:15	(unrelated sample)
ZZZZZZ	4M65180.D	05/09/16	16:08	05:49	(unrelated sample)
OP93678A-MB1	4M65181.D	05/09/16	16:41	06:22	Method Blank
OP93678A-BS12	4M65182.D	05/09/16	17:14	06:55	Blank Spike
JC19644-4	4M65183.D	05/09/16	17:47	07:28	RA-11 (10-11)
JC19644-5	4M65184.D	05/09/16	18:20	08:01	RA-10 (5.5-6.5)
OP93678A-MS	4M65185.D	05/09/16	18:52	08:33	Matrix Spike
OP93678A-MSD	4M65186.D	05/09/16	19:25	09:06	Matrix Spike Duplicate
OP93478A-BS12	4M65188.D	05/09/16	20:31	10:12	Blank Spike
JC19023-1	4M65189.D	05/09/16	21:04	10:45	(used for QC only; not part of job JC19644)
ZZZZZZ	4M65190.D	05/09/16	21:37	11:18	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample:	E4M2910-DFTPP	**Injection Date:**	05/09/16
Lab File ID:	4M65169.D	**Injection Time:**	10:19
Instrument ID:	GCMS4M		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	4M65191.D	05/09/16	22:10	11:51	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E6P1209-DFTPP
Lab File ID: 6P25923.D
Instrument ID: GCMS6P
Injection Date: 05/13/16
Injection Time: 09:12

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	118557	54.8		Pass
68	Less than 2.0% of mass 69	1119	0.52	(0.93) [a]	Pass
69	Mass 69 relative abundance	120494	55.7		Pass
70	Less than 2.0% of mass 69	996	0.46	(0.83) [a]	Pass
127	40.0 - 60.0% of mass 198	126024	58.3		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	216184	100.0		Pass
199	5.0 - 9.0% of mass 198	14389	6.66		Pass
275	10.0 - 30.0% of mass 198	64576	29.9		Pass
365	1.0 - 100.0% of mass 198	9081	4.20		Pass
441	Present, but less than mass 443	28875	13.4	(79.7) [b]	Pass
442	40.0 - 100.0% of mass 198	185597	85.9		Pass
443	17.0 - 23.0% of mass 442	36212	16.8	(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
E6P1209-IC1209	6P25924.D	05/13/16	09:24	00:12	Initial cal 2
E6P1209-IC1209	6P25925.D	05/13/16	09:53	00:41	Initial cal 1
E6P1209-IC1209	6P25926.D	05/13/16	10:20	01:08	Initial cal 100
E6P1209-IC1209	6P25927.D	05/13/16	10:47	01:35	Initial cal 80
E6P1209-ICC1209	6P25928.D	05/13/16	11:15	02:03	Initial cal 50
E6P1209-IC1209	6P25929.D	05/13/16	11:42	02:30	Initial cal 25
E6P1209-IC1209	6P25930.D	05/13/16	12:09	02:57	Initial cal 10
E6P1209-IC1209	6P25931.D	05/13/16	12:36	03:24	Initial cal 5

Instrument Performance Check (DFTPP)

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E6P1210-DFTPP
Lab File ID: 6P25937.D
Instrument ID: GCMS6P
Injection Date: 05/13/16
Injection Time: 14:25

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	89165	43.1		Pass
68	Less than 2.0% of mass 69	207	0.10	(0.22) [a]	Pass
69	Mass 69 relative abundance	93133	45.0		Pass
70	Less than 2.0% of mass 69	404	0.20	(0.43) [a]	Pass
127	40.0 - 60.0% of mass 198	109826	53.1		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	206826	100.0		Pass
199	5.0 - 9.0% of mass 198	14852	7.18		Pass
275	10.0 - 30.0% of mass 198	54986	26.6		Pass
365	1.0 - 100.0% of mass 198	7287	3.52		Pass
441	Present, but less than mass 443	22871	11.1	(84.5) [b]	Pass
442	40.0 - 100.0% of mass 198	139682	67.5		Pass
443	17.0 - 23.0% of mass 442	27080	13.1	(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
E6P1210-IC1210	6P25938.D	05/13/16	14:45	00:20	Initial cal 100
E6P1210-IC1210	6P25939.D	05/13/16	15:12	00:47	Initial cal 80
E6P1210-ICC1210	6P25940.D	05/13/16	15:40	01:15	Initial cal 50
E6P1210-IC1210	6P25941.D	05/13/16	16:07	01:42	Initial cal 25
E6P1210-IC1210	6P25942.D	05/13/16	16:35	02:10	Initial cal 10
E6P1210-IC1210	6P25943.D	05/13/16	17:02	02:37	Initial cal 5
E6P1210-IC1210	6P25944.D	05/13/16	17:30	03:05	Initial cal 2
E6P1210-IC1210	6P25945.D	05/13/16	17:57	03:32	Initial cal 1
E6P1210-ICV1209	6P25950.D	05/13/16	20:14	05:49	Initial cal verification 50
E6P1210-ICV1210	6P25950A.D	05/13/16	20:14	05:49	Initial cal verification 50
E6P1210-ICV1209	6P25951.D	05/13/16	20:42	06:17	Initial cal verification 50
E6P1210-ICV1210	6P25952.D	05/13/16	21:09	06:44	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E6P1211-DFTPP
Lab File ID: 6P25953.D
Instrument ID: GCMS6P
Injection Date: 05/16/16
Injection Time: 08:59

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	125051	47.5		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	127610	48.5		Pass
70	Less than 2.0% of mass 69	625	0.24	(0.49) [a]	Pass
127	40.0 - 60.0% of mass 198	144274	54.9		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	262997	100.0		Pass
199	5.0 - 9.0% of mass 198	16343	6.21		Pass
275	10.0 - 30.0% of mass 198	68986	26.2		Pass
365	1.0 - 100.0% of mass 198	7608	2.89		Pass
441	Present, but less than mass 443	24632	9.37	(81.1) [b]	Pass
442	40.0 - 100.0% of mass 198	158754	60.4		Pass
443	17.0 - 23.0% of mass 442	30379	11.6	(19.1) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E6P1211-ICV1209	6P25954.D	05/16/16	09:15	00:16	Initial cal verification 50
E6P1211-ICV1209	6P25955.D	05/16/16	09:42	00:43	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E6P1212-DFTPP
Lab File ID: 6P25958.D
Instrument ID: GCMS6P
Injection Date: 05/16/16
Injection Time: 11:00

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	129527	47.4		Pass
68	Less than 2.0% of mass 69	932	0.34	(0.67) [a]	Pass
69	Mass 69 relative abundance	138190	50.6		Pass
70	Less than 2.0% of mass 69	775	0.28	(0.56) [a]	Pass
127	40.0 - 60.0% of mass 198	148557	54.4		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	273010	100.0		Pass
199	5.0 - 9.0% of mass 198	18218	6.67		Pass
275	10.0 - 30.0% of mass 198	70571	25.8		Pass
365	1.0 - 100.0% of mass 198	8697	3.19		Pass
441	Present, but less than mass 443	23976	8.78	(76.8) [b]	Pass
442	40.0 - 100.0% of mass 198	151981	55.7		Pass
443	17.0 - 23.0% of mass 442	31207	11.4	(20.5) [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
E6P1212-ICV1209	6P25959.D	05/16/16	11:13	00:13	Initial cal verification 50
E6P1212-ICV1209	6P25960.D	05/16/16	11:40	00:40	Initial cal verification 50
E6P1212-ICV1210	6P25960A.D	05/16/16	11:40	00:40	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E6P1214-DFTPP
Lab File ID: 6P25989A.D
Instrument ID: GCMS6P
Injection Date: 05/17/16
Injection Time: 07:19

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	78554	44.6		Pass
68	Less than 2.0% of mass 69	1196	0.68	(1.42) [a]	Pass
69	Mass 69 relative abundance	84357	47.9		Pass
70	Less than 2.0% of mass 69	461	0.26	(0.55) [a]	Pass
127	40.0 - 60.0% of mass 198	92752	52.6		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	176173	100.0		Pass
199	5.0 - 9.0% of mass 198	11338	6.44		Pass
275	10.0 - 30.0% of mass 198	46552	26.4		Pass
365	1.0 - 100.0% of mass 198	5703	3.24		Pass
441	Present, but less than mass 443	15722	8.92	(79.7) [b]	Pass
442	40.0 - 100.0% of mass 198	107968	61.3		Pass
443	17.0 - 23.0% of mass 442	19728	11.2	(18.3) [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
E6P1214-CC1209	6P25990.D	05/17/16	07:31	00:12	Continuing cal 25
E6P1214-CC1210	6P25991.D	05/17/16	07:58	00:39	Continuing cal 25
OP93937-LB19	6P25993.D	05/17/16	08:52	01:33	Leachate Blank
OP93938-LB21	6P25994.D	05/17/16	09:19	02:00	Leachate Blank
OP93938-LS8	6P25995.D	05/17/16	09:46	02:27	Leachate Spike
OP93938-MS	6P25995.D	05/17/16	09:46	02:27	Matrix Spike
OP93597-MB1	6P26005.D	05/17/16	10:15	02:56	Method Blank
OP93596-MB1	6P26006.D	05/17/16	10:42	03:23	Method Blank
ZZZZZZ	6P26007.D	05/17/16	11:10	03:51	(unrelated sample)
ZZZZZZ	6P26008.D	05/17/16	11:37	04:18	(unrelated sample)
ZZZZZZ	6P26009.D	05/17/16	12:04	04:45	(unrelated sample)
ZZZZZZ	6P26010.D	05/17/16	12:31	05:12	(unrelated sample)
ZZZZZZ	6P26014.D	05/17/16	12:58	05:39	(unrelated sample)
OP93405A-MB1	6P26016.D	05/17/16	13:53	06:34	Method Blank
ZZZZZZ	6P26017.D	05/17/16	14:20	07:01	(unrelated sample)
ZZZZZZ	6P26018.D	05/17/16	14:47	07:28	(unrelated sample)
OP93662B-MB1	6P26019.D	05/17/16	15:16	07:57	Method Blank
ZZZZZZ	6P26020.D	05/17/16	15:44	08:25	(unrelated sample)
OP93938-MSD	6P25996B.D	05/17/16	16:11	08:52	Matrix Spike Duplicate

Instrument Performance Check (DFTPP)

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E6P1214-DFTPP
Lab File ID: 6P25989A.D
Instrument ID: GCMS6P
Injection Date: 05/17/16
Injection Time: 07:19

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	6P26002.D	05/17/16	16:38	09:19	(unrelated sample)
JC20062-1	6P26003.D	05/17/16	17:06	09:47	(used for QC only; not part of job JC19644)
ZZZZZZ	6P26021.D	05/17/16	17:33	10:14	(unrelated sample)
ZZZZZZ	6P26004.D	05/17/16	18:00	10:41	(unrelated sample)
OP93678-MB1	6P26011.D	05/17/16	18:27	11:08	Method Blank
ZZZZZZ	6P26012.D	05/17/16	18:54	11:35	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EF6563-DFTPP
Lab File ID: F156050.D
Instrument ID: GCMSF
Injection Date: 04/04/16
Injection Time: 18:54

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	108584	30.9		Pass
68	Less than 2.0% of mass 69	596	0.17	(0.43) [a]	Pass
69	Mass 69 relative abundance	140032	39.9		Pass
70	Less than 2.0% of mass 69	642	0.18	(0.46) [a]	Pass
127	40.0 - 60.0% of mass 198	175460	50.0		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	351082	100.0		Pass
199	5.0 - 9.0% of mass 198	23024	6.56		Pass
275	10.0 - 30.0% of mass 198	62466	17.8		Pass
365	1.0 - 100.0% of mass 198	5730	1.63		Pass
441	Present, but less than mass 443	29498	8.40	(76.5) [b]	Pass
442	40.0 - 100.0% of mass 198	194704	55.5		Pass
443	17.0 - 23.0% of mass 442	38575	11.0	(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
EF6563-IC6563	F156051.D	04/04/16	19:09	00:15	Initial cal 100
EF6563-IC6563	F156052.D	04/04/16	19:38	00:44	Initial cal 80
EF6563-ICC6563	F156053.D	04/04/16	20:07	01:13	Initial cal 50
EF6563-IC6563	F156054.D	04/04/16	20:37	01:43	Initial cal 25
EF6563-IC6563	F156055.D	04/04/16	21:06	02:12	Initial cal 10
EF6563-IC6563	F156056.D	04/04/16	21:35	02:41	Initial cal 5
EF6563-IC6563	F156057.D	04/04/16	22:04	03:10	Initial cal 2
EF6563-IC6563	F156058.D	04/04/16	22:33	03:39	Initial cal 1

Instrument Performance Check (DFTPP)

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EF6564-DFTPP
Lab File ID: F156059.D
Instrument ID: GCMSF
Injection Date: 04/04/16
Injection Time: 23:06

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	115179	32.1		Pass
68	Less than 2.0% of mass 69	157	0.04	(0.10) [a]	Pass
69	Mass 69 relative abundance	151437	42.2		Pass
70	Less than 2.0% of mass 69	785	0.22	(0.52) [a]	Pass
127	40.0 - 60.0% of mass 198	186202	51.9		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	358677	100.0		Pass
199	5.0 - 9.0% of mass 198	23181	6.46		Pass
275	10.0 - 30.0% of mass 198	63472	17.7		Pass
365	1.0 - 100.0% of mass 198	5413	1.51		Pass
441	Present, but less than mass 443	27575	7.69	(79.8) [b]	Pass
442	40.0 - 100.0% of mass 198	177434	49.5		Pass
443	17.0 - 23.0% of mass 442	34561	9.64	(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
EF6564-IC6564	F156060.D	04/04/16	23:27	00:21	Initial cal 100
EF6564-IC6564	F156061.D	04/04/16	23:56	00:50	Initial cal 80
EF6564-ICC6564	F156062.D	04/05/16	00:25	01:19	Initial cal 50
EF6564-IC6564	F156063.D	04/05/16	00:53	01:47	Initial cal 25
EF6564-IC6564	F156064.D	04/05/16	01:22	02:16	Initial cal 10
EF6564-IC6564	F156065.D	04/05/16	01:51	02:45	Initial cal 5
EF6564-IC6564	F156066.D	04/05/16	02:19	03:13	Initial cal 2
EF6564-IC6564	F156067.D	04/05/16	02:48	03:42	Initial cal 1
EF6564-ICV6563	F156069.D	04/05/16	03:46	04:40	Initial cal verification 50
EF6564-ICV6563	F156070.D	04/05/16	04:15	05:09	Initial cal verification 50
EF6564-ICV6563	F156071.D	04/05/16	04:44	05:38	Initial cal verification 50
EF6564-ICV6564	F156071A.D	04/05/16	04:44	05:38	Initial cal verification 50
EF6564-ICV6563	F156072.D	04/05/16	05:13	06:07	Initial cal verification 50
EF6564-ICV6564	F156072A.D	04/05/16	05:13	06:07	Initial cal verification 50
EF6564-ICV6563	F156073.D	04/05/16	05:42	06:36	Initial cal verification 50
EF6564-ICV6564	F156073A.D	04/05/16	05:42	06:36	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EF6567-DFTPP
Lab File ID: F156088.D
Instrument ID: GCMSF
Injection Date: 04/05/16
Injection Time: 18:00

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	102858	36.1		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	139965	49.1		Pass
70	Less than 2.0% of mass 69	764	0.27	(0.55) [a]	Pass
127	40.0 - 60.0% of mass 198	155093	54.5		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	284778	100.0		Pass
199	5.0 - 9.0% of mass 198	18151	6.37		Pass
275	10.0 - 30.0% of mass 198	55232	19.4		Pass
365	1.0 - 100.0% of mass 198	5389	1.89		Pass
441	Present, but less than mass 443	28740	10.1	(74.0) [b]	Pass
442	40.0 - 100.0% of mass 198	192210	67.5		Pass
443	17.0 - 23.0% of mass 442	38818	13.6	(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
EF6567-IC6567	F156089.D	04/05/16	18:25	00:25	Initial cal 100
EF6567-IC6567	F156090.D	04/05/16	18:54	00:54	Initial cal 80
EF6567-ICC6567	F156091.D	04/05/16	19:23	01:23	Initial cal 50
EF6567-IC6567	F156092.D	04/05/16	19:51	01:51	Initial cal 25
EF6567-IC6567	F156093.D	04/05/16	20:20	02:20	Initial cal 10
EF6567-IC6567	F156094.D	04/05/16	20:49	02:49	Initial cal 5
EF6567-IC6567	F156095.D	04/05/16	21:18	03:18	Initial cal 2
EF6567-IC6567	F156096.D	04/05/16	21:47	03:47	Initial cal 1
EF6567-ICV6564	F156097.D	04/05/16	22:16	04:16	Initial cal verification 50
EF6567-ICV6567	F156098.D	04/05/16	22:45	04:45	Initial cal verification 50
EF6567-ICV6567	F156099.D	04/05/16	23:14	05:14	Initial cal verification 50
EF6567-ICV6567	F156100.D	04/05/16	23:43	05:43	Initial cal verification 50
EF6567-ICV6567	F156101.D	04/06/16	00:12	06:12	Initial cal verification 50
EF6567-ICV6566	F156102.D	04/06/16	00:41	06:41	Initial cal verification 50
EF6567-ICV6566	F156104.D	04/06/16	01:39	07:39	Initial cal verification 50
EF6567-ICV6566	F156105.D	04/06/16	02:08	08:08	Initial cal verification 50
EF6567-ICV6566	F156106.D	04/06/16	02:38	08:38	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EF6604-DFTPP
Lab File ID: F156855.D
Instrument ID: GCMSF
Injection Date: 05/06/16
Injection Time: 08:57

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	189928	40.3		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	279251	59.2		Pass
70	Less than 2.0% of mass 69	1304	0.28	(0.47) [a]	Pass
127	40.0 - 60.0% of mass 198	267754	56.8		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	471402	100.0		Pass
199	5.0 - 9.0% of mass 198	32533	6.90		Pass
275	10.0 - 30.0% of mass 198	102362	21.7		Pass
365	1.0 - 100.0% of mass 198	11880	2.52		Pass
441	Present, but less than mass 443	57256	12.1	(73.6) [b]	Pass
442	40.0 - 100.0% of mass 198	401941	85.3		Pass
443	17.0 - 23.0% of mass 442	77768	16.5	(19.3) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EF6604-CC6563	F156856.D	05/06/16	09:10	00:13	Continuing cal 25
EF6604-CC6564	F156857.D	05/06/16	09:39	00:42	Continuing cal 25
OP93662B-BS1	F156858B.D	05/06/16	10:38	01:41	Blank Spike
OP93662-BS1	F156858.D	05/06/16	10:38	01:41	Blank Spike
OP93662B-MB1	F156859B.D	05/06/16	11:06	02:09	Method Blank
OP93662-MB1	F156859.D	05/06/16	11:06	02:09	Method Blank
JC19644-1	F156860.D	05/06/16	11:35	02:38	RA-16 GWD
JC19644-2	F156861.D	05/06/16	12:04	03:07	S-42S
JC19644-3	F156862.D	05/06/16	12:33	03:36	RA-11 GWS
OP93629-MB1	F156871.D	05/06/16	13:02	04:05	Method Blank
OP93629-BS1	F156872.D	05/06/16	13:30	04:33	Blank Spike
JC19644-2	F156880.D	05/06/16	13:59	05:02	S-42S
OP93662B-MS	F156863B.D	05/06/16	14:28	05:31	Matrix Spike
OP93662-MS	F156863.D	05/06/16	14:28	05:31	Matrix Spike
OP93668-MB1	F156881.D	05/06/16	14:57	06:00	Method Blank
OP93668-BS1	F156882.D	05/06/16	15:26	06:29	Blank Spike
ZZZZZZ	F156883.D	05/06/16	15:55	06:58	(unrelated sample)
OP93662B-MSD	F156864B.D	05/06/16	16:24	07:27	Matrix Spike Duplicate
OP93662-MSD	F156864.D	05/06/16	16:24	07:27	Matrix Spike Duplicate

Instrument Performance Check (DFTPP)

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EF6604-DFTPP
Lab File ID: F156855.D
Instrument ID: GCMSF
Injection Date: 05/06/16
Injection Time: 08:57

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
JC19633-1	F156865.D	05/06/16	16:53	07:56	(used for QC only; not part of job JC19644)
JC19633-1Q	F156865B.D	05/06/16	16:53	07:56	(used for QC only; not part of job JC19644)
ZZZZZZ	F156866.D	05/06/16	17:22	08:25	(unrelated sample)
ZZZZZZ	F156867.D	05/06/16	17:51	08:54	(unrelated sample)
ZZZZZZ	F156868.D	05/06/16	18:20	09:23	(unrelated sample)
ZZZZZZ	F156869.D	05/06/16	18:49	09:52	(unrelated sample)
ZZZZZZ	F156870.D	05/06/16	19:18	10:21	(unrelated sample)
ZZZZZZ	F156873.D	05/06/16	19:47	10:50	(unrelated sample)
JC19513-10	F156874.D	05/06/16	20:16	11:19	(used for QC only; not part of job JC19644)
ZZZZZZ	F156875.D	05/06/16	20:45	11:48	(unrelated sample)
ZZZZZZ	F156884.D	05/06/16	23:09	14:12	(unrelated sample)
ZZZZZZ	F156885.D	05/06/16	23:38	14:41	(unrelated sample)
ZZZZZZ	F156886.D	05/07/16	00:07	15:10	(unrelated sample)
ZZZZZZ	F156887.D	05/07/16	00:36	15:39	(unrelated sample)
ZZZZZZ	F156888.D	05/07/16	01:05	16:08	(unrelated sample)
ZZZZZZ	F156889.D	05/07/16	01:33	16:36	(unrelated sample)
ZZZZZZ	F156890.D	05/07/16	02:02	17:05	(unrelated sample)
ZZZZZZ	F156891.D	05/07/16	02:31	17:34	(unrelated sample)
ZZZZZZ	F156892.D	05/07/16	03:00	18:03	(unrelated sample)
ZZZZZZ	F156893.D	05/07/16	03:28	18:31	(unrelated sample)
ZZZZZZ	F156894.D	05/07/16	03:57	19:00	(unrelated sample)
ZZZZZZ	F156895.D	05/07/16	04:26	19:29	(unrelated sample)
ZZZZZZ	F156896.D	05/07/16	04:55	19:58	(unrelated sample)

Semivolatile Internal Standard Area Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E3E3637-CC3623	**Injection Date:**	05/06/16
Lab File ID:	3E82973.D	**Injection Time:**	12:32
Instrument ID:	GCMS3E	**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	132791	4.45	473996	5.50	291527	7.51	490915	9.67	523762	13.85	369592	15.95
Upper Limit [a]	265582	4.95	947992	6.00	583054	8.01	981830	10.17	1047524	14.35	739184	16.45
Lower Limit [b]	66396	3.95	236998	5.00	145764	7.01	245458	9.17	261881	13.35	184796	15.45

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
OP93678-MB1	112924	4.45	437615	5.50	261170	7.50	436717	9.66	417656	13.84	321356	15.95
OP93678-BS1	129909	4.45	455398	5.50	270061	7.51	447807	9.66	438198	13.84	315308	15.95
ZZZZZZ	118802	4.44	442983	5.50	263562	7.50	449724	9.66	428267	13.84	312361	15.95
ZZZZZZ	91224	4.45	330983	5.50	193292	7.51	334393	9.67	199837*	13.88	159372*	16.00
ZZZZZZ	81502	4.44	307482	5.50	192641	7.51	339853	9.67	236389*	13.85	206154	15.96
ZZZZZZ	89127	4.45	336436	5.50	219887	7.51	377091	9.66	279368	13.84	262578	15.96
ZZZZZZ	107119	4.45	390873	5.50	237857	7.51	407239	9.66	369006	13.84	266732	15.95
ZZZZZZ	128901	4.45	473983	5.50	286254	7.51	489407	9.66	458000	13.84	337572	15.95

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: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E3E3639-CC3623	**Injection Date:**	05/09/16
Lab File ID:	3E82997.D	**Injection Time:**	09:40
Instrument ID:	GCMS3E	**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	157118	4.45	568497	5.51	375060	7.52	665277	9.67	727832	13.85	600260	15.96
Upper Limit [a]	314236	4.95	1136994	6.01	750120	8.02	1330554	10.17	1455664	14.35	1200520	16.46
Lower Limit [b]	78559	3.95	284249	5.01	187530	7.02	332639	9.17	363916	13.35	300130	15.46

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
ZZZZZZ	128687	4.45	490759	5.51	320925	7.51	586762	9.67	411939	13.85	376142	15.96
ZZZZZZ	122482	4.45	459651	5.50	311616	7.51	575682	9.67	638010	13.84	349073	15.96
ZZZZZZ	135239	4.45	429628	5.51	187623	7.52	278275*	9.68	320318*	13.85	328876	15.96
ZZZZZZ	104089	4.45	408142	5.50	268306	7.51	482262	9.67	443526	13.85	364144	15.96
ZZZZZZ	123373	4.45	464838	5.51	305826	7.51	517645	9.67	413075	13.85	380089	15.96
ZZZZZZ	91594	4.45	323218	5.51	203204	7.51	359455	9.67	261085*	13.85	335651	16.11
JC19644-5	98118	4.45	385099	5.51	241176	7.52	421272	9.67	418435	13.85	295560*	15.96
JC19644-4	92431	4.45	345651	5.51	213049	7.51	382935	9.67	413052	13.85	319317	15.96
ZZZZZZ	97738	4.45	370042	5.51	231325	7.52	433784	9.67	425397	13.85	305359	15.96
ZZZZZZ	90612	4.46	339989	5.51	226541	7.52	368432	9.68	233825*	13.86	216872*	15.96
ZZZZZZ	88349	4.46	333659	5.51	219908	7.52	372085	9.68	238772*	13.86	222438*	15.97
ZZZZZZ	97180	4.45	348991	5.51	148159*	7.54	317992*	9.72	202596*	13.92	167467*	16.02
JC19644-5 [c]	106306	4.45	403187	5.51	253842	7.52	438665	9.67	351314*	13.85	290148*	15.97
JC19596-12A	101227	4.45	378808	5.51	233586	7.52	382245	9.68	299637*	13.86	272097*	15.97
OP93678-MS [d]	92487	4.46	356021	5.51	217806	7.52	326942*	9.68	275221*	13.86	247441*	15.98
OP93678-MSD [d]	107842	4.46	399232	5.51	244305	7.52	372836	9.68	309911*	13.87	272136*	15.99

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) Confirmation run for internal standard areas.
(d) Dilution required due to viscosity of the extract matrix

Semivolatile Internal Standard Area Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E3M2874-CC2855	**Injection Date:**	05/06/16
Lab File ID:	3M61121.D	**Injection Time:**	09:29
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	264557	10.43	412849	13.43	678083	17.64	581670	22.24
Upper Limit [a]	529114	10.93	825698	13.93	1356166	18.14	1163340	22.74
Lower Limit [b]	132279	9.93	206425	12.93	339042	17.14	290835	21.74

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP93597A-MB1	349329	10.43	491187	13.43	726780	17.64	578588	22.24
OP93597A-BS12	348036	10.43	480861	13.43	715171	17.64	603243	22.24
ZZZZZZ	328467	10.43	496929	13.43	794996	17.64	627066	22.24
JC19423-1	322020	10.43	446441	13.43	709643	17.64	568535	22.24
OP93662A-MB1	280185	10.43	394506	13.43	623165	17.64	533946	22.24
OP93662A-BS12	351170	10.43	572116	13.43	914781	17.64	750976	22.24
JC19644-1	298744	10.43	437898	13.43	698736	17.64	577858	22.24
JC19644-2	293936	10.43	431783	13.43	679768	17.64	556785	22.24
JC19644-3	310768	10.43	461406	13.43	705901	17.64	585493	22.24
ZZZZZZ	281382	10.43	392702	13.43	645630	17.64	532484	22.24
OP93677A-MB1	306061	10.43	421923	13.43	655154	17.64	557549	22.24
OP93677A-BS12	289388	10.43	394979	13.43	614996	17.64	517979	22.24
JC19639-1	358597	10.43	553929	13.43	939088	17.64	751711	22.24
ZZZZZZ	393048	10.43	581927	13.43	965070	17.64	778197	22.24
OP93662A-MS	415009	10.43	621115	13.43	1018135	17.64	806798	22.24
OP93662A-MSD	387740	10.43	569931	13.43	927885	17.64	744661	22.24
ZZZZZZ	325712	10.43	407213	13.43	686850	17.64	530026	22.24
ZZZZZZ	413677	10.43	543751	13.43	827604	17.64	585312	22.24

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: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E4M2910-CC2881	**Injection Date:**	05/09/16
Lab File ID:	4M65170.D	**Injection Time:**	10:32
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	326495	10.68	574008	13.66	915613	17.84	829985	22.44
Upper Limit [a]	652990	11.18	1148016	14.16	1831226	18.34	1659970	22.94
Lower Limit [b]	163248	10.18	287004	13.16	457807	17.34	414993	21.94

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP93662A-MB1	223438	10.68	420716	13.66	619749	17.84	496073	22.44
ZZZZZZ	349639	10.68	679597	13.66	1061790	17.84	824808	22.44
ZZZZZZ	315409	10.68	642956	13.66	1014289	17.84	758528	22.44
ZZZZZZ	233816	10.68	403903	13.66	611675	17.84	478877	22.44
ZZZZZZ	273144	10.68	468729	13.66	740788	17.84	607271	22.44
ZZZZZZ	249752	10.68	441441	13.66	705855	17.84	606796	22.44
OP93718A-MB1	251801	10.68	459587	13.66	642435	17.84	527048	22.44
ZZZZZZ	222034	10.68	406708	13.66	600791	17.84	493359	22.44
ZZZZZZ	286462	10.68	510260	13.66	815141	17.84	647853	22.44
OP93678A-MB1	295447	10.68	531806	13.66	783374	17.84	590417	22.44
OP93678A-BS12	263020	10.68	487375	13.66	712009	17.84	576073	22.44
JC19644-4	251204	10.68	452103	13.66	657246	17.84	526228	22.44
JC19644-5	362332	10.68	649537	13.66	926986	17.84	790624	22.44
OP93678A-MS	308912	10.68	561494	13.66	811240	17.84	656707	22.44
OP93678A-MSD	219393	10.68	409663	13.66	595979	17.84	471726	22.44
OP93478A-BS12	286068	10.68	511650	13.66	796664	17.84	611028	22.44
JC19023-1	283881	10.68	567365	13.66	790604	17.84	605601	22.44
ZZZZZZ	232298	10.68	405280	13.66	639560	17.84	518230	22.44
ZZZZZZ	257522	10.68	481847	13.66	705010	17.84	559258	22.44

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: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E6P1214-CC1209	**Injection Date:**	05/17/16
Lab File ID:	6P25990.D	**Injection Time:**	07:31
Instrument ID:	GCMS6P	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	637221	4.85	2587405	5.98	1479053	8.08	2441596	10.27	2200669	14.45	2010443	16.56
Upper Limit [a]	1274442	5.35	5174810	6.48	2958106	8.58	4883192	10.77	4401338	14.95	4020886	17.06
Lower Limit [b]	318611	4.35	1293703	5.48	739527	7.58	1220798	9.77	1100335	13.95	1005222	16.06

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
OP93937-LB19	629968	4.85	2477809	5.97	1404863	8.07	2278228	10.26	2012136	14.45	1828975	16.56
OP93938-LB21	613151	4.85	2429652	5.97	1390424	8.07	2261312	10.26	1979855	14.45	1794905	16.56
OP93938-LS8	617435	4.85	2403589	5.97	1356855	8.08	2186650	10.27	1925795	14.45	1739776	16.56
OP93938-MS	617435	4.85	2403589	5.97	1356855	8.08	2186650	10.27	1925795	14.45	1739776	16.56
OP93597-MB1	766601	4.85	2967796	5.97	1618608	8.07	2553160	10.26	2066375	14.45	1781366	16.56
OP93596-MB1	641195	4.85	2561172	5.97	1431647	8.07	2269975	10.26	1860746	14.45	1637067	16.56
ZZZZZZ	761230	4.85	2865505	5.97	1649065	8.08	2762557	10.27	2446099	14.45	2274312	16.56
ZZZZZZ	749263	4.85	2824512	5.98	1617158	8.09	2715131	10.28	2429308	14.45	2224320	16.56
ZZZZZZ	759704	4.85	2875048	5.97	1651506	8.09	2720485	10.28	2420212	14.45	2251800	16.56
ZZZZZZ	647995	4.85	2483366	5.98	1453355	8.09	2405298	10.28	2148996	14.45	1968837	16.56
ZZZZZZ	700558	4.85	2691221	5.98	1670613	8.10	2979716	10.29	2838573	14.45	2550545	16.56
OP93405A-MB1	630260	4.85	2540673	5.97	1420132	8.07	2328617	10.26	1979257	14.44	1777379	16.56
ZZZZZZ	655170	4.85	2454029	5.98	1465284	8.09	2455111	10.28	2329052	14.45	2135155	16.56
ZZZZZZ	630238	4.85	2446949	5.97	1433876	8.08	2414640	10.27	2238272	14.44	2038720	16.56
OP93662B-MB1	559352	4.84	2265686	5.97	1291611	8.07	2147156	10.26	1917708	14.45	1746884	16.56
ZZZZZZ	624883	4.84	2476751	5.97	1420173	8.07	2360964	10.26	2108683	14.45	1912479	16.56
OP93938-MSD	604843	4.85	2396760	5.97	1326873	8.07	2172874	10.26	1926751	14.45	1726498	16.56
ZZZZZZ	605592	4.84	2430802	5.97	1420853	8.07	2347015	10.26	2067749	14.44	1821131	16.56
JC20062-1	802339	4.84	3247703	5.97	1921713	8.07	3159811	10.26	2794192	14.45	2446365	16.56
ZZZZZZ	549529	4.84	2169800	5.97	1236078	8.07	2063845	10.26	1852122	14.44	1638058	16.56
ZZZZZZ	662465	4.84	2705944	5.97	1574349	8.07	2647265	10.26	2284952	14.44	2045897	16.56
OP93678-MB1	388906	4.84	1997339	5.97	1200294	8.07	2010724	10.25	1380087	14.44	1241378	16.55
ZZZZZZ	602682	4.84	2339841	5.97	1294194	8.08	2201986	10.28	2076043	14.47	1947717	16.57

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: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	EF6604-CC6563	**Injection Date:**	05/06/16
Lab File ID:	F156856.D	**Injection Time:**	09:10
Instrument ID:	GCMSF	**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	773560	4.78	3165804	5.71	1839173	7.14	2967641	9.04	2713658	14.32	2528354	17.37
Upper Limit [a]	1547120	5.28	6331608	6.21	3678346	7.64	5935282	9.54	5427316	14.82	5056708	17.87
Lower Limit [b]	386780	4.28	1582902	5.21	919587	6.64	1483821	8.54	1356829	13.82	1264177	16.87

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
OP93662-BS1	683576	4.78	3056259	5.71	1620555	7.14	2608440	9.05	2374165	14.33	2137393	17.37
OP93662B-BS1	683576	4.78	3056259	5.71	1620555	7.14	2608440	9.05	2374165	14.33	2137393	17.37
OP93662B-MB1	610038	4.78	2494280	5.70	1461312	7.14	2371475	9.04	2255787	14.32	2082926	17.36
OP93662-MB1	610038	4.78	2494280	5.70	1461312	7.14	2371475	9.04	2255787	14.32	2082926	17.36
JC19644-1	652029	4.78	2657418	5.70	1605209	7.14	2585092	9.04	2321745	14.32	2165865	17.36
JC19644-2	604746	4.78	2512283	5.70	1485127	7.14	2398761	9.04	2153040	14.32	2024188	17.36
JC19644-3	648391	4.78	2746086	5.70	1604766	7.14	2587256	9.04	2383453	14.32	2246707	17.36
OP93629-MB1	598009	4.78	2492404	5.71	1460186	7.14	2350288	9.04	2151628	14.32	1983196	17.36
OP93629-BS1	616704	4.78	2772466	5.71	1407624	7.14	2210408	9.04	1966126	14.32	1767761	17.36
JC19644-2	529678	4.78	2256711	5.71	1347502	7.14	2174495	9.04	2003808	14.32	1891860	17.36
OP93662B-MS	640617	4.78	2906440	5.71	1478055	7.14	2350168	9.05	2109839	14.32	1934830	17.37
OP93662-MS	640617	4.78	2906440	5.71	1478055	7.14	2350168	9.05	2109839	14.32	1934830	17.37
OP93668-MB1	579949	4.78	2400912	5.71	1408069	7.14	2295277	9.04	2096757	14.32	1937633	17.37
OP93668-BS1	561034	4.78	2487392	5.71	1280186	7.14	2063441	9.05	1836377	14.32	1666238	17.36
ZZZZZZ	663551	4.78	2768925	5.70	1629904	7.14	2622682	9.04	2388856	14.32	2240463	17.37
OP93662B-MSD	677258	4.78	2999096	5.71	1575643	7.14	2469127	9.05	2237574	14.33	2053635	17.37
OP93662-MSD	677258	4.78	2999096	5.71	1575643	7.14	2469127	9.05	2237574	14.33	2053635	17.37
JC19633-1	650864	4.78	2679735	5.71	1557072	7.14	2484896	9.04	2324623	14.32	2155481	17.37
JC19633-1Q	650864	4.78	2679735	5.71	1557072	7.14	2484896	9.04	2324623	14.32	2155481	17.37
ZZZZZZ	666421	4.78	2776320	5.70	1601368	7.14	2585858	9.04	2359200	14.32	2174042	17.37
ZZZZZZ	650984	4.78	2672233	5.71	1581902	7.14	2481879	9.05	2311767	14.32	2142502	17.37
ZZZZZZ	617060	4.78	2622099	5.71	1514520	7.14	2448557	9.04	2322015	14.32	2124891	17.37
ZZZZZZ	635283	4.78	2642357	5.71	1569750	7.14	2509785	9.04	2254412	14.32	2115091	17.37
ZZZZZZ	657396	4.78	2678950	5.71	1596225	7.14	2528457	9.05	2336652	14.33	2122838	17.37
ZZZZZZ	549587	4.78	2216287	5.71	1298231	7.14	2100406	9.04	1857270	14.32	1719849	17.36
JC19513-10	629358	4.78	2551668	5.71	1482398	7.14	2358487	9.04	2217849	14.32	2015916	17.37
ZZZZZZ	630512	4.78	2656613	5.71	1528065	7.14	2479576	9.05	2258298	14.34	2048496	17.38
ZZZZZZ	624802	4.78	2548113	5.71	1498061	7.14	2399180	9.04	2125651	14.32	1976513	17.37
ZZZZZZ	630215	4.78	2573430	5.71	1497876	7.14	2404698	9.04	2176247	14.32	1984699	17.37
ZZZZZZ	609099	4.78	2511553	5.71	1472860	7.14	2376560	9.04	2129577	14.32	1952752	17.37
ZZZZZZ	588237	4.78	2426137	5.71	1418766	7.14	2291486	9.04	2011763	14.32	1887269	17.37
ZZZZZZ	571306	4.78	2357402	5.71	1377713	7.14	2217808	9.04	1962577	14.32	1794937	17.36
ZZZZZZ	554892	4.78	2278019	5.71	1337355	7.14	2149111	9.04	1919217	14.32	1771960	17.37
ZZZZZZ	573595	4.78	2365312	5.71	1390977	7.14	2189721	9.04	1962170	14.32	1842032	17.37
ZZZZZZ	602645	4.78	2474364	5.71	1443650	7.14	2275404	9.04	2040392	14.32	1869630	17.37

Semivolatile Internal Standard Area Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	EF6604-CC6563	**Injection Date:**	05/06/16
Lab File ID:	F156856.D	**Injection Time:**	09:10
Instrument ID:	GCMSF	**Method:**	SW846 8270D

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
ZZZZZZ	568358	4.78	2333420	5.71	1346631	7.14	2178579	9.04	1954506	14.32	1798217	17.37
ZZZZZZ	483215	4.78	2016606	5.71	1173735	7.14	1876786	9.04	1702989	14.32	1531179	17.36
ZZZZZZ	611383	4.78	2546578	5.71	1475977	7.14	2353681	9.04	2101674	14.32	1926362	17.37
ZZZZZZ	500478	4.78	2056303	5.71	1217317	7.14	1934718	9.04	1725511	14.32	1550879	17.36
ZZZZZZ	516005	4.78	2138538	5.71	1250115	7.14	2012609	9.04	1797346	14.32	1614910	17.37

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: JC19644
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
JC19644-1	F156860.D	42	31	93	78	68	73
JC19644-2	F156880.D	0* [a]	0* [a]	0* [a]	70	63	71
JC19644-2	F156861.D	41	27	98	74	67	82
JC19644-3	F156862.D	42	29	89	73	64	64
OP93662-BS1	F156858.D	41	31	92	65	66	79
OP93662-MB1	F156859.D	37	25	71	64	57	71
OP93662-MS	F156863.D	63	57	98	79	80	79
OP93662-MSD	F156864.D	57	53	93	71	72	73

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: JC19644
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
JC19644-4	3E83008.D	70	69	83	81	89	91
JC19644-5	3E83020.D	66	66	62	79	79	90
JC19644-5	3E83007.D	70	68	64	80	80	84
OP93678-BS1	3E82982.D	68	67	76	82	90	90
OP93678-MB1	3E82981.D	59	59	57	64	67	59
OP93678-MB1	6P26011.D	79	82	50	56	66	59
OP93678-MS	3E83015.D	65	68	87	74	86	80
OP93678-MSD	3E83016.D	51	50	61	63	66	60

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%

Semivolatile Surrogate Recovery Summary

Job Number: JC19644
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
JC19644-1	3M61128.D	70	72	84
JC19644-2	3M61129.D	66	67	91
JC19644-3	3M61130.D	66	66	78
OP93662A-BS12	3M61127.D	53	49	71
OP93662A-MB1	3M61126.D	56	61	91
OP93662A-MB1	4M65171.D	79	68	99
OP93662A-MS	3M61138.D	52	52	65
OP93662A-MSD	3M61139.D	47	51	68

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: JC19644
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
JC19644-4	4M65183.D	103	74	91
JC19644-5	4M65184.D	91	79	90
OP93678A-BS12	4M65182.D	99	86	98
OP93678A-MB1	4M65181.D	88	73	71
OP93678A-MS	4M65185.D	98	81	101
OP93678A-MSD	4M65186.D	95	76	94

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

Initial Calibration Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E3E3621-ICC3621
Lab FileID: 3E82671.D

```
                          Response Factor Report  MS3E

  Method       : C:\msdchem\1\METHODS\M3E3621.M (RTE Integrator)
  Title        : Semi Volatile  GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 10:56:37 2016
  Last Update  : Thu Apr 28 10:56:37 2016
  Response via : Initial Calibration

  Calibration Files
  2   =3E82675.D  5   =3E82674.D  25  =3E82672.D  80  =3E82670.D
  100 =3E82669.D  50  =3E82671.D  1   =3E82676.D  10  =3E82673.D

   Compound         2     5     25    80    100   50    1     10    Avg %RSD
  ---------------------------------------------------------------------------
102)     1,4-Dichlorobenzene-d ----------------ISTD---------------------
103) Benzaldehyde 1.189 1.194 1.075 0.797       1.013 1.227 1.094 1.084  13.62

104)     Acenaphthene-d10a     ----------------ISTD---------------------
105) 1,2,4,5-Tetr 0.509 0.535 0.473 0.487 0.487 0.482 0.518 0.470 0.495   4.65

106)     Phenanthrene-d10a     ----------------ISTD---------------------
107) Atrazine     0.106 0.110 0.100 0.100 0.097 0.101 0.104 0.097 0.102   4.23
108) o-Terphenyl  0.554 0.543 0.493 0.499 0.485 0.493 0.561 0.494 0.515   6.12
109) 1-Chloroocta 0.335 0.349 0.323 0.321 0.313 0.327 0.352 0.315 0.329   4.49

110) I   Chrysene-d12a         ----------------ISTD---------------------
111) benzidine    0.554 0.648 0.499 0.340       0.432 0.427 0.547 0.492  20.64

112) I   Naphthalene-d8a       ----------------ISTD---------------------
113) Hydroquinone       0.220 0.294 0.296 0.281 0.304       0.255 0.275  11.61

114)     Chrysene-d12b         ----------------ISTD---------------------
115) 2,3,7,8-TCDD                                                0.000# -1.00
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           M3E3623.M         Thu Apr 28 11:03:23 2016   MS3E
```

Initial Calibration Verification

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E3E3621-ICV3621
Lab FileID: 3E82680A.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E3E3621\3E82680a.D         Vial: 13
Acq On    : 26 Apr 2016   6:22 pm                    Operator: ashleyn
Sample    : icv3621-50                               Inst    : MS3E
Misc      : op93161,e3e3621                          Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\msdchem\1\METHODS\M3E3620.M (RTE Integrator)
Title        : Semi Volatile  GC/MS,zb-5msplus 30m x .25mm x .25MWed Apr 27 09:55:50 2016
Last Update  : Wed Apr 27 09:55:50 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
104	Acenaphthene-d10a	1.000	1.000	0.0	109	0.00	7.64
105	1,2,4,5-Tetrachlorobenzen	0.495	0.494	0.2	112	0.00	6.54

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3E82671a.D M3E3620.M Wed Apr 27 10:32:25 2016 MS3E

Initial Calibration Verification

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E3E3621-ICV3621
Lab FileID: 3E82681A.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E3E3621\3E82681a.D         Vial: 14
Acq On    : 26 Apr 2016   6:48 pm                    Operator: ashleyn
Sample    : icv3621-50                               Inst    : MS3E
Misc      : op93161,e3e3621                          Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\msdchem\1\METHODS\M3E3623.M (RTE Integrator)
Title        : Semi Volatile  GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 10:56:37 2016
Last Update  : Thu Apr 28 10:56:37 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	107	0.00	4.54
103	Benzaldehyde	1.084	1.140	-5.2	121	0.00	4.22
106	Phenanthrene-d10a	1.000	1.000	0.0	91	0.00	9.81
107	Atrazine	0.102	0.100	2.0	91	0.00	9.48

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3E82671a.D M3E3623.M Thu Apr 28 11:08:16 2016 MS3E

Initial Calibration Verification

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E3E3621-ICV3621
Lab FileID: 3E82683.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E3E3621\3E82683.D          Vial: 16
Acq On    : 26 Apr 2016   7:40 pm                    Operator: ashleyn
Sample    : icv3621-50                               Inst    : MS3E
Misc      : op93161,e3e3621                          Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\msdchem\1\METHODS\M3E3620.M (RTE Integrator)
Title        : Semi Volatile  GC/MS,zb-5msplus 30m x .25mm x .25MWed Apr 27 09:55:50 2016
Last Update  : Wed Apr 27 09:55:50 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	89	0.00	5.60
113 T	Hydroquinone	0.275	0.319	-16.0	93	0.00	6.05

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3E82671a.D M3E3620.M Wed Apr 27 10:09:13 2016 MS3E

Initial Calibration Verification

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E3E3622-ICV3621
Lab FileID: 3E82685A.D

Evaluate Continuing Calibration Report

```
  Data File : C:\msdchem\1\DATA\E3E3622\3E82685a.D         Vial: 2
  Acq On    : 27 Apr 2016  11:46 am                    Operator: ashleyn
  Sample    : icv3621-50                               Inst    : MS3E
  Misc      : op93161,e3e3622                          Multiplr: 1.00
  MS Integration Params: lscint.p

  Method       : C:\msdchem\1\METHODS\M3E3620.M (RTE Integrator)
  Title        : Semi Volatile  GC/MS,zb-5msplus 30m x .25mm x .25MWed Apr 27 12:17:28 2016
  Last Update  : Wed Apr 27 12:17:28 2016
  Response via : Multiple Level Calibration

  Min. RRF     :   0.050  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
  Max. RRF Dev :  30%     Max. Rel. Area : 200%

         Compound                   AvgRF   CCRF      %Dev Area%  Dev(min)R.T.
  ---------------------------------------------------------------------------
110 I   Chrysene-d12a               1.000   1.000      0.0   99   0.00   13.99
111 T   benzidine                   0.492   0.825    -67.7# 189   0.00   11.98
 ---------------------------------------------------------------------------
 ---------------------------------------------------------------------------

    (#) = Out of Range               SPCC's out = 0  CCC's out = 0
     3E82671a.D M3E3620.M        Wed Apr 27 12:23:24 2016   MS3E
```

Initial Calibration Summary

Job Number: JC19644 **Sample:** E3E3623-ICC3623
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3E82697.D
Project: BMSMC, Building 5 Area, PR

Response Factor Report MS3E

Method : C:\msdchem\1\METHODS\M3E3623.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 10:34:49 2016
Last Update : Thu Apr 28 10:34:49 2016
Response via : Initial Calibration

Calibration Files
2 =3E82702.D 5 =3E82701.D 25 =3E82699.D 80 =3E82698.D
100 =3E82696.D 50 =3E82697.D 1 =3E82703.D 10 =3E82700.D

Compound	2	5	25	80	100	50	1	10	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	----------ISTD----------									
2) 1,4-Dioxane	0.390	0.393	0.342	0.336	0.336	0.324	0.465	0.329	0.365	13.37
3) Pyridine	0.864	1.163	1.050	1.084	1.081	1.039		0.977	1.037	9.12
4) N-Nitrosodim	0.562	0.564	0.621	0.629	0.615	0.604		0.535	0.590	6.11
5) 2-Fluorophen	1.209	1.270	1.239	1.289	1.285	1.236	1.183	1.100	1.226	5.14
6) Indene	2.427	2.587	2.338	2.427	2.376	2.334	2.414	2.187	2.386	4.74
7) Cumene	3.623	3.536	3.383	3.566	3.538	3.407	3.717	3.149	3.490	5.01
8) Phenol-d5	1.609	1.600	1.573	1.748	1.764	1.619	1.420	1.431	1.595	7.88
9) Phenol	1.774	1.752	1.725	1.883	1.867	1.798	1.620	1.572	1.749	6.24
10) Aniline	2.018	2.085	2.047	2.106	2.083	2.147	1.975	1.786	2.031	5.54
11) bis(2-Chloro	1.297	1.222	1.166	1.190	1.168	1.147	1.320	1.085	1.199	6.50
12) 2-Chlorophen	1.519	1.534	1.436	1.467	1.465	1.421	1.462	1.291	1.449	5.13
13) Decane	1.549	1.541	1.505	1.568	1.565	1.518	1.638	1.390	1.534	4.62
14) 1,3-Dichloro	1.584	1.665	1.552	1.598	1.575	1.529	1.726	1.450	1.585	5.27
15) 1,4-Dichloro	1.774	1.790	1.565	1.608	1.600	1.565	1.911	1.494	1.663	8.63
16) Benzyl alcoh	0.883	0.903	0.889	0.960	0.949	0.901	0.814	0.769	0.884	7.24
17) 1,2-Dichloro	1.556	1.604	1.470	1.504	1.490	1.443	1.553	1.364	1.498	5.03
18) Acetophenone	2.052	2.101	1.957	2.023	1.926	1.951	2.101	1.764	1.984	5.62
19) 2-Methylphen	1.309	1.318	1.201	1.220	1.202	1.198	1.248	1.110	1.226	5.46
20) 2,2'-oxybis(	0.513	0.537	0.491	0.488	0.484	0.477		0.450	0.491	5.57
21) 3&4-Methylph	1.295	1.387	1.281	1.311	1.298	1.269	1.315	1.149	1.288	5.17
22) n-Nitroso-di	1.050	1.058	1.059	1.090	1.054	1.059	1.074	0.960	1.051	3.71
23) Hexachloroet	0.568	0.576	0.514	0.497	0.493	0.495	0.622	0.490	0.532	9.40
24) I Naphthalene-d8	----------ISTD----------									
25) Nitrobenzene	0.373	0.427	0.401	0.408	0.406	0.403	0.414	0.368	0.400	4.99
26) Nitrobenzene	0.392	0.425	0.412	0.420	0.429	0.414	0.439	0.373	0.413	5.16
27) Quinoline	0.735	0.763	0.682	0.656	0.659	0.676	0.753	0.641	0.696	6.83
28) Isophorone	0.667	0.696	0.655	0.682	0.681	0.675	0.683	0.626	0.671	3.24
29) 2-Nitropheno	0.202	0.215	0.205	0.224	0.227	0.216	0.208	0.193	0.211	5.39
30) 2,4-Dimethyl	0.336	0.383	0.370	0.372	0.374	0.377	0.367	0.332	0.364	5.23
31) Benzoic acid		0.235	0.285	0.290	0.292	0.289		0.217	0.268	12.28
32) bis(2-Chloro	0.376	0.387	0.352	0.361	0.370	0.362	0.378	0.334	0.365	4.56
33) 2,4-Dichloro	0.283	0.307	0.288	0.289	0.292	0.287	0.250	0.275	0.284	5.68
34) 2,6-Dichloro	0.297	0.301	0.282	0.283	0.286	0.284	0.320	0.266	0.290	5.53
35) 1,3,5-Trichl	0.356	0.357	0.325	0.339	0.344	0.334	0.372	0.317	0.343	5.29
36) 1,2,4-Trichl	0.337	0.345	0.308	0.310	0.314	0.306	0.363	0.305	0.324	6.76
37) 1,2,3-Trichl	0.340	0.328	0.301	0.287	0.287	0.296	0.361	0.294	0.312	8.94
38) Naphthalene	1.145	1.182	1.053	1.085	1.095	1.072	1.214	1.001	1.106	6.35
39) 4-Chloroanil	0.463	0.468	0.447	0.457	0.463	0.455	0.445	0.406	0.451	4.33
40) 2,3-Dichloro	0.371	0.388	0.345	0.341	0.338	0.347	0.398	0.333	0.358	6.92
41) Caprolactam	0.152	0.152	0.158	0.148	0.144	0.149	0.173	0.136	0.151	7.11
42) Hexachlorobu	0.196	0.218	0.185	0.176	0.176	0.181	0.236	0.184	0.194	11.34
43) 4-Chloro-3-m	0.345	0.329	0.321	0.323	0.317	0.316	0.339	0.299	0.324	4.45
44) 2-Methylnaph	0.660	0.670	0.613	0.617	0.616	0.620	0.648	0.576	0.628	4.82
45) 1-Methylnaph	0.689	0.706	0.640	0.633	0.629	0.637	0.698	0.606	0.655	5.70

Initial Calibration Summary

Job Number: JC19644 **Sample:** E3E3623-ICC3623
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3E82697.D
Project: BMSMC, Building 5 Area, PR

```
46) Dimethylnaph 0.641 0.694 0.623 0.609 0.597 0.618 0.691 0.597 0.634   6.15

47) I   Acenaphthene-d10      ----------------ISTD---------------------
48) Hexachlorocy       0.232 0.293 0.349 0.355 0.341       0.233 0.301  18.95
            ---- Quadratic regression ----  Coefficient =  0.9995
              Response Ratio = -0.04596 + 0.34209 *A + 0.00450 *A^2

49) 2,4,6-Trichl 0.384 0.374 0.361 0.368 0.370 0.373 0.335 0.338 0.363   4.77
50) 2,4,5-Trichl 0.418 0.419 0.373 0.396 0.396 0.399 0.461 0.368 0.404   7.32
51) 2-Fluorobiph 1.363 1.364 1.265 1.331 1.306 1.316 1.458 1.209 1.327   5.56
52) 2-Chloronaph 1.186 1.218 1.093 1.121 1.103 1.130 1.154 1.066 1.134   4.42
53) Biphenyl     1.566 1.579 1.438 1.567 1.539 1.528 1.510 1.369 1.512   4.82
54) 2-Nitroanili 0.386 0.417 0.415 0.455 0.433 0.424 0.443 0.389 0.420   5.77
55) Dimethylphth 1.382 1.412 1.294 1.302 1.298 1.319 1.395 1.226 1.328   4.74
56) Acenaphthyle 1.965 1.985 1.824 1.910 1.853 1.890 1.978 1.733 1.892   4.61
57) 2,6-Dinitrot 0.293 0.317 0.296 0.301 0.300 0.307 0.289 0.277 0.297   4.06
58) 3-Nitroanili 0.322 0.343 0.327 0.342 0.339 0.345 0.333 0.299 0.331   4.57
59) Acenaphthene 1.278 1.311 1.176 1.274 1.241 1.254 1.357 1.163 1.257   5.16
60) 2,4-Dinitrop 0.044 0.073 0.130 0.171 0.173 0.162       0.086 0.120  43.67
            ---- Quadratic regression ----  Coefficient =  0.9988
              Response Ratio = -0.02536 + 0.15841 *A + 0.00417 *A^2

61) 4-Nitropheno       0.190 0.215 0.241 0.228 0.230       0.179 0.214  11.48
62) Dibenzofuran 1.694 1.727 1.571 1.647 1.613 1.621 1.842 1.518 1.654   6.06
63) 2,4-Dinitrot 0.388 0.430 0.415 0.423 0.415 0.433 0.370 0.381 0.407   5.90
64) 2,3,4,6-Tetr 0.306 0.328 0.292 0.302 0.302 0.310 0.273 0.282 0.299   5.71
65) Diethylphtha 1.389 1.484 1.376 1.440 1.398 1.409 1.377 1.288 1.395   4.04
66) Fluorene     1.437 1.426 1.336 1.393 1.370 1.386 1.495 1.236 1.385   5.55
67) 4-Chlorophen 0.677 0.695 0.612 0.595 0.584 0.613 0.691 0.585 0.631   7.61
68) 4-Nitroanili 0.296 0.349 0.322 0.338 0.322 0.340 0.293 0.288 0.318   7.35

69) I   Phenanthrene-d10      ----------------ISTD---------------------
70) 4,6-Dinitro-       0.102 0.132 0.152 0.155 0.149       0.105 0.133  17.94
            ---- Quadratic regression ----  Coefficient =  0.9997
              Response Ratio = -0.00936 + 0.15055 *A + 0.00316 *A^2

71) n-Nitrosodip 0.554 0.597 0.535 0.567 0.575 0.568 0.531 0.516 0.556   4.80
72) 1,2-Diphenyl 0.809 0.829 0.817 0.889 0.884 0.870 0.755 0.769 0.828   6.10
73) 2,4,6-Tribro 0.140 0.151 0.141 0.137 0.140 0.141 0.140 0.139 0.141   2.85
74) 4-Bromopheny 0.247 0.248 0.222 0.228 0.228 0.233 0.269 0.227 0.238   6.64
75) Hexachlorobe 0.300 0.309 0.268 0.264 0.264 0.269 0.333 0.275 0.285   9.11
76) Pentachlorop 0.110 0.120 0.140 0.153 0.159 0.152       0.116 0.136  14.79
77) Phenanthrene 1.235 1.227 1.094 1.158 1.145 1.131 1.244 1.051 1.161   6.05
78) Anthracene   1.187 1.224 1.126 1.163 1.163 1.160 1.208 1.071 1.163   4.13
79) Carbazole    1.098 1.085 1.006 1.064 1.065 1.064 1.076 0.959 1.052   4.40
80) Di-n-butylph 1.261 1.349 1.355 1.476 1.478 1.442 1.281 1.226 1.359   7.26
81) Fluoranthene 1.258 1.300 1.209 1.295 1.301 1.283 1.276 1.147 1.259   4.30
82) Octadecane   0.431 0.464 0.458 0.528 0.530 0.505 0.442 0.421 0.473   9.13

83) I   Chrysene-d12          ----------------ISTD---------------------
84) Pyrene       1.221 1.252 1.172 1.198 1.195 1.210 1.229 1.103 1.197   3.78
85) Terphenyl-d1 0.866 0.860 0.831 0.821 0.824 0.842 0.895 0.779 0.840   4.14
86) Butylbenzylp 0.546 0.537 0.583 0.628 0.619 0.618 0.534 0.503 0.571   8.27
87) Butyl steara 0.278 0.275 0.304 0.344 0.352 0.333 0.255 0.257 0.300  13.04
88) Benzo[a]anth 1.246 1.225 1.125 1.138 1.126 1.148 1.278 1.067 1.169   6.18
89) 3,3'-Dichlor 0.441 0.464 0.446 0.440 0.432 0.445 0.400 0.410 0.435   4.74
90) Chrysene     1.169 1.179 1.073 1.031 0.995 1.062 1.211 1.009 1.091   7.65
91) bis(2-Ethylh 0.705 0.737 0.786 0.775 0.754 0.776 0.666 0.679 0.735   6.32

92) I   Perylene-d12          ----------------ISTD---------------------
```

Initial Calibration Summary

Job Number: JC19644 **Sample:** E3E3623-ICC3623
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3E82697.D
Project: BMSMC, Building 5 Area, PR

```
 93) Di-n-octylph 1.236 1.324 1.509 1.771 1.824 1.635       1.237 1.505  16.40
             ---- Quadratic regression ----  Coefficient =  0.9998
               Response Ratio = -0.03560 + 1.48864 *A + 0.14260 *A^2

 94) Benzo[b]fluo 1.305 1.370 1.327 1.452 1.458 1.339 1.350 1.217 1.352   5.77
 95) Benzo[k]fluo 1.272 1.265 1.176 1.191 1.161 1.233 1.212 1.143 1.207   3.94
 96) Benzo[a]pyre 1.105 1.156 1.116 1.173 1.146 1.144 1.138 1.051 1.129   3.37
 97) Indeno[1,2,3 1.067 1.081 1.070 1.129 1.120 1.119 1.050 0.968 1.076   4.85
 98) Dibenz(a,h)a 0.990 1.018 1.003 1.096 1.073 1.061 0.951 0.908 1.012   6.29
 99) Dibenz[a,h]a 1.065 1.140 1.069 1.069 1.018 1.069 1.114 1.004 1.068   4.18
100) 7,12-Dimethy 0.565 0.587 0.612 0.669 0.678 0.644 0.546 0.521 0.603   9.57
101) Benzo[g,h,i] 1.065 1.102 1.031 1.026 0.977 1.013 1.079 0.995 1.036   4.16
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           M3E3623.M         Thu Apr 28 10:35:53 2016   MS3E
```

Initial Calibration Verification

Job Number: JC19644 **Sample:** E3E3623-ICV3623
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3E82704.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E3E3623\3E82704.D Vial: 10
Acq On : 27 Apr 2016 7:36 pm Operator: ashleyn
Sample : icv3623-50 Inst : MS3E
Misc : op93161,e3e3623 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\msdchem\1\METHODS\M3E3623.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:55:31 2016
Last Update : Thu Apr 28 09:55:31 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	144	0.00	4.53
9	t	Phenol	1.749	1.422	18.7	114	0.00	4.30
12	t	2-Chlorophenol	1.449	1.345	7.2	136	0.00	4.38
19	t	2-Methylphenol	1.226	1.117	8.9	134	0.00	4.74
21	t	3&4-Methylphenol	1.288	1.175	8.8	133	0.00	4.87
24	I	Naphthalene-d8	1.000	1.000	0.0	142	0.00	5.60
29	t	2-Nitrophenol	0.211	0.194	8.1	127	0.00	5.26
30	t	2,4-Dimethylphenol	0.364	0.368	-1.1	138	0.00	5.30
31	t	Benzoic acid	0.268	0.252	6.0	124	0.00	5.44
33	t	2,4-Dichlorophenol	0.284	0.289	-1.8	143	0.00	5.48
34	t	2,6-Dichlorophenol	0.290	0.278	4.1	139	0.00	5.69
43	t	4-Chloro-3-methylphenol	0.324	0.296	8.6	133	-0.01	6.20
47	I	Acenaphthene-d10	1.000	1.000	0.0	152	0.00	7.63
49	t	2,4,6-Trichlorophenol	0.363	0.359	1.1	147	0.00	6.68
50	t	2,4,5-Trichlorophenol	0.404	0.358	11.4	137	-0.01	6.73
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	50.000	44.059	11.9	116	0.00	7.76
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.214	0.181	15.4	119	0.00	7.91
64		2,3,4,6-Tetrachlorophenol	0.299	0.301	-0.7	148	0.00	8.11
69	I	Phenanthrene-d10	1.000	1.000	0.0	152	0.00	9.80
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	50.000	44.412	11.2	132	-0.01	8.52
		----------	AvgRF	CCRF	% Dev	----------		
76	t	Pentachlorophenol	0.136	0.136	0.0	136	0.00	9.54

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3E82697.D M3E623.M Thu Apr 28 10:08:52 2016 MS3E

Initial Calibration Verification

Job Number: JC19644 **Sample:** E3E3623-ICV3623
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3E82705.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E3E3623\3E82705.D Vial: 11
Acq On : 27 Apr 2016 8:01 pm Operator: ashleyn
Sample : icv3623-50 Inst : MS3E
Misc : op93161,e3e3623 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\msdchem\1\METHODS\M3E3623.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:55:31 2016
Last Update : Thu Apr 28 09:55:31 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	138	0.00	4.53
3	t	Pyridine	1.037	1.084	-4.5	144	0.00	2.50
10		Aniline	2.031	1.907	6.1	123	0.00	4.30
16	t	Benzyl alcohol	0.884	0.835	5.5	128	0.00	4.65
24	I	Naphthalene-d8	1.000	1.000	0.0	150	0.00	5.60
39	t	4-Chloroaniline	0.451	0.385	14.6	127	0.00	5.68
44	t	2-Methylnaphthalene	0.628	0.590	6.1	143	0.00	6.34
47	I	Acenaphthene-d10	1.000	1.000	0.0	163	0.00	7.63
54	t	2-Nitroaniline	0.420	0.345	17.9	133	0.00	7.06
58	t	3-Nitroaniline	0.331	0.289	12.7	137	0.00	7.61
62	t	Dibenzofuran	1.654	1.550	6.3	156	0.00	7.92
68	t	4-Nitroaniline	0.318	0.265	16.7	127	0.00	8.48
69	I	Phenanthrene-d10	1.000	1.000	0.0	167	0.00	9.80
79	t	Carbazole	1.052	0.943	10.4	148	0.00	10.20

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3E82697.D M3E3623.M Thu Apr 28 10:08:54 2016 MS3E

Initial Calibration Verification

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E3E3623-ICV3623
Lab FileID: 3E82706.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E3E3623\3E82706.D Vial: 12
Acq On : 27 Apr 2016 8:27 pm Operator: ashleyn
Sample : icv3623-50 Inst : MS3E
Misc : op93161,e3e3623 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\msdchem\1\METHODS\M3E3623.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:55:31 2016
Last Update : Thu Apr 28 09:55:31 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	168	0.00	4.53
5	S	2-Fluorophenol	1.226	1.047	14.6	142	0.00	3.56
8	S	Phenol-d5	1.595	1.281	19.7	133	0.00	4.29
24	I	Naphthalene-d8	1.000	1.000	0.0	172	0.00	5.60
25	S	Nitrobenzene-d5	0.400	0.338	15.5	144	0.00	4.97
47	I	Acenaphthene-d10	1.000	1.000	0.0	179	0.00	7.63
51	S	2-Fluorobiphenyl	1.327	1.207	9.0	164	0.00	6.78
69	I	Phenanthrene-d10	1.000	1.000	0.0	178	0.00	9.80
73	S	2,4,6-Tribromophenol	0.141	0.122	13.5	154	0.00	8.76
83	I	Chrysene-d12	1.000	1.000	0.0	160	-0.01	13.97
85	S	Terphenyl-d14	0.840	0.776	7.6	147	0.00	12.36

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3E82697.D M3E3623.M Thu Apr 28 10:08:55 2016 MS3E

Initial Calibration Verification

Job Number: JC19644 **Sample:** E3E3623-ICV3623
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3E82707.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E3E3623\3E82707.D Vial: 13
Acq On : 27 Apr 2016 8:53 pm Operator: ashleyn
Sample : icv3623-50 Inst : MS3E
Misc : op93161,e3e3623 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\msdchem\1\METHODS\M3E3623.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 10:34:49 2016
Last Update : Thu Apr 28 10:34:49 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	139	0.00	4.53
4	t	N-Nitrosodimethylamine	0.590	0.583	1.2	134	0.02	2.36
11	t	bis(2-Chloroethyl)ether	1.199	1.111	7.3	135	0.00	4.34
14	t	1,3-Dichlorobenzene	1.585	1.503	5.2	137	0.00	4.49
15	t	1,4-Dichlorobenzene	1.663	1.536	7.6	137	0.00	4.54
17	t	1,2-Dichlorobenzene	1.498	1.394	6.9	135	0.00	4.66
20	t	2,2'-oxybis(1-Chloropropa	0.491	0.396	19.3	116	0.00	4.74
22	t	n-Nitroso-di-n-propylamin	1.051	0.902	14.2	119	0.00	4.85
23	t	Hexachloroethane	0.532	0.521	2.1	147	0.00	4.92
24	I	Naphthalene-d8	1.000	1.000	0.0	134	0.00	5.60
26	t	Nitrobenzene	0.413	0.377	8.7	122	0.00	4.98
28	t	Isophorone	0.671	0.666	0.7	132	0.00	5.19
32	t	bis(2-Chloroethoxy)methan	0.365	0.334	8.5	124	0.00	5.38
36	t	1,2,4-Trichlorobenzene	0.324	0.319	1.5	140	0.00	5.55
38	t	Naphthalene	1.106	1.056	4.5	132	0.00	5.62
42	t	Hexachlorobutadiene	0.194	0.194	0.0	144	0.00	5.73
47	I	Acenaphthene-d10	1.000	1.000	0.0	136	0.00	7.63
		----------	True	Calc.	% Drift	----------		
48	t	Hexachlorocyclopentadiene	50.000	47.488	5.0	116	0.00	6.51
		----------	AvgRF	CCRF	% Dev	----------		
52	t	2-Chloronaphthalene	1.134	1.094	3.5	131	0.00	6.91
55	t	Dimethylphthalate	1.328	1.256	5.4	129	0.00	7.31
56	t	Acenaphthylene	1.892	1.732	8.5	124	0.00	7.44
57	t	2,6-Dinitrotoluene	0.297	0.280	5.7	124	0.00	7.39
59	t	Acenaphthene	1.257	1.174	6.6	127	0.00	7.68
63	t	2,4-Dinitrotoluene	0.407	0.349	14.3	109	0.00	7.94
65	t	Diethylphthalate	1.395	1.255	10.0	121	0.00	8.30
66	t	Fluorene	1.385	1.237	10.7	121	0.00	8.41
67	t	4-Chlorophenyl-phenylethe	0.631	0.580	8.1	128	0.00	8.43
69	I	Phenanthrene-d10	1.000	1.000	0.0	132	0.00	9.80
71	t	n-Nitrosodiphenylamine	0.556	0.502	9.7	117	0.00	8.61
72	t	1,2-Diphenylhydrazine	0.828	0.770	7.0	117	0.00	8.66
74	t	4-Bromophenyl-phenylether	0.238	0.230	3.4	130	0.00	9.15
75	t	Hexachlorobenzene	0.285	0.265	7.0	131	0.00	9.21
77	t	Phenanthrene	1.161	1.047	9.8	122	0.00	9.83
78	t	Anthracene	1.163	1.025	11.9	117	0.00	9.92
80	t	Di-n-butylphthalate	1.359	1.231	9.4	113	0.00	10.83

Initial Calibration Verification

Job Number: JC19644 **Sample:** E3E3623-ICV3623
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3E82707.D
Project: BMSMC, Building 5 Area, PR

81	t	Fluoranthene	1.259	1.114	11.5	115	0.00	11.69
83	I	Chrysene-d12	1.000	1.000	0.0	120	0.00	13.98
84	t	Pyrene	1.197	1.157	3.3	115	0.00	12.04
86	t	Butylbenzylphthalate	0.571	0.525	8.1	102	0.00	13.20
88	t	Benzo[a]anthracene	1.169	1.049	10.3	110	0.00	13.96
90	t	Chrysene	1.091	0.945	13.4	107	0.00	14.02
91	t	bis(2-Ethylhexyl)phthalat	0.735	0.669	9.0	103	0.00	14.17
92	I	Perylene-d12	1.000	1.000	0.0	112	0.00	16.09
		----------	True	Calc.	% Drift	----------		
93	t	Di-n-octylphthalate	50.000	42.065	15.9	93	0.00	15.16
		----------	AvgRF	CCRF	% Dev	----------		
94	t	Benzo[b]fluoranthene	1.352	1.169	13.5	98	-0.01	15.57
95	t	Benzo[k]fluoranthene	1.207	1.131	6.3	103	-0.01	15.61
96	t	Benzo[a]pyrene	1.129	1.043	7.6	102	0.00	16.01
97	t	Indeno[1,2,3-cd]pyrene	1.076	1.039	3.4	104	0.00	17.56
99	t	Dibenz[a,h]anthracene	1.068	1.005	5.9	106	-0.01	17.60
101	t	Benzo[g,h,i]perylene	1.036	0.953	8.0	106	-0.01	17.96

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3E82697.D M3E3623.M Thu Apr 28 10:39:48 2016 MS3E

6.7.10 6

Initial Calibration Verification

Job Number: JC19644 **Sample:** E3E3623-ICV3623
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3E82708.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E3E3623\3E82708.D Vial: 14
Acq On : 27 Apr 2016 9:18 pm Operator: ashleyn
Sample : icv3623-50 Inst : MS3E
Misc : op93161,e3e3623 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\msdchem\1\METHODS\M3E3623.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:55:31 2016
Last Update : Thu Apr 28 09:55:31 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	134	0.00	4.53
2	t	1,4-Dioxane	0.365	0.357	2.2	148	0.03	2.05
6	t	Indene	2.386	2.391	-0.2	137	0.00	4.73
7	t	Cumene	3.490	3.434	1.6	135	0.00	3.93
13	t	Decane	1.534	1.502	2.1	133	0.00	4.41
18	t	Acetophenone	1.984	1.785	10.0	123	0.00	4.84
24	I	Naphthalene-d8	1.000	1.000	0.0	137	0.00	5.60
27	t	Quinoline	0.696	0.669	3.9	135	0.00	5.96
40	t	2,3-Dichloroaniline	0.358	0.293	18.2	115	0.00	6.67
41	t	Caprolactam	0.151	0.125	17.2	115	-0.03	6.04
45	t	1-Methylnaphthalene	0.655	0.613	6.4	131	0.00	6.45
46	t	Dimethylnaphthalene	0.634	0.593	6.5	131	0.00	7.09
47	I	Acenaphthene-d10	1.000	1.000	0.0	139	0.00	7.63
53	t	Biphenyl	1.512	1.468	2.9	133	0.00	6.90
69	I	Phenanthrene-d10	1.000	1.000	0.0	140	0.00	9.80
82	t	Octadecane	0.473	0.451	4.7	125	0.00	9.76
92	I	Perylene-d12	1.000	1.000	0.0	126	0.00	16.09
100	t	7,12-Dimethylbenz(a)anthr	0.603	0.308	48.9#	60	-0.02	15.56

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3E82697.D M3E3623.M Thu Apr 28 10:08:57 2016 MS3E

Initial Calibration Verification

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E3E3623-ICV3623
Lab FileID: 3E82709.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E3E3623\3E82709.D          Vial: 15
Acq On    : 27 Apr 2016   9:44 pm                    Operator: ashleyn
Sample    : icv3623-50                               Inst    : MS3E
Misc      : op93161,e3e3623                          Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\msdchem\1\METHODS\M3E3623.M (RTE Integrator)
Title        : Semi Volatile  GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:55:31 2016
Last Update  : Thu Apr 28 09:55:31 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	136	-0.01	13.97
89 t	3,3'-Dichlorobenzidine	0.435	0.423	2.8	129	0.00	13.98

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3E82697.D M3E3623.M Thu Apr 28 10:08:58 2016 MS3E

Continuing Calibration Summary

Job Number: JC19644 **Sample:** E3E3637-CC3623
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3E82973.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E3E3637\3E82973.D Vial: 2
Acq On : 6 May 2016 12:32 pm Operator: ashleyn
Sample : cc3623-50 Inst : MS3E
Misc : op93596,e3e3637 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\msdchem\1\METHODS\M3E3623.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MFri May 06 14:23:29 2016
Last Update : Fri May 06 14:23:29 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	76	-0.02	4.45
2	t	1,4-Dioxane	0.365	0.297	18.6	69	-0.09	1.90
3	t	Pyridine	1.037	0.830	20.0	60	-0.08	2.26
4	t	N-Nitrosodimethylamine	0.590	0.476	19.3	59	-0.08	2.22
5	S	2-Fluorophenol	1.226	1.068	12.9	65	0.02	3.51
6	t	Indene	2.386	2.035	14.7	66	-0.02	4.64
7	t	Cumene	3.490	2.966	15.0	66	-0.03	3.84
8	S	Phenol-d5	1.595	1.356	15.0	63	0.03	4.26
9	t	Phenol	1.749	1.402	19.8	59	0.03	4.27
10		Aniline	2.031	1.567	22.8#	55	-0.02	4.21
11	t	bis(2-Chloroethyl)ether	1.200	1.009	15.9	66	-0.02	4.26
12	t	2-Chlorophenol	1.449	1.323	8.7	70	0.00	4.32
13	t	Decane	1.534	1.268	17.3	63	-0.02	4.32
14	t	1,3-Dichlorobenzene	1.585	1.501	5.3	74	0.05	4.40
15	t	1,4-Dichlorobenzene	1.663	1.512	9.1	73	-0.02	4.46
16	t	Benzyl alcohol	0.884	0.768	13.1	64	0.05	4.57
17	t	1,2-Dichlorobenzene	1.498	1.418	5.3	74	0.00	4.57
18	t	Acetophenone	1.984	1.734	12.6	67	0.06	4.76
19	t	2-Methylphenol	1.226	1.027	16.2	65	-0.03	4.69
20	t	2,2'-oxybis(1-Chloropropa	0.491	0.419	14.7	66	0.06	4.66
21	t	3&4-Methylphenol	1.288	1.081	16.1	64	0.04	4.81
22	t	n-Nitroso-di-n-propylamin	1.051	0.887	15.6	63	-0.02	4.76
23	t	Hexachloroethane	0.532	0.599	-12.6	91	-0.02	4.83
24	I	Naphthalene-d8	1.000	1.000	0.0	73	-0.11	5.50
25	S	Nitrobenzene-d5	0.400	0.393	1.8	71	-0.09	4.88
26	t	Nitrobenzene	0.413	0.393	4.8	69	-0.09	4.90
27	t	Quinoline	0.696	0.675	3.0	73	-0.11	5.86
28	t	Isophorone	0.671	0.624	7.0	67	-0.10	5.10
29	t	2-Nitrophenol	0.211	0.203	3.8	68	-0.09	5.17
30	t	2,4-Dimethylphenol	0.364	0.366	-0.5	71	-0.07	5.23
31	t	Benzoic acid	0.268	0.252	6.0	63	-0.07	5.37
32	t	bis(2-Chloroethoxy)methan	0.365	0.335	8.2	67	-0.10	5.28
33	t	2,4-Dichlorophenol	0.284	0.312	-9.9	79	-0.07	5.42
34	t	2,6-Dichlorophenol	0.290	0.305	-5.2	78	-0.09	5.60
35		1,3,5-Trichlorobenzene	0.343	0.374	-9.0	81	-0.10	5.17
36	t	1,2,4-Trichlorobenzene	0.324	0.353	-9.0	84	-0.10	5.45
37		1,2,3-Trichlorobenzene	0.312	0.332	-6.4	81	-0.11	5.66
38	t	Naphthalene	1.106	1.036	6.3	70	-0.11	5.52
39	t	4-Chloroaniline	0.451	0.423	6.2	68	-0.10	5.59
40	t	2,3-Dichloroaniline	0.358	0.380	-6.1	80	-0.11	6.57
41	t	Caprolactam	0.151	0.135	10.6	66	-0.11	5.96

Continuing Calibration Summary

Job Number: JC19644 **Sample:** E3E3637-CC3623
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3E82973.D
Project: BMSMC, Building 5 Area, PR

42	t	Hexachlorobutadiene	0.194	0.236	-21.6#	95	-0.11	5.63
43	t	4-Chloro-3-methylphenol	0.324	0.312	3.7	72	-0.06	6.15
44	t	2-Methylnaphthalene	0.628	0.646	-2.9	76	-0.11	6.23
45	t	1-Methylnaphthalene	0.655	0.665	-1.5	76	-0.12	6.34
46	t	Dimethylnaphthalene	0.634	0.672	-6.0	79	-0.12	6.97
47	I	Acenaphthene-d10	1.000	1.000	0.0	82	-0.11	7.51
		----------	True	Calc.	% Drift	----------		
48	t	Hexachlorocyclopentadiene	100.000	102.936	-2.9	83	-0.10	6.40
		----------	AvgRF	CCRF	% Dev	----------		
49	t	2,4,6-Trichlorophenol	0.363	0.377	-3.9	83	-0.08	6.59
50	t	2,4,5-Trichlorophenol	0.404	0.393	2.7	81	-0.10	6.68
51	S	2-Fluorobiphenyl	1.327	1.343	-1.2	84	-0.10	6.66
52	t	2-Chloronaphthalene	1.134	1.109	2.2	81	-0.10	6.80
53	t	Biphenyl	1.512	1.471	2.7	79	-0.10	6.78
54	t	2-Nitroaniline	0.420	0.415	1.2	81	-0.09	6.96
55	t	Dimethylphthalate	1.328	1.305	1.7	81	-0.10	7.19
56	t	Acenaphthylene	1.892	1.842	2.6	80	-0.10	7.32
57	t	2,6-Dinitrotoluene	0.297	0.290	2.4	78	-0.09	7.28
58	t	3-Nitroaniline	0.331	0.299	9.7	71	-0.09	7.50
59	t	Acenaphthene	1.257	1.225	2.5	80	-0.10	7.56
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	100.000	94.377	5.6	75	-0.05	7.67
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.214	0.205	4.2	73	-0.14	7.95
62	t	Dibenzofuran	1.654	1.598	3.4	81	-0.10	7.80
63	t	2,4-Dinitrotoluene	0.407	0.415	-2.0	79	-0.09	7.83
64		2,3,4,6-Tetrachlorophenol	0.299	0.297	0.7	79	-0.08	8.01
65	t	Diethylphthalate	1.395	1.410	-1.1	82	-0.11	8.18
66	t	Fluorene	1.385	1.372	0.9	81	-0.10	8.28
67	t	4-Chlorophenyl-phenylethe	0.631	0.671	-6.3	90	-0.10	8.30
68	t	4-Nitroaniline	0.318	0.305	4.1	74	-0.09	8.37
69	I	Phenanthrene-d10	1.000	1.000	0.0	84	-0.08	9.67
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	50.000	49.567	0.9	82	-0.07	8.42
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.556	0.553	0.5	82	-0.08	8.49
72	t	1,2-Diphenylhydrazine	0.828	0.792	4.3	76	-0.09	8.54
73	S	2,4,6-Tribromophenol	0.141	0.140	0.7	84	-0.07	8.65
74	t	4-Bromophenyl-phenylether	0.238	0.251	-5.5	90	-0.09	9.02
75	t	Hexachlorobenzene	0.285	0.292	-2.5	91	-0.09	9.08
76	t	Pentachlorophenol	0.136	0.105	22.8#	58	-0.05	9.44
77	t	Phenanthrene	1.161	1.115	4.0	83	-0.09	9.70
78	t	Anthracene	1.163	1.133	2.6	82	-0.08	9.78
79	t	Carbazole	1.052	1.013	3.7	80	-0.07	10.08
80	t	Di-n-butylphthalate	1.359	1.337	1.6	78	-0.08	10.70
81	t	Fluoranthene	1.259	1.298	-3.1	85	-0.08	11.56
82	t	Octadecane	0.473	0.412	12.9	68	-0.09	9.63
83	I	Chrysene-d12	1.000	1.000	0.0	83	-0.09	13.85
84	t	Pyrene	1.197	1.254	-4.8	86	-0.09	11.90
85	S	Terphenyl-d14	0.840	0.859	-2.3	85	-0.09	12.23
86	t	Butylbenzylphthalate	0.571	0.558	2.3	75	-0.08	13.07

Continuing Calibration Summary

Job Number: JC19644 **Sample:** E3E3637-CC3623
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3E82973.D
Project: BMSMC, Building 5 Area, PR

87		Butyl stearate	0.300	0.270	10.0	67	-0.08	13.25
88	t	Benzo[a]anthracene	1.169	1.145	2.1	83	-0.08	13.83
89	t	3,3'-Dichlorobenzidine	0.435	0.439	-0.9	82	-0.08	13.85
90	t	Chrysene	1.091	1.063	2.6	83	-0.08	13.89
91	t	bis(2-Ethylhexyl)phthalat	0.735	0.684	6.9	73	-0.08	14.03
92	I	Perylene-d12	1.000	1.000	0.0	69	-0.14	15.95
		----------	True	Calc.	% Drift	----------		
93	t	Di-n-octylphthalate	50.000	47.621	4.8	65	-0.13	15.03
		----------	AvgRF	CCRF	% Dev	----------		
94	t	Benzo[b]fluoranthene	1.352	1.431	-5.8	73	-0.02	15.45
95	t	Benzo[k]fluoranthene	1.207	1.242	-2.9	69	-0.14	15.48
96	t	Benzo[a]pyrene	1.129	1.138	-0.8	68	-0.14	15.88
97	t	Indeno[1,2,3-cd]pyrene	1.076	1.128	-4.8	69	-0.03	17.40
98	t	Dibenz(a,h)acridine	1.012	0.980	3.2	63	-0.16	17.08
99	t	Dibenz[a,h]anthracene	1.068	1.121	-5.0	72	-0.18	17.43
100	t	7,12-Dimethylbenz(a)anthr	0.603	0.646	-7.1	69	-0.14	15.43
101	t	Benzo[g,h,i]perylene	1.036	1.098	-6.0	74	-0.19	17.79

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3E82671a.D M3E3623.M Fri May 06 14:25:23 2016 MS3E

6.7.13

6

Continuing Calibration Summary

Job Number: JC19644 **Sample:** E3E3637-CC3621
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3E82974.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E3E3637\3E82974.D Vial: 3
Acq On : 6 May 2016 1:01 pm Operator: ashleyn
Sample : cc3621-50 Inst : MS3E
Misc : op93596,e3e3637 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\msdchem\1\METHODS\M3E3623.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MFri May 06 14:23:29 2016
Last Update : Fri May 06 14:23:29 2016
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	56	-0.10	4.44
103	Benzaldehyde	1.084	0.732	32.5#	41#	-0.10	4.12
104	Acenaphthene-d10a	1.000	1.000	0.0	70	-0.11	7.51
105	1,2,4,5-Tetrachlorobenzen	0.495	0.618	-24.8#	89	-0.10	6.42
106	Phenanthrene-d10a	1.000	1.000	0.0	74	-0.09	9.66
107	Atrazine	0.102	0.122	-19.6	89	-0.09	9.34
108 I	Chrysene-d12a	1.000	1.000	0.0	83	-0.15	13.84
109 T	benzidine	0.492	0.442	10.2	85	-0.14	11.84
110 I	Naphthalene-d8a	1.000	1.000	0.0	52	-0.05	5.50
111 T	Hydroquinone	0.275	0.290	-5.5	50	0.00	5.99

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3E82671a.D M3E3623.M Fri May 06 14:25:24 2016 MS3E

Continuing Calibration Summary

Job Number: JC19644 **Sample:** E3E3639-CC3623
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3E82997.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E3E3639\3E82997.D Vial: 2
Acq On : 9 May 2016 9:40 am Operator: ashleyn
Sample : cc3623-25 Inst : MS3E
Misc : op93596,e3e3639 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\msdchem\1\METHODS\M3E3623.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MFri May 06 22:35:22 2016
Last Update : Fri May 06 22:35:22 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	93	0.04	4.45
2	t	1,4-Dioxane	0.365	0.383	-4.9	104	-0.05	1.92
3	t	Pyridine	1.037	0.830	20.0	73	-0.03	2.28
4	t	N-Nitrosodimethylamine	0.590	0.478	19.0	72	-0.03	2.25
5	S	2-Fluorophenol	1.226	1.119	8.7	84	0.07	3.53
6	t	Indene	2.386	2.167	9.2	86	0.04	4.65
7	t	Cumene	3.490	3.070	12.0	84	0.03	3.85
8	S	Phenol-d5	1.595	1.387	13.0	82	0.09	4.27
9	t	Phenol	1.749	1.420	18.8	76	0.09	4.28
10		Aniline	2.031	1.667	17.9	76	0.04	4.22
11	t	bis(2-Chloroethyl)ether	1.200	1.024	14.7	82	0.04	4.27
12	t	2-Chlorophenol	1.449	1.349	6.9	87	0.06	4.33
13	t	Decane	1.534	1.175	23.4#	72	0.03	4.33
14	t	1,3-Dichlorobenzene	1.585	1.575	0.6	94	0.11	4.41
15	t	1,4-Dichlorobenzene	1.663	1.583	4.8	94	0.04	4.47
16	t	Benzyl alcohol	0.884	0.790	10.6	82	0.11	4.58
17	t	1,2-Dichlorobenzene	1.498	1.504	-0.4	95	0.06	4.58
18	t	Acetophenone	1.984	1.774	10.6	84	0.12	4.77
19	t	2-Methylphenol	1.226	1.046	14.7	81	0.02	4.70
20	t	2,2'-oxybis(1-Chloropropa	0.491	0.468	4.7	88	0.12	4.67
21	t	3&4-Methylphenol	1.288	1.189	7.7	86	0.10	4.82
22	t	n-Nitroso-di-n-propylamin	1.051	0.878	16.5	77	0.04	4.77
23	t	Hexachloroethane	0.532	0.635	-19.4	115	0.04	4.84
24	I	Naphthalene-d8	1.000	1.000	0.0	87	0.05	5.51
25	S	Nitrobenzene-d5	0.400	0.385	3.8	83	0.04	4.89
26	t	Nitrobenzene	0.413	0.382	7.5	80	0.04	4.90
27	t	Quinoline	0.696	0.718	-3.2	91	0.05	5.86
28	t	Isophorone	0.671	0.633	5.7	84	0.04	5.10
29	t	2-Nitrophenol	0.211	0.206	2.4	87	0.05	5.17
30	t	2,4-Dimethylphenol	0.364	0.378	-3.8	88	0.07	5.24
31	t	Benzoic acid	0.268	0.237	11.6	72	0.05	5.35
32	t	bis(2-Chloroethoxy)methan	0.365	0.334	8.5	82	0.05	5.29
33	t	2,4-Dichlorophenol	0.284	0.324	-14.1	97	0.08	5.43
34	t	2,6-Dichlorophenol	0.290	0.330	-13.8	101	0.06	5.60
35		1,3,5-Trichlorobenzene	0.343	0.400	-16.6	107	0.04	5.17
36	t	1,2,4-Trichlorobenzene	0.324	0.373	-15.1	105	0.05	5.45
37		1,2,3-Trichlorobenzene	0.312	0.366	-17.3	105	0.05	5.67
38	t	Naphthalene	1.106	1.101	0.5	90	0.05	5.53
39	t	4-Chloroaniline	0.451	0.444	1.6	86	0.06	5.59
40	t	2,3-Dichloroaniline	0.358	0.405	-13.1	102	0.07	6.57
41	t	Caprolactam	0.151	0.130	13.9	71	0.04	5.95

Continuing Calibration Summary

Job Number: JC19644 **Sample:** E3E3639-CC3623
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3E82997.D
Project: BMSMC, Building 5 Area, PR

42 t	Hexachlorobutadiene	0.194	0.256	-32.0#	119	0.05	5.64
43 t	4-Chloro-3-methylphenol	0.324	0.323	0.3	87	0.11	6.15
44 t	2-Methylnaphthalene	0.628	0.674	-7.3	95	0.06	6.24
45 t	1-Methylnaphthalene	0.655	0.695	-6.1	94	0.06	6.35
46 t	Dimethylnaphthalene	0.634	0.709	-11.8	98	0.07	6.98
47 I	Acenaphthene-d10	1.000	1.000	0.0	99	0.06	7.52
	----------	True	Calc.	% Drift	----------		
48 t	Hexachlorocyclopentadiene	50.000	43.013	14.0	88	0.04	6.41
	----------	AvgRF	CCRF	% Dev	----------		
49 t	2,4,6-Trichlorophenol	0.363	0.403	-11.0	111	0.06	6.59
50 t	2,4,5-Trichlorophenol	0.404	0.397	1.7	105	0.04	6.69
51 S	2-Fluorobiphenyl	1.327	1.375	-3.6	108	0.05	6.67
52 t	2-Chloronaphthalene	1.134	1.119	1.3	101	0.05	6.81
53 t	Biphenyl	1.512	1.476	2.4	102	0.05	6.79
54 t	2-Nitroaniline	0.420	0.362	13.8	86	0.06	6.96
55 t	Dimethylphthalate	1.328	1.366	-2.9	105	0.06	7.20
56 t	Acenaphthylene	1.892	1.840	2.7	100	0.05	7.33
57 t	2,6-Dinitrotoluene	0.297	0.294	1.0	99	0.06	7.28
58 t	3-Nitroaniline	0.331	0.308	6.9	93	0.07	7.51
59 t	Acenaphthene	1.257	1.192	5.2	100	0.06	7.56
	----------	True	Calc.	% Drift	----------		
60 t	2,4-Dinitrophenol	50.000	44.961	10.1	97	0.11	7.67
	----------	AvgRF	CCRF	% Dev	----------		
61 t	4-Nitrophenol	0.214	0.205	4.2	94	0.06	7.98
62 t	Dibenzofuran	1.654	1.689	-2.1	106	0.07	7.80
63 t	2,4-Dinitrotoluene	0.407	0.418	-2.7	100	0.07	7.83
64	2,3,4,6-Tetrachlorophenol	0.299	0.307	-2.7	104	0.09	8.02
65 t	Diethylphthalate	1.395	1.427	-2.3	103	0.07	8.18
66 t	Fluorene	1.385	1.427	-3.0	106	0.07	8.28
67 t	4-Chlorophenyl-phenylethe	0.631	0.716	-13.5	116	0.07	8.31
68 t	4-Nitroaniline	0.318	0.311	2.2	96	0.08	8.37
69 I	Phenanthrene-d10	1.000	1.000	0.0	105	0.06	9.67
	----------	True	Calc.	% Drift	----------		
70 t	4,6-Dinitro-2-methylpheno	25.000	24.554	1.8	106	0.05	8.42
	----------	AvgRF	CCRF	% Dev	----------		
71 t	n-Nitrosodiphenylamine	0.556	0.545	2.0	107	0.05	8.49
72 t	1,2-Diphenylhydrazine	0.828	0.699	15.6	89	0.04	8.54
73 S	2,4,6-Tribromophenol	0.141	0.145	-2.8	108	0.05	8.65
74 t	4-Bromophenyl-phenylether	0.238	0.260	-9.2	122	0.06	9.03
75 t	Hexachlorobenzene	0.285	0.313	-9.8	122	0.05	9.09
76 t	Pentachlorophenol	0.136	0.100	26.5#	74	0.09	9.44
77 t	Phenanthrene	1.161	1.093	5.9	104	0.06	9.71
78 t	Anthracene	1.163	1.110	4.6	103	0.07	9.79
79 t	Carbazole	1.052	0.995	5.4	103	0.08	10.09
80 t	Di-n-butylphthalate	1.359	1.261	7.2	97	0.08	10.70
81 t	Fluoranthene	1.259	1.312	-4.2	113	0.10	11.56
82 t	Octadecane	0.473	0.371	21.6#	85	0.06	9.63
83 I	Chrysene-d12	1.000	1.000	0.0	106	0.06	13.85
84 t	Pyrene	1.197	1.211	-1.2	110	0.04	11.91
85 S	Terphenyl-d14	0.840	0.871	-3.7	111	0.05	12.23
86 t	Butylbenzylphthalate	0.571	0.505	11.6	92	0.06	13.08

Continuing Calibration Summary

Job Number: JC19644 **Sample:** E3E3639-CC3623
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3E82997.D
Project: BMSMC, Building 5 Area, PR

87		Butyl stearate	0.300	0.221	26.3#	77	0.06	13.25
88	t	Benzo[a]anthracene	1.169	1.118	4.4	105	0.07	13.83
89	t	3,3'-Dichlorobenzidine	0.435	0.442	-1.6	105	0.07	13.85
90	t	Chrysene	1.091	1.044	4.3	103	0.06	13.88
91	t	bis(2-Ethylhexyl)phthalat	0.735	0.640	12.9	86	0.07	14.03
92	I	Perylene-d12	1.000	1.000	0.0	97	0.06	15.96
		----------	True	Calc.	% Drift	----------		
93	t	Di-n-octylphthalate	25.000	21.659	13.4	84	0.05	15.03
		----------	AvgRF	CCRF	% Dev	----------		
94	t	Benzo[b]fluoranthene	1.352	1.367	-1.1	100	0.16	15.44
95	t	Benzo[k]fluoranthene	1.207	1.285	-6.5	106	0.05	15.48
96	t	Benzo[a]pyrene	1.129	1.145	-1.4	100	0.06	15.88
97	t	Indeno[1,2,3-cd]pyrene	1.076	0.975	9.4	89	0.18	17.39
98	t	Dibenz(a,h)acridine	1.012	0.938	7.3	91	0.05	17.08
99	t	Dibenz[a,h]anthracene	1.068	0.996	6.7	91	0.03	17.42
100	t	7,12-Dimethylbenz(a)anthr	0.603	0.638	-5.8	101	0.05	15.43
101	t	Benzo[g,h,i]perylene	1.036	0.968	6.6	91	0.03	17.78

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3E82672a.D M3E3623.M Mon May 09 11:58:59 2016 MS3E

6.7.15
6

Continuing Calibration Summary

Job Number: JC19644 **Sample:** E3E3639-CC3621
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3E82998.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E3E3639\3E82998.D Vial: 3
Acq On : 9 May 2016 10:06 am Operator: ashleyn
Sample : cc3621-25 Inst : MS3E
Misc : op93596,e3e3639 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\msdchem\1\METHODS\M3E3623.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MFri May 06 22:35:22 2016
Last Update : Fri May 06 22:35:22 2016
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102		1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	55	0.04	4.45
103		Benzaldehyde	1.084	0.886	18.3	46#	0.03	4.13
104		Acenaphthene-d10a	1.000	1.000	0.0	74	0.05	7.51
105		1,2,4,5-Tetrachlorobenzen	0.495	0.618	-24.8#	97	0.04	6.43
106		Phenanthrene-d10a	1.000	1.000	0.0	78	0.06	9.67
107		Atrazine	0.102	0.127	-24.5#	100	0.06	9.35
108	I	Chrysene-d12a	1.000	1.000	0.0	93	0.06	13.85
109	T	benzidine	0.492	0.254	48.4#	47#	0.05	11.85
110	I	Naphthalene-d8a	1.000	1.000	0.0	52	0.05	5.51
111	T	Hydroquinone	0.275	0.309	-12.4	54	0.11	6.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3E82672a.D M3E3623.M Mon May 09 12:00:00 2016 MS3E

Initial Calibration Summary

Job Number: JC19644
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: JC19644 **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: JC19644 **Sample:** E3M2855-ICV2855
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3M60772.D
Project: BMSMC, Building 5 Area, PR

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: JC19644 **Sample:** E3M2855-ICV2855
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3M60773.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

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

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

Min. RRF     :   0.050  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

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

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

Initial Calibration Verification

Job Number: JC19644
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: JC19644 **Sample:** E3M2874-CC2855
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3M61121.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E3M2874\3m61121.D          Vial: 2
Acq On    :  6 May 2016   9:29 am                    Operator: linseyk
Sample    : cc2855-1                                 Inst    : MS3M
Misc      : op93629a,e3m2874                         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 May 06 14:17:24 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	66	0.00	10.43
2	t	1,4-dioxane	0.207	0.206	0.5	65	-0.10	2.16
3	S	2-Fluorophenol	0.500	0.490	2.0	64	-0.06	4.37
4	S	Phenol-d5	0.828	0.788	4.8	61	0.00	5.98
5		Phenol	0.893	0.822	8.0	58	0.00	5.99
6	t	bis(2-Chloroethyl)ether	0.675	0.582	13.8	54	0.02	6.11
7	S	Nitrobenzene-d5	0.770	0.686	10.9	56	-0.02	7.55
8	t	Nitrobenzene	0.836	0.695	16.9	53	-0.04	7.57
9	t	Naphthalene	2.223	2.052	7.7	62	0.16	8.94
10	t	Hexachlorobutadiene	0.387	0.403	-4.1	66	0.00	9.23
11	t	2-Methylnaphthalene	1.158	1.104	4.7	61	0.00	10.30
12	t	1-Methylnaphthalene	1.559	1.145	26.6#	54	0.00	10.49
13		Hexachlorocyclopentadiene	0.308	0.279	9.4	52	0.02	10.65
14	I	Fluorene-d10	1.000	1.000	0.0	66	0.00	13.43
15	S	2-Fluorobiphenyl	1.099	1.024	6.8	61	-0.03	11.10
16	t	Acenaphthylene	1.385	1.289	6.9	55	-0.01	12.09
17	t	Acenaphthene	0.925	0.876	5.3	59	0.00	12.44
		----------	True	Calc.	% Drift	----------		
18	t	4,6-dinitro-2-methylpheno	5.000	4.784	4.3	63	0.02	13.66
		----------	AvgRF	CCRF	% Dev	----------		
19	t	Fluorene	1.110	1.028	7.4	57	0.02	13.49
20	S	2,4,6-Tribromophenol	0.125	0.125	0.0	63	0.03	13.98
21	I	Fluoranthene-d10	1.000	1.000	0.0	63	0.00	17.64
22	t	Hexachlorobenzene	0.189	0.183	3.2	61	-0.05	14.56
		----------	True	Calc.	% Drift	----------		
23	t	Pentachlorophenol	5.000	4.050	19.0	49	-0.01	15.01
		----------	AvgRF	CCRF	% Dev	----------		
24	t	Phenanthrene	0.980	0.931	5.0	59	0.00	15.40
25	t	Anthracene	0.865	0.839	3.0	56	0.00	15.49
26	t	Fluoranthene	1.231	1.085	11.9	59	0.00	17.67
27	t	Pyrene	1.144	1.046	8.6	56	0.00	18.07
28	S	Terphenyl-d14	0.580	0.618	-6.6	69	0.02	18.46
29	t	Benzo[a]anthracene	1.097	0.948	13.6	56	0.22	20.16
30	t	Chrysene	1.051	0.980	6.8	57	-0.03	20.22
31	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	67	0.00	22.24

Continuing Calibration Summary

Job Number: JC19644 **Sample:** E3M2874-CC2855
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3M61121.D
Project: BMSMC, Building 5 Area, PR

32	t	Benzo[b]fluoranthene	1.331	1.227	7.8	61	0.01	21.83
33	t	Benzo[k]fluoranthene	1.232	1.124	8.8	61	0.01	21.87
34	t	Benzo[a]pyrene	1.240	1.099	11.4	60	-0.14	22.27
35	t	Indeno[1,2,3-cd]pyrene	1.260	1.308	-3.8	65	0.01	23.75
36	t	Dibenz[a,h]anthracene	1.039	0.983	5.4	61	0.01	23.79
37	t	Benzo[g,h,i]perylene	1.095	1.131	-3.3	66	0.00	24.11

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3m60763a.D M3M2855SIM.M Fri May 06 14:53:31 2016 RPT1

Initial Calibration Summary

Job Number: JC19644
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: JC19644 **Sample:** E4M2881-ICC2881
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4M64724.D
Project: BMSMC, Building 5 Area, PR

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

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

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

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

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

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

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

6.7.22

6

Initial Calibration Verification

Job Number: JC19644
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: JC19644 **Sample:** E4M2881-ICV2881
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4M64733.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

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

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

Min. RRF     :   0.050  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

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

Initial Calibration Verification

Job Number: JC19644
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: JC19644 **Sample:** E4M2881-ICV2881
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4M64734.D
Project: BMSMC, Building 5 Area, PR

```
                    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: JC19644 **Sample:** E4M2910-CC2881
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4M65170.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E4M2910\4m65170.D          Vial: 2
Acq On    :  9 May 2016  10:32 am                    Operator: linseyk
Sample    : cc2881-1                                 Inst    : GCMS4M
Misc      : op93541a,e4m2910                         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  : Sat Apr 23 14:44:32 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	104	-0.02	10.68
2	S	2-Fluorophenol	0.524	0.516	1.5	97	-0.02	4.70
3	S	Phenol-d5	0.881	0.896	-1.7	100	-0.02	6.29
4	t	Phenol	0.902	0.946	-4.9	101	0.00	6.31
5	t	bis(2-Chloroethyl)ether	0.680	0.708	-4.1	101	-0.02	6.38
6	S	Nitrobenzene-d5	0.790	0.852	-7.8	106	-0.02	7.82
7	t	Naphthalene	2.251	2.300	-2.2	102	-0.02	9.20
8	t	Hexachlorobutadiene	0.556	0.587	-5.6	104	-0.03	9.49
9	t	2-Methylnaphthalene	0.979	1.347	-37.6#	145	-0.02	10.56
		----------	True	Calc.	% Drift	----------		
10	t	Hexachlorocyclopentadiene	2.000	2.430	-21.5#	137	-0.02	10.92
		----------	AvgRF	CCRF	% Dev	----------		
11	S	2-Fluorobiphenyl	1.155	1.183	-2.4	113	-0.02	11.35
12	I	Fluorene-d10	1.000	1.000	0.0	100	-0.02	13.66
13	t	Acenaphthylene	0.917	0.902	1.6	99	-0.02	12.33
14	t	Acenaphthene	0.590	0.590	0.0	101	-0.02	12.68
15	t	Dibenzofuran	0.879	0.920	-4.7	96	-0.02	13.04
16	t	Fluorene	1.067	1.043	2.2	92	-0.02	13.70
17	S	2,4,6-Tribromophenol	0.213	0.194	8.9	81	-0.02	14.21
18	t	Hexachlorobenzene	0.418	0.408	2.4	96	0.00	14.83
19	t	Pentachlorophenol	0.171	0.195	-14.0	99	0.00	15.26
20	t	Phenanthrene	1.438	1.500	-4.3	102	-0.02	15.61
21	t	Anthracene	1.362	1.448	-6.3	100	-0.02	15.71
22	I	Fluoranthene-d10	1.000	1.000	0.0	102	-0.03	17.84
23	t	Fluoranthene	1.080	1.121	-3.8	112	-0.03	17.87
24	t	Pyrene	1.065	1.083	-1.7	103	-0.03	18.27
25	S	Terphenyl-d14	0.540	0.598	-10.7	112	-0.03	18.65
26	t	Benzo[a]anthracene	0.987	0.959	2.8	98	-0.06	20.34
27	t	Chrysene	0.966	0.990	-2.5	105	-0.03	20.42
28	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	124	0.00	22.44
29	t	Benzo[b]fluoranthene	1.439	1.127	21.7#	94	0.02	22.01
30	t	Benzo[k]fluoranthene	1.205	1.087	9.8	116	-0.03	22.05
31	t	Benzo[a]pyrene	1.193	1.154	3.3	118	0.01	22.46
32	t	Indeno[1,2,3-cd]pyrene	1.492	1.325	11.2	109	0.01	23.98
33	t	Dibenz[a,h]anthracene	1.201	1.099	8.5	121	0.01	24.02
34	t	Benzo[g,h,i]perylene	1.260	1.113	11.7	109	0.03	24.36

Continuing Calibration Summary

Job Number: JC19644 **Sample:** E4M2910-CC2881
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4M65170.D
Project: BMSMC, Building 5 Area, PR

35	I	1-Methylnaphthalene-d10a	1.000	1.000	0.0	104	-0.02	10.68
36	t	1,4-Dioxane	0.260	0.239	8.1	100	-0.05	2.42
37	t	1-Methylnaphthalene	0.935	1.216	-30.1#	140	-0.02	10.75
38	I	Fluorene-d10a	1.000	1.000	0.0	100	-0.02	13.66
		----------	True	Calc.	% Drift	----------		
39	t	4,6-dinitro-2-methylpheno	5.000	6.817	-36.3#	147	-0.02	13.89
		----------	AvgRF	CCRF	% Dev	----------		
40	t	1,2-Diphenylhydrazine	0.947	0.999	-5.5	91	-0.02	14.06
41	t	n-nitrosodiphenylamine	0.702	0.637	9.3	80	-0.02	14.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m64724.D M4M2881SIM.M Tue May 10 10:34:38 2016 MANAGER

Initial Calibration Summary

Job Number: JC19644 **Sample:** E6P1209-ICC1209
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6P25928.D
Project: BMSMC, Building 5 Area, PR

Response Factor Report MS6P

Method : C:\MSDCHEM\1\METHODS\M6P1209.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuMon May 16 17:22:40 2016
Last Update : Mon May 16 17:22:40 2016
Response via : Initial Calibration

Calibration Files
2 =6p25924.D 5 =6p25931.D 25 =6p25929.D 80 =6p25927.D
100 =6p25926.D 50 =6p25928.D 1 =6p25925.D 10 =6p25930.D

Compound	2	5	25	80	100	50	1	10	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	----------ISTD----------									
2) 1,4-Dioxane	0.758	0.720	0.669	0.654	0.650	0.667	0.925	0.639	0.710	13.45
3) Pyridine	1.882	1.894	1.743	1.747	1.775	1.779	1.850	1.714	1.798	3.79
4) N-Nitrosodim	1.207	1.111	1.056	1.048	1.056	1.067	1.053	0.992	1.074	5.85
5) 2-Fluorophen	1.635	1.645	1.473	1.440	1.451	1.470	1.666	1.414	1.524	6.88
6) Indene	2.899	3.049	2.684	2.462	2.384	2.611	3.046	2.634	2.721	9.29
7) Cumene	4.188	4.260	3.802	3.535	3.430	3.680	4.280	3.712	3.861	8.71
8) Phenol-d5	2.107	2.190	1.943	1.866	1.874	1.922	2.141	1.919	1.995	6.48
9) Phenol	2.238	2.236	2.086	2.112	2.097	2.077	2.277	1.994	2.140	4.62
10) Aniline	2.723	2.778	2.230	2.141	2.121	2.187	2.860	2.372	2.427	12.78
11) bis(2-Chloro	1.638	1.665	1.484	1.415	1.414	1.461	1.624	1.463	1.521	6.85
12) 2-Chlorophen	1.626	1.662	1.522	1.462	1.452	1.486	1.700	1.500	1.551	6.23
13) Decane	2.253	2.211	1.901	1.735	1.681	1.842	2.386	1.909	1.990	13.05
14) 1,3-Dichloro	1.744	1.798	1.580	1.496	1.488	1.553	1.777	1.553	1.624	7.90
15) 1,4-Dichloro	1.748	1.835	1.594	1.504	1.484	1.574	1.839	1.587	1.646	8.64
16) Benzyl alcoh	1.111	1.144	1.035	0.993	0.995	1.028	1.151	1.025	1.060	6.13
17) 1,2-Dichloro	1.708	1.685	1.485	1.402	1.385	1.466	1.861	1.476	1.559	10.98
18) Acetophenone	2.475	2.547	2.166	1.998	1.950	2.124	2.490	2.216	2.246	10.29
19) 2-Methylphen	1.544	1.588	1.432	1.376	1.358	1.415	1.680	1.421	1.477	7.73
20) 2,2'-oxybis(	0.599	0.594	0.528	0.493	0.491	0.514	0.622	0.513	0.544	9.61
21) 3&4-Methylph	1.686	1.678	1.523	1.448	1.413	1.514	1.721	1.479	1.558	7.66
22) n-Nitroso-di	1.483	1.484	1.282	1.200	1.207	1.257	1.516	1.287	1.339	9.87
23) Hexachloroet	0.509	0.532	0.478	0.463	0.459	0.476	0.539	0.466	0.490	6.49
24) I Naphthalene-d8	----------ISTD----------									
25) Nitrobenzene	0.482	0.492	0.437	0.419	0.411	0.422	0.474	0.431	0.446	7.03
26) Nitrobenzene	0.507	0.523	0.456	0.432	0.423	0.436	0.501	0.450	0.466	8.33
27) Quinoline	0.788	0.817	0.730	0.696	0.698	0.707	0.822	0.709	0.746	7.25
28) Isophorone	0.849	0.882	0.770	0.716	0.713	0.731	0.908	0.756	0.791	9.83
29) 2-Nitropheno	0.204	0.215	0.196	0.185	0.180	0.189	0.214	0.190	0.197	6.66
30) 2,4-Dimethyl	0.366	0.401	0.351	0.364	0.358	0.353	0.392	0.338	0.365	5.81
31) Benzoic acid		0.164	0.212	0.264	0.281	0.244		0.162	0.221	22.90
----- Quadratic regression -----								Coefficient =		0.9998
Response Ratio = -0.01041 + 0.21320 *A + 0.02868 *A^2										
32) bis(2-Chloro	0.499	0.490	0.433	0.408	0.402	0.415	0.504	0.424	0.447	9.69
33) 2,4-Dichloro	0.301	0.303	0.271	0.265	0.259	0.266	0.318	0.261	0.281	8.27
34) 2,6-Dichloro	0.298	0.290	0.268	0.249	0.244	0.256	0.298	0.256	0.270	8.21
35) 1,3,5-Trichl	0.350	0.340	0.301	0.275	0.264	0.291	0.347	0.300	0.308	10.78
36) 1,2,4-Trichl	0.315	0.318	0.290	0.274	0.268	0.280	0.336	0.280	0.295	8.39
37) 1,2,3-Trichl	0.318	0.319	0.285	0.270	0.260	0.274	0.323	0.274	0.290	8.79
38) Naphthalene	1.249	1.238	1.099	1.027	0.989	1.056	1.295	1.074	1.128	10.20
39) 4-Chloroanil	0.505	0.507	0.451	0.417	0.402	0.427	0.533	0.441	0.460	10.44
40) 2,3-Dichloro	0.379	0.380	0.343	0.314	0.310	0.323	0.400	0.334	0.348	9.80
41) Caprolactam	0.190	0.195	0.190	0.179	0.187	0.184	0.215	0.173	0.189	6.64
42) Hexachlorobu	0.165	0.162	0.150	0.141	0.135	0.142	0.165	0.146	0.151	7.82

```
43) 4-Chloro-3-m 0.380 0.361 0.343 0.330 0.329 0.333 0.376 0.326 0.347   6.33
44) 2-Methylnaph 0.674 0.678 0.597 0.553 0.541 0.568 0.646 0.589 0.606   8.90
45) 1-Methylnaph 0.663 0.684 0.613 0.569 0.559 0.593 0.686 0.610 0.622   8.03
46) Dimethylnaph 0.682 0.688 0.631 0.584 0.580 0.607 0.684 0.620 0.635   7.09

47) I   Acenaphthene-d10      ----------------ISTD---------------------
48) Hexachlorocy 0.254 0.295 0.290 0.300 0.295 0.291 0.261 0.255 0.280   7.03
49) 2,4,6-Trichl 0.334 0.353 0.324 0.323 0.309 0.320 0.329 0.306 0.325   4.50
50) 2,4,5-Trichl 0.363 0.371 0.352 0.358 0.354 0.353 0.372 0.328 0.356   3.87
51) 2-Fluorobiph 1.376 1.409 1.247 1.235 1.163 1.225 1.457 1.205 1.290   8.38
52) 2-Chloronaph 1.234 1.265 1.103 1.080 1.027 1.067 1.285 1.073 1.142   8.94
53) Biphenyl     1.662 1.690 1.489 1.441 1.372 1.456 1.726 1.433 1.534   8.90
54) 2-Nitroanili 0.414 0.416 0.433 0.442 0.437 0.430 0.369 0.386 0.416   6.25
55) Dimethylphth 1.418 1.451 1.286 1.262 1.219 1.260 1.513 1.247 1.332   8.33
56) Acenaphthyle 2.056 2.104 1.882 1.839 1.761 1.839 2.012 1.819 1.914   6.56
57) 2,6-Dinitrot 0.243 0.299 0.282 0.288 0.284 0.285 0.242 0.262 0.273   7.87
58) 3-Nitroanili 0.337 0.379 0.357 0.353 0.351 0.348 0.326 0.338 0.348   4.56
59) Acenaphthene 1.326 1.285 1.166 1.143 1.102 1.140 1.358 1.135 1.207   8.25
60) 2,4-Dinitrop 0.033 0.076 0.126 0.160 0.166 0.146       0.086 0.113  43.83
         ----- Quadratic regression -----                Coefficient =  0.9997
              Response Ratio = -0.01687 + 0.13321 *A + 0.00741 *A^2

61) 4-Nitropheno 0.206 0.196 0.212 0.219 0.224 0.216 0.184 0.182 0.205   7.76
62) Dibenzofuran 1.796 1.732 1.551 1.473 1.417 1.496 1.833 1.540 1.605   9.88
63) 2,4-Dinitrot 0.366 0.393 0.390 0.386 0.371 0.383 0.291 0.353 0.367   9.06
64) 2,3,4,6-Tetr 0.270 0.252 0.249 0.264 0.262 0.258 0.241 0.224 0.253   5.83
65) Diethylphtha 1.509 1.456 1.332 1.283 1.259 1.284 1.450 1.277 1.356   7.32
66) Fluorene     1.525 1.451 1.319 1.267 1.230 1.281 1.404 1.274 1.344   7.76
67) 4-Chlorophen 0.690 0.665 0.582 0.559 0.539 0.557 0.659 0.583 0.604   9.61
68) 4-Nitroanili 0.410 0.386 0.359 0.351 0.355 0.351 0.358 0.350 0.365   5.93

69) I   Phenanthrene-d10      ----------------ISTD---------------------
70) 4,6-Dinitro-       0.083 0.111 0.132 0.137 0.123       0.082 0.111  21.48
         ----- Quadratic regression -----                Coefficient =  0.9999
              Response Ratio = -0.00664 + 0.11655 *A + 0.00914 *A^2

71) n-Nitrosodip 0.581 0.604 0.552 0.537 0.522 0.538 0.599 0.537 0.559   5.61
72) 1,2-Diphenyl 1.079 1.112 0.993 0.956 0.928 0.964 1.039 0.970 1.005   6.45
73) 2,4,6-Tribro 0.110 0.096 0.100 0.105 0.104 0.104 0.091 0.091 0.100   6.86
74) 4-Bromopheny 0.221 0.214 0.198 0.192 0.187 0.194 0.213 0.190 0.201   6.37
75) Hexachlorobe 0.223 0.234 0.215 0.212 0.204 0.215 0.244 0.211 0.220   6.03
76) Pentachlorop 0.130 0.107 0.128 0.141 0.144 0.138       0.101 0.127  13.18
77) Phenanthrene 1.264 1.249 1.125 1.091 1.046 1.101 1.301 1.100 1.160   8.28
78) Anthracene   1.293 1.223 1.124 1.095 1.068 1.110 1.195 1.086 1.149   6.90
79) Carbazole    1.181 1.161 1.057 1.034 0.999 1.039 1.170 1.014 1.082   7.00
80) Di-n-butylph 1.534 1.402 1.364 1.323 1.295 1.333 1.367 1.272 1.361   5.96
81) Fluoranthene 1.379 1.286 1.205 1.163 1.144 1.178 1.348 1.153 1.232   7.54
82) Octadecane   0.670 0.629 0.614 0.581 0.555 0.590 0.566 0.582 0.598   6.25

83) I   Chrysene-d12          ----------------ISTD---------------------
84) Pyrene       1.477 1.465 1.323 1.307 1.237 1.286 1.478 1.281 1.357   7.35
85) Terphenyl-d1 0.901 0.885 0.825 0.834 0.791 0.810 0.862 0.795 0.838   4.87
86) Butylbenzylp 0.721 0.513 0.602 0.635 0.618 0.614 0.577 0.501 0.598  11.71
87) Butyl steara 0.529 0.372 0.439 0.460 0.434 0.446 0.375 0.365 0.427  13.05
88) Benzo[a]anth 1.354 1.212 1.140 1.138 1.102 1.117 1.372 1.064 1.188   9.78
89) 3,3'-Dichlor 0.460 0.346 0.415 0.430 0.423 0.422 0.404 0.360 0.407   9.22
90) Chrysene     1.256 1.205 1.119 1.108 1.075 1.098 1.272 1.074 1.151   7.02
91) bis(2-Ethylh 1.210 0.634 0.829 0.885 0.858 0.854 0.842 0.679 0.849  20.28
         ----- Quadratic regression -----                Coefficient =  0.9990
              Response Ratio = -0.01528 + 0.86972 *A + 0.00141 *A^2
```

Initial Calibration Summary

Job Number: JC19644 **Sample:** E6P1209-ICC1209
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6P25928.D
Project: BMSMC, Building 5 Area, PR

```
 92) I   Perylene-d12          ----------------ISTD---------------------
 93) Di-n-octylph 1.722 0.865 1.391 1.574 1.479 1.507 1.356 1.037 1.366  20.75
          ----- Quadratic regression -----                Coefficient =  0.9976
               Response Ratio = -0.06080 + 1.59412 *A + -0.02502 *A^2

 94) Benzo[b]fluo 1.360 1.133 1.237 1.293 1.298 1.264 1.385 1.149 1.265   7.13
 95) Benzo[k]fluo 1.363 1.348 1.208 1.149 1.036 1.171 1.360 1.149 1.223   9.91
 96) Benzo[a]pyre 1.197 0.999 1.077 1.100 1.060 1.105 1.147 0.966 1.081   6.90
 97) Indeno[1,2,3 1.182 0.850 1.118 1.221 1.147 1.197 1.187 0.887 1.099  13.27
 98) Dibenz(a,h)a 1.128 0.720 1.033 1.057 0.997 1.081 1.022 0.835 0.984  13.93
 99) Dibenz[a,h]a 1.336 1.053 1.212 1.242 1.157 1.247 1.210 1.057 1.189   8.14
100) 7,12-Dimethy 0.531 0.499 0.545 0.571 0.545 0.556 0.510 0.469 0.528   6.35
101) Benzo[g,h,i] 1.279 1.174 1.208 1.207 1.115 1.230 1.251 1.064 1.191   5.99


 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          M6P1209.M         Mon May 16 17:23:57 2016   ACLIMS
```

Initial Calibration Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E6P1210-ICC1210
Lab FileID: 6P25940.D

```
                         Response Factor Report  MS6P

  Method       : C:\MSDCHEM\1\METHODS\M6P1209.M (RTE Integrator)
  Title        : Semi Volatile  GC/MS,zb-5msi 30m x .25mm x .25MoTuMon May 16 17:22:40 2016
  Last Update  : Mon May 16 17:22:40 2016
  Response via : Initial Calibration

  Calibration Files
  2   =6p25944.D  5   =6p25943.D  25  =6p25941.D  80  =6p25939.D
  100 =6p25938.D  50  =6p25940.D  1   =6p25945.D  10  =6p25942.D

   Compound          2     5     25    80    100   50    1     10    Avg %RSD
102)     1,4-Dichlorobenzene-d ----------------ISTD---------------------
103) Benzaldehyde 1.302 1.304 1.180 1.176 1.008 1.185 1.327 1.157 1.205   8.70

104)     Acenaphthene-d10a     ----------------ISTD---------------------
105) 1,2,4,5-Tetr 0.526 0.519 0.475 0.488 0.472 0.481 0.533 0.473 0.496   5.18

106)     Phenanthrene-d10a     ----------------ISTD---------------------
107) Atrazine     0.093 0.099 0.100 0.107 0.109 0.108 0.095 0.088 0.100   7.52
108) o-Terphenyl  0.561 0.596 0.534 0.538 0.539 0.548 0.570 0.529 0.552   4.10
109) 1-Chloroocta 0.325 0.387 0.383 0.382 0.389 0.393 0.325 0.364 0.368   7.65

110) I   Chrysene-d12a         ----------------ISTD---------------------
111) benzidine    0.064 0.097 0.322 0.479 0.472 0.420       0.141 0.285  63.63
          ----- Quadratic regression -----                Coefficient =  0.9971
               Response Ratio = -0.04616 + 0.41515 *A + 0.03379 *A^2

112) I   Naphthalene-d8a       ----------------ISTD---------------------
113) Hydroquinone 0.374 0.396 0.385 0.378 0.393 0.377 0.368 0.357 0.378   3.42


 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           M6P1209.M         Mon May 16 17:30:56 2016   ACLIMS
```

Initial Calibration Verification

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E6P1210-ICV1210
Lab FileID: 6P25950A.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e6p1210\6p25950a.D Vial: 14
Acq On : 13 May 2016 8:14 pm Operator: ariellec
Sample : icv1210-50 Inst : MS6P
Misc : op93693,e6p1210 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M6P1209.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuMon May 16 09:26:46 2016
Last Update : Mon May 16 09:26:46 2016
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	132	0.00	4.87
103	Benzaldehyde	1.205	1.210	-0.4	135	0.00	4.53
106	Phenanthrene-d10a	1.000	1.000	0.0	127	0.00	10.30
107	Atrazine	0.100	0.111	-11.0	131	0.02	9.94

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6p25940a.D M6P1209.M Mon May 16 11:53:28 2016 ACLIMS

Initial Calibration Verification

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E6P1210-ICV1209
Lab FileID: 6P25950.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e6p1210\6p25950.D Vial: 14
Acq On : 13 May 2016 8:14 pm Operator: ariellec
Sample : icv1209-50 Inst : MS6P
Misc : op93693,e6p1210 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M6P1209.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuMon May 16 09:26:46 2016
Last Update : Mon May 16 09:26:46 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	121	0.00	4.87
2	t	1,4-Dioxane	0.710	0.637	10.3	116	0.01	2.47
6	t	Indene	2.721	2.607	4.2	121	0.00	5.07
7	t	Cumene	3.861	3.550	8.1	117	0.00	4.26
13	t	Decane	1.990	1.604	19.4	106	0.00	4.74
18	t	Acetophenone	2.246	2.034	9.4	116	0.00	5.19
24	I	Naphthalene-d8	1.000	1.000	0.0	116	0.00	6.00
27	t	Quinoline	0.746	0.678	9.1	111	0.00	6.37
40	t	2,3-Dichloroaniline	0.348	0.286	17.8	103	0.00	7.11
41	t	Caprolactam	0.189	0.156	17.5	98	0.00	6.43
45	t	1-Methylnaphthalene	0.622	0.567	8.8	111	0.00	6.89
46	t	Dimethylnaphthalene	0.635	0.580	8.7	111	0.00	7.55
47	I	Acenaphthene-d10	1.000	1.000	0.0	111	0.00	8.11
48	t	Hexachlorocyclopentadiene	0.280	0.140	0.0	106	0.00	6.96
53	t	Biphenyl	1.534	1.462	4.7	111	0.00	7.35
69	I	Phenanthrene-d10	1.000	1.000	0.0	110	0.00	10.30
82	t	Octadecane	0.598	0.544	9.0	101	0.00	10.24
92	I	Perylene-d12	1.000	1.000	0.0	87	0.00	16.60
100	t	7,12-Dimethylbenz(a)anthr	0.528	0.519	1.7	81	0.00	16.08

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6p25940a.D M6P1209.M Mon May 16 11:53:26 2016 ACLIMS

Initial Calibration Verification

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E6P1210-ICV1209
Lab FileID: 6P25951.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e6p1210\6p25951.D Vial: 15
Acq On : 13 May 2016 8:42 pm Operator: ariellec
Sample : icv1209-50 Inst : MS6P
Misc : op93693,e6p1210 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M6P1209.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuMon May 16 09:26:46 2016
Last Update : Mon May 16 09:26:46 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	113	0.00	14.49
89 t	3,3'-Dichlorobenzidine	0.407	0.372	8.6	100	0.00	14.48

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6p25940a.D M6P1209.M Mon May 16 12:05:49 2016 ACLIMS

Initial Calibration Verification

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E6P1210-ICV1210
Lab FileID: 6P25952.D

Evaluate Continuing Calibration Report

```
  Data File : C:\msdchem\1\DATA\e6p1210\6p25952.D          Vial: 16
  Acq On    : 13 May 2016   9:09 pm                    Operator: ariellec
  Sample    : icv1210-50                               Inst    : MS6P
  Misc      : op93693,e6p1210                          Multiplr: 1.00
  MS Integration Params: lscint.p

  Method       : C:\MSDCHEM\1\METHODS\M6P1209.M (RTE Integrator)
  Title        : Semi Volatile  GC/MS,zb-5msi 30m x .25mm x .25MoTuMon May 16 09:26:46 2016
  Last Update  : Mon May 16 09:26:46 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.
  ---------------------------------------------------------------------------
           ---------------------- AvgRF   CCRF     % Dev   -------------
112 I   Naphthalene-d8             1.000   1.000      0.0  108   0.00    6.00
113 T   Hydroquinone               0.378   0.370      2.1  106   0.02    6.41

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    (#) = Out of Range               SPCC's out = 0  CCC's out = 0
     6p25940a.D M6P1209.M        Mon May 16 09:56:40 2016   ACLIMS
```

Initial Calibration Verification

Job Number: JC19644 **Sample:** E6P1211-ICV1209
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6P25954.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E6P1211\6p25954.D Vial: 2
Acq On : 16 May 2016 9:15 am Operator: ariellec
Sample : ICV1209-50 Inst : MS6P
Misc : op93693,e6p1211 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M6P1209.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuMon May 16 09:26:46 2016
Last Update : Mon May 16 09:26:46 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	124	0.00	4.87
9	t	Phenol	2.140	1.823	14.8	109	0.03	4.61
12	t	2-Chlorophenol	1.551	1.410	9.1	117	0.02	4.71
19	t	2-Methylphenol	1.477	1.292	12.5	113	0.02	5.08
21	t	3&4-Methylphenol	1.558	1.364	12.5	111	0.03	5.21
24	I	Naphthalene-d8	1.000	1.000	0.0	109	0.00	6.00
29	t	2-Nitrophenol	0.197	0.187	5.1	108	0.01	5.63
30	t	2,4-Dimethylphenol	0.365	0.390	-6.8	121	0.02	5.67
		----------	True	Calc.	% Drift	----------		
31	t	Benzoic acid	50.000	53.582	-7.2	117	0.10	5.82
33	t	2,4-Dichlorophenol	0.281	0.278	1.1	114	0.02	5.86
34	t	2,6-Dichlorophenol	0.270	0.272	-0.7	116	0.01	6.08
43	t	4-Chloro-3-methylphenol	0.347	0.333	4.0	109	0.03	6.61
47	I	Acenaphthene-d10	1.000	1.000	0.0	107	0.00	8.11
49	t	2,4,6-Trichlorophenol	0.325	0.354	-8.9	119	0.02	7.12
50	t	2,4,5-Trichlorophenol	0.356	0.353	0.8	107	0.02	7.16
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	100.000	46.925	6.15	88	0.02	8.22
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.205	0.225	-9.8	111	0.06	8.35
64		2,3,4,6-Tetrachlorophenol	0.253	0.277	-9.5	115	0.02	8.59
69	I	Phenanthrene-d10	1.000	1.000	0.0	107	0.00	10.30
70	t	4,6-Dinitro-2-methylpheno	50.000	47.679	4.6	102	0.02	8.99
76	t	Pentachlorophenol	0.127	0.064	-0.1	98	0.02	10.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6p25940a.D M6P1209.M Mon May 16 10:09:28 2016 ACLIMS

Initial Calibration Verification

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E6P1211-ICV1209
Lab FileID: 6P25955.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E6P1211\6p25955.D Vial: 3
Acq On : 16 May 2016 9:42 am Operator: ariellec
Sample : ICV1209-50 Inst : MS6P
Misc : op93693,e6p1211 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M6P1209.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuMon May 16 09:26:46 2016
Last Update : Mon May 16 09:26:46 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	4.87
10		Aniline	2.427	1.985	18.2	99	0.03	4.64
16	t	Benzyl alcohol	1.060	1.002	5.5	106	0.03	5.00
24	I	Naphthalene-d8	1.000	1.000	0.0	105	0.00	6.00
39	t	4-Chloroaniline	0.460	0.381	17.2	94	0.02	6.08
44	t	2-Methylnaphthalene	0.606	0.581	4.1	108	0.00	6.77
47	I	Acenaphthene-d10	1.000	1.000	0.0	106	0.00	8.11
54	t	2-Nitroaniline	0.416	0.388	6.7	95	0.03	7.52
58	t	3-Nitroaniline	0.348	0.293	15.8	89	0.03	8.08
62	t	Dibenzofuran	1.605	1.594	0.7	113	0.00	8.40
68	t	4-Nitroaniline	0.365	0.300	17.8	90	0.04	8.96
69	I	Phenanthrene-d10	1.000	1.000	0.0	108	0.00	10.30
79	t	Carbazole	1.082	1.024	5.4	107	0.02	10.70

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6p25940a.D M6P1209.M Mon May 16 10:05:50 2016 ACLIMS

Initial Calibration Verification

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E6P1212-ICV1209
Lab FileID: 6P25959.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e6p1212\6p25959.D Vial: 2
Acq On : 16 May 2016 11:13 am Operator: ariellec
Sample : icv1209-50 Inst : MS6P
Misc : op93693,e6p1212 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M6P1209.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuMon May 16 09:26:46 2016
Last Update : Mon May 16 09:26:46 2016
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	118	-0.01	4.86
5	S	2-Fluorophenol	1.524	1.332	12.6	107	0.03	3.88
8	S	Phenol-d5	1.995	1.627	18.4	100	0.02	4.59
24	I	Naphthalene-d8	1.000	1.000	0.0	107	-0.01	5.99
25	S	Nitrobenzene-d5	0.446	0.404	9.4	102	0.00	5.32
47	I	Acenaphthene-d10	1.000	1.000	0.0	107	-0.01	8.10
51	S	2-Fluorobiphenyl	1.290	1.223	5.2	107	0.00	7.21
69	I	Phenanthrene-d10	1.000	1.000	0.0	107	-0.01	10.29
73	S	2,4,6-Tribromophenol	0.100	0.077	23.0	78	0.00	9.24
83	I	Chrysene-d12	1.000	1.000	0.0	98	-0.01	14.48
85	S	Terphenyl-d14	0.838	0.774	7.6	93	-0.01	12.85

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6p25940a.D M6P1209.M Mon May 16 11:37:08 2016 ACLIMS

Initial Calibration Verification

Job Number: JC19644 **Sample:** E6P1212-ICV1209
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6P25960.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e6p1212\6p25960.D Vial: 3
Acq On : 16 May 2016 11:40 am Operator: ariellec
Sample : icv1209-50 Inst : MS6P
Misc : op93693,e6p1212 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M6P1209.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuMon May 16 17:22:40 2016
Last Update : Mon May 16 17:22:40 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	103	0.00	4.86
4	t	N-Nitrosodimethylamine	1.074	1.043	2.9	101	0.04	2.78
11	t	bis(2-Chloroethyl)ether	1.521	1.519	0.1	107	0.00	4.66
14	t	1,3-Dichlorobenzene	1.624	1.641	-1.0	109	0.00	4.82
15	t	1,4-Dichlorobenzene	1.646	1.658	-0.7	109	0.00	4.87
17	t	1,2-Dichlorobenzene	1.559	1.562	-0.2	110	0.00	5.00
20	t	2,2'-oxybis(1-Chloropropa	0.544	0.494	9.2	99	0.00	5.08
22	t	n-Nitroso-di-n-propylamin	1.339	1.203	10.2	99	0.01	5.20
23	t	Hexachloroethane	0.490	0.534	-9.0	116	0.00	5.28
24	I	Naphthalene-d8	1.000	1.000	0.0	94	0.00	5.99
26	t	Nitrobenzene	0.466	0.454	2.6	98	0.00	5.34
28	t	Isophorone	0.791	0.795	-0.5	102	0.03	5.57
32	t	bis(2-Chloroethoxy)methan	0.447	0.425	4.9	96	0.00	5.75
36	t	1,2,4-Trichlorobenzene	0.295	0.326	-10.5	109	-0.01	5.93
38	t	Naphthalene	1.128	1.136	-0.7	101	0.00	6.01
42	t	Hexachlorobutadiene	0.151	0.179	-18.5	119	-0.02	6.13
47	I	Acenaphthene-d10	1.000	1.000	0.0	93	-0.01	8.10
52	t	2-Chloronaphthalene	1.142	1.180	-3.3	103	0.00	7.36
55	t	Dimethylphthalate	1.332	1.351	-1.4	100	0.02	7.77
56	t	Acenaphthylene	1.914	1.877	1.9	95	0.00	7.91
57	t	2,6-Dinitrotoluene	0.273	0.296	-8.4	97	0.00	7.84
59	t	Acenaphthene	1.207	1.227	-1.7	100	0.00	8.15
63	t	2,4-Dinitrotoluene	0.367	0.377	-2.7	92	0.00	8.39
65	t	Diethylphthalate	1.356	1.361	-0.4	98	0.01	8.78
66	t	Fluorene	1.344	1.356	-0.9	98	0.00	8.89
67	t	4-Chlorophenyl-phenylethe	0.604	0.642	-6.3	107	-0.01	8.90
69	I	Phenanthrene-d10	1.000	1.000	0.0	92	-0.01	10.29
71	t	n-Nitrosodiphenylamine	0.559	0.589	-5.4	101	0.00	9.08
72	t	1,2-Diphenylhydrazine	1.005	0.954	5.1	91	0.00	9.14
74	t	4-Bromophenyl-phenylether	0.201	0.213	-6.0	101	0.00	9.63
75	t	Hexachlorobenzene	0.220	0.210	4.5	90	-0.01	9.69
77	t	Phenanthrene	1.160	1.174	-1.2	98	0.00	10.33
78	t	Anthracene	1.149	1.162	-1.1	97	0.00	10.41
80	t	Di-n-butylphthalate	1.361	1.375	-1.0	95	0.00	11.32
81	t	Fluoranthene	1.232	1.231	0.1	97	-0.01	12.19
83	I	Chrysene-d12	1.000	1.000	0.0	81	0.00	14.49
84	t	Pyrene	1.357	1.551	-14.3	97	0.00	12.54
86	t	Butylbenzylphthalate	0.598	0.691	-15.6	91	0.00	13.70
88	t	Benzo[a]anthracene	1.188	1.293	-8.8	93	0.00	14.47

Initial Calibration Verification

Job Number: JC19644 **Sample:** E6P1212-ICV1209
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6P25960.D
Project: BMSMC, Building 5 Area, PR

90	t	Chrysene	1.151	1.249	-8.5	92	0.00	14.52
		----------	True	Calc.	% Drift	----------		
91	t	bis(2-Ethylhexyl)phthalat	50.000	55.643	-11.3	91	0.00	14.66
		----------	AvgRF	CCRF	% Dev	----------		
92	I	Perylene-d12	1.000	1.000	0.0	78	-0.01	16.59
		----------	True	Calc.	% Drift	----------		
93	t	Di-n-octylphthalate	50.000	55.659	-11.3	88	0.00	15.65
		----------	AvgRF	CCRF	% Dev	----------		
94	t	Benzo[b]fluoranthene	1.265	1.307	-3.3	81	0.00	16.07
95	t	Benzo[k]fluoranthene	1.223	1.347	-10.1	90	-0.04	16.12
96	t	Benzo[a]pyrene	1.081	1.256	-16.2	89	0.00	16.52
97	t	Indeno[1,2,3-cd]pyrene	1.099	1.257	-14.4	82	-0.04	18.00
99	t	Dibenz[a,h]anthracene	1.189	1.266	-6.5	80	0.00	18.04
101	t	Benzo[g,h,i]perylene	1.191	1.257	-5.5	80	0.00	18.38

(#) = Out of Range SPCC's out = 0 CCC's out = 0

6p25940a.D M6P1209.M Mon May 16 17:26:53 2016 ACLIMS

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Initial Calibration Verification

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E6P1212-ICV1210
Lab FileID: 6P25960A.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e6p1212\6p25960A.D Vial: 3
Acq On : 16 May 2016 11:40 am Operator: ariellec
Sample : icv1210-50 Inst : MS6P
Misc : op93693,e6p1212 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M6P1209.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuMon May 16 09:26:46 2016
Last Update : Mon May 16 09:26:46 2016
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
104	Acenaphthene-d10a	1.000	1.000	0.0	107	-0.01	8.10
105	1,2,4,5-Tetrachlorobenzen	0.496	0.605	-22.0	135	0.00	6.96
110 I	Chrysene-d12a	1.000	1.000	0.0	100	0.00	14.49
	----------	True	Calc.	% Drift	----------		
111 T	benzidine	50.000	36.011	27.9	77	0.02	12.47

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6p25940a.D M6P1209.M Mon May 16 12:11:46 2016 ACLIMS

Continuing Calibration Summary

Job Number: JC19644 **Sample:** E6P1214-CC1209
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6P25990.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e6p1214\6p25990.D Vial: 2
Acq On : 17 May 2016 7:31 am Operator: ariellec
Sample : cc1209-25 Inst : MS6P
Misc : op93693,e6p1214 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M6P1209.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue May 17 08:48:58 2016
Last Update : Tue May 17 08:48:58 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	126	-0.01	4.85
2	t	1,4-Dioxane	0.710	0.648	8.7	122	0.00	2.46
3	t	Pyridine	1.798	1.661	7.6	120	0.05	2.81
4	t	N-Nitrosodimethylamine	1.074	0.946	11.9	113	0.00	2.73
5	S	2-Fluorophenol	1.524	1.431	6.1	122	0.00	3.86
6	t	Indene	2.721	2.546	6.4	119	0.00	5.06
7	t	Cumene	3.861	3.697	4.2	122	-0.01	4.24
8	S	Phenol-d5	1.995	1.852	7.2	120	-0.10	4.57
9	t	Phenol	2.140	2.100	1.9	127	0.00	4.58
10		Aniline	2.427	2.006	17.3	113	-0.04	4.60
11	t	bis(2-Chloroethyl)ether	1.521	1.411	7.2	120	0.00	4.64
12	t	2-Chlorophenol	1.551	1.485	4.3	123	0.00	4.69
13	t	Decane	1.990	1.759	11.6	116	-0.01	4.71
14	t	1,3-Dichlorobenzene	1.624	1.572	3.2	125	-0.01	4.80
15	t	1,4-Dichlorobenzene	1.646	1.603	2.6	126	0.00	4.86
16	t	Benzyl alcohol	1.060	0.987	6.9	120	0.00	4.96
17	t	1,2-Dichlorobenzene	1.559	1.498	3.9	127	-0.01	4.98
18	t	Acetophenone	2.246	2.032	9.5	118	0.00	5.18
19	t	2-Methylphenol	1.477	1.337	9.5	117	-0.07	5.05
20	t	2,2'-oxybis(1-Chloropropa	0.544	0.520	4.4	124	0.00	5.07
21	t	3&4-Methylphenol	1.558	1.449	7.0	120	0.00	5.17
22	t	n-Nitroso-di-n-propylamin	1.339	1.133	15.4	111	0.00	5.18
23	t	Hexachloroethane	0.490	0.497	-1.4	131	-0.01	5.26
24	I	Naphthalene-d8	1.000	1.000	0.0	123	0.00	5.98
25	S	Nitrobenzene-d5	0.446	0.412	7.6	116	0.00	5.31
26	t	Nitrobenzene	0.466	0.428	8.2	116	0.00	5.32
27	t	Quinoline	0.746	0.706	5.4	119	0.02	6.36
28	t	Isophorone	0.791	0.706	10.7	113	0.02	5.55
29	t	2-Nitrophenol	0.197	0.194	1.5	122	0.00	5.61
30	t	2,4-Dimethylphenol	0.365	0.326	10.7	114	0.00	5.64
		----------	True	Calc.	% Drift	----------		
31	t	Benzoic acid	25.000	24.174	3.3	120	0.04	5.74
		----------	AvgRF	CCRF	% Dev	----------		
32	t	bis(2-Chloroethoxy)methan	0.447	0.419	6.3	120	0.00	5.73
33	t	2,4-Dichlorophenol	0.281	0.275	2.1	125	0.00	5.83
34	t	2,6-Dichlorophenol	0.270	0.270	0.0	124	0.00	6.06
35		1,3,5-Trichlorobenzene	0.308	0.309	-0.3	127	0.00	5.61
36	t	1,2,4-Trichlorobenzene	0.295	0.303	-2.7	129	0.00	5.91
37		1,2,3-Trichlorobenzene	0.290	0.294	-1.4	127	0.00	6.14

Continuing Calibration Summary

Job Number: JC19644 **Sample:** E6P1214-CC1209
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6P25990.D
Project: BMSMC, Building 5 Area, PR

38	t	Naphthalene	1.128	1.095	2.9	123	0.00	6.00
39	t	4-Chloroaniline	0.460	0.421	8.5	115	0.00	6.05
40	t	2,3-Dichloroaniline	0.348	0.340	2.3	122	0.00	7.08
41	t	Caprolactam	0.189	0.164	13.2	106	0.07	6.47
42	t	Hexachlorobutadiene	0.151	0.156	-3.3	128	0.00	6.11
43	t	4-Chloro-3-methylphenol	0.347	0.330	4.9	119	0.02	6.57
44	t	2-Methylnaphthalene	0.606	0.594	2.0	123	0.00	6.75
45	t	1-Methylnaphthalene	0.622	0.615	1.1	124	0.00	6.86
46	t	Dimethylnaphthalene	0.635	0.631	0.6	123	0.00	7.52
47	I	Acenaphthene-d10	1.000	1.000	0.0	124	0.00	8.08
48	t	Hexachlorocyclopentadiene	0.280	0.244	12.9	104	0.00	6.93
49	t	2,4,6-Trichlorophenol	0.325	0.340	-4.6	129	0.00	7.08
50	t	2,4,5-Trichlorophenol	0.356	0.373	-4.8	131	-0.03	7.13
51	S	2-Fluorobiphenyl	1.290	1.271	1.5	126	0.00	7.19
52	t	2-Chloronaphthalene	1.142	1.108	3.0	124	0.00	7.34
53	t	Biphenyl	1.534	1.506	1.8	125	0.00	7.32
54	t	2-Nitroaniline	0.416	0.391	6.0	112	0.02	7.48
55	t	Dimethylphthalate	1.332	1.265	5.0	122	0.01	7.74
56	t	Acenaphthylene	1.914	1.859	2.9	122	0.00	7.88
57	t	2,6-Dinitrotoluene	0.273	0.286	-4.8	126	0.00	7.81
58	t	3-Nitroaniline	0.348	0.329	5.5	114	0.02	8.04
59	t	Acenaphthene	1.207	1.176	2.6	125	0.00	8.12
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	50.000	39.865	20.3#	97	0.02	8.18
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.205	0.198	3.4	116	0.04	8.29
62	t	Dibenzofuran	1.605	1.571	2.1	125	0.00	8.37
63	t	2,4-Dinitrotoluene	0.367	0.387	-5.4	122	0.01	8.37
64		2,3,4,6-Tetrachlorophenol	0.253	0.275	-8.7	136	0.00	8.54
65	t	Diethylphthalate	1.356	1.267	6.6	118	0.01	8.75
66	t	Fluorene	1.344	1.308	2.7	123	0.00	8.86
67	t	4-Chlorophenyl-phenylethe	0.604	0.604	0.0	128	0.00	8.88
68	t	4-Nitroaniline	0.365	0.303	17.0	104	0.02	8.91
69	I	Phenanthrene-d10	1.000	1.000	0.0	125	0.00	10.27
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	25.000	22.587	9.7	111	0.01	8.95
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.559	0.548	2.0	124	0.00	9.06
72	t	1,2-Diphenylhydrazine	1.005	0.894	11.0	112	0.00	9.11
73	S	2,4,6-Tribromophenol	0.100	0.081	19.0	101	0.00	9.21
74	t	4-Bromophenyl-phenylether	0.201	0.189	6.0	119	0.00	9.61
75	t	Hexachlorobenzene	0.220	0.188	14.5	109	0.00	9.66
76	t	Pentachlorophenol	0.127	0.128	-0.8	125	0.01	9.98
77	t	Phenanthrene	1.160	1.125	3.0	125	0.00	10.30
78	t	Anthracene	1.149	1.129	1.7	125	0.00	10.38
79	t	Carbazole	1.082	1.015	6.2	120	0.01	10.66
80	t	Di-n-butylphthalate	1.361	1.341	1.5	123	0.00	11.28
81	t	Fluoranthene	1.232	1.204	2.3	125	0.00	12.16
82	t	Octadecane	0.598	0.558	6.7	114	0.00	10.20
83	I	Chrysene-d12	1.000	1.000	0.0	119	0.00	14.45
84	t	Pyrene	1.357	1.405	-3.5	126	0.00	12.51
85	S	Terphenyl-d14	0.838	0.840	-0.2	121	0.00	12.83
86	t	Butylbenzylphthalate	0.598	0.648	-8.4	128	0.00	13.67

Continuing Calibration Summary

Job Number: JC19644 **Sample:** E6P1214-CC1209
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6P25990.D
Project: BMSMC, Building 5 Area, PR

87		Butyl stearate	0.427	0.452	-5.9	122	-0.01	13.82
88	t	Benzo[a]anthracene	1.188	1.217	-2.4	127	0.00	14.43
89	t	3,3'-Dichlorobenzidine	0.407	0.412	-1.2	118	0.00	14.45
90	t	Chrysene	1.151	1.208	-5.0	128	0.00	14.49
		----------	True	Calc.	% Drift	----------		
91	t	bis(2-Ethylhexyl)phthalat	25.000	27.024	-8.1	131	0.00	14.62
		----------	AvgRF	CCRF	% Dev	----------		
92	I	Perylene-d12	1.000	1.000	0.0	111	0.00	16.56
		----------	True	Calc.	% Drift	----------		
93	t	Di-n-octylphthalate	25.000	28.568	-14.3	136	0.00	15.61
		----------	AvgRF	CCRF	% Dev	----------		
94	t	Benzo[b]fluoranthene	1.265	1.358	-7.4	122	0.00	16.04
95	t	Benzo[k]fluoranthene	1.223	1.284	-5.0	118	-0.03	16.08
96	t	Benzo[a]pyrene	1.081	1.169	-8.1	121	0.00	16.48
97	t	Indeno[1,2,3-cd]pyrene	1.099	1.083	1.5	108	-0.04	17.96
98	t	Dibenz(a,h)acridine	0.984	0.974	1.0	105	0.00	17.65
99	t	Dibenz[a,h]anthracene	1.189	1.160	2.4	106	0.00	17.99
100	t	7,12-Dimethylbenz(a)anthr	0.528	0.543	-2.8	111	0.00	16.04
101	t	Benzo[g,h,i]perylene	1.191	1.147	3.7	106	0.00	18.34

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6p25941a.D M6P1209.M Tue May 17 09:03:13 2016 ACLIMS

Continuing Calibration Summary

Job Number: JC19644 **Sample:** E6P1214-CC1210
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6P25991.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e6p1214\6p25991.D Vial: 3
Acq On : 17 May 2016 7:58 am Operator: ariellec
Sample : cc1210-25 Inst : MS6P
Misc : op93693,e6p1214 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M6P1209.M (RTE Integrator)
Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue May 17 08:48:58 2016
Last Update : Tue May 17 08:48:58 2016
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	134	0.00	4.85
103	Benzaldehyde	1.205	1.136	5.7	129	0.00	4.52
104	Acenaphthene-d10a	1.000	1.000	0.0	127	0.00	8.08
105	1,2,4,5-Tetrachlorobenzen	0.496	0.516	-4.0	138	0.00	6.94
106	Phenanthrene-d10a	1.000	1.000	0.0	126	0.00	10.27
107	Atrazine	0.100	0.112	-12.0	142	0.03	9.92
108 s	o-Terphenyl	0.552	0.564	-2.2	133	0.00	10.91
109 s	1-Chlorooctadecane	0.368	0.373	-1.4	123	0.00	12.10
110 I	Chrysene-d12a	1.000	1.000	0.0	130	0.00	14.45
	----------	True	Calc.	% Drift	----------		
111 T	benzidine	25.000	22.009	12.0	124	0.00	12.44
	----------	AvgRF	CCRF	% Dev	----------		
112 I	Naphthalene-d8a	1.000	1.000	0.0	128	0.00	5.97
113 T	Hydroquinone	0.378	0.377	0.3	126	0.02	6.39

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6p25941a.D M6P1209.M Tue May 17 09:03:15 2016 ACLIMS

Initial Calibration Summary

Job Number: JC19644 **Sample:** EF6563-ICC6563
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** F156053.D
Project: BMSMC, Building 5 Area, PR

Response Factor Report MSF

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Apr 06 08:33:31 2016
Response via : Initial Calibration

Calibration Files
2 =F156057.D 5 =F156056.D 25 =F156054.D 80 =F156052.D
100 =F156051.D 50 =F156053.D 10 =F156055.D 1 =F156058.D

Compound	2	5	25	80	100	50	10	1	Avg	%RSD
1) I 1,4-Dichlorobenzene-d					ISTD					
2) 1,4-Dioxane	0.435	0.754	0.557	0.575	0.554	0.612	0.690	0.779	0.619	18.58
3) Pyridine	1.365	1.512	1.488	1.487	1.463	1.471	1.542	1.345	1.459	4.72
4) N-Nitrosodim	0.543	0.544	0.495	0.517	0.510	0.518	0.499	0.573	0.525	5.05
5) 2-Fluorophen	1.468	1.471	1.393	1.349	1.313	1.386	1.406	1.467	1.407	4.18
6) Indene	2.666	2.624	2.377	2.021	1.886	2.207	2.519	2.639	2.367	12.66
7) Cumene	3.433	3.411	3.202	2.915	2.701	3.053	3.298	3.427	3.180	8.47
8) Phenol-d5	1.803	1.781	1.689	1.611	1.551	1.667	1.761	1.822	1.711	5.68
9) Phenol	1.900	1.860	1.778	1.806	1.715	1.740	1.819	1.950	1.821	4.36
10) Aniline	2.277	2.212	1.926	1.735	1.611	1.803	2.109	2.271	1.993	13.03
11) bis(2-Chloro	1.382	1.395	1.284	1.231	1.184	1.273	1.336	1.395	1.310	6.07
12) 2-Chlorophen	1.593	1.585	1.471	1.360	1.308	1.430	1.522	1.612	1.485	7.60
13) Decane	1.432	1.362	1.270	1.113	1.067	1.177	1.318	1.482	1.278	11.67
14) 1,3-Dichloro	1.778	1.750	1.645	1.489	1.422	1.574	1.731	1.787	1.647	8.44
15) 1,4-Dichloro	1.757	1.794	1.643	1.495	1.421	1.564	1.736	1.736	1.643	8.31
16) Benzyl alcoh	1.001	0.995	0.930	0.879	0.857	0.917	0.984	1.012	0.947	6.30
17) 1,2-Dichloro	1.685	1.678	1.556	1.352	1.294	1.465	1.623	1.707	1.545	10.27
18) Acetophenone	2.011	2.022	1.799	1.511	1.427	1.643	1.941	1.967	1.790	13.16
19) 2-Methylphen	1.341	1.350	1.271	1.169	1.116	1.238	1.323	1.368	1.272	7.19
20) 2,2'-oxybis(	0.519	0.515	0.457	0.414	0.397	0.444	0.476	0.558	0.472	11.71
21) 3&4-Methylph	1.394	1.437	1.313	1.146	1.075	1.236	1.397	1.437	1.304	10.61
22) n-Nitroso-di	1.093	1.062	0.939	0.859	0.831	0.894	1.003	1.050	0.966	10.31
23) Hexachloroet	0.542	0.548	0.505	0.467	0.445	0.489	0.516	0.560	0.509	8.00
24) I Naphthalene-d8					ISTD					
25) Nitrobenzene	0.382	0.394	0.374	0.357	0.348	0.373	0.387	0.374	0.374	4.05
26) Nitrobenzene	0.398	0.419	0.397	0.372	0.356	0.390	0.411	0.388	0.391	5.14
27) Quinoline	0.814	0.815	0.776	0.728	0.694	0.750	0.806	0.802	0.773	5.81
28) Isophorone	0.695	0.714	0.677	0.616	0.588	0.648	0.701	0.705	0.668	6.90
29) 2-Nitropheno	0.205	0.219	0.210	0.186	0.177	0.200	0.217	0.210	0.203	7.26
30) 2,4-Dimethyl	0.317	0.325	0.320	0.323	0.312	0.330	0.322	0.308	0.320	2.22
31) Benzoic acid	0.238	0.266	0.282	0.304	0.269	0.296	0.273	0.211	0.267	11.38
32) bis(2-Chloro	0.458	0.456	0.418	0.381	0.364	0.400	0.440	0.452	0.421	8.62
33) 2,4-Dichloro	0.337	0.338	0.325	0.295	0.280	0.311	0.337	0.332	0.319	6.90
34) 2,6-Dichloro	0.337	0.336	0.309	0.264	0.247	0.286	0.328	0.345	0.307	12.01
35) 1,3,5-Trichl	0.373	0.382	0.340	0.279	0.265	0.311	0.362	0.377	0.336	13.70
36) 1,2,4-Trichl	0.357	0.355	0.333	0.295	0.277	0.318	0.349	0.356	0.330	9.34
37) 1,2,3-Trichl	0.361	0.353	0.324	0.286	0.270	0.313	0.338	0.361	0.326	10.48
38) Naphthalene	1.244	1.223	1.108	0.902	0.815	1.014	1.196	1.235	1.092	15.11
39) 4-Chloroanil	0.503	0.506	0.454	0.380	0.354	0.414	0.497	0.500	0.451	13.52
40) 2,3-Dichloro	0.426	0.411	0.376	0.304	0.284	0.332	0.413	0.430	0.372	15.57
41) Caprolactam	0.152	0.150	0.152	0.151	0.144	0.151	0.155	0.158	0.152	2.70
42) Hexachlorobu	0.178	0.165	0.160	0.137	0.128	0.148	0.167	0.167	0.156	11.01
43) 4-Chloro-3-m	0.317	0.341	0.316	0.299	0.283	0.309	0.328	0.314	0.313	5.66
44) 2-Methylnaph	0.684	0.678	0.621	0.539	0.508	0.582	0.663	0.653	0.616	10.80
45) 1-Methylnaph	0.696	0.700	0.639	0.552	0.524	0.602	0.680	0.679	0.634	10.71

Initial Calibration Summary

Job Number: JC19644 **Sample:** EF6563-ICC6563
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** F156053.D
Project: BMSMC, Building 5 Area, PR

```
46) Dimethylnaph 0.704 0.711 0.655 0.561 0.526 0.611 0.686 0.685 0.642  10.79

47) I   Acenaphthene-d10      ----------------ISTD---------------------
48) Hexachlorocy 0.282 0.297 0.293 0.246 0.228 0.268 0.299 0.260 0.271   9.49
49) 2,4,6-Trichl 0.393 0.378 0.339 0.281 0.259 0.313 0.371 0.382 0.339  14.82
50) 2,4,5-Trichl 0.398 0.405 0.378 0.353 0.334 0.357 0.384 0.381 0.374   6.38
51) 2-Fluorobiph 1.441 1.396 1.288 1.112 1.046 1.185 1.361 1.384 1.277  11.40
52) 2-Chloronaph 1.266 1.268 1.154 1.024 0.963 1.087 1.227 1.257 1.156  10.30
53) Biphenyl     1.656 1.637 1.515 1.274 1.190 1.381 1.585 1.636 1.484  12.18
54) 2-Nitroanili 0.328 0.346 0.335 0.331 0.317 0.334 0.340 0.289 0.328   5.41
55) Dimethylphth 1.390 1.383 1.309 1.191 1.117 1.234 1.355 1.370 1.293   7.86
56) Acenaphthyle 2.072 2.049 1.907 1.660 1.516 1.758 1.992 2.035 1.874  11.02
57) 2,6-Dinitrot 0.260 0.292 0.287 0.279 0.266 0.287 0.292 0.274 0.280   4.29
58) 3-Nitroanili 0.350 0.364 0.367 0.349 0.334 0.354 0.368 0.315 0.350   5.16
59) Acenaphthene 1.304 1.315 1.193 1.026 0.962 1.091 1.233 1.290 1.177  11.47
60) 2,4-Dinitrop 0.079 0.109 0.154 0.169 0.164 0.164 0.132 0.056 0.129  33.34
         ----- Quadratic regression -----                Coefficient =  0.9994
              Response Ratio = -0.01316 + 0.17125 *A + -0.00057 *A^2

61) 4-Nitropheno 0.152 0.164 0.172 0.176 0.169 0.169 0.163 0.151 0.164   5.39
62) Dibenzofuran 1.767 1.778 1.615 1.414 1.331 1.493 1.707 1.742 1.606  10.77
63) 2,4-Dinitrot 0.372 0.398 0.402 0.385 0.368 0.389 0.395 0.322 0.379   6.84
64) 2,3,4,6-Tetr 0.290 0.297 0.291 0.273 0.255 0.279 0.294 0.275 0.282   4.99
65) Diethylphtha 1.365 1.347 1.288 1.180 1.123 1.236 1.314 1.374 1.278   7.15
66) Fluorene     1.404 1.425 1.247 1.024 0.952 1.101 1.348 1.385 1.236  15.07
67) 4-Chlorophen 0.658 0.618 0.540 0.437 0.407 0.477 0.592 0.629 0.545  17.38
68) 4-Nitroanili 0.354 0.373 0.358 0.353 0.338 0.349 0.372 0.332 0.353   4.12

69) I   Phenanthrene-d10      ----------------ISTD---------------------
70) 4,6-Dinitro-       0.100 0.130 0.139 0.135 0.139 0.115       0.126  12.21
71) n-Nitrosodip 0.603 0.630 0.578 0.523 0.491 0.550 0.597 0.609 0.572   8.30
72) 1,2-Diphenyl 0.825 0.848 0.798 0.745 0.715 0.774 0.823 0.802 0.791   5.61
73) 2,4,6-Tribro 0.086 0.085 0.083 0.079 0.076 0.084 0.084 0.077 0.082   4.52
74) 4-Bromopheny 0.210 0.211 0.197 0.176 0.164 0.183 0.199 0.200 0.192   8.62
75) Hexachlorobe 0.198 0.203 0.182 0.167 0.157 0.176 0.192 0.194 0.184   8.80
76) Pentachlorop 0.123 0.132 0.133 0.115 0.108 0.123 0.129 0.105 0.121   8.73
77) Phenanthrene 1.263 1.260 1.159 1.018 0.949 1.069 1.225 1.264 1.151  10.79
78) Anthracene   1.250 1.272 1.164 1.030 0.963 1.096 1.211 1.229 1.152   9.69
79) Carbazole    1.162 1.163 1.109 0.982 0.930 1.024 1.142 1.127 1.080   8.25
80) Di-n-butylph 1.378 1.461 1.400 1.262 1.170 1.324 1.413 1.382 1.349   6.94
81) Fluoranthene 1.200 1.228 1.163 1.058 1.000 1.105 1.185 1.191 1.141   6.94
82) Octadecane   0.485 0.512 0.484 0.425 0.409 0.456 0.499 0.476 0.468   7.66

83) I   Chrysene-d12          ----------------ISTD---------------------
84) Pyrene       1.431 1.461 1.433 1.397 1.341 1.430 1.429 1.425 1.419   2.52
85) Terphenyl-d1 0.821 0.833 0.822 0.805 0.769 0.825 0.818 0.806 0.812   2.43
86) Butylbenzylp 0.660 0.694 0.706 0.733 0.705 0.726 0.684 0.665 0.697   3.81
87) Butyl steara 0.340 0.377 0.394 0.398 0.386 0.410 0.382 0.334 0.378   7.18
88) Benzo[a]anth 1.264 1.198 1.198 1.204 1.158 1.210 1.186 1.274 1.212   3.22
89) 3,3'-Dichlor 0.414 0.432 0.427 0.442 0.426 0.430 0.428 0.377 0.422   4.64
90) Chrysene     1.228 1.241 1.201 1.193 1.137 1.202 1.208 1.224 1.204   2.62
91) bis(2-Ethylh 0.915 0.943 0.999 1.006 0.983 1.020 0.962 0.896 0.966   4.60

92) I   Perylene-d12          ----------------ISTD---------------------
93) Di-n-octylph 1.708 1.820 1.853 1.727 1.647 1.823 1.823 1.621 1.753   5.09
94) Benzo[b]fluo 1.257 1.309 1.254 1.168 1.101 1.210 1.289 1.300 1.236   5.84
95) Benzo[k]fluo 1.257 1.247 1.241 1.125 1.084 1.186 1.265 1.275 1.210   5.89
96) Benzo[a]pyre 1.158 1.179 1.152 1.082 1.030 1.124 1.150 1.175 1.132   4.55
97) Indeno[1,2,3 1.063 1.065 1.077 1.016 0.969 1.047 1.071 1.045 1.044   3.43
98) Dibenz(a,h)a 0.885 0.929 0.931 0.877 0.838 0.901 0.930 0.883 0.897   3.65
```

Initial Calibration Summary

Job Number: JC19644 **Sample:** EF6563-ICC6563
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** F156053.D
Project: BMSMC, Building 5 Area, PR

```
 99) Dibenz[a,h]a 1.026 1.044 1.043 1.012 0.945 1.014 1.061 0.937 1.010   4.54
100) 7,12-Dimethy 0.460 0.490 0.528 0.499 0.469 0.519 0.495 0.401 0.483   8.27
101) Benzo[g,h,i] 1.148 1.180 1.162 1.086 1.015 1.104 1.164 1.169 1.128   5.00
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          MF6563.M          Wed Apr 06 08:34:20 2016   RT1
```

Initial Calibration Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EF6564-ICC6564
Lab FileID: F156062.D

Response Factor Report MSF

Method : C:\MSDCHEM\1\METHODS\MF6564.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Apr 06 08:33:31 2016
Response via : Initial Calibration

Calibration Files
2 =F156066.D 5 =F156065.D 25 =F156063.D 80 =F156061.D
100 =F156060.D 50 =F156062.D 10 =F156064.D 1 =F156067.D

Compound	2	5	25	80	100	50	10	1	Avg	%RSD
159) I 1,4-Dichlorobenzene-d	ISTD									
160) Benzaldehyde	1.314	1.266	1.115	0.952	0.817	1.052	1.157	1.340	1.126	16.20
161) I Naphthalene-d8b	ISTD									
162) Hydroquinone	0.268	0.329	0.362	0.349	0.321	0.376	0.354	0.252	0.326	13.67
163) Acenaphthene-d10b	ISTD									
164) 1,2,4,5-Tetr	0.648	0.642	0.534	0.466	0.440	0.496	0.569	0.657	0.557	15.50
165) Phenanthrene-d10b	ISTD									
166) Atrazine	0.203	0.217	0.192	0.178	0.168	0.186	0.193	0.200	0.192	7.94
167) Chrysene-d12b	ISTD									
168) Benzidine	0.740	0.852	0.774	0.574	0.440	0.740	0.776	0.664	0.695	19.00

(#) = Out of Range ### Number of calibration levels exceeded format ###

MF6563.M Wed Apr 06 09:12:35 2016 RT1

Initial Calibration Verification

Job Number: JC19644 **Sample:** EF6564-ICV6563
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** F156069.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\EF6564\F156069.D          Vial: 11
Acq On    :  5 Apr 2016   3:46 am                   Operator: sarad
Sample    : icv6563-50                              Inst    : MSF
Misc      : op92661,ef6564,100                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Method       : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Wed Apr 06 08:33:31 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	99	0.00	4.88
3	t	Pyridine	1.459	1.468	-0.6	99	0.07	2.86
10	t	Aniline	1.993	2.110	-5.9	116	0.00	4.64
16	t	Benzyl alcohol	0.947	0.920	2.9	99	0.00	4.98
24	I	Naphthalene-d8	1.000	1.000	0.0	106	0.00	5.80
39	t	4-Chloroaniline	0.451	0.416	7.8	106	0.00	5.85
44	t	2-Methylnaphthalene	0.616	0.531	13.8	96	0.00	6.33
47	I	Acenaphthene-d10	1.000	1.000	0.0	103	0.00	7.27
54	t	2-Nitroaniline	0.328	0.291	11.3	90	0.00	6.82
58	t	3-Nitroaniline	0.350	0.305	12.9	89	0.00	7.21
62	t	Dibenzofuran	1.606	1.408	12.3	97	0.00	7.49
68	t	4-Nitroaniline	0.353	0.292	17.3	86	-0.01	7.90
69	I	Phenanthrene-d10	1.000	1.000	0.0	99	-0.01	9.21
79	t	Carbazole	1.080	0.973	9.9	94	0.00	9.61

```
(#) = Out of Range              SPCC's out = 0  CCC's out = 0
 F156062A.D MF6563.M         Wed Apr 06 08:50:50 2016   RT1
```

Initial Calibration Verification

Job Number: JC19644 **Sample:** EF6564-ICV6563
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** F156070.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\EF6564\F156070.D          Vial: 12
Acq On    :  5 Apr 2016   4:15 am                   Operator: sarad
Sample    : icv6563-50                              Inst    : MSF
Misc      : op92661,ef6564,100                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Method       : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Wed Apr 06 08:33:31 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	4.88
5	S	2-Fluorophenol	1.407	1.228	12.7	90	0.00	3.89
8	S	Phenol-d5	1.711	1.474	13.9	90	0.00	4.60
24	I	Naphthalene-d8	1.000	1.000	0.0	101	0.00	5.80
25	S	Nitrobenzene-d5	0.374	0.331	11.5	89	0.00	5.28
47	I	Acenaphthene-d10	1.000	1.000	0.0	97	0.00	7.27
51	S	2-Fluorobiphenyl	1.277	1.106	13.4	90	0.00	6.63
69	I	Phenanthrene-d10	1.000	1.000	0.0	91	-0.01	9.21
73	S	2,4,6-Tribromophenol	0.082	0.072	12.2	78	-0.01	8.19
83	I	Chrysene-d12	1.000	1.000	0.0	95	-0.02	14.53
85	S	Terphenyl-d14	0.812	0.700	13.8	80	0.00	12.30

(#) = Out of Range SPCC's out = 0 CCC's out = 0
F156062A.D MF6563.M Wed Apr 06 08:50:51 2016 RT1

Initial Calibration Verification

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EF6564-ICV6564
Lab FileID: F156071A.D

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\EF6564\F156071A.D          Vial: 13
Acq On    :  5 Apr 2016   4:44 am                    Operator: sarad
Sample    : icv6564-50                               Inst    : MSF
Misc      : op92661,ef6564,100                       Multiplr: 1.00
MS Integration Params: LSCINT.P

Method       : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Wed Apr 06 08:33:31 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.
163	Acenaphthene-d10b	1.000	1.000	0.0	103	0.00	7.27
164	1,2,4,5-Tetrachlorobenzen	0.557	0.496	11.0	103	0.00	6.46

(#) = Out of Range SPCC's out = 0 CCC's out = 0
F156062A.D MF6563.M Thu Apr 07 09:55:38 2016 RT1

Initial Calibration Verification

Job Number: JC19644 **Sample:** EF6564-ICV6563
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** F156071.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EF6564\F156071.D Vial: 13
Acq On : 5 Apr 2016 4:44 am Operator: sarad
Sample : icv6563-50 Inst : MSF
Misc : op92661,ef6564,100 Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Apr 06 08:33:31 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	91	0.00	4.88
4	t	N-Nitrosodimethylamine	0.525	0.491	6.5	86	0.00	2.76
11	t	bis(2-Chloroethyl)ether	1.310	1.262	3.7	90	0.00	4.68
14	t	1,3-Dichlorobenzene	1.647	1.531	7.0	88	0.00	4.84
15	t	1,4-Dichlorobenzene	1.643	1.547	5.8	90	0.00	4.89
17	t	1,2-Dichlorobenzene	1.545	1.468	5.0	91	0.00	5.00
20	t	2,2'-oxybis(1-Chloropropa	0.472	0.407	13.8	83	0.00	5.08
22		n-Nitroso-di-n-propylamin	0.966	0.892	7.7	91	0.00	5.17
23	t	Hexachloroethane	0.509	0.474	6.9	88	0.00	5.25
24	I	Naphthalene-d8	1.000	1.000	0.0	91	0.00	5.80
26	t	Nitrobenzene	0.391	0.361	7.7	84	0.00	5.29
28	t	Isophorone	0.668	0.657	1.6	92	-0.01	5.46
32	t	bis(2-Chloroethoxy)methan	0.421	0.383	9.0	87	0.00	5.62
36	t	1,2,4-Trichlorobenzene	0.330	0.300	9.1	86	0.00	5.76
38	t	Naphthalene	1.092	1.031	5.6	92	0.00	5.82
42	t	Hexachlorobutadiene	0.156	0.146	6.4	89	0.00	5.90
47	I	Acenaphthene-d10	1.000	1.000	0.0	85	0.00	7.27
52	t	2-Chloronaphthalene	1.156	1.074	7.1	84	0.00	6.74
55	t	Dimethylphthalate	1.293	1.139	11.9	78	0.00	6.98
56	t	Acenaphthylene	1.874	1.715	8.5	83	0.00	7.13
57	t	2,6-Dinitrotoluene	0.280	0.250	10.7	74	0.00	7.05
59	t	Acenaphthene	1.177	1.104	6.2	86	0.00	7.30
63	t	2,4-Dinitrotoluene	0.379	0.317	16.4	69	0.00	7.46
65	t	Diethylphthalate	1.278	1.093	14.5	75	-0.01	7.74
66	t	Fluorene	1.236	1.107	10.4	85	0.00	7.89
67	t	4-Chlorophenyl-phenylethe	0.545	0.466	14.5	83	0.00	7.89
69	I	Phenanthrene-d10	1.000	1.000	0.0	80	0.00	9.21
71	t	n-Nitrosodiphenylamine	0.572	0.506	11.5	74	0.00	8.03
72	t	1,2-Diphenylhydrazine	0.791	0.781	1.3	81	0.00	8.08
74	t	4-Bromophenyl-phenylether	0.192	0.180	6.3	79	0.00	8.54
75	t	Hexachlorobenzene	0.184	0.176	4.3	80	0.00	8.62
77	t	Phenanthrene	1.151	1.081	6.1	81	0.00	9.25
78	t	Anthracene	1.152	1.079	6.3	79	-0.01	9.33
80	t	Di-n-butylphthalate	1.349	1.228	9.0	74	0.00	10.32
81	t	Fluoranthene	1.141	1.063	6.8	77	-0.01	11.42
83	I	Chrysene-d12	1.000	1.000	0.0	81	-0.01	14.54
84	t	Pyrene	1.419	1.406	0.9	79	0.00	11.88
86	t	Butylbenzylphthalate	0.697	0.638	8.5	71	-0.01	13.48

Initial Calibration Verification

Job Number: JC19644 **Sample:** EF6564-ICV6563
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** F156071.D
Project: BMSMC, Building 5 Area, PR

88	t	Benzo[a]anthracene	1.212	1.111	8.3	74	-0.01	14.52
90	t	Chrysene	1.204	1.116	7.3	75	-0.02	14.59
91	t	bis(2-Ethylhexyl)phthalat	0.966	0.878	9.1	70	0.00	14.89
92	I	Perylene-d12	1.000	1.000	0.0	76	-0.01	17.58
93	t	Di-n-octylphthalate	1.753	1.614	7.9	67	0.00	16.35
94	t	Benzo[b]fluoranthene	1.236	1.149	7.0	72	-0.01	16.83
95	t	Benzo[k]fluoranthene	1.210	1.203	0.6	77	-0.02	16.89
96	t	Benzo[a]pyrene	1.132	1.096	3.2	74	-0.01	17.47
97	t	Indeno[1,2,3-cd]pyrene	1.044	1.002	4.0	72	-0.02	19.53
99	t	Dibenz[a,h]anthracene	1.010	0.973	3.7	73	-0.02	19.59
101	t	Benzo[g,h,i]perylene	1.128	1.079	4.3	74	-0.02	19.95

(#) = Out of Range SPCC's out = 0 CCC's out = 0
F156062A.D MF6563.M Thu Apr 07 09:55:37 2016 RT1

Initial Calibration Verification

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EF6564-ICV6563
Lab FileID: F156072.D

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\EF6564\F156072.D          Vial: 14
Acq On    :  5 Apr 2016   5:13 am                   Operator: sarad
Sample    : icv6563-50                              Inst    : MSF
Misc      : op92661,ef6564,100                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Method       : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Wed Apr 06 08:33:31 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	4.88
2	t	1,4-Dioxane	0.619	0.548	11.5	88	0.00	2.49
6	t	Indene	2.367	2.240	5.4	100	0.00	5.07
7	t	Cumene	3.180	2.825	11.2	91	0.00	4.29
13	t	Decane	1.278	1.119	12.4	94	0.00	4.76
18	t	Acetophenone	1.790	1.667	6.9	100	0.00	5.17
24	I	Naphthalene-d8	1.000	1.000	0.0	110	0.00	5.80
27	t	Quinoline	0.773	0.578	25.2	85	-0.02	6.05
41	t	Caprolactam	0.152	0.112	26.3	82	-0.03	6.09
45	t	1-Methylnaphthalene	0.634	0.469	26.0	86	0.00	6.41
46	t	Dimethylnaphthalene	0.642	0.480	25.2	87	0.00	6.86
47	I	Acenaphthene-d10	1.000	1.000	0.0	93	0.00	7.27
48	t	Hexachlorocyclopentadiene	0.271	0.278	-2.6	96	0.00	6.46
53	t	Biphenyl	1.484	1.284	13.5	87	0.00	6.72
69	I	Phenanthrene-d10	1.000	1.000	0.0	88	0.00	9.21
82	t	Octadecane	0.468	0.437	6.6	84	0.00	9.10
92	I	Perylene-d12	1.000	1.000	0.0	79	-0.01	17.58
100	t	7,12-Dimethylbenz(a)anthr	0.483	0.447	7.5	68	-0.02	16.84

(#) = Out of Range SPCC's out = 0 CCC's out = 0
F156062A.D MF6563.M Thu Apr 07 09:55:39 2016 RT1

Initial Calibration Verification

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EF6564-ICV6564
Lab FileID: F156072A.D

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\EF6564\F156072A.D          Vial: 14
Acq On    :  5 Apr 2016   5:13 am                    Operator: sarad
Sample    : icv6564-50                               Inst    : MSF
Misc      : op92661,ef6564,100                       Multiplr: 1.00
MS Integration Params: LSCINT.P

Method       : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Wed Apr 06 08:33:31 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.
159 I	1,4-Dichlorobenzene-d4b	1.000	1.000	0.0	109	0.00	4.88
160 t	Benzaldehyde	1.126	1.021	9.3	105	0.00	4.56
165	Phenanthrene-d10b	1.000	1.000	0.0	97	0.00	9.21
166	Atrazine	0.192	0.172	10.4	90	0.00	8.79

(#) = Out of Range SPCC's out = 0 CCC's out = 0
F156062A.D MF6563.M Thu Apr 07 09:55:40 2016 RT1

Initial Calibration Verification

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EF6564-ICV6564
Lab FileID: F156073A.D

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\EF6564\F156073A.D          Vial: 15
Acq On    :  5 Apr 2016   5:42 am                    Operator: sarad
Sample    : icv6564-50                               Inst    : MSF
Misc      : op92661,ef6564,100                       Multiplr: 1.00
MS Integration Params: LSCINT.P

Method       : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Wed Apr 06 08:33:31 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.
167	Chrysene-d12b	1.000	1.000	0.0	104	0.00	14.53
168	Benzidine	0.695	0.912	-31.2#	128	0.00	11.76

(#) = Out of Range SPCC's out = 0 CCC's out = 0
F156062A.D MF6563.M Thu Apr 07 09:55:42 2016 RT1

Initial Calibration Verification

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EF6564-ICV6563
Lab FileID: F156073.D

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\EF6564\F156073.D          Vial: 15
Acq On    :  5 Apr 2016   5:42 am                   Operator: sarad
Sample    : icv6563-50                              Inst    : MSF
Misc      : op92661,ef6564,100                      Multiplr: 1.00
MS Integration Params: LSCINT.P

Method       : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Wed Apr 06 08:33:31 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	108	-0.02	14.53
89 t	3,3'-Dichlorobenzidine	0.422	0.396	6.2	100	-0.01	14.55

(#) = Out of Range SPCC's out = 0 CCC's out = 0
F156062A.D MF6563.M Thu Apr 07 09:55:41 2016 RT1

Initial Calibration Verification

Job Number: JC19644 **Sample:** EF6567-ICV6564
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** F156097.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\EF6567\F156097.D          Vial: 10
Acq On    :  5 Apr 2016  10:16 pm                   Operator: sarad
Sample    : icv6564-50                              Inst    : MSF
Misc      : op92661,ef6567                          Multiplr: 1.00
MS Integration Params: LSCINT.P

Method       : C:\MSDCHEM\1\METHODS\MF6563AP9.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Fri Apr 08 17:01:57 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.
161	I	Naphthalene-d8b	1.000	1.000	0.0	71	0.00	5.80
162	t	Hydroquinone	0.326	0.369	-13.2	69	0.00	6.07

(#) = Out of Range SPCC's out = 0 CCC's out = 0
F156091A.D MF6563AP9.M Fri Apr 08 17:30:38 2016 RT1

Continuing Calibration Summary

Job Number: JC19644 **Sample:** EF6604-CC6563
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** F156856.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EF6604\F156856.D Vial: 2
Acq On : 6 May 2016 9:10 am Operator: linseyk
Sample : cc6563-25 Inst : MSF
Misc : op93631,ef6604 Multiplr: 1.00
MS Integration Params: LSCINT.P

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri May 06 12:22:13 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	90	-0.03	4.78
2	t	1,4-Dioxane	0.619	0.587	5.2	94	-0.03	2.37
3	t	Pyridine	1.459	1.429	2.1	86	-0.03	2.68
4	t	N-Nitrosodimethylamine	0.525	0.573	-9.1	104	-0.03	2.65
5	S	2-Fluorophenol	1.407	1.353	3.8	87	-0.02	3.81
6	t	Indene	2.367	2.537	-7.2	96	-0.03	4.97
7	t	Cumene	3.180	3.589	-12.9	100	-0.04	4.19
8	S	Phenol-d5	1.711	1.758	-2.7	93	-0.02	4.53
9	t	Phenol	1.821	2.050	-12.6	103	-0.04	4.54
10	t	Aniline	1.993	2.025	-1.6	94	-0.02	4.54
11	t	bis(2-Chloroethyl)ether	1.310	1.338	-2.1	93	-0.03	4.58
12	t	2-Chlorophenol	1.485	1.430	3.7	87	-0.02	4.63
13	t	Decane	1.278	1.030	19.4	73	-0.03	4.66
14	t	1,3-Dichlorobenzene	1.647	1.559	5.3	85	-0.03	4.74
15	t	1,4-Dichlorobenzene	1.643	1.629	0.9	89	-0.03	4.79
16	t	Benzyl alcohol	0.947	0.931	1.7	90	-0.03	4.88
17	t	1,2-Dichlorobenzene	1.545	1.503	2.7	86	-0.03	4.90
18	t	Acetophenone	1.790	2.131	-19.1	106	-0.03	5.08
19	t	2-Methylphenol	1.272	1.359	-6.8	96	-0.03	4.97
20	t	2,2'-oxybis(1-Chloropropa	0.472	0.458	3.0	90	-0.02	4.98
21	t	3&4-Methylphenol	1.304	1.426	-9.4	97	-0.01	5.08
22		n-Nitroso-di-n-propylamin	0.966	1.226	-26.9#	117	-0.02	5.08
23	t	Hexachloroethane	0.509	0.488	4.1	86	-0.03	5.15
24	I	Naphthalene-d8	1.000	1.000	0.0	100	-0.03	5.71
25	S	Nitrobenzene-d5	0.374	0.412	-10.2	110	-0.04	5.18
26	t	Nitrobenzene	0.391	0.442	-13.0	111	-0.05	5.20
27	t	Quinoline	0.773	0.704	8.9	91	-0.03	5.96
28	t	Isophorone	0.668	0.735	-10.0	108	-0.03	5.37
29	t	2-Nitrophenol	0.203	0.183	9.9	87	-0.03	5.43
30	t	2,4-Dimethylphenol	0.320	0.340	-6.3	106	-0.04	5.46
31	t	Benzoic acid	0.267	0.287	-7.5	102	0.00	5.55
32	t	bis(2-Chloroethoxy)methan	0.421	0.402	4.5	96	-0.02	5.52
33	t	2,4-Dichlorophenol	0.319	0.281	11.9	86	0.09	5.61
34		2,6-Dichlorophenol	0.307	0.276	10.1	89	-0.02	5.76
35		1,3,5-Trichlorobenzene	0.336	0.308	8.3	91	-0.03	5.43
36	t	1,2,4-Trichlorobenzene	0.330	0.296	10.3	89	-0.03	5.66
37		1,2,3-Trichlorobenzene	0.326	0.297	8.9	91	-0.03	5.82
38	t	Naphthalene	1.092	1.077	1.4	97	-0.02	5.72
39	t	4-Chloroaniline	0.451	0.419	7.1	92	-0.02	5.76
40	t	2,3-Dichloroaniline	0.372	0.344	7.5	91	0.10	6.45
41	t	Caprolactam	0.152	0.126	17.1	82	0.09	6.02

Continuing Calibration Summary

Job Number: JC19644 **Sample:** EF6604-CC6563
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** F156856.D
Project: BMSMC, Building 5 Area, PR

42	t	Hexachlorobutadiene	0.156	0.155	0.6	96	-0.03	5.80
43	t	4-Chloro-3-methylphenol	0.313	0.329	-5.1	104	-0.03	6.12
44	t	2-Methylnaphthalene	0.616	0.579	6.0	93	0.10	6.23
45	t	1-Methylnaphthalene	0.634	0.605	4.6	94	-0.03	6.30
46	t	Dimethylnaphthalene	0.642	0.600	6.5	91	-0.04	6.74
47	I	Acenaphthene-d10	1.000	1.000	0.0	98	-0.04	7.14
48	t	Hexachlorocyclopentadiene	0.271	0.310	-14.4	103	-0.03	6.35
49	t	2,4,6-Trichlorophenol	0.339	0.322	5.0	93	-0.05	6.45
50	t	2,4,5-Trichlorophenol	0.374	0.354	5.3	91	-0.07	6.49
51	S	2-Fluorobiphenyl	1.277	1.221	4.4	93	-0.03	6.52
52	t	2-Chloronaphthalene	1.156	1.095	5.3	93	-0.03	6.63
53	t	Biphenyl	1.484	1.431	3.6	92	-0.03	6.60
54	t	2-Nitroaniline	0.328	0.413	-25.9#	120	-0.03	6.71
55	t	Dimethylphthalate	1.293	1.270	1.8	95	-0.03	6.87
56	t	Acenaphthylene	1.874	1.815	3.1	93	-0.04	7.00
57	t	2,6-Dinitrotoluene	0.280	0.287	-2.5	97	-0.03	6.93
58	t	3-Nitroaniline	0.350	0.319	8.9	85	-0.03	7.10
59	t	Acenaphthene	1.177	1.141	3.1	93	-0.04	7.18
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	50.000	49.178	1.6	100	-0.02	7.20
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.164	0.196	-19.5	112	-0.02	7.29
62	t	Dibenzofuran	1.606	1.502	6.5	91	-0.04	7.36
63	t	2,4-Dinitrotoluene	0.379	0.395	-4.2	96	-0.03	7.34
64		2,3,4,6-Tetrachlorophenol	0.282	0.272	3.5	91	-0.04	7.49
65	t	Diethylphthalate	1.278	1.285	-0.5	97	-0.05	7.60
66	t	Fluorene	1.236	1.281	-3.6	100	-0.05	7.74
67	t	4-Chlorophenyl-phenylethe	0.545	0.546	-0.2	99	-0.05	7.74
68	t	4-Nitroaniline	0.353	0.320	9.3	87	-0.05	7.77
69	I	Phenanthrene-d10	1.000	1.000	0.0	98	-0.05	9.04
70	t	4,6-Dinitro-2-methylpheno	0.126	0.142	-12.7	107	-0.03	7.81
71	t	n-Nitrosodiphenylamine	0.572	0.525	8.2	89	-0.04	7.89
72	t	1,2-Diphenylhydrazine	0.791	0.936	-18.3	115	-0.04	7.94
73	S	2,4,6-Tribromophenol	0.082	0.096	-17.1	114	-0.04	8.05
74	t	4-Bromophenyl-phenylether	0.192	0.189	1.6	93	-0.05	8.38
75	t	Hexachlorobenzene	0.184	0.195	-6.0	105	-0.05	8.46
76	t	Pentachlorophenol	0.121	0.132	-9.1	97	-0.04	8.76
77	t	Phenanthrene	1.151	1.121	2.6	95	-0.05	9.08
78	t	Anthracene	1.152	1.128	2.1	95	-0.06	9.16
79	t	Carbazole	1.080	0.998	7.6	88	-0.04	9.44
80	t	Di-n-butylphthalate	1.349	1.360	-0.8	95	-0.05	10.13
81	t	Fluoranthene	1.141	1.113	2.5	94	-0.06	11.22
82	t	Octadecane	0.468	0.443	5.3	90	-0.05	8.93
83	I	Chrysene-d12	1.000	1.000	0.0	103	-0.05	14.32
84	t	Pyrene	1.419	1.311	7.6	94	-0.07	11.67
85	S	Terphenyl-d14	0.812	0.797	1.8	100	-0.06	12.10
86	t	Butylbenzylphthalate	0.697	0.643	7.7	94	-0.06	13.28
87		Butyl stearate	0.378	0.319	15.6	84	-0.06	13.55
88	t	Benzo[a]anthracene	1.212	1.140	5.9	98	-0.05	14.30
89	t	3,3'-Dichlorobenzidine	0.422	0.419	0.7	101	-0.04	14.34
90	t	Chrysene	1.204	1.143	5.1	98	-0.06	14.38
91	t	bis(2-Ethylhexyl)phthalat	0.966	0.912	5.6	94	-0.05	14.68
92	I	Perylene-d12	1.000	1.000	0.0	101	-0.05	17.37
93	t	Di-n-octylphthalate	1.753	1.665	5.0	91	-0.05	16.12

Continuing Calibration Summary

Job Number: JC19644 **Sample:** EF6604-CC6563
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** F156856.D
Project: BMSMC, Building 5 Area, PR

94	t	Benzo[b]fluoranthene	1.236	1.260	-1.9	102	-0.02	16.62
95	t	Benzo[k]fluoranthene	1.210	1.232	-1.8	101	-0.05	16.67
96	t	Benzo[a]pyrene	1.132	1.102	2.7	97	-0.05	17.25
97	t	Indeno[1,2,3-cd]pyrene	1.044	1.056	-1.1	99	-0.07	19.31
98	t	Dibenz(a,h)acridine	0.897	0.936	-4.3	102	-0.02	18.95
99	t	Dibenz[a,h]anthracene	1.010	1.071	-6.0	104	-0.06	19.37
100	t	7,12-Dimethylbenz(a)anthr	0.483	0.548	-13.5	105	-0.05	16.63
101	t	Benzo[g,h,i]perylene	1.128	1.146	-1.6	100	-0.08	19.74

(#) = Out of Range SPCC's out = 0 CCC's out = 0
F156063A.D MF6563.M Fri May 06 12:22:55 2016 RT1

Continuing Calibration Summary

Job Number: JC19644 **Sample:** EF6604-CC6564
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** F156857.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\EF6604\F156857.D          Vial: 3
Acq On    :  6 May 2016   9:39 am                   Operator: linseyk
Sample    : cc6564-25                               Inst    : MSF
Misc      : op93631,ef6604                          Multiplr: 1.00
MS Integration Params: LSCINT.P

Method       : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Fri May 06 12:22:13 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-d4b	1.000	1.000	0.0	68	-0.03	4.78
103 t	Benzaldehyde	1.126	1.096	2.7	66	-0.03	4.46
104 I	Naphthalene-d8b	1.000	1.000	0.0	74	-0.03	5.70
105 t	Hydroquinone	0.326	0.321	1.5	66	-0.05	6.00
106	Acenaphthene-d10b	1.000	1.000	0.0	86	-0.04	7.14
107	1,2,4,5-Tetrachlorobenzen	0.557	0.449	19.4	72	-0.03	6.36
108	Phenanthrene-d10b	1.000	1.000	0.0	81	-0.05	9.04
109	Atrazine	0.192	0.185	3.6	78	-0.06	8.63
110	Chrysene-d12b	1.000	1.000	0.0	83	-0.06	14.32
111	Benzidine	0.695	0.579	16.7	62	-0.05	11.58

(#) = Out of Range SPCC's out = 0 CCC's out = 0
F156063A.D MF6563.M Fri May 06 12:22:56 2016 RT1

GC/MS Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6604\F156860.D Vial: 6
Acq On : 6 May 2016 11:35 am Operator: linseyk
Sample : jc19644-1 Inst : MSF
Misc : op93662,ef6604,900 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 06 11:57:25 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu May 05 10:56:04 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.78	152	652029	40.00	ppm	-0.03
24) Naphthalene-d8	5.70	136	2657418	40.00	ppm	-0.03
47) Acenaphthene-d10	7.14	164	1605209	40.00	ppm	-0.04
69) Phenanthrene-d10	9.04	188	2585092	40.00	ppm	-0.05
83) Chrysene-d12	14.32	240	2321745	40.00	ppm	-0.06
92) Perylene-d12	17.36	264	2165865	40.00	ppm	-0.06
102) 1,4-Dichlorobenzene-d4b	4.78	152	652029	40.00	ppm	-0.03
104) Naphthalene-d8b	5.70	136	2657418	40.00	ppm	-0.03
106) Acenaphthene-d10b	7.14	164	1605209	40.00	ppm	-0.04
108) Phenanthrene-d10b	9.04	188	2585092	40.00	ppm	-0.05
110) Chrysene-d12b	14.32	240	2321745	40.00	ppm	-0.06

System Monitoring Compounds						
5) 2-Fluorophenol	3.81	112	483679	21.09	ppm	-0.02
Spiked Amount 50.000			Recovery = 42.18%			
8) Phenol-d5	4.53	99	430700	15.45	ppm	-0.02
Spiked Amount 50.000			Recovery = 30.90%			
25) Nitrobenzene-d5	5.18	82	966211	38.93	ppm	-0.04
Spiked Amount 50.000			Recovery = 77.86%			
51) 2-Fluorobiphenyl	6.52	172	1736531	33.89	ppm	-0.03
Spiked Amount 50.000			Recovery = 67.78%			
73) 2,4,6-Tribromophenol	8.04	330	244528	46.35	ppm	-0.05
Spiked Amount 50.000			Recovery = 92.70%			
85) Terphenyl-d14	12.10	244	1729963	36.69	ppm	-0.06
Spiked Amount 50.000			Recovery = 73.38%			

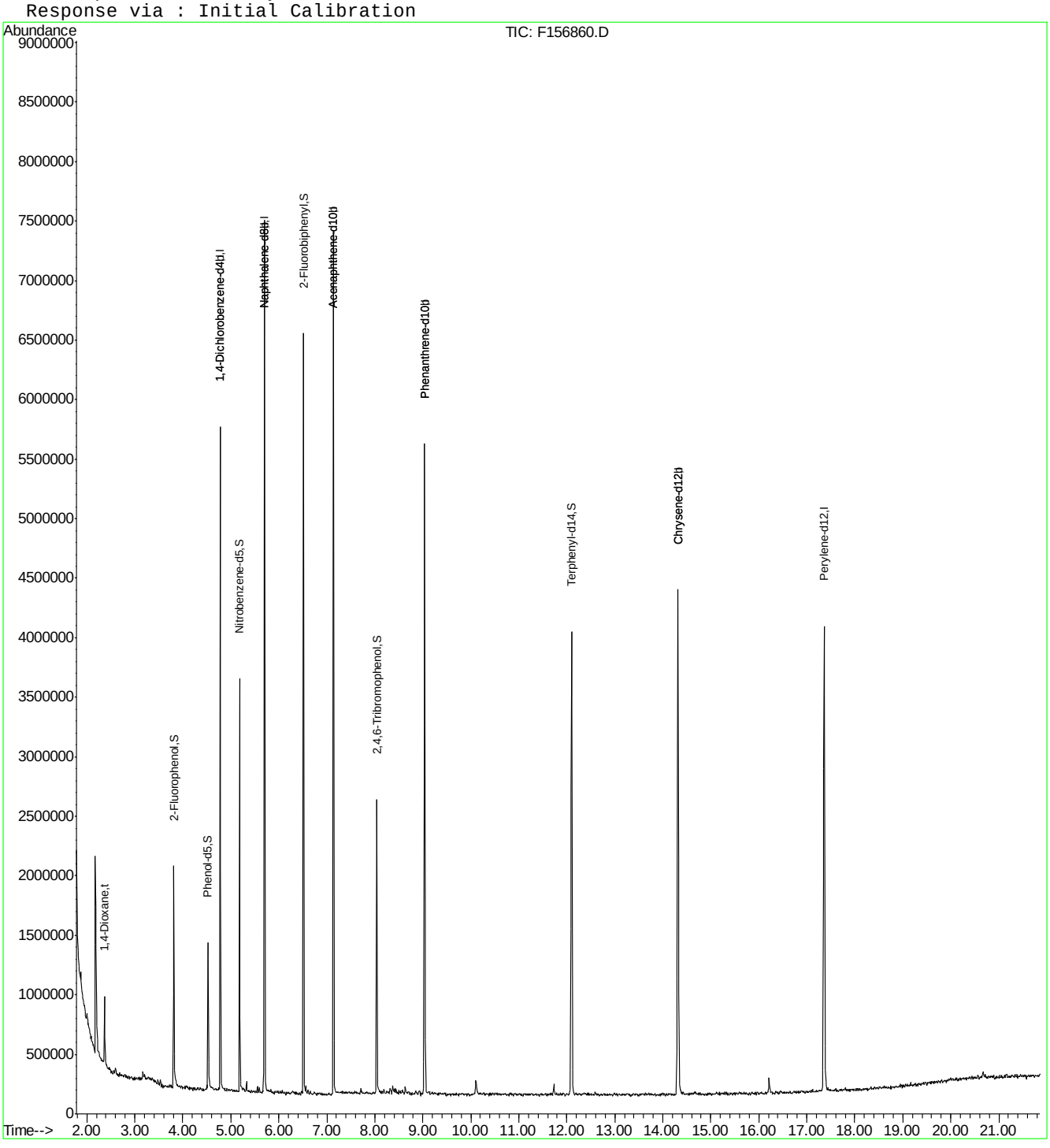
Target Compounds						Qvalue
2) 1,4-Dioxane	2.37	88	242629	24.03	ppm	99

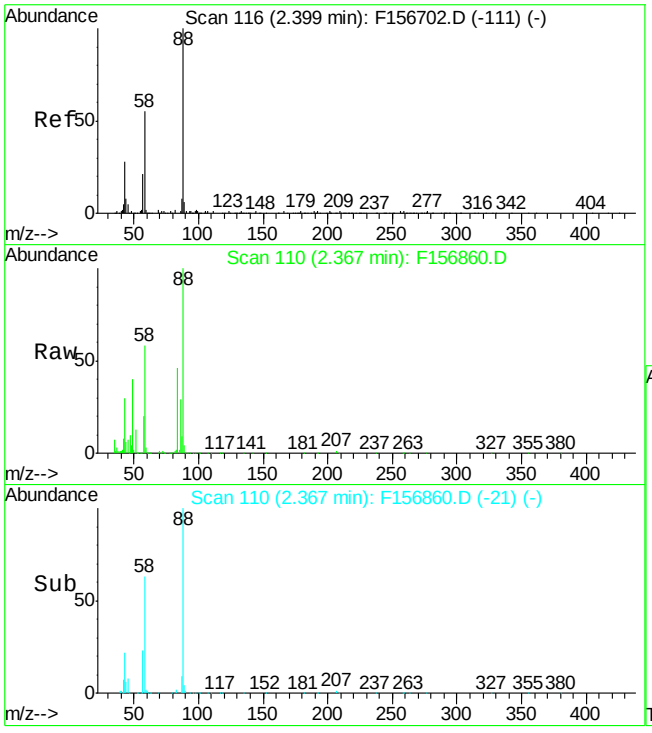
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6604\F156860.D Vial: 6
Acq On : 6 May 2016 11:35 am Operator: linseyk
Sample : jc19644-1 Inst : MSF
Misc : op93662,ef6604,900 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 6 13:23 2016 Quant Results File: MF6563.RES

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri May 06 12:22:13 2016
Response via : Initial Calibration

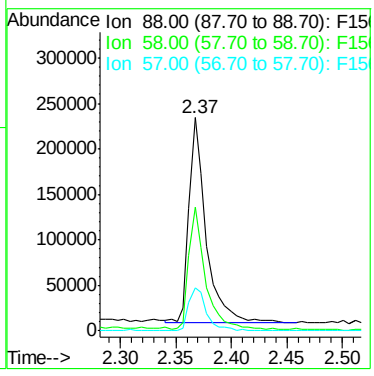




#2
1,4-Dioxane
Concen: 24.03 ppm
RT: 2.37 min Scan# 110
Delta R.T. -0.03 min
Lab File: F156860.D
Acq: 6 May 2016 11:35 am

Tgt Ion: 88 Resp: 242629

Ion	Ratio	Lower	Upper
88	100		
58	59.4	29.3	89.3
57	20.8	0.0	51.7



SGS ACCUTEST JC19644

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 05/06/16 15:01

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6604\F156861.D Vial: 7
Acq On : 6 May 2016 12:04 pm Operator: linseyk
Sample : jc19644-2 Inst : MSF
Misc : op93662,ef6604,1000 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 06 12:26:32 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu May 05 10:56:04 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.78	152	604746	40.00 ppm	-0.03
24) Naphthalene-d8	5.70	136	2512283	40.00 ppm	-0.03
47) Acenaphthene-d10	7.14	164	1485127	40.00 ppm	-0.04
69) Phenanthrene-d10	9.04	188	2398761	40.00 ppm	-0.05
83) Chrysene-d12	14.32	240	2153040	40.00 ppm	-0.06
92) Perylene-d12	17.36	264	2024188	40.00 ppm	-0.06
102) 1,4-Dichlorobenzene-d4b	4.78	152	604746	40.00 ppm	-0.03
104) Naphthalene-d8b	5.70	136	2512283	40.00 ppm	-0.03
106) Acenaphthene-d10b	7.14	164	1485127	40.00 ppm	-0.04
108) Phenanthrene-d10b	9.04	188	2398761	40.00 ppm	-0.05
110) Chrysene-d12b	14.32	240	2152943	40.00 ppm	-0.06

System Monitoring Compounds					
5) 2-Fluorophenol	3.82	112	431986	20.31 ppm	-0.01
Spiked Amount 50.000			Recovery = 40.62%		
8) Phenol-d5	4.53	99	347029	13.42 ppm	-0.01
Spiked Amount 50.000			Recovery = 26.84%		
25) Nitrobenzene-d5	5.18	82	867338	36.97 ppm	-0.04
Spiked Amount 50.000			Recovery = 73.94%		
51) 2-Fluorobiphenyl	6.52	172	1577794	33.29 ppm	-0.03
Spiked Amount 50.000			Recovery = 66.58%		
73) 2,4,6-Tribromophenol	8.04	330	238713	48.77 ppm	-0.05
Spiked Amount 50.000			Recovery = 97.54%		
85) Terphenyl-d14	12.10	244	1785242	40.83 ppm	-0.06
Spiked Amount 50.000			Recovery = 81.66%		

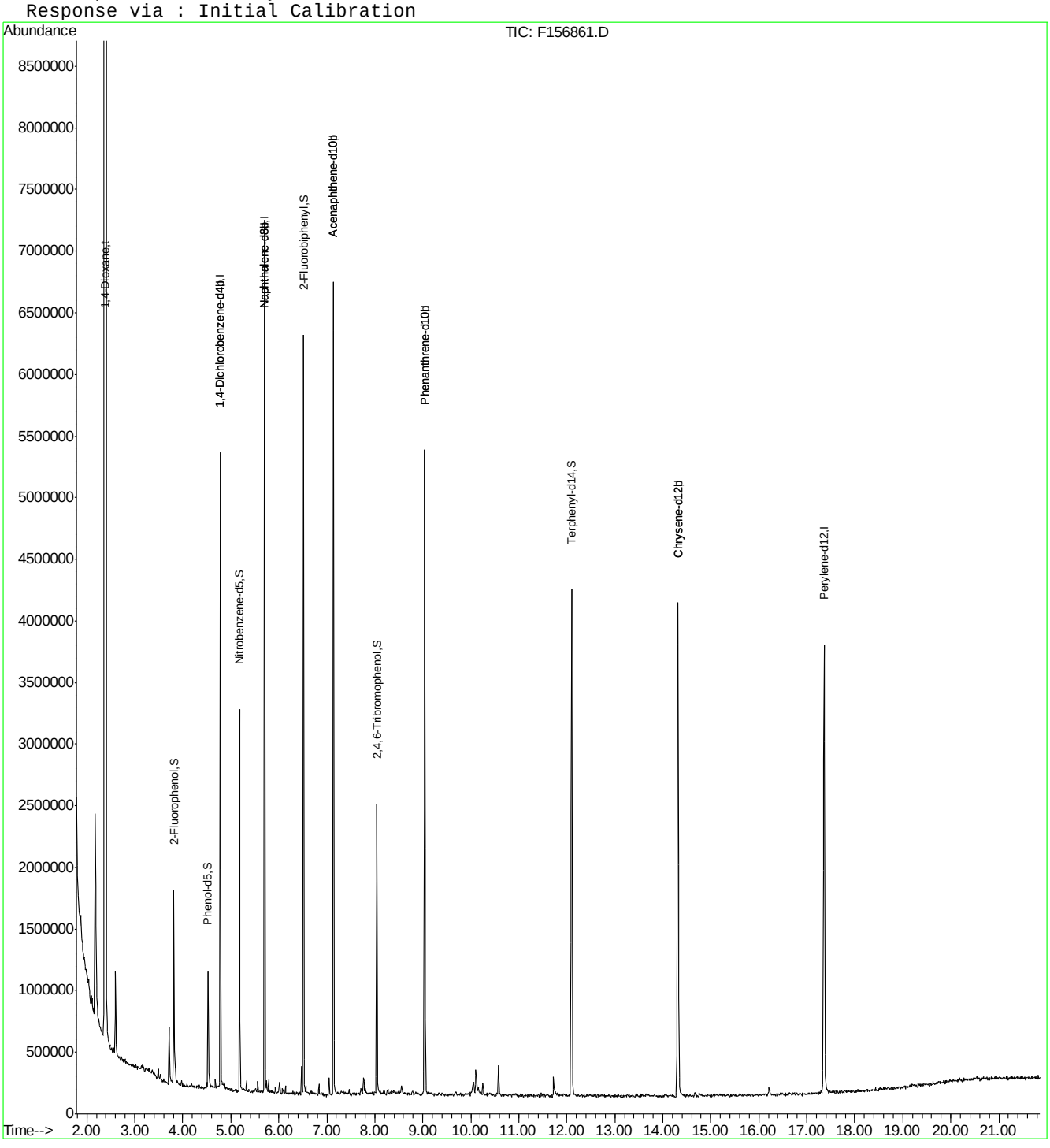
Target Compounds					Qvalue
2) 1,4-Dioxane	2.38	88	20092197m	2145.60 ppm	

(#) = qualifier out of range (m) = manual integration (+) = signals summed
F156861.D MF6563.M Fri May 06 13:24:16 2016 RT1

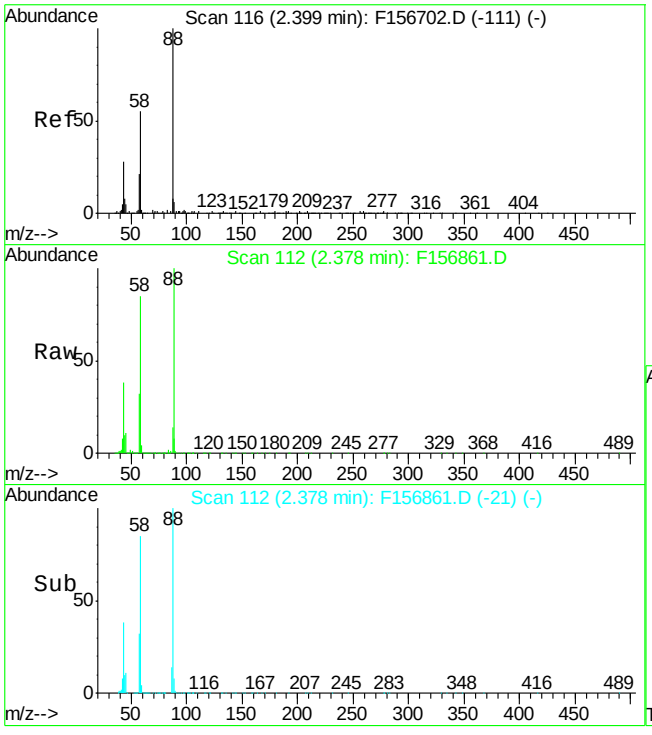
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6604\F156861.D Vial: 7
Acq On : 6 May 2016 12:04 pm Operator: linseyk
Sample : jc19644-2 Inst : MSF
Misc : op93662,ef6604,1000 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 6 13:24 2016 Quant Results File: MF6563.RES

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri May 06 12:22:13 2016
Response via : Initial Calibration



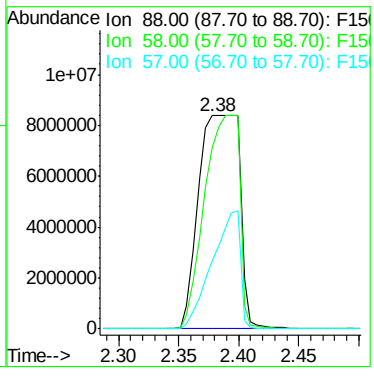
F156861.D MF6563.M Fri May 06 13:24:17 2016 RT1 Page 2



#2
1,4-Dioxane
Concen: 2145.60 ppm m
RT: 2.38 min Scan# 112
Delta R.T. -0.02 min
Lab File: F156861.D
Acq: 6 May 2016 12:04 pm

Tgt Ion: 88 Resp:20092197

Ion	Ratio	Lower	Upper
88	100		
58	84.7	29.3	89.3
57	31.5	0.0	51.7



7.1.2

7

Manual Integration Approval Summary

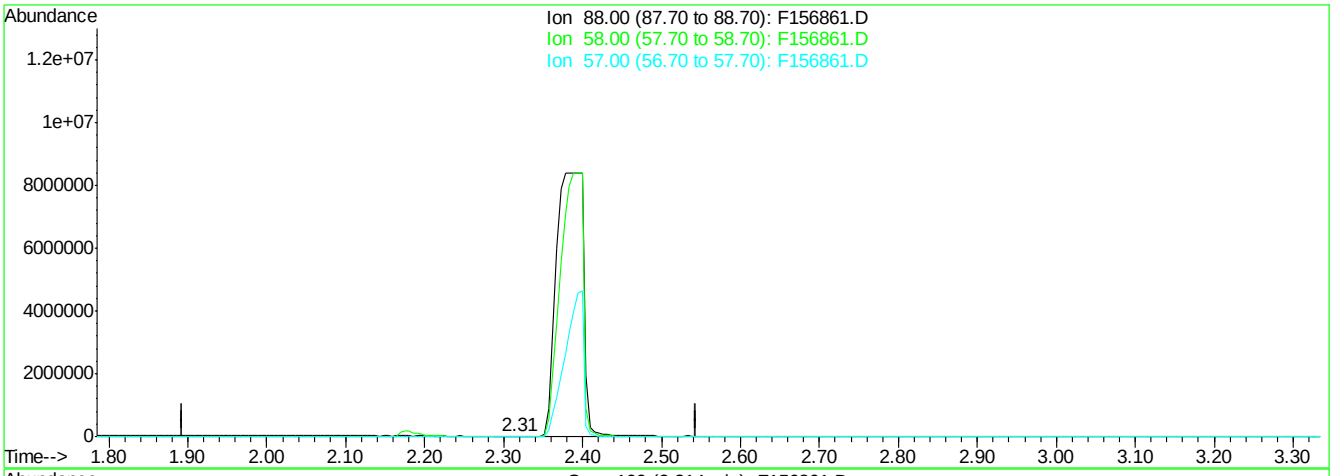
Sample Number:	JC19644-2	**Method:**	SW846 8270D
Lab FileID:	F156861.D	**Analyst approved:**	05/06/16 13:25 Linsey Kirschmann
Injection Time:	05/06/16 12:04	**Supervisor approved:**	05/06/16 15:01 Kristi Schollenberger

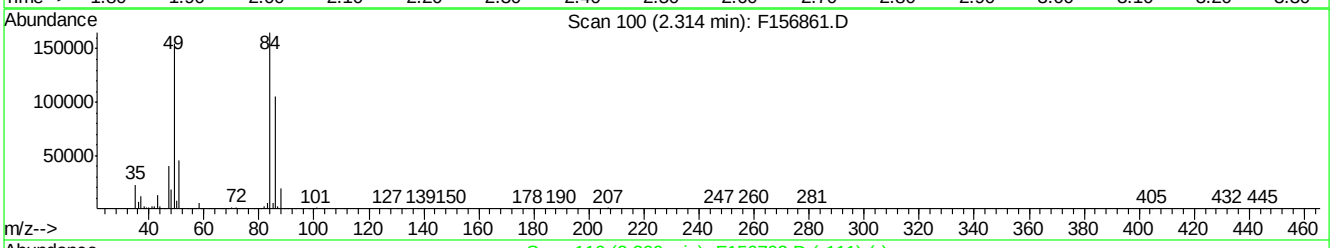
Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dioxane	123-91-1		2.38	Poor instrument integration

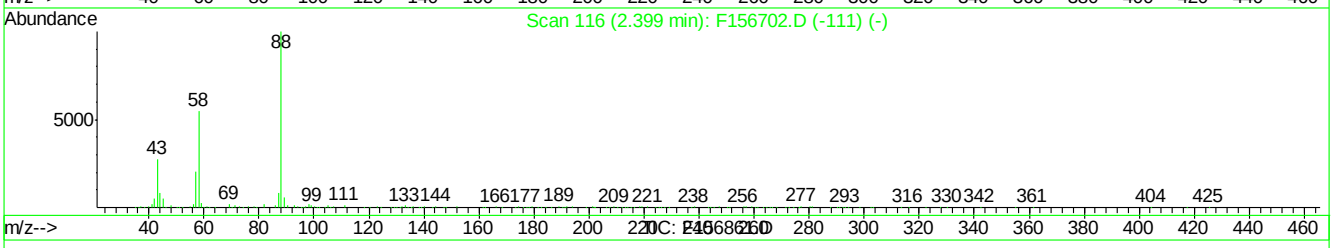
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EF6604\F156861.D Vial: 7
Acq On : 6 May 2016 12:04 pm Operator: linseyk
Sample : jc19644-2 Inst : MSF
Misc : op93662,ef6604,1000 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 6 12:26 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri May 06 12:22:13 2016
Response via : Multiple Level Calibration







(2) 1,4-Dioxane (t)

2.31min 1.11ppm

response 10431

Ion	Exp%	Act%
88.00	100	100
58.00	59.30	7.28#
57.00	21.70	2.91
0.00	0.00	0.00

F156861.D MF6563.M Fri May 06 13:23:25 2016 RT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6604\F156880.D Vial: 26
Acq On : 6 May 2016 1:59 pm Operator: linseyk
Sample : jc19644-2 Inst : MSF
Misc : op93662,ef6604,1000,,,1,50 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 06 14:21:50 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu May 05 10:56:04 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.78	152	529678	40.00	ppm	-0.03
24) Naphthalene-d8	5.71	136	2256711	40.00	ppm	-0.03
47) Acenaphthene-d10	7.14	164	1347502	40.00	ppm	-0.04
69) Phenanthrene-d10	9.04	188	2174495	40.00	ppm	-0.05
83) Chrysene-d12	14.32	240	2003808	40.00	ppm	-0.06
92) Perylene-d12	17.36	264	1891860	40.00	ppm	-0.06
102) 1,4-Dichlorobenzene-d4b	4.78	152	529678	40.00	ppm	-0.03
104) Naphthalene-d8b	5.71	136	2256711	40.00	ppm	-0.03
106) Acenaphthene-d10b	7.14	164	1347502	40.00	ppm	-0.04
108) Phenanthrene-d10b	9.04	188	2174495	40.00	ppm	-0.05
110) Chrysene-d12b	14.32	240	2003808	40.00	ppm	-0.06

System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	5.21	82	14856	0.70	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.40%	
51) 2-Fluorobiphenyl	6.52	172	27183	0.63	ppm	-0.03
Spiked Amount 50.000			Recovery	=	1.26%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	12.10	244	29051	0.71	ppm	-0.06
Spiked Amount 50.000			Recovery	=	1.42%	

Target Compounds						Qvalue
2) 1,4-Dioxane	2.37	88	637341	77.71	ppm	99

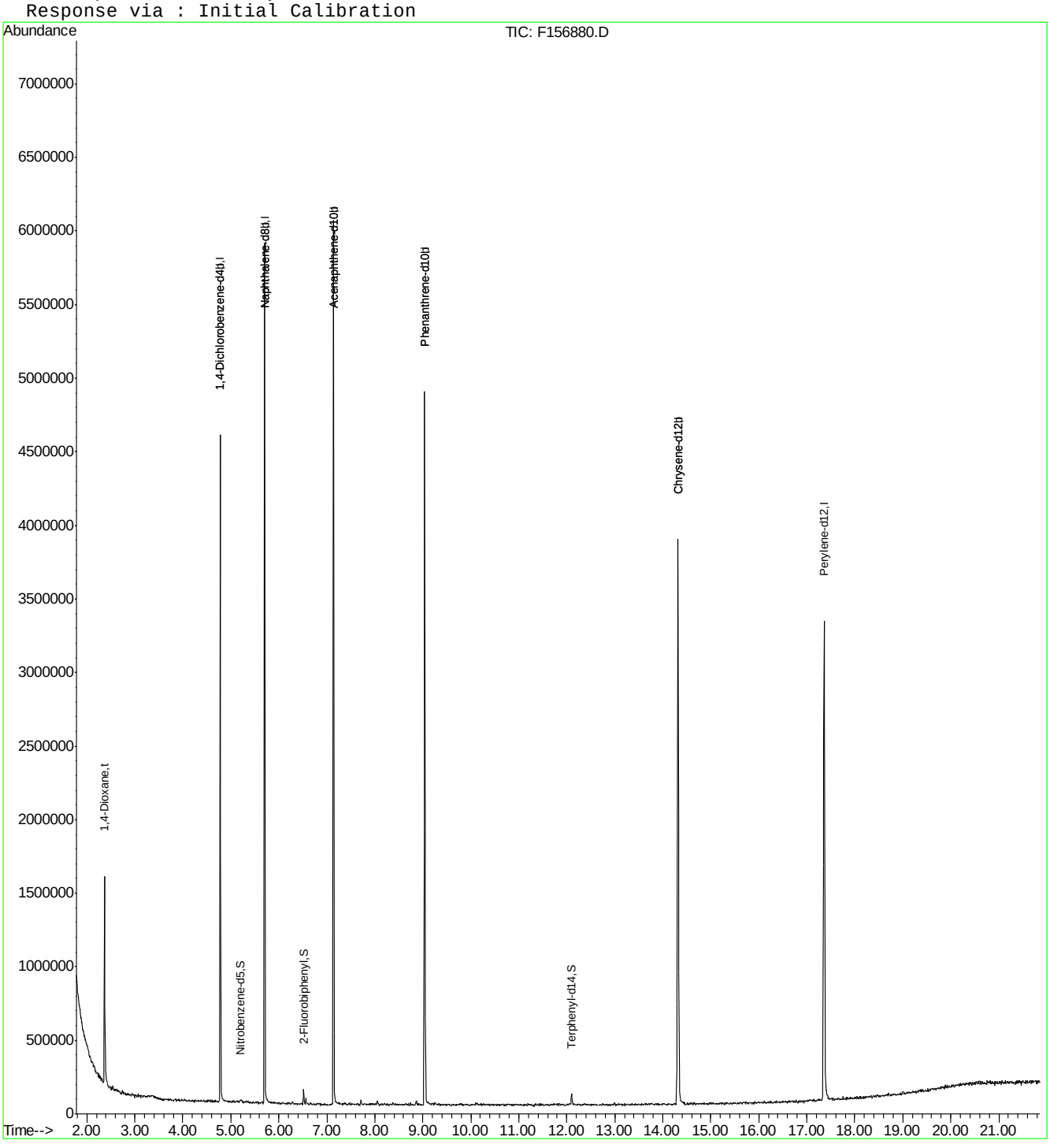
(#) = qualifier out of range (m) = manual integration (+) = signals summed
F156880.D MF6563.M Fri May 06 14:43:24 2016 RT1

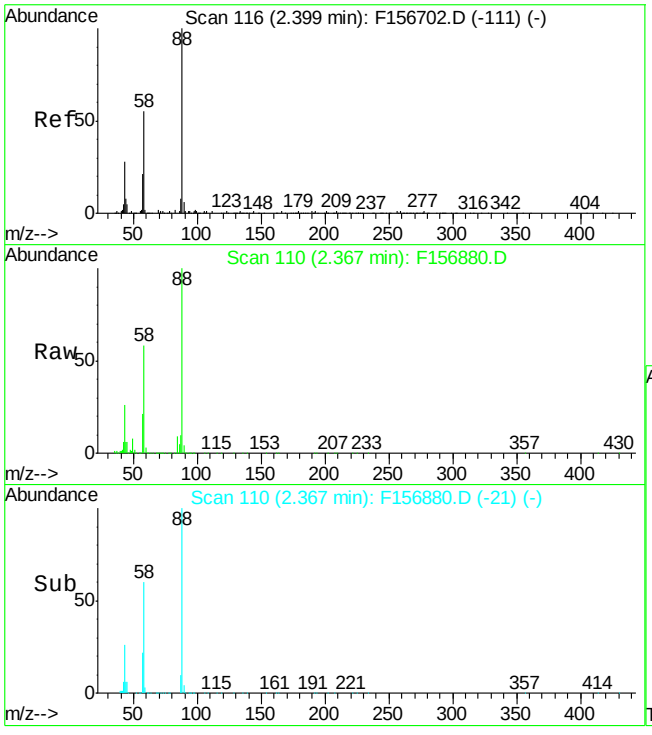
SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6604\F156880.D Vial: 26
Acq On : 6 May 2016 1:59 pm Operator: linseyk
Sample : jc19644-2 Inst : MSF
Misc : op93662,ef6604,1000,,,1,50 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 6 14:42 2016 Quant Results File: MF6563.RES

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri May 06 12:22:13 2016
Response via : Initial Calibration

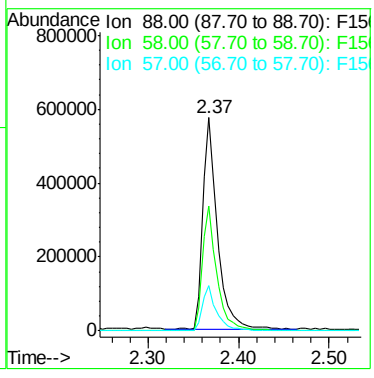




#2
1,4-Dioxane
Concen: 77.71 ppm
RT: 2.37 min Scan# 110
Delta R.T. -0.03 min
Lab File: F156880.D
Acq: 6 May 2016 1:59 pm

Tgt Ion: 88 Resp: 637341

Ion	Ratio	Lower	Upper
88	100		
58	58.6	29.3	89.3
57	21.4	0.0	51.7



7.1.3

7

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6604\F156862.D Vial: 8
Acq On : 6 May 2016 12:33 pm Operator: linseyk
Sample : jc19644-3 Inst : MSF
Misc : op93662,ef6604,900 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 06 13:24:56 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri May 06 12:22:13 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

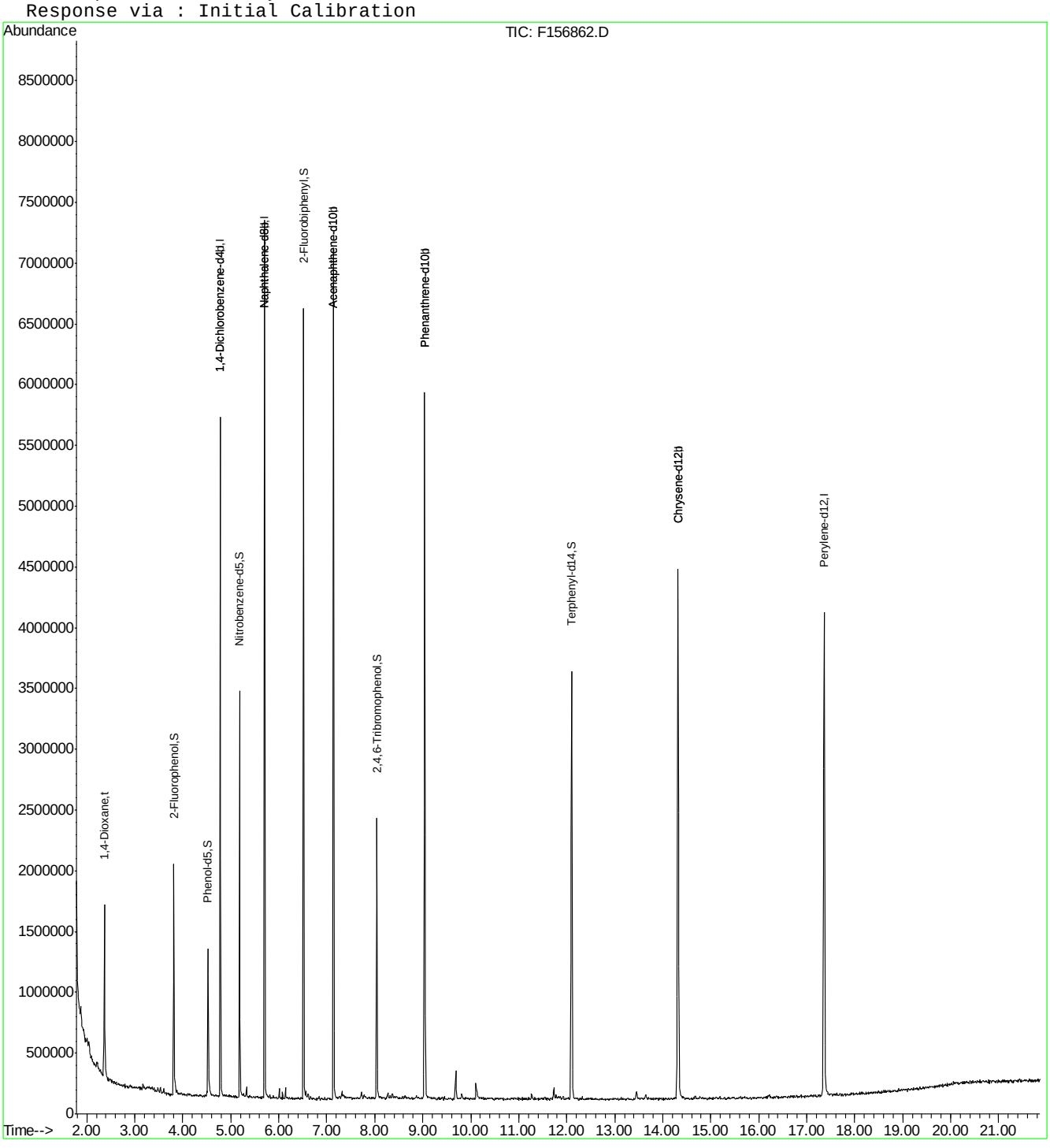
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.78	152	648391	40.00	ppm	-0.03
24) Naphthalene-d8	5.70	136	2746086	40.00	ppm	-0.03
47) Acenaphthene-d10	7.14	164	1604766	40.00	ppm	-0.04
69) Phenanthrene-d10	9.04	188	2587256	40.00	ppm	-0.05
83) Chrysene-d12	14.32	240	2383453	40.00	ppm	-0.06
92) Perylene-d12	17.36	264	2246707	40.00	ppm	-0.06
102) 1,4-Dichlorobenzene-d4b	4.78	152	648391	40.00	ppm	-0.03
104) Naphthalene-d8b	5.70	136	2746086	40.00	ppm	-0.03
106) Acenaphthene-d10b	7.14	164	1604766	40.00	ppm	-0.04
108) Phenanthrene-d10b	9.04	188	2587256	40.00	ppm	-0.05
110) Chrysene-d12b	14.32	240	2383539	40.00	ppm	-0.06
System Monitoring Compounds						
5) 2-Fluorophenol	3.81	112	476380	20.89	ppm	-0.02
Spiked Amount 50.000			Recovery = 41.78%			
8) Phenol-d5	4.53	99	401033	14.46	ppm	-0.02
Spiked Amount 50.000			Recovery = 28.92%			
25) Nitrobenzene-d5	5.18	82	934514	36.44	ppm	-0.04
Spiked Amount 50.000			Recovery = 72.88%			
51) 2-Fluorobiphenyl	6.52	172	1634146	31.90	ppm	-0.03
Spiked Amount 50.000			Recovery = 63.80%			
73) 2,4,6-Tribromophenol	8.04	330	233645	44.25	ppm	-0.05
Spiked Amount 50.000			Recovery = 88.50%			
85) Terphenyl-d14	12.10	244	1541161	31.84	ppm	-0.06
Spiked Amount 50.000			Recovery = 63.68%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.37	88	606490	60.41	ppm	96

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

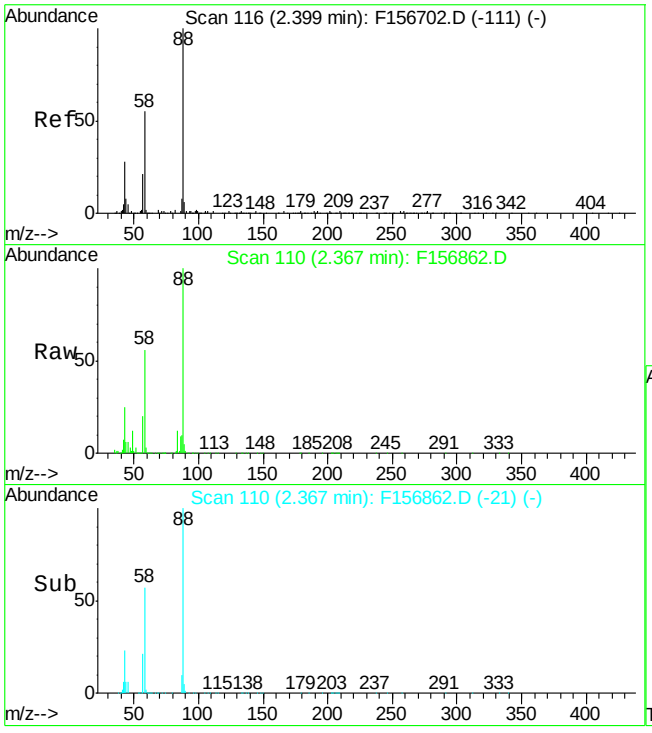
Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6604\F156862.D Vial: 8
Acq On : 6 May 2016 12:33 pm Operator: linseyk
Sample : jc19644-3 Inst : MSF
Misc : op93662,ef6604,900 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 6 13:25 2016 Quant Results File: MF6563.RES

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri May 06 12:22:13 2016
Response via : Initial Calibration



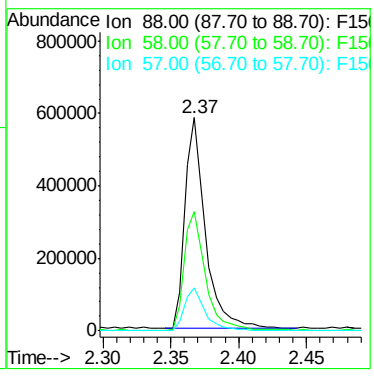
F156862.D MF6563.M Fri May 06 13:25:39 2016 RT1 Page 2



#2
1,4-Dioxane
Concen: 60.41 ppm
RT: 2.37 min Scan# 110
Delta R.T. -0.03 min
Lab File: F156862.D
Acq: 6 May 2016 12:33 pm

Tgt Ion: 88 Resp: 606490

Ion	Ratio	Lower	Upper
88	100		
58	56.3	29.3	89.3
57	20.4	0.0	51.7



7.1.4

7

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3639\
Data File : 3E83008.D
Acq On : 9 May 2016 3:12 pm
Operator : ashleyn
Sample : jc19644-4
Misc : op93678,e3e3639,30.5
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 09 15:44:13 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MMon May 09 14:18:31 2016
QLast Update : Mon May 09 14:18:31 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.454	152	92431	40.00 ppm	0.04
24) Naphthalene-d8	5.508	136	345651	40.00 ppm	0.05
47) Acenaphthene-d10	7.513	164	213049	40.00 ppm	0.05
69) Phenanthrene-d10	9.674	188	382935	40.00 ppm	0.06
83) Chrysene-d12	13.846	240	413052	40.00 ppm	0.06
92) Perylene-d12	15.959	264	319317	40.00 ppm	0.06
102) 1,4-Dichlorobenzene-d4a	4.454	152	92431	40.00 ppm	0.04
104) Acenaphthene-d10a	7.513	164	213049	40.00 ppm	0.05
106) Phenanthrene-d10a	9.674	188	382935	40.00 ppm	0.06
108) Chrysene-d12a	13.846	240	413052	40.00 ppm	0.06
110) Naphthalene-d8a	5.508	136	345651	40.00 ppm	0.05

System Monitoring Compounds					
5) 2-Fluorophenol	3.534	112	99069	34.96 ppm	0.08
Spiked Amount 50.000			Recovery	= 69.92%	
8) Phenol-d5	4.283	99	126332	34.27 ppm	0.11
Spiked Amount 50.000			Recovery	= 68.54%	
25) Nitrobenzene-d5	4.887	82	140617	40.68 ppm	0.04
Spiked Amount 50.000			Recovery	= 81.36%	
51) 2-Fluorobiphenyl	6.668	172	312907	44.29 ppm	0.05
Spiked Amount 50.000			Recovery	= 88.58%	
73) 2,4,6-Tribromophenol	8.653	330	55847	41.35 ppm	0.06
Spiked Amount 50.000			Recovery	= 82.70%	
85) Terphenyl-d14	12.231	244	393990	45.44 ppm	0.05
Spiked Amount 50.000			Recovery	= 90.88%	

Target Compounds	Qvalue

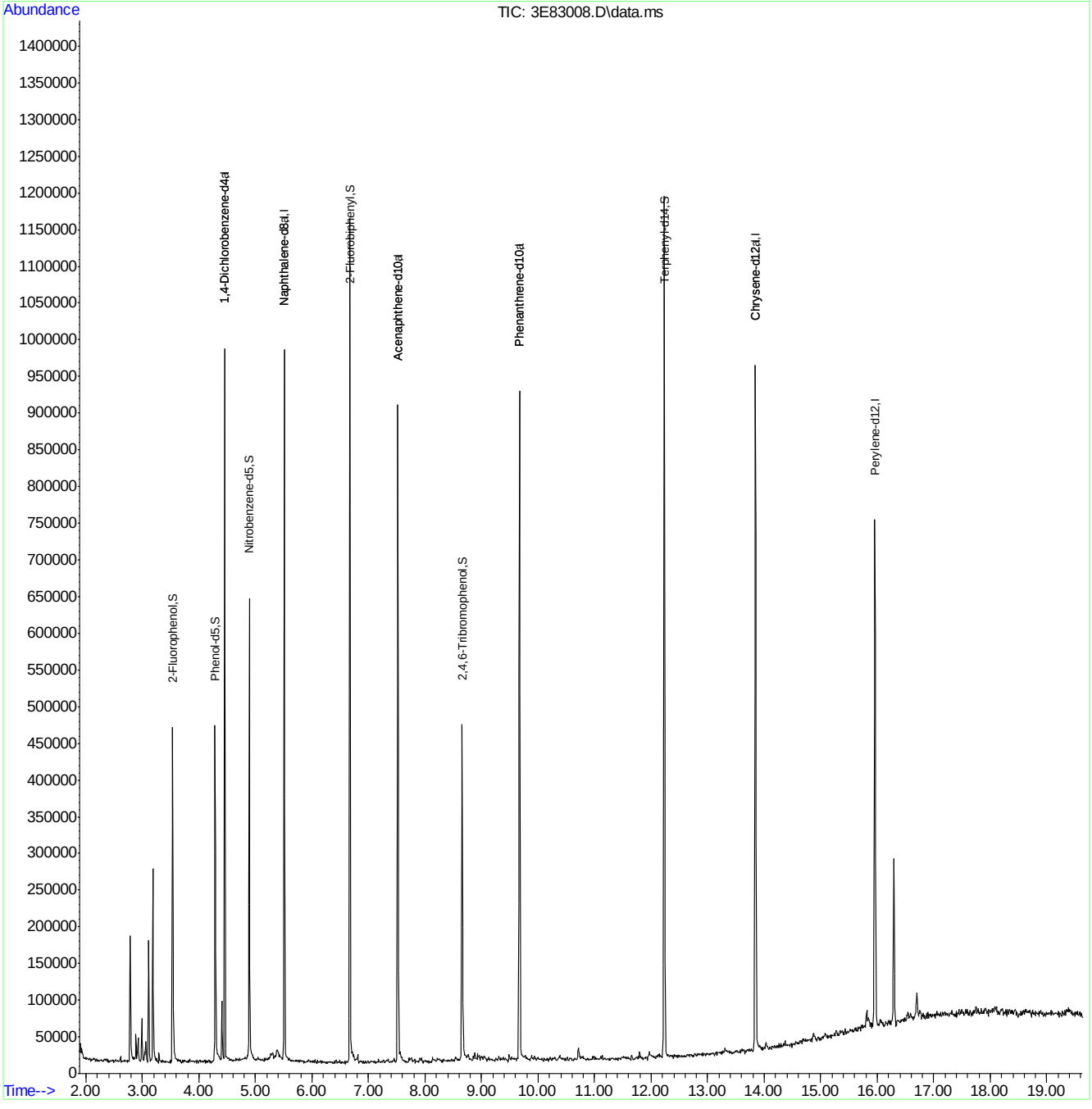
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3639\
Data File : 3E83008.D
Acq On : 9 May 2016 3:12 pm
Operator : ashleyn
Sample : jc19644-4
Misc : op93678,e3e3639,30.5
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 09 15:44:13 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MMon May 09 14:18:31 2016
QLast Update : Mon May 09 14:18:31 2016
Response via : Initial Calibration



M3E3623.M Mon May 09 15:44:24 2016 MS3E

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3639\
Data File : 3E83007.D
Acq On : 9 May 2016 2:46 pm
Operator : ashleyn
Sample : jc19644-5
Misc : op93678,e3e3639,31.0
ALS Vial : 12 Sample Multiplier: 1

Quant Time: May 19 14:06:18 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu May 19 12:30:36 2016
QLast Update : Thu May 19 12:30:36 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.454	152	98118	40.00 ppm	0.04
24) Naphthalene-d8	5.508	136	385099	40.00 ppm	0.05
47) Acenaphthene-d10	7.519	164	241176	40.00 ppm	0.06
69) Phenanthrene-d10	9.674	188	421272	40.00 ppm	0.06
83) Chrysene-d12	13.846	240	418435	40.00 ppm	0.06
92) Perylene-d12	15.959	264	295560	40.00 ppm	0.16
102) 1,4-Dichlorobenzene-d4a	4.454	152	98118	40.00 ppm	0.04
104) Acenaphthene-d10a	7.519	164	241176	40.00 ppm	0.06
106) Phenanthrene-d10a	9.674	188	421272	40.00 ppm	0.06
108) Chrysene-d12a	13.846	240	418435	40.00 ppm	0.06
110) Naphthalene-d8a	5.508	136	385099	40.00 ppm	0.05

System Monitoring Compounds					
5) 2-Fluorophenol	3.534	112	105023	34.91 ppm	0.08
Spiked Amount 50.000			Recovery	= 69.82%	
8) Phenol-d5	4.283	99	132681	33.90 ppm	0.00
Spiked Amount 50.000			Recovery	= 67.80%	
25) Nitrobenzene-d5	4.887	82	153126	39.76 ppm	0.04
Spiked Amount 50.000			Recovery	= 79.52%	
51) 2-Fluorobiphenyl	6.668	172	320483	40.07 ppm	0.05
Spiked Amount 50.000			Recovery	= 80.14%	
73) 2,4,6-Tribromophenol	8.658	330	47733	32.13 ppm	0.06
Spiked Amount 50.000			Recovery	= 64.26%	
85) Terphenyl-d14	12.231	244	368655	41.97 ppm	0.05
Spiked Amount 50.000			Recovery	= 83.94%	

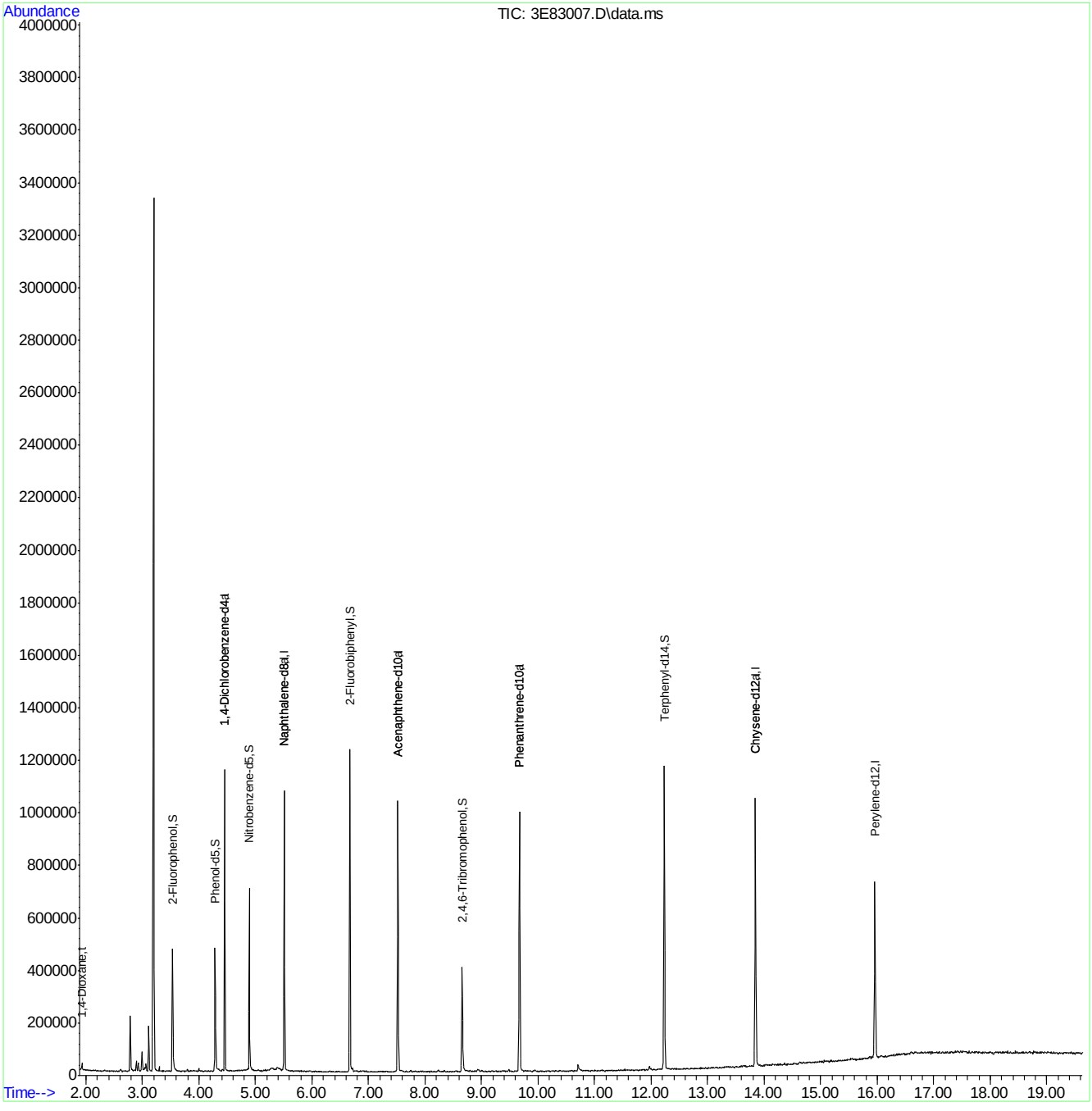
Target Compounds					Qvalue
2) 1,4-Dioxane	1.929	88	4847	5.42 ppm	83

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

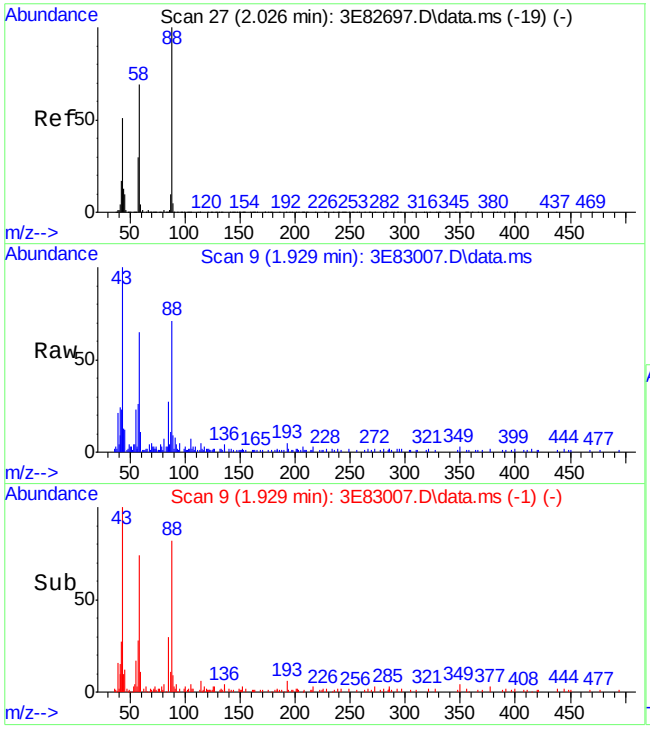
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3639\
Data File : 3E83007.D
Acq On : 9 May 2016 2:46 pm
Operator : ashleyn
Sample : jc19644-5
Misc : op93678,e3e3639,31.0
ALS Vial : 12 Sample Multiplier: 1

Quant Time: May 19 14:06:18 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu May 19 12:30:36 2016
QLast Update : Thu May 19 12:30:36 2016
Response via : Initial Calibration



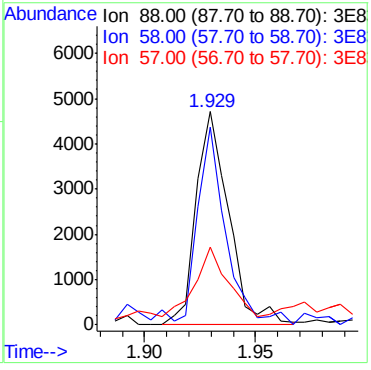
M3E3623.M Thu May 19 14:06:24 2016 MS3E



#2
1,4-Dioxane
Concen: 5.42 ppm
RT: 1.929 min Scan# 9
Delta R.T. -0.044 min
Lab File: 3E83007.D
Acq: 9 May 2016 2:46 pm

Tgt Ion: 88 Resp: 4847

Ion	Ratio	Lower	Upper
88	100		
58	88.9	39.2	99.2
57	30.5	0.5	60.5



7.1.6

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3639\
Data File : 3E83020.D
Acq On : 9 May 2016 6:42 pm
Operator : ashleyn
Sample : jc19644-5
Misc : op93678,e3e3639,31.0
ALS Vial : 12 Sample Multiplier: 1

Quant Time: May 10 12:11:01 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MTue May 10 10:50:48 2016
QLast Update : Tue May 10 10:50:48 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.454	152	106306	40.00 ppm	0.04
24) Naphthalene-d8	5.508	136	403187	40.00 ppm	0.05
47) Acenaphthene-d10	7.519	164	253842	40.00 ppm	0.06
69) Phenanthrene-d10	9.674	188	438665	40.00 ppm	0.06
83) Chrysene-d12	13.852	240	351314	40.00 ppm	0.07
92) Perylene-d12	15.970	264	290148	40.00 ppm	0.07
102) 1,4-Dichlorobenzene-d4a	4.454	152	106306	40.00 ppm	0.04
104) Acenaphthene-d10a	7.519	164	253842	40.00 ppm	0.06
106) Phenanthrene-d10a	9.674	188	438665	40.00 ppm	0.06
108) Chrysene-d12a	13.852	240	351314	40.00 ppm	0.07
110) Naphthalene-d8a	5.508	136	403187	40.00 ppm	0.05
System Monitoring Compounds					
5) 2-Fluorophenol	3.529	112	106843	32.78 ppm	0.07
Spiked Amount 50.000			Recovery	= 65.56%	
8) Phenol-d5	4.272	99	139905	32.99 ppm	0.10
Spiked Amount 50.000			Recovery	= 65.98%	
25) Nitrobenzene-d5	4.893	82	160240	39.74 ppm	0.05
Spiked Amount 50.000			Recovery	= 79.48%	
51) 2-Fluorobiphenyl	6.668	172	334192	39.70 ppm	0.05
Spiked Amount 50.000			Recovery	= 79.40%	
73) 2,4,6-Tribromophenol	8.658	330	48273	31.20 ppm	0.06
Spiked Amount 50.000			Recovery	= 62.40%	
85) Terphenyl-d14	12.236	244	330953	44.87 ppm	0.05
Spiked Amount 50.000			Recovery	= 89.74%	
Target Compounds					Qvalue
2) 1,4-Dioxane	1.929	88	4813	4.97 ppm	92

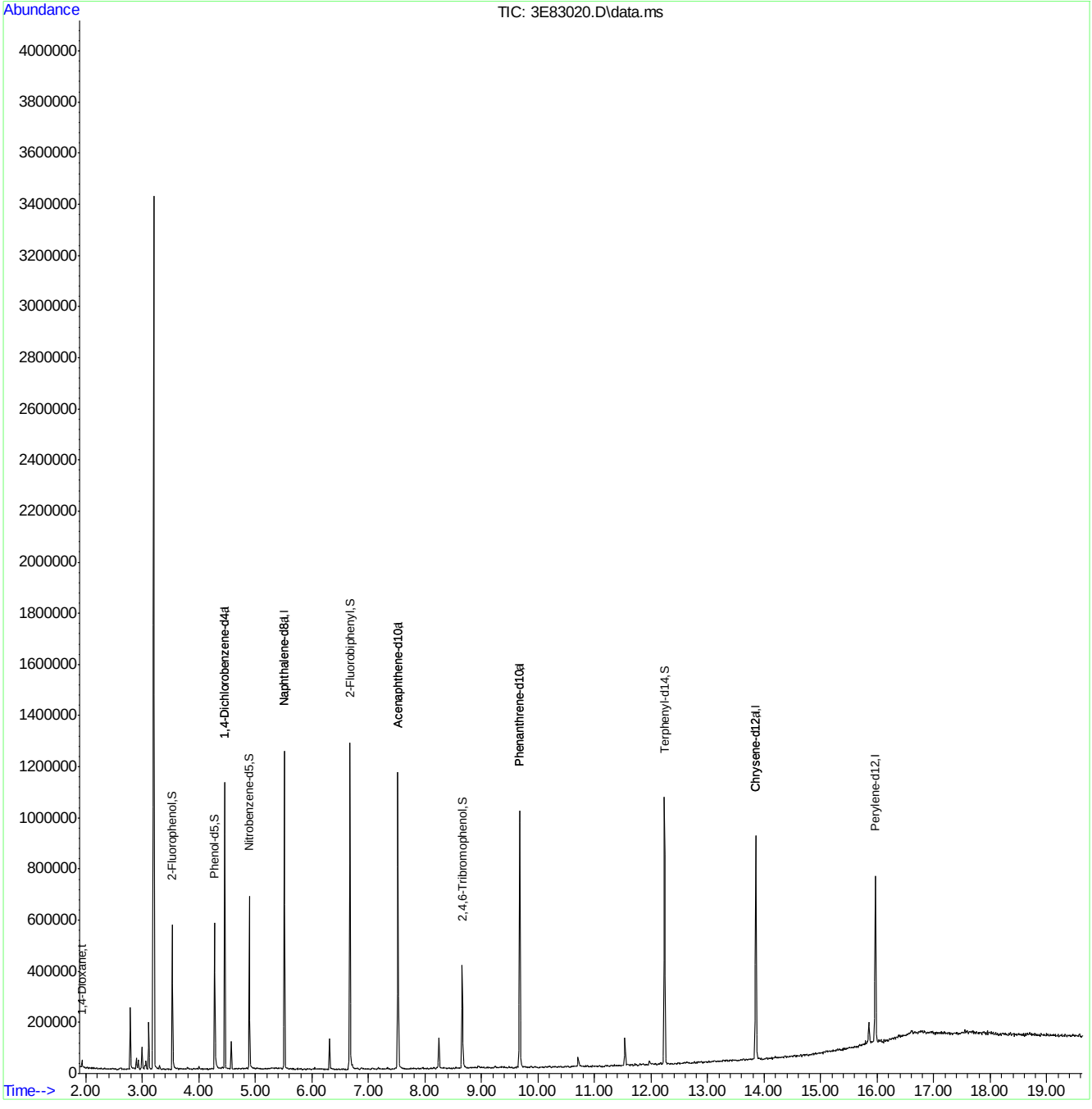
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

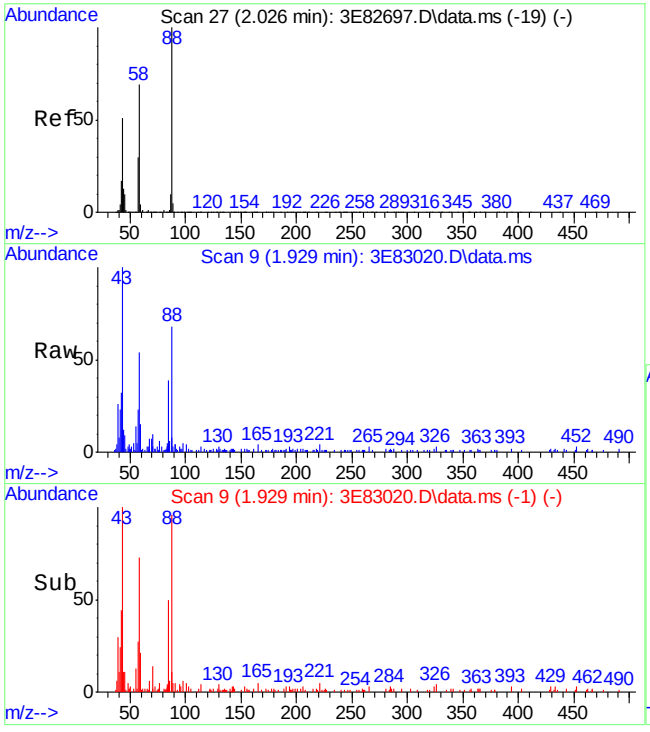
Data Path : C:\msdchem\1\DATA\E3E3639\
Data File : 3E83020.D
Acq On : 9 May 2016 6:42 pm
Operator : ashleyn
Sample : jc19644-5
Misc : op93678,e3e3639,31.0
ALS Vial : 12 Sample Multiplier: 1

Quant Time: May 10 12:11:01 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MTue May 10 10:50:48 2016
QLast Update : Tue May 10 10:50:48 2016
Response via : Initial Calibration



M3E3623.M Tue May 10 12:11:28 2016 MS3E

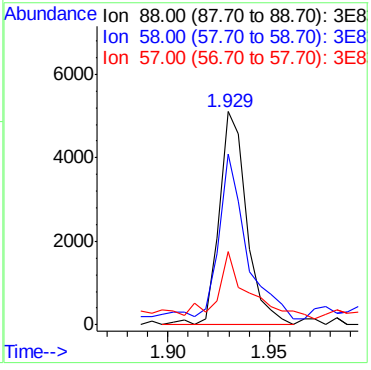
SGS ACCUTEST JC19644



#2
1,4-Dioxane
Concen: 4.97 ppm
RT: 1.929 min Scan# 9
Delta R.T. -0.044 min
Lab File: 3E83020.D
Acq: 9 May 2016 6:42 pm

Tgt Ion: 88 Resp: 4813

Ion	Ratio	Lower	Upper
88	100		
58	76.4	39.2	99.2
57	27.8	0.5	60.5



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2874\
Data File : 3m61128.D
Acq On : 6 May 2016 1:19 pm
Operator : linseyk
Sample : jc19644-1
Misc : op93662a,e3m2874,900
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 06 14:50:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri May 06 14:17:24 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	10.426	150	298744	4.00 ppm	0.00
14) Fluorene-d10	13.430	176	437898	4.00 ppm	0.00
21) Fluoranthene-d10	17.639	212	698736	4.00 ppm	0.00
31) Benzo(a)pyrene-d12	22.243	264	577858	4.00 ppm	0.00
System Monitoring Compounds					
3) 2-Fluorophenol	4.368	112	885953	23.70 ppm	-0.06
Spiked Amount 50.000			Recovery = 47.40%		
4) Phenol-d5	5.976	99	993187	16.06 ppm	0.00
Spiked Amount 50.000			Recovery = 32.12%		
7) Nitrobenzene-d5	7.549	82	2026134	35.23 ppm	-0.02
Spiked Amount 50.000			Recovery = 70.46%		
15) 2-Fluorobiphenyl	11.098	172	4325106	35.94 ppm	-0.03
Spiked Amount 50.000			Recovery = 71.88%		
20) 2,4,6-Tribromophenol	13.976	330	586721	42.81 ppm	0.03
Spiked Amount 50.000			Recovery = 85.62%		
28) Terphenyl-d14	18.458	244	4269191	42.12 ppm	0.02
Spiked Amount 50.000			Recovery = 84.24%		
Target Compounds					Qvalue
2) 1,4-dioxane	2.159	88	344696	22.33 ppm #	25

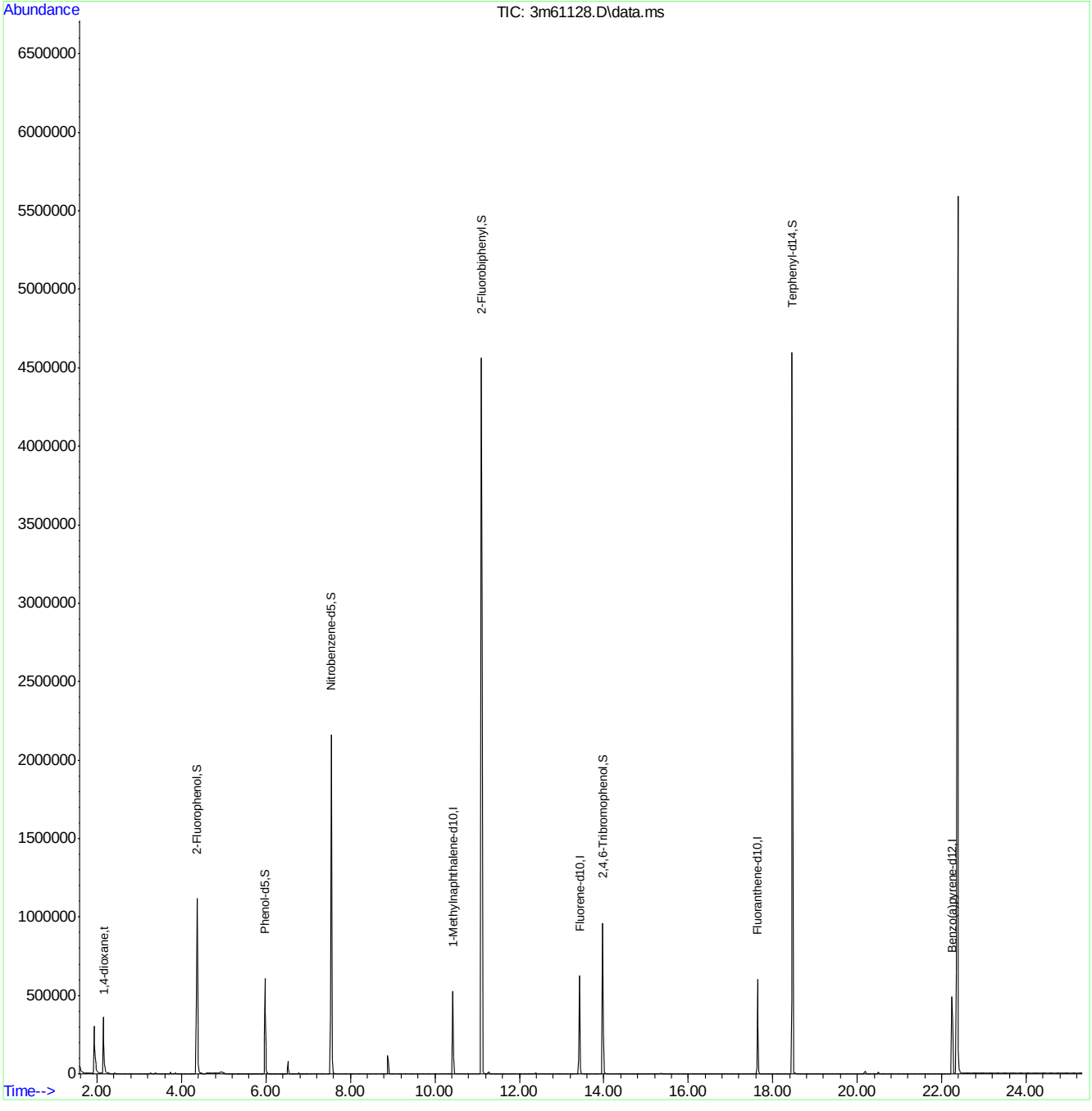
(#) = qualifier out of range (m) = manual integration (+) = signals summed

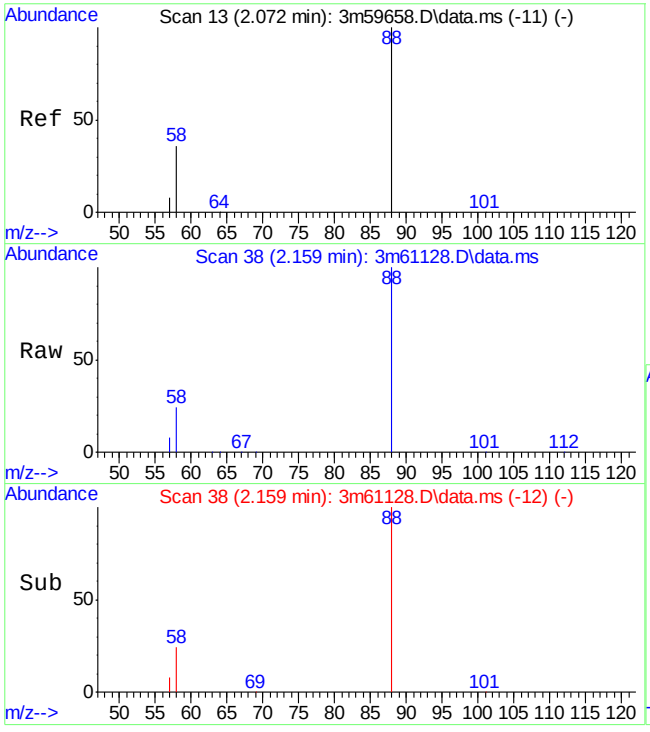
SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2874\
Data File : 3m61128.D
Acq On : 6 May 2016 1:19 pm
Operator : linseyk
Sample : jc19644-1
Misc : op93662a,e3m2874,900
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 06 14:50:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri May 06 14:17:24 2016
Response via : Initial Calibration

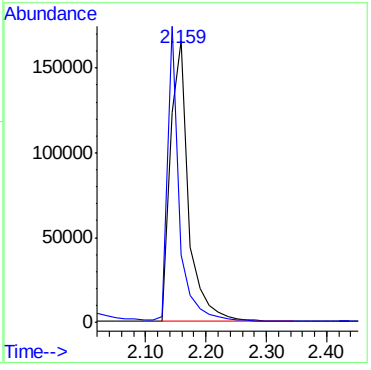




#2
1,4-dioxane
Concen: 22.33 ppm
RT: 2.159 min Scan# 38
Delta R.T. -0.097 min
Lab File: 3m61128.D
Acq: 6 May 2016 1:19 pm

Tgt Ion: 88 Resp: 344696

Ion	Ratio	Lower	Upper
88	100		
58	22.9	77.1	117.1#



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2874\
Data File : 3m61129.D
Acq On : 6 May 2016 1:51 pm
Operator : linseyk
Sample : jc19644-2
Misc : op93662a,e3m2874,1000
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 06 14:51:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri May 06 14:17:24 2016
Response via : Initial Calibration

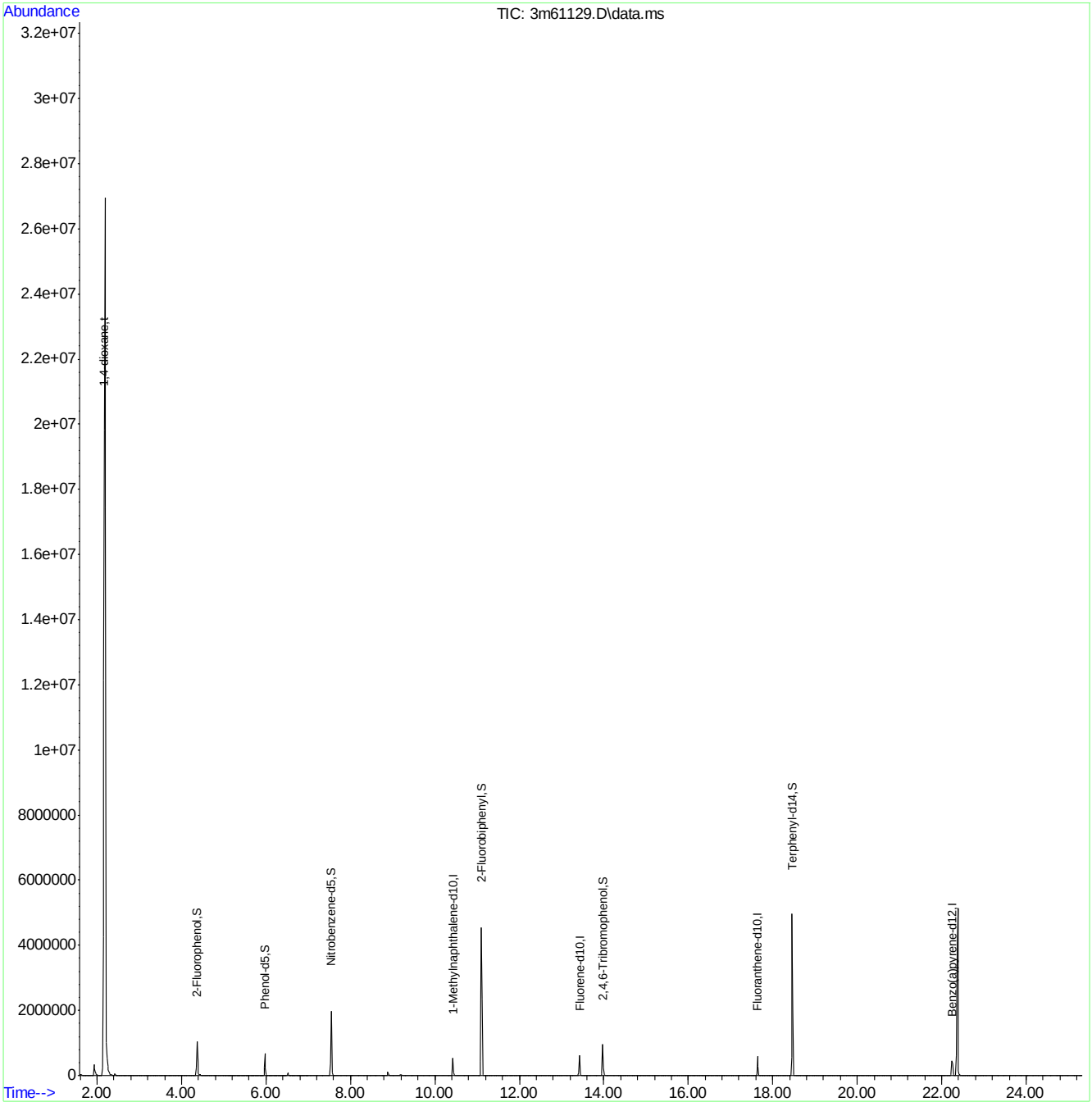
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.427	150	293936	4.00	ppm	0.00
14) Fluorene-d10	13.430	176	431783	4.00	ppm	0.00
21) Fluoranthene-d10	17.639	212	679768	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.243	264	556785	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	4.369	112	775515	21.09	ppm	-0.06
Spiked Amount 50.000			Recovery = 42.18%			
4) Phenol-d5	5.976	99	826019	13.58	ppm	0.00
Spiked Amount 50.000			Recovery = 27.16%			
7) Nitrobenzene-d5	7.550	82	1865646	32.97	ppm	-0.02
Spiked Amount 50.000			Recovery = 65.94%			
15) 2-Fluorobiphenyl	11.099	172	3978307	33.53	ppm	-0.03
Spiked Amount 50.000			Recovery = 67.06%			
20) 2,4,6-Tribromophenol	13.976	330	577128	42.71	ppm	0.03
Spiked Amount 50.000			Recovery = 85.42%			
28) Terphenyl-d14	18.458	244	4501340	45.65	ppm	0.02
Spiked Amount 50.000			Recovery = 91.30%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.174	88	30719728	2022.82	ppm	87

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

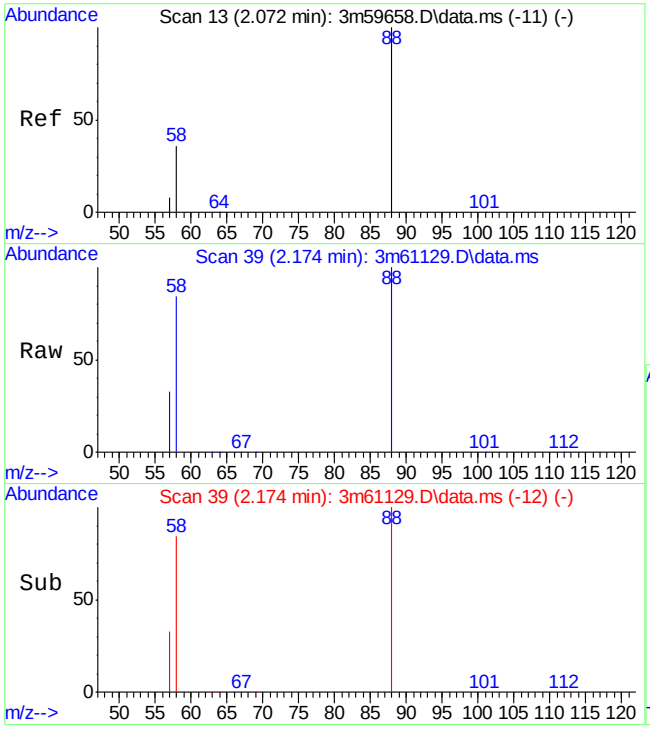
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2874\
Data File : 3m61129.D
Acq On : 6 May 2016 1:51 pm
Operator : linseyk
Sample : jc19644-2
Misc : op93662a,e3m2874,1000
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 06 14:51:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri May 06 14:17:24 2016
Response via : Initial Calibration



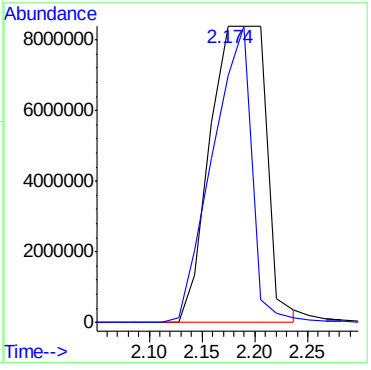
SGS ACCUTEST JC19644



#2
1,4-dioxane
Concen: 2022.82 ppm
RT: 2.174 min Scan# 39
Delta R.T. -0.082 min
Lab File: 3m61129.D
Acq: 6 May 2016 1:51 pm

Tgt Ion: 88 Resp:30719728

Ion	Ratio	Lower	Upper
88	100		
58	84.4	77.1	117.1



7.1.9

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2874\
Data File : 3m61130.D
Acq On : 6 May 2016 2:24 pm
Operator : linseyk
Sample : jc19644-3
Misc : op93662a,e3m2874,900
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 06 14:51:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri May 06 14:17:24 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	10.427	150	310768	4.00 ppm	0.00
14) Fluorene-d10	13.430	176	461406	4.00 ppm	0.00
21) Fluoranthene-d10	17.639	212	705901	4.00 ppm	0.00
31) Benzo(a)pyrene-d12	22.243	264	585493	4.00 ppm	0.00
System Monitoring Compounds					
3) 2-Fluorophenol	4.368	112	891590	22.93 ppm	-0.06
Spiked Amount 50.000			Recovery = 45.86%		
4) Phenol-d5	5.976	99	968555	15.06 ppm	0.00
Spiked Amount 50.000			Recovery = 30.12%		
7) Nitrobenzene-d5	7.550	82	1984493	33.18 ppm	-0.02
Spiked Amount 50.000			Recovery = 66.36%		
15) 2-Fluorobiphenyl	11.099	172	4161607	32.82 ppm	-0.03
Spiked Amount 50.000			Recovery = 65.64%		
20) 2,4,6-Tribromophenol	13.976	330	556084	38.51 ppm	0.03
Spiked Amount 50.000			Recovery = 77.02%		
28) Terphenyl-d14	18.458	244	4001656	39.08 ppm	0.02
Spiked Amount 50.000			Recovery = 78.16%		
Target Compounds					Qvalue
2) 1,4-dioxane	2.159	88	887669	55.28 ppm	# 21

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

7.1.10

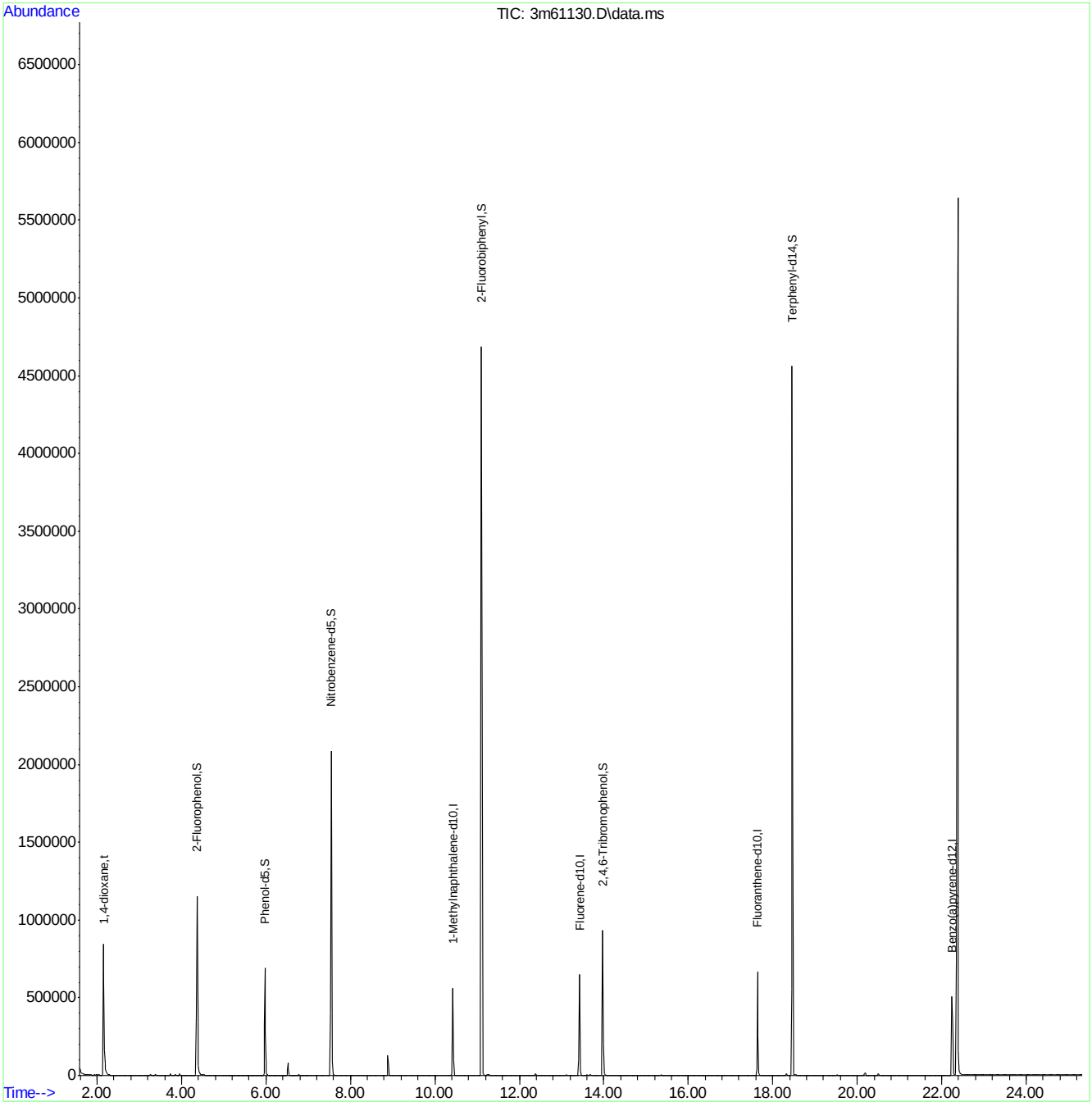
7

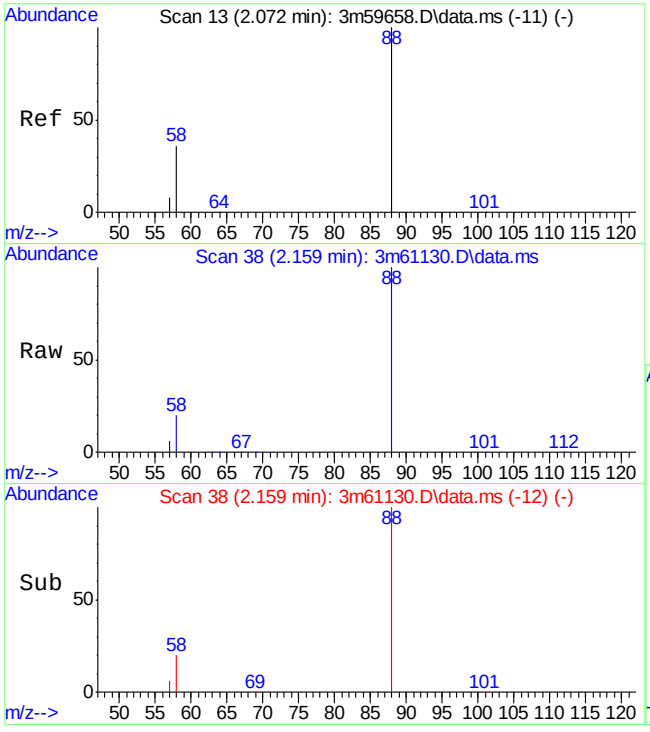
SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2874\
Data File : 3m61130.D
Acq On : 6 May 2016 2:24 pm
Operator : linseyk
Sample : jc19644-3
Misc : op93662a,e3m2874,900
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 06 14:51:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri May 06 14:17:24 2016
Response via : Initial Calibration

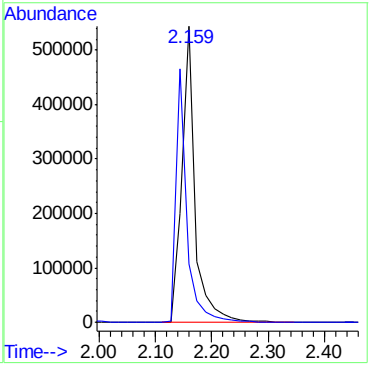




#2
1,4-dioxane
Concen: 55.28 ppm
RT: 2.159 min Scan# 38
Delta R.T. -0.097 min
Lab File: 3m61130.D
Acq: 6 May 2016 2:24 pm

Tgt Ion: 88 Resp: 887669

Ion	Ratio	Lower	Upper
88	100		
58	19.6	77.1	117.1#



7.1.10

7

SGS ACCUTEST JC19644

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 05/19/16 13:08

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65183.D
Acq On : 9 May 2016 5:47 pm
Operator : linseyk
Sample : jc19644-4
Misc : op93678a,e4m2910,30.5
ALS Vial : 15 Sample Multiplier: 1

Quant Time: May 19 13:07:17 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 06 13:08:34 2016
Response via : Initial Calibration

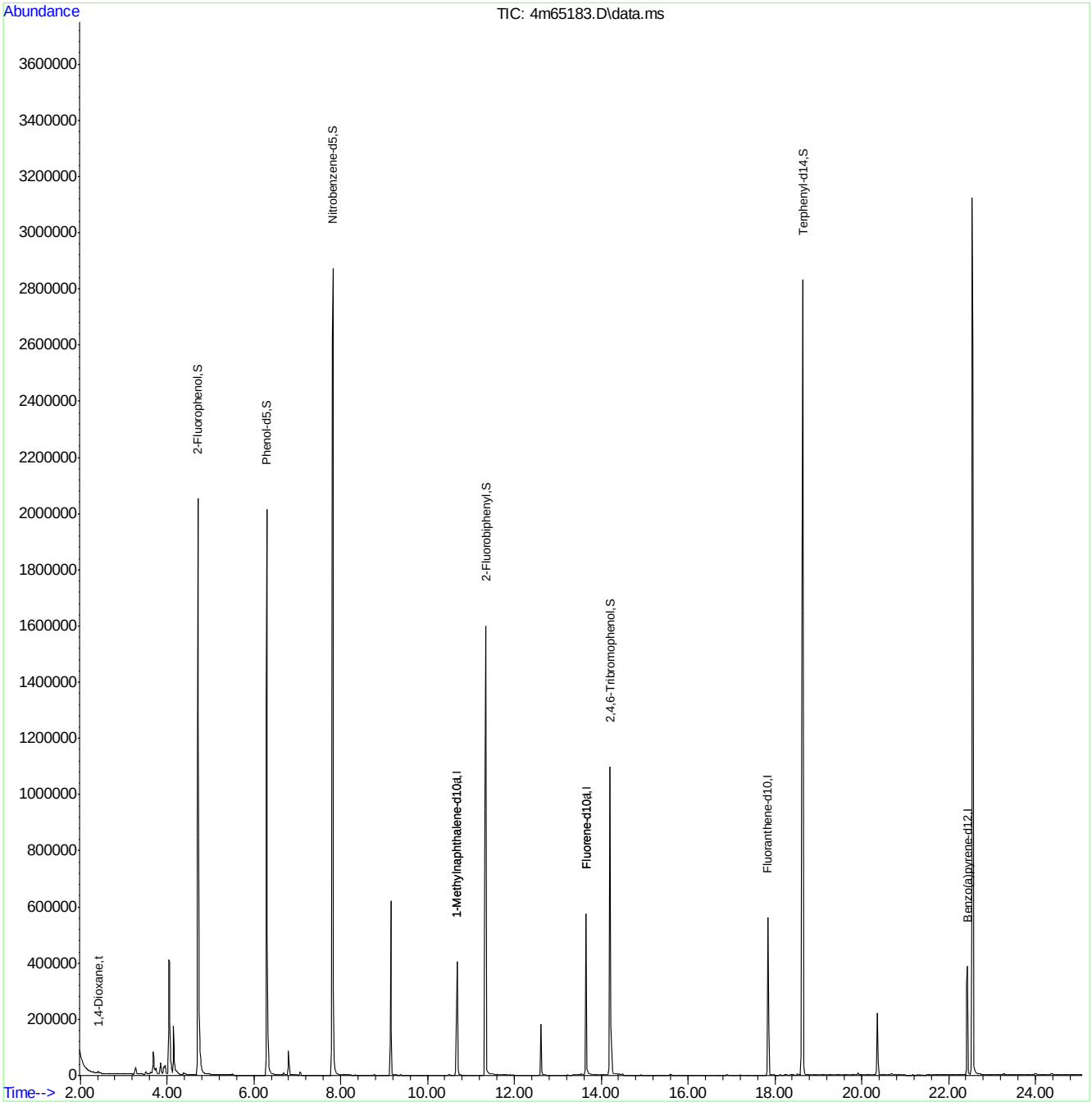
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.678	152	251204	4.00	ppm	-0.02
12) Fluorene-d10	13.656	176	452103	4.00	ppm	-0.02
22) Fluoranthene-d10	17.836	212	657246	4.00	ppm	-0.03
28) Benzo(a)pyrene-d12	22.436	264	526228	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.678	152	251204	4.00	ppm	-0.02
38) Fluorene-d10a	13.656	176	452103	4.00	ppm	-0.02
System Monitoring Compounds						
2) 2-Fluorophenol	4.715	112	1334741	40.58	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 81.16%#			
3) Phenol-d5	6.301	99	2331880	42.16	ppm	0.00
Spiked Amount 50.000			Recovery = 84.32%			
6) Nitrobenzene-d5	7.822	82	2545516	51.32	ppm	-0.02
Spiked Amount 50.000			Recovery = 102.64%			
11) 2-Fluorobiphenyl	11.346	172	2665220	36.76	ppm	-0.02
Spiked Amount 50.000			Recovery = 73.52%			
17) 2,4,6-Tribromophenol	14.206	330	913354	37.87	ppm	-0.02
Spiked Amount 50.000			Recovery = 75.74%			
25) Terphenyl-d14	18.646	244	4039354	45.49	ppm	-0.03
Spiked Amount 50.000			Recovery = 90.98%			
Target Compounds						Qvalue
36) 1,4-Dioxane	2.414	88	3108m	0.19	ppm	

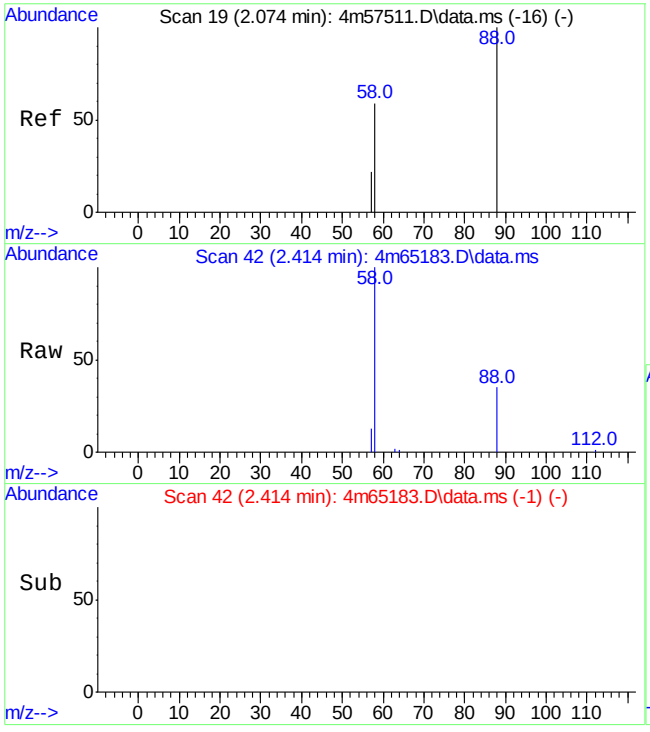
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65183.D
Acq On : 9 May 2016 5:47 pm
Operator : linseyk
Sample : jc19644-4
Misc : op93678a,e4m2910,30.5
ALS Vial : 15 Sample Multiplier: 1

Quant Time: May 19 13:07:17 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 06 13:08:34 2016
Response via : Initial Calibration

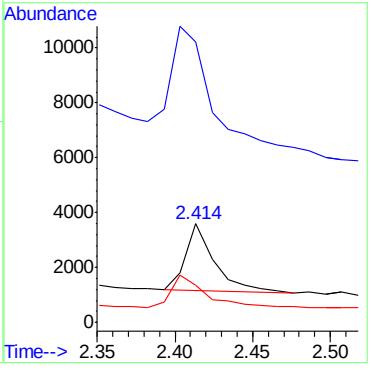




#36
1,4-Dioxane
Concen: 0.19 ppm m
RT: 2.414 min Scan# 42
Delta R.T. -0.062 min
Lab File: 4m65183.D
Acq: 9 May 2016 5:47 pm

Tgt Ion: 88 Resp: 3108

Ion	Ratio	Lower	Upper
88	100		
58	284.5	61.9	101.9#
57	38.2	0.0	37.4#



7.1.11

7

SGS ACCUTEST JC19644

Manual Integration Approval Summary

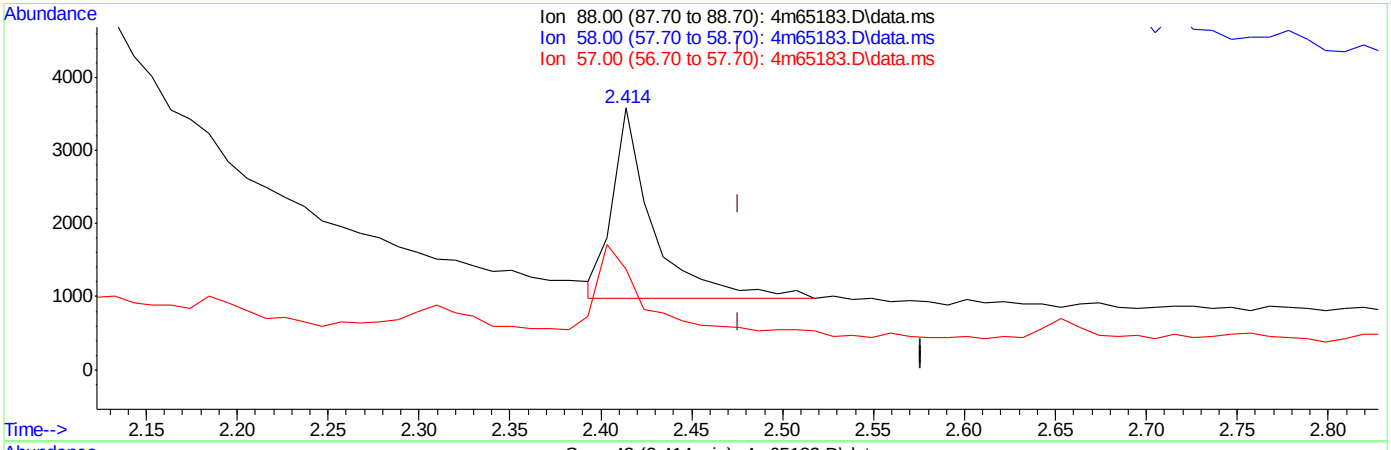
Sample Number:	JC19644-4	**Method:**	SW846 8270D BY SIM
Lab FileID:	4M65183.D	**Analyst approved:**	05/19/16 13:08 Kristi Schollenberger
Injection Time:	05/09/16 17:47	**Supervisor approved:**	05/19/16 13:08 Kristi Schollenberger

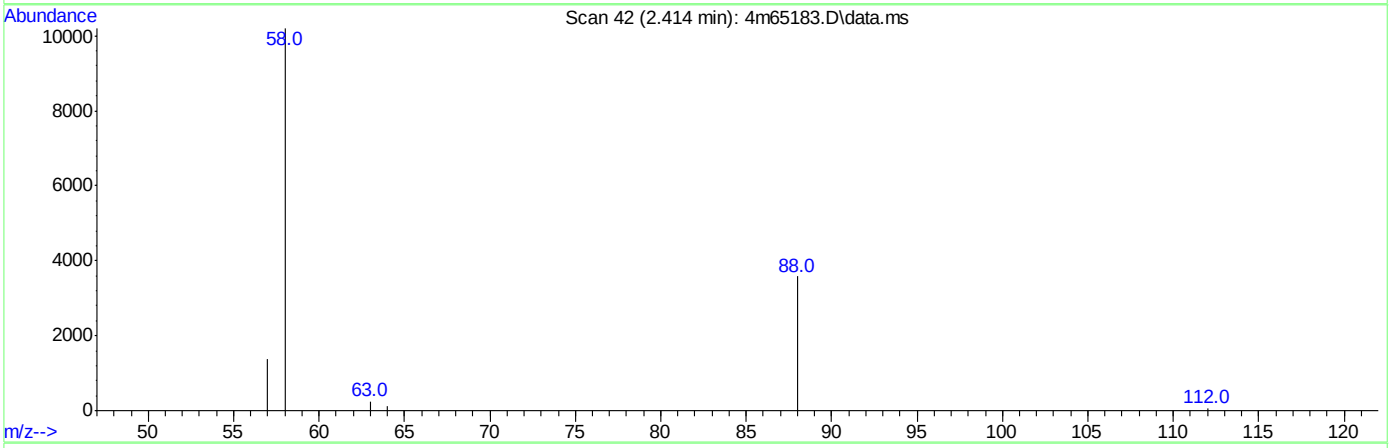
Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dioxane	123-91-1		2.41	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65183.D
Acq On : 9 May 2016 5:47 pm
Operator : linseyk
Sample : jc19644-4
Misc : op93678a,e4m2910,30.5
ALS Vial : 15 Sample Multiplier: 1

Quant Time: May 10 10:46:07 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 06 13:08:34 2016
Response via : Initial Calibration





TIC: 4m65183.D\data.ms

(36) 1,4-Dioxane (t)

2.414min (-0.062) 0.25ppm

response 4052

Ion	Exp%	Act%
88.00	100	100
58.00	81.90	135.54#
57.00	17.40	29.87
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65184.D
Acq On : 9 May 2016 6:20 pm
Operator : linseyk
Sample : jc19644-5
Misc : op93678a,e4m2910,31.0
ALS Vial : 16 Sample Multiplier: 1

Quant Time: May 10 10:46:40 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 06 13:08:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.678	152	362332	4.00	ppm	-0.02
12) Fluorene-d10	13.656	176	649537	4.00	ppm	-0.02
22) Fluoranthene-d10	17.836	212	926986	4.00	ppm	-0.03
28) Benzo(a)pyrene-d12	22.436	264	790624	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.678	152	362332	4.00	ppm	-0.02
38) Fluorene-d10a	13.656	176	649537	4.00	ppm	-0.02
System Monitoring Compounds						
2) 2-Fluorophenol	4.725	112	1845003	38.89	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 77.78%#			
3) Phenol-d5	6.301	99	3336741	41.82	ppm	0.00
Spiked Amount 50.000			Recovery = 83.64%			
6) Nitrobenzene-d5	7.821	82	3267523	45.67	ppm	-0.02
Spiked Amount 50.000			Recovery = 91.34%			
11) 2-Fluorobiphenyl	11.346	172	4140830	39.60	ppm	-0.02
Spiked Amount 50.000			Recovery = 79.20%			
17) 2,4,6-Tribromophenol	14.206	330	1069151	30.86	ppm	-0.02
Spiked Amount 50.000			Recovery = 61.72%			
25) Terphenyl-d14	18.645	244	5619698	44.87	ppm	-0.03
Spiked Amount 50.000			Recovery = 89.74%			
Target Compounds						Qvalue
36) 1,4-Dioxane	2.413	88	79025	3.36	ppm #	68

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

7.1.12

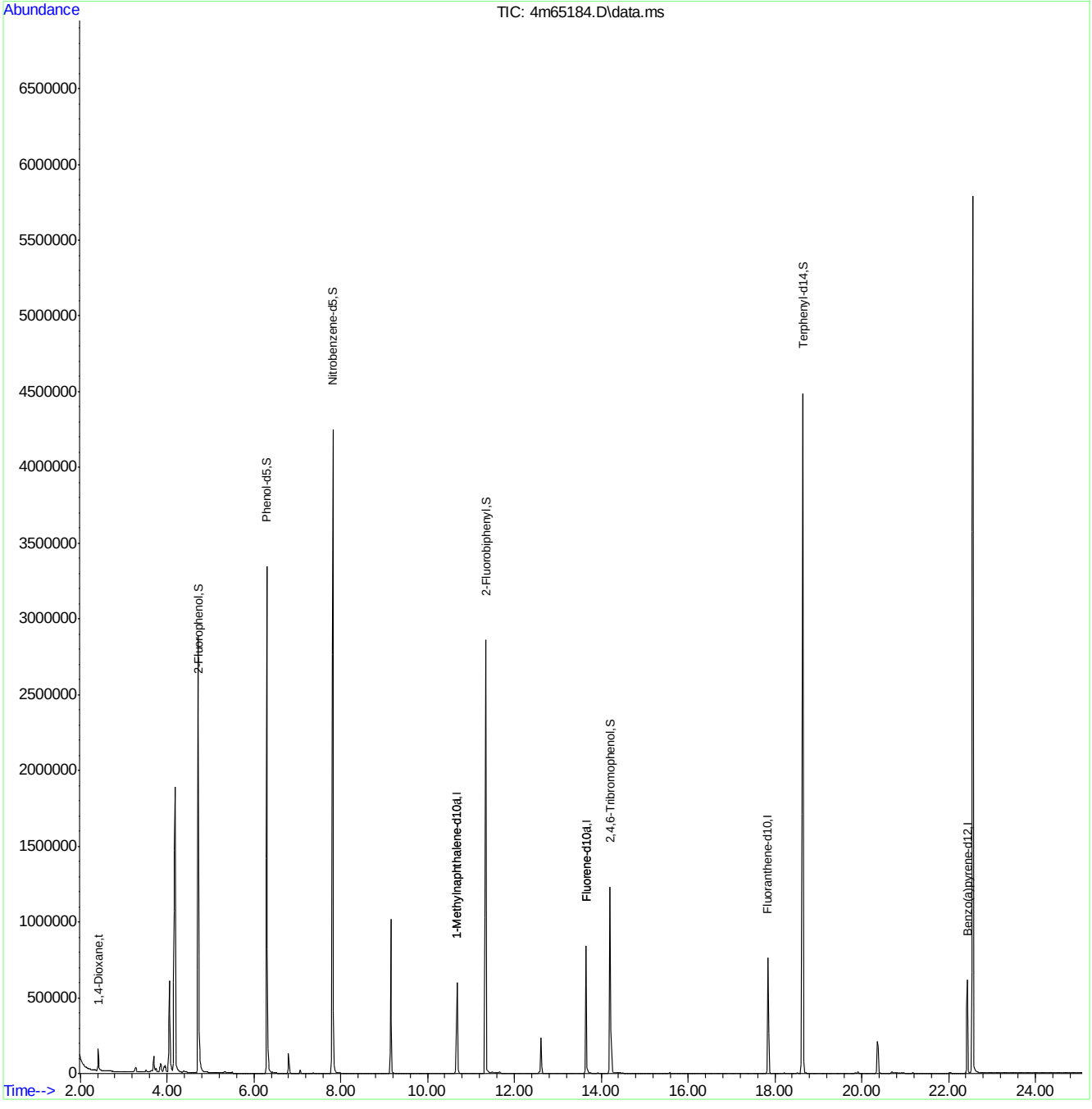
7

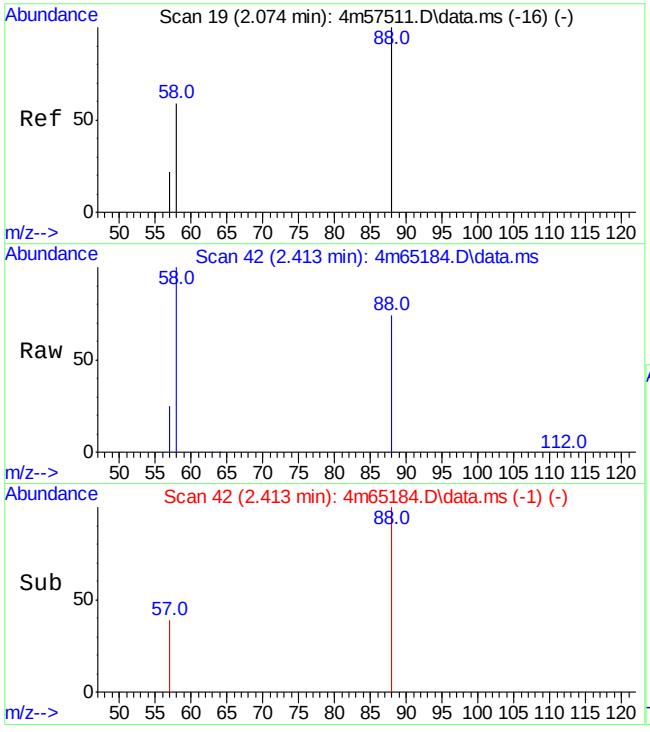
SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65184.D
Acq On : 9 May 2016 6:20 pm
Operator : linseyk
Sample : jc19644-5
Misc : op93678a,e4m2910,31.0
ALS Vial : 16 Sample Multiplier: 1

Quant Time: May 10 10:46:40 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 06 13:08:34 2016
Response via : Initial Calibration

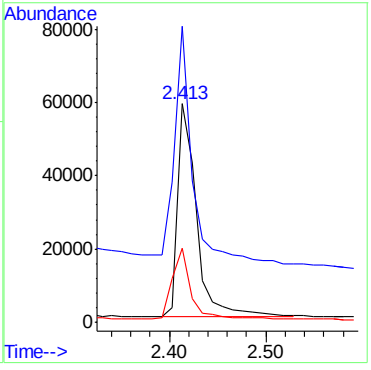




#36
1,4-Dioxane
Concen: 3.36 ppm
RT: 2.413 min Scan# 42
Delta R.T. -0.063 min
Lab File: 4m65184.D
Acq: 9 May 2016 6:20 pm

Tgt Ion: 88 Resp: 79025

Ion	Ratio	Lower	Upper
88	100		
58	109.7	61.9	101.9#
57	33.4	0.0	37.4



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6604\F156859.D Vial: 5
Acq On : 6 May 2016 11:06 am Operator: linseyk
Sample : op93662-mb1 Inst : MSF
Misc : op93662,ef6604,1000 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 06 11:28:53 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu May 05 10:56:04 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.78	152	610038	40.00 ppm	-0.03
24) Naphthalene-d8	5.70	136	2494280	40.00 ppm	-0.03
47) Acenaphthene-d10	7.14	164	1461312	40.00 ppm	-0.04
69) Phenanthrene-d10	9.04	188	2371475	40.00 ppm	-0.05
83) Chrysene-d12	14.32	240	2255787	40.00 ppm	-0.06
92) Perylene-d12	17.36	264	2082926	40.00 ppm	-0.06
102) 1,4-Dichlorobenzene-d4b	4.78	152	610038	40.00 ppm	-0.03
104) Naphthalene-d8b	5.70	136	2494280	40.00 ppm	-0.03
106) Acenaphthene-d10b	7.14	164	1461312	40.00 ppm	-0.04
108) Phenanthrene-d10b	9.04	188	2371475	40.00 ppm	-0.05
110) Chrysene-d12b	14.32	240	2255787	40.00 ppm	-0.06

System Monitoring Compounds					
5) 2-Fluorophenol	3.81	112	393912	18.36 ppm	-0.02
Spiked Amount 50.000			Recovery	= 36.72%	
8) Phenol-d5	4.53	99	325069	12.46 ppm	-0.02
Spiked Amount 50.000			Recovery	= 24.92%	
25) Nitrobenzene-d5	5.18	82	749188	32.16 ppm	-0.04
Spiked Amount 50.000			Recovery	= 64.32%	
51) 2-Fluorobiphenyl	6.52	172	1326364	28.44 ppm	-0.03
Spiked Amount 50.000			Recovery	= 56.88%	
73) 2,4,6-Tribromophenol	8.04	330	171820	35.50 ppm	-0.05
Spiked Amount 50.000			Recovery	= 71.00%	
85) Terphenyl-d14	12.10	244	1628904	35.56 ppm	-0.06
Spiked Amount 50.000			Recovery	= 71.12%	

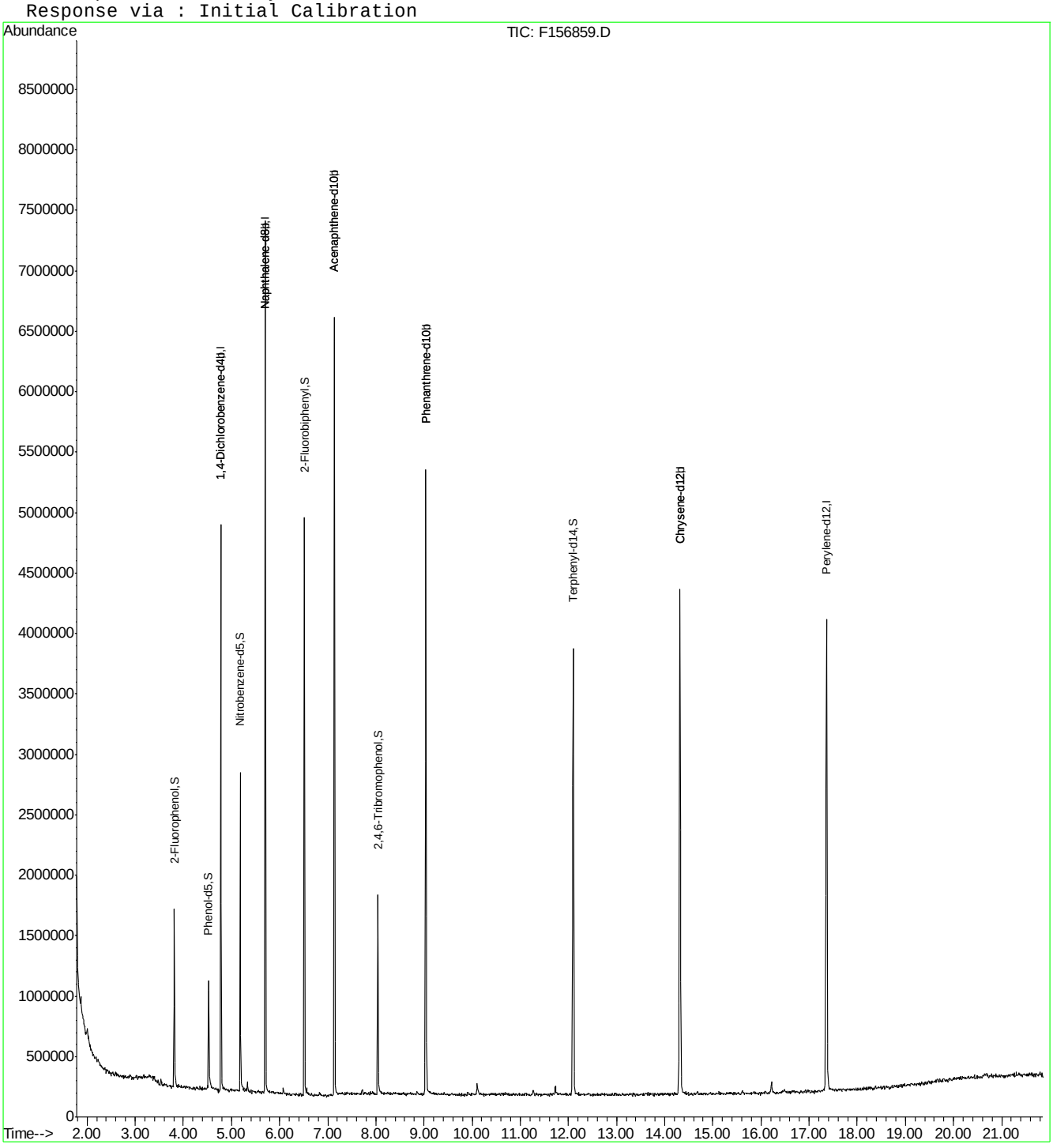
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed
F156859.D MF6563.M Fri May 06 13:22:03 2016 RT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6604\F156859.D Vial: 5
Acq On : 6 May 2016 11:06 am Operator: linseyk
Sample : op93662-mb1 Inst : MSF
Misc : op93662,ef6604,1000 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 6 13:21 2016 Quant Results File: MF6563.RES

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri May 06 12:22:13 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3637\
Data File : 3E82981.D
Acq On : 6 May 2016 2:52 pm
Operator : ashleyn
Sample : op93678-mb1
Misc : op93678,e3e3637,30.0
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 06 15:14:18 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MFri May 06 14:23:29 2016
QLast Update : Fri May 06 14:23:29 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.449	152	112924	40.00	ppm	-0.02
24) Naphthalene-d8	5.497	136	437615	40.00	ppm	-0.11
47) Acenaphthene-d10	7.503	164	261170	40.00	ppm	-0.11
69) Phenanthrene-d10	9.658	188	436717	40.00	ppm	-0.10
83) Chrysene-d12	13.836	240	417656	40.00	ppm	-0.10
92) Perylene-d12	15.948	264	321356	40.00	ppm	-0.14
102) 1,4-Dichlorobenzene-d4a	4.449	152	112924	40.00	ppm	-0.09
104) Acenaphthene-d10a	7.503	164	261170	40.00	ppm	-0.11
106) Phenanthrene-d10a	9.658	188	436717	40.00	ppm	-0.10
108) Chrysene-d12a	13.836	240	417656	40.00	ppm	-0.16
110) Naphthalene-d8a	5.497	136	437615	40.00	ppm	-0.05

System Monitoring Compounds						
5) 2-Fluorophenol	3.524	112	102328	29.56	ppm	0.03
Spiked Amount 50.000			Recovery = 59.12%			
8) Phenol-d5	4.272	99	133031	29.53	ppm	0.05
Spiked Amount 50.000			Recovery = 59.06%			
25) Nitrobenzene-d5	4.877	82	140825	32.18	ppm	-0.10
Spiked Amount 50.000			Recovery = 64.36%			
51) 2-Fluorobiphenyl	6.658	172	288169	33.27	ppm	-0.10
Spiked Amount 50.000			Recovery = 66.54%			
73) 2,4,6-Tribromophenol	8.642	330	43910	28.51	ppm	-0.08
Spiked Amount 50.000			Recovery = 57.02%			
85) Terphenyl-d14	12.220	244	259754	29.63	ppm	-0.10
Spiked Amount 50.000			Recovery = 59.26%			

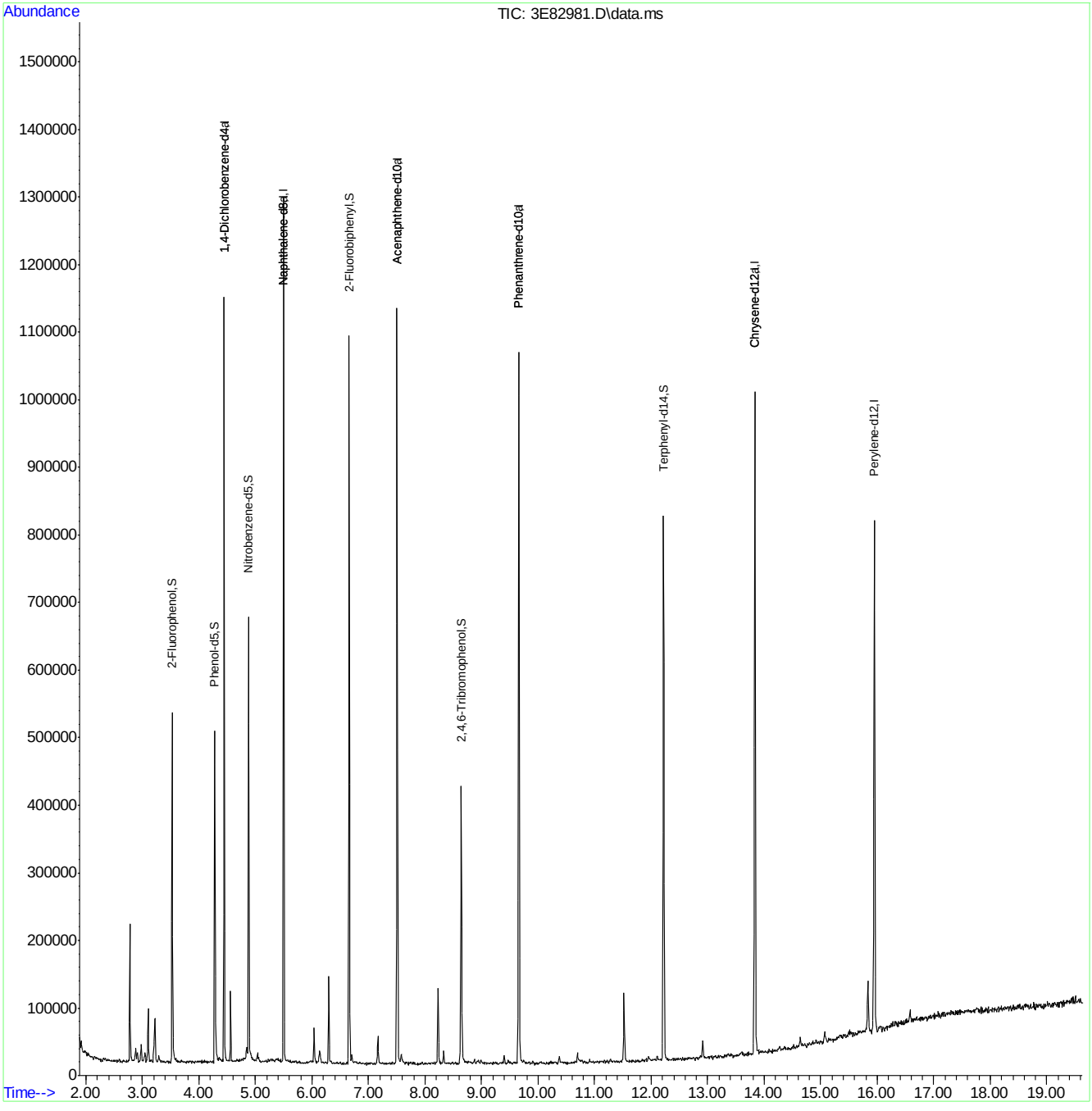
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3637\
Data File : 3E82981.D
Acq On : 6 May 2016 2:52 pm
Operator : ashleyn
Sample : op93678-mb1
Misc : op93678,e3e3637,30.0
ALS Vial : 10 Sample Multiplier: 1

Quant Time: May 06 15:14:18 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MFri May 06 14:23:29 2016
QLast Update : Fri May 06 14:23:29 2016
Response via : Initial Calibration



M3E3623.M Fri May 06 15:14:26 2016 MS3E

Page: 2

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1214\
Data File : 6p26011.D
Acq On : 17 May 2016 6:27 pm
Operator : ariellec
Sample : OP93678-MB1
Misc : op93678,e6p1214,30.0
ALS Vial : 23 Sample Multiplier: 1

Quant Time: May 18 09:54:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue May 17 17:03:06 2016
QLast Update : Tue May 17 17:03:06 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.842	152	388906	40.00	ppm	-0.02
24) Naphthalene-d8	5.965	136	1997339	40.00	ppm	-0.01
47) Acenaphthene-d10	8.073	164	1200294	40.00	ppm	0.00
69) Phenanthrene-d10	10.255	188	2010724	40.00	ppm	-0.01
83) Chrysene-d12	14.443	240	1380087	40.00	ppm	-0.01
92) Perylene-d12	16.550	264	1241378	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.842	152	388906	40.00	ppm	0.00
104) Acenaphthene-d10a	8.073	164	1200294	40.00	ppm	0.00
106) Phenanthrene-d10a	10.255	188	2010724	40.00	ppm	-0.01
110) Chrysene-d12a	14.443	240	1380087	40.00	ppm	-0.01
112) Naphthalene-d8a	5.965	136	1997339	40.00	ppm	-0.01
114) Chrysene-d12b	14.443	240	1380087	40.00	ppm	-0.04
System Monitoring Compounds						
5) 2-Fluorophenol	3.852	112	587956	39.68	ppm	0.00
Spiked Amount 50.000			Recovery = 79.36%			
8) Phenol-d5	4.558	99	791391	40.79	ppm	0.00
Spiked Amount 50.000			Recovery = 81.58%			
25) Nitrobenzene-d5	5.302	82	627547	28.18	ppm	0.00
Spiked Amount 50.000			Recovery = 56.36%			
51) 2-Fluorobiphenyl	7.185	172	1267356	32.75	ppm	0.00
Spiked Amount 50.000			Recovery = 65.50%			
73) 2,4,6-Tribromophenol	9.201	330	125030	24.81	ppm	0.00
Spiked Amount 50.000			Recovery = 49.62%			
85) Terphenyl-d14	12.817	244	849650	29.39	ppm	-0.01
Spiked Amount 50.000			Recovery = 58.78%			
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

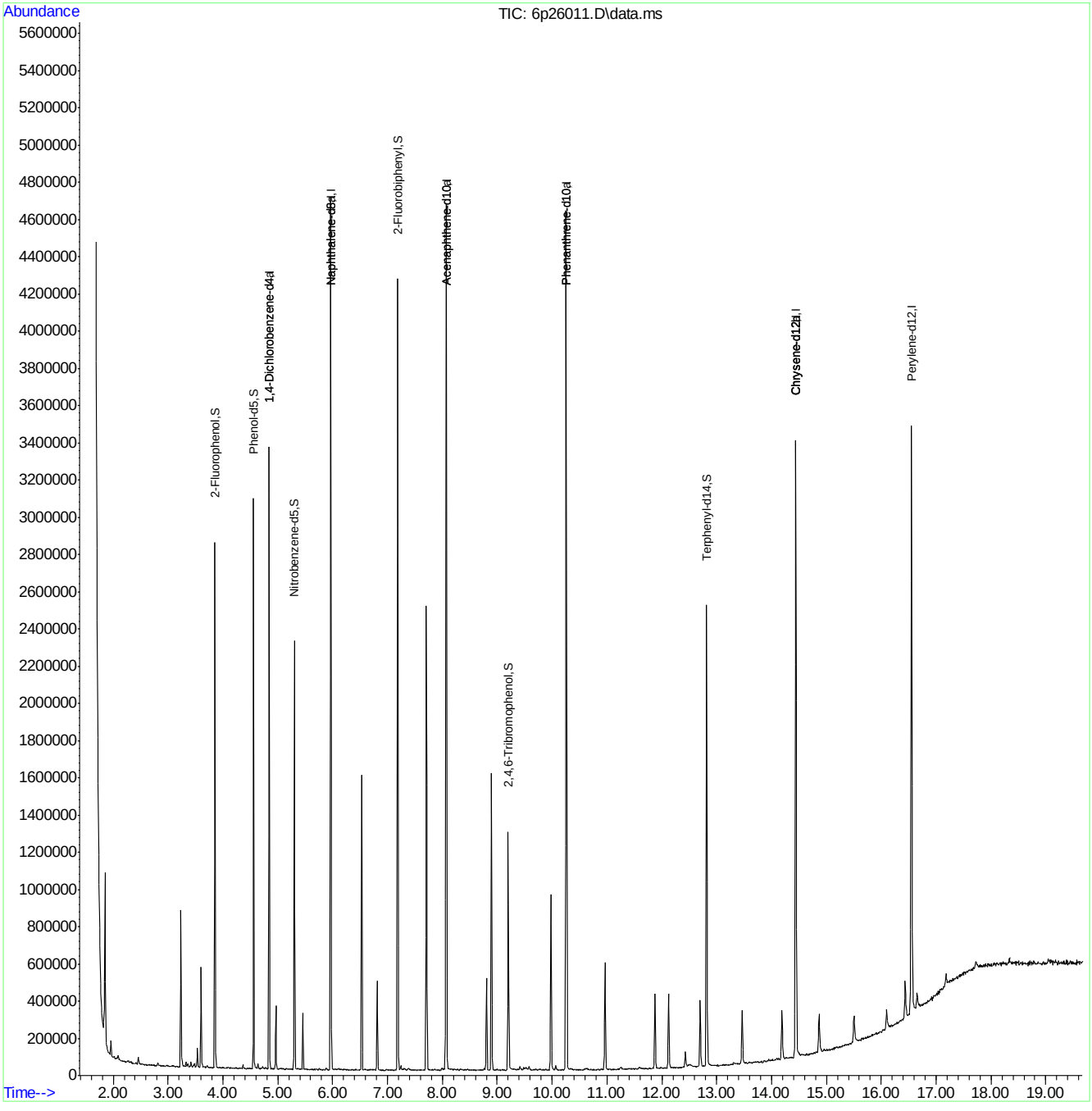
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1214\
Data File : 6p26011.D
Acq On : 17 May 2016 6:27 pm
Operator : ariellec
Sample : OP93678-MB1
Misc : op93678,e6p1214,30.0
ALS Vial : 23 Sample Multiplier: 1

Quant Time: May 18 09:54:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue May 17 17:03:06 2016
QLast Update : Tue May 17 17:03:06 2016
Response via : Initial Calibration



SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2874\
Data File : 3m61126.D
Acq On : 6 May 2016 12:15 pm
Operator : linseyk
Sample : op93662a-mb1
Misc : op93662a,e3m2874,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 06 14:19:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri May 06 14:17:24 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	10.426	150	280185	4.00 ppm	0.00
14) Fluorene-d10	13.430	176	394506	4.00 ppm	0.00
21) Fluoranthene-d10	17.639	212	623165	4.00 ppm	0.00
31) Benzo(a)pyrene-d12	22.243	264	533946	4.00 ppm	0.00
System Monitoring Compounds					
3) 2-Fluorophenol	4.368	112	714783	20.39 ppm	-0.06
Spiked Amount 50.000			Recovery	= 40.78%	
4) Phenol-d5	5.976	99	733163	12.64 ppm	0.00
Spiked Amount 50.000			Recovery	= 25.28%	
7) Nitrobenzene-d5	7.550	82	1501873	27.85 ppm	-0.02
Spiked Amount 50.000			Recovery	= 55.70%	
15) 2-Fluorobiphenyl	11.099	172	3313652	30.57 ppm	-0.03
Spiked Amount 50.000			Recovery	= 61.14%	
20) 2,4,6-Tribromophenol	13.976	330	425060	34.43 ppm	0.03
Spiked Amount 50.000			Recovery	= 68.86%	
28) Terphenyl-d14	18.458	244	4103987	45.40 ppm	0.02
Spiked Amount 50.000			Recovery	= 90.80%	
Target Compounds					Qvalue

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

7.2.4

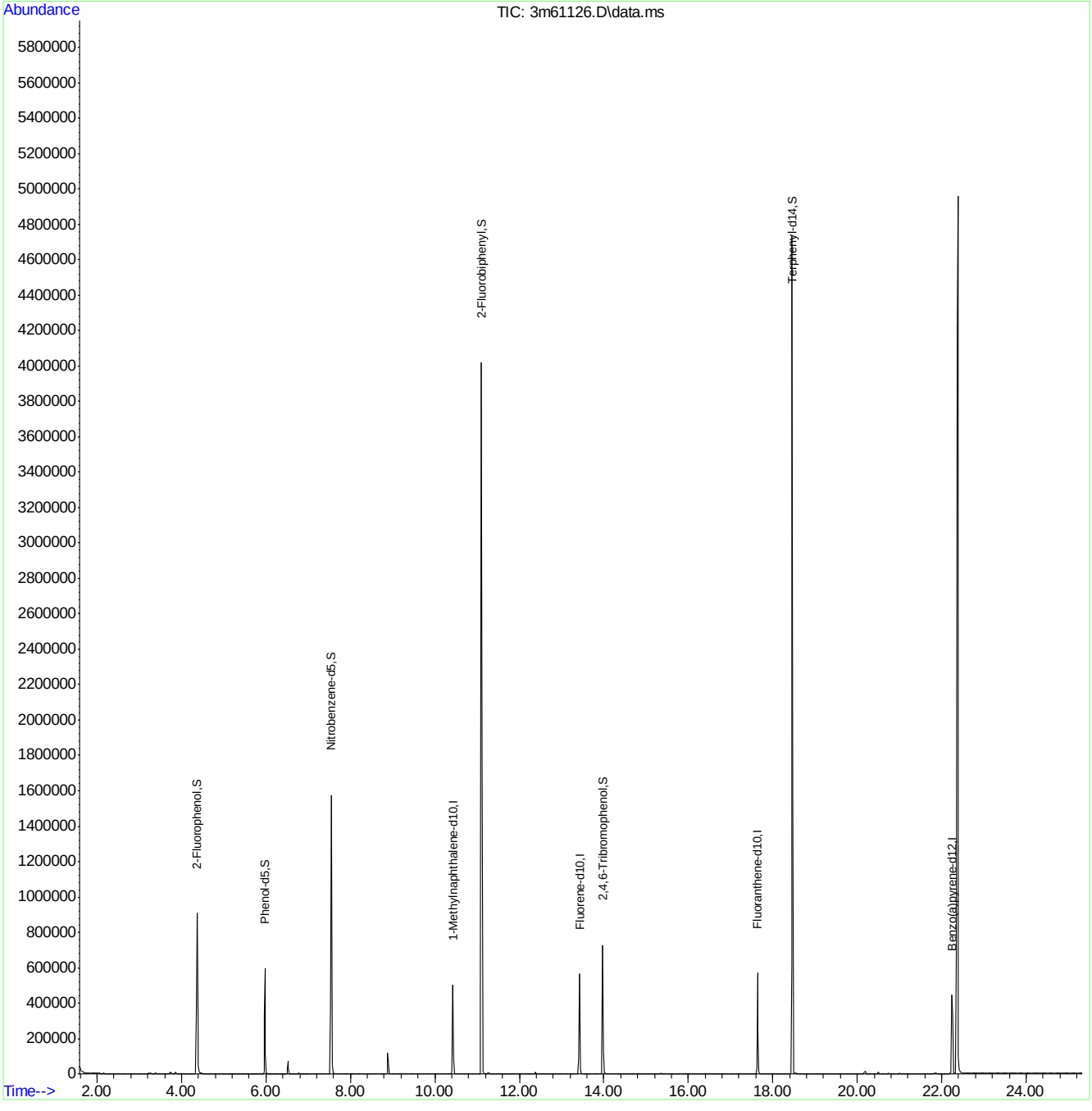
7

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2874\
Data File : 3m61126.D
Acq On : 6 May 2016 12:15 pm
Operator : linseyk
Sample : op93662a-mb1
Misc : op93662a,e3m2874,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 06 14:19:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri May 06 14:17:24 2016
Response via : Initial Calibration



SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65171.D
Acq On : 9 May 2016 11:08 am
Operator : linseyk
Sample : op93662a-mb1
Misc : op93662a,e4m2910,1000
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:35:15 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 06 13:08:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.678	152	223438	4.00	ppm	-0.02
12) Fluorene-d10	13.656	176	420716	4.00	ppm	-0.02
22) Fluoranthene-d10	17.836	212	619749	4.00	ppm	-0.03
28) Benzo(a)pyrene-d12	22.436	264	496073	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.678	152	223438	4.00	ppm	#-0.02
38) Fluorene-d10a	13.656	176	420716	4.00	ppm	-0.02
System Monitoring Compounds						
2) 2-Fluorophenol	4.714	112	717083	24.51	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 49.02%			
3) Phenol-d5	6.301	99	825995	16.79	ppm	0.00
Spiked Amount 50.000			Recovery = 33.58%			
6) Nitrobenzene-d5	7.821	82	1735125	39.33	ppm	-0.02
Spiked Amount 50.000			Recovery = 78.66%			
11) 2-Fluorobiphenyl	11.346	172	2207163	34.22	ppm	-0.02
Spiked Amount 50.000			Recovery = 68.44%			
17) 2,4,6-Tribromophenol	14.205	330	710695	31.67	ppm	-0.02
Spiked Amount 50.000			Recovery = 63.34%			
25) Terphenyl-d14	18.645	244	4141970	49.47	ppm	-0.03
Spiked Amount 50.000			Recovery = 98.94%			
Target Compounds						Qvalue

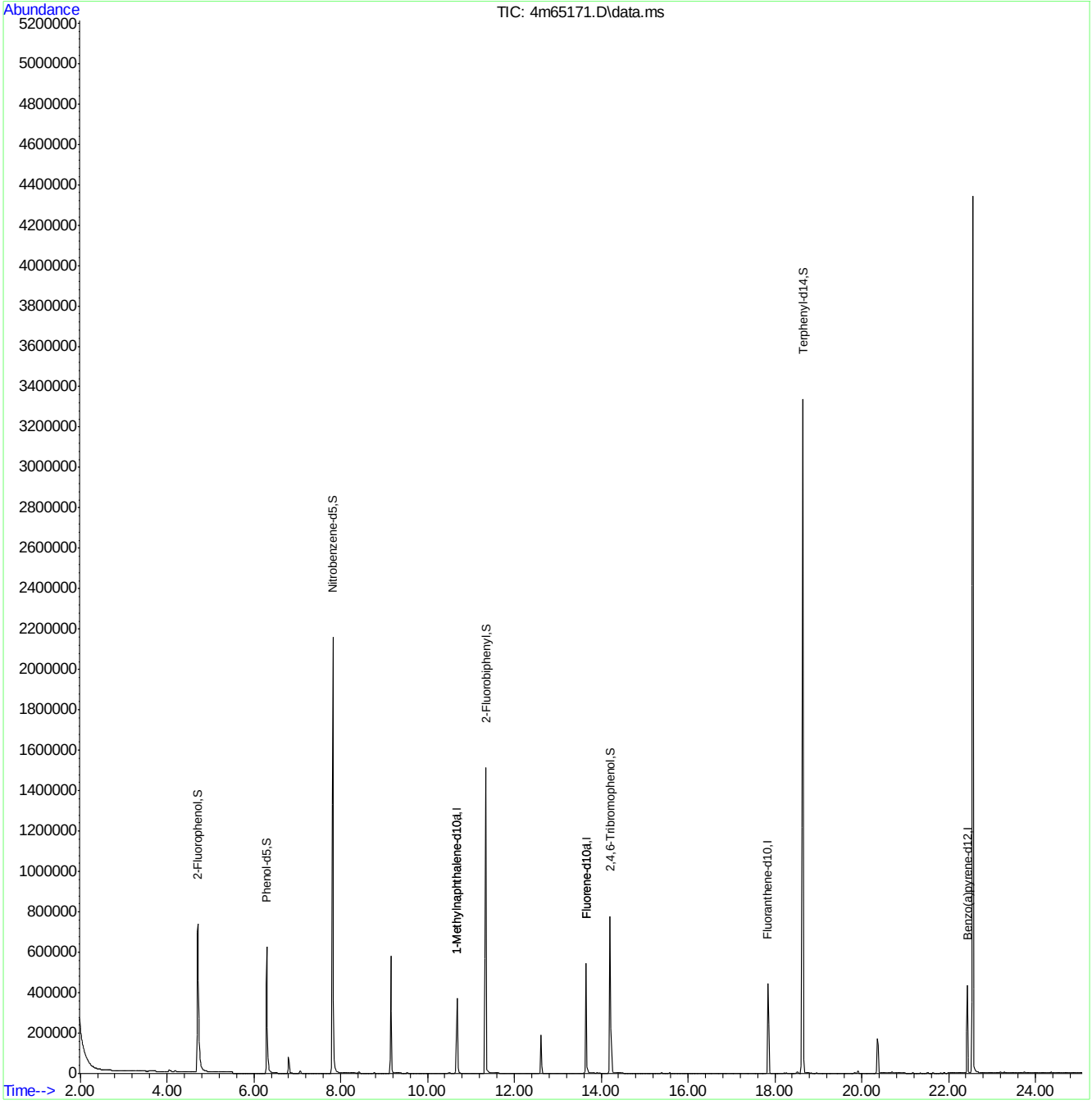
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65171.D
Acq On : 9 May 2016 11:08 am
Operator : linseyk
Sample : op93662a-mb1
Misc : op93662a,e4m2910,1000
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 10 10:35:15 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 06 13:08:34 2016
Response via : Initial Calibration



M4M2881SIM.M Tue May 10 10:35:18 2016 MANAGER

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65181.D
Acq On : 9 May 2016 4:41 pm
Operator : linseyk
Sample : op93678a-mb1
Misc : op93678a,e4m2910,30.0
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 10 10:45:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Fri May 06 13:08:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.678	152	295447	4.00	ppm	-0.02
12) Fluorene-d10	13.656	176	531806	4.00	ppm	-0.02
22) Fluoranthene-d10	17.836	212	783374	4.00	ppm	-0.03
28) Benzo(a)pyrene-d12	22.436	264	590417	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.678	152	295447	4.00	ppm	-0.02
38) Fluorene-d10a	13.656	176	531806	4.00	ppm	-0.02
System Monitoring Compounds						
2) 2-Fluorophenol	4.725	112	1581586	40.88	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 81.76%#			
3) Phenol-d5	6.315	99	2844349	43.72	ppm	0.00
Spiked Amount 50.000			Recovery = 87.44%			
6) Nitrobenzene-d5	7.821	82	2576665	44.17	ppm	-0.02
Spiked Amount 50.000			Recovery = 88.34%			
11) 2-Fluorobiphenyl	11.346	172	3119888	36.59	ppm	-0.02
Spiked Amount 50.000			Recovery = 73.18%			
17) 2,4,6-Tribromophenol	14.205	330	965776	34.05	ppm	-0.02
Spiked Amount 50.000			Recovery = 68.10%			
25) Terphenyl-d14	18.645	244	3735554	35.30	ppm	-0.03
Spiked Amount 50.000			Recovery = 70.60%			
Target Compounds						Qvalue

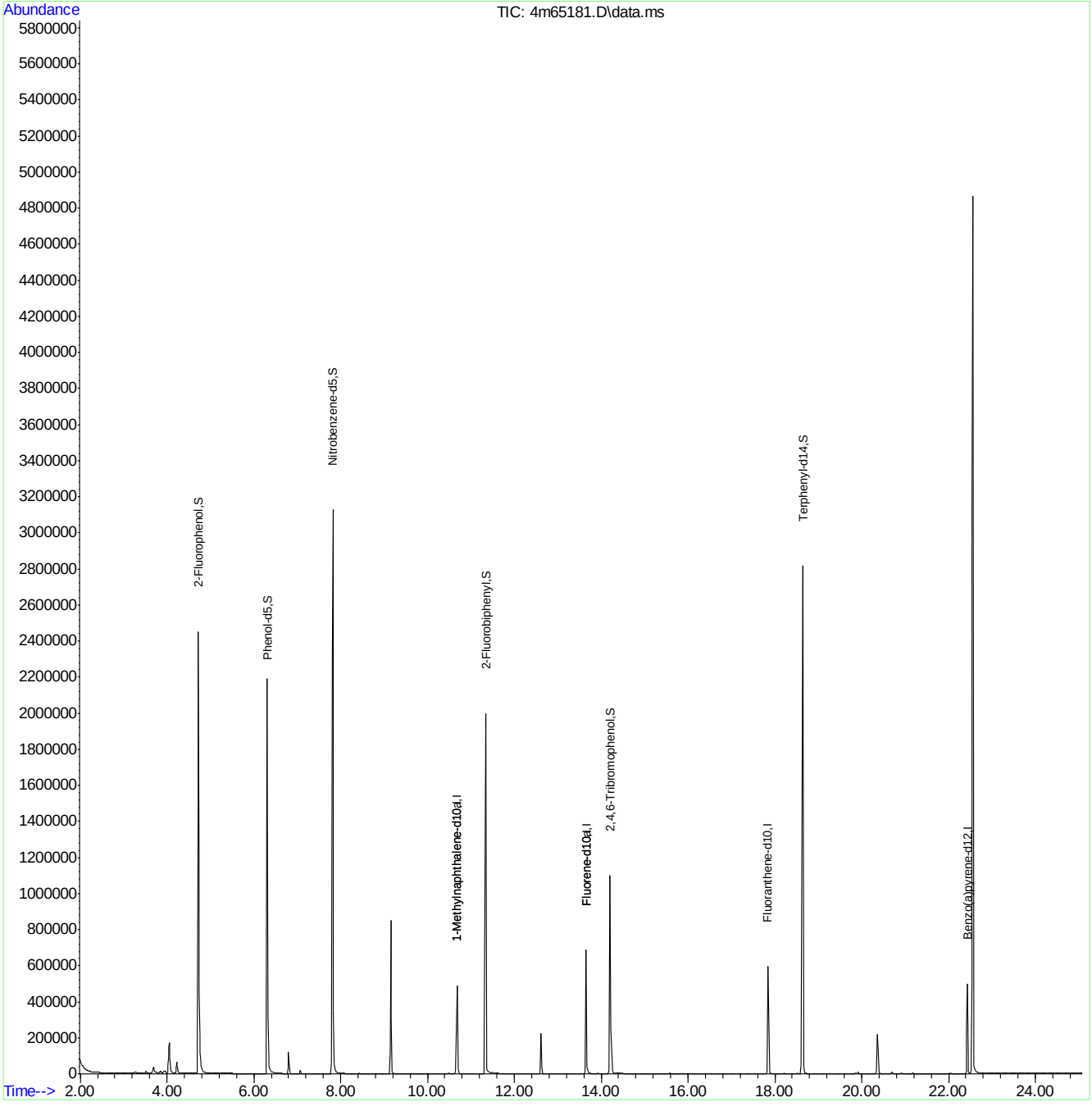
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65181.D
Acq On : 9 May 2016 4:41 pm
Operator : linseyk
Sample : op93678a-mb1
Misc : op93678a,e4m2910,30.0
ALS Vial : 13 Sample Multiplier: 1

Quant Time: May 10 10:45:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Fri May 06 13:08:34 2016
Response via : Initial Calibration



M4M2881SIM.M Tue May 10 10:45:15 2016 MANAGER

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6604\F156858.D Vial: 4
Acq On : 6 May 2016 10:38 am Operator: linseyk
Sample : op93662-bs1 Inst : MSF
Misc : op93662,ef6604,1000 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 06 10:59:58 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu May 05 10:56:04 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.78	152	683576	40.00	ppm	-0.03
24) Naphthalene-d8	5.71	136	3056259	40.00	ppm	-0.03
47) Acenaphthene-d10	7.14	164	1620555	40.00	ppm	-0.04
69) Phenanthrene-d10	9.05	188	2608440	40.00	ppm	-0.05
83) Chrysene-d12	14.33	240	2374165	40.00	ppm	-0.05
92) Perylene-d12	17.37	264	2137393	40.00	ppm	-0.05
102) 1,4-Dichlorobenzene-d4b	4.78	152	683576	40.00	ppm	-0.03
104) Naphthalene-d8b	5.71	136	3056259	40.00	ppm	-0.03
106) Acenaphthene-d10b	7.14	164	1620555	40.00	ppm	-0.04
108) Phenanthrene-d10b	9.05	188	2608440	40.00	ppm	-0.05
110) Chrysene-d12b	14.33	240	2374165	40.00	ppm	-0.05

System Monitoring Compounds						
5) 2-Fluorophenol	3.81	112	498128	20.72	ppm	-0.02
Spiked Amount 50.000			Recovery = 41.44%			
8) Phenol-d5	4.53	99	452791	15.49	ppm	-0.02
Spiked Amount 50.000			Recovery = 30.98%			
25) Nitrobenzene-d5	5.19	82	924181	32.38	ppm	-0.03
Spiked Amount 50.000			Recovery = 64.76%			
51) 2-Fluorobiphenyl	6.52	172	1701565	32.90	ppm	-0.03
Spiked Amount 50.000			Recovery = 65.80%			
73) 2,4,6-Tribromophenol	8.05	330	245022	46.03	ppm	-0.03
Spiked Amount 50.000			Recovery = 92.06%			
85) Terphenyl-d14	12.11	244	1895041	39.30	ppm	-0.06
Spiked Amount 50.000			Recovery = 78.60%			

Target Compounds							Qvalue
2) 1,4-Dioxane	2.37	88	156463	14.78	ppm		98
3) Pyridine	2.68	79	343343	13.77	ppm		98
4) N-Nitrosodimethylamine	2.64	42	203415	22.67	ppm		91
6) Indene	4.97	116	1324192	32.73	ppm		97
7) Cumene	4.18	105	1563303	28.77	ppm		93
9) Phenol	4.54	94	552272	17.75	ppm	#	51
10) Aniline	4.54	93	796855	23.40	ppm		69
11) bis(2-Chloroethyl)ether	4.58	93	729781	32.60	ppm		96
12) 2-Chlorophenol	4.63	128	750372	29.57	ppm		96
13) Decane	4.66	43	406557	18.62	ppm		88
14) 1,3-Dichlorobenzene	4.74	146	694868	24.69	ppm		98
15) 1,4-Dichlorobenzene	4.79	146	734887	26.17	ppm		97
16) Benzyl alcohol	4.88	108	448821	27.73	ppm	#	65
17) 1,2-Dichlorobenzene	4.91	146	702702	26.62	ppm		99
18) Acetophenone	5.08	105	1161986	37.98	ppm		95
19) 2-Methylphenol	4.97	108	657574	30.25	ppm		99
20) 2,2'-oxybis(1-Chloropropan	4.98	121	218703	27.10	ppm	#	38
21) 3&4-Methylphenol	5.08	108	658826	29.55	ppm		96
22) n-Nitroso-di-n-propylamine	5.08	70	616665	37.34	ppm		95
23) Hexachloroethane	5.15	201	210703	24.22	ppm		97
26) Nitrobenzene	5.20	77	953853	31.91	ppm		85
27) Quinoline	5.96	129	1729483	29.28	ppm		94
28) Isophorone	5.37	82	1677947	32.87	ppm		94

(#) = qualifier out of range (m) = manual integration
F156858.D MF6563.M Fri May 06 11:01:54 2016 RT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6604\F156858.D Vial: 4
Acq On : 6 May 2016 10:38 am Operator: linseyk
Sample : op93662-bs1 Inst : MSF
Misc : op93662,ef6604,1000 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 06 10:59:58 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu May 05 10:56:04 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
29)	2-Nitrophenol	5.43	139	413751	26.68 ppm		95
30)	2,4-Dimethylphenol	5.46	107	751463	30.76 ppm		97
31)	Benzoic acid	5.55	105	385218	18.86 ppm		96
32)	bis(2-Chloroethoxy)methane	5.52	93	873572	27.15 ppm		97
33)	2,4-Dichlorophenol	5.61	162	630350	25.84 ppm		95
34)	2,6-Dichlorophenol	5.77	162	631227	26.94 ppm		98
36)	1,2,4-Trichlorobenzene	5.66	180	583794	23.14 ppm		100
38)	Naphthalene	5.72	128	2292416	27.47 ppm		98
39)	4-Chloroaniline	5.76	127	629810	18.28 ppm		95
40)	2,3-Dichloroaniline	6.45	161	760679	26.77 ppm		94
41)	Caprolactam	6.02	55	99414	8.57 ppm		87
42)	Hexachlorobutadiene	5.80	225	285017	23.87 ppm		97
43)	4-Chloro-3-methylphenol	6.12	107	844197	35.28 ppm		98
44)	2-Methylnaphthalene	6.23	141	1302871	27.68 ppm		96
45)	1-Methylnaphthalene	6.30	141	1322370	27.30 ppm		96
46)	Dimethylnaphthalene	6.74	156	1387757	28.28 ppm		97
48)	Hexachlorocyclopentadiene	6.35	237	568602	51.71 ppm		97
49)	2,4,6-Trichlorophenol	6.45	196	492296	35.80 ppm		98
50)	2,4,5-Trichlorophenol	6.50	196	510721	33.73 ppm		98
52)	2-Chloronaphthalene	6.63	162	1430419	30.55 ppm		95
53)	Biphenyl	6.61	154	1890727	31.44 ppm		99
54)	2-Nitroaniline	6.72	65	616786	46.47 ppm		85
55)	Dimethylphthalate	6.87	163	2007218	38.30 ppm		100
56)	Acenaphthylene	7.00	152	2404077	31.67 ppm		98
57)	2,6-Dinitrotoluene	6.94	165	433061	38.23 ppm		88
58)	3-Nitroaniline	7.10	138	348940	24.61 ppm		78
59)	Acenaphthene	7.18	153	1597863	33.52 ppm		95
60)	2,4-Dinitrophenol	7.21	184	577388	86.93 ppm	#	51
61)	4-Nitrophenol	7.29	109	209419	31.44 ppm		94
62)	Dibenzofuran	7.36	168	2265475	34.82 ppm		93
63)	2,4-Dinitrotoluene	7.34	165	628196	40.93 ppm		85
64)	2,3,4,6-Tetrachlorophenol	7.50	232	416667	36.49 ppm		94
65)	Diethylphthalate	7.61	149	2045494	39.50 ppm		98
66)	Fluorene	7.75	166	1932241	38.59 ppm		98
67)	4-Chlorophenyl-phenylether	7.75	204	844544	38.28 ppm		99
68)	4-Nitroaniline	7.78	138	486515	33.98 ppm		95
70)	4,6-Dinitro-2-methylphenol	7.81	198	377921	45.87 ppm		91
71)	n-Nitrosodiphenylamine	7.89	169	1297574	34.76 ppm		98
72)	1,2-Diphenylhydrazine	7.94	77	2319615	44.96 ppm		91
74)	4-Bromophenyl-phenylether	8.39	248	474797	37.84 ppm		94
75)	Hexachlorobenzene	8.47	284	491463	41.04 ppm		95
76)	Pentachlorophenol	8.76	266	321598	40.76 ppm		95
77)	Phenanthrene	9.08	178	2832219	37.74 ppm		98
78)	Anthracene	9.17	178	2735825	36.42 ppm		100
79)	Carbazole	9.45	167	2682031	38.08 ppm		99
80)	Di-n-butylphthalate	10.15	149	3558178	40.45 ppm		98
81)	Fluoranthene	11.24	202	2913368	39.15 ppm		99
82)	Octadecane	8.93	57	1064007	34.85 ppm		90
84)	Pyrene	11.68	202	3018022	35.84 ppm		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6604\F156858.D Vial: 4
Acq On : 6 May 2016 10:38 am Operator: linseyk
Sample : op93662-bs1 Inst : MSF
Misc : op93662,ef6604,1000 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 06 10:59:58 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu May 05 10:56:04 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
86)	Butylbenzylphthalate	13.28	149	1509615	36.50	ppm	88
88)	Benzo[a]anthracene	14.31	228	2641219	36.73	ppm	98
89)	3,3'-Dichlorobenzidine	14.35	252	1281875	51.17	ppm	97
90)	Chrysene	14.39	228	2621574	36.67	ppm	98
91)	bis(2-Ethylhexyl)phthalate	14.69	149	2104920	36.73	ppm	96
93)	Di-n-octylphthalate	16.13	149	3525311	37.64	ppm	98
94)	Benzo[b]fluoranthene	16.62	252	2647637	40.08	ppm	99
95)	Benzo[k]fluoranthene	16.68	252	2572624	39.79	ppm	98
96)	Benzo[a]pyrene	17.26	252	2214945	36.63	ppm	99
97)	Indeno[1,2,3-cd]pyrene	19.32	276	2207641	39.57	ppm	95
99)	Dibenz[a,h]anthracene	19.38	278	2246124	41.61	ppm	99
100)	7,12-Dimethylbenz(a)anthra	16.64	256	1115841	43.26	ppm	99
101)	Benzo[g,h,i]perylene	19.75	276	2382217	39.51	ppm	95
103)	Benzaldehyde	4.46	105	582191	30.24	ppm	98
107)	1,2,4,5-Tetrachlorobenzene	6.36	216	628860	27.89	ppm	98
109)	Atrazine	8.64	200	528559	42.16	ppm	98
111)	Benzidine	11.58	184	469151	11.37	ppm	99

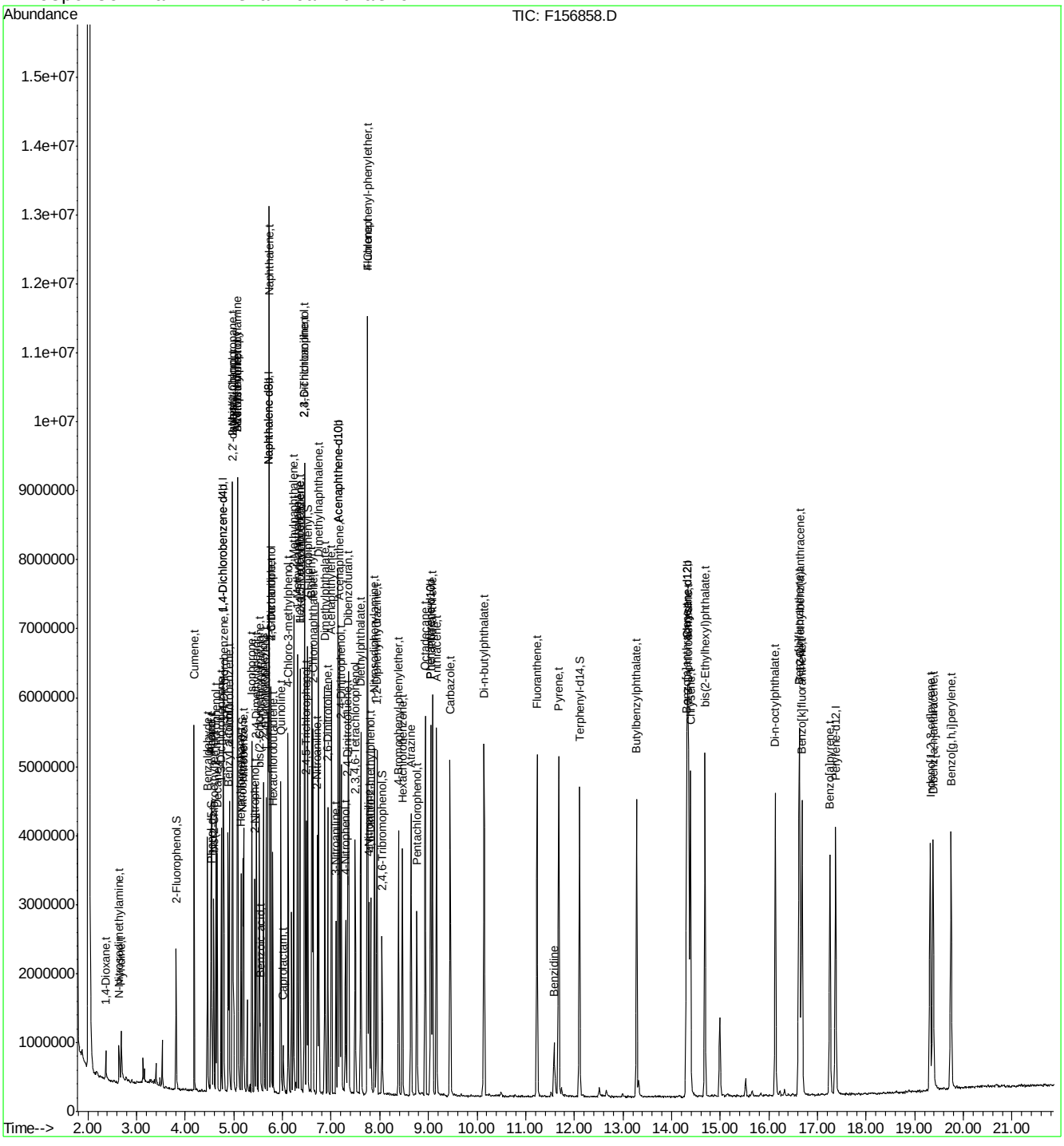
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6604\F156858.D Vial: 4
Acq On : 6 May 2016 10:38 am Operator: linseyk
Sample : op93662-bs1 Inst : MSF
Misc : op93662,ef6604,1000 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 6 11:01 2016 Quant Results File: MF6563.RES

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu May 05 10:56:04 2016
Response via : Initial Calibration



SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3637\
Data File : 3E82982.D
Acq On : 6 May 2016 3:18 pm
Operator : ashleyn
Sample : op93678-bs1
Misc : op93678,e3e3637,30.0
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 06 15:39:18 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MFri May 06 14:23:29 2016
QLast Update : Fri May 06 14:23:29 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.449	152	129909	40.00 ppm	-0.02
24) Naphthalene-d8	5.497	136	455398	40.00 ppm	-0.11
47) Acenaphthene-d10	7.508	164	270061	40.00 ppm	-0.11
69) Phenanthrene-d10	9.664	188	447807	40.00 ppm	-0.09
83) Chrysene-d12	13.841	240	438198	40.00 ppm	-0.09
92) Perylene-d12	15.954	264	315308	40.00 ppm	-0.14
102) 1,4-Dichlorobenzene-d4a	4.449	152	129909	40.00 ppm	-0.09
104) Acenaphthene-d10a	7.508	164	270061	40.00 ppm	-0.11
106) Phenanthrene-d10a	9.664	188	447807	40.00 ppm	-0.09
108) Chrysene-d12a	13.841	240	438198	40.00 ppm	-0.15
110) Naphthalene-d8a	5.497	136	455398	40.00 ppm	-0.05
System Monitoring Compounds					
5) 2-Fluorophenol	3.518	112	135732	34.08 ppm	0.02
Spiked Amount 50.000			Recovery = 68.16%		
8) Phenol-d5	4.256	99	173398	33.46 ppm	0.03
Spiked Amount 50.000			Recovery = 66.92%		
25) Nitrobenzene-d5	4.882	82	187246	41.11 ppm	-0.09
Spiked Amount 50.000			Recovery = 82.22%		
51) 2-Fluorobiphenyl	6.658	172	404317	45.14 ppm	-0.10
Spiked Amount 50.000			Recovery = 90.28%		
73) 2,4,6-Tribromophenol	8.642	330	59952	37.96 ppm	-0.08
Spiked Amount 50.000			Recovery = 75.92%		
85) Terphenyl-d14	12.220	244	414878	45.10 ppm	-0.10
Spiked Amount 50.000			Recovery = 90.20%		

Target Compounds					Qvalue
2) 1,4-Dioxane	1.924	88	37209	31.41 ppm	97
3) Pyridine	2.267	79	94440	28.05 ppm	95
4) N-Nitrosodimethylamine	2.234	74	63398	33.09 ppm	85
6) Indene	4.636	116	284658	36.73 ppm	98
7) Cumene	3.839	105	377903	33.34 ppm	96
9) Phenol	4.272	94	177098	31.18 ppm	97
10) Aniline	4.208	93	178834	27.11 ppm	81
11) bis(2-Chloroethyl)ether	4.256	93	135517	34.79 ppm	96
12) 2-Chlorophenol	4.320	128	166877	35.45 ppm	97
13) Decane	4.320	43	158065	31.72 ppm	95
14) 1,3-Dichlorobenzene	4.401	146	188334	36.59 ppm	98
15) 1,4-Dichlorobenzene	4.459	146	195454	36.18 ppm	99
16) Benzyl alcohol	4.572	108	105029	36.60 ppm	97
17) 1,2-Dichlorobenzene	4.572	146	178990	36.79 ppm	97
18) Acetophenone	4.759	105	220135	34.16 ppm	96
19) 2-Methylphenol	4.695	108	137781	34.61 ppm	97
20) 2,2'-oxybis(1-Chloropr...	4.657	121	50472	31.62 ppm	93
21) 3&4-Methylphenol	4.818	108	147173	35.18 ppm	98
22) n-Nitroso-di-n-propyla...	4.764	70	114957	33.69 ppm	87
23) Hexachloroethane	4.829	201	72621	42.04 ppm	94
26) Nitrobenzene	4.898	77	187166	39.79 ppm	97
27) Quinoline	5.855	129	325006	41.03 ppm	99
28) Isophorone	5.096	82	304985	39.95 ppm	93

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3637\
Data File : 3E82982.D
Acq On : 6 May 2016 3:18 pm
Operator : ashleyn
Sample : op93678-bs1
Misc : op93678,e3e3637,30.0
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 06 15:39:18 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MFri May 06 14:23:29 2016
QLast Update : Fri May 06 14:23:29 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
29) 2-Nitrophenol	5.160	139	88232	36.66	ppm		91
30) 2,4-Dimethylphenol	5.235	107	161808	39.06	ppm		97
31) Benzoic acid	5.374	105	103128	33.79	ppm		94
32) bis(2-Chloroethoxy)met...	5.283	93	157262	37.84	ppm		98
33) 2,4-Dichlorophenol	5.417	162	150253	46.51	ppm		99
34) 2,6-Dichlorophenol	5.599	162	144265	43.72	ppm		96
36) 1,2,4-Trichlorobenzene	5.444	180	160981	43.67	ppm		97
38) Naphthalene	5.518	128	496757	39.45	ppm		98
39) 4-Chloroaniline	5.588	127	148705	28.99	ppm		93
40) 2,3-Dichloroaniline	6.561	161	171681	42.16	ppm		98
41) Caprolactam	5.957	55	65472	37.97	ppm		96
42) Hexachlorobutadiene	5.625	225	101615	46.00	ppm		98
43) 4-Chloro-3-methylphenol	6.150	107	150224	40.76	ppm		93
44) 2-Methylnaphthalene	6.230	141	307418	43.02	ppm		95
45) 1-Methylnaphthalene	6.337	141	317621	42.60	ppm		95
46) Dimethylnaphthalene	6.973	156	316377	43.85	ppm		97
48) Hexachlorocyclopentadiene	6.396	237	171765	77.75	ppm		99
49) 2,4,6-Trichlorophenol	6.588	196	111081	45.36	ppm		99
50) 2,4,5-Trichlorophenol	6.684	196	106550	39.07	ppm		96
52) 2-Chloronaphthalene	6.797	162	317867	41.52	ppm		95
53) Biphenyl	6.781	154	427318	41.86	ppm		98
54) 2-Nitroaniline	6.957	65	127519	44.95	ppm		92
55) Dimethylphthalate	7.187	163	388705	43.35	ppm		98
56) Acenaphthylene	7.321	152	508765	39.82	ppm		97
57) 2,6-Dinitrotoluene	7.273	165	86568	43.12	ppm		90
58) 3-Nitroaniline	7.503	138	76904	34.40	ppm		97
59) Acenaphthene	7.551	153	355542	41.91	ppm		94
60) 2,4-Dinitrophenol	7.669	184	81583	78.62	ppm		85
61) 4-Nitrophenol	7.957	109	56581	39.19	ppm		96
62) Dibenzofuran	7.792	168	500428	44.81	ppm		88
63) 2,4-Dinitrotoluene	7.829	165	117225	42.69	ppm		73
64) 2,3,4,6-Tetrachlorophenol	8.011	232	76697	37.94	ppm		95
65) Diethylphthalate	8.177	149	413981	43.95	ppm		99
66) Fluorene	8.278	166	399610	42.74	ppm		97
67) 4-Chlorophenyl-phenyle...	8.300	204	189369	44.42	ppm		96
68) 4-Nitroaniline	8.369	138	92264	42.93	ppm	#	72
70) 4,6-Dinitro-2-methylph...	8.417	198	66367	40.98	ppm		92
71) n-Nitrosodiphenylamine	8.487	169	271120	43.59	ppm		97
72) 1,2-Diphenylhydrazine	8.530	77	404530	43.66	ppm		98
74) 4-Bromophenyl-phenylether	9.016	248	119615	44.93	ppm		92
75) Hexachlorobenzene	9.081	284	125836	39.41	ppm		92
76) Pentachlorophenol	9.439	266	33969	22.35	ppm		99
77) Phenanthrene	9.701	178	537048	41.33	ppm		97
78) Anthracene	9.781	178	526043	40.42	ppm		98
79) Carbazole	10.081	167	509144	43.23	ppm		99
80) Di-n-butylphthalate	10.691	149	659635	43.37	ppm		96
81) Fluoranthene	11.552	202	597901	42.43	ppm		98
82) Octadecane	9.626	57	217568	41.13	ppm		89
84) Pyrene	11.899	202	616744	47.02	ppm		97
86) Butylbenzylphthalate	13.065	149	269633	43.10	ppm		93

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3637\
Data File : 3E82982.D
Acq On : 6 May 2016 3:18 pm
Operator : ashleyn
Sample : op93678-bs1
Misc : op93678,e3e3637,30.0
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 06 15:39:18 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MFri May 06 14:23:29 2016
QLast Update : Fri May 06 14:23:29 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
88) Benzo[a]anthracene	13.825	228	549300	42.89	ppm		97
89) 3,3'-Dichlorobenzidine	13.852	252	338934	71.16	ppm		98
90) Chrysene	13.884	228	497423	41.62	ppm		98
91) bis(2-Ethylhexyl)phtha...	14.028	149	357540	44.41	ppm		99
93) Di-n-octylphthalate	15.023	149	553365	43.57	ppm		100
94) Benzo[b]fluoranthene	15.440	252	483453	45.35	ppm		98
95) Benzo[k]fluoranthene	15.478	252	429542	45.16	ppm		97
96) Benzo[a]pyrene	15.873	252	373773	42.00	ppm		99
97) Indeno[1,2,3-cd]pyrene	17.387	276	344687	40.66	ppm		89
99) Dibenz[a,h]anthracene	17.419	278	342455	40.66	ppm		97
100) 7,12-Dimethylbenz(a)an...	15.430	256	225479	47.45	ppm		89
101) Benzo[g,h,i]perylene	17.783	276	337425	41.31	ppm		96
103) Benzaldehyde	4.128	105	112825	32.04	ppm	#	85
105) 1,2,4,5-Tetrachloroben...	6.417	216	183367	54.84	ppm		96
107) Atrazine	9.343	215	61032	53.55	ppm	#	84
109) benzidine	11.841	184	286274	53.08	ppm		84

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

7.3.2

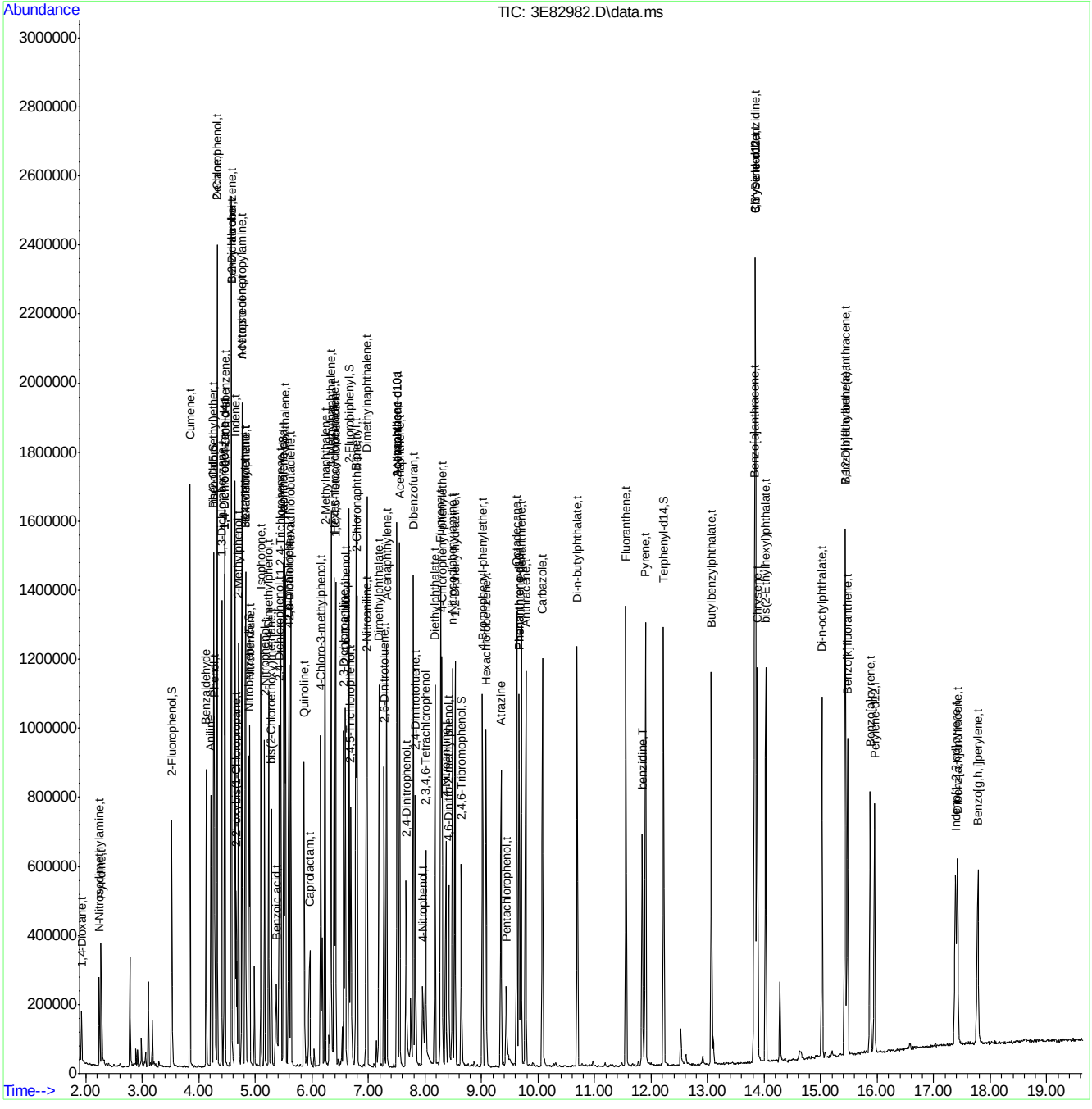
7

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3637\
Data File : 3E82982.D
Acq On : 6 May 2016 3:18 pm
Operator : ashleyn
Sample : op93678-bs1
Misc : op93678,e3e3637,30.0
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 06 15:39:18 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MFri May 06 14:23:29 2016
QLast Update : Fri May 06 14:23:29 2016
Response via : Initial Calibration



SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2874\
Data File : 3m61127.D
Acq On : 6 May 2016 12:47 pm
Operator : linseyk
Sample : op93662a-bs12
Misc : op93662a,e3m2874,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 06 14:50:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri May 06 14:17:24 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	10.426	150	351170	4.00 ppm	0.00
14) Fluorene-d10	13.430	176	572116	4.00 ppm	0.00
21) Fluoranthene-d10	17.639	212	914781	4.00 ppm	0.00
31) Benzo(a)pyrene-d12	22.243	264	750976	4.00 ppm	0.00
System Monitoring Compounds					
3) 2-Fluorophenol	4.368	112	783870	17.84 ppm	-0.06
Spiked Amount 50.000				Recovery = 35.68%	
4) Phenol-d5	5.976	99	838632	11.54 ppm	0.00
Spiked Amount 50.000				Recovery = 23.08%	
7) Nitrobenzene-d5	7.549	82	1794273	26.54 ppm	-0.02
Spiked Amount 50.000				Recovery = 53.08%	
15) 2-Fluorobiphenyl	11.098	172	3839737	24.42 ppm	-0.03
Spiked Amount 50.000				Recovery = 48.84%	
20) 2,4,6-Tribromophenol	13.976	330	514055	28.71 ppm	0.03
Spiked Amount 50.000				Recovery = 57.42%	
28) Terphenyl-d14	18.458	244	4684410	35.30 ppm	0.02
Spiked Amount 50.000				Recovery = 70.60%	
Target Compounds					Qvalue
2) 1,4-dioxane	2.159	88	7337	0.40 ppm #	26
5) Phenol	5.988	94	123323	1.57 ppm #	87
6) bis(2-Chloroethyl)ether	6.109	93	28635	0.48 ppm #	56
8) Nitrobenzene	7.568	77	39230	0.53 ppm #	50
9) Naphthalene	8.943	128	100005	0.51 ppm	100
10) Hexachlorobutadiene	9.225	225	17874	0.53 ppm	90
11) 2-Methylnaphthalene	10.303	141	56260	0.55 ppm #	59
13) Hexachlorocyclopentadiene	10.652	237	7105	0.26 ppm	81
16) Acenaphthylene	12.088	152	97217	0.49 ppm	98
17) Acenaphthene	12.443	153	70922	0.54 ppm	99
18) 4,6-dinitro-2-methylph...	13.656	198	73815	4.12 ppm	63
19) Fluorene	13.486	166	85380	0.54 ppm	78
22) Hexachlorobenzene	14.563	284	24771	0.57 ppm	81
23) Pentachlorophenol	15.011	266	101622	3.45 ppm	90
24) Phenanthrene	15.398	178	138167	0.62 ppm	99
25) Anthracene	15.490	178	122603	0.62 ppm	97
26) Fluoranthene	17.670	202	174149	0.62 ppm	97
27) Pyrene	18.071	202	171577	0.66 ppm	96
29) Benzo[a]anthracene	20.157	228	156762	0.63 ppm	96
30) Chrysene	20.219	228	153988	0.64 ppm	83
32) Benzo[b]fluoranthene	21.826	252	145800	0.58 ppm	92
33) Benzo[k]fluoranthene	21.857	252	143478	0.62 ppm	89
34) Benzo[a]pyrene	22.274	252	140747	0.60 ppm	97
35) Indeno[1,2,3-cd]pyrene	23.749	276	156467	0.66 ppm	96
36) Dibenz[a,h]anthracene	23.787	278	128613	0.66 ppm	69
37) Benzo[g,h,i]perylene	24.107	276	132439	0.64 ppm	93

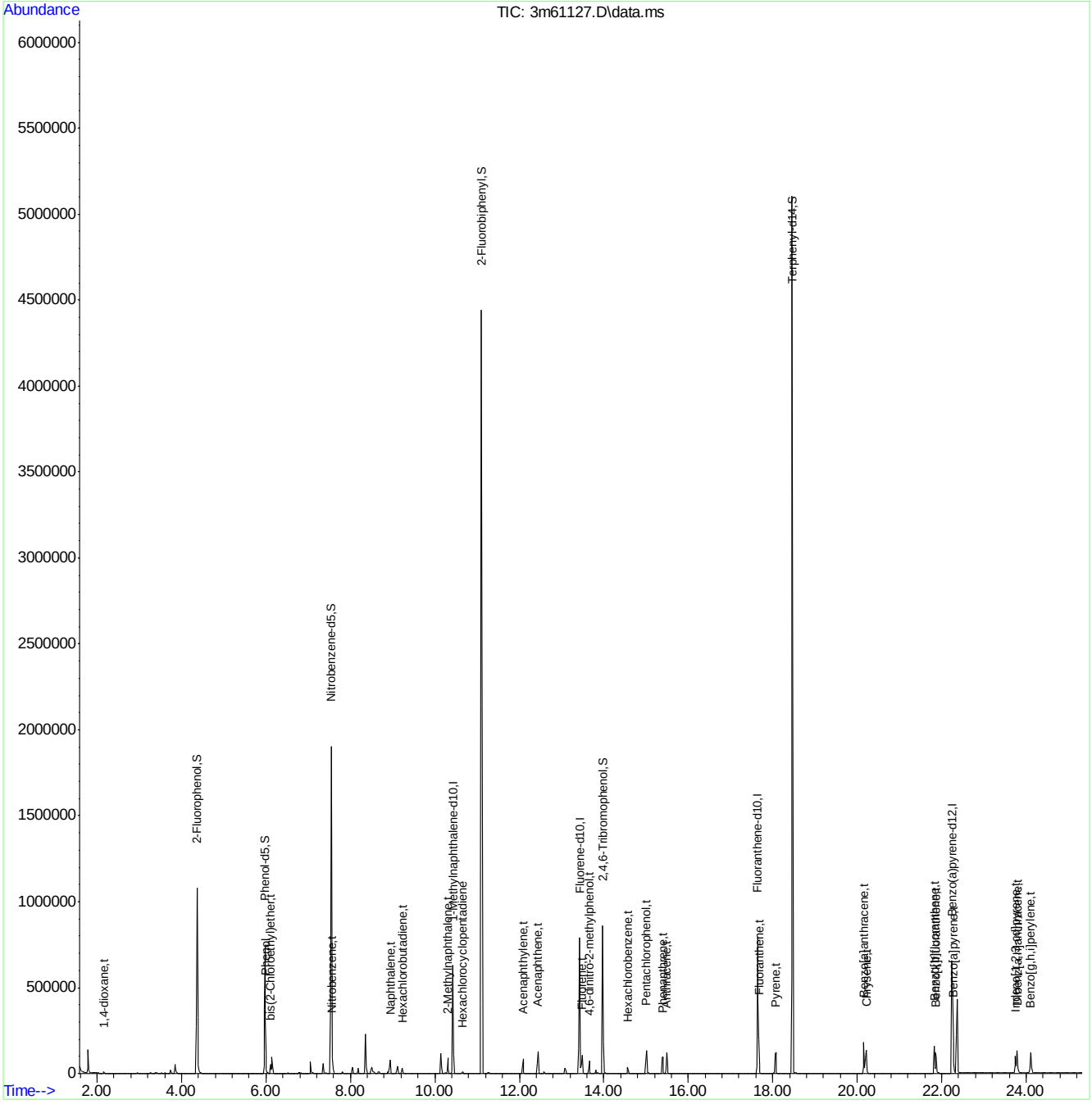
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2874\
Data File : 3m61127.D
Acq On : 6 May 2016 12:47 pm
Operator : linseyk
Sample : op93662a-bs12
Misc : op93662a,e3m2874,1000
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 06 14:50:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri May 06 14:17:24 2016
Response via : Initial Calibration



SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65182.D
Acq On : 9 May 2016 5:14 pm
Operator : linseyk
Sample : op93678a-bs12
Misc : op93678a,e4m2910,30.0
ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 10 10:45:36 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 06 13:08:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.678	152	263020	4.00	ppm	-0.02
12) Fluorene-d10	13.656	176	487375	4.00	ppm	-0.02
22) Fluoranthene-d10	17.836	212	712009	4.00	ppm	-0.03
28) Benzo(a)pyrene-d12	22.436	264	576073	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.678	152	263020	4.00	ppm	-0.02
38) Fluorene-d10a	13.656	176	487375	4.00	ppm	-0.02
System Monitoring Compounds						
2) 2-Fluorophenol	4.714	112	1571624	45.64	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 91.28%#			
3) Phenol-d5	6.301	99	2677754	46.24	ppm	0.00
Spiked Amount 50.000			Recovery = 92.48%			
6) Nitrobenzene-d5	7.821	82	2574993	49.58	ppm	-0.02
Spiked Amount 50.000			Recovery = 99.16%			
11) 2-Fluorobiphenyl	11.346	172	3259967	42.94	ppm	-0.02
Spiked Amount 50.000			Recovery = 85.88%			
17) 2,4,6-Tribromophenol	14.205	330	931026	35.81	ppm	-0.02
Spiked Amount 50.000			Recovery = 71.62%			
25) Terphenyl-d14	18.645	244	4689686	48.75	ppm	-0.03
Spiked Amount 50.000			Recovery = 97.50%			
Target Compounds						Qvalue
4) Phenol	6.315	94	340638	5.74	ppm	57
5) bis(2-Chloroethyl)ether	6.383	93	45387	1.02	ppm	81
7) Naphthalene	9.198	128	143967	0.97	ppm	99
8) Hexachlorobutadiene	9.492	225	30968	0.85	ppm	72
9) 2-Methylnaphthalene	10.559	142	65465	1.02	ppm	83
10) Hexachlorocyclopentadiene	10.917	237	13484	0.73	ppm	90
13) Acenaphthylene	12.325	152	87577	0.78	ppm	100
14) Acenaphthene	12.680	153	60091	0.84	ppm	98
15) Dibenzofuran	13.035	168	90994	0.85	ppm	90
16) Fluorene	13.704	166	109194	0.84	ppm	95
18) Hexachlorobenzene	14.825	284	39842	0.78	ppm	80
19) Pentachlorophenol	15.258	266	97967	4.70	ppm	97
20) Phenanthrene	15.614	178	153745	0.88	ppm	95
21) Anthracene	15.722	178	145300	0.88	ppm	93
23) Fluoranthene	17.873	202	177128	0.92	ppm	99
24) Pyrene	18.269	202	172645	0.91	ppm	96
26) Benzo[a]anthracene	20.359	228	171070	0.97	ppm #	93
27) Chrysene	20.415	228	150227	0.87	ppm	95
29) Benzo[b]fluoranthene	22.009	252	126224	0.61	ppm	95
30) Benzo[k]fluoranthene	22.050	252	133448	0.77	ppm	98
31) Benzo[a]pyrene	22.463	252	121817	0.71	ppm	92
32) Indeno[1,2,3-cd]pyrene	23.978	276	119370	0.56	ppm	99
33) Dibenz[a,h]anthracene	24.019	278	101233	0.59	ppm	98
34) Benzo[g,h,i]perylene	24.363	276	103980	0.57	ppm	100
36) 1,4-Dioxane	2.413	88	10343	0.61	ppm #	40
39) 4,6-dinitro-2-methylph...	13.895	198	92183	6.44	ppm	78
40) 1,2-Diphenylhydrazine	14.062	77	100111	0.87	ppm	97

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65182.D
Acq On : 9 May 2016 5:14 pm
Operator : linseyk
Sample : op93678a-bs12
Misc : op93678a,e4m2910,30.0
ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 10 10:45:36 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 06 13:08:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) n-nitrosodiphenylamine	14.014	169	63972	0.75	ppm	94

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

7.3.4

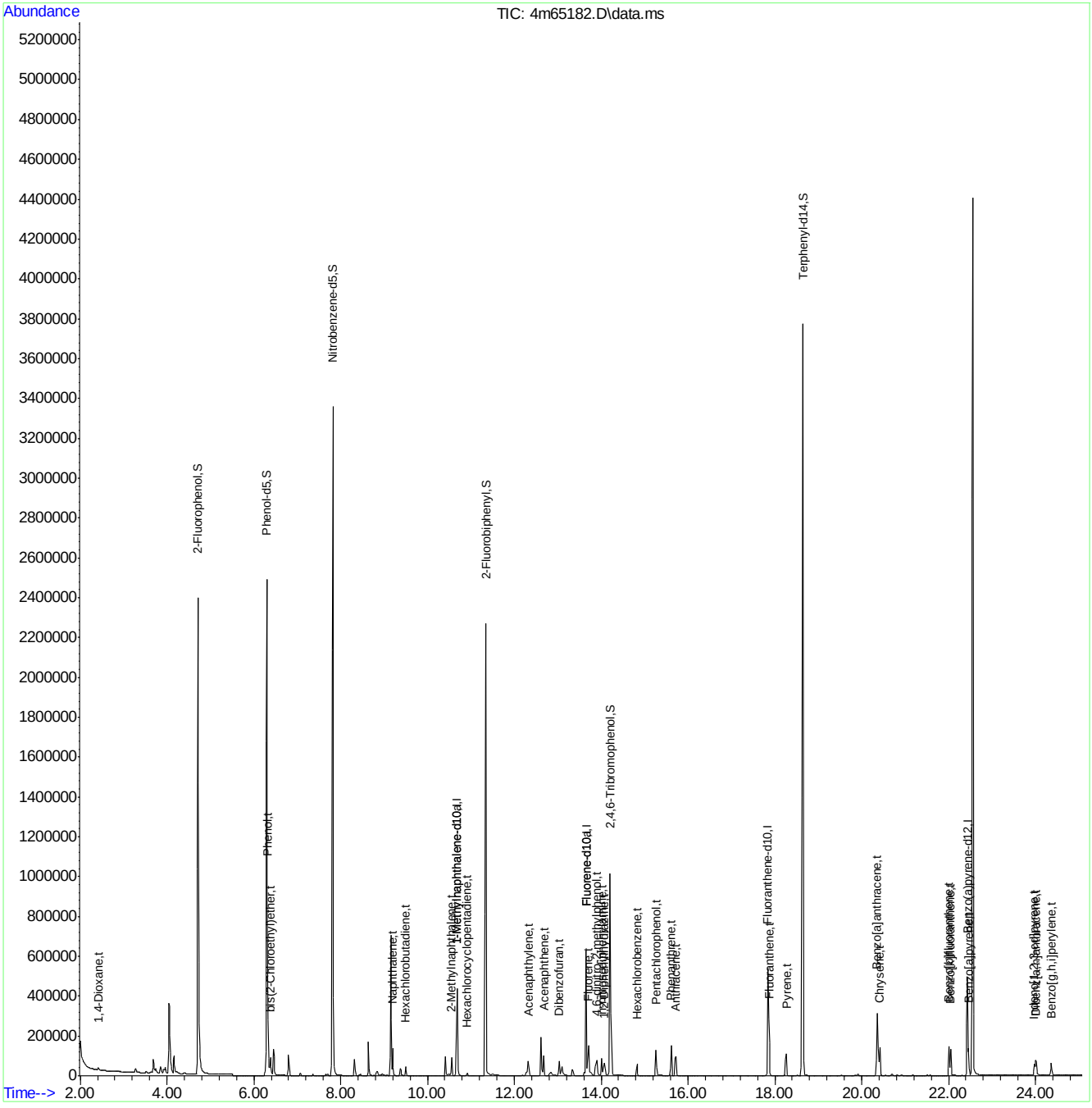
7

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65182.D
Acq On : 9 May 2016 5:14 pm
Operator : linseyk
Sample : op93678a-bs12
Misc : op93678a,e4m2910,30.0
ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 10 10:45:36 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 06 13:08:34 2016
Response via : Initial Calibration



SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6604\F156863.D Vial: 9
Acq On : 6 May 2016 2:28 pm Operator: linseyk
Sample : op93662-ms Inst : MSF
Misc : op93662,ef6604,500 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 09 08:57:34 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon May 09 08:57:31 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.78	152	640617	40.00	ppm	-0.03
24) Naphthalene-d8	5.71	136	2906440	40.00	ppm	-0.03
47) Acenaphthene-d10	7.14	164	1478055	40.00	ppm	-0.04
69) Phenanthrene-d10	9.05	188	2350168	40.00	ppm	-0.05
83) Chrysene-d12	14.32	240	2109839	40.00	ppm	-0.05
92) Perylene-d12	17.37	264	1934830	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4b	4.78	152	640617	40.00	ppm	-0.03
104) Naphthalene-d8b	5.71	136	2906440	40.00	ppm	-0.03
106) Acenaphthene-d10b	7.14	164	1478055	40.00	ppm	-0.04
108) Phenanthrene-d10b	9.05	188	2350168	40.00	ppm	-0.05
110) Chrysene-d12b	14.32	240	2109839	40.00	ppm	-0.05

System Monitoring Compounds						
5) 2-Fluorophenol	3.82	112	709476	31.49	ppm	-0.01
Spiked Amount 50.000			Recovery = 62.98%			
8) Phenol-d5	4.53	99	781731	28.53	ppm	-0.02
Spiked Amount 50.000			Recovery = 57.06%			
25) Nitrobenzene-d5	5.19	82	1069502	39.40	ppm	-0.03
Spiked Amount 50.000			Recovery = 78.80%			
51) 2-Fluorobiphenyl	6.52	172	1896111	40.19	ppm	-0.03
Spiked Amount 50.000			Recovery = 80.38%			
73) 2,4,6-Tribromophenol	8.05	330	234929	48.99	ppm	-0.04
Spiked Amount 50.000			Recovery = 97.98%			
85) Terphenyl-d14	12.10	244	1698473	39.64	ppm	-0.06
Spiked Amount 50.000			Recovery = 79.28%			

Target Compounds							Qvalue
2) 1,4-Dioxane	2.37	88	223824	22.56	ppm		99
3) Pyridine	2.69	79	472312	20.21	ppm		97
4) N-Nitrosodimethylamine	2.65	42	282909	33.65	ppm		95
6) Indene	4.97	116	1524784	40.22	ppm		97
7) Cumene	4.19	105	1814664	35.63	ppm		94
9) Phenol	4.54	94	907399	31.11	ppm		76
10) Aniline	4.54	93	943049	29.55	ppm		80
11) bis(2-Chloroethyl)ether	4.58	93	839121	39.99	ppm		94
12) 2-Chlorophenol	4.63	128	870870	36.62	ppm		92
13) Decane	4.66	43	504110	24.64	ppm		89
14) 1,3-Dichlorobenzene	4.74	146	832996	31.58	ppm		99
15) 1,4-Dichlorobenzene	4.79	146	871567	33.12	ppm		97
16) Benzyl alcohol	4.89	108	566358	37.34	ppm		74
17) 1,2-Dichlorobenzene	4.90	146	813190	32.87	ppm		98
18) Acetophenone	5.08	105	1324576	46.20	ppm		93
19) 2-Methylphenol	4.97	108	830141	40.75	ppm		100
20) 2,2'-oxybis(1-Chloropropan	4.98	121	258995	34.24	ppm	#	32
21) 3&4-Methylphenol	5.09	108	866919	41.50	ppm		99
22) n-Nitroso-di-n-propylamine	5.08	70	720774	46.57	ppm		95
23) Hexachloroethane	5.15	201	252410	30.96	ppm		89
26) Nitrobenzene	5.20	77	1121833	39.47	ppm		83
27) Quinoline	5.97	129	1877851	33.43	ppm		99
28) Isophorone	5.37	82	1916041	39.47	ppm		94

(#) = qualifier out of range (m) = manual integration
F156863.D MF6563.M Mon May 09 08:58:44 2016 RT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6604\F156863.D Vial: 9
Acq On : 6 May 2016 2:28 pm Operator: linseyk
Sample : op93662-ms Inst : MSF
Misc : op93662,ef6604,500 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 09 08:57:34 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon May 09 08:57:31 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
29)	2-Nitrophenol	5.43	139	475503	32.24	ppm		97
30)	2,4-Dimethylphenol	5.47	107	995998	42.88	ppm		98
31)	Benzoic acid	5.56	105	591585	30.46	ppm		93
32)	bis(2-Chloroethoxy)methane	5.52	93	1011481	33.06	ppm		98
33)	2,4-Dichlorophenol	5.61	162	752711	32.45	ppm		96
34)	2,6-Dichlorophenol	5.76	162	725586	32.56	ppm		97
36)	1,2,4-Trichlorobenzene	5.66	180	696406	29.03	ppm		98
38)	Naphthalene	5.72	128	2635004	33.20	ppm		98
39)	4-Chloroaniline	5.76	127	602424	18.38	ppm		96
40)	2,3-Dichloroaniline	6.45	161	793573	29.36	ppm		94
41)	Caprolactam	6.02	55	168079	15.24	ppm		95
42)	Hexachlorobutadiene	5.80	225	362458	31.92	ppm		100
43)	4-Chloro-3-methylphenol	6.12	107	912338	40.09	ppm		96
44)	2-Methylnaphthalene	6.23	141	1475048	32.96	ppm		98
45)	1-Methylnaphthalene	6.30	141	1510085	32.78	ppm		97
46)	Dimethylnaphthalene	6.74	156	1549014	33.19	ppm		98
48)	Hexachlorocyclopentadiene	6.35	237	681190	67.92	ppm		99
49)	2,4,6-Trichlorophenol	6.45	196	531245	42.36	ppm		98
50)	2,4,5-Trichlorophenol	6.49	196	534980	38.74	ppm		99
52)	2-Chloronaphthalene	6.63	162	1622508	37.99	ppm		93
53)	Biphenyl	6.60	154	2123246	38.71	ppm		99
54)	2-Nitroaniline	6.72	65	633923	52.37	ppm		92
55)	Dimethylphthalate	6.87	163	2021609	42.30	ppm		99
56)	Acenaphthylene	7.00	152	2612057	37.73	ppm		99
57)	2,6-Dinitrotoluene	6.93	165	431169	41.74	ppm		87
58)	3-Nitroaniline	7.10	138	343770	26.58	ppm		82
59)	Acenaphthene	7.18	153	1766951	40.64	ppm		93
60)	2,4-Dinitrophenol	7.21	184	531360	87.69	ppm	#	51
61)	4-Nitrophenol	7.29	109	298045	49.06	ppm	#	78
62)	Dibenzofuran	7.36	168	2374840	40.02	ppm		94
63)	2,4-Dinitrotoluene	7.34	165	624484	44.61	ppm		85
64)	2,3,4,6-Tetrachlorophenol	7.49	232	426488	40.96	ppm		86
65)	Diethylphthalate	7.61	149	2025819	42.89	ppm		96
66)	Fluorene	7.75	166	1959980	42.92	ppm		100
67)	4-Chlorophenyl-phenylether	7.74	204	851670	42.32	ppm		92
68)	4-Nitroaniline	7.77	138	491476	37.63	ppm		99
70)	4,6-Dinitro-2-methylphenol	7.81	198	349735	47.11	ppm		88
71)	n-Nitrosodiphenylamine	7.89	169	1288203	38.30	ppm		98
72)	1,2-Diphenylhydrazine	7.94	77	2380713	51.21	ppm		90
74)	4-Bromophenyl-phenylether	8.38	248	470179	41.59	ppm		88
75)	Hexachlorobenzene	8.46	284	484402	44.89	ppm		93
76)	Pentachlorophenol	8.76	266	328579	46.22	ppm		94
77)	Phenanthrene	9.08	178	2784665	41.19	ppm		99
78)	Anthracene	9.16	178	2669373	39.44	ppm		98
79)	Carbazole	9.45	167	2563604	40.40	ppm		99
80)	Di-n-butylphthalate	10.14	149	3406453	42.98	ppm		98
81)	Fluoranthene	11.23	202	2791762	41.64	ppm		97
82)	Octadecane	8.93	57	1029074	37.41	ppm		87
84)	Pyrene	11.67	202	2937726	39.26	ppm		98

(#) = qualifier out of range (m) = manual integration

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6604\F156863.D Vial: 9
Acq On : 6 May 2016 2:28 pm Operator: linseyk
Sample : op93662-ms Inst : MSF
Misc : op93662,ef6604,500 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 09 08:57:34 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon May 09 08:57:31 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
86)	Butylbenzylphthalate	13.28	149	1420963	38.66	ppm	87
88)	Benzo[a]anthracene	14.31	228	2500198	39.12	ppm	98
89)	3,3'-Dichlorobenzidine	14.34	252	1287767	57.85	ppm	99
90)	Chrysene	14.38	228	2450392	38.57	ppm	99
91)	bis(2-Ethylhexyl)phthalate	14.68	149	2017971	39.62	ppm	94
93)	Di-n-octylphthalate	16.13	149	3285181	38.75	ppm	100
94)	Benzo[b]fluoranthene	16.62	252	2438638	40.78	ppm	99
95)	Benzo[k]fluoranthene	16.67	252	2448158	41.83	ppm	98
96)	Benzo[a]pyrene	17.25	252	2130346	38.92	ppm	98
97)	Indeno[1,2,3-cd]pyrene	19.31	276	2074062	41.06	ppm	98
99)	Dibenz[a,h]anthracene	19.37	278	2055643	42.07	ppm	96
100)	7,12-Dimethylbenz(a)anthra	16.63	256	988351	42.33	ppm	96
101)	Benzo[g,h,i]perylene	19.74	276	2198277	40.27	ppm	99
103)	Benzaldehyde	4.46	105	608267	33.72	ppm	96
107)	1,2,4,5-Tetrachlorobenzene	6.36	216	765436	37.22	ppm	97
109)	Atrazine	8.64	200	497581	44.05	ppm	99
111)	Benzidine	11.58	184	64300	1.75	ppm	90

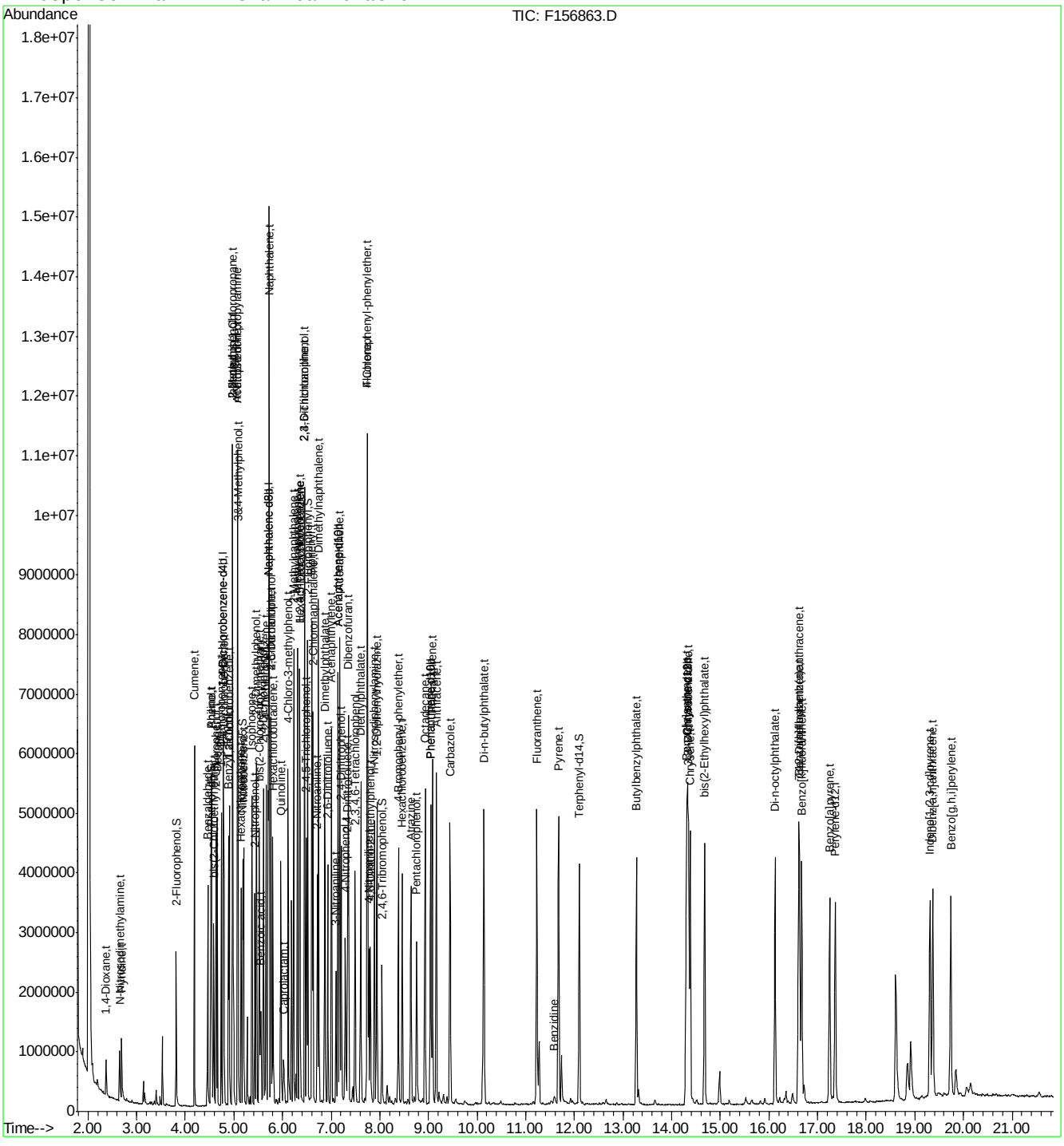
(#) = qualifier out of range (m) = manual integration (+) = signals summed
F156863.D MF6563.M Mon May 09 08:58:44 2016 RT1

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6604\F156863.D Vial: 9
Acq On : 6 May 2016 2:28 pm Operator: linseyk
Sample : op93662-ms Inst : MSF
Misc : op93662,ef6604,500 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 9 8:58 2016 Quant Results File: MF6563.RES

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon May 09 08:57:31 2016
Response via : Initial Calibration



SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6604\F156864.D Vial: 10
Acq On : 6 May 2016 4:24 pm Operator: linseyk
Sample : op93662-msd Inst : MSF
Misc : op93662,ef6604,500 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 06 16:46:23 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri May 06 16:40:49 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.78	152	677258	40.00	ppm	-0.03
24) Naphthalene-d8	5.71	136	2999096	40.00	ppm	-0.03
47) Acenaphthene-d10	7.14	164	1575643	40.00	ppm	-0.04
69) Phenanthrene-d10	9.05	188	2469127	40.00	ppm	-0.05
83) Chrysene-d12	14.33	240	2237574	40.00	ppm	-0.05
92) Perylene-d12	17.37	264	2053635	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4b	4.78	152	677258	40.00	ppm	-0.03
104) Naphthalene-d8b	5.71	136	2999096	40.00	ppm	-0.03
106) Acenaphthene-d10b	7.14	164	1575643	40.00	ppm	-0.04
108) Phenanthrene-d10b	9.05	188	2469127	40.00	ppm	-0.05
110) Chrysene-d12b	14.33	240	2237574	40.00	ppm	-0.05
System Monitoring Compounds						
5) 2-Fluorophenol	3.81	112	682576	28.66	ppm	-0.02
Spiked Amount 50.000			Recovery = 57.32%			
8) Phenol-d5	4.53	99	762273	26.32	ppm	-0.02
Spiked Amount 50.000			Recovery = 52.64%			
25) Nitrobenzene-d5	5.19	82	997226	35.61	ppm	-0.03
Spiked Amount 50.000			Recovery = 71.22%			
51) 2-Fluorobiphenyl	6.52	172	1805027	35.89	ppm	-0.03
Spiked Amount 50.000			Recovery = 71.78%			
73) 2,4,6-Tribromophenol	8.05	330	233696	46.38	ppm	-0.04
Spiked Amount 50.000			Recovery = 92.76%			
85) Terphenyl-d14	12.10	244	1661751	36.57	ppm	-0.06
Spiked Amount 50.000			Recovery = 73.14%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.37	88	197824	18.86	ppm	98
3) Pyridine	2.69	79	422133	17.09	ppm	96
4) N-Nitrosodimethylamine	2.65	42	289592	32.58	ppm	90
6) Indene	4.97	116	1448972	36.15	ppm	97
7) Cumene	4.19	105	1666532	30.95	ppm	95
9) Phenol	4.54	94	903498	29.30	ppm	75
10) Aniline	4.54	93	947701	28.09	ppm	78
11) bis(2-Chloroethyl)ether	4.58	93	798982	36.02	ppm	96
12) 2-Chlorophenol	4.63	128	814657	32.40	ppm	94
13) Decane	4.66	43	466523	21.57	ppm	88
14) 1,3-Dichlorobenzene	4.74	146	763041	27.36	ppm	99
15) 1,4-Dichlorobenzene	4.79	146	806995	29.00	ppm	97
16) Benzyl alcohol	4.89	108	546870	34.11	ppm	76
17) 1,2-Dichlorobenzene	4.91	146	763749	29.20	ppm	98
18) Acetophenone	5.08	105	1248432	41.19	ppm	94
19) 2-Methylphenol	4.97	108	801629	37.22	ppm	99
20) 2,2'-oxybis(1-Chloropropan	4.98	121	237819	29.74	ppm #	37
21) 3&4-Methylphenol	5.09	108	842654	38.15	ppm	96
22) n-Nitroso-di-n-propylamine	5.08	70	683642	41.78	ppm	97
23) Hexachloroethane	5.15	201	243915	28.30	ppm	92
26) Nitrobenzene	5.20	77	1060711	36.16	ppm	82
27) Quinoline	5.96	129	1807460	31.18	ppm	96
28) Isophorone	5.37	82	1834483	36.62	ppm	93

(#) = qualifier out of range (m) = manual integration
F156864.D MF6563.M Mon May 09 11:45:49 2016 RT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6604\F156864.D Vial: 10
Acq On : 6 May 2016 4:24 pm Operator: linseyk
Sample : op93662-msd Inst : MSF
Misc : op93662,ef6604,500 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 06 16:46:23 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri May 06 16:40:49 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
29)	2-Nitrophenol	5.43	139	448636	29.48	ppm		96
30)	2,4-Dimethylphenol	5.46	107	976603	40.74	ppm		97
31)	Benzoic acid	5.56	105	632592	31.57	ppm		97
32)	bis(2-Chloroethoxy)methane	5.52	93	976376	30.92	ppm		98
33)	2,4-Dichlorophenol	5.61	162	716025	29.91	ppm		95
34)	2,6-Dichlorophenol	5.77	162	700125	30.45	ppm		95
36)	1,2,4-Trichlorobenzene	5.66	180	640478	25.88	ppm		99
38)	Naphthalene	5.72	128	2470774	30.17	ppm		98
39)	4-Chloroaniline	5.76	127	620242	18.34	ppm		97
40)	2,3-Dichloroaniline	6.45	161	783666	28.10	ppm		96
41)	Caprolactam	6.02	55	167862	14.75	ppm		94
42)	Hexachlorobutadiene	5.80	225	319813	27.29	ppm		97
43)	4-Chloro-3-methylphenol	6.12	107	876384	37.32	ppm		98
44)	2-Methylnaphthalene	6.23	141	1406236	30.45	ppm		96
45)	1-Methylnaphthalene	6.30	141	1450611	30.52	ppm		98
46)	Dimethylnaphthalene	6.74	156	1516216	31.48	ppm		98
48)	Hexachlorocyclopentadiene	6.35	237	630273	58.95	ppm		98
49)	2,4,6-Trichlorophenol	6.45	196	501673	37.53	ppm		99
50)	2,4,5-Trichlorophenol	6.49	196	517341	35.14	ppm		97
52)	2-Chloronaphthalene	6.63	162	1548106	34.00	ppm		93
53)	Biphenyl	6.60	154	2068574	35.38	ppm		99
54)	2-Nitroaniline	6.72	65	591990	45.88	ppm		89
55)	Dimethylphthalate	6.87	163	1890834	37.11	ppm		99
56)	Acenaphthylene	7.00	152	2500487	33.88	ppm		99
57)	2,6-Dinitrotoluene	6.93	165	423913	38.49	ppm		79
58)	3-Nitroaniline	7.10	138	307112	22.28	ppm		75
59)	Acenaphthene	7.18	153	1663649	35.89	ppm		95
60)	2,4-Dinitrophenol	7.20	184	480066	74.71	ppm	#	57
61)	4-Nitrophenol	7.29	109	273146	42.18	ppm		88
62)	Dibenzofuran	7.36	168	2296670	36.31	ppm		95
63)	2,4-Dinitrotoluene	7.34	165	580440	38.89	ppm		88
64)	2,3,4,6-Tetrachlorophenol	7.49	232	407248	36.69	ppm		88
65)	Diethylphthalate	7.61	149	1947824	38.68	ppm		99
66)	Fluorene	7.75	166	1872571	38.47	ppm		96
67)	4-Chlorophenyl-phenylether	7.74	204	822211	38.33	ppm		96
68)	4-Nitroaniline	7.77	138	442374	31.77	ppm		98
70)	4,6-Dinitro-2-methylphenol	7.81	198	341125	43.74	ppm		85
71)	n-Nitrosodiphenylamine	7.89	169	1223017	34.61	ppm		99
72)	1,2-Diphenylhydrazine	7.94	77	2257748	46.23	ppm		91
74)	4-Bromophenyl-phenylether	8.38	248	454746	38.29	ppm		92
75)	Hexachlorobenzene	8.46	284	467538	41.24	ppm		98
76)	Pentachlorophenol	8.76	266	322041	43.12	ppm		93
77)	Phenanthrene	9.08	178	2621499	36.90	ppm		99
78)	Anthracene	9.16	178	2562931	36.04	ppm		99
79)	Carbazole	9.45	167	2489020	37.34	ppm		99
80)	Di-n-butylphthalate	10.14	149	3268045	39.25	ppm		98
81)	Fluoranthene	11.23	202	2680755	38.06	ppm		99
82)	Octadecane	8.93	57	997500	34.51	ppm		91
84)	Pyrene	11.67	202	2839854	35.79	ppm		96

(#) = qualifier out of range (m) = manual integration

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6604\F156864.D Vial: 10
Acq On : 6 May 2016 4:24 pm Operator: linseyk
Sample : op93662-msd Inst : MSF
Misc : op93662,ef6604,500 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 06 16:46:23 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri May 06 16:40:49 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
86)	Butylbenzylphthalate	13.28	149	1388161	35.62	ppm	88
88)	Benzo[a]anthracene	14.31	228	2409283	35.55	ppm	99
89)	3,3'-Dichlorobenzidine	14.35	252	1359787	57.60	ppm	98
90)	Chrysene	14.38	228	2318239	34.41	ppm	99
91)	bis(2-Ethylhexyl)phthalate	14.68	149	1952486	36.15	ppm	95
93)	Di-n-octylphthalate	16.13	149	3298186	36.65	ppm	99
94)	Benzo[b]fluoranthene	16.62	252	2378253	37.47	ppm	99
95)	Benzo[k]fluoranthene	16.67	252	2288587	36.84	ppm	97
96)	Benzo[a]pyrene	17.25	252	2060425	35.47	ppm	98
97)	Indeno[1,2,3-cd]pyrene	19.31	276	1961713	36.59	ppm	97
99)	Dibenz[a,h]anthracene	19.37	278	1984977	38.27	ppm	99
100)	7,12-Dimethylbenz(a)anthra	16.63	256	972980	39.26	ppm	98
101)	Benzo[g,h,i]perylene	19.74	276	2089392	36.06	ppm	96
103)	Benzaldehyde	4.46	105	608692	31.92	ppm	95
107)	1,2,4,5-Tetrachlorobenzene	6.36	216	697475	31.82	ppm	98
109)	Atrazine	8.64	200	481756	40.59	ppm	99
111)	Benzidine	11.58	184	263342	6.77	ppm	97

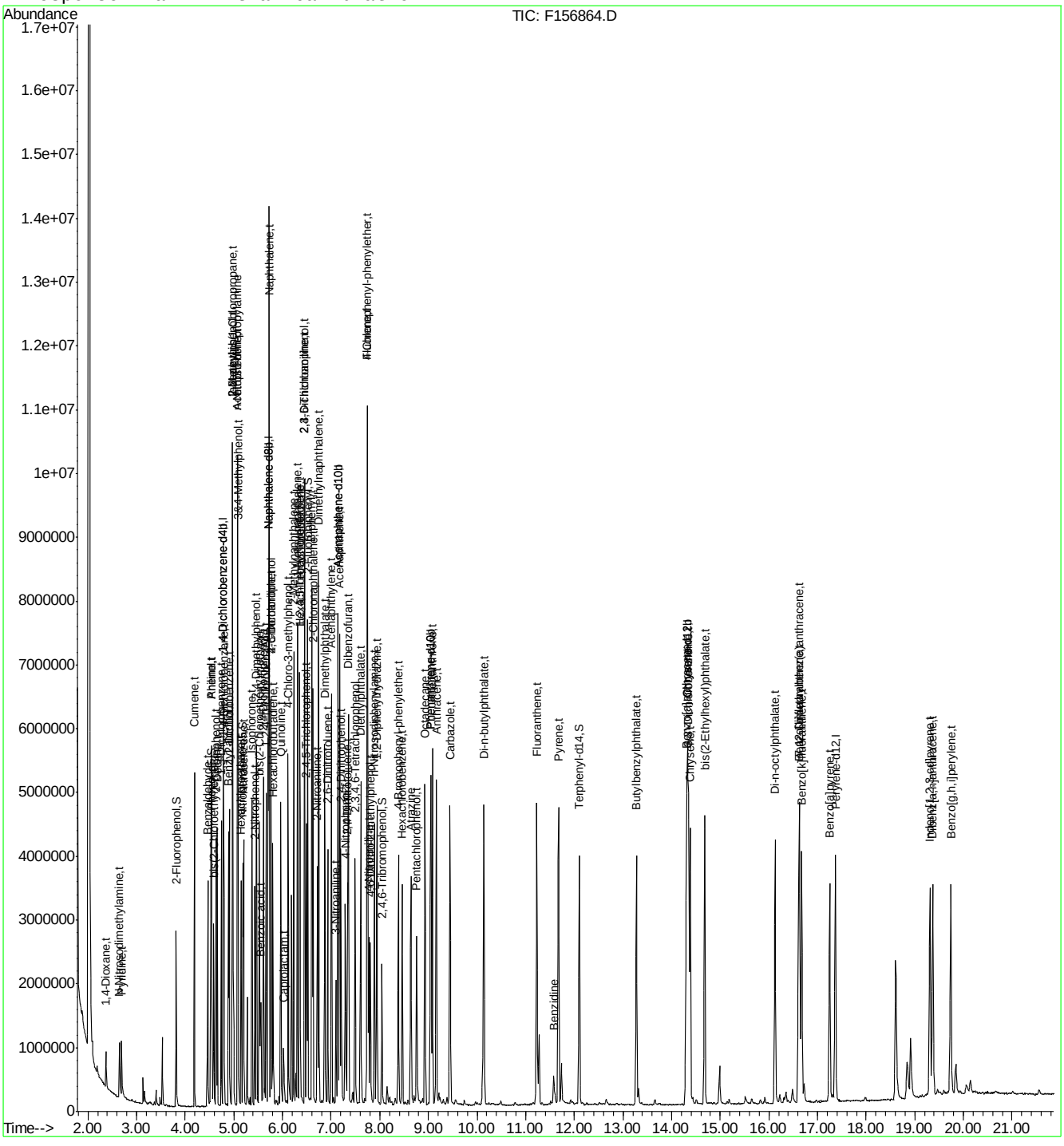
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6604\F156864.D Vial: 10
Acq On : 6 May 2016 4:24 pm Operator: linseyk
Sample : op93662-msd Inst : MSF
Misc : op93662,ef6604,500 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 9 11:45 2016 Quant Results File: MF6563.RES

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon May 09 09:57:38 2016
Response via : Initial Calibration



SGS ACCUTEST JC19644

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
05/10/16 14:47

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3639\
Data File : 3E83015.D
Acq On : 9 May 2016 7:35 pm
Operator : ashleyn
Sample : op93678-ms
Misc : op93678,e3e3639,31.2,,,1,2
ALS Vial : 20 Sample Multiplier: 1

Quant Time: May 10 12:04:20 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MTue May 10 10:50:48 2016
QLast Update : Tue May 10 10:50:48 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.460	152	92487	40.00 ppm	0.04
24) Naphthalene-d8	5.508	136	356021	40.00 ppm	0.05
47) Acenaphthene-d10	7.524	164	217806	40.00 ppm	0.06
69) Phenanthrene-d10	9.680	188	326942	40.00 ppm	0.07
83) Chrysene-d12	13.862	240	275221	40.00 ppm	0.08
92) Perylene-d12	15.980	264	247441	40.00 ppm	0.09
102) 1,4-Dichlorobenzene-d4a	4.460	152	92487	40.00 ppm	0.04
104) Acenaphthene-d10a	7.524	164	217806	40.00 ppm	0.06
106) Phenanthrene-d10a	9.680	188	326942	40.00 ppm	0.07
108) Chrysene-d12a	13.862	240	275221	40.00 ppm	0.08
110) Naphthalene-d8a	5.508	136	356021	40.00 ppm	0.05
System Monitoring Compounds					
5) 2-Fluorophenol	3.534	112	45756	16.14 ppm	0.08
Spiked Amount 50.000			Recovery	= 32.28%	
8) Phenol-d5	4.272	99	63044	17.09 ppm	0.10
Spiked Amount 50.000			Recovery	= 34.18%	
25) Nitrobenzene-d5	4.893	82	66184	18.59 ppm	0.05
Spiked Amount 50.000			Recovery	= 37.18%	
51) 2-Fluorobiphenyl	6.669	172	155445	21.52 ppm	0.05
Spiked Amount 50.000			Recovery	= 43.04%	
73) 2,4,6-Tribromophenol	8.658	330	25125	21.79 ppm	0.06
Spiked Amount 50.000			Recovery	= 43.58%	
85) Terphenyl-d14	12.242	244	115004	19.90 ppm	0.06
Spiked Amount 50.000			Recovery	= 39.80%	

Target Compounds					Qvalue
2) 1,4-Dioxane	1.935	88	5833	6.92 ppm	93
3) Pyridine	2.299	79	19214	8.02 ppm	94
4) N-Nitrosodimethylamine	2.251	74	13219	9.69 ppm	93
6) Indene	4.647	116	92322	16.73 ppm	94
7) Cumene	3.850	105	96565	11.97 ppm	94
9) Phenol	4.283	94	66914	16.55 ppm	98
10) Aniline	4.224	93	40951	8.72 ppm	83
11) bis(2-Chloroethyl)ether	4.272	93	46021	16.59 ppm	94
12) 2-Chlorophenol	4.337	128	61148	18.25 ppm	95
13) Decane	4.331	43	46866	13.21 ppm	98
14) 1,3-Dichlorobenzene	4.417	146	55812	15.23 ppm	98
15) 1,4-Dichlorobenzene	4.470	146	57828	15.04 ppm	98
16) Benzyl alcohol	4.583	108	37088	18.16 ppm	97
17) 1,2-Dichlorobenzene	4.583	146	57130	16.49 ppm	96
18) Acetophenone	4.770	105	74963m	16.34 ppm	
19) 2-Methylphenol	4.706	108	50573	17.84 ppm	98
20) 2,2'-oxybis(1-Chloropr...	4.668	121	17581	15.47 ppm #	57
21) 3&4-Methylphenol	4.829	108	53300	17.90 ppm	94
22) n-Nitroso-di-n-propyla...	4.770	70	39989	16.46 ppm	80
23) Hexachloroethane	4.839	201	16766	13.63 ppm	92
26) Nitrobenzene	4.909	77	66275	18.02 ppm	98
27) Quinoline	5.866	129	121653	19.65 ppm	98
28) Isophorone	5.107	82	113255	18.98 ppm	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3639\
Data File : 3E83015.D
Acq On : 9 May 2016 7:35 pm
Operator : ashleyn
Sample : op93678-ms
Misc : op93678,e3e3639,31.2,,,1,2
ALS Vial : 20 Sample Multiplier: 1

Quant Time: May 10 12:04:20 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MTue May 10 10:50:48 2016
QLast Update : Tue May 10 10:50:48 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
29) 2-Nitrophenol	5.176	139	30727	16.33 ppm	89
30) 2,4-Dimethylphenol	5.246	107	65150	20.12 ppm	98
31) Benzoic acid	5.353	105	18408m	7.71 ppm	
32) bis(2-Chloroethoxy)met...	5.294	93	58707	18.07 ppm	97
33) 2,4-Dichlorophenol	5.433	162	58211	23.05 ppm	94
34) 2,6-Dichlorophenol	5.609	162	54315	21.05 ppm	96
36) 1,2,4-Trichlorobenzene	5.460	180	57485	19.95 ppm	96
38) Naphthalene	5.529	128	201211	20.44 ppm	78
39) 4-Chloroaniline	5.599	127	54074	13.48 ppm	98
40) 2,3-Dichloroaniline	6.578	161	67119	21.08 ppm	97
41) Caprolactam	5.952	55	22745	16.87 ppm	92
42) Hexachlorobutadiene	5.636	225	37663	21.81 ppm	96
43) 4-Chloro-3-methylphenol	6.166	107	58552	20.32 ppm	98
44) 2-Methylnaphthalene	6.241	141	122802	21.98 ppm	94
45) 1-Methylnaphthalene	6.348	141	124641	21.38 ppm	95
46) Dimethylnaphthalene	6.984	156	128352	22.76 ppm	97
49) 2,4,6-Trichlorophenol	6.599	196	44027	22.29 ppm	94
50) 2,4,5-Trichlorophenol	6.701	196	41903	19.05 ppm	94
52) 2-Chloronaphthalene	6.813	162	126189	20.44 ppm	98
53) Biphenyl	6.792	154	168385	20.45 ppm	96
54) 2-Nitroaniline	6.968	65	47119	20.59 ppm	91
55) Dimethylphthalate	7.203	163	150100	20.75 ppm	98
56) Acenaphthylene	7.332	152	213030	20.67 ppm	99
57) 2,6-Dinitrotoluene	7.289	165	31515	19.46 ppm	98
58) 3-Nitroaniline	7.514	138	28579	15.85 ppm	97
59) Acenaphthene	7.567	153	141496	20.68 ppm	96
60) 2,4-Dinitrophenol	7.695	184	3951	10.90 ppm	85
61) 4-Nitrophenol	7.990	109	22291	19.14 ppm	81
62) Dibenzofuran	7.808	168	195889	21.75 ppm	87
63) 2,4-Dinitrotoluene	7.845	165	41631	18.80 ppm	85
64) 2,3,4,6-Tetrachlorophenol	8.027	232	34950	21.44 ppm	90
65) Diethylphthalate	8.188	149	156404	20.59 ppm	99
66) Fluorene	8.289	166	154198	20.45 ppm	99
67) 4-Chlorophenyl-phenyle...	8.311	204	72820	21.18 ppm	94
68) 4-Nitroaniline	8.380	138	29255	16.88 ppm	95
70) 4,6-Dinitro-2-methylph...	8.439	198	6087	7.40 ppm	72
71) n-Nitrosodiphenylamine	8.498	169	103975	22.90 ppm	98
72) 1,2-Diphenylhydrazine	8.541	77	149092	22.04 ppm	98
74) 4-Bromophenyl-phenylether	9.033	248	42473	21.85 ppm	94
75) Hexachlorobenzene	9.097	284	47768	20.49 ppm	95
76) Pentachlorophenol	9.460	266	14573	13.13 ppm	99
77) Phenanthrene	9.717	178	292121	30.79 ppm	99
78) Anthracene	9.792	178	212432	22.35 ppm	100
79) Carbazole	10.097	167	179320	20.86 ppm	99
80) Di-n-butylphthalate	10.707	149	205649	18.52 ppm	97
81) Fluoranthene	11.573	202	288933	28.08 ppm	94
82) Octadecane	9.637	57	81294	21.05 ppm	90
84) Pyrene	11.921	202	311078	37.76 ppm	99
86) Butylbenzylphthalate	13.082	149	81561	20.76 ppm	94
88) Benzo[a]anthracene	13.846	228	229382	28.52 ppm	99

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3639\
Data File : 3E83015.D
Acq On : 9 May 2016 7:35 pm
Operator : ashleyn
Sample : op93678-ms
Misc : op93678,e3e3639,31.2,,,1,2
ALS Vial : 20 Sample Multiplier: 1

Quant Time: May 10 12:04:20 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MTue May 10 10:50:48 2016
QLast Update : Tue May 10 10:50:48 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
89) 3,3'-Dichlorobenzidine	13.868	252	82960	27.73	ppm		97
90) Chrysene	13.900	228	216638	28.86	ppm		97
91) bis(2-Ethylhexyl)phtha...	14.044	149	108734	21.50	ppm		95
93) Di-n-octylphthalate	15.039	149	182661	19.85	ppm		98
94) Benzo[b]fluoranthene	15.462	252	229293	27.41	ppm		96
95) Benzo[k]fluoranthene	15.499	252	176250	23.61	ppm		95
96) Benzo[a]pyrene	15.900	252	192769	27.61	ppm		96
97) Indeno[1,2,3-cd]pyrene	17.425	276	162573m	24.44	ppm		
99) Dibenz[a,h]anthracene	17.457	278	136417	20.64	ppm		97
100) 7,12-Dimethylbenz(a)an...	15.451	256	74791	20.06	ppm		99
101) Benzo[g,h,i]perylene	17.826	276	167383	26.11	ppm		92
103) Benzaldehyde	4.139	105	38870	15.50	ppm	#	82
105) 1,2,4,5-Tetrachloroben...	6.433	216	73005	27.07	ppm		99
107) Atrazine	9.359	215	23400	28.12	ppm	#	81

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

7.4.3

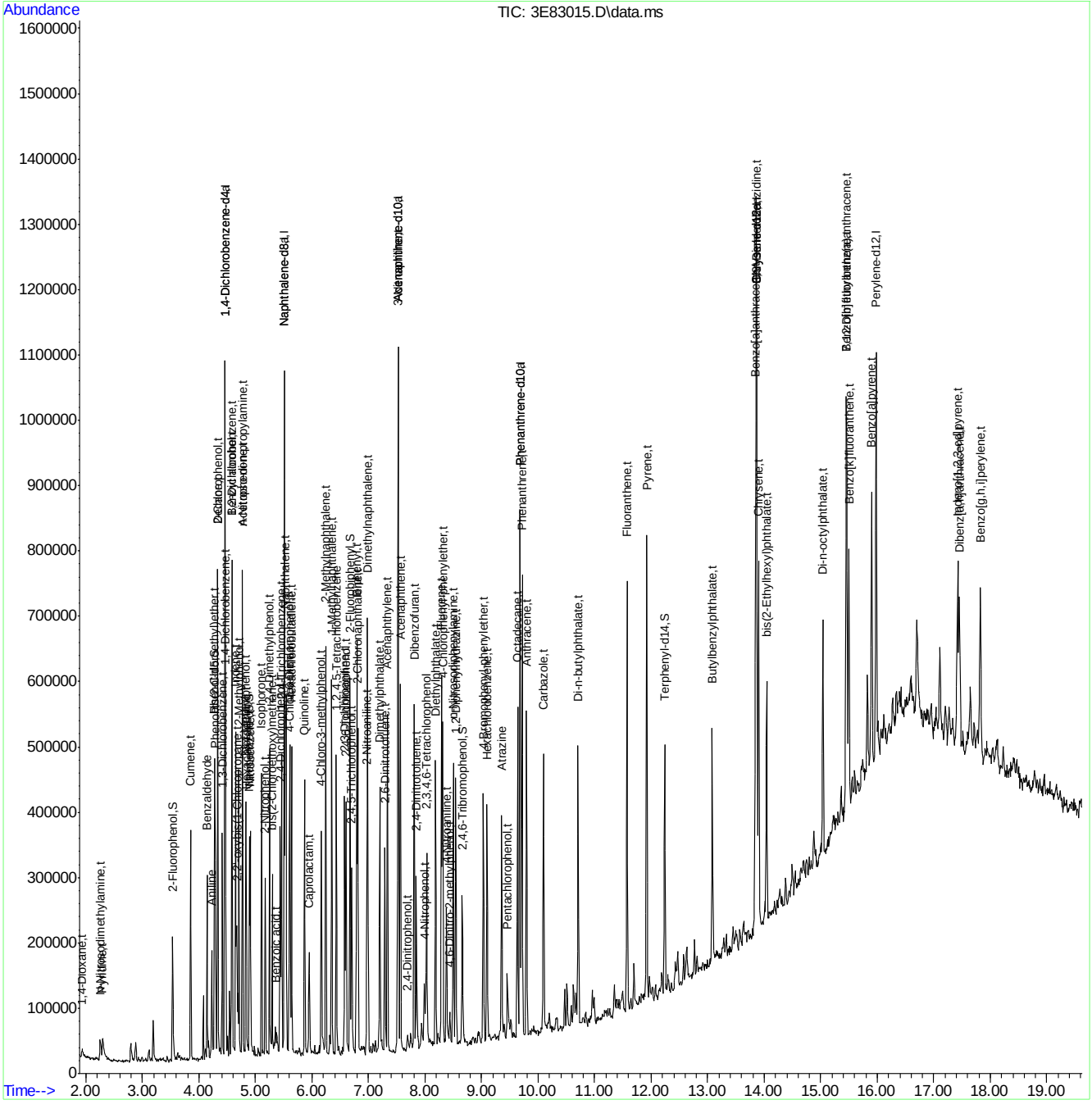
7

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3639\
Data File : 3E83015.D
Acq On : 9 May 2016 7:35 pm
Operator : ashleyn
Sample : op93678-ms
Misc : op93678,e3e3639,31.2,,,1,2
ALS Vial : 20 Sample Multiplier: 1

Quant Time: May 10 12:04:20 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MTue May 10 10:50:48 2016
QLast Update : Tue May 10 10:50:48 2016
Response via : Initial Calibration



SGS ACCUTEST JC19644

Manual Integration Approval Summary

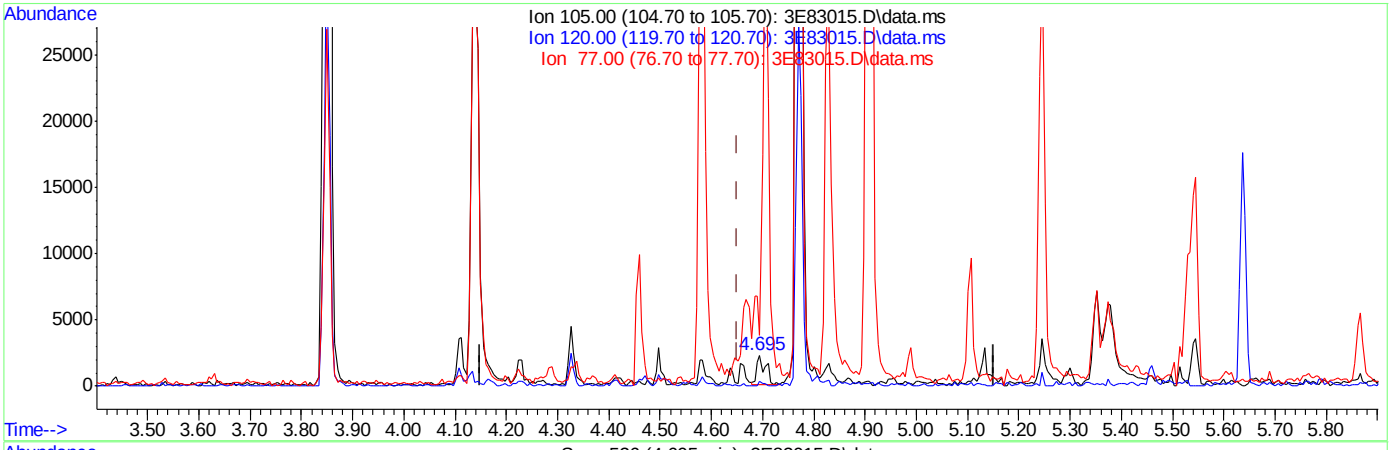
Sample Number:	OP93678-MS	**Method:**	SW846 8270D
Lab FileID:	3E83015.D	**Analyst approved:**	05/10/16 12:12 Ashley Noble
Injection Time:	05/09/16 19:35	**Supervisor approved:**	05/10/16 14:47 Nina Pandya

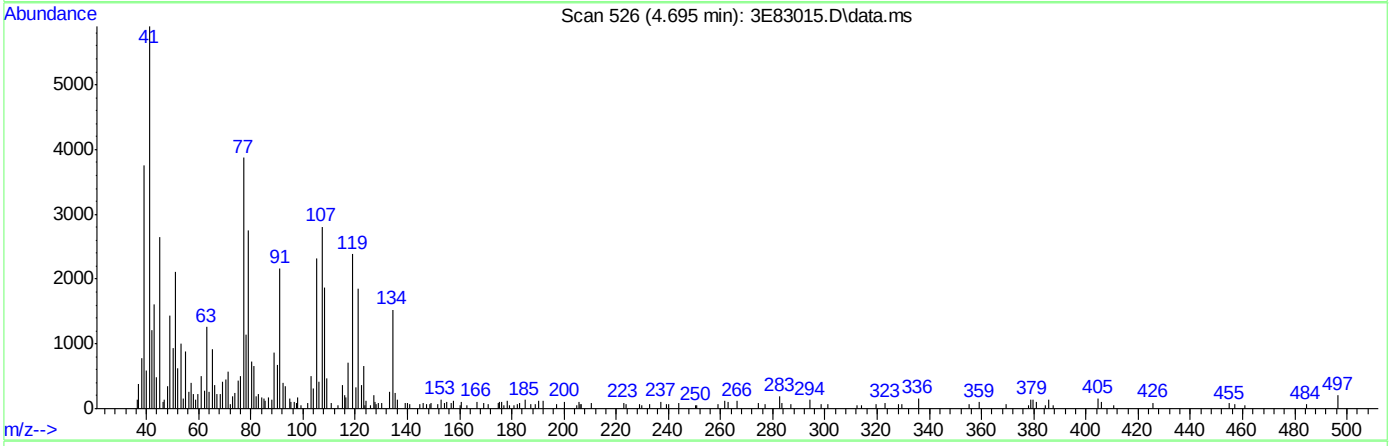
Parameter	CAS	Sig#	R.T. (min.)	Reason
Acetophenone	98-86-2		4.77	Poor instrument integration
Benzoic acid	65-85-0		5.35	Split peak
Indeno(1,2,3-cd)pyrene	193-39-5		17.42	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3639\
Data File : 3E83015.D
Acq On : 9 May 2016 7:35 pm
Operator : ashleyn
Sample : op93678-ms
Misc : op93678,e3e3639,31.2,,,1,2
ALS Vial : 20 Sample Multiplier: 1

Quant Time: May 10 11:21:57 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MTue May 10 10:50:48 2016
QLast Update : Tue May 10 10:50:48 2016
Response via : Initial Calibration





TIC: 3E83015.D\data.ms

(18) Acetophenone (t)

4.695min (+0.044) 0.58ppm

response 2684

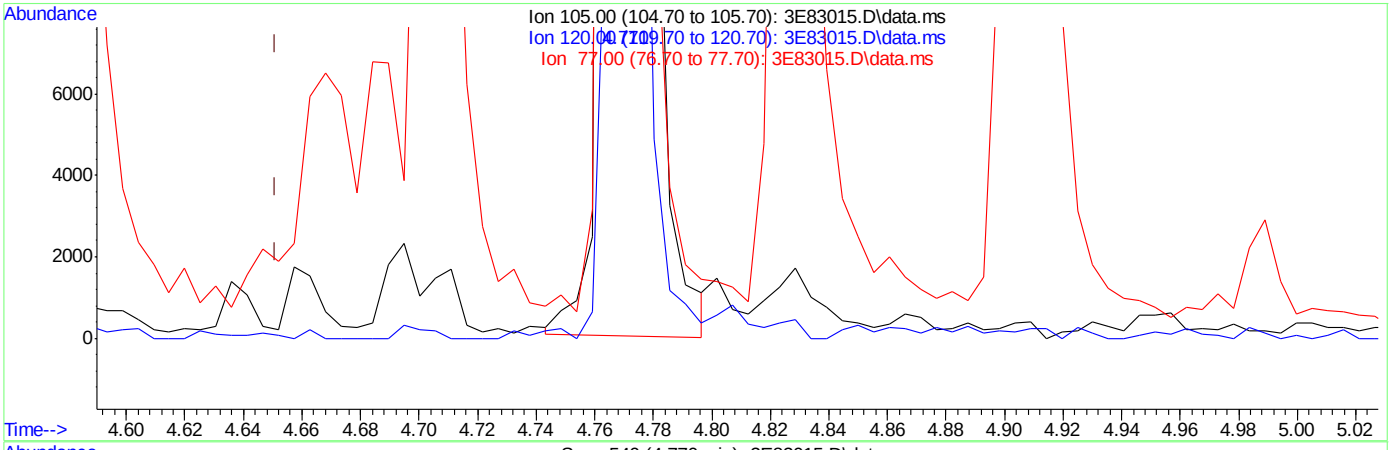
Ion	Exp%	Act%
105.00	100	100
120.00	28.90	11.38
77.00	85.20	58.26
0.00	0.00	0.00

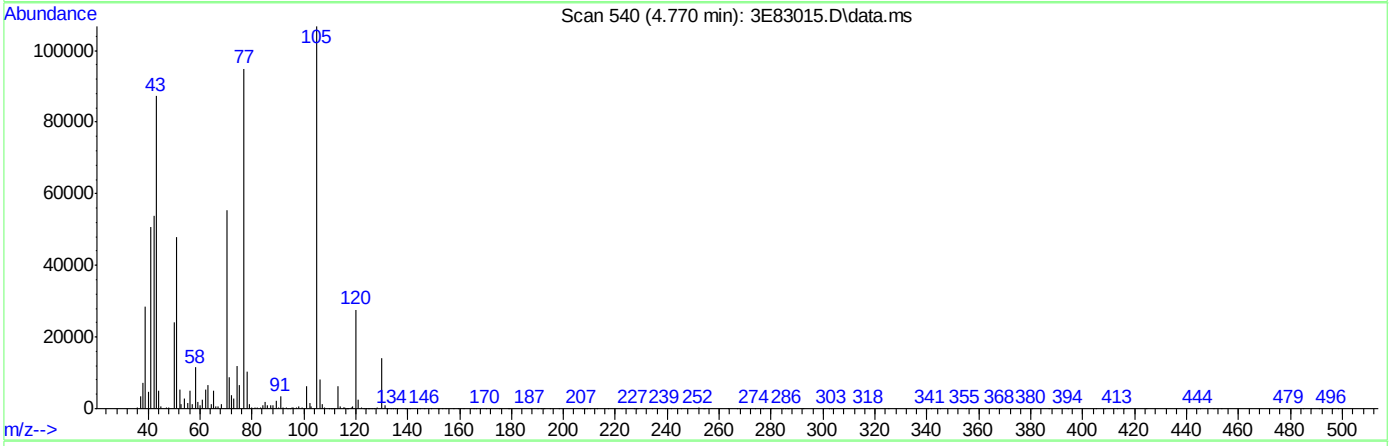
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\E3E3639\
Data File : 3E83015.D
Acq On    :  9 May 2016   7:35 pm
Operator  : ashleyn
Sample    : op93678-ms
Misc      : op93678,e3e3639,31.2,,,1,2
ALS Vial  : 20   Sample Multiplier: 1

Quant Time: May 10 11:21:57 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title  : Semi Volatile  GC/MS,zb-5msplus 30m x .25mm x .25MTue May 10 10:50:48 2016
QLast Update : Tue May 10 10:50:48 2016
Response via : Initial Calibration
```





TIC: 3E83015.D\data.ms

(18) Acetophenone (t)

4.770min (+0.119) 16.34ppm m

response 74963

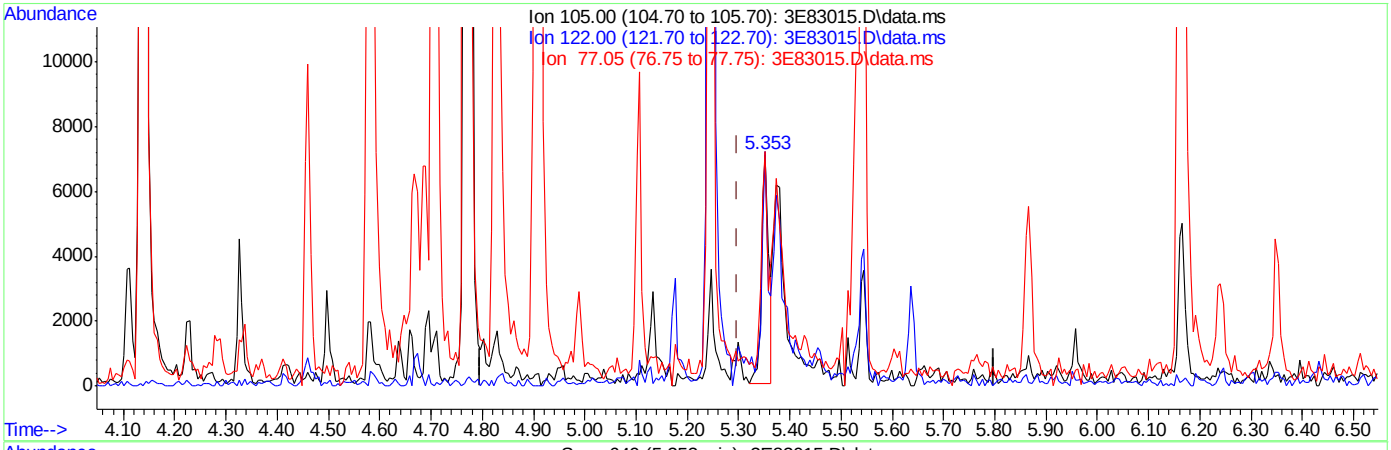
Ion	Exp%	Act%
105.00	100	100
120.00	28.90	25.83
77.00	85.20	88.90
0.00	0.00	0.00

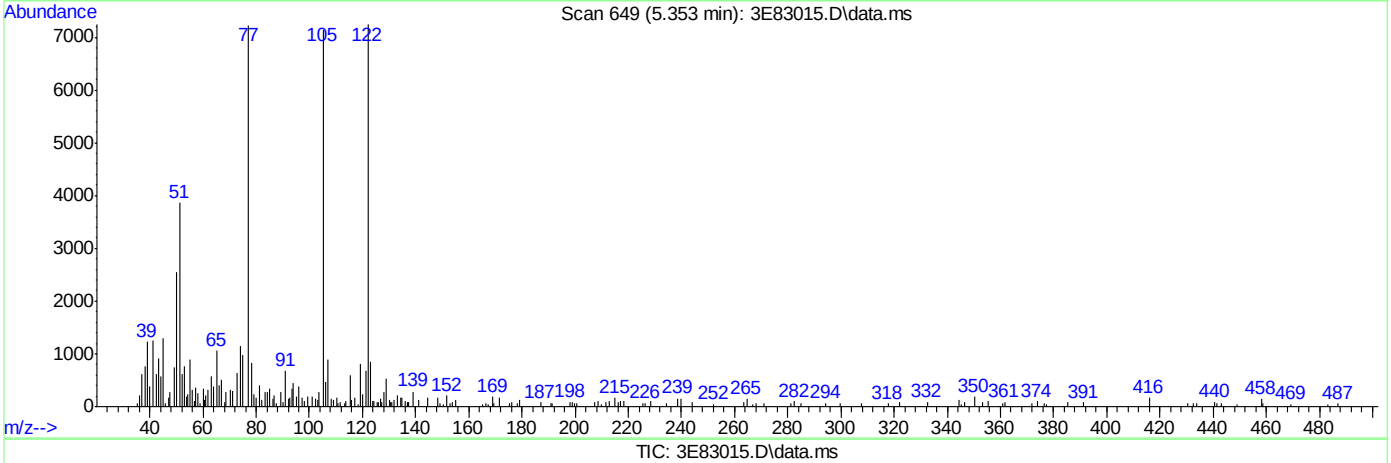
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3639\
Data File : 3E83015.D
Acq On : 9 May 2016 7:35 pm
Operator : ashleyn
Sample : op93678-ms
Misc : op93678,e3e3639,31.2,,,1,2
ALS Vial : 20 Sample Multiplier: 1

Quant Time: May 10 11:21:57 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MTue May 10 10:50:48 2016
QLast Update : Tue May 10 10:50:48 2016
Response via : Initial Calibration





TIC: 3E83015.D\data.ms

(31) Benzoic acid (t)

5.353min (+0.055) 3.09ppm

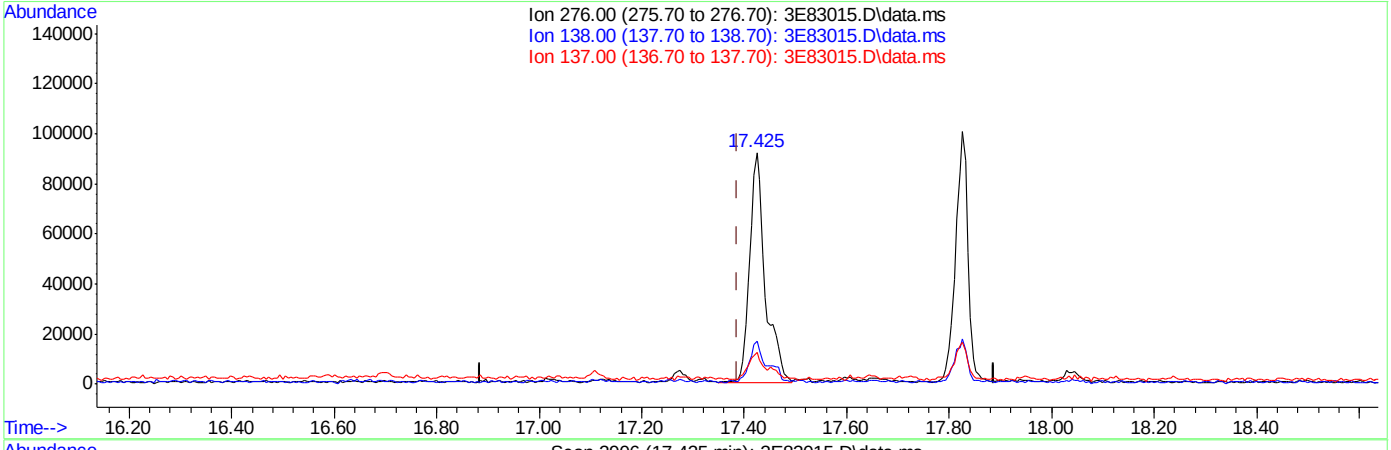
response 7376

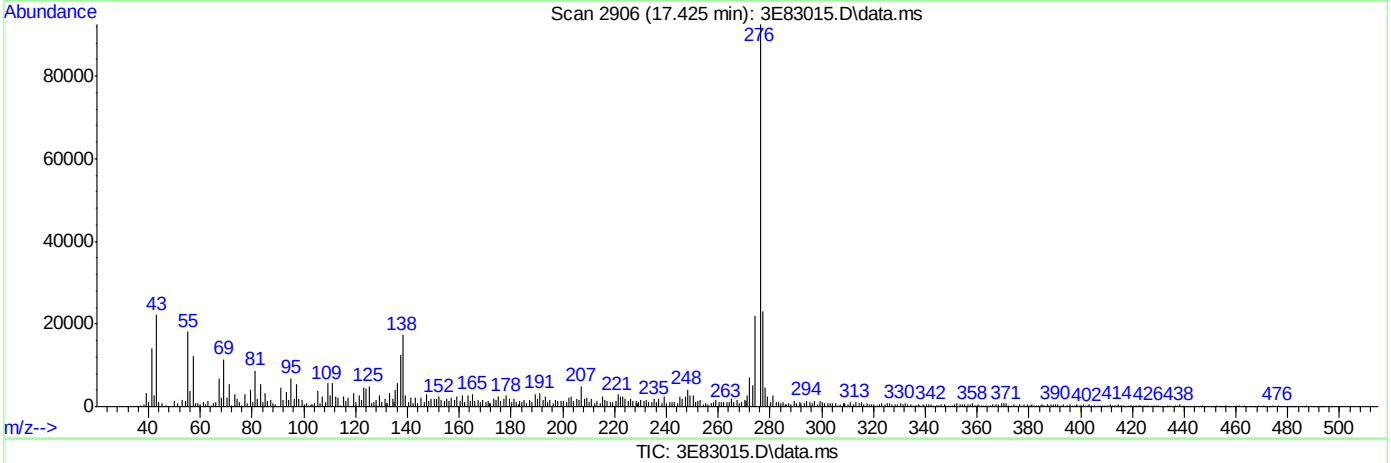
Ion	Exp%	Act%
105.00	100	100
122.00	74.00	102.06
77.05	79.10	92.47
0.00	0.00	0.00

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\E3E3639\
Data File : 3E83015.D
Acq On    :  9 May 2016   7:35 pm
Operator  : ashleyn
Sample    : op93678-ms
Misc      : op93678,e3e3639,31.2,,,1,2
ALS Vial  : 20   Sample Multiplier: 1

Quant Time: May 10 11:21:57 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title  : Semi Volatile  GC/MS,zb-5msplus 30m x .25mm x .25MTue May 10 10:50:48 2016
QLast Update : Tue May 10 10:50:48 2016
Response via : Initial Calibration
```





(97) Indeno[1,2,3-cd]pyrene (t)

17.425min (+0.038) 28.87ppm

response 192059

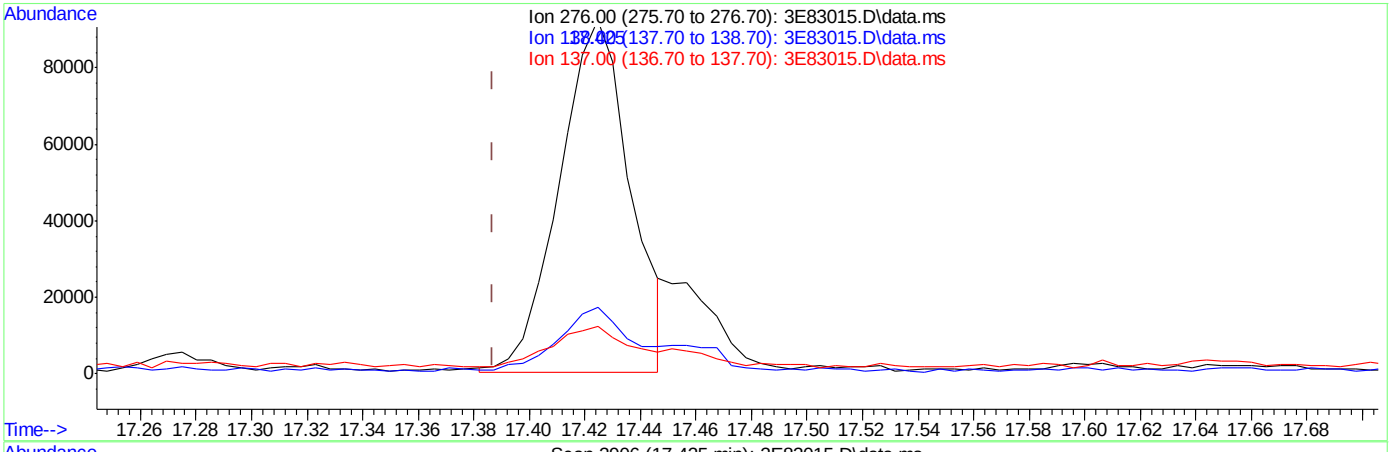
Ion	Exp%	Act%
276.00	100	100
138.00	13.20	17.81
137.00	10.30	11.20
0.00	0.00	0.00

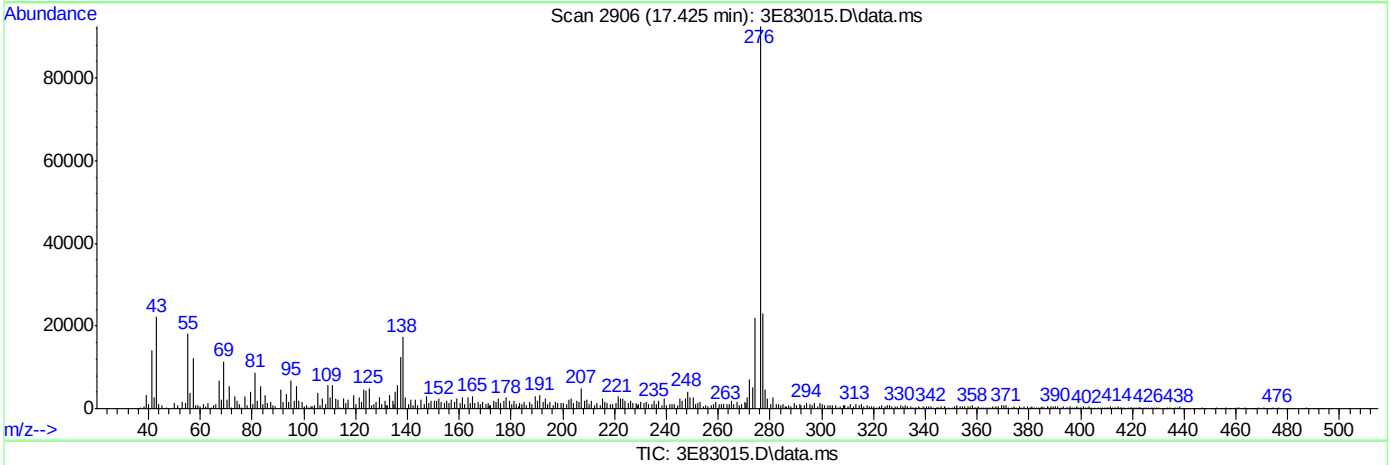
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\E3E3639\
Data File : 3E83015.D
Acq On    :  9 May 2016   7:35 pm
Operator  : ashleyn
Sample    : op93678-ms
Misc      : op93678,e3e3639,31.2,,,1,2
ALS Vial  : 20   Sample Multiplier: 1

Quant Time: May 10 11:21:57 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title  : Semi Volatile  GC/MS,zb-5msplus 30m x .25mm x .25MTue May 10 10:50:48 2016
QLast Update : Tue May 10 10:50:48 2016
Response via : Initial Calibration
```





TIC: 3E83015.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

17.425min (+0.038) 24.44ppm m

response 162573

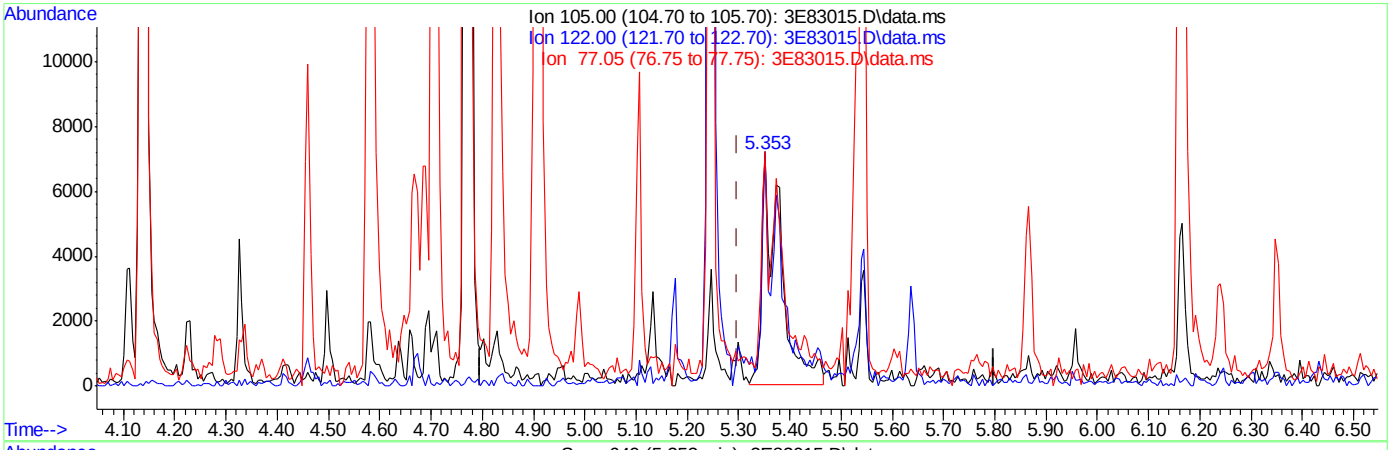
Ion	Exp%	Act%
276.00	100	100
138.00	13.20	18.70
137.00	10.30	13.59
0.00	0.00	0.00

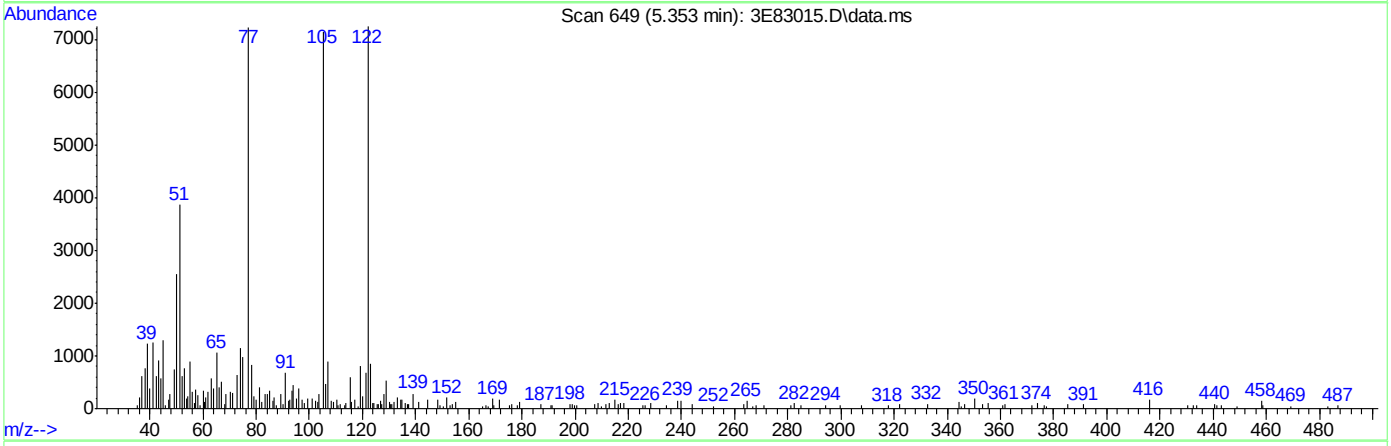
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3639\
Data File : 3E83015.D
Acq On : 9 May 2016 7:35 pm
Operator : ashleyn
Sample : op93678-ms
Misc : op93678,e3e3639,31.2,,,1,2
ALS Vial : 20 Sample Multiplier: 1

Quant Time: May 10 12:04:20 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MTue May 10 10:50:48 2016
QLast Update : Tue May 10 10:50:48 2016
Response via : Initial Calibration





TIC: 3E83015.D\data.ms

(31) Benzoic acid (t)

5.353min (+0.055) 7.71ppm m

response 18408

Ion	Exp%	Act%
105.00	100	100
122.00	74.00	101.51
77.05	79.10	101.25
0.00	0.00	0.00

SGS ACCUTEST JC19644

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
05/10/16 14:47

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3639\
Data File : 3E83016.D
Acq On : 9 May 2016 8:01 pm
Operator : ashleyn
Sample : op93678-msd
Misc : op93678,e3e3639,30.3,,,1,2
ALS Vial : 21 Sample Multiplier: 1

Quant Time: May 10 12:07:20 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MTue May 10 10:50:48 2016
QLast Update : Tue May 10 10:50:48 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.459	152	107842	40.00	ppm	0.04
24) Naphthalene-d8	5.513	136	399232	40.00	ppm	0.05
47) Acenaphthene-d10	7.524	164	244305	40.00	ppm	0.06
69) Phenanthrene-d10	9.685	188	372836	40.00	ppm	0.07
83) Chrysene-d12	13.868	240	309911	40.00	ppm	0.09
92) Perylene-d12	15.986	264	272136	40.00	ppm	0.09
102) 1,4-Dichlorobenzene-d4a	4.459	152	107842	40.00	ppm	0.04
104) Acenaphthene-d10a	7.524	164	244305	40.00	ppm	0.06
106) Phenanthrene-d10a	9.685	188	372836	40.00	ppm	0.07
108) Chrysene-d12a	13.868	240	309911	40.00	ppm	0.09
110) Naphthalene-d8a	5.513	136	399232	40.00	ppm	0.05
System Monitoring Compounds						
5) 2-Fluorophenol	3.534	112	42061	12.72	ppm	0.08
Spiked Amount 50.000			Recovery = 25.44%			
8) Phenol-d5	4.277	99	54141	12.59	ppm	0.10
Spiked Amount 50.000			Recovery = 25.18%			
25) Nitrobenzene-d5	4.893	82	62501	15.65	ppm	0.05
Spiked Amount 50.000			Recovery = 31.30%			
51) 2-Fluorobiphenyl	6.674	172	133446	16.47	ppm	0.05
Spiked Amount 50.000			Recovery = 32.94%			
73) 2,4,6-Tribromophenol	8.663	330	19892	15.13	ppm	0.07
Spiked Amount 50.000			Recovery = 30.26%			
85) Terphenyl-d14	12.242	244	97990	15.06	ppm	0.06
Spiked Amount 50.000			Recovery = 30.12%			

Target Compounds						Qvalue
2) 1,4-Dioxane	1.924	88	8821	8.97	ppm	92
3) Pyridine	2.288	79	20516	7.34	ppm	87
4) N-Nitrosodimethylamine	2.250	74	15613	9.82	ppm	82
6) Indene	4.652	116	88025	13.68	ppm	99
7) Cumene	3.850	105	106784	11.35	ppm	96
9) Phenol	4.288	94	55890	11.85	ppm	88
10) Aniline	4.224	93	35606	6.50	ppm	83
11) bis(2-Chloroethyl)ether	4.272	93	42705	13.21	ppm	92
12) 2-Chlorophenol	4.336	128	51913	13.28	ppm	95
13) Decane	4.331	43	55919	13.52	ppm	91
14) 1,3-Dichlorobenzene	4.417	146	54043	12.65	ppm	99
15) 1,4-Dichlorobenzene	4.470	146	56615	12.62	ppm	91
16) Benzyl alcohol	4.582	108	32220	13.53	ppm	99
17) 1,2-Dichlorobenzene	4.582	146	53159	13.16	ppm	96
18) Acetophenone	4.770	105	71827m	13.43	ppm	
19) 2-Methylphenol	4.705	108	42959	13.00	ppm	100
20) 2,2'-oxybis(1-Chloropr...	4.668	121	16744	12.64	ppm #	78
21) 3&4-Methylphenol	4.828	108	46875	13.50	ppm	100
22) n-Nitroso-di-n-propyla...	4.770	70	39435	13.92	ppm	83
23) Hexachloroethane	4.839	201	14942	10.42	ppm	97
26) Nitrobenzene	4.909	77	61397	14.89	ppm	96
27) Quinoline	5.866	129	103000	14.83	ppm	98
28) Isophorone	5.107	82	104234	15.57	ppm	90

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3639\
Data File : 3E83016.D
Acq On : 9 May 2016 8:01 pm
Operator : ashleyn
Sample : op93678-msd
Misc : op93678,e3e3639,30.3,,,1,2
ALS Vial : 21 Sample Multiplier: 1

Quant Time: May 10 12:07:20 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MTue May 10 10:50:48 2016
QLast Update : Tue May 10 10:50:48 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
29) 2-Nitrophenol	5.176	139	27590	13.07	ppm		92
30) 2,4-Dimethylphenol	5.246	107	61008	16.80	ppm		98
31) Benzoic acid	5.374	105	9459	3.53	ppm	#	52
32) bis(2-Chloroethoxy)met...	5.294	93	53291	14.63	ppm		98
33) 2,4-Dichlorophenol	5.438	162	45732	16.15	ppm		93
34) 2,6-Dichlorophenol	5.609	162	47359	16.37	ppm		93
36) 1,2,4-Trichlorobenzene	5.460	180	50240	15.55	ppm		94
38) Naphthalene	5.534	128	172543	15.63	ppm		78
39) 4-Chloroaniline	5.604	127	42486	9.45	ppm		97
40) 2,3-Dichloroaniline	6.583	161	56802	15.91	ppm		94
41) Caprolactam	5.952	55	21016	13.90	ppm		98
42) Hexachlorobutadiene	5.641	225	33115	17.10	ppm		99
43) 4-Chloro-3-methylphenol	6.166	107	49364	15.28	ppm		99
44) 2-Methylnaphthalene	6.246	141	102415	16.35	ppm		96
45) 1-Methylnaphthalene	6.353	141	107494	16.45	ppm		96
46) Dimethylnaphthalene	6.989	156	109610	17.33	ppm		96
49) 2,4,6-Trichlorophenol	6.604	196	35176	15.88	ppm		92
50) 2,4,5-Trichlorophenol	6.700	196	33357	13.52	ppm		97
52) 2-Chloronaphthalene	6.813	162	106332	15.36	ppm		98
53) Biphenyl	6.791	154	146898	15.91	ppm		99
54) 2-Nitroaniline	6.973	65	40605	15.82	ppm		96
55) Dimethylphthalate	7.203	163	133124	16.41	ppm		99
56) Acenaphthylene	7.337	152	176942	15.31	ppm		100
57) 2,6-Dinitrotoluene	7.289	165	26249	14.45	ppm		87
58) 3-Nitroaniline	7.519	138	23162	11.45	ppm	#	71
59) Acenaphthene	7.567	153	123302	16.07	ppm		99
60) 2,4-Dinitrophenol	7.706	184	1257	7.66	ppm	#	42
61) 4-Nitrophenol	7.989	109	23704	18.15	ppm		81
62) Dibenzofuran	7.808	168	157060	15.55	ppm		92
63) 2,4-Dinitrotoluene	7.850	165	33369	13.43	ppm		84
64) 2,3,4,6-Tetrachlorophenol	8.032	232	28656	15.67	ppm		96
65) Diethylphthalate	8.187	149	138476	16.25	ppm		98
66) Fluorene	8.294	166	133884	15.83	ppm		99
67) 4-Chlorophenyl-phenyle...	8.316	204	62047	16.09	ppm		98
68) 4-Nitroaniline	8.385	138	26844	13.81	ppm		91
70) 4,6-Dinitro-2-methylph...	8.444	198	3118	4.70	ppm		91
71) n-Nitrosodiphenylamine	8.503	169	90995	17.57	ppm		95
72) 1,2-Diphenylhydrazine	8.546	77	131089	16.99	ppm		98
74) 4-Bromophenyl-phenylether	9.032	248	36551	16.49	ppm		93
75) Hexachlorobenzene	9.097	284	37613	14.15	ppm		92
76) Pentachlorophenol	9.460	266	10806	8.54	ppm		81
77) Phenanthrene	9.722	178	248636	22.98	ppm		97
78) Anthracene	9.797	178	179208	16.54	ppm		99
79) Carbazole	10.102	167	148511	15.15	ppm		98
80) Di-n-butylphthalate	10.712	149	173229	13.68	ppm		97
81) Fluoranthene	11.578	202	248163	21.15	ppm		95
82) Octadecane	9.637	57	67297	15.28	ppm		92
84) Pyrene	11.926	202	263742	28.43	ppm		97
86) Butylbenzylphthalate	13.087	149	71486	16.16	ppm		92
88) Benzo[a]anthracene	13.852	228	197530	21.81	ppm		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3639\
Data File : 3E83016.D
Acq On : 9 May 2016 8:01 pm
Operator : ashleyn
Sample : op93678-msd
Misc : op93678,e3e3639,30.3,,,1,2
ALS Vial : 21 Sample Multiplier: 1

Quant Time: May 10 12:07:20 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MTue May 10 10:50:48 2016
QLast Update : Tue May 10 10:50:48 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
89) 3,3'-Dichlorobenzidine	13.873	252	76553	22.73 ppm		98
90) Chrysene	13.905	228	180299	21.33 ppm		95
91) bis(2-Ethylhexyl)phtha...	14.049	149	95305	16.74 ppm		93
93) Di-n-octylphthalate	15.044	149	156430	15.80 ppm		99
94) Benzo[b]fluoranthene	15.467	252	187733m	20.41 ppm		
95) Benzo[k]fluoranthene	15.504	252	136624	16.64 ppm		98
96) Benzo[a]pyrene	15.905	252	151887	19.78 ppm		98
97) Indeno[1,2,3-cd]pyrene	17.435	276	129205m	17.66 ppm		
99) Dibenz[a,h]anthracene	17.462	278	108467	14.92 ppm		95
100) 7,12-Dimethylbenz(a)an...	15.456	256	58102	14.17 ppm		93
101) Benzo[g,h,i]perylene	17.836	276	124626	17.68 ppm		96
103) Benzaldehyde	4.138	105	39146	13.39 ppm	#	82
105) 1,2,4,5-Tetrachloroben...	6.433	216	58635	19.38 ppm		98
107) Atrazine	9.359	215	20215	21.30 ppm	#	79

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

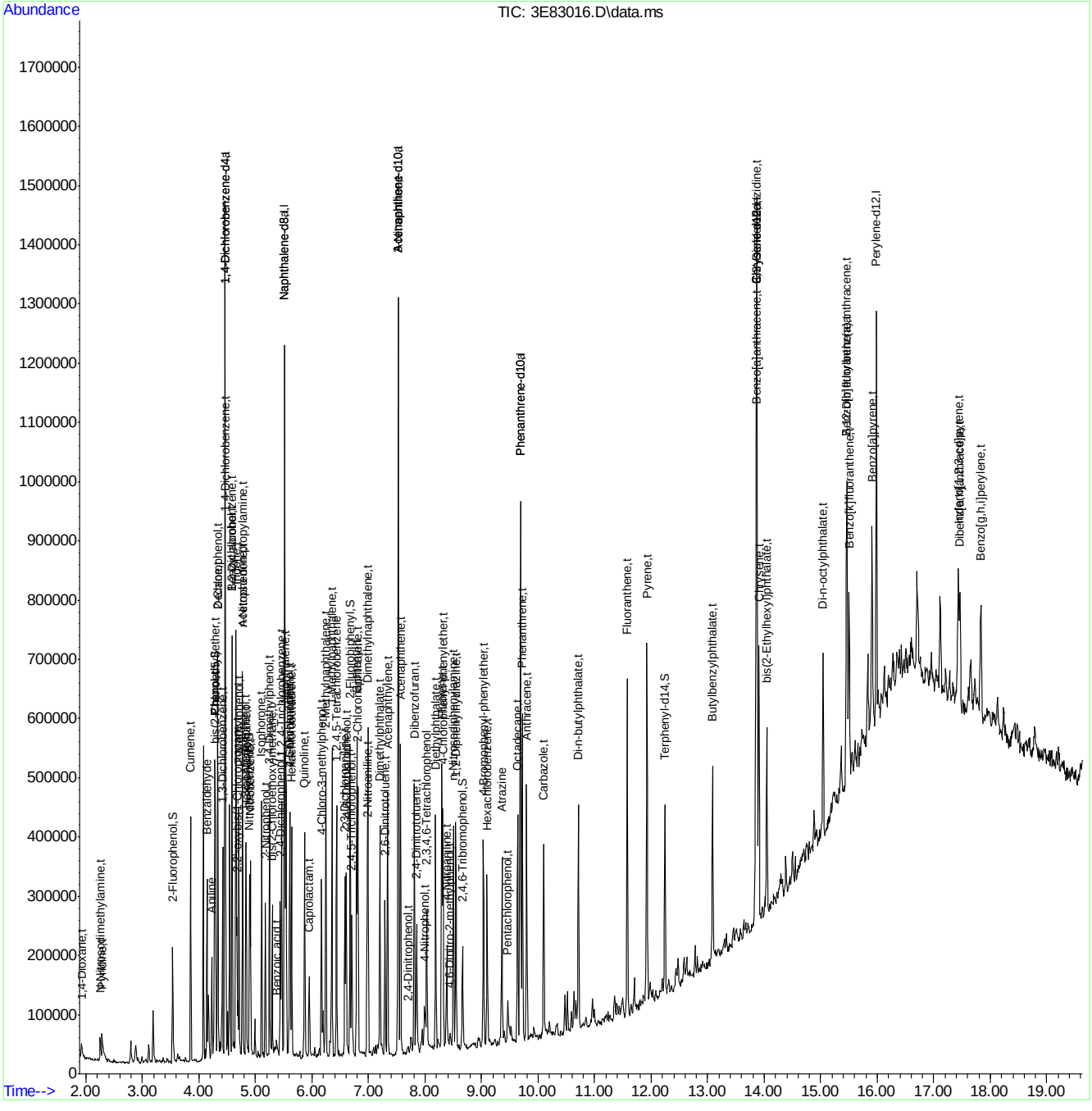
7.4.4

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3639\
Data File : 3E83016.D
Acq On : 9 May 2016 8:01 pm
Operator : ashleyn
Sample : op93678-msd
Misc : op93678,e3e3639,30.3,,,1,2
ALS Vial : 21 Sample Multiplier: 1

Quant Time: May 10 12:07:20 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MTue May 10 10:50:48 2016
QLast Update : Tue May 10 10:50:48 2016
Response via : Initial Calibration



Manual Integration Approval Summary

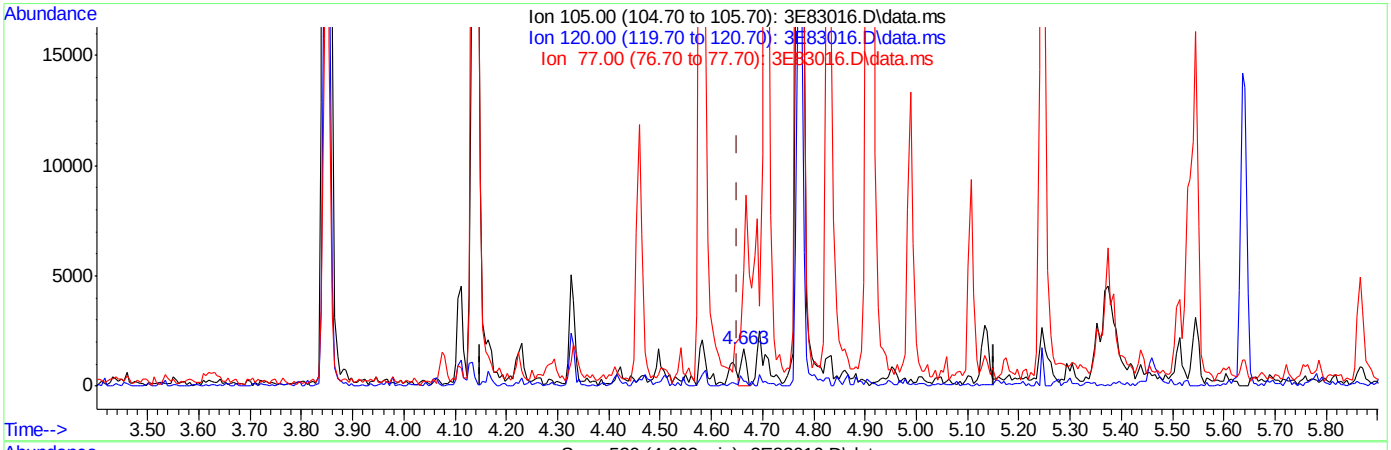
Sample Number:	OP93678-MSD	**Method:**	SW846 8270D
Lab FileID:	3E83016.D	**Analyst approved:**	05/10/16 12:12 Ashley Noble
Injection Time:	05/09/16 20:01	**Supervisor approved:**	05/10/16 14:47 Nina Pandya

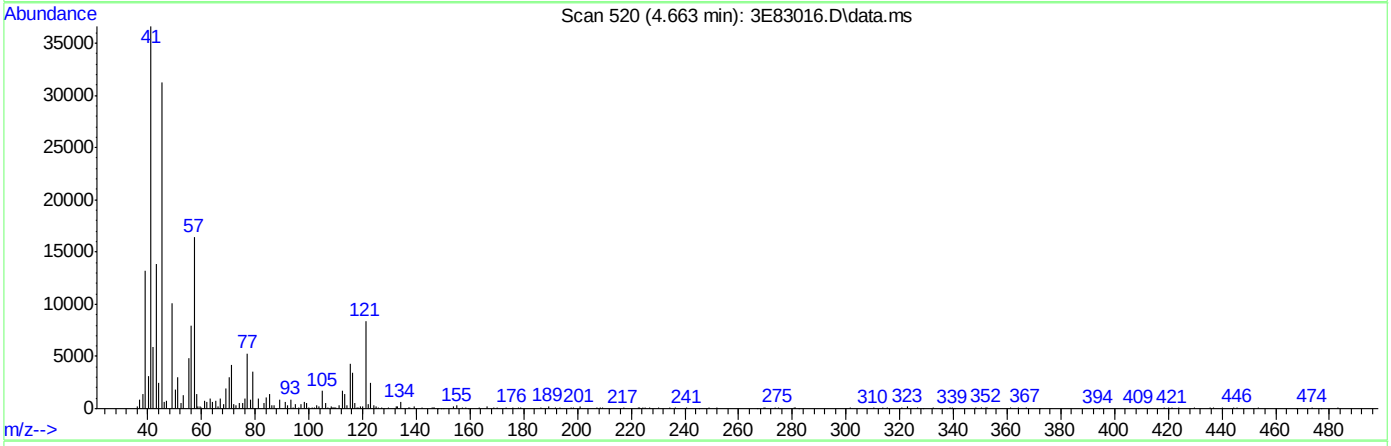
Parameter	CAS	Sig#	R.T. (min.)	Reason
Acetophenone	98-86-2		4.77	Poor instrument integration
Benzo(b)fluoranthene	205-99-2		15.47	Poor instrument integration
Indeno(1,2,3-cd)pyrene	193-39-5		17.44	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3639\
Data File : 3E83016.D
Acq On : 9 May 2016 8:01 pm
Operator : ashleyn
Sample : op93678-msd
Misc : op93678,e3e3639,30.3,,,1,2
ALS Vial : 21 Sample Multiplier: 1

Quant Time: May 10 11:21:59 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MTue May 10 10:50:48 2016
QLast Update : Tue May 10 10:50:48 2016
Response via : Initial Calibration





TIC: 3E83016.D\data.ms

(18) Acetophenone (t)

4.663min (+0.011) 0.22ppm

response 1198

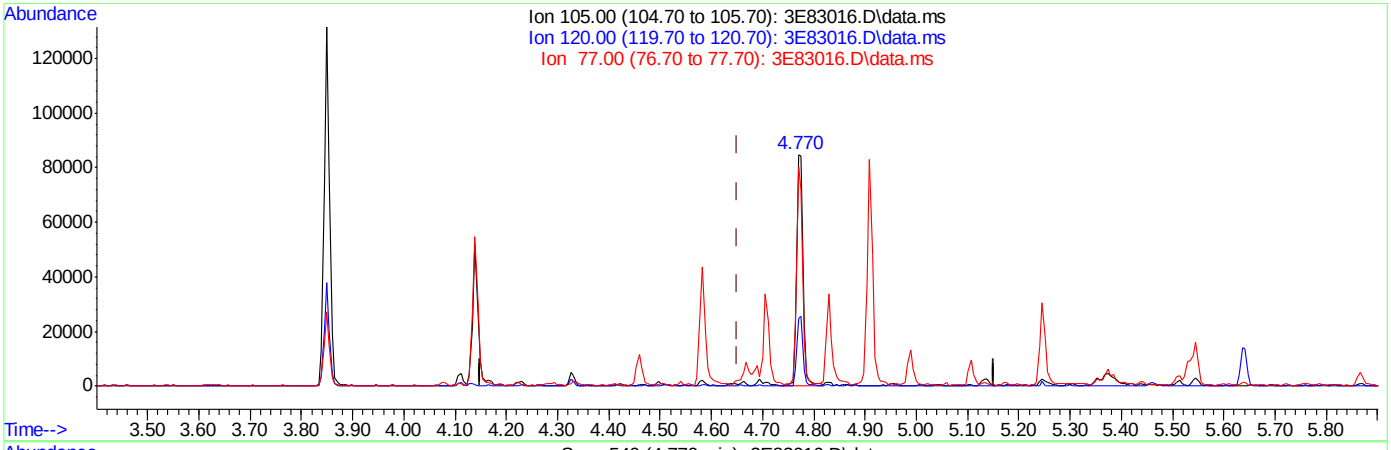
Ion	Exp%	Act%
105.00	100	100
120.00	28.90	13.74
77.00	85.20	113.97
0.00	0.00	0.00

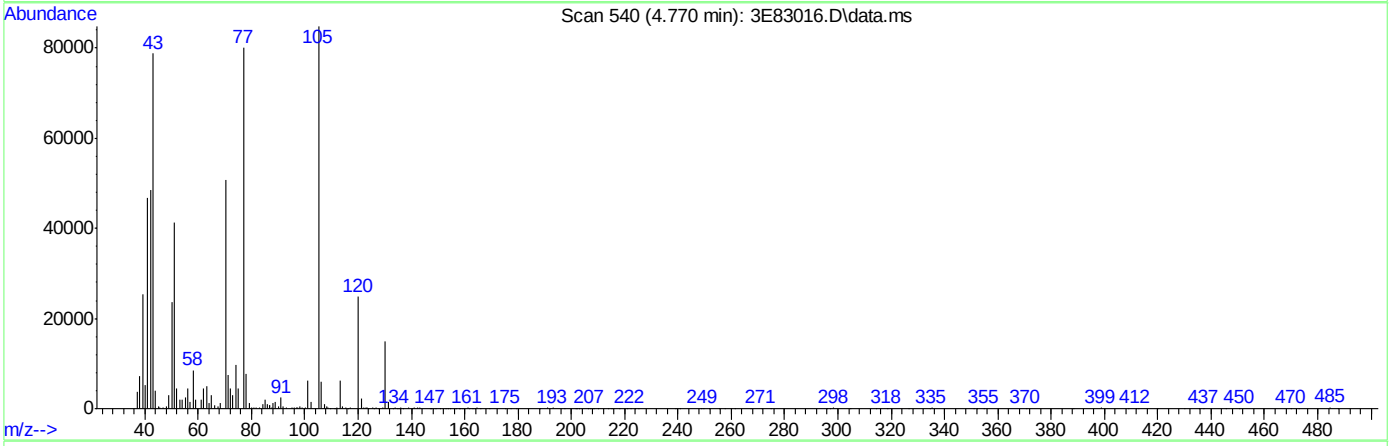
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\E3E3639\
Data File : 3E83016.D
Acq On    :  9 May 2016   8:01 pm
Operator  : ashleyn
Sample    : op93678-msd
Misc      : op93678,e3e3639,30.3,,,1,2
ALS Vial  : 21   Sample Multiplier: 1

Quant Time: May 10 11:21:59 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title  : Semi Volatile  GC/MS,zb-5msplus 30m x .25mm x .25MTue May 10 10:50:48 2016
QLast Update : Tue May 10 10:50:48 2016
Response via : Initial Calibration
```





TIC: 3E83016.D\data.ms

(18) Acetophenone (t)

4.770min (+0.118) 13.43ppm m

response 71827

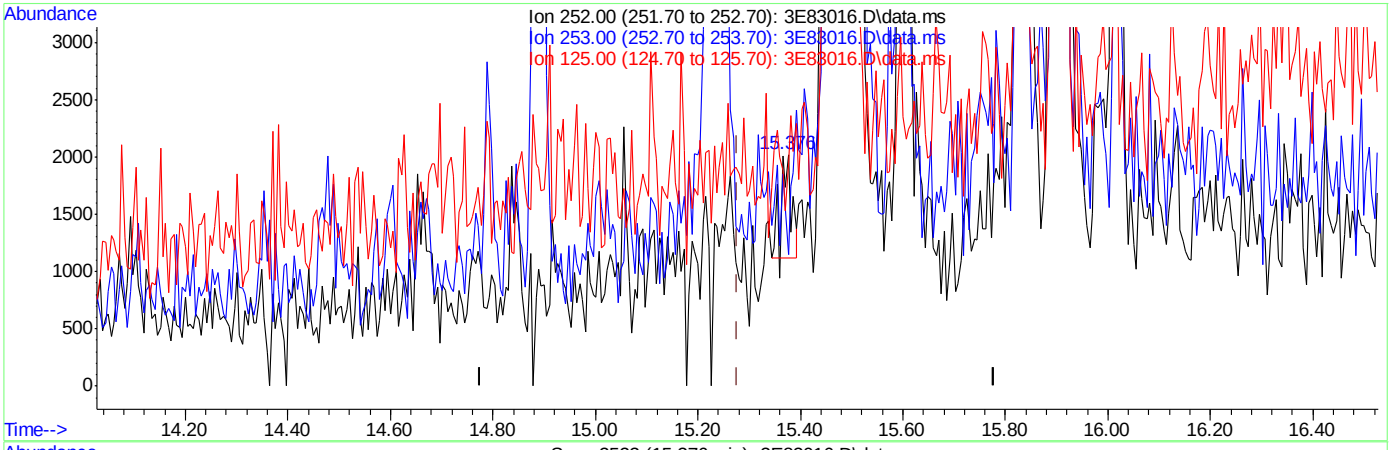
Ion	Exp%	Act%
105.00	100	100
120.00	28.90	29.24
77.00	85.20	94.38
0.00	0.00	0.00

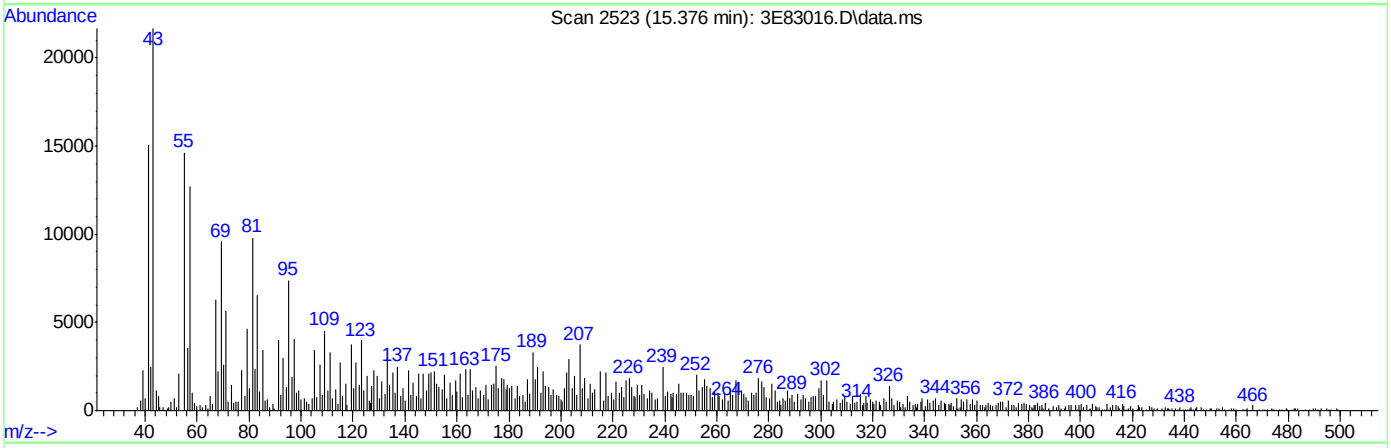
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3639\
Data File : 3E83016.D
Acq On : 9 May 2016 8:01 pm
Operator : ashleyn
Sample : op93678-msd
Misc : op93678,e3e3639,30.3,,,1,2
ALS Vial : 21 Sample Multiplier: 1

Quant Time: May 10 11:21:59 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MTue May 10 10:50:48 2016
QLast Update : Tue May 10 10:50:48 2016
Response via : Initial Calibration





TIC: 3E83016.D\data.ms

(94) Benzo[b]fluoranthene (t)

15.376min (+0.098) 0.14ppm

response 1274

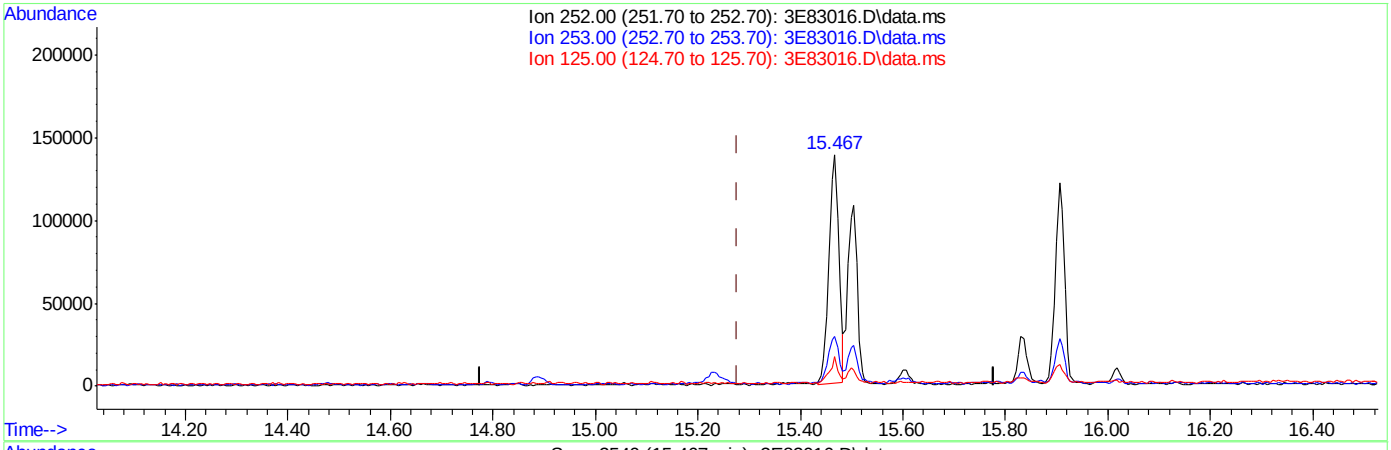
Ion	Exp%	Act%
252.00	100	100
253.00	23.00	0.00
125.00	9.10	0.00
0.00	0.00	0.00

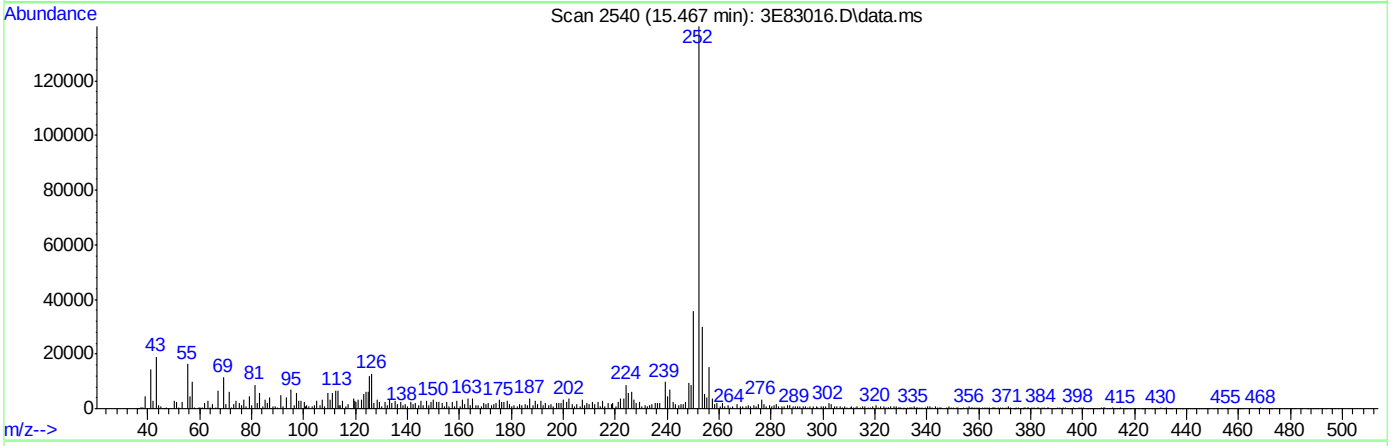
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\E3E3639\
Data File : 3E83016.D
Acq On    :  9 May 2016   8:01 pm
Operator  : ashleyn
Sample    : op93678-msd
Misc      : op93678,e3e3639,30.3,,,1,2
ALS Vial  : 21   Sample Multiplier: 1

Quant Time: May 10 11:21:59 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title  : Semi Volatile  GC/MS,zb-5msplus 30m x .25mm x .25MTue May 10 10:50:48 2016
QLast Update : Tue May 10 10:50:48 2016
Response via : Initial Calibration
```





TIC: 3E83016.D\data.ms

(94) Benzo[b]fluoranthene (t)

15.467min (+0.189) 20.41ppm m

response 187733

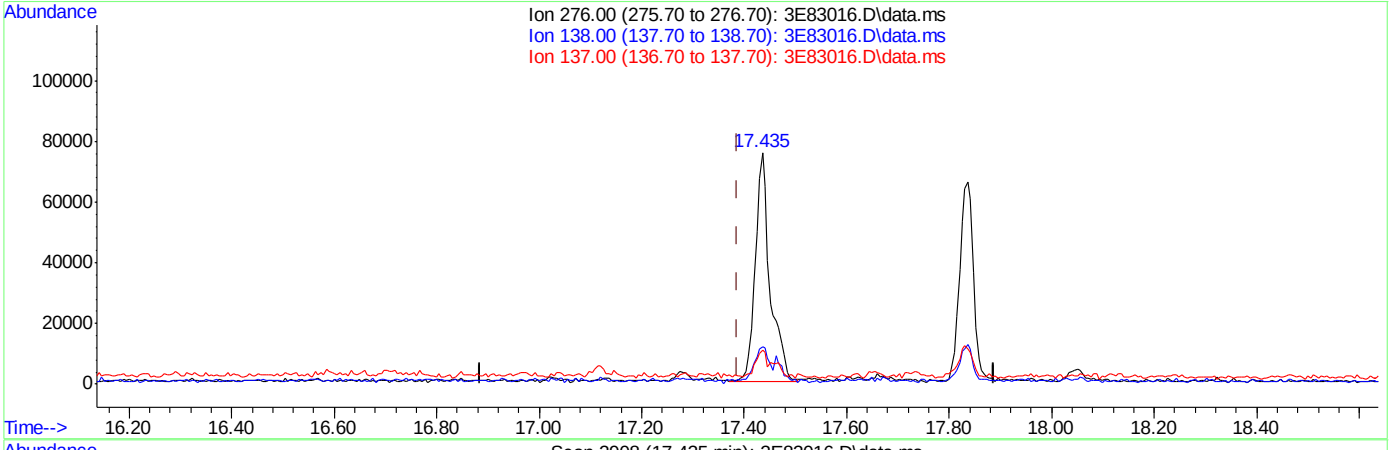
Ion	Exp%	Act%
252.00	100	100
253.00	23.00	21.40
125.00	9.10	8.45
0.00	0.00	0.00

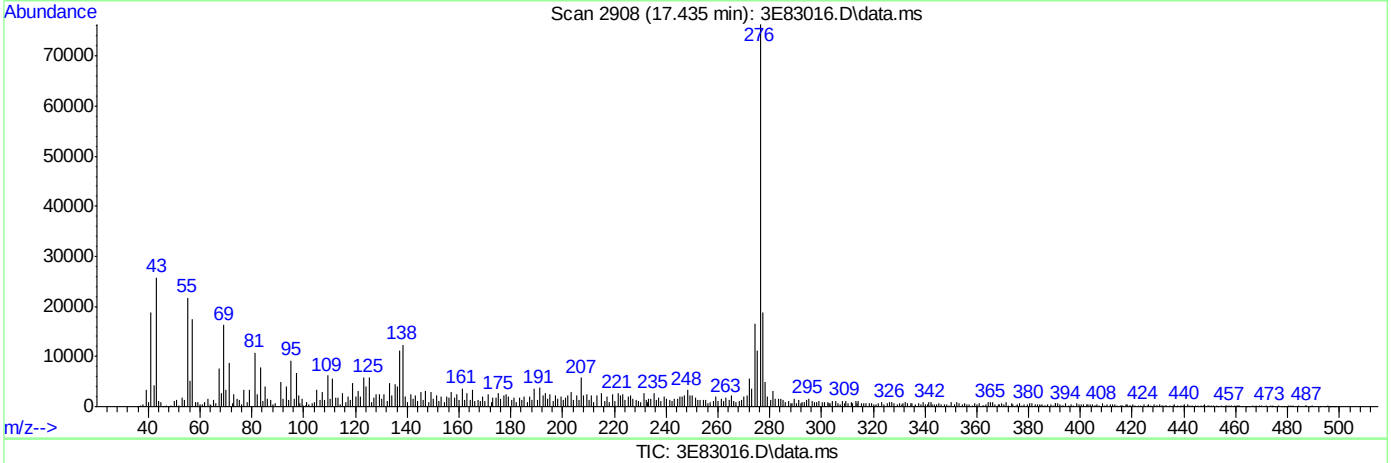
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\E3E3639\
Data File : 3E83016.D
Acq On    :  9 May 2016   8:01 pm
Operator  : ashleyn
Sample    : op93678-msd
Misc      : op93678,e3e3639,30.3,,,1,2
ALS Vial  : 21   Sample Multiplier: 1

Quant Time: May 10 11:21:59 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title  : Semi Volatile  GC/MS,zb-5msplus 30m x .25mm x .25MTue May 10 10:50:48 2016
QLast Update : Tue May 10 10:50:48 2016
Response via : Initial Calibration
```





(97) Indeno[1,2,3-cd]pyrene (t)

17.435min (+0.048) 20.82ppm

response 152309

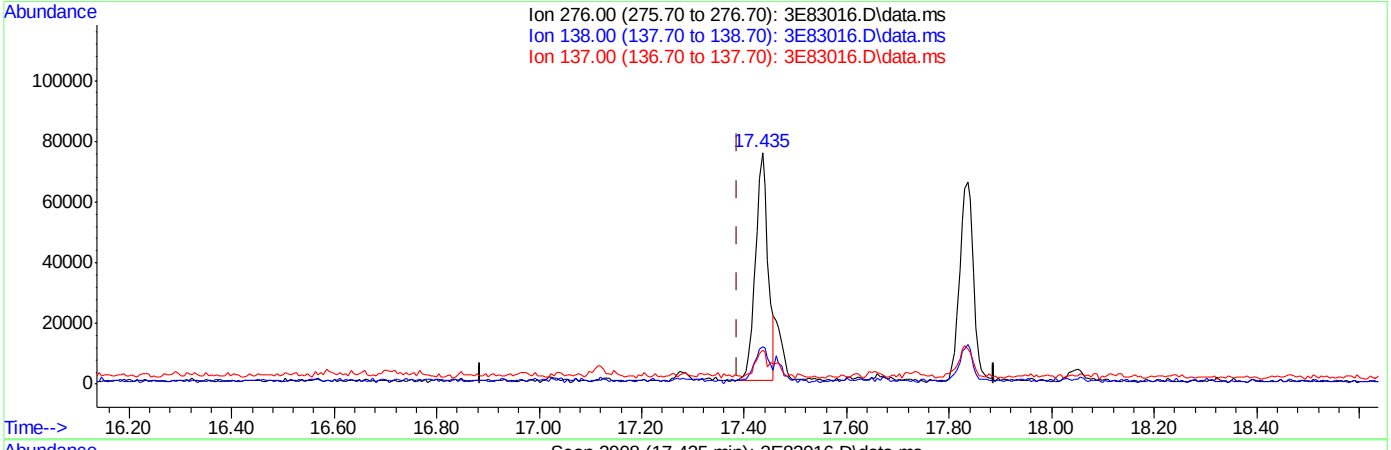
Ion	Exp%	Act%
276.00	100	100
138.00	13.20	15.28
137.00	10.30	10.69
0.00	0.00	0.00

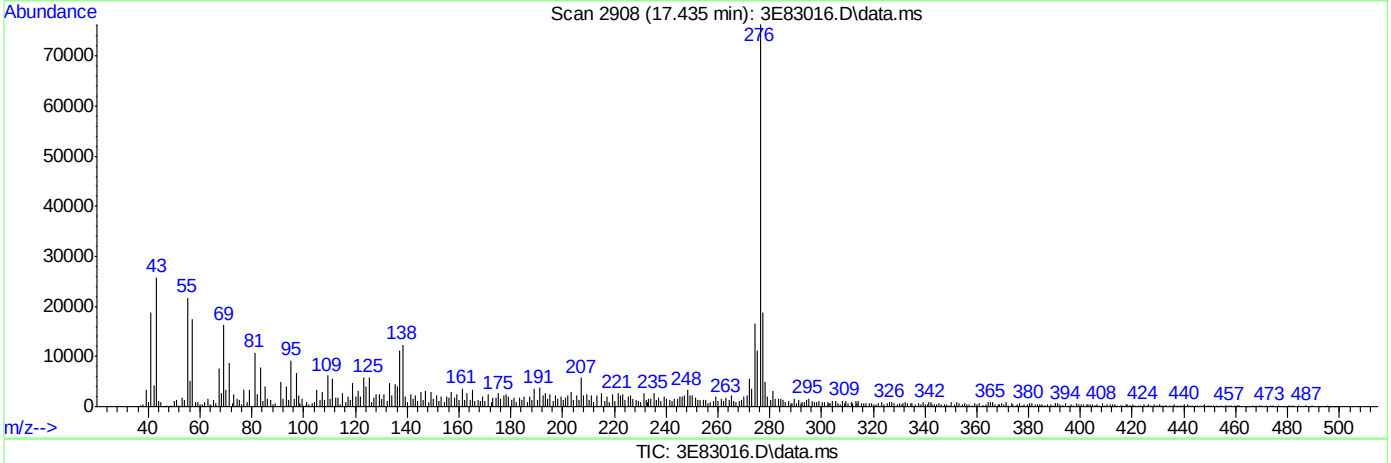
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3639\
Data File : 3E83016.D
Acq On : 9 May 2016 8:01 pm
Operator : ashleyn
Sample : op93678-msd
Misc : op93678,e3e3639,30.3,,,1,2
ALS Vial : 21 Sample Multiplier: 1

Quant Time: May 10 11:21:59 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MTue May 10 10:50:48 2016
QLast Update : Tue May 10 10:50:48 2016
Response via : Initial Calibration





TIC: 3E83016.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

17.435min (+0.048) 17.66ppm m

response 129205

Ion	Exp%	Act%
276.00	100	100
138.00	13.20	16.27
137.00	10.30	14.68
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2874\
Data File : 3m61138.D
Acq On : 6 May 2016 6:42 pm
Operator : linseyk
Sample : op93662a-ms
Misc : op93662a,e3m2874,500
ALS Vial : 19 Sample Multiplier: 1

Quant Time: May 09 09:02:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon May 09 09:02:07 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.427	150	415009	4.00	ppm	0.00
14) Fluorene-d10	13.430	176	621115	4.00	ppm	0.00
21) Fluoranthene-d10	17.639	212	1018135	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.243	264	806798	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	4.369	112	1157583	22.29	ppm	-0.06
Spiked Amount 50.000			Recovery = 44.58%			
4) Phenol-d5	5.976	99	1542999	17.96	ppm	0.00
Spiked Amount 50.000			Recovery = 35.92%			
7) Nitrobenzene-d5	7.550	82	2088478	26.14	ppm	-0.02
Spiked Amount 50.000			Recovery = 52.28%			
15) 2-Fluorobiphenyl	11.099	172	4420328	25.90	ppm	-0.03
Spiked Amount 50.000			Recovery = 51.80%			
20) 2,4,6-Tribromophenol	13.976	330	583425	30.01	ppm	0.03
Spiked Amount 50.000			Recovery = 60.02%			
28) Terphenyl-d14	18.458	244	4770487	32.30	ppm	0.02
Spiked Amount 50.000			Recovery = 64.60%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.159	88	8674	0.40	ppm #	54
5) Phenol	5.988	94	224957	2.43	ppm #	89
6) bis(2-Chloroethyl)ether	6.109	93	34955	0.50	ppm #	46
8) Nitrobenzene	7.568	77	49674	0.57	ppm #	52
9) Naphthalene	8.943	128	117857	0.51	ppm	98
10) Hexachlorobutadiene	9.225	225	22165	0.55	ppm	86
11) 2-Methylnaphthalene	10.303	141	72824	0.61	ppm #	63
13) Hexachlorocyclopentadiene	10.652	237	9540	0.30	ppm #	77
16) Acenaphthylene	12.088	152	115296	0.54	ppm	99
17) Acenaphthene	12.443	153	80855	0.56	ppm	93
18) 4,6-dinitro-2-methylph...	13.656	198	88418	4.47	ppm	76
19) Fluorene	13.486	166	94928	0.55	ppm	75
22) Hexachlorobenzene	14.563	284	27928	0.58	ppm	83
23) Pentachlorophenol	15.011	266	109485	3.35	ppm	87
24) Phenanthrene	15.382	178	150824	0.60	ppm	91
25) Anthracene	15.490	178	138784	0.63	ppm	95
26) Fluoranthene	17.670	202	193201	0.62	ppm	95
27) Pyrene	18.056	202	182850	0.63	ppm	84
29) Benzo[a]anthracene	20.157	228	165748	0.59	ppm	99
30) Chrysene	20.204	228	164354	0.61	ppm	98
32) Benzo[b]fluoranthene	21.826	252	154918	0.58	ppm	89
33) Benzo[k]fluoranthene	21.857	252	150818	0.61	ppm	94
34) Benzo[a]pyrene	22.274	252	161478	0.65	ppm	94
35) Indeno[1,2,3-cd]pyrene	23.749	276	162415	0.64	ppm	95
36) Dibenz[a,h]anthracene	23.787	278	133431	0.64	ppm	74
37) Benzo[g,h,i]perylene	24.107	276	144394	0.65	ppm	93

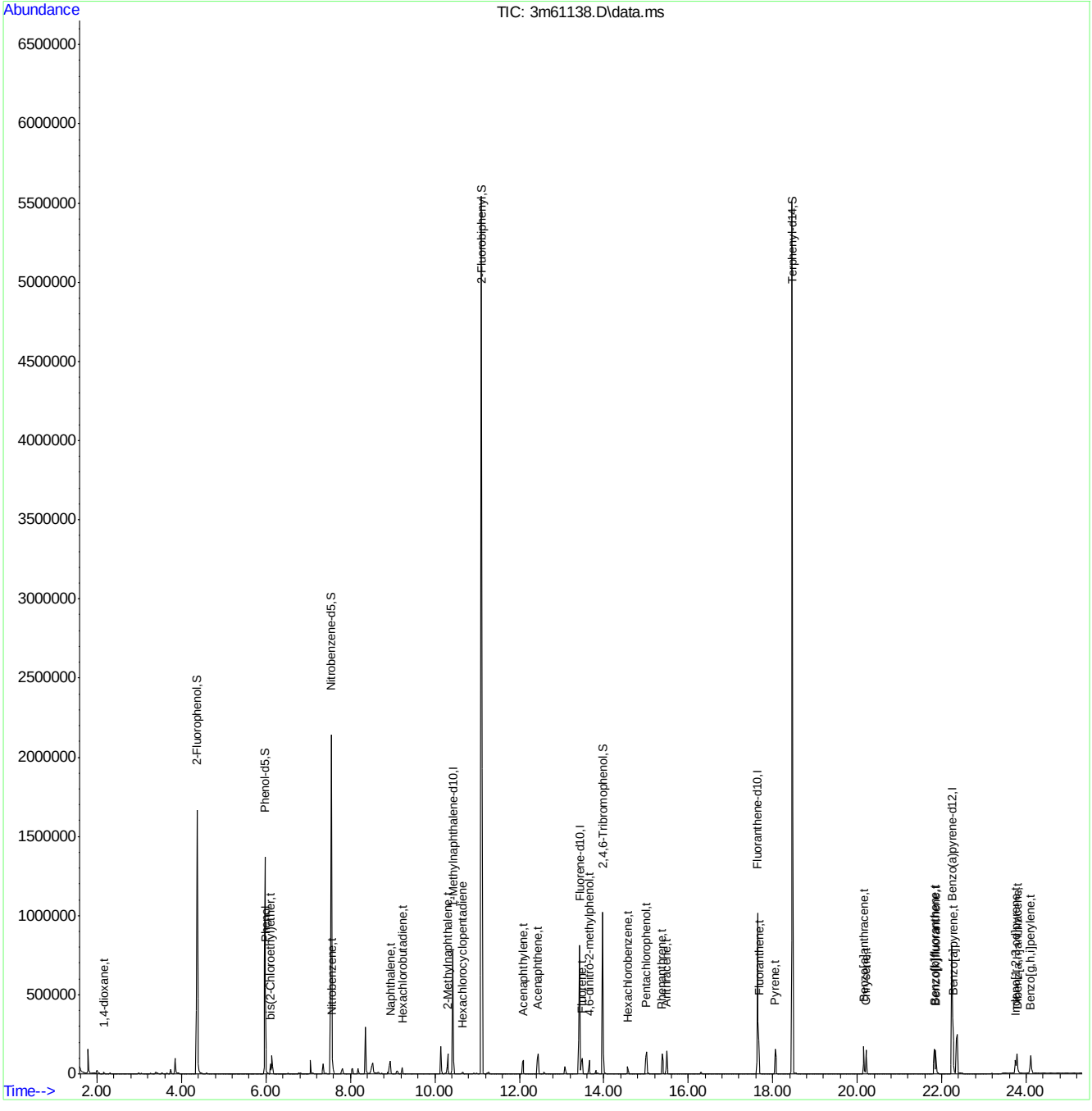
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2874\
Data File : 3m61138.D
Acq On : 6 May 2016 6:42 pm
Operator : linseyk
Sample : op93662a-ms
Misc : op93662a,e3m2874,500
ALS Vial : 19 Sample Multiplier: 1

Quant Time: May 09 09:02:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon May 09 09:02:07 2016
Response via : Initial Calibration



M3M2855SIM.M Mon May 09 09:02:39 2016 RPT1 Page: 2

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2874\
Data File : 3m61139.D
Acq On : 6 May 2016 7:14 pm
Operator : linseyk
Sample : op93662a-msd
Misc : op93662a,e3m2874,500
ALS Vial : 20 Sample Multiplier: 1

Quant Time: May 09 09:03:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon May 09 09:02:07 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	10.426	150	387740	4.00 ppm	0.00
14) Fluorene-d10	13.430	176	569931	4.00 ppm	0.00
21) Fluoranthene-d10	17.639	212	927885	4.00 ppm	0.00
31) Benzo(a)pyrene-d12	22.243	264	744661	4.00 ppm	0.00
System Monitoring Compounds					
3) 2-Fluorophenol	4.368	112	1062311	21.90 ppm	-0.06
Spiked Amount 50.000			Recovery = 43.80%		
4) Phenol-d5	5.976	99	1387304	17.28 ppm	0.00
Spiked Amount 50.000			Recovery = 34.56%		
7) Nitrobenzene-d5	7.549	82	1761704	23.60 ppm	-0.02
Spiked Amount 50.000			Recovery = 47.20%		
15) 2-Fluorobiphenyl	11.098	172	3997866	25.53 ppm	-0.03
Spiked Amount 50.000			Recovery = 51.06%		
20) 2,4,6-Tribromophenol	13.976	330	561525	31.48 ppm	0.03
Spiked Amount 50.000			Recovery = 62.96%		
28) Terphenyl-d14	18.458	244	4548160	33.79 ppm	0.02
Spiked Amount 50.000			Recovery = 67.58%		
Target Compounds					Qvalue
2) 1,4-dioxane	2.159	88	9350	0.47 ppm	99
5) Phenol	5.988	94	198989	2.30 ppm #	90
6) bis(2-Chloroethyl)ether	6.109	93	30456	0.47 ppm #	35
8) Nitrobenzene	7.568	77	40991	0.51 ppm #	56
9) Naphthalene	8.943	128	101973	0.47 ppm	99
10) Hexachlorobutadiene	9.225	225	19287	0.51 ppm	85
11) 2-Methylnaphthalene	10.303	141	63818	0.57 ppm #	64
13) Hexachlorocyclopentadiene	10.652	237	7912	0.27 ppm #	77
16) Acenaphthylene	12.088	152	104864	0.53 ppm	100
17) Acenaphthene	12.443	153	74113	0.56 ppm	92
18) 4,6-dinitro-2-methylph...	13.656	198	74752	4.18 ppm	82
19) Fluorene	13.486	166	89306	0.56 ppm #	72
22) Hexachlorobenzene	14.563	284	26824	0.61 ppm	84
23) Pentachlorophenol	15.011	266	93307	3.14 ppm	87
24) Phenanthrene	15.382	178	147419	0.65 ppm	92
25) Anthracene	15.490	178	132090	0.66 ppm	95
26) Fluoranthene	17.670	202	180432	0.63 ppm	94
27) Pyrene	18.056	202	173527	0.65 ppm	85
29) Benzo[a]anthracene	20.157	228	156987	0.62 ppm	99
30) Chrysene	20.204	228	152340	0.62 ppm	99
32) Benzo[b]fluoranthene	21.826	252	140792	0.57 ppm	88
33) Benzo[k]fluoranthene	21.857	252	137898	0.60 ppm	93
34) Benzo[a]pyrene	22.274	252	144979	0.63 ppm	93
35) Indeno[1,2,3-cd]pyrene	23.749	276	146289	0.62 ppm	95
36) Dibenz[a,h]anthracene	23.787	278	118867	0.61 ppm	74
37) Benzo[g,h,i]perylene	24.107	276	129877	0.64 ppm	94

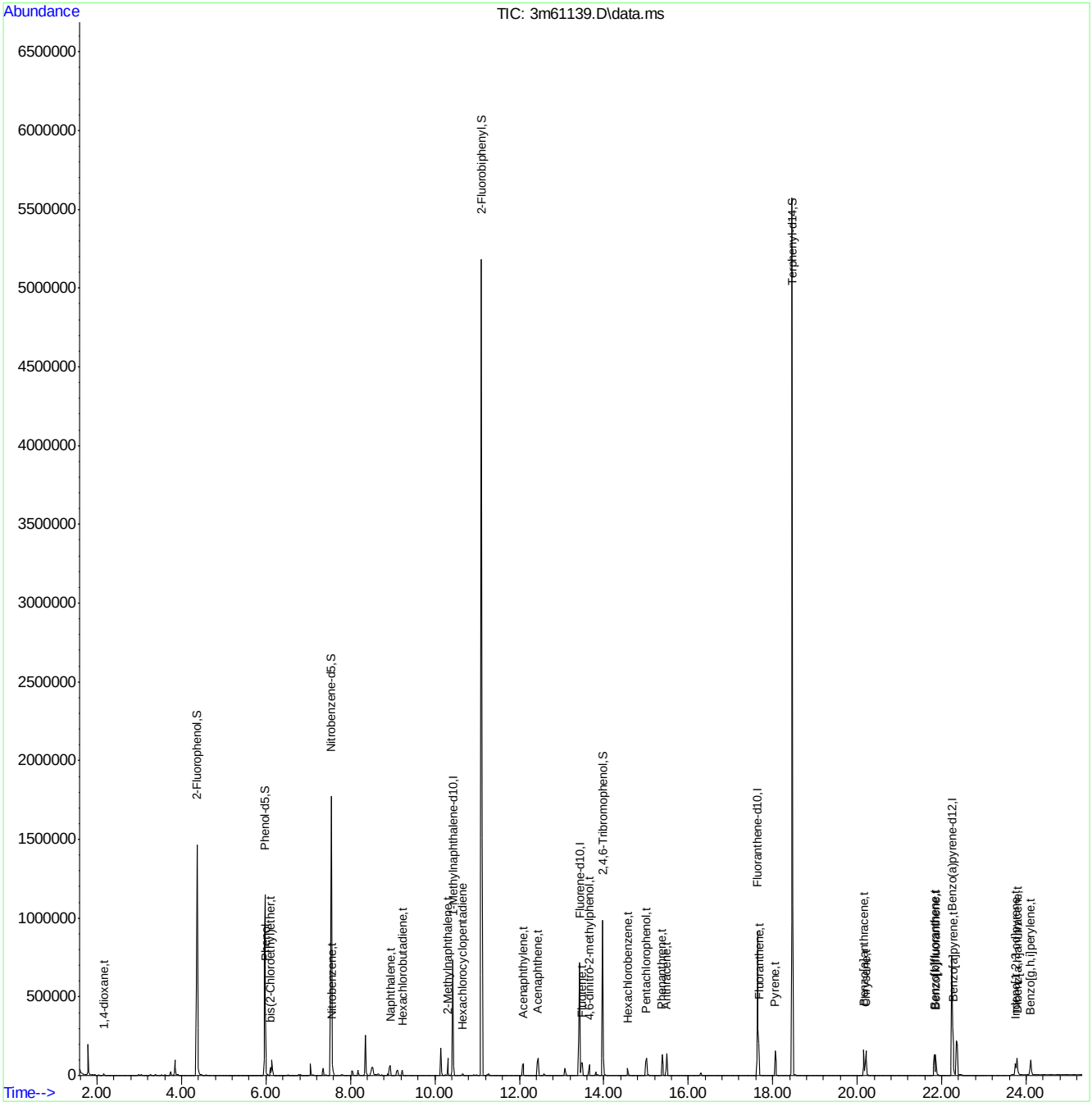
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2874\
Data File : 3m61139.D
Acq On : 6 May 2016 7:14 pm
Operator : linseyk
Sample : op93662a-msd
Misc : op93662a,e3m2874,500
ALS Vial : 20 Sample Multiplier: 1

Quant Time: May 09 09:03:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon May 09 09:02:07 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65185.D
Acq On : 9 May 2016 6:52 pm
Operator : linseyk
Sample : op93678a-ms
Misc : op93678a,e4m2910,31.1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: May 10 10:51:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Fri May 06 13:08:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.678	152	308912	4.00	ppm	-0.02
12) Fluorene-d10	13.656	176	561494	4.00	ppm	-0.02
22) Fluoranthene-d10	17.836	212	811240	4.00	ppm	-0.03
28) Benzo(a)pyrene-d12	22.436	264	656707	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.678	152	308912	4.00	ppm	-0.02
38) Fluorene-d10a	13.656	176	561494	4.00	ppm	-0.02
System Monitoring Compounds						
2) 2-Fluorophenol	4.714	112	1713339	42.36	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 84.72%#			
3) Phenol-d5	6.301	99	3097311	45.54	ppm	0.00
Spiked Amount 50.000			Recovery = 91.08%			
6) Nitrobenzene-d5	7.821	82	2979619	48.85	ppm	-0.02
Spiked Amount 50.000			Recovery = 97.70%			
11) 2-Fluorobiphenyl	11.346	172	3614188	40.54	ppm	-0.02
Spiked Amount 50.000			Recovery = 81.08%			
17) 2,4,6-Tribromophenol	14.206	330	1110896	37.09	ppm	-0.02
Spiked Amount 50.000			Recovery = 74.18%			
25) Terphenyl-d14	18.645	244	5540968	50.56	ppm	-0.03
Spiked Amount 50.000			Recovery = 101.12%			
Target Compounds						Qvalue
4) Phenol	6.315	94	394945	5.67	ppm	74
5) bis(2-Chloroethyl)ether	6.384	93	61368	1.17	ppm	78
7) Naphthalene	9.198	128	166690	0.96	ppm	100
8) Hexachlorobutadiene	9.492	225	36206	0.84	ppm	75
9) 2-Methylnaphthalene	10.559	142	77440	1.02	ppm	86
10) Hexachlorocyclopentadiene	10.917	237	14237	0.67	ppm	93
13) Acenaphthylene	12.325	152	96970	0.75	ppm	99
14) Acenaphthene	12.680	153	66637	0.80	ppm	97
15) Dibenzofuran	13.035	168	105716	0.86	ppm	95
16) Fluorene	13.704	166	133756	0.89	ppm	100
18) Hexachlorobenzene	14.825	284	47204	0.81	ppm	79
19) Pentachlorophenol	15.258	266	139370	5.80	ppm	95
20) Phenanthrene	15.614	178	179996	0.89	ppm	96
21) Anthracene	15.707	178	172563	0.90	ppm	98
23) Fluoranthene	17.874	202	211095	0.96	ppm	100
24) Pyrene	18.250	202	216905	1.00	ppm	80
26) Benzo[a]anthracene	20.359	228	226045	1.13	ppm #	92
27) Chrysene	20.415	228	185274	0.95	ppm	96
29) Benzo[b]fluoranthene	22.009	252	193547	0.82	ppm	98
30) Benzo[k]fluoranthene	22.050	252	196036	0.99	ppm	97
31) Benzo[a]pyrene	22.463	252	185766	0.95	ppm	90
32) Indeno[1,2,3-cd]pyrene	23.978	276	219814	0.90	ppm	98
33) Dibenz[a,h]anthracene	24.006	278	176819	0.90	ppm	73
34) Benzo[g,h,i]perylene	24.364	276	193800	0.94	ppm	100
36) 1,4-Dioxane	2.424	88	13664	0.68	ppm #	72
39) 4,6-dinitro-2-methylph...	13.895	198	94376	5.85	ppm	86
40) 1,2-Diphenylhydrazine	14.062	77	130816	0.98	ppm	97

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65185.D
Acq On : 9 May 2016 6:52 pm
Operator : linseyk
Sample : op93678a-ms
Misc : op93678a,e4m2910,31.1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: May 10 10:51:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Fri May 06 13:08:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) n-nitrosodiphenylamine	14.014	169	81840	0.83	ppm	98

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

7.4.7

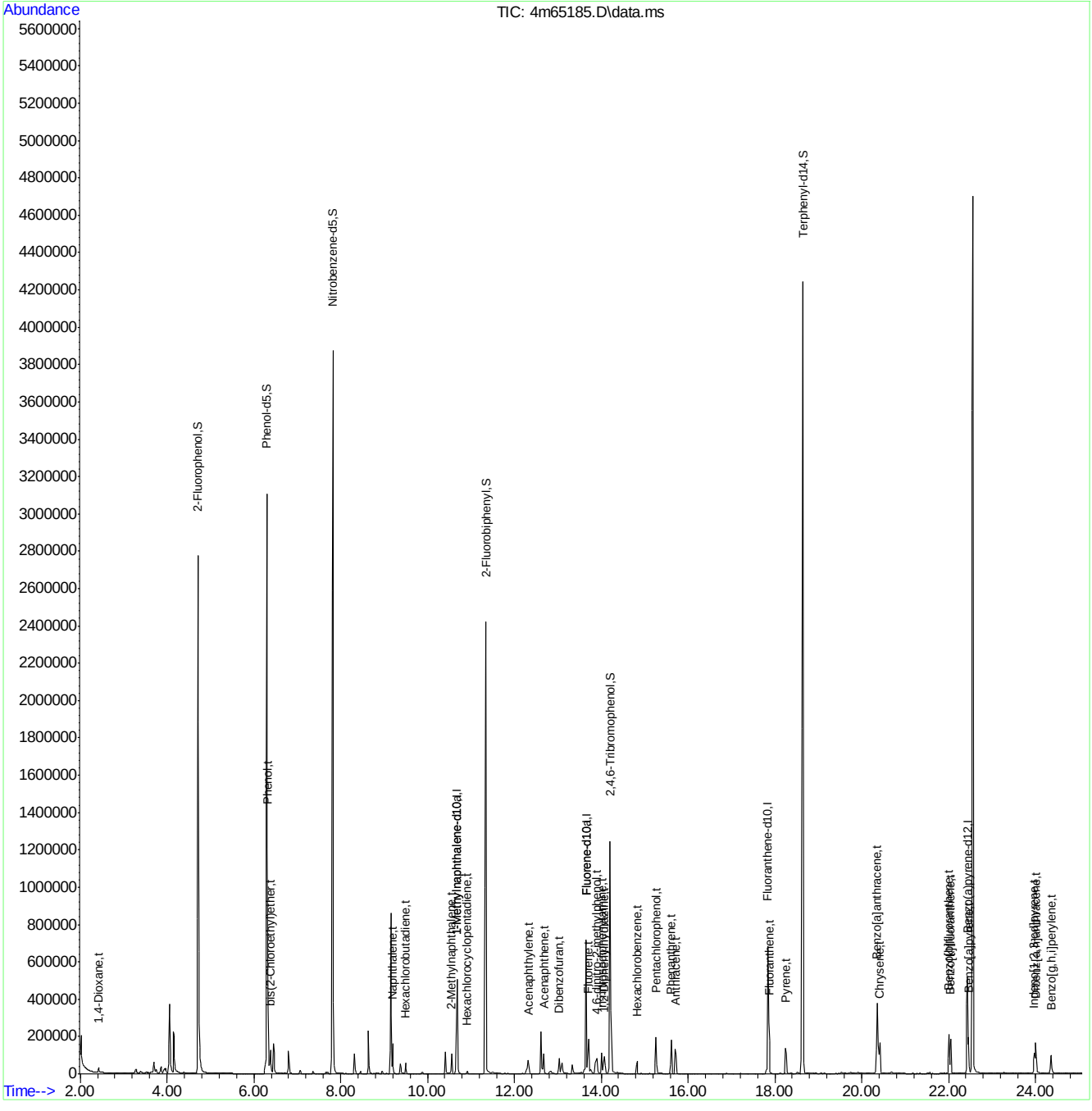
7

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65185.D
Acq On : 9 May 2016 6:52 pm
Operator : linseyk
Sample : op93678a-ms
Misc : op93678a,e4m2910,31.1
ALS Vial : 17 Sample Multiplier: 1

Quant Time: May 10 10:51:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Fri May 06 13:08:34 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65186.D
Acq On : 9 May 2016 7:25 pm
Operator : linseyk
Sample : op93678a-msd
Misc : op93678a,e4m2910,31.2
ALS Vial : 18 Sample Multiplier: 1

Quant Time: May 10 10:52:07 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 06 13:08:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.678	152	219393	4.00	ppm	-0.02
12) Fluorene-d10	13.656	176	409663	4.00	ppm	-0.02
22) Fluoranthene-d10	17.836	212	595979	4.00	ppm	-0.03
28) Benzo(a)pyrene-d12	22.436	264	471726	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.678	152	219393	4.00	ppm	-0.02
38) Fluorene-d10a	13.656	176	409663	4.00	ppm	-0.02
System Monitoring Compounds						
2) 2-Fluorophenol	4.714	112	1160532	40.40	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 80.80%#			
3) Phenol-d5	6.301	99	2166747	44.85	ppm	0.00
Spiked Amount 50.000			Recovery = 89.70%			
6) Nitrobenzene-d5	7.806	82	2047608	47.27	ppm	-0.04
Spiked Amount 50.000			Recovery = 94.54%			
11) 2-Fluorobiphenyl	11.346	172	2390649	37.75	ppm	-0.02
Spiked Amount 50.000			Recovery = 75.50%			
17) 2,4,6-Tribromophenol	14.206	330	853071	39.04	ppm	-0.02
Spiked Amount 50.000			Recovery = 78.08%			
25) Terphenyl-d14	18.645	244	3766259	46.78	ppm	-0.03
Spiked Amount 50.000			Recovery = 93.56%			
Target Compounds						Qvalue
4) Phenol	6.315	94	291467	5.89	ppm	57
5) bis(2-Chloroethyl)ether	6.384	93	36822	0.99	ppm #	62
7) Naphthalene	9.198	128	111766	0.91	ppm	100
8) Hexachlorobutadiene	9.492	225	24219	0.79	ppm	78
9) 2-Methylnaphthalene	10.559	142	54142	1.01	ppm	87
10) Hexachlorocyclopentadiene	10.917	237	8530	0.59	ppm	94
13) Acenaphthylene	12.325	152	68918	0.73	ppm	98
14) Acenaphthene	12.680	153	47917	0.79	ppm	97
15) Dibenzofuran	13.035	168	78942	0.88	ppm	92
16) Fluorene	13.704	166	94033	0.86	ppm	99
18) Hexachlorobenzene	14.825	284	33199	0.78	ppm	76
19) Pentachlorophenol	15.258	266	100022	5.70	ppm	92
20) Phenanthrene	15.614	178	129419	0.88	ppm	97
21) Anthracene	15.707	178	123666	0.89	ppm	98
23) Fluoranthene	17.874	202	147636	0.92	ppm	100
24) Pyrene	18.250	202	153870	0.97	ppm	80
26) Benzo[a]anthracene	20.359	228	157562	1.07	ppm #	90
27) Chrysene	20.415	228	129660	0.90	ppm	98
29) Benzo[b]fluoranthene	22.009	252	136573	0.80	ppm	98
30) Benzo[k]fluoranthene	22.050	252	140509	0.99	ppm	97
31) Benzo[a]pyrene	22.463	252	129300	0.92	ppm	89
32) Indeno[1,2,3-cd]pyrene	23.978	276	154581	0.88	ppm	98
33) Dibenz[a,h]anthracene	24.006	278	124955	0.88	ppm	95
34) Benzo[g,h,i]perylene	24.364	276	136634	0.92	ppm	100
36) 1,4-Dioxane	2.393	88	9799	0.69	ppm #	41
39) 4,6-dinitro-2-methylph...	13.895	198	63278	5.45	ppm	83
40) 1,2-Diphenylhydrazine	14.062	77	94085	0.97	ppm	97

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65186.D
Acq On : 9 May 2016 7:25 pm
Operator : linseyk
Sample : op93678a-msd
Misc : op93678a,e4m2910,31.2
ALS Vial : 18 Sample Multiplier: 1

Quant Time: May 10 10:52:07 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 06 13:08:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) n-nitrosodiphenylamine	14.014	169	59342	0.82	ppm	98

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

7.4.8

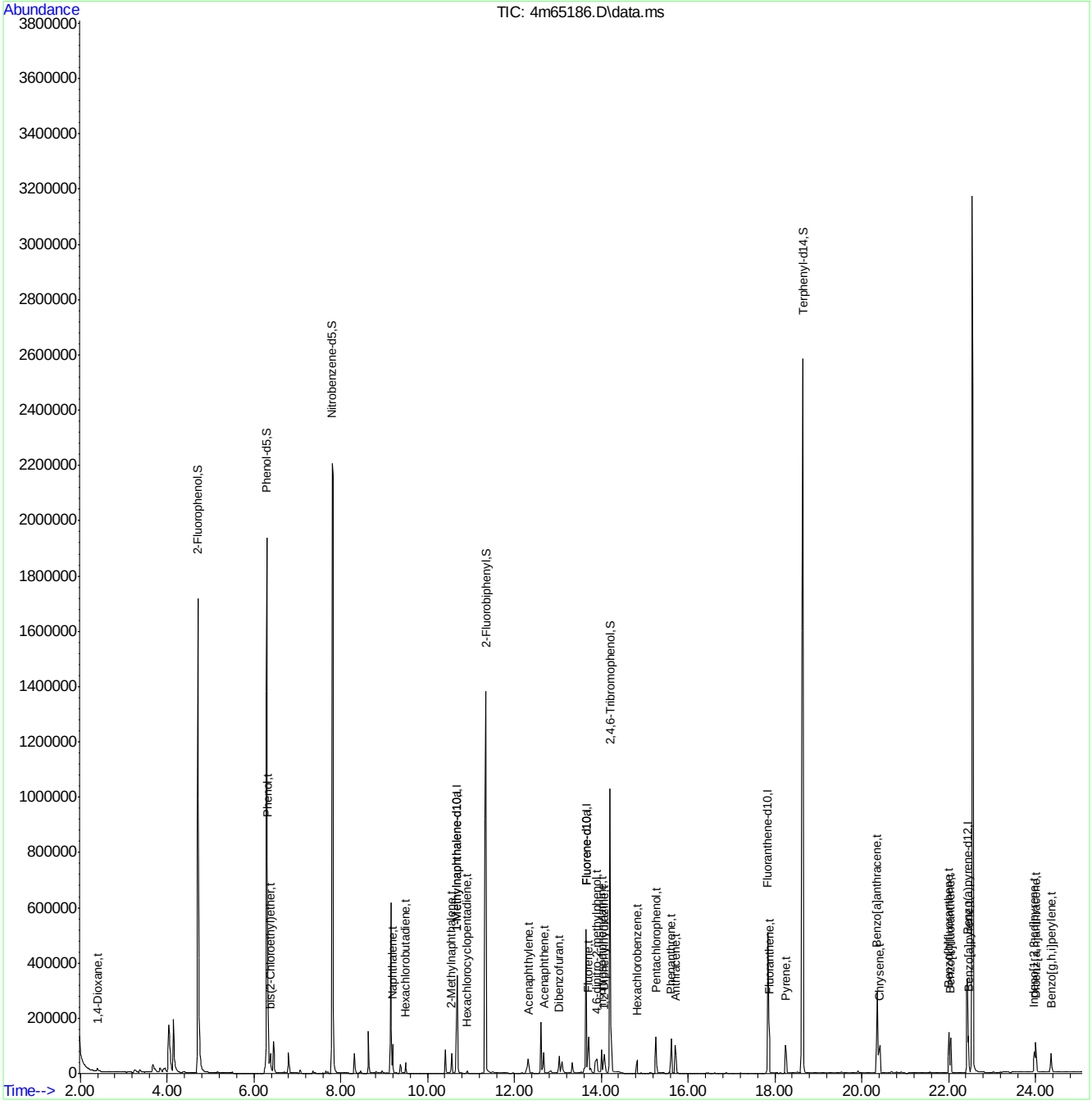
7

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65186.D
Acq On : 9 May 2016 7:25 pm
Operator : linseyk
Sample : op93678a-msd
Misc : op93678a,e4m2910,31.2
ALS Vial : 18 Sample Multiplier: 1

Quant Time: May 10 10:52:07 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 06 13:08:34 2016
Response via : Initial Calibration



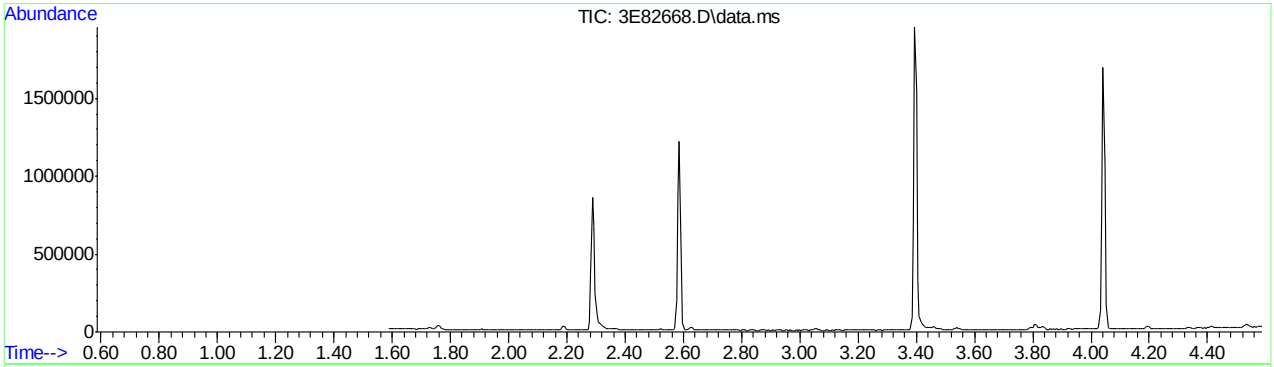
SGS ACCUTEST JC19644

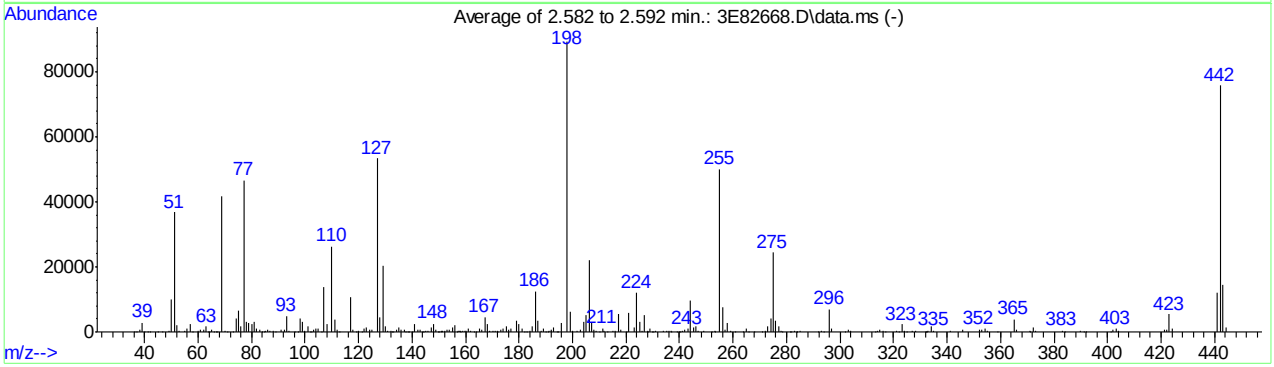
DFTPP

Data Path : C:\msdchem\1\DATA\E3E3621\
Data File : 3E82668.D
Acq On : 26 Apr 2016 1:15 pm
Operator : ashleyn
Sample : dftpp
Misc : op93161,e3e3621
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : C:\msdchem\1\METHODS\dftpp3e.M
Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25Sat Aug 08 13:07:52 2015
Last Update : Sat Aug 08 13:07:52 2015





AutoFind: Scans 187, 188, 189; Background Corrected with Scan 182

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	41.3	36856	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	46.6	41596	PASS
70	69	0.00	2	1.1	473	PASS
127	198	40	60	59.7	53290	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	89282	PASS
199	198	5	9	7.0	6277	PASS
275	198	10	30	27.4	24445	PASS
365	198	1	100	4.3	3823	PASS
441	443	0.10	100	81.7	11945	PASS
442	198	40	100	84.9	75784	PASS
443	442	17	23	19.3	14615	PASS

SGS ACCUTEST JC19644

Average of 2.582 to 2.592 min.: 3E82668.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.95	178	51.05	36856	63.90	95	75.00	6415
37.00	132	52.10	2026	64.10	103	76.10	1581
38.05	617	53.00	239	65.05	861	77.10	46564
39.10	2883	55.00	194	66.00	68	78.05	3075
39.95	132	56.00	1123	66.90	94	79.00	2747
41.00	92	57.10	2357	67.10	118	80.00	2453
41.95	28	57.95	149	69.00	41596	81.00	3116
44.80	79	60.05	228	70.00	473	82.00	926
46.80	97	61.05	553	70.95	12	83.05	852
49.05	258	62.05	643	72.95	46	84.00	14
50.10	10040	63.10	1707	74.10	4084	84.80	126

Average of 2.582 to 2.592 min.: 3E82668.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
85.05	500	98.05	4042	108.00	2319	123.00	1496
85.95	849	99.05	3181	110.05	26216	123.95	633
87.00	437	99.95	331	111.00	3957	125.00	618
88.00	281	101.00	1840	111.95	529	127.05	53290
88.80	64	102.00	104	112.95	180	128.10	4613
91.00	776	102.20	51	117.05	10703	129.00	20430
92.10	832	103.00	777	118.05	804	130.00	1785
92.95	4905	104.00	1188	118.95	149	131.00	300
94.00	436	105.00	1024	120.05	310	131.95	292
96.00	147	106.00	81	121.10	51	132.60	96
97.10	147	107.00	13899	122.00	1171	132.90	84

Average of 2.582 to 2.592 min.: 3E82668.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
134.00	692	143.80	59	151.55	241	158.95	388
135.00	1479	144.20	125	152.05	267	159.90	230
136.05	561	145.05	200	153.00	809	160.10	501
137.10	853	146.00	443	154.05	648	161.00	1044
137.70	73	147.05	1346	155.00	1325	162.00	387
138.25	168	148.00	2595	156.10	1957	163.05	167
138.90	146	149.05	683	156.90	85	164.00	57
140.10	122	149.80	53	157.15	470	165.00	1119
141.00	2557	150.00	130	157.70	185	166.05	775
142.00	855	150.80	63	157.90	302	167.10	4615
143.00	624	151.10	345	158.10	92	168.00	2256

Average of 2.582 to 2.592 min.: 3E82668.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
169.00	511	180.00	2385	190.80	87	201.50	439
170.10	192	181.00	1004	191.05	322	203.05	740
171.05	196	181.95	158	191.90	809	204.10	3111
171.90	346	182.95	134	192.20	199	205.05	5276
172.10	68	183.90	249	193.00	1233	206.10	22056
173.00	538	185.05	1798	193.95	182	207.00	2697
174.00	893	186.00	12561	194.70	79	208.00	743
175.10	1737	187.00	3562	196.00	2936	208.95	314
176.05	598	188.05	497	198.00	89282	209.90	153
177.05	1080	189.00	915	199.00	6277	211.10	1100
179.00	3512	190.00	74	199.95	517	211.80	191

Average of 2.582 to 2.592 min.: 3E82668.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
213.00	67	227.00	5176	237.00	228	249.00	376
215.00	213	227.95	514	239.10	83	251.90	91
215.95	352	228.20	103	239.70	54	253.05	340
217.00	5504	229.00	1175	240.10	51	253.30	78

dftpp3e.M Wed Apr 27 13:53:22 2016 MS3E Page: 2

217.95	826	229.80	87	240.95	360	255.00	50144
220.20	119	230.10	51	242.00	812	256.05	7597
221.00	5713	231.00	410	243.10	927	257.10	646
223.10	1444	233.95	320	244.10	9833	258.00	2780
224.05	12024	235.00	426	245.10	1367	259.05	424
225.05	2985	236.00	198	246.00	1793	260.90	67
226.00	196	236.80	175	246.95	412	263.75	181

Average of 2.582 to 2.592 min.: 3E82668.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
265.00	1168	278.20	77	297.00	920	323.10	2337
265.80	23	281.10	61	302.00	90	324.05	375
267.85	136	281.90	50	303.10	803	324.90	58
270.80	50	282.95	235	304.00	193	327.00	425
272.05	262	283.80	65	313.10	52	328.05	247
273.05	1654	284.00	91	314.05	384	331.80	54
274.10	4139	285.10	377	315.00	697	332.10	93
275.00	24445	291.90	105	316.05	481	332.40	73
276.05	3307	293.10	476	317.10	50	333.00	219
277.00	1785	293.95	154	321.10	214	334.10	1669
277.90	283	296.00	7027	322.00	82	335.05	409

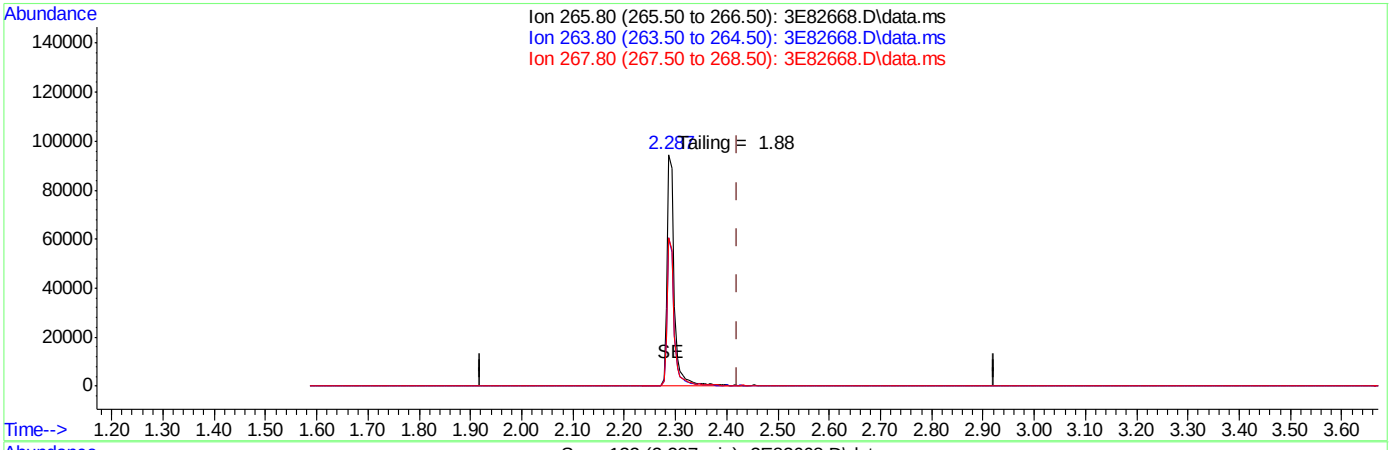
Average of 2.582 to 2.592 min.: 3E82668.D\data.ms
dftpp
Modified:subtracted

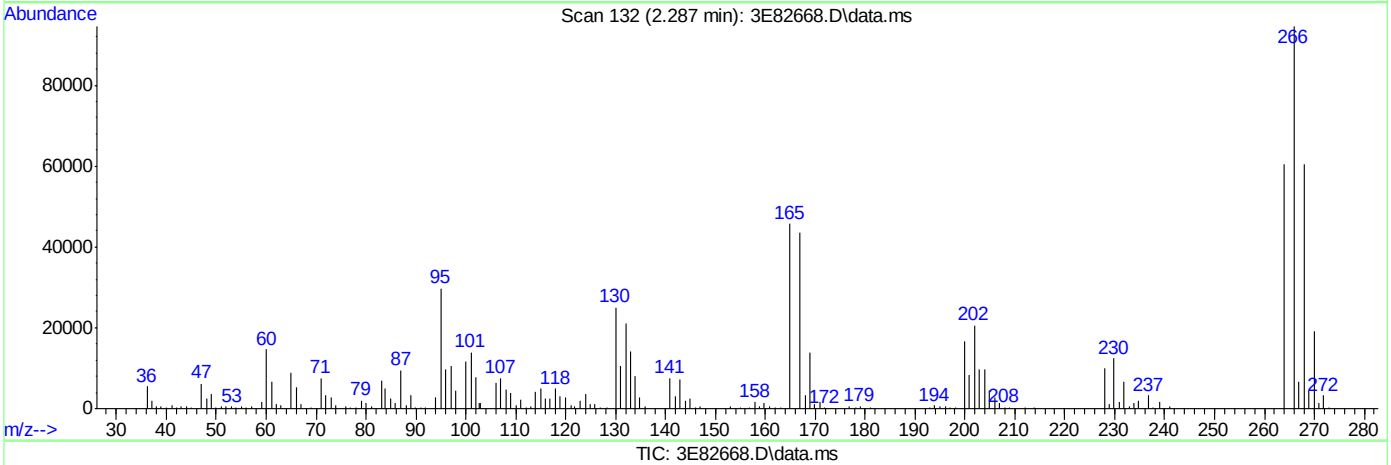
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
341.05	307	372.05	1521	421.10	837		
346.00	551	373.10	351	422.05	810		
352.10	859	382.95	364	423.10	5503		
353.05	597	384.10	115	424.05	1177		
354.05	947	390.05	232	441.15	11945		
355.10	201	391.10	53	442.10	75784		
359.00	52	392.00	56	443.10	14615		
365.05	3823	401.10	69	444.15	1316		
366.05	627	402.05	650				
370.90	61	403.05	937				
371.15	251	404.05	315				

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3621\
Data File : 3E82668.D
Acq On : 26 Apr 2016 1:15 pm
Operator : ashleyn
Sample : dftpp
Misc : op93161,e3e3621
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 26 13:29:05 2016
Quant Method : C:\msdchem\1\METHODS\dftpp3e.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25Sat Aug 08 13:07:52 2015
QLast Update : Sat Aug 08 13:07:52 2015
Response via : Initial Calibration





(1) Pentachlorophenol (t)

2.287min (-0.134) 59.91ppb

response 93631

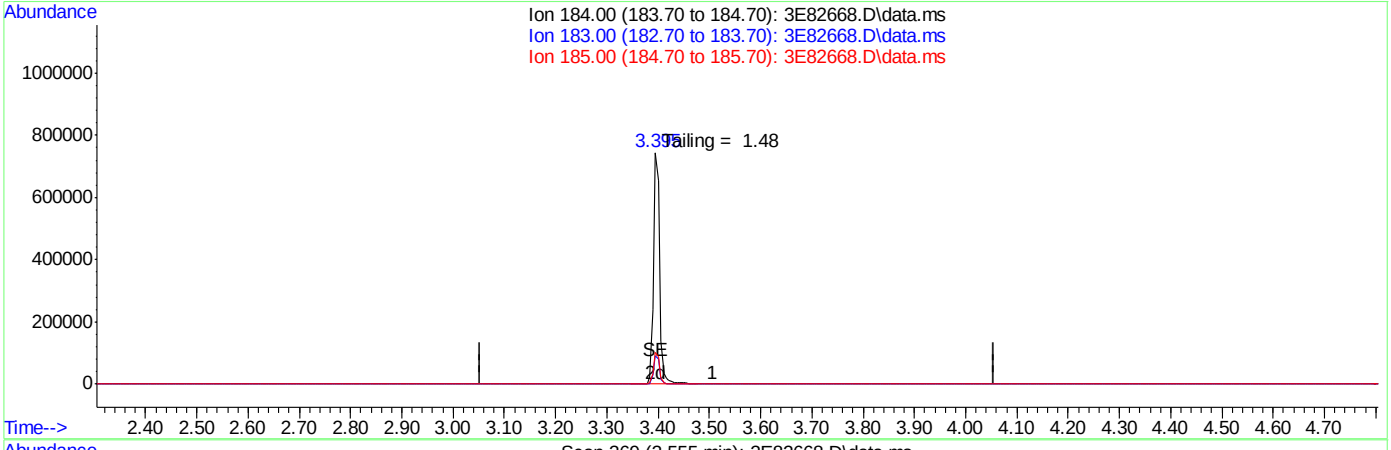
Ion	Exp%	Act%
265.80	100	100
263.80	62.20	63.87
267.80	64.70	63.95
0.00	0.00	0.00

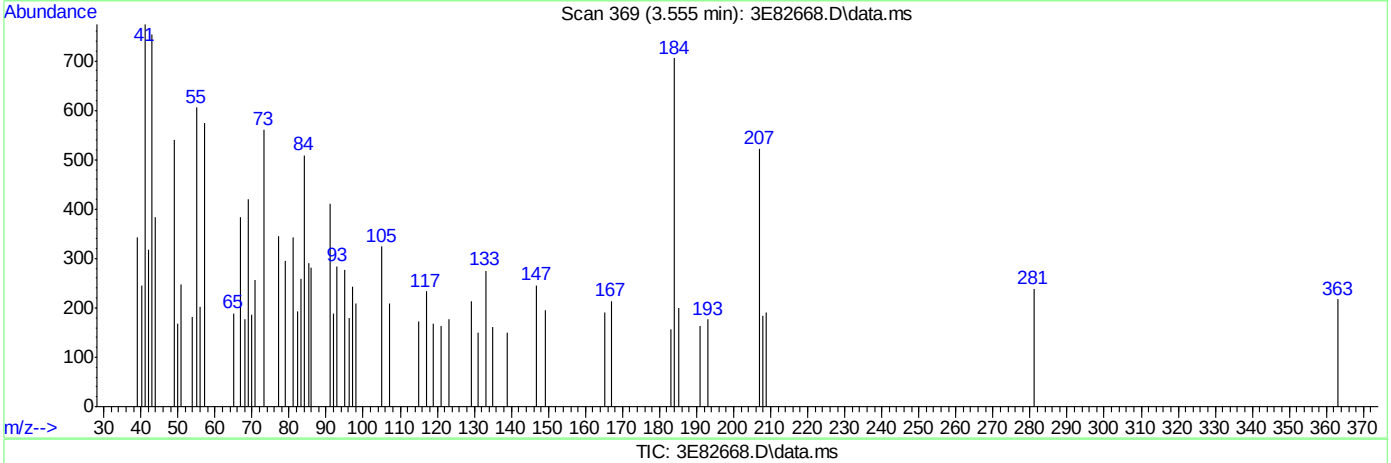
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3621\
Data File : 3E82668.D
Acq On : 26 Apr 2016 1:15 pm
Operator : ashleyn
Sample : dftpp
Misc : op93161,e3e3621
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 26 13:29:05 2016
Quant Method : C:\msdchem\1\METHODS\dftpp3e.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25Sat Aug 08 13:07:52 2015
QLast Update : Sat Aug 08 13:07:52 2015
Response via : Initial Calibration





TIC: 3E82668.D\data.ms

(2) Benzidine (t)

3.555min 0.00ppb d

response 0

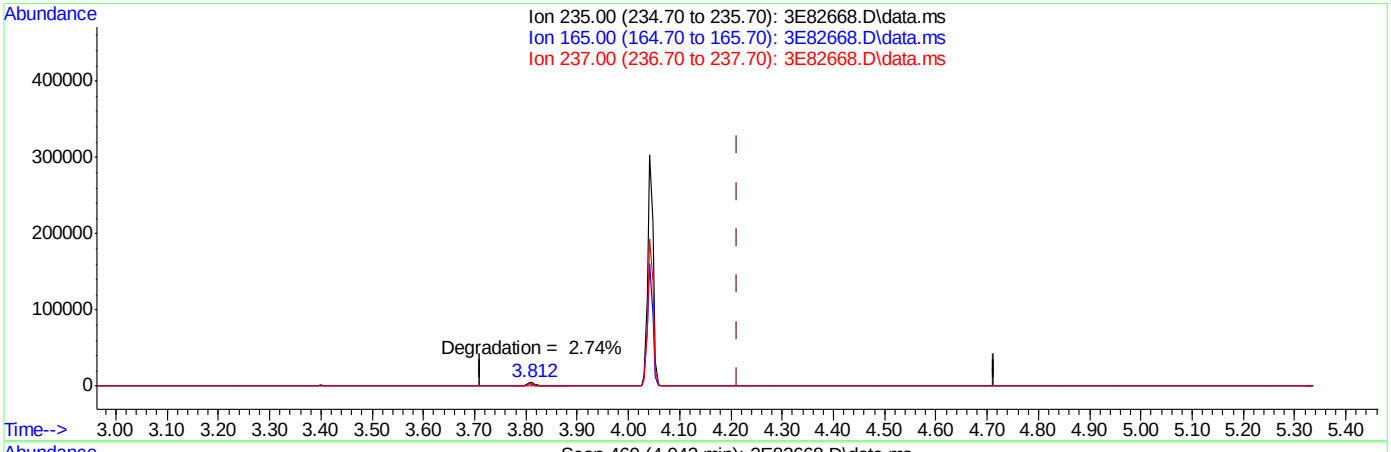
Ion	Exp%	Act%
184.00	100	0.00
183.00	13.20	0.00
185.00	15.40	0.00
0.00	0.00	0.00

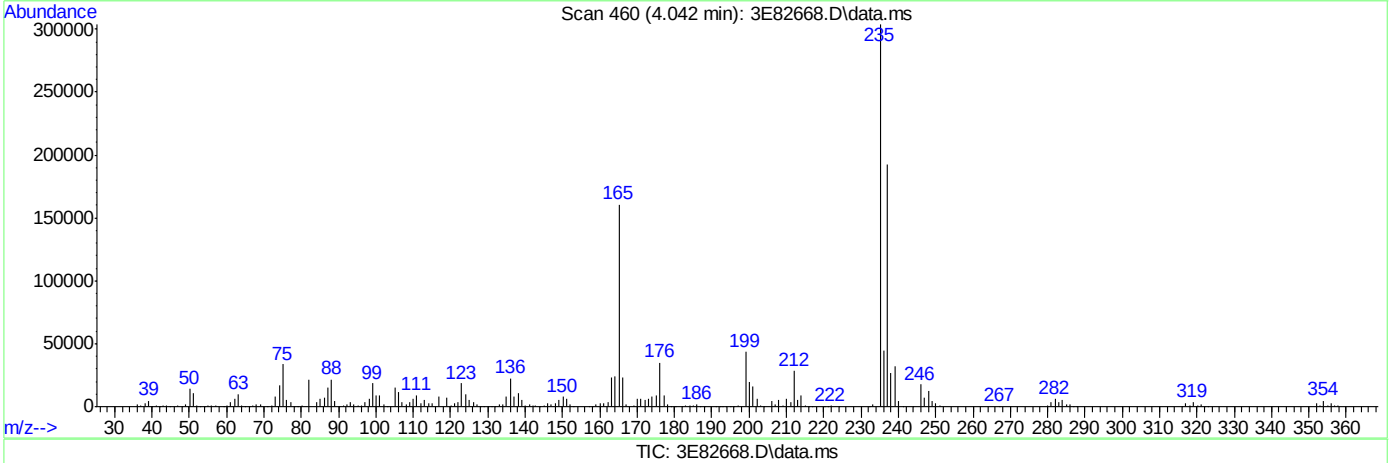
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3621\
Data File : 3E82668.D
Acq On : 26 Apr 2016 1:15 pm
Operator : ashleyn
Sample : dftpp
Misc : op93161,e3e3621
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 26 13:29:05 2016
Quant Method : C:\msdchem\1\METHODS\dftpp3e.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25Sat Aug 08 13:07:52 2015
QLast Update : Sat Aug 08 13:07:52 2015
Response via : Initial Calibration





TIC: 3E82668.D\data.ms

(3) PP-DDT (t)

4.042min (-0.171) 53.13ppb

response 220559

Ion	Exp%	Act%
235.00	100	100
165.00	0.10	51.65#
237.00	0.10	63.60#
0.00	0.00	0.00

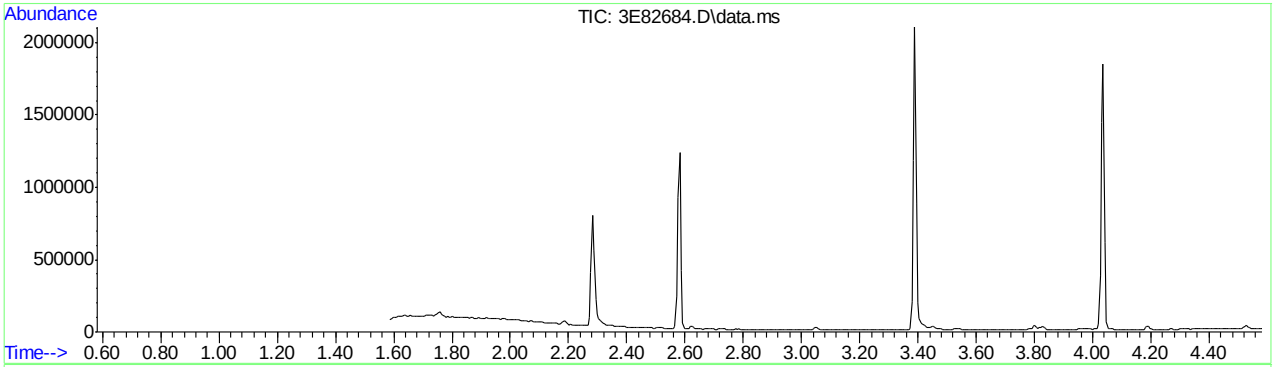
SGS ACCUTEST JC19644

DFTPP

Data Path : C:\msdchem\1\DATA\E3E3622\
Data File : 3E82684.D
Acq On : 27 Apr 2016 9:39 am
Operator : ashleyn
Sample : dftpp
Misc : op93161,e3e3622
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : C:\msdchem\1\METHODS\dftpp3e.M
Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25Sat Aug 08 13:07:52 2015
Last Update : Sat Aug 08 13:07:52 2015



AutoFind: Scans 186, 187, 188; Background Corrected with Scan 181

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	37.6	35061	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	43.7	40730	PASS
70	69	0.00	2	0.9	367	PASS
127	198	40	60	59.1	55168	PASS
197	198	0.00	1	0.1	108	PASS
198	198	100	100	100.0	93304	PASS
199	198	5	9	6.9	6394	PASS
275	198	10	30	26.4	24591	PASS
365	198	1	100	4.0	3692	PASS
441	443	0.10	100	76.4	8486	PASS
442	198	40	100	60.8	56685	PASS
443	442	17	23	19.6	11103	PASS

SGS ACCUTEST JC19644

Average of 2.576 to 2.587 min.: 3E82684.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.05	194	54.05	108	66.00	126	80.00	2405
38.05	552	55.00	73	67.05	56	81.00	3429
39.05	2396	56.00	1130	69.00	40730	82.00	748
40.00	114	57.00	2481	70.05	367	83.00	816
44.95	180	58.05	146	73.00	365	83.95	95
46.95	217	59.70	53	74.00	4356	85.00	401
49.00	186	61.00	393	75.00	6519	85.95	905
50.10	9622	61.95	619	76.05	2326	87.05	374
51.05	35061	63.00	1573	77.10	45956	87.90	181
52.05	2023	64.00	240	78.10	2876	88.90	68
52.95	85	65.00	678	79.00	2997	91.00	714

Average of 2.576 to 2.587 min.: 3E82684.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
92.00	1036	103.00	721	117.00	11840	129.00	21407
93.00	5048	104.00	1359	118.00	734	130.00	1996
93.95	155	105.00	1178	118.95	128	131.00	270
95.05	75	107.00	14170	119.95	77	131.80	95
95.95	44	108.00	2587	121.05	101	133.00	172
96.15	248	110.00	27420	122.00	1115	134.00	779
98.00	4270	111.00	3975	123.00	1360	135.05	1451
99.00	3229	112.00	682	123.95	560	136.00	788
99.90	265	112.90	5	125.00	637	137.05	957
101.00	1910	115.00	170	127.00	55168	138.15	322
102.00	76	116.05	1073	128.00	3895	139.00	264

Average of 2.576 to 2.587 min.: 3E82684.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
141.05	2708	151.00	441	161.00	1094	171.10	264
141.95	783	152.05	424	161.85	374	171.95	548
143.00	674	152.90	777	163.05	156	173.00	736
144.95	77	154.05	739	163.90	61	174.05	1204
146.00	466	155.00	1816	164.10	90	175.10	2095
146.20	87	156.00	2533	164.95	945	176.05	691
147.00	1447	156.80	86	166.00	780	177.00	905
148.05	2858	157.10	588	167.00	5321	178.10	187
148.95	512	158.05	482	168.00	2509	179.00	4034
149.80	92	159.00	468	168.95	484	180.00	2534
150.05	180	160.00	857	170.00	283	181.00	1169

Average of 2.576 to 2.587 min.: 3E82684.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
181.90	107	192.00	968	203.00	820	214.95	323
182.20	68	193.05	1222	204.10	3706	216.00	186
182.95	186	193.90	273	205.10	6107	216.20	133
183.95	396	194.90	79	206.10	23752	217.00	6300
185.05	1712	195.10	190	207.05	2983	218.05	849
186.10	13405	196.00	2946	208.00	750	219.00	66
187.10	3970	196.70	108	209.10	121	220.10	94
188.10	576	198.00	93304	210.10	444	221.10	4309
189.00	1018	199.00	6394	211.05	900	222.10	160
189.85	153	200.00	514	211.90	63	223.00	1450
190.95	307	201.50	589	214.20	60	224.10	13314

Average of 2.576 to 2.587 min.: 3E82684.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
225.10	3219	235.90	62	247.00	411	256.05	7429
226.00	336	236.10	187	248.10	59	257.05	616
227.00	5680	236.95	461	248.75	125	258.00	3237
228.05	717	238.95	271	249.05	257	259.00	517

dftpp3e.M Wed Apr 27 12:11:56 2016 MS3E Page: 2

229.00	1232	240.00	186	249.90	66	263.95	232
229.95	216	240.95	238	250.90	62	265.00	1440
231.00	543	241.95	736	251.10	60	265.85	134
232.00	178	243.05	543	252.10	106	267.30	59
232.80	63	244.10	9828	252.90	97	270.90	81
234.10	345	245.05	1311	253.05	239	272.00	129
235.00	501	246.05	2095	255.10	51680	273.05	1654

Average of 2.576 to 2.587 min.: 3E82684.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
274.05	4481	289.80	50	309.00	57	327.85	253
275.10	24591	292.00	60	310.00	53	332.10	119
276.10	3070	293.05	577	314.10	412	333.10	290
277.00	2350	294.20	67	315.00	880	334.10	1605
278.05	404	296.10	7560	316.05	509	335.05	411
281.05	123	297.00	1087	317.05	110	341.10	327
282.10	138	301.10	59	321.05	263	342.20	157
282.95	263	302.20	95	322.05	179	345.95	628
284.05	269	303.10	973	323.10	2478	346.90	50
285.00	435	304.05	271	324.05	357	352.00	245
289.00	51	307.95	148	327.00	515	352.15	536

Average of 2.576 to 2.587 min.: 3E82684.D\data.ms
dftpp
Modified:subtracted

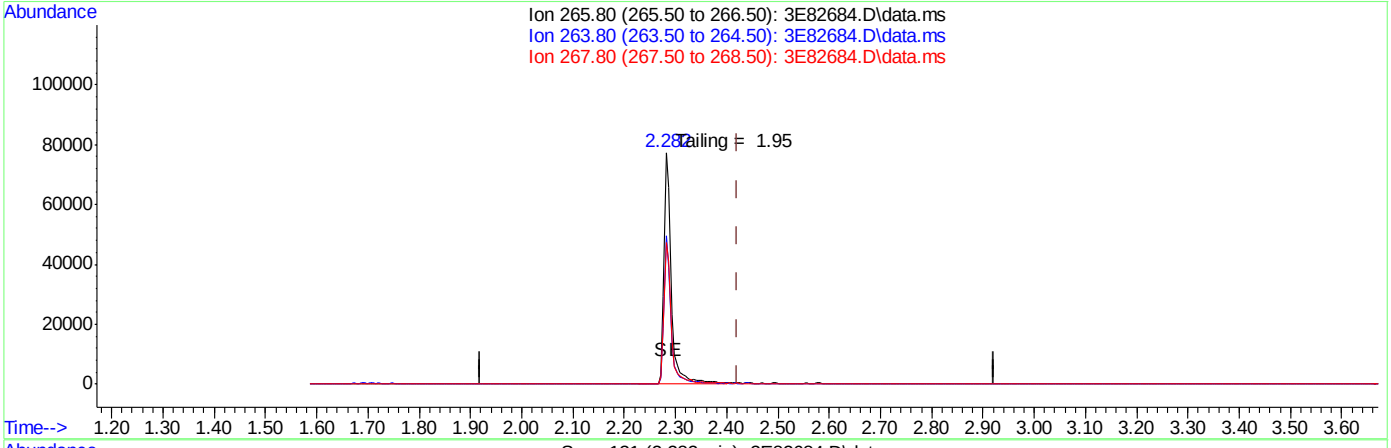
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
353.15	576	391.00	72	441.10	8486		
354.05	873	392.10	51	442.10	56685		
355.15	196	401.20	56	443.10	11103		
365.05	3692	402.05	525	444.15	990		
366.05	638	402.95	637				
371.05	159	404.05	218				
372.10	1557	421.10	538				
373.10	374	422.05	745				
383.05	342	423.10	4236				
384.10	64	424.05	756				
389.95	111	438.30	57				

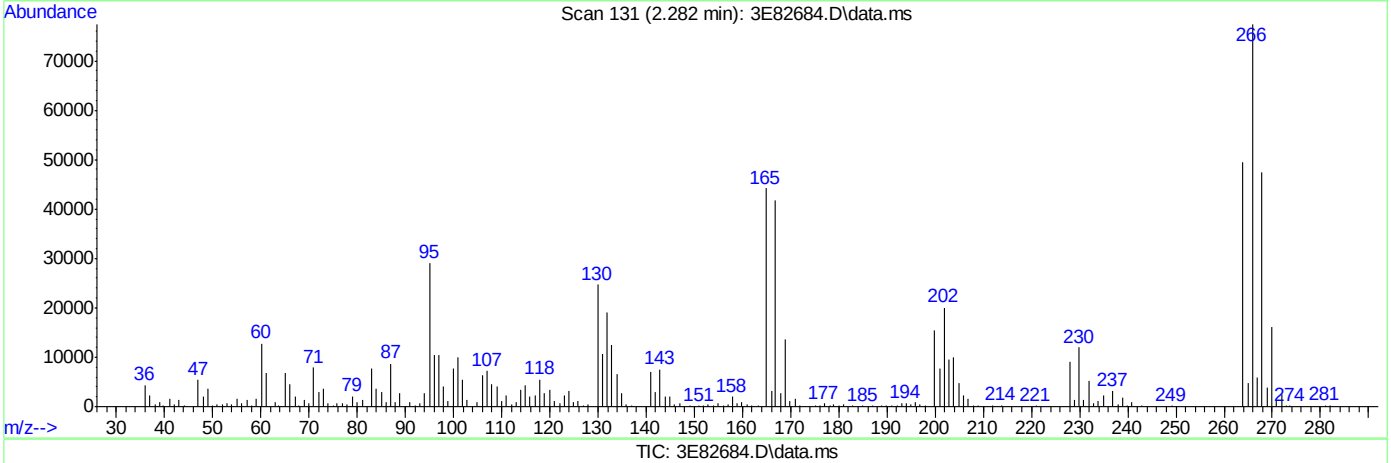
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3622\
Data File : 3E82684.D
Acq On : 27 Apr 2016 9:39 am
Operator : ashleyn
Sample : dftpp
Misc : op93161,e3e3622
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 27 09:58:13 2016
Quant Method : C:\msdchem\1\METHODS\dftpp3e.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25Sat Aug 08 13:07:52 2015
QLast Update : Sat Aug 08 13:07:52 2015
Response via : Initial Calibration





TIC: 3E82684.D\data.ms

(1) Pentachlorophenol (t)

2.282min (-0.139) 48.87ppb

response 76381

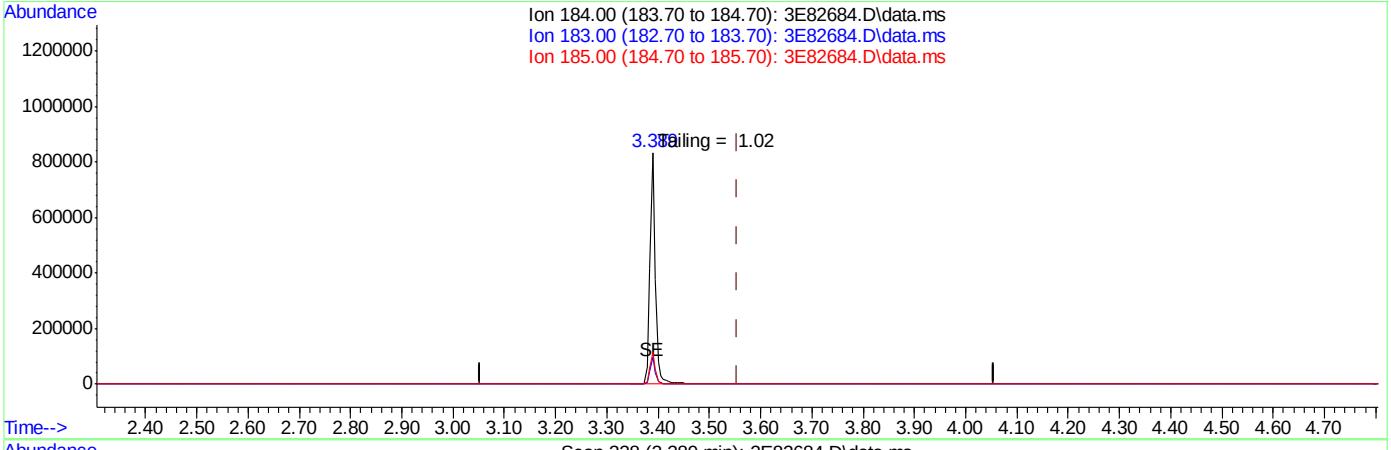
Ion	Exp%	Act%
265.80	100	100
263.80	62.20	63.83
267.80	64.70	60.95
0.00	0.00	0.00

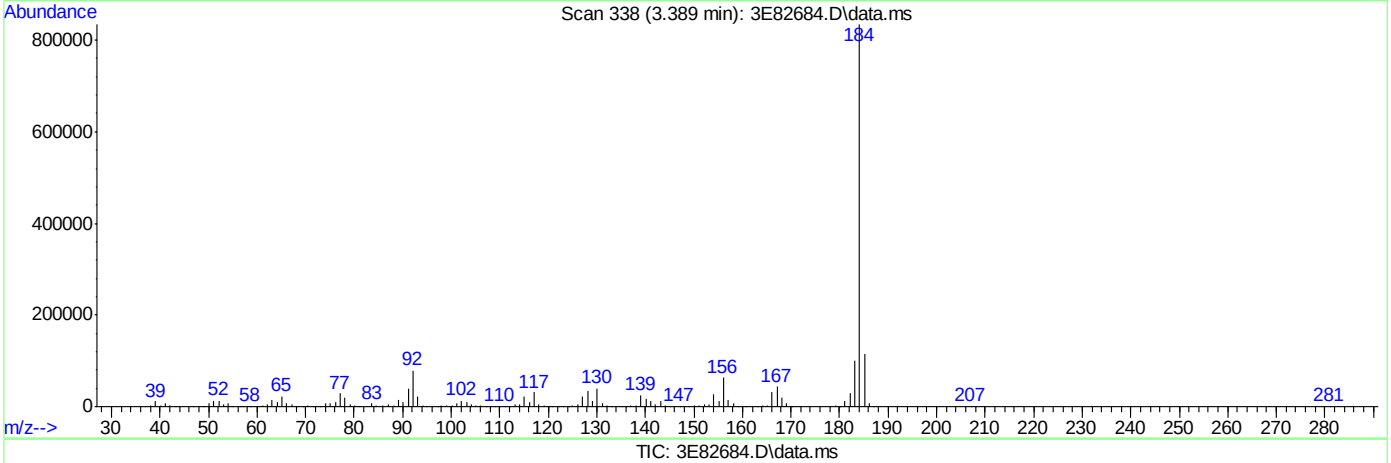
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3622\
Data File : 3E82684.D
Acq On : 27 Apr 2016 9:39 am
Operator : ashleyn
Sample : dftpp
Misc : op93161,e3e3622
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 27 09:58:13 2016
Quant Method : C:\msdchem\1\METHODS\dftpp3e.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25Sat Aug 08 13:07:52 2015
QLast Update : Sat Aug 08 13:07:52 2015
Response via : Initial Calibration





TIC: 3E82684.D\data.ms

(2) Benzidine (t)

3.389min (-0.166) 58.24ppb

response 611530

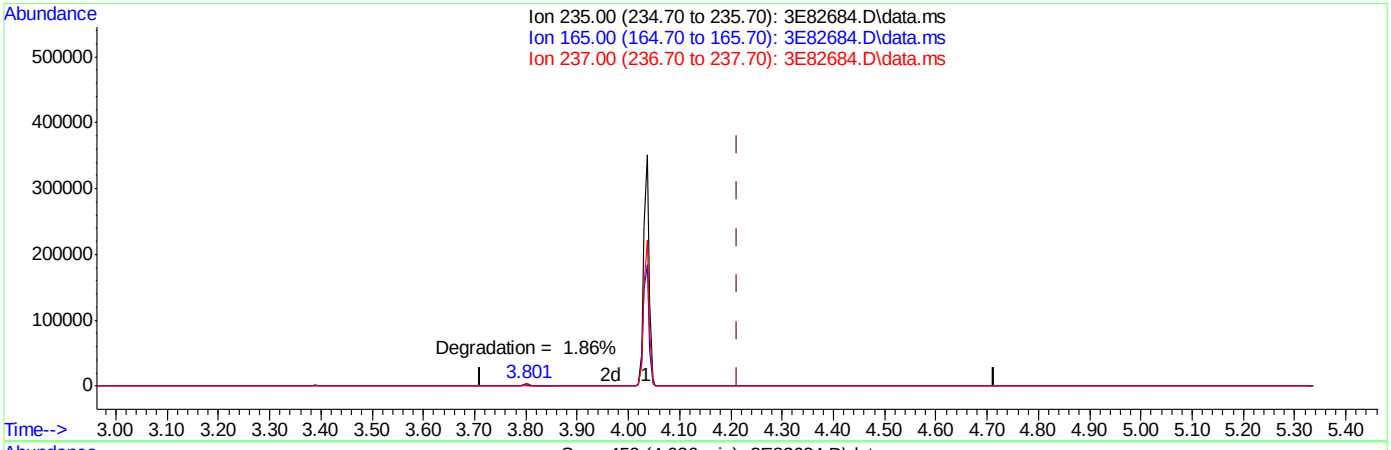
Ion	Exp%	Act%
184.00	100	100
183.00	13.20	11.94
185.00	15.40	13.92
0.00	0.00	0.00

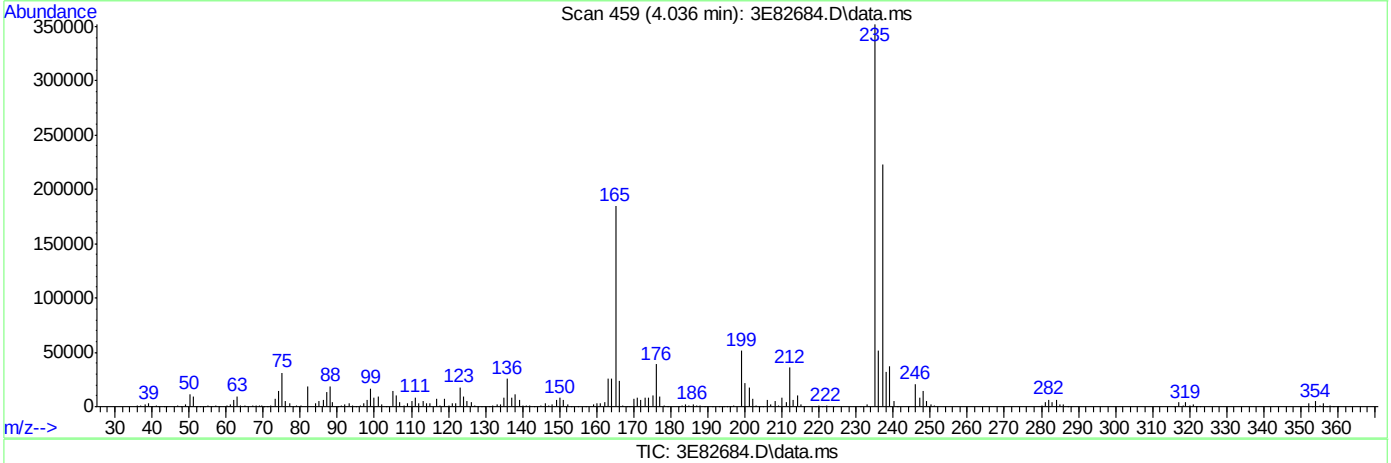
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3622\
Data File : 3E82684.D
Acq On : 27 Apr 2016 9:39 am
Operator : ashleyn
Sample : dftpp
Misc : op93161,e3e3622
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 27 09:58:13 2016
Quant Method : C:\msdchem\1\METHODS\dftpp3e.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25Sat Aug 08 13:07:52 2015
QLast Update : Sat Aug 08 13:07:52 2015
Response via : Initial Calibration





TIC: 3E82684.D\data.ms

(3) PP-DDT (t)

4.036min (-0.177) 61.08ppb

response 253588

Ion	Exp%	Act%
235.00	100	100
165.00	0.10	55.01#
237.00	0.10	63.63#
0.00	0.00	0.00

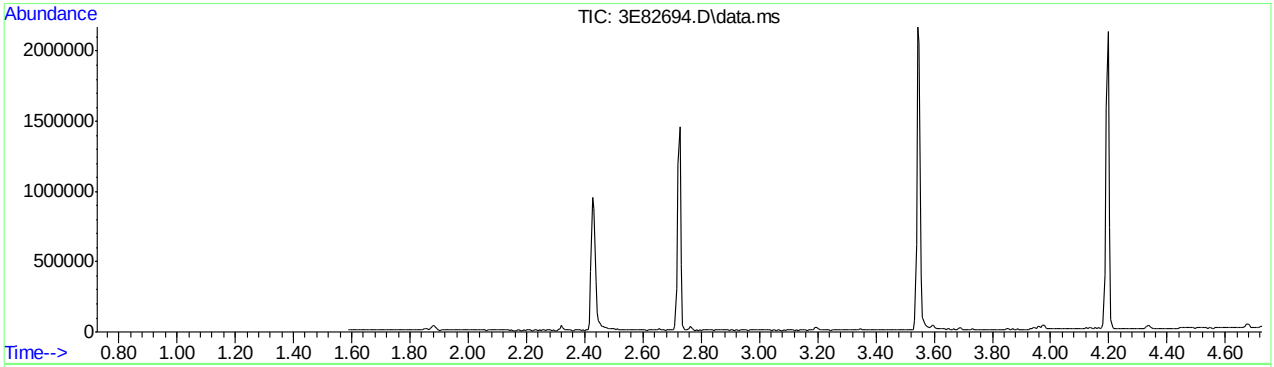
SGS ACCUTEST JC19644

DFTPP

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82694.D
Acq On : 27 Apr 2016 3:21 pm
Operator : ashleyn
Sample : dftpp
Misc : op93161,e3e3623
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : C:\msdchem\1\METHODS\dftpp3e.M
Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25Sat Aug 08 13:07:52 2015
Last Update : Sat Aug 08 13:07:52 2015



AutoFind: Scans 213, 214, 215; 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	49.8	53138	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	49.3	52572	PASS
70	69	0.00	2	0.5	250	PASS
127	198	40	60	54.0	57610	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	106714	PASS
199	198	5	9	6.3	6685	PASS
275	198	10	30	27.3	29152	PASS
365	198	1	100	4.1	4414	PASS
441	443	0.10	100	85.2	15379	PASS
442	198	40	100	86.4	92170	PASS
443	442	17	23	19.6	18045	PASS

SGS ACCUTEST JC19644

Average of 2.721 to 2.731 min.: 3E82694.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.80	117	46.10	50	56.95	3304	65.80	88
36.95	280	47.05	251	57.80	58	66.00	78
38.05	878	47.70	59	58.00	85	69.00	52572
39.10	4913	48.00	151	60.80	89	70.15	250
40.00	321	50.10	15901	61.10	803	73.05	298
40.95	143	51.05	53138	62.05	920	74.10	5681
41.90	286	52.10	2848	62.80	191	75.05	8433
43.00	133	52.80	67	63.05	1886	76.10	493
44.00	106	54.05	131	64.00	169	77.10	57460
44.90	92	55.00	192	64.20	189	78.05	3589
45.20	99	56.05	1405	65.05	783	79.10	4057

Average of 2.721 to 2.731 min.: 3E82694.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
80.00	3038	91.00	824	100.00	473	112.80	56
81.10	3695	91.80	138	101.00	2056	113.10	275
81.95	1253	92.05	1168	102.10	100	114.00	63
83.00	1208	92.95	6550	103.00	768	114.70	103
83.90	247	93.80	185	104.05	1271	114.90	67
85.00	338	94.10	255	105.05	1617	115.80	456
85.20	546	95.05	216	107.10	16366	117.05	14303
85.90	1449	96.00	197	108.05	3154	118.00	1050
87.05	581	97.05	274	110.05	28291	119.10	79
88.05	170	98.00	5123	111.00	4560	119.95	320
89.00	70	99.05	4145	111.95	391	120.80	51

Average of 2.721 to 2.731 min.: 3E82694.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
121.00	82	131.10	590	139.30	79	147.15	1802
121.90	473	132.05	364	139.60	134	148.10	3179
122.10	851	132.65	195	140.10	573	148.95	782
122.70	128	134.00	718	141.05	2769	150.05	230
123.05	1883	135.00	1883	142.10	1066	150.90	264
124.05	777	136.00	781	142.90	533	151.25	220
125.10	1001	136.90	447	143.20	90	151.80	138
127.10	57610	137.10	504	143.75	162	152.10	134
128.00	2878	137.70	143	144.10	96	152.80	120
129.05	22318	138.10	83	144.85	139	153.05	898
130.00	2060	138.65	129	146.15	739	153.95	714

Average of 2.721 to 2.731 min.: 3E82694.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
155.10	1901	163.05	180	171.80	104	181.05	1228
156.05	2215	163.65	113	172.10	446	181.75	216
156.90	275	165.00	1293	173.10	870	182.50	96
157.10	247	165.70	171	174.05	1069	183.00	63
157.50	269	166.20	719	175.05	1969	183.95	306
158.00	566	167.10	5728	175.70	62	184.20	251
158.75	193	168.05	2936	176.15	722	184.80	686
159.15	418	169.10	493	177.00	1304	185.20	457
160.00	1018	170.10	187	178.90	1605	186.10	14426
161.10	1565	170.90	158	179.10	2417	187.10	4550
161.95	397	171.10	114	180.00	2510	188.05	514

Average of 2.721 to 2.731 min.: 3E82694.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
189.05	1005	199.05	6685	208.90	101	217.90	1053
190.10	318	199.85	678	209.20	206	218.70	67
190.70	55	201.00	91	209.80	469	219.10	66
191.00	293	201.50	696	210.20	186	219.30	113

dftpp3e.M Thu Apr 28 09:08:35 2016 MS3E Page: 2

191.20	262	202.30	94	211.05	1396	219.90	141
191.95	1296	202.90	1083	212.00	176	221.00	1984
193.00	1622	204.10	4013	214.80	133	221.20	3620
194.20	442	205.05	7232	215.00	292	221.85	920
194.95	302	206.10	26209	215.70	263	222.20	138
195.95	3739	207.05	3312	216.10	536	222.95	947
198.00	106714	208.00	1053	217.05	6659	224.10	14263

Average of 2.721 to 2.731 min.: 3E82694.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
225.05	3703	234.30	106	242.05	878	250.00	61
226.00	252	234.80	195	243.20	332	251.10	86
227.00	6127	234.95	347	244.10	11875	251.40	101
228.00	760	235.50	53	245.10	1626	251.90	354
228.20	127	235.95	401	246.10	2179	252.40	216
229.00	1198	236.90	233	247.00	443	253.20	801
230.30	190	237.05	356	247.75	196	255.05	57749
230.85	570	238.85	533	248.20	95	256.00	9429
232.00	162	240.00	159	248.90	360	257.05	310
233.80	118	240.80	63	249.10	236	257.30	387
234.05	469	241.05	392	249.50	63	258.05	3710

Average of 2.721 to 2.731 min.: 3E82694.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
258.95	686	274.05	5508	284.00	132	301.70	102
260.70	61	275.05	29152	284.95	423	303.05	1024
262.70	52	276.05	4092	289.10	121	304.00	364
264.10	328	277.05	2356	290.20	52	308.00	278
264.95	1594	277.70	82	293.00	453	310.20	140
265.90	159	278.05	296	293.80	158	312.95	117
270.70	79	278.80	50	294.10	55	313.30	152
271.10	280	280.80	127	296.05	8533	313.95	559
271.90	114	281.70	75	297.00	1040	314.60	150
272.30	86	282.00	60	298.10	65	314.95	926
273.05	2314	282.95	276	300.90	64	316.15	571

Average of 2.721 to 2.731 min.: 3E82694.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
317.10	114	332.30	77	345.20	80	355.30	66
321.05	425	332.80	52	346.05	808	361.70	90
323.00	2908	333.05	337	347.00	131	362.80	126
324.15	737	334.05	1803	351.40	84	365.05	4414
325.70	61	335.05	783	351.90	231	365.95	803
326.10	55	337.10	52	352.05	757	370.20	75
326.80	155	340.10	55	353.00	248	371.10	183
327.00	470	340.60	58	353.20	598	372.05	1639
327.95	291	341.00	115	353.60	94	373.00	629
329.10	56	341.30	70	354.15	889	382.80	146
332.05	289	341.90	56	355.10	81	383.05	330

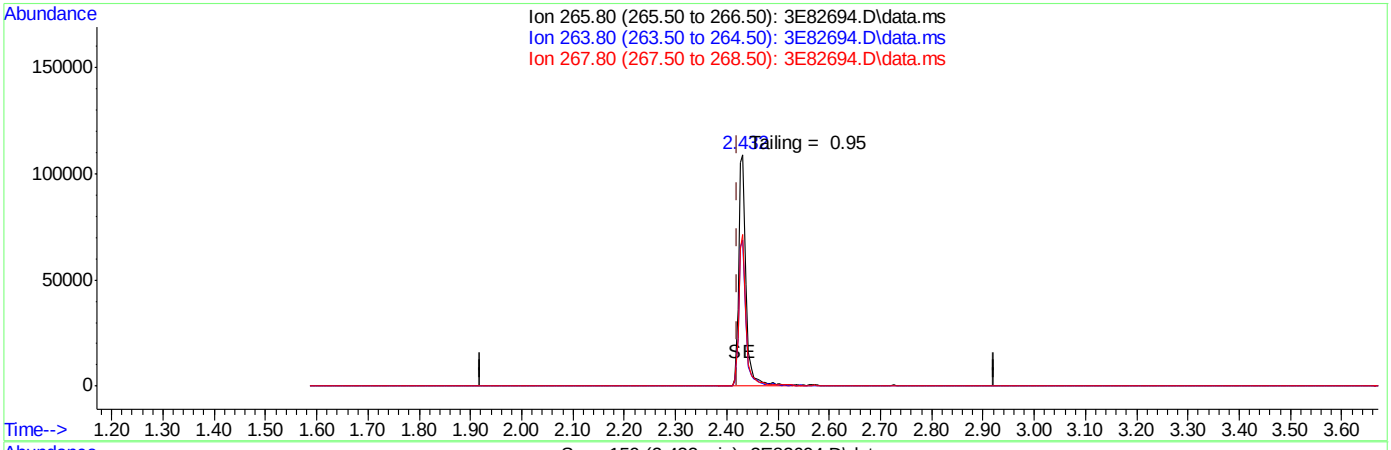
Average of 2.721 to 2.731 min.: 3E82694.D\data.ms
dftpp
Modified:subtracted

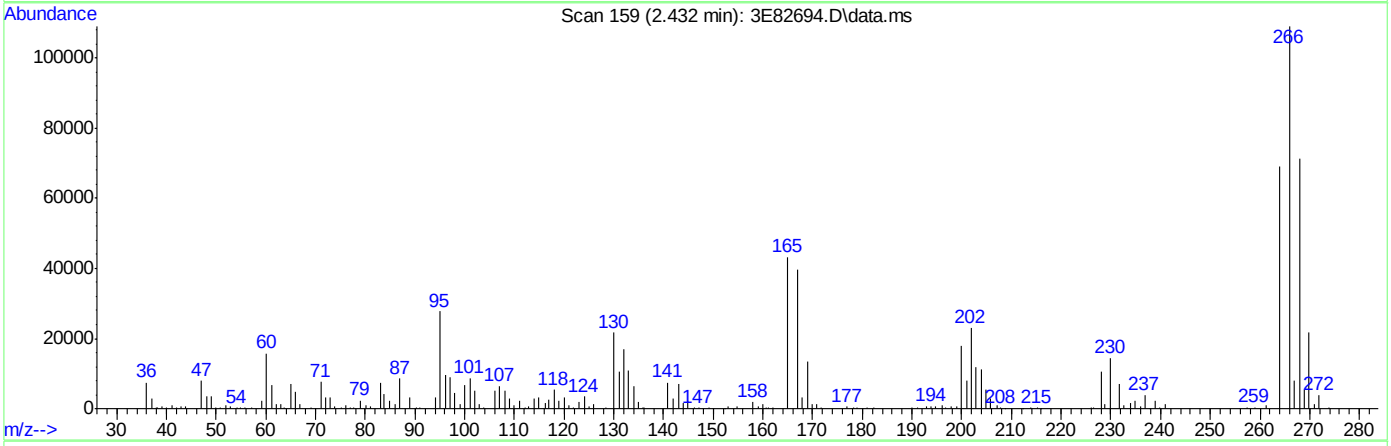
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
385.00	63	421.05	918	435.55	241	442.10	92170
389.80	51	422.10	542	436.25	211	443.10	18045
390.05	175	423.10	5770	436.90	128	444.10	1790
390.90	114	424.05	1230	437.10	99	445.00	64
392.00	164	425.10	111	437.75	275		
394.10	56	430.20	91	438.15	362		
401.05	176	431.70	74	438.90	245		
402.05	787	433.40	95	439.40	151		
403.00	1121	434.15	152	439.70	110		
404.05	322	434.50	61	439.90	149		
420.10	80	434.90	62	441.20	15379		

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82694.D
Acq On : 27 Apr 2016 3:21 pm
Operator : ashleyn
Sample : dftpp
Misc : op93161,e3e3623
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 27 15:28:41 2016
Quant Method : C:\msdchem\1\METHODS\dftpp3e.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25Sat Aug 08 13:07:52 2015
QLast Update : Sat Aug 08 13:07:52 2015
Response via : Initial Calibration





(1) Pentachlorophenol (t)

2.432min (+0.011) 71.67ppb

response 112005

Ion	Exp%	Act%
265.80	100	100
263.80	62.20	63.18
267.80	64.70	65.25
0.00	0.00	0.00

SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82694.D
Acq On : 27 Apr 2016 3:21 pm
Operator : ashleyn
Sample : dftpp
Misc : op93161,e3e3623
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 27 15:28:41 2016
Quant Method : C:\msdchem\1\METHODS\dftpp3e.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25Sat Aug 08 13:07:52 2015
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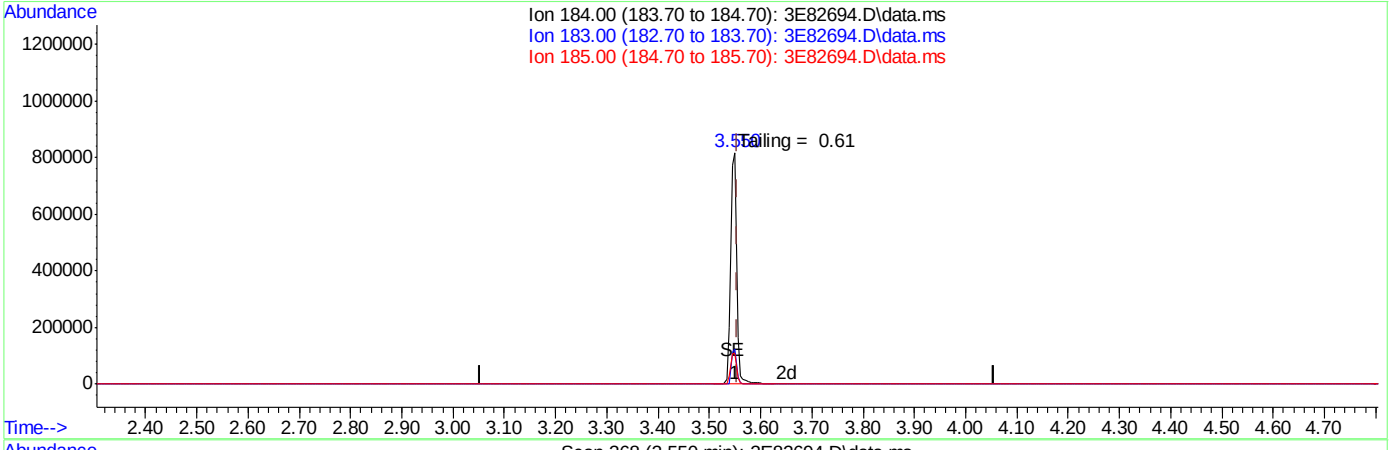
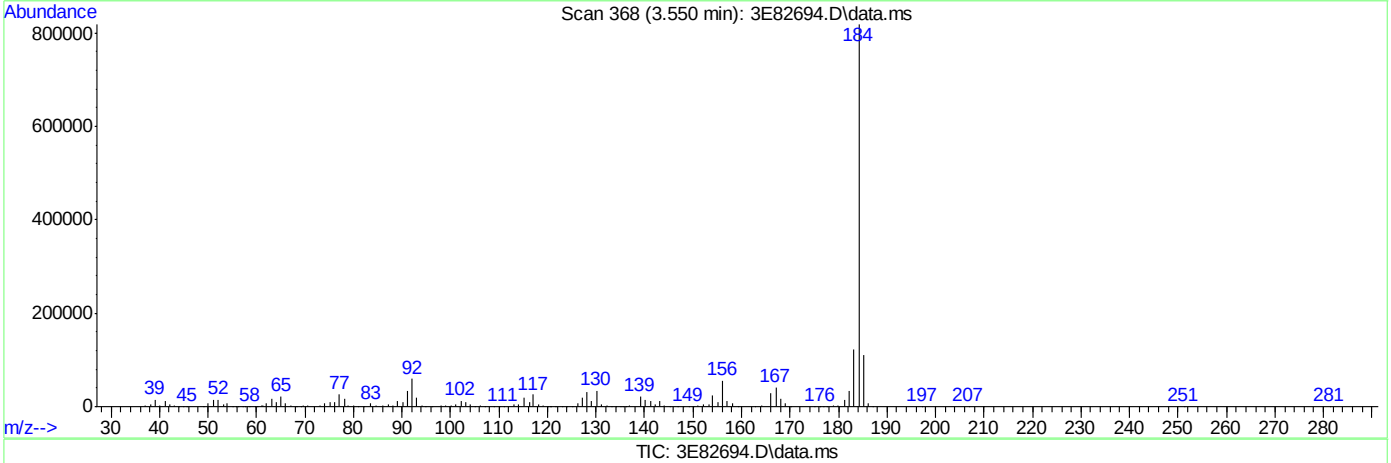
Response via : Initial Calibration





TIC: 3E82694.D\data.ms

(2) Benzidine (t)

3.550min (-0.005) 63.38ppb

response 665561

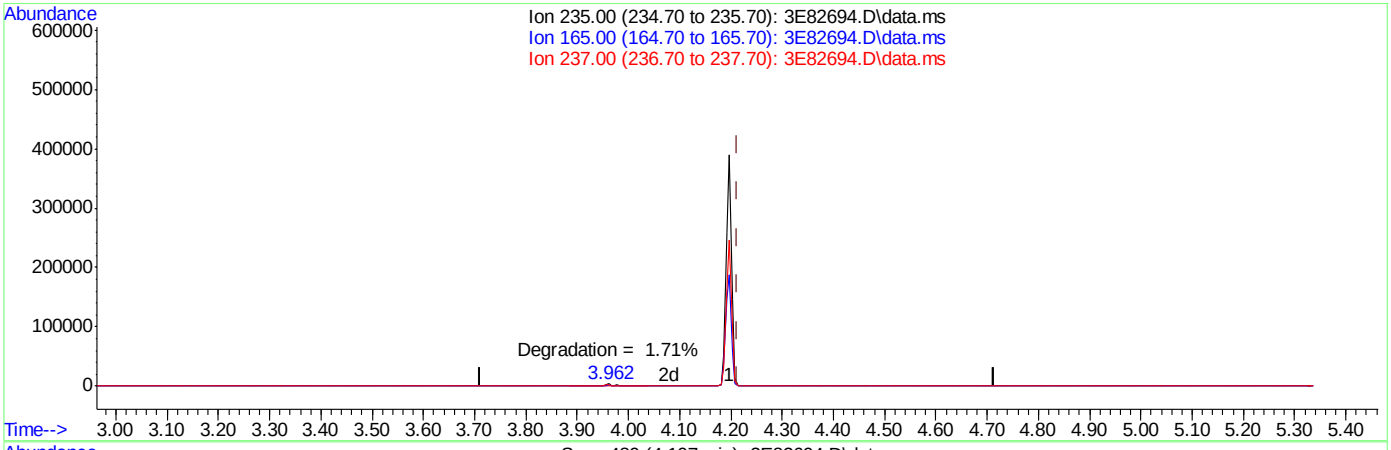
Ion	Exp%	Act%
184.00	100	100
183.00	13.20	14.96
185.00	15.40	13.44
0.00	0.00	0.00

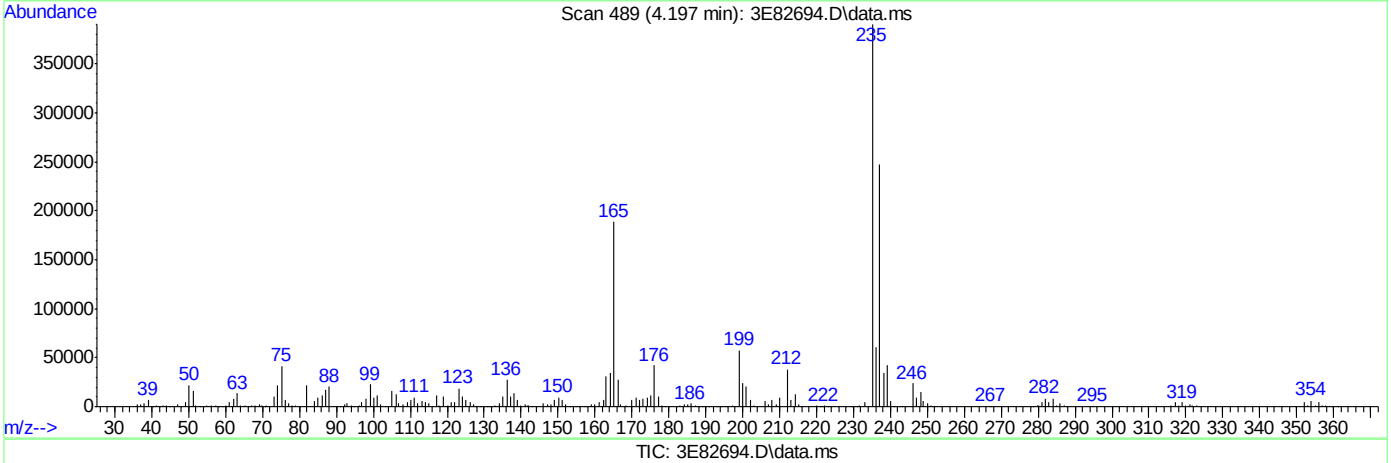
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82694.D
Acq On : 27 Apr 2016 3:21 pm
Operator : ashleyn
Sample : dftpp
Misc : op93161,e3e3623
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 27 15:28:41 2016
Quant Method : C:\msdchem\1\METHODS\dftpp3e.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25Sat Aug 08 13:07:52 2015
QLast Update : Sat Aug 08 13:07:52 2015
Response via : Initial Calibration





TIC: 3E82694.D\data.ms

(3) PP-DDT (t)

4.197min (-0.016) 67.09ppb

response 278535

Ion	Exp%	Act%
235.00	100	100
165.00	0.10	50.49#
237.00	0.10	63.46#
0.00	0.00	0.00

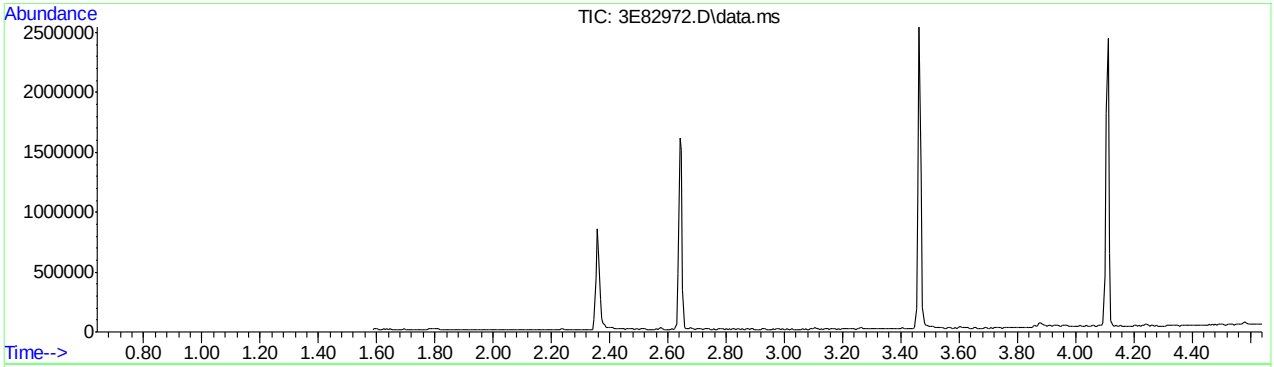
SGS ACCUTEST JC19644

DFTPP

Data Path : C:\msdchem\1\DATA\E3E3637\
Data File : 3E82972.D
Acq On : 6 May 2016 12:18 pm
Operator : ashleyn
Sample : dftpp
Misc : op93596,e3e3637
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : C:\msdchem\1\METHODS\dftpp3e.M
Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25Sat Aug 08 13:07:52 2015
Last Update : Sat Aug 08 13:07:52 2015



AutoFind: Scans 197, 198, 199; Background Corrected with Scan 193

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	57.1	66022	PASS
68	69	0.00	2	0.3	190	PASS
69	198	0.00	100	49.9	57650	PASS
70	69	0.00	2	0.8	456	PASS
127	198	40	60	57.4	66356	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	115589	PASS
199	198	5	9	7.6	8839	PASS
275	198	10	30	26.6	30761	PASS
365	198	1	100	4.8	5530	PASS
441	443	0.10	100	86.2	8343	PASS
442	198	40	100	43.0	49734	PASS
443	442	17	23	19.5	9682	PASS

SGS ACCUTEST JC19644

Average of 2.635 to 2.646 min.: 3E82972.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.10	56	44.95	105	58.10	117	67.00	135
35.90	76	47.70	166	58.90	51	67.95	190
37.10	336	49.05	453	59.10	71	69.05	57650
38.10	1073	50.10	19552	59.95	199	70.15	456
39.05	6001	51.10	66022	60.30	22	70.80	82
39.90	281	52.10	3661	61.10	945	71.10	120
40.10	191	53.15	229	62.05	1085	72.30	128
41.10	494	54.30	79	63.15	2637	73.10	487
42.10	5	55.00	331	64.05	377	74.05	8011
43.05	603	56.00	1853	65.05	855	75.10	10513
43.90	167	57.05	4122	66.70	131	76.00	660

Average of 2.635 to 2.646 min.: 3E82972.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
77.05	62750	85.90	45	93.95	713	103.05	1028
78.10	4048	86.05	1445	94.80	216	104.05	1907
79.05	4539	87.00	547	95.00	156	105.05	1970
79.90	627	87.20	344	96.15	641	107.05	22564
80.05	3529	87.80	91	98.05	7955	108.05	3292
81.10	5280	88.15	293	99.05	5655	110.10	32832
82.05	1415	89.20	123	100.00	502	111.10	5137
83.05	840	89.70	52	100.80	272	112.00	774
83.90	58	91.10	1547	101.05	2709	113.00	335
84.05	247	92.10	1510	102.00	126	113.70	66
85.05	1145	93.10	9860	102.30	242	114.15	147

Average of 2.635 to 2.646 min.: 3E82972.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
115.00	279	125.10	1144	136.10	1015	143.20	304
117.05	24887	127.05	66356	137.10	1215	144.00	59
118.05	1378	128.10	3688	137.70	81	144.20	340
119.20	348	129.10	31121	138.00	171	145.00	125
120.00	428	130.05	3145	138.50	51	145.20	111
120.90	69	131.00	384	139.20	150	146.05	760
121.10	195	132.10	351	140.00	61	147.15	2593
122.15	1881	133.10	148	140.20	395	148.05	5184
123.10	2595	133.90	204	141.05	4215	148.80	7
123.90	234	134.10	1147	142.05	1521	149.00	1035
124.15	977	135.05	2512	143.00	476	149.30	72

Average of 2.635 to 2.646 min.: 3E82972.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
150.05	339	159.25	433	167.05	7959	176.00	853
151.10	765	160.00	1586	168.05	3966	177.00	1367
152.15	539	160.90	194	169.10	720	178.00	348
153.10	1367	161.10	1480	169.80	105	178.25	239
154.00	884	162.00	628	170.25	224	179.10	5466
155.10	2131	163.00	60	171.05	498	179.80	388
156.10	2977	163.20	121	172.00	800	180.10	4013
157.20	583	163.95	201	172.80	127	181.10	1858
157.50	116	164.40	103	173.10	826	182.15	376
158.05	664	164.95	1871	174.15	1434	182.90	197
158.90	263	166.15	1196	175.10	2897	183.20	75

Average of 2.635 to 2.646 min.: 3E82972.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
183.40	109	193.10	2240	202.10	8	211.05	1690
184.05	707	193.95	378	202.95	709	211.90	116
185.10	510	194.20	302	203.20	578	213.00	143
185.30	1608	195.00	324	204.10	5826	213.30	136

dftpp3e.M Fri May 06 14:21:33 2016 MS3E Page: 2

186.10	20314	195.60	287	205.15	9634	214.15	133
187.10	5552	196.15	3976	206.10	35461	214.95	547
188.15	729	198.10	115589	207.15	4201	216.10	515
189.10	1631	199.05	8839	207.95	1528	217.05	11392
190.05	353	200.10	1039	209.05	507	217.90	823
191.00	688	200.75	289	209.65	271	218.10	612
192.05	2012	201.75	530	209.95	332	218.90	114

Average of 2.635 to 2.646 min.: 3E82972.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
219.40	181	229.10	2151	237.95	146	244.10	14334
220.40	90	229.95	390	238.30	93	245.15	2203
221.15	4113	231.10	837	238.95	303	246.10	3650
221.90	209	231.95	120	239.20	214	247.00	712
222.20	669	232.75	217	239.50	130	247.80	156
223.10	2681	233.95	687	240.00	518	248.00	190
224.10	19457	234.80	101	240.95	546	249.00	751
225.05	4729	235.15	902	241.20	239	249.90	207
225.95	493	235.95	446	242.00	207	250.90	275
227.10	10125	236.30	69	242.20	1204	252.05	556
227.95	1158	237.10	876	243.15	1394	252.40	231

Average of 2.635 to 2.646 min.: 3E82972.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
252.80	62	260.15	233	269.80	82	282.20	80
253.05	1032	260.90	53	270.00	82	282.60	117
253.60	823	261.25	111	271.15	441	283.05	305
253.80	620	262.90	56	272.20	265	283.95	197
255.10	72704	263.65	187	273.15	2868	285.05	697
256.10	11128	265.10	2596	274.10	6633	285.90	72
257.00	147	266.00	224	275.10	30761	286.20	106
257.15	1087	266.90	70	276.10	4358	289.10	143
258.10	5516	267.30	81	277.10	3722	290.20	89
259.00	937	268.00	95	277.95	463	291.00	75
259.90	94	269.25	143	281.40	139	291.70	69

Average of 2.635 to 2.646 min.: 3E82972.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
292.00	79	301.70	61	313.90	277	326.90	324
292.20	52	302.05	365	315.10	1175	327.10	396
292.90	505	303.00	1391	316.10	633	327.90	131
293.10	473	304.00	318	320.15	208	328.35	243
293.60	162	306.80	69	321.05	574	331.90	164
294.40	85	307.70	92	321.90	183	332.20	220
296.10	12195	308.50	55	323.15	2976	332.80	102
297.05	1669	310.00	113	323.95	624	333.30	351
298.20	118	310.20	72	325.20	60	334.10	2354
298.90	63	311.80	78	325.80	56	334.90	85
301.20	74	313.20	225	326.30	112	335.10	399

Average of 2.635 to 2.646 min.: 3E82972.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
336.10	72	350.70	57	360.80	101	369.95	197
338.80	50	351.10	115	362.00	122	370.90	135
339.40	54	351.90	378	362.60	67	372.05	1444
340.00	54	352.10	519	363.30	51	372.70	64
340.90	267	353.05	748	365.10	5530	372.90	193
341.15	209	353.90	91	366.15	885	373.10	264
341.60	116	354.15	602	366.80	112	373.40	128
345.95	709	354.80	85	368.20	123	380.10	55
346.80	160	355.15	403	369.10	62	382.70	117
347.30	88	357.25	109	369.40	61	383.10	192
348.10	62	359.10	65	369.70	90	384.10	154

Average of 2.635 to 2.646 min.: 3E82972.D\data.ms

dftpp3e.M Fri May 06 14:21:33 2016 MS3E Page: 3

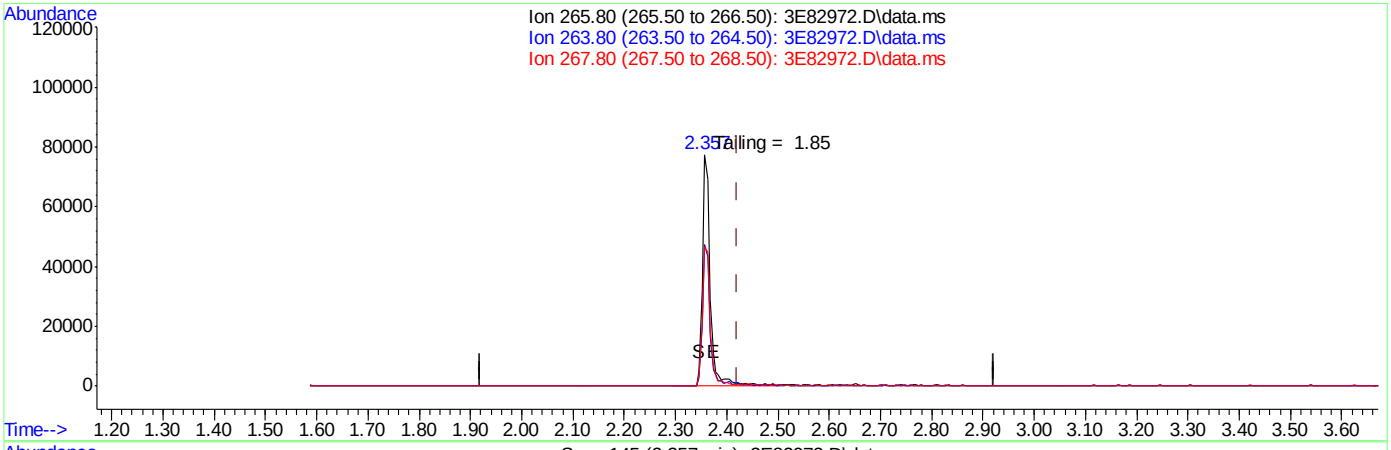
dftpp
Modified:subtracted

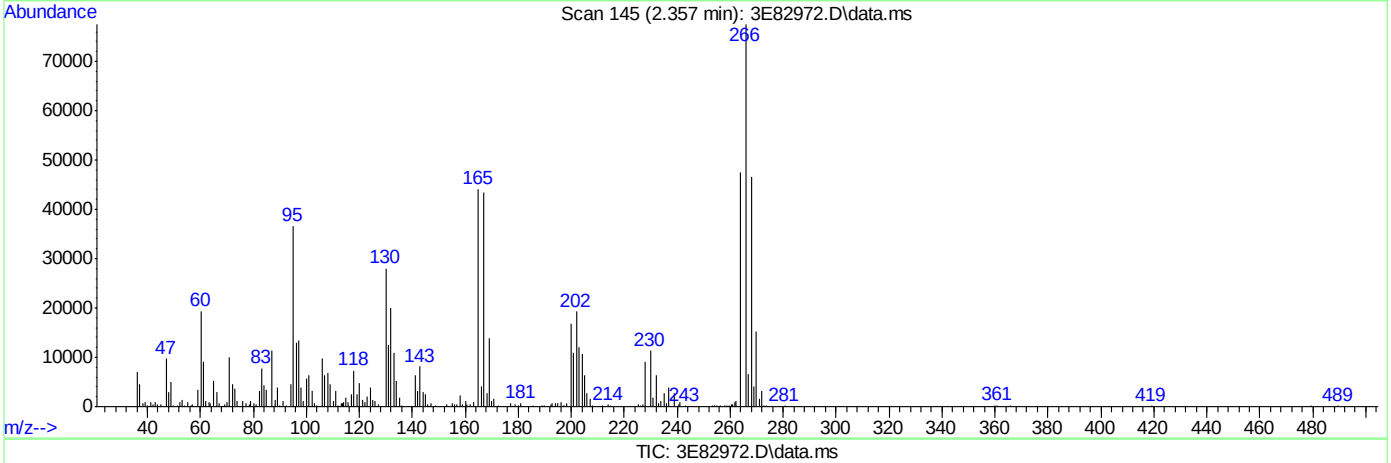
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
389.80	183	414.90	55	430.30	98	436.75	227
390.20	127	416.10	60	431.00	109	437.60	166
391.00	295	417.50	66	431.30	78	438.00	65
391.50	65	419.70	80	431.60	54	438.40	70
394.90	67	421.00	711	432.10	94	438.80	91
398.80	56	422.10	669	433.35	235	439.35	243
401.40	136	422.50	86	433.80	94	441.15	8343
402.10	588	423.10	3590	434.50	107	442.10	49734
403.05	759	424.15	753	435.10	183	443.15	9682
403.90	70	425.45	161	435.90	169	444.15	1141
404.10	176	428.80	108	436.20	61	453.30	75

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3637\
Data File : 3E82972.D
Acq On : 6 May 2016 12:18 pm
Operator : ashleyn
Sample : dftpp
Misc : op93596,e3e3637
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 06 12:25:44 2016
Quant Method : C:\msdchem\1\METHODS\dftpp3e.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25Sat Aug 08 13:07:52 2015
QLast Update : Sat Aug 08 13:07:52 2015
Response via : Initial Calibration





TIC: 3E82972.D\data.ms

(1) Pentachlorophenol (t)

2.357min (-0.064) 51.00ppb

response 79702

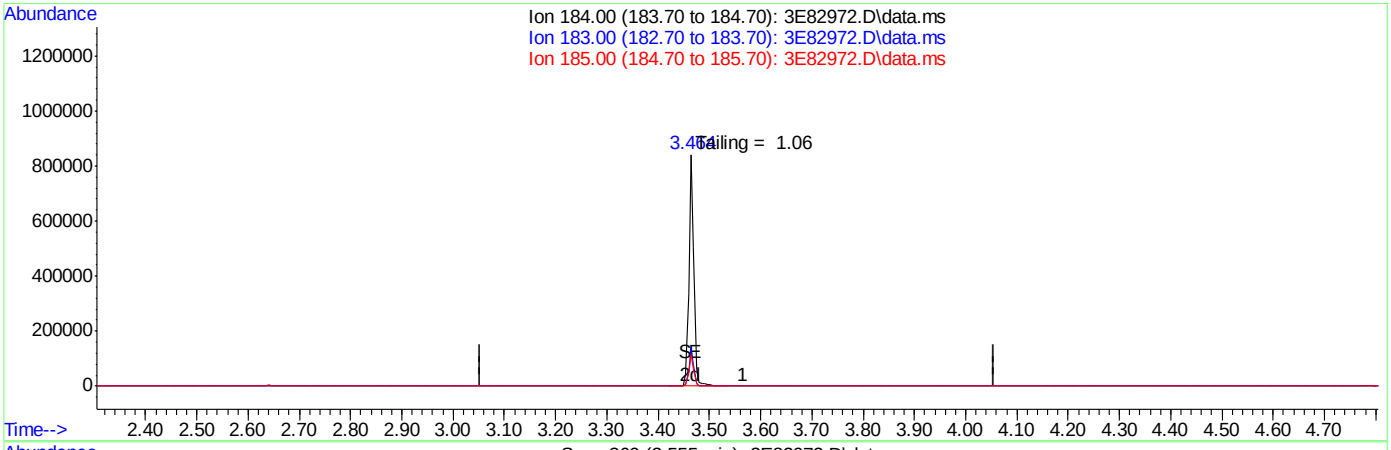
Ion	Exp%	Act%
265.80	100	100
263.80	62.20	61.03
267.80	64.70	59.79
0.00	0.00	0.00

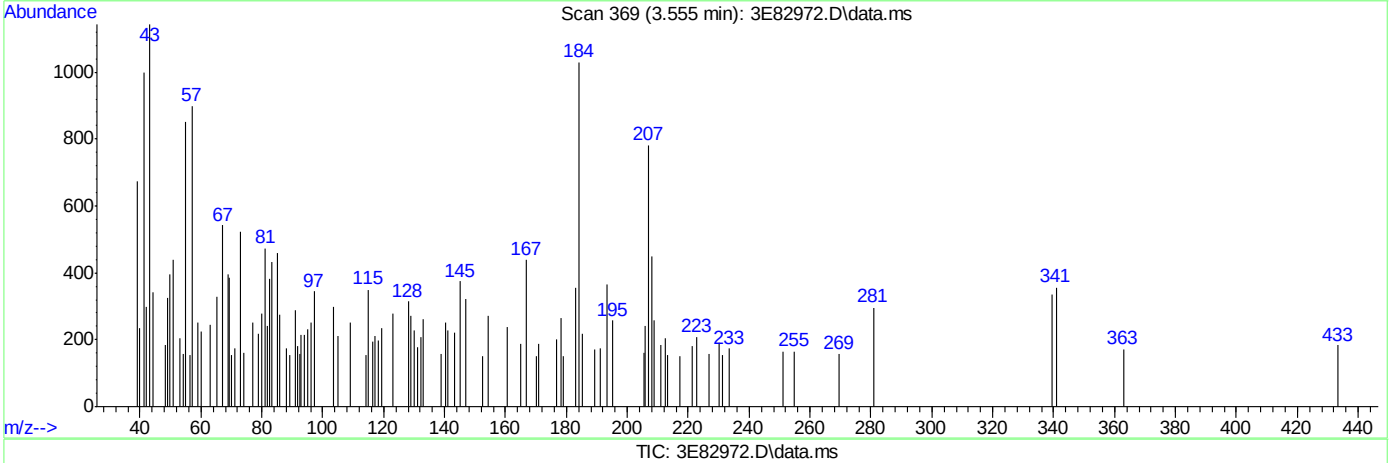
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3637\
Data File : 3E82972.D
Acq On : 6 May 2016 12:18 pm
Operator : ashleyn
Sample : dftpp
Misc : op93596,e3e3637
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 06 12:25:44 2016
Quant Method : C:\msdchem\1\METHODS\dftpp3e.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25Sat Aug 08 13:07:52 2015
QLast Update : Sat Aug 08 13:07:52 2015
Response via : Initial Calibration





TIC: 3E82972.D\data.ms

(2) Benzidine (t)

3.555min 0.00ppb d

response 0

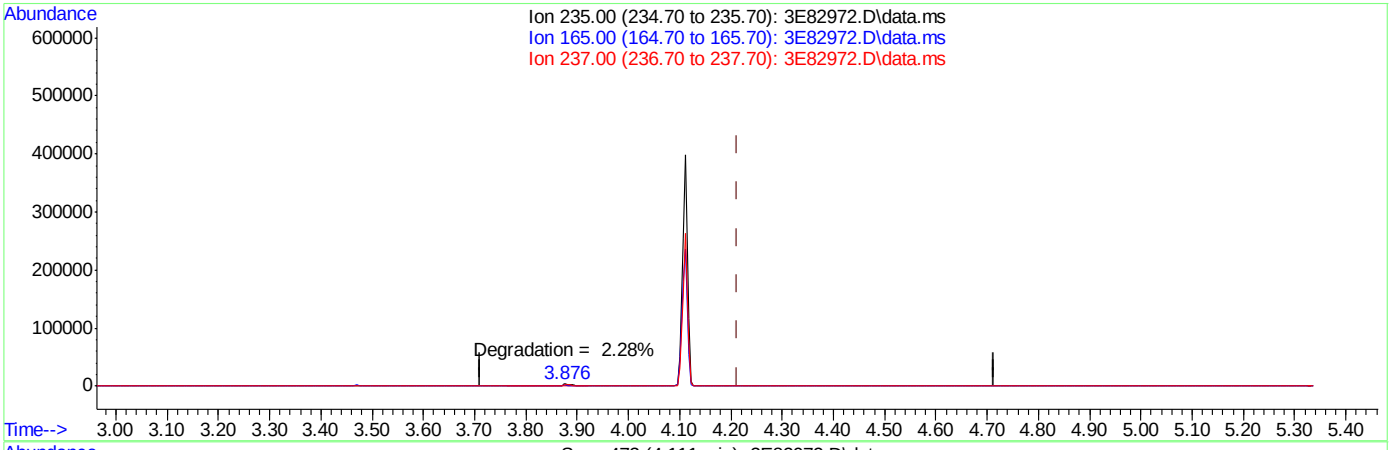
Ion	Exp%	Act%
184.00	100	0.00
183.00	13.20	0.00
185.00	15.40	0.00
0.00	0.00	0.00

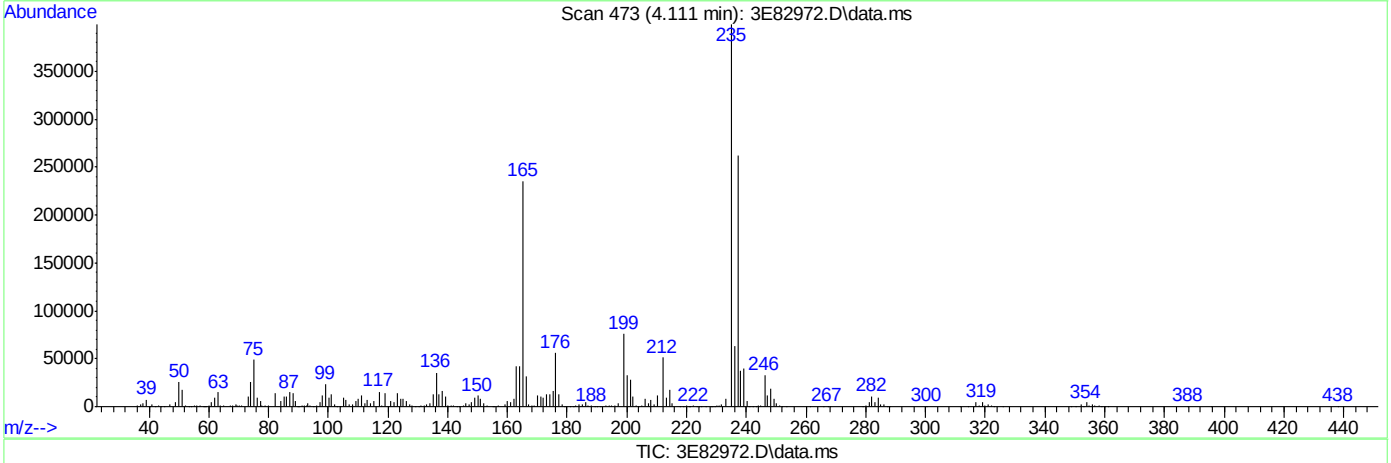
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3637\
Data File : 3E82972.D
Acq On : 6 May 2016 12:18 pm
Operator : ashleyn
Sample : dftpp
Misc : op93596,e3e3637
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 06 12:25:44 2016
Quant Method : C:\msdchem\1\METHODS\dftpp3e.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25Sat Aug 08 13:07:52 2015
QLast Update : Sat Aug 08 13:07:52 2015
Response via : Initial Calibration





TIC: 3E82972.D\data.ms

(3) PP-DDT (t)

4.111min (-0.102) 64.56ppb

response 268015

Ion	Exp%	Act%
235.00	100	100
165.00	0.10	62.21#
237.00	0.10	63.67#
0.00	0.00	0.00

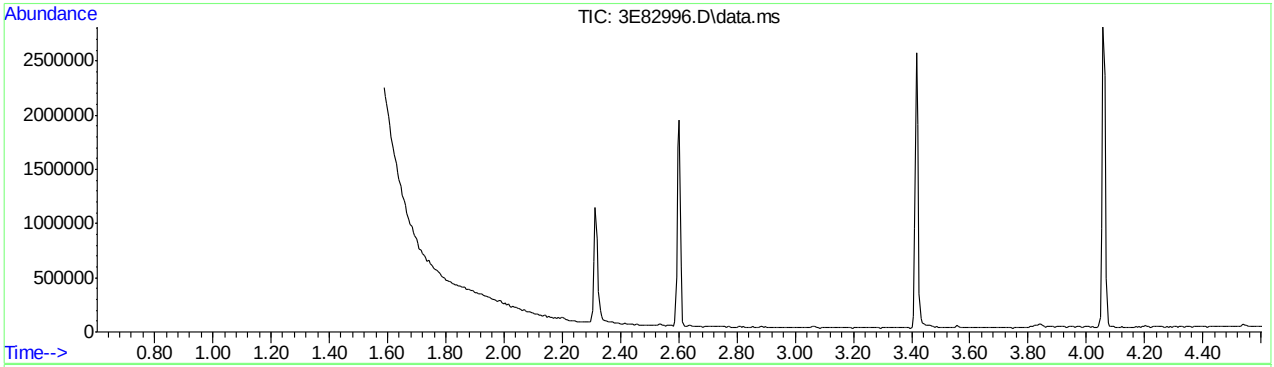
SGS ACCUTEST JC19644

DFTPP

Data Path : C:\msdchem\1\DATA\E3E3639\
Data File : 3E82996.D
Acq On : 9 May 2016 9:27 am
Operator : ashleyn
Sample : dftpp
Misc : op93596,e3e3639
ALS Vial : 1 Sample Multiplier: 1

Integration File: RTEINT.P

Method : C:\msdchem\1\METHODS\dftpp3e.M
Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25Sat Aug 08 13:07:52 2015
Last Update : Sat Aug 08 13:07:52 2015



AutoFind: Scans 190, 191, 192; Background Corrected with Scan 185

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	40.9	57766	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	38.7	54758	PASS
70	69	0.00	2	1.0	546	PASS
127	198	40	60	50.4	71293	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	141402	PASS
199	198	5	9	7.0	9843	PASS
275	198	10	30	28.9	40909	PASS
365	198	1	100	5.4	7668	PASS
441	443	0.10	100	69.5	14728	PASS
442	198	40	100	71.0	100440	PASS
443	442	17	23	21.1	21187	PASS

Average of 2.598 to 2.608 min.: 3E82996.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.10	71	45.05	198	59.85	203	71.05	187
36.00	79	48.95	364	61.05	859	71.85	113
36.50	88	50.05	17592	62.00	920	72.20	95
37.05	134	51.05	57766	63.00	2163	73.05	648
38.05	1217	52.10	2723	64.00	326	74.00	6578
39.05	4596	52.90	114	65.00	1040	75.05	10200
40.00	234	55.10	931	65.95	243	76.20	2844
41.10	4	56.10	2315	66.20	92	77.10	58917
41.95	486	57.05	3930	67.20	353	78.05	4269
43.15	69	58.00	36	69.00	54758	79.00	5013
44.00	235	59.30	56	70.05	546	80.05	2998

Average of 2.598 to 2.608 min.: 3E82996.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
81.00	5239	92.10	1376	101.00	2948	112.80	116
82.05	861	93.00	9597	102.15	233	113.00	200
83.05	823	93.70	110	103.00	743	113.70	182
83.75	485	93.95	566	103.20	127	115.15	486
85.05	984	94.20	103	104.05	1575	116.00	186
86.00	1484	95.10	81	105.00	1877	117.05	24024
86.95	472	96.05	274	107.00	21848	118.05	1975
87.85	216	97.05	498	108.00	3306	118.80	118
88.10	203	98.00	7139	110.05	33402	120.05	434
88.95	159	99.05	5465	111.00	5027	121.15	439
91.00	711	99.90	523	112.10	1112	122.00	1848

Average of 2.598 to 2.608 min.: 3E82996.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
123.00	2417	133.10	198	142.10	831	150.00	303
124.10	1452	134.10	1232	142.60	103	151.05	739
124.95	1141	135.05	2724	143.10	1200	151.75	605
127.05	71293	136.10	1188	143.95	454	153.05	1591
128.05	6099	137.00	1200	144.80	102	153.90	369
129.05	32726	138.20	268	145.10	623	154.20	597
130.05	3062	139.00	85	146.00	1225	155.10	2608
131.00	574	139.90	210	147.05	2237	156.05	3483
131.85	348	140.10	373	148.00	5492	157.05	655
132.30	55	141.05	4574	149.00	1066	157.80	413
132.50	67	141.90	478	149.80	164	158.10	609

Average of 2.598 to 2.608 min.: 3E82996.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
159.05	689	166.20	64	175.00	1898	183.30	147
159.70	178	167.00	8853	175.20	1305	183.80	102
159.95	1252	168.10	3961	175.90	200	184.05	823
161.00	1991	168.95	1028	176.05	625	184.95	1568
161.95	759	169.95	529	176.80	113	186.10	22230
162.20	105	170.80	198	177.05	1139	187.10	6301
163.00	367	171.00	200	177.90	148	188.00	1100
164.10	176	171.90	289	178.95	6179	189.05	1696
164.70	266	172.20	493	180.00	3718	190.25	278
165.00	1640	173.05	857	181.05	1840	191.15	1015
166.00	692	174.00	1735	182.10	530	192.05	2164

Average of 2.598 to 2.608 min.: 3E82996.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
193.05	2434	203.00	1199	211.85	389	220.20	268
193.80	104	204.10	7147	212.65	196	221.10	5188
194.00	341	205.10	10813	213.05	35	221.70	157
194.90	307	206.05	40658	214.05	152	222.00	1638

dftpp3e.M Mon May 09 11:56:26 2016 MS3E Page: 2

196.05	4243	207.05	6142	214.95	760	222.30	140
198.00	141402	208.00	1557	216.20	409	223.10	3076
199.05	9843	209.00	53	217.00	13461	224.10	24193
200.10	859	209.40	277	218.05	1478	225.05	5479
201.20	79	210.10	933	219.00	414	225.95	455
201.45	602	210.90	725	219.60	94	227.05	11271
201.80	131	211.15	944	219.75	459	228.10	2071

Average of 2.598 to 2.608 min.: 3E82996.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
228.95	2490	235.15	569	245.10	2615	253.05	550
230.05	310	236.00	278	246.10	5182	255.10	93877
230.30	76	236.20	303	247.05	938	256.10	12901
231.00	319	236.95	697	248.00	175	257.05	1268
231.20	576	238.20	79	249.00	718	258.10	6889
231.80	171	239.20	645	250.00	148	259.10	1133
232.50	84	240.00	418	251.00	482	260.00	325
232.80	62	241.10	931	251.60	180	261.30	114
233.00	237	242.05	1578	251.80	101	262.95	280
234.05	864	243.10	1722	252.10	385	263.40	81
234.90	74	244.10	15710	252.40	68	263.95	189

Average of 2.598 to 2.608 min.: 3E82996.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
265.00	2828	271.95	611	283.05	659	291.70	130
265.90	179	273.10	3154	284.10	461	291.90	75
267.05	359	274.10	8383	285.10	796	292.25	312
268.00	43	275.10	40909	286.25	157	293.00	917
268.70	61	276.10	5748	287.30	68	294.05	398
269.00	103	277.05	4062	287.90	54	294.50	93
269.30	79	278.05	704	288.50	146	295.20	227
269.90	123	278.95	51	289.00	102	296.10	14685
270.20	187	280.30	65	290.00	292	297.00	1761
270.40	60	282.05	241	290.80	102	299.20	65
271.20	274	282.90	14	291.10	119	300.80	95

Average of 2.598 to 2.608 min.: 3E82996.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
301.10	97	311.40	59	322.00	140	332.05	424
302.00	454	312.05	186	322.20	116	333.20	690
303.00	627	313.05	273	323.10	4360	334.10	2638
303.15	970	314.05	693	324.05	756	335.05	635
304.00	530	315.05	1626	325.15	268	336.00	98
304.90	52	316.15	895	325.95	155	337.60	66
305.90	66	317.25	176	327.00	722	339.10	100
307.10	66	318.80	84	327.90	373	340.10	96
307.95	244	319.90	132	328.10	132	341.00	465
309.00	93	320.40	52	328.95	194	341.20	147
309.90	134	321.15	745	331.05	104	341.90	80

Average of 2.598 to 2.608 min.: 3E82996.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
342.20	67	357.05	221	367.60	50	383.05	703
345.00	51	358.00	72	369.90	79	384.10	127
346.05	1107	359.10	107	370.20	110	384.60	50
347.15	224	359.40	103	371.05	406	389.90	192
350.10	63	361.30	55	372.10	2564	390.20	170
350.80	65	363.40	165	373.10	231	391.05	113
351.20	156	364.00	147	373.25	520	392.10	225
352.00	1207	365.10	7668	375.40	50	394.40	52
353.05	910	366.05	1080	376.90	62	398.30	87
354.10	1379	366.60	82	380.20	68	400.50	59
354.90	320	367.10	103	382.30	66	402.10	960

Average of 2.598 to 2.608 min.: 3E82996.D\data.ms

dftpp3e.M Mon May 09 11:56:26 2016 MS3E Page: 3

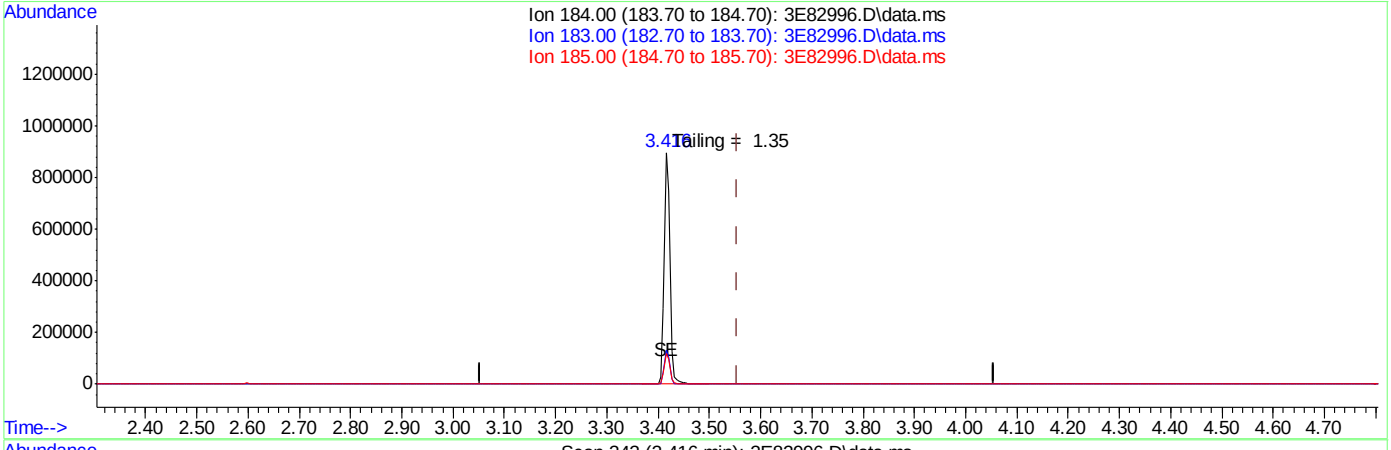
dftpp
Modified:subtracted

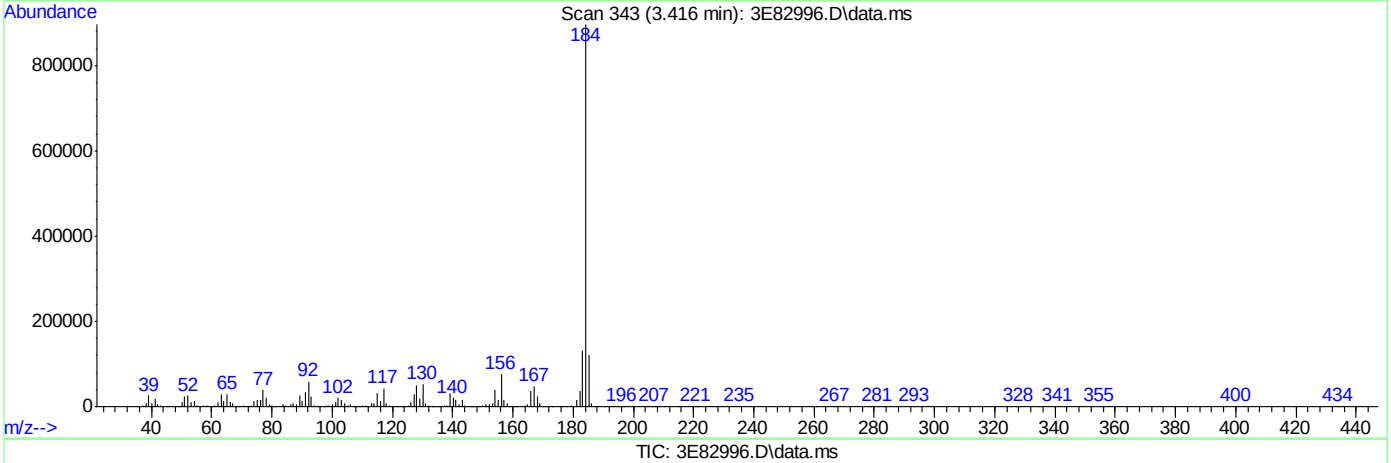
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
403.05	844	424.15	1337	432.80	105	439.30	58
404.15	509	424.85	184	433.30	54	439.60	121
404.90	66	425.40	172	433.60	97	441.15	14728
410.10	67	426.00	52	434.00	147	442.10	100440
411.30	68	427.70	51	435.00	50	443.10	21187
418.10	71	428.30	156	435.30	123	444.10	1723
419.00	51	428.90	101	436.20	160	445.40	62
420.00	104	429.30	127	436.60	60	460.20	58
420.95	948	431.30	73	437.50	308	479.50	56
422.05	915	431.90	109	437.70	68	480.90	52
423.15	6991	432.55	150	438.90	149		

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3639\
Data File : 3E82996.D
Acq On : 9 May 2016 9:27 am
Operator : ashleyn
Sample : dftpp
Misc : op93596,e3e3639
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 09 09:34:55 2016
Quant Method : C:\msdchem\1\METHODS\dftpp3e.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25Sat Aug 08 13:07:52 2015
QLast Update : Sat Aug 08 13:07:52 2015
Response via : Initial Calibration





TIC: 3E82996.D\data.ms

(2) Benzidine (t)

3.416min (-0.139) 66.71ppb

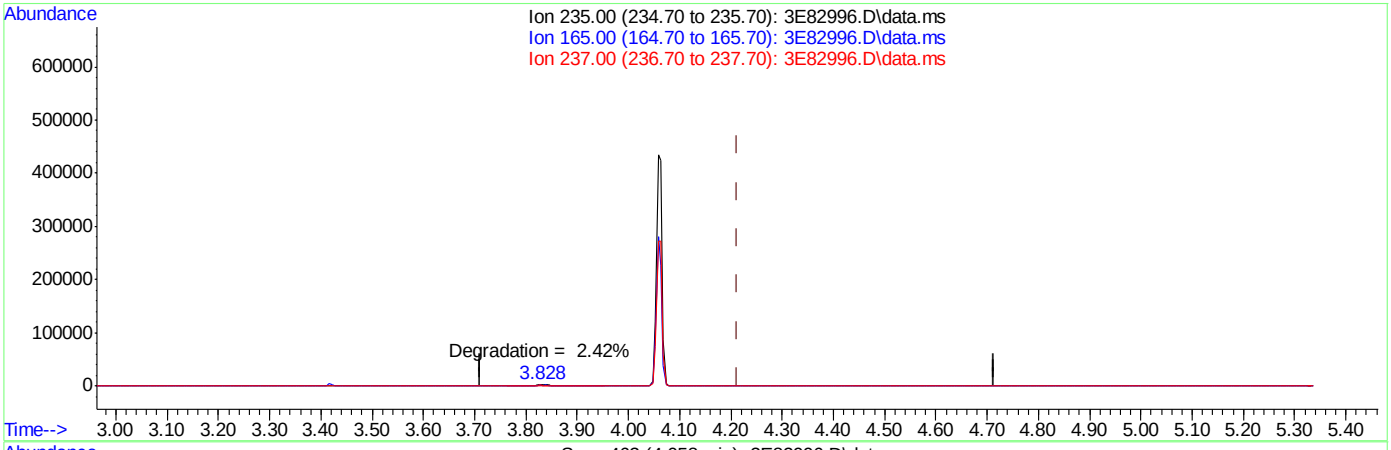
response 700486

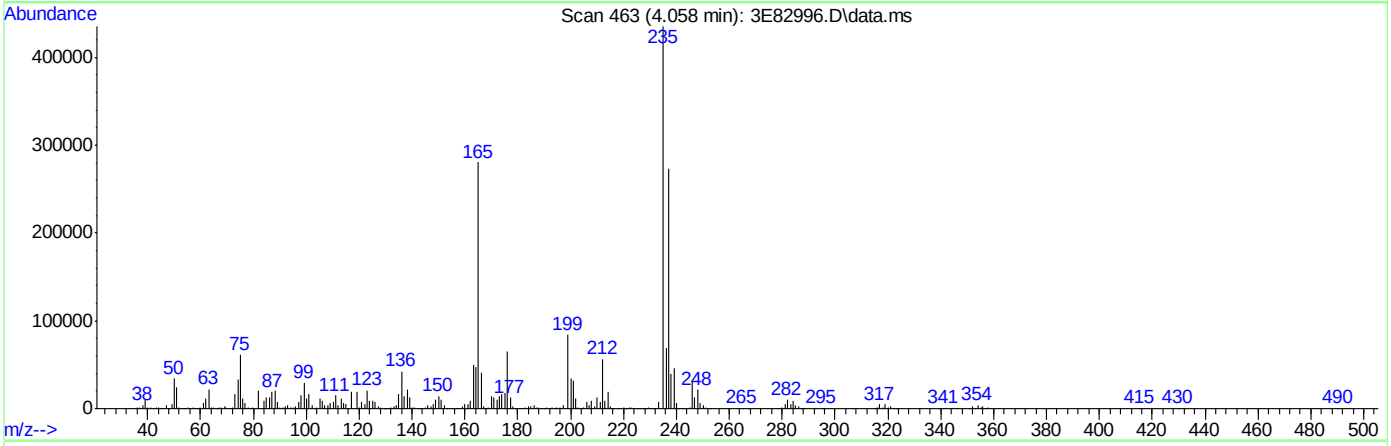
Ion	Exp%	Act%
184.00	100	100
183.00	13.20	14.57
185.00	15.40	13.42
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3639\
Data File : 3E82996.D
Acq On : 9 May 2016 9:27 am
Operator : ashleyn
Sample : dftpp
Misc : op93596,e3e3639
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 09 09:34:55 2016
Quant Method : C:\msdchem\1\METHODS\dftpp3e.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25Sat Aug 08 13:07:52 2015
QLast Update : Sat Aug 08 13:07:52 2015
Response via : Initial Calibration





TIC: 3E82996.D\data.ms

(3) PP-DDT (t)

4.058min (-0.155) 83.62ppb

response 347161

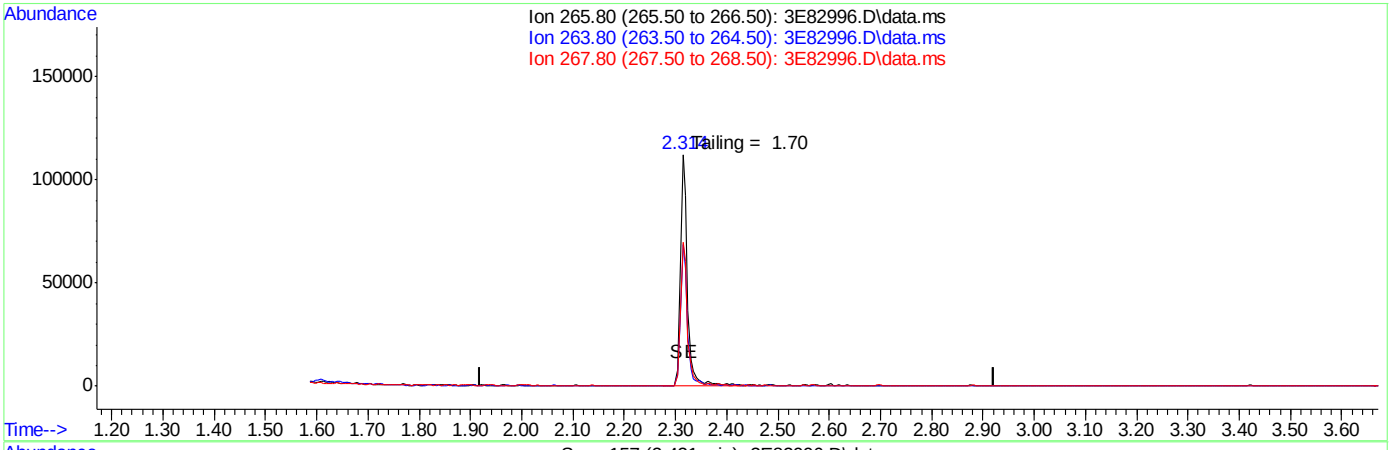
Ion	Exp%	Act%
235.00	100	100
165.00	0.10	60.01#
237.00	0.10	63.92#
0.00	0.00	0.00

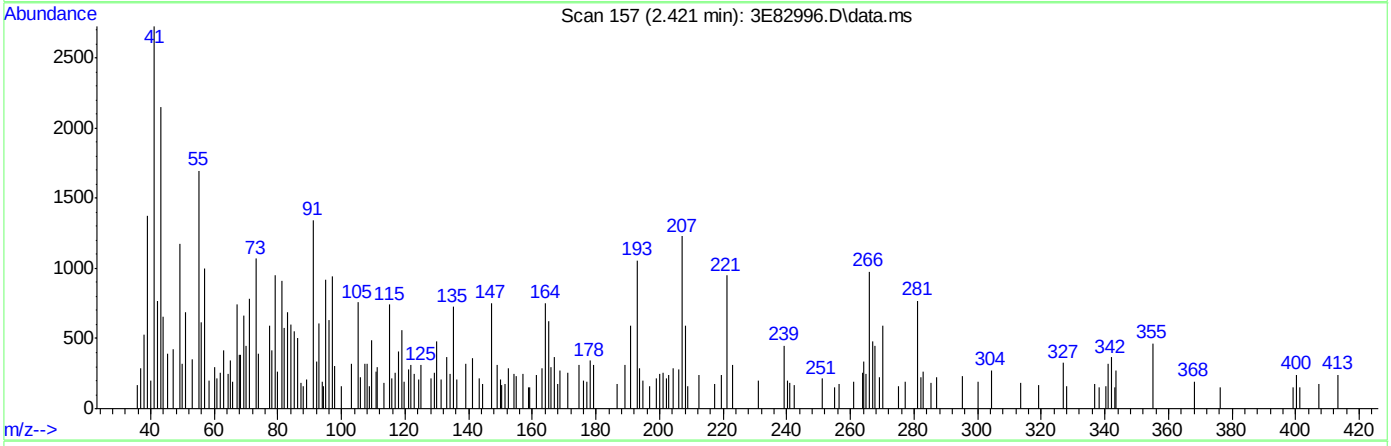
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3639\
Data File : 3E82996.D
Acq On : 9 May 2016 9:27 am
Operator : ashleyn
Sample : dftpp
Misc : op93596,e3e3639
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 09 09:34:55 2016
Quant Method : C:\msdchem\1\METHODS\dftpp3e.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25Sat Aug 08 13:07:52 2015
QLast Update : Sat Aug 08 13:07:52 2015
Response via : Initial Calibration





TIC: 3E82996.D\data.ms

(1) Pentachlorophenol (t)

2.421min 0.00ppb d

response 0

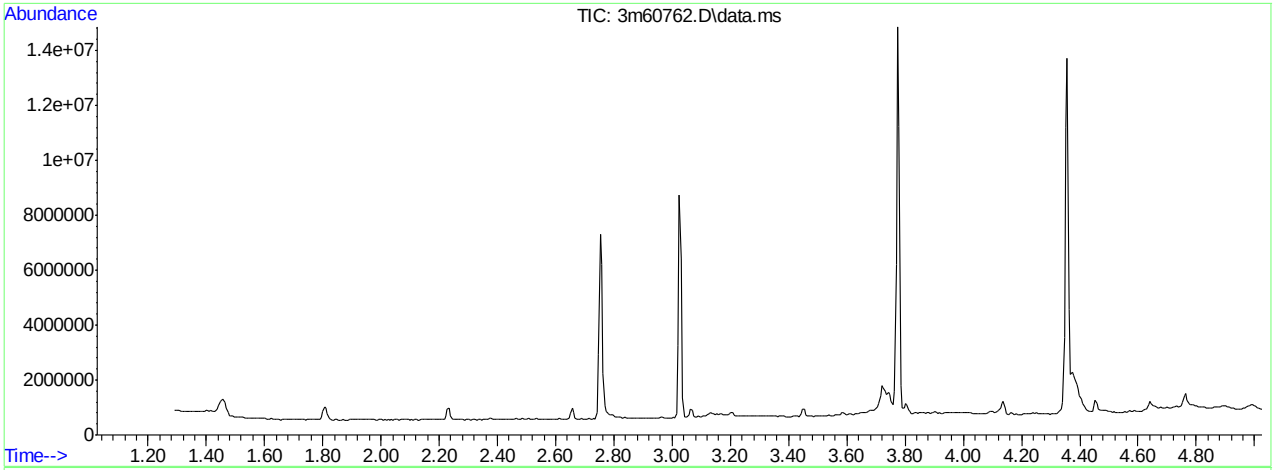
Ion	Exp%	Act%
265.80	100	0.00
263.80	62.20	0.00
267.80	64.70	0.00
0.00	0.00	0.00

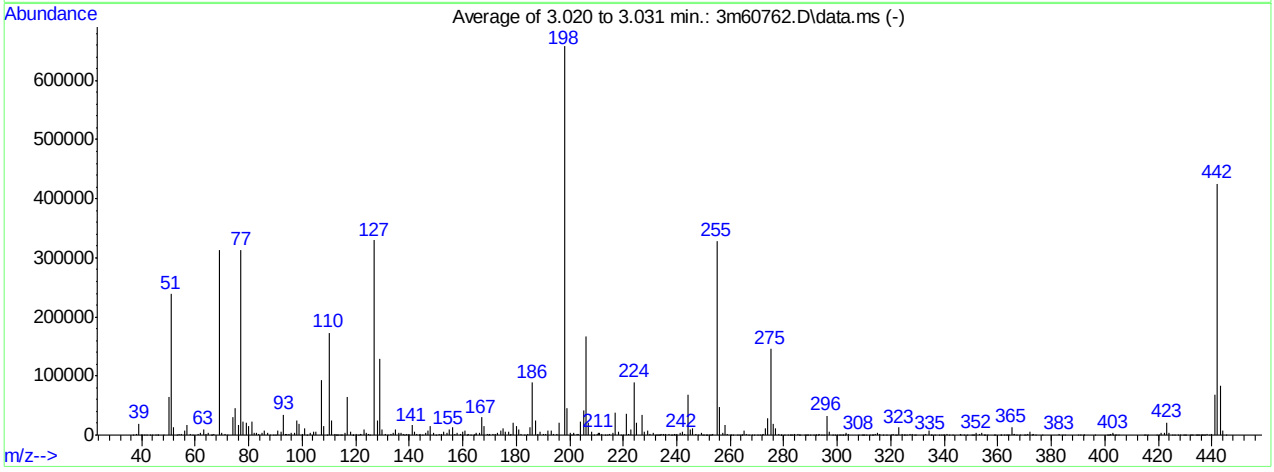
SGS ACCUTEST JC19644

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

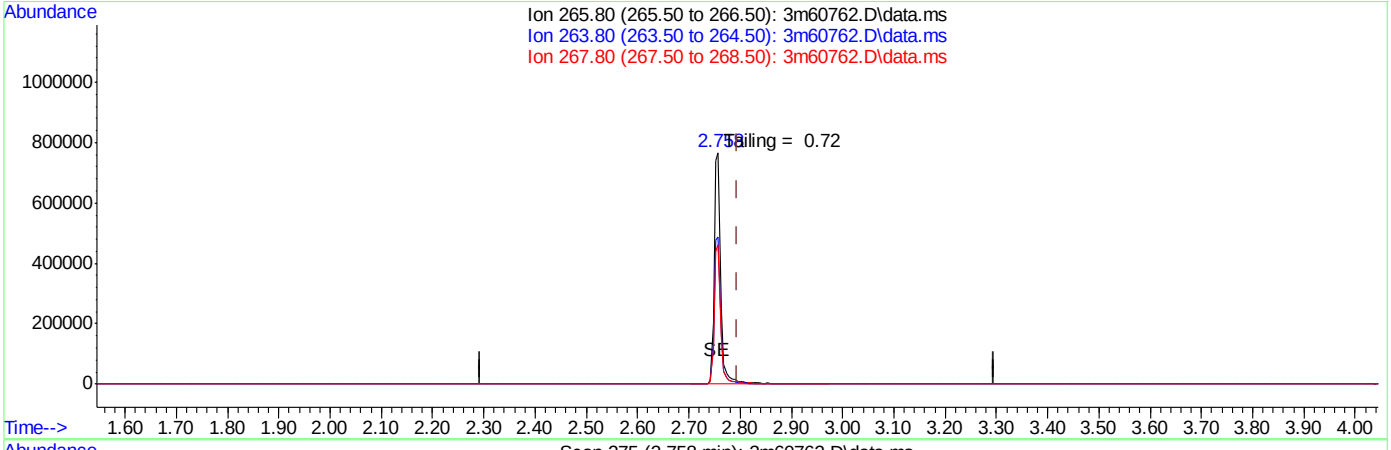
dftpp
Modified:subtracted

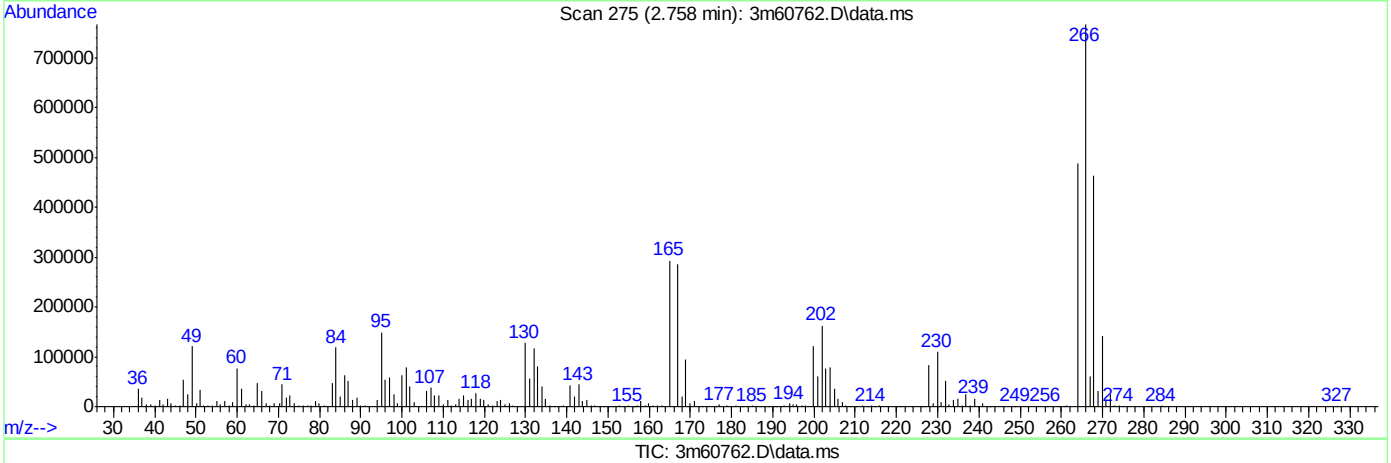
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
423.10	21736	432.90	494	438.80	912		
424.10	4461	433.85	400	439.90	2031		
425.00	512	434.50	189	441.10	68134		
426.10	183	434.80	226	442.10	425304		
427.20	203	435.40	731	443.10	83298		
428.30	259	435.90	455	444.10	7637		
429.50	82	436.25	476	445.10	306		
429.70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





(1) Pentachlorophenol (t)

2.758min (-0.037) 190.28ppb

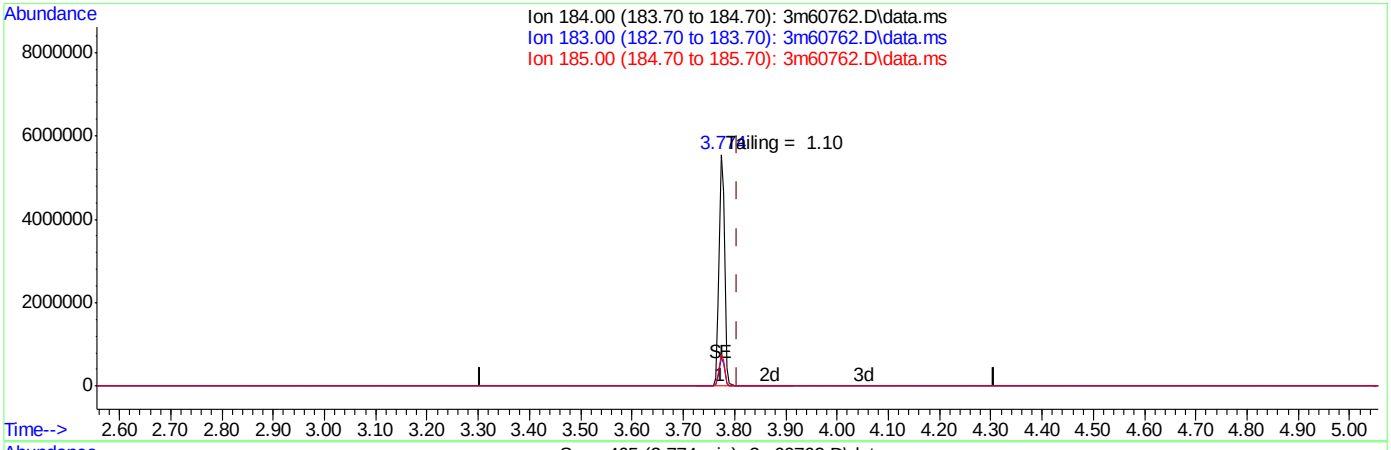
response 701808

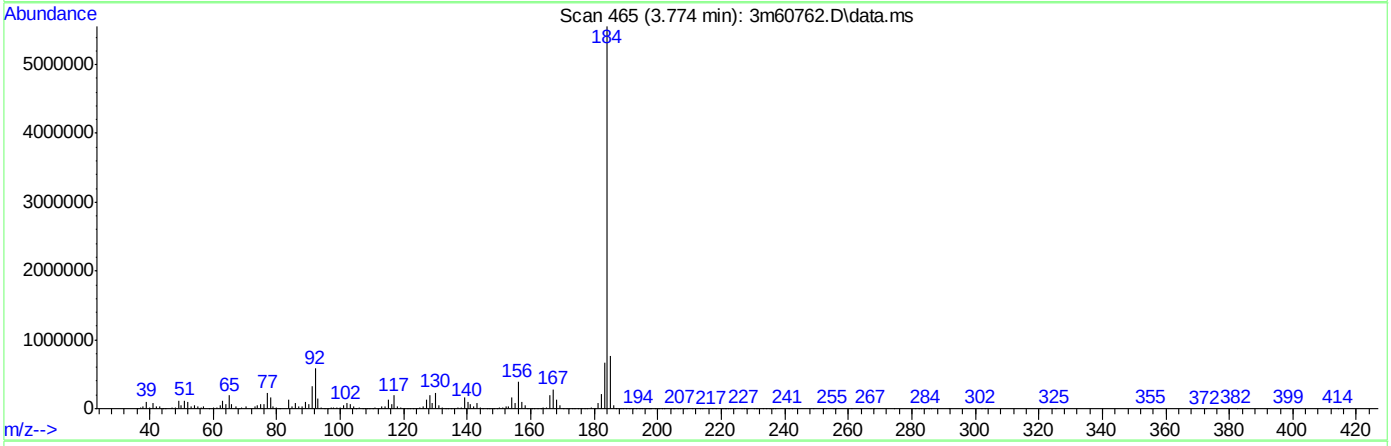
Ion	Exp%	Act%
265.80	100	100
263.80	62.80	63.64
267.80	64.10	60.34
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60762.D
Acq On : 21 Apr 2016 1:31 pm
Operator : linseyk
Sample : dftpp
Misc : op93052a,e3m2855
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 21 13:36:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP3M.M
Quant Title : DFTPP, RXI-5MS 30m x .25mm x .25um
QLast Update : Wed Dec 09 10:32:40 2015
Response via : Initial Calibration





TIC: 3m60762.D\data.ms

(2) Benzidine (t)

3.774min (-0.032) 229.17ppb

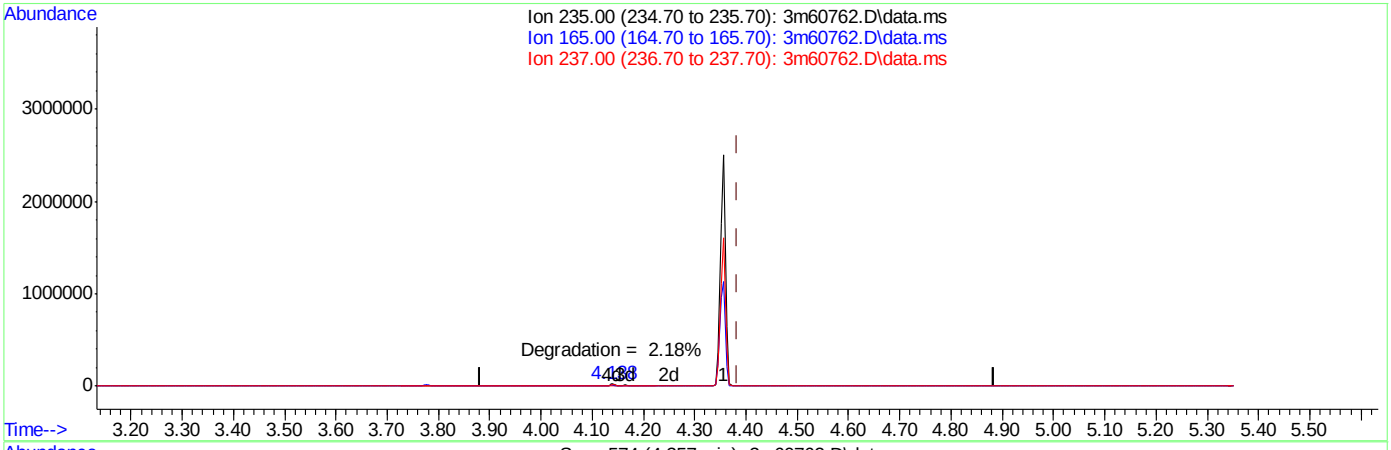
response 4170192

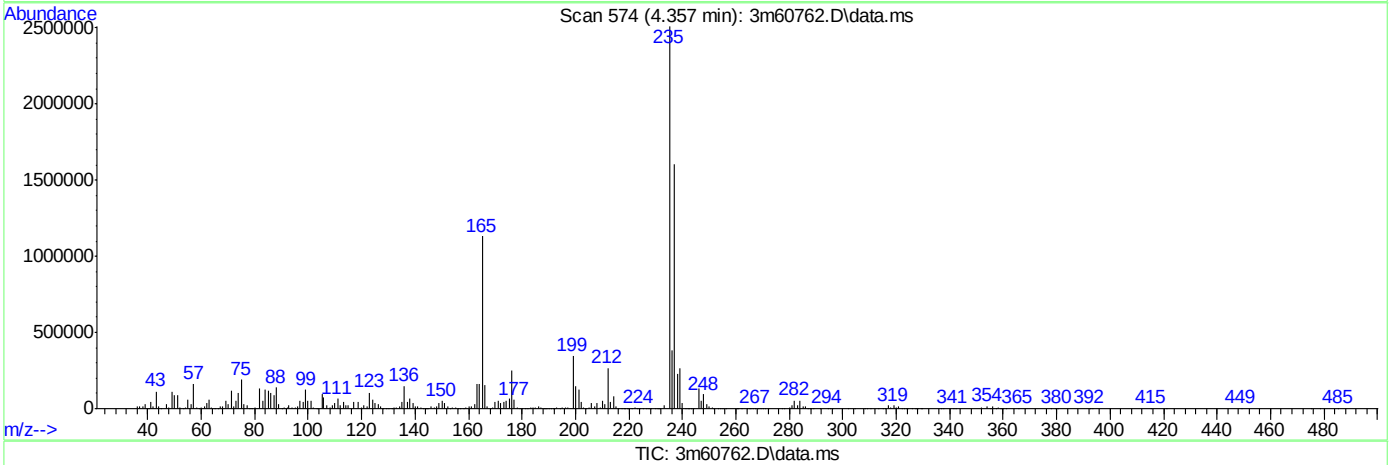
Ion	Exp%	Act%
184.00	100	100
183.00	11.50	12.07
185.00	14.40	13.67
0.00	0.00	0.00

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

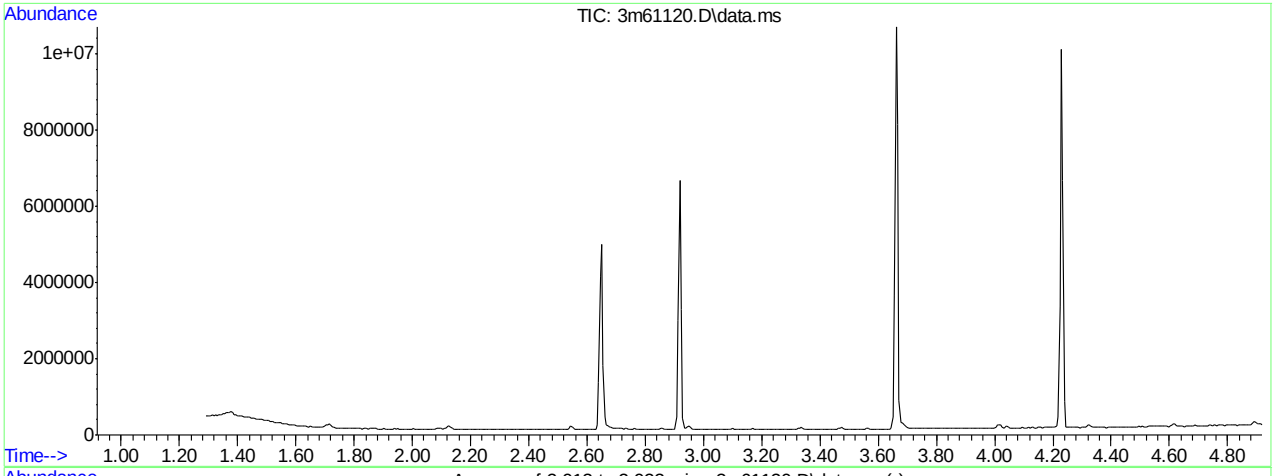
Ion	Exp%	Act%
235.00	100	100
165.00	0.00	48.45#
237.00	0.00	63.48#
0.00	0.00	0.00

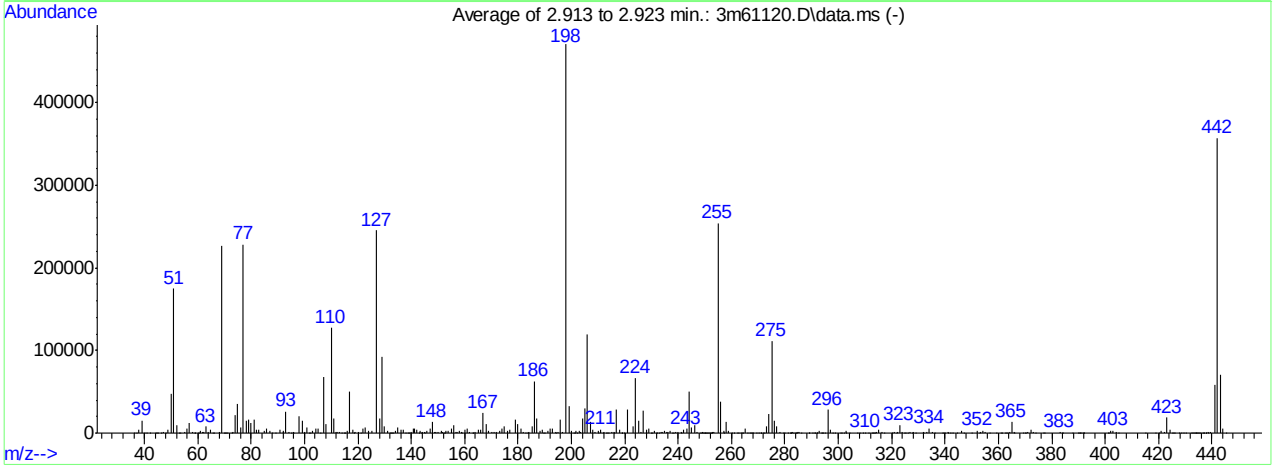
SGS ACCUTEST JC19644

DFTPP

Data File : C:\msdchem\1\DATA\E3M2874\3m61120.D Vial: 1
Acq On : 6 May 2016 9:12 am Operator: linseyk
Sample : dftpp Inst : MS3M
Misc : op93629a,e3m2874 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 304, 305, 306; Background Corrected with Scan 299

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	37.1	174615	PASS
68	69	0.00	2	0.4	971	PASS
69	198	0.00	100	48.2	226769	PASS
70	69	0.00	2	0.2	434	PASS
127	198	40	60	52.2	245269	PASS
197	198	0.00	1	0.4	1647	PASS
198	198	100	100	100.0	470251	PASS
199	198	5	9	6.8	32030	PASS
275	198	10	30	23.7	111349	PASS
365	198	1	100	2.8	13182	PASS
441	443	0.10	100	82.8	57951	PASS
442	198	40	100	75.9	356808	PASS
443	442	17	23	19.6	69960	PASS

3m61120.D DFTPP3M.M Fri May 06 14:13:30 2016 RPT1

Average of 2.913 to 2.923 min.: 3m61120.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	255	46.95	1019	58.05	768	65.80	147
37.00	636	47.95	73	58.70	161	66.10	347
38.00	3442	49.00	3888	59.05	149	68.10	971
39.05	15595	49.95	47775	60.10	210	69.00	226769
40.00	510	51.00	174615	60.60	221	69.95	268
41.00	622	52.00	10006	61.15	2548	70.20	434
42.10	335	52.95	226	61.90	1135	70.60	119
44.00	439	53.30	95	62.05	1442	70.95	306
44.70	223	55.15	1198	63.00	8081	72.80	483
44.95	599	56.00	5845	64.05	1008	73.05	986
46.20	155	56.95	12345	64.95	3988	74.00	22147

Average of 2.913 to 2.923 min.: 3m61120.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
75.00	35296	86.95	2090	98.00	19860	107.95	11194
76.20	6845	87.90	490	99.00	14983	110.00	126888
77.00	228383	89.20	692	99.95	1723	110.95	17266
78.05	15298	91.00	4063	100.90	7391	111.85	1008
79.00	16749	92.00	1440	101.80	234	112.10	1783
79.95	12135	92.20	2695	102.00	492	112.95	827
81.00	16324	93.00	26305	102.95	3171	114.00	96
82.00	4456	94.05	2038	104.05	5688	114.70	205
82.95	4020	95.00	535	105.05	5989	115.00	639
85.00	2722	95.90	272	106.10	508	115.95	3146
85.90	5509	96.05	1116	107.00	67973	117.00	50192

Average of 2.913 to 2.923 min.: 3m61120.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
117.90	4165	128.95	92209	138.00	328	144.90	901
118.60	105	130.00	7602	138.65	323	145.10	145
119.05	991	130.95	2179	139.15	306	146.00	2568
120.10	997	131.85	552	139.90	1459	147.00	5509
121.00	360	132.45	385	140.85	5084	147.90	13136
121.95	5095	133.00	403	141.10	5924	148.90	1197
122.90	6449	133.30	387	142.05	4257	149.15	1953
123.95	3250	134.05	2643	142.90	600	150.10	930
125.05	3199	135.00	6554	143.10	2244	151.10	2123
127.00	245269	136.05	3449	143.80	179	151.75	1110
128.00	17829	136.95	3789	144.15	800	152.00	384

Average of 2.913 to 2.923 min.: 3m61120.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
152.70	731	161.00	5533	170.95	1164	182.75	573
153.00	3129	161.90	2076	172.00	1979	183.50	186
154.00	3178	162.90	579	172.95	2875	183.80	287
155.00	5802	163.10	111	174.05	5038	184.05	1326
156.00	9555	164.05	883	175.00	8778	185.10	8220
156.90	838	164.95	4077	176.00	3112	186.05	62808
157.10	1743	166.00	4157	177.05	4002	187.00	17777
157.95	2435	166.90	24063	178.95	16681	188.10	2218
158.80	404	168.05	11140	180.05	11168	188.95	3967
159.00	1446	169.00	2090	181.05	5738	189.70	341
159.95	3780	170.00	880	182.00	915	189.95	637

Average of 2.913 to 2.923 min.: 3m61120.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
191.05	2431	200.80	349	209.00	1874	215.90	725
192.05	5393	201.40	717	210.00	617	216.10	1727
192.95	5261	201.60	2210	210.25	2532	217.00	28680
194.00	324	202.00	255	210.90	1025	217.95	4151

194.15	987	202.95	2794	211.10	4334	218.80	159
194.95	1590	203.20	1216	211.70	430	219.10	528
196.00	16121	204.05	17417	212.10	1012	219.60	142
196.70	1647	205.10	29488	212.90	330	221.10	28865
198.00	470251	206.05	119576	213.30	86	223.00	7950
199.00	32030	207.05	14085	213.90	91	224.05	67024
199.95	2460	208.00	3896	215.10	1931	225.05	15455

Average of 2.913 to 2.923 min.: 3m61120.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
226.10	1291	233.80	822	241.30	210	249.60	156
227.00	26955	234.00	781	242.15	3556	249.80	325
227.95	4328	235.00	2168	243.10	5061	250.10	163
228.20	1009	235.75	875	244.05	50211	250.40	90
229.00	5006	236.10	1101	245.05	6312	250.70	329
229.75	496	237.05	2692	246.05	9780	251.20	191
230.20	452	237.90	198	247.00	1788	251.70	191
231.00	2382	238.15	371	248.25	476	252.05	523
231.90	145	239.05	1292	248.70	222	252.30	335
232.10	431	240.05	1241	249.00	1672	252.70	446
232.95	623	241.05	1448	249.20	285	253.00	943

Average of 2.913 to 2.923 min.: 3m61120.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
253.30	1255	263.40	92	270.90	244	280.00	74
255.00	253739	263.95	683	271.05	647	280.90	131
256.05	37672	264.20	335	271.80	296	281.70	144
257.00	2220	264.95	5203	272.10	345	282.20	73
257.20	701	265.85	609	273.05	8178	282.50	239
258.00	13971	266.90	94	274.10	22640	282.80	794
259.00	2642	267.15	325	275.05	111349	283.00	411
259.95	448	267.50	220	276.05	14496	283.80	167
261.00	525	268.20	192	277.05	8438	284.10	587
262.00	83	269.45	318	278.00	1383	284.30	228
262.70	96	269.95	422	279.30	162	284.80	822

Average of 2.913 to 2.923 min.: 3m61120.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
285.10	829	294.00	495	303.10	3053	314.15	1304
285.95	415	294.20	132	304.10	463	315.10	3695
288.85	294	294.80	316	307.20	155	316.20	1646
289.10	116	296.00	28097	308.10	444	317.05	235
290.30	175	297.10	3811	309.05	251	320.00	187
291.00	238	297.85	222	310.10	581	321.05	1139
291.20	122	298.70	190	311.20	115	321.90	117
291.90	269	300.75	340	312.70	81	322.15	918
292.10	265	301.10	103	312.95	249	323.05	9545
293.00	2247	301.95	344	313.30	92	324.05	1481
293.80	172	302.70	391	313.90	81	324.90	116

Average of 2.913 to 2.923 min.: 3m61120.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
325.10	110	336.10	267	350.00	105	363.00	74
326.00	217	339.10	76	352.10	2930	363.50	139
326.95	1789	339.60	104	353.00	534	364.05	764
327.80	307	340.00	168	353.15	1873	365.00	13182
328.00	932	340.95	1285	354.05	2535	365.80	116
329.00	134	341.20	372	355.10	749	366.05	1826
331.70	75	342.05	307	356.70	140	369.40	80
332.10	990	342.90	104	359.05	336	370.00	257
333.25	1259	344.30	146	361.00	80	370.20	183
334.10	5899	346.00	2133	361.50	84	371.10	1381
335.05	1489	347.10	526	362.40	145	372.10	4714

Average of 2.913 to 2.923 min.: 3m61120.D\data.ms

dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
373.05	1339	390.90	106	418.75	165	429.20	295
373.80	221	391.35	215	420.20	222	430.15	222
376.90	74	391.80	253	421.10	3203	432.20	172
377.30	110	392.05	163	422.10	1920	432.90	213
383.00	1359	401.00	325	423.10	18740	433.30	78
383.80	217	401.20	136	424.10	4388	433.50	125
384.00	171	402.10	2144	425.00	437	433.80	86
387.70	136	402.95	2791	425.50	83	434.00	145
389.70	170	404.00	947	426.10	107	434.40	142
390.10	688	405.10	117	427.50	94	434.70	133
390.70	312	414.95	266	428.30	135	435.20	414

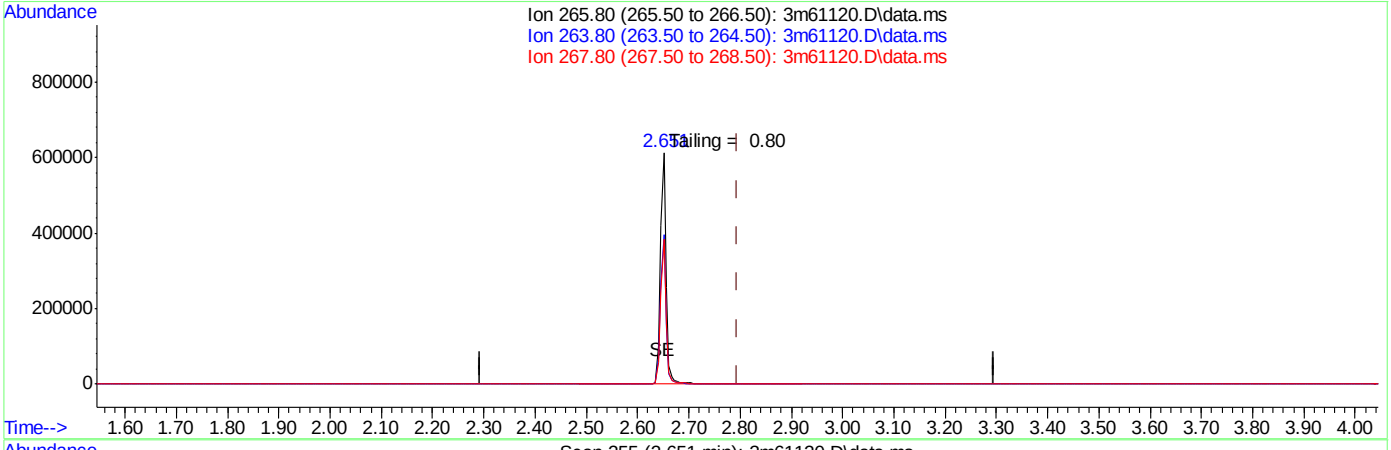
Average of 2.913 to 2.923 min.: 3m61120.D\data.ms
dftpp
Modified:subtracted

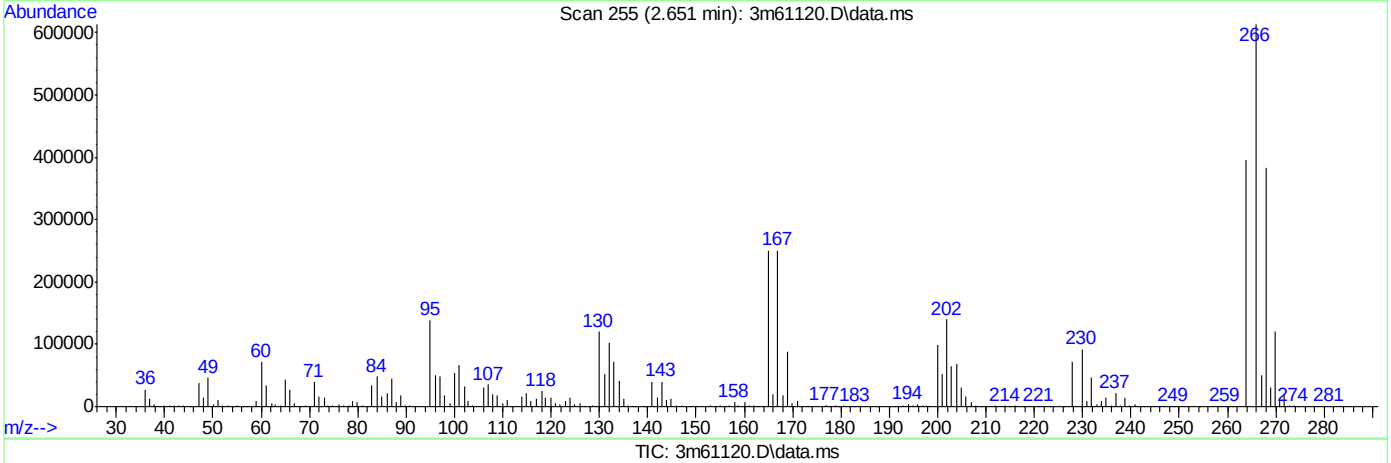
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
435.60	100	443.10	69960				
436.30	174	444.10	5994				
436.70	341	445.10	658				
436.95	512						
437.60	269						
437.90	658						
438.50	166						
438.75	1795						
439.35	1635						
441.10	57951						
442.10	356808						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2874\
Data File : 3m61120.D
Acq On : 6 May 2016 9:12 am
Operator : linseyk
Sample : dftpp
Misc : op93629a,e3m2874
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 06 09:16:19 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: 3m61120.D\data.ms

(1) Pentachlorophenol (t)

2.651min (-0.144) 131.71ppb

response 485792

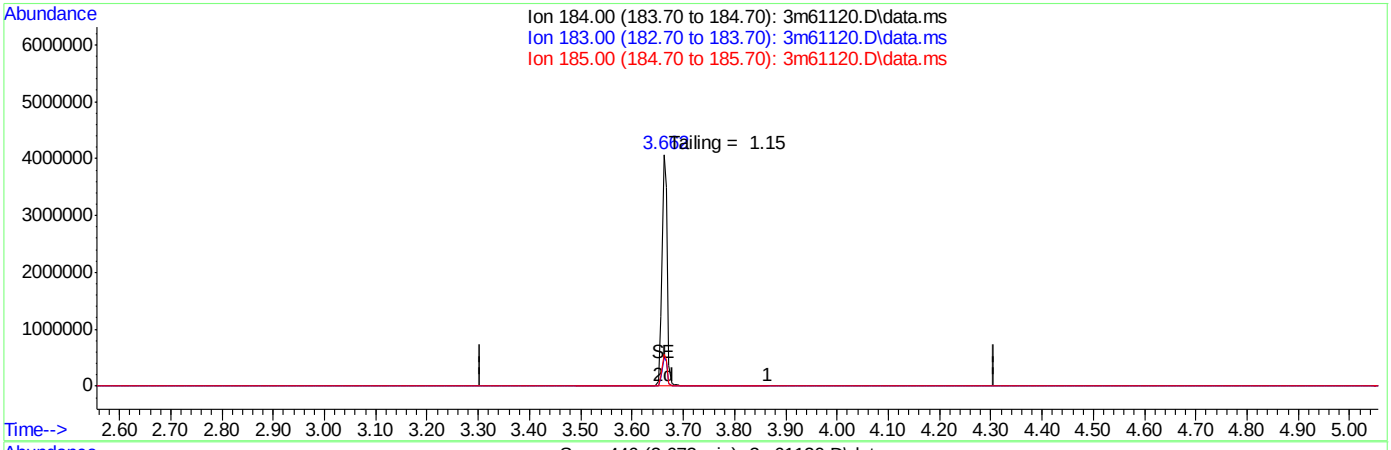
Ion	Exp%	Act%
265.80	100	100
263.80	62.80	64.53
267.80	64.10	62.32
0.00	0.00	0.00

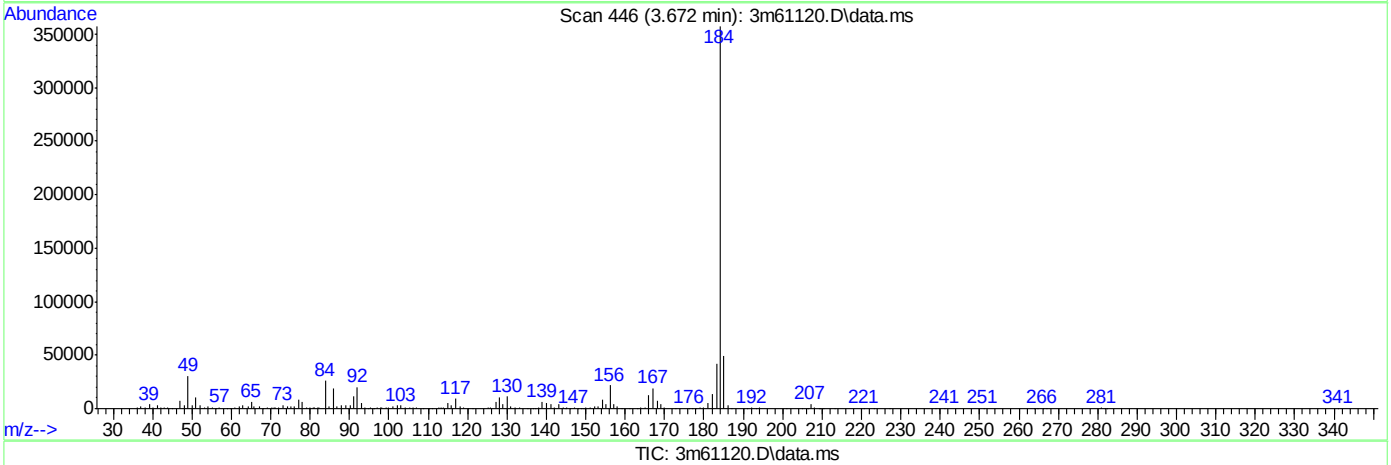
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2874\
Data File : 3m61120.D
Acq On : 6 May 2016 9:12 am
Operator : linseyk
Sample : dftpp
Misc : op93629a,e3m2874
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 06 09:16:19 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: 3m61120.D\data.ms

(2) Benzidine (t)

3.806min 0.00ppb d

response 0

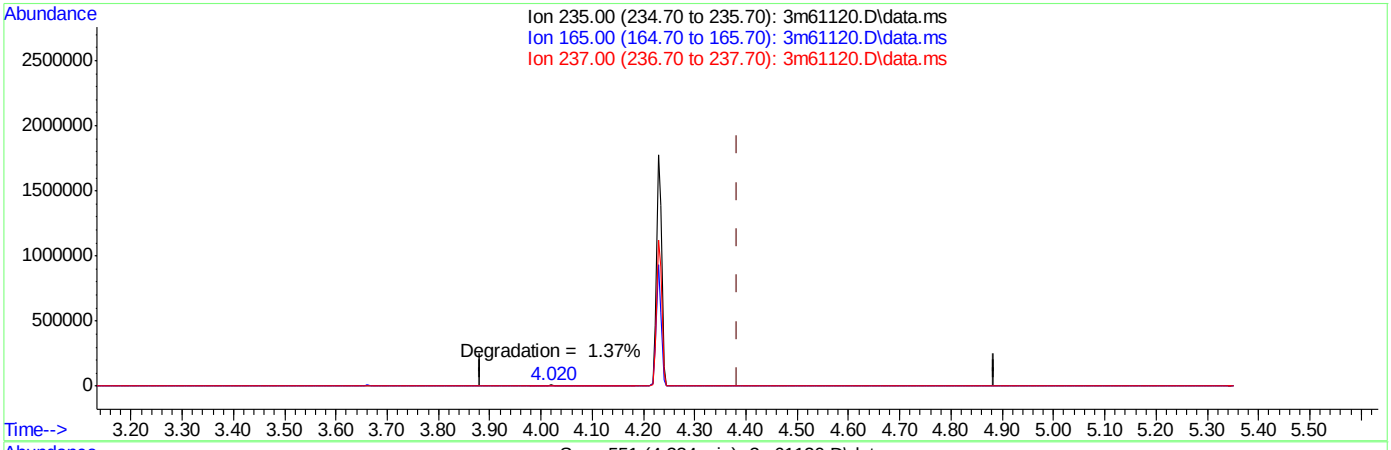
Ion	Exp%	Act%
184.00	100	0.00
183.00	11.50	0.00
185.00	14.40	0.00
0.00	0.00	0.00

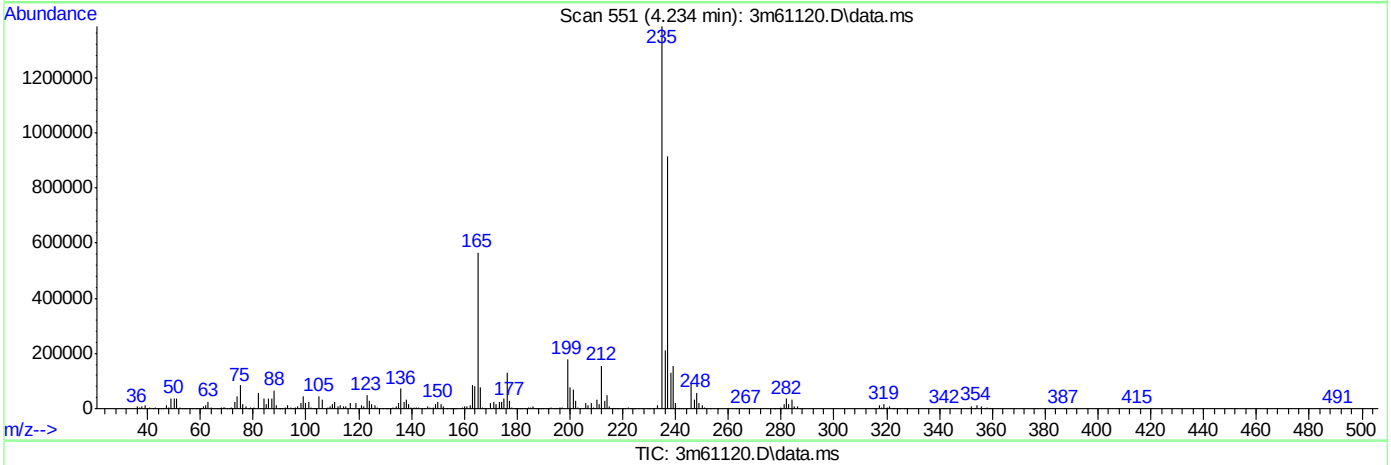
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2874\
Data File : 3m61120.D
Acq On : 6 May 2016 9:12 am
Operator : linseyk
Sample : dftpp
Misc : op93629a,e3m2874
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 06 09:16:19 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: 3m61120.D\data.ms

(3) PP-DDT (t)

4.229min (-0.155) 164.31ppb

response 1223897

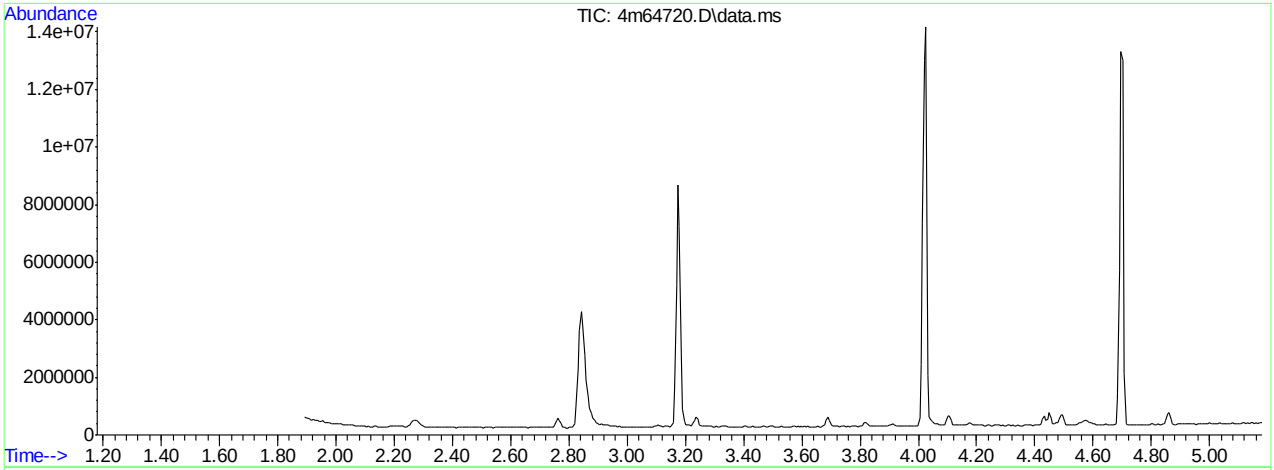
Ion	Exp%	Act%
235.00	100	100
165.00	0.00	49.16#
237.00	0.00	64.33#
0.00	0.00	0.00

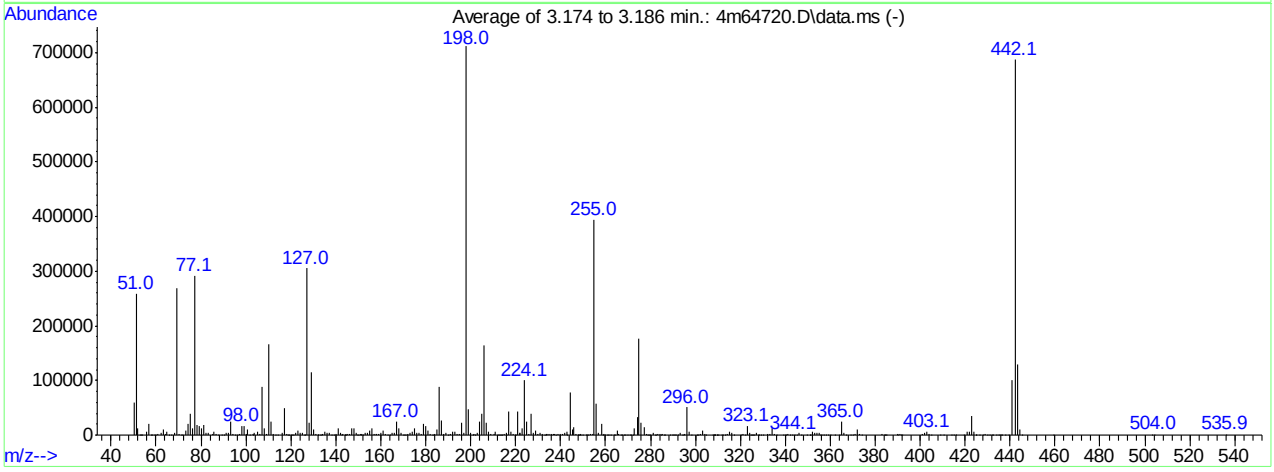
SGS ACCUTEST JC19644

DFTPP

Data File : C:\msdchem\1\DATA\E4M2881\4m64720.D Vial: 1
Acq On : 14 Apr 2016 9:05 am Operator: linseyk
Sample : dftpp Inst : GCMS4M
Misc : op92998a,e4m2881 Multiplr: 1.00
MS Integration Params: events3.e

Method : C:\MSDCHEM\1\METHODS\DFTPP4M.M (ChemStation Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um





AutoFind: Scans 225, 226, 227; Background Corrected with Scan 208

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	36.3	258280	PASS
68	69	0.00	2	1.6	4287	PASS
69	198	0.00	100	37.8	268929	PASS
70	69	0.00	2	0.9	2537	PASS
127	198	40	60	42.9	305536	PASS
197	198	0.00	1	0.6	4427	PASS
198	198	100	100	100.0	711488	PASS
199	198	5	9	6.6	46648	PASS
275	198	10	30	24.9	177016	PASS
365	198	1	100	3.4	24255	PASS
441	443	0.01	100	77.5	100995	PASS
442	198	40	100	96.6	687531	PASS
443	442	17	23	19.0	130315	PASS

4m64720.D DFTPP4M.M Thu Apr 14 17:23:44 2016 MANAGER

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
50.05	59733	60.00	457	71.05	45	82.00	3891
51.05	258280	60.95	2678	71.90	622	83.00	5071
51.95	12358	62.05	3823	73.00	9177	85.00	2914
53.00	186	63.05	10823	74.00	20144	85.95	7237
53.20	923	64.05	1402	75.00	38614	86.90	2228
53.85	408	65.00	5253	76.05	12303	87.90	789
56.00	7193	66.00	478	77.10	291176	89.10	798
57.00	20601	67.00	82	78.00	19044	90.00	181
57.95	640	68.05	4287	79.00	17419	91.05	4835
58.20	383	69.00	268929	80.05	12571	92.00	3669
59.05	543	70.00	2537	81.00	18508	93.00	24515

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
94.05	2541	103.90	4777	116.05	3605	125.00	3741
95.00	895	105.00	5877	117.00	48560	125.95	348
95.95	779	106.00	2485	118.05	3075	126.20	636
97.15	2316	106.95	88755	118.80	620	127.00	305536
98.00	16613	108.05	12214	119.20	215	128.00	23012
99.00	16199	109.05	2422	120.05	375	129.00	114200
99.95	1254	110.00	166575	120.70	174	129.90	9530
100.90	9998	111.00	24379	121.15	456	131.05	2380
101.85	176	112.05	3159	122.00	4961	131.90	114
103.00	2632	112.90	992	123.00	7911	132.20	424
103.20	406	114.05	581	123.95	3501	132.90	482

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
133.70	311	143.00	1643	151.00	2319	158.95	2293
133.95	1878	143.85	195	151.20	262	159.95	4700
135.00	7204	144.15	596	151.70	1172	161.00	7679
136.00	4006	144.60	357	152.10	379	162.00	2024
137.05	4208	145.15	1487	153.00	4763	162.95	887
137.85	196	145.95	2061	154.00	3534	164.05	614
138.85	503	147.00	12335	155.10	7868	165.00	4310
140.05	1684	148.00	12963	156.00	12995	165.95	4544
141.00	12121	149.00	4103	157.00	2880	167.00	24350
142.00	4450	149.80	169	157.80	1810	168.00	11917
142.80	799	150.00	706	158.00	1559	169.05	3197

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
170.20	1030	180.00	15550	190.05	860	200.95	38
170.60	727	181.00	7487	190.95	2833	201.40	2324
171.00	742	182.00	1147	191.95	7105	201.80	329
172.00	2495	183.00	730	193.05	6769	202.95	4648
173.05	3867	183.50	555	194.05	1386	204.05	23832
174.05	6120	184.00	1539	195.00	1415	205.10	38998
175.00	12082	185.05	11088	196.05	22627	206.10	163456
176.00	3990	186.00	88595	197.00	4427	207.10	23332
177.00	3562	187.00	25789	198.00	711488	208.00	5882
178.05	2032	188.05	2540	199.00	46648	209.00	1628
178.95	20312	189.00	4726	199.95	4431	210.20	3008

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
211.05	7001	219.10	1376	228.00	4753	236.00	1429
211.80	264	219.70	317	229.00	7916	236.95	1291
212.50	118	220.10	811	229.90	1145	237.20	1406
213.10	343	221.10	43960	231.05	4425	238.00	703

M4M2881SIM.M Thu Apr 14 17:02:12 2016 MANAGER Page: 0

213.50	160	221.80	3763	232.00	1293	238.90	1387
214.10	203	222.05	3811	232.80	756	240.00	1127
215.00	1974	223.00	11574	233.20	189	241.00	2142
215.80	726	224.05	100086	233.90	1180	242.05	4545
216.10	3291	225.10	24836	234.10	1520	242.80	559
217.00	42592	226.05	2623	235.00	3019	243.05	5893
218.00	6216	227.00	39165	235.70	174	244.10	77501

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
245.10	10548	252.10	944	261.15	295	271.00	706
246.00	13587	253.15	1948	262.10	97	271.30	600
247.00	2554	254.10	1469	263.90	841	272.10	1096
247.60	95	255.00	393813	264.10	85	273.00	12304
247.90	655	256.00	58016	265.05	8314	274.05	32919
248.15	385	257.00	4804	265.95	1264	275.00	177016
248.70	1297	258.05	20468	266.90	170	276.00	21876
248.95	397	258.80	334	267.30	236	277.05	13725
249.90	937	259.10	3164	268.20	135	278.05	1847
251.15	1085	259.85	844	268.90	160	278.80	508
251.60	120	261.00	398	269.95	781	279.10	487

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
279.90	97	289.65	492	298.00	371	308.90	180
281.15	3645	290.05	414	300.70	209	309.50	68
282.00	571	290.80	189	301.05	509	309.80	136
282.20	320	291.05	458	302.00	1242	310.00	228
283.00	3052	292.05	1119	303.05	7446	311.50	189
284.10	1574	293.05	3652	303.95	1659	312.30	438
284.70	625	294.00	550	304.90	120	313.05	655
285.05	2194	294.80	223	307.60	77	314.05	3006
286.00	243	295.10	1890	307.95	828	315.00	5281
286.20	82	296.00	50648	308.20	185	316.05	3288
288.95	296	297.10	6591	308.60	117	317.00	557

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
319.90	249	328.20	555	340.95	2487	353.00	4422
321.00	1400	328.90	433	342.10	910	354.10	5044
322.05	1021	330.00	185	343.00	381	355.05	4717
323.10	17235	332.05	1488	344.05	473	355.80	350
324.10	3221	333.05	1447	345.00	91	356.10	958
324.80	308	334.10	13095	346.00	4050	357.00	1042
325.15	381	335.05	2912	347.10	989	358.15	194
325.60	169	336.00	564	349.80	109	359.10	315
326.00	204	339.05	501	350.90	148	359.90	75
327.10	3992	339.90	84	351.20	323	361.90	82
327.95	875	340.05	154	352.20	5622	363.80	101

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
365.00	24255	384.30	311	404.10	2425	424.05	6189
366.00	3411	384.70	108	405.05	334	424.90	213
367.00	289	385.00	105	409.15	192	425.05	410
369.20	430	389.80	374	410.20	74	426.40	190
370.05	894	390.05	1404	414.10	70	428.00	89
371.00	1350	391.05	1482	414.95	322	429.05	1531
372.10	11350	391.70	321	416.10	70	430.05	705
373.20	2681	392.15	272	419.60	100	431.05	478
374.10	120	401.05	1198	421.00	5303	431.80	78
383.05	2662	402.00	4961	422.10	6085	432.40	297
383.90	339	403.10	6080	423.10	34179	433.90	84

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms

M4M2881SIM.M Thu Apr 14 17:02:12 2016 MANAGER Page: 1

dftpp
Modified:subtracted

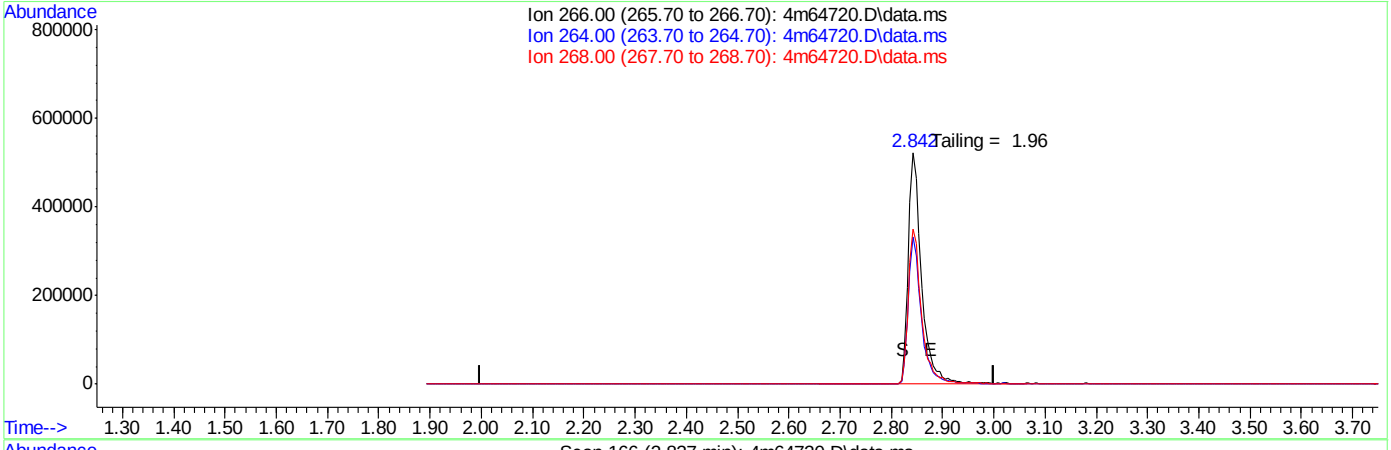
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
434.90	128	459.15	493				
435.30	158	503.00	77				
435.95	261	504.00	208				
436.40	88	535.90	70				
438.00	91						
439.15	323						
441.10	100995						
442.10	687531						
443.10	130315						
444.10	11143						
445.10	553						

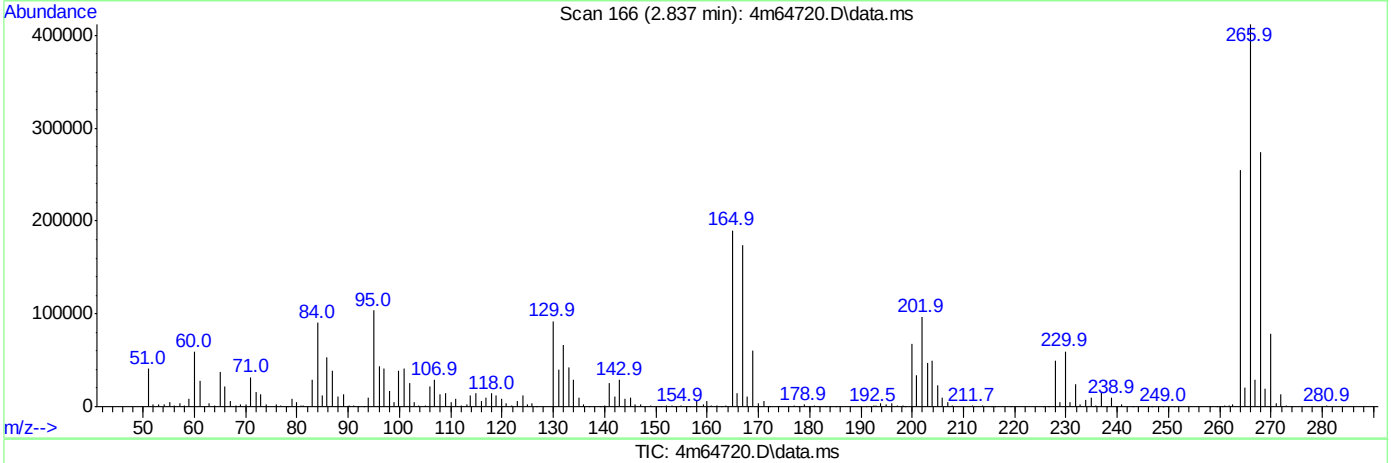
SGS ACCUTEST
JC19644

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

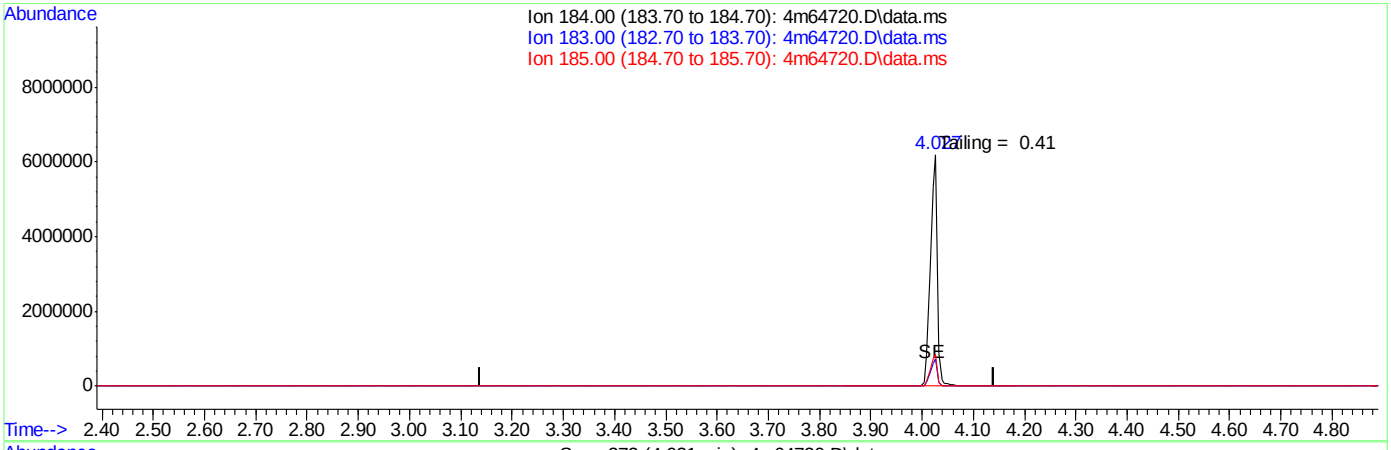
response 0

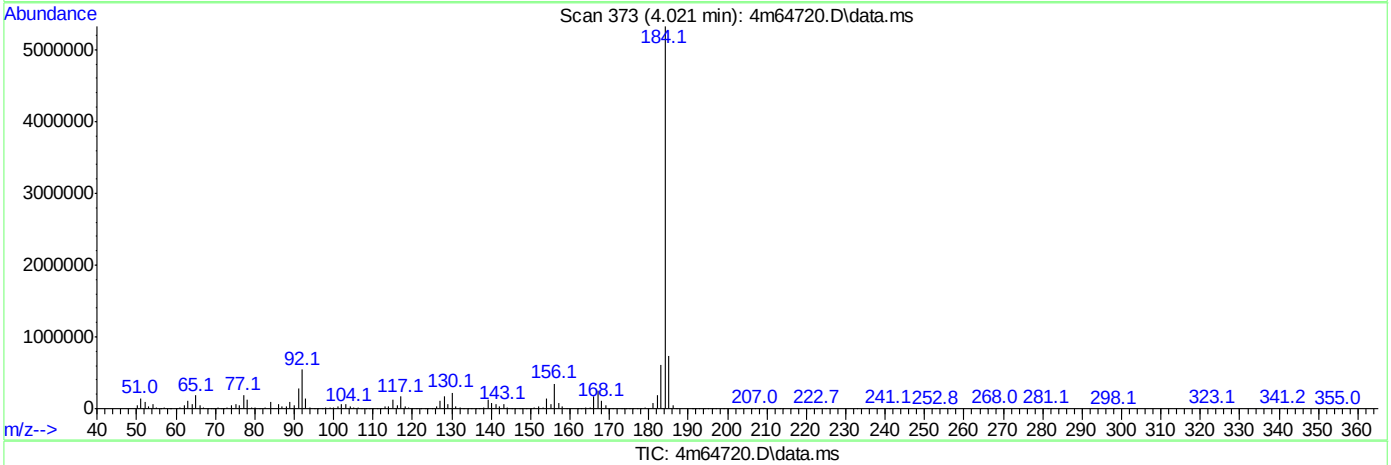
Ion	Exp%	Act%
266.00	100	0.00
264.00	58.00	0.00#
268.00	62.00	0.00#
0.00	0.00	0.00

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

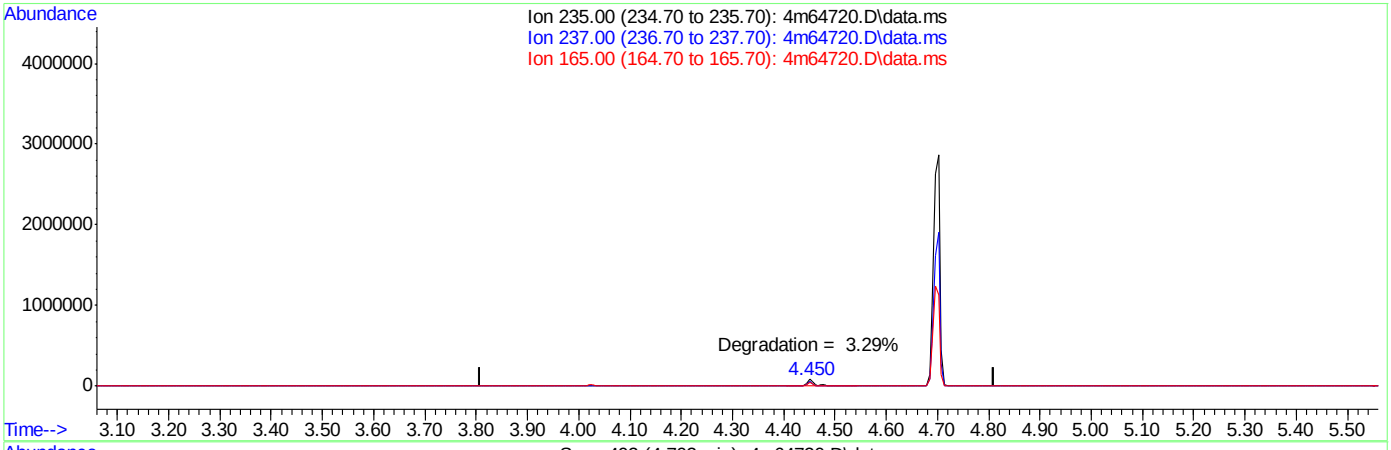
response 0

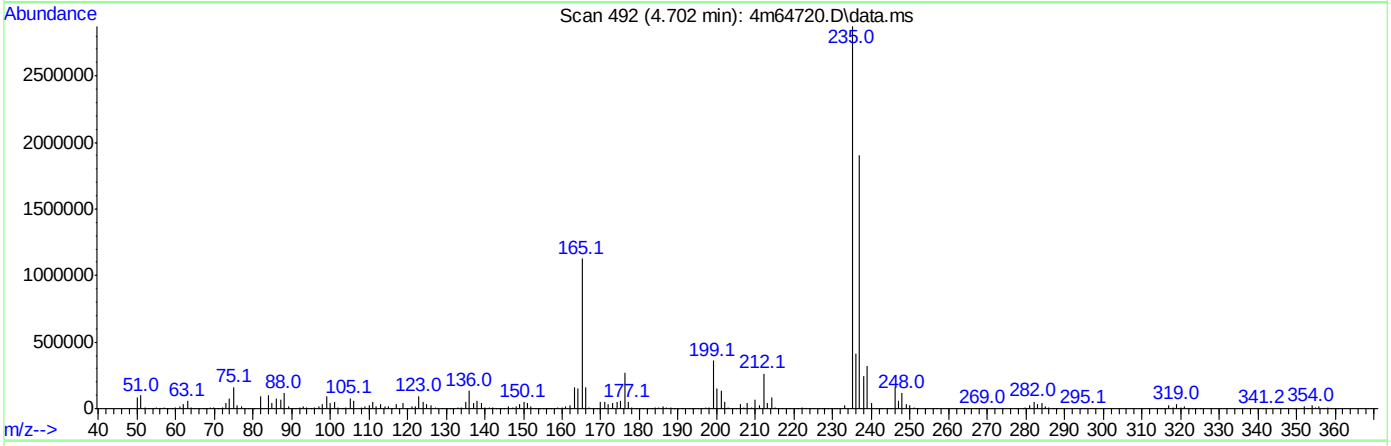
Ion	Exp%	Act%
184.00	100	0.00
183.00	10.60	0.00#
185.00	13.40	0.00#
0.00	0.00	0.00

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

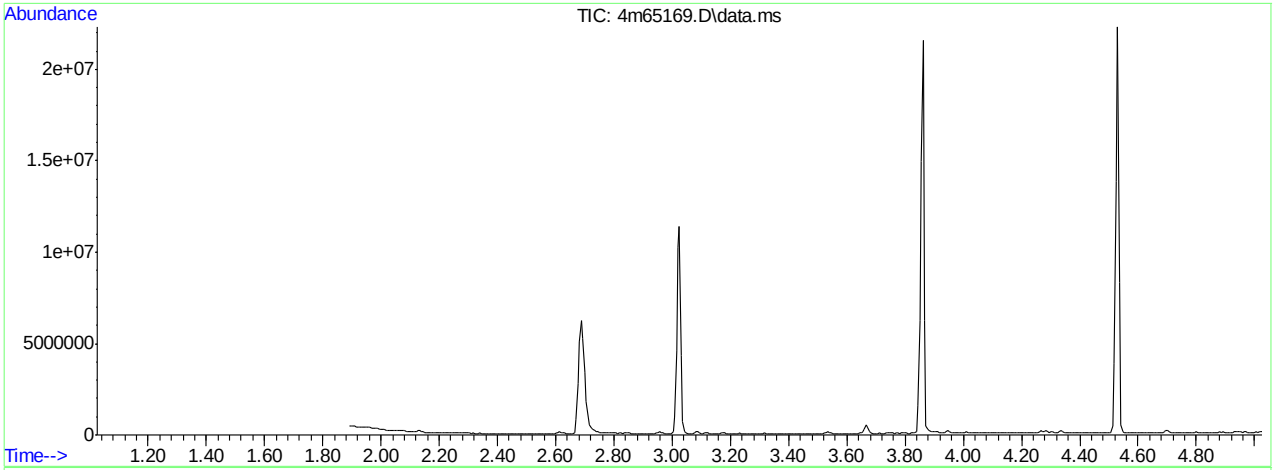
Ion	Exp%	Act%
235.00	100	0.00
237.00	63.70	0.00#
165.00	48.70	0.00#
0.00	0.00	0.00

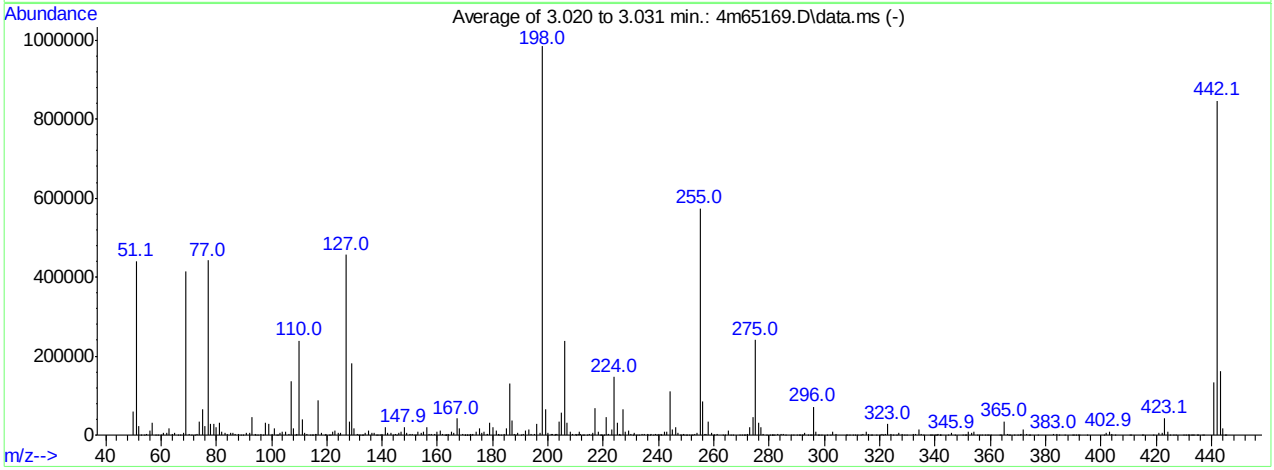
SGS ACCUTEST JC19644

DFTPP

Data File : C:\msdchem\1\DATA\E4M2910\4m65169.D Vial: 1
Acq On : 9 May 2016 10:19 am Operator: linseyk
Sample : dftpp Inst : GCMS4M
Misc : op93541a,e4m2910 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 198, 199, 200; Background Corrected with Scan 182

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	44.7	440259	PASS
68	69	0.00	2	1.7	6860	PASS
69	198	0.00	100	42.2	414779	PASS
70	69	0.00	2	0.6	2282	PASS
127	198	40	60	46.4	456555	PASS
197	198	0.00	1	0.6	6380	PASS
198	198	100	100	100.0	983872	PASS
199	198	5	9	6.6	65024	PASS
275	198	10	30	24.4	240288	PASS
365	198	1	100	3.5	34339	PASS
441	443	0.01	100	82.3	133227	PASS
442	198	40	100	86.0	846165	PASS
443	442	17	23	19.1	161859	PASS

4m65169.D DFTPP4M.M Tue May 10 10:33:43 2016 MANAGER

Average of 3.020 to 3.031 min.: 4m65169.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
50.10	58291	61.00	5332	72.10	96	83.00	5263
51.10	440259	62.10	4706	73.05	2701	84.00	2412
52.05	22583	63.00	16058	74.00	35476	85.00	5202
52.85	34	64.05	2825	75.00	64873	85.95	5728
53.95	354	65.00	6720	76.05	21674	87.00	3773
54.95	2313	66.05	751	77.05	442369	87.85	1625
55.95	12488	66.85	777	78.00	28462	89.00	123
57.00	31348	68.05	6860	79.00	28489	89.80	86
58.00	999	69.00	414779	80.00	19120	90.95	4776
59.00	123	70.05	2282	81.00	30194	91.95	6623
59.90	1160	71.15	506	81.95	8764	93.00	46856

Average of 3.020 to 3.031 min.: 4m65169.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
94.00	2346	103.00	5919	112.90	1623	121.30	165
94.20	488	103.90	8960	114.10	402	122.00	7394
94.95	67	104.90	9126	114.70	88	123.05	11611
96.05	3220	106.10	3046	114.95	1254	123.95	4889
96.90	1037	107.00	136353	115.90	3454	124.60	356
97.90	31465	108.00	18487	116.10	3017	125.00	5916
99.00	27167	108.70	301	117.00	87184	127.00	456555
100.00	1996	109.05	3722	117.95	6471	128.00	34857
101.00	16103	110.00	239432	119.05	1163	129.00	181138
101.95	1512	111.00	39435	119.85	2179	129.95	16104
102.30	160	112.05	5131	120.95	911	131.00	4103

Average of 3.020 to 3.031 min.: 4m65169.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
131.60	155	140.05	2767	150.05	1640	159.90	7252
132.00	1381	140.95	18727	151.05	2389	161.00	11049
132.60	500	142.00	5937	151.70	662	161.95	2241
133.05	774	143.00	4781	152.05	1032	162.60	83
133.95	4729	144.00	1290	153.00	7798	162.90	232
135.00	11924	144.80	1560	154.00	4963	163.15	883
136.10	5594	145.10	152	155.05	9227	163.70	212
137.00	6143	146.05	4412	156.00	20945	163.95	1832
137.85	1493	146.95	9995	157.00	4012	165.00	8607
138.45	368	147.95	19890	157.95	3126	166.05	5350
139.00	1491	149.00	4573	158.90	2967	167.00	42388

Average of 3.020 to 3.031 min.: 4m65169.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
168.00	17213	175.05	17847	183.95	3237	194.00	3448
169.05	3531	176.05	4449	185.00	15773	194.90	2166
169.90	775	177.00	9254	186.00	130621	196.00	27752
170.10	368	177.90	1576	187.00	38163	197.05	6380
170.70	434	178.15	2100	187.90	4129	198.00	983872
170.95	923	179.00	31514	188.10	517	199.00	65024
171.40	392	180.00	20609	188.95	6897	200.05	5708
172.00	2456	181.10	10552	190.05	1175	201.25	2451
172.30	444	182.00	2780	191.00	4302	201.65	3110
172.95	3951	182.20	437	192.00	11095	202.20	1485
174.05	9029	183.00	1535	193.05	12969	202.85	3399

Average of 3.020 to 3.031 min.: 4m65169.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
203.10	2818	211.90	1900	219.50	257	227.95	7310
204.00	35460	212.70	211	220.10	1482	229.00	12481
205.00	55976	213.10	730	220.95	46240	230.10	2019
206.10	239472	214.10	458	221.70	3099	230.70	354

M4M2881SIM.M Fri May 06 21:42:07 2016 MANAGER Page: 0

207.00	30918	215.00	2617	222.00	3550	231.00	4613
208.00	9706	215.70	351	223.00	13938	232.05	1139
208.95	3653	216.00	5460	224.00	147579	232.90	1221
209.90	523	217.00	67541	225.05	32206	234.00	3877
210.20	2210	218.00	8142	225.80	752	235.00	4338
210.70	3220	218.85	730	226.05	4267	235.90	854
211.10	8622	219.10	449	227.00	64464	236.10	2931

Average of 3.020 to 3.031 min.: 4m65169.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
236.80	998	245.05	15637	252.05	1163	261.05	1638
237.05	3609	246.00	20647	253.00	3156	263.10	476
238.05	481	247.05	4812	254.00	4962	263.90	949
238.90	1805	247.70	394	255.00	573547	265.05	10855
239.10	326	248.05	770	256.00	84552	265.85	1529
240.00	1567	248.90	3047	256.90	2131	267.00	590
240.70	1113	249.10	981	257.10	4096	269.10	547
241.00	1953	250.00	849	258.00	34725	270.05	965
242.05	8079	250.40	912	259.05	4651	270.75	513
243.00	9195	251.00	1217	259.80	249	271.30	660
244.05	109605	251.75	543	260.05	876	272.00	2150

Average of 3.020 to 3.031 min.: 4m65169.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
273.00	19249	282.00	285	292.15	687	302.05	1285
274.05	45501	283.00	3085	293.00	5353	303.10	9303
275.00	240288	284.10	1621	293.90	945	304.05	2802
276.05	31909	285.10	3263	294.85	646	307.70	509
277.00	19934	286.05	560	295.10	343	308.10	554
277.95	3741	288.00	321	296.00	72152	308.95	1400
278.95	843	288.85	917	297.00	9241	310.05	1128
280.10	174	289.95	633	297.80	129	311.10	102
280.90	232	290.80	97	298.05	576	311.70	127
281.20	531	291.10	563	298.80	172	313.10	1082
281.60	107	291.80	190	301.00	907	314.05	3754

Average of 3.020 to 3.031 min.: 4m65169.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
315.00	7890	324.90	424	338.20	137	345.95	4883
316.00	4170	326.05	580	338.70	136	347.00	467
316.90	249	326.95	4391	339.10	519	349.80	160
317.10	496	328.05	2791	339.70	127	350.60	74
318.80	75	328.90	922	340.20	89	351.05	516
319.80	87	329.70	69	340.80	676	352.10	8764
320.95	1932	332.00	1939	341.05	2098	353.05	5200
321.20	582	332.95	2084	341.80	113	354.10	8083
322.00	1625	334.05	14899	341.90	259	355.10	1140
323.00	27368	335.05	4203	342.05	223	356.10	137
324.05	3710	335.95	385	344.90	96	356.80	93

Average of 3.020 to 3.031 min.: 4m65169.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
358.10	381	369.95	625	386.80	113	405.00	404
358.90	118	370.60	493	389.90	936	410.20	324
359.15	268	371.05	1840	390.10	380	410.85	251
359.95	291	372.05	13487	390.95	1405	414.75	382
363.40	160	373.00	3103	391.60	130	415.10	123
363.70	217	373.80	213	392.00	1007	419.00	169
365.00	34339	374.25	299	395.00	163	421.00	6488
366.00	3825	377.00	69	400.95	914	422.00	6663
366.75	244	383.00	3412	402.05	4901	423.10	42805
367.10	275	383.90	1623	402.95	9294	424.00	9187
368.70	114	384.85	177	404.05	2936	424.90	1122

Average of 3.020 to 3.031 min.: 4m65169.D\data.ms

M4M2881SIM.M Fri May 06 21:42:07 2016 MANAGER Page: 1

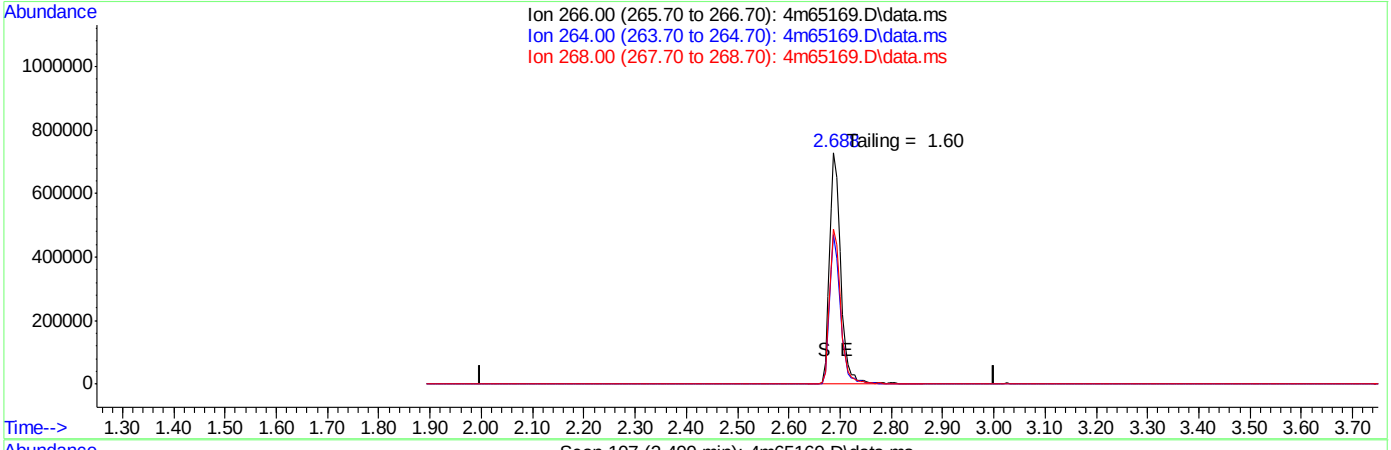
dftpp
Modified:subtracted

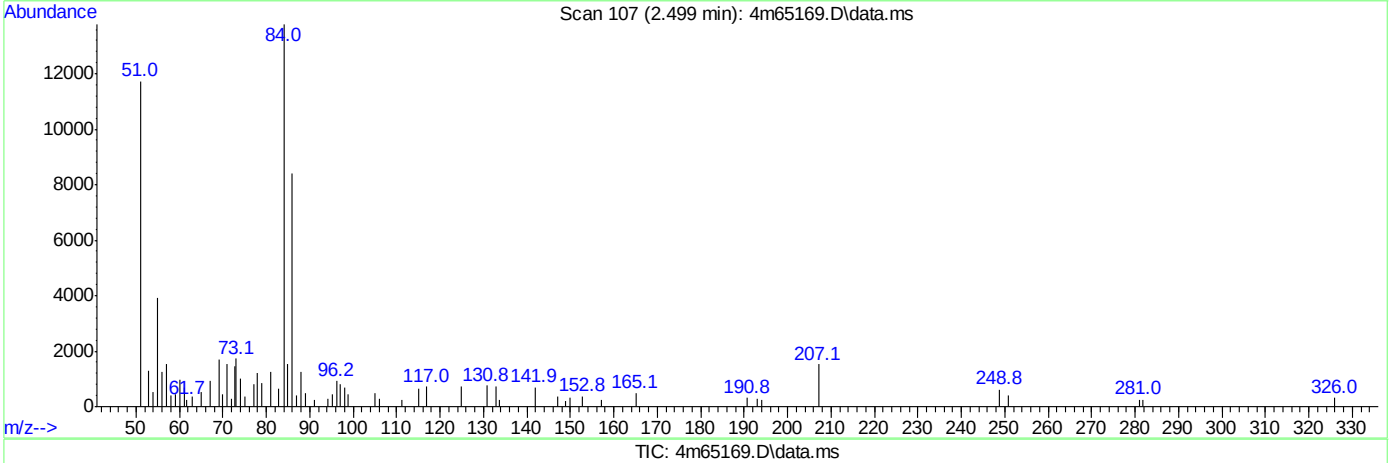
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
426.10	133	436.60	446				
427.10	92	437.35	254				
429.80	485	441.00	133227				
430.65	506	442.05	846165				
431.65	615	443.05	161859				
432.05	421	444.05	16961				
432.65	407	444.90	128				
433.00	106	445.10	877				
433.30	285						
434.80	377						
435.30	157						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65169.D
Acq On : 9 May 2016 10:19 am
Operator : linseyk
Sample : dftpp
Misc : op93541a,e4m2910
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 09 10:25:21 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: 4m65169.D\data.ms

(1) pentachlorophenol (t)

2.500min (-2.500) 0.00ppb

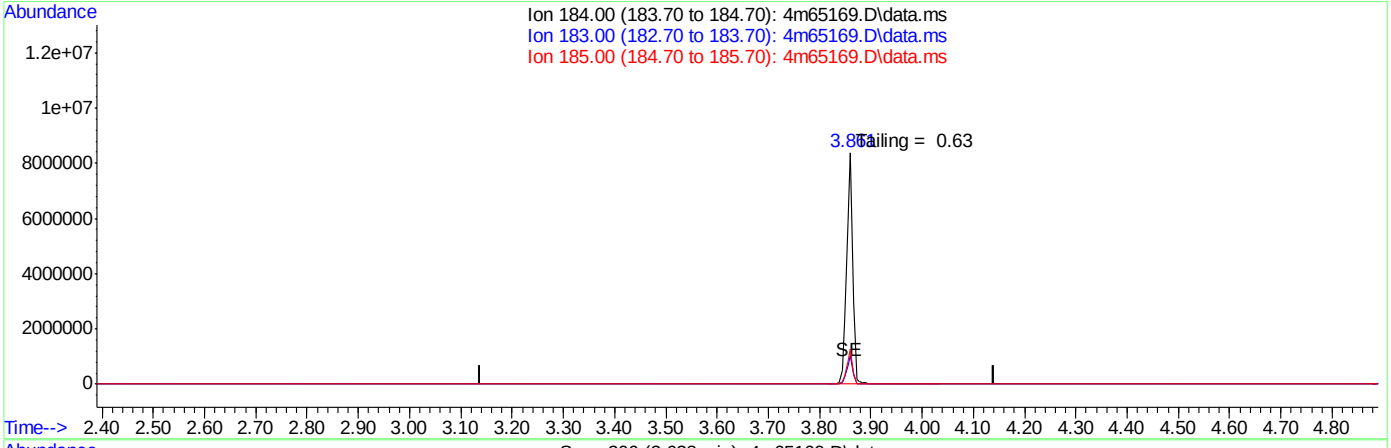
response 0

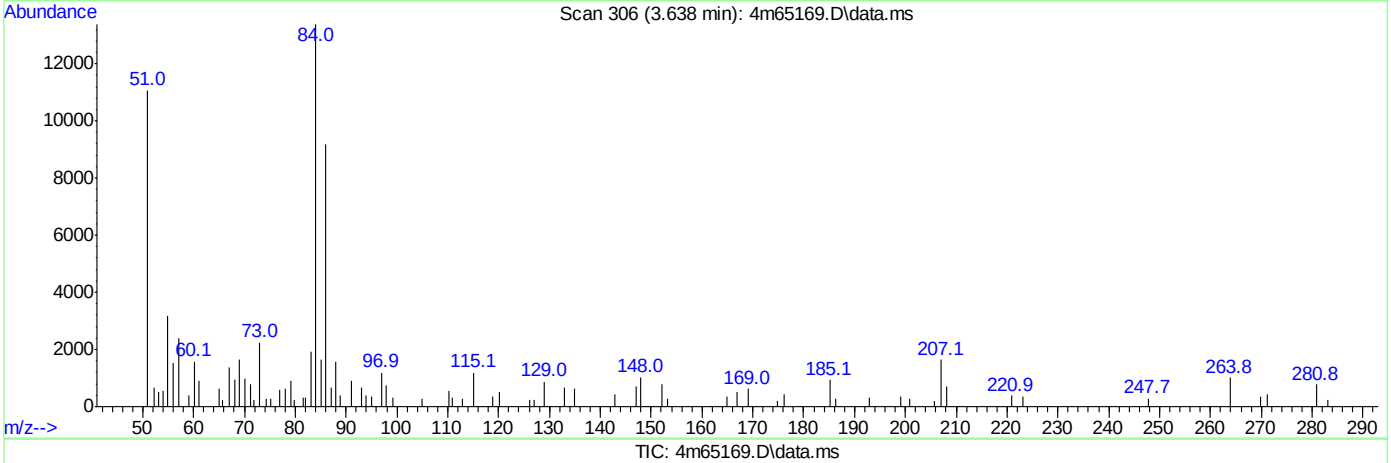
Ion	Exp%	Act%
266.00	100	0.00
264.00	58.00	0.00#
268.00	62.00	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65169.D
Acq On : 9 May 2016 10:19 am
Operator : linseyk
Sample : dftpp
Misc : op93541a,e4m2910
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 09 10:25:21 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: 4m65169.D\data.ms

(2) benzidine (t)

3.640min (-3.640) 0.00ppb

response 0

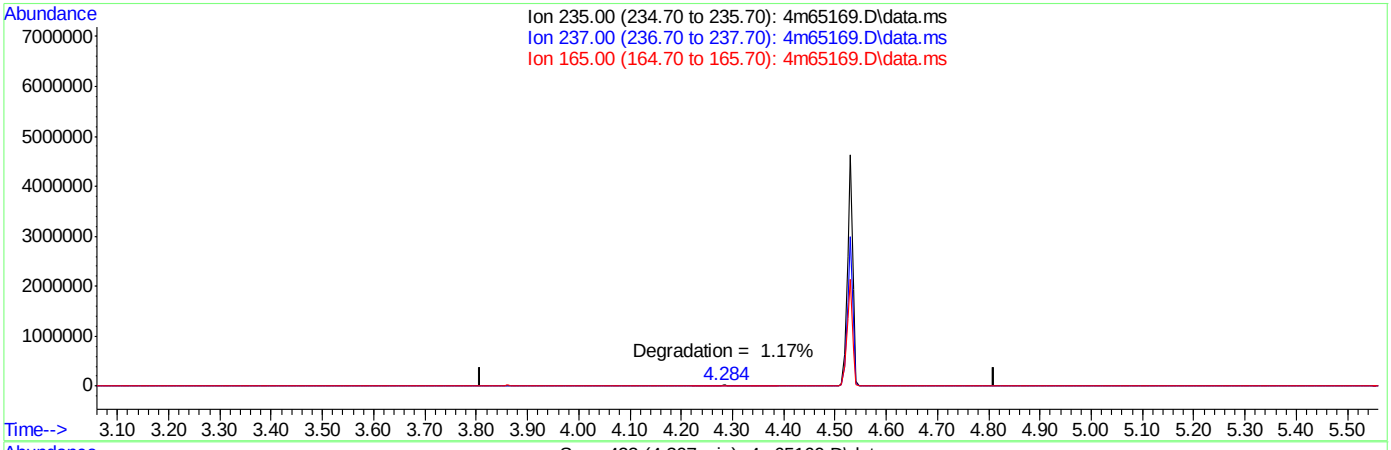
Ion	Exp%	Act%
184.00	100	0.00
183.00	10.60	0.00#
185.00	13.40	0.00#
0.00	0.00	0.00

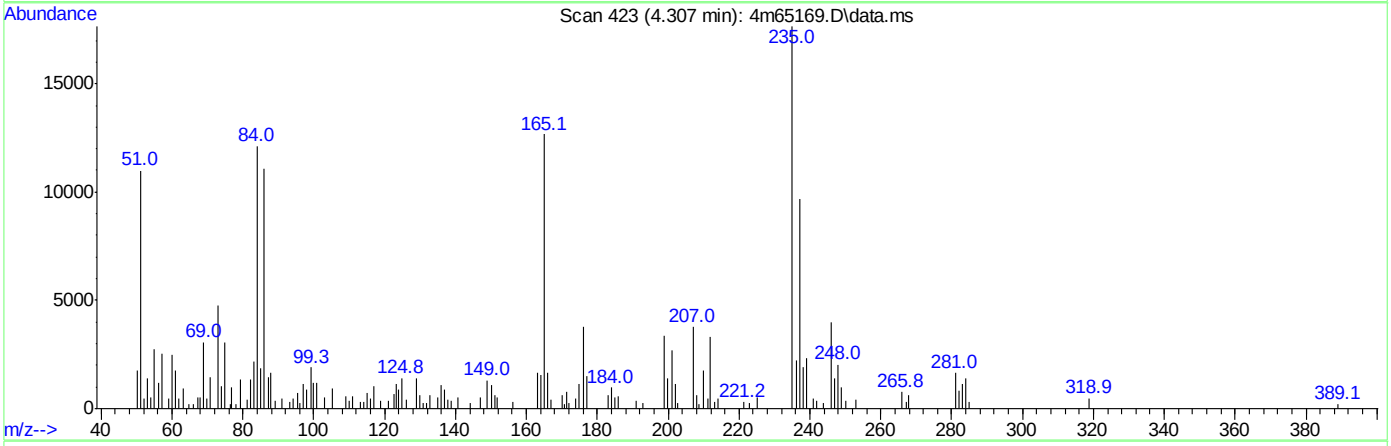
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65169.D
Acq On : 9 May 2016 10:19 am
Operator : linseyk
Sample : dftpp
Misc : op93541a,e4m2910
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 09 10:25:21 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: 4m65169.D\data.ms

(3) ddt (t)

4.310min (-4.310) 0.00ppb

response 0

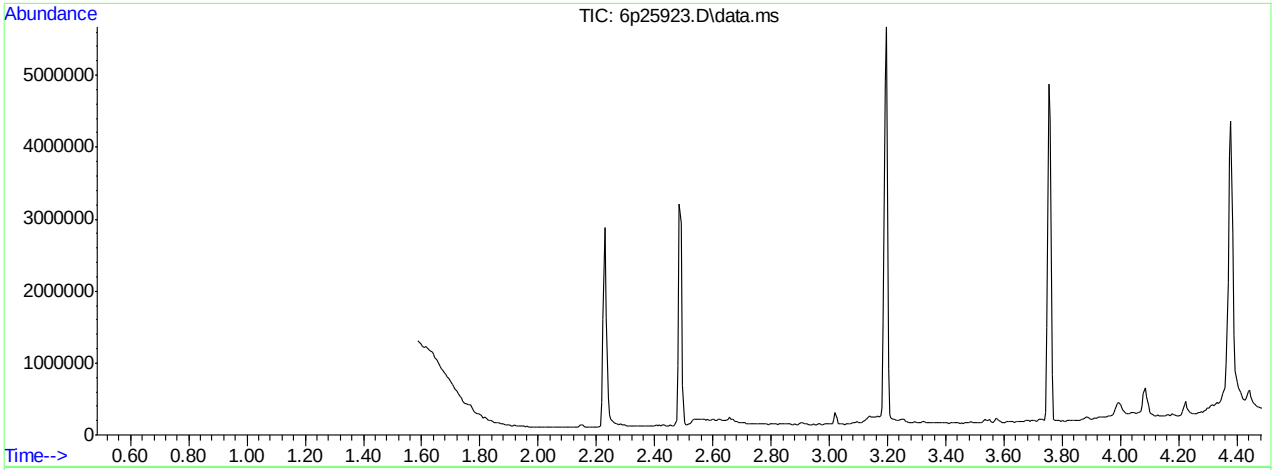
Ion	Exp%	Act%
235.00	100	0.00
237.00	63.70	0.00#
165.00	48.70	0.00#
0.00	0.00	0.00

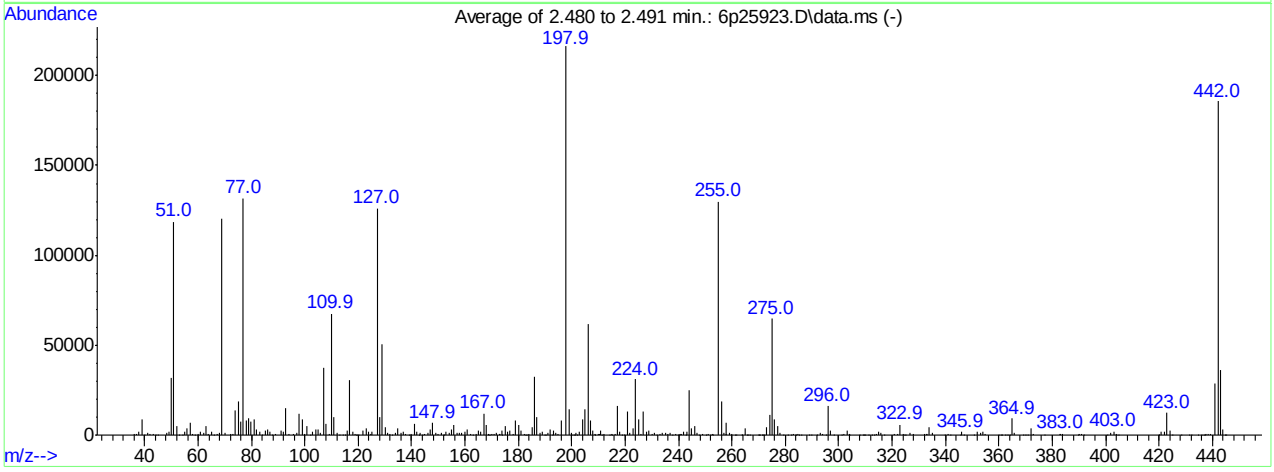
SGS ACCUTEST JC19644

DFTPP

Data File : C:\msdchem\1\DATA\e6p1209\6p25923.D Vial: 1
Acq On : 13 May 2016 9:12 am Operator: ariellec
Sample : dftpp Inst : MS6P
Misc : op93693,e6p1209 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\DFTPP6P.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5 15m x .25mm x .25um





AutoFind: Scans 168, 169, 170; Background Corrected with Scan 164

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	54.8	118557	PASS
68	69	0.00	2	0.9	1119	PASS
69	198	0.00	100	55.7	120494	PASS
70	69	0.00	2	0.8	996	PASS
127	198	40	60	58.3	126024	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	216184	PASS
199	198	5	9	6.7	14389	PASS
275	198	10	30	29.9	64576	PASS
365	198	1	100	4.2	9081	PASS
441	443	0.10	100	79.7	28875	PASS
442	198	40	100	85.9	185597	PASS
443	442	17	23	19.5	36212	PASS

6p25923.D DFTPP6P.M Fri May 13 10:08:38 2016 ACLIMS

Average of 2.480 to 2.491 min.: 6p25923.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.85	599	48.90	1879	59.95	544	72.05	340
36.90	520	50.00	31979	61.00	1665	73.00	711
37.90	1760	50.95	118557	62.00	1534	74.00	13490
38.95	9007	51.95	5318	63.00	4788	74.95	18975
39.95	278	52.95	257	63.95	758	76.05	7677
41.00	1157	54.00	57	64.95	2117	76.95	131730
41.90	342	54.95	1990	66.00	79	77.95	8392
43.00	599	55.95	4006	67.00	729	78.95	9133
43.90	5	57.00	7144	68.00	1119	79.90	7200
44.85	333	57.90	574	68.90	120494	80.90	9026
48.05	1198	58.85	90	70.00	996	81.95	3079

Average of 2.480 to 2.491 min.: 6p25923.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
83.00	1671	95.90	836	107.00	37530	117.95	2117
83.90	42	97.05	1116	107.95	6227	119.00	401
85.00	2323	97.95	11905	109.00	631	119.20	138
85.90	3267	98.90	8441	109.90	67466	119.80	283
86.90	2059	99.90	956	110.95	9749	119.90	126
87.90	177	100.90	5182	112.00	1504	121.90	2435
88.90	506	101.85	135	112.95	279	122.95	3559
90.90	2325	102.95	1598	114.00	141	123.95	1720
91.95	1834	103.95	3399	114.95	298	124.80	440
92.95	14816	104.90	3378	116.00	2349	125.00	1884
93.90	576	105.95	1251	116.90	30820	127.00	126024

Average of 2.480 to 2.491 min.: 6p25923.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
128.00	9771	138.90	271	148.95	1559	158.90	1041
128.90	50493	139.95	760	149.95	427	159.90	1888
129.95	4445	140.90	6411	151.05	1117	160.95	2862
130.95	1077	141.95	2196	151.80	294	161.90	829
131.95	850	142.80	246	152.00	180	163.00	245
132.60	109	143.00	1540	152.95	1967	163.95	356
133.90	1286	143.80	165	153.95	1339	164.90	2434
134.90	3996	144.90	453	154.95	3205	165.95	2088
135.95	1532	145.90	1486	155.95	5768	167.00	12139
137.00	2084	146.95	3382	157.00	1246	168.00	5837
137.90	528	147.90	6789	157.90	1249	168.80	100

Average of 2.480 to 2.491 min.: 6p25923.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
168.95	945	176.85	2559	187.00	9759	196.00	7878
169.40	126	178.00	612	188.00	1114	197.90	216184
169.95	635	178.95	8222	188.90	1899	198.90	14389
170.95	534	179.95	5682	189.80	253	199.80	178
171.90	970	180.90	2603	190.10	161	200.00	1295
172.90	858	182.10	598	190.95	1167	200.90	119
173.10	375	182.80	131	191.90	3018	201.30	168
173.70	163	183.05	334	192.80	329	201.45	1139
174.00	2285	183.95	726	192.95	2819	201.90	206
175.00	5193	185.05	4223	194.00	976	202.90	1701
175.95	1965	186.00	32368	194.95	718	203.95	8917

Average of 2.480 to 2.491 min.: 6p25923.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
205.00	14499	214.10	100	224.00	31075	235.00	1070
206.00	61669	214.80	133	225.00	8486	236.05	642
206.95	7820	214.95	932	226.00	849	236.90	1100
207.95	2281	216.10	531	226.90	12904	237.75	232

208.70	125	216.90	16465	227.95	2052	239.00	799
208.85	771	217.95	1979	228.95	2683	239.90	253
210.00	474	218.80	105	229.95	567	240.10	322
210.20	597	219.70	287	231.00	1164	240.80	517
210.95	2383	220.95	13024	231.90	106	241.00	565
211.40	154	221.90	1180	232.90	371	241.90	1939
211.95	459	222.95	3647	233.95	1071	242.80	223

Average of 2.480 to 2.491 min.: 6p25923.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
243.00	1909	252.95	721	263.90	232	272.95	4537
244.00	24659	255.00	129861	264.90	3485	274.00	11357
244.95	3464	255.95	18778	265.70	208	275.00	64576
246.00	5303	256.95	1414	266.00	303	276.00	8816
246.90	1227	257.80	721	266.80	101	276.95	5314
247.90	71	258.00	6919	269.80	209	277.95	1062
248.95	863	258.90	1002	270.00	122	279.10	160
250.05	158	259.95	342	270.50	155	281.05	256
250.95	429	261.00	138	271.10	260	282.20	104
252.00	330	261.80	158	271.50	108	282.95	746
252.80	117	263.65	264	271.90	302	283.70	154

Average of 2.480 to 2.491 min.: 6p25923.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
284.00	213	296.90	2350	311.10	108	324.80	137
284.80	543	298.10	114	312.60	245	325.10	131
285.00	322	301.00	148	313.10	162	326.90	1239
285.95	285	302.05	386	314.05	915	327.95	602
289.00	114	303.00	2292	314.95	2158	332.00	639
289.80	105	303.85	368	315.90	1066	332.90	652
291.90	108	304.10	277	316.90	317	333.20	357
292.90	1271	307.90	272	320.90	701	333.95	4106
293.95	398	308.90	138	321.90	452	334.90	968
295.10	104	309.40	123	322.95	5907	339.80	108
296.00	16214	310.00	306	324.05	904	340.95	939

Average of 2.480 to 2.491 min.: 6p25923.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
341.90	182	361.20	126	377.10	135	403.80	220
345.70	190	362.60	116	382.80	441	404.00	586
345.90	1746	363.40	129	383.00	681	404.90	101
346.90	299	363.90	295	383.85	389	419.80	153
350.80	318	364.95	9081	389.60	121	420.10	108
352.05	1643	365.90	1368	390.10	380	420.95	1742
353.00	1276	369.30	126	390.95	347	421.95	1764
353.95	2103	369.95	226	391.90	224	423.00	12369
354.90	456	370.80	176	400.80	155	424.00	2467
360.00	318	372.00	4002	402.00	1508	425.10	225
360.80	105	372.95	792	403.00	2137	428.30	101

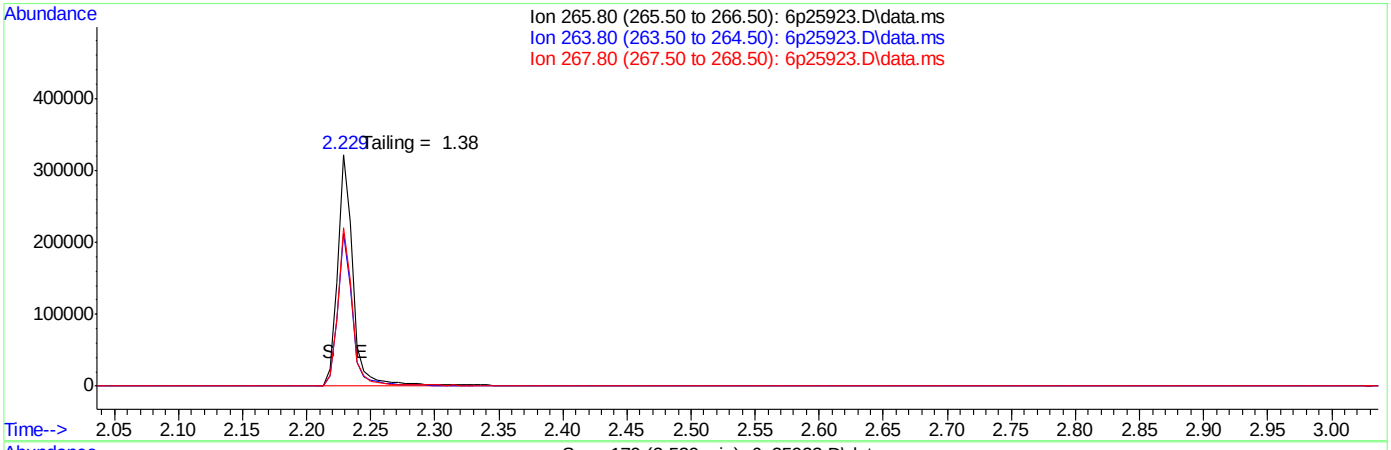
Average of 2.480 to 2.491 min.: 6p25923.D\data.ms
dftpp
Modified:subtracted

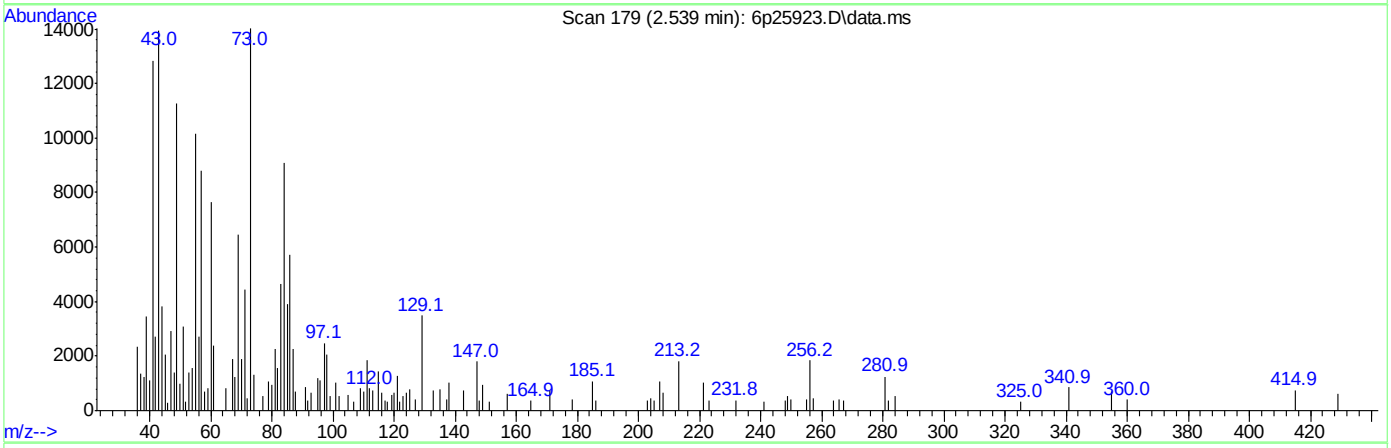
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
431.40	159	443.00	36212				
432.30	103	444.05	3362				
434.60	119	444.70	101				
435.90	128	445.00	193				
436.95	272						
437.30	185						
437.65	477						
438.35	475						
439.40	381						
441.05	28875						
442.00	185597						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25923.D
Acq On : 13 May 2016 9:12 am
Operator : ariellec
Sample : dftpp
Misc : op93693,e6p1209
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 13 09:17:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP6P.M
Quant Title : Semi Volatile GC/MS, ZB-5 15m x .25mm x .25um
QLast Update : Tue Apr 05 12:41:26 2016
Response via : Initial Calibration





TIC: 6p25923.D\data.ms

(1) Pentachlorophenol (t)

2.536min 0.00ppb d

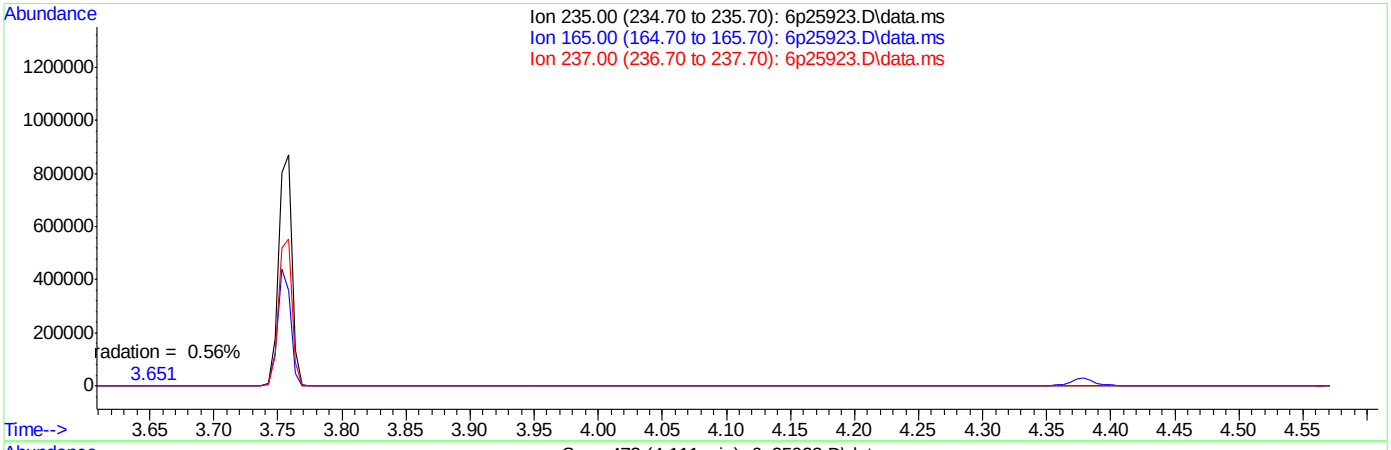
response 0

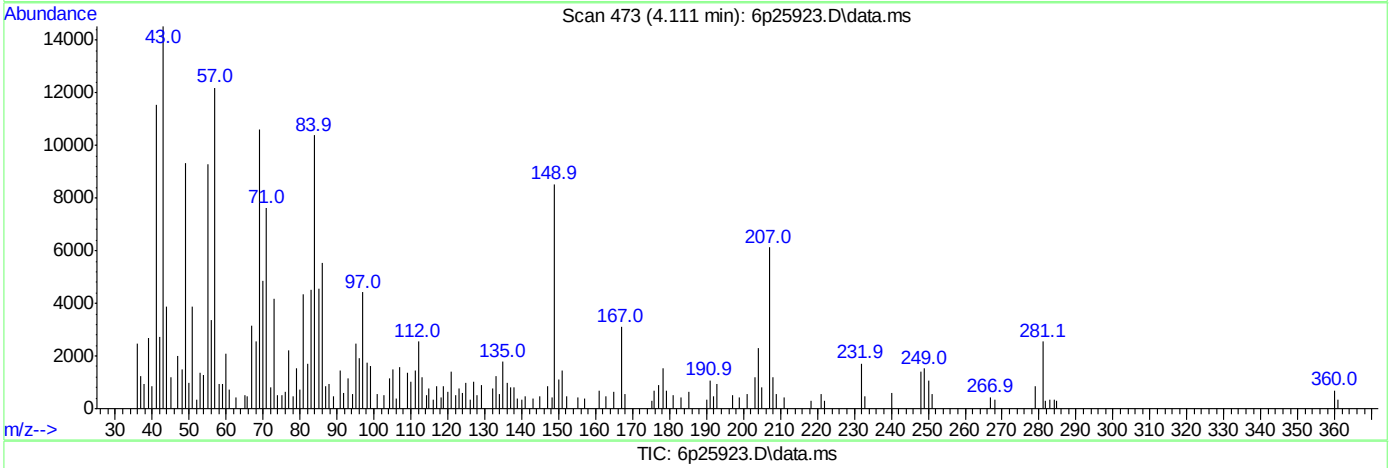
Ion	Exp%	Act%
265.80	100	0.00
263.80	62.70	0.00
267.80	62.60	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25923.D
Acq On : 13 May 2016 9:12 am
Operator : ariellec
Sample : dftpp
Misc : op93693,e6p1209
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 13 09:17:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP6P.M
Quant Title : Semi Volatile GC/MS, ZB-5 15m x .25mm x .25um
QLast Update : Tue Apr 05 12:41:26 2016
Response via : Initial Calibration





TIC: 6p25923.D\data.ms

(3) PP-DDT (t)

4.109min (-4.109) 0.00ppb

response 0

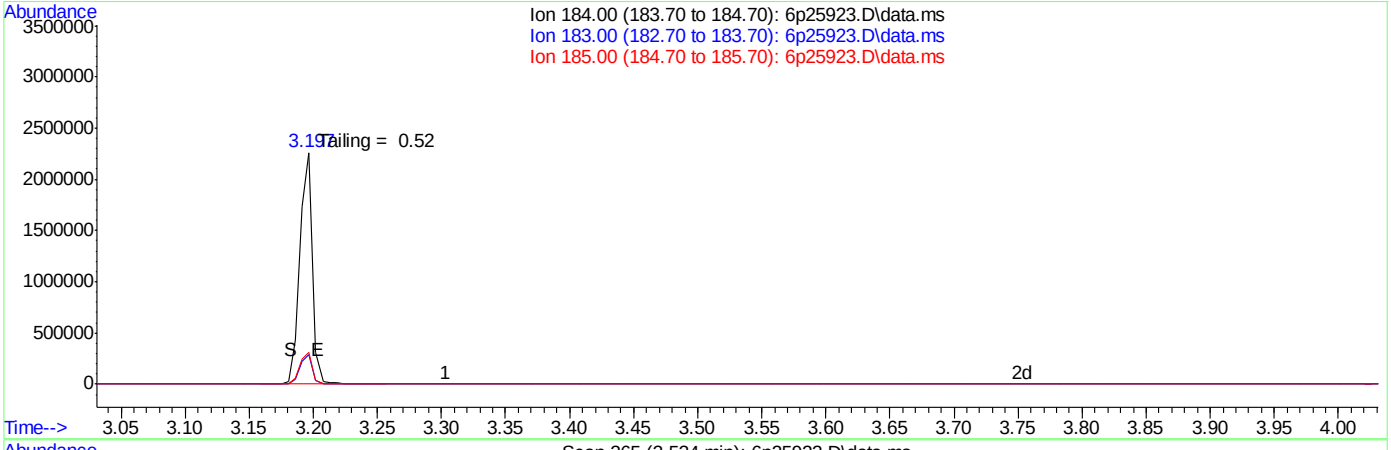
Ion	Exp%	Act%
235.00	100	0.00
165.00	93.70	0.00#
237.00	85.60	0.00#
0.00	0.00	0.00

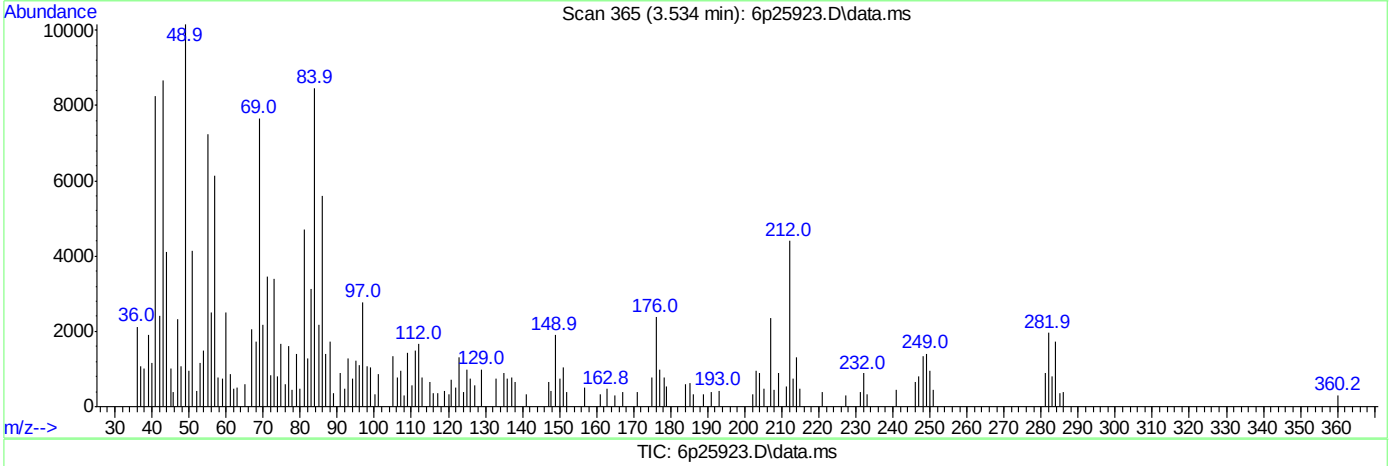
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25923.D
Acq On : 13 May 2016 9:12 am
Operator : ariellec
Sample : dftpp
Misc : op93693,e6p1209
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 13 09:17:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP6P.M
Quant Title : Semi Volatile GC/MS, ZB-5 15m x .25mm x .25um
QLast Update : Tue Apr 05 12:41:26 2016
Response via : Initial Calibration





TIC: 6p25923.D\data.ms

(2) Benzidine (t)

3.531min 0.00ppb d

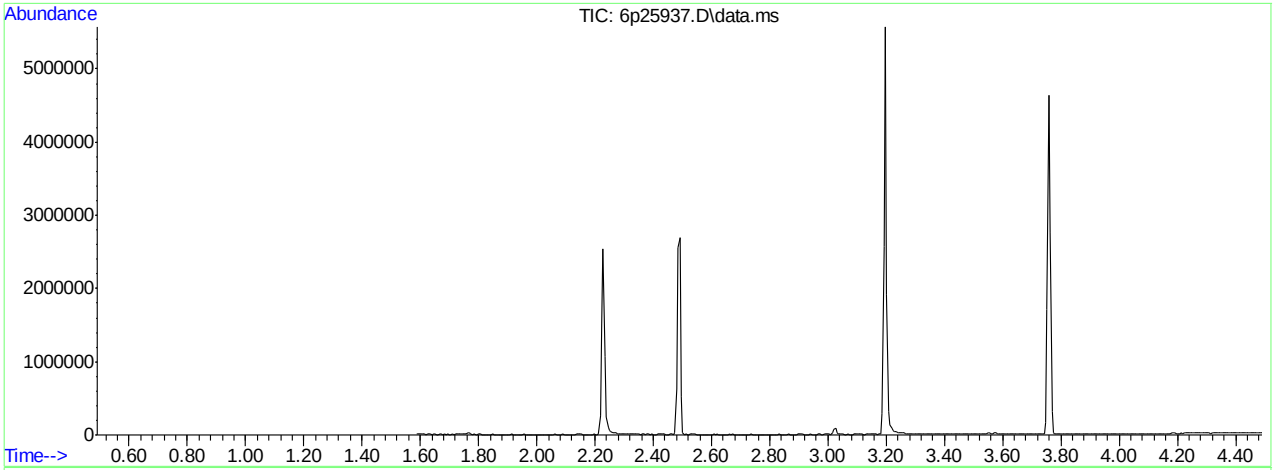
response 0

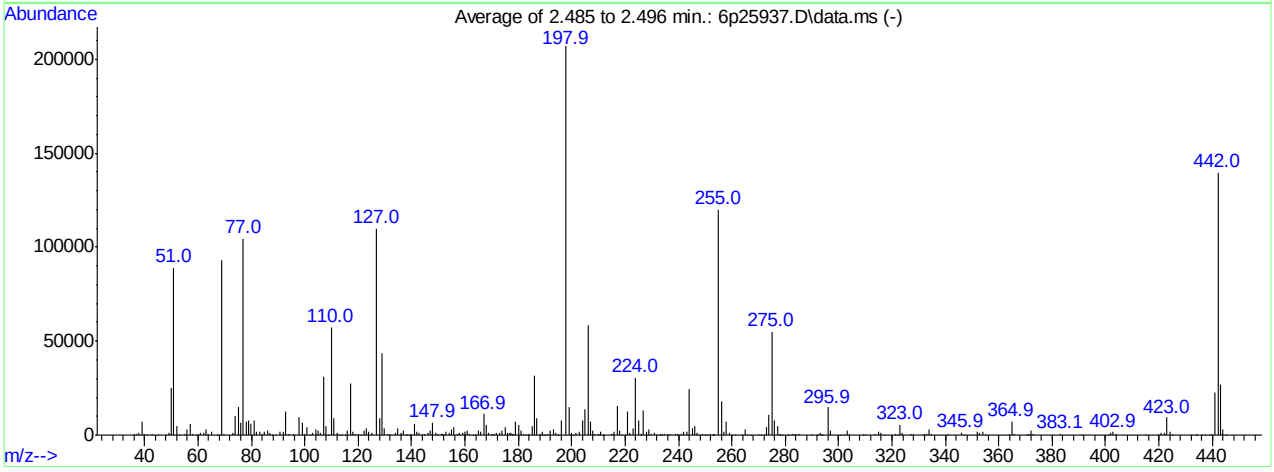
Ion	Exp%	Act%
184.00	100	0.00
183.00	11.10	0.00
185.00	13.90	0.00
0.00	0.00	0.00

DFTPP

Data File : C:\msdchem\1\DATA\e6p1210\6p25937.D Vial: 1
Acq On : 13 May 2016 2:25 pm Operator: ariellec
Sample : dftpp Inst : MS6P
Misc : op93693,e6p1210 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\DFTPP6P.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5 15m x .25mm x .25um





AutoFind: Scans 169, 170, 171; Background Corrected with Scan 164

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	43.1	89165	PASS
68	69	0.00	2	0.2	207	PASS
69	198	0.00	100	45.0	93133	PASS
70	69	0.00	2	0.4	404	PASS
127	198	40	60	53.1	109826	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	206826	PASS
199	198	5	9	7.2	14852	PASS
275	198	10	30	26.6	54986	PASS
365	198	1	100	3.5	7287	PASS
441	443	0.10	100	84.5	22871	PASS
442	198	40	100	67.5	139682	PASS
443	442	17	23	19.4	27080	PASS

6p25937.D DFTPP6P.M Mon May 16 18:07:42 2016 ACLIMS

Average of 2.485 to 2.496 min.: 6p25937.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.90	429	50.95	89165	63.00	3056	77.00	104411
36.90	321	52.00	4694	63.95	569	78.00	7017
37.90	1193	52.90	101	65.00	1542	78.95	7676
39.00	7184	55.00	674	67.00	225	79.95	5719
39.90	599	55.90	2803	67.90	207	80.95	7705
40.90	80	56.95	5868	68.90	93133	81.90	1906
42.95	349	57.90	350	69.90	404	82.95	1772
45.00	110	59.00	114	73.00	1071	83.90	354
47.90	132	60.00	114	74.00	10437	84.90	1826
48.95	1065	60.95	1311	75.00	14815	85.90	2349
50.00	24953	61.95	1143	76.00	6302	86.95	1029

Average of 2.485 to 2.496 min.: 6p25937.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
87.95	243	102.00	107	113.00	238	123.70	166
88.85	216	102.90	1407	114.00	119	123.95	1646
90.90	1655	103.95	3019	114.90	154	124.95	1318
91.90	1994	104.90	2483	116.05	2342	127.00	109826
92.90	12470	106.00	1116	116.95	27473	128.00	8787
93.90	820	107.00	31092	117.90	1654	129.00	43395
95.90	613	108.00	4678	119.00	328	129.95	3482
98.00	9454	108.90	133	119.90	393	130.85	690
98.90	6815	110.00	57418	120.80	174	131.85	324
99.95	787	111.00	8759	122.00	2437	134.00	1153
100.90	3910	112.00	1123	122.95	3368	134.90	3323

Average of 2.485 to 2.496 min.: 6p25937.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
135.90	1505	146.00	1205	155.90	4386	166.95	11095
137.00	2125	147.00	2562	156.85	799	168.00	5612
137.75	310	147.90	6660	157.90	1056	168.95	963
138.10	117	148.90	1394	159.00	934	169.95	580
138.95	287	149.95	387	159.95	1629	170.80	467
139.95	687	151.00	754	160.95	2553	171.85	927
140.95	6203	151.60	400	161.85	799	172.95	1440
141.95	1635	152.00	263	162.80	100	173.95	2278
142.95	1337	152.90	1708	163.70	286	175.00	4022
143.90	348	154.00	1499	164.90	2182	176.00	1379
144.85	348	155.00	3122	166.00	1926	176.80	1134

Average of 2.485 to 2.496 min.: 6p25937.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
177.00	1259	187.00	8871	195.00	108	206.95	7229
177.70	128	187.95	763	196.00	7586	207.95	2114
178.00	877	188.90	1773	197.90	206826	208.90	398
178.90	7073	189.10	135	198.90	14852	209.90	815
180.00	5572	189.80	249	199.95	1283	210.30	124
180.95	2614	190.00	137	200.50	142	210.60	804
181.95	426	190.90	811	201.45	1456	210.95	1781
182.70	283	191.95	2667	202.90	1710	211.70	215
183.95	765	193.00	3137	204.00	8006	212.10	201
185.00	4619	194.00	933	205.00	13566	214.80	332
186.00	31574	194.80	259	206.00	58437	215.00	344

Average of 2.485 to 2.496 min.: 6p25937.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
215.95	1572	226.00	109	235.90	816	247.85	240
216.95	15321	226.95	13030	236.95	843	248.95	872
217.90	2153	227.90	2107	238.90	586	249.80	154
218.90	167	228.95	2788	239.95	491	250.80	260

219.90	275	229.85	441	240.95	529	251.85	418
221.00	12574	230.95	1011	241.95	1575	252.90	273
221.70	1388	231.80	125	242.95	1814	253.10	401
222.95	3653	233.00	189	244.00	24313	253.30	117
224.00	30697	233.20	134	245.05	3339	255.00	120093
225.00	7819	233.90	810	245.90	4921	256.00	17738
225.80	385	234.85	912	246.90	943	256.90	1635

Average of 2.485 to 2.496 min.: 6p25937.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
257.95	7042	273.00	4171	283.10	107	300.80	111
258.90	1312	273.95	10917	283.95	364	301.90	122
260.00	127	275.00	54986	284.95	895	303.00	2201
261.00	105	275.95	7858	289.80	143	304.00	647
263.90	114	276.95	4721	291.80	112	309.00	120
264.90	3045	277.80	306	292.10	162	310.00	124
266.00	274	278.00	597	293.00	1109	313.90	859
267.10	118	279.00	168	293.70	130	314.95	1643
270.20	111	280.90	133	293.90	241	315.95	1256
270.90	304	281.10	138	295.95	14871	316.90	114
272.20	100	282.80	525	296.95	2195	321.05	434

Average of 2.485 to 2.496 min.: 6p25937.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
322.00	197	345.95	1376	371.90	2702	420.95	1250
323.00	5552	346.90	123	372.95	788	421.90	433
323.95	924	352.00	1641	383.05	848	422.20	1441
326.95	907	352.90	1455	390.95	243	423.00	9384
327.95	573	354.00	1759	401.10	180	424.00	1854
331.70	121	354.85	304	401.90	1114	425.05	288
332.05	361	363.80	149	402.85	1518	432.10	130
332.85	663	364.90	7287	403.70	104	433.65	235
334.05	3272	365.90	788	404.00	433	434.40	109
334.90	837	370.60	124	415.00	135	435.80	106
341.05	728	371.05	413	419.50	108	437.30	158

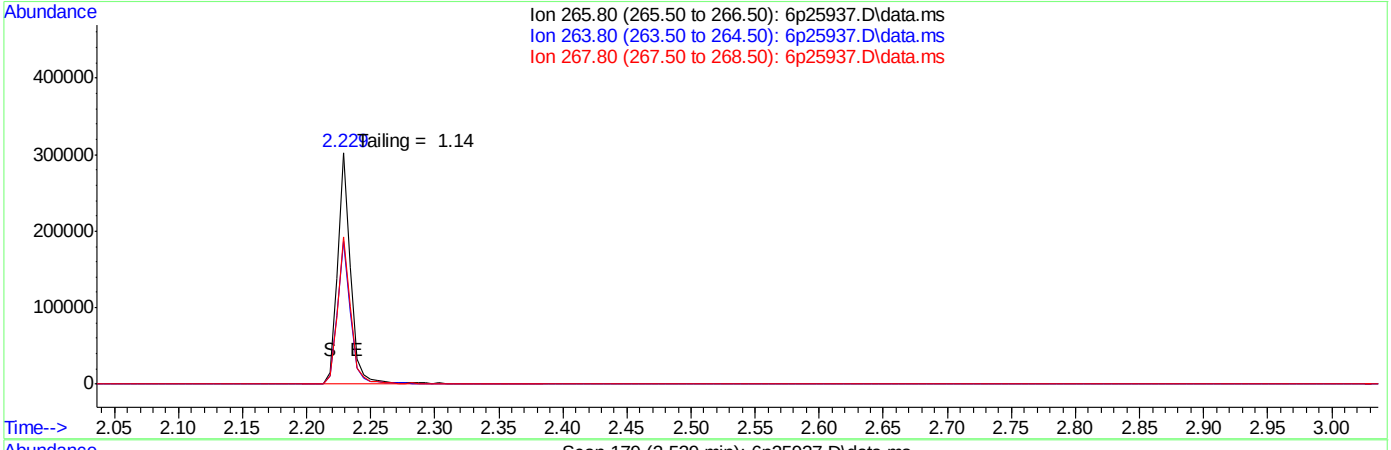
Average of 2.485 to 2.496 min.: 6p25937.D\data.ms
dftpp
Modified:subtracted

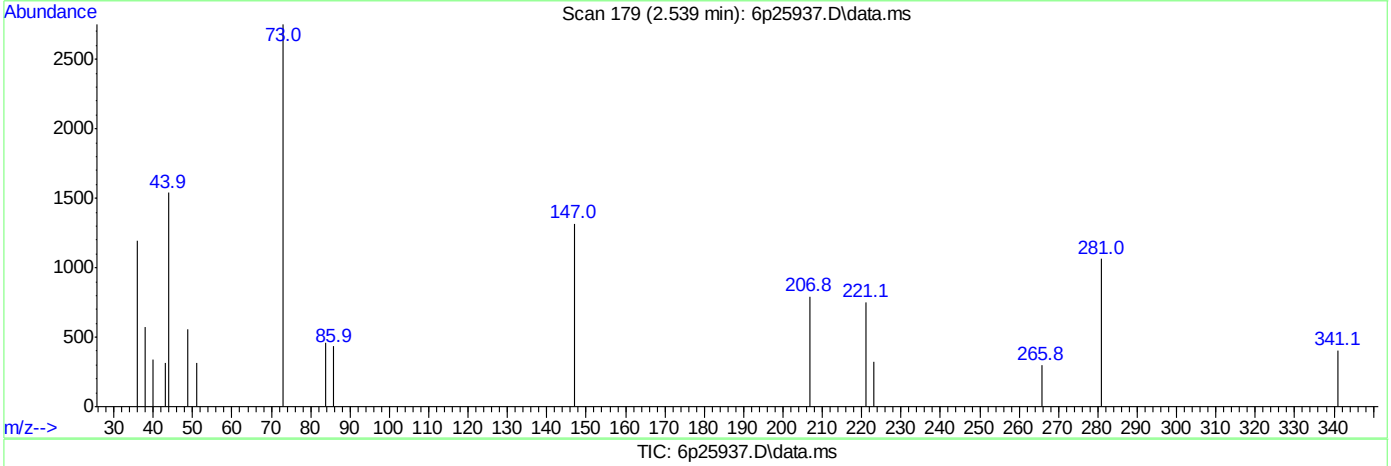
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
439.00	308						
439.85	402						
441.00	22871						
442.00	139682						
443.00	27080						
444.00	2972						
445.00	138						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e6p1210\
Data File : 6p25937.D
Acq On : 13 May 2016 2:25 pm
Operator : ariellec
Sample : dftpp
Misc : op93693,e6p1210
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 13 14:30:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP6P.M
Quant Title : Semi Volatile GC/MS, ZB-5 15m x .25mm x .25um
QLast Update : Tue Apr 05 12:41:26 2016
Response via : Initial Calibration





TIC: 6p25937.D\data.ms

(1) Pentachlorophenol (t)

2.536min (-2.536) 0.00ppb

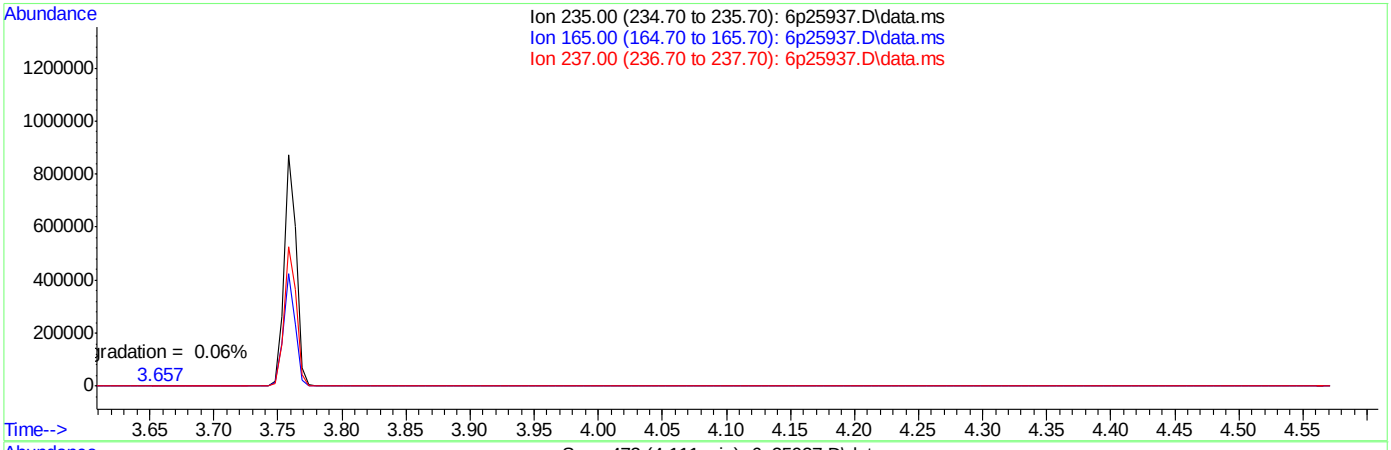
response 0

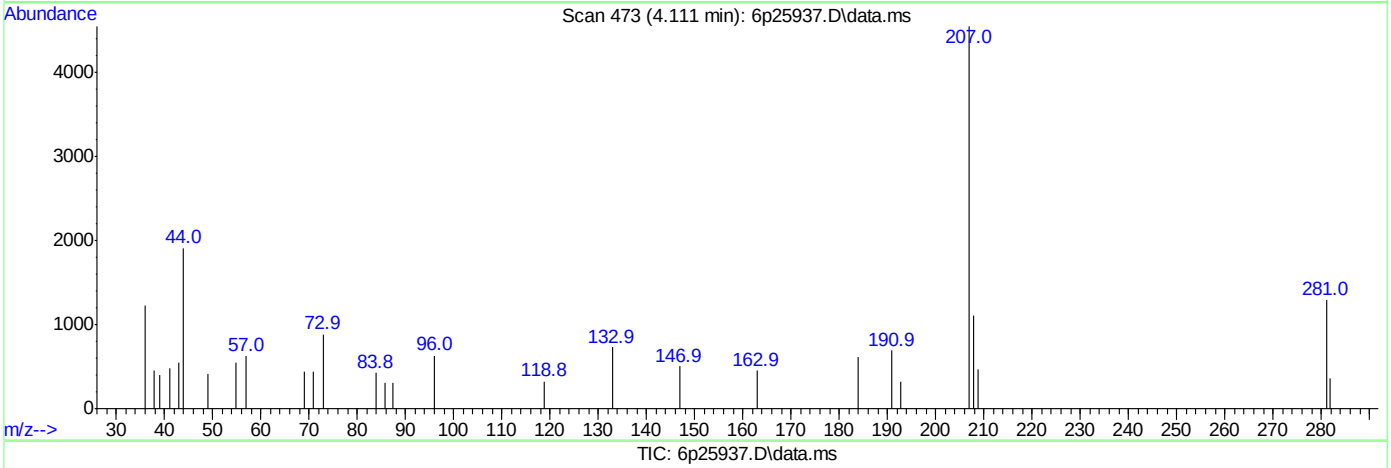
Ion	Exp%	Act%
265.80	100	0.00
263.80	62.70	0.00#
267.80	62.60	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e6p1210\
Data File : 6p25937.D
Acq On : 13 May 2016 2:25 pm
Operator : ariellec
Sample : dftpp
Misc : op93693,e6p1210
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 13 14:30:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP6P.M
Quant Title : Semi Volatile GC/MS, ZB-5 15m x .25mm x .25um
QLast Update : Tue Apr 05 12:41:26 2016
Response via : Initial Calibration





TIC: 6p25937.D\data.ms

(3) PP-DDT (t)

4.109min (-4.109) 0.00ppb

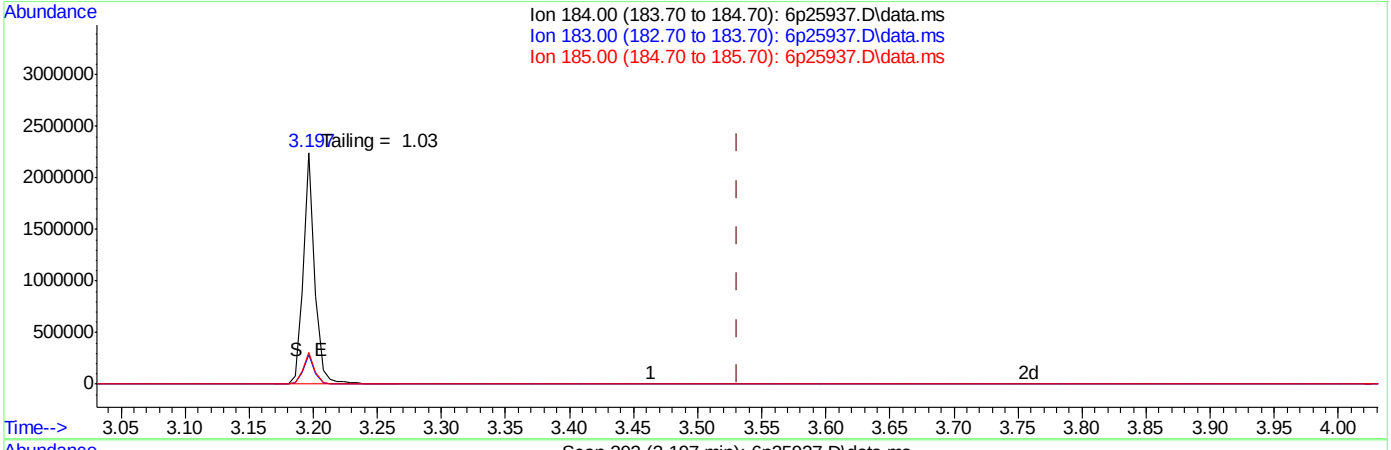
response 0

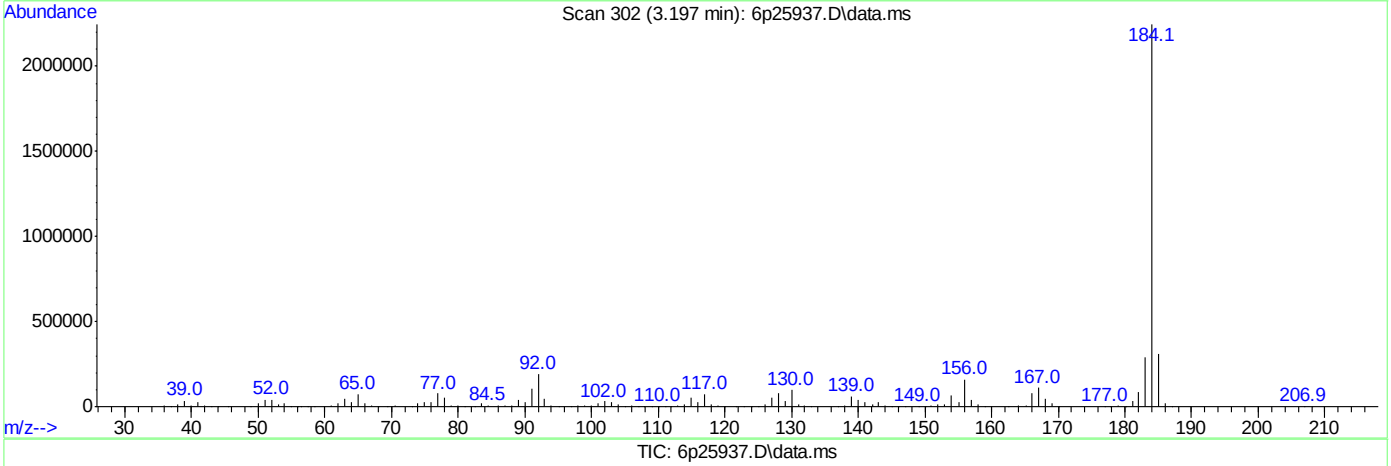
Ion	Exp%	Act%
235.00	100	0.00
165.00	93.70	0.00#
237.00	85.60	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e6p1210\
Data File : 6p25937.D
Acq On : 13 May 2016 2:25 pm
Operator : ariellec
Sample : dftpp
Misc : op93693,e6p1210
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 13 14:30:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP6P.M
Quant Title : Semi Volatile GC/MS, ZB-5 15m x .25mm x .25um
QLast Update : Tue Apr 05 12:41:26 2016
Response via : Initial Calibration





TIC: 6p25937.D\data.ms

(2) Benzidine (t)

3.197min (-0.334) 0.00ppb m

response 1426118

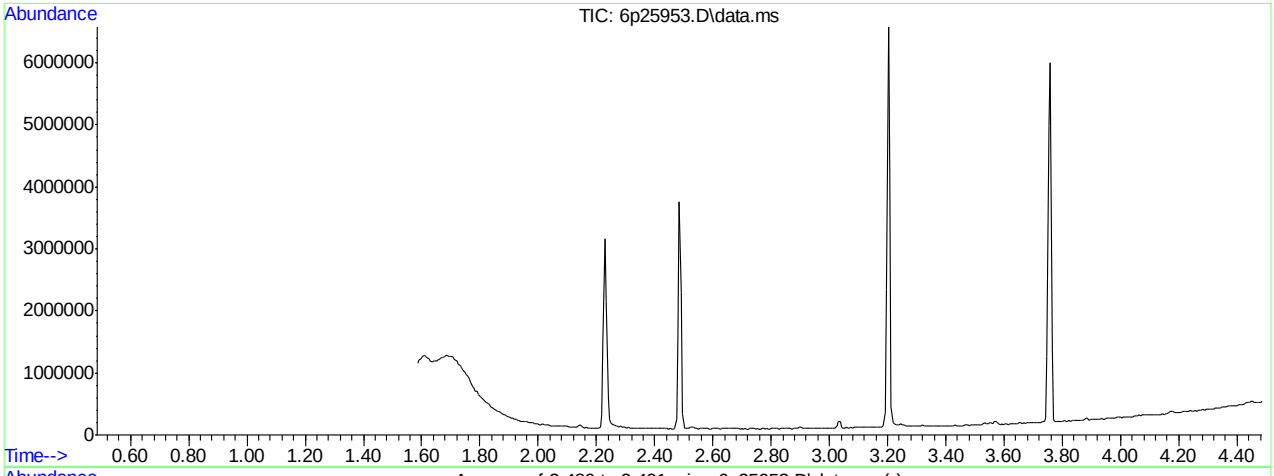
Ion	Exp%	Act%
184.00	100	100
183.00	11.10	12.80
185.00	13.90	13.81
0.00	0.00	0.00

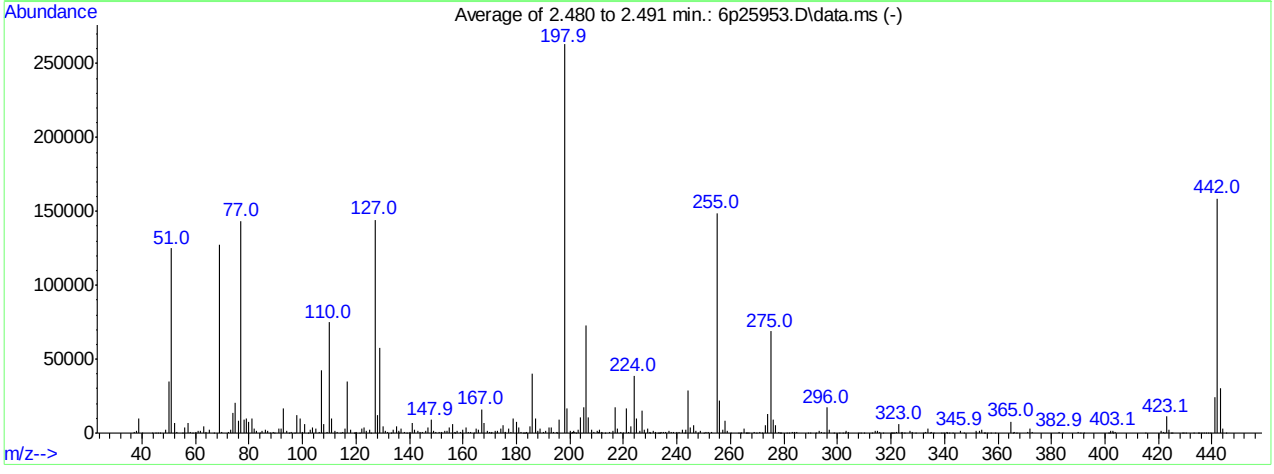
SGS ACCUTEST JC19644

DFTPP

Data File : C:\msdchem\1\DATA\E6P1211\6p25953.D Vial: 1
Acq On : 16 May 2016 8:59 am Operator: ariellec
Sample : dftpp Inst : MS6P
Misc : op93693,e6p1211 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\DFTPP6P.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5 15m x .25mm x .25um





AutoFind: Scans 168, 169, 170; Background Corrected with Scan 163

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	47.5	125051	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	48.5	127610	PASS
70	69	0.00	2	0.5	625	PASS
127	198	40	60	54.9	144274	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	262997	PASS
199	198	5	9	6.2	16343	PASS
275	198	10	30	26.2	68986	PASS
365	198	1	100	2.9	7608	PASS
441	443	0.10	100	81.1	24632	PASS
442	198	40	100	60.4	158754	PASS
443	442	17	23	19.1	30379	PASS

6p25953.D DFTPP6P.M Mon May 16 09:06:17 2016 ACLIMS

Average of 2.480 to 2.491 min.: 6p25953.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.90	578	52.00	6689	63.90	674	78.00	9493
37.95	1815	52.90	476	64.95	2564	79.00	10151
38.95	9790	54.95	268	66.95	241	79.95	7401
39.95	190	55.95	3812	68.90	127610	80.90	10240
43.90	51	57.00	7224	69.95	625	81.95	2751
44.90	398	57.95	694	72.10	422	82.95	1848
46.00	121	58.95	56	73.00	2281	83.90	415
46.90	153	59.95	524	74.00	13412	84.90	1522
48.90	2001	61.00	1816	74.95	20431	85.90	2594
49.95	34577	61.95	1902	76.00	8372	86.95	1688
50.95	125051	63.00	4346	77.00	143614	87.90	243

Average of 2.480 to 2.491 min.: 6p25953.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
89.00	423	99.85	957	110.95	10254	121.10	219
89.30	129	100.95	5859	111.90	1595	121.95	2935
90.95	2880	101.90	269	112.95	481	122.95	3752
92.00	3255	102.95	2268	114.20	101	123.95	1762
92.95	16749	103.90	3668	114.95	629	124.90	1949
93.90	1332	104.90	2930	116.00	2993	125.60	314
94.90	298	106.05	1077	116.90	34880	127.00	144274
95.90	678	107.00	42680	117.95	2625	128.00	12272
96.95	82	108.00	6231	119.10	375	128.95	57493
97.95	12224	109.05	1136	119.80	119	130.00	4486
98.95	10068	109.95	74856	120.05	738	130.85	1385

Average of 2.480 to 2.491 min.: 6p25953.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
131.95	616	142.00	2195	152.00	492	161.95	1009
132.95	273	142.95	1829	152.95	1843	162.90	531
133.95	2090	143.95	485	153.95	1689	163.90	223
135.00	4441	144.95	497	155.00	3491	164.90	2734
135.80	23	146.00	1397	156.00	6066	165.90	2406
136.00	1521	147.00	3751	156.80	224	167.00	16279
136.95	3215	147.95	8821	157.05	1121	168.00	7174
138.00	502	148.90	1866	157.85	1635	168.95	1531
138.80	182	149.95	584	159.00	1161	169.85	476
140.05	684	150.95	1146	159.95	1970	170.30	295
141.00	6929	151.70	384	160.95	3618	170.85	621

Average of 2.480 to 2.491 min.: 6p25953.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
171.95	1199	181.00	3667	189.90	842	200.60	168
172.80	448	181.85	698	190.95	1298	200.90	459
173.00	1411	182.70	214	192.00	3472	201.45	1482
174.00	2849	182.90	135	192.90	3871	201.80	441
175.00	5312	183.40	181	194.00	506	202.00	241
175.80	945	183.95	953	194.90	214	202.95	2328
176.00	1158	184.95	4731	195.10	897	204.00	10676
176.90	2804	186.00	40410	195.95	8817	204.95	17640
177.90	1123	187.00	9931	197.90	262997	206.00	72728
178.90	9899	188.05	1209	198.95	16343	207.00	10833
180.00	7648	188.95	2714	199.95	1621	208.00	2236

Average of 2.480 to 2.491 min.: 6p25953.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
208.95	933	218.95	492	229.80	148	237.95	426
210.05	1626	220.00	305	230.00	561	238.85	649
210.60	591	221.00	17041	230.95	1787	239.85	468
211.05	2687	221.70	1141	232.00	487	240.90	977

211.65	844	222.90	4457	232.80	165	242.00	2275
212.00	231	224.00	38656	233.00	113	242.80	381
213.10	113	225.00	10135	233.70	153	243.10	2274
214.95	864	226.10	1421	233.95	1091	244.00	28498
215.95	1920	226.95	15117	234.85	1126	245.05	3772
216.90	17630	227.95	2653	235.85	876	246.00	5389
217.90	2750	228.95	3361	236.95	1191	246.90	1470

Average of 2.480 to 2.491 min.: 6p25953.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
248.00	225	260.10	143	270.90	516	281.80	119
248.85	1186	263.10	100	271.75	264	282.90	609
250.00	178	263.70	121	272.90	5073	284.00	424
250.95	668	263.95	400	274.00	13120	284.95	1156
251.85	527	264.95	3264	275.00	68986	288.90	122
253.00	1166	265.70	180	276.00	8829	289.90	119
255.00	149002	265.90	223	276.95	5592	291.85	361
256.00	22323	266.40	145	277.90	882	292.95	1389
257.00	2089	266.90	1	278.60	109	293.95	503
257.90	8543	268.85	481	278.90	155	294.90	405
258.95	1265	269.85	290	281.05	67	296.00	17237

Average of 2.480 to 2.491 min.: 6p25953.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
297.00	2332	313.95	1259	324.05	836	338.80	227
298.70	122	314.90	1909	325.00	303	339.80	110
300.85	252	315.95	1090	326.90	1558	340.90	172
301.95	322	317.00	117	327.85	923	341.00	428
302.90	262	320.00	108	329.00	118	341.95	370
303.05	1909	320.50	124	332.10	353	342.95	316
304.05	525	320.80	258	332.95	633	345.95	1734
307.95	228	321.10	177	334.00	3381	347.05	287
308.75	230	322.00	487	334.80	126	351.80	100
309.85	381	323.00	6409	335.05	965	351.95	1808
312.95	321	323.70	186	336.00	148	353.00	1578

Average of 2.480 to 2.491 min.: 6p25953.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
354.00	2504	372.00	2992	403.05	1529	429.50	112
354.70	154	372.95	896	403.95	658	430.00	219
355.00	224	382.95	840	415.20	109	433.20	151
356.10	104	384.05	244	420.95	1308	434.65	306
357.10	124	390.00	421	421.90	703	435.40	117
358.80	129	391.00	294	422.20	195	436.00	103
365.00	7608	391.90	107	423.05	11026	437.10	108
365.80	179	401.15	273	424.05	2530	437.80	171
365.95	907	401.80	172	424.90	171	438.50	265
367.00	120	401.95	1199	425.10	221	439.35	344
371.05	626	402.90	174	428.90	156	441.05	24632

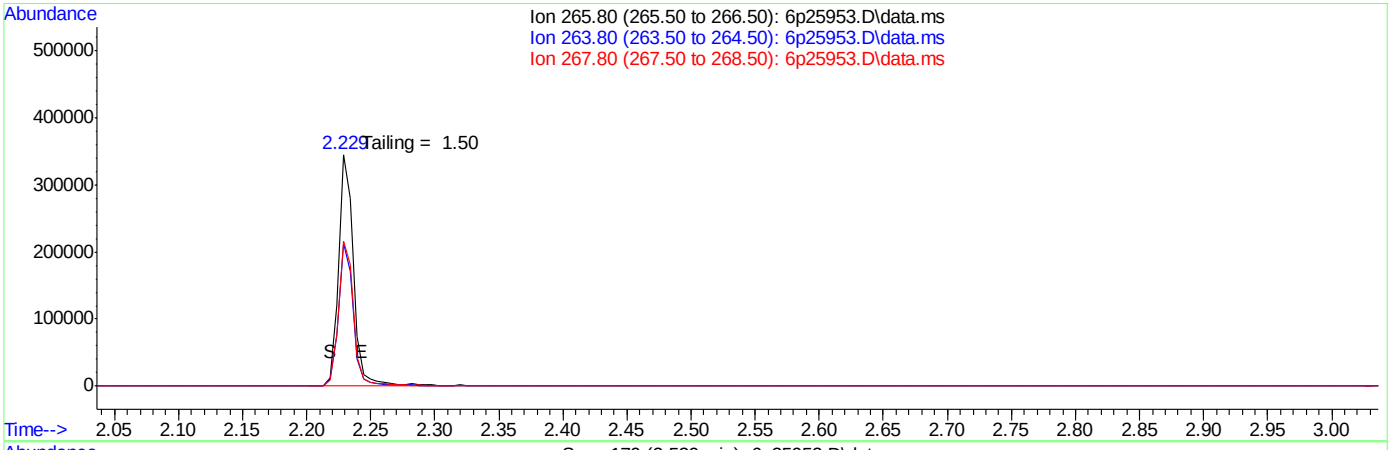
Average of 2.480 to 2.491 min.: 6p25953.D\data.ms
dftpp
Modified:subtracted

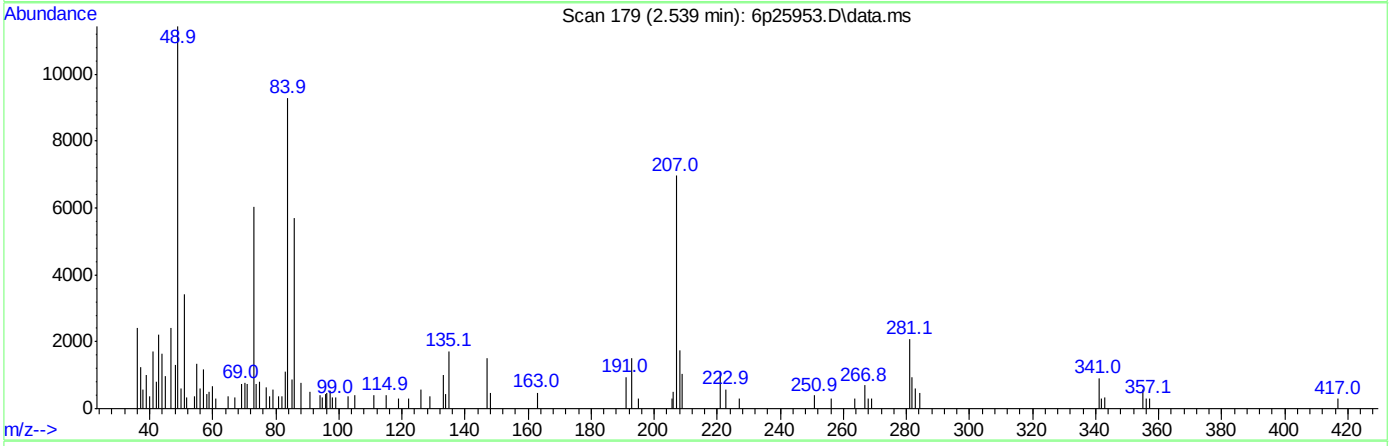
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
442.00	158754						
443.05	30379						
444.00	2934						
445.10	130						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E6P1211\
Data File : 6p25953.D
Acq On : 16 May 2016 8:59 am
Operator : ariellec
Sample : dftpp
Misc : op93693,e6p1211
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 16 09:04:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP6P.M
Quant Title : Semi Volatile GC/MS, ZB-5 15m x .25mm x .25um
QLast Update : Tue Apr 05 12:41:26 2016
Response via : Initial Calibration





TIC: 6p25953.D\data.ms

(1) Pentachlorophenol (t)

2.536min 0.00ppb d

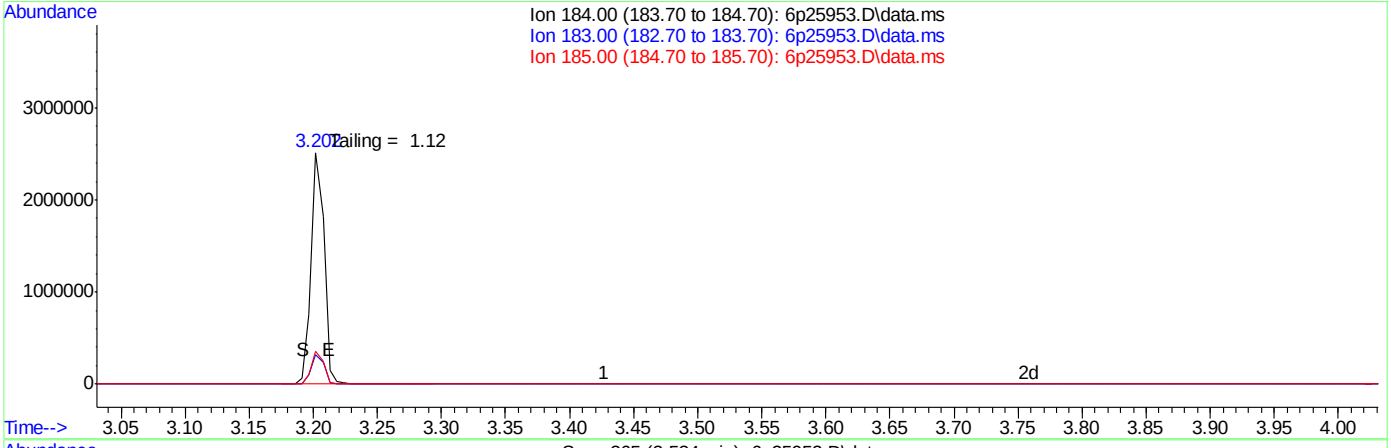
response 0

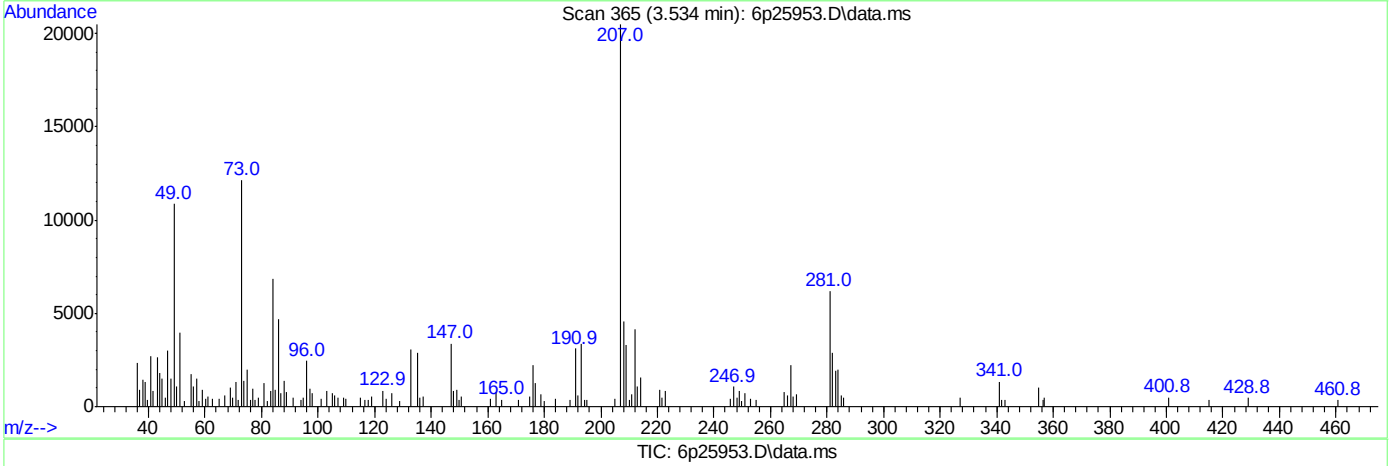
Ion	Exp%	Act%
265.80	100	0.00
263.80	62.70	0.00
267.80	62.60	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E6P1211\
Data File : 6p25953.D
Acq On : 16 May 2016 8:59 am
Operator : ariellec
Sample : dftpp
Misc : op93693,e6p1211
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 16 09:04:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP6P.M
Quant Title : Semi Volatile GC/MS, ZB-5 15m x .25mm x .25um
QLast Update : Tue Apr 05 12:41:26 2016
Response via : Initial Calibration





TIC: 6p25953.D\data.ms

(2) Benzidine (t)

3.531min 0.00ppb d

response 0

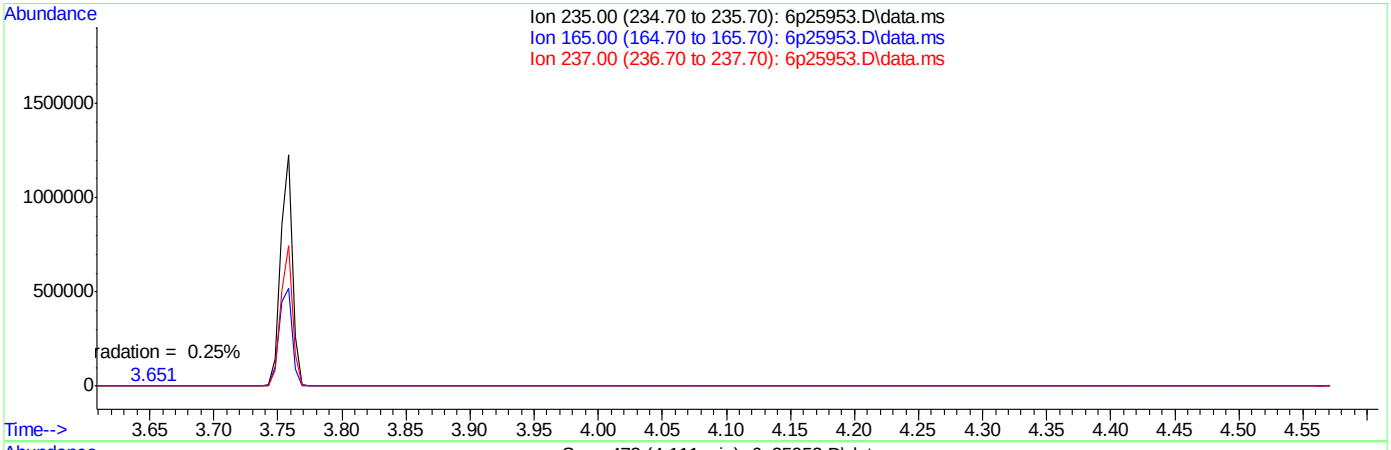
Ion	Exp%	Act%
184.00	100	0.00
183.00	11.10	0.00
185.00	13.90	0.00
0.00	0.00	0.00

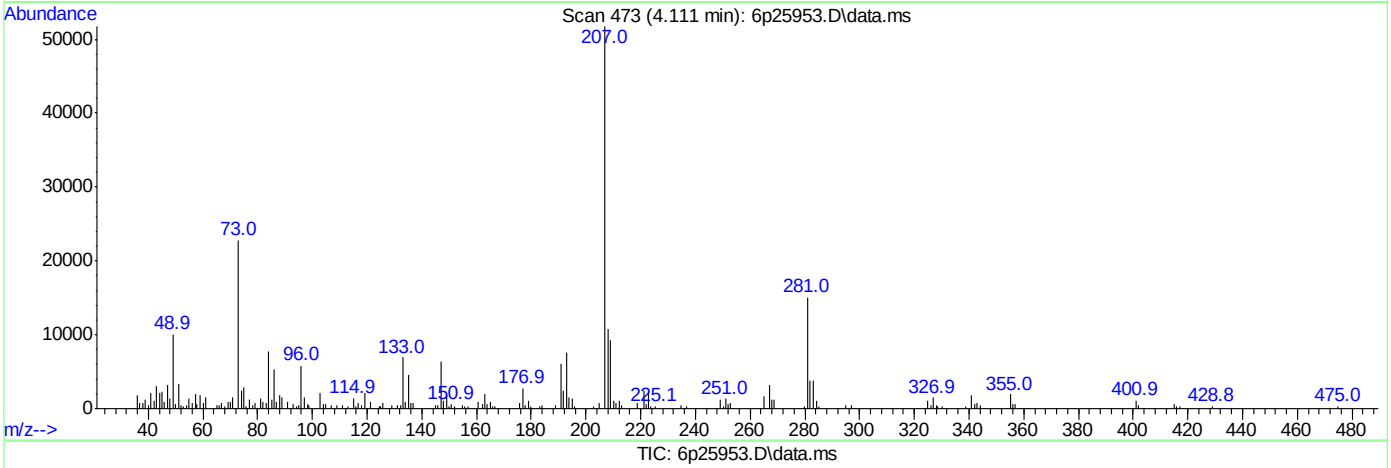
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E6P1211\
Data File : 6p25953.D
Acq On : 16 May 2016 8:59 am
Operator : ariellec
Sample : dftpp
Misc : op93693,e6p1211
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 16 09:04:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP6P.M
Quant Title : Semi Volatile GC/MS, ZB-5 15m x .25mm x .25um
QLast Update : Tue Apr 05 12:41:26 2016
Response via : Initial Calibration





TIC: 6p25953.D\data.ms

(3) PP-DDT (t)

4.109min 0.00ppb d

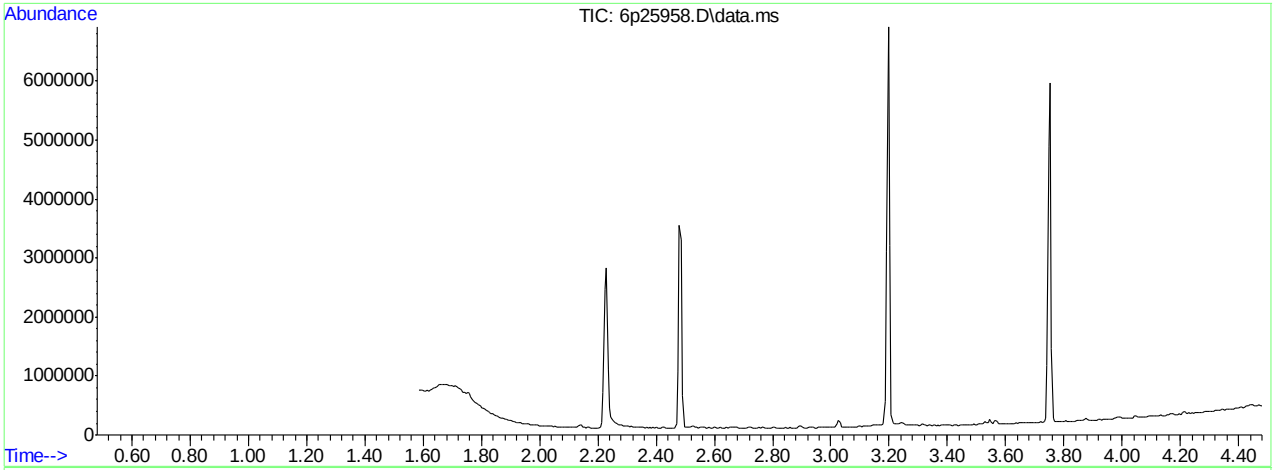
response 0

Ion	Exp%	Act%
235.00	100	0.00
165.00	93.70	0.00
237.00	85.60	0.00
0.00	0.00	0.00

DFTPP

Data File : C:\msdchem\1\DATA\e6p1212\6p25958.D Vial: 1
Acq On : 16 May 2016 11:00 am Operator: ariellec
Sample : dftpp Inst : MS6P
Misc : op93693,e6p1212 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\DFTPP6P.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5 15m x .25mm x .25um



AutoFind: Scans 167, 168, 169; Background Corrected with Scan 163

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	47.4	129527	PASS
68	69	0.00	2	0.7	932	PASS
69	198	0.00	100	50.6	138190	PASS
70	69	0.00	2	0.6	775	PASS
127	198	40	60	54.4	148557	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	273010	PASS
199	198	5	9	6.7	18218	PASS
275	198	10	30	25.8	70571	PASS
365	198	1	100	3.2	8697	PASS
441	443	0.10	100	76.8	23976	PASS
442	198	40	100	55.7	151981	PASS
443	442	17	23	20.5	31207	PASS

6p25958.D DFTPP6P.M Mon May 16 11:38:16 2016 ACLIMS

Average of 2.475 to 2.486 min.: 6p25958.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.85	372	50.95	129527	59.95	280	71.70	130
36.90	1334	51.95	6291	60.95	1658	72.95	1943
38.00	1708	52.80	126	61.95	1918	74.00	14924
39.00	9877	53.05	603	62.95	4818	75.00	21404
39.90	25	53.85	434	64.00	978	76.05	8461
40.95	601	54.90	732	65.00	2738	76.95	143656
43.00	803	55.90	3718	65.90	167	77.95	10626
43.90	156	57.00	8516	68.00	932	78.95	10023
44.85	179	57.90	149	68.90	138190	79.95	8183
45.90	149	58.10	186	69.90	775	80.95	10322
50.00	36301	59.00	328	70.85	659	81.90	1998

Average of 2.475 to 2.486 min.: 6p25958.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
83.00	2562	95.90	870	107.00	43335	117.95	3080
84.90	1646	96.90	367	107.95	6537	118.95	474
85.90	4509	97.90	13271	108.95	1147	119.85	926
86.90	1209	98.95	10378	110.00	76514	120.95	111
87.90	97	100.00	1242	110.95	12886	122.00	3121
88.80	67	100.90	5710	111.95	1969	122.95	4635
90.95	2801	101.95	354	112.95	662	123.95	2166
91.95	2606	102.90	2638	114.10	105	124.95	2156
92.90	17195	103.95	3528	114.85	560	127.00	148557
93.90	1456	105.05	3530	116.05	3209	128.00	11280
94.95	254	106.05	1919	116.90	37330	129.00	58915

Average of 2.475 to 2.486 min.: 6p25958.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
129.95	5339	138.90	656	148.95	1929	156.95	1350
130.95	1586	139.80	126	150.05	543	157.95	1420
131.90	968	140.00	754	150.80	180	159.00	1199
132.90	701	140.95	7967	151.00	513	159.90	2050
133.90	2401	141.95	2578	151.20	288	160.95	3442
134.95	4169	143.00	1554	151.60	334	161.95	1077
135.90	982	144.00	558	152.00	682	162.90	370
136.20	237	145.05	572	152.90	2618	164.10	613
136.95	2290	145.95	1536	153.95	1856	164.95	3199
137.80	158	146.90	4061	154.95	4064	166.00	1939
137.95	522	147.90	8897	155.95	5769	166.95	17053

Average of 2.475 to 2.486 min.: 6p25958.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
167.95	7609	178.90	10770	188.80	397	197.90	273010
168.90	1015	179.95	7757	189.00	2296	198.90	18218
169.95	610	180.95	3031	190.05	634	199.90	1628
170.95	832	182.05	780	190.90	1334	201.10	222
171.90	1597	182.60	187	191.90	4009	201.40	1413
172.95	1811	182.90	217	192.95	3299	201.90	255
173.95	3145	184.05	1099	193.80	76	202.70	272
175.00	5593	185.00	5558	194.00	395	203.00	2166
176.05	1693	186.00	40435	194.80	479	204.00	10972
176.95	2777	187.00	11600	195.10	359	205.00	18985
177.95	1119	187.95	1650	196.00	9110	206.00	75056

Average of 2.475 to 2.486 min.: 6p25958.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
206.95	9404	214.70	179	225.90	639	234.95	1284
207.95	2708	215.00	726	226.10	893	235.95	962
208.95	1277	216.10	1964	227.00	16646	236.95	1790
210.00	804	216.90	18746	227.90	1336	237.70	133

210.20	681	218.00	2436	228.10	1130	238.10	189
210.70	252	219.00	576	228.90	3385	238.85	759
211.00	3249	220.95	15286	229.90	545	239.95	922
211.60	503	222.00	244	230.85	1105	240.80	132
212.10	184	223.00	4756	231.90	332	241.00	457
212.90	320	224.00	40491	233.00	291	241.80	289
214.00	104	225.00	10196	233.95	1238	241.95	2077

Average of 2.475 to 2.486 min.: 6p25958.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
243.00	2727	253.10	1028	264.95	3676	276.00	9441
244.00	32288	255.00	153264	265.85	991	276.70	567
245.05	4060	256.00	22034	266.90	412	276.95	5515
245.95	6034	256.80	178	268.85	237	277.90	1241
247.00	1305	256.95	1349	269.85	381	278.60	151
247.95	411	257.95	8138	271.10	330	279.00	124
248.95	1398	258.60	144	271.90	456	282.00	57
250.00	162	258.90	1209	272.30	445	282.80	150
250.85	546	259.95	500	273.00	4912	282.95	883
251.95	511	260.70	256	274.00	13669	284.00	463
252.80	139	263.80	388	275.00	70571	284.95	1035

Average of 2.475 to 2.486 min.: 6p25958.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
287.80	108	297.00	2951	310.10	144	323.00	6252
288.80	233	298.00	155	312.50	103	324.00	1256
289.70	150	300.80	309	313.15	321	325.30	107
290.00	199	301.20	115	314.05	813	325.80	107
291.10	123	302.05	408	314.90	1965	326.90	1028
292.05	342	302.60	101	315.95	1321	328.00	539
292.90	1371	302.95	1859	316.90	123	329.10	119
293.80	198	304.05	519	319.60	118	332.00	257
294.20	280	307.95	250	320.10	129	333.00	594
295.00	489	309.00	105	320.90	776	333.80	281
296.00	17658	309.80	199	322.00	295	334.10	3932

Average of 2.475 to 2.486 min.: 6p25958.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
335.05	834	353.10	1034	372.00	3550	402.05	1304
339.80	109	354.00	2029	373.05	1030	402.95	2037
340.20	105	354.95	13	373.90	128	404.00	642
341.05	925	355.20	283	383.00	866	404.90	116
341.90	342	364.90	8697	384.00	336	405.20	109
342.90	101	365.80	418	389.80	361	415.10	126
345.95	1053	366.00	593	390.80	270	417.00	117
346.95	240	366.90	117	391.10	140	420.90	1269
351.90	1164	370.10	122	391.60	207	422.05	1514
352.10	888	371.00	232	392.10	196	423.05	10918
352.80	595	371.20	260	401.10	251	424.05	3138

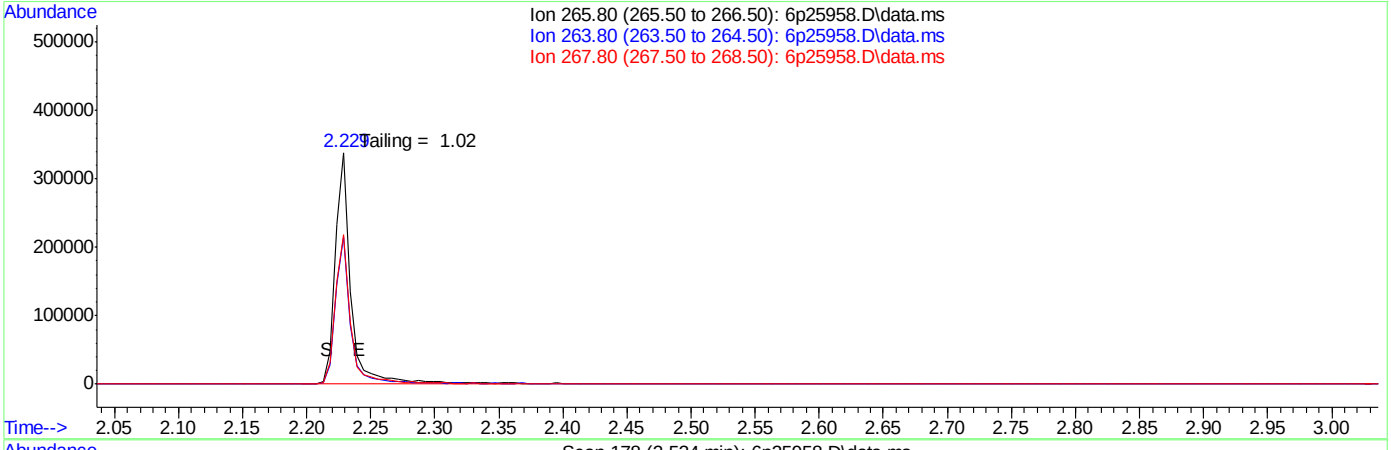
Average of 2.475 to 2.486 min.: 6p25958.D\data.ms
dftpp
Modified:subtracted

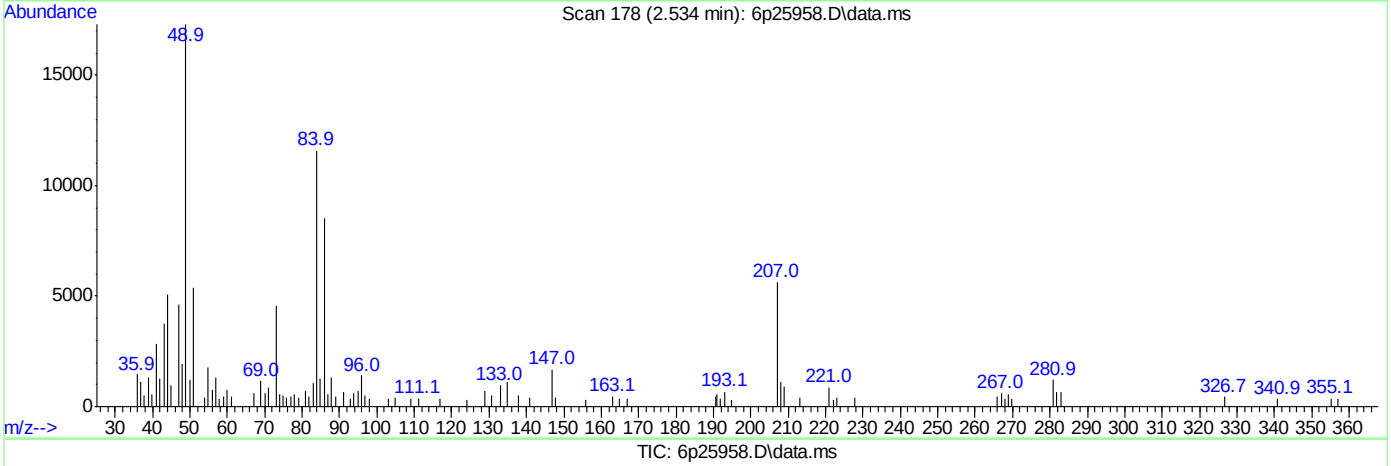
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
425.00	464	437.70	279				
428.40	113	438.40	117				
430.60	100	438.80	105				
431.00	100	439.10	161				
431.80	112	439.70	651				
432.20	124	441.10	23976				
433.40	131	442.05	151981				
434.30	126	443.00	31207				
434.70	100	443.90	798				
435.40	125	444.10	1940				
436.50	235	444.80	151				

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e6p1212\
Data File : 6p25958.D
Acq On : 16 May 2016 11:00 am
Operator : ariellec
Sample : dftpp
Misc : op93693,e6p1212
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 16 11:05:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP6P.M
Quant Title : Semi Volatile GC/MS, ZB-5 15m x .25mm x .25um
QLast Update : Tue Apr 05 12:41:26 2016
Response via : Initial Calibration





TIC: 6p25958.D\data.ms

(1) Pentachlorophenol (t)

2.536min 0.00ppb d

response 0

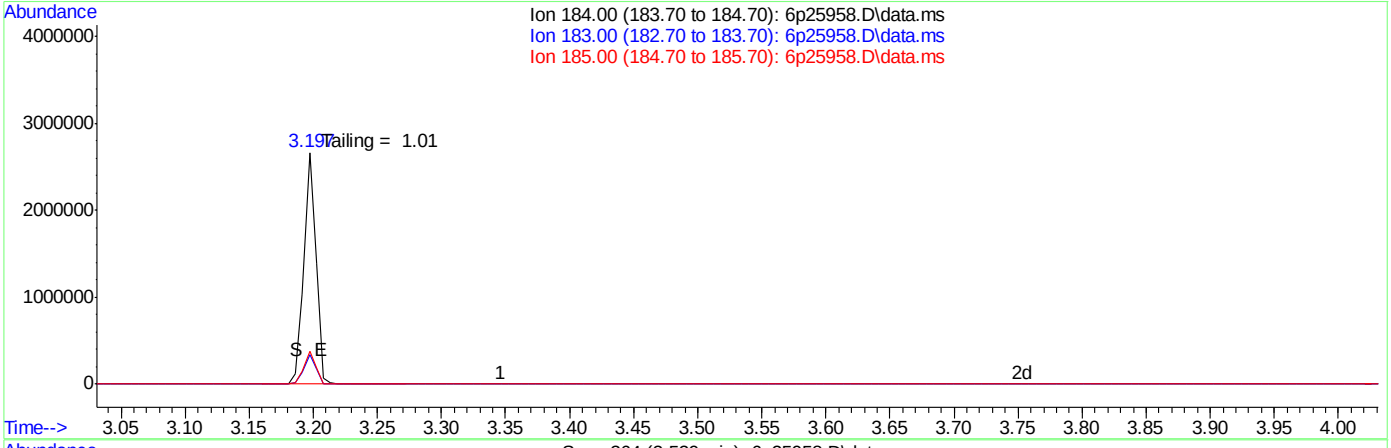
Ion	Exp%	Act%
265.80	100	0.00
263.80	62.70	0.00
267.80	62.60	0.00
0.00	0.00	0.00

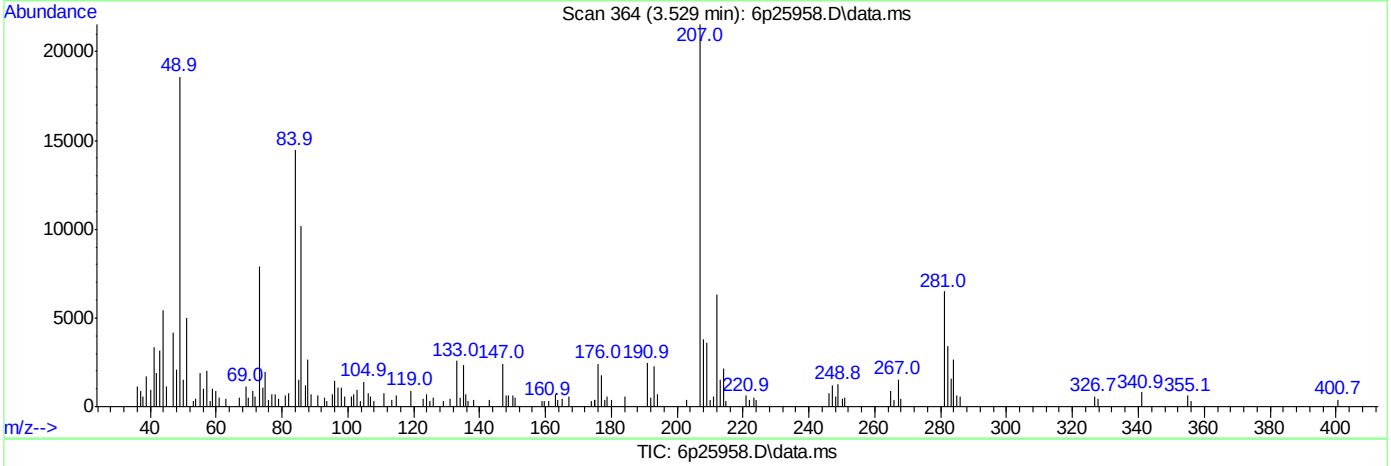
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e6p1212\
Data File : 6p25958.D
Acq On : 16 May 2016 11:00 am
Operator : ariellec
Sample : dftpp
Misc : op93693,e6p1212
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 16 11:05:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP6P.M
Quant Title : Semi Volatile GC/MS, ZB-5 15m x .25mm x .25um
QLast Update : Tue Apr 05 12:41:26 2016
Response via : Initial Calibration





TIC: 6p25958.D\data.ms

(2) Benzidine (t)

3.531min 0.00ppb d

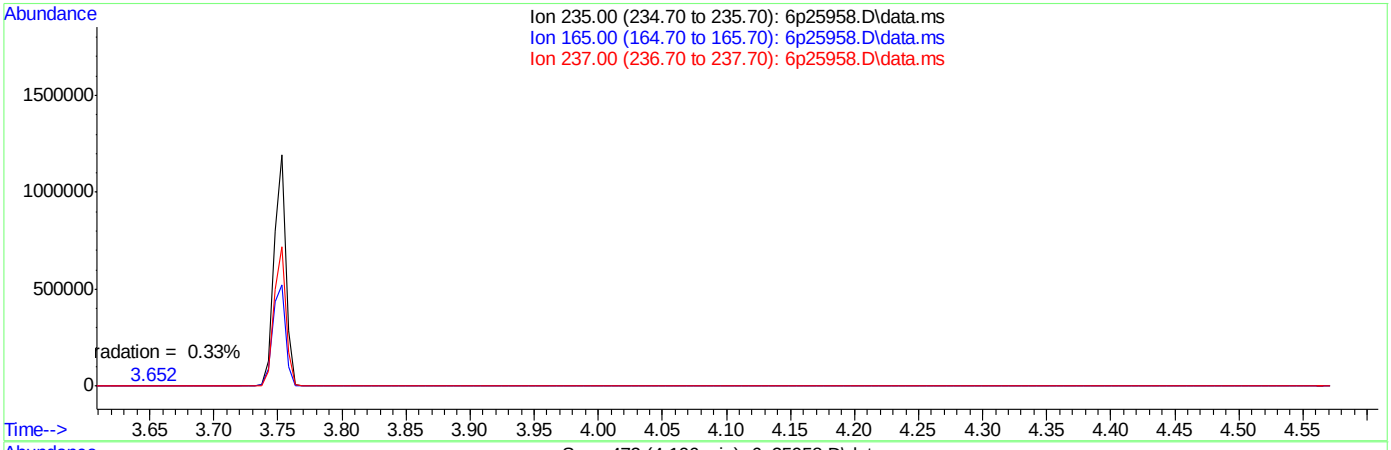
response 0

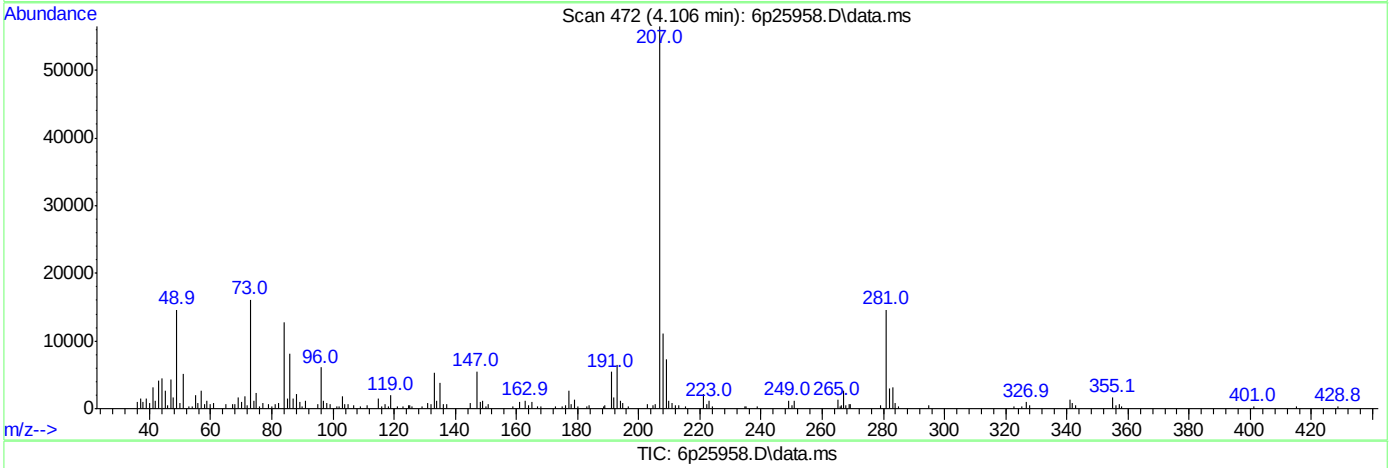
Ion	Exp%	Act%
184.00	100	0.00
183.00	11.10	0.00
185.00	13.90	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e6p1212\
Data File : 6p25958.D
Acq On : 16 May 2016 11:00 am
Operator : ariellec
Sample : dftpp
Misc : op93693,e6p1212
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 16 11:05:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP6P.M
Quant Title : Semi Volatile GC/MS, ZB-5 15m x .25mm x .25um
QLast Update : Tue Apr 05 12:41:26 2016
Response via : Initial Calibration





(3) PP-DDT (t)

4.109min (-4.109) 0.00ppb

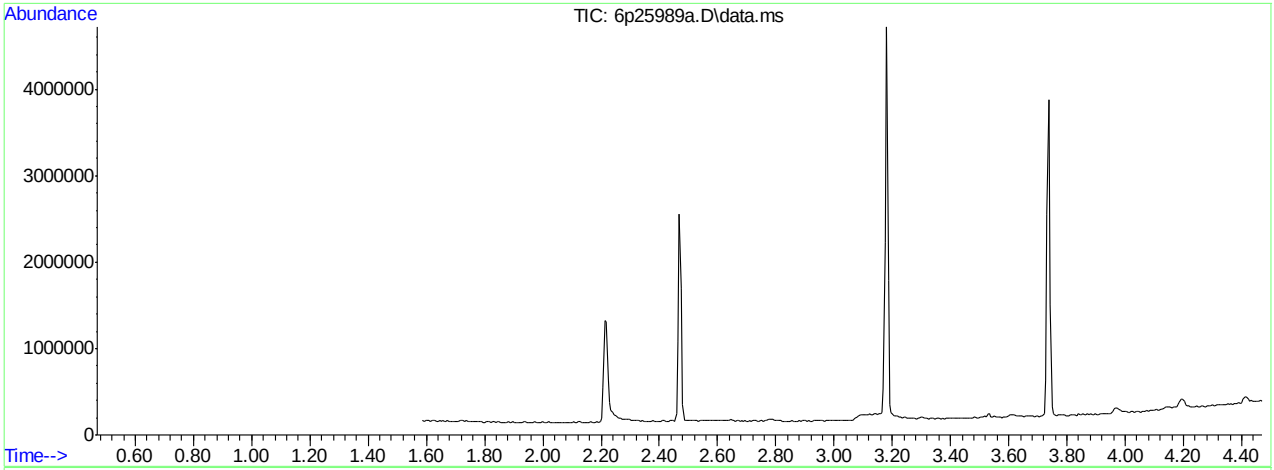
response 0

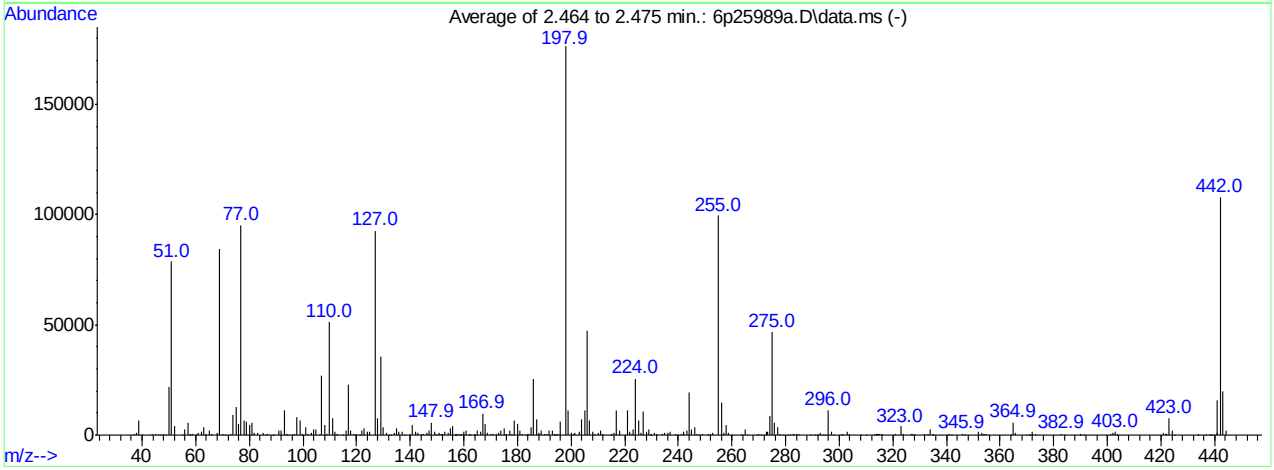
Ion	Exp%	Act%
235.00	100	0.00
165.00	93.70	0.00#
237.00	85.60	0.00#
0.00	0.00	0.00

DFTPP

Data File : C:\msdchem\1\DATA\e6p1214\6p25989a.D Vial: 1
Acq On : 17 May 2016 7:19 am Operator: ariellec
Sample : dftpp Inst : MS6P
Misc : op93693,e6p1214 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\DFTPP6P.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5 15m x .25mm x .25um





AutoFind: Scans 165, 166, 167; Background Corrected with Scan 161

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	44.6	78554	PASS
68	69	0.00	2	1.4	1196	PASS
69	198	0.00	100	47.9	84357	PASS
70	69	0.00	2	0.5	461	PASS
127	198	40	60	52.6	92752	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	176173	PASS
199	198	5	9	6.4	11338	PASS
275	198	10	30	26.4	46552	PASS
365	198	1	100	3.2	5703	PASS
441	443	0.10	100	79.7	15722	PASS
442	198	40	100	61.3	107968	PASS
443	442	17	23	18.3	19728	PASS

6p25989a.D DFTPP6P.M Tue May 17 07:25:09 2016 ACLIMS

Average of 2.464 to 2.475 min.: 6p25989a.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.90	523	51.00	78554	62.95	3406	76.00	5258
37.85	979	51.95	4034	64.00	316	76.95	95232
38.95	6440	55.00	104	65.00	1929	77.95	6514
39.90	211	55.95	2440	66.00	441	78.90	6168
43.90	311	56.95	5604	68.00	1196	80.00	4729
44.90	433	57.80	118	68.90	84357	80.90	5817
45.90	109	57.95	400	69.90	461	81.90	1217
46.90	103	58.95	461	71.00	136	82.95	1174
47.90	719	59.95	118	73.00	293	85.00	1204
48.90	61	60.95	1068	73.90	8919	85.90	162
49.95	22009	62.00	1288	74.95	12886	86.90	747

Average of 2.464 to 2.475 min.: 6p25989a.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
88.80	162	98.95	6807	108.95	671	119.95	722
89.00	181	99.80	186	110.00	51261	121.20	148
90.95	1964	99.95	548	110.95	7618	121.95	2117
91.90	2103	100.90	3342	111.95	1316	122.90	3088
92.90	10990	101.90	448	112.70	117	123.90	1378
93.90	726	102.95	1202	112.95	443	124.95	1472
94.10	231	103.95	2623	115.00	160	127.00	92752
94.95	15	104.95	2476	115.90	2006	128.00	7687
95.95	247	106.10	236	116.95	23090	129.00	35513
97.05	617	107.00	26826	117.95	1960	129.95	3586
97.90	8338	108.00	4572	118.90	556	130.95	814

Average of 2.464 to 2.475 min.: 6p25989a.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
132.00	172	143.95	689	153.95	1273	162.00	575
132.85	172	145.00	449	154.95	2924	162.70	102
133.95	1119	146.00	1073	156.00	4251	163.60	110
134.90	2840	146.90	2271	156.80	134	163.80	144
135.90	1540	147.95	5818	156.90	140	164.10	187
137.00	1632	148.95	1334	157.05	546	164.90	1864
137.70	164	149.85	333	157.85	753	166.05	1385
139.95	316	150.95	882	158.50	125	166.95	9761
140.95	4612	151.55	545	158.95	760	167.90	5160
141.95	1749	152.05	619	159.90	1642	168.95	1070
142.95	1253	152.90	1698	160.95	2218	169.90	279

Average of 2.464 to 2.475 min.: 6p25989a.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
171.05	695	181.00	2079	190.85	316	201.00	420
171.95	612	181.85	422	191.95	1996	201.50	1007
173.00	1205	183.05	240	192.95	2291	203.00	1463
173.90	2082	183.80	273	193.80	191	204.00	7137
174.95	3250	184.15	329	193.95	617	205.00	11076
175.60	218	184.95	3826	194.20	161	206.00	47130
175.90	751	186.00	25295	194.90	635	207.00	6607
177.00	1957	187.00	6898	196.00	6152	208.00	1499
178.05	779	187.95	921	197.90	176173	208.90	650
178.90	6445	188.85	1813	198.95	11338	210.00	855
180.00	5061	189.95	409	199.95	946	210.95	1862

Average of 2.464 to 2.475 min.: 6p25989a.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
211.95	336	225.00	6560	235.95	817	246.85	759
214.60	114	225.90	892	236.90	1513	247.90	235
215.05	512	226.95	10548	238.95	649	248.95	716
215.90	1149	227.95	1685	239.90	233	250.95	337

216.90	11297	228.90	2450	240.95	676	251.90	314
217.95	1829	229.75	303	241.80	224	253.00	937
221.00	10947	230.00	191	242.00	1338	255.00	99592
221.75	1397	230.95	988	243.00	2027	255.95	14823
222.90	480	232.00	288	244.00	19369	256.95	952
223.05	2403	233.95	568	244.95	2579	257.90	4796
224.00	25432	234.95	1121	246.00	3718	258.85	854

Average of 2.464 to 2.475 min.: 6p25989a.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
259.70	156	275.00	46552	289.00	154	301.20	118
263.80	327	275.95	5658	290.90	100	303.00	1741
264.90	2516	276.95	3666	291.50	108	304.00	325
265.70	253	278.05	768	291.90	101	307.80	113
269.00	159	279.10	103	292.85	906	310.10	105
269.85	460	281.00	49	293.90	226	313.10	105
270.90	134	281.70	134	294.80	220	313.70	282
271.90	191	282.70	192	296.00	11219	314.00	237
272.90	1714	283.00	436	296.90	1529	314.20	332
273.10	1653	284.00	323	297.90	104	314.80	579
273.95	8736	284.95	603	300.90	272	315.00	599

Average of 2.464 to 2.475 min.: 6p25989a.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
315.95	583	334.80	207	364.00	132	389.85	347
321.00	438	335.05	448	364.95	5703	390.10	123
323.00	3921	340.95	547	365.85	785	391.00	153
323.95	510	341.90	111	369.80	169	401.00	318
326.80	330	345.85	700	370.70	102	402.05	954
327.00	305	346.95	250	370.90	227	403.00	1389
327.80	144	352.00	1367	371.80	132	403.85	379
328.10	268	353.05	895	372.00	1619	420.95	948
331.85	305	353.90	750	373.05	534	421.60	406
333.10	287	354.10	468	382.95	524	422.10	653
334.00	2490	354.95	395	383.90	149	423.00	7799

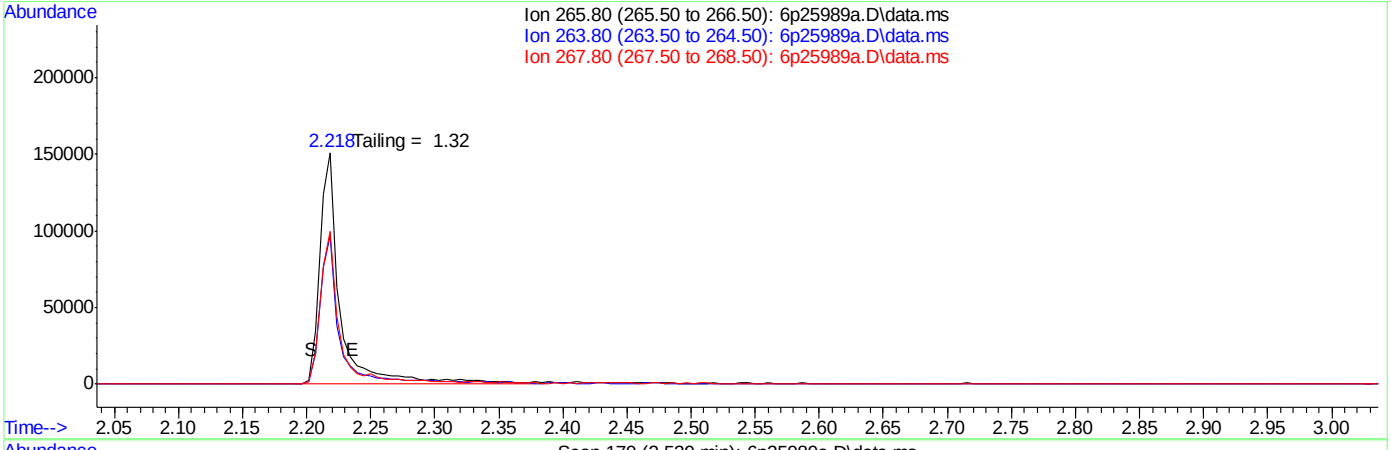
Average of 2.464 to 2.475 min.: 6p25989a.D\data.ms
dftpp
Modified:subtracted

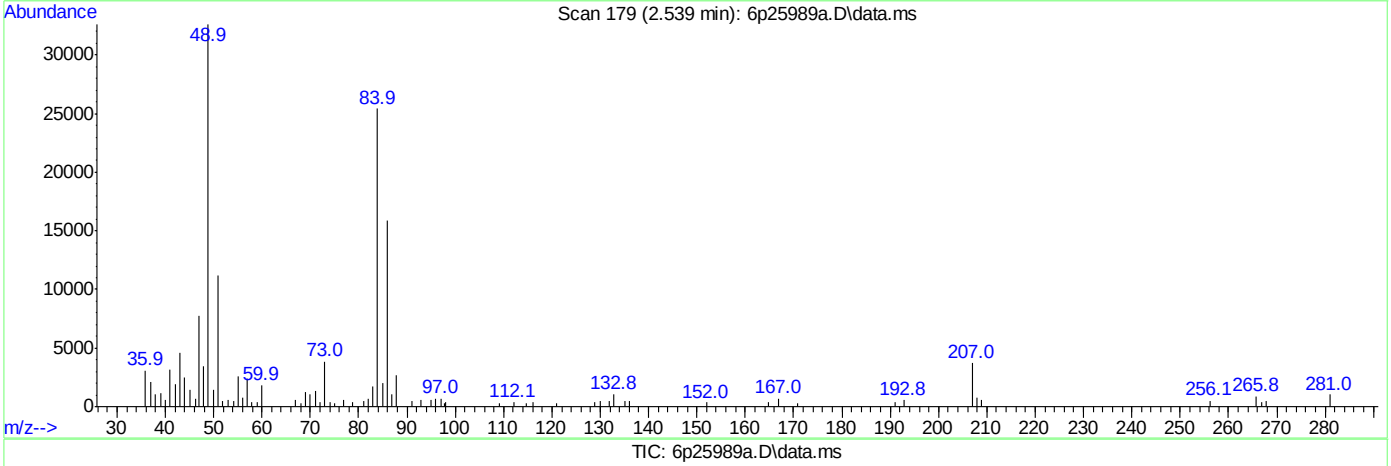
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
424.00	1800	442.00	107968				
425.10	115	443.00	19728				
433.60	107	444.10	2033				
433.90	110						
436.90	153						
438.00	192						
438.30	141						
438.70	102						
439.60	161						
440.90	1216						
441.05	15722						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e6p1214\
Data File : 6p25989a.D
Acq On : 17 May 2016 7:19 am
Operator : ariellec
Sample : dftpp
Misc : op93693,e6p1214
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 17 07:24:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP6P.M
Quant Title : Semi Volatile GC/MS, ZB-5 15m x .25mm x .25um
QLast Update : Tue Apr 05 12:41:26 2016
Response via : Initial Calibration





TIC: 6p25989a.D\data.ms

(1) Pentachlorophenol (t)

2.536min 0.00ppb d

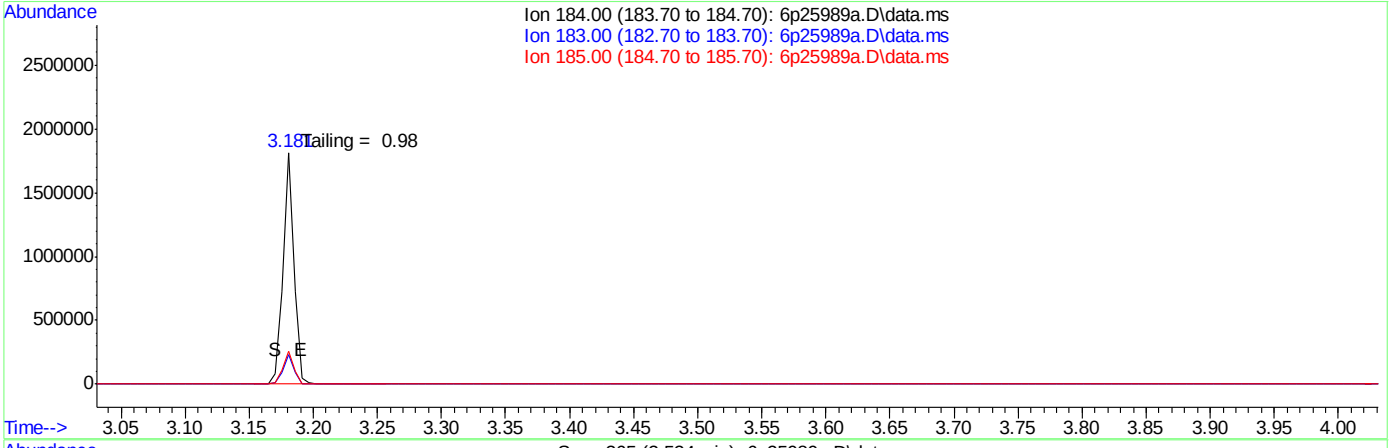
response 0

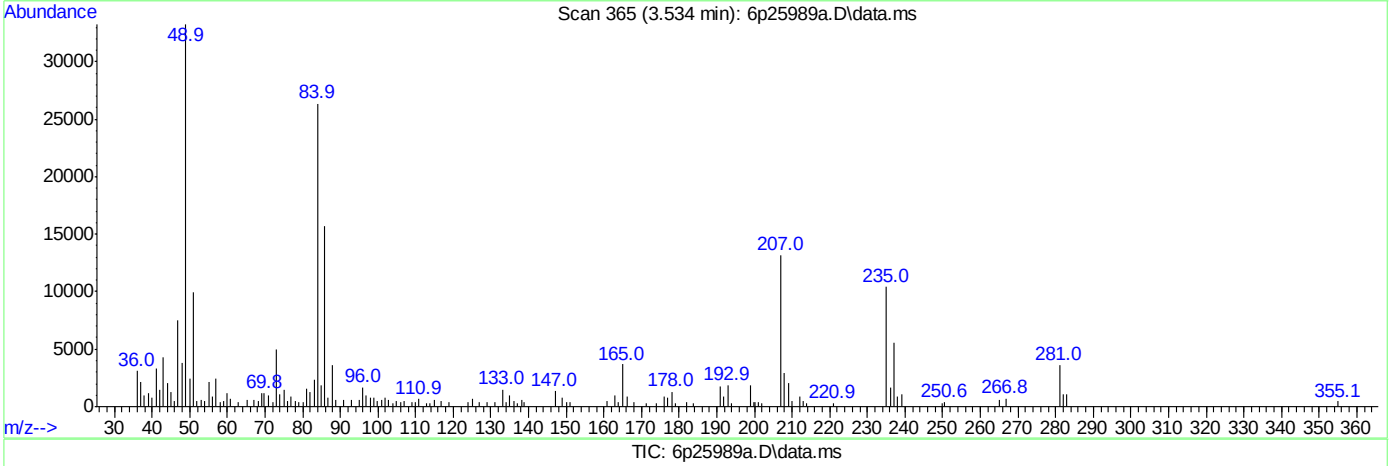
Ion	Exp%	Act%
265.80	100	0.00
263.80	62.70	0.00
267.80	62.60	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e6p1214\
Data File : 6p25989a.D
Acq On : 17 May 2016 7:19 am
Operator : ariellec
Sample : dftpp
Misc : op93693,e6p1214
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 17 07:24:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP6P.M
Quant Title : Semi Volatile GC/MS, ZB-5 15m x .25mm x .25um
QLast Update : Tue Apr 05 12:41:26 2016
Response via : Initial Calibration





TIC: 6p25989a.D\data.ms

(2) Benzidine (t)

3.531min 0.00ppb d

response 0

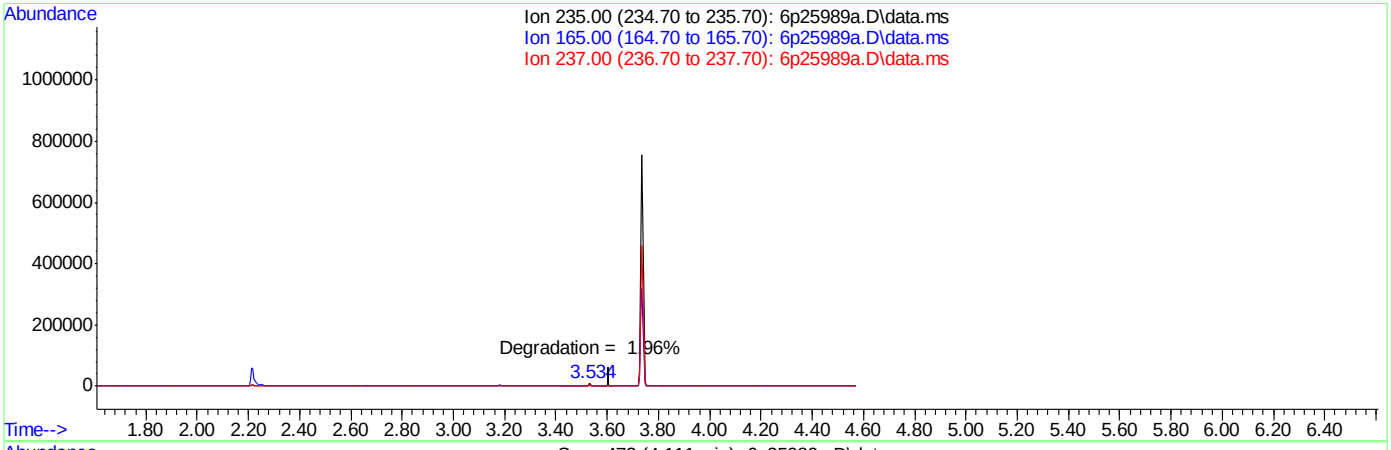
Ion	Exp%	Act%
184.00	100	0.00
183.00	11.10	0.00
185.00	13.90	0.00
0.00	0.00	0.00

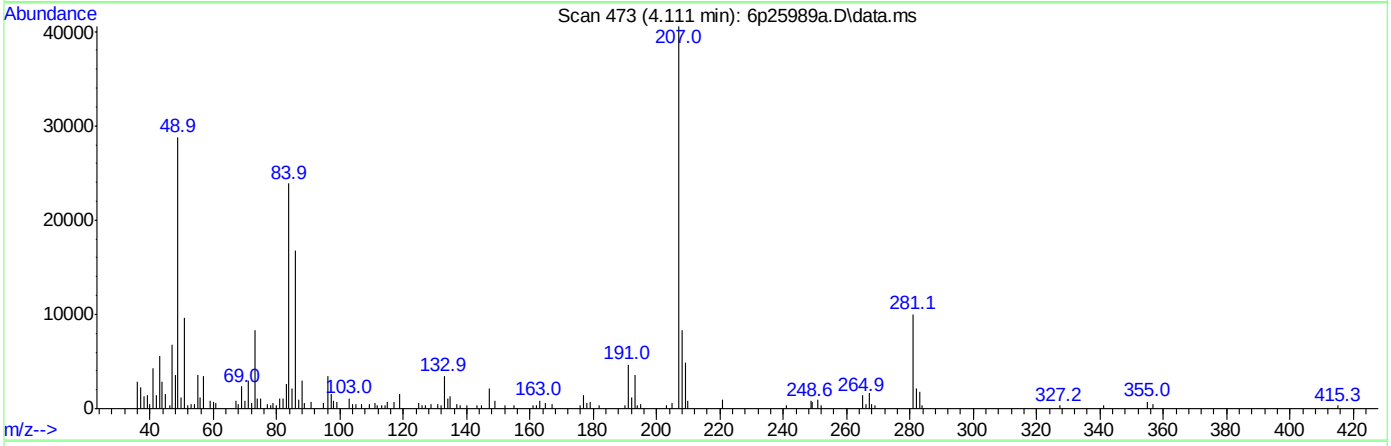
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e6p1214\
Data File : 6p25989a.D
Acq On : 17 May 2016 7:19 am
Operator : ariellec
Sample : dftpp
Misc : op93693,e6p1214
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 17 07:24:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP6P.M
Quant Title : Semi Volatile GC/MS, ZB-5 15m x .25mm x .25um
QLast Update : Tue Apr 05 12:41:26 2016
Response via : Initial Calibration





TIC: 6p25989a.D\data.ms

(3) PP-DDT (t)

4.109min (-4.109) 0.00ppb

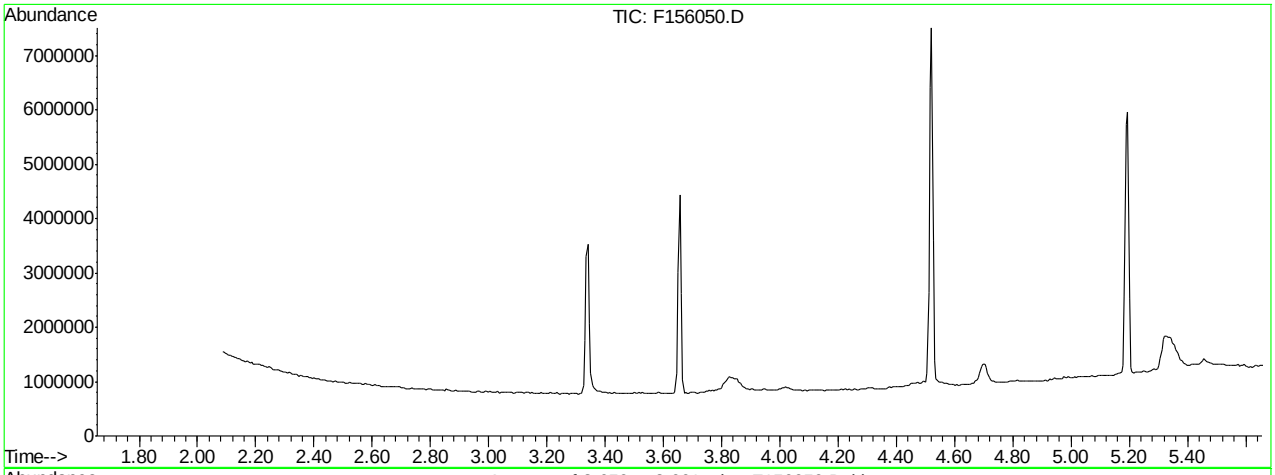
response 0

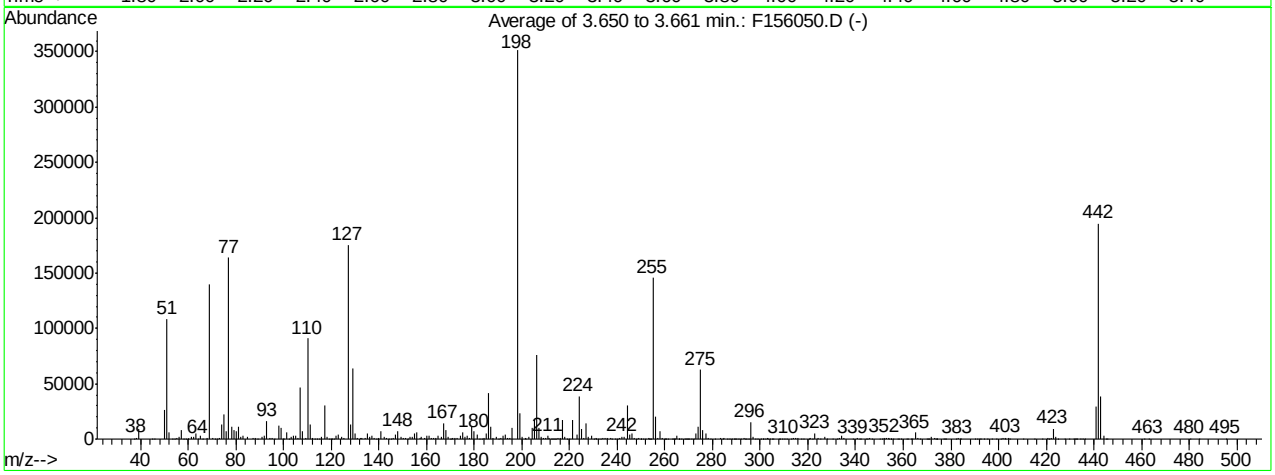
Ion	Exp%	Act%
235.00	100	0.00
165.00	93.70	0.00#
237.00	85.60	0.00#
0.00	0.00	0.00

SGS ACCUTEST JC19644

DFTPP

Data File : C:\MSDCHEM\1\DATA\EF6563\F156050.D Vial: 1
Acq On : 4 Apr 2016 6:54 pm Operator: sarad
Sample : dftpp Inst : MSF
Misc : op92661,ef6563,100 Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : C:\MSDCHEM\1\METHODS\DFTPPF.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um





AutoFind: Scans 294, 295, 296; Background Corrected with Scan 289

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	30.9	108584	PASS
68	69	0.00	2	0.4	596	PASS
69	198	0.00	100	39.9	140032	PASS
70	69	0.00	2	0.5	642	PASS
127	198	40	60	50.0	175460	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	351082	PASS
199	198	5	9	6.6	23024	PASS
275	198	10	30	17.8	62466	PASS
365	198	1	100	1.6	5730	PASS
441	443	0.10	100	76.5	29498	PASS
442	198	40	100	55.5	194704	PASS
443	442	17	23	19.8	38575	PASS

F156050.D DFTPPF.M Tue Apr 05 08:58:18 2016 RT1

Average of 3.650 to 3.661 min.: F156050.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.10	121	56.10	2199	66.00	127	78.10	11499
38.10	1475	57.10	8176	68.05	596	79.05	8614
39.10	9324	58.10	323	69.00	140032	80.05	7248
45.00	511	59.05	46	70.05	642	81.05	10934
45.90	115	60.00	329	71.10	195	82.00	2181
50.10	26475	60.10	39	72.00	349	83.00	3331
51.10	108584	61.10	1880	73.05	1066	85.05	2334
52.05	5725	62.05	1771	74.10	12924	87.00	1216
53.10	215	63.05	4830	75.05	21814	88.00	1338
54.10	62	64.05	543	76.10	7484	89.05	289
55.10	911	65.10	2744	77.05	163988	91.00	2470

Average of 3.650 to 3.661 min.: F156050.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
92.05	2633	103.00	1713	113.85	350	124.10	1768
93.00	16334	104.05	3481	114.90	344	125.05	1397
94.10	1243	105.00	3203	115.95	2130	127.00	175460
95.10	687	106.10	1218	117.05	30135	128.00	12823
96.05	297	107.05	46722	118.00	2399	129.00	64327
98.00	11699	108.05	6997	119.00	151	129.95	5600
99.00	10166	109.10	753	120.00	387	131.05	599
99.90	353	110.00	90877	120.20	319	132.10	620
100.10	429	111.05	13190	121.15	409	133.00	595
101.05	5906	112.05	1333	122.00	2582	134.00	1539
102.00	451	113.00	458	123.00	3857	135.00	4877

Average of 3.650 to 3.661 min.: F156050.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
136.05	1744	147.05	4585	157.95	1596	169.00	1573
137.10	2951	147.95	7382	159.00	1240	170.10	239
138.00	646	149.05	1699	160.05	2858	170.30	64
138.90	204	150.00	628	161.00	2965	170.95	1211
140.05	843	151.05	1260	162.00	774	172.00	1359
141.00	6969	151.95	410	163.00	610	173.00	1278
142.00	2410	153.00	1882	164.00	741	174.05	3573
143.00	1540	154.05	1929	164.95	2736	175.05	5852
144.05	466	155.10	4621	166.00	2181	176.05	2477
145.00	528	156.05	6490	167.00	14623	177.00	2801
146.05	1548	157.10	1173	168.05	8099	177.95	1127

Average of 3.650 to 3.661 min.: F156050.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
179.00	11119	190.00	253	201.70	512	212.10	470
180.00	7086	191.05	899	203.00	1704	212.80	113
181.05	4124	192.00	3434	204.10	10276	213.10	360
182.00	455	193.05	3871	205.05	17348	213.70	51
183.05	461	194.05	910	206.10	75549	214.15	268
184.05	845	195.10	766	207.10	10008	214.90	577
185.05	5401	196.00	10568	208.05	1885	216.00	1141
186.10	41858	198.00	351082	209.00	601	217.00	17682
187.05	11420	199.00	23024	210.10	779	218.05	2187
188.05	931	199.95	1705	210.95	2624	219.00	209
189.05	1961	201.50	1343	211.55	1122	220.00	120

Average of 3.650 to 3.661 min.: F156050.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
221.05	16981	232.15	291	243.05	2187	253.00	879
223.00	4309	233.15	393	244.10	30309	253.25	26
224.00	38517	234.00	545	245.05	4332	253.80	466
225.10	9646	235.05	1129	246.00	4946	254.00	316

226.00	1104	236.00	714	247.05	1138	254.95	145383
227.00	14705	237.05	1154	248.00	436	256.00	20745
227.95	1957	237.80	56	248.95	897	256.95	1371
229.00	3117	239.05	301	249.90	236	258.00	7130
230.00	453	239.90	483	250.10	183	259.05	928
230.90	209	241.00	854	251.10	353	259.70	65
231.05	883	242.10	2069	251.90	364	260.05	182

Average of 3.650 to 3.661 min.: F156050.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
260.45	109	268.95	145	277.95	750	290.05	320
261.05	362	269.40	73	279.10	383	291.00	56
263.10	196	269.70	11	281.05	157	291.90	94
263.75	135	270.00	200	283.10	590	293.00	1314
264.00	199	271.00	363	284.10	413	293.90	81
264.20	127	272.00	387	284.95	670	294.10	199
264.95	2896	273.00	4768	286.25	243	294.90	201
265.70	276	273.95	11030	287.10	176	296.00	15656
266.00	166	275.00	62466	288.10	57	297.05	2264
267.10	268	276.00	8219	289.10	71	298.00	101
268.20	186	277.00	4810	289.25	277	298.70	52

Average of 3.650 to 3.661 min.: F156050.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
300.10	165	309.10	264	322.00	194	338.90	94
301.00	186	310.10	323	323.00	5205	340.95	626
301.20	67	311.00	66	324.05	1075	341.80	104
302.05	269	313.20	206	325.10	92	342.10	77
302.90	452	314.05	642	327.00	1660	344.30	67
303.05	1367	315.00	1345	328.00	316	344.80	55
303.90	401	315.95	1017	330.20	64	345.95	1123
304.80	118	317.00	123	332.05	295	346.95	337
305.30	72	318.10	97	333.00	554	350.30	57
307.90	97	320.30	55	334.00	3443	351.00	53
308.10	100	321.00	739	335.00	659	351.90	190

Average of 3.650 to 3.661 min.: F156050.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
352.10	1136	361.80	50	373.70	51	390.95	261
353.00	850	363.20	93	374.10	93	392.00	63
353.90	238	363.80	64	374.30	83	392.30	58
354.05	1167	365.00	5730	376.90	190	393.90	123
354.90	54	366.00	971	377.50	52	395.10	58
355.05	273	367.05	161	378.10	53	397.10	51
356.00	53	370.00	168	382.10	54	399.10	78
357.60	67	370.30	97	383.00	761	400.95	208
357.90	60	370.75	263	383.85	127	401.95	995
358.90	65	372.00	1944	384.10	53	402.80	239
361.20	167	373.00	674	390.05	446	403.00	1403

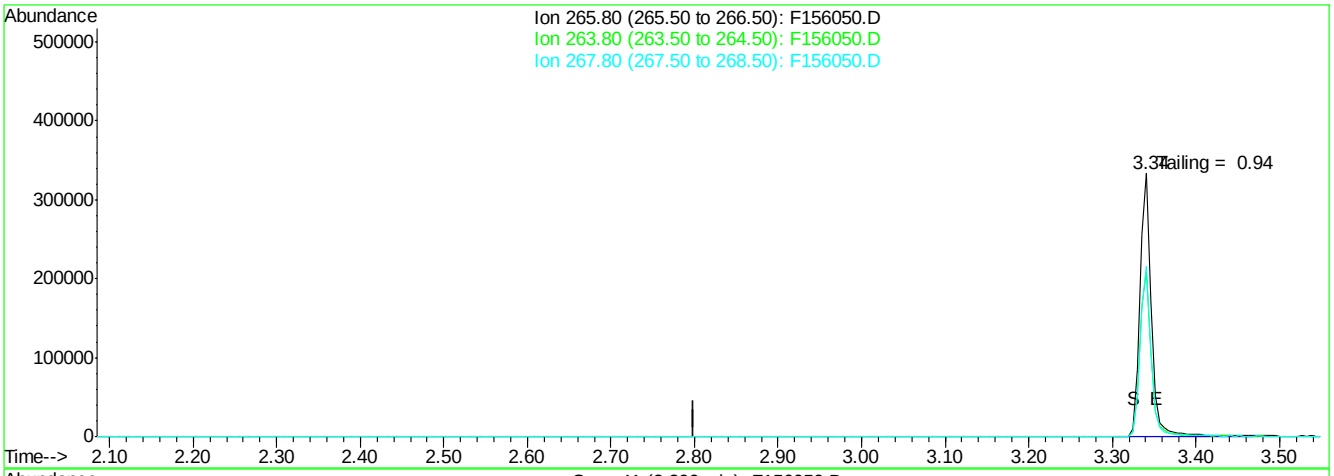
Average of 3.650 to 3.661 min.: F156050.D
dftpp
Modified:subtracted

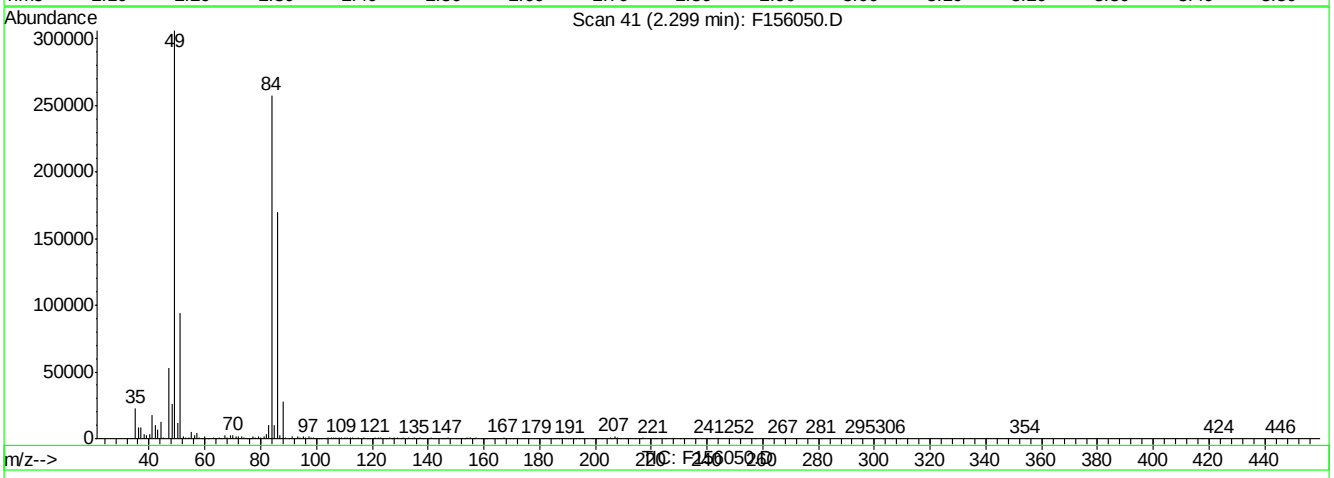
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
404.00	584	427.70	83	443.00	38575		
404.80	65	429.40	79	444.05	3498		
410.40	50	431.40	71	445.05	222		
415.10	112	432.10	134	445.50	51		
418.40	66	432.50	63	461.20	56		
420.90	861	432.90	122	463.00	83		
421.10	526	434.30	156	480.40	92		
421.95	1059	435.20	63	484.20	64		
423.00	9553	436.00	65	495.30	60		
424.00	2146	441.00	29498				
425.05	126	442.00	194704				

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EF6563\F156050.D Vial: 1
Acq On : 4 Apr 2016 6:54 pm Operator: sarad
Sample : dftpp Inst : MSF
Misc : op92661,ef6563,100 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 4 19:00 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPF.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Thu Mar 24 11:46:42 2016
Response via : Multiple Level Calibration





(1) Pentachlorophenol (t)

2.30min 0.00ppb

response 0

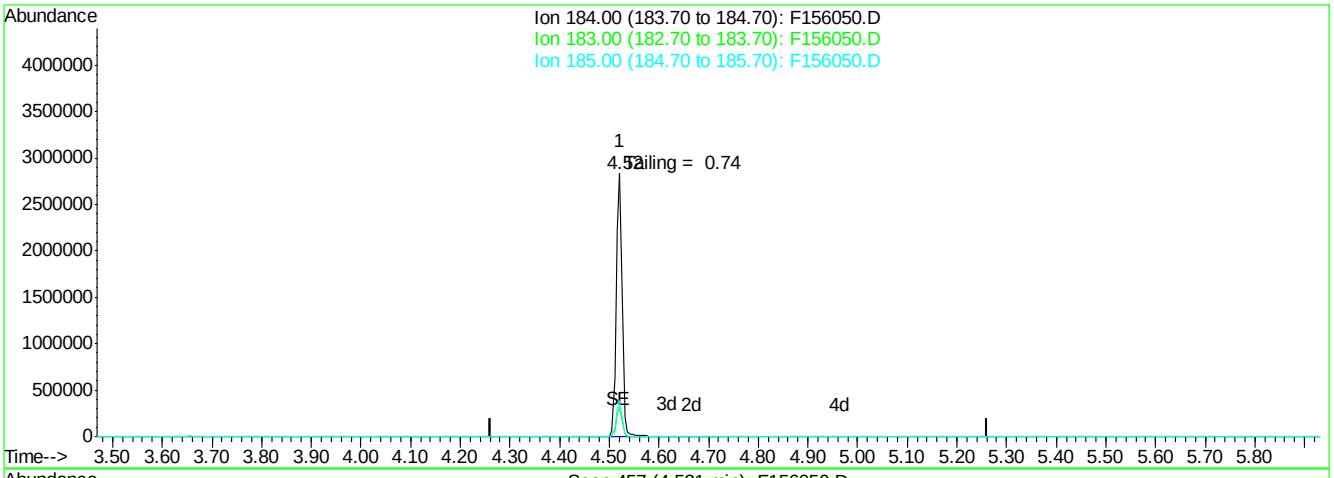
Ion	Exp%	Act%
265.80	100	0.00
263.80	63.00	0.00#
267.80	64.80	0.00#
0.00	0.00	0.00

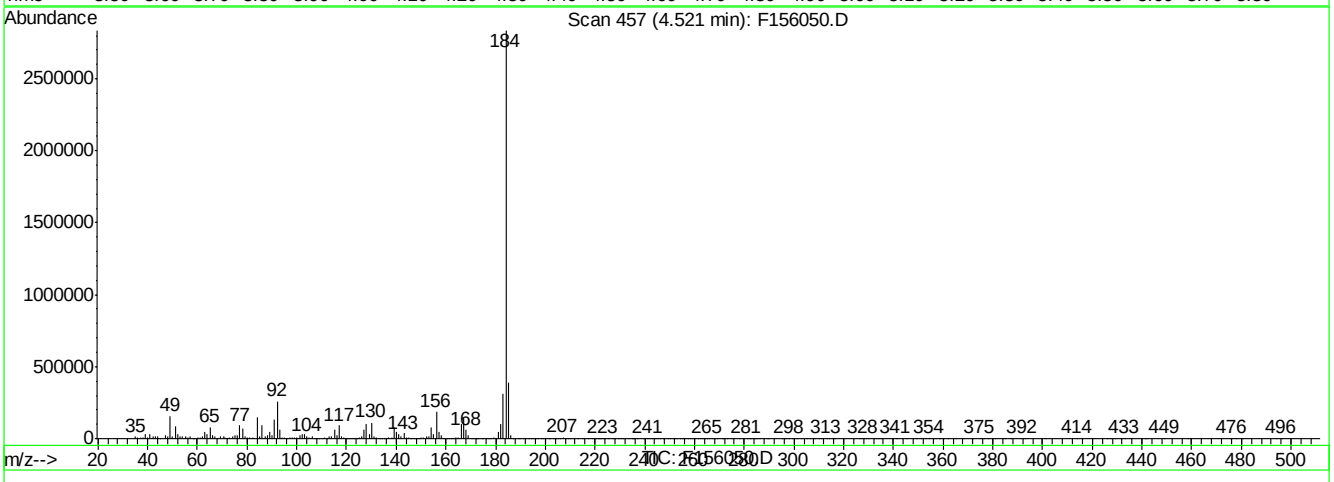
F156050.D DFTPPF.M Mon Apr 04 19:01:22 2016 RT1

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EF6563\F156050.D Vial: 1
Acq On : 4 Apr 2016 6:54 pm Operator: sarad
Sample : dftpp Inst : MSF
Misc : op92661,ef6563,100 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 4 19:01 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPF.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Thu Mar 24 11:46:42 2016
Response via : Multiple Level Calibration





(2) Benzidine (t)

4.52min 125.89ppb

response 2358304

Ion	Exp%	Act%
184.00	100	100
183.00	12.60	10.87
185.00	16.20	13.85
0.00	0.00	0.00

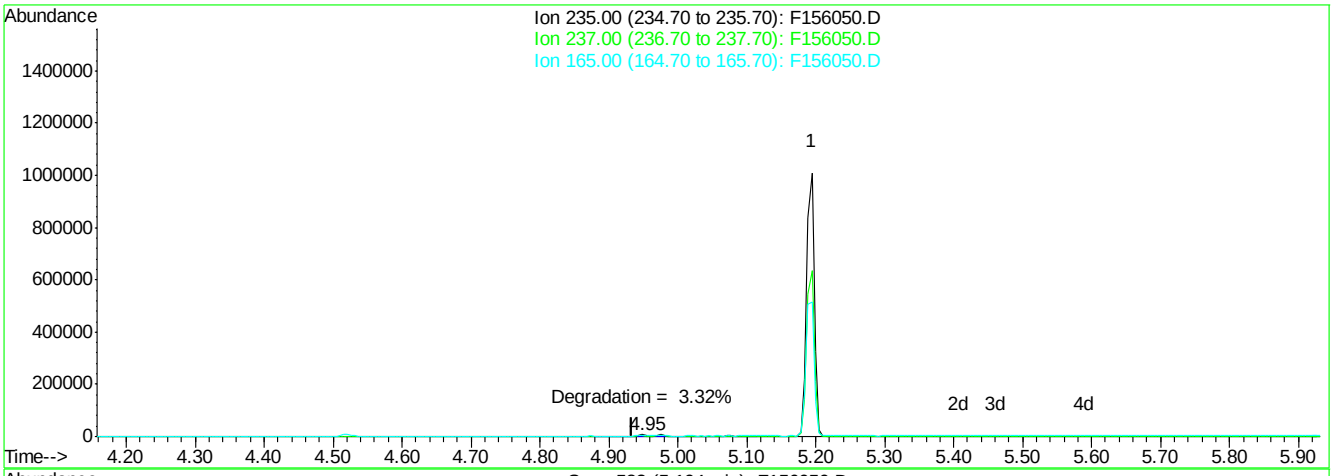
F156050.D DFTPPF.M Mon Apr 04 19:01:32 2016 RT1

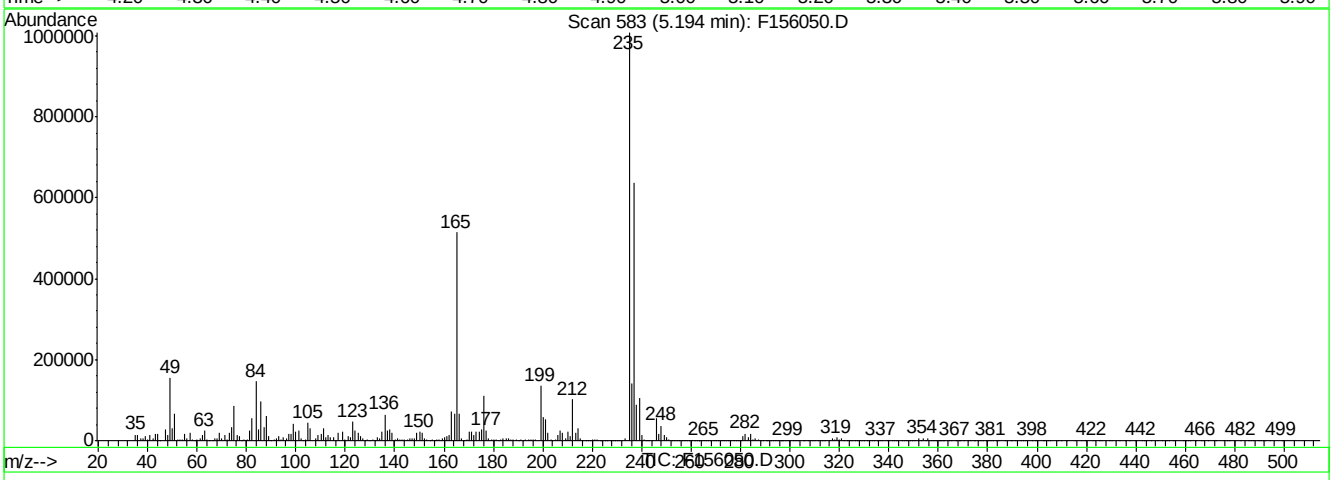
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EF6563\F156050.D Vial: 1
Acq On : 4 Apr 2016 6:54 pm Operator: sarad
Sample : dftpp Inst : MSF
Misc : op92661,ef6563,100 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 4 19:01 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPF.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Thu Mar 24 11:46:42 2016
Response via : Single Level Calibration





(3) ddt (t)

5.19min 50.20ppb

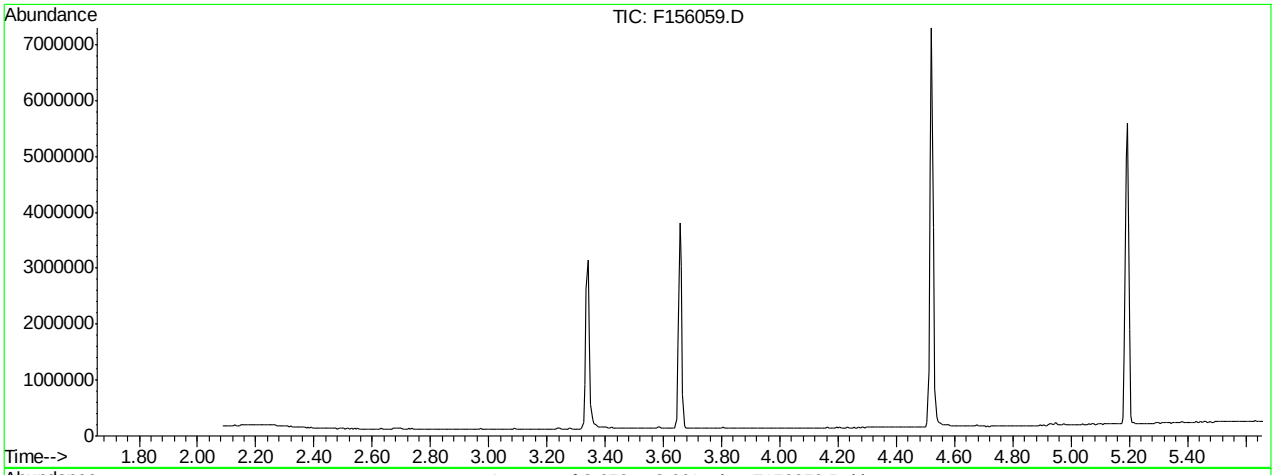
response 779578

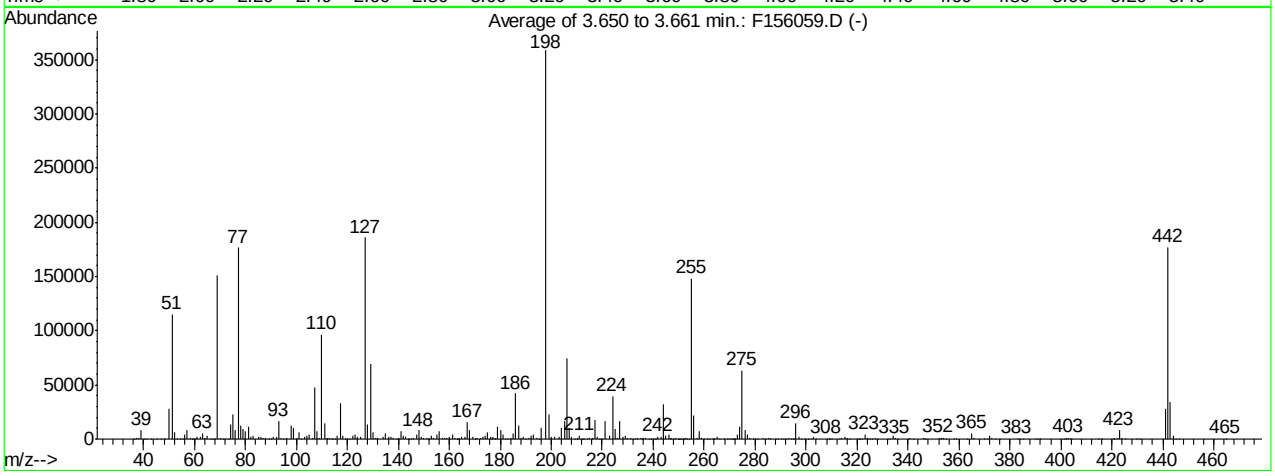
Ion	Exp%	Act%
235.00	100	100
237.00	66.70	64.25
165.00	59.50	54.99
0.00	0.00	0.00

F156050.D DFTPPF.M Mon Apr 04 19:01:45 2016 RT1

DFTPP

Data File : C:\MSDCHEM\1\DATA\EF6564\F156059.D Vial: 1
Acq On : 4 Apr 2016 11:06 pm Operator: sarad
Sample : dftpp Inst : MSF
Misc : op92661,ef6564,100 Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : C:\MSDCHEM\1\METHODS\DFTPPF.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um





AutoFind: Scans 294, 295, 296; Background Corrected with Scan 289

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	32.1	115179	PASS
68	69	0.00	2	0.1	157	PASS
69	198	0.00	100	42.2	151437	PASS
70	69	0.00	2	0.5	785	PASS
127	198	40	60	51.9	186202	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	358677	PASS
199	198	5	9	6.5	23181	PASS
275	198	10	30	17.7	63472	PASS
365	198	1	100	1.5	5413	PASS
441	443	0.10	100	79.8	27575	PASS
442	198	40	100	49.5	177434	PASS
443	442	17	23	19.5	34561	PASS

F156059.D DFTPPF.M Tue Apr 05 09:44:21 2016 RT1

Average of 3.650 to 3.661 min.: F156059.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	101	51.10	115179	61.10	1746	71.80	73
37.10	647	52.10	6200	62.10	1793	73.10	554
38.10	1311	53.10	252	63.10	5611	74.10	13037
39.05	8323	54.15	204	64.10	860	75.10	23122
40.05	441	55.10	276	65.10	2866	76.05	8284
41.10	389	56.10	3758	66.10	219	77.10	176491
43.10	114	57.10	8251	67.10	39	78.10	12704
45.10	71	58.10	758	68.00	157	79.10	9634
47.05	483	59.05	34	69.00	151437	80.05	7703
48.05	346	59.40	63	70.05	785	81.00	11177
50.05	27956	60.10	262	71.20	313	82.00	2523

Average of 3.650 to 3.661 min.: F156059.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
83.10	2967	95.00	10	107.05	47593	116.05	2895
85.05	2033	96.05	697	108.05	7381	117.05	33243
86.00	2359	98.00	12220	109.05	1263	118.00	2779
87.00	1087	99.00	10890	110.00	96688	118.95	407
88.00	960	100.05	1205	111.00	14437	120.00	256
89.10	159	101.00	5862	111.90	459	121.00	284
90.00	72	102.00	482	112.05	1342	122.00	3048
91.00	2335	103.00	2269	112.90	627	123.05	4441
92.05	2422	104.05	3609	113.80	79	124.00	1683
93.05	17061	105.05	3684	114.00	101	125.00	2068
94.05	1272	106.10	1410	115.10	289	127.00	186202

Average of 3.650 to 3.661 min.: F156059.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
128.00	13730	139.95	594	149.95	896	159.90	554
128.95	69021	141.00	7558	151.05	1092	160.05	2046
130.00	5740	142.05	2861	151.60	283	161.05	3971
131.00	1240	142.95	1628	152.05	256	162.00	830
131.95	628	143.70	136	153.00	2738	162.85	316
134.00	1770	144.10	522	154.00	1359	163.10	248
135.00	5452	145.05	535	155.05	4416	164.05	629
136.05	2251	146.00	1211	156.05	6855	165.00	2524
137.05	2589	147.00	3706	157.15	1431	166.00	2604
138.10	583	148.00	8220	158.00	1275	167.05	15875
139.15	306	149.00	2077	159.00	1316	168.05	8364

Average of 3.650 to 3.661 min.: F156059.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
169.05	1700	177.90	192	188.10	1460	200.05	1677
170.00	168	178.05	832	189.00	2476	201.50	1904
170.25	453	179.00	11250	190.00	484	203.00	2172
171.00	804	180.05	7935	191.00	1054	204.00	10164
172.05	1051	181.05	4199	192.05	3300	205.05	17072
173.05	2277	181.95	497	193.05	4197	206.10	74245
174.00	2790	182.95	497	194.05	878	207.00	9933
175.05	6057	184.05	737	195.05	522	208.00	1997
176.05	1945	185.05	5325	196.00	10444	209.05	410
176.80	323	186.05	42413	198.00	358677	210.00	511
177.00	2145	187.05	12306	199.00	23181	210.30	455

Average of 3.650 to 3.661 min.: F156059.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
211.10	3591	219.80	171	232.00	337	240.95	501
211.90	163	221.05	16562	233.05	423	242.00	2453
212.10	158	223.00	3383	234.00	1016	243.05	2298
212.90	178	224.10	39349	235.00	1402	244.05	31834

214.20	57	225.05	9461	235.80	58	245.05	3589
215.00	855	226.05	1111	236.00	583	246.00	4699
215.90	205	227.00	16124	236.95	1420	246.70	89
216.05	1263	228.00	2042	238.05	330	247.05	1194
217.00	17655	229.00	3218	239.05	433	248.00	266
218.05	2283	229.95	590	239.95	427	248.90	1065
218.95	274	231.05	1351	240.80	107	249.85	224

Average of 3.650 to 3.661 min.: F156059.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
250.10	96	258.00	7545	268.90	54	277.95	633
250.70	225	259.00	1105	269.95	238	279.05	217
251.15	272	260.00	189	270.80	257	280.10	51
251.70	87	261.00	329	271.10	131	281.05	415
252.05	297	262.10	88	271.70	172	283.00	831
253.00	871	263.50	65	272.15	265	284.10	523
253.40	315	263.80	165	273.00	4245	285.15	817
254.00	454	264.00	143	274.00	11599	286.00	94
255.00	148034	265.05	2447	275.00	63472	288.00	54
256.00	22204	265.90	496	276.00	8397	288.85	195
257.00	1309	267.90	152	277.05	4502	290.20	61

Average of 3.650 to 3.661 min.: F156059.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
290.95	149	302.10	247	316.95	205	328.00	470
291.95	186	303.00	1987	320.20	51	332.10	412
293.05	1451	303.90	551	320.90	173	333.00	465
293.95	367	308.10	364	321.10	267	334.00	3432
294.90	70	309.00	106	322.05	284	335.05	767
295.10	145	309.20	88	323.05	4529	336.00	79
296.00	14754	309.95	185	323.90	146	340.00	178
297.05	2016	312.90	78	324.05	772	340.95	617
298.00	100	314.10	894	325.05	115	342.10	63
299.30	58	315.05	1782	326.00	63	346.05	1077
300.90	122	316.00	1001	326.95	849	346.70	169

Average of 3.650 to 3.661 min.: F156059.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
347.00	116	370.00	203	392.00	178	422.00	1337
352.00	1458	371.00	426	401.00	53	423.00	8310
352.90	88	372.05	2666	401.85	228	424.05	1589
353.05	1025	373.05	614	402.10	351	425.05	283
354.00	1462	374.00	76	403.00	1361	429.80	115
354.95	374	376.10	64	403.80	56	430.90	52
357.90	59	383.00	543	404.10	504	441.00	27575
358.95	197	383.80	175	414.90	69	442.00	177434
363.00	72	385.00	114	416.00	57	443.00	34561
365.00	5413	389.95	280	420.70	147	444.00	3599
366.00	914	390.90	385	421.00	983	445.00	148

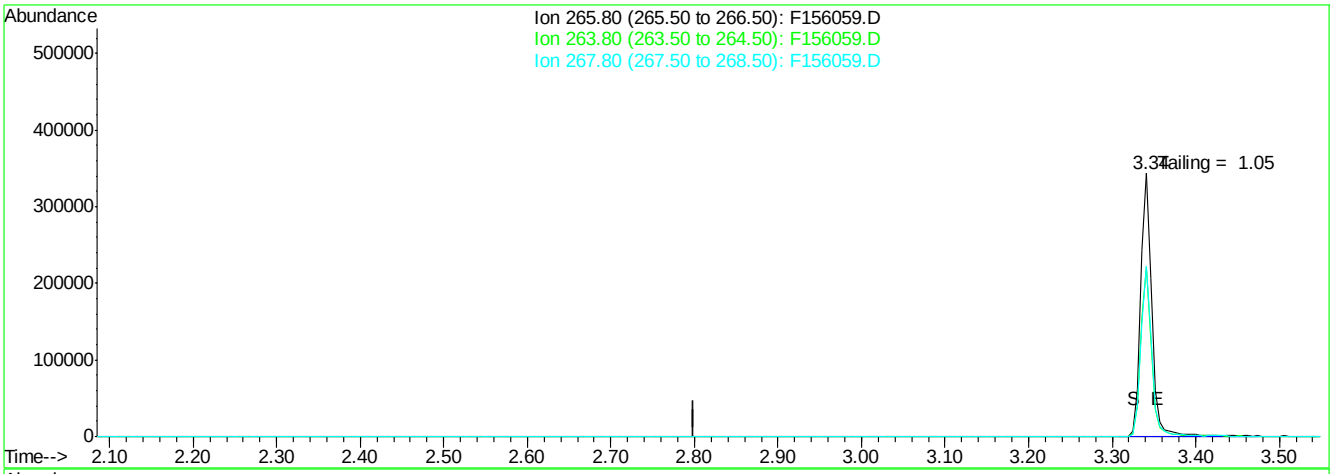
Average of 3.650 to 3.661 min.: F156059.D
dftpp
Modified:subtracted

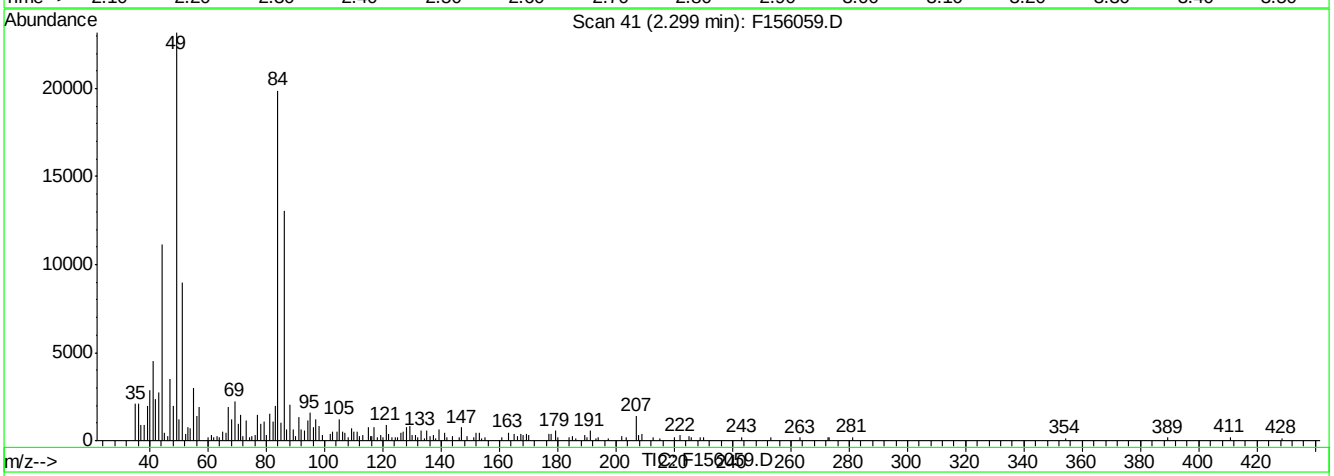
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
446.20	59						
464.70	59						

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EF6564\F156059.D Vial: 1
Acq On : 4 Apr 2016 11:06 pm Operator: sarad
Sample : dftpp Inst : MSF
Misc : op92661,ef6564,100 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 4 23:12 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPF.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Thu Mar 24 11:46:42 2016
Response via : Multiple Level Calibration





(1) Pentachlorophenol (t)

2.30min 0.00ppb

response 0

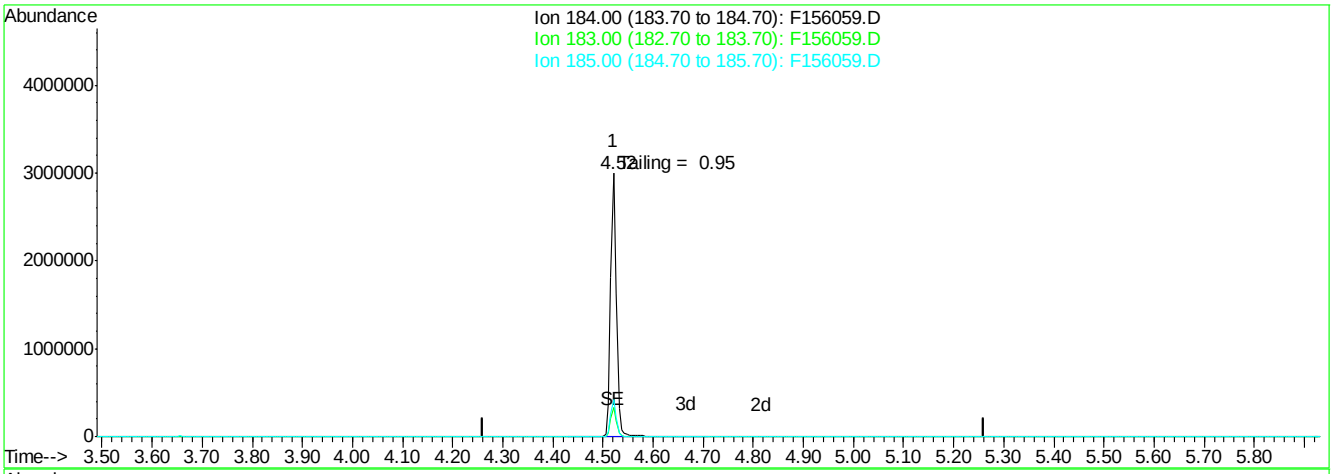
Ion	Exp%	Act%
265.80	100	0.00
263.80	63.00	0.00#
267.80	64.80	0.00#
0.00	0.00	0.00

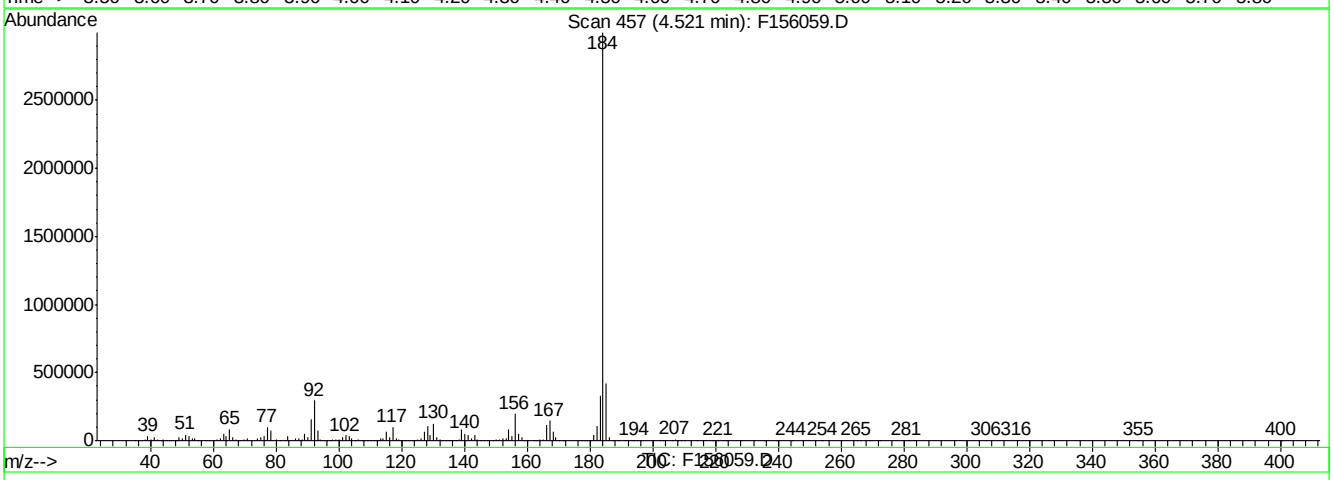
F156059.D DFTPPF.M Mon Apr 04 23:16:21 2016 RT1

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EF6564\F156059.D Vial: 1
Acq On : 4 Apr 2016 11:06 pm Operator: sarad
Sample : dftpp Inst : MSF
Misc : op92661,ef6564,100 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 4 23:12 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPF.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Thu Mar 24 11:46:42 2016
Response via : Multiple Level Calibration





(2) Benzidine (t)

4.52min 127.15ppb

response 2381841

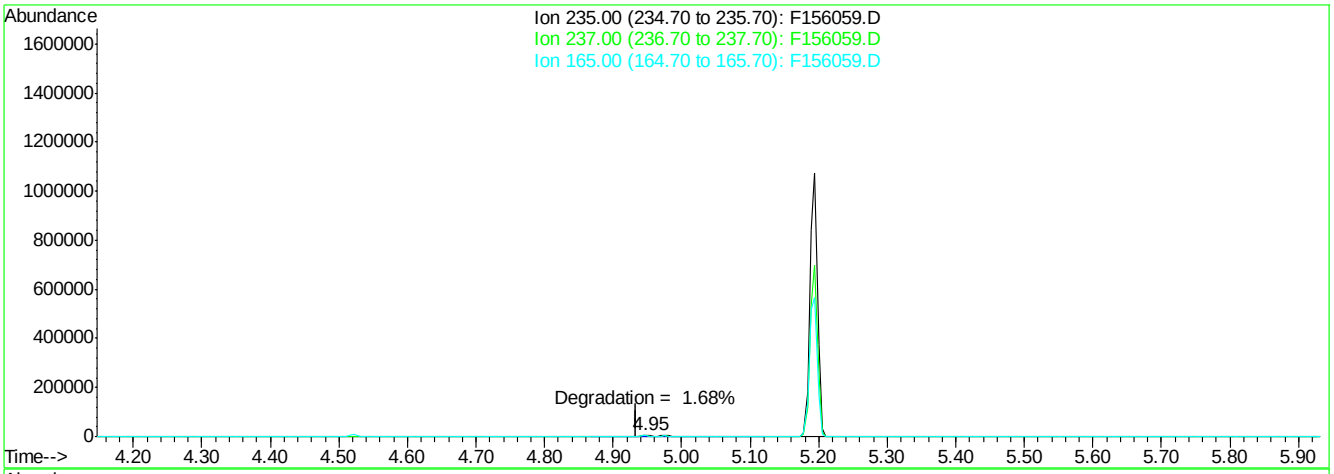
Ion	Exp%	Act%
184.00	100	100
183.00	12.60	10.83
185.00	16.20	13.82
0.00	0.00	0.00

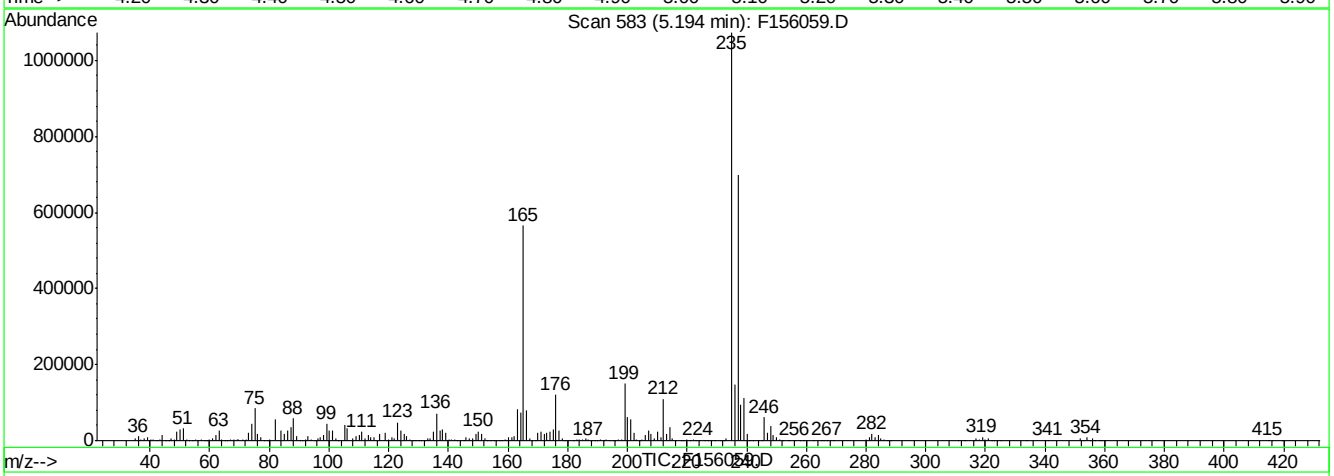
F156059.D DFTPPF.M Mon Apr 04 23:16:45 2016 RT1

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EF6564\F156059.D Vial: 1
Acq On : 4 Apr 2016 11:06 pm Operator: sarad
Sample : dftpp Inst : MSF
Misc : op92661,ef6564,100 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 4 23:12 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPF.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Thu Mar 24 11:46:42 2016
Response via : Single Level Calibration





(3) ddt (t)

5.19min 51.98ppb

response 807232

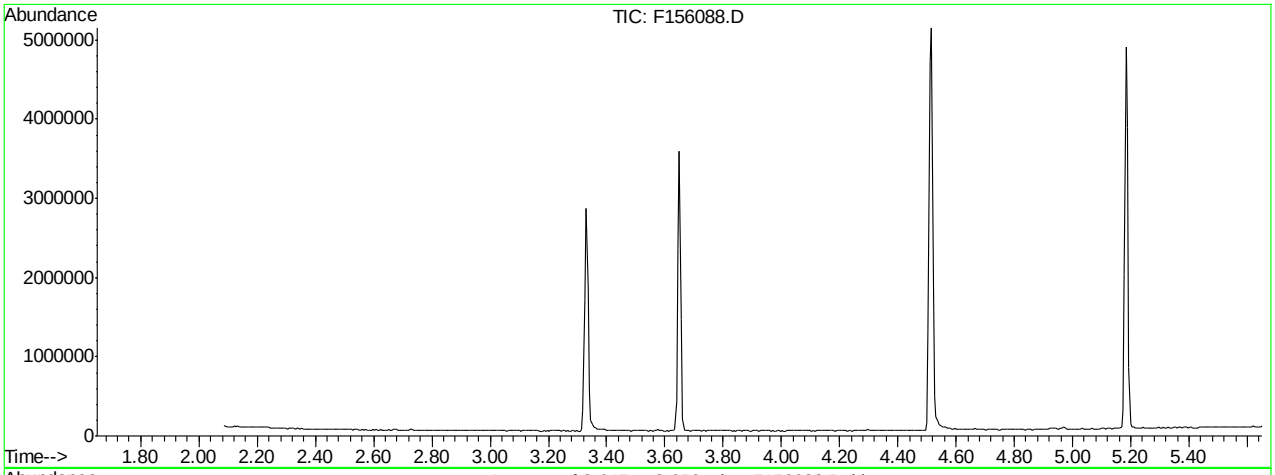
Ion	Exp%	Act%
235.00	100	100
237.00	66.70	64.82
165.00	59.50	55.83
0.00	0.00	0.00

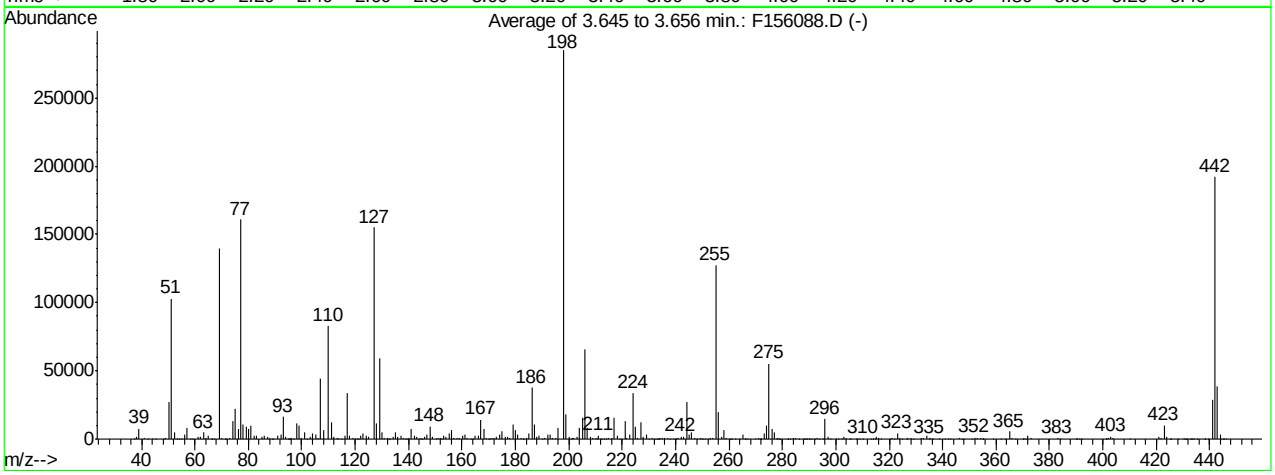
F156059.D DFTPPF.M Mon Apr 04 23:16:54 2016 RT1

SGS ACCUTEST JC19644

DFTPP

Data File : C:\MSDCHEM\1\DATA\EF6567\F156088.D Vial: 1
Acq On : 5 Apr 2016 6:00 pm Operator: ashleyd
Sample : dftpp Inst : MSF
Misc : op92661,ef6567 Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : C:\MSDCHEM\1\METHODS\DFTPPF.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um





AutoFind: Scans 293, 294, 295; Background Corrected with Scan 288

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	36.1	102858	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	49.1	139965	PASS
70	69	0.00	2	0.5	764	PASS
127	198	40	60	54.5	155093	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	284778	PASS
199	198	5	9	6.4	18151	PASS
275	198	10	30	19.4	55232	PASS
365	198	1	100	1.9	5389	PASS
441	443	0.10	100	74.0	28740	PASS
442	198	40	100	67.5	192210	PASS
443	442	17	23	20.2	38818	PASS

F156088.D DFTPPF.M Fri Apr 08 16:29:12 2016 RT1

Average of 3.645 to 3.656 min.: F156088.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.05	422	52.15	5161	64.10	775	75.10	22161
38.10	1660	53.10	365	65.10	2825	76.15	7083
39.10	7784	53.90	50	66.00	72	77.10	160886
41.10	791	54.95	420	66.15	188	78.10	10930
42.20	116	56.10	3225	67.05	187	79.05	9279
44.10	315	57.05	7993	69.00	139965	80.00	7587
45.10	166	58.05	432	70.10	764	81.05	9790
48.00	164	59.05	112	71.05	136	82.10	2490
49.10	536	61.10	1593	71.80	56	83.00	2187
50.05	27320	62.10	1806	73.10	1142	85.05	1968
51.10	102858	63.10	4851	74.10	13287	86.00	2502

Average of 3.645 to 3.656 min.: F156088.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
87.05	1482	96.05	824	107.10	44368	118.90	475
88.00	469	96.95	24	108.05	6868	119.90	214
88.80	71	98.00	11504	110.00	82640	120.15	329
89.10	352	99.05	9765	111.05	12612	120.95	188
91.05	2330	100.00	753	112.00	1505	121.20	122
92.05	2954	101.00	5375	113.05	508	122.05	2348
93.00	16059	102.10	316	113.80	60	123.00	4021
94.00	1312	103.05	1449	114.75	165	124.05	2433
94.90	167	104.05	3890	116.10	2222	125.00	2039
95.10	168	105.10	3106	117.05	33584	127.10	155093
95.40	294	105.95	559	118.00	2268	128.10	11711

Average of 3.645 to 3.656 min.: F156088.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
129.00	59208	138.90	160	148.00	9076	158.10	1085
130.00	5206	139.10	111	149.00	1708	159.00	1147
130.95	1065	140.05	562	150.05	425	160.05	2284
132.05	459	141.05	7169	151.20	1208	161.10	3432
132.75	339	142.05	2414	151.70	525	162.10	1175
133.05	211	143.05	1603	152.10	233	163.00	402
134.10	1297	144.10	466	153.05	2092	164.00	363
135.05	4892	144.80	143	154.00	1787	165.05	2418
136.10	1858	145.05	325	155.10	4093	166.00	2135
137.00	2572	146.00	1329	156.10	6531	167.05	14023
137.90	830	147.00	3032	157.10	1044	168.05	7410

Average of 3.645 to 3.656 min.: F156088.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
169.10	1190	178.00	707	188.05	1274	200.10	1778
169.90	419	179.00	10755	189.00	2419	200.80	123
170.30	92	180.05	6796	190.00	346	201.40	812
171.05	879	181.00	2999	191.05	1220	201.70	599
172.05	1234	181.95	641	192.05	3064	203.00	1878
173.00	1613	182.80	134	193.00	3588	204.10	8551
174.10	3204	183.10	197	193.90	703	205.10	15920
175.10	5492	184.05	748	194.95	625	206.10	65842
176.10	1566	185.10	4417	196.05	8040	207.05	8584
176.90	864	186.10	37725	198.00	284778	208.00	1758
177.10	1510	187.10	10488	199.00	18151	209.00	492

Average of 3.645 to 3.656 min.: F156088.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
210.10	953	219.20	110	231.10	1223	240.00	115
210.50	388	221.05	13237	232.05	215	240.15	312
211.10	2663	221.70	523	232.95	278	241.05	998
211.90	185	223.00	3629	233.20	162	242.00	1829

212.20	77	224.10	33869	233.90	309	243.15	1575
213.00	97	225.05	8704	234.10	696	244.10	27274
214.10	52	225.90	831	235.05	1004	245.10	3432
214.95	570	227.00	12761	235.95	890	246.05	4873
216.00	1212	228.05	2041	237.00	1046	247.00	895
217.00	15507	229.05	3152	238.10	67	247.90	128
218.00	2173	229.80	302	239.00	436	249.05	776

Average of 3.645 to 3.656 min.: F156088.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
249.80	93	260.20	61	271.60	96	279.20	82
250.00	170	260.60	51	271.80	113	281.80	53
251.05	287	261.05	277	272.10	296	282.05	238
252.00	206	262.40	59	273.05	4058	283.00	317
253.05	816	263.80	214	274.00	9959	284.00	528
254.00	595	265.00	2944	275.00	55232	285.10	852
255.00	127522	266.00	188	276.10	7485	286.10	109
256.05	19434	266.15	298	277.00	4765	287.90	59
257.10	1335	266.95	140	277.90	393	288.10	52
258.00	6378	270.00	250	278.05	683	288.90	138
259.00	1069	270.95	457	278.80	80	289.20	56

Average of 3.645 to 3.656 min.: F156088.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
289.80	53	301.00	99	313.90	306	324.90	65
290.00	73	301.95	365	314.10	390	326.30	62
290.80	63	303.10	1857	314.80	284	327.00	766
291.95	169	304.00	489	315.05	1532	328.10	586
293.10	1244	305.05	133	316.00	843	328.90	67
293.95	289	305.70	50	317.05	160	331.95	697
294.90	108	307.80	194	320.00	62	333.00	508
296.00	14782	308.00	168	321.00	489	334.00	2716
296.95	1866	309.00	63	322.05	240	334.95	423
298.10	353	310.15	240	323.05	4530	335.20	468
300.00	58	312.90	65	324.05	1066	336.00	85

Average of 3.645 to 3.656 min.: F156088.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
336.25	148	354.05	1232	370.85	279	402.00	951
338.80	50	355.00	103	372.05	2563	403.05	1765
340.90	420	355.15	177	373.15	594	403.90	605
342.00	80	359.00	78	383.05	684	410.20	64
342.80	77	361.60	78	383.95	230	421.00	1693
346.05	977	363.30	63	389.95	284	421.95	1150
346.95	245	365.00	5389	390.20	100	423.00	10193
348.00	56	365.95	1063	391.05	307	424.10	1875
350.80	55	367.10	57	391.90	238	425.00	218
351.95	1195	370.00	63	401.05	168	425.70	124
353.05	845	370.30	84	401.40	86	428.20	100

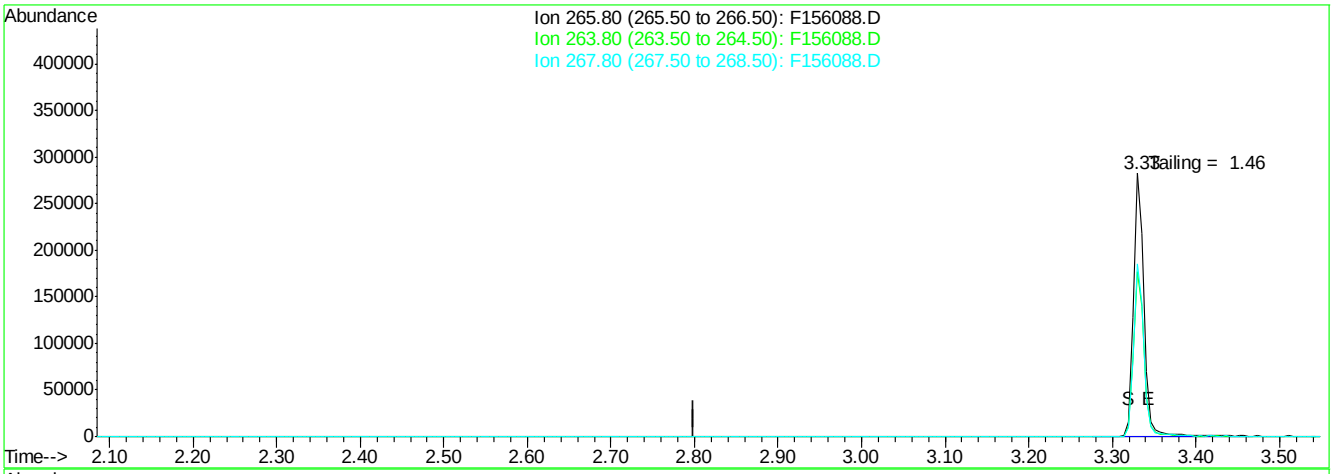
Average of 3.645 to 3.656 min.: F156088.D
dftpp
Modified:subtracted

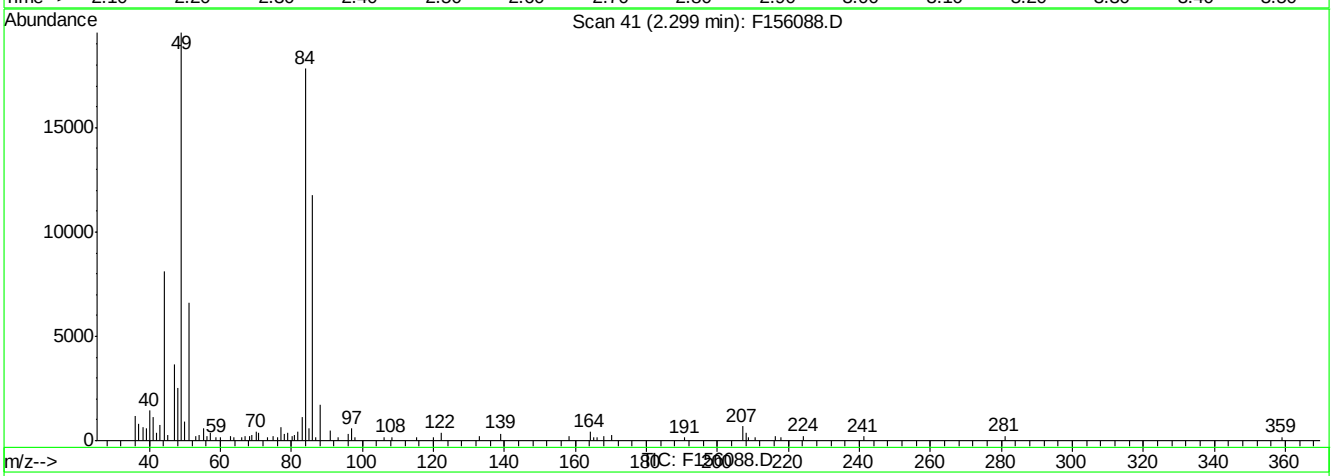
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
430.00	218	439.30	60				
430.50	68	441.05	28740				
431.10	89	442.00	192210				
431.45	133	443.00	38818				
432.65	134	443.90	401				
433.00	76	444.10	3354				
433.40	66	444.90	204				
433.90	59	445.20	184				
435.30	97	446.00	56				
438.10	60						
438.30	53						

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EF6567\F156088.D Vial: 1
Acq On : 5 Apr 2016 6:00 pm Operator: ashleyd
Sample : dftpp Inst : MSF
Misc : op92661,ef6567 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 5 18:06 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPF.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Thu Mar 24 11:46:42 2016
Response via : Multiple Level Calibration





(1) Pentachlorophenol (t)

2.30min 0.00ppb

response 0

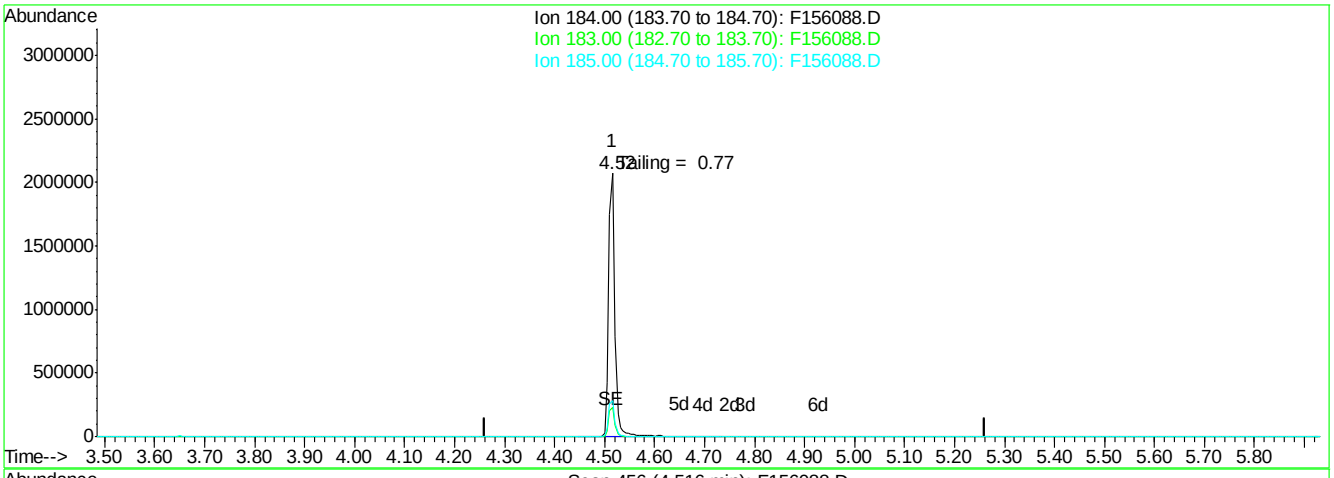
Ion	Exp%	Act%
265.80	100	0.00
263.80	63.00	0.00#
267.80	64.80	0.00#
0.00	0.00	0.00

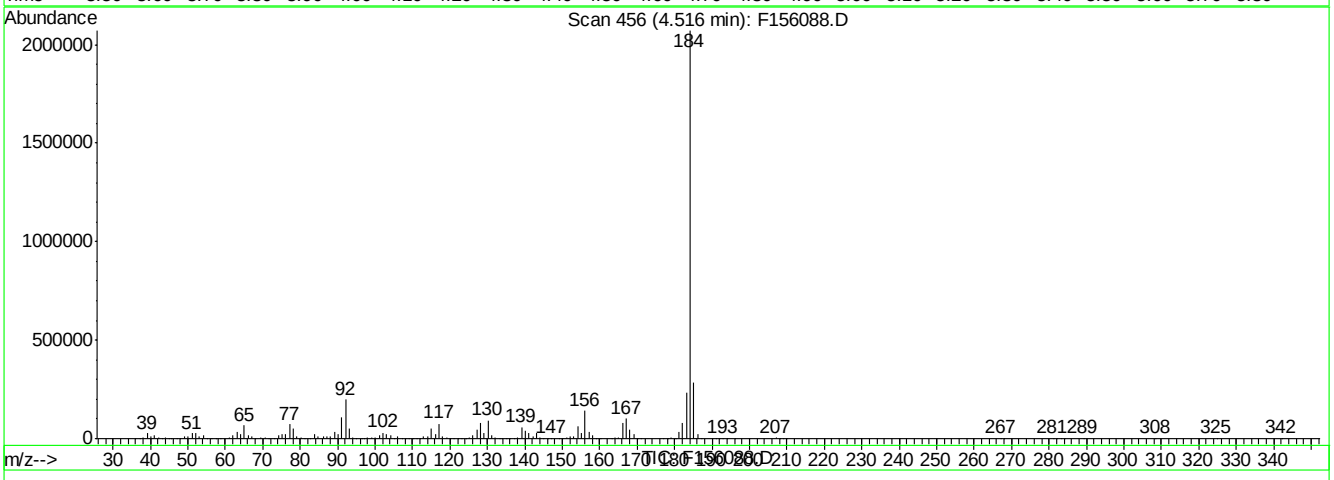
F156088.D DFTPPF.M Tue Apr 05 18:12:48 2016 RT1

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EF6567\F156088.D Vial: 1
Acq On : 5 Apr 2016 6:00 pm Operator: ashleyd
Sample : dftpp Inst : MSF
Misc : op92661,ef6567 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 5 18:06 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPF.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Thu Mar 24 11:46:42 2016
Response via : Multiple Level Calibration





(2) Benzidine (t)

4.52min 94.58ppb

response 1771832

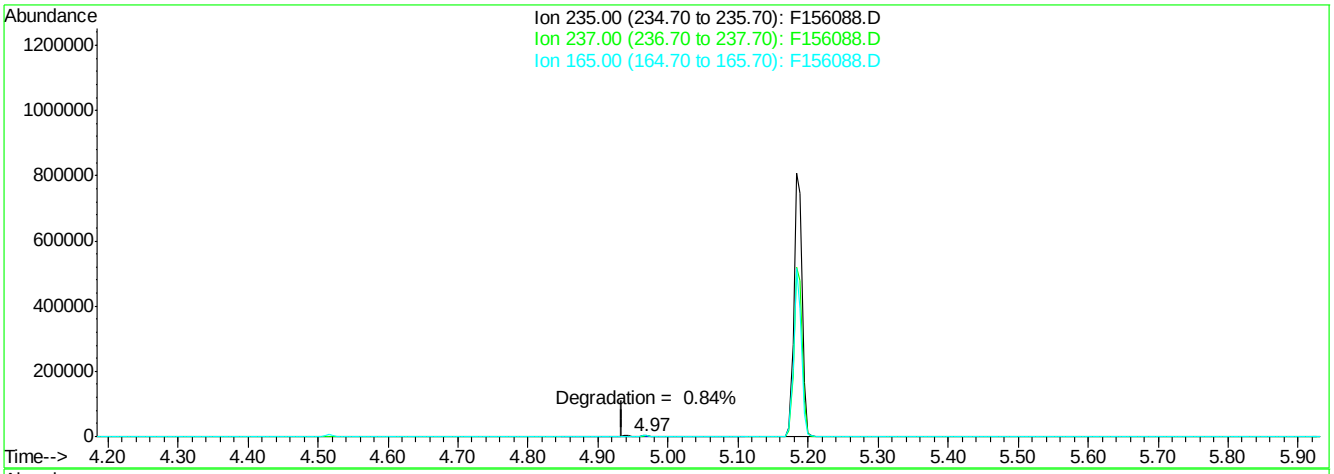
Ion	Exp%	Act%
184.00	100	100
183.00	12.60	11.25
185.00	16.20	14.07
0.00	0.00	0.00

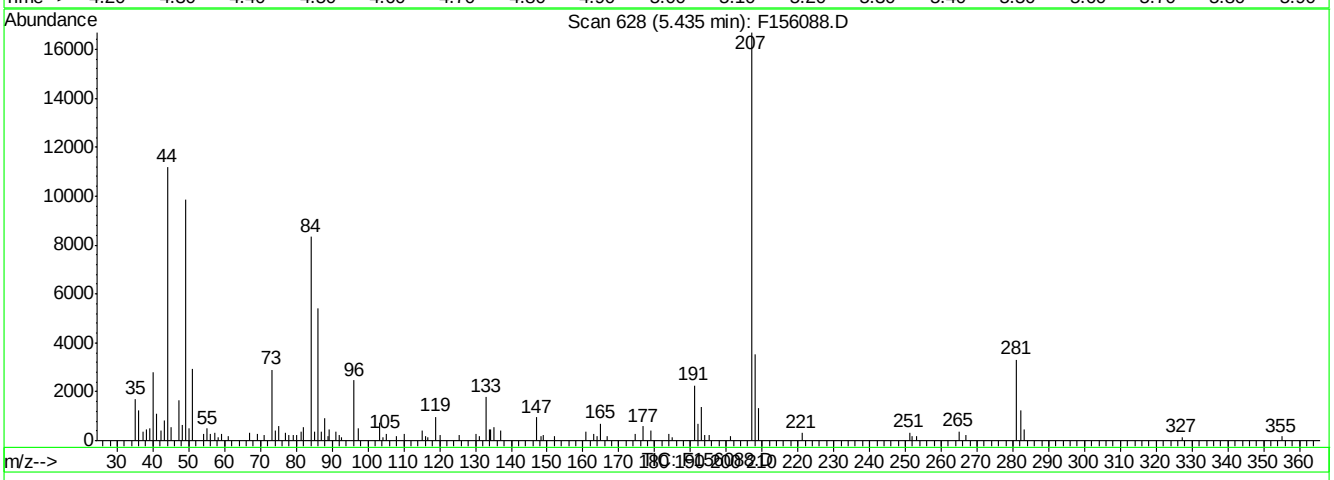
F156088.D DFTPPF.M Tue Apr 05 18:12:55 2016 RT1

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EF6567\F156088.D Vial: 1
Acq On : 5 Apr 2016 6:00 pm Operator: ashleyd
Sample : dftpp Inst : MSF
Misc : op92661,ef6567 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 5 18:06 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPF.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Thu Mar 24 11:46:42 2016
Response via : Single Level Calibration





(3) ddt (t)

5.43min 0.00ppb

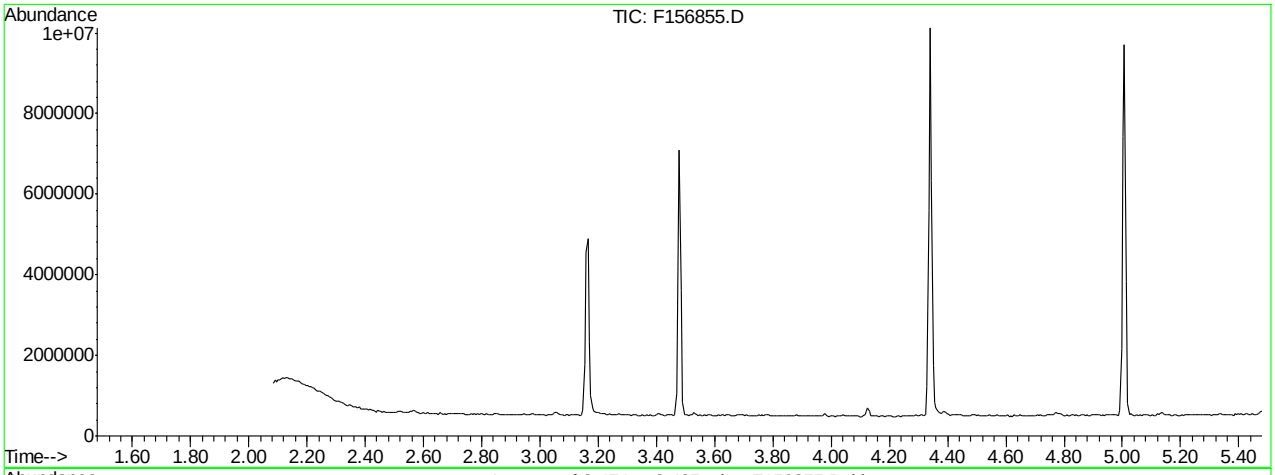
response 0

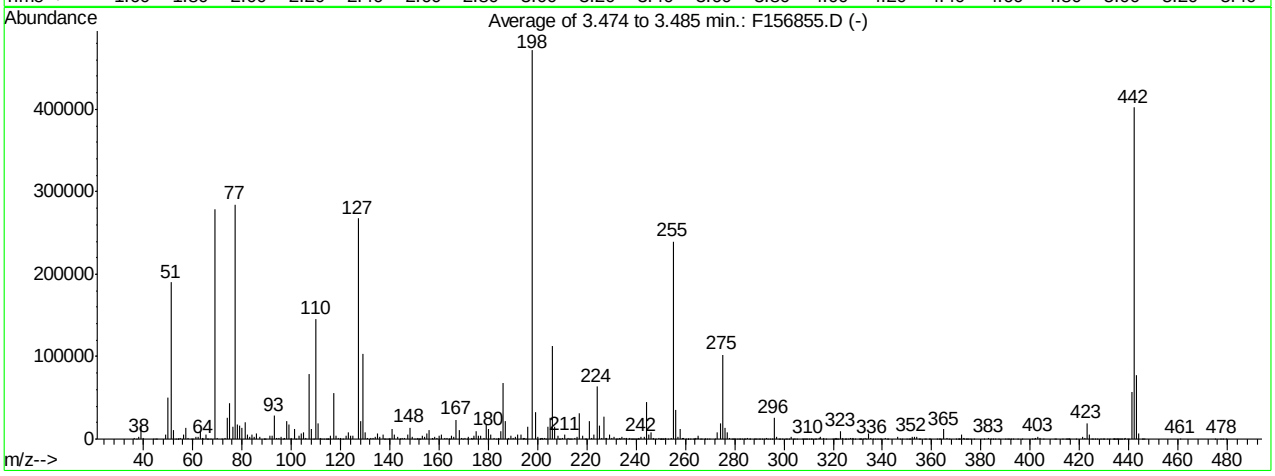
Ion	Exp%	Act%
235.00	100	0.00
237.00	66.70	0.00#
165.00	59.50	0.00#
0.00	0.00	0.00

F156088.D DFTPPF.M Tue Apr 05 18:13:03 2016 RT1

DFTPP

Data File : C:\MSDCHEM\1\DATA\EF6604\F156855.D Vial: 1
Acq On : 6 May 2016 8:57 am Operator: linseyk
Sample : dftpp Inst : MSF
Misc : op93631,ef6604 Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : C:\MSDCHEM\1\METHODS\DFTPPF.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um





AutoFind: Scans 261, 262, 263; Background Corrected with Scan 256

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	40.3	189928	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	59.2	279251	PASS
70	69	0.00	2	0.5	1304	PASS
127	198	40	60	56.8	267754	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	471402	PASS
199	198	5	9	6.9	32533	PASS
275	198	10	30	21.7	102362	PASS
365	198	1	100	2.5	11880	PASS
441	443	0.10	100	73.6	57256	PASS
442	198	40	100	85.3	401941	PASS
443	442	17	23	19.3	77768	PASS

F156855.D DFTPPF.M Fri May 06 12:20:52 2016 RT1

Average of 3.474 to 3.485 min.: F156855.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	793	52.05	10480	62.10	3183	73.05	1642
37.10	368	53.05	631	63.10	9121	74.05	25749
38.10	2675	53.80	165	64.00	268	75.05	42946
39.10	16246	54.15	169	64.20	1278	76.15	15142
40.05	1102	55.10	772	65.15	5102	77.10	284863
44.10	494	56.05	6067	65.90	328	78.10	17798
44.90	498	57.10	13621	66.20	200	79.05	16529
45.20	309	58.10	1261	67.15	280	80.05	14200
49.10	5306	59.25	584	69.10	279251	81.10	20655
50.10	49812	60.00	469	70.00	1304	82.00	5350
51.05	189928	61.10	2586	71.95	17	83.05	2709

Average of 3.474 to 3.485 min.: F156855.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
84.00	5216	95.10	760	105.10	7588	114.40	101
85.00	3100	96.05	2329	106.00	1379	114.90	72
86.00	7274	97.00	247	107.10	78717	115.15	54
87.00	2604	97.15	791	108.00	12500	116.05	4481
88.85	29	98.10	21844	108.95	331	117.05	56094
89.10	659	99.05	17697	110.05	146181	118.10	4765
89.70	98	100.05	1677	111.05	19330	118.95	955
91.10	4242	101.10	11686	112.00	1720	120.00	1274
92.10	4390	101.90	80	112.20	140	120.80	196
93.05	27947	103.10	4171	113.15	442	122.05	4474
94.05	1514	104.00	6888	114.10	185	123.00	7752

Average of 3.474 to 3.485 min.: F156855.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
124.00	4194	136.05	2833	144.90	789	154.00	2237
125.05	3598	137.05	5359	145.95	1897	155.10	7201
127.10	267754	137.80	652	147.10	5412	156.05	10407
128.05	22025	138.30	279	148.00	13803	157.10	931
129.05	103623	139.05	460	149.10	2678	157.50	401
130.05	8762	140.10	1408	150.05	734	158.00	2642
131.05	1729	141.00	11922	150.90	320	159.00	1393
132.05	829	142.00	4840	151.40	1005	160.05	3702
133.05	1411	143.00	2539	151.90	82	161.05	5191
134.05	2661	144.00	370	152.10	573	162.15	1494
135.05	6596	144.20	544	153.10	3751	163.10	1235

Average of 3.474 to 3.485 min.: F156855.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
163.90	82	173.00	2043	182.15	1315	191.05	2950
164.15	667	173.20	309	183.05	541	192.00	5619
165.00	4755	174.00	3714	184.00	1330	193.15	4818
166.10	2533	174.20	1177	184.20	436	194.00	1256
167.05	23765	175.10	9769	185.10	9928	194.30	394
168.05	10316	176.05	3553	186.10	68320	194.80	1206
169.10	2035	177.05	3914	187.05	21172	195.05	51
169.80	416	178.10	1550	187.90	431	196.00	14847
170.65	1184	179.05	17792	188.20	1642	198.00	471402
171.25	501	180.10	12101	189.05	3617	199.00	32533
172.00	2162	181.10	5739	190.00	874	200.05	2338

Average of 3.474 to 3.485 min.: F156855.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
200.90	378	208.10	4118	217.00	31314	227.80	888
201.20	381	208.90	271	218.10	4150	228.05	2053
201.45	1009	209.00	241	219.25	503	229.00	4937
201.70	1537	210.05	1600	219.60	133	230.15	937

202.10	364	211.05	5129	221.10	21799	231.05	2288
202.90	1125	212.15	938	221.85	1794	231.80	222
203.10	62	212.75	177	223.05	6027	232.20	124
204.10	14637	213.15	401	224.05	63326	233.20	864
205.10	26559	213.85	24	225.10	17016	233.50	315
206.10	112813	215.05	1690	226.10	1960	234.05	2129
207.05	14416	216.05	2564	227.05	26597	235.00	1501

Average of 3.474 to 3.485 min.: F156855.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
235.80	866	240.80	621	249.70	120	257.10	2269
236.10	1010	241.05	766	249.95	348	258.05	12733
236.90	714	242.10	3044	250.20	189	259.00	1415
237.20	992	243.10	2941	250.70	172	259.10	1151
237.95	330	244.10	44768	250.90	178	260.00	238
238.20	262	245.05	5548	251.20	214	260.95	373
238.80	108	246.05	7949	252.15	1229	261.25	333
239.00	708	246.90	222	252.90	451	262.10	107
239.50	228	247.10	1374	254.00	1814	263.20	59
239.95	396	248.05	644	255.05	239701	263.40	150
240.60	136	249.05	1731	256.10	35082	263.80	245

Average of 3.474 to 3.485 min.: F156855.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
264.15	904	274.05	18663	282.15	204	290.10	162
264.95	4559	275.10	102362	283.05	591	291.20	117
265.20	1358	276.10	13082	283.75	111	291.95	477
265.85	432	277.05	8514	284.25	436	292.90	1444
266.70	55	278.05	1615	285.10	1422	293.20	266
267.80	106	278.85	322	285.90	247	294.05	400
268.05	269	279.30	50	286.30	306	295.10	299
268.80	192	279.60	80	287.90	67	296.05	25602
269.85	214	280.05	288	288.20	178	297.10	3282
272.00	272	280.85	128	288.90	362	297.90	251
273.05	8195	281.90	77	289.90	302	298.20	90

Average of 3.474 to 3.485 min.: F156855.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
299.20	142	308.85	254	319.80	65	325.95	194
300.80	201	309.30	260	320.10	100	326.95	1949
301.20	66	310.05	382	320.50	60	327.80	497
301.90	290	310.90	83	320.90	71	328.00	903
303.05	3374	311.20	250	321.20	845	329.00	76
303.95	720	312.30	69	321.70	162	330.50	114
304.20	246	312.90	412	322.00	87	330.70	106
305.25	342	314.15	1414	323.05	10109	330.90	77
307.30	63	314.90	2931	323.95	1943	331.20	284
308.00	315	316.05	1799	324.90	233	332.05	644
308.60	146	317.00	606	325.10	53	332.75	856

Average of 3.474 to 3.485 min.: F156855.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
333.30	604	346.00	2620	357.00	150	370.60	137
334.10	6721	347.05	365	357.70	144	370.95	676
335.10	1349	347.90	119	359.00	204	371.20	402
336.00	285	349.90	225	359.30	129	372.10	4988
337.00	133	350.50	98	362.20	51	372.80	106
337.80	57	351.20	136	362.90	163	373.10	1401
338.65	178	352.00	3068	363.30	112	373.70	78
339.15	214	353.00	2540	365.00	11880	374.20	56
340.95	1270	354.05	2950	366.00	1670	375.00	117
342.00	152	355.00	268	367.20	140	375.60	54
342.15	451	355.20	366	369.90	188	376.95	201

Average of 3.474 to 3.485 min.: F156855.D

dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
381.20	64	394.80	50	414.60	67	425.30	287
383.05	2080	396.80	87	414.90	82	426.30	144
383.95	518	400.95	482	415.30	54	427.20	66
385.00	67	401.80	216	415.60	111	428.30	236
385.90	69	402.05	1281	415.80	55	429.20	103
387.00	103	403.05	3254	418.60	75	429.90	180
389.90	356	404.05	975	421.05	3116	431.10	140
390.80	498	405.30	67	422.00	1611	432.25	598
391.20	320	409.90	53	423.05	19484	433.40	139
392.10	316	410.10	117	424.00	4917	433.90	364
392.80	113	413.00	52	425.00	117	434.15	439

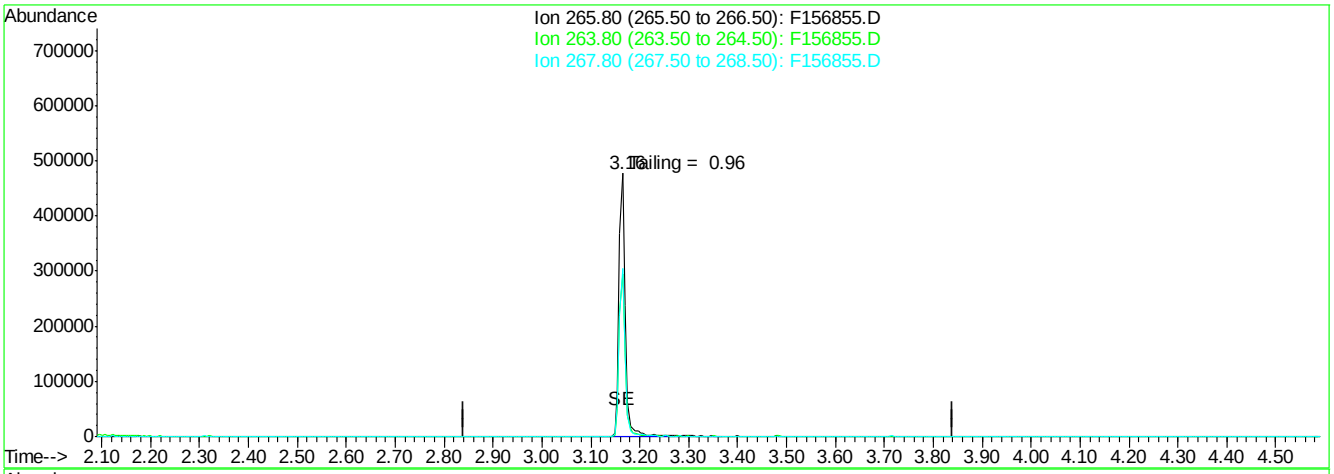
Average of 3.474 to 3.485 min.: F156855.D
dftpp
Modified:subtracted

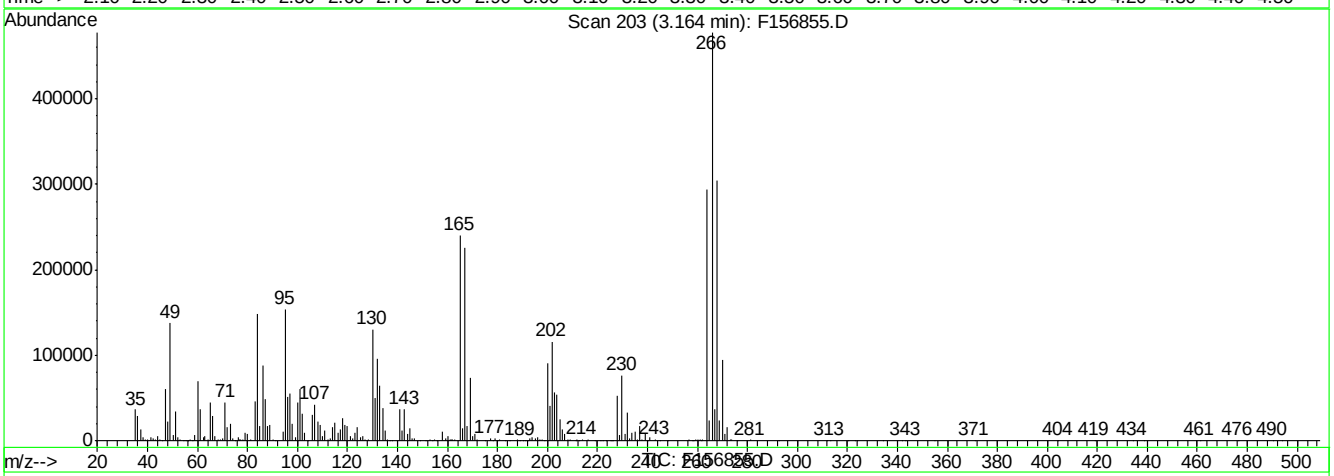
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
434.50	343	439.90	238	478.10	123		
434.80	380	441.05	57256	479.30	59		
435.30	86	442.10	401941				
435.50	121	443.10	77768				
435.80	635	444.05	6766				
436.10	325	445.20	548				
436.60	643	446.00	155				
437.35	592	446.20	51				
438.20	174	460.90	148				
438.40	848	474.80	59				
439.30	580	477.20	82				

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EF6604\F156855.D Vial: 1
Acq On : 6 May 2016 8:57 am Operator: linseyk
Sample : dftpp Inst : MSF
Misc : op93631,ef6604 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 6 9:03 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPF.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Fri Apr 08 15:27:53 2016
Response via : Multiple Level Calibration





(1) Pentachlorophenol (t)

3.16min 224.94ppb

response 418159

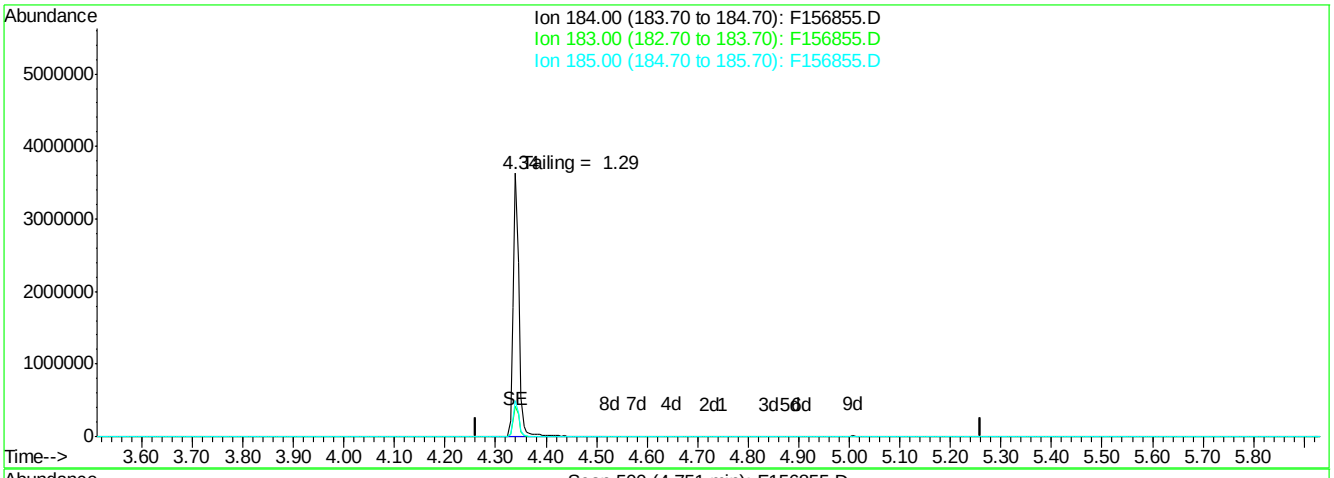
Ion	Exp%	Act%
265.80	100	100
263.80	63.00	61.49
267.80	64.80	63.64
0.00	0.00	0.00

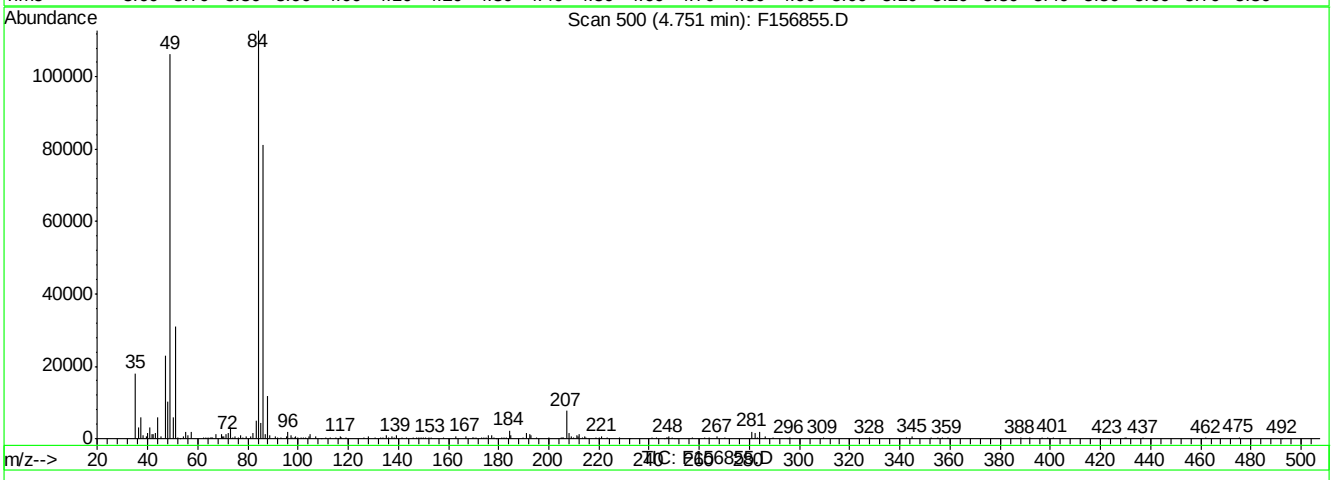
F156855.D DFTPPF.M Fri May 06 12:20:59 2016 RT1

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EF6604\F156855.D Vial: 1
Acq On : 6 May 2016 8:57 am Operator: linseyk
Sample : dftpp Inst : MSF
Misc : op93631,ef6604 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 6 9:03 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPF.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Fri Apr 08 15:27:53 2016
Response via : Multiple Level Calibration





(2) Benzidine (t)

4.75min 0.10ppb

response 1836

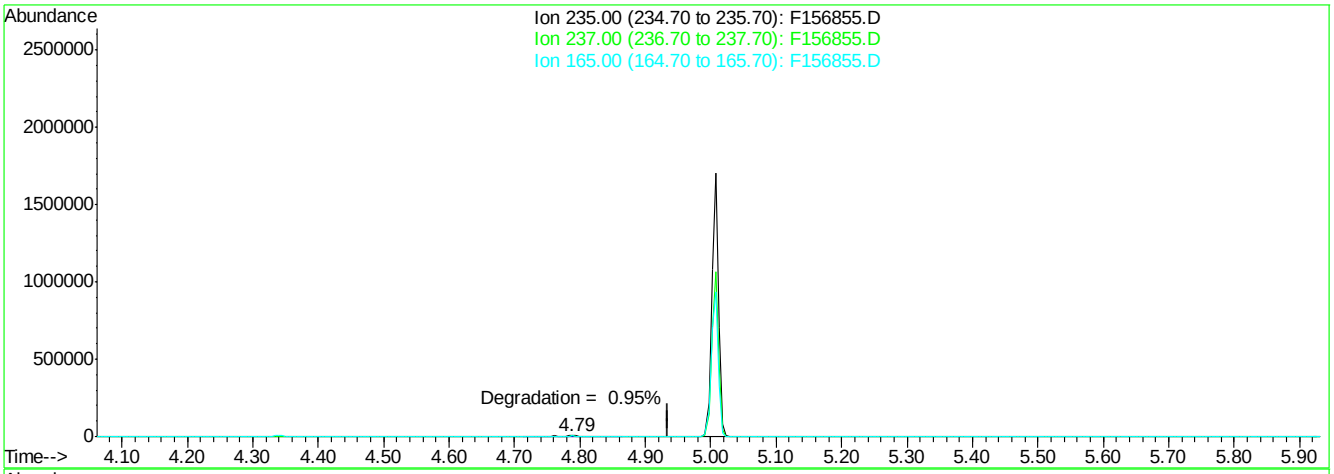
Ion	Exp%	Act%
184.00	100	100
183.00	12.60	0.00
185.00	16.20	0.00
0.00	0.00	0.00

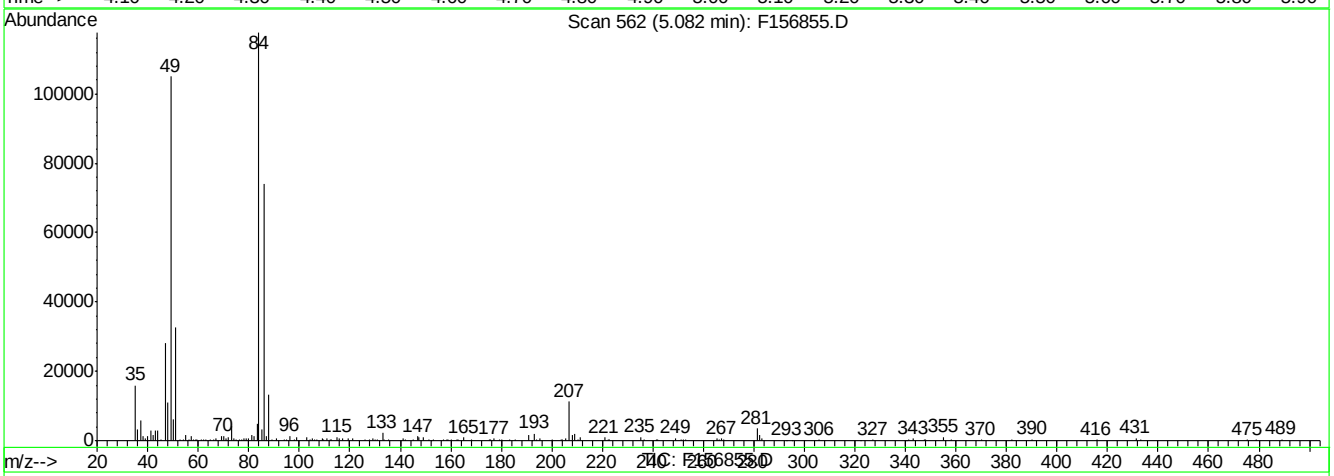
F156855.D DFTPPF.M Fri May 06 12:21:06 2016 RT1

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EF6604\F156855.D Vial: 1
Acq On : 6 May 2016 8:57 am Operator: linseyk
Sample : dftpp Inst : MSF
Misc : op93631,ef6604 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: May 6 9:03 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPF.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Fri Apr 08 15:27:53 2016
Response via : Single Level Calibration





(3) ddt (t)

5.08min 0.07ppb

response 1023

Ion	Exp%	Act%
235.00	100	100
237.00	66.70	0.00#
165.00	59.50	140.57#
0.00	0.00	0.00

F156855.D DFTPPF.M Fri May 06 12:21:11 2016 RT1

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3621\
Data File : 3E82669.D
Acq On : 26 Apr 2016 1:34 pm
Operator : ashleyn
Sample : ic3621-100
Misc : op93161,e3e3621
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 27 08:57:31 2016
Quant Method : C:\msdchem\1\METHODS\M3E3620.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MTue Apr 26 13:56:22 2016
QLast Update : Wed Apr 27 08:57:10 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.540	152	289593	40.00	ppm	0.00
24) Naphthalene-d8	5.610	136	1157319	40.00	ppm	0.00
47) Acenaphthene-d10	7.642	164	511334	40.00	ppm	0.00
69) Phenanthrene-d10	9.814	188	859541	40.00	ppm	0.00
83) Chrysene-d12	13.991	240	778490	40.00	ppm	0.00
92) Perylene-d12	16.109	264	696836	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.540	152	289593	40.00	ppm	0.00
104) Acenaphthene-d10a	7.642	164	511334	40.00	ppm	0.00
106) Phenanthrene-d10a	9.814	188	859541	40.00	ppm	0.00
110) Chrysene-d12a	13.991	240	778490	40.00	ppm	0.00
112) Naphthalene-d8a	5.610	136	1157319	40.00	ppm	0.00
114) Chrysene-d12b	13.991	240	778490	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	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) o-Terphenyl	10.455	230	1043182	100.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	200.00%	
109) 1-Chlorooctadecane	11.670	57	672048	100.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	200.00%	

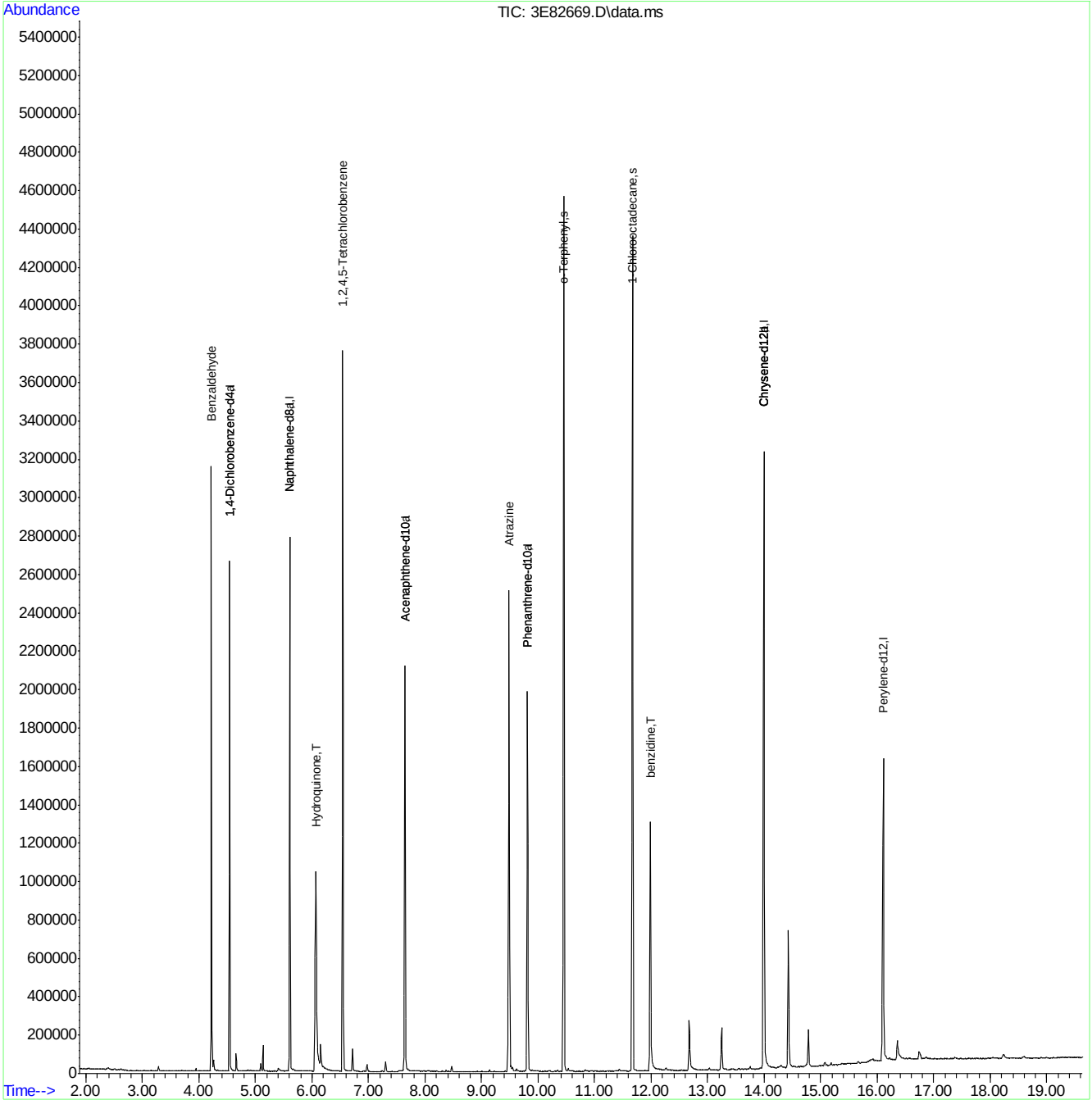
Target Compounds						Qvalue
103) Benzaldehyde	4.219	105	478506	100.00	ppm	91
105) 1,2,4,5-Tetrachloroben...	6.546	216	621919	100.00	ppm	99
107) Atrazine	9.487	215	208636	100.00	ppm	83
111) benzidine	11.990	184	683580	100.00	ppm	99
113) Hydroquinone	6.069	110	812292	100.00	ppm	94

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3621\
Data File : 3E82669.D
Acq On : 26 Apr 2016 1:34 pm
Operator : ashleyn
Sample : ic3621-100
Misc : op93161,e3e3621
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 27 08:57:31 2016
Quant Method : C:\msdchem\1\METHODS\M3E3620.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MTue Apr 26 13:56:22 2016
QLast Update : Wed Apr 27 08:57:10 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3621\
Data File : 3E82670.D
Acq On : 26 Apr 2016 2:00 pm
Operator : ashleyn
Sample : ic3621-80
Misc : op93161,e3e3621
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 27 08:58:09 2016
Quant Method : C:\msdchem\1\METHODS\M3E3620.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Apr 27 08:57:10 2016
QLast Update : Wed Apr 27 08:57:10 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.540	152	276746	40.00	ppm	0.00
24) Naphthalene-d8	5.609	136	1122369	40.00	ppm	0.00
47) Acenaphthene-d10	7.642	164	498619	40.00	ppm	0.00
69) Phenanthrene-d10	9.813	188	838282	40.00	ppm	0.00
83) Chrysene-d12	13.991	240	789250	40.00	ppm	0.00
92) Perylene-d12	16.103	264	723819	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.540	152	276746	40.00	ppm	0.00
104) Acenaphthene-d10a	7.642	164	498619	40.00	ppm	0.00
106) Phenanthrene-d10a	9.813	188	838282	40.00	ppm	0.00
110) Chrysene-d12a	13.991	240	789250	40.00	ppm	0.00
112) Naphthalene-d8a	5.609	136	1122369	40.00	ppm	0.00
114) Chrysene-d12b	13.991	240	789250	40.00	ppm	0.00

System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0d	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	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) o-Terphenyl	10.455	230	837120	82.28	ppm	0.00
Spiked Amount 50.000			Recovery = 164.56%			
109) 1-Chlorooctadecane	11.669	57	538274	82.13	ppm	0.00
Spiked Amount 50.000			Recovery = 164.26%			

Target Compounds						Qvalue
103) Benzaldehyde	4.219	105	441377	96.52	ppm	93
105) 1,2,4,5-Tetrachloroben...	6.545	216	485916	80.12	ppm	99
107) Atrazine	9.487	215	168112	82.62	ppm	89
111) benzidine	11.985	184	537199	77.51	ppm	99
113) Hydroquinone	6.059	110	665047	84.42	ppm	92

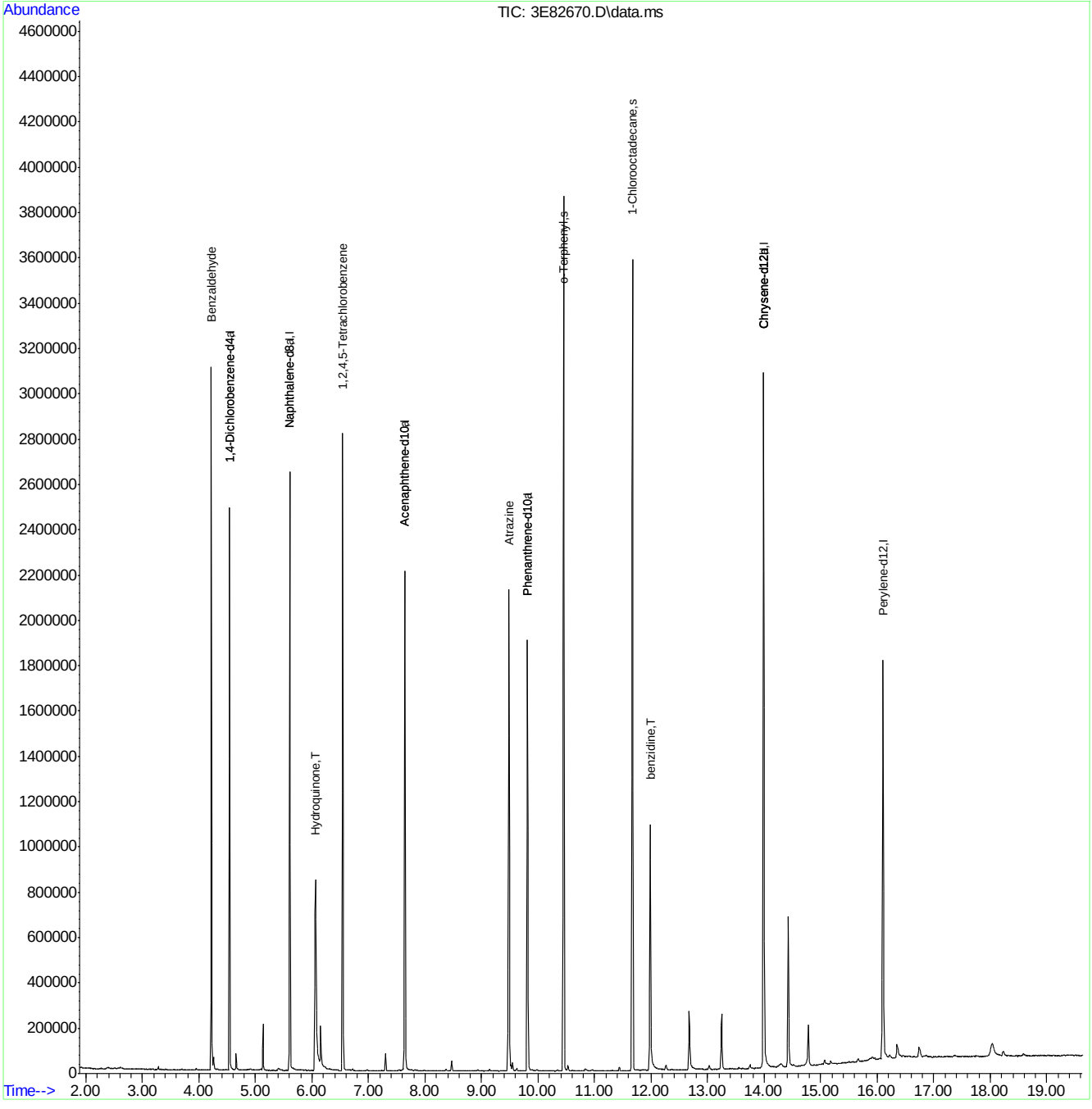
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3621\
Data File : 3E82670.D
Acq On : 26 Apr 2016 2:00 pm
Operator : ashleyn
Sample : ic3621-80
Misc : op93161,e3e3621
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 27 08:58:09 2016
Quant Method : C:\msdchem\1\METHODS\M3E3620.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Apr 27 08:57:10 2016
QLast Update : Wed Apr 27 08:57:10 2016
Response via : Initial Calibration



SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3621\
Data File : 3E82671.D
Acq On : 26 Apr 2016 2:26 pm
Operator : ashleyn
Sample : icc3621-50
Misc : op93161,e3e3621
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 27 08:58:47 2016
Quant Method : C:\msdchem\1\METHODS\M3E3620.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Apr 27 08:57:10 2016
QLast Update : Wed Apr 27 08:57:10 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.540	152	279549	40.00 ppm	0.00
24) Naphthalene-d8	5.610	136	1138547	40.00 ppm	0.00
47) Acenaphthene-d10	7.642	164	515041	40.00 ppm	0.00
69) Phenanthrene-d10	9.808	188	889382	40.00 ppm	0.00
83) Chrysene-d12	13.991	240	844557	40.00 ppm	0.00
92) Perylene-d12	16.104	264	792881	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.540	152	279549	40.00 ppm	0.00
104) Acenaphthene-d10a	7.642	164	515041	40.00 ppm	0.00
106) Phenanthrene-d10a	9.808	188	889382	40.00 ppm	0.00
110) Chrysene-d12a	13.991	240	844557	40.00 ppm	0.00
112) Naphthalene-d8a	5.610	136	1138547	40.00 ppm	0.00
114) Chrysene-d12b	13.991	240	844557	40.00 ppm	0.00

System Monitoring Compounds					
5) 2-Fluorophenol	0.000	112	0d	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	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
85) Terphenyl-d14	0.000	244	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
108) o-Terphenyl	10.455	230	548454	50.81 ppm	0.00
Spiked Amount 50.000			Recovery	= 101.62%	
109) 1-Chlorooctadecane	11.670	57	363504	52.27 ppm	0.00
Spiked Amount 50.000			Recovery	= 104.54%	

Target Compounds					Qvalue
103) Benzaldehyde	4.219	105	353989	76.64 ppm	95
105) 1,2,4,5-Tetrachloroben...	6.540	216	310522	49.57 ppm	99
107) Atrazine	9.482	215	112114	51.93 ppm	90
111) benzidine	11.985	184	456367	61.54 ppm	99
113) Hydroquinone	6.059	110	432342	54.10 ppm	95

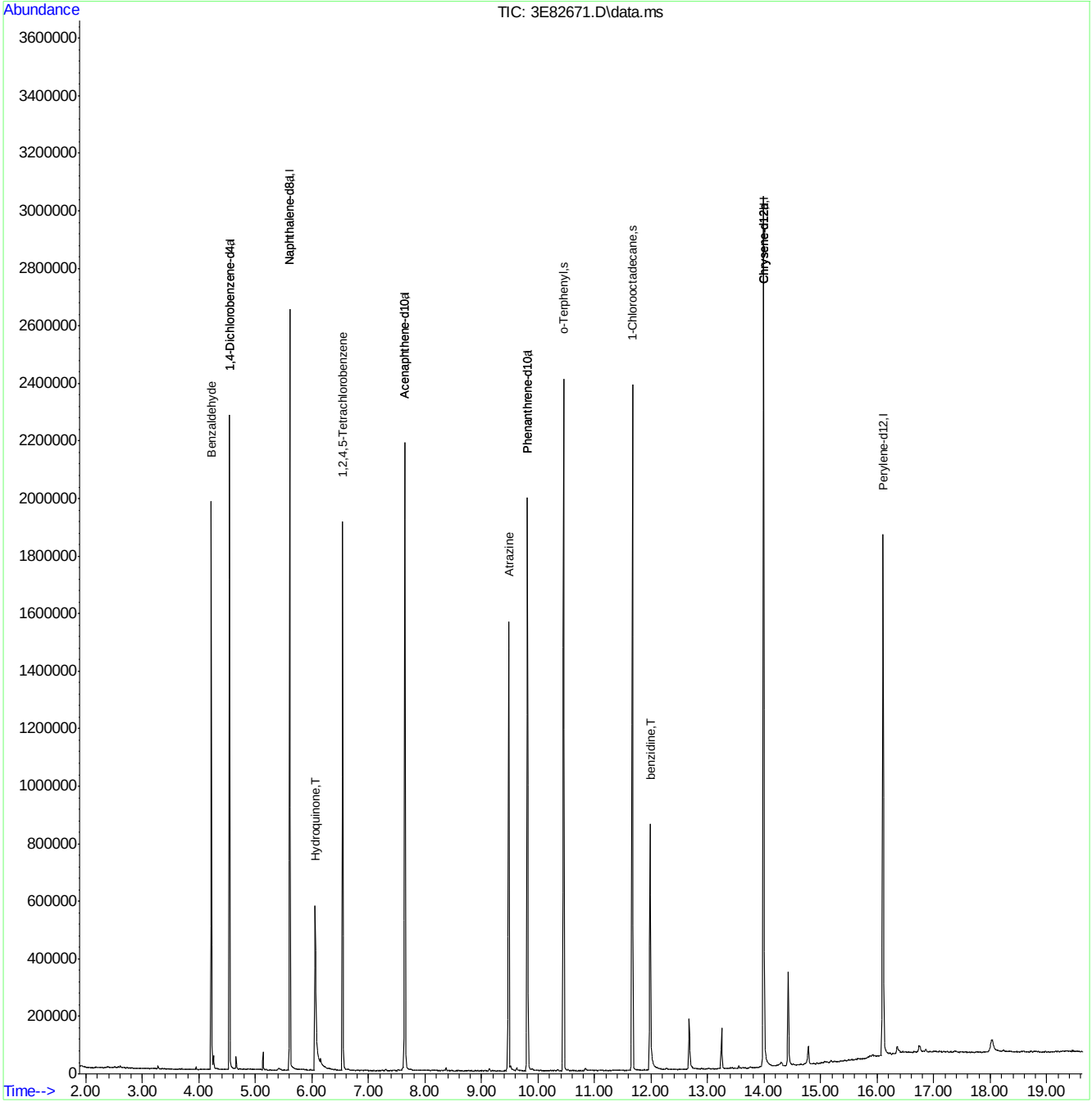
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3621\
Data File : 3E82671.D
Acq On : 26 Apr 2016 2:26 pm
Operator : ashleyn
Sample : icc3621-50
Misc : op93161,e3e3621
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 27 08:58:47 2016
Quant Method : C:\msdchem\1\METHODS\M3E3620.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Apr 27 08:57:10 2016
QLast Update : Wed Apr 27 08:57:10 2016
Response via : Initial Calibration



M3E3620.M Wed Apr 27 08:59:02 2016 MS3E Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3621\
Data File : 3E82672.D
Acq On : 26 Apr 2016 2:52 pm
Operator : ashleyn
Sample : ic3621-25
Misc : op93161,e3e3621
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 27 08:59:26 2016
Quant Method : C:\msdchem\1\METHODS\M3E3620.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Apr 27 08:57:10 2016
QLast Update : Wed Apr 27 08:57:10 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.540	152	289158	40.00 ppm	0.00
24) Naphthalene-d8	5.609	136	1182384	40.00 ppm	0.00
47) Acenaphthene-d10	7.642	164	550622	40.00 ppm	0.00
69) Phenanthrene-d10	9.813	188	955625	40.00 ppm	0.00
83) Chrysene-d12	13.991	240	905392	40.00 ppm	0.00
92) Perylene-d12	16.103	264	861303	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.540	152	289158	40.00 ppm	0.00
104) Acenaphthene-d10a	7.642	164	550622	40.00 ppm	0.00
106) Phenanthrene-d10a	9.813	188	955625	40.00 ppm	0.00
110) Chrysene-d12a	13.991	240	905392	40.00 ppm	0.00
112) Naphthalene-d8a	5.609	136	1182384	40.00 ppm	0.00
114) Chrysene-d12b	13.991	240	905392	40.00 ppm	0.00

System Monitoring Compounds					
5) 2-Fluorophenol	0.000	112	0d	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	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
85) Terphenyl-d14	0.000	244	0d	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
108) o-Terphenyl	10.450	230	294432	25.39 ppm	-0.01
Spiked Amount 50.000			Recovery = 50.78%		
109) 1-Chlorooctadecane	11.664	57	193082	25.84 ppm	0.00
Spiked Amount 50.000			Recovery = 51.68%		

Target Compounds					Qvalue
103) Benzaldehyde	4.213	105	194301	40.67 ppm	89
105) 1,2,4,5-Tetrachloroben...	6.540	216	162939	24.33 ppm	99
107) Atrazine	9.476	215	59482	25.64 ppm	89
111) benzidine	11.985	184	282179	35.49 ppm	99
113) Hydroquinone	6.053	110	217445	26.20 ppm	92

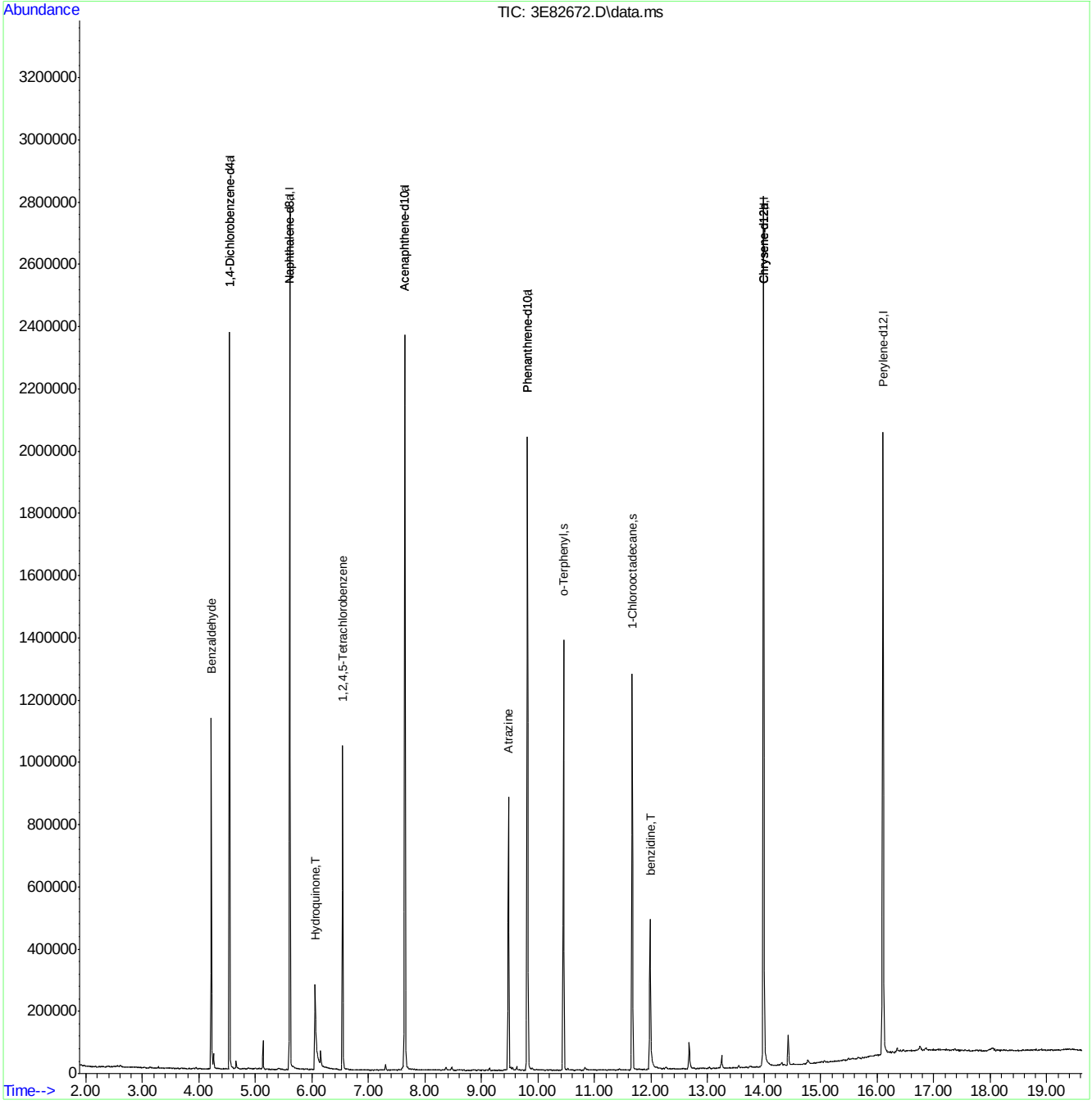
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3621\
Data File : 3E82672.D
Acq On : 26 Apr 2016 2:52 pm
Operator : ashleyn
Sample : ic3621-25
Misc : op93161,e3e3621
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 27 08:59:26 2016
Quant Method : C:\msdchem\1\METHODS\M3E3620.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Apr 27 08:57:10 2016
QLast Update : Wed Apr 27 08:57:10 2016
Response via : Initial Calibration



M3E3620.M Wed Apr 27 08:59:44 2016 MS3E Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3621\
Data File : 3E82673.D
Acq On : 26 Apr 2016 3:19 pm
Operator : ashleyn
Sample : ic3621-10
Misc : op93161,e3e3621
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 27 09:02:19 2016
Quant Method : C:\msdchem\1\METHODS\M3E3620.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Apr 27 08:57:10 2016
QLast Update : Wed Apr 27 08:57:10 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.540	152	300576	40.00 ppm	0.00
24) Naphthalene-d8	5.609	136	1222647	40.00 ppm	0.00
47) Acenaphthene-d10	7.642	164	571099	40.00 ppm	0.00
69) Phenanthrene-d10	9.808	188	991077	40.00 ppm	0.00
83) Chrysene-d12	13.991	240	931960	40.00 ppm	0.00
92) Perylene-d12	16.103	264	892438	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.540	152	300576	40.00 ppm	0.00
104) Acenaphthene-d10a	7.642	164	571099	40.00 ppm	0.00
106) Phenanthrene-d10a	9.808	188	991077	40.00 ppm	0.00
110) Chrysene-d12a	13.991	240	931960	40.00 ppm	0.00
112) Naphthalene-d8a	5.609	136	1222647	40.00 ppm	0.00
114) Chrysene-d12b	13.991	240	931960	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	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
73) 2,4,6-Tribromophenol	0.000	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
85) Terphenyl-d14	0.000	244	0d	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
108) o-Terphenyl	10.450	230	122328	10.17 ppm	-0.01
Spiked Amount 50.000			Recovery = 20.34%		
109) 1-Chlorooctadecane	11.664	57	78105	10.08 ppm	0.00
Spiked Amount 50.000			Recovery = 20.16%		

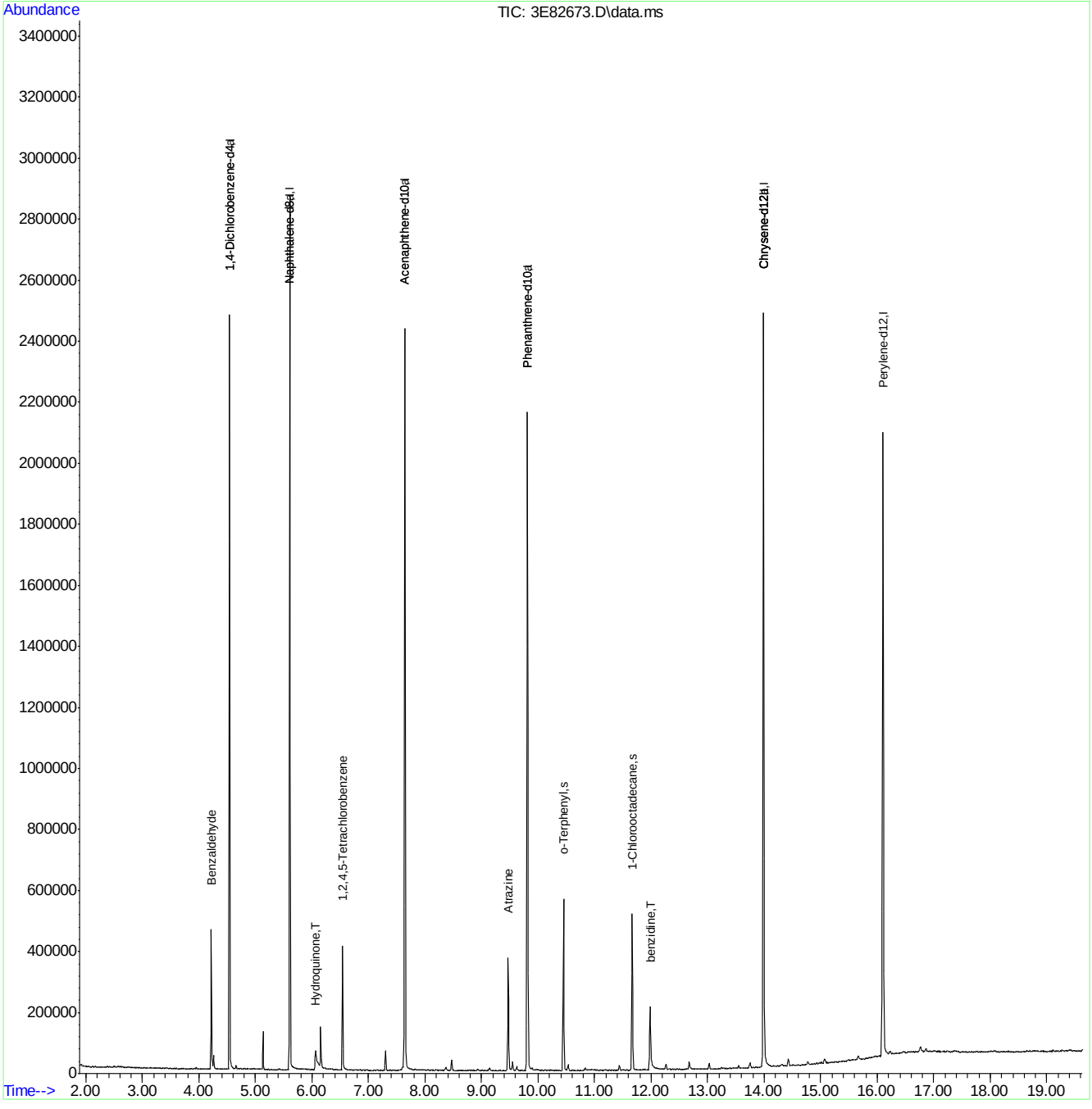
Target Compounds					Qvalue
103) Benzaldehyde	4.213	105	82240	16.56 ppm	89
105) 1,2,4,5-Tetrachloroben...	6.540	216	67129	9.66 ppm	99
107) Atrazine	9.471	215	24114	10.02 ppm	87
111) benzidine	11.985	184	127420	15.57 ppm	98
113) Hydroquinone	6.064	110	77949	9.08 ppm	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3621\
Data File : 3E82673.D
Acq On : 26 Apr 2016 3:19 pm
Operator : ashleyn
Sample : ic3621-10
Misc : op93161,e3e3621
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 27 09:02:19 2016
Quant Method : C:\msdchem\1\METHODS\M3E3620.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Apr 27 08:57:10 2016
QLast Update : Wed Apr 27 08:57:10 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3621\
Data File : 3E82674.D
Acq On : 26 Apr 2016 3:45 pm
Operator : ashleyn
Sample : ic3621-5
Misc : op93161,e3e3621
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 27 09:03:11 2016
Quant Method : C:\msdchem\1\METHODS\M3E3620.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Apr 27 08:57:10 2016
QLast Update : Wed Apr 27 08:57:10 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.540	152	301145	40.00 ppm	0.00
24) Naphthalene-d8	5.609	136	1224906	40.00 ppm	0.00
47) Acenaphthene-d10	7.642	164	555436	40.00 ppm	0.00
69) Phenanthrene-d10	9.808	188	963977	40.00 ppm	0.00
83) Chrysene-d12	13.991	240	904104	40.00 ppm	0.00
92) Perylene-d12	16.104	264	874004	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.540	152	301145	40.00 ppm	0.00
104) Acenaphthene-d10a	7.642	164	555436	40.00 ppm	0.00
106) Phenanthrene-d10a	9.808	188	963977	40.00 ppm	0.00
110) Chrysene-d12a	13.991	240	904104	40.00 ppm	0.00
112) Naphthalene-d8a	5.609	136	1224906	40.00 ppm	0.00
114) Chrysene-d12b	13.991	240	904104	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	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
85) Terphenyl-d14	0.000	244	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
108) o-Terphenyl	10.450	230	65450	5.59 ppm	-0.01
Spiked Amount 50.000			Recovery	= 11.18%	
109) 1-Chlorooctadecane	11.664	57	42102	5.59 ppm	0.00
Spiked Amount 50.000			Recovery	= 11.18%	

Target Compounds					Qvalue
103) Benzaldehyde	4.213	105	44956	9.03 ppm	90
105) 1,2,4,5-Tetrachloroben...	6.540	216	37172	5.50 ppm	97
107) Atrazine	9.471	215	13195	5.64 ppm	92
111) benzidine	11.985	184	73196	9.22 ppm	99
113) Hydroquinone	6.075	110	33695	3.92 ppm	89

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

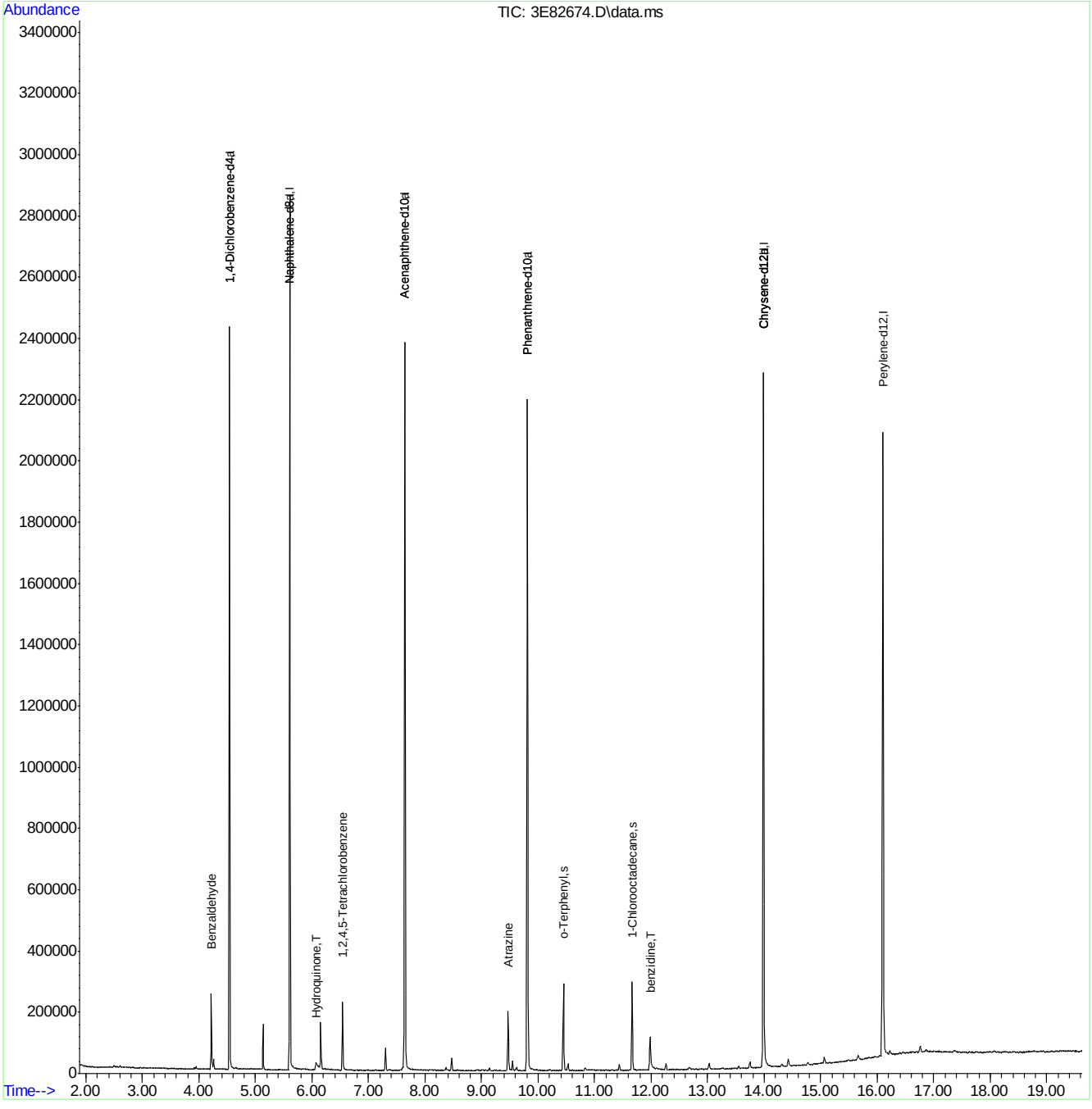
7.6.6 7

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3621\
Data File : 3E82674.D
Acq On : 26 Apr 2016 3:45 pm
Operator : ashleyn
Sample : ic3621-5
Misc : op93161,e3e3621
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 27 09:03:11 2016
Quant Method : C:\msdchem\1\METHODS\M3E3620.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Apr 27 08:57:10 2016
QLast Update : Wed Apr 27 08:57:10 2016
Response via : Initial Calibration



M3E3620.M Wed Apr 27 09:03:29 2016 MS3E Page: 2

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3621\
Data File : 3E82675.D
Acq On : 26 Apr 2016 4:11 pm
Operator : ashleyn
Sample : ic3621-2
Misc : op93161,e3e3621
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 27 09:03:56 2016
Quant Method : C:\msdchem\1\METHODS\M3E3620.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Apr 27 08:57:10 2016
QLast Update : Wed Apr 27 08:57:10 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.540	152	331626	40.00	ppm	0.00
24) Naphthalene-d8	5.609	136	1335111	40.00	ppm	0.00
47) Acenaphthene-d10	7.642	164	615642	40.00	ppm	0.00
69) Phenanthrene-d10	9.808	188	1052251	40.00	ppm	0.00
83) Chrysene-d12	13.991	240	996379	40.00	ppm	0.00
92) Perylene-d12	16.104	264	959913	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.540	152	331626	40.00	ppm	0.00
104) Acenaphthene-d10a	7.642	164	615642	40.00	ppm	0.00
106) Phenanthrene-d10a	9.808	188	1052251	40.00	ppm	0.00
110) Chrysene-d12a	13.991	240	996379	40.00	ppm	0.00
112) Naphthalene-d8a	5.609	136	1335111	40.00	ppm	0.00
114) Chrysene-d12b	13.991	240	996379	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	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) o-Terphenyl	10.450	230	29133	2.28	ppm	-0.01
Spiked Amount 50.000			Recovery	=	4.56%	
109) 1-Chlorooctadecane	11.664	57	17607	2.14	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.28%	

Target Compounds							Qvalue
103) Benzaldehyde	4.219	105	19710	3.60	ppm		98
105) 1,2,4,5-Tetrachloroben...	6.540	216	15678	2.09	ppm		94
107) Atrazine	9.466	215	5556	2.18	ppm	#	74
111) benzidine	11.985	184	27592	3.15	ppm		97
113) Hydroquinone	6.096	110	10721	1.14	ppm		96

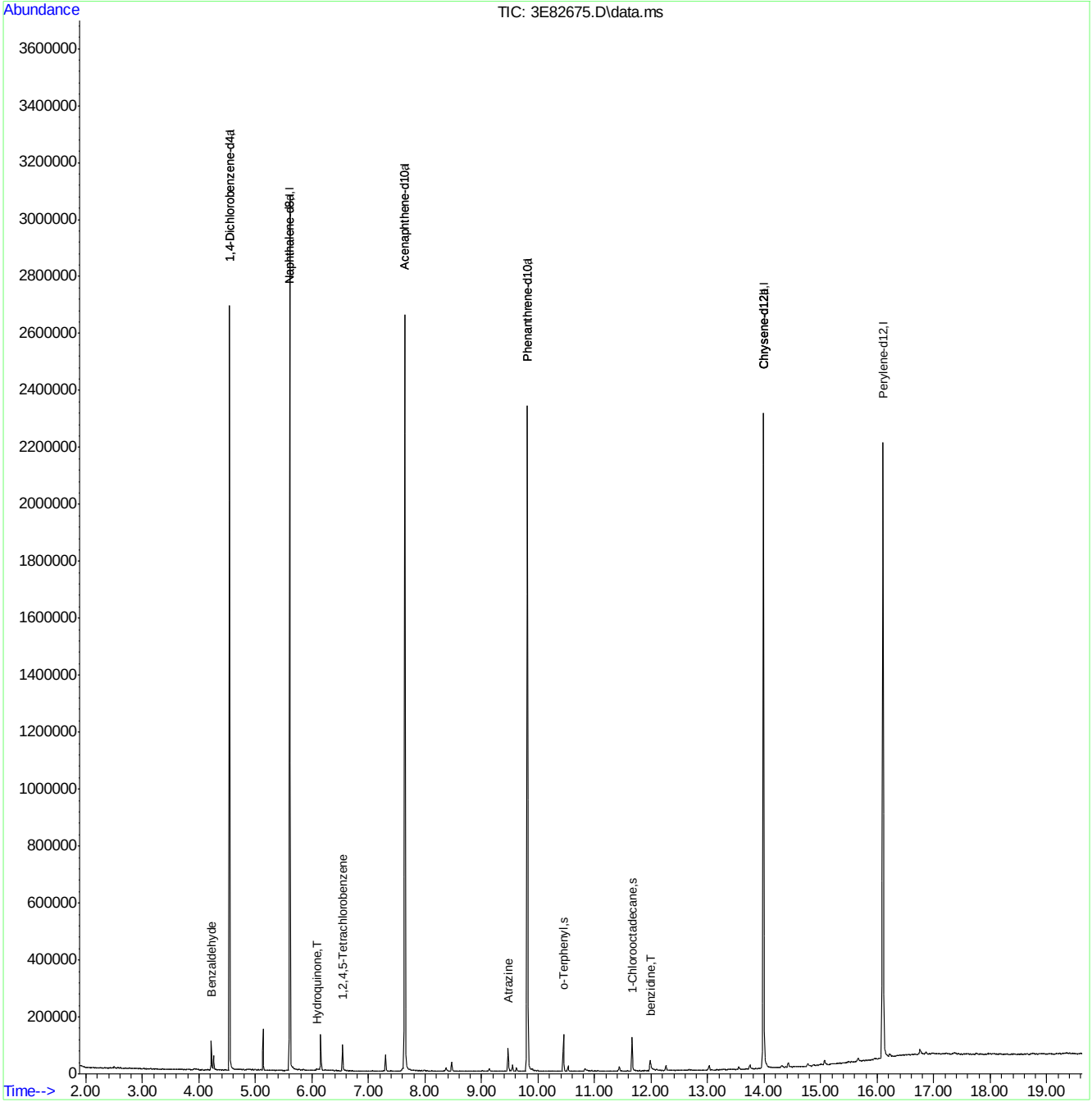
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3621\
Data File : 3E82675.D
Acq On : 26 Apr 2016 4:11 pm
Operator : ashleyn
Sample : ic3621-2
Misc : op93161,e3e3621
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 27 09:03:56 2016
Quant Method : C:\msdchem\1\METHODS\M3E3620.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Apr 27 08:57:10 2016
QLast Update : Wed Apr 27 08:57:10 2016
Response via : Initial Calibration



M3E3620.M Wed Apr 27 09:04:27 2016 MS3E Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3621\
Data File : 3E82676.D
Acq On : 26 Apr 2016 4:37 pm
Operator : ashleyn
Sample : ic3621-1
Misc : op93161,e3e3621
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 27 09:05:00 2016
Quant Method : C:\msdchem\1\METHODS\M3E3620.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Apr 27 08:57:10 2016
QLast Update : Wed Apr 27 08:57:10 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.540	152	312469	40.00	ppm	0.00
24) Naphthalene-d8	5.610	136	1296183	40.00	ppm	0.00
47) Acenaphthene-d10	7.642	164	591540	40.00	ppm	0.00
69) Phenanthrene-d10	9.808	188	1016668	40.00	ppm	0.00
83) Chrysene-d12	13.991	240	954506	40.00	ppm	0.00
92) Perylene-d12	16.104	264	923822	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.540	152	312469	40.00	ppm	0.00
104) Acenaphthene-d10a	7.642	164	591540	40.00	ppm	0.00
106) Phenanthrene-d10a	9.808	188	1016668	40.00	ppm	0.00
110) Chrysene-d12a	13.991	240	954506	40.00	ppm	0.00
112) Naphthalene-d8a	5.610	136	1296183	40.00	ppm	0.00
114) Chrysene-d12b	13.991	240	954506	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	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) o-Terphenyl	10.450	230	14269	1.16	ppm	-0.01
Spiked Amount 50.000			Recovery	=	2.32%	
109) 1-Chlorooctadecane	11.664	57	8949	1.13	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.26%	

Target Compounds						Qvalue
103) Benzaldehyde	4.219	105	9583	1.86	ppm	94
105) 1,2,4,5-Tetrachloroben...	6.540	216	7654	1.06	ppm	96
107) Atrazine	9.471	215	2648	1.07	ppm	94
111) benzidine	11.990	184	10184	1.22	ppm	92
113) Hydroquinone	6.096	110	3163	0.35	ppm	90

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

7.6.8

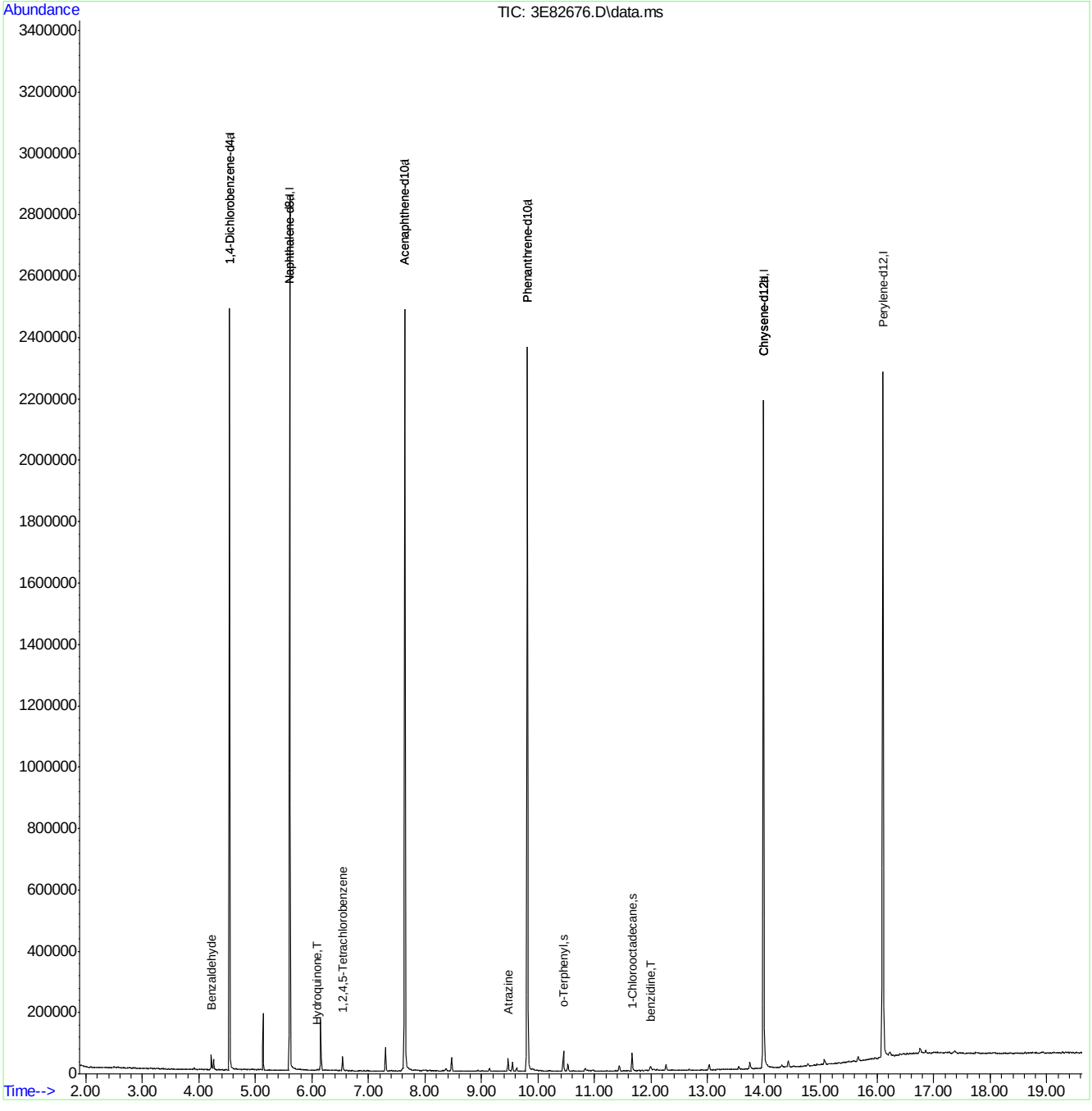
7

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3621\
Data File : 3E82676.D
Acq On : 26 Apr 2016 4:37 pm
Operator : ashleyn
Sample : ic3621-1
Misc : op93161,e3e3621
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 27 09:05:00 2016
Quant Method : C:\msdchem\1\METHODS\M3E3620.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Apr 27 08:57:10 2016
QLast Update : Wed Apr 27 08:57:10 2016
Response via : Initial Calibration



M3E3620.M Wed Apr 27 09:05:19 2016 MS3E Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3621\
Data File : 3E82680a.D
Acq On : 26 Apr 2016 6:22 pm
Operator : ashleyn
Sample : icv3621-50
Misc : op93161,e3e3621
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 27 12:20:52 2016
Quant Method : C:\msdchem\1\METHODS\M3E3620.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Apr 27 09:55:50 2016
QLast Update : Wed Apr 27 09:55:50 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.540	152	304548	40.00 ppm	0.00
24) Naphthalene-d8	5.609	136	1158365	40.00 ppm	0.00
47) Acenaphthene-d10	7.642	164	563604	40.00 ppm	0.00
69) Phenanthrene-d10	9.808	188	793159	40.00 ppm	-0.01
83) Chrysene-d12	13.991	240	660980	40.00 ppm	-0.02
92) Perylene-d12	16.103	264	462613	40.00 ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.540	152	304548	40.00 ppm	0.00
104) Acenaphthene-d10a	7.642	164	563604	40.00 ppm	0.00
106) Phenanthrene-d10a	9.808	188	793159	40.00 ppm	0.00
110) Chrysene-d12a	13.991	240	660980	40.00 ppm	0.00
112) Naphthalene-d8a	5.609	136	1158365	40.00 ppm	0.00
114) Chrysene-d12b	13.991	240	660980	40.00 ppm	0.00

System Monitoring Compounds					
5) 2-Fluorophenol	0.000	112	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
8) Phenol-d5	0.000	99	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
25) Nitrobenzene-d5	0.000	82	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
51) 2-Fluorobiphenyl	0.000	172	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
73) 2,4,6-Tribromophenol	0.000	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
85) Terphenyl-d14	0.000	244	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
108) o-Terphenyl	0.000	230	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
109) 1-Chlorooctadecane	0.000	57	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%

Target Compounds					Qvalue
105) 1,2,4,5-Tetrachloroben...	6.540	216	348310	49.91 ppm	99

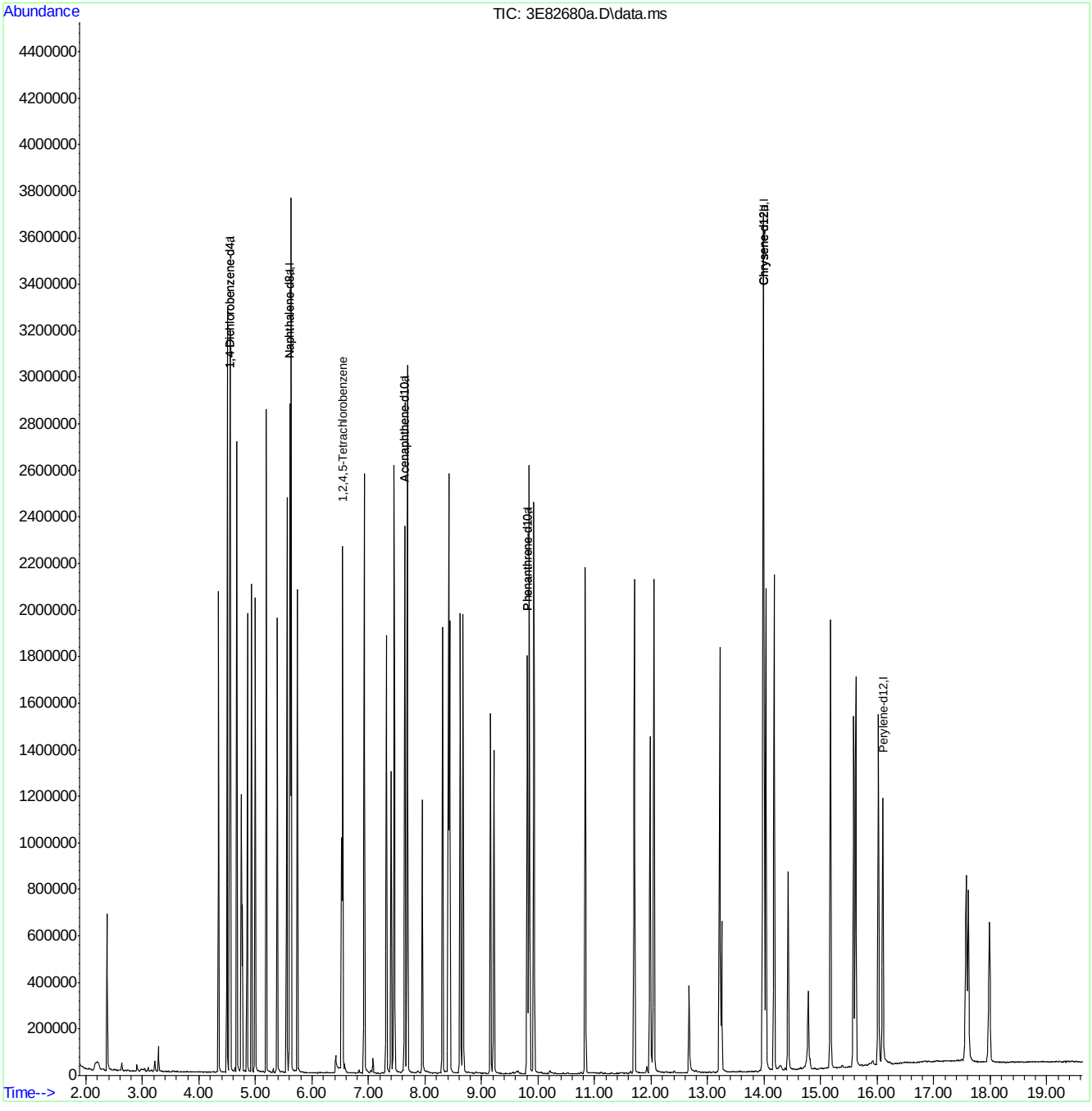
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3621\
Data File : 3E82680a.D
Acq On : 26 Apr 2016 6:22 pm
Operator : ashleyn
Sample : icv3621-50
Misc : op93161,e3e3621
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 27 12:20:52 2016
Quant Method : C:\msdchem\1\METHODS\M3E3620.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Apr 27 09:55:50 2016
QLast Update : Wed Apr 27 09:55:50 2016
Response via : Initial Calibration



M3E3620.M Wed Apr 27 12:20:56 2016 MS3E Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3621\
Data File : 3E82681a.D
Acq On : 26 Apr 2016 6:48 pm
Operator : ashleyn
Sample : icv3621-50
Misc : op93161,e3e3621
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 28 11:07:37 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 10:56:37 2016
QLast Update : Thu Apr 28 10:56:37 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.540	152	299771	40.00 ppm	0.00
24) Naphthalene-d8	5.604	136	1144167	40.00 ppm	0.00
47) Acenaphthene-d10	7.642	164	561548	40.00 ppm	0.00
69) Phenanthrene-d10	9.808	188	813751	40.00 ppm	0.00
83) Chrysene-d12	13.985	240	661947	40.00 ppm	0.00
92) Perylene-d12	16.098	264	508019	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.540	152	299771	40.00 ppm	0.00
104) Acenaphthene-d10a	7.642	164	561548	40.00 ppm	0.00
106) Phenanthrene-d10a	9.808	188	813751	40.00 ppm	0.00
110) Chrysene-d12a	13.985	240	661947	40.00 ppm	0.00
112) Naphthalene-d8a	5.604	136	1144167	40.00 ppm	0.00
114) Chrysene-d12b	13.985	240	661947	40.00 ppm	0.00

System Monitoring Compounds					
5) 2-Fluorophenol	0.000	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
8) Phenol-d5	0.000	99	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
25) Nitrobenzene-d5	0.000	82	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
51) 2-Fluorobiphenyl	0.000	172	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
73) 2,4,6-Tribromophenol	0.000	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
85) Terphenyl-d14	0.000	244	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
108) o-Terphenyl	0.000	230	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
109) 1-Chlorooctadecane	0.000	57	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%

Target Compounds					Qvalue
103) Benzaldehyde	4.219	105	427003	52.55 ppm	96
107) Atrazine	9.476	215	102078	49.29 ppm	93

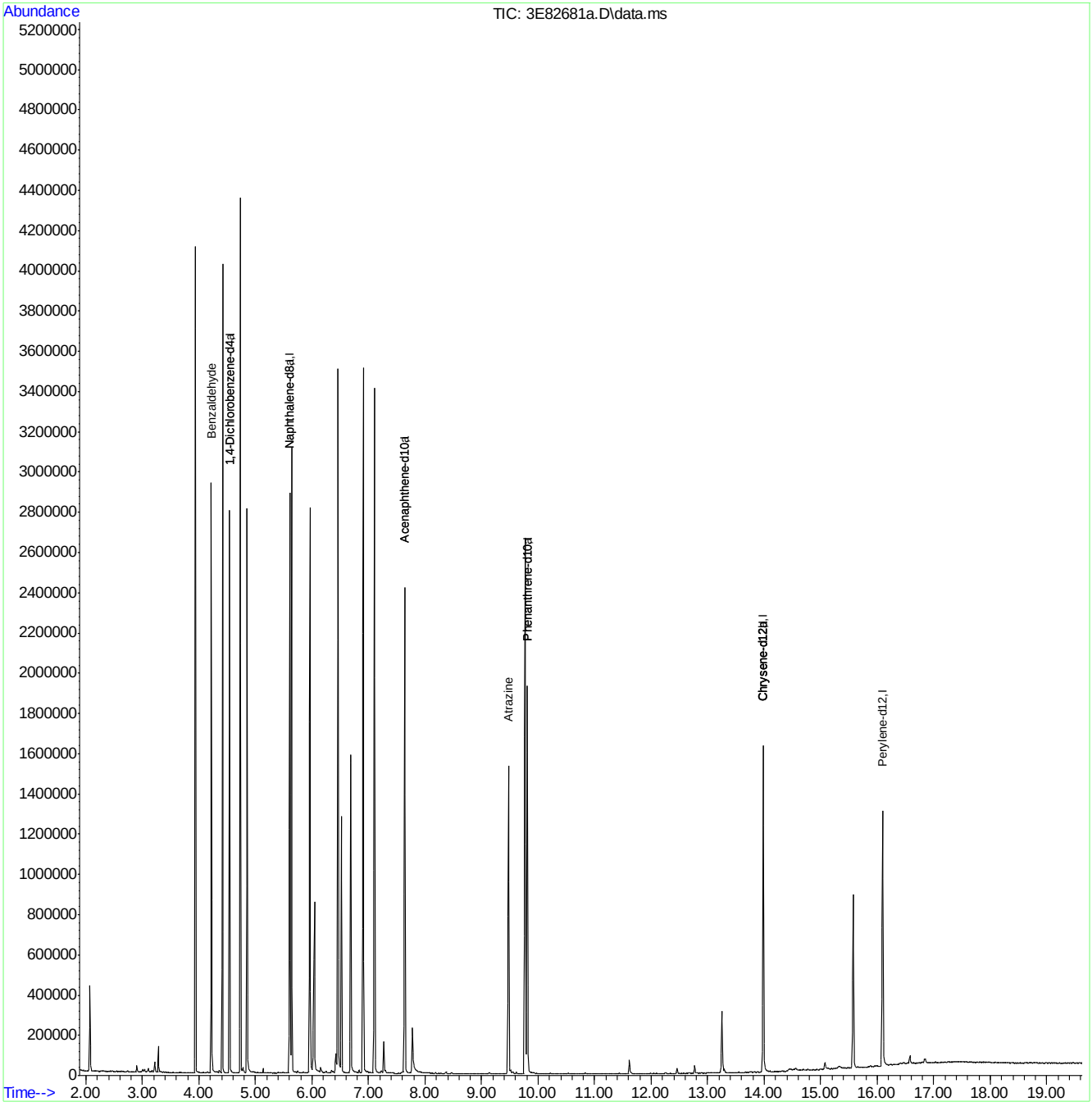
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3621\
Data File : 3E82681a.D
Acq On : 26 Apr 2016 6:48 pm
Operator : ashleyn
Sample : icv3621-50
Misc : op93161,e3e3621
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 28 11:07:37 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 10:56:37 2016
QLast Update : Thu Apr 28 10:56:37 2016
Response via : Initial Calibration



M3E3623.M Thu Apr 28 11:11:41 2016 MS3E

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3621\
Data File : 3E82683.D
Acq On : 26 Apr 2016 7:40 pm
Operator : ashleyn
Sample : icv3621-50
Misc : op93161,e3e3621
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 27 10:28:03 2016
Quant Method : C:\msdchem\1\METHODS\M3E3620.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Apr 27 09:55:50 2016
QLast Update : Wed Apr 27 09:55:50 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.540	152	253204	40.00	ppm	0.00
24) Naphthalene-d8	5.604	136	1011973	40.00	ppm	-0.01
47) Acenaphthene-d10	7.642	164	522155	40.00	ppm	0.00
69) Phenanthrene-d10	9.808	188	796180	40.00	ppm	-0.01
83) Chrysene-d12	13.986	240	700682	40.00	ppm	-0.02
92) Perylene-d12	16.098	264	645641	40.00	ppm	-0.02
102) 1,4-Dichlorobenzene-d4a	4.540	152	253204	40.00	ppm	0.00
104) Acenaphthene-d10a	7.642	164	522155	40.00	ppm	0.00
106) Phenanthrene-d10a	9.808	188	796180	40.00	ppm	0.00
110) Chrysene-d12a	13.986	240	700682	40.00	ppm	0.00
112) Naphthalene-d8a	5.604	136	1011973	40.00	ppm	0.00
114) Chrysene-d12b	13.986	240	700682	40.00	ppm	0.00

System Monitoring Compounds

5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-Chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds						Qvalue
113) Hydroquinone	6.053	110	402910	57.91	ppm	99

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

7.6.11

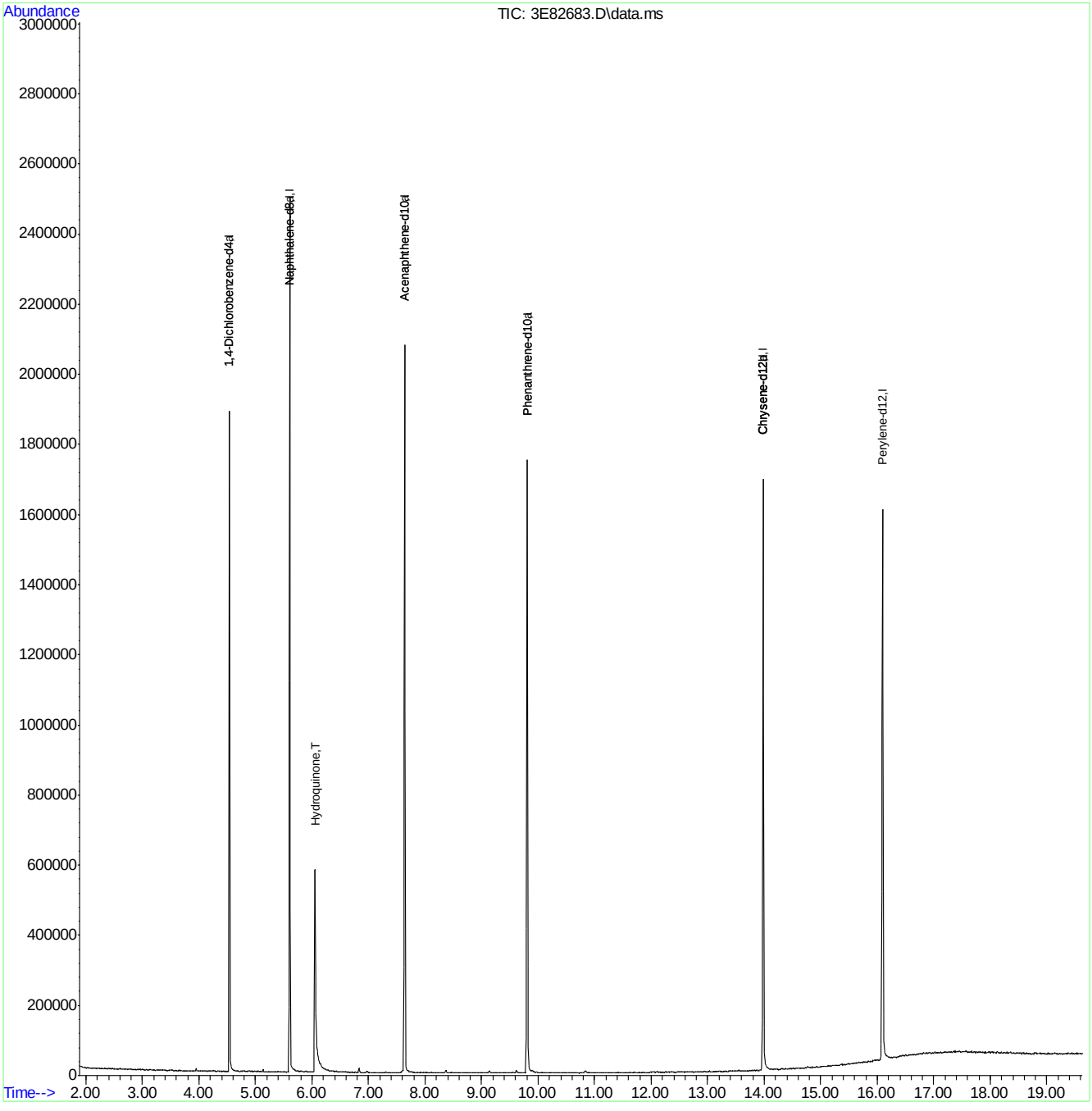
7

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3621\
Data File : 3E82683.D
Acq On : 26 Apr 2016 7:40 pm
Operator : ashleyn
Sample : icv3621-50
Misc : op93161,e3e3621
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 27 10:28:03 2016
Quant Method : C:\msdchem\1\METHODS\M3E3620.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Apr 27 09:55:50 2016
QLast Update : Wed Apr 27 09:55:50 2016
Response via : Initial Calibration



M3E3620.M Wed Apr 27 10:28:07 2016 MS3E

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3622\
Data File : 3E82685a.D
Acq On : 27 Apr 2016 11:46 am
Operator : ashleyn
Sample : icv3621-50
Misc : op93161,e3e3622
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 27 12:23:10 2016
Quant Method : C:\msdchem\1\METHODS\M3E3620.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Apr 27 12:17:28 2016
QLast Update : Wed Apr 27 12:17:28 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.534	152	256439	40.00	ppm	0.00
24) Naphthalene-d8	5.604	136	1011433	40.00	ppm	-0.01
47) Acenaphthene-d10	7.637	164	544154	40.00	ppm	-0.01
69) Phenanthrene-d10	9.803	188	870586	40.00	ppm	-0.02
83) Chrysene-d12	13.985	240	834701	40.00	ppm	-0.02
92) Perylene-d12	16.098	264	794617	40.00	ppm	-0.02
102) 1,4-Dichlorobenzene-d4a	4.534	152	256439	40.00	ppm	0.00
104) Acenaphthene-d10a	7.637	164	544154	40.00	ppm	0.00
106) Phenanthrene-d10a	9.803	188	870586	40.00	ppm	0.00
110) Chrysene-d12a	13.985	240	834701	40.00	ppm	0.00
112) Naphthalene-d8a	5.604	136	1011433	40.00	ppm	0.00
114) Chrysene-d12b	13.985	240	834701	40.00	ppm	0.00

System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-Chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

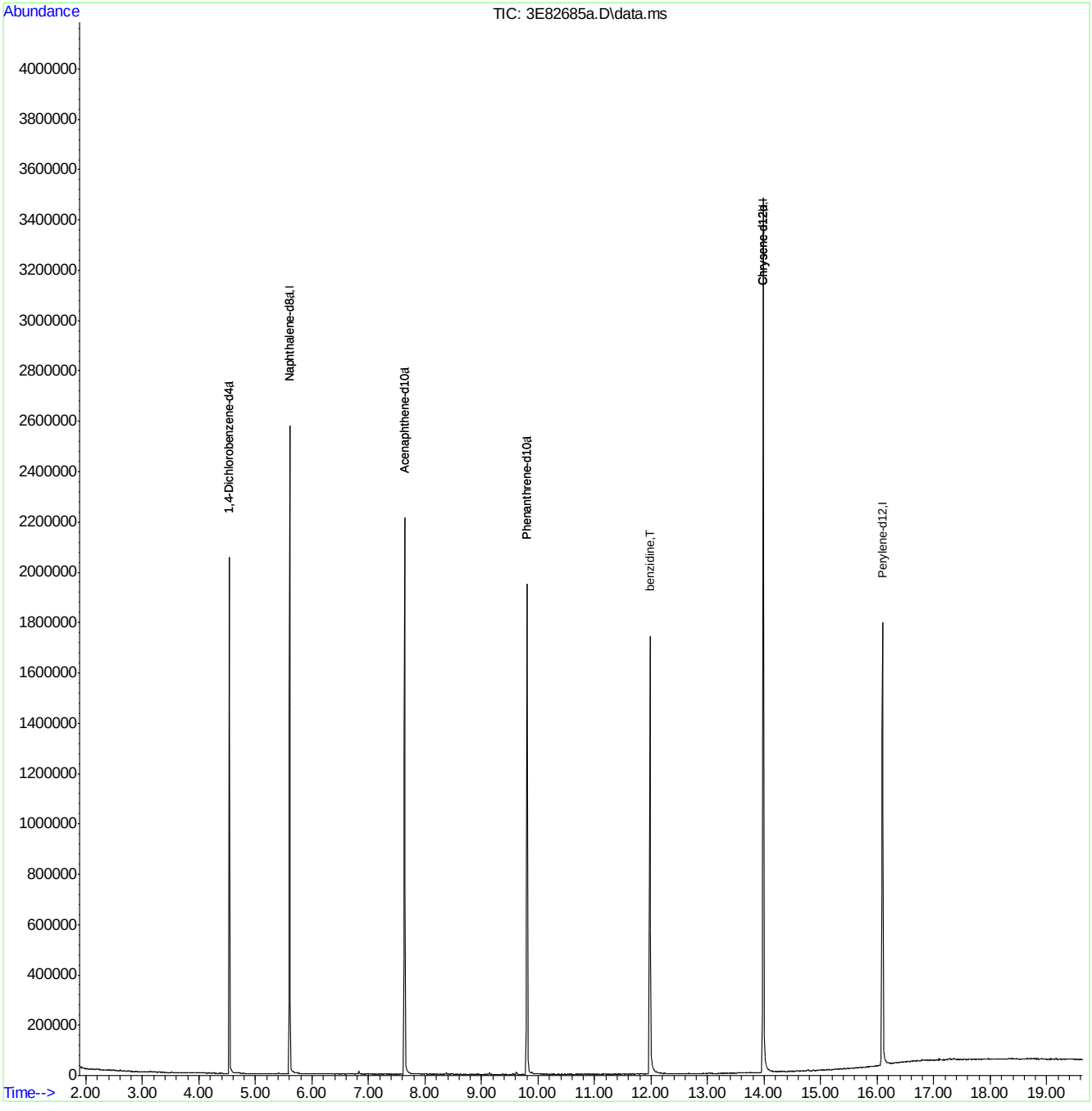
Target Compounds						Qvalue
111) benzidine	11.980	184	860560	83.76	ppm	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3622\
Data File : 3E82685a.D
Acq On : 27 Apr 2016 11:46 am
Operator : ashleyn
Sample : icv3621-50
Misc : op93161,e3e3622
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 27 12:23:10 2016
Quant Method : C:\msdchem\1\METHODS\M3E3620.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MWed Apr 27 12:17:28 2016
QLast Update : Wed Apr 27 12:17:28 2016
Response via : Initial Calibration



M3E3620.M Wed Apr 27 12:23:19 2016 MS3E

Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82702.D
Acq On : 27 Apr 2016 4:10 pm
Operator : ashleyn
Sample : ic3623-2
Misc : op93161,e3e3623
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 28 09:27:31 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:26:28 2016
QLast Update : Thu Apr 28 09:26:28 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.534	152	206049	40.00	ppm	0.00
24) Naphthalene-d8	5.599	136	821359	40.00	ppm	0.00
47) Acenaphthene-d10	7.631	164	482237	40.00	ppm	0.00
69) Phenanthrene-d10	9.797	188	822977	40.00	ppm	0.00
83) Chrysene-d12	13.980	240	884956	40.00	ppm	0.00
92) Perylene-d12	16.093	264	857499	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.534	152	206049	40.00	ppm	0.00
104) Acenaphthene-d10a	7.631	164	482237	40.00	ppm	0.00
106) Phenanthrene-d10a	9.797	188	822977	40.00	ppm	0.00
110) Chrysene-d12a	13.980	240	884956	40.00	ppm	0.00
112) Naphthalene-d8a	5.599	136	821359	40.00	ppm	0.00
114) Chrysene-d12b	13.980	240	884956	40.00	ppm	0.00

System Monitoring Compounds						
5) 2-Fluorophenol	3.555	112	12451	1.95	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.90%	
8) Phenol-d5	4.288	99	16577	1.98	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.96%	
25) Nitrobenzene-d5	4.968	82	15328	1.86	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.72%	
51) 2-Fluorobiphenyl	6.775	172	32857	2.10	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.20%	
73) 2,4,6-Tribromophenol	8.765	330	5759	1.98	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.96%	
85) Terphenyl-d14	12.359	244	38311	2.10	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.20%	
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-Chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	

Target Compounds							Qvalue
2) 1,4-Dioxane	2.036	88	4018	2.27	ppm		84
3) Pyridine	2.395	79	8899	1.62	ppm		76
4) N-Nitrosodimethylamine	2.347	74	5793	1.89	ppm		98
6) Indene	4.727	116	25007	2.04	ppm		97
7) Cumene	3.925	105	37323	2.11	ppm		98
9) Phenol	4.299	94	18280	2.01	ppm		88
10) Aniline	4.294	93	20793	1.98	ppm		95
11) bis(2-Chloroethyl)ether	4.342	93	13366	2.23	ppm		90
12) 2-Chlorophenol	4.385	128	15653	2.12	ppm		92
13) Decane	4.406	43	15954	2.05	ppm		95
14) 1,3-Dichlorobenzene	4.486	146	16317	2.03	ppm		95
15) 1,4-Dichlorobenzene	4.545	146	18272	2.21	ppm		99
16) Benzyl alcohol	4.647	108	9099	1.97	ppm		92
17) 1,2-Dichlorobenzene	4.657	146	16032	2.10	ppm		100
18) Acetophenone	4.845	105	21144	2.10	ppm		93
19) 2-Methylphenol	4.743	108	13485	2.17	ppm		94
20) 2,2'-oxybis(1-Chloropr...	4.743	121	5290	2.11	ppm	#	89
21) 3&4-Methylphenol	4.866	108	13346	2.02	ppm		94

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82702.D
Acq On : 27 Apr 2016 4:10 pm
Operator : ashleyn
Sample : ic3623-2
Misc : op93161,e3e3623
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 28 09:27:31 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:26:28 2016
QLast Update : Thu Apr 28 09:26:28 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
22) n-Nitroso-di-n-propyla...	4.845	70	10818	2.01	ppm		87
23) Hexachloroethane	4.925	201	5855	2.23	ppm		89
26) Nitrobenzene	4.984	77	16095	1.90	ppm		99
27) Quinoline	5.957	129	30197	2.16	ppm		96
28) Isophorone	5.181	82	27382	1.99	ppm		94
29) 2-Nitrophenol	5.256	139	8299	1.89	ppm		89
30) 2,4-Dimethylphenol	5.305	107	13806	1.83	ppm		96
31) Benzoic acid	5.395	105	7449	1.35	ppm		92
32) bis(2-Chloroethoxy)met...	5.379	93	15422	2.08	ppm		96
33) 2,4-Dichlorophenol	5.492	162	11616	1.95	ppm		95
34) 2,6-Dichlorophenol	5.690	162	12183	2.09	ppm		87
35) 1,3,5-Trichlorobenzene	5.262	180	14632	2.12	ppm		96
36) 1,2,4-Trichlorobenzene	5.545	180	13844	2.14	ppm		99
37) 1,2,3-Trichlorobenzene	5.759	180	13970	2.28	ppm		99
38) Naphthalene	5.620	128	47035	2.12	ppm		77
39) 4-Chloroaniline	5.684	127	19005	2.06	ppm		88
40) 2,3-Dichloroaniline	6.674	161	15237	2.13	ppm		95
41) Caprolactam	6.021	55	6224	2.05	ppm		92
42) Hexachlorobutadiene	5.732	225	8048	2.10	ppm		98
43) 4-Chloro-3-methylphenol	6.203	107	14172	2.17	ppm		95
44) 2-Methylnaphthalene	6.342	141	27103	2.13	ppm		98
45) 1-Methylnaphthalene	6.449	141	28290	2.15	ppm		98
46) Dimethylnaphthalene	7.091	156	26305	2.06	ppm		88
48) Hexachlorocyclopentadiene	6.513	237	8861	2.45	ppm		88
49) 2,4,6-Trichlorophenol	6.684	196	9249	2.11	ppm		99
50) 2,4,5-Trichlorophenol	6.743	196	10081	2.13	ppm		90
52) 2-Chloronaphthalene	6.914	162	28585	2.11	ppm		98
53) Biphenyl	6.893	154	37750	2.08	ppm		96
54) 2-Nitroaniline	7.059	65	9298	1.83	ppm		83
55) Dimethylphthalate	7.305	163	33317	2.11	ppm		99
56) Acenaphthylene	7.444	152	47371	2.11	ppm		95
57) 2,6-Dinitrotoluene	7.385	165	7057	1.95	ppm		94
58) 3-Nitroaniline	7.604	138	7759	1.94	ppm		99
59) Acenaphthene	7.674	153	30805	2.07	ppm		96
60) 2,4-Dinitrophenol	7.797	184	2116	1.32	ppm	#	22
61) 4-Nitrophenol	7.941	109	3636	1.41	ppm	#	15
62) Dibenzofuran	7.920	168	40844	2.10	ppm		85
63) 2,4-Dinitrotoluene	7.941	165	9346	1.86	ppm		70
64) 2,3,4,6-Tetrachlorophenol	8.113	232	7374	2.02	ppm		85
65) Diethylphthalate	8.294	149	33497	1.99	ppm		98
66) Fluorene	8.401	166	34647	2.12	ppm		97
67) 4-Chlorophenyl-phenyle...	8.428	204	16332	2.21	ppm		88
68) 4-Nitroaniline	8.466	138	7134	1.81	ppm		87
70) 4,6-Dinitro-2-methylph...	8.530	198	2737	1.00	ppm		89
71) n-Nitrosodiphenylamine	8.610	169	22797	1.98	ppm		98
72) 1,2-Diphenylhydrazine	8.658	77	33297	1.92	ppm		93
74) 4-Bromophenyl-phenylether	9.150	248	10156	2.14	ppm		91
75) Hexachlorobenzene	9.204	284	12344	2.18	ppm		96
76) Pentachlorophenol	9.541	266	9074	3.15	ppm		94
77) Phenanthrene	9.829	178	50812	2.18	ppm		97

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82702.D
Acq On : 27 Apr 2016 4:10 pm
Operator : ashleyn
Sample : ic3623-2
Misc : op93161,e3e3623
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 28 09:27:31 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:26:28 2016
QLast Update : Thu Apr 28 09:26:28 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
78) Anthracene	9.910	178	48842	2.06 ppm	96
79) Carbazole	10.198	167	45178	2.11 ppm	98
80) Di-n-butylphthalate	10.824	149	51909	1.82 ppm	97
81) Fluoranthene	11.691	202	51763	2.00 ppm	96
82) Octadecane	9.760	57	17739	1.78 ppm	98
84) Pyrene	12.038	202	54010	2.05 ppm	99
86) Butylbenzylphthalate	13.204	149	24160	1.88 ppm	92
87) Butyl stearate	13.381	56	12317	1.79 ppm	85
88) Benzo[a]anthracene	13.964	228	55117	2.19 ppm	96
89) 3,3'-Dichlorobenzidine	13.980	252	19517	2.01 ppm	91
90) Chrysene	14.012	228	51714	2.21 ppm	97
91) bis(2-Ethylhexyl)phtha...	14.167	149	31202	1.88 ppm	92
93) Di-n-octylphthalate	15.162	149	53008	1.60 ppm	93
94) Benzo[b]fluoranthene	15.563	252	55973	1.92 ppm	97
95) Benzo[k]fluoranthene	15.606	252	54554	2.13 ppm	95
96) Benzo[a]pyrene	16.007	252	47383	1.95 ppm	97
97) Indeno[1,2,3-cd]pyrene	17.548	276	45763	1.99 ppm	97
98) Dibenz(a,h)acridine	17.227	279	42463	1.93 ppm	91
99) Dibenz[a,h]anthracene	17.590	278	45682	2.01 ppm	99
100) 7,12-Dimethylbenz(a)an...	15.563	256	24221	1.83 ppm	98
101) Benzo[g,h,i]perylene	17.954	276	45671	2.08 ppm	98

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

7.6.13

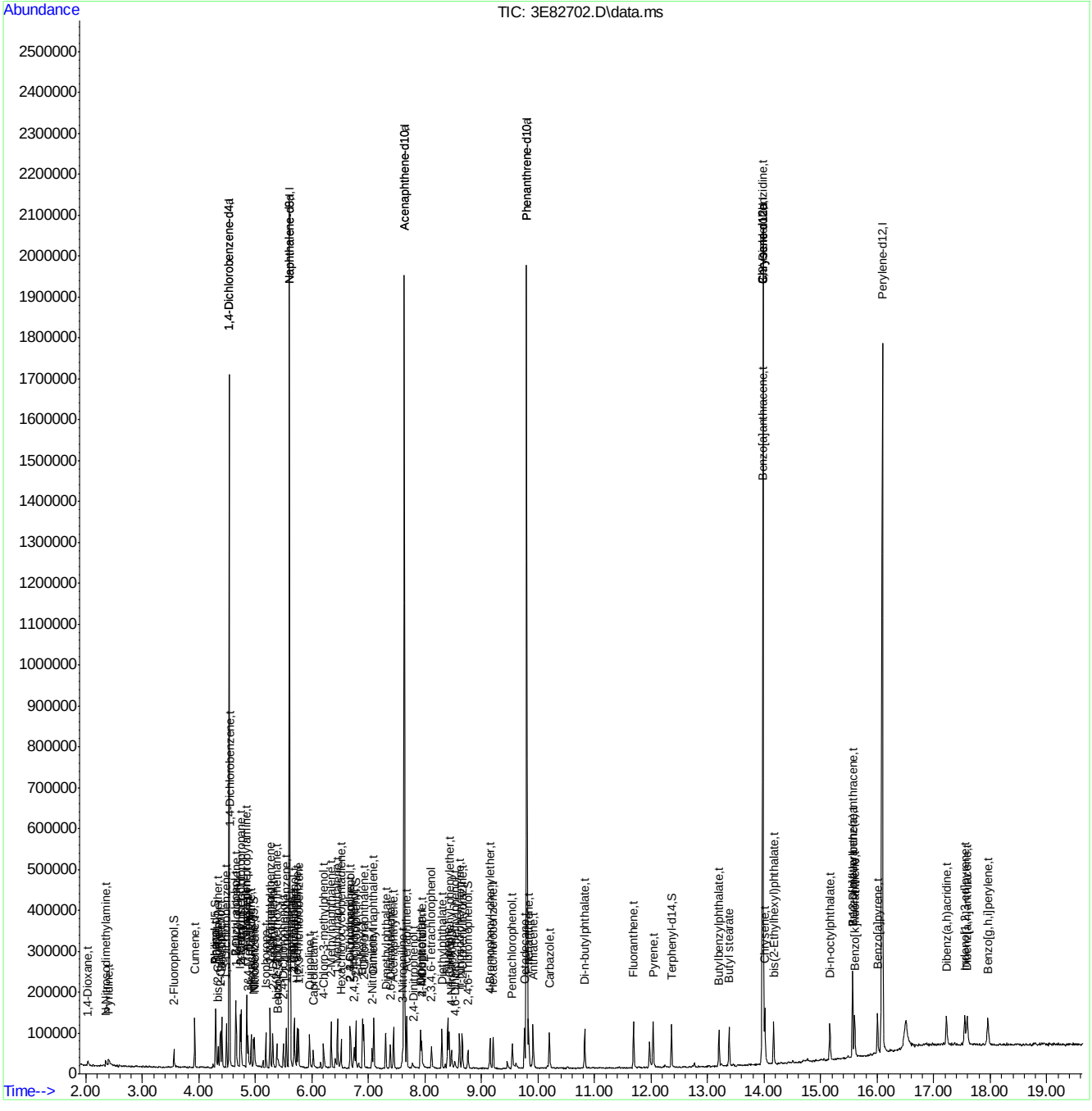
7

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82702.D
Acq On : 27 Apr 2016 4:10 pm
Operator : ashleyn
Sample : ic3623-2
Misc : op93161,e3e3623
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 28 09:27:31 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:26:28 2016
QLast Update : Thu Apr 28 09:26:28 2016
Response via : Initial Calibration



SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82696.D
Acq On : 27 Apr 2016 4:35 pm
Operator : ashleyn
Sample : ic3623-100
Misc : op93161,e3e3623
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 28 14:46:17 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 10:56:37 2016
QLast Update : Thu Apr 28 10:56:37 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.534	152	183913	40.00	ppm	0.00
24) Naphthalene-d8	5.604	136	652396	40.00	ppm	0.00
47) Acenaphthene-d10	7.636	164	346483	40.00	ppm	0.00
69) Phenanthrene-d10	9.803	188	549968	40.00	ppm	0.00
83) Chrysene-d12	13.991	240	600610	40.00	ppm	0.00
92) Perylene-d12	16.093	264	466917	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.534	152	183913	40.00	ppm	0.00
104) Acenaphthene-d10a	7.636	164	346483	40.00	ppm	0.00
106) Phenanthrene-d10a	9.803	188	549968	40.00	ppm	0.00
110) Chrysene-d12a	13.991	240	600610	40.00	ppm	0.00
112) Naphthalene-d8a	5.604	136	652396	40.00	ppm	0.00
114) Chrysene-d12b	13.991	240	600610	40.00	ppm	0.00

System Monitoring Compounds						
5) 2-Fluorophenol	3.550	112	590959	104.81	ppm	0.00
Spiked Amount 50.000			Recovery	=	209.62%	
8) Phenol-d5	4.294	99	810998	110.55	ppm	0.00
Spiked Amount 50.000			Recovery	=	221.10%	
25) Nitrobenzene-d5	4.978	82	662984	101.62	ppm	0.00
Spiked Amount 50.000			Recovery	=	203.24%	
51) 2-Fluorobiphenyl	6.781	172	1131616	98.48	ppm	0.00
Spiked Amount 50.000			Recovery	=	196.96%	
73) 2,4,6-Tribromophenol	8.770	330	193052	99.53	ppm	0.00
Spiked Amount 50.000			Recovery	=	199.06%	
85) Terphenyl-d14	12.370	244	1237037	98.11	ppm	0.00
Spiked Amount 50.000			Recovery	=	196.22%	
108) o-Terphenyl	0.000	230	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-Chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	

Target Compounds						Qvalue
2) 1,4-Dioxane	2.026	88	154905	92.40	ppm	98
3) Pyridine	2.363	79	496873	104.24	ppm	98
4) N-Nitrosodimethylamine	2.336	74	282917	104.30	ppm	100
6) Indene	4.727	116	1092355	99.57	ppm	98
7) Cumene	3.930	105	1626883	101.39	ppm	96
9) Phenol	4.304	94	858452	106.76	ppm	86
10) Aniline	4.294	93	957929	102.58	ppm	84
11) bis(2-Chloroethyl)ether	4.347	93	537362	97.44	ppm	99
12) 2-Chlorophenol	4.390	128	674183	101.17	ppm	94
13) Decane	4.411	43	719354	101.98	ppm	98
14) 1,3-Dichlorobenzene	4.491	146	723953	99.35	ppm	100
15) 1,4-Dichlorobenzene	4.545	146	735548	96.18	ppm	99
16) Benzyl alcohol	4.652	108	436366	107.42	ppm	97
17) 1,2-Dichlorobenzene	4.663	146	685027	99.46	ppm	97
18) Acetophenone	4.855	105	885618	97.07	ppm	99
19) 2-Methylphenol	4.748	108	552605	98.05	ppm	98
20) 2,2'-oxybis(1-Chloropr...	4.748	121	222375	98.41	ppm	90
21) 3&4-Methylphenol	4.871	108	596732	100.75	ppm	100

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82696.D
Acq On : 27 Apr 2016 4:35 pm
Operator : ashleyn
Sample : ic3623-100
Misc : op93161,e3e3623
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 28 14:46:17 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 10:56:37 2016
QLast Update : Thu Apr 28 10:56:37 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
22) n-Nitroso-di-n-propyla...	4.860	70	484634	100.34	ppm		99
23) Hexachloroethane	4.925	201	226660	92.69	ppm		96
26) Nitrobenzene	4.994	77	700416	103.95	ppm		99
27) Quinoline	5.973	129	1075054	94.75	ppm		98
28) Isophorone	5.197	82	1111342	101.62	ppm		99
29) 2-Nitrophenol	5.262	139	370113	107.33	ppm		93
30) 2,4-Dimethylphenol	5.310	107	609653	102.72	ppm		96
31) Benzoic acid	5.470	105	476169	108.90	ppm		99
32) bis(2-Chloroethoxy)met...	5.385	93	603217	101.32	ppm		99
33) 2,4-Dichlorophenol	5.486	162	476446	102.94	ppm		97
34) 2,6-Dichlorophenol	5.695	162	465847	98.54	ppm		99
35) 1,3,5-Trichlorobenzene	5.267	180	561344	100.34	ppm		99
36) 1,2,4-Trichlorobenzene	5.550	180	512632	97.08	ppm		98
37) 1,2,3-Trichlorobenzene	5.764	180	467504	91.94	ppm		96
38) Naphthalene	5.625	128	1786578	99.05	ppm		99
39) 4-Chloroaniline	5.690	127	755025	102.75	ppm		98
40) 2,3-Dichloroaniline	6.679	161	551383	94.52	ppm		98
41) Caprolactam	6.096	55	234713	95.02	ppm		97
42) Hexachlorobutadiene	5.738	225	286614	90.57	ppm		99
43) 4-Chloro-3-methylphenol	6.219	107	517656	98.07	ppm		98
44) 2-Methylnaphthalene	6.347	141	1005481	98.21	ppm		97
45) 1-Methylnaphthalene	6.460	141	1026593	96.12	ppm		97
46) Dimethylnaphthalene	7.102	156	973425	94.18	ppm		98
48) Hexachlorocyclopentadiene	6.519	237	614451	199.63	ppm		98
49) 2,4,6-Trichlorophenol	6.690	196	320394	101.98	ppm		98
50) 2,4,5-Trichlorophenol	6.743	196	343084	98.06	ppm		99
52) 2-Chloronaphthalene	6.925	162	955515	97.29	ppm		97
53) Biphenyl	6.904	154	1333394	101.81	ppm		99
54) 2-Nitroaniline	7.075	65	375106	103.07	ppm		99
55) Dimethylphthalate	7.316	163	1124129	97.71	ppm		100
56) Acenaphthylene	7.449	152	1605256	97.93	ppm		98
57) 2,6-Dinitrotoluene	7.401	165	260216	101.03	ppm		93
58) 3-Nitroaniline	7.626	138	293504	102.32	ppm		99
59) Acenaphthene	7.685	153	1075250	98.78	ppm		95
60) 2,4-Dinitrophenol	7.781	184	299079	198.46	ppm		97
61) 4-Nitrophenol	7.925	109	197174	106.43	ppm	#	12
62) Dibenzofuran	7.925	168	1397480	97.53	ppm		98
63) 2,4-Dinitrotoluene	7.957	165	359514	102.04	ppm		78
64) 2,3,4,6-Tetrachlorophenol	8.118	232	261916	100.98	ppm		99
65) Diethylphthalate	8.310	149	1210584	100.18	ppm		99
66) Fluorene	8.412	166	1186949	98.95	ppm		99
67) 4-Chlorophenyl-phenyle...	8.433	204	506217	92.55	ppm		100
68) 4-Nitroaniline	8.503	138	278854	101.13	ppm		96
70) 4,6-Dinitro-2-methylph...	8.546	198	212566	99.94	ppm		95
71) n-Nitrosodiphenylamine	8.626	169	791021	103.55	ppm		98
72) 1,2-Diphenylhydrazine	8.669	77	1214768	106.75	ppm		97
74) 4-Bromophenyl-phenylether	9.155	248	313818	95.98	ppm		97
75) Hexachlorobenzene	9.220	284	363140	92.61	ppm		98
76) Pentachlorophenol	9.551	266	437943	234.63	ppm		98
77) Phenanthrene	9.845	178	1574416	98.67	ppm		100

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82696.D
Acq On : 27 Apr 2016 4:35 pm
Operator : ashleyn
Sample : ic3623-100
Misc : op93161,e3e3623
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 28 14:46:17 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 10:56:37 2016
QLast Update : Thu Apr 28 10:56:37 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
78) Anthracene	9.926	178	1599404	100.06 ppm	99
79) Carbazole	10.209	167	1463939	101.21 ppm	100
80) Di-n-butylphthalate	10.835	149	2032734	108.82 ppm	99
81) Fluoranthene	11.701	202	1788366	103.34 ppm	98
82) Octadecane	9.765	57	728326	112.10 ppm	98
84) Pyrene	12.049	202	1794331	99.81 ppm	99
86) Butylbenzylphthalate	13.210	149	928919	108.34 ppm	98
87) Butyl stearate	13.386	56	528263	117.34 ppm	97
88) Benzo[a]anthracene	13.975	228	1690194	96.29 ppm	100
89) 3,3'-Dichlorobenzidine	13.991	252	648962	99.41 ppm	99
90) Chrysene	14.033	228	1494698	91.24 ppm	99
91) bis(2-Ethylhexyl)phtha...	14.172	149	1132578	102.64 ppm	99
93) Di-n-octylphthalate	15.173	149	2129246	99.69 ppm	98
94) Benzo[b]fluoranthene	15.595	252	1701440	107.79 ppm	99
95) Benzo[k]fluoranthene	15.633	252	1355421	96.22 ppm	97
96) Benzo[a]pyrene	16.028	252	1337890	101.53 ppm	99
97) Indeno[1,2,3-cd]pyrene	17.580	276	1307742	104.17 ppm	98
98) Dibenz(a,h)acridine	17.248	279	1252829	106.01 ppm	99
99) Dibenz[a,h]anthracene	17.622	278	1188142	95.27 ppm	98
100) 7,12-Dimethylbenz(a)an...	15.590	256	791082	112.43 ppm	100
101) Benzo[g,h,i]perylene	17.997	276	1140006	94.26 ppm	98

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

7.6.14

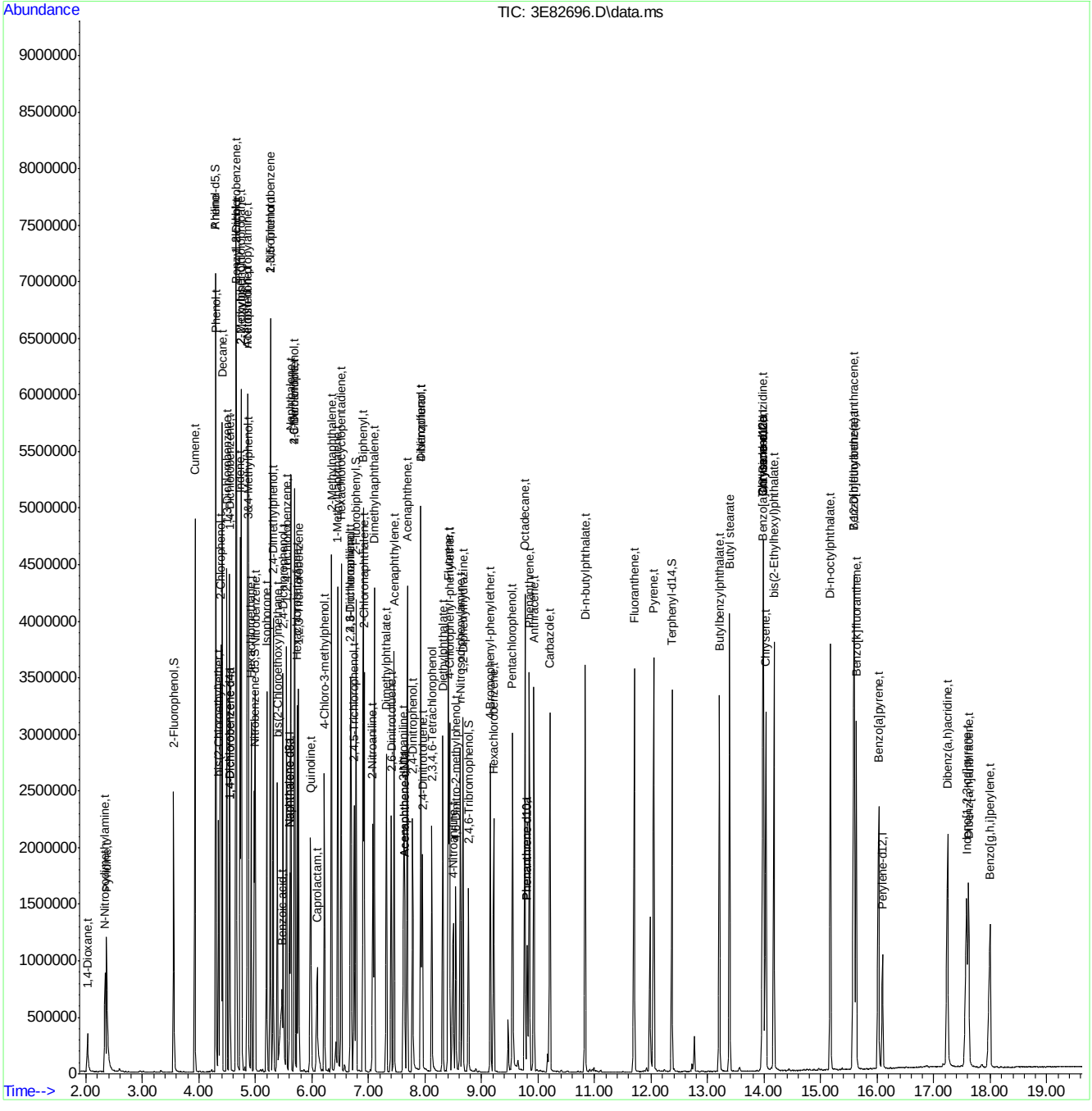
7

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82696.D
Acq On : 27 Apr 2016 4:35 pm
Operator : ashleyn
Sample : ic3623-100
Misc : op93161,e3e3623
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 28 14:46:17 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 10:56:37 2016
QLast Update : Thu Apr 28 10:56:37 2016
Response via : Initial Calibration



M3E3623.M Thu Apr 28 14:46:28 2016 MS3E Page: 4

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82697.D
Acq On : 27 Apr 2016 5:01 pm
Operator : ashleyn
Sample : icc3623-50
Misc : op93161,e3e3623
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 28 14:48:42 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 14:47:35 2016
QLast Update : Thu Apr 28 14:47:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.534	152	175863	40.00	ppm	0.00
24) Naphthalene-d8	5.604	136	651751	40.00	ppm	0.00
47) Acenaphthene-d10	7.636	164	354196	40.00	ppm	0.00
69) Phenanthrene-d10	9.803	188	585144	40.00	ppm	0.00
83) Chrysene-d12	13.985	240	629413	40.00	ppm	0.00
92) Perylene-d12	16.093	264	539056	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.534	152	175863	40.00	ppm	0.00
104) Acenaphthene-d10a	7.636	164	354196	40.00	ppm	0.00
106) Phenanthrene-d10a	9.803	188	585144	40.00	ppm	0.00
110) Chrysene-d12a	13.985	240	629413	40.00	ppm	0.00
112) Naphthalene-d8a	5.604	136	651751	40.00	ppm	0.00
114) Chrysene-d12b	13.985	240	629413	40.00	ppm	0.00

System Monitoring Compounds						
5) 2-Fluorophenol	3.550	112	271715	50.40	ppm	0.00
Spiked Amount 50.000			Recovery = 100.80%			
8) Phenol-d5	4.288	99	355938	50.74	ppm	0.00
Spiked Amount 50.000			Recovery = 101.48%			
25) Nitrobenzene-d5	4.973	82	328197	50.35	ppm	0.00
Spiked Amount 50.000			Recovery = 100.70%			
51) 2-Fluorobiphenyl	6.775	172	582712	49.61	ppm	0.00
Spiked Amount 50.000			Recovery = 99.22%			
73) 2,4,6-Tribromophenol	8.765	330	102949	49.89	ppm	0.00
Spiked Amount 50.000			Recovery = 99.78%			
85) Terphenyl-d14	12.365	244	662699	50.15	ppm	0.00
Spiked Amount 50.000			Recovery = 100.30%			
108) o-Terphenyl	0.000	230	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-Chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds						Qvalue
2) 1,4-Dioxane	2.026	88	71262	44.44	ppm	100
3) Pyridine	2.368	79	228432	50.12	ppm	100
4) N-Nitrosodimethylamine	2.336	74	132836	51.21	ppm	100
6) Indene	4.727	116	513014	48.90	ppm	100
7) Cumene	3.925	105	748849	48.81	ppm	100
9) Phenol	4.299	94	395160	51.39	ppm	100
10) Aniline	4.294	93	472043	52.86	ppm	100
11) bis(2-Chloroethyl)ether	4.342	93	252189	47.82	ppm	100
12) 2-Chlorophenol	4.385	128	312358	49.01	ppm	100
13) Decane	4.411	43	333609	49.46	ppm	100
14) 1,3-Dichlorobenzene	4.491	146	336184	48.25	ppm	100
15) 1,4-Dichlorobenzene	4.545	146	344095	47.05	ppm	100
16) Benzyl alcohol	4.652	108	197970	50.97	ppm	100
17) 1,2-Dichlorobenzene	4.657	146	317206	48.16	ppm	100
18) Acetophenone	4.850	105	428904	49.16	ppm	100
19) 2-Methylphenol	4.748	108	263461	48.89	ppm	100
20) 2,2'-oxybis(1-Chloropr...	4.748	121	104922	48.56	ppm	100
21) 3&4-Methylphenol	4.866	108	278945	49.25	ppm	100

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82697.D
Acq On : 27 Apr 2016 5:01 pm
Operator : ashleyn
Sample : icc3623-50
Misc : op93161,e3e3623
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 28 14:48:42 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 14:47:35 2016
QLast Update : Thu Apr 28 14:47:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
22) n-Nitroso-di-n-propyla...	4.855	70	232868	50.42	ppm		100
23) Hexachloroethane	4.925	201	108811	46.53	ppm		100
26) Nitrobenzene	4.989	77	337648	50.16	ppm		100
27) Quinoline	5.962	129	550729	48.59	ppm		100
28) Isophorone	5.192	82	550045	50.34	ppm		100
29) 2-Nitrophenol	5.256	139	176091	51.12	ppm		100
30) 2,4-Dimethylphenol	5.304	107	307094	51.79	ppm		100
31) Benzoic acid	5.438	105	235499	53.91	ppm		100
32) bis(2-Chloroethoxy)met...	5.379	93	294923	49.59	ppm		100
33) 2,4-Dichlorophenol	5.486	162	233574	50.52	ppm		100
34) 2,6-Dichlorophenol	5.690	162	231717	49.06	ppm		100
35) 1,3,5-Trichlorobenzene	5.262	180	272299	48.72	ppm		100
36) 1,2,4-Trichlorobenzene	5.551	180	249599	47.32	ppm		100
37) 1,2,3-Trichlorobenzene	5.764	180	241237	47.49	ppm		100
38) Naphthalene	5.625	128	873194	48.46	ppm		100
39) 4-Chloroaniline	5.684	127	370841	50.52	ppm		100
40) 2,3-Dichloroaniline	6.674	161	282797	48.53	ppm		100
41) Caprolactam	6.069	55	121563	49.26	ppm		100
42) Hexachlorobutadiene	5.738	225	147453	46.64	ppm		100
43) 4-Chloro-3-methylphenol	6.208	107	257995	48.93	ppm		100
44) 2-Methylnaphthalene	6.342	141	505513	49.42	ppm		100
45) 1-Methylnaphthalene	6.454	141	519288	48.67	ppm		100
46) Dimethylnaphthalene	7.096	156	503354	48.75	ppm		100
48) Hexachlorocyclopentadiene	6.513	237	302161	101.72	ppm		100
49) 2,4,6-Trichlorophenol	6.684	196	165070	51.40	ppm		100
50) 2,4,5-Trichlorophenol	6.738	196	176664	49.39	ppm		100
52) 2-Chloronaphthalene	6.920	162	500412	49.84	ppm		100
53) Biphenyl	6.898	154	676468	50.53	ppm		100
54) 2-Nitroaniline	7.064	65	187560	50.41	ppm		100
55) Dimethylphthalate	7.310	163	583804	49.64	ppm		100
56) Acenaphthylene	7.444	152	836669	49.93	ppm		100
57) 2,6-Dinitrotoluene	7.390	165	135884	51.61	ppm		100
58) 3-Nitroaniline	7.615	138	152537	52.02	ppm		100
59) Acenaphthene	7.679	153	555020	49.88	ppm		100
60) 2,4-Dinitrophenol	7.770	184	143594	101.94	ppm		100
61) 4-Nitrophenol	7.915	109	101952	53.83	ppm	#	57
62) Dibenzofuran	7.920	168	717646	49.00	ppm		100
63) 2,4-Dinitrotoluene	7.947	165	191570	53.19	ppm		100
64) 2,3,4,6-Tetrachlorophenol	8.113	232	137302	51.78	ppm		100
65) Diethylphthalate	8.305	149	623816	50.50	ppm		100
66) Fluorene	8.407	166	613791	50.05	ppm		100
67) 4-Chlorophenyl-phenyle...	8.428	204	271353	48.53	ppm		100
68) 4-Nitroaniline	8.482	138	150334	53.33	ppm		100
70) 4,6-Dinitro-2-methylph...	8.535	198	109209	50.73	ppm		100
71) n-Nitrosodiphenylamine	8.615	169	415449	51.12	ppm		100
72) 1,2-Diphenylhydrazine	8.663	77	636291	52.56	ppm		100
74) 4-Bromophenyl-phenylether	9.150	248	170590	49.04	ppm		100
75) Hexachlorobenzene	9.214	284	196405	47.08	ppm		100
76) Pentachlorophenol	9.541	266	222234	111.91	ppm		100
77) Phenanthrene	9.840	178	826947	48.71	ppm		100

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82697.D
Acq On : 27 Apr 2016 5:01 pm
Operator : ashleyn
Sample : icc3623-50
Misc : op93161,e3e3623
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 28 14:48:42 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 14:47:35 2016
QLast Update : Thu Apr 28 14:47:35 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
78) Anthracene	9.915	178	848568	49.89 ppm	100
79) Carbazole	10.204	167	778462	50.59 ppm	100
80) Di-n-butylphthalate	10.830	149	1054410	53.05 ppm	100
81) Fluoranthene	11.696	202	938229	50.96 ppm	100
82) Octadecane	9.760	57	369633	53.47 ppm	100
84) Pyrene	12.044	202	951671	50.51 ppm	100
86) Butylbenzylphthalate	13.204	149	485883	54.07 ppm	100
87) Butyl stearate	13.381	56	262225	55.58 ppm	100
88) Benzo[a]anthracene	13.964	228	902867	49.08 ppm	100
89) 3,3'-Dichlorobenzidine	13.985	252	350305	51.20 ppm	100
90) Chrysene	14.023	228	835228	48.65 ppm	100
91) bis(2-Ethylhexyl)phtha...	14.167	149	610894	52.83 ppm	100
93) Di-n-octylphthalate	15.162	149	1101372	49.89 ppm	100
94) Benzo[b]fluoranthene	15.579	252	901952	49.49 ppm	100
95) Benzo[k]fluoranthene	15.622	252	830899	51.09 ppm	100
96) Benzo[a]pyrene	16.018	252	771104	50.69 ppm	100
97) Indeno[1,2,3-cd]pyrene	17.564	276	753798	52.01 ppm	100
98) Dibenz(a,h)acridine	17.237	279	714697	52.38 ppm	100
99) Dibenz[a,h]anthracene	17.606	278	720059	50.01 ppm	100
100) 7,12-Dimethylbenz(a)an...	15.579	256	434160	53.45 ppm	100
101) Benzo[g,h,i]perylene	17.975	276	683275	48.94 ppm	100

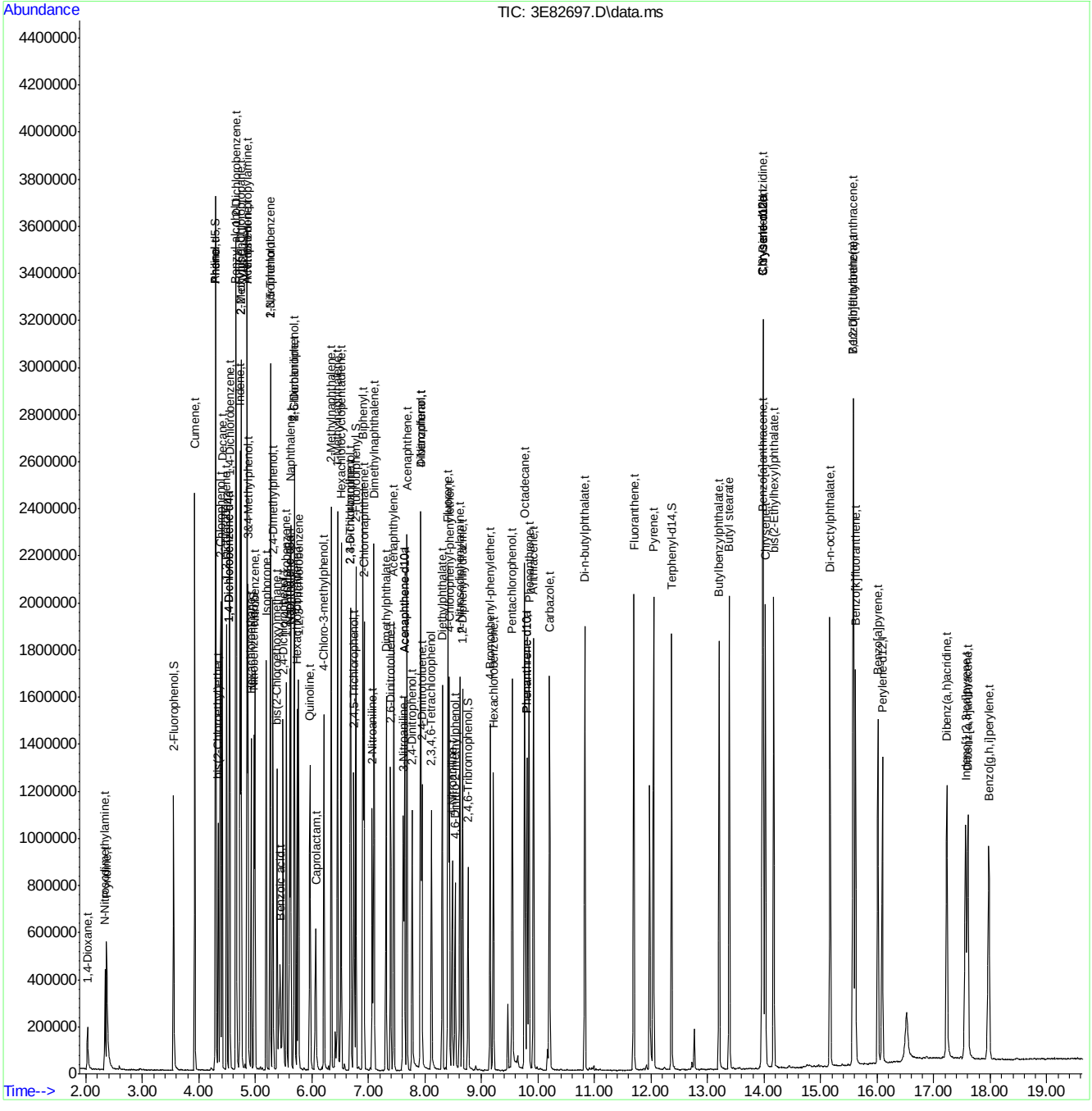
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82697.D
Acq On : 27 Apr 2016 5:01 pm
Operator : ashleyn
Sample : icc3623-50
Misc : op93161,e3e3623
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 28 14:48:42 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 14:47:35 2016
QLast Update : Thu Apr 28 14:47:35 2016
Response via : Initial Calibration



M3E3623.M Thu Apr 28 14:48:51 2016 MS3E Page: 4

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 04/28/16 16:14

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82698.D
Acq On : 27 Apr 2016 5:27 pm
Operator : ashleyn
Sample : ic3623-80
Misc : op93161,e3e3623
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 28 09:17:30 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:07:42 2016
QLast Update : Thu Apr 28 09:07:42 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.534	152	166604	40.00	ppm	0.00
24) Naphthalene-d8	5.604	136	615922	40.00	ppm	0.00
47) Acenaphthene-d10	7.637	164	327640	40.00	ppm	0.00
69) Phenanthrene-d10	9.803	188	533610	40.00	ppm	0.00
83) Chrysene-d12	13.985	240	582640	40.00	ppm	0.00
92) Perylene-d12	16.093	264	467933	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.534	152	166604	40.00	ppm	0.00
104) Acenaphthene-d10a	7.637	164	327640	40.00	ppm	0.00
106) Phenanthrene-d10a	9.803	188	533610	40.00	ppm	0.00
110) Chrysene-d12a	13.985	240	582640	40.00	ppm	0.00
112) Naphthalene-d8a	5.604	136	615922	40.00	ppm	0.00
114) Chrysene-d12b	13.985	240	582640	40.00	ppm	0.00

System Monitoring Compounds						
5) 2-Fluorophenol	3.550	112	429481	81.79	ppm	0.00
Spiked Amount 50.000			Recovery = 163.58%			
8) Phenol-d5	4.294	99	582356	82.66	ppm	0.00
Spiked Amount 50.000			Recovery = 165.32%			
25) Nitrobenzene-d5	4.978	82	502856	80.70	ppm	0.00
Spiked Amount 50.000			Recovery = 161.40%			
51) 2-Fluorobiphenyl	6.781	172	872213	81.21	ppm	0.00
Spiked Amount 50.000			Recovery = 162.42%			
73) 2,4,6-Tribromophenol	8.771	330	146349	78.04	ppm	0.00
Spiked Amount 50.000			Recovery = 156.08%			
85) Terphenyl-d14	12.365	244	956752	78.84	ppm	0.00
Spiked Amount 50.000			Recovery = 157.68%			
108) o-Terphenyl	0.000	230	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-Chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds						Qvalue
2) 1,4-Dioxane	2.026	88	112013	81.46	ppm	95
3) Pyridine	2.363	79	361178	81.81	ppm	99
4) N-Nitrosodimethylamine	2.336	74	209521	82.49	ppm	90
6) Indene	4.727	116	808714	82.46	ppm	98
7) Cumene	3.930	105	1188166	82.15	ppm	97
9) Phenol	4.299	94	627314	82.20	ppm	89
10) Aniline	4.294	93	701878	79.66	ppm	90
11) bis(2-Chloroethyl)ether	4.347	93	396539	82.23	ppm	96
12) 2-Chlorophenol	4.385	128	488806	81.32	ppm	99
13) Decane	4.411	43	522527	81.41	ppm	97
14) 1,3-Dichlorobenzene	4.492	146	532344	82.36	ppm	100
15) 1,4-Dichlorobenzene	4.545	146	535889	81.30	ppm	100
16) Benzyl alcohol	4.652	108	319746	83.01	ppm	97
17) 1,2-Dichlorobenzene	4.663	146	501173	82.05	ppm	96
18) Acetophenone	4.855	105	673960	83.47	ppm	97
19) 2-Methylphenol	4.748	108	406383	81.31	ppm	97
20) 2,2'-oxybis(1-Chloropr...	4.748	121	162626	81.26	ppm	94
21) 3&4-Methylphenol	4.871	108	436872	81.73	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82698.D
Acq On : 27 Apr 2016 5:27 pm
Operator : ashleyn
Sample : ic3623-80
Misc : op93161,e3e3623
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 28 09:17:30 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:07:42 2016
QLast Update : Thu Apr 28 09:07:42 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
22) n-Nitroso-di-n-propyla...	4.855	70	363245	82.53	ppm		91
23) Hexachloroethane	4.925	201	165532	80.45	ppm		93
26) Nitrobenzene	4.994	77	517320	79.62	ppm		98
27) Quinoline	5.973	129	807539	78.56	ppm		99
28) Isophorone	5.192	82	839752	80.40	ppm		96
29) 2-Nitrophenol	5.262	139	276419	81.03	ppm		90
30) 2,4-Dimethylphenol	5.310	107	458133	79.26	ppm		98
31) Benzoic acid	5.460	105	356638m	79.73	ppm		
32) bis(2-Chloroethoxy)met...	5.385	93	445278	79.03	ppm		97
33) 2,4-Dichlorophenol	5.487	162	355549	79.78	ppm		99
34) 2,6-Dichlorophenol	5.695	162	349105	79.54	ppm		99
35) 1,3,5-Trichlorobenzene	5.262	180	417293	79.89	ppm		99
36) 1,2,4-Trichlorobenzene	5.551	180	382177	79.98	ppm		99
37) 1,2,3-Trichlorobenzene	5.765	180	353372	78.76	ppm		99
38) Naphthalene	5.626	128	1336508	80.10	ppm		99
39) 4-Chloroaniline	5.690	127	563279	79.69	ppm		97
40) 2,3-Dichloroaniline	6.679	161	419813	79.58	ppm		98
41) Caprolactam	6.086	55	182366	80.81	ppm		97
42) Hexachlorobutadiene	5.738	225	217056	79.03	ppm		99
43) 4-Chloro-3-methylphenol	6.214	107	398458	81.73	ppm		98
44) 2-Methylnaphthalene	6.342	141	760638	79.87	ppm		99
45) 1-Methylnaphthalene	6.455	141	780010	79.97	ppm		99
46) Dimethylnaphthalene	7.096	156	750781	80.28	ppm		100
48) Hexachlorocyclopentadiene	6.519	237	457438	160.50	ppm		99
49) 2,4,6-Trichlorophenol	6.690	196	240985	79.22	ppm		97
50) 2,4,5-Trichlorophenol	6.743	196	259792	79.78	ppm		97
52) 2-Chloronaphthalene	6.920	162	734460	80.30	ppm		99
53) Biphenyl	6.904	154	1026561	81.72	ppm		99
54) 2-Nitroaniline	7.070	65	298111	84.98	ppm		97
55) Dimethylphthalate	7.316	163	852876	79.59	ppm		100
56) Acenaphthylene	7.449	152	1251883	81.67	ppm		97
57) 2,6-Dinitrotoluene	7.396	165	197333	79.34	ppm		99
58) 3-Nitroaniline	7.621	138	224002	80.04	ppm		100
59) Acenaphthene	7.685	153	834916	81.71	ppm		96
60) 2,4-Dinitrophenol	7.776	184	224563	163.77	ppm		97
61) 4-Nitrophenol	7.920	109	158128	84.31	ppm	#	81
62) Dibenzofuran	7.925	168	1079177	81.47	ppm		95
63) 2,4-Dinitrotoluene	7.952	165	277127	79.82	ppm		71
64) 2,3,4,6-Tetrachlorophenol	8.118	232	198203	79.01	ppm		96
65) Diethylphthalate	8.311	149	943822	82.11	ppm		99
66) Fluorene	8.412	166	912648	80.84	ppm		99
67) 4-Chlorophenyl-phenyle...	8.434	204	389674	79.47	ppm		98
68) 4-Nitroaniline	8.492	138	221451	81.74	ppm		95
70) 4,6-Dinitro-2-methylph...	8.541	198	162194	80.01	ppm		94
71) n-Nitrosodiphenylamine	8.621	169	605333	79.38	ppm		99
72) 1,2-Diphenylhydrazine	8.664	77	948330	81.08	ppm		97
74) 4-Bromophenyl-phenylether	9.156	248	243603	79.14	ppm		98
75) Hexachlorobenzene	9.214	284	281638	79.27	ppm		95
76) Pentachlorophenol	9.546	266	326404	157.26	ppm		99
77) Phenanthrene	9.840	178	1235999	81.43	ppm		100

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82698.D
Acq On : 27 Apr 2016 5:27 pm
Operator : ashleyn
Sample : ic3623-80
Misc : op93161,e3e3623
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 28 09:17:30 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:07:42 2016
QLast Update : Thu Apr 28 09:07:42 2016
Response via : Initial Calibration

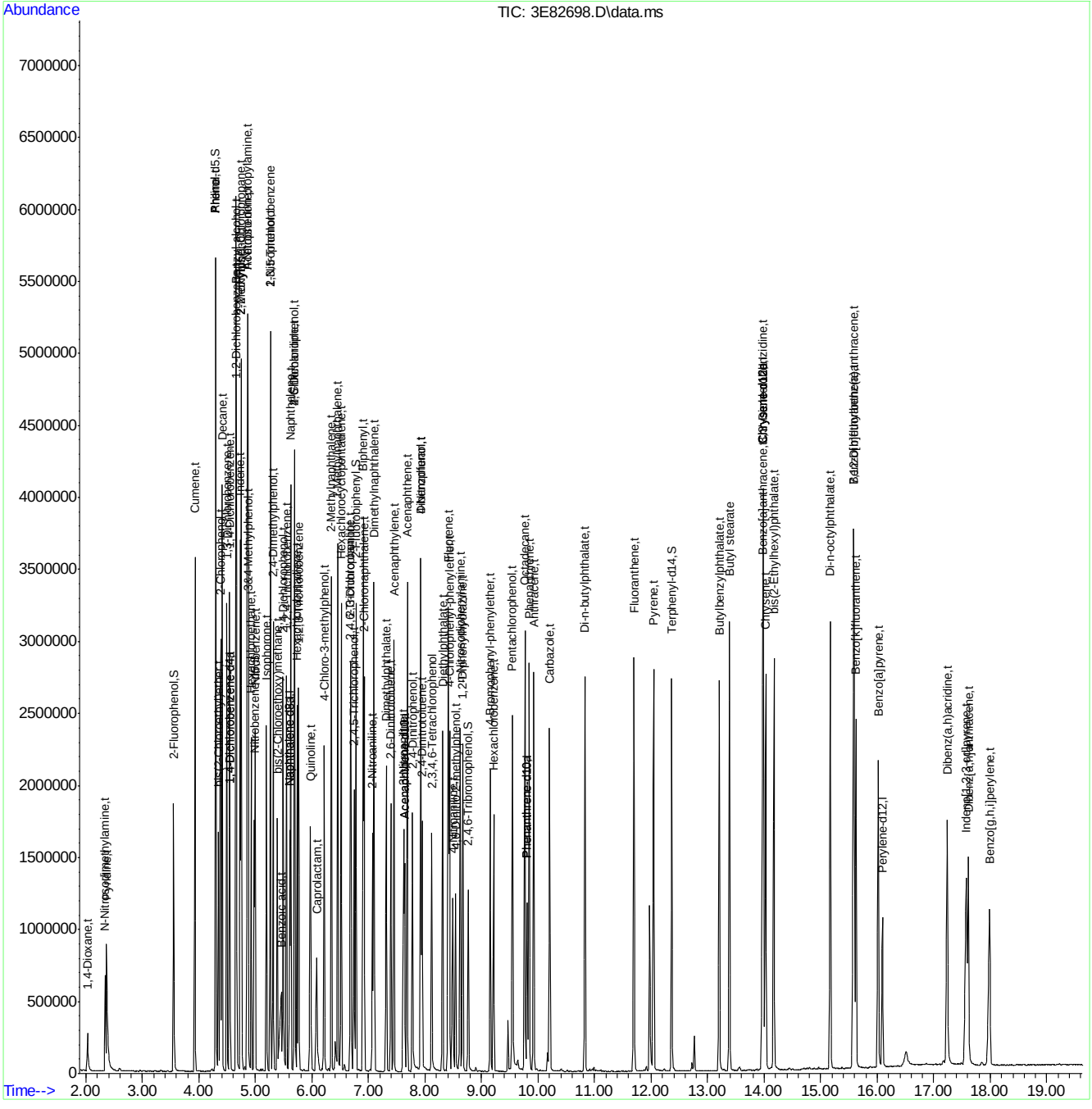
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
78) Anthracene	9.921	178	1240688	80.07 ppm	100
79) Carbazole	10.204	167	1135331	79.95 ppm	100
80) Di-n-butylphthalate	10.830	149	1575664	80.90 ppm	98
81) Fluoranthene	11.696	202	1381686	80.18 ppm	99
82) Octadecane	9.765	57	563809	81.66 ppm	97
84) Pyrene	12.049	202	1396000	79.71 ppm	99
86) Butylbenzylphthalate	13.210	149	732279	81.33 ppm	98
87) Butyl stearate	13.386	56	400613	80.29 ppm	97
88) Benzo[a]anthracene	13.969	228	1326612	80.13 ppm	99
89) 3,3'-Dichlorobenzidine	13.991	252	512512	80.20 ppm	99
90) Chrysene	14.028	228	1200866	80.16 ppm	99
91) bis(2-Ethylhexyl)phtha...	14.173	149	903366	81.03 ppm	100
93) Di-n-octylphthalate	15.168	149	1657300	81.92 ppm	99
94) Benzo[b]fluoranthene	15.590	252	1358924	83.09 ppm	98
95) Benzo[k]fluoranthene	15.628	252	1114766	79.60 ppm	98
96) Benzo[a]pyrene	16.023	252	1098021	81.96 ppm	99
97) Indeno[1,2,3-cd]pyrene	17.574	276	1056684	80.74 ppm	97
98) Dibenz(a,h)acridine	17.243	279	1025865	82.19 ppm	99
99) Dibenz[a,h]anthracene	17.617	278	1000269	81.96 ppm	98
100) 7,12-Dimethylbenz(a)an...	15.585	256	625859	80.94 ppm	100
101) Benzo[g,h,i]perylene	17.986	276	959762	82.47 ppm	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82698.D
Acq On : 27 Apr 2016 5:27 pm
Operator : ashleyn
Sample : ic3623-80
Misc : op93161,e3e3623
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 28 09:17:30 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:07:42 2016
QLast Update : Thu Apr 28 09:07:42 2016
Response via : Initial Calibration



Manual Integration Approval Summary

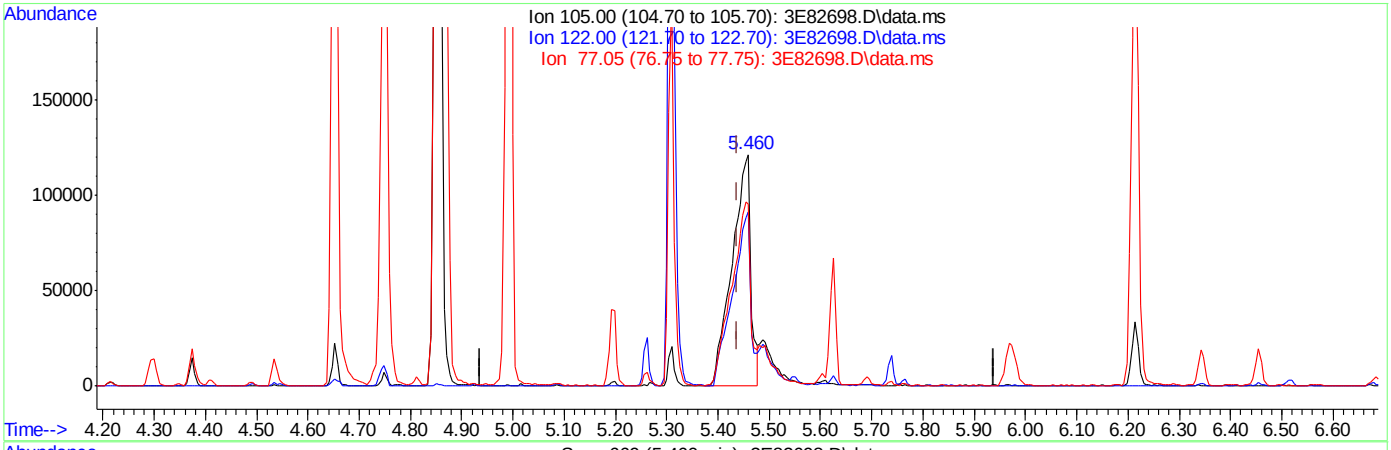
Sample Number:	E3E3623-IC3623	**Method:**	SW846 8270D
Lab FileID:	3E82698.D	**Analyst approved:**	04/28/16 10:43 Ashley Noble
Injection Time:	04/27/16 17:27	**Supervisor approved:**	04/28/16 16:14 Kristi Schollenberger

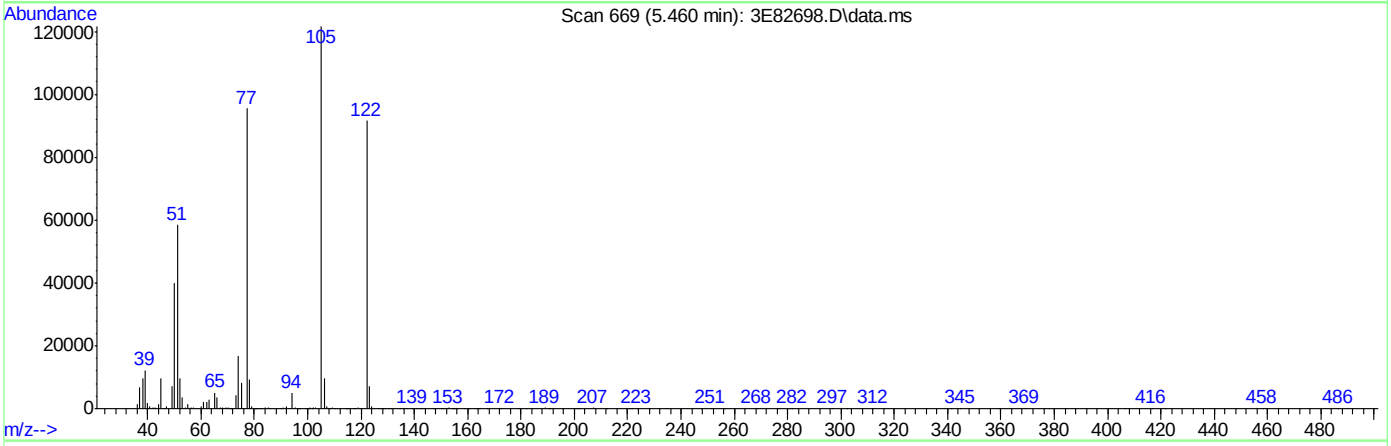
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic acid	65-85-0		5.46	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82698.D
Acq On : 27 Apr 2016 5:27 pm
Operator : ashleyn
Sample : ic3623-80
Misc : op93161,e3e3623
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 28 09:09:04 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:07:42 2016
QLast Update : Thu Apr 28 09:07:42 2016
Response via : Initial Calibration





TIC: 3E82698.D\data.ms

(31) Benzoic acid (t)

5.460min (+0.022) 68.67ppm

response 307168

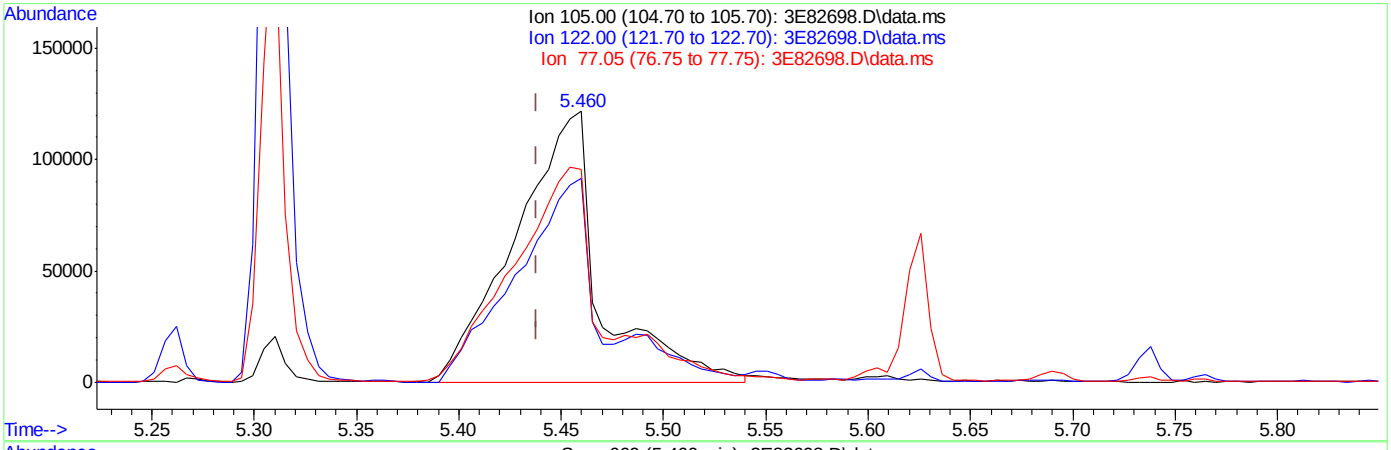
Ion	Exp%	Act%
105.00	100	100
122.00	74.00	74.72
77.05	79.10	77.32
0.00	0.00	0.00

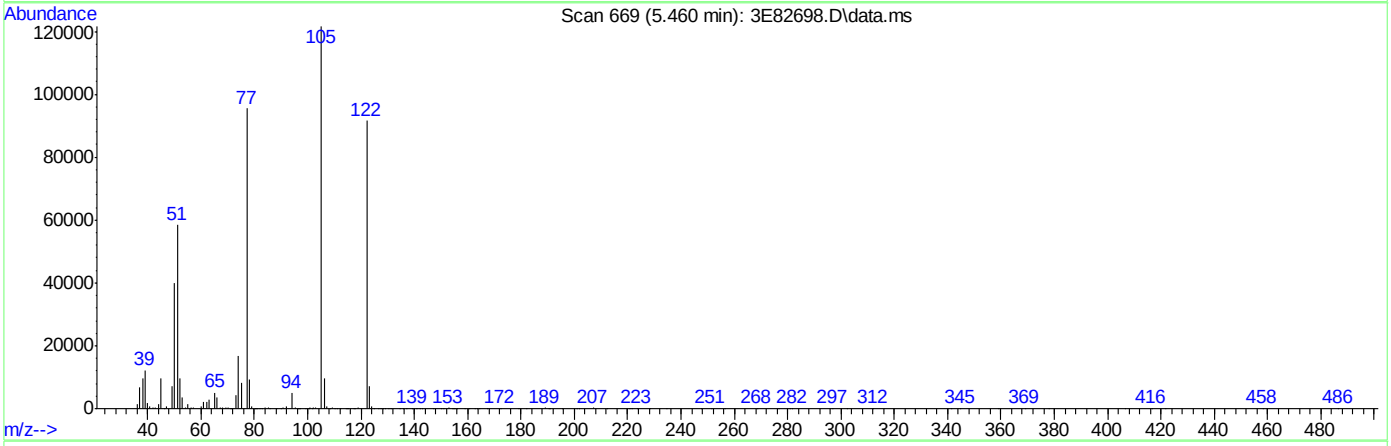
3E82698.D edits: Benzoic acid

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82698.D
Acq On : 27 Apr 2016 5:27 pm
Operator : ashleyn
Sample : ic3623-80
Misc : op93161,e3e3623
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 28 09:09:04 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:07:42 2016
QLast Update : Thu Apr 28 09:07:42 2016
Response via : Initial Calibration





TIC: 3E82698.D\data.ms

(31) Benzoic acid (t)

5.460min (+0.022) 79.73ppm m

response 356638

Ion	Exp%	Act%
105.00	100	100
122.00	74.00	75.23
77.05	79.10	78.55
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82699.D
Acq On : 27 Apr 2016 5:53 pm
Operator : ashleyn
Sample : ic3623-25
Misc : op93161,e3e3623
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 28 09:19:51 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:07:42 2016
QLast Update : Thu Apr 28 09:07:42 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.534	152	169242	40.00 ppm	0.00
24) Naphthalene-d8	5.599	136	656613	40.00 ppm	0.00
47) Acenaphthene-d10	7.631	164	378829	40.00 ppm	0.00
69) Phenanthrene-d10	9.797	188	636547	40.00 ppm	0.00
83) Chrysene-d12	13.980	240	686362	40.00 ppm	0.00
92) Perylene-d12	16.087	264	617001	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.534	152	169242	40.00 ppm	0.00
104) Acenaphthene-d10a	7.631	164	378829	40.00 ppm	0.00
106) Phenanthrene-d10a	9.797	188	636547	40.00 ppm	0.00
110) Chrysene-d12a	13.980	240	686362	40.00 ppm	0.00
112) Naphthalene-d8a	5.599	136	656613	40.00 ppm	0.00
114) Chrysene-d12b	13.980	240	686362	40.00 ppm	0.00

System Monitoring Compounds					
5) 2-Fluorophenol	3.550	112	131074	24.57 ppm	0.00
Spiked Amount 50.000			Recovery = 49.14%		
8) Phenol-d5	4.288	99	166363	23.25 ppm	0.00
Spiked Amount 50.000			Recovery = 46.50%		
25) Nitrobenzene-d5	4.968	82	164713	24.80 ppm	0.00
Spiked Amount 50.000			Recovery = 49.60%		
51) 2-Fluorobiphenyl	6.775	172	299507	24.12 ppm	0.00
Spiked Amount 50.000			Recovery = 48.24%		
73) 2,4,6-Tribromophenol	8.760	330	56025	25.04 ppm	0.00
Spiked Amount 50.000			Recovery = 50.08%		
85) Terphenyl-d14	12.359	244	356296	24.92 ppm	0.00
Spiked Amount 50.000			Recovery = 49.84%		
108) o-Terphenyl	0.000	230	0d	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
109) 1-Chlorooctadecane	0.000	57	0d	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		

Target Compounds					Qvalue
2) 1,4-Dioxane	2.031	88	36197	25.91 ppm	95
3) Pyridine	2.368	79	111031	24.76 ppm	95
4) N-Nitrosodimethylamine	2.336	74	65643	25.44 ppm	92
6) Indene	4.727	116	247264	24.82 ppm	99
7) Cumene	3.925	105	357855	24.36 ppm	97
9) Phenol	4.299	94	182439	23.53 ppm	99
10) Aniline	4.294	93	216509	24.19 ppm	81
11) bis(2-Chloroethyl)ether	4.342	93	123309	25.17 ppm	97
12) 2-Chlorophenol	4.385	128	151900	24.88 ppm	98
13) Decane	4.406	43	159234	24.42 ppm	94
14) 1,3-Dichlorobenzene	4.486	146	164182	25.00 ppm	98
15) 1,4-Dichlorobenzene	4.545	146	165561	24.73 ppm	99
16) Benzyl alcohol	4.647	108	94030	24.03 ppm	90
17) 1,2-Dichlorobenzene	4.657	146	155490	25.06 ppm	98
18) Acetophenone	4.850	105	206978	25.23 ppm	97
19) 2-Methylphenol	4.743	108	127078	25.03 ppm	97
20) 2,2'-oxybis(1-Chloropr...	4.743	121	51944	25.55 ppm	98
21) 3&4-Methylphenol	4.866	108	135489	24.95 ppm	99

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82699.D
Acq On : 27 Apr 2016 5:53 pm
Operator : ashleyn
Sample : ic3623-25
Misc : op93161,e3e3623
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 28 09:19:51 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:07:42 2016
QLast Update : Thu Apr 28 09:07:42 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
22) n-Nitroso-di-n-propyla...	4.850	70	111991	25.05	ppm		97
23) Hexachloroethane	4.925	201	54373	26.02	ppm		94
26) Nitrobenzene	4.984	77	169128	24.42	ppm		93
27) Quinoline	5.957	129	280037	25.55	ppm		99
28) Isophorone	5.187	82	268652	24.13	ppm		98
29) 2-Nitrophenol	5.256	139	84093	23.12	ppm		90
30) 2,4-Dimethylphenol	5.305	107	151751	24.63	ppm		99
31) Benzoic acid	5.412	105	117132	24.56	ppm		97
32) bis(2-Chloroethoxy)met...	5.379	93	144542	24.06	ppm		98
33) 2,4-Dichlorophenol	5.481	162	118015	24.84	ppm		95
34) 2,6-Dichlorophenol	5.690	162	115788	24.75	ppm		98
35) 1,3,5-Trichlorobenzene	5.262	180	133190	23.92	ppm		99
36) 1,2,4-Trichlorobenzene	5.545	180	126440	24.82	ppm		98
37) 1,2,3-Trichlorobenzene	5.759	180	123475	25.82	ppm		97
38) Naphthalene	5.620	128	432255	24.30	ppm		99
39) 4-Chloroaniline	5.684	127	183543	24.36	ppm		98
40) 2,3-Dichloroaniline	6.674	161	141491	25.16	ppm		99
41) Caprolactam	6.048	55	64698	26.89	ppm		95
42) Hexachlorobutadiene	5.732	225	76038	25.97	ppm		100
43) 4-Chloro-3-methylphenol	6.203	107	131704	25.34	ppm		96
44) 2-Methylnaphthalene	6.342	141	251436	24.77	ppm		98
45) 1-Methylnaphthalene	6.449	141	262533	25.25	ppm		99
46) Dimethylnaphthalene	7.091	156	255808	25.66	ppm		97
48) Hexachlorocyclopentadiene	6.513	237	138745	42.10	ppm		97
49) 2,4,6-Trichlorophenol	6.684	196	85386	24.28	ppm		98
50) 2,4,5-Trichlorophenol	6.738	196	88416	23.48	ppm		95
52) 2-Chloronaphthalene	6.914	162	258786	24.47	ppm		98
53) Biphenyl	6.893	154	340582	23.45	ppm		99
54) 2-Nitroaniline	7.059	65	98288	24.23	ppm		97
55) Dimethylphthalate	7.305	163	306266	24.72	ppm		98
56) Acenaphthylene	7.444	152	431883	24.37	ppm		97
57) 2,6-Dinitrotoluene	7.385	165	70026	24.35	ppm		98
58) 3-Nitroaniline	7.610	138	77457	23.94	ppm		95
59) Acenaphthene	7.674	153	278321	23.56	ppm		98
60) 2,4-Dinitrophenol	7.765	184	61361	38.70	ppm		96
61) 4-Nitrophenol	7.915	109	50961	23.50	ppm	#	44
62) Dibenzofuran	7.920	168	372073	24.29	ppm		94
63) 2,4-Dinitrotoluene	7.941	165	98175	24.46	ppm		80
64) 2,3,4,6-Tetrachlorophenol	8.113	232	69198	23.86	ppm		94
65) Diethylphthalate	8.300	149	325833	24.52	ppm		99
66) Fluorene	8.401	166	316275	24.23	ppm		99
67) 4-Chlorophenyl-phenyle...	8.428	204	144871	25.55	ppm		96
68) 4-Nitroaniline	8.471	138	76150	24.31	ppm		96
70) 4,6-Dinitro-2-methylph...	8.524	198	52679	21.78	ppm		91
71) n-Nitrosodiphenylamine	8.610	169	212802	23.39	ppm		98
72) 1,2-Diphenylhydrazine	8.658	77	325061	23.30	ppm		100
74) 4-Bromophenyl-phenylether	9.150	248	88446	24.09	ppm		98
75) Hexachlorobenzene	9.209	284	106499	25.13	ppm		98
76) Pentachlorophenol	9.541	266	111325	44.96	ppm		96
77) Phenanthrene	9.835	178	435298	24.04	ppm		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82699.D
Acq On : 27 Apr 2016 5:53 pm
Operator : ashleyn
Sample : ic3623-25
Misc : op93161,e3e3623
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 28 09:19:51 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:07:42 2016
QLast Update : Thu Apr 28 09:07:42 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
78) Anthracene	9.910	178	447800	24.22 ppm	99
79) Carbazole	10.199	167	400167	23.62 ppm	98
80) Di-n-butylphthalate	10.824	149	538964	23.20 ppm	99
81) Fluoranthene	11.691	202	481158	23.41 ppm	99
82) Octadecane	9.760	57	182285	22.13 ppm	96
84) Pyrene	12.038	202	502576	24.36 ppm	98
86) Butylbenzylphthalate	13.204	149	250247	23.59 ppm	97
87) Butyl stearate	13.381	56	130595	22.22 ppm	92
88) Benzo[a]anthracene	13.964	228	482758	24.75 ppm	98
89) 3,3'-Dichlorobenzidine	13.980	252	191333	25.42 ppm	98
90) Chrysene	14.017	228	460084	26.07 ppm	99
91) bis(2-Ethylhexyl)phtha...	14.167	149	337045	25.66 ppm	100
93) Di-n-octylphthalate	15.162	149	582074	21.82 ppm	97
94) Benzo[b]fluoranthene	15.569	252	511710	23.73 ppm	99
95) Benzo[k]fluoranthene	15.611	252	453609	24.56 ppm	99
96) Benzo[a]pyrene	16.007	252	430506	24.37 ppm	99
97) Indeno[1,2,3-cd]pyrene	17.553	276	412456	23.90 ppm	99
98) Dibenz(a,h)acridine	17.227	279	386805	23.50 ppm	99
99) Dibenz[a,h]anthracene	17.590	278	412067	25.61 ppm	99
100) 7,12-Dimethylbenz(a)an...	15.569	256	235923	23.14 ppm	99
101) Benzo[g,h,i]perylene	17.959	276	397616	25.91 ppm	98

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

7.6.17

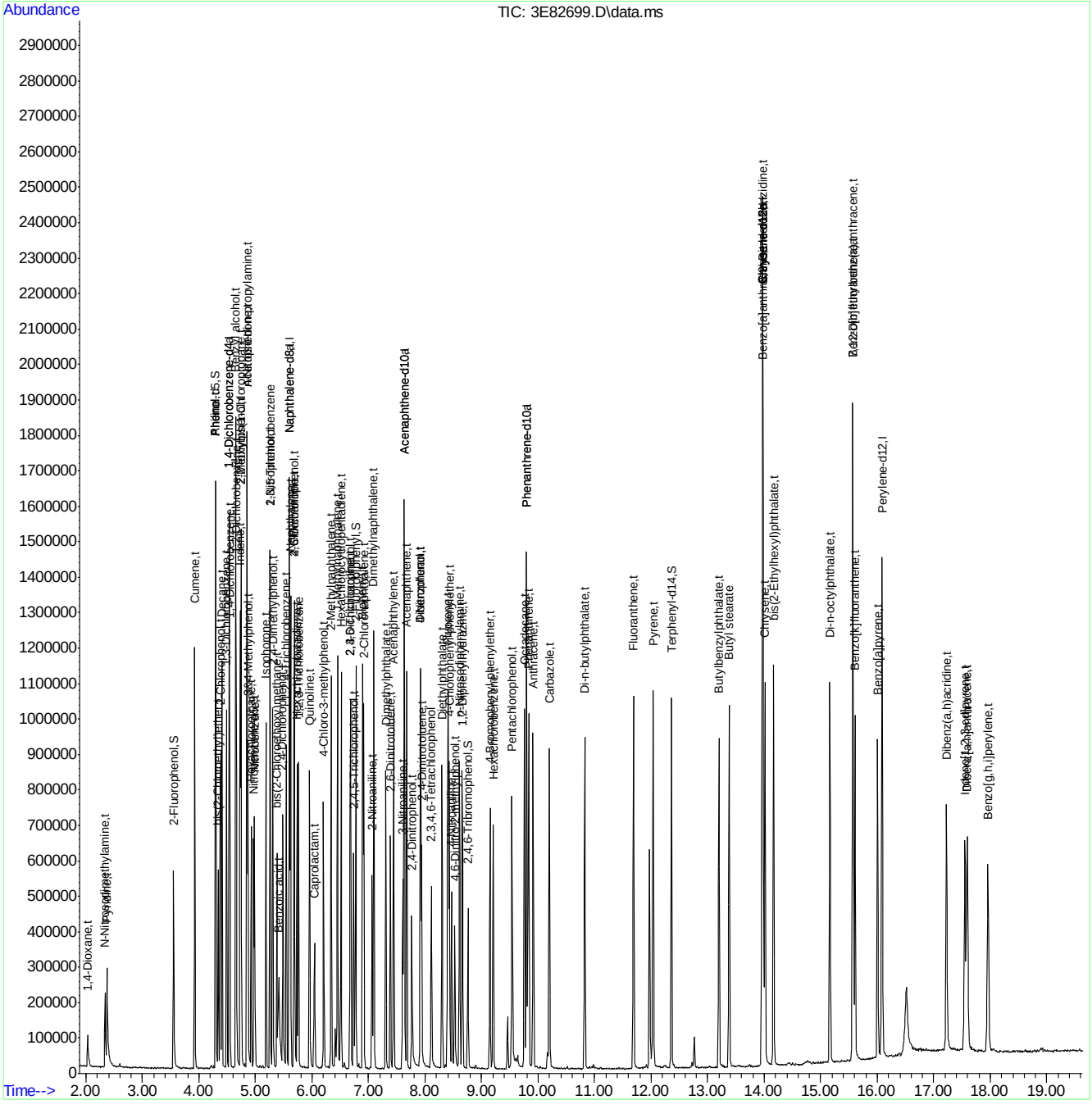
7

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82699.D
Acq On : 27 Apr 2016 5:53 pm
Operator : ashleyn
Sample : ic3623-25
Misc : op93161,e3e3623
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 28 09:19:51 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:07:42 2016
QLast Update : Thu Apr 28 09:07:42 2016
Response via : Initial Calibration



SGS ACCUTEST JC19644

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 04/28/16 16:14

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82700.D
Acq On : 27 Apr 2016 6:18 pm
Operator : ashleyn
Sample : ic3623-10
Misc : op93161,e3e3623
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 28 09:22:21 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:20:59 2016
QLast Update : Thu Apr 28 09:20:59 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.534	152	193225	40.00	ppm	0.00
24) Naphthalene-d8	5.599	136	738599	40.00	ppm	0.00
47) Acenaphthene-d10	7.631	164	429652	40.00	ppm	0.00
69) Phenanthrene-d10	9.797	188	719640	40.00	ppm	0.00
83) Chrysene-d12	13.975	240	781748	40.00	ppm	-0.01
92) Perylene-d12	16.087	264	723976	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.534	152	193225	40.00	ppm	0.00
104) Acenaphthene-d10a	7.631	164	429652	40.00	ppm	0.00
106) Phenanthrene-d10a	9.797	188	719640	40.00	ppm	0.00
110) Chrysene-d12a	13.975	240	781748	40.00	ppm	-0.01
112) Naphthalene-d8a	5.599	136	738599	40.00	ppm	0.00
114) Chrysene-d12b	13.975	240	781748	40.00	ppm	-0.01

System Monitoring Compounds						
5) 2-Fluorophenol	3.550	112	53117	8.71	ppm	0.00
Spiked Amount 50.000			Recovery	=	17.42%	
8) Phenol-d5	4.288	99	69134	8.54	ppm	0.00
Spiked Amount 50.000			Recovery	=	17.08%	
25) Nitrobenzene-d5	4.968	82	67872	9.08	ppm	0.00
Spiked Amount 50.000			Recovery	=	18.16%	
51) 2-Fluorobiphenyl	6.775	172	129909	9.27	ppm	0.00
Spiked Amount 50.000			Recovery	=	18.54%	
73) 2,4,6-Tribromophenol	8.760	330	24949	9.92	ppm	0.00
Spiked Amount 50.000			Recovery	=	19.84%	
85) Terphenyl-d14	12.359	244	152282	9.39	ppm	0.00
Spiked Amount 50.000			Recovery	=	18.78%	
108) o-Terphenyl	0.000	230	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-Chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	

Target Compounds						Qvalue
2) 1,4-Dioxane	2.031	88	15912	9.84	ppm	97
3) Pyridine	2.374	79	47198	9.19	ppm	97
4) N-Nitrosodimethylamine	2.341	74	25840	8.67	ppm	95
6) Indene	4.727	116	105622	9.23	ppm	96
7) Cumene	3.925	105	152118	9.07	ppm	98
9) Phenol	4.299	94	75924	8.65	ppm	98
10) Aniline	4.288	93	86266	8.52	ppm	89
11) bis(2-Chloroethyl)ether	4.342	93	52436	9.29	ppm	92
12) 2-Chlorophenol	4.385	128	62370	8.92	ppm	93
13) Decane	4.406	43	67138	9.03	ppm	92
14) 1,3-Dichlorobenzene	4.486	146	70060	9.28	ppm	98
15) 1,4-Dichlorobenzene	4.545	146	72182	9.43	ppm	99
16) Benzyl alcohol	4.647	108	37152	8.32	ppm	89
17) 1,2-Dichlorobenzene	4.657	146	65875	9.23	ppm	97
18) Acetophenone	4.845	105	85212	8.98	ppm	96
19) 2-Methylphenol	4.743	108	53609	9.21	ppm	97
20) 2,2'-oxybis(1-Chloropr...	4.743	121	21749	9.28	ppm	93
21) 3&4-Methylphenol	4.866	108	55495	8.91	ppm	100

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82700.D
Acq On : 27 Apr 2016 6:18 pm
Operator : ashleyn
Sample : ic3623-10
Misc : op93161,e3e3623
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 28 09:22:21 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:20:59 2016
QLast Update : Thu Apr 28 09:20:59 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
22) n-Nitroso-di-n-propyla...	4.845	70	46351	9.00	ppm	94
23) Hexachloroethane	4.919	201	23678	9.81	ppm	84
26) Nitrobenzene	4.984	77	68889	8.90	ppm	99
27) Quinoline	5.957	129	118437	9.60	ppm	99
28) Isophorone	5.182	82	115612	9.30	ppm	97
29) 2-Nitrophenol	5.256	139	35717	8.87	ppm	86
30) 2,4-Dimethylphenol	5.305	107	61328	8.90	ppm	97
31) Benzoic acid	5.412	105	40145m	7.52	ppm	
32) bis(2-Chloroethoxy)met...	5.374	93	61673	9.24	ppm	98
33) 2,4-Dichlorophenol	5.486	162	50833	9.53	ppm	94
34) 2,6-Dichlorophenol	5.690	162	49077	9.36	ppm	98
35) 1,3,5-Trichlorobenzene	5.262	180	58573	9.46	ppm	99
36) 1,2,4-Trichlorobenzene	5.545	180	56407	9.86	ppm	98
37) 1,2,3-Trichlorobenzene	5.759	180	54366	10.06	ppm	96
38) Naphthalene	5.620	128	184786	9.30	ppm	97
39) 4-Chloroaniline	5.679	127	75000	8.91	ppm	98
40) 2,3-Dichloroaniline	6.674	161	61515	9.72	ppm	93
41) Caprolactam	6.032	55	25118	9.09	ppm	97
42) Hexachlorobutadiene	5.732	225	33884	10.22	ppm	97
43) 4-Chloro-3-methylphenol	6.203	107	55143	9.35	ppm	97
44) 2-Methylnaphthalene	6.342	141	106443	9.35	ppm	96
45) 1-Methylnaphthalene	6.449	141	111820	9.54	ppm	98
46) Dimethylnaphthalene	7.091	156	110199	9.75	ppm	98
48) Hexachlorocyclopentadiene	6.513	237	50110	13.95	ppm	95
49) 2,4,6-Trichlorophenol	6.679	196	36324	9.20	ppm	97
50) 2,4,5-Trichlorophenol	6.738	196	39506	9.40	ppm	99
52) 2-Chloronaphthalene	6.915	162	114506	9.59	ppm	100
53) Biphenyl	6.893	154	147040	9.02	ppm	100
54) 2-Nitroaniline	7.059	65	41767	9.01	ppm	90
55) Dimethylphthalate	7.305	163	131665	9.41	ppm	98
56) Acenaphthylene	7.439	152	186145	9.27	ppm	97
57) 2,6-Dinitrotoluene	7.385	165	29704	9.19	ppm	89
58) 3-Nitroaniline	7.604	138	32160	8.86	ppm	97
59) Acenaphthene	7.674	153	124890	9.41	ppm	98
60) 2,4-Dinitrophenol	7.770	184	18473	10.82	ppm	91
61) 4-Nitrophenol	7.925	109	19208	7.82	ppm	92
62) Dibenzofuran	7.915	168	163040	9.41	ppm	91
63) 2,4-Dinitrotoluene	7.941	165	40940	9.05	ppm	80
64) 2,3,4,6-Tetrachlorophenol	8.113	232	30289	9.34	ppm	91
65) Diethylphthalate	8.294	149	138373	9.16	ppm	99
66) Fluorene	8.401	166	132760	9.01	ppm	98
67) 4-Chlorophenyl-phenyle...	8.428	204	62789	9.73	ppm	94
68) 4-Nitroaniline	8.466	138	30946	8.72	ppm	98
70) 4,6-Dinitro-2-methylph...	8.524	198	18838	7.12	ppm	97
71) n-Nitrosodiphenylamine	8.610	169	92910	9.20	ppm	96
72) 1,2-Diphenylhydrazine	8.658	77	138351	8.89	ppm	95
74) 4-Bromophenyl-phenylether	9.145	248	40759	9.94	ppm	98
75) Hexachlorobenzene	9.204	284	49410	10.32	ppm	98
76) Pentachlorophenol	9.535	266	41590	15.31	ppm	92
77) Phenanthrene	9.830	178	189020	9.28	ppm	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82700.D
Acq On : 27 Apr 2016 6:18 pm
Operator : ashleyn
Sample : ic3623-10
Misc : op93161,e3e3623
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 28 09:22:21 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:20:59 2016
QLast Update : Thu Apr 28 09:20:59 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
78) Anthracene	9.910	178	192668	9.29 ppm	100
79) Carbazole	10.199	167	172487	9.13 ppm	99
80) Di-n-butylphthalate	10.824	149	220647	8.53 ppm	99
81) Fluoranthene	11.685	202	206442	9.02 ppm	99
82) Octadecane	9.755	57	75715	8.33 ppm	96
84) Pyrene	12.033	202	215472	9.24 ppm	99
86) Butylbenzylphthalate	13.199	149	98394	8.23 ppm	97
87) Butyl stearate	13.376	56	50263	7.72 ppm	93
88) Benzo[a]anthracene	13.959	228	208508	9.41 ppm	99
89) 3,3'-Dichlorobenzidine	13.980	252	80162	9.30 ppm	99
90) Chrysene	14.012	228	197286	9.71 ppm	98
91) bis(2-Ethylhexyl)phtha...	14.167	149	132606	8.78 ppm	99
93) Di-n-octylphthalate	15.157	149	223924	7.34 ppm	97
94) Benzo[b]fluoranthene	15.563	252	220297	8.73 ppm	98
95) Benzo[k]fluoranthene	15.606	252	206870	9.60 ppm	98
96) Benzo[a]pyrene	16.007	252	190201	9.18 ppm	99
97) Indeno[1,2,3-cd]pyrene	17.542	276	175214	8.75 ppm	99
98) Dibenz(a,h)acridine	17.227	279	164264	8.58 ppm	100
99) Dibenz[a,h]anthracene	17.585	278	181661	9.50 ppm	99
100) 7,12-Dimethylbenz(a)an...	15.563	256	94359	8.01 ppm	97
101) Benzo[g,h,i]perylene	17.954	276	180122	9.84 ppm	97

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

7.6.18

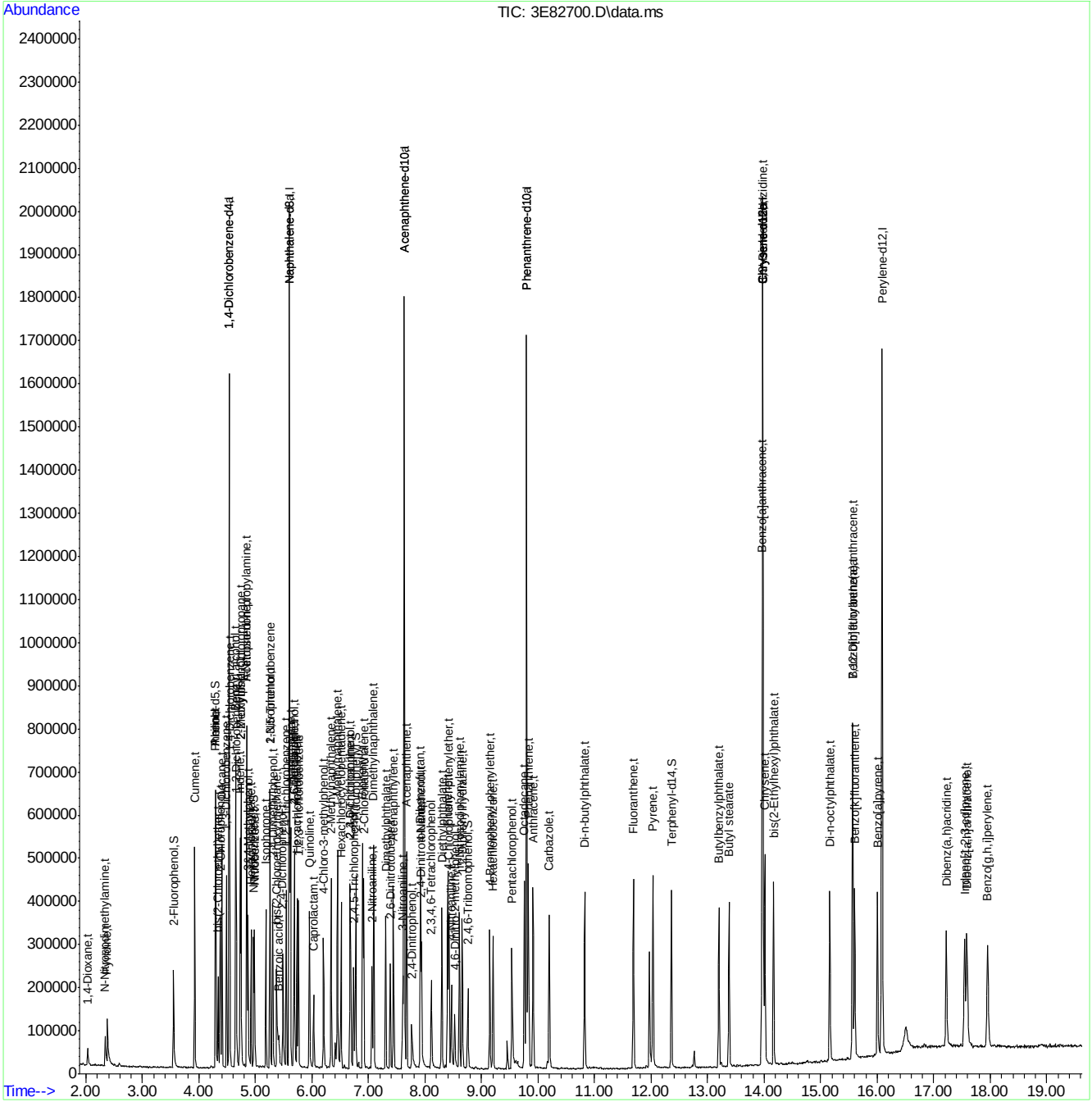
7

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82700.D
Acq On : 27 Apr 2016 6:18 pm
Operator : ashleyn
Sample : ic3623-10
Misc : op93161,e3e3623
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 28 09:22:21 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:20:59 2016
QLast Update : Thu Apr 28 09:20:59 2016
Response via : Initial Calibration



SGS ACCUTEST JC19644

Manual Integration Approval Summary

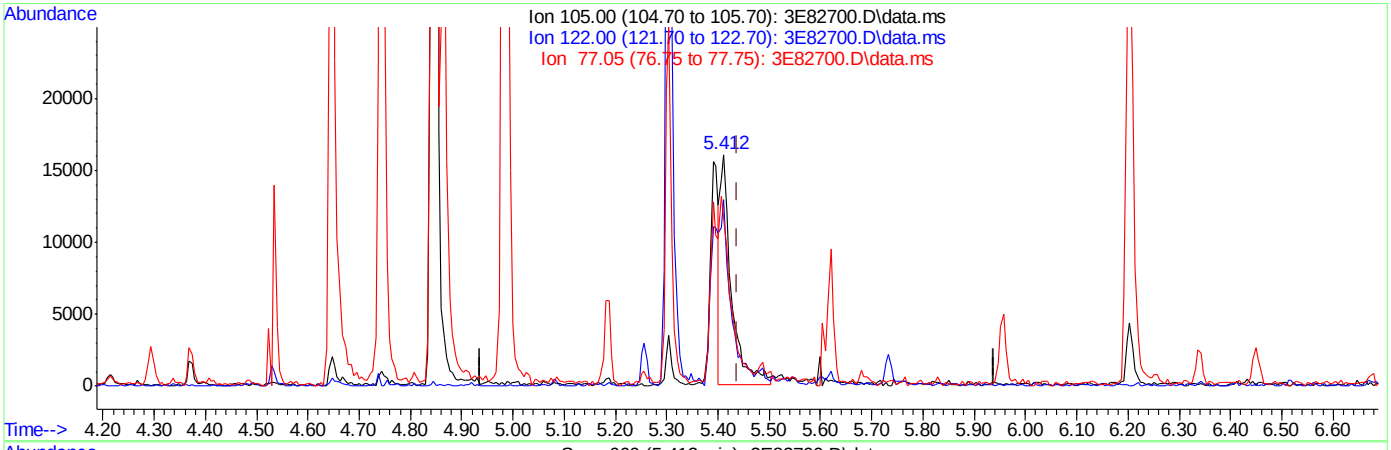
Sample Number:	E3E3623-IC3623	**Method:**	SW846 8270D
Lab FileID:	3E82700.D	**Analyst approved:**	04/28/16 10:43 Ashley Noble
Injection Time:	04/27/16 18:18	**Supervisor approved:**	04/28/16 16:14 Kristi Schollenberger

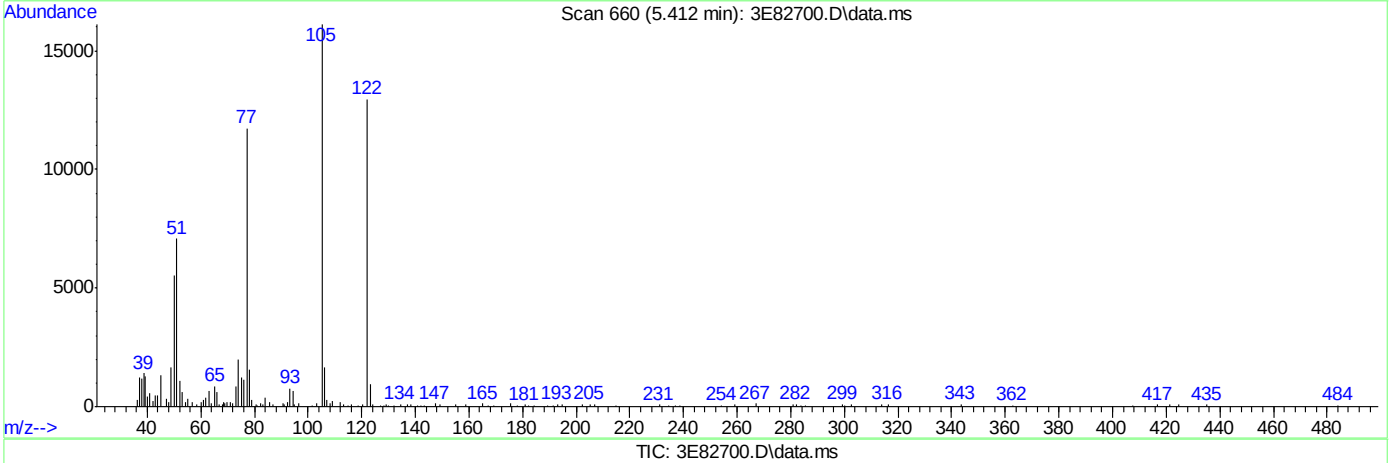
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic acid	65-85-0		5.41	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82700.D
Acq On : 27 Apr 2016 6:18 pm
Operator : ashleyn
Sample : ic3623-10
Misc : op93161,e3e3623
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 28 09:21:10 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:20:59 2016
QLast Update : Thu Apr 28 09:20:59 2016
Response via : Initial Calibration





TIC: 3E82700.D\data.ms

(31) Benzoic acid (t)

5.412min (-0.027) 4.51ppm

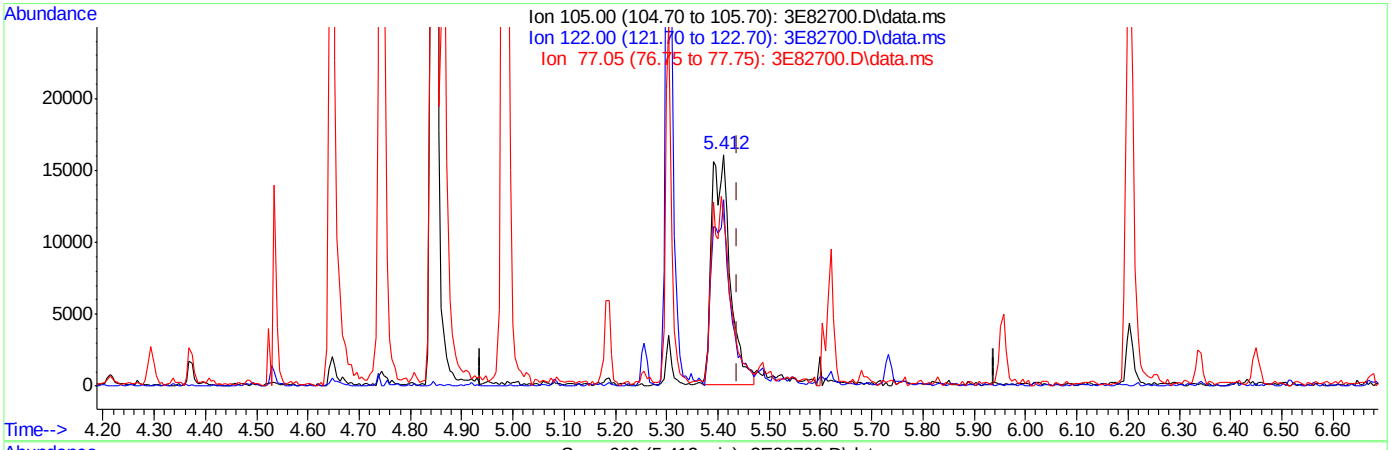
response 24058

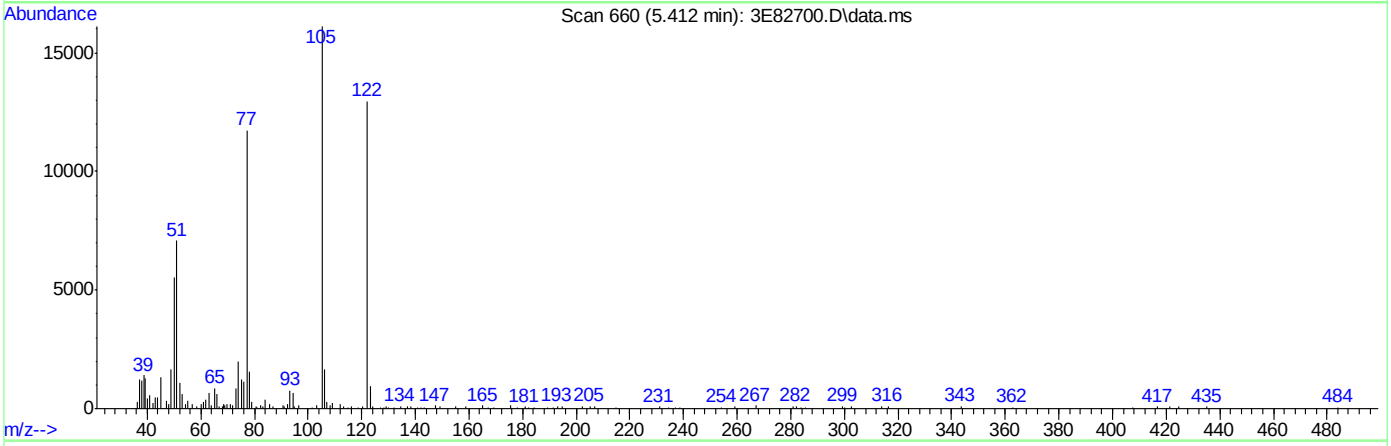
Ion	Exp%	Act%
105.00	100	100
122.00	74.00	78.66
77.05	79.10	64.40
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82700.D
Acq On : 27 Apr 2016 6:18 pm
Operator : ashleyn
Sample : ic3623-10
Misc : op93161,e3e3623
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 28 09:21:10 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:20:59 2016
QLast Update : Thu Apr 28 09:20:59 2016
Response via : Initial Calibration





TIC: 3E82700.D\data.ms

(31) Benzoic acid (t)

5.412min (-0.027) 7.52ppm m

response 40145

Ion	Exp%	Act%
105.00	100	100
122.00	74.00	80.43
77.05	79.10	72.77
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82701.D
Acq On : 27 Apr 2016 6:44 pm
Operator : ashleyn
Sample : ic3623-5
Misc : op93161,e3e3623
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 28 09:23:59 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:22:44 2016
QLast Update : Thu Apr 28 09:22:44 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.534	152	191497	40.00 ppm	0.00
24) Naphthalene-d8	5.599	136	747633	40.00 ppm	0.00
47) Acenaphthene-d10	7.631	164	443822	40.00 ppm	0.00
69) Phenanthrene-d10	9.797	188	754904	40.00 ppm	0.00
83) Chrysene-d12	13.975	240	830501	40.00 ppm	-0.01
92) Perylene-d12	16.087	264	779438	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.534	152	191497	40.00 ppm	0.00
104) Acenaphthene-d10a	7.631	164	443822	40.00 ppm	0.00
106) Phenanthrene-d10a	9.797	188	754904	40.00 ppm	0.00
110) Chrysene-d12a	13.975	240	830501	40.00 ppm	-0.01
112) Naphthalene-d8a	5.599	136	747633	40.00 ppm	0.00
114) Chrysene-d12b	13.975	240	830501	40.00 ppm	-0.01

System Monitoring Compounds					
5) 2-Fluorophenol	3.550	112	30398	5.16 ppm	0.00
Spiked Amount 50.000			Recovery	= 10.32%	
8) Phenol-d5	4.288	99	38311	4.92 ppm	0.00
Spiked Amount 50.000			Recovery	= 9.84%	
25) Nitrobenzene-d5	4.968	82	39872	5.37 ppm	0.00
Spiked Amount 50.000			Recovery	= 10.74%	
51) 2-Fluorobiphenyl	6.775	172	75663	5.30 ppm	0.00
Spiked Amount 50.000			Recovery	= 10.60%	
73) 2,4,6-Tribromophenol	8.760	330	14205	5.39 ppm	0.00
Spiked Amount 50.000			Recovery	= 10.78%	
85) Terphenyl-d14	12.359	244	89330	5.25 ppm	0.00
Spiked Amount 50.000			Recovery	= 10.50%	
108) o-Terphenyl	0.000	230	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
109) 1-Chlorooctadecane	0.000	57	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	

Target Compounds					Qvalue
2) 1,4-Dioxane	2.031	88	9415	5.89 ppm	90
3) Pyridine	2.384	79	27830	5.56 ppm	98
4) N-Nitrosodimethylamine	2.341	74	13490	4.69 ppm	96
6) Indene	4.727	116	61925	5.55 ppm	98
7) Cumene	3.925	105	84643	5.19 ppm	99
9) Phenol	4.299	94	41937	4.95 ppm	98
10) Aniline	4.288	93	49912	5.13 ppm	87
11) bis(2-Chloroethyl)ether	4.342	93	29241	5.30 ppm	95
12) 2-Chlorophenol	4.385	128	36710	5.41 ppm	99
13) Decane	4.406	43	36893	5.11 ppm	95
14) 1,3-Dichlorobenzene	4.486	146	39855	5.40 ppm	96
15) 1,4-Dichlorobenzene	4.545	146	42843	5.71 ppm	98
16) Benzyl alcohol	4.647	108	21621	5.05 ppm	93
17) 1,2-Dichlorobenzene	4.657	146	38399	5.52 ppm	97
18) Acetophenone	4.845	105	50290	5.46 ppm	97
19) 2-Methylphenol	4.743	108	31556	5.56 ppm	96
20) 2,2'-oxybis(1-Chloropr...	4.743	121	12846	5.61 ppm	91
21) 3&4-Methylphenol	4.866	108	33212	5.50 ppm	97

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82701.D
Acq On : 27 Apr 2016 6:44 pm
Operator : ashleyn
Sample : ic3623-5
Misc : op93161,e3e3623
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 28 09:23:59 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:22:44 2016
QLast Update : Thu Apr 28 09:22:44 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
22) n-Nitroso-di-n-propyla...	4.845	70	25330	5.07	ppm		96
23) Hexachloroethane	4.920	201	13788	5.79	ppm		87
26) Nitrobenzene	4.984	77	39696	5.18	ppm		97
27) Quinoline	5.957	129	71291	5.75	ppm		96
28) Isophorone	5.182	82	65037	5.24	ppm		99
29) 2-Nitrophenol	5.256	139	20106	5.05	ppm		81
30) 2,4-Dimethylphenol	5.305	107	35831	5.25	ppm		97
31) Benzoic acid	5.406	105	21984	4.28	ppm		96
32) bis(2-Chloroethoxy)met...	5.374	93	36160	5.44	ppm		99
33) 2,4-Dichlorophenol	5.486	162	28650	5.36	ppm		91
34) 2,6-Dichlorophenol	5.690	162	28121	5.37	ppm		96
35) 1,3,5-Trichlorobenzene	5.256	180	33354	5.38	ppm		99
36) 1,2,4-Trichlorobenzene	5.545	180	32258	5.59	ppm		97
37) 1,2,3-Trichlorobenzene	5.759	180	30618	5.59	ppm		98
38) Naphthalene	5.620	128	110465	5.57	ppm		99
39) 4-Chloroaniline	5.679	127	43690	5.24	ppm		96
40) 2,3-Dichloroaniline	6.674	161	36285	5.70	ppm		96
41) Caprolactam	6.027	55	14236	5.18	ppm		97
42) Hexachlorobutadiene	5.732	225	20379	6.05	ppm		97
43) 4-Chloro-3-methylphenol	6.203	107	30733	5.22	ppm		98
44) 2-Methylnaphthalene	6.342	141	62634	5.51	ppm		93
45) 1-Methylnaphthalene	6.449	141	66014	5.61	ppm		98
46) Dimethylnaphthalene	7.091	156	64844	5.70	ppm		97
48) Hexachlorocyclopentadiene	6.513	237	25741	7.38	ppm		90
49) 2,4,6-Trichlorophenol	6.685	196	20723	5.16	ppm		93
50) 2,4,5-Trichlorophenol	6.738	196	23252	5.42	ppm		98
52) 2-Chloronaphthalene	6.915	162	67577	5.52	ppm		97
53) Biphenyl	6.893	154	87576	5.30	ppm		99
54) 2-Nitroaniline	7.059	65	23150	4.93	ppm		99
55) Dimethylphthalate	7.305	163	78324	5.48	ppm		99
56) Acenaphthylene	7.439	152	110126	5.39	ppm		97
57) 2,6-Dinitrotoluene	7.385	165	17570	5.35	ppm		83
58) 3-Nitroaniline	7.605	138	19021	5.19	ppm		92
59) Acenaphthene	7.674	153	72724	5.37	ppm		93
60) 2,4-Dinitrophenol	7.770	184	8113	5.07	ppm		84
61) 4-Nitrophenol	7.931	109	10537	4.34	ppm	#	28
62) Dibenzofuran	7.915	168	95786	5.42	ppm		88
63) 2,4-Dinitrotoluene	7.941	165	23880	5.21	ppm		90
64) 2,3,4,6-Tetrachlorophenol	8.113	232	18184	5.50	ppm		92
65) Diethylphthalate	8.294	149	82307	5.37	ppm		100
66) Fluorene	8.401	166	79104	5.30	ppm		96
67) 4-Chlorophenyl-phenyle...	8.423	204	38565	5.82	ppm		96
68) 4-Nitroaniline	8.460	138	19338	5.42	ppm		90
70) 4,6-Dinitro-2-methylph...	8.524	198	9662	3.69	ppm		96
71) n-Nitrosodiphenylamine	8.605	169	56379	5.41	ppm		94
72) 1,2-Diphenylhydrazine	8.653	77	78221	4.90	ppm		100
74) 4-Bromophenyl-phenylether	9.145	248	23369	5.44	ppm		97
75) Hexachlorobenzene	9.204	284	29177	5.77	ppm		96
76) Pentachlorophenol	9.541	266	22726	8.37	ppm		94
77) Phenanthrene	9.830	178	115804	5.50	ppm		98

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82701.D
Acq On : 27 Apr 2016 6:44 pm
Operator : ashleyn
Sample : ic3623-5
Misc : op93161,e3e3623
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 28 09:23:59 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:22:44 2016
QLast Update : Thu Apr 28 09:22:44 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
78) Anthracene	9.910	178	115488	5.38 ppm	98
79) Carbazole	10.199	167	102376	5.26 ppm	96
80) Di-n-butylphthalate	10.824	149	127273	4.83 ppm	98
81) Fluoranthene	11.686	202	122702	5.21 ppm	98
82) Octadecane	9.755	57	43825	4.75 ppm	98
84) Pyrene	12.033	202	129954	5.33 ppm	98
86) Butylbenzylphthalate	13.199	149	55724	4.55 ppm	98
87) Butyl stearate	13.376	56	28528	4.32 ppm	91
88) Benzo[a]anthracene	13.959	228	127135	5.46 ppm	99
89) 3,3'-Dichlorobenzidine	13.980	252	48148	5.33 ppm	92
90) Chrysene	14.012	228	122364	5.70 ppm	99
91) bis(2-Ethylhexyl)phtha...	14.167	149	76560	4.89 ppm	99
93) Di-n-octylphthalate	15.157	149	129029	4.15 ppm	97
94) Benzo[b]fluoranthene	15.563	252	133466	5.04 ppm	98
95) Benzo[k]fluoranthene	15.601	252	123290	5.36 ppm	99
96) Benzo[a]pyrene	16.007	252	112674	5.13 ppm	99
97) Indeno[1,2,3-cd]pyrene	17.542	276	105323	5.05 ppm	97
98) Dibenz(a,h)acridine	17.221	279	99143	4.95 ppm	98
99) Dibenz[a,h]anthracene	17.585	278	111077	5.45 ppm	99
100) 7,12-Dimethylbenz(a)an...	15.558	256	57230	4.70 ppm	99
101) Benzo[g,h,i]perylene	17.954	276	107396	5.47 ppm	98

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

7.6.19

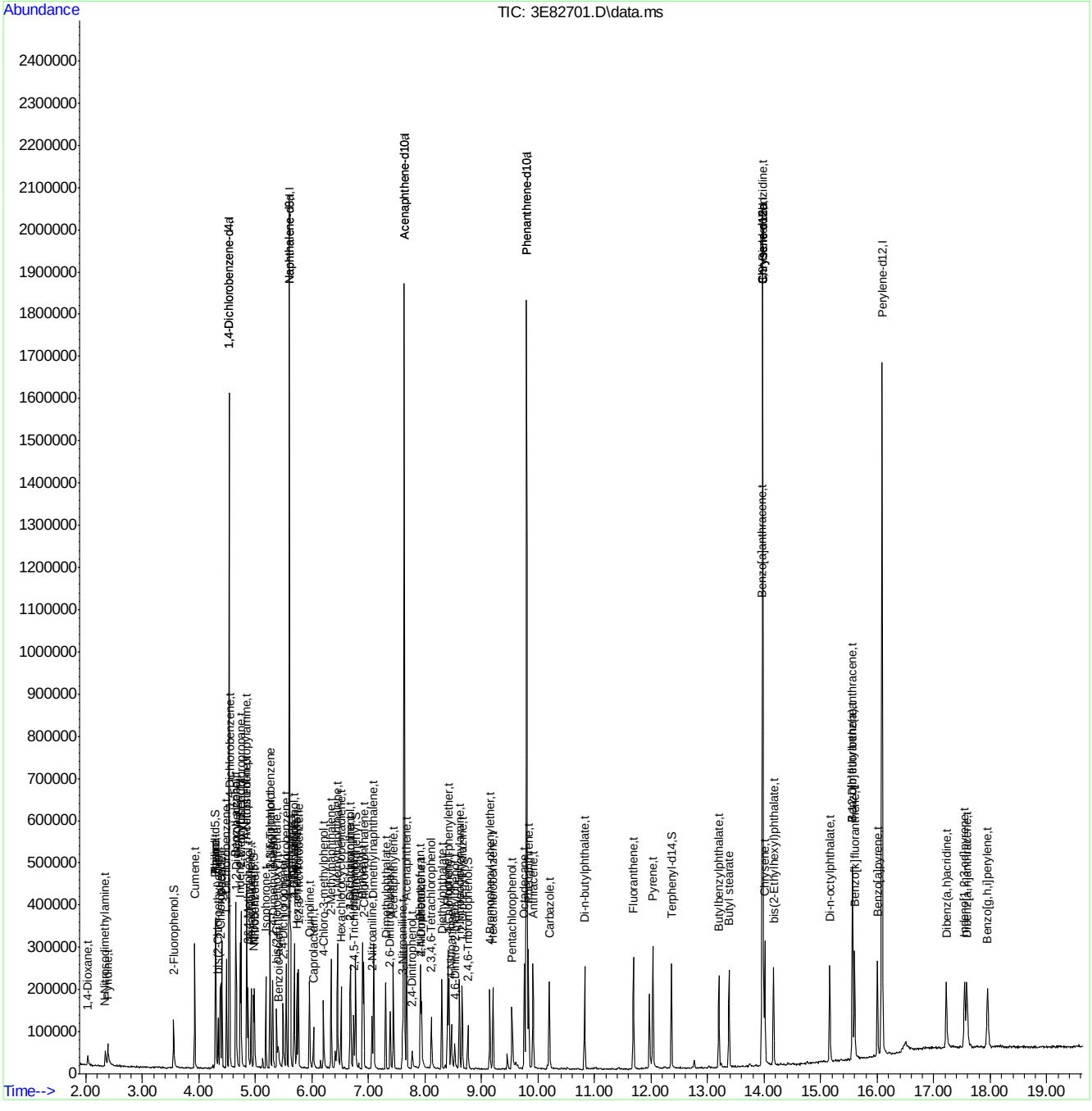
7

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82701.D
Acq On : 27 Apr 2016 6:44 pm
Operator : ashleyn
Sample : ic3623-5
Misc : op93161,e3e3623
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 28 09:23:59 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:22:44 2016
QLast Update : Thu Apr 28 09:22:44 2016
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 04/28/16 16:14

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82703.D
Acq On : 27 Apr 2016 7:10 pm
Operator : ashleyn
Sample : ic3623-1
Misc : op93161,e3e3623
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 28 16:21:11 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:28:02 2016
QLast Update : Thu Apr 28 09:28:02 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.534	152	201336	40.00	ppm	0.00
24) Naphthalene-d8	5.599	136	784399	40.00	ppm	0.00
47) Acenaphthene-d10	7.631	164	471658	40.00	ppm	0.00
69) Phenanthrene-d10	9.797	188	809372	40.00	ppm	0.00
83) Chrysene-d12	13.975	240	879982	40.00	ppm	-0.01
92) Perylene-d12	16.087	264	860340	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.534	152	201336	40.00	ppm	0.00
104) Acenaphthene-d10a	7.631	164	471658	40.00	ppm	0.00
106) Phenanthrene-d10a	9.797	188	809372	40.00	ppm	0.00
110) Chrysene-d12a	13.975	240	879982	40.00	ppm	-0.01
112) Naphthalene-d8a	5.599	136	784399	40.00	ppm	0.00
114) Chrysene-d12b	13.975	240	879982	40.00	ppm	-0.01

System Monitoring Compounds						
5) 2-Fluorophenol	3.555	112	5953	0.96	ppm	0.00
Spiked Amount 50.000			Recovery = 1.92%			
8) Phenol-d5	4.294	99	7146	0.88	ppm	0.00
Spiked Amount 50.000			Recovery = 1.76%			
25) Nitrobenzene-d5	4.968	82	8116	1.04	ppm	0.00
Spiked Amount 50.000			Recovery = 2.08%			
51) 2-Fluorobiphenyl	6.775	172	17193	1.11	ppm	0.00
Spiked Amount 50.000			Recovery = 2.22%			
73) 2,4,6-Tribromophenol	8.760	330	2839	0.99	ppm	0.00
Spiked Amount 50.000			Recovery = 1.98%			
85) Terphenyl-d14	12.354	244	19679	1.08	ppm	-0.01
Spiked Amount 50.000			Recovery = 2.16%			
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-Chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds							Qvalue
2) 1,4-Dioxane	2.036	88	2343	1.33	ppm		84
3) Pyridine	2.422	79	3481	0.67	ppm		88
4) N-Nitrosodimethylamine	2.379	74	1649	0.56	ppm	#	1
6) Indene	4.727	116	12150	1.01	ppm		99
7) Cumene	3.925	105	18710	1.08	ppm		97
9) Phenol	4.299	94	8156	0.92	ppm		89
10) Aniline	4.294	93	9942	0.97	ppm		86
11) bis(2-Chloroethyl)ether	4.342	93	6644	1.12	ppm		94
12) 2-Chlorophenol	4.385	128	7357	1.01	ppm		93
13) Decane	4.406	43	8247	1.08	ppm		86
14) 1,3-Dichlorobenzene	4.486	146	8687	1.10	ppm		95
15) 1,4-Dichlorobenzene	4.545	146	9617	1.17	ppm		94
16) Benzyl alcohol	4.652	108	4099	0.91	ppm		89
17) 1,2-Dichlorobenzene	4.657	146	7819	1.04	ppm		98
18) Acetophenone	4.845	105	10573	1.07	ppm		85
19) 2-Methylphenol	4.748	108	6283	1.02	ppm		92
20) 2,2'-oxybis(1-Chloropr...	4.743	121	2911	1.18	ppm	#	92
21) 3&4-Methylphenol	4.871	108	6617	1.02	ppm		80

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82703.D
Acq On : 27 Apr 2016 7:10 pm
Operator : ashleyn
Sample : ic3623-1
Misc : op93161,e3e3623
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 28 16:21:11 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:28:02 2016
QLast Update : Thu Apr 28 09:28:02 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
22) n-Nitroso-di-n-propyla...	4.845	70	5407	1.03	ppm		83
23) Hexachloroethane	4.925	201	3129	1.20	ppm	#	78
26) Nitrobenzene	4.989	77	8613	1.07	ppm		98
27) Quinoline	5.957	129	14762	1.09	ppm		97
28) Isophorone	5.181	82	13387	1.02	ppm		89
29) 2-Nitrophenol	5.256	139	4086	0.98	ppm		74
30) 2,4-Dimethylphenol	5.304	107	7196	1.01	ppm		94
32) bis(2-Chloroethoxy)met...	5.379	93	7418	1.04	ppm		91
33) 2,4-Dichlorophenol	5.497	162	4911	0.87	ppm		98
34) 2,6-Dichlorophenol	5.690	162	6273	1.12	ppm		95
35) 1,3,5-Trichlorobenzene	5.262	180	7293	1.10	ppm		91
36) 1,2,4-Trichlorobenzene	5.545	180	7124	1.14	ppm		86
37) 1,2,3-Trichlorobenzene	5.759	180	7087	1.19	ppm		97
38) Naphthalene	5.620	128	23806	1.11	ppm		96
39) 4-Chloroaniline	5.684	127	8731	0.99	ppm		89
40) 2,3-Dichloroaniline	6.674	161	7806	1.13	ppm		99
41) Caprolactam	6.016	55	3391	1.17	ppm		82
42) Hexachlorobutadiene	5.732	225	4637	1.26	ppm		95
43) 4-Chloro-3-methylphenol	6.208	107	6644	1.05	ppm		94
44) 2-Methylnaphthalene	6.342	141	12709	1.04	ppm		97
45) 1-Methylnaphthalene	6.449	141	13691	1.08	ppm		97
46) Dimethylnaphthalene	7.091	156	13555	1.11	ppm		96
48) Hexachlorocyclopentadiene	6.513	237	2973	0.89	ppm		74
49) 2,4,6-Trichlorophenol	6.684	196	3952	0.91	ppm		95
50) 2,4,5-Trichlorophenol	6.749	196	5441	1.17	ppm		92
52) 2-Chloronaphthalene	6.914	162	13603	1.02	ppm		99
53) Biphenyl	6.893	154	17804	1.00	ppm		92
54) 2-Nitroaniline	7.059	65	5223	1.06	ppm		85
55) Dimethylphthalate	7.300	163	16447	1.06	ppm		94
56) Acenaphthylene	7.439	152	23329	1.05	ppm		97
57) 2,6-Dinitrotoluene	7.385	165	3404	0.97	ppm		85
58) 3-Nitroaniline	7.610	138	3926	1.01	ppm		85
59) Acenaphthene	7.674	153	16005	1.09	ppm		95
60) 2,4-Dinitrophenol	7.786	184	203	0.14	ppm	#	36
61) 4-Nitrophenol	7.952	109	2029m	0.84	ppm		
62) Dibenzofuran	7.915	168	21721	1.13	ppm		74
63) 2,4-Dinitrotoluene	7.941	165	4358	0.90	ppm		68
64) 2,3,4,6-Tetrachlorophenol	8.113	232	3215	0.90	ppm		82
65) Diethylphthalate	8.294	149	16231	0.98	ppm		96
66) Fluorene	8.401	166	17628	1.09	ppm		94
67) 4-Chlorophenyl-phenyle...	8.428	204	8145	1.11	ppm		95
68) 4-Nitroaniline	8.471	138	3455	0.91	ppm		85
70) 4,6-Dinitro-2-methylph...	8.530	198	949	0.38	ppm		95
71) n-Nitrosodiphenylamine	8.610	169	10751	0.95	ppm		98
72) 1,2-Diphenylhydrazine	8.658	77	15273	0.90	ppm		93
74) 4-Bromophenyl-phenylether	9.145	248	5450	1.15	ppm		99
75) Hexachlorobenzene	9.204	284	6748	1.20	ppm		90
76) Pentachlorophenol	9.541	266	3510	1.28	ppm	#	75
77) Phenanthrene	9.829	178	25171	1.08	ppm		98
78) Anthracene	9.910	178	24438	1.04	ppm		94

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82703.D
Acq On : 27 Apr 2016 7:10 pm
Operator : ashleyn
Sample : ic3623-1
Misc : op93161,e3e3623
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 28 16:21:11 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:28:02 2016
QLast Update : Thu Apr 28 09:28:02 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
79) Carbazole	10.198	167	21762	1.03 ppm	97
80) Di-n-butylphthalate	10.824	149	25922	0.94 ppm	100
81) Fluoranthene	11.691	202	25823	1.02 ppm	95
82) Octadecane	9.755	57	8950	0.93 ppm	98
84) Pyrene	12.033	202	27046	1.03 ppm	99
86) Butylbenzylphthalate	13.199	149	11749	0.93 ppm	91
87) Butyl stearate	13.376	56	5607	0.83 ppm	95
88) Benzo[a]anthracene	13.959	228	28123	1.11 ppm	89
89) 3,3'-Dichlorobenzidine	13.980	252	8797	0.91 ppm	82
90) Chrysene	14.012	228	26639	1.13 ppm	99
91) bis(2-Ethylhexyl)phtha...	14.167	149	14654	0.89 ppm	91
93) Di-n-octylphthalate	15.157	149	25082	0.77 ppm	99
94) Benzo[b]fluoranthene	15.563	252	29043	1.00 ppm	94
95) Benzo[k]fluoranthene	15.606	252	26060	1.00 ppm	88
96) Benzo[a]pyrene	16.002	252	24478	1.01 ppm	98
97) Indeno[1,2,3-cd]pyrene	17.548	276	22582	0.98 ppm	88
98) Dibenz(a,h)acridine	17.227	279	20454	0.93 ppm	97
99) Dibenz[a,h]anthracene	17.590	278	23967	1.05 ppm	97
100) 7,12-Dimethylbenz(a)an...	15.558	256	11743	0.89 ppm	98
101) Benzo[g,h,i]perylene	17.954	276	23216	1.05 ppm	94

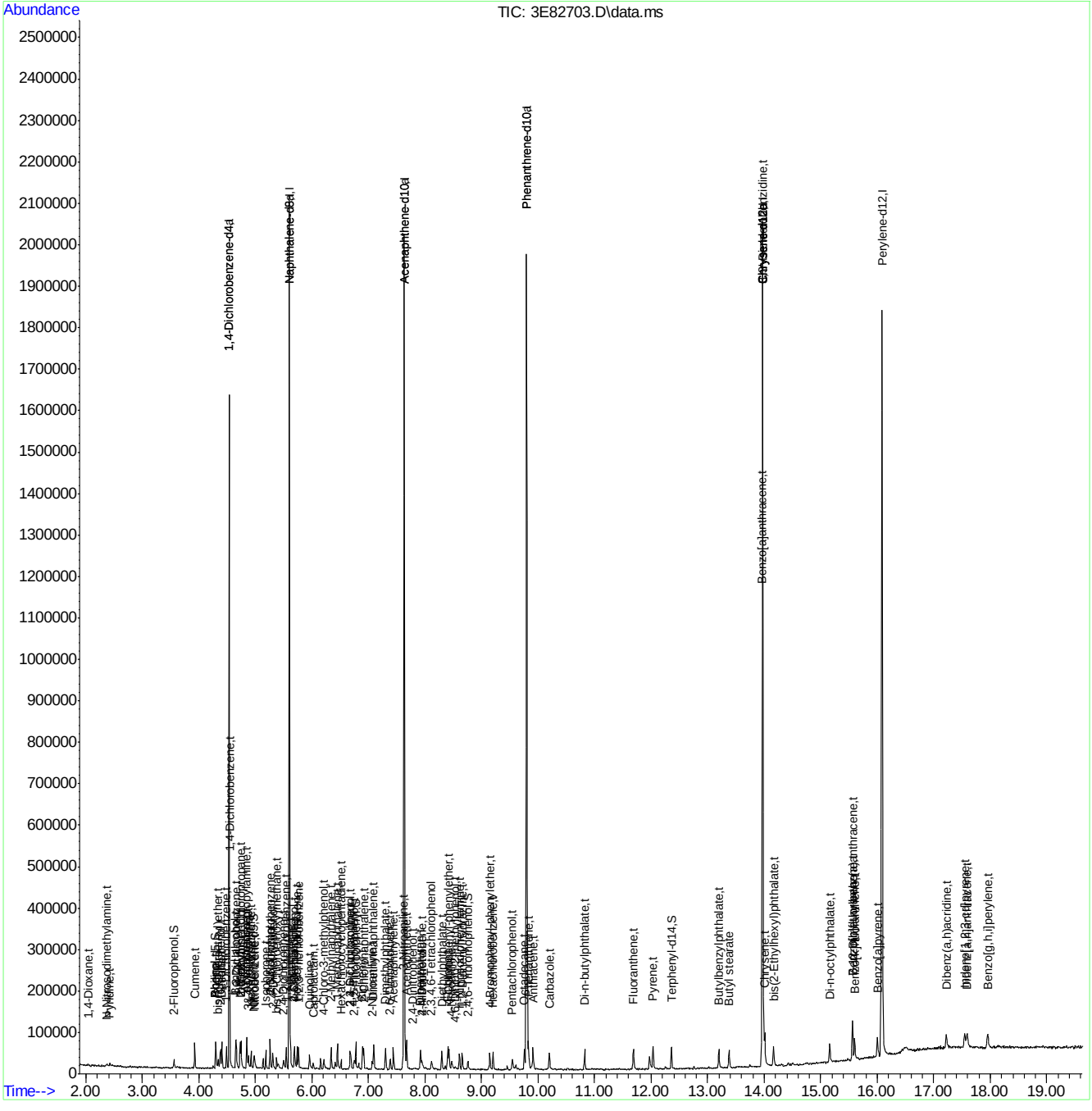
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82703.D
Acq On : 27 Apr 2016 7:10 pm
Operator : ashleyn
Sample : ic3623-1
Misc : op93161,e3e3623
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 28 16:21:11 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:28:02 2016
QLast Update : Thu Apr 28 09:28:02 2016
Response via : Initial Calibration



SGS ACCUTEST JC19644

Manual Integration Approval Summary

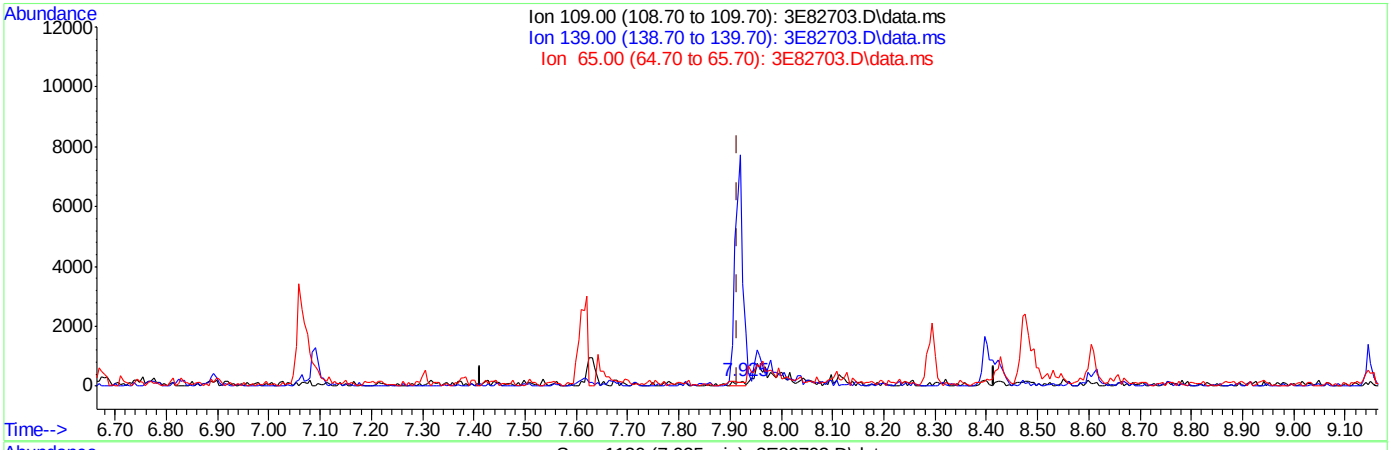
Sample Number:	E3E3623-IC3623	**Method:**	SW846 8270D
Lab FileID:	3E82703.D	**Analyst approved:**	04/28/16 10:43 Ashley Noble
Injection Time:	04/27/16 19:10	**Supervisor approved:**	04/28/16 16:14 Kristi Schollenberger

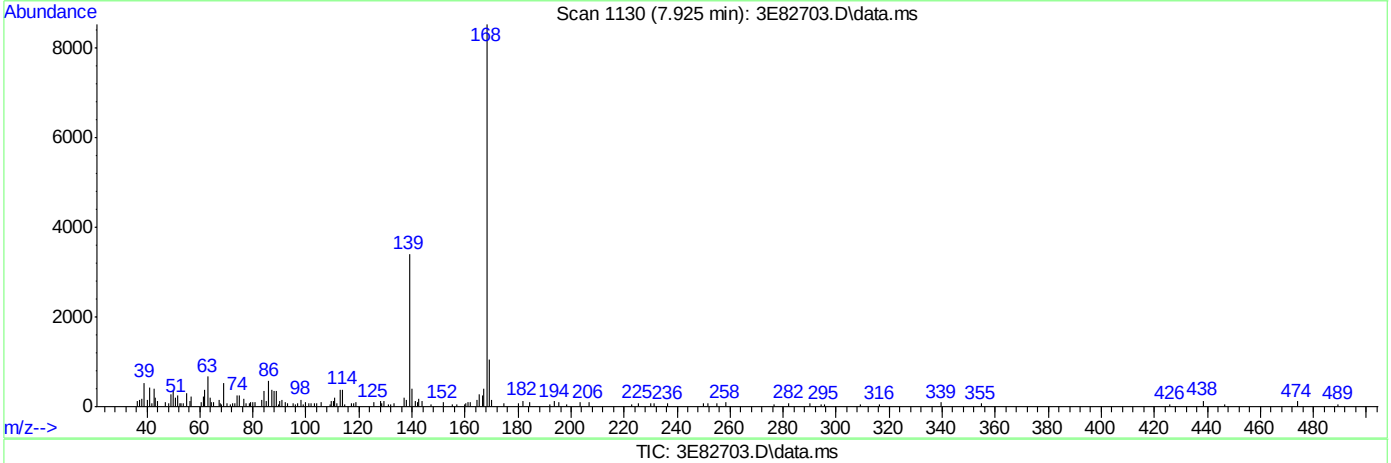
Parameter	CAS	Sig#	R.T. (min.)	Reason
4-Nitrophenol	100-02-7		7.95	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82703.D
Acq On : 27 Apr 2016 7:10 pm
Operator : ashleyn
Sample : ic3623-1
Misc : op93161,e3e3623
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 28 09:28:13 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:28:02 2016
QLast Update : Thu Apr 28 09:28:02 2016
Response via : Initial Calibration





TIC: 3E82703.D\data.ms

(61) 4-Nitrophenol (t)

7.925min (+0.011) 0.10ppm

response 231

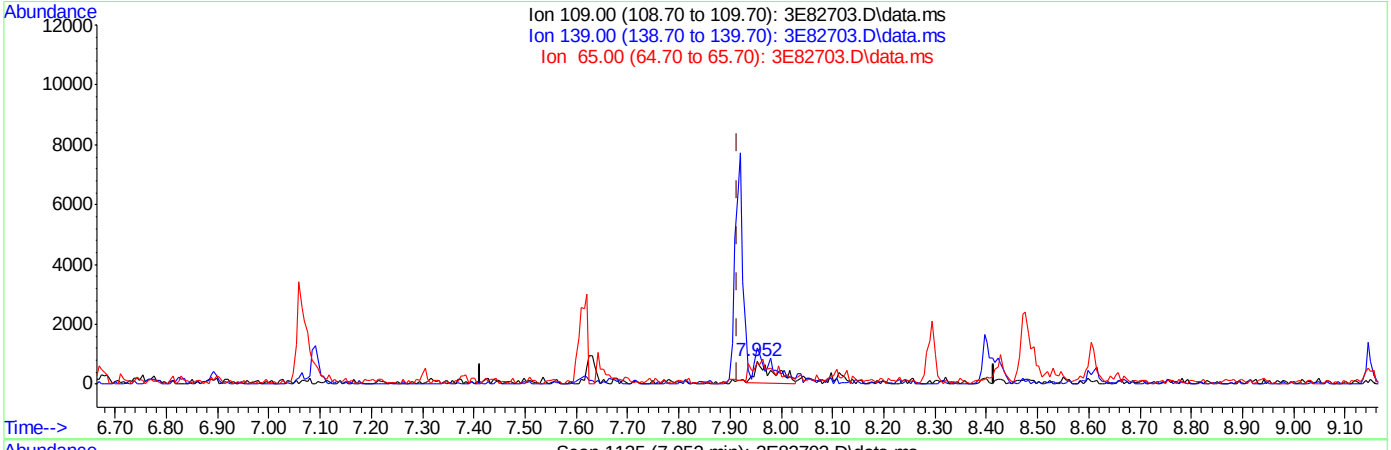
Ion	Exp%	Act%
109.00	100	100
139.00	369.70	1748.75#
65.00	133.80	0.00#
0.00	0.00	0.00

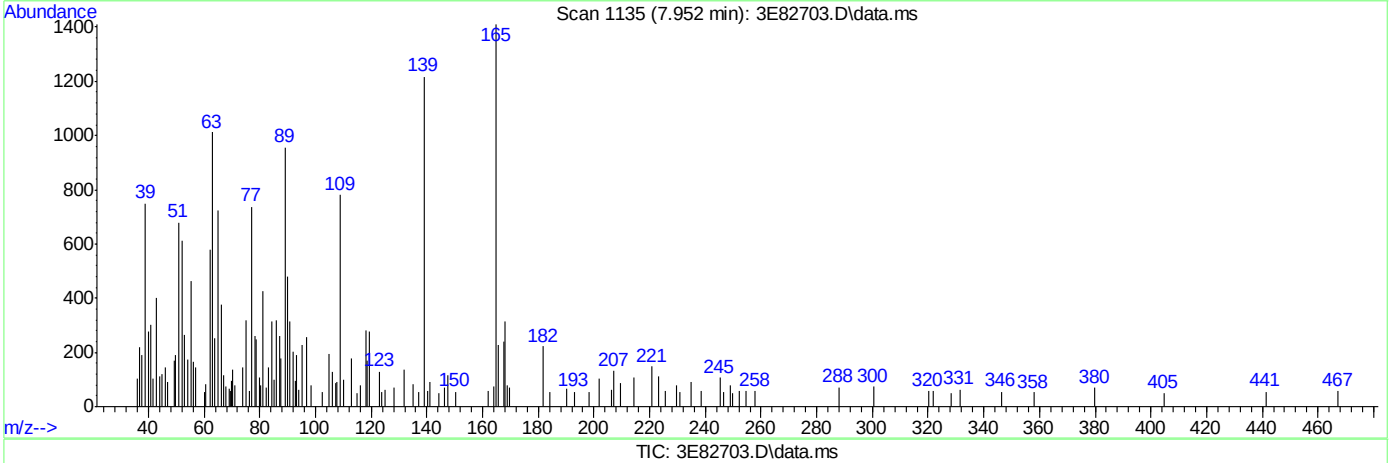
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82703.D
Acq On : 27 Apr 2016 7:10 pm
Operator : ashleyn
Sample : ic3623-1
Misc : op93161,e3e3623
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 28 09:29:07 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:28:02 2016
QLast Update : Thu Apr 28 09:28:02 2016
Response via : Initial Calibration





TIC: 3E82703.D\data.ms

(61) 4-Nitrophenol (t)

7.952min (+0.037) 0.84ppm m

response 2029

Ion	Exp%	Act%
109.00	100	100
139.00	369.70	155.70#
65.00	133.80	92.70#
0.00	0.00	0.00

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82704.D
Acq On : 27 Apr 2016 7:36 pm
Operator : ashleyn
Sample : icv3623-50
Misc : op93161,e3e3623
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 28 09:54:56 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:51:16 2016
QLast Update : Thu Apr 28 09:51:16 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.534	152	253195	40.00	ppm	0.00
24) Naphthalene-d8	5.599	136	923379	40.00	ppm	0.00
47) Acenaphthene-d10	7.631	164	539347	40.00	ppm	0.00
69) Phenanthrene-d10	9.797	188	888750	40.00	ppm	0.00
83) Chrysene-d12	13.975	240	903049	40.00	ppm	-0.01
92) Perylene-d12	16.087	264	817282	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.534	152	253195	40.00	ppm	0.00
104) Acenaphthene-d10a	7.631	164	539347	40.00	ppm	0.00
106) Phenanthrene-d10a	9.797	188	888750	40.00	ppm	0.00
110) Chrysene-d12a	13.975	240	903049	40.00	ppm	-0.01
112) Naphthalene-d8a	5.599	136	923379	40.00	ppm	0.00
114) Chrysene-d12b	13.975	240	903049	40.00	ppm	-0.01

System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-Chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds							Qvalue
9) Phenol	4.299	94	449994	40.65	ppm		83
12) 2-Chlorophenol	4.385	128	425787	46.41	ppm		93
19) 2-Methylphenol	4.743	108	353432	45.55	ppm		97
21) 3&4-Methylphenol	4.866	108	371762	45.59	ppm		97
29) 2-Nitrophenol	5.256	139	223915	45.88	ppm		76
30) 2,4-Dimethylphenol	5.304	107	425084	50.60	ppm		94
31) Benzoic acid	5.438	105	290920	47.01	ppm		98
33) 2,4-Dichlorophenol	5.481	162	333794	50.96	ppm		97
34) 2,6-Dichlorophenol	5.690	162	321020	47.98	ppm		97
43) 4-Chloro-3-methylphenol	6.198	107	341283	45.68	ppm		99
49) 2,4,6-Trichlorophenol	6.679	196	242291	49.54	ppm		99
50) 2,4,5-Trichlorophenol	6.727	196	241668	44.37	ppm		99
60) 2,4-Dinitrophenol	7.765	184	83159	44.06	ppm		87
61) 4-Nitrophenol	7.909	109	121744	42.22	ppm	#	17
64) 2,3,4,6-Tetrachlorophenol	8.113	232	203154	50.32	ppm		93
70) 4,6-Dinitro-2-methylph...	8.524	198	143701	44.41	ppm		95
76) Pentachlorophenol	9.535	266	150808	50.00	ppm		97

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82704.D
Acq On : 27 Apr 2016 7:36 pm
Operator : ashleyn
Sample : icv3623-50
Misc : op93161,e3e3623
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 28 09:54:56 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:51:16 2016
QLast Update : Thu Apr 28 09:51:16 2016
Response via : Initial Calibration

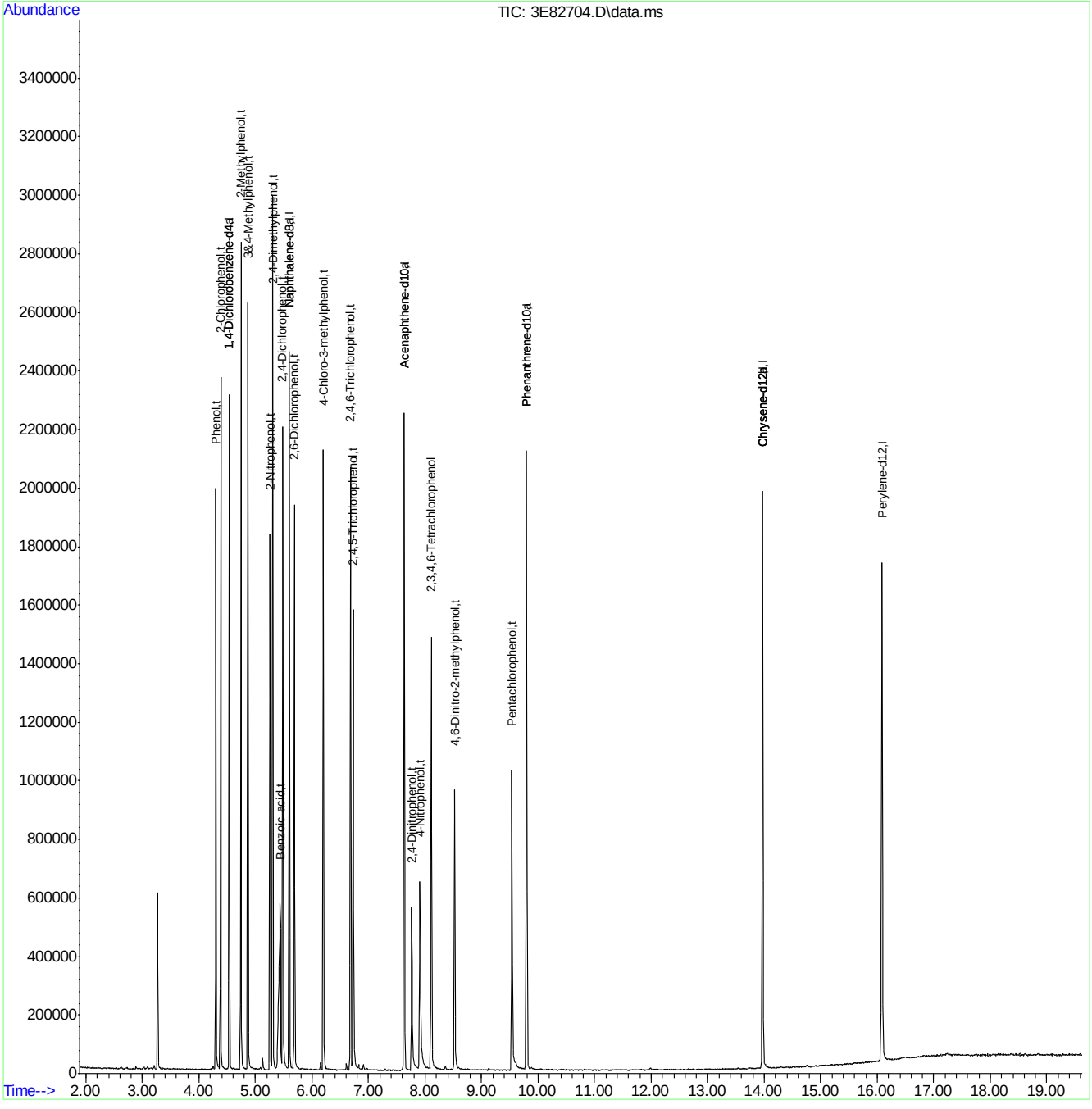
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82704.D
Acq On : 27 Apr 2016 7:36 pm
Operator : ashleyn
Sample : icv3623-50
Misc : op93161,e3e3623
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 28 09:54:56 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:51:16 2016
QLast Update : Thu Apr 28 09:51:16 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82705.D
Acq On : 27 Apr 2016 8:01 pm
Operator : ashleyn
Sample : icv3623-50
Misc : op93161,e3e3623
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 28 09:56:48 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:55:31 2016
QLast Update : Thu Apr 28 09:55:31 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.534	152	242808	40.00	ppm	0.00
24) Naphthalene-d8	5.599	136	977222	40.00	ppm	0.00
47) Acenaphthene-d10	7.631	164	578835	40.00	ppm	0.00
69) Phenanthrene-d10	9.797	188	974888	40.00	ppm	0.00
83) Chrysene-d12	13.975	240	940245	40.00	ppm	-0.01
92) Perylene-d12	16.087	264	693572	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.534	152	242808	40.00	ppm	0.00
104) Acenaphthene-d10a	7.631	164	578835	40.00	ppm	0.00
106) Phenanthrene-d10a	9.797	188	974888	40.00	ppm	0.00
110) Chrysene-d12a	13.975	240	940245	40.00	ppm	-0.01
112) Naphthalene-d8a	5.599	136	977222	40.00	ppm	0.00
114) Chrysene-d12b	13.975	240	940245	40.00	ppm	-0.01

System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-Chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds						Qvalue
3) Pyridine	2.502	79	329134	52.30	ppm	100
10) Aniline	4.299	93	578760	46.94	ppm	74
16) Benzyl alcohol	4.652	108	253354	47.24	ppm	95
39) 4-Chloroaniline	5.679	127	470004	42.70	ppm	98
44) 2-Methylnaphthalene	6.342	141	721109	47.02	ppm	98
54) 2-Nitroaniline	7.064	65	249409	41.02	ppm	95
58) 3-Nitroaniline	7.610	138	209078	43.63	ppm	98
62) Dibenzofuran	7.920	168	1121670	46.86	ppm	82
68) 4-Nitroaniline	8.476	138	191613	41.60	ppm	92
79) Carbazole	10.198	167	1149453	44.83	ppm	98

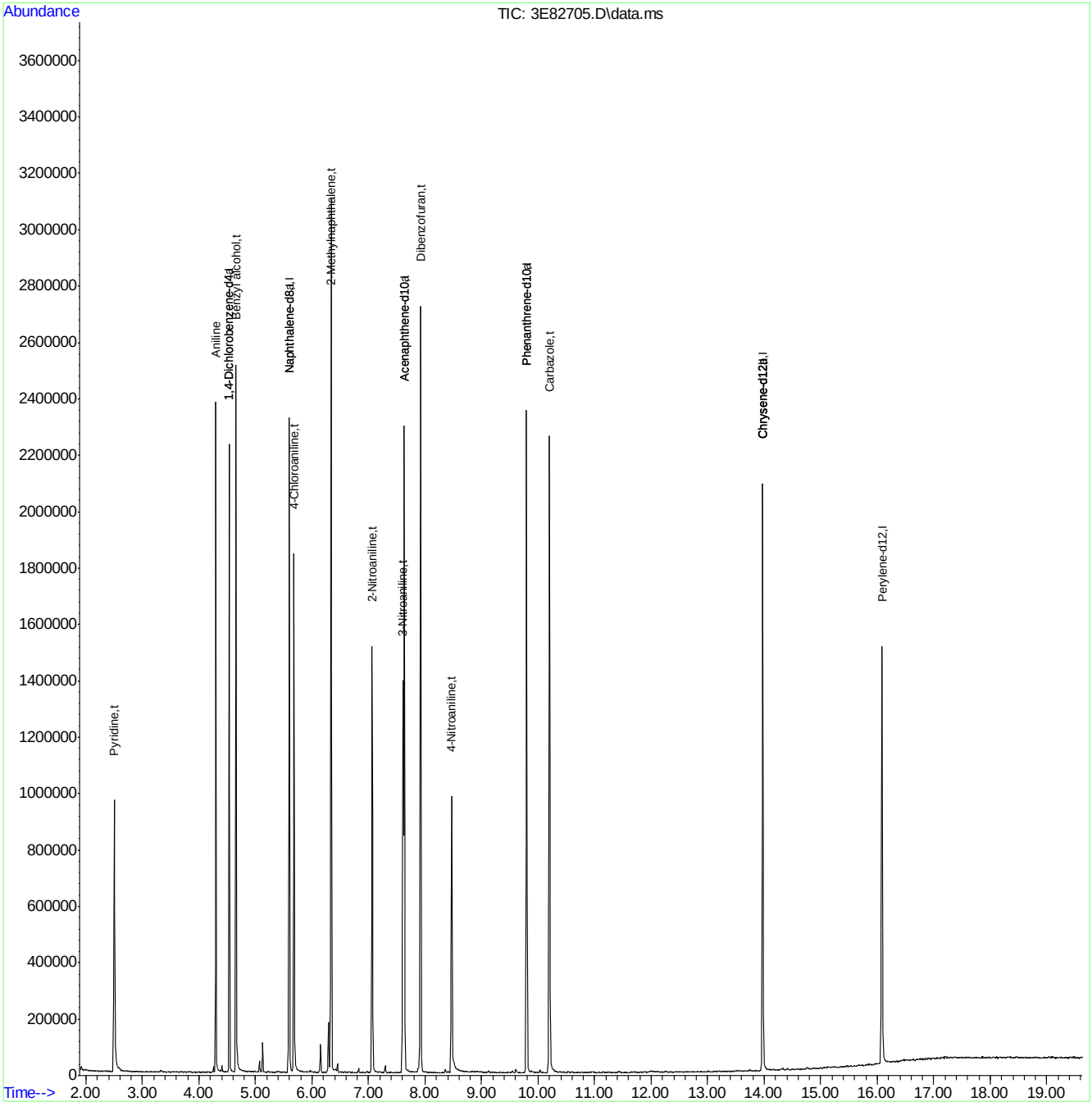
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82705.D
Acq On : 27 Apr 2016 8:01 pm
Operator : ashleyn
Sample : icv3623-50
Misc : op93161,e3e3623
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 28 09:56:48 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:55:31 2016
QLast Update : Thu Apr 28 09:55:31 2016
Response via : Initial Calibration



M3E3623.M Thu Apr 28 09:57:00 2016 MS3E

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82706.D
Acq On : 27 Apr 2016 8:27 pm
Operator : ashleyn
Sample : icv3623-50
Misc : op93161,e3e3623
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 28 09:59:10 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:55:31 2016
QLast Update : Thu Apr 28 09:55:31 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.534	152	294934	40.00 ppm	0.00
24) Naphthalene-d8	5.599	136	1122153	40.00 ppm	0.00
47) Acenaphthene-d10	7.631	164	634276	40.00 ppm	0.00
69) Phenanthrene-d10	9.797	188	1042906	40.00 ppm	0.00
83) Chrysene-d12	13.975	240	1006219	40.00 ppm	-0.01
92) Perylene-d12	16.087	264	917479	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.534	152	294934	40.00 ppm	0.00
104) Acenaphthene-d10a	7.631	164	634276	40.00 ppm	0.00
106) Phenanthrene-d10a	9.797	188	1042906	40.00 ppm	0.00
110) Chrysene-d12a	13.975	240	1006219	40.00 ppm	-0.01
112) Naphthalene-d8a	5.599	136	1122153	40.00 ppm	0.00
114) Chrysene-d12b	13.975	240	1006219	40.00 ppm	-0.01

System Monitoring Compounds					
5) 2-Fluorophenol	3.556	112	386028	42.69 ppm	0.00
Spiked Amount 50.000			Recovery	= 85.38%	
8) Phenol-d5	4.288	99	472410	40.16 ppm	0.00
Spiked Amount 50.000			Recovery	= 80.32%	
25) Nitrobenzene-d5	4.968	82	473886	42.23 ppm	0.00
Spiked Amount 50.000			Recovery	= 84.46%	
51) 2-Fluorobiphenyl	6.775	172	956727	45.48 ppm	0.00
Spiked Amount 50.000			Recovery	= 90.96%	
73) 2,4,6-Tribromophenol	8.760	330	158523	43.10 ppm	0.00
Spiked Amount 50.000			Recovery	= 86.20%	
85) Terphenyl-d14	12.359	244	976576	46.23 ppm	0.00
Spiked Amount 50.000			Recovery	= 92.46%	
108) o-Terphenyl	0.000	230	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
109) 1-Chlorooctadecane	0.000	57	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	

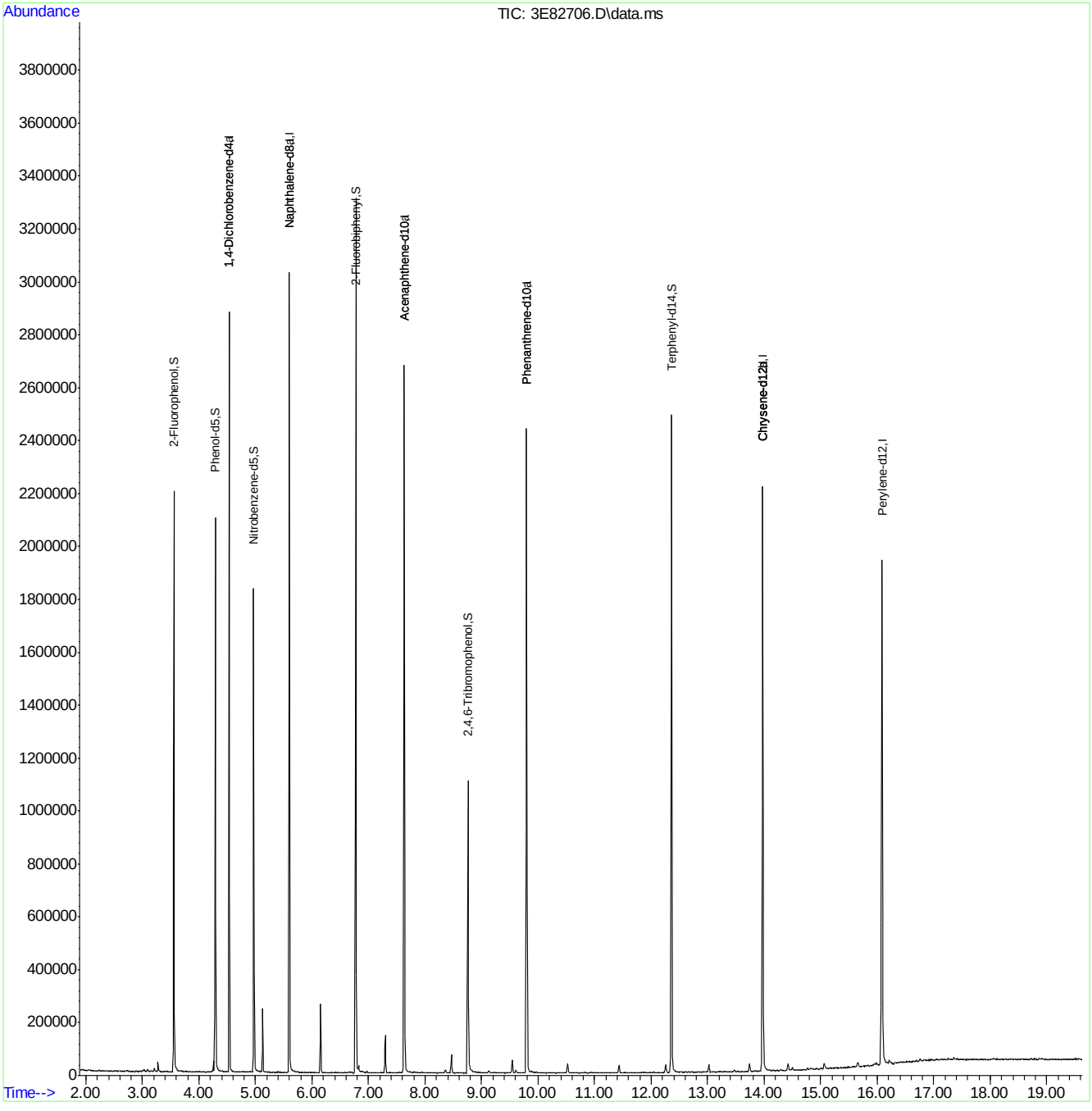
Target Compounds	Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82706.D
Acq On : 27 Apr 2016 8:27 pm
Operator : ashleyn
Sample : icv3623-50
Misc : op93161,e3e3623
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 28 09:59:10 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:55:31 2016
QLast Update : Thu Apr 28 09:55:31 2016
Response via : Initial Calibration



M3E3623.M Thu Apr 28 09:59:18 2016 MS3E

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82707.D
Acq On : 27 Apr 2016 8:53 pm
Operator : ashleyn
Sample : icv3623-50
Misc : op93161,e3e3623
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 28 10:38:48 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 10:34:49 2016
QLast Update : Thu Apr 28 10:34:49 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.534	152	245156	40.00	ppm	0.00
24) Naphthalene-d8	5.599	136	874463	40.00	ppm	0.00
47) Acenaphthene-d10	7.631	164	480121	40.00	ppm	0.00
69) Phenanthrene-d10	9.797	188	773529	40.00	ppm	0.00
83) Chrysene-d12	13.980	240	755367	40.00	ppm	0.00
92) Perylene-d12	16.087	264	606378	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.534	152	245156	40.00	ppm	0.00
104) Acenaphthene-d10a	7.631	164	480121	40.00	ppm	0.00
106) Phenanthrene-d10a	9.797	188	773529	40.00	ppm	0.00
110) Chrysene-d12a	13.980	240	755367	40.00	ppm	0.00
112) Naphthalene-d8a	5.599	136	874463	40.00	ppm	0.00
114) Chrysene-d12b	13.980	240	755367	40.00	ppm	0.00

System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0d	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%			
85) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-Chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds							Qvalue
4) N-Nitrosodimethylamine	2.357	74	178528	49.37	ppm		98
11) bis(2-Chloroethyl)ether	4.342	93	340477	46.31	ppm		97
14) 1,3-Dichlorobenzene	4.492	146	460725	47.43	ppm		100
15) 1,4-Dichlorobenzene	4.545	146	470686	46.17	ppm		100
17) 1,2-Dichlorobenzene	4.657	146	427142	46.52	ppm		99
20) 2,2'-oxybis(1-Chloropr...	4.743	121	121248	40.25	ppm	#	53
22) n-Nitroso-di-n-propyla...	4.850	70	276418	42.93	ppm		96
23) Hexachloroethane	4.925	201	159719	49.00	ppm		93
26) Nitrobenzene	4.984	77	412334	45.66	ppm		97
28) Isophorone	5.187	82	727904	49.66	ppm		99
32) bis(2-Chloroethoxy)met...	5.379	93	364758	45.71	ppm		97
36) 1,2,4-Trichlorobenzene	5.545	180	348581	49.25	ppm		99
38) Naphthalene	5.620	128	1153907	47.73	ppm		99
42) Hexachlorobutadiene	5.732	225	212044	49.99	ppm		99
48) Hexachlorocyclopentadiene	6.513	237	175970	47.49	ppm		98
52) 2-Chloronaphthalene	6.914	162	656450	48.24	ppm		99
55) Dimethylphthalate	7.310	163	754000	47.30	ppm		99
56) Acenaphthylene	7.444	152	1039435	45.76	ppm		97

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82707.D
Acq On : 27 Apr 2016 8:53 pm
Operator : ashleyn
Sample : icv3623-50
Misc : op93161,e3e3623
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 28 10:38:48 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 10:34:49 2016
QLast Update : Thu Apr 28 10:34:49 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
57) 2,6-Dinitrotoluene	7.390	165	168140	47.11 ppm	92
59) Acenaphthene	7.679	153	704636	46.72 ppm	96
63) 2,4-Dinitrotoluene	7.941	165	209749	42.96 ppm	72
65) Diethylphthalate	8.300	149	753475	45.00 ppm	99
66) Fluorene	8.407	166	742158	44.65 ppm	99
67) 4-Chlorophenyl-phenyle...	8.428	204	348265	45.95 ppm	95
71) n-Nitrosodiphenylamine	8.610	169	485872	45.22 ppm	96
72) 1,2-Diphenylhydrazine	8.658	77	744267	46.50 ppm	99
74) 4-Bromophenyl-phenylether	9.150	248	222198	48.32 ppm	94
75) Hexachlorobenzene	9.209	284	256330	46.48 ppm	99
77) Phenanthrene	9.835	178	1012118	45.10 ppm	100
78) Anthracene	9.915	178	991047	44.08 ppm	99
80) Di-n-butylphthalate	10.830	149	1190567	45.31 ppm	99
81) Fluoranthene	11.691	202	1077282	44.26 ppm	99
84) Pyrene	12.038	202	1092155	48.30 ppm	99
86) Butylbenzylphthalate	13.204	149	495725	45.97 ppm	99
88) Benzo[a]anthracene	13.964	228	990248	44.85 ppm	98
90) Chrysene	14.023	228	891994	43.30 ppm	99
91) bis(2-Ethylhexyl)phtha...	14.167	149	631657	45.52 ppm	98
93) Di-n-octylphthalate	15.162	149	1023328	42.07 ppm	98
94) Benzo[b]fluoranthene	15.569	252	885751	43.21 ppm	93
95) Benzo[k]fluoranthene	15.611	252	856958	46.84 ppm	99
96) Benzo[a]pyrene	16.012	252	790344	46.18 ppm	98
97) Indeno[1,2,3-cd]pyrene	17.558	276	787469	48.30 ppm	98
99) Dibenz[a,h]anthracene	17.596	278	761946	47.04 ppm	98
101) Benzo[g,h,i]perylene	17.965	276	722162	45.98 ppm	99

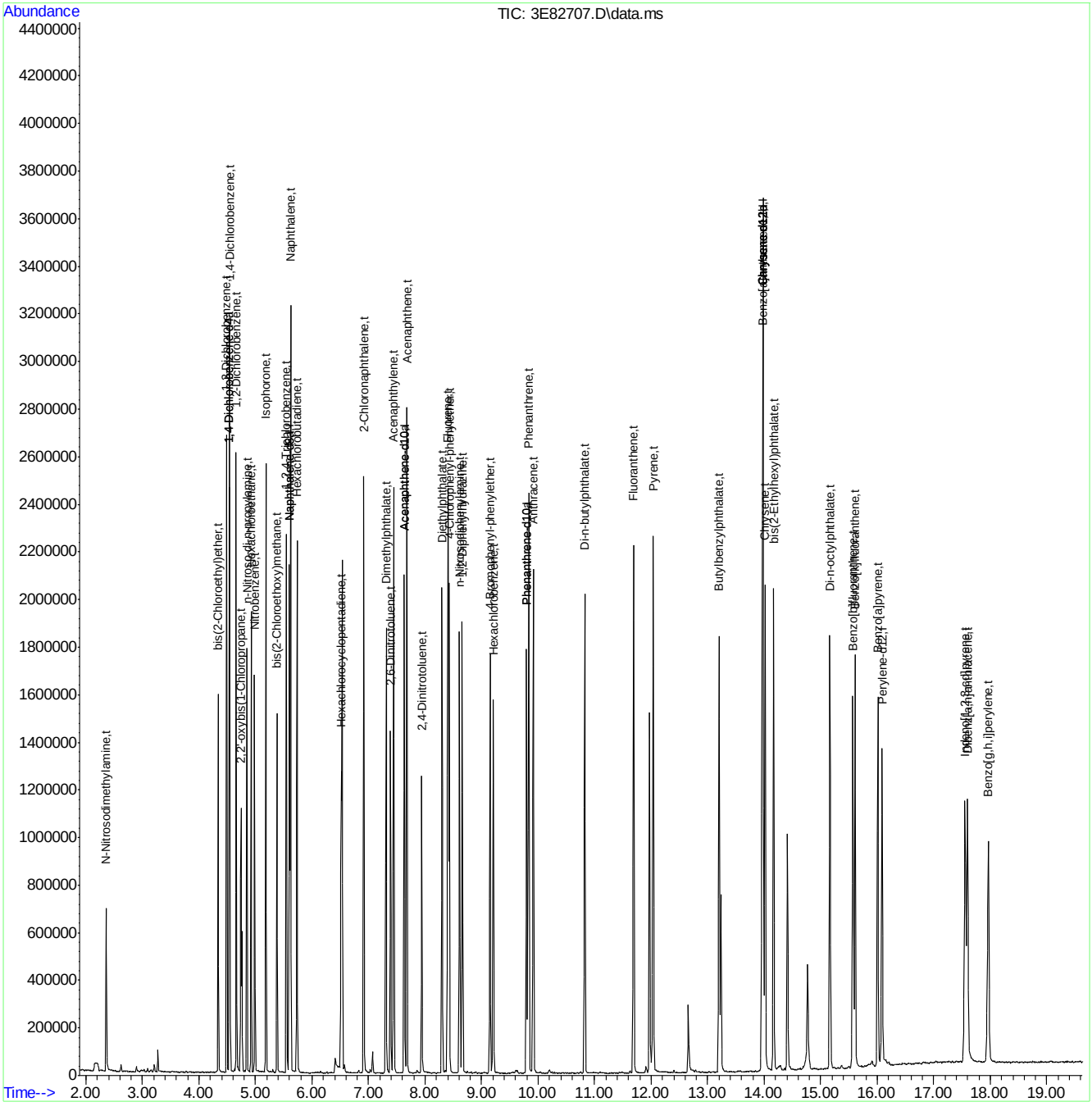
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82707.D
Acq On : 27 Apr 2016 8:53 pm
Operator : ashleyn
Sample : icv3623-50
Misc : op93161,e3e3623
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 28 10:38:48 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 10:34:49 2016
QLast Update : Thu Apr 28 10:34:49 2016
Response via : Initial Calibration



SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82708.D
Acq On : 27 Apr 2016 9:18 pm
Operator : ashleyn
Sample : icv3623-50
Misc : op93161,e3e3623
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 28 10:04:31 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:55:31 2016
QLast Update : Thu Apr 28 09:55:31 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.534	152	235746	40.00 ppm	0.00
24) Naphthalene-d8	5.599	136	889763	40.00 ppm	0.00
47) Acenaphthene-d10	7.631	164	490972	40.00 ppm	0.00
69) Phenanthrene-d10	9.797	188	822120	40.00 ppm	0.00
83) Chrysene-d12	13.975	240	835477	40.00 ppm	-0.01
92) Perylene-d12	16.087	264	680722	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.534	152	235746	40.00 ppm	0.00
104) Acenaphthene-d10a	7.631	164	490972	40.00 ppm	0.00
106) Phenanthrene-d10a	9.797	188	822120	40.00 ppm	0.00
110) Chrysene-d12a	13.975	240	835477	40.00 ppm	-0.01
112) Naphthalene-d8a	5.599	136	889763	40.00 ppm	0.00
114) Chrysene-d12b	13.975	240	835477	40.00 ppm	-0.01

System Monitoring Compounds					
5) 2-Fluorophenol	0.000	112	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
8) Phenol-d5	0.000	99	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
25) Nitrobenzene-d5	0.000	82	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
51) 2-Fluorobiphenyl	0.000	172	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
73) 2,4,6-Tribromophenol	0.000	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
85) Terphenyl-d14	0.000	244	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
108) o-Terphenyl	0.000	230	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
109) 1-Chlorooctadecane	0.000	57	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%

Target Compounds					Qvalue
2) 1,4-Dioxane	2.053	88	105118	48.92 ppm	98
6) Indene	4.727	116	704707	50.11 ppm	98
7) Cumene	3.930	105	1012036	49.20 ppm	98
13) Decane	4.411	43	442492	48.94 ppm	99
18) Acetophenone	4.845	105	526101	44.99 ppm	98
27) Quinoline	5.957	129	744147	48.09 ppm	98
40) 2,3-Dichloroaniline	6.674	161	326418	41.03 ppm	97
41) Caprolactam	6.037	55	139338	41.36 ppm	98
45) 1-Methylnaphthalene	6.454	141	681355	46.78 ppm	99
46) Dimethylnaphthalene	7.091	156	659227	46.76 ppm	99
53) Biphenyl	6.898	154	901152	48.56 ppm	99
82) Octadecane	9.760	57	463250	47.70 ppm	99
100) 7,12-Dimethylbenz(a)an...	15.563	256	262491	25.59 ppm	98

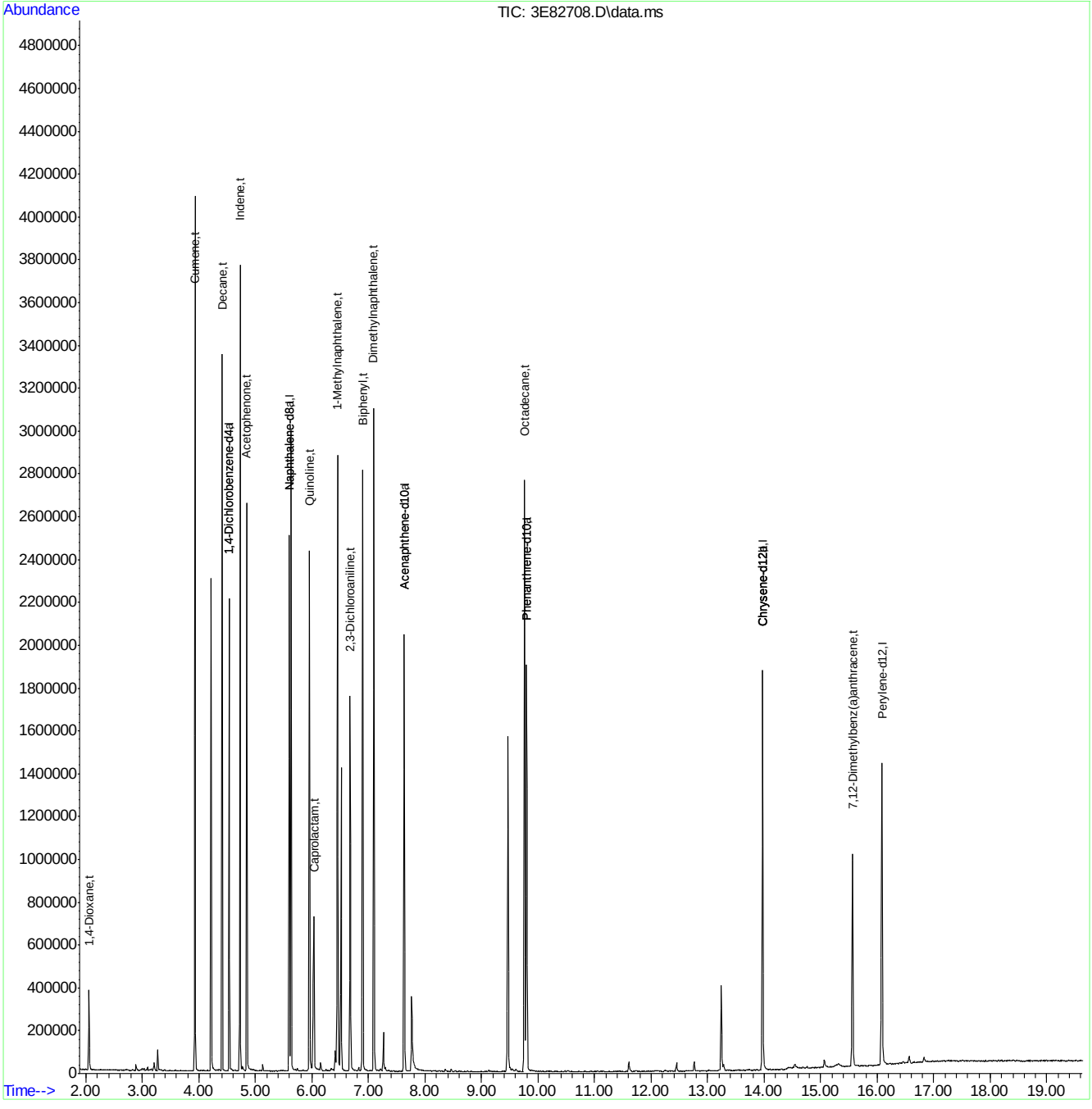
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82708.D
Acq On : 27 Apr 2016 9:18 pm
Operator : ashleyn
Sample : icv3623-50
Misc : op93161,e3e3623
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 28 10:04:31 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:55:31 2016
QLast Update : Thu Apr 28 09:55:31 2016
Response via : Initial Calibration



M3E3623.M Thu Apr 28 10:05:22 2016 MS3E Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82709.D
Acq On : 27 Apr 2016 9:44 pm
Operator : ashleyn
Sample : icv3623-50
Misc : op93161,e3e3623
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 28 10:06:10 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:55:31 2016
QLast Update : Thu Apr 28 09:55:31 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.534	152	183200	40.00	ppm	0.00
24) Naphthalene-d8	5.599	136	721250	40.00	ppm	0.00
47) Acenaphthene-d10	7.631	164	436095	40.00	ppm	0.00
69) Phenanthrene-d10	9.797	188	765816	40.00	ppm	0.00
83) Chrysene-d12	13.975	240	856539	40.00	ppm	-0.01
92) Perylene-d12	16.087	264	840907	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.534	152	183200	40.00	ppm	0.00
104) Acenaphthene-d10a	7.631	164	436095	40.00	ppm	0.00
106) Phenanthrene-d10a	9.797	188	765816	40.00	ppm	0.00
110) Chrysene-d12a	13.975	240	856539	40.00	ppm	-0.01
112) Naphthalene-d8a	5.599	136	721250	40.00	ppm	0.00
114) Chrysene-d12b	13.975	240	856539	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%			
85) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-Chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds						Qvalue
89) 3,3'-Dichlorobenzidine	13.980	252	452494	48.60	ppm	98

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

7.6.26

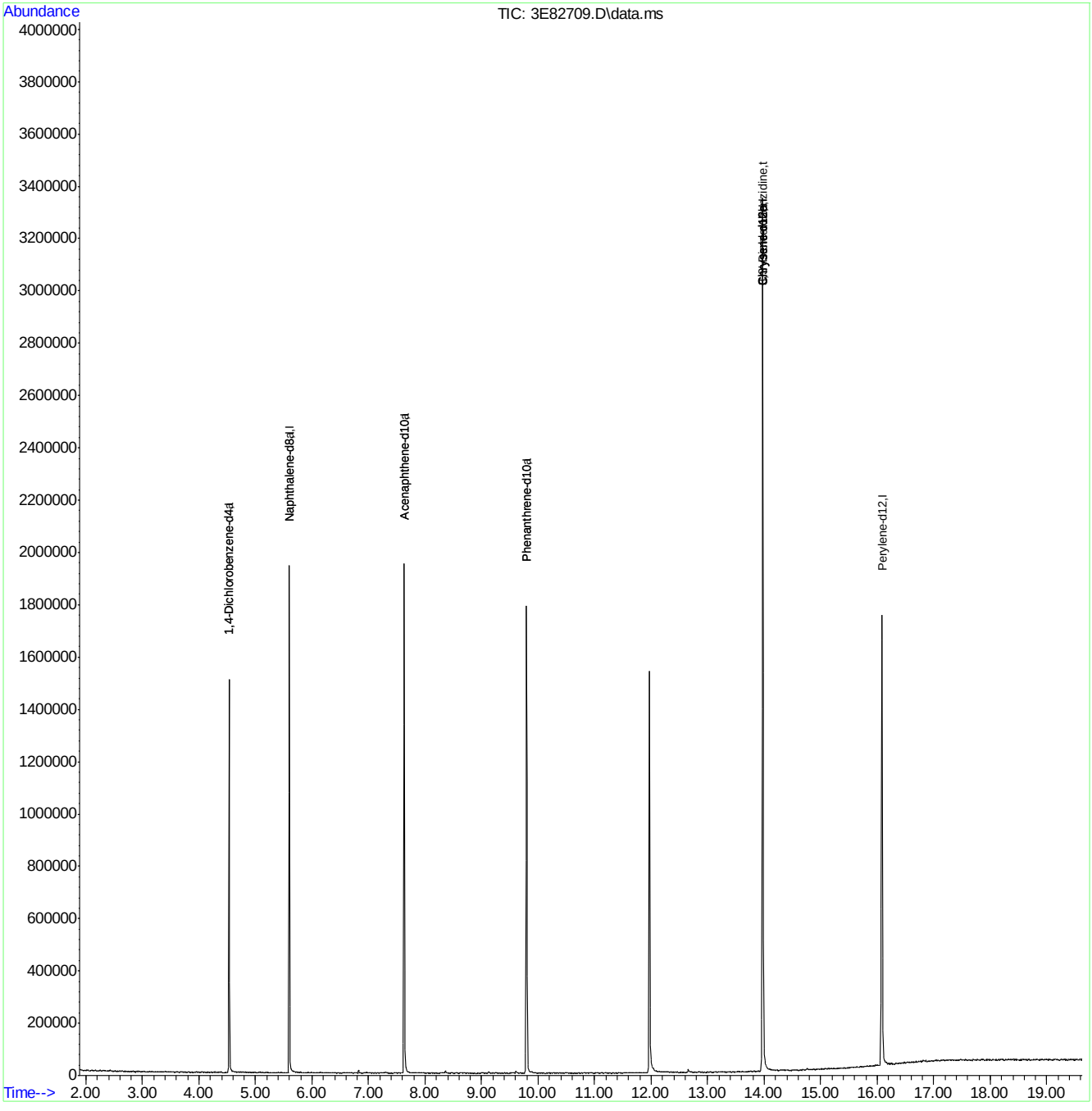
7

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3623\
Data File : 3E82709.D
Acq On : 27 Apr 2016 9:44 pm
Operator : ashleyn
Sample : icv3623-50
Misc : op93161,e3e3623
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 28 10:06:10 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 09:55:31 2016
QLast Update : Thu Apr 28 09:55:31 2016
Response via : Initial Calibration



M3E3623.M Thu Apr 28 10:06:17 2016 MS3E

Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3637\
Data File : 3E82973.D
Acq On : 6 May 2016 12:32 pm
Operator : ashleyn
Sample : cc3623-50
Misc : op93596,e3e3637
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 06 14:22:55 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MFri May 06 14:22:02 2016
QLast Update : Fri May 06 14:22:02 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.449	152	132791	40.00	ppm	-0.02
24) Naphthalene-d8	5.497	136	473996	40.00	ppm	-0.11
47) Acenaphthene-d10	7.508	164	291527	40.00	ppm	-0.11
69) Phenanthrene-d10	9.669	188	490915	40.00	ppm	-0.08
83) Chrysene-d12	13.846	240	523762	40.00	ppm	-0.09
92) Perylene-d12	15.954	264	369592	40.00	ppm	-0.14
102) 1,4-Dichlorobenzene-d4a	4.449	152	132791	40.00	ppm	-0.09
104) Acenaphthene-d10a	7.508	164	291527	40.00	ppm	-0.11
106) Phenanthrene-d10a	9.669	188	490915	40.00	ppm	-0.08
108) Chrysene-d12a	13.846	240	523762	40.00	ppm	-0.14
110) Naphthalene-d8a	5.497	136	473996	40.00	ppm	-0.05
System Monitoring Compounds						
5) 2-Fluorophenol	3.513	112	177307	43.55	ppm	0.02
Spiked Amount 50.000			Recovery	=	87.10%	
8) Phenol-d5	4.256	99	225006	42.48	ppm	0.03
Spiked Amount 50.000			Recovery	=	84.96%	
25) Nitrobenzene-d5	4.882	82	232758	49.10	ppm	-0.09
Spiked Amount 50.000			Recovery	=	98.20%	
51) 2-Fluorobiphenyl	6.658	172	489570	50.64	ppm	-0.10
Spiked Amount 50.000			Recovery	=	101.28%	
73) 2,4,6-Tribromophenol	8.647	330	85996	49.67	ppm	-0.07
Spiked Amount 50.000			Recovery	=	99.34%	
85) Terphenyl-d14	12.226	244	562106	51.12	ppm	-0.09
Spiked Amount 50.000			Recovery	=	102.24%	

Target Compounds							Qvalue
2) 1,4-Dioxane	1.903	88	49305	40.72	ppm		90
3) Pyridine	2.256	79	137784	40.03	ppm		89
4) N-Nitrosodimethylamine	2.224	74	78988	40.33	ppm		89
6) Indene	4.636	116	337764	42.64	ppm		97
7) Cumene	3.839	105	492304	42.49	ppm		95
9) Phenol	4.267	94	232726	40.09	ppm		96
10) Aniline	4.208	93	260085	38.57	ppm		80
11) bis(2-Chloroethyl)ether	4.256	93	167563	42.08	ppm		95
12) 2-Chlorophenol	4.320	128	219653	45.65	ppm		98
13) Decane	4.320	43	210452	41.32	ppm		94
14) 1,3-Dichlorobenzene	4.401	146	249098	47.35	ppm		96
15) 1,4-Dichlorobenzene	4.459	146	250927	45.44	ppm		99
16) Benzyl alcohol	4.572	108	127474	43.46	ppm		97
17) 1,2-Dichlorobenzene	4.572	146	235336	47.32	ppm		100
18) Acetophenone	4.759	105	287847	43.70	ppm		97
19) 2-Methylphenol	4.695	108	170473	41.89	ppm		98
20) 2,2'-oxybis(1-Chloropr...	4.657	121	69560	42.63	ppm	#	77
21) 3&4-Methylphenol	4.812	108	179430	41.96	ppm		100
22) n-Nitroso-di-n-propyla...	4.764	70	147231	42.22	ppm		87
23) Hexachloroethane	4.829	201	99510	56.36	ppm		89
26) Nitrobenzene	4.898	77	232650	47.52	ppm		96
27) Quinoline	5.855	129	399801	48.50	ppm		98
28) Isophorone	5.096	82	369907	46.55	ppm		93

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3637\
Data File : 3E82973.D
Acq On : 6 May 2016 12:32 pm
Operator : ashleyn
Sample : cc3623-50
Misc : op93596,e3e3637
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 06 14:22:55 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MFri May 06 14:22:02 2016
QLast Update : Fri May 06 14:22:02 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
29) 2-Nitrophenol	5.165	139	119989	47.89 ppm	#	68
30) 2,4-Dimethylphenol	5.230	107	216764	50.27 ppm		100
31) Benzoic acid	5.369	105	149140	46.94 ppm		94
32) bis(2-Chloroethoxy)met...	5.283	93	198708	45.94 ppm		98
33) 2,4-Dichlorophenol	5.417	162	184668	54.92 ppm		97
34) 2,6-Dichlorophenol	5.599	162	180965	52.69 ppm		97
35) 1,3,5-Trichlorobenzene	5.165	180	221692	54.54 ppm		98
36) 1,2,4-Trichlorobenzene	5.449	180	208947	54.46 ppm		98
37) 1,2,3-Trichlorobenzene	5.658	180	196486	53.19 ppm		95
38) Naphthalene	5.518	128	614006	46.85 ppm		97
39) 4-Chloroaniline	5.588	127	250735	46.96 ppm		98
40) 2,3-Dichloroaniline	6.567	161	225186	53.13 ppm		98
41) Caprolactam	5.957	55	80064	44.61 ppm		99
42) Hexachlorobutadiene	5.631	225	139755	60.78 ppm		97
43) 4-Chloro-3-methylphenol	6.150	107	184604	48.12 ppm		99
44) 2-Methylnaphthalene	6.230	141	382732	51.45 ppm		94
45) 1-Methylnaphthalene	6.337	141	393736	50.74 ppm		95
46) Dimethylnaphthalene	6.973	156	398057	53.01 ppm		95
48) Hexachlorocyclopentadiene	6.396	237	251930	102.94 ppm		99
49) 2,4,6-Trichlorophenol	6.588	196	137556	52.04 ppm		99
50) 2,4,5-Trichlorophenol	6.684	196	143119	48.62 ppm		94
52) 2-Chloronaphthalene	6.802	162	404097	48.90 ppm		99
53) Biphenyl	6.781	154	536005	48.64 ppm		98
54) 2-Nitroaniline	6.957	65	151061	49.33 ppm		95
55) Dimethylphthalate	7.193	163	475633	49.13 ppm		98
56) Acenaphthylene	7.321	152	671069	48.66 ppm		99
57) 2,6-Dinitrotoluene	7.278	165	105755	48.80 ppm		91
58) 3-Nitroaniline	7.503	138	109014	45.17 ppm		88
59) Acenaphthene	7.556	153	446306	48.73 ppm		96
60) 2,4-Dinitrophenol	7.669	184	108331	94.38 ppm		93
61) 4-Nitrophenol	7.947	109	74783	47.98 ppm		92
62) Dibenzofuran	7.797	168	582299	48.30 ppm		90
63) 2,4-Dinitrotoluene	7.834	165	151397	51.07 ppm		93
64) 2,3,4,6-Tetrachlorophenol	8.011	232	108315	49.63 ppm		94
65) Diethylphthalate	8.177	149	513730	50.53 ppm		99
66) Fluorene	8.278	166	499885	49.53 ppm		99
67) 4-Chlorophenyl-phenyle...	8.300	204	244358	53.10 ppm		97
68) 4-Nitroaniline	8.369	138	111021	47.85 ppm	#	73
70) 4,6-Dinitro-2-methylph...	8.423	198	89370	49.57 ppm		94
71) n-Nitrosodiphenylamine	8.492	169	339451	49.78 ppm		98
72) 1,2-Diphenylhydrazine	8.535	77	486159	47.86 ppm		96
74) 4-Bromophenyl-phenylether	9.016	248	154299	52.87 ppm		94
75) Hexachlorobenzene	9.081	284	179019	51.15 ppm		94
76) Pentachlorophenol	9.439	266	128781	77.30 ppm		95
77) Phenanthrene	9.701	178	683974	48.02 ppm		99
78) Anthracene	9.781	178	695032	48.71 ppm		97
79) Carbazole	10.081	167	621741	48.16 ppm		98
80) Di-n-butylphthalate	10.696	149	820532	49.21 ppm		98
81) Fluoranthene	11.557	202	796644	51.57 ppm		97
82) Octadecane	9.626	57	252573	43.55 ppm		94

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3637\
Data File : 3E82973.D
Acq On : 6 May 2016 12:32 pm
Operator : ashleyn
Sample : cc3623-50
Misc : op93596,e3e3637
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 06 14:22:55 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MFri May 06 14:22:02 2016
QLast Update : Fri May 06 14:22:02 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
84) Pyrene	11.905	202	821184	52.38 ppm	98
86) Butylbenzylphthalate	13.071	149	365374	48.87 ppm	98
87) Butyl stearate	13.247	56	176509	44.96 ppm	89
88) Benzo[a]anthracene	13.830	228	749776	48.98 ppm	99
89) 3,3'-Dichlorobenzidine	13.852	252	287530	50.51 ppm	98
90) Chrysene	13.889	228	695954	48.72 ppm	98
91) bis(2-Ethylhexyl)phtha...	14.034	149	447559	46.51 ppm	98
93) Di-n-octylphthalate	15.028	149	716551	47.62 ppm	98
94) Benzo[b]fluoranthene	15.446	252	661038	52.91 ppm	97
95) Benzo[k]fluoranthene	15.483	252	573741	51.46 ppm	97
96) Benzo[a]pyrene	15.879	252	525895	50.42 ppm	97
97) Indeno[1,2,3-cd]pyrene	17.398	276	520990	52.43 ppm	87
98) Dibenz(a,h)acridine	17.077	279	452644	48.39 ppm	99
99) Dibenz[a,h]anthracene	17.430	278	517704	52.44 ppm	98
100) 7,12-Dimethylbenz(a)an...	15.435	256	298415	53.58 ppm	97
101) Benzo[g,h,i]perylene	17.788	276	507322	52.99 ppm	98

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

7.6.27

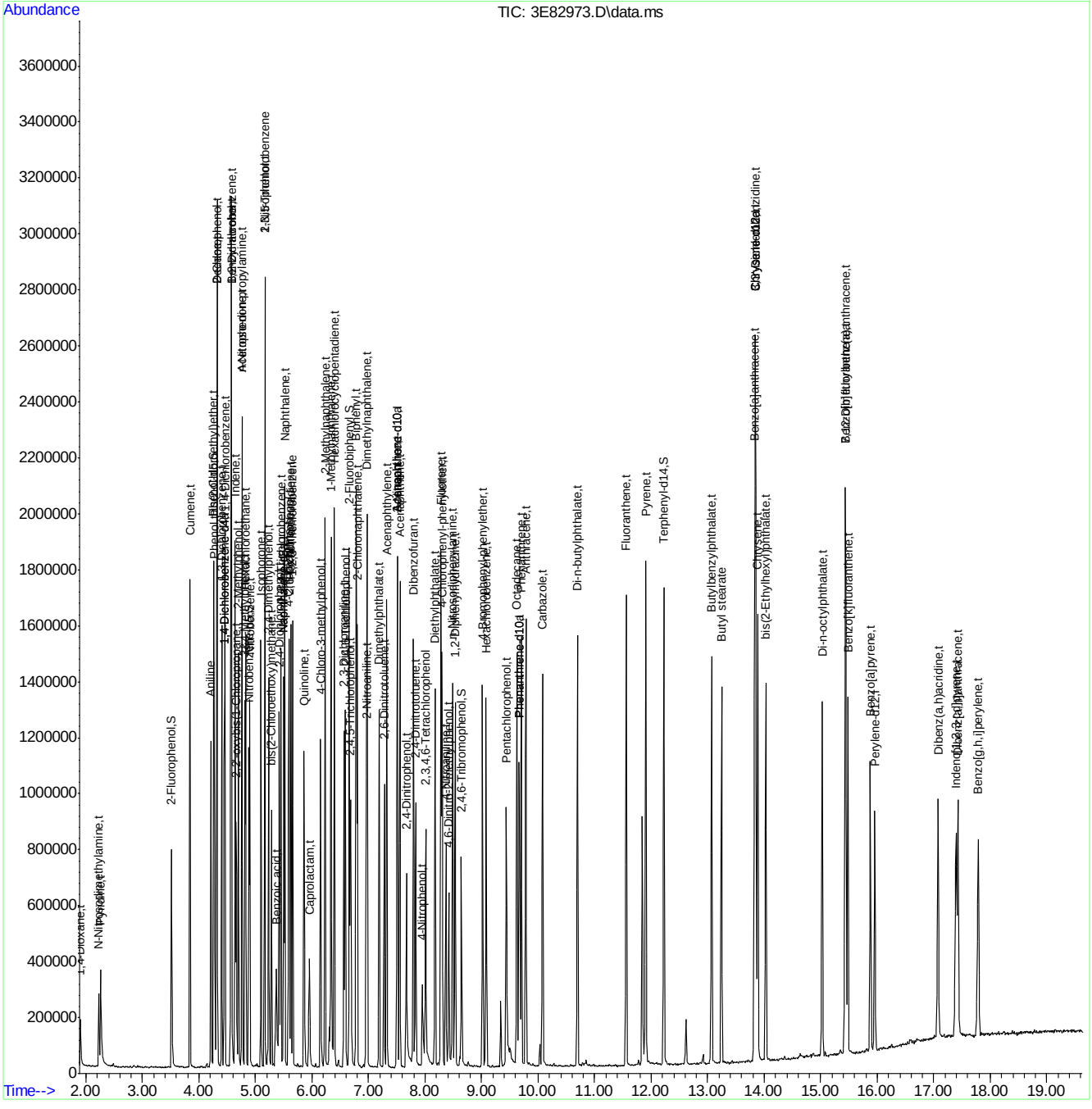
7

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3637\
Data File : 3E82973.D
Acq On : 6 May 2016 12:32 pm
Operator : ashleyn
Sample : cc3623-50
Misc : op93596,e3e3637
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 06 14:22:55 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MFri May 06 14:22:02 2016
QLast Update : Fri May 06 14:22:02 2016
Response via : Initial Calibration



SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3637\
Data File : 3E82974.D
Acq On : 6 May 2016 1:01 pm
Operator : ashleyn
Sample : cc3621-50
Misc : op93596,e3e3637
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 14:24:17 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MFri May 06 14:22:02 2016
QLast Update : Fri May 06 14:23:29 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.444	152	157031	40.00	ppm	-0.02
24) Naphthalene-d8	5.497	136	593067	40.00	ppm	-0.11
47) Acenaphthene-d10	7.508	164	358242	40.00	ppm	-0.11
69) Phenanthrene-d10	9.664	188	660113	40.00	ppm	-0.09
83) Chrysene-d12	13.841	240	703510	40.00	ppm	-0.09
92) Perylene-d12	15.954	264	534302	40.00	ppm	-0.14
102) 1,4-Dichlorobenzene-d4a	4.444	152	157031	40.00	ppm	-0.10
104) Acenaphthene-d10a	7.508	164	358242	40.00	ppm	-0.11
106) Phenanthrene-d10a	9.664	188	660113	40.00	ppm	-0.09
108) Chrysene-d12a	13.841	240	703510	40.00	ppm	-0.15
110) Naphthalene-d8a	5.497	136	593067	40.00	ppm	-0.05

System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	

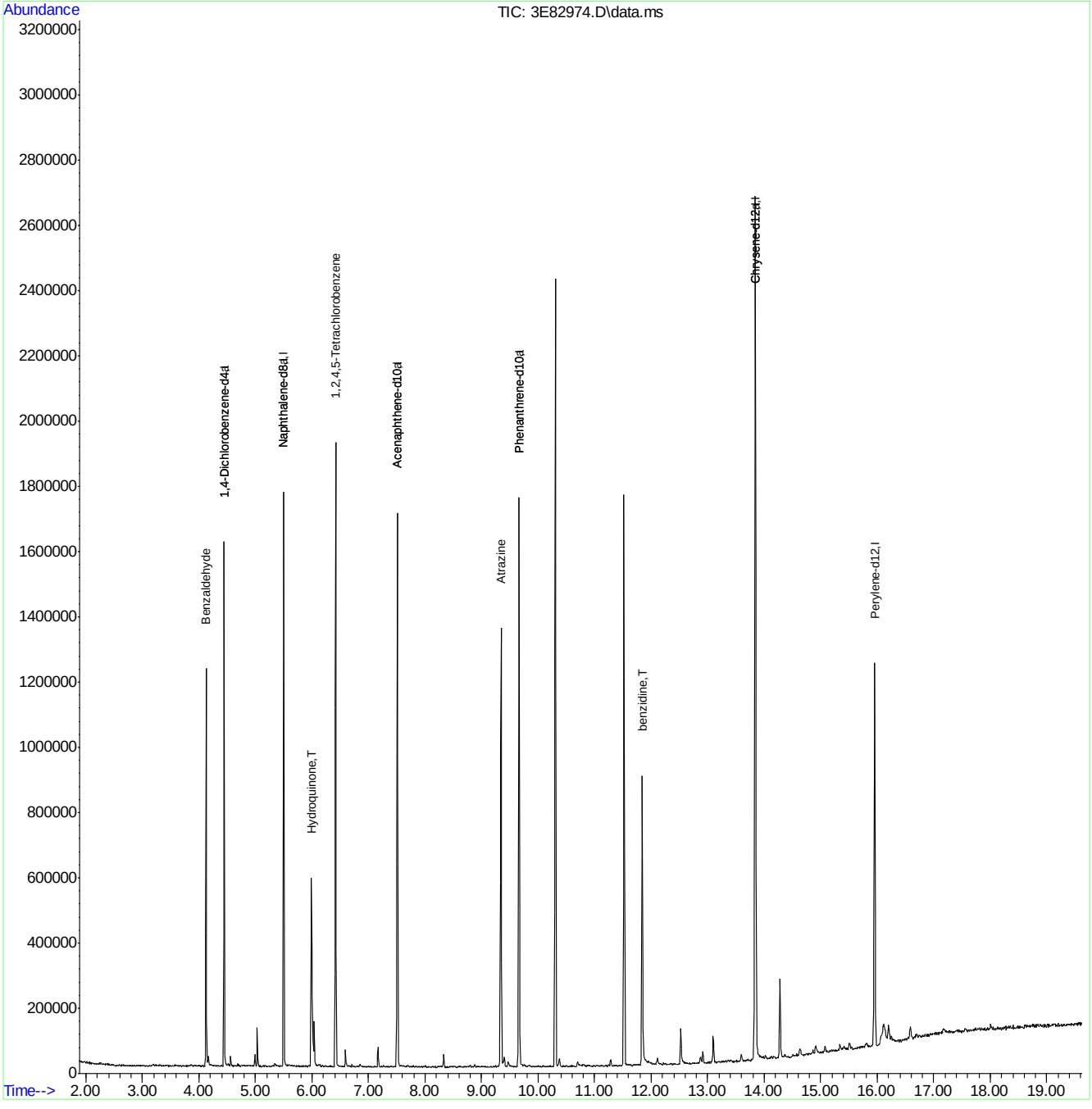
Target Compounds							Qvalue
103) Benzaldehyde	4.123	105	143680	33.76	ppm	#	79
105) 1,2,4,5-Tetrachloroben...	6.417	216	276537	62.35	ppm		99
107) Atrazine	9.343	215	100331	59.72	ppm	#	86
109) benzidine	11.841	184	389001	44.92	ppm		96
111) Hydroquinone	5.989	110	215057	52.74	ppm		59

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3637\
Data File : 3E82974.D
Acq On : 6 May 2016 1:01 pm
Operator : ashleyn
Sample : cc3621-50
Misc : op93596,e3e3637
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 14:24:17 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MFri May 06 14:22:02 2016
QLast Update : Fri May 06 14:23:29 2016
Response via : Initial Calibration



M3E3623.M Fri May 06 14:24:21 2016 MS3E

SGS ACCUTEST JC19644

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
05/09/16 13:13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3639\
Data File : 3E82997.D
Acq On : 9 May 2016 9:40 am
Operator : ashleyn
Sample : cc3623-25
Misc : op93596,e3e3639
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 09 11:58:42 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MFri May 06 22:35:22 2016
QLast Update : Fri May 06 22:35:22 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.454	152	157118	40.00	ppm	0.04
24) Naphthalene-d8	5.508	136	568497	40.00	ppm	0.05
47) Acenaphthene-d10	7.519	164	375060	40.00	ppm	0.06
69) Phenanthrene-d10	9.674	188	665277	40.00	ppm	0.06
83) Chrysene-d12	13.846	240	727832	40.00	ppm	0.06
92) Perylene-d12	15.959	264	600260	40.00	ppm	0.06
102) 1,4-Dichlorobenzene-d4a	4.454	152	157118	40.00	ppm	0.04
104) Acenaphthene-d10a	7.519	164	375060	40.00	ppm	0.06
106) Phenanthrene-d10a	9.674	188	665277	40.00	ppm	0.06
108) Chrysene-d12a	13.846	240	727832	40.00	ppm	0.06
110) Naphthalene-d8a	5.508	136	568497	40.00	ppm	0.05
System Monitoring Compounds						
5) 2-Fluorophenol	3.529	112	109879	22.81	ppm	0.07
Spiked Amount 50.000			Recovery = 45.62%			
8) Phenol-d5	4.267	99	136193	21.73	ppm	0.09
Spiked Amount 50.000			Recovery = 43.46%			
25) Nitrobenzene-d5	4.887	82	136663	24.04	ppm	0.04
Spiked Amount 50.000			Recovery = 48.08%			
51) 2-Fluorobiphenyl	6.668	172	322365	25.92	ppm	0.05
Spiked Amount 50.000			Recovery = 51.84%			
73) 2,4,6-Tribromophenol	8.647	330	60393	25.74	ppm	0.05
Spiked Amount 50.000			Recovery = 51.48%			
85) Terphenyl-d14	12.231	244	396029	25.92	ppm	0.05
Spiked Amount 50.000			Recovery = 51.84%			

Target Compounds						Qvalue
2) 1,4-Dioxane	1.924	88	37573	26.23	ppm	92
3) Pyridine	2.277	79	81499	20.01	ppm	93
4) N-Nitrosodimethylamine	2.245	74	46980	20.27	ppm	82
6) Indene	4.647	116	212772	22.70	ppm	97
7) Cumene	3.850	105	301458	21.99	ppm	98
9) Phenol	4.277	94	139401	20.29	ppm	95
10) Aniline	4.219	93	163708	20.52	ppm	75
11) bis(2-Chloroethyl)ether	4.267	93	100555	21.34	ppm	98
12) 2-Chlorophenol	4.331	128	132502	23.27	ppm	93
13) Decane	4.331	43	115429	19.15	ppm	99
14) 1,3-Dichlorobenzene	4.411	146	154623	24.84	ppm	98
15) 1,4-Dichlorobenzene	4.470	146	155489	23.80	ppm	98
16) Benzyl alcohol	4.577	108	77555	22.35	ppm	89
17) 1,2-Dichlorobenzene	4.582	146	147737	25.11	ppm	98
18) Acetophenone	4.770	105	174212	22.35	ppm	96
19) 2-Methylphenol	4.700	108	102708	21.33	ppm	99
20) 2,2'-oxybis(1-Chloropr...	4.668	121	45955	23.80	ppm #	85
21) 3&4-Methylphenol	4.823	108	116731	23.07	ppm	95
22) n-Nitroso-di-n-propyla...	4.770	70	86246	20.90	ppm	99
23) Hexachloroethane	4.839	201	62348	29.84	ppm	85
26) Nitrobenzene	4.903	77	135850	23.14	ppm	99
27) Quinoline	5.861	129	255101	25.80	ppm	98
28) Isophorone	5.101	82	224735	23.58	ppm	99

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3639\
Data File : 3E82997.D
Acq On : 9 May 2016 9:40 am
Operator : ashleyn
Sample : cc3623-25
Misc : op93596,e3e3639
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 09 11:58:42 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MFri May 06 22:35:22 2016
QLast Update : Fri May 06 22:35:22 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
29) 2-Nitrophenol	5.171	139	73227	24.37 ppm	#	75
30) 2,4-Dimethylphenol	5.240	107	134241	25.96 ppm		98
31) Benzoic acid	5.353	105	84148m	22.08 ppm		
32) bis(2-Chloroethoxy)met...	5.288	93	118558	22.85 ppm		97
33) 2,4-Dichlorophenol	5.427	162	114961	28.50 ppm		96
34) 2,6-Dichlorophenol	5.604	162	117304	28.48 ppm		93
35) 1,3,5-Trichlorobenzene	5.171	180	142076	29.14 ppm		99
36) 1,2,4-Trichlorobenzene	5.454	180	132575	28.81 ppm		100
37) 1,2,3-Trichlorobenzene	5.668	180	130013	29.34 ppm		97
38) Naphthalene	5.529	128	391095	24.88 ppm		98
39) 4-Chloroaniline	5.593	127	157855	24.65 ppm		95
40) 2,3-Dichloroaniline	6.572	161	143906	28.31 ppm		97
41) Caprolactam	5.952	55	46046	21.39 ppm		90
42) Hexachlorobutadiene	5.636	225	90827	32.94 ppm		99
43) 4-Chloro-3-methylphenol	6.155	107	114917	24.98 ppm	#	68
44) 2-Methylnaphthalene	6.235	141	239336	26.83 ppm		97
45) 1-Methylnaphthalene	6.347	141	246813	26.52 ppm		95
46) Dimethylnaphthalene	6.979	156	251809	27.96 ppm		97
48) Hexachlorocyclopentadiene	6.406	237	122682	43.01 ppm		96
49) 2,4,6-Trichlorophenol	6.593	196	94509	27.79 ppm		97
50) 2,4,5-Trichlorophenol	6.690	196	93112	24.58 ppm		96
52) 2-Chloronaphthalene	6.807	162	262401	24.68 ppm		98
53) Biphenyl	6.786	154	346038	24.41 ppm		98
54) 2-Nitroaniline	6.963	65	84755	21.51 ppm		92
55) Dimethylphthalate	7.198	163	320222	25.71 ppm		100
56) Acenaphthylene	7.326	152	431389	24.31 ppm		97
57) 2,6-Dinitrotoluene	7.278	165	68987	24.74 ppm		99
58) 3-Nitroaniline	7.508	138	72250	23.27 ppm		94
59) Acenaphthene	7.562	153	279383	23.71 ppm		94
60) 2,4-Dinitrophenol	7.674	184	59248	44.96 ppm		93
61) 4-Nitrophenol	7.984	109	48007m	23.94 ppm		
62) Dibenzofuran	7.802	168	395902	25.53 ppm		86
63) 2,4-Dinitrotoluene	7.834	165	97911	25.67 ppm		95
64) 2,3,4,6-Tetrachlorophenol	8.016	232	71998	25.64 ppm		94
65) Diethylphthalate	8.182	149	334553	25.58 ppm		97
66) Fluorene	8.284	166	334575	25.77 ppm		98
67) 4-Chlorophenyl-phenyle...	8.305	204	167815	28.34 ppm		96
68) 4-Nitroaniline	8.369	138	72885	24.42 ppm		83
70) 4,6-Dinitro-2-methylph...	8.423	198	56047	24.55 ppm		90
71) n-Nitrosodiphenylamine	8.492	169	226762	24.54 ppm		93
72) 1,2-Diphenylhydrazine	8.535	77	290791	21.13 ppm		93
74) 4-Bromophenyl-phenylether	9.027	248	108311	27.39 ppm		91
75) Hexachlorobenzene	9.086	284	130138	27.44 ppm		98
76) Pentachlorophenol	9.444	266	82905	36.72 ppm		95
77) Phenanthrene	9.706	178	454309	23.54 ppm		99
78) Anthracene	9.787	178	461530	23.87 ppm		100
79) Carbazole	10.086	167	413867	23.65 ppm		99
80) Di-n-butylphthalate	10.701	149	524386	23.21 ppm		99
81) Fluoranthene	11.562	202	545616	26.06 ppm		95
82) Octadecane	9.631	57	154225	19.62 ppm		96

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3639\
Data File : 3E82997.D
Acq On : 9 May 2016 9:40 am
Operator : ashleyn
Sample : cc3623-25
Misc : op93596,e3e3639
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 09 11:58:42 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MFri May 06 22:35:22 2016
QLast Update : Fri May 06 22:35:22 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
84) Pyrene	11.910	202	550923	25.29 ppm	99
86) Butylbenzylphthalate	13.076	149	229507	22.09 ppm	94
87) Butyl stearate	13.247	56	100426	18.41 ppm	82
88) Benzo[a]anthracene	13.830	228	508706	23.91 ppm	98
89) 3,3'-Dichlorobenzidine	13.852	252	201196	25.43 ppm	98
90) Chrysene	13.884	228	474900	23.92 ppm	99
91) bis(2-Ethylhexyl)phtha...	14.033	149	291012	21.76 ppm	96
93) Di-n-octylphthalate	15.028	149	487570	21.66 ppm	96
94) Benzo[b]fluoranthene	15.440	252	512993	25.28 ppm	99
95) Benzo[k]fluoranthene	15.478	252	482160	26.62 ppm	98
96) Benzo[a]pyrene	15.879	252	429602	25.36 ppm	97
97) Indeno[1,2,3-cd]pyrene	17.392	276	365909	22.67 ppm	87
98) Dibenz(a,h)acridine	17.077	279	351869	23.16 ppm	99
99) Dibenz[a,h]anthracene	17.424	278	373582	23.30 ppm	95
100) 7,12-Dimethylbenz(a)an...	15.435	256	239299	26.45 ppm	99
101) Benzo[g,h,i]perylene	17.783	276	363299	23.36 ppm	95

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

7.6.29

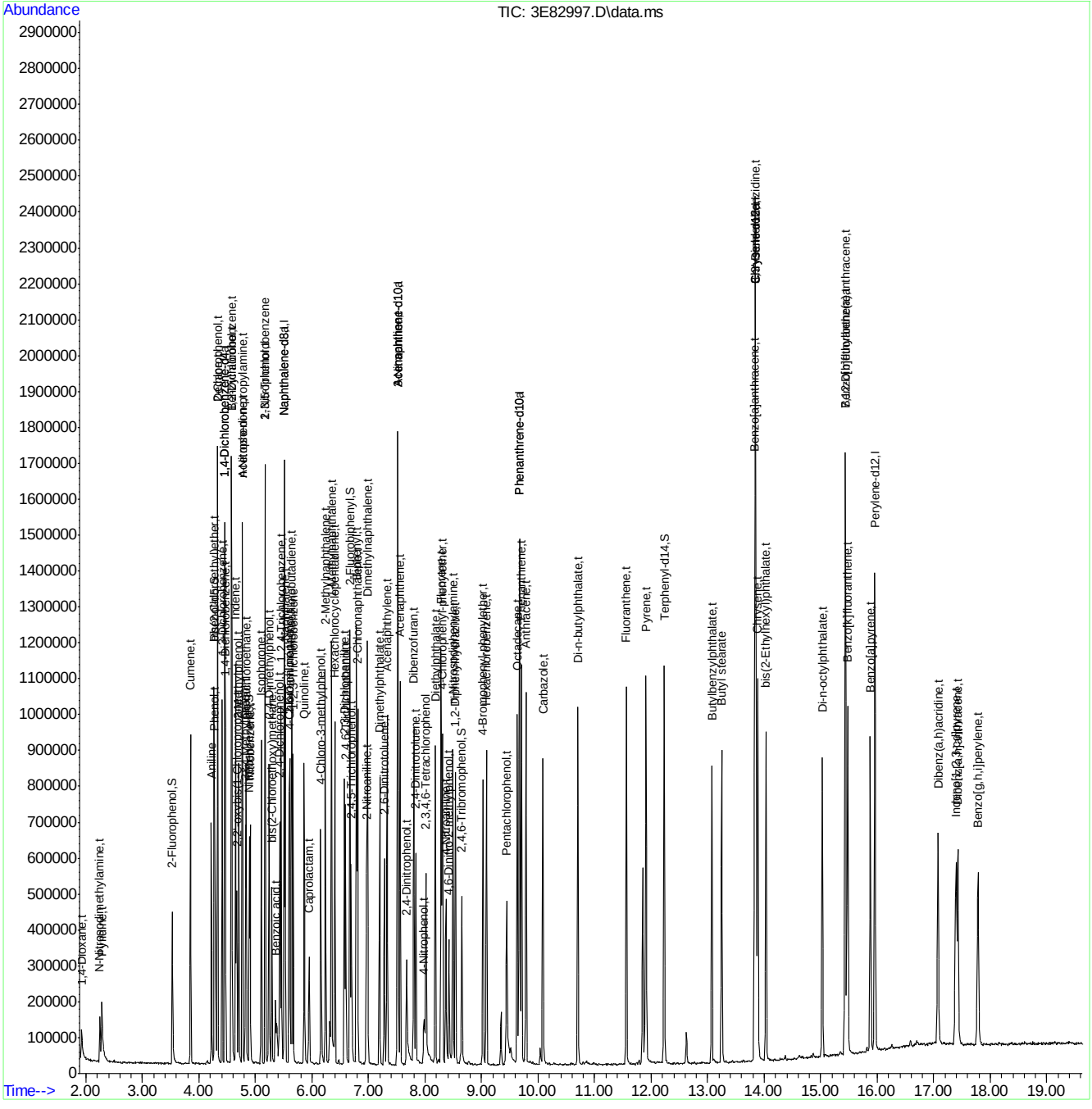
7

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3639\
Data File : 3E82997.D
Acq On : 9 May 2016 9:40 am
Operator : ashleyn
Sample : cc3623-25
Misc : op93596,e3e3639
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 09 11:58:42 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MFri May 06 22:35:22 2016
QLast Update : Fri May 06 22:35:22 2016
Response via : Initial Calibration



SGS ACCUTEST JC19644

Manual Integration Approval Summary

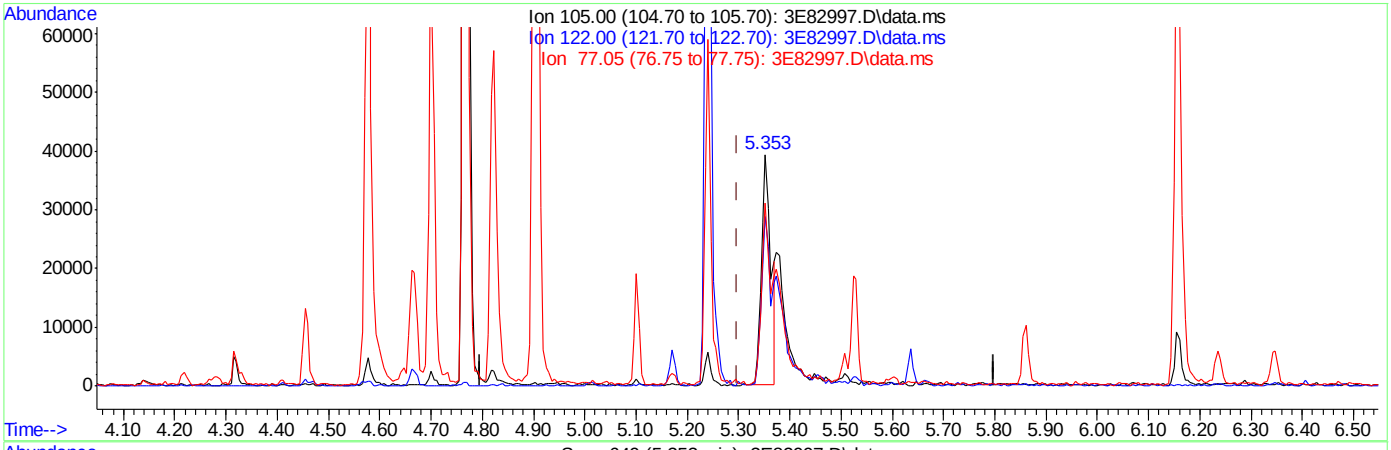
Sample Number:	E3E3639-CC3623	**Method:**	SW846 8270D
Lab FileID:	3E82997.D	**Analyst approved:**	05/09/16 12:02 Ashley Noble
Injection Time:	05/09/16 09:40	**Supervisor approved:**	05/09/16 13:13 Nina Pandya

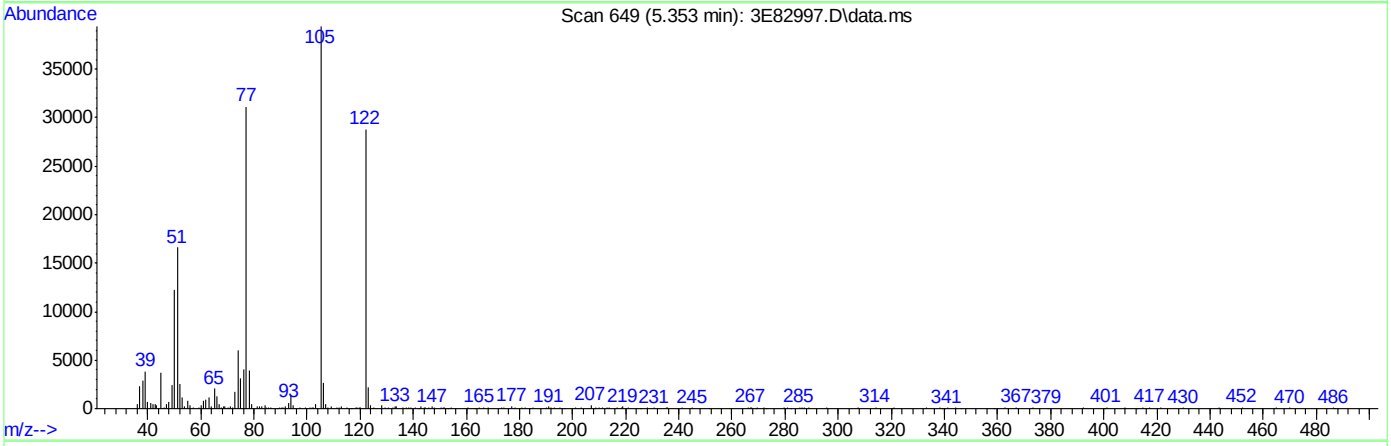
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic acid	65-85-0		5.35	Split peak
4-Nitrophenol	100-02-7		7.98	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3639\
Data File : 3E82997.D
Acq On : 9 May 2016 9:40 am
Operator : ashleyn
Sample : cc3623-25
Misc : op93596,e3e3639
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 09 10:00:59 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MFri May 06 22:35:22 2016
QLast Update : Fri May 06 22:35:22 2016
Response via : Initial Calibration





TIC: 3E82997.D\data.ms

(31) Benzoic acid (t)

5.353min (+0.054) 13.19ppm

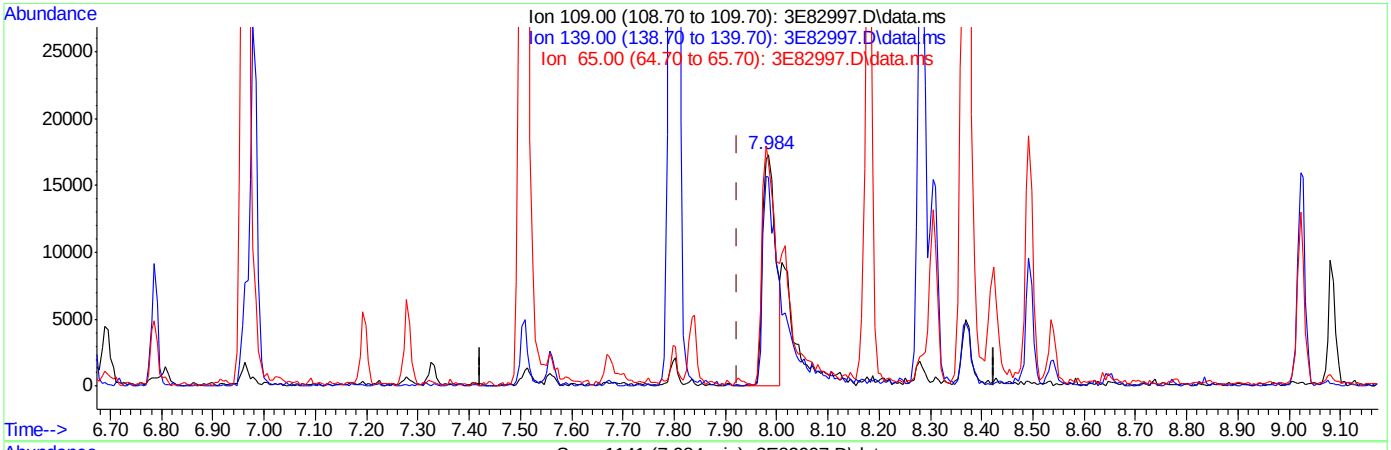
response 50244

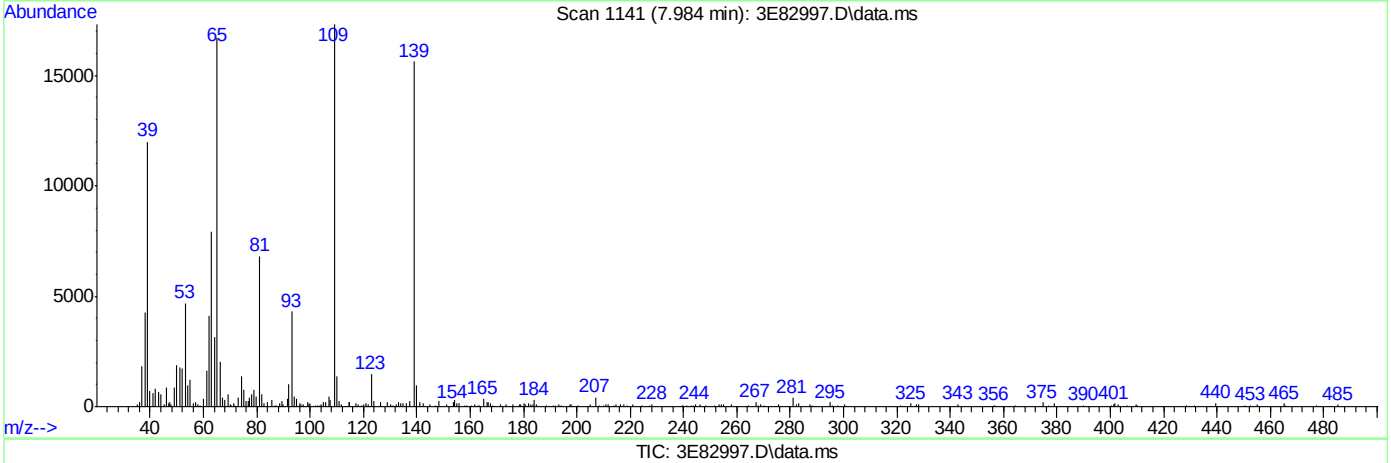
Ion	Exp%	Act%
105.00	100	100
122.00	74.00	69.20
77.05	79.10	75.35
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3639\
Data File : 3E82997.D
Acq On : 9 May 2016 9:40 am
Operator : ashleyn
Sample : cc3623-25
Misc : op93596,e3e3639
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 09 10:00:59 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MFri May 06 22:35:22 2016
QLast Update : Fri May 06 22:35:22 2016
Response via : Initial Calibration





TIC: 3E82997.D\data.ms

(61) 4-Nitrophenol (t)

7.984min (+0.060) 15.47ppm

response 31031

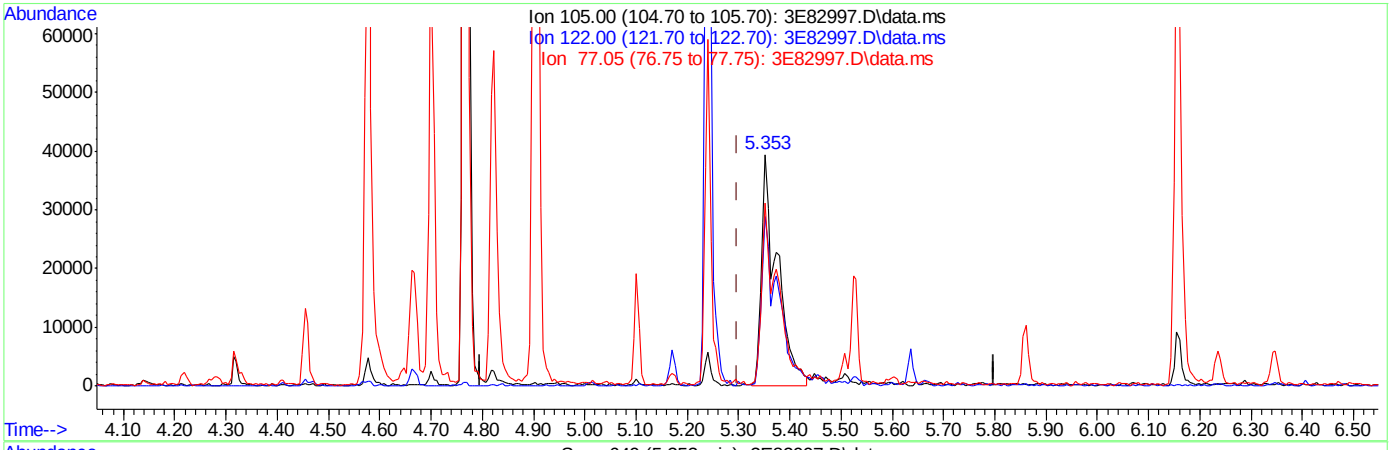
Ion	Exp%	Act%
109.00	100	100
139.00	87.50	87.54
65.00	104.40	88.42
0.00	0.00	0.00

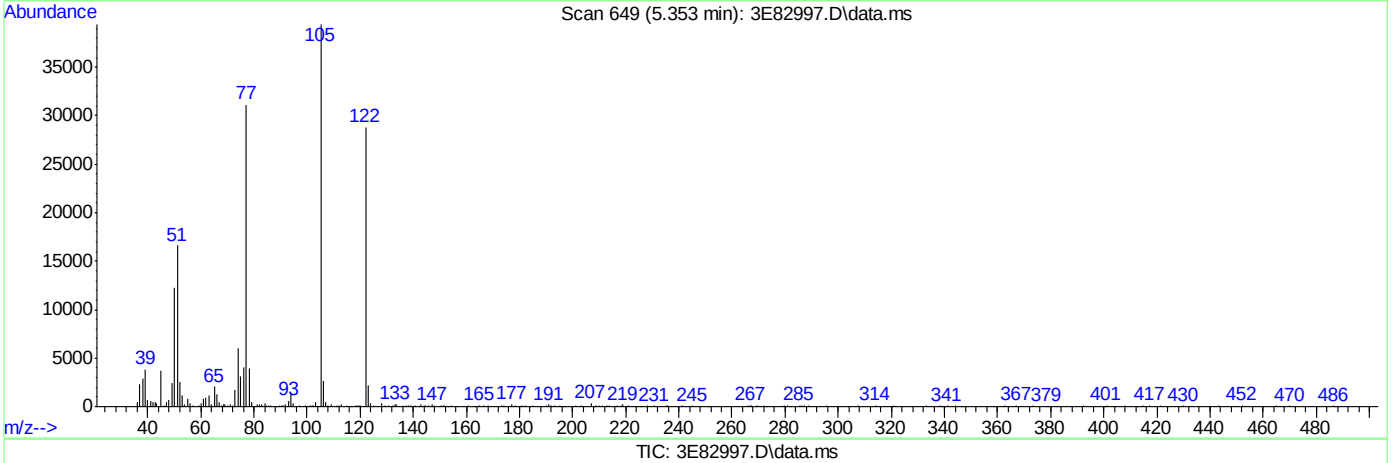
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3639\
Data File : 3E82997.D
Acq On : 9 May 2016 9:40 am
Operator : ashleyn
Sample : cc3623-25
Misc : op93596,e3e3639
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 09 10:00:59 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MFri May 06 22:35:22 2016
QLast Update : Fri May 06 22:35:22 2016
Response via : Initial Calibration





TIC: 3E82997.D\data.ms

(31) Benzoic acid (t)

5.353min (+0.054) 22.08ppm m

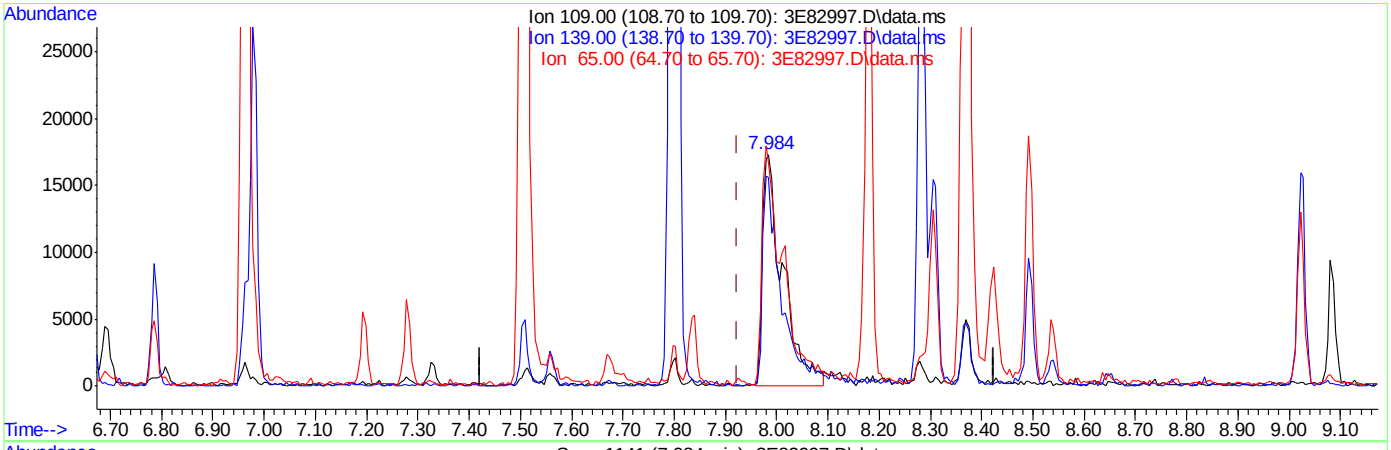
response 84148

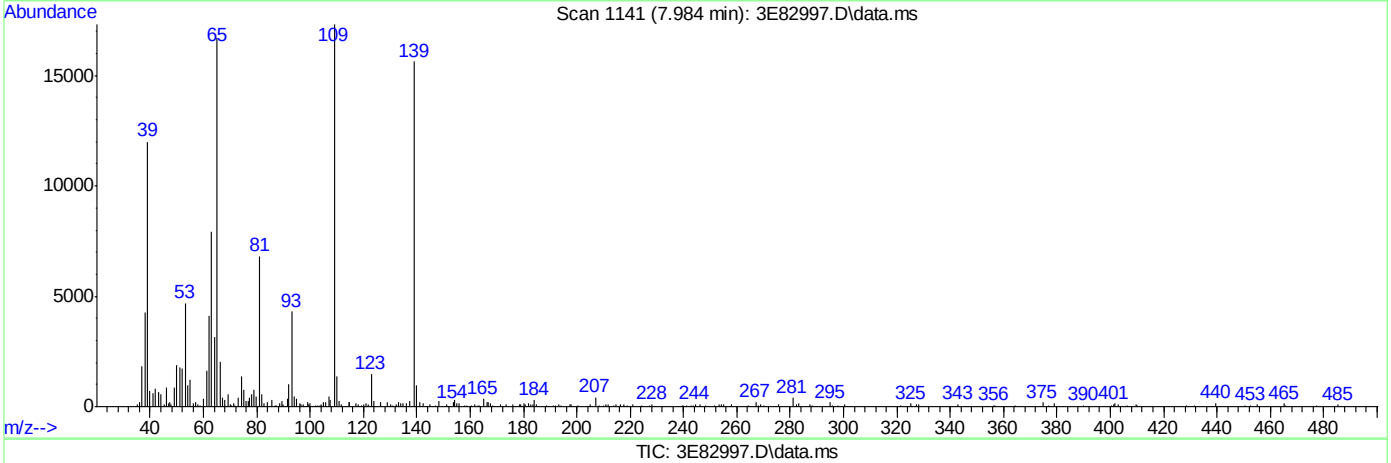
Ion	Exp%	Act%
105.00	100	100
122.00	74.00	73.10
77.05	79.10	78.99
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3639\
Data File : 3E82997.D
Acq On : 9 May 2016 9:40 am
Operator : ashleyn
Sample : cc3623-25
Misc : op93596,e3e3639
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 09 10:00:59 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MFri May 06 22:35:22 2016
QLast Update : Fri May 06 22:35:22 2016
Response via : Initial Calibration





TIC: 3E82997.D\data.ms

(61) 4-Nitrophenol (t)

7.984min (+0.060) 23.94ppm m

response 48007

Ion	Exp%	Act%
109.00	100	100
139.00	87.50	90.25
65.00	104.40	96.49
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3639\
Data File : 3E82998.D
Acq On : 9 May 2016 10:06 am
Operator : ashleyn
Sample : cc3621-25
Misc : op93596,e3e3639
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 09 11:59:36 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MFri May 06 22:35:22 2016
QLast Update : Fri May 06 22:35:22 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.454	152	160086	40.00	ppm	0.04
24) Naphthalene-d8	5.508	136	612081	40.00	ppm	0.05
47) Acenaphthene-d10	7.514	164	408355	40.00	ppm	0.05
69) Phenanthrene-d10	9.669	188	746799	40.00	ppm	0.06
83) Chrysene-d12	13.846	240	838543	40.00	ppm	0.06
92) Perylene-d12	15.959	264	786223	40.00	ppm	0.06
102) 1,4-Dichlorobenzene-d4a	4.454	152	160086	40.00	ppm	0.04
104) Acenaphthene-d10a	7.514	164	408355	40.00	ppm	0.05
106) Phenanthrene-d10a	9.669	188	746799	40.00	ppm	0.06
108) Chrysene-d12a	13.846	240	838543	40.00	ppm	0.06
110) Naphthalene-d8a	5.508	136	612081	40.00	ppm	0.05

System Monitoring Compounds

5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	

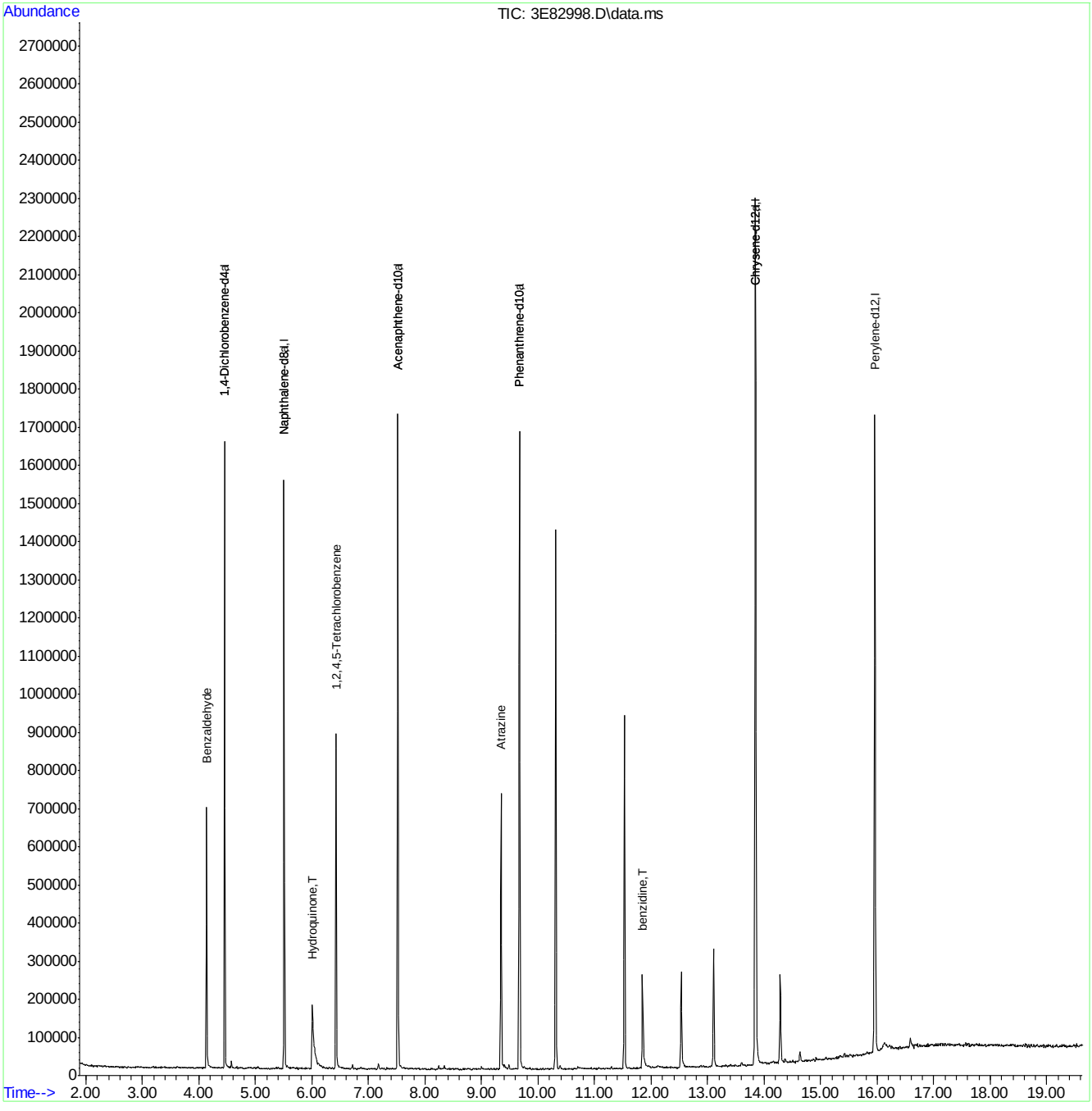
Target Compounds						Qvalue
103) Benzaldehyde	4.133	105	88666	20.43	ppm #	85
105) 1,2,4,5-Tetrachloroben...	6.428	216	157850	31.22	ppm	98
107) Atrazine	9.348	215	59480	31.29	ppm #	79
109) benzidine	11.851	184	132949	12.88	ppm	95
111) Hydroquinone	6.005	110	118352	28.12	ppm	72

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3639\
Data File : 3E82998.D
Acq On : 9 May 2016 10:06 am
Operator : ashleyn
Sample : cc3621-25
Misc : op93596,e3e3639
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 09 11:59:36 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MFri May 06 22:35:22 2016
QLast Update : Fri May 06 22:35:22 2016
Response via : Initial Calibration



M3E3623.M Mon May 09 11:59:46 2016 MS3E

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 JC19644

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

7.6.31

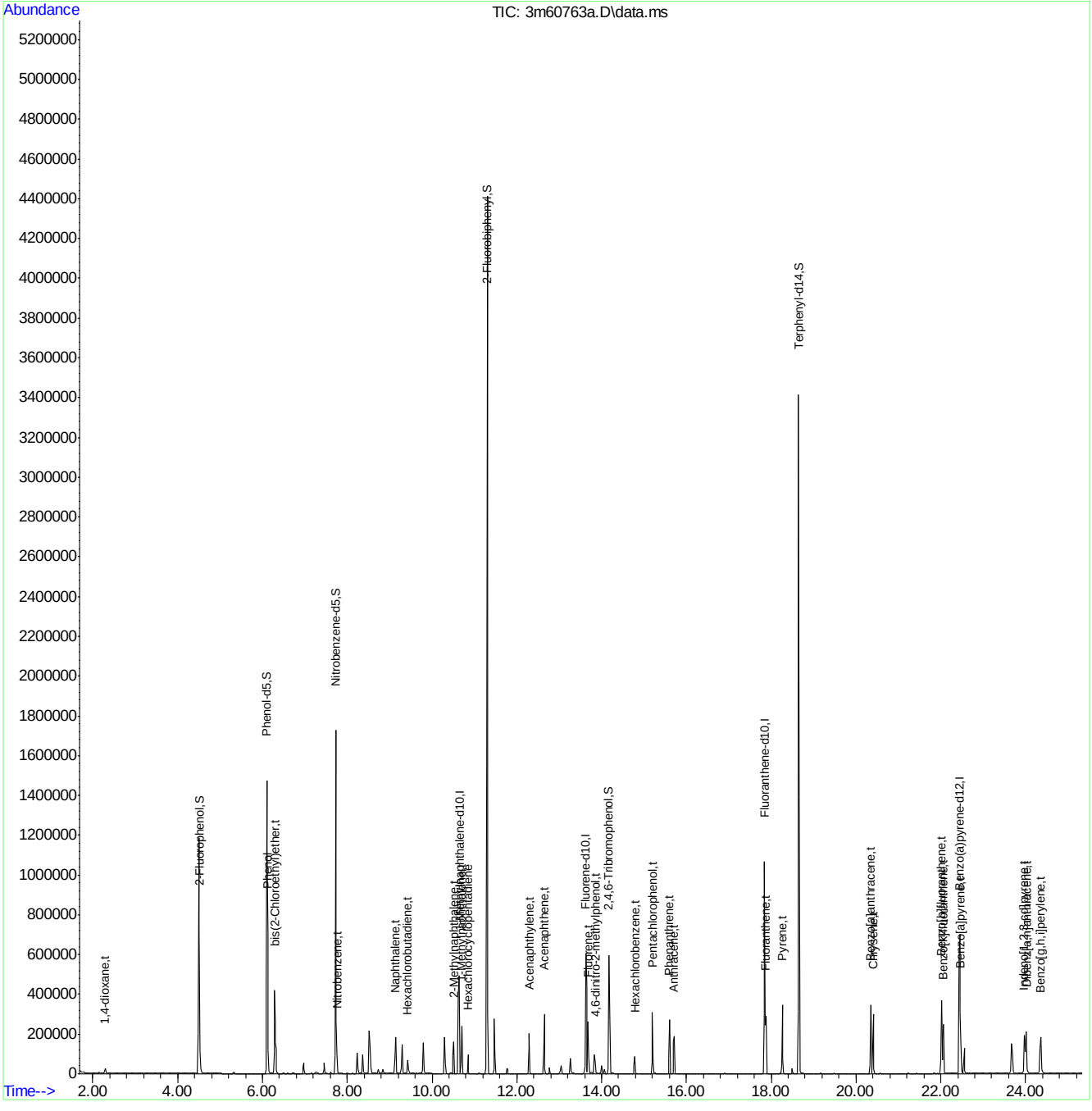
7

SGS ACCUTEST JC19644

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 JC19644

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 JC19644

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

7.6.32

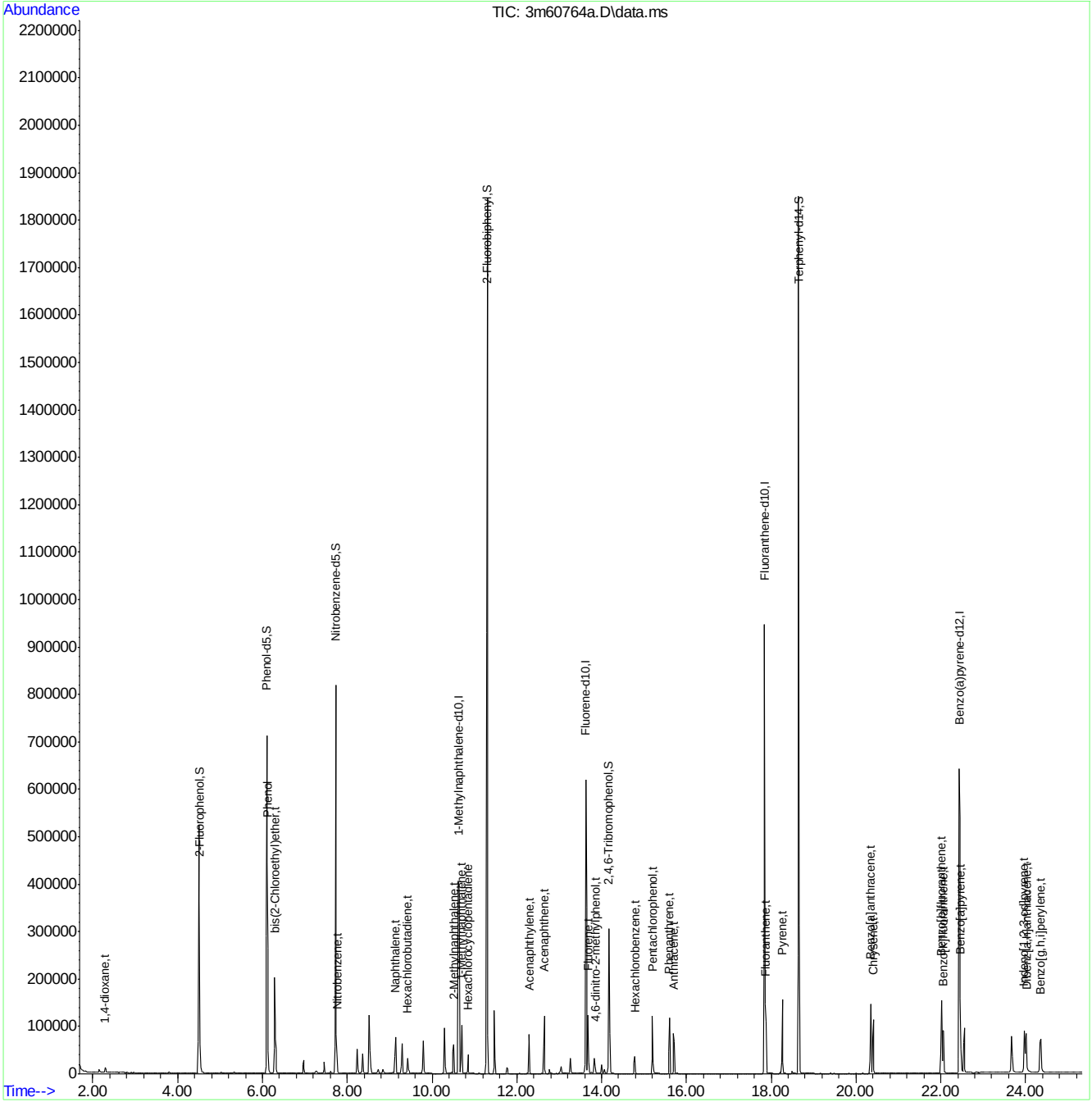
7

SGS ACCUTEST JC19644

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



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 JC19644

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

7.6.33

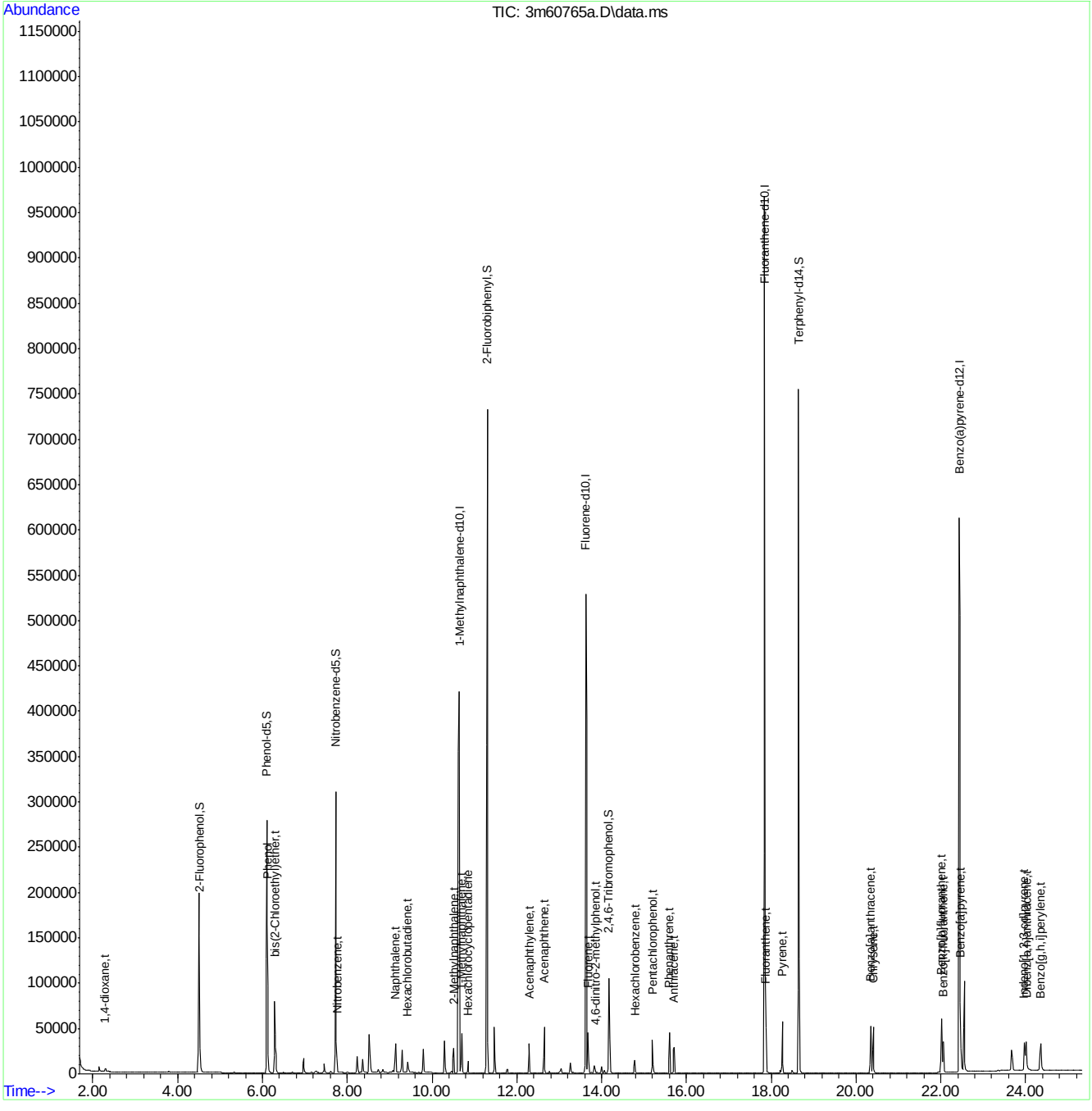
7

SGS ACCUTEST JC19644

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 JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60766.D
Acq On : 21 Apr 2016 4:12 pm
Operator : linseyk
Sample : ic2855-0.1
Misc : op93052a,e3m2855
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 22 08:27:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:27:18 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

7.6.34

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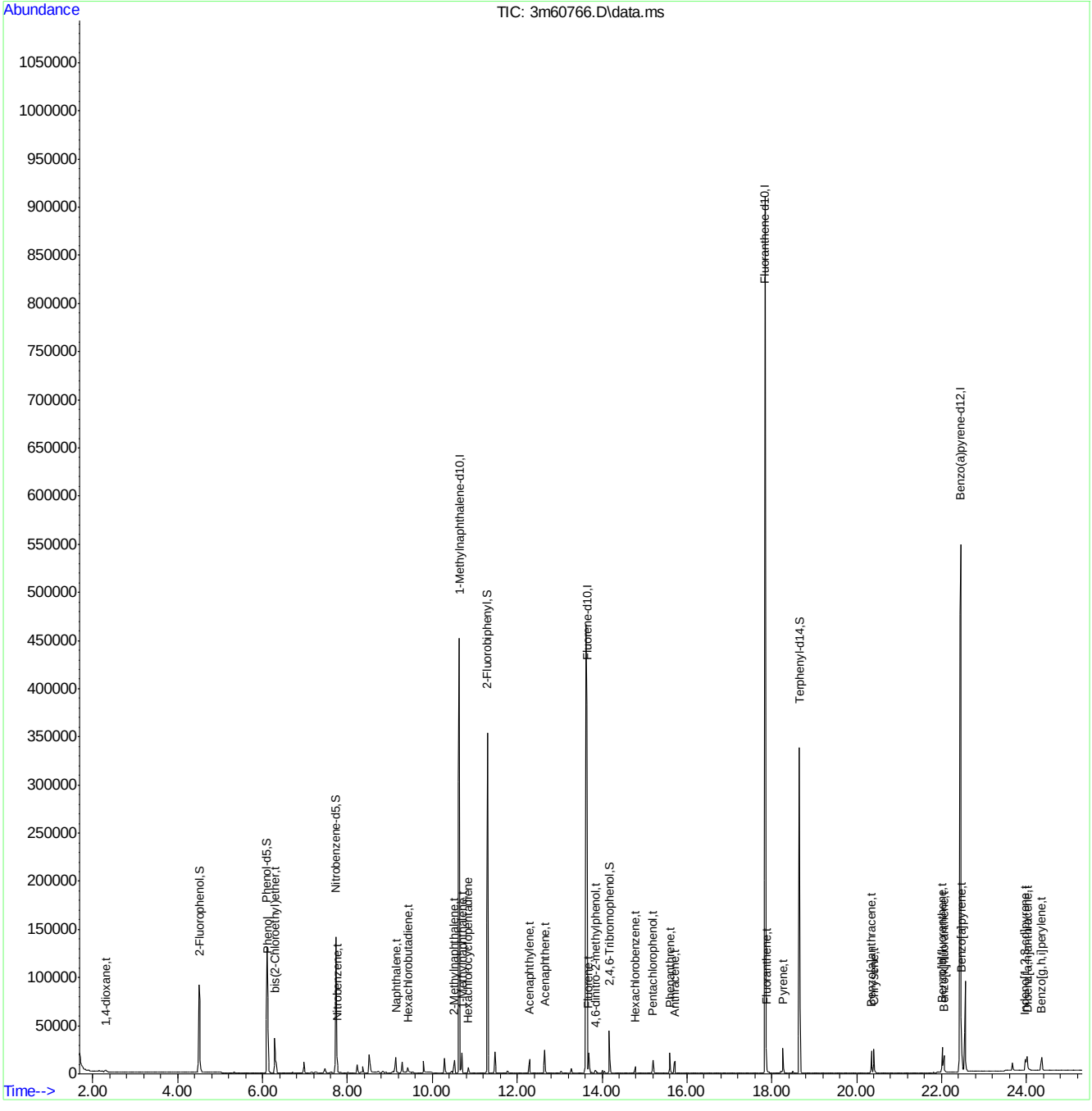
SGS ACCUTEST JC19644

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



M3M2855SIM.M Fri Apr 22 08:27:46 2016 RPT1 Page: 3

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60767.D
Acq On : 21 Apr 2016 4:44 pm
Operator : linseyk
Sample : ic2855-0.05
Misc : op93052a,e3m2855
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 22 08:34:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:32:39 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.641	150	339033	4.00	ppm	0.00
14) Fluorene-d10	13.626	176	520555	4.00	ppm	-0.02
21) Fluoranthene-d10	17.844	212	888983	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.432	264	706519	4.00	ppm	-0.02
System Monitoring Compounds						
3) 2-Fluorophenol	4.515	112	42704	1.01	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.02%	
4) Phenol-d5	6.104	99	70262	1.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.00%	
7) Nitrobenzene-d5	7.726	82	63026	0.97	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.94%	
15) 2-Fluorobiphenyl	11.303	172	145045	1.01	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.02%	
20) 2,4,6-Tribromophenol	14.172	330	13489	0.83	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.66%	
28) Terphenyl-d14	18.647	244	135801	1.05	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.10%	
Target Compounds						Qvalue
2) 1,4-dioxane	2.305	88	1056	0.06	ppm	90
5) Phenol	6.116	94	18706	0.25	ppm #	73
6) bis(2-Chloroethyl)ether	6.285	93	3013	0.05	ppm	88
8) Nitrobenzene	7.764	77	3438	0.05	ppm	92
9) Naphthalene	9.139	128	9285	0.05	ppm	99
10) Hexachlorobutadiene	9.421	225	1685	0.05	ppm	99
11) 2-Methylnaphthalene	10.518	141	4767	0.05	ppm	96
12) 1-Methylnaphthalene	10.702	141	6629	0.05	ppm	95
13) Hexachlorocyclopentadiene	10.846	237	2049	0.08	ppm	97
16) Acenaphthylene	12.293	152	8346	0.05	ppm	99
17) Acenaphthene	12.648	153	5946	0.05	ppm	99
18) 4,6-dinitro-2-methylph...	13.852	198	948	0.07	ppm	91
19) Fluorene	13.682	166	7106	0.05	ppm	100
22) Hexachlorobenzene	14.783	284	2065	0.05	ppm	96
23) Pentachlorophenol	15.201	266	4271	0.17	ppm	98
24) Phenanthrene	15.603	178	10238	0.05	ppm	99
25) Anthracene	15.711	178	8587	0.04	ppm	98
26) Fluoranthene	17.875	202	12772	0.05	ppm	99
27) Pyrene	18.261	202	11982	0.05	ppm	98
29) Benzo[a]anthracene	20.347	228	11591	0.05	ppm	100
30) Chrysene	20.408	228	11884	0.05	ppm	99
32) Benzo[b]fluoranthene	22.015	252	11635	0.04	ppm	99
33) Benzo[k]fluoranthene	22.062	252	11007	0.05	ppm	100
34) Benzo[a]pyrene	22.463	252	12936	0.06	ppm	98
35) Indeno[1,2,3-cd]pyrene	23.963	276	10547	0.05	ppm	100
36) Dibenz[a,h]anthracene	24.020	278	8444	0.05	ppm	100
37) Benzo[g,h,i]perylene	24.358	276	9475	0.05	ppm	99

SGS ACCUTEST JC19644

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

7.6.35

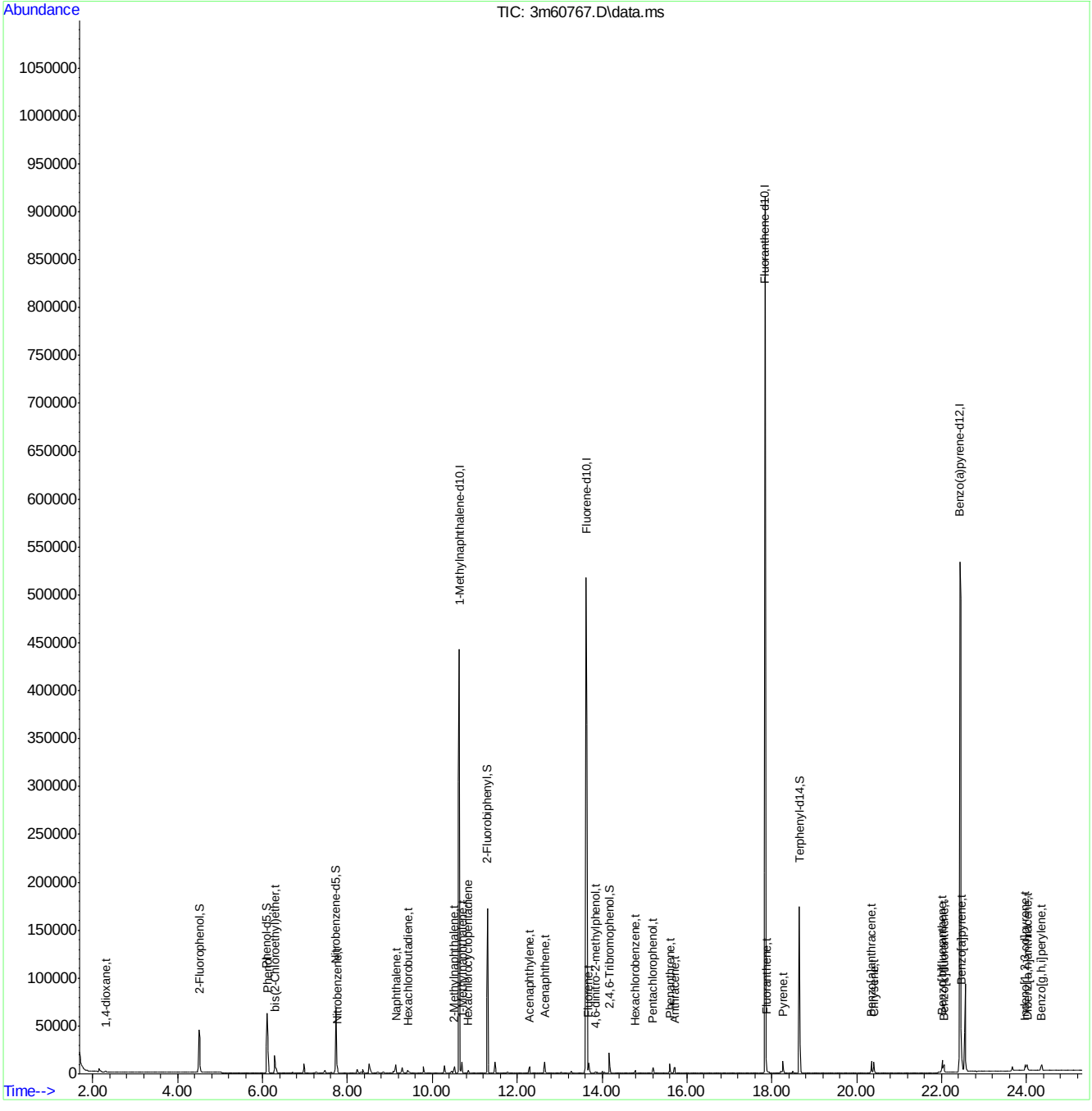
7

SGS ACCUTEST JC19644

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 JC19644

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

7.6.36

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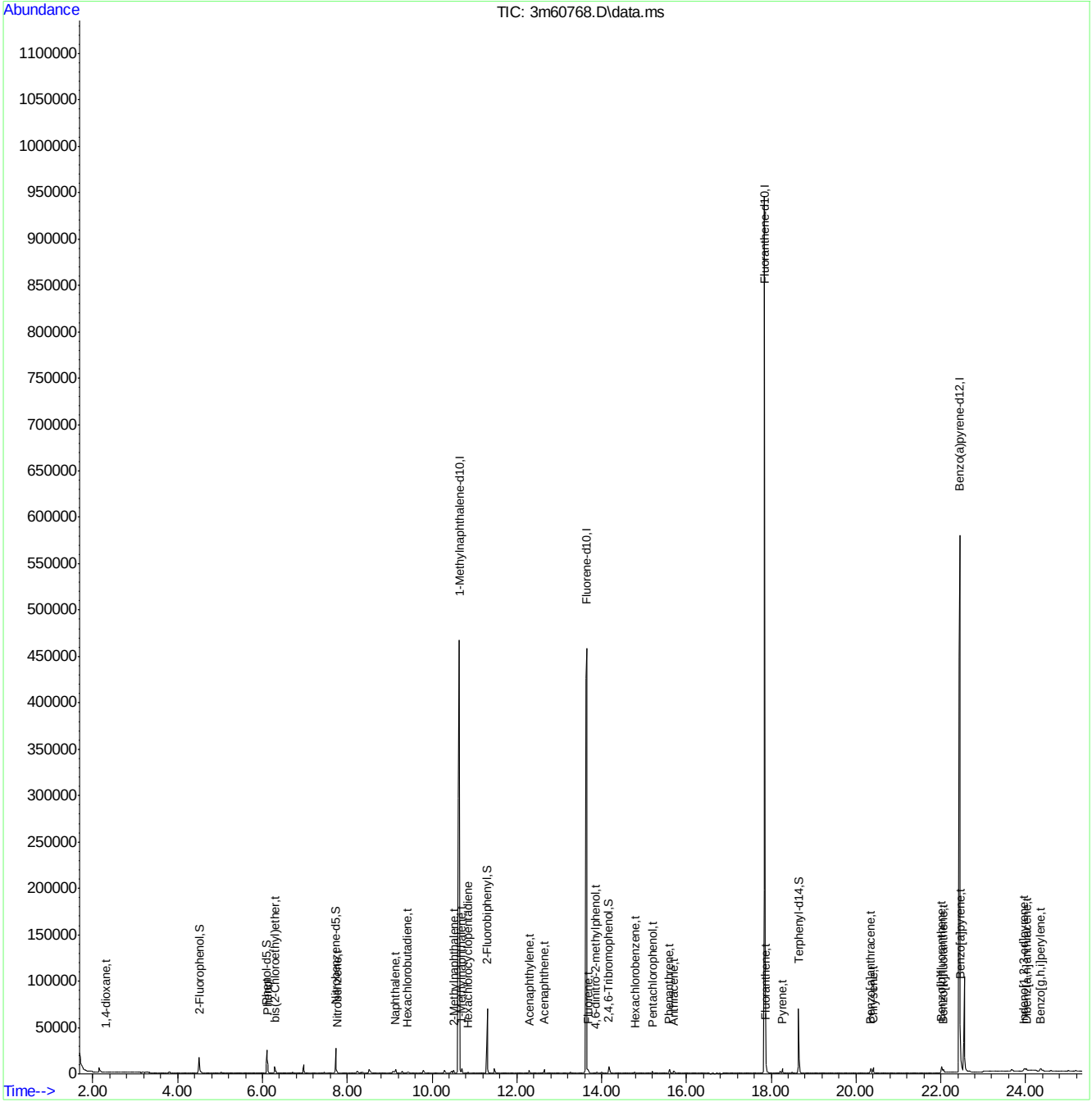
SGS ACCUTEST JC19644

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



SGS ACCUTEST JC19644

Manual Integration Approval Summary

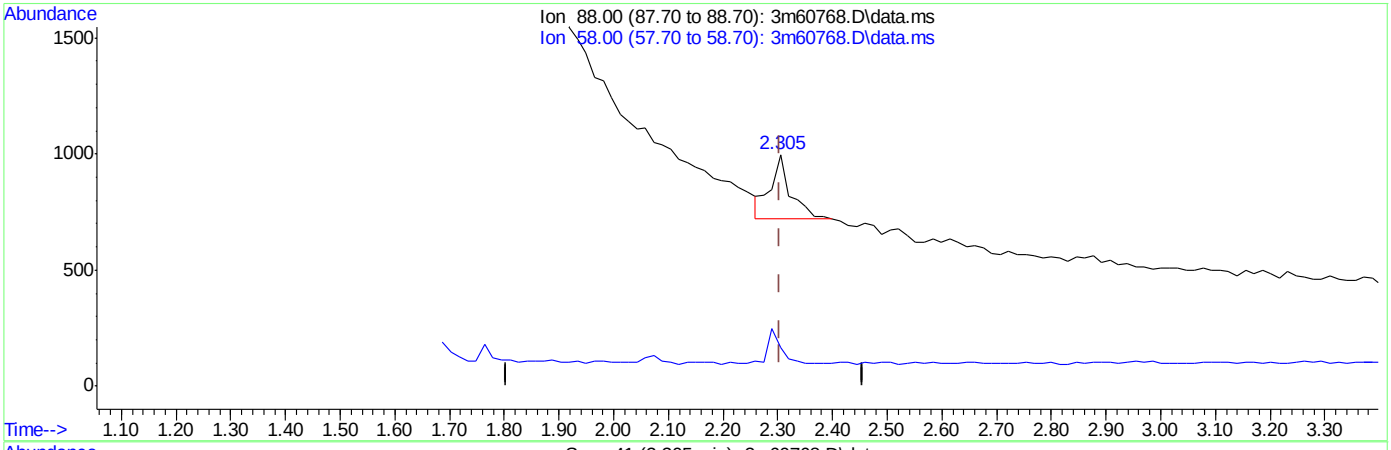
Sample Number:	E3M2855-IC2855	**Method:**	SW846 8270D BY SIM
Lab FileID:	3M60768.D	**Analyst approved:**	04/22/16 09:15 Linsey Kirschmann
Injection Time:	04/21/16 17:17	**Supervisor approved:**	04/22/16 12:27 Nina Pandya

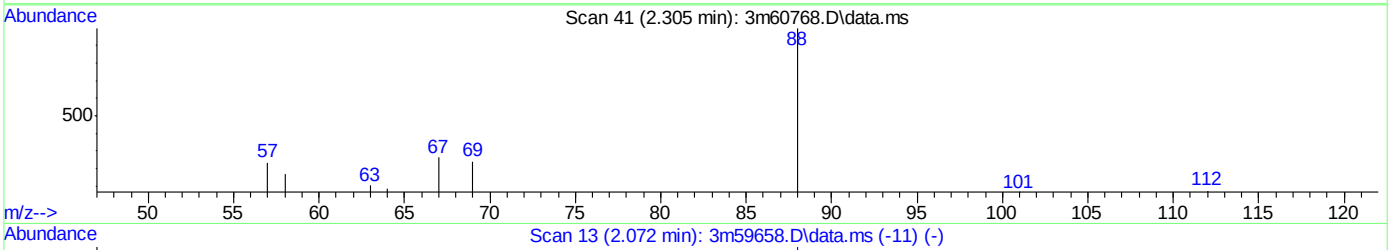
Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dioxane	123-91-1		2.30	Baseline ripple
Benzo(a)pyrene	50-32-8		22.46	Baseline ripple

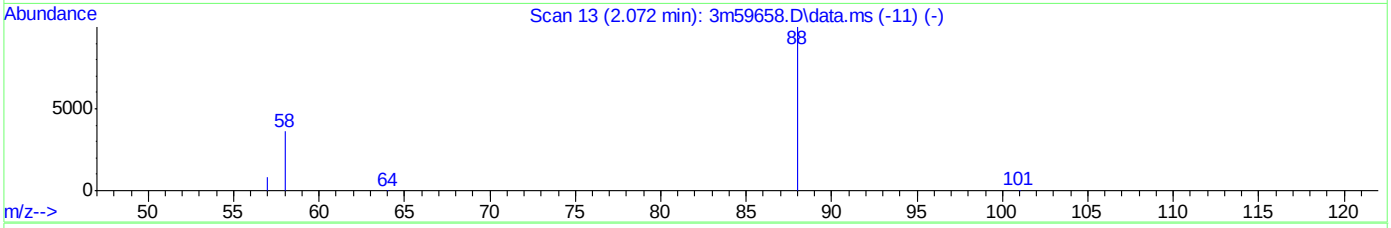
Quantitation Report (Qedit)

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

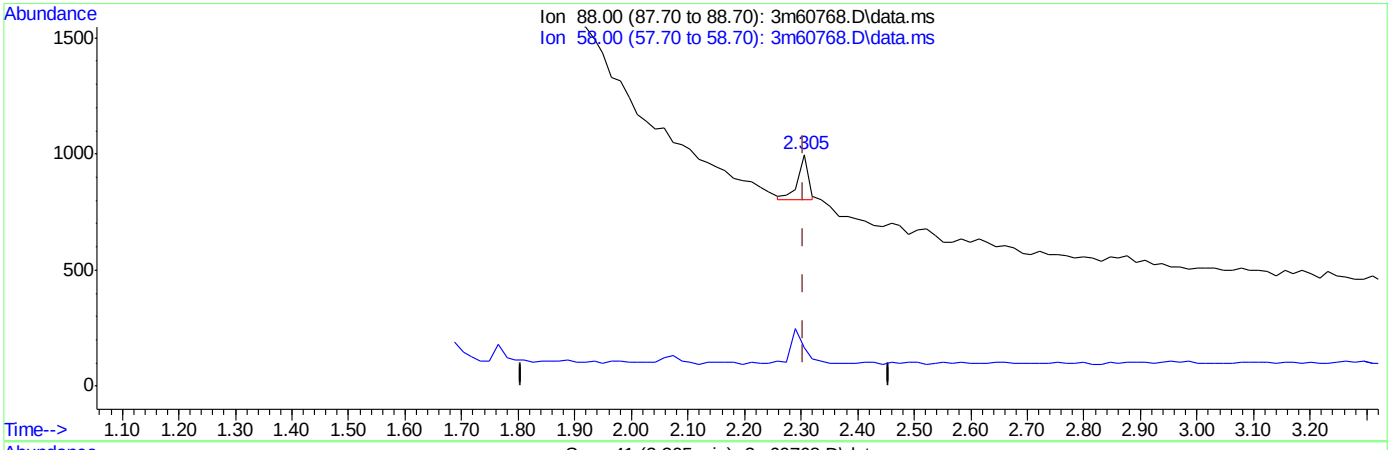
Ion	Exp%	Act%
88.00	100	100
58.00	32.40	28.23
0.00	0.00	0.00
0.00	0.00	0.00

SGS ACCUTEST JC19644

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



(2) 1,4-dioxane (t)

2.305min (-0.000) 0.01ppm m

response 245

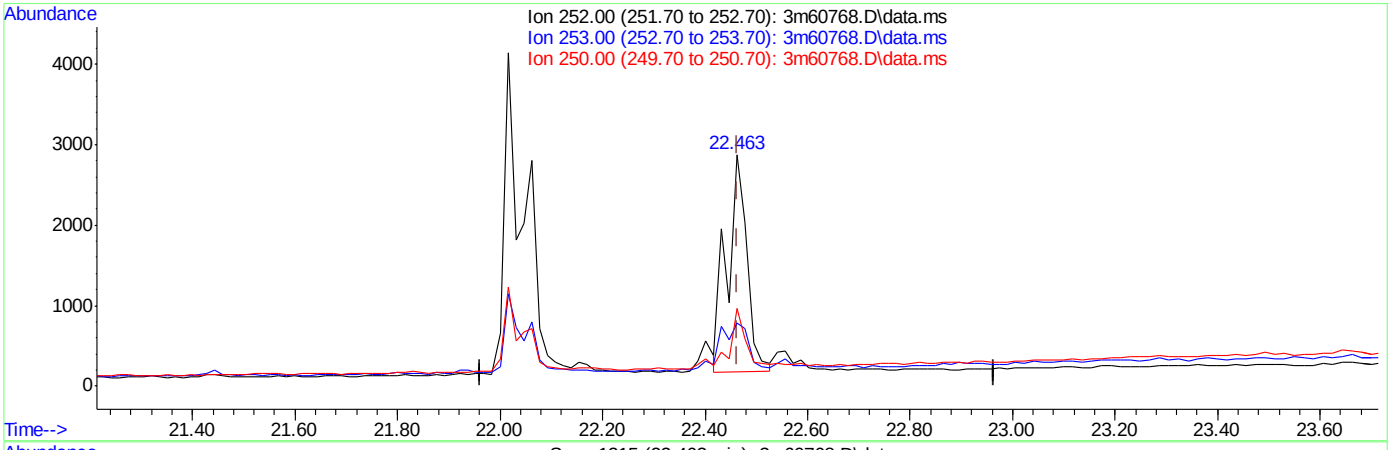
Ion	Exp%	Act%
88.00	100	100
58.00	32.40	16.63
0.00	0.00	0.00
0.00	0.00	0.00

SGS ACCUTEST JC19644

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

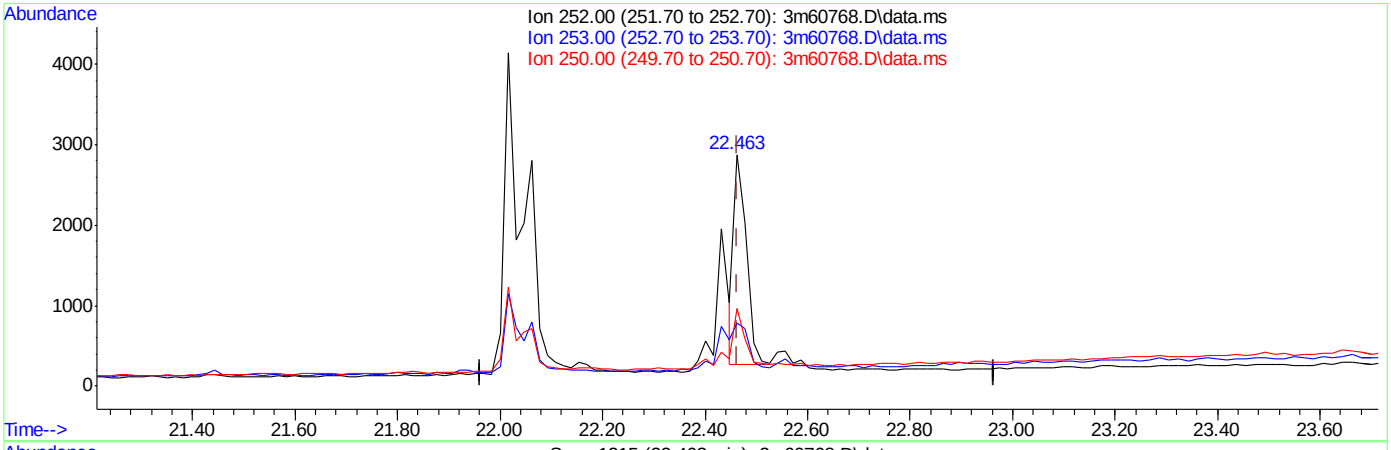
Ion	Exp%	Act%
252.00	100	100
253.00	18.80	20.93
250.00	26.10	27.47
0.00	0.00	0.00

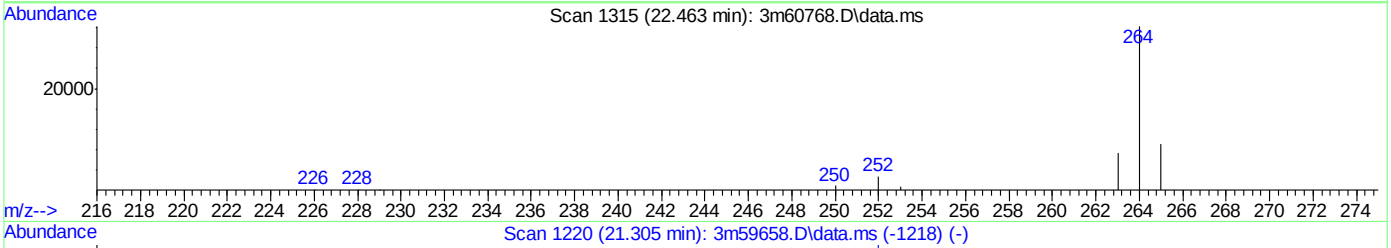
SGS ACCUTEST JC19644

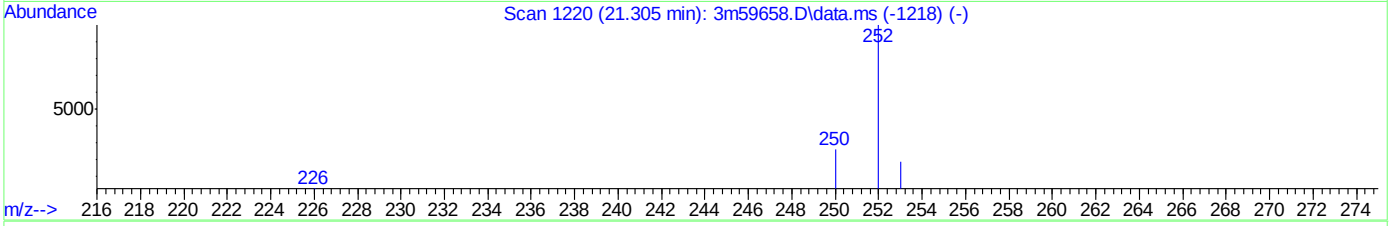
Quantitation Report (Qedit)

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

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

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

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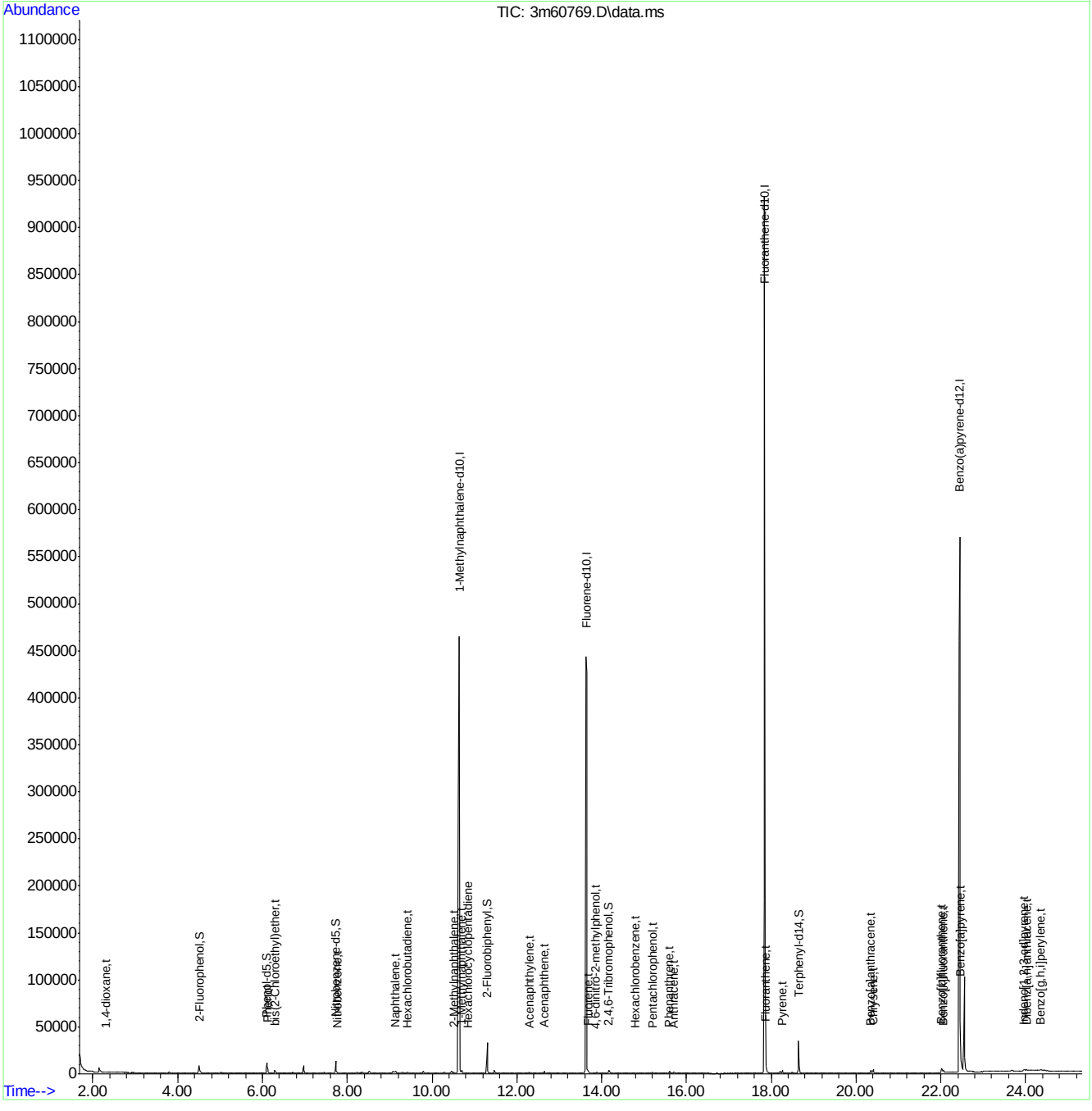
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:30:05 2016
Response via : Initial Calibration



SGS ACCUTEST JC19644

Manual Integration Approval Summary

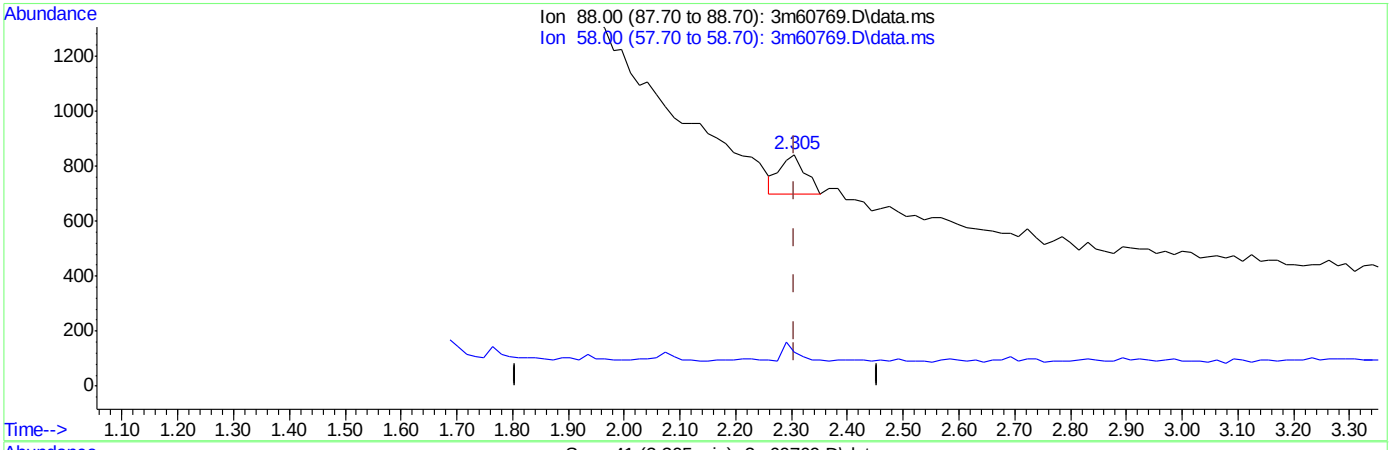
Sample Number:	E3M2855-IC2855	**Method:**	SW846 8270D BY SIM
Lab FileID:	3M60769.D	**Analyst approved:**	04/22/16 09:15 Linsey Kirschmann
Injection Time:	04/21/16 17:49	**Supervisor approved:**	04/22/16 12:27 Nina Pandya

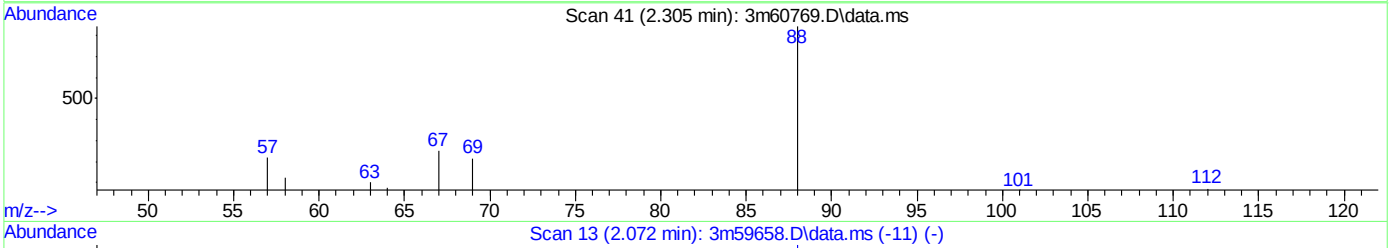
Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dioxane	123-91-1		2.31	Baseline ripple

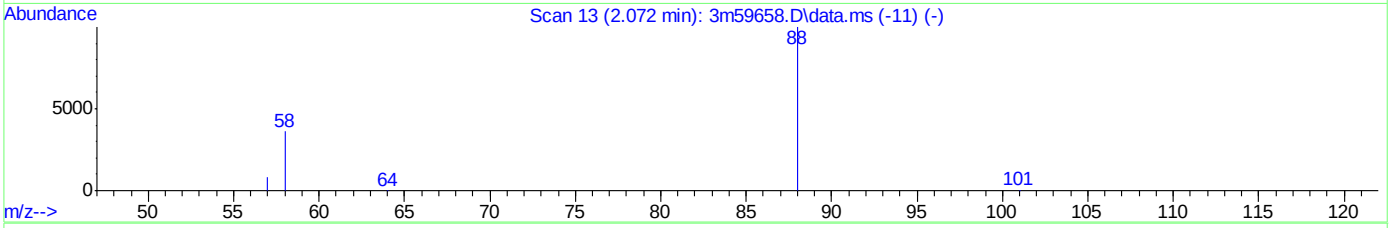
Quantitation Report (Qedit)

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

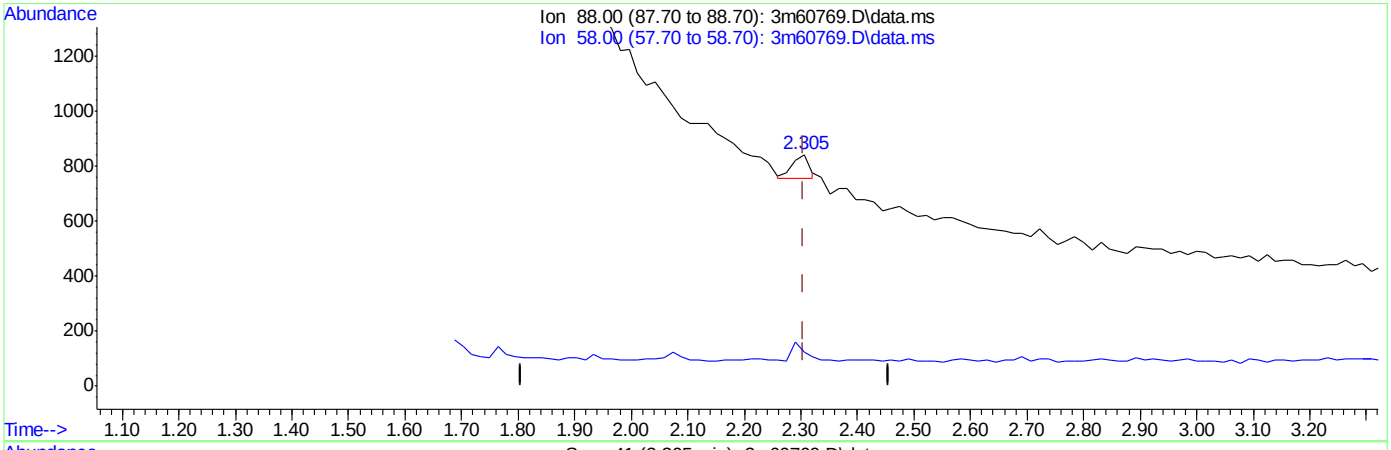
Ion	Exp%	Act%
88.00	100	100
58.00	32.40	25.45
0.00	0.00	0.00
0.00	0.00	0.00

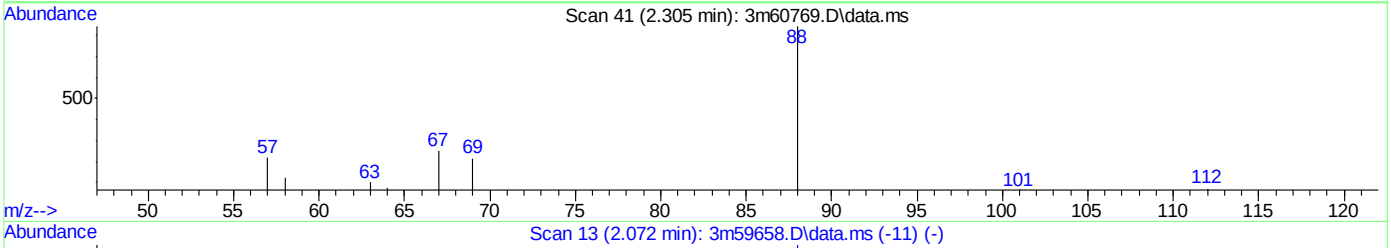
SGS ACCUTEST JC19644

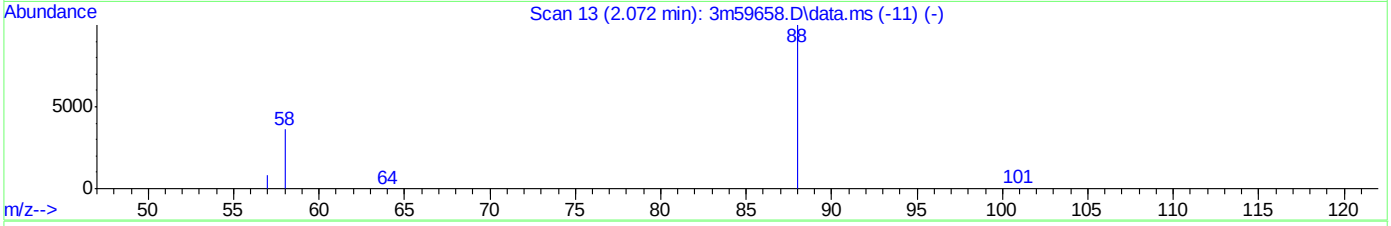
Quantitation Report (Qedit)

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 JC19644

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 JC19644

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

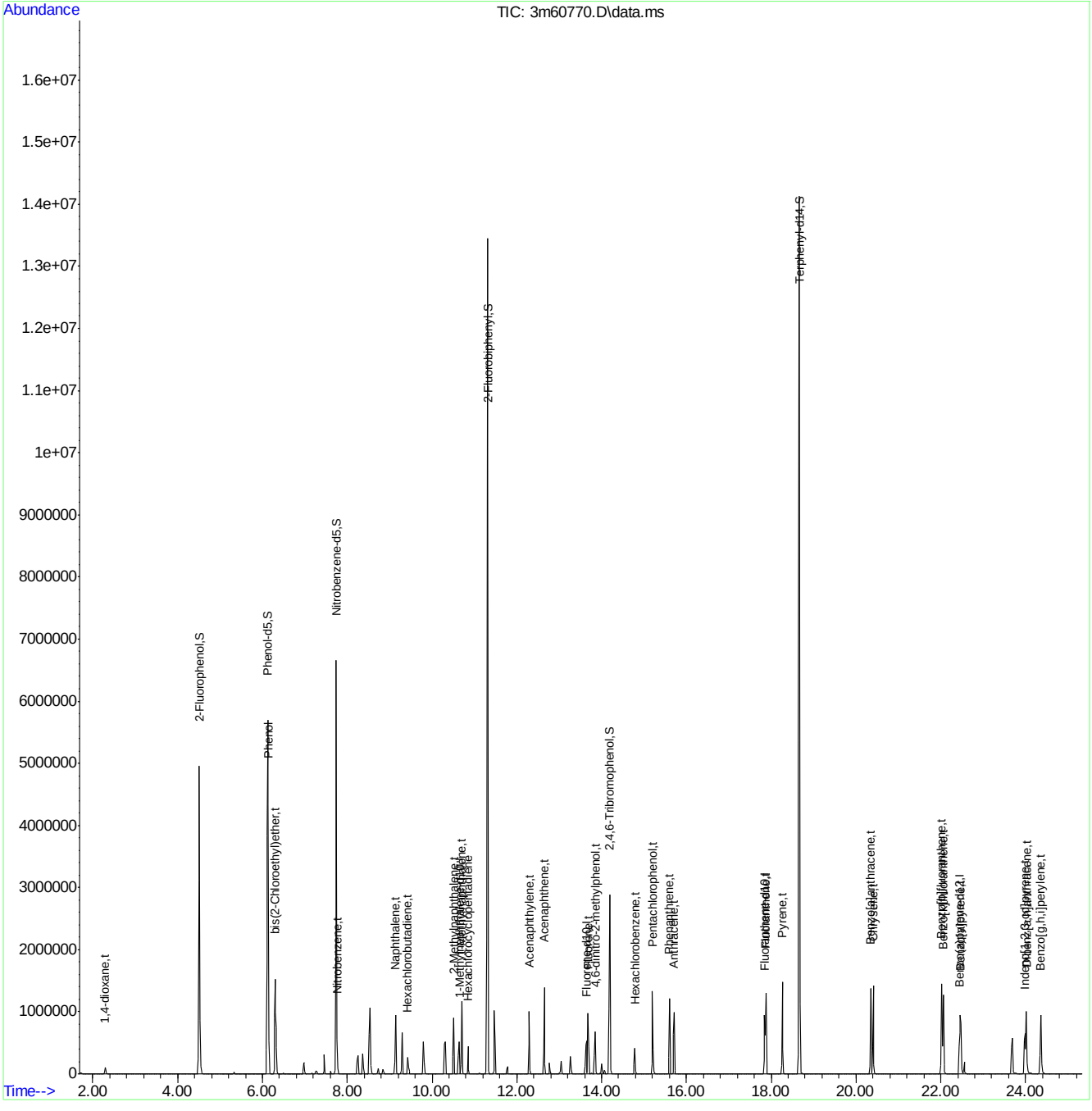
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60770.D
Acq On : 21 Apr 2016 6:22 pm
Operator : linseyk
Sample : ic2855-5.0
Misc : op93052a,e3m2855
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 22 08:30:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:30:48 2016
Response via : Initial Calibration



M3M2855SIM.M Fri Apr 22 08:31:12 2016 RPT1 Page: 3

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60771.D
Acq On : 21 Apr 2016 6:55 pm
Operator : linseyk
Sample : ic2855-2.5
Misc : op93052a,e3m2855
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 22 08:31:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:31:18 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.640	150	385250	4.00	ppm	0.00
14) Fluorene-d10	13.644	176	616747	4.00	ppm	0.00
21) Fluoranthene-d10	17.843	212	966990	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.448	264	773663	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	4.515	112	2363254	48.90	ppm	0.00
Spiked Amount 50.000			Recovery = 97.80%			
4) Phenol-d5	6.116	99	3871836	48.37	ppm	-0.01
Spiked Amount 50.000			Recovery = 96.74%			
7) Nitrobenzene-d5	7.726	82	3072767	40.29	ppm	-0.02
Spiked Amount 50.000			Recovery = 80.58%			
15) 2-Fluorobiphenyl	11.303	172	7301000	42.25	ppm	-0.02
Spiked Amount 50.000			Recovery = 84.50%			
20) 2,4,6-Tribromophenol	14.191	330	926725	47.63	ppm	0.00
Spiked Amount 50.000			Recovery = 95.26%			
28) Terphenyl-d14	18.662	244	6991573	49.82	ppm	0.00
Spiked Amount 50.000			Recovery = 99.64%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.289	88	48881	2.39	ppm #	59
5) Phenol	6.128	94	1024552	11.84	ppm #	67
6) bis(2-Chloroethyl)ether	6.285	93	142356	2.16	ppm	77
8) Nitrobenzene	7.764	77	205619	2.56	ppm	76
9) Naphthalene	9.138	128	535435	2.50	ppm	98
10) Hexachlorobutadiene	9.421	225	87273	2.32	ppm	94
11) 2-Methylnaphthalene	10.517	141	279805	2.51	ppm	94
12) 1-Methylnaphthalene	10.702	141	340057	2.24	ppm	91
13) Hexachlorocyclopentadiene	10.846	237	158162	5.40	ppm	93
16) Acenaphthylene	12.293	152	544103	2.55	ppm	98
17) Acenaphthene	12.648	153	350568	2.45	ppm	95
18) 4,6-dinitro-2-methylph...	13.851	198	297531	19.93	ppm	92
19) Fluorene	13.682	166	399367	2.31	ppm	96
22) Hexachlorobenzene	14.783	284	115675	2.53	ppm	95
23) Pentachlorophenol	15.200	266	400828	15.26	ppm	98
24) Phenanthrene	15.602	178	602735	2.56	ppm	99
25) Anthracene	15.711	178	589914	2.71	ppm	98
26) Fluoranthene	17.874	202	671708	2.48	ppm	99
27) Pyrene	18.261	202	685271	2.51	ppm	99
29) Benzo[a]anthracene	20.346	228	610065	2.48	ppm	98
30) Chrysene	20.408	228	651165	2.57	ppm	98
32) Benzo[b]fluoranthene	22.015	252	621501	2.16	ppm	98
33) Benzo[k]fluoranthene	22.061	252	586018	2.45	ppm	99
34) Benzo[a]pyrene	22.463	252	565533	2.34	ppm	99
35) Indeno[1,2,3-cd]pyrene	23.963	276	624468	2.57	ppm	97
36) Dibenz[a,h]anthracene	24.020	278	520048	2.60	ppm	100
37) Benzo[g,h,i]perylene	24.358	276	542545	2.57	ppm	100

SGS ACCUTEST JC19644

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

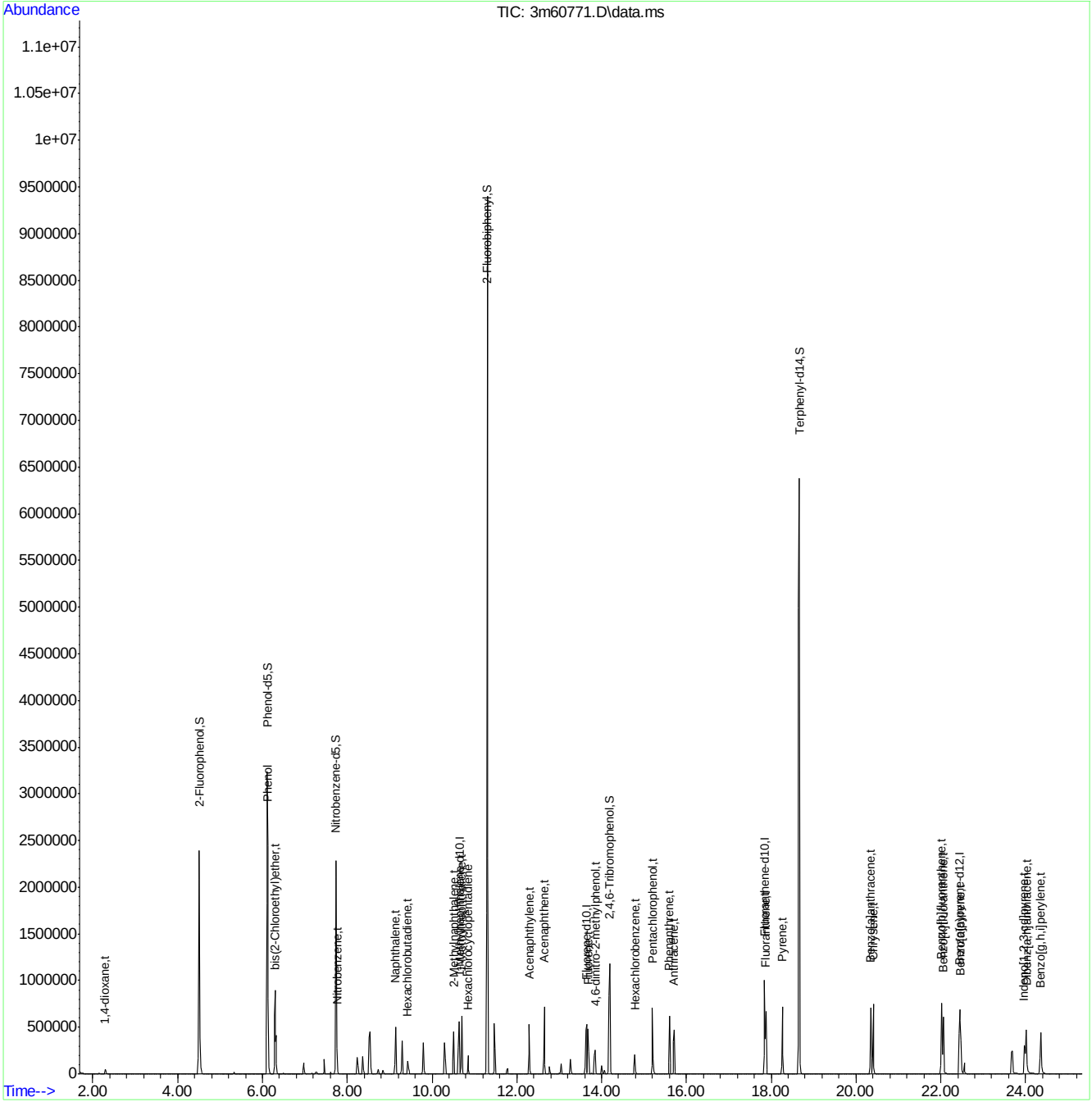
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = 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 JC19644

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

7.6.40

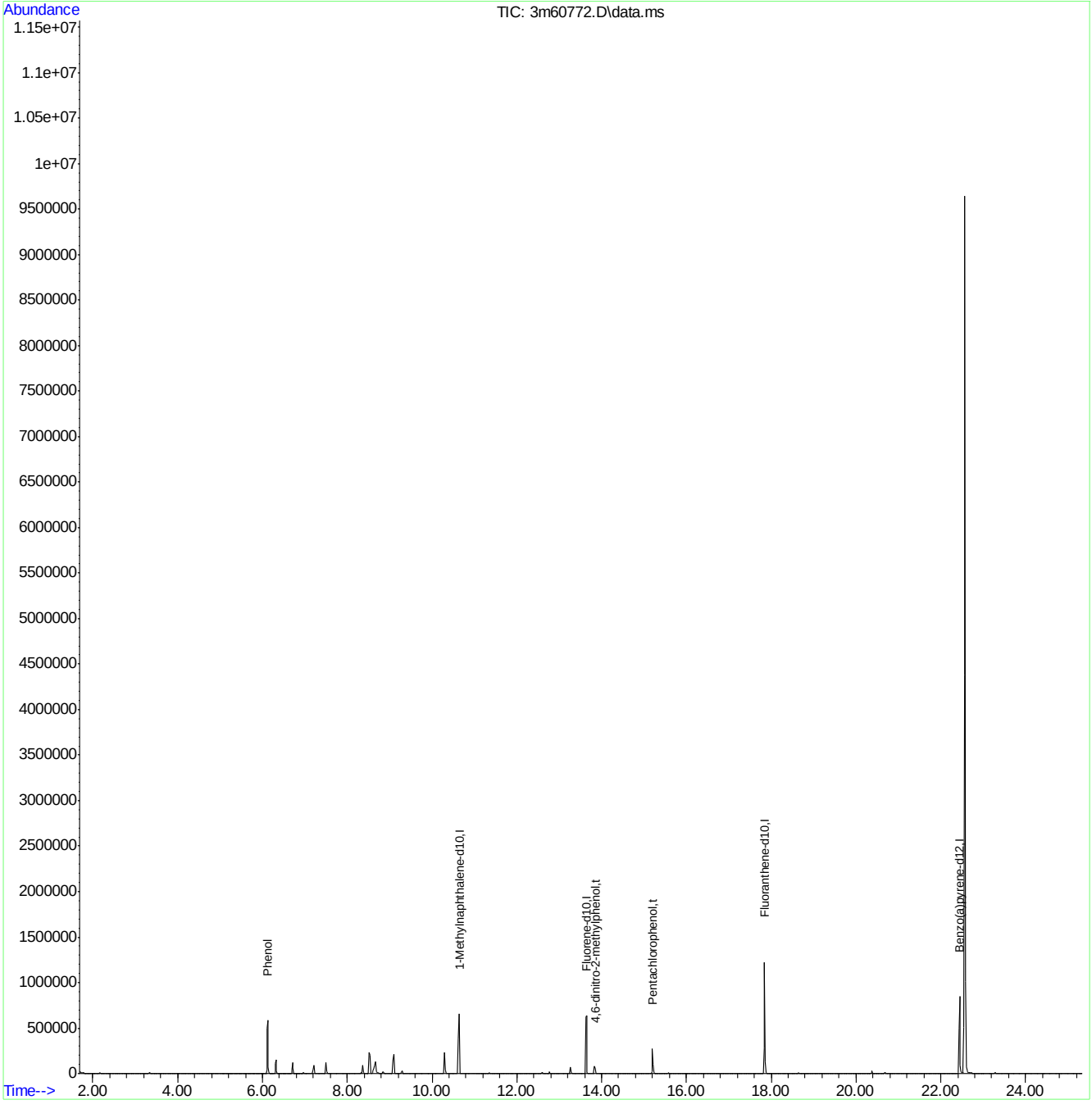
7

SGS ACCUTEST JC19644

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

7.6.41

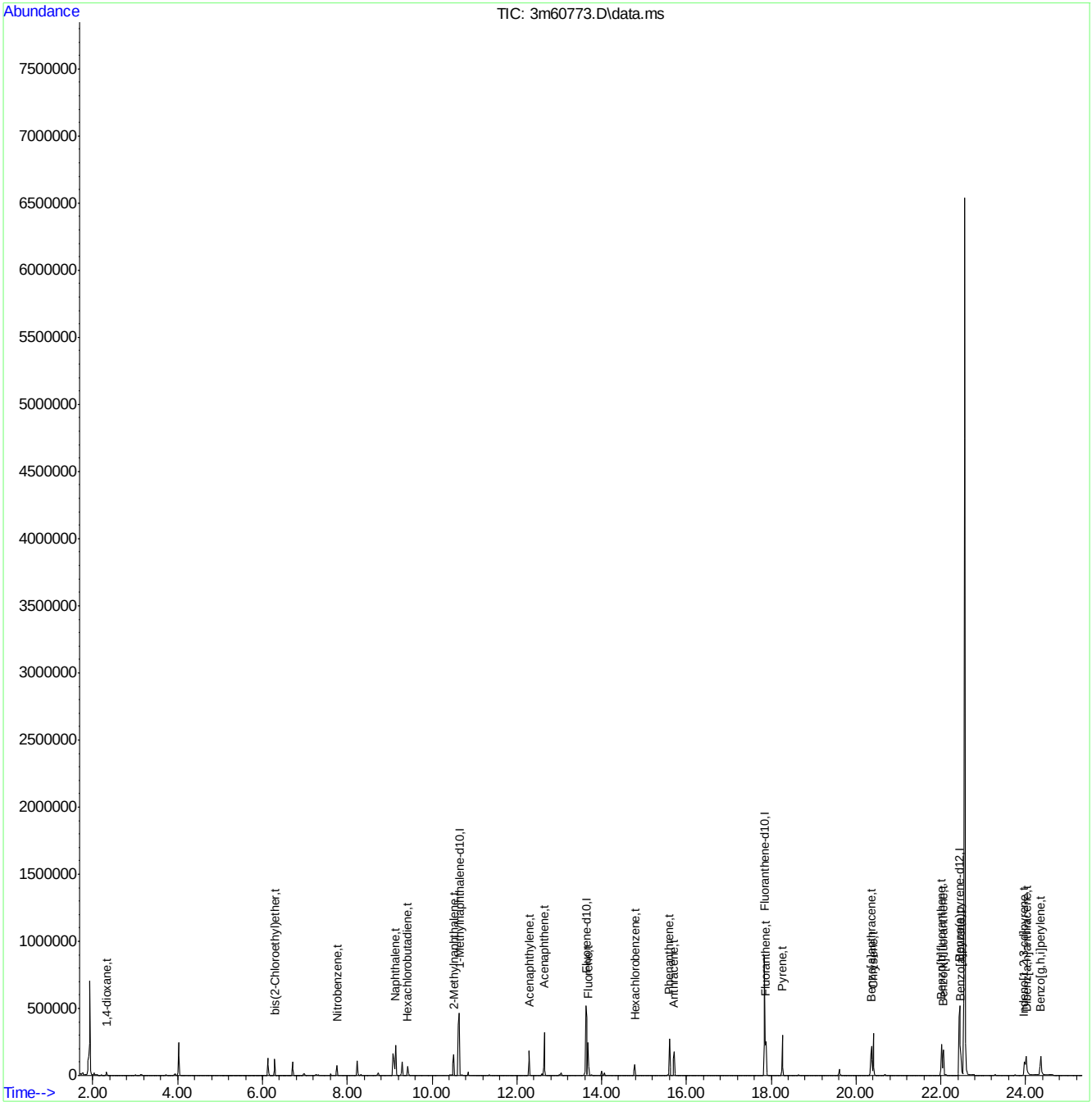
7

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60773.D
Acq On : 21 Apr 2016 8:00 pm
Operator : linseyk
Sample : icv2855-1.0
Misc : op93052a,e3m2855
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 22 08:58:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:34:22 2016
Response via : Initial Calibration



M3M2855SIM.M Fri Apr 22 08:58:28 2016 RPT1 Page: 2

SGS ACCUTEST JC19644

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

7.6.42

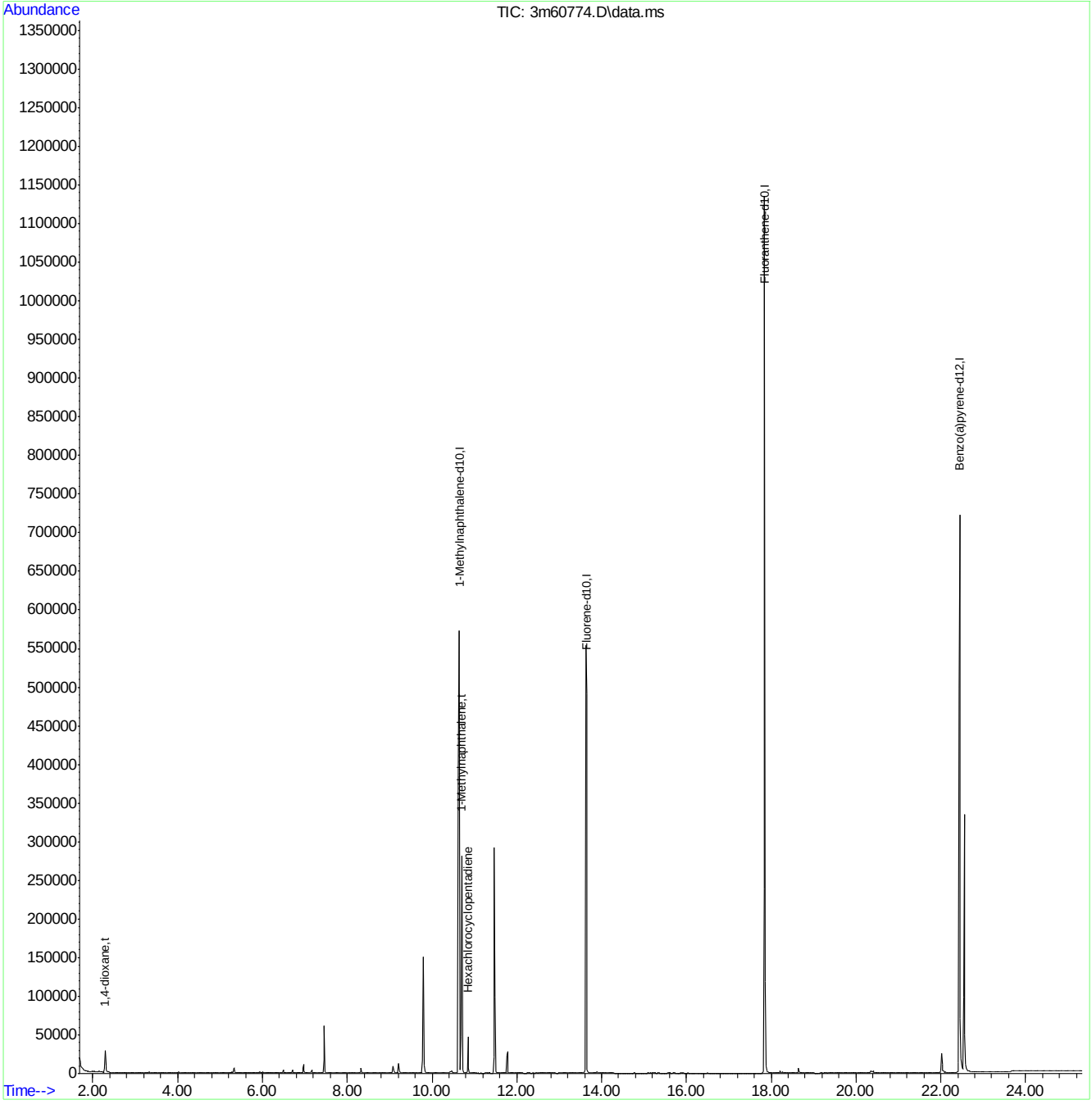
7

SGS ACCUTEST JC19644

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

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2874\
Data File : 3m61121.D
Acq On : 6 May 2016 9:29 am
Operator : linseyk
Sample : cc2855-1
Misc : op93629a,e3m2874
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 06 14:14:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri May 06 14:14:16 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.426	150	264557	4.00	ppm	0.00
14) Fluorene-d10	13.430	176	412849	4.00	ppm	0.00
21) Fluoranthene-d10	17.639	212	678083	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.243	264	581670	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	4.368	112	648660	19.60	ppm	-0.06
Spiked Amount 50.000			Recovery = 39.20%			
4) Phenol-d5	5.976	99	1042279	19.03	ppm	0.00
Spiked Amount 50.000			Recovery = 38.06%			
7) Nitrobenzene-d5	7.549	82	906938	17.81	ppm	-0.02
Spiked Amount 50.000			Recovery = 35.62%			
15) 2-Fluorobiphenyl	11.098	172	2112839	18.62	ppm	-0.03
Spiked Amount 50.000			Recovery = 37.24%			
20) 2,4,6-Tribromophenol	13.976	330	257854	19.96	ppm	0.03
Spiked Amount 50.000			Recovery = 39.92%			
28) Terphenyl-d14	18.458	244	2094663	21.30	ppm	0.02
Spiked Amount 50.000			Recovery = 42.60%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.159	88	13602	1.00	ppm #	33
5) Phenol	5.988	94	271784	4.60	ppm #	76
6) bis(2-Chloroethyl)ether	6.109	93	38467	0.86	ppm	72
8) Nitrobenzene	7.568	77	45961	0.83	ppm #	51
9) Naphthalene	8.943	128	135731	0.92	ppm	100
10) Hexachlorobutadiene	9.225	225	26631	1.04	ppm	92
11) 2-Methylnaphthalene	10.303	141	73015	0.95	ppm #	55
12) 1-Methylnaphthalene	10.488	141	75734	0.73	ppm #	56
13) Hexachlorocyclopentadiene	10.652	237	36962	1.82	ppm	82
16) Acenaphthylene	12.088	152	133006	0.93	ppm	98
17) Acenaphthene	12.443	153	90456	0.95	ppm	100
18) 4,6-dinitro-2-methylph...	13.656	198	63805	4.78	ppm	55
19) Fluorene	13.486	166	106147	0.93	ppm	80
22) Hexachlorobenzene	14.563	284	31051	0.97	ppm	78
23) Pentachlorophenol	15.011	266	89032	4.05	ppm	94
24) Phenanthrene	15.397	178	157822	0.95	ppm	99
25) Anthracene	15.490	178	142292	0.97	ppm	90
26) Fluoranthene	17.670	202	183856	0.88	ppm	94
27) Pyrene	18.071	202	177342	0.91	ppm	94
29) Benzo[a]anthracene	20.157	228	160784	0.86	ppm	97
30) Chrysene	20.219	228	166088	0.93	ppm	85
32) Benzo[b]fluoranthene	21.826	252	178397	0.92	ppm	95
33) Benzo[k]fluoranthene	21.872	252	163415	0.91	ppm	94
34) Benzo[a]pyrene	22.274	252	159805	0.89	ppm	98
35) Indeno[1,2,3-cd]pyrene	23.749	276	190184	1.04	ppm	97
36) Dibenz[a,h]anthracene	23.787	278	142892	0.95	ppm	69
37) Benzo[g,h,i]perylene	24.106	276	164417	1.03	ppm	92

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2874\
Data File : 3m61121.D
Acq On : 6 May 2016 9:29 am
Operator : linseyk
Sample : cc2855-1
Misc : op93629a,e3m2874
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 06 14:14:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri May 06 14:14:16 2016
Response via : Initial Calibration

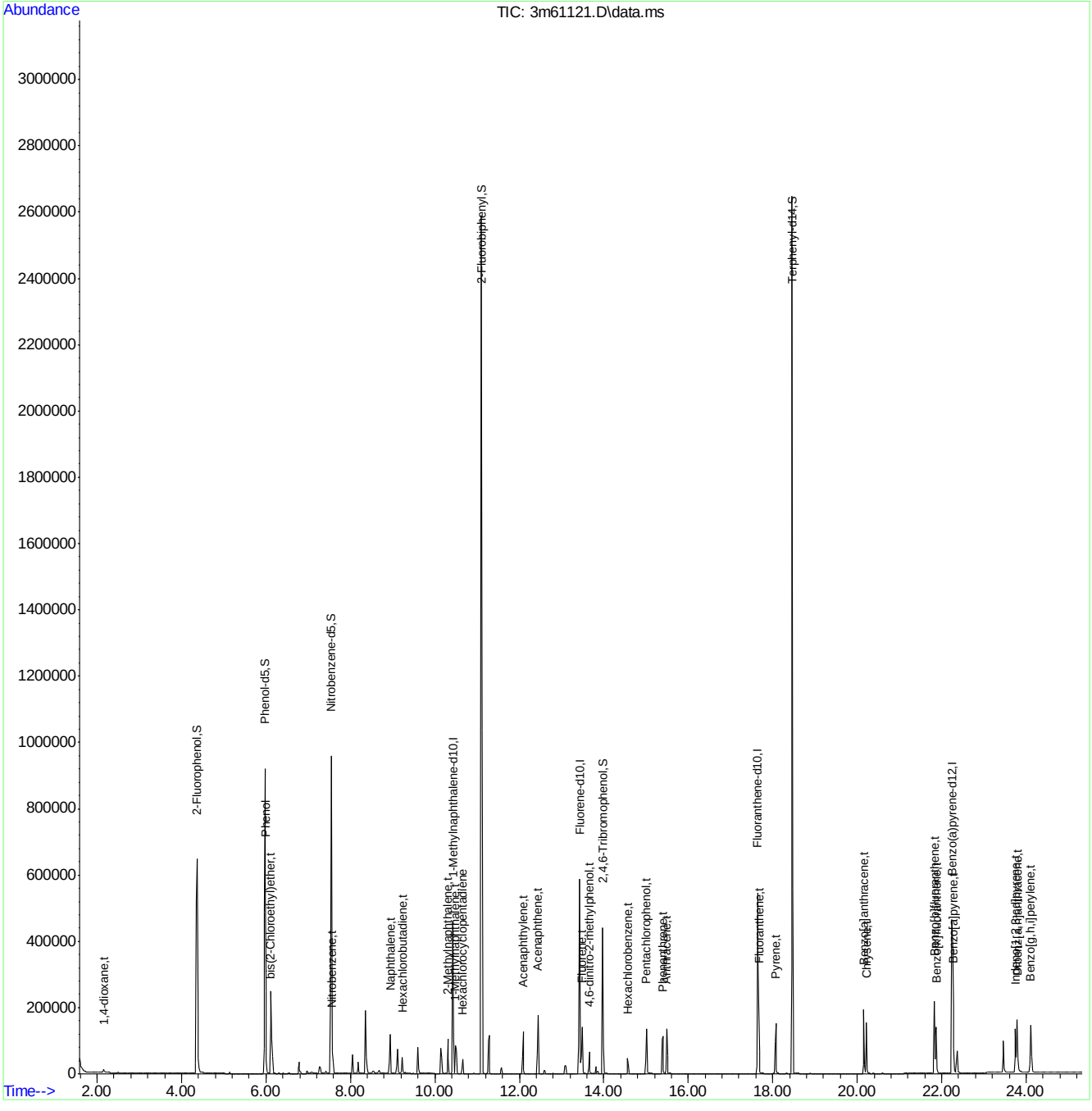
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2874\
Data File : 3m61121.D
Acq On : 6 May 2016 9:29 am
Operator : linseyk
Sample : cc2855-1
Misc : op93629a,e3m2874
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 06 14:14:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri May 06 14:14:16 2016
Response via : Initial Calibration



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 JC19644

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

7.6.44

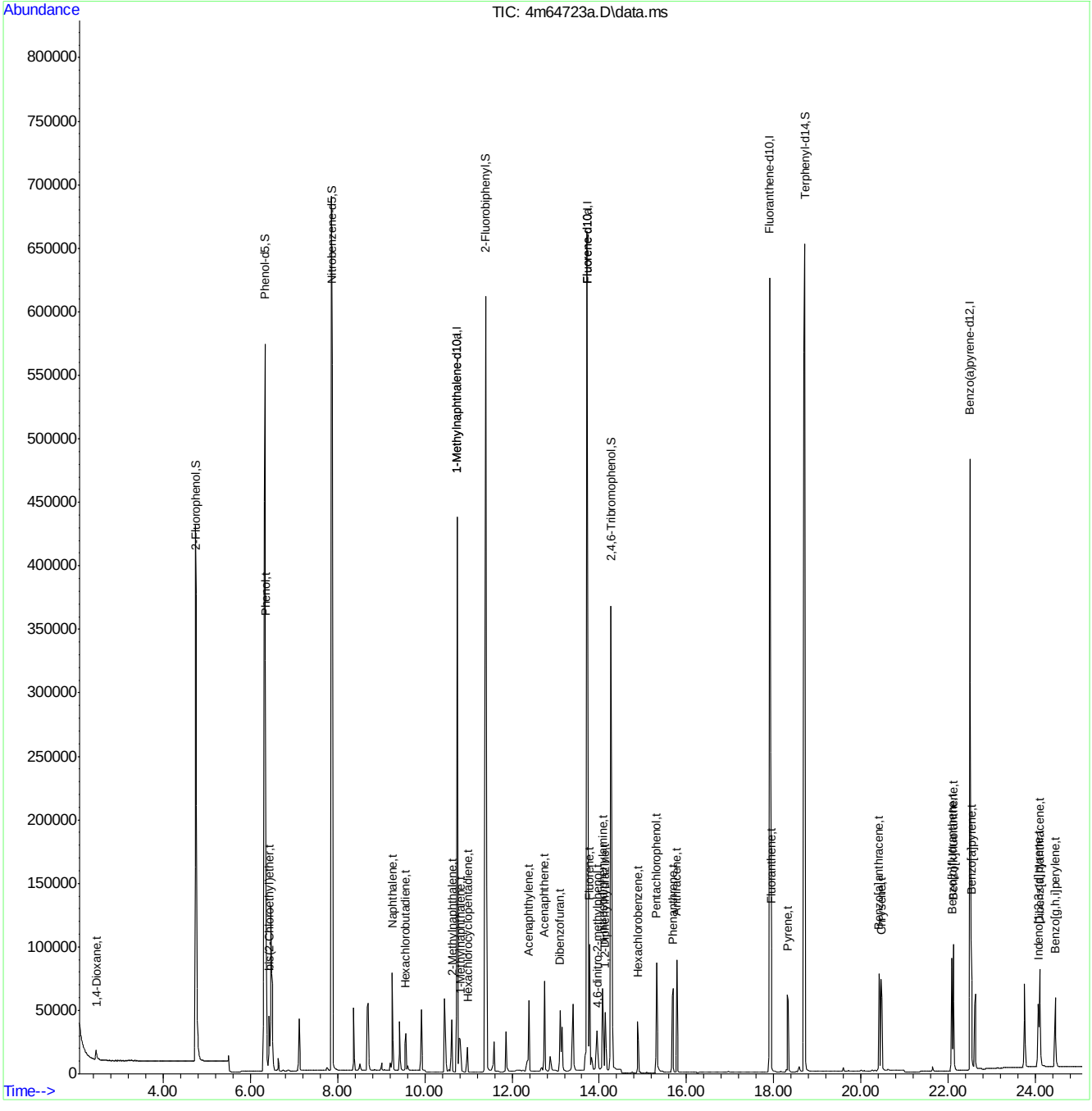
7

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64723a.D
Acq On : 14 Apr 2016 10:42 am
Operator : linseyk
Sample : ic2881-0.5
Misc : op92998a,e4m2881
ALS Vial : 2 Sample Multiplier: 1

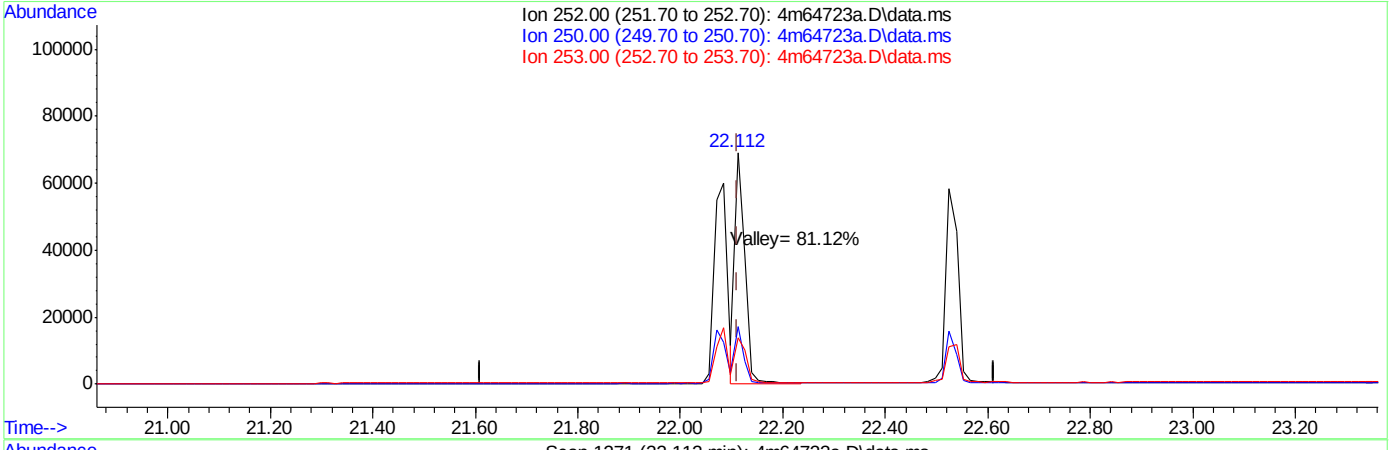
Quant Time: Apr 14 15:17:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:16:44 2016
Response via : Initial Calibration

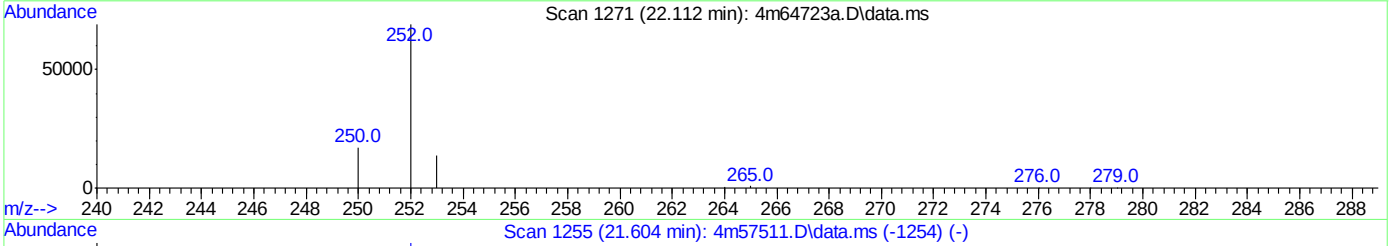


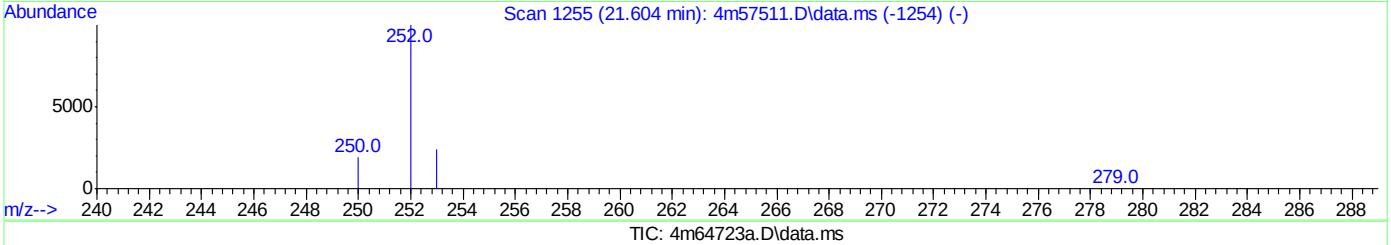
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64723a.D
Acq On : 14 Apr 2016 10:42 am
Operator : linseyk
Sample : ic2881-0.5
Misc : op92998a,e4m2881
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 14 15:11:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:11:05 2016
Response via : Initial Calibration







TIC: 4m64723a.D\data.ms

(30) Benzo[k]fluoranthene (t)

22.112min (0.000) 0.48ppm

response 89387

Ion	Exp%	Act%
252.00	100	100
250.00	24.80	24.21
253.00	19.80	18.89
0.00	0.00	0.00

SGS ACCUTEST JC19644

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

7.6.45

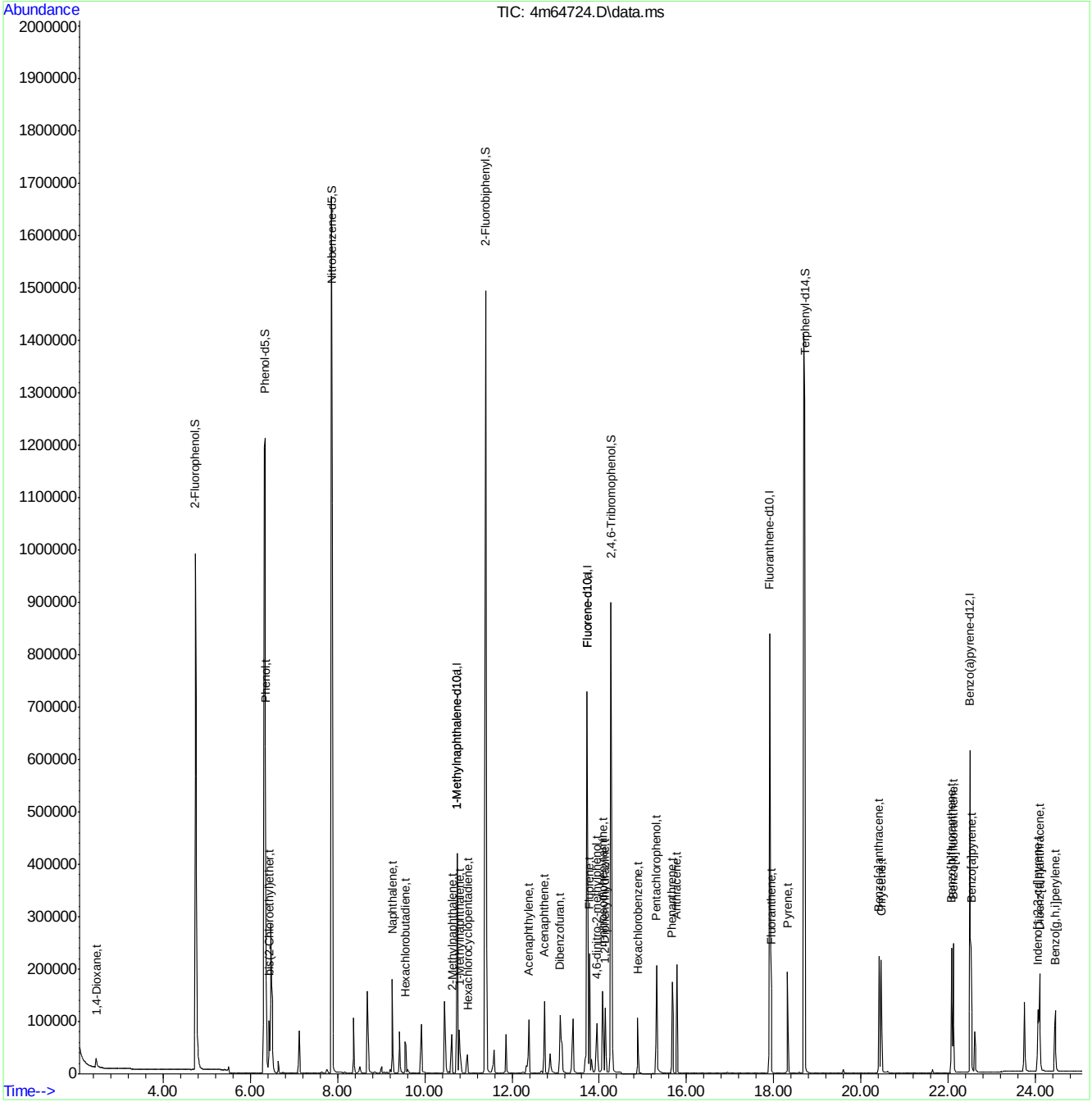
7

SGS ACCUTEST JC19644

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

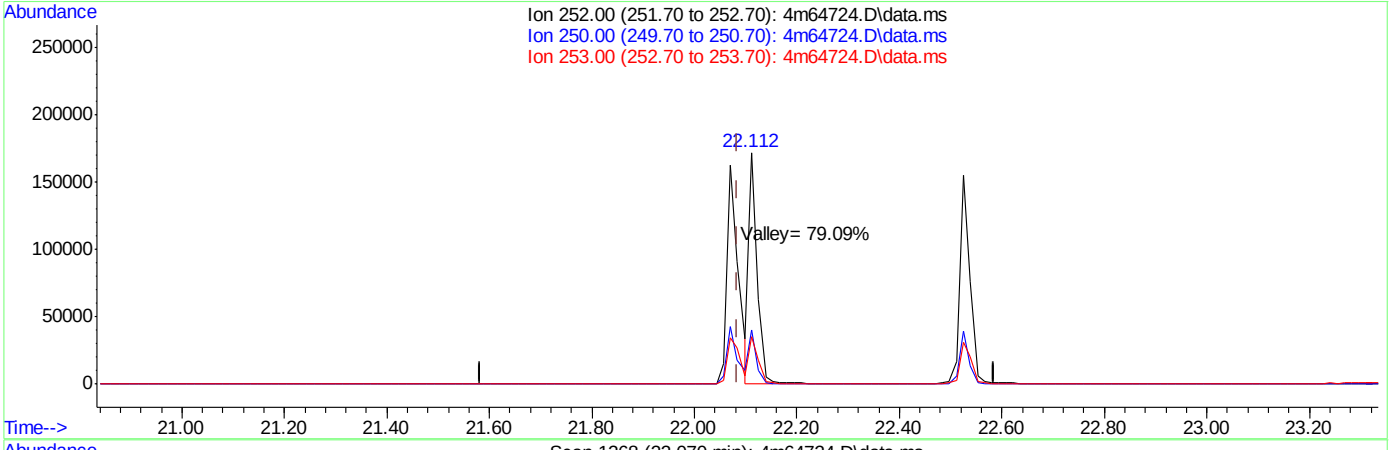


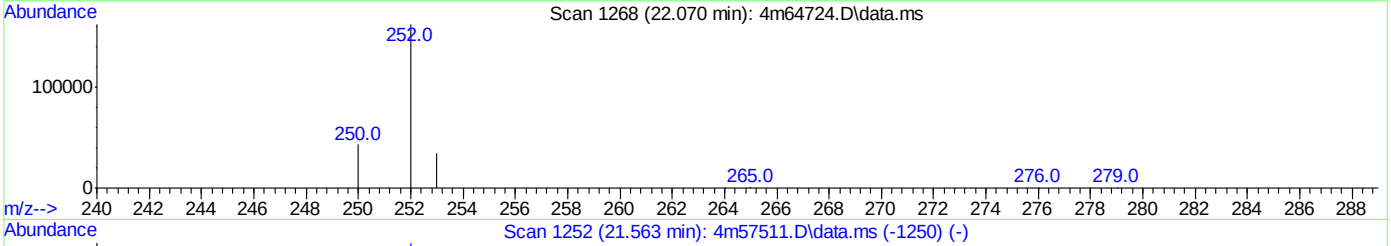
SGS ACCUTEST JC19644

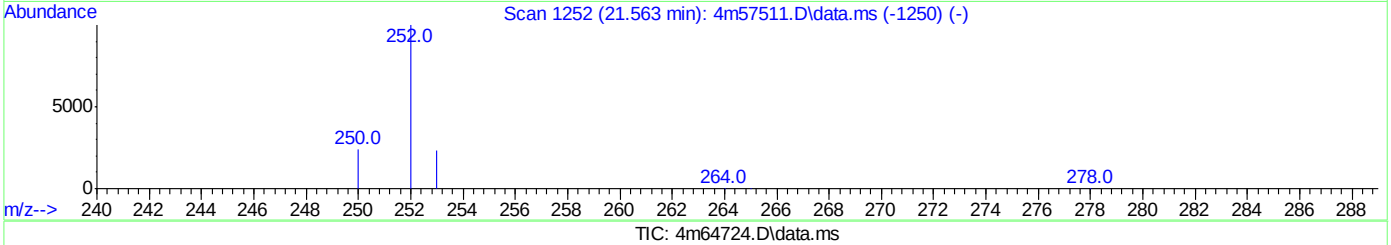
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64724.D
Acq On : 14 Apr 2016 11:13 am
Operator : linseyk
Sample : icc2881-1.0
Misc : op92998a,e4m2881
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 14 15:12:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:12:00 2016
Response via : Initial Calibration







TIC: 4m64724.D\data.ms

(29) Benzo[b]fluoranthene (t)

22.070min (-0.014) 1.02ppm

response 249096

Ion	Exp%	Act%
252.00	100	100
250.00	19.90	25.97
253.00	27.70	21.20
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64725.D
Acq On : 14 Apr 2016 11:44 am
Operator : linseyk
Sample : ic2881-0.2
Misc : op92998a,e4m2881
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 14 15:28:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:28:49 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.746	152	284988	4.00	ppm	0.00
12) Fluorene-d10	13.724	176	506257	4.00	ppm	0.00
22) Fluoranthene-d10	17.904	212	790251	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	22.497	264	600983	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.746	152	284988	4.00	ppm	0.00
38) Fluorene-d10a	13.724	176	506257	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	4.741	112	154379	4.07	ppm	-0.01
Spiked Amount 50.000	Range 11 - 58		Recovery = 8.14%#			
3) Phenol-d5	6.338	99	261565	4.08	ppm	0.00
Spiked Amount 50.000			Recovery = 8.16%			
6) Nitrobenzene-d5	7.864	82	233647	4.07	ppm	0.00
Spiked Amount 50.000			Recovery = 8.14%			
11) 2-Fluorobiphenyl	11.390	172	352568	4.28	ppm	0.00
Spiked Amount 50.000			Recovery = 8.56%			
17) 2,4,6-Tribromophenol	14.273	330	121131	4.17	ppm	0.00
Spiked Amount 50.000			Recovery = 8.34%			
25) Terphenyl-d14	18.694	244	437958	4.00	ppm	0.00
Spiked Amount 50.000			Recovery = 8.00%			
Target Compounds						Qvalue
4) Phenol	6.352	94	66443	1.01	ppm	94
5) bis(2-Chloroethyl)ether	6.434	93	9934	0.20	ppm	94
7) Naphthalene	9.256	128	33060	0.20	ppm	99
8) Hexachlorobutadiene	9.565	225	7994	0.20	ppm	99
9) 2-Methylnaphthalene	10.626	142	13532	0.20	ppm	99
10) Hexachlorocyclopentadiene	10.984	237	6597	0.35	ppm	100
13) Acenaphthylene	12.388	152	22912	0.20	ppm	99
14) Acenaphthene	12.743	153	14986	0.20	ppm	98
15) Dibenzofuran	13.097	168	23893	0.20	ppm	97
16) Fluorene	13.771	166	28326	0.20	ppm	99
18) Hexachlorobenzene	14.883	284	10972	0.20	ppm	98
19) Pentachlorophenol	15.316	266	19930	0.97	ppm	97
20) Phenanthrene	15.671	178	37427	0.20	ppm	100
21) Anthracene	15.780	178	35181	0.20	ppm	99
23) Fluoranthene	17.941	202	41945	0.20	ppm	99
24) Pyrene	18.318	202	42201	0.20	ppm	99
26) Benzo[a]anthracene	20.408	228	39404	0.20	ppm	98
27) Chrysene	20.464	228	38354	0.20	ppm	99
29) Benzo[b]fluoranthene	22.070	252	44250	0.20	ppm	99
30) Benzo[k]fluoranthene	22.112	252	35796	0.20	ppm	98
31) Benzo[a]pyrene	22.525	252	36721	0.21	ppm	98
32) Indeno[1,2,3-cd]pyrene	24.053	276	45470	0.20	ppm	94
33) Dibenz[a,h]anthracene	24.094	278	36670	0.20	ppm	99
34) Benzo[g,h,i]perylene	24.452	276	38801	0.20	ppm	100
36) 1,4-Dioxane	2.472	88	4064	0.17	ppm	80
37) 1-Methylnaphthalene	10.793	142	12503	0.20	ppm	99
39) 4,6-dinitro-2-methylph...	13.963	198	7678	0.88	ppm	96

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

7.6.46

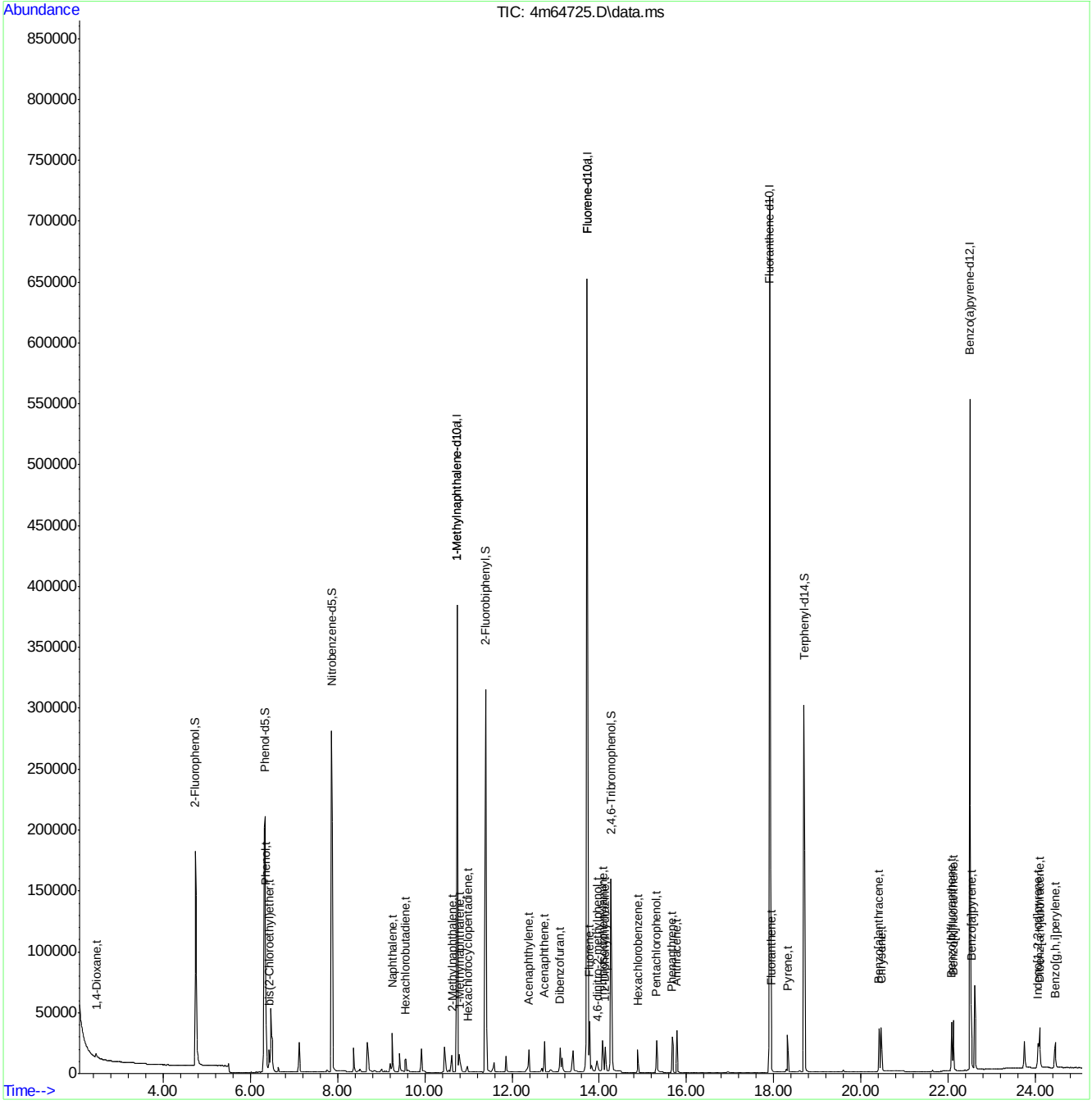
7

SGS ACCUTEST JC19644

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

SGS ACCUTEST JC19644

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

7.6.47

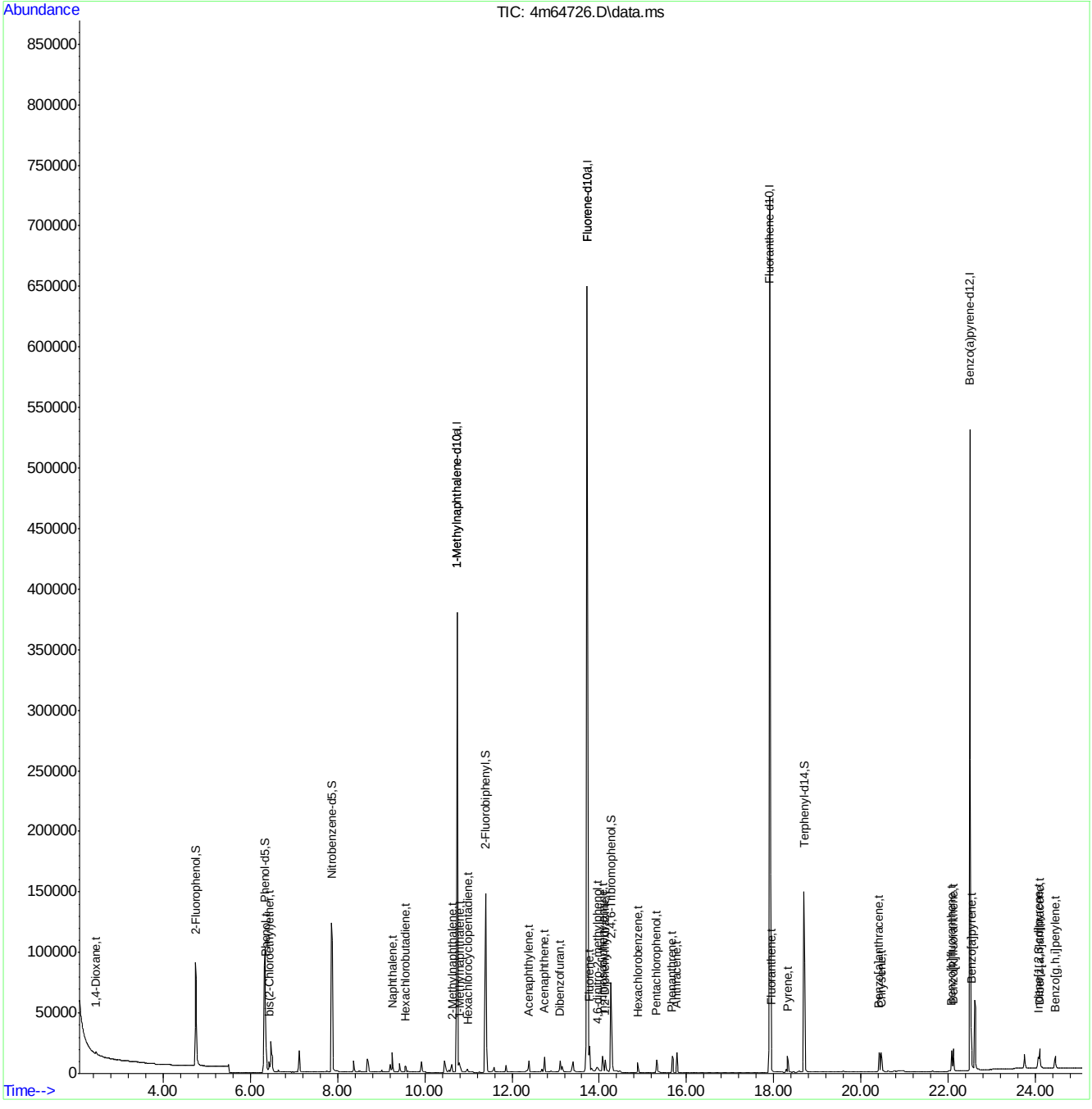
7

SGS ACCUTEST JC19644

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



SGS ACCUTEST JC19644

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

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

7.6.48

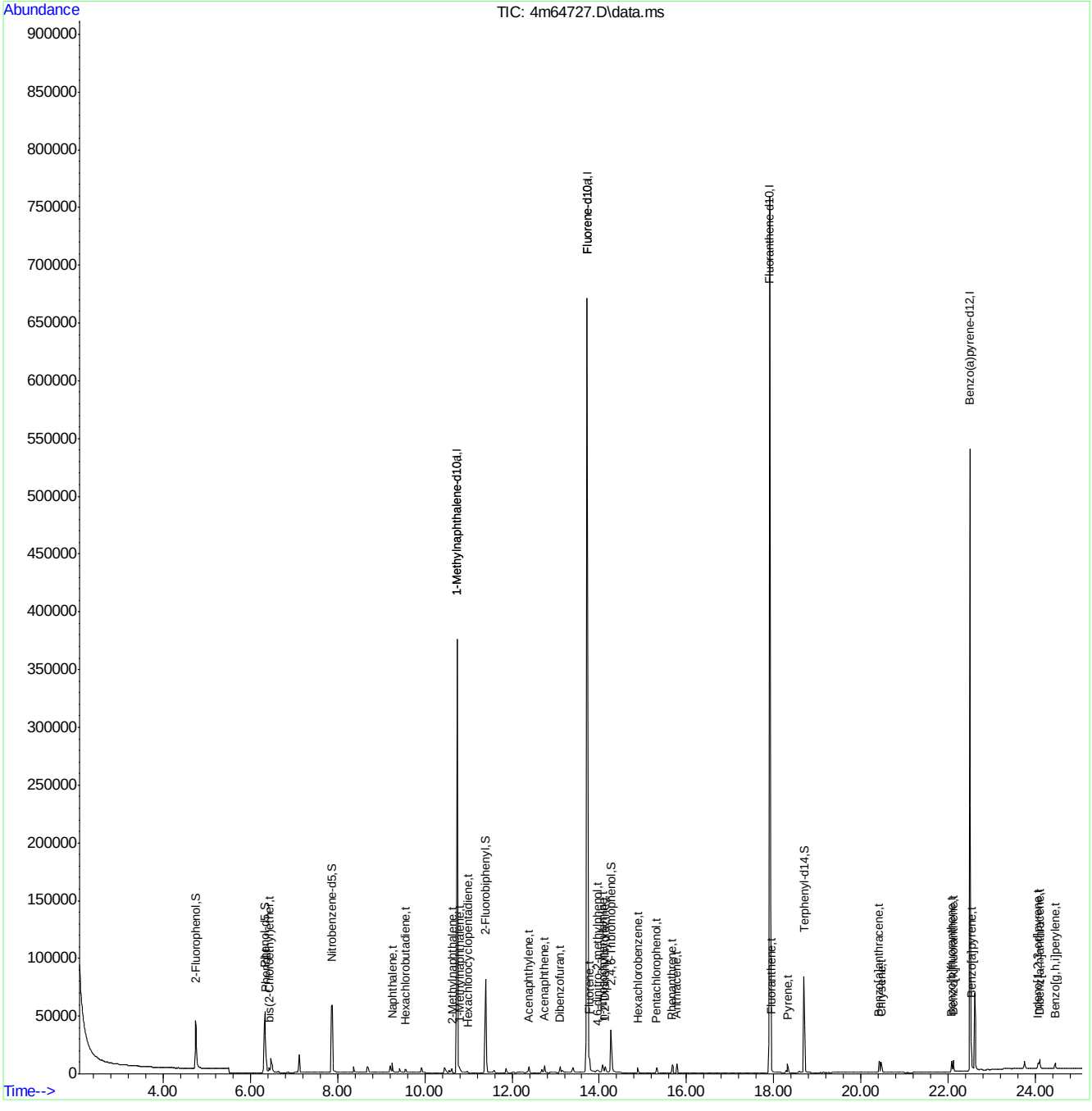
7

SGS ACCUTEST JC19644

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



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

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

7.6.49

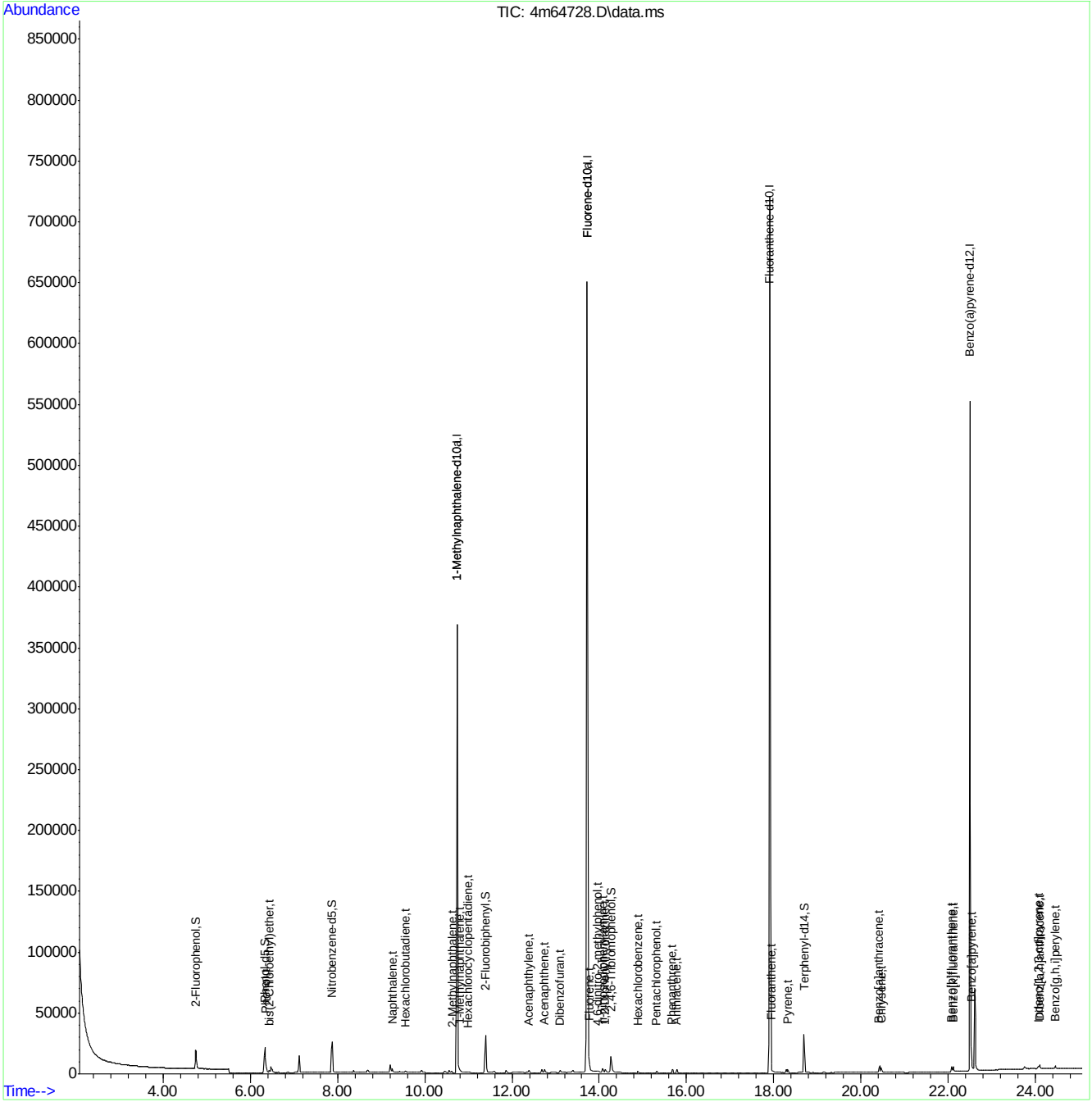
7

SGS ACCUTEST JC19644

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 JC19644

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 JC19644

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

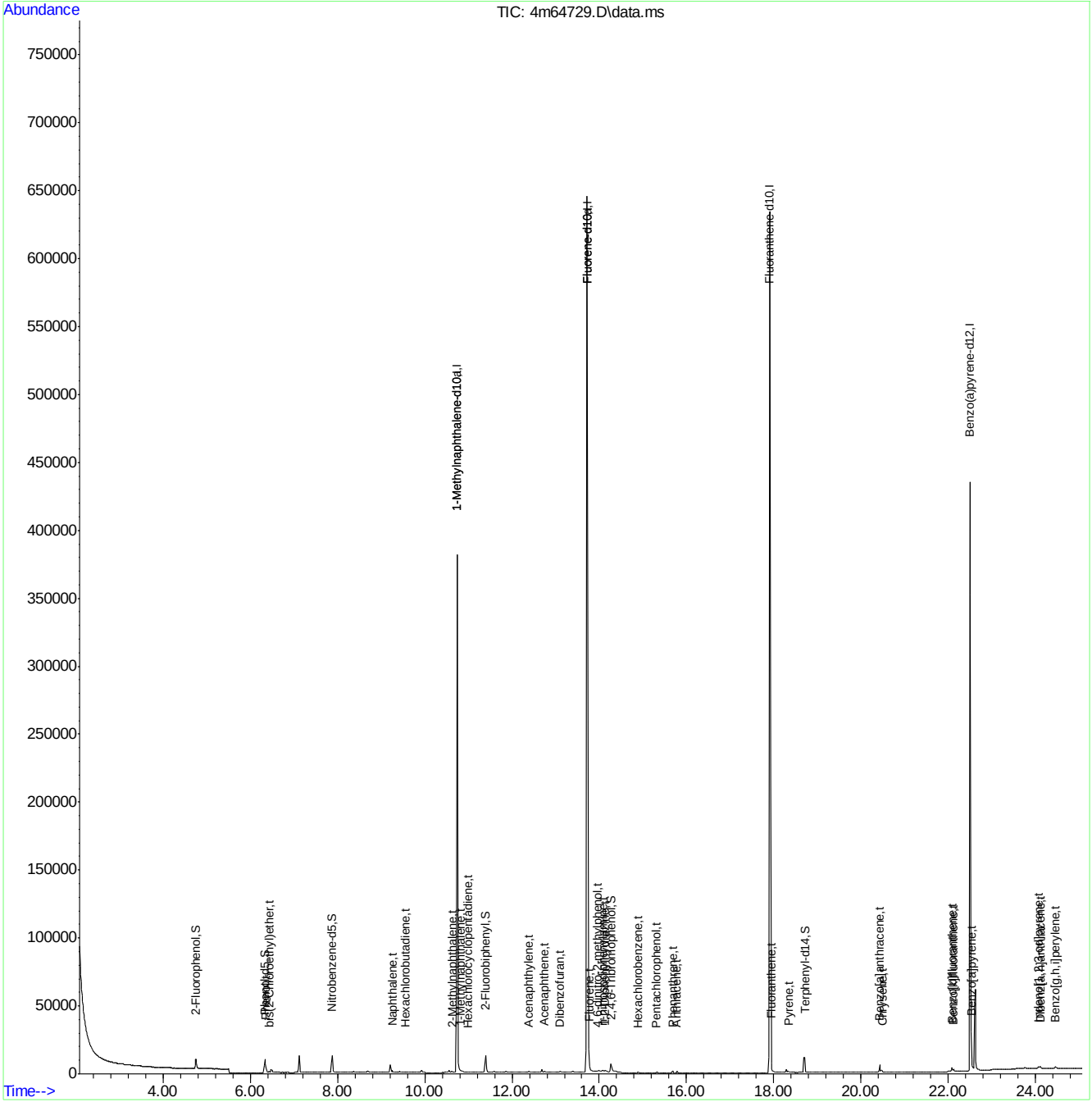
7.6.50

7

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



M4M2881SIM.M Thu Apr 14 15:53:40 2016 MANAGER Page: 3

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 JC19644

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

7.6.51

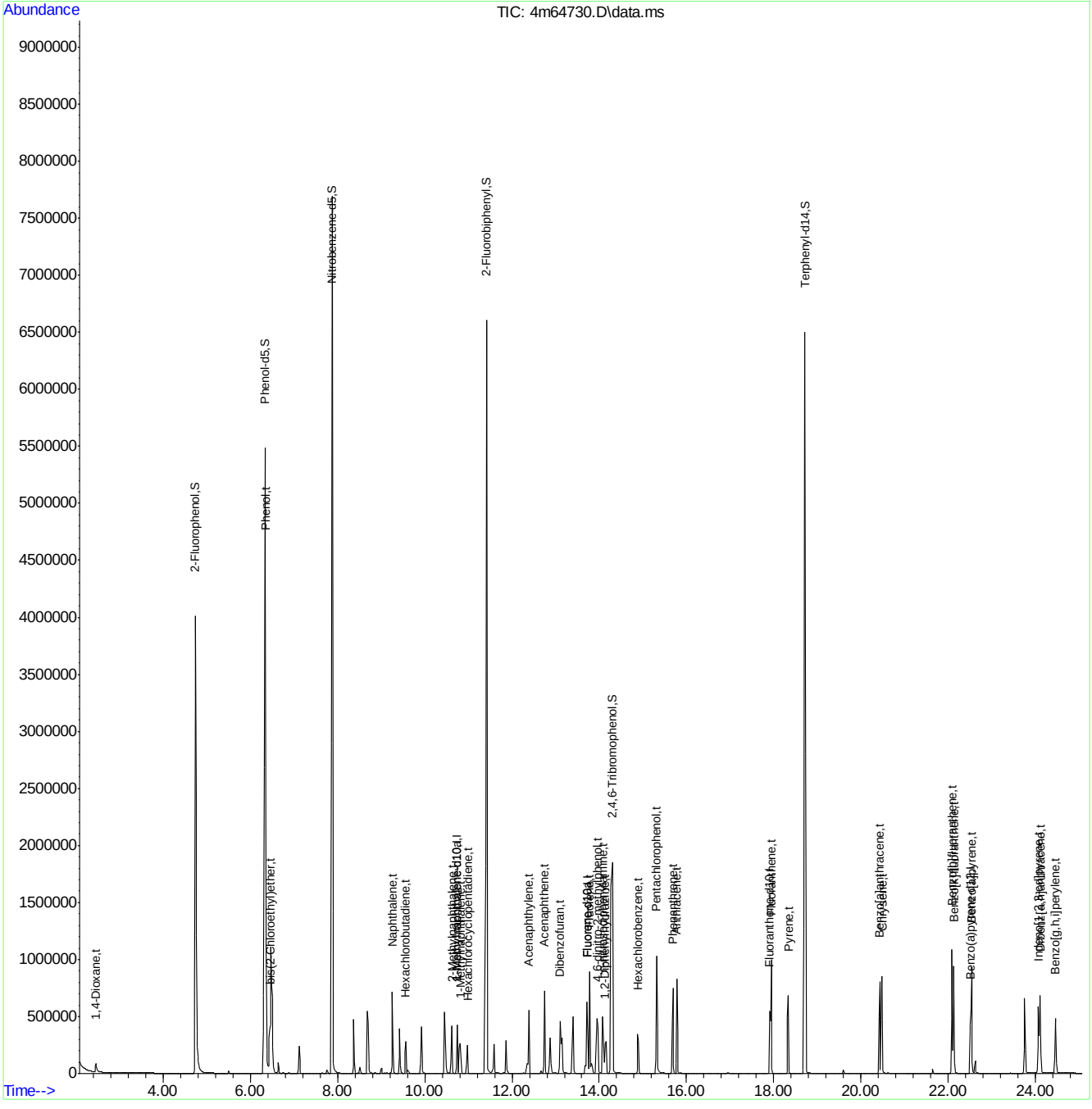
7

SGS ACCUTEST JC19644

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



SGS ACCUTEST JC19644

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

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

7.6.52

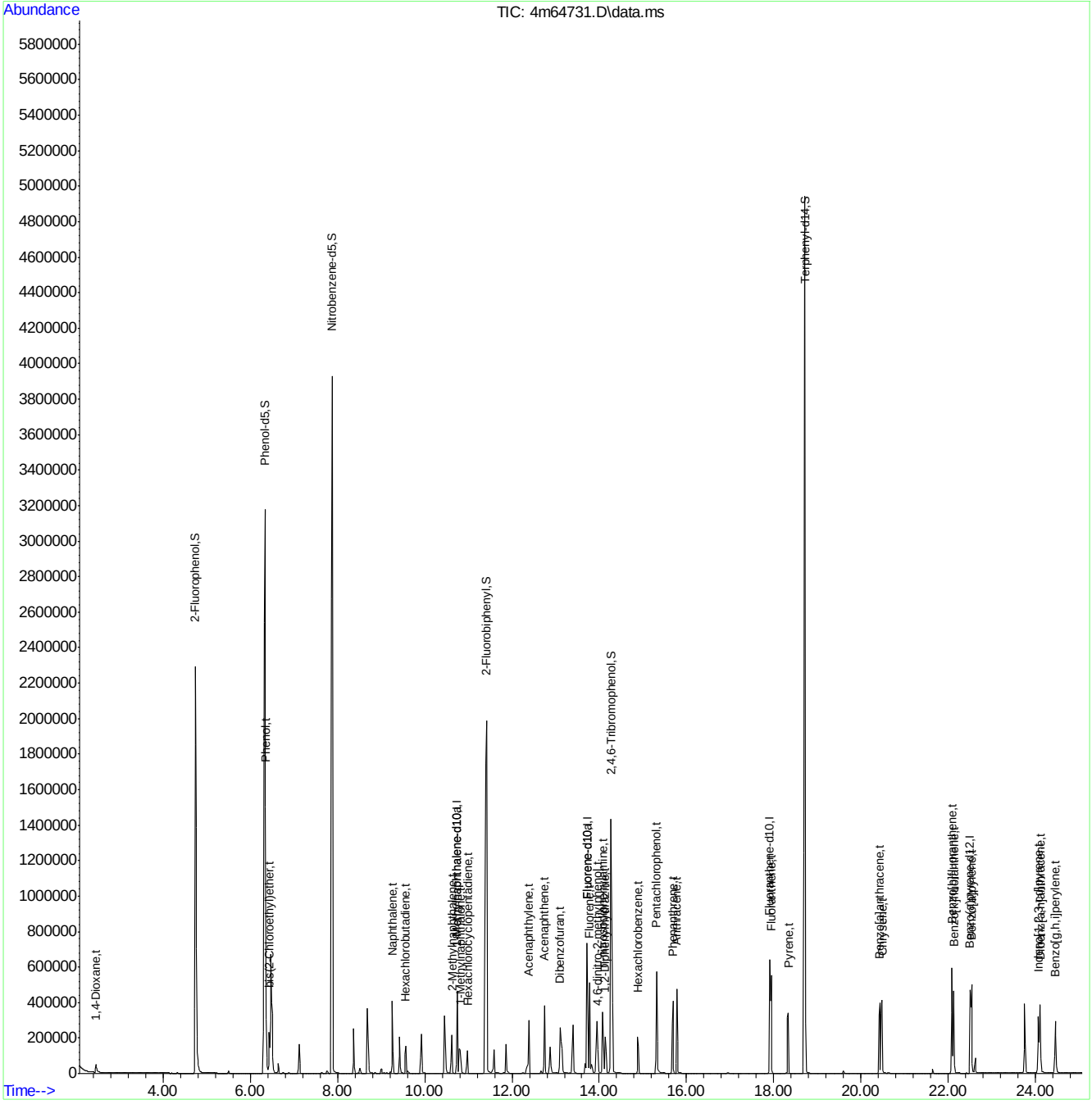
7

SGS ACCUTEST JC19644

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

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64732.D
Acq On : 14 Apr 2016 3:25 pm
Operator : linseyk
Sample : icv2881-1.0
Misc : op92998a,e4m2881
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 14 15:57:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:56:58 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.746	152	390727	4.00	ppm	0.00
12) Fluorene-d10	13.724	176	664300	4.00	ppm	0.00
22) Fluoranthene-d10	17.904	212	995159	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	22.511	264	771368	4.00	ppm	0.01
35) 1-Methylnaphthalene-d10a	10.746	152	390727	4.00	ppm	0.00
38) Fluorene-d10a	13.724	176	664300	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery	=	0.00%#	
3) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
6) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
11) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
17) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
4) Phenol	6.352	94	411546	4.67	ppm	79
19) Pentachlorophenol	15.316	266	135876	4.78	ppm	93
39) 4,6-dinitro-2-methylph...	13.963	198	89891	4.89	ppm	98

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

7.6.53

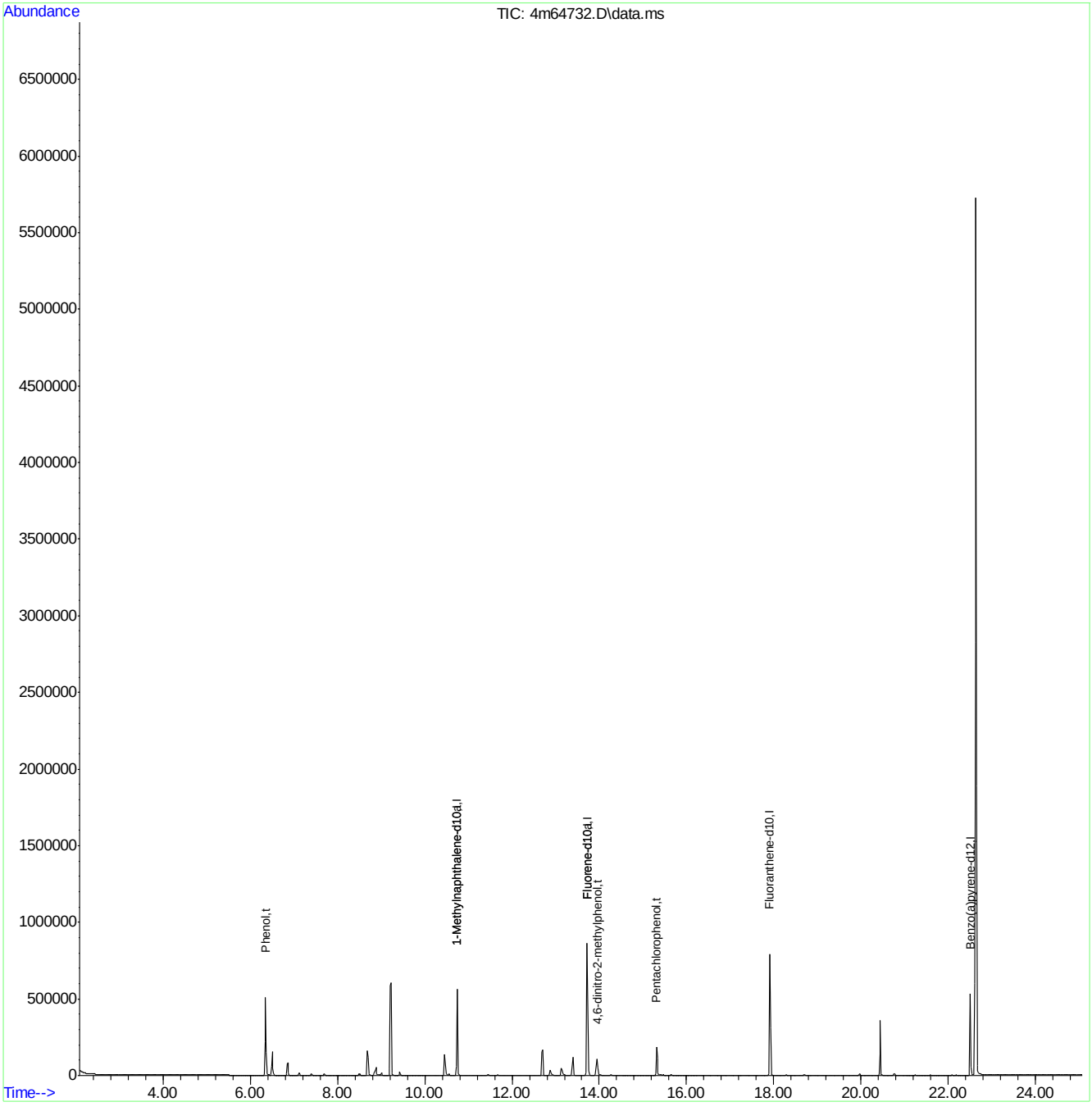
7

SGS ACCUTEST JC19644

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 JC19644

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)

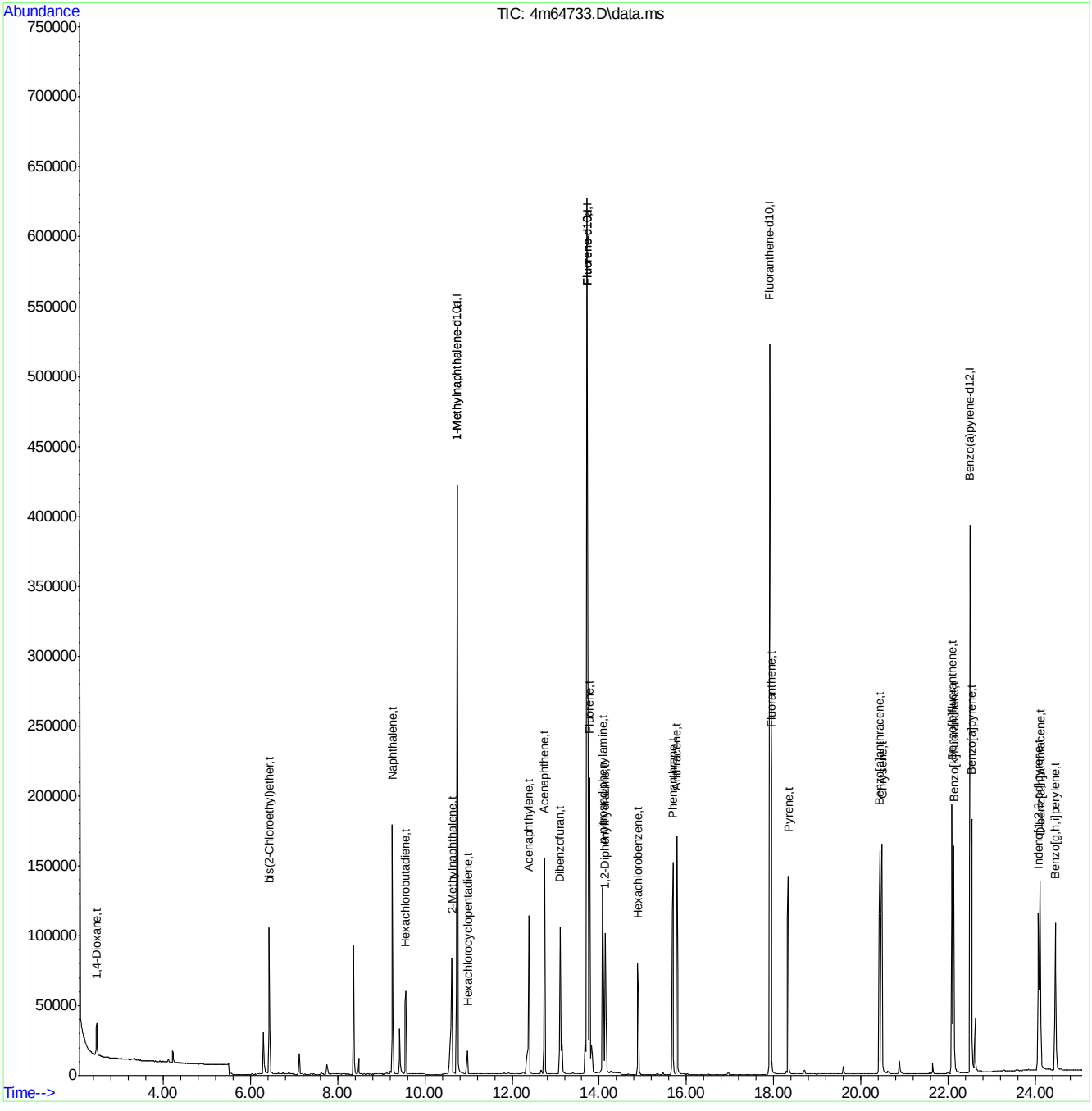
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64733.D
Acq On : 14 Apr 2016 3:57 pm
Operator : linseyk
Sample : icv2881-1.0
Misc : op92998a,e4m2881
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 14 16:31:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:54:58 2016
Response via : Initial Calibration



SGS ACCUTEST JC19644

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

7.6.55

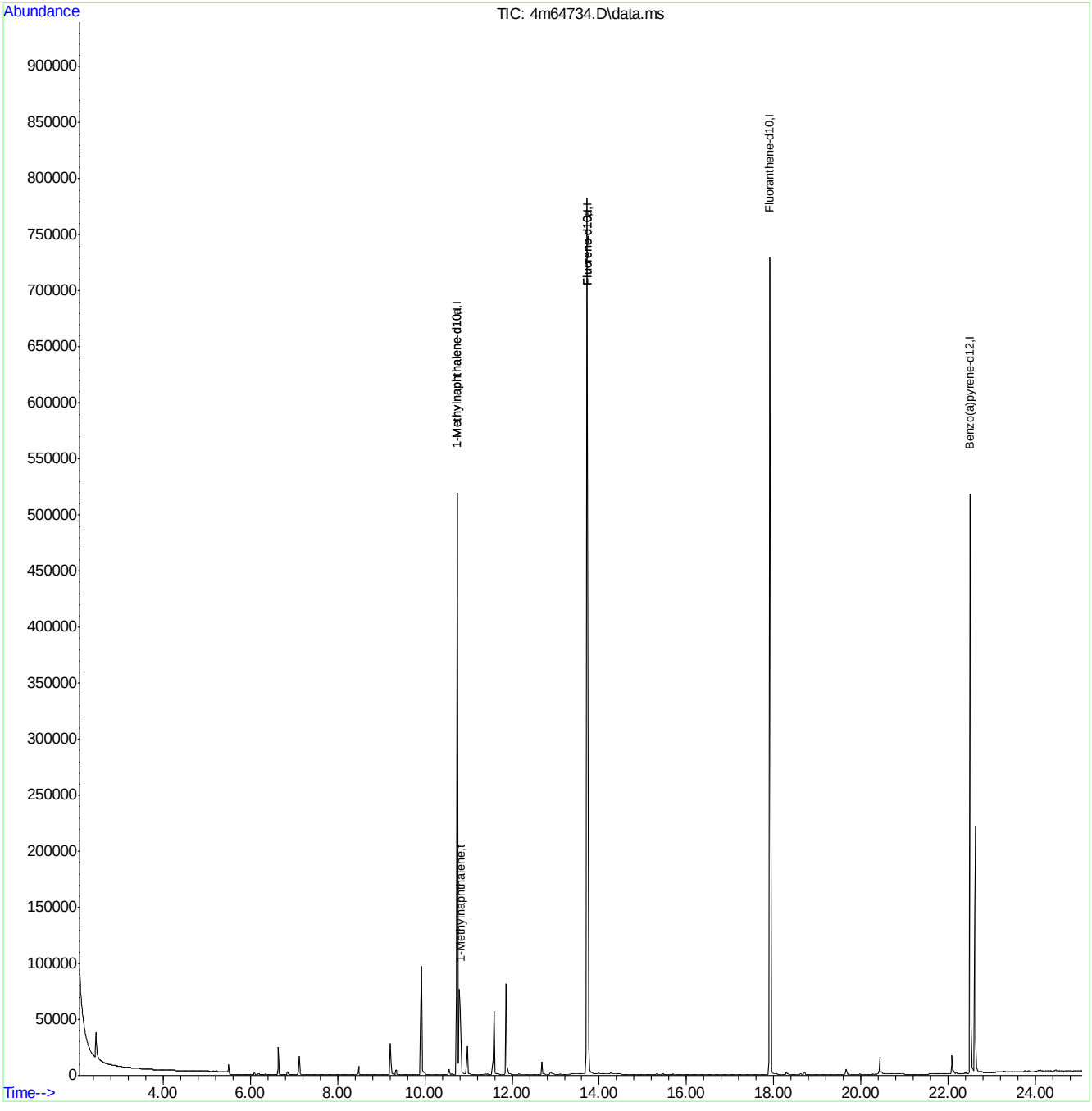
7

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64734.D
Acq On : 14 Apr 2016 4:28 pm
Operator : linseyk
Sample : icv2881-1.0
Misc : op92998a,e4m2881
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 14 17:01:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:54:58 2016
Response via : Initial Calibration



M4M2881SIM.M Thu Apr 14 17:02:12 2016 MANAGER

Page: 2

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65170.D
Acq On : 9 May 2016 10:32 am
Operator : linseyk
Sample : cc2881-1
Misc : op93541a,e4m2910
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 09 10:57:49 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 06 13:08:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1-Methylnaphthalene-d10	10.678	152	326495	4.00	ppm		-0.02
12) Fluorene-d10	13.656	176	574008	4.00	ppm		-0.02
22) Fluoranthene-d10	17.836	212	915613	4.00	ppm		-0.03
28) Benzo(a)pyrene-d12	22.436	264	829985	4.00	ppm		0.00
35) 1-Methylnaphthalene-d10a	10.678	152	326495	4.00	ppm		#-0.02
38) Fluorene-d10a	13.656	176	574008	4.00	ppm		-0.02
System Monitoring Compounds							
2) 2-Fluorophenol	4.704	112	842525	19.71	ppm		-0.02
Spiked Amount 50.000	Range 11 - 58		Recovery = 39.42%				
3) Phenol-d5	6.287	99	1462810	20.35	ppm		-0.02
Spiked Amount 50.000			Recovery = 40.70%				
6) Nitrobenzene-d5	7.821	82	1391121	21.58	ppm		-0.02
Spiked Amount 50.000			Recovery = 43.16%				
11) 2-Fluorobiphenyl	11.346	172	1930885	20.49	ppm		-0.02
Spiked Amount 50.000			Recovery = 40.98%				
17) 2,4,6-Tribromophenol	14.205	330	556837	18.19	ppm		-0.02
Spiked Amount 50.000			Recovery = 36.38%				
25) Terphenyl-d14	18.645	244	2735738	22.12	ppm		-0.03
Spiked Amount 50.000			Recovery = 44.24%				
Target Compounds							Qvalue
4) Phenol	6.315	94	386054	5.24	ppm		89
5) bis(2-Chloroethyl)ether	6.383	93	57756	1.04	ppm	#	42
7) Naphthalene	9.198	128	187762	1.02	ppm		100
8) Hexachlorobutadiene	9.492	225	47875	1.06	ppm		73
9) 2-Methylnaphthalene	10.559	142	109932	1.38	ppm		83
10) Hexachlorocyclopentadiene	10.917	237	65709	2.43	ppm		91
13) Acenaphthylene	12.325	152	129395	0.98	ppm		99
14) Acenaphthene	12.680	153	84662	1.00	ppm		96
15) Dibenzofuran	13.035	168	132022	1.05	ppm		99
16) Fluorene	13.704	166	149663	0.98	ppm		97
18) Hexachlorobenzene	14.825	284	58607	0.98	ppm		81
19) Pentachlorophenol	15.258	266	139810	5.69	ppm		94
20) Phenanthrene	15.614	178	215236	1.04	ppm		98
21) Anthracene	15.707	178	207739	1.06	ppm		97
23) Fluoranthene	17.874	202	256515	1.04	ppm		99
24) Pyrene	18.269	202	247866	1.02	ppm		98
26) Benzo[a]anthracene	20.340	228	219601	0.97	ppm	#	94
27) Chrysene	20.415	228	226560	1.02	ppm		99
29) Benzo[b]fluoranthene	22.009	252	233884	0.78	ppm		93
30) Benzo[k]fluoranthene	22.050	252	225556	0.90	ppm		98
31) Benzo[a]pyrene	22.463	252	239425	0.97	ppm		91
32) Indeno[1,2,3-cd]pyrene	23.978	276	274857	0.89	ppm		100
33) Dibenz[a,h]anthracene	24.019	278	227949	0.92	ppm		94
34) Benzo[g,h,i]perylene	24.363	276	230944	0.88	ppm		100
36) 1,4-Dioxane	2.424	88	19517	0.92	ppm		94
37) 1-Methylnaphthalene	10.750	142	99269	1.30	ppm		88
39) 4,6-dinitro-2-methylph...	13.895	198	116347	6.82	ppm		85

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65170.D
Acq On : 9 May 2016 10:32 am
Operator : linseyk
Sample : cc2881-1
Misc : op93541a,e4m2910
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 09 10:57:49 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 06 13:08:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
40) 1,2-Diphenylhydrazine	14.062	77	143309	1.05 ppm	97
41) n-nitrosodiphenylamine	14.014	169	91348	0.91 ppm	94

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

7.6.56

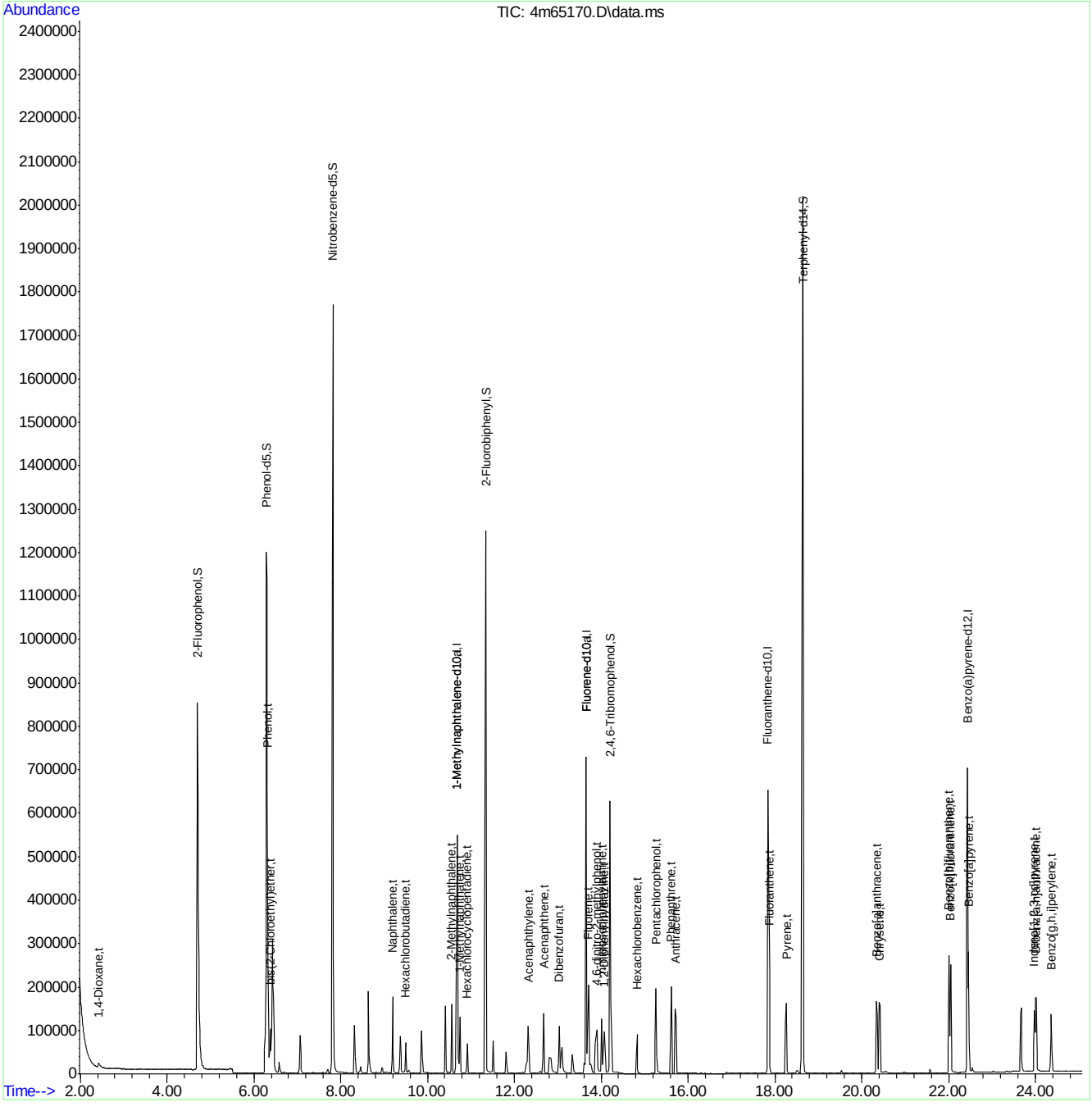
7

SGS ACCUTEST JC19644

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65170.D
Acq On : 9 May 2016 10:32 am
Operator : linseyk
Sample : cc2881-1
Misc : op93541a,e4m2910
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 09 10:57:49 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 06 13:08:34 2016
Response via : Initial Calibration



SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25924.D
Acq On : 13 May 2016 9:24 am
Operator : ariellec
Sample : ic1209-2
Misc : op93693,e6p1209
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 13 09:55:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 09:48:02 2016
QLast Update : Fri May 13 09:52:10 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.869	152	579980	40.00	ppm	0.00
24) Naphthalene-d8	5.997	136	2376057	40.00	ppm	0.00
47) Acenaphthene-d10	8.110	164	1358066	40.00	ppm	0.00
69) Phenanthrene-d10	10.303	188	2403780	40.00	ppm	0.00
83) Chrysene-d12	14.491	240	2318295	40.00	ppm	0.00
92) Perylene-d12	16.604	264	2248542	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.869	152	579980	40.00	ppm	0.00
104) Acenaphthene-d10a	8.110	164	1358066	40.00	ppm	0.00
106) Phenanthrene-d10a	10.303	188	2403780	40.00	ppm	0.00
110) Chrysene-d12a	14.491	240	2318295	40.00	ppm	0.00
112) Naphthalene-d8a	5.997	136	2376057	40.00	ppm	0.00
114) Chrysene-d12b	14.491	240	2318295	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.858	112	47403	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
8) Phenol-d5	4.569	99	61107	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
25) Nitrobenzene-d5	5.324	82	57208	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
51) 2-Fluorobiphenyl	7.217	172	93452	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
73) 2,4,6-Tribromophenol	9.244	330	13234	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
85) Terphenyl-d14	12.860	244	104394	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-Chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.457	88	21972	2.00	ppm	96
3) Pyridine	2.772	79	54572	2.00	ppm	98
4) N-Nitrosodimethylamine	2.735	74	35013	2.00	ppm	95
6) Indene	5.072	116	84063	2.00	ppm	96
7) Cumene	4.259	105	121434	2.00	ppm	97
9) Phenol	4.580	94	64897	2.00	ppm	88
10) Aniline	4.607	93	78978	2.00	ppm	93
11) bis(2-Chloroethyl)ether	4.655	93	47512	2.00	ppm	95
12) 2-Chlorophenol	4.698	128	47141	2.00	ppm	99
13) Decane	4.730	43	65348	2.00	ppm	87
14) 1,3-Dichlorobenzene	4.821	146	50573	2.00	ppm	95
15) 1,4-Dichlorobenzene	4.880	146	50695	2.00	ppm	92
16) Benzyl alcohol	4.971	108	32221	2.00	ppm	96
17) 1,2-Dichlorobenzene	5.003	146	49526	2.00	ppm	98
18) Acetophenone	5.190	105	71785	2.00	ppm	85
19) 2-Methylphenol	5.056	108	44763	2.00	ppm	98
20) 2,2'-oxybis(1-Chloropr...	5.083	121	17370	2.00	ppm #	69

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25924.D
Acq On : 13 May 2016 9:24 am
Operator : ariellec
Sample : ic1209-2
Misc : op93693,e6p1209
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 13 09:55:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 09:48:02 2016
QLast Update : Fri May 13 09:52:10 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.179	108	48883	2.00	ppm		97
22) n-Nitroso-di-n-propyla...	5.184	70	42997	2.00	ppm		92
23) Hexachloroethane	5.286	201	14771	2.00	ppm	#	73
26) Nitrobenzene	5.340	77	60230	2.00	ppm		95
27) Quinoline	6.367	129	93672	2.00	ppm		96
28) Isophorone	5.548	82	100868	2.00	ppm		94
29) 2-Nitrophenol	5.623	139	24261	2.00	ppm		97
30) 2,4-Dimethylphenol	5.650	107	43453	2.00	ppm		96
31) Benzoic acid	5.693	105	16933	2.00	ppm	#	48
32) bis(2-Chloroethoxy)met...	5.746	93	59253	2.00	ppm		98
33) 2,4-Dichlorophenol	5.848	162	35808	2.00	ppm		97
34) 2,6-Dichlorophenol	6.072	162	35395	2.00	ppm		99
35) 1,3,5-Trichlorobenzene	5.634	180	41596	2.00	ppm		92
36) 1,2,4-Trichlorobenzene	5.939	180	37463	2.00	ppm		92
37) 1,2,3-Trichlorobenzene	6.163	180	37794	2.00	ppm		99
38) Naphthalene	6.019	128	148396	2.00	ppm		98
39) 4-Chloroaniline	6.067	127	59938	2.00	ppm		96
40) 2,3-Dichloroaniline	7.110	161	45039	2.00	ppm		99
41) Caprolactam	6.415	55	22520	2.00	ppm		94
42) Hexachlorobutadiene	6.142	225	19595	2.00	ppm		95
43) 4-Chloro-3-methylphenol	6.580	107	45145	2.00	ppm		95
44) 2-Methylnaphthalene	6.773	141	80082	2.00	ppm		94
45) 1-Methylnaphthalene	6.891	141	78772	2.00	ppm		98
46) Dimethylnaphthalene	7.549	156	81062	2.00	ppm		96
48) Hexachlorocyclopentadiene	6.955	237	34528	4.00	ppm		98
49) 2,4,6-Trichlorophenol	7.105	196	22700	2.00	ppm		94
50) 2,4,5-Trichlorophenol	7.147	196	24622	2.00	ppm		96
52) 2-Chloronaphthalene	7.367	162	83781	2.00	ppm		95
53) Biphenyl	7.345	154	112833	2.00	ppm		98
54) 2-Nitroaniline	7.495	65	28103	2.00	ppm		96
55) Dimethylphthalate	7.752	163	96270	2.00	ppm		100
56) Acenaphthylene	7.912	152	139581	2.00	ppm		98
57) 2,6-Dinitrotoluene	7.827	165	16499	2.00	ppm		90
58) 3-Nitroaniline	8.051	138	22854	2.00	ppm		98
59) Acenaphthene	8.153	153	90069	2.00	ppm		96
60) 2,4-Dinitrophenol	8.196	184	4425	4.00	ppm		88
61) 4-Nitrophenol	8.287	109	13956	2.00	ppm		93
62) Dibenzofuran	8.394	168	121972	2.00	ppm		96
63) 2,4-Dinitrotoluene	8.383	165	24838	2.00	ppm		84
64) 2,3,4,6-Tetrachlorophenol	8.570	232	18355	2.00	ppm		86
65) Diethylphthalate	8.763	149	102464	2.00	ppm		94
66) Fluorene	8.891	166	103523	2.00	ppm		97
67) 4-Chlorophenyl-phenyle...	8.912	204	46867	2.00	ppm		89
68) 4-Nitroaniline	8.918	138	27846	2.00	ppm		96
70) 4,6-Dinitro-2-methylph...	8.971	198	4669	2.00	ppm	#	43
71) n-Nitrosodiphenylamine	9.084	169	69803	2.00	ppm		98
72) 1,2-Diphenylhydrazine	9.142	77	129635	2.00	ppm		94
74) 4-Bromophenyl-phenylether	9.640	248	26583	2.00	ppm		91
75) Hexachlorobenzene	9.699	284	26797	2.00	ppm		89
76) Pentachlorophenol	10.009	266	31175	4.00	ppm		96

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25924.D
Acq On : 13 May 2016 9:24 am
Operator : ariellec
Sample : ic1209-2
Misc : op93693,e6p1209
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 13 09:55:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 09:48:02 2016
QLast Update : Fri May 13 09:52:10 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) Phenanthrene	10.335	178	151926	2.00	ppm	98
78) Anthracene	10.410	178	155434	2.00	ppm	97
79) Carbazole	10.678	167	141967	2.00	ppm	99
80) Di-n-butylphthalate	11.314	149	184323	2.00	ppm	99
81) Fluoranthene	12.197	202	165745	2.00	ppm	90
82) Octadecane	10.239	57	80524	2.00	ppm	91
84) Pyrene	12.550	202	171256	2.00	ppm	98
86) Butylbenzylphthalate	13.699	149	83601	2.00	ppm	91
87) Butyl stearate	13.865	56	61342	2.00	ppm	95
88) Benzo[a]anthracene	14.475	228	156992	2.00	ppm	96
89) 3,3'-Dichlorobenzidine	14.475	252	53366	2.00	ppm	96
90) Chrysene	14.529	228	145599	2.00	ppm	99
91) bis(2-Ethylhexyl)phtha...	14.657	149	140227	2.00	ppm	97
93) Di-n-octylphthalate	15.652	149	193568	2.00	ppm	100
94) Benzo[b]fluoranthene	16.074	252	152950	2.00	ppm	78
95) Benzo[k]fluoranthene	16.112	252	153254	2.00	ppm	94
96) Benzo[a]pyrene	16.518	252	134524	2.00	ppm	97
97) Indeno[1,2,3-cd]pyrene	17.994	276	132876	2.00	ppm	94
98) Dibenz(a,h)acridine	17.690	279	126859	2.00	ppm	98
99) Dibenz[a,h]anthracene	18.037	278	150150	2.00	ppm	94
100) 7,12-Dimethylbenz(a)an...	16.074	256	59736	2.00	ppm	94
101) Benzo[g,h,i]perylene	18.374	276	143768	2.00	ppm	92

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

76.57

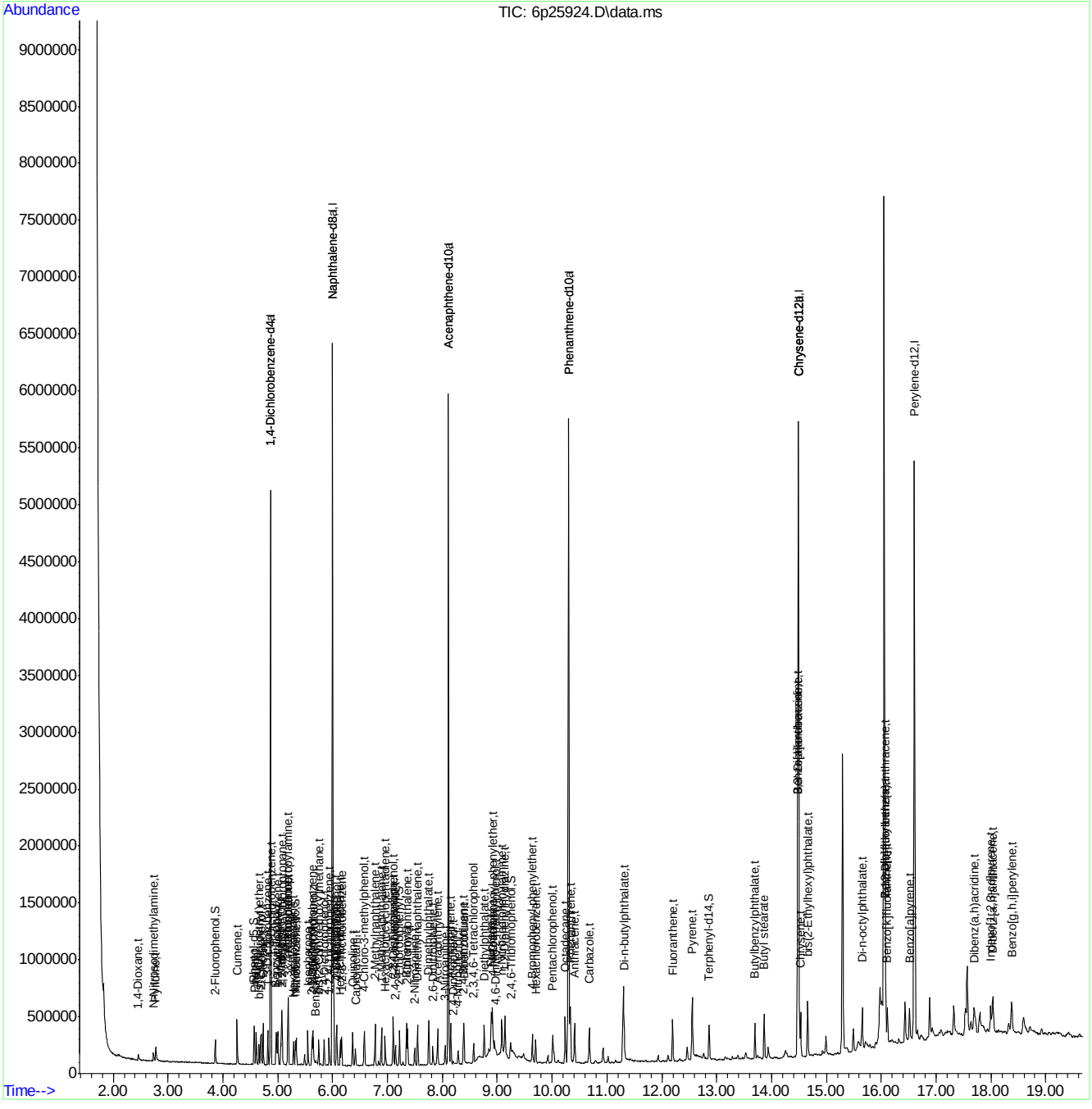
7

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25924.D
Acq On : 13 May 2016 9:24 am
Operator : ariellec
Sample : ic1209-2
Misc : op93693,e6p1209
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 13 09:55:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 09:48:02 2016
QLast Update : Fri May 13 09:52:10 2016
Response via : Initial Calibration



SGS ACCUTEST JC19644

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
05/16/16 18:39

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25925.D
Acq On : 13 May 2016 9:53 am
Operator : ariellec
Sample : ic1209-1
Misc : op93693,e6p1209
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 13 10:15:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 10:14:54 2016
QLast Update : Fri May 13 10:14:54 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.869	152	566988	40.00	ppm	0.00
24) Naphthalene-d8	5.997	136	2299226	40.00	ppm	0.00
47) Acenaphthene-d10	8.110	164	1288121	40.00	ppm	0.00
69) Phenanthrene-d10	10.303	188	2112725	40.00	ppm	0.00
83) Chrysene-d12	14.491	240	1996516	40.00	ppm	0.00
92) Perylene-d12	16.604	264	1980514	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.869	152	566988	40.00	ppm	0.00
104) Acenaphthene-d10a	8.110	164	1288121	40.00	ppm	0.00
106) Phenanthrene-d10a	10.303	188	2112725	40.00	ppm	0.00
110) Chrysene-d12a	14.491	240	1996516	40.00	ppm	0.00
112) Naphthalene-d8a	5.997	136	2299226	40.00	ppm	0.00
114) Chrysene-d12b	14.491	240	1996516	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.858	112	23612	1.02	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.04%	
8) Phenol-d5	4.564	99	30351	1.02	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.04%	
25) Nitrobenzene-d5	5.323	82	27240	0.98	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.96%	
51) 2-Fluorobiphenyl	7.217	172	46914	1.06	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.12%	
73) 2,4,6-Tribromophenol	9.239	330	4802	0.83	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.66%	
85) Terphenyl-d14	12.860	244	43011	0.96	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.92%	
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.456	88	13113	1.22	ppm	89
3) Pyridine	2.777	79	26230	0.98	ppm	98
4) N-Nitrosodimethylamine	2.740	74	14932	0.87	ppm	94
6) Indene	5.072	116	43180	1.05	ppm	97
7) Cumene	4.259	105	60667	1.02	ppm	98
9) Phenol	4.575	94	32281	1.02	ppm	94
10) Aniline	4.607	93	40537	1.05	ppm	88
11) bis(2-Chloroethyl)ether	4.655	93	23016	0.99	ppm	95
12) 2-Chlorophenol	4.698	128	24100	1.05	ppm	94
13) Decane	4.730	43	33816	1.06	ppm	85
14) 1,3-Dichlorobenzene	4.821	146	25190	1.02	ppm	85
15) 1,4-Dichlorobenzene	4.879	146	26070	1.05	ppm	97
16) Benzyl alcohol	4.970	108	16314	1.04	ppm	93
17) 1,2-Dichlorobenzene	5.002	146	26380	1.09	ppm	95
18) Acetophenone	5.190	105	35296	1.01	ppm	83
19) 2-Methylphenol	5.056	108	23812	1.09	ppm	91
20) 2,2'-oxybis(1-Chloropr...	5.083	121	8812	1.04	ppm #	59

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25925.D
Acq On : 13 May 2016 9:53 am
Operator : ariellec
Sample : ic1209-1
Misc : op93693,e6p1209
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 13 10:15:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 10:14:54 2016
QLast Update : Fri May 13 10:14:54 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.179	108	24391	1.02	ppm		94
22) n-Nitroso-di-n-propyla...	5.184	70	21486	1.02	ppm		88
23) Hexachloroethane	5.286	201	7641	1.06	ppm	#	76
26) Nitrobenzene	5.339	77	28794	0.99	ppm		89
27) Quinoline	6.366	129	47233	1.04	ppm		97
28) Isophorone	5.548	82	52172	1.07	ppm		94
29) 2-Nitrophenol	5.623	139	12317	1.05	ppm		90
30) 2,4-Dimethylphenol	5.650	107	22550	1.07	ppm		97
31) Benzoic acid	5.682	105	7614	0.93	ppm	#	61
32) bis(2-Chloroethoxy)met...	5.746	93	28978	1.01	ppm		98
33) 2,4-Dichlorophenol	5.848	162	18300	1.06	ppm		97
34) 2,6-Dichlorophenol	6.072	162	17149	1.00	ppm		99
35) 1,3,5-Trichlorobenzene	5.634	180	19936	0.99	ppm		96
36) 1,2,4-Trichlorobenzene	5.933	180	19329	1.07	ppm		91
37) 1,2,3-Trichlorobenzene	6.163	180	18563	1.02	ppm		98
38) Naphthalene	6.019	128	74428	1.04	ppm		95
39) 4-Chloroaniline	6.067	127	30616	1.06	ppm		92
40) 2,3-Dichloroaniline	7.110	161	23004	1.06	ppm		98
41) Caprolactam	6.409	55	12359	1.13	ppm		84
42) Hexachlorobutadiene	6.142	225	9482	1.00	ppm		95
43) 4-Chloro-3-methylphenol	6.575	107	21610	0.99	ppm		96
44) 2-Methylnaphthalene	6.773	141	37153	0.96	ppm		97
45) 1-Methylnaphthalene	6.885	141	39458	1.04	ppm		99
46) Dimethylnaphthalene	7.548	156	39345	1.00	ppm		96
48) Hexachlorocyclopentadiene	6.955	237	16791	2.05	ppm		97
49) 2,4,6-Trichlorophenol	7.104	196	10580	0.98	ppm		93
50) 2,4,5-Trichlorophenol	7.147	196	11991	1.03	ppm		83
52) 2-Chloronaphthalene	7.367	162	41372	1.04	ppm		98
53) Biphenyl	7.345	154	55575	1.04	ppm		97
54) 2-Nitroaniline	7.495	65	11894	0.89	ppm		95
55) Dimethylphthalate	7.752	163	48709	1.07	ppm		99
56) Acenaphthylene	7.912	152	64788	0.98	ppm		96
57) 2,6-Dinitrotoluene	7.827	165	7787	1.00	ppm		97
58) 3-Nitroaniline	8.051	138	10486	0.97	ppm		98
59) Acenaphthene	8.153	153	43718	1.02	ppm		98
60) 2,4-Dinitrophenol	8.196	184	1182	1.13	ppm	#	89
61) 4-Nitrophenol	8.287	109	5934	0.90	ppm		91
62) Dibenzofuran	8.393	168	59023	1.02	ppm		95
63) 2,4-Dinitrotoluene	8.383	165	9381	0.80	ppm		85
64) 2,3,4,6-Tetrachlorophenol	8.570	232	7761	0.89	ppm		88
65) Diethylphthalate	8.763	149	46699	0.96	ppm		94
66) Fluorene	8.891	166	45220	0.92	ppm		98
67) 4-Chlorophenyl-phenyle...	8.912	204	21220	0.95	ppm		94
68) 4-Nitroaniline	8.918	138	11515	0.87	ppm		83
70) 4,6-Dinitro-2-methylph...	8.966	198	1815	0.88	ppm	#	42
71) n-Nitrosodiphenylamine	9.083	169	31641	1.03	ppm		96
72) 1,2-Diphenylhydrazine	9.142	77	54879	0.96	ppm		95
74) 4-Bromophenyl-phenylether	9.640	248	11231	0.96	ppm		92
75) Hexachlorobenzene	9.699	284	12886	1.09	ppm		88
76) Pentachlorophenol	10.009	266	9638	1.41	ppm		89

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25925.D
Acq On : 13 May 2016 9:53 am
Operator : ariellec
Sample : ic1209-1
Misc : op93693,e6p1209
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 13 10:15:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 10:14:54 2016
QLast Update : Fri May 13 10:14:54 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
77) Phenanthrene	10.335	178	68702	1.03 ppm	98
78) Anthracene	10.410	178	63105	0.92 ppm	97
79) Carbazole	10.677	167	61801	0.99 ppm	97
80) Di-n-butylphthalate	11.308	149	72215	0.89 ppm	100
81) Fluoranthene	12.196	202	71208	0.98 ppm	88
82) Octadecane	10.239	57	29902	0.84 ppm	90
84) Pyrene	12.549	202	73794	1.00 ppm	97
86) Butylbenzylphthalate	13.699	149	28786	0.80 ppm	94
87) Butyl stearate	13.865	56	18703	0.71 ppm	89
88) Benzo[a]anthracene	14.475	228	68463	1.01 ppm	99
89) 3,3'-Dichlorobenzidine	14.475	252	20159	0.88 ppm	90
90) Chrysene	14.528	228	63469	1.01 ppm	98
91) bis(2-Ethylhexyl)phtha...	14.657	149	42023	0.70 ppm	93
93) Di-n-octylphthalate	15.652	149	67141	0.79 ppm	93
94) Benzo[b]fluoranthene	16.074	252	68557	1.02 ppm	77
95) Benzo[k]fluoranthene	16.112	252	67315	1.00 ppm	91
96) Benzo[a]pyrene	16.518	252	56778	0.96 ppm	95
97) Indeno[1,2,3-cd]pyrene	17.994	276	58756m	1.00 ppm	
98) Dibenz(a,h)acridine	17.695	279	50583	0.91 ppm	96
99) Dibenz[a,h]anthracene	18.037	278	59927	0.91 ppm	95
100) 7,12-Dimethylbenz(a)an...	16.074	256	25262	0.96 ppm	98
101) Benzo[g,h,i]perylene	18.374	276	61962	0.98 ppm	81

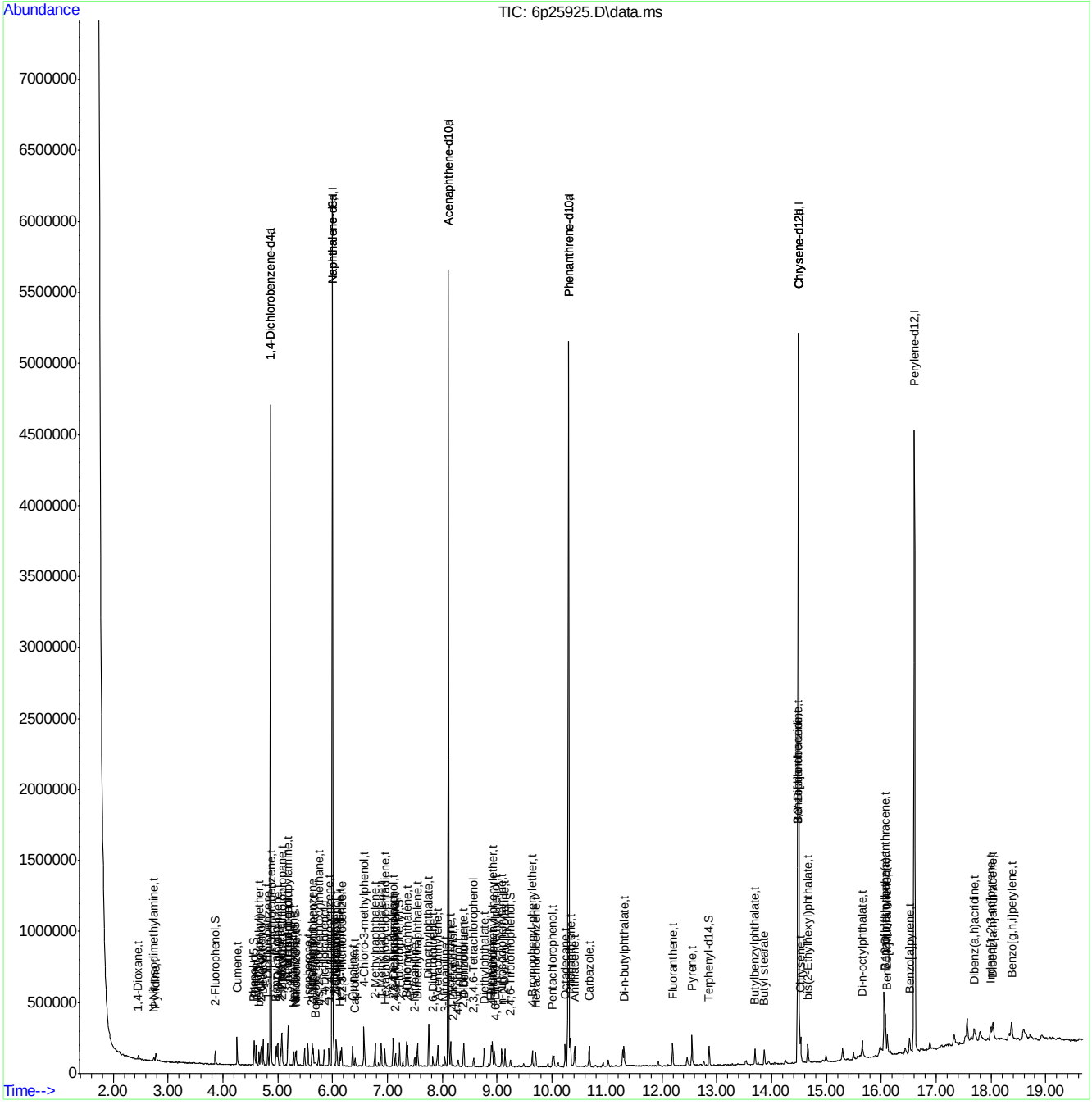
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25925.D
Acq On : 13 May 2016 9:53 am
Operator : ariellec
Sample : ic1209-1
Misc : op93693,e6p1209
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 13 10:15:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 10:14:54 2016
QLast Update : Fri May 13 10:14:54 2016
Response via : Initial Calibration



SGS ACCUTEST JC19644

Manual Integration Approval Summary

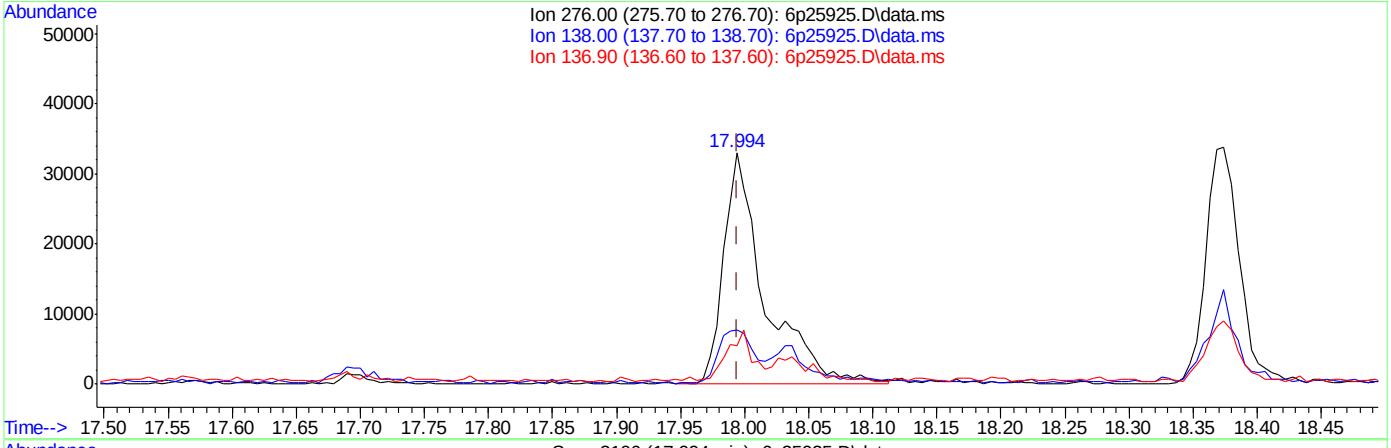
Sample Number:	E6P1209-IC1209	**Method:**	SW846 8270D
Lab FileID:	6P25925.D	**Analyst approved:**	05/16/16 09:29 Arielle Cocozza
Injection Time:	05/13/16 09:53	**Supervisor approved:**	05/16/16 18:39 Nina Pandya

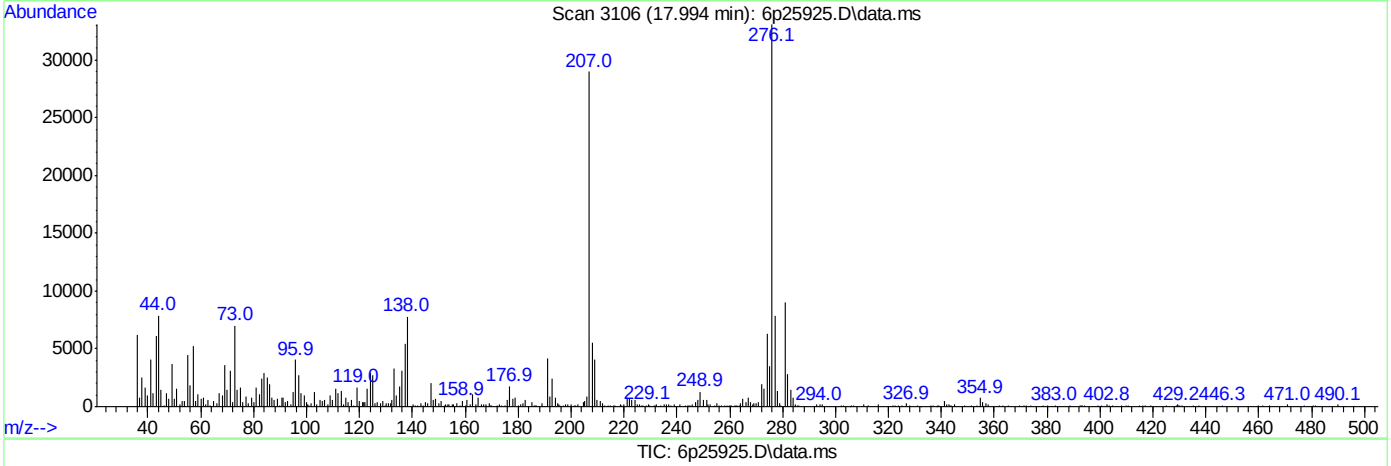
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		17.99	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25925.D
Acq On : 13 May 2016 9:53 am
Operator : ariellec
Sample : ic1209-1
Misc : op93693,e6p1209
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 13 10:15:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 10:14:54 2016
QLast Update : Fri May 13 10:14:54 2016
Response via : Initial Calibration





TIC: 6p25925.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

17.994min (-0.000) 1.26ppm

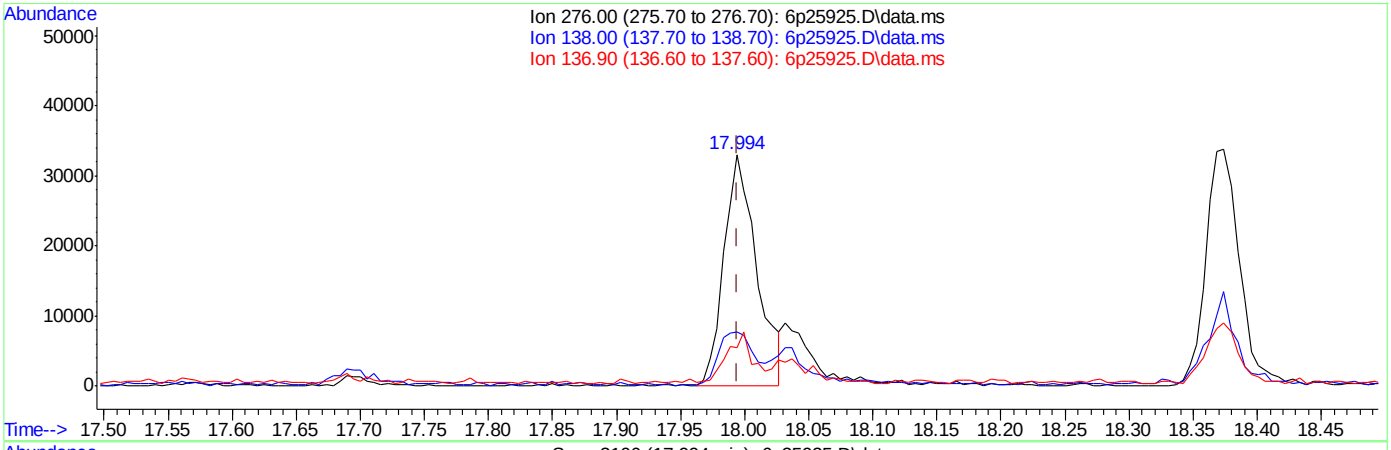
response 73871

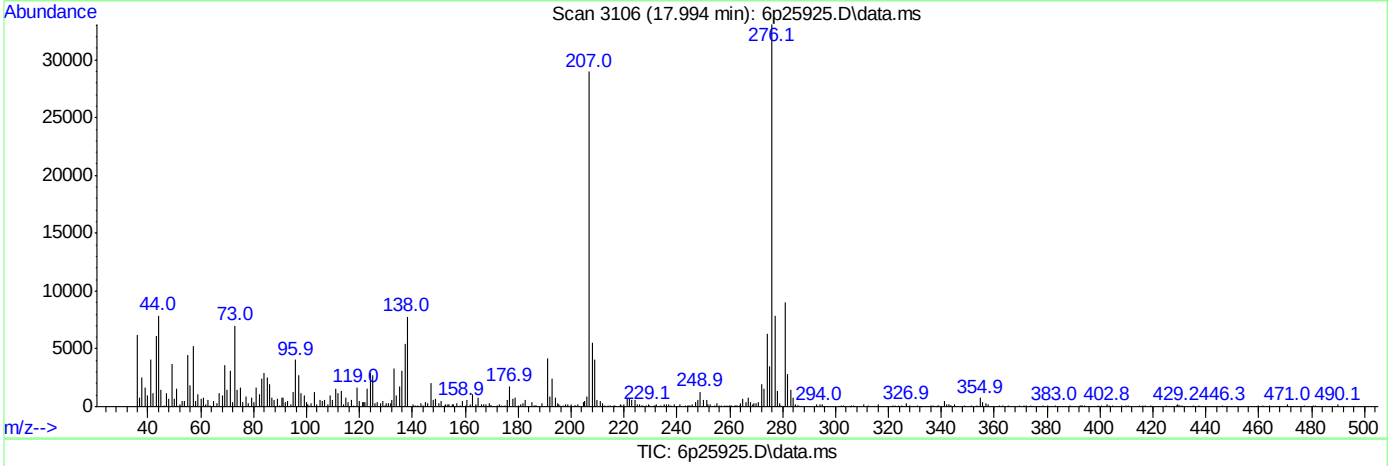
Ion	Exp%	Act%
276.00	100	100
138.00	20.00	22.73
136.90	14.60	14.95
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25925.D
Acq On : 13 May 2016 9:53 am
Operator : ariellec
Sample : ic1209-1
Misc : op93693,e6p1209
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 13 10:15:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 10:14:54 2016
QLast Update : Fri May 13 10:14:54 2016
Response via : Initial Calibration





TIC: 6p25925.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

17.994min (-0.000) 1.00ppm m

response 58756

Ion	Exp%	Act%
276.00	100	100
138.00	20.00	23.53
136.90	14.60	16.57
0.00	0.00	0.00

SGS ACCUTEST JC19644

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
05/16/16 18:39

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25926.D
Acq On : 13 May 2016 10:20 am
Operator : ariellec
Sample : ic1209-100
Misc : op93693,e6p1209
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 16 17:13:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 10:17:05 2016
QLast Update : Fri May 13 10:17:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.869	152	566562	40.00	ppm	0.00
24) Naphthalene-d8	6.003	136	2464993	40.00	ppm	0.00
47) Acenaphthene-d10	8.115	164	1389288	40.00	ppm	0.00
69) Phenanthrene-d10	10.308	188	2293395	40.00	ppm	0.00
83) Chrysene-d12	14.507	240	2196112	40.00	ppm	0.02
92) Perylene-d12	16.614	264	2189435	40.00	ppm	0.01
102) 1,4-Dichlorobenzene-d4a	4.869	152	566562	40.00	ppm	0.00
104) Acenaphthene-d10a	8.115	164	1389288	40.00	ppm	0.00
106) Phenanthrene-d10a	10.308	188	2293395	40.00	ppm	0.00
110) Chrysene-d12a	14.507	240	2196112	40.00	ppm	0.02
112) Naphthalene-d8a	6.003	136	2464993	40.00	ppm	0.00
114) Chrysene-d12b	14.507	240	2196112	40.00	ppm	0.02
System Monitoring Compounds						
5) 2-Fluorophenol	3.869	112	2055112	87.92	ppm	0.01
Spiked Amount 50.000			Recovery	=	175.84%	
8) Phenol-d5	4.585	99	2653723	88.20	ppm	0.02
Spiked Amount 50.000			Recovery	=	176.40%	
25) Nitrobenzene-d5	5.334	82	2535724	86.13	ppm	0.01
Spiked Amount 50.000			Recovery	=	172.26%	
51) 2-Fluorobiphenyl	7.227	172	4040920	82.13	ppm	0.01
Spiked Amount 50.000			Recovery	=	164.26%	
73) 2,4,6-Tribromophenol	9.260	330	595893	103.40	ppm	0.02
Spiked Amount 50.000			Recovery	=	206.80%	
85) Terphenyl-d14	12.876	244	4344858	89.81	ppm	0.02
Spiked Amount 50.000			Recovery	=	179.62%	
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-Chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.451	88	920952	77.28	ppm	94
3) Pyridine	2.767	79	2513573	95.09	ppm	97
4) N-Nitrosodimethylamine	2.740	74	1495679	93.41	ppm	93
6) Indene	5.077	116	3377110	80.21	ppm	99
7) Cumene	4.264	105	4858938	81.03	ppm	98
9) Phenol	4.596	94	2970379	92.89	ppm	95
10) Aniline	4.617	93	3003568	75.96	ppm	94
11) bis(2-Chloroethyl)ether	4.671	93	2003274	86.71	ppm	97
12) 2-Chlorophenol	4.708	128	2057219	87.34	ppm	98
13) Decane	4.735	43	2381054	72.47	ppm	94
14) 1,3-Dichlorobenzene	4.826	146	2107873	84.53	ppm	100
15) 1,4-Dichlorobenzene	4.885	146	2102027	82.74	ppm	100
16) Benzyl alcohol	4.986	108	1409362	87.98	ppm	98
17) 1,2-Dichlorobenzene	5.008	146	1961025	77.59	ppm	99
18) Acetophenone	5.206	105	2762687	78.56	ppm	92
19) 2-Methylphenol	5.067	108	1923445	84.25	ppm	98
20) 2,2'-oxybis(1-Chloropr...	5.088	121	695550	80.46	ppm	87

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25926.D
Acq On : 13 May 2016 10:20 am
Operator : ariellec
Sample : ic1209-100
Misc : op93693,e6p1209
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 16 17:13:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 10:17:05 2016
QLast Update : Fri May 13 10:17:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	5.200	108	2001359	82.96	ppm	99
22) n-Nitroso-di-n-propyla...	5.211	70	1709772	80.51	ppm	95
23) Hexachloroethane	5.291	201	650262	87.58	ppm	81
26) Nitrobenzene	5.355	77	2605539	83.90	ppm	96
27) Quinoline	6.398	129	4298531	86.64	ppm	98
28) Isophorone	5.569	82	4394329	81.18	ppm	97
29) 2-Nitrophenol	5.634	139	1111734	86.22	ppm	88
30) 2,4-Dimethylphenol	5.666	107	2206468	94.46	ppm	97
31) Benzoic acid	5.821	105	1733219m	204.55	ppm	
32) bis(2-Chloroethoxy)met...	5.762	93	2476313	80.14	ppm	99
33) 2,4-Dichlorophenol	5.864	162	1594589	83.50	ppm	99
34) 2,6-Dichlorophenol	6.088	162	1506023	81.97	ppm	97
35) 1,3,5-Trichlorobenzene	5.644	180	1626536	75.74	ppm	98
36) 1,2,4-Trichlorobenzene	5.944	180	1651385	82.25	ppm	98
37) 1,2,3-Trichlorobenzene	6.174	180	1602019	81.10	ppm	96
38) Naphthalene	6.029	128	6097154	77.79	ppm	99
39) 4-Chloroaniline	6.083	127	2479831	77.60	ppm	98
40) 2,3-Dichloroaniline	7.121	161	1909092	79.50	ppm	98
41) Caprolactam	6.505	55	1152286	92.44	ppm	92
42) Hexachlorobutadiene	6.147	225	833890	82.04	ppm	97
43) 4-Chloro-3-methylphenol	6.607	107	2028245	87.08	ppm	99
44) 2-Methylnaphthalene	6.784	141	3332034	81.90	ppm	99
45) 1-Methylnaphthalene	6.901	141	3444466	82.84	ppm	100
46) Dimethylnaphthalene	7.559	156	3572665	84.83	ppm	93
48) Hexachlorocyclopentadiene	6.965	237	2050625	229.31	ppm	97
49) 2,4,6-Trichlorophenol	7.121	196	1074781	93.37	ppm	94
50) 2,4,5-Trichlorophenol	7.169	196	1228129	96.22	ppm	94
52) 2-Chloronaphthalene	7.383	162	3566250	81.54	ppm	97
53) Biphenyl	7.361	154	4766799	81.03	ppm	97
54) 2-Nitroaniline	7.522	65	1518720	111.66	ppm	94
55) Dimethylphthalate	7.773	163	4234474	83.21	ppm	98
56) Acenaphthylene	7.928	152	6114692	86.57	ppm	99
57) 2,6-Dinitrotoluene	7.853	165	986019	117.12	ppm	95
58) 3-Nitroaniline	8.078	138	1218550	105.96	ppm	94
59) Acenaphthene	8.169	153	3827199	82.11	ppm	97
60) 2,4-Dinitrophenol	8.228	184	1154727	1305.44	ppm	87
61) 4-Nitrophenol	8.324	109	776958	114.78	ppm	98
62) Dibenzofuran	8.410	168	4923118	78.12	ppm	94
63) 2,4-Dinitrotoluene	8.410	165	1288662	112.93	ppm	92
64) 2,3,4,6-Tetrachlorophenol	8.586	232	910221	102.51	ppm	87
65) Diethylphthalate	8.789	149	4371387	85.07	ppm	96
66) Fluorene	8.907	166	4272512	84.00	ppm	97
67) 4-Chlorophenyl-phenyle...	8.923	204	1872127	79.90	ppm	93
68) 4-Nitroaniline	8.971	138	1232175	92.43	ppm	98
70) 4,6-Dinitro-2-methylph...	9.003	198	783077	373.12	ppm	89
71) n-Nitrosodiphenylamine	9.105	169	2992552	88.48	ppm	99
72) 1,2-Diphenylhydrazine	9.158	77	5322717	87.68	ppm	95
74) 4-Bromophenyl-phenylether	9.656	248	1072498	86.24	ppm	96
75) Hexachlorobenzene	9.715	284	1169322	87.36	ppm	90
76) Pentachlorophenol	10.030	266	1645587	259.82	ppm	95

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25926.D
Acq On : 13 May 2016 10:20 am
Operator : ariellec
Sample : ic1209-100
Misc : op93693,e6p1209
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 16 17:13:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 10:17:05 2016
QLast Update : Fri May 13 10:17:05 2016
Response via : Initial Calibration

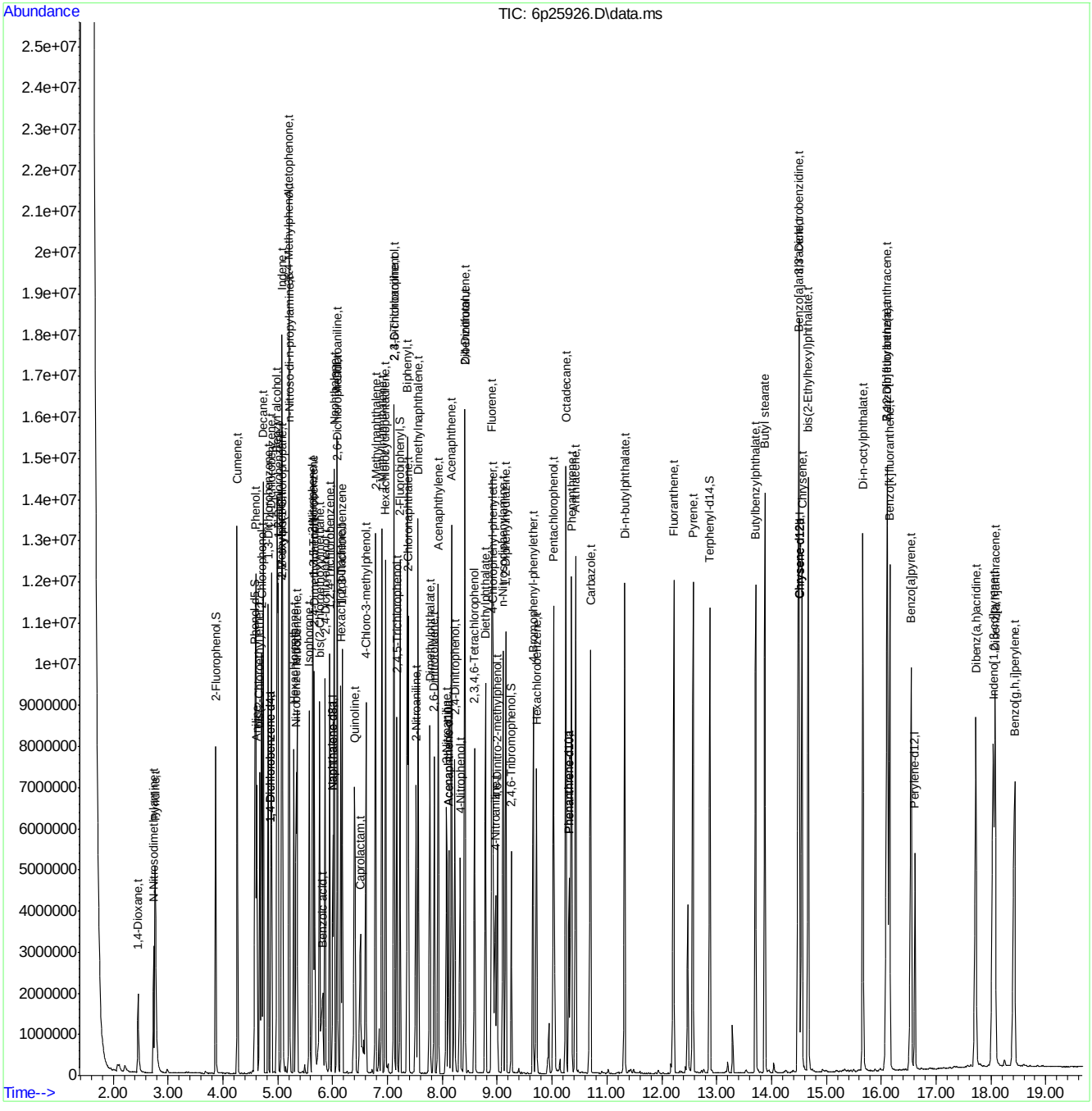
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
77) Phenanthrene	10.351	178	5997808	81.57 ppm	100
78) Anthracene	10.431	178	6123519	85.85 ppm	99
79) Carbazole	10.704	167	5729331	85.00 ppm	97
80) Di-n-butylphthalate	11.325	149	7426879	89.31 ppm	99
81) Fluoranthene	12.218	202	6560770	83.92 ppm	90
82) Octadecane	10.249	57	3184668	89.87 ppm	98
84) Pyrene	12.571	202	6793640	83.72 ppm	98
86) Butylbenzylphthalate	13.710	149	3395628	95.30 ppm	91
87) Butyl stearate	13.876	56	2381088	95.96 ppm	96
88) Benzo[a]anthracene	14.491	228	6049963	80.85 ppm	98
89) 3,3'-Dichlorobenzidine	14.496	252	2319652	97.77 ppm	97
90) Chrysene	14.555	228	5903756	85.08 ppm	99
91) bis(2-Ethylhexyl)phtha...	14.667	149	4709386	83.62 ppm	98
93) Di-n-octylphthalate	15.668	149	8095528	96.11 ppm	100
94) Benzo[b]fluoranthene	16.112	252	7105242	94.58 ppm	83
95) Benzo[k]fluoranthene	16.154	252	5669493m	76.09 ppm	
96) Benzo[a]pyrene	16.545	252	5799377	90.43 ppm	95
97) Indeno[1,2,3-cd]pyrene	18.042	276	6277338m	96.84 ppm	
98) Dibenz(a,h)acridine	17.727	279	5459192	92.78 ppm	99
99) Dibenz[a,h]anthracene	18.080	278	6330373	90.86 ppm	97
100) 7,12-Dimethylbenz(a)an...	16.112	256	2983377	104.66 ppm	96
101) Benzo[g,h,i]perylene	18.433	276	6102119	88.12 ppm	94

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25926.D
Acq On : 13 May 2016 10:20 am
Operator : ariellec
Sample : ic1209-100
Misc : op93693,e6p1209
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 16 17:13:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 10:17:05 2016
QLast Update : Fri May 13 10:17:05 2016
Response via : Initial Calibration



SGS ACCUTEST JC19644

Manual Integration Approval Summary

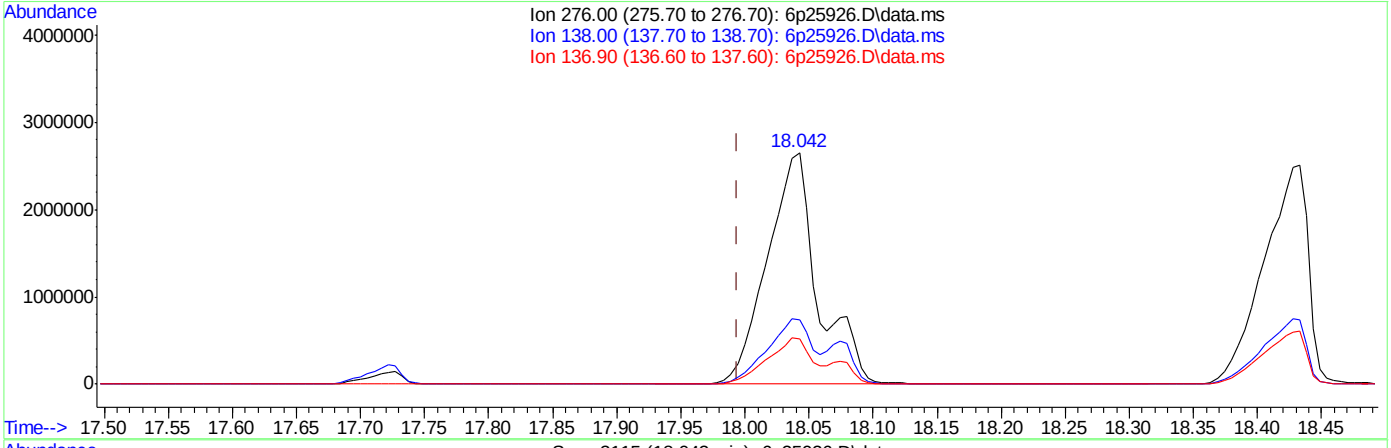
Sample Number:	E6P1209-IC1209	**Method:**	SW846 8270D
Lab FileID:	6P25926.D	**Analyst approved:**	05/16/16 18:09 Arielle Cocozza
Injection Time:	05/13/16 10:20	**Supervisor approved:**	05/16/16 18:39 Nina Pandya

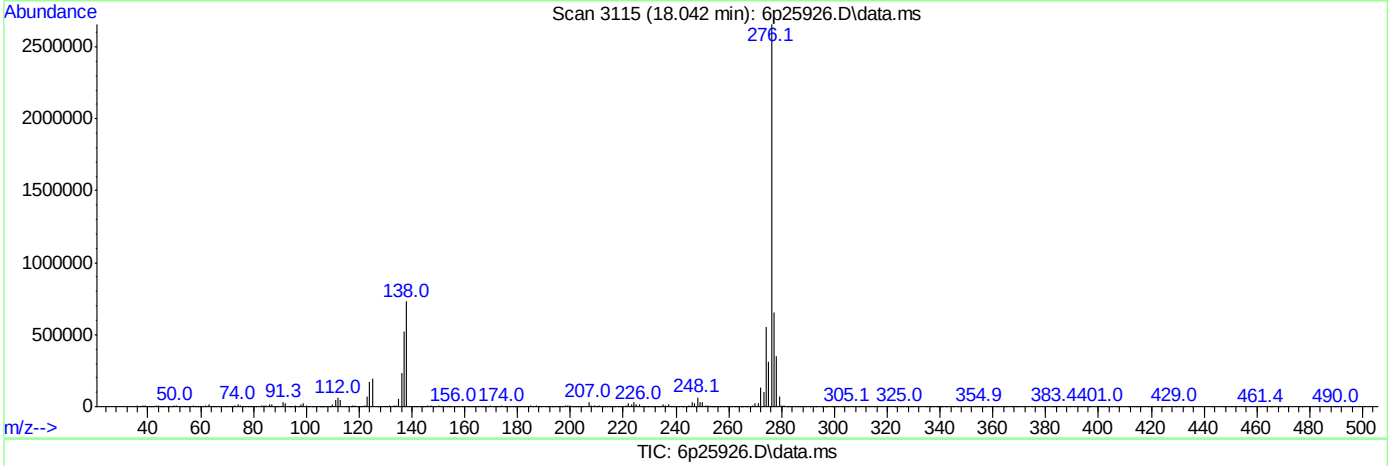
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		5.82	Split peak
Benzo(k)fluoranthene	207-08-9		16.15	Overlapping peak
Indeno(1,2,3-cd)pyrene	193-39-5		18.04	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25926.D
Acq On : 13 May 2016 10:20 am
Operator : ariellec
Sample : ic1209-100
Misc : op93693,e6p1209
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 13 10:40:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 10:17:05 2016
QLast Update : Fri May 13 10:17:05 2016
Response via : Initial Calibration





TIC: 6p25926.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

18.042min (+0.048) 112.85ppm

response 7315098

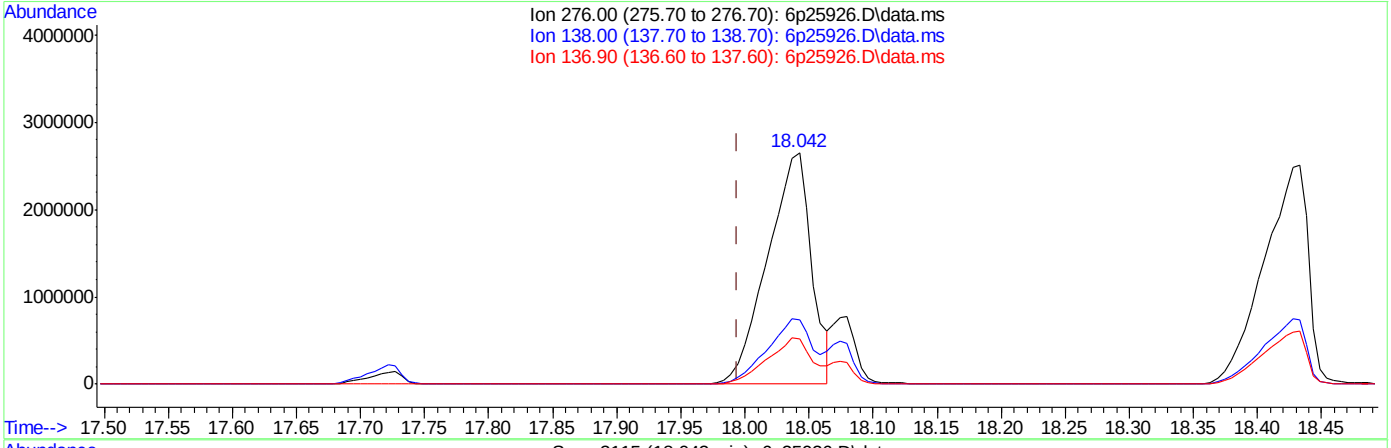
Ion	Exp%	Act%
276.00	100	100
138.00	20.00	27.53
136.90	14.60	19.51
0.00	0.00	0.00

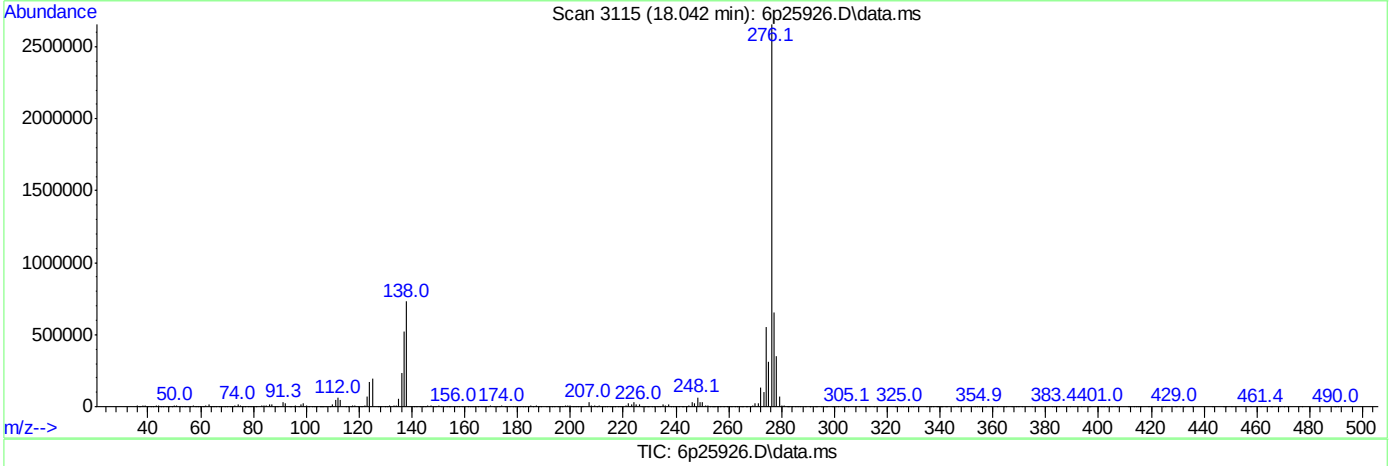
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25926.D
Acq On : 13 May 2016 10:20 am
Operator : ariellec
Sample : ic1209-100
Misc : op93693,e6p1209
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 13 10:40:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 10:17:05 2016
QLast Update : Fri May 13 10:17:05 2016
Response via : Initial Calibration





TIC: 6p25926.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

18.042min (+0.048) 96.84ppm m

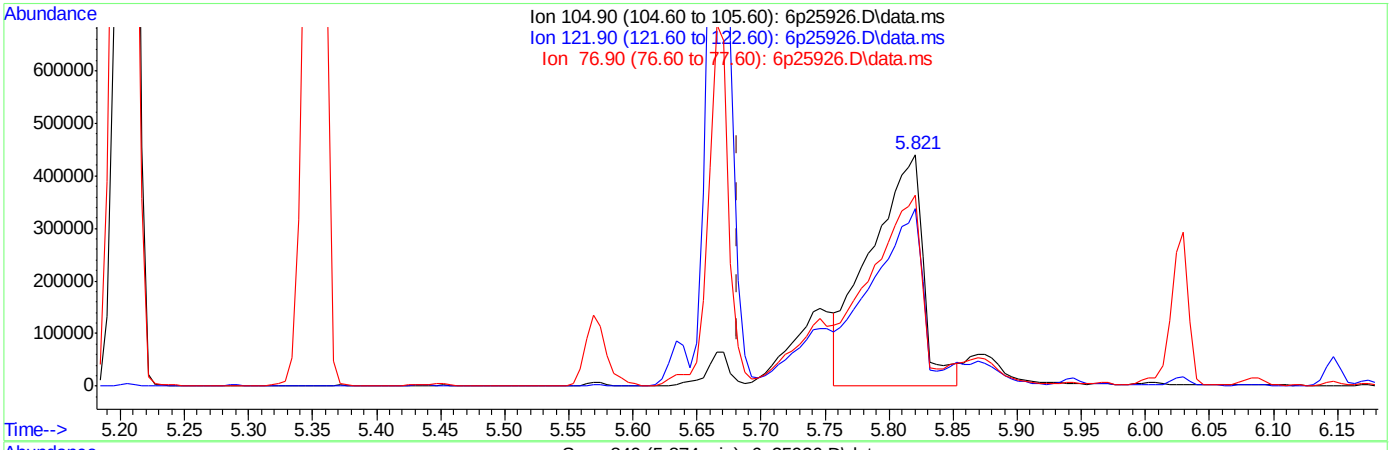
response 6277338

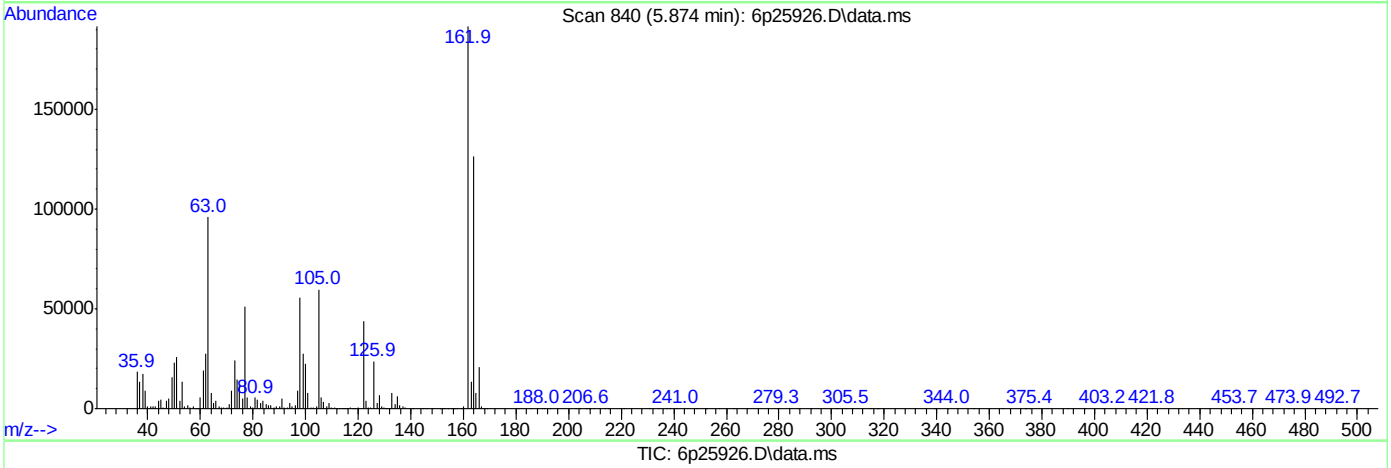
Ion	Exp%	Act%
276.00	100	100
138.00	20.00	27.55
136.90	14.60	19.52
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25926.D
Acq On : 13 May 2016 10:20 am
Operator : ariellec
Sample : ic1209-100
Misc : op93693,e6p1209
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 13 10:40:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 10:17:05 2016
QLast Update : Fri May 13 10:17:05 2016
Response via : Initial Calibration





TIC: 6p25926.D\data.ms

(31) Benzoic acid (t)

5.821min (+0.139) 150.13ppm

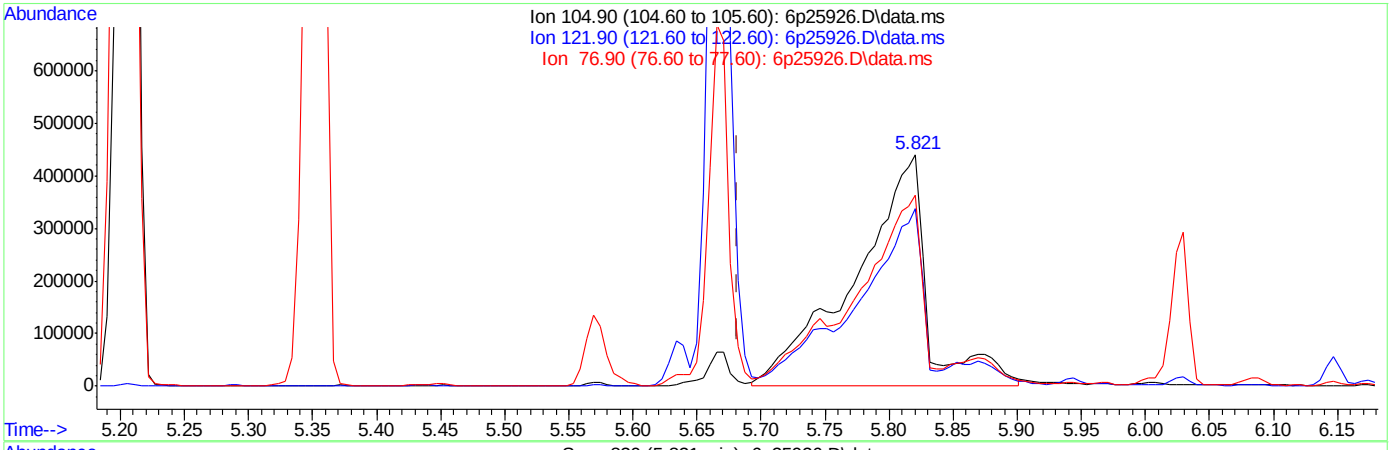
response 1272090

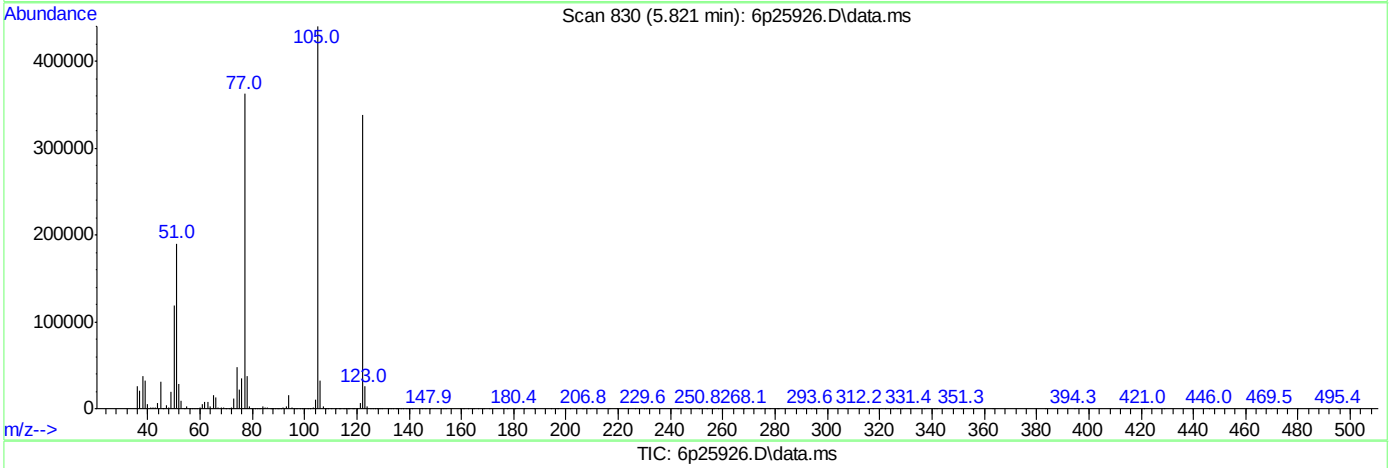
Ion	Exp%	Act%
104.90	100	100
121.90	71.70	75.31
76.90	84.30	81.16
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25926.D
Acq On : 13 May 2016 10:20 am
Operator : ariellec
Sample : ic1209-100
Misc : op93693,e6p1209
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 13 10:40:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 10:17:05 2016
QLast Update : Fri May 13 10:17:05 2016
Response via : Initial Calibration





TIC: 6p25926.D\data.ms

(31) Benzoic acid (t)

5.821min (+0.139) 204.55ppm m

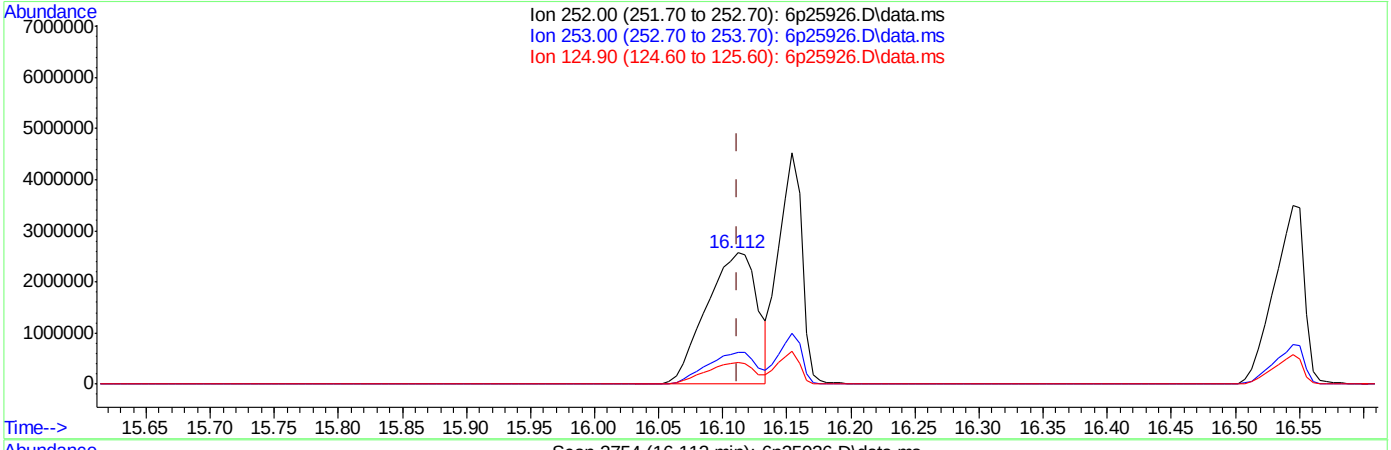
response 1733219

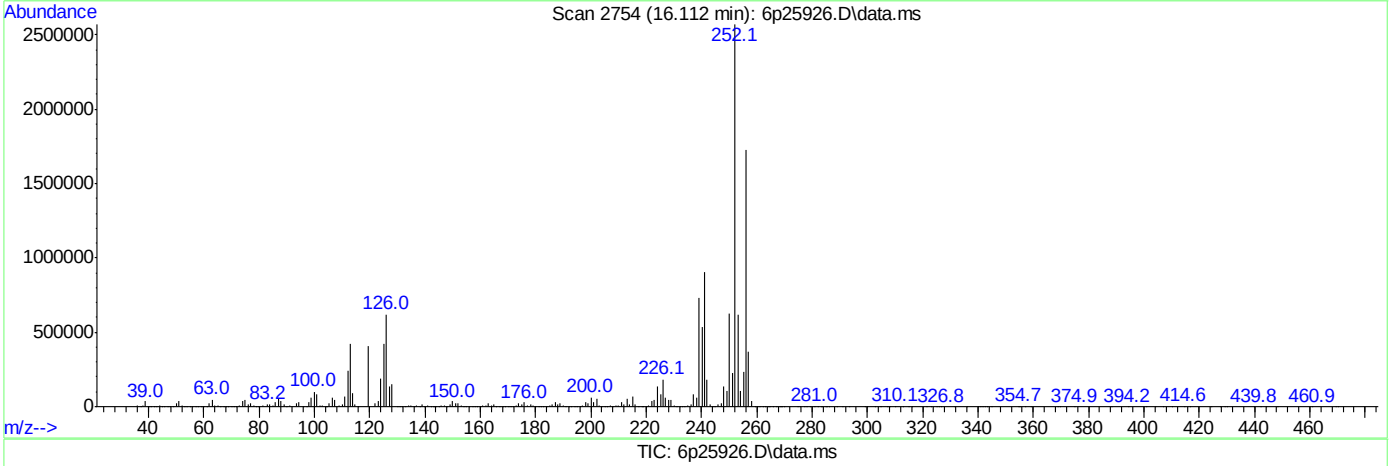
Ion	Exp%	Act%
104.90	100	100
121.90	71.70	76.70
76.90	84.30	82.29
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25926.D
Acq On : 13 May 2016 10:20 am
Operator : ariellec
Sample : ic1209-100
Misc : op93693,e6p1209
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 13 12:06:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 10:17:05 2016
QLast Update : Fri May 13 10:17:05 2016
Response via : Initial Calibration





TIC: 6p25926.D\data.ms

(95) Benzo[k]fluoranthene (t)

16.112min (0.000) 95.35ppm

response 7105242

Ion	Exp%	Act%
252.00	100	100
253.00	25.30	24.79
124.90	10.90	16.83
0.00	0.00	0.00

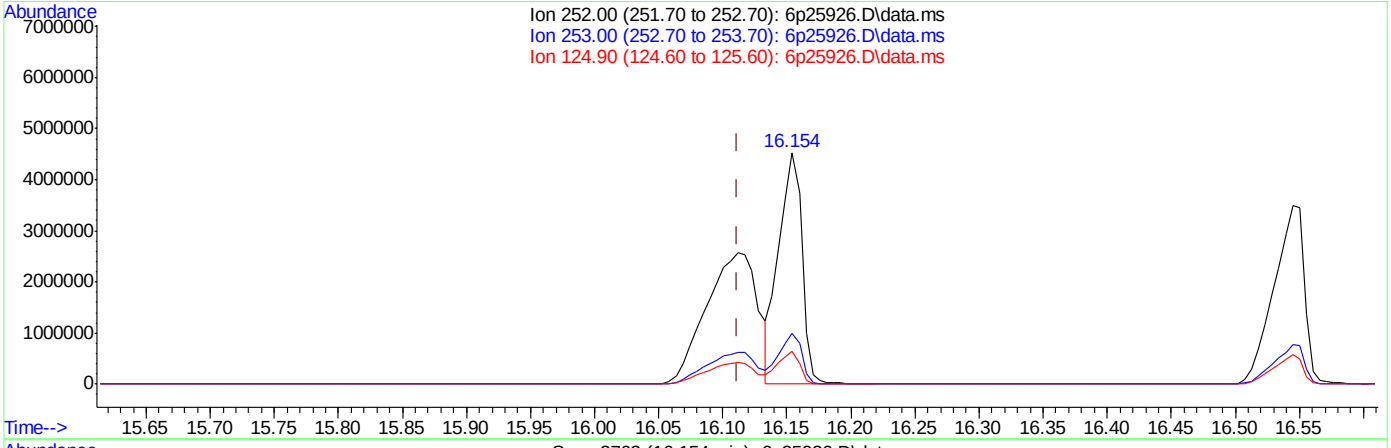
SGS ACCUTEST JC19644

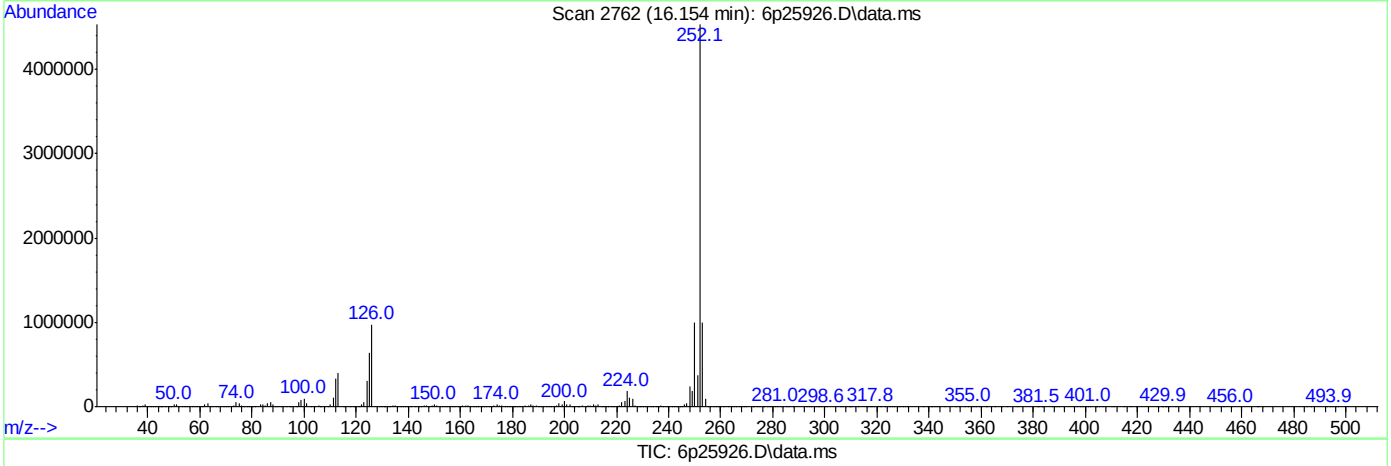
6P25926.D edits: Benzo[k]fluoranthene

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25926.D
Acq On : 13 May 2016 10:20 am
Operator : ariellec
Sample : ic1209-100
Misc : op93693,e6p1209
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 13 12:06:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 10:17:05 2016
QLast Update : Fri May 13 10:17:05 2016
Response via : Initial Calibration





TIC: 6p25926.D\data.ms

(95) Benzo[k]fluoranthene (t)

16.154min (+0.043) 76.09ppm m

response 5669493

Ion	Exp%	Act%
252.00	100	100
253.00	25.30	21.90
124.90	10.90	13.98
0.00	0.00	0.00

SGS ACCUTEST JC19644

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
05/16/16 18:39

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25927.D
Acq On : 13 May 2016 10:47 am
Operator : ariellec
Sample : ic1209-80
Misc : op93693,e6p1209
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 13 11:11:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 11:10:43 2016
QLast Update : Fri May 13 11:10:43 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.869	152	559226	40.00	ppm	0.00
24) Naphthalene-d8	6.003	136	2365386	40.00	ppm	0.00
47) Acenaphthene-d10	8.115	164	1288267	40.00	ppm	0.00
69) Phenanthrene-d10	10.308	188	2102107	40.00	ppm	0.00
83) Chrysene-d12	14.507	240	1953631	40.00	ppm	0.00
92) Perylene-d12	16.609	264	1887534	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.869	152	559226	40.00	ppm	0.00
104) Acenaphthene-d10a	8.115	164	1288267	40.00	ppm	0.00
106) Phenanthrene-d10a	10.308	188	2102107	40.00	ppm	0.00
110) Chrysene-d12a	14.507	240	1953631	40.00	ppm	0.00
112) Naphthalene-d8a	6.003	136	2365386	40.00	ppm	0.00
114) Chrysene-d12b	14.507	240	1953631	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.863	112	1610017	72.71	ppm	0.00
Spiked Amount 50.000			Recovery	=	145.42%	
8) Phenol-d5	4.580	99	2087471	73.17	ppm	0.00
Spiked Amount 50.000			Recovery	=	146.34%	
25) Nitrobenzene-d5	5.334	82	1984075	73.64	ppm	0.00
Spiked Amount 50.000			Recovery	=	147.28%	
51) 2-Fluorobiphenyl	7.227	172	3181245	74.15	ppm	0.00
Spiked Amount 50.000			Recovery	=	148.30%	
73) 2,4,6-Tribromophenol	9.255	330	440018	82.37	ppm	0.00
Spiked Amount 50.000			Recovery	=	164.74%	
85) Terphenyl-d14	12.870	244	3260083	78.41	ppm	0.00
Spiked Amount 50.000			Recovery	=	156.82%	
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-Chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.456	88	731499	67.28	ppm	98
3) Pyridine	2.767	79	1954479	76.16	ppm	97
4) N-Nitrosodimethylamine	2.740	74	1172642	75.87	ppm	93
6) Indene	5.077	116	2753572	70.94	ppm	98
7) Cumene	4.264	105	3953821	71.31	ppm	98
9) Phenol	4.596	94	2361851	76.65	ppm	91
10) Aniline	4.617	93	2395083	66.71	ppm	93
11) bis(2-Chloroethyl)ether	4.665	93	1582952	72.63	ppm	98
12) 2-Chlorophenol	4.708	128	1634927	73.42	ppm	98
13) Decane	4.735	43	1940425	65.88	ppm	95
14) 1,3-Dichlorobenzene	4.826	146	1673133	71.67	ppm	98
15) 1,4-Dichlorobenzene	4.885	146	1681831	71.16	ppm	99
16) Benzyl alcohol	4.981	108	1110368	73.15	ppm	98
17) 1,2-Dichlorobenzene	5.008	146	1568321	67.94	ppm	98
18) Acetophenone	5.206	105	2234446	69.33	ppm	82
19) 2-Methylphenol	5.067	108	1538477	72.06	ppm	99
20) 2,2'-oxybis(1-Chloropr...	5.088	121	550875	69.06	ppm #	89

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25927.D
Acq On : 13 May 2016 10:47 am
Operator : ariellec
Sample : ic1209-80
Misc : op93693,e6p1209
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 13 11:11:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 11:10:43 2016
QLast Update : Fri May 13 11:10:43 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	5.195	108	1619601	72.11	ppm	100
22) n-Nitroso-di-n-propyla...	5.206	70	1341742	68.46	ppm	93
23) Hexachloroethane	5.291	201	517748	73.70	ppm	84
26) Nitrobenzene	5.350	77	2041426	72.39	ppm	97
27) Quinoline	6.393	129	3293253	72.40	ppm	98
28) Isophorone	5.564	82	3387786	69.59	ppm	96
29) 2-Nitrophenol	5.634	139	875721	74.18	ppm	87
30) 2,4-Dimethylphenol	5.666	107	1721096	78.23	ppm	99
31) Benzoic acid	5.799	105	1246984	113.73	ppm	97
32) bis(2-Chloroethoxy)met...	5.757	93	1929425	69.68	ppm	99
33) 2,4-Dichlorophenol	5.858	162	1252494	72.33	ppm	99
34) 2,6-Dichlorophenol	6.088	162	1179474	71.18	ppm	98
35) 1,3,5-Trichlorobenzene	5.639	180	1300140	68.64	ppm	97
36) 1,2,4-Trichlorobenzene	5.944	180	1295655	71.48	ppm	97
37) 1,2,3-Trichlorobenzene	6.174	180	1274980	71.79	ppm	97
38) Naphthalene	6.024	128	4860405	69.79	ppm	99
39) 4-Chloroaniline	6.077	127	1972464	69.51	ppm	98
40) 2,3-Dichloroaniline	7.115	161	1487554	69.29	ppm	100
41) Caprolactam	6.495	55	846671	72.61	ppm	94
42) Hexachlorobutadiene	6.147	225	665255	72.55	ppm	97
43) 4-Chloro-3-methylphenol	6.602	107	1559507	72.91	ppm	99
44) 2-Methylnaphthalene	6.778	141	2613871	71.25	ppm	99
45) 1-Methylnaphthalene	6.896	141	2693717	71.61	ppm	98
46) Dimethylnaphthalene	7.559	156	2762155	71.99	ppm	95
48) Hexachlorocyclopentadiene	6.960	237	1543653	177.48	ppm	97
49) 2,4,6-Trichlorophenol	7.120	196	833265	79.83	ppm	95
50) 2,4,5-Trichlorophenol	7.163	196	921562	78.86	ppm	95
52) 2-Chloronaphthalene	7.377	162	2782772	73.11	ppm	96
53) Biphenyl	7.356	154	3712840	72.66	ppm	98
54) 2-Nitroaniline	7.516	65	1139964	87.00	ppm	93
55) Dimethylphthalate	7.773	163	3250622	72.97	ppm	99
56) Acenaphthylene	7.923	152	4739286	75.75	ppm	99
57) 2,6-Dinitrotoluene	7.848	165	742662	90.00	ppm	97
58) 3-Nitroaniline	8.073	138	908479	83.53	ppm	96
59) Acenaphthene	8.163	153	2945479	72.47	ppm	98
60) 2,4-Dinitrophenol	8.217	184	823582	353.25	ppm	84
61) 4-Nitrophenol	8.319	109	564525	85.71	ppm	92
62) Dibenzofuran	8.409	168	3796493	70.08	ppm	94
63) 2,4-Dinitrotoluene	8.404	165	993587	90.02	ppm	98
64) 2,3,4,6-Tetrachlorophenol	8.581	232	681408	82.07	ppm	87
65) Diethylphthalate	8.784	149	3306654	73.03	ppm	96
66) Fluorene	8.902	166	3263209	73.09	ppm	97
67) 4-Chlorophenyl-phenyle...	8.918	204	1440118	71.05	ppm	89
68) 4-Nitroaniline	8.960	138	904082	75.03	ppm	100
70) 4,6-Dinitro-2-methylph...	8.998	198	553954	150.74	ppm	94
71) n-Nitrosodiphenylamine	9.099	169	2255658	75.67	ppm	99
72) 1,2-Diphenylhydrazine	9.153	77	4018730	75.32	ppm	93
74) 4-Bromophenyl-phenylether	9.650	248	808256	74.31	ppm	94
75) Hexachlorobenzene	9.715	284	890805	75.80	ppm	96
76) Pentachlorophenol	10.025	266	1185432	185.69	ppm	97

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25927.D
Acq On : 13 May 2016 10:47 am
Operator : ariellec
Sample : ic1209-80
Misc : op93693,e6p1209
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 13 11:11:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 11:10:43 2016
QLast Update : Fri May 13 11:10:43 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
77) Phenanthrene	10.351	178	4587213	72.52 ppm	99
78) Anthracene	10.426	178	4604222	73.91 ppm	99
79) Carbazole	10.699	167	4348459	74.09 ppm	98
80) Di-n-butylphthalate	11.319	149	5561964	75.67 ppm	99
81) Fluoranthene	12.212	202	4890299	72.11 ppm	91
82) Octadecane	10.249	57	2441057	77.78 ppm	98
84) Pyrene	12.565	202	5105149	74.78 ppm	99
86) Butylbenzylphthalate	13.710	149	2479479	79.47 ppm	92
87) Butyl stearate	13.876	56	1798980	82.61 ppm	99
88) Benzo[a]anthracene	14.486	228	4446668	71.35 ppm	99
89) 3,3'-Dichlorobenzidine	14.496	252	1681982	80.29 ppm	98
90) Chrysene	14.550	228	4328890	73.80 ppm	100
91) bis(2-Ethylhexyl)phtha...	14.667	149	3459019	73.03 ppm	98
93) Di-n-octylphthalate	15.662	149	5941702	82.90 ppm	97
94) Benzo[b]fluoranthene	16.101	252	4881765	76.76 ppm	99
95) Benzo[k]fluoranthene	16.149	252	4337281	68.58 ppm	100
96) Benzo[a]pyrene	16.539	252	4152213	77.58 ppm	95
97) Indeno[1,2,3-cd]pyrene	18.032	276	4609633m	83.36 ppm	
98) Dibenz(a,h)acridine	17.716	279	3991015	80.62 ppm	99
99) Dibenz[a,h]anthracene	18.069	278	4688862	80.51 ppm	97
100) 7,12-Dimethylbenz(a)an...	16.106	256	2155704	86.38 ppm	97
101) Benzo[g,h,i]perylene	18.417	276	4557626	79.49 ppm	94

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

7.6.60

7

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25927.D
Acq On : 13 May 2016 10:47 am
Operator : ariellec
Sample : ic1209-80
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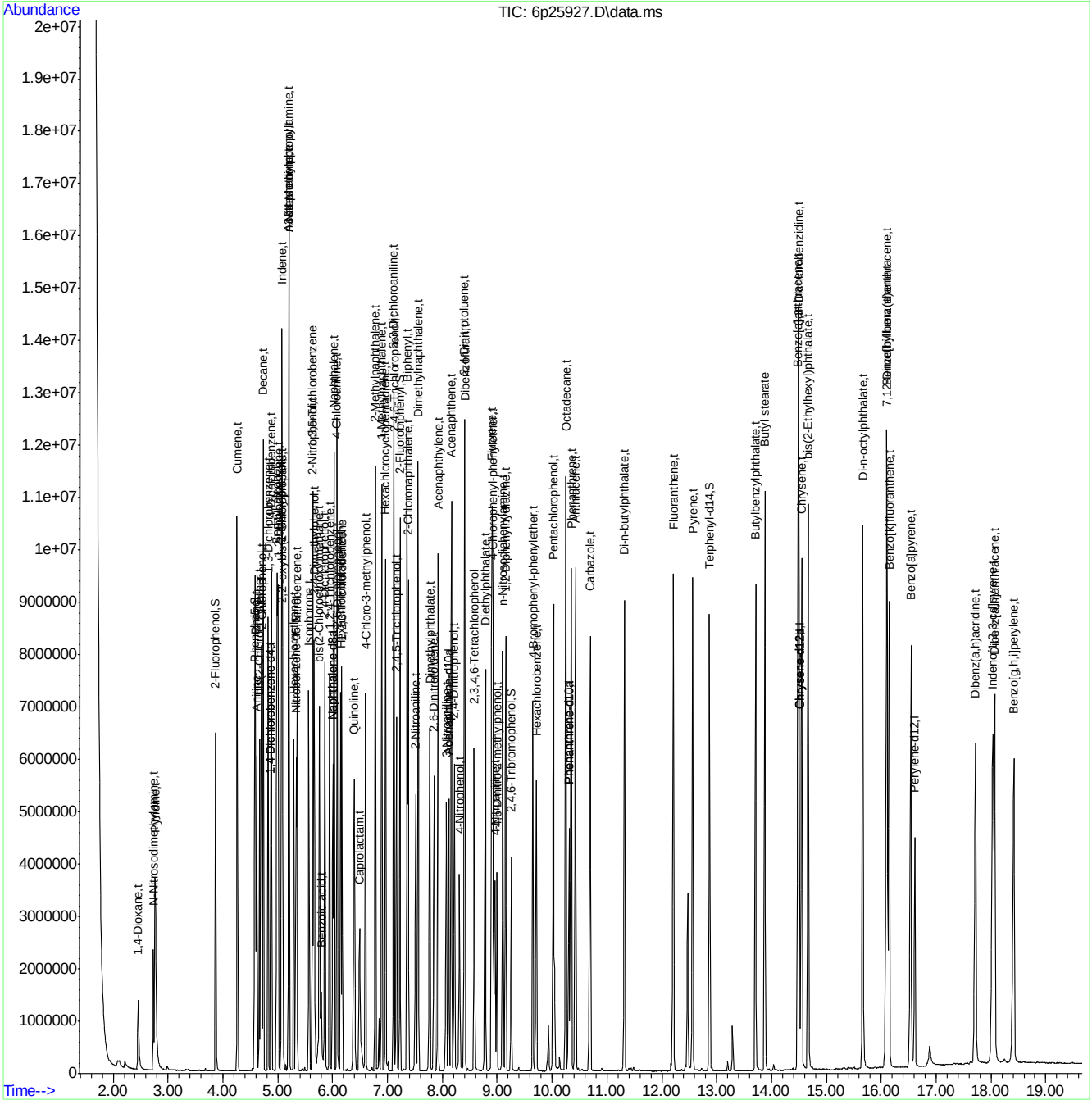
QLast Update : Fri May 13 11:10:43 2016
Response via : Initial Calibration



SGS ACCUTEST JC19644

Manual Integration Approval Summary

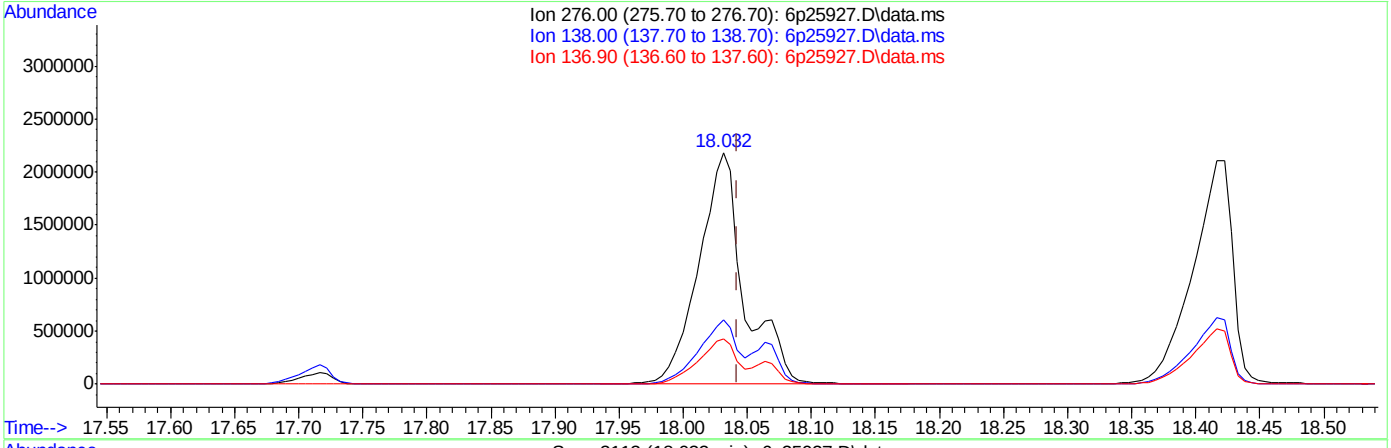
Sample Number:	E6P1209-IC1209	**Method:**	SW846 8270D
Lab FileID:	6P25927.D	**Analyst approved:**	05/16/16 09:29 Arielle Cocozza
Injection Time:	05/13/16 10:47	**Supervisor approved:**	05/16/16 18:39 Nina Pandya

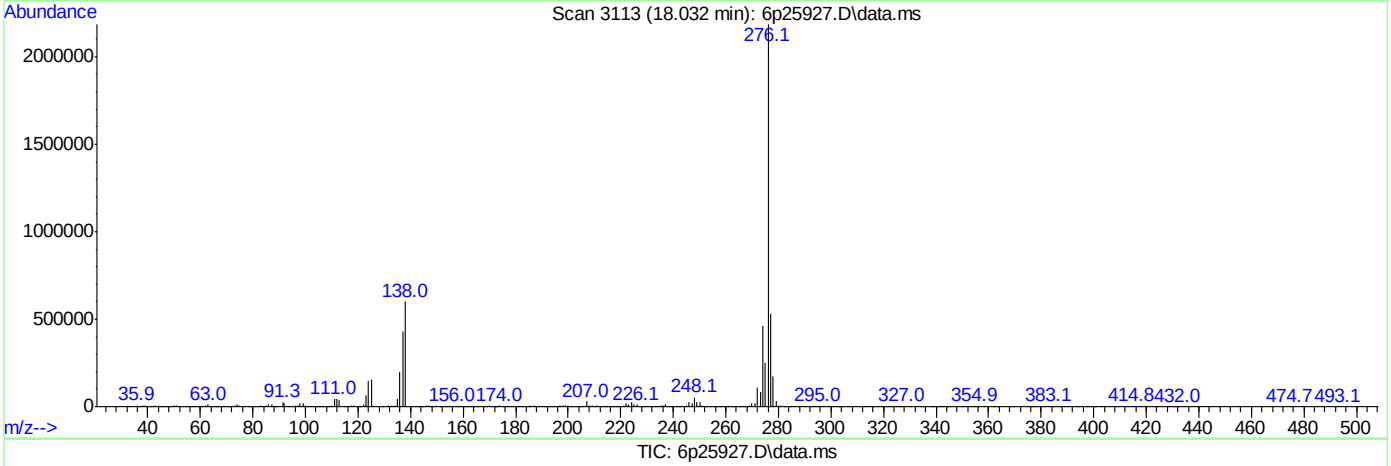
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		18.03	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25927.D
Acq On : 13 May 2016 10:47 am
Operator : ariellec
Sample : ic1209-80
Misc : op93693,e6p1209
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 13 11:10:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 11:10:43 2016
QLast Update : Fri May 13 11:10:43 2016
Response via : Initial Calibration





TIC: 6p25927.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

18.032min (-0.011) 98.34ppm

response 5437743

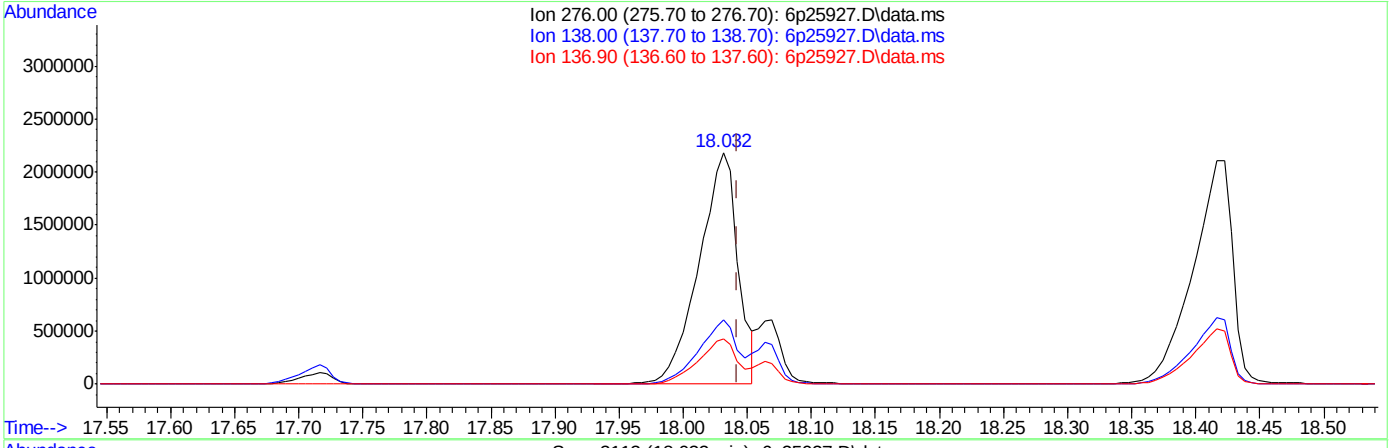
Ion	Exp%	Act%
276.00	100	100
138.00	20.00	27.50
136.90	14.60	19.67
0.00	0.00	0.00

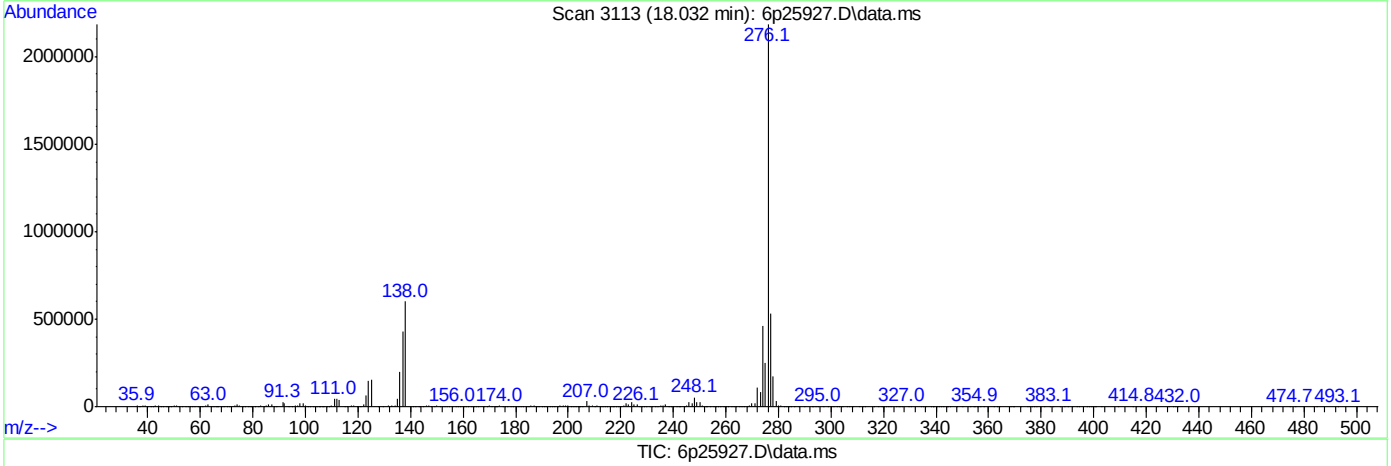
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25927.D
Acq On : 13 May 2016 10:47 am
Operator : ariellec
Sample : ic1209-80
Misc : op93693,e6p1209
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 13 11:10:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 11:10:43 2016
QLast Update : Fri May 13 11:10:43 2016
Response via : Initial Calibration





TIC: 6p25927.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

18.032min (-0.011) 83.36ppm m

response 4609633

Ion	Exp%	Act%
276.00	100	100
138.00	20.00	27.54
136.90	14.60	19.70
0.00	0.00	0.00

SGS ACCUTEST JC19644

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
05/16/16 18:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25928.D
Acq On : 13 May 2016 11:15 am
Operator : ariellec
Sample : icc1209-50
Misc : op93693,e6p1209
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 13 11:36:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 11:11:22 2016
QLast Update : Fri May 13 11:11:22 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.869	152	502297	40.00	ppm	0.00
24) Naphthalene-d8	6.003	136	2161230	40.00	ppm	0.00
47) Acenaphthene-d10	8.116	164	1222131	40.00	ppm	0.00
69) Phenanthrene-d10	10.303	188	1993199	40.00	ppm	0.00
83) Chrysene-d12	14.502	240	1896728	40.00	ppm	0.00
92) Perylene-d12	16.609	264	1831871	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.869	152	502297	40.00	ppm	0.00
104) Acenaphthene-d10a	8.116	164	1222131	40.00	ppm	0.00
106) Phenanthrene-d10a	10.303	188	1993199	40.00	ppm	0.00
110) Chrysene-d12a	14.502	240	1896728	40.00	ppm	0.00
112) Naphthalene-d8a	6.003	136	2161230	40.00	ppm	0.00
114) Chrysene-d12b	14.502	240	1896728	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.863	112	923147	47.50	ppm	0.00
Spiked Amount 50.000			Recovery = 95.00%			
8) Phenol-d5	4.575	99	1206688	48.12	ppm	0.00
Spiked Amount 50.000			Recovery = 96.24%			
25) Nitrobenzene-d5	5.329	82	1139198	47.21	ppm	0.00
Spiked Amount 50.000			Recovery = 94.42%			
51) 2-Fluorobiphenyl	7.222	172	1871769	46.84	ppm	0.00
Spiked Amount 50.000			Recovery = 93.68%			
73) 2,4,6-Tribromophenol	9.249	330	260091	50.97	ppm	0.00
Spiked Amount 50.000			Recovery = 101.94%			
85) Terphenyl-d14	12.870	244	1921279	47.84	ppm	0.00
Spiked Amount 50.000			Recovery = 95.68%			
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-Chlorooctadecane	12.207	57	1531	0.00	ppm	0.00
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.457	88	418681	44.65	ppm	94
3) Pyridine	2.767	79	1117296	49.06	ppm	98
4) N-Nitrosodimethylamine	2.735	74	669710	48.87	ppm	94
6) Indene	5.077	116	1639269	48.39	ppm	98
7) Cumene	4.259	105	2310374	47.69	ppm	98
9) Phenol	4.585	94	1304259	47.62	ppm	80
10) Aniline	4.612	93	1373168	44.43	ppm	94
11) bis(2-Chloroethyl)ether	4.660	93	917605	47.98	ppm	97
12) 2-Chlorophenol	4.703	128	933222	47.64	ppm	99
13) Decane	4.735	43	1156636	45.74	ppm	94
14) 1,3-Dichlorobenzene	4.821	146	975368	47.76	ppm	98
15) 1,4-Dichlorobenzene	4.885	146	988222	47.88	ppm	99
16) Benzyl alcohol	4.976	108	645412	48.38	ppm	99
17) 1,2-Dichlorobenzene	5.003	146	920687	46.14	ppm	99
18) Acetophenone	5.200	105	1333528	47.65	ppm	81
19) 2-Methylphenol	5.061	108	888611	47.52	ppm	99
20) 2,2'-oxybis(1-Chloropr...	5.088	121	322839	46.65	ppm	91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25928.D
Acq On : 13 May 2016 11:15 am
Operator : ariellec
Sample : icc1209-50
Misc : op93693,e6p1209
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 13 11:36:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 11:11:22 2016
QLast Update : Fri May 13 11:11:22 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.190	108	950515	48.31	ppm		99
22) n-Nitroso-di-n-propyla...	5.200	70	789125	46.50	ppm		92
23) Hexachloroethane	5.286	201	299100	48.35	ppm	#	73
26) Nitrobenzene	5.345	77	1176707	46.78	ppm		98
27) Quinoline	6.383	129	1910629	47.09	ppm		98
28) Isophorone	5.559	82	1974609	45.89	ppm		97
29) 2-Nitrophenol	5.628	139	509934	48.15	ppm		92
30) 2,4-Dimethylphenol	5.660	107	954251	47.74	ppm		96
31) Benzoic acid	5.773	105	659787	59.58	ppm		91
32) bis(2-Chloroethoxy)met...	5.751	93	1121488	45.81	ppm		99
33) 2,4-Dichlorophenol	5.853	162	719541	46.59	ppm		98
34) 2,6-Dichlorophenol	6.083	162	692867	47.06	ppm		99
35) 1,3,5-Trichlorobenzene	5.639	180	785170	47.04	ppm		98
36) 1,2,4-Trichlorobenzene	5.939	180	757101	46.96	ppm		96
37) 1,2,3-Trichlorobenzene	6.169	180	741138	46.87	ppm		97
38) Naphthalene	6.024	128	2853847	46.32	ppm		99
39) 4-Chloroaniline	6.072	127	1153434	46.00	ppm		98
40) 2,3-Dichloroaniline	7.115	161	873175	46.06	ppm		98
41) Caprolactam	6.473	55	497433	47.79	ppm		95
42) Hexachlorobutadiene	6.142	225	383582	46.87	ppm		98
43) 4-Chloro-3-methylphenol	6.591	107	898981	47.04	ppm		98
44) 2-Methylnaphthalene	6.778	141	1535721	47.10	ppm		99
45) 1-Methylnaphthalene	6.891	141	1603084	47.90	ppm		99
46) Dimethylnaphthalene	7.554	156	1638703	47.94	ppm		95
48) Hexachlorocyclopentadiene	6.960	237	888608	104.83	ppm		96
49) 2,4,6-Trichlorophenol	7.115	196	488447	49.35	ppm		95
50) 2,4,5-Trichlorophenol	7.158	196	539969	48.88	ppm		94
52) 2-Chloronaphthalene	7.372	162	1630153	46.14	ppm		97
53) Biphenyl	7.351	154	2224207	46.96	ppm		99
54) 2-Nitroaniline	7.511	65	656655	51.70	ppm		90
55) Dimethylphthalate	7.763	163	1925127	46.58	ppm		99
56) Acenaphthylene	7.918	152	2808795	47.96	ppm		99
57) 2,6-Dinitrotoluene	7.843	165	434872	53.87	ppm		92
58) 3-Nitroaniline	8.062	138	531682	50.97	ppm		98
59) Acenaphthene	8.158	153	1741820	46.26	ppm		97
60) 2,4-Dinitrophenol	8.212	184	445687	154.77	ppm		96
61) 4-Nitrophenol	8.308	109	330344	51.94	ppm		93
62) Dibenzofuran	8.404	168	2286132	45.90	ppm		96
63) 2,4-Dinitrotoluene	8.399	165	584628	54.14	ppm		100
64) 2,3,4,6-Tetrachlorophenol	8.575	232	393414	49.63	ppm		87
65) Diethylphthalate	8.773	149	1962184	46.70	ppm		95
66) Fluorene	8.896	166	1957071	47.23	ppm		97
67) 4-Chlorophenyl-phenyle...	8.918	204	851009	45.53	ppm		92
68) 4-Nitroaniline	8.945	138	536195	47.65	ppm		97
70) 4,6-Dinitro-2-methylph...	8.987	198	306043	71.93	ppm		93
71) n-Nitrosodiphenylamine	9.094	169	1341667	48.12	ppm		99
72) 1,2-Diphenylhydrazine	9.153	77	2400960	48.16	ppm		95
74) 4-Bromophenyl-phenylether	9.645	248	483572	47.74	ppm		91
75) Hexachlorobenzene	9.709	284	535521	48.70	ppm		91
76) Pentachlorophenol	10.020	266	687249	109.15	ppm		98

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25928.D
Acq On : 13 May 2016 11:15 am
Operator : ariellec
Sample : icc1209-50
Misc : op93693,e6p1209
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 13 11:36:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 11:11:22 2016
QLast Update : Fri May 13 11:11:22 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) Phenanthrene	10.346	178	2744213	46.85	ppm	98
78) Anthracene	10.421	178	2764381	47.71	ppm	99
79) Carbazole	10.688	167	2588014	47.38	ppm	98
80) Di-n-butylphthalate	11.319	149	3321192	48.30	ppm	100
81) Fluoranthene	12.207	202	2934582	46.79	ppm	90
82) Octadecane	10.244	57	1469848	49.74	ppm	96
84) Pyrene	12.560	202	3049032	46.77	ppm	99
86) Butylbenzylphthalate	13.705	149	1454956	48.11	ppm	93
87) Butyl stearate	13.871	56	1057454	49.61	ppm	96
88) Benzo[a]anthracene	14.480	228	2649029	45.00	ppm	98
89) 3,3'-Dichlorobenzidine	14.486	252	1000776	49.16	ppm	96
90) Chrysene	14.539	228	2603547	46.62	ppm	100
91) bis(2-Ethylhexyl)phtha...	14.662	149	2024447	45.00	ppm	97
93) Di-n-octylphthalate	15.657	149	3450602	49.16	ppm	97
94) Benzo[b]fluoranthene	16.090	252	2893823	47.36	ppm	99
95) Benzo[k]fluoranthene	16.133	252	2681818	45.31	ppm	96
96) Benzo[a]pyrene	16.529	252	2530311	49.08	ppm	95
97) Indeno[1,2,3-cd]pyrene	18.021	276	2741438m	50.55	ppm	
98) Dibenz(a,h)acridine	17.711	279	2475117	51.42	ppm	100
99) Dibenz[a,h]anthracene	18.059	278	2855230	50.44	ppm	98
100) 7,12-Dimethylbenz(a)an...	16.096	256	1272937	51.53	ppm	97
101) Benzo[g,h,i]perylene	18.406	276	2816673	50.70	ppm	95

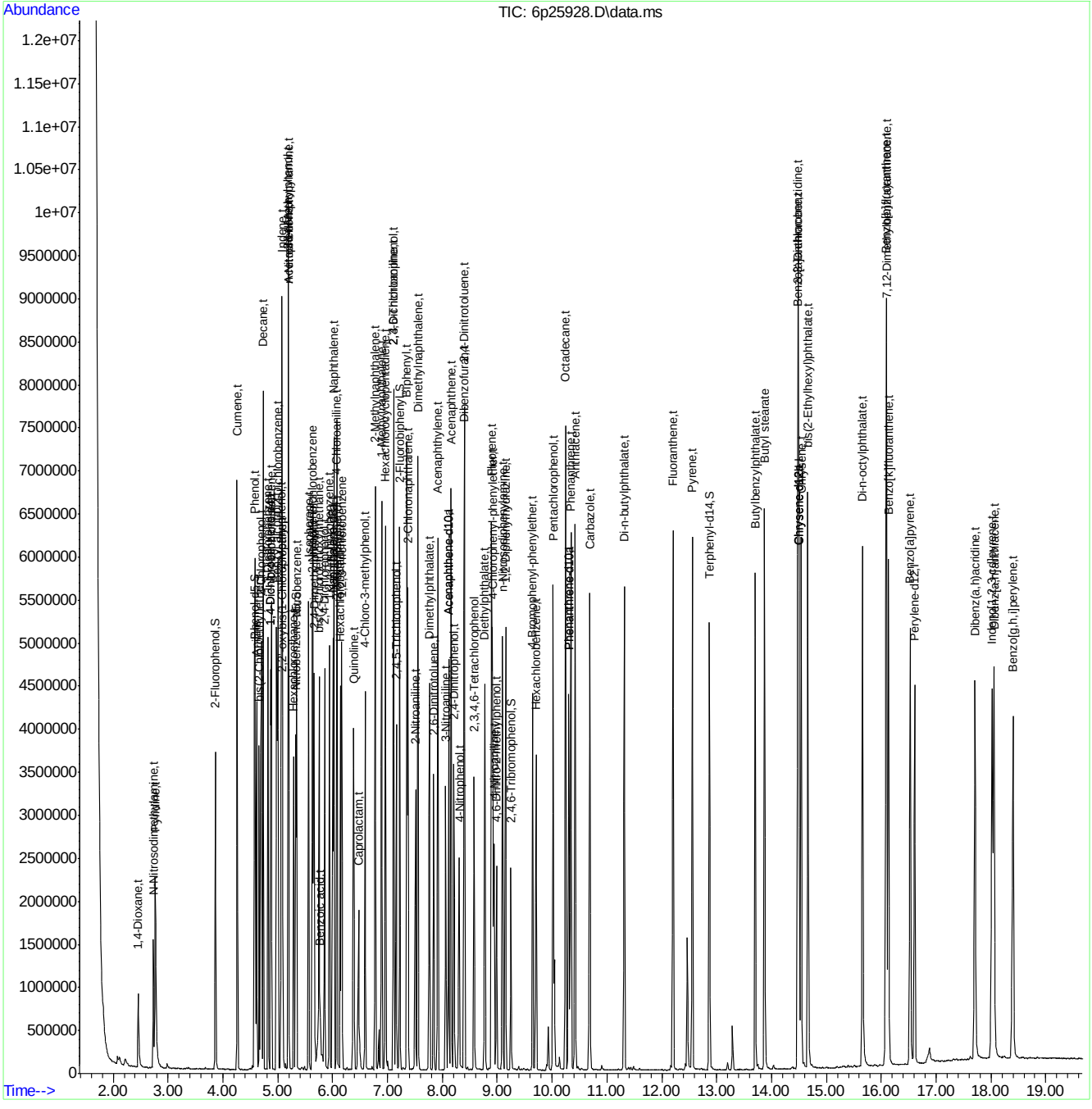
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25928.D
Acq On : 13 May 2016 11:15 am
Operator : ariellec
Sample : icc1209-50
Misc : op93693,e6p1209
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 13 11:36:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 11:11:22 2016
QLast Update : Fri May 13 11:11:22 2016
Response via : Initial Calibration



SGS ACCUTEST JC19644

Manual Integration Approval Summary

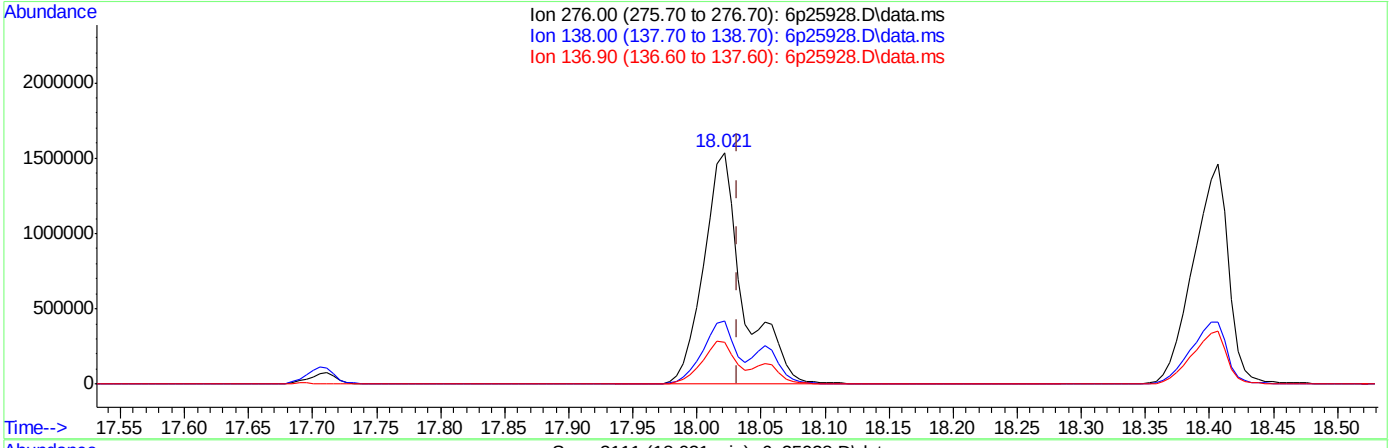
Sample Number:	E6P1209-ICC1209	**Method:**	SW846 8270D
Lab FileID:	6P25928.D	**Analyst approved:**	05/16/16 09:29 Arielle Cocozza
Injection Time:	05/13/16 11:15	**Supervisor approved:**	05/16/16 18:43 Nina Pandya

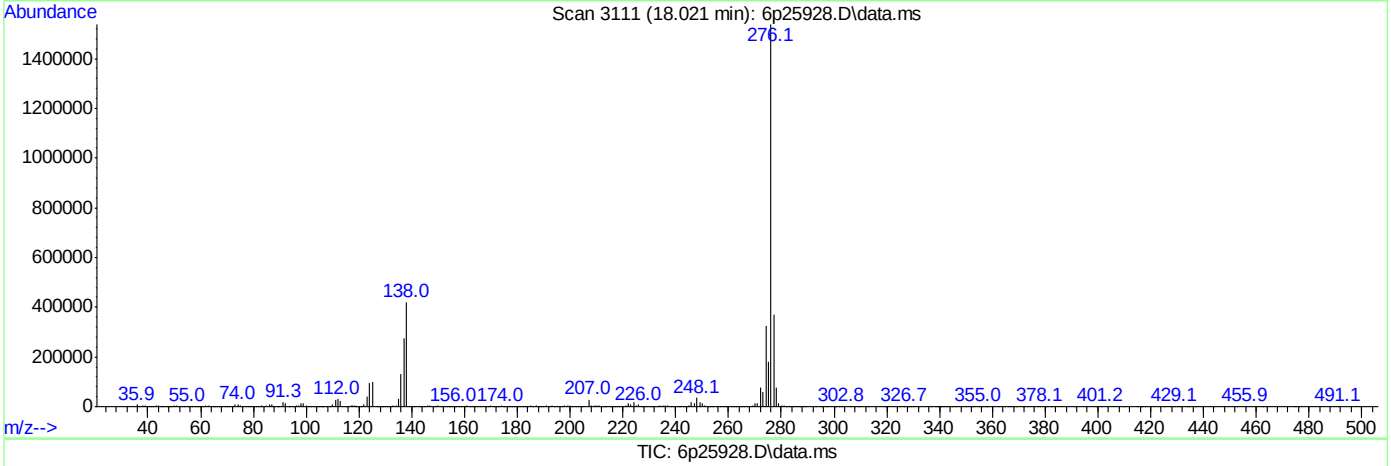
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		18.02	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25928.D
Acq On : 13 May 2016 11:15 am
Operator : ariellec
Sample : icc1209-50
Misc : op93693,e6p1209
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 13 11:34:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 11:11:22 2016
QLast Update : Fri May 13 11:11:22 2016
Response via : Initial Calibration





TIC: 6p25928.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

18.021min (-0.011) 61.34ppm

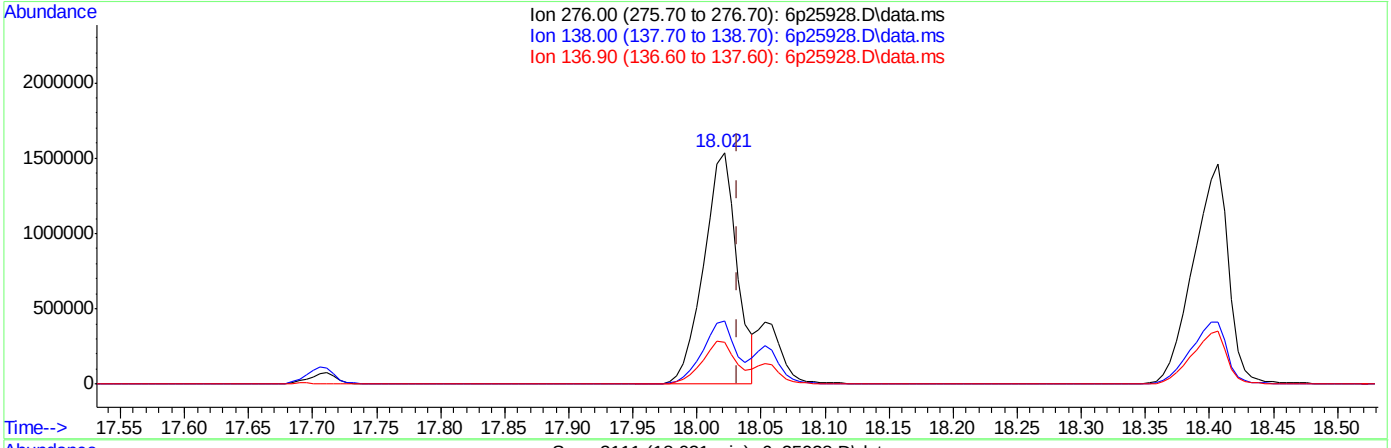
response 3326256

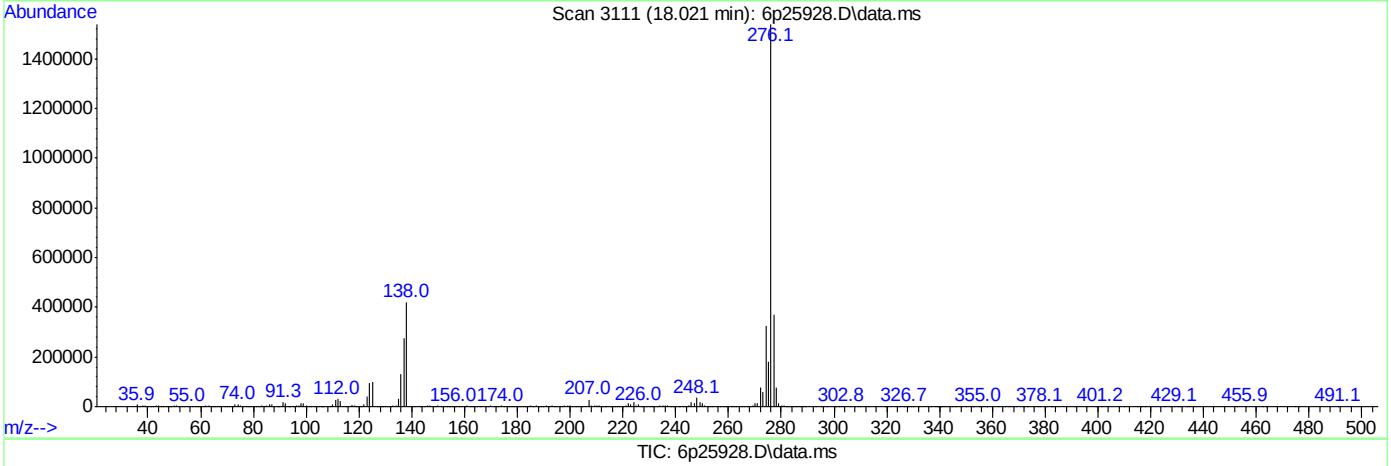
Ion	Exp%	Act%
276.00	100	100
138.00	20.00	27.31
136.90	14.60	17.92
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25928.D
Acq On : 13 May 2016 11:15 am
Operator : ariellec
Sample : icc1209-50
Misc : op93693,e6p1209
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 13 11:34:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 11:11:22 2016
QLast Update : Fri May 13 11:11:22 2016
Response via : Initial Calibration





TIC: 6p25928.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

18.021min (-0.011) 50.55ppm m

response 2741438

Ion	Exp%	Act%
276.00	100	100
138.00	20.00	27.32
136.90	14.60	17.95
0.00	0.00	0.00

SGS ACCUTEST JC19644

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
05/16/16 18:39

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25929.D
Acq On : 13 May 2016 11:42 am
Operator : ariellec
Sample : ic1209-25
Misc : op93693,e6p1209
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 13 12:04:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 11:39:12 2016
QLast Update : Fri May 13 11:39:12 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.869	152	506892	40.00	ppm	0.00
24) Naphthalene-d8	5.997	136	2096052	40.00	ppm	0.00
47) Acenaphthene-d10	8.110	164	1196565	40.00	ppm	0.00
69) Phenanthrene-d10	10.303	188	1955220	40.00	ppm	0.00
83) Chrysene-d12	14.496	240	1855371	40.00	ppm	0.00
92) Perylene-d12	16.604	264	1808233	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.869	152	506892	40.00	ppm	0.00
104) Acenaphthene-d10a	8.110	164	1196565	40.00	ppm	0.00
106) Phenanthrene-d10a	10.303	188	1955220	40.00	ppm	0.00
110) Chrysene-d12a	14.496	240	1855371	40.00	ppm	0.00
112) Naphthalene-d8a	5.997	136	2096052	40.00	ppm	0.00
114) Chrysene-d12b	14.496	240	1855371	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.858	112	466743	24.04	ppm	0.00
Spiked Amount 50.000			Recovery = 48.08%			
8) Phenol-d5	4.569	99	615497	24.51	ppm	0.00
Spiked Amount 50.000			Recovery = 49.02%			
25) Nitrobenzene-d5	5.324	82	573093	24.77	ppm	0.00
Spiked Amount 50.000			Recovery = 49.54%			
51) 2-Fluorobiphenyl	7.222	172	932271	24.13	ppm	0.00
Spiked Amount 50.000			Recovery = 48.26%			
73) 2,4,6-Tribromophenol	9.244	330	122698	24.42	ppm	0.00
Spiked Amount 50.000			Recovery = 48.84%			
85) Terphenyl-d14	12.865	244	957036	24.57	ppm	0.00
Spiked Amount 50.000			Recovery = 49.14%			
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.457	88	212096	22.90	ppm	93
3) Pyridine	2.767	79	552071	24.11	ppm	98
4) N-Nitrosodimethylamine	2.729	74	334597	24.30	ppm	99
6) Indene	5.077	116	850212	25.03	ppm	99
7) Cumene	4.259	105	1204648	24.87	ppm	98
9) Phenol	4.580	94	660761	24.14	ppm	94
10) Aniline	4.612	93	706344	23.16	ppm	94
11) bis(2-Chloroethyl)ether	4.660	93	470095	24.56	ppm	97
12) 2-Chlorophenol	4.703	128	482282	24.63	ppm	94
13) Decane	4.735	43	602139	24.00	ppm	98
14) 1,3-Dichlorobenzene	4.821	146	500667	24.51	ppm	99
15) 1,4-Dichlorobenzene	4.880	146	505114	24.46	ppm	99
16) Benzyl alcohol	4.976	108	327768	24.50	ppm	93
17) 1,2-Dichlorobenzene	5.003	146	470513	23.73	ppm	97
18) Acetophenone	5.195	105	686151	24.53	ppm	99
19) 2-Methylphenol	5.056	108	453566	24.27	ppm	99
20) 2,2'-oxybis(1-Chloropr...	5.083	121	167336	24.29	ppm #	90

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25929.D
Acq On : 13 May 2016 11:42 am
Operator : ariellec
Sample : ic1209-25
Misc : op93693,e6p1209
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 13 12:04:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 11:39:12 2016
QLast Update : Fri May 13 11:39:12 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	5.184	108	482466	24.46	ppm	99
22) n-Nitroso-di-n-propyla...	5.195	70	406262	24.06	ppm	98
23) Hexachloroethane	5.286	201	151477	24.43	ppm	97
26) Nitrobenzene	5.340	77	597484	24.81	ppm	97
27) Quinoline	6.372	129	956570	24.59	ppm	99
28) Isophorone	5.554	82	1009002	24.58	ppm	99
29) 2-Nitrophenol	5.628	139	257262	25.23	ppm	86
30) 2,4-Dimethylphenol	5.655	107	460189	23.95	ppm	94
31) Benzoic acid	5.746	105	277139	24.85	ppm	99
32) bis(2-Chloroethoxy)met...	5.751	93	566992	24.29	ppm	99
33) 2,4-Dichlorophenol	5.848	162	355407	24.06	ppm	98
34) 2,6-Dichlorophenol	6.078	162	350521	24.84	ppm	99
35) 1,3,5-Trichlorobenzene	5.634	180	394640	24.67	ppm	99
36) 1,2,4-Trichlorobenzene	5.939	180	379832	24.59	ppm	97
37) 1,2,3-Trichlorobenzene	6.163	180	373151	24.64	ppm	98
38) Naphthalene	6.019	128	1439431	24.45	ppm	99
39) 4-Chloroaniline	6.067	127	590686	24.68	ppm	99
40) 2,3-Dichloroaniline	7.110	161	449755	24.85	ppm	97
41) Caprolactam	6.447	55	249261	24.91	ppm	97
42) Hexachlorobutadiene	6.142	225	197143	25.15	ppm	97
43) 4-Chloro-3-methylphenol	6.586	107	449959	24.57	ppm	100
44) 2-Methylnaphthalene	6.773	141	781781	25.01	ppm	98
45) 1-Methylnaphthalene	6.891	141	802814	24.94	ppm	99
46) Dimethylnaphthalene	7.549	156	827067	25.16	ppm	99
48) Hexachlorocyclopentadiene	6.960	237	434286	51.83	ppm	99
49) 2,4,6-Trichlorophenol	7.110	196	242562	25.10	ppm	98
50) 2,4,5-Trichlorophenol	7.153	196	263529	24.48	ppm	98
52) 2-Chloronaphthalene	7.372	162	824922	24.22	ppm	98
53) Biphenyl	7.345	154	1113572	24.31	ppm	99
54) 2-Nitroaniline	7.500	65	323569	25.84	ppm	94
55) Dimethylphthalate	7.757	163	961481	24.09	ppm	100
56) Acenaphthylene	7.912	152	1407202	24.74	ppm	99
57) 2,6-Dinitrotoluene	7.832	165	210924	26.28	ppm	91
58) 3-Nitroaniline	8.057	138	266858	26.03	ppm	98
59) Acenaphthene	8.153	153	871989	24.01	ppm	99
60) 2,4-Dinitrophenol	8.201	184	187815	60.04	ppm	96
61) 4-Nitrophenol	8.297	109	158255	25.22	ppm	94
62) Dibenzofuran	8.399	168	1160206	24.19	ppm	99
63) 2,4-Dinitrotoluene	8.388	165	291889	27.16	ppm	94
64) 2,3,4,6-Tetrachlorophenol	8.570	232	186578	24.07	ppm	97
65) Diethylphthalate	8.773	149	996453	24.55	ppm	99
66) Fluorene	8.891	166	986661	24.59	ppm	100
67) 4-Chlorophenyl-phenyle...	8.912	204	434893	24.20	ppm	99
68) 4-Nitroaniline	8.934	138	268422	24.59	ppm	99
70) 4,6-Dinitro-2-methylph...	8.977	198	136243	30.01	ppm	94
71) n-Nitrosodiphenylamine	9.089	169	674799	24.86	ppm	99
72) 1,2-Diphenylhydrazine	9.148	77	1212986	24.99	ppm	99
74) 4-Bromophenyl-phenylether	9.645	248	242508	24.63	ppm	97
75) Hexachlorobenzene	9.704	284	263193	24.53	ppm	92
76) Pentachlorophenol	10.014	266	311845	49.58	ppm	97

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25929.D
Acq On : 13 May 2016 11:42 am
Operator : ariellec
Sample : ic1209-25
Misc : op93693,e6p1209
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 13 12:04:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 11:39:12 2016
QLast Update : Fri May 13 11:39:12 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) Phenanthrene	10.341	178	1375205	24.24	ppm	99
78) Anthracene	10.415	178	1373783	24.39	ppm	100
79) Carbazole	10.683	167	1292211	24.37	ppm	99
80) Di-n-butylphthalate	11.314	149	1666714	24.88	ppm	100
81) Fluoranthene	12.202	202	1472413	24.24	ppm	99
82) Octadecane	10.239	57	749735	25.89	ppm	99
84) Pyrene	12.555	202	1533860	24.37	ppm	100
86) Butylbenzylphthalate	13.700	149	698381	23.79	ppm	94
87) Butyl stearate	13.871	56	508953	24.45	ppm	99
88) Benzo[a]anthracene	14.475	228	1322437	23.43	ppm	99
89) 3,3'-Dichlorobenzidine	14.480	252	480915	24.23	ppm	100
90) Chrysene	14.534	228	1297630	24.08	ppm	99
91) bis(2-Ethylhexyl)phtha...	14.662	149	961270	22.29	ppm	99
93) Di-n-octylphthalate	15.657	149	1572391	22.77	ppm	99
94) Benzo[b]fluoranthene	16.080	252	1398553	23.44	ppm	99
95) Benzo[k]fluoranthene	16.122	252	1365517	23.82	ppm	99
96) Benzo[a]pyrene	16.524	252	1217615	24.02	ppm	99
97) Indeno[1,2,3-cd]pyrene	18.005	276	1263496m	23.55	ppm	
98) Dibenz(a,h)acridine	17.700	279	1167470	24.43	ppm	99
99) Dibenz[a,h]anthracene	18.048	278	1370201	24.48	ppm	100
100) 7,12-Dimethylbenz(a)an...	16.085	256	616301	25.12	ppm	98
101) Benzo[g,h,i]perylene	18.390	276	1365572	24.83	ppm	98

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

7.6.62

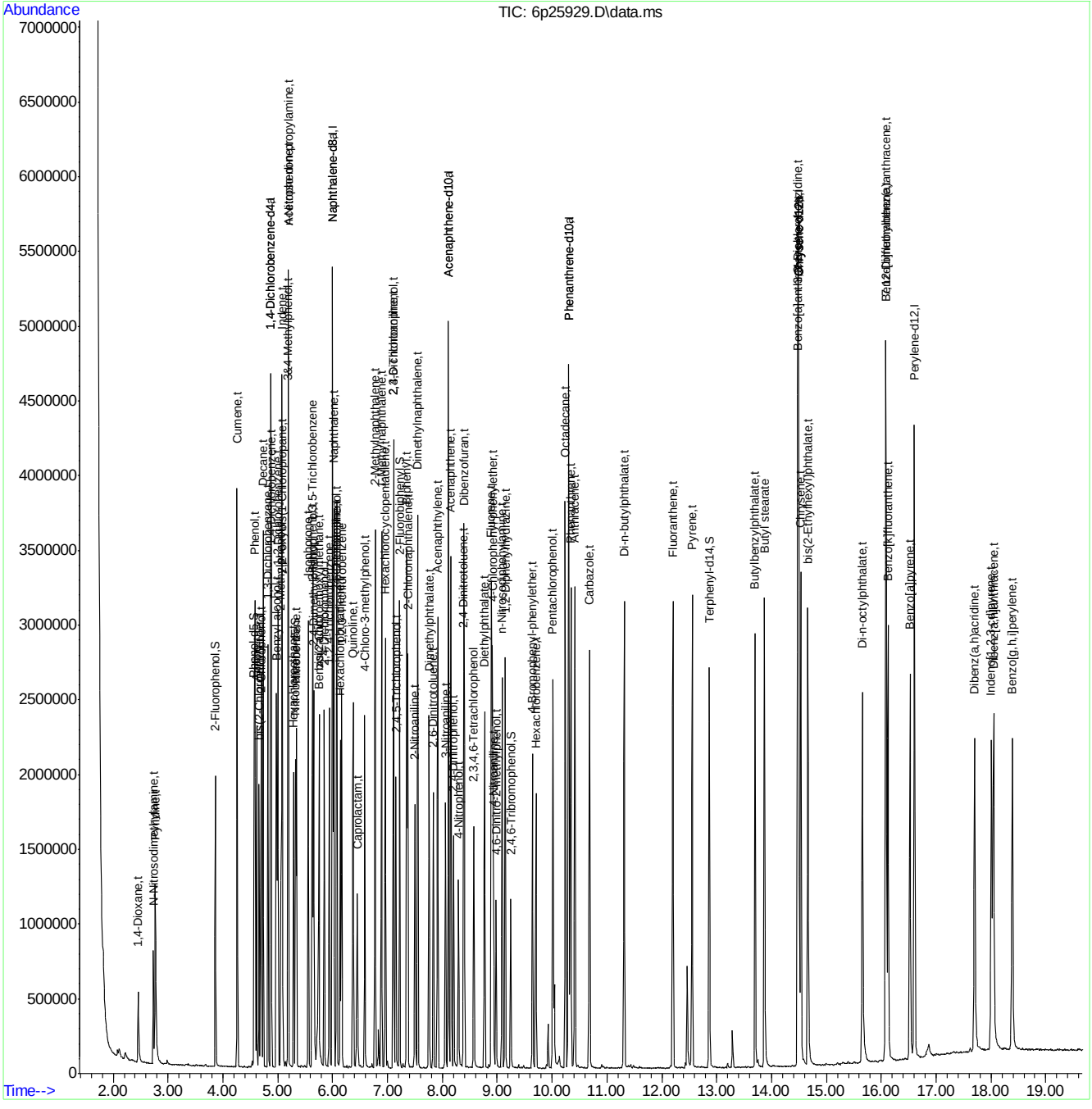
7

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25929.D
Acq On : 13 May 2016 11:42 am
Operator : ariellec
Sample : ic1209-25
Misc : op93693,e6p1209
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 13 12:04:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 11:39:12 2016
QLast Update : Fri May 13 11:39:12 2016
Response via : Initial Calibration



SGS ACCUTEST JC19644

Manual Integration Approval Summary

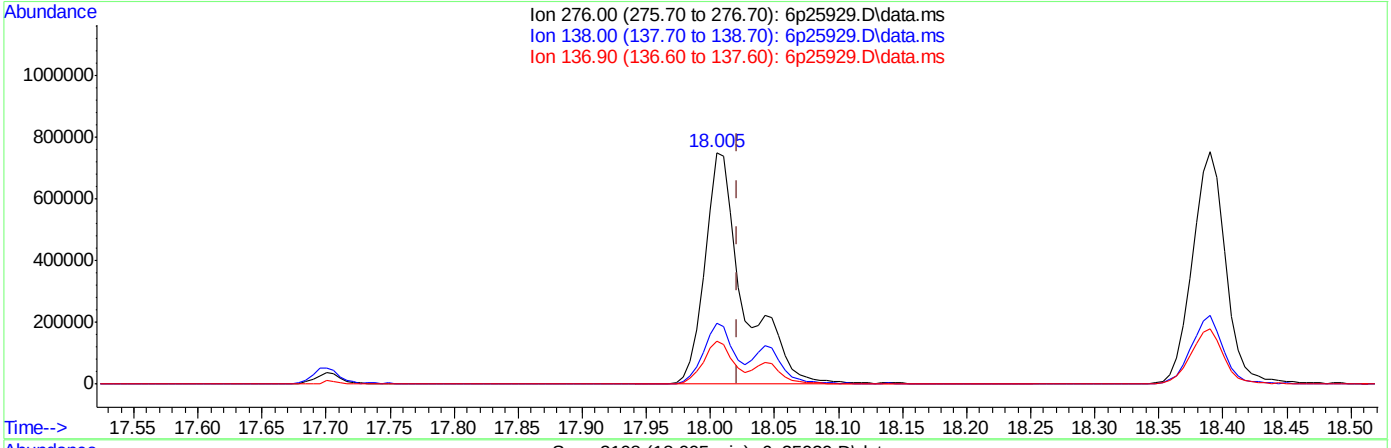
Sample Number:	E6P1209-IC1209	**Method:**	SW846 8270D
Lab FileID:	6P25929.D	**Analyst approved:**	05/16/16 09:29 Arielle Cocozza
Injection Time:	05/13/16 11:42	**Supervisor approved:**	05/16/16 18:39 Nina Pandya

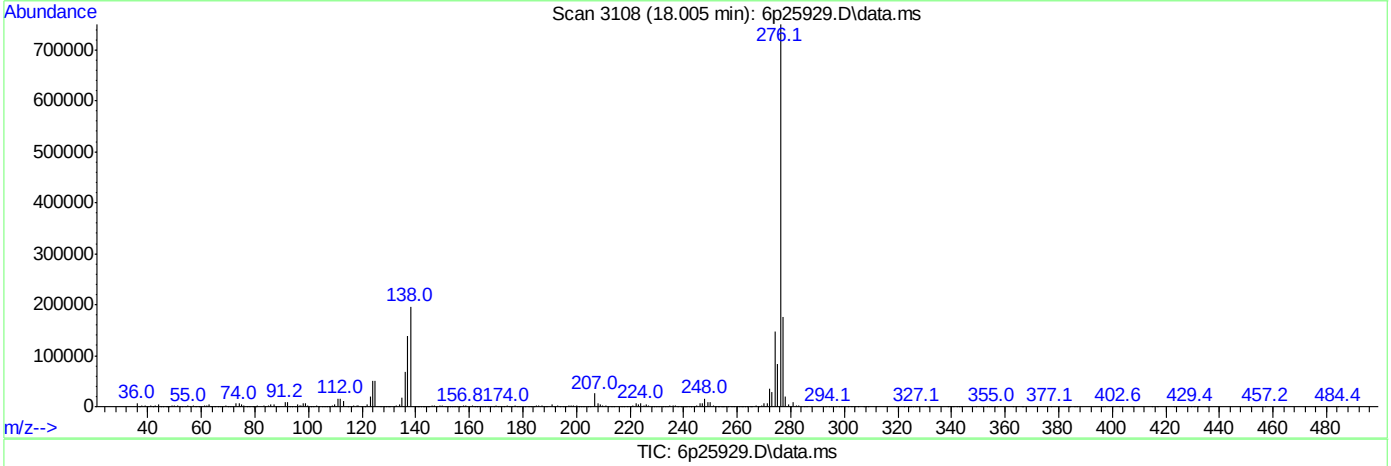
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		18.01	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25929.D
Acq On : 13 May 2016 11:42 am
Operator : ariellec
Sample : ic1209-25
Misc : op93693,e6p1209
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 13 12:02:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 11:39:12 2016
QLast Update : Fri May 13 11:39:12 2016
Response via : Initial Calibration





TIC: 6p25929.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

18.005min (-0.016) 30.11ppm

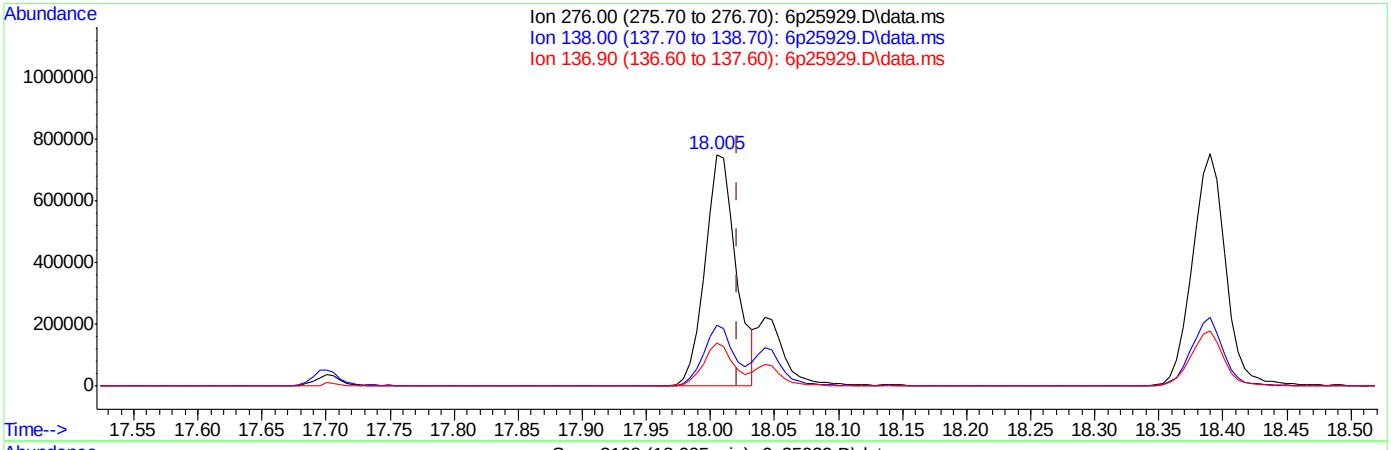
response 1615485

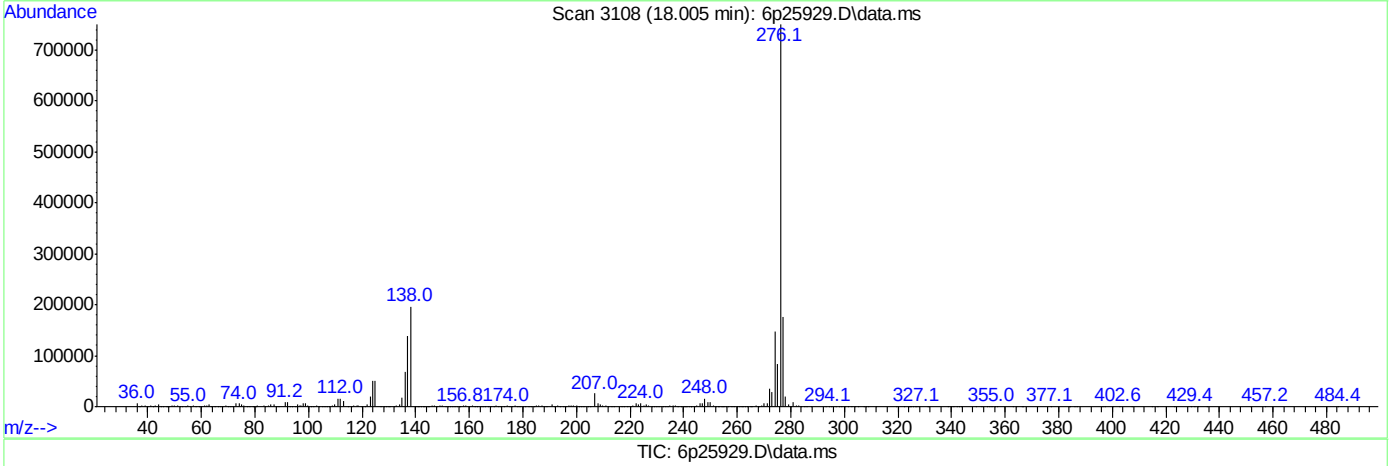
Ion	Exp%	Act%
276.00	100	100
138.00	27.30	26.19
136.90	18.00	18.47
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25929.D
Acq On : 13 May 2016 11:42 am
Operator : ariellec
Sample : ic1209-25
Misc : op93693,e6p1209
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 13 12:02:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 11:39:12 2016
QLast Update : Fri May 13 11:39:12 2016
Response via : Initial Calibration





TIC: 6p25929.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

18.005min (-0.016) 23.55ppm m

response 1263496

Ion	Exp%	Act%
276.00	100	100
138.00	27.30	26.24
136.90	18.00	18.52
0.00	0.00	0.00

SGS ACCUTEST JC19644

6P25930.D

Manual Integrations APPROVED (compounds with "m" flag)

Nina Pandya
05/16/16 18:39

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25930.D
Acq On : 13 May 2016 12:09 pm
Operator : ariellec
Sample : ic1209-10
Misc : op93693,e6p1209
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 16 17:17:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 13:19:46 2016
QLast Update : Fri May 13 13:19:46 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.869	152	511515	40.00	ppm	0.00
24) Naphthalene-d8	5.997	136	2143031	40.00	ppm	0.00
47) Acenaphthene-d10	8.110	164	1232823	40.00	ppm	0.00
69) Phenanthrene-d10	10.303	188	2007725	40.00	ppm	0.00
83) Chrysene-d12	14.491	240	1885056	40.00	ppm	0.00
92) Perylene-d12	16.604	264	1790617	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.869	152	511515	40.00	ppm	0.00
104) Acenaphthene-d10a	8.110	164	1232823	40.00	ppm	0.00
106) Phenanthrene-d10a	10.303	188	2007725	40.00	ppm	0.00
110) Chrysene-d12a	14.491	240	1885056	40.00	ppm	0.00
112) Naphthalene-d8a	5.997	136	2143031	40.00	ppm	0.00
114) Chrysene-d12b	14.491	240	1885056	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.858	112	180814	9.27	ppm	0.00
Spiked Amount 50.000			Recovery	=	18.54%	
8) Phenol-d5	4.569	99	245435	9.62	ppm	0.00
Spiked Amount 50.000			Recovery	=	19.24%	
25) Nitrobenzene-d5	5.323	82	231128	9.67	ppm	0.00
Spiked Amount 50.000			Recovery	=	19.34%	
51) 2-Fluorobiphenyl	7.217	172	371251	9.34	ppm	0.00
Spiked Amount 50.000			Recovery	=	18.68%	
73) 2,4,6-Tribromophenol	9.244	330	45836	9.11	ppm	0.00
Spiked Amount 50.000			Recovery	=	18.22%	
85) Terphenyl-d14	12.865	244	374637	9.48	ppm	0.00
Spiked Amount 50.000			Recovery	=	18.96%	
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.456	88	81742	9.00	ppm	99
3) Pyridine	2.767	79	219240	9.54	ppm	97
4) N-Nitrosodimethylamine	2.735	74	126885	9.24	ppm	99
6) Indene	5.072	116	336803	9.68	ppm	99
7) Cumene	4.259	105	474693	9.61	ppm	99
9) Phenol	4.580	94	255009	9.32	ppm	87
10) Aniline	4.607	93	303377	9.78	ppm	98
11) bis(2-Chloroethyl)ether	4.660	93	187058	9.62	ppm	94
12) 2-Chlorophenol	4.698	128	191818	9.67	ppm	98
13) Decane	4.730	43	244126	9.59	ppm	96
14) 1,3-Dichlorobenzene	4.821	146	198554	9.56	ppm	98
15) 1,4-Dichlorobenzene	4.879	146	202916	9.64	ppm	97
16) Benzyl alcohol	4.970	108	131034	9.67	ppm	96
17) 1,2-Dichlorobenzene	5.002	146	188757	9.47	ppm	97
18) Acetophenone	5.190	105	283353	9.86	ppm	95
19) 2-Methylphenol	5.056	108	181762	9.62	ppm	99
20) 2,2'-oxybis(1-Chloropr...	5.083	121	65581	9.42	ppm #	88

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25930.D
Acq On : 13 May 2016 12:09 pm
Operator : ariellec
Sample : ic1209-10
Misc : op93693,e6p1209
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 16 17:17:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 13:19:46 2016
QLast Update : Fri May 13 13:19:46 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	5.179	108	189129	9.49	ppm	96
22) n-Nitroso-di-n-propyla...	5.190	70	164562	9.61	ppm	98
23) Hexachloroethane	5.286	201	59652	9.51	ppm	93
26) Nitrobenzene	5.339	77	240927	9.65	ppm	98
27) Quinoline	6.366	129	379947	9.51	ppm	99
28) Isophorone	5.548	82	404886	9.56	ppm	98
29) 2-Nitrophenol	5.623	139	101807	9.65	ppm	93
30) 2,4-Dimethylphenol	5.650	107	181012	9.25	ppm	95
31) Benzoic acid	5.714	105	86995	8.10	ppm	98
32) bis(2-Chloroethoxy)met...	5.746	93	226920	9.48	ppm	99
33) 2,4-Dichlorophenol	5.847	162	139961	9.30	ppm	97
34) 2,6-Dichlorophenol	6.072	162	137142	9.48	ppm	98
35) 1,3,5-Trichlorobenzene	5.634	180	160652	9.72	ppm	98
36) 1,2,4-Trichlorobenzene	5.938	180	150253	9.50	ppm	94
37) 1,2,3-Trichlorobenzene	6.163	180	146863	9.44	ppm	99
38) Naphthalene	6.019	128	575498	9.52	ppm	99
39) 4-Chloroaniline	6.067	127	236341	9.58	ppm	97
40) 2,3-Dichloroaniline	7.110	161	179113	9.60	ppm	97
41) Caprolactam	6.425	55	92645	9.13	ppm	94
42) Hexachlorobutadiene	6.142	225	78171	9.68	ppm	99
43) 4-Chloro-3-methylphenol	6.580	107	174789	9.39	ppm	97
44) 2-Methylnaphthalene	6.773	141	315761	9.73	ppm	96
45) 1-Methylnaphthalene	6.890	141	326562	9.80	ppm	99
46) Dimethylnaphthalene	7.548	156	332418	9.78	ppm	98
48) Hexachlorocyclopentadiene	6.955	237	157385	18.22	ppm	98
49) 2,4,6-Trichlorophenol	7.104	196	94385	9.43	ppm	97
50) 2,4,5-Trichlorophenol	7.147	196	101174	9.21	ppm	97
52) 2-Chloronaphthalene	7.366	162	330629	9.40	ppm	99
53) Biphenyl	7.345	154	441606	9.34	ppm	98
54) 2-Nitroaniline	7.495	65	118857	9.27	ppm	91
55) Dimethylphthalate	7.757	163	384481	9.36	ppm	99
56) Acenaphthylene	7.912	152	560728	9.51	ppm	98
57) 2,6-Dinitrotoluene	7.832	165	80623	9.58	ppm	93
58) 3-Nitroaniline	8.051	138	104298	9.71	ppm	92
59) Acenaphthene	8.153	153	349814	9.40	ppm	97
60) 2,4-Dinitrophenol	8.196	184	53289	17.05	ppm	85
61) 4-Nitrophenol	8.286	109	56027	8.88	ppm	94
62) Dibenzofuran	8.399	168	474565	9.59	ppm	98
63) 2,4-Dinitrotoluene	8.388	165	108914	9.64	ppm	93
64) 2,3,4,6-Tetrachlorophenol	8.570	232	69095	8.87	ppm	97
65) Diethylphthalate	8.768	149	393446	9.41	ppm	100
66) Fluorene	8.891	166	392543	9.48	ppm	100
67) 4-Chlorophenyl-phenyle...	8.912	204	179661	9.65	ppm	94
68) 4-Nitroaniline	8.923	138	108005	9.60	ppm	97
70) 4,6-Dinitro-2-methylph...	8.971	198	41065	8.83	ppm	97
71) n-Nitrosodiphenylamine	9.083	169	269753	9.62	ppm	97
72) 1,2-Diphenylhydrazine	9.142	77	486851	9.65	ppm	99
74) 4-Bromophenyl-phenylether	9.640	248	95390	9.45	ppm	99
75) Hexachlorobenzene	9.698	284	105780	9.59	ppm	82
76) Pentachlorophenol	10.009	266	101461	16.52	ppm	96

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25930.D
Acq On : 13 May 2016 12:09 pm
Operator : ariellec
Sample : ic1209-10
Misc : op93693,e6p1209
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 16 17:17:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 13:19:46 2016
QLast Update : Fri May 13 13:19:46 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) Phenanthrene	10.335	178	552341	9.49	ppm	99
78) Anthracene	10.415	178	544897	9.44	ppm	99
79) Carbazole	10.683	167	508719	9.37	ppm	100
80) Di-n-butylphthalate	11.314	149	638289	9.34	ppm	100
81) Fluoranthene	12.202	202	578481	9.36	ppm	96
82) Octadecane	10.239	57	292199	9.73	ppm	97
84) Pyrene	12.549	202	603858	9.44	ppm	99
86) Butylbenzylphthalate	13.699	149	236009	8.38	ppm	89
87) Butyl stearate	13.870	56	171851	8.53	ppm	97
88) Benzo[a]anthracene	14.475	228	501605	8.96	ppm	98
89) 3,3'-Dichlorobenzidine	14.480	252	169491	8.81	ppm	99
90) Chrysene	14.528	228	506338	9.33	ppm	99
91) bis(2-Ethylhexyl)phtha...	14.662	149	319898	8.00	ppm	99
93) Di-n-octylphthalate	15.657	149	464343	7.58	ppm	99
94) Benzo[b]fluoranthene	16.079	252	514336	9.09	ppm	100
95) Benzo[k]fluoranthene	16.117	252	514560	9.13	ppm	100
96) Benzo[a]pyrene	16.518	252	432564	8.94	ppm	99
97) Indeno[1,2,3-cd]pyrene	18.005	276	396955m	8.07	ppm	
98) Dibenz(a,h)acridine	17.700	279	373655	8.48	ppm	99
99) Dibenz[a,h]anthracene	18.042	278	473046	8.88	ppm	98
100) 7,12-Dimethylbenz(a)an...	16.079	256	210003	8.88	ppm	96
101) Benzo[g,h,i]perylene	18.379	276	476300	8.93	ppm	99

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

7.6.63

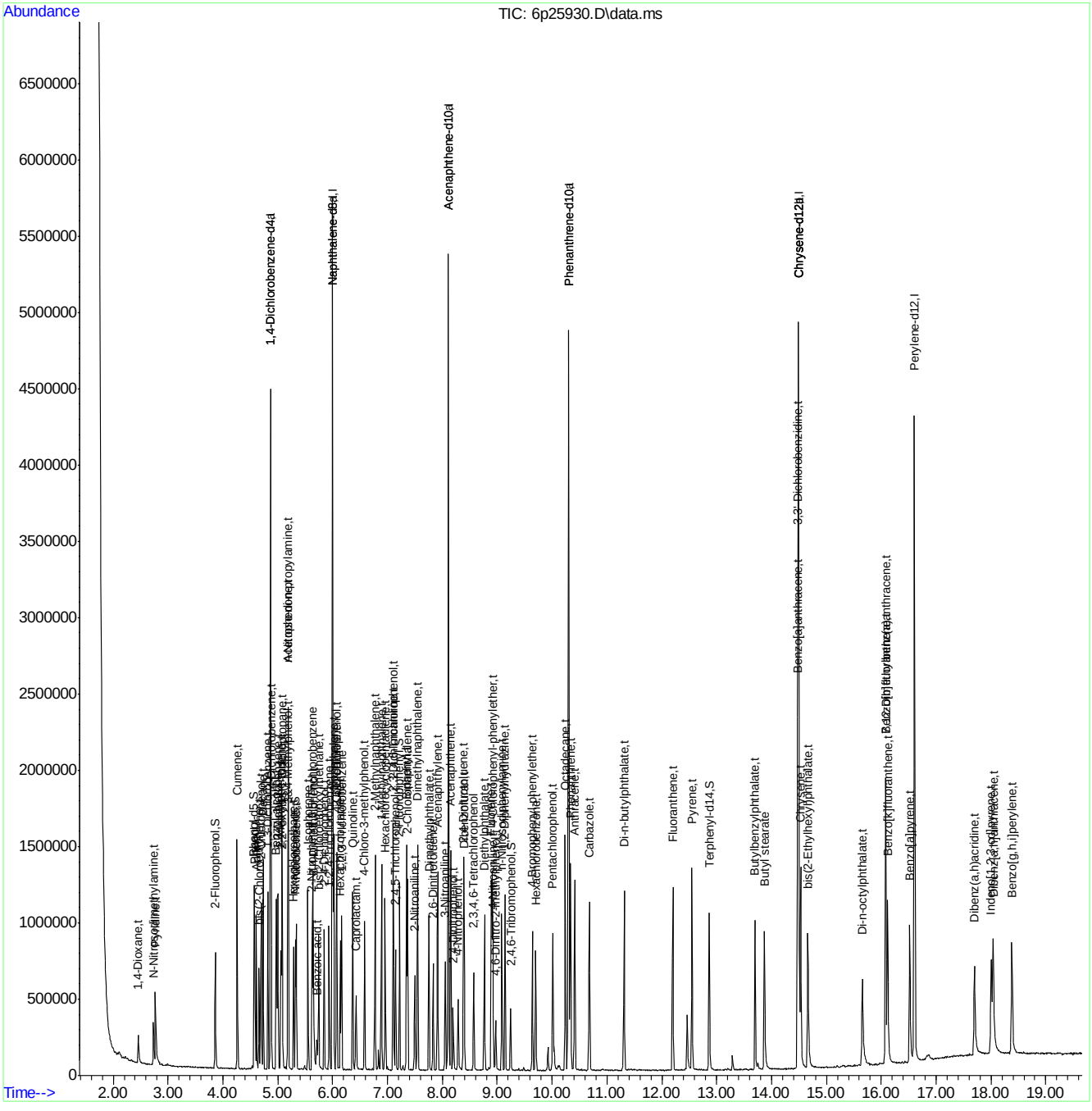
7

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25930.D
Acq On : 13 May 2016 12:09 pm
Operator : ariellec
Sample : ic1209-10
Misc : op93693,e6p1209
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 16 17:17:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 13:19:46 2016
QLast Update : Fri May 13 13:19:46 2016
Response via : Initial Calibration



Manual Integration Approval Summary

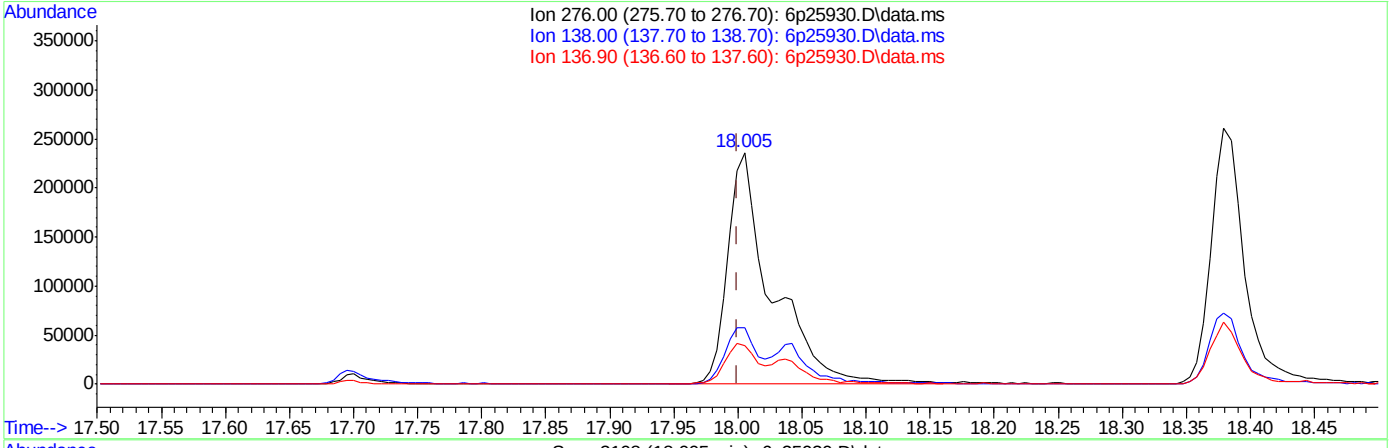
Sample Number:	E6P1209-IC1209	**Method:**	SW846 8270D
Lab FileID:	6P25930.D	**Analyst approved:**	05/16/16 18:10 Arielle Cocozza
Injection Time:	05/13/16 12:09	**Supervisor approved:**	05/16/16 18:39 Nina Pandya

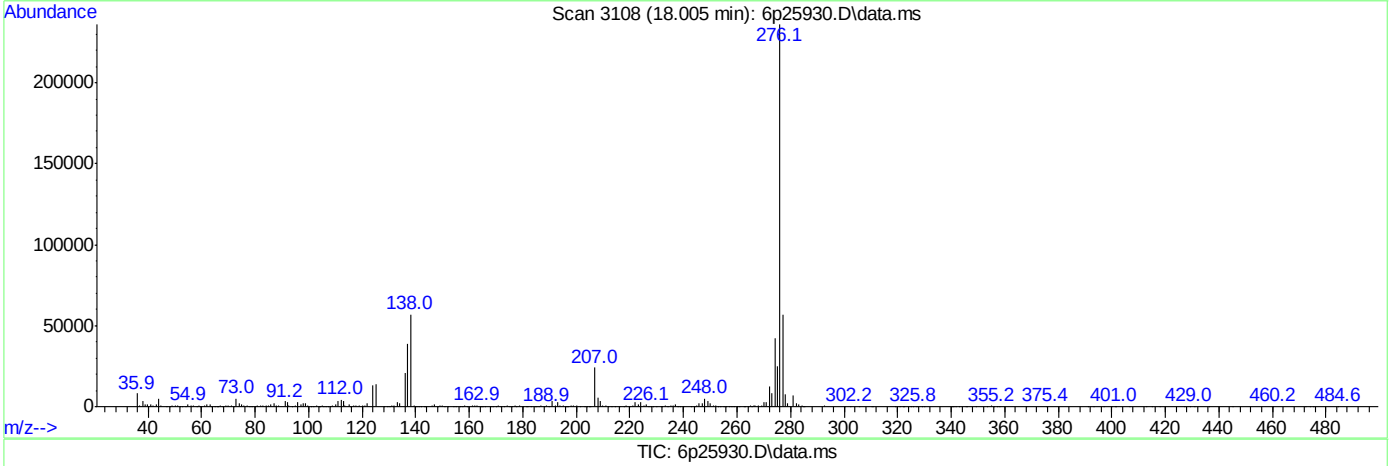
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		18.00	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25930.D
Acq On : 13 May 2016 12:09 pm
Operator : ariellec
Sample : ic1209-10
Misc : op93693,e6p1209
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 13 13:21:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 13:19:46 2016
QLast Update : Fri May 13 13:19:46 2016
Response via : Initial Calibration





TIC: 6p25930.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

18.005min (+0.005) 11.45ppm

response 563156

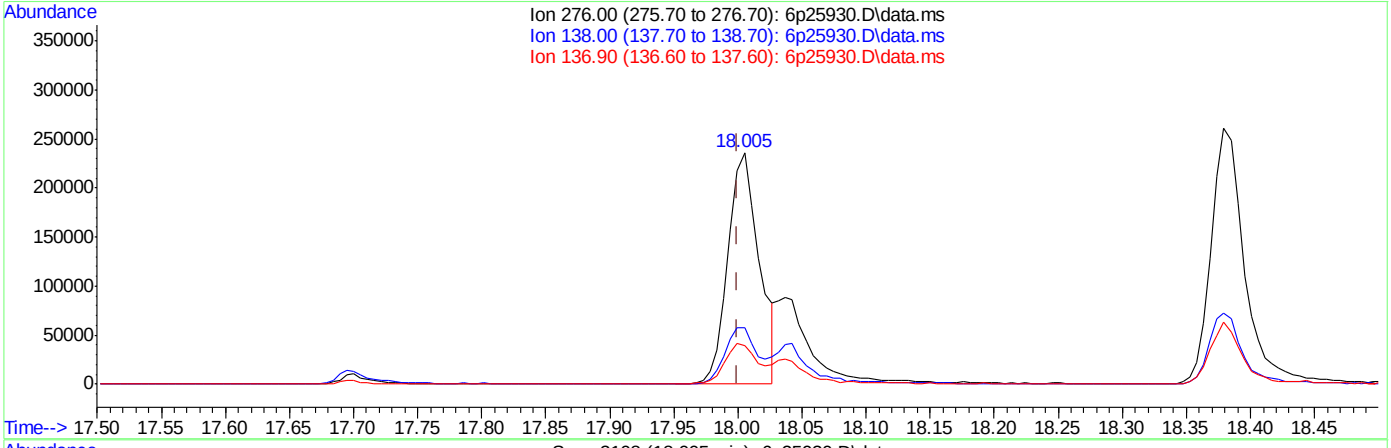
Ion	Exp%	Act%
276.00	100	100
138.00	27.30	23.86
136.90	18.00	16.37
0.00	0.00	0.00

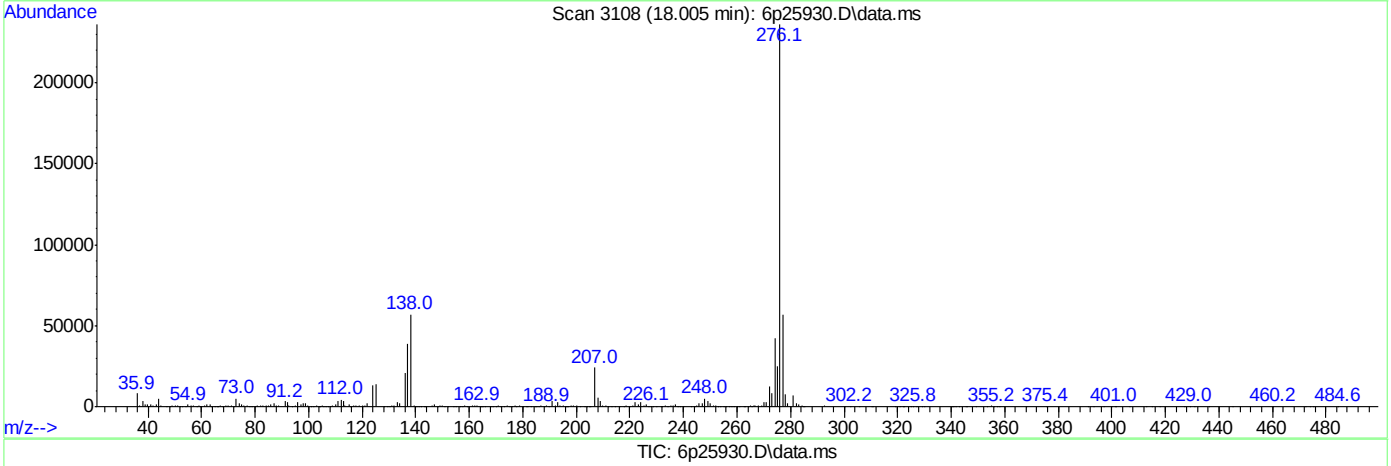
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25930.D
Acq On : 13 May 2016 12:09 pm
Operator : ariellec
Sample : ic1209-10
Misc : op93693,e6p1209
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 13 13:21:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 13:19:46 2016
QLast Update : Fri May 13 13:19:46 2016
Response via : Initial Calibration





TIC: 6p25930.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

18.005min (+0.005) 8.07ppm m

response 396955

Ion	Exp%	Act%
276.00	100	100
138.00	27.30	24.19
136.90	18.00	16.49
0.00	0.00	0.00

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25931.D
Acq On : 13 May 2016 12:36 pm
Operator : ariellec
Sample : ic1209-5
Misc : op93693,e6p1209
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 13 13:27:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 13:18:38 2016
QLast Update : Fri May 13 13:18:38 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.869	152	479724	40.00	ppm	0.00
24) Naphthalene-d8	5.997	136	1970250	40.00	ppm	0.00
47) Acenaphthene-d10	8.110	164	1118862	40.00	ppm	0.00
69) Phenanthrene-d10	10.303	188	1811110	40.00	ppm	0.00
83) Chrysene-d12	14.491	240	1677495	40.00	ppm	0.00
92) Perylene-d12	16.604	264	1605013	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.869	152	479724	40.00	ppm	0.00
104) Acenaphthene-d10a	8.110	164	1118862	40.00	ppm	0.00
106) Phenanthrene-d10a	10.303	188	1811110	40.00	ppm	0.00
110) Chrysene-d12a	14.491	240	1677495	40.00	ppm	0.00
112) Naphthalene-d8a	5.997	136	1970250	40.00	ppm	0.00
114) Chrysene-d12b	14.491	240	1677495	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.858	112	98632	5.39	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.78%	
8) Phenol-d5	4.569	99	131324	5.49	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.98%	
25) Nitrobenzene-d5	5.323	82	121050	5.51	ppm	0.00
Spiked Amount 50.000			Recovery	=	11.02%	
51) 2-Fluorobiphenyl	7.217	172	196997	5.46	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.92%	
73) 2,4,6-Tribromophenol	9.239	330	21772	4.80	ppm	0.00
Spiked Amount 50.000			Recovery	=	9.60%	
85) Terphenyl-d14	12.865	244	185612	5.28	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.56%	
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.457	88	43153	5.05	ppm	95
3) Pyridine	2.772	79	113567	5.24	ppm	98
4) N-Nitrosodimethylamine	2.735	74	66635	5.17	ppm	97
6) Indene	5.072	116	182859	5.60	ppm	99
7) Cumene	4.259	105	255466	5.52	ppm	99
9) Phenol	4.580	94	134079	5.22	ppm	89
10) Aniline	4.607	93	166606	5.72	ppm	98
11) bis(2-Chloroethyl)ether	4.655	93	99833	5.47	ppm	99
12) 2-Chlorophenol	4.698	128	99662	5.36	ppm	97
13) Decane	4.730	43	132579	5.56	ppm	97
14) 1,3-Dichlorobenzene	4.821	146	107838	5.54	ppm	96
15) 1,4-Dichlorobenzene	4.879	146	110047	5.58	ppm	100
16) Benzyl alcohol	4.970	108	68592	5.39	ppm	98
17) 1,2-Dichlorobenzene	5.002	146	101031	5.40	ppm	97
18) Acetophenone	5.190	105	152719	5.66	ppm	97
19) 2-Methylphenol	5.056	108	95218	5.38	ppm	98
20) 2,2'-oxybis(1-Chloropr...	5.083	121	35648	5.46	ppm #	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25931.D
Acq On : 13 May 2016 12:36 pm
Operator : ariellec
Sample : ic1209-5
Misc : op93693,e6p1209
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 13 13:27:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 13:18:38 2016
QLast Update : Fri May 13 13:18:38 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	5.179	108	100609	5.38	ppm	97
22) n-Nitroso-di-n-propyla...	5.184	70	88966	5.54	ppm	96
23) Hexachloroethane	5.286	201	31884	5.42	ppm	94
26) Nitrobenzene	5.339	77	128904	5.61	ppm	99
27) Quinoline	6.366	129	201143	5.48	ppm	98
28) Isophorone	5.548	82	217277	5.58	ppm	99
29) 2-Nitrophenol	5.623	139	52899	5.46	ppm	93
30) 2,4-Dimethylphenol	5.650	107	98777	5.49	ppm	97
31) Benzoic acid	5.698	105	40272	4.04	ppm	87
32) bis(2-Chloroethoxy)met...	5.746	93	120667	5.48	ppm	99
33) 2,4-Dichlorophenol	5.848	162	74704	5.40	ppm	97
34) 2,6-Dichlorophenol	6.072	162	71316	5.36	ppm	94
35) 1,3,5-Trichlorobenzene	5.634	180	83631	5.51	ppm	98
36) 1,2,4-Trichlorobenzene	5.933	180	78413	5.39	ppm	95
37) 1,2,3-Trichlorobenzene	6.163	180	78571	5.49	ppm	96
38) Naphthalene	6.019	128	304848	5.48	ppm	99
39) 4-Chloroaniline	6.067	127	124905	5.51	ppm	97
40) 2,3-Dichloroaniline	7.104	161	93629	5.46	ppm	98
41) Caprolactam	6.415	55	48061	5.14	ppm	94
42) Hexachlorobutadiene	6.142	225	39932	5.38	ppm	100
43) 4-Chloro-3-methylphenol	6.580	107	88861	5.19	ppm	97
44) 2-Methylnaphthalene	6.773	141	166974	5.60	ppm	96
45) 1-Methylnaphthalene	6.885	141	168436	5.50	ppm	99
46) Dimethylnaphthalene	7.548	156	169419	5.42	ppm	100
48) Hexachlorocyclopentadiene	6.955	237	82620	10.54	ppm	98
49) 2,4,6-Trichlorophenol	7.104	196	49335	5.43	ppm	97
50) 2,4,5-Trichlorophenol	7.147	196	51888	5.18	ppm	95
52) 2-Chloronaphthalene	7.367	162	176861	5.54	ppm	97
53) Biphenyl	7.345	154	236367	5.51	ppm	99
54) 2-Nitroaniline	7.495	65	58157	5.00	ppm	94
55) Dimethylphthalate	7.752	163	202932	5.45	ppm	98
56) Acenaphthylene	7.912	152	294250	5.50	ppm	98
57) 2,6-Dinitrotoluene	7.827	165	41766	5.47	ppm	98
58) 3-Nitroaniline	8.051	138	52959	5.43	ppm	90
59) Acenaphthene	8.153	153	179730	5.32	ppm	97
60) 2,4-Dinitrophenol	8.196	184	21338	7.52	ppm	70
61) 4-Nitrophenol	8.287	109	27421	4.77	ppm	91
62) Dibenzofuran	8.394	168	242289	5.40	ppm	96
63) 2,4-Dinitrotoluene	8.383	165	54915	5.36	ppm	92
64) 2,3,4,6-Tetrachlorophenol	8.570	232	35231	4.98	ppm	99
65) Diethylphthalate	8.763	149	203624	5.37	ppm	98
66) Fluorene	8.886	166	202935	5.40	ppm	99
67) 4-Chlorophenyl-phenyle...	8.912	204	93024	5.50	ppm	97
68) 4-Nitroaniline	8.918	138	53989	5.29	ppm	96
70) 4,6-Dinitro-2-methylph...	8.971	198	18810	4.49	ppm	99
71) n-Nitrosodiphenylamine	9.084	169	136671	5.40	ppm	96
72) 1,2-Diphenylhydrazine	9.142	77	251739	5.53	ppm	99
74) 4-Bromophenyl-phenylether	9.640	248	48384	5.31	ppm	98
75) Hexachlorobenzene	9.699	284	52923	5.32	ppm	86
76) Pentachlorophenol	10.009	266	48339	8.71	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25931.D
Acq On : 13 May 2016 12:36 pm
Operator : ariellec
Sample : ic1209-5
Misc : op93693,e6p1209
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 13 13:27:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 13:18:38 2016
QLast Update : Fri May 13 13:18:38 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77)	Phenanthrene	10.335	178	282865	5.39	ppm	99
78)	Anthracene	10.415	178	276916	5.32	ppm	99
79)	Carbazole	10.677	167	262809	5.36	ppm	100
80)	Di-n-butylphthalate	11.314	149	317486	5.15	ppm	99
81)	Fluoranthene	12.196	202	291046	5.22	ppm	98
82)	Octadecane	10.239	57	142306	5.25	ppm	98
84)	Pyrene	12.549	202	307149	5.39	ppm	100
86)	Butylbenzylphthalate	13.699	149	107629	4.29	ppm	90
87)	Butyl stearate	13.871	56	77932	4.35	ppm	99
88)	Benzo[a]anthracene	14.475	228	254234	5.11	ppm	100
89)	3,3'-Dichlorobenzidine	14.480	252	72587	4.24	ppm	96
90)	Chrysene	14.528	228	252612	5.22	ppm	97
91)	bis(2-Ethylhexyl)phtha...	14.662	149	132889	3.73	ppm	99
93)	Di-n-octylphthalate	15.652	149	173471	3.15	ppm	100
94)	Benzo[b]fluoranthene	16.074	252	227325	4.48	ppm	99
95)	Benzo[k]fluoranthene	16.112	252	270494	5.35	ppm	98
96)	Benzo[a]pyrene	16.518	252	200381	4.62	ppm	98
97)	Indeno[1,2,3-cd]pyrene	18.000	276	170566	3.81	ppm	94
98)	Dibenz(a,h)acridine	17.695	279	144479	3.61	ppm	98
99)	Dibenz[a,h]anthracene	18.042	278	211283	4.42	ppm	98
100)	7,12-Dimethylbenz(a)an...	16.080	256	100053	4.72	ppm	99
101)	Benzo[g,h,i]perylene	18.379	276	235491	4.91	ppm	97

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

7.6.64

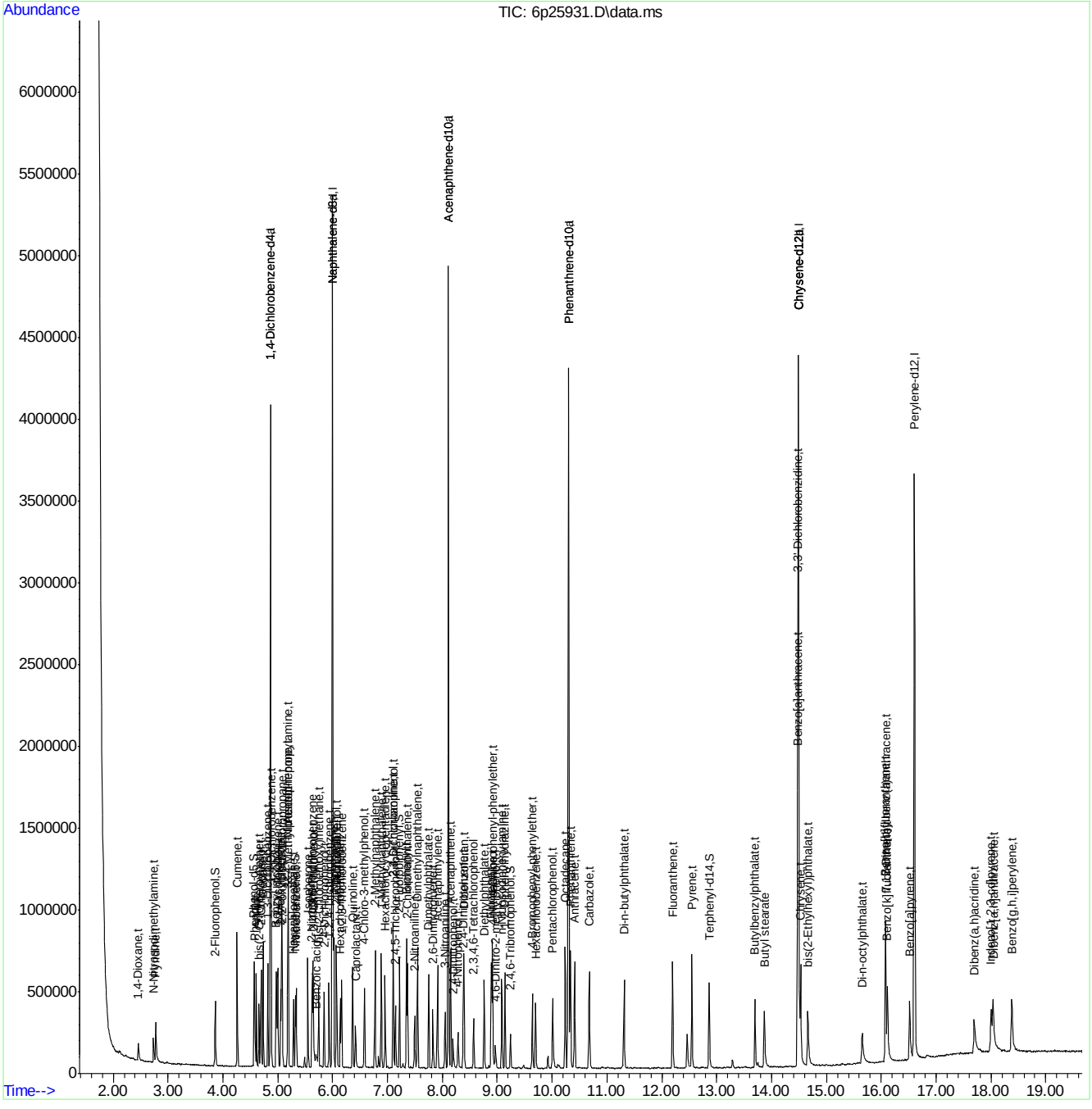
7

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1209\
Data File : 6p25931.D
Acq On : 13 May 2016 12:36 pm
Operator : ariellec
Sample : ic1209-5
Misc : op93693,e6p1209
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 13 13:27:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 13:18:38 2016
QLast Update : Fri May 13 13:18:38 2016
Response via : Initial Calibration



SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1210\
Data File : 6p25938.D
Acq On : 13 May 2016 2:45 pm
Operator : ariellec
Sample : ic1210-100
Misc : op93693,e6p1210
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 13 15:18:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 15:16:50 2016
QLast Update : Fri May 13 15:16:50 2016
Response via : Initial Calibration

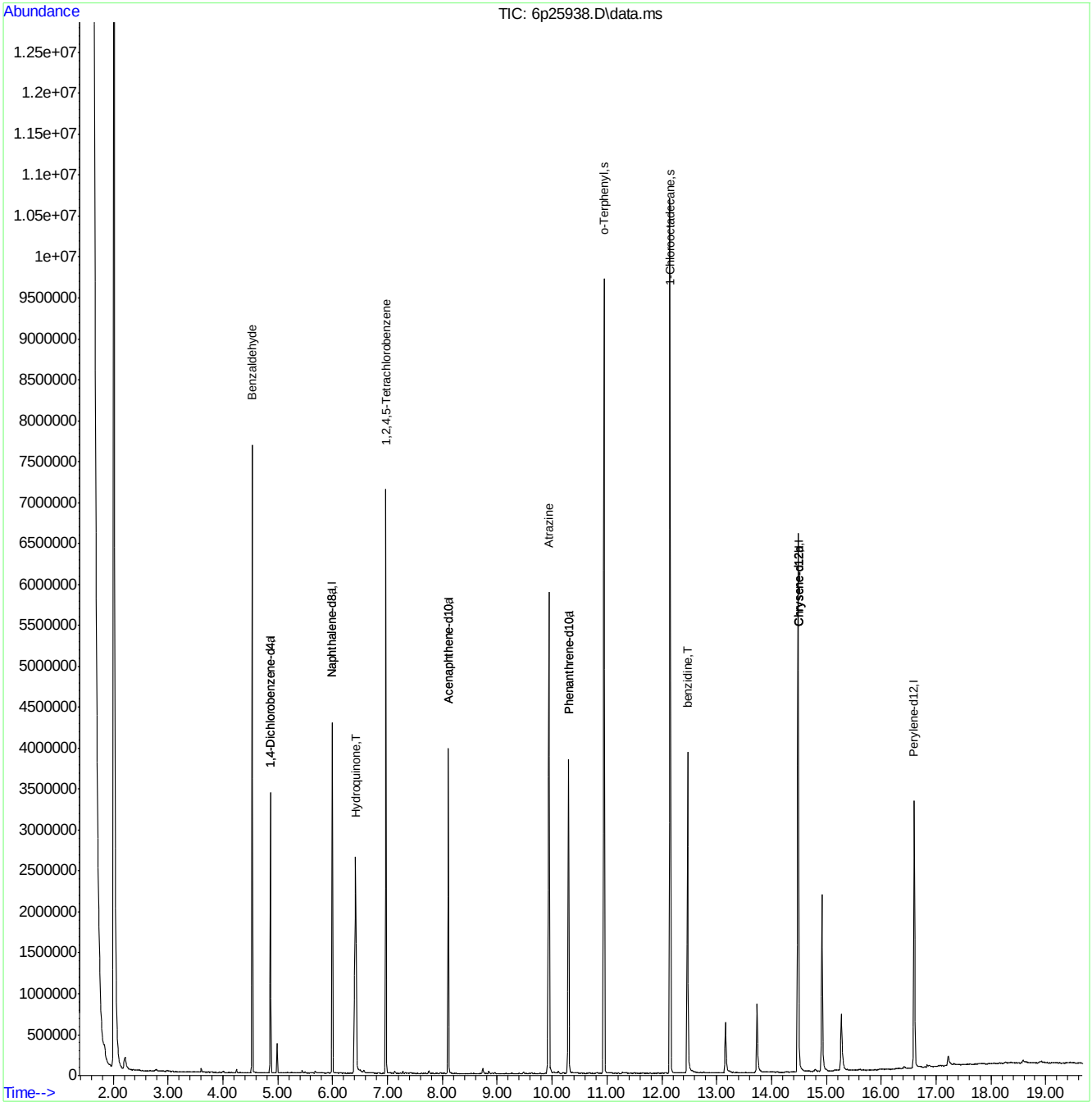
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.869	152	419681	40.00	ppm	0.00
24) Naphthalene-d8	5.992	136	1746969	40.00	ppm	0.00
47) Acenaphthene-d10	8.110	164	989027	40.00	ppm	0.00
69) Phenanthrene-d10	10.303	188	1651069	40.00	ppm	0.00
83) Chrysene-d12	14.491	240	1438382	40.00	ppm	0.00
92) Perylene-d12	16.598	264	1344005	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.869	152	419681	40.00	ppm	0.00
104) Acenaphthene-d10a	8.110	164	989027	40.00	ppm	0.00
106) Phenanthrene-d10a	10.303	188	1651069	40.00	ppm	0.00
110) Chrysene-d12a	14.491	240	1438382	40.00	ppm	0.00
112) Naphthalene-d8a	5.992	136	1746969	40.00	ppm	0.00
114) Chrysene-d12b	14.491	240	1438382	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) o-Terphenyl	10.950	230	2225093	100.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	200.00%	
109) 1-Chlorooctadecane	12.148	57	1604050	100.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	200.00%	
Target Compounds						Qvalue
103) Benzaldehyde	4.532	105	1057823	100.00	ppm	99
105) 1,2,4,5-Tetrachloroben...	6.971	216	1166821	100.00	ppm	99
107) Atrazine	9.945	215	448468	100.00	ppm	93
111) benzidine	12.469	184	1697006	100.00	ppm	99
113) Hydroquinone	6.425	110	1717366	100.00	ppm	96

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1210\
Data File : 6p25938.D
Acq On : 13 May 2016 2:45 pm
Operator : ariellec
Sample : ic1210-100
Misc : op93693,e6p1210
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 13 15:18:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 15:16:50 2016
QLast Update : Fri May 13 15:16:50 2016
Response via : Initial Calibration



SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1210\
Data File : 6p25939.D
Acq On : 13 May 2016 3:12 pm
Operator : ariellec
Sample : ic1210-80
Misc : op93693,e6p1210
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 13 15:38:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 15:37:51 2016
QLast Update : Fri May 13 15:37:51 2016
Response via : Initial Calibration

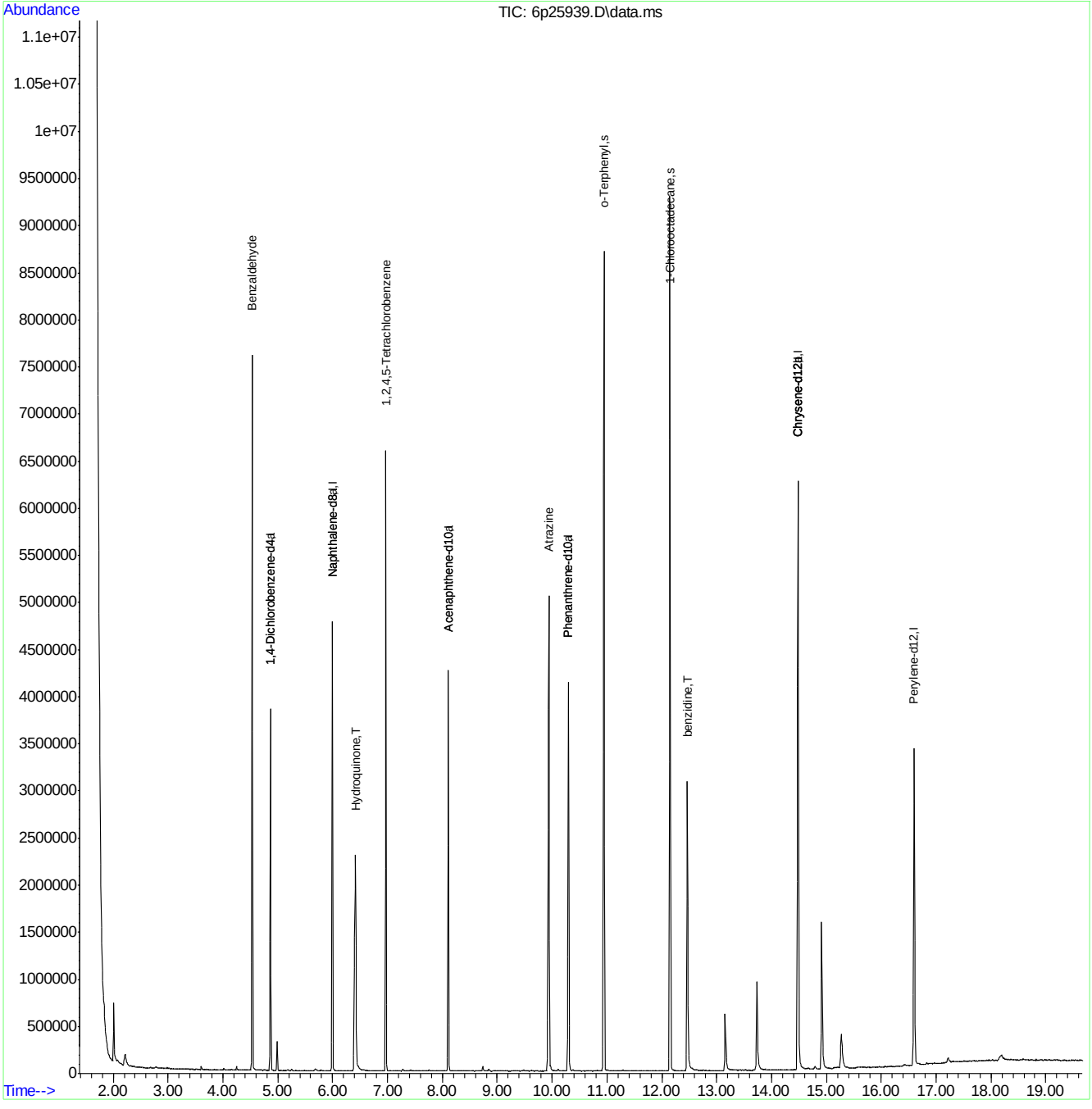
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.864	152	462190	40.00	ppm	0.00
24) Naphthalene-d8	5.997	136	1917148	40.00	ppm	0.00
47) Acenaphthene-d10	8.110	164	1049211	40.00	ppm	0.00
69) Phenanthrene-d10	10.298	188	1748457	40.00	ppm	0.00
83) Chrysene-d12	14.486	240	1525130	40.00	ppm	0.00
92) Perylene-d12	16.598	264	1348351	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.864	152	462190	40.00	ppm	0.00
104) Acenaphthene-d10a	8.110	164	1049211	40.00	ppm	0.00
106) Phenanthrene-d10a	10.298	188	1748457	40.00	ppm	0.00
110) Chrysene-d12a	14.486	240	1525130	40.00	ppm	0.00
112) Naphthalene-d8a	5.997	136	1917148	40.00	ppm	0.00
114) Chrysene-d12b	14.486	240	1525130	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) o-Terphenyl	10.945	230	1883079	79.96	ppm	0.00
Spiked Amount 50.000			Recovery	=	159.92%	
109) 1-Chlorooctadecane	12.148	57	1336158	79.32	ppm	0.00
Spiked Amount 50.000			Recovery	=	158.64%	
Target Compounds						Qvalue
103) Benzaldehyde	4.532	105	1086762	86.13	ppm	99
105) 1,2,4,5-Tetrachloroben...	6.971	216	1023807	81.33	ppm	100
107) Atrazine	9.939	215	374355	79.41	ppm	89
111) benzidine	12.469	184	1461681	80.61	ppm	99
113) Hydroquinone	6.415	110	1450162	78.44	ppm	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1210\
Data File : 6p25939.D
Acq On : 13 May 2016 3:12 pm
Operator : ariellec
Sample : ic1210-80
Misc : op93693,e6p1210
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 13 15:38:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 15:37:51 2016
QLast Update : Fri May 13 15:37:51 2016
Response via : Initial Calibration



SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1210\
Data File : 6p25940.D
Acq On : 13 May 2016 3:40 pm
Operator : ariellec
Sample : icc1210-50
Misc : op93693,e6p1210
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 13 16:05:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 16:05:05 2016
QLast Update : Fri May 13 16:05:05 2016
Response via : Initial Calibration

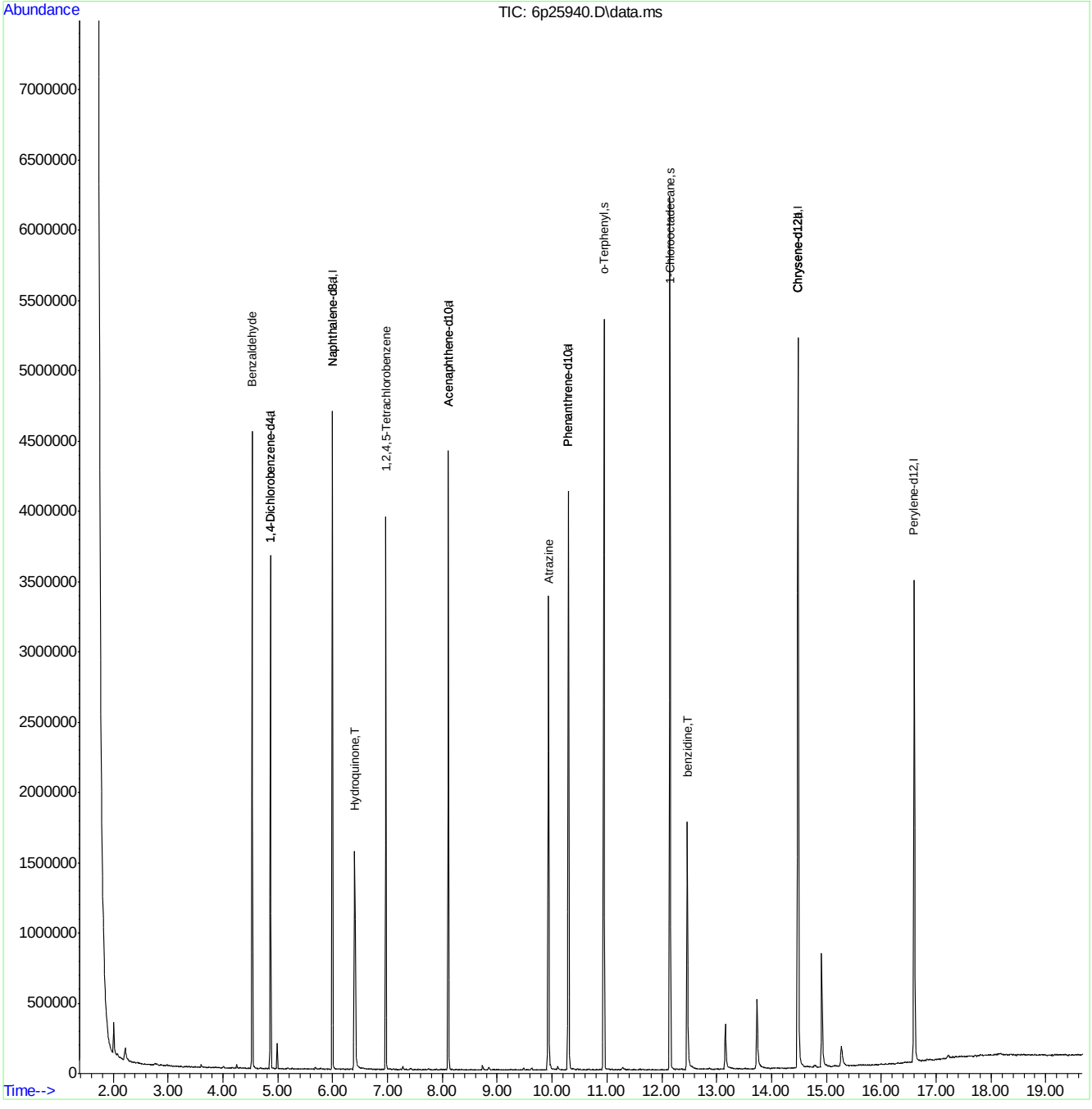
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.869	152	461004	40.00	ppm	0.00
24) Naphthalene-d8	5.997	136	1895979	40.00	ppm	0.00
47) Acenaphthene-d10	8.110	164	1058235	40.00	ppm	0.00
69) Phenanthrene-d10	10.298	188	1731490	40.00	ppm	0.00
83) Chrysene-d12	14.486	240	1536148	40.00	ppm	0.00
92) Perylene-d12	16.598	264	1384356	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.869	152	461004	40.00	ppm	0.00
104) Acenaphthene-d10a	8.110	164	1058235	40.00	ppm	0.00
106) Phenanthrene-d10a	10.298	188	1731490	40.00	ppm	0.00
110) Chrysene-d12a	14.486	240	1536148	40.00	ppm	0.00
112) Naphthalene-d8a	5.997	136	1895979	40.00	ppm	0.00
114) Chrysene-d12b	14.486	240	1536148	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) o-Terphenyl	10.945	230	1185250	50.54	ppm	0.00
Spiked Amount 50.000			Recovery	=	101.08%	
109) 1-Chlorooctadecane	12.148	57	850560	50.66	ppm	0.00
Spiked Amount 50.000			Recovery	=	101.32%	
Target Compounds						Qvalue
103) Benzaldehyde	4.532	105	682578	52.75	ppm	100
105) 1,2,4,5-Tetrachloroben...	6.971	216	636738	50.10	ppm	100
107) Atrazine	9.939	215	233497	50.01	ppm	100
111) benzidine	12.464	184	806349	45.94	ppm	100
113) Hydroquinone	6.409	110	892442	49.20	ppm	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1210\
Data File : 6p25940.D
Acq On : 13 May 2016 3:40 pm
Operator : ariellec
Sample : icc1210-50
Misc : op93693,e6p1210
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 13 16:05:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 16:05:05 2016
QLast Update : Fri May 13 16:05:05 2016
Response via : Initial Calibration



SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1210\
Data File : 6p25941.D
Acq On : 13 May 2016 4:07 pm
Operator : ariellec
Sample : ic1210-25
Misc : op93693,e6p1210
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 16 07:50:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 16:05:05 2016
QLast Update : Mon May 16 07:50:18 2016
Response via : Initial Calibration

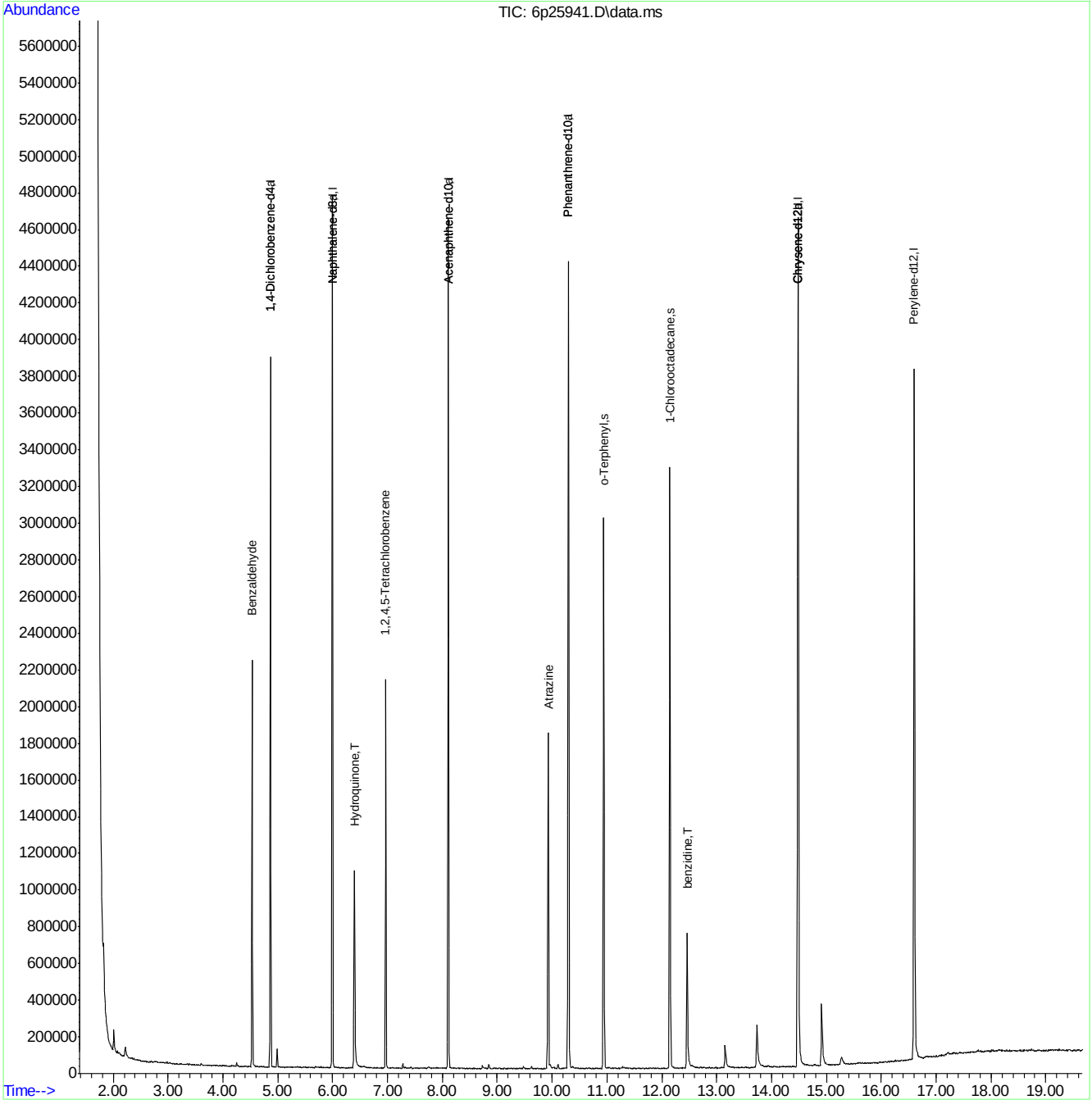
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.864	152	475096	40.00	ppm	0.00
24) Naphthalene-d8	5.997	136	1977392	40.00	ppm	0.00
47) Acenaphthene-d10	8.110	164	1140388	40.00	ppm	0.00
69) Phenanthrene-d10	10.298	188	1920918	40.00	ppm	0.00
83) Chrysene-d12	14.486	240	1690696	40.00	ppm	0.00
92) Perylene-d12	16.598	264	1513827	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.864	152	475096	40.00	ppm	0.00
104) Acenaphthene-d10a	8.110	164	1140388	40.00	ppm	0.00
106) Phenanthrene-d10a	10.298	188	1920918	40.00	ppm	0.00
110) Chrysene-d12a	14.486	240	1690696	40.00	ppm	0.00
112) Naphthalene-d8a	5.997	136	1977392	40.00	ppm	0.00
114) Chrysene-d12b	14.486	240	1690696	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) o-Terphenyl	10.945	230	640994	24.73	ppm	0.00
Spiked Amount 50.000			Recovery	=	49.46%	
109) 1-Chlorooctadecane	12.143	57	460129	24.78	ppm	0.00
Spiked Amount 50.000			Recovery	=	49.56%	
Target Compounds						Qvalue
103) Benzaldehyde	4.532	105	350450	25.95	ppm	97
105) 1,2,4,5-Tetrachloroben...	6.966	216	338724	24.80	ppm	99
107) Atrazine	9.934	215	119887	23.58	ppm	97
111) benzidine	12.464	184	340384	19.02	ppm	99
113) Hydroquinone	6.399	110	475701	25.11	ppm	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1210\
Data File : 6p25941.D
Acq On : 13 May 2016 4:07 pm
Operator : ariellec
Sample : ic1210-25
Misc : op93693,e6p1210
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 16 07:50:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 16:05:05 2016
QLast Update : Mon May 16 07:50:18 2016
Response via : Initial Calibration



SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1210\
Data File : 6p25942.D
Acq On : 13 May 2016 4:35 pm
Operator : ariellec
Sample : ic1210-10
Misc : op93693,e6p1210
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 16 08:43:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuMon May 16 08:07:52 2016
QLast Update : Mon May 16 08:09:32 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.863	152	465631	40.00	ppm	0.00
24) Naphthalene-d8	5.997	136	1930671	40.00	ppm	0.00
47) Acenaphthene-d10	8.110	164	1121111	40.00	ppm	0.00
69) Phenanthrene-d10	10.298	188	1879952	40.00	ppm	0.00
83) Chrysene-d12	14.486	240	1659788	40.00	ppm	0.00
92) Perylene-d12	16.598	264	1460404	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.863	152	465631	40.00	ppm	0.00
104) Acenaphthene-d10a	8.110	164	1121111	40.00	ppm	0.00
106) Phenanthrene-d10a	10.298	188	1879952	40.00	ppm	0.00
110) Chrysene-d12a	14.486	240	1659788	40.00	ppm	0.00
112) Naphthalene-d8a	5.997	136	1930671	40.00	ppm	0.00
114) Chrysene-d12b	14.486	240	1659788	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) o-Terphenyl	10.939	230	248497	9.58	ppm	0.00
Spiked Amount 50.000			Recovery	=	19.16%	
109) 1-Chlorooctadecane	12.143	57	170846	9.87	ppm	0.00
Spiked Amount 50.000			Recovery	=	19.74%	
Target Compounds						Qvalue
103) Benzaldehyde	4.532	105	134735	9.61	ppm	97
105) 1,2,4,5-Tetrachloroben...	6.965	216	132450	9.53	ppm	98
107) Atrazine	9.929	215	41537	8.85	ppm	91
111) benzidine	12.459	184	58361	4.94	ppm	97
113) Hydroquinone	6.393	110	172179	9.43	ppm	99

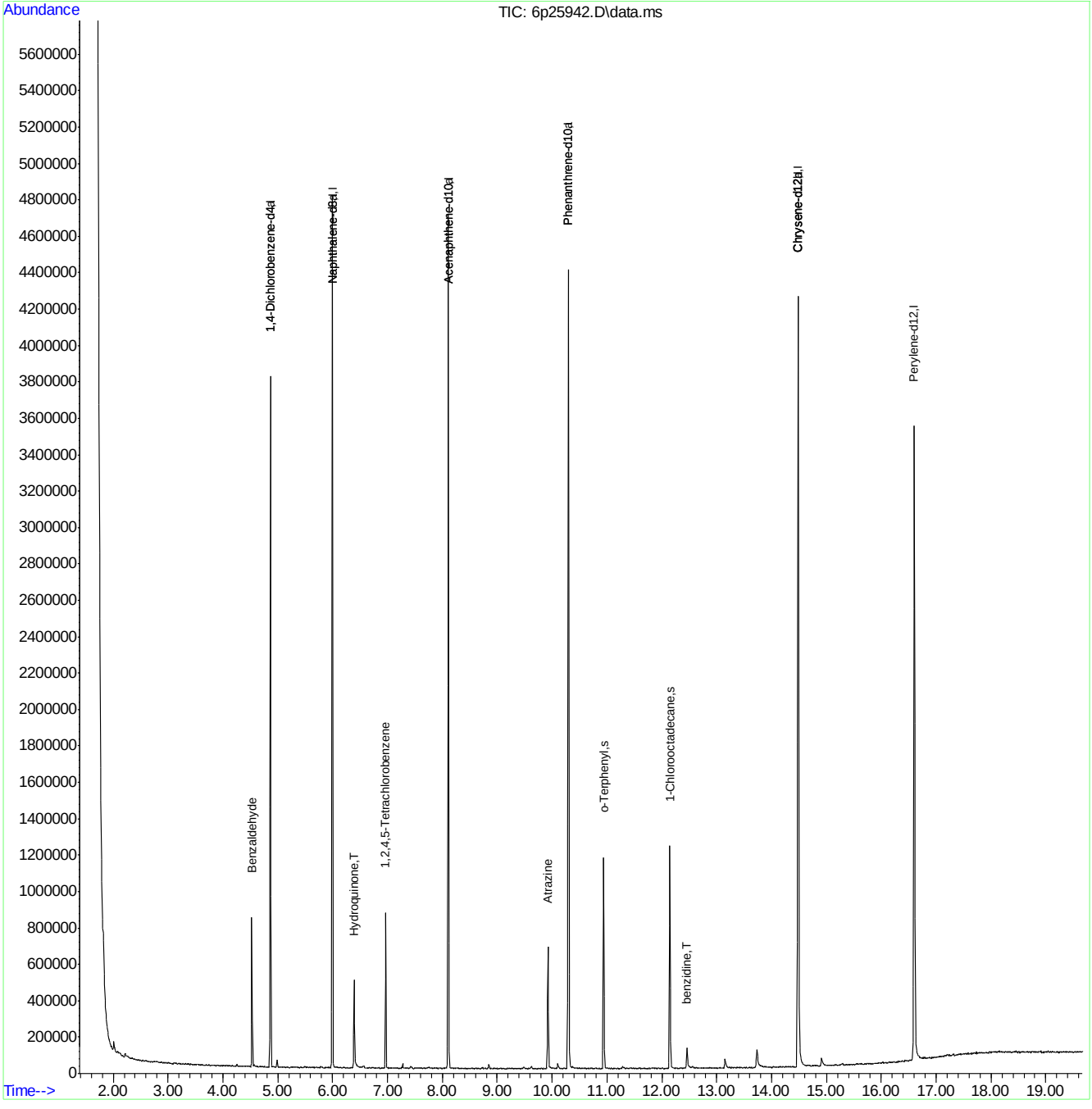
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1210\
Data File : 6p25942.D
Acq On : 13 May 2016 4:35 pm
Operator : ariellec
Sample : ic1210-10
Misc : op93693,e6p1210
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 16 08:43:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuMon May 16 08:07:52 2016
QLast Update : Mon May 16 08:09:32 2016
Response via : Initial Calibration



M6P1209.M Mon May 16 09:24:59 2016 ACLIMS Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1210\
Data File : 6p25943.D
Acq On : 13 May 2016 5:02 pm
Operator : ariellec
Sample : ic1210-5
Misc : op93693,e6p1210
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 16 08:44:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuMon May 16 08:09:32 2016
QLast Update : Mon May 16 08:09:32 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.864	152	473744	40.00	ppm	0.00
24) Naphthalene-d8	5.997	136	1963288	40.00	ppm	0.00
47) Acenaphthene-d10	8.110	164	1137987	40.00	ppm	0.00
69) Phenanthrene-d10	10.298	188	1872695	40.00	ppm	0.00
83) Chrysene-d12	14.491	240	1602621	40.00	ppm	0.00
92) Perylene-d12	16.598	264	1391117	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.864	152	473744	40.00	ppm	0.00
104) Acenaphthene-d10a	8.110	164	1137987	40.00	ppm	0.00
106) Phenanthrene-d10a	10.298	188	1872695	40.00	ppm	0.00
110) Chrysene-d12a	14.491	240	1602621	40.00	ppm	0.00
112) Naphthalene-d8a	5.997	136	1963288	40.00	ppm	0.00
114) Chrysene-d12b	14.491	240	1602621	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) o-Terphenyl	10.940	230	139527	5.40	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.80%	
109) 1-Chlorooctadecane	12.143	57	90671	5.26	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.52%	
Target Compounds						Qvalue
103) Benzaldehyde	4.532	105	77237	5.41	ppm	98
105) 1,2,4,5-Tetrachloroben...	6.966	216	73782	5.23	ppm	99
107) Atrazine	9.923	215	23289	4.98	ppm	85
111) benzidine	12.459	184	19373	1.70	ppm	89
113) Hydroquinone	6.393	110	97163	5.23	ppm	98

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

7.6.70

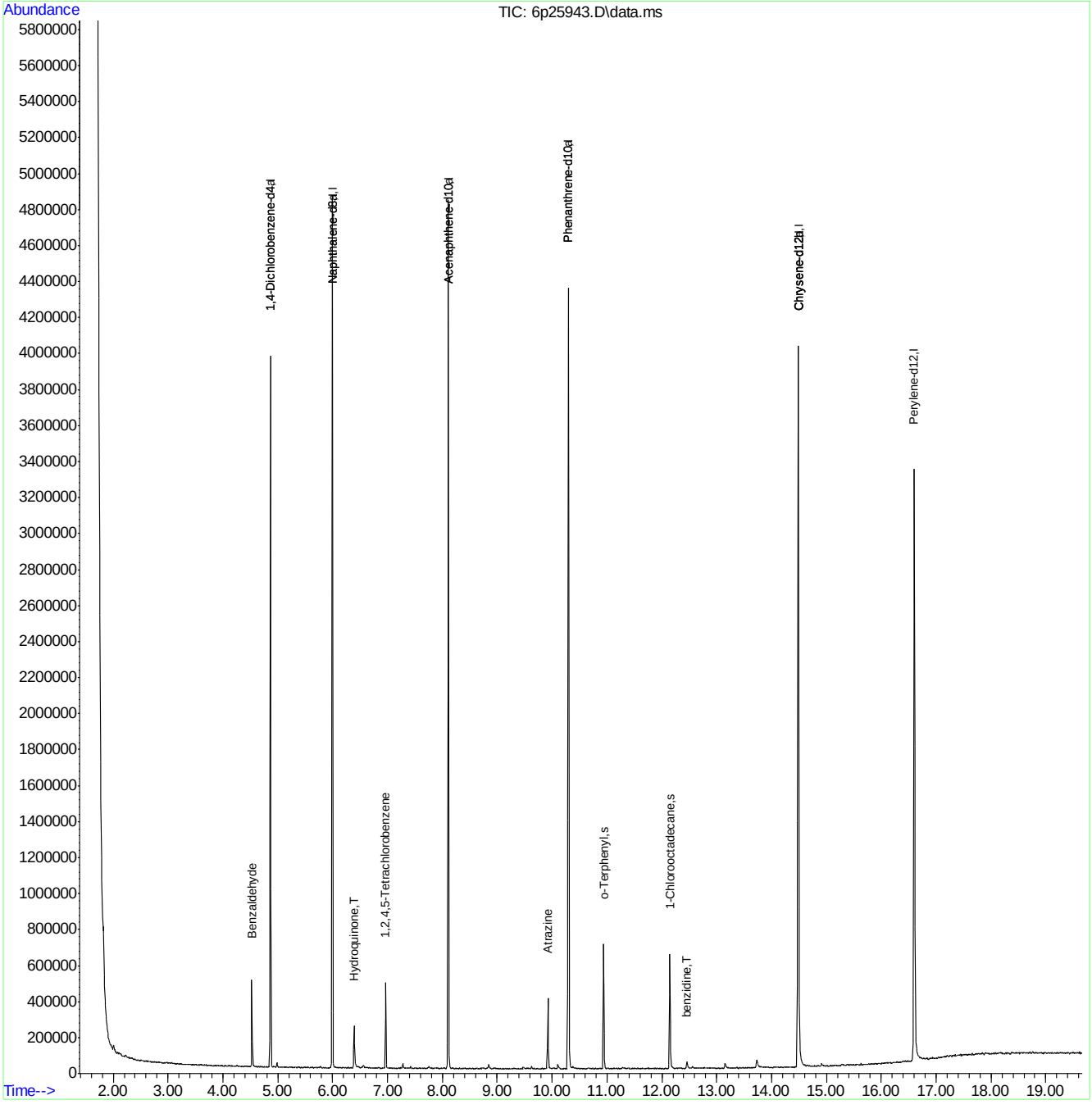
7

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1210\
Data File : 6p25943.D
Acq On : 13 May 2016 5:02 pm
Operator : ariellec
Sample : ic1210-5
Misc : op93693,e6p1210
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 16 08:44:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuMon May 16 08:09:32 2016
QLast Update : Mon May 16 08:09:32 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1210\
Data File : 6p25944.D
Acq On : 13 May 2016 5:30 pm
Operator : ariellec
Sample : ic1210-2
Misc : op93693,e6p1210
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 16 08:45:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 16:05:05 2016
QLast Update : Fri May 13 16:05:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.869	152	443371	40.00	ppm	0.00
24) Naphthalene-d8	5.997	136	1848747	40.00	ppm	0.00
47) Acenaphthene-d10	8.110	164	1056117	40.00	ppm	0.00
69) Phenanthrene-d10	10.298	188	1732123	40.00	ppm	0.00
83) Chrysene-d12	14.486	240	1501702	40.00	ppm	0.00
92) Perylene-d12	16.598	264	1322482	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.869	152	443371	40.00	ppm	0.00
104) Acenaphthene-d10a	8.110	164	1056117	40.00	ppm	0.00
106) Phenanthrene-d10a	10.298	188	1732123	40.00	ppm	0.00
110) Chrysene-d12a	14.486	240	1501702	40.00	ppm	0.00
112) Naphthalene-d8a	5.997	136	1848747	40.00	ppm	0.00
114) Chrysene-d12b	14.486	240	1501702	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) o-Terphenyl	10.939	230	48615	2.07	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.14%	
109) 1-Chlorooctadecane	12.143	57	28190	1.68	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.36%	
Target Compounds						Qvalue
103) Benzaldehyde	4.532	105	28853	2.32	ppm	91
105) 1,2,4,5-Tetrachloroben...	6.965	216	27762	2.19	ppm	98
107) Atrazine	9.923	215	8080	1.73	ppm	93
111) benzidine	12.458	184	3900	0.23	ppm	91
113) Hydroquinone	6.393	110	34534	1.95	ppm	95

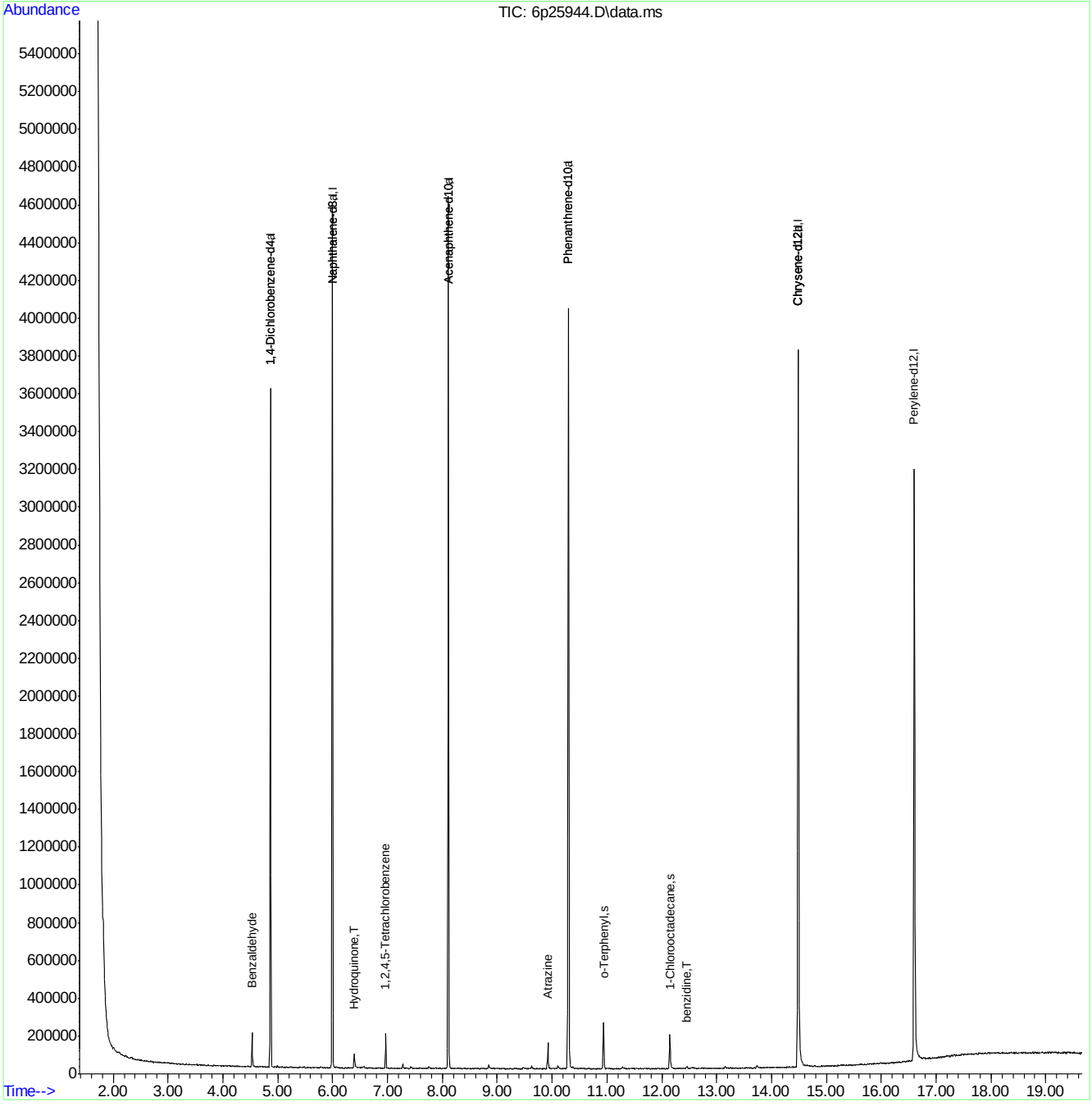
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1210\
Data File : 6p25944.D
Acq On : 13 May 2016 5:30 pm
Operator : ariellec
Sample : ic1210-2
Misc : op93693,e6p1210
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 16 08:45:17 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 16:05:05 2016
QLast Update : Fri May 13 16:05:05 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1210\
Data File : 6p25945.D
Acq On : 13 May 2016 5:57 pm
Operator : ariellec
Sample : ic1210-1
Misc : op93693,e6p1210
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 16 08:46:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuMon May 16 08:09:32 2016
QLast Update : Mon May 16 08:09:32 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.864	152	425429	40.00	ppm	0.00
24) Naphthalene-d8	5.997	136	1758530	40.00	ppm	0.00
47) Acenaphthene-d10	8.110	164	1026934	40.00	ppm	0.00
69) Phenanthrene-d10	10.298	188	1692990	40.00	ppm	0.00
83) Chrysene-d12	14.491	240	1431450	40.00	ppm	0.00
92) Perylene-d12	16.604	264	1254231	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.864	152	425429	40.00	ppm	0.00
104) Acenaphthene-d10a	8.110	164	1026934	40.00	ppm	0.00
106) Phenanthrene-d10a	10.298	188	1692990	40.00	ppm	0.00
110) Chrysene-d12a	14.491	240	1431450	40.00	ppm	0.00
112) Naphthalene-d8a	5.997	136	1758530	40.00	ppm	0.00
114) Chrysene-d12b	14.491	240	1431450	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) o-Terphenyl	10.940	230	24122	1.03	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.06%	
109) 1-Chlorooctadecane	12.143	57	13738	0.88	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.76%	
Target Compounds						Qvalue
103) Benzaldehyde	4.532	105	14111	1.10	ppm	99
105) 1,2,4,5-Tetrachloroben...	6.966	216	13689	1.08	ppm	89
107) Atrazine	9.923	215	4006	0.95	ppm	86
111) benzidine	12.459	184	2008	0.20	ppm	80
113) Hydroquinone	6.393	110	16180	0.97	ppm	97

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

7.6.72

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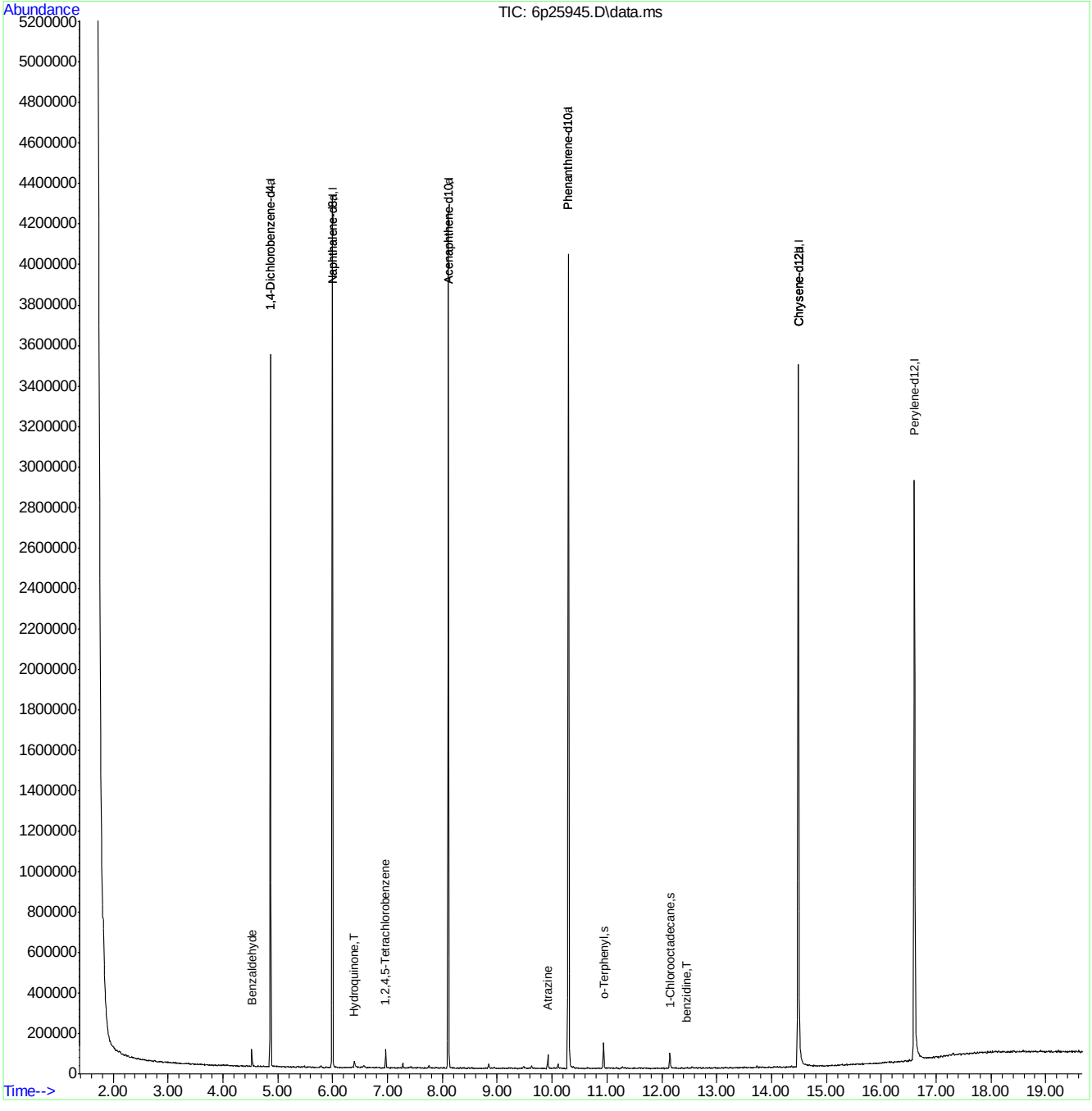
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1210\
Data File : 6p25945.D
Acq On : 13 May 2016 5:57 pm
Operator : ariellec
Sample : ic1210-1
Misc : op93693,e6p1210
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 16 08:46:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuMon May 16 08:09:32 2016
QLast Update : Mon May 16 08:09:32 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1210\
Data File : 6p25950.D
Acq On : 13 May 2016 8:14 pm
Operator : ariellec
Sample : icv1210-50
Misc : op93693,e6p1210
ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 16 11:53:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 16:05:05 2016
QLast Update : Fri May 13 16:05:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.869	152	609564	40.00	ppm	0.00
24) Naphthalene-d8	5.997	136	2508037	40.00	ppm	0.00
47) Acenaphthene-d10	8.110	164	1354963	40.00	ppm	0.00
69) Phenanthrene-d10	10.298	188	2192668	40.00	ppm	0.00
83) Chrysene-d12	14.486	240	1829789	40.00	ppm	0.00
92) Perylene-d12	16.598	264	1596608	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.869	152	609564	40.00	ppm	0.00
104) Acenaphthene-d10a	8.110	164	1354963	40.00	ppm	0.00
106) Phenanthrene-d10a	10.298	188	2192668	40.00	ppm	0.00
110) Chrysene-d12a	14.486	240	1829789	40.00	ppm	0.00
112) Naphthalene-d8a	5.997	136	2508037	40.00	ppm	0.00
114) Chrysene-d12b	14.486	240	1829789	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.467	88	485226	44.83	ppm	96
6) Indene	5.072	116	1986252	47.90	ppm	100
7) Cumene	4.264	105	2704946	45.97	ppm	98
13) Decane	4.735	43	1222399	40.31	ppm	95
18) Acetophenone	5.190	105	1549761	45.28	ppm	99
27) Quinoline	6.367	129	2124400	45.42	ppm	99
40) 2,3-Dichloroaniline	7.110	161	897379	41.12	ppm	97
41) Caprolactam	6.431	55	489835	41.31	ppm	96
45) 1-Methylnaphthalene	6.891	141	1778171	45.58	ppm	99
46) Dimethylnaphthalene	7.549	156	1818447	45.70	ppm	98
48) Hexachlorocyclopentadiene	6.960	237	473243	49.86	ppm	97
53) Biphenyl	7.345	154	2475881	47.66	ppm	99
82) Octadecane	10.239	57	1489822	45.43	ppm	98
100) 7,12-Dimethylbenz(a)an...	16.080	256	1036703	49.16	ppm	95

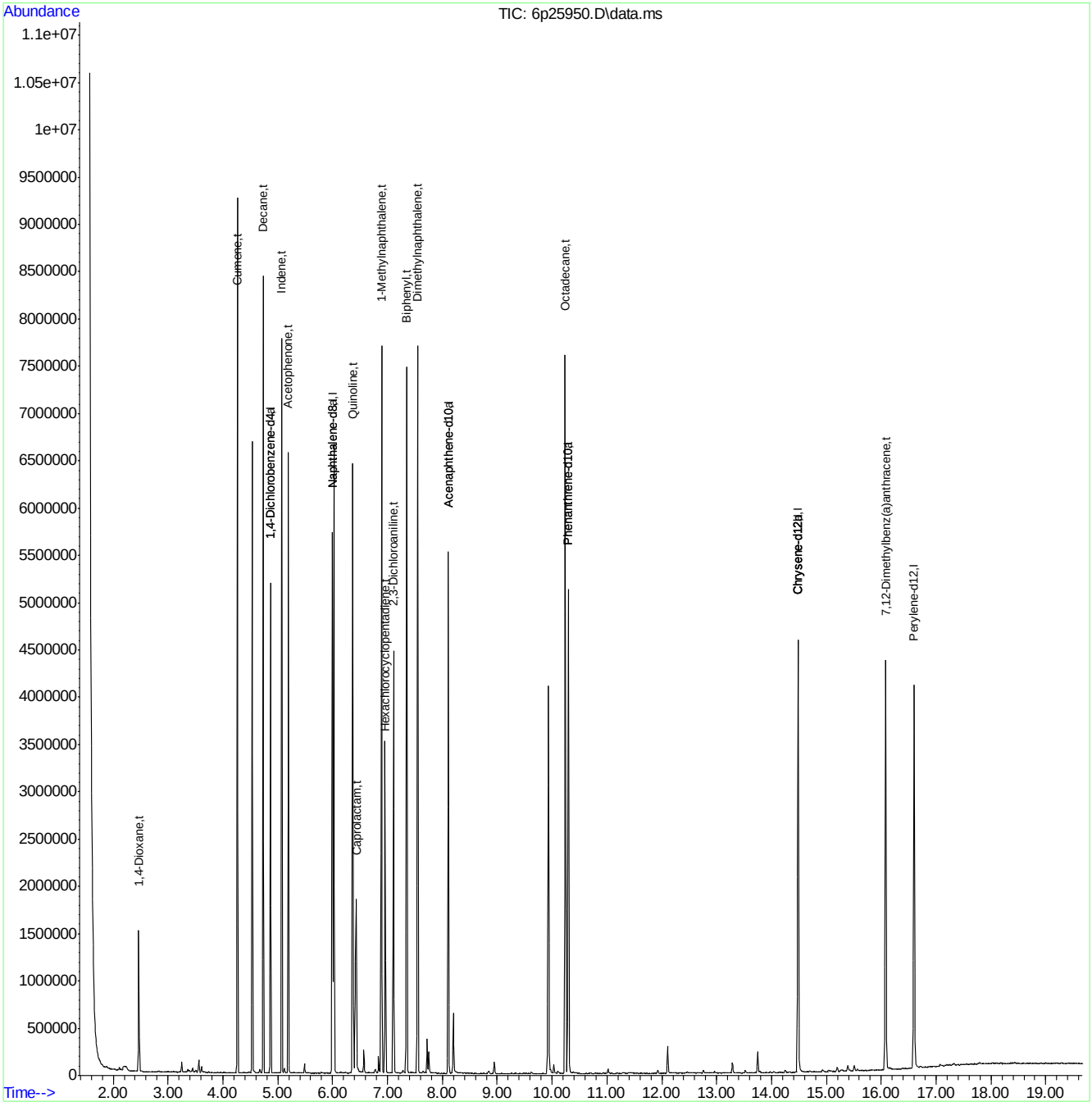
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1210\
Data File : 6p25950.D
Acq On : 13 May 2016 8:14 pm
Operator : ariellec
Sample : icv1210-50
Misc : op93693,e6p1210
ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 16 11:53:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 16:05:05 2016
QLast Update : Fri May 13 16:05:05 2016
Response via : Initial Calibration



M6P1209.M Mon May 16 17:29:52 2016 ACLIMS Page: 2

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1210\
Data File : 6p25950a.D
Acq On : 13 May 2016 8:14 pm
Operator : ariellec
Sample : icv1210-50
Misc : op93693,e6p1210
ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 16 11:52:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 16:05:05 2016
QLast Update : Fri May 13 16:05:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.869	152	609564	40.00	ppm	0.00
24) Naphthalene-d8	5.997	136	2508037	40.00	ppm	0.00
47) Acenaphthene-d10	8.110	164	1354963	40.00	ppm	0.00
69) Phenanthrene-d10	10.298	188	2192668	40.00	ppm	0.00
83) Chrysene-d12	14.486	240	1829789	40.00	ppm	0.00
92) Perylene-d12	16.598	264	1596608	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.869	152	609564	40.00	ppm	0.00
104) Acenaphthene-d10a	8.110	164	1354963	40.00	ppm	0.00
106) Phenanthrene-d10a	10.298	188	2192668	40.00	ppm	0.00
110) Chrysene-d12a	14.486	240	1829789	40.00	ppm	0.00
112) Naphthalene-d8a	5.997	136	2508037	40.00	ppm	0.00
114) Chrysene-d12b	14.486	240	1829789	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
103) Benzaldehyde	4.532	105	922158	53.89	ppm	100
107) Atrazine	9.939	215	305250	51.63	ppm	93

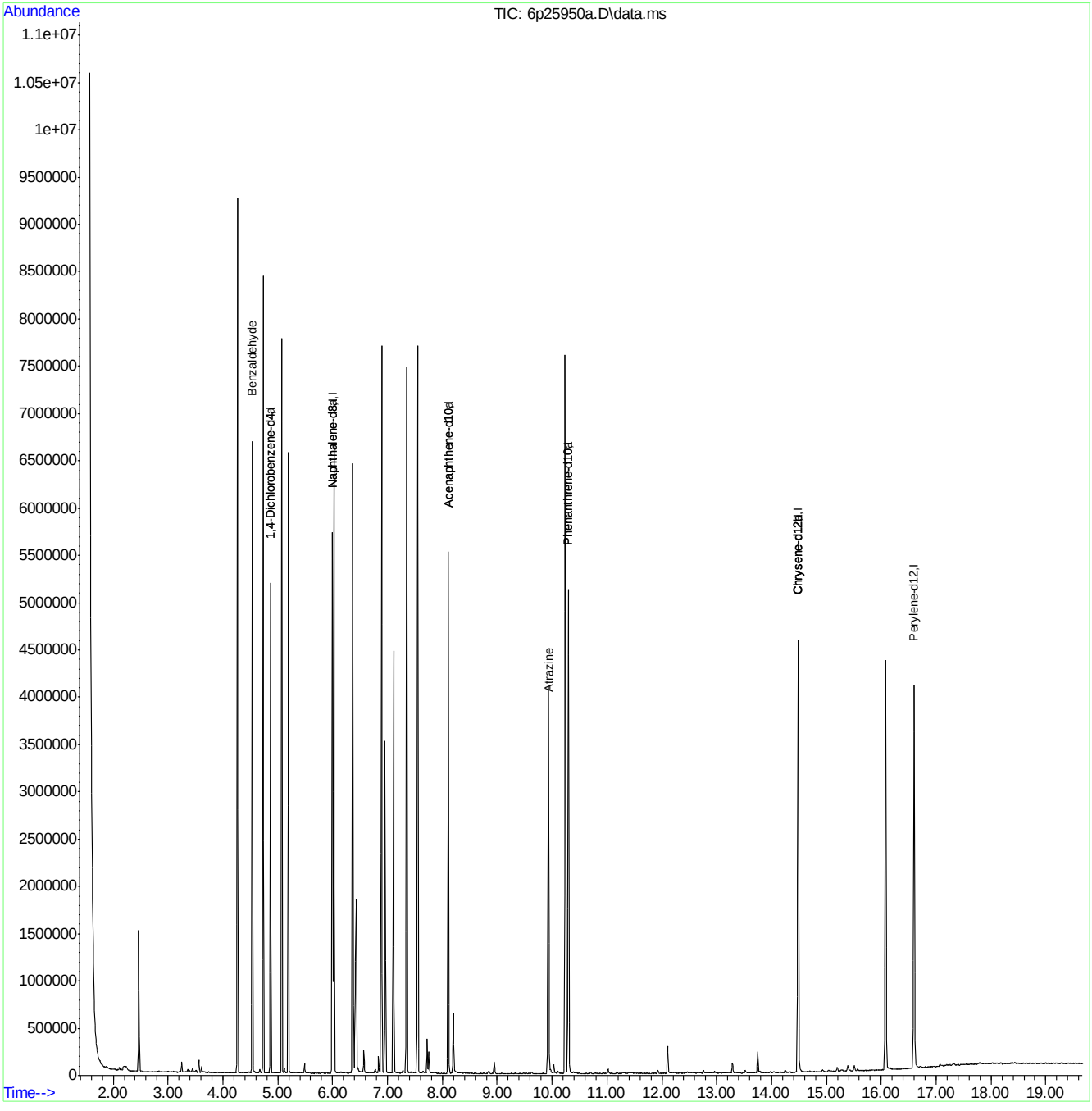
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1210\
Data File : 6p25950a.D
Acq On : 13 May 2016 8:14 pm
Operator : ariellec
Sample : icv1210-50
Misc : op93693,e6p1210
ALS Vial : 14 Sample Multiplier: 1

Quant Time: May 16 11:52:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 16:05:05 2016
QLast Update : Fri May 13 16:05:05 2016
Response via : Initial Calibration



M6P1209.M Mon May 16 17:29:28 2016 ACLIMS Page: 2

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1210\
Data File : 6p25951.D
Acq On : 13 May 2016 8:42 pm
Operator : ariellec
Sample : icv1210-50
Misc : op93693,e6p1210
ALS Vial : 15 Sample Multiplier: 1

Quant Time: May 16 12:05:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 16:05:05 2016
QLast Update : Fri May 13 16:05:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.869	152	567146	40.00	ppm	0.00
24) Naphthalene-d8	5.997	136	2326025	40.00	ppm	0.00
47) Acenaphthene-d10	8.110	164	1348429	40.00	ppm	0.00
69) Phenanthrene-d10	10.298	188	2280734	40.00	ppm	0.00
83) Chrysene-d12	14.486	240	2145860	40.00	ppm	0.00
92) Perylene-d12	16.598	264	1892922	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.869	152	567146	40.00	ppm	0.00
104) Acenaphthene-d10a	8.110	164	1348429	40.00	ppm	0.00
106) Phenanthrene-d10a	10.298	188	2280734	40.00	ppm	0.00
110) Chrysene-d12a	14.486	240	2145860	40.00	ppm	0.00
112) Naphthalene-d8a	5.997	136	2326025	40.00	ppm	0.00
114) Chrysene-d12b	14.486	240	2145860	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
89) 3,3'-Dichlorobenzidine	14.480	252	997296	45.62	ppm	99

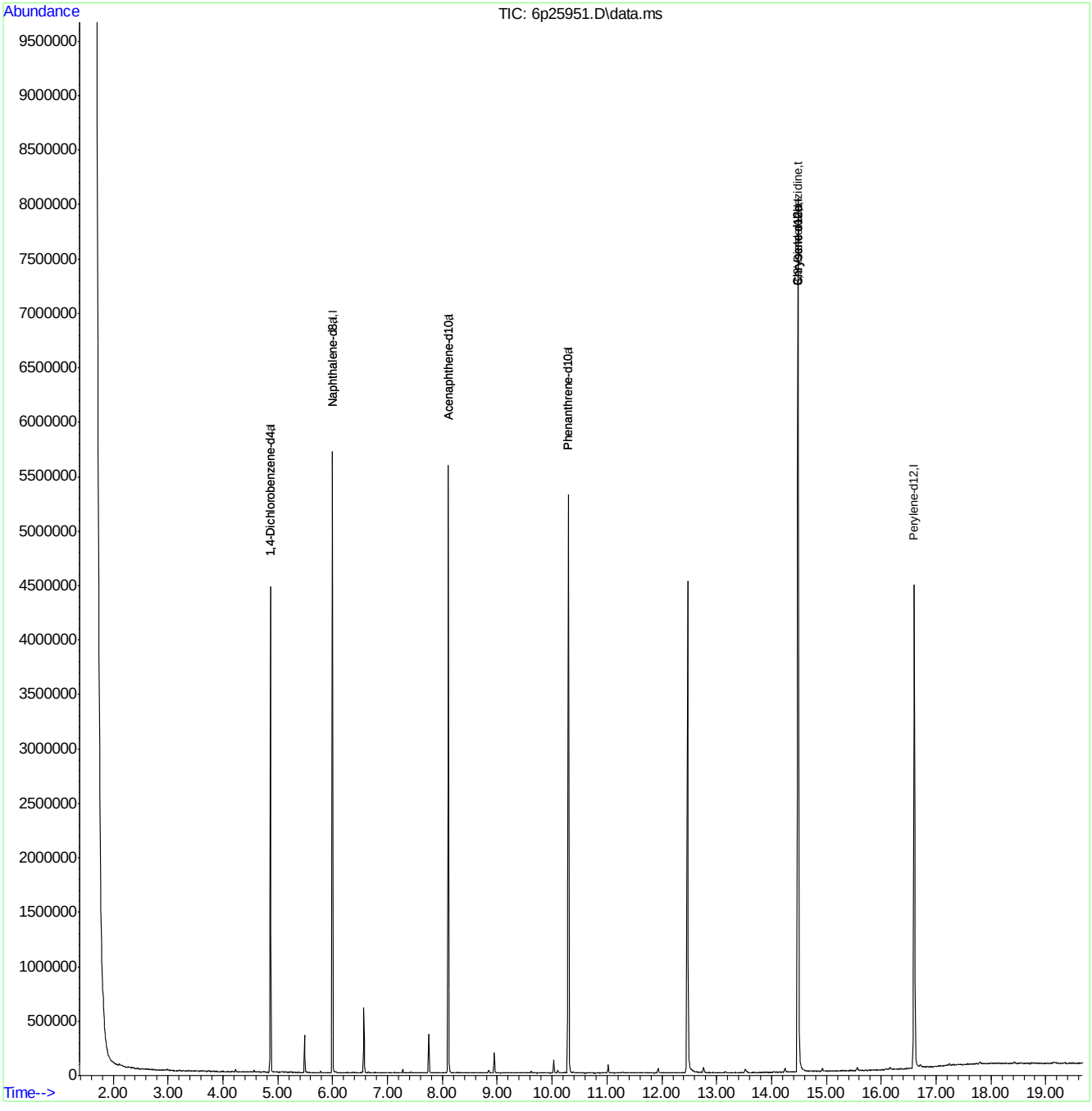
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1210\
Data File : 6p25951.D
Acq On : 13 May 2016 8:42 pm
Operator : ariellec
Sample : icv1210-50
Misc : op93693,e6p1210
ALS Vial : 15 Sample Multiplier: 1

Quant Time: May 16 12:05:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 16:05:05 2016
QLast Update : Fri May 13 16:05:05 2016
Response via : Initial Calibration



SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1210\
Data File : 6p25952.D
Acq On : 13 May 2016 9:09 pm
Operator : ariellec
Sample : icv1210-50
Misc : op93693,e6p1210
ALS Vial : 16 Sample Multiplier: 1

Quant Time: May 16 09:31:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 16:05:05 2016
QLast Update : Fri May 13 16:05:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.869	152	507488	40.00	ppm	0.00
24) Naphthalene-d8	5.997	136	2045948	40.00	ppm	0.00
47) Acenaphthene-d10	8.110	164	1170605	40.00	ppm	0.00
69) Phenanthrene-d10	10.298	188	1904024	40.00	ppm	0.00
83) Chrysene-d12	14.486	240	1655657	40.00	ppm	0.00
92) Perylene-d12	16.598	264	1440019	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.869	152	507488	40.00	ppm	0.00
104) Acenaphthene-d10a	8.110	164	1170605	40.00	ppm	0.00
106) Phenanthrene-d10a	10.298	188	1904024	40.00	ppm	0.00
110) Chrysene-d12a	14.486	240	1655657	40.00	ppm	0.00
112) Naphthalene-d8a	5.997	136	2045948	40.00	ppm	0.00
114) Chrysene-d12b	14.486	240	1655657	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
113) Hydroquinone	6.409	110	945058	48.28	ppm	99

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

7.6.76

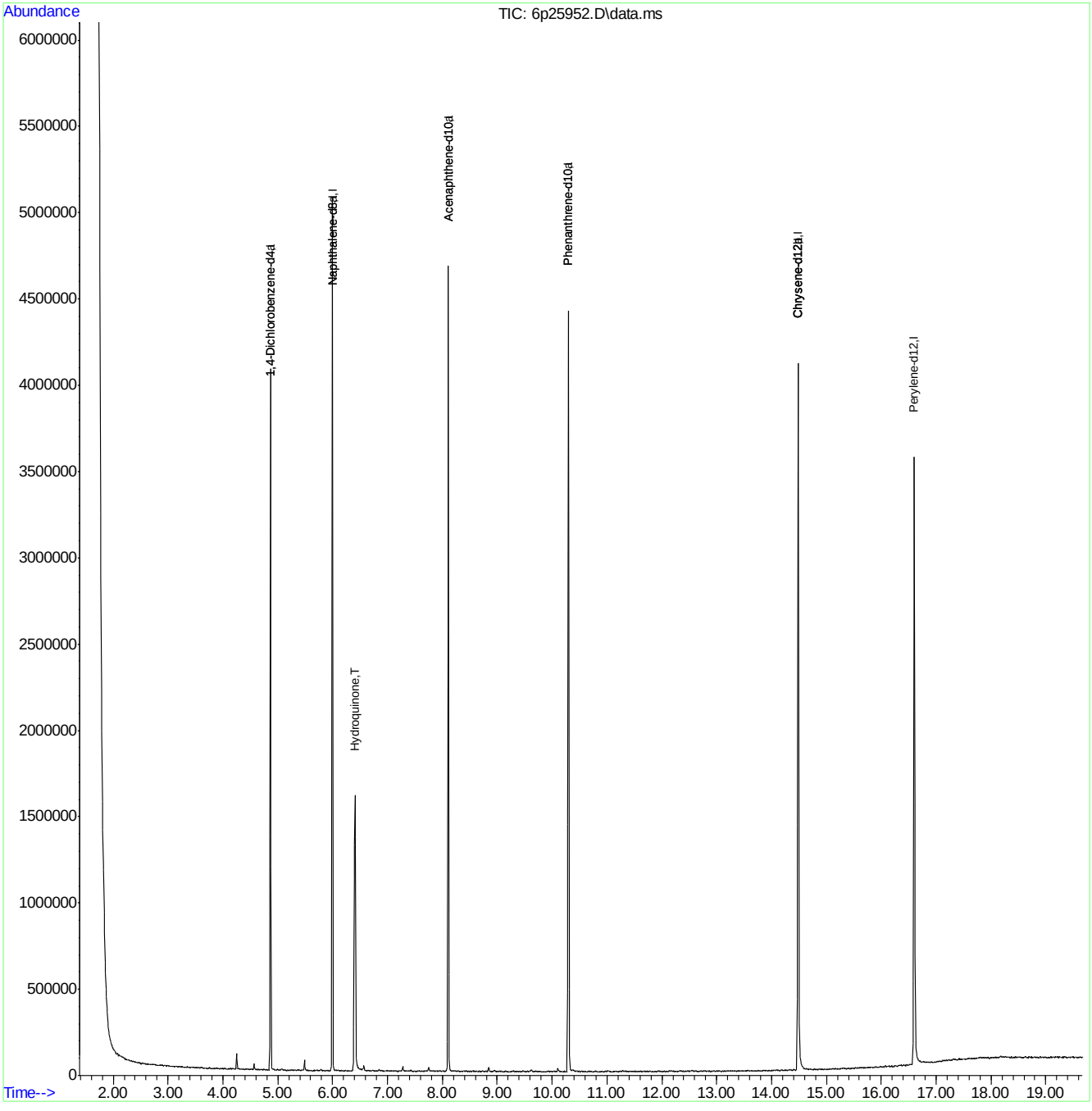
7

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1210\
Data File : 6p25952.D
Acq On : 13 May 2016 9:09 pm
Operator : ariellec
Sample : icv1210-50
Misc : op93693,e6p1210
ALS Vial : 16 Sample Multiplier: 1

Quant Time: May 16 09:31:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuFri May 13 16:05:05 2016
QLast Update : Fri May 13 16:05:05 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1211\
Data File : 6p25954.D
Acq On : 16 May 2016 9:15 am
Operator : ariellec
Sample : ICV1209-50
Misc : op93693,e6p1211
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 16 09:40:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuMon May 16 09:26:46 2016
QLast Update : Mon May 16 09:26:46 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.869	152	621318	40.00	ppm	0.00
24) Naphthalene-d8	5.997	136	2361613	40.00	ppm	0.00
47) Acenaphthene-d10	8.110	164	1310114	40.00	ppm	0.00
69) Phenanthrene-d10	10.303	188	2139687	40.00	ppm	0.00
83) Chrysene-d12	14.491	240	1830697	40.00	ppm	0.00
92) Perylene-d12	16.604	264	1580840	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.869	152	621318	40.00	ppm	0.00
104) Acenaphthene-d10a	8.110	164	1310114	40.00	ppm	0.00
106) Phenanthrene-d10a	10.303	188	2139687	40.00	ppm	0.00
110) Chrysene-d12a	14.491	240	1830697	40.00	ppm	0.00
112) Naphthalene-d8a	5.997	136	2361613	40.00	ppm	0.00
114) Chrysene-d12b	14.491	240	1830697	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-Chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
9) Phenol	4.612	94	1416137	42.61	ppm	81
12) 2-Chlorophenol	4.714	128	1095098	45.45	ppm	96
19) 2-Methylphenol	5.077	108	1003078	43.73	ppm	99
21) 3&4-Methylphenol	5.206	108	1059066	43.77	ppm	99
29) 2-Nitrophenol	5.634	139	552497	47.56	ppm	81
30) 2,4-Dimethylphenol	5.671	107	1150191	53.31	ppm	96
31) Benzoic acid	5.815	105	771411	53.58	ppm	90
33) 2,4-Dichlorophenol	5.864	162	819578	49.46	ppm	98
34) 2,6-Dichlorophenol	6.083	162	802418	50.35	ppm	99
43) 4-Chloro-3-methylphenol	6.607	107	983206	47.96	ppm	98
49) 2,4,6-Trichlorophenol	7.120	196	580357	54.55	ppm	98
50) 2,4,5-Trichlorophenol	7.163	196	577655	49.48	ppm	98
60) 2,4-Dinitrophenol	8.217	184	195992	46.92	ppm #	82
61) 4-Nitrophenol	8.351	109	368161	54.89	ppm	96
64) 2,3,4,6-Tetrachlorophenol	8.586	232	452873	54.73	ppm	98
70) 4,6-Dinitro-2-methylph...	8.987	198	310808	47.68	ppm	97
76) Pentachlorophenol	10.025	266	340173	50.16	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1211\
Data File : 6p25954.D
Acq On : 16 May 2016 9:15 am
Operator : ariellec
Sample : ICV1209-50
Misc : op93693,e6p1211
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 16 09:40:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuMon May 16 09:26:46 2016
QLast Update : Mon May 16 09:26:46 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

7.6.77

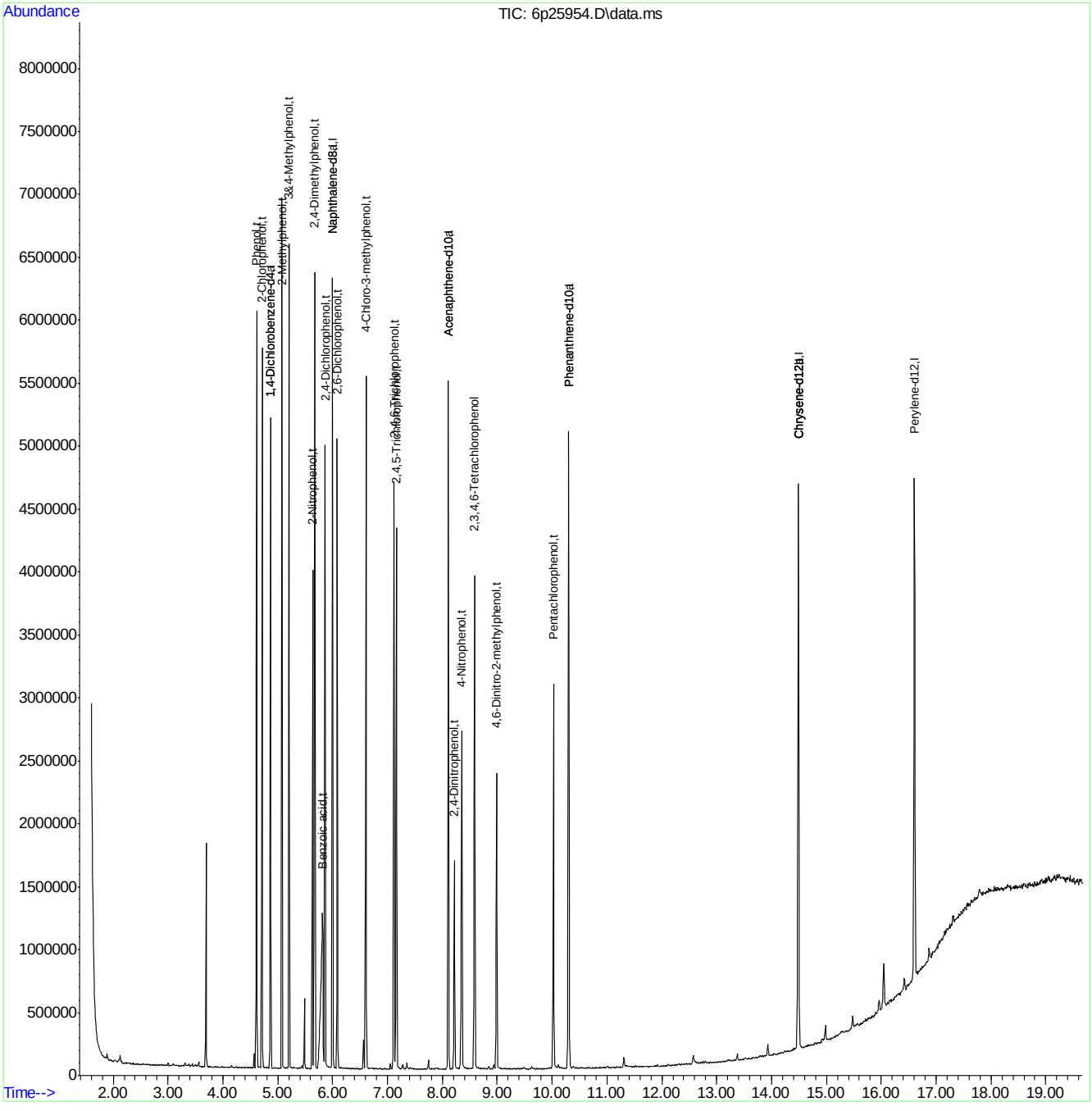
7

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1211\
Data File : 6p25954.D
Acq On : 16 May 2016 9:15 am
Operator : ariellec
Sample : ICV1209-50
Misc : op93693,e6p1211
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 16 09:40:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuMon May 16 09:26:46 2016
QLast Update : Mon May 16 09:26:46 2016
Response via : Initial Calibration



M6P1209.M Mon May 16 10:09:09 2016 ACLIMS Page: 3

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1211\
Data File : 6p25955.D
Acq On : 16 May 2016 9:42 am
Operator : ariellec
Sample : ICV1209-50
Misc : op93693,e6p1211
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 16 10:05:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuMon May 16 09:26:46 2016
QLast Update : Mon May 16 09:26:46 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.874	152	547414	40.00	ppm	0.00
24) Naphthalene-d8	5.997	136	2275940	40.00	ppm	0.00
47) Acenaphthene-d10	8.110	164	1291420	40.00	ppm	0.00
69) Phenanthrene-d10	10.298	188	2155241	40.00	ppm	0.00
83) Chrysene-d12	14.491	240	1897297	40.00	ppm	0.00
92) Perylene-d12	16.598	264	1098100	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.874	152	547414	40.00	ppm	0.00
104) Acenaphthene-d10a	8.110	164	1291420	40.00	ppm	0.00
106) Phenanthrene-d10a	10.298	188	2155241	40.00	ppm	0.00
110) Chrysene-d12a	14.491	240	1897297	40.00	ppm	0.00
112) Naphthalene-d8a	5.997	136	2275940	40.00	ppm	0.00
114) Chrysene-d12b	14.491	240	1897297	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-Chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
10) Aniline	4.639	93	1358598	40.91	ppm	99
16) Benzyl alcohol	5.003	108	685368	47.24	ppm	98
39) 4-Chloroaniline	6.083	127	1084615	41.41	ppm	96
44) 2-Methylnaphthalene	6.773	141	1653297	47.97	ppm	96
54) 2-Nitroaniline	7.522	65	625855	46.61	ppm	98
58) 3-Nitroaniline	8.083	138	473168	42.06	ppm	95
62) Dibenzofuran	8.399	168	2573051	49.66	ppm	96
68) 4-Nitroaniline	8.961	138	483911	41.07	ppm	96
79) Carbazole	10.699	167	2757536	47.30	ppm	99

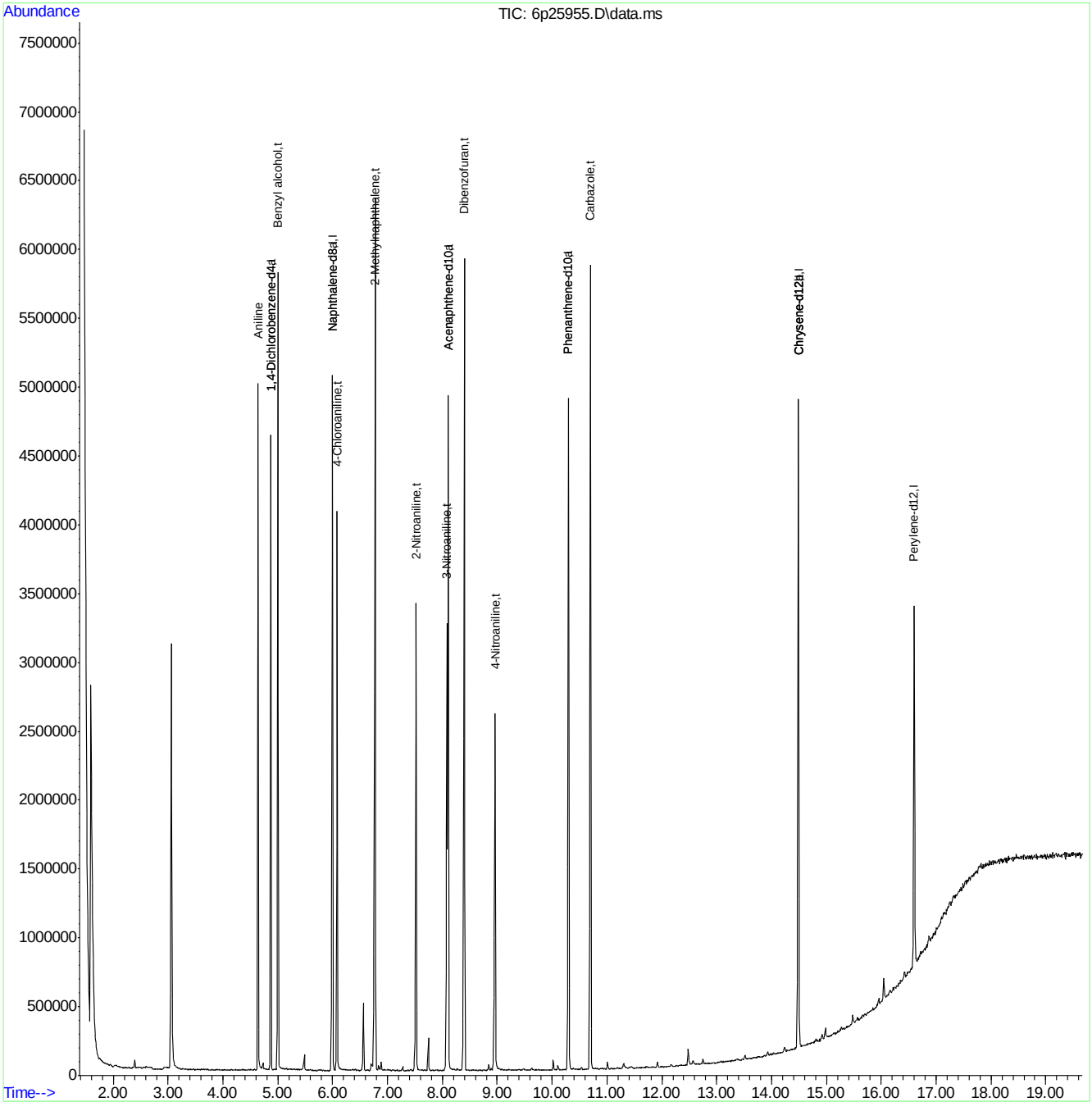
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E6P1211\
Data File : 6p25955.D
Acq On : 16 May 2016 9:42 am
Operator : ariellec
Sample : ICV1209-50
Misc : op93693,e6p1211
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 16 10:05:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuMon May 16 09:26:46 2016
QLast Update : Mon May 16 09:26:46 2016
Response via : Initial Calibration



SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1212\
Data File : 6p25959.D
Acq On : 16 May 2016 11:13 am
Operator : ariellec
Sample : icv1209-50
Misc : op93693,e6p1212
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 16 11:36:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuMon May 16 09:26:46 2016
QLast Update : Mon May 16 09:26:46 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.858	152	593990	40.00	ppm	-0.01
24) Naphthalene-d8	5.987	136	2309344	40.00	ppm	-0.01
47) Acenaphthene-d10	8.099	164	1311541	40.00	ppm	-0.01
69) Phenanthrene-d10	10.292	188	2126146	40.00	ppm	-0.01
83) Chrysene-d12	14.480	240	1853981	40.00	ppm	-0.01
92) Perylene-d12	16.593	264	1644750	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.858	152	593990	40.00	ppm	-0.01
104) Acenaphthene-d10a	8.099	164	1311541	40.00	ppm	-0.01
106) Phenanthrene-d10a	10.292	188	2126146	40.00	ppm	0.00
110) Chrysene-d12a	14.480	240	1853981	40.00	ppm	0.00
112) Naphthalene-d8a	5.987	136	2309344	40.00	ppm	-0.01
114) Chrysene-d12b	14.480	240	1853981	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.885	112	988660	43.68	ppm	0.03
Spiked Amount 50.000			Recovery = 87.36%			
8) Phenol-d5	4.591	99	1208281	40.78	ppm	0.02
Spiked Amount 50.000			Recovery = 81.56%			
25) Nitrobenzene-d5	5.323	82	1166541	45.30	ppm	0.00
Spiked Amount 50.000			Recovery = 90.60%			
51) 2-Fluorobiphenyl	7.211	172	2004890	47.42	ppm	0.00
Spiked Amount 50.000			Recovery = 94.84%			
73) 2,4,6-Tribromophenol	9.239	330	203600	38.21	ppm	0.00
Spiked Amount 50.000			Recovery = 76.42%			
85) Terphenyl-d14	12.854	244	1792964	46.16	ppm	-0.01
Spiked Amount 50.000			Recovery = 92.32%			
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-Chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds Qvalue

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

7.6.79

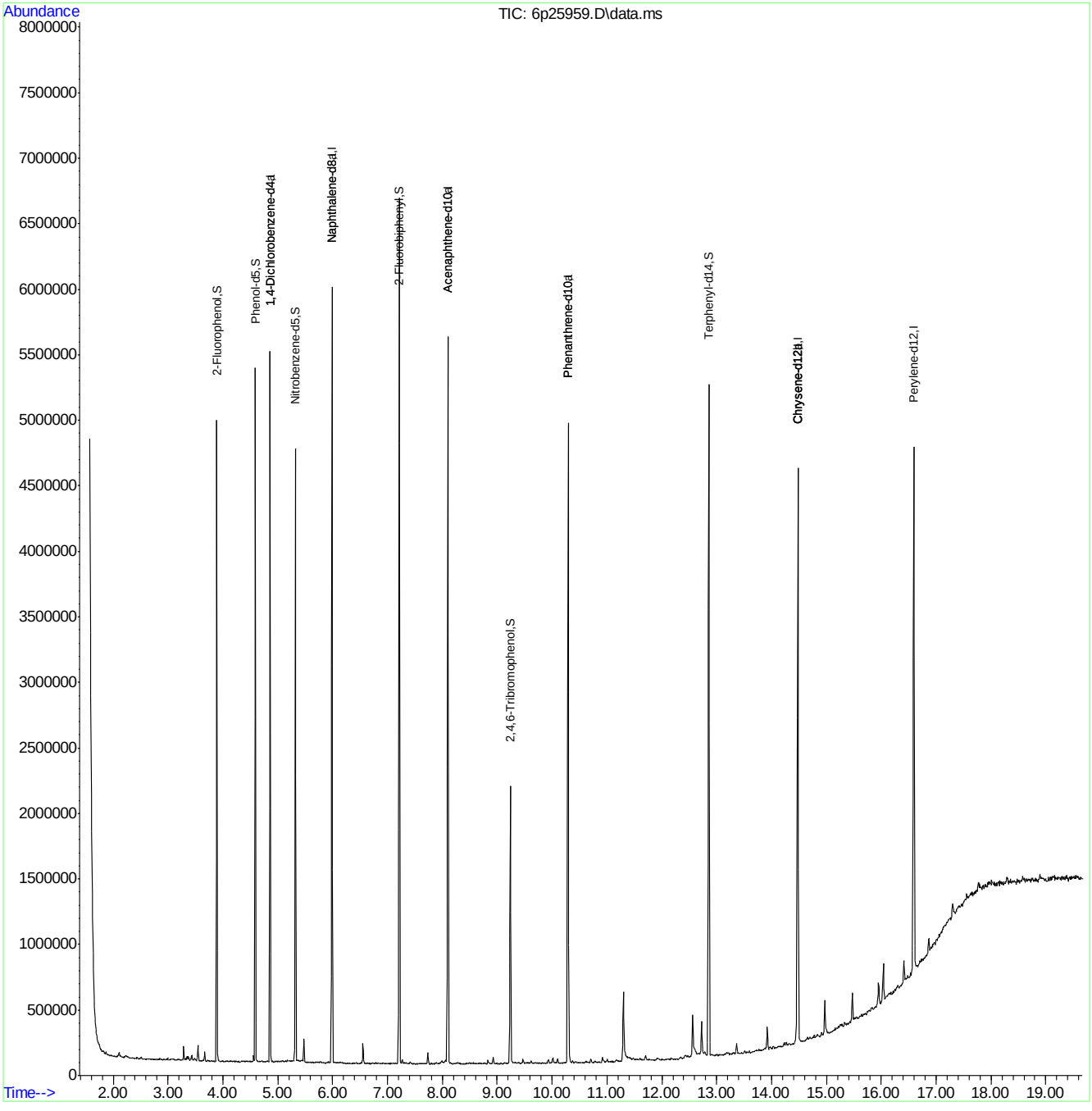
7

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1212\
Data File : 6p25959.D
Acq On : 16 May 2016 11:13 am
Operator : ariellec
Sample : icv1209-50
Misc : op93693,e6p1212
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 16 11:36:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuMon May 16 09:26:46 2016
QLast Update : Mon May 16 09:26:46 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1212\
Data File : 6p25960.D
Acq On : 16 May 2016 11:40 am
Operator : ariellec
Sample : icv1209-50
Misc : op93693,e6p1212
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 16 12:10:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuMon May 16 09:26:46 2016
QLast Update : Mon May 16 09:26:46 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.864	152	518609	40.00	ppm	0.00
24) Naphthalene-d8	5.992	136	2031947	40.00	ppm	0.00
47) Acenaphthene-d10	8.099	164	1135484	40.00	ppm	-0.01
69) Phenanthrene-d10	10.292	188	1841762	40.00	ppm	-0.01
83) Chrysene-d12	14.486	240	1532336	40.00	ppm	0.00
92) Perylene-d12	16.593	264	1434652	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.864	152	518609	40.00	ppm	0.00
104) Acenaphthene-d10a	8.099	164	1135484	40.00	ppm	-0.01
106) Phenanthrene-d10a	10.292	188	1841762	40.00	ppm	0.00
110) Chrysene-d12a	14.486	240	1532336	40.00	ppm	0.00
112) Naphthalene-d8a	5.992	136	2031947	40.00	ppm	0.00
114) Chrysene-d12b	14.486	240	1532336	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-Chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
4) N-Nitrosodimethylamine	2.778	74	676265	48.57	ppm	95
11) bis(2-Chloroethyl)ether	4.660	93	984892	49.96	ppm	95
14) 1,3-Dichlorobenzene	4.815	146	1063748	50.53	ppm	99
15) 1,4-Dichlorobenzene	4.874	146	1074571	50.36	ppm	99
17) 1,2-Dichlorobenzene	4.997	146	1012385	50.10	ppm	97
20) 2,2'-oxybis(1-Chloropr...	5.077	121	320520	45.42	ppm #	78
22) n-Nitroso-di-n-propyla...	5.201	70	780181	44.93	ppm	98
23) Hexachloroethane	5.281	201	346029	54.42	ppm #	81
26) Nitrobenzene	5.340	77	1153827	48.76	ppm	100
28) Isophorone	5.575	82	2019626	50.29	ppm	98
32) bis(2-Chloroethoxy)met...	5.751	93	1079437	47.56	ppm	100
36) 1,2,4-Trichlorobenzene	5.928	180	828060	55.20	ppm	98
38) Naphthalene	6.014	128	2885387	50.33	ppm	100
42) Hexachlorobutadiene	6.126	225	455565	59.47	ppm	99
52) 2-Chloronaphthalene	7.361	162	1675421	51.70	ppm	99
55) Dimethylphthalate	7.773	163	1917292	50.71	ppm	99
56) Acenaphthylene	7.907	152	2663618	49.03	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1212\
Data File : 6p25960.D
Acq On : 16 May 2016 11:40 am
Operator : ariellec
Sample : icv1209-50
Misc : op93693,e6p1212
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 16 12:10:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuMon May 16 09:26:46 2016
QLast Update : Mon May 16 09:26:46 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
57)	2,6-Dinitrotoluene	7.837	165	419790	54.17 ppm	96
59)	Acenaphthene	8.148	153	1741530	50.83 ppm	99
63)	2,4-Dinitrotoluene	8.394	165	535645	51.47 ppm	75
65)	Diethylphthalate	8.779	149	1931483	50.17 ppm	98
66)	Fluorene	8.886	166	1924393	50.45 ppm	99
67)	4-Chlorophenyl-phenyle...	8.902	204	911119	53.12 ppm	98
71)	n-Nitrosodiphenylamine	9.084	169	1356999	52.74 ppm	99
72)	1,2-Diphenylhydrazine	9.137	77	2195735	47.45 ppm	99
74)	4-Bromophenyl-phenylether	9.635	248	490612	52.96 ppm	98
75)	Hexachlorobenzene	9.688	284	483417	47.79 ppm	92
77)	Phenanthrene	10.330	178	2701713	50.59 ppm	99
78)	Anthracene	10.410	178	2675837	50.57 ppm	100
80)	Di-n-butylphthalate	11.319	149	3165826	50.51 ppm	100
81)	Fluoranthene	12.191	202	2833371	49.95 ppm	97
84)	Pyrene	12.544	202	2970135	57.14 ppm	100
86)	Butylbenzylphthalate	13.705	149	1324183	57.84 ppm	100
88)	Benzo[a]anthracene	14.470	228	2476493	54.44 ppm	100
90)	Chrysene	14.523	228	2392090	54.26 ppm	100
91)	bis(2-Ethylhexyl)phtha...	14.657	149	1834646	55.64 ppm	99
93)	Di-n-octylphthalate	15.652	149	3025552	55.66 ppm	97
94)	Benzo[b]fluoranthene	16.074	252	2343984	51.66 ppm	95
95)	Benzo[k]fluoranthene	16.117	252	2414737	53.61 ppm	96
96)	Benzo[a]pyrene	16.518	252	2252456	58.08 ppm	97
97)	Indeno[1,2,3-cd]pyrene	18.000	276	2255028	54.91 ppm	95
99)	Dibenz[a,h]anthracene	18.037	278	2271031	53.25 ppm	98
101)	Benzo[g,h,i]perylene	18.385	276	2255036	52.79 ppm	98

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

7.6.80

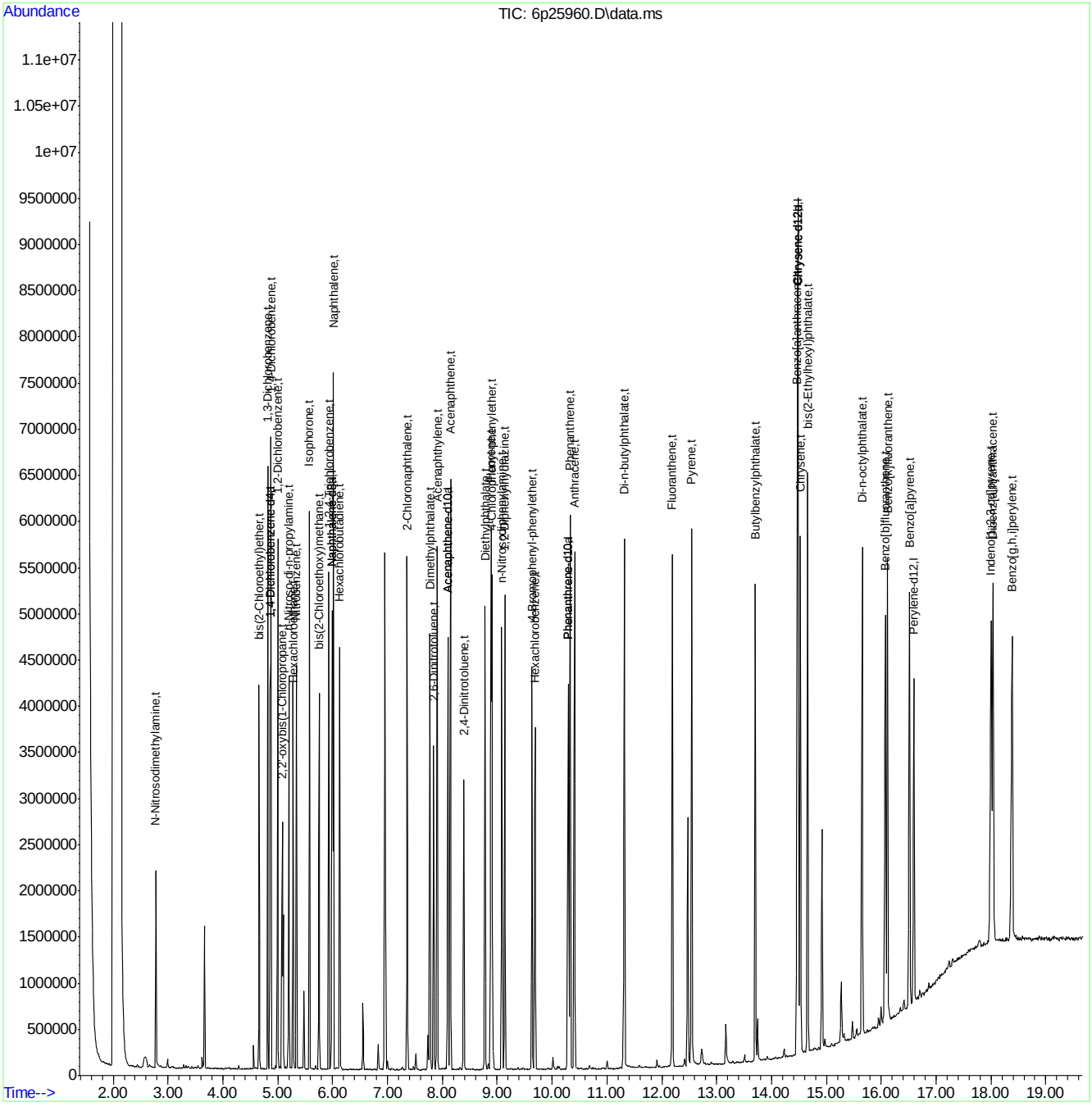
7

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1212\
Data File : 6p25960.D
Acq On : 16 May 2016 11:40 am
Operator : ariellec
Sample : icv1209-50
Misc : op93693,e6p1212
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 16 12:10:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuMon May 16 09:26:46 2016
QLast Update : Mon May 16 09:26:46 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1212\
Data File : 6p25960A.D
Acq On : 16 May 2016 11:40 am
Operator : ariellec
Sample : icv1209-50
Misc : op93693,e6p1212
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 16 12:11:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuMon May 16 09:26:46 2016
QLast Update : Mon May 16 09:26:46 2016
Response via : Initial Calibration

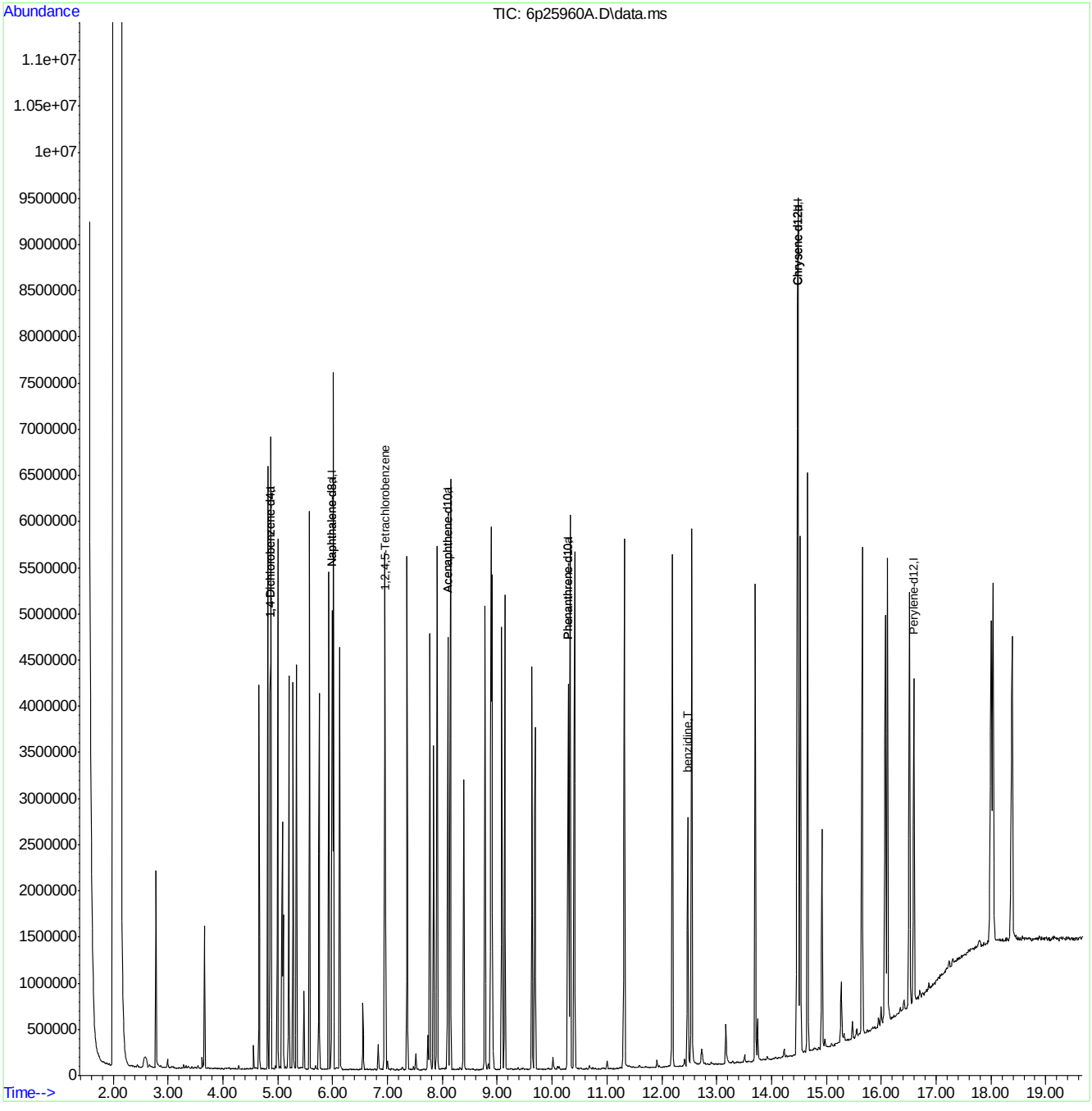
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.864	152	518609	40.00	ppm	0.00
24) Naphthalene-d8	5.992	136	2031947	40.00	ppm	0.00
47) Acenaphthene-d10	8.099	164	1135484	40.00	ppm	-0.01
69) Phenanthrene-d10	10.292	188	1841762	40.00	ppm	-0.01
83) Chrysene-d12	14.486	240	1532336	40.00	ppm	0.00
92) Perylene-d12	16.593	264	1434652	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.864	152	518609	40.00	ppm	0.00
104) Acenaphthene-d10a	8.099	164	1135484	40.00	ppm	-0.01
106) Phenanthrene-d10a	10.292	188	1841762	40.00	ppm	0.00
110) Chrysene-d12a	14.486	240	1532336	40.00	ppm	0.00
112) Naphthalene-d8a	5.992	136	2031947	40.00	ppm	0.00
114) Chrysene-d12b	14.486	240	1532336	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-Chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
105) 1,2,4,5-Tetrachloroben...	6.960	216	858796	61.02	ppm	99
111) benzidine	12.475	184	1242537	72.02	ppm	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1212\
Data File : 6p25960A.D
Acq On : 16 May 2016 11:40 am
Operator : ariellec
Sample : icv1209-50
Misc : op93693,e6p1212
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 16 12:11:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuMon May 16 09:26:46 2016
QLast Update : Mon May 16 09:26:46 2016
Response via : Initial Calibration



M6P1209.M Mon May 16 12:11:24 2016 ACLIMS Page: 2

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1214\
Data File : 6p25990.D
Acq On : 17 May 2016 7:31 am
Operator : ariellec
Sample : cc1209-25
Misc : op93693,e6p1214
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 17 07:52:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue May 17 07:52:18 2016
QLast Update : Tue May 17 07:52:18 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.847	152	637221	40.00	ppm	0.00
24) Naphthalene-d8	5.976	136	2587405	40.00	ppm	0.00
47) Acenaphthene-d10	8.078	164	1479053	40.00	ppm	0.00
69) Phenanthrene-d10	10.265	188	2441596	40.00	ppm	0.00
83) Chrysene-d12	14.453	240	2200669	40.00	ppm	0.00
92) Perylene-d12	16.561	264	2010443	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.847	152	637221	40.00	ppm	0.00
104) Acenaphthene-d10a	8.078	164	1479053	40.00	ppm	0.00
106) Phenanthrene-d10a	10.265	188	2441596	40.00	ppm	0.00
110) Chrysene-d12a	14.453	240	2200669	40.00	ppm	0.00
112) Naphthalene-d8a	5.976	136	2587405	40.00	ppm	0.00
114) Chrysene-d12b	14.453	240	2200669	40.00	ppm	-0.03
System Monitoring Compounds						
5) 2-Fluorophenol	3.858	112	569730	23.46	ppm	0.02
Spiked Amount 50.000			Recovery	=	46.92%	
8) Phenol-d5	4.569	99	737715	23.21	ppm	0.02
Spiked Amount 50.000			Recovery	=	46.42%	
25) Nitrobenzene-d5	5.307	82	666384	23.10	ppm	0.00
Spiked Amount 50.000			Recovery	=	46.20%	
51) 2-Fluorobiphenyl	7.190	172	1174797	24.64	ppm	0.00
Spiked Amount 50.000			Recovery	=	49.28%	
73) 2,4,6-Tribromophenol	9.212	330	123432	20.17	ppm	0.00
Spiked Amount 50.000			Recovery	=	40.34%	
85) Terphenyl-d14	12.827	244	1155784	25.07	ppm	0.00
Spiked Amount 50.000			Recovery	=	50.14%	
108) o-Terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-Chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.456	88	258161	22.82	ppm	95
3) Pyridine	2.809	79	661627	23.10	ppm	97
4) N-Nitrosodimethylamine	2.735	74	376672	22.02	ppm	96
6) Indene	5.056	116	1013844	23.39	ppm	99
7) Cumene	4.238	105	1472570	23.94	ppm	99
9) Phenol	4.580	94	836166	24.53	ppm	91
10) Aniline	4.601	93	798850	20.67	ppm	96
11) bis(2-Chloroethyl)ether	4.644	93	561952	23.20	ppm	96
12) 2-Chlorophenol	4.687	128	591596	23.94	ppm	96
13) Decane	4.708	43	700583	22.10	ppm	99
14) 1,3-Dichlorobenzene	4.799	146	625945	24.20	ppm	100
15) 1,4-Dichlorobenzene	4.863	146	638484	24.35	ppm	100
16) Benzyl alcohol	4.965	108	392955	23.27	ppm	92
17) 1,2-Dichlorobenzene	4.981	146	596768	24.04	ppm	97
18) Acetophenone	5.179	105	809257	22.62	ppm	86
19) 2-Methylphenol	5.051	108	532602	22.64	ppm	98
20) 2,2'-oxybis(1-Chloropr...	5.067	121	207067	23.88	ppm	91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1214\
Data File : 6p25990.D
Acq On : 17 May 2016 7:31 am
Operator : ariellec
Sample : cc1209-25
Misc : op93693,e6p1214
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 17 07:52:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue May 17 07:52:18 2016
QLast Update : Tue May 17 07:52:18 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.174	108	577182	23.26	ppm		100
22) n-Nitroso-di-n-propyla...	5.179	70	451429	21.16	ppm		98
23) Hexachloroethane	5.265	201	197914	25.33	ppm		84
26) Nitrobenzene	5.323	77	692662	22.99	ppm		98
27) Quinoline	6.361	129	1141646	23.66	ppm		99
28) Isophorone	5.548	82	1141733	22.33	ppm		97
29) 2-Nitrophenol	5.607	139	313819	24.66	ppm		85
30) 2,4-Dimethylphenol	5.639	107	526863	22.29	ppm		99
31) Benzoic acid	5.735	105	333557	24.17	ppm		86
32) bis(2-Chloroethoxy)met...	5.730	93	678280	23.47	ppm		99
33) 2,4-Dichlorophenol	5.831	162	445366	24.53	ppm		99
34) 2,6-Dichlorophenol	6.056	162	436101	24.98	ppm		98
35) 1,3,5-Trichlorobenzene	5.612	180	500328	25.08	ppm		98
36) 1,2,4-Trichlorobenzene	5.912	180	490529	25.68	ppm		98
37) 1,2,3-Trichlorobenzene	6.142	180	475242	25.30	ppm		99
38) Naphthalene	5.997	128	1770015	24.25	ppm		100
39) 4-Chloroaniline	6.051	127	680844	22.87	ppm		97
40) 2,3-Dichloroaniline	7.083	161	549470	24.40	ppm		98
41) Caprolactam	6.473	55	265228	21.68	ppm		98
42) Hexachlorobutadiene	6.115	225	252025	25.84	ppm		99
43) 4-Chloro-3-methylphenol	6.575	107	533791	23.76	ppm		92
44) 2-Methylnaphthalene	6.746	141	960646	24.52	ppm		97
45) 1-Methylnaphthalene	6.858	141	995051	24.72	ppm		97
46) Dimethylnaphthalene	7.516	156	1020357	24.86	ppm		99
48) Hexachlorocyclopentadiene	6.928	237	450286	43.46	ppm		96
49) 2,4,6-Trichlorophenol	7.083	196	314110	26.15	ppm		97
50) 2,4,5-Trichlorophenol	7.131	196	344649	26.15	ppm		98
52) 2-Chloronaphthalene	7.340	162	1024343	24.27	ppm		98
53) Biphenyl	7.318	154	1392553	24.56	ppm		100
54) 2-Nitroaniline	7.484	65	361769	23.53	ppm		94
55) Dimethylphthalate	7.741	163	1169010	23.74	ppm		100
56) Acenaphthylene	7.880	152	1718104	24.28	ppm		99
57) 2,6-Dinitrotoluene	7.810	165	264736	26.23	ppm		97
58) 3-Nitroaniline	8.040	138	303736	23.57	ppm		89
59) Acenaphthene	8.121	153	1086776	24.35	ppm		98
60) 2,4-Dinitrophenol	8.180	184	182296	39.87	ppm	#	96
61) 4-Nitrophenol	8.292	109	183229	24.20	ppm		95
62) Dibenzofuran	8.367	168	1451837	24.46	ppm		97
63) 2,4-Dinitrotoluene	8.367	165	357366	26.36	ppm		92
64) 2,3,4,6-Tetrachlorophenol	8.543	232	254303	27.22	ppm		97
65) Diethylphthalate	8.746	149	1171160	23.35	ppm		98
66) Fluorene	8.859	166	1209246	24.34	ppm		99
67) 4-Chlorophenyl-phenyle...	8.880	204	558290	24.99	ppm		94
68) 4-Nitroaniline	8.912	138	280308	20.77	ppm		94
70) 4,6-Dinitro-2-methylph...	8.950	198	151581	22.59	ppm		89
71) n-Nitrosodiphenylamine	9.057	169	836759	24.53	ppm		99
72) 1,2-Diphenylhydrazine	9.110	77	1364069	22.24	ppm		99
74) 4-Bromophenyl-phenylether	9.608	248	288617	23.50	ppm		97
75) Hexachlorobenzene	9.661	284	287266	21.42	ppm		78
76) Pentachlorophenol	9.982	266	389175	50.29	ppm		97

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1214\
Data File : 6p25990.D
Acq On : 17 May 2016 7:31 am
Operator : ariellec
Sample : cc1209-25
Misc : op93693,e6p1214
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 17 07:52:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue May 17 07:52:18 2016
QLast Update : Tue May 17 07:52:18 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) Phenanthrene	10.303	178	1716613	24.25	ppm	100
78) Anthracene	10.378	178	1722847	24.56	ppm	99
79) Carbazole	10.656	167	1548717	23.45	ppm	99
80) Di-n-butylphthalate	11.282	149	2046254	24.63	ppm	99
81) Fluoranthene	12.164	202	1837636	24.44	ppm	97
82) Octadecane	10.196	57	851177	23.31	ppm	98
84) Pyrene	12.512	202	1932311	25.89	ppm	99
86) Butylbenzylphthalate	13.667	149	890844	27.09	ppm	97
87) Butyl stearate	13.822	56	621245	26.42	ppm	99
88) Benzo[a]anthracene	14.432	228	1674154	25.62	ppm	99
89) 3,3'-Dichlorobenzidine	14.448	252	566537	25.27	ppm	98
90) Chrysene	14.491	228	1661057	26.23	ppm	99
91) bis(2-Ethylhexyl)phtha...	14.619	149	1260864	27.02	ppm	97
93) Di-n-octylphthalate	15.614	149	2141018	28.57	ppm	97
94) Benzo[b]fluoranthene	16.037	252	1706693	26.84	ppm	97
95) Benzo[k]fluoranthene	16.079	252	1613556	26.25	ppm	99
96) Benzo[a]pyrene	16.481	252	1469010	27.03	ppm	98
97) Indeno[1,2,3-cd]pyrene	17.957	276	1360523	24.64	ppm	99
98) Dibenz(a,h)acridine	17.652	279	1223375	24.73	ppm	99
99) Dibenz[a,h]anthracene	17.994	278	1457183	24.38	ppm	97
100) 7,12-Dimethylbenz(a)an...	16.042	256	681975	25.68	ppm	96
101) Benzo[g,h,i]perylene	18.337	276	1441516	24.08	ppm	96

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

7.6.82

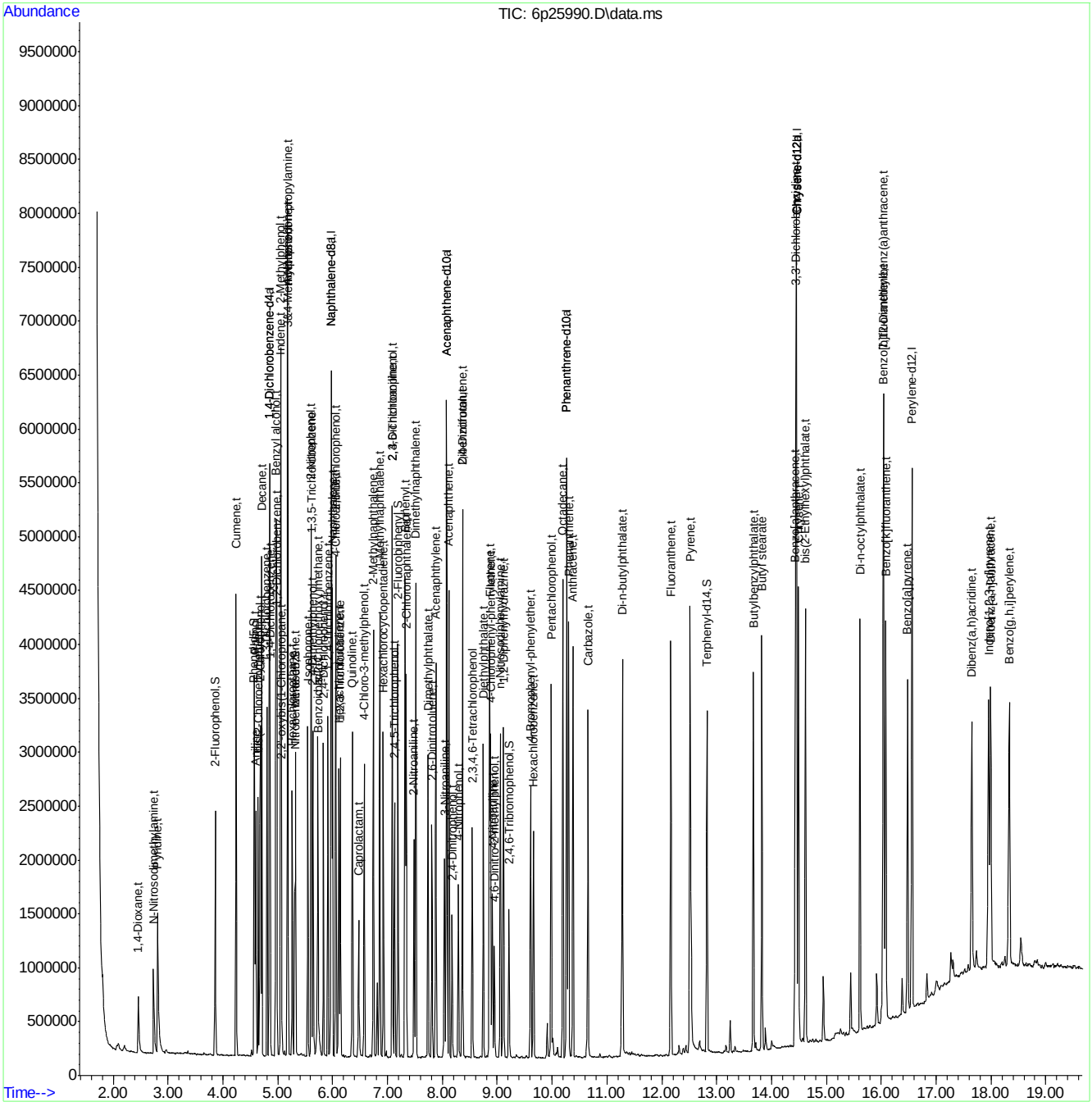
7

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1214\
Data File : 6p25990.D
Acq On : 17 May 2016 7:31 am
Operator : ariellec
Sample : cc1209-25
Misc : op93693,e6p1214
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 17 07:52:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue May 17 07:52:18 2016
QLast Update : Tue May 17 07:52:18 2016
Response via : Initial Calibration



SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1214\
Data File : 6p25991.D
Acq On : 17 May 2016 7:58 am
Operator : ariellec
Sample : cc1210-25
Misc : op93693,e6p1214
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 17 09:02:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue May 17 07:52:18 2016
QLast Update : Tue May 17 07:52:18 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.847	152	635952	40.00	ppm	0.00
24) Naphthalene-d8	5.971	136	2537128	40.00	ppm	0.00
47) Acenaphthene-d10	8.078	164	1446226	40.00	ppm	0.00
69) Phenanthrene-d10	10.265	188	2424586	40.00	ppm	0.00
83) Chrysene-d12	14.448	240	2193649	40.00	ppm	0.00
92) Perylene-d12	16.561	264	1999186	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.847	152	635952	40.00	ppm	0.00
104) Acenaphthene-d10a	8.078	164	1446226	40.00	ppm	0.00
106) Phenanthrene-d10a	10.265	188	2424586	40.00	ppm	0.00
110) Chrysene-d12a	14.448	240	2193649	40.00	ppm	0.00
112) Naphthalene-d8a	5.971	136	2537128	40.00	ppm	0.00
114) Chrysene-d12b	14.448	240	2193649	40.00	ppm	-0.04
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) o-Terphenyl	10.907	230	854481	25.54	ppm	0.00
Spiked Amount 50.000			Recovery	=	51.08%	
109) 1-Chlorooctadecane	12.100	57	565841	25.33	ppm	0.00
Spiked Amount 50.000			Recovery	=	50.66%	
Target Compounds						Qvalue
103) Benzaldehyde	4.516	105	451583	23.57	ppm	98
105) 1,2,4,5-Tetrachloroben...	6.939	216	466807	26.04	ppm	99
107) Atrazine	9.918	215	170475	28.15	ppm	94
111) benzidine	12.437	184	422254	22.01	ppm	99
113) Hydroquinone	6.393	110	597191	24.88	ppm	96

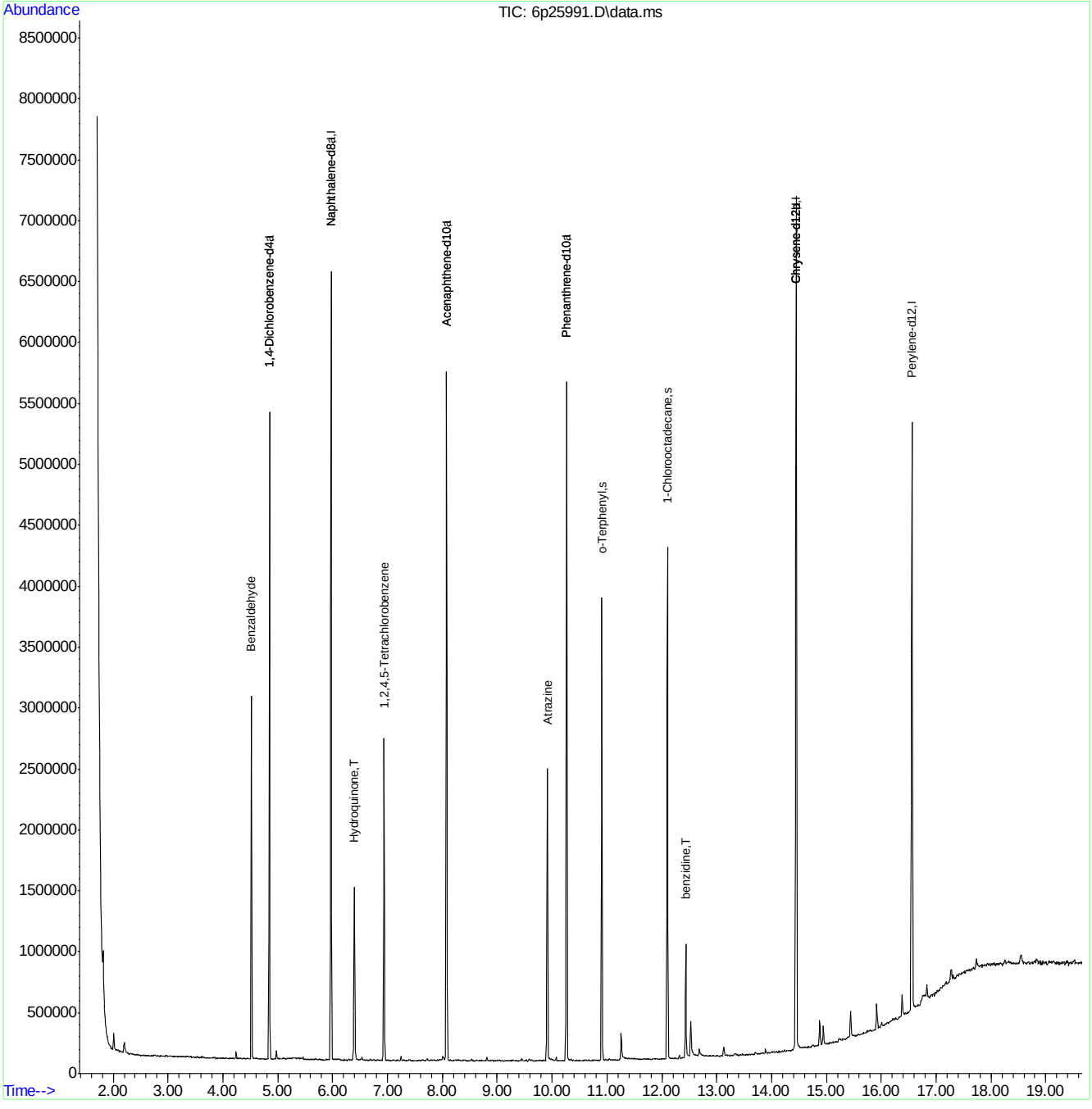
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e6p1214\
Data File : 6p25991.D
Acq On : 17 May 2016 7:58 am
Operator : ariellec
Sample : cc1210-25
Misc : op93693,e6p1214
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 17 09:02:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\M6P1209.M
Quant Title : Semi Volatile GC/MS,zb-5msi 30m x .25mm x .25MoTuTue May 17 07:52:18 2016
QLast Update : Tue May 17 07:52:18 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6563\F156051.D Vial: 2
Acq On : 4 Apr 2016 7:09 pm Operator: sarad
Sample : ic6563-100 Inst : MSF
Misc : op92661,ef6563,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 08:14:01 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 08:13:49 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.88	152	735738	40.00	ppm	0.00
24) Naphthalene-d8	5.81	136	2800726	40.00	ppm	0.00
47) Acenaphthene-d10	7.28	164	1660280	40.00	ppm	0.00
69) Phenanthrene-d10	9.22	188	2724294	40.00	ppm	0.00
83) Chrysene-d12	14.55	240	2126198	40.00	ppm	0.00
92) Perylene-d12	17.60	264	2220858	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.88	152	735738	40.00	ppm	0.00
112) Naphthalene-d8A	5.81	136	2800726	40.00	ppm	0.00
121) Acenaphthene-d10A	7.28	164	1660280	40.00	ppm	0.00
132) Phenanthrene-d10A	9.22	188	2724294	40.00	ppm	0.00
147) Chrysene-d12A	14.55	240	2126198	40.00	ppm	0.00
155) Perylene-d12A	17.60	264	2220858	40.00	ppm	-0.10
159) 1,4-Dichlorobenzene-d4b	4.88	152	735738	40.00	ppm	0.00
161) Naphthalene-d8b	5.81	136	2800726	40.00	ppm	0.00
163) Acenaphthene-d10b	7.28	164	1660280	40.00	ppm	0.00
165) Phenanthrene-d10b	9.22	188	2724294	40.00	ppm	0.00
167) Chrysene-d12b	14.55	240	2126198	40.00	ppm	0.00
169) 1,4-Dichlorobenzene-d4c	4.88	152	735738	40.00	ppm	0.00
171) Naphthalene-d8c	5.81	136	2800726	40.00	ppm	0.00
176) Chrysene-d12c	14.55	240	2126198	40.00	ppm	0.00
178) Naphthalene-d8a	5.81	136	2800726	40.00	ppm	0.15
180) Chrysene-d12B	14.55	240	2126198	40.00	ppm	0.25
System Monitoring Compounds						
5) 2-Fluorophenol	3.89	112	2415283	97.31	ppm	0.00
Spiked Amount 50.000			Recovery = 194.62%			
8) Phenol-d5	4.61	99	2853578	96.41	ppm	0.00
Spiked Amount 50.000			Recovery = 192.82%			
25) Nitrobenzene-d5	5.28	82	2433835	96.44	ppm	0.00
Spiked Amount 50.000			Recovery = 192.88%			
51) 2-Fluorobiphenyl	6.64	172	4342287	93.76	ppm	0.00
Spiked Amount 50.000			Recovery = 187.52%			
73) 2,4,6-Tribromophenol	8.20	330	517542	95.28	ppm	0.00
Spiked Amount 50.000			Recovery = 190.56%			
85) Terphenyl-d14	12.32	244	4088465	96.46	ppm	0.01
Spiked Amount 50.000			Recovery = 192.92%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.48	88	1018203	95.16	ppm	95
3) Pyridine	2.79	79	2690464	99.72	ppm	99
4) N-Nitrosodimethylamine	2.76	42	937530	90.49	ppm	96
6) Indene	5.07	116	3469537	92.16	ppm	99
7) Cumene	4.29	105	4968732	93.89	ppm	97
9) Phenol	4.62	94	3154982	99.75	ppm	98
10) Aniline	4.64	93	2963325	94.39	ppm	99
11) bis(2-Chloroethyl)ether	4.69	93	2177822	96.37	ppm	96
12) 2-Chlorophenol	4.73	128	2406387	95.55	ppm	99
13) Decane	4.76	43	1963317	95.11	ppm	98
14) 1,3-Dichlorobenzene	4.84	146	2614967	94.91	ppm	99
15) 1,4-Dichlorobenzene	4.89	146	2614476	95.23	ppm	99

(#) = qualifier out of range (m) = manual integration
F156051.D MF6563.M Tue Apr 05 08:42:32 2016 RT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6563\F156051.D Vial: 2
Acq On : 4 Apr 2016 7:09 pm Operator: sarad
Sample : ic6563-100 Inst : MSF
Misc : op92661,ef6563,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 08:14:01 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 08:13:49 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
16)	Benzyl alcohol	4.98	108	1576852	96.65	ppm	92
17)	1,2-Dichlorobenzene	5.01	146	2379933	93.80	ppm	99
18)	Acetophenone	5.18	105	2624782	92.97	ppm	99
19)	2-Methylphenol	5.06	108	2053215	94.88	ppm	99
20)	2,2'-oxybis(1-Chloropropan	5.08	121	730006	94.43	ppm	95
21)	3&4-Methylphenol	5.17	108	1977426	92.94	ppm	98
22)	n-Nitroso-di-n-propylamine	5.18	70	1528888	96.37	ppm	98
23)	Hexachloroethane	5.26	201	817929	95.24	ppm	90
26)	Nitrobenzene	5.30	77	2494112	95.44	ppm	99
27)	Quinoline	6.07	129	4860825	96.16	ppm	98
28)	Isophorone	5.48	82	4117430	95.13	ppm	98
29)	2-Nitrophenol	5.53	139	1242388	94.12	ppm	93
30)	2,4-Dimethylphenol	5.55	107	2185611	97.20	ppm	99
31)	Benzoic acid	5.65	105	1881567	95.13	ppm	94
32)	bis(2-Chloroethoxy)methane	5.62	93	2547670	95.25	ppm	99
33)	2,4-Dichlorophenol	5.70	162	1959287	94.69	ppm	98
34)	2,6-Dichlorophenol	5.86	162	1731527	92.72	ppm	98
35)	1,3,5-Trichlorobenzene	5.54	180	1853561	91.96	ppm	98
36)	1,2,4-Trichlorobenzene	5.77	180	1938698	93.10	ppm	99
37)	1,2,3-Trichlorobenzene	5.93	180	1890090	92.62	ppm	99
38)	Naphthalene	5.82	128	5709757	89.14	ppm	94
39)	4-Chloroaniline	5.86	127	2479911	92.20	ppm	99
40)	2,3-Dichloroaniline	6.56	161	1986572	92.15	ppm	95
41)	Caprolactam	6.13	55	1008962	97.53	ppm	98
42)	Hexachlorobutadiene	5.91	225	893950	92.65	ppm	99
43)	4-Chloro-3-methylphenol	6.21	107	1978829	95.60	ppm	98
44)	2-Methylnaphthalene	6.34	141	3554755	93.20	ppm	97
45)	1-Methylnaphthalene	6.42	141	3668076	93.09	ppm	98
46)	Dimethylnaphthalene	6.87	156	3683476	92.55	ppm	98
48)	Hexachlorocyclopentadiene	6.46	237	1893313	184.00	ppm	99
49)	2,4,6-Trichlorophenol	6.56	196	1076514	90.67	ppm	99
50)	2,4,5-Trichlorophenol	6.60	196	1388401	97.07	ppm	97
52)	2-Chloronaphthalene	6.75	162	3997017	93.95	ppm	97
53)	Biphenyl	6.72	154	4938769	92.56	ppm	96
54)	2-Nitroaniline	6.83	65	1315818	97.37	ppm	99
55)	Dimethylphthalate	6.99	163	4635167	95.00	ppm	99
56)	Acenaphthylene	7.13	152	6291490	92.61	ppm	96
57)	2,6-Dinitrotoluene	7.05	165	1104006	96.28	ppm	99
58)	3-Nitroaniline	7.22	138	1387906	97.20	ppm	97
59)	Acenaphthene	7.31	153	3993510	93.75	ppm	99
60)	2,4-Dinitrophenol	7.34	184	1363184	199.99	ppm	90
61)	4-Nitrophenol	7.38	109	700188	98.20	ppm	95
62)	Dibenzofuran	7.50	168	5523942	94.24	ppm	96
63)	2,4-Dinitrotoluene	7.47	165	1525966	97.18	ppm	99
64)	2,3,4,6-Tetrachlorophenol	7.63	232	1059085	95.49	ppm	98
65)	Diethylphthalate	7.75	149	4660438	95.22	ppm	98
66)	Fluorene	7.90	166	3950840	92.72	ppm	100
67)	4-Chlorophenyl-phenylether	7.89	204	1689443	92.10	ppm	99
68)	4-Nitroaniline	7.92	138	1402452	98.41	ppm	99

(#) = qualifier out of range (m) = manual integration

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6563\F156051.D Vial: 2
Acq On : 4 Apr 2016 7:09 pm Operator: sarad
Sample : ic6563-100 Inst : MSF
Misc : op92661,ef6563,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 08:14:01 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 08:13:49 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
70)	4,6-Dinitro-2-methylphenol	7.96	198	920275	98.75	ppm	98
71)	n-Nitrosodiphenylamine	8.04	169	3341482	94.31	ppm	100
72)	1,2-Diphenylhydrazine	8.09	77	4866438	96.01	ppm	100
74)	4-Bromophenyl-phenylether	8.55	248	1119508	94.72	ppm	98
75)	Hexachlorobenzene	8.63	284	1067556	94.24	ppm	96
76)	Pentachlorophenol	8.93	266	1472528	187.28	ppm	97
77)	Phenanthrene	9.26	178	6463150	94.05	ppm	99
78)	Anthracene	9.34	178	6560053	93.30	ppm	98
79)	Carbazole	9.62	167	6335193	94.85	ppm	99
80)	Di-n-butylphthalate	10.33	149	7970957	93.84	ppm	98
81)	Fluoranthene	11.44	202	6809284	94.97	ppm	99
82)	Octadecane	9.11	57	2784718	94.50	ppm	98
84)	Pyrene	11.89	202	7130369	96.69	ppm	99
86)	Butylbenzylphthalate	13.50	149	3749178	98.42	ppm	99
87)	Butyl stearate	13.78	56	2050981	96.66	ppm	97
88)	Benzo[a]anthracene	14.53	228	6154397	97.90	ppm	99
89)	3,3'-Dichlorobenzidine	14.57	252	2263266	99.56	ppm	99
90)	Chrysene	14.62	228	6043538	96.93	ppm	98
91)	bis(2-Ethylhexyl)phthalate	14.91	149	5223738	98.04	ppm	99
93)	Di-n-octylphthalate	16.36	149	9141867	94.78	ppm	99
94)	Benzo[b]fluoranthene	16.86	252	6115537	94.36	ppm	98
95)	Benzo[k]fluoranthene	16.93	252	6017663	93.42	ppm	99
96)	Benzo[a]pyrene	17.50	252	5718329	95.17	ppm	99
97)	Indeno[1,2,3-cd]pyrene	19.56	276	5381186	96.35	ppm	98
98)	Dibenz(a,h)acridine	19.19	279	4651885	96.37	ppm	98
99)	Dibenz[a,h]anthracene	19.62	278	5247348	95.01	ppm	98
100)	7,12-Dimethylbenz(a)anthra	16.88	256	2602864	95.06	ppm	98
101)	Benzo[g,h,i]perylene	19.99	276	5636779	95.40	ppm	99

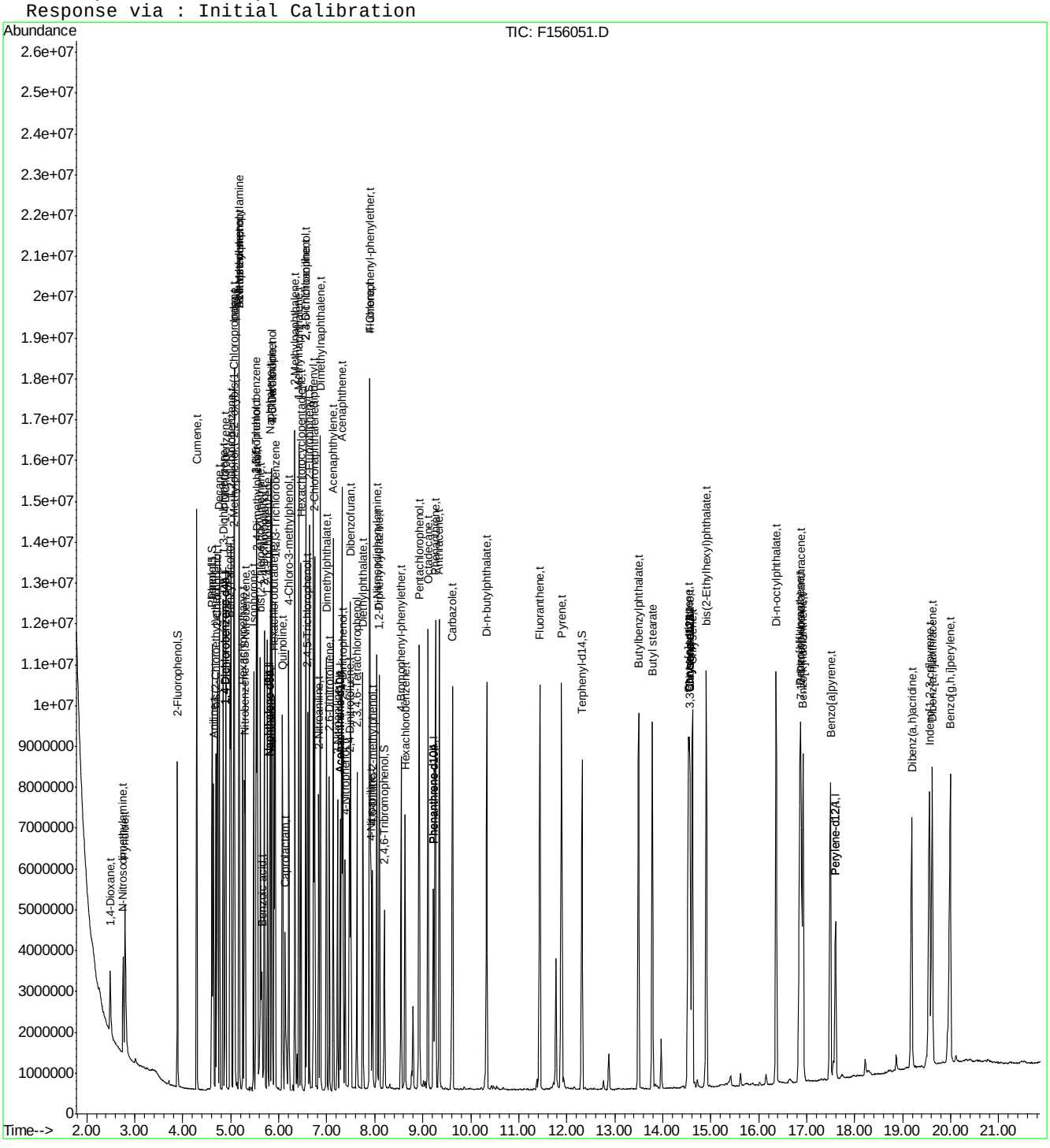
(#) = qualifier out of range (m) = manual integration (+) = signals summed
F156051.D MF6563.M Tue Apr 05 08:42:32 2016 RT1

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6563\F156051.D Vial: 2
Acq On : 4 Apr 2016 7:09 pm Operator: sarad
Sample : ic6563-100 Inst : MSF
Misc : op92661,ef6563,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 5 8:42 2016 Quant Results File: MF6563.RES

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 08:13:49 2016
Response via : Initial Calibration



SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6563\F156052.D Vial: 3
Acq On : 4 Apr 2016 7:38 pm Operator: sarad
Sample : ic6563-80 Inst : MSF
Misc : op92661,ef6563,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 08:14:04 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 08:13:49 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.88	152	764392	40.00	ppm	0.00
24) Naphthalene-d8	5.81	136	2888824	40.00	ppm	0.00
47) Acenaphthene-d10	7.27	164	1719749	40.00	ppm	0.00
69) Phenanthrene-d10	9.22	188	2826597	40.00	ppm	0.00
83) Chrysene-d12	14.55	240	2250416	40.00	ppm	0.00
92) Perylene-d12	17.59	264	2338825	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.88	152	764392	40.00	ppm	0.00
112) Naphthalene-d8A	5.81	136	2888824	40.00	ppm	0.00
121) Acenaphthene-d10A	7.27	164	1719749	40.00	ppm	0.00
132) Phenanthrene-d10A	9.22	188	2826597	40.00	ppm	0.00
147) Chrysene-d12A	14.55	240	2250416	40.00	ppm	0.00
155) Perylene-d12A	17.59	264	2338825	40.00	ppm	-0.10
159) 1,4-Dichlorobenzene-d4b	4.88	152	764392	40.00	ppm	0.00
161) Naphthalene-d8b	5.81	136	2888824	40.00	ppm	0.00
163) Acenaphthene-d10b	7.27	164	1719749	40.00	ppm	0.00
165) Phenanthrene-d10b	9.22	188	2826597	40.00	ppm	0.00
167) Chrysene-d12b	14.55	240	2250416	40.00	ppm	0.00
169) 1,4-Dichlorobenzene-d4c	4.88	152	764392	40.00	ppm	0.00
171) Naphthalene-d8c	5.81	136	2888824	40.00	ppm	0.00
176) Chrysene-d12c	14.55	240	2250416	40.00	ppm	0.00
178) Naphthalene-d8a	5.81	136	2888824	40.00	ppm	0.15
180) Chrysene-d12B	14.55	240	2250416	40.00	ppm	0.25
System Monitoring Compounds						
5) 2-Fluorophenol	3.89	112	2062489	79.98	ppm	0.00
Spiked Amount 50.000			Recovery = 159.96%			
8) Phenol-d5	4.61	99	2462479	80.08	ppm	0.00
Spiked Amount 50.000			Recovery = 160.16%			
25) Nitrobenzene-d5	5.28	82	2060768	79.17	ppm	0.00
Spiked Amount 50.000			Recovery = 158.34%			
51) 2-Fluorobiphenyl	6.63	172	3825541	79.74	ppm	0.00
Spiked Amount 50.000			Recovery = 159.48%			
73) 2,4,6-Tribromophenol	8.20	330	446788	79.28	ppm	0.00
Spiked Amount 50.000			Recovery = 158.56%			
85) Terphenyl-d14	12.31	244	3624247	80.79	ppm	0.00
Spiked Amount 50.000			Recovery = 161.58%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.50	88	879798	79.14	ppm	95
3) Pyridine	2.80	79	2273153	81.09	ppm	100
4) N-Nitrosodimethylamine	2.76	42	790559	73.45	ppm	97
6) Indene	5.07	116	3089321	78.98	ppm	100
7) Cumene	4.29	105	4456078	81.05	ppm	99
9) Phenol	4.62	94	2760273	84.00	ppm	98
10) Aniline	4.64	93	2652544	81.32	ppm	99
11) bis(2-Chloroethyl)ether	4.69	93	1882357	80.17	ppm	97
12) 2-Chlorophenol	4.73	128	2078397	79.43	ppm	98
13) Decane	4.76	43	1701763	79.35	ppm	99
14) 1,3-Dichlorobenzene	4.84	146	2276578	79.53	ppm	100
15) 1,4-Dichlorobenzene	4.89	146	2285665	80.13	ppm	99

(#) = qualifier out of range (m) = manual integration
F156052.D MF6563.M Tue Apr 05 08:44:12 2016 RT1

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6563\F156052.D Vial: 3
Acq On : 4 Apr 2016 7:38 pm Operator: sarad
Sample : ic6563-80 Inst : MSF
Misc : op92661,ef6563,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 08:14:04 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 08:13:49 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
16) Benzyl alcohol	4.98	108	1343060	79.24 ppm	94
17) 1,2-Dichlorobenzene	5.01	146	2067345	78.43 ppm	99
18) Acetophenone	5.18	105	2310235	78.76 ppm	89
19) 2-Methylphenol	5.06	108	1787075	79.49 ppm	99
20) 2,2'-oxybis(1-Chloropropan	5.08	121	632570	78.76 ppm	93
21) 3&4-Methylphenol	5.17	108	1752503	79.28 ppm	99
22) n-Nitroso-di-n-propylamine	5.18	70	1313164	79.67 ppm	99
23) Hexachloroethane	5.26	201	713347	79.95 ppm	87
26) Nitrobenzene	5.30	77	2147480	79.67 ppm	96
27) Quinoline	6.07	129	4207237	80.69 ppm	99
28) Isophorone	5.47	82	3560554	79.75 ppm	97
29) 2-Nitrophenol	5.53	139	1072794	78.79 ppm	88
30) 2,4-Dimethylphenol	5.55	107	1867062	80.50 ppm	97
31) Benzoic acid	5.64	105	1754892	86.02 ppm	96
32) bis(2-Chloroethoxy)methane	5.62	93	2201059	79.78 ppm	99
33) 2,4-Dichlorophenol	5.70	162	1702377	79.77 ppm	98
34) 2,6-Dichlorophenol	5.86	162	1527098	79.28 ppm	98
35) 1,3,5-Trichlorobenzene	5.54	180	1612386	77.56 ppm	98
36) 1,2,4-Trichlorobenzene	5.76	180	1703831	79.32 ppm	99
37) 1,2,3-Trichlorobenzene	5.93	180	1653422	78.55 ppm	99
38) Naphthalene	5.82	128	5210846	78.87 ppm	98
39) 4-Chloroaniline	5.86	127	2195979	79.16 ppm	99
40) 2,3-Dichloroaniline	6.56	161	1755819	78.96 ppm	97
41) Caprolactam	6.13	55	872700	81.79 ppm	98
42) Hexachlorobutadiene	5.90	225	791240	79.50 ppm	98
43) 4-Chloro-3-methylphenol	6.21	107	1726269	80.86 ppm	100
44) 2-Methylnaphthalene	6.34	141	3113016	79.13 ppm	99
45) 1-Methylnaphthalene	6.42	141	3188993	78.46 ppm	99
46) Dimethylnaphthalene	6.87	156	3238997	78.90 ppm	99
48) Hexachlorocyclopentadiene	6.46	237	1690587	158.61 ppm	100
49) 2,4,6-Trichlorophenol	6.56	196	965555	78.51 ppm	98
50) 2,4,5-Trichlorophenol	6.59	196	1215427	82.04 ppm	98
52) 2-Chloronaphthalene	6.74	162	3523183	79.95 ppm	98
53) Biphenyl	6.72	154	4380247	79.25 ppm	96
54) 2-Nitroaniline	6.83	65	1137580	81.27 ppm	97
55) Dimethylphthalate	6.99	163	4095162	81.03 ppm	99
56) Acenaphthylene	7.13	152	5708953	81.13 ppm	98
57) 2,6-Dinitrotoluene	7.05	165	959498	80.78 ppm	99
58) 3-Nitroaniline	7.22	138	1200801	81.19 ppm	98
59) Acenaphthene	7.31	153	3530348	80.01 ppm	96
60) 2,4-Dinitrophenol	7.33	184	1162305	164.62 ppm	97
61) 4-Nitrophenol	7.38	109	605426	81.98 ppm	97
62) Dibenzofuran	7.50	168	4864463	80.12 ppm	99
63) 2,4-Dinitrotoluene	7.47	165	1324034	81.41 ppm	98
64) 2,3,4,6-Tetrachlorophenol	7.62	232	937948	81.64 ppm	96
65) Diethylphthalate	7.75	149	4058066	80.04 ppm	98
66) Fluorene	7.90	166	3521021	79.77 ppm	99
67) 4-Chlorophenyl-phenylether	7.89	204	1501482	79.02 ppm	98
68) 4-Nitroaniline	7.91	138	1214235	82.26 ppm	99

(#) = qualifier out of range (m) = manual integration

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6563\F156052.D Vial: 3
Acq On : 4 Apr 2016 7:38 pm Operator: sarad
Sample : ic6563-80 Inst : MSF
Misc : op92661,ef6563,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 08:14:04 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 08:13:49 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

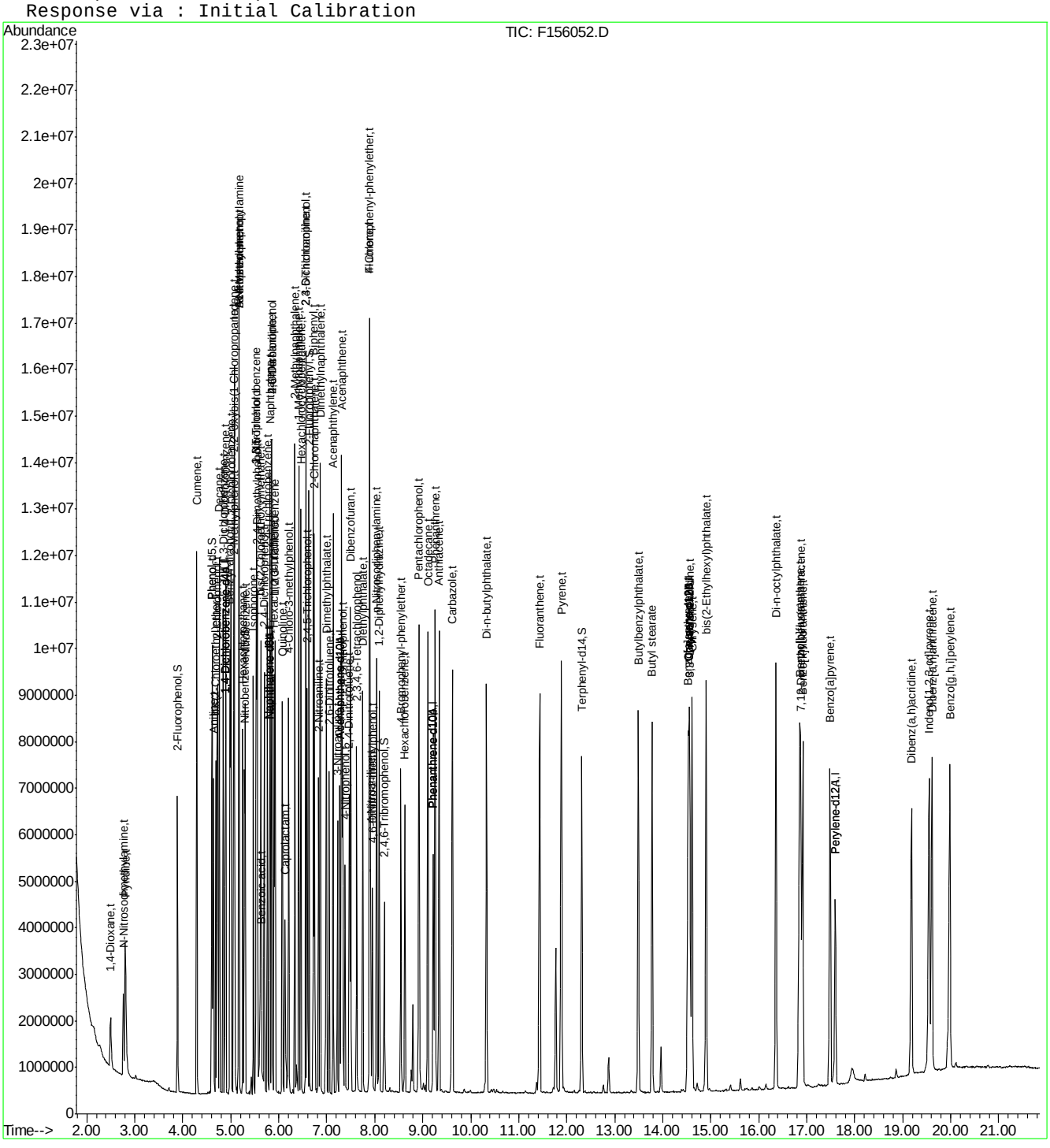
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
70)	4,6-Dinitro-2-methylphenol	7.95	198	785914	81.28	ppm	98
71)	n-Nitrosodiphenylamine	8.04	169	2958155	80.47	ppm	99
72)	1,2-Diphenylhydrazine	8.09	77	4213708	80.12	ppm	97
74)	4-Bromophenyl-phenylether	8.55	248	994002	81.06	ppm	97
75)	Hexachlorobenzene	8.63	284	945310	80.43	ppm	96
76)	Pentachlorophenol	8.92	266	1300970	159.47	ppm	96
77)	Phenanthrene	9.26	178	5752271	80.67	ppm	100
78)	Anthracene	9.34	178	5824392	79.84	ppm	100
79)	Carbazole	9.62	167	5550966	80.10	ppm	99
80)	Di-n-butylphthalate	10.33	149	7133269	80.93	ppm	99
81)	Fluoranthene	11.44	202	5981934	80.41	ppm	99
82)	Octadecane	9.11	57	2401312	78.54	ppm	97
84)	Pyrene	11.89	202	6287677	80.55	ppm	99
86)	Butylbenzylphthalate	13.49	149	3301200	81.88	ppm	98
87)	Butyl stearate	13.78	56	1791413	79.76	ppm	98
88)	Benzo[a]anthracene	14.53	228	5420519	81.47	ppm	100
89)	3,3'-Dichlorobenzidine	14.56	252	1990392	82.72	ppm	100
90)	Chrysene	14.61	228	5371405	81.40	ppm	100
91)	bis(2-Ethylhexyl)phthalate	14.91	149	4525592	80.25	ppm	100
93)	Di-n-octylphthalate	16.36	149	8079322	79.54	ppm	100
94)	Benzo[b]fluoranthene	16.85	252	5463606	80.05	ppm	98
95)	Benzo[k]fluoranthene	16.92	252	5260391	77.55	ppm	98
96)	Benzo[a]pyrene	17.49	252	5062293	80.00	ppm	100
97)	Indeno[1,2,3-cd]pyrene	19.55	276	4753743	80.82	ppm	99
98)	Dibenz(a,h)acridine	19.18	279	4103933	80.73	ppm	100
99)	Dibenz[a,h]anthracene	19.61	278	4734117	81.40	ppm	98
100)	7,12-Dimethylbenz(a)anthra	16.88	256	2332244	80.88	ppm	98
101)	Benzo[g,h,i]perylene	19.99	276	5078801	81.62	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed
F156052.D MF6563.M Tue Apr 05 08:44:12 2016 RT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6563\F156052.D Vial: 3
Acq On : 4 Apr 2016 7:38 pm Operator: sarad
Sample : ic6563-80 Inst : MSF
Misc : op92661,ef6563,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 5 8:44 2016 Quant Results File: MF6563.RES

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 08:42:42 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6563\F156053.D Vial: 4
Acq On : 4 Apr 2016 8:07 pm Operator: sarad
Sample : icc6563-50 Inst : MSF
Misc : op92661,ef6563,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 08:46:02 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 08:46:00 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.88	152	871983	40.00	ppm	0.00
24) Naphthalene-d8	5.80	136	3243593	40.00	ppm	0.00
47) Acenaphthene-d10	7.27	164	1949962	40.00	ppm	0.00
69) Phenanthrene-d10	9.22	188	3159351	40.00	ppm	0.00
83) Chrysene-d12	14.55	240	2526174	40.00	ppm	0.00
92) Perylene-d12	17.59	264	2502949	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.88	152	871983	40.00	ppm	0.00
112) Naphthalene-d8A	5.80	136	3243593	40.00	ppm	0.00
121) Acenaphthene-d10A	7.27	164	1949962	40.00	ppm	0.00
132) Phenanthrene-d10A	9.22	188	3159351	40.00	ppm	0.00
147) Chrysene-d12A	14.55	240	2526174	40.00	ppm	0.00
155) Perylene-d12A	17.59	264	2502949	40.00	ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.88	152	871983	40.00	ppm	0.00
161) Naphthalene-d8b	5.80	136	3243593	40.00	ppm	0.00
163) Acenaphthene-d10b	7.27	164	1949962	40.00	ppm	0.00
165) Phenanthrene-d10b	9.22	188	3159351	40.00	ppm	0.00
167) Chrysene-d12b	14.55	240	2526174	40.00	ppm	0.00
169) 1,4-Dichlorobenzene-d4c	4.88	152	871983	40.00	ppm	0.00
171) Naphthalene-d8c	5.80	136	3243593	40.00	ppm	0.00
176) Chrysene-d12c	14.55	240	2526174	40.00	ppm	0.00
178) Naphthalene-d8a	5.80	136	3243593	40.00	ppm	0.15
180) Chrysene-d12B	14.55	240	2526174	40.00	ppm	0.24
System Monitoring Compounds						
5) 2-Fluorophenol	3.89	112	1510498	51.35	ppm	0.00
Spiked Amount 50.000			Recovery	=	102.70%	
8) Phenol-d5	4.60	99	1817034	51.78	ppm	0.00
Spiked Amount 50.000			Recovery	=	103.56%	
25) Nitrobenzene-d5	5.28	82	1513443	51.96	ppm	0.00
Spiked Amount 50.000			Recovery	=	103.92%	
51) 2-Fluorobiphenyl	6.63	172	2889575	53.18	ppm	0.00
Spiked Amount 50.000			Recovery	=	106.36%	
73) 2,4,6-Tribromophenol	8.20	330	329797	52.51	ppm	0.00
Spiked Amount 50.000			Recovery	=	105.02%	
85) Terphenyl-d14	12.31	244	2605068	51.56	ppm	0.00
Spiked Amount 50.000			Recovery	=	103.12%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.49	88	666778	53.27	ppm	95
3) Pyridine	2.79	79	1603285	49.91	ppm	100
4) N-Nitrosodimethylamine	2.76	42	564202	48.48	ppm	99
6) Indene	5.07	116	2405863	54.15	ppm	100
7) Cumene	4.29	105	3327601	52.82	ppm	100
9) Phenol	4.61	94	1896418	49.61	ppm	93
10) Aniline	4.64	93	1964758	52.52	ppm	100
11) bis(2-Chloroethyl)ether	4.69	93	1387751	51.78	ppm	100
12) 2-Chlorophenol	4.72	128	1558857	52.35	ppm	100
13) Decane	4.76	43	1282990	52.59	ppm	100
14) 1,3-Dichlorobenzene	4.84	146	1715893	52.65	ppm	100
15) 1,4-Dichlorobenzene	4.89	146	1704630	52.36	ppm	100

(#) = qualifier out of range (m) = manual integration
F156053.D MF6563.M Tue Apr 05 08:47:21 2016 RT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6563\F156053.D Vial: 4
Acq On : 4 Apr 2016 8:07 pm Operator: sarad
Sample : icc6563-50 Inst : MSF
Misc : op92661,ef6563,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 08:46:02 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 08:46:00 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
16) Benzyl alcohol	4.98	108	999116	51.84	ppm	100
17) 1,2-Dichlorobenzene	5.01	146	1596681	53.45	ppm	100
18) Acetophenone	5.17	105	1790578	53.79	ppm	100
19) 2-Methylphenol	5.05	108	1349727	52.72	ppm	100
20) 2,2'-oxybis(1-Chloropropan	5.08	121	483612	53.06	ppm	100
21) 3&4-Methylphenol	5.17	108	1347184	53.62	ppm	100
22) n-Nitroso-di-n-propylamine	5.17	70	974183	51.88	ppm	100
23) Hexachloroethane	5.25	201	533108	52.39	ppm	100
26) Nitrobenzene	5.29	77	1579979	52.28	ppm	100
27) Quinoline	6.07	129	3039806	51.77	ppm	100
28) Isophorone	5.47	82	2628484	52.49	ppm	100
29) 2-Nitrophenol	5.52	139	809389	53.21	ppm	100
30) 2,4-Dimethylphenol	5.55	107	1338514	51.29	ppm	100
31) Benzoic acid	5.63	105	1201010	51.15	ppm	100
32) bis(2-Chloroethoxy)methane	5.62	93	1622282	52.42	ppm	100
33) 2,4-Dichlorophenol	5.70	162	1261730	52.70	ppm	100
34) 2,6-Dichlorophenol	5.86	162	1160131	53.80	ppm	100
35) 1,3,5-Trichlorobenzene	5.54	180	1261006	54.58	ppm	100
36) 1,2,4-Trichlorobenzene	5.76	180	1289139	53.60	ppm	100
37) 1,2,3-Trichlorobenzene	5.92	180	1268943	54.02	ppm	100
38) Naphthalene	5.82	128	4111706	55.69	ppm	100
39) 4-Chloroaniline	5.85	127	1678939	54.09	ppm	100
40) 2,3-Dichloroaniline	6.56	161	1346445	54.16	ppm	100
41) Caprolactam	6.12	55	613796	50.85	ppm	100
42) Hexachlorobutadiene	5.90	225	599845	53.79	ppm	100
43) 4-Chloro-3-methylphenol	6.20	107	1251313	52.01	ppm	100
44) 2-Methylnaphthalene	6.33	141	2358934	53.60	ppm	100
45) 1-Methylnaphthalene	6.41	141	2439588	53.80	ppm	100
46) Dimethylnaphthalene	6.86	156	2476399	53.97	ppm	100
48) Hexachlorocyclopentadiene	6.46	237	1305240	108.31	ppm	100
49) 2,4,6-Trichlorophenol	6.56	196	762268	55.01	ppm	100
50) 2,4,5-Trichlorophenol	6.59	196	869436	51.31	ppm	100
52) 2-Chloronaphthalene	6.74	162	2649514	53.04	ppm	100
53) Biphenyl	6.72	154	3366639	53.89	ppm	100
54) 2-Nitroaniline	6.82	65	814469	51.05	ppm	100
55) Dimethylphthalate	6.99	163	3008660	52.28	ppm	100
56) Acenaphthylene	7.13	152	4284263	53.44	ppm	100
57) 2,6-Dinitrotoluene	7.05	165	698403	51.69	ppm	100
58) 3-Nitroaniline	7.22	138	861937	51.14	ppm	100
59) Acenaphthene	7.31	153	2658055	53.13	ppm	100
60) 2,4-Dinitrophenol	7.32	184	800604	99.05	ppm	100
61) 4-Nitrophenol	7.37	109	412116	48.92	ppm	100
62) Dibenzofuran	7.49	168	3640302	52.85	ppm	100
63) 2,4-Dinitrotoluene	7.46	165	948033	51.11	ppm	100
64) 2,3,4,6-Tetrachlorophenol	7.62	232	680751	51.90	ppm	100
65) Diethylphthalate	7.75	149	3011705	52.38	ppm	100
66) Fluorene	7.89	166	2684681	53.69	ppm	100
67) 4-Chlorophenyl-phenylether	7.89	204	1162378	54.17	ppm	100
68) 4-Nitroaniline	7.91	138	850105	50.32	ppm	100

(#) = qualifier out of range (m) = manual integration

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6563\F156053.D Vial: 4
Acq On : 4 Apr 2016 8:07 pm Operator: sarad
Sample : icc6563-50 Inst : MSF
Misc : op92661,ef6563,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 08:46:02 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 08:46:00 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
70)	4,6-Dinitro-2-methylphenol	7.94	198	547100	50.35	ppm	100
71)	n-Nitrosodiphenylamine	8.04	169	2171178	52.74	ppm	100
72)	1,2-Diphenylhydrazine	8.09	77	3056349	51.97	ppm	100
74)	4-Bromophenyl-phenylether	8.54	248	721480	52.41	ppm	100
75)	Hexachlorobenzene	8.63	284	694643	52.78	ppm	100
76)	Pentachlorophenol	8.92	266	969858	106.48	ppm	100
77)	Phenanthrene	9.25	178	4222158	52.83	ppm	100
78)	Anthracene	9.34	178	4326567	53.10	ppm	100
79)	Carbazole	9.61	167	4045902	52.22	ppm	100
80)	Di-n-butylphthalate	10.33	149	5229224	52.88	ppm	100
81)	Fluoranthene	11.43	202	4365246	52.41	ppm	100
82)	Octadecane	9.10	57	1802615	53.07	ppm	100
84)	Pyrene	11.88	202	4516342	51.43	ppm	100
86)	Butylbenzylphthalate	13.49	149	2294077	50.29	ppm	100
87)	Butyl stearate	13.77	56	1294518	51.40	ppm	100
88)	Benzo[a]anthracene	14.53	228	3822200	50.86	ppm	100
89)	3,3'-Dichlorobenzidine	14.56	252	1356731	49.67	ppm	100
90)	Chrysene	14.61	228	3796706	50.96	ppm	100
91)	bis(2-Ethylhexyl)phthalate	14.90	149	3222419	50.85	ppm	100
93)	Di-n-octylphthalate	16.35	149	5703091	52.56	ppm	100
94)	Benzo[b]fluoranthene	16.84	252	3787237	51.78	ppm	98
95)	Benzo[k]fluoranthene	16.91	252	3710262	52.01	ppm	98
96)	Benzo[a]pyrene	17.48	252	3518005	52.01	ppm	100
97)	Indeno[1,2,3-cd]pyrene	19.54	276	3276791	51.83	ppm	100
98)	Dibenz(a,h)acridine	19.18	279	2819743	51.70	ppm	100
99)	Dibenz[a,h]anthracene	19.60	278	3172655	50.59	ppm	100
100)	7,12-Dimethylbenz(a)anthra	16.87	256	1624656	52.42	ppm	100
101)	Benzo[g,h,i]perylene	19.98	276	3454887	51.57	ppm	100

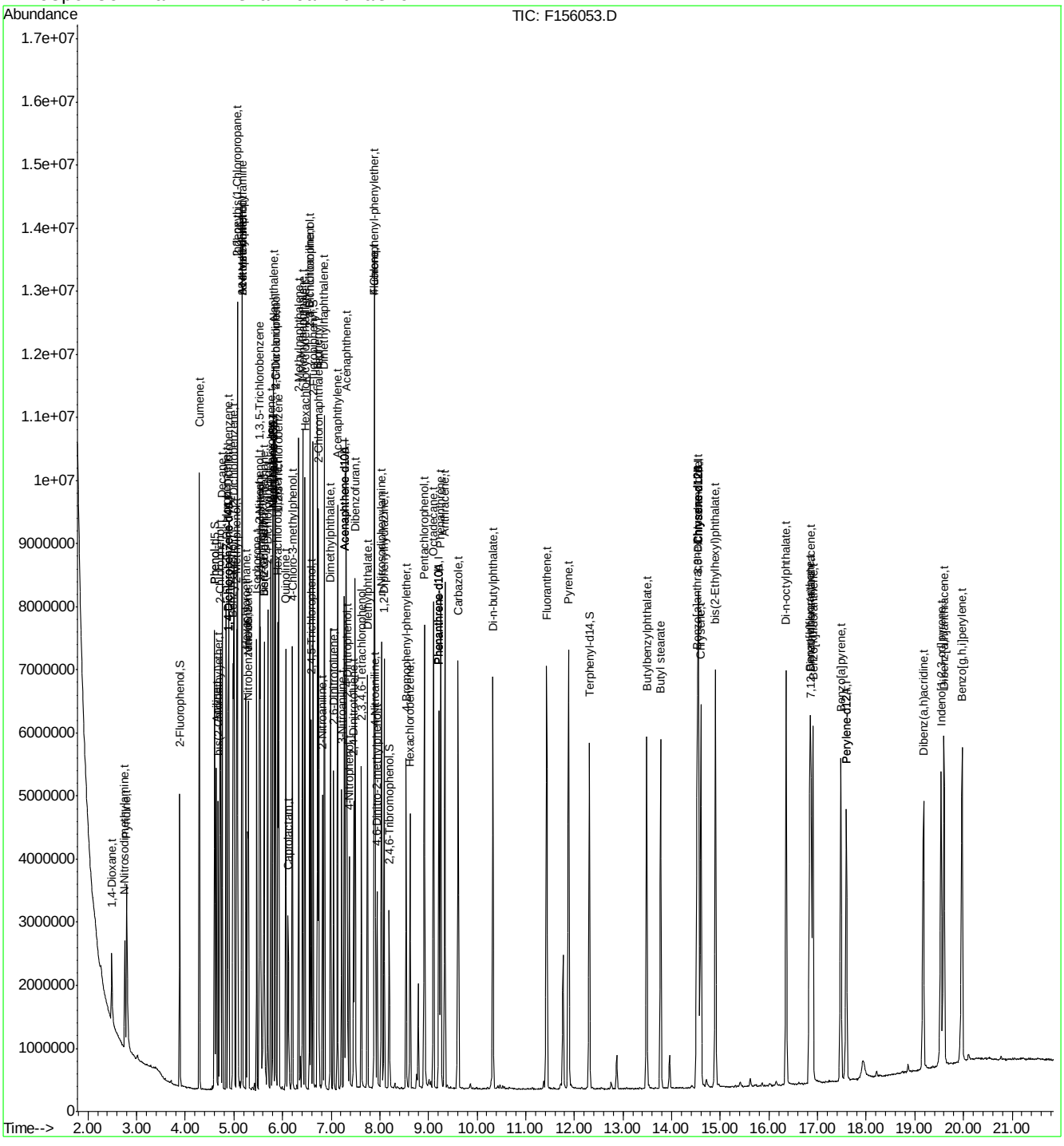
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6563\F156053.D Vial: 4
Acq On : 4 Apr 2016 8:07 pm Operator: sarad
Sample : icc6563-50 Inst : MSF
Misc : op92661,ef6563,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 5 8:47 2016 Quant Results File: MF6563.RES

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 08:46:00 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6563\F156054.D Vial: 5
Acq On : 4 Apr 2016 8:37 pm Operator: sarad
Sample : ic6563-25 Inst : MSF
Misc : op92661,ef6563,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 08:51:15 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 08:51:13 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.88	152	863972	40.00 ppm	0.00
24) Naphthalene-d8	5.80	136	3172306	40.00 ppm	0.00
47) Acenaphthene-d10	7.27	164	1883448	40.00 ppm	0.00
69) Phenanthrene-d10	9.22	188	3035235	40.00 ppm	0.00
83) Chrysene-d12	14.54	240	2628411	40.00 ppm	0.00
92) Perylene-d12	17.59	264	2496395	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.88	152	863972	40.00 ppm	0.00
112) Naphthalene-d8A	5.80	136	3172306	40.00 ppm	0.00
121) Acenaphthene-d10A	7.27	164	1883448	40.00 ppm	0.00
132) Phenanthrene-d10A	9.22	188	3035235	40.00 ppm	0.00
147) Chrysene-d12A	14.54	240	2628411	40.00 ppm	0.00
155) Perylene-d12A	17.59	264	2496395	40.00 ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.88	152	863972	40.00 ppm	0.00
161) Naphthalene-d8b	5.80	136	3172306	40.00 ppm	0.00
163) Acenaphthene-d10b	7.27	164	1883448	40.00 ppm	0.00
165) Phenanthrene-d10b	9.22	188	3035235	40.00 ppm	0.00
167) Chrysene-d12b	14.54	240	2628411	40.00 ppm	0.00
169) 1,4-Dichlorobenzene-d4c	4.88	152	863972	40.00 ppm	0.00
171) Naphthalene-d8c	5.80	136	3172306	40.00 ppm	0.00
176) Chrysene-d12c	14.54	240	2628411	40.00 ppm	0.00
178) Naphthalene-d8a	5.80	136	3172306	40.00 ppm	0.15
180) Chrysene-d12B	14.54	240	2628411	40.00 ppm	0.24
System Monitoring Compounds					
5) 2-Fluorophenol	3.88	112	752440	25.82 ppm	0.00
Spiked Amount 50.000			Recovery = 51.64%		
8) Phenol-d5	4.60	99	912194	26.24 ppm	0.00
Spiked Amount 50.000			Recovery = 52.48%		
25) Nitrobenzene-d5	5.28	82	742392	26.06 ppm	0.00
Spiked Amount 50.000			Recovery = 52.12%		
51) 2-Fluorobiphenyl	6.63	172	1516539	28.90 ppm	0.00
Spiked Amount 50.000			Recovery = 57.80%		
73) 2,4,6-Tribromophenol	8.19	330	156688	25.97 ppm	0.00
Spiked Amount 50.000			Recovery = 51.94%		
85) Terphenyl-d14	12.30	244	1350753	25.70 ppm	0.00
Spiked Amount 50.000			Recovery = 51.40%		
Target Compounds					Qvalue
2) 1,4-Dioxane	2.49	88	300998	24.02 ppm	92
3) Pyridine	2.79	79	803322	25.24 ppm	97
4) N-Nitrosodimethylamine	2.76	42	267516	24.06 ppm	91
6) Indene	5.07	116	1283677	29.16 ppm	99
7) Cumene	4.29	105	1729204	27.70 ppm	99
9) Phenol	4.61	94	960339	25.36 ppm	88
10) Aniline	4.63	93	1040023	28.06 ppm	99
11) bis(2-Chloroethyl)ether	4.68	93	693596	26.12 ppm	98
12) 2-Chlorophenol	4.72	128	794091	26.91 ppm	97
13) Decane	4.76	43	685617	28.36 ppm	98
14) 1,3-Dichlorobenzene	4.84	146	888469	27.51 ppm	98
15) 1,4-Dichlorobenzene	4.89	146	886953	27.50 ppm	97

(#) = qualifier out of range (m) = manual integration
F156054.D MF6563.M Tue Apr 05 08:55:03 2016 RT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6563\F156054.D Vial: 5
Acq On : 4 Apr 2016 8:37 pm Operator: sarad
Sample : ic6563-25 Inst : MSF
Misc : op92661,ef6563,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 08:51:15 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 08:51:13 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
16)	Benzyl alcohol	4.97	108	502295	26.30	ppm	98
17)	1,2-Dichlorobenzene	5.01	146	840153	28.38	ppm	98
18)	Acetophenone	5.17	105	971192	29.45	ppm	89
19)	2-Methylphenol	5.05	108	686123	27.05	ppm	97
20)	2,2'-oxybis(1-Chloropropan	5.08	121	246770	27.32	ppm	99
21)	3&4-Methylphenol	5.16	108	709224	28.49	ppm	99
22)	n-Nitroso-di-n-propylamine	5.17	70	507230	27.26	ppm	99
23)	Hexachloroethane	5.25	201	272875	27.06	ppm	96
26)	Nitrobenzene	5.29	77	787089	26.64	ppm	95
27)	Quinoline	6.06	129	1538109	26.79	ppm	98
28)	Isophorone	5.47	82	1342384	27.41	ppm	98
29)	2-Nitrophenol	5.52	139	416350	27.99	ppm	96
30)	2,4-Dimethylphenol	5.55	107	634238	24.85	ppm	98
31)	Benzoic acid	5.61	105	560004	24.39	ppm	94
32)	bis(2-Chloroethoxy)methane	5.62	93	828882	27.39	ppm	99
33)	2,4-Dichlorophenol	5.70	162	644033	27.51	ppm	97
34)	2,6-Dichlorophenol	5.86	162	612096	29.02	ppm	98
35)	1,3,5-Trichlorobenzene	5.54	180	673723	29.81	ppm	99
36)	1,2,4-Trichlorobenzene	5.76	180	660441	28.08	ppm	98
37)	1,2,3-Trichlorobenzene	5.92	180	642498	27.96	ppm	100
38)	Naphthalene	5.82	128	2197280	30.43	ppm	98
39)	4-Chloroaniline	5.85	127	899321	29.62	ppm	97
40)	2,3-Dichloroaniline	6.56	161	746079	30.69	ppm	99
41)	Caprolactam	6.10	55	301563	25.55	ppm	98
42)	Hexachlorobutadiene	5.90	225	317763	29.13	ppm	99
43)	4-Chloro-3-methylphenol	6.20	107	625695	26.59	ppm	98
44)	2-Methylnaphthalene	6.33	141	1231532	28.61	ppm	99
45)	1-Methylnaphthalene	6.41	141	1267730	28.59	ppm	99
46)	Dimethylnaphthalene	6.86	156	1299211	28.95	ppm	98
48)	Hexachlorocyclopentadiene	6.46	237	688873	59.18	ppm	99
49)	2,4,6-Trichlorophenol	6.56	196	398885	29.80	ppm	97
50)	2,4,5-Trichlorophenol	6.59	196	444742	27.13	ppm	99
52)	2-Chloronaphthalene	6.74	162	1358812	28.16	ppm	97
53)	Biphenyl	6.72	154	1783507	29.56	ppm	99
54)	2-Nitroaniline	6.82	65	394873	25.62	ppm	91
55)	Dimethylphthalate	6.98	163	1540455	27.71	ppm	99
56)	Acenaphthylene	7.13	152	2244918	28.99	ppm	99
57)	2,6-Dinitrotoluene	7.05	165	338348	25.93	ppm	91
58)	3-Nitroaniline	7.21	138	432182	26.55	ppm	97
59)	Acenaphthene	7.30	153	1404418	29.06	ppm	99
60)	2,4-Dinitrophenol	7.32	184	362949	46.49	ppm	85
61)	4-Nitrophenol	7.37	109	201885	25.03	ppm	97
62)	Dibenzofuran	7.49	168	1900959	28.57	ppm	97
63)	2,4-Dinitrotoluene	7.46	165	472912	26.39	ppm	98
64)	2,3,4,6-Tetrachlorophenol	7.62	232	342001	27.00	ppm	97
65)	Diethylphthalate	7.74	149	1515673	27.29	ppm	99
66)	Fluorene	7.89	166	1468152	30.40	ppm	100
67)	4-Chlorophenyl-phenylether	7.89	204	635326	30.66	ppm	98
68)	4-Nitroaniline	7.90	138	421135	25.81	ppm	98

(#) = qualifier out of range (m) = manual integration

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6563\F156054.D Vial: 5
Acq On : 4 Apr 2016 8:37 pm Operator: sarad
Sample : ic6563-25 Inst : MSF
Misc : op92661,ef6563,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 08:51:15 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 08:51:13 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

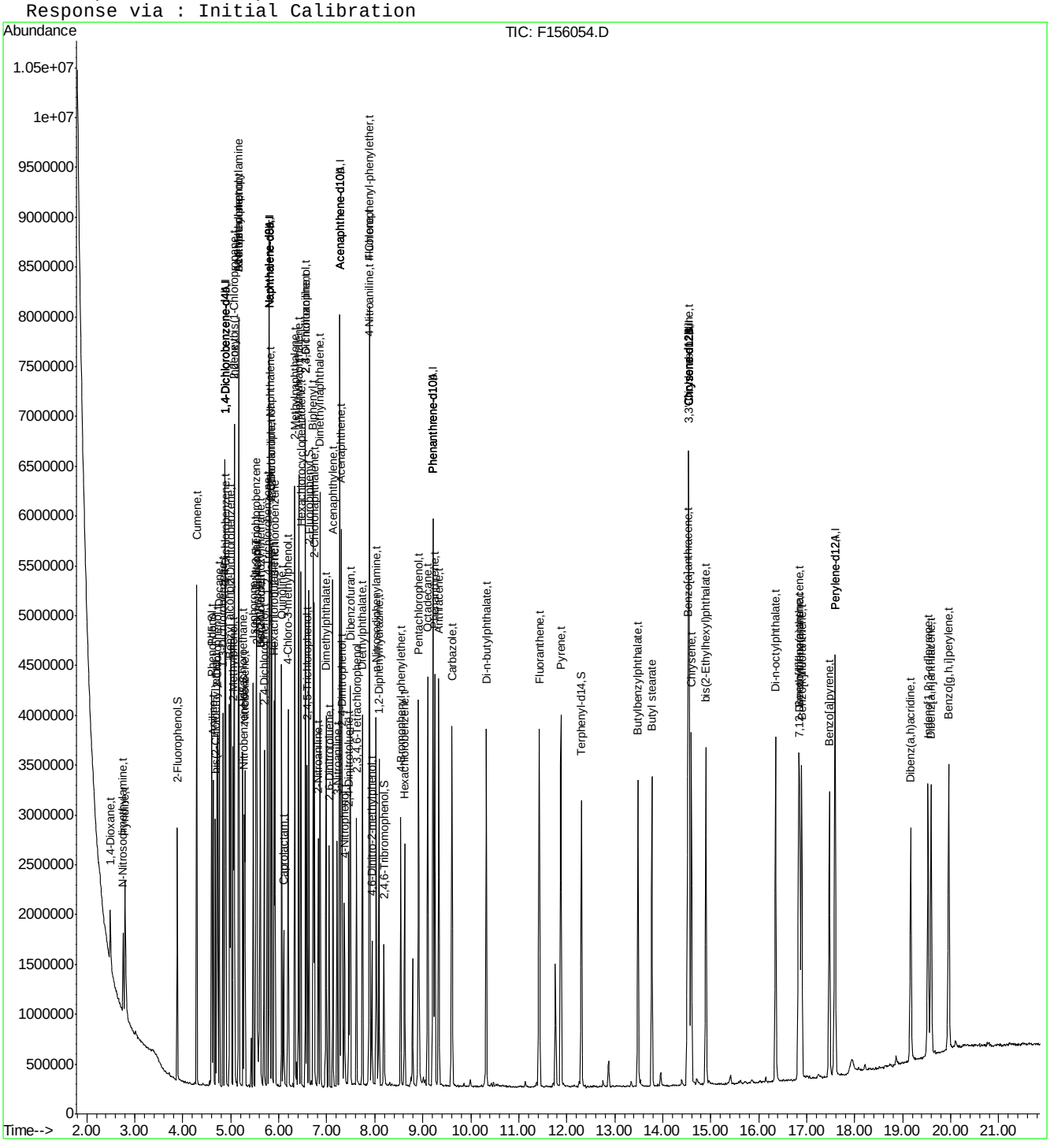
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
70)	4,6-Dinitro-2-methylphenol	7.94	198	246086	23.58	ppm	97
71)	n-Nitrosodiphenylamine	8.03	169	1095544	27.70	ppm	98
72)	1,2-Diphenylhydrazine	8.09	77	1514394	26.80	ppm	97
74)	4-Bromophenyl-phenylether	8.54	248	374041	28.28	ppm	96
75)	Hexachlorobenzene	8.62	284	344952	27.28	ppm	95
76)	Pentachlorophenol	8.91	266	505532	57.77	ppm	98
77)	Phenanthrene	9.25	178	2198868	28.64	ppm	98
78)	Anthracene	9.33	178	2208822	28.27	ppm	100
79)	Carbazole	9.61	167	2104374	28.33	ppm	98
80)	Di-n-butylphthalate	10.32	149	2655403	27.95	ppm	100
81)	Fluoranthene	11.43	202	2205706	27.57	ppm	100
82)	Octadecane	9.10	57	918139	28.14	ppm	99
84)	Pyrene	11.88	202	2354708	25.79	ppm	99
86)	Butylbenzylphthalate	13.48	149	1160576	24.47	ppm	99
87)	Butyl stearate	13.77	56	647006	24.74	ppm	98
88)	Benzo[a]anthracene	14.52	228	1967547	25.14	ppm	99
89)	3,3'-Dichlorobenzidine	14.55	252	702116	24.70	ppm	98
90)	Chrysene	14.60	228	1973288	25.50	ppm	100
91)	bis(2-Ethylhexyl)phthalate	14.89	149	1641094	24.90	ppm	100
93)	Di-n-octylphthalate	16.35	149	2891187	26.74	ppm	100
94)	Benzo[b]fluoranthene	16.83	252	1957203	27.04	ppm	99
95)	Benzo[k]fluoranthene	16.89	252	1936392	27.42	ppm	98
96)	Benzo[a]pyrene	17.47	252	1798129	26.71	ppm	99
97)	Indeno[1,2,3-cd]pyrene	19.53	276	1680946	26.64	ppm	96
98)	Dibenz(a,h)acridine	19.17	279	1452033	26.68	ppm	99
99)	Dibenz[a,h]anthracene	19.59	278	1627629	26.33	ppm	99
100)	7,12-Dimethylbenz(a)anthra	16.86	256	823820	26.64	ppm	99
101)	Benzo[g,h,i]perylene	19.96	276	1813089	27.19	ppm	98

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6563\F156054.D Vial: 5
Acq On : 4 Apr 2016 8:37 pm Operator: sarad
Sample : ic6563-25 Inst : MSF
Misc : op92661,ef6563,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 5 8:54 2016 Quant Results File: MF6563.RES

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 08:51:13 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6563\F156055.D Vial: 6
Acq On : 4 Apr 2016 9:06 pm Operator: sarad
Sample : ic6563-10 Inst : MSF
Misc : op92661,ef6563,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 08:14:11 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 08:13:49 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.88	152	905594	40.00 ppm	0.00
24) Naphthalene-d8	5.80	136	3313258	40.00 ppm	0.00
47) Acenaphthene-d10	7.27	164	1977563	40.00 ppm	0.00
69) Phenanthrene-d10	9.21	188	3195086	40.00 ppm	0.00
83) Chrysene-d12	14.54	240	2841277	40.00 ppm	-0.01
92) Perylene-d12	17.59	264	2625091	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.88	152	905594	40.00 ppm	0.00
112) Naphthalene-d8A	5.80	136	3313258	40.00 ppm	0.00
121) Acenaphthene-d10A	7.27	164	1977563	40.00 ppm	0.00
132) Phenanthrene-d10A	9.21	188	3195086	40.00 ppm	0.00
147) Chrysene-d12A	14.54	240	2841277	40.00 ppm	-0.01
155) Perylene-d12A	17.59	264	2625091	40.00 ppm	-0.11
159) 1,4-Dichlorobenzene-d4b	4.88	152	905594	40.00 ppm	0.00
161) Naphthalene-d8b	5.80	136	3313258	40.00 ppm	0.00
163) Acenaphthene-d10b	7.27	164	1977563	40.00 ppm	0.00
165) Phenanthrene-d10b	9.21	188	3195086	40.00 ppm	0.00
167) Chrysene-d12b	14.54	240	2841277	40.00 ppm	-0.01
169) 1,4-Dichlorobenzene-d4c	4.88	152	905594	40.00 ppm	0.00
171) Naphthalene-d8c	5.80	136	3313258	40.00 ppm	0.00
176) Chrysene-d12c	14.54	240	2841277	40.00 ppm	-0.01
178) Naphthalene-d8a	5.80	136	3313258	40.00 ppm	0.15
180) Chrysene-d12B	14.54	240	2841277	40.00 ppm	0.23
System Monitoring Compounds					
5) 2-Fluorophenol	3.88	112	318354	10.42 ppm	0.00
Spiked Amount 50.000			Recovery = 20.84%		
8) Phenol-d5	4.60	99	398798	10.95 ppm	0.00
Spiked Amount 50.000			Recovery = 21.90%		
25) Nitrobenzene-d5	5.28	82	320247	10.73 ppm	0.00
Spiked Amount 50.000			Recovery = 21.46%		
51) 2-Fluorobiphenyl	6.63	172	673076	12.20 ppm	0.00
Spiked Amount 50.000			Recovery = 24.40%		
73) 2,4,6-Tribromophenol	8.19	330	66985	10.52 ppm	0.00
Spiked Amount 50.000			Recovery = 21.04%		
85) Terphenyl-d14	12.30	244	580883	10.26 ppm	0.00
Spiked Amount 50.000			Recovery = 20.52%		
Target Compounds					Qvalue
2) 1,4-Dioxane	2.49	88	156183	11.86 ppm	97
3) Pyridine	2.80	79	349091	10.51 ppm	99
4) N-Nitrosodimethylamine	2.76	42	113073	8.87 ppm	97
6) Indene	5.07	116	570276	12.31 ppm	100
7) Cumene	4.29	105	746757	11.46 ppm	99
9) Phenol	4.61	94	411742	10.58 ppm	94
10) Aniline	4.63	93	477431	12.36 ppm	99
11) bis(2-Chloroethyl)ether	4.68	93	302414	10.87 ppm	98
12) 2-Chlorophenol	4.72	128	344498	11.11 ppm	96
13) Decane	4.76	43	298455	11.75 ppm	97
14) 1,3-Dichlorobenzene	4.84	146	391842	11.55 ppm	97
15) 1,4-Dichlorobenzene	4.89	146	393136	11.63 ppm	99

(#) = qualifier out of range (m) = manual integration
F156055.D MF6563.M Tue Apr 05 08:56:35 2016 RT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6563\F156055.D Vial: 6
Acq On : 4 Apr 2016 9:06 pm Operator: sarad
Sample : ic6563-10 Inst : MSF
Misc : op92661,ef6563,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 08:14:11 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 08:13:49 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
16)	Benzyl alcohol	4.97	108	222777	11.09	ppm		97
17)	1,2-Dichlorobenzene	5.00	146	367366	11.76	ppm		98
18)	Acetophenone	5.17	105	439501	12.65	ppm		95
19)	2-Methylphenol	5.05	108	299562	11.25	ppm		99
20)	2,2'-oxybis(1-Chloropropan	5.08	121	107662	11.31	ppm		96
21)	3&4-Methylphenol	5.16	108	316195	12.07	ppm		99
22)	n-Nitroso-di-n-propylamine	5.17	70	227077	11.63	ppm		98
23)	Hexachloroethane	5.25	201	116924	11.06	ppm		95
26)	Nitrobenzene	5.29	77	340147	11.00	ppm		92
27)	Quinoline	6.06	129	667853	11.17	ppm		99
28)	Isophorone	5.47	82	580700	11.34	ppm		100
29)	2-Nitrophenol	5.52	139	179684	11.51	ppm		92
30)	2,4-Dimethylphenol	5.55	107	267013	10.04	ppm		96
31)	Benzoic acid	5.59	105	225890	9.65	ppm	#	74
32)	bis(2-Chloroethoxy)methane	5.62	93	364338	11.51	ppm		98
33)	2,4-Dichlorophenol	5.69	162	279178	11.41	ppm		97
34)	2,6-Dichlorophenol	5.86	162	271818	12.30	ppm		96
35)	1,3,5-Trichlorobenzene	5.54	180	299476	12.56	ppm		97
36)	1,2,4-Trichlorobenzene	5.76	180	289266	11.74	ppm		99
37)	1,2,3-Trichlorobenzene	5.92	180	280336	11.61	ppm		99
38)	Naphthalene	5.82	128	990453	13.07	ppm		98
39)	4-Chloroaniline	5.85	127	411341	12.93	ppm		96
40)	2,3-Dichloroaniline	6.56	161	341826	13.40	ppm		97
41)	Caprolactam	6.09	55	128773	10.52	ppm		95
42)	Hexachlorobutadiene	5.90	225	137961	12.09	ppm		97
43)	4-Chloro-3-methylphenol	6.19	107	271558	11.09	ppm		99
44)	2-Methylnaphthalene	6.33	141	549250	12.17	ppm		98
45)	1-Methylnaphthalene	6.41	141	562852	12.07	ppm		98
46)	Dimethylnaphthalene	6.86	156	568349	12.07	ppm		97
48)	Hexachlorocyclopentadiene	6.46	237	295404	24.10	ppm		100
49)	2,4,6-Trichlorophenol	6.56	196	183214	12.96	ppm		97
50)	2,4,5-Trichlorophenol	6.58	196	189673	11.13	ppm		98
52)	2-Chloronaphthalene	6.74	162	606809	11.97	ppm		99
53)	Biphenyl	6.72	154	783724	12.33	ppm		98
54)	2-Nitroaniline	6.82	65	168174	10.45	ppm		93
55)	Dimethylphthalate	6.98	163	669711	11.52	ppm		99
56)	Acenaphthylene	7.13	152	984619	12.17	ppm		98
57)	2,6-Dinitrotoluene	7.04	165	144184	10.56	ppm		99
58)	3-Nitroaniline	7.21	138	181727	10.69	ppm		93
59)	Acenaphthene	7.30	153	609405	12.01	ppm		99
60)	2,4-Dinitrophenol	7.32	184	130327	16.05	ppm		78
61)	4-Nitrophenol	7.36	109	80472	9.48	ppm		94
62)	Dibenzofuran	7.49	168	843891	12.09	ppm		98
63)	2,4-Dinitrotoluene	7.46	165	195395	10.45	ppm		97
64)	2,3,4,6-Tetrachlorophenol	7.62	232	145578	11.02	ppm		97
65)	Diethylphthalate	7.74	149	649860	11.15	ppm		98
66)	Fluorene	7.89	166	666627	13.13	ppm		97
67)	4-Chlorophenyl-phenylether	7.89	204	292638	13.39	ppm		95
68)	4-Nitroaniline	7.89	138	183728	10.82	ppm		96

(#) = qualifier out of range (m) = manual integration

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6563\F156055.D Vial: 6
Acq On : 4 Apr 2016 9:06 pm Operator: sarad
Sample : ic6563-10 Inst : MSF
Misc : op92661,ef6563,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 08:14:11 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 08:13:49 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
70)	4,6-Dinitro-2-methylphenol	7.93	198	92062	8.42	ppm	96
71)	n-Nitrosodiphenylamine	8.03	169	476719	11.47	ppm	99
72)	1,2-Diphenylhydrazine	8.08	77	657054	11.05	ppm	98
74)	4-Bromophenyl-phenylether	8.54	248	158586	11.44	ppm	96
75)	Hexachlorobenzene	8.62	284	153731	11.57	ppm	97
76)	Pentachlorophenol	8.91	266	205675	22.30	ppm	95
77)	Phenanthrene	9.25	178	978306	12.14	ppm	98
78)	Anthracene	9.33	178	967667	11.73	ppm	99
79)	Carbazole	9.61	167	912387	11.65	ppm	99
80)	Di-n-butylphthalate	10.32	149	1128842	11.33	ppm	100
81)	Fluoranthene	11.42	202	946511	11.26	ppm	100
82)	Octadecane	9.10	57	398210	11.52	ppm	98
84)	Pyrene	11.87	202	1015323	10.30	ppm	99
86)	Butylbenzylphthalate	13.48	149	485601	9.54	ppm	97
87)	Butyl stearate	13.77	56	271564	9.58	ppm	99
88)	Benzo[a]anthracene	14.52	228	842177	10.03	ppm	99
89)	3,3'-Dichlorobenzidine	14.55	252	303885	10.00	ppm	98
90)	Chrysene	14.59	228	857826	10.30	ppm	100
91)	bis(2-Ethylhexyl)phthalate	14.89	149	683429	9.60	ppm	97
93)	Di-n-octylphthalate	16.35	149	1196588	10.50	ppm	99
94)	Benzo[b]fluoranthene	16.83	252	846094	11.04	ppm	98
95)	Benzo[k]fluoranthene	16.89	252	829903	10.90	ppm	99
96)	Benzo[a]pyrene	17.46	252	754900	10.63	ppm	98
97)	Indeno[1,2,3-cd]pyrene	19.52	276	702662	10.64	ppm	94
98)	Dibenz(a,h)acridine	19.16	279	610277	10.70	ppm	100
99)	Dibenz[a,h]anthracene	19.58	278	696447	10.67	ppm	97
100)	7,12-Dimethylbenz(a)anthra	16.84	256	325014	10.04	ppm	99
101)	Benzo[g,h,i]perylene	19.95	276	764066	10.94	ppm	97

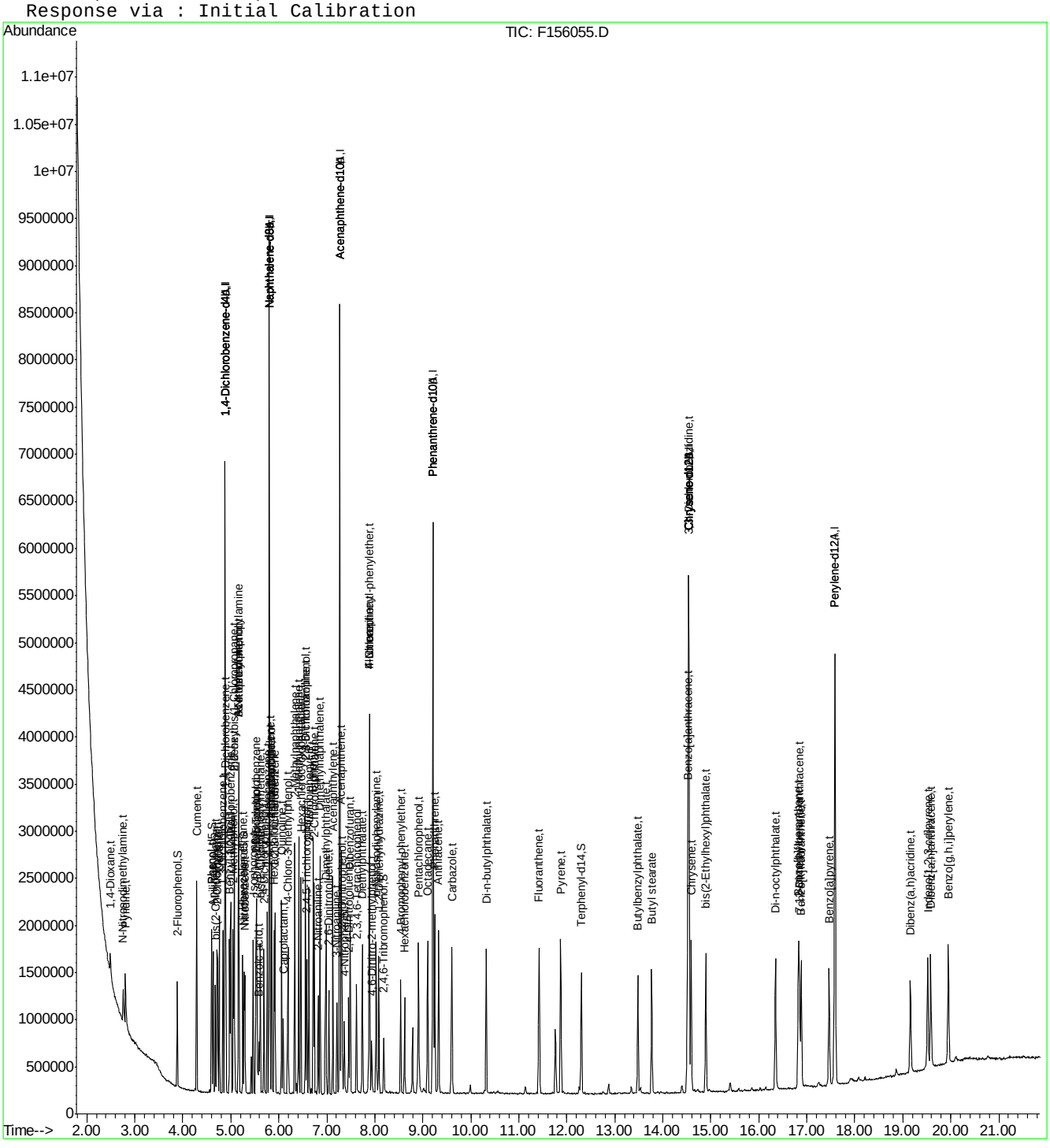
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6563\F156055.D Vial: 6
Acq On : 4 Apr 2016 9:06 pm Operator: sarad
Sample : ic6563-10 Inst : MSF
Misc : op92661,ef6563,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 5 8:56 2016 Quant Results File: MF6563.RES

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 08:55:08 2016
Response via : Initial Calibration



SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6563\F156056.D Vial: 7
Acq On : 4 Apr 2016 9:35 pm Operator: sarad
Sample : ic6563-5 Inst : MSF
Misc : op92661,ef6563,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 08:14:13 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 08:13:49 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.88	152	931507	40.00	ppm	0.00
24) Naphthalene-d8	5.80	136	3436758	40.00	ppm	0.00
47) Acenaphthene-d10	7.27	164	2021007	40.00	ppm	0.00
69) Phenanthrene-d10	9.21	188	3225697	40.00	ppm	0.00
83) Chrysene-d12	14.54	240	2893026	40.00	ppm	-0.01
92) Perylene-d12	17.59	264	2659500	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.88	152	931507	40.00	ppm	0.00
112) Naphthalene-d8A	5.80	136	3436758	40.00	ppm	0.00
121) Acenaphthene-d10A	7.27	164	2021007	40.00	ppm	0.00
132) Phenanthrene-d10A	9.21	188	3225697	40.00	ppm	0.00
147) Chrysene-d12A	14.54	240	2893026	40.00	ppm	-0.01
155) Perylene-d12A	17.59	264	2659500	40.00	ppm	-0.11
159) 1,4-Dichlorobenzene-d4b	4.88	152	931507	40.00	ppm	0.00
161) Naphthalene-d8b	5.80	136	3436758	40.00	ppm	0.00
163) Acenaphthene-d10b	7.27	164	2021007	40.00	ppm	0.00
165) Phenanthrene-d10b	9.21	188	3225697	40.00	ppm	0.00
167) Chrysene-d12b	14.54	240	2893026	40.00	ppm	-0.01
169) 1,4-Dichlorobenzene-d4c	4.88	152	931507	40.00	ppm	0.00
171) Naphthalene-d8c	5.80	136	3436758	40.00	ppm	0.00
176) Chrysene-d12c	14.54	240	2893026	40.00	ppm	-0.01
178) Naphthalene-d8a	5.80	136	3436758	40.00	ppm	0.15
180) Chrysene-d12B	14.54	240	2893026	40.00	ppm	0.23

System Monitoring Compounds						
5) 2-Fluorophenol	3.88	112	171255	5.45	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.90%	
8) Phenol-d5	4.59	99	207335	5.53	ppm	0.00
Spiked Amount 50.000			Recovery	=	11.06%	
25) Nitrobenzene-d5	5.28	82	169051	5.46	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.92%	
51) 2-Fluorobiphenyl	6.63	172	352630	6.25	ppm	0.00
Spiked Amount 50.000			Recovery	=	12.50%	
73) 2,4,6-Tribromophenol	8.18	330	34343	5.34	ppm	-0.01
Spiked Amount 50.000			Recovery	=	10.68%	
85) Terphenyl-d14	12.30	244	301180	5.22	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.44%	

Target Compounds						Qvalue
2) 1,4-Dioxane	2.49	88	87752	6.48	ppm	95
3) Pyridine	2.81	79	176084	5.15	ppm	98
4) N-Nitrosodimethylamine	2.76	42	63395	4.83	ppm	96
6) Indene	5.07	116	305528	6.41	ppm	99
7) Cumene	4.29	105	397141	5.93	ppm	97
9) Phenol	4.61	94	216569	5.41	ppm	93
10) Aniline	4.63	93	257505	6.48	ppm	92
11) bis(2-Chloroethyl)ether	4.68	93	162439	5.68	ppm	99
12) 2-Chlorophenol	4.72	128	184524	5.79	ppm	98
13) Decane	4.76	43	158573	6.07	ppm	95
14) 1,3-Dichlorobenzene	4.84	146	203800	5.84	ppm	100
15) 1,4-Dichlorobenzene	4.89	146	208865	6.01	ppm	96

(#) = qualifier out of range (m) = manual integration
F156056.D MF6563.M Tue Apr 05 08:57:58 2016 RT1

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6563\F156056.D Vial: 7
Acq On : 4 Apr 2016 9:35 pm Operator: sarad
Sample : ic6563-5 Inst : MSF
Misc : op92661,ef6563,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 08:14:13 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 08:13:49 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
16) Benzyl alcohol	4.97	108	115910	5.61	ppm		97
17) 1,2-Dichlorobenzene	5.00	146	195335	6.08	ppm		98
18) Acetophenone	5.17	105	235469	6.59	ppm		92
19) 2-Methylphenol	5.05	108	157196	5.74	ppm		98
20) 2,2'-oxybis(1-Chloropropan	5.08	121	59923	6.12	ppm		93
21) 3&4-Methylphenol	5.16	108	167369	6.21	ppm		98
22) n-Nitroso-di-n-propylamine	5.17	70	123649	6.16	ppm		95
23) Hexachloroethane	5.25	201	63788	5.87	ppm		90
26) Nitrobenzene	5.29	77	179935	5.61	ppm		98
27) Quinoline	6.06	129	349968	5.64	ppm		99
28) Isophorone	5.46	82	306735	5.78	ppm		96
29) 2-Nitrophenol	5.52	139	94069	5.81	ppm		92
30) 2,4-Dimethylphenol	5.55	107	139481	5.06	ppm		94
31) Benzoic acid	5.57	105	114126	4.70	ppm		91
32) bis(2-Chloroethoxy)methane	5.62	93	195998	5.97	ppm		98
33) 2,4-Dichlorophenol	5.69	162	145285	5.72	ppm		97
34) 2,6-Dichlorophenol	5.86	162	144546	6.31	ppm		99
35) 1,3,5-Trichlorobenzene	5.53	180	164116	6.64	ppm		96
36) 1,2,4-Trichlorobenzene	5.76	180	152578	5.97	ppm		98
37) 1,2,3-Trichlorobenzene	5.92	180	151509	6.05	ppm		97
38) Naphthalene	5.82	128	525580	6.69	ppm		99
39) 4-Chloroaniline	5.85	127	217464	6.59	ppm		98
40) 2,3-Dichloroaniline	6.56	161	176515	6.67	ppm		98
41) Caprolactam	6.09	55	64409	5.07	ppm		94
42) Hexachlorobutadiene	5.90	225	70966	5.99	ppm		97
43) 4-Chloro-3-methylphenol	6.19	107	146701	5.78	ppm		99
44) 2-Methylnaphthalene	6.33	141	291321	6.22	ppm		95
45) 1-Methylnaphthalene	6.41	141	300622	6.22	ppm		97
46) Dimethylnaphthalene	6.85	156	305639	6.26	ppm		98
48) Hexachlorocyclopentadiene	6.46	237	149951	11.97	ppm		99
49) 2,4,6-Trichlorophenol	6.56	196	95389	6.60	ppm		96
50) 2,4,5-Trichlorophenol	6.58	196	102296	5.88	ppm		96
52) 2-Chloronaphthalene	6.74	162	320335	6.19	ppm		98
53) Biphenyl	6.72	154	413488	6.37	ppm		98
54) 2-Nitroaniline	6.82	65	87377	5.31	ppm		100
55) Dimethylphthalate	6.98	163	349340	5.88	ppm		100
56) Acenaphthylene	7.13	152	517726	6.26	ppm		98
57) 2,6-Dinitrotoluene	7.04	165	73798	5.29	ppm		94
58) 3-Nitroaniline	7.21	138	91856	5.28	ppm		96
59) Acenaphthene	7.30	153	332260	6.41	ppm		99
60) 2,4-Dinitrophenol	7.31	184	55130	6.64	ppm	#	24
61) 4-Nitrophenol	7.36	109	41361	4.77	ppm		98
62) Dibenzofuran	7.49	168	449077	6.29	ppm		96
63) 2,4-Dinitrotoluene	7.46	165	100620	5.26	ppm		77
64) 2,3,4,6-Tetrachlorophenol	7.62	232	75026	5.56	ppm		98
65) Diethylphthalate	7.74	149	340318	5.71	ppm		98
66) Fluorene	7.89	166	360051	6.94	ppm		97
67) 4-Chlorophenyl-phenylether	7.89	204	156209	7.00	ppm		90
68) 4-Nitroaniline	7.89	138	94299	5.44	ppm		96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6563\F156056.D Vial: 7
Acq On : 4 Apr 2016 9:35 pm Operator: sarad
Sample : ic6563-5 Inst : MSF
Misc : op92661,ef6563,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 08:14:13 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 08:13:49 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

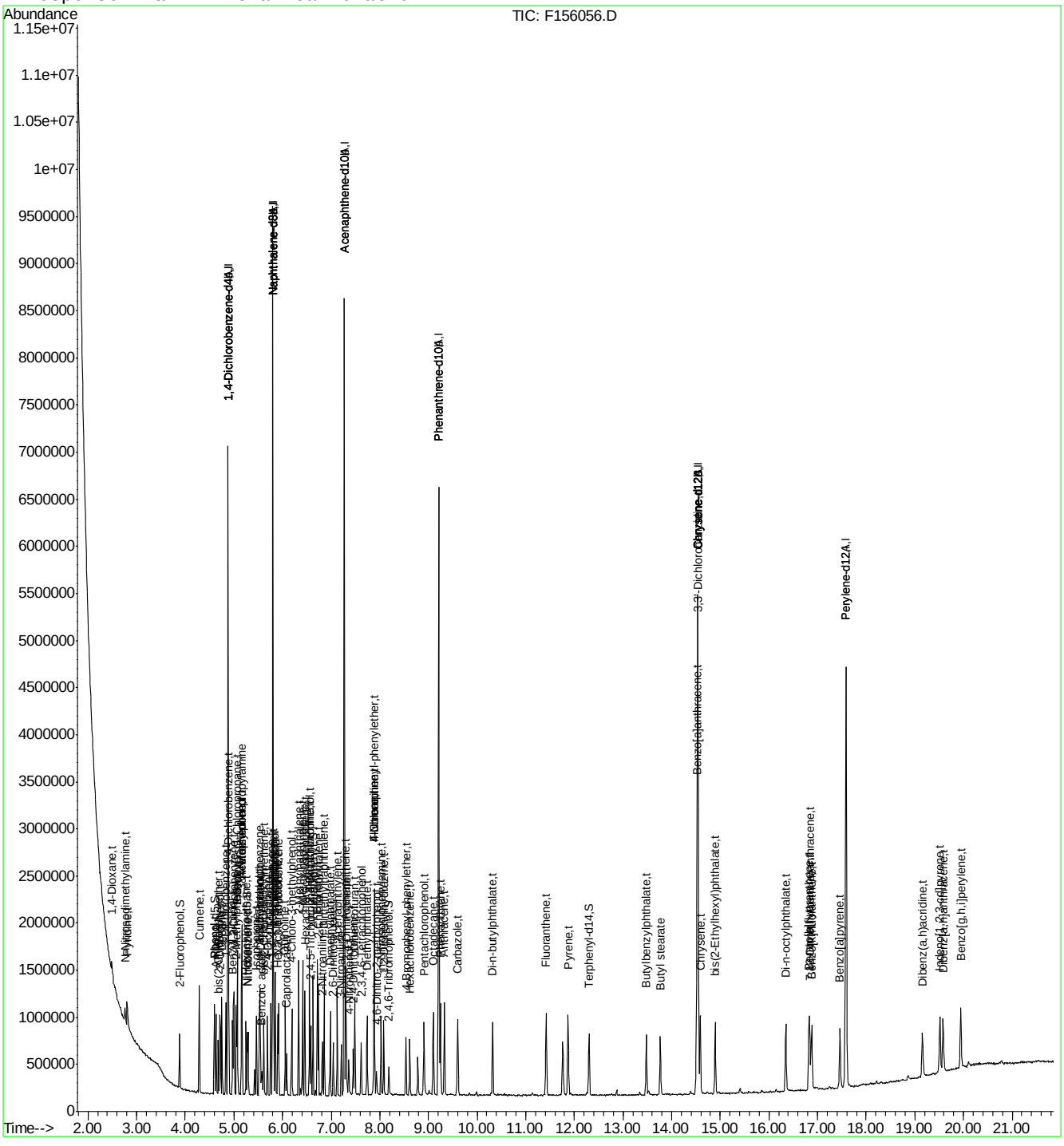
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
70)	4,6-Dinitro-2-methylphenol	7.93	198	40513	3.67	ppm	96
71)	n-Nitrosodiphenylamine	8.02	169	253978	6.05	ppm	99
72)	1,2-Diphenylhydrazine	8.08	77	341978	5.70	ppm	98
74)	4-Bromophenyl-phenylether	8.54	248	85099	6.08	ppm	94
75)	Hexachlorobenzene	8.62	284	81969	6.11	ppm	94
76)	Pentachlorophenol	8.91	266	106497	11.44	ppm	99
77)	Phenanthrene	9.25	178	508086	6.24	ppm	99
78)	Anthracene	9.33	178	512709	6.16	ppm	99
79)	Carbazole	9.60	167	468870	5.93	ppm	100
80)	Di-n-butylphthalate	10.32	149	589128	5.86	ppm	99
81)	Fluoranthene	11.42	202	495066	5.83	ppm	99
82)	Octadecane	9.10	57	206521	5.92	ppm	99
84)	Pyrene	11.87	202	528440	5.27	ppm	98
86)	Butylbenzylphthalate	13.48	149	250816	4.84	ppm	97
87)	Butyl stearate	13.77	56	136234	4.72	ppm	99
88)	Benzo[a]anthracene	14.52	228	433302	5.07	ppm	97
89)	3,3'-Dichlorobenzidine	14.55	252	156108	5.05	ppm	98
90)	Chrysene	14.59	228	448785	5.29	ppm	99
91)	bis(2-Ethylhexyl)phthalate	14.89	149	341191	4.71	ppm	96
93)	Di-n-octylphthalate	16.35	149	604939	5.24	ppm	98
94)	Benzo[b]fluoranthene	16.82	252	435201	5.61	ppm	99
95)	Benzo[k]fluoranthene	16.88	252	414541	5.37	ppm	99
96)	Benzo[a]pyrene	17.46	252	392090	5.45	ppm	99
97)	Indeno[1,2,3-cd]pyrene	19.52	276	353891	5.29	ppm	91
98)	Dibenz(a,h)acridine	19.16	279	308931	5.34	ppm	100
99)	Dibenz[a,h]anthracene	19.58	278	347003	5.25	ppm	95
100)	7,12-Dimethylbenz(a)anthra	16.84	256	162841	4.97	ppm	96
101)	Benzo[g,h,i]perylene	19.94	276	392199	5.54	ppm	96

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6563\F156056.D Vial: 7
Acq On : 4 Apr 2016 9:35 pm Operator: sarad
Sample : ic6563-5 Inst : MSF
Misc : op92661,ef6563,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 5 8:57 2016 Quant Results File: MF6563.RES

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 08:56:42 2016
Response via : Initial Calibration



F156057.D

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 04/06/16 15:11

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6563\F156057.D Vial: 8
Acq On : 4 Apr 2016 10:04 pm Operator: sarad
Sample : ic6563-2 Inst : MSF
Misc : op92661,ef6563,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 09:16:53 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 09:16:50 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.88	152	918307	40.00	ppm	0.00
24) Naphthalene-d8	5.80	136	3392002	40.00	ppm	0.00
47) Acenaphthene-d10	7.27	164	1972367	40.00	ppm	0.00
69) Phenanthrene-d10	9.21	188	3182891	40.00	ppm	0.00
83) Chrysene-d12	14.54	240	2811338	40.00	ppm	-0.01
92) Perylene-d12	17.59	264	2583255	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.88	152	918307	40.00	ppm	0.00
112) Naphthalene-d8A	5.80	136	3392002	40.00	ppm	0.00
121) Acenaphthene-d10A	7.27	164	1972367	40.00	ppm	0.00
132) Phenanthrene-d10A	9.21	188	3182891	40.00	ppm	0.00
147) Chrysene-d12A	14.54	240	2811338	40.00	ppm	-0.01
155) Perylene-d12A	17.59	264	2583255	40.00	ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.88	152	918307	40.00	ppm	0.00
161) Naphthalene-d8b	5.80	136	3392002	40.00	ppm	0.00
163) Acenaphthene-d10b	7.27	164	1972367	40.00	ppm	0.00
165) Phenanthrene-d10b	9.21	188	3182891	40.00	ppm	0.00
167) Chrysene-d12b	14.54	240	2811338	40.00	ppm	-0.01
169) 1,4-Dichlorobenzene-d4c	4.88	152	918307	40.00	ppm	0.00
171) Naphthalene-d8c	5.80	136	3392002	40.00	ppm	0.00
176) Chrysene-d12c	14.54	240	2811338	40.00	ppm	-0.01
178) Naphthalene-d8a	5.80	136	3392002	40.00	ppm	0.15
180) Chrysene-d12B	14.54	240	2811338	40.00	ppm	0.23

System Monitoring Compounds						
5) 2-Fluorophenol	3.88	112	67381	2.12	ppm	0.00
Spiked Amount 50.000			Recovery = 4.24%			
8) Phenol-d5	4.59	99	82796	2.15	ppm	0.00
Spiked Amount 50.000			Recovery = 4.30%			
25) Nitrobenzene-d5	5.28	82	64774	2.05	ppm	0.00
Spiked Amount 50.000			Recovery = 4.10%			
51) 2-Fluorobiphenyl	6.63	172	142064	2.34	ppm	0.00
Spiked Amount 50.000			Recovery = 4.68%			
73) 2,4,6-Tribromophenol	8.19	330	13619	2.10	ppm	-0.01
Spiked Amount 50.000			Recovery = 4.20%			
85) Terphenyl-d14	12.30	244	115350	2.02	ppm	0.00
Spiked Amount 50.000			Recovery = 4.04%			

Target Compounds							Qvalue
2) 1,4-Dioxane	2.49	88	19952m	1.39	ppm		
3) Pyridine	2.82	79	62693	1.83	ppm		99
4) N-Nitrosodimethylamine	2.77	42	24930	2.11	ppm	#	71
6) Indene	5.07	116	122410	2.35	ppm		98
7) Cumene	4.29	105	157607	2.22	ppm		97
9) Phenol	4.60	94	87242	2.13	ppm		93
10) Aniline	4.63	93	104543	2.40	ppm		94
11) bis(2-Chloroethyl)ether	4.68	93	63459	2.15	ppm		100
12) 2-Chlorophenol	4.72	128	73140	2.20	ppm		98
13) Decane	4.76	43	65729	2.35	ppm		91
14) 1,3-Dichlorobenzene	4.84	146	81625	2.22	ppm		97
15) 1,4-Dichlorobenzene	4.89	146	80670	2.18	ppm		97

(#) = qualifier out of range (m) = manual integration
F156057.D MF6563.M Tue Apr 05 09:24:02 2016 RT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6563\F156057.D Vial: 8
Acq On : 4 Apr 2016 10:04 pm Operator: sarad
Sample : ic6563-2 Inst : MSF
Misc : op92661,ef6563,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 09:16:53 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 09:16:50 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
16)	Benzyl alcohol	4.97	108	45980	2.16	ppm		95
17)	1,2-Dichlorobenzene	5.00	146	77388	2.26	ppm		98
18)	Acetophenone	5.17	105	92358	2.33	ppm		92
19)	2-Methylphenol	5.05	108	61550	2.15	ppm		98
20)	2,2'-oxybis(1-Chloropropan	5.08	121	23816	2.30	ppm	#	84
21)	3&4-Methylphenol	5.16	108	63995	2.20	ppm		92
22)	n-Nitroso-di-n-propylamine	5.17	70	50208	2.35	ppm		96
23)	Hexachloroethane	5.25	201	24892	2.19	ppm		93
26)	Nitrobenzene	5.29	77	67438	2.04	ppm		96
27)	Quinoline	6.05	129	138065	2.14	ppm		98
28)	Isophorone	5.46	82	117937	2.12	ppm		96
29)	2-Nitrophenol	5.52	139	34742	2.03	ppm		85
30)	2,4-Dimethylphenol	5.55	107	53800	1.97	ppm		97
31)	Benzoic acid	5.57	105	40367	1.69	ppm		94
32)	bis(2-Chloroethoxy)methane	5.62	93	77708	2.24	ppm		98
33)	2,4-Dichlorophenol	5.69	162	57101	2.14	ppm		97
34)	2,6-Dichlorophenol	5.86	162	57136	2.28	ppm		99
35)	1,3,5-Trichlorobenzene	5.53	180	63320	2.31	ppm		97
36)	1,2,4-Trichlorobenzene	5.76	180	60630	2.23	ppm		97
37)	1,2,3-Trichlorobenzene	5.92	180	61163	2.30	ppm		93
38)	Naphthalene	5.82	128	211027	2.39	ppm		97
39)	4-Chloroaniline	5.85	127	85275	2.32	ppm		99
40)	2,3-Dichloroaniline	6.56	161	72171	2.41	ppm		96
41)	Caprolactam	6.08	55	25731	2.01	ppm		98
42)	Hexachlorobutadiene	5.90	225	30238	2.37	ppm		96
43)	4-Chloro-3-methylphenol	6.19	107	53743	2.03	ppm		95
44)	2-Methylnaphthalene	6.33	141	116051	2.29	ppm		97
45)	1-Methylnaphthalene	6.41	141	118123	2.26	ppm		94
46)	Dimethylnaphthalene	6.86	156	119350	2.25	ppm		99
48)	Hexachlorocyclopentadiene	6.46	237	55624	4.15	ppm		96
49)	2,4,6-Trichlorophenol	6.56	196	38754	2.43	ppm		97
50)	2,4,5-Trichlorophenol	6.58	196	39267	2.16	ppm		92
52)	2-Chloronaphthalene	6.74	162	124816	2.26	ppm		97
53)	Biphenyl	6.72	154	163283	2.32	ppm		98
54)	2-Nitroaniline	6.82	65	32355	1.97	ppm		90
55)	Dimethylphthalate	6.98	163	137083	2.20	ppm		99
56)	Acenaphthylene	7.13	152	204353	2.29	ppm		98
57)	2,6-Dinitrotoluene	7.04	165	25658	1.83	ppm		98
58)	3-Nitroaniline	7.21	138	34477	1.96	ppm		97
59)	Acenaphthene	7.30	153	128608	2.29	ppm		97
60)	2,4-Dinitrophenol	7.32	184	15677	2.14	ppm	#	46
61)	4-Nitrophenol	7.36	109	15018	1.81	ppm		96
62)	Dibenzofuran	7.49	168	174267	2.27	ppm		98
63)	2,4-Dinitrotoluene	7.45	165	36684	1.91	ppm		98
64)	2,3,4,6-Tetrachlorophenol	7.62	232	28627	2.06	ppm		94
65)	Diethylphthalate	7.74	149	134572	2.19	ppm		98
66)	Fluorene	7.89	166	138455	2.37	ppm		99
67)	4-Chlorophenyl-phenylether	7.89	204	64851	2.57	ppm		91
68)	4-Nitroaniline	7.89	138	34880	1.98	ppm		91

(#) = qualifier out of range (m) = manual integration
F156057.D MF6563.M Tue Apr 05 09:24:02 2016 RT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6563\F156057.D Vial: 8
Acq On : 4 Apr 2016 10:04 pm Operator: sarad
Sample : ic6563-2 Inst : MSF
Misc : op92661,ef6563,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 09:16:53 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 09:16:50 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
70)	4,6-Dinitro-2-methylphenol	7.93	198	11717	1.17	ppm	94
71)	n-Nitrosodiphenylamine	8.02	169	95889	2.15	ppm	96
72)	1,2-Diphenylhydrazine	8.08	77	131296	2.11	ppm	96
74)	4-Bromophenyl-phenylether	8.54	248	33407	2.23	ppm	97
75)	Hexachlorobenzene	8.62	284	31503	2.20	ppm	97
76)	Pentachlorophenol	8.91	266	39004	3.97	ppm	96
77)	Phenanthrene	9.25	178	200983	2.27	ppm	99
78)	Anthracene	9.33	178	198929	2.23	ppm	97
79)	Carbazole	9.60	167	184916	2.20	ppm	97
80)	Di-n-butylphthalate	10.32	149	219322	2.06	ppm	98
81)	Fluoranthene	11.42	202	190900	2.14	ppm	98
82)	Octadecane	9.10	57	77261	2.09	ppm	95
84)	Pyrene	11.87	202	201138	2.02	ppm	98
86)	Butylbenzylphthalate	13.48	149	92745	1.86	ppm	96
87)	Butyl stearate	13.76	56	47830	1.74	ppm	94
88)	Benzo[a]anthracene	14.52	228	177735	2.12	ppm	96
89)	3,3'-Dichlorobenzidine	14.55	252	58243	1.92	ppm	99
90)	Chrysene	14.59	228	172615	2.05	ppm	98
91)	bis(2-Ethylhexyl)phthalate	14.89	149	128666	1.86	ppm	95
93)	Di-n-octylphthalate	16.34	149	220603	1.92	ppm	99
94)	Benzo[b]fluoranthene	16.82	252	162360	2.06	ppm	95
95)	Benzo[k]fluoranthene	16.88	252	162400	2.11	ppm	98
96)	Benzo[a]pyrene	17.46	252	149619	2.07	ppm	99
97)	Indeno[1,2,3-cd]pyrene	19.52	276	137334	2.04	ppm	96
98)	Dibenz(a,h)acridine	19.16	279	114274	1.96	ppm	98
99)	Dibenz[a,h]anthracene	19.58	278	132465	2.01	ppm	100
100)	7,12-Dimethylbenz(a)anthra	16.84	256	59468	1.84	ppm	91
101)	Benzo[g,h,i]perylene	19.94	276	148274	2.05	ppm	94

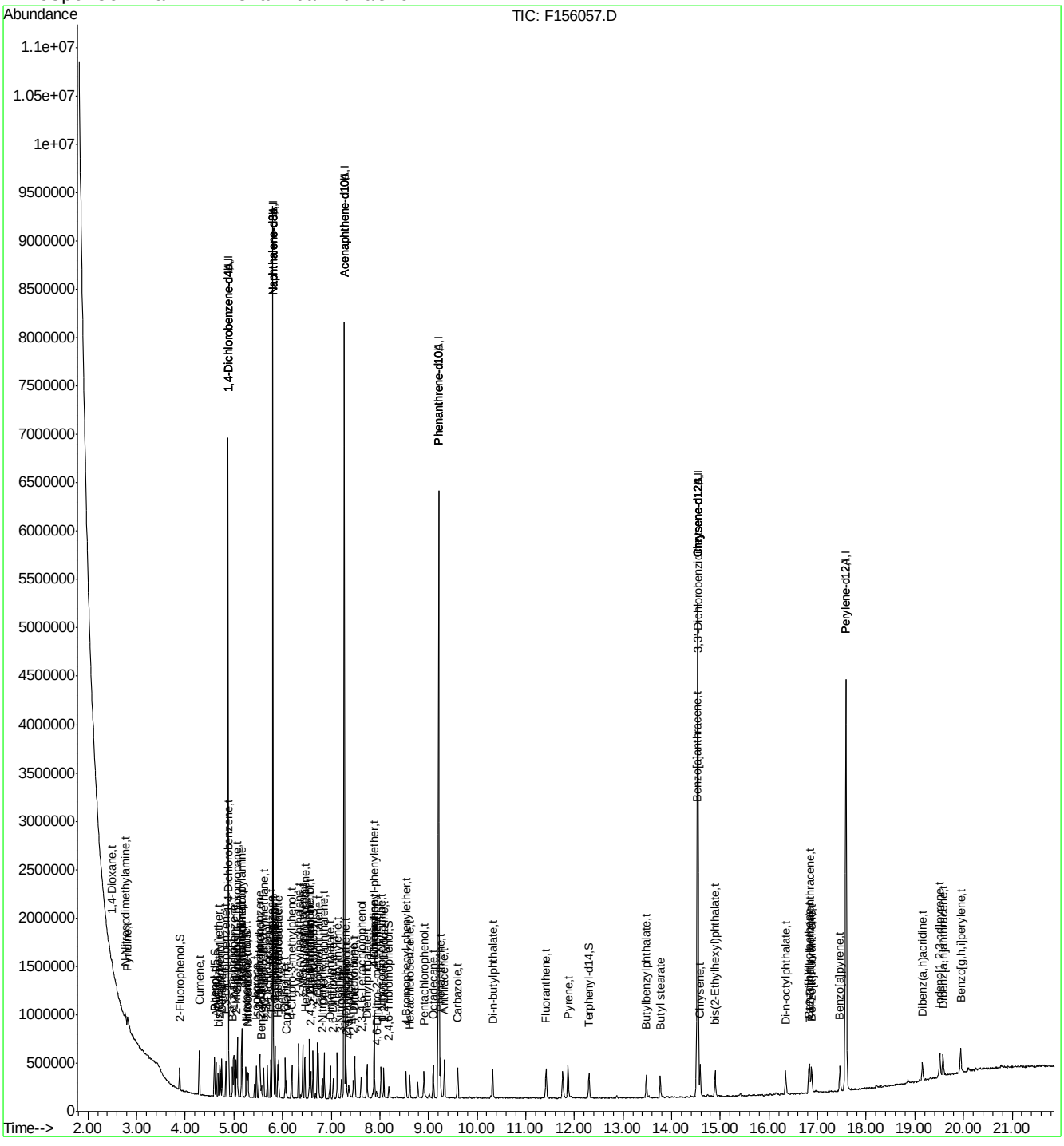
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6563\F156057.D Vial: 8
Acq On : 4 Apr 2016 10:04 pm Operator: sarad
Sample : ic6563-2 Inst : MSF
Misc : op92661,ef6563,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 5 9:23 2016 Quant Results File: MF6563.RES

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 09:16:50 2016
Response via : Initial Calibration



SGS ACCUTEST JC19644

Manual Integration Approval Summary

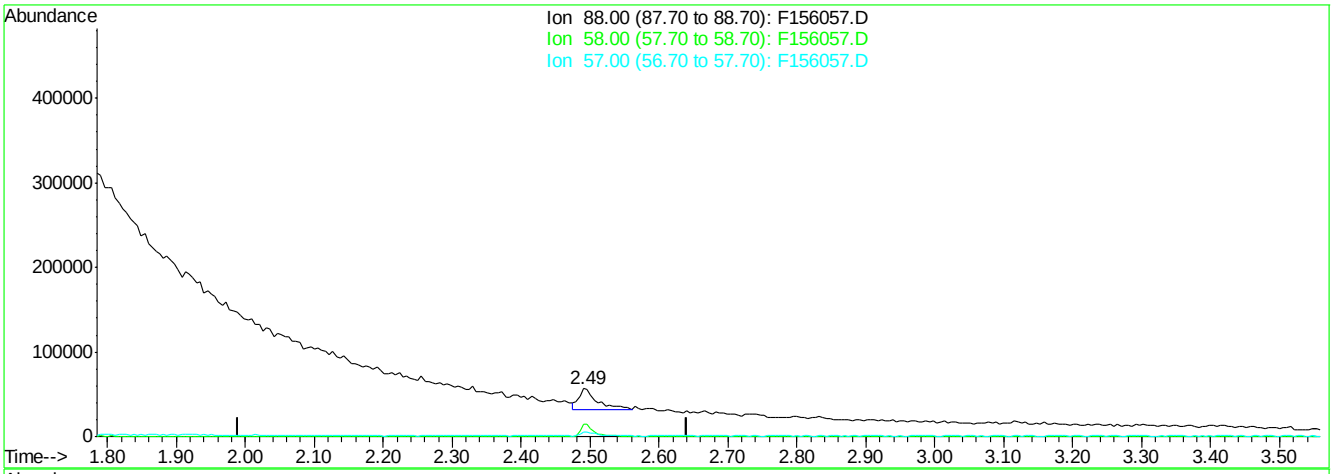
Sample Number:	EF6563-IC6563	**Method:**	SW846 8270D
Lab FileID:	F156057.D	**Analyst approved:**	04/06/16 08:21 Linsey Kirschmann
Injection Time:	04/04/16 22:04	**Supervisor approved:**	04/06/16 15:11 Kristi Schollenberger

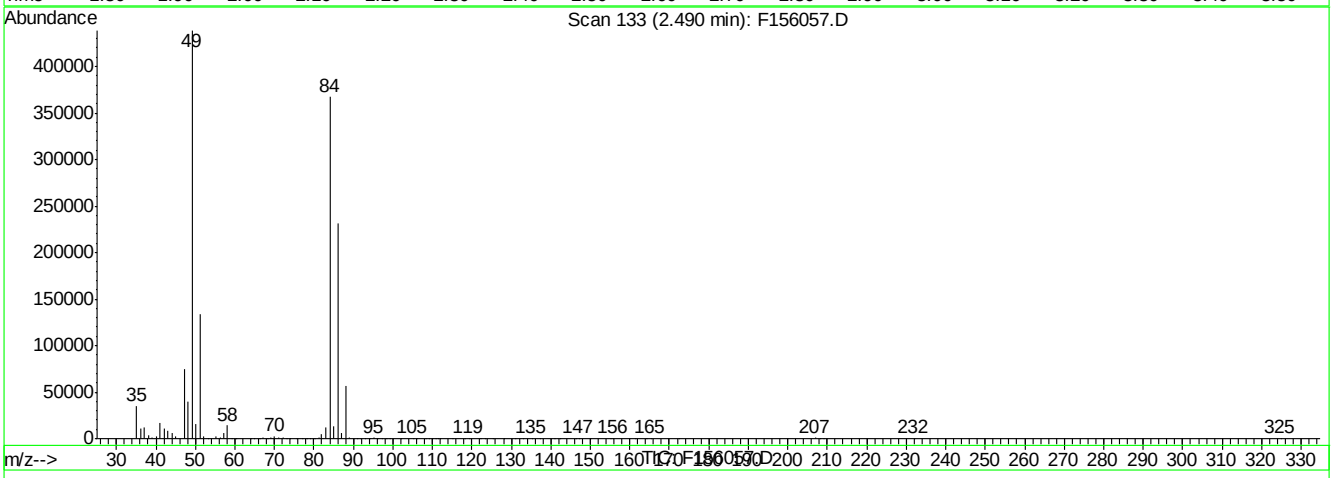
Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dioxane	123-91-1		2.49	Poor instrument integration

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EF6563\F156057.D Vial: 8
Acq On : 4 Apr 2016 10:04 pm Operator: sarad
Sample : ic6563-2 Inst : MSF
Misc : op92661,ef6563,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 5 9:14 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 09:06:16 2016
Response via : Multiple Level Calibration





(2) 1,4-Dioxane (t)

2.49min 3.04ppm

response 43525

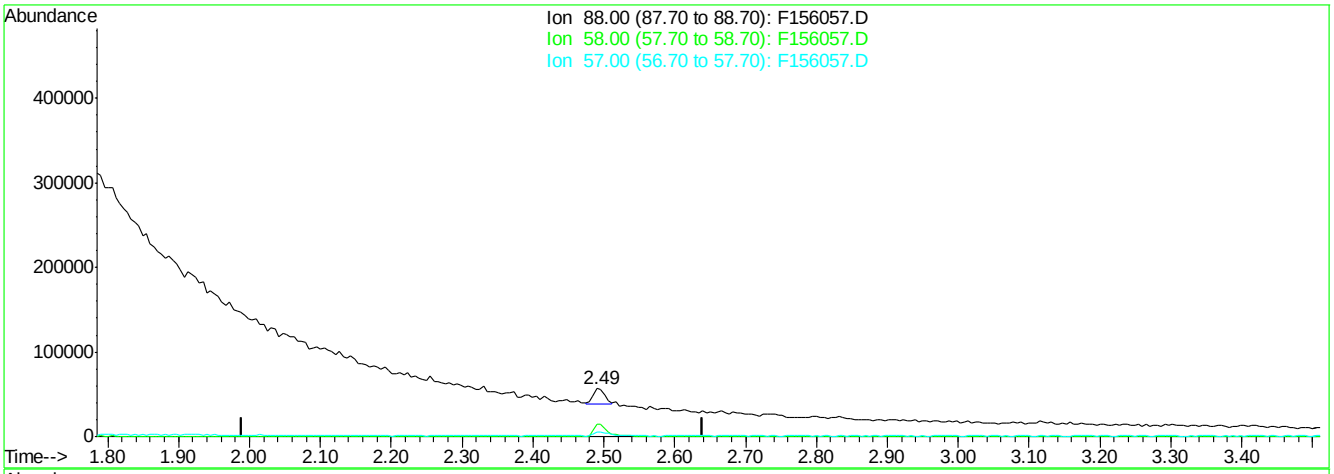
Ion	Exp%	Act%
88.00	100	100
58.00	66.20	68.89
57.00	21.10	24.74
0.00	0.00	0.00

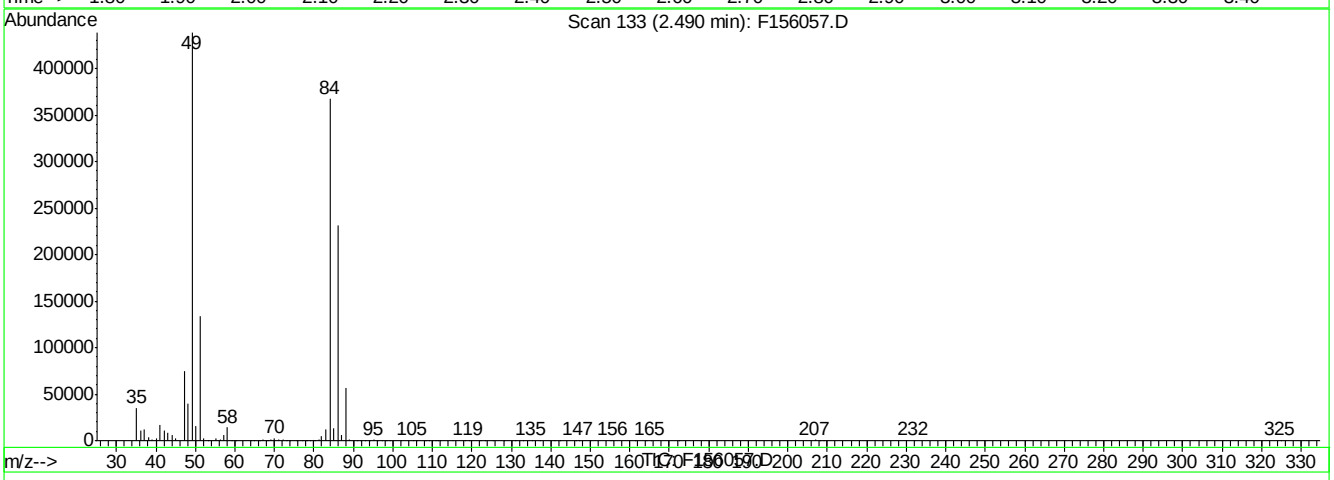
F156057.D MF6563.M Tue Apr 05 09:15:23 2016 RT1

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EF6563\F156057.D Vial: 8
Acq On : 4 Apr 2016 10:04 pm Operator: sarad
Sample : ic6563-2 Inst : MSF
Misc : op92661,ef6563,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 5 9:15 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 09:06:16 2016
Response via : Multiple Level Calibration





(2) 1,4-Dioxane (t)

2.49min 1.39ppm m

response 19952

Ion	Exp%	Act%
88.00	100	100
58.00	66.20	25.38#
57.00	21.10	10.38
0.00	0.00	0.00

F156057.D MF6563.M Tue Apr 05 09:15:29 2016 RT1

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 04/06/16 15:11

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6563\F156058.D Vial: 9
Acq On : 4 Apr 2016 10:33 pm Operator: sarad
Sample : ic6563-1 Inst : MSF
Misc : op92661,ef6563,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 08:14:17 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 08:13:49 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.88	152	925326	40.00	ppm	0.00
24) Naphthalene-d8	5.80	136	3443301	40.00	ppm	0.00
47) Acenaphthene-d10	7.27	164	2022694	40.00	ppm	0.00
69) Phenanthrene-d10	9.21	188	3240274	40.00	ppm	0.00
83) Chrysene-d12	14.53	240	2829220	40.00	ppm	-0.02
92) Perylene-d12	17.59	264	2605308	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.88	152	925326	40.00	ppm	0.00
112) Naphthalene-d8A	5.80	136	3443301	40.00	ppm	0.00
121) Acenaphthene-d10A	7.27	164	2022694	40.00	ppm	0.00
132) Phenanthrene-d10A	9.21	188	3240274	40.00	ppm	0.00
147) Chrysene-d12A	14.53	240	2829220	40.00	ppm	-0.02
155) Perylene-d12A	17.59	264	2605308	40.00	ppm	-0.11
159) 1,4-Dichlorobenzene-d4b	4.88	152	925326	40.00	ppm	0.00
161) Naphthalene-d8b	5.80	136	3443301	40.00	ppm	0.00
163) Acenaphthene-d10b	7.27	164	2022694	40.00	ppm	0.00
165) Phenanthrene-d10b	9.21	188	3240274	40.00	ppm	0.00
167) Chrysene-d12b	14.53	240	2829220	40.00	ppm	-0.02
169) 1,4-Dichlorobenzene-d4c	4.88	152	925326	40.00	ppm	0.00
171) Naphthalene-d8c	5.80	136	3443301	40.00	ppm	0.00
176) Chrysene-d12c	14.53	240	2829220	40.00	ppm	-0.02
178) Naphthalene-d8a	5.80	136	3443301	40.00	ppm	0.15
180) Chrysene-d12B	14.53	240	2829220	40.00	ppm	0.22

System Monitoring Compounds						
5) 2-Fluorophenol	3.88	112	33942	1.09	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.18%	
8) Phenol-d5	4.60	99	42142	1.13	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.26%	
25) Nitrobenzene-d5	5.28	82	32224	1.04	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.08%	
51) 2-Fluorobiphenyl	6.63	172	69971	1.24	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.48%	
73) 2,4,6-Tribromophenol	8.19	330	6260	0.97	ppm	-0.01
Spiked Amount 50.000			Recovery	=	1.94%	
85) Terphenyl-d14	12.30	244	57004	1.01	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.02%	

Target Compounds						Qvalue
2) 1,4-Dioxane	2.50	88	18018m	1.34	ppm	
3) Pyridine	2.82	79	31114	0.92	ppm	89
4) N-Nitrosodimethylamine	2.77	42	13265	1.02	ppm	99
6) Indene	5.07	116	61038	1.29	ppm	98
7) Cumene	4.29	105	79272	1.19	ppm	99
9) Phenol	4.60	94	45104	1.13	ppm	96
10) Aniline	4.63	93	52526	1.33	ppm	95
11) bis(2-Chloroethyl)ether	4.68	93	32260	1.14	ppm	98
12) 2-Chlorophenol	4.72	128	37291	1.18	ppm	95
13) Decane	4.76	43	34278	1.32	ppm	98
14) 1,3-Dichlorobenzene	4.84	146	41335	1.19	ppm	98
15) 1,4-Dichlorobenzene	4.89	146	40166	1.16	ppm	95

(#) = qualifier out of range (m) = manual integration
F156058.D MF6563.M Tue Apr 05 09:25:39 2016 RT1

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6563\F156058.D Vial: 9
Acq On : 4 Apr 2016 10:33 pm Operator: sarad
Sample : ic6563-1 Inst : MSF
Misc : op92661,ef6563,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 08:14:17 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 08:13:49 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
16) Benzyl alcohol	4.97	108	23422	1.14	ppm		90
17) 1,2-Dichlorobenzene	5.00	146	39477	1.24	ppm		94
18) Acetophenone	5.17	105	45494	1.28	ppm		93
19) 2-Methylphenol	5.05	108	31635	1.16	ppm		95
20) 2,2'-oxybis(1-Chloropropan	5.08	121	12901	1.33	ppm	#	72
21) 3&4-Methylphenol	5.16	108	33244	1.24	ppm		96
22) n-Nitroso-di-n-propylamine	5.16	70	24292	1.22	ppm		96
23) Hexachloroethane	5.25	201	12952	1.20	ppm		91
26) Nitrobenzene	5.29	77	33402	1.04	ppm		98
27) Quinoline	6.05	129	69003	1.11	ppm		99
28) Isophorone	5.46	82	60703	1.14	ppm		98
29) 2-Nitrophenol	5.52	139	18094	1.11	ppm		86
30) 2,4-Dimethylphenol	5.55	107	26515	0.96	ppm		99
31) Benzoic acid	5.56	105	18143	0.75	ppm		84
32) bis(2-Chloroethoxy)methane	5.62	93	38876	1.18	ppm		97
33) 2,4-Dichlorophenol	5.69	162	28566	1.12	ppm		97
34) 2,6-Dichlorophenol	5.86	162	29724	1.29	ppm		97
35) 1,3,5-Trichlorobenzene	5.53	180	32487	1.31	ppm		98
36) 1,2,4-Trichlorobenzene	5.76	180	30670	1.20	ppm		97
37) 1,2,3-Trichlorobenzene	5.92	180	31037	1.24	ppm		96
38) Naphthalene	5.82	128	106291	1.35	ppm		90
39) 4-Chloroaniline	5.85	127	43078	1.30	ppm		98
40) 2,3-Dichloroaniline	6.56	161	37045	1.40	ppm		95
41) Caprolactam	6.07	55	13615	1.07	ppm		93
42) Hexachlorobutadiene	5.90	225	14417	1.22	ppm		96
43) 4-Chloro-3-methylphenol	6.19	107	27002	1.06	ppm		95
44) 2-Methylnaphthalene	6.33	141	56195	1.20	ppm		96
45) 1-Methylnaphthalene	6.41	141	58487	1.21	ppm		97
46) Dimethylnaphthalene	6.85	156	58934	1.20	ppm		93
48) Hexachlorocyclopentadiene	6.46	237	26262	2.09	ppm		99
49) 2,4,6-Trichlorophenol	6.56	196	19329	1.34	ppm		98
50) 2,4,5-Trichlorophenol	6.58	196	19243	1.10	ppm		95
52) 2-Chloronaphthalene	6.74	162	63561	1.23	ppm		98
53) Biphenyl	6.72	154	82740	1.27	ppm		97
54) 2-Nitroaniline	6.82	65	14621	0.89	ppm	#	80
55) Dimethylphthalate	6.98	163	69268	1.17	ppm		97
56) Acenaphthylene	7.13	152	102899	1.24	ppm		99
57) 2,6-Dinitrotoluene	7.04	165	13845	0.99	ppm		91
58) 3-Nitroaniline	7.21	138	15918	0.92	ppm		90
59) Acenaphthene	7.30	153	65211	1.26	ppm		96
60) 2,4-Dinitrophenol	7.32	184	5693	0.69	ppm	#	25
61) 4-Nitrophenol	7.36	109	7647	0.88	ppm		94
62) Dibenzofuran	7.49	168	88112	1.23	ppm		97
63) 2,4-Dinitrotoluene	7.45	165	16291	0.85	ppm		87
64) 2,3,4,6-Tetrachlorophenol	7.62	232	13911	1.03	ppm		91
65) Diethylphthalate	7.74	149	69487	1.17	ppm		97
66) Fluorene	7.89	166	70042	1.35	ppm		96
67) 4-Chlorophenyl-phenylether	7.89	204	31787	1.42	ppm		84
68) 4-Nitroaniline	7.89	138	16764	0.97	ppm		90

(#) = qualifier out of range (m) = manual integration

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6563\F156058.D Vial: 9
Acq On : 4 Apr 2016 10:33 pm Operator: sarad
Sample : ic6563-1 Inst : MSF
Misc : op92661,ef6563,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 08:14:17 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 08:13:49 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

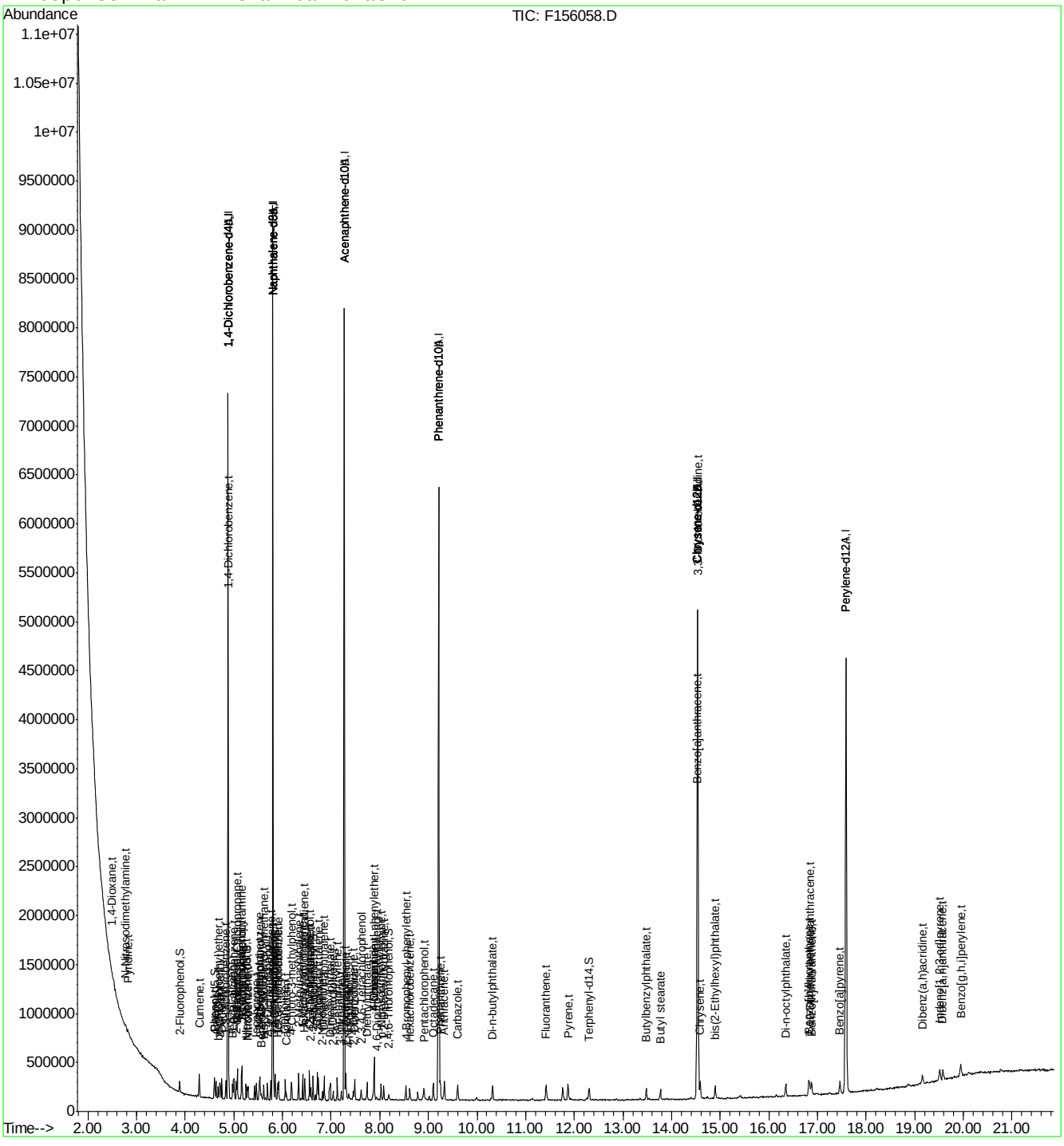
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
70)	4,6-Dinitro-2-methylphenol	7.93	198	4799	0.43	ppm	92
71)	n-Nitrosodiphenylamine	8.02	169	49361	1.17	ppm	91
72)	1,2-Diphenylhydrazine	8.08	77	64939	1.08	ppm	97
74)	4-Bromophenyl-phenylether	8.54	248	16182	1.15	ppm	97
75)	Hexachlorobenzene	8.62	284	15706	1.17	ppm	96
76)	Pentachlorophenol	8.91	266	17082	1.83	ppm	94
77)	Phenanthrene	9.25	178	102369	1.25	ppm	98
78)	Anthracene	9.33	178	99583	1.19	ppm	98
79)	Carbazole	9.60	167	91266	1.15	ppm	97
80)	Di-n-butylphthalate	10.32	149	111956	1.11	ppm	97
81)	Fluoranthene	11.42	202	96469	1.13	ppm	98
82)	Octadecane	9.10	57	38528	1.10	ppm	95
84)	Pyrene	11.87	202	100822	1.03	ppm	94
86)	Butylbenzylphthalate	13.48	149	47051	0.93	ppm	93
87)	Butyl stearate	13.77	56	23594	0.84	ppm	93
88)	Benzo[a]anthracene	14.52	228	90088	1.08	ppm	96
89)	3,3'-Dichlorobenzidine	14.54	252	26697	0.88	ppm	83
90)	Chrysene	14.59	228	86595	1.04	ppm	93
91)	bis(2-Ethylhexyl)phthalate	14.89	149	63397	0.89	ppm	99
93)	Di-n-octylphthalate	16.34	149	105581	0.93	ppm	99
94)	Benzo[b]fluoranthene	16.82	252	84697	1.11	ppm	95
95)	Benzo[k]fluoranthene	16.88	252	83033	1.10	ppm	97
96)	Benzo[a]pyrene	17.46	252	76555	1.09	ppm	97
97)	Indeno[1,2,3-cd]pyrene	19.52	276	68054	1.04	ppm	96
98)	Dibenz(a,h)acridine	19.16	279	57503	1.02	ppm	99
99)	Dibenz[a,h]anthracene	19.57	278	61000	0.94	ppm	99
100)	7,12-Dimethylbenz(a)anthra	16.84	256	26148	0.81	ppm	98
101)	Benzo[g,h,i]perylene	19.94	276	76109	1.10	ppm	97

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6563\F156058.D Vial: 9
Acq On : 4 Apr 2016 10:33 pm Operator: sarad
Sample : ic6563-1 Inst : MSF
Misc : op92661,ef6563,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 5 9:25 2016 Quant Results File: MF6563.RES

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 09:24:11 2016
Response via : Initial Calibration



Manual Integration Approval Summary

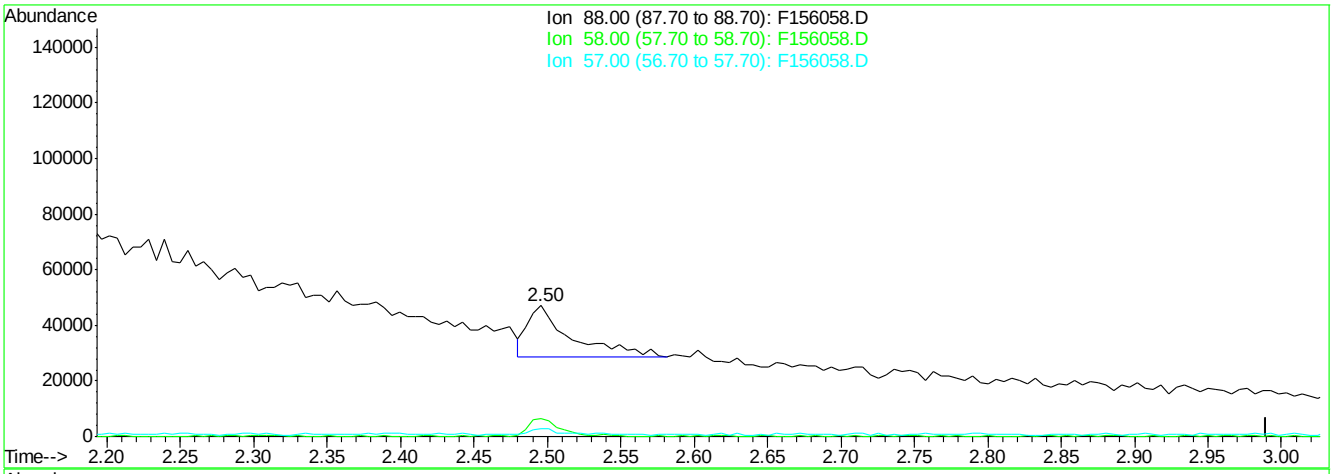
Sample Number:	EF6563-IC6563	**Method:**	SW846 8270D
Lab FileID:	F156058.D	**Analyst approved:**	04/06/16 08:21 Linsey Kirschmann
Injection Time:	04/04/16 22:33	**Supervisor approved:**	04/06/16 15:11 Kristi Schollenberger

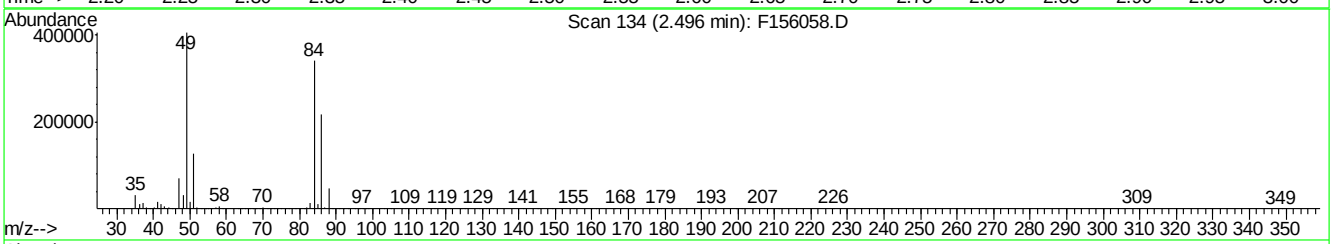
Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dioxane	123-91-1		2.50	Poor instrument integration

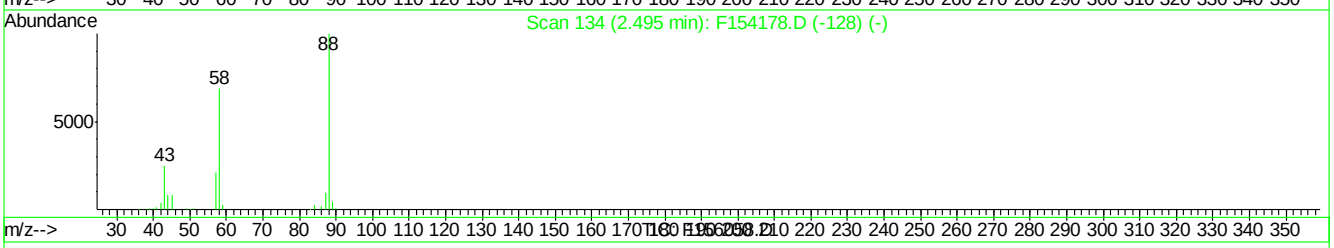
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EF6563\F156058.D Vial: 9
Acq On : 4 Apr 2016 10:33 pm Operator: sarad
Sample : ic6563-1 Inst : MSF
Misc : op92661,ef6563,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 5 8:14 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 09:24:11 2016
Response via : Multiple Level Calibration







(2) 1,4-Dioxane (t)

2.50min 2.82ppm

response 37950

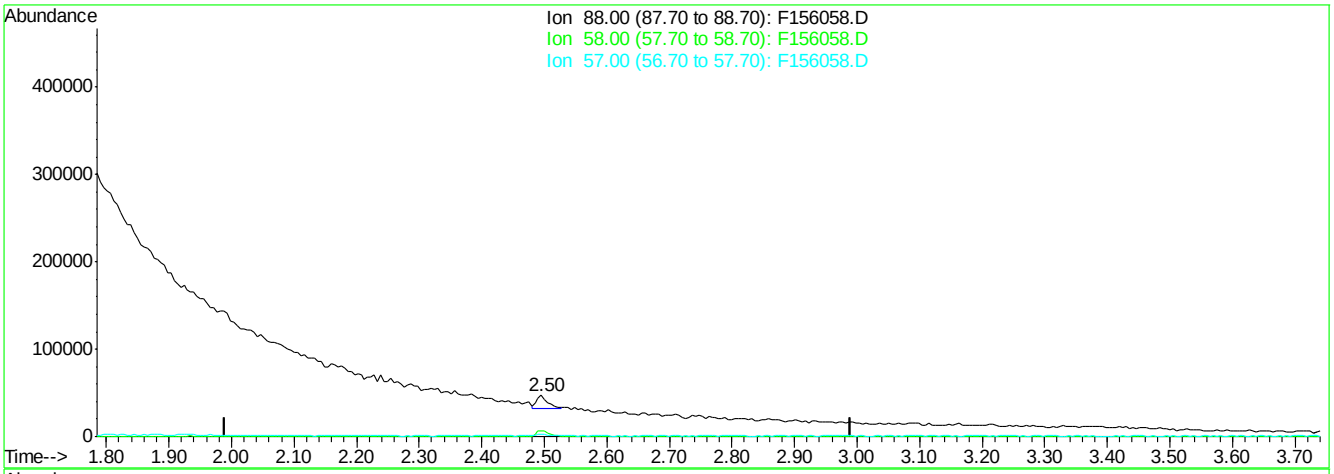
Ion	Exp%	Act%
88.00	100	100
58.00	61.80	40.90
57.00	19.90	13.02
0.00	0.00	0.00

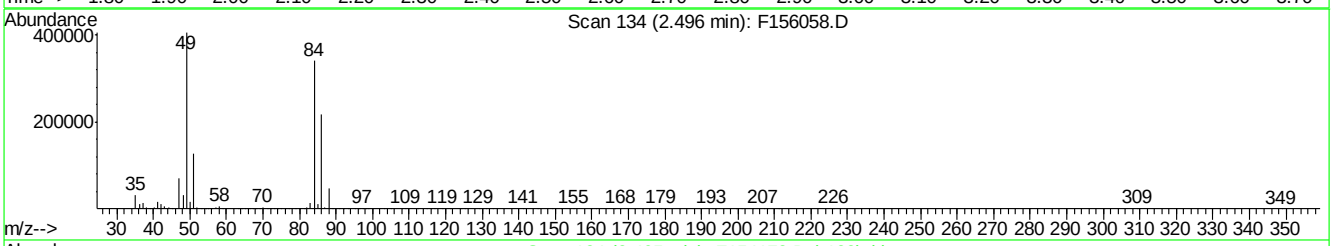
F156058.D MF6563.M Tue Apr 05 09:24:19 2016 RT1

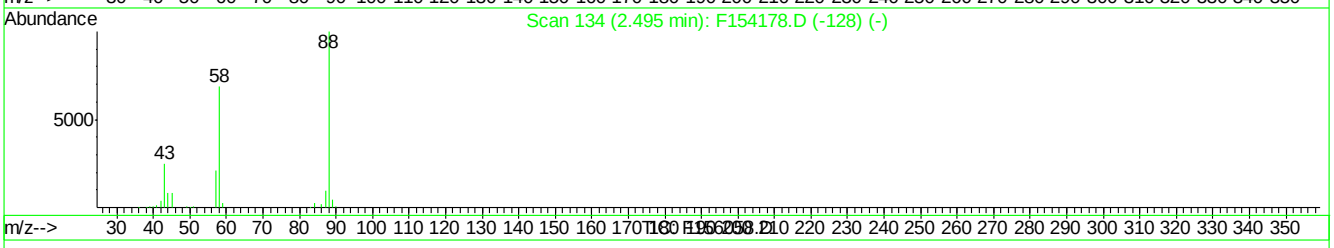
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EF6563\F156058.D Vial: 9
Acq On : 4 Apr 2016 10:33 pm Operator: sarad
Sample : ic6563-1 Inst : MSF
Misc : op92661,ef6563,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 5 9:24 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 09:24:11 2016
Response via : Multiple Level Calibration







(2) 1,4-Dioxane (t)

2.50min 1.34ppm m

response 18018

Ion	Exp%	Act%
88.00	100	100
58.00	61.80	13.73#
57.00	19.90	5.91
0.00	0.00	0.00

F156058.D MF6563.M Tue Apr 05 09:24:27 2016 RT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6564\F156060.D Vial: 2
Acq On : 4 Apr 2016 11:27 pm Operator: sarad
Sample : ic6564-100 Inst : MSF
Misc : op92661,ef6564,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 09:55:29 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 09:55:18 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.88	152	876019	40.00	ppm	0.00
24) Naphthalene-d8	5.80	136	3330661	40.00	ppm	0.00
47) Acenaphthene-d10	7.27	164	1696591	40.00	ppm	0.00
69) Phenanthrene-d10	9.21	188	2963286	40.00	ppm	0.00
83) Chrysene-d12	14.53	240	2499519	40.00	ppm	-0.02
92) Perylene-d12	17.59	264	2399017	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.88	152	876019	40.00	ppm	0.00
112) Naphthalene-d8A	5.80	136	3330661	40.00	ppm	0.00
121) Acenaphthene-d10A	7.27	164	1696591	40.00	ppm	0.00
132) Phenanthrene-d10A	9.21	188	2963286	40.00	ppm	0.00
147) Chrysene-d12A	14.53	240	2499519	40.00	ppm	-0.02
155) Perylene-d12A	17.59	264	2399017	40.00	ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.88	152	876019	40.00	ppm	0.00
161) Naphthalene-d8b	5.80	136	3330661	40.00	ppm	0.00
163) Acenaphthene-d10b	7.27	164	1696591	40.00	ppm	0.00
165) Phenanthrene-d10b	9.21	188	2963286	40.00	ppm	0.00
167) Chrysene-d12b	14.53	240	2499519	40.00	ppm	0.00
169) 1,4-Dichlorobenzene-d4c	4.88	152	876019	40.00	ppm	0.00
171) Naphthalene-d8c	5.80	136	3330661	40.00	ppm	0.00
176) Chrysene-d12c	14.53	240	2499519	40.00	ppm	-0.02
178) Naphthalene-d8a	5.80	136	3330661	40.00	ppm	0.15
180) Chrysene-d12B	14.53	240	2499519	40.00	ppm	0.22

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.00	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.00	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.00	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

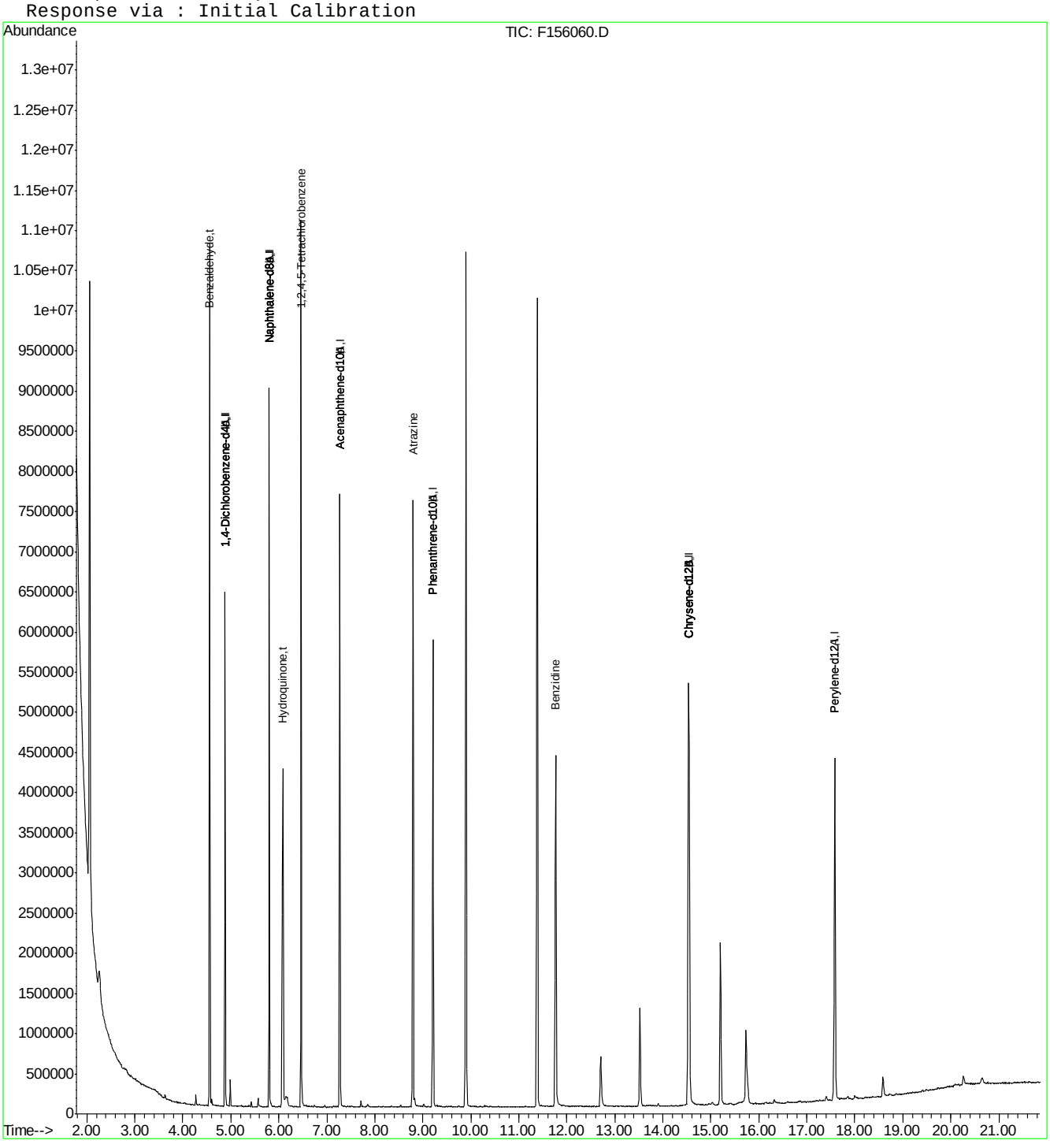
Target Compounds						Qvalue
160) Benzaldehyde	4.56	105	1788383	100.00	ppm	94
162) Hydroquinone	6.09	110	2676489	100.00	ppm	97
164) 1,2,4,5-Tetrachlorobenzene	6.47	216	1866229	100.00	ppm	99
166) Atrazine	8.80	200	1246711	100.00	ppm	98
168) Benzidine	11.77	184	2751436	100.00	ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed
F156060.D MF6563.M Tue Apr 05 10:07:06 2016 RT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6564\F156060.D Vial: 2
Acq On : 4 Apr 2016 11:27 pm Operator: sarad
Sample : ic6564-100 Inst : MSF
Misc : op92661,ef6564,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 5 10:07 2016 Quant Results File: MF6563.RES

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 09:55:18 2016
Response via : Initial Calibration



F156060.D MF6563.M Tue Apr 05 10:07:07 2016 RT1 Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6564\F156061.D Vial: 3
Acq On : 4 Apr 2016 11:56 pm Operator: sarad
Sample : ic6564-80 Inst : MSF
Misc : op92661,ef6564,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 09:55:57 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 09:55:18 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.88	152	778045	40.00	ppm	0.00
24) Naphthalene-d8	5.80	136	2974600	40.00	ppm	0.00
47) Acenaphthene-d10	7.27	164	1548244	40.00	ppm	0.00
69) Phenanthrene-d10	9.21	188	2777345	40.00	ppm	0.00
83) Chrysene-d12	14.53	240	2529147	40.00	ppm	-0.02
92) Perylene-d12	17.58	264	2444530	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4A	4.88	152	778045	40.00	ppm	0.00
112) Naphthalene-d8A	5.80	136	2974600	40.00	ppm	0.00
121) Acenaphthene-d10A	7.27	164	1548244	40.00	ppm	0.00
132) Phenanthrene-d10A	9.21	188	2777345	40.00	ppm	0.00
147) Chrysene-d12A	14.53	240	2529147	40.00	ppm	-0.02
155) Perylene-d12A	17.58	264	2444530	40.00	ppm	-0.01
159) 1,4-Dichlorobenzene-d4b	4.88	152	778045	40.00	ppm	0.00
161) Naphthalene-d8b	5.80	136	2974600	40.00	ppm	0.00
163) Acenaphthene-d10b	7.27	164	1548244	40.00	ppm	0.00
165) Phenanthrene-d10b	9.21	188	2777345	40.00	ppm	0.00
167) Chrysene-d12b	14.53	240	2529147	40.00	ppm	0.00
169) 1,4-Dichlorobenzene-d4c	4.88	152	778045	40.00	ppm	0.00
171) Naphthalene-d8c	5.80	136	2974600	40.00	ppm	0.00
176) Chrysene-d12c	14.53	240	2529147	40.00	ppm	-0.02
178) Naphthalene-d8a	5.80	136	2974600	40.00	ppm	0.15
180) Chrysene-d12B	14.53	240	2529147	40.00	ppm	0.22

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.00	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.00	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.00	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.00	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds						Qvalue
160) Benzaldehyde	4.56	105	1480808	93.23	ppm	94
162) Hydroquinone	6.08	110	2074959	86.81	ppm	98
164) 1,2,4,5-Tetrachlorobenzene	6.46	216	1443307	84.75	ppm	99
166) Atrazine	8.79	200	988551	84.60	ppm	98
168) Benzidine	11.77	184	2902612	104.26	ppm	98

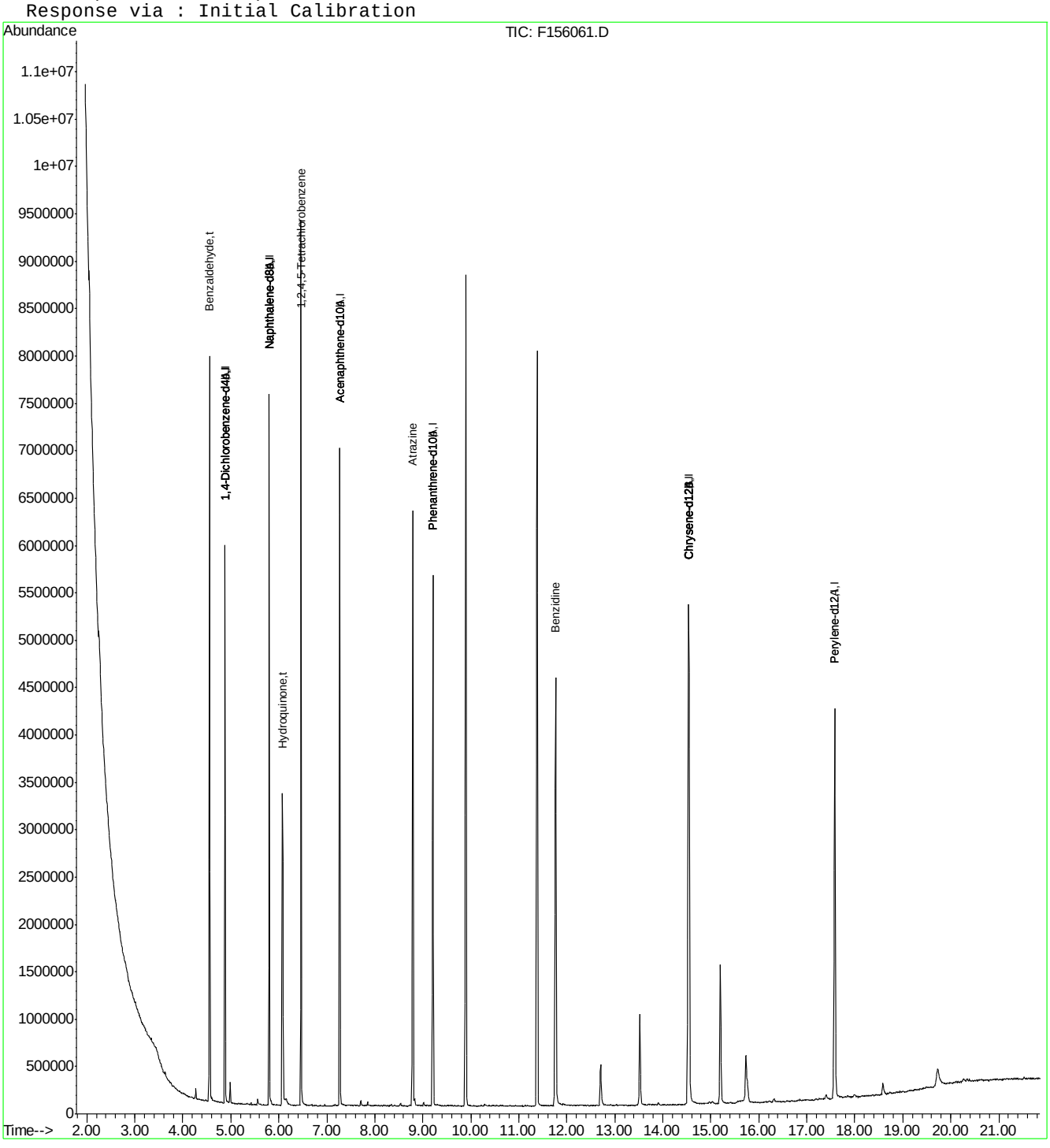
(#) = qualifier out of range (m) = manual integration (+) = signals summed
F156061.D MF6563.M Tue Apr 05 10:07:56 2016 RT1

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6564\F156061.D Vial: 3
Acq On : 4 Apr 2016 11:56 pm Operator: sarad
Sample : ic6564-80 Inst : MSF
Misc : op92661,ef6564,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 5 10:07 2016 Quant Results File: MF6563.RES

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 09:55:18 2016
Response via : Initial Calibration



F156061.D MF6563.M Tue Apr 05 10:07:56 2016 RT1 Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6564\F156062.D Vial: 4
Acq On : 5 Apr 2016 12:25 am Operator: sarad
Sample : icc6564-50 Inst : MSF
Misc : op92661,ef6564,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 09:55:59 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 09:55:18 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.88	152	789682	40.00	ppm	0.00
24) Naphthalene-d8	5.80	136	3030346	40.00	ppm	0.00
47) Acenaphthene-d10	7.27	164	1607375	40.00	ppm	0.00
69) Phenanthrene-d10	9.21	188	2850459	40.00	ppm	0.00
83) Chrysene-d12	14.53	240	2641342	40.00	ppm	-0.02
92) Perylene-d12	17.58	264	2578423	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4A	4.88	152	789682	40.00	ppm	0.00
112) Naphthalene-d8A	5.80	136	3030346	40.00	ppm	0.00
121) Acenaphthene-d10A	7.27	164	1607375	40.00	ppm	0.00
132) Phenanthrene-d10A	9.21	188	2850459	40.00	ppm	0.00
147) Chrysene-d12A	14.53	240	2641342	40.00	ppm	-0.02
155) Perylene-d12A	17.58	264	2578423	40.00	ppm	-0.01
159) 1,4-Dichlorobenzene-d4b	4.88	152	789682	40.00	ppm	0.00
161) Naphthalene-d8b	5.80	136	3030346	40.00	ppm	0.00
163) Acenaphthene-d10b	7.27	164	1607375	40.00	ppm	0.00
165) Phenanthrene-d10b	9.21	188	2850459	40.00	ppm	0.00
167) Chrysene-d12b	14.53	240	2641342	40.00	ppm	0.00
169) 1,4-Dichlorobenzene-d4c	4.88	152	789682	40.00	ppm	0.00
171) Naphthalene-d8c	5.80	136	3030346	40.00	ppm	0.00
176) Chrysene-d12c	14.53	240	2641342	40.00	ppm	-0.02
178) Naphthalene-d8a	5.80	136	3030346	40.00	ppm	0.15
180) Chrysene-d12B	14.53	240	2641342	40.00	ppm	0.22

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.00	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.00	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.00	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

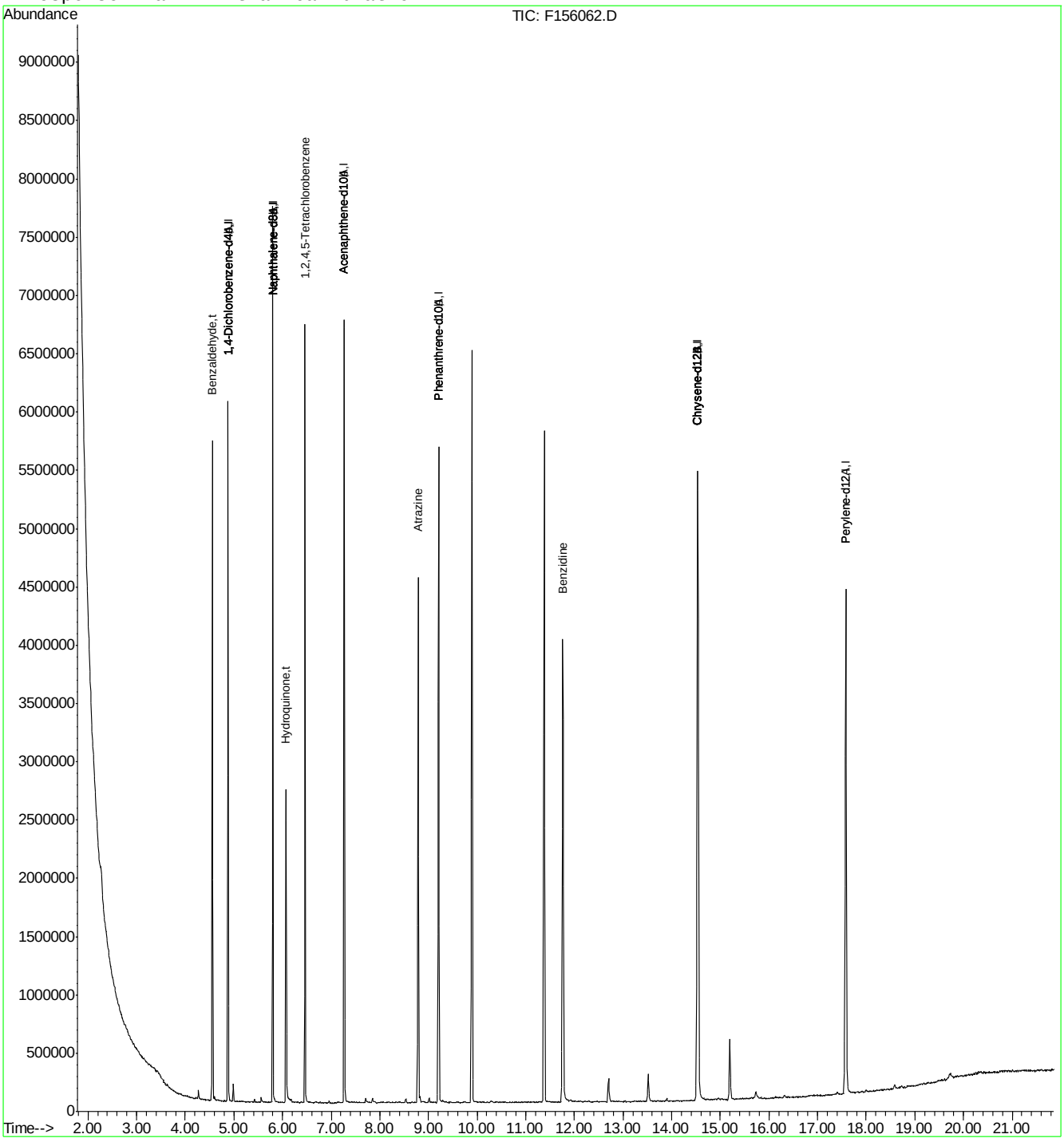
Target Compounds						Qvalue
160) Benzaldehyde	4.56	105	1038509	64.42	ppm	95
162) Hydroquinone	6.07	110	1423940	58.47	ppm	98
164) 1,2,4,5-Tetrachlorobenzene	6.46	216	995643	56.31	ppm	98
166) Atrazine	8.79	200	662708	55.26	ppm	97
168) Benzidine	11.76	184	2444021	84.06	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed
F156062.D MF6563.M Tue Apr 05 10:08:48 2016 RT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6564\F156062.D Vial: 4
Acq On : 5 Apr 2016 12:25 am Operator: sarad
Sample : icc6564-50 Inst : MSF
Misc : op92661,ef6564,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 5 10:08 2016 Quant Results File: MF6563.RES

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 09:55:18 2016
Response via : Initial Calibration



F156062.D MF6563.M Tue Apr 05 10:08:48 2016 RT1 Page 2

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6564\F156063.D Vial: 5
Acq On : 5 Apr 2016 12:53 am Operator: sarad
Sample : ic6564-25 Inst : MSF
Misc : op92661,ef6564,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 09:56:01 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 09:55:18 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.88	152	897327	40.00 ppm	0.00
24) Naphthalene-d8	5.80	136	3495590	40.00 ppm	0.00
47) Acenaphthene-d10	7.27	164	1830512	40.00 ppm	0.00
69) Phenanthrene-d10	9.21	188	3215186	40.00 ppm	0.00
83) Chrysene-d12	14.53	240	2889252	40.00 ppm	-0.02
92) Perylene-d12	17.58	264	2749195	40.00 ppm	-0.01
102) 1,4-Dichlorobenzene-d4A	4.88	152	897327	40.00 ppm	0.00
112) Naphthalene-d8A	5.80	136	3495590	40.00 ppm	0.00
121) Acenaphthene-d10A	7.27	164	1830512	40.00 ppm	0.00
132) Phenanthrene-d10A	9.21	188	3215186	40.00 ppm	0.00
147) Chrysene-d12A	14.53	240	2889252	40.00 ppm	-0.02
155) Perylene-d12A	17.58	264	2749195	40.00 ppm	-0.01
159) 1,4-Dichlorobenzene-d4b	4.88	152	897327	40.00 ppm	0.00
161) Naphthalene-d8b	5.80	136	3495590	40.00 ppm	0.00
163) Acenaphthene-d10b	7.27	164	1830512	40.00 ppm	0.00
165) Phenanthrene-d10b	9.21	188	3215186	40.00 ppm	0.00
167) Chrysene-d12b	14.53	240	2889252	40.00 ppm	0.00
169) 1,4-Dichlorobenzene-d4c	4.88	152	897327	40.00 ppm	0.00
171) Naphthalene-d8c	5.80	136	3495590	40.00 ppm	0.00
176) Chrysene-d12c	14.53	240	2889252	40.00 ppm	-0.02
178) Naphthalene-d8a	5.80	136	3495590	40.00 ppm	0.15
180) Chrysene-d12B	14.53	240	2889252	40.00 ppm	0.22

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
8) Phenol-d5	0.00	99	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
51) 2-Fluorobiphenyl	0.00	172	0d	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
85) Terphenyl-d14	0.00	244	0d	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		

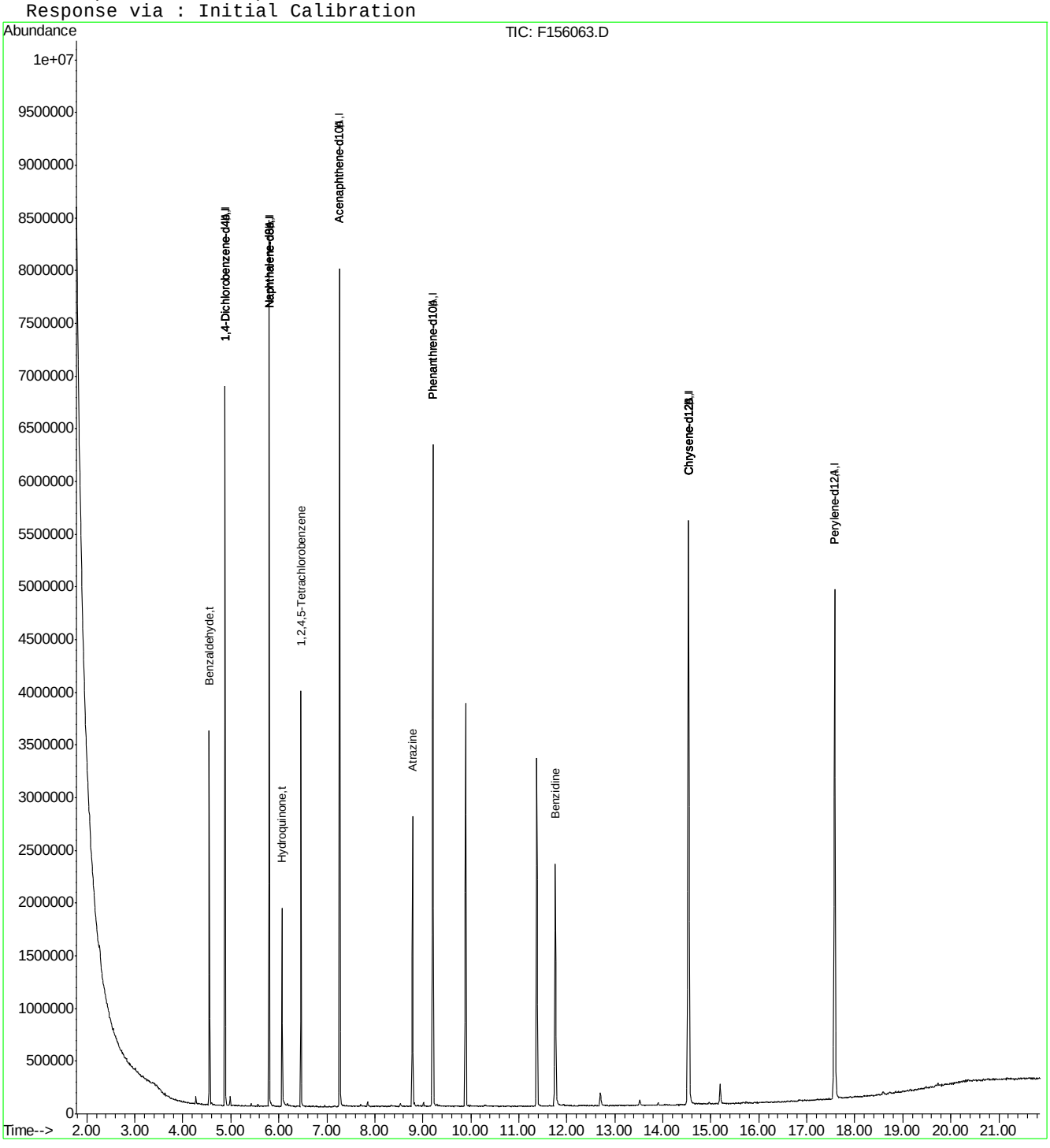
Target Compounds					Qvalue
160) Benzaldehyde	4.55	105	625383	34.14 ppm	93
162) Hydroquinone	6.06	110	789896	28.12 ppm	98
164) 1,2,4,5-Tetrachlorobenzene	6.46	216	610612	30.33 ppm	98
166) Atrazine	8.79	200	385755	28.52 ppm	98
168) Benzidine	11.76	184	1398321	43.97 ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed
F156063.D MF6563.M Tue Apr 05 10:09:35 2016 RT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6564\F156063.D Vial: 5
Acq On : 5 Apr 2016 12:53 am Operator: sarad
Sample : ic6564-25 Inst : MSF
Misc : op92661,ef6564,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 5 10:09 2016 Quant Results File: MF6563.RES

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 09:55:18 2016
Response via : Initial Calibration



F156063.D MF6563.M Tue Apr 05 10:09:35 2016 RT1 Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6564\F156064.D Vial: 6
Acq On : 5 Apr 2016 1:22 am Operator: sarad
Sample : ic6564-10 Inst : MSF
Misc : op92661,ef6564,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 09:56:03 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 09:55:18 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.88	152	885213	40.00 ppm	0.00
24) Naphthalene-d8	5.80	136	3420800	40.00 ppm	0.00
47) Acenaphthene-d10	7.27	164	1822219	40.00 ppm	0.00
69) Phenanthrene-d10	9.21	188	3282226	40.00 ppm	0.00
83) Chrysene-d12	14.53	240	3053939	40.00 ppm	-0.02
92) Perylene-d12	17.59	264	2907168	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.88	152	885213	40.00 ppm	0.00
112) Naphthalene-d8A	5.80	136	3420800	40.00 ppm	0.00
121) Acenaphthene-d10A	7.27	164	1822219	40.00 ppm	0.00
132) Phenanthrene-d10A	9.21	188	3282226	40.00 ppm	0.00
147) Chrysene-d12A	14.53	240	3053939	40.00 ppm	-0.02
155) Perylene-d12A	17.59	264	2907168	40.00 ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.88	152	885213	40.00 ppm	0.00
161) Naphthalene-d8b	5.80	136	3420800	40.00 ppm	0.00
163) Acenaphthene-d10b	7.27	164	1822219	40.00 ppm	0.00
165) Phenanthrene-d10b	9.21	188	3282226	40.00 ppm	0.00
167) Chrysene-d12b	14.53	240	3053939	40.00 ppm	0.00
169) 1,4-Dichlorobenzene-d4c	4.88	152	885213	40.00 ppm	0.00
171) Naphthalene-d8c	5.80	136	3420800	40.00 ppm	0.00
176) Chrysene-d12c	14.53	240	3053939	40.00 ppm	-0.02
178) Naphthalene-d8a	5.80	136	3420800	40.00 ppm	0.15
180) Chrysene-d12B	14.53	240	3053939	40.00 ppm	0.22

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
8) Phenol-d5	0.00	99	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
85) Terphenyl-d14	0.00	244	0d	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		

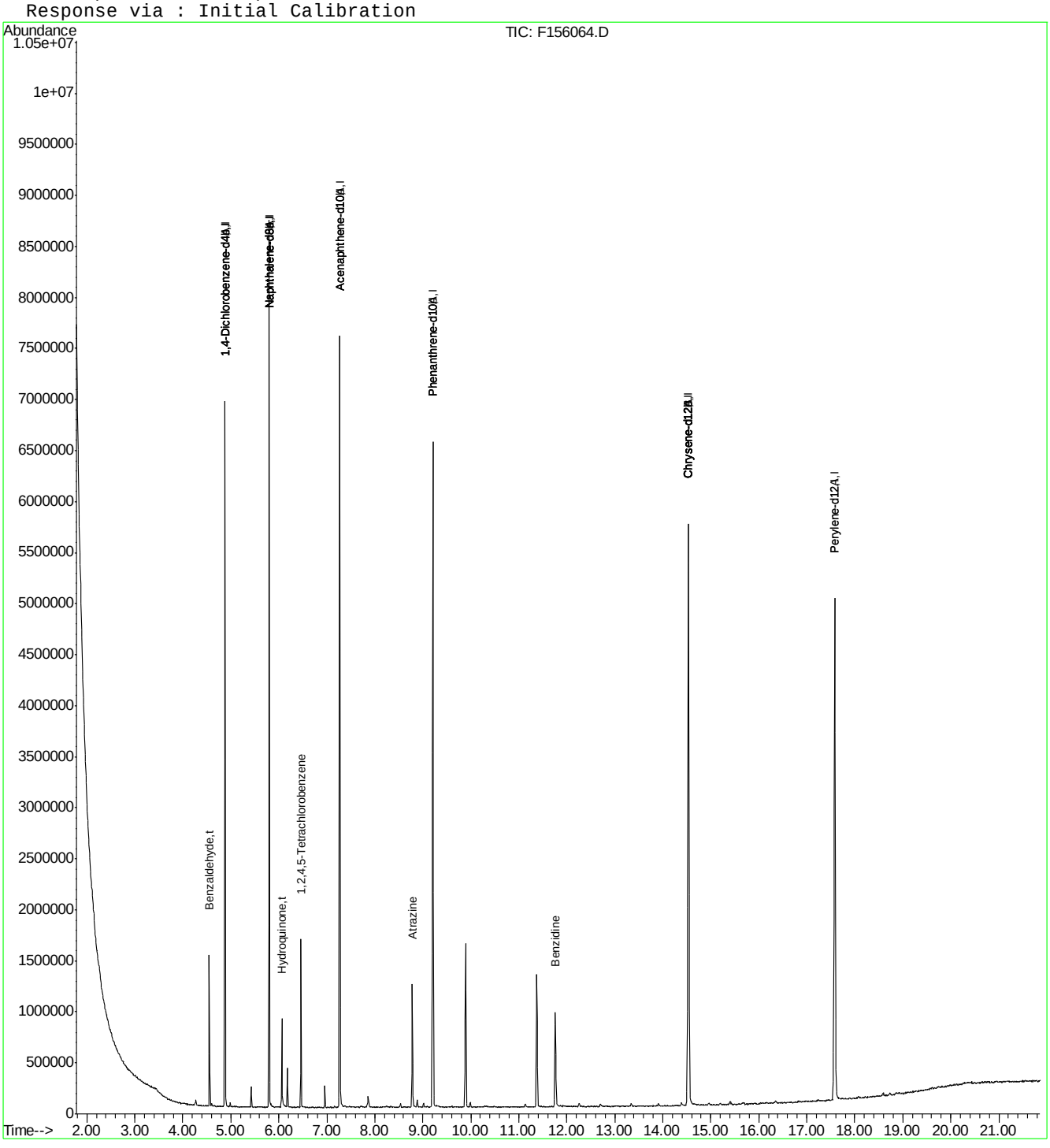
Target Compounds					Qvalue
160) Benzaldehyde	4.55	105	256018	14.17 ppm	94
162) Hydroquinone	6.06	110	302905	11.02 ppm	98
164) 1,2,4,5-Tetrachlorobenzene	6.46	216	258989	12.92 ppm	98
166) Atrazine	8.78	200	158420	11.47 ppm	97
168) Benzidine	11.76	184	592694	17.63 ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed
F156064.D MF6563.M Tue Apr 05 10:10:29 2016 RT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6564\F156064.D Vial: 6
Acq On : 5 Apr 2016 1:22 am Operator: sarad
Sample : ic6564-10 Inst : MSF
Misc : op92661,ef6564,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 5 10:10 2016 Quant Results File: MF6563.RES

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 09:55:18 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6564\F156065.D Vial: 7
Acq On : 5 Apr 2016 1:51 am Operator: sarad
Sample : ic6564-5 Inst : MSF
Misc : op92661,ef6564,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 09:56:05 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 09:55:18 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.88	152	935945	40.00 ppm	0.00
24) Naphthalene-d8	5.80	136	3563923	40.00 ppm	0.00
47) Acenaphthene-d10	7.27	164	1902764	40.00 ppm	0.00
69) Phenanthrene-d10	9.21	188	3340344	40.00 ppm	0.00
83) Chrysene-d12	14.53	240	3114492	40.00 ppm	-0.02
92) Perylene-d12	17.59	264	2956755	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.88	152	935945	40.00 ppm	0.00
112) Naphthalene-d8A	5.80	136	3563923	40.00 ppm	0.00
121) Acenaphthene-d10A	7.27	164	1902764	40.00 ppm	0.00
132) Phenanthrene-d10A	9.21	188	3340344	40.00 ppm	0.00
147) Chrysene-d12A	14.53	240	3114492	40.00 ppm	-0.02
155) Perylene-d12A	17.59	264	2956755	40.00 ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.88	152	935945	40.00 ppm	0.00
161) Naphthalene-d8b	5.80	136	3563923	40.00 ppm	0.00
163) Acenaphthene-d10b	7.27	164	1902764	40.00 ppm	0.00
165) Phenanthrene-d10b	9.21	188	3340344	40.00 ppm	0.00
167) Chrysene-d12b	14.53	240	3114492	40.00 ppm	0.00
169) 1,4-Dichlorobenzene-d4c	4.88	152	935945	40.00 ppm	0.00
171) Naphthalene-d8c	5.80	136	3563923	40.00 ppm	0.00
176) Chrysene-d12c	14.53	240	3114492	40.00 ppm	-0.02
178) Naphthalene-d8a	5.80	136	3563923	40.00 ppm	0.15
180) Chrysene-d12B	14.53	240	3114492	40.00 ppm	0.22

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
8) Phenol-d5	0.00	99	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
85) Terphenyl-d14	0.00	244	0d	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		

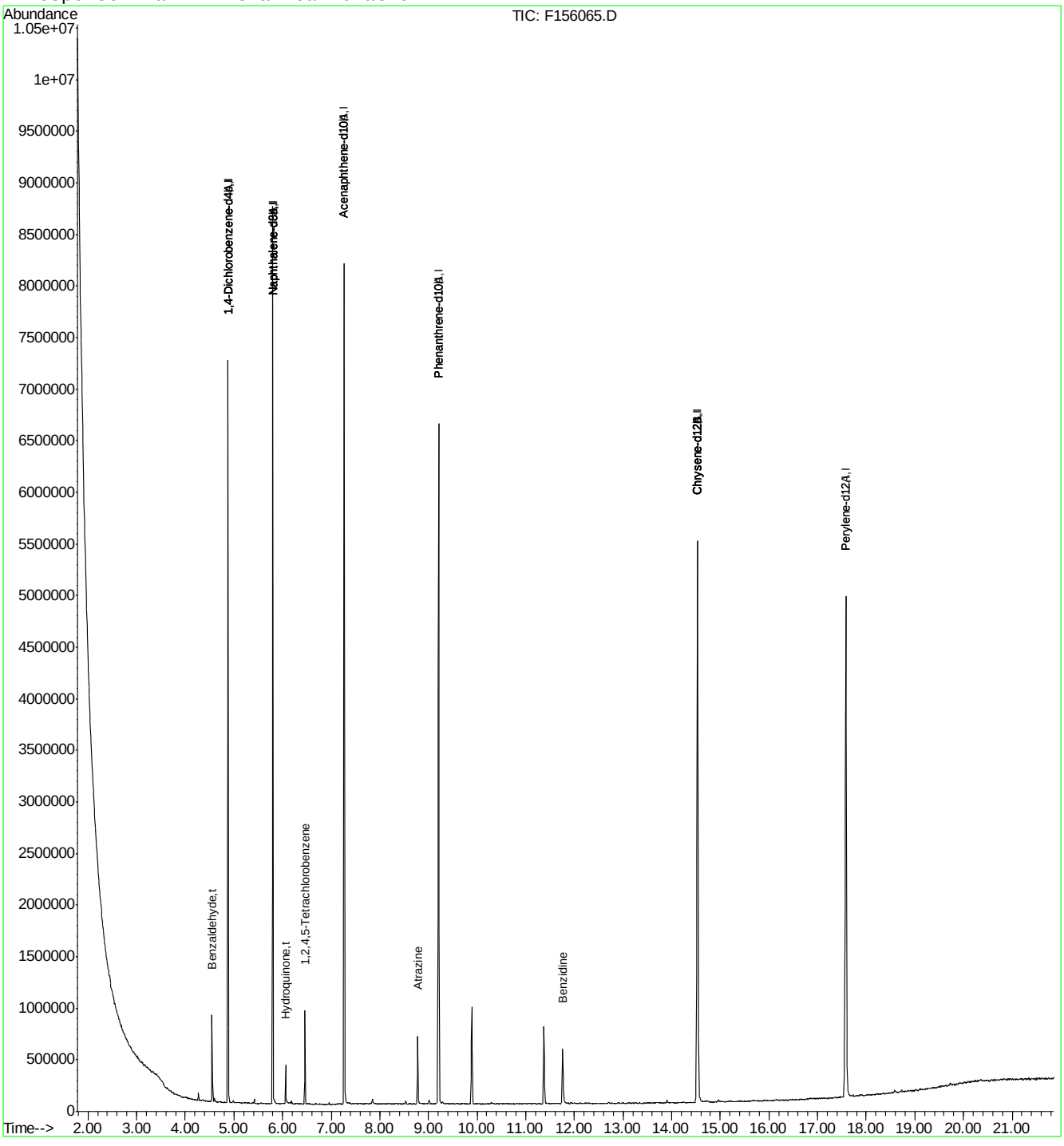
Target Compounds					Qvalue
160) Benzaldehyde	4.55	105	148058	7.75 ppm	91
162) Hydroquinone	6.06	110	146743	5.12 ppm	98
164) 1,2,4,5-Tetrachlorobenzene	6.46	216	152792	7.30 ppm	97
166) Atrazine	8.78	200	90736	6.46 ppm	95
168) Benzidine	11.76	184	331741	9.68 ppm	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed
F156065.D MF6563.M Tue Apr 05 10:11:14 2016 RT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6564\F156065.D Vial: 7
Acq On : 5 Apr 2016 1:51 am Operator: sarad
Sample : ic6564-5 Inst : MSF
Misc : op92661,ef6564,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 5 10:11 2016 Quant Results File: MF6563.RES

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 09:55:18 2016
Response via : Initial Calibration



F156065.D MF6563.M Tue Apr 05 10:11:14 2016 RT1 Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6564\F156066.D Vial: 8
Acq On : 5 Apr 2016 2:19 am Operator: sarad
Sample : ic6564-2 Inst : MSF
Misc : op92661,ef6564,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 09:56:33 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 09:55:18 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.88	152	962586	40.00 ppm	0.00
24) Naphthalene-d8	5.80	136	3652889	40.00 ppm	0.00
47) Acenaphthene-d10	7.27	164	1925626	40.00 ppm	0.00
69) Phenanthrene-d10	9.21	188	3455884	40.00 ppm	0.00
83) Chrysene-d12	14.53	240	3185957	40.00 ppm	-0.02
92) Perylene-d12	17.58	264	3042111	40.00 ppm	-0.01
102) 1,4-Dichlorobenzene-d4A	4.88	152	962586	40.00 ppm	0.00
112) Naphthalene-d8A	5.80	136	3652889	40.00 ppm	0.00
121) Acenaphthene-d10A	7.27	164	1925626	40.00 ppm	0.00
132) Phenanthrene-d10A	9.21	188	3455884	40.00 ppm	0.00
147) Chrysene-d12A	14.53	240	3185957	40.00 ppm	-0.02
155) Perylene-d12A	17.58	264	3042111	40.00 ppm	-0.01
159) 1,4-Dichlorobenzene-d4b	4.88	152	962586	40.00 ppm	0.00
161) Naphthalene-d8b	5.80	136	3652889	40.00 ppm	0.00
163) Acenaphthene-d10b	7.27	164	1925626	40.00 ppm	0.00
165) Phenanthrene-d10b	9.21	188	3455884	40.00 ppm	0.00
167) Chrysene-d12b	14.53	240	3185957	40.00 ppm	0.00
169) 1,4-Dichlorobenzene-d4c	4.88	152	962586	40.00 ppm	0.00
171) Naphthalene-d8c	5.80	136	3652889	40.00 ppm	0.00
176) Chrysene-d12c	14.53	240	3185957	40.00 ppm	-0.02
178) Naphthalene-d8a	5.80	136	3652889	40.00 ppm	0.15
180) Chrysene-d12B	14.53	240	3185957	40.00 ppm	0.22

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
8) Phenol-d5	0.00	99	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
25) Nitrobenzene-d5	0.00	82	0d	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
85) Terphenyl-d14	0.00	244	0d	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		

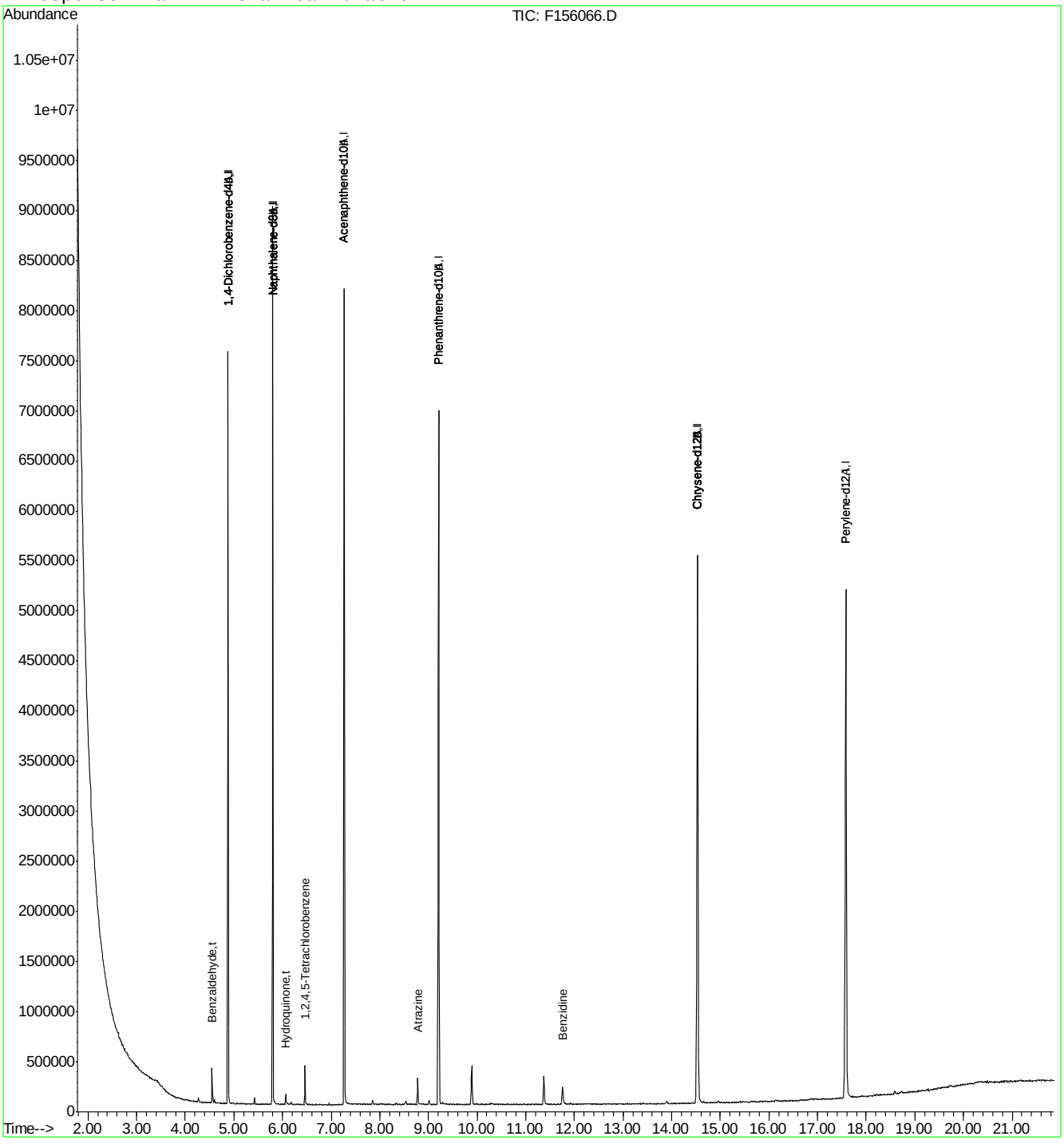
Target Compounds					Qvalue
160) Benzaldehyde	4.55	105	63241	3.22 ppm	94
162) Hydroquinone	6.06	110	48989	1.67 ppm	95
164) 1,2,4,5-Tetrachlorobenzene	6.46	216	62433	2.95 ppm	99
166) Atrazine	8.78	200	35152	2.42 ppm	94
168) Benzidine	11.76	184	117911	3.36 ppm	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed
F156066.D MF6563.M Tue Apr 05 10:12:03 2016 RT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6564\F156066.D Vial: 8
Acq On : 5 Apr 2016 2:19 am Operator: sarad
Sample : ic6564-2 Inst : MSF
Misc : op92661,ef6564,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 5 10:11 2016 Quant Results File: MF6563.RES

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 09:55:18 2016
Response via : Initial Calibration



F156066.D MF6563.M Tue Apr 05 10:12:03 2016 RT1 Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6564\F156067.D Vial: 9
Acq On : 5 Apr 2016 2:48 am Operator: sarad
Sample : ic6564-1 Inst : MSF
Misc : op92661,ef6564,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 09:56:35 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 09:55:18 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.88	152	901429	40.00 ppm	0.00
24) Naphthalene-d8	5.80	136	3431104	40.00 ppm	0.00
47) Acenaphthene-d10	7.27	164	1802430	40.00 ppm	0.00
69) Phenanthrene-d10	9.21	188	3227891	40.00 ppm	0.00
83) Chrysene-d12	14.53	240	3012466	40.00 ppm	-0.02
92) Perylene-d12	17.58	264	2866400	40.00 ppm	-0.01
102) 1,4-Dichlorobenzene-d4A	4.88	152	901429	40.00 ppm	0.00
112) Naphthalene-d8A	5.80	136	3431104	40.00 ppm	0.00
121) Acenaphthene-d10A	7.27	164	1802430	40.00 ppm	0.00
132) Phenanthrene-d10A	9.21	188	3227891	40.00 ppm	0.00
147) Chrysene-d12A	14.53	240	3012466	40.00 ppm	-0.02
155) Perylene-d12A	17.58	264	2866400	40.00 ppm	-0.01
159) 1,4-Dichlorobenzene-d4b	4.88	152	901429	40.00 ppm	0.00
161) Naphthalene-d8b	5.80	136	3431104	40.00 ppm	0.00
163) Acenaphthene-d10b	7.27	164	1802430	40.00 ppm	0.00
165) Phenanthrene-d10b	9.21	188	3227891	40.00 ppm	0.00
167) Chrysene-d12b	14.53	240	3012466	40.00 ppm	0.00
169) 1,4-Dichlorobenzene-d4c	4.88	152	901429	40.00 ppm	0.00
171) Naphthalene-d8c	5.80	136	3431104	40.00 ppm	0.00
176) Chrysene-d12c	14.53	240	3012466	40.00 ppm	-0.02
178) Naphthalene-d8a	5.80	136	3431104	40.00 ppm	0.15
180) Chrysene-d12B	14.53	240	3012466	40.00 ppm	0.22

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
8) Phenol-d5	0.00	99	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
51) 2-Fluorobiphenyl	0.00	172	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
85) Terphenyl-d14	0.00	244	0d	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		

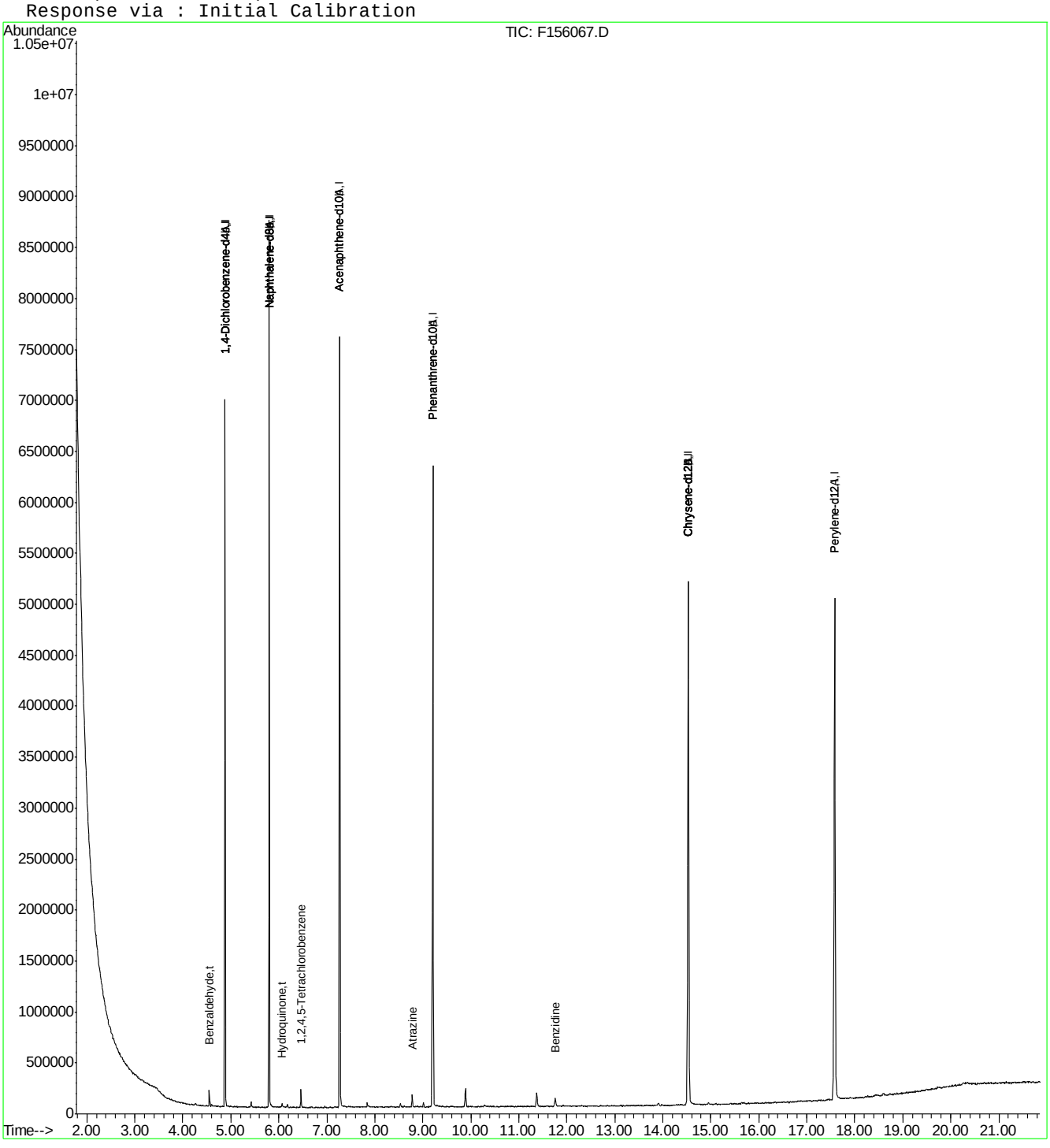
Target Compounds					Qvalue
160) Benzaldehyde	4.56	105	30190	1.64 ppm	94
162) Hydroquinone	6.06	110	21604	0.78 ppm	94
164) 1,2,4,5-Tetrachlorobenzene	6.46	216	29618	1.49 ppm	95
166) Atrazine	8.78	200	16149	1.19 ppm	98
168) Benzidine	11.76	184	50022	1.51 ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed
F156067.D MF6563.M Tue Apr 05 10:12:49 2016 RT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6564\F156067.D Vial: 9
Acq On : 5 Apr 2016 2:48 am Operator: sarad
Sample : ic6564-1 Inst : MSF
Misc : op92661,ef6564,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 5 10:12 2016 Quant Results File: MF6563.RES

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 09:55:18 2016
Response via : Initial Calibration



F156067.D MF6563.M Tue Apr 05 10:12:49 2016 RT1 Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6564\F156069.D Vial: 11
Acq On : 5 Apr 2016 3:46 am Operator: sarad
Sample : icv6563-50 Inst : MSF
Misc : op92661,ef6564,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 10:36:52 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 10:36:50 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.88	152	864272	40.00	ppm	0.00
24) Naphthalene-d8	5.80	136	3423451	40.00	ppm	0.00
47) Acenaphthene-d10	7.27	164	2005879	40.00	ppm	0.00
69) Phenanthrene-d10	9.21	188	3116817	40.00	ppm	-0.01
83) Chrysene-d12	14.53	240	2569410	40.00	ppm	-0.02
92) Perylene-d12	17.58	264	1956035	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4A	4.88	152	864272	40.00	ppm	0.00
112) Naphthalene-d8A	5.80	136	3423451	40.00	ppm	0.00
121) Acenaphthene-d10A	7.27	164	2005879	40.00	ppm	0.00
132) Phenanthrene-d10A	9.21	188	3116817	40.00	ppm	-0.01
147) Chrysene-d12A	14.53	240	2569410	40.00	ppm	-0.02
155) Perylene-d12A	17.58	264	1956035	40.00	ppm	-0.01
159) 1,4-Dichlorobenzene-d4b	4.88	152	864272	40.00	ppm	0.00
161) Naphthalene-d8b	5.80	136	3423451	40.00	ppm	0.00
163) Acenaphthene-d10b	7.27	164	2005879	40.00	ppm	0.00
165) Phenanthrene-d10b	9.21	188	3116817	40.00	ppm	0.00
167) Chrysene-d12b	14.53	240	2569410	40.00	ppm	0.00
169) 1,4-Dichlorobenzene-d4c	4.88	152	864272	40.00	ppm	0.00
171) Naphthalene-d8c	5.80	136	3423451	40.00	ppm	0.00
176) Chrysene-d12c	14.53	240	2569410	40.00	ppm	-0.02
178) Naphthalene-d8a	5.80	136	3423451	40.00	ppm	0.15
180) Chrysene-d12B	14.53	240	2569410	40.00	ppm	0.22

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.00	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.00	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.00	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.00	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds

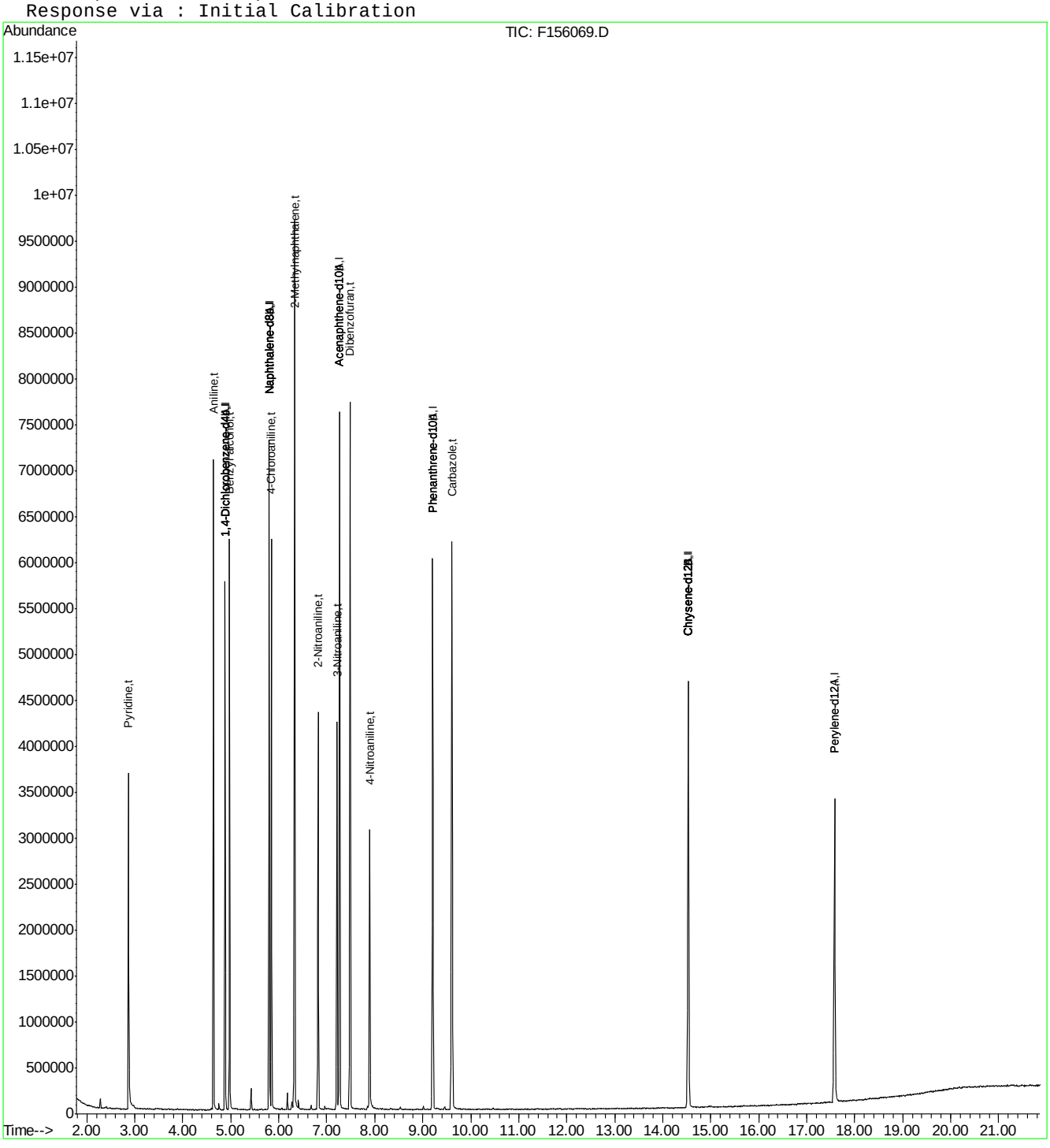
						Qvalue
3) Pyridine	2.86	79	1586125	50.31	ppm	99
10) Aniline	4.64	93	2279154	52.93	ppm	100
16) Benzyl alcohol	4.98	108	994014	48.58	ppm	97
39) 4-Chloroaniline	5.85	127	1781416	46.15	ppm	97
44) 2-Methylnaphthalene	6.33	141	2274002	43.13	ppm	100
54) 2-Nitroaniline	6.82	65	730620	44.48	ppm	99
58) 3-Nitroaniline	7.21	138	763794	43.52	ppm	98
62) Dibenzofuran	7.49	168	3529125	43.82	ppm	100
68) 4-Nitroaniline	7.90	138	731613	41.28	ppm	98
79) Carbazole	9.61	167	3790834	44.96	ppm	99

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6564\F156069.D Vial: 11
Acq On : 5 Apr 2016 3:46 am Operator: sarad
Sample : icv6563-50 Inst : MSF
Misc : op92661,ef6564,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 5 10:38 2016 Quant Results File: MF6563.RES

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 10:36:50 2016
Response via : Initial Calibration



F156069.D MF6563.M Tue Apr 05 10:38:58 2016 RT1 Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6564\F156070.D Vial: 12
Acq On : 5 Apr 2016 4:15 am Operator: sarad
Sample : icv6563-50 Inst : MSF
Misc : op92661,ef6564,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 09:46:20 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 09:45:41 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.88	152	887640	40.00	ppm	0.00
24) Naphthalene-d8	5.80	136	3267655	40.00	ppm	0.00
47) Acenaphthene-d10	7.27	164	1882697	40.00	ppm	0.00
69) Phenanthrene-d10	9.21	188	2875140	40.00	ppm	-0.01
83) Chrysene-d12	14.53	240	2396451	40.00	ppm	-0.02
92) Perylene-d12	17.58	264	2121009	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4A	4.88	152	887640	40.00	ppm	0.00
112) Naphthalene-d8A	5.80	136	3267655	40.00	ppm	0.00
121) Acenaphthene-d10A	7.27	164	1882697	40.00	ppm	0.00
132) Phenanthrene-d10A	9.21	188	2875140	40.00	ppm	-0.01
147) Chrysene-d12A	14.53	240	2396451	40.00	ppm	-0.02
155) Perylene-d12A	17.58	264	2121009	40.00	ppm	-0.01
159) 1,4-Dichlorobenzene-d4b	4.88	152	887640	40.00	ppm	0.00
161) Naphthalene-d8b	5.80	136	3267655	40.00	ppm	0.00
163) Acenaphthene-d10b	7.27	164	1882697	40.00	ppm	0.00
165) Phenanthrene-d10b	9.21	188	2875140	40.00	ppm	0.00
167) Chrysene-d12b	14.53	240	2396451	40.00	ppm	0.13
169) 1,4-Dichlorobenzene-d4c	4.88	152	887640	40.00	ppm	0.00
171) Naphthalene-d8c	5.80	136	3267655	40.00	ppm	0.00
176) Chrysene-d12c	14.53	240	2396451	40.00	ppm	-0.02
178) Naphthalene-d8a	5.80	136	3267655	40.00	ppm	0.15
180) Chrysene-d12B	14.53	240	2396451	40.00	ppm	0.22

System Monitoring Compounds						
5) 2-Fluorophenol	3.89	112	1362727	43.66	ppm	0.00
Spiked Amount 50.000			Recovery = 87.32%			
8) Phenol-d5	4.60	99	1634955	43.07	ppm	0.00
Spiked Amount 50.000			Recovery = 86.14%			
25) Nitrobenzene-d5	5.28	82	1353390	44.35	ppm	0.00
Spiked Amount 50.000			Recovery = 88.70%			
51) 2-Fluorobiphenyl	6.63	172	2602481	43.31	ppm	0.00
Spiked Amount 50.000			Recovery = 86.62%			
73) 2,4,6-Tribromophenol	8.19	330	257319	43.86	ppm	-0.01
Spiked Amount 50.000			Recovery = 87.72%			
85) Terphenyl-d14	12.30	244	2096294	43.07	ppm	0.00
Spiked Amount 50.000			Recovery = 86.14%			

Target Compounds Qvalue

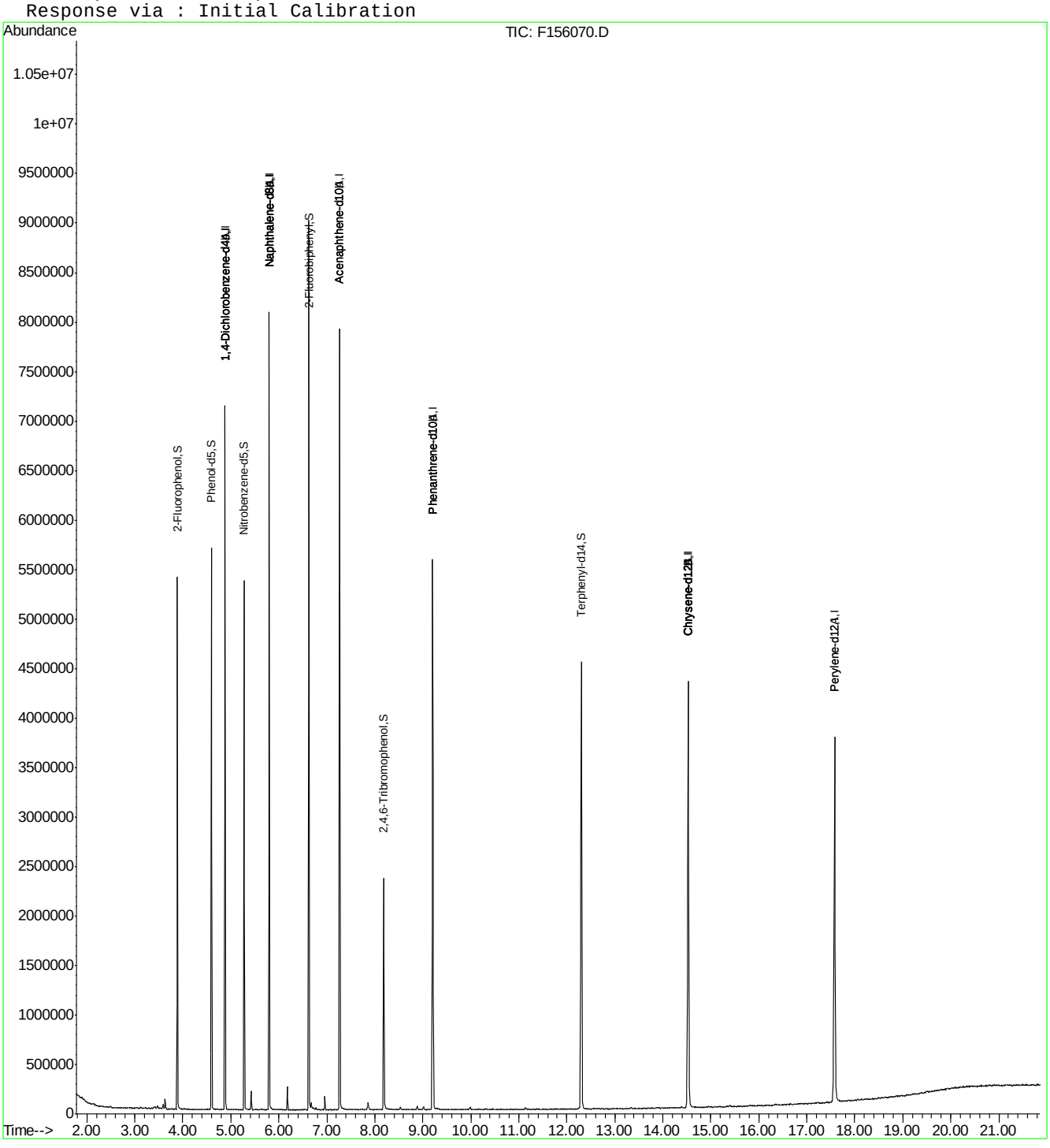
(#) = qualifier out of range (m) = manual integration (+) = signals summed
F156070.D MF6563.M Wed Apr 06 15:30:52 2016 RT1

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6564\F156070.D Vial: 12
Acq On : 5 Apr 2016 4:15 am Operator: sarad
Sample : icv6563-50 Inst : MSF
Misc : op92661,ef6564,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 5 10:39 2016 Quant Results File: MF6563.RES

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Apr 06 08:33:31 2016
Response via : Initial Calibration



SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6564\F156071.D Vial: 13
Acq On : 5 Apr 2016 4:44 am Operator: sarad
Sample : icv6563-50 Inst : MSF
Misc : op92661,ef6564,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 10:44:21 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 10:36:50 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.88	152	791654	40.00	ppm	0.00
24) Naphthalene-d8	5.80	136	2940255	40.00	ppm	0.00
47) Acenaphthene-d10	7.27	164	1650821	40.00	ppm	0.00
69) Phenanthrene-d10	9.21	188	2527126	40.00	ppm	0.00
83) Chrysene-d12	14.54	240	2041490	40.00	ppm	-0.01
92) Perylene-d12	17.58	264	1894786	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4A	4.88	152	791654	40.00	ppm	0.00
112) Naphthalene-d8A	5.80	136	2940255	40.00	ppm	0.00
121) Acenaphthene-d10A	7.27	164	1650821	40.00	ppm	0.00
132) Phenanthrene-d10A	9.21	188	2527126	40.00	ppm	0.00
147) Chrysene-d12A	14.54	240	2041490	40.00	ppm	-0.01
155) Perylene-d12A	17.58	264	1894786	40.00	ppm	-0.01
159) 1,4-Dichlorobenzene-d4b	4.88	152	791654	40.00	ppm	0.00
161) Naphthalene-d8b	5.80	136	2940255	40.00	ppm	0.00
163) Acenaphthene-d10b	7.27	164	1650821	40.00	ppm	0.00
165) Phenanthrene-d10b	9.21	188	2527126	40.00	ppm	0.00
167) Chrysene-d12b	14.54	240	2041490	40.00	ppm	0.00
169) 1,4-Dichlorobenzene-d4c	4.88	152	791654	40.00	ppm	0.00
171) Naphthalene-d8c	5.80	136	2940255	40.00	ppm	0.00
176) Chrysene-d12c	14.54	240	2041490	40.00	ppm	-0.01
178) Naphthalene-d8a	5.80	136	2940255	40.00	ppm	0.15
180) Chrysene-d12B	14.54	240	2041490	40.00	ppm	0.23

System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.00	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.00	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.00	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.00	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds						Qvalue
4) N-Nitrosodimethylamine	2.76	42	485916	46.76	ppm	98
11) bis(2-Chloroethyl)ether	4.68	93	1249072	48.18	ppm	98
14) 1,3-Dichlorobenzene	4.84	146	1514832	46.47	ppm	98
15) 1,4-Dichlorobenzene	4.89	146	1530755	47.07	ppm	100
17) 1,2-Dichlorobenzene	5.00	146	1452410	47.50	ppm	98
20) 2,2'-oxybis(1-Chloropropan	5.08	121	402803	43.10	ppm	97
22) n-Nitroso-di-n-propylamine	5.17	70	882539	46.14	ppm	94
23) Hexachloroethane	5.25	201	468808	46.54	ppm	96
26) Nitrobenzene	5.29	77	1327194	46.15	ppm	94
28) Isophorone	5.46	82	2413879	49.15	ppm	96
32) bis(2-Chloroethoxy)methane	5.62	93	1407061	45.46	ppm	99
36) 1,2,4-Trichlorobenzene	5.76	180	1103469	45.47	ppm	98

(#) = qualifier out of range (m) = manual integration
F156071.D MF6563.M Thu Apr 07 09:52:13 2016 RT1

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6564\F156071.D Vial: 13
Acq On : 5 Apr 2016 4:44 am Operator: sarad
Sample : icv6563-50 Inst : MSF
Misc : op92661,ef6564,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 10:44:21 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 10:36:50 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38)	Naphthalene	5.82	128	3790901	47.22	ppm	99
42)	Hexachlorobutadiene	5.90	225	535368	46.60	ppm	99
52)	2-Chloronaphthalene	6.74	162	2215777	46.45	ppm	97
55)	Dimethylphthalate	6.98	163	2349889	44.02	ppm	100
56)	Acenaphthylene	7.13	152	3539399	45.77	ppm	99
57)	2,6-Dinitrotoluene	7.05	165	515828	44.71	ppm	93
59)	Acenaphthene	7.30	153	2278169	46.91	ppm	99
63)	2,4-Dinitrotoluene	7.46	165	654129	41.83	ppm	99
65)	Diethylphthalate	7.74	149	2254990	42.74	ppm	100
66)	Fluorene	7.89	166	2284573	44.79	ppm	100
67)	4-Chlorophenyl-phenylether	7.89	204	961950	42.80	ppm	96
71)	n-Nitrosodiphenylamine	8.03	169	1599662	44.14	ppm	99
72)	1,2-Diphenylhydrazine	8.08	77	2466045	49.23	ppm	100
74)	4-Bromophenyl-phenylether	8.54	248	568052	46.63	ppm	99
75)	Hexachlorobenzene	8.62	284	556035	47.82	ppm	95
77)	Phenanthrene	9.25	178	3414104	46.87	ppm	98
78)	Anthracene	9.33	178	3410039	46.76	ppm	99
80)	Di-n-butylphthalate	10.32	149	3880513	45.44	ppm	100
81)	Fluoranthene	11.42	202	3358980	46.50	ppm	99
84)	Pyrene	11.88	202	3587015	49.54	ppm	98
86)	Butylbenzylphthalate	13.48	149	1628471	45.79	ppm	98
88)	Benzo[a]anthracene	14.52	228	2835540	45.86	ppm	100
90)	Chrysene	14.59	228	2848434	46.34	ppm	99
91)	bis(2-Ethylhexyl)phthalate	14.89	149	2239893	45.45	ppm	98
93)	Di-n-octylphthalate	16.35	149	3823114	46.05	ppm	99
94)	Benzo[b]fluoranthene	16.83	252	2720341	46.45	ppm	99
95)	Benzo[k]fluoranthene	16.89	252	2848494	49.70	ppm	99
96)	Benzo[a]pyrene	17.47	252	2596492	48.44	ppm	99
97)	Indeno[1,2,3-cd]pyrene	19.53	276	2372059	47.96	ppm	99
99)	Dibenz[a,h]anthracene	19.59	278	2304304	48.15	ppm	98
101)	Benzo[g,h,i]perylene	19.95	276	2556304	47.82	ppm	97

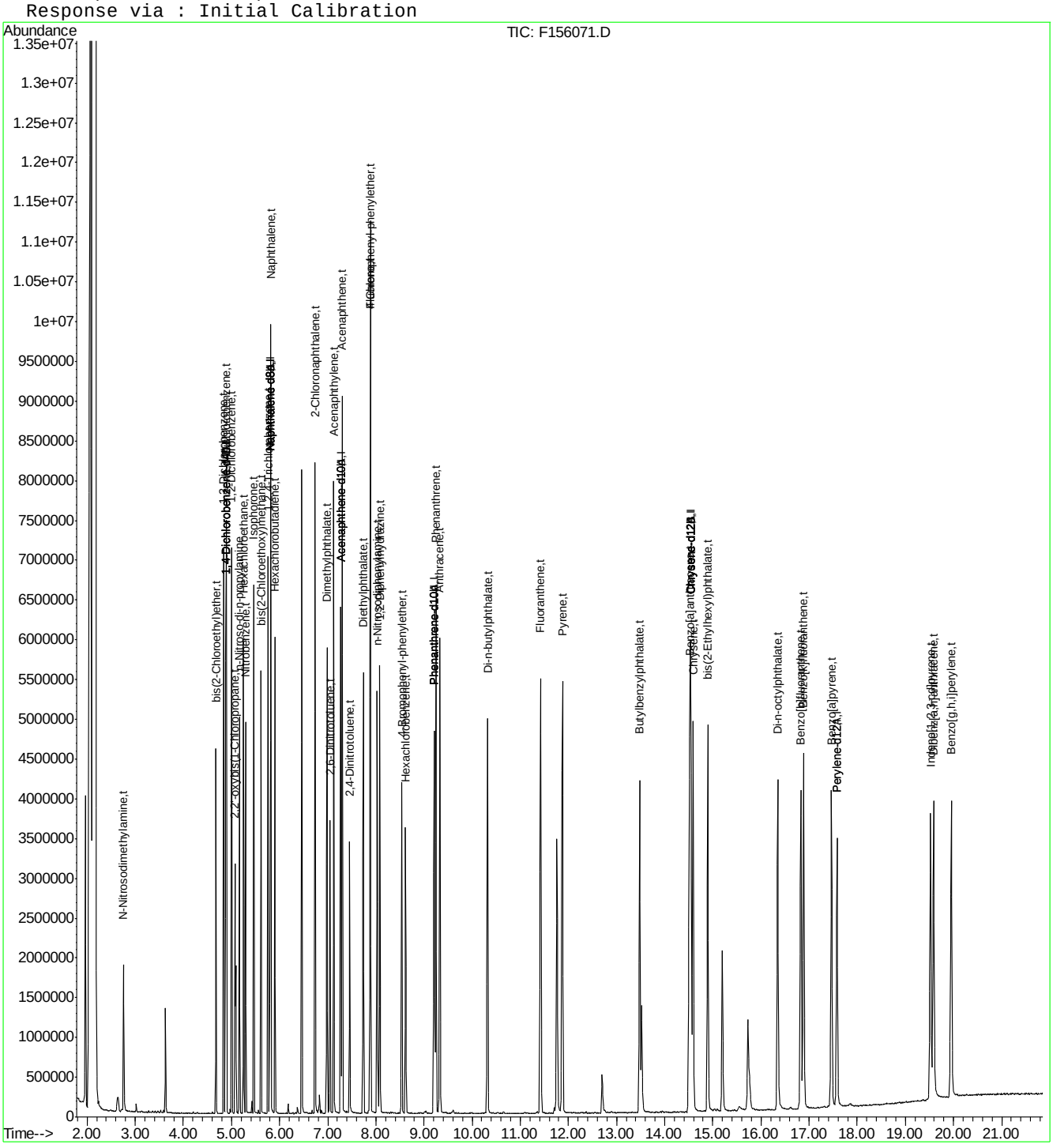
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6564\F156071.D Vial: 13
Acq On : 5 Apr 2016 4:44 am Operator: sarad
Sample : icv6563-50 Inst : MSF
Misc : op92661,ef6564,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 7 9:52 2016 Quant Results File: MF6563.RES

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Apr 06 08:33:31 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6564\F156071A.D Vial: 13
Acq On : 5 Apr 2016 4:44 am Operator: sarad
Sample : icv6563-50 Inst : MSF
Misc : op92661,ef6564,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 10:44:21 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 10:36:50 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.88	152	791654	40.00	ppm	0.00
24) Naphthalene-d8	5.80	136	2940255	40.00	ppm	0.00
47) Acenaphthene-d10	7.27	164	1650821	40.00	ppm	0.00
69) Phenanthrene-d10	9.21	188	2527126	40.00	ppm	0.00
83) Chrysene-d12	14.54	240	2041490	40.00	ppm	-0.01
92) Perylene-d12	17.58	264	1894786	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4A	4.88	152	791654	40.00	ppm	0.00
112) Naphthalene-d8A	5.80	136	2940255	40.00	ppm	0.00
121) Acenaphthene-d10A	7.27	164	1650821	40.00	ppm	0.00
132) Phenanthrene-d10A	9.21	188	2527126	40.00	ppm	0.00
147) Chrysene-d12A	14.54	240	2041490	40.00	ppm	-0.01
155) Perylene-d12A	17.58	264	1894786	40.00	ppm	-0.01
159) 1,4-Dichlorobenzene-d4b	4.88	152	791654	40.00	ppm	0.00
161) Naphthalene-d8b	5.80	136	2940255	40.00	ppm	0.00
163) Acenaphthene-d10b	7.27	164	1650821	40.00	ppm	0.00
165) Phenanthrene-d10b	9.21	188	2527126	40.00	ppm	0.00
167) Chrysene-d12b	14.54	240	2041490	40.00	ppm	0.00
169) 1,4-Dichlorobenzene-d4c	4.88	152	791654	40.00	ppm	0.00
171) Naphthalene-d8c	5.80	136	2940255	40.00	ppm	0.00
176) Chrysene-d12c	14.54	240	2041490	40.00	ppm	-0.01
178) Naphthalene-d8a	5.80	136	2940255	40.00	ppm	0.15
180) Chrysene-d12B	14.54	240	2041490	40.00	ppm	0.23

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.00	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.00	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.00	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.00	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds						Qvalue
164) 1,2,4,5-Tetrachlorobenzene	6.46	216	1023403	44.56	ppm	98

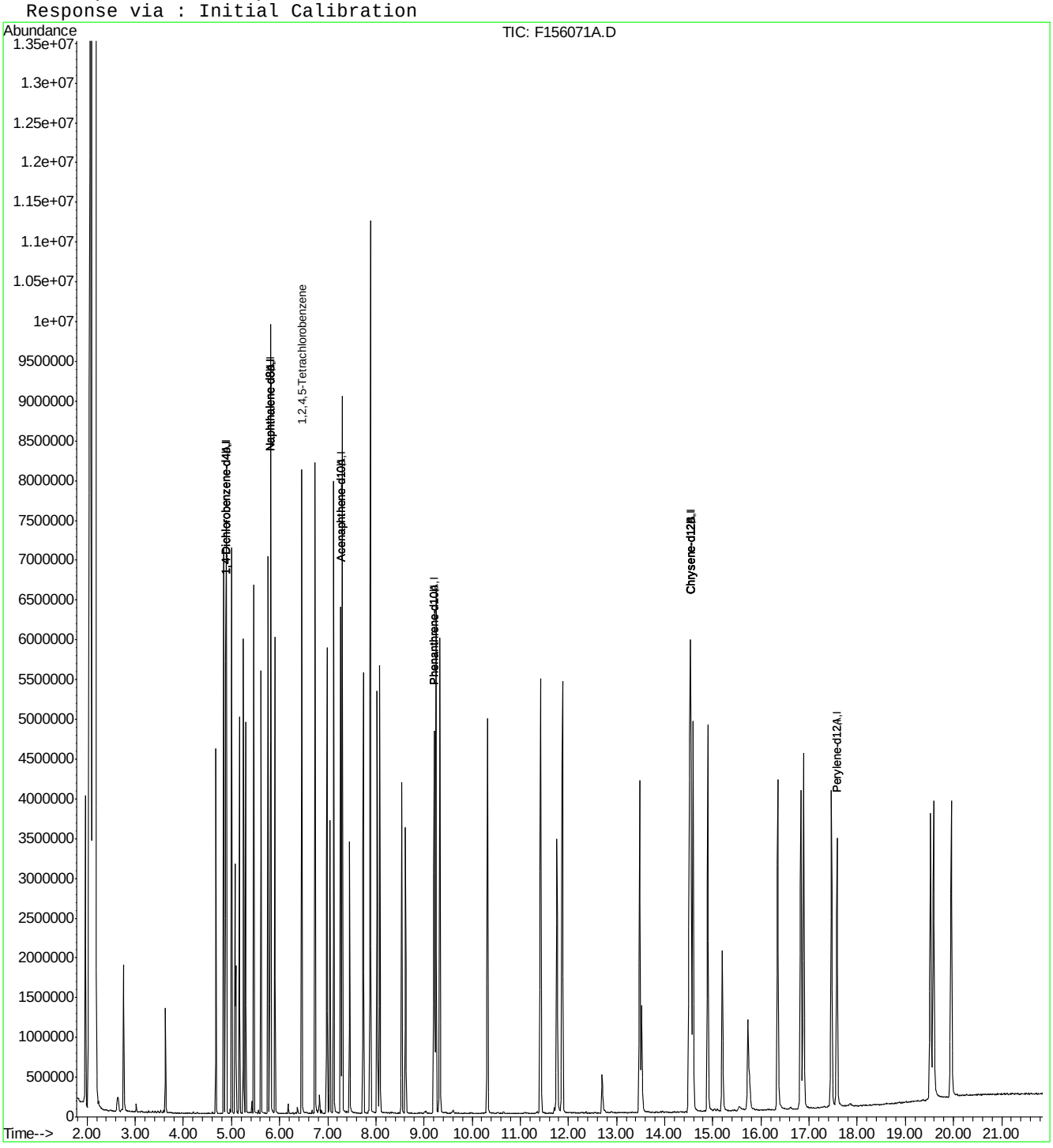
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6564\F156071A.D Vial: 13
Acq On : 5 Apr 2016 4:44 am Operator: sarad
Sample : icv6563-50 Inst : MSF
Misc : op92661,ef6564,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 7 9:52 2016 Quant Results File: MF6563.RES

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Apr 06 08:33:31 2016
Response via : Initial Calibration



F156071A.D MF6563.M Thu Apr 07 09:52:38 2016 RT1 Page 2

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6564\F156072A.D Vial: 14
Acq On : 5 Apr 2016 5:13 am Operator: sarad
Sample : icv6563-50 Inst : MSF
Misc : op92661,ef6564,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 10:55:42 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 10:36:50 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.88	152	857846	40.00	ppm	0.00
24) Naphthalene-d8	5.80	136	3576668	40.00	ppm	0.00
47) Acenaphthene-d10	7.27	164	1817820	40.00	ppm	0.00
69) Phenanthrene-d10	9.21	188	2775738	40.00	ppm	0.00
83) Chrysene-d12	14.53	240	2296061	40.00	ppm	-0.02
92) Perylene-d12	17.58	264	1979067	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4A	4.88	152	857846	40.00	ppm	0.00
112) Naphthalene-d8A	5.80	136	3576668	40.00	ppm	0.00
121) Acenaphthene-d10A	7.27	164	1817820	40.00	ppm	0.00
132) Phenanthrene-d10A	9.21	188	2775738	40.00	ppm	0.00
147) Chrysene-d12A	14.53	240	2296061	40.00	ppm	-0.02
155) Perylene-d12A	17.58	264	1979067	40.00	ppm	-0.01
159) 1,4-Dichlorobenzene-d4b	4.88	152	857846	40.00	ppm	0.00
161) Naphthalene-d8b	5.80	136	3576668	40.00	ppm	0.00
163) Acenaphthene-d10b	7.27	164	1817820	40.00	ppm	0.00
165) Phenanthrene-d10b	9.21	188	2775738	40.00	ppm	0.00
167) Chrysene-d12b	14.53	240	2296061	40.00	ppm	0.00
169) 1,4-Dichlorobenzene-d4c	4.88	152	857846	40.00	ppm	0.00
171) Naphthalene-d8c	5.80	136	3576668	40.00	ppm	0.00
176) Chrysene-d12c	14.53	240	2296061	40.00	ppm	-0.02
178) Naphthalene-d8a	5.80	136	3576668	40.00	ppm	0.15
180) Chrysene-d12B	14.53	240	2296061	40.00	ppm	0.22

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.00	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.00	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.00	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.00	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds						Qvalue
160) Benzaldehyde	4.56	105	1094500	45.31	ppm	99
166) Atrazine	8.79	200	597779	44.80	ppm	99

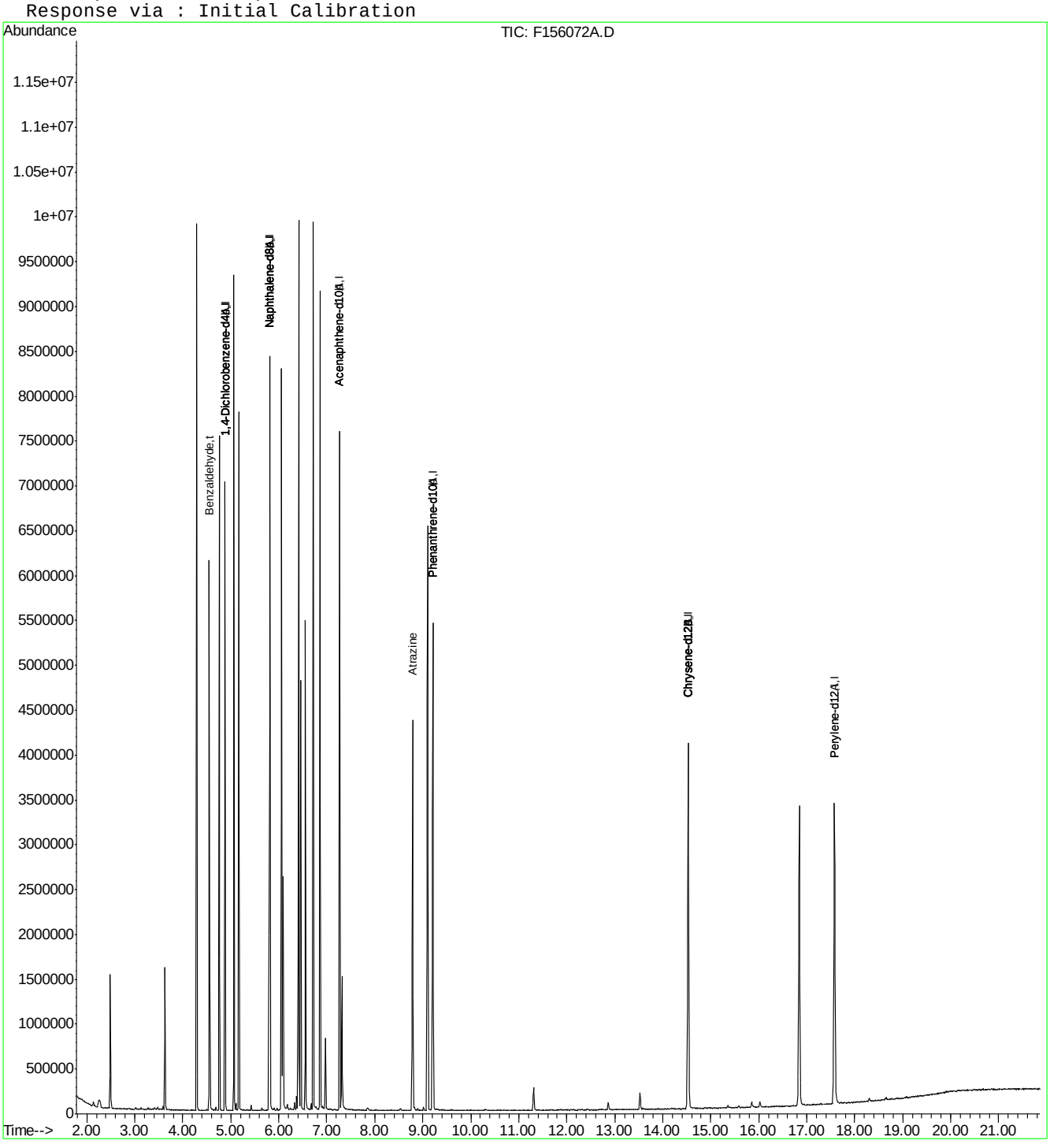
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6564\F156072A.D Vial: 14
Acq On : 5 Apr 2016 5:13 am Operator: sarad
Sample : icv6563-50 Inst : MSF
Misc : op92661,ef6564,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 7 9:53 2016 Quant Results File: MF6563.RES

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Apr 06 08:33:31 2016
Response via : Initial Calibration



F156072A.D MF6563.M Thu Apr 07 09:53:25 2016 RT1 Page 2

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6564\F156072.D Vial: 14
Acq On : 5 Apr 2016 5:13 am Operator: sarad
Sample : icv6563-50 Inst : MSF
Misc : op92661,ef6564,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 10:55:42 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 10:36:50 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.88	152	857846	40.00	ppm	0.00
24) Naphthalene-d8	5.80	136	3576668	40.00	ppm	0.00
47) Acenaphthene-d10	7.27	164	1817820	40.00	ppm	0.00
69) Phenanthrene-d10	9.21	188	2775738	40.00	ppm	0.00
83) Chrysene-d12	14.53	240	2296061	40.00	ppm	-0.02
92) Perylene-d12	17.58	264	1979067	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4A	4.88	152	857846	40.00	ppm	0.00
112) Naphthalene-d8A	5.80	136	3576668	40.00	ppm	0.00
121) Acenaphthene-d10A	7.27	164	1817820	40.00	ppm	0.00
132) Phenanthrene-d10A	9.21	188	2775738	40.00	ppm	0.00
147) Chrysene-d12A	14.53	240	2296061	40.00	ppm	-0.02
155) Perylene-d12A	17.58	264	1979067	40.00	ppm	-0.01
159) 1,4-Dichlorobenzene-d4b	4.88	152	857846	40.00	ppm	0.00
161) Naphthalene-d8b	5.80	136	3576668	40.00	ppm	0.00
163) Acenaphthene-d10b	7.27	164	1817820	40.00	ppm	0.00
165) Phenanthrene-d10b	9.21	188	2775738	40.00	ppm	0.00
167) Chrysene-d12b	14.53	240	2296061	40.00	ppm	0.00
169) 1,4-Dichlorobenzene-d4c	4.88	152	857846	40.00	ppm	0.00
171) Naphthalene-d8c	5.80	136	3576668	40.00	ppm	0.00
176) Chrysene-d12c	14.53	240	2296061	40.00	ppm	-0.02
178) Naphthalene-d8a	5.80	136	3576668	40.00	ppm	0.15
180) Chrysene-d12B	14.53	240	2296061	40.00	ppm	0.22

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.00	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.00	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.00	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.00	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds

						Qvalue
2) 1,4-Dioxane	2.49	88	587733	44.25	ppm	97
6) Indene	5.07	116	2402169	47.31	ppm	99
7) Cumene	4.29	105	3028952	44.41	ppm	100
13) Decane	4.76	43	1199734	43.79	ppm	97
18) Acetophenone	5.17	105	1787382	46.56	ppm	92
27) Quinoline	6.05	129	2584470	37.39	ppm	97
41) Caprolactam	6.09	55	501453	36.96	ppm	97
45) 1-Methylnaphthalene	6.41	141	2097104	36.99	ppm	99
46) Dimethylnaphthalene	6.86	156	2148084	37.40	ppm	100
48) Hexachlorocyclopentadiene	6.46	237	630910	51.15	ppm	99
53) Biphenyl	6.72	154	2917712	43.26	ppm	100
82) Octadecane	9.10	57	1516617	46.58	ppm	100

(#) = qualifier out of range (m) = manual integration
F156072.D MF6563.M Thu Apr 07 09:52:51 2016 RT1

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6564\F156072.D Vial: 14
Acq On : 5 Apr 2016 5:13 am Operator: sarad
Sample : icv6563-50 Inst : MSF
Misc : op92661,ef6564,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 10:55:42 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 10:36:50 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
100) 7,12-Dimethylbenz(a)anthra	16.84	256	1106284	46.32 ppm	100

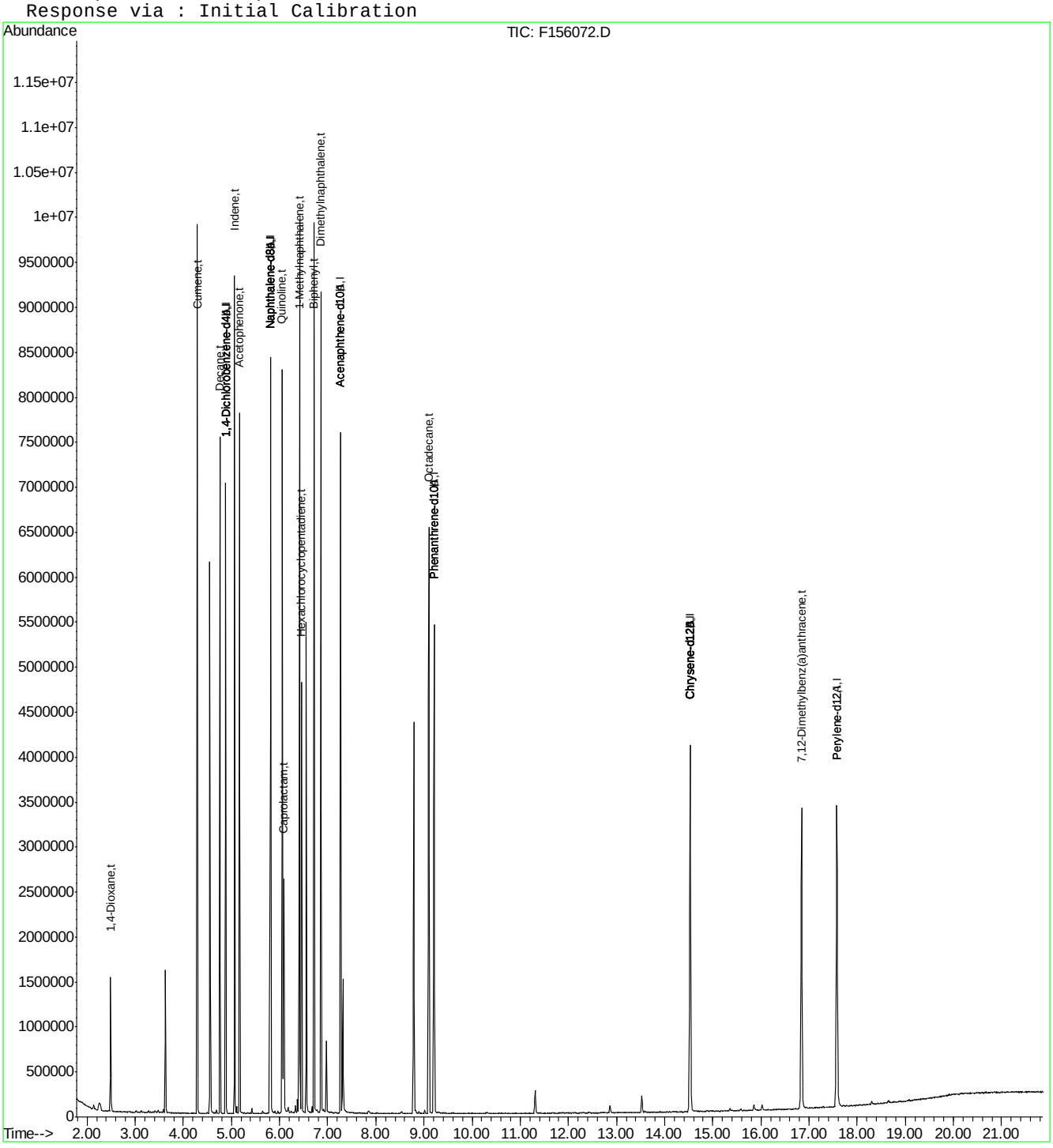
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6564\F156072.D Vial: 14
Acq On : 5 Apr 2016 5:13 am Operator: sarad
Sample : icv6563-50 Inst : MSF
Misc : op92661,ef6564,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 7 9:52 2016 Quant Results File: MF6563.RES

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Apr 06 08:33:31 2016
Response via : Initial Calibration



F156072.D MF6563.M Thu Apr 07 09:52:52 2016 RT1 Page 3

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6564\F156073.D Vial: 15
Acq On : 5 Apr 2016 5:42 am Operator: sarad
Sample : icv6564-50 Inst : MSF
Misc : op92661,ef6564,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 10:58:25 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 10:36:50 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.88	152	909903	40.00	ppm	0.00
24) Naphthalene-d8	5.80	136	3328731	40.00	ppm	0.00
47) Acenaphthene-d10	7.27	164	1966387	40.00	ppm	0.00
69) Phenanthrene-d10	9.21	188	3138917	40.00	ppm	-0.01
83) Chrysene-d12	14.53	240	2735429	40.00	ppm	-0.02
92) Perylene-d12	17.58	264	2564354	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4A	4.88	152	909903	40.00	ppm	0.00
112) Naphthalene-d8A	5.80	136	3328731	40.00	ppm	0.00
121) Acenaphthene-d10A	7.27	164	1966387	40.00	ppm	0.00
132) Phenanthrene-d10A	9.21	188	3138917	40.00	ppm	-0.01
147) Chrysene-d12A	14.53	240	2735429	40.00	ppm	-0.02
155) Perylene-d12A	17.58	264	2564354	40.00	ppm	-0.01
159) 1,4-Dichlorobenzene-d4b	4.88	152	909903	40.00	ppm	0.00
161) Naphthalene-d8b	5.80	136	3328731	40.00	ppm	0.00
163) Acenaphthene-d10b	7.27	164	1966387	40.00	ppm	0.00
165) Phenanthrene-d10b	9.21	188	3138917	40.00	ppm	0.00
167) Chrysene-d12b	14.53	240	2735429	40.00	ppm	0.00
169) 1,4-Dichlorobenzene-d4c	4.88	152	909903	40.00	ppm	0.00
171) Naphthalene-d8c	5.80	136	3328731	40.00	ppm	0.00
176) Chrysene-d12c	14.53	240	2735429	40.00	ppm	-0.02
178) Naphthalene-d8a	5.80	136	3328731	40.00	ppm	0.15
180) Chrysene-d12B	14.53	240	2735429	40.00	ppm	0.22

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.00	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.00	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.00	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.00	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds

						Qvalue
89) 3,3'-Dichlorobenzidine	14.55	252	1355321	46.96	ppm	99

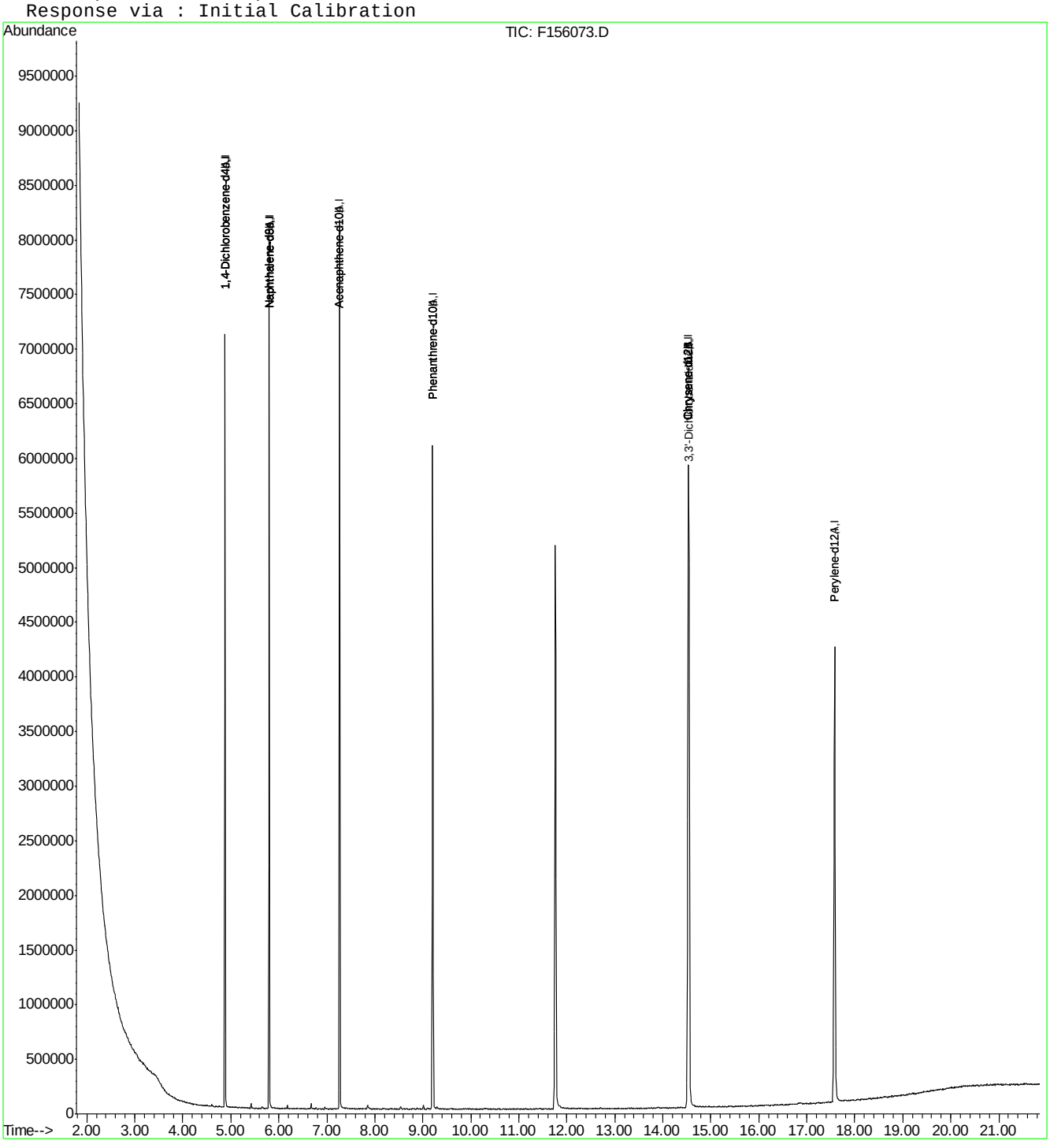
(#) = qualifier out of range (m) = manual integration (+) = signals summed
F156073.D MF6563.M Thu Apr 07 09:53:52 2016 RT1

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6564\F156073.D Vial: 15
Acq On : 5 Apr 2016 5:42 am Operator: sarad
Sample : icv6564-50 Inst : MSF
Misc : op92661,ef6564,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 7 9:53 2016 Quant Results File: MF6563.RES

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Apr 06 08:33:31 2016
Response via : Initial Calibration



F156073.D MF6563.M Thu Apr 07 09:53:52 2016 RT1 Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6564\F156073A.D Vial: 15
Acq On : 5 Apr 2016 5:42 am Operator: sarad
Sample : icv6564-50 Inst : MSF
Misc : op92661,ef6564,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 05 10:58:25 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 05 10:36:50 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.88	152	909903	40.00 ppm	0.00
24) Naphthalene-d8	5.80	136	3328731	40.00 ppm	0.00
47) Acenaphthene-d10	7.27	164	1966387	40.00 ppm	0.00
69) Phenanthrene-d10	9.21	188	3138917	40.00 ppm	-0.01
83) Chrysene-d12	14.53	240	2735429	40.00 ppm	-0.02
92) Perylene-d12	17.58	264	2564354	40.00 ppm	-0.01
102) 1,4-Dichlorobenzene-d4A	4.88	152	909903	40.00 ppm	0.00
112) Naphthalene-d8A	5.80	136	3328731	40.00 ppm	0.00
121) Acenaphthene-d10A	7.27	164	1966387	40.00 ppm	0.00
132) Phenanthrene-d10A	9.21	188	3138917	40.00 ppm	-0.01
147) Chrysene-d12A	14.53	240	2735429	40.00 ppm	-0.02
155) Perylene-d12A	17.58	264	2564354	40.00 ppm	-0.01
159) 1,4-Dichlorobenzene-d4b	4.88	152	909903	40.00 ppm	0.00
161) Naphthalene-d8b	5.80	136	3328731	40.00 ppm	0.00
163) Acenaphthene-d10b	7.27	164	1966387	40.00 ppm	0.00
165) Phenanthrene-d10b	9.21	188	3138917	40.00 ppm	0.00
167) Chrysene-d12b	14.53	240	2735429	40.00 ppm	0.00
169) 1,4-Dichlorobenzene-d4c	4.88	152	909903	40.00 ppm	0.00
171) Naphthalene-d8c	5.80	136	3328731	40.00 ppm	0.00
176) Chrysene-d12c	14.53	240	2735429	40.00 ppm	-0.02
178) Naphthalene-d8a	5.80	136	3328731	40.00 ppm	0.15
180) Chrysene-d12B	14.53	240	2735429	40.00 ppm	0.22

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
8) Phenol-d5	0.00	99	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
25) Nitrobenzene-d5	0.00	82	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
51) 2-Fluorobiphenyl	0.00	172	0d	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
73) 2,4,6-Tribromophenol	0.00	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
85) Terphenyl-d14	0.00	244	0d	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		

Target Compounds					Qvalue
168) Benzidine	11.76	184	3118781	65.60 ppm	99

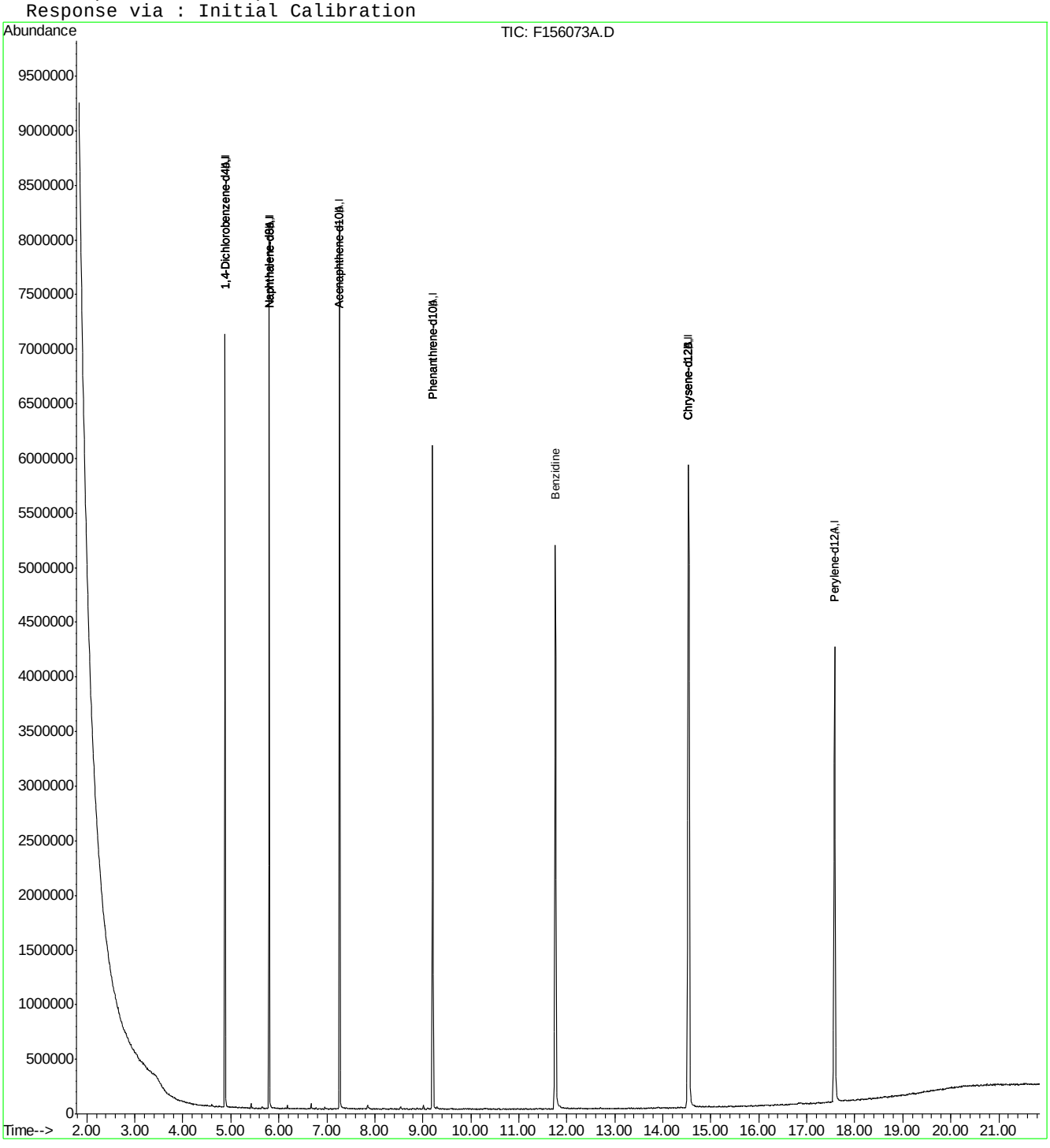
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6564\F156073A.D Vial: 15
Acq On : 5 Apr 2016 5:42 am Operator: sarad
Sample : icv6564-50 Inst : MSF
Misc : op92661,ef6564,100 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 7 9:53 2016 Quant Results File: MF6563.RES

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Apr 06 08:33:31 2016
Response via : Initial Calibration



F156073A.D MF6563.M Thu Apr 07 09:54:03 2016 RT1 Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6567\F156097.D Vial: 10
Acq On : 5 Apr 2016 10:16 pm Operator: sarad
Sample : icv6564-50 Inst : MSF
Misc : op92661,ef6567 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 08 16:44:02 2016 Quant Results File: MF6563AP9.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Apr 08 16:43:38 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.87	152	549264	40.00	ppm	0.00
24) Naphthalene-d8	5.80	136	2140076	40.00	ppm	0.00
47) Acenaphthene-d10	7.27	164	1242814	40.00	ppm	0.00
69) Phenanthrene-d10	9.21	188	2015567	40.00	ppm	0.00
83) Chrysene-d12	14.52	240	1762466	40.00	ppm	0.00
92) Perylene-d12	17.58	264	1617527	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4A	4.87	152	549264	40.00	ppm	0.00
112) Naphthalene-d8A	5.80	136	2140076	40.00	ppm	0.00
121) Acenaphthene-d10A	7.27	164	1242814	40.00	ppm	0.00
132) Phenanthrene-d10A	9.21	188	2015567	40.00	ppm	0.00
147) Chrysene-d12A	14.52	240	1762466	40.00	ppm	0.00
155) Perylene-d12A	17.58	264	1617527	40.00	ppm	-0.01
159) 1,4-Dichlorobenzene-d4b	4.87	152	549264	40.00	ppm	0.00
161) Naphthalene-d8b	5.80	136	2140076	40.00	ppm	0.00
163) Acenaphthene-d10b	7.27	164	1242814	40.00	ppm	0.00
165) Phenanthrene-d10b	9.21	188	2015567	40.00	ppm	0.00
167) Chrysene-d12b	14.52	240	1762466	40.00	ppm	0.00
169) 1,4-Dichlorobenzene-d4c	4.87	152	549264	40.00	ppm	0.00
171) Naphthalene-d8c	5.80	136	2140076	40.00	ppm	0.00
176) Chrysene-d12c	14.52	240	1762466	40.00	ppm	0.00
178) Naphthalene-d8a	5.80	136	2140076	40.00	ppm	0.00
180) Chrysene-d12B	14.52	240	1762466	40.00	ppm	0.02

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.00	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.00	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.00	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.00	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds						Qvalue
162) Hydroquinone	6.07	110	986234	56.47	ppm	92

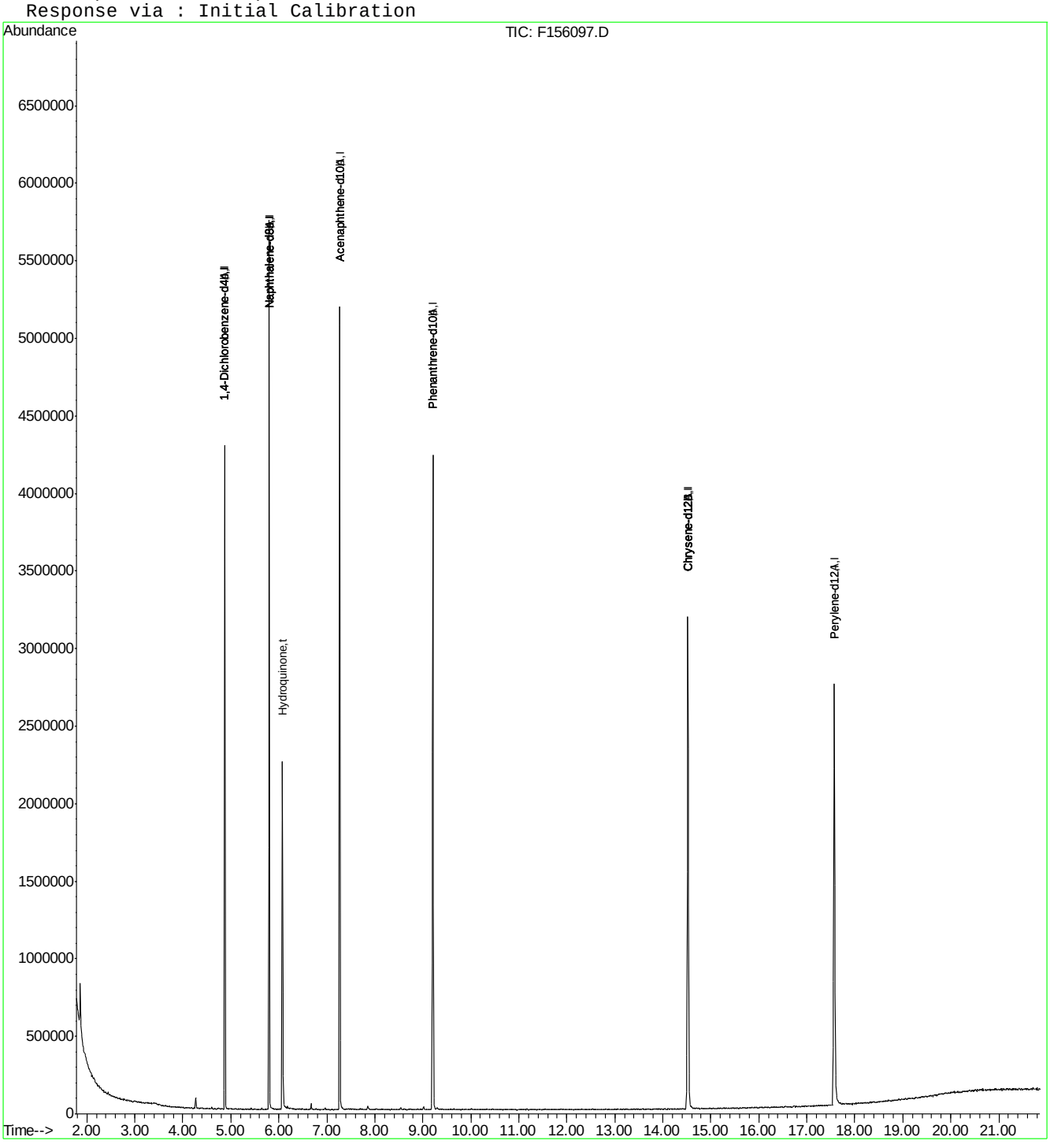
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6567\F156097.D Vial: 10
Acq On : 5 Apr 2016 10:16 pm Operator: sarad
Sample : icv6564-50 Inst : MSF
Misc : op92661,ef6567 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: Apr 8 16:45 2016 Quant Results File: MF6563AP9.RES

Method : C:\MSDCHEM\1\METHODS\MF6563AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri Apr 08 17:01:57 2016
Response via : Initial Calibration



F156097.D MF6563AP9.M Fri Apr 08 17:25:26 2016 RT1 Page 2

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
05/06/16 16:28

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6604\F156856.D Vial: 2
Acq On : 6 May 2016 9:10 am Operator: linseyk
Sample : cc6563-25 Inst : MSF
Misc : op93631,ef6604 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 06 09:32:19 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu May 05 10:56:04 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.78	152	773560	40.00	ppm	-0.03
24) Naphthalene-d8	5.71	136	3165804	40.00	ppm	-0.03
47) Acenaphthene-d10	7.14	164	1839173	40.00	ppm	-0.04
69) Phenanthrene-d10	9.04	188	2967641	40.00	ppm	-0.05
83) Chrysene-d12	14.32	240	2713658	40.00	ppm	-0.05
92) Perylene-d12	17.37	264	2528354	40.00	ppm	-0.05
102) 1,4-Dichlorobenzene-d4b	4.78	152	773560	40.00	ppm	-0.03
104) Naphthalene-d8b	5.71	136	3165804	40.00	ppm	-0.03
106) Acenaphthene-d10b	7.14	164	1839173	40.00	ppm	-0.04
108) Phenanthrene-d10b	9.04	188	2967641	40.00	ppm	-0.05
110) Chrysene-d12b	14.32	240	2713715	40.00	ppm	-0.05

System Monitoring Compounds						
5) 2-Fluorophenol	3.81	112	654181	24.05	ppm	-0.02
Spiked Amount 50.000			Recovery = 48.10%			
8) Phenol-d5	4.53	99	849898	25.69	ppm	-0.02
Spiked Amount 50.000			Recovery = 51.38%			
25) Nitrobenzene-d5	5.18	82	816072	27.60	ppm	-0.04
Spiked Amount 50.000			Recovery = 55.20%			
51) 2-Fluorobiphenyl	6.52	172	1403146	23.90	ppm	-0.03
Spiked Amount 50.000			Recovery = 47.80%			
73) 2,4,6-Tribromophenol	8.05	330	178850	29.53	ppm	-0.04
Spiked Amount 50.000			Recovery = 59.06%			
85) Terphenyl-d14	12.10	244	1350901	24.51	ppm	-0.06
Spiked Amount 50.000			Recovery = 49.02%			

Target Compounds							Qvalue
2) 1,4-Dioxane	2.37	88	283684	23.68	ppm		94
3) Pyridine	2.68	79	691071	24.49	ppm		97
4) N-Nitrosodimethylamine	2.65	42	277140	27.30	ppm		92
6) Indene	4.97	116	1226356	26.79	ppm		98
7) Cumene	4.19	105	1735165	28.22	ppm		96
9) Phenol	4.54	94	991338	28.15	ppm		75
10) Aniline	4.54	93	979113	25.41	ppm		75
11) bis(2-Chloroethyl)ether	4.58	93	646793	25.53	ppm		96
12) 2-Chlorophenol	4.63	128	691210	24.07	ppm		97
13) Decane	4.66	43	498194	20.16	ppm		82
14) 1,3-Dichlorobenzene	4.74	146	753533	23.66	ppm		98
15) 1,4-Dichlorobenzene	4.79	146	787431	24.78	ppm		97
16) Benzyl alcohol	4.88	108	449877	24.56	ppm	#	71
17) 1,2-Dichlorobenzene	4.90	146	726723	24.32	ppm		98
18) Acetophenone	5.08	105	1030414	29.76	ppm		92
19) 2-Methylphenol	4.97	108	657189	26.72	ppm		99
20) 2,2'-oxybis(1-Chloropropan	4.98	121	221608	24.27	ppm	#	51
21) 3&4-Methylphenol	5.08	108	689232	27.32	ppm		97
22) n-Nitroso-di-n-propylamine	5.08	70	592595	31.71	ppm		94
23) Hexachloroethane	5.15	201	235787	23.95	ppm		94
26) Nitrobenzene	5.20	77	875073	28.26	ppm		85
27) Quinoline	5.96	129	1392573	22.76	ppm		97
28) Isophorone	5.37	82	1454164	27.50	ppm		96

(#) = qualifier out of range (m) = manual integration
F156856.D MF6563.M Fri May 06 12:21:21 2016 RT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6604\F156856.D Vial: 2
Acq On : 6 May 2016 9:10 am Operator: linseyk
Sample : cc6563-25 Inst : MSF
Misc : op93631,ef6604 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 06 09:32:19 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu May 05 10:56:04 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
29)	2-Nitrophenol	5.43	139	363075	22.60	ppm		81
30)	2,4-Dimethylphenol	5.46	107	672845	26.59	ppm		96
31)	Benzoic acid	5.55	105	568483m	26.87	ppm		
32)	bis(2-Chloroethoxy)methane	5.52	93	794980	23.85	ppm		97
33)	2,4-Dichlorophenol	5.61	162	555317	21.98	ppm		96
34)	2,6-Dichlorophenol	5.76	162	545517	22.48	ppm		98
35)	1,3,5-Trichlorobenzene	5.43	180	609925	22.93	ppm		100
36)	1,2,4-Trichlorobenzene	5.66	180	585258	22.40	ppm		98
37)	1,2,3-Trichlorobenzene	5.82	180	587133	22.78	ppm		98
38)	Naphthalene	5.72	128	2130117	24.64	ppm		99
39)	4-Chloroaniline	5.76	127	829545	23.24	ppm		99
40)	2,3-Dichloroaniline	6.45	161	680788	23.13	ppm		97
41)	Caprolactam	6.02	55	248329	20.68	ppm		91
42)	Hexachlorobutadiene	5.80	225	306200	24.75	ppm		97
43)	4-Chloro-3-methylphenol	6.12	107	650573	26.25	ppm		98
44)	2-Methylnaphthalene	6.23	141	1145860	23.50	ppm		97
45)	1-Methylnaphthalene	6.30	141	1196376	23.84	ppm		99
46)	Dimethylnaphthalene	6.74	156	1186854	23.35	ppm		98
48)	Hexachlorocyclopentadiene	6.35	237	711852	57.04	ppm		99
49)	2,4,6-Trichlorophenol	6.45	196	370229	23.73	ppm		99
50)	2,4,5-Trichlorophenol	6.49	196	406505	23.66	ppm		97
52)	2-Chloronaphthalene	6.63	162	1258719	23.68	ppm		95
53)	Biphenyl	6.60	154	1644894	24.10	ppm		98
54)	2-Nitroaniline	6.71	65	474585	31.51	ppm		81
55)	Dimethylphthalate	6.87	163	1459434	24.54	ppm		100
56)	Acenaphthylene	7.00	152	2085861	24.21	ppm		99
57)	2,6-Dinitrotoluene	6.93	165	329445	25.63	ppm		91
58)	3-Nitroaniline	7.10	138	366258	22.76	ppm		88
59)	Acenaphthene	7.18	153	1311960	24.25	ppm		95
60)	2,4-Dinitrophenol	7.20	184	361430	49.18	ppm	#	51
61)	4-Nitrophenol	7.29	109	225754	29.86	ppm		92
62)	Dibenzofuran	7.36	168	1726258	23.38	ppm		96
63)	2,4-Dinitrotoluene	7.34	165	454523	26.09	ppm		85
64)	2,3,4,6-Tetrachlorophenol	7.49	232	312309	24.10	ppm		93
65)	Diethylphthalate	7.60	149	1477125	25.13	ppm		98
66)	Fluorene	7.74	166	1471988	25.90	ppm		99
67)	4-Chlorophenyl-phenylether	7.74	204	628149	25.09	ppm		95
68)	4-Nitroaniline	7.77	138	367717	22.63	ppm		94
70)	4,6-Dinitro-2-methylphenol	7.81	198	263610	28.12	ppm		95
71)	n-Nitrosodiphenylamine	7.89	169	973290	22.92	ppm		96
72)	1,2-Diphenylhydrazine	7.94	77	1735713	29.57	ppm		95
74)	4-Bromophenyl-phenylether	8.38	248	349633	24.49	ppm		95
75)	Hexachlorobenzene	8.46	284	361651	26.54	ppm		98
76)	Pentachlorophenol	8.76	266	490799	54.67	ppm		96
77)	Phenanthrene	9.08	178	2079852	24.36	ppm		98
78)	Anthracene	9.16	178	2091972	24.48	ppm		98
79)	Carbazole	9.44	167	1851015	23.10	ppm		98
80)	Di-n-butylphthalate	10.13	149	2522784	25.21	ppm		98
81)	Fluoranthene	11.22	202	2065216	24.39	ppm		99

(#) = qualifier out of range (m) = manual integration

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6604\F156856.D Vial: 2
Acq On : 6 May 2016 9:10 am Operator: linseyk
Sample : cc6563-25 Inst : MSF
Misc : op93631,ef6604 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 06 09:32:19 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu May 05 10:56:04 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
82)	Octadecane	8.93	57	822247	23.67	ppm	88
84)	Pyrene	11.67	202	2223214	23.10	ppm	98
86)	Butylbenzylphthalate	13.28	149	1090929	23.08	ppm	90
87)	Butyl stearate	13.55	56	541080	21.12	ppm	87
88)	Benzo[a]anthracene	14.30	228	1933701	23.53	ppm	99
89)	3,3'-Dichlorobenzidine	14.34	252	711124	24.84	ppm	98
90)	Chrysene	14.38	228	1937919	23.72	ppm	99
91)	bis(2-Ethylhexyl)phthalate	14.68	149	1547202	23.62	ppm	95
93)	Di-n-octylphthalate	16.12	149	2630557	23.74	ppm	99
94)	Benzo[b]fluoranthene	16.62	252	1991525	25.49	ppm	97
95)	Benzo[k]fluoranthene	16.67	252	1946848	25.46	ppm	96
96)	Benzo[a]pyrene	17.25	252	1741263	24.34	ppm	99
97)	Indeno[1,2,3-cd]pyrene	19.31	276	1668358	25.28	ppm	98
98)	Dibenz(a,h)acridine	18.95	279	1478726	26.09	ppm	97
99)	Dibenz[a,h]anthracene	19.37	278	1693006	26.51	ppm	98
100)	7,12-Dimethylbenz(a)anthra	16.63	256	866436	28.40	ppm	95
101)	Benzo[g,h,i]perylene	19.74	276	1811504	25.40	ppm	98

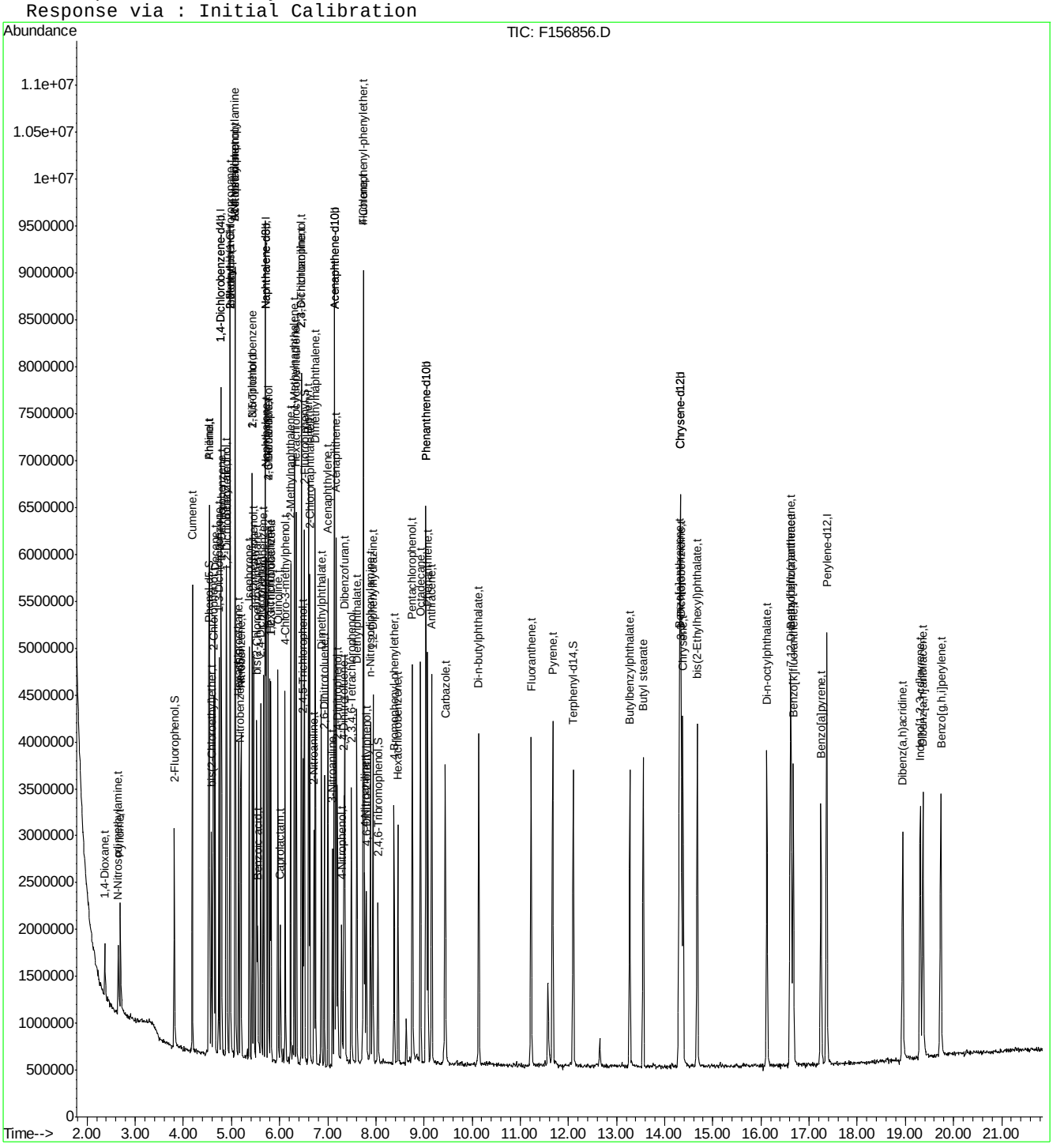
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6604\F156856.D Vial: 2
Acq On : 6 May 2016 9:10 am Operator: linseyk
Sample : cc6563-25 Inst : MSF
Misc : op93631,ef6604 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 6 9:35 2016 Quant Results File: MF6563.RES

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu May 05 10:56:04 2016
Response via : Initial Calibration



SGS ACCUTEST JC19644

Manual Integration Approval Summary

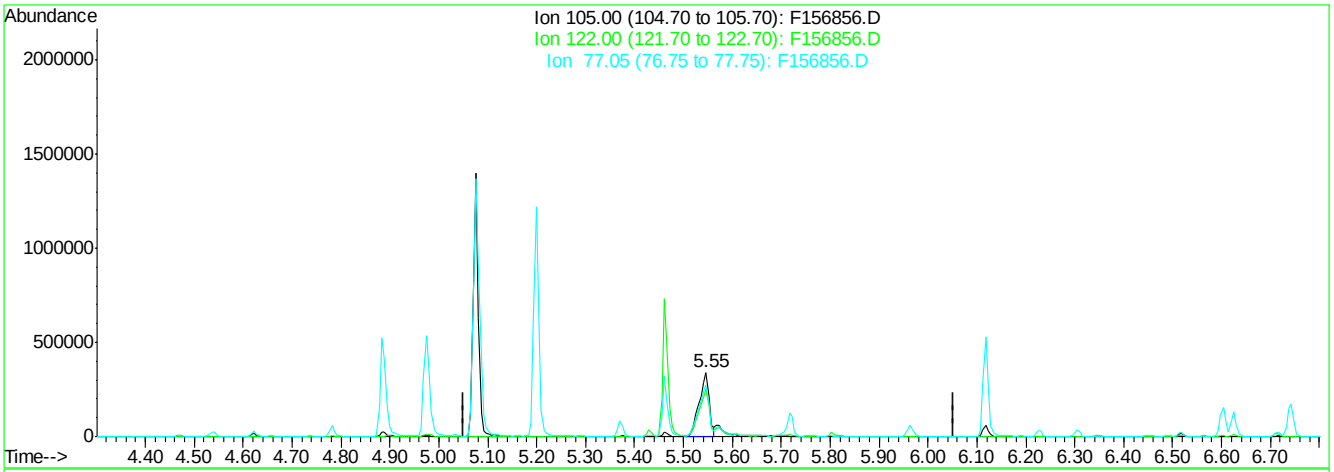
Sample Number:	EF6604-CC6563	**Method:**	EPA 625
Lab FileID:	F156856.D	**Analyst approved:**	05/06/16 13:25 Linsey Kirschmann
Injection Time:	05/06/16 09:10	**Supervisor approved:**	05/06/16 16:28 Nina Pandya

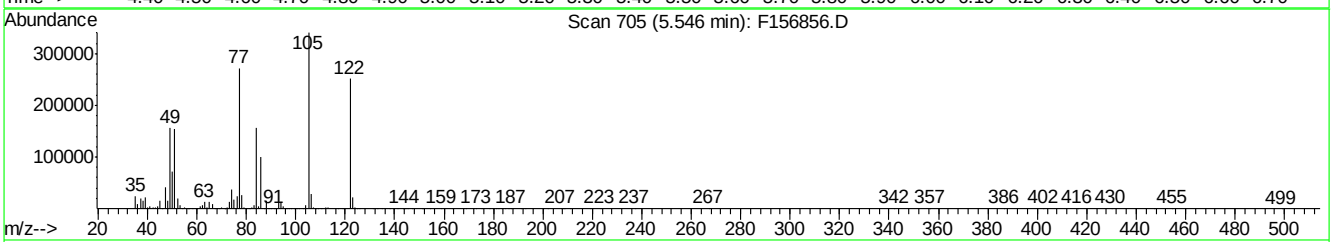
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		5.55	Split peak

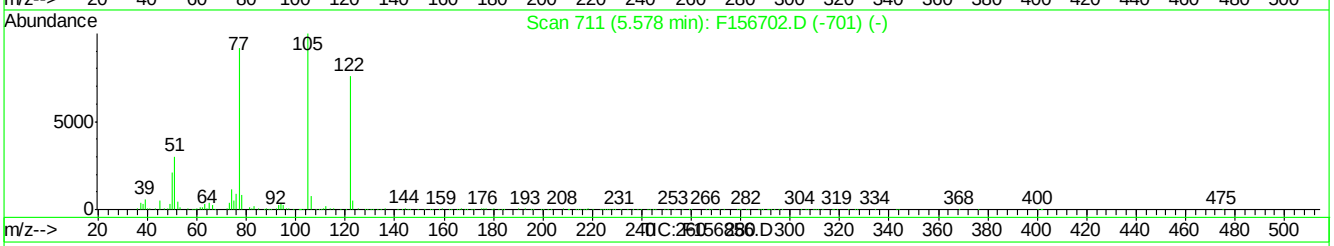
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EF6604\F156856.D Vial: 2
Acq On : 6 May 2016 9:10 am Operator: linseyk
Sample : cc6563-25 Inst : MSF
Misc : op93631,ef6604 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 6 9:32 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu May 05 10:56:04 2016
Response via : Multiple Level Calibration







(31) Benzoic acid (t)

5.55min 22.90ppm

response 484448

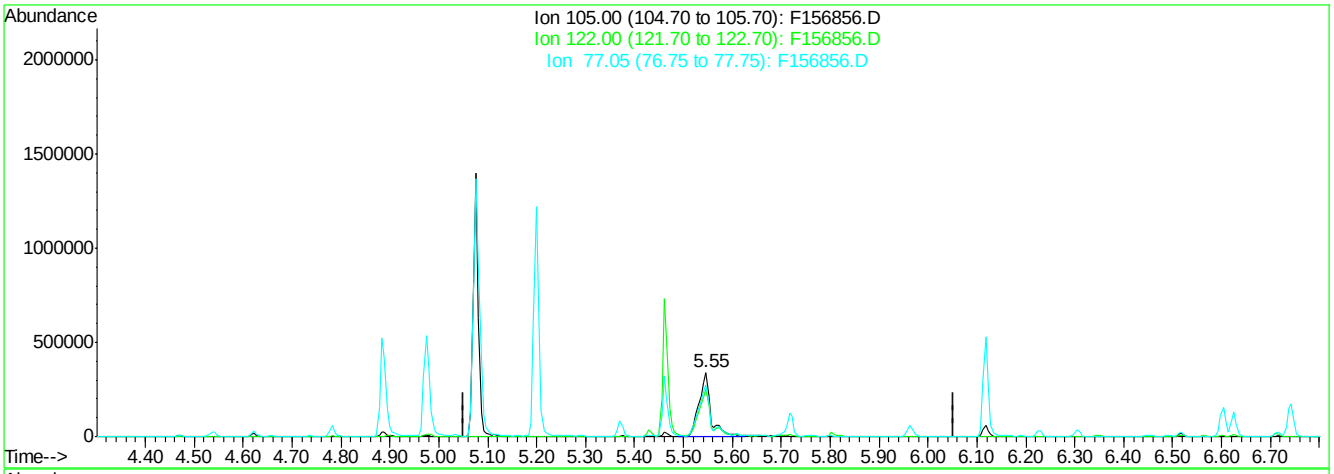
Ion	Exp%	Act%
105.00	100	100
122.00	79.10	73.38
77.05	81.30	80.59
0.00	0.00	0.00

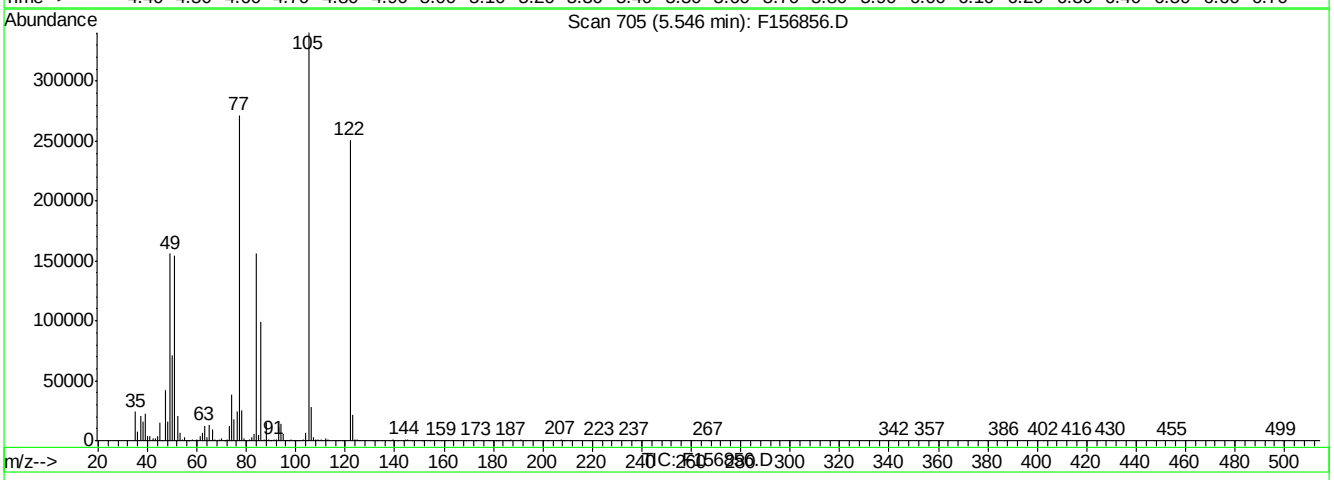
F156856.D MF6563.M Fri May 06 09:35:14 2016 RT1

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EF6604\F156856.D Vial: 2
Acq On : 6 May 2016 9:10 am Operator: linseyk
Sample : cc6563-25 Inst : MSF
Misc : op93631,ef6604 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 6 9:35 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu May 05 10:56:04 2016
Response via : Multiple Level Calibration





(31) Benzoic acid (t)

5.55min 26.87ppm m

response 568483

Ion	Exp%	Act%
105.00	100	100
122.00	79.10	73.71
77.05	81.30	79.78
0.00	0.00	0.00

F156856.D MF6563.M Fri May 06 12:21:31 2016 RT1

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6604\F156857.D Vial: 3
Acq On : 6 May 2016 9:39 am Operator: linseyk
Sample : cc6564-25 Inst : MSF
Misc : op93631,ef6604 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 06 12:22:17 2016 Quant Results File: MF6563.RES

Quant Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri May 06 12:22:13 2016
Response via : Initial Calibration
DataAcq Meth : MF6563

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.78	152	606297	40.00	ppm	-0.03
24) Naphthalene-d8	5.70	136	2583147	40.00	ppm	-0.03
47) Acenaphthene-d10	7.14	164	1577162	40.00	ppm	-0.04
69) Phenanthrene-d10	9.04	188	2590512	40.00	ppm	-0.05
83) Chrysene-d12	14.32	240	2395292	40.00	ppm	-0.06
92) Perylene-d12	17.36	264	2256507	40.00	ppm	-0.06
102) 1,4-Dichlorobenzene-d4b	4.78	152	606297	40.00	ppm	-0.03
104) Naphthalene-d8b	5.70	136	2583147	40.00	ppm	-0.03
106) Acenaphthene-d10b	7.14	164	1577162	40.00	ppm	-0.04
108) Phenanthrene-d10b	9.04	188	2590512	40.00	ppm	-0.05
110) Chrysene-d12b	14.32	240	2395292	40.00	ppm	-0.06

System Monitoring Compounds						
5) 2-Fluorophenol	0.00	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.00	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.00	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.00	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.00	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.00	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	

Target Compounds						Qvalue
103) Benzaldehyde	4.46	105	415389	24.33	ppm	95
105) Hydroquinone	6.00	110	518168	24.58	ppm	96
107) 1,2,4,5-Tetrachlorobenzene	6.36	216	442196	20.15	ppm	97
109) Atrazine	8.63	200	299897	24.08	ppm	96
111) Benzidine	11.58	184	867078	20.83	ppm	97

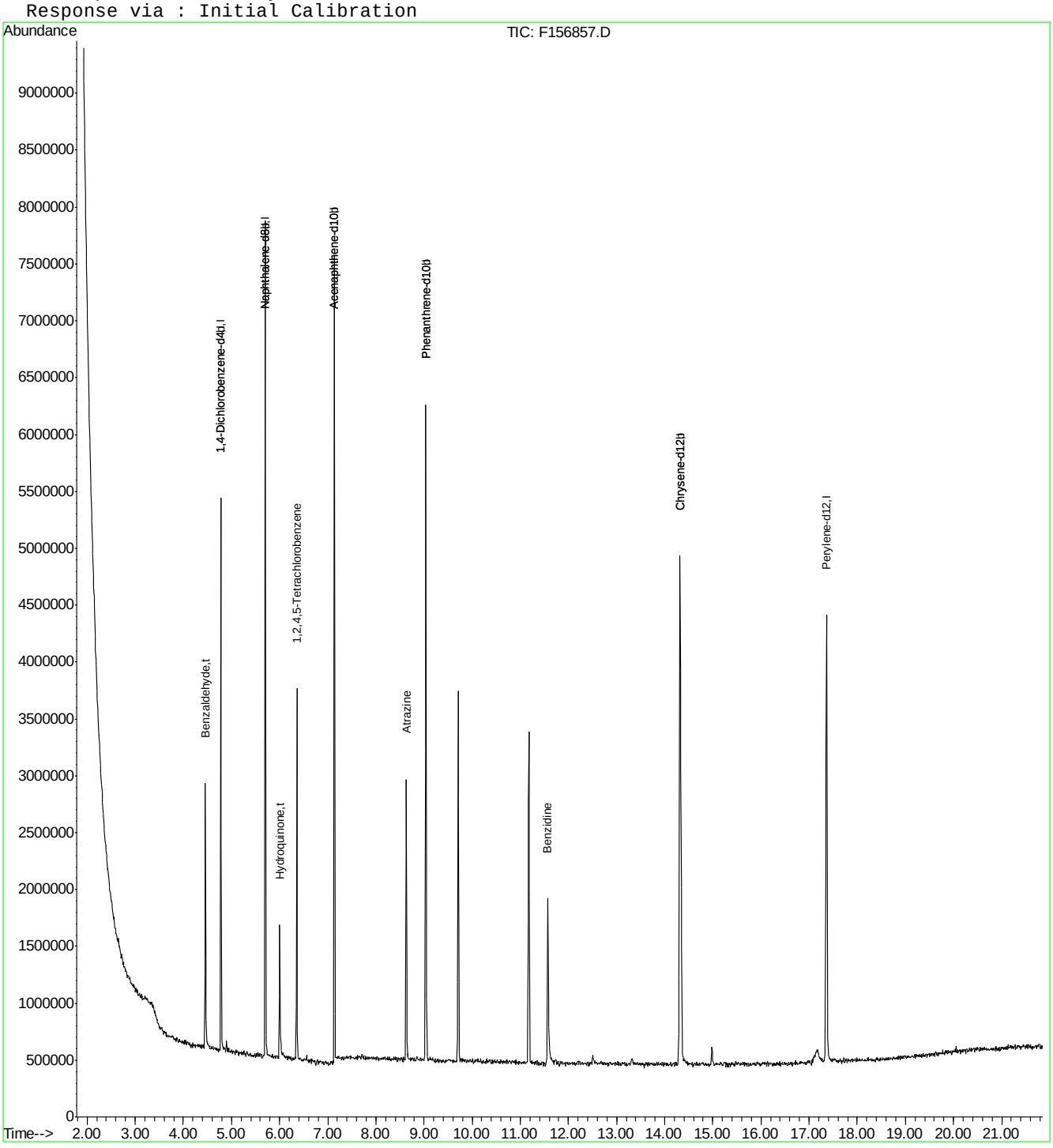
(#) = qualifier out of range (m) = manual integration (+) = signals summed
F156857.D MF6563.M Fri May 06 12:22:43 2016 RT1

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EF6604\F156857.D Vial: 3
Acq On : 6 May 2016 9:39 am Operator: linseyk
Sample : cc6564-25 Inst : MSF
Misc : op93631,ef6604 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Time: May 6 12:22 2016 Quant Results File: MF6563.RES

Method : C:\MSDCHEM\1\METHODS\MF6563.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Fri May 06 12:22:13 2016
Response via : Initial Calibration



F156857.D MF6563.M Fri May 06 12:22:43 2016 RT1 Page 2

SGS ACCUTEST JC19644

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E3E3621

Print Analyst Name: Ashley M. Dye

Analyst Signature: AMD

Date: 4/26/2016

Columns: ZB5MSplus30mx.25mmx.25µ

Method 8270D/625

Initial Cal. Method ~~V13E3591~~ 3620

Injection Volume: 1µL AMD 4/26/16

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	See page 1	

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: 4/27/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	3E82667	DFTPP				1					RR	RR ions at
	82668	DFTPP				1					OK	1:15PM
	82669	IC3621-100		~~BNA~~ TCL426W AMD 4/26/16		2					OK	SV151827-73A
	82670	-80				3					OK	-73B
	82671	IC3621-50				4					OK	-73C
	82672	IC3621-25				5					OK	-73D
	82673	-10				6					OK	-73E
	82674	-5				7					OK	-73G
	82675	-2				8					OK	-73H
	82676	-1				9					OK	-73I
	82677	ICV3620-50		Acids		10					OK	SV151827-129
	82678	ICV3620-50		Anilines		11					OK	-130
	82679	ICV3620-50		ABN SUM		12					OK	OP161712.33
	82680	ICV3620-50		BM		13					OK	SV161935-1 benzidine NO #89
	82681	ICV3620-50		BN2		14					OK	SV151827-134 #100
	82682	ICV3621-50		Benzidines		15		AN	1/29/16	28	OK	good for #89. benz. ↑ can't [illegible] SV151827-38C
	82683	ICV3621-50		HQ		16					OK	-98D 7:40PM

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 JC19644

SGS ACCUTEST

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: E3E3622

Print Analyst Name: Ashley N.

Analyst Signature: AM

Date: 4/27/16

Columns: ZB5msplus 30m x 25mm x 2

Method: 8270D/625

Initial Cal. Method: M3E3620

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV1515279 1	dftpp	50ppm
QM5732	Internal std	4000ppm
162418	dam (Fisher)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AWO

Date: 4/27/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	BE82684	dftpp			W	1					OK	9:39AM
	82685	ICV3620-50		Benzidine std		2					OK	SV16193514B ~~benzidine~~ 11:46
												cannot run for benzidine

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: QR015-07
Rev. Date: 1/19/16

SGS ACCUTEST JC19644

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E3E3623

Print Analyst Name: Ashley N.

Analyst Signature: dM

Date: 4/27/16

Columns: ZB5msplus 30mx.25mmx.25µm

Method 8270D/625

Initial Cal. Method M3E3623

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SU 151827-9	dftpp	50ppm
-107E	BNA	50ppm
not run →	~~TCMX~~	~~50ppm~~
CM(73)	Internal Std	400ppm
162418	Chem (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: 4/28/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	3E82686	dftpp			W	1					not using	12:24pm reinstall
	82687	CC3620-50		BNA		2					↓	2:47 heavy PAH's r reinstall
	82688	dftpp			W	1					NG	127r reinject
	82689	dftpp				1					↓	127r retune.
	82690	dftpp			W	1					not using	127r retune
	82691	DFTPP			W	1						127r retune
	82692	DFTPP			W	1						abundances retune
	82693	DFTPP			W	1						abundances retune
	82694	DFTPP			W	1					OK	321PM. recalibrate.
	82695	CC3620SU			W	2					not using	heavy PAH's ↓
	82696	icc3623-50		BNA		23					OK	SV151827-107E
	82697	ic3623-100				32					OK	-106A
	82698	-80				4					OK	-106B
	82699	-25				5					OK	-107F
	82700	-10				6					OK	-106E
	82701	-5				7					OK	-106G
	82702	-2				8					OK	-106H ran before 82696

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 E3E3623

Print Analyst Name: Ashley N.

Analyst Signature: AN

Date: 4/27/16

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	See page #7	

Columns: ZB5msplus3Dmx 21mmx.25µ

Method 8270D 1625

Initial Cal. Method M3E3623

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: AMC

Date: 4/28/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	~~3E~~ 82703	ic3623-1		BNA		9					OK	SV151877-106I
	82704	icv 3623-5D		Acids		10					OK	~~-129~~ -114 AN 4/27/16 (a)
	82705	icv 3623-5D		Anilines		11					OK	~~-130~~ -145 AN (a) 4/27
	82706	icv 3623-5D		ABNsum		12					OK	OP16171233
	82707	icv 3623-5D		BN1		13					OK	SV161935-1 [No ~~8~~ 9
	82708	icv 3623-5D		BN2		14					OK	(a) AN 4/27/16 134 cont'd SV151877-~~35E~~ [100 ↓ NOS
	82709	icv 3623-5D		Benzidine 3rd		15					OK	SV161935-14B
	~~82710~~ AN 4/27/16 (a)											9:44pm

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

9

7.7.3

7

SGS ACCUTEST

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID E3E3637

Date: 5-6-2016

Print Analyst Name: Ashley N.

Analyst Signature: AN

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
157827-91	dftpp	50ppm
161935-19A	BNA	↓
157827-17C	TCL42	↓
CM5732	internal Std	4000ppm
162641	dcm (Fisher)	—

Columns: ZB5ms@30m x 2.5mm x 25µm

Method 8270D/625

Initial Cal. Method M3E3623

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: AMW

Date: 5/10/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	BE82958	dftpp			W	1					NG	127↑ bad reinject
	82959	dftpp				1					↓	abundance↓ + 50EMvolts
	82960	dftpp				1					NG	127↑ retune
	82961	dftpp				1					↓	127↑ retune
	82962	dftpp				1					NG	127↑ abundance↓ reinstall
	82963	dftpp			W	1					NG	127↑ retune
	82964	dftpp			W	1					not using	+ 50EMvolts
	82965	dftpp				1					↓	127↑ reinject.
	82966	dftpp				1					NG	127↑ 197↑ reinject
	82967	dftpp			W	1					↓	127↑ retune
	82968	dftpp				1					↓	127↑ retune
	82969	dftpp				1					not using	11:32AM up EM30vol
	82970	cc3623-50		BNA		2					↓	
	82971	dftpp			W	1					↓	+ 20EMvolts.
	82972	dftpp				1					OK	* 12:18pm
	82973	cc3623-50		BNA		2					OK	✓ 10, pce↓ / 42↑
	82974	cc3621-50		TCL42		3					OK	benzaldehyde↓ ✓ 124TCBT

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 JC19644

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E3E3637

Print Analyst Name: Ashley N.

Date: 5-6-2016

Analyst Signature: [illegible]

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	See page #55	

Columns: ZB5MS(B)/30mx.25mmx.25µm

Method 8270D/625

Initial Cal. Method M3E3623

Injection Volume: 1µL

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [illegible]

Date: 5/10/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	82975	tcl42 verif 1ppm				4					OK	✓
	82976	JC18964-6	93677-1	ABTCL11		5			5		OK	SV51827-1286 CF1 moved to end of sequence
	82977	-7				6	2		5		OK	
	82978	-5				8					not using	Not needed 7:42
	82979	80 bnaverif 2ppm				9					OK	report from 2M. ran after 3E82975.
	82980	81 OP93678-MB1	93678-1	ABS270	S	10	2mv 5/6/16	+			OK	SV51827-628 ✓
	82981	82 -BS1				11					OK	[124TCB↑]
	82982	83 JC19440-11		ABTCL20		12		+			OK	
	82984	JC19694-2		ABTCL04		13		+	5,6		OK	RR 15+1:20.
	82985	-2				14	50		5,6	AN 5/6/16	OK	RR CLO
	82986	-2				15	5	+	5		OK	
	82987	-2				16	50	+			OK	
	82988	JC19696-1-11A ~~JC19696-14~~ AN 5/6/16	93678-1	ABTCL20	S	17		+			OK	
	82989	-15A				18		+			OK	
	82990	-19A				19			1-3,5,6		RR	for I.S.
	~~82991~~	AN 5/9/16				~~20~~						
	~~82992~~			AN 5/9/16		~~21~~						

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 JC19644

SGS ACCUTEST

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: E3E3639

Print Analyst Name: Ashley N.

Date: 5-9-16

Analyst Signature: [signature]

Columns: ZB5msx30mx25mmx25µm

Method: 8270D/625

Initial Cal. Method: M3E3623

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
158791	DFTPP	50ppm
16685-19B	BNA	25ppm
15877-17D	TCL42	↓
CM5752	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: 5-5-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	E82996	DFTPP			W	1					OK	9:37AM
	82997	CC 3623-25		BNA		2					OK	PCP 61↓/42↑
	82998	CC 3621-25		TCL42		3					OK	12,45TCB↑ anthracene↑/Benzidine
	82999	bnaverif-1ppm				4					OK	SVD823-626
R	83000	JC19596-19A	936781	ABTCL20B	S	5		+	/	\	OK	
R	83001	JC18964-17	93477-1	ABTCL11	S	6	20		/	✱ ✓	OK	*surr are good. ATV519116@ VF=5mL
	83002	JC19511-2	935961	ABTCL20	S	7	5		24 ↓	\	OK	RR1:2 for I.S. diluted due to matrix
	83003	-1		↓		8	2		34 ↓		not using	RR I.S.
	83004	-5		↓		9	2		45 ↓	\	OK	(F)
	83005	JC19462-56		ABTCL20B +BNAPCL		10	5		/	\	OK	remake of E3E83001
	83006	-5		↓		11	4		/	\	OK	
	83007	JC19644-5	936781	ABSL +2MNAP +1MNAP.	S	12			8 ↓	\	OK	RR for I.S
	83008	-4		↓		13			/	\	OK	
	83009	JC19596-17A		ABTCL20 (1)		14		+	/	\	OK	
	83010	-18A		↓		15		+	5 ↓	\	RR/OK	RR for IS
	83011	-20A		↓		16		+	5.6 ↓	\	RR/OK	RR for IS
	83012	-21A		↓		17		+	5.4 ↓	\	OK/RR	RR for I.S.

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 JC19644

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E3E3639

Print Analyst Name: Ashley N.

Date: 5-9-16

Analyst Signature: [illegible]

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	See page #61	

Columns: 2BS 5m 0.25mm x 25mm x 25µm

Method 8270D / 1625

Initial Cal. Method M3E3673

Injection Volume: 1µL

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [illegible] Date: 5-9-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	3E83013	JC19596-13A	936781	ABTC20	S	18		Y	3.6	\	OK	RR 1:5 + 1:50
	83014	-12A				19	2	Y	5.6	\	OK	1.5 confirmed by dilution due to viscosity MS
	83015	OP93678-MS		ABS270		20	2		4.50	\	OK	↓ ↓
	83016	-MSD		↓		21	2		5.6	\	OK	
R	83017	JC18964-17	934721	ABTC11	S	22			3	\	OK	VF = 5mL ran after 3E83016
R	83018	JC19511-2	935596-1	ABTC20	S	23	10		2.6	\	OK	ran before 3E83104 CF
R	83019	JC19511-1				8	2		3.6		not using	CF
R	83020	JC19644-5	93678	ABS270 MMP	S	12			5.6	\	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

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	40ppm
159148	Dimethylsulfone	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [illegible]

Date: 4-22-2016

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	3m60750	Condition			W	100					Condition	
	60755	↓			W	100					↓	
	60760	Condition			W	99						
	60761	DFTPP ~~ICC2855-1.0~~ 4/14/16		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: E3M2874

Print Analyst Name: Linsey K

Analyst Signature: JK

Date: 5/6/16

Columns: 35-5ms 30m x .25mm x .25um

Method: 8270D/1625

Initial Cal. Method: M3M2855sim

Injection Volume: 1uL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SHS182405	DFTPP	5ppm
SHT169559	SMSTD	10ppm
-7	SM Internal	40ppm
1602001	DCM (Washer)	—

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: 5-9-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	3m61120	DFTPP			W	1					OK	9:12AM
	61121	CC2855-1.0		Bnasim	W	2					OK	
	61122	CP93547-MS1	935471	BS270	S	3			✓	✓	OK	
	61123	-BS12		1,4dioxane		4			✓	✓	OK	
	61124	JC194231		~~PCB~~		5			✓	✓	OK	
	61125	JC18aa69P		PCB		6			✓	✓	OK	Run after 3m61123
	61126	CP93602-MS1	936021			7			✓	✓	OK	
	61127	-BS12				8			✓	✓	OK	
	61128	JC19644-1		1,4dioxane		9			✓	✓	OK	
	61129	-2				10			✓	✓	OK	
	61130	-3				11			✓	✓	OK	
	61131	JC19089-1		PCB		12			/	✓	OK	Sent to RX
	61132	-2				13			/	/	OK	
	61133	-3				14			✓		ok	re-run internals
	61134	-4				15					not ran	cut from seq.
	61135	-5				16						
	61136	-6				17						

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 E3M2874

Print Analyst Name: Linsell K

Analyst Signature: [signature]

Date: 5/6/16

Columns: ~~35 Bms~~ 30m x .25mm x .25um

Method 8270D/625

Initial Cal. Method M3M2874 ~~58~~ 57 ~~Initial~~

Injection Volume:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	Cell Rg 37	

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: 5-9-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	3M01137	JC196347	93602-1	PCP	W	18					not ran	cut from sequence.
	61138	OP93602-MS		8B270		19			/	/	OK	
	61139	-MSD				20			/	/	OK	
	61140	JC195551	93609-1	SIMPAH	W	21			/	/	OK	
	61141	JC191867A	93618-1	BSIMNJ 1,4dioxane	W	22	5		/	/	OK	
	61142	JC189772-3	93723-1	1,4dioxane	S	23			/	/	OK	8:51pm
	61143	OP93723-MSD		B8270		24			/		nr	out of clock 9:22pm
	61144A	OP93677bd2	93677-1	B8270	W	25			✓	✓	OK	reran as "A" file bad in calib. ran after 3M61130
	61145	JC196409F		1,4Dioxx		26			✓	✓	OK	
	61146	OP93677mbl		B8270		27			✓	✓	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 JC19644

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	DFTPP			W	1					NG	PCP↑ rerun
	64720	DFTPP			W	1					OK	9:05AM
	64721	CC2881-05		BNAsim	W	2					not using	
	64722	1:100 x test				2					not using	test split changed. flow and oven temp
	64723A	IC2881-5		BNAsim	W	2					OK	SVS1827-104D voran 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 E4M2910

Print Analyst Name: Lindsey K

Analyst Signature: LK

Date: 5/9/16

Columns: Rxi-5Sil MS 30m x .25mm x .25um

Method 8270D/1625

Initial Cal. Method M4M2888 SIM

Injection Volume: 1 ul

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV1518418-8	DFTPP	50ppm
SV160935-6	SIM std.	1.0ppm
-7	SIM Internal	40ppm
1602601	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: EM

Date: 5-10-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	4M65168	DFTPP			W	1					NG	PCP↑ Aban↑ rerun
	65169	DFTPP			W	1					OK	10:19AM
	65170	CC2881-1.0		B10sim	W	2					OK	benzo(b)↓
	65171	OP93662-MB1	93662-1	AB8270	W	3			/	/	OK	
	65172	JC19689-3		PCP		4			/	/	OK	
	65173	-4				5			/	/	OK	
	65174	-5				6			/	/	OK	
	65175	-6				7			/	/	OK	
	65176	-7				8			/	/	OK	
	65177	OP93718-MB1	93718-1	B8270	W	9			/	/	OK	
	65178	-1512				10			4↓	/	OK	IS for internal
	65179	JC19855-2		NAP+1,4dioxx		11			/	/	OK	
	65180	-1				12			/	/	OK	
	65181	OP93678-MB1	93678-1		S	13			/	/	OK	
	65182	-1512				14			/	/	OK	
	65183	JC19644-4		NAP+1,4dioxx		15			/	/	OK	
	65184	-5				16			/	/	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

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7.7.9

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SGS ACCUTEST

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: E4M2910

Print Analyst Name: Linsey K

Analyst Signature: JK

Date: 5/9/16

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	Sec 8 183	

Columns: Rxi-5Sil MS 30m x .25mm x .25um

Method: 8270 D/625

Initial Cal. Method: M4M2881 bim

Injection Volume: 1 uL

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [illegible]

Date: 5-10-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	4M65185	OP93478-MS	93478-1	B8270		17			/	/	OK	
	65186	-MSD				18			/	/	OK	
	65187	OP93478mb1	93478-1	AB8270	S	19			↓	/	OK	N-for internals
	65188	-bs12				20			/	/	OK	
	65189	JC19023-1		naph+laptop - simpah.		21			/	/	OK	
	65190	-2				22			/	/	OK	
	65191	-4				23			/	/	OK	10:10pm
	65192	OP93478-MS		AB8270		24					RR	out of check 10:42pm
	65193	-MSD				25					RR	out of check 11:14pm

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07
Rev. Date: 1/19/16

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7.7.9

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E6P1209

Print Analyst Name: Arelle Corona

Analyst Signature:

Date: 5/13/16

Columns: Zebron ZB-35ms+ 30m x 0.25mm x 0.25µm

Method 8270D/625

Initial Cal. Method M6P1209

Injection Volume: 1 µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
5182918	DFTPP	25ppm
CM5732	Int. Std	400ppm
627661	DCM (F-Std)	→

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: AMMO

Date: 5/16/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	625920	DFTPP			W	1					NG	Rept reinj 26
	25921	DFTPP			W	1					NG	Retune BFB 245 Rept
	25922	DFTPP			W	1					NG	Rept 4924 2 FST Reinstall
	25923	DFTPP			W	1					OK	912AM
	25924	IC1209-2		BNA	W	2					OK	SV151827106H
	25925	-1				3					OK	-106I
	25926	-100				4					OK	-106A
	25927	-80				5					OK	-106B
	25928	IC1209-50				6					OK	-106G
	25929	IC1209-25				7					OK	-107F
	25930	10				8					OK	-106E
	25931	5				9					OK	-106G

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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7.7.10

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: E6P1210

Print Analyst Name: Arielle Cocozza

Analyst Signature:

Date: 5/13/16

Columns: ZB-5ms+ 30mx0.25mmx0.25um

Method: 8270D/625

Initial Cal. Method: M6P1209

Injection Volume: 1ul

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
1517410	DFTPP	50ppm
CW5732	Int-Std	40000ppm
1129661	M(5-Str)	—

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: 5/16/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	6P25932	DFTPP				1					not using	2751 reinjected
	25933	DFTPP				1						2754-2758 reinjected
	25934	DFTPP				1						
	25935	DFTPP				1					not using	ion 30 out of range
	25936	DFTPP				1						
	25937	DFTPP				1					OK	225PM
	25938	ICI210-100		TCL42	W	2					OK	SU16193531A
	25939	-80				3					OK	B
	25940	ICCI210-50				4					OK	C
	25941	ICI210-25				5					OK	D
	25942	ICI210-10				6					OK	E
	25943	-5				7					OK	G
	25944	-2				8					OK	H
	25945	-1				9					OK	I
	25946	ICV1210-50		ACN Surr		10					RR	OP16171292
	25947	50		Acids		11					RR	SU16135-21
	25948	50		Anilines		12					RR	-20

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: E6P1210

Print Analyst Name: Arielle Colozza

Analyst Signature:

Date: 5/13/16

Columns: 25m x 25m x 25m

Method 8270D/625

Initial Cal. Method MEP1209

Injection Volume: 1 ul

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	Copy	

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: Anne

Date: 5/16/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	25949	EW120-50		BN1		13					OK	5/16/1935 17
	25950	50		BN2		14					OK	-10
	25951	50		Benzidine		15					OK	5/15/1827 383
	25952	50		HQ 2nd Acetone		16					OK	-98c

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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7.7.11

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: E6P1211

Print Analyst Name: Adelle Cocozza

Analyst Signature:

Date: 5/16/16

Columns: 35m x .18mm x .25um

Method: 8270D/625

Initial Cal. Method: MCP1209

Injection Volume: 1ul

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV15782907	DFTPP	50ng/ul
CW5172	Int Std	4000ug/ml
162561	Neutrals	

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: AMRO

Date: 5/16/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	6P25953	DFTPP			W	1					OK	50ng/ul
	25954	CV1209-50		Acids	W	2					OK	SV15782787
	25955	-50		Anilines	W	3					OK	SV18193577
	25956	-50		Abn Scrn	W	4					OK	QP16171233 1000ug/ml
	25957	-50		BNA	W	5					no data	

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

7.7.12

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E6P1212

Print Analyst Name: Arelle Cecan

Analyst Signature:

Date: 5/16/16

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV 61829102	DFTPP	50ng/µl
CM5779	Int Std	4000ng/µl
16266	DCM (Esho)	—

Columns: ZB5SMS+ 30mx25mmx.25µm

Method 8270D/625

Initial Cal. Method M6P1209

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: AMC

Date: 5/16/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	6P25958	DFTPP			W	1					OK	1100Am
	25960 ~~25960~~	ICV1209-50		Aqw Surr	W	2					OK	QP1671292
	25960	-50		BNA	W	3					OK	1140Am SV61827-98

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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Rev. Date: 1/19/16

7.7.13

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E6P1214

Print Analyst Name: Arielle Cocerza

Analyst Signature:

Date: 5/17/16

Columns: ZB5MS + 30mx.25mmx.25um

Method 8270D/625

Initial Cal. Method M6P1709

Injection Volume: 1ul

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
15582791	DFTPP	50ng/ul
~~15582613~~	~~BNA~~ AcS1726	~~75ppm~~
15582723	TCL42	20ppm
15582907F	BNA	
CW732	Int Std	400ppm
62641	DCM (Surr)	—

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: AMD

Date: 5/17/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	6P25989A	DFTPP				1					OK	FILAM
	25990	CC1209-25		BNA		2					OK	GOV
	25991	CC1210-25		TCL42		3					OK	
	25992	BNA WS 20ppm				4					OK	SW5582723
	25993	QP93937-LB14	93937-1	AOSTCLP	W	5			/	/	OK	
	25994	QP93938-LB21	93938-1	AOSTCLP	W	6			/	/	OK	
	25995A	-LS8				7			/	/	OK	
	25996A	-MSD				8					OK	Rerun for 6P25987 6P25995
	25997	QP93937-LS7	93937-1	AOSTCLP	W	9					OK	
	25998	MSD				10					OK	
	25999	JC20150-1	93938-1	AOSTCLP	W	11					OK	
	26000	JC20113-5A				12					OK	
	26001	JC20111-5A				13					OK	
	26002	JC20062-2	93872	ABSL+HQ	W	14	10				OK	
	26003	1				15	5				OK	
	26004	2				16					OK	
	26005	QP93597-MB1	93597	AOSTOX	S	17			/	/	OK	Rerun for 6P25995

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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7.7.14

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E6P1214

Print Analyst Name: Arele Cocazy

Analyst Signature:

Date: 5/17/16

Columns: 7890 MS 30m x 250 mm x .25 um

Method 8270D/625

Initial Cal. Method M6P1204

Injection Volume: 1 ul

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	See p 123	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AMC Date: 5/17/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	EP26006	op93596-MB1	93596	AB82704	S	18		F	/	/	OK	
	26007	JC19517	93597	AB82720	S	19	2		/	/	OK	
	26008	9				20	2		/	/	OK	
	26009	8				21	2		/	/	OK	
	26010	1	93596	AB82720	S	22	2		/	/	OK	
	26011	op93678-MB1	93678	AB82704	S	23					OK	Contact EP26009
	26012	JC19596-13A		AB82704		24	5				OK	
	26013	DCM			W	00					Cleanup	After Dirty Sample
	26014	JC19511-2	93596	AB82720	S	25	5		/		OK	Contact EP26010
	26015	-2				26	10				not running	not needed
	26016	op93405AMB1	93405A	EPA PAH	S	27			/	/	OK	Contact EP26014 WP32
	26017	JC18916-52		EPA NAPH/MB		28			/		OK	
	26018	52				29	5				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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Rev. Date: 1/19/16

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SGS ACCUTEST JC19644

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EF6563

Print Analyst Name: Linsey

Analyst Signature: [signature]

Date: 4/4/16

Columns: ZB-5ms Plus ~~Rtx-5Silms~~ 30mx.25mmx.25um 7/14/16

Method 8270D/625

Initial Cal. Method MF6563

Injection Volume: 1ul

Standard Data

Lot #	Description	Conc.
SV151827-60A	BNA	100 ppm
-60B	↓	80
-60C		50
-60D		25
-60E		10
-60F	↓	5 ↓

Standard Data

Lot #	Description	Conc.
SV151629-103	DFTPP	50 ppm
SV151827-60H	BNA	2 ppm
-60I	↓	1 ↓
CMS832	Internal Std.	400ppm
K2107	DCM-Fisher's	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 4/6/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	F151036	Condition			W	100					Condition	
	156045	Condition			W	100					↓	
	156046	condition				99						
	↓ 156048	↓				↓					Not run	sequence changed
	156049	DFTPP			W	1					NG	51↓, reinject
	156050	DFTPP			W	1					OK	
	156051	IC6563-100		BNA		2					OK	
	156052	-80				3					OK	
	156053	IC6563-50				4					OK	
	156054	IC6563-25				5					OK	
	156055	-10				6					OK	
	156056	-5				7					OK	
	156057	-2				8					OK	
	156058	-1				9					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 EF6564

Print Analyst Name: Sara Davis

Analyst Signature: SED

Date: 4/4/2016

Columns: ZB-5msplus 30m x .25mm x .25um

Method 8270 D/625

Initial Cal. Method MF6563

Injection Volume: 1 ul

Standard Data

Lot #	Description	Conc.
SV151827-73A	TCL42	100 ppm
-73B	↓	80 ↓
-73C		50
-73D		25
-73E		10
-73G	↓	5 ↓

Standard Data

Lot #	Description	Conc.
SV151829-103	DFTPP	50 ppm
SV151827-73 II	TCL42	2 ppm
-73 I	↓	1 ↓
CM5732	Internal Std	4000 ppm
162107	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: 4/6/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	F156059	DFTPP			W	1					OK	11:06 pm
	156060	TCL6564-100		TCL42	W	2					OK	
	156061	-80				3					OK	
	156062	TCL6564-50				4					OK	
	156063	TCL6564-25				5					OK	
	156064	-10				6					OK	
	156065	-5				7					OK	
	156066	-2				8					OK	
	156067	-1				9					OK	
	156068	TCV6563-50		Acids		10					rr	SV151827-79
	156069	-50		Aniline		11					OK	-78
	156070	-50		ABN sicc		12					OK	OP161712 33
	156071	-50		BN1		13					OK	SV151827-88
	156072	-50		BN2		14					OK	-80
	156073	TCV6564-50		Benzidine 3rd		15					OK	-38F
	~~156073~~											
	SD 2 4/4/16											

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.

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Rev. Date: 1/19/16

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7.7.16

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EF6567

Print Analyst Name: Sara Davis

Date: 4/5/2016

Analyst Signature: SED

Standard Data

Lot #	Description	Conc.
SV151827-96A	AP9SL	100 ppm
-96B	↓	80 ↓
-96C		50
-96D		25
-96E		10
-96G	↓	5 ↓

Standard Data

Lot #	Description	Conc.
SV151829-108	DFTPP	50 ppm
SV151827-96H	AP9SL	2 ppm
-96I	↓	1 ↓
CM-5732	Internal Std	4000 ppm
162107	DCM (Fisher)	—

Columns: ZB-5ms Plus 30m x .25mm x .25

Method 8270D/625

Initial Cal. Method MF6563

Injection Volume: µL

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: 4-5-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	F156088	DFTPP				1					ok	6.00pm
	156089	ic6567-100		AP9SL		2					ok	
	156090	-80				3					ok	
	156091	icc6567-50				4					ok	
	156092	ic6567-25				5					ok	
	156093	-10				6					ok	
	156094	-5				7					ok	
	156095	-2				8					ok	
	156096	-1				9					ok	
	156097	icv6564-50		HQ		10					ok	SV151827-98D
	156098	icv6567-50		m-toluidine		11					ok	OP151624123
	156099	-50		Catechol		12					ok	OP151624 8
	156100	-50		12NB		13					ok	SV151827-99
	156101	-50		2+3CA		14					ok	SV151827-100
	156102	icv6566-50		AP9 2nd		15					ok	OP161712-36
	156103	-50		Methapyrilene 3rd		16					not used	SV151829-128A not needed
	156104	-50		Hexachlorophene 2nd		17					ok	-56

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 EF6567

Print Analyst Name: Sara Davis

Date: 4/5/2016

Analyst Signature: SED

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	see page 109	

Columns: ZB-5ms plus 30m x .25mm x .25um

Method 8270 D/625

Initial Cal. Method MF6563

Injection Volume: 1 ul

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [illegible] Date: 4-5-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	F156105	ICV6566-50		APA Megamix 2nd		18					[illegible]	SV151829-68 [illegible]
	156106	-50		APA 3rd		19					[illegible]	-122A

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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7.7.17

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EF6604

Print Analyst Name: Linsey K

Analyst Signature: LK

Date: 5/6/16

Columns: 2-5ms @ 30mx.25mmx.25um

Method 8270D 1625

Initial Cal. Method MF6563

Injection Volume: 1ul

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV150824-08	DFTPP	50ppm
SV150827-1060	BNA	25ppm
SV160425-40	TCL42	25ppm
CM5132	Internal Std.	400ppm
1602061	Dem-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: DM

Date: 5-9-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	F150855	DFTPP			W	1					OK	8:57AM
	150856	CC160325		BNA	W	2					OK	22,54↑
	150857	CC160425		TCL42	W	3					OK	
	150858	OP93602-bs	93602-1	ABS270	W	4			/	/	OK	
	150859	-mb				5			/	/	OK	
	150860	JC19644-1		ABSL +2mm +1mm		6			/	/	OK	
	150861	-2				7			/	/	OK	M 1:50
	150862	-3				8			/	/	OK	
	150863	OP93602-ms		ABS270		9			/	/	OK	
	150864	-msd				10			/	/	OK	[illegible]
	150865	JC19633-1		ABTCL20		11			/	/	OK	
	150866	-2				12			/	/	OK	
	150867	-3				13			/	/	OK	
	150868	-5				14			/	/	OK	
	150869	-6				15			/	/	OK	
	150870	-4				16			/	/	OK	
	150871	op93629+tbl	93629-1	ABS270	W	17		+	/	/	OK	ran after F150862

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

7.7.18

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EF6604

Print Analyst Name: Ashley Moye

Analyst Signature: AMO

Date: 5/6/16

Columns: 2B5ms(1)30m×25mm×.25µm

Method 8270D/625

Initial Cal. Method MF6563

Injection Volume: µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	SECpaq c41	

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: 5-9-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	F156872	op93629-bs1	93629-1	AB8270+	W	18			/	✓	OK	ran after F156862
	156873	JC19271-1A		AB8270+		19		+	/	/	OK	
	156874	JC19513-10		BNS270+		20		+	/	/	OK	
	156875	JC19510-8		BNS270+		21		+	/	/	OK	8:45pm
	156876	-9				22			/		RR	out of clock 9:14pm
	156877	JC19389-4		BNS270+		23			/		RR	Out of Clock 9:43pm
	156878	op93629-ms		AB8270		24			/		RR	outside Clock 10:12pm
	156879	-msd				25			/		RR	outside Clock 10:40pm
	156880	JC19644-2	93662-1	ABSL +2mmap +1mmap	W	26	50		/	X	O/K	ran After F156862
	156881	op93668-mb1	93662-1	AB625	W	27			/	/	OK	Ran After F156863 625
	156882	BS1				28			/	/	OK	
	156883	JC19632-1A		24DMP		29			✓		OK	
	156884	JC19639-4		ABSL2		30			/	/	OK	Ran After F156879
	156885	3				31			/	/	OK	
	156886	5				32			/	/	OK	
	156887	6				33			/	/	OK	
	156888	7				34			/	/	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

7.7.18

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EF6604

Print Analyst Name: Arielle Cocozza

Date: 5/6/16

Analyst Signature:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	Decp 41	

Columns: ZB5MS 30mx.25mmx.25um

Method 8270D/625

Initial Cal. Method MF6563

Injection Volume: 1ul

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: 5-9-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	156889	JC19639-1	936681	ABN2	W	35			/	/	OK	625
	156890	JC19597-1		ABPP2		36			/	/	OK	
	156891	JC19597-1		ABPP2		37			/	/	OK	
	156892	JC19612-1		BS2		38			/	/	OK	
	156893	JC19581-3		Dimethylphthalate		39			/	/	OK	
	156894	JC19609-1		PAH		40			/	/	OK	
	156895	2				41			/	/	OK	
	156896	3				42			/	/	OK	4:55AM

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

7.7.18

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ABN Aqueous Extraction Logbook

LOGBOOK ID: 6-1727

Date Started: 5/5/16 Time Started: 4:30pm

Date Finished: 5/5/16 Time Finished: 2200

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):

Separatory Funnel: SW846 3510C/CLP/other ✓ 3510C SIM ____

Continuous Liquid Liquid: SW846 3520C/CLP/other ____

BATCH # MS 93662	RACK# Julius
Extracted by:	KS, SD
Concentrated by:	RF, GM
Vialed by:	RF
Relinquished by:	
Accepted by:	
Supervisor Review:	DH Sieline

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	76, 76.0	-0.5, 0.1	76, 76	ND
Waterbath Chiller (GPM)	2	4	✓	✓	2
NEVAP (32-38°C; LPM)	2	36.0	+0.1	36	10

SURROGATE	LOT #	CONC (ppm)	AMT (mL)
ABN 05	16171209	50	1

WITNESS SIGN: ADC SPIKE SIGN: KS

MATRIX SPIKE	LOT #	CONC (ppm)	AMT (mL)
Acid	16193516	50	Acid: 1
Acid (for SIM)			A(SIM): 0.1
Base #1 SV	16193517	50	1
Base #2 SV	16193510	50	1
Anilines SV	15192711S	50	1
BSIM op	16171266	1	1

WITNESS SIGN: ADC SPIKE SIGN: KS

SOLVENT	LOT #	BRAND	AMT (mL)
METH CHLOR	162661	Fisher	6X60

REAGENT	LOT #	BRAND
NaOH	153803	Fisher
H2SO4	2661960	Ricca
Sodium Sulfate	148420	Fisher
Glass Wool	02005-2	Lab
Filter Paper		
pH strips		

Special Client Spike Instructions

QC ID# for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt. Spiked

WITNESS SIGN: SPIKE SIGN:

Manager/Supervisor/Team Lead Approval:

	Sample #	Analysis Type	Sample Bottle #	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		DIH2O	1000	1	5	clear	1		
	BS1			DIH2O	1000	1	5	yellow	1		
	JC19633-1 MS		2	Yellow	500	1	5	yellow	1		
	MSD		2	Yellow	500	1	5	yellow	1		
	BS	12SIM		DIH2O	1000	1	5	clear	1		
	JC19639-1 MS		3	clear	500	1	5	clear	1		
	MSD		3	clear	500	1	5	clear	1		
1	JC19644-1	ABN	1	Yellow	900	1	5	clear	1		
2	-2		2	Yellow	1000	1	5	clear	1		
3	-3		1	orange	900	1	5	clear	1		
4	JC19633-1		1	Yellow	1000	1	5	l. yellow	1		
5	-2		1	Yellow	1000	1	5	l. yellow	1		
6	-3		1	Yellow	1000	1	5	brown	1		
7	-4		1	Yellow	1000	1	5	brown	1		
8	-5		1	orange	990	1	5	yellow	1		
9	-6		2	clear	1000	1	5	clear	1		
10	JC19639-1		2	clear	1000	1	5	clear	1		
11	-2		6	clear	1000	1	5	clear	1		
12	-3		1	clear	1000	1	5	clear	1		
13	-4		1	clear	990	1	5	clear	1		
14	-5		3	clear	1000	1	5	clear	1		
15	-6		2	clear	1000	1	5	clear	1		
16	-7		3	clear	1000	1	5	clear	1		
17											
18											
19											
20											

1d TAT

Comments: okay to split MS/MSD, not enough bottles
okay to split SIM MS/MSD, not enough bottles

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason:

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other:

SGS ACCUTEST INC.
Form: OP022A-08
Rev Date: 1/13/16

ABN Aqueous Extraction Logbook

LOGBOOK ID: 6-1727

Date Started: 5/5/16 Time Started: 4:30pm

Date Finished: 5/5/16 Time Finished: 2200

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):

Separatory Funnel: SW846 3510C/CLP/other √ 3510C SIM

Continuous Liquid Liquid: SW846 3520C/CLP/other

BATCH # MS 93662	RACK# Julus
Extracted by:	KS, SD
Concentrated by:	RF, GM
Vialed by:	RF
Relinquished by:	
Accepted by:	
Supervisor Review:	DH Sielle

Special Client Spike Instructions

QC ID# for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt. Spiked

WITNESS SIGN: SPIKE SIGN:

Manager/Supervisor/Team Lead Approval:

Sample #	Analysis Type	Sample Bottle #	Sample Description	Sample Volume (mL)	pH Adjust(mL) <2 H2SO4	pH Adjust(mL) >11 NaOH	Final Extract Color	Final Extract Vol(mL)	Misc. GPC Cleanup	Misc. Comments
MB1	ABN		DIH2O	1000	1	5	clear	1		
BS1			DIH2O	1000	1	5	yellow	1		
JC19633-1 MS		2	Yellow	500	1	5	yellow	1		
↓ MSD		2	Yellow	500	1	5	yellow	1		
BS	12SIM		DIH2O	1000	1	5	clear	1		
JC19639-1 MS		3	clear	500	1	5	clear	1		
↓ MSD		3	clear	500	1	5	clear	1		
1 JC19644-1	ABN	1	Yellow	900	1	5	clear	1		
2 -2		2	Yellow	1000	1	5	clear	1		
3 -3		1	orange	900	1	5	clear	1		
4 JC19633-1		1	Yellow	1000	1	5	l. yellow	1		
5 -2		1	Yellow	1000	1	5	l. yellow	1		
6 -3		1	Yellow	1000	1	5	brown	1		
7 -4		1	Yellow	1000	1	5	brown	1		
8 -5		1	orange	990	1	5	yellow	1		
9 -6		2	clear	1000	1	5	clear	1		
10 JC19639-1		2	clear	1000	1	5	clear	1		
11 -2		6	clear	1000	1	5	clear	1		
12 -3		1	clear	1000	1	5	clear	1		
13 -4		1	clear	990	1	5	clear	1		
14 -5		3	clear	1000	1	5	clear	1		
15 -6		2	clear	1000	1	5	clear	1		
16 -7		3	clear	1000	1	5	clear	1		
17										
18										
19										
20										

1d TAT

Comments: okay to split MS/MSD, not enough bottles
okay to split SIM MS/MSD, not enough bottles

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)					
Buchi Chiller					
Waterbath (70-80°C)	6, 7	76, 76.0	-0.5, 0.1	76, 76	ND
Waterbath Chiller (GPM)	2	4	/	/	2
NEVAP (32-38°C; LPM)	2	36.0	+0.1	36	10

SURROGATE	LOT #	CONC (ppm)	AMT (mL)
ABN 05	16171209	50	1

WITNESS SIGN: ADC SPIKE SIGN: KS

MATRIX SPIKE	LOT #	CONC (ppm)	AMT (mL)
Acid	16193516	50	Acid: 1
Acid (for SIM)			A(SIM): 0.1
Base #1 SV	16193517	50	1
Base #2 SV	16193510	50	1
Anilines SV	15192711S	50	1
BSIM op	16171266	1	1

WITNESS SIGN: ADC SPIKE SIGN: KS

SOLVENT	LOT #	BRAND	AMT (mL)
METH CHLOR	162661	Fisher	6X60

REAGENT	LOT #	BRAND
NaOH	153803	Fisher
H2SO4	2661960	Ricca
Sodium Sulfate	148420	Fisher
Glass Wool	02005-2	Lab
Filter Paper		
pH strips		

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason:

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other:

SGS ACCUTEST INC.
Form: OP022A-08
Rev Date: 1/13/16

LOGBOOK ID: 6-17 1.5

ABN Extraction Log - Solids

Date started: 5/6/16 Time started: 8:30am
Date finished: 5/6/16 Time finished: 2pm

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Microwave SW3546 ✓ Sonication SW3550C ____
Waste Dil. SW3580A ____ Soxhlet SW3540C ____

BATCH # MS 93678 RACK# B-13

Weighed/Extracted by:	SD FP
Concentrated by:	SD FP
Vialed by:	FP SD
Relinquished by:	AQ
Accepted by:	
Supervisor Review:	5/6/16

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	Sonicator ID / Microwave ID	Final Extract Color	Final Extract Vol(mL)	GPC Cleanup	Comments
	MB1	ABN		Sand	30.0			3	clear	1		
	BS1			Sand	30.0			3	Yellow	1		
	JC19596-12A MS		1	Soil	31.2		✓	3	Brown	1		
	1 MSD		1	Soil	30.3		✓	3	Brown	1		
	BS 125M			Sand	30.0			3	clear	1		
	JC19644-4 MS A		1	Soil	31.1		✓	3	L-Yellow	1		
	1 MSD A		1	Soil	31.2		✓	3	L-Yellow	1		
1	JC19596-12A	ABN	1	Soil	30.2		✓	3	Brown	1		
2	-13A		2	Soil	30.2		✓	3	Brown	1		
3	-14A		1	wet Soil	32.1		✓	3	yellow	1		
4	-15A		2	wet Soil	32.1	✓		3	yellow	1		
5	-17A		2	Soil	30.3		✓	3	yellow	1		
6	-18A		2	Soil	31.1		✓	3	Brown	1		
7	-19A		2	Soil	31.1		✓	3	yellow	1		
8	-20A		2	Mud Rock	30.0	✓		3	Brown	1		
9	-21A		1	Mud Rock	30.7	✓		3	Brown	1		
10	JC19644-4		1	Soil	30.5		✓	3	yellow	1		
11	-5		1	Soil	31.0		✓	3	Brown	1		
12	JC19694-2		1	Soil	30.6		✓	3	Brown	1		
13	~~-3~~											
14	~~-4~~											
15	~~-5~~											
16	~~-6~~											
17	JC19640-11		1	Wet Sand	30.9	✓		3	Brown	1		
18												
19												
20												

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	76.7	0.6, 1.3	75, 76	NA
Waterbath Chiller (GPM)	7.3, 7.3	3.5	–	–	21, 2.2
NEVAP (32-38°C, LPM)	3	35.6	0.6	36	10
Balance	B-42	N/A	N/A	N/A	N/A

SURROGATE	LOT #	CONC (ppm)	AMT (mL)
ABN OP	1617129-2	50	1

WITNESS SIGN: SPIKE SIGN: FP

MATRIX SPIKE	LOT #	CONC (ppm)	AMT (mL)
Acid SV	1619356	50	Acid: 1
Acid (for SIM)			A(SIM): 0.1
Base #1 SV	1619351 7	50	1
Base #2 SV	1619351 0	50	1
Aniline SV	1619351 5	50	1
BSIM OP	1617126 6	1	1

WITNESS SIGN: SPIKE SIGN: FP

SOLVENT	LOT #	BRAND	AMT (mL)
1:1 METH CHLOR/ ACETONE	1624489 / 158571	Fisher / Fisher	30 ml
METH CHLOR			

REAGENT	LOT #	BRAND
HYDROMATRIX	6280850	Fisher
SODIUM SULFATE	157477	Fisher
FILTER PAPER	962-094	Fisher

MATRIX	LOT #	BRAND
SAND	6GA160113 1A	Fisher

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason:

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other: please update ial batch

SGS ACCUTEST INC.
Form: OP019A-06
Rev Date: 11/20/15

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[redacted]

LOGBOOK ID: 6-17 1.5

ABN Extraction Log - Solids

Date started: 5/6/16 Time started: 8:30am
Date finished: 5/6/16 Time finished: 2pm

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Microwave SW3546 √ Sonication SW3550C ____
Waste Dil. SW3580A ____ Soxhlet SW3540C ____

BATCH # MS 93678 RACK# B-13

Weighed/Extracted by: SD FF
Concentrated by: SD FF
Vialed by: FF SD
Relinquished by: AQ
Accepted by:
Supervisor Review: 5/6/16

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	Sonicator ID / Microwave ID	Final Extract Color	Final Extract Vol(mL)	GPC Cleanup	Comments
	MB1	ABN		Sand	30.0			3	clear	1		
	BS1			Sand	30.0			3	Yellow	1		
	JC19596-12A MS		1	Soil	31.2		/	3	Brown	1		
	1 MSD		1	Soil	30.3		/	3	Brown	1		
	BS	125IM		Sand	30.0			3	clear	1		
	JC19644-4 MS	A	1	Soil	31.1		/	3	L-Yellow	1		
	1 MSD	A	1	Soil	31.2		/	3	L-Yellow	1		
1	JC19596-12A	ABN	1	Soil	30.2		/	3	Brown	1		
2	-13A		2	Soil	30.2		/	3	Brown	1		
3	-14A		1	wet Soil	32.1		/	3	yellow	1		
4	-15A		2	wet Soil	32.1	/		3	yellow	1		
5	-17A		2	Soil	30.3		/	3	yellow	1		
6	-18A		2	Soil	31.1		/	3	Brown	1		
7	-19A		2	Soil	31.1		/	3	yellow	1		
8	-20A		2	Mud Rock	30.0	/		3	Brown	1		
9	-21A		1	Mud Rock	30.7	/		3	Brown	1		
10	JC19644-4		1	Soil	30.5		/	3	yellow	1		
11	-5		1	Soil	31.0		/	3	Brown	1		
12	JC19694-2		1	Soil	30.6		/	3	Brown	1		
13	~~-3~~											
14	~~-4~~											
15	~~-5~~											
16	~~-6~~											
17	JC19640-11		1	Wet Sand	30.9	/		3	Brown	1		
18												
19												
20												

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	76.7	0.6, 1.3	75.76	NA
Waterbath Chiller (GPM)	7.3, 7.3	3.5	–	–	21, 2.2
NEVAP (32-38°C, LPM)	3	35.6	0.6	36	10
Balance	B-42	N/A	N/A	N/A	N/A

SURROGATE	LOT #	CONC (ppm)	AMT (mL)
ABN OP	16171229-2	50	1

WITNESS SIGN: SPIKE SIGN: FF

MATRIX SPIKE	LOT #	CONC (ppm)	AMT (mL)
Acid SV	16193516	50	Acid: 1
Acid (for SIM)			A(SIM): 0.1
Base #1 SV	16193517	50	1
Base #2 SV	16193510	50	1
Aniline SV	16193515	50	1
BSIM OP	16171266	1	1

WITNESS SIGN: SPIKE SIGN: FF

SOLVENT	LOT #	BRAND	AMT (mL)
1:1 METH CHLOR/ ACETONE	1624489 / 158571	Fisher / Fisher	30 ml
METH CHLOR			

REAGENT	LOT #	BRAND
HYDROMATRIX	6280850	Hydromat
SODIUM SULFATE	157477	Fisher
FILTER PAPER	962-094	Fisher

MATRIX	LOT #	BRAND
SAND	66A16011311A	Fisher

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason:

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other: please update ial 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: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGH5285-MB1 [a]	GH104961.D	1	05/16/16	XPL	n/a	n/a	GGH5285

The QC reported here applies to the following samples: **Method:** SW846-8015C (DAI)

JC19644-1, JC19644-2, JC19644-3

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

CAS No.	Surrogate Recoveries		Limits
111-27-3	Hexanol	104%	56-145%

(a) Reported from 1st Signal. %RSD of initial calibration on 2nd signal excess method criteria (20%) so using for confirmation only.

Method Blank Summary

Job Number: JC19644
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)

JC19644-4, JC19644-5

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%

Method Blank Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGH5290-MB2	GH105055.D	1	05/18/16	XPL	n/a	n/a	GGH5290

The QC reported here applies to the following samples: **Method:** SW846-8015C (DAI)

JC19914-2MS, JC19914-2MSD

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%

Blank Spike Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GGH5285-BS [a]	GH104962.D	1	05/16/16	XPL	n/a	n/a	GGH5285

The QC reported here applies to the following samples: **Method:** SW846-8015C (DAI)

JC19644-1, JC19644-2, JC19644-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
64-17-5	Ethanol	5000	5540	111	74-123
78-83-1	Isobutyl Alcohol	5000	6110	122	70-124
67-63-0	Isopropyl Alcohol	5000	8700	174* [b]	76-121
71-23-8	n-Propyl Alcohol	5000	6100	122	73-122
71-36-3	n-Butyl Alcohol	5000	6320	126* [b]	67-116
78-92-2	sec-Butyl Alcohol	5000	5490	110	74-118
67-56-1	Methanol	5000	4810	96	67-121

CAS No.	Surrogate Recoveries	BSP	Limits
111-27-3	Hexanol	115%	56-145%

(a) Reported from 1st Signal. %RSD of initial calibration on 2nd signal excess method criteria (20%) so using for confirmation only.
(b) High percent recoveries and no associated positive found in the QC batch.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC19644
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)

JC19644-4, JC19644-5

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: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC19644-1MS	GH104964.D	1	05/16/16	XPL	n/a	n/a	GGH5285
JC19644-1MSD	GH104965.D	1	05/16/16	XPL	n/a	n/a	GGH5285
JC19644-1	GH104963.D	1	05/16/16	XPL	n/a	n/a	GGH5285

The QC reported here applies to the following samples: **Method:** SW846-8015C (DAI)

JC19644-1, JC19644-2, JC19644-3

CAS No.	Compound	JC19644-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
64-17-5	Ethanol	ND		5000	5730	115	5000	5830	117	2	58-145/27
78-83-1	Isobutyl Alcohol	ND		5000	6360	127	5000	6620	132* [a]	4	69-131/25
67-63-0	Isopropyl Alcohol	ND		5000	5180	104	5000	5900	118	13	70-133/28
71-23-8	n-Propyl Alcohol	ND		5000	6240	125	5000	6730	135	8	66-137/29
71-36-3	n-Butyl Alcohol	ND		5000	6710	134* [a]	5000	6890	138* [a]	3	63-131/25
78-92-2	sec-Butyl Alcohol	ND		5000	5780	116	5000	6090	122	5	64-136/25
67-56-1	Methanol	ND		5000	4920	98	5000	4970	99	1	48-148/34

CAS No.	Surrogate Recoveries	MS	MSD	JC19644-1	Limits
111-27-3	Hexanol	111%	113%	104%	56-145%

(a) High percent recoveries and no associated positive found in the QC batch.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19644
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)

JC19644-4, JC19644-5

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: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5285-CC5269	**Injection Date:**	05/16/16
Lab File ID:	GH104960.D	**Injection Time:**	15:50
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

Sample ID:	GGH5285-BS	**Injection Date:**	05/16/16
Lab File ID:	GH104962.D	**Injection Time:**	16:28
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Ethanol	1 [a]	1.49	1.49	5540		ug/l	82.3
Ethanol	2	1.11	1.11	2310		ug/l	
Isobutyl Alcohol	1 [a]	3.36	3.36	6110		ug/l	110.9
Isobutyl Alcohol	2	2.89	2.89	1750		ug/l	
Isopropyl Alcohol	1 [a]	1.80	1.80	8700		ug/l	126.8
Isopropyl Alcohol	2	1.37	1.37	1950		ug/l	
n-Propyl Alcohol	1 [a]	2.56	2.56	6100		ug/l	85.7
n-Propyl Alcohol	2	1.94	1.94	2440		ug/l	
n-Butyl Alcohol	1 [a]	3.80	3.80	6320		ug/l	87.9
n-Butyl Alcohol	2	3.38	3.38	2460		ug/l	
sec-Butyl Alcohol	1 [a]	2.99	2.99	5490		ug/l	91.6
sec-Butyl Alcohol	2	2.51	2.51	2040		ug/l	
Methanol	1 [a]	1.15	1.15	4810		ug/l	51.2
Methanol	2	0.86	0.86	2850		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC19644
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: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5285-CC5269	**Injection Date:**	05/16/16
Lab File ID:	GH104960.D	**Injection Time:**	15:50
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

Sample ID:	JC19644-1MS	**Injection Date:**	05/16/16
Lab File ID:	GH104964.D	**Injection Time:**	16:57
Client ID:	Matrix Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Ethanol	1 [a]	1.49	1.49	5730		ug/l	82.3
Ethanol	2	1.12	1.11	2390		ug/l	
Isobutyl Alcohol	1 [a]	3.35	3.36	6360		ug/l	109.5
Isobutyl Alcohol	2	2.89	2.89	1860		ug/l	
Isopropyl Alcohol	1 [a]	1.79	1.80	5180		ug/l	87.8
Isopropyl Alcohol	2	1.37	1.37	2020		ug/l	
n-Propyl Alcohol	1 [a]	2.56	2.56	6240		ug/l	88.9
n-Propyl Alcohol	2	1.95	1.94	2400		ug/l	
n-Butyl Alcohol	1 [a]	3.80	3.80	6710		ug/l	104.3
n-Butyl Alcohol	2	3.38	3.38	2110		ug/l	
sec-Butyl Alcohol	1 [a]	2.99	2.99	5780		ug/l	94.9
sec-Butyl Alcohol	2	2.52	2.51	2060		ug/l	
Methanol	1 [a]	1.15	1.15	4920		ug/l	47.9
Methanol	2	0.86	0.86	3020		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC19644
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: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5285-CC5269	**Injection Date:**	05/16/16
Lab File ID:	GH104960.D	**Injection Time:**	15:50
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

Sample ID:	JC19644-1MSD	**Injection Date:**	05/16/16
Lab File ID:	GH104965.D	**Injection Time:**	17:12
Client ID:	Matrix Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Ethanol	1 [a]	1.49	1.49	5830		ug/l	84.0
Ethanol	2	1.11	1.11	2380		ug/l	
Isobutyl Alcohol	1 [a]	3.35	3.36	6620		ug/l	112.3
Isobutyl Alcohol	2	2.89	2.89	1860		ug/l	
Isopropyl Alcohol	1 [a]	1.79	1.80	5900		ug/l	98.0
Isopropyl Alcohol	2	1.36	1.37	2020		ug/l	
n-Propyl Alcohol	1 [a]	2.56	2.56	6730		ug/l	107.7
n-Propyl Alcohol	2	1.94	1.94	2020		ug/l	
n-Butyl Alcohol	1 [a]	3.80	3.80	6890		ug/l	105.9
n-Butyl Alcohol	2	3.38	3.38	2120		ug/l	
sec-Butyl Alcohol	1 [a]	2.99	2.99	6090		ug/l	98.2
sec-Butyl Alcohol	2	2.51	2.51	2080		ug/l	
Methanol	1 [a]	1.15	1.15	4970		ug/l	47.6
Methanol	2	0.86	0.86	3060		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC19644
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: JC19644
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]
JC19644-1	GH104963.D	104
JC19644-2	GH104966.D	90
JC19644-3	GH104967.D	105
GGH5285-BS	GH104962.D	115
GGH5285-MB1	GH104961.D	104
JC19644-1MS	GH104964.D	111
JC19644-1MSD	GH104965.D	113

Surrogate Compounds	Recovery Limits
S1 = Hexanol	56-145%

(a) Recovery from GC signal #1

Volatile Surrogate Recovery Summary

Job Number: JC19644
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]
JC19644-4	GH105052.D	73	78
JC19644-5	GH105053.D	84	88
GGH5290-BS	GH105051.D	95	98
GGH5290-MB1	GH105050.D	87	90
JC19914-2MS	GH105057.D	88	89
JC19914-2MSD	GH105058.D	91	92
GGH5290-MB2	GH105055.D	87	89

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: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5285-CC5269	**Injection Date:**	05/16/16
Lab File ID:	GH104960.D	**Injection Time:**	15:50
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

	S1 [a] **RT**
Check Std	5.60

Lab Sample ID	**Lab File ID**	**Date Analyzed**	**Time Analyzed**	**S1** [a] **RT**
GGH5285-MB1	GH104961.D	05/16/16	16:06	5.60
GGH5285-BS	GH104962.D	05/16/16	16:28	5.60
JC19644-1	GH104963.D	05/16/16	16:45	5.60
JC19644-1MS	GH104964.D	05/16/16	16:57	5.60
JC19644-1MSD	GH104965.D	05/16/16	17:12	5.60
JC19644-2	GH104966.D	05/16/16	17:30	5.60
JC19644-3	GH104967.D	05/16/16	17:45	5.60
ZZZZZZ	GH104968.D	05/16/16	18:07	5.59
ZZZZZZ	GH104969.D	05/16/16	18:21	5.60

Surrogate Compounds

S1 = Hexanol

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JC19644
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
JC19644-4	GH105052.D	05/18/16	15:13	5.51	5.56
JC19644-5	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: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	GGH5290-CC5288	**Injection Date:**	05/18/16
Lab File ID:	GH105054.D	**Injection Time:**	15:49
Instrument ID:	GCGH	**Method:**	SW846-8015C (DAI)

	S1 [a] RT	S1 [b] RT
Check Std	5.50	5.56

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT
GGH5290-MB2	GH105055.D	05/18/16	16:03	5.50	5.56
JC19914-2	GH105056.D	05/18/16	16:18	5.50	5.56
JC19914-2MS	GH105057.D	05/18/16	16:40	5.50	5.56
JC19914-2MSD	GH105058.D	05/18/16	16:54	5.50	5.56
ZZZZZZ	GH105059.D	05/18/16	17:08	5.50	5.56
ZZZZZZ	GH105060.D	05/18/16	17:23	5.50	5.56
ZZZZZZ	GH105061.D	05/18/16	17:44	5.50	5.56
ZZZZZZ	GH105062.D	05/18/16	17:59	5.50	5.56
ZZZZZZ	GH105063.D	05/18/16	18:13	5.50	5.56
ZZZZZZ	GH105064.D	05/18/16	18:35	5.50	5.56

Surrogate Compounds

S1 = Hexanol

(a) Retention time from GC signal #2
(b) Retention time from GC signal #1

Initial Calibration Summary

Job Number: JC19644 **Sample:** GGH5269-ICC5269
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** GH104677.D
Project: BMSMC, Building 5 Area, PR

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: JC19644 **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: JC19644 **Sample:** GGH5285-CC5269
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** GH104960.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\GH104960.D\FID1A.CH        Vial: 90
Acq On    : 16 May 2016   3:50 pm                   Operator: XULIU
Sample    : CC5269-5000                             Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104960.D\FID2B.CH        Vial: 90
Acq On    : 16 May 2016   4:06 pm                   Operator: XULIU
Sample    : CC5269-5000                             Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                Multiplr: 1.00
IntFile   : autoint2.e

Method       : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 11:06:41 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	Methanol	14.769	15.539	-5.2	111	0.00	1.12- 1.18
2	Ethanol	18.712	20.181	-7.9	109	0.00	1.45- 1.54
3	Tert-Butyl Alcohol	27.303	27.932	-2.3	104	0.00	2.01- 2.13
4	1-Propanol	22.287	26.640	-19.5	110	0.00	2.50- 2.62
5	2-Propanol	20.750	21.265	-2.5	108	0.00	1.75- 1.84
6	Isobutanol	27.487	29.690	-8.0	104	0.00	3.31- 3.40
7	1-Butanol	24.487	30.580	-24.9#	107	0.00	3.77- 3.83
8	2-Butanol	25.198	26.836	-6.5	107	0.00	2.93- 3.05
9 S	Hexanol	76.514	79.188	-3.5	99	0.00	5.57- 5.63

***** Signal #2 *****

1	Methanol	20.329	12.123	40.4#	88	-0.03	0.83- 0.89
2	Ethanol	31.774	14.023	55.9#	41#	-0.03	1.08- 1.14
3	Tert-Butyl Alcohol	65.293	24.578	62.4#	30#	-0.03	1.57- 1.63
4	1-Propanol	49.271	17.818	63.8#	23#	-0.02	1.91- 1.98
5	2-Propanol	41.806	15.827	62.1#	34#	-0.02	1.34- 1.40
6	Isobutanol	62.036	20.449	67.0#	37#	0.00	2.86- 2.92
7	1-Butanol	51.767	20.165	61.0#	39#	-0.01	3.35- 3.41
8	2-Butanol	49.414	18.847	61.9#	32#	-0.02	2.48- 2.54
9 S	Hexanol	164.574	55.647	66.2#	33#	0.05	5.45- 5.51

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GH104677.D MGH5269.M Tue May 17 07:43:54 2016 GCGH

Continuing Calibration Summary

Job Number: JC19644 **Sample:** GGH5285-CC5269
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** GH104970.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\GH104970.D\FID1A.CH        Vial: 95
Acq On    : 16 May 2016   6:35 pm                   Operator: XULIU
Sample    : CC5269-10000                            Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104970.D\FID2B.CH        Vial: 95
Acq On    : 16 May 2016   6:50 pm                   Operator: XULIU
Sample    : CC5269-10000                            Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                Multiplr: 1.00
IntFile   : autoint2.e

Method       : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 11:06:41 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	Methanol	14.769	15.639	-5.9	112	0.00	1.11- 1.17
2	Ethanol	18.712	19.990	-6.8	103	0.00	1.44- 1.53
3	Tert-Butyl Alcohol	27.303	29.597	-8.4	103	0.00	2.01- 2.13
4	1-Propanol	22.287	26.594	-19.3	110	0.00	2.50- 2.62
5	2-Propanol	20.750	21.147	-1.9	95	0.00	1.75- 1.84
6	Isobutanol	27.487	30.720	-11.8	110	-0.02	3.31- 3.40
7	1-Butanol	24.487	29.375	-20.0	108	-0.03	3.77- 3.83
8	2-Butanol	25.198	27.070	-7.4	110	0.00	2.93- 3.05
9 S	Hexanol	76.514	68.194	10.9	85	-0.01	5.57- 5.63
*****	Signal #2 *****						
1	Methanol	20.329	8.116	60.1#	79	-0.02	0.84- 0.90
2	Ethanol	31.774	8.863	72.1#	42#	-0.03	1.08- 1.14
3	Tert-Butyl Alcohol	65.293	15.588	76.1#	26#	-0.03	1.57- 1.63
4	1-Propanol	49.271	10.781	78.1#	24#	-0.02	1.90- 1.97
5	2-Propanol	41.806	8.923	78.7#	28#	-0.03	1.33- 1.39
6	Isobutanol	62.036	16.062	74.1#	34#	0.00	2.87- 2.93
7	1-Butanol	51.767	15.372	70.3#	37#	0.00	3.36- 3.42
8	2-Butanol	49.414	14.363	70.9#	33#	-0.02	2.48- 2.54
9 S	Hexanol	164.574	39.514	76.0#	25#	0.05	5.45- 5.51

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GH104678.D MGH5269.M Tue May 17 08:00:40 2016 GCGH

Initial Calibration Summary

Job Number: JC19644 **Sample:** GGH5288-ICC5288
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** GH105020.D
Project: BMSMC, Building 5 Area, PR

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

Initial Calibration Verification

Job Number: JC19644 **Sample:** GGH5288-ICV5288
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** GH105024.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\1\DATA\GH105024.D\FID1A.CH        Vial: 9
Acq On    : 17 May 2016   6:02 pm                   Operator: XULIU
Sample    : ICV5288-5000                            Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105024.D\FID2B.CH        Vial: 9
Acq On    : 17 May 2016   6:24 pm                   Operator: XULIU
Sample    : ICV5288-5000                            Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                Multiplr: 1.00
IntFile   : autoint2.e

Method       : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 08:55:49 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	Methanol	15.459	13.025	15.7	84	0.00	1.09- 1.15
2	Ethanol	18.950	20.029	-5.7	101	0.00	1.41- 1.50
3	Tert-Butyl Alcohol	28.335	29.971	-5.8	105	0.00	1.96- 2.08
4	1-Propanol	24.326	25.536	-5.0	99	0.00	2.46- 2.58
5	2-Propanol	19.931	21.074	-5.7	100	0.00	1.71- 1.80
6	Isobutanol	28.771	30.222	-5.0	103	0.00	3.27- 3.36
7	1-Butanol	28.561	29.118	-2.0	102	0.00	3.73- 3.79
8	2-Butanol	25.634	26.603	-3.8	103	0.00	2.89- 3.01
9 S	Hexanol	67.597	69.942	-3.5	101	0.00	5.54- 5.60
*****	Signal #2 *****						
1	Methanol	32.254	34.546	-7.1	99	0.00	0.87- 0.93
2	Ethanol	39.861	45.328	-13.7	104	0.00	1.13- 1.19
3	Tert-Butyl Alcohol	63.583	66.584	-4.7	100	0.00	1.63- 1.69
4	1-Propanol	50.842	57.021	-12.2	104	0.01	1.99- 2.06
5	2-Propanol	45.279	47.646	-5.2	101	0.00	1.38- 1.44
6	Isobutanol	61.221	66.607	-8.8	107	0.00	2.91- 2.97
7	1-Butanol	66.170	65.238	1.4	102	0.01	3.39- 3.45
8	2-Butanol	54.284	60.860	-12.1	108	0.00	2.54- 2.60
9 S	Hexanol	155.348	158.160	-1.8	100	0.00	5.47- 5.53

(#) = Out of Range SPCC's out = 0 CCC's out = 0
GH105020.D MGH5288.M Wed May 18 09:09:59 2016 GCGH

Continuing Calibration Summary

Job Number: JC19644 **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: JC19644 **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: JC19644 **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

8.7.9

8

GC Volatiles

Raw Data

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104963.D\FID1A.CH          Vial: 1
Acq On    : 16 May 2016   4:45 pm                     Operator: XULIU
Sample    : JC19644-1                                 Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104963.D\FID2B.CH          Vial: 1
Acq On    : 16 May 2016   4:57 pm                     Operator: XULIU
Sample    : JC19644-1                                 Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  7:50 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:24:13 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um

 Compound          RT#1   RT#2    Resp#1   Resp#2     PPB       PPB
---------------------------------------------------------------------------

System Monitoring Compounds
9) S   Hexanol           5.60   5.48    398784   277934 5211.908  1688.813 #
 Spiked Amount   5000.000                  Recovery     =  104.24%    33.78%

Target Compounds
```

9.1.1

9

```
---------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40%  (m)=manual int.
GH104963.D  MGH5269.M      Tue May 17 07:50:11 2016      GCGH
```

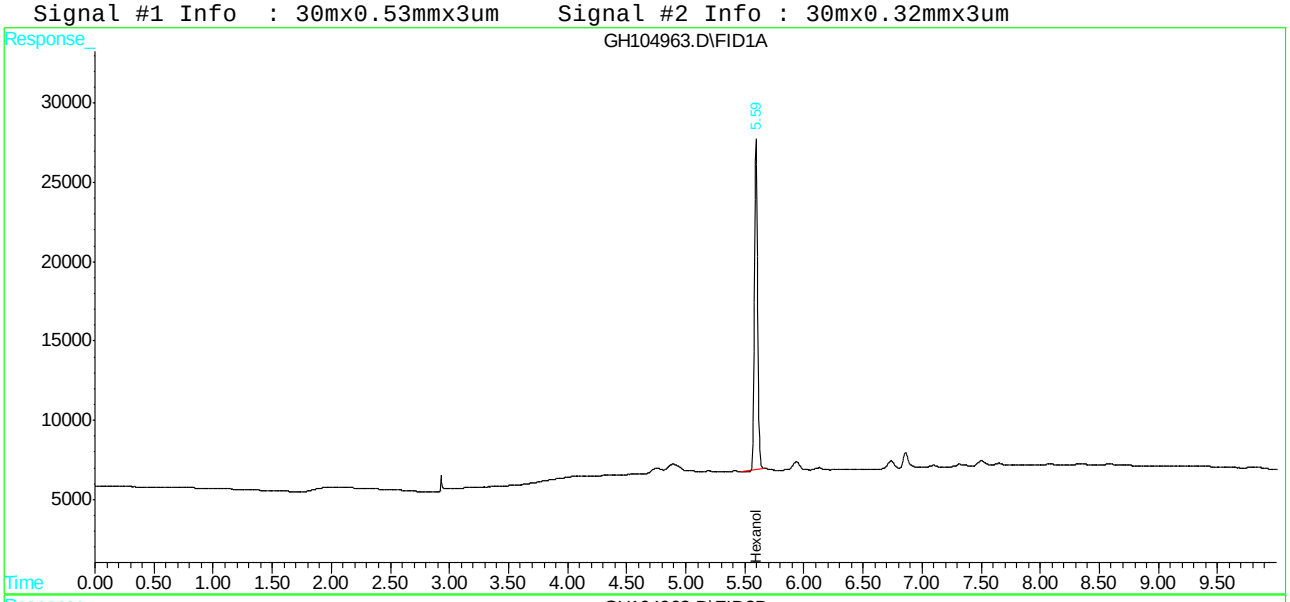
Quantitation Report (QT Reviewed)

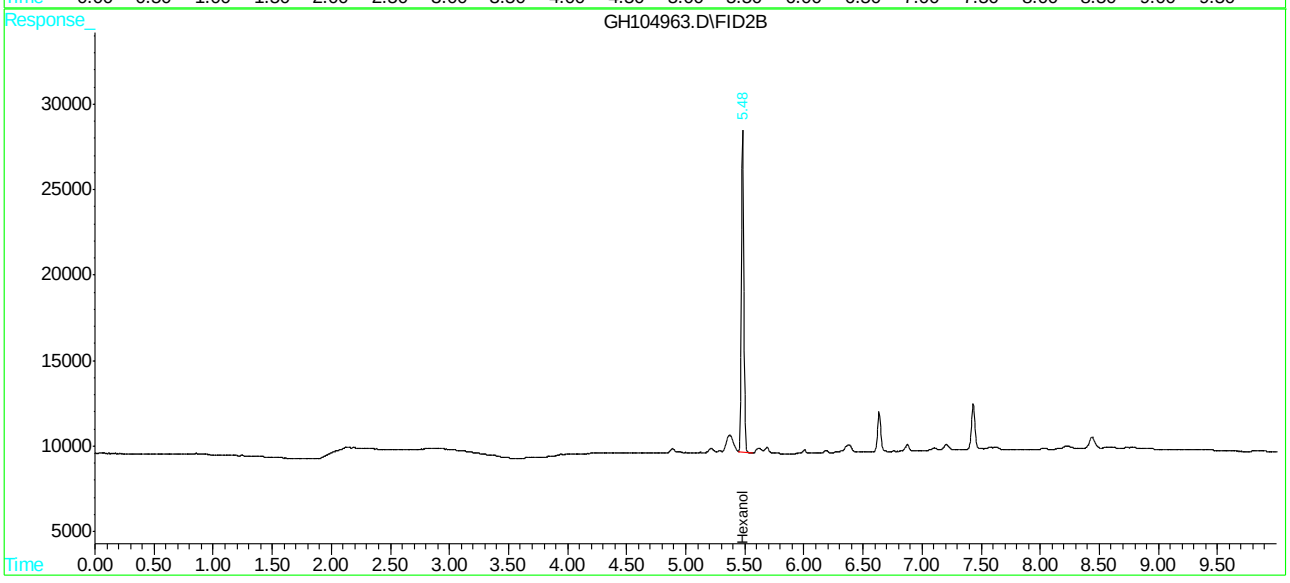
```
Data File : C:\HPCHEM\1\DATA\GH104963.D\FID1A.CH          Vial: 1
Acq On    : 16 May 2016   4:45 pm                     Operator: XULIU
Sample    : JC19644-1                                 Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104963.D\FID2B.CH          Vial: 1
Acq On    : 16 May 2016   4:57 pm                     Operator: XULIU
Sample    : JC19644-1                                 Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  7:50 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:24:13 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104966.D\FID1A.CH          Vial: 4
Acq On    : 16 May 2016   5:30 pm                     Operator: XULIU
Sample    : JC19644-2                                 Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104966.D\FID2B.CH          Vial: 4
Acq On    : 16 May 2016   5:45 pm                     Operator: XULIU
Sample    : JC19644-2                                 Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  7:50 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:46:40 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
9) S Hexanol	5.60	5.48	343962	230260	4495.415	1399.128 #
Spiked Amount 5000.000			Recovery	=	89.91%	27.98%
Target Compounds						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

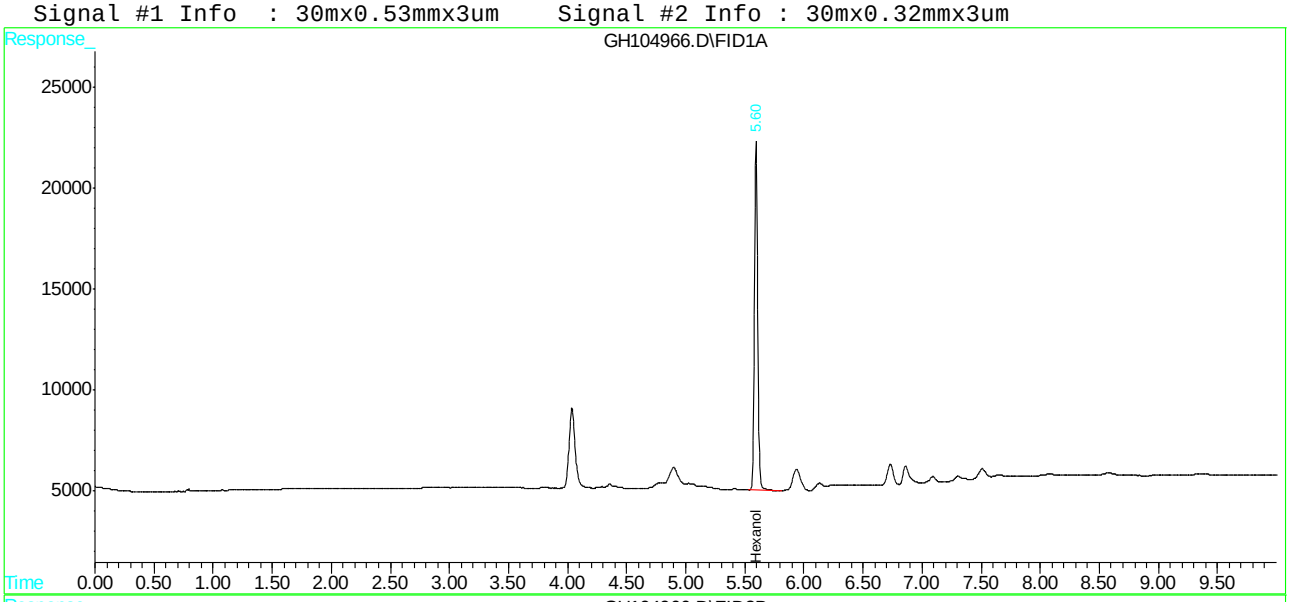
Quantitation Report (QT Reviewed)

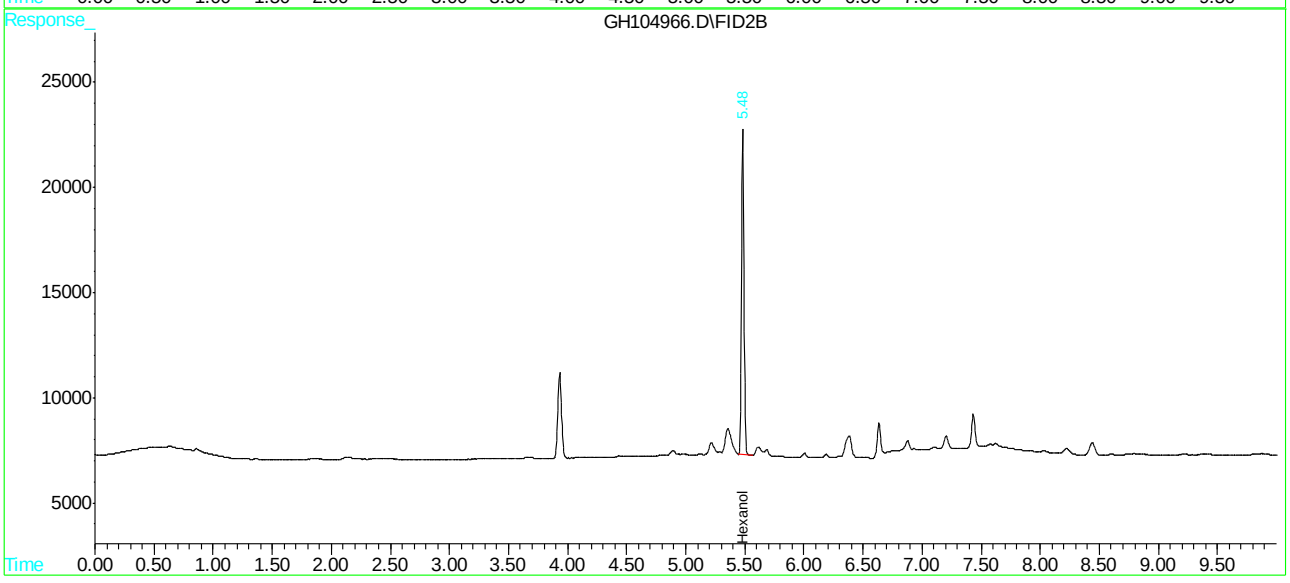
```
Data File : C:\HPCHEM\1\DATA\GH104966.D\FID1A.CH          Vial: 4
Acq On    : 16 May 2016   5:30 pm                     Operator: XULIU
Sample    : JC19644-2                                 Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104966.D\FID2B.CH          Vial: 4
Acq On    : 16 May 2016   5:45 pm                     Operator: XULIU
Sample    : JC19644-2                                 Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  7:50 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:46:40 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104967.D\FID1A.CH          Vial: 5
Acq On    : 16 May 2016   5:45 pm                     Operator: XULIU
Sample    : JC19644-3                                 Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104967.D\FID2B.CH          Vial: 5
Acq On    : 16 May 2016   6:07 pm                     Operator: XULIU
Sample    : JC19644-3                                 Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  7:50 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:46:40 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
9) S Hexanol	5.60	5.48	402295	277706	5257.790	1687.425 #
Spiked Amount 5000.000			Recovery	=	105.16%	33.75%
Target Compounds						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

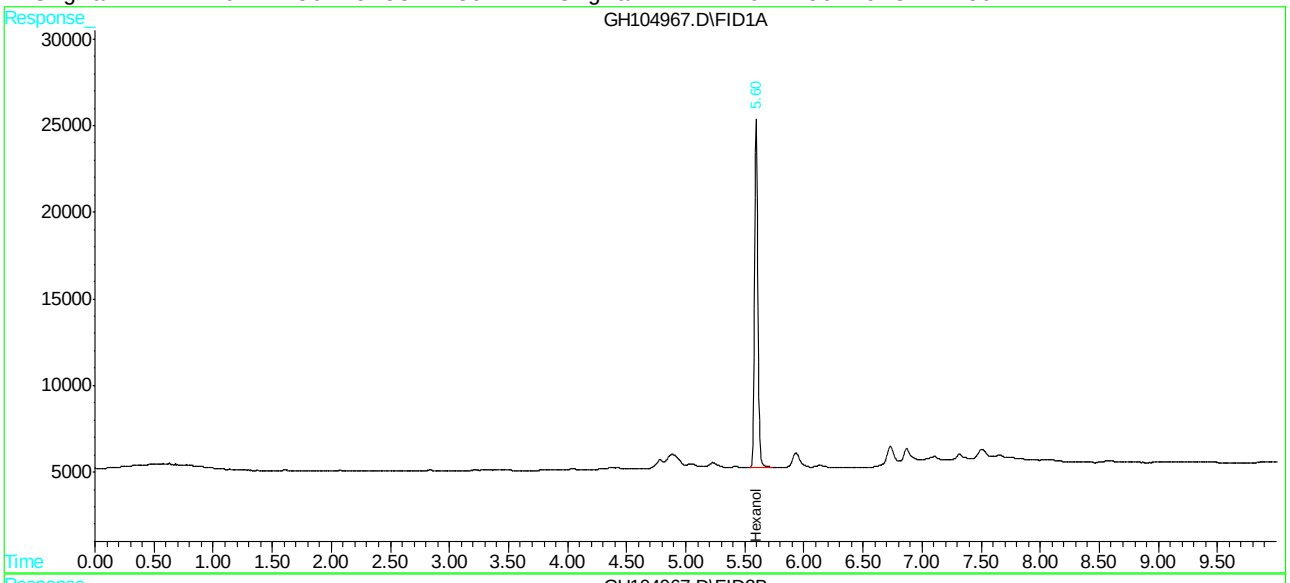
Quantitation Report (QT Reviewed)

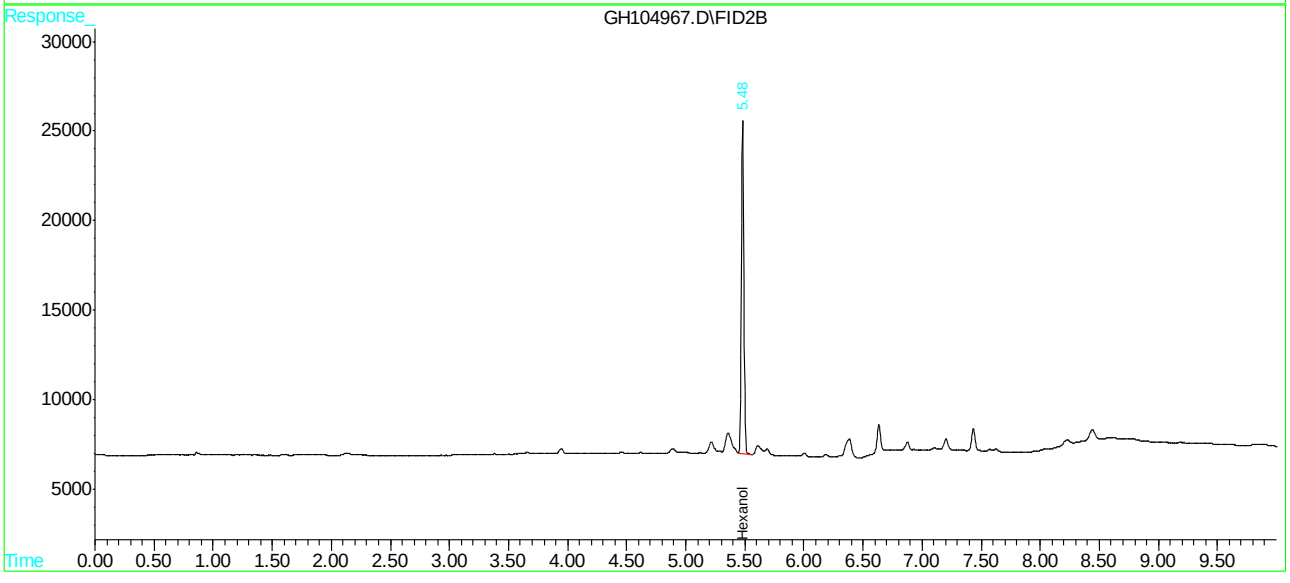
```
Data File : C:\HPCHEM\1\DATA\GH104967.D\FID1A.CH          Vial: 5
Acq On    : 16 May 2016   5:45 pm                     Operator: XULIU
Sample    : JC19644-3                                 Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104967.D\FID2B.CH          Vial: 5
Acq On    : 16 May 2016   6:07 pm                     Operator: XULIU
Sample    : JC19644-3                                 Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  7:50 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:46:40 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105052.D\FID1A.CH          Vial: 25
Acq On    : 18 May 2016   3:13 pm                     Operator: XULIU
Sample    : JC19644-4                                 Inst    : GCGH
Misc      : GC48425,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105052.D\FID2B.CH          Vial: 25
Acq On    : 18 May 2016   3:27 pm                     Operator: XULIU
Sample    : JC19644-4                                 Inst    : GCGH
Misc      : GC48425,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 19  7:31 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   5.51    263303   563378 3895.202  3626.568
 Spiked Amount   5000.000                 Recovery     =   77.90%    72.53%

Target Compounds
```

9.1.4

9

```
---------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40%  (m)=manual int.
GH105052.D  MGH5288.M      Thu May 19 07:31:17 2016      GCGH
```

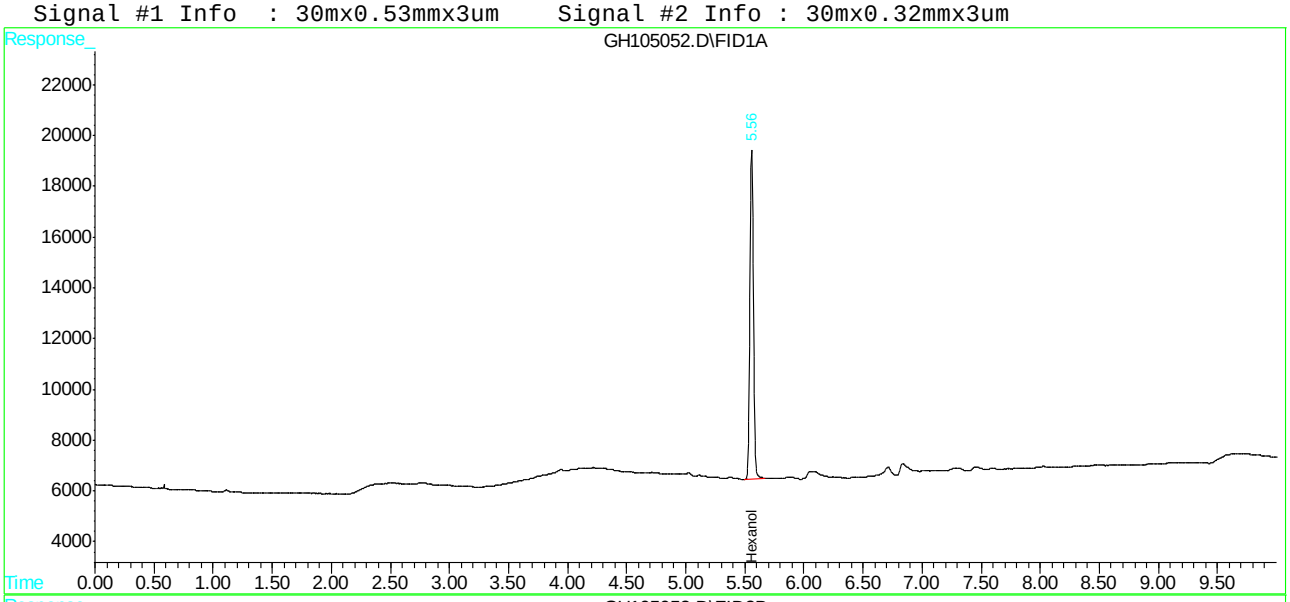
Quantitation Report (QT Reviewed)

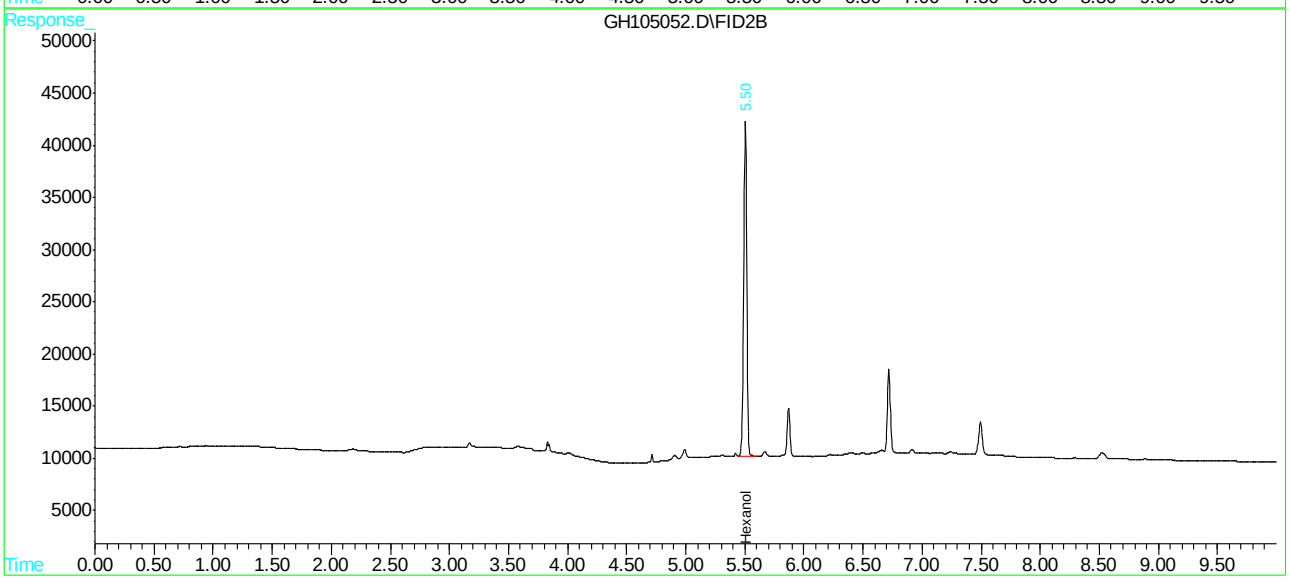
Data File : C:\HPCHEM\1\DATA\GH105052.D\FID1A.CH Vial: 25
Acq On : 18 May 2016 3:13 pm Operator: XULIU
Sample : JC19644-4 Inst : GCGH
Misc : GC48425,GGH5290,5.0,,,,1 Multiplr: 1.00
IntFile : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105052.D\FID2B.CH Vial: 25
Acq On : 18 May 2016 3:27 pm Operator: XULIU
Sample : JC19644-4 Inst : GCGH
Misc : GC48425,GGH5290,5.0,,,,1 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: May 19 7:31 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\GH105053.D\FID1A.CH          Vial: 26
Acq On    : 18 May 2016   3:27 pm                     Operator: XULIU
Sample    : JC19644-5                                 Inst    : GCGH
Misc      : GC48425,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105053.D\FID2B.CH          Vial: 26
Acq On    : 18 May 2016   3:49 pm                     Operator: XULIU
Sample    : JC19644-5                                 Inst    : GCGH
Misc      : GC48425,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 19  7:31 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   5.49    298198   651975 4411.435  4196.878
 Spiked Amount   5000.000                 Recovery     =   88.23%    83.94%

Target Compounds
```

9.15

9

```
---------------------------------------------------------------------------
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40%  (m)=manual int.
GH105053.D  MGH5288.M      Thu May 19 07:31:34 2016      GCGH
```


SGS ACCUTEST JC19644

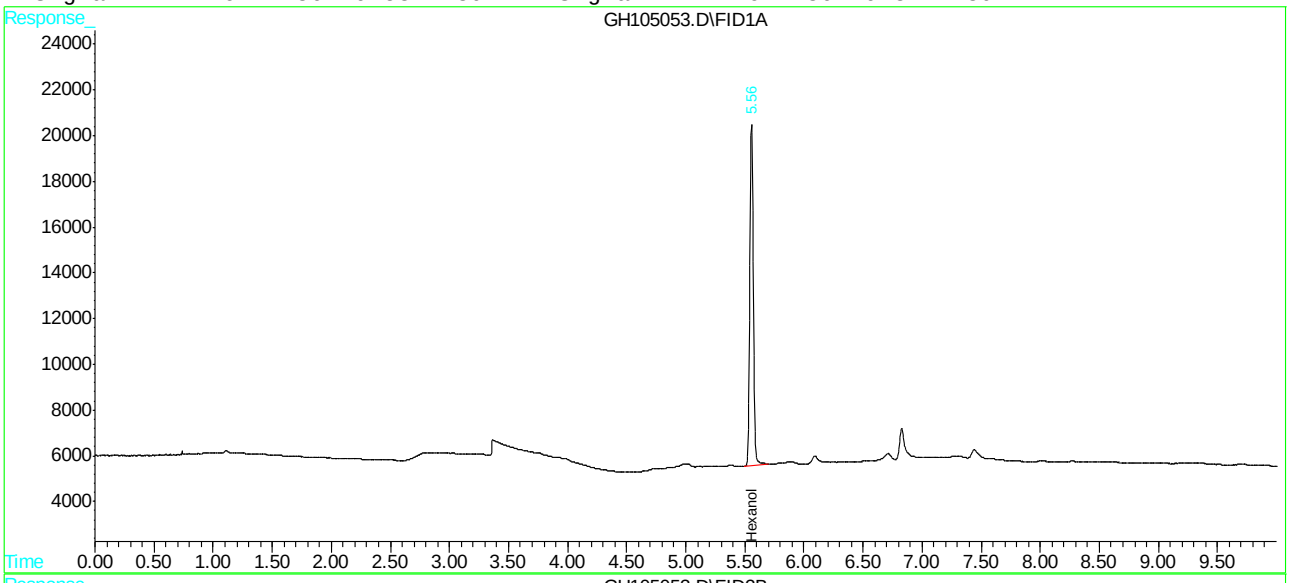
Quantitation Report (QT Reviewed)

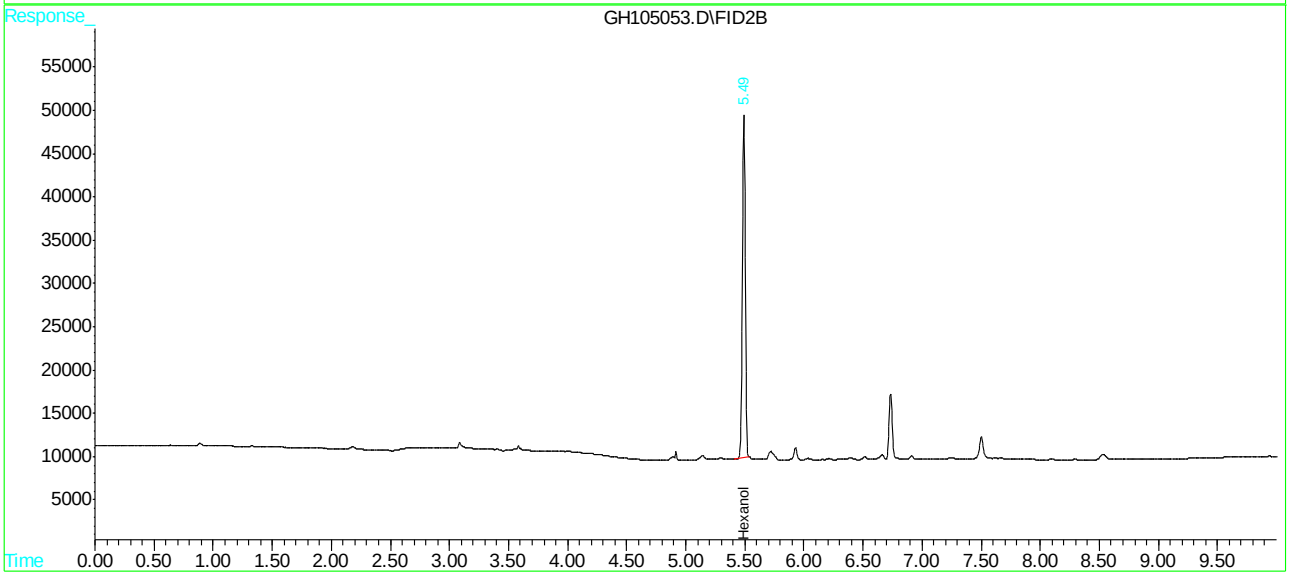
```
Data File : C:\HPCHEM\1\DATA\GH105053.D\FID1A.CH          Vial: 26
Acq On    : 18 May 2016   3:27 pm                     Operator: XULIU
Sample    : JC19644-5                                 Inst    : GCGH
Misc      : GC48425,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105053.D\FID2B.CH          Vial: 26
Acq On    : 18 May 2016   3:49 pm                     Operator: XULIU
Sample    : JC19644-5                                 Inst    : GCGH
Misc      : GC48425,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 19  7:31 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\GH104961.D\FID1A.CH          Vial: 91
Acq On    : 16 May 2016   4:06 pm                     Operator: XULIU
Sample    : MB1                                       Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104961.D\FID2B.CH          Vial: 91
Acq On    : 16 May 2016   4:28 pm                     Operator: XULIU
Sample    : MB1                                       Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  7:39 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:24:13 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
System Monitoring Compounds						
9) S Hexanol	5.60	5.48	398117	284089	5203.193	1726.210 #
Spiked Amount 5000.000			Recovery	=	104.06%	34.52%
Target Compounds						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC19644

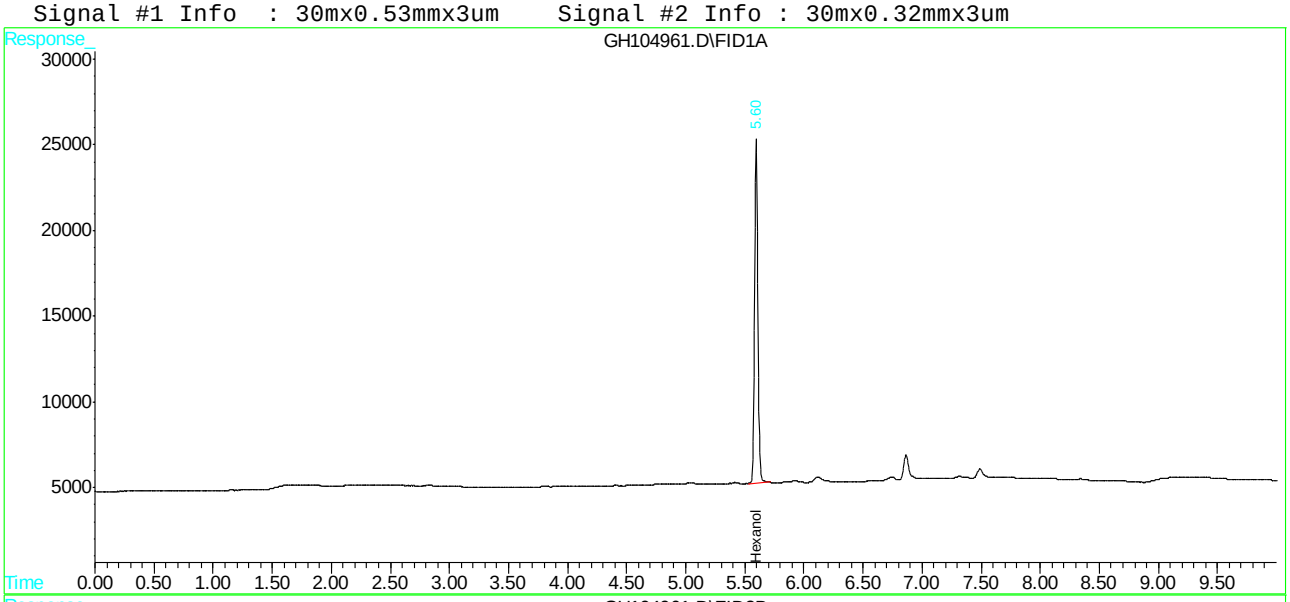
Quantitation Report (QT Reviewed)

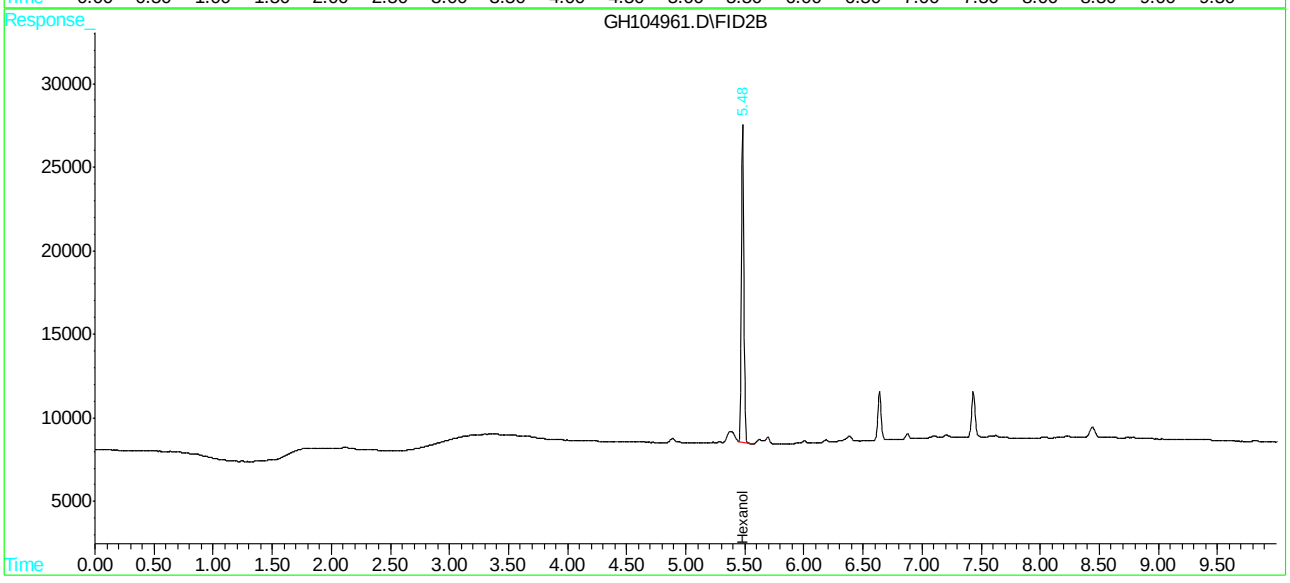
```
Data File : C:\HPCHEM\1\DATA\GH104961.D\FID1A.CH          Vial: 91
Acq On    : 16 May 2016   4:06 pm                     Operator: XULIU
Sample    : MB1                                       Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104961.D\FID2B.CH          Vial: 91
Acq On    : 16 May 2016   4:28 pm                     Operator: XULIU
Sample    : MB1                                       Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  7:39 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:24:13 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105050.D\FID1A.CH          Vial: 91
Acq On    : 18 May 2016   2:42 pm                     Operator: XULIU
Sample    : MB1                                       Inst    : GCGH
Misc      : GC48425,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105050.D\FID2B.CH          Vial: 91
Acq On    : 18 May 2016   2:58 pm                     Operator: XULIU
Sample    : MB1                                       Inst    : GCGH
Misc      : GC48425,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 19  7:16 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 09:37:12 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um

 Compound          RT#1   RT#2    Resp#1   Resp#2     PPB       PPB
---------------------------------------------------------------------

System Monitoring Compounds
9) S   Hexanol           5.56   5.50    304202   672098 4500.252  4326.419
 Spiked Amount   5000.000                  Recovery     =   90.01%    86.53%

Target Compounds
```

9.2.2

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 JC19644

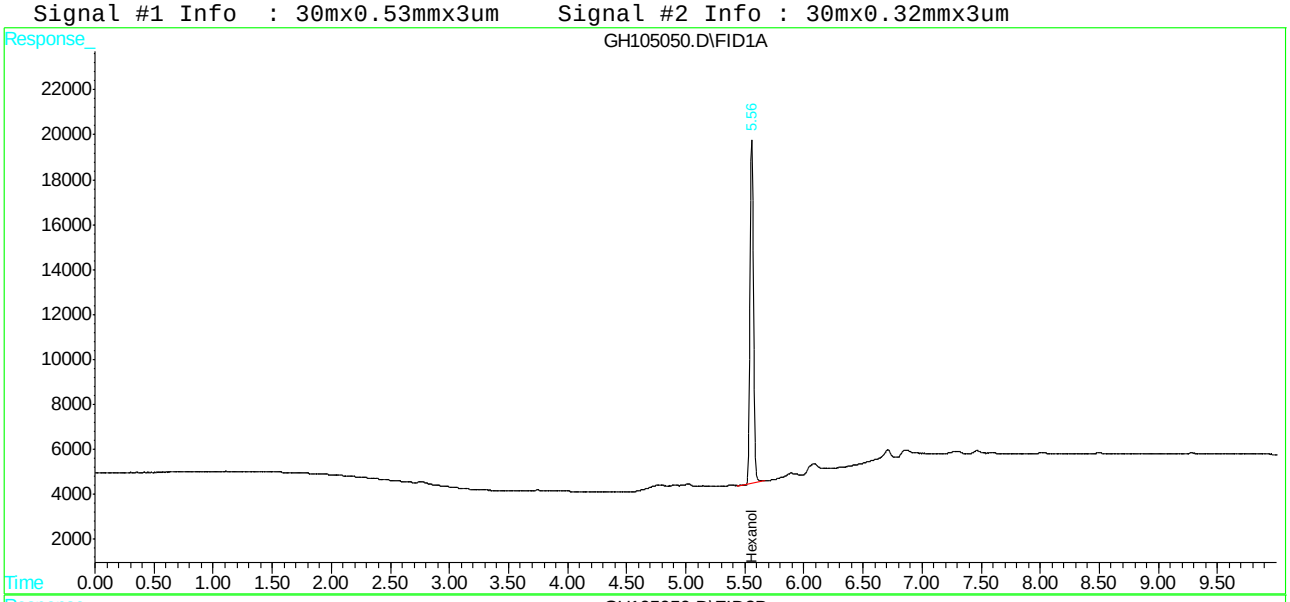
Quantitation Report (QT Reviewed)

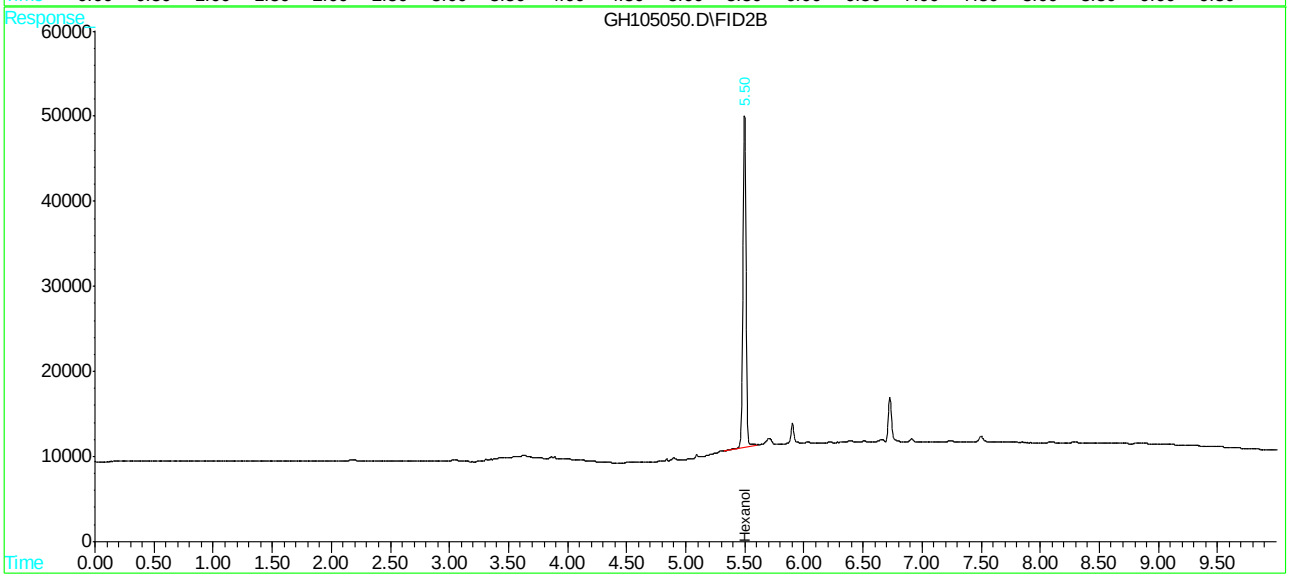
```
Data File : C:\HPCHEM\1\DATA\GH105050.D\FID1A.CH          Vial: 91
Acq On    : 18 May 2016   2:42 pm                     Operator: XULIU
Sample    : MB1                                       Inst    : GCGH
Misc      : GC48425,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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\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
```

9.2.3

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 JC19644

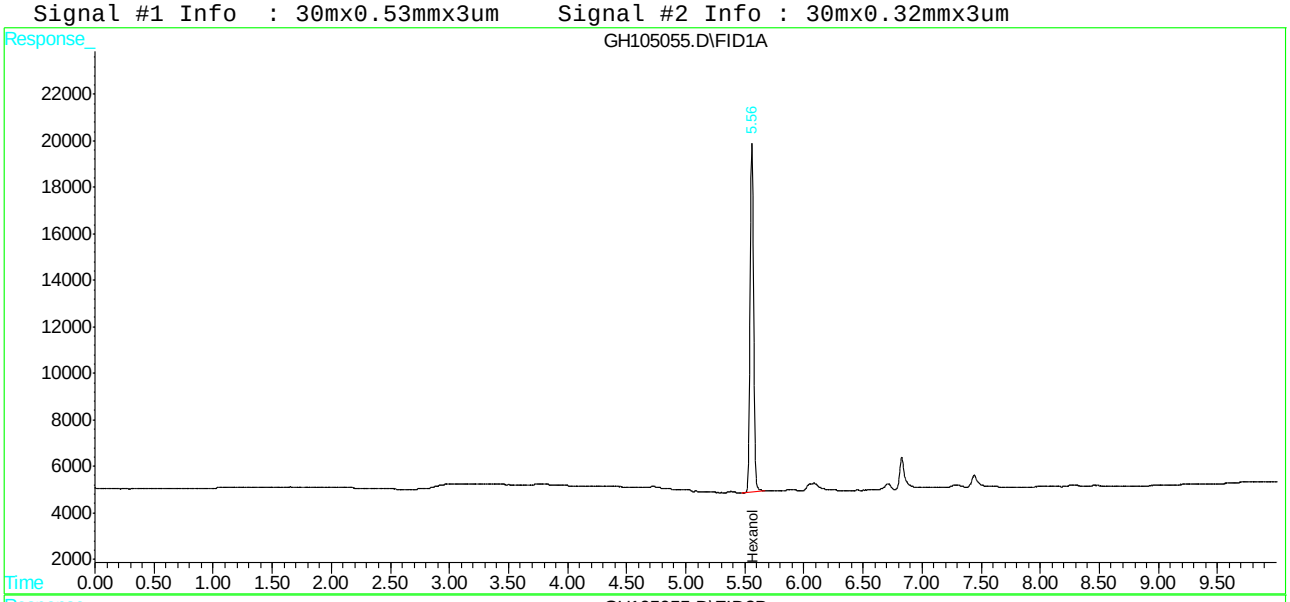
Quantitation Report (QT Reviewed)

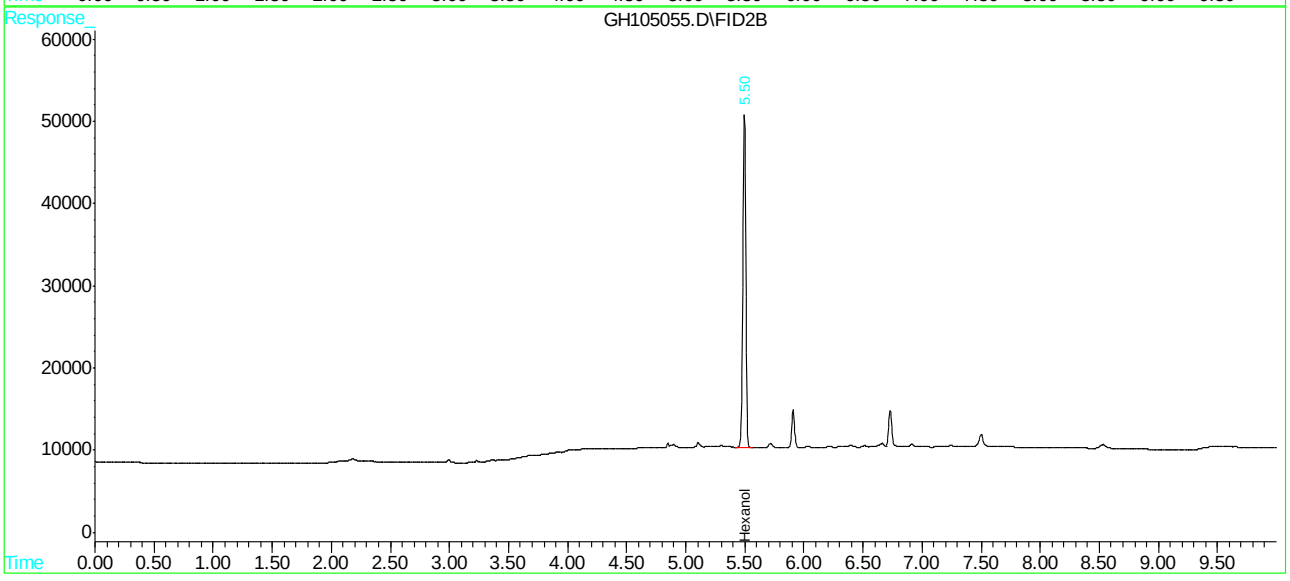
```
Data File : C:\HPCHEM\1\DATA\GH105055.D\FID1A.CH          Vial: 91
Acq On    : 18 May 2016   4:03 pm                     Operator: XULIU
Sample    : MB2                                       Inst    : GCGH
Misc      : GC48426,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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\GH104962.D\FID1A.CH          Vial: 92
Acq On    : 16 May 2016   4:28 pm                     Operator: XULIU
Sample    : BS                                        Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104962.D\FID2B.CH          Vial: 92
Acq On    : 16 May 2016   4:45 pm                     Operator: XULIU
Sample    : BS                                        Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  7:38 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:24:13 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.60	5.48	439726	309830	5746.997	1882.618 #
Spiked Amount	5000.000			Recovery	=	114.94%	37.65%
	Target Compounds						
1)	Methanol	1.15	0.86	71026	57960	4809.159	2851.105 #
2)	Ethanol	1.49	1.11	103628	73446	5537.932	2311.507 #
3)	Tert-Butyl Alcoh	2.07	1.60	194353	120481	7118.284	1845.234 #
4)	1-Propanol	2.56	1.94	135960	120368	6100.301	2443.009 #
5)	2-Propanol	1.80	1.37f	180447	81610	8696.137	1952.102 #
6)	Isobutanol	3.36	2.89	167811	108711	6105.202	1752.384 #
7)	1-Butanol	3.80	3.38	154708	127417	6318.080	2461.364 #
8)	2-Butanol	2.99	2.51f	138399	101020	5492.386	2044.341 #

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC19644

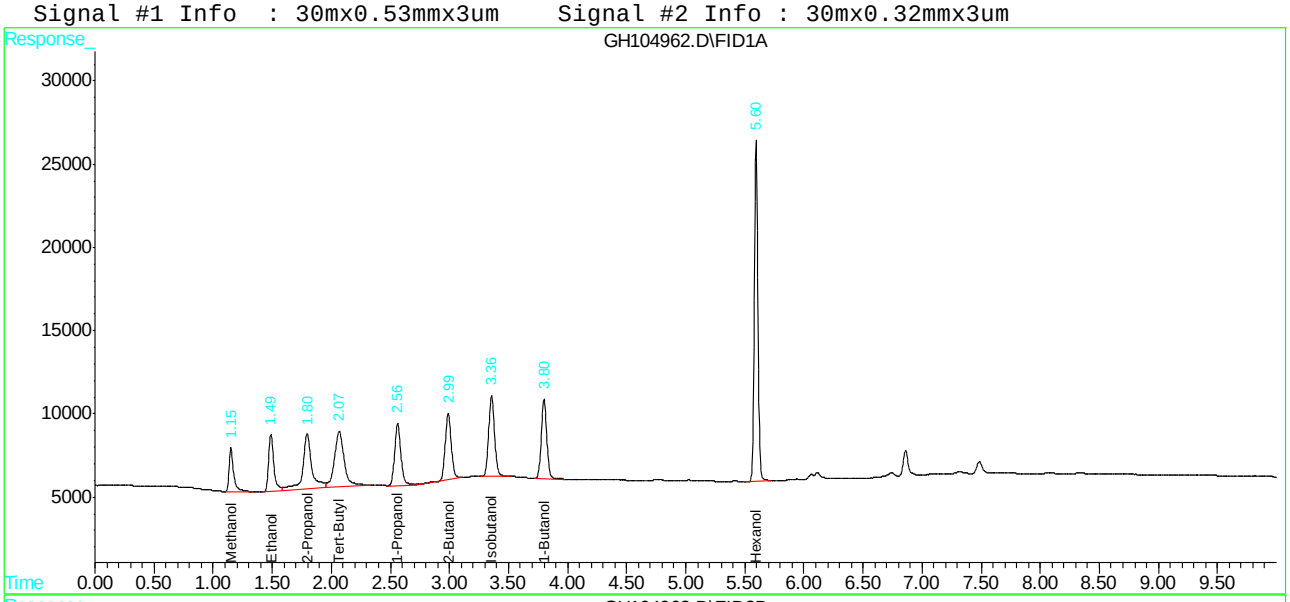
Quantitation Report (QT Reviewed)

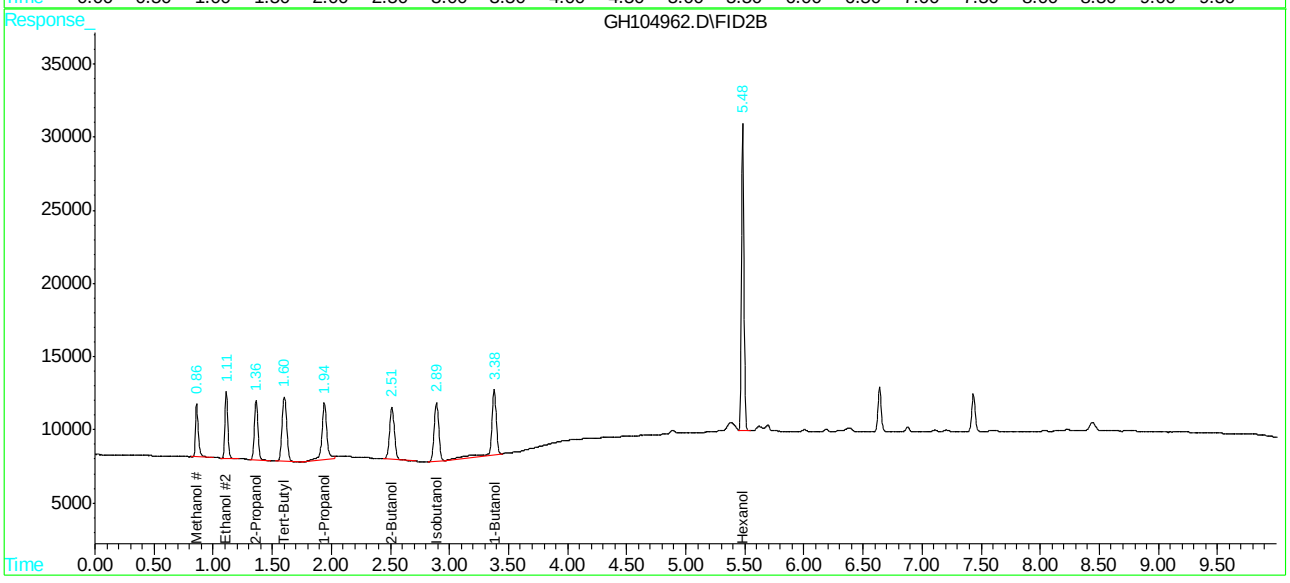
```
Data File : C:\HPCHEM\1\DATA\GH104962.D\FID1A.CH          Vial: 92
Acq On    : 16 May 2016   4:28 pm                     Operator: XULIU
Sample    : BS                                        Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104962.D\FID2B.CH          Vial: 92
Acq On    : 16 May 2016   4:45 pm                     Operator: XULIU
Sample    : BS                                        Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  7:38 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:24:13 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105051.D\FID1A.CH          Vial: 92
Acq On    : 18 May 2016   2:58 pm                     Operator: XULIU
Sample    : BS                                        Inst    : GCGH
Misc      : GC48425,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105051.D\FID2B.CH          Vial: 92
Acq On    : 18 May 2016   3:13 pm                     Operator: XULIU
Sample    : BS                                        Inst    : GCGH
Misc      : GC48425,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 19  7:18 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 09:37:12 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.56	5.50	331713	735813	4907.236	4736.560
	Spiked Amount 5000.000			Recovery	=	98.14%	94.73%
	Target Compounds						
1)	Methanol	1.11	0.91	76338	155204	4938.195	4811.899
2)	Ethanol	1.44	1.16	99507	198781	5250.978	4986.853
3)	Tert-Butyl Alcoh	2.00	1.65	144637	323706	5104.554	5091.080
4)	1-Propanol	2.50	2.01	129150	258222	5309.109	5078.862
5)	2-Propanol	1.74	1.41	104714	226653	5253.818	5005.689
6)	Isobutanol	3.30	2.94	141712	297186	4925.527	4854.304
7)	1-Butanol	3.75	3.42	146123	282625	5116.251	4271.194
8)	2-Butanol	2.93	2.57	131140	317642	5115.785	5851.450

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC19644

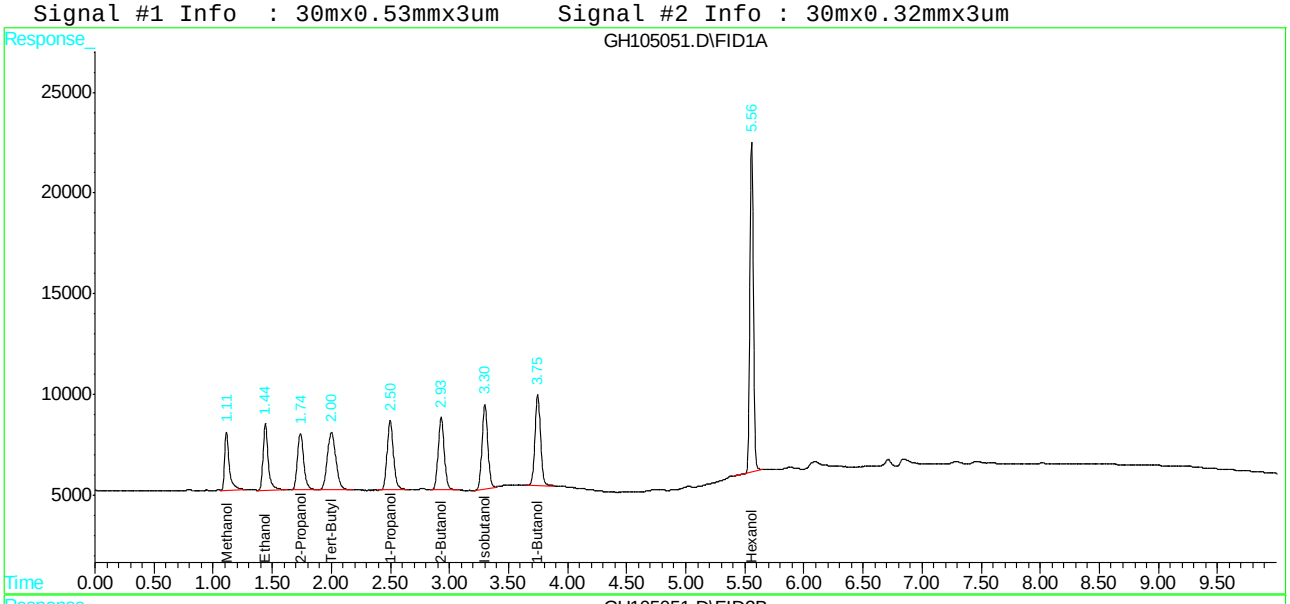
Quantitation Report (QT Reviewed)

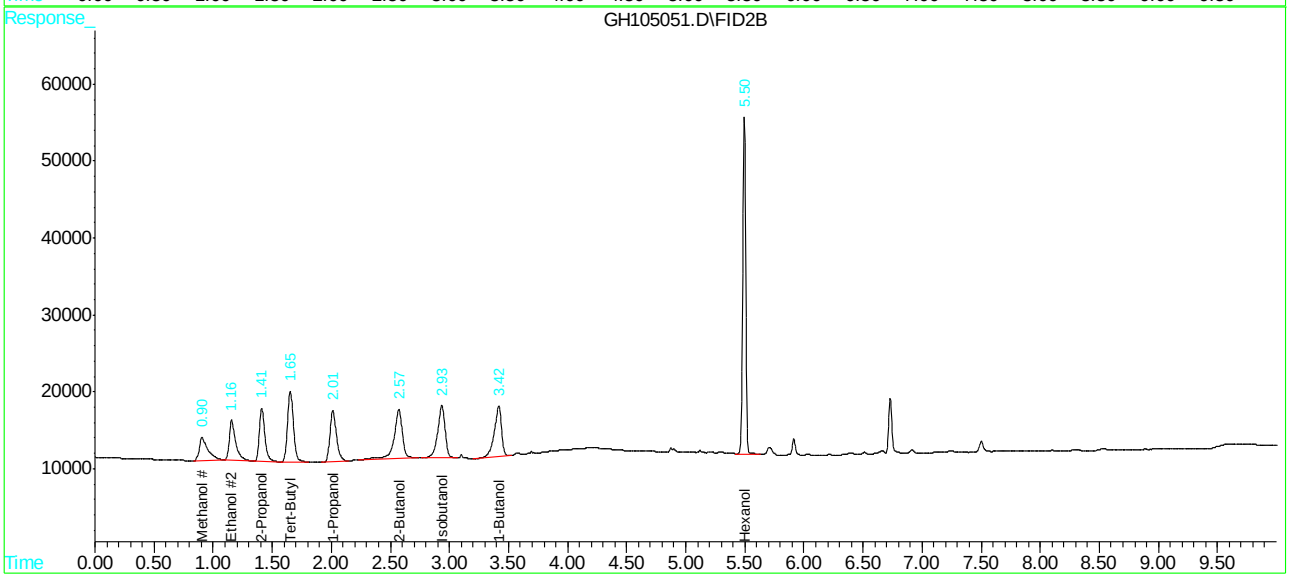
```
Data File : C:\HPCHEM\1\DATA\GH105051.D\FID1A.CH          Vial: 92
Acq On    : 18 May 2016   2:58 pm                     Operator: XULIU
Sample    : BS                                        Inst    : GCGH
Misc      : GC48425,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104964.D\FID1A.CH          Vial: 2
Acq On    : 16 May 2016   4:57 pm                     Operator: XULIU
Sample    : JC19644-1MS                               Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104964.D\FID2B.CH          Vial: 2
Acq On    : 16 May 2016   5:12 pm                     Operator: XULIU
Sample    : JC19644-1MS                               Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  7:46 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:46:40 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	System Monitoring Compounds							
9) S	Hexanol	5.60	5.48	423617	291848	5536.460	1773.354	#
Spiked Amount	5000.000			Recovery	=	110.73%	35.47%	
	Target Compounds							
1)	Methanol	1.15	0.86	72720	61380	4923.823	3019.335	
2)	Ethanol	1.49	1.12	107138	75953	5725.512	2390.398	#
3)	Tert-Butyl Alcoh	2.07	1.61	171758	124596	6290.720	1908.250	#
4)	1-Propanol	2.56	1.95	138985	118086	6236.037	2396.694	#
5)	2-Propanol	1.79	1.37f	107581	84259	5184.591	2015.454	#
6)	Isobutanol	3.35	2.89	174938	115275	6364.513	1858.191	#
7)	1-Butanol	3.80	3.38	164381	109032	6713.099	2106.225	#
8)	2-Butanol	2.99	2.52	145573	101789	5777.092	2059.904	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

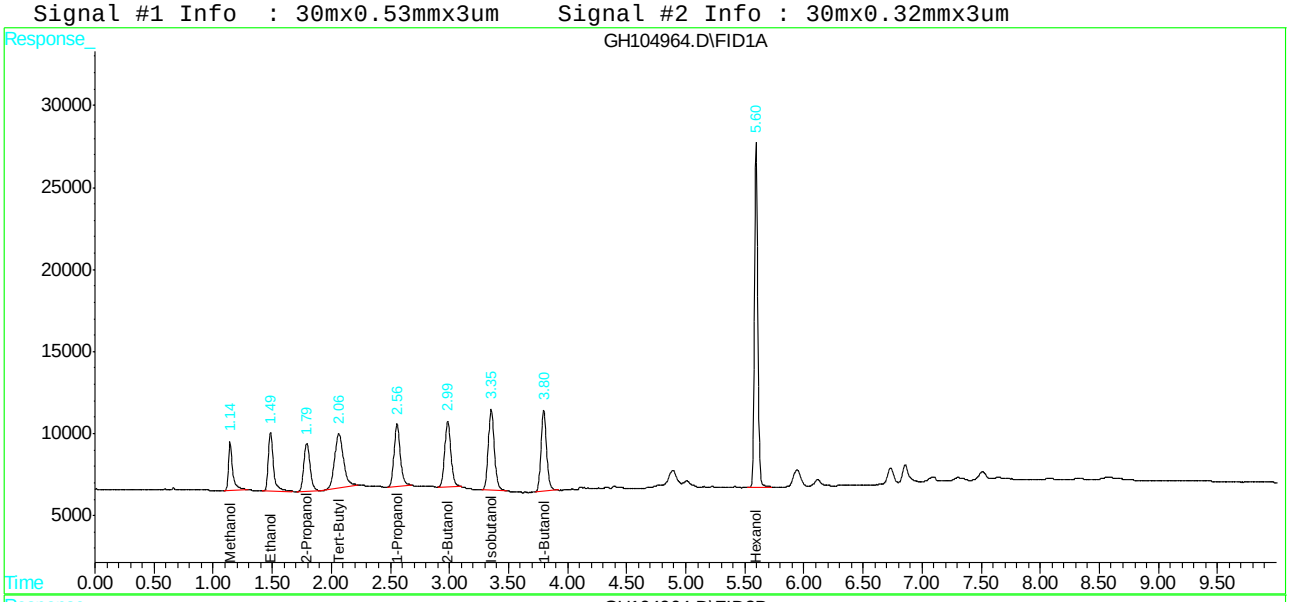
Quantitation Report (QT Reviewed)

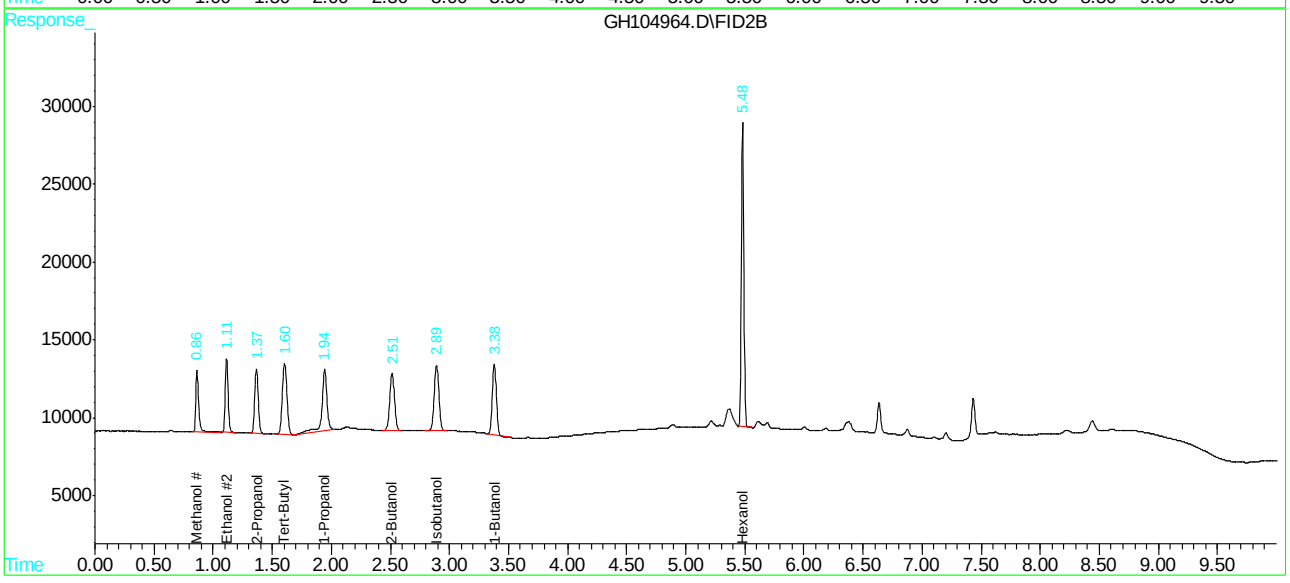
```
Data File : C:\HPCHEM\1\DATA\GH104964.D\FID1A.CH          Vial: 2
Acq On    : 16 May 2016   4:57 pm                     Operator: XULIU
Sample    : JC19644-1MS                               Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104964.D\FID2B.CH          Vial: 2
Acq On    : 16 May 2016   5:12 pm                     Operator: XULIU
Sample    : JC19644-1MS                               Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  7:46 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:46:40 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104965.D\FID1A.CH          Vial: 3
Acq On    : 16 May 2016   5:12 pm                     Operator: XULIU
Sample    : JC19644-1MSD                              Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104965.D\FID2B.CH          Vial: 3
Acq On    : 16 May 2016   5:30 pm                     Operator: XULIU
Sample    : JC19644-1MSD                              Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  7:47 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:46:40 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	System Monitoring Compounds							
9) S	Hexanol	5.60	5.48	431149	292567	5634.903	1777.727	#
Spiked Amount	5000.000			Recovery	=	112.70%	35.55%	
	Target Compounds							
1)	Methanol	1.15	0.86	73375	62227	4968.163	3061.026	
2)	Ethanol	1.49	1.11	109011	75678	5825.598	2381.731	#
3)	Tert-Butyl Alcoh	2.07	1.60	169876	125262	6221.802	1918.451	#
4)	1-Propanol	2.56	1.94f	150011	99591	6730.745	2021.302	#
5)	2-Propanol	1.79	1.36f	122453	84591	5901.293	2023.395	#
6)	Isobutanol	3.35	2.89	182004	115401	6621.580	1860.232	#
7)	1-Butanol	3.80	3.38	168796	109734	6893.405	2119.783	#
8)	2-Butanol	2.99	2.51f	153419	102611	6088.456	2076.538	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

GH104965.D MGH5269.M Tue May 17 07:50:34 2016 GCGH

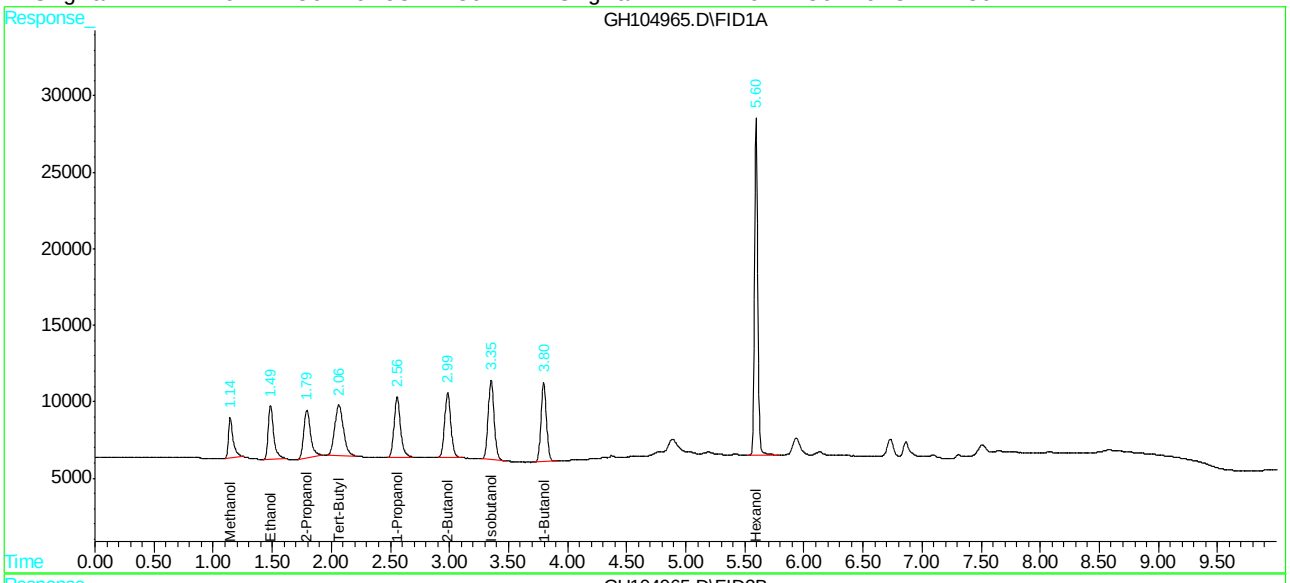
Quantitation Report (QT Reviewed)

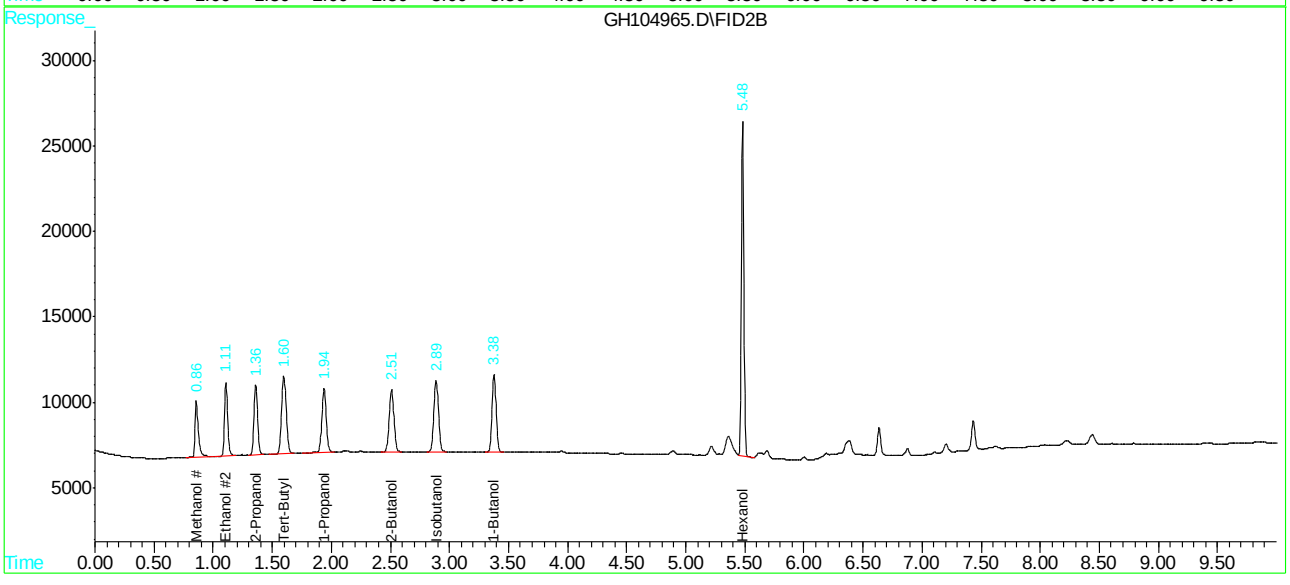
```
Data File : C:\HPCHEM\1\DATA\GH104965.D\FID1A.CH          Vial: 3
Acq On    : 16 May 2016   5:12 pm                     Operator: XULIU
Sample    : JC19644-1MSD                              Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104965.D\FID2B.CH          Vial: 3
Acq On    : 16 May 2016   5:30 pm                     Operator: XULIU
Sample    : JC19644-1MSD                              Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  7:47 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:46:40 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





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.

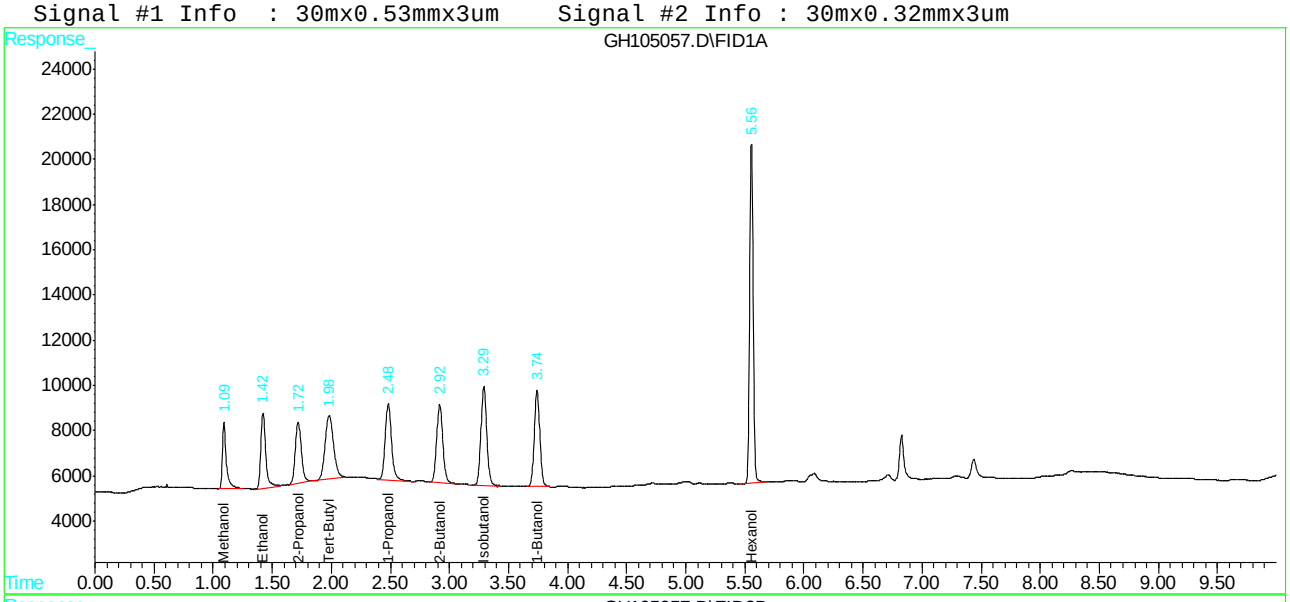
Quantitation Report (QT Reviewed)

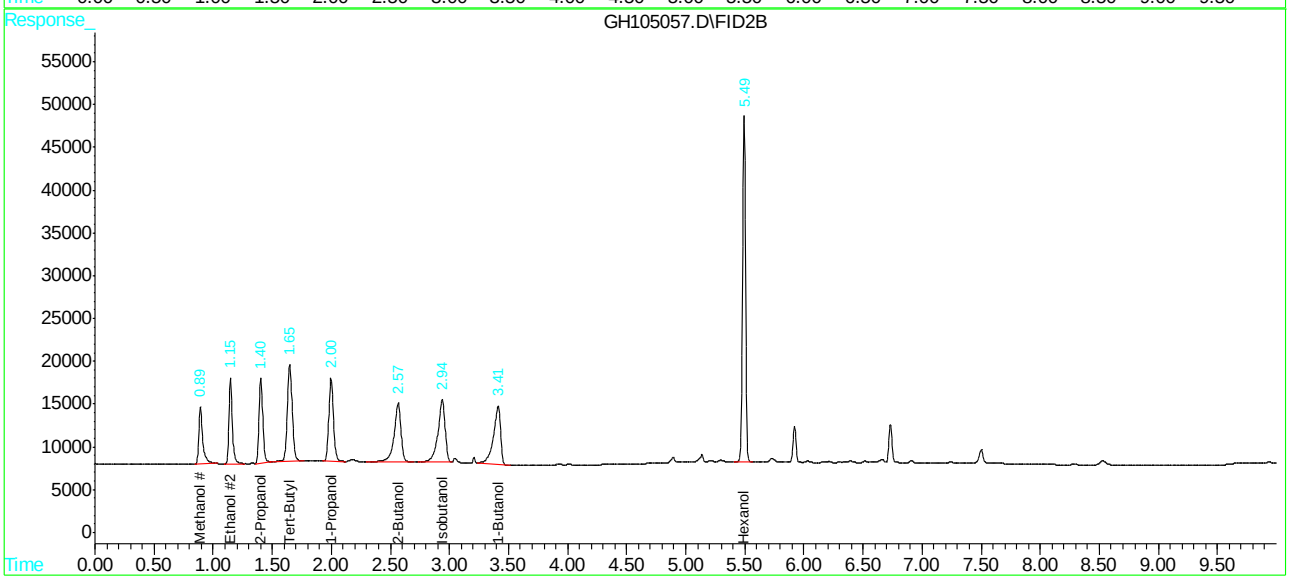
```
Data File : C:\HPCHEM\1\DATA\GH105057.D\FID1A.CH          Vial: 2
Acq On    : 18 May 2016   4:40 pm                     Operator: XULIU
Sample    : JC19914-2MS                               Inst    : GCGH
Misc      : GC48426,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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.

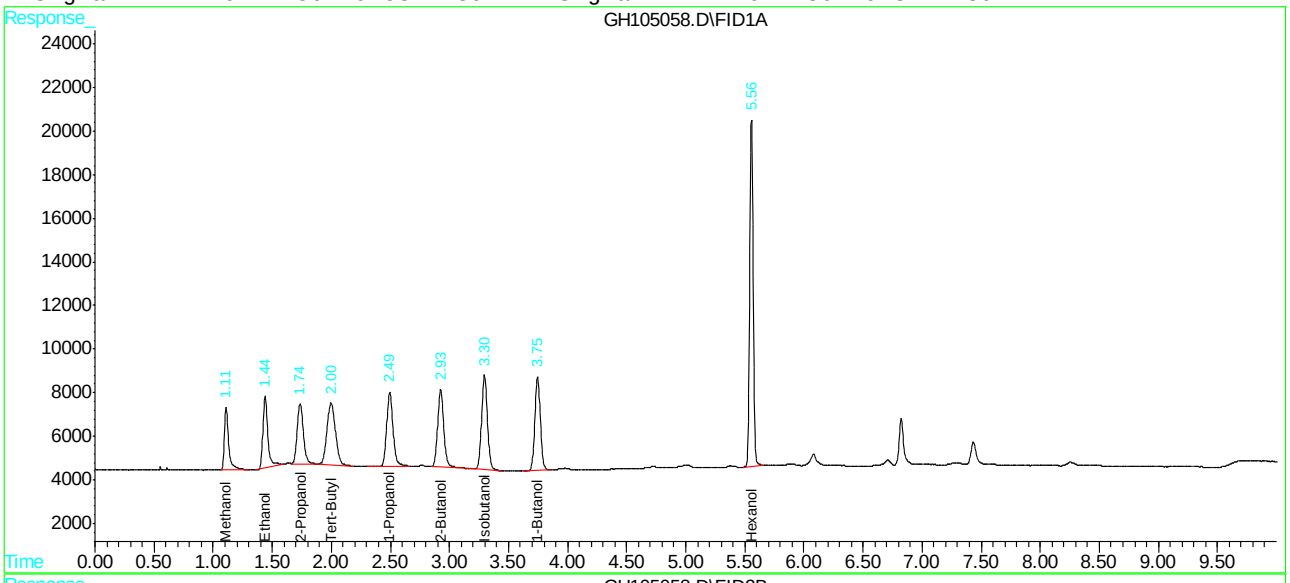
Quantitation Report (QT Reviewed)

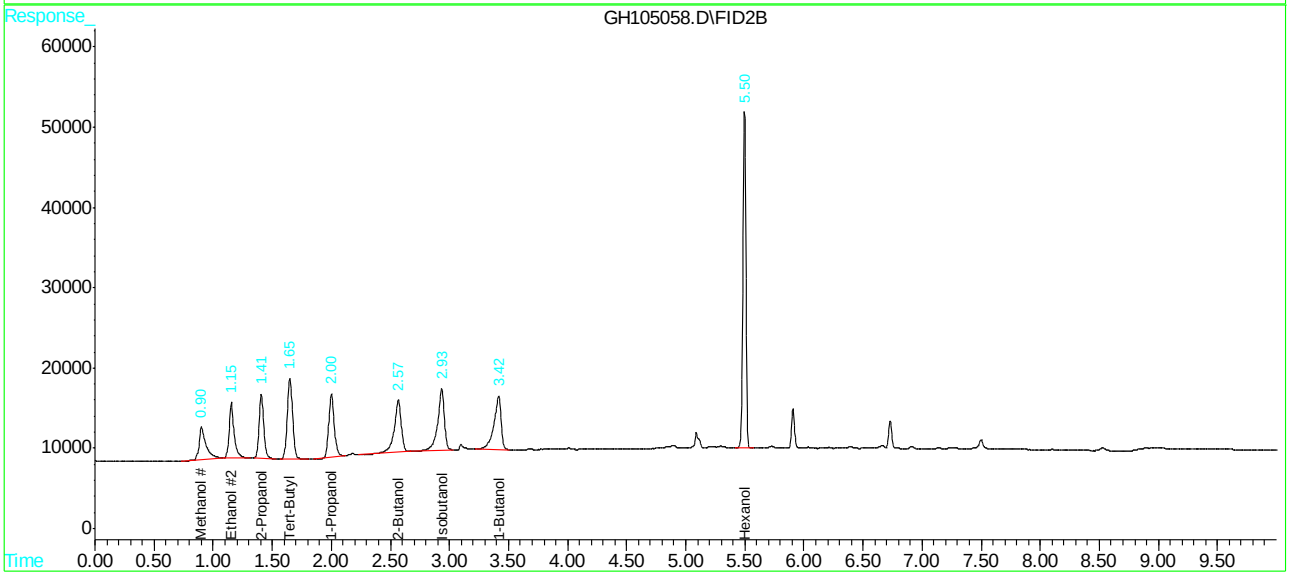
```
Data File : C:\HPCHEM\1\DATA\GH105058.D\FID1A.CH          Vial: 3
Acq On    : 18 May 2016   4:54 pm                     Operator: XULIU
Sample    : JC19914-2MSD                              Inst    : GCGH
Misc      : GC48426,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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 JC19644

Manual Integrations
APPROVED
(compounds with "m" flag)
Owen McKenna
05/10/16 12:49

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104674.D\FID1A.CH          Vial: 2
Acq On    :  9 May 2016   1:28 pm                     Operator: XULIU
Sample    : IC5269-100                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104674.D\FID2B.CH          Vial: 2
Acq On    :  9 May 2016   1:49 pm                     Operator: XULIU
Sample    : IC5269-100                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10 10:29 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 09:30:14 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.61	5.44	49985	112111	653.275	663.209
Spiked Amount	5000.000			Recovery	=	13.07%	13.26%
	Target Compounds						
1)	Methanol	1.15	0.88	1614	2383	109.284	94.588
2)	Ethanol	1.50	1.13	1891	2911	101.049	88.894
3)	Tert-Butyl Alcoh	2.08	1.62	2661	6282	97.471	106.692
4)	1-Propanol	2.58f	1.96	1437	4687	56.648m	117.370 #
5)	2-Propanol	1.81	1.38	2379	4175	114.673	105.617
6)	Isobutanol	3.38	2.91	2339	6882	85.109	109.048
7)	1-Butanol	3.84	3.38	2288	5438	87.938m	102.310
8)	2-Butanol	3.00	2.53	2251	4806	89.595	104.191

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

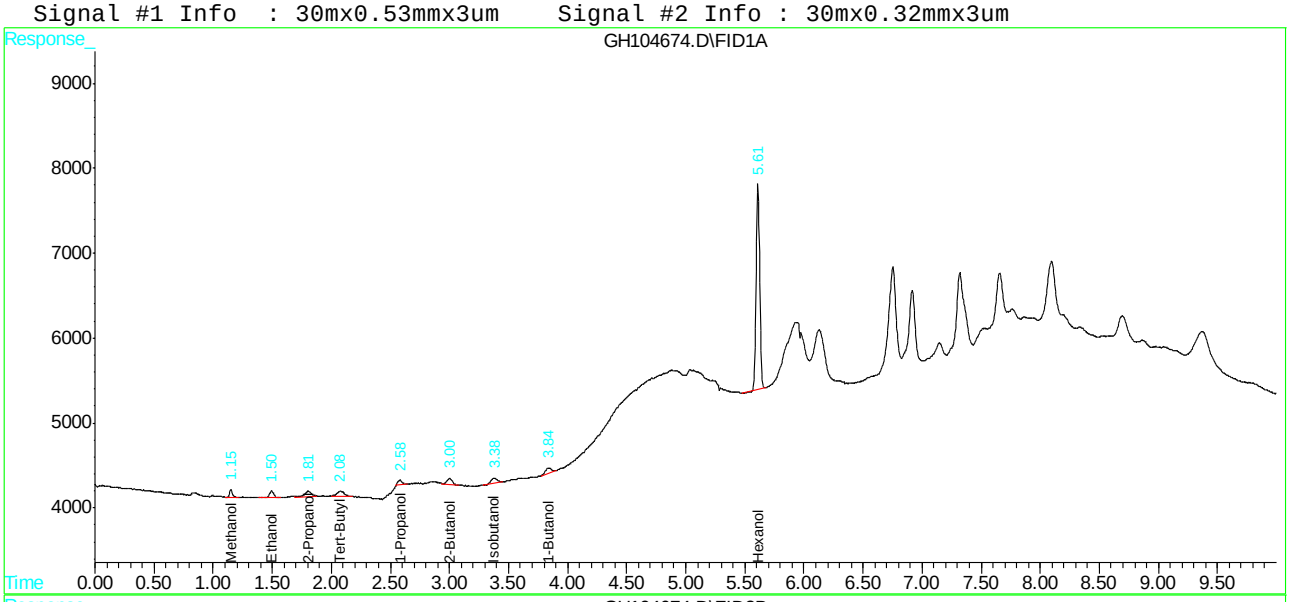
Quantitation Report (QT Reviewed)

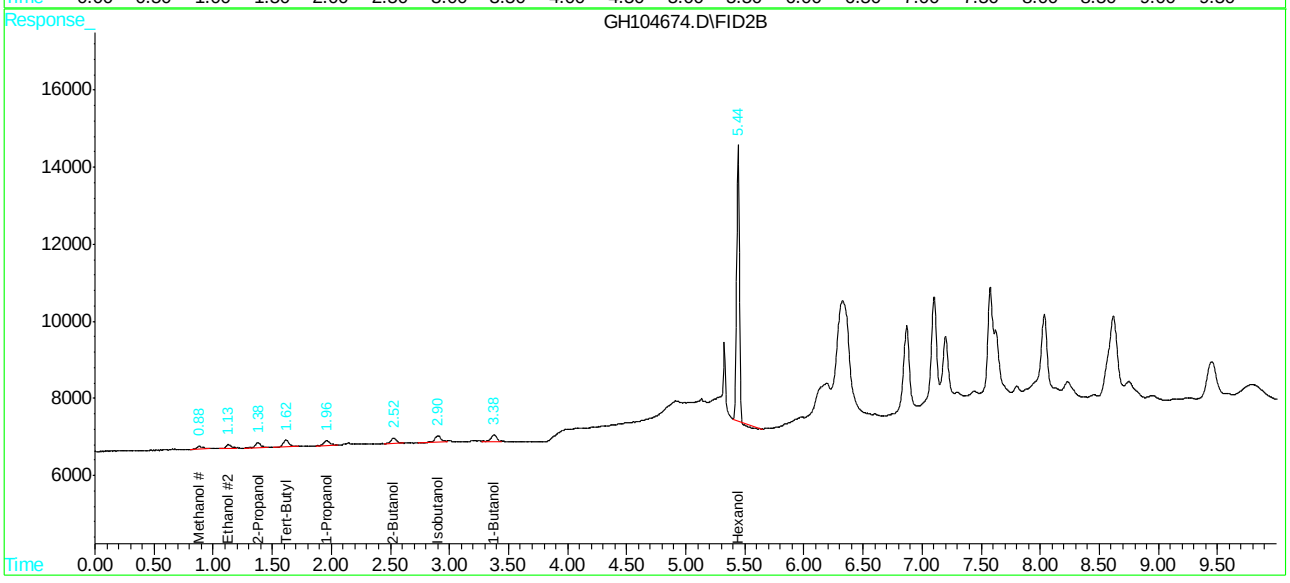
```
Data File : C:\HPCHEM\1\DATA\GH104674.D\FID1A.CH          Vial: 2
Acq On    :  9 May 2016   1:28 pm                     Operator: XULIU
Sample    : IC5269-100                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104674.D\FID2B.CH          Vial: 2
Acq On    :  9 May 2016   1:49 pm                     Operator: XULIU
Sample    : IC5269-100                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10 10:29 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 09:30:14 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Manual Integration Approval Summary

Sample Number:	GGH5269-IC5269	**Method:**	SW846-8015C (DAI)
Lab FileID:	GH104674.D	**Analyst approved:**	05/10/16 10:51 Xu Liu
Injection Time:	05/09/16 13:28	**Supervisor approved:**	05/10/16 12:49 Owen McKenna

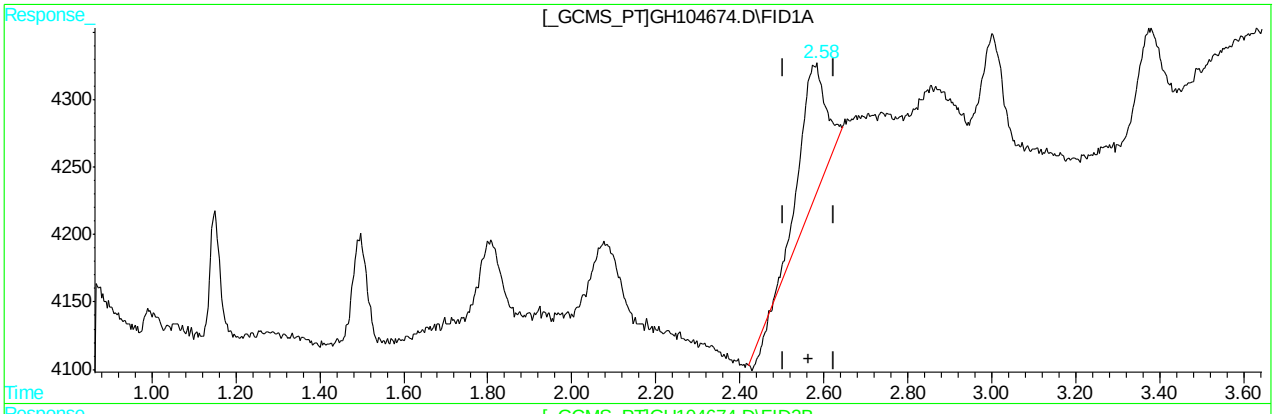
Parameter	CAS	Sig#	R.T. (min.)	Reason
n-Propyl Alcohol	71-23-8	1	2.58	Poor instrument integration
n-Butyl Alcohol	71-36-3	1	3.84	Poor instrument integration

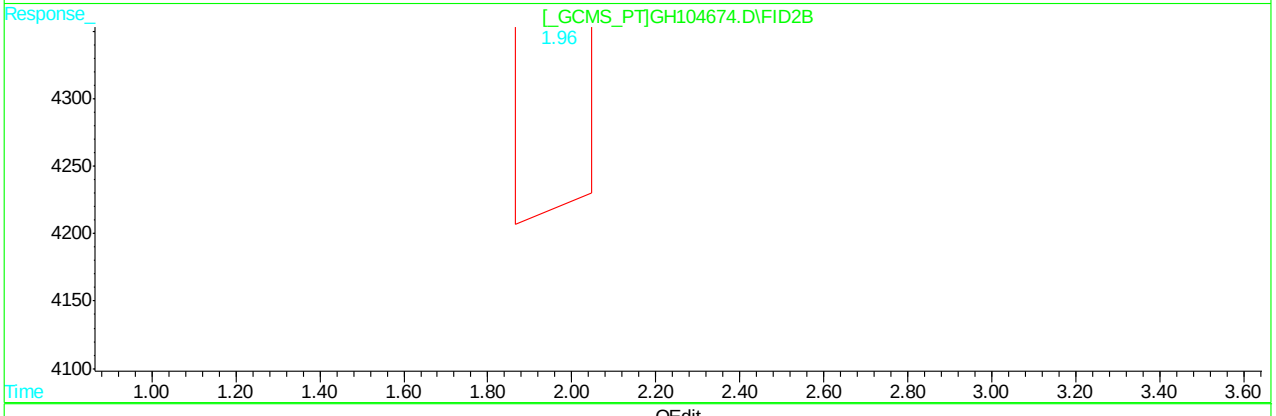
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH104674.D\FID1A.CH          Vial: 2
Acq On    :  9 May 2016   1:28 pm                     Operator: XULIU
Sample    : IC5269-100                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104674.D\FID2B.CH          Vial: 2
Acq On    :  9 May 2016   1:49 pm                     Operator: XULIU
Sample    : IC5269-100                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10  9:41 2016  Quant Results File: MGH5269.RES


Method       : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 10:22:20 2016
Response via : Multiple Level Calibration
```





QEdit

(4) 1-Propanol

2.58min 150.557PPB

response 3820

(4) 1-Propanol #2

1.96min 117.370PPB

response 4687

(+) = Expected Retention Time

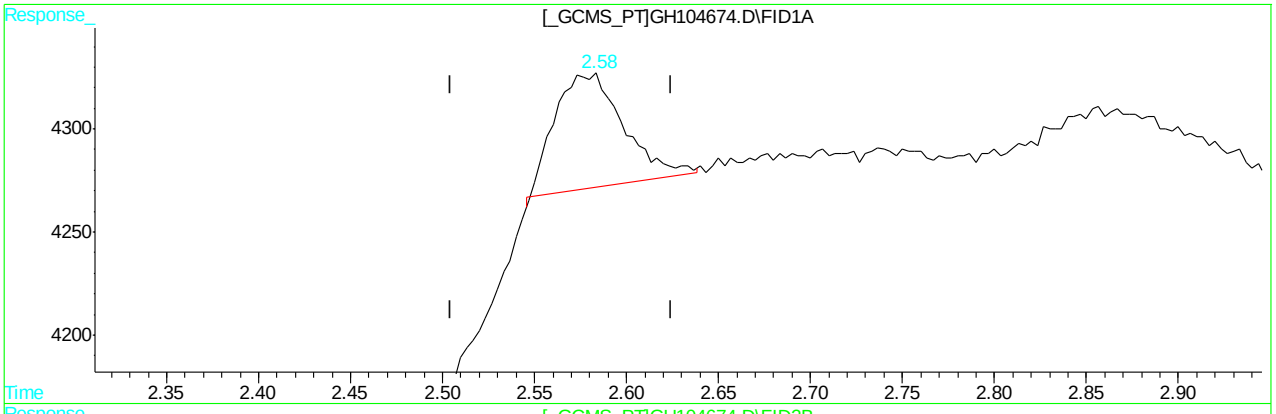
GH104674.D MGH5269.M Tue May 10 10:24:42 2016 GCGH

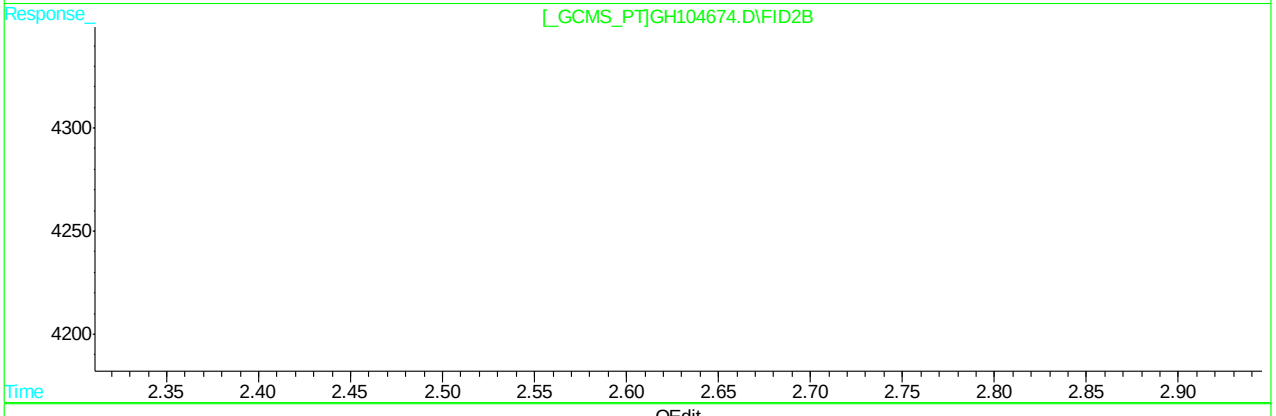
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH104674.D\FID1A.CH          Vial: 2
Acq On    :  9 May 2016   1:28 pm                     Operator: XULIU
Sample    : IC5269-100                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104674.D\FID2B.CH          Vial: 2
Acq On    :  9 May 2016   1:49 pm                     Operator: XULIU
Sample    : IC5269-100                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10  9:41 2016  Quant Results File: MGH5269.RES


Method       : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 10:22:20 2016
Response via : Multiple Level Calibration
```





QEdit

(4) 1-Propanol

2.58min 56.648PPB m

response 1437

(4) 1-Propanol #2

1.96min 117.370PPB

response 4687

(+) = Expected Retention Time

GH104674.D MGH5269.M Tue May 10 10:26:13 2016 GCGH

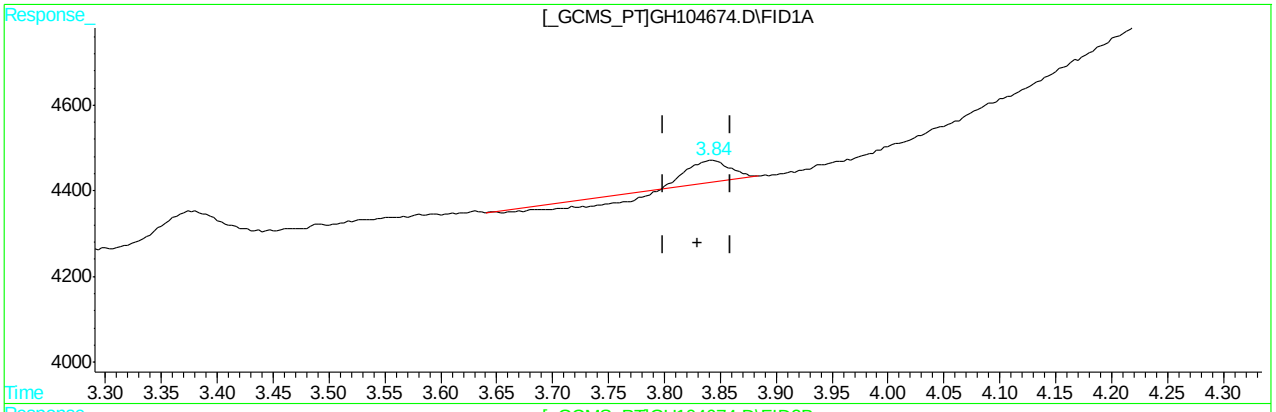
SGS ACCUTEST JC19644

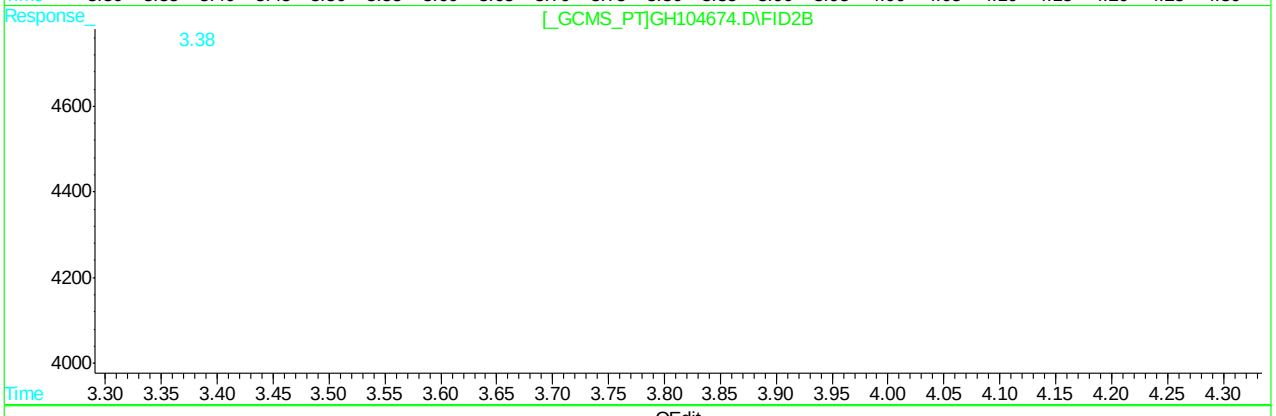
Quantitation Report (Qedit)

```
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

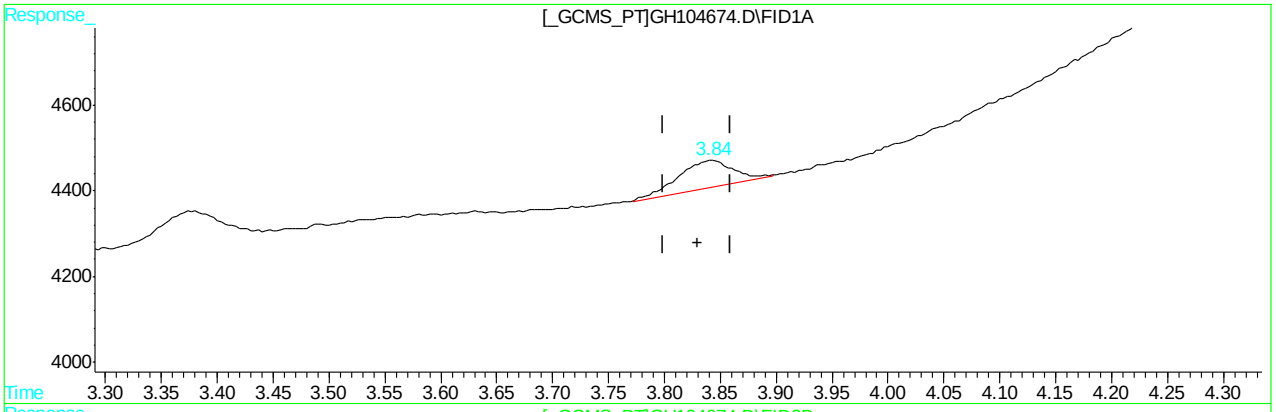
GH104674.D MGH5269.M Tue May 10 10:28:49 2016 GCGH

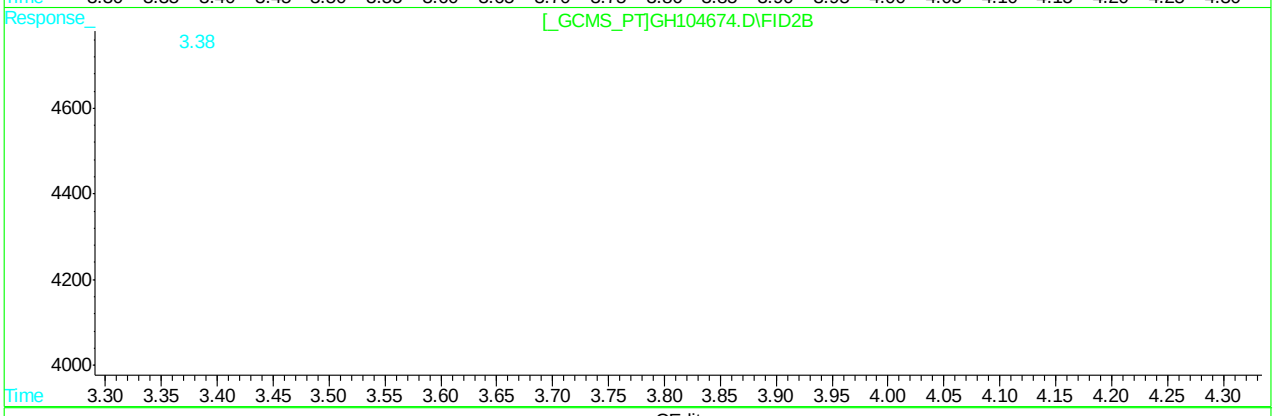
Quantitation Report (Qedit)

```
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 JC19644

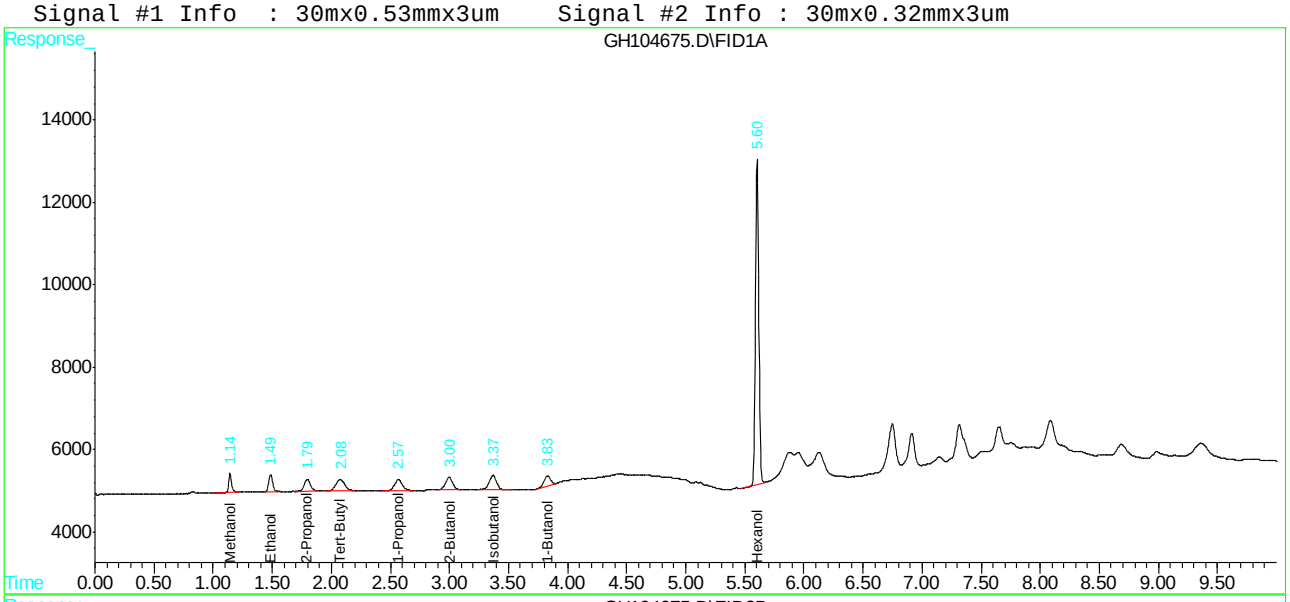
Quantitation Report (QT Reviewed)

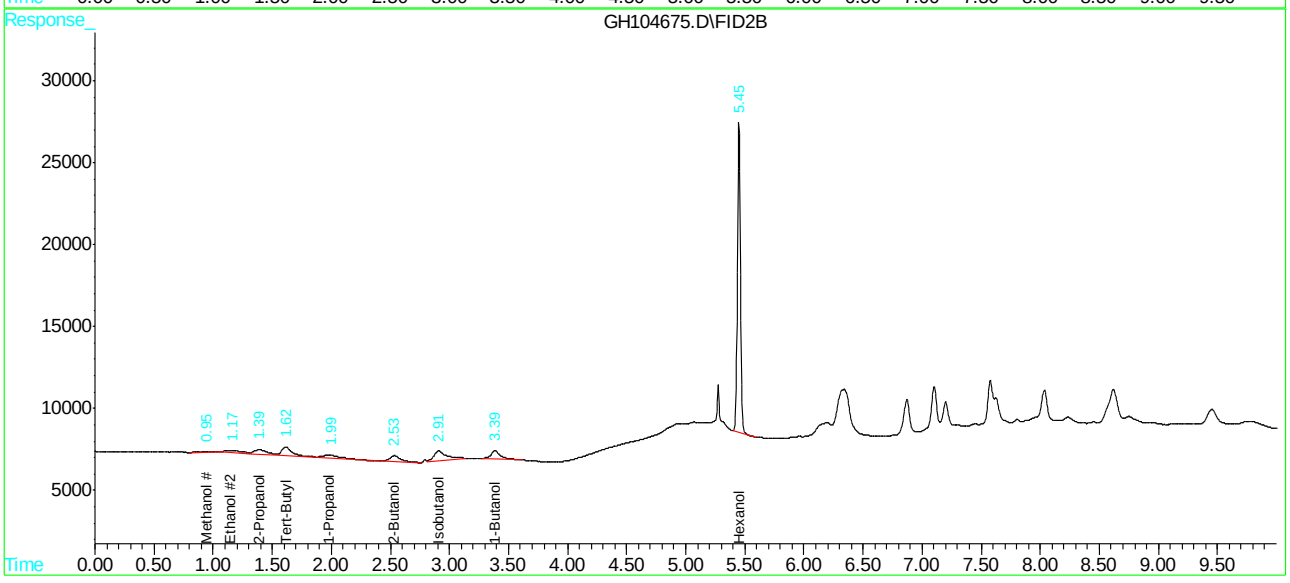
```
Data File : C:\HPCHEM\1\DATA\GH104675.D\FID1A.CH          Vial: 3
Acq On    :  9 May 2016   1:49 pm                     Operator: XULIU
Sample    : IC5269-500                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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
```





Manual Integration Approval Summary

Sample Number:	GGH5269-IC5269	**Method:**	SW846-8015C (DAI)
Lab FileID:	GH104675.D	**Analyst approved:**	05/10/16 11:09 Xu Liu
Injection Time:	05/09/16 13:49	**Supervisor approved:**	05/10/16 12:49 Owen McKenna

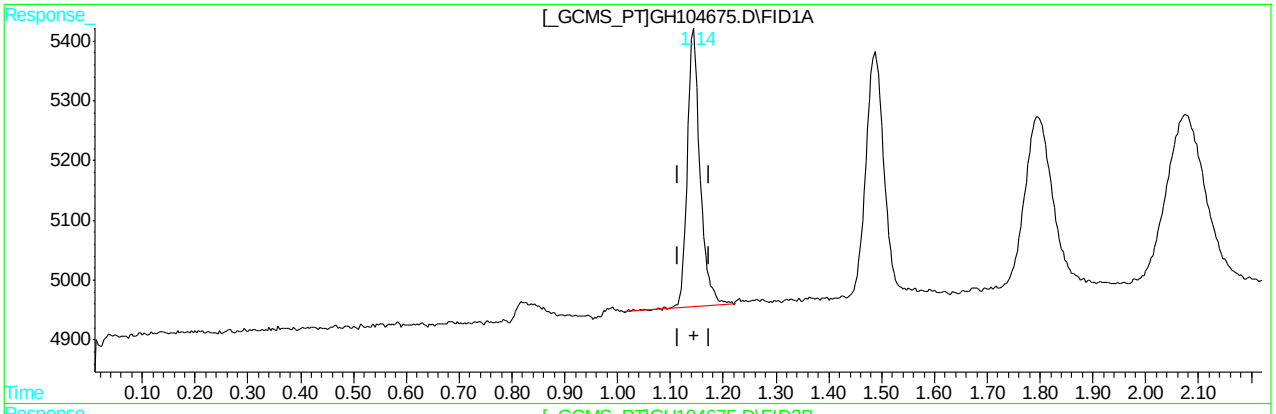
Parameter	CAS	Sig#	R.T. (min.)	Reason
Methanol	67-56-1	2	0.95	Missed peak

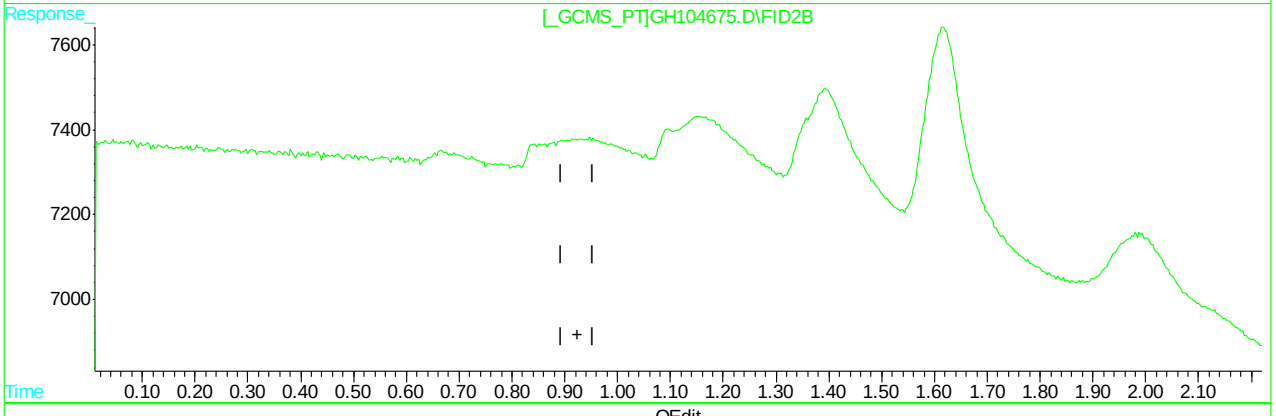
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH104675.D\FID1A.CH          Vial: 3
Acq On    :  9 May 2016   1:49 pm                     Operator: XULIU
Sample    : IC5269-500                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104675.D\FID2B.CH          Vial: 3
Acq On    :  9 May 2016   2:04 pm                     Operator: XULIU
Sample    : IC5269-500                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10  9:57 2016  Quant Results File: MGH5269.RES


Method       : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 10:29:55 2016
Response via : Multiple Level Calibration
```





QEdit

(1) Methanol

1.14min 539.359PPB

response 7966

(1) Methanol #2

0.00min 0.000PPB

response 0

(+) = Expected Retention Time

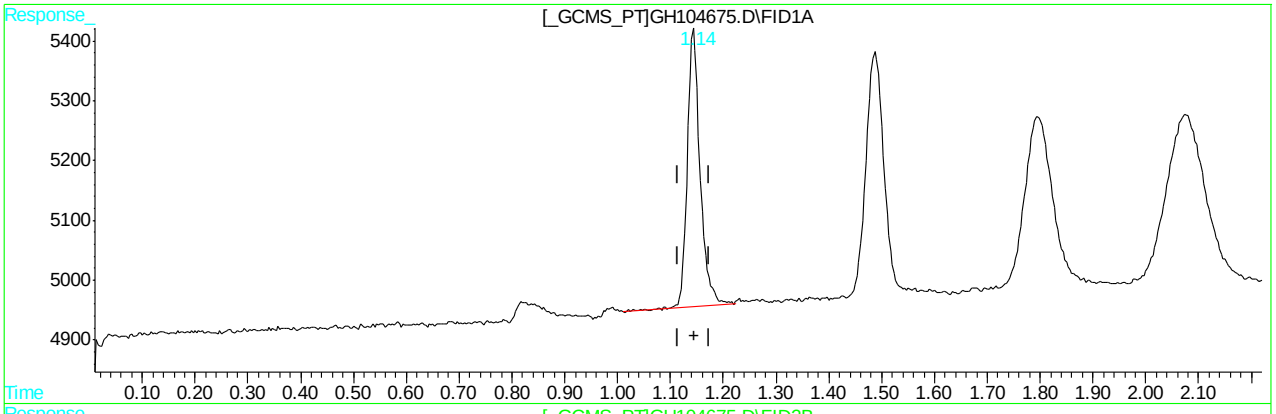
GH104675.D MGH5269.M Tue May 10 11:06:18 2016 GCGH

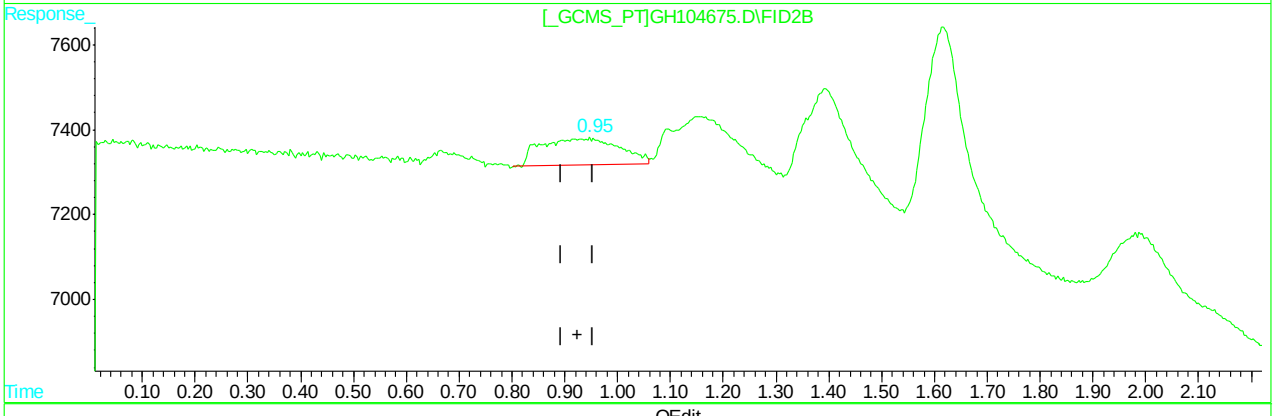
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH104675.D\FID1A.CH          Vial: 3
Acq On    :  9 May 2016   1:49 pm                     Operator: XULIU
Sample    : IC5269-500                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104675.D\FID2B.CH          Vial: 3
Acq On    :  9 May 2016   2:04 pm                     Operator: XULIU
Sample    : IC5269-500                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10  9:57 2016  Quant Results File: MGH5269.RES


Method       : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 10:29:55 2016
Response via : Multiple Level Calibration
```





QEdit

(1) Methanol

1.14min 539.359PPB

response 7966

(1) Methanol #2

0.95min 255.524PPB m

response 6439

(+) = Expected Retention Time

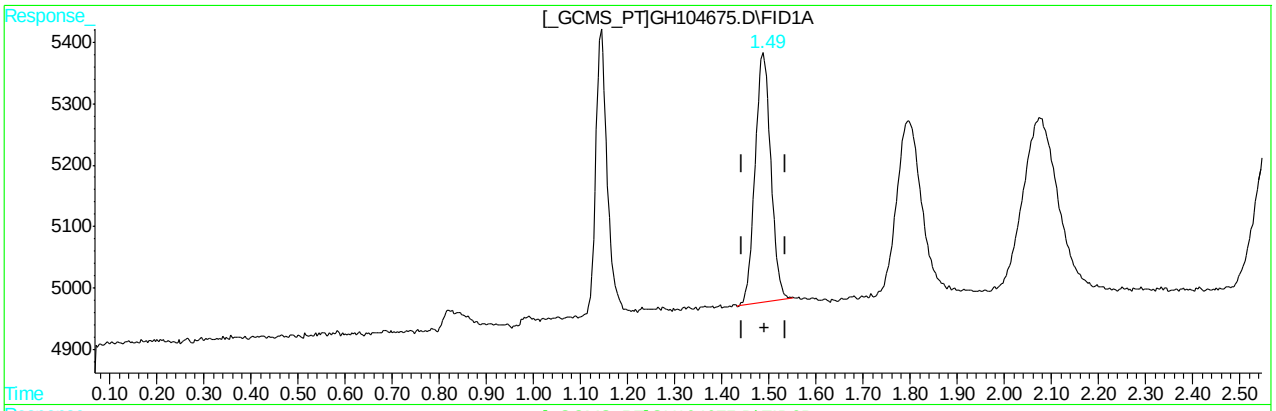
GH104675.D MGH5269.M Tue May 10 11:06:25 2016 GCGH

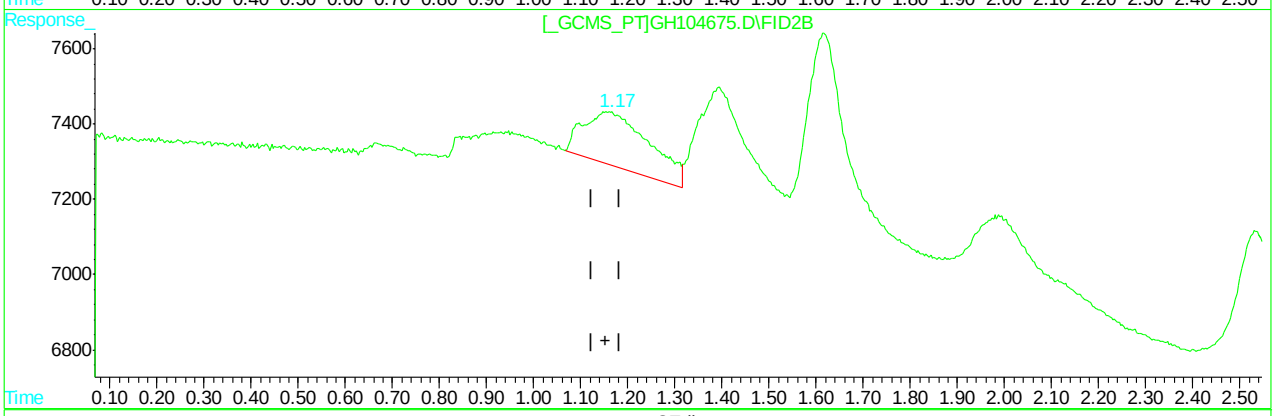
Quantitation Report (Qedit)

```
Data File : C:\HPCHEM\1\DATA\GH104675.D\FID1A.CH          Vial: 3
Acq On    :  9 May 2016   1:49 pm                     Operator: XULIU
Sample    : IC5269-500                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104675.D\FID2B.CH          Vial: 3
Acq On    :  9 May 2016   2:04 pm                     Operator: XULIU
Sample    : IC5269-500                                Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10 11:06 2016  Quant Results File: MGH5269.RES


Method       : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 11:06:41 2016
Response via : Multiple Level Calibration
```





QEdit

(2) Ethanol

1.49min 503.977PPB

response 9431

(2) Ethanol #2

1.15min 430.233PPB

response 14087

(+) = Expected Retention Time

GH104675.D MGH5269.M Tue May 10 11:24:42 2016 GCGH

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104676.D\FID1A.CH          Vial: 4
Acq On    :  9 May 2016   2:04 pm                     Operator: XULIU
Sample    : IC5269-1000                               Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104676.D\FID2B.CH          Vial: 4
Acq On    :  9 May 2016   2:18 pm                     Operator: XULIU
Sample    : IC5269-1000                               Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10  9:58 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 09:57:36 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.60	5.44	303591	672843	3967.781	3980.295
	Spiked Amount 5000.000			Recovery	=	79.36%	79.61%
	Target Compounds						
1)	Methanol	1.15	0.90	15388	31657	1041.927	1256.339
2)	Ethanol	1.49	1.14	19273	41463	1029.941	1266.307
3)	Tert-Butyl Alcoh	2.07	1.62f	27422	61351	1004.338	1042.011
4)	1-Propanol	2.56	1.97	23966	39583	944.641	991.147
5)	2-Propanol	1.80	1.39	20074	44557	967.396	1127.272
6)	Isobutanol	3.37	2.91	28308	55331	1029.904	876.740
7)	1-Butanol	3.83	3.39	25885	57940	994.891	1090.021
8)	2-Butanol	3.00	2.53	31386	52105	1249.275	1129.682

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

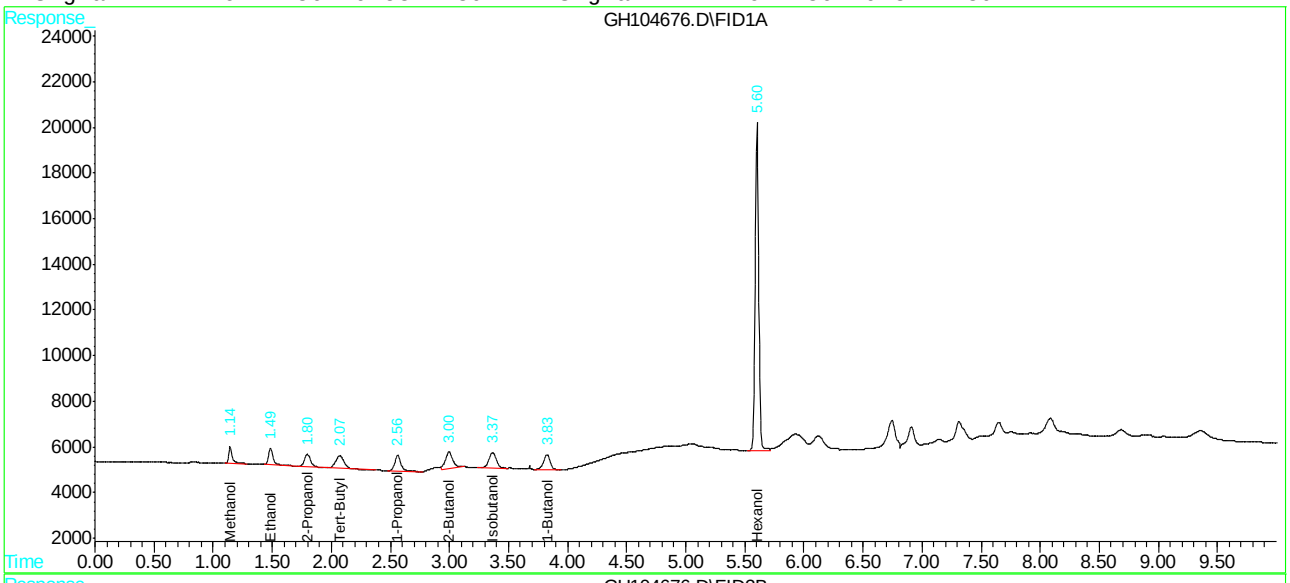
Quantitation Report (QT Reviewed)

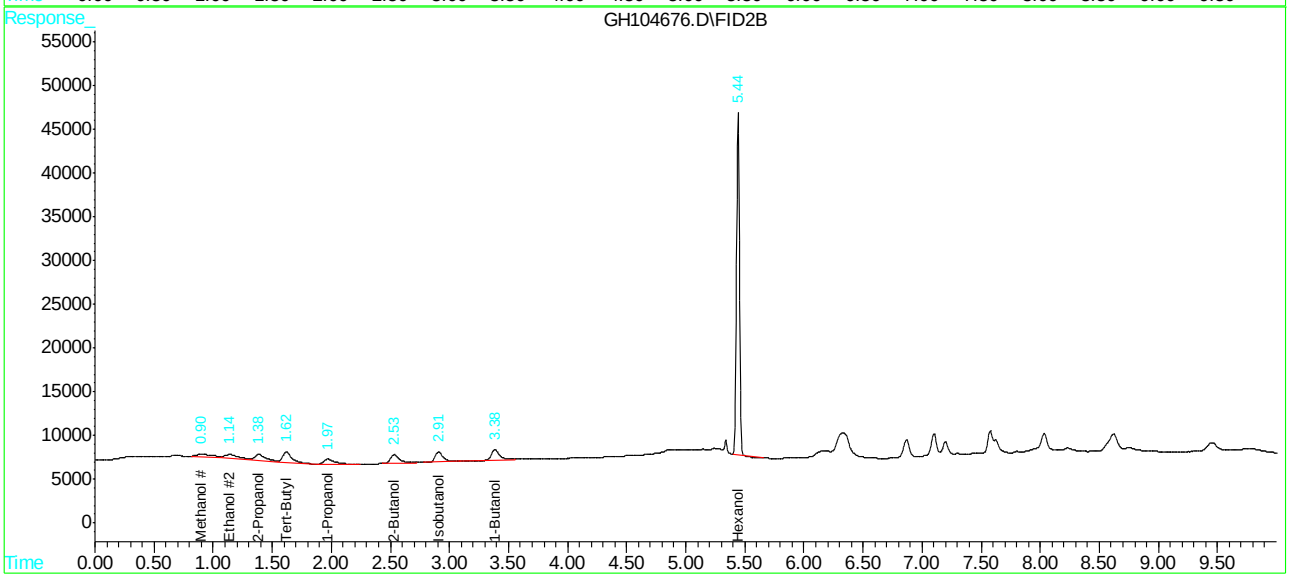
```
Data File : C:\HPCHEM\1\DATA\GH104676.D\FID1A.CH          Vial: 4
Acq On    :  9 May 2016   2:04 pm                     Operator: XULIU
Sample    : IC5269-1000                               Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104676.D\FID2B.CH          Vial: 4
Acq On    :  9 May 2016   2:18 pm                     Operator: XULIU
Sample    : IC5269-1000                               Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 10  9:58 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 10 09:57:36 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





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 JC19644

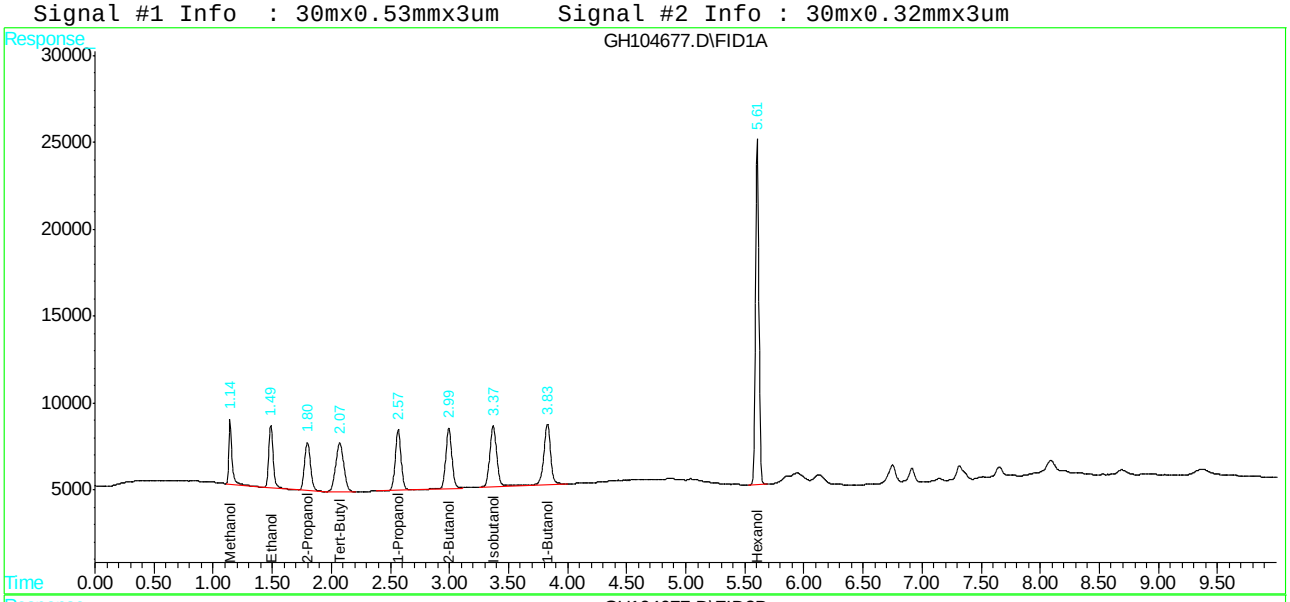
Quantitation Report (QT Reviewed)

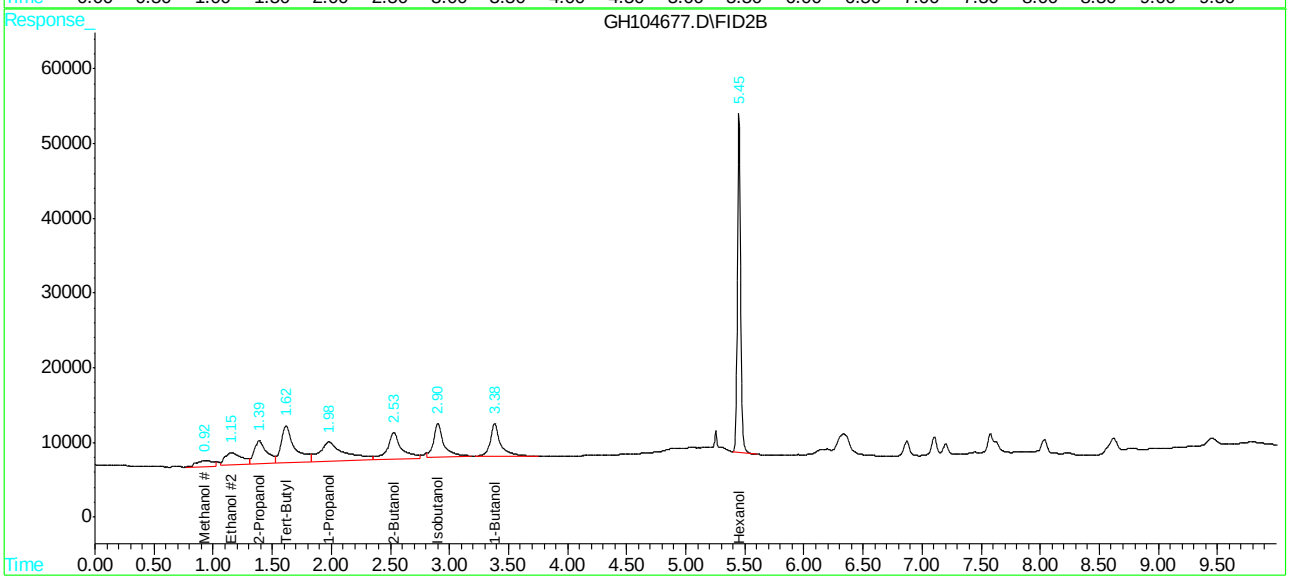
```
Data File : C:\HPCHEM\1\DATA\GH104677.D\FID1A.CH          Vial: 5
Acq On    :  9 May 2016   2:18 pm                     Operator: XULIU
Sample    : ICC5269-5000                              Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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 JC19644

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

SGS ACCUTEST JC19644

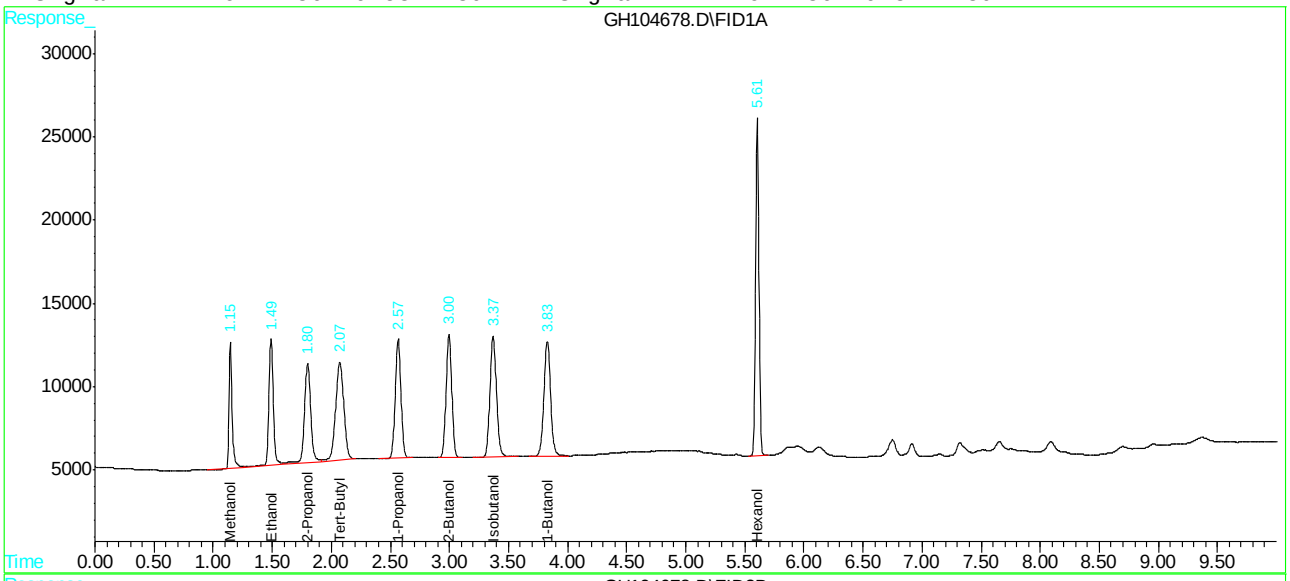
Quantitation Report (QT Reviewed)

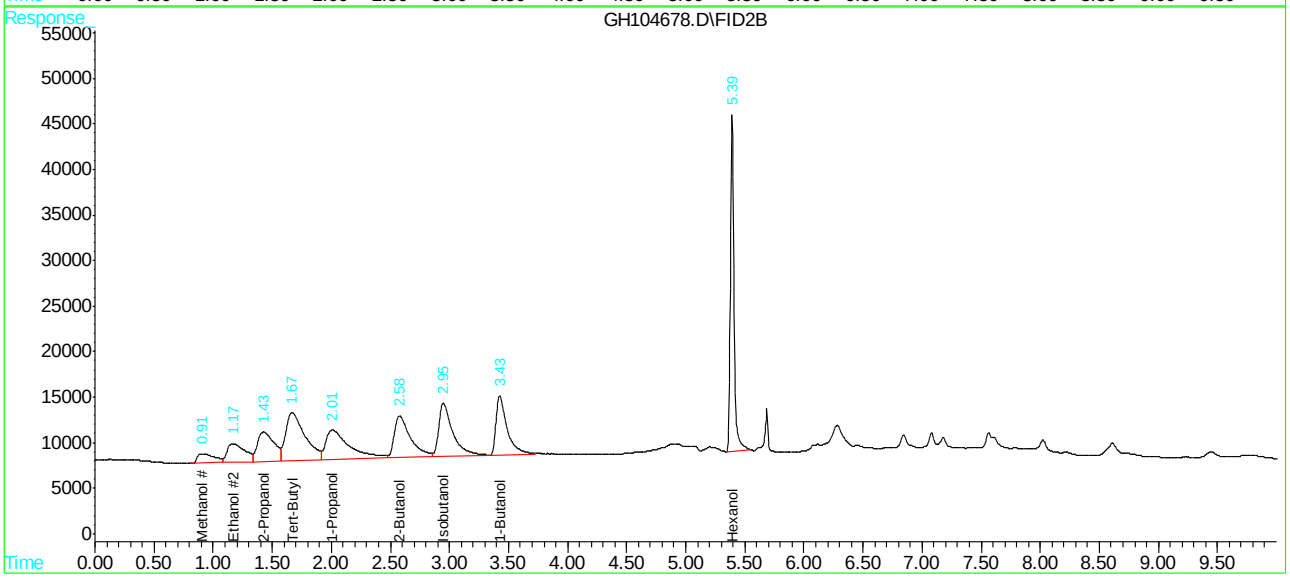
```
Data File : C:\HPCHEM\1\DATA\GH104678.D\FID1A.CH          Vial: 6
Acq On    :  9 May 2016   2:33 pm                     Operator: XULIU
Sample    : IC5269-10000                              Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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 JC19644

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

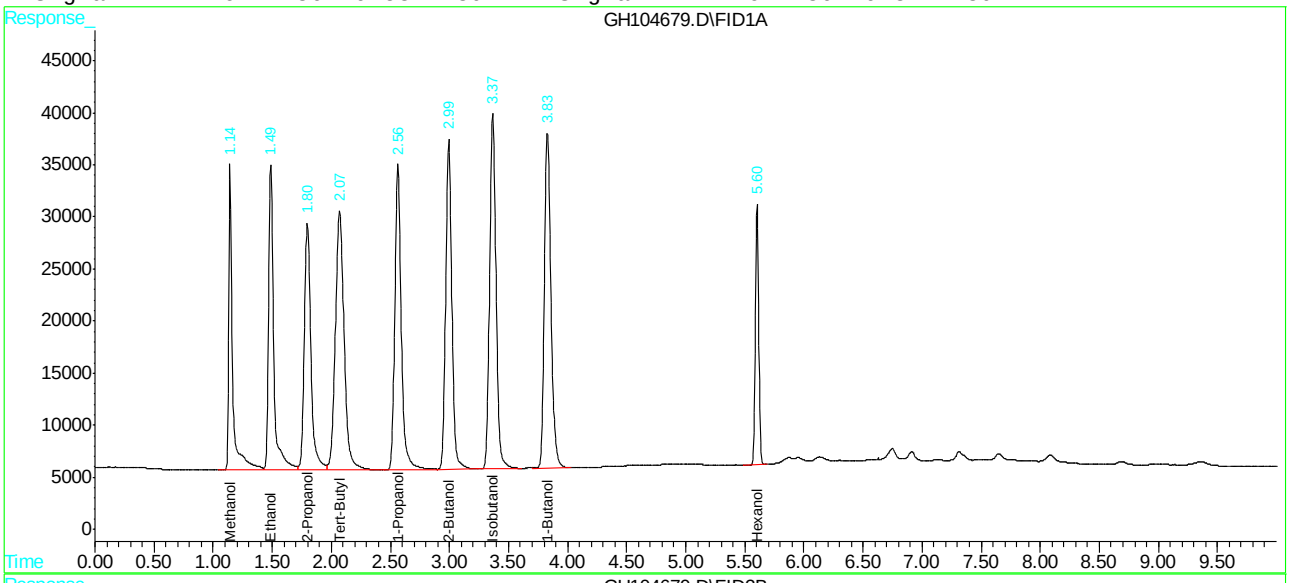
Quantitation Report (QT Reviewed)

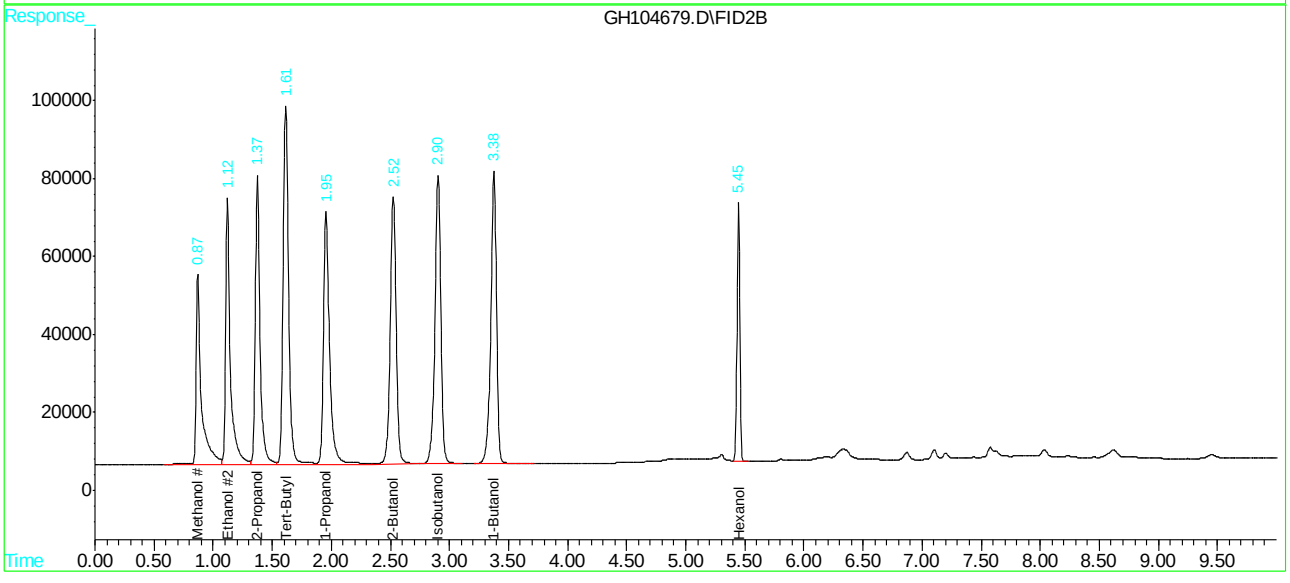
Data File : C:\HPCHEM\1\DATA\GH104679.D\FID1A.CH Vial: 7
Acq On : 9 May 2016 2:54 pm Operator: XULIU
Sample : IC5269-50000 Inst : GCGH
Misc : GC48342,GGH5269,5.0,,,,1 Multiplr: 1.00
IntFile : AUTOINT1.E

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.

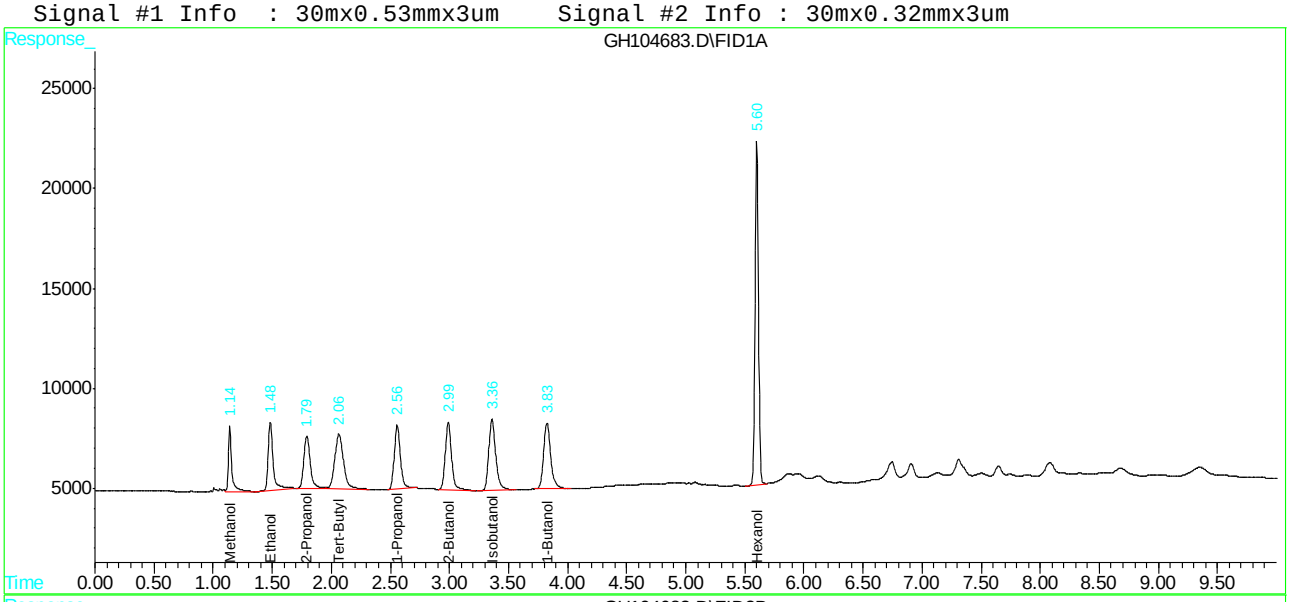
Quantitation Report (QT Reviewed)

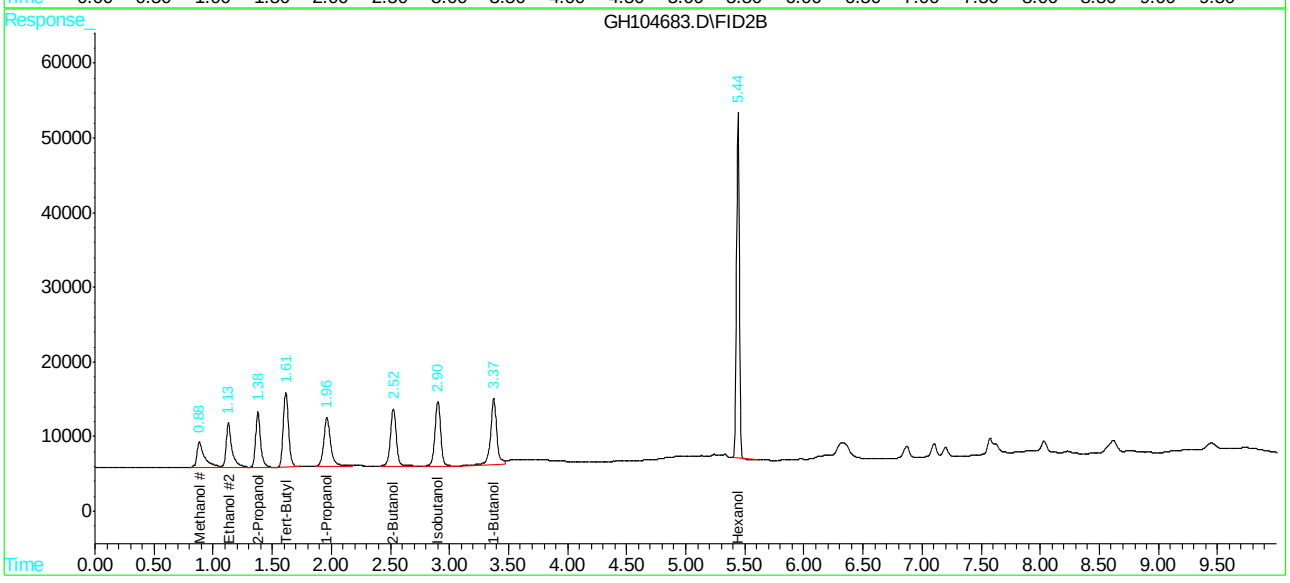
```
Data File : C:\HPCHEM\1\DATA\GH104683.D\FID1A.CH          Vial: 10
Acq On    :  9 May 2016   5:42 pm                     Operator: XULIU
Sample    : ICV5269-5000                              Inst    : GCGH
Misc      : GC48342,GGH5269,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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\GH104960.D\FID1A.CH          Vial: 90
Acq On    : 16 May 2016   3:50 pm                     Operator: XULIU
Sample    : CC5269-5000                               Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104960.D\FID2B.CH          Vial: 90
Acq On    : 16 May 2016   4:06 pm                     Operator: XULIU
Sample    : CC5269-5000                               Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  7:37 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:24:13 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	System Monitoring Compounds							
9) S	Hexanol	5.60	5.48	395939	278237	5174.719	1690.654	#
Spiked Amount	5000.000			Recovery	=	103.49%	33.81%	
	Target Compounds							
1)	Methanol	1.15	0.86	77696	60614	5260.772	2981.680	#
2)	Ethanol	1.49	1.11	100907	70117	5392.537	2206.715	#
3)	Tert-Butyl Alcoh	2.07	1.60	139661	122888	5115.166	1882.097	#
4)	1-Propanol	2.56	1.94	133202	89091	5976.549	1808.195	#
5)	2-Propanol	1.80	1.37f	106323	79137	5123.975	1892.937	#
6)	Isobutanol	3.36	2.89	148451	102247	5400.863	1648.192	#
7)	1-Butanol	3.80	3.38	152899	100826	6244.216	1947.702	#
8)	2-Butanol	2.99	2.51f	134178	94233	5324.862	1906.994	#

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

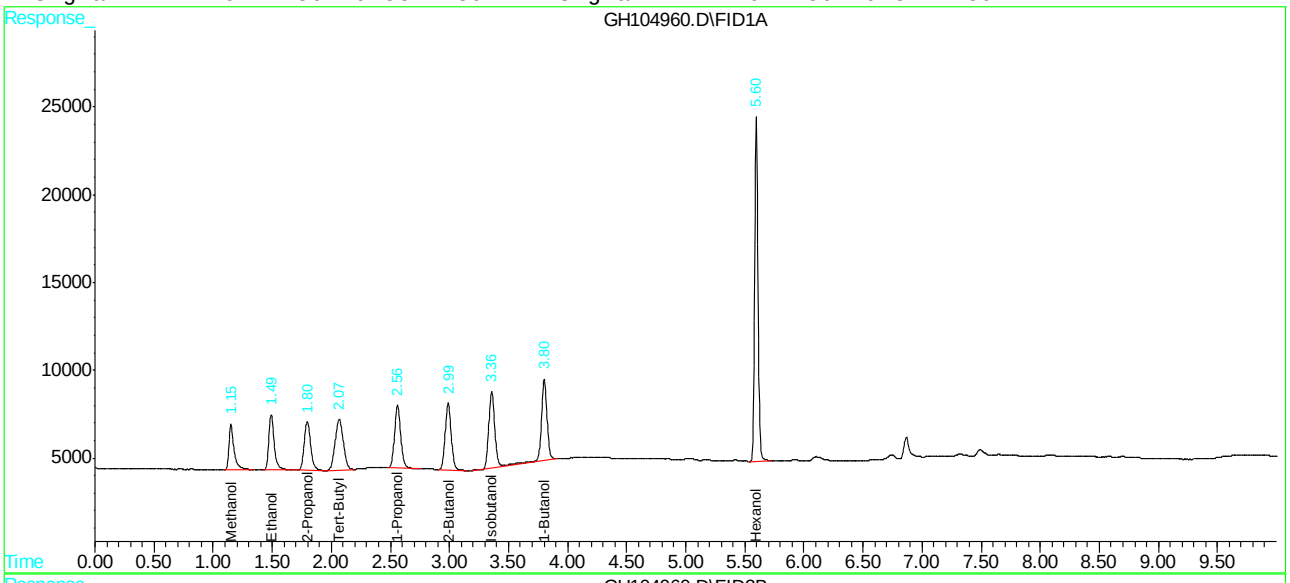
Quantitation Report (QT Reviewed)

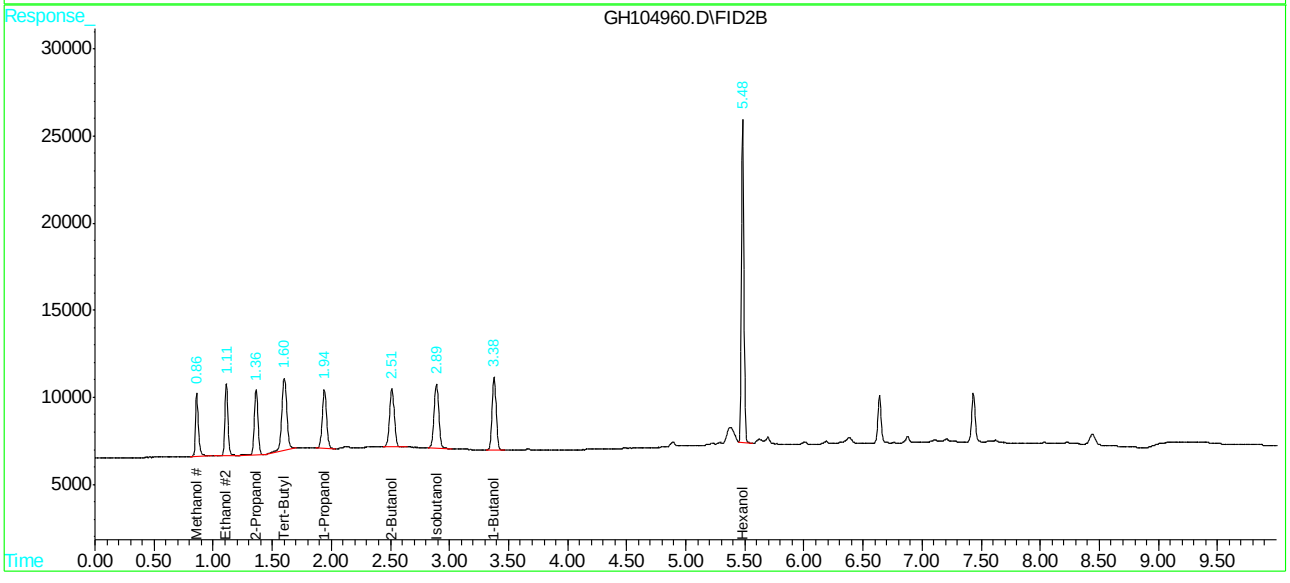
```
Data File : C:\HPCHEM\1\DATA\GH104960.D\FID1A.CH          Vial: 90
Acq On    : 16 May 2016   3:50 pm                     Operator: XULIU
Sample    : CC5269-5000                               Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104960.D\FID2B.CH          Vial: 90
Acq On    : 16 May 2016   4:06 pm                     Operator: XULIU
Sample    : CC5269-5000                               Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  7:37 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:24:13 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH104970.D\FID1A.CH          Vial: 95
Acq On    : 16 May 2016   6:35 pm                     Operator: XULIU
Sample    : CC5269-10000                              Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104970.D\FID2B.CH          Vial: 95
Acq On    : 16 May 2016   6:50 pm                     Operator: XULIU
Sample    : CC5269-10000                              Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  7:48 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:48:39 2016
Response via : Initial Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.60	5.48	340971	197569	4456.325	1200.491 #
	Spiked Amount 5000.000			Recovery	=	89.13%	24.01%
	Target Compounds						
1)	Methanol	1.14	0.87	156388	81158	10588.936	3992.234 #
2)	Ethanol	1.49	1.11	199897	88628	10682.620	2789.292 #
3)	Tert-Butyl Alcoh	2.07	1.60	295973	155882	10840.182	2387.419 #
4)	1-Propanol	2.56	1.94f	265940	107810	11932.315	2188.114 #
5)	2-Propanol	1.79	1.36f	211475	89229	10191.453	2134.344 #
6)	Isobutanol	3.35	2.90	307202	160621	11176.453	2589.156 #
7)	1-Butanol	3.80	3.39f	293749	153724	11996.353	2969.557 #
8)	2-Butanol	2.99	2.51f	270702	143634	10742.841	2906.731 #

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC19644

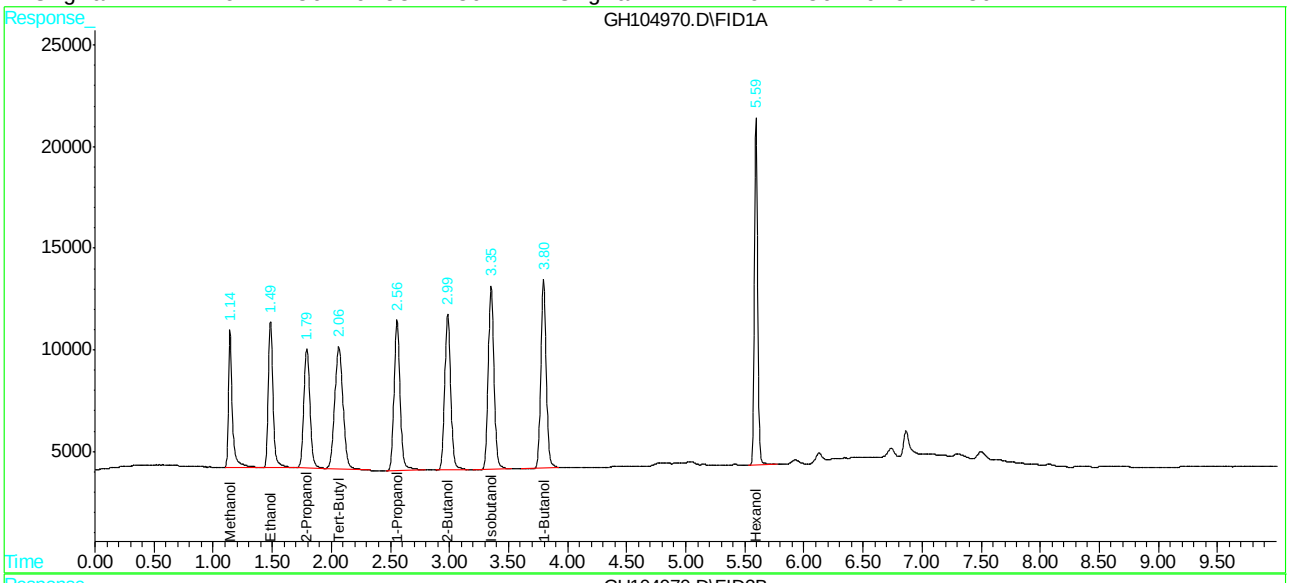
Quantitation Report (QT Reviewed)

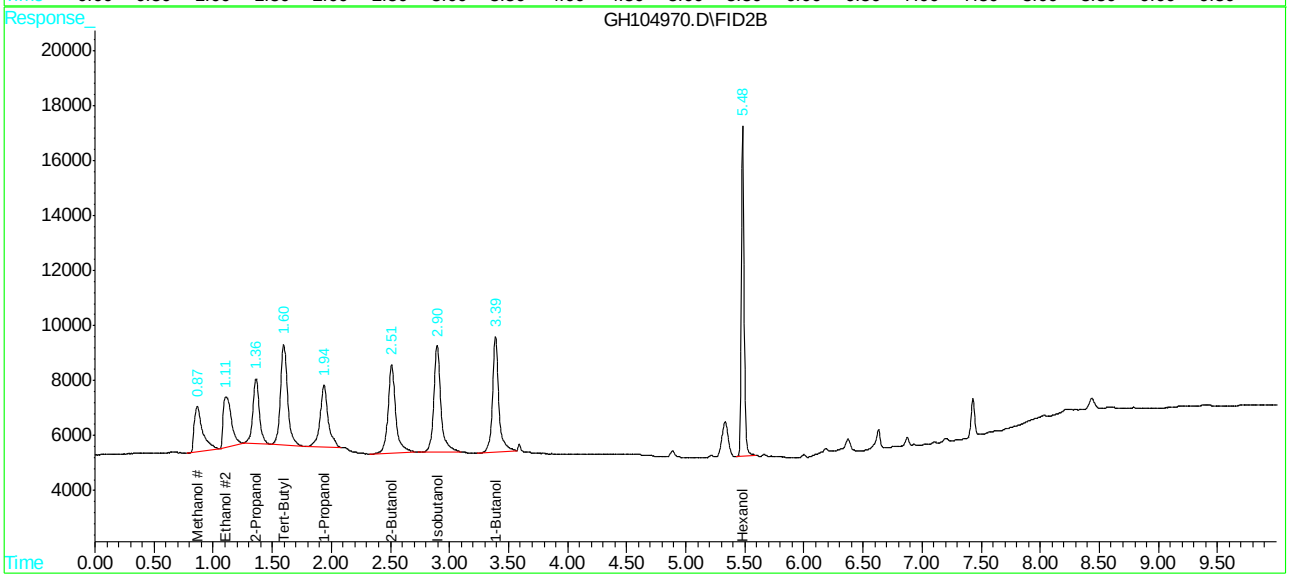
```
Data File : C:\HPCHEM\1\DATA\GH104970.D\FID1A.CH          Vial: 95
Acq On    : 16 May 2016   6:35 pm                     Operator: XULIU
Sample    : CC5269-10000                              Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH104970.D\FID2B.CH          Vial: 95
Acq On    : 16 May 2016   6:50 pm                     Operator: XULIU
Sample    : CC5269-10000                              Inst    : GCGH
Misc      : GC48420,GGH5285,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 17  7:48 2016  Quant Results File: MGH5269.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5269.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 07:48:39 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5269.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





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.
GH105017.D MGH5288.M Wed May 18 08:50:53 2016 GCGH

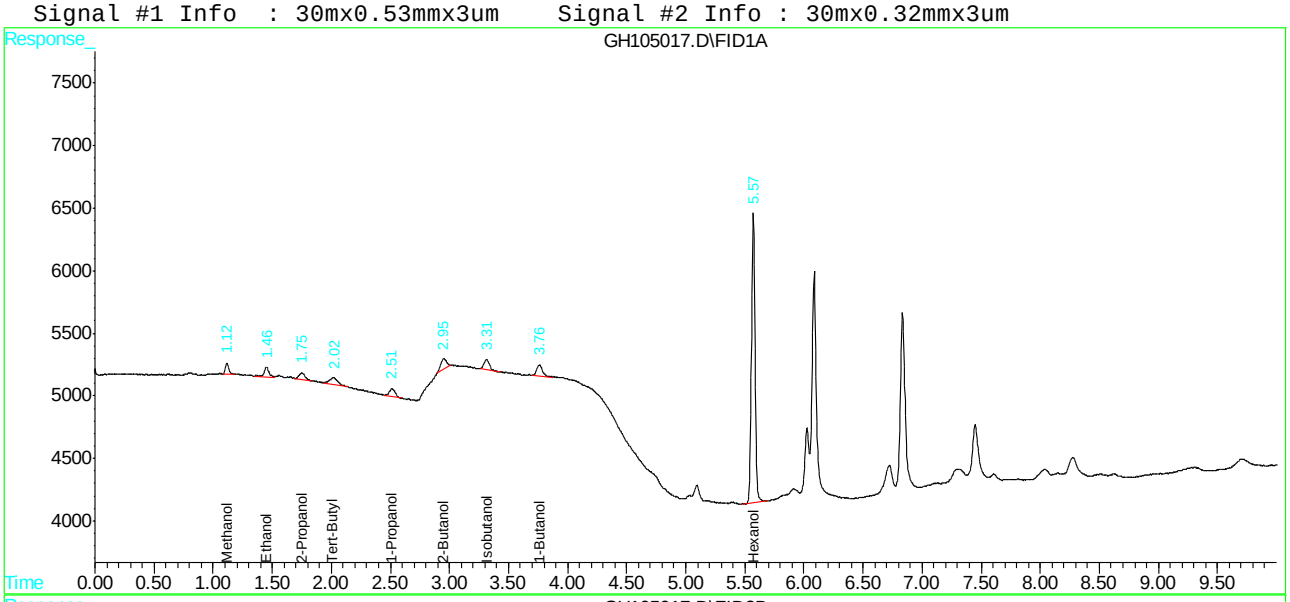
Quantitation Report (QT Reviewed)

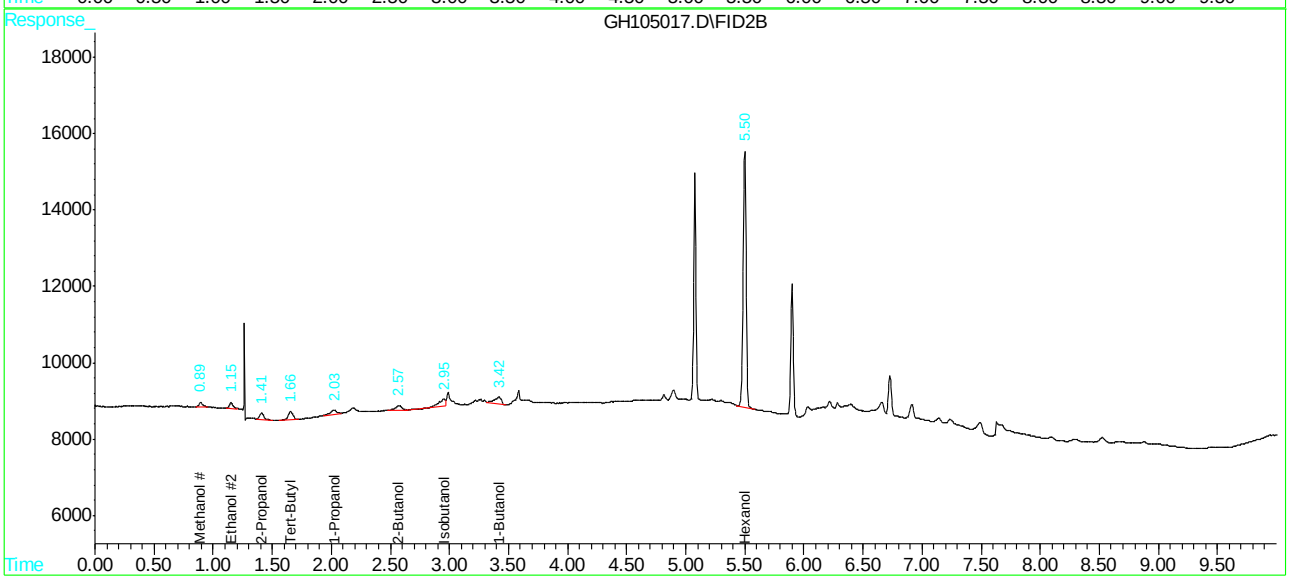
```
Data File : C:\HPCHEM\1\DATA\GH105017.D\FID1A.CH          Vial: 2
Acq On    : 17 May 2016   4:14 pm                     Operator: XULIU
Sample    : IC5288-100                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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
```





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

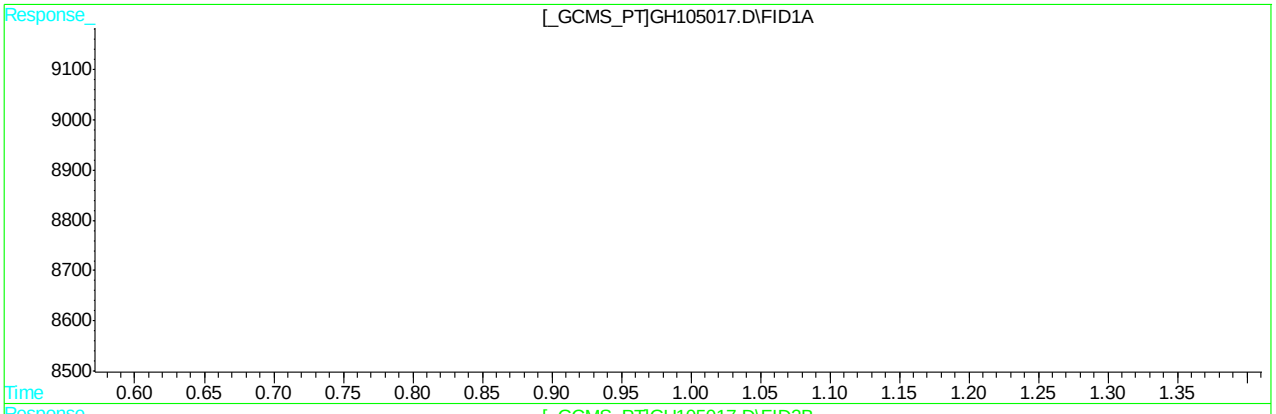
Parameter	CAS	Sig#	R.T. (min.)	Reason
Methanol	67-56-1	2	0.89	Poor instrument integration
Ethanol	64-17-5	2	1.15	Poor instrument integration
n-Propyl Alcohol	71-23-8	2	2.03	Poor instrument integration
sec-Butyl Alcohol	78-92-2	2	2.57	Poor instrument integration
sec-Butyl Alcohol	78-92-2	1	2.95	Poor instrument integration
n-Butyl Alcohol	71-36-3	2	3.42	Poor instrument integration

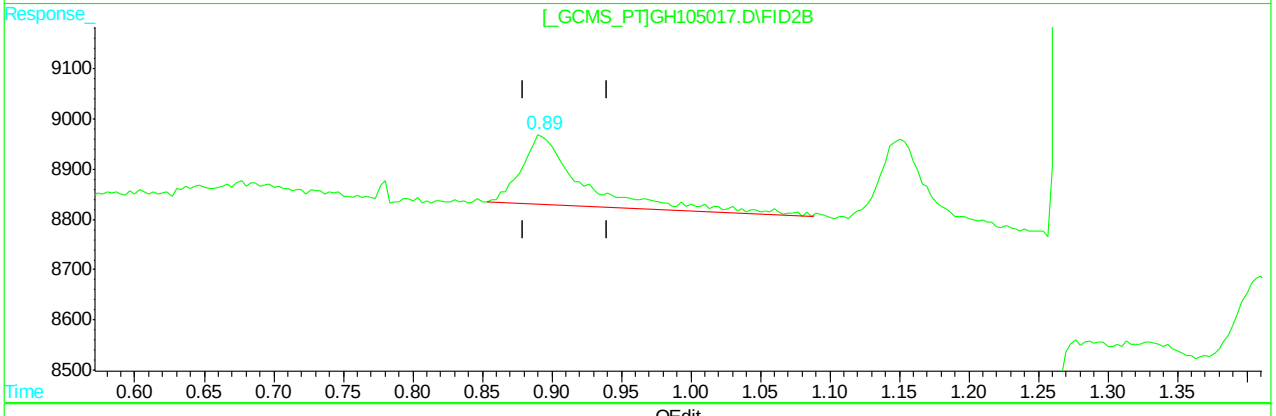
Quantitation Report (Qedit)

```
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

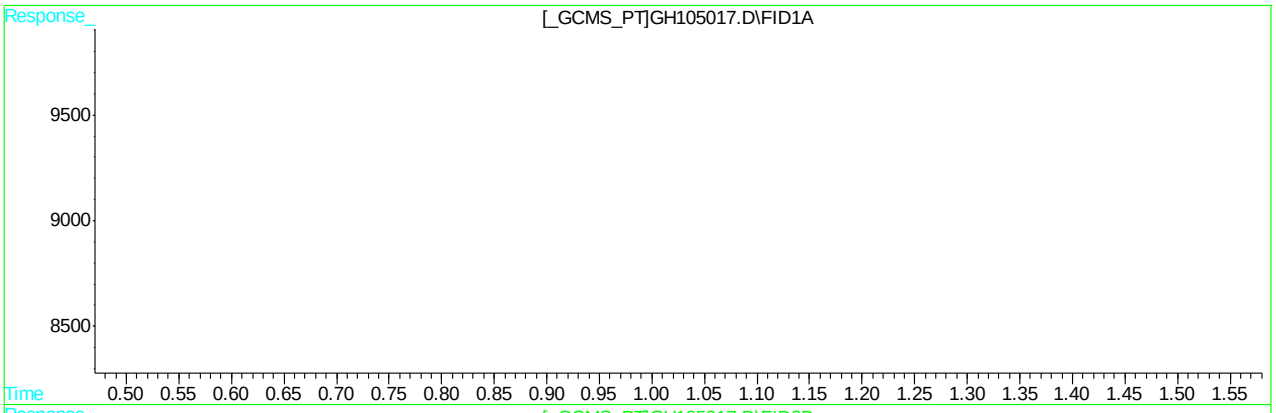
GH105017.D MGH5288.M Wed May 18 08:43:56 2016 GCGH

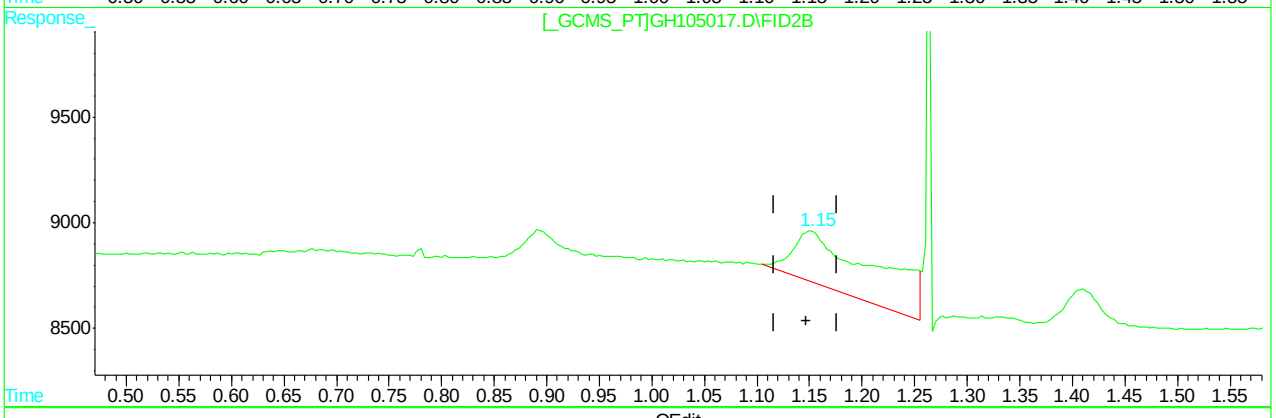
Quantitation Report (Qedit)

```
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

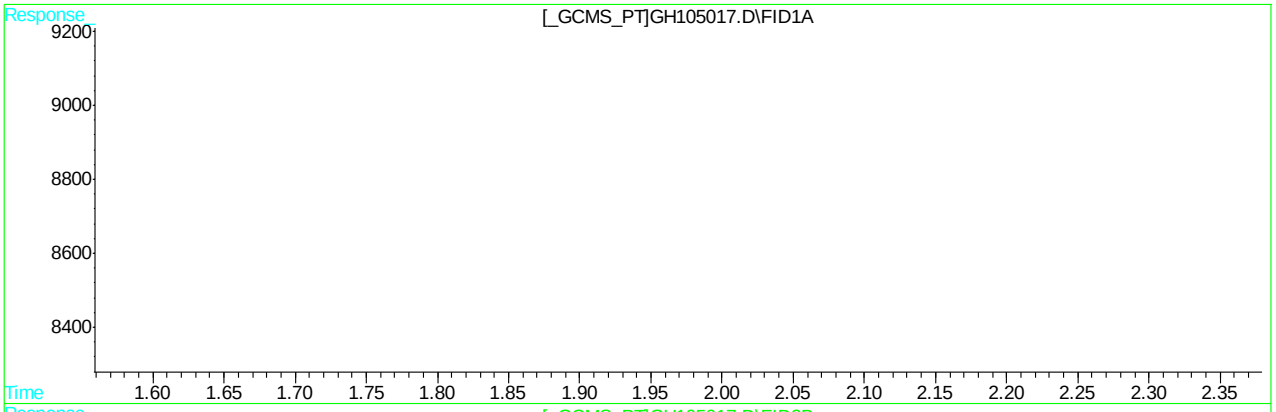
GH105017.D MGH5288.M Wed May 18 08:44:26 2016 GCGH

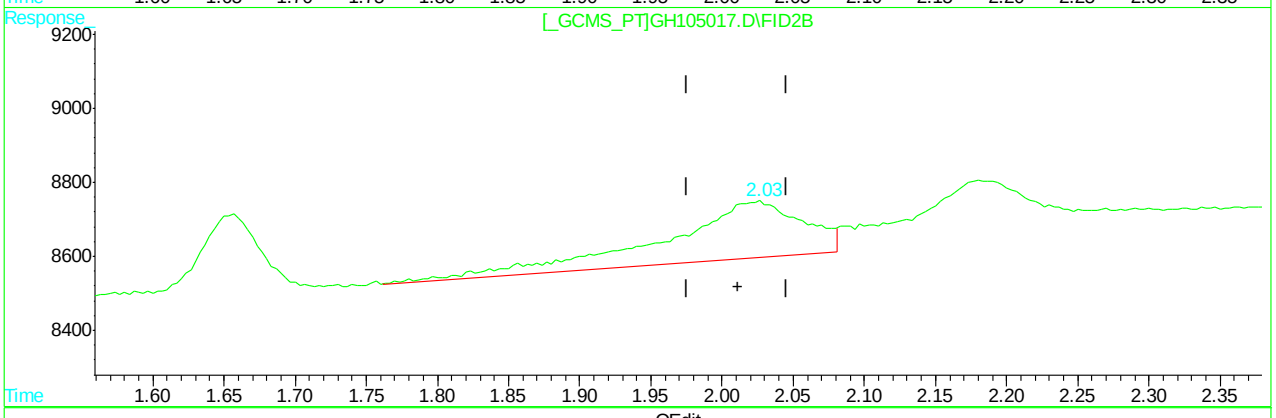
Quantitation Report (Qedit)

```
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

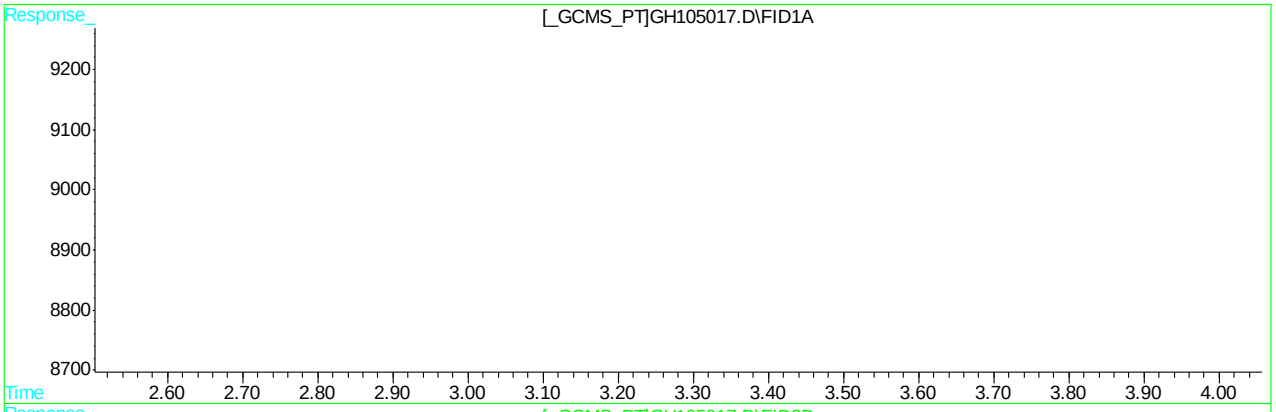
GH105017.D MGH5288.M Wed May 18 08:44:42 2016 GCGH

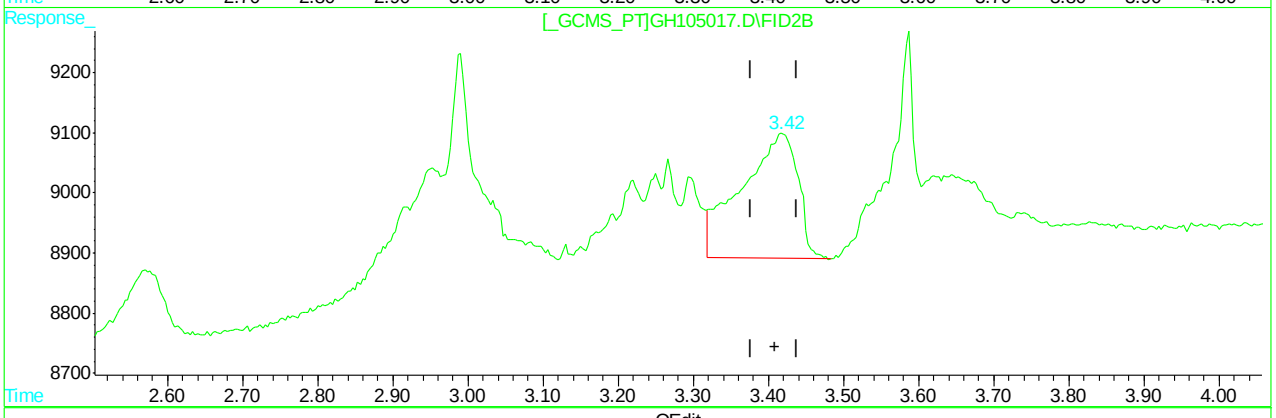
Quantitation Report (Qedit)

```
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

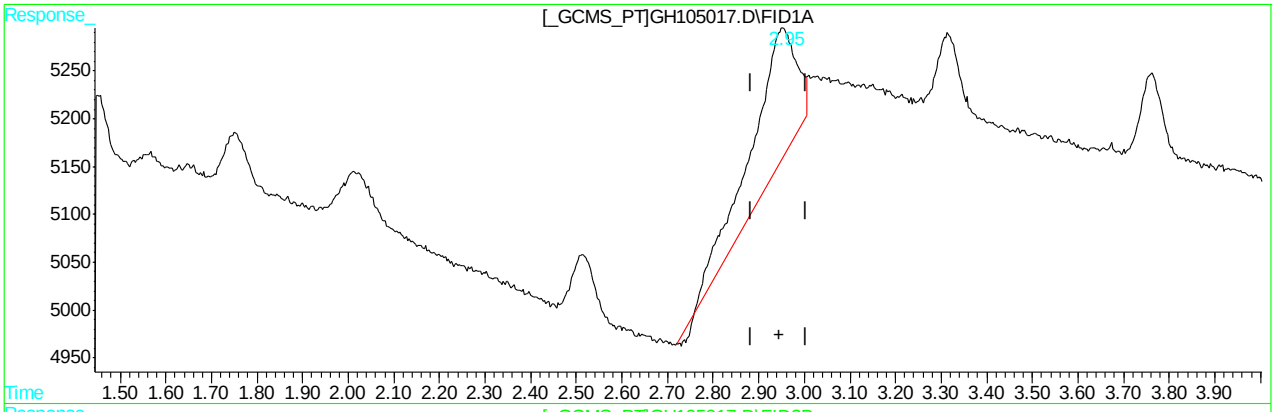
GH105017.D MGH5288.M Wed May 18 08:45:02 2016 GCGH

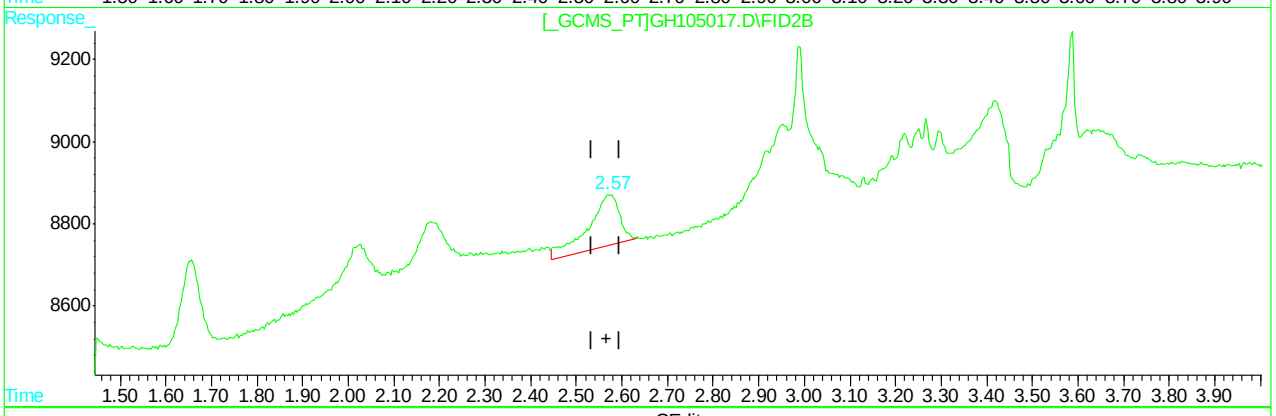
Quantitation Report (Qedit)

```
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

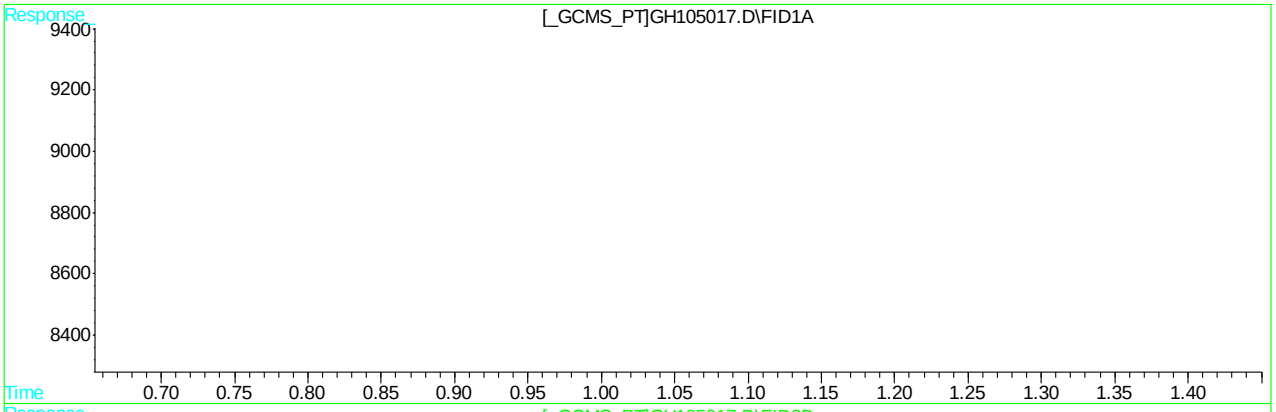
GH105017.D MGH5288.M Wed May 18 08:45:09 2016 GCGH

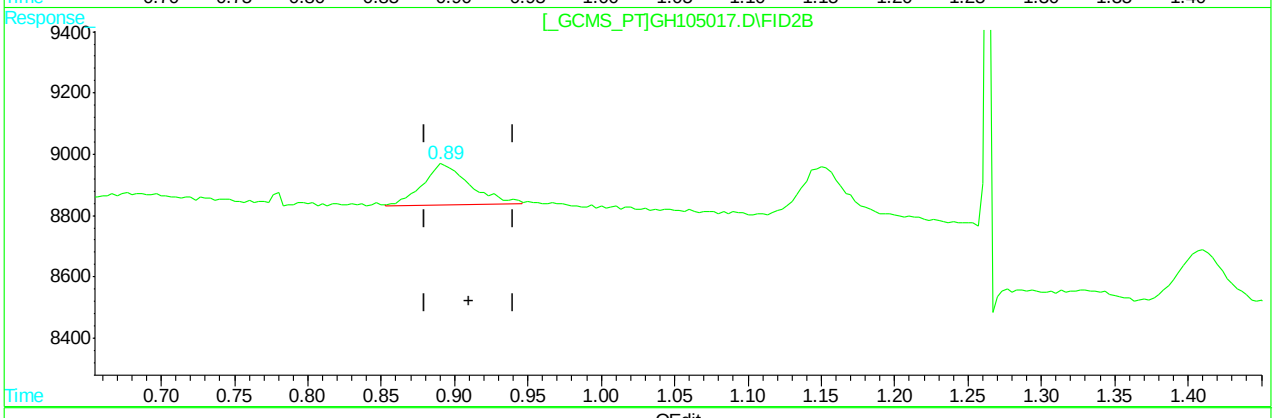
Quantitation Report (Qedit)

```
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

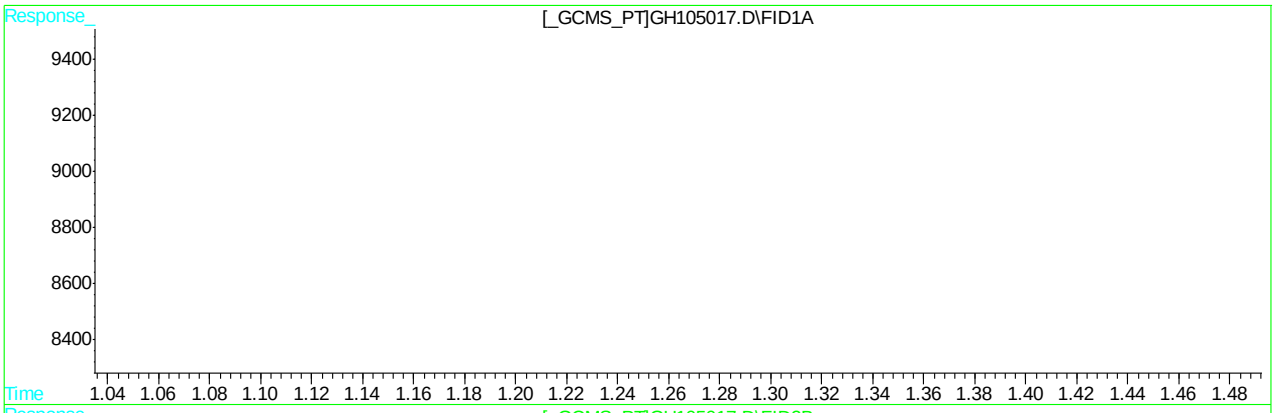
GH105017.D MGH5288.M Wed May 18 08:46:19 2016 GCGH

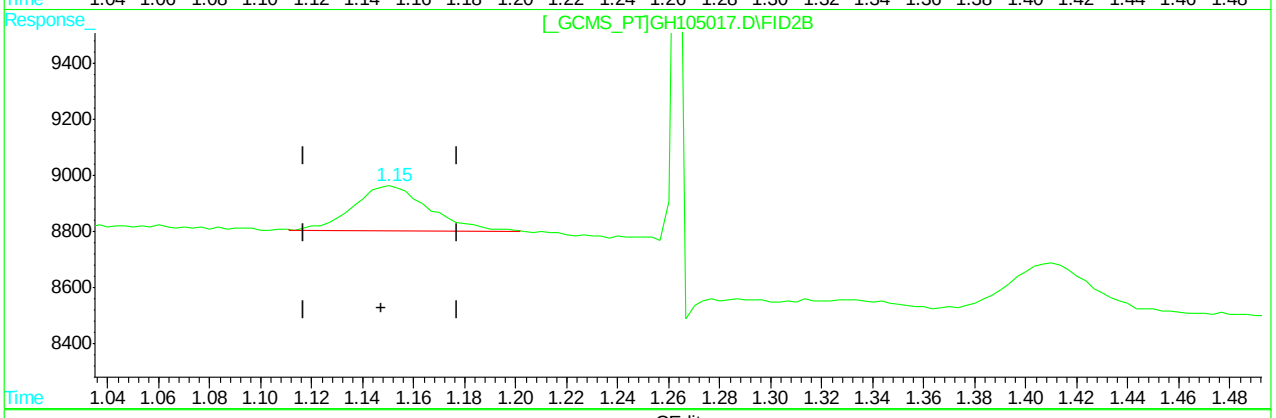
Quantitation Report (Qedit)

```
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

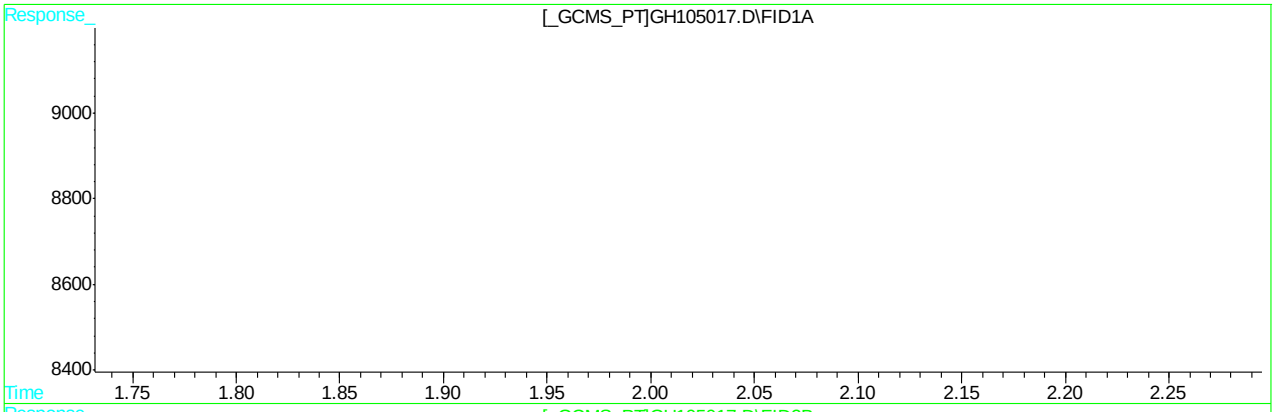
GH105017.D MGH5288.M Wed May 18 08:46:55 2016 GCGH

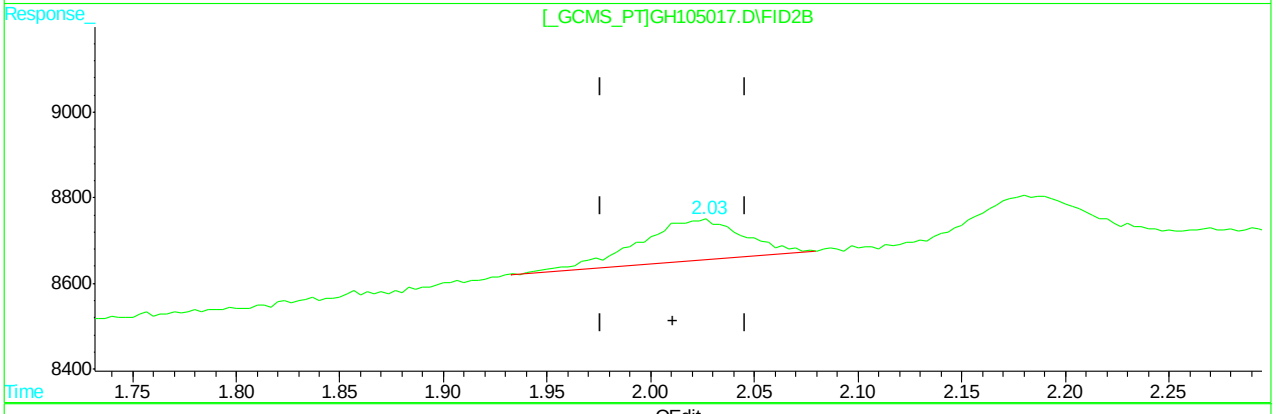
Quantitation Report (Qedit)

```
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

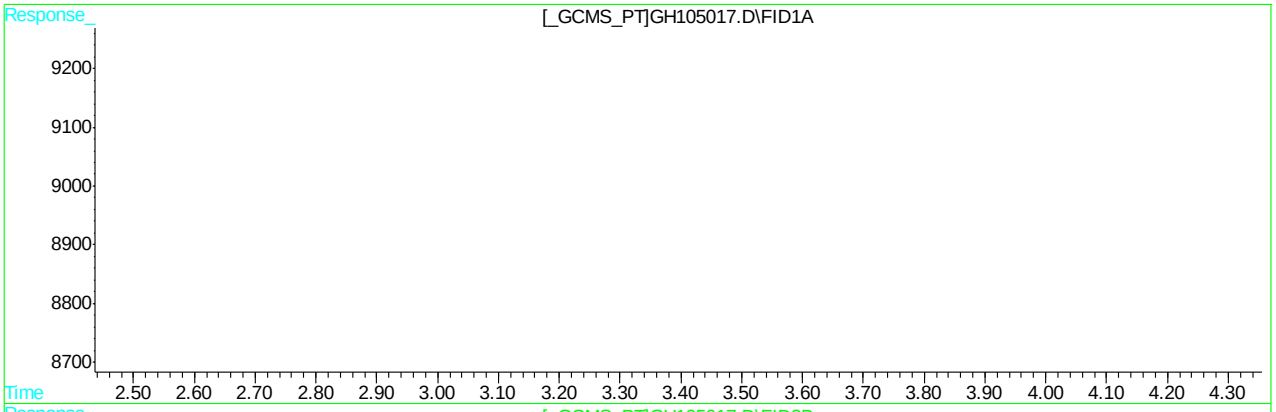
GH105017.D MGH5288.M Wed May 18 08:48:45 2016 GCGH

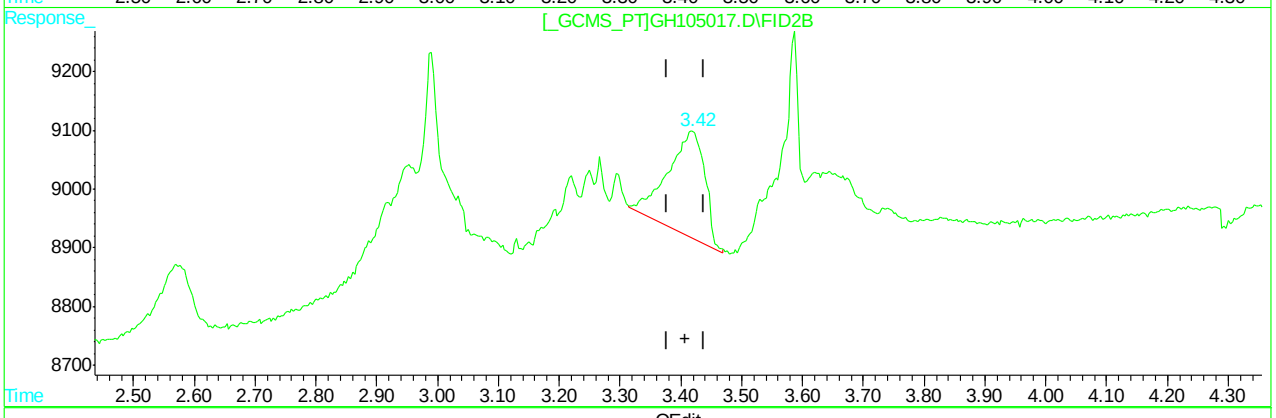
Quantitation Report (Qedit)

```
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

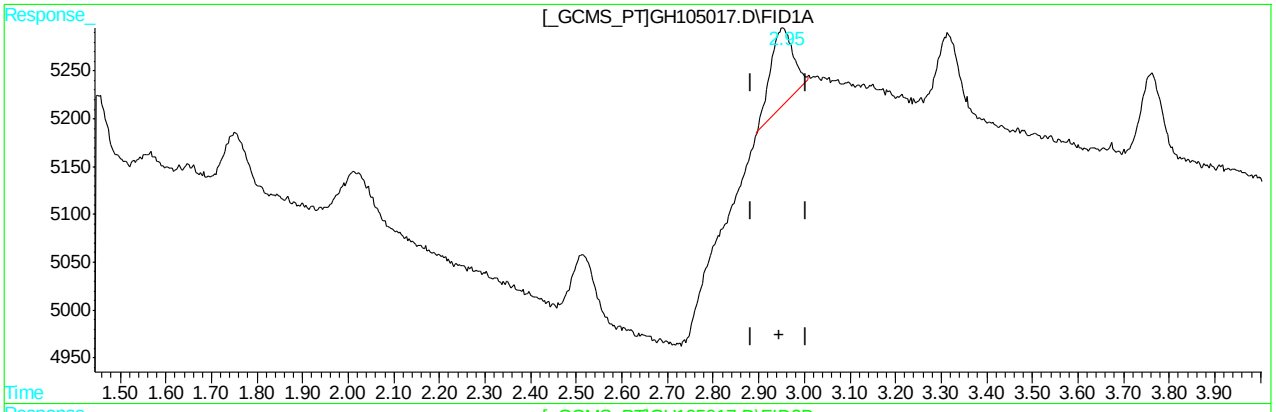
GH105017.D MGH5288.M Wed May 18 08:49:10 2016 GCGH

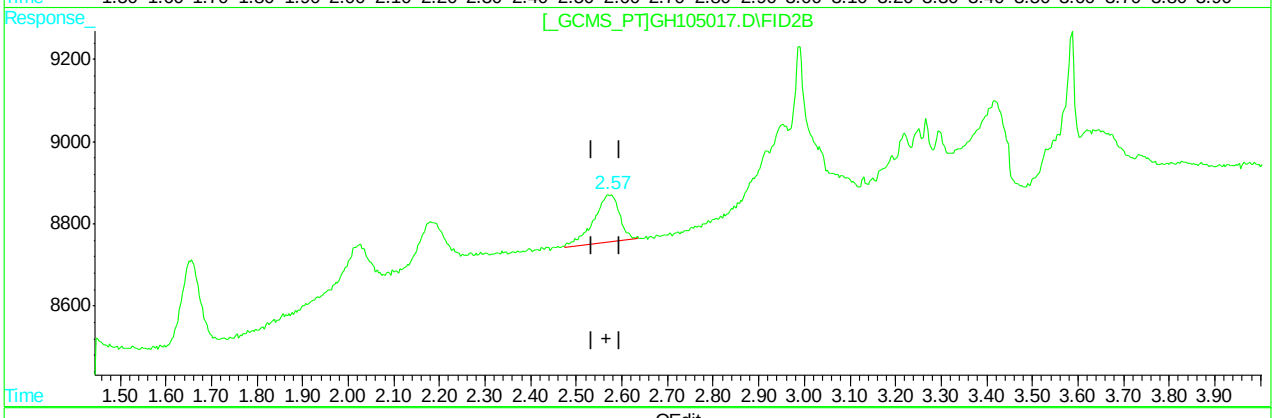
Quantitation Report (Qedit)

```
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 JC19644

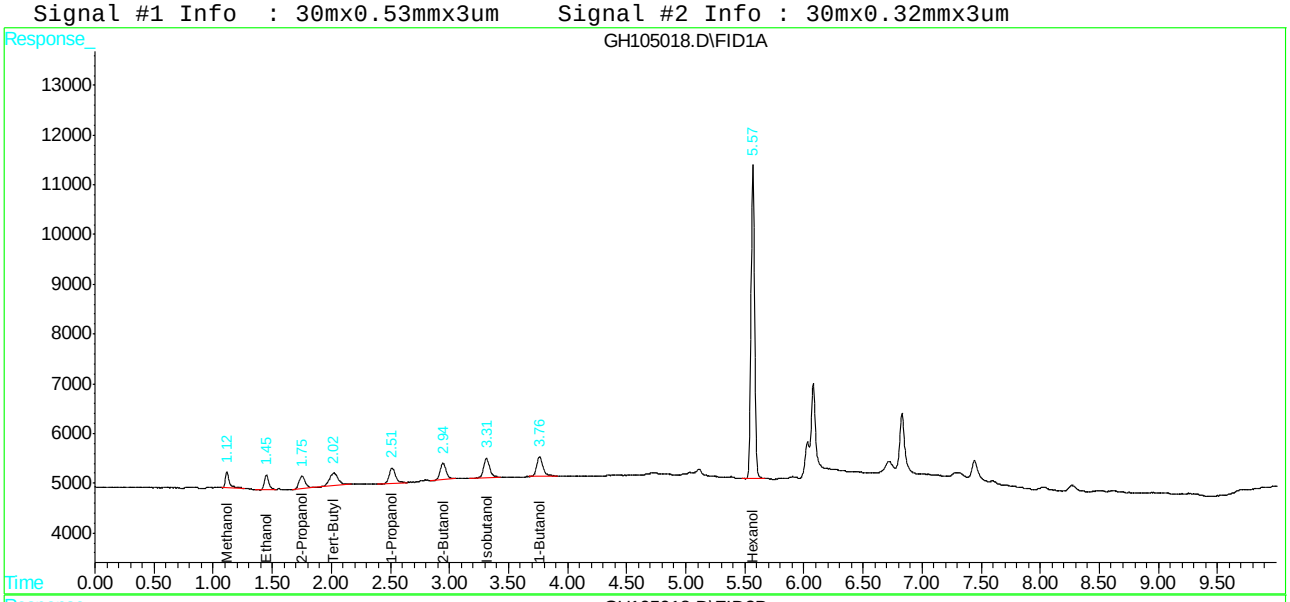
Quantitation Report (QT Reviewed)

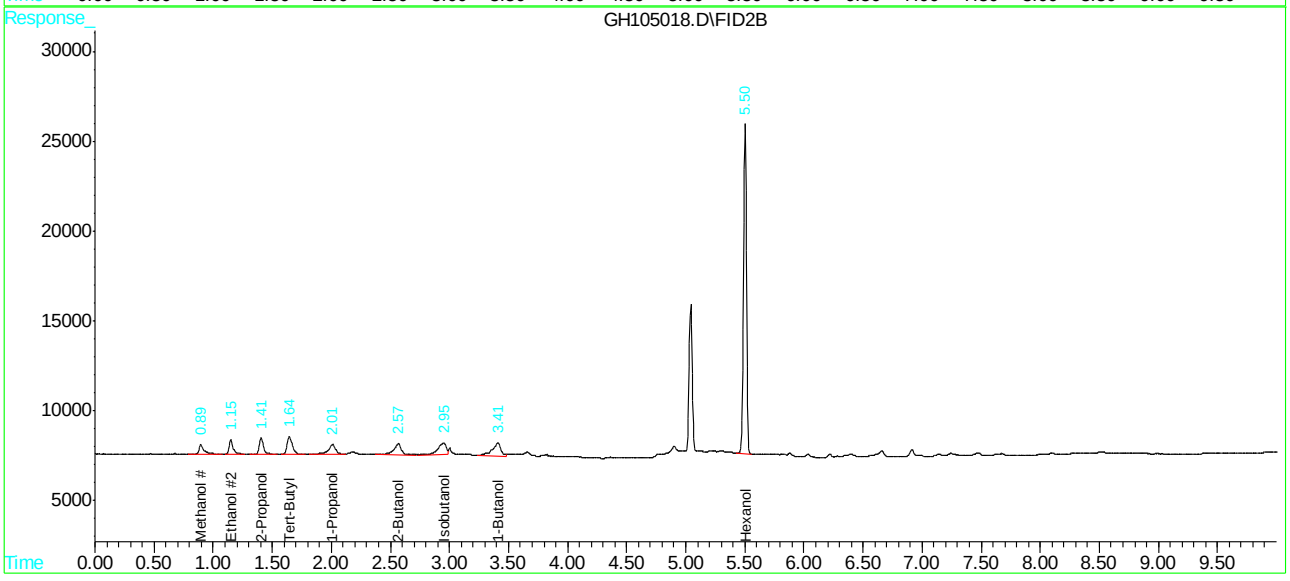
```
Data File : C:\HPCHEM\1\DATA\GH105018.D\FID1A.CH          Vial: 3
Acq On    : 17 May 2016   4:28 pm                     Operator: XULIU
Sample    : IC5288-500                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105018.D\FID2B.CH          Vial: 3
Acq On    : 17 May 2016   4:43 pm                     Operator: XULIU
Sample    : IC5288-500                                Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:23 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:22:56 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105019.D\FID1A.CH          Vial: 4
Acq On    : 17 May 2016   4:43 pm                     Operator: XULIU
Sample    : IC5288-1000                               Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105019.D\FID2B.CH          Vial: 4
Acq On    : 17 May 2016   4:57 pm                     Operator: XULIU
Sample    : IC5288-1000                               Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:22 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:22:21 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.57	5.51	274171	622051	4543.104	4492.586
Spiked Amount	5000.000			Recovery	=	90.86%	89.85%
	Target Compounds						
1)	Methanol	1.12	0.92	16166	29685	1087.516	897.349
2)	Ethanol	1.45	1.17f	18855	36354	966.928	863.337
3)	Tert-Butyl Alcoh	2.01	1.66	28949	63750	1007.774	981.673
4)	1-Propanol	2.51	2.02	25248	52807	1004.669	976.309
5)	2-Propanol	1.75	1.42	20497	43421	993.892	942.889
6)	Isobutanol	3.31	2.94	29498	59602	1017.007	973.641
7)	1-Butanol	3.76	3.42	29408	73648	1055.991	1224.889
8)	2-Butanol	2.94	2.57	25576	58599	1005.126	1059.749

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

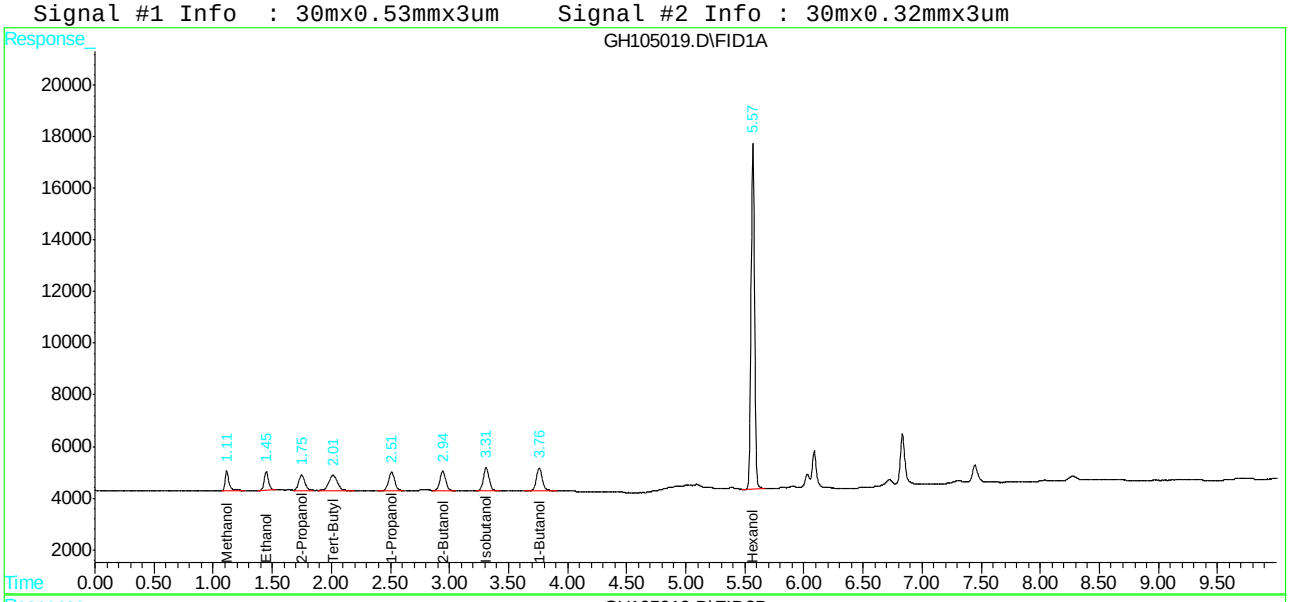
Quantitation Report (QT Reviewed)

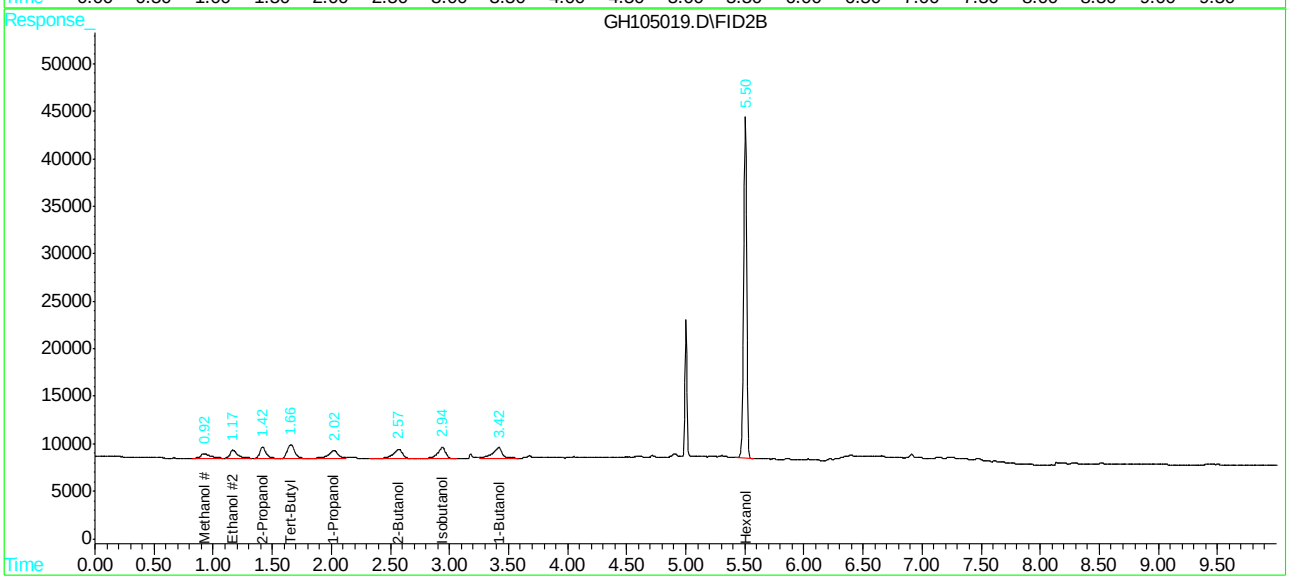
```
Data File : C:\HPCHEM\1\DATA\GH105019.D\FID1A.CH          Vial: 4
Acq On    : 17 May 2016   4:43 pm                     Operator: XULIU
Sample    : IC5288-1000                               Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105019.D\FID2B.CH          Vial: 4
Acq On    : 17 May 2016   4:57 pm                     Operator: XULIU
Sample    : IC5288-1000                               Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:22 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 07:22:21 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105020.D\FID1A.CH          Vial: 5
Acq On    : 17 May 2016   4:57 pm                     Operator: XULIU
Sample    : ICC5288-5000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105020.D\FID2B.CH          Vial: 5
Acq On    : 17 May 2016   5:19 pm                     Operator: XULIU
Sample    : ICC5288-5000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:09 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 15:45:13 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.57	5.50	345209	794669	4511.712	4828.644
Spiked Amount	5000.000			Recovery	=	90.23%	96.57%
	Target Compounds						
1)	Methanol	1.12	0.89	77443	173699	5243.603	8544.414 #
2)	Ethanol	1.45	1.15	99445	217347	5314.412	6840.346
3)	Tert-Butyl Alcoh	2.01	1.65	142996	332018	5237.321	5085.028
4)	1-Propanol	2.51	2.01	128385	274702	5760.408	5575.380
5)	2-Propanol	1.75	1.41	105046	236654	5062.425	5660.735
6)	Isobutanol	3.31	2.94	147383	311633	5362.003	5023.429
7)	1-Butanol	3.76	3.42	143097	319465	5843.923	6171.241
8)	2-Butanol	2.94	2.57	129413	280976	5135.753	5686.138

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC19644

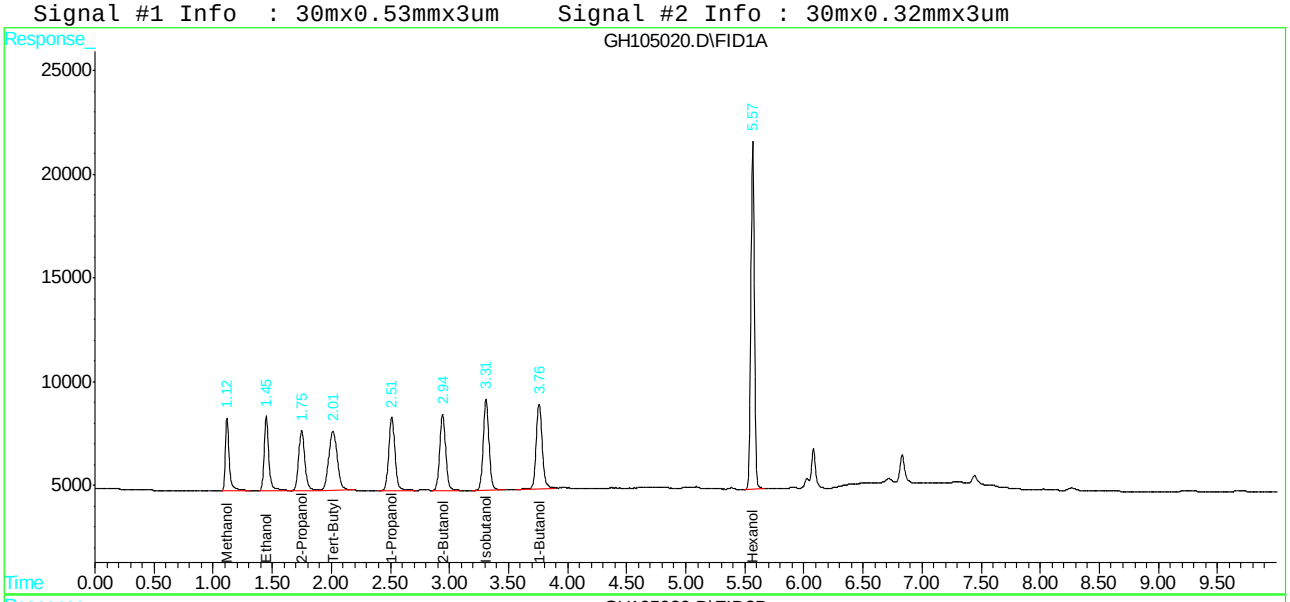
Quantitation Report (QT Reviewed)

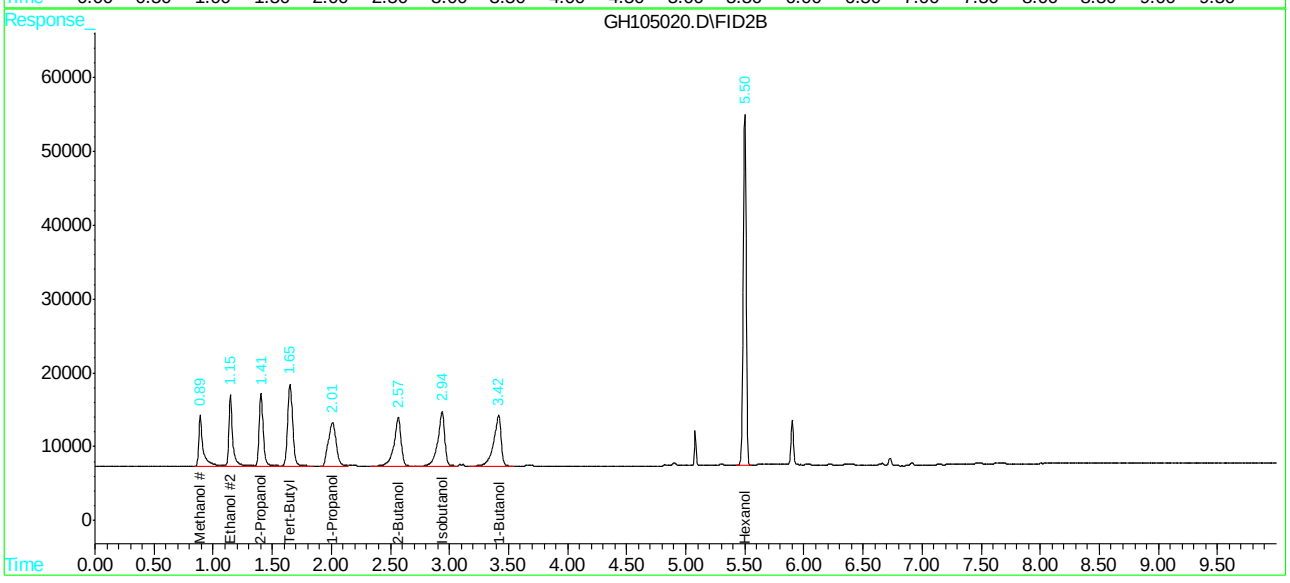
```
Data File : C:\HPCHEM\1\DATA\GH105020.D\FID1A.CH          Vial: 5
Acq On    : 17 May 2016   4:57 pm                     Operator: XULIU
Sample    : ICC5288-5000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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 JC19644

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105021.D\FID1A.CH          Vial: 6
Acq On    : 17 May 2016   5:19 pm                     Operator: XULIU
Sample    : IC5288-10000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105021.D\FID2B.CH          Vial: 6
Acq On    : 17 May 2016   5:33 pm                     Operator: XULIU
Sample    : IC5288-10000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:09 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 15:45:13 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.57	5.50	355196	814101	4642.238	4946.724
Spiked Amount	5000.000			Recovery	=	92.84%	98.93%
	Target Compounds						
1)	Methanol	1.12	0.89	157448	346407	10660.697	17040.107 #
2)	Ethanol	1.45	1.15	202728	432745	10833.939	13619.358
3)	Tert-Butyl Alcoh	2.02	1.65	294805	663970	10797.389	10169.042
4)	1-Propanol	2.51	2.02	257894	549862	11571.266	11160.064
5)	2-Propanol	1.75	1.41	213932	472748	10309.866	11308.075
6)	Isobutanol	3.31	2.95	298782	632695	10870.134	10198.859
7)	1-Butanol	3.76	3.41	289038	604299	11803.967	11673.499
8)	2-Butanol	2.94	2.57	262599	566046	10421.277	11455.123

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC19644

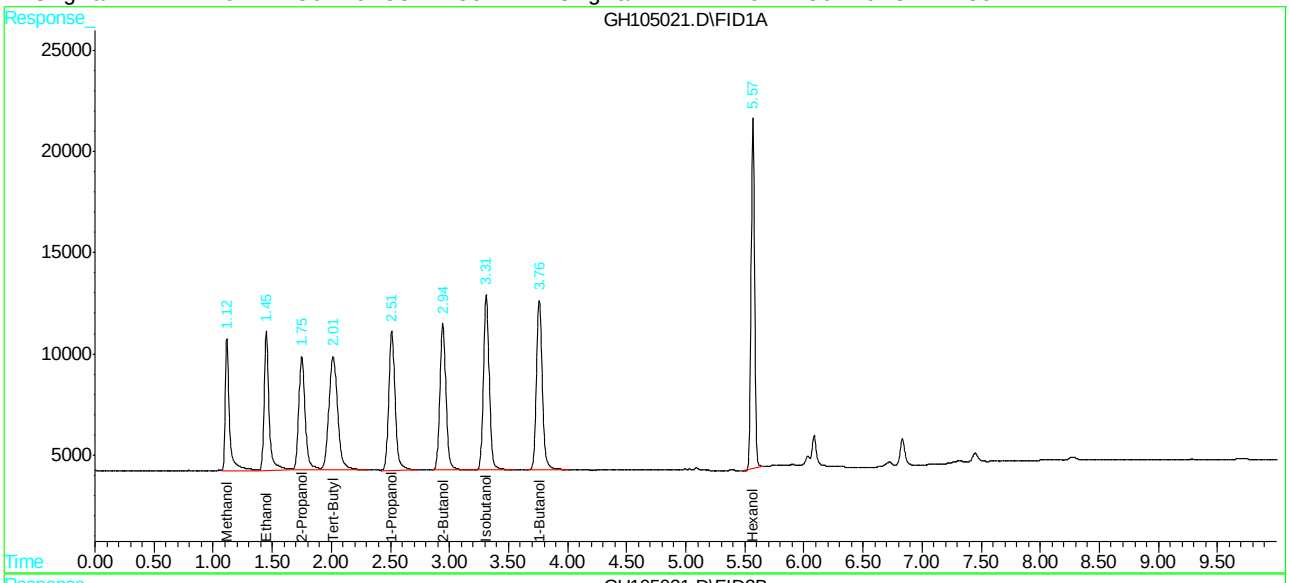
Quantitation Report (QT Reviewed)

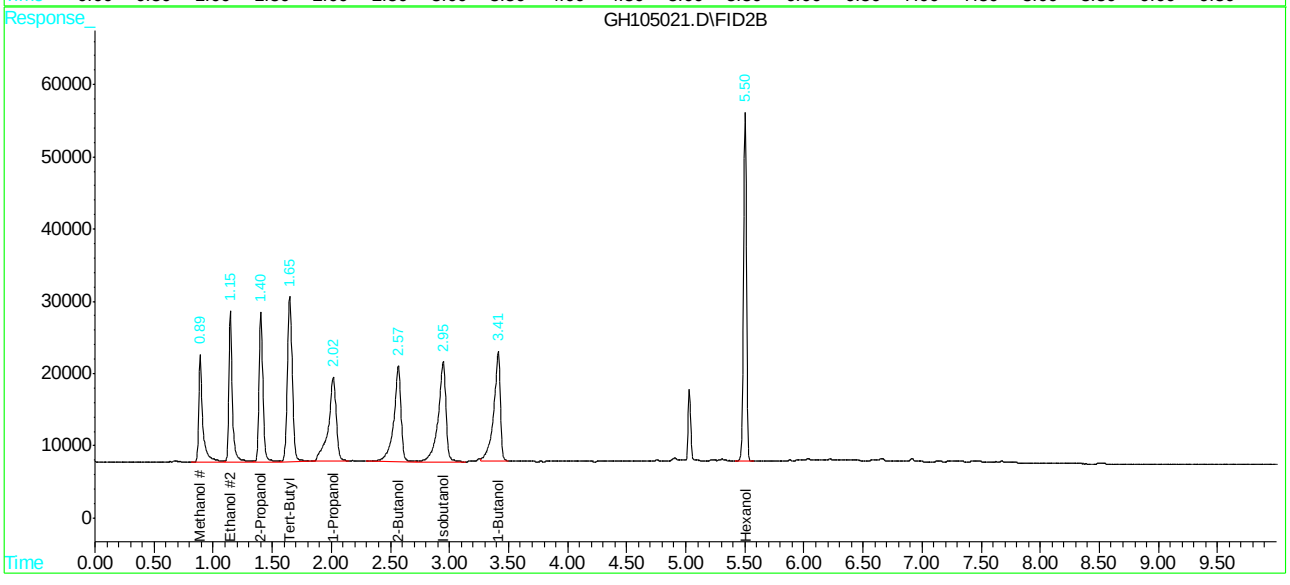
```
Data File : C:\HPCHEM\1\DATA\GH105021.D\FID1A.CH          Vial: 6
Acq On    : 17 May 2016   5:19 pm                     Operator: XULIU
Sample    : IC5288-10000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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 JC19644

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105022.D\FID1A.CH          Vial: 7
Acq On    : 17 May 2016   5:33 pm                     Operator: XULIU
Sample    : IC5288-50000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105022.D\FID2B.CH          Vial: 7
Acq On    : 17 May 2016   5:48 pm                     Operator: XULIU
Sample    : IC5288-50000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:10 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 15:45:13 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	System Monitoring Compounds							
9) S	Hexanol	5.57	5.50	412961	947054	5397.192	5754.582	
	Spiked Amount 5000.000			Recovery	=	107.94%	115.09%	
	Target Compounds							
1)	Methanol	1.12	0.89	720543	1576706	48787.500	77559.774	#
2)	Ethanol	1.45	1.15	934936	1996365	49963.655	62829.557	
3)	Tert-Butyl Alcoh	2.02	1.65	1362114	3066977	49888.133	46972.339	
4)	1-Propanol	2.51	2.02	1197382	2577415	53724.608	52311.489	
5)	2-Propanol	1.75	1.41	990575	2181490	47738.100	52180.934	
6)	Isobutanol	3.31	2.94	1369639	2883211	49829.464	46476.511	
7)	1-Butanol	3.76	3.42	1316221	2839006	53752.804	54842.255	
8)	2-Butanol	2.94	2.57	1212229	2632402	48107.436	53272.148	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

SGS ACCUTEST JC19644

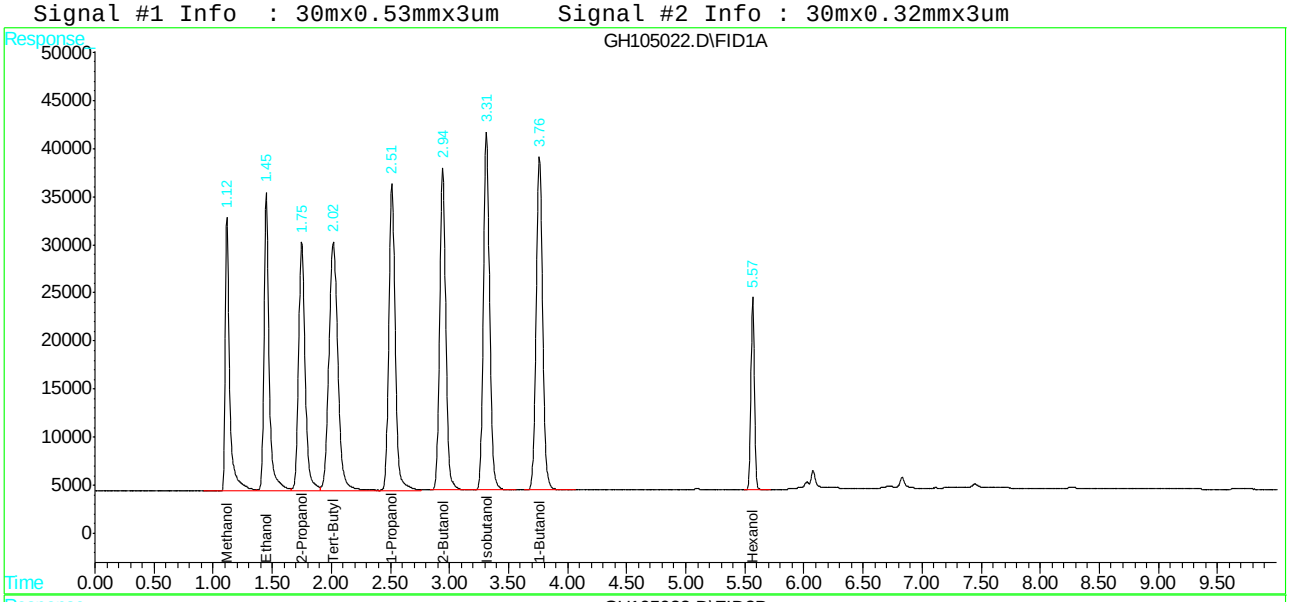
Quantitation Report (QT Reviewed)

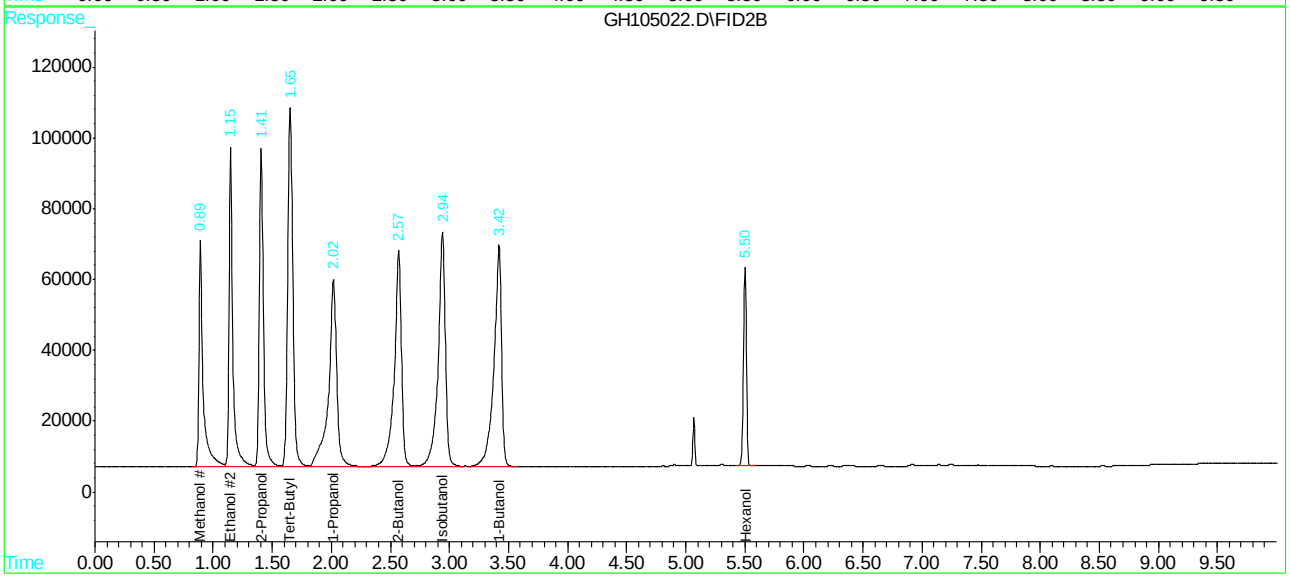
```
Data File : C:\HPCHEM\1\DATA\GH105022.D\FID1A.CH          Vial: 7
Acq On    : 17 May 2016   5:33 pm                     Operator: XULIU
Sample    : IC5288-50000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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 JC19644

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105023.D\FID1A.CH          Vial: 8
Acq On    : 17 May 2016   5:48 pm                     Operator: XULIU
Sample    : IC5288-100000                             Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105023.D\FID2B.CH          Vial: 8
Acq On    : 17 May 2016   6:02 pm                     Operator: XULIU
Sample    : IC5288-100000                             Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:10 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 15:45:13 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.57	5.50	259897	594005	3396.729	3609.352
	Spiked Amount 5000.000			Recovery	=	67.93%	72.19%
	Target Compounds						
1)	Methanol	1.12	0.89	1381464	3140971	93538.113	154507.580 #
2)	Ethanol	1.45	1.15	1913963	4176473	102283.537	131441.900
3)	Tert-Butyl Alcoh	2.02	1.66	2957875	6562015	108333.721	100500.651
4)	1-Propanol	2.51	2.03	2510870	5487726	112658.677	111379.470
5)	2-Propanol	1.76	1.41	2027830	4596795	97725.857	109954.692
6)	Isobutanol	3.32	2.96f	2927116	6160124	106492.774	99299.394
7)	1-Butanol	3.76	3.42	2754661	5940276	112496.937	114750.761
8)	2-Butanol	2.95	2.57	2539551	5573181	100782.352	112784.937

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

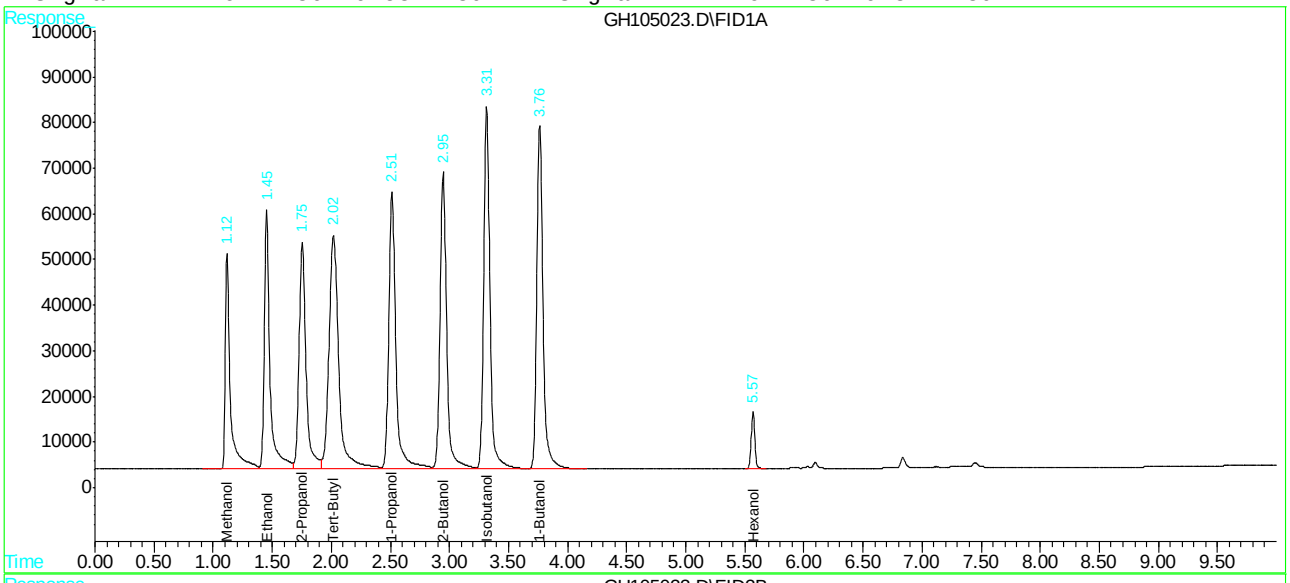
Quantitation Report (QT Reviewed)

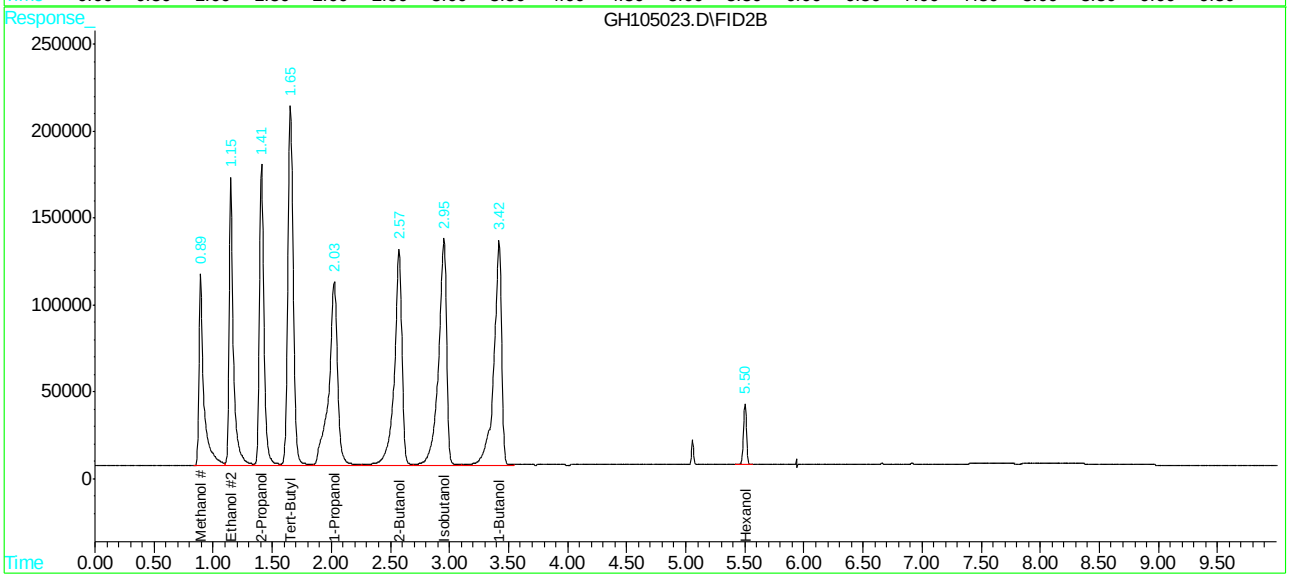
```
Data File : C:\HPCHEM\1\DATA\GH105023.D\FID1A.CH          Vial: 8
Acq On    : 17 May 2016   5:48 pm                     Operator: XULIU
Sample    : IC5288-100000                             Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105023.D\FID2B.CH          Vial: 8
Acq On    : 17 May 2016   6:02 pm                     Operator: XULIU
Sample    : IC5288-100000                             Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  7:10 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Tue May 17 15:45:13 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105024.D\FID1A.CH          Vial: 9
Acq On    : 17 May 2016   6:02 pm                     Operator: XULIU
Sample    : ICV5288-5000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105024.D\FID2B.CH          Vial: 9
Acq On    : 17 May 2016   6:24 pm                     Operator: XULIU
Sample    : ICV5288-5000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18  9:07 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 08:55:49 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.57	5.50	349710	790800	5173.481	5090.525
Spiked Amount	5000.000			Recovery	=	103.47%	101.81%
	Target Compounds						
1)	Methanol	1.12	0.90	65127	172731	4212.940	5355.287
2)	Ethanol	1.45	1.16	100143	226641	5284.554	5685.787
3)	Tert-Butyl Alcoh	2.02	1.66	149854	332921	5288.674	5236.015
4)	1-Propanol	2.52	2.02	127682	285106	5248.735	5607.628
5)	2-Propanol	1.75	1.41	105368	238229	5286.625	5261.345
6)	Isobutanol	3.31	2.94	151110	333033	5252.180	5439.828
7)	1-Butanol	3.76	3.42	145592	326188	5097.649	4929.542
8)	2-Butanol	2.95	2.57	133016	304299	5188.956	5605.638

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

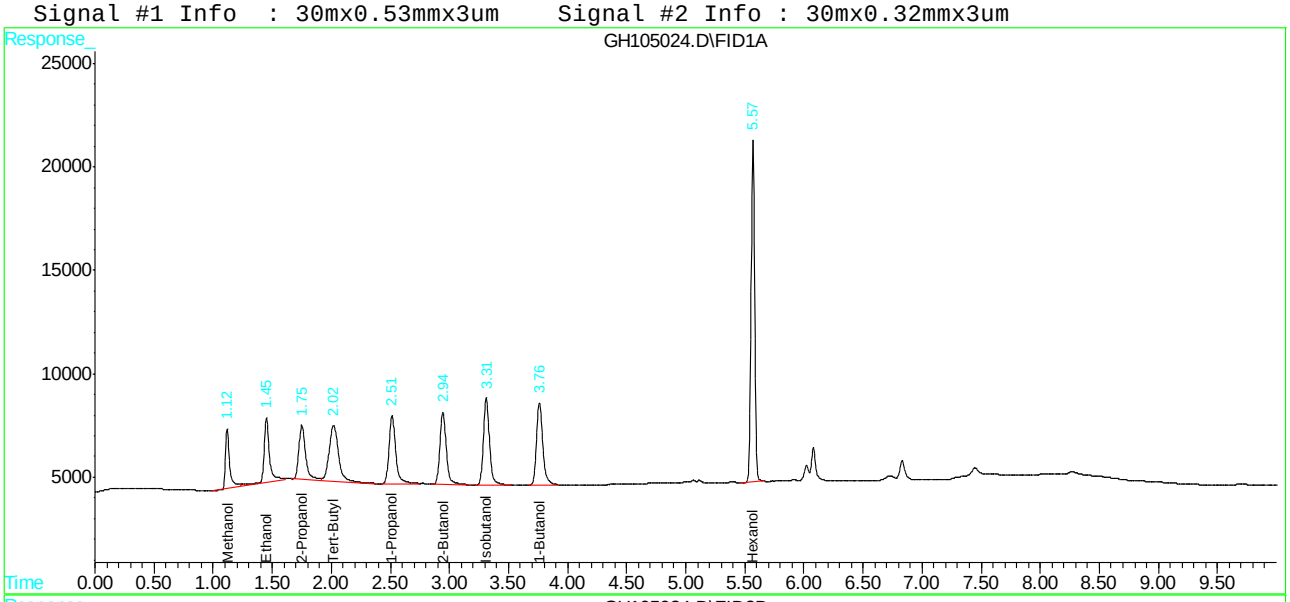
Quantitation Report (QT Reviewed)

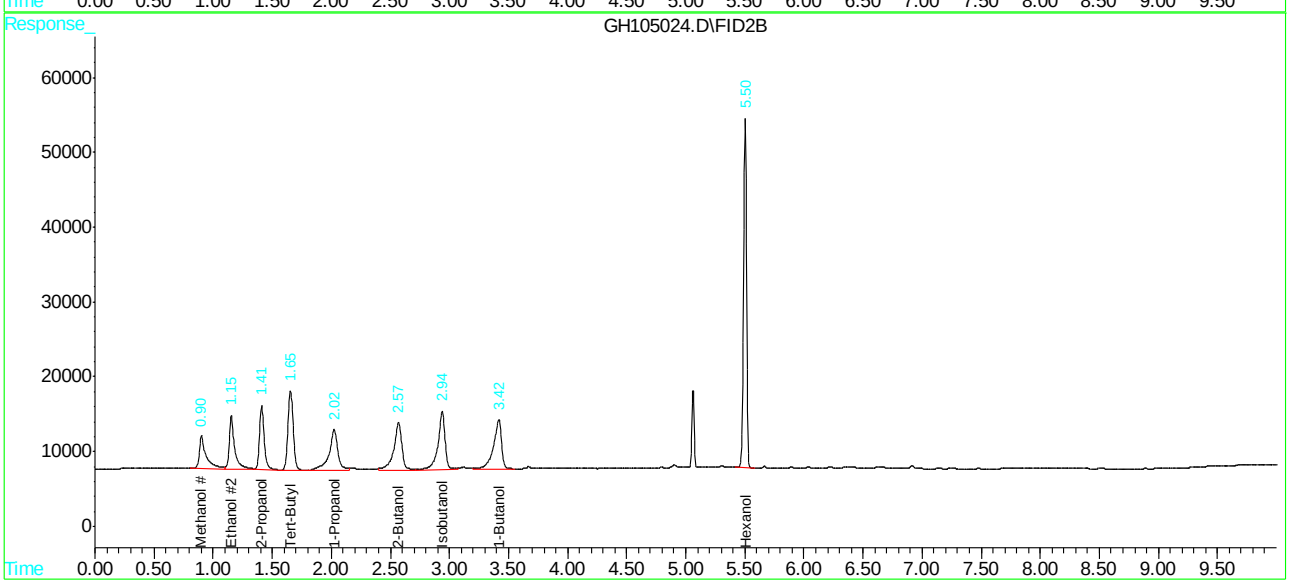
```
Data File : C:\HPCHEM\1\DATA\GH105024.D\FID1A.CH          Vial: 9
Acq On    : 17 May 2016   6:02 pm                     Operator: XULIU
Sample    : ICV5288-5000                              Inst    : GCGH
Misc      : GC48422,GGH5288,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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.

SGS ACCUTEST JC19644

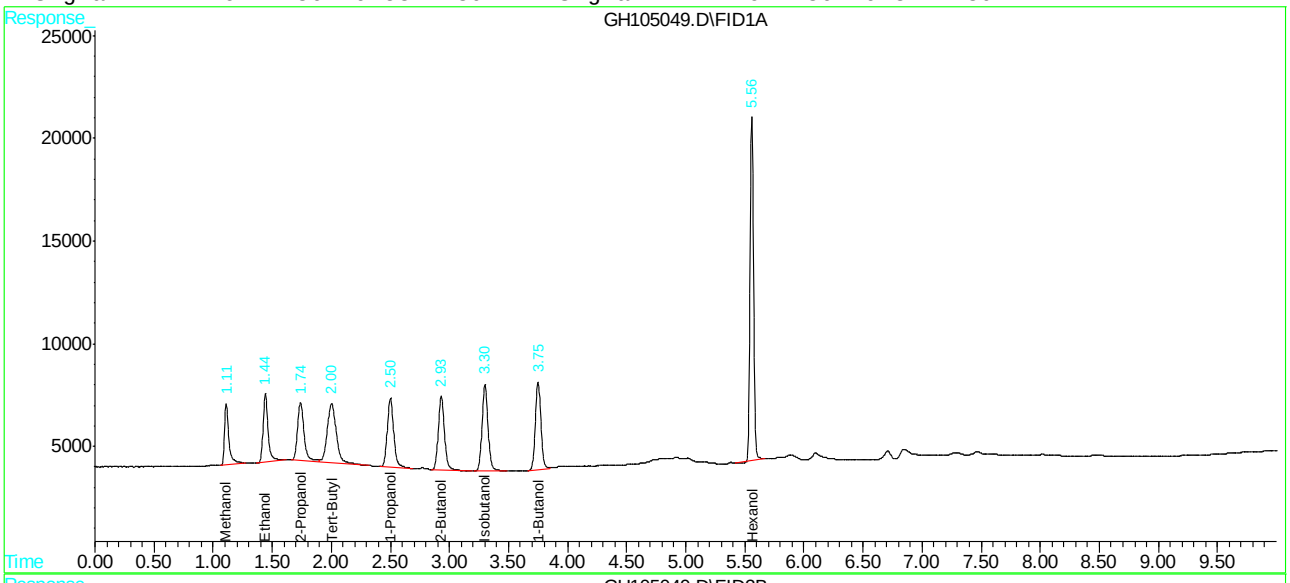
Quantitation Report (QT Reviewed)

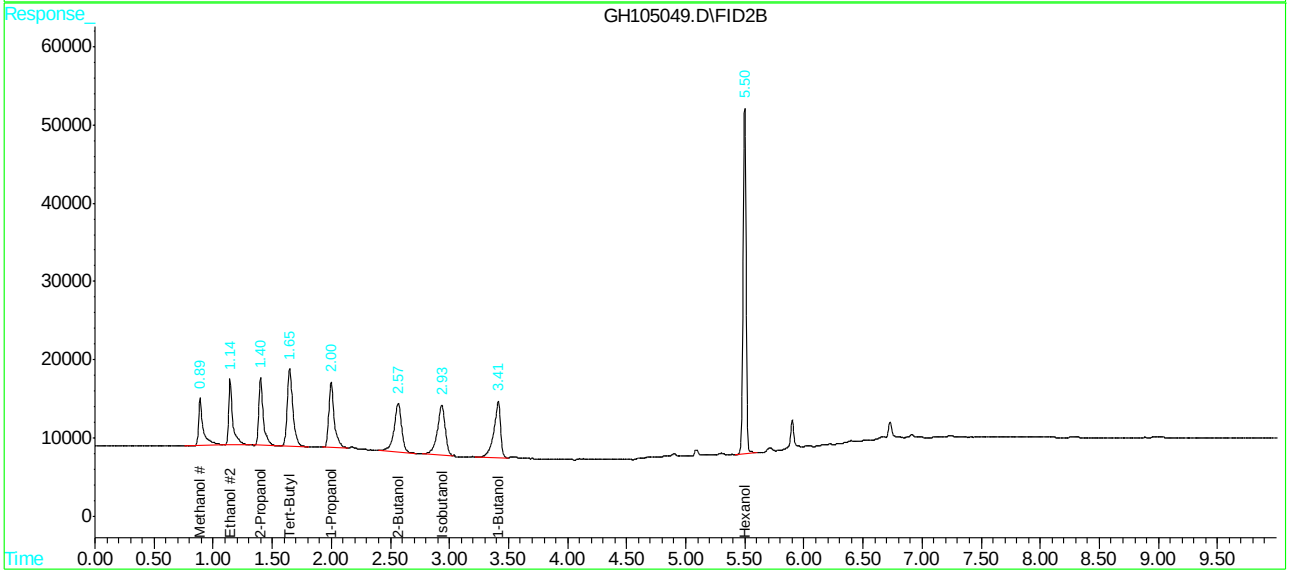
```
Data File : C:\HPCHEM\1\DATA\GH105049.D\FID1A.CH          Vial: 95
Acq On    : 18 May 2016   2:28 pm                     Operator: XULIU
Sample    : CC5288-5000                               Inst    : GCGH
Misc      : GC48428,GGH5289,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105049.D\FID2B.CH          Vial: 95
Acq On    : 18 May 2016   2:42 pm                     Operator: XULIU
Sample    : CC5288-5000                               Inst    : GCGH
Misc      : GC48428,GGH5289,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 18 14:49 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 09:37:12 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105054.D\FID1A.CH          Vial: 95
Acq On    : 18 May 2016   3:49 pm                     Operator: XULIU
Sample    : CC5288-10000                              Inst    : GCGH
Misc      : GC48425,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105054.D\FID2B.CH          Vial: 95
Acq On    : 18 May 2016   4:03 pm                     Operator: XULIU
Sample    : CC5288-10000                              Inst    : GCGH
Misc      : GC48425,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 19  7:19 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 09:37:12 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.56	5.50	338121	755547	5002.038	4863.592
Spiked Amount	5000.000			Recovery	=	100.04%	97.27%
	Target Compounds						
1)	Methanol	1.12	0.90	155738	339910	10074.450	10538.457
2)	Ethanol	1.45	1.15	196979	420490	10394.572	10548.933
3)	Tert-Butyl Alcoh	2.00	1.65	282574	657111	9972.662	10334.711
4)	1-Propanol	2.50	2.00	241854	544714	9942.144	10713.762
5)	2-Propanol	1.74	1.41	204381	464119	10254.424	10250.174
6)	Isobutanol	3.30	2.94	299019	589948	10393.093	9636.336
7)	1-Butanol	3.75	3.42	283820	604502	9937.443	9135.595
8)	2-Butanol	2.93	2.57	264578	556980	10321.197	10260.406

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

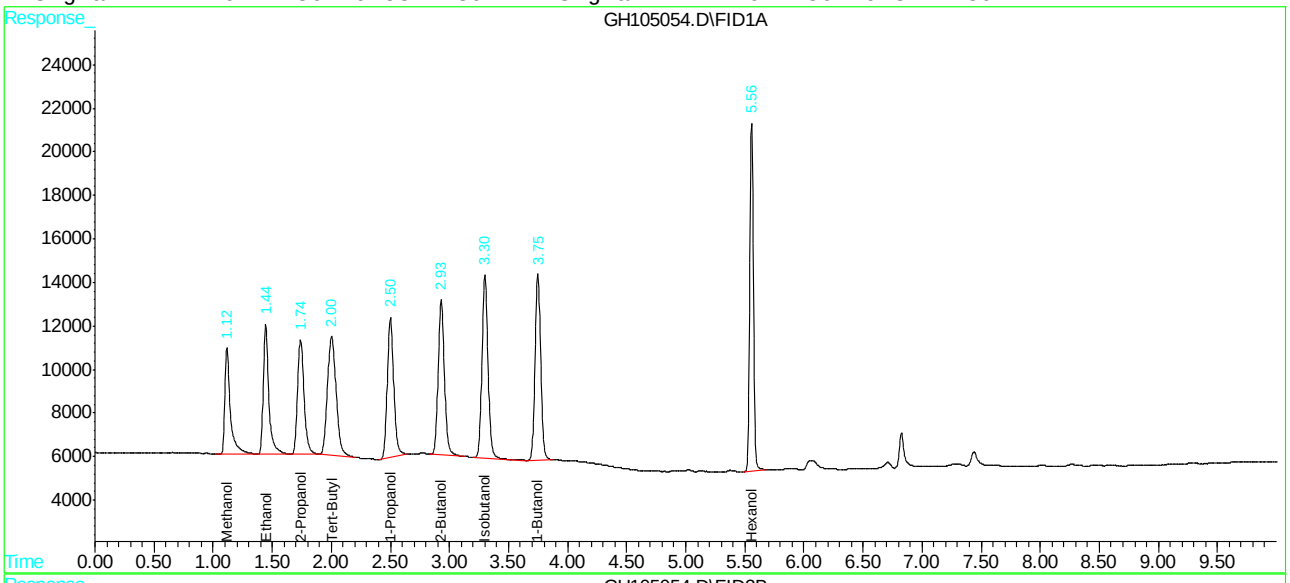
Quantitation Report (QT Reviewed)

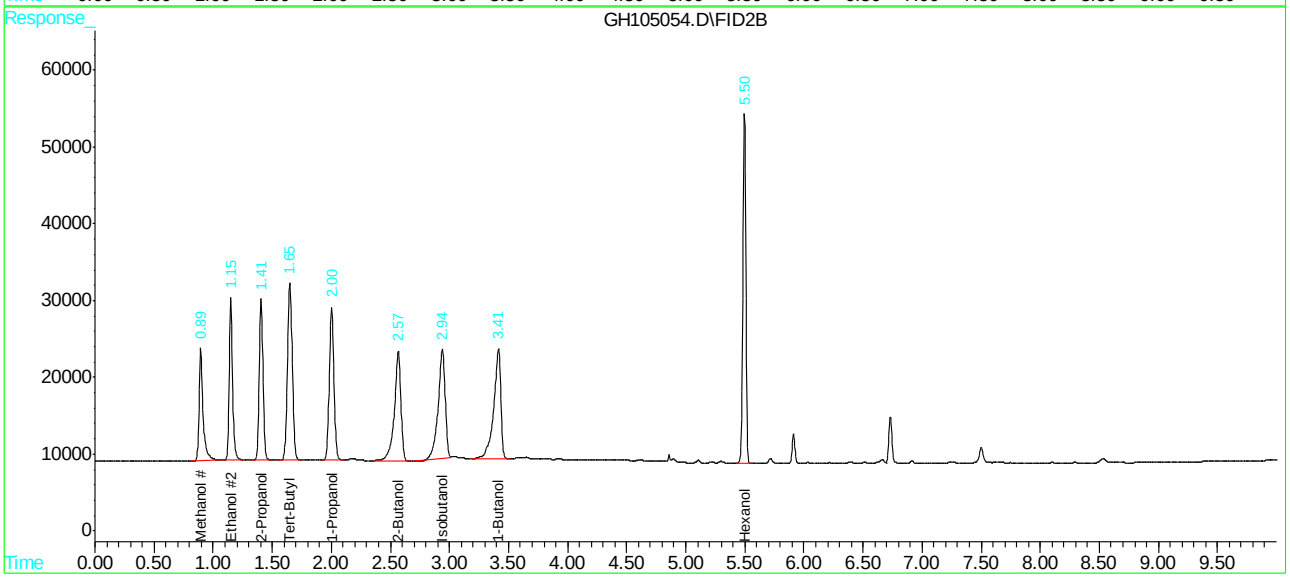
```
Data File : C:\HPCHEM\1\DATA\GH105054.D\FID1A.CH          Vial: 95
Acq On    : 18 May 2016   3:49 pm                     Operator: XULIU
Sample    : CC5288-10000                              Inst    : GCGH
Misc      : GC48425,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105054.D\FID2B.CH          Vial: 95
Acq On    : 18 May 2016   4:03 pm                     Operator: XULIU
Sample    : CC5288-10000                              Inst    : GCGH
Misc      : GC48425,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 19  7:19 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Wed May 18 09:37:12 2016
Response via : Multiple Level Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```





Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\1\DATA\GH105065.D\FID1A.CH          Vial: 10
Acq On    : 18 May 2016   6:49 pm                     Operator: XULIU
Sample    : CC5288-5000                               Inst    : GCGH
Misc      : GC48426,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

Data File : C:\HPCHEM\1\DATA\GH105065.D\FID2B.CH          Vial: 10
Acq On    : 18 May 2016   7:04 pm                     Operator: XULIU
Sample    : CC5288-5000                               Inst    : GCGH
Misc      : GC48426,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May 19  7:28 2016  Quant Results File: MGH5288.RES

Quant Method : C:\HPCHEM\1\METHODS\MGH5288.M (Chemstation Integrator)
Title        : METHOD SW846-8015C (DAI)
Last Update  : Thu May 19 07:23:53 2016
Response via : Initial Calibration
DataAcq Meth : MGH5288.M

Volume Inj.     : 2ul
Signal #1 Phase : ZB-624            Signal #2 Phase: RTX-1
Signal #1 Info  : 30mx0.53mmx3um    Signal #2 Info : 30mx0.32mmx3um
```

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	System Monitoring Compounds						
9) S	Hexanol	5.56	5.50	333289	747312	4930.546	4810.584
Spiked Amount	5000.000			Recovery	=	98.61%	96.21%
	Target Compounds						
1)	Methanol	1.11	0.90	75224	158718	4866.132	4920.856
2)	Ethanol	1.44	1.15	97300	200591	5134.513	5032.264
3)	Tert-Butyl Alcoh	2.00	1.65	140623	324101	4962.895	5097.291
4)	1-Propanol	2.50	2.01	128538	256427	5283.936	5043.553
5)	2-Propanol	1.74	1.41	102593	226293	5147.386	4997.732
6)	Isobutanol	3.30	2.95	150005	275960	5213.766	4507.587
7)	1-Butanol	3.75	3.42	140831	286285	4930.933	4326.511
8)	2-Butanol	2.93	2.57	130268	276039	5081.741	5085.051

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 40% (m)=manual int.

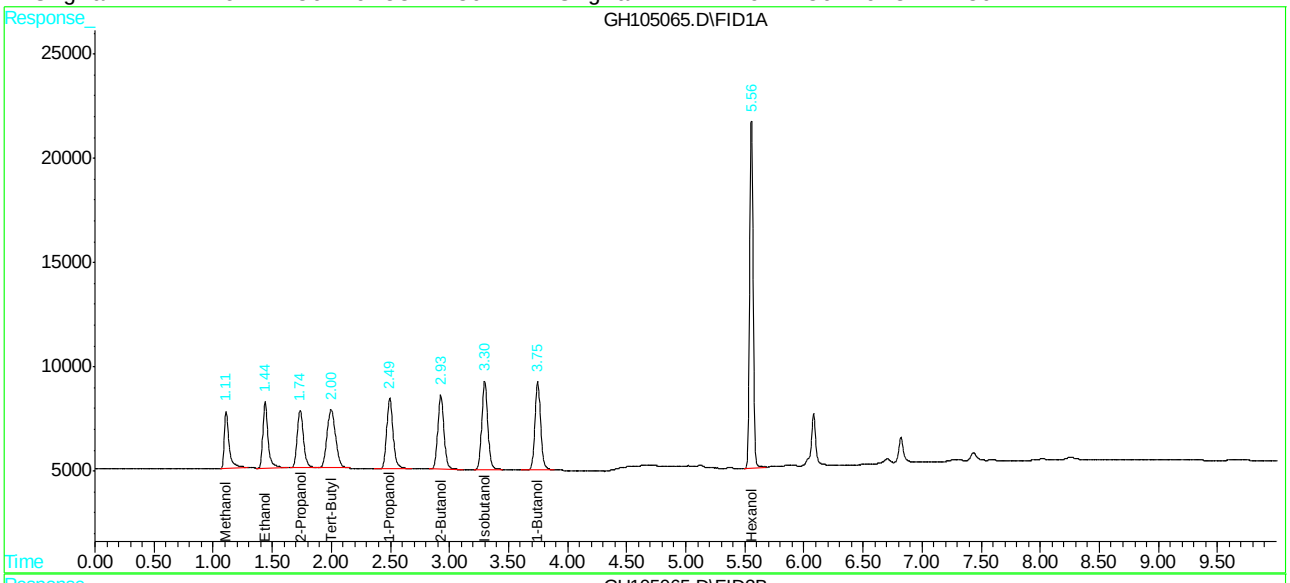
Quantitation Report (QT Reviewed)

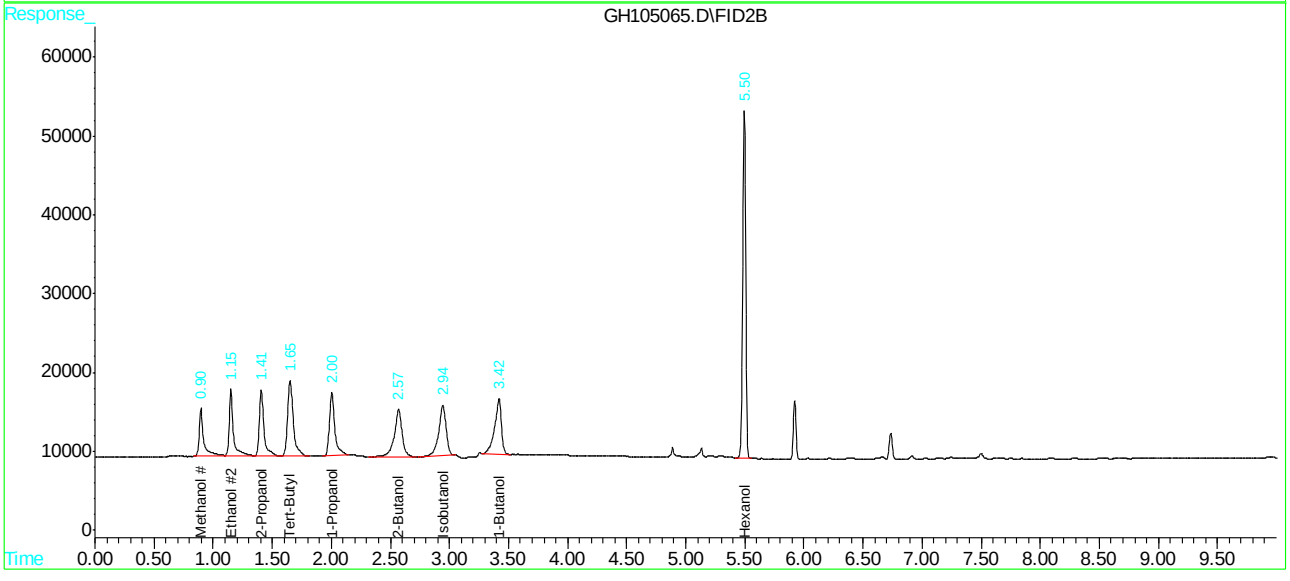
```
Data File : C:\HPCHEM\1\DATA\GH105065.D\FID1A.CH          Vial: 10
Acq On    : 18 May 2016   6:49 pm                     Operator: XULIU
Sample    : CC5288-5000                               Inst    : GCGH
Misc      : GC48426,GGH5290,5.0,,,,1                  Multiplr: 1.00
IntFile   : AUTOINT1.E

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: GGH5269

Print Analyst Name: Xielin

Date: 5/9/16

Analyst Signature:

Columns: ZB624 / RTX-1 (30m x 0.25mm x 3um) (30m x 0.32mm x

Method 8015C ALC

Initial Cal. Method MGH5269

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
015MX-18	ALL SUR	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	5000ul STD, 2ul sur/1ml 1/20	
	104680	2G5269-100,000					1					✓	not need. No 2nd signal		
	104681	2G5269-100,000					1						No	1000ul STD, 4ul sur/ml	
	104682	2GH5269-5000					1						No		
	104683	2GH5269-5000					1					✓	ok	50ul STD(2), 2.5ul sur/1ml 1/20	

MTX = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.
Sample Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * IF pH > 2, comment on sample result.
All strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR001-10
Rev. Date: 1/19/16

SGS ACCUTEST JC19644

9.6.1

9

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
015MMXC19	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	8260 CMS	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 3um) (30m x 0.25mm x 1u)

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 3 5/16					1					✓	ok		
	104982	~~JC19914-3~~ 200498-1 5/16	48422 CMB	G W	5		1					✓	ok	JC200498-1	✓
	104983	JC200498-4 5/16	✓	G W	5		1					✓	ok	JC200498-4	✓
	104984	JC200498-5 5/16	✓	G W	5		1					✓	ok	JC200498-5	✓
	104985	JC200314-2 5/16	48423 CMB	G W	4		1					✓	ok		✓
	104986	JC200314-4	✓	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

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9.6.2

9

SGS ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: GGH 5288

Print Analyst Name: Xu Gi

Date: 5/17/16

Analyst Signature: [illegible]

Columns: ZB624 / RTX-1 (30m x0.53mm x3µm) (30m x0.32mm x3µm)

Method 8015C ALL

Initial Cal. Method MGH 5288

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
015 2014 118	ALL SUR (5/15)	2000 ppm
015 2014 117	ALL STD (5/15)	100 ppm
015 2014 130	ALL SUR (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: 5/19/16

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
	GH105015	ZB					1					✓	not used		
	105016	ZB					1					✓	ok		
	105017	2C5288-100					1					✓	ok	10µl STD, 4µl SUR / 10ml H2O	
	105018	2C5288-500					1					✓	ok	5µl STD, 1µl SUR / 10ml H2O	
	105019	2C5288-1000					1					✓	ok	10µl STD, 2.5µl SUR / 10ml H2O	
	105020	2C5288-5000					1					✓	ok	50µl STD, 2.5µl SUR / 10ml H2O	
	105021	2C5288-10,000					1					✓	ok	100µl STD, 2.5µl SUR / 10ml H2O	
	105022	2C5288-50,000					1					✓	ok	500µl STD, 3µl SUR / 10ml H2O	
	105023	2C5288-100,000					1					✓	ok	1000µl STD, 4µl SUR / 10ml H2O	
	105024	2C5288-5000					1					✓	ok	2.5µl SUR / 50µl STD (2x) / 10ml H2O	

5/17

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

9.6.3

9

SGS ACCUTEST JC19644

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 SW15C All

Initial Cal. Method MGH5288

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
015mx028	All Surr (5/15)	2000 ppm
015mx028	All SID (5/15)	100 ppm
015mx030	All SID(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:** 5/19/16

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
	GH105026	2B					1						not need		
	105027	2B					1						not need		
	105028	2B					1						✓ ok		
	105028	CC5288-50000					1						✓ ok	50μl/10ml/10	
	105029	MB1					1						✓ ok		
	105030	BS					1						✓ ok	50μl/50(2)/10ml/10	
	105031	JCW386-1	484635 LMA	G W	3		1						✓ ok		✓
	105032	JCW386-1MS	✓	G W	3		1						✓ ok	50μl/50(2)/10ml/sample	✓
	105033	JCW386-1MSD	✓	G W	3		1						✓ ok	50μl/50(2)/10ml/sample	✓
	105034	JC19855-1	484636 LMA	G W	5		1						✓ ok		✓
-18	105035	JC19855-2	✓	G W	5		1						✓ ok		✓
	105036	JC19950-1	484638 LMA	G W	5		1						✓ ok		✓
	105037	JC19950-3	✓	G W	6		1						✓ ok		✓
	105038	CC5288-100000					1						✓ ok	100μl/50/10ml/10	
	105039						1								
	105040						1								
	105041						1								

5/18

X = Matrix Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.
mple Amt = Volume (ML) or Weight (g); MOH amt. = volume (ul) extract injected * IF pH > 2, comment on sample result.
strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer calculation; 4 = analyst's correction error

m: OR001-10
Date: 1/19/16

SGS ACCUTEST JC19644

SGS ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: GGH5289

Print Analyst Name: Xulica

Date: 5/18/16

Analyst Signature:

Columns: 7B620 / RTX-1 (30m x 0.53mm x 3µm) (30m x 0.32mm x 3µ)

Method 8015CALL

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: 5/9/16

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 CALA	G W	3		1					✓	ok		✓
	105042	JC19950-11	✓	W E R	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	
												(✓)		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 JC19644

9.6.4

9

SGS ACCUTEST

VOLATILE ANALYSIS LOG

Batch ID: GGH5290

Print Analyst Name: Xu Lin

Analyst Signature: [signature]

Columns: 2BGX / RTX-1 (30m x 0.53 mm x 3μm) (30m x 0.32mm x 2μm)

Method 8015CALL

Initial Cal. Method MGH5288

Date: 5/18/16

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
015mix428	ALL surr (5/25)	2000 ppm
015mix429	ALL std (5/25)	100 ppm
015mix430	ALL std(2) (5/25)	100 ppm

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [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
	0501050	MB1										✓	ok		
	1050 51	BS										✓	ok	50µl surr/ml sample	
	1050 52	JC19644-4	48425 LMA	S	1		5.0/5					✓	ok		
	1050 53	JC19644-5	✓	S	1		5.0/5					✓	ok		
	~~JC19914-~~													(ok) 5/18	
	1050 54	CC5288-10,000										✓	ok	50µl surr/ml sample	
	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 surr/ml sample	
	1050 58	JC19914-2MSD	✓	S	1		5.0/5					✓	ok	50µl surr/ml sample	
	1050 59	JC ~~19914-6~~ 19492-28	48362 Meth ✓ (ok) 5/19	S	1		5.0/5			5/19		✓	ok ~~ok~~ ~~5/18~~ (ok) 5/19	✓ ok	
	1050 60	JC ~~19914-7~~ 19492-29 (ok) 5/19		S	1		5.0/5					↑	ok ~~RR~~	JC19492-29 (ok) 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	JC20386-2	48436 LMA	S	2		5.0/5					✓	ok		
	1050 65	CC5288-5000										✓	ok	50µl surr/ml sample	

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.
Strike outs must be initialed, dated and reason code applied as follows: 1 = reviewer correction error; 2 = transcription error; 3 = computer calculation; 4 = analyst's correction error

Form: OR001-10
Date: 1/19/16

SGS ACCUTEST JC19644

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: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93665-MB1	4G67947.D	1	05/06/16	BP	05/05/16	OP93665	G4G1782

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC19644-1, JC19644-2, JC19644-3

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

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	81%	26-132%
877-09-8	Tetrachloro-m-xylene	78%	26-132%
2051-24-3	Decachlorobiphenyl	95%	10-118%
2051-24-3	Decachlorobiphenyl	81%	10-118%

Method Blank Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93736-MB1	6G34897.D	1	05/10/16	RK	05/09/16	OP93736	G6G1007

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC19644-4, JC19644-5

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	89%	24-136%
877-09-8	Tetrachloro-m-xylene	89%	24-136%
2051-24-3	Decachlorobiphenyl	88%	10-153%
2051-24-3	Decachlorobiphenyl	100%	10-153%

Blank Spike Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93665-BS1	4G67948.D	1	05/06/16	BP	05/05/16	OP93665	G4G1782

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC19644-1, JC19644-2, JC19644-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
309-00-2	Aldrin	0.167	0.15	90	38-138
319-84-6	alpha-BHC	0.167	0.15	90	51-144
319-85-7	beta-BHC	0.167	0.15	90	55-137
319-86-8	delta-BHC	0.167	0.14	84	33-148
58-89-9	gamma-BHC (Lindane)	0.167	0.15	90	53-142
5103-71-9	alpha-Chlordane	0.167	0.15	90	52-137
5103-74-2	gamma-Chlordane	0.167	0.16	96	52-140
60-57-1	Dieldrin	0.167	0.16	96	54-144
72-54-8	4,4'-DDD	0.167	0.15	90	46-151
72-55-9	4,4'-DDE	0.167	0.14	84	51-142
50-29-3	4,4'-DDT	0.167	0.17	102	53-158
72-20-8	Endrin	0.167	0.16	96	53-149
1031-07-8	Endosulfan sulfate	0.167	0.16	96	49-148
7421-93-4	Endrin aldehyde	0.167	0.16	96	45-137
53494-70-5	Endrin ketone	0.167	0.16	96	48-142
959-98-8	Endosulfan-I	0.167	0.15	90	54-139
33213-65-9	Endosulfan-II	0.167	0.16	96	54-142
76-44-8	Heptachlor	0.167	0.15	90	45-137
1024-57-3	Heptachlor epoxide	0.167	0.16	96	54-140
72-43-5	Methoxychlor	0.167	0.17	102	51-157

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	79%	26-132%
877-09-8	Tetrachloro-m-xylene	76%	26-132%
2051-24-3	Decachlorobiphenyl	102%	10-118%
2051-24-3	Decachlorobiphenyl	85%	10-118%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93736-BS1	6G34898.D	1	05/10/16	RK	05/09/16	OP93736	G6G1007

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC19644-4, JC19644-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
309-00-2	Aldrin	16.7	18.1	109	40-135
319-84-6	alpha-BHC	16.7	17.9	107	37-134
319-85-7	beta-BHC	16.7	17.2	103	37-131
319-86-8	delta-BHC	16.7	16.1	97	34-132
58-89-9	gamma-BHC (Lindane)	16.7	18.0	108	36-128
5103-71-9	alpha-Chlordane	16.7	18.3	110	40-131
5103-74-2	gamma-Chlordane	16.7	18.2	109	41-133
60-57-1	Dieldrin	16.7	18.7	112	33-133
72-54-8	4,4'-DDD	16.7	18.8	113	37-132
72-55-9	4,4'-DDE	16.7	18.9	113	39-133
50-29-3	4,4'-DDT	16.7	17.1	103	26-150
72-20-8	Endrin	16.7	19.3	116	41-134
1031-07-8	Endosulfan sulfate	16.7	17.7	106	38-138
7421-93-4	Endrin aldehyde	16.7	17.8	107	37-129
959-98-8	Endosulfan-I	16.7	17.6	106	39-130
33213-65-9	Endosulfan-II	16.7	18.0	108	40-134
76-44-8	Heptachlor	16.7	16.9	101	36-132
1024-57-3	Heptachlor epoxide	16.7	18.1	109	39-131
72-43-5	Methoxychlor	16.7	17.1	103	28-149
53494-70-5	Endrin ketone	16.7	18.1	109	31-138

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	109%	24-136%
877-09-8	Tetrachloro-m-xylene	108%	24-136%
2051-24-3	Decachlorobiphenyl	107%	10-153%
2051-24-3	Decachlorobiphenyl	122%	10-153%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93665-MS	4G67996.D	1	05/06/16	BP	05/05/16	OP93665	G4G1782
OP93665-MSD	4G67997.D	1	05/06/16	BP	05/05/16	OP93665	G4G1782
JC19644-1	4G67960.D	1	05/06/16	BP	05/05/16	OP93665	G4G1782

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC19644-1, JC19644-2, JC19644-3

CAS No.	Compound	JC19644-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
309-00-2	Aldrin	ND		0.167	0.14	84	0.167	0.13	78	7	37-159/40
319-84-6	alpha-BHC	ND		0.167	0.15	90	0.167	0.14	84	7	37-164/37
319-85-7	beta-BHC	ND		0.167	0.17	102	0.167	0.17	102	0	46-151/36
319-86-8	delta-BHC	ND		0.167	0.15	90	0.167	0.15	90	0	32-168/36
58-89-9	gamma-BHC (Lindane)	ND		0.167	0.15	90	0.167	0.15	90	0	44-160/37
5103-71-9	alpha-Chlordane	ND		0.167	0.15	90	0.167	0.15	90	0	38-160/35
5103-74-2	gamma-Chlordane	ND		0.167	0.16	96	0.167	0.16	96	0	39-157/37
60-57-1	Dieldrin	ND		0.167	0.17	102	0.167	0.16	96	6	42-161/36
72-54-8	4,4'-DDD	ND		0.167	0.14	84	0.167	0.14	84	0	40-161/36
72-55-9	4,4'-DDE	ND		0.167	0.094	56	0.167	0.088	53	7	34-158/36
50-29-3	4,4'-DDT	ND		0.167	0.12	72	0.167	0.12	72	0	41-173/33
72-20-8	Endrin	ND		0.167	0.15	90	0.167	0.15	90	0	44-166/35
1031-07-8	Endosulfan sulfate	ND		0.167	0.17	102	0.167	0.17	102	0	46-161/36
7421-93-4	Endrin aldehyde	ND		0.167	0.18	108	0.167	0.19	114	5	34-149/36
53494-70-5	Endrin ketone	ND		0.167	0.18	108	0.167	0.18	108	0	44-157/36
959-98-8	Endosulfan-I	ND		0.167	0.18	108	0.167	0.19	114	5	43-154/35
33213-65-9	Endosulfan-II	ND		0.167	0.19	114	0.167	0.19	114	0	40-162/35
76-44-8	Heptachlor	ND		0.167	0.14	84	0.167	0.14	84	0	33-153/37
1024-57-3	Heptachlor epoxide	ND		0.167	0.17	102	0.167	0.16	96	6	45-154/37
72-43-5	Methoxychlor	ND		0.167	0.13	78	0.167	0.12	72	8	48-169/32
8001-35-2	Toxaphene	ND			ND			ND		nc	50-150/30

CAS No.	Surrogate Recoveries	MS	MSD	JC19644-1	Limits
877-09-8	Tetrachloro-m-xylene	65%	65%	67%	26-132%
877-09-8	Tetrachloro-m-xylene	66%	69%	68%	26-132%
2051-24-3	Decachlorobiphenyl	96%	94%	107%	10-118%
2051-24-3	Decachlorobiphenyl	90%	90%	95%	10-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93736-MS	6G34899.D	1	05/10/16	RK	05/09/16	OP93736	G6G1007
OP93736-MSD	6G34900.D	1	05/10/16	RK	05/09/16	OP93736	G6G1007
JC19823-1	6G34901.D	1	05/10/16	RK	05/09/16	OP93736	G6G1007

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC19644-4, JC19644-5

CAS No.	Compound	JC19823-1 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		18.7	15.2	81	19.2	18.8	98	21	19-147/48
319-84-6	alpha-BHC	ND		18.7	14.8	79	19.2	18.6	97	23	13-155/50
319-85-7	beta-BHC	ND		18.7	15.0	80	19.2	18.7	97	22	10-145/53
319-86-8	delta-BHC	ND		18.7	13.6	73	19.2	16.8	87	21	11-148/51
58-89-9	gamma-BHC (Lindane)	ND		18.7	15.0	80	19.2	18.7	97	22	16-143/47
5103-71-9	alpha-Chlordane	ND		18.7	15.5	83	19.2	19.2	100	21	15-151/50
5103-74-2	gamma-Chlordane	ND		18.7	15.3	82	19.2	18.9	98	21	13-151/50
60-57-1	Dieldrin	ND		18.7	15.8	85	19.2	19.9	103	23	10-157/54
72-54-8	4,4'-DDD	ND		18.7	15.8	85	19.2	19.4	101	20	10-157/52
72-55-9	4,4'-DDE	ND		18.7	15.9	85	19.2	19.6	102	21	10-155/49
50-29-3	4,4'-DDT	ND		18.7	14.5	78	19.2	17.7	92	20	10-187/49
72-20-8	Endrin	ND		18.7	17.0	91	19.2	19.9	103	16	14-154/53
1031-07-8	Endosulfan sulfate	ND		18.7	15.8	85	19.2	19.0	99	18	16-140/55
7421-93-4	Endrin aldehyde	ND		18.7	15.1	81	19.2	18.2	95	19	10-156/51
959-98-8	Endosulfan-I	ND		18.7	14.8	79	19.2	18.2	95	21	12-142/47
33213-65-9	Endosulfan-II	ND		18.7	15.5	83	19.2	18.4	96	17	10-150/52
76-44-8	Heptachlor	ND		18.7	14.9	80	19.2	18.6	97	22	10-159/49
1024-57-3	Heptachlor epoxide	ND		18.7	15.0	80	19.2	18.5	96	21	16-150/51
72-43-5	Methoxychlor	ND		18.7	14.6	78	19.2	17.7	92	19	10-166/52
53494-70-5	Endrin ketone	ND		18.7	16.1	86	19.2	19.5	101	19	10-171/52
8001-35-2	Toxaphene	ND			ND			ND		nc	50-150/30

CAS No.	Surrogate Recoveries	MS	MSD	JC19823-1	Limits
877-09-8	Tetrachloro-m-xylene	85%	101%	94%	24-136%
877-09-8	Tetrachloro-m-xylene	85%	101%	95%	24-136%
2051-24-3	Decachlorobiphenyl	85%	98%	92%	10-153%
2051-24-3	Decachlorobiphenyl	97%	112%	107%	10-153%

* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G4G1782-CC1778	**Injection Date:**	05/06/16
Lab File ID:	4G67943.D	**Injection Time:**	07:57
Instrument ID:	GC4G	**Method:**	SW846 8081B

	IS 1 AREA	RT	IS 2 AREA	RT
Check Std	388486249	2.07	434701935	1.79
Upper Limit [a]	776972498	2.57	869403870	2.29
Lower Limit [b]	194243125	1.57	217350968	1.29

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
OP93657-MB1	382579847	2.07	417426330	1.78
OP93657-BS1	397679036	2.07	435383596	1.79
OP93665-MB1	398816489	2.07	424988297	1.79
OP93665-BS1	415399031	2.07	439770811	1.79
ZZZZZZ	405699326	2.07	458281883	1.79
ZZZZZZ	381182811	2.06	420999017	1.79
JC19644-1	413837213	2.07	463444752	1.79
JC19644-2	414209405	2.07	430339000	1.79
JC19644-3	421517937	2.07	477392614	1.80
ZZZZZZ	281085119	2.06	302392393	1.78
OP93683-MB1	414419618	2.07	387725814	1.80
OP93683-BS1	413764507	2.07	390486091	1.80
OP93683-BS13	419347477	2.07	445433260	1.80
JC19505-1	413208472	2.06	427009489	1.80
ZZZZZZ	452347272	2.06	426658430	1.80
ZZZZZZ	413223149	2.07	426977677	1.80
ZZZZZZ	418079860	2.06	425179669	1.80
ZZZZZZ	428623135	2.07	396199878	1.80
JC19559-1	408492053	2.06	396776540	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: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G4G1782-CC1778	**Injection Date:**	05/06/16
Lab File ID:	4G67994.D	**Injection Time:**	20:15
Instrument ID:	GC4G	**Method:**	SW846 8081B

	IS 1 AREA	RT	IS 2 AREA	RT
Check Std	400969949	2.07	458442877	1.81
Upper Limit [a]	801939898	2.57	916885754	2.31
Lower Limit [b]	200484975	1.57	229221439	1.31

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
OP93665-MS	417202857	2.07	463724460	1.81
OP93665-MSD	427208697	2.07	484372590	1.81
OP93683-MS	414688968	2.07	431681326	1.81
OP93683-MSD	405019375	2.07	422344641	1.81
ZZZZZZ	384959609	2.07	372515584	1.81
ZZZZZZ	424377943	2.06	401760298	1.79
ZZZZZZ	384573732	2.07	361446818	1.79
ZZZZZZ	421143595	2.07	416717332	1.79
ZZZZZZ	394965601	2.07	374525232	1.79
ZZZZZZ	347066384	2.07	338267177	1.78
ZZZZZZ	428193682	2.07	419293819	1.80
ZZZZZZ	408791964	2.07	382117609	1.80
ZZZZZZ	428860179	2.07	420448526	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: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G1007-CC987	**Injection Date:**	05/10/16
Lab File ID:	6G34895.D	**Injection Time:**	09:53
Instrument ID:	GC6G	**Method:**	SW846 8081B

	IS 1 AREA	RT	IS 2 AREA	RT
Check Std	50344821	1.57	132055403	1.30
Upper Limit [a]	100689642	2.07	264110806	1.80
Lower Limit [b]	25172411	1.07	66027702	0.80

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
OP93736-MB1	51813297	1.57	139352760	1.30
OP93736-BS1	46195908	1.57	124602882	1.30
OP93736-MS	50704851	1.57	137984482	1.30
OP93736-MSD	43518466	1.57	118773630	1.30
JC19823-1	45117182	1.57	123990616	1.30
ZZZZZZ	50221484	1.57	136882072	1.30
ZZZZZZ	56271114	1.57	153031555	1.30
ZZZZZZ	57767725	1.57	157490718	1.30
ZZZZZZ	56663074	1.57	153409344	1.30
JC19644-4	51275612	1.57	138956742	1.30
JC19644-5	48687088	1.57	129488306	1.30

IS 1 = 1-Bromo-2-nitrobenzene (Signal #2)
IS 2 = 1-Bromo-2-nitrobenzene (Signal #1)

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

DDT/Endrin Breakdown Check

Job Number: JC19644
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: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: G4G1782-DDT
Lab File ID: 4G67942.D
Instrument ID: GC4G
Injection Date: 05/06/16
Injection Time: 07:42

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	3032566	4285767
4,4'-DDE	2546601	3502915
4,4'-DDT	917024392	873373951
DDT Breakdown [a]	0.6 %	0.9 %
Endrin aldehyde	5873647	6487849
Endrin ketone	21044663	18373158
Endrin	500163220	449652175
Endrin Breakdown [b]	5.1 %	5.2 %

(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
G4G1782-CC1778	4G67943.D	05/06/16	07:57	00:15	Continuing cal 25
OP93657-MB1	4G67945.D	05/06/16	08:27	00:45	Method Blank
OP93657-BS1	4G67946.D	05/06/16	08:42	01:00	Blank Spike
OP93665-MB1	4G67947.D	05/06/16	08:57	01:15	Method Blank
OP93665-BS1	4G67948.D	05/06/16	09:13	01:31	Blank Spike
ZZZZZZ	4G67950.D	05/06/16	09:28	01:46	(unrelated sample)
ZZZZZZ	4G67951.D	05/06/16	09:43	02:01	(unrelated sample)
JC19644-1	4G67960.D	05/06/16	09:58	02:16	RA-16 GWD
JC19644-2	4G67961.D	05/06/16	10:13	02:31	S-42S
JC19644-3	4G67962.D	05/06/16	10:28	02:46	RA-11 GWS
ZZZZZZ	4G67952.D	05/06/16	10:44	03:02	(unrelated sample)
OP93683-MB1	4G67963.D	05/06/16	11:10	03:28	Method Blank
OP93683-BS1	4G67964.D	05/06/16	11:25	03:43	Blank Spike
OP93683-BS13	4G67965.D	05/06/16	11:40	03:58	Blank Spike
JC19505-1	4G67966.D	05/06/16	11:55	04:13	(used for QC only; not part of job JC19644)
ZZZZZZ	4G67967.D	05/06/16	12:11	04:29	(unrelated sample)
ZZZZZZ	4G67968.D	05/06/16	12:26	04:44	(unrelated sample)
ZZZZZZ	4G67969.D	05/06/16	12:41	04:59	(unrelated sample)
ZZZZZZ	4G67970.D	05/06/16	12:56	05:14	(unrelated sample)
JC19559-1	4G67971.D	05/06/16	13:19	05:37	(used for QC only; not part of job JC19644)

DDT/Endrin Breakdown Check

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: G4G1782-DDT
Lab File ID: 4G67972.D
Instrument ID: GC4G
Injection Date: 05/06/16
Injection Time: 14:42

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	22121084	4963083
4,4'-DDE	5367484	8646322
4,4'-DDT	811155070	952378347
DDT Breakdown [a]	3.3 %	1.4 %
Endrin aldehyde	5587284	5381880
Endrin ketone	21667838	19578143
Endrin	590922440	522374414
Endrin Breakdown [b]	4.4 %	4.6 %

(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
G4G1782-CC1778	4G67973.D	05/06/16	14:57	00:15	Continuing cal 50
OP93694-MB1	4G67975.D	05/06/16	15:27	00:45	Method Blank
OP93694-BS1	4G67976.D	05/06/16	15:43	01:01	Blank Spike
OP93694-MS	4G67977.D	05/06/16	15:58	01:16	Matrix Spike
OP93694-MSD	4G67978.D	05/06/16	16:13	01:31	Matrix Spike Duplicate
ZZZZZZ	4G67979.D	05/06/16	16:28	01:46	(unrelated sample)
JC19759-2	4G67980.D	05/06/16	16:43	02:01	(used for QC only; not part of job JC19644)
ZZZZZZ	4G67981.D	05/06/16	16:58	02:16	(unrelated sample)
ZZZZZZ	4G67982.D	05/06/16	17:13	02:31	(unrelated sample)
ZZZZZZ	4G67983.D	05/06/16	17:29	02:47	(unrelated sample)
ZZZZZZ	4G67984.D	05/06/16	17:44	03:02	(unrelated sample)
ZZZZZZ	4G67985.D	05/06/16	17:59	03:17	(unrelated sample)
ZZZZZZ	4G67986.D	05/06/16	18:14	03:32	(unrelated sample)
ZZZZZZ	4G67987.D	05/06/16	18:29	03:47	(unrelated sample)
ZZZZZZ	4G67988.D	05/06/16	18:44	04:02	(unrelated sample)
ZZZZZZ	4G67989.D	05/06/16	18:59	04:17	(unrelated sample)
OP93657-LB28	4G67990.D	05/06/16	19:15	04:33	Leachate Blank
OP93657-LB29	4G67991.D	05/06/16	19:30	04:48	Leachate Blank
OP93657-LS15	4G67992.D	05/06/16	19:45	05:03	Leachate Spike
OP93657-MS	4G67992.D	05/06/16	19:45	05:03	Matrix Spike
OP93657-MSD	4G67993.D	05/06/16	20:00	05:18	Matrix Spike Duplicate
G4G1782-CC1778	4G67994.D	05/06/16	20:15	05:33	Continuing cal 25
OP93665-MS	4G67996.D	05/06/16	20:46	06:04	Matrix Spike
OP93665-MSD	4G67997.D	05/06/16	21:01	06:19	Matrix Spike Duplicate

DDT/Endrin Breakdown Check

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: G4G1782-DDT
Lab File ID: 4G67972.D
Instrument ID: GC4G
Injection Date: 05/06/16
Injection Time: 14:42

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
OP93683-MS	4G67998.D	05/06/16	21:16	06:34	Matrix Spike
OP93683-MSD	4G67999.D	05/06/16	21:31	06:49	Matrix Spike Duplicate
ZZZZZZ	4G68000.D	05/06/16	21:46	07:04	(unrelated sample)
ZZZZZZ	4G68001.D	05/06/16	22:01	07:19	(unrelated sample)
ZZZZZZ	4G68002.D	05/06/16	22:16	07:34	(unrelated sample)
ZZZZZZ	4G68003.D	05/06/16	22:32	07:50	(unrelated sample)
ZZZZZZ	4G68004.D	05/06/16	22:47	08:05	(unrelated sample)
ZZZZZZ	4G68005.D	05/06/16	23:02	08:20	(unrelated sample)
ZZZZZZ	4G68006.D	05/06/16	23:17	08:35	(unrelated sample)
ZZZZZZ	4G68007.D	05/06/16	23:32	08:50	(unrelated sample)
ZZZZZZ	4G68008.D	05/06/16	23:47	09:05	(unrelated sample)

DDT/Endrin Breakdown Check

Job Number: JC19644
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 JC19644)
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: JC19644
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: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample:	G6G1007-DDT	**Injection Date:**	05/10/16
Lab File ID:	6G34894.D	**Injection Time:**	09:37
Instrument ID:	GC6G		

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	645206	1288789
4,4'-DDE	676208	326437
4,4'-DDT	220572202	75824742
DDT Breakdown [a]	0.6 %	2.1 %
Endrin aldehyde	1170030	501790
Endrin ketone	5035275	2290048
Endrin	124888107	46570631
Endrin Breakdown [b]	4.7 %	5.7 %

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100
(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
G6G1007-CC987	6G34895.D	05/10/16	09:53	00:16	Continuing cal 25
OP93736-MB1	6G34897.D	05/10/16	10:27	00:50	Method Blank
OP93736-BS1	6G34898.D	05/10/16	10:43	01:06	Blank Spike
OP93736-MS	6G34899.D	05/10/16	11:00	01:23	Matrix Spike
OP93736-MSD	6G34900.D	05/10/16	11:16	01:39	Matrix Spike Duplicate
JC19823-1	6G34901.D	05/10/16	11:33	01:56	(used for QC only; not part of job JC19644)
ZZZZZZ	6G34902.D	05/10/16	11:49	02:12	(unrelated sample)
ZZZZZZ	6G34903.D	05/10/16	12:06	02:29	(unrelated sample)
ZZZZZZ	6G34904.D	05/10/16	12:22	02:45	(unrelated sample)
ZZZZZZ	6G34905.D	05/10/16	12:38	03:01	(unrelated sample)
JC19644-4	6G34906.D	05/10/16	12:55	03:18	RA-11 (10-11)
JC19644-5	6G34907.D	05/10/16	13:11	03:34	RA-10 (5.5-6.5)

GC Identification Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G4G1782-CC1778	**Injection Date:**	05/06/16
Lab File ID:	4G67943.D	**Injection Time:**	07:57
Instrument ID:	GC4G	**Method:**	SW846 8081B

Sample ID:	OP93665-BS1	**Injection Date:**	05/06/16
Lab File ID:	4G67948.D	**Injection Time:**	09:13
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1	4.43	4.43	0.16		ug/l	6.5
Aldrin	2 [a]	5.45	5.45	0.15		ug/l	
alpha-BHC	1	3.15	3.15	0.16		ug/l	6.5
alpha-BHC	2 [a]	3.87	3.87	0.15		ug/l	
beta-BHC	1	3.60	3.60	0.17		ug/l	12.5
beta-BHC	2 [a]	4.44	4.44	0.15		ug/l	
delta-BHC	1	4.06	4.06	0.17		ug/l	19.4
delta-BHC	2 [a]	4.87	4.87	0.14		ug/l	
gamma-BHC (Lindane)	1	3.49	3.49	0.17		ug/l	12.5
gamma-BHC (Lindane)	2 [a]	4.34	4.34	0.15		ug/l	
alpha-Chlordane	1	5.56	5.56	0.16		ug/l	6.5
alpha-Chlordane	2 [a]	6.85	6.85	0.15		ug/l	
gamma-Chlordane	1	5.38	5.38	0.17		ug/l	6.1
gamma-Chlordane	2 [a]	6.61	6.61	0.16		ug/l	
Dieldrin	1	6.08	6.08	0.18		ug/l	11.8
Dieldrin	2 [a]	7.40	7.40	0.16		ug/l	
4,4'-DDD	1	6.57	6.56	0.16		ug/l	6.5
4,4'-DDD	2 [a]	8.08	8.08	0.15		ug/l	
4,4'-DDE	1 [a]	5.69	5.68	0.14		ug/l	6.9
4,4'-DDE	2	7.11	7.10	0.15		ug/l	
4,4'-DDT	1	6.99	6.99	0.19		ug/l	11.1
4,4'-DDT	2 [a]	8.62	8.62	0.17		ug/l	
Endrin	1	6.42	6.42	0.17		ug/l	6.1
Endrin	2 [a]	7.92	7.92	0.16		ug/l	
Endosulfan sulfate	1	8.09	8.08	0.18		ug/l	11.8
Endosulfan sulfate	2 [a]	9.33	9.33	0.16		ug/l	
Endrin aldehyde	1	7.39	7.39	0.17		ug/l	6.1
Endrin aldehyde	2 [a]	8.85	8.85	0.16		ug/l	
Endrin ketone	1	8.55	8.55	0.18		ug/l	11.8
Endrin ketone	2 [a]	10.19	10.19	0.16		ug/l	
Endosulfan-I	1	5.74	5.74	0.17		ug/l	12.5
Endosulfan-I	2 [a]	6.95	6.95	0.15		ug/l	
Endosulfan-II	1	6.76	6.76	0.18		ug/l	11.8
Endosulfan-II	2 [a]	8.28	8.28	0.16		ug/l	
Heptachlor	1 [a]	3.82	3.81	0.15		ug/l	0.0
Heptachlor	2	4.97	4.97	0.15		ug/l	
Heptachlor epoxide	1	5.20	5.19	0.17		ug/l	6.1
Heptachlor epoxide	2 [a]	6.32	6.32	0.16		ug/l	
Methoxychlor	1	7.80	7.80	0.20		ug/l	16.2
Methoxychlor	2 [a]	9.83	9.83	0.17		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G1007-CC987	**Injection Date:**	05/10/16
Lab File ID:	6G34895.D	**Injection Time:**	09:53
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP93736-BS1	**Injection Date:**	05/10/16
Lab File ID:	6G34898.D	**Injection Time:**	10:43
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	3.68	3.68	18.1		ug/kg	2.2
Aldrin	2	4.69	4.69	18.5		ug/kg	
alpha-BHC	1	2.48	2.48	17.9		ug/kg	0.0
alpha-BHC	2 [a]	3.16	3.16	17.9		ug/kg	
beta-BHC	1	2.88	2.88	17.9		ug/kg	4.0
beta-BHC	2 [a]	3.70	3.70	17.2		ug/kg	
delta-BHC	1	3.07	3.07	16.3		ug/kg	1.2
delta-BHC	2 [a]	4.12	4.12	16.1		ug/kg	
gamma-BHC (Lindane)	1	2.80	2.80	18.1		ug/kg	0.6
gamma-BHC (Lindane)	2 [a]	3.61	3.61	18.0		ug/kg	
alpha-Chlordane	1 [a]	4.78	4.78	18.3		ug/kg	0.5
alpha-Chlordane	2	6.12	6.12	18.4		ug/kg	
gamma-Chlordane	1 [a]	4.60	4.60	18.2		ug/kg	1.1
gamma-Chlordane	2	5.88	5.87	18.4		ug/kg	
Dieldrin	1	5.30	5.30	19.1		ug/kg	2.1
Dieldrin	2 [a]	6.69	6.69	18.7		ug/kg	
4,4'-DDD	1	5.79	5.79	19.0		ug/kg	1.1
4,4'-DDD	2 [a]	7.45	7.45	18.8		ug/kg	
4,4'-DDE	1	4.91	4.91	19.2		ug/kg	1.6
4,4'-DDE	2 [a]	6.42	6.42	18.9		ug/kg	
4,4'-DDT	1 [a]	6.24	6.24	17.1		ug/kg	6.2
4,4'-DDT	2	8.03	8.03	18.2		ug/kg	
Endrin	1	5.64	5.64	19.5		ug/kg	1.0
Endrin	2 [a]	7.23	7.23	19.3		ug/kg	
Endosulfan sulfate	1	7.39	7.39	18.6		ug/kg	5.0
Endosulfan sulfate	2 [a]	8.75	8.75	17.7		ug/kg	
Endrin aldehyde	1	6.65	6.65	18.0		ug/kg	1.1
Endrin aldehyde	2 [a]	8.24	8.24	17.8		ug/kg	
Endosulfan-I	1 [a]	4.96	4.96	17.6		ug/kg	1.7
Endosulfan-I	2	6.22	6.22	17.9		ug/kg	
Endosulfan-II	1	5.98	5.98	18.6		ug/kg	3.3
Endosulfan-II	2 [a]	7.61	7.61	18.0		ug/kg	
Heptachlor	1	3.33	3.32	17.7		ug/kg	4.6
Heptachlor	2 [a]	4.22	4.22	16.9		ug/kg	
Heptachlor epoxide	1 [a]	4.42	4.42	18.1		ug/kg	1.1
Heptachlor epoxide	2	5.57	5.57	18.3		ug/kg	
Methoxychlor	1 [a]	7.11	7.11	17.1		ug/kg	2.9
Methoxychlor	2	9.40	9.40	17.6		ug/kg	
Endrin ketone	1	7.86	7.86	18.8		ug/kg	3.8
Endrin ketone	2 [a]	9.80	9.80	18.1		ug/kg	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G4G1782-CC1778	**Injection Date:**	05/06/16
Lab File ID:	4G67994.D	**Injection Time:**	20:15
Instrument ID:	GC4G	**Method:**	SW846 8081B

Sample ID:	OP93665-MS	**Injection Date:**	05/06/16
Lab File ID:	4G67996.D	**Injection Time:**	20:46
Client ID:	Matrix Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	4.43	4.43	0.14		ug/l	0.0
Aldrin	2	5.45	5.46	0.14		ug/l	
alpha-BHC	1 [a]	3.16	3.16	0.15		ug/l	6.9
alpha-BHC	2	3.86	3.87	0.14		ug/l	
beta-BHC	1 [a]	3.63	3.63	0.17		ug/l	6.1
beta-BHC	2	4.44	4.44	0.16		ug/l	
delta-BHC	1 [a]	4.06	4.06	0.15		ug/l	0.0
delta-BHC	2	4.87	4.87	0.15		ug/l	
gamma-BHC (Lindane)	1 [a]	3.51	3.51	0.15		ug/l	0.0
gamma-BHC (Lindane)	2	4.34	4.34	0.15		ug/l	
alpha-Chlordane	1 [a]	5.56	5.56	0.15		ug/l	0.0
alpha-Chlordane	2	6.85	6.85	0.15		ug/l	
gamma-Chlordane	1 [a]	5.38	5.38	0.16		ug/l	6.5
gamma-Chlordane	2	6.62	6.61	0.15		ug/l	
Dieldrin	1 [a]	6.08	6.08	0.17		ug/l	6.1
Dieldrin	2	7.40	7.40	0.16		ug/l	
4,4'-DDD	1 [a]	6.60	6.60	0.14		ug/l	6.9
4,4'-DDD	2	8.08	8.08	0.15		ug/l	
4,4'-DDE	1 [a]	5.72	5.72	0.094		ug/l	39.3
4,4'-DDE	2	7.11	7.11	0.14		ug/l	
4,4'-DDT	1 [a]	7.01	7.01	0.12		ug/l	8.0
4,4'-DDT	2	8.62	8.62	0.13		ug/l	
Endrin	1 [a]	6.42	6.42	0.15		ug/l	0.0
Endrin	2	7.92	7.92	0.15		ug/l	
Endosulfan sulfate	1 [a]	8.10	8.10	0.17		ug/l	6.1
Endosulfan sulfate	2	9.33	9.33	0.16		ug/l	
Endrin aldehyde	1 [a]	7.40	7.40	0.18		ug/l	5.7
Endrin aldehyde	2	8.86	8.86	0.17		ug/l	
Endrin ketone	1 [a]	8.56	8.56	0.18		ug/l	5.7
Endrin ketone	2	10.19	10.19	0.17		ug/l	
Endosulfan-I	1 [a]	5.74	5.74	0.18		ug/l	18.2
Endosulfan-I	2	6.95	6.95	0.15		ug/l	
Endosulfan-II	1 [a]	6.77	6.77	0.19		ug/l	17.1
Endosulfan-II	2	8.28	8.28	0.16		ug/l	
Heptachlor	1 [a]	3.85	3.85	0.14		ug/l	0.0
Heptachlor	2	4.97	4.97	0.14		ug/l	
Heptachlor epoxide	1 [a]	5.20	5.20	0.17		ug/l	6.1
Heptachlor epoxide	2	6.32	6.32	0.16		ug/l	
Methoxychlor	1 [a]	7.83	7.83	0.13		ug/l	7.4
Methoxychlor	2	9.83	9.84	0.14		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G1007-CC987	**Injection Date:**	05/10/16
Lab File ID:	6G34895.D	**Injection Time:**	09:53
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP93736-MS	**Injection Date:**	05/10/16
Lab File ID:	6G34899.D	**Injection Time:**	11:00
Client ID:	Matrix Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	3.68	3.68	15.2		ug/kg	2.0
Aldrin	2	4.69	4.69	15.5		ug/kg	
alpha-BHC	1 [a]	2.48	2.48	14.8		ug/kg	0.7
alpha-BHC	2	3.16	3.16	14.9		ug/kg	
beta-BHC	1 [a]	2.88	2.88	15.0		ug/kg	4.1
beta-BHC	2	3.71	3.70	14.4		ug/kg	
delta-BHC	1 [a]	3.07	3.07	13.6		ug/kg	2.2
delta-BHC	2	4.12	4.12	13.3		ug/kg	
gamma-BHC (Lindane)	1 [a]	2.80	2.80	15.0		ug/kg	0.0
gamma-BHC (Lindane)	2	3.61	3.61	15.0		ug/kg	
alpha-Chlordane	1 [a]	4.78	4.78	15.5		ug/kg	0.6
alpha-Chlordane	2	6.12	6.12	15.6		ug/kg	
gamma-Chlordane	1 [a]	4.60	4.60	15.3		ug/kg	1.9
gamma-Chlordane	2	5.87	5.87	15.6		ug/kg	
Dieldrin	1 [a]	5.30	5.30	15.8		ug/kg	0.6
Dieldrin	2	6.69	6.69	15.7		ug/kg	
4,4'-DDD	1 [a]	5.79	5.79	15.8		ug/kg	0.6
4,4'-DDD	2	7.45	7.45	15.7		ug/kg	
4,4'-DDE	1 [a]	4.91	4.91	15.9		ug/kg	1.3
4,4'-DDE	2	6.42	6.42	15.7		ug/kg	
4,4'-DDT	1 [a]	6.24	6.24	14.5		ug/kg	4.7
4,4'-DDT	2	8.03	8.03	15.2		ug/kg	
Endrin	1 [a]	5.64	5.64	17.0		ug/kg	4.8
Endrin	2	7.23	7.23	16.2		ug/kg	
Endosulfan sulfate	1 [a]	7.39	7.39	15.8		ug/kg	2.6
Endosulfan sulfate	2	8.75	8.75	15.4		ug/kg	
Endrin aldehyde	1 [a]	6.65	6.65	15.1		ug/kg	2.0
Endrin aldehyde	2	8.24	8.24	14.8		ug/kg	
Endosulfan-I	1 [a]	4.96	4.96	14.8		ug/kg	2.7
Endosulfan-I	2	6.22	6.22	15.2		ug/kg	
Endosulfan-II	1 [a]	5.99	5.98	15.5		ug/kg	2.0
Endosulfan-II	2	7.61	7.61	15.2		ug/kg	
Heptachlor	1 [a]	3.32	3.32	14.9		ug/kg	4.1
Heptachlor	2	4.22	4.22	14.3		ug/kg	
Heptachlor epoxide	1 [a]	4.42	4.42	15.0		ug/kg	2.0
Heptachlor epoxide	2	5.57	5.57	15.3		ug/kg	
Methoxychlor	1 [a]	7.11	7.11	14.6		ug/kg	2.0
Methoxychlor	2	9.40	9.40	14.9		ug/kg	
Endrin ketone	1 [a]	7.86	7.86	16.1		ug/kg	3.2
Endrin ketone	2	9.80	9.80	15.6		ug/kg	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G4G1782-CC1778	**Injection Date:**	05/06/16
Lab File ID:	4G67994.D	**Injection Time:**	20:15
Instrument ID:	GC4G	**Method:**	SW846 8081B

Sample ID:	OP93665-MSD	**Injection Date:**	05/06/16
Lab File ID:	4G67997.D	**Injection Time:**	21:01
Client ID:	Matrix Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	4.43	4.43	0.13		ug/l	7.4
Aldrin	2	5.46	5.46	0.14		ug/l	
alpha-BHC	1 [a]	3.16	3.16	0.14		ug/l	0.0
alpha-BHC	2	3.87	3.87	0.14		ug/l	
beta-BHC	1 [a]	3.63	3.63	0.17		ug/l	0.0
beta-BHC	2	4.44	4.44	0.17		ug/l	
delta-BHC	1 [a]	4.06	4.06	0.15		ug/l	0.0
delta-BHC	2	4.87	4.87	0.15		ug/l	
gamma-BHC (Lindane)	1 [a]	3.51	3.51	0.15		ug/l	6.5
gamma-BHC (Lindane)	2	4.34	4.34	0.16		ug/l	
alpha-Chlordane	1 [a]	5.56	5.56	0.15		ug/l	0.0
alpha-Chlordane	2	6.85	6.85	0.15		ug/l	
gamma-Chlordane	1 [a]	5.38	5.38	0.16		ug/l	6.5
gamma-Chlordane	2	6.62	6.61	0.15		ug/l	
Dieldrin	1 [a]	6.08	6.08	0.16		ug/l	0.0
Dieldrin	2	7.40	7.40	0.16		ug/l	
4,4'-DDD	1 [a]	6.60	6.60	0.14		ug/l	6.9
4,4'-DDD	2	8.08	8.08	0.15		ug/l	
4,4'-DDE	1 [a]	5.72	5.72	0.088		ug/l	45.6
4,4'-DDE	2	7.11	7.11	0.14		ug/l	
4,4'-DDT	1 [a]	7.01	7.01	0.12		ug/l	8.0
4,4'-DDT	2	8.63	8.62	0.13		ug/l	
Endrin	1 [a]	6.42	6.42	0.15		ug/l	0.0
Endrin	2	7.92	7.92	0.15		ug/l	
Endosulfan sulfate	1 [a]	8.10	8.10	0.17		ug/l	6.1
Endosulfan sulfate	2	9.33	9.33	0.16		ug/l	
Endrin aldehyde	1 [a]	7.40	7.40	0.19		ug/l	5.4
Endrin aldehyde	2	8.86	8.86	0.18		ug/l	
Endrin ketone	1 [a]	8.56	8.56	0.18		ug/l	5.7
Endrin ketone	2	10.19	10.19	0.17		ug/l	
Endosulfan-I	1 [a]	5.74	5.74	0.19		ug/l	23.5
Endosulfan-I	2	6.95	6.95	0.15		ug/l	
Endosulfan-II	1 [a]	6.77	6.77	0.19		ug/l	17.1
Endosulfan-II	2	8.28	8.28	0.16		ug/l	
Heptachlor	1 [a]	3.85	3.85	0.14		ug/l	0.0
Heptachlor	2	4.97	4.97	0.14		ug/l	
Heptachlor epoxide	1 [a]	5.20	5.20	0.16		ug/l	0.0
Heptachlor epoxide	2	6.32	6.32	0.16		ug/l	
Methoxychlor	1 [a]	7.83	7.83	0.12		ug/l	15.4
Methoxychlor	2	9.84	9.84	0.14		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G1007-CC987	**Injection Date:**	05/10/16
Lab File ID:	6G34895.D	**Injection Time:**	09:53
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP93736-MSD	**Injection Date:**	05/10/16
Lab File ID:	6G34900.D	**Injection Time:**	11:16
Client ID:	Matrix Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	3.68	3.68	18.8		ug/kg	0.5
Aldrin	2	4.69	4.69	18.9		ug/kg	
alpha-BHC	1 [a]	2.48	2.48	18.6		ug/kg	0.5
alpha-BHC	2	3.16	3.16	18.5		ug/kg	
beta-BHC	1 [a]	2.88	2.88	18.7		ug/kg	5.5
beta-BHC	2	3.70	3.70	17.7		ug/kg	
delta-BHC	1 [a]	3.07	3.07	16.8		ug/kg	3.0
delta-BHC	2	4.12	4.12	16.3		ug/kg	
gamma-BHC (Lindane)	1 [a]	2.80	2.80	18.7		ug/kg	0.0
gamma-BHC (Lindane)	2	3.61	3.61	18.7		ug/kg	
alpha-Chlordane	1 [a]	4.78	4.78	19.2		ug/kg	0.0
alpha-Chlordane	2	6.12	6.12	19.2		ug/kg	
gamma-Chlordane	1 [a]	4.60	4.60	18.9		ug/kg	0.5
gamma-Chlordane	2	5.87	5.87	19.0		ug/kg	
Dieldrin	1 [a]	5.30	5.30	19.9		ug/kg	3.1
Dieldrin	2	6.69	6.69	19.3		ug/kg	
4,4'-DDD	1 [a]	5.79	5.79	19.4		ug/kg	1.6
4,4'-DDD	2	7.45	7.45	19.1		ug/kg	
4,4'-DDE	1 [a]	4.91	4.91	19.6		ug/kg	2.1
4,4'-DDE	2	6.42	6.42	19.2		ug/kg	
4,4'-DDT	1 [a]	6.24	6.24	17.7		ug/kg	5.0
4,4'-DDT	2	8.03	8.03	18.6		ug/kg	
Endrin	1 [a]	5.64	5.64	19.9		ug/kg	0.5
Endrin	2	7.23	7.23	19.8		ug/kg	
Endosulfan sulfate	1 [a]	7.39	7.39	19.0		ug/kg	3.8
Endosulfan sulfate	2	8.75	8.75	18.3		ug/kg	
Endrin aldehyde	1 [a]	6.65	6.65	18.2		ug/kg	1.1
Endrin aldehyde	2	8.24	8.24	18.0		ug/kg	
Endosulfan-I	1 [a]	4.96	4.96	18.2		ug/kg	2.2
Endosulfan-I	2	6.22	6.22	18.6		ug/kg	
Endosulfan-II	1 [a]	5.98	5.98	18.4		ug/kg	1.1
Endosulfan-II	2	7.61	7.61	18.2		ug/kg	
Heptachlor	1 [a]	3.32	3.32	18.6		ug/kg	5.0
Heptachlor	2	4.22	4.22	17.7		ug/kg	
Heptachlor epoxide	1 [a]	4.42	4.42	18.5		ug/kg	2.1
Heptachlor epoxide	2	5.57	5.57	18.9		ug/kg	
Methoxychlor	1 [a]	7.11	7.11	17.7		ug/kg	1.7
Methoxychlor	2	9.40	9.40	18.0		ug/kg	
Endrin ketone	1 [a]	7.86	7.86	19.5		ug/kg	3.7
Endrin ketone	2	9.80	9.80	18.8		ug/kg	

(a) QC results reported from this column.

Semivolatile Surrogate Recovery Summary

Job Number: JC19644
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]
JC19644-1	4G67960.D	67	68	107	95
JC19644-2	4G67961.D	62	57	107	88
JC19644-3	4G67962.D	64	64	97	85
OP93665-BS1	4G67948.D	79	76	102	85
OP93665-MB1	4G67947.D	81	78	95	81
OP93665-MS	4G67996.D	65	66	96	90
OP93665-MSD	4G67997.D	65	69	94	90

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: JC19644
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]
JC19644-4	6G34906.D	109	107	106	120
JC19644-5	6G34907.D	104	107	109	119
OP93736-BS1	6G34898.D	109	108	107	122
OP93736-MB1	6G34897.D	89	89	88	100
OP93736-MS	6G34899.D	85	85	85	97
OP93736-MSD	6G34900.D	101	101	98	112

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: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G1007-CC987	**Injection Date:**	05/10/16
Lab File ID:	6G34895.D	**Injection Time:**	09:53
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
OP93736-MB1	6G34897.D	05/10/16	10:27	1.97	2.46	9.90	11.74
OP93736-BS1	6G34898.D	05/10/16	10:43	1.97	2.46	9.89	11.74
OP93736-MS	6G34899.D	05/10/16	11:00	1.97	2.46	9.89	11.74
OP93736-MSD	6G34900.D	05/10/16	11:16	1.97	2.46	9.89	11.74
JC19823-1	6G34901.D	05/10/16	11:33	1.97	2.46	9.89	11.74
ZZZZZZ	6G34902.D	05/10/16	11:49	1.97	2.46	9.89	11.74
ZZZZZZ	6G34903.D	05/10/16	12:06	1.97	2.46	9.89	11.74
ZZZZZZ	6G34904.D	05/10/16	12:22	1.97	2.46	9.90	11.74
ZZZZZZ	6G34905.D	05/10/16	12:38	1.97	2.46	9.89	11.74
JC19644-4	6G34906.D	05/10/16	12:55	1.97	2.46	9.89	11.74
JC19644-5	6G34907.D	05/10/16	13:11	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

GC Surrogate Retention Time Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G4G1782-CC1778	**Injection Date:**	05/06/16
Lab File ID:	4G67943.D	**Injection Time:**	07:57
Instrument ID:	GC4G	**Method:**	SW846 8081B

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	2.58	3.11	10.24	11.64

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP93657-MB1	4G67945.D	05/06/16	08:27	2.58	3.10	10.24	11.65
OP93657-BS1	4G67946.D	05/06/16	08:42	2.58	3.10	10.24	11.65
OP93665-MB1	4G67947.D	05/06/16	08:57	2.58	3.10	10.24	11.65
OP93665-BS1	4G67948.D	05/06/16	09:13	2.58	3.10	10.24	11.65
ZZZZZZ	4G67950.D	05/06/16	09:28	2.58	3.10	10.24	11.65
ZZZZZZ	4G67951.D	05/06/16	09:43	2.58	3.10	10.24	11.65
JC19644-1	4G67960.D	05/06/16	09:58	2.58	3.10	10.25	11.65
JC19644-2	4G67961.D	05/06/16	10:13	2.58	3.10	10.24	11.65
JC19644-3	4G67962.D	05/06/16	10:28	2.58	3.10	10.24	11.65
ZZZZZZ	4G67952.D	05/06/16	10:44	2.58	3.11	10.24	11.64
OP93683-MB1	4G67963.D	05/06/16	11:10	2.60	3.10	10.25	11.65
OP93683-BS1	4G67964.D	05/06/16	11:25	2.59	3.11	10.24	11.65
OP93683-BS13	4G67965.D	05/06/16	11:40	2.59	3.11	10.24	11.65
JC19505-1	4G67966.D	05/06/16	11:55	2.59	3.11	10.24	11.65
ZZZZZZ	4G67967.D	05/06/16	12:11	2.59	3.11	10.24	11.65
ZZZZZZ	4G67968.D	05/06/16	12:26	2.59	3.11	10.24	11.65
ZZZZZZ	4G67969.D	05/06/16	12:41	2.59	3.11	10.24	11.64
ZZZZZZ	4G67970.D	05/06/16	12:56	2.60	3.11	10.24	11.64
JC19559-1	4G67971.D	05/06/16	13:19	2.60	3.10	10.25	11.65

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: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G4G1782-CC1778	**Injection Date:**	05/06/16
Lab File ID:	4G67994.D	**Injection Time:**	20:15
Instrument ID:	GC4G	**Method:**	SW846 8081B

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	2.60	3.10	10.25	11.64

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP93665-MS	4G67996.D	05/06/16	20:46	2.60	3.10	10.25	11.64
OP93665-MSD	4G67997.D	05/06/16	21:01	2.60	3.10	10.25	11.64
OP93683-MS	4G67998.D	05/06/16	21:16	2.59	3.10	10.25	11.64
OP93683-MSD	4G67999.D	05/06/16	21:31	2.60	3.11	10.25	11.64
ZZZZZZ	4G68000.D	05/06/16	21:46	2.60	3.11	10.24	11.64
ZZZZZZ	4G68001.D	05/06/16	22:01	2.58	3.10	10.23	11.64
ZZZZZZ	4G68002.D	05/06/16	22:16	2.58	3.11	10.24	11.64
ZZZZZZ	4G68003.D	05/06/16	22:32	2.58	3.11	10.24	11.64
ZZZZZZ	4G68004.D	05/06/16	22:47	2.58	3.11	10.24	11.64
ZZZZZZ	4G68005.D	05/06/16	23:02	2.58	3.11	10.24	11.64
ZZZZZZ	4G68006.D	05/06/16	23:17	2.58	3.11	10.24	11.64
ZZZZZZ	4G68007.D	05/06/16	23:32	2.58	3.10	10.24	11.64
ZZZZZZ	4G68008.D	05/06/16	23:47	2.58	3.11	10.24	11.64

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: JC19644
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: JC19644 **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: JC19644 **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: JC19644 **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: JC19644
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
```

Initial Calibration Verification

Job Number: JC19644 **Sample:** G4G1778-ICV1778
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4G67844.D
Project: BMSMC, Building 5 Area, PR

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: JC19644 **Sample:** G4G1778-ICV1778
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4G67845.D
Project: BMSMC, Building 5 Area, PR

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: JC19644 **Sample:** G4G1782-CC1778
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4G67943.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\4G1782\4g67943.D\ECD1A.ch  Vial: 2
Signal #2 : C:\msdchem\1\DATA\4G1782\4g67943.D\ECD2B.ch
Acq On    :  6 May 2016   7:57 am                    Operator: brittanp
Sample    : cc1778-25                                Inst    : GC4G
Misc      : op93644,g4g1782,15.5,,,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  : Fri May 06 09:21:19 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	-0.01	1.76- 1.82
2	SAB	Tetrachloro-m-xylene	0.862	0.861	0.1	101	-0.01	2.55- 2.61
3	A	alpha-BHC	1.180	1.173	0.6	102	0.00	3.12- 3.18
4	MA	gamma-BHC	1.032	1.014	1.7	100	0.00	3.46- 3.52
5	MA	Heptachlor	0.968	1.021	-5.5	110	0.00	3.78- 3.84
6	B	beta-BHC	0.494	0.530	-7.3	110	0.00	3.57- 3.63
7	B	delta-BHC	0.940	1.019	-8.4	113	-0.01	4.03- 4.09
8	MB	Aldrin	0.988	0.972	1.6	101	0.00	4.40- 4.46
9	B	Heptachlor Epoxide	0.883	0.846	4.2	99	-0.01	5.16- 5.22
10	B	gamma-Chlordane	0.883	0.848	4.0	98	-0.01	5.35- 5.41
11	B	alpha-Chlordane	0.952	0.891	6.4	100	-0.01	5.53- 5.59
12	A	Endosulfan I	0.979	0.959	2.0	103	-0.01	5.71- 5.77
13	B	4,4'-DDE	0.882	0.790	10.4	98	0.00	5.65- 5.71
14	MA	Dieldrin	0.928	0.921	0.8	100	-0.01	6.05- 6.11
15	MA	Endrin	0.883	0.864	2.2	102	-0.01	6.39- 6.45
16	A	4,4'-DDD	0.748	0.658	12.0	91	0.00	6.53- 6.59
17	B	Endosulfan II	0.850	0.847	0.4	100	-0.01	6.73- 6.79
		----------	True	Calc.	% Drift		----------	
18	MA	4,4'-DDT	25.000	28.149	-12.6	121	-0.01	6.96- 7.02
		----------	AvgRF	CCRF	% Dev		----------	
19	B	Endrin Aldehyde	0.718	0.716	0.3	103	-0.02	7.36- 7.42
20	B	Endosulfan Sulfate	0.779	0.825	-5.9	109	-0.02	8.05- 8.11
21	A	Methoxychlor	0.333	0.393	-18.0	117	-0.01	7.77- 7.83
22		Mirex	0.777	0.794	-2.2	104	-0.02	7.95- 8.01
23	B	Endrin Ketone	0.901	0.965	-7.1	107	-0.02	8.52- 8.58
24	SA	Decachlorobiphenyl	0.812	0.899	-10.7	112	-0.01	10.21-10.27

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	103	0.00	2.04- 2.10
2	SAB	Tetrachloro-m-xylene	0.881	0.883	-0.2	103	0.00	3.08- 3.14
3	A	alpha-BHC	1.287	1.233	4.2	101	0.00	3.84- 3.90
4	MA	gamma-BHC	1.144	1.105	3.4	101	0.00	4.31- 4.37
5	MA	Heptachlor	1.179	1.175	0.3	105	-0.01	4.94- 5.00
6	B	beta-BHC	0.518	0.495	4.4	101	0.00	4.41- 4.47
7	B	delta-BHC	1.068	1.084	-1.5	105	-0.01	4.84- 4.90
8	MB	Aldrin	1.161	1.102	5.1	102	-0.01	5.42- 5.48

Continuing Calibration Summary

Job Number: JC19644 **Sample:** G4G1782-CC1778
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4G67943.D
Project: BMSMC, Building 5 Area, PR

9	B	Heptachlor Epoxide	1.049	0.994	5.2	102	-0.01	6.29- 6.35
10	B	gamma-Chlordane	1.013	0.990	2.3	102	-0.01	6.58- 6.64
11	B	alpha-Chlordane	1.018	0.966	5.1	102	-0.01	6.82- 6.88
12	A	Endosulfan I	0.972	0.936	3.7	102	-0.01	6.92- 6.98
13	B	4,4'-DDE	1.015	0.993	2.2	102	-0.02	7.07- 7.13
14	MA	Dieldrin	1.013	1.002	1.1	103	-0.02	7.37- 7.43
15	MA	Endrin	0.903	0.908	-0.6	105	-0.02	7.89- 7.95
16	A	4,4'-DDD	0.820	0.785	4.3	100	-0.02	8.05- 8.11
17	B	Endosulfan II	0.893	0.874	2.1	103	-0.02	8.25- 8.31
18	MA	4,4'-DDT	0.717	0.781	-8.9	113	-0.02	8.59- 8.65
19	B	Endrin Aldehyde	0.678	0.667	1.6	103	-0.02	8.82- 8.88
20	B	Endosulfan Sulfate	0.747	0.768	-2.8	109	-0.02	9.30- 9.36
21	A	Methoxychlor	0.390	0.414	-6.2	113	-0.01	9.80- 9.86
22		Mirex	0.627	0.627	0.0	108	-0.01	10.12-10.18
23	B	Endrin Ketone	0.820	0.856	-4.4	110	-0.01	10.16-10.22
24	SA	Decachlorobiphenyl	0.625	0.626	-0.2	106	-0.01	11.61-11.67

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4g67836.D 4PST1778.M Fri May 06 09:44:40 2016 RPT1

10.9.6

10

Continuing Calibration Summary

Job Number: JC19644 **Sample:** G4G1782-CC1778
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4G67973.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\4G1782\4g67973.D\ECD1A.ch  Vial: 4
Signal #2 : C:\msdchem\1\DATA\4G1782\4g67973.D\ECD2B.ch
Acq On    :  6 May 2016   2:57 pm                    Operator: dharas
Sample    : cc1778-50                                Inst    : GC4G
Misc      : op93657,g4g1782,100,,,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  : Fri May 06 15:02:23 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	0.03	1.79- 1.85
2	SAB	Tetrachloro-m-xylene	0.862	0.987	-14.5	114	0.02	2.56- 2.62
3	A	alpha-BHC	1.180	1.283	-8.7	103	0.00	3.13- 3.19
4	MA	gamma-BHC	1.032	1.124	-8.9	102	0.00	3.47- 3.53
5	MA	Heptachlor	0.968	1.118	-15.5	104	0.01	3.79- 3.85
6	B	beta-BHC	0.494	0.542	-9.7	102	0.01	3.58- 3.64
7	B	delta-BHC	0.940	0.980	-4.3	98	0.00	4.03- 4.09
8	MB	Aldrin	0.988	1.072	-8.5	103	0.00	4.40- 4.46
9	B	Heptachlor Epoxide	0.883	0.950	-7.6	101	0.00	5.17- 5.23
10	B	gamma-Chlordane	0.883	0.959	-8.6	101	0.00	5.35- 5.41
11	B	alpha-Chlordane	0.952	0.983	-3.3	102	0.00	5.53- 5.59
12	A	Endosulfan I	0.979	1.065	-8.8	106	0.00	5.71- 5.77
13	B	4,4'-DDE	0.882	0.886	-0.5	99	0.00	5.66- 5.72
14	MA	Dieldrin	0.928	1.056	-13.8	104	0.00	6.05- 6.11
15	MA	Endrin	0.883	1.000	-13.3	107	0.00	6.39- 6.45
16	A	4,4'-DDD	0.748	0.840	-12.3	105	0.00	6.54- 6.60
17	B	Endosulfan II	0.850	1.016	-19.5	110	0.00	6.73- 6.79
		----------	True	Calc.	% Drift	----------		
18	MA	4,4'-DDT	50.000	43.374	13.3	84	0.00	6.96- 7.02
		----------	AvgRF	CCRF	% Dev	----------		
19	B	Endrin Aldehyde	0.718	0.806	-12.3	106	0.00	7.37- 7.43
20	B	Endosulfan Sulfate	0.779	0.926	-18.9	113	0.00	8.06- 8.12
21	A	Methoxychlor	0.333	0.345	-3.6	93	0.00	7.78- 7.84
22		Mirex	0.777	0.847	-9.0	107	0.00	7.95- 8.01
23	B	Endrin Ketone	0.901	1.022	-13.4	104	0.00	8.52- 8.58
24	SA	Decachlorobiphenyl	0.812	0.941	-15.9	117	0.00	10.21-10.27
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	95	0.03	1.72- 1.92
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	98	0.03	1.72- 1.92
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: JC19644 **Sample:** G4G1782-CC1778
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4G67973.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	0.02	2.06- 2.12
2	SAB	Tetrachloro-m-xylene	0.881	0.910	-3.3	103	0.00	3.08- 3.14
3	A	alpha-BHC	1.287	1.356	-5.4	103	0.00	3.84- 3.90
4	MA	gamma-BHC	1.144	1.214	-6.1	103	0.00	4.32- 4.38
5	MA	Heptachlor	1.179	1.228	-4.2	104	0.00	4.94- 5.00
6	B	beta-BHC	0.518	0.536	-3.5	104	0.00	4.41- 4.47
7	B	delta-BHC	1.068	1.186	-11.0	107	0.00	4.84- 4.90
8	MB	Aldrin	1.161	1.181	-1.7	103	0.00	5.43- 5.49
9	B	Heptachlor Epoxide	1.049	1.060	-1.0	103	0.00	6.29- 6.35
10	B	gamma-Chlordane	1.013	1.063	-4.9	104	0.00	6.59- 6.65
11	B	alpha-Chlordane	1.018	1.031	-1.3	104	0.00	6.82- 6.88
12	A	Endosulfan I	0.972	1.012	-4.1	105	0.00	6.92- 6.98
13	B	4,4'-DDE	1.015	1.085	-6.9	105	0.00	7.08- 7.14
14	MA	Dieldrin	1.013	1.092	-7.8	105	0.00	7.37- 7.43
15	MA	Endrin	0.903	0.995	-10.2	108	0.00	7.89- 7.95
16	A	4,4'-DDD	0.820	0.868	-5.9	104	0.00	8.05- 8.11
17	B	Endosulfan II	0.893	0.950	-6.4	105	0.00	8.25- 8.31
18	MA	4,4'-DDT	0.717	0.811	-13.1	108	0.00	8.59- 8.65
19	B	Endrin Aldehyde	0.678	0.718	-5.9	106	0.00	8.83- 8.89
20	B	Endosulfan Sulfate	0.747	0.811	-8.6	110	0.00	9.30- 9.36
21	A	Methoxychlor	0.390	0.419	-7.4	110	0.00	9.80- 9.86
22		Mirex	0.627	0.649	-3.5	108	0.00	10.12-10.18
23	B	Endrin Ketone	0.820	0.911	-11.1	109	0.00	10.16-10.22
24	SA	Decachlorobiphenyl	0.625	0.660	-5.6	109	0.00	11.61-11.67
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	96	0.02	1.99- 2.19
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	0.02	1.99- 2.19
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 Fri May 06 18:21:55 2016 RPT1

10.9.7

10

Continuing Calibration Summary

Job Number: JC19644 **Sample:** G4G1782-CC1778
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4G67994.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\4G1782\4g67994.D\ECD1A.ch  Vial: 2
Signal #2 : C:\msdchem\1\DATA\4G1782\4g67994.D\ECD2B.ch
Acq On    :  6 May 2016   8:15 pm                    Operator: dharas
Sample    : cc1778-25                                Inst    : GC4G
Misc      : op93657,g4g1782,100,,,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  : Sat May 07 16:37:23 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	106	0.00	1.78- 1.84
2	SAB	Tetrachloro-m-xylene	0.862	0.851	1.3	105	0.00	2.57- 2.63
3	A	alpha-BHC	1.180	1.135	3.8	104	0.00	3.13- 3.19
4	MA	gamma-BHC	1.032	0.997	3.4	104	0.00	3.48- 3.54
5	MA	Heptachlor	0.968	0.884	8.7	100	0.00	3.82- 3.88
6	B	beta-BHC	0.494	0.439	11.1	96	0.00	3.60- 3.66
7	B	delta-BHC	0.940	0.925	1.6	109	0.00	4.03- 4.09
8	MB	Aldrin	0.988	0.996	-0.8	109	0.00	4.40- 4.46
9	B	Heptachlor Epoxide	0.883	0.937	-6.1	116	0.00	5.17- 5.23
10	B	gamma-Chlordane	0.883	0.945	-7.0	115	0.00	5.35- 5.41
11	B	alpha-Chlordane	0.952	0.942	1.1	111	0.00	5.53- 5.59
12	A	Endosulfan I	0.979	1.252	-27.9#	141	0.00	5.71- 5.77
13	B	4,4'-DDE	0.882	0.487	44.8#	64	0.00	5.69- 5.75
14	MA	Dieldrin	0.928	0.968	-4.3	111	0.00	6.05- 6.11
15	MA	Endrin	0.883	0.784	11.2	98	0.00	6.39- 6.45
16	A	4,4'-DDD	0.748	0.670	10.4	98	0.00	6.57- 6.63
17	B	Endosulfan II	0.850	1.017	-19.6	127	0.00	6.74- 6.80
		----------	True	Calc.	% Drift	----------		
18	MA	4,4'-DDT	25.000	20.058	19.8	86	0.00	6.98- 7.04
		----------	AvgRF	CCRF	% Dev	----------		
19	B	Endrin Aldehyde	0.718	0.805	-12.1	122	0.00	7.37- 7.43
20	B	Endosulfan Sulfate	0.779	0.798	-2.4	111	0.00	8.07- 8.13
21	A	Methoxychlor	0.333	0.241	27.6#	76	0.00	7.80- 7.86
22		Mirex	0.777	0.844	-8.6	117	0.00	7.96- 8.02
23	B	Endrin Ketone	0.901	0.966	-7.2	113	0.00	8.53- 8.59
24	SA	Decachlorobiphenyl	0.812	0.759	6.5	100	0.00	10.22-10.28

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	2.04- 2.10
2	SAB	Tetrachloro-m-xylene	0.881	0.872	1.0	106	0.00	3.07- 3.13
3	A	alpha-BHC	1.287	1.249	3.0	106	0.00	3.84- 3.90
4	MA	gamma-BHC	1.144	1.137	0.6	108	0.00	4.31- 4.37
5	MA	Heptachlor	1.179	1.117	5.3	103	0.00	4.94- 5.00
6	B	beta-BHC	0.518	0.539	-4.1	113	0.00	4.41- 4.47
7	B	delta-BHC	1.068	1.073	-0.5	107	0.00	4.84- 4.90
8	MB	Aldrin	1.161	1.128	2.8	108	0.00	5.43- 5.49

Continuing Calibration Summary

Job Number: JC19644 **Sample:** G4G1782-CC1778
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4G67994.D
Project: BMSMC, Building 5 Area, PR

9	B	Heptachlor Epoxide	1.049	1.042	0.7	110	0.00	6.29- 6.35
10	B	gamma-Chlordane	1.013	1.040	-2.7	111	0.00	6.58- 6.64
11	B	alpha-Chlordane	1.018	1.011	0.7	110	0.00	6.82- 6.88
12	A	Endosulfan I	0.972	0.985	-1.3	111	0.00	6.92- 6.98
13	B	4,4'-DDE	1.015	1.052	-3.6	112	0.00	7.08- 7.14
14	MA	Dieldrin	1.013	1.056	-4.2	112	0.00	7.37- 7.43
15	MA	Endrin	0.903	0.825	8.6	99	0.00	7.89- 7.95
16	A	4,4'-DDD	0.820	0.837	-2.1	110	0.00	8.05- 8.11
17	B	Endosulfan II	0.893	0.930	-4.1	113	0.00	8.25- 8.31
18	MA	4,4'-DDT	0.717	0.663	7.5	99	0.00	8.59- 8.65
19	B	Endrin Aldehyde	0.678	0.748	-10.3	119	0.00	8.83- 8.89
20	B	Endosulfan Sulfate	0.747	0.751	-0.5	110	0.00	9.30- 9.36
21	A	Methoxychlor	0.390	0.335	14.1	94	0.00	9.81- 9.87
22		Mirex	0.627	0.656	-4.6	117	0.00	10.12-10.18
23	B	Endrin Ketone	0.820	0.873	-6.5	116	0.00	10.16-10.22
24	SA	Decachlorobiphenyl	0.625	0.598	4.3	104	0.00	11.61-11.67

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4g67836.D 4PST1778.M Sat May 07 16:56:14 2016 RPT1

10.9.8

10

Continuing Calibration Summary

Job Number: JC19644 **Sample:** G4G1783-CC1778
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4G68010.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\4G1783\4g68010.D\ECD1A.ch  Vial: 4
Signal #2 : C:\msdchem\1\DATA\4G1783\4g68010.D\ECD2B.ch
Acq On    :  7 May 2016   3:13 pm                    Operator: brittanp
Sample    : cc1778-50                                Inst    : GC4G
Misc      : op93683,g4g1783,15.0,,,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  : Sat May 07 16:37:23 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	105	-0.02	1.75- 1.81
2	SAB	Tetrachloro-m-xylene	0.862	0.852	1.2	104	-0.02	2.54- 2.60
3	A	alpha-BHC	1.180	1.240	-5.1	106	-0.02	3.11- 3.17
4	MA	gamma-BHC	1.032	1.049	-1.6	101	-0.01	3.46- 3.52
5	MA	Heptachlor	0.968	1.062	-9.7	105	0.00	3.78- 3.84
6	B	beta-BHC	0.494	0.521	-5.5	104	-0.01	3.56- 3.62
7	B	delta-BHC	0.940	1.045	-11.2	111	-0.02	4.02- 4.08
8	MB	Aldrin	0.988	1.027	-3.9	104	-0.02	4.39- 4.45
9	B	Heptachlor Epoxide	0.883	0.895	-1.4	101	-0.02	5.16- 5.22
10	B	gamma-Chlordane	0.883	0.911	-3.2	102	-0.02	5.34- 5.40
11	B	alpha-Chlordane	0.952	0.939	1.4	104	-0.02	5.52- 5.58
12	A	Endosulfan I	0.979	1.054	-7.7	112	-0.01	5.71- 5.77
13	B	4,4'-DDE	0.882	0.818	7.3	97	0.00	5.65- 5.71
14	MA	Dieldrin	0.928	1.012	-9.1	106	-0.02	6.05- 6.11
15	MA	Endrin	0.883	0.951	-7.7	108	-0.02	6.38- 6.44
16	A	4,4'-DDD	0.748	0.778	-4.0	103	0.00	6.54- 6.60
17	B	Endosulfan II	0.850	0.990	-16.5	114	-0.01	6.72- 6.78
		----------	True	Calc.	% Drift	----------		
18	MA	4,4'-DDT	50.000	55.984	-12.0	121	0.00	6.96- 7.02
		----------	AvgRF	CCRF	% Dev	----------		
19	B	Endrin Aldehyde	0.718	0.775	-7.9	108	-0.01	7.36- 7.42
20	B	Endosulfan Sulfate	0.779	0.893	-14.6	115	-0.01	8.05- 8.11
21	A	Methoxychlor	0.333	0.403	-21.0#	115	0.00	7.77- 7.83
22		Mirex	0.777	0.824	-6.0	111	-0.02	7.95- 8.01
23	B	Endrin Ketone	0.901	1.033	-14.7	112	-0.01	8.52- 8.58
24	SA	Decachlorobiphenyl	0.812	0.905	-11.5	119	-0.01	10.21-10.27

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	102	-0.02	2.02- 2.08
2	SAB	Tetrachloro-m-xylene	0.881	0.914	-3.7	107	-0.02	3.06- 3.12
3	A	alpha-BHC	1.287	1.345	-4.5	105	-0.02	3.83- 3.89
4	MA	gamma-BHC	1.144	1.200	-4.9	105	-0.01	4.31- 4.37
5	MA	Heptachlor	1.179	1.248	-5.9	108	-0.02	4.93- 4.99
6	B	beta-BHC	0.518	0.531	-2.5	105	-0.01	4.40- 4.46
7	B	delta-BHC	1.068	1.187	-11.1	110	-0.01	4.83- 4.89
8	MB	Aldrin	1.161	1.181	-1.7	106	-0.02	5.42- 5.48

Continuing Calibration Summary

Job Number: JC19644 **Sample:** G4G1783-CC1778
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4G68010.D
Project: BMSMC, Building 5 Area, PR

9	B	Heptachlor Epoxide	1.049	1.048	0.1	105	-0.02	6.28- 6.34
10	B	gamma-Chlordane	1.013	1.062	-4.8	106	-0.02	6.58- 6.64
11	B	alpha-Chlordane	1.018	1.030	-1.2	107	-0.02	6.81- 6.87
12	A	Endosulfan I	0.972	1.008	-3.7	107	-0.02	6.92- 6.98
13	B	4,4'-DDE	1.015	1.077	-6.1	107	-0.02	7.07- 7.13
14	MA	Dieldrin	1.013	1.092	-7.8	107	-0.02	7.37- 7.43
15	MA	Endrin	0.903	0.988	-9.4	110	-0.02	7.89- 7.95
16	A	4,4'-DDD	0.820	0.862	-5.1	106	-0.02	8.05- 8.11
17	B	Endosulfan II	0.893	0.949	-6.3	108	-0.02	8.24- 8.30
18	MA	4,4'-DDT	0.717	0.871	-21.5#	119	-0.02	8.59- 8.65
19	B	Endrin Aldehyde	0.678	0.722	-6.5	109	-0.02	8.82- 8.88
20	B	Endosulfan Sulfate	0.747	0.823	-10.2	115	-0.02	9.30- 9.36
21	A	Methoxychlor	0.390	0.441	-13.1	119	-0.01	9.80- 9.86
22		Mirex	0.627	0.657	-4.8	112	-0.02	10.11-10.17
23	B	Endrin Ketone	0.820	0.921	-12.3	113	-0.01	10.16-10.22
24	SA	Decachlorobiphenyl	0.625	0.656	-5.0	111	-0.02	11.61-11.67

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4g67837.D 4PST1778.M Mon May 09 09:15:19 2016 RPT1

10.9.9

10

Initial Calibration Summary

Job Number: JC19644 **Sample:** G6G987-ICC987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34134.D
Project: BMSMC, Building 5 Area, PR

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: JC19644 **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

10.9.10 10

Initial Calibration Verification

Job Number: JC19644 **Sample:** G6G987-ICV987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34140.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\987\6g34140.D\ECD1A.CH     Vial: 13
Signal #2 : C:\msdchem\1\DATA\987\6g34140.D\ECD2B.CH
Acq On    : 14 Apr 2016   6:33 pm                    Operator: dharas
Sample    : icv987-25                                Inst    : HP G1530A
Misc      : op92908,g6g987,6.8,,,10,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\6PST987.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Apr 18 11:27:24 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.28- 1.34
2	SAB	Tetrachloro-m-xylene	0.916	0.874	4.6	98	0.00	1.96- 2.02
3	A	alpha-BHC	1.181	1.114	5.7	94	0.00	2.47- 2.53
4	MA	gamma-BHC	1.100	1.046	4.9	95	0.00	2.79- 2.85
5	MA	Heptachlor	1.104	1.038	6.0	96	0.00	3.31- 3.37
6	B	beta-BHC	0.540	0.507	6.1	95	0.00	2.87- 2.93
7	B	delta-BHC	1.025	1.045	-2.0	101	0.00	3.06- 3.12
8	MB	Aldrin	1.020	0.950	6.9	95	0.00	3.66- 3.73
9	B	Heptachlor Epoxide	0.955	0.899	5.9	96	0.00	4.41- 4.47
10	B	gamma-Chlordane	0.961	0.924	3.9	98	0.00	4.59- 4.65
11	B	alpha-Chlordane	0.954	0.904	5.2	97	0.00	4.77- 4.83
12	A	Endosulfan I	0.941	0.877	6.8	95	0.00	4.95- 5.01
13	B	4,4'-DDE	0.790	0.718	9.1	93	0.00	4.90- 4.96
14	MA	Dieldrin	0.931	0.881	5.4	97	0.00	5.30- 5.36
15	MA	Endrin	0.844	0.820	2.8	99	-0.01	5.64- 5.70
16	A	4,4'-DDD	0.668	0.637	4.6	100	-0.01	5.79- 5.85
17	B	Endosulfan II	0.833	0.789	5.3	99	0.00	5.98- 6.04
18	MA	4,4'-DDT	0.727	0.694	4.5	98	-0.01	6.24- 6.30
19	B	Endrin Aldehyde	0.679	0.694	-2.2	105	-0.01	6.65- 6.71
20	B	Endosulfan Sulfate	0.732	0.724	1.1	102	-0.01	7.39- 7.45
21	A	Methoxychlor	0.436	0.413	5.3	95	-0.01	7.11- 7.17
22		Mirex		----------NA----------				
23	B	Endrin Ketone	0.870	0.850	2.3	99	-0.01	7.87- 7.93
24	SAB	Decachlorobiphenyl	0.797	0.781	2.0	100	-0.01	9.89- 9.95
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	95	0.00	1.28- 1.34
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	95	0.00	1.28- 1.34
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

***** Signal #2 *****

10.9.11 10

Initial Calibration Verification

Job Number: JC19644 **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

10.9.11 10

Initial Calibration Verification

Job Number: JC19644 **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: JC19644 **Sample:** G6G987-ICV987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34141.D
Project: BMSMC, Building 5 Area, PR

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	98	0.00	1.56- 1.62
2	SAB	Tetrachloro-m-xylene		----------NA----------				
3	A	alpha-BHC		----------NA----------				
4	MA	gamma-BHC		----------NA----------				
5	MA	Heptachlor		----------NA----------				
6	B	beta-BHC		----------NA----------				
7	B	delta-BHC		----------NA----------				
8	MB	Aldrin		----------NA----------				
9	B	Heptachlor Epoxide		----------NA----------				
10	B	gamma-Chlordane		----------NA----------				
11	B	alpha-Chlordane		----------NA----------				
12	A	Endosulfan I		----------NA----------				
13	B	4,4'-DDE		----------NA----------				
14	MA	Dieldrin		----------NA----------				
15	MA	Endrin		----------NA----------				
16	A	4,4'-DDD		----------NA----------				
17	B	Endosulfan II		----------NA----------				
18	MA	4,4'-DDT		----------NA----------				
19	B	Endrin Aldehyde		----------NA----------				
20	B	Endosulfan Sulfate		----------NA----------				
21	A	Methoxychlor		----------NA----------				
22		Mirex	0.716	0.722	-0.8	108	-0.01	9.73- 9.79
23	B	Endrin Ketone		----------NA----------				
24	SAB	Decachlorobiphenyl		----------NA----------				
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	92	0.00	1.56- 1.62
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	92	0.00	1.49- 1.69
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g34134.D 6PST987.M Mon Apr 18 12:20:19 2016

10.9.12 10

Initial Calibration Verification

Job Number: JC19644 **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: JC19644 **Sample:** G6G987-ICV987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34142.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	0.804	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

10.9.13 10

Initial Calibration Verification

Job Number: JC19644 **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: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G6G987-ICV987
Lab FileID: 6G34143.D

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	97	0.00	1.55- 1.61
2	SAB	Tetrachloro-m-xylene	0.903	0.823	8.9	93	0.00	2.45- 2.51
3	A	alpha-BHC		----------NA----------				
4	MA	gamma-BHC		----------NA----------				
5	MA	Heptachlor		----------NA----------				
6	B	beta-BHC		----------NA----------				
7	B	delta-BHC		----------NA----------				
8	MB	Aldrin		----------NA----------				
9	B	Heptachlor Epoxide		----------NA----------				
10	B	gamma-Chlordane		----------NA----------				
11	B	alpha-Chlordane		----------NA----------				
12	A	Endosulfan I		----------NA----------				
13	B	4,4'-DDE		----------NA----------				
14	MA	Dieldrin		----------NA----------				
15	MA	Endrin		----------NA----------				
16	A	4,4'-DDD		----------NA----------				
17	B	Endosulfan II		----------NA----------				
18	MA	4,4'-DDT		----------NA----------				
19	B	Endrin Aldehyde		----------NA----------				
20	B	Endosulfan Sulfate		----------NA----------				
21	A	Methoxychlor		----------NA----------				
22		Mirex		----------NA----------				
23	B	Endrin Ketone		----------NA----------				
24	SAB	Decachlorobiphenyl	0.679	0.680	-0.1	99	-0.01	11.73-11.79
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	95	0.00	1.55- 1.61
26	L8	Toxaphene{A}	0.015	0.013	13.3	85	-0.01	6.59- 6.79
27	L8	Toxaphene{B}	0.026	0.025	3.8	92	-0.01	7.52- 7.72
28	L8	Toxaphene{C}	0.039	0.037	5.1	90	-0.01	7.70- 7.90
29	L8	Toxaphene{D}	0.026	0.025	3.8	92	-0.01	8.18- 8.38
30	L8	Toxaphene{E}	0.022	0.024	-9.1	102	-0.01	9.16- 9.36
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	98	0.00	1.48- 1.68
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g34135.D 6PST987.M Mon Apr 18 12:22:01 2016

10.9.14 10

Continuing Calibration Summary

Job Number: JC19644 **Sample:** G6G1007-CC987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34895.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\1007\6g34895.D\ECD1A.CH    Vial: 2
Signal #2 : C:\msdchem\1\DATA\1007\6g34895.D\ECD2B.CH
Acq On    : 10 May 2016   9:53 am                    Operator: rebeccak
Sample    : cc987-25                                 Inst    : HP G1530A
Misc      : op93642,g6g1007,1000,,,5,5               Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\6PST987.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Sat May 07 14:59:36 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	92	0.00	1.27- 1.33
2	SAB	Tetrachloro-m-xylene	0.916	0.891	2.7	92	0.00	1.94- 2.00
3	A	alpha-BHC	1.181	1.187	-0.5	93	-0.01	2.45- 2.51
4	MA	gamma-BHC	1.100	1.096	0.4	92	-0.01	2.77- 2.83
5	MA	Heptachlor	1.104	1.014	8.2	86	-0.01	3.29- 3.35
6	B	beta-BHC	0.540	0.537	0.6	93	-0.01	2.85- 2.91
7	B	delta-BHC	1.025	1.037	-1.2	92	0.00	3.04- 3.10
8	MB	Aldrin	1.020	0.973	4.6	90	-0.01	3.64- 3.71
9	B	Heptachlor Epoxide	0.955	0.908	4.9	89	-0.02	4.39- 4.45
10	B	gamma-Chlordane	0.961	0.871	9.4	85	-0.02	4.57- 4.63
11	B	alpha-Chlordane	0.954	0.889	6.8	87	-0.02	4.75- 4.81
12	A	Endosulfan I	0.941	0.896	4.8	90	-0.02	4.93- 4.99
13	B	4,4'-DDE	0.790	0.791	-0.1	95	-0.02	4.88- 4.94
14	MA	Dieldrin	0.931	0.911	2.1	92	-0.02	5.27- 5.33
15	MA	Endrin	0.844	0.832	1.4	93	-0.02	5.61- 5.67
16	A	4,4'-DDD	0.668	0.674	-0.9	97	-0.02	5.76- 5.82
17	B	Endosulfan II	0.833	0.824	1.1	95	-0.02	5.95- 6.01
18	MA	4,4'-DDT	0.727	0.625	14.0	81	-0.02	6.21- 6.27
19	B	Endrin Aldehyde	0.679	0.678	0.1	95	-0.02	6.62- 6.68
20	B	Endosulfan Sulfate	0.732	0.737	-0.7	96	-0.02	7.36- 7.42
21	A	Methoxychlor	0.436	0.375	14.0	79	-0.02	7.08- 7.14
22		Mirex	0.746	0.718	3.8	90	-0.02	7.21- 7.27
23	B	Endrin Ketone	0.870	0.860	1.1	92	-0.01	7.83- 7.89
24	SAB	Decachlorobiphenyl	0.797	0.766	3.9	91	-0.02	9.86- 9.92
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	88	0.00	1.27- 1.33
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	88	0.00	1.27- 1.33
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

***** Signal #2 *****

10.9.15 10

Continuing Calibration Summary

Job Number: JC19644 **Sample:** G6G1007-CC987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34895.D
Project: BMSMC, Building 5 Area, PR

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.54- 1.60
2	SAB	Tetrachloro-m-xylene	0.903	0.873	3.3	108	0.00	2.43- 2.49
3	A	alpha-BHC	1.177	1.168	0.8	110	0.00	3.13- 3.19
4	MA	gamma-BHC	1.102	1.085	1.5	109	0.00	3.58- 3.64
5	MA	Heptachlor	1.114	0.992	11.0	102	0.00	4.19- 4.25
6	B	beta-BHC	0.537	0.499	7.1	105	0.00	3.67- 3.73
7	B	delta-BHC	1.027	1.013	1.4	110	0.00	4.09- 4.15
8	MB	Aldrin	1.036	0.976	5.8	106	0.00	4.66- 4.72
9	B	Heptachlor Epoxide	0.965	0.906	6.1	104	0.00	5.54- 5.60
10	B	gamma-Chlordane	0.944	0.892	5.5	107	0.00	5.84- 5.90
11	B	alpha-Chlordane	0.937	0.897	4.3	108	0.00	6.09- 6.15
12	A	Endosulfan I	0.911	0.870	4.5	109	0.00	6.19- 6.25
13	B	4,4'-DDE	0.808	0.800	1.0	120	0.00	6.39- 6.45
14	MA	Dieldrin	0.930	0.911	2.0	112	0.00	6.66- 6.72
15	MA	Endrin	0.845	0.831	1.7	113	0.00	7.20- 7.26
16	A	4,4'-DDD	0.698	0.718	-2.9	113	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	0.586	7.4	105	0.00	8.00- 8.06
19	B	Endrin Aldehyde	0.670	0.676	-0.9	114	0.00	8.21- 8.27
20	B	Endosulfan Sulfate	0.727	0.709	2.5	112	0.00	8.72- 8.78
21	A	Methoxychlor	0.349	0.321	8.0	101	0.00	9.37- 9.43
22		Mirex	0.716	0.687	4.1	112	0.00	9.68- 9.74
23	B	Endrin Ketone	0.850	0.841	1.1	114	0.00	9.77- 9.83
24	SAB	Decachlorobiphenyl	0.679	0.750	-10.5	119	0.00	11.71-11.77
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	100	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	100	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 Tue May 10 13:18:29 2016

10.9.15 10

Continuing Calibration Summary

Job Number: JC19644 **Sample:** G6G1007-CC987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34909.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\1007\6g34909.D\ECD1A.CH    Vial: 4
Signal #2 : C:\msdchem\1\DATA\1007\6g34909.D\ECD2B.CH
Acq On    : 10 May 2016   2:56 pm                    Operator: dharas
Sample    : cc987-50                                 Inst    : HP G1530A
Misc      : op93736,g6g1007,15.1,,,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  : Sat May 07 14:59:36 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	95	0.00	1.27- 1.33
2	SAB	Tetrachloro-m-xylene	0.916	0.848	7.4	90	0.00	1.95- 2.01
3	A	alpha-BHC	1.181	1.207	-2.2	90	0.00	2.46- 2.52
4	MA	gamma-BHC	1.100	1.104	-0.4	90	0.00	2.78- 2.84
5	MA	Heptachlor	1.104	1.054	4.5	89	0.00	3.30- 3.36
6	B	beta-BHC	0.540	0.506	6.3	91	0.00	2.86- 2.92
7	B	delta-BHC	1.025	1.063	-3.7	90	0.00	3.05- 3.11
8	MB	Aldrin	1.020	0.993	2.6	90	0.00	3.65- 3.72
9	B	Heptachlor Epoxide	0.955	0.863	9.6	85	0.00	4.40- 4.46
10	B	gamma-Chlordane	0.961	0.872	9.3	85	0.00	4.57- 4.63
11	B	alpha-Chlordane	0.954	0.884	7.3	87	0.00	4.76- 4.82
12	A	Endosulfan I	0.941	0.878	6.7	88	0.00	4.94- 5.00
13	B	4,4'-DDE	0.790	0.807	-2.2	93	0.00	4.89- 4.95
14	MA	Dieldrin	0.931	0.911	2.1	91	0.00	5.28- 5.34
15	MA	Endrin	0.844	0.833	1.3	92	0.00	5.62- 5.68
16	A	4,4'-DDD	0.668	0.707	-5.8	97	0.00	5.77- 5.83
17	B	Endosulfan II	0.833	0.826	0.8	92	0.00	5.96- 6.02
18	MA	4,4'-DDT	0.727	0.668	8.1	85	0.00	6.22- 6.28
19	B	Endrin Aldehyde	0.679	0.680	-0.1	96	0.00	6.63- 6.69
20	B	Endosulfan Sulfate	0.732	0.752	-2.7	99	0.00	7.37- 7.43
21	A	Methoxychlor	0.436	0.395	9.4	87	0.00	7.09- 7.15
22		Mirex	0.746	0.696	6.7	92	0.00	7.22- 7.28
23	B	Endrin Ketone	0.870	0.904	-3.9	97	0.00	7.84- 7.90
24	SAB	Decachlorobiphenyl	0.797	0.749	6.0	94	0.00	9.87- 9.93
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	94	0.00	1.27- 1.33
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	96	0.00	1.27- 1.33
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

***** Signal #2 *****

10.9.16 10

Continuing Calibration Summary

Job Number: JC19644 **Sample:** G6G1007-CC987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34909.D
Project: BMSMC, Building 5 Area, PR

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	109	0.00	1.54- 1.60
2	SAB	Tetrachloro-m-xylene	0.903	0.834	7.6	105	0.00	2.43- 2.49
3	A	alpha-BHC	1.177	1.160	1.4	106	0.00	3.13- 3.19
4	MA	gamma-BHC	1.102	1.059	3.9	105	0.00	3.58- 3.64
5	MA	Heptachlor	1.114	0.985	11.6	100	0.00	4.19- 4.25
6	B	beta-BHC	0.537	0.481	10.4	100	0.00	3.68- 3.74
7	B	delta-BHC	1.027	1.022	0.5	108	0.00	4.09- 4.15
8	MB	Aldrin	1.036	0.937	9.6	103	0.00	4.66- 4.72
9	B	Heptachlor Epoxide	0.965	0.855	11.4	101	0.00	5.54- 5.60
10	B	gamma-Chlordane	0.944	0.848	10.2	103	0.00	5.85- 5.91
11	B	alpha-Chlordane	0.937	0.843	10.0	103	0.00	6.09- 6.15
12	A	Endosulfan I	0.911	0.813	10.8	103	0.00	6.19- 6.25
13	B	4,4'-DDE	0.808	0.778	3.7	104	0.00	6.39- 6.45
14	MA	Dieldrin	0.930	0.849	8.7	105	0.00	6.66- 6.72
15	MA	Endrin	0.845	0.776	8.2	106	0.00	7.20- 7.26
16	A	4,4'-DDD	0.698	0.681	2.4	106	0.00	7.42- 7.48
17	B	Endosulfan II	0.827	0.765	7.5	104	0.00	7.58- 7.64
18	MA	4,4'-DDT	0.633	0.594	6.2	104	0.00	8.00- 8.06
19	B	Endrin Aldehyde	0.670	0.639	4.6	108	0.00	8.21- 8.27
20	B	Endosulfan Sulfate	0.727	0.697	4.1	112	0.00	8.72- 8.78
21	A	Methoxychlor	0.349	0.341	2.3	106	0.00	9.38- 9.44
22		Mirex	0.716	0.644	10.1	110	0.00	9.68- 9.74
23	B	Endrin Ketone	0.850	0.842	0.9	114	0.00	9.77- 9.83
24	SAB	Decachlorobiphenyl	0.679	0.706	-4.0	116	0.00	11.71-11.77
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.54- 1.60
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	110	0.00	1.47- 1.67
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g34135.D 6PST987.M Tue May 10 18:17:59 2016

10.9.16 10

GC Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67960.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 9:58 am
Operator : brittanp
Sample : jc19644-1
Misc : op93665,g4g1782,300,,,2,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 06 10:33:54 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...	1.791	2.066	463.4E6	413.8E6	50.000	50.000
25) I 1-bromo-2...	1.791	2.066	463.4E6	413.8E6	50.000	50.000
31) I 1-bromo-2...	1.791	2.066	463.4E6	413.8E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.581	3.100	213.9E6	199.0E6	26.770	27.306
Spiked Amount	40.000	Range 30 - 150	Recovery	=	66.92%	68.27%
24) SA Decachlor...	10.245	11.647	321.7E6	197.0E6	42.721	38.107
Spiked Amount	40.000		Recovery	=	106.80%	95.27%

Target Compounds

SemiQuant Compounds - Not Calibrated on this Instrument

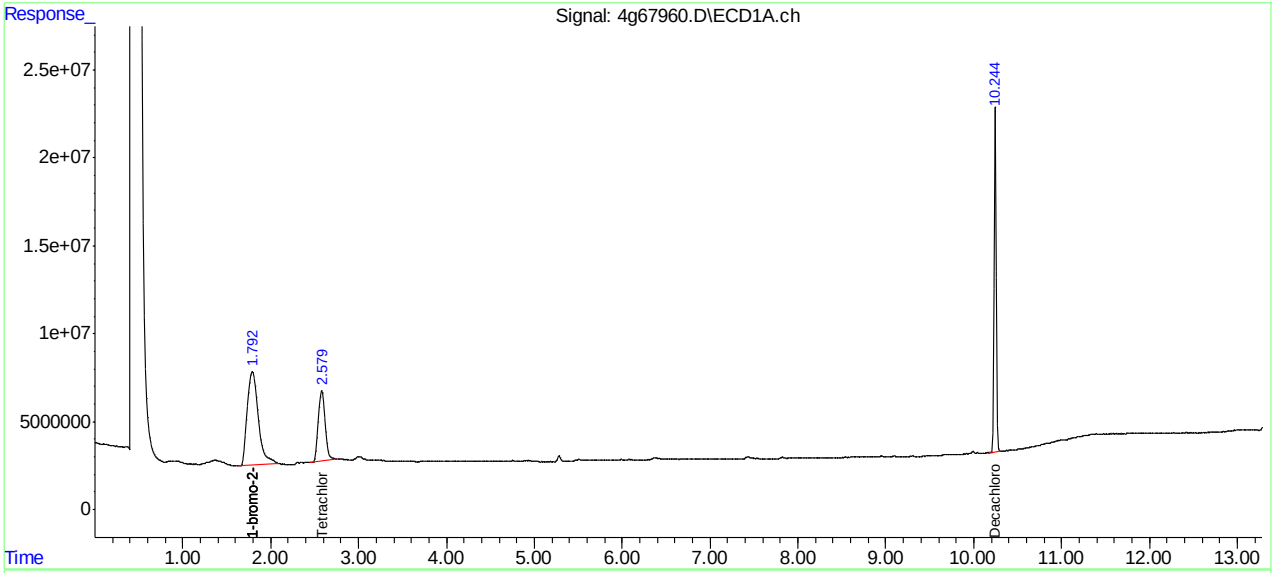
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

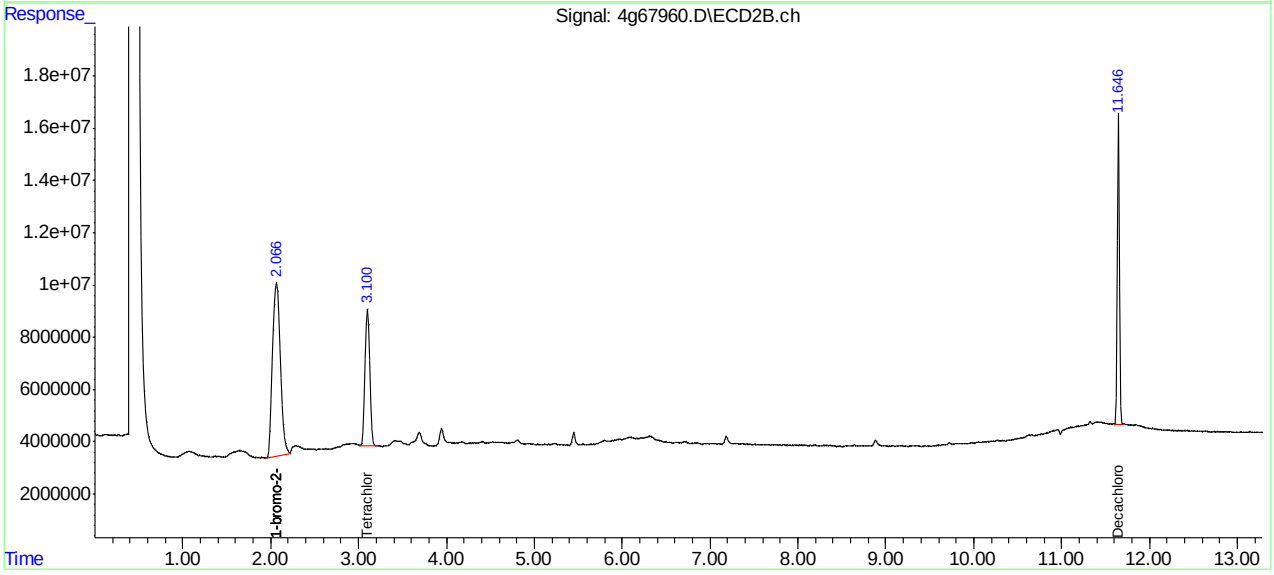
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67960.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 9:58 am
Operator : brittanp
Sample : jc19644-1
Misc : op93665,g4g1782,300,,,2,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 06 10:33:54 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 JC19644

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 05/06/16 10:47

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67961.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 10:13 am
Operator : brittanp
Sample : jc19644-2
Misc : op93665,g4g1782,300,,,2,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 06 10:35:15 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...	1.794	2.069	430.3E6	414.2E6	50.000	50.000
25) I 1-bromo-2...	1.794	2.069	430.3E6	414.2E6	50.000	50.000
31) I 1-bromo-2...	1.794	2.069	430.3E6	414.2E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.582	3.104	185.2E6	167.8E6	24.962m	22.996
Spiked Amount	40.000	Range	30 - 150	Recovery	= 62.41%	57.49%
24) SA Decachlor...	10.244	11.648	300.6E6	182.1E6	42.992	35.199
Spiked Amount	40.000			Recovery	= 107.48%	88.00%
Target Compounds						
SemiQuant Compounds - Not Calibrated on this Instrument						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

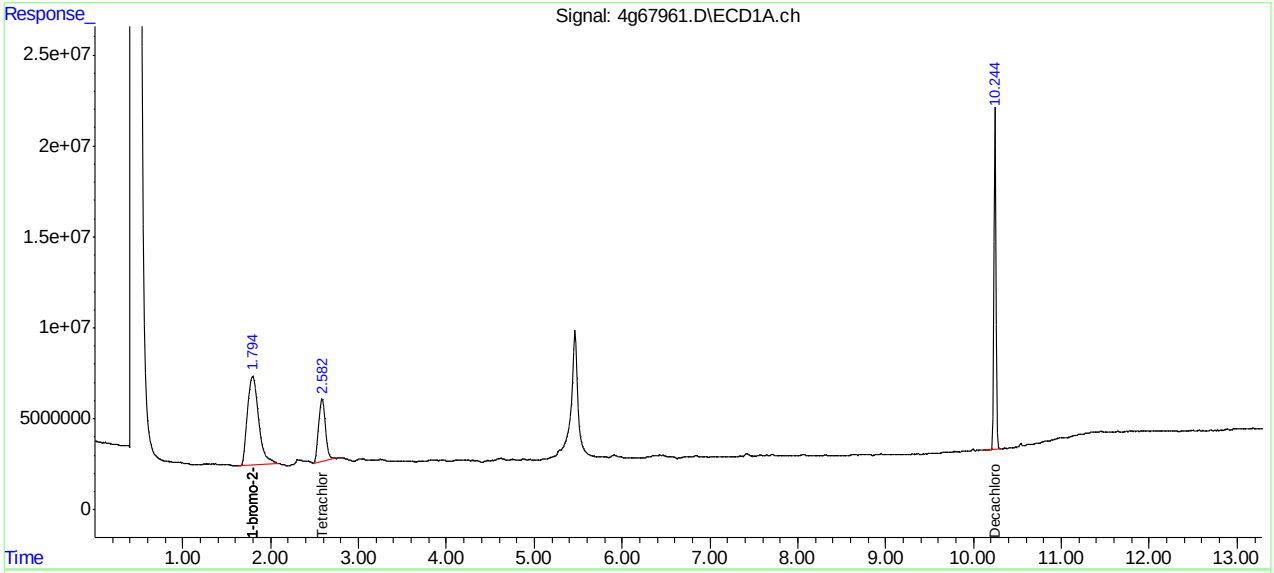
11.1.2 11

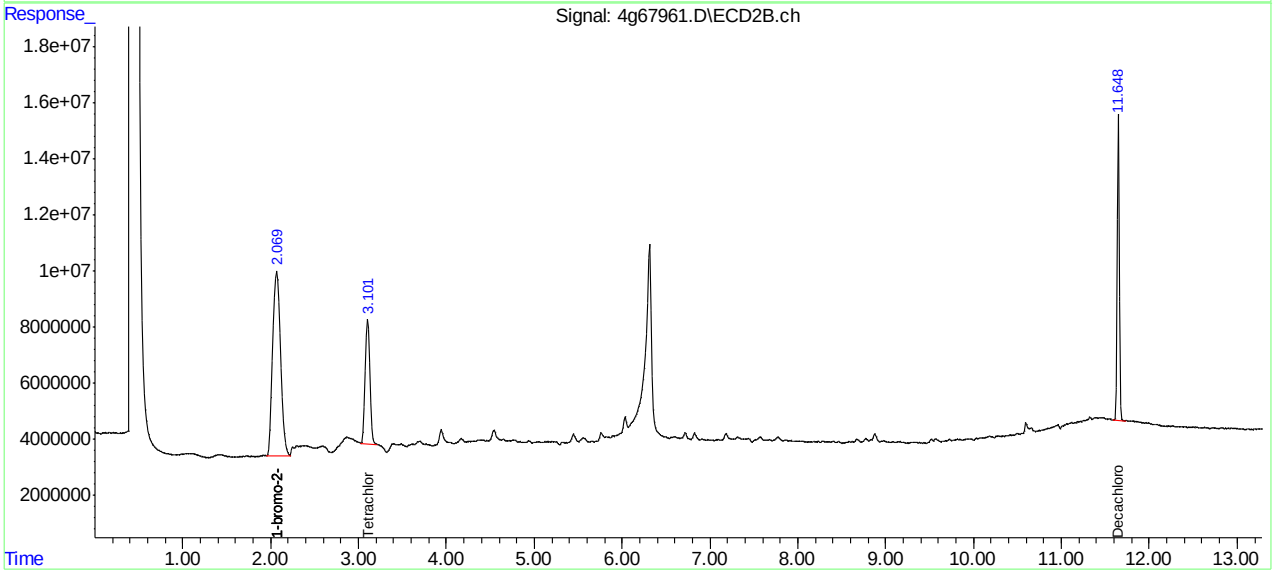
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67961.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 10:13 am
Operator : brittanp
Sample : jc19644-2
Misc : op93665,g4g1782,300,,,2,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 06 10:35:15 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 JC19644

Manual Integration Approval Summary

Sample Number:	JC19644-2	**Method:**	SW846 8081B
Lab FileID:	4G67961.D	**Analyst approved:**	05/06/16 10:35 Brittany Piercy
Injection Time:	05/06/16 10:13	**Supervisor approved:**	05/06/16 10:47 Gwendolyn Burns

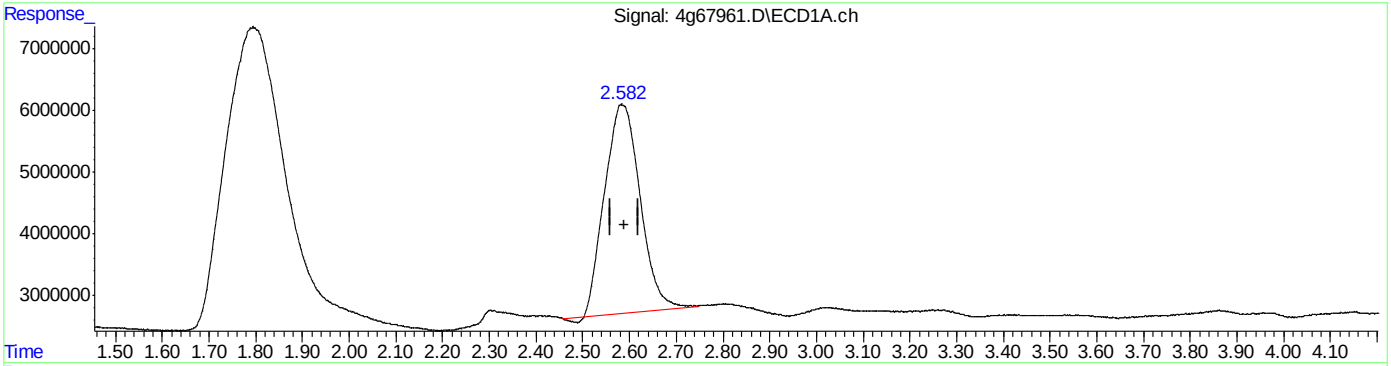
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	2.58	Poor instrument integration

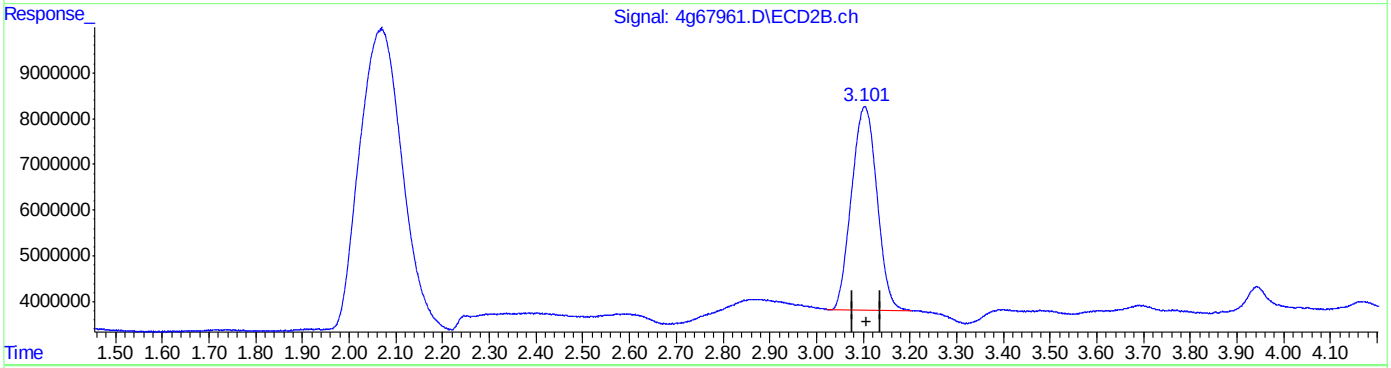
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67961.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 10:13 am
Operator : brittanp
Sample : jc19644-2
Misc : op93665,g4g1782,300,,,2,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 06 10:34:08 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)
2.583min 24.036 PPB
response 178350958

(2) Tetrachloro-m-xylene #2 (SAB)
3.104min 22.996 PPB
response 167760550

(+) = Expected Retention Time

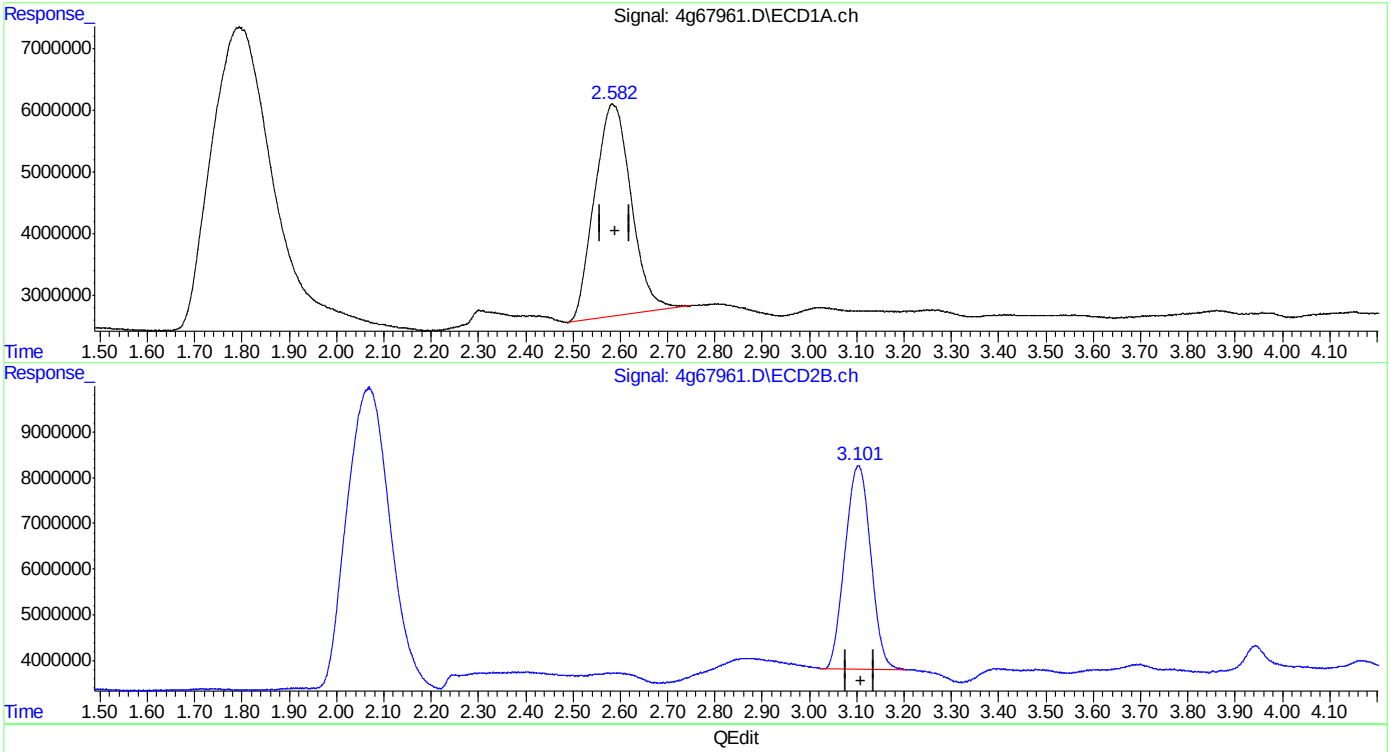
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67961.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 10:13 am
Operator : brittanp
Sample : jc19644-2
Misc : op93665,g4g1782,300,,,2,1
ALS Vial : 21 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 06 10:34:08 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)
2.582min 24.962 PPB m
response 185221651

(2) Tetrachloro-m-xylene #2 (SAB)
3.104min 22.996 PPB
response 167760550

(+) = Expected Retention Time

SGS ACCUTEST JC19644

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
05/06/16 11:46

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67962.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 10:28 am
Operator : brittanp
Sample : jc19644-3
Misc : op93665,g4g1782,300,,,2,1
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 06 11:19:27 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	2.068	477.4E6	421.5E6	50.000	50.000
25) I 1-bromo-2...	1.797	2.068	477.4E6	421.5E6	50.000	50.000
31) I 1-bromo-2...	1.797	2.068	477.4E6	421.5E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.583	3.103	211.6E6	190.4E6	25.704	25.644
Spiked Amount	40.000	Range 30 - 150	Recovery	=	64.26%	64.11%
24) SA Decachlor...	10.242	11.647	300.2E6	179.5E6	38.701m	34.092
Spiked Amount	40.000		Recovery	=	96.75%	85.23%

Target Compounds

SemiQuant Compounds - Not Calibrated on this Instrument

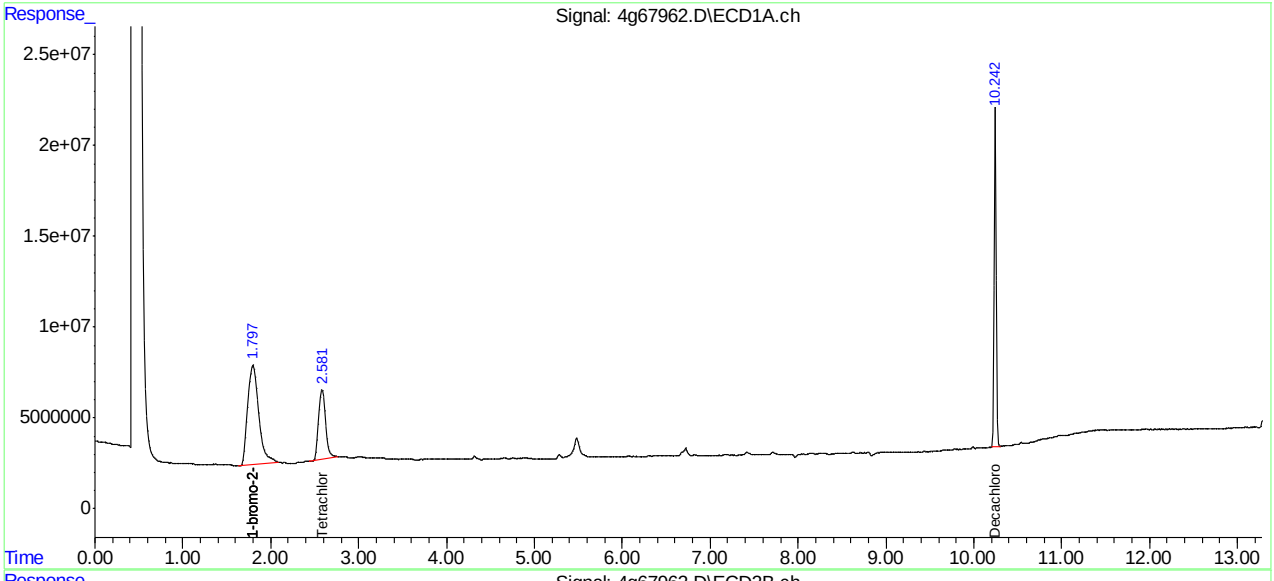
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

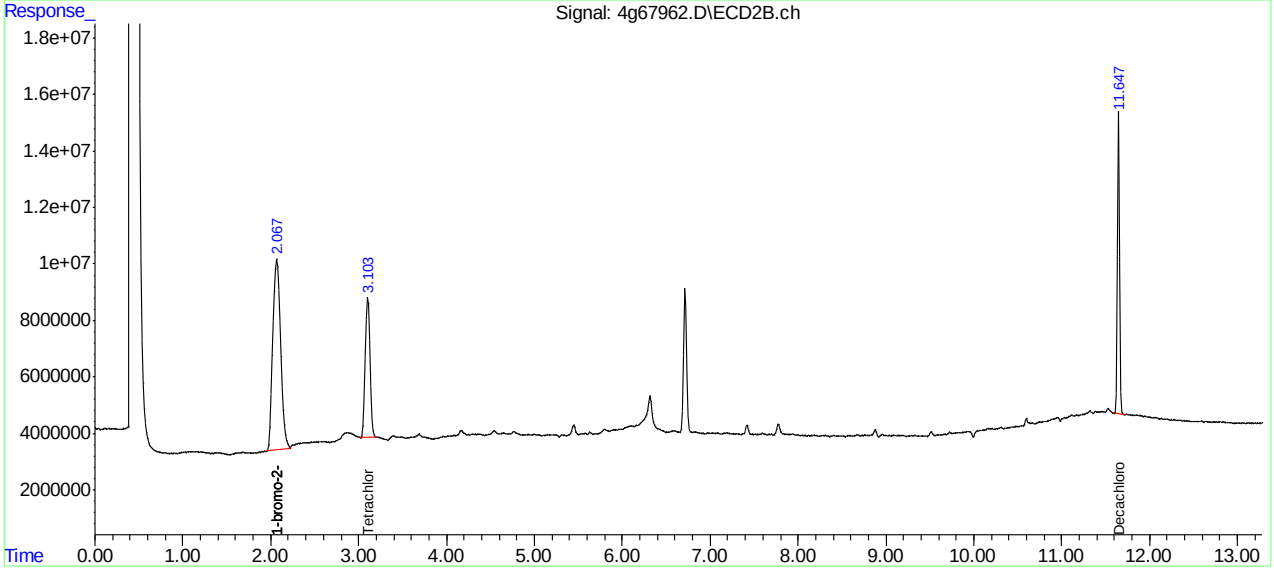
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67962.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 10:28 am
Operator : brittanp
Sample : jc19644-3
Misc : op93665,g4g1782,300,,,2,1
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 06 11:19:27 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 JC19644

Manual Integration Approval Summary

Sample Number:	JC19644-3	**Method:**	SW846 8081B
Lab FileID:	4G67962.D	**Analyst approved:**	05/06/16 11:19 Dhara Saparia
Injection Time:	05/06/16 10:28	**Supervisor approved:**	05/06/16 11:46 Gwendolyn Burns

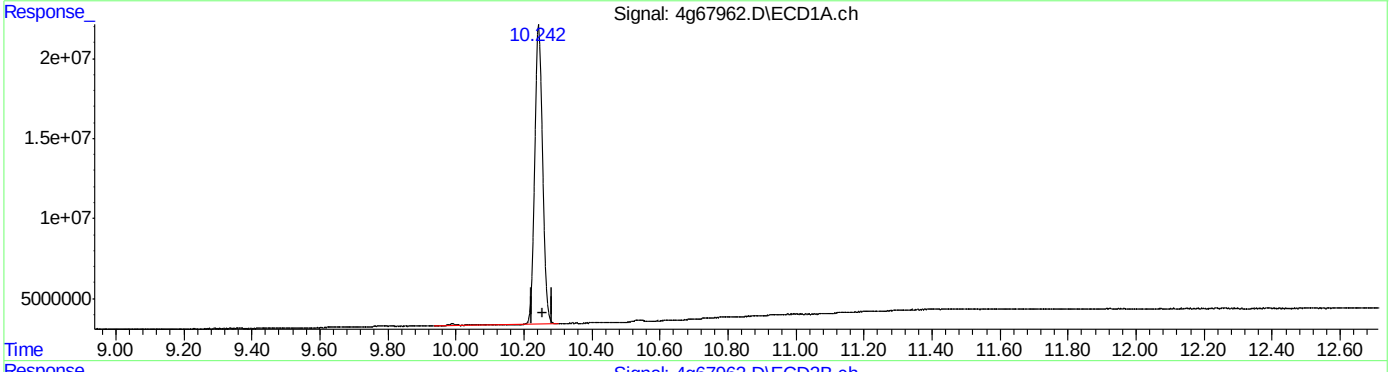
Parameter	CAS	Sig#	R.T. (min.)	Reason
Decachlorobiphenyl	2051-24-3	1	10.24	Poorly defined baseline

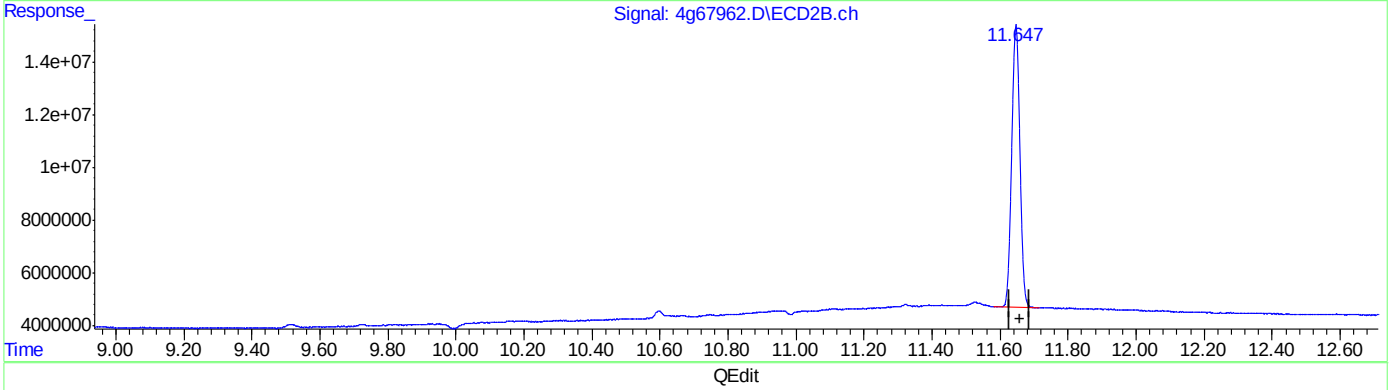
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67962.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 10:28 am
Operator : brittanp
Sample : jc19644-3
Misc : op93665,g4g1782,300,,,2,1
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 06 11:18:18 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)
10.244min 38.929 PPB
response 301969034

(24) Decachlorobiphenyl #2 (SA)
11.647min 34.092 PPB
response 179497787

(+) = Expected Retention Time

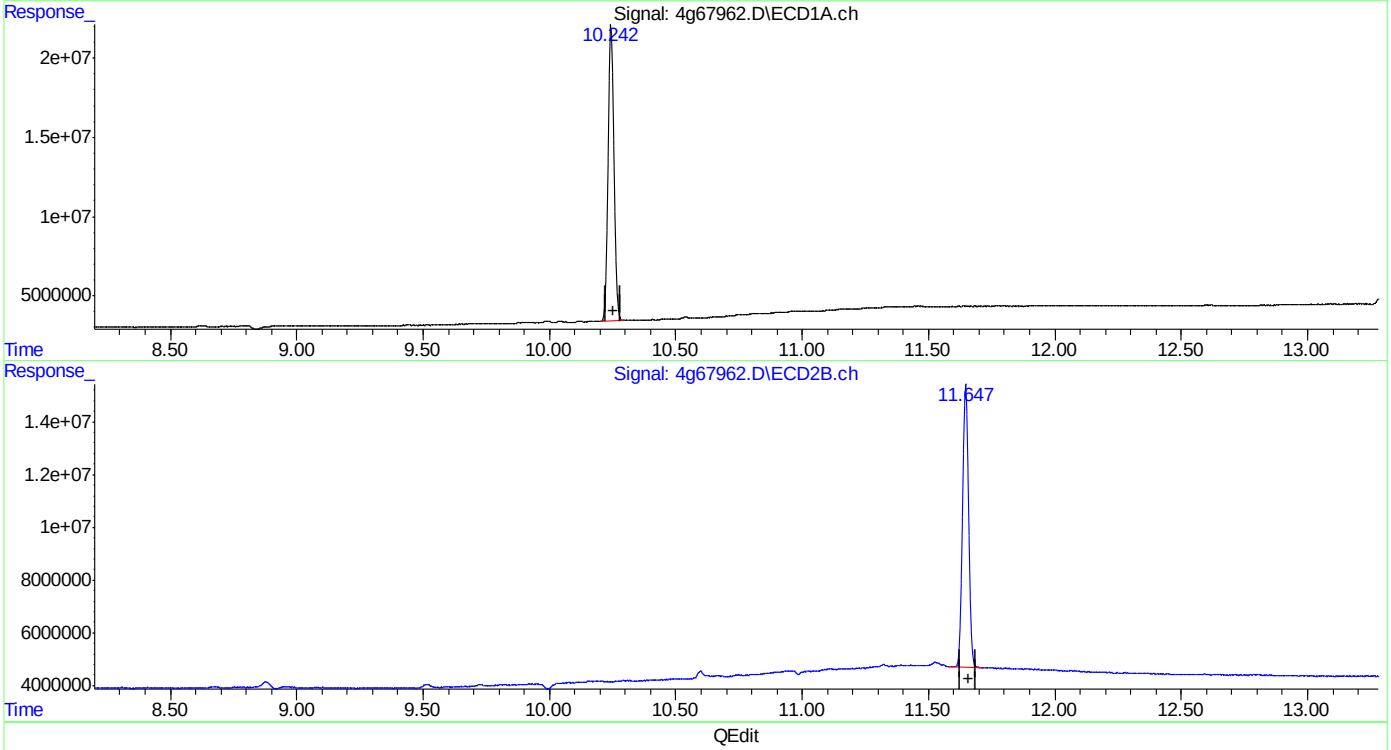
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67962.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 10:28 am
Operator : brittanp
Sample : jc19644-3
Misc : op93665,g4g1782,300,,,2,1
ALS Vial : 22 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 06 11:18:18 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)
10.242min 38.701 PPB m
response 300198613

(24) Decachlorobiphenyl #2 (SA)
11.647min 34.092 PPB
response 179497787

(+) = Expected Retention Time

SGS ACCUTEST JC19644

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
05/11/16 06:52

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1007\
Data File : 6g34906.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 May 2016 12:55 pm
Operator : dharas
Sample : jc19644-4
Misc : op93736,g6g1007,16.3,,,10,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 10 13:18:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.297	1.568	139.0E6	51275612	50.000	50.000
25) I 1-bromo-2...	1.297	1.568	139.0E6	51275612	50.000	50.000
31) I 1-bromo-2...	1.297	1.568	139.0E6	51275612	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	1.973	2.461	110.7E6	39799224	43.475	42.961
Spiked Amount	40.000	Range	30 - 150	Recovery	= 108.69%	107.40%
24) SAB Decachlor...	9.893f	11.739	94308855	33563801	42.583m	48.187
Spiked Amount	40.000			Recovery	= 106.46%	120.47%

Target Compounds

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

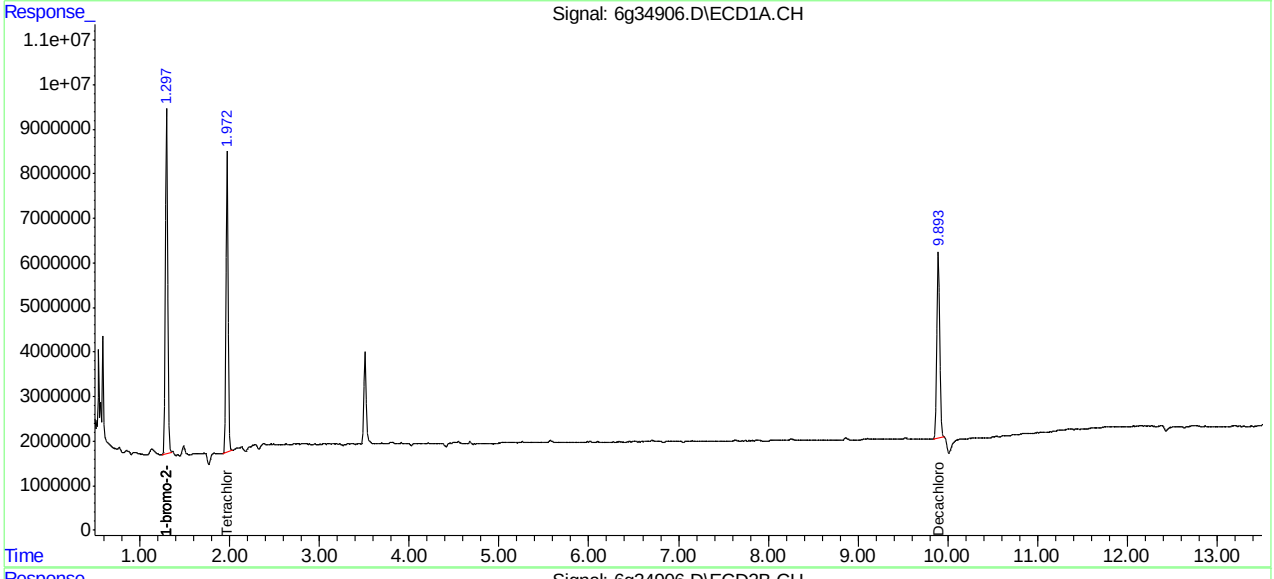
11.1.4
11

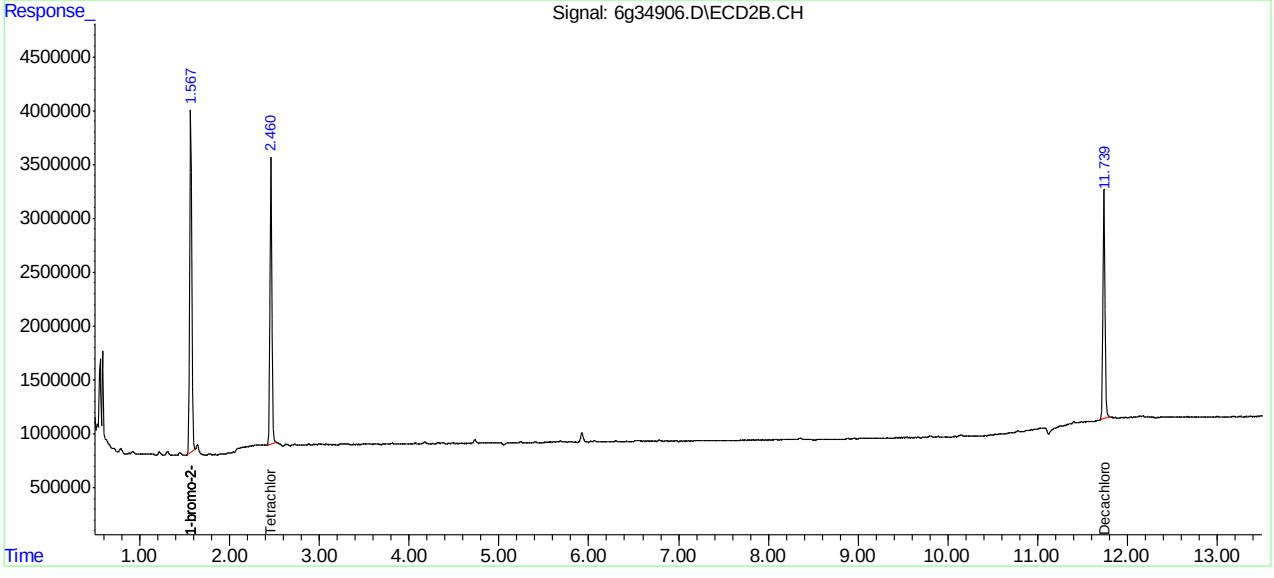
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1007\
Data File : 6g34906.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 May 2016 12:55 pm
Operator : dharas
Sample : jc19644-4
Misc : op93736,g6g1007,16.3,,,10,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 10 13:18:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC19644

Manual Integration Approval Summary

Sample Number:	JC19644-4	**Method:**	SW846 8081B
Lab FileID:	6G34906.D	**Analyst approved:**	05/10/16 13:20 Dhara Saparia
Injection Time:	05/10/16 12:55	**Supervisor approved:**	05/11/16 06:52 Gwendolyn Burns

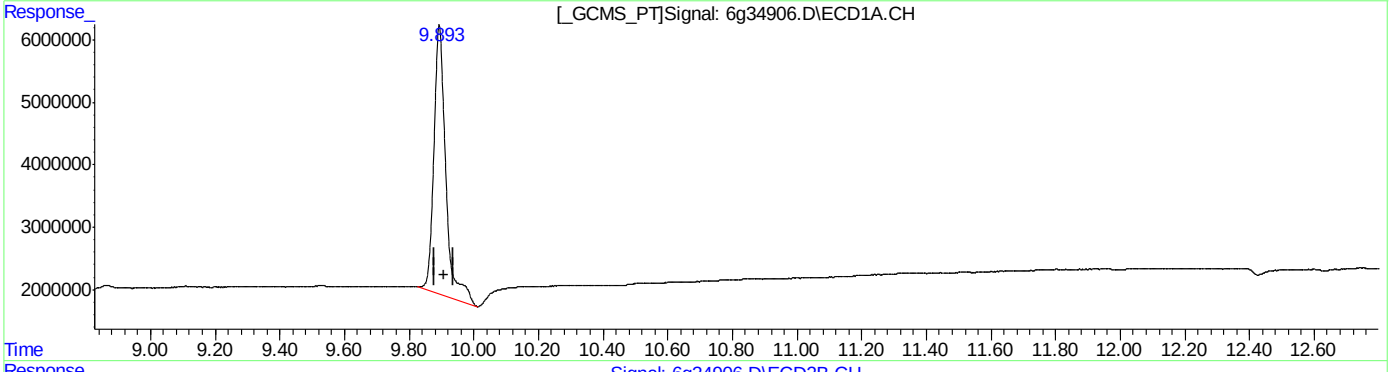
Parameter	CAS	Sig#	R.T. (min.)	Reason
Decachlorobiphenyl	2051-24-3	1	9.89	Poorly defined baseline

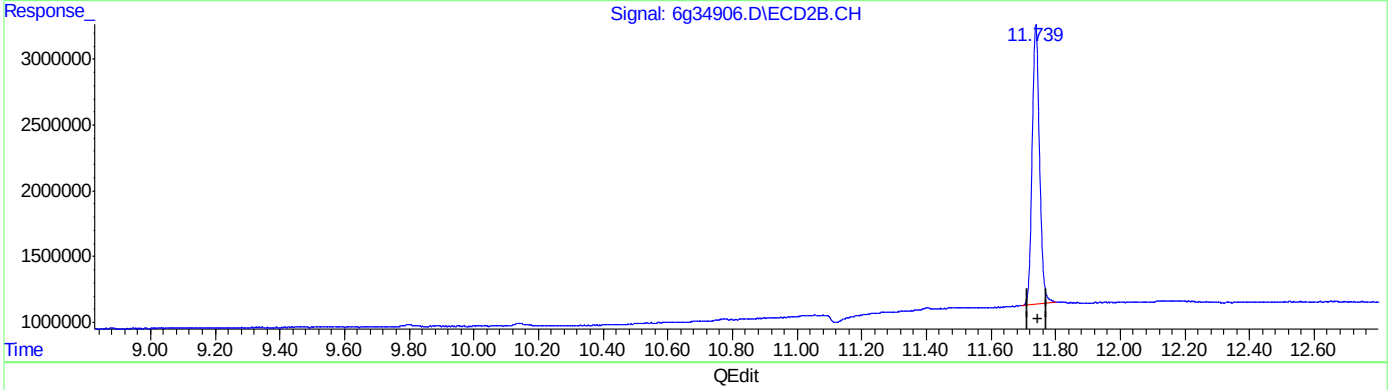
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1007\
Data File : 6g34906.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 May 2016 12:55 pm
Operator : dharas
Sample : jc19644-4
Misc : op93736,g6g1007,16.3,,,10,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 10 13:17:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(24) Decachlorobiphenyl (SAB)
9.893min 49.688PPB
response 110044684

(24) Decachlorobiphenyl #2 (SAB)
11.739min 48.187PPB
response 33563801

(+) = Expected Retention Time
6PST987.M Tue May 10 13:17:46 2016

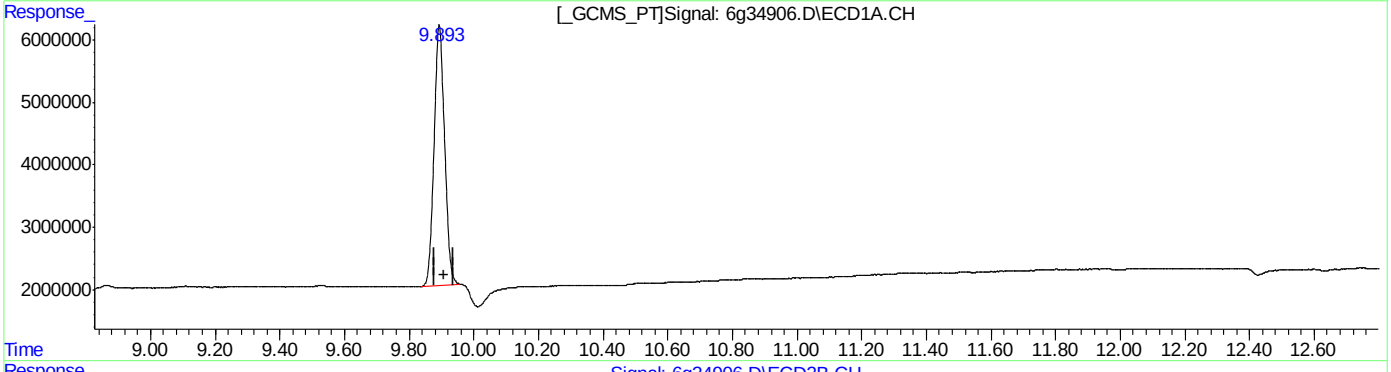
SGS ACCUTEST JC19644

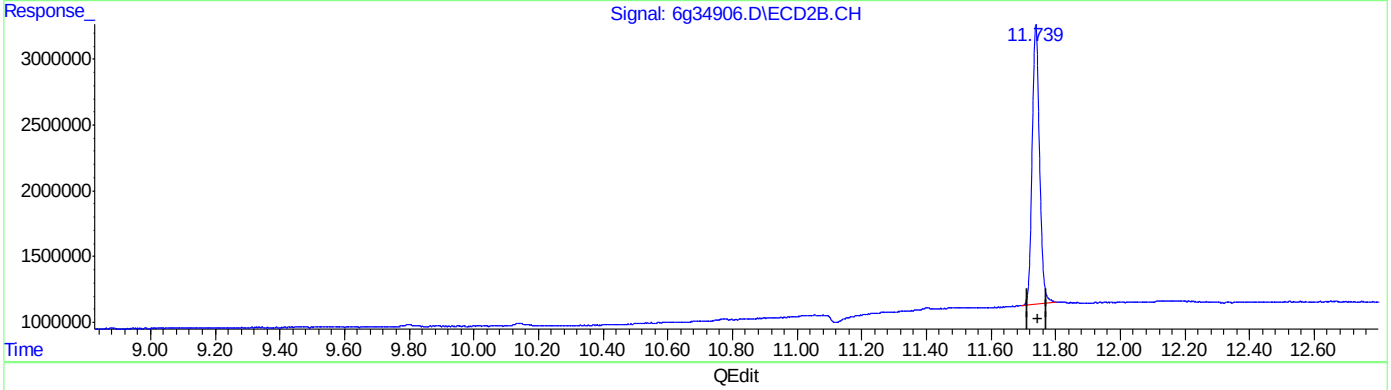
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1007\
Data File : 6g34906.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 May 2016 12:55 pm
Operator : dharas
Sample : jc19644-4
Misc : op93736,g6g1007,16.3,,,10,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 10 13:17:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(24) Decachlorobiphenyl (SAB)
9.893min 42.583PPB m
response 94308855

(24) Decachlorobiphenyl #2 (SAB)
11.739min 48.187PPB
response 33563801

(+) = Expected Retention Time
6PST987.M Tue May 10 13:17:52 2016

SGS ACCUTEST JC19644

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
05/11/16 06:52

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1007\
Data File : 6g34907.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 May 2016 1:11 pm
Operator : dharas
Sample : jc19644-5
Misc : op93736,g6g1007,15.1,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 10 13:26:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2...	1.297	1.567	129.5E6	48687088	50.000	50.000
25) I 1-bromo-2...	1.297	1.567	129.5E6	48687088	50.000	50.000
31) I 1-bromo-2...	1.297	1.567	129.5E6	48687088	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	1.973	2.461	98286896	37518146	41.411	42.652
Spiked Amount	40.000	Range	30 - 150	Recovery	= 103.53%	106.63%
24) SAB Decachlor...	9.894f	11.738	90126962	31549176	43.670m	47.703
Spiked Amount	40.000			Recovery	= 109.18%	119.26%

Target Compounds

SemiQuant Compounds - Not Calibrated on this Instrument

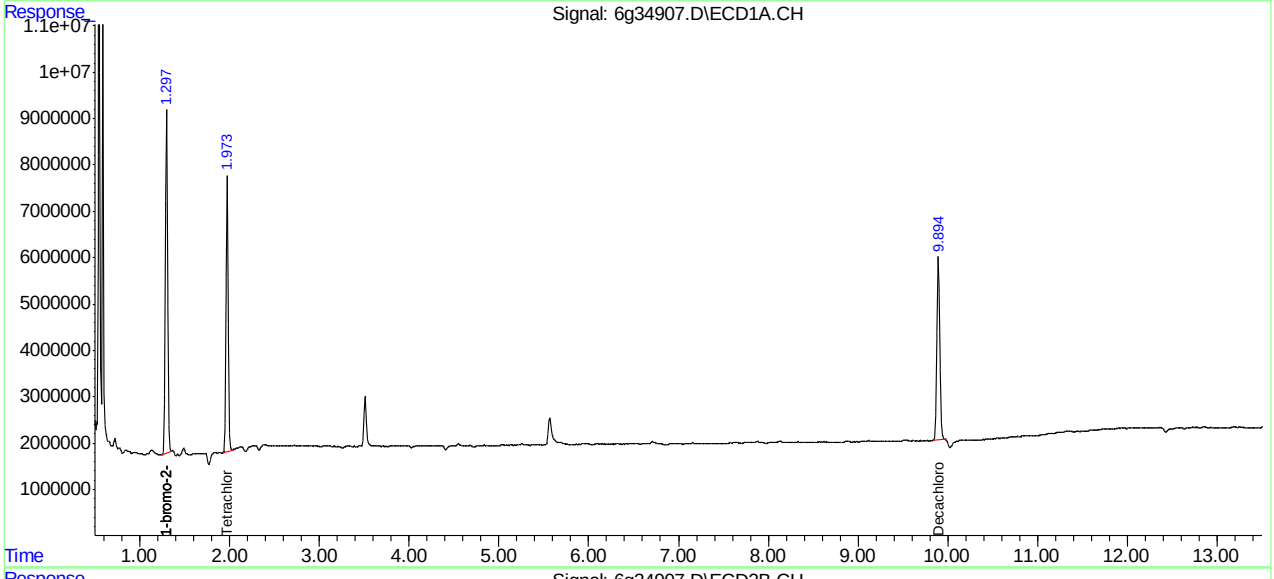
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

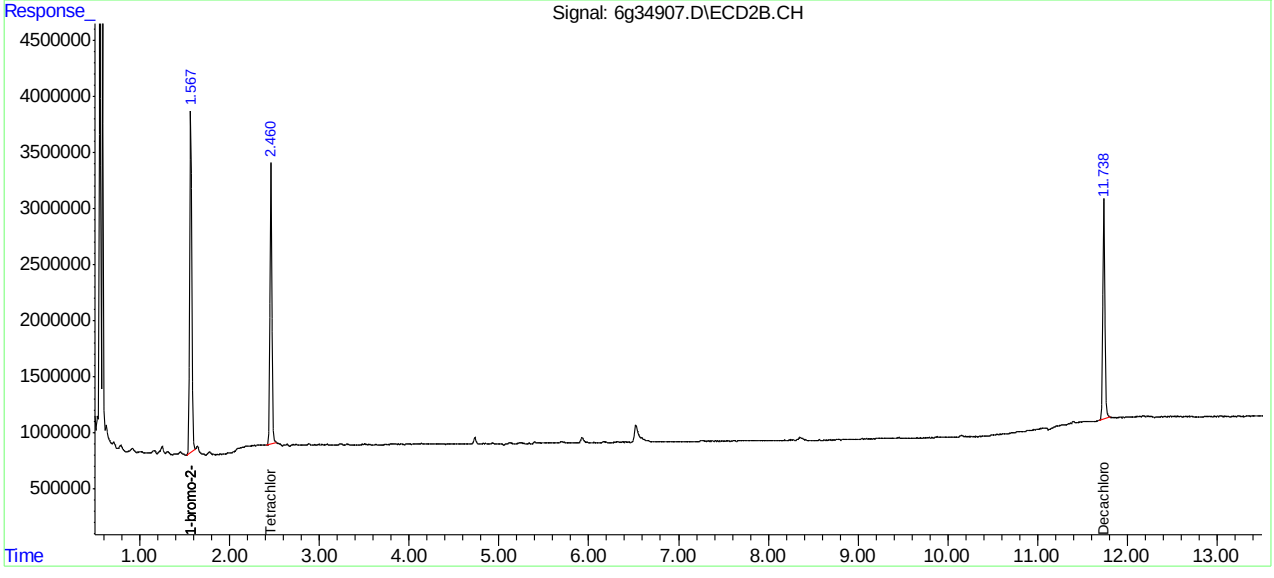
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1007\
Data File : 6g34907.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 May 2016 1:11 pm
Operator : dharas
Sample : jc19644-5
Misc : op93736,g6g1007,15.1,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 10 13:26:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	JC19644-5	**Method:**	SW846 8081B
Lab FileID:	6G34907.D	**Analyst approved:**	05/10/16 13:27 Dhara Saparia
Injection Time:	05/10/16 13:11	**Supervisor approved:**	05/11/16 06:52 Gwendolyn Burns

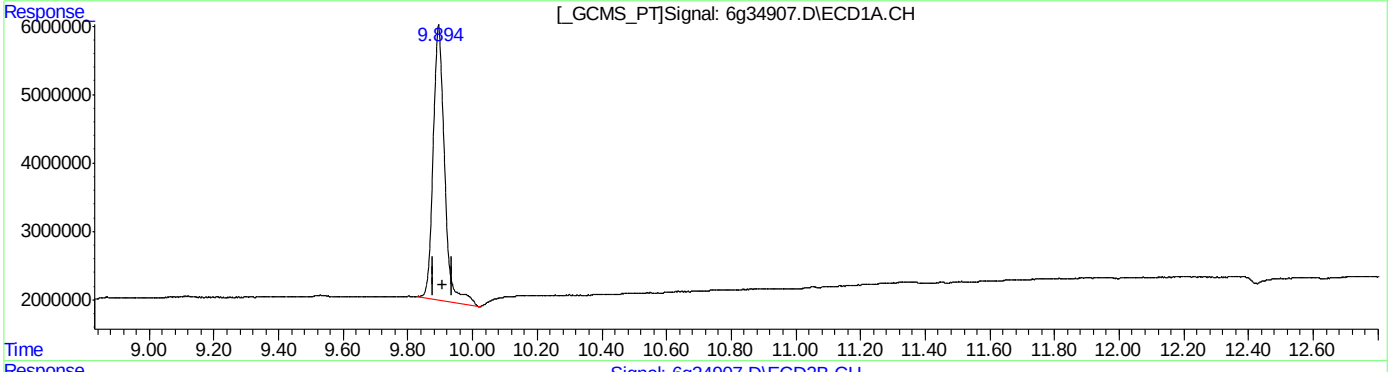
Parameter	CAS	Sig#	R.T. (min.)	Reason
Decachlorobiphenyl	2051-24-3	1	9.89	Poorly defined baseline

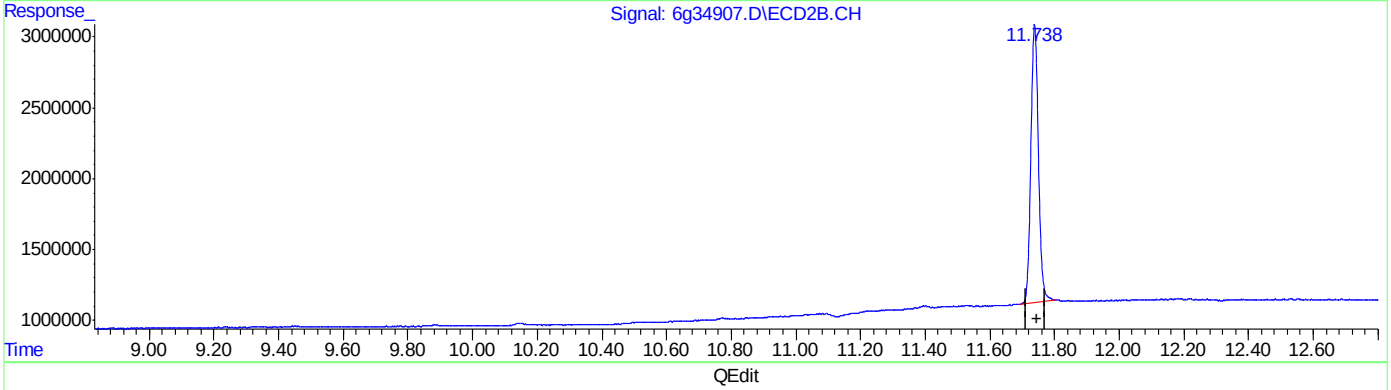
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1007\
Data File : 6g34907.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 May 2016 1:11 pm
Operator : dharas
Sample : jc19644-5
Misc : op93736,g6g1007,15.1,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 10 13:25:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(24) Decachlorobiphenyl (SAB)
9.894min 47.620PPB
response 98279667

(24) Decachlorobiphenyl #2 (SAB)
11.738min 47.703PPB
response 31549176

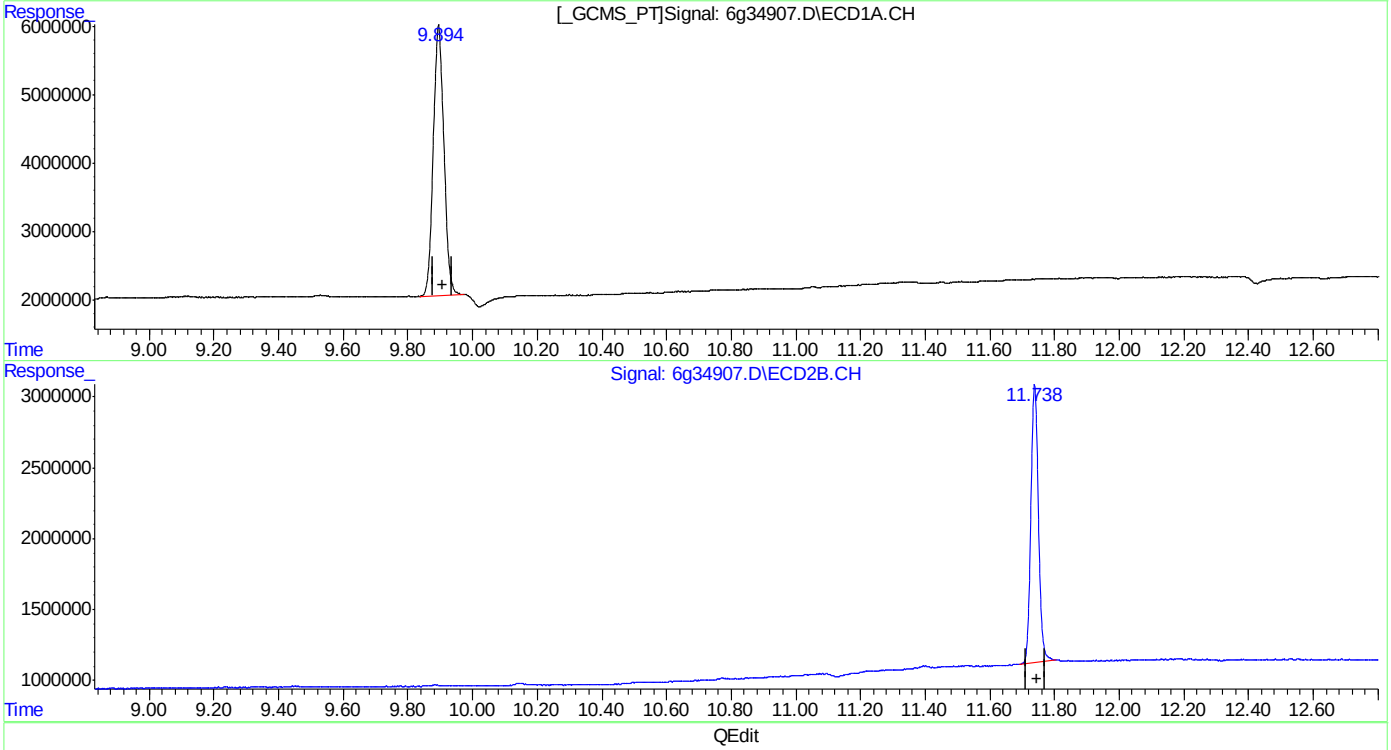
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1007\
Data File : 6g34907.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 May 2016 1:11 pm
Operator : dharas
Sample : jc19644-5
Misc : op93736,g6g1007,15.1,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 10 13:25:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(24) Decachlorobiphenyl (SAB)
9.894min 43.670PPB m
response 90126962

(24) Decachlorobiphenyl #2 (SAB)
11.738min 47.703PPB
response 31549176

(+) = Expected Retention Time
6PST987.M Tue May 10 13:26:12 2016

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67947.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 8:57 am
Operator : brittanp
Sample : op93665-mb1
Misc : op93665,g4g1782,300,,,2,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 06 09:40:46 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...	1.793	2.067	425.0E6	398.8E6	50.000	50.000
25) I 1-bromo-2...	1.793	2.067	425.0E6	398.8E6	50.000	50.000
31) I 1-bromo-2...	1.793	2.067	425.0E6	398.8E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachlo...	2.579	3.104	237.0E6	220.0E6	32.335	31.316
Spiked Amount	40.000	Range	30 - 150	Recovery	= 80.84%	78.29%
24) SA Decachlor...	10.244	11.646	263.4E6	161.1E6	38.142	32.332
Spiked Amount	40.000			Recovery	= 95.36%	80.83%

Target Compounds

SemiQuant Compounds - Not Calibrated on this Instrument

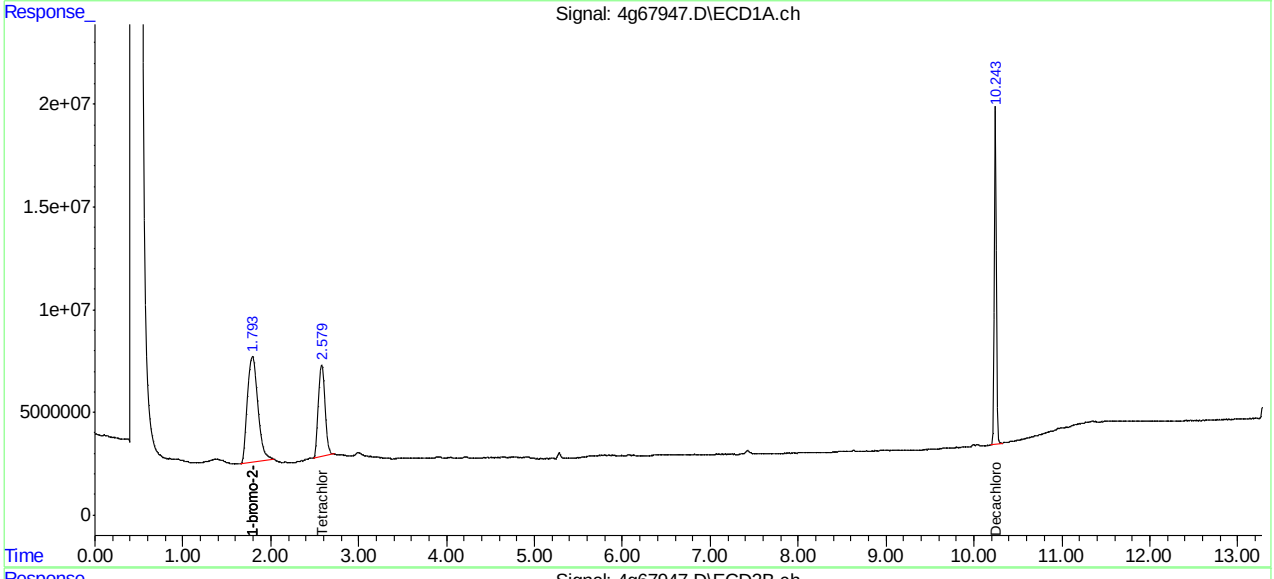
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

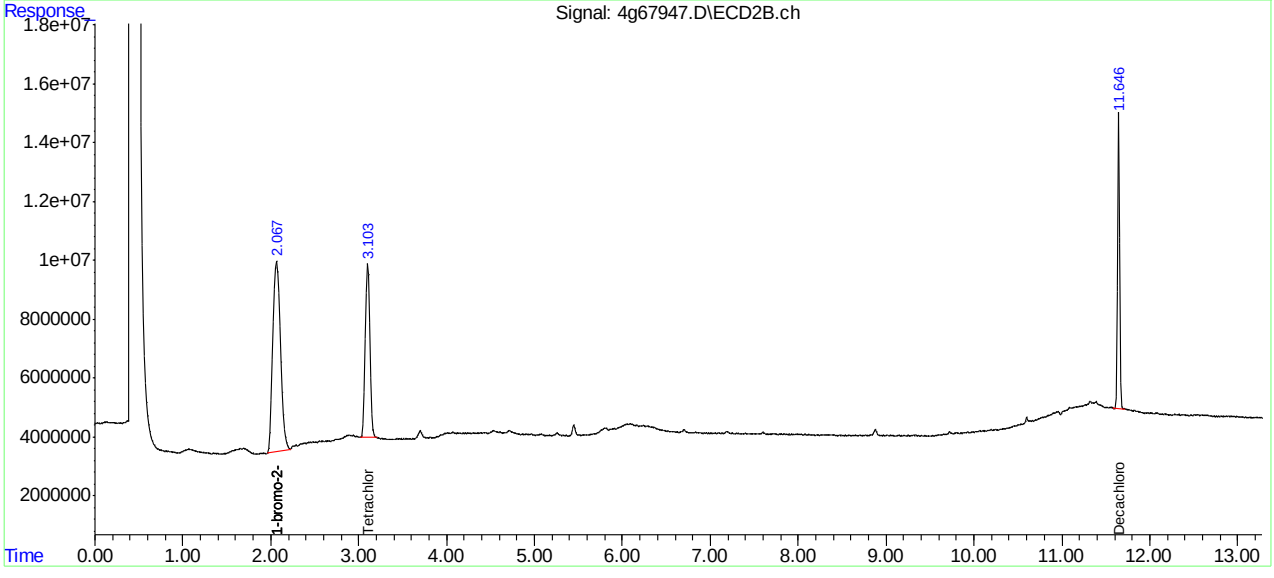
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67947.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 8:57 am
Operator : brittanp
Sample : op93665-mb1
Misc : op93665,g4g1782,300,,,2,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 06 09:40:46 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 JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1007\
Data File : 6g34897.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 May 2016 10:27 am
Operator : dharas
Sample : op93736-mb1
Misc : op93736,g6g1007,15.0,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 10 13:11:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.299	1.567	139.4E6	51813297	50.000	50.000
25) I	1-bromo-2...	1.299	1.567	139.4E6	51813297	50.000	50.000
31) I	1-bromo-2...	1.299	1.567	139.4E6	51813297	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.974	2.460	90580634	33383244	35.463	35.662
Spiked Amount		40.000	Range	30 - 150	Recovery	= 88.66%	89.16%
24) SAB	Decachlor...	9.897	11.739	77993490	28169132	35.116	40.022
Spiked Amount		40.000			Recovery	= 87.79%	100.06%

Target Compounds

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

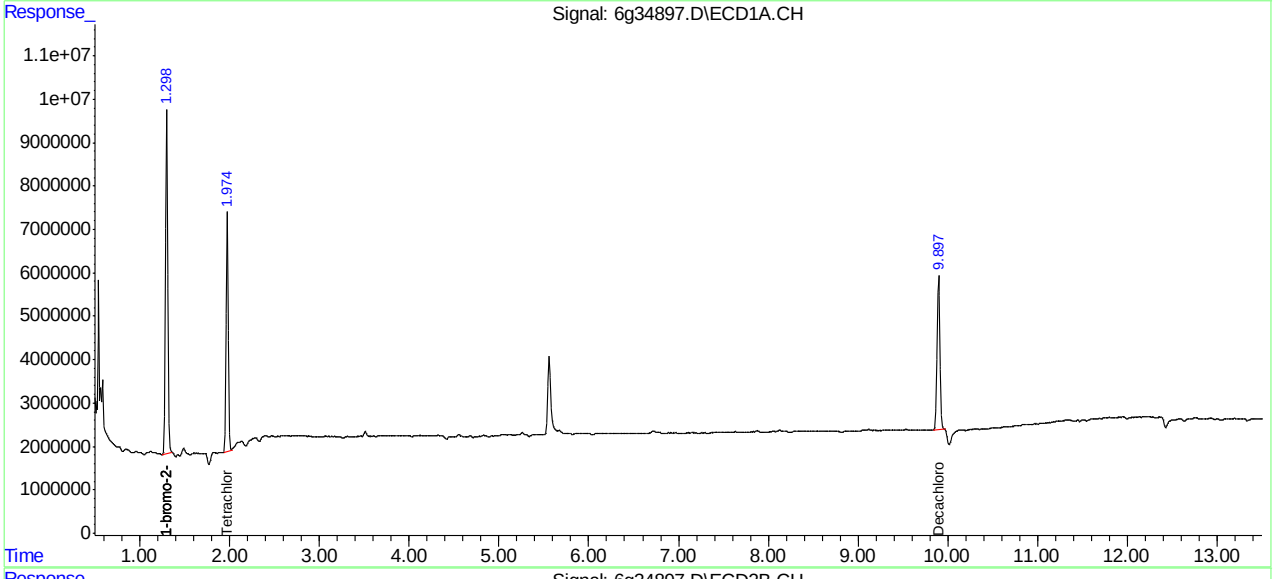
SGS ACCUTEST JC19644

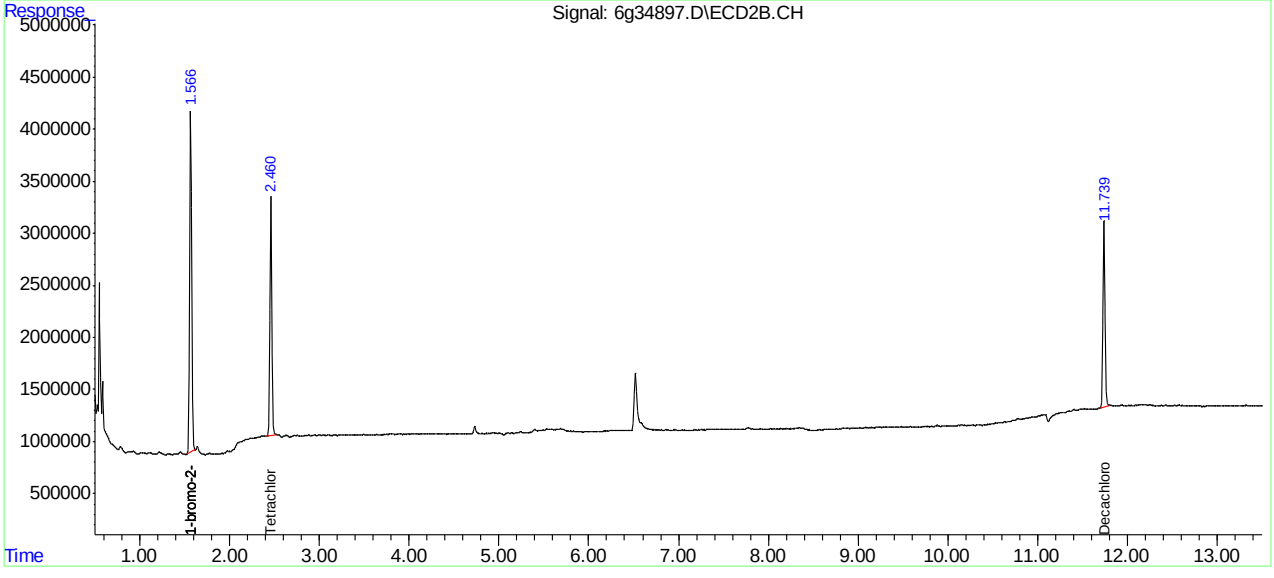
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1007\
Data File : 6g34897.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 May 2016 10:27 am
Operator : dharas
Sample : op93736-mb1
Misc : op93736,g6g1007,15.0,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 10 13:11:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67948.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 9:13 am
Operator : brittanp
Sample : op93665-bs1
Misc : op93665,g4g1782,300,,,2,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 06 09:41:34 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

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.792	2.068	439.8E6	415.4E6	50.000	50.000
25) I	1-bromo-2...	1.792	2.068	439.8E6	415.4E6	50.000	50.000
31) I	1-bromo-2...	1.792	2.068	439.8E6	415.4E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.581	3.104	239.3E6	222.1E6	31.553	30.353
Spiked Amount		40.000 Range	30 - 150	Recovery	=	78.88%	75.88%
24) SA	Decachlor...	10.244	11.646	290.4E6	176.1E6	40.645	33.936
Spiked Amount		40.000		Recovery	=	101.61%	84.84%
	Target Compounds						
3) A	alpha-BHC	3.150	3.865	253.9E6	238.4E6	24.468	22.289
4) MA	gamma-BHC	3.495	4.343	224.8E6	219.6E6	24.780	23.106
5) MA	Heptachlor	3.817	4.969	190.1E6	222.9E6	22.317	22.765
6) B	beta-BHC	3.600	4.438	110.7E6	99217589	25.466	23.050
7) B	delta-BHC	4.057	4.870	214.6E6	190.9E6	25.961	21.514
8) MB	Aldrin	4.431	5.455	207.1E6	210.6E6	23.827	21.833
9) B	Heptachlo...	5.195	6.316	199.1E6	203.0E6	25.638	23.307
10) B	gamma-Chl...	5.376	6.614	198.2E6	200.1E6	25.534	23.763
11) B	alpha-Chl...	5.558	6.846	201.7E6	193.4E6	24.096	22.880
12) A	Endosulfan I	5.743	6.952	219.8E6	187.5E6	25.534	23.227
13) B	4,4'-DDE	5.689	7.106	165.1E6	192.2E6	21.275	22.798
14) MA	Dieldrin	6.081	7.398f	215.6E6	204.1E6	26.419	24.237
15) MA	Endrin	6.418	7.920f	199.4E6	182.6E6	25.660	24.331
16) A	4,4'-DDD	6.569	8.080	159.9E6	158.4E6	24.306	23.246
17) B	Endosulfa...	6.758	8.277f	201.7E6	176.2E6	26.972	23.758
18) MA	4,4'-DDT	6.991	8.623f	137.5E6	155.6E6	28.218	26.123
19) B	Endrin Al...	7.394	8.854f	165.2E6	132.0E6	26.177	23.430
20) B	Endosulfa...	8.087	9.330f	185.8E6	151.5E6	27.105	24.401
21) A	Methoxychlor	7.804	9.833	87426062	80913110	29.840	25.000
23) B	Endrin Ke...	8.551	10.192	218.2E6	164.5E6	27.533	24.140
	SemiQuant Compounds - Not Calibrated on this Instrument						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

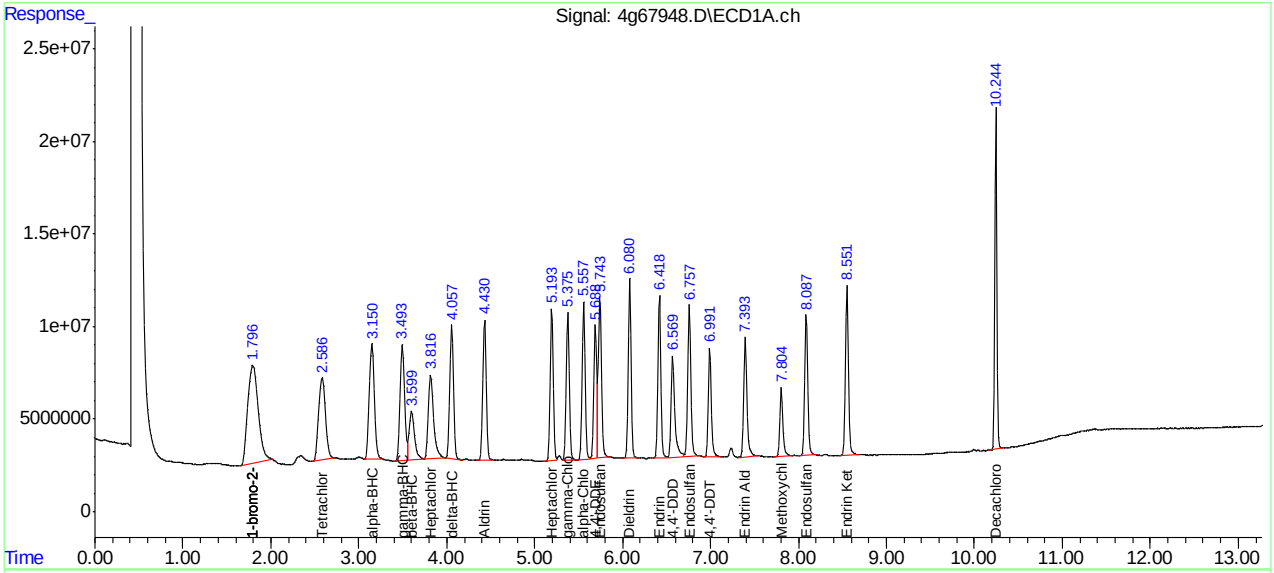
SGS ACCUTEST JC19644

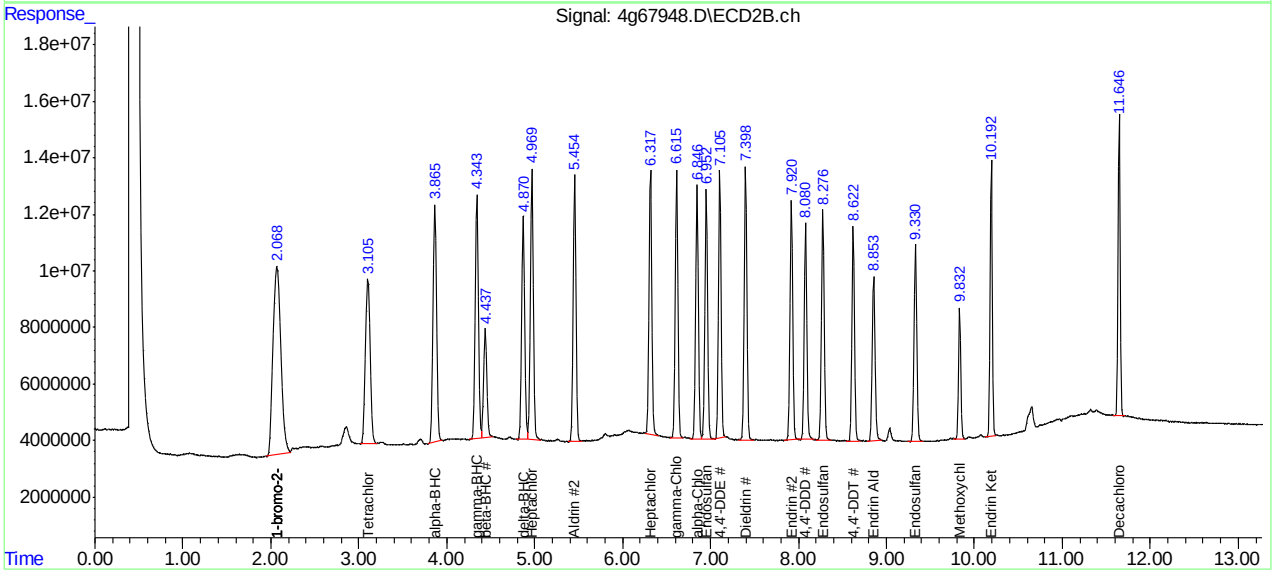
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67948.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 9:13 am
Operator : brittanp
Sample : op93665-bs1
Misc : op93665,g4g1782,300,,,2,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 06 09:41:34 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





Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
05/11/16 06:52

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1007\
Data File : 6g34898.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 May 2016 10:43 am
Operator : dharas
Sample : op93736-bs1
Misc : op93736,g6g1007,15.0,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 10 13:12:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.297	1.567	124.6E6	46195908	50.000	50.000
25) I	1-bromo-2...	1.297	1.567	124.6E6	46195908	50.000	50.000
31) I	1-bromo-2...	1.297	1.567	124.6E6	46195908	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.972	2.460	99572086	36094453	43.597	43.246
Spiked Amount		40.000 Range	30 - 150	Recovery	=	108.99%	108.12%
24) SAB	Decachlor...	9.894f	11.739	85044288	30657078	42.823	48.853
Spiked Amount		40.000		Recovery	=	107.06%	122.13%
	Target Compounds						
3) A	alpha-BHC	2.484	3.161	79209147	29165160	26.903m	26.822
4) MA	gamma-BHC	2.799	3.612	74327694	27538114	27.116	27.049
5) MA	Heptachlor	3.325	4.216	72883202	26100288	26.488	25.367
6) B	beta-BHC	2.880	3.704	36159389	12771116	26.874	25.746
7) B	delta-BHC	3.073	4.120	62609880	22883033	24.509	24.119
8) MB	Aldrin	3.676	4.691	68906425	26559809	27.115	27.760
9) B	Heptachlo...	4.422	5.570	64469000	24530478	27.096	27.508
10) B	gamma-Chl...	4.596f	5.875	65206400	24054718	27.234	27.594
11) B	alpha-Chl...	4.777f	6.119	65265248	23942611	27.465	27.645
12) A	Endosulfan I	4.960	6.217	62105827	22558968	26.473	26.812
13) B	4,4'-DDE	4.908	6.418	56607173	21222160	28.747	28.417
14) MA	Dieldrin	5.303	6.687	66623350	24064975	28.722	28.001
15) MA	Endrin	5.643	7.229	61435707	22606053	29.196	28.950
16) A	4,4'-DDD	5.793f	7.447	47489283	18173235	28.526	28.197
17) B	Endosulfa...	5.985	7.611	57816792	20635984	27.848	27.020
18) MA	4,4'-DDT	6.243f	8.026	46550294	16007722	25.707	27.364
19) B	Endrin Al...	6.654	8.239	45679025	16504004	26.994	26.653
20) B	Endosulfa...	7.390	8.754	50999241	17886531	27.971	26.614
21) A	Methoxychlor	7.108f	9.405	27909392	8499748	25.716	26.369
23) B	Endrin Ke...	7.863	9.799	61109366	21374966	28.184	27.210

SemiQuant Compounds - Not Calibrated on this Instrument

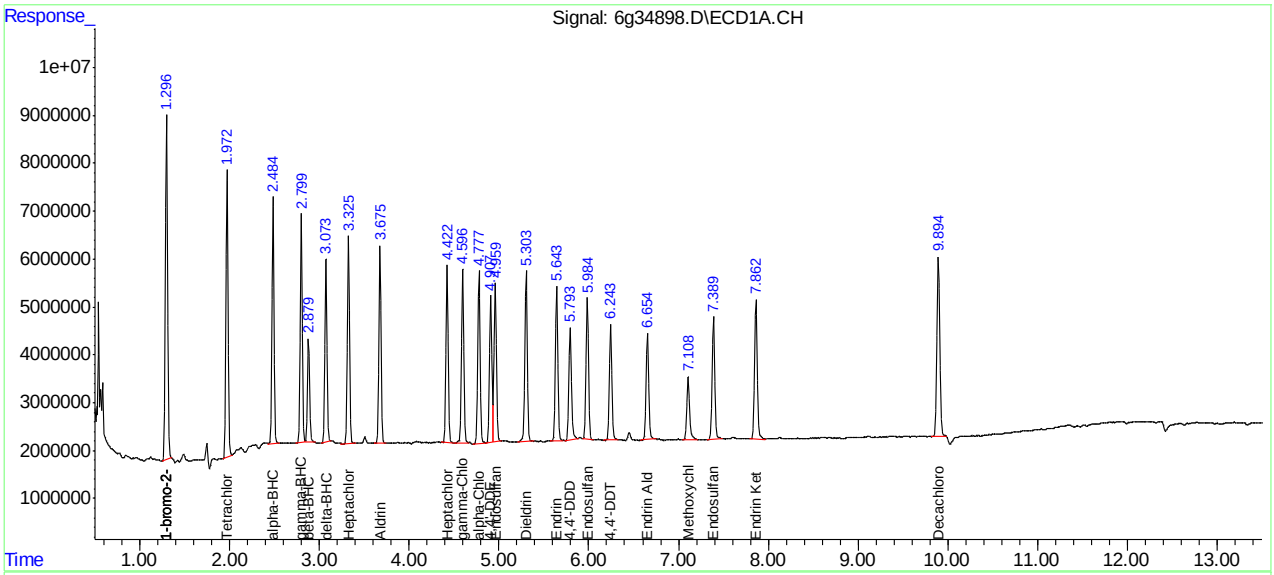
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

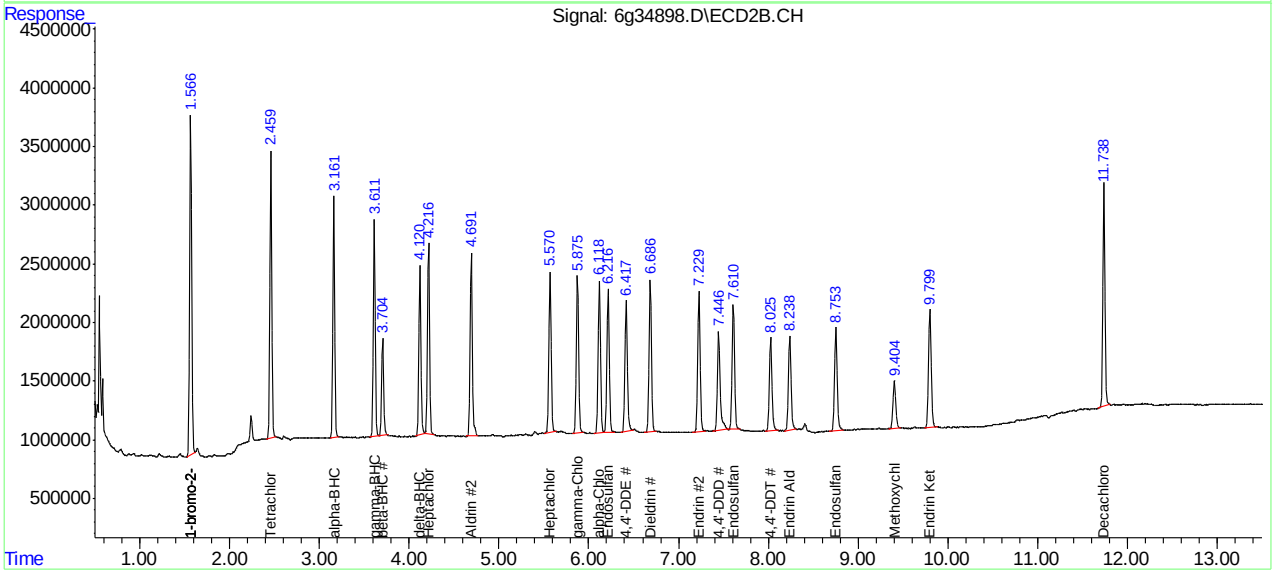
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1007\
Data File : 6g34898.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 May 2016 10:43 am
Operator : dharas
Sample : op93736-bs1
Misc : op93736,g6g1007,15.0,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 10 13:12:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC19644

Manual Integration Approval Summary

Sample Number:	OP93736-BS1	**Method:**	SW846 8081B
Lab FileID:	6G34898.D	**Analyst approved:**	05/10/16 13:20 Dhara Saparia
Injection Time:	05/10/16 10:43	**Supervisor approved:**	05/11/16 06:52 Gwendolyn Burns

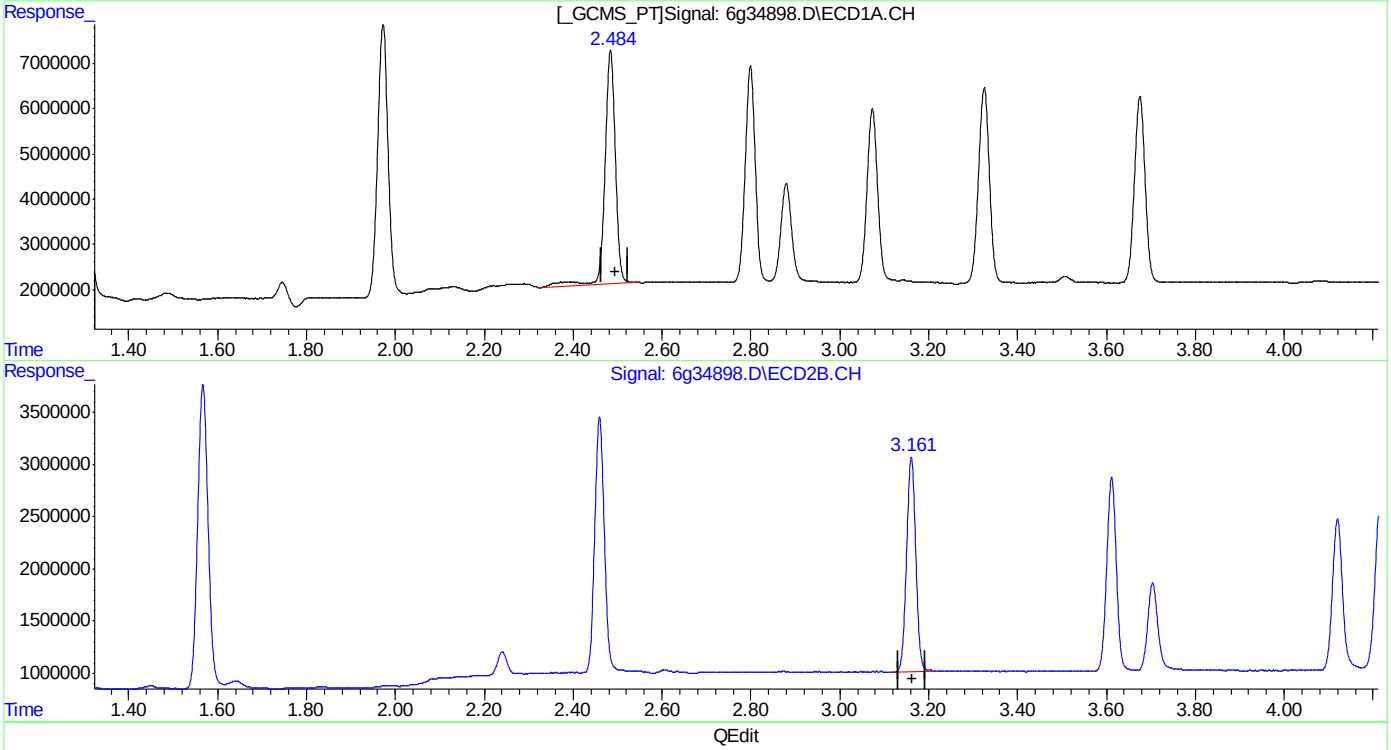
Parameter	CAS	Sig#	R.T. (min.)	Reason
alpha-BHC	319-84-6	1	2.48	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1007\
Data File : 6g34898.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 May 2016 10:43 am
Operator : dharas
Sample : op93736-bs1
Misc : op93736,g6g1007,15.0,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 10 13:12:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(3) alpha-BHC (A)
2.484min 28.610PPB
response 84234512

(3) alpha-BHC #2 (A)
3.161min 26.822PPB
response 29165160

(+) = Expected Retention Time
6PST987.M Tue May 10 13:12:06 2016

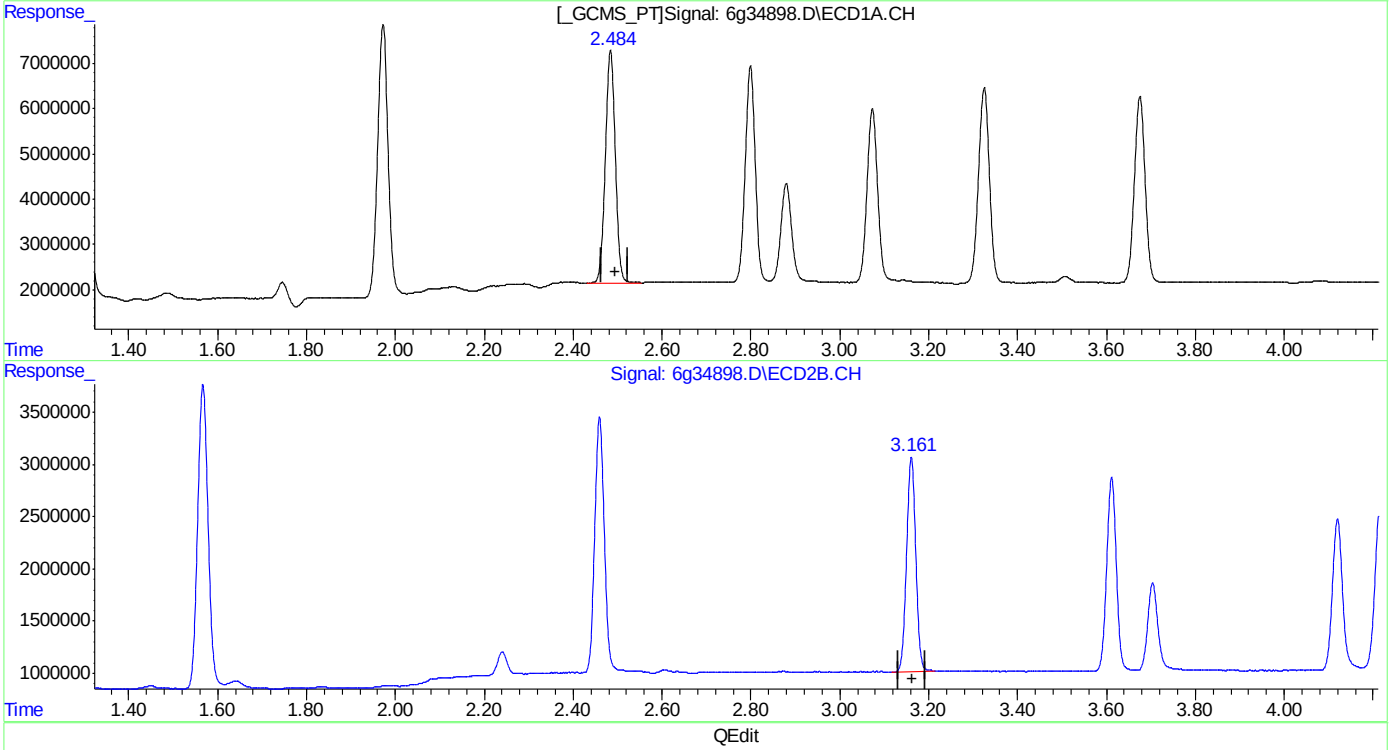
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1007\
Data File : 6g34898.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 May 2016 10:43 am
Operator : dharas
Sample : op93736-bs1
Misc : op93736,g6g1007,15.0,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 10 13:12:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(3) alpha-BHC (A)
2.484min 26.903PPB m
response 79209147

(3) alpha-BHC #2 (A)
3.161min 26.822PPB
response 29165160

(+) = Expected Retention Time
6PST987.M Tue May 10 13:12:13 2016

SGS ACCUTEST JC19644

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
05/09/16 15:33

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67996.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 8:46 pm
Operator : dharas
Sample : op93665-ms
Misc : op93665,g4g1782,300,,,2,1
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 09 08:21:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 16:37:24 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...	1.809	2.068	463.7E6	417.2E6	50.000	50.000	
25) I	1-bromo-2...	1.809	2.068	463.7E6	417.2E6	50.000	50.000	
31) I	1-bromo-2...	1.809	2.068	463.7E6	417.2E6	50.000	50.000	
	System Monitoring Compounds							
2) SAB	Tetrachlo...	2.599	3.103	207.3E6	195.3E6	25.931	26.581	
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 64.83%	66.45%	
24) SA	Decachlor...	10.249	11.644	290.4E6	188.2E6	38.547	36.114	
	Spiked Amount	40.000			Recovery	= 96.37%	90.28%	
	Target Compounds							
3) A	alpha-BHC	3.155	3.864	241.9E6	229.5E6	22.108	21.362	
4) MA	gamma-BHC	3.506	4.343	222.3E6	221.4E6	23.237	23.190	
5) MA	Heptachlor	3.847	4.969	194.6E6	209.3E6	21.671	21.282	
6) B	beta-BHC	3.630	4.442	116.4E6	101.9E6	25.399	23.578	
7) B	delta-BHC	4.058	4.873	196.1E6	195.5E6	22.503	21.945	
8) MB	Aldrin	4.432	5.454	187.4E6	198.7E6	20.451	20.510	
9) B	Heptachlo...	5.198	6.316	205.0E6	205.0E6	25.039	23.432	
10) B	gamma-Chl...	5.382	6.616	200.0E6	192.4E6	24.426	22.755	
11) B	alpha-Chl...	5.562	6.847	201.7E6	186.8E6	22.858	21.997	
12) A	Endosulfan I	5.744	6.952	245.2E6	185.9E6	27.015m	22.931	
13) B	4,4'-DDE	5.725	7.108	115.9E6	173.3E6	14.166m	20.467	#
14) MA	Dieldrin	6.084	7.400	214.8E6	202.0E6	24.964	23.894	
15) MA	Endrin	6.423	7.919	189.3E6	172.1E6	23.101	22.837	
16) A	4,4'-DDD	6.603	8.083	148.4E6	153.3E6	21.405	22.408	
17) B	Endosulfa...	6.767	8.279	226.0E6	182.1E6	28.664	24.443	
18) MA	4,4'-DDT	7.010	8.624	86923336	118.1E6	18.047	19.752	
19) B	Endrin Al...	7.405	8.856	183.7E6	148.2E6	27.594	26.177	
20) B	Endosulfa...	8.098	9.332	180.6E6	149.7E6	24.991	24.014	
21) A	Methoxychlor	7.831	9.835	58114926	67986662	18.811	20.915	
23) B	Endrin Ke...	8.559	10.193	220.7E6	171.6E6	26.408	25.069	

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

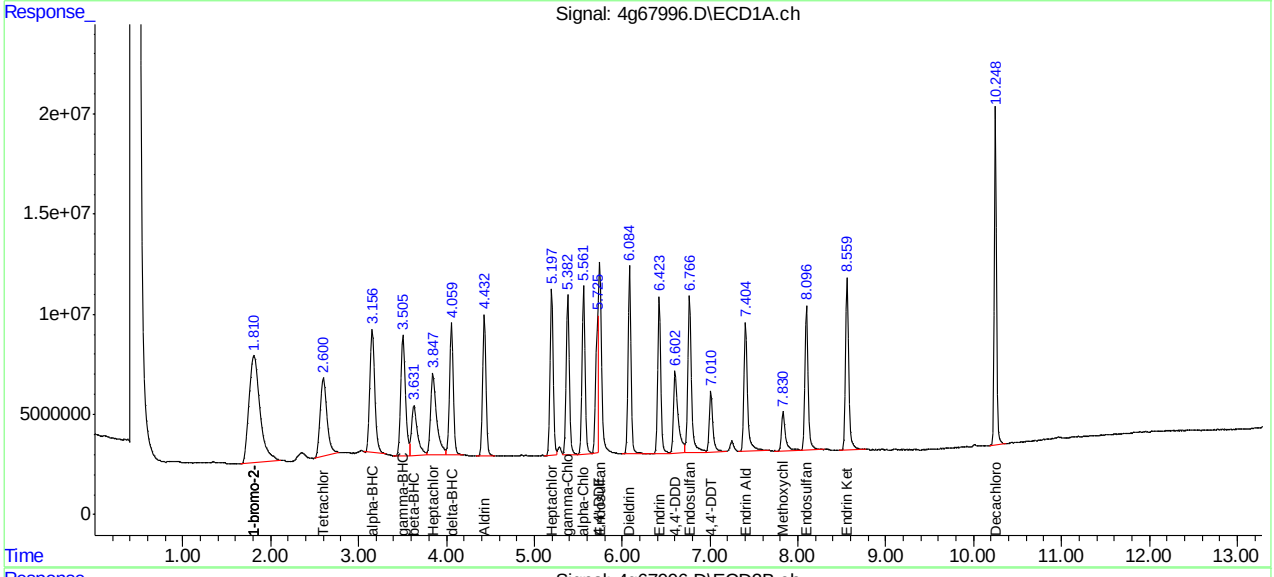
SGS ACCUTEST JC19644

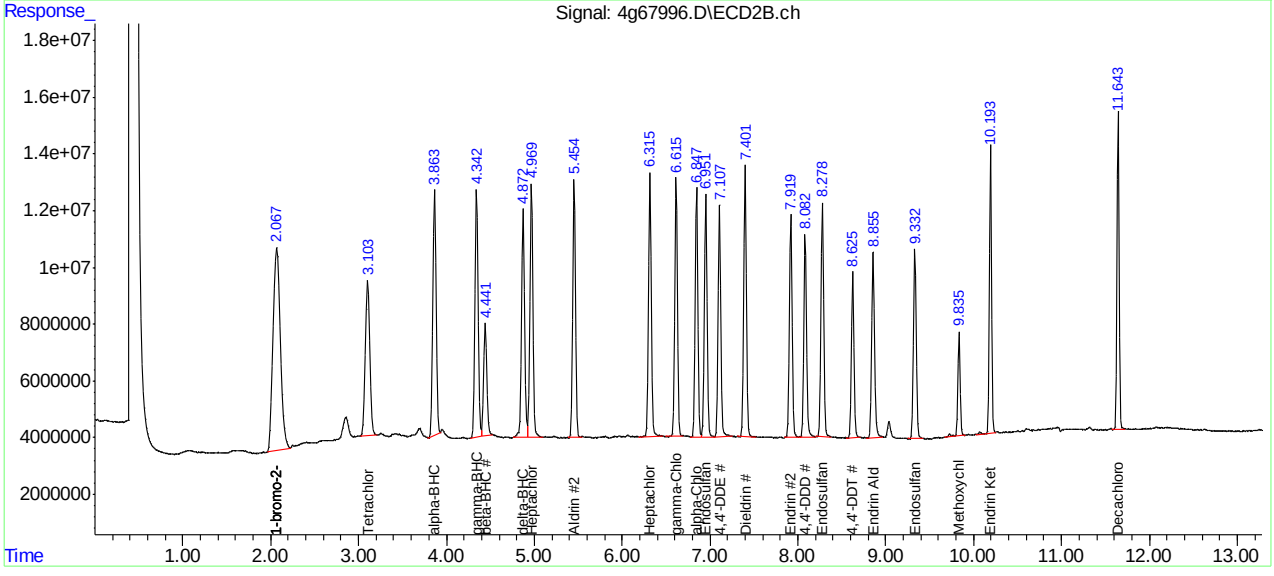
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67996.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 8:46 pm
Operator : dharas
Sample : op93665-ms
Misc : op93665,g4g1782,300,,,2,1
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 09 08:21:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 16:37:24 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:	OP93665-MS	**Method:**	SW846 8081B
Lab FileID:	4G67996.D	**Analyst approved:**	05/09/16 08:26 Brittany Piercy
Injection Time:	05/06/16 20:46	**Supervisor approved:**	05/09/16 15:33 Gwendolyn Burns

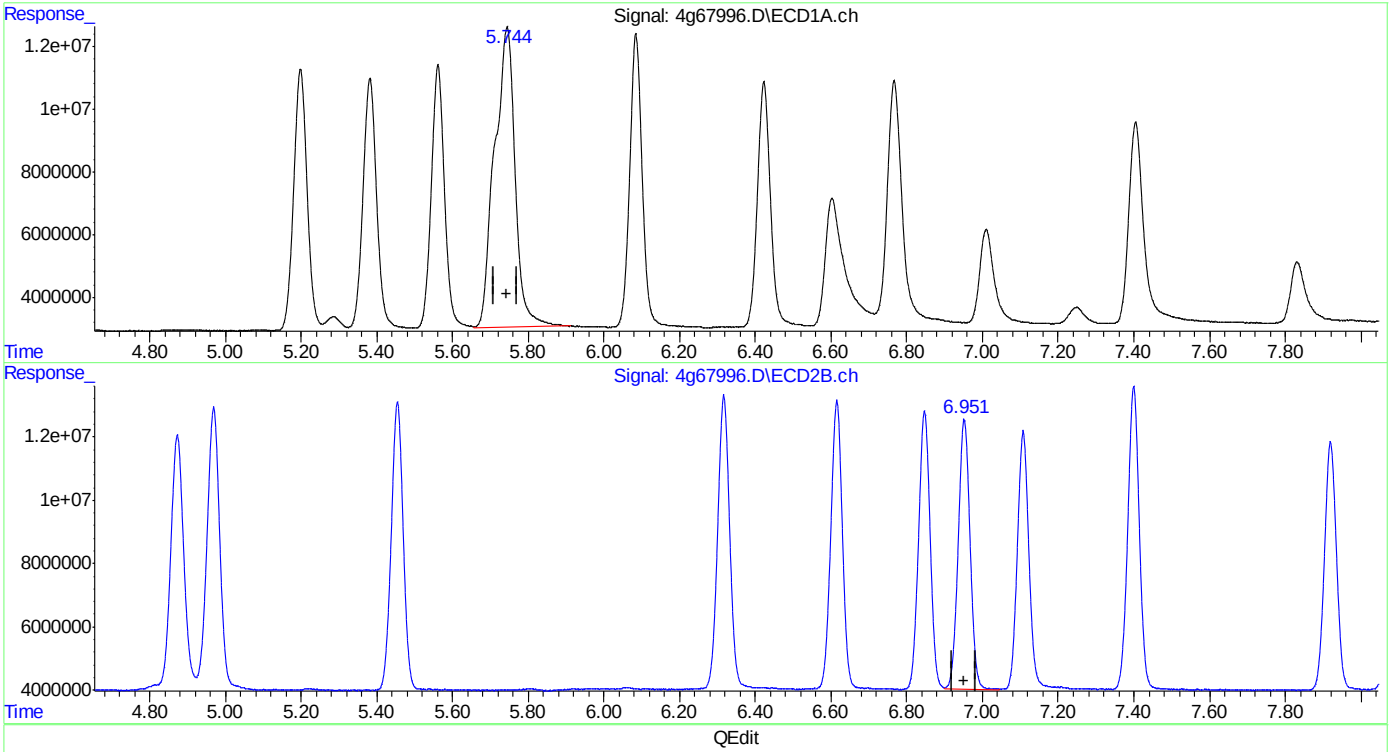
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	1	5.72	Poor instrument integration
Endosulfan-I	959-98-8	1	5.74	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67996.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 8:46 pm
Operator : dharas
Sample : op93665-ms
Misc : op93665,g4g1782,300,,,2,1
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 07 16:39:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 16:37:24 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

(12) Endosulfan I (A)
5.744min 39.742 PPB
response 360757301

(12) Endosulfan I #2 (A)
6.952min 22.931 PPB
response 185929260

(+) = Expected Retention Time

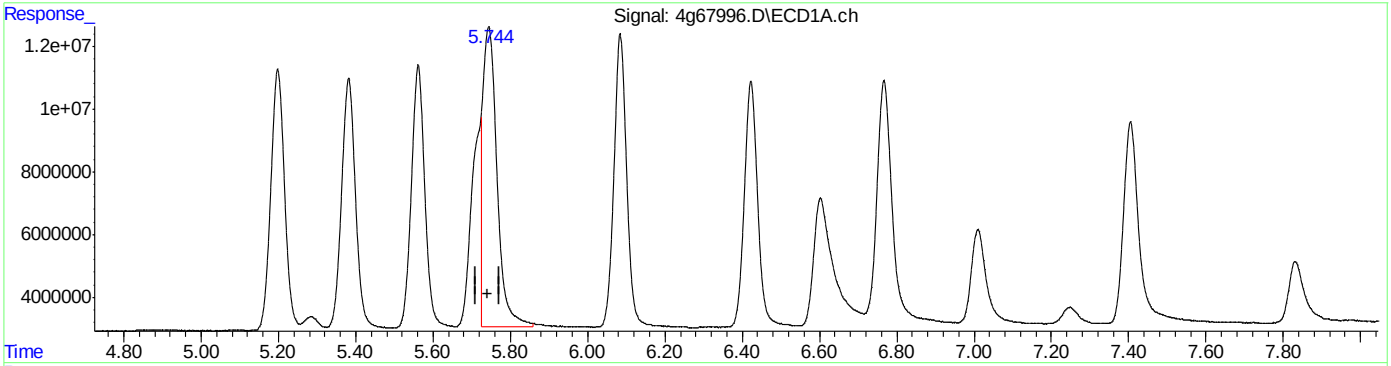
SGS ACCUTEST JC19644

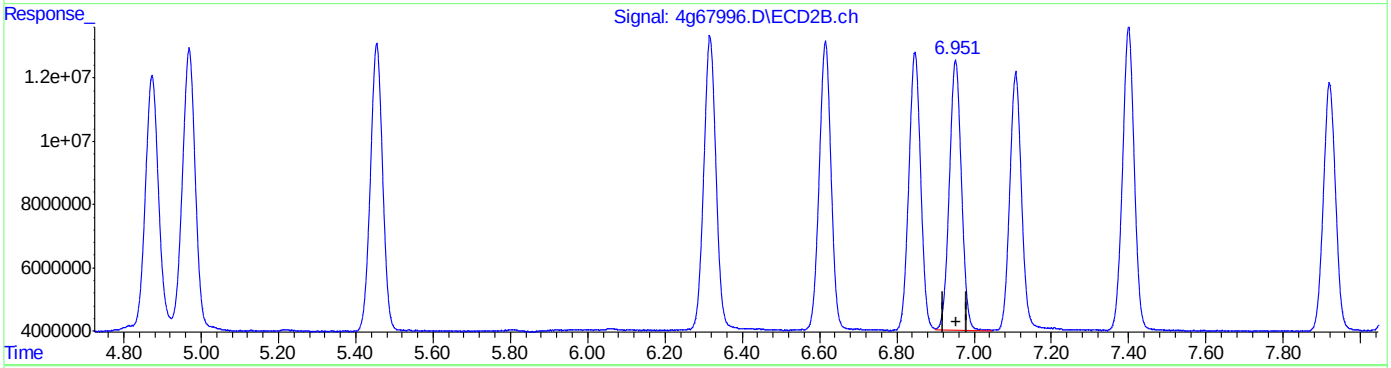
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67996.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 8:46 pm
Operator : dharas
Sample : op93665-ms
Misc : op93665,g4g1782,300,,,2,1
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 07 16:39:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 16:37:24 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

(12) Endosulfan I (A)
5.744min 27.015 PPB m
response 245233114

(12) Endosulfan I #2 (A)
6.952min 22.931 PPB
response 185929260

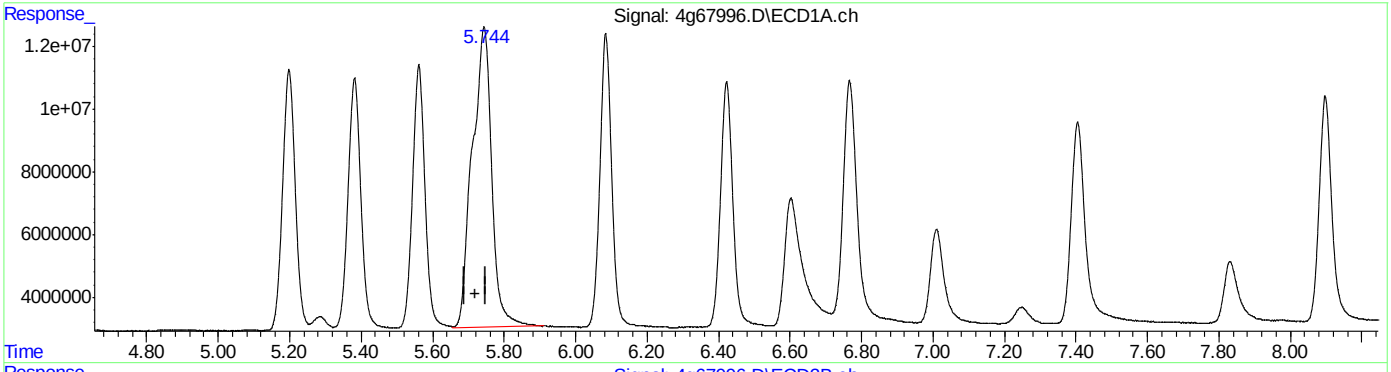
(+) = Expected Retention Time
4PST1778.M Mon May 09 08:20:32 2016 RPT1

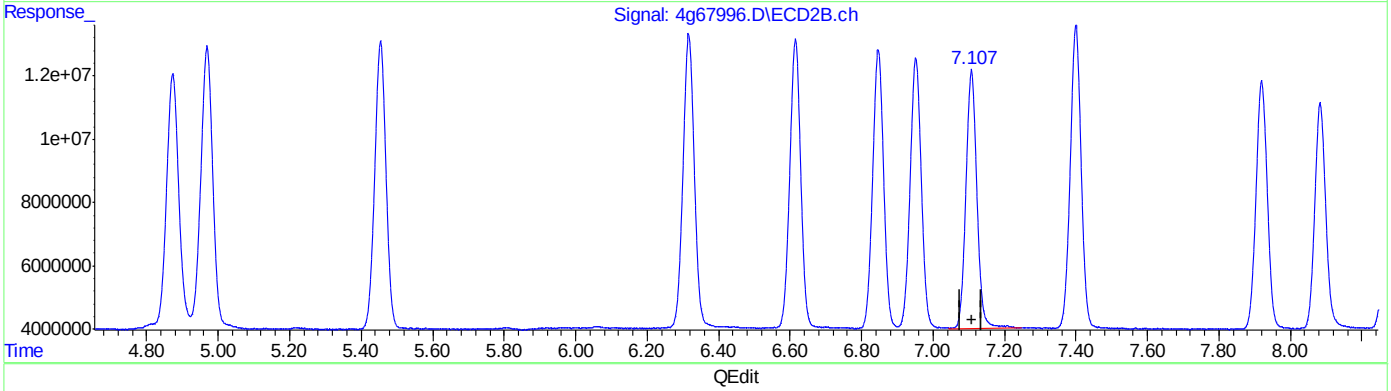
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67996.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 8:46 pm
Operator : dharas
Sample : op93665-ms
Misc : op93665,g4g1782,300,,,2,1
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 07 16:39:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 16:37:24 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)
5.744min 44.080 PPB
response 360757301

(13) 4,4'-DDE #2 (B)
7.108min 20.467 PPB
response 173330201

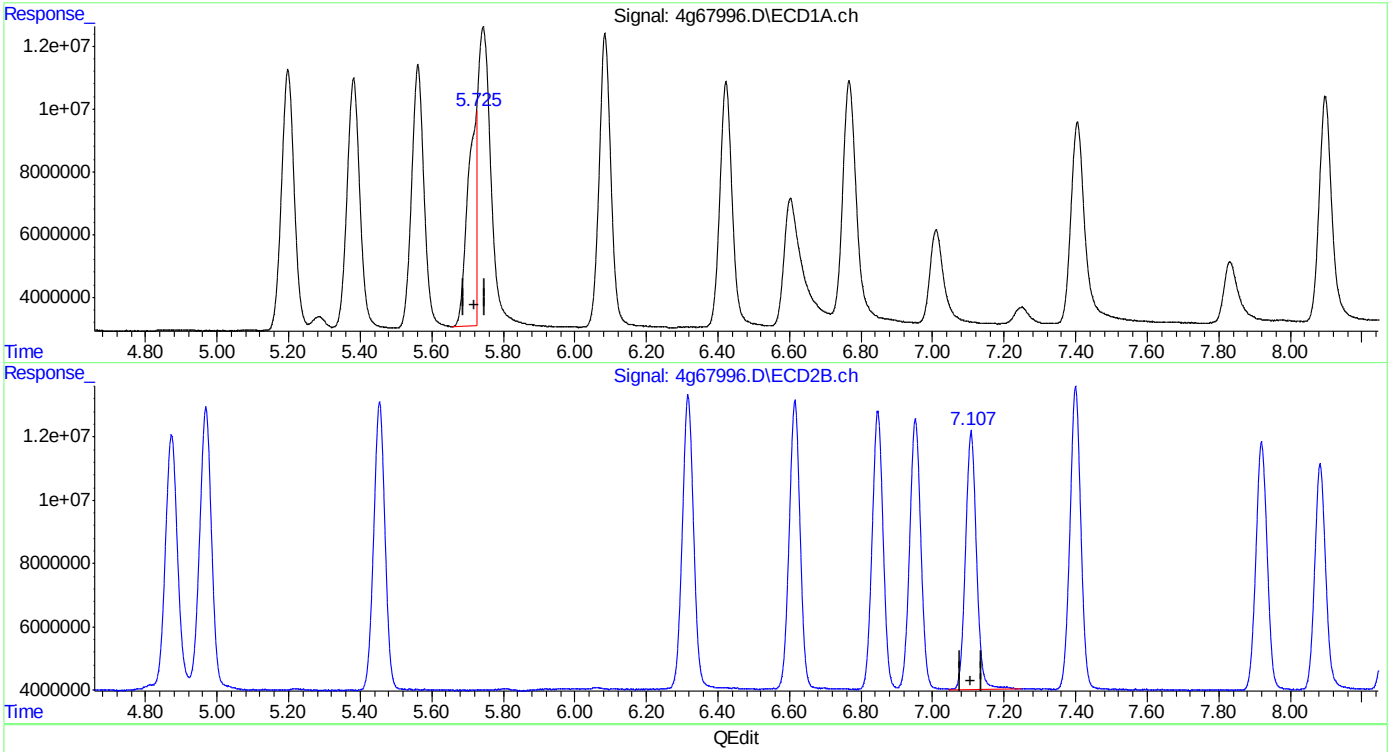
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67996.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 8:46 pm
Operator : dharas
Sample : op93665-ms
Misc : op93665,g4g1782,300,,,2,1
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 07 16:39:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 16:37:24 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)
5.725min 14.166 PPB m
response 115935205

(13) 4,4'-DDE #2 (B)
7.108min 20.467 PPB
response 173330201

(+) = Expected Retention Time

SGS ACCUTEST JC19644

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
05/09/16 15:33

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67997.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 9:01 pm
Operator : dharas
Sample : op93665-msd
Misc : op93665,g4g1782,300,,,2,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 09 08:22:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 16:37:24 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...	1.812	2.071	484.4E6	427.2E6	50.000	50.000	
25) I	1-bromo-2...	1.812	2.071	484.4E6	427.2E6	50.000	50.000	
31) I	1-bromo-2...	1.812	2.071	484.4E6	427.2E6	50.000	50.000	
	System Monitoring Compounds							
2) SAB	Tetrachlo...	2.602	3.105	216.1E6	207.9E6	25.877	27.637	
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 64.69%	69.09%	
24) SA	Decachlor...	10.248	11.644	297.5E6	192.7E6	37.797	36.112	
	Spiked Amount	40.000			Recovery	= 94.49%	90.28%	
	Target Compounds							
3) A	alpha-BHC	3.158	3.867	247.6E6	232.1E6	21.664	21.100	
4) MA	gamma-BHC	3.505	4.345	226.3E6	228.1E6	22.644	23.329	
5) MA	Heptachlor	3.846	4.969	203.0E6	214.1E6	21.645	21.257	
6) B	beta-BHC	3.629	4.442	118.9E6	112.5E6	24.847	25.412	
7) B	delta-BHC	4.059	4.873	199.8E6	204.5E6	21.949	22.412	
8) MB	Aldrin	4.432	5.455	190.8E6	203.9E6	19.936	20.559	
9) B	Heptachlo...	5.198	6.317	208.8E6	209.9E6	24.414	23.429	
10) B	gamma-Chl...	5.381	6.616	204.9E6	197.5E6	23.956	22.809	
11) B	alpha-Chl...	5.562	6.848	206.6E6	192.2E6	22.408	22.101	
12) A	Endosulfan I	5.744	6.953	264.9E6	190.2E6	27.937m	22.904	
13) B	4,4'-DDE	5.723	7.108	112.7E6	178.8E6	13.189m	20.617	#
14) MA	Dieldrin	6.085	7.401	218.4E6	206.6E6	24.299	23.867	
15) MA	Endrin	6.423	7.921	191.9E6	175.3E6	22.424	22.712	
16) A	4,4'-DDD	6.604	8.084	151.4E6	157.0E6	20.904	22.412	
17) B	Endosulfa...	6.767	8.280	233.4E6	188.3E6	28.346	24.687	
18) MA	4,4'-DDT	7.009	8.625	89954307	123.4E6	17.901	20.146	
19) B	Endrin Al...	7.405	8.856	194.2E6	157.9E6	27.926	27.250	
20) B	Endosulfa...	8.098	9.333	187.8E6	156.1E6	24.882	24.449	
21) A	Methoxychlor	7.831	9.835	59776604	68870277	18.524	20.691	
23) B	Endrin Ke...	8.559	10.193	229.7E6	180.3E6	26.314	25.721	

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

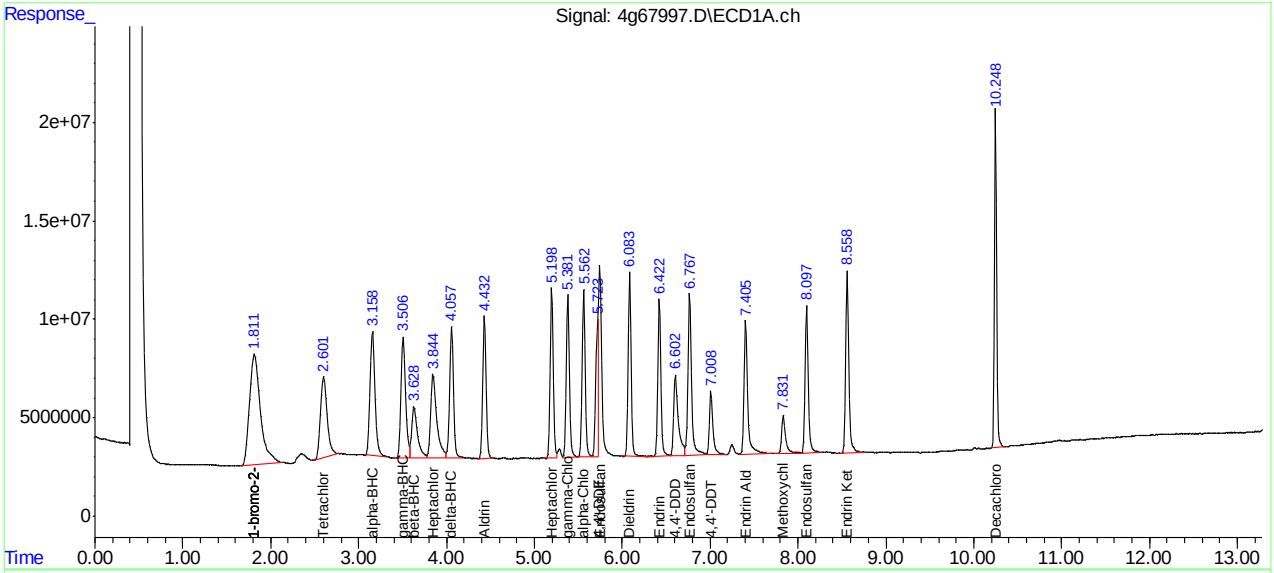
SGS ACCUTEST JC19644

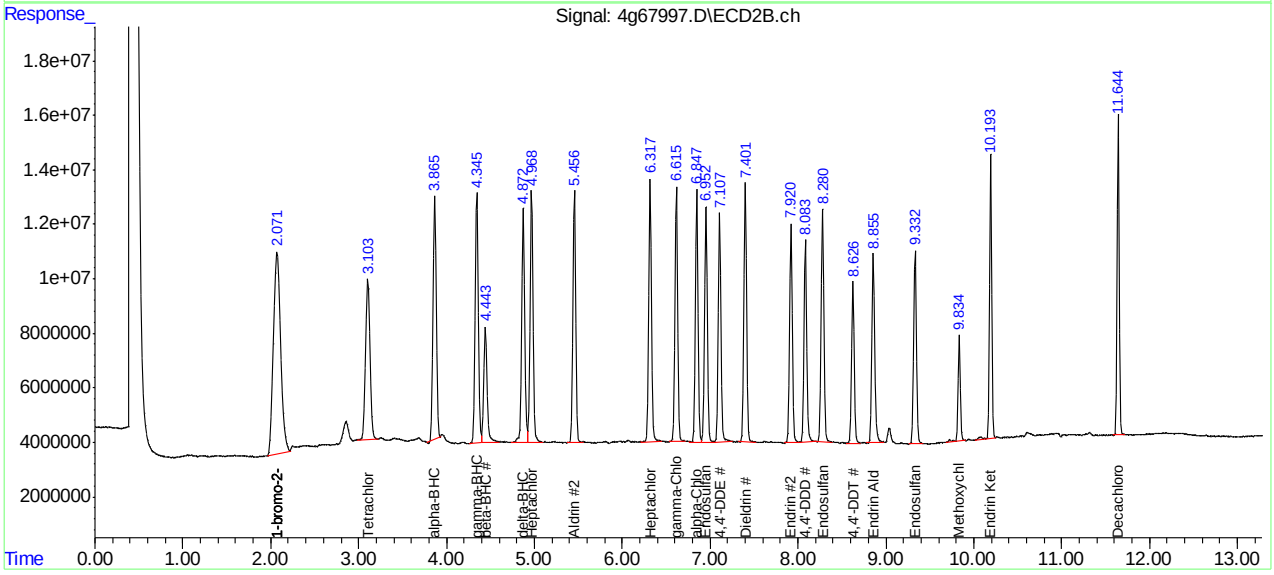
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67997.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 9:01 pm
Operator : dharas
Sample : op93665-msd
Misc : op93665,g4g1782,300,,,2,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 09 08:22:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 16:37:24 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 JC19644

Manual Integration Approval Summary

Sample Number:	OP93665-MSD	**Method:**	SW846 8081B
Lab FileID:	4G67997.D	**Analyst approved:**	05/09/16 08:26 Brittany Piercy
Injection Time:	05/06/16 21:01	**Supervisor approved:**	05/09/16 15:33 Gwendolyn Burns

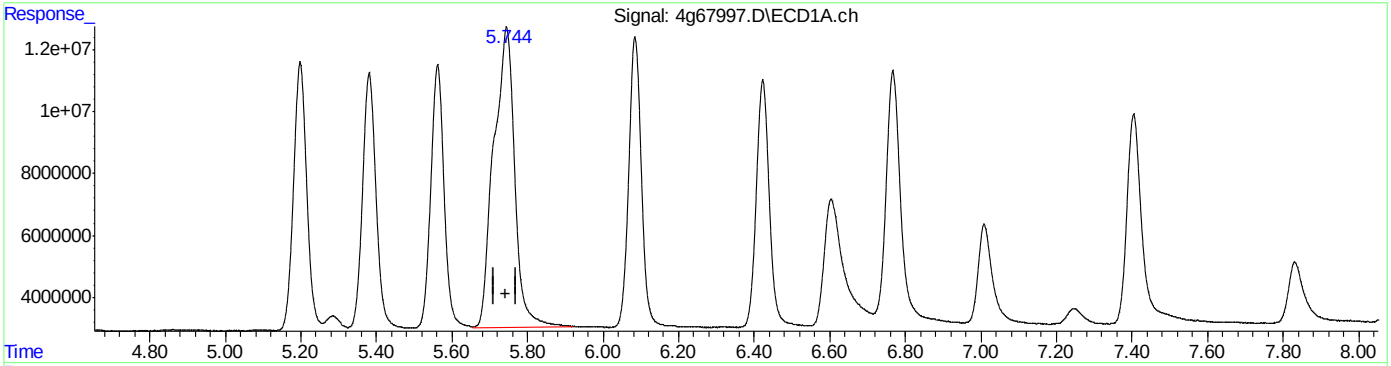
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	1	5.72	Poor instrument integration
Endosulfan-I	959-98-8	1	5.74	Poor instrument integration

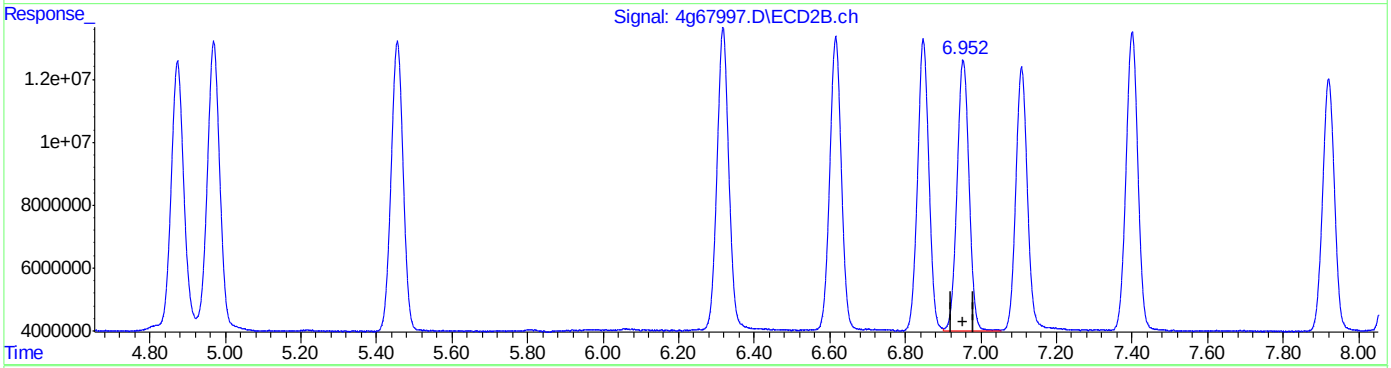
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67997.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 9:01 pm
Operator : dharas
Sample : op93665-msd
Misc : op93665,g4g1782,300,,,2,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 07 16:40:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 16:37:24 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

(12) Endosulfan I (A)
5.745min 39.201 PPB
response 371694680

(12) Endosulfan I #2 (A)
6.953min 22.904 PPB
response 190168749

(+) = Expected Retention Time

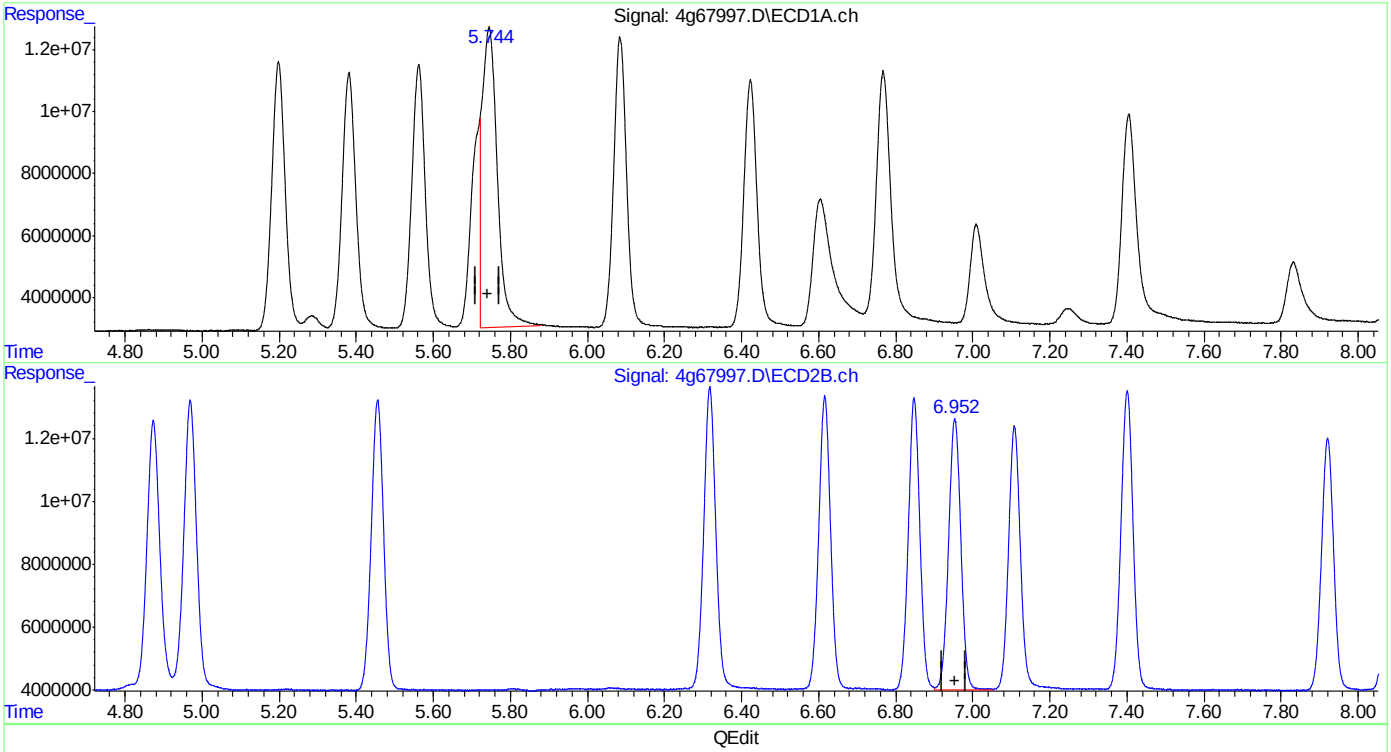
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67997.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 9:01 pm
Operator : dharas
Sample : op93665-msd
Misc : op93665,g4g1782,300,,,2,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 07 16:40:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 16:37:24 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

(12) Endosulfan I (A)
5.744min 27.937 PPB m
response 264886715

(12) Endosulfan I #2 (A)
6.953min 22.904 PPB
response 190168749

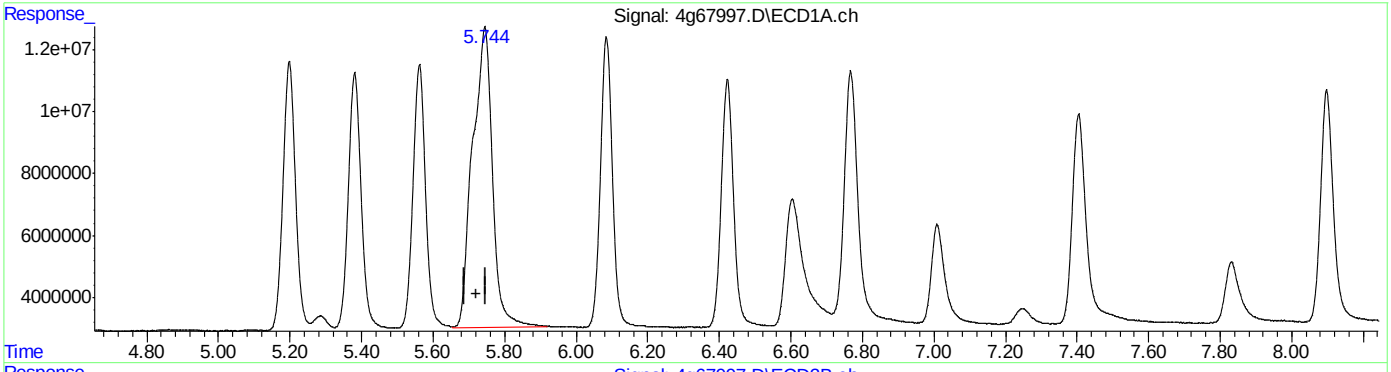
(+) = Expected Retention Time
4PST1778.M Mon May 09 08:22:15 2016 RPT1

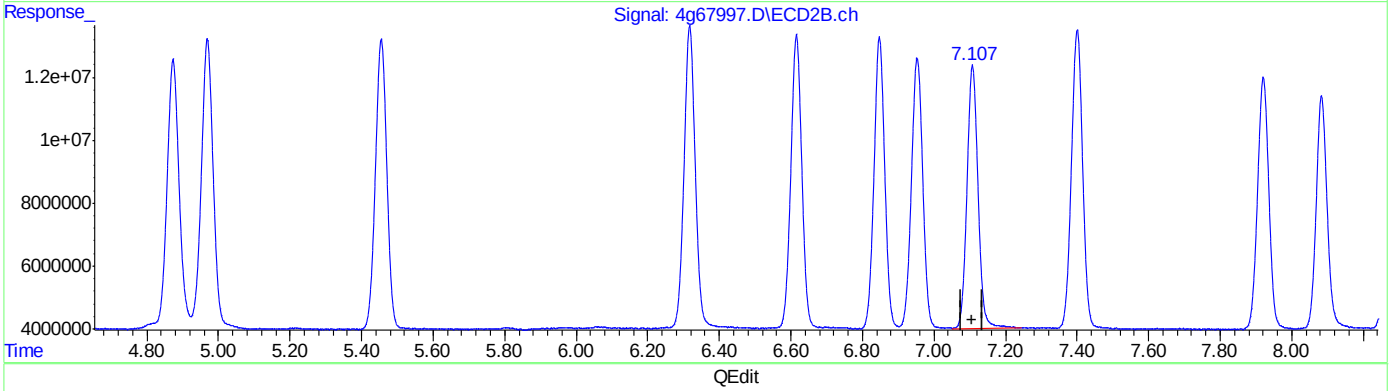
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67997.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 9:01 pm
Operator : dharas
Sample : op93665-msd
Misc : op93665,g4g1782,300,,,2,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 07 16:40:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 16:37:24 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)
5.745min 43.480 PPB
response 371694680

(13) 4,4'-DDE #2 (B)
7.108min 20.617 PPB
response 178796167

(+) = Expected Retention Time

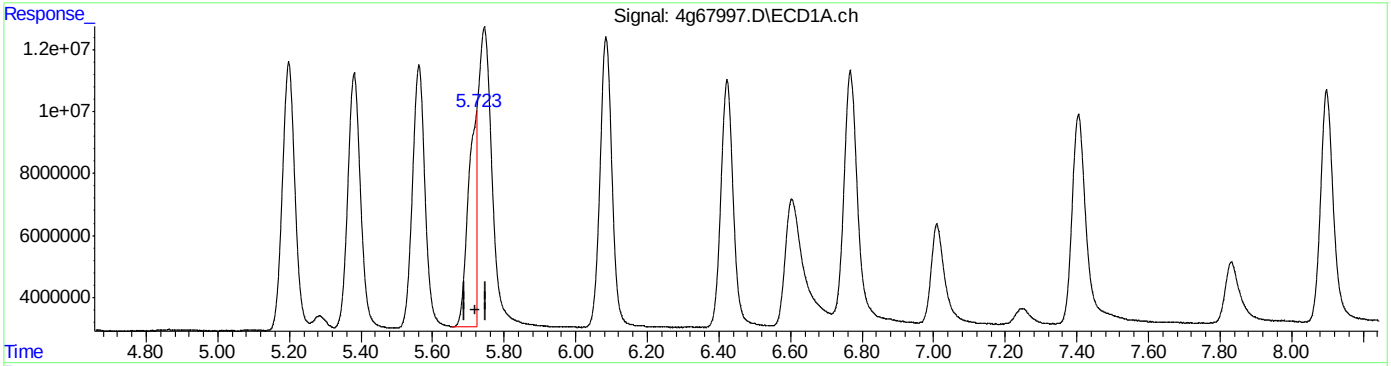
SGS ACCUTEST JC19644

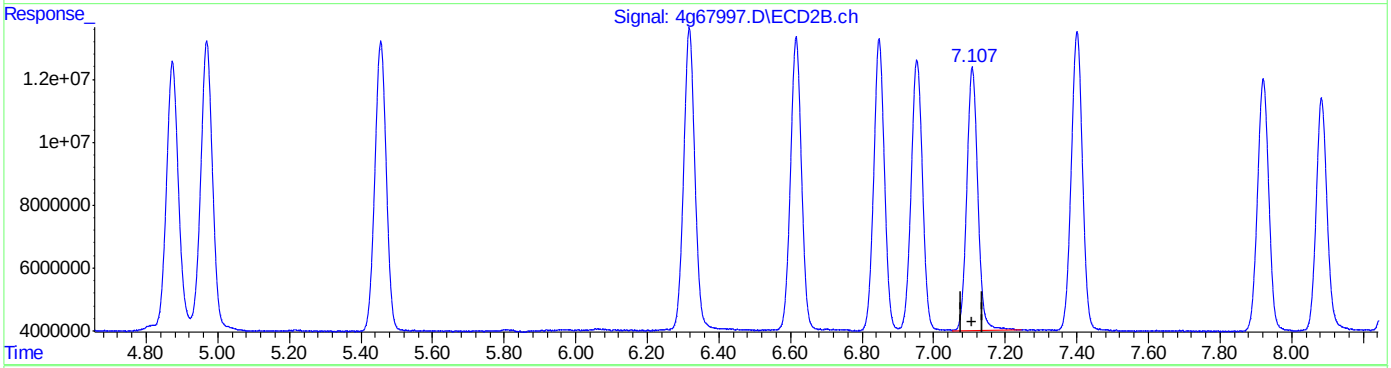
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67997.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 9:01 pm
Operator : dharas
Sample : op93665-msd
Misc : op93665,g4g1782,300,,,2,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 07 16:40:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 16:37:24 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)
5.723min 13.189 PPB m
response 112746288

(13) 4,4'-DDE #2 (B)
7.108min 20.617 PPB
response 178796167

(+) = Expected Retention Time
4PST1778.M Mon May 09 08:22:29 2016 RPT1

SGS ACCUTEST JC19644

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 05/11/16 06:52

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1007\
Data File : 6g34899.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 May 2016 11:00 am
Operator : dharas
Sample : op93736-ms
Misc : op93736,g6g1007,16.4,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 10 13:13:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.295	1.566	138.0E6	50704851	50.000	50.000
25) I	1-bromo-2...	1.295	1.566	138.0E6	50704851	50.000	50.000
31) I	1-bromo-2...	1.295	1.566	138.0E6	50704851	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.971	2.460	85973945	30976973	33.993	33.815
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 84.98%	84.54%
24)	SAB Decachlor...	9.894f	11.739	74840046	26851596	34.030	38.984
	Spiked Amount	40.000			Recovery	= 85.08%	97.46%
	Target Compounds						
3) A	alpha-BHC	2.483	3.161	64807354	23860256	19.877m	19.992
4) MA	gamma-BHC	2.798	3.612	60993644	22488418	20.094	20.124
5) MA	Heptachlor	3.325	4.217	61020400	21656944	20.026	19.176
6) B	beta-BHC	2.879	3.705	29925903	10509563	20.084	19.303
7) B	delta-BHC	3.073	4.120	51645676	18563999	18.256	17.826
8) MB	Aldrin	3.675	4.692	57423626	21854864	20.405	20.811
9) B	Heptachlo...	4.423	5.570	53078972	20123032	20.145	20.559
10) B	gamma-Chl...	4.596f	5.875	54194856	20025840	20.440	20.929
11) B	alpha-Chl...	4.778f	6.119	54686340	19870975	20.781	20.904
12) A	Endosulfan I	4.960	6.217	51617726	18760280	19.869	20.314
13) B	4,4'-DDE	4.909	6.416	46342350	17296506	21.252	21.101
14) MA	Dieldrin	5.302	6.687	54382251	19866499	21.171	21.060
15) MA	Endrin	5.642	7.229	53079531	18643633	22.779	21.753
16) A	4,4'-DDD	5.793f	7.447	39137208	14834834	21.229	20.970
17) B	Endosulfa...	5.985	7.611	47655744	17035581	20.728	20.322
18) MA	4,4'-DDT	6.245f	8.027	39078750	13095175	19.488	20.394
19) B	Endrin Al...	6.653	8.240	37862221	13466573	20.204	19.814
20) B	Endosulfa...	7.389	8.752	42737436	15182636	21.167	20.582
21) A	Methoxychlor	7.108f	9.403	23571034	7040223	19.612	19.899
23) B	Endrin Ke...	7.862	9.799	51809937	18065238	21.578	20.952

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

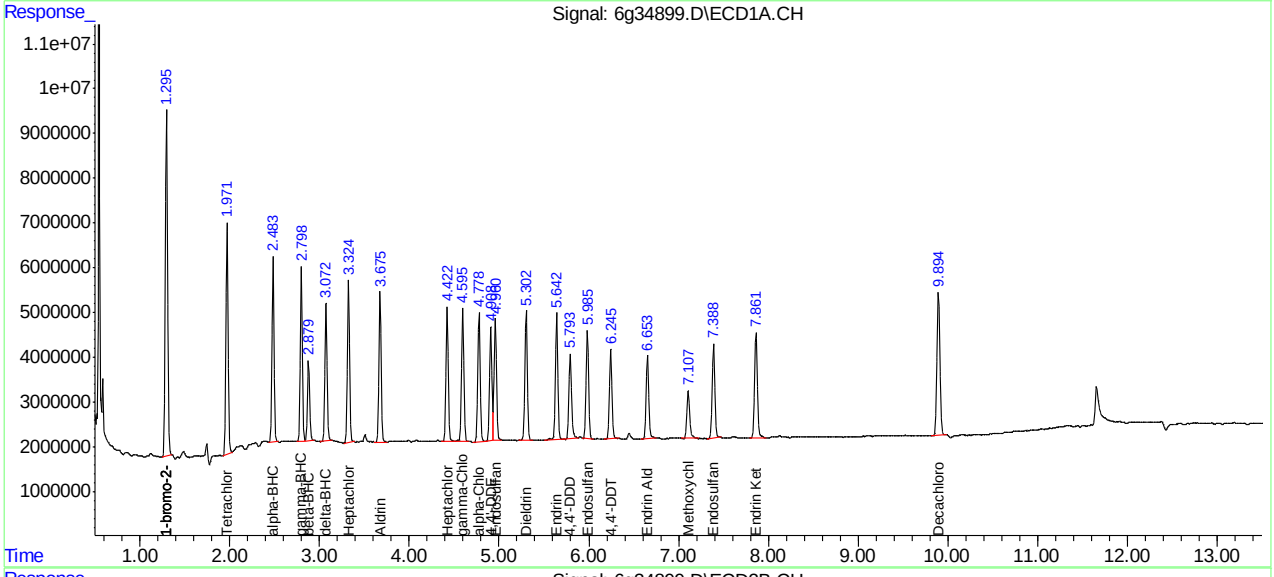
SGS ACCUTEST JC19644

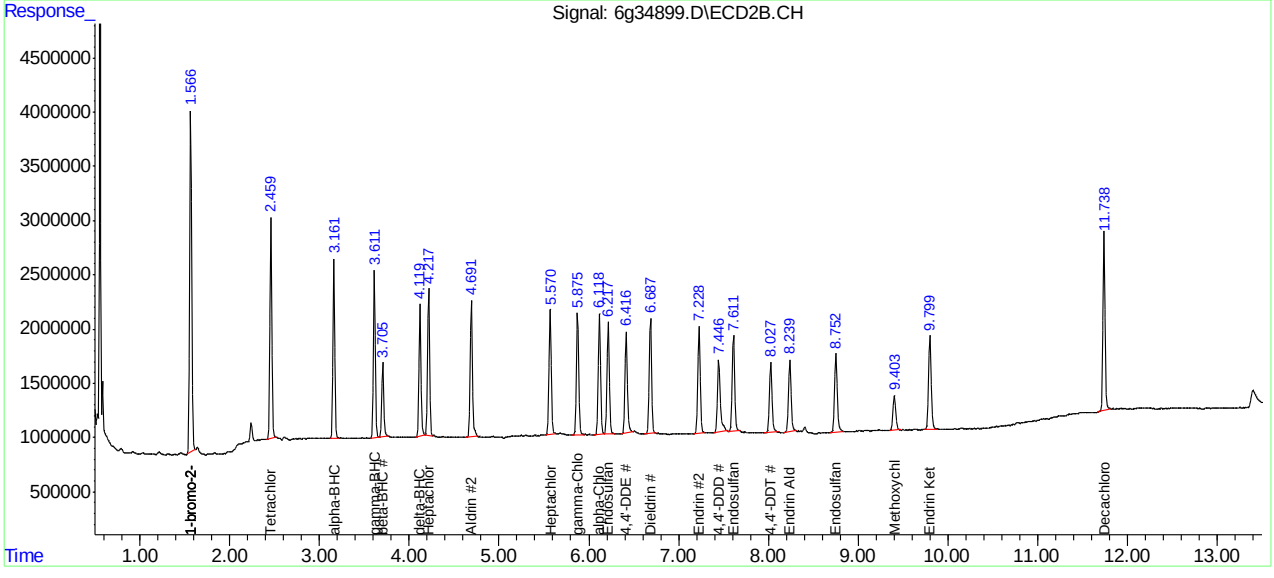
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1007\
Data File : 6g34899.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 May 2016 11:00 am
Operator : dharas
Sample : op93736-ms
Misc : op93736,g6g1007,16.4,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 10 13:13:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC19644

Manual Integration Approval Summary

Sample Number:	OP93736-MS	**Method:**	SW846 8081B
Lab FileID:	6G34899.D	**Analyst approved:**	05/10/16 13:20 Dhara Saparia
Injection Time:	05/10/16 11:00	**Supervisor approved:**	05/11/16 06:52 Gwendolyn Burns

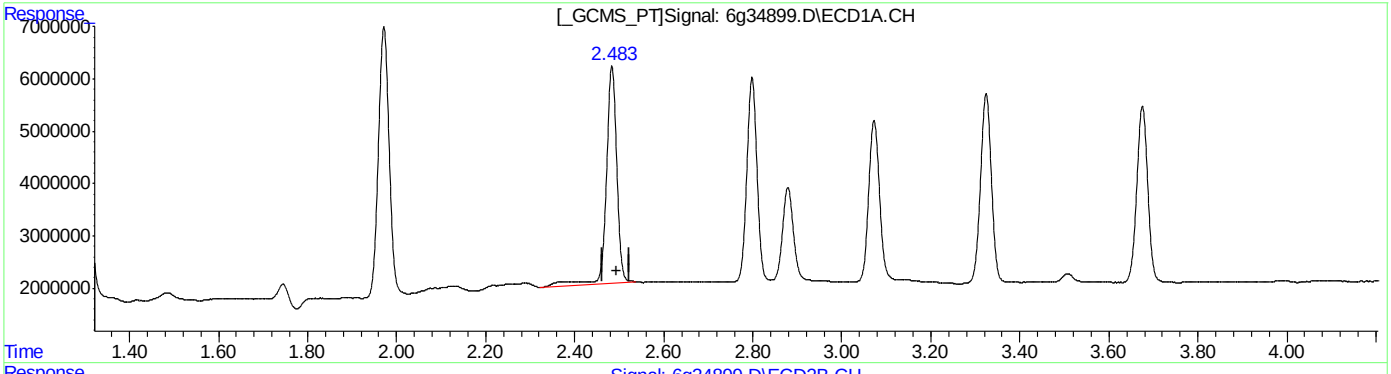
Parameter	CAS	Sig#	R.T. (min.)	Reason
alpha-BHC	319-84-6	1	2.48	Poor instrument integration

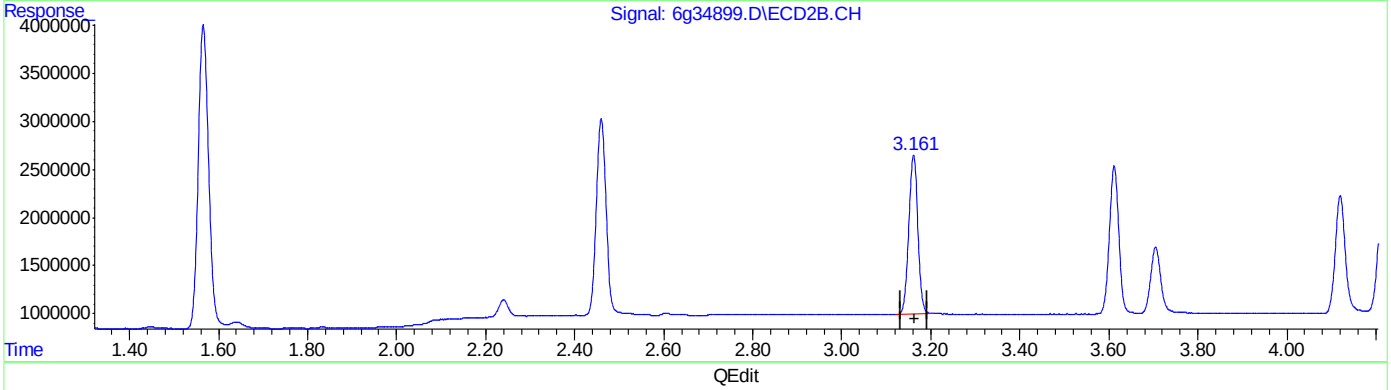
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1007\
Data File : 6g34899.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 May 2016 11:00 am
Operator : dharas
Sample : op93736-ms
Misc : op93736,g6g1007,16.4,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 10 13:12:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(3) alpha-BHC (A)
2.484min 21.339PPB
response 69575892

(3) alpha-BHC #2 (A)
3.161min 19.992PPB
response 23860256

(+) = Expected Retention Time
6PST987.M Tue May 10 13:12:57 2016

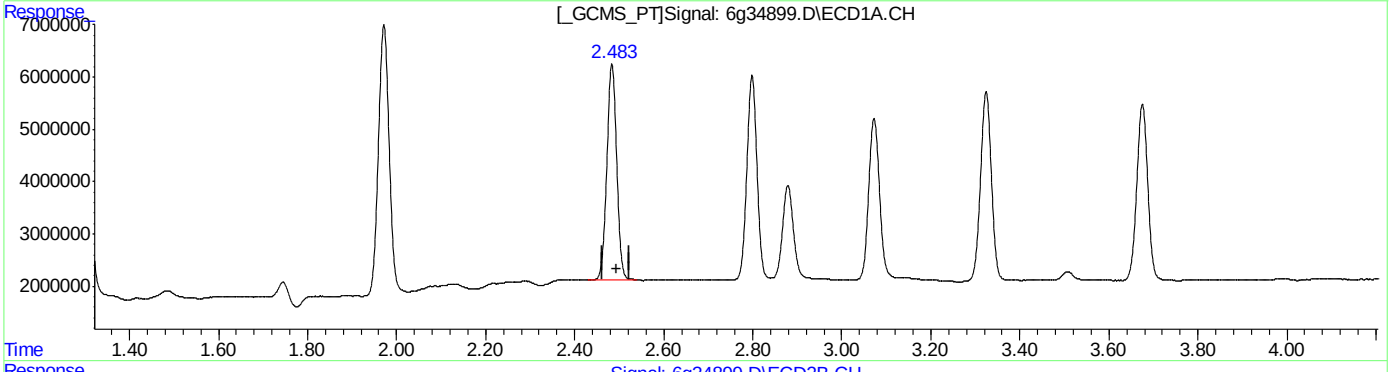
SGS ACCUTEST JC19644

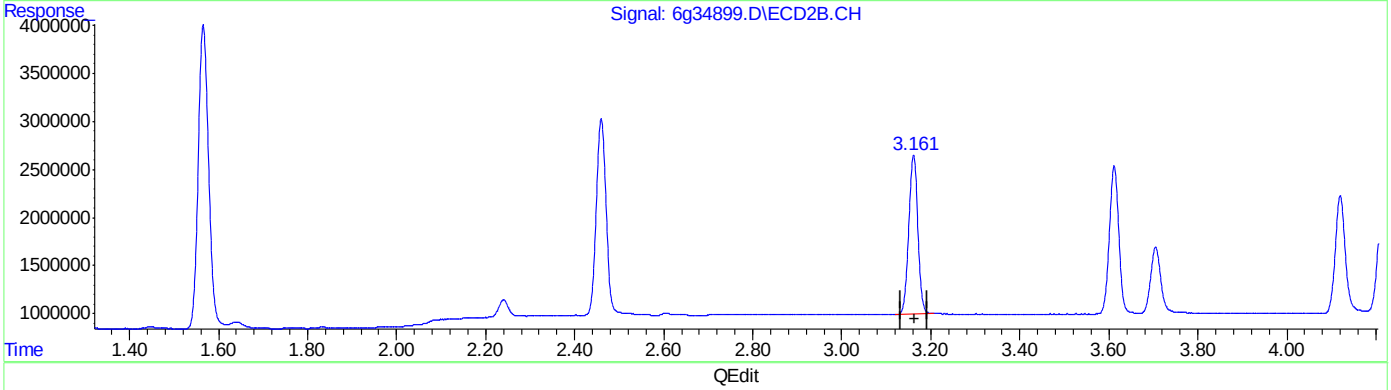
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1007\
Data File : 6g34899.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 May 2016 11:00 am
Operator : dharas
Sample : op93736-ms
Misc : op93736,g6g1007,16.4,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 10 13:12:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(3) alpha-BHC (A)
2.483min 19.877PPB m
response 64807354

(3) alpha-BHC #2 (A)
3.161min 19.992PPB
response 23860256

(+) = Expected Retention Time
6PST987.M Tue May 10 13:13:03 2016

SGS ACCUTEST JC19644

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 05/11/16 06:52

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1007\
Data File : 6g34900.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 May 2016 11:16 am
Operator : dharas
Sample : op93736-msd
Misc : op93736,g6g1007,15.9,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 10 13:14:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.296	1.567	118.8E6	43518466	50.000	50.000
25) I	1-bromo-2...	1.296	1.567	118.8E6	43518466	50.000	50.000
31) I	1-bromo-2...	1.296	1.567	118.8E6	43518466	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.972	2.460	88307255	31625803	40.563	40.224
Spiked Amount		40.000 Range	30 - 150	Recovery	=	101.41%	100.56%
24) SAB	Decachlor...	9.894f	11.738	74041163	26552644	39.112	44.916
Spiked Amount		40.000		Recovery	=	97.78%	112.29%
	Target Compounds						
3) A	alpha-BHC	2.483	3.161	67630782	24616864	24.098m	24.032
4) MA	gamma-BHC	2.798	3.611	63511507	23300357	24.307	24.294
5) MA	Heptachlor	3.324	4.217	63442385	22319020	24.188	23.026
6) B	beta-BHC	2.879	3.705	31110393	10740700	24.256	22.985
7) B	delta-BHC	3.073	4.119	53151856	18974267	21.827	21.229
8) MB	Aldrin	3.675	4.691	59176386	22101412	24.429	24.521
9) B	Heptachlo...	4.422	5.569	54625994	20649554	24.086	24.581
10) B	gamma-Chl...	4.596f	5.875	56166946	20274537	24.610	24.688
11) B	alpha-Chl...	4.777f	6.119	56474537	20312633	24.932	24.897
12) A	Endosulfan I	4.959f	6.216	53000441	19190344	23.701	24.211
13) B	4,4'-DDE	4.908	6.417	47828711	17569393	25.481	24.973
14) MA	Dieldrin	5.303	6.686	57105091	20316313	25.826	25.094
15) MA	Endrin	5.642f	7.227	51977268	18899576	25.913	25.693
16) A	4,4'-DDD	5.794	7.447	40021264	15093918	25.220	24.860
17) B	Endosulfa...	5.984f	7.612	47406311	17052694	23.955	23.702
18) MA	4,4'-DDT	6.244f	8.027	39639742	13311635	22.965	24.155
19) B	Endrin Al...	6.653f	8.238	38036591	13667104	23.581	23.430
20) B	Endosulfa...	7.388f	8.753	42925771	15044346	24.699	23.762
21) A	Methoxychlor	7.108f	9.404	23792397	7116849	22.998	23.437
23) B	Endrin Ke...	7.863	9.799	52282191	18051594	25.297	24.393

SemiQuant Compounds - Not Calibrated on this Instrument

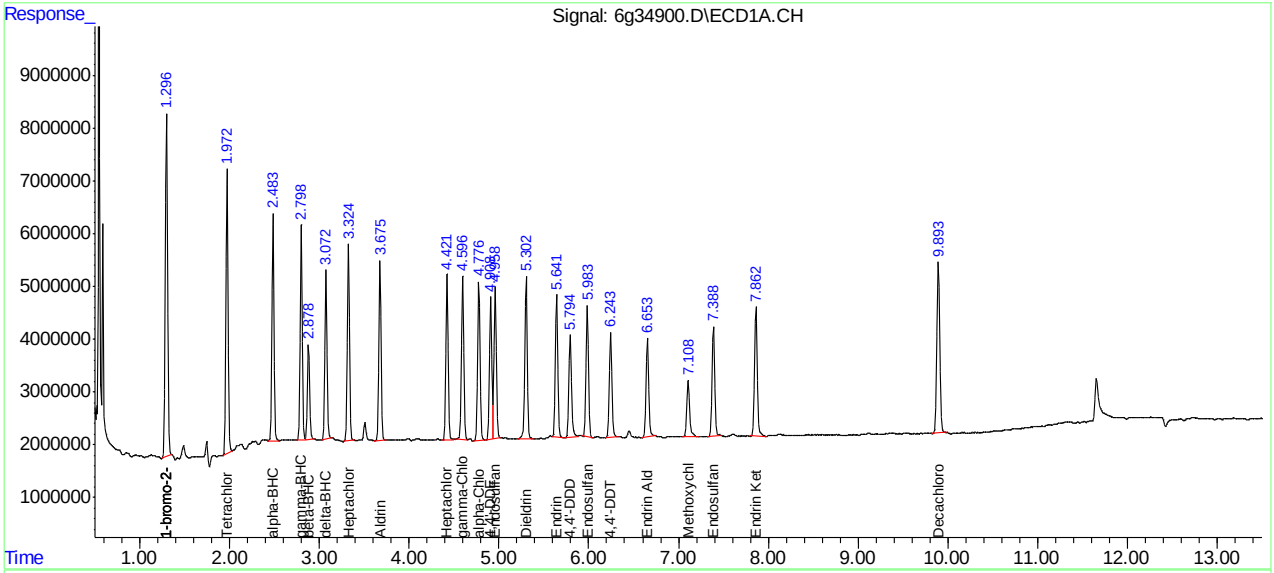
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

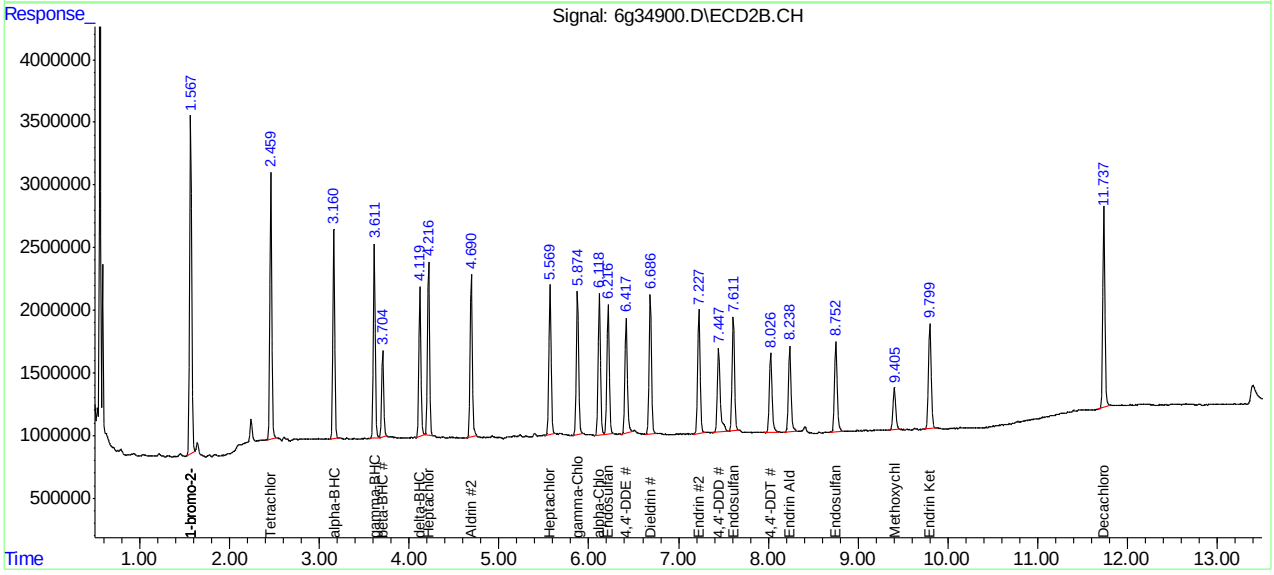
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1007\
Data File : 6g34900.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 May 2016 11:16 am
Operator : dharas
Sample : op93736-msd
Misc : op93736,g6g1007,15.9,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 10 13:14:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC19644

Manual Integration Approval Summary

Sample Number:	OP93736-MSD	**Method:**	SW846 8081B
Lab FileID:	6G34900.D	**Analyst approved:**	05/10/16 13:20 Dhara Saparia
Injection Time:	05/10/16 11:16	**Supervisor approved:**	05/11/16 06:52 Gwendolyn Burns

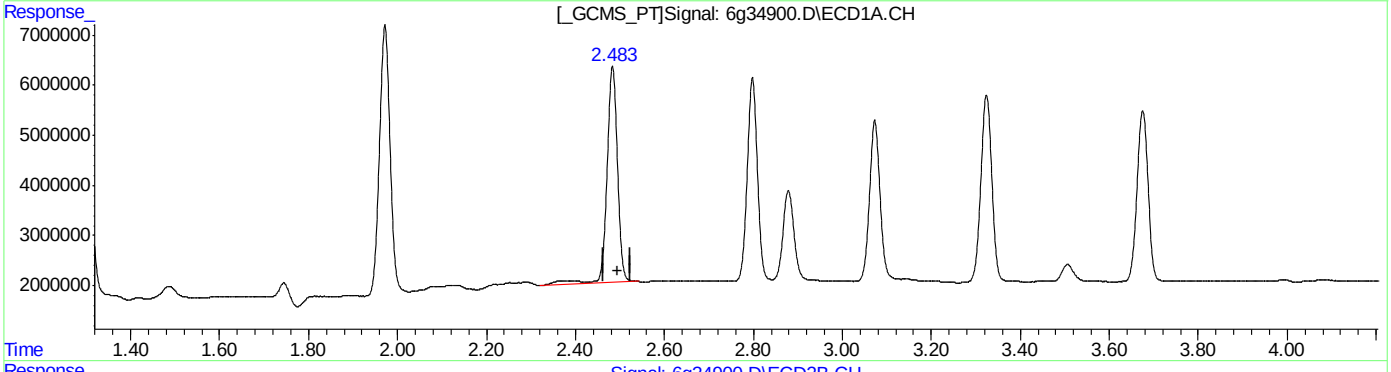
Parameter	CAS	Sig#	R.T. (min.)	Reason
alpha-BHC	319-84-6	1	2.48	Poor instrument integration

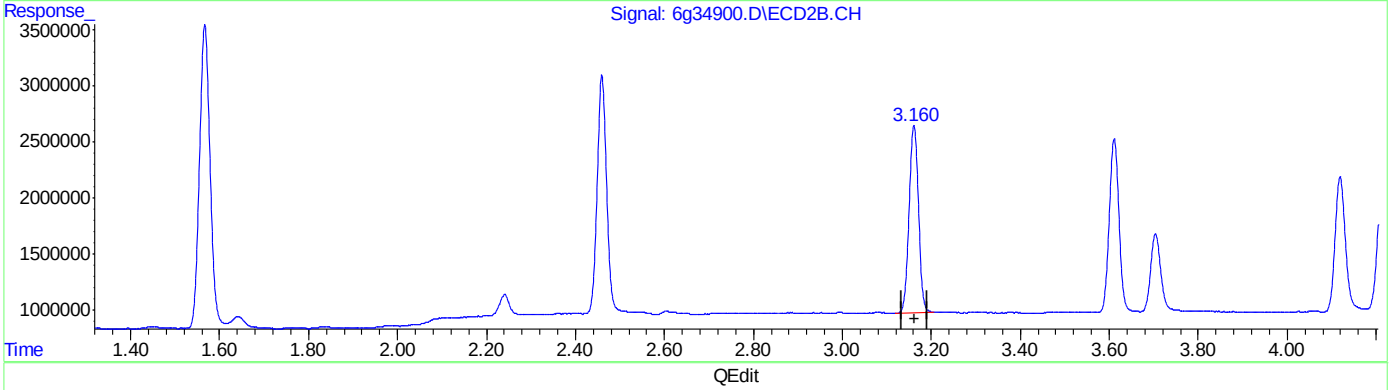
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1007\
Data File : 6g34900.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 May 2016 11:16 am
Operator : dharas
Sample : op93736-msd
Misc : op93736,g6g1007,15.9,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 10 13:13:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(3) alpha-BHC (A)
2.483min 25.468PPB
response 71476831

(3) alpha-BHC #2 (A)
3.161min 24.032PPB
response 24616864

(+) = Expected Retention Time

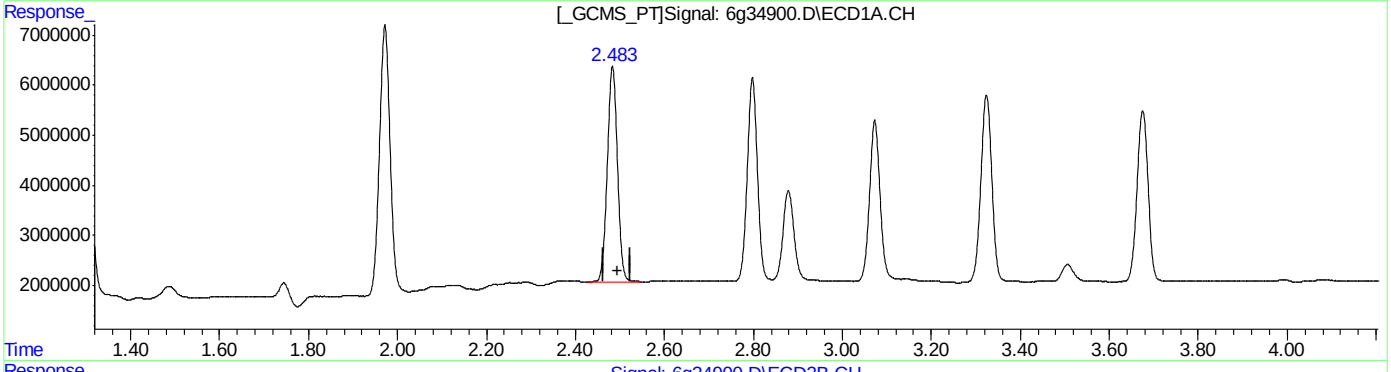
SGS ACCUTEST JC19644

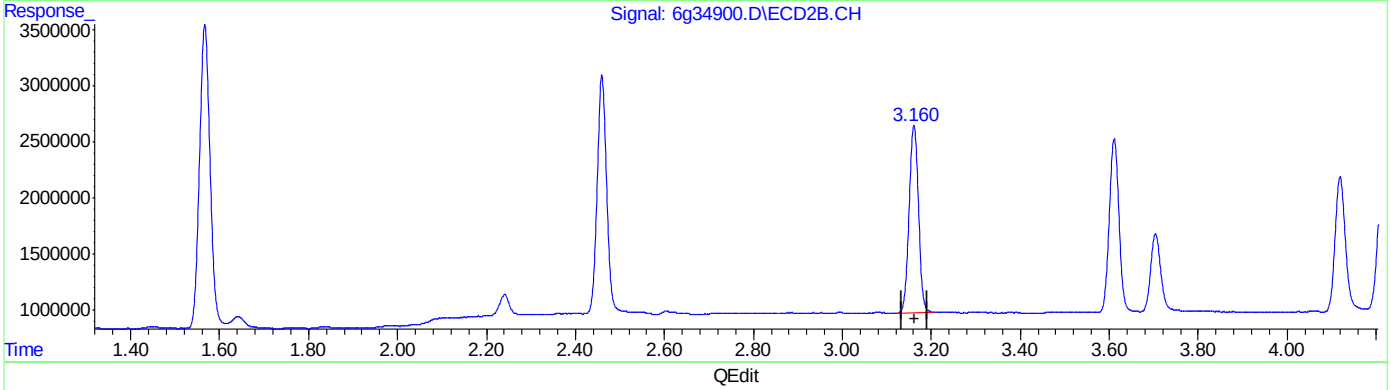
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1007\
Data File : 6g34900.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 May 2016 11:16 am
Operator : dharas
Sample : op93736-msd
Misc : op93736,g6g1007,15.9,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 10 13:13:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(3) alpha-BHC (A)
2.483min 24.098PPB m
response 67630782

(3) alpha-BHC #2 (A)
3.161min 24.032PPB
response 24616864

(+) = Expected Retention Time
6PST987.M Tue May 10 13:13:52 2016

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

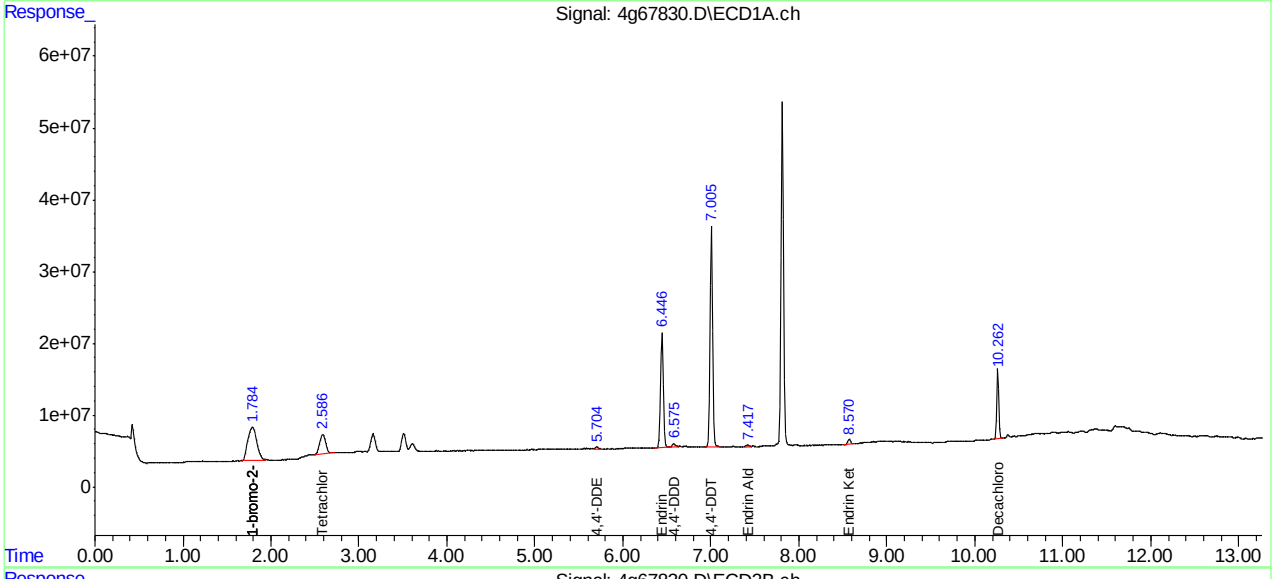
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

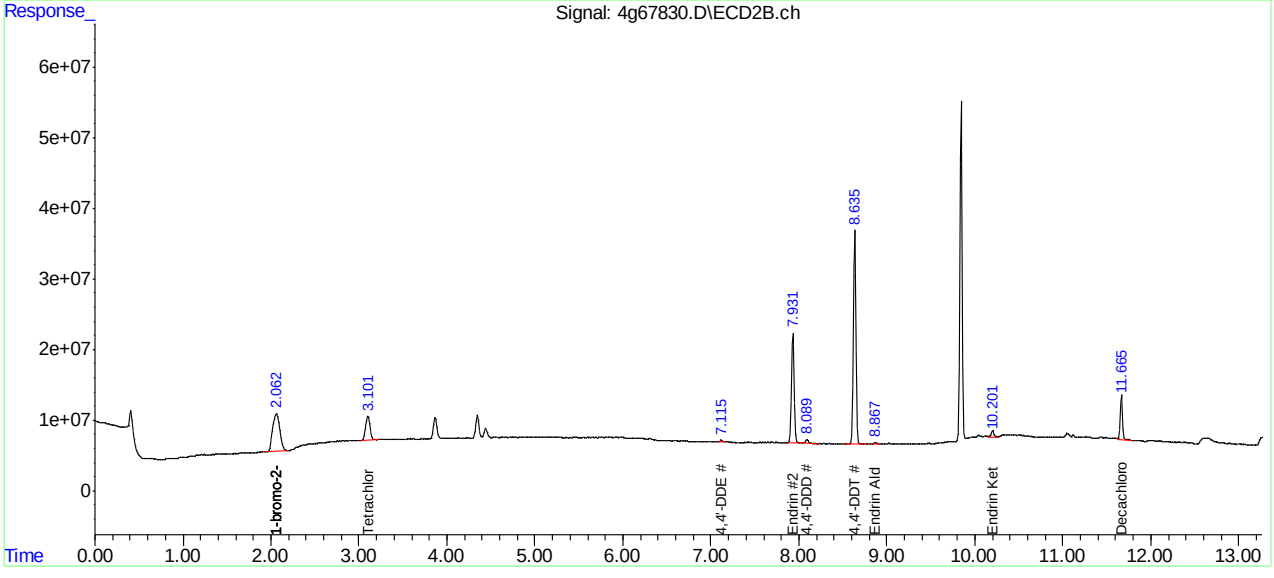
Quantitation Report (QT Reviewed)

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

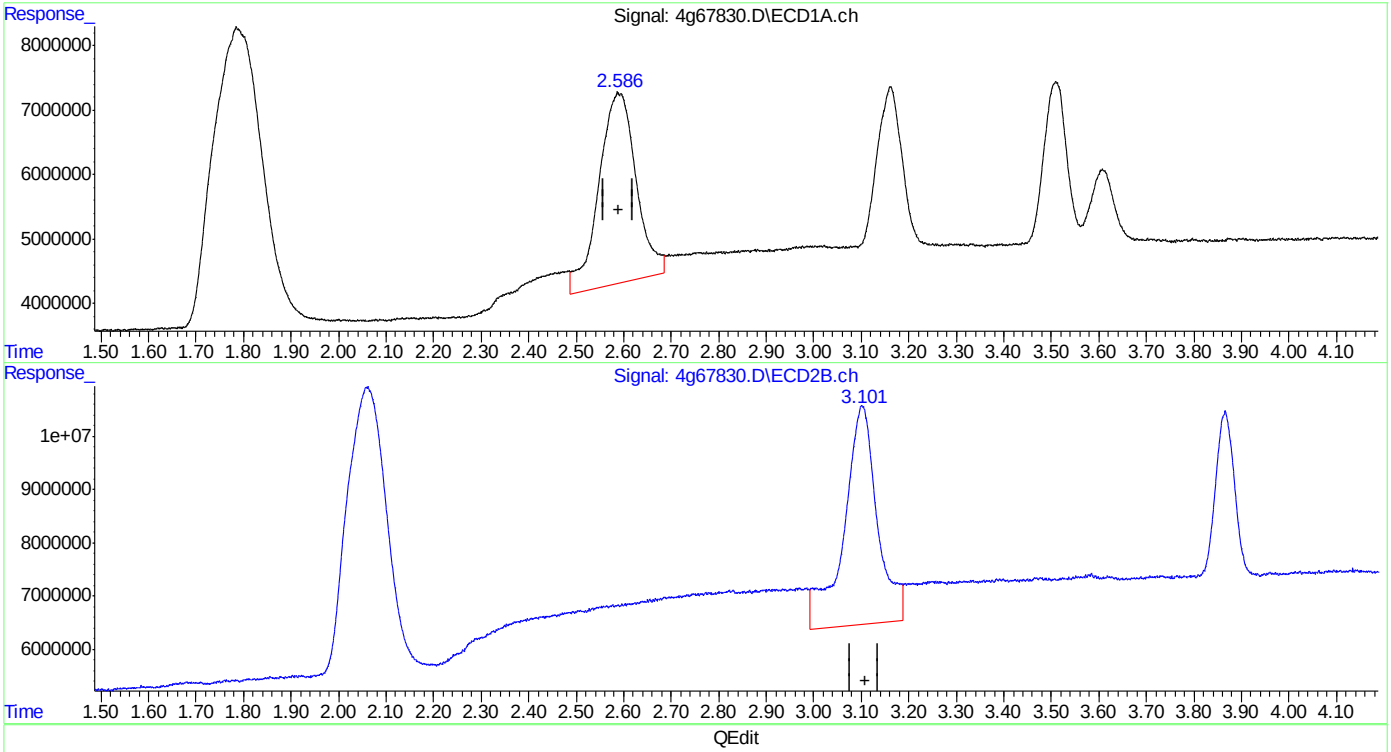
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	2.59	Poorly defined baseline
Tetrachloro-m-xylene	877-09-8	2	3.10	Poorly defined baseline
4,4'-DDE	72-55-9	2	7.12	Poorly defined baseline
Endrin aldehyde	7421-93-4	1	7.42	Poorly defined baseline
Endrin aldehyde	7421-93-4	2	8.87	Poorly 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

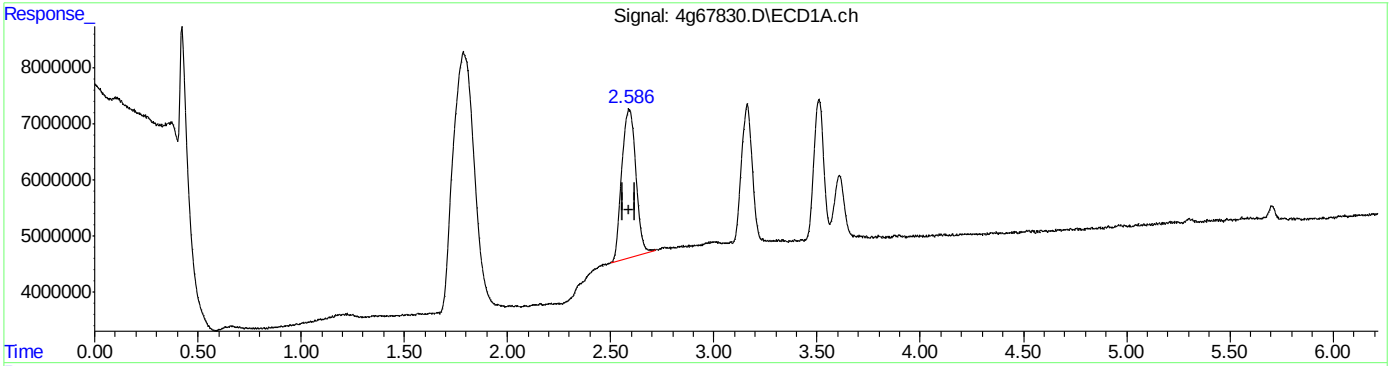
SGS ACCUTEST JC19644

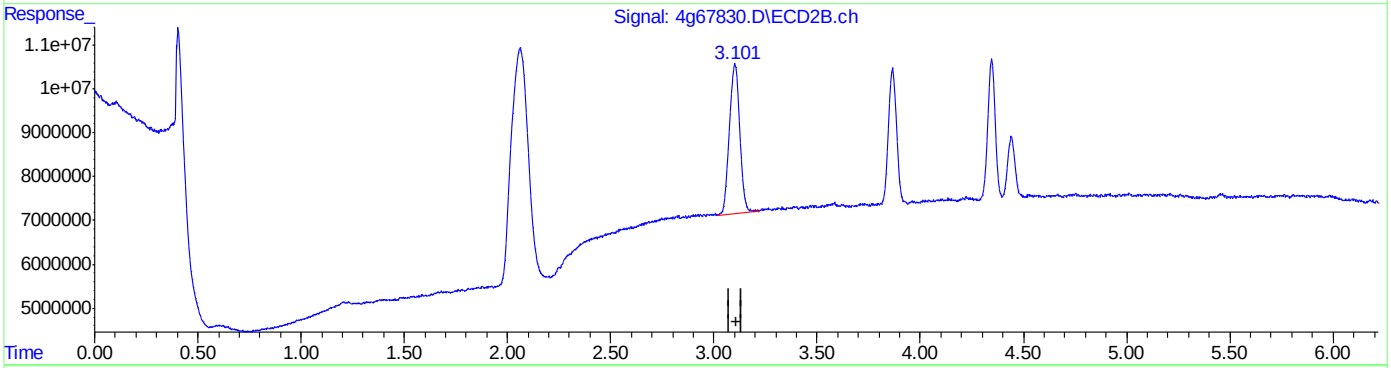
Quantitation Report (Qedit)

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

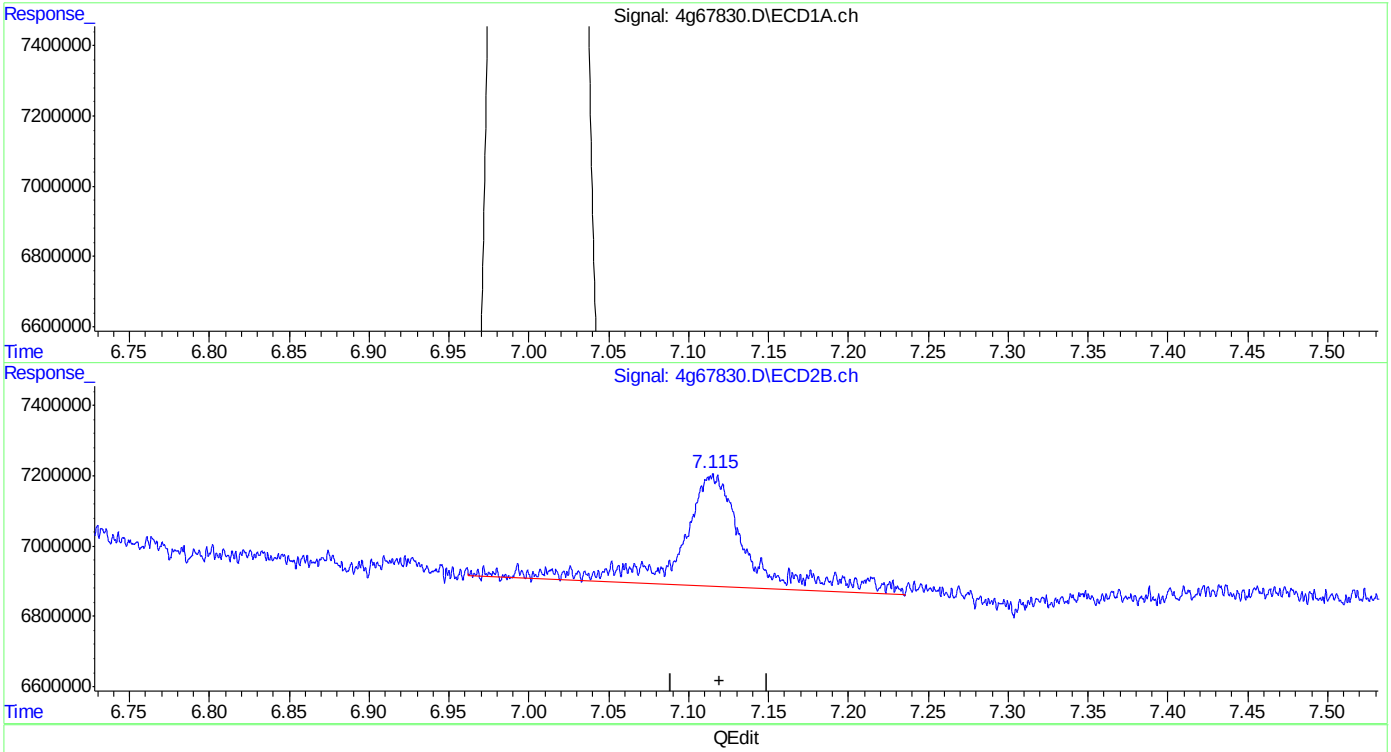
SGS ACCUTEST JC19644

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

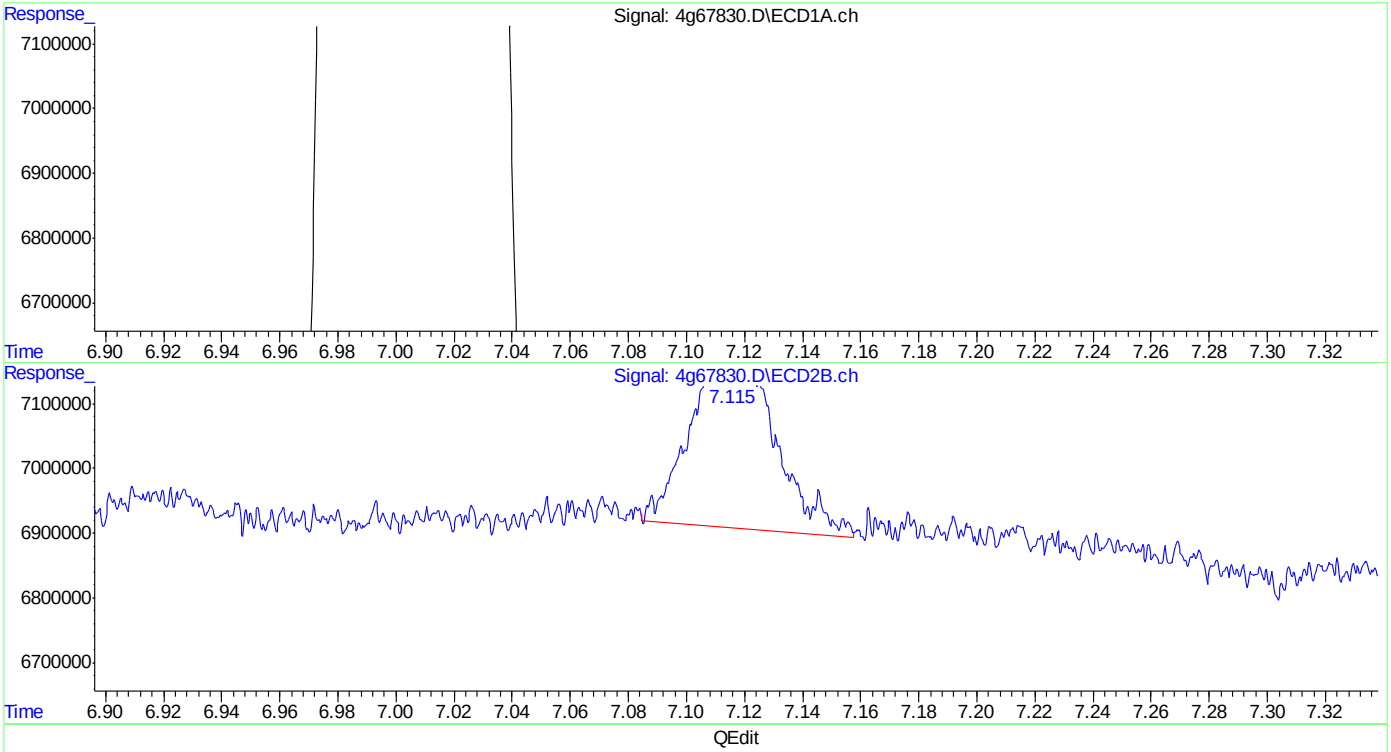
SGS ACCUTEST JC19644

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
4PST1778.M Tue May 03 15:29:29 2016 RPT1

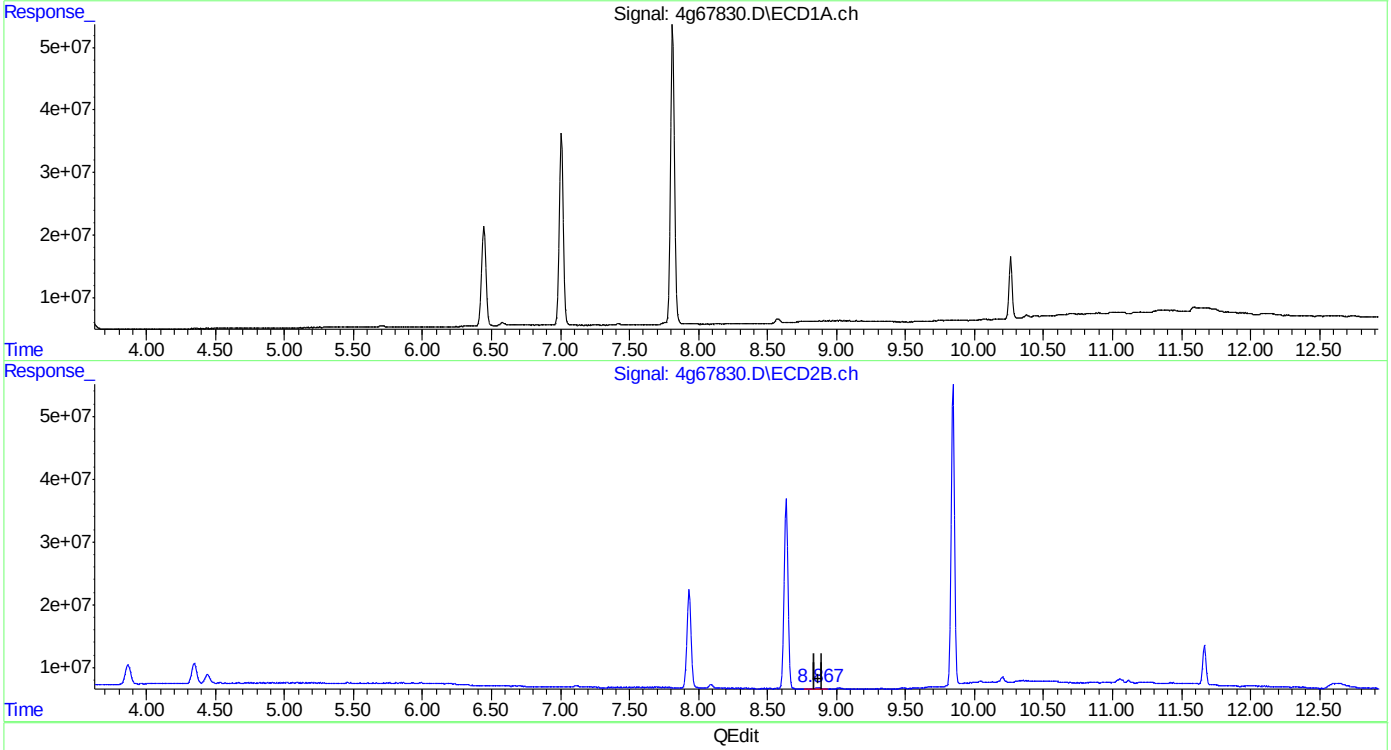
SGS ACCUTEST JC19644

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

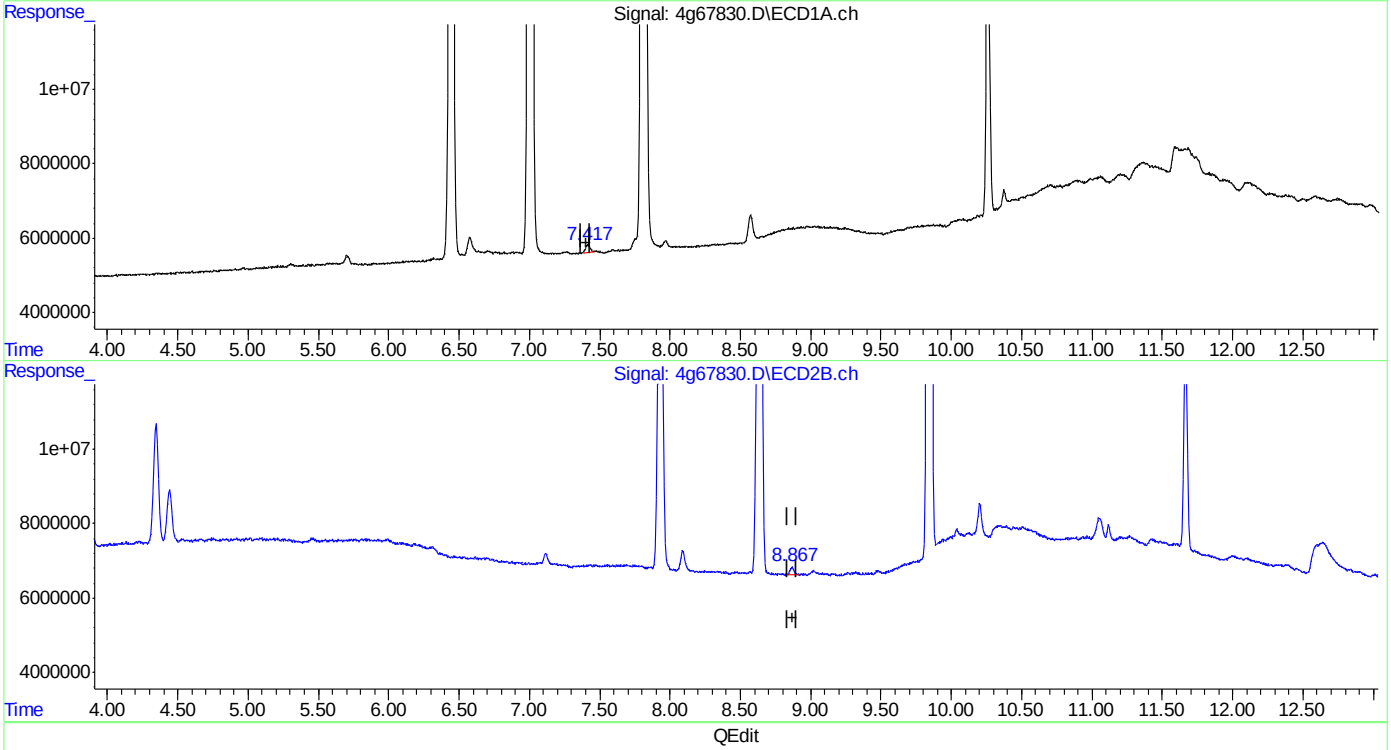
SGS ACCUTEST JC19644

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

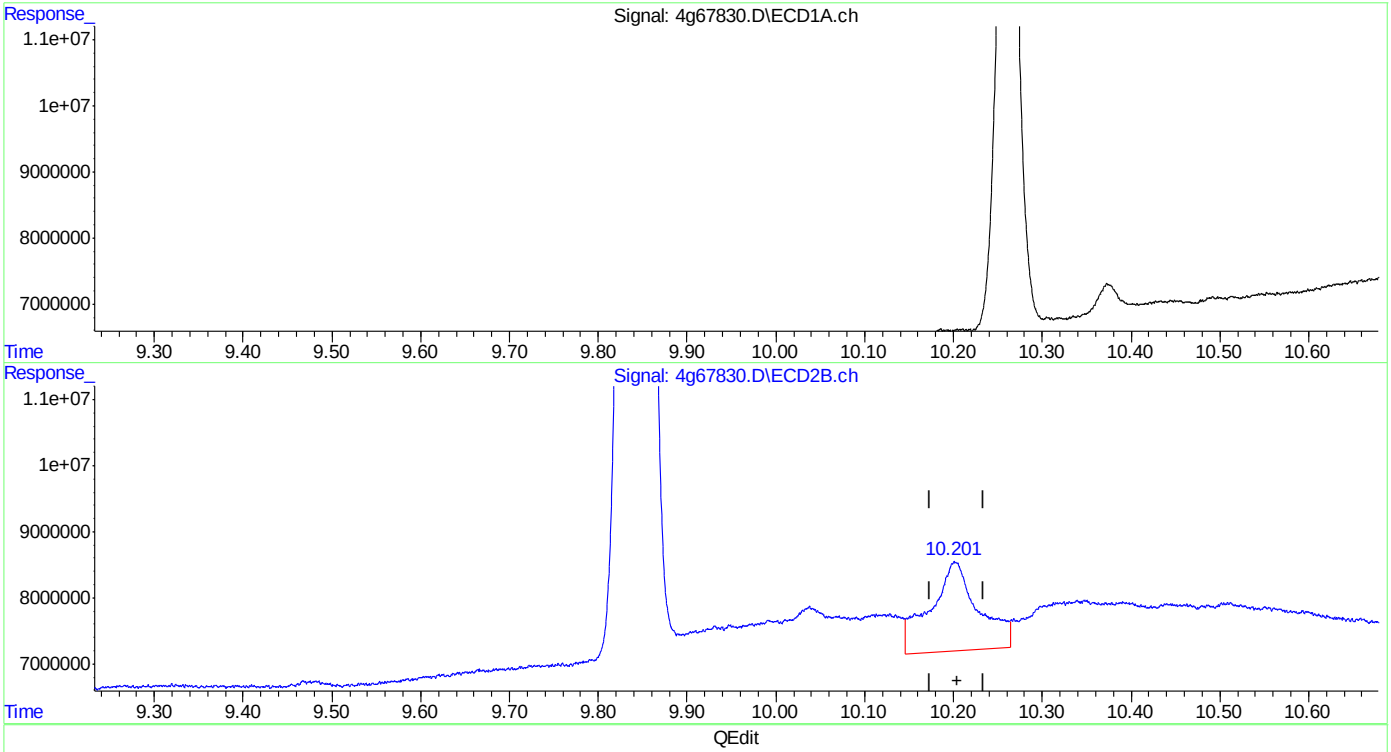
SGS ACCUTEST JC19644

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

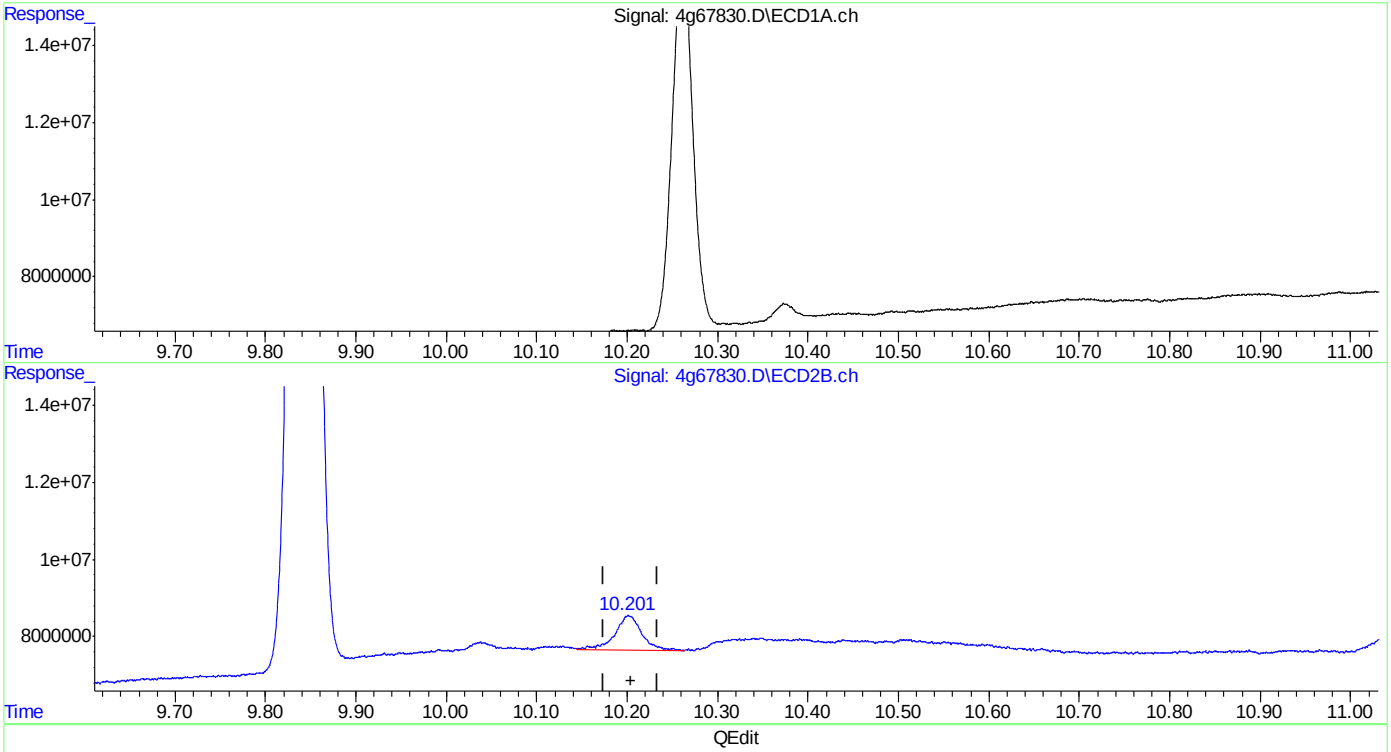
SGS ACCUTEST JC19644

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)
10.201min 3.725 PPB m
response 18350578

(+) = Expected Retention Time

4PST1778.M Tue May 03 15:30:56 2016 RPT1

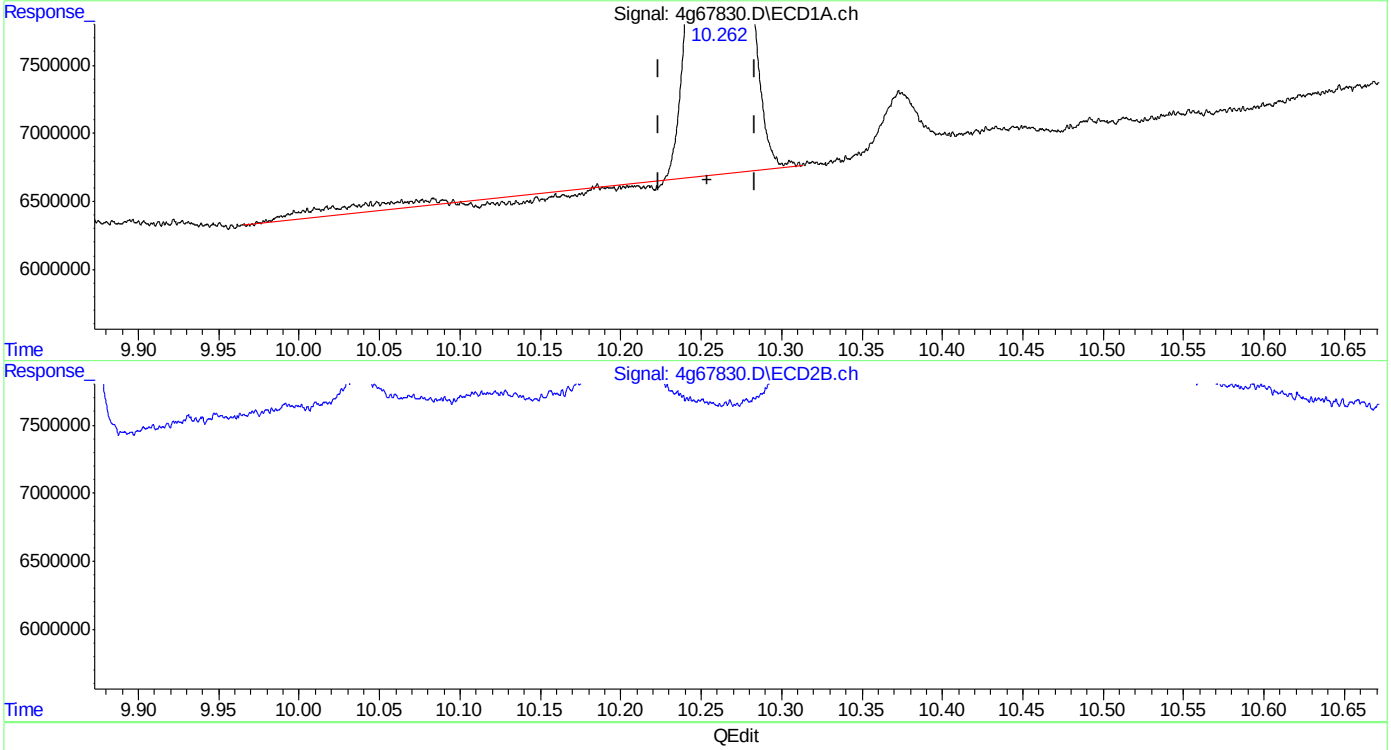
SGS ACCUTEST JC19644

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

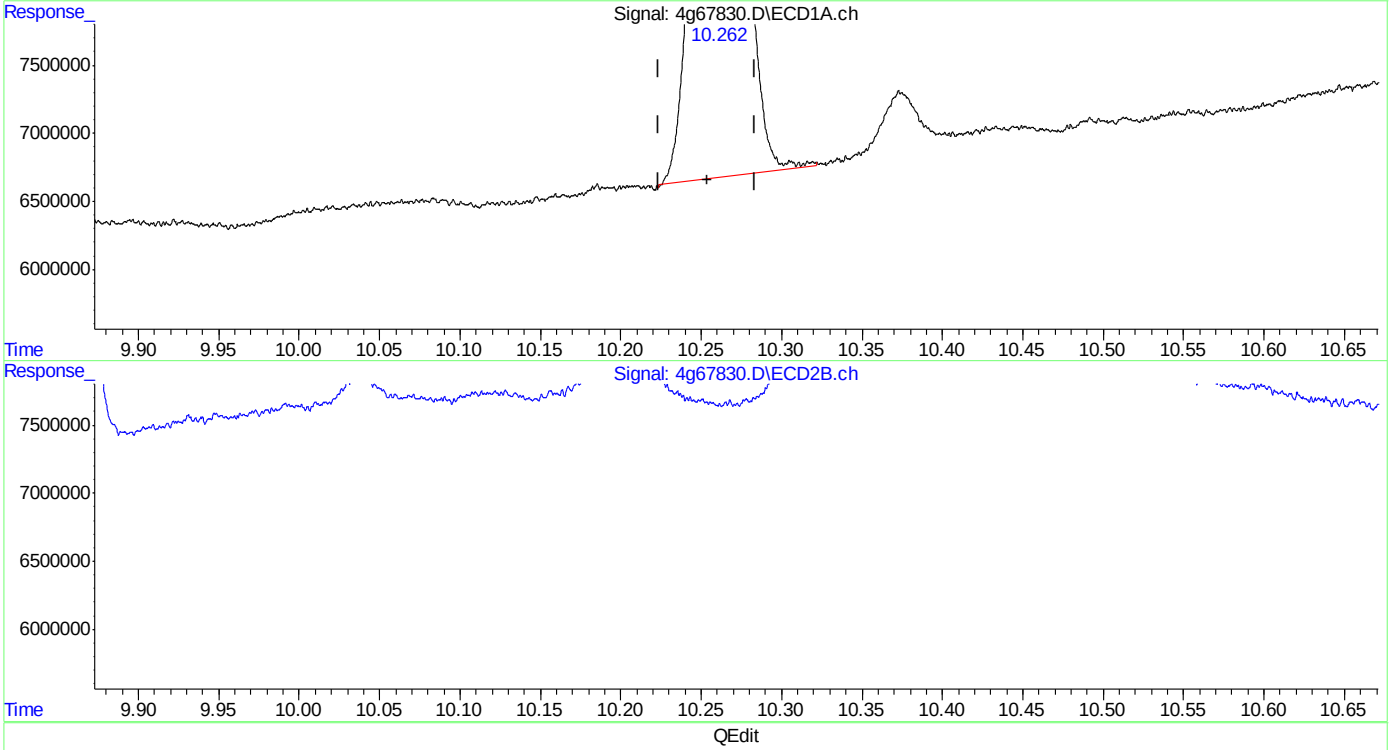
(+) = Expected Retention Time
4PST1778.M Tue May 03 15:31:08 2016 RPT1

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 28.756 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 JC19644

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
05/06/16 10:47

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67942.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 7:42 am
Operator : brittanp
Sample : ddt
Misc : op93644,g4g1782,15.5,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 06 09:37:19 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...	1.782f	2.066	501.0E6	437.8E6	50.000	50.000
25) I	1-bromo-2...	1.782	2.066	501.0E6	437.8E6	50.000	50.000
31) I	1-bromo-2...	1.782	2.066	501.0E6	437.8E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.571f	3.102	187.3E6	171.3E6	21.689m	22.216
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 54.22%	55.54%
24) SA	Decachlor...	10.239f	11.640f	199.4E6	124.0E6	24.502	22.681
	Spiked Amount	40.000			Recovery	= 61.25%	56.70%
	Target Compounds						
13) B	4,4'-DDE	5.685	7.102f	2546601	3502915	0.288m	0.394m#
15) MA	Endrin	6.413f	7.920f	500.2E6	449.7E6	56.505	56.850
16) A	4,4'-DDD	6.564	8.080	3032566	4285767	0.405m	0.597m#
18) MA	4,4'-DDT	6.979f	8.621f	917.0E6	873.4E6	118.975	139.132
19) B	Endrin Al...	7.390	8.853f	5873647	6487849	0.817m	1.092m#
23) B	Endrin Ke...	8.543f	10.190	21044663	18373158	2.331	2.558
	SemiQuant Compounds - Not Calibrated on this Instrument						

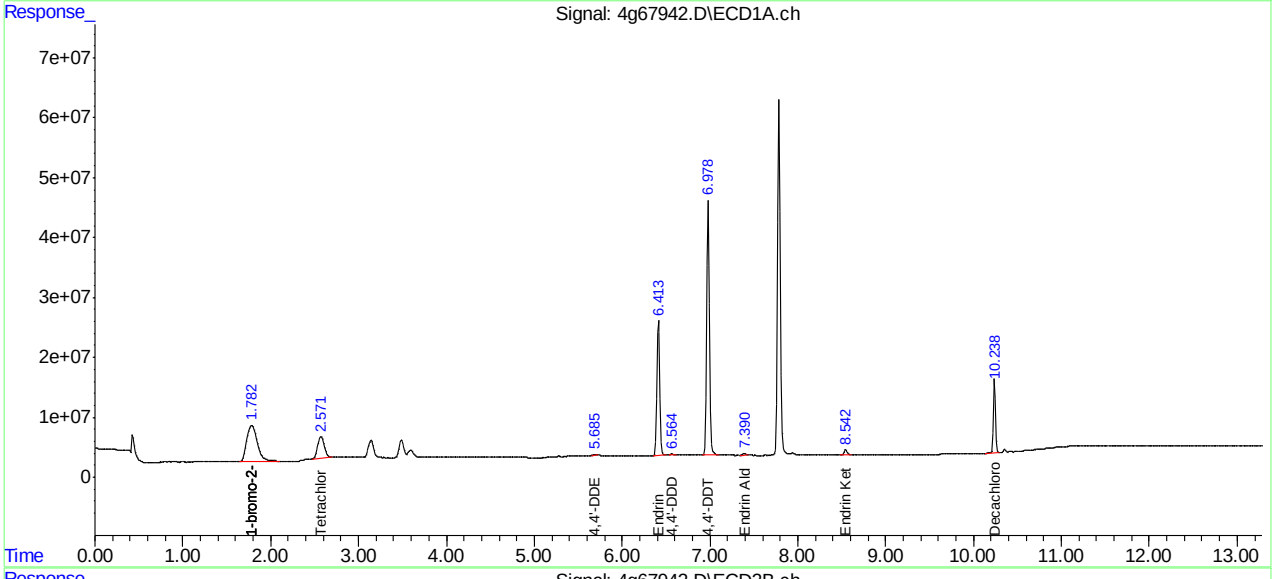
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

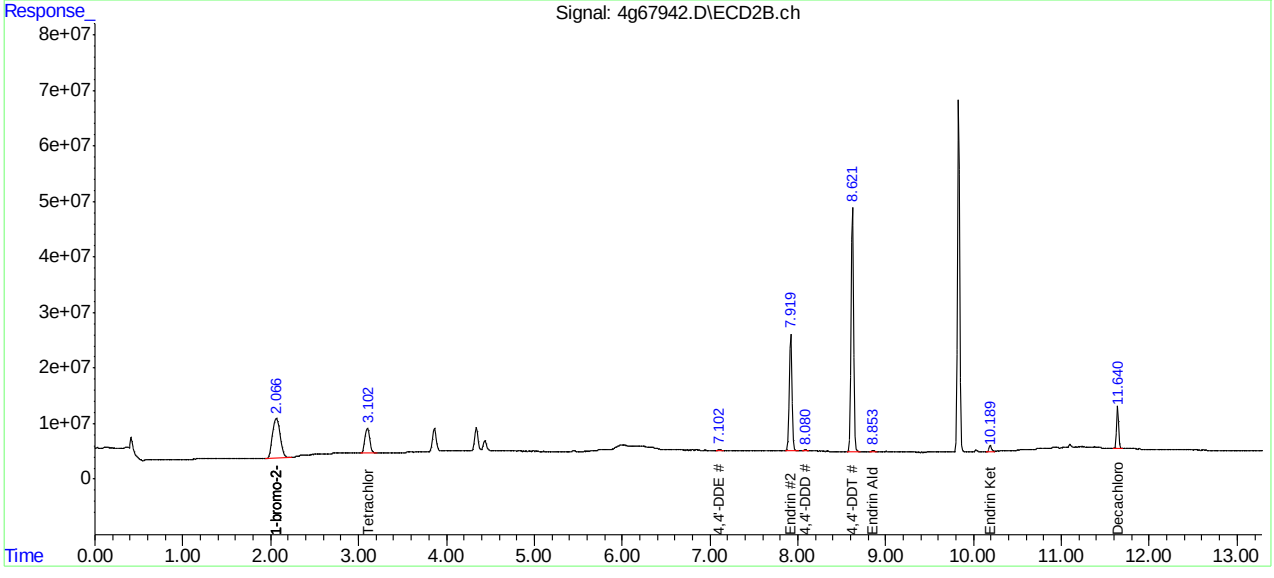
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67942.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 7:42 am
Operator : brittanp
Sample : ddt
Misc : op93644,g4g1782,15.5,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 06 09:37:19 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





Manual Integration Approval Summary

Sample Number:	G4G1782-DDT	**Method:**	SW846 8081B
Lab FileID:	4G67942.D	**Analyst approved:**	05/06/16 09:43 Brittany Piercy
Injection Time:	05/06/16 07:42	**Supervisor approved:**	05/06/16 10:47 Gwendolyn Burns

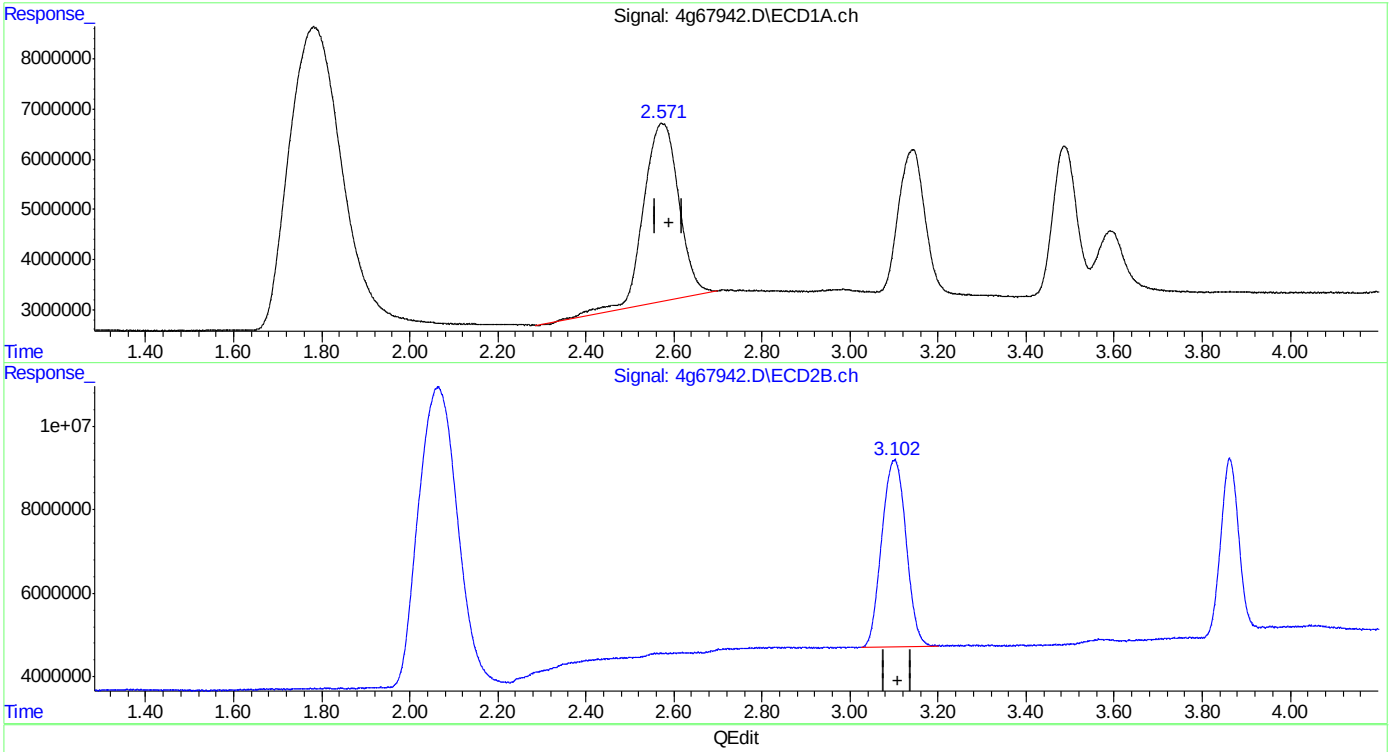
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	2.57	Poor instrument integration
4,4'-DDE	72-55-9	1	5.68	Poor instrument integration
4,4'-DDD	72-54-8	1	6.56	Poor instrument integration
4,4'-DDE	72-55-9	2	7.10	Poor instrument integration
Endrin aldehyde	7421-93-4	1	7.39	Poor instrument integration
4,4'-DDD	72-54-8	2	8.08	Poor instrument integration
Endrin aldehyde	7421-93-4	2	8.85	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67942.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 7:42 am
Operator : brittanp
Sample : ddt
Misc : op93644,g4g1782,15.5,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 06 07:55:37 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)
2.572min 22.920 PPB
response 197976055

(2) Tetrachloro-m-xylene #2 (SAB)
3.102min 22.216 PPB
response 171313848

(+) = Expected Retention Time
4PST1778.M Fri May 06 09:35:58 2016 RPT1

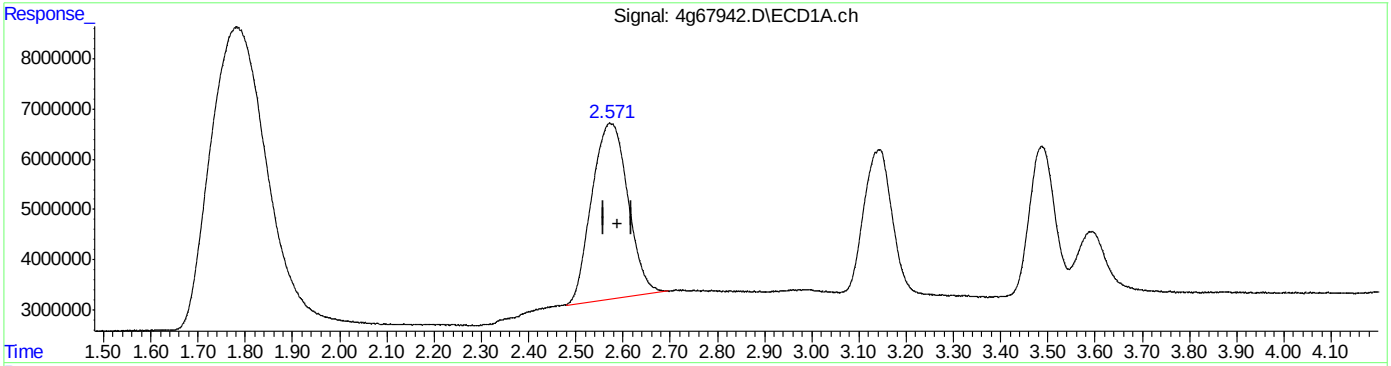
SGS ACCUTEST JC19644

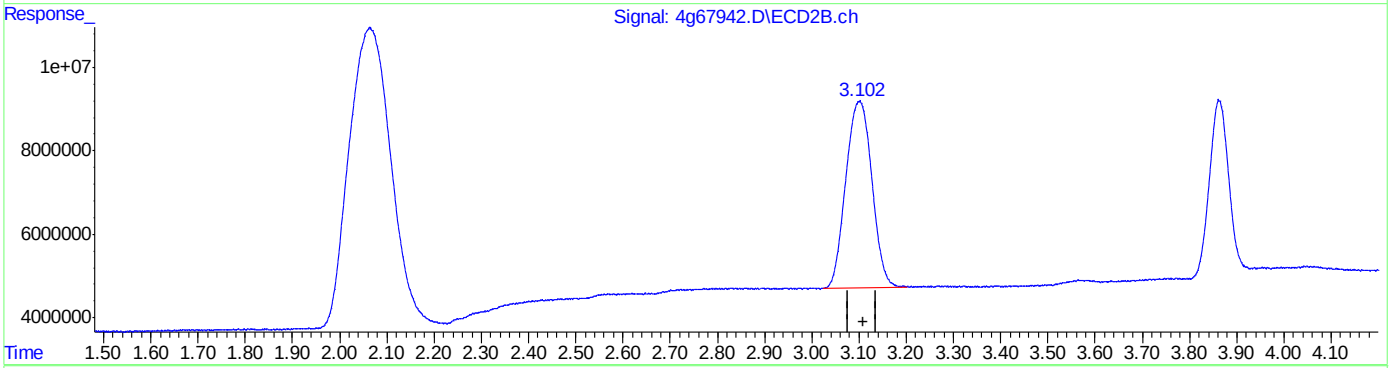
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67942.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 7:42 am
Operator : brittanp
Sample : ddt
Misc : op93644,g4g1782,15.5,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 06 07:55:37 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)
2.571min 21.689 PPB m
response 187347678

(2) Tetrachloro-m-xylene #2 (SAB)
3.102min 22.216 PPB
response 171313848

(+) = Expected Retention Time
4PST1778.M Fri May 06 09:36:05 2016 RPT1

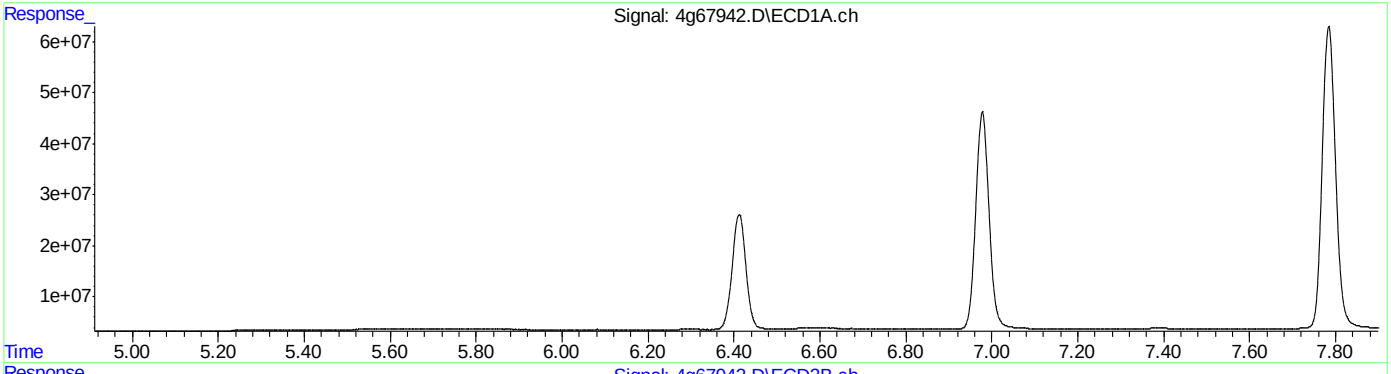
SGS ACCUTEST JC19644

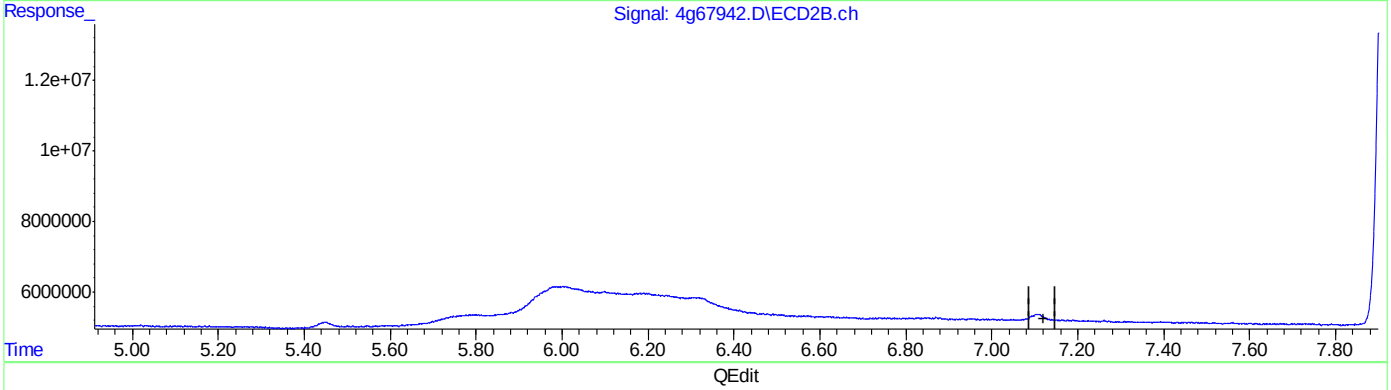
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67942.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 7:42 am
Operator : brittanp
Sample : ddt
Misc : op93644,g4g1782,15.5,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 06 07:55:37 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)
0.000min 0.000 PPB
response 0

(13) 4,4'-DDE #2 (B)
0.000min 0.000 PPB
response 0

(+) = Expected Retention Time

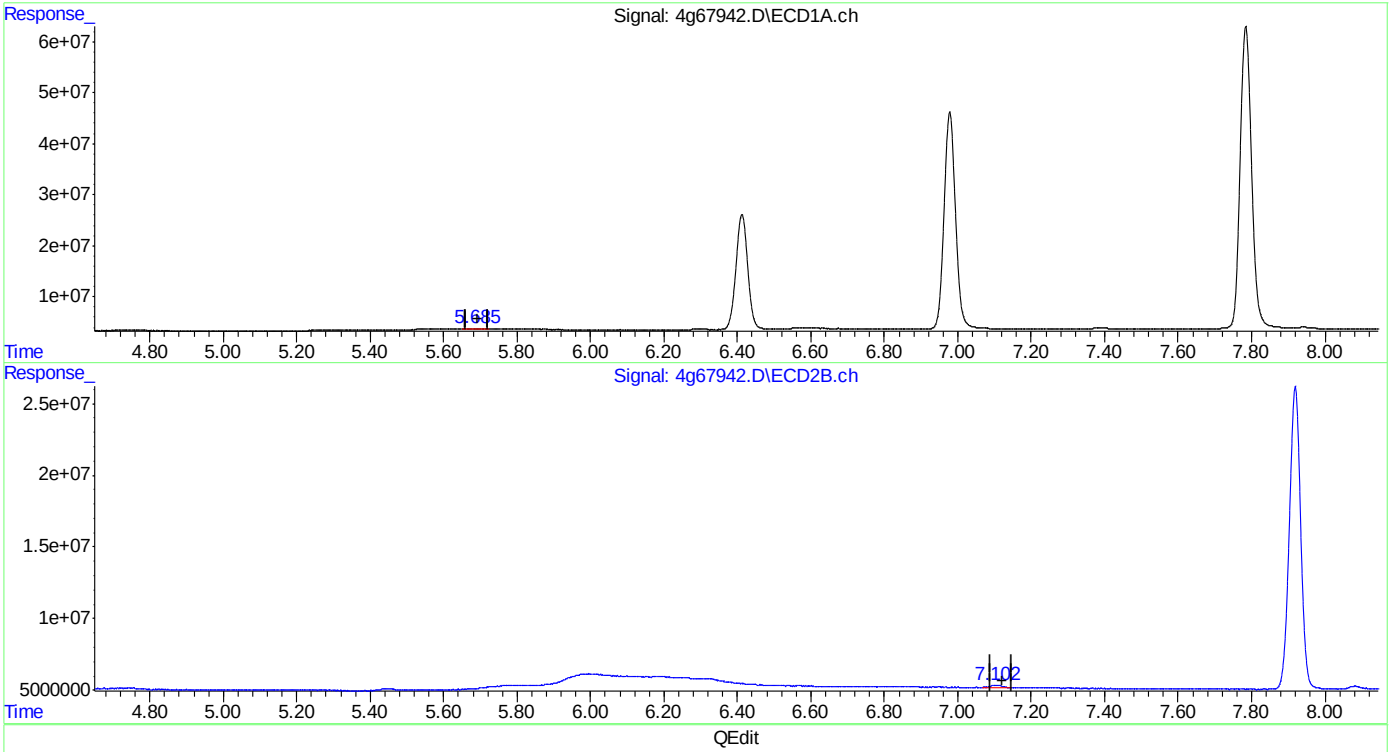
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67942.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 7:42 am
Operator : brittanp
Sample : ddt
Misc : op93644,g4g1782,15.5,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 06 07:55:37 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)
5.685min 0.288 PPB m
response 2546601

(13) 4,4'-DDE #2 (B)
7.102min 0.394 PPB m
response 3502915

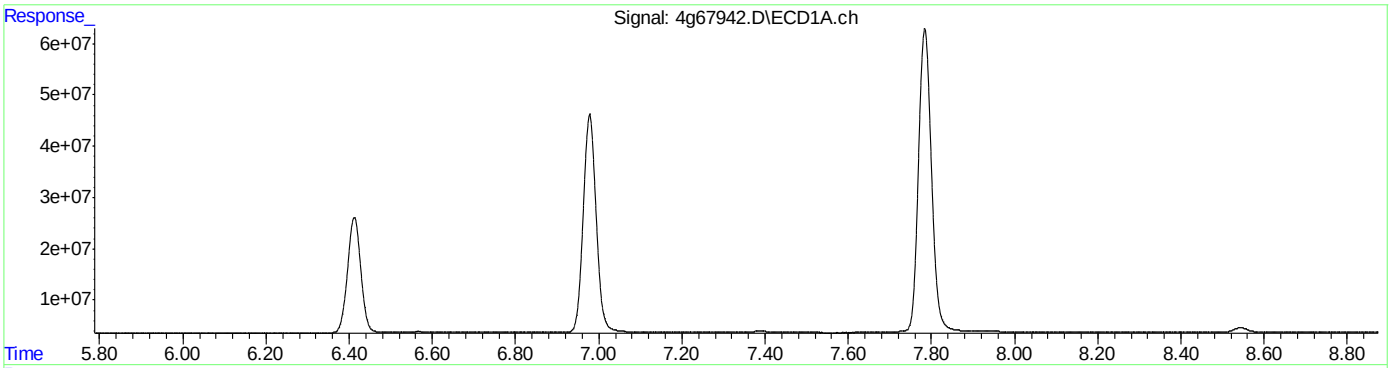
(+) = Expected Retention Time
4PST1778.M Fri May 06 09:36:42 2016 RPT1

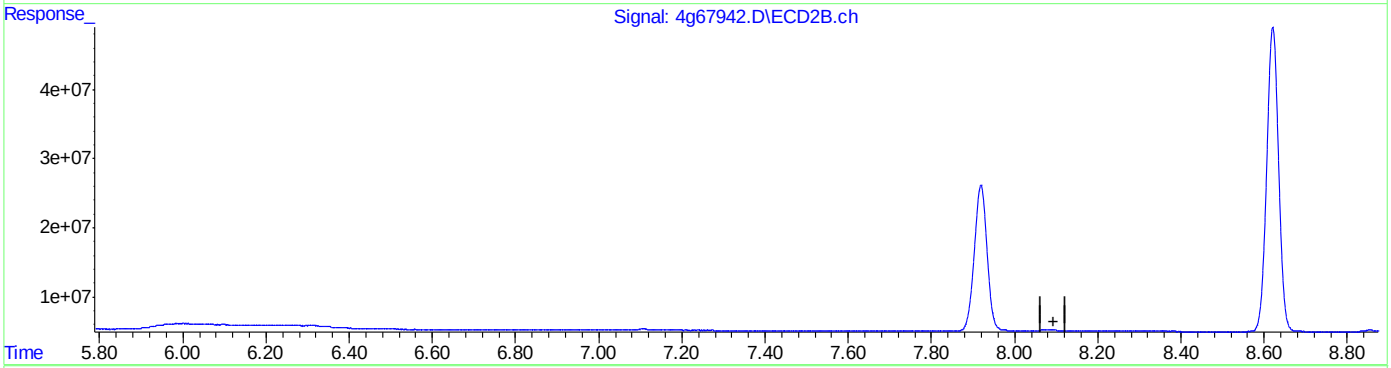
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67942.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 7:42 am
Operator : brittanp
Sample : ddt
Misc : op93644,g4g1782,15.5,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 06 07:55:37 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

(16) 4,4'-DDD (A)
0.000min 0.000 PPB
response 0

(16) 4,4'-DDD #2 (A)
0.000min 0.000 PPB
response 0

(+) = Expected Retention Time

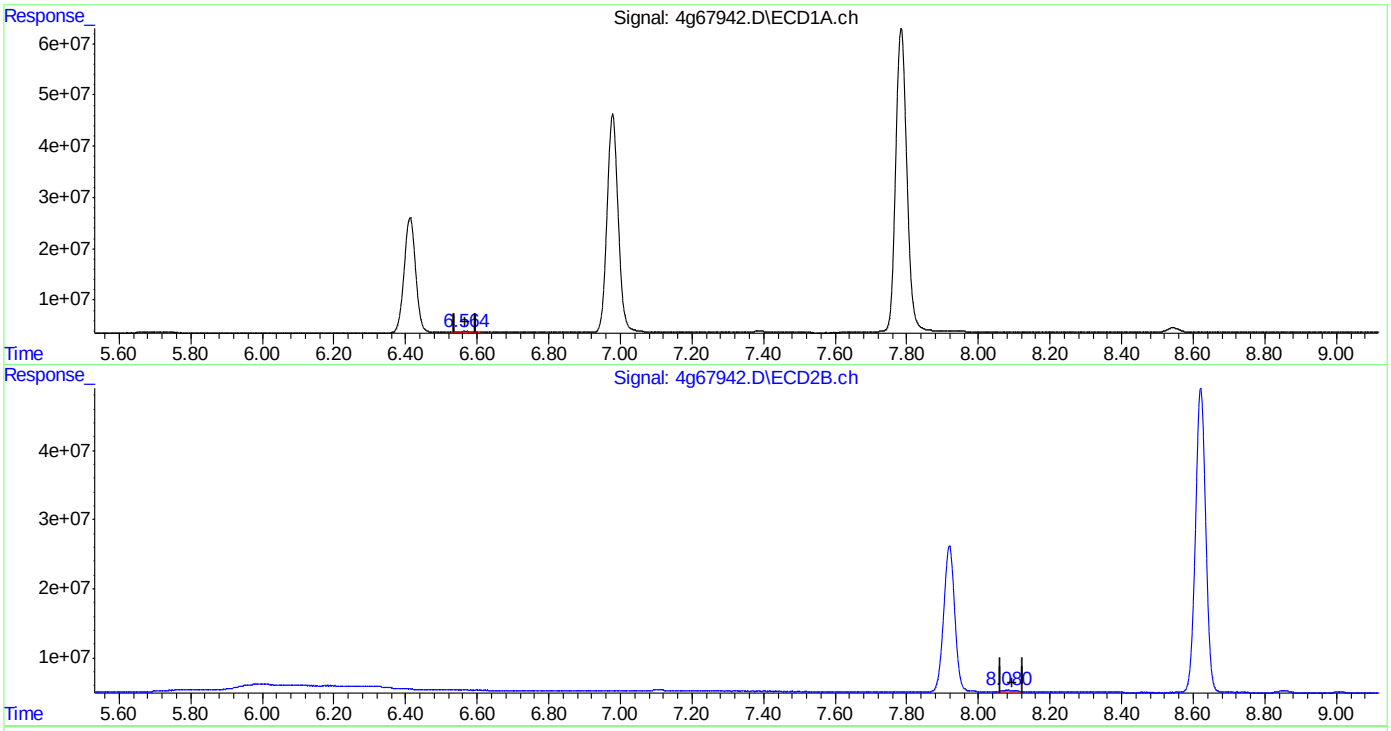
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67942.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 7:42 am
Operator : brittanp
Sample : ddt
Misc : op93644,g4g1782,15.5,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 06 07:55:37 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

(16) 4,4'-DDD (A)
6.564min 0.405 PPB m
response 3032566

(16) 4,4'-DDD #2 (A)
8.080min 0.597 PPB m
response 4285767

(+) = Expected Retention Time
4PST1778.M Fri May 06 09:37:02 2016 RPT1

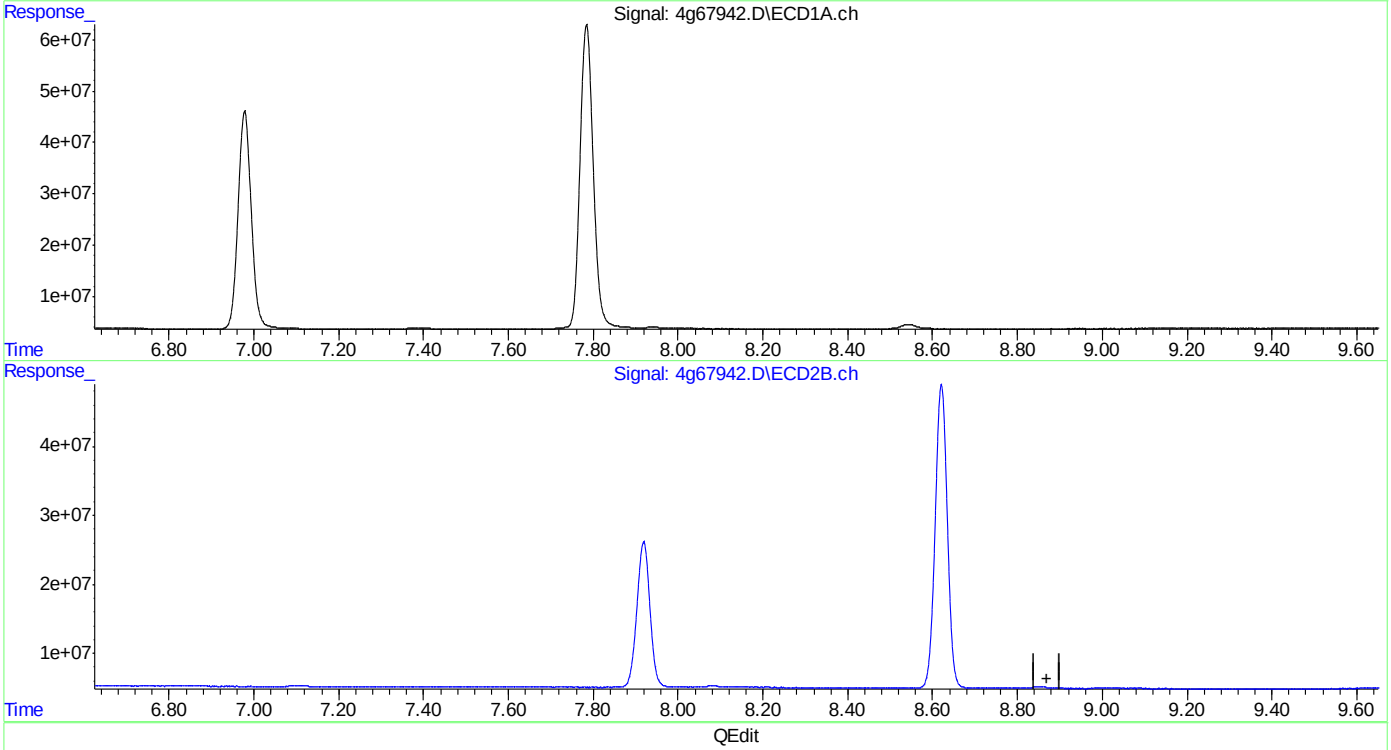
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67942.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 7:42 am
Operator : brittanp
Sample : ddt
Misc : op93644,g4g1782,15.5,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 06 07:55:37 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



(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

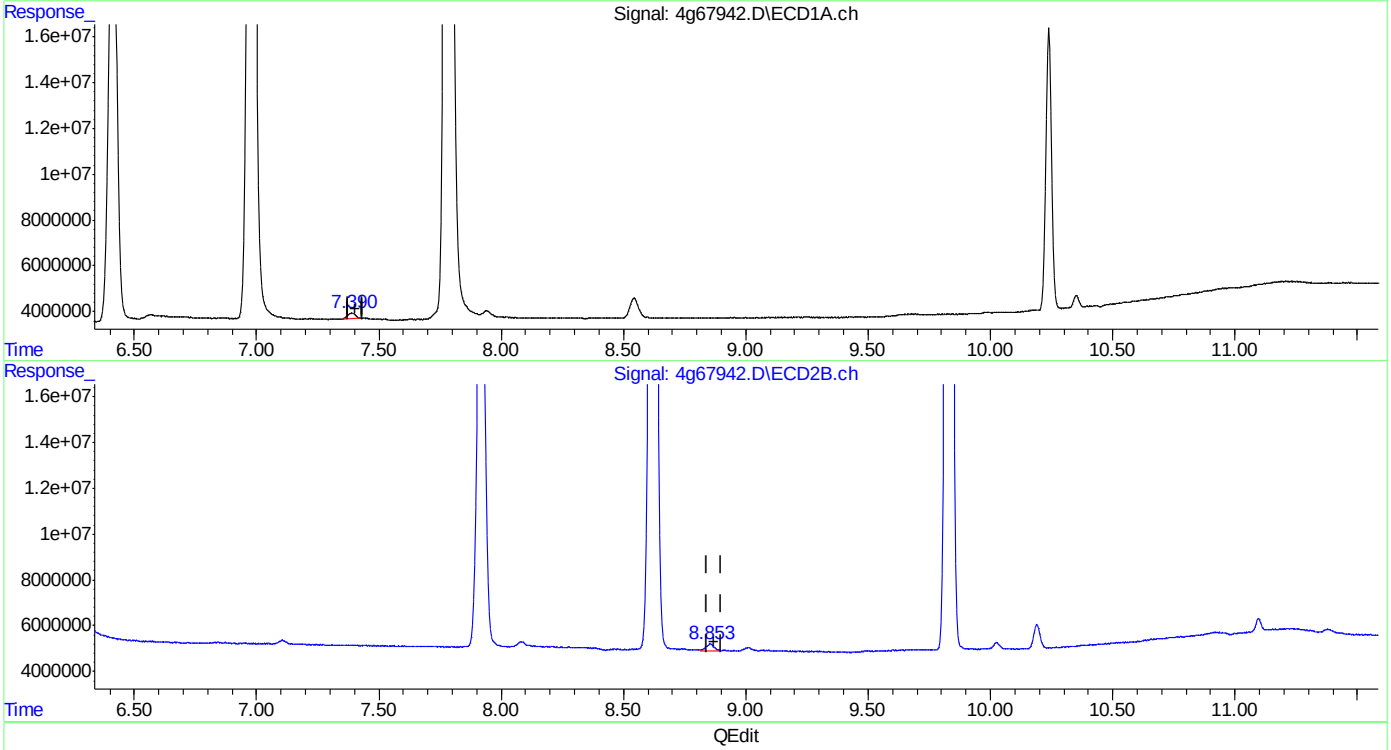
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67942.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 7:42 am
Operator : brittanp
Sample : ddt
Misc : op93644,g4g1782,15.5,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 06 07:55:37 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



(19) Endrin Aldehyde (B)
7.390min 0.817 PPB m
response 5873647

(19) Endrin Aldehyde #2 (B)
8.853min 1.092 PPB m
response 6487849

(+) = Expected Retention Time
4PST1778.M Fri May 06 09:37:24 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
05/09/16 06:55

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67972.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 2:42 pm
Operator : dharas
Sample : ddt
Misc : op93657,g4g1782,100,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 06 18:19:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Fri May 06 15:02:24 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...	1.787	2.062	534.7E6	489.2E6	50.000	50.000
25) I	1-bromo-2...	1.787	2.062	534.7E6	489.2E6	50.000	50.000
31) I	1-bromo-2...	1.787	2.062	534.7E6	489.2E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.575	3.097	204.0E6	187.4E6	22.126	21.746
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 55.32%	54.36%
24) SA	Decachlor...	10.239	11.639	234.4E6	146.4E6	26.979	23.958
	Spiked Amount	40.000			Recovery	= 67.45%	59.89%
	Target Compounds						
13) B	4,4'-DDE	5.692	7.104	5367484	8646322	0.569m	0.871 #
15) MA	Endrin	6.411	7.917	590.9E6	522.4E6	62.541	59.106
16) A	4,4'-DDD	6.632f	8.083	22121084	4963083	2.766m	0.619m#
18) MA	4,4'-DDT	6.981	8.620	811.2E6	952.4E6	103.301	135.779 #
19) B	Endrin Al...	7.394	8.848	5587284	5381880	0.728	0.811m
23) B	Endrin Ke...	8.546	10.190	21667838	19578143	2.248	2.439

SemiQuant Compounds - Not Calibrated on this Instrument

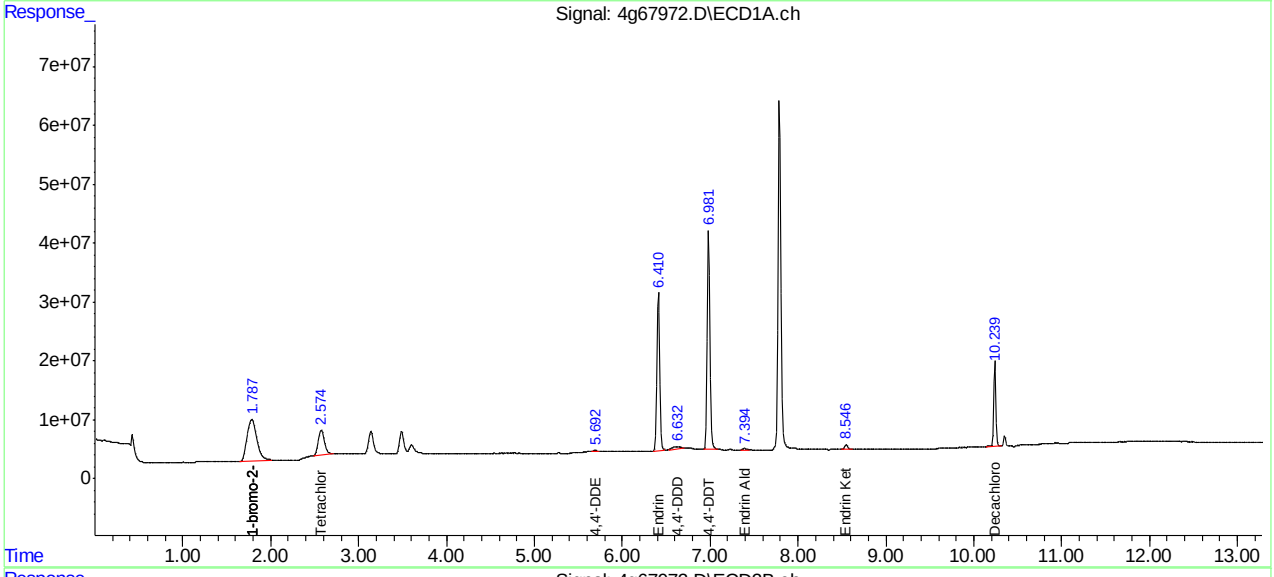
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

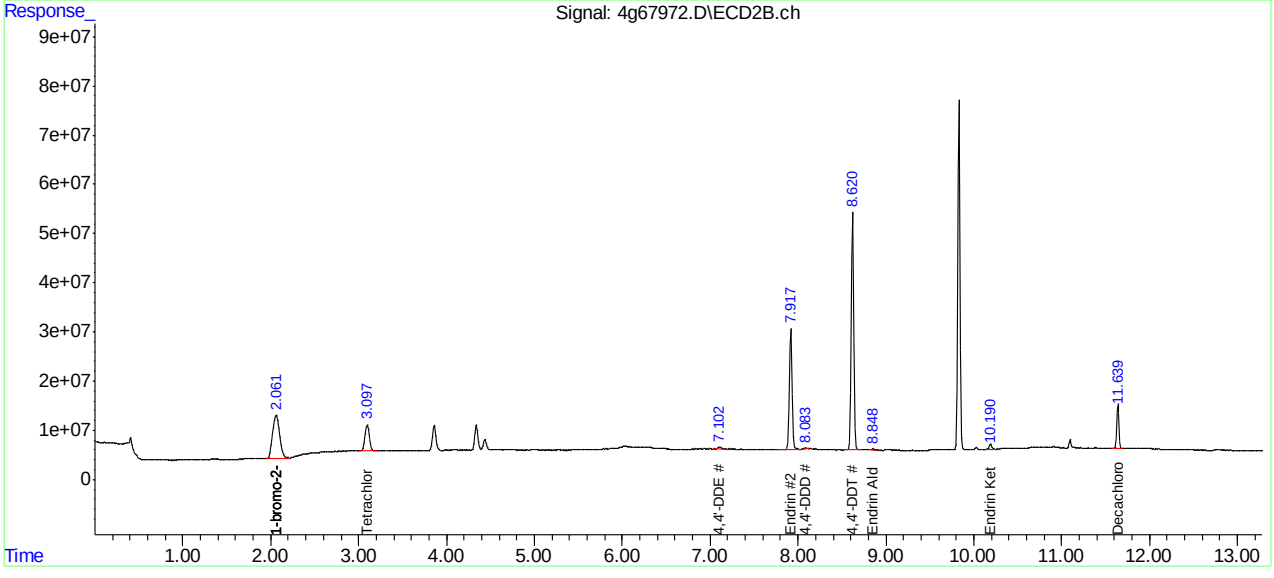
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67972.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 2:42 pm
Operator : dharas
Sample : ddt
Misc : op93657,g4g1782,100,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 06 18:19:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Fri May 06 15:02:24 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:	G4G1782-DDT	**Method:**	SW846 8081B
Lab FileID:	4G67972.D	**Analyst approved:**	05/06/16 18:24 Dhara Saparia
Injection Time:	05/06/16 14:42	**Supervisor approved:**	05/09/16 06:55 Gwendolyn Burns

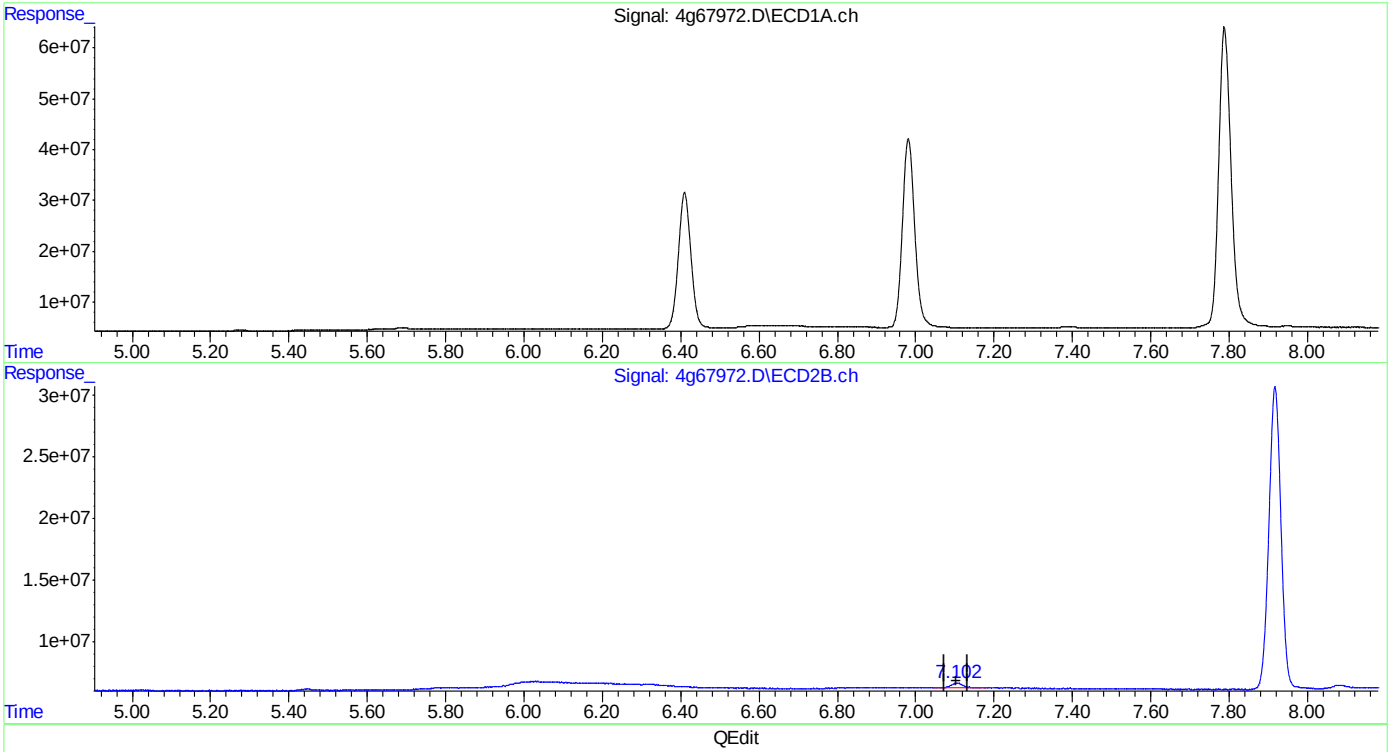
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	1	5.69	Poor instrument integration
4,4'-DDD	72-54-8	1	6.63	Poor instrument integration
4,4'-DDD	72-54-8	2	8.08	Poor instrument integration
Endrin aldehyde	7421-93-4	2	8.85	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67972.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 2:42 pm
Operator : dharas
Sample : ddt
Misc : op93657,g4g1782,100,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 06 18:17:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Fri May 06 15:02:24 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)
0.000min 0.000 PPB
response 0

(13) 4,4'-DDE #2 (B)
7.104min 0.871 PPB
response 8646322

(+) = Expected Retention Time
4PST1778.M Fri May 06 18:18:34 2016 RPT1

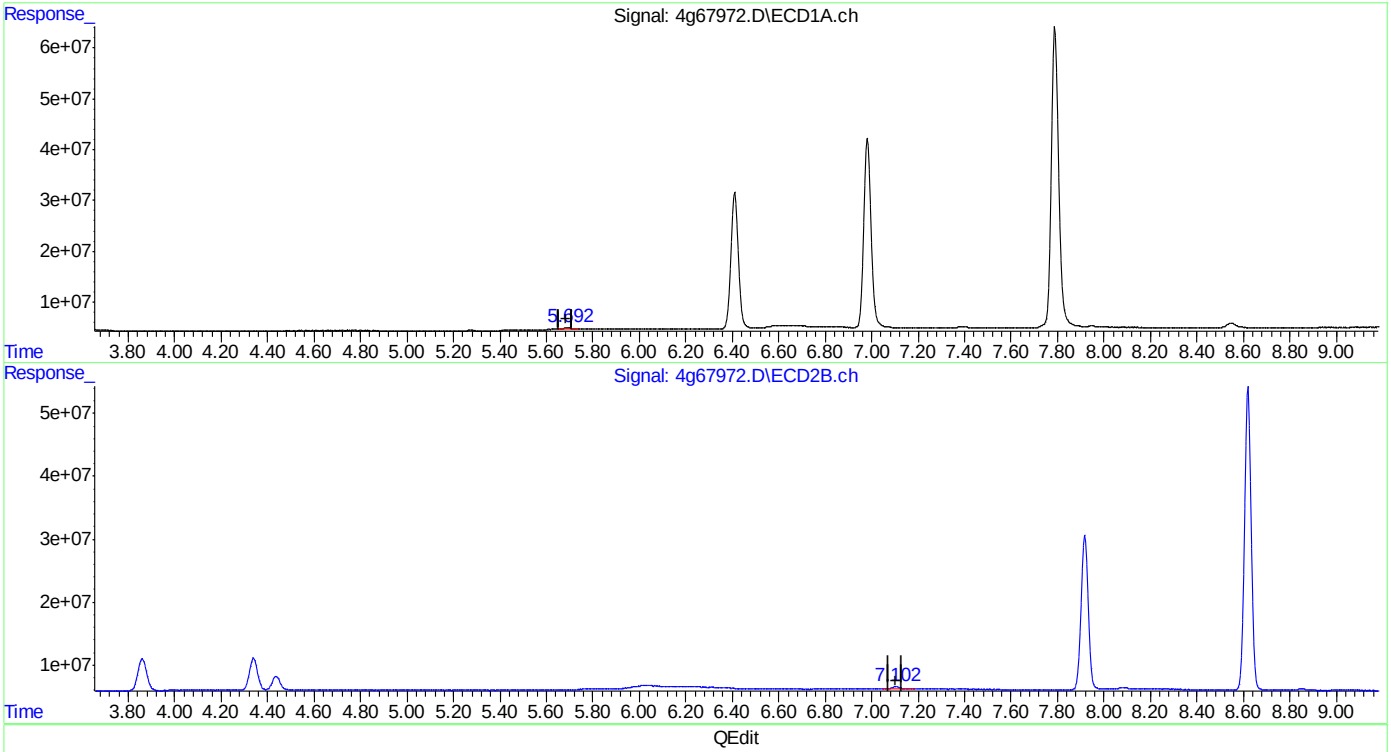
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67972.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 2:42 pm
Operator : dharas
Sample : ddt
Misc : op93657,g4g1782,100,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 06 18:17:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Fri May 06 15:02:24 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)
5.692min 0.569 PPB m
response 5367484

(13) 4,4'-DDE #2 (B)
7.104min 0.871 PPB
response 8646322

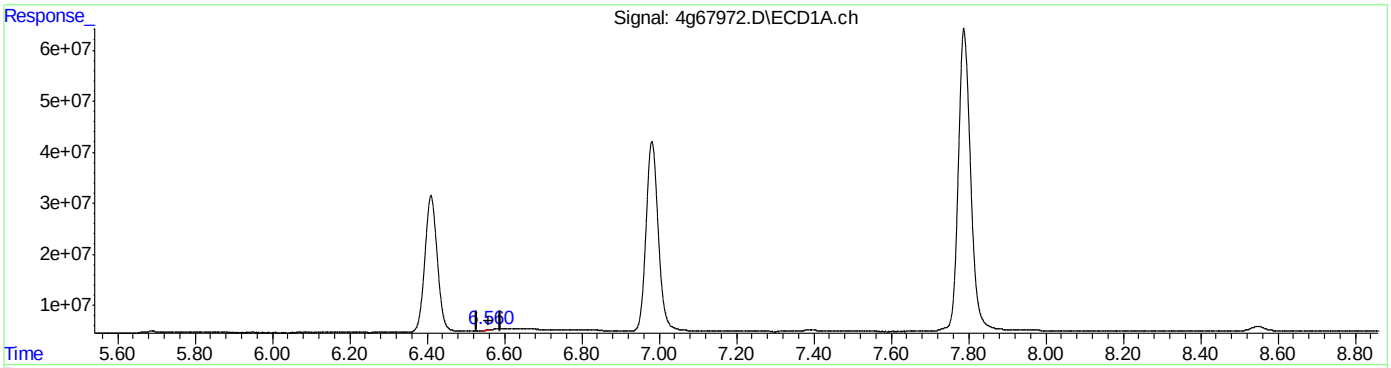
(+) = Expected Retention Time
4PST1778.M Fri May 06 18:18:47 2016 RPT1

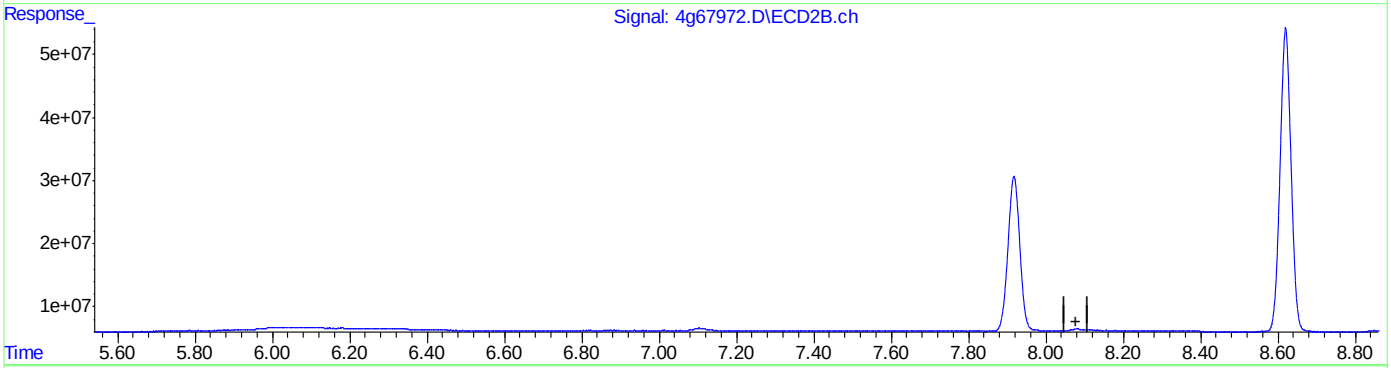
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67972.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 2:42 pm
Operator : dharas
Sample : ddt
Misc : op93657,g4g1782,100,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 06 18:17:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Fri May 06 15:02:24 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)
6.561min 0.065 PPB
response 522307

(16) 4,4'-DDD #2 (A)
0.000min 0.000 PPB
response 0

(+) = Expected Retention Time

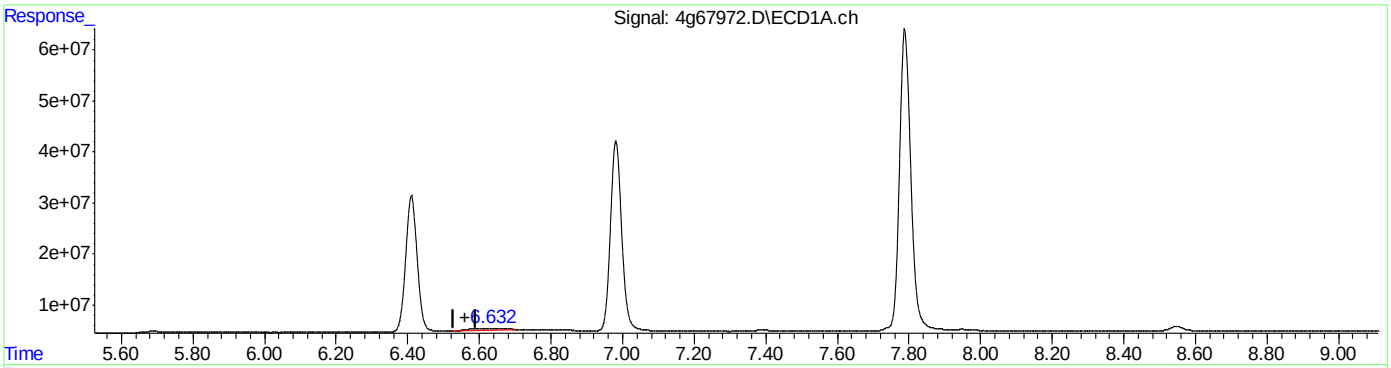
SGS ACCUTEST JC19644

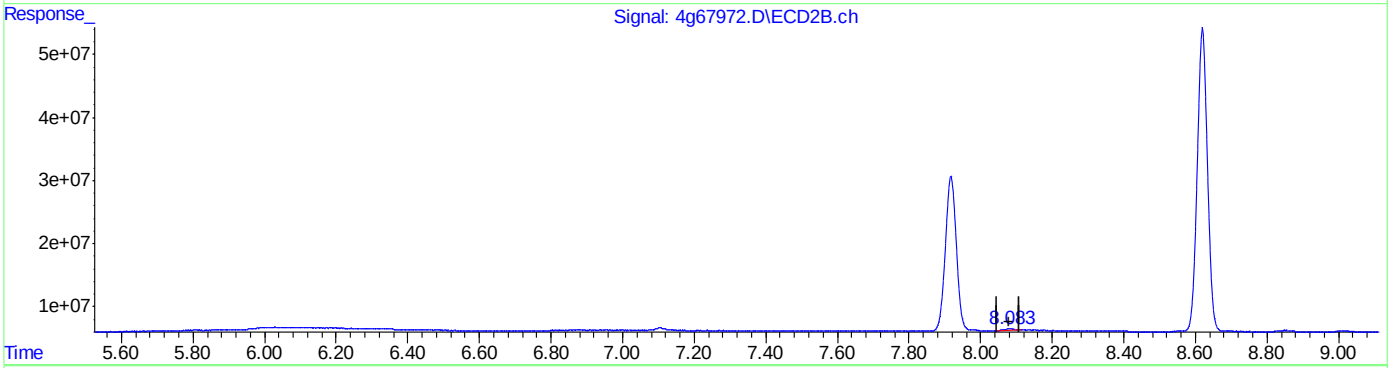
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67972.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 2:42 pm
Operator : dharas
Sample : ddt
Misc : op93657,g4g1782,100,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 06 18:17:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Fri May 06 15:02:24 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)
6.632min 2.766 PPB m
response 22121084

(16) 4,4'-DDD #2 (A)
8.083min 0.619 PPB m
response 4963083

(+) = Expected Retention Time

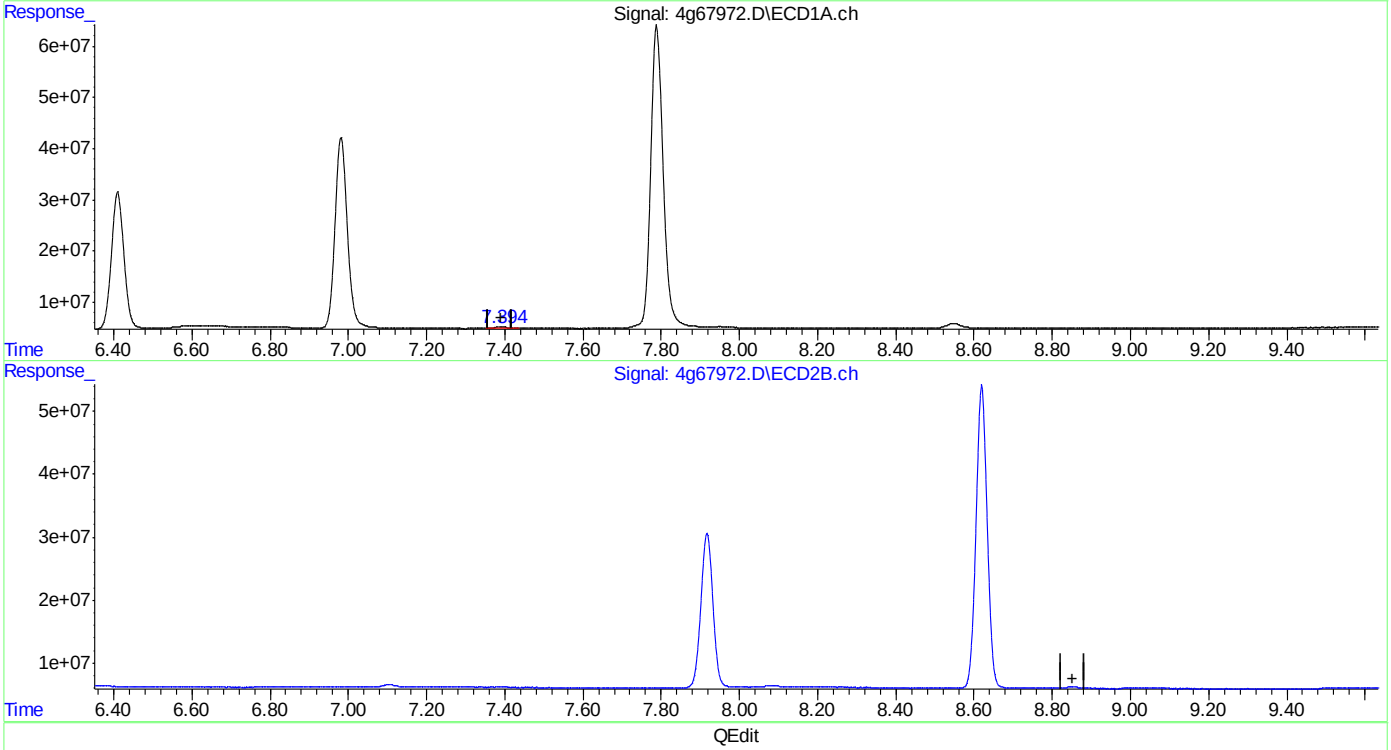
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67972.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 2:42 pm
Operator : dharas
Sample : ddt
Misc : op93657,g4g1782,100,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 06 18:17:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Fri May 06 15:02:24 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)
7.394min 0.728 PPB
response 5587284

(19) Endrin Aldehyde #2 (B)
0.000min 0.000 PPB
response 0

(+) = Expected Retention Time
4PST1778.M Fri May 06 18:19:37 2016 RPT1

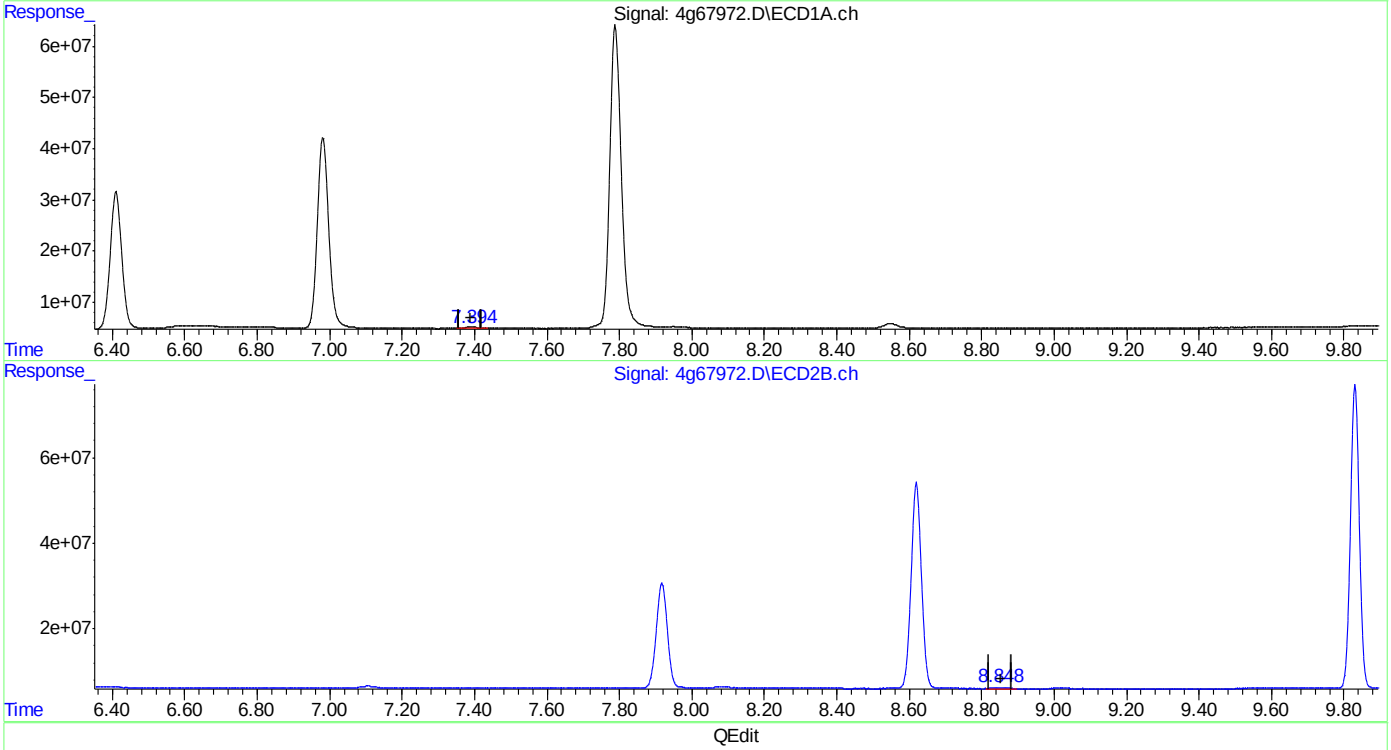
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67972.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 2:42 pm
Operator : dharas
Sample : ddt
Misc : op93657,g4g1782,100,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 06 18:17:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Fri May 06 15:02:24 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)
7.394min 0.728 PPB
response 5587284

(19) Endrin Aldehyde #2 (B)
8.848min 0.811 PPB m
response 5381880

(+) = Expected Retention Time
4PST1778.M Fri May 06 18:19:52 2016 RPT1

SGS ACCUTEST JC19644

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.

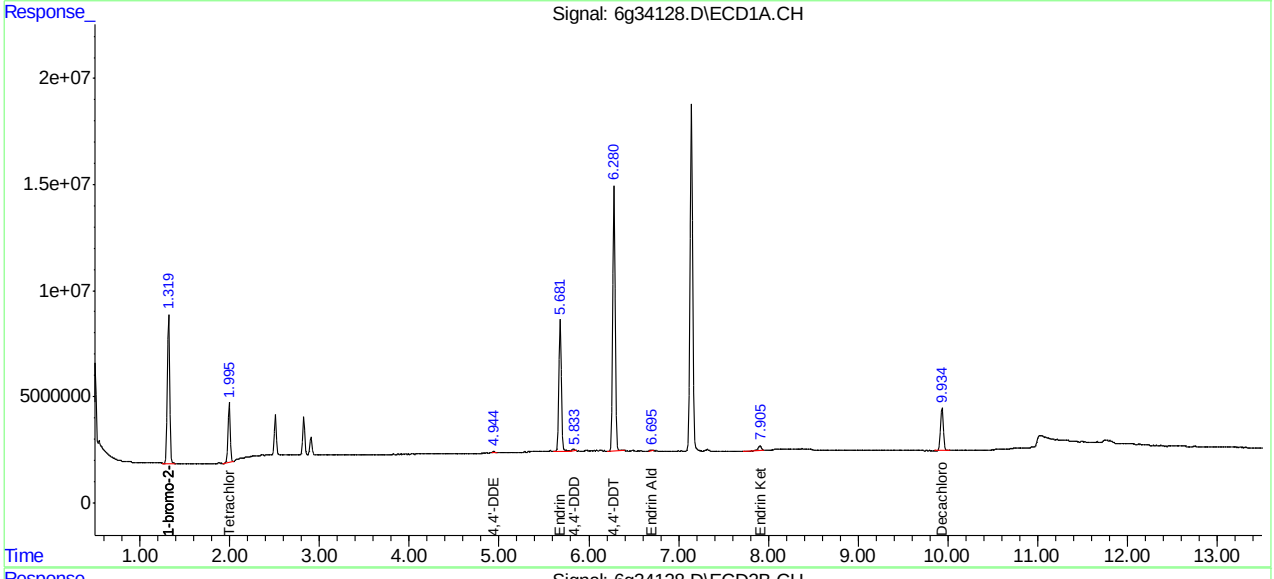
11.5.4 11

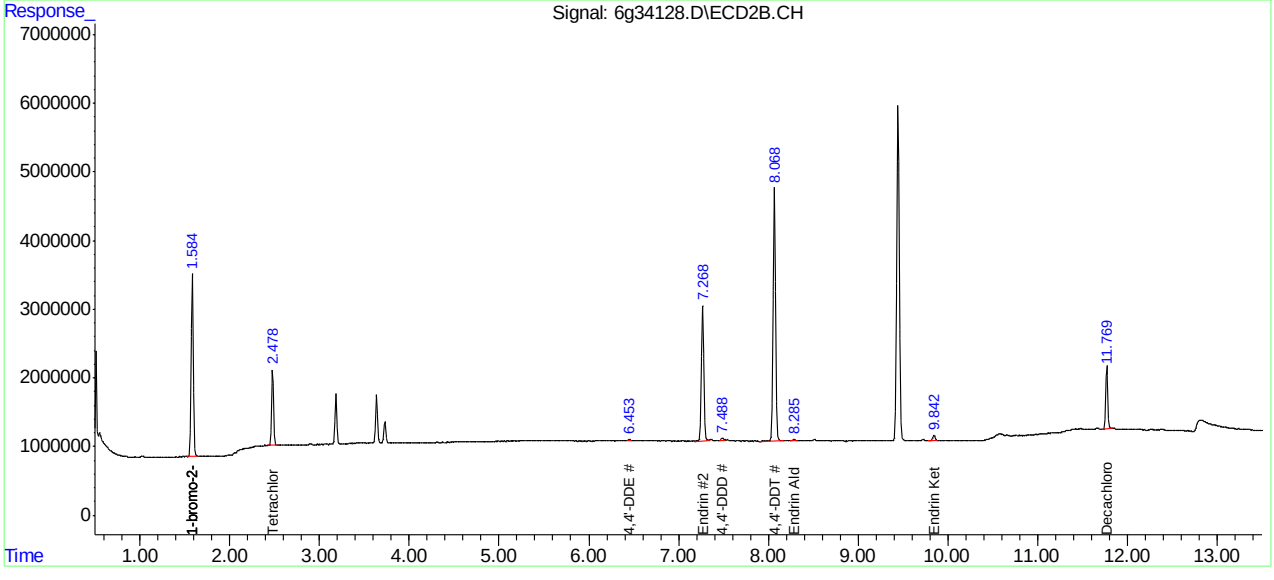
Quantitation Report (QT Reviewed)

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

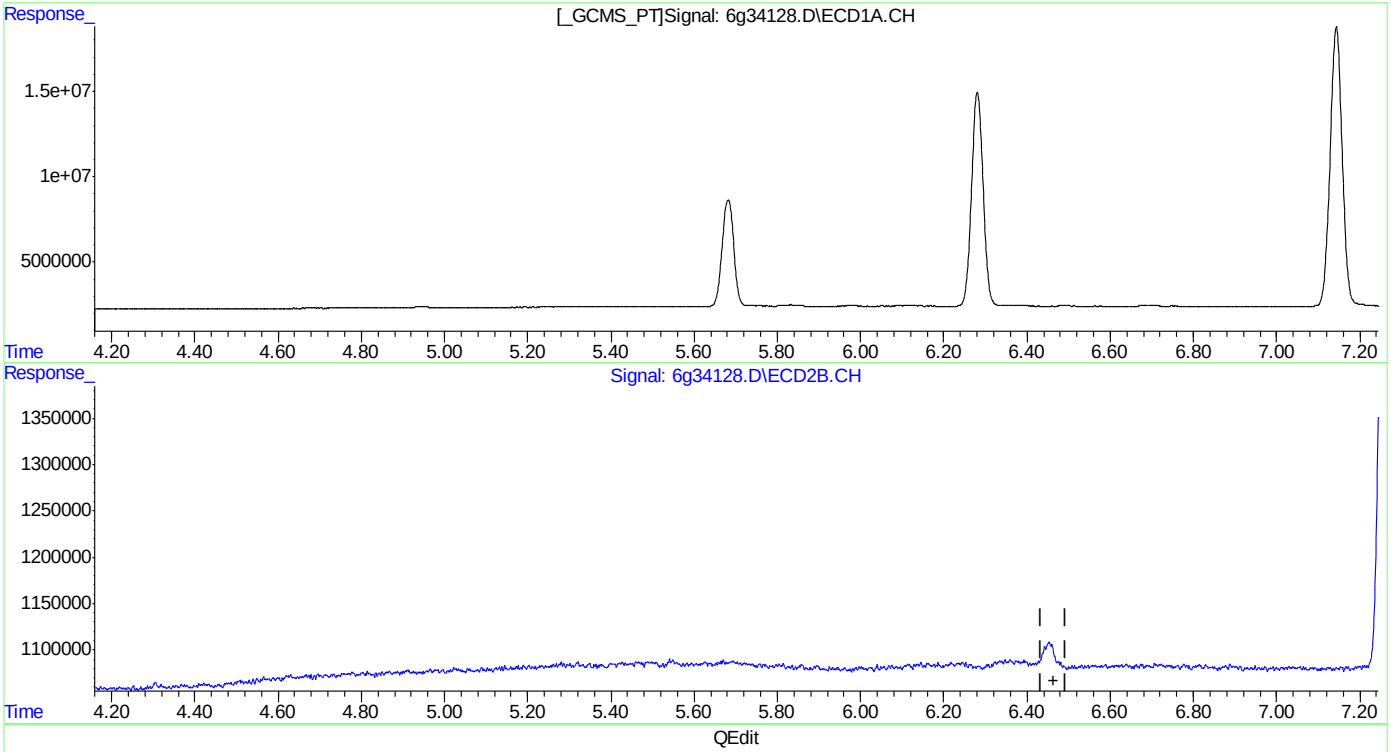
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	1	4.94	Poor instrument integration
4,4'-DDD	72-54-8	1	5.83	Poor instrument integration
4,4'-DDE	72-55-9	2	6.45	Poor instrument integration
Endrin aldehyde	7421-93-4	1	6.70	Poor instrument integration
4,4'-DDD	72-54-8	2	7.49	Poor instrument integration
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

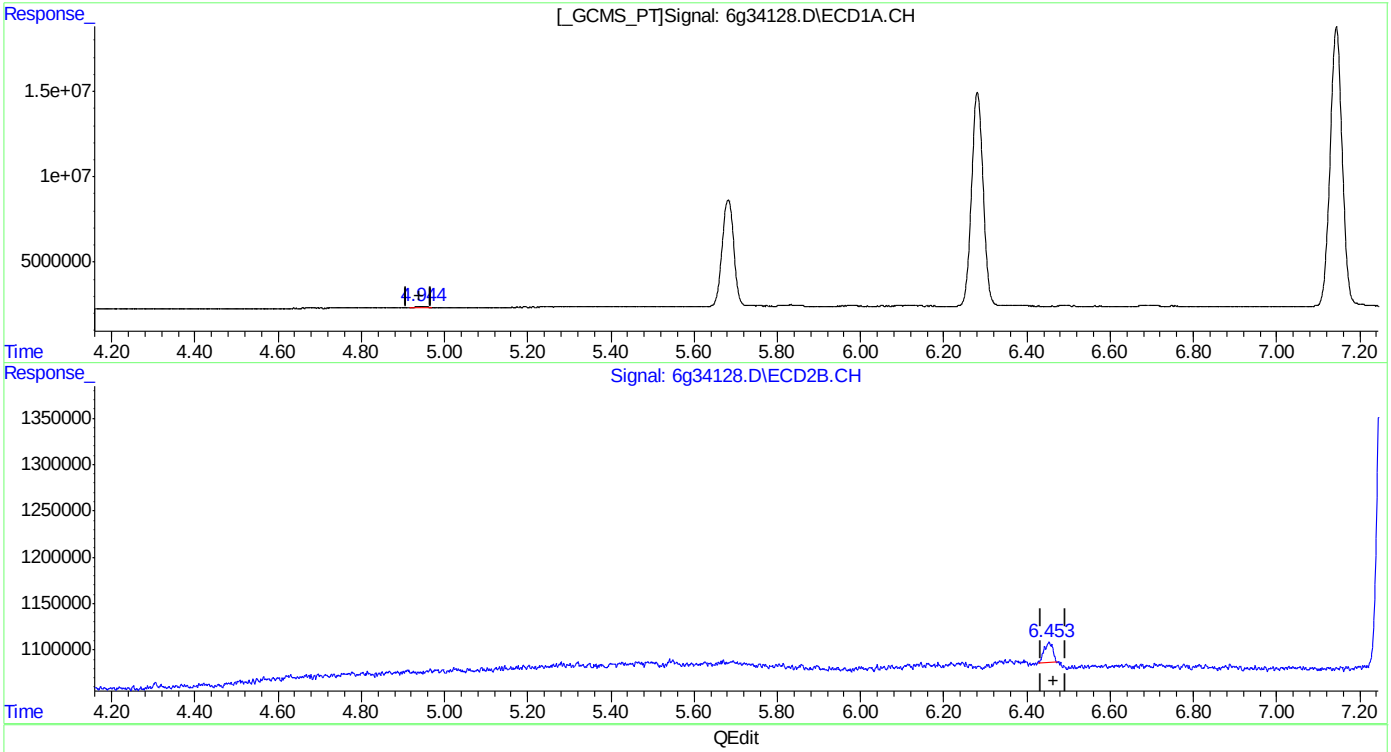
SGS ACCUTEST JC19644

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

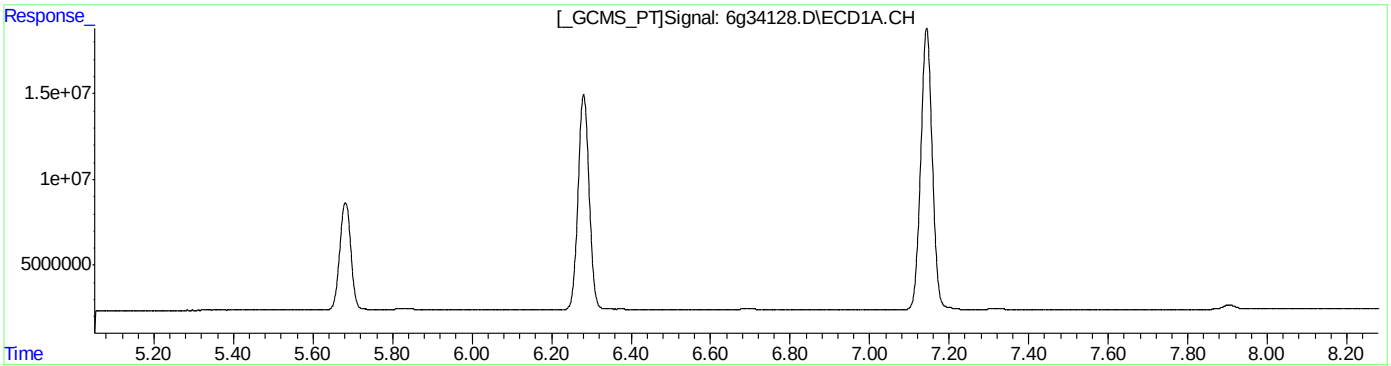
(+) = Expected Retention Time
6PST987.M Mon Apr 18 11:41:43 2016

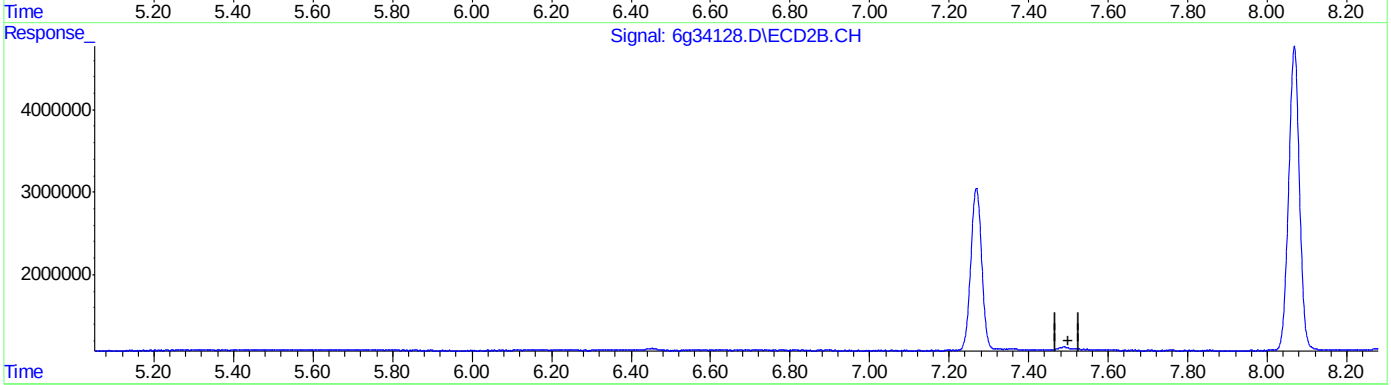
Quantitation Report (Qedit)

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

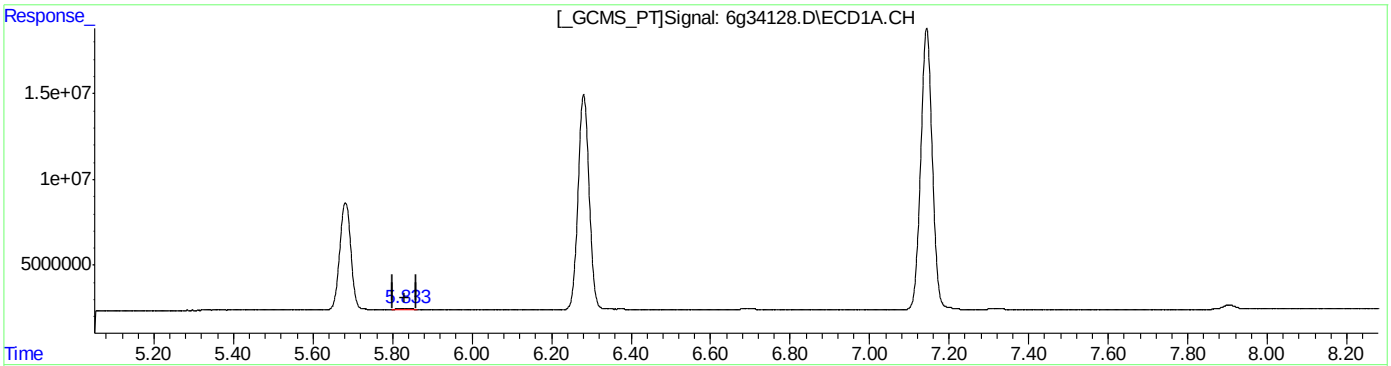
(+) = Expected Retention Time

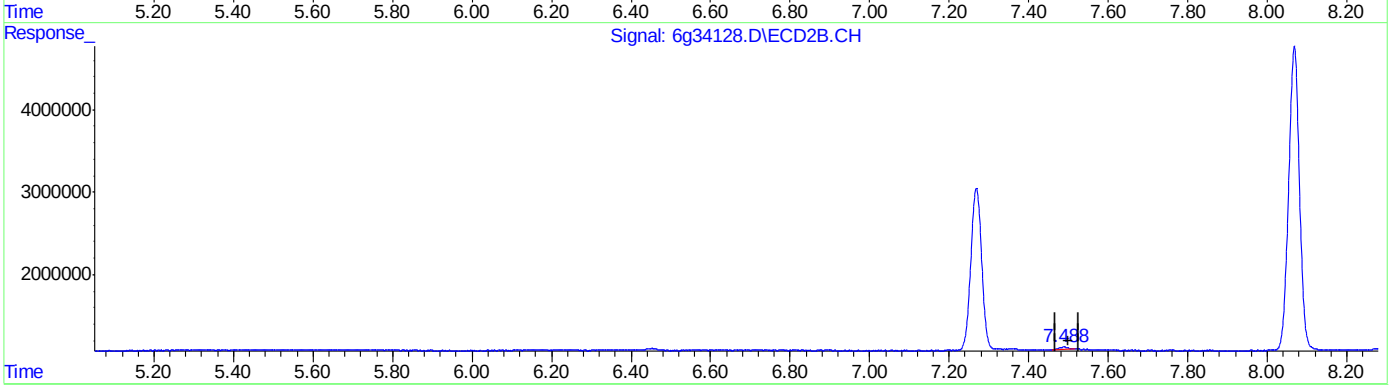
Quantitation Report (Qedit)

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

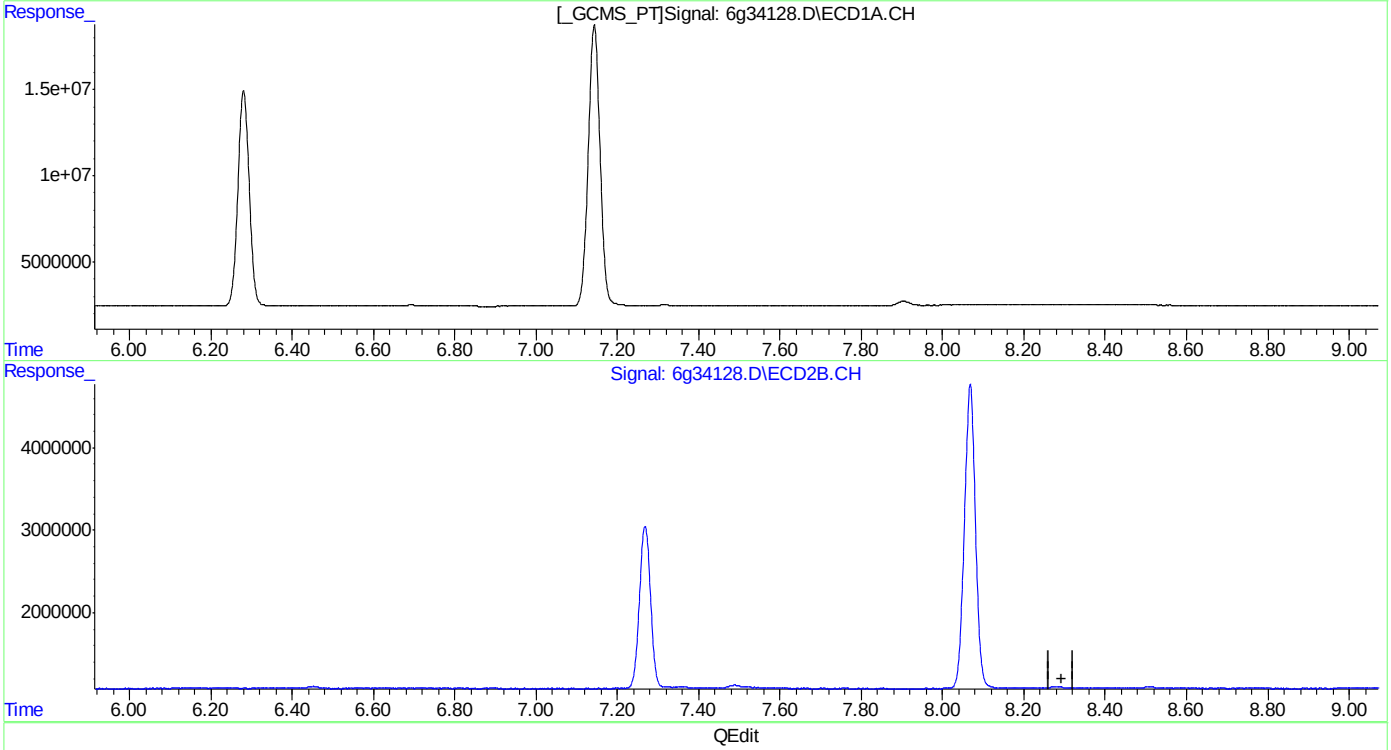
SGS ACCUTEST JC19644

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)
0.000min 0.000PPB
response 0

(19) Endrin Aldehyde #2 (B)
0.000min 0.000PPB
response 0

(+) = Expected Retention Time

6PST987.M Mon Apr 18 11:42:26 2016

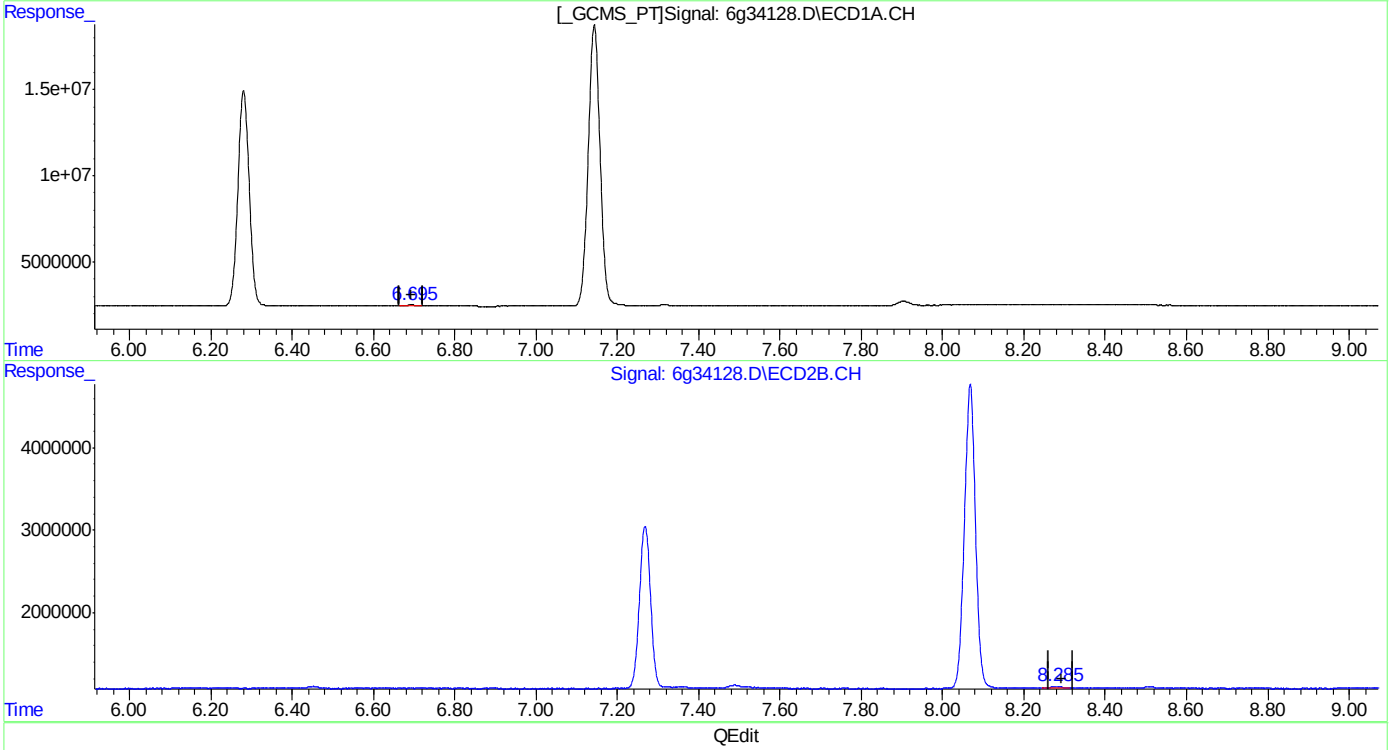
SGS ACCUTEST JC19644

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 JC19644

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
05/11/16 06:51

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1007\
Data File : 6g34894.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 May 2016 9:37 am
Operator : rebeccak
Sample : ddt
Misc : op93642,g6g1007,1000,,,5,5
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 10 13:09:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.297	1.567	136.5E6	52771243	50.000	50.000
25) I	1-bromo-2...	1.297	1.567	136.5E6	52771243	50.000	50.000
31) I	1-bromo-2...	1.297	1.567	136.5E6	52771243	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.971	2.459	51947654	20183364	20.766	21.169
Spiked Amount		40.000	Range	30 - 150	Recovery	= 51.91%	52.92%
24) SAB	Decachlor...	9.889f	11.737	45482414	16888291	20.909	23.559
Spiked Amount		40.000			Recovery	= 52.27%	58.90%
	Target Compounds						
13) B	4,4'-DDE	4.904f	6.413	676208	326437	0.314m	0.383m
15) MA	Endrin	5.640f	7.228	124.9E6	46570631	54.186	52.209
16) A	4,4'-DDD	5.790f	7.455	645206	1288789	0.354m	1.750m#
18) MA	4,4'-DDT	6.239f	8.026	220.6E6	75824742	111.210	113.465
19) B	Endrin Al...	6.649f	8.241	1170030	501790	0.631m	0.709m
23) B	Endrin Ke...	7.857f	9.796	5035275	2290048	2.120	2.552m

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

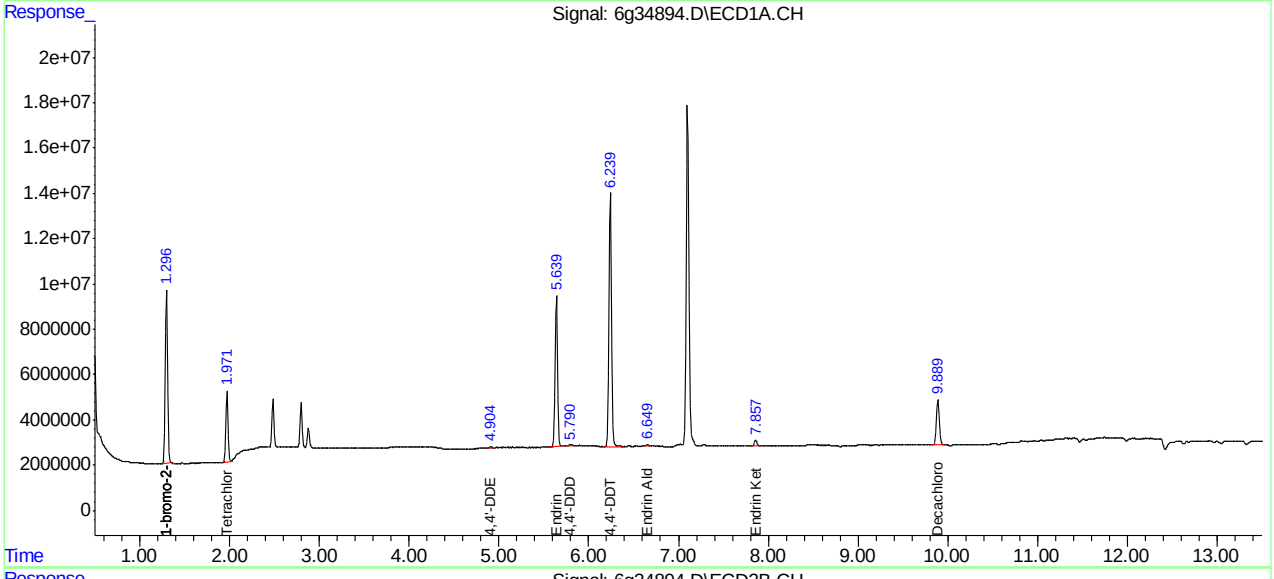
11.5.5 11

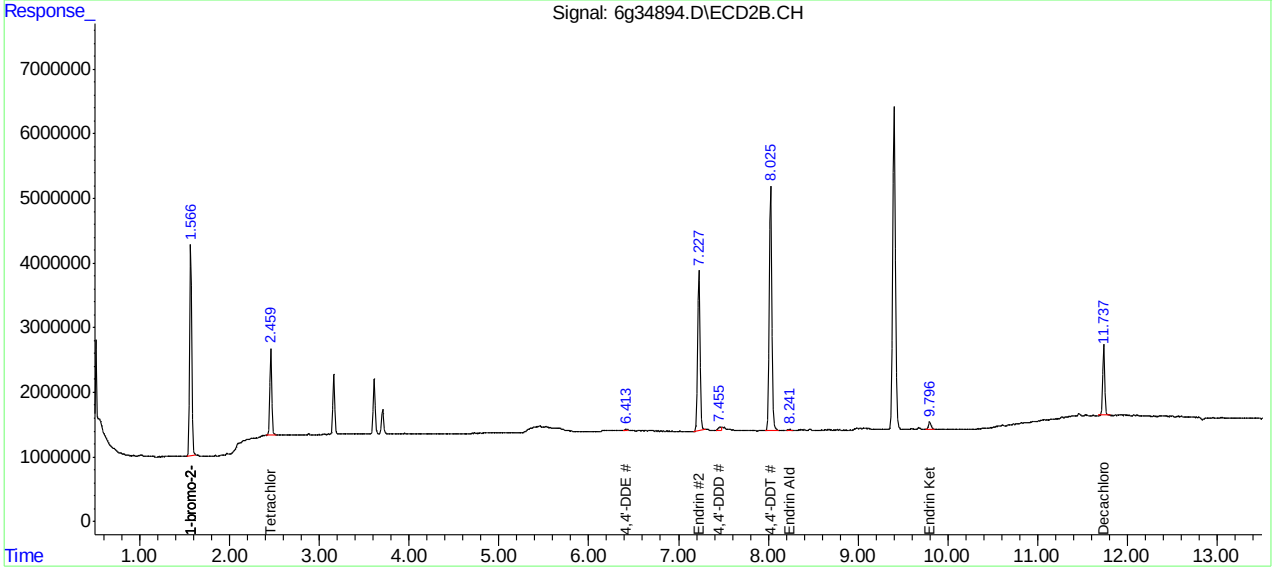
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1007\
Data File : 6g34894.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 May 2016 9:37 am
Operator : rebeccak
Sample : ddt
Misc : op93642,g6g1007,1000,,,5,5
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 10 13:09:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC19644

Manual Integration Approval Summary

Sample Number:	G6G1007-DDT	**Method:**	EPA 608
Lab FileID:	6G34894.D	**Analyst approved:**	05/10/16 13:20 Dhara Saparia
Injection Time:	05/10/16 09:37	**Supervisor approved:**	05/11/16 06:51 Gwendolyn Burns

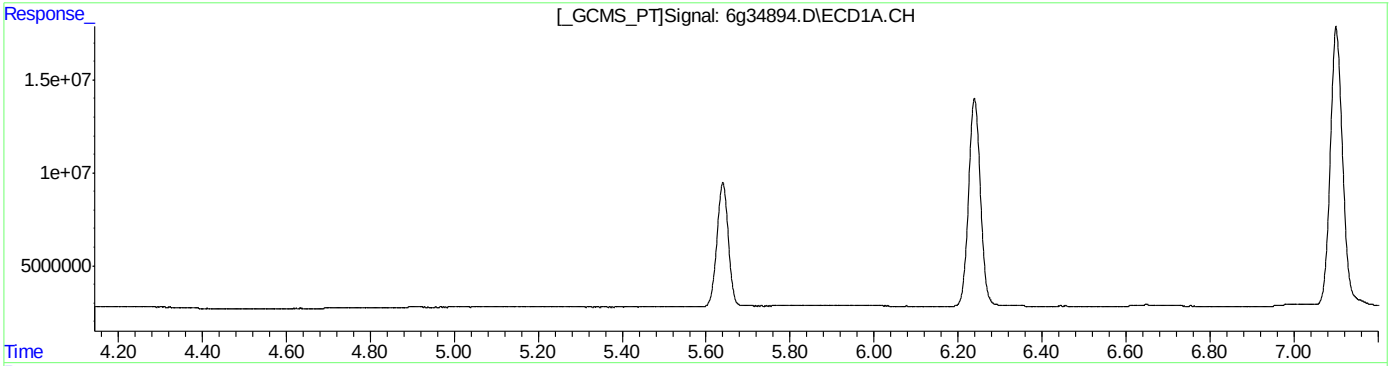
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	1	4.90	Poor instrument integration
4,4'-DDD	72-54-8	1	5.79	Poor instrument integration
4,4'-DDE	72-55-9	2	6.41	Poor instrument integration
Endrin aldehyde	7421-93-4	1	6.65	Poor instrument integration
4,4'-DDD	72-54-8	2	7.46	Poor instrument integration
Endrin aldehyde	7421-93-4	2	8.24	Poor instrument integration
Endrin ketone	53494-70-5	2	9.80	Poor instrument integration

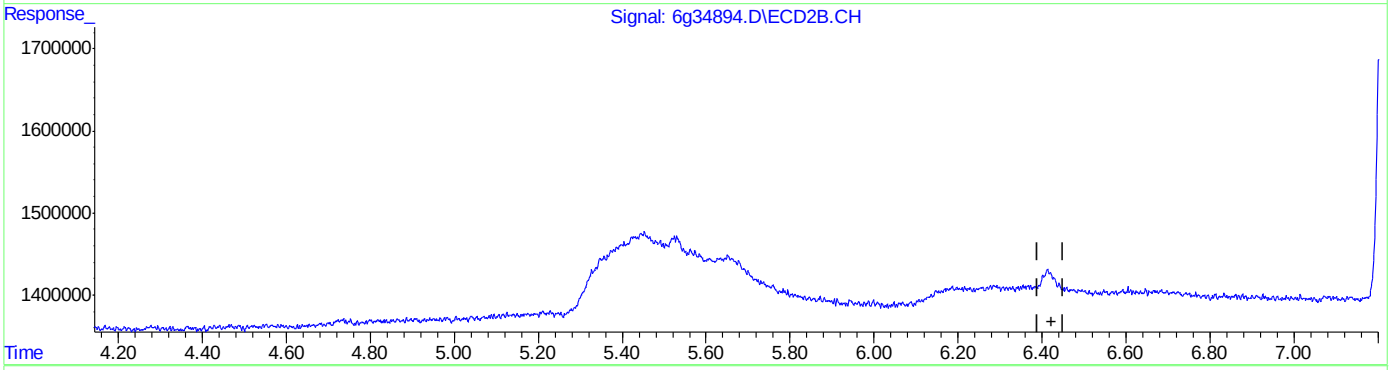
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1007\
Data File : 6g34894.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 May 2016 9:37 am
Operator : rebeccak
Sample : ddt
Misc : op93642,g6g1007,1000,,,5,5
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 10 13:07:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(13) 4,4'-DDE (B)
0.000min 0.000PPB
response 0

(13) 4,4'-DDE #2 (B)
0.000min 0.000PPB
response 0

(+) = Expected Retention Time

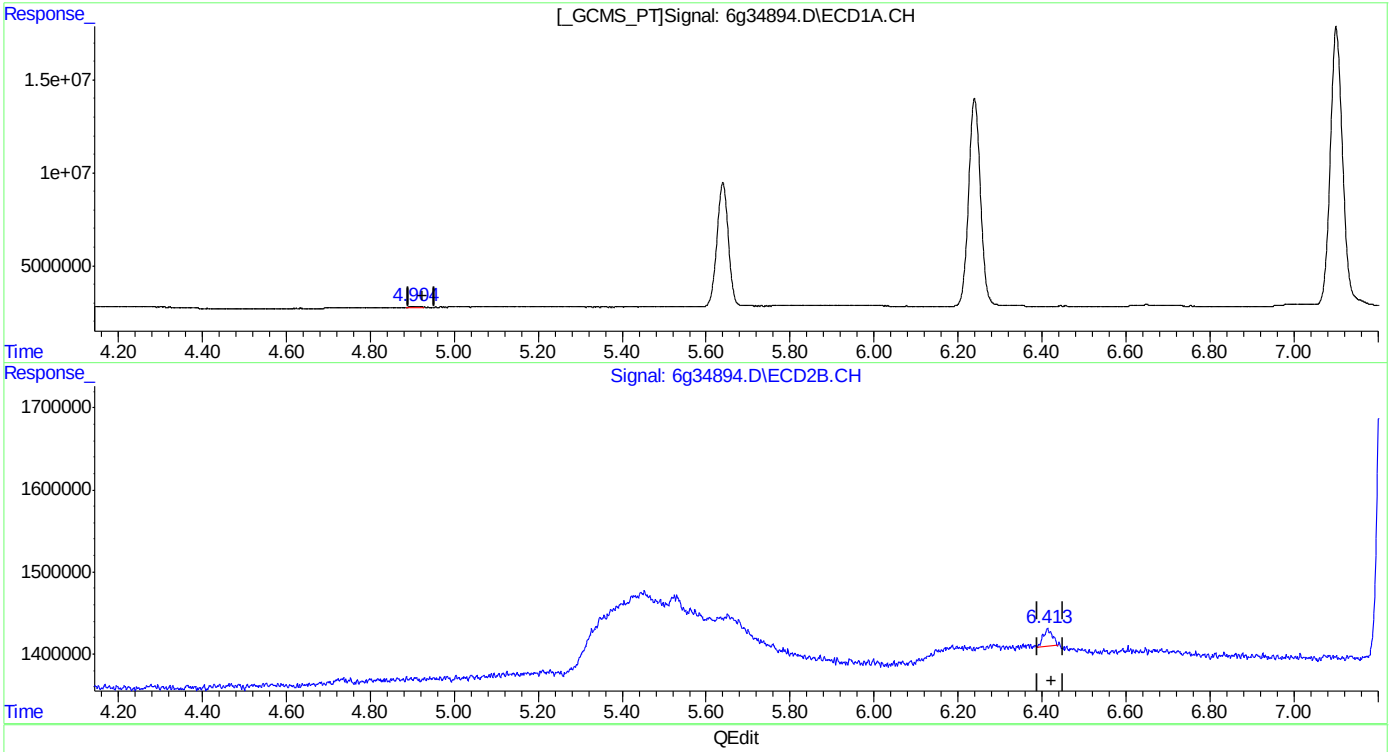
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1007\
Data File : 6g34894.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 May 2016 9:37 am
Operator : rebeccak
Sample : ddt
Misc : op93642,g6g1007,1000,,,5,5
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 10 13:07:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(13) 4,4'-DDE (B)
4.904min 0.314PPB m
response 676208

(13) 4,4'-DDE #2 (B)
6.413min 0.383PPB m
response 326437

(+) = Expected Retention Time

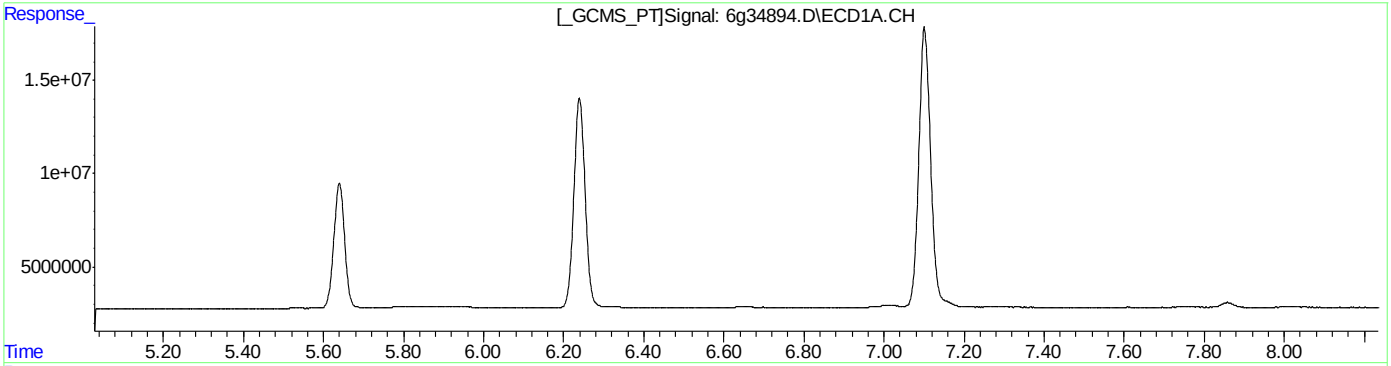
SGS ACCUTEST JC19644

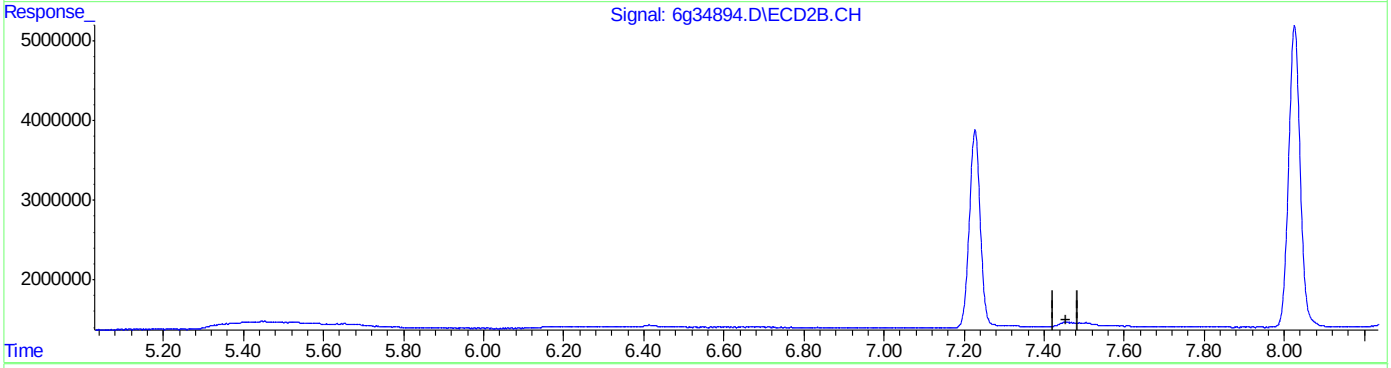
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1007\
Data File : 6g34894.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 May 2016 9:37 am
Operator : rebeccak
Sample : ddt
Misc : op93642,g6g1007,1000,,,5,5
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 10 13:07:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(16) 4,4'-DDD (A)
0.000min 0.000PPB
response 0

(16) 4,4'-DDD #2 (A)
0.000min 0.000PPB
response 0

(+) = Expected Retention Time
6PST987.M Tue May 10 13:08:26 2016

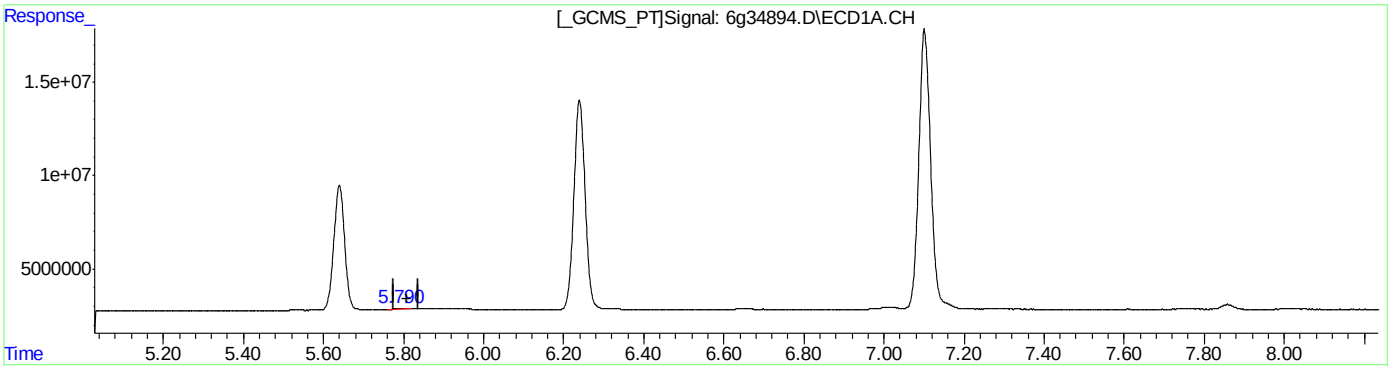
SGS ACCUTEST JC19644

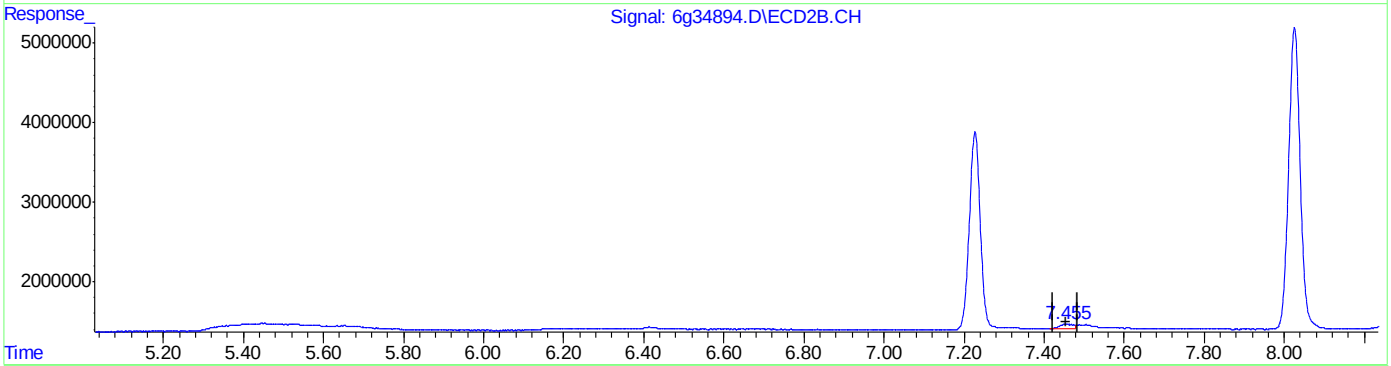
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1007\
Data File : 6g34894.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 May 2016 9:37 am
Operator : rebeccak
Sample : ddt
Misc : op93642,g6g1007,1000,,,5,5
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 10 13:07:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(16) 4,4'-DDD (A)
5.790min 0.354PPB m
response 645206

(16) 4,4'-DDD #2 (A)
7.455min 1.750PPB m
response 1288789

(+) = Expected Retention Time
6PST987.M Tue May 10 13:08:59 2016

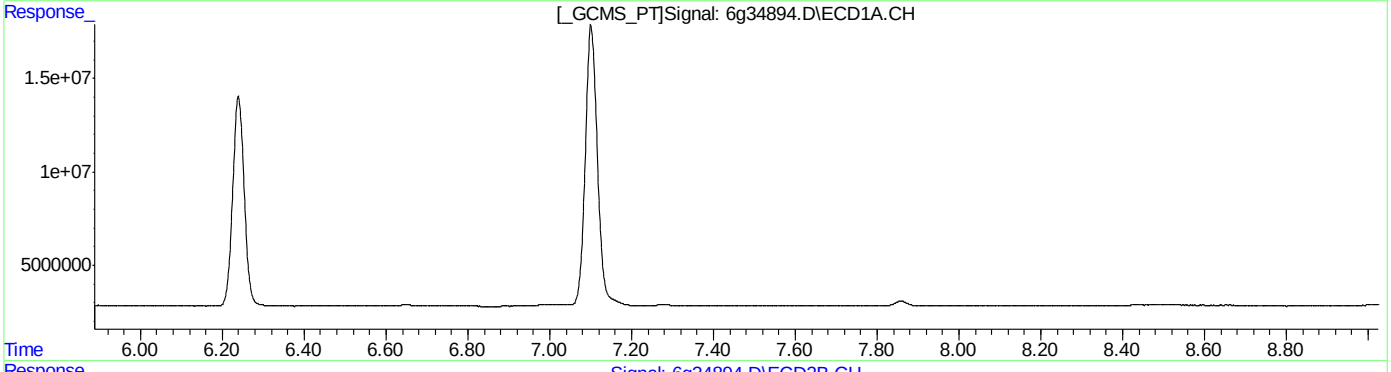
SGS ACCUTEST JC19644

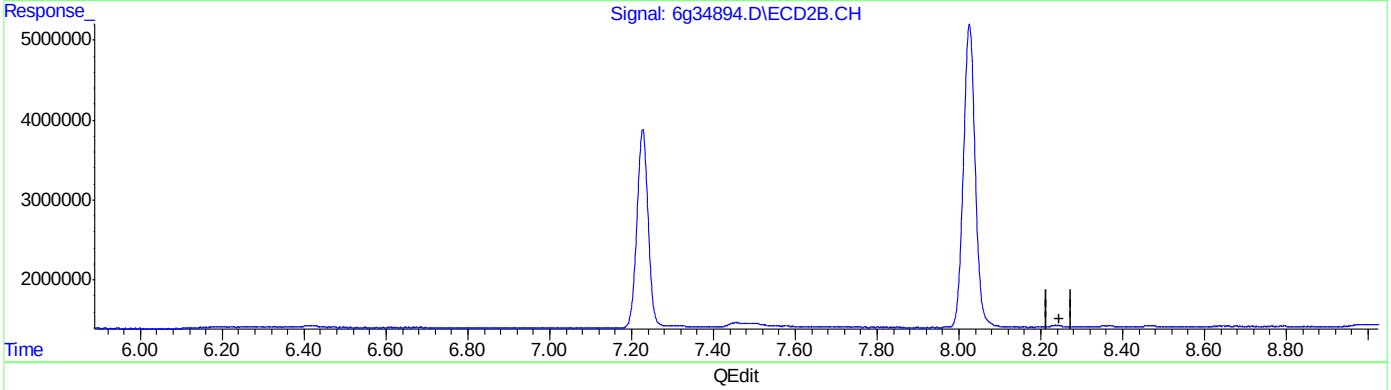
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1007\
Data File : 6g34894.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 May 2016 9:37 am
Operator : rebeccak
Sample : ddt
Misc : op93642,g6g1007,1000,,,5,5
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 10 13:07:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(19) Endrin Aldehyde (B)
0.000min 0.000PPB
response 0

(19) Endrin Aldehyde #2 (B)
0.000min 0.000PPB
response 0

(+) = Expected Retention Time

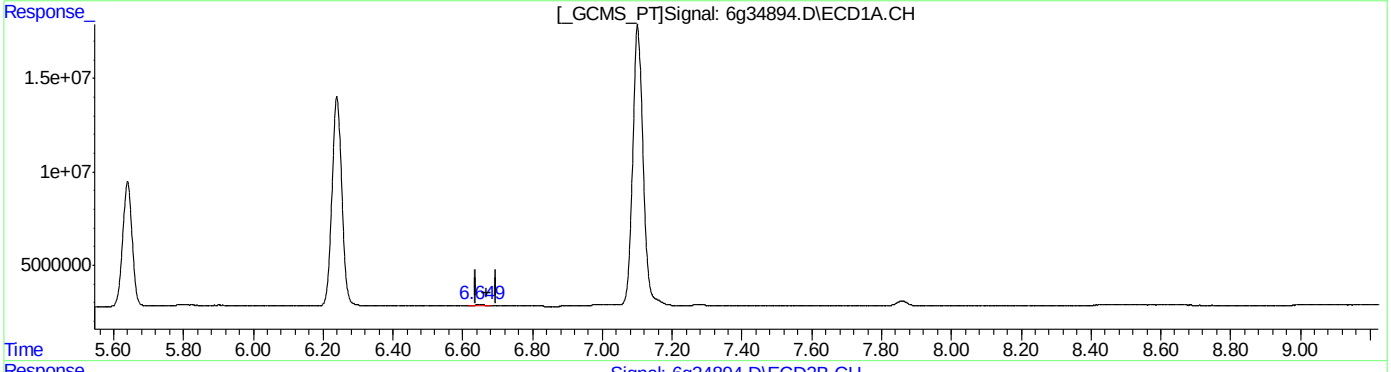
SGS ACCUTEST JC19644

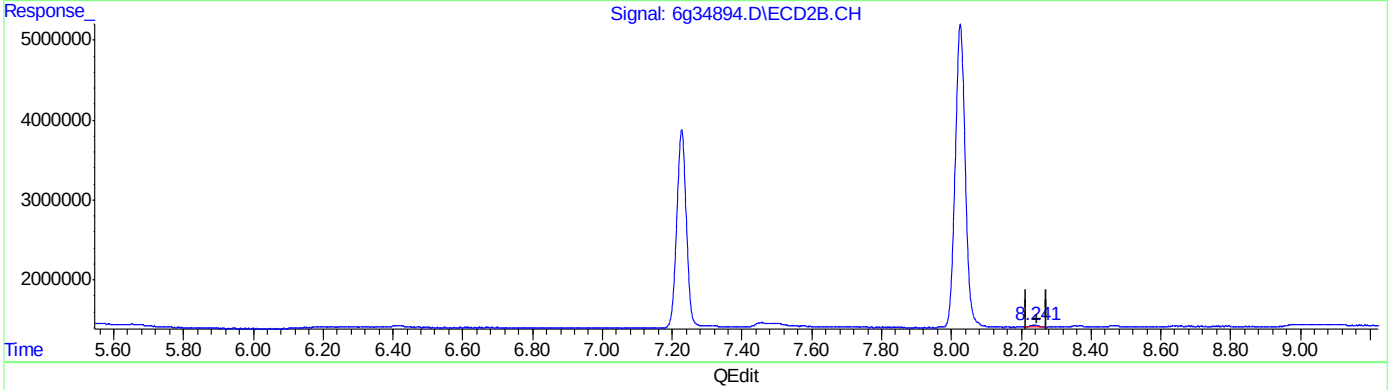
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1007\
Data File : 6g34894.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 May 2016 9:37 am
Operator : rebeccak
Sample : ddt
Misc : op93642,g6g1007,1000,,,5,5
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 10 13:07:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(19) Endrin Aldehyde (B)
6.649min 0.631PPB m
response 1170030

(19) Endrin Aldehyde #2 (B)
8.241min 0.709PPB m
response 501790

(+) = Expected Retention Time
6PST987.M Tue May 10 13:09:29 2016

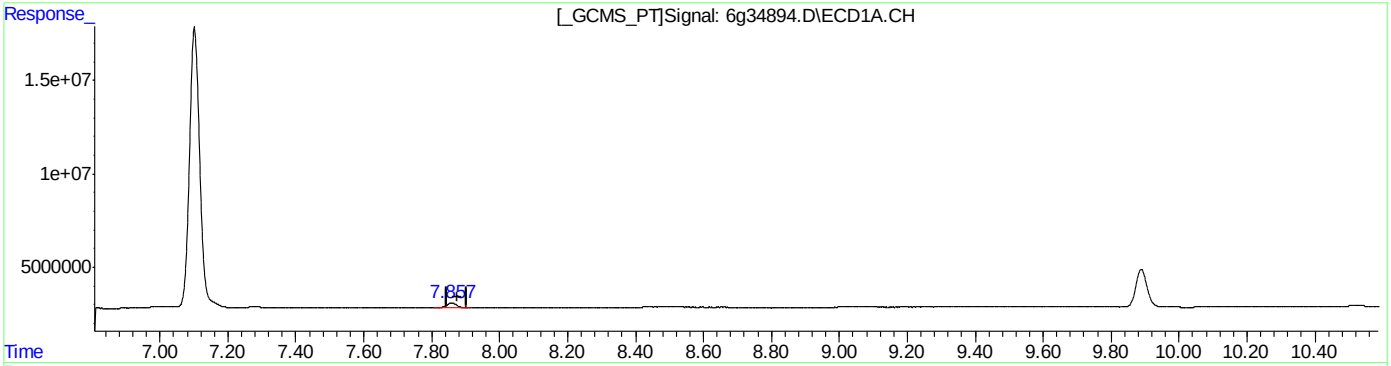
SGS ACCUTEST JC19644

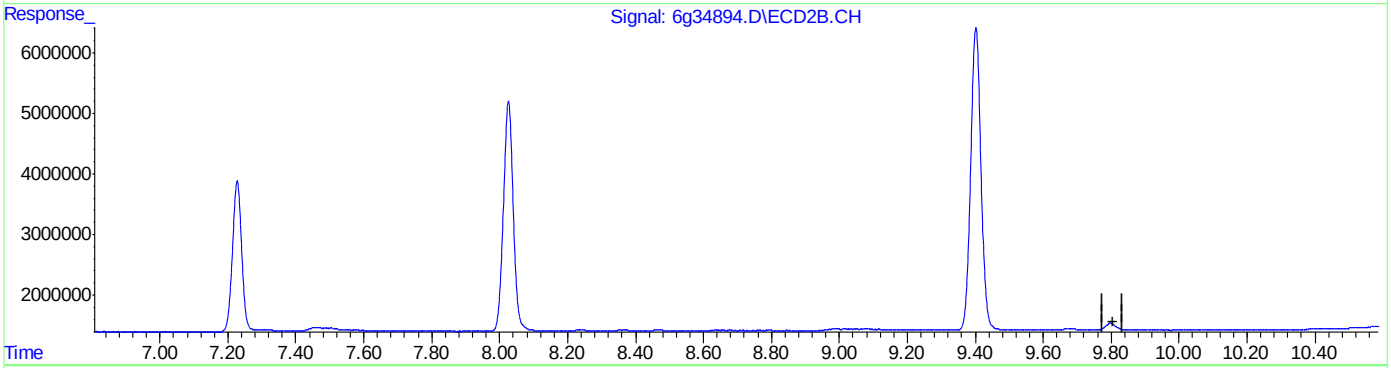
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1007\
Data File : 6g34894.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 May 2016 9:37 am
Operator : rebeccak
Sample : ddt
Misc : op93642,g6g1007,1000,,,5,5
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 10 13:07:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(23) Endrin Ketone (B)
7.857min 2.120PPB
response 5035275

(23) Endrin Ketone #2 (B)
0.000min 0.000PPB
response 0

(+) = Expected Retention Time
6PST987.M Tue May 10 13:09:38 2016

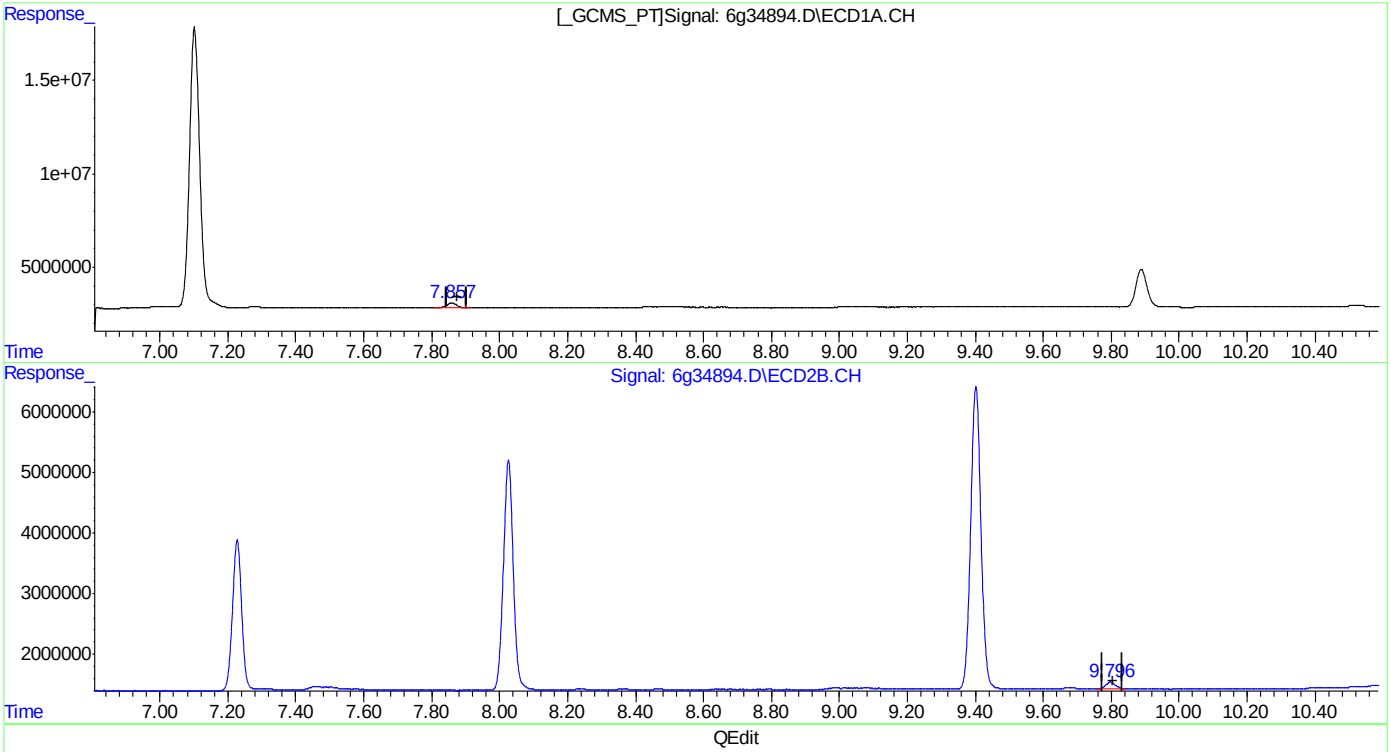
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\1007\
Data File : 6g34894.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 May 2016 9:37 am
Operator : rebeccak
Sample : ddt
Misc : op93642,g6g1007,1000,,,5,5
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 10 13:07:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(23) Endrin Ketone (B)
7.857min 2.120PPB
response 5035275

(23) Endrin Ketone #2 (B)
9.796min 2.552PPB m
response 2290048

(+) = Expected Retention Time
6PST987.M Tue May 10 13:09:45 2016

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.

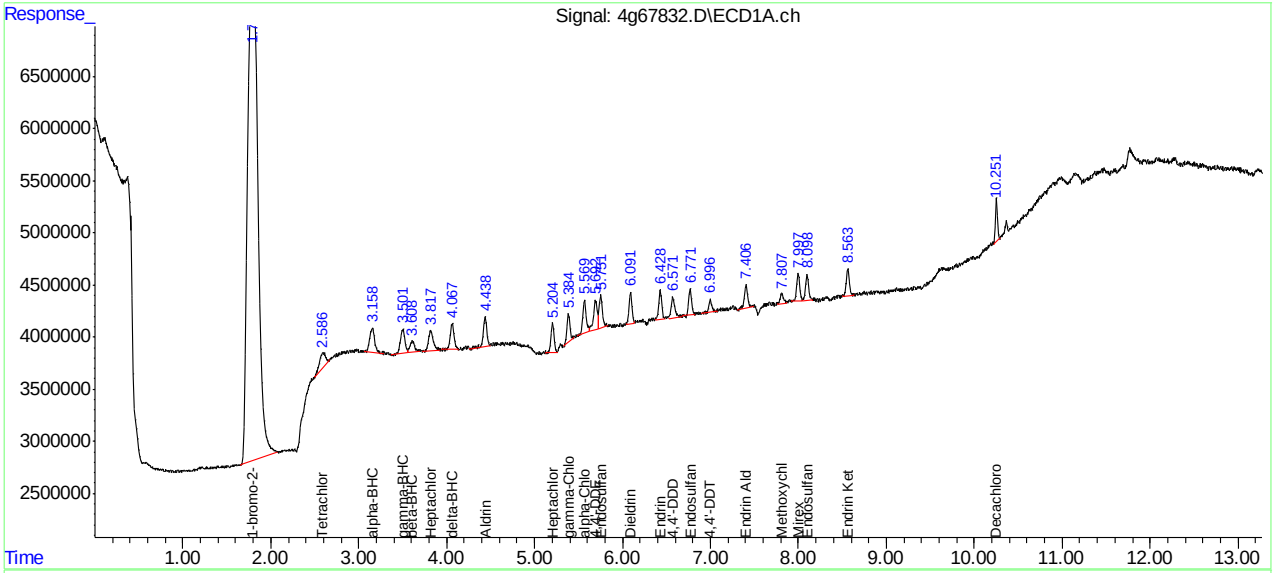
11.6.1 11

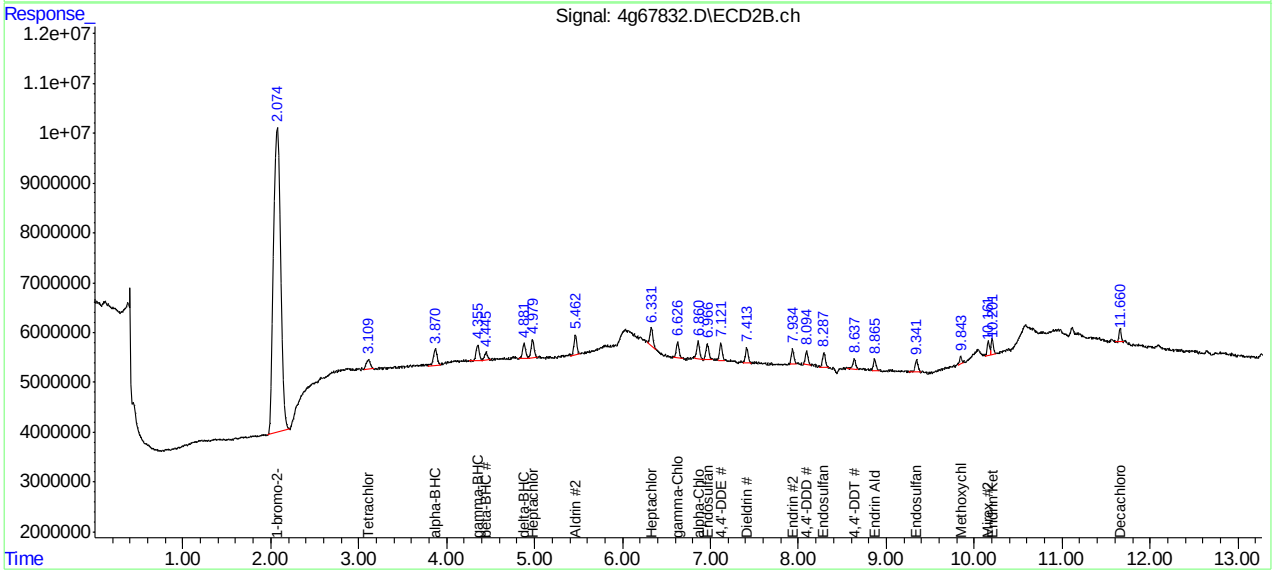
Quantitation Report (QT Reviewed)

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

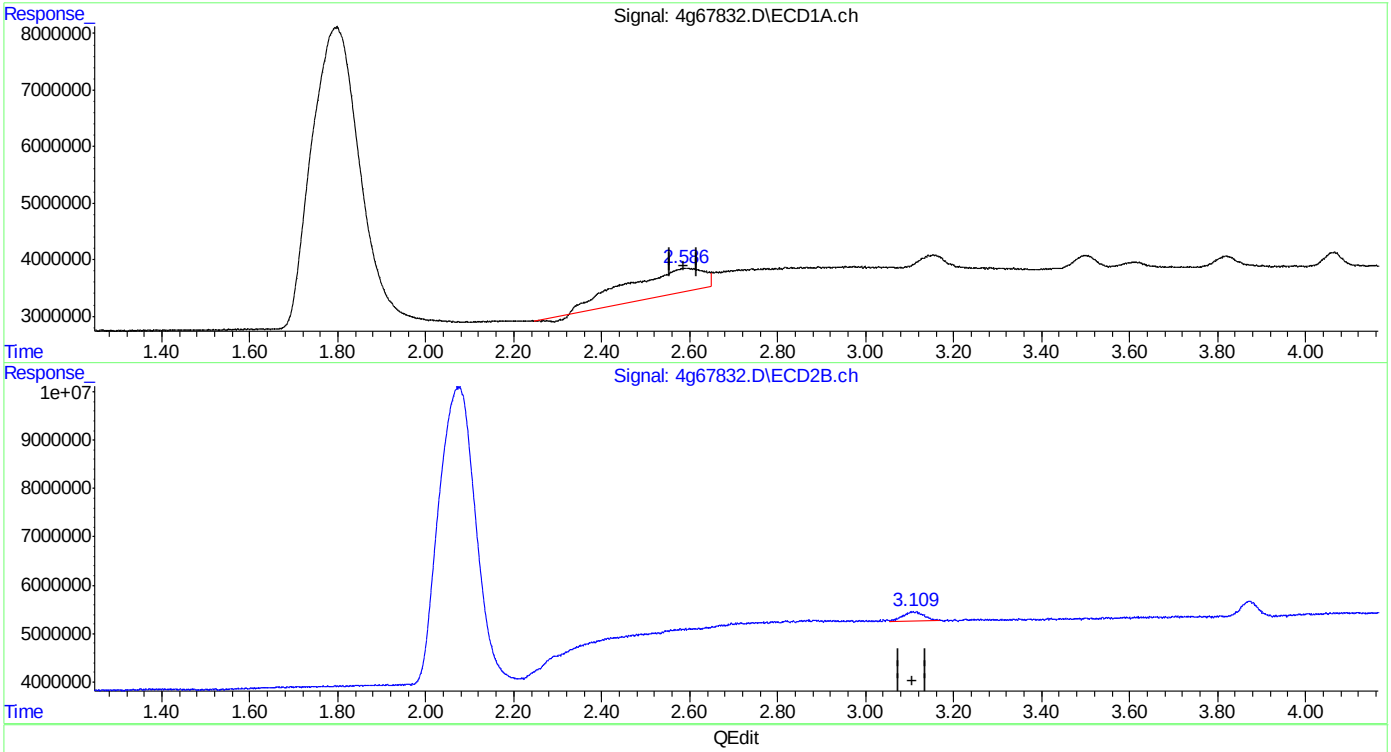
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	2.59	Poorly defined baseline
gamma-Chlordane	5103-74-2	1	5.38	Poorly defined baseline
Dieldrin	60-57-1	1	6.09	Poorly defined baseline
Endrin	72-20-8	1	6.43	Poorly defined baseline
Methoxychlor	72-43-5	1	7.81	Poorly defined baseline
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

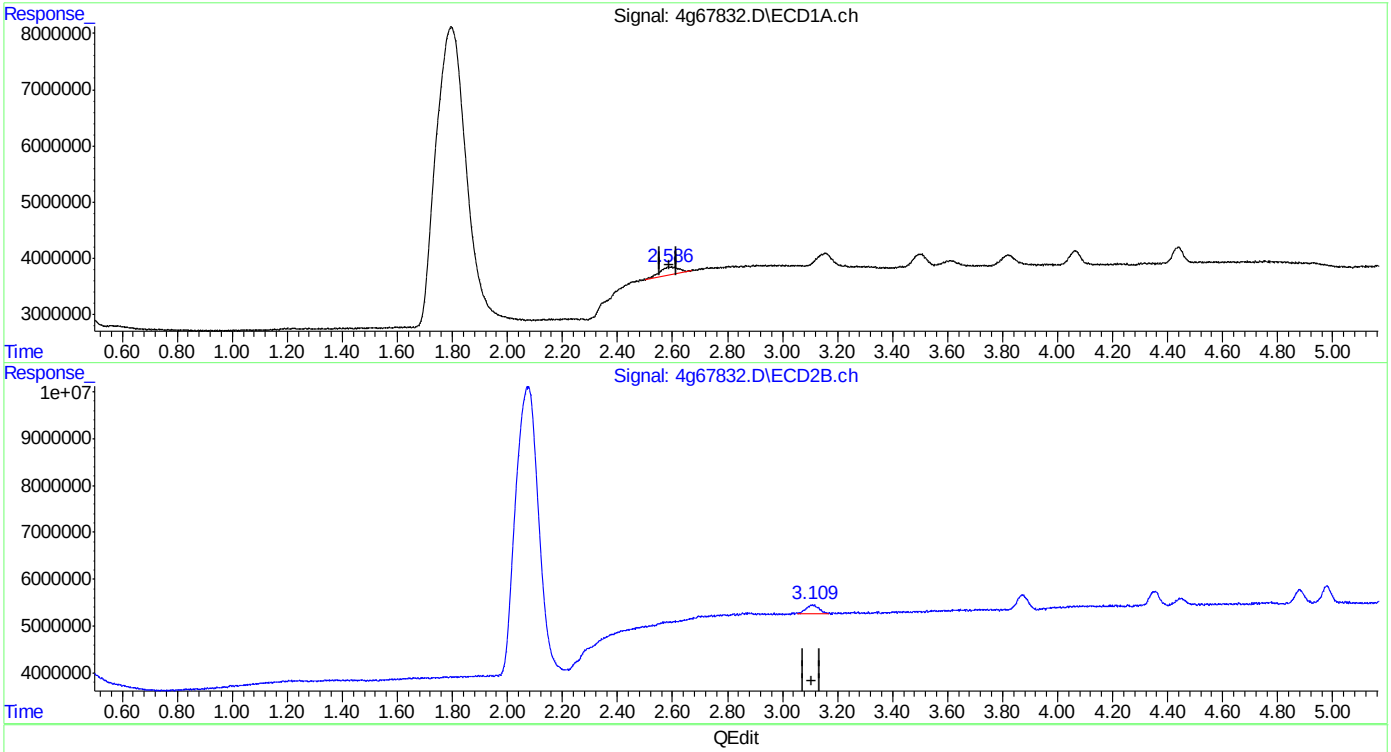
SGS ACCUTEST JC19644

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)
2.586min 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

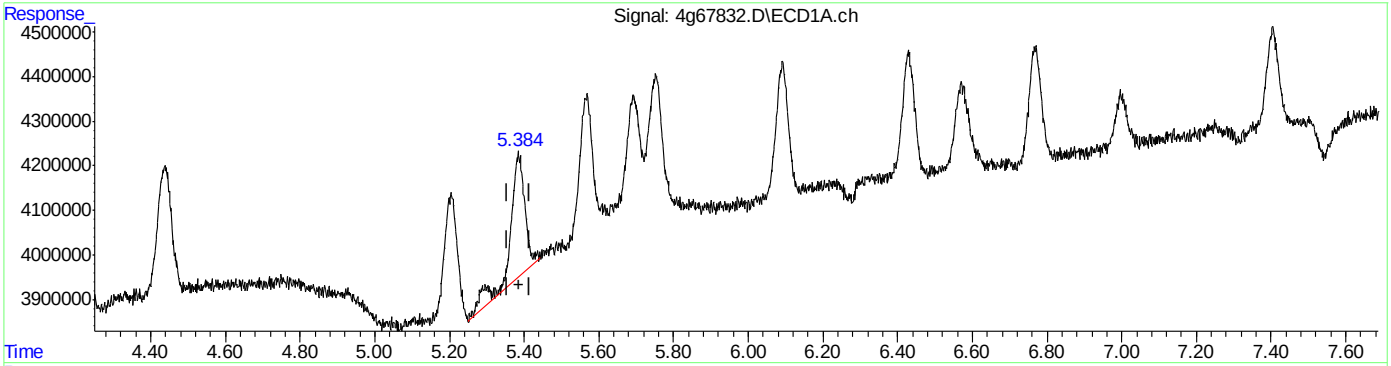
SGS ACCUTEST JC19644

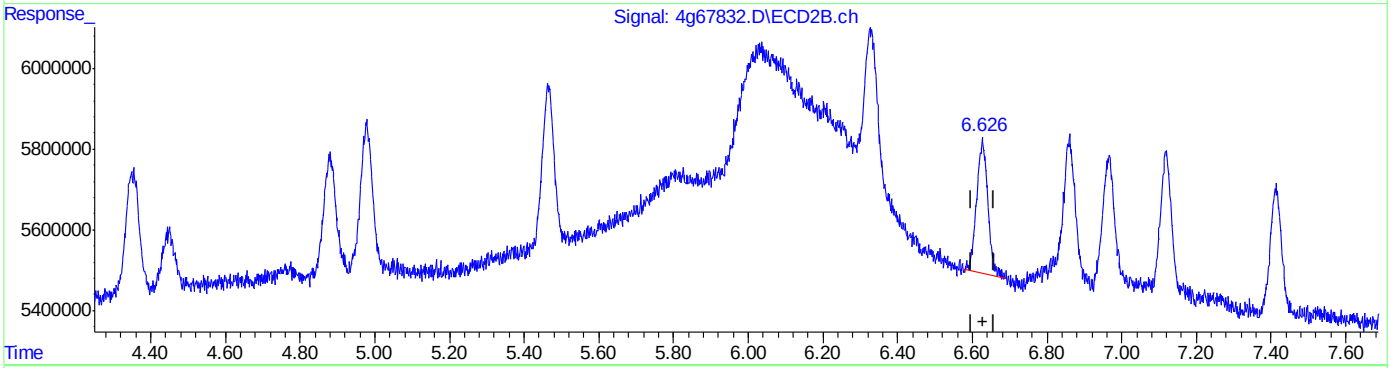
Quantitation Report (Qedit)

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

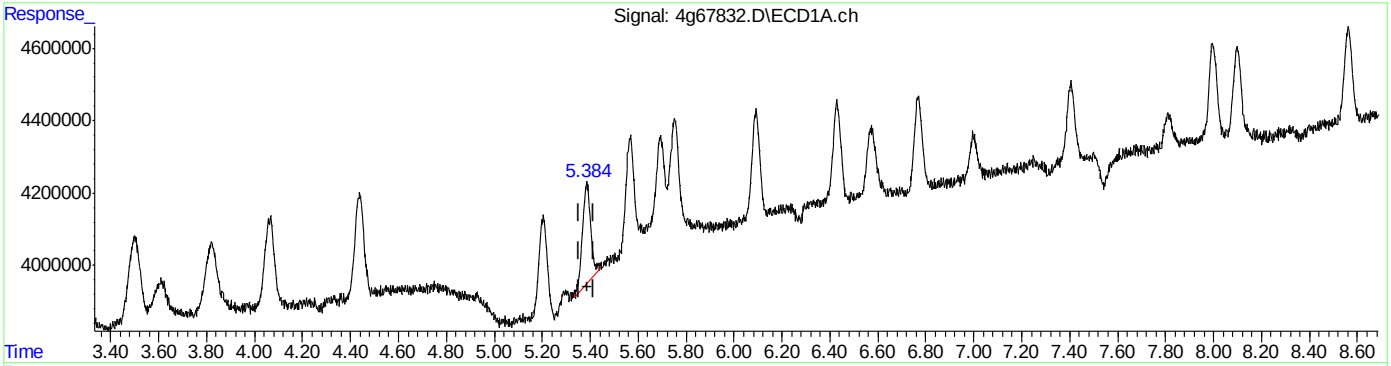
SGS ACCUTEST JC19644

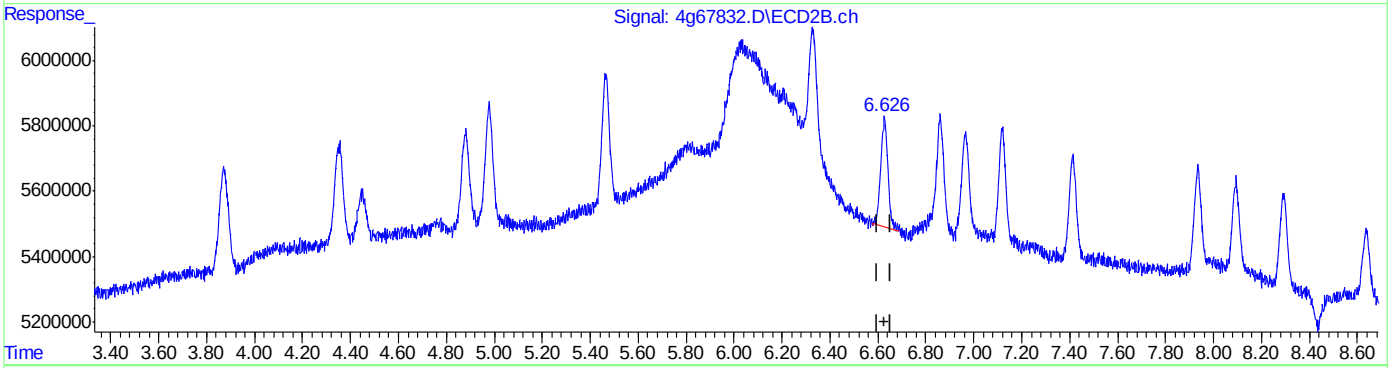
Quantitation Report (Qedit)

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

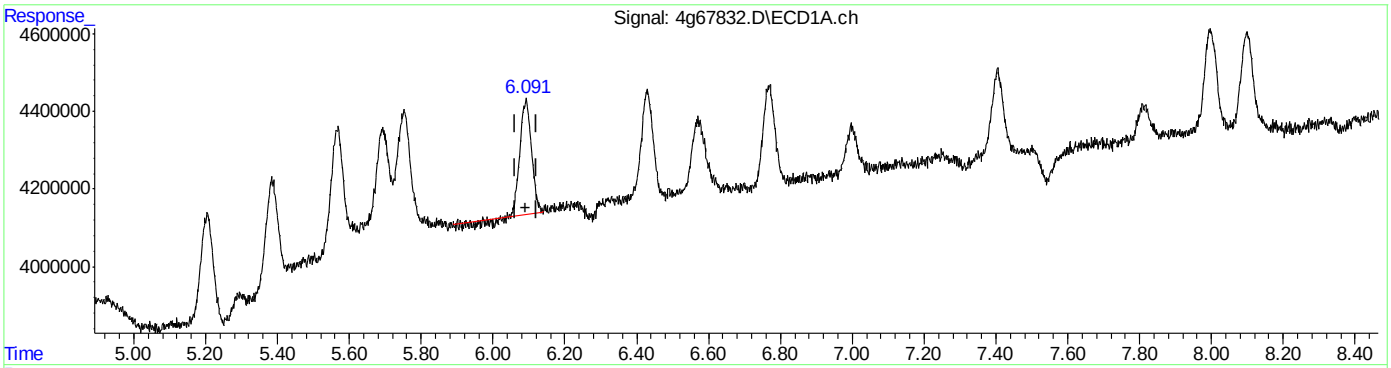
SGS ACCUTEST JC19644

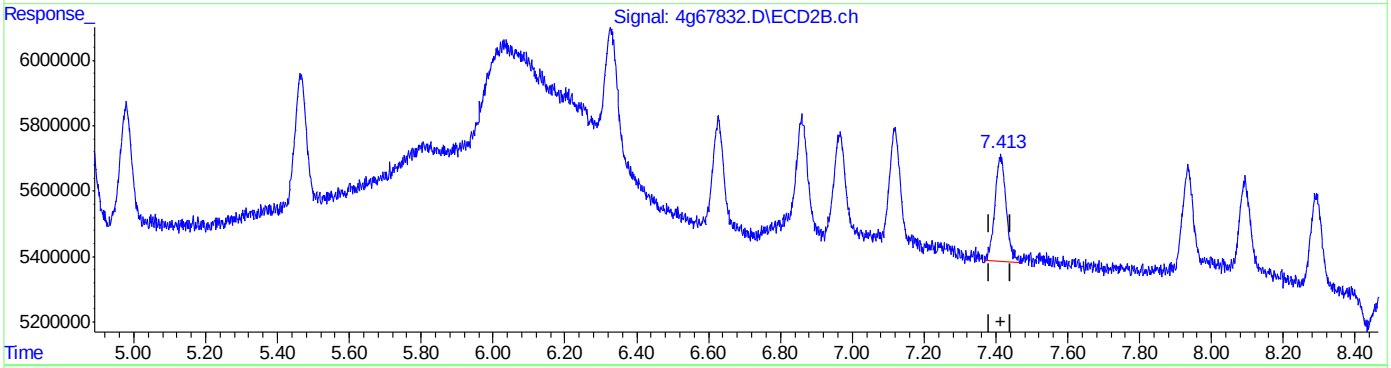
Quantitation Report (Qedit)

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

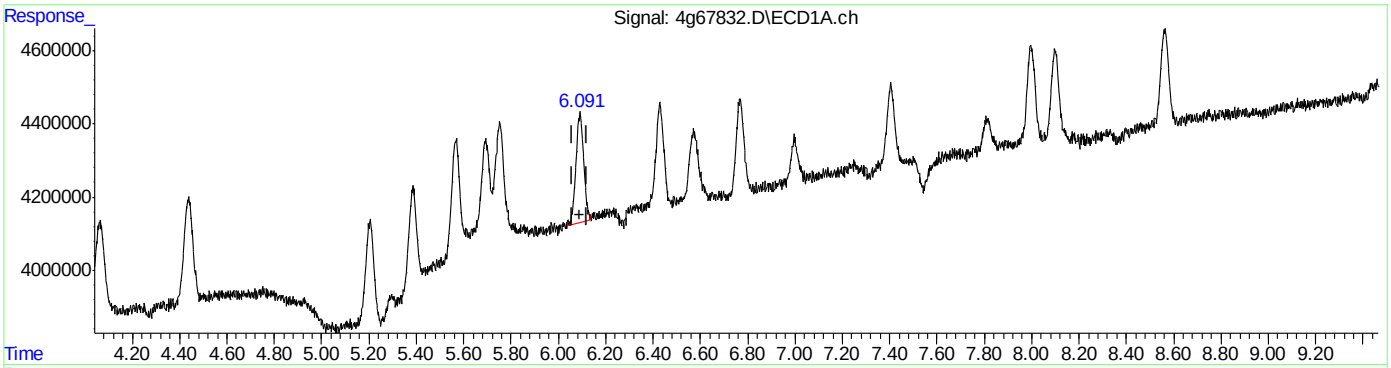
(+) = Expected Retention Time
4PST1778.M Tue May 03 15:00:55 2016 RPT1

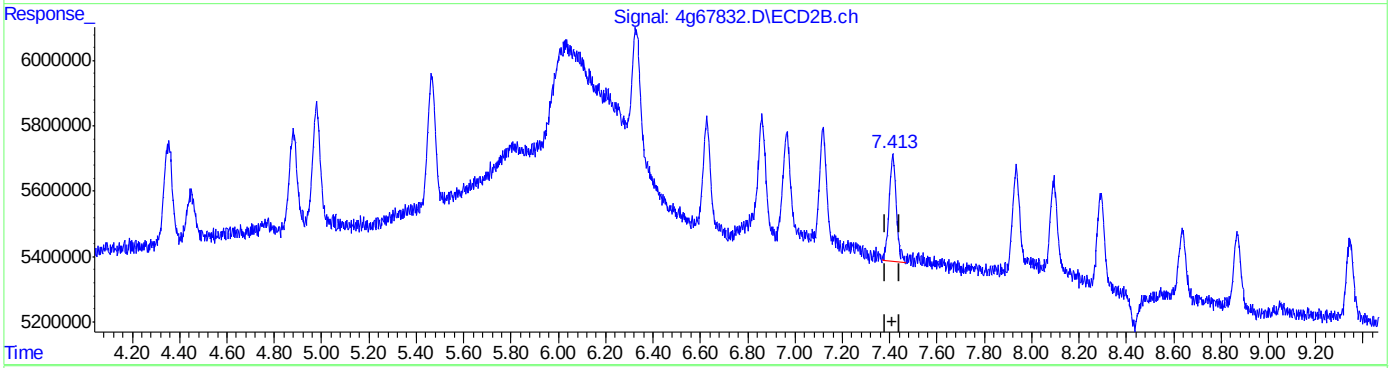
Quantitation Report (Qedit)

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

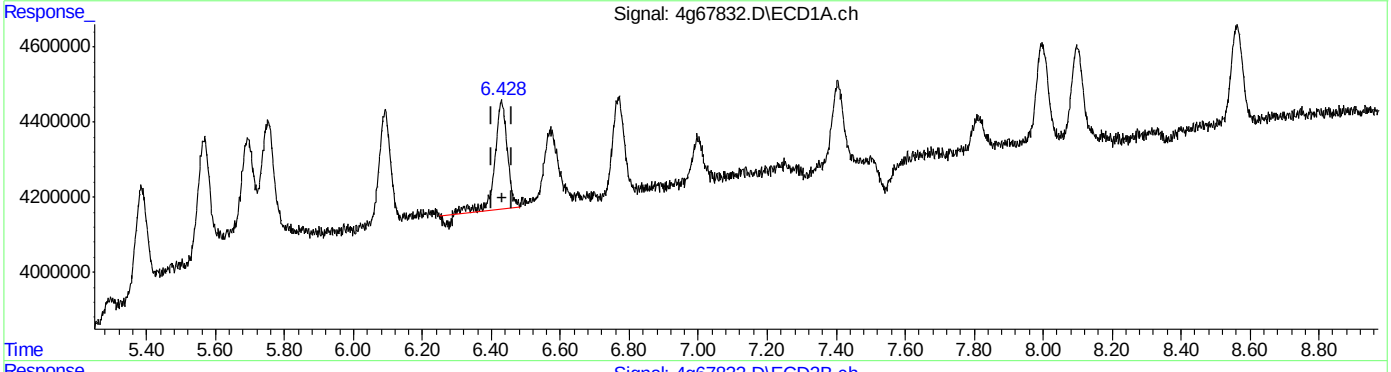
SGS ACCUTEST JC19644

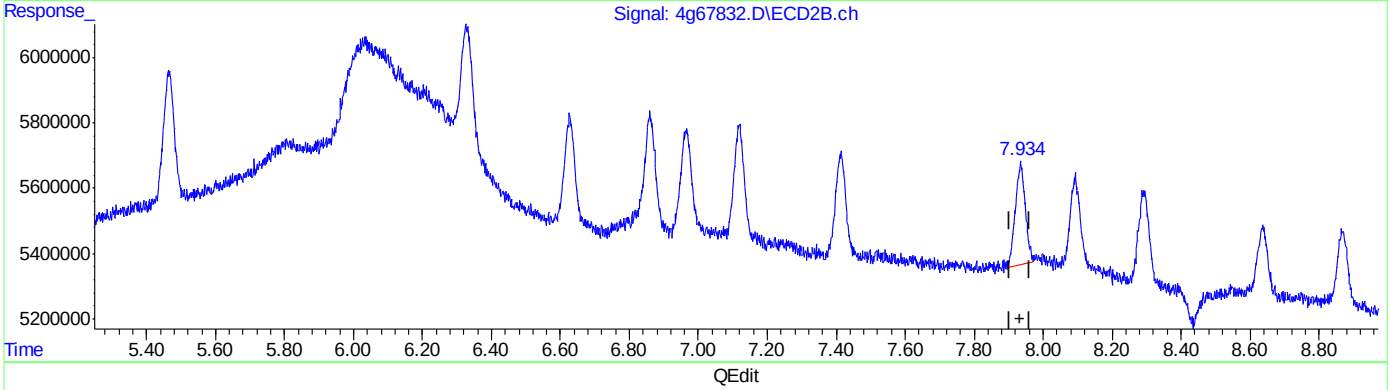
Quantitation Report (Qedit)

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

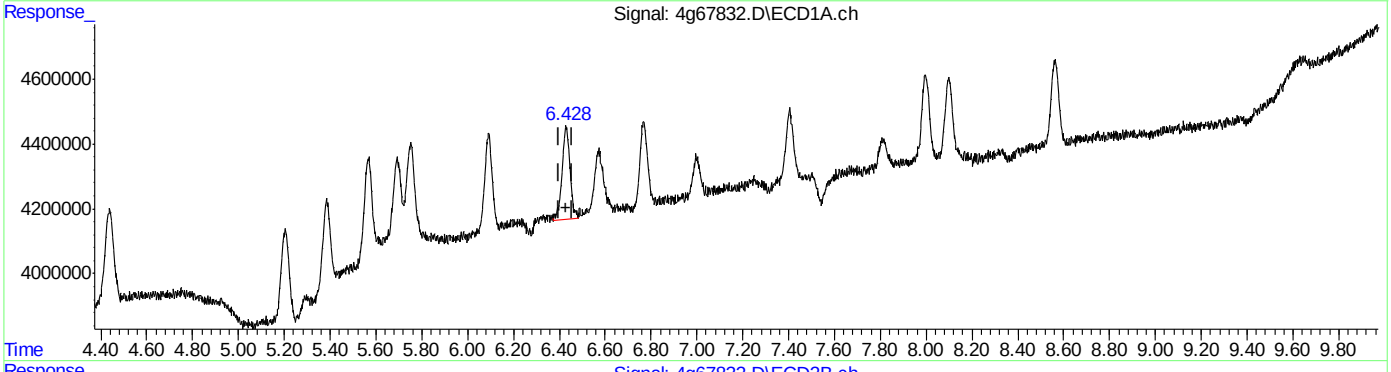
SGS ACCUTEST JC19644

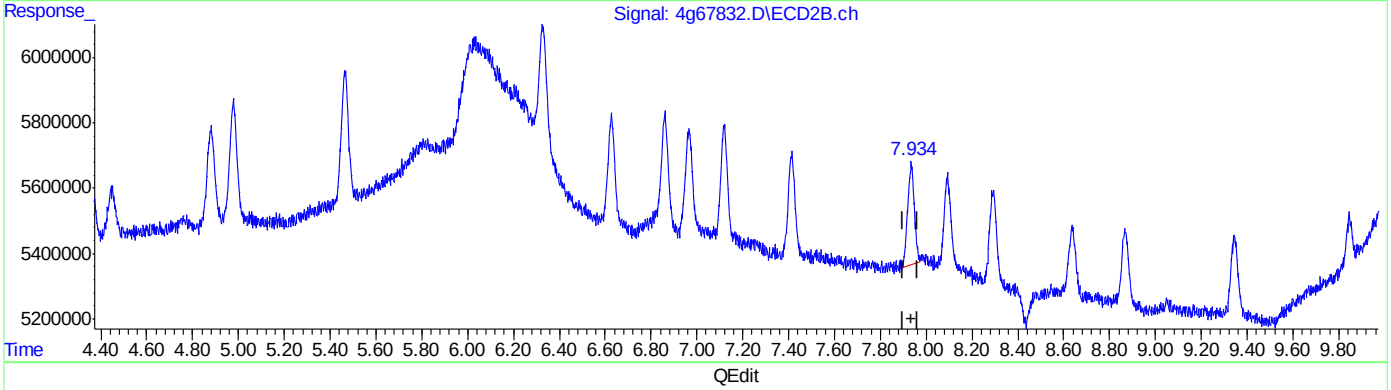
Quantitation Report (Qedit)

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

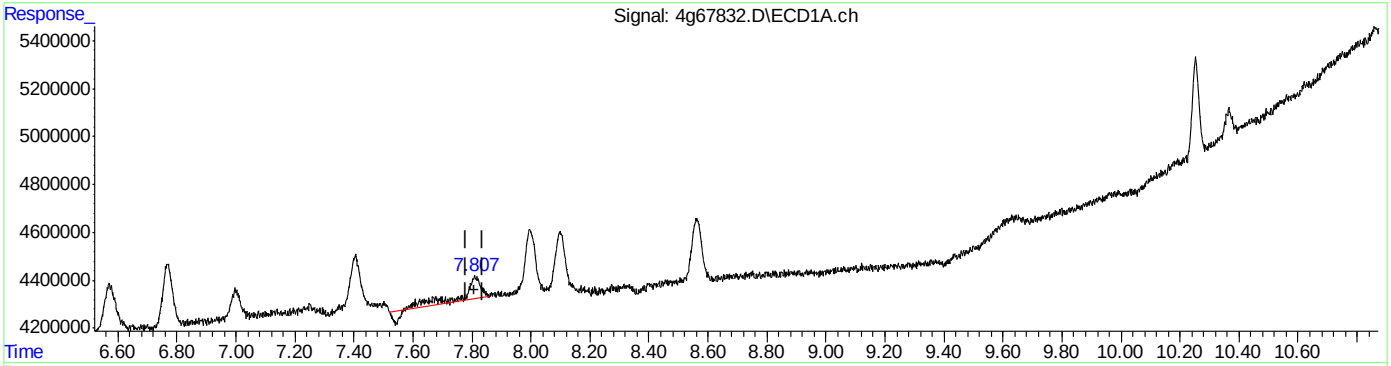
SGS ACCUTEST JC19644

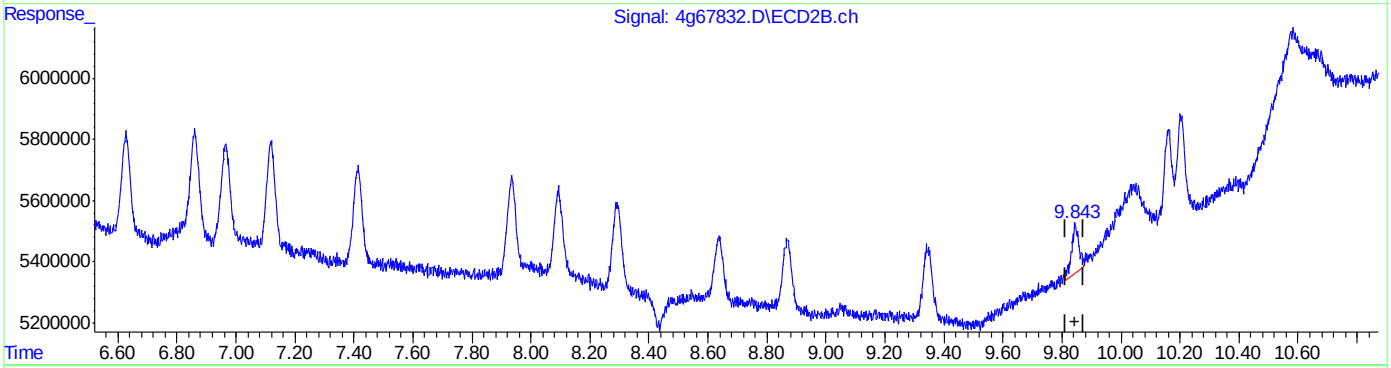
Quantitation Report (Qedit)

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
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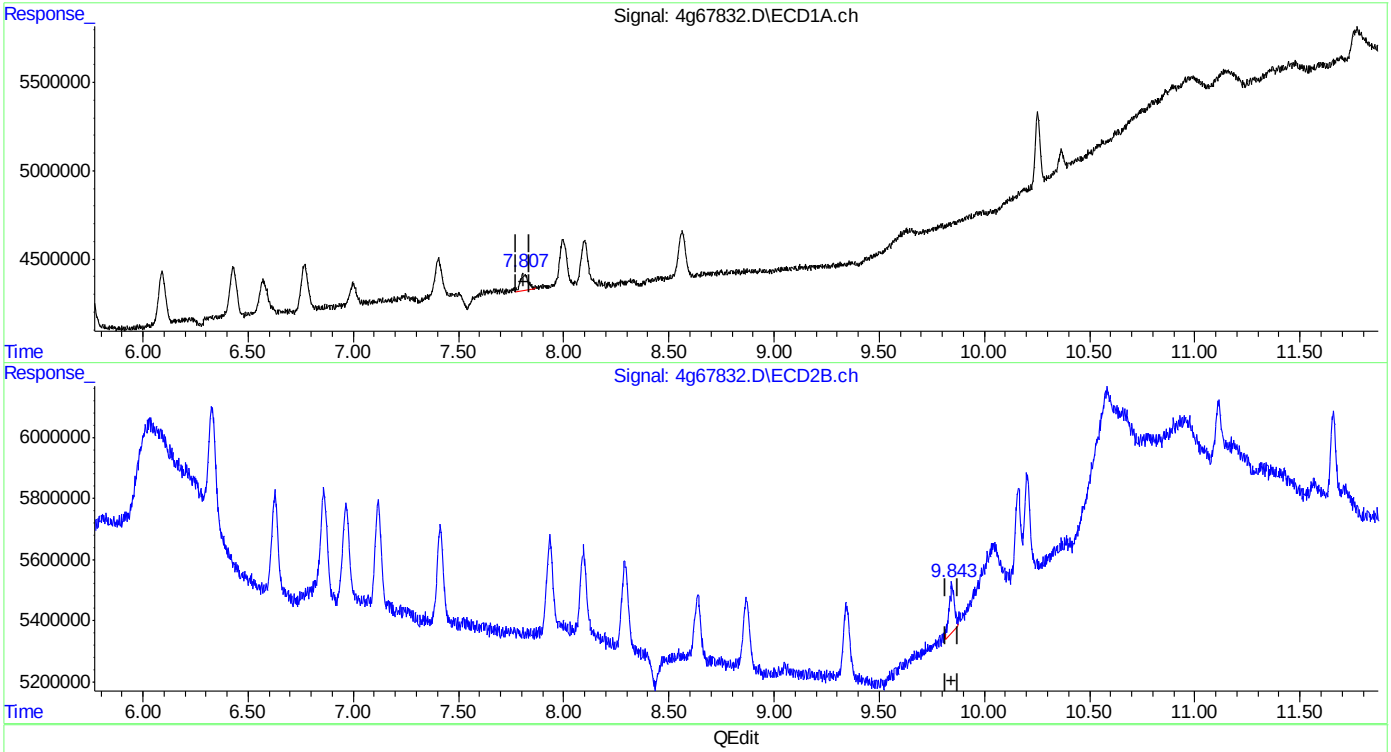
Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



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 JC19644

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
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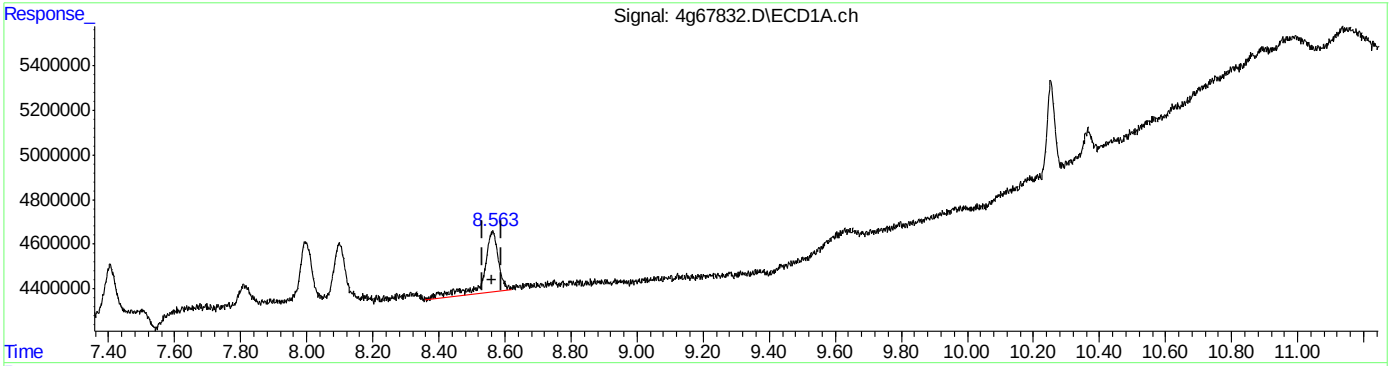
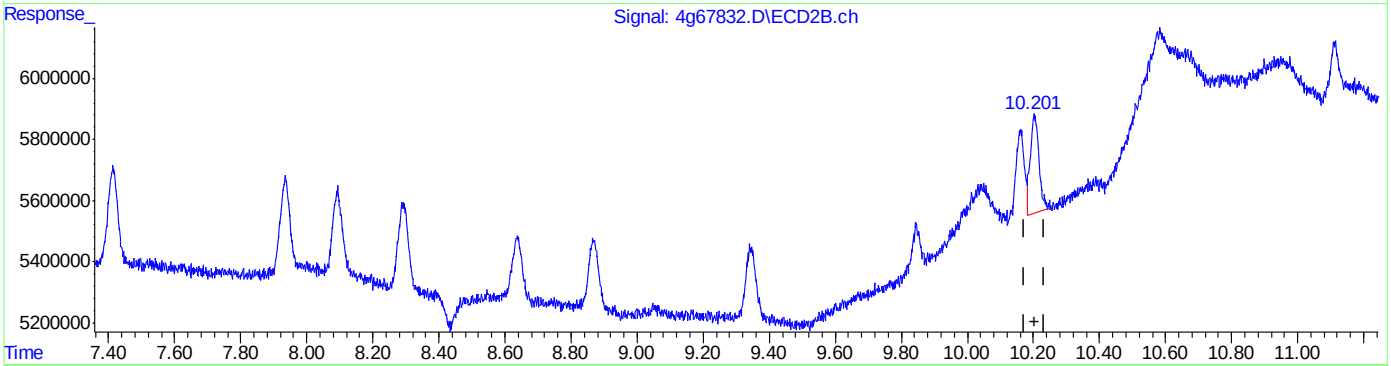
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





QEdit

(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
4PST1778.M Tue May 03 15:01:26 2016 RPT1

SGS ACCUTEST JC19644

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
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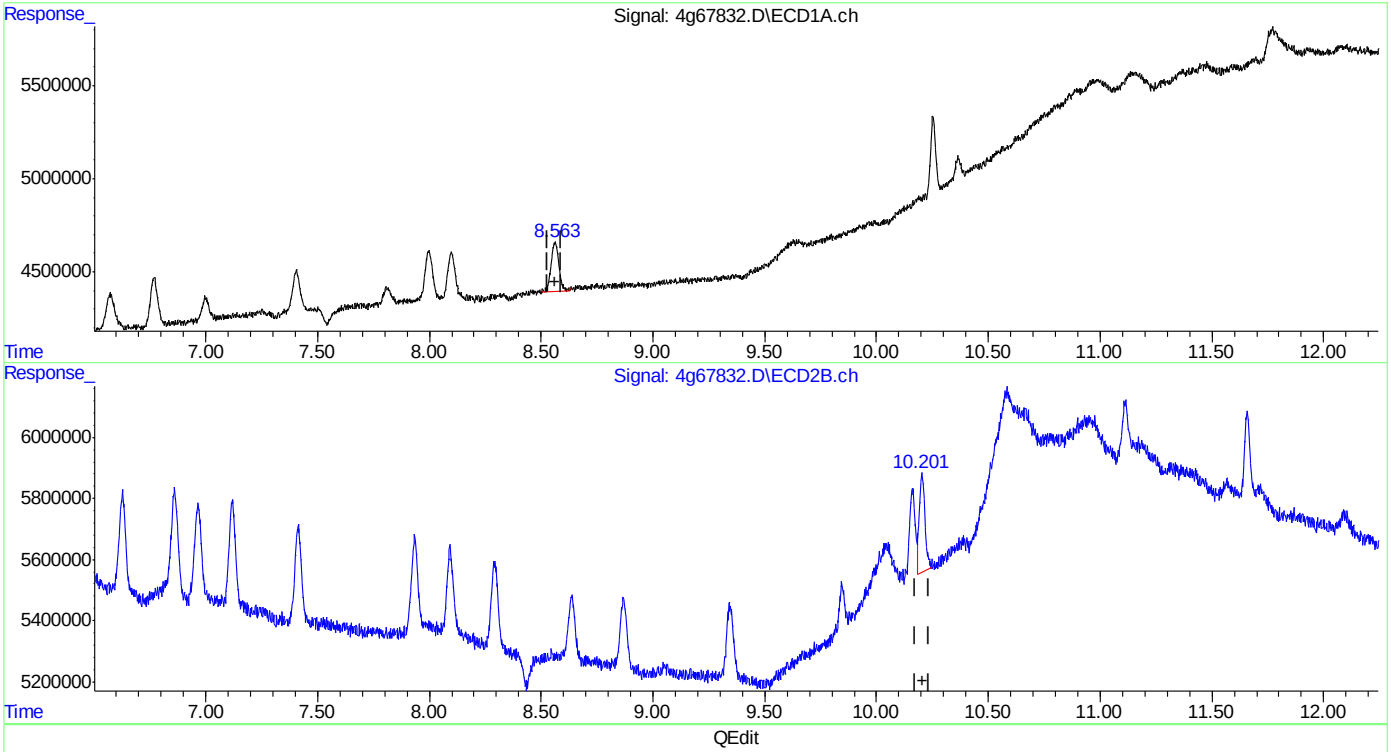
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



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 JC19644

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
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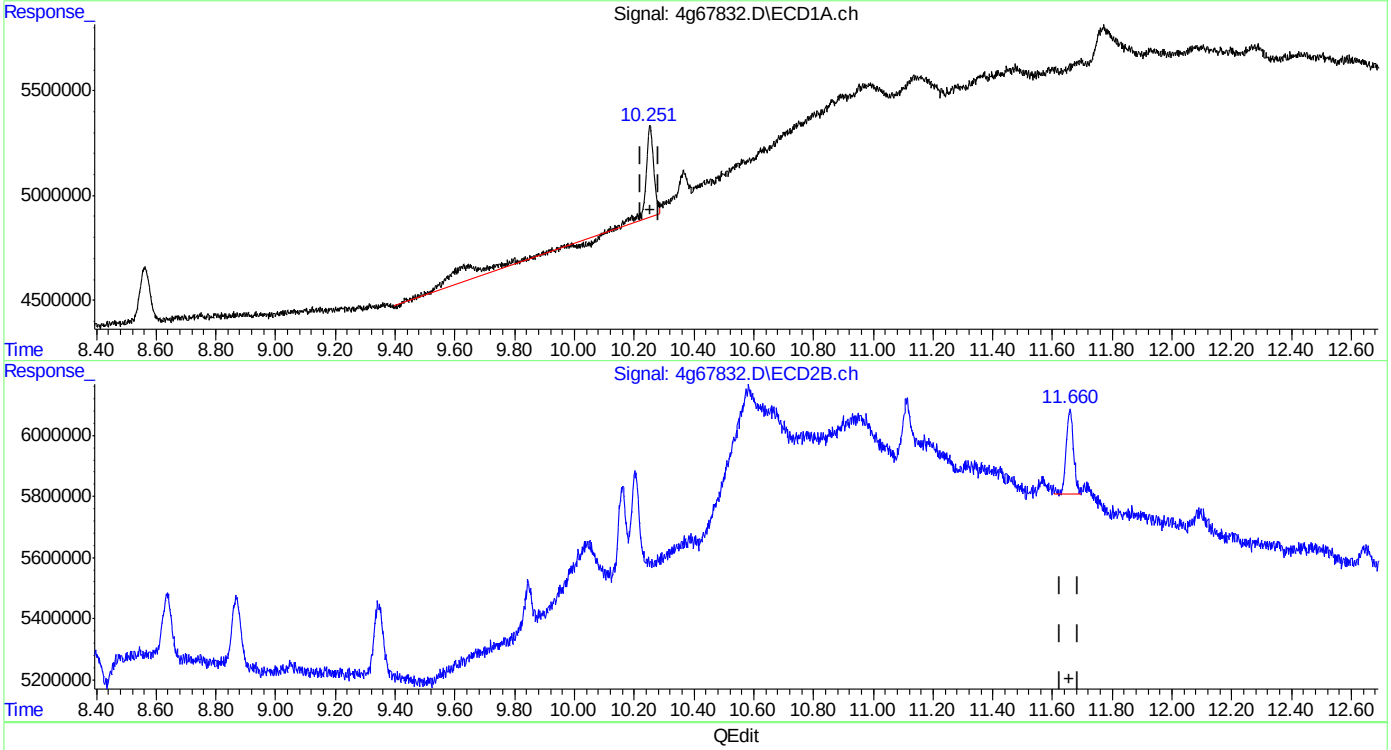
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



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

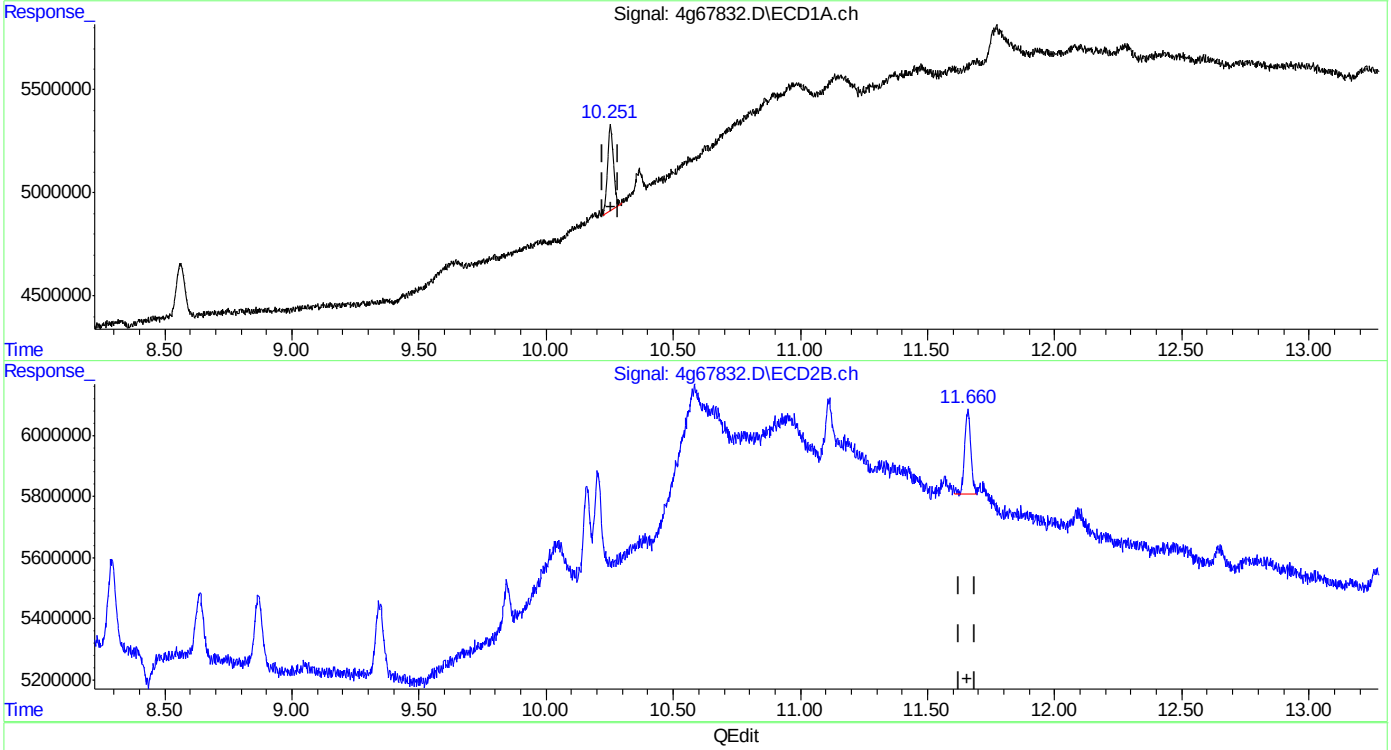
SGS ACCUTEST JC19644

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 JC19644

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

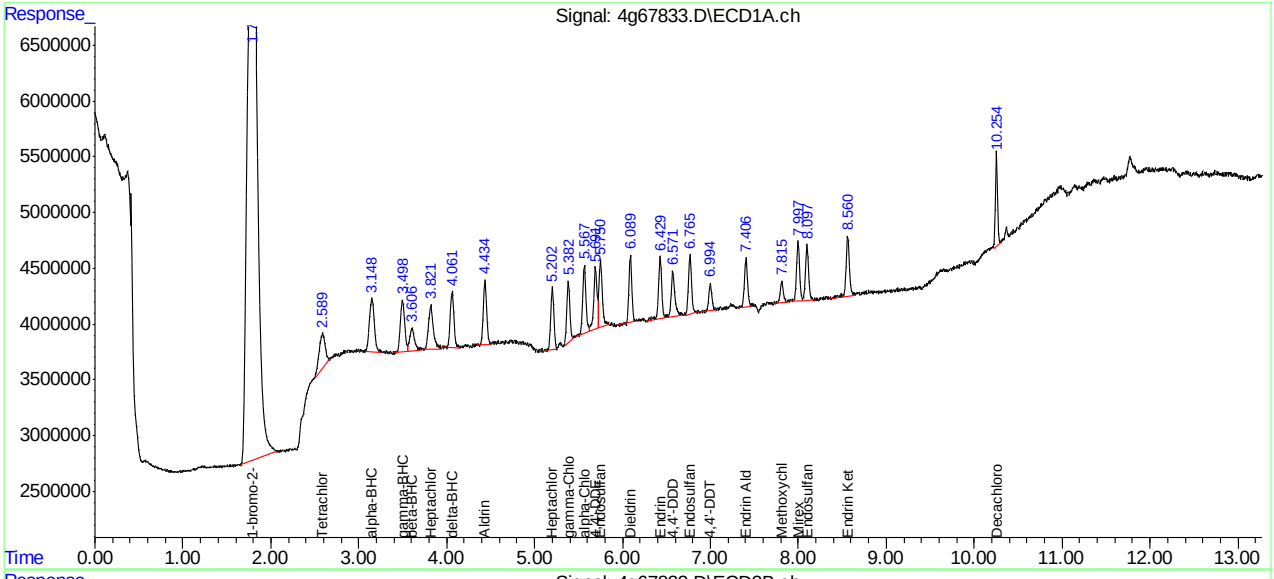
SGS ACCUTEST JC19644

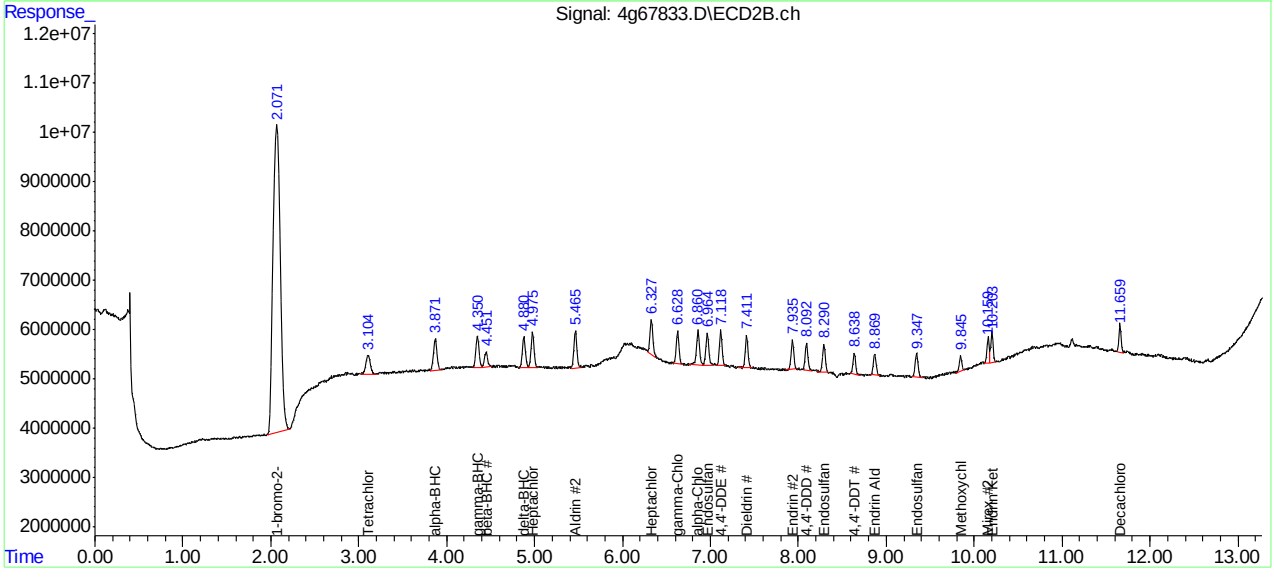
Quantitation Report (QT Reviewed)

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





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

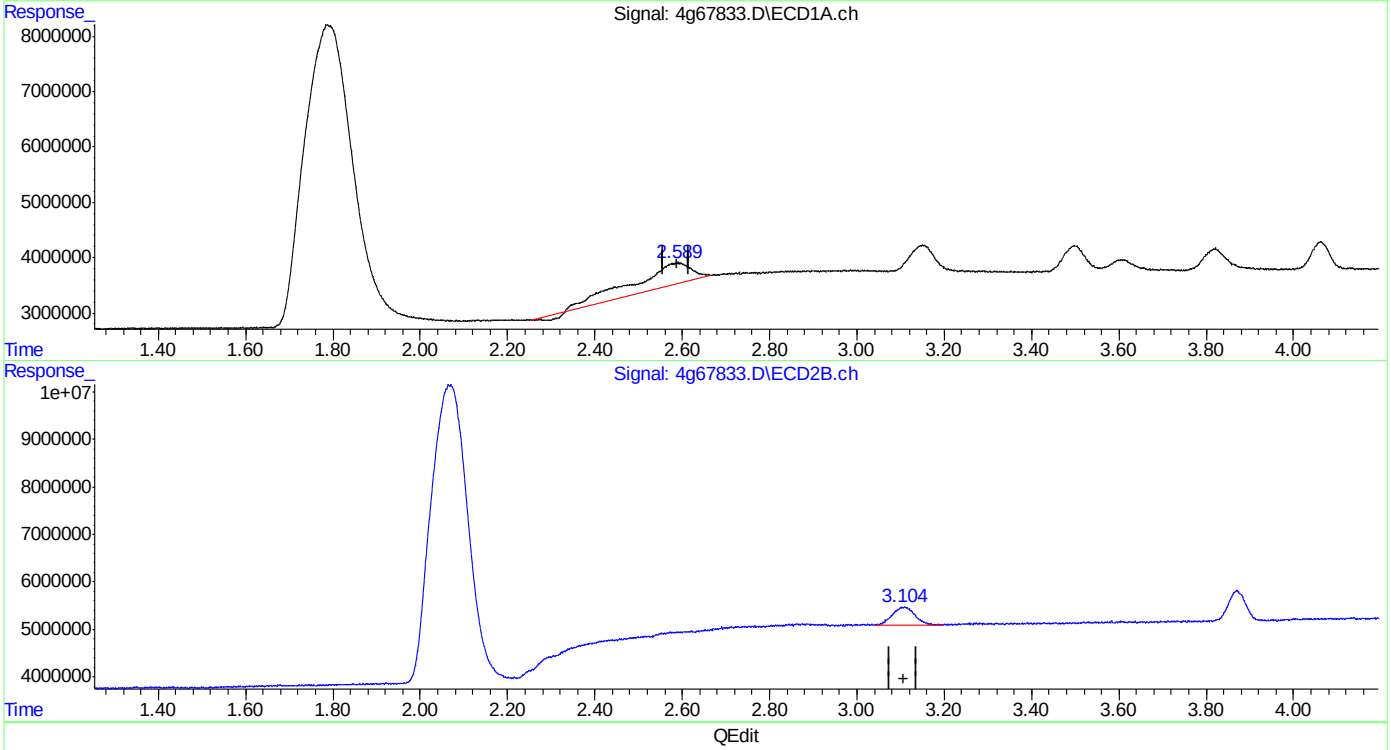
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	2.59	Poorly defined baseline
Heptachlor	76-44-8	2	4.98	Poorly defined baseline
gamma-Chlordane	5103-74-2	1	5.38	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	1	10.25	Poorly defined baseline

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 JC19644

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
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Integrator: ChemStation

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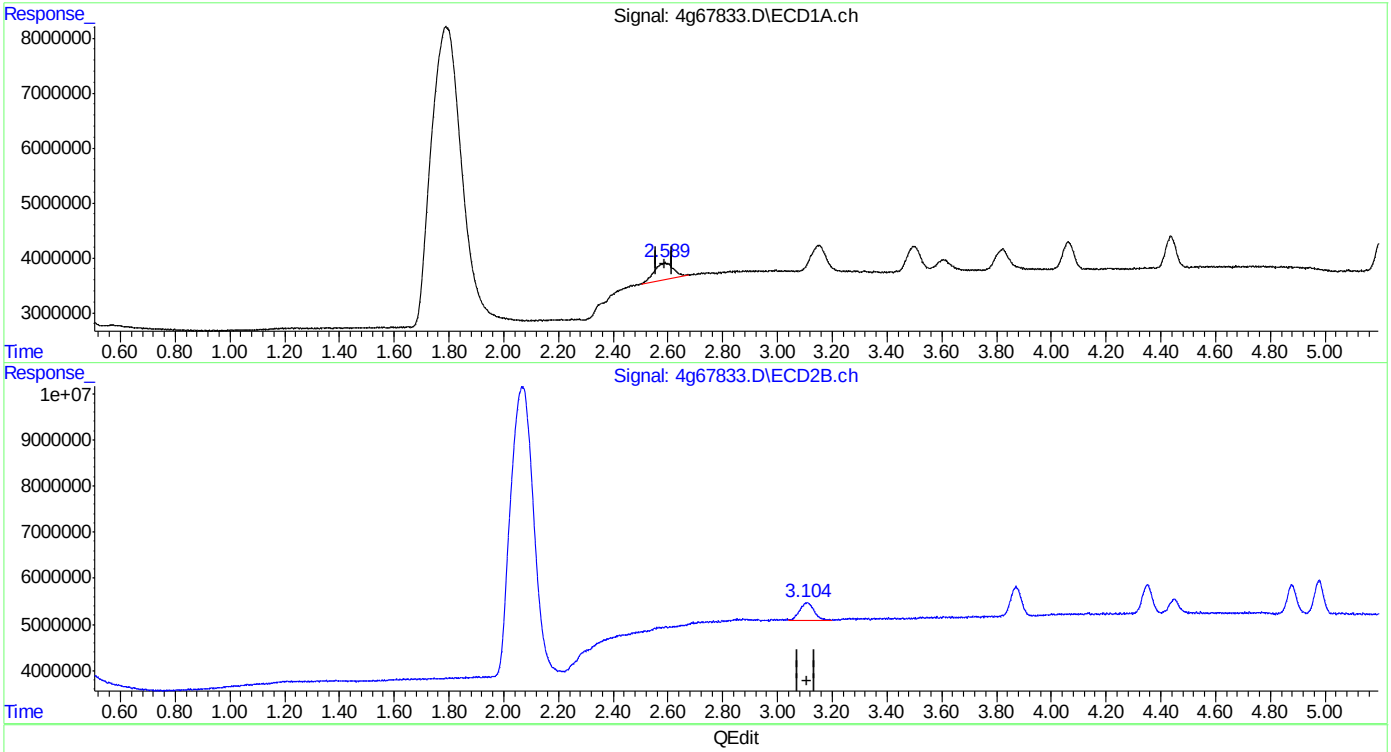
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um



(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

SGS ACCUTEST JC19644

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
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Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
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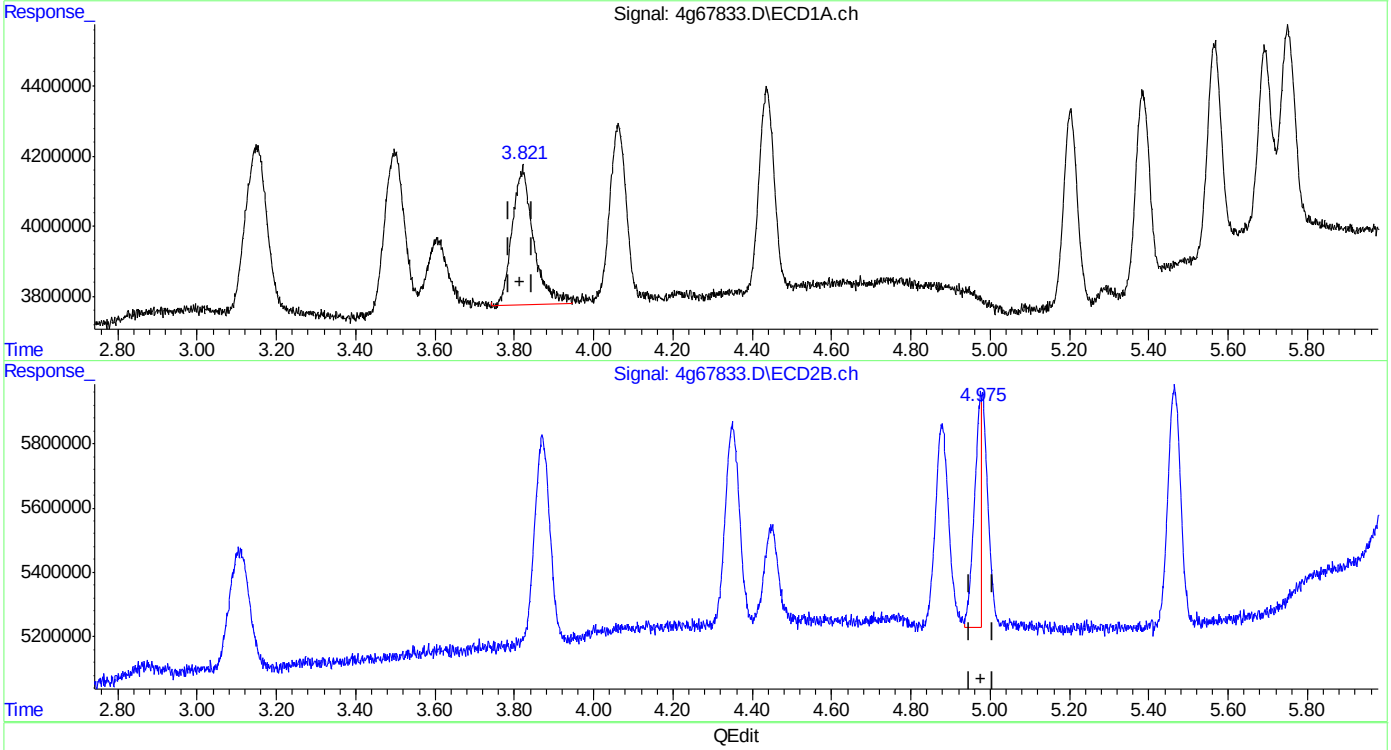
Response via : Initial Calibration
Integrator: ChemStation

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
4PST1778.M Tue May 03 14:58:10 2016 RPT1

Quantitation Report (Qedit)

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Data File : 4g67833.D
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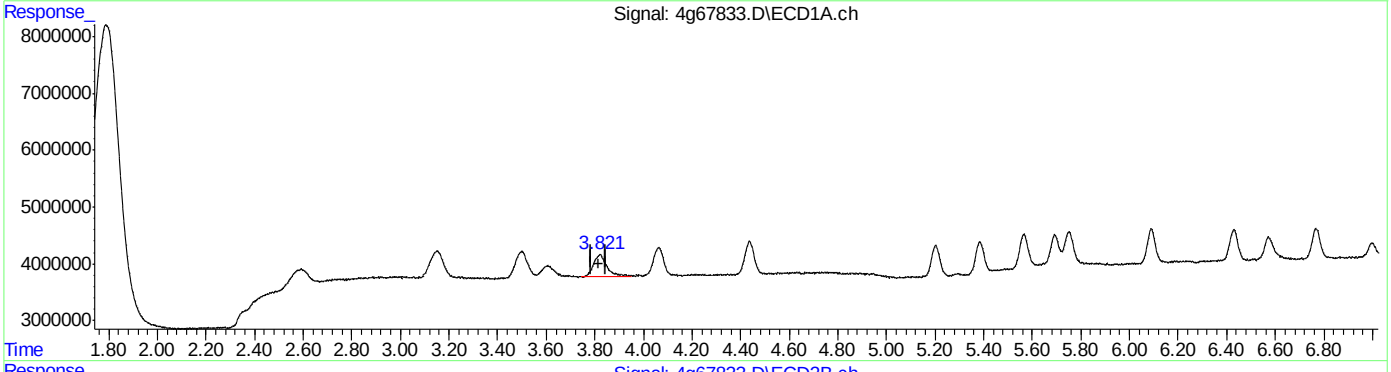
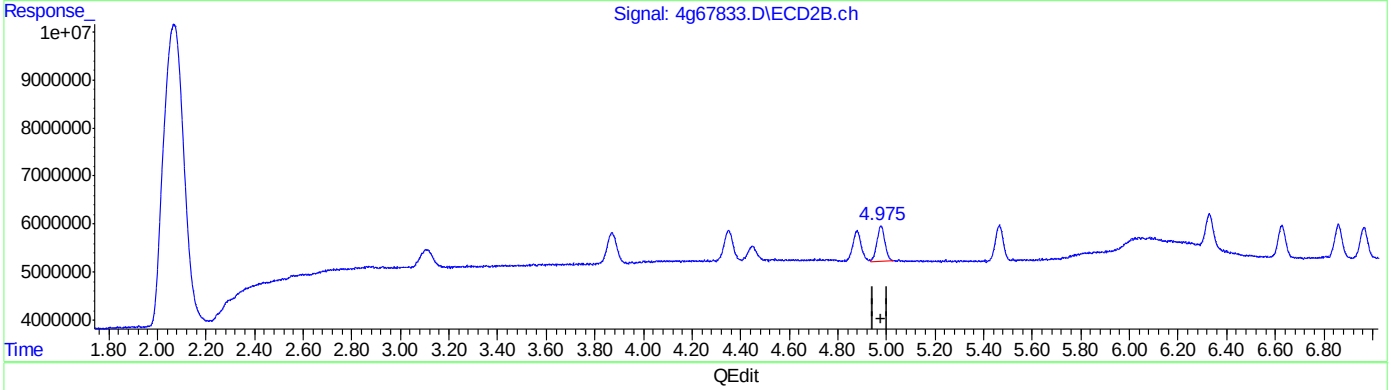
Signal #1 Info : 30mx.32mmx.32um Signal #2 Info : 30m x .32mm x .25um





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

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
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Quant Title : PEST/PCB
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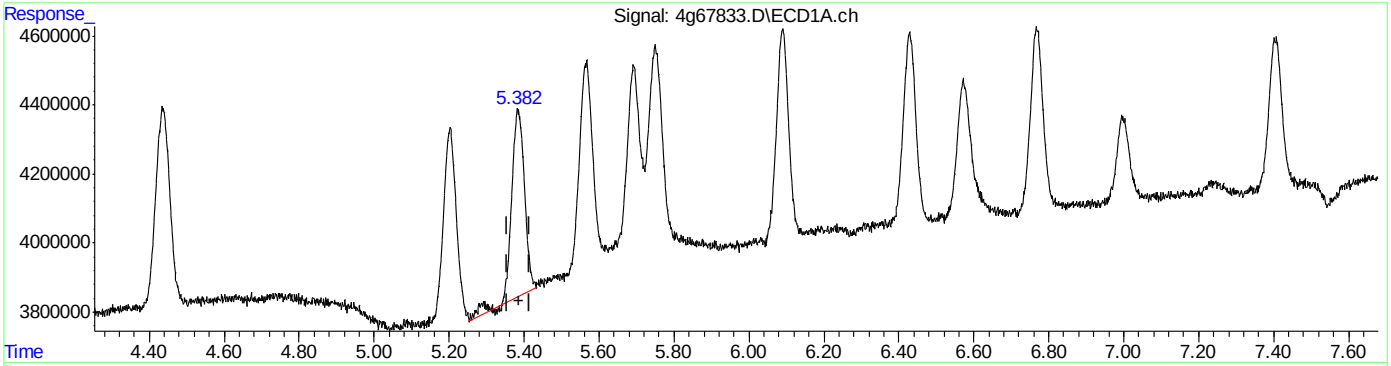
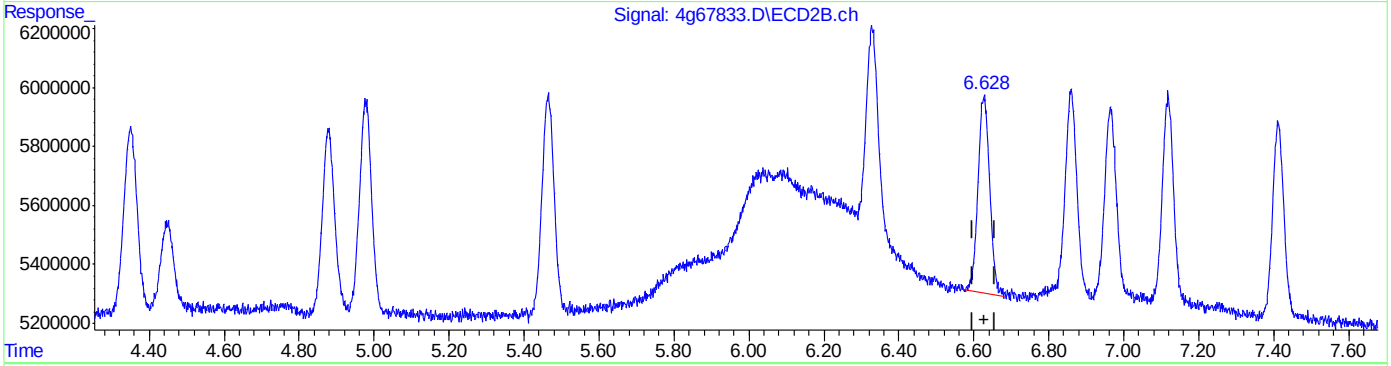
Integrator: ChemStation

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

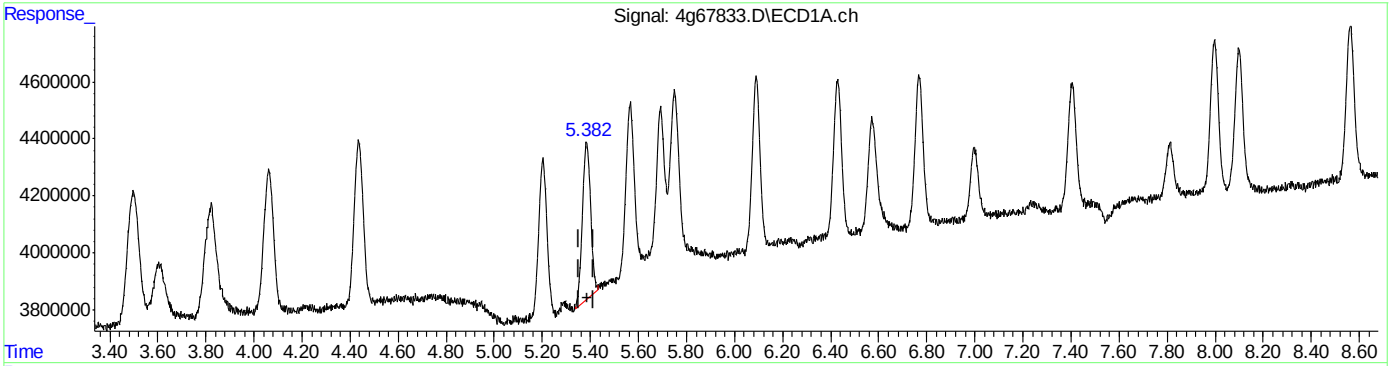
SGS ACCUTEST JC19644

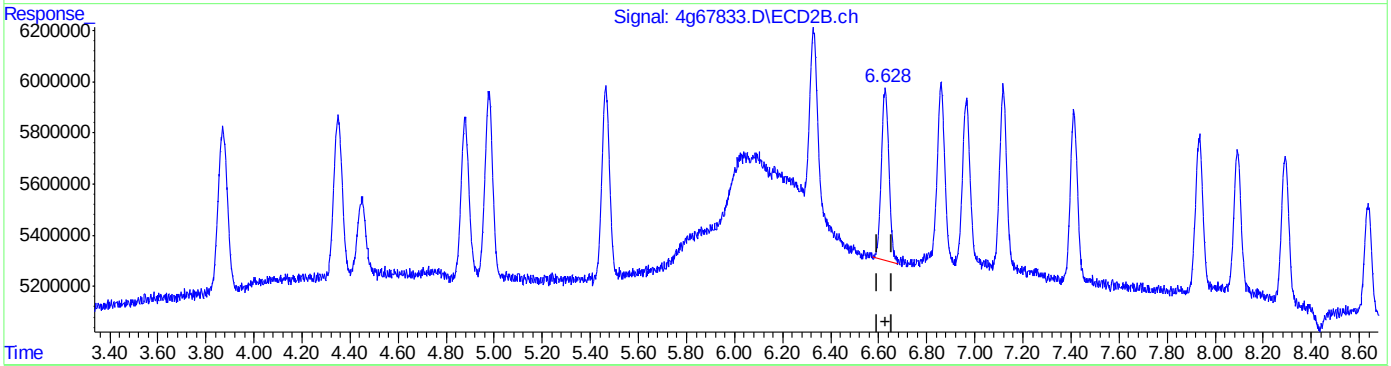
Quantitation Report (Qedit)

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

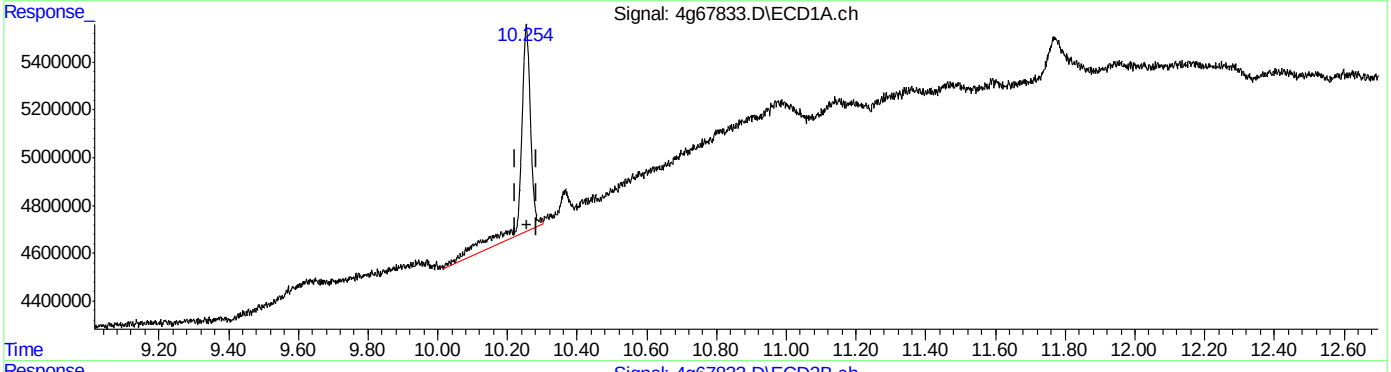
(+) = Expected Retention Time
4PST1778.M Tue May 03 14:58:30 2016 RPT1

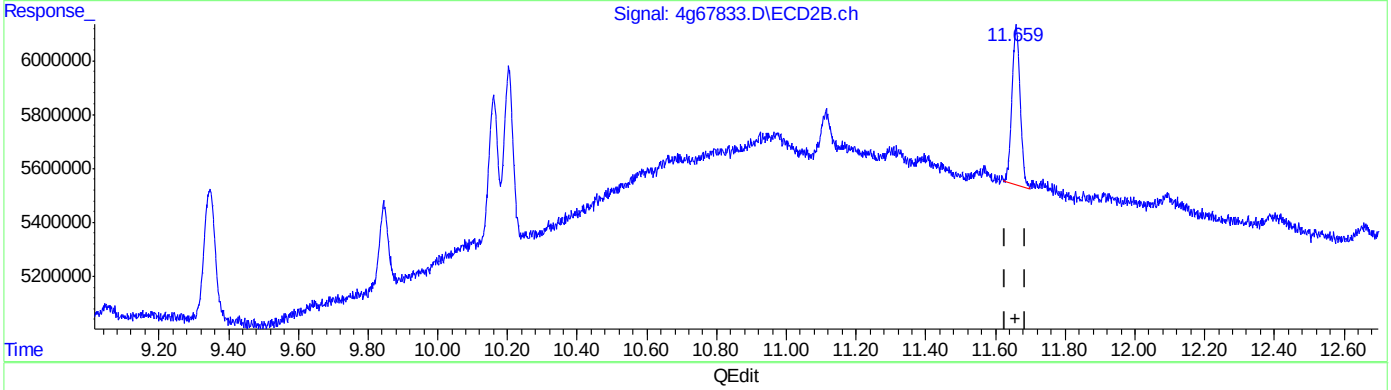
Quantitation Report (Qedit)

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

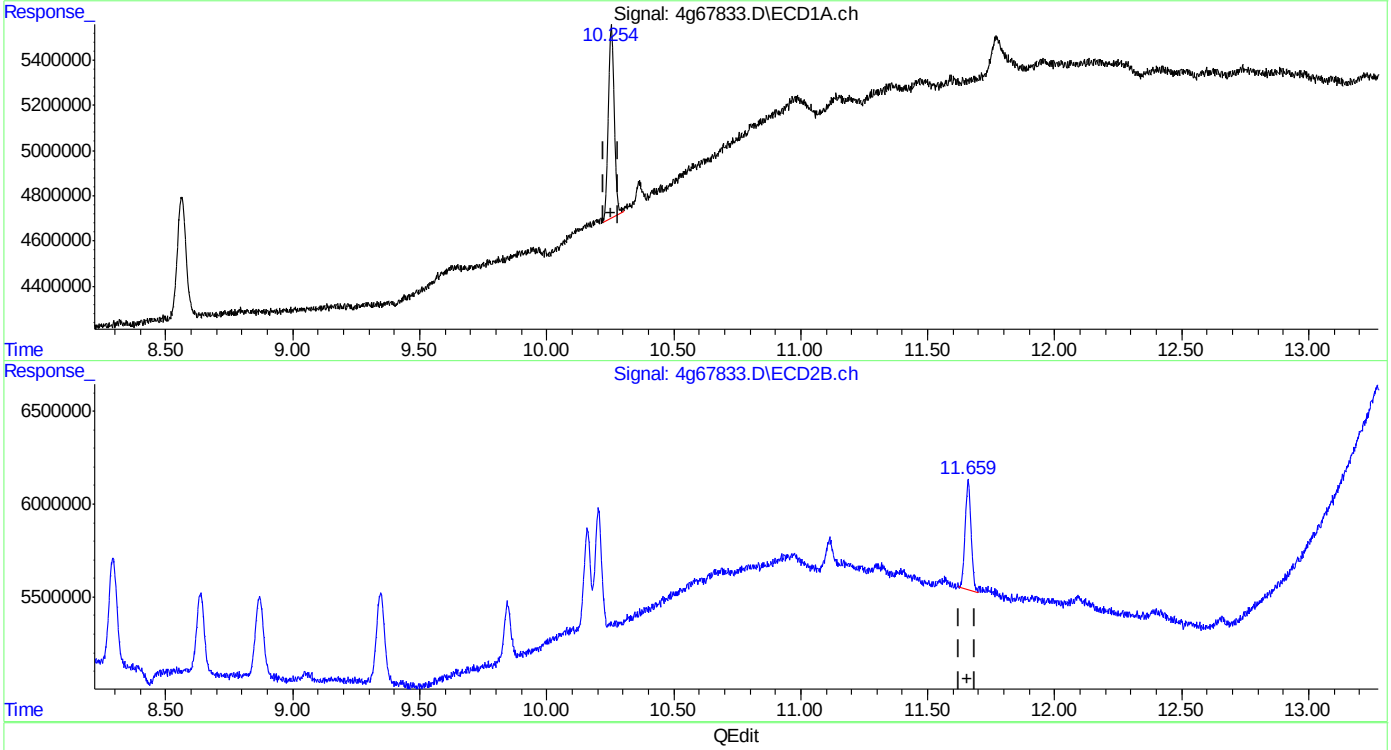
SGS ACCUTEST JC19644

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



(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
4PST1778.M Tue May 03 14:58:58 2016 RPT1

SGS ACCUTEST JC19644

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.

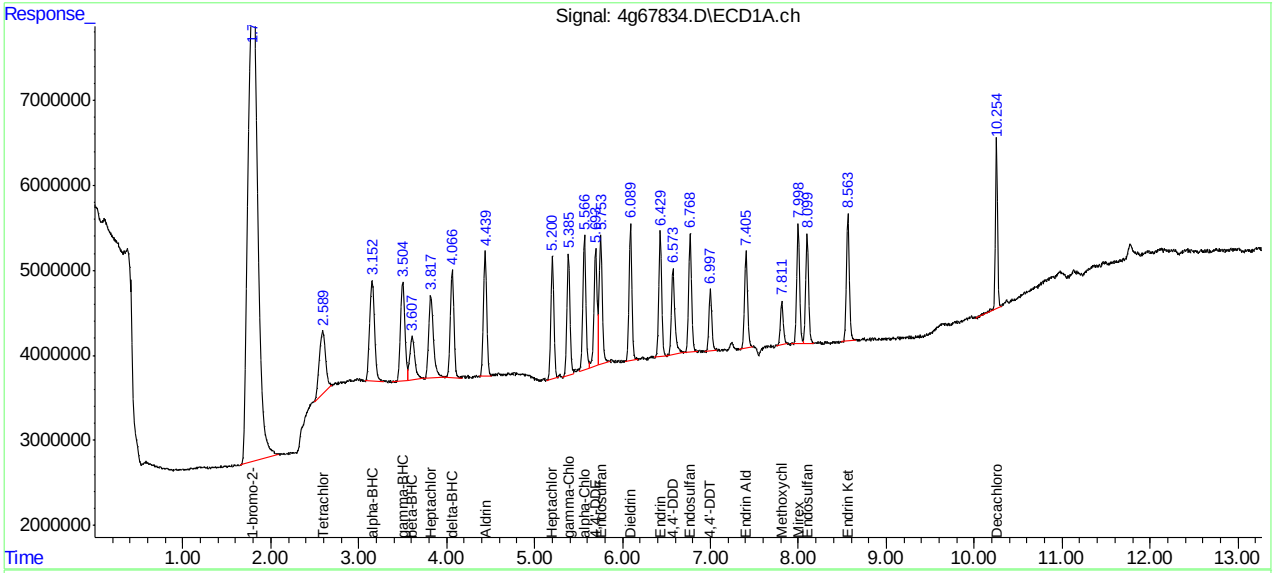
11.6.3 11

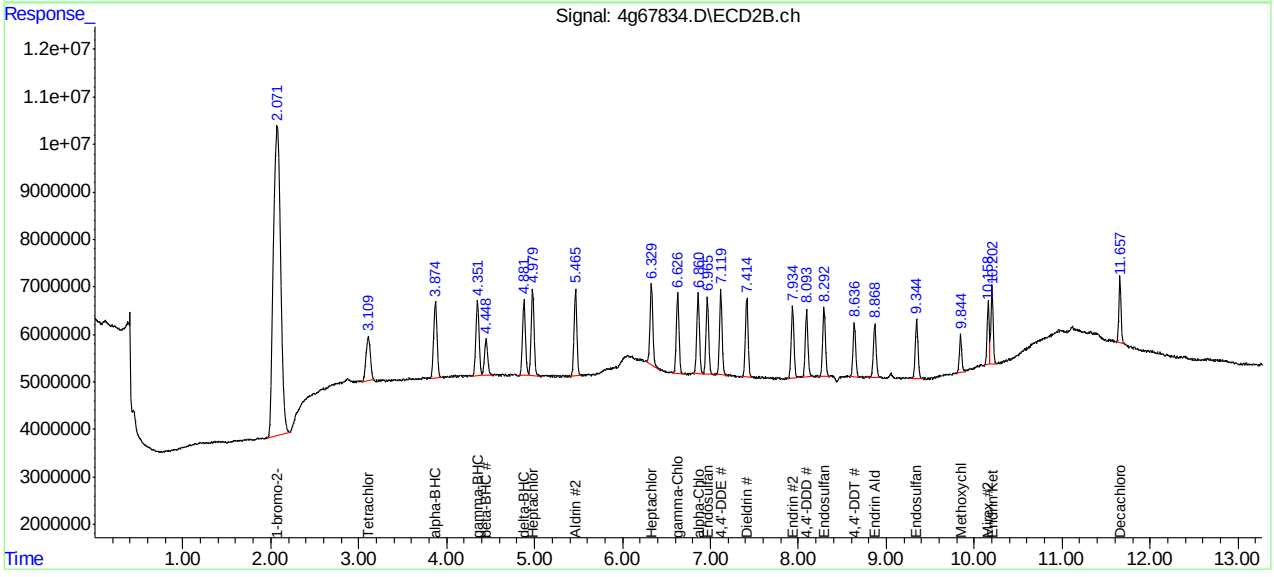
Quantitation Report (QT Reviewed)

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





SGS ACCUTEST JC19644

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

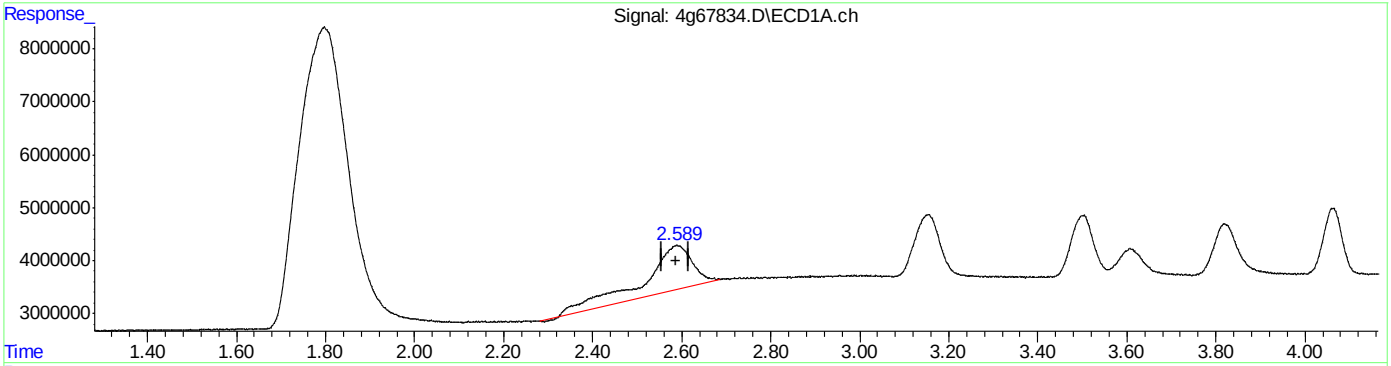
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	2.59	Poorly defined baseline
alpha-Chlordane	5103-71-9	1	5.57	Poorly defined baseline

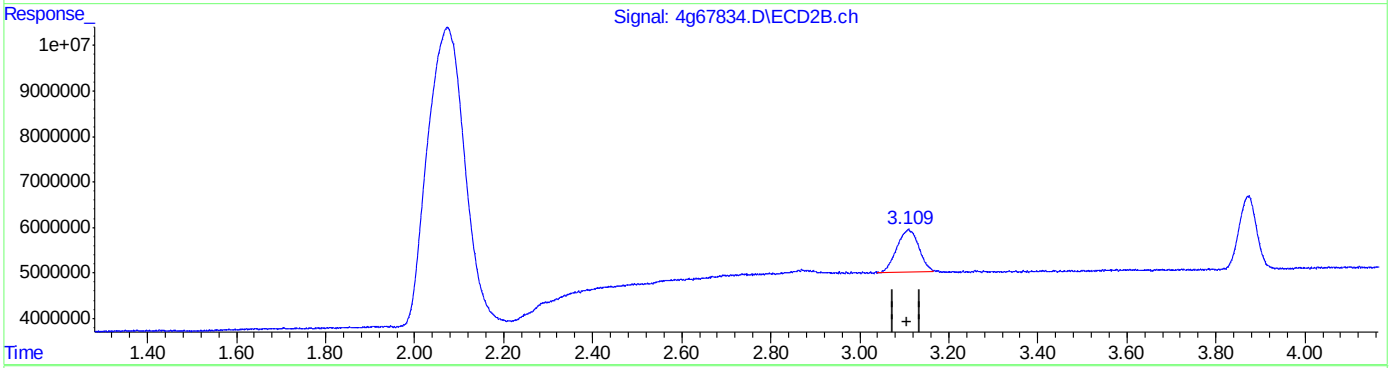
Quantitation Report (Qedit)

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

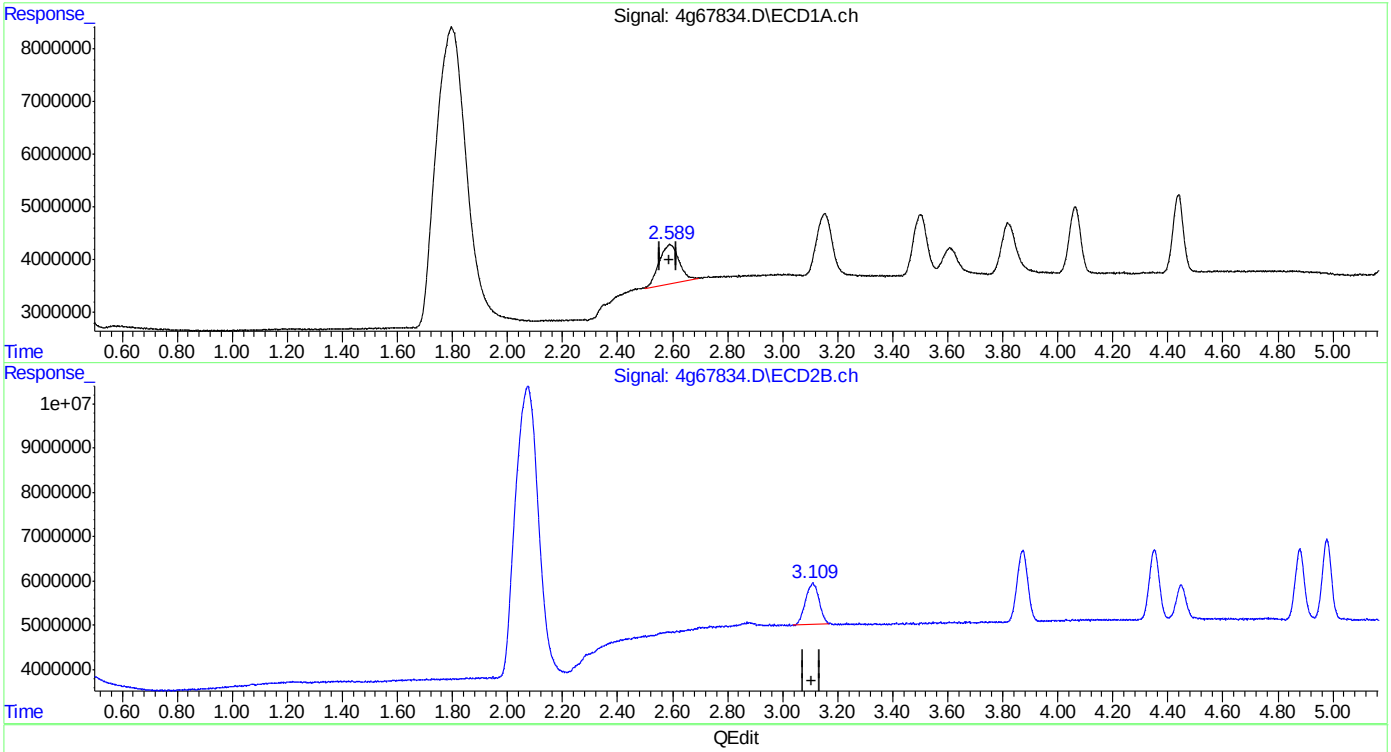
SGS ACCUTEST JC19644

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 4.566 PPB m
response 37120423

(2) Tetrachloro-m-xylene #2 (SAB)
3.110min 4.642 PPB
response 31510534

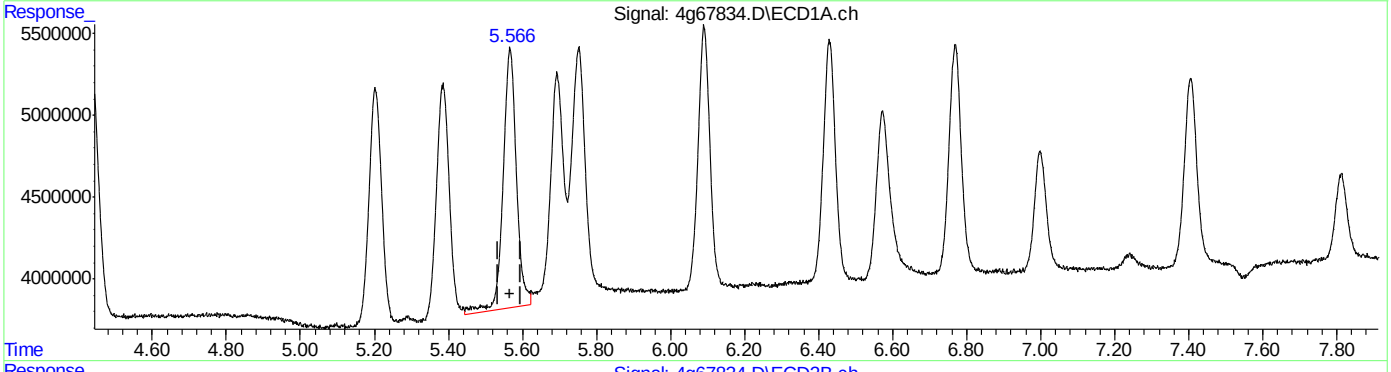
(+) = Expected Retention Time

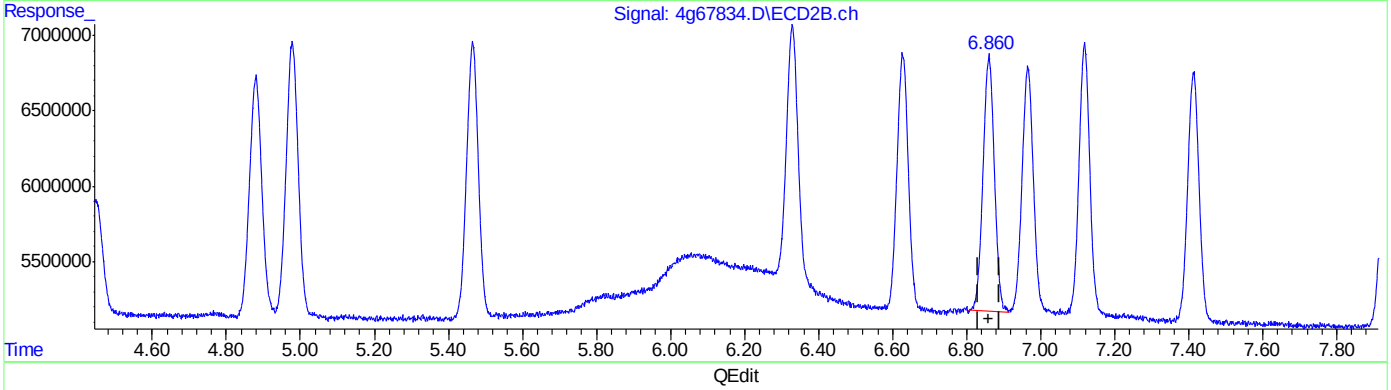
Quantitation Report (Qedit)

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





QEdit

(11) alpha-Chlordane (B)
5.566min 4.945 PPB
response 39336194

(11) alpha-Chlordane #2 (B)
6.860min 4.916 PPB
response 36218841

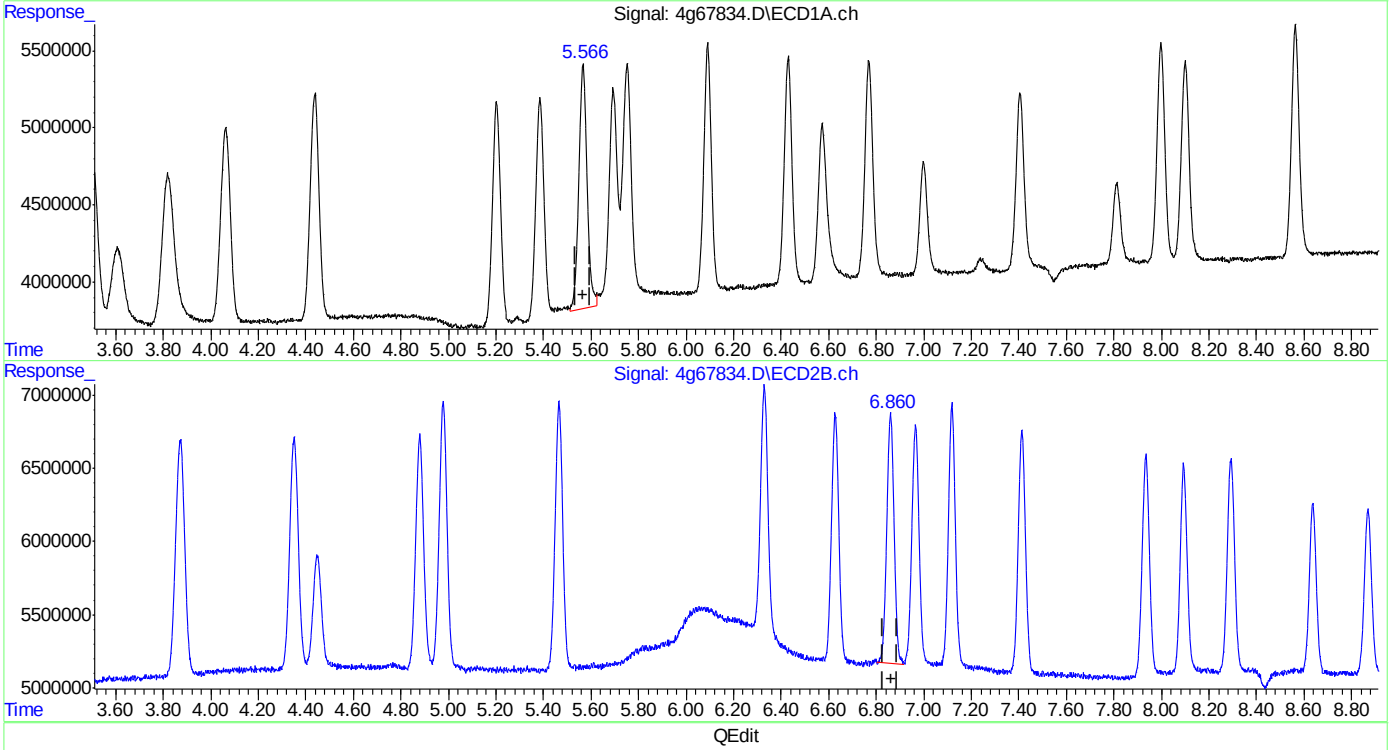
(+) = Expected Retention Time

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.

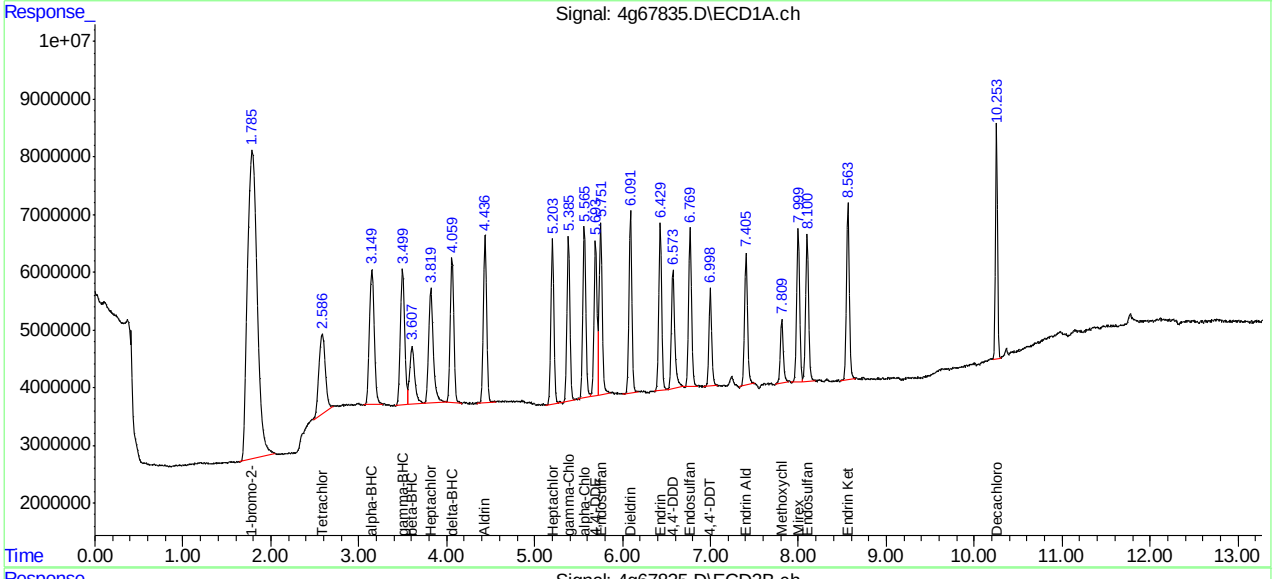
11.6.4 11

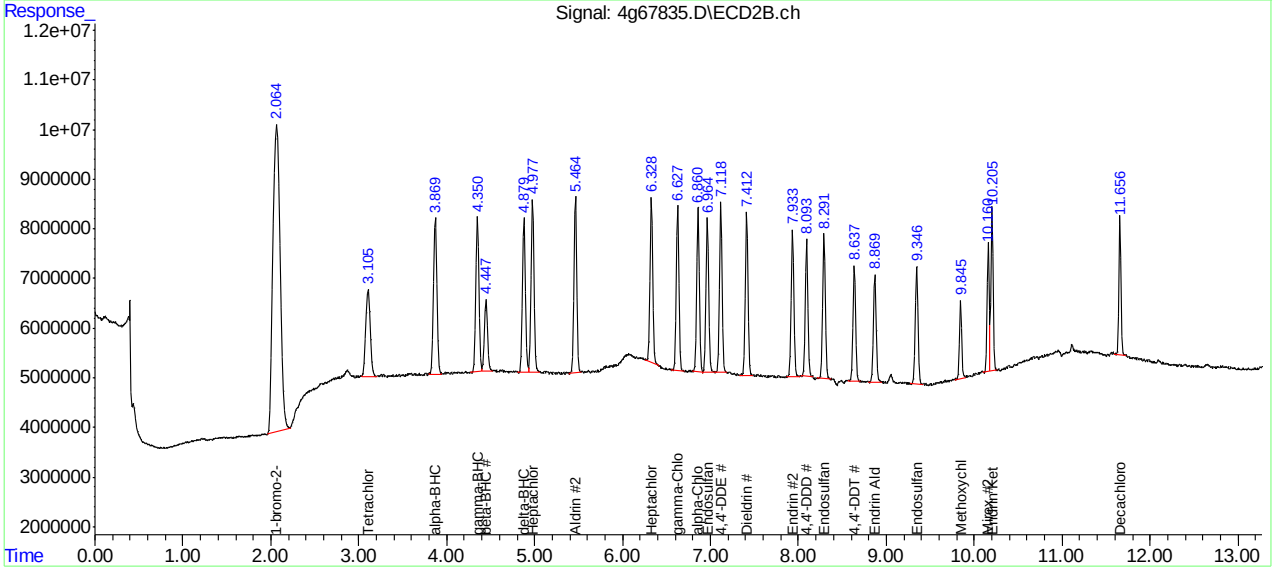
Quantitation Report (QT Reviewed)

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 JC19644

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

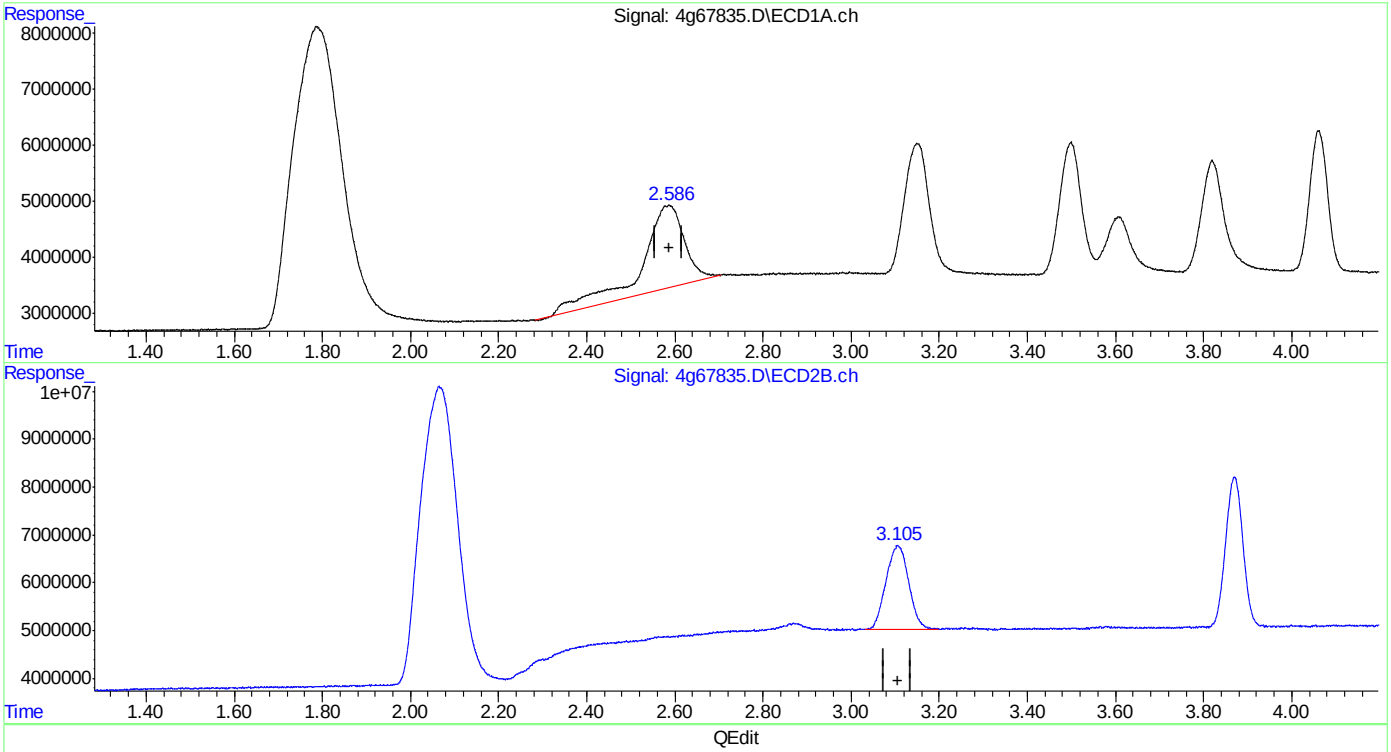
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	2.59	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	1	10.25	Poorly defined baseline

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

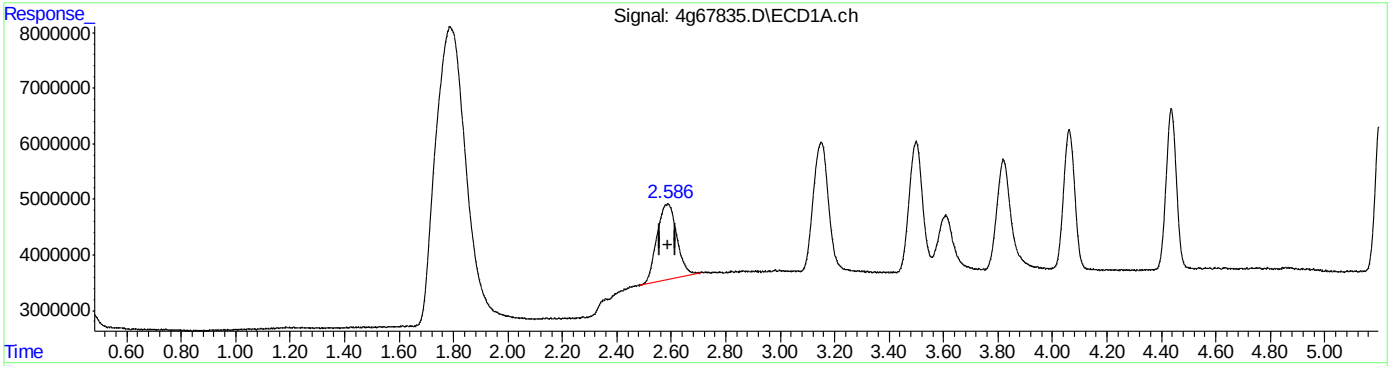
(+) = Expected Retention Time
4PST1778.M Tue May 03 14:54:27 2016 RPT1

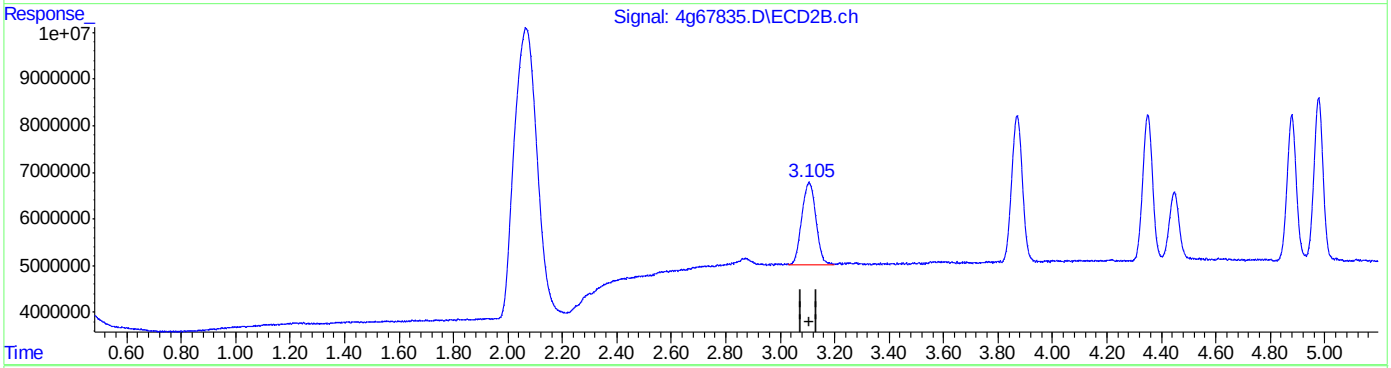
Quantitation Report (Qedit)

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)
2.586min 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

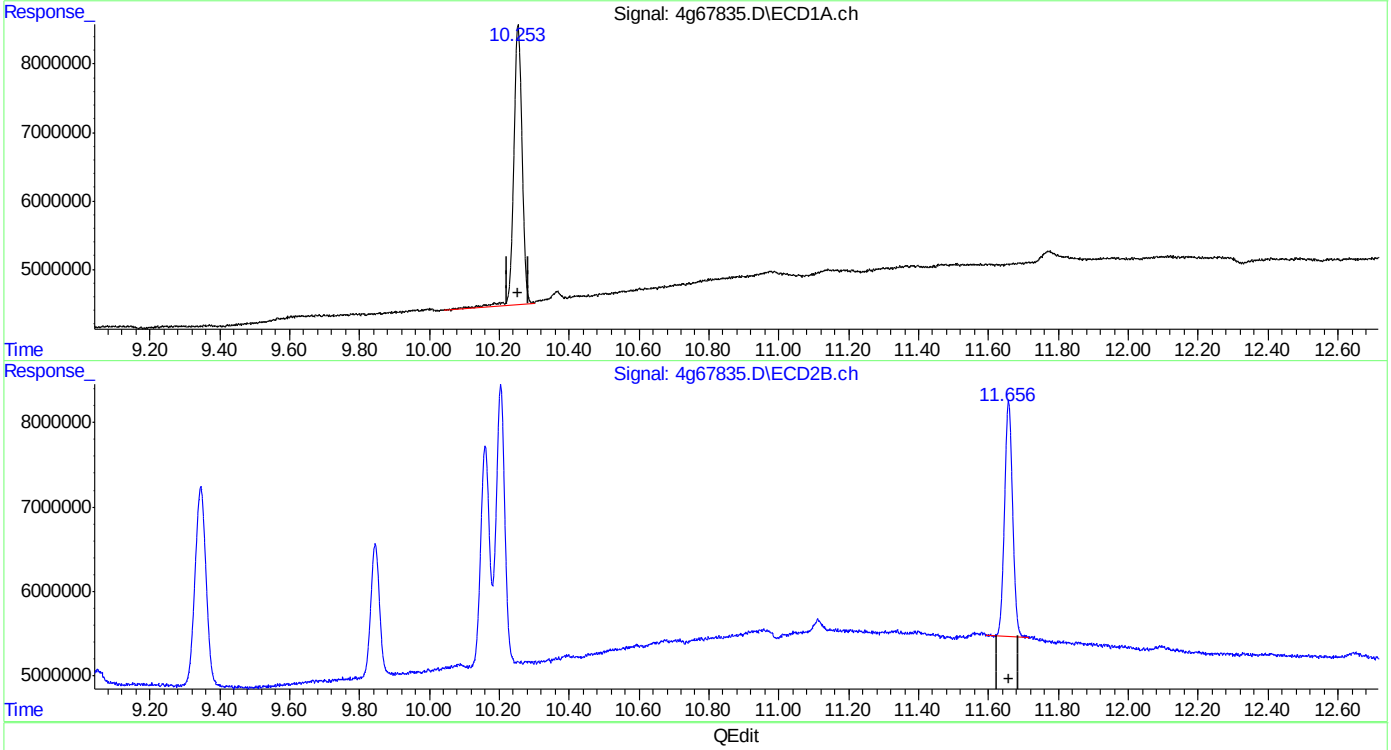
SGS ACCUTEST JC19644

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

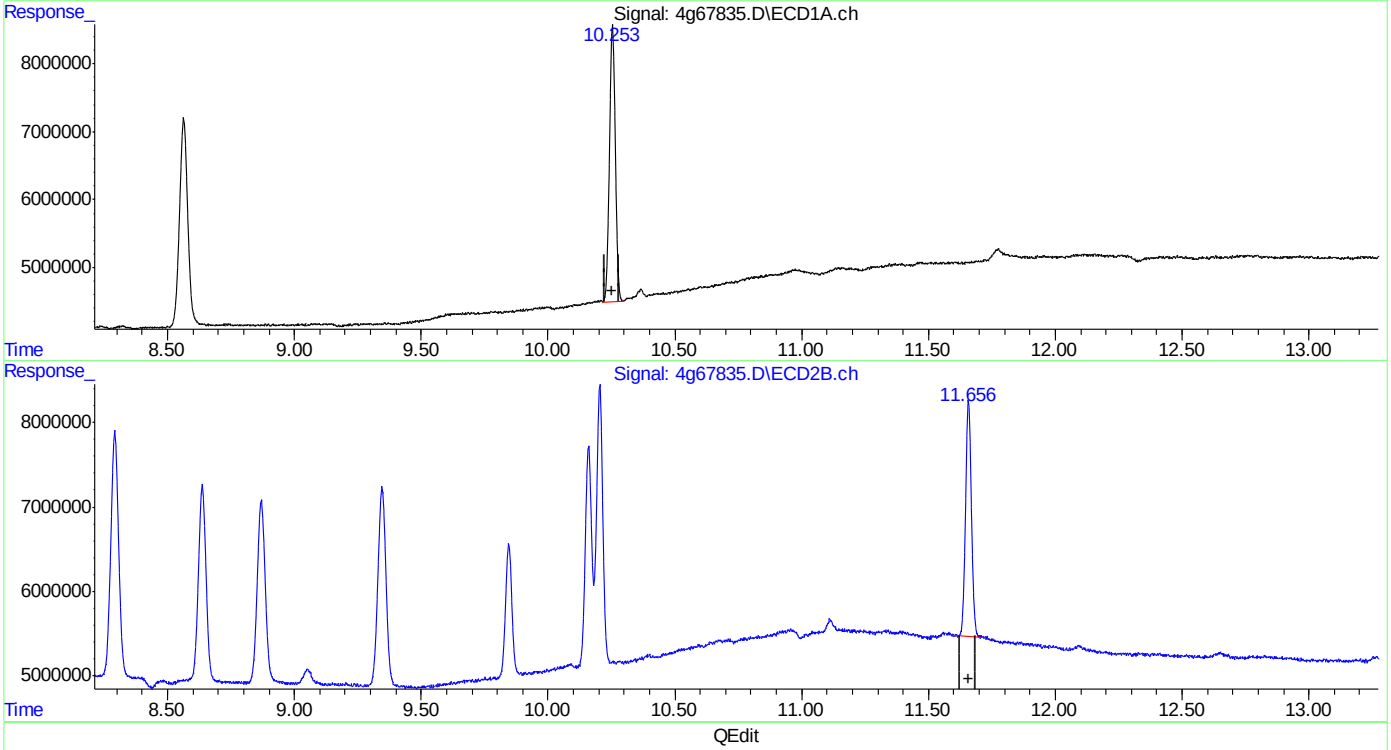
(+) = Expected Retention Time
4PST1778.M Tue May 03 14:54:53 2016 RPT1

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



QEdit

(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

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.

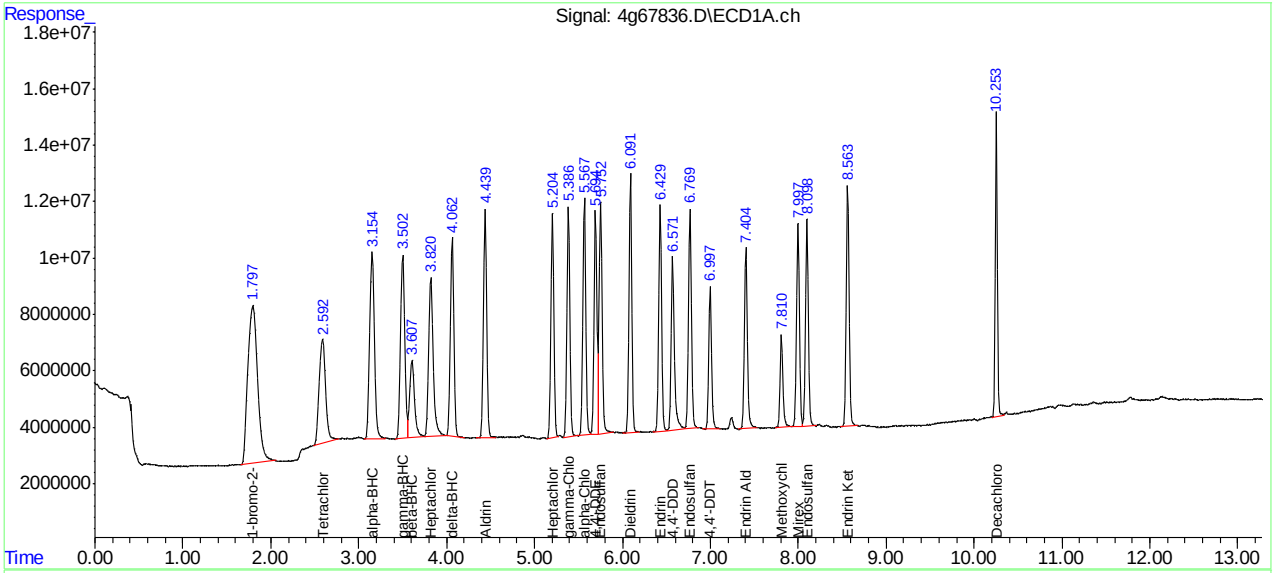
11.6.5 11

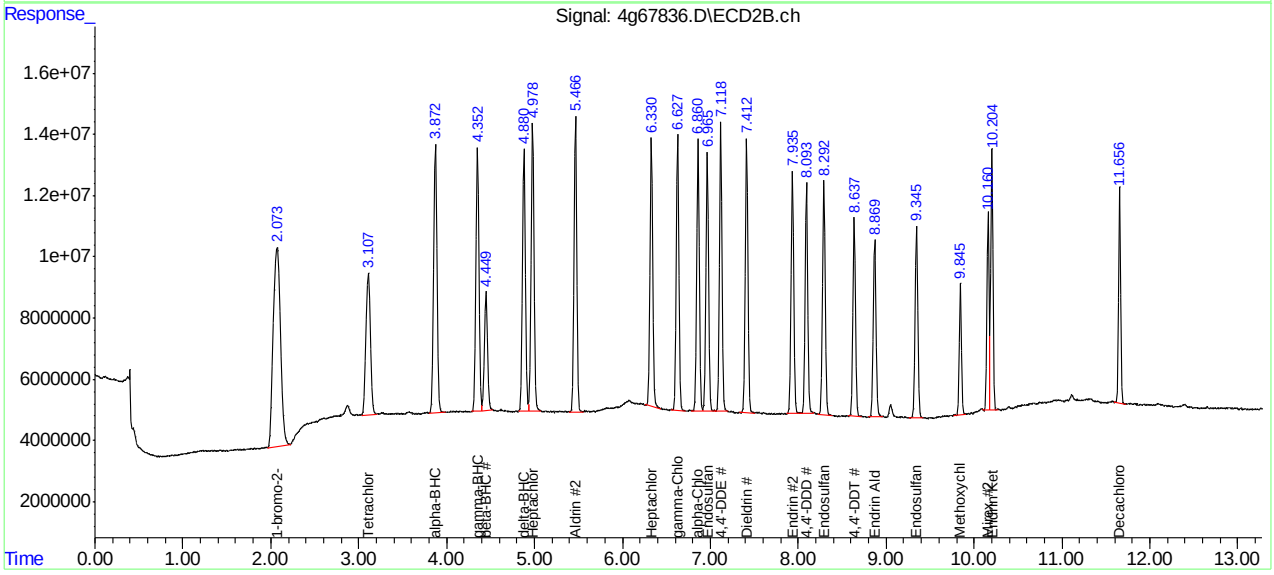
Quantitation Report (QT Reviewed)

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

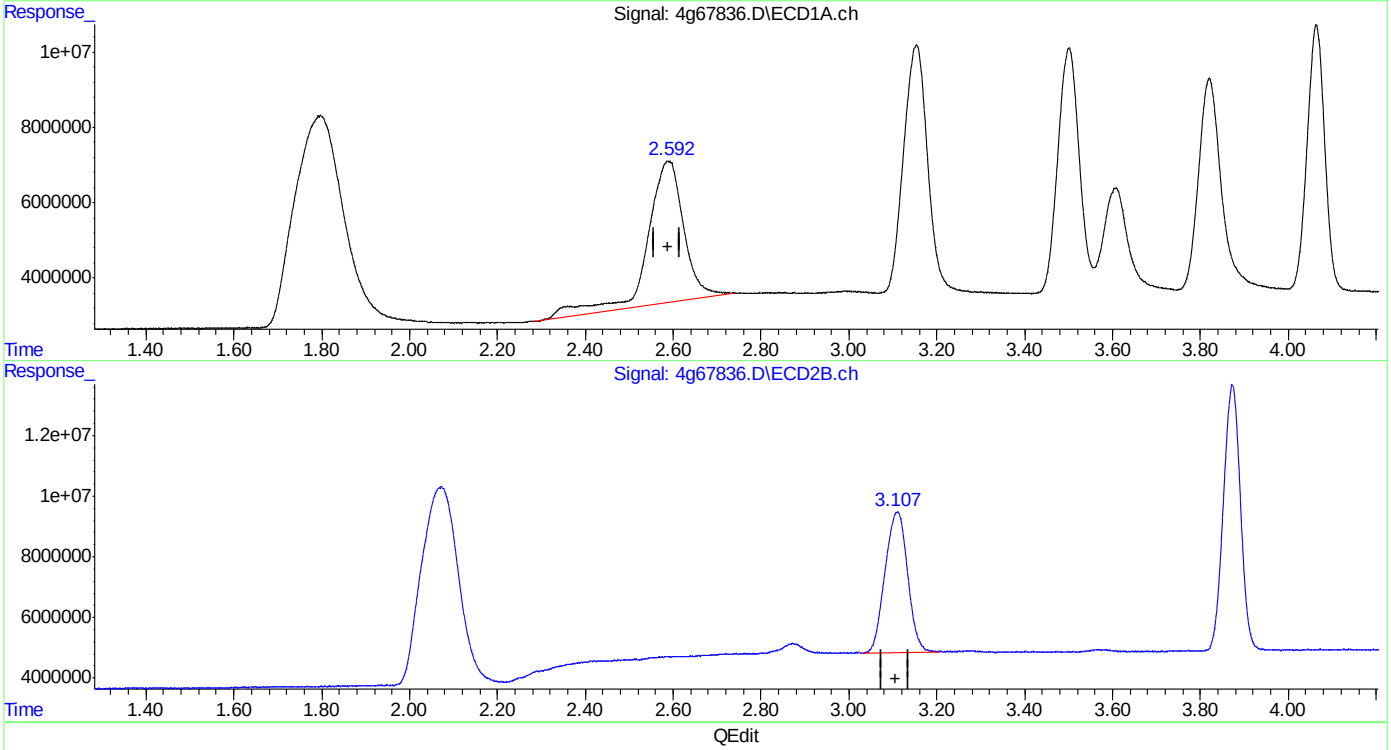
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	2.59	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	1	10.25	Poorly defined baseline

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

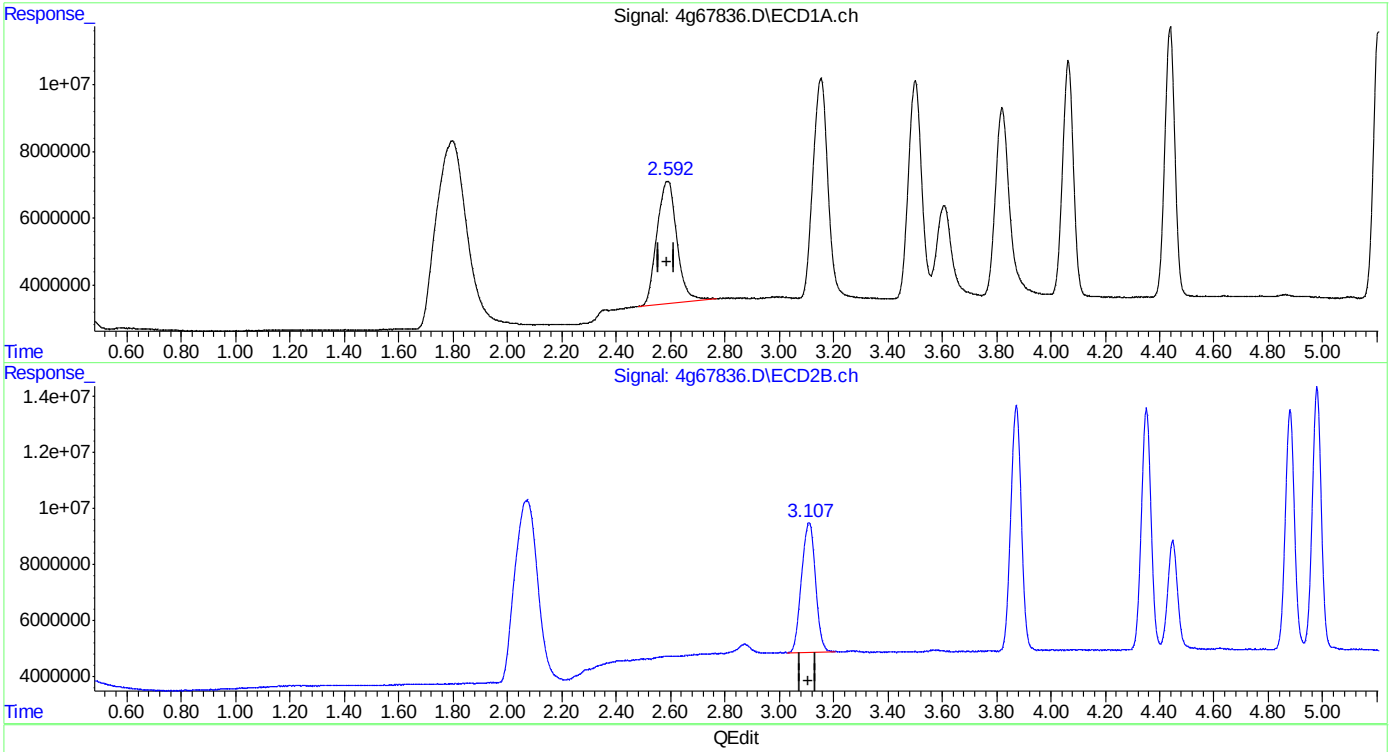
(+) = Expected Retention Time

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

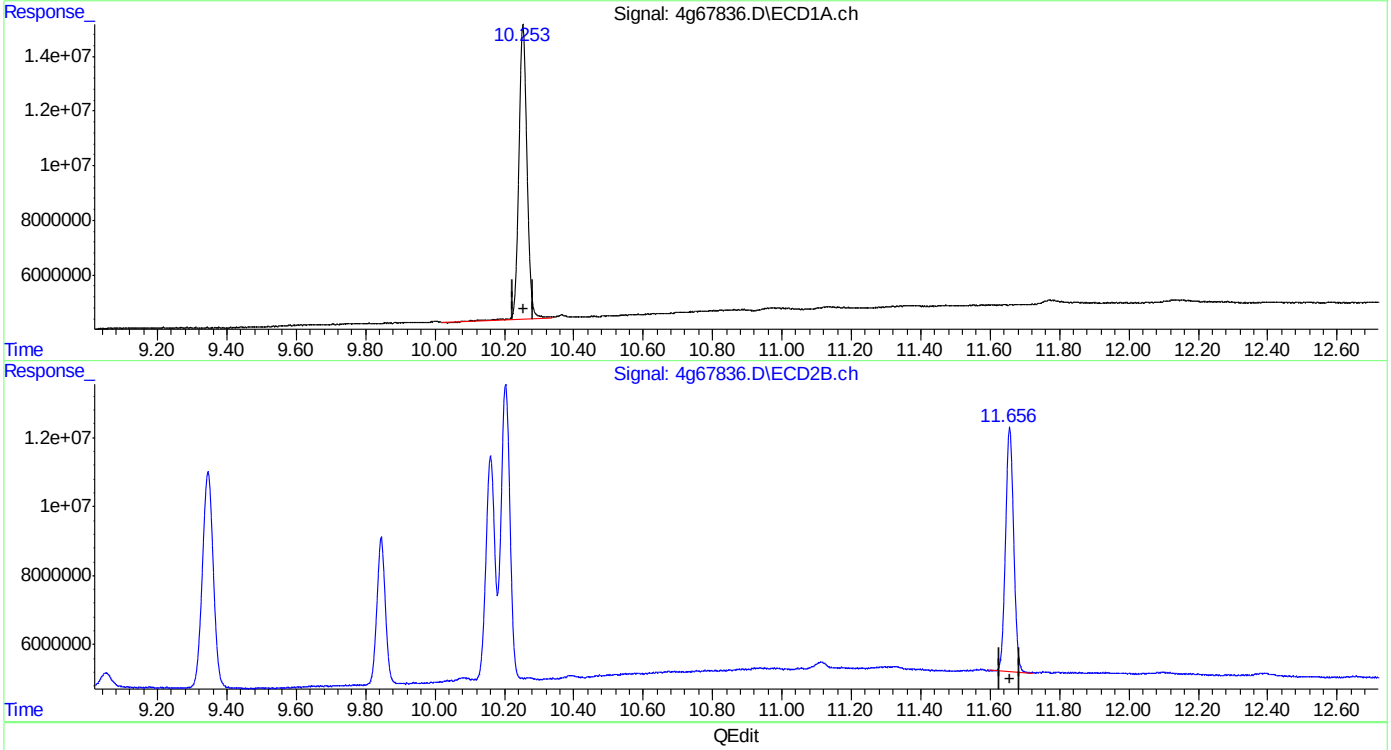
SGS ACCUTEST JC19644

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

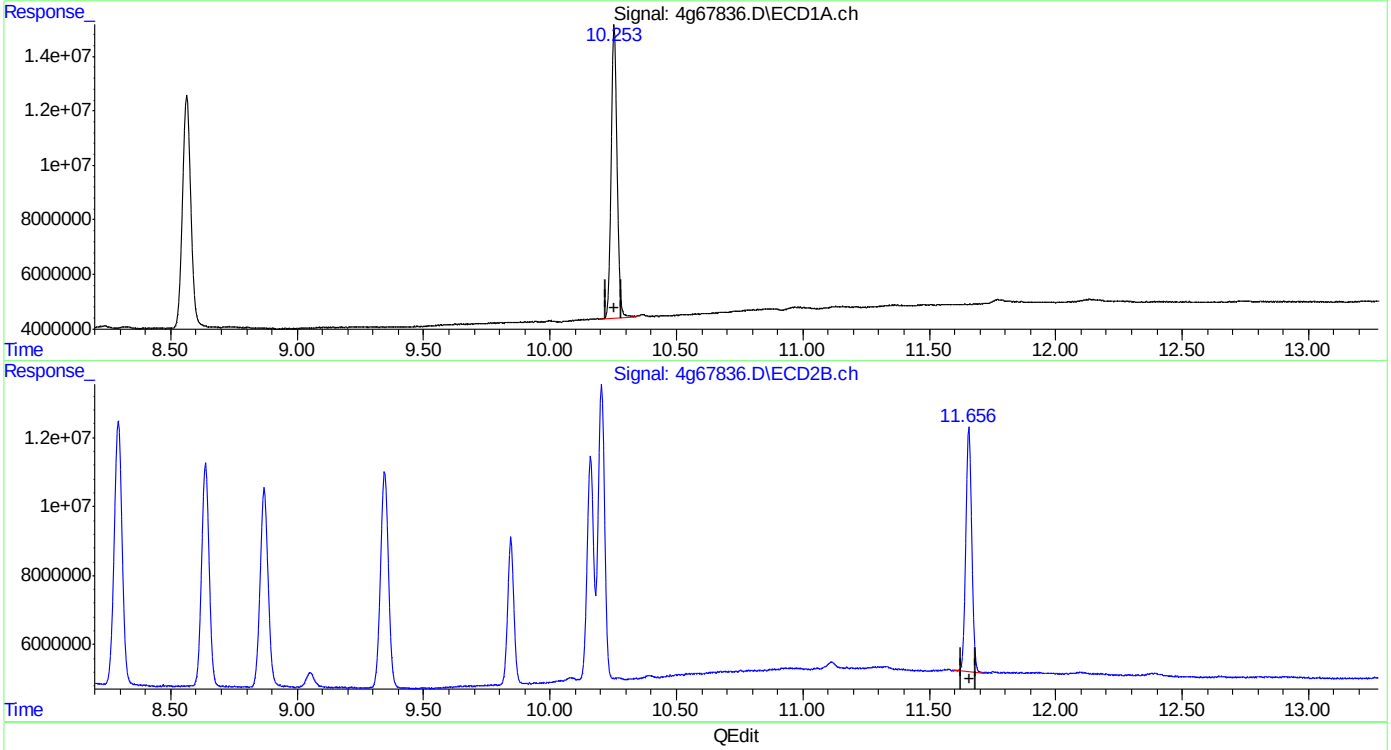
SGS ACCUTEST JC19644

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

SGS ACCUTEST JC19644

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.

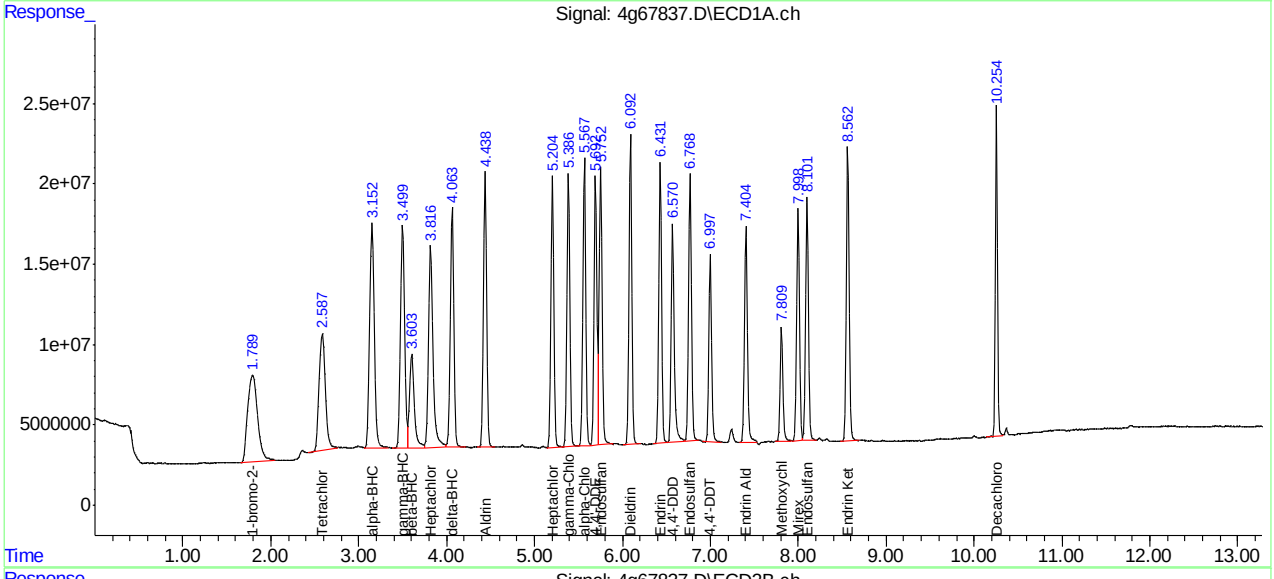
11.6.6 11

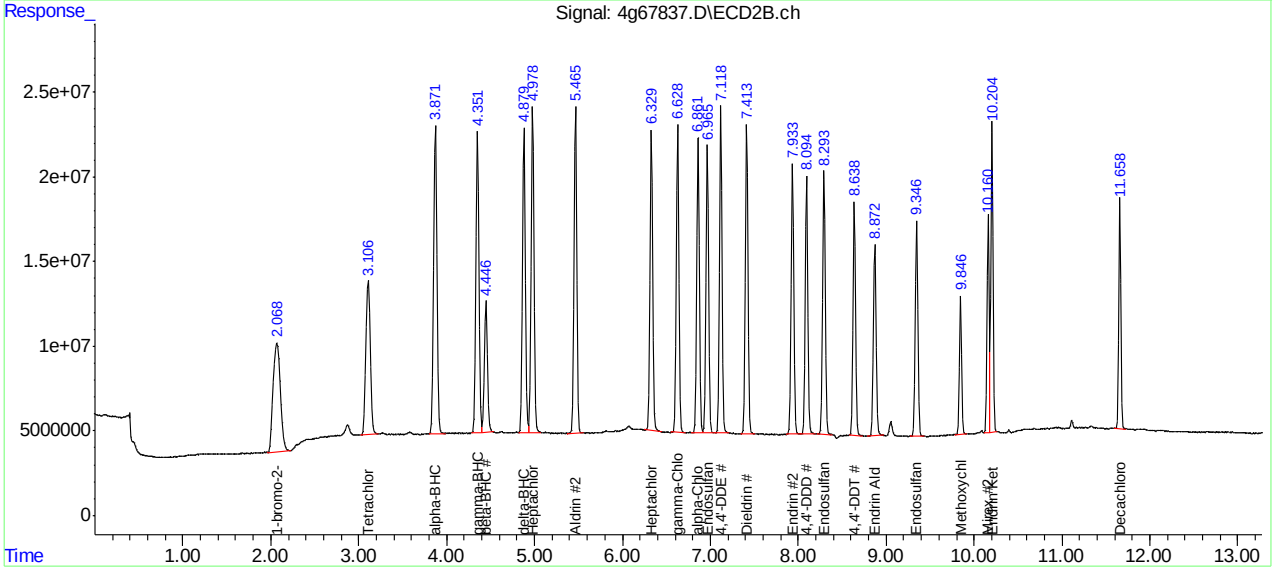
Quantitation Report (QT Reviewed)

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





SGS ACCUTEST JC19644

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

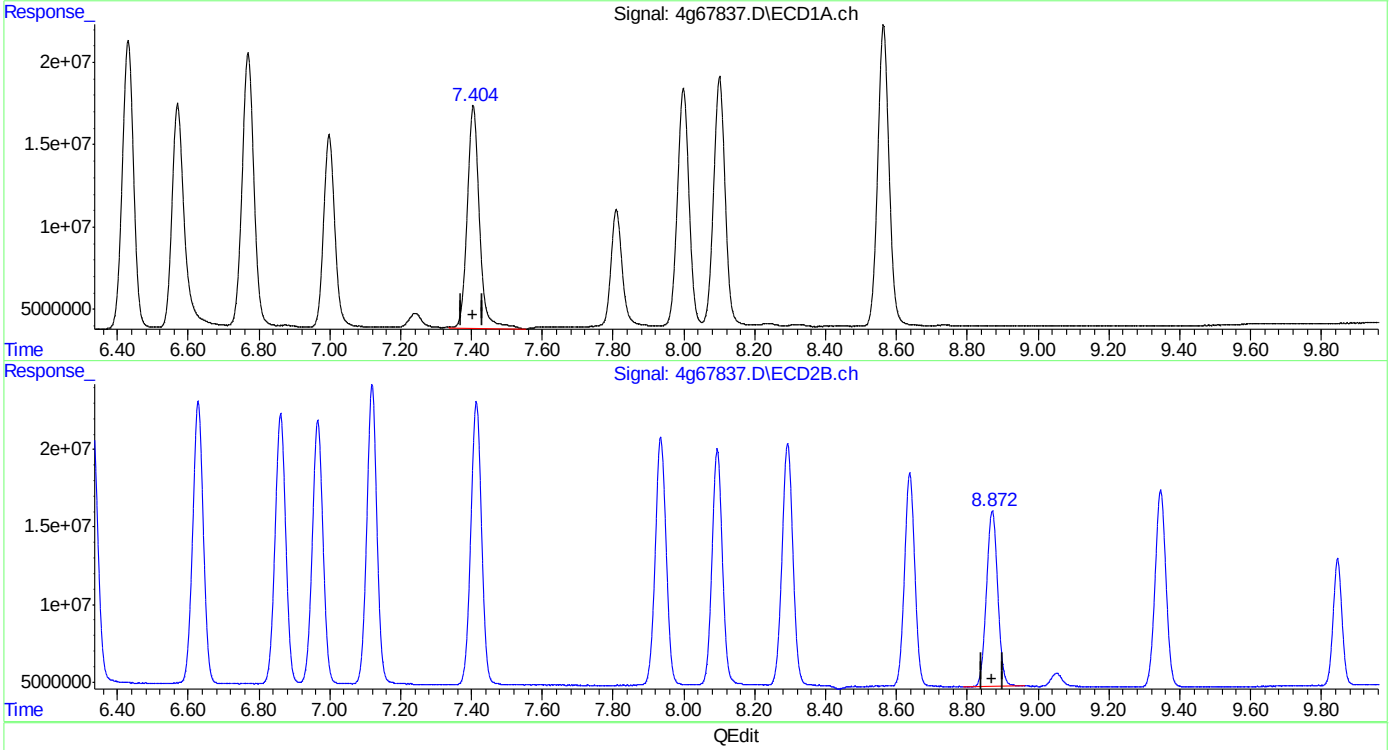
Parameter	CAS	Sig#	R.T. (min.)	Reason
Endrin aldehyde	7421-93-4	1	7.40	Poorly defined baseline
Methoxychlor	72-43-5	1	7.81	Poorly defined baseline

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

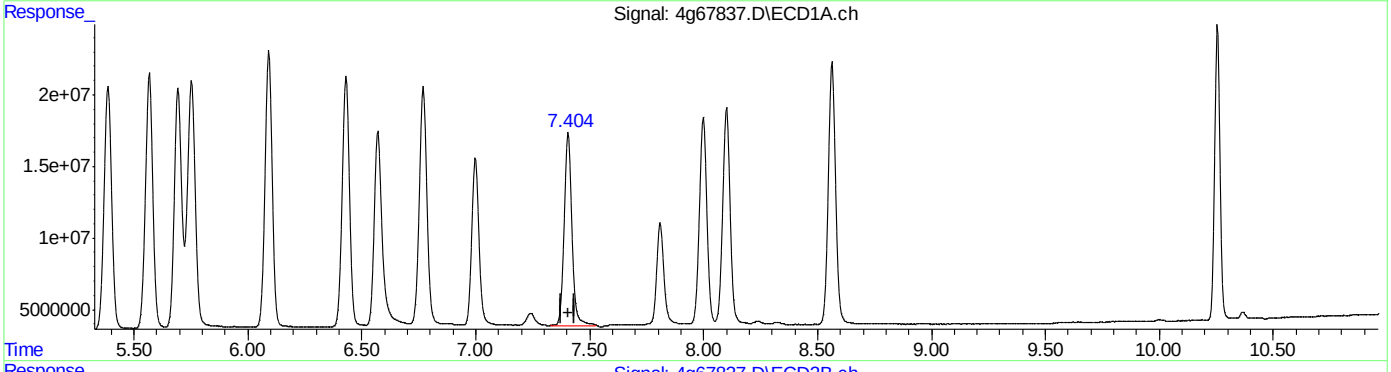
SGS ACCUTEST JC19644

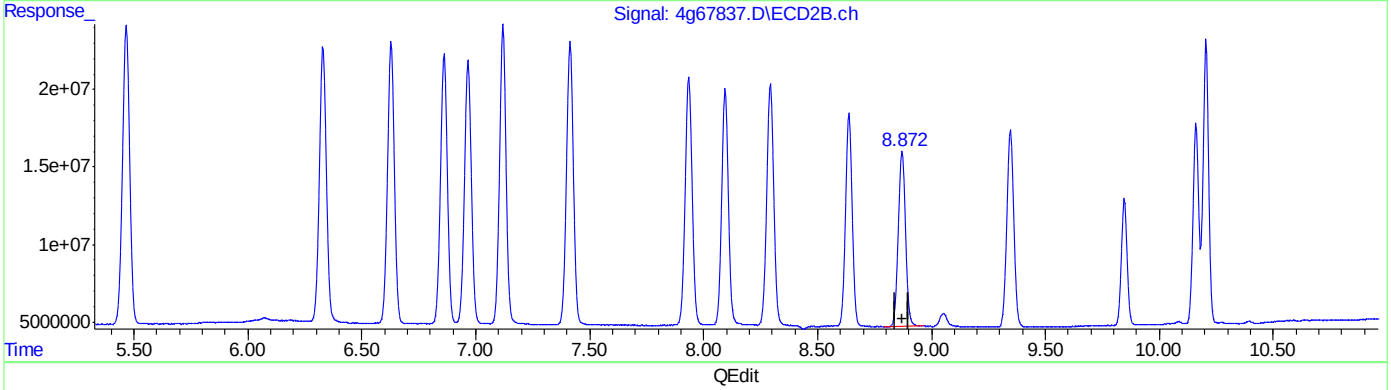
Quantitation Report (Qedit)

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
4PST1778.M Tue May 03 14:43:40 2016 RPT1

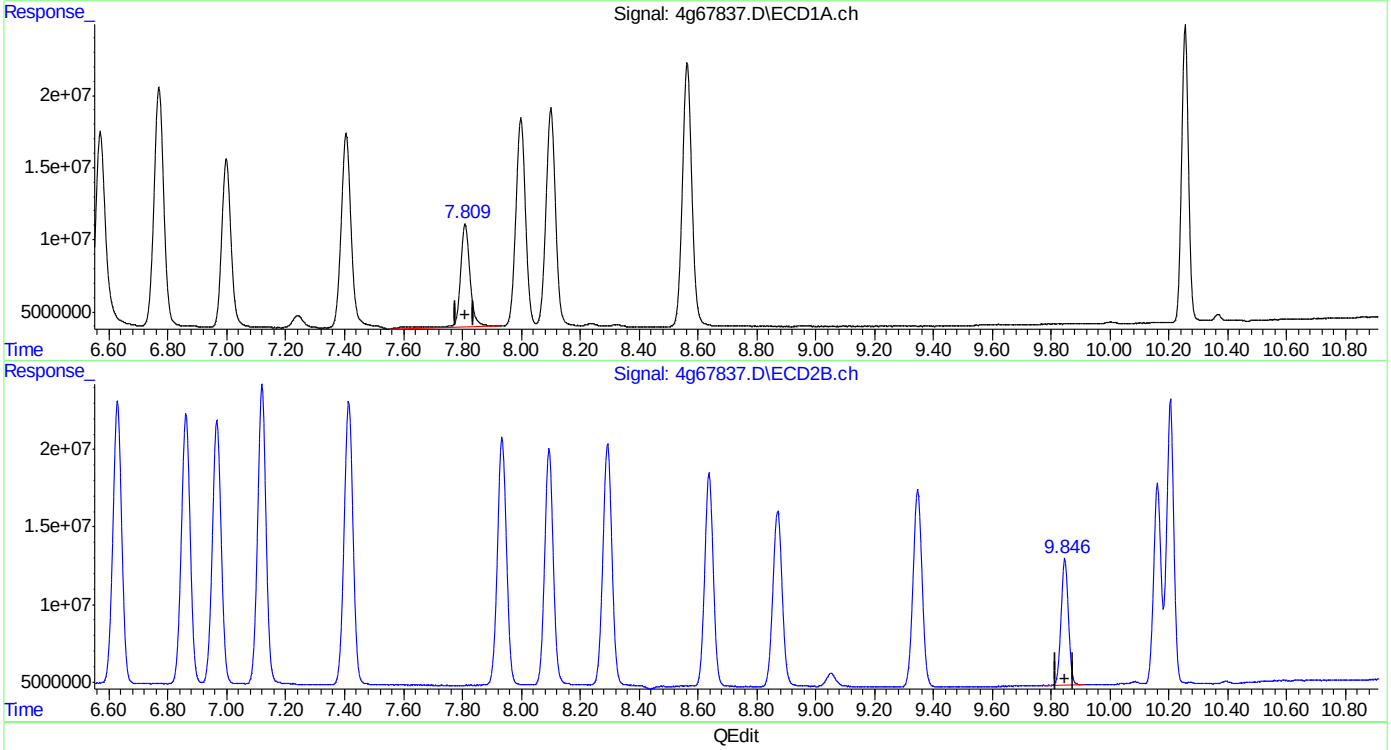
SGS ACCUTEST JC19644

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

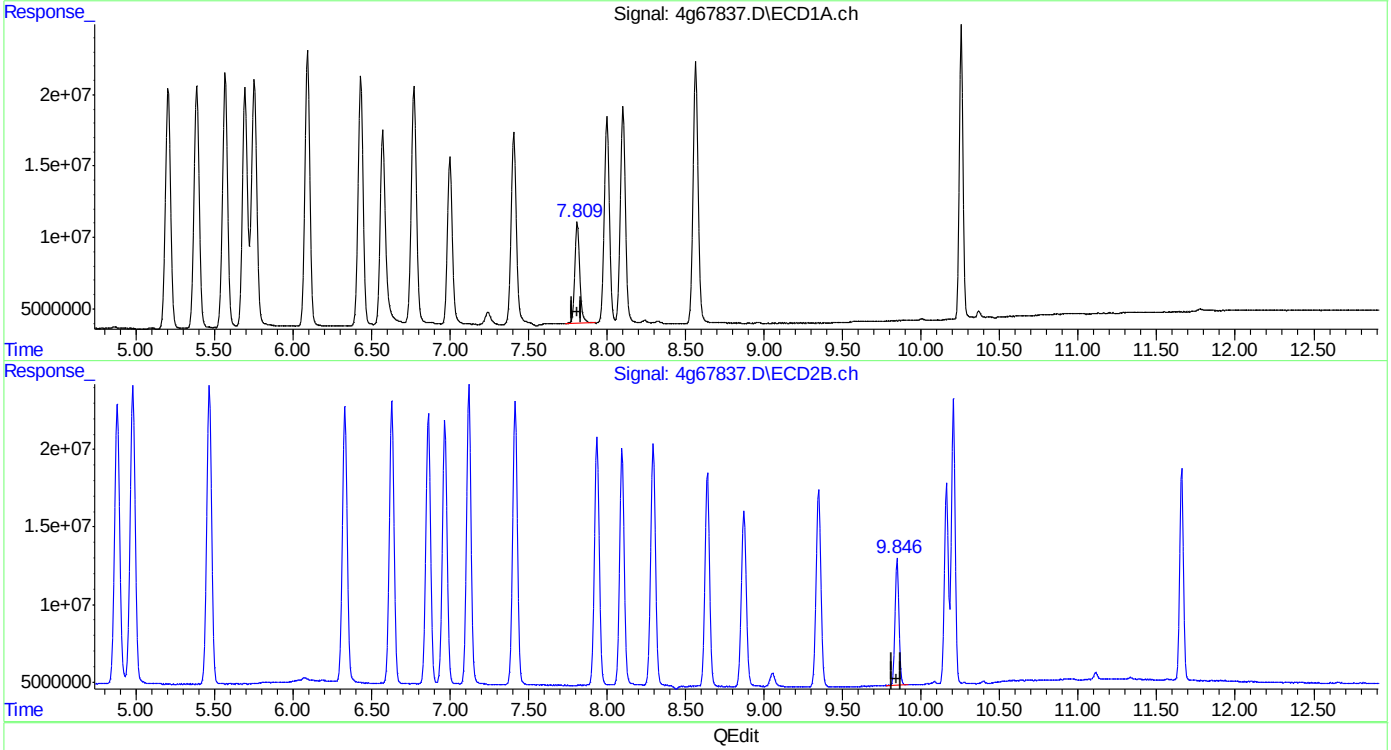
(+) = Expected Retention Time
4PST1778.M Tue May 03 14:43:43 2016 RPT1

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

SGS ACCUTEST JC19644

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

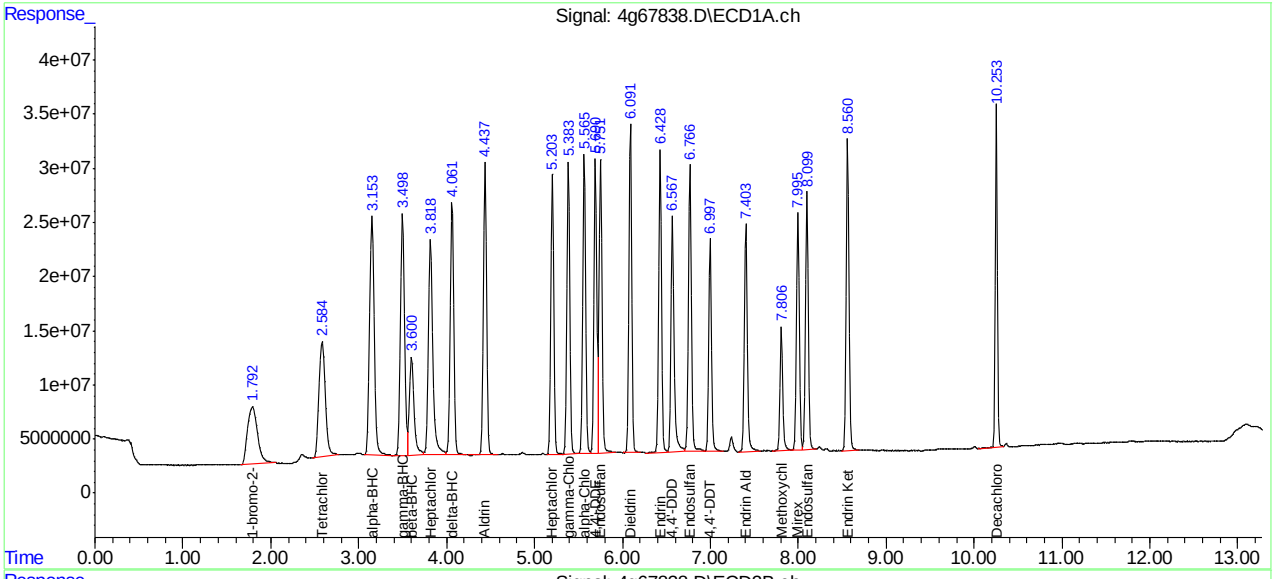
11

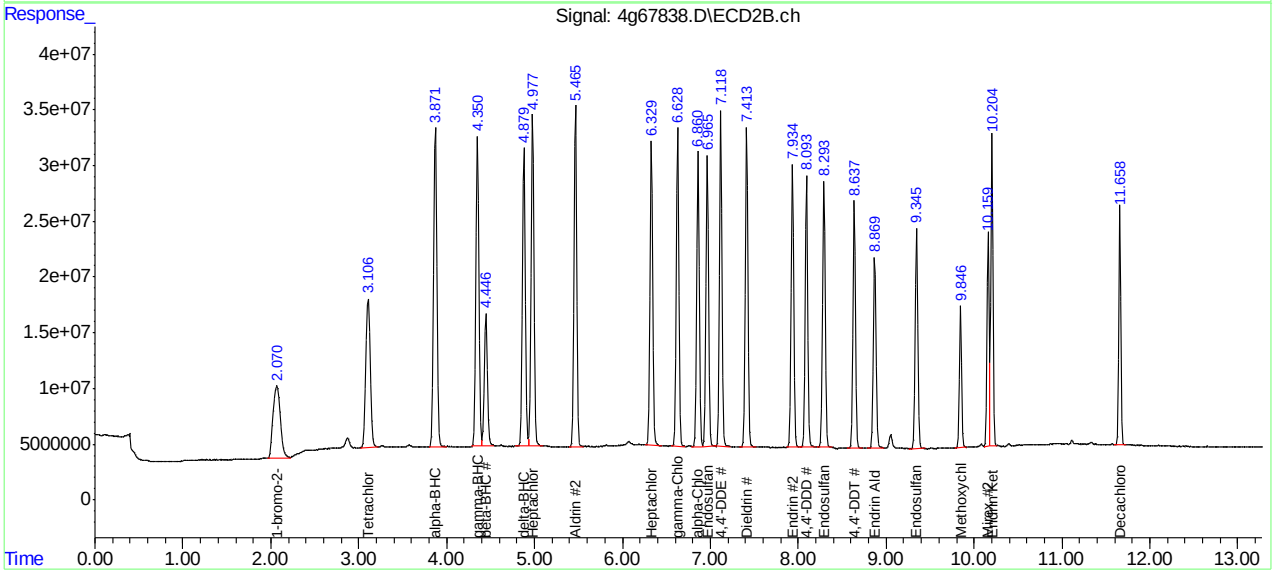
Quantitation Report (QT Reviewed)

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

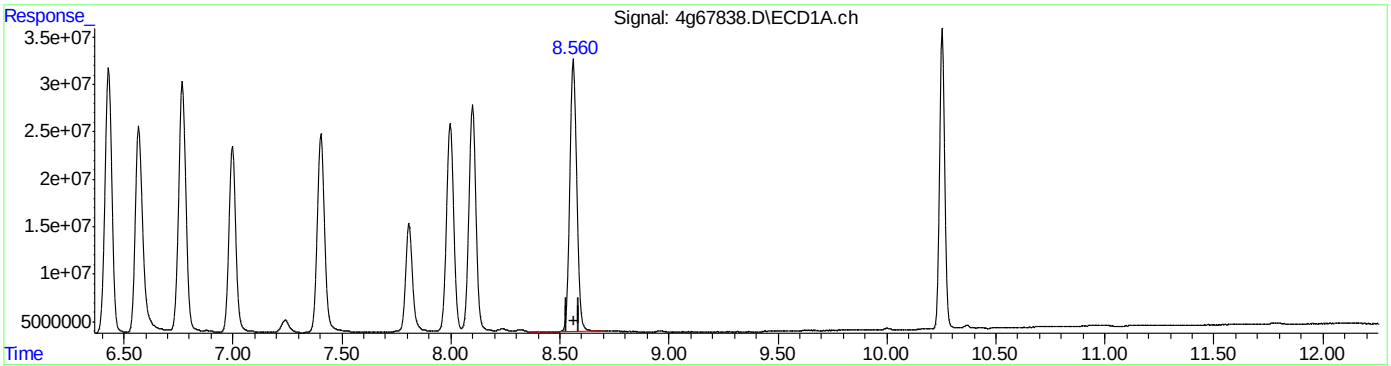
Parameter	CAS	Sig#	R.T. (min.)	Reason
Endrin ketone	53494-70-5	1	8.56	Poorly defined baseline

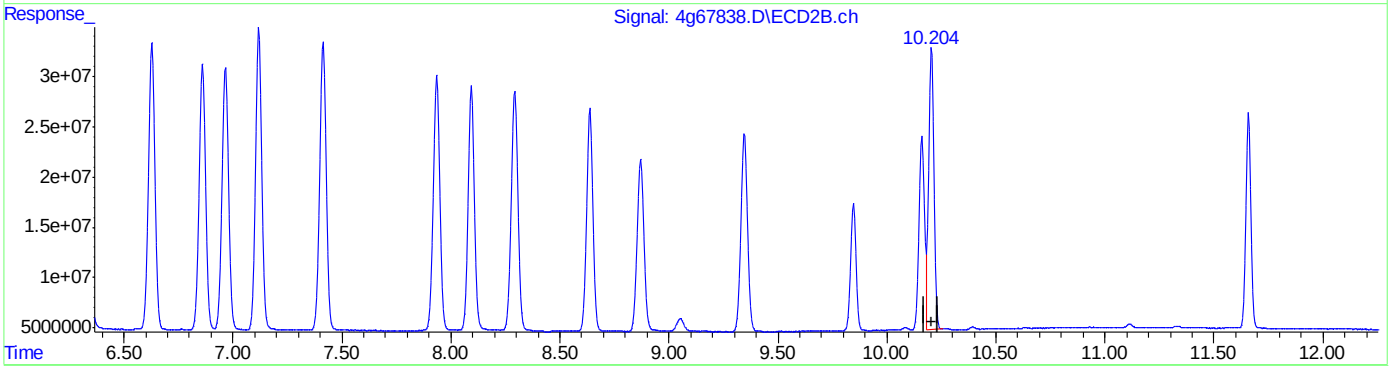
Quantitation Report (Qedit)

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





QEdit

(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

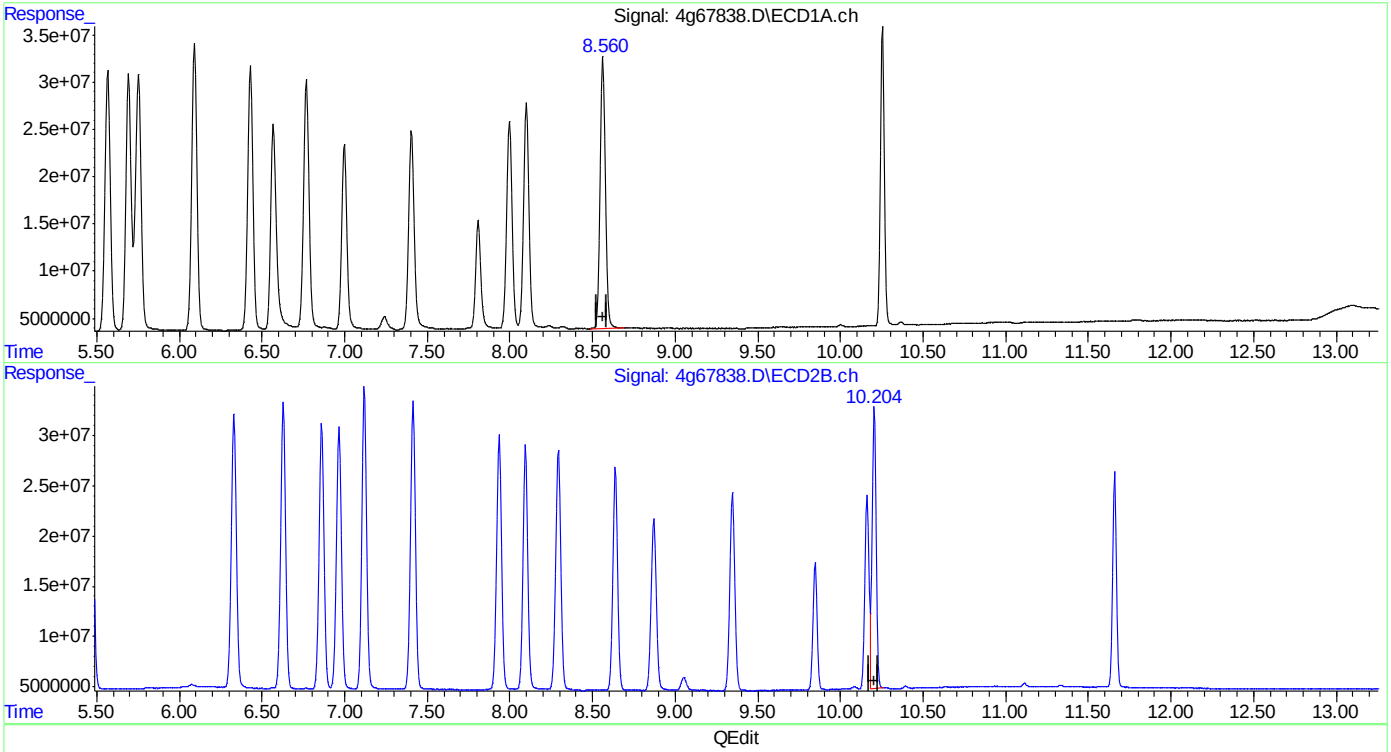
SGS ACCUTEST JC19644

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 JC19644

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

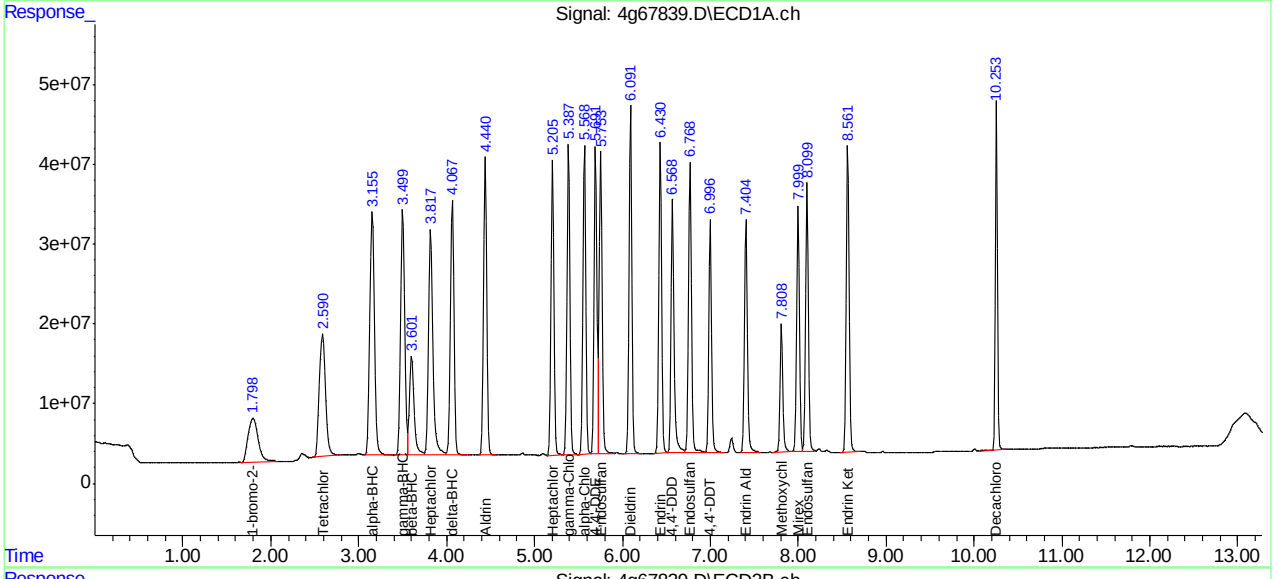
SGS ACCUTEST JC19644

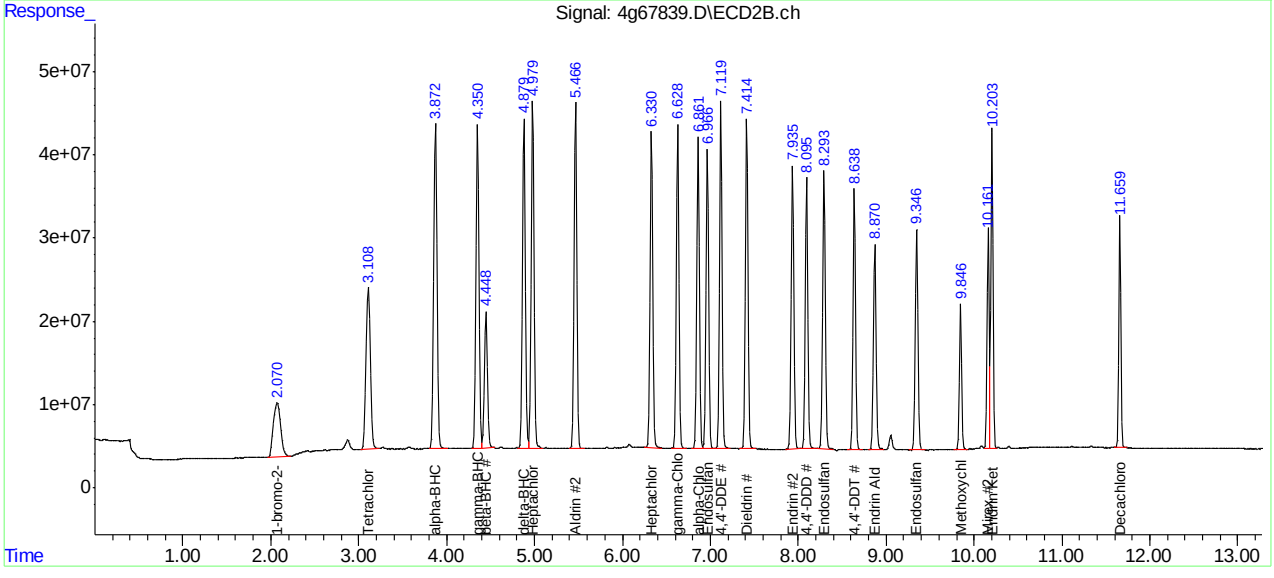
Quantitation Report (QT Reviewed)

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.

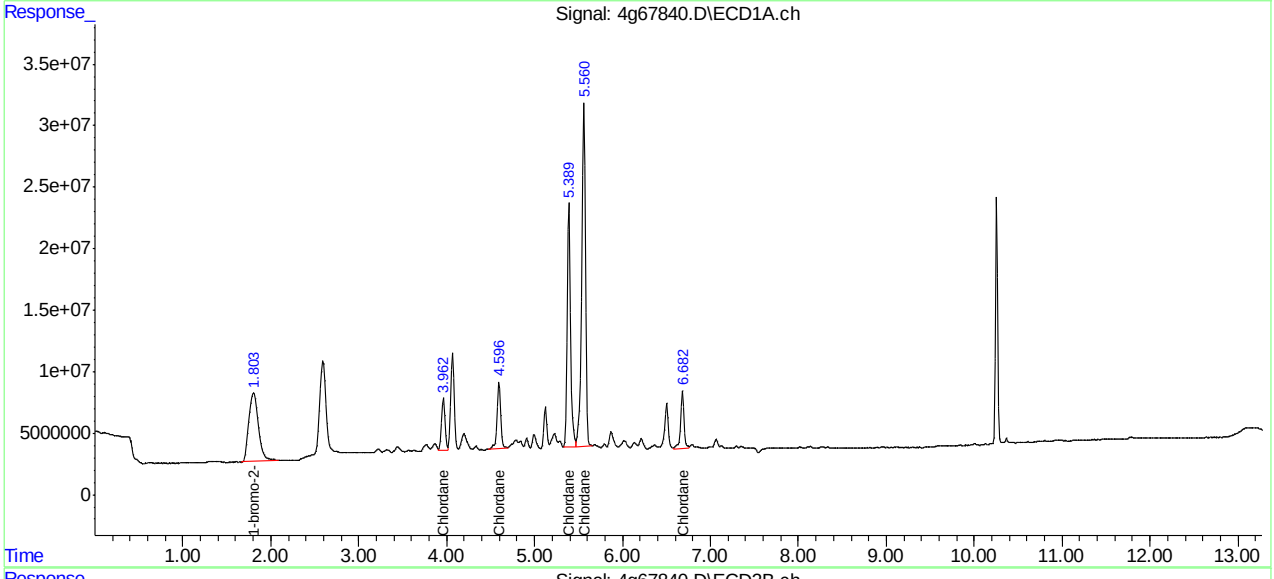
11.6.9 11

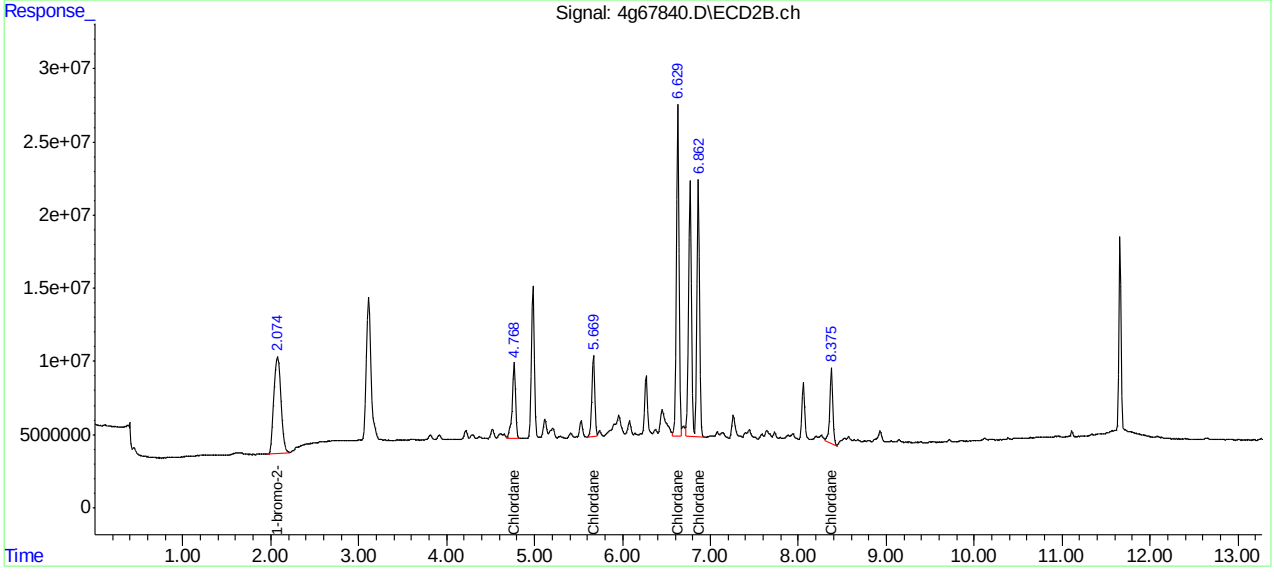
Quantitation Report (QT Reviewed)

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





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

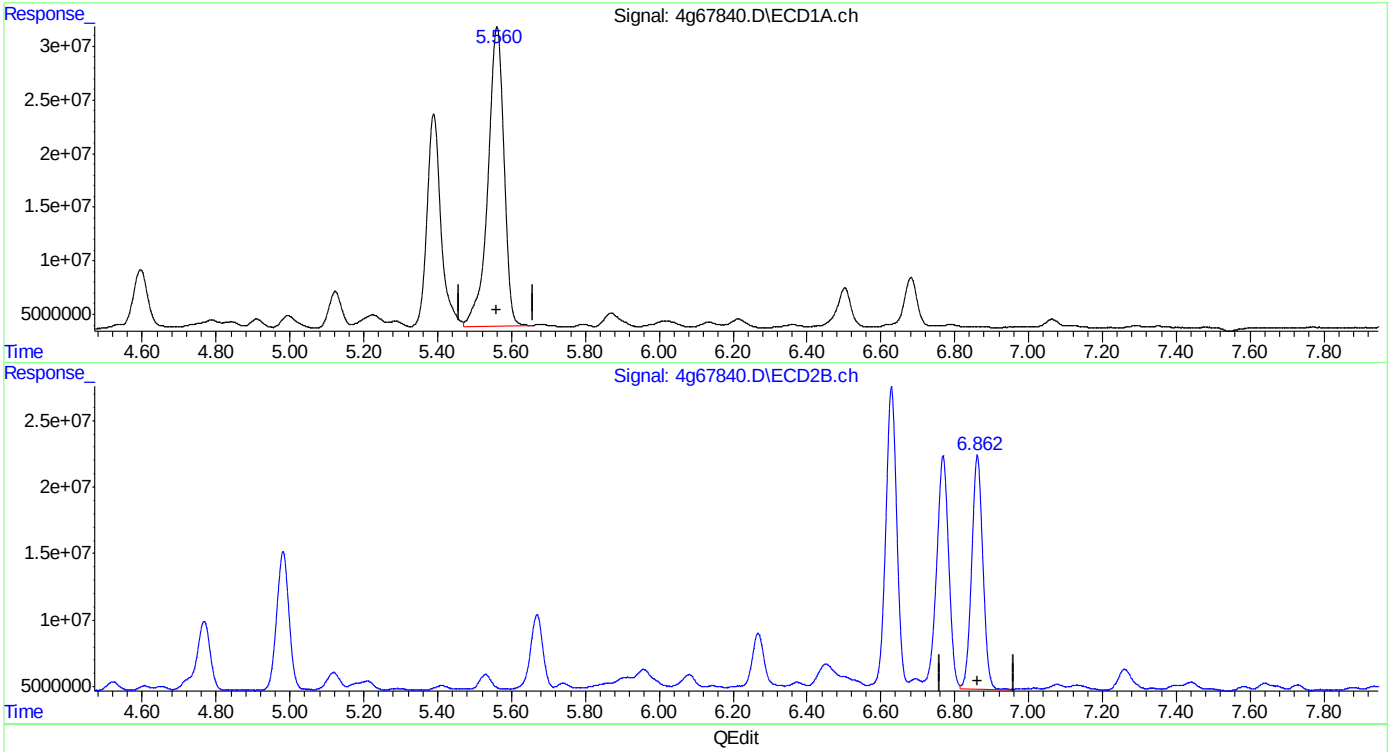
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	2.59	Poorly defined baseline
Chlordane-D		2	6.86	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	2	11.66	Poorly defined baseline

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

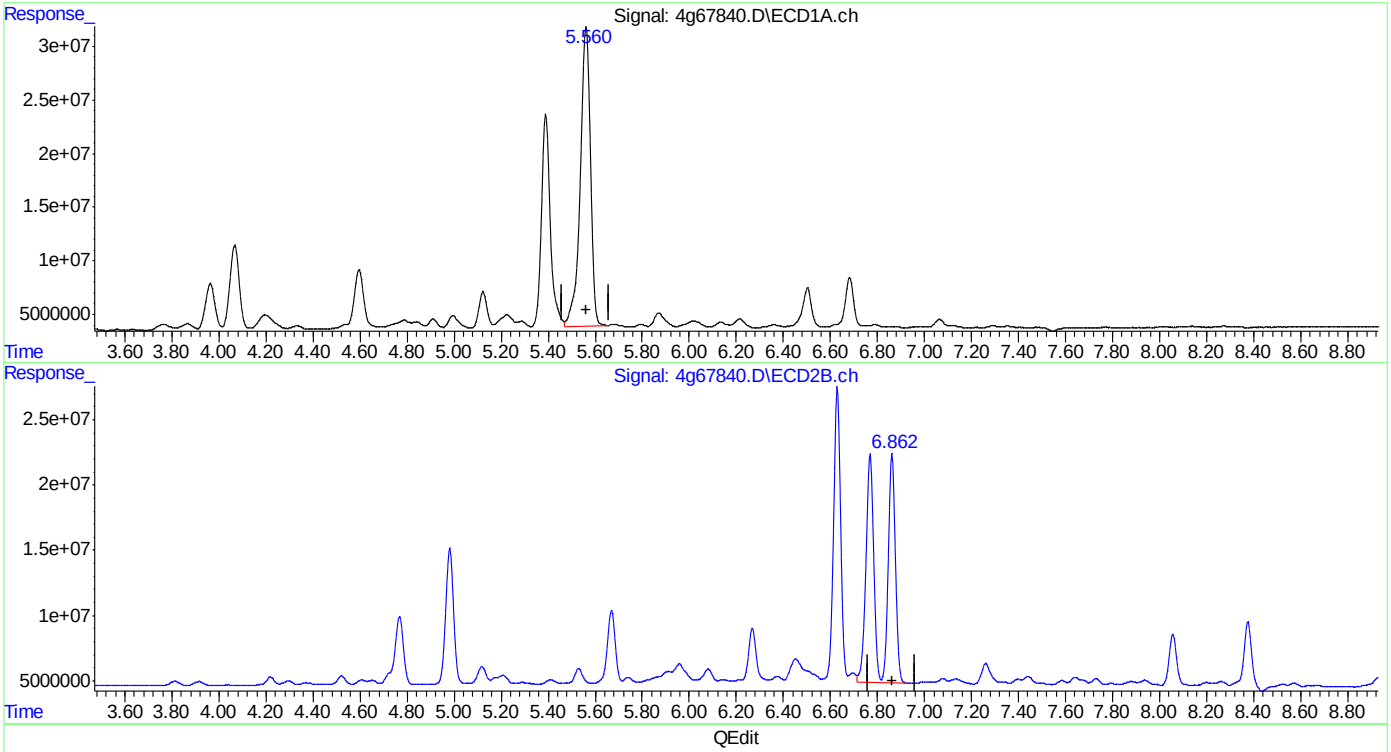
SGS ACCUTEST JC19644

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 JC19644

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.

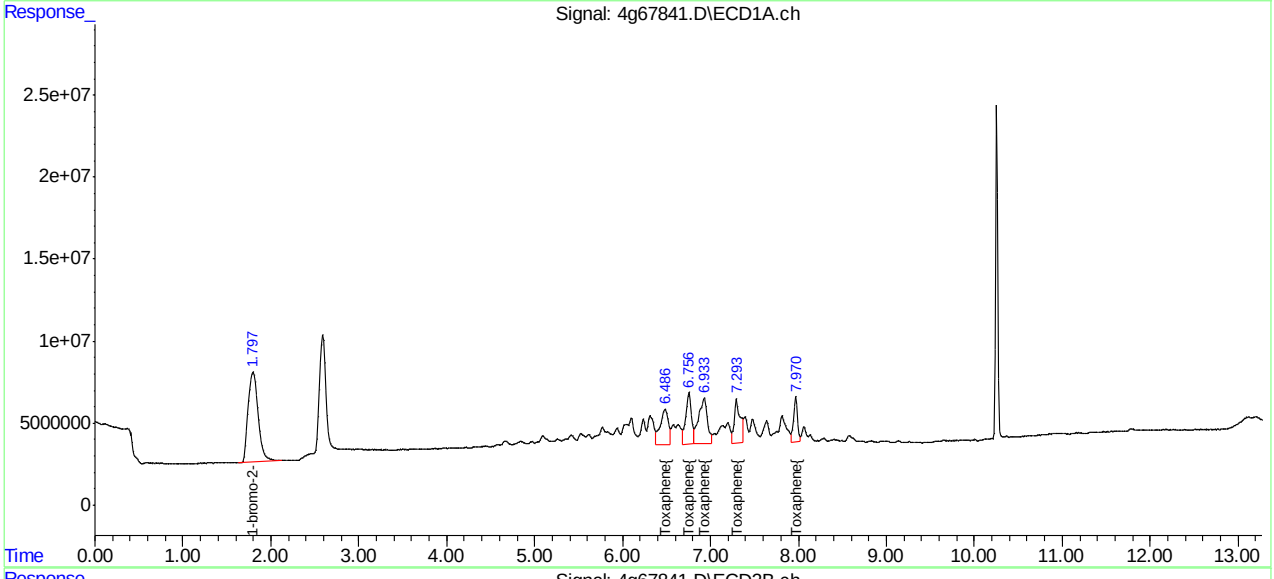
11.6.10 11

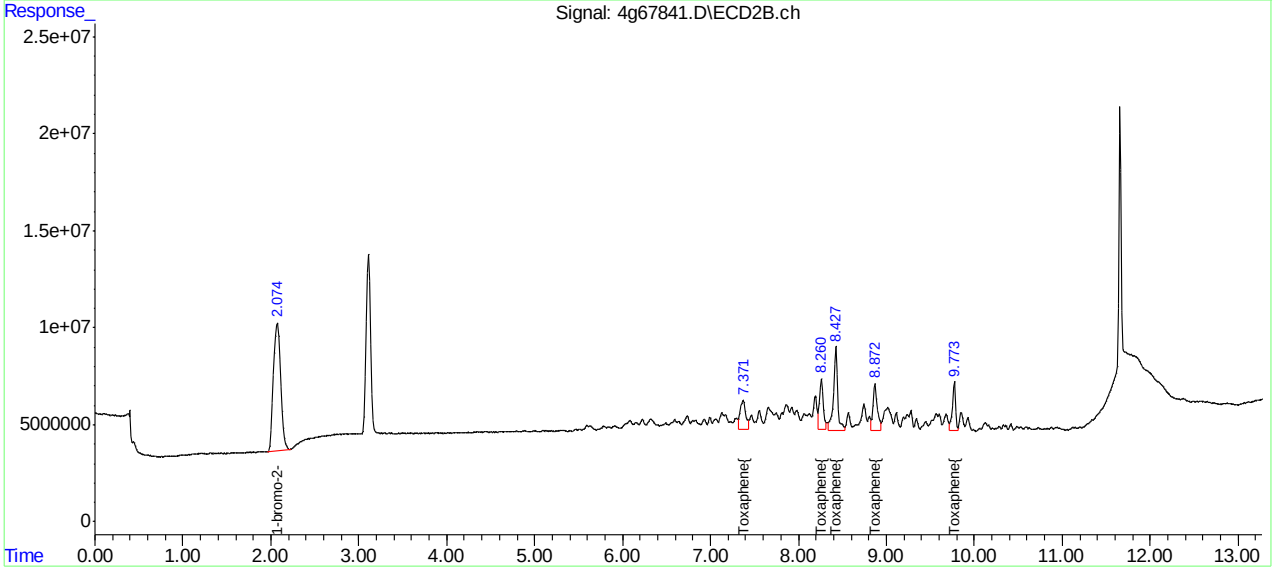
Quantitation Report (QT Reviewed)

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





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.

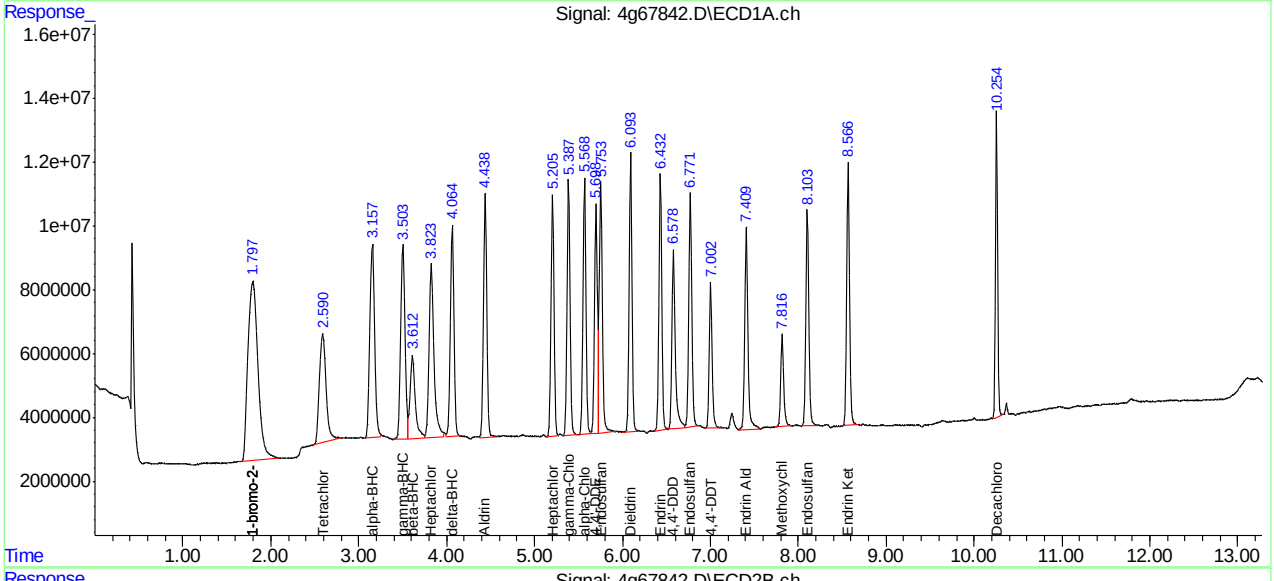
11.6.11
11

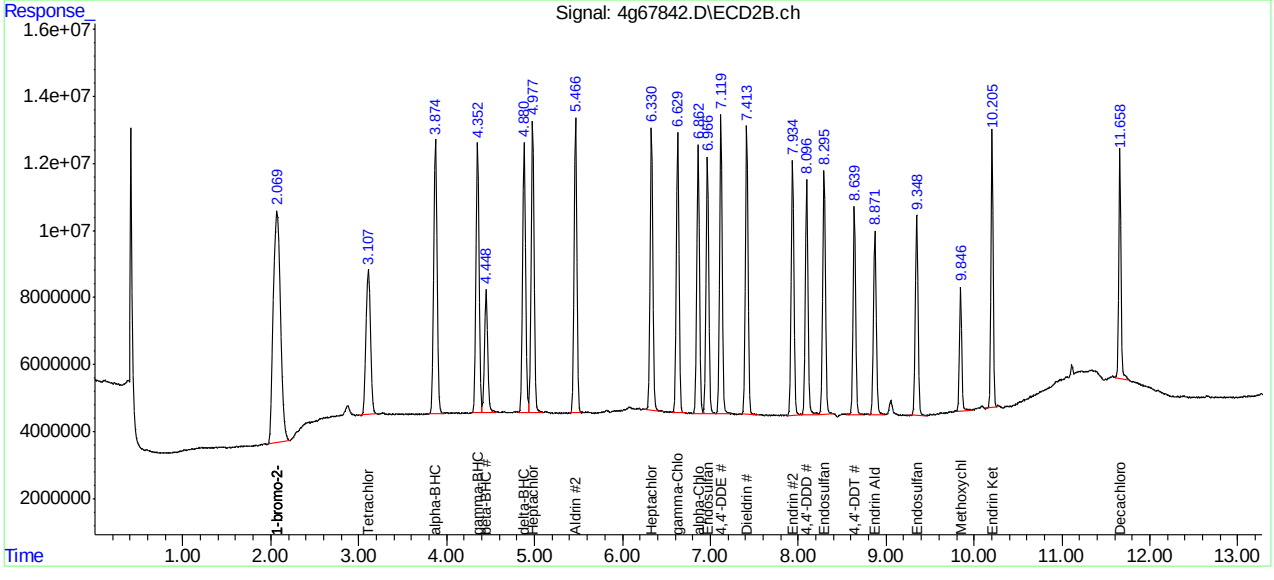
Quantitation Report (QT Reviewed)

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

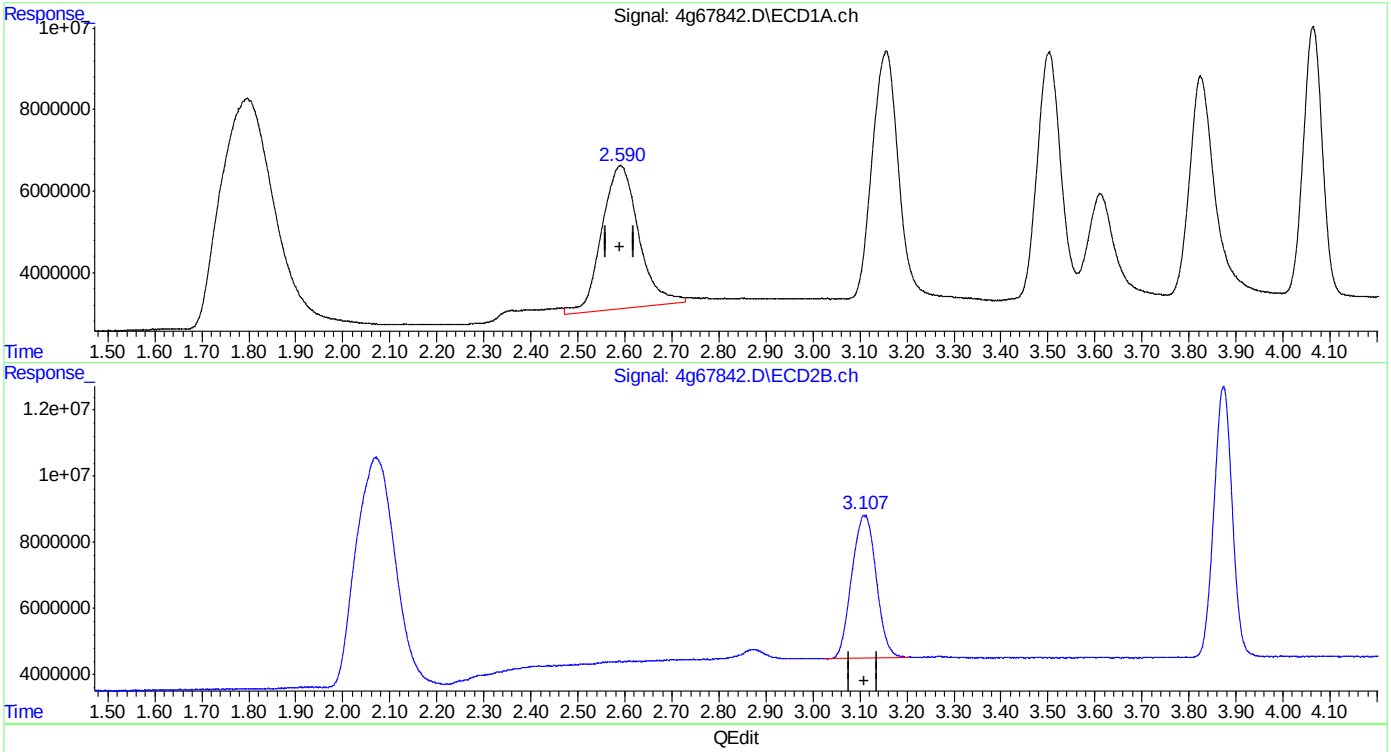
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	2.59	Poor instrument integration
4,4'-DDT	50-29-3	2	8.64	Poor instrument integration
Methoxychlor	72-43-5	2	9.85	Poor instrument integration
Decachlorobiphenyl	2051-24-3	1	10.25	Poor instrument integration
Decachlorobiphenyl	2051-24-3	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

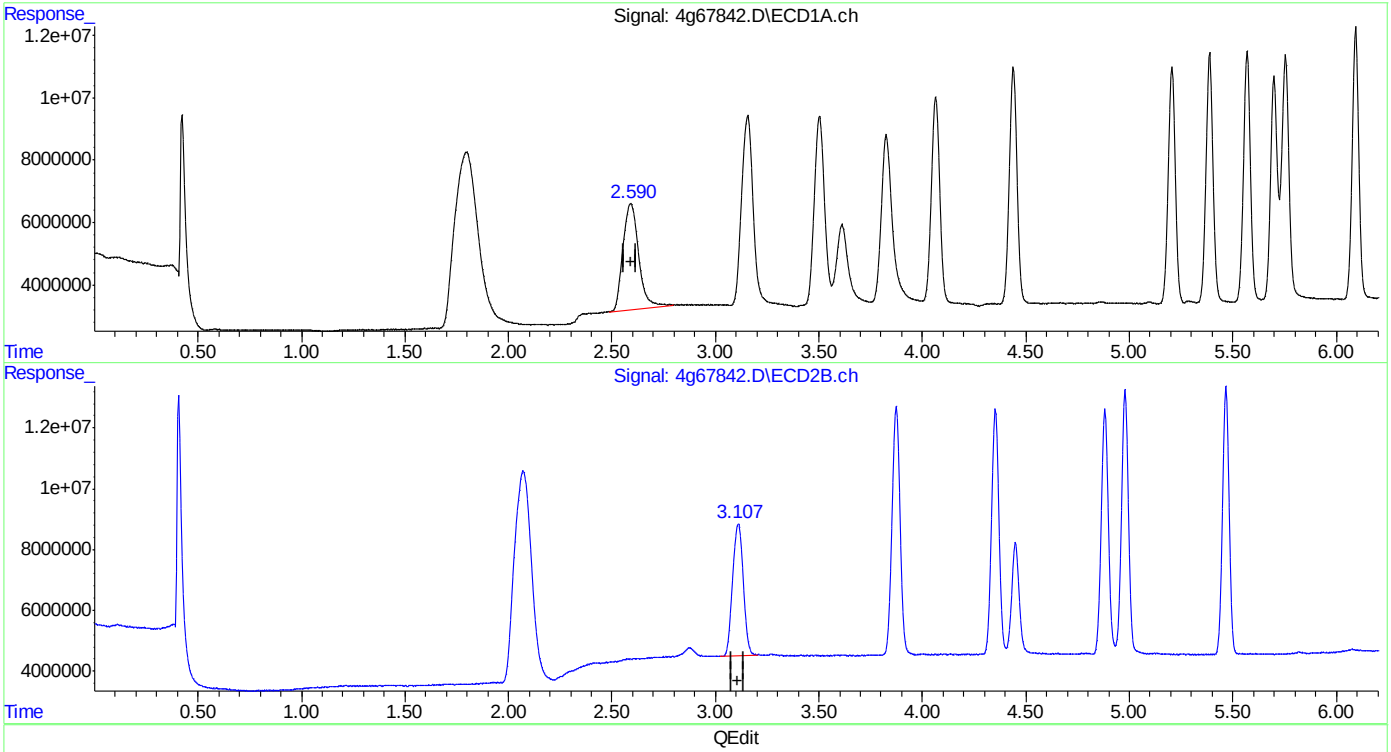
SGS ACCUTEST JC19644

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

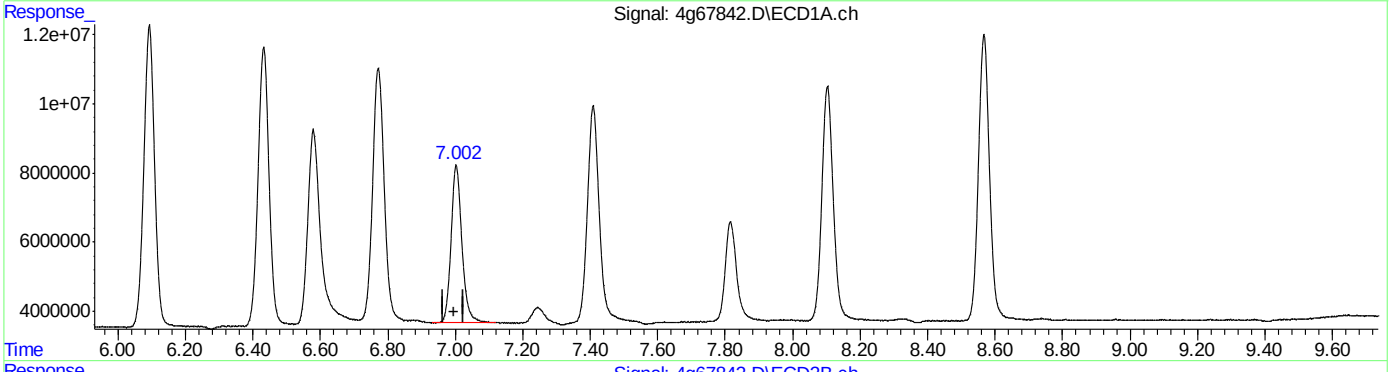
SGS ACCUTEST JC19644

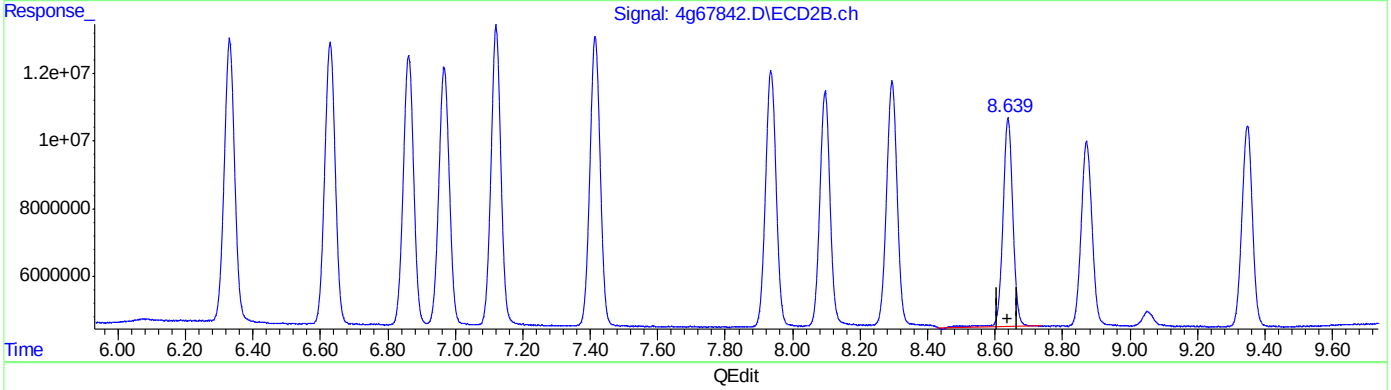
Quantitation Report (Qedit)

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

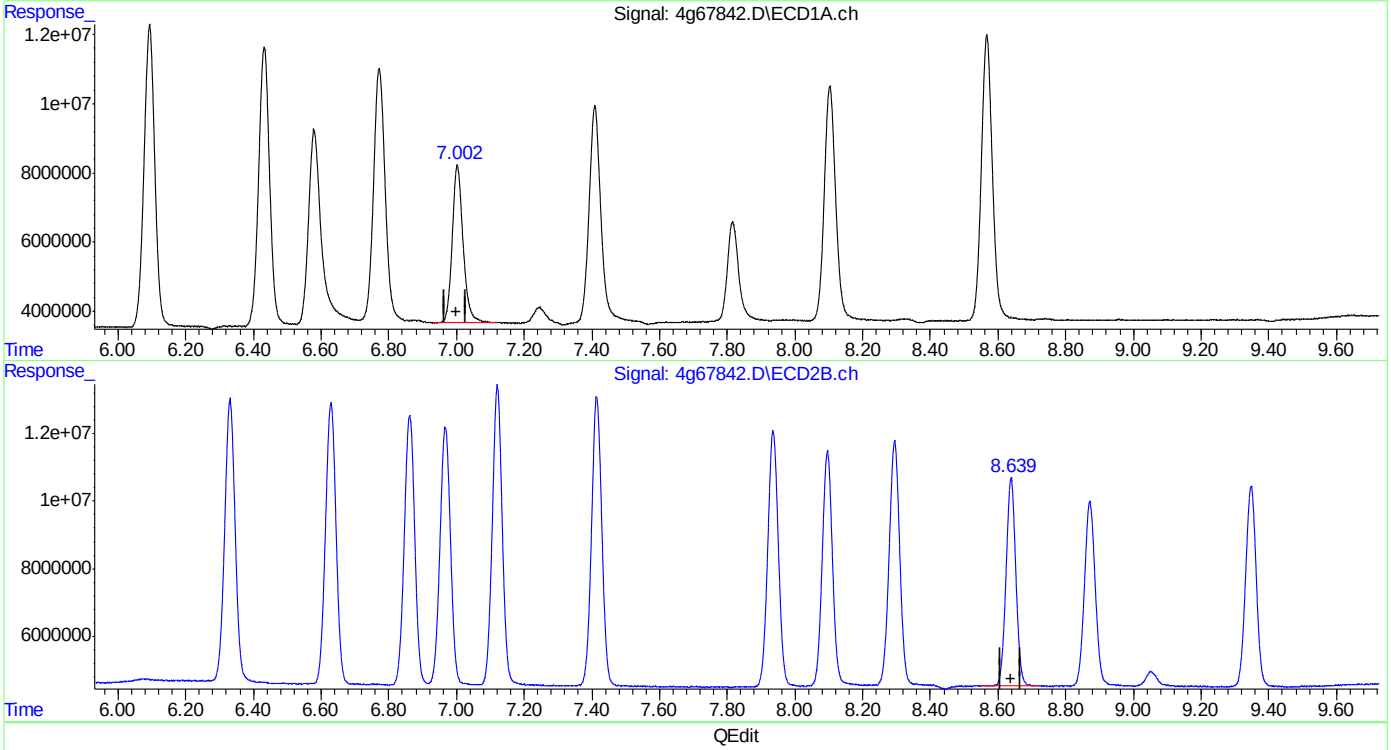
SGS ACCUTEST JC19644

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

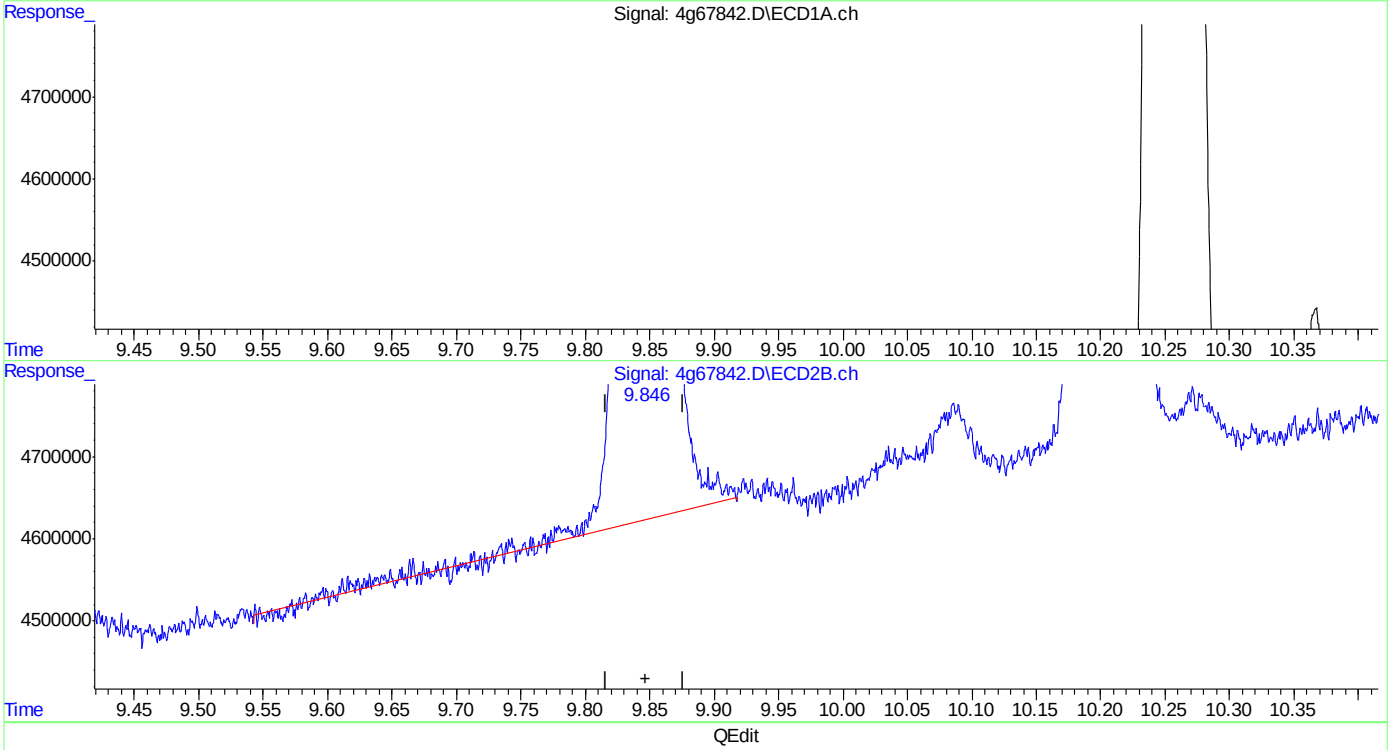
SGS ACCUTEST JC19644

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

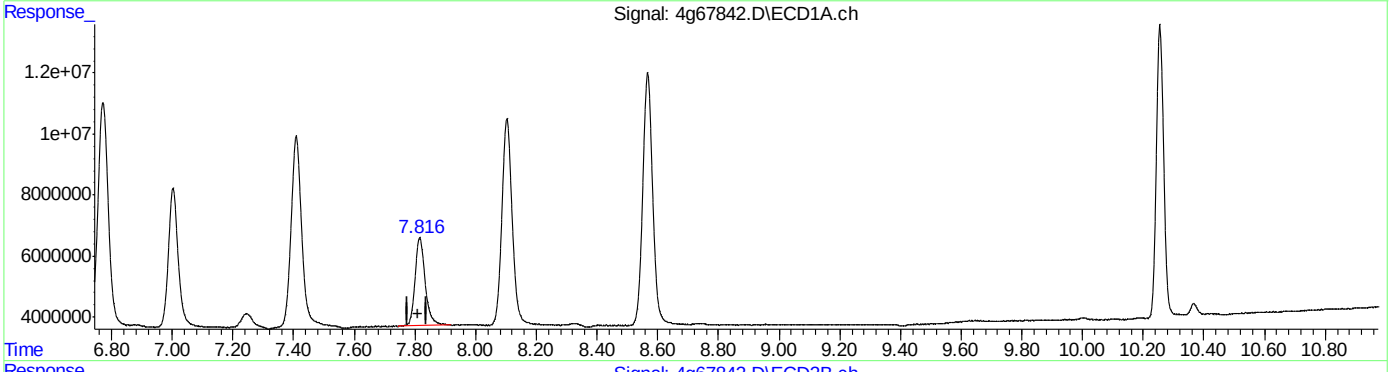
(+) = Expected Retention Time

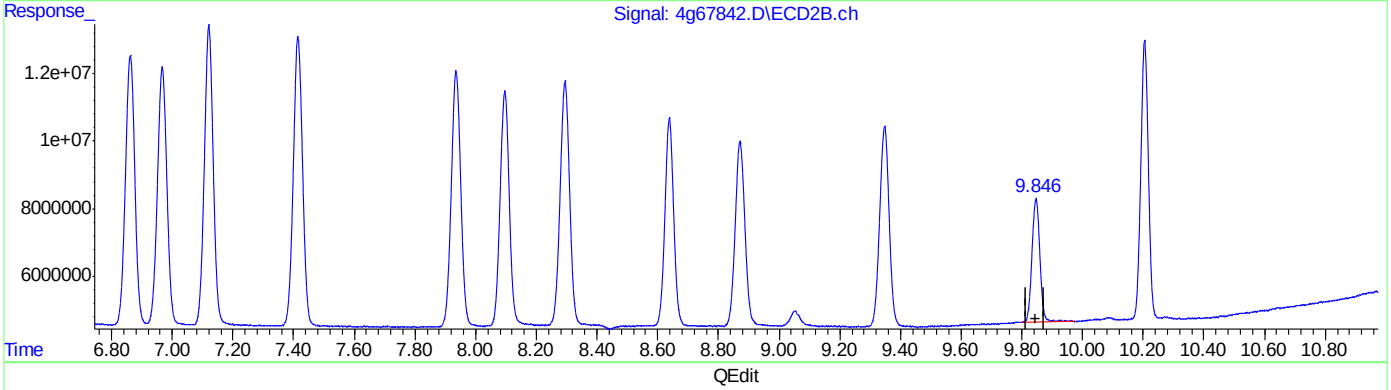
Quantitation Report (Qedit)

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

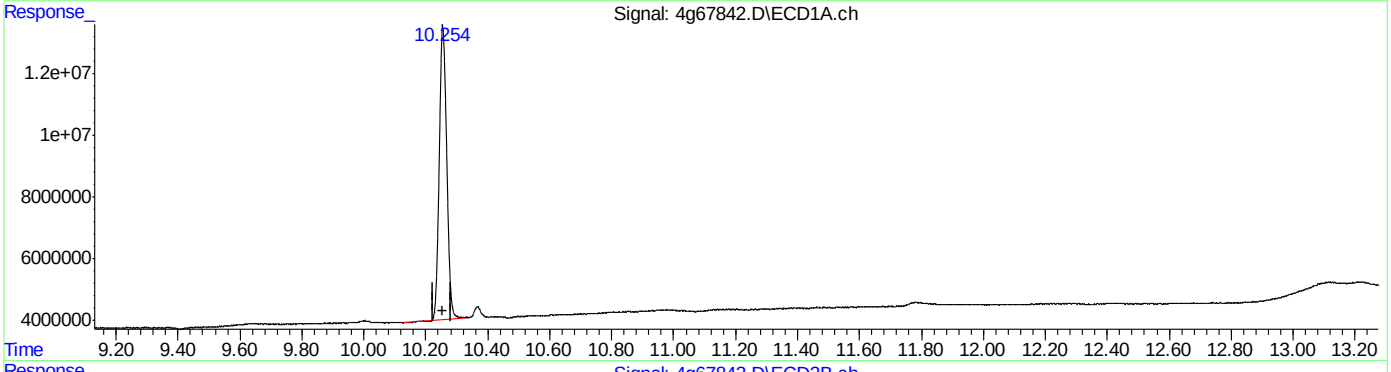
SGS ACCUTEST JC19644

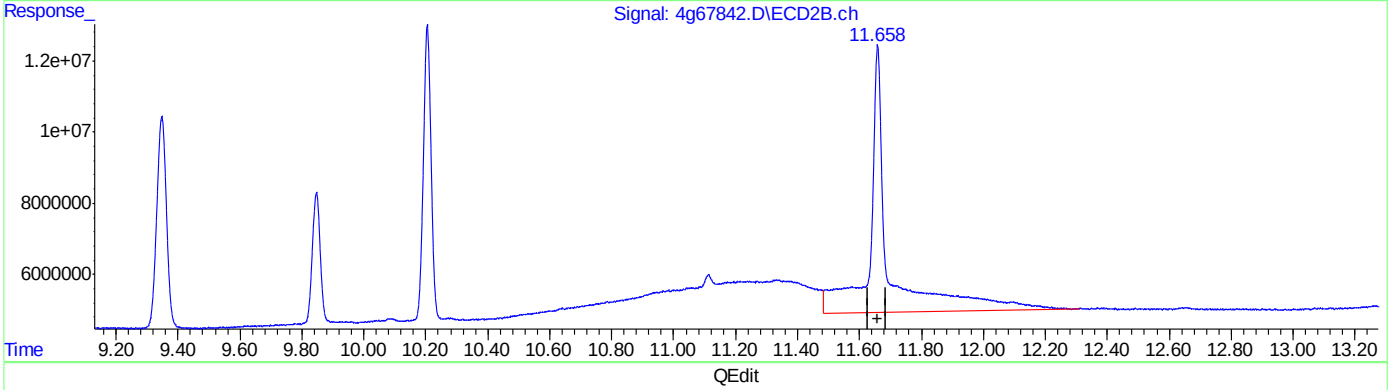
Quantitation Report (Qedit)

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

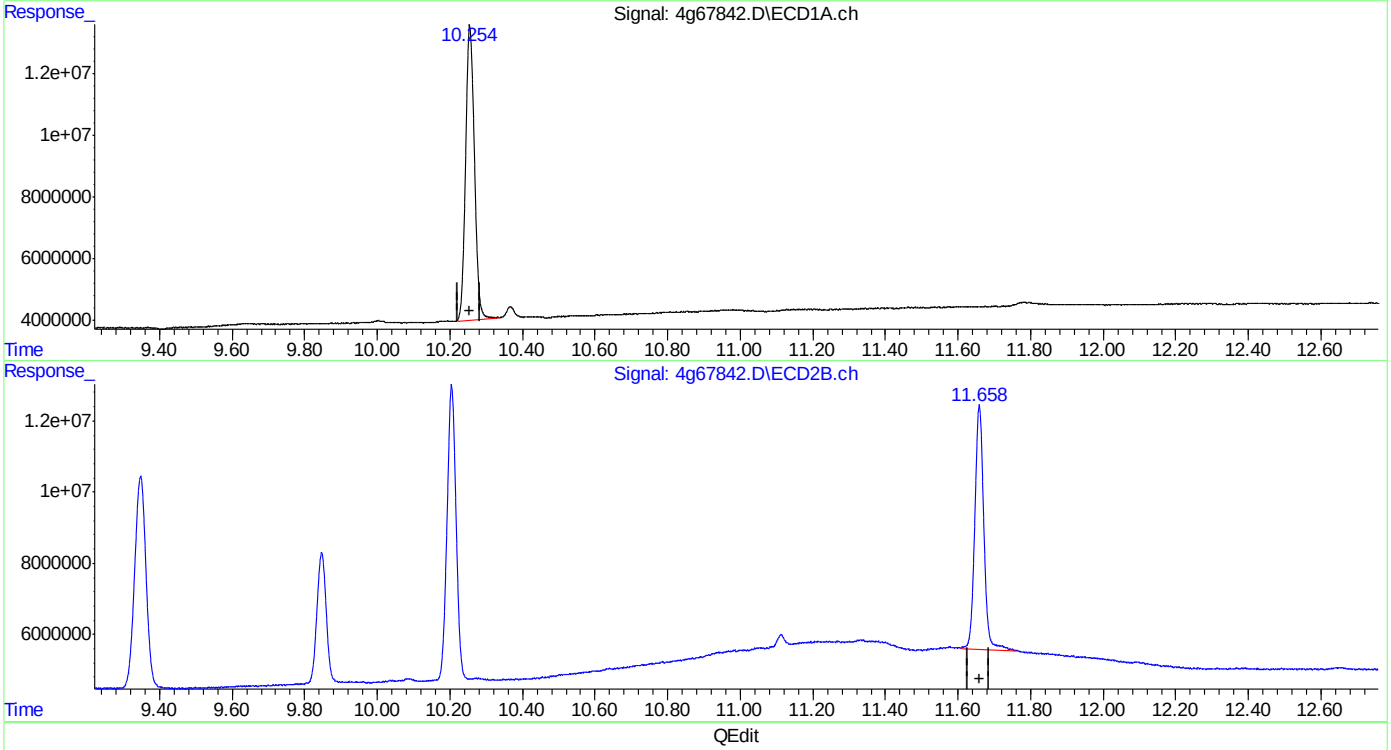
SGS ACCUTEST JC19644

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 JC19644

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						

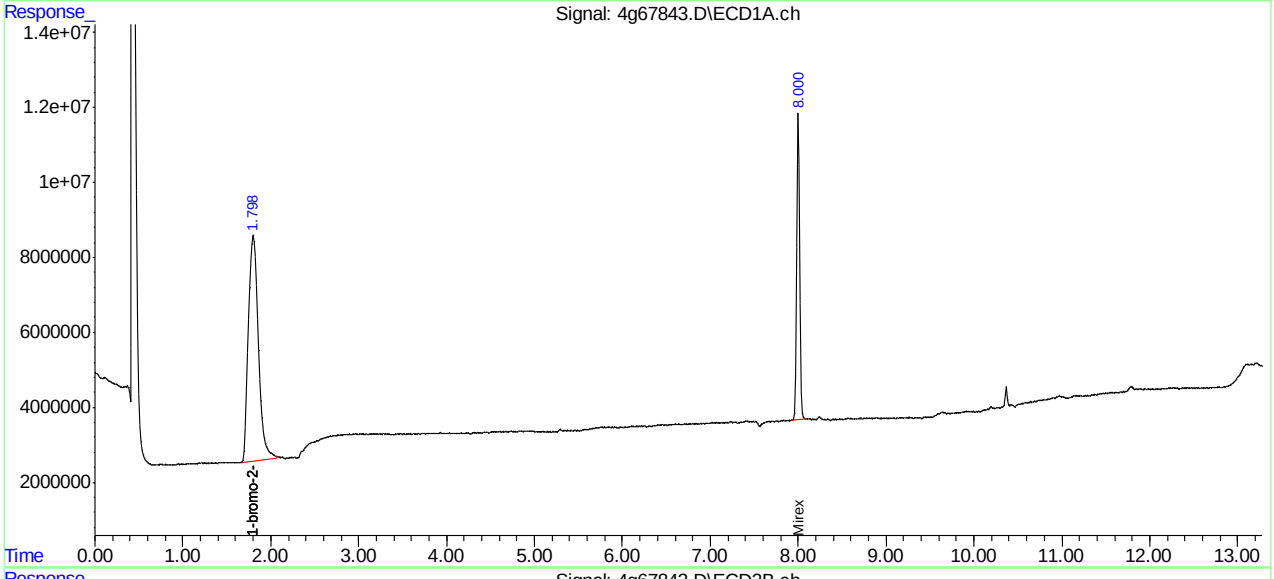
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

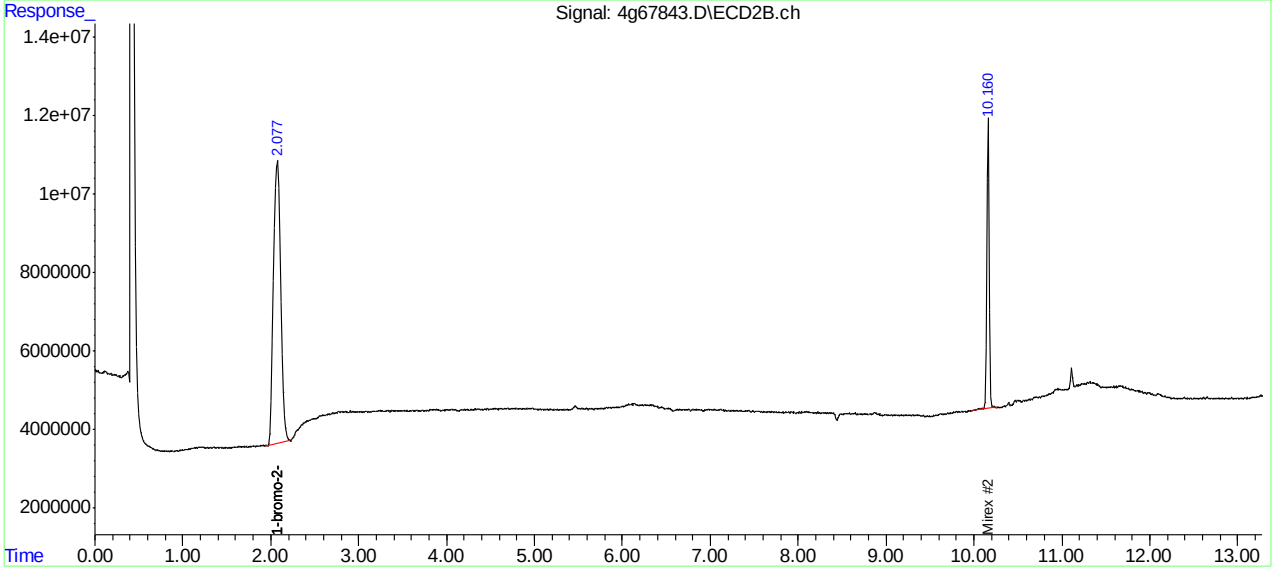
Quantitation Report (QT Reviewed)

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.

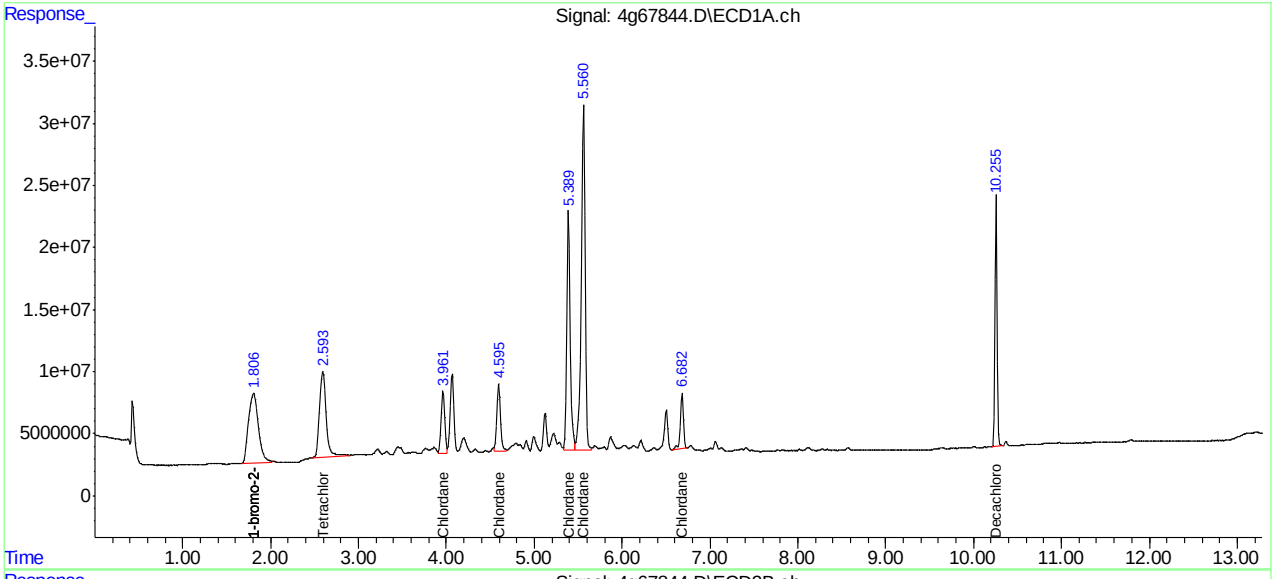
11.6.13 11

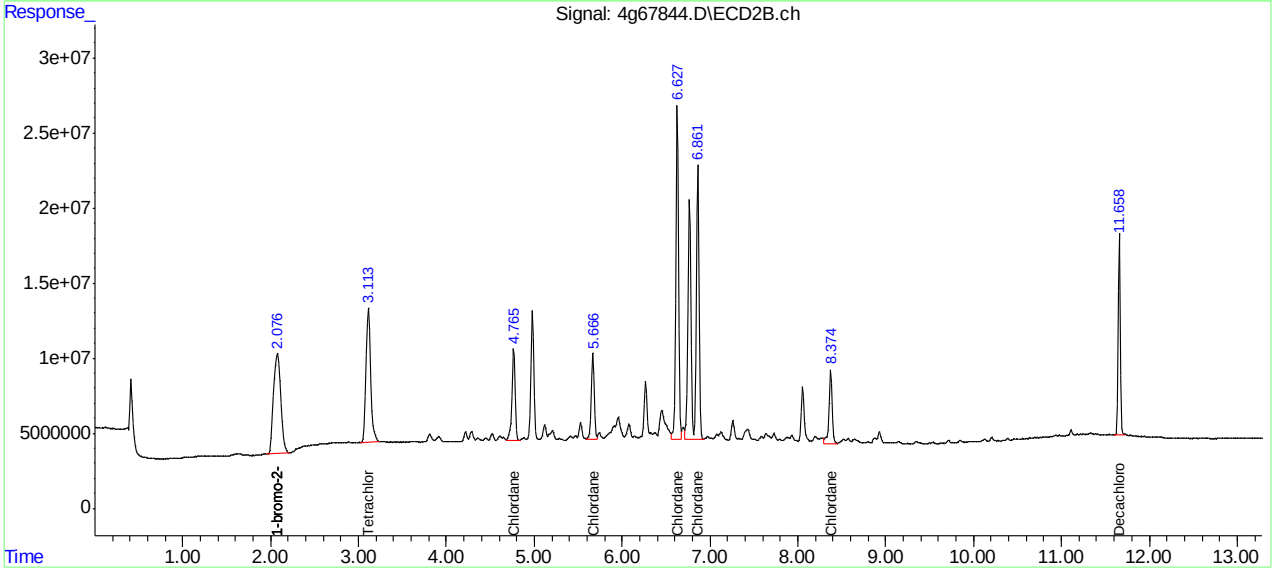
Quantitation Report (QT Reviewed)

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 JC19644

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

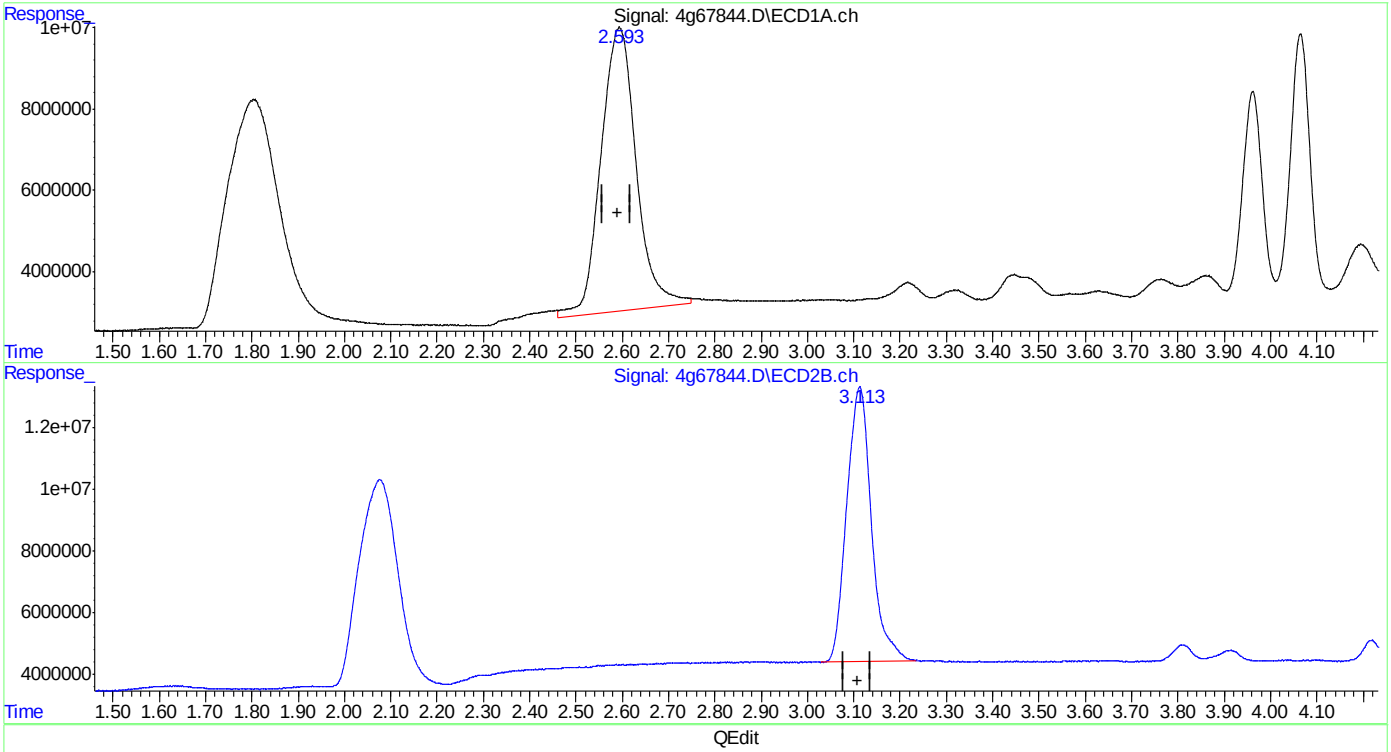
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	2.59	Poor instrument integration
Chlordane-D		2	6.86	Split peak
Chlordane-E		2	8.37	Poor instrument integration
Decachlorobiphenyl	2051-24-3	1	10.26	Poor instrument integration

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



QEdit

(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

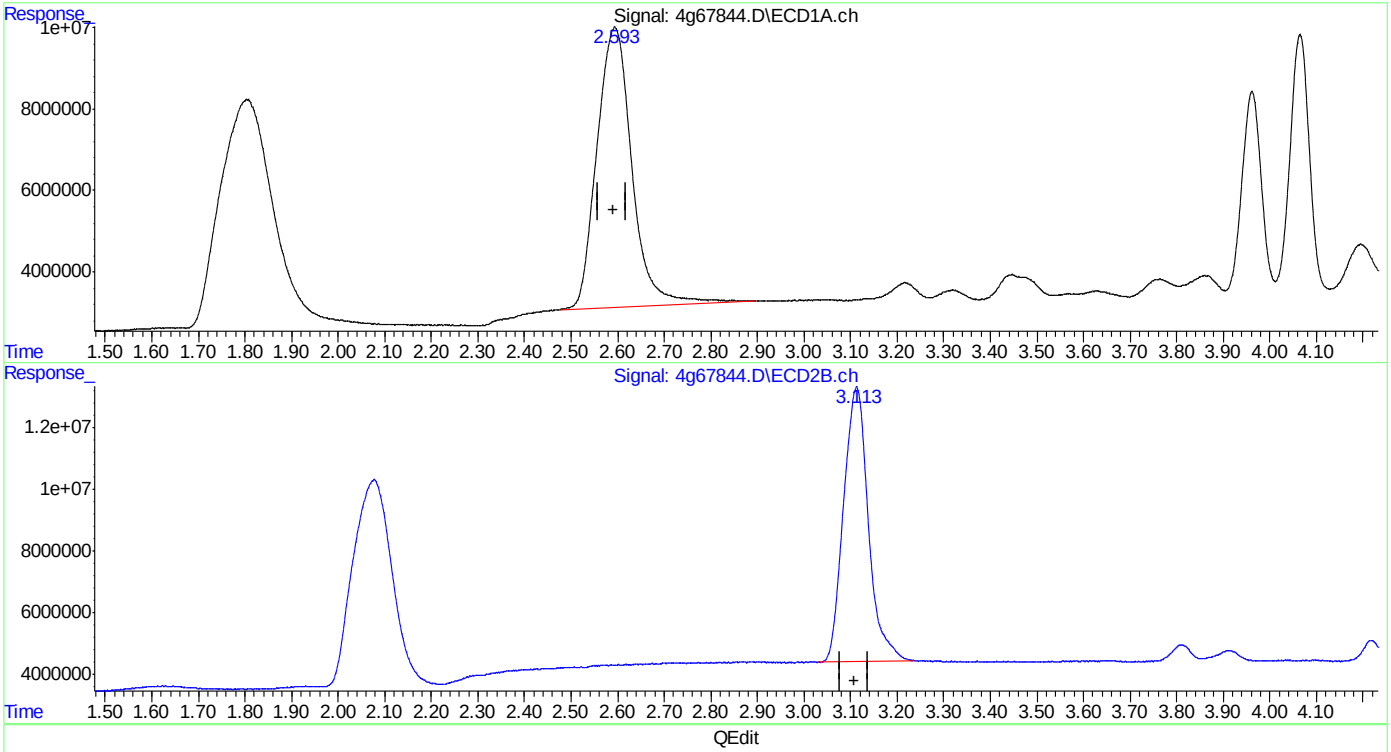
(+) = Expected Retention Time

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)
2.593min 47.476 PPB m
response 359820827

(2) Tetrachloro-m-xylene #2 (SAB)
3.113min 48.809 PPB
response 329519867

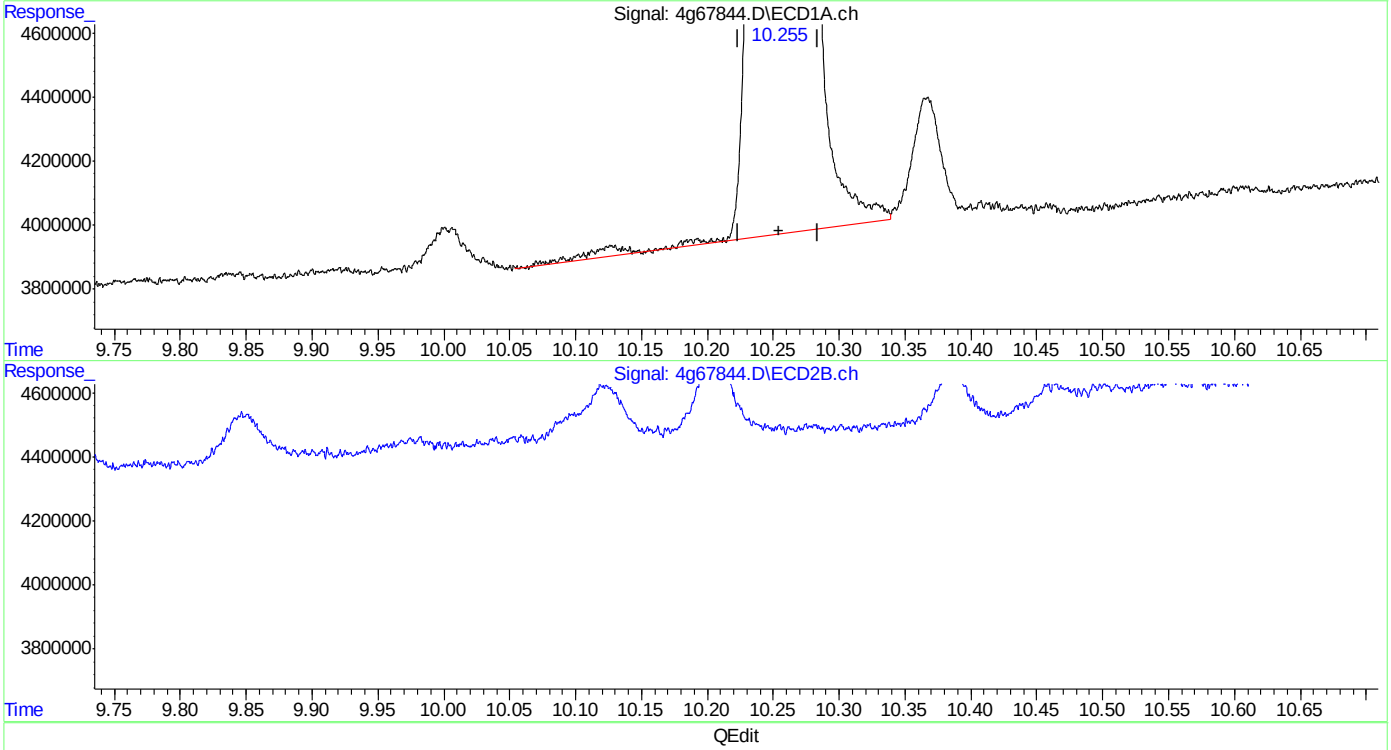
(+) = Expected Retention Time

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

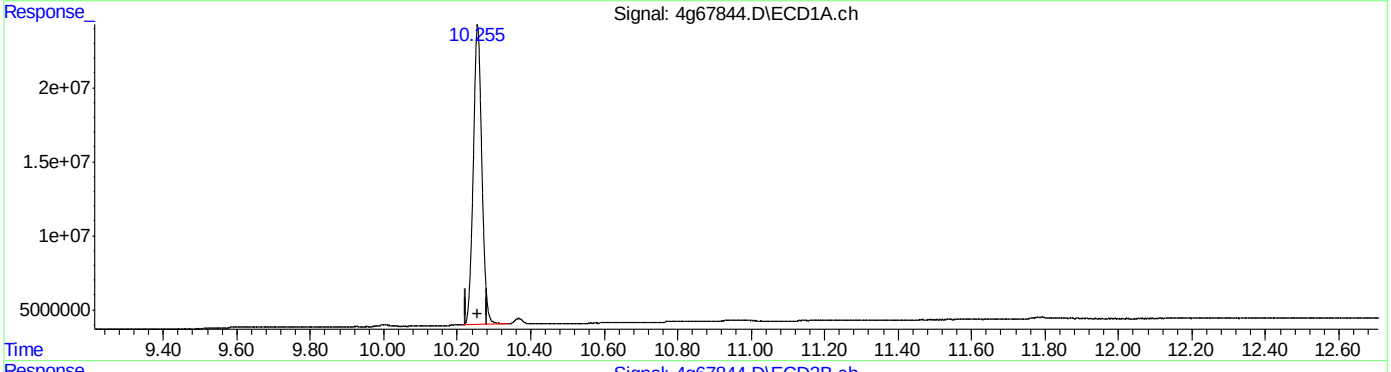
SGS ACCUTEST JC19644

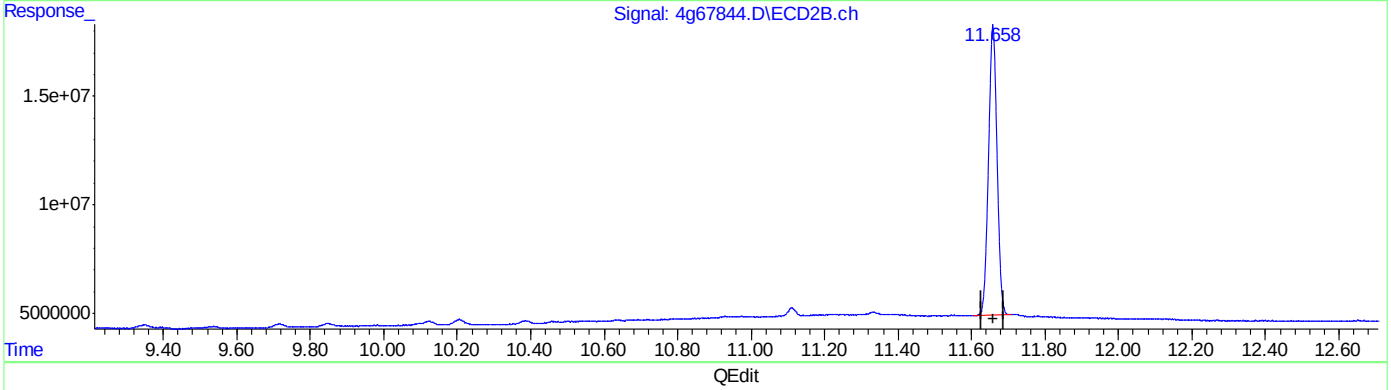
Quantitation Report (Qedit)

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

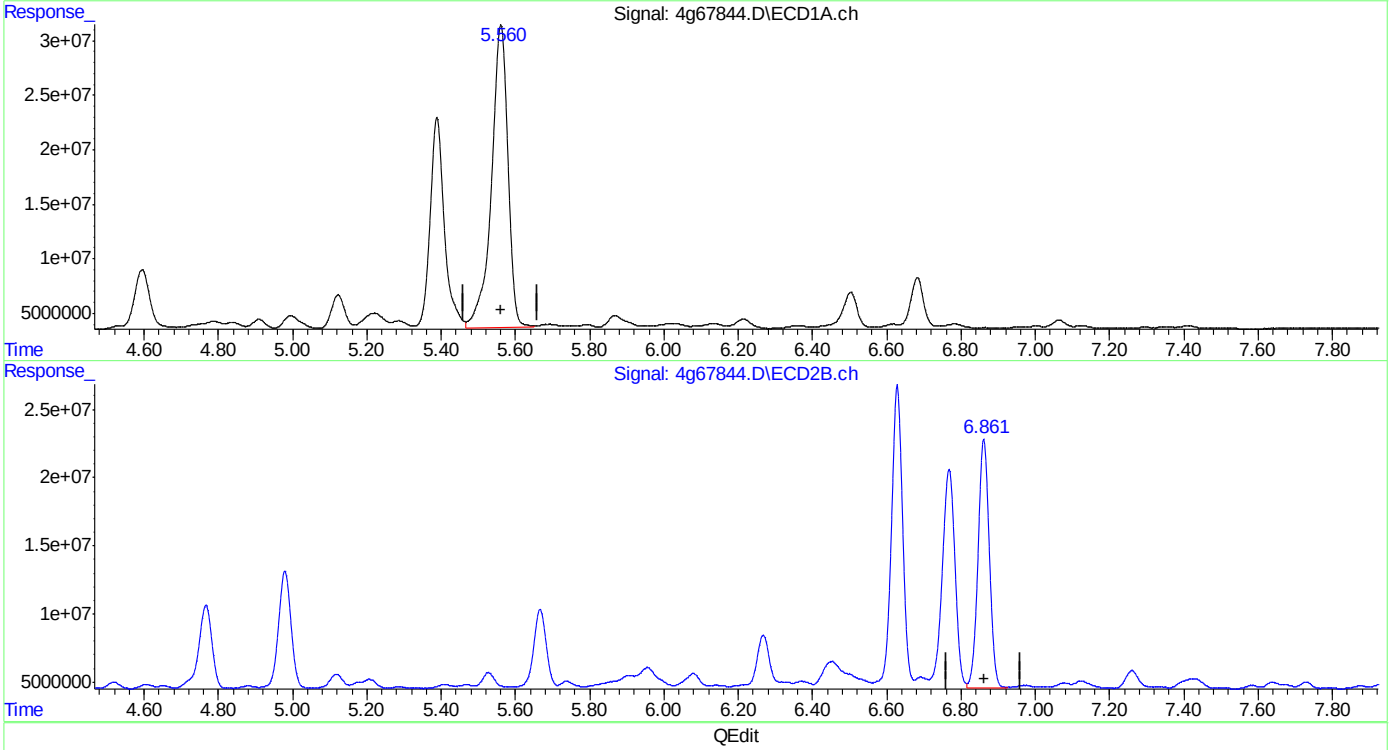
(+) = Expected Retention Time

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 241.391 PPB
response 384618387

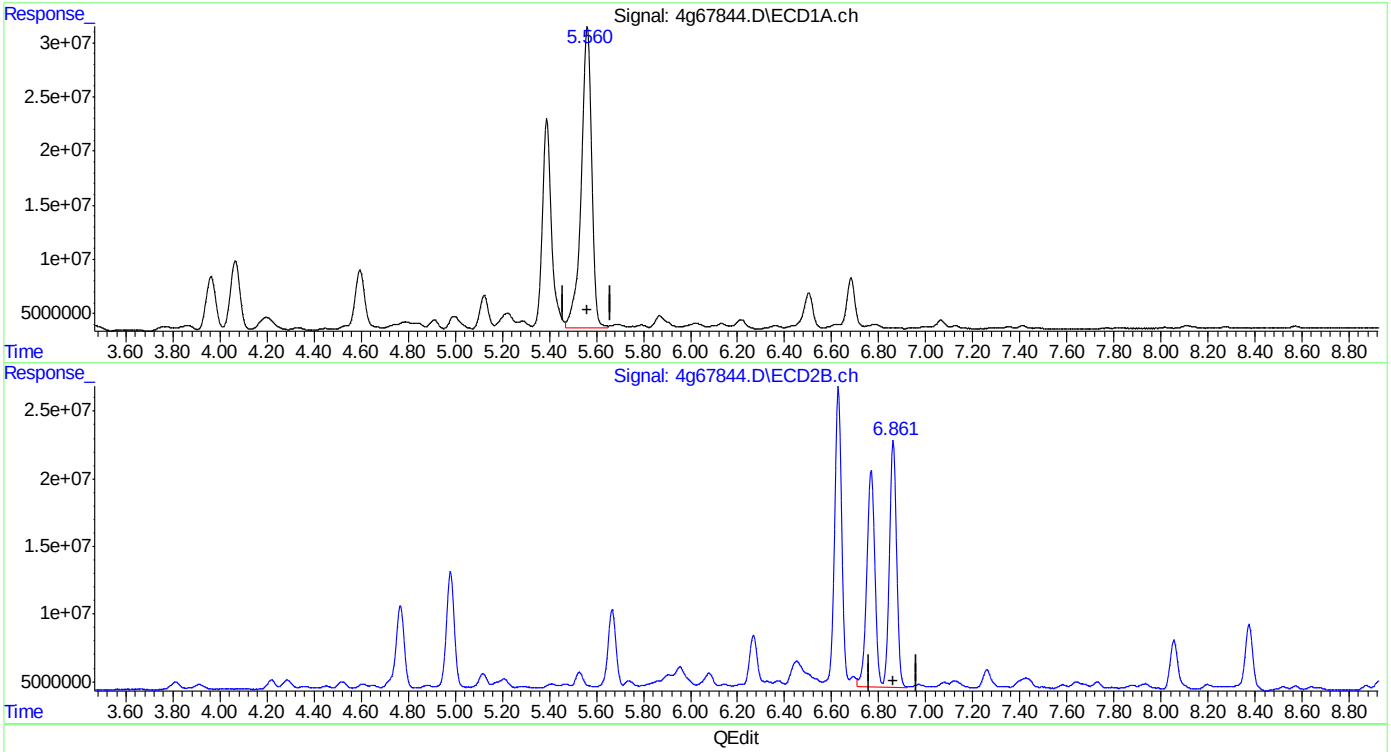
(+) = Expected Retention Time
4PST1778.M Tue May 03 15:48:58 2016 RPT1

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

(35) Chlordane {D}
5.561min 491.023 PPB
response 857819158

(35) Chlordane {D} #2
6.861min 483.494 PPB m
response 770372391

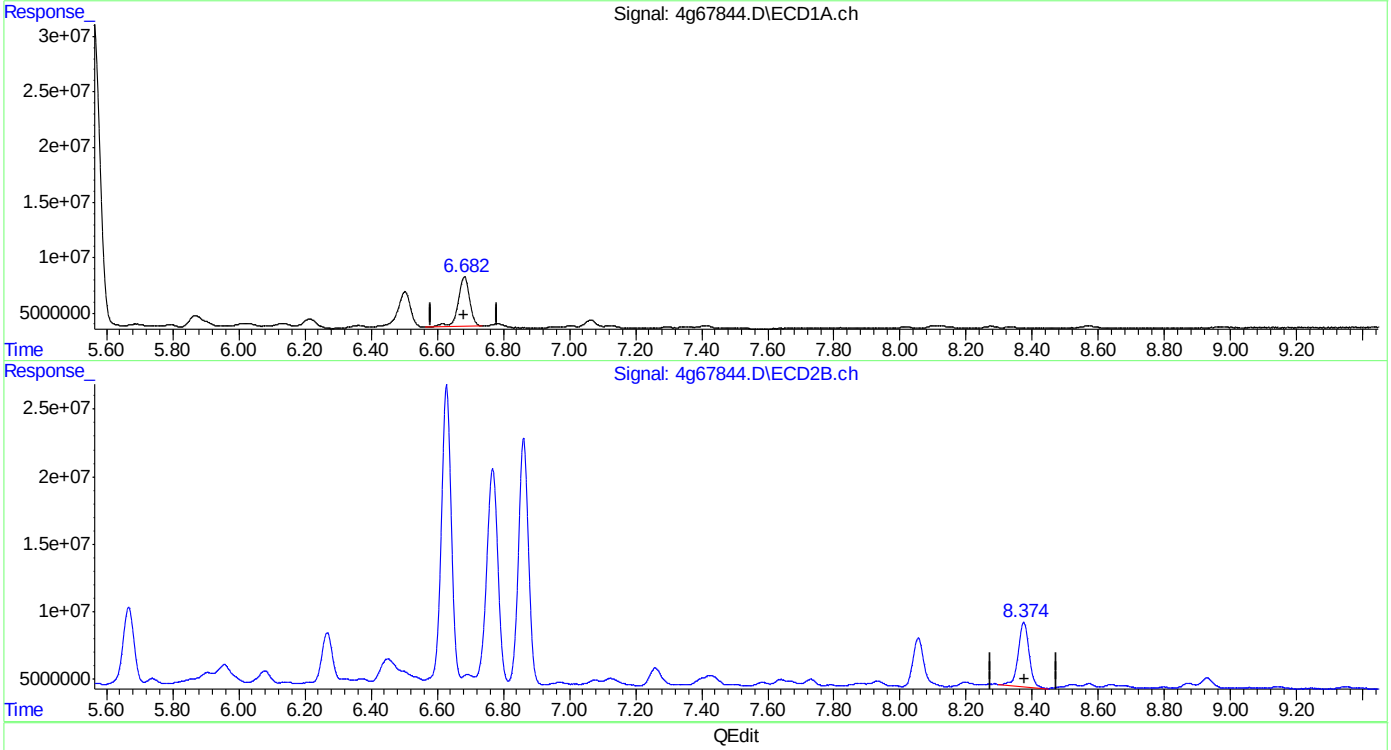
(+) = Expected Retention Time

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

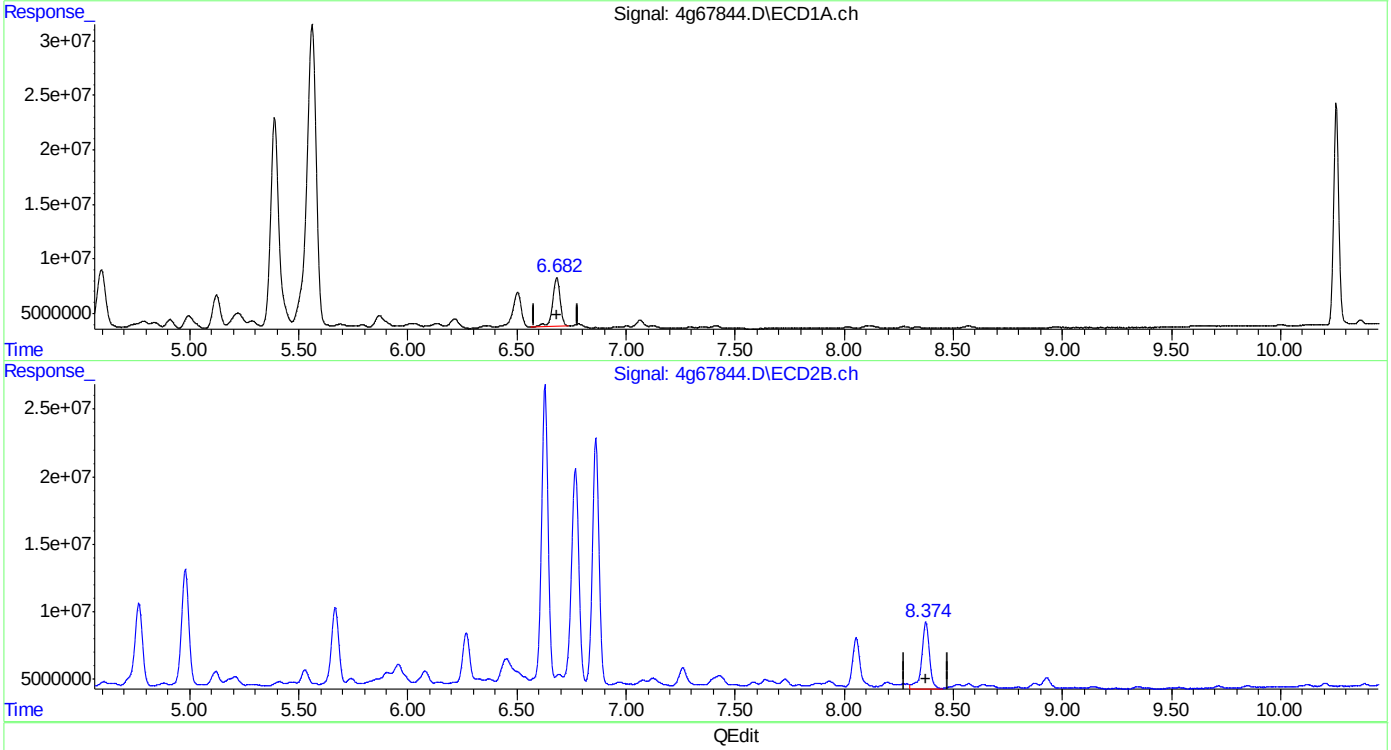
SGS ACCUTEST JC19644

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 JC19644

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.

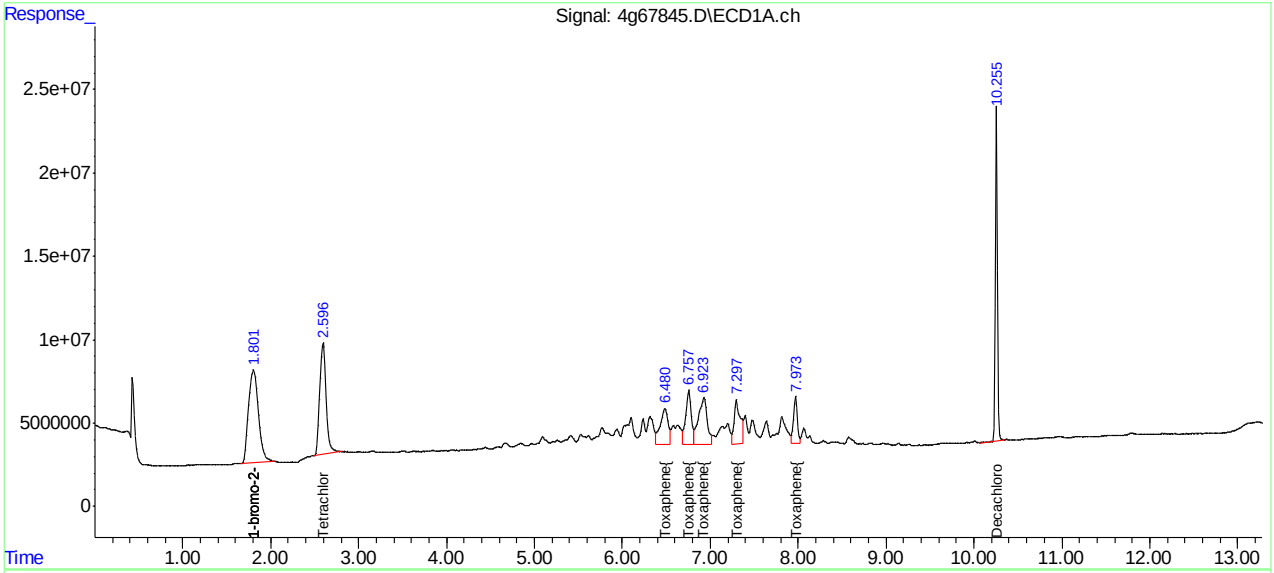
11.6.14 11

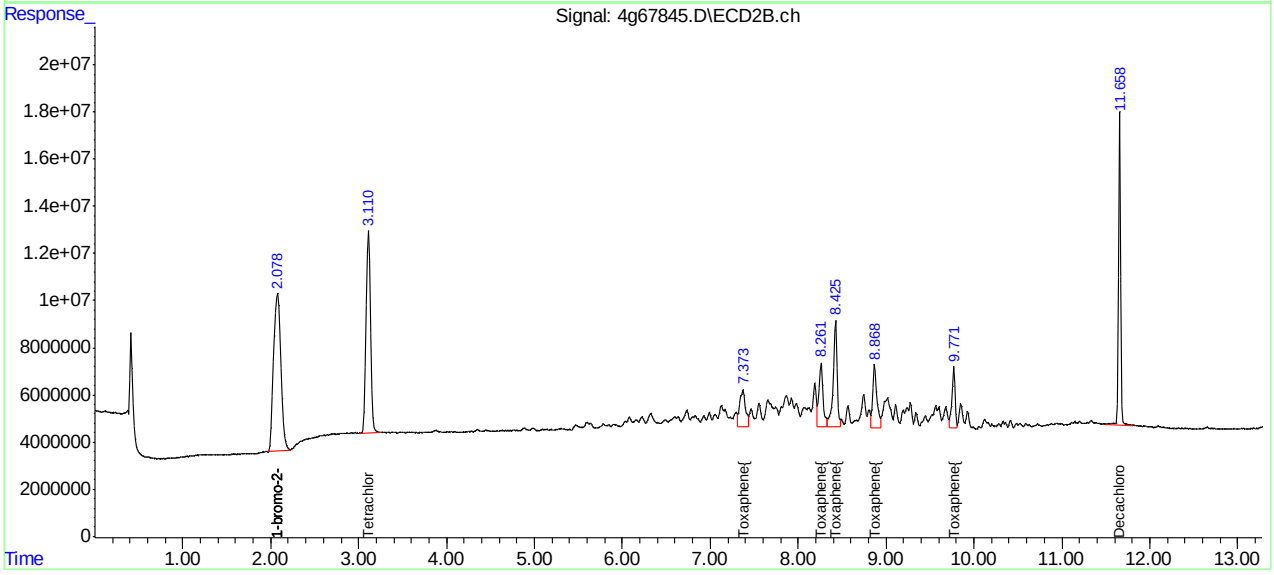
Quantitation Report (QT Reviewed)

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





SGS ACCUTEST JC19644

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

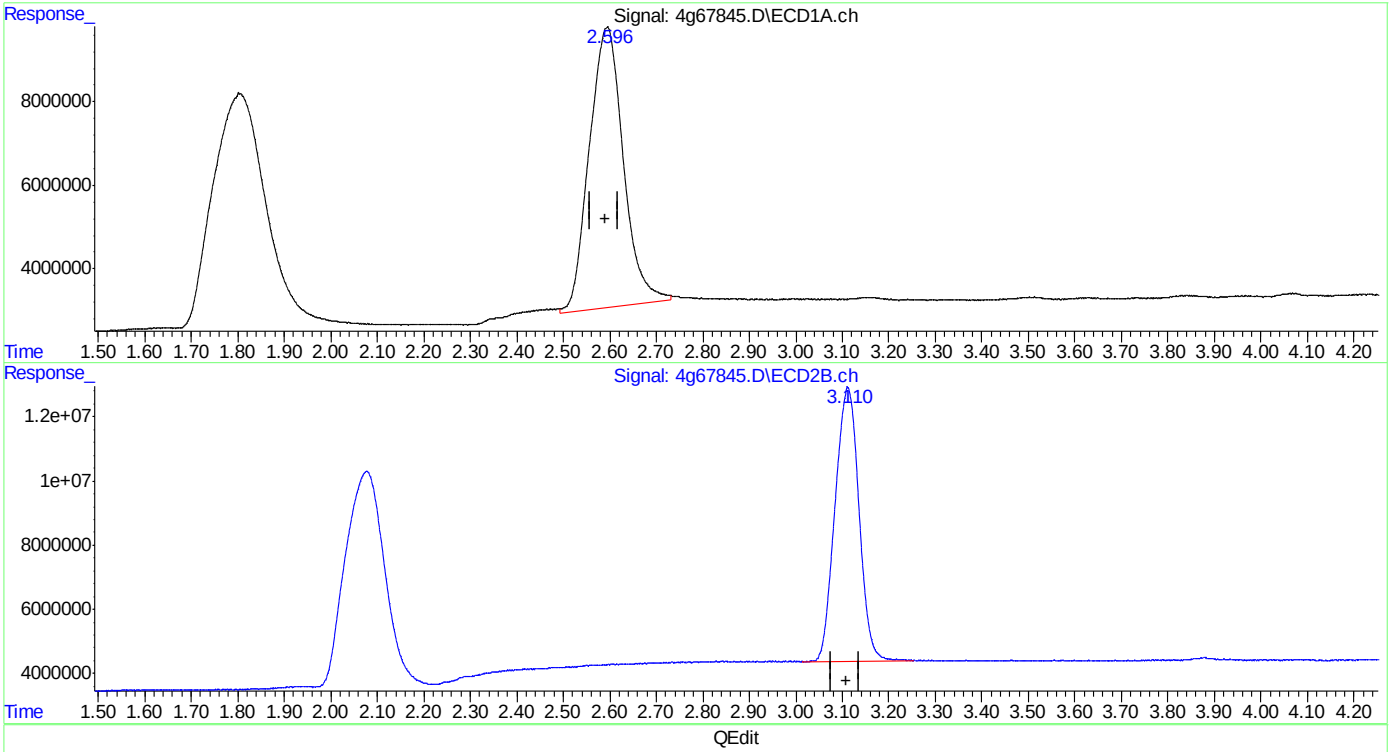
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	2.60	Poor instrument integration
Toxaphene-D		1	7.30	Split peak

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

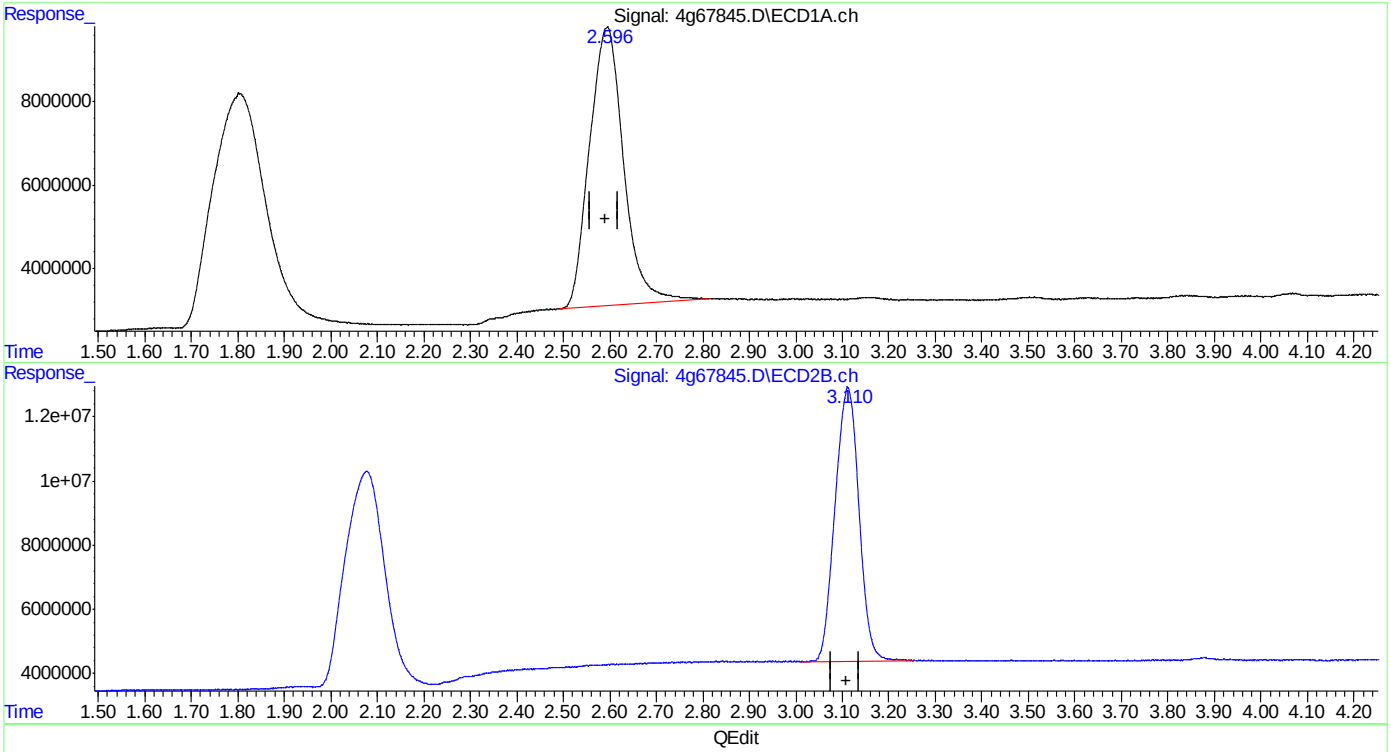
(+) = Expected Retention Time

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
4PST1778.M Tue May 03 15:51:26 2016 RPT1

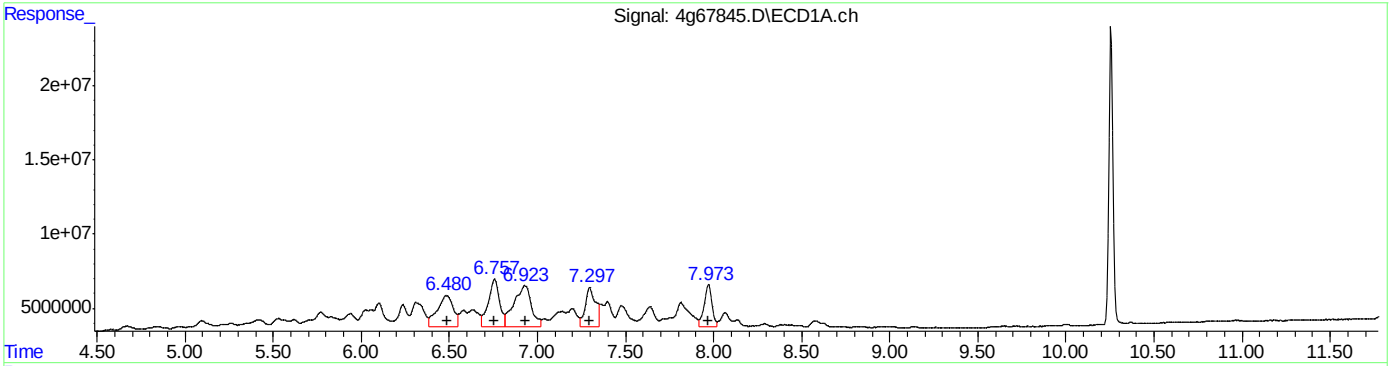
SGS ACCUTEST JC19644

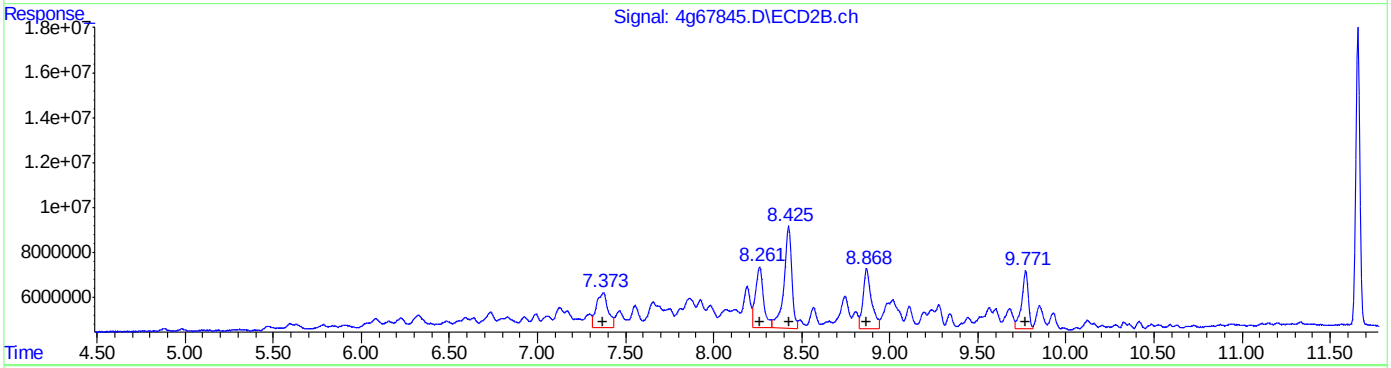
Quantitation Report (Qedit)

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

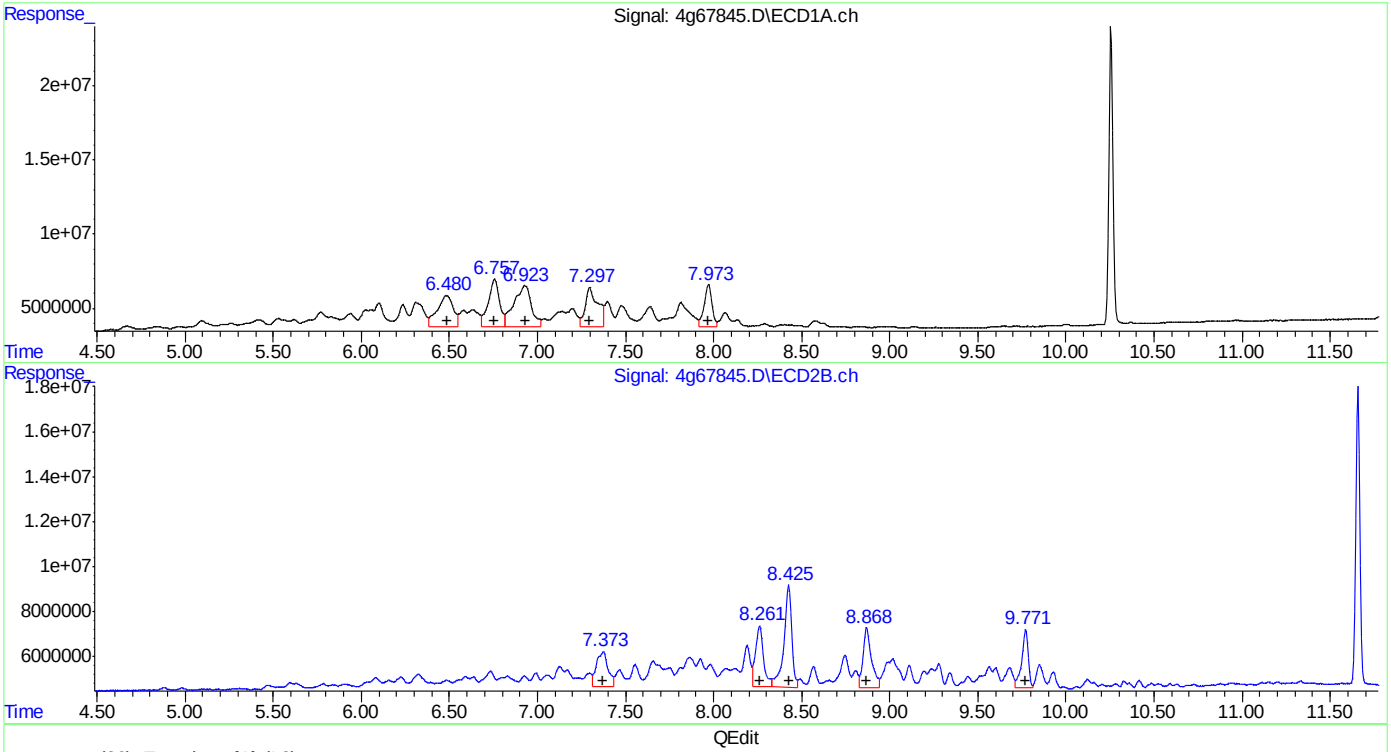
(+) = Expected Retention Time

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



(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 JC19644

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 05/06/16 10:47

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67943.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 7:57 am
Operator : brittanp
Sample : cc1778-25
Misc : op93644,g4g1782,15.5,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 06 08:13:24 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...	1.789	2.069	434.7E6	388.5E6	50.000	50.000
25) I	1-bromo-2...	1.789	2.069	434.7E6	388.5E6	50.000	50.000
31) I	1-bromo-2...	1.789	2.069	434.7E6	388.5E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.577	3.106	187.1E6	171.4E6	24.962m	25.057
Spiked Amount		40.000 Range	30 - 150	Recovery	=	62.41%	62.64%
24) SA	Decachlor...	10.242	11.644	195.4E6	121.6E6	27.659	25.049
Spiked Amount		40.000		Recovery	=	69.15%	62.62%
	Target Compounds						
3) A	alpha-BHC	3.148	3.865	254.9E6	239.4E6	24.854	23.936
4) MA	gamma-BHC	3.493	4.344	220.3E6	214.6E6	24.563	24.143
5) MA	Heptachlor	3.810	4.970	222.0E6	228.3E6	26.373	24.932
6) B	beta-BHC	3.596	4.438	115.3E6	96121276	26.834	23.878
7) B	delta-BHC	4.056	4.869	221.4E6	210.6E6	27.100	25.382
8) MB	Aldrin	4.431	5.455	211.3E6	214.1E6	24.604	23.734
9) B	Heptachlo...	5.193	6.316	183.9E6	193.1E6	23.953	23.700
10) B	gamma-Chl...	5.376	6.615	184.3E6	192.4E6	24.021	24.431
11) B	alpha-Chl...	5.557	6.847	193.7E6	187.7E6	23.411	23.742
12) A	Endosulfan I	5.742	6.952	208.4E6	181.8E6	24.492	24.075
13) B	4,4'-DDE	5.684	7.104f	171.6E6	192.8E6	22.373	24.451
14) MA	Dieldrin	6.079	7.399f	200.3E6	194.7E6	24.826	24.728
15) MA	Endrin	6.416	7.919f	187.8E6	176.3E6	24.449	25.120
16) A	4,4'-DDD	6.560	8.079f	142.9E6	152.6E6	21.983	23.945
17) B	Endosulfa...	6.755	8.277f	184.1E6	169.8E6	24.910	24.475
18) MA	4,4'-DDT	6.987	8.622f	135.5E6	151.7E6	28.149	27.228m
19) B	Endrin Al...	7.389f	8.854f	155.6E6	129.5E6	24.933	24.574
20) B	Endosulfa...	8.084f	9.329f	179.3E6	149.2E6	26.466	25.689
21) A	Methoxychlor	7.797	9.832	85318930	80493724	29.460	26.594
22)	Mirex	7.982f	10.147	172.5E6	121.7E6	25.538	24.999
23) B	Endrin Ke...	8.547f	10.191	209.6E6	166.3E6	26.758	26.083

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

11.6.15 11

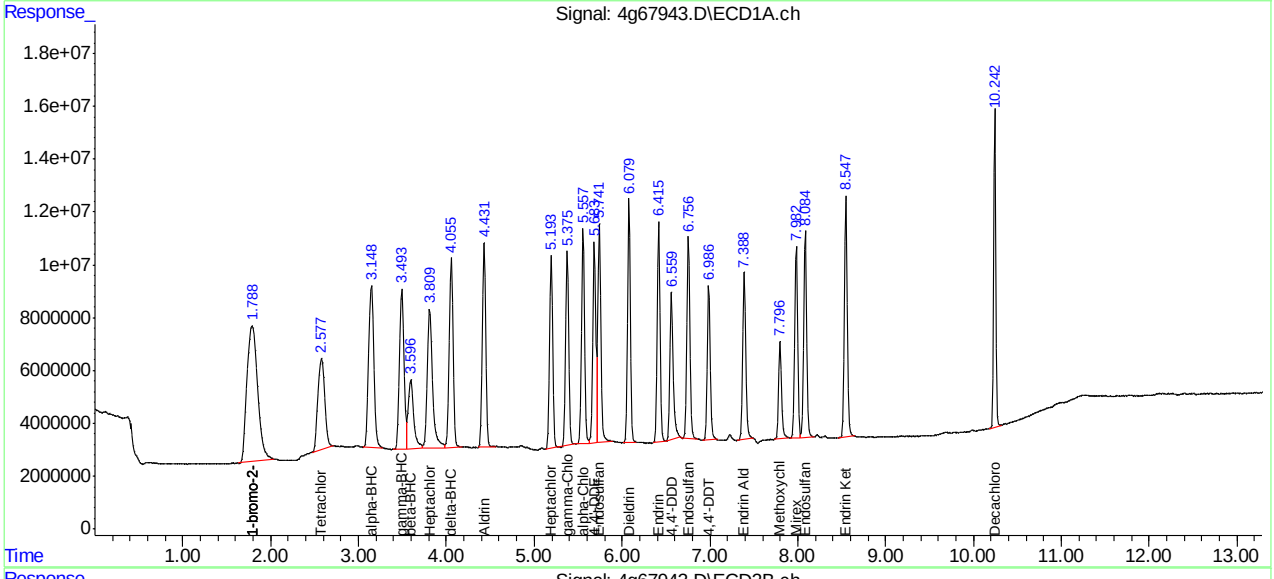
SGS ACCUTEST JC19644

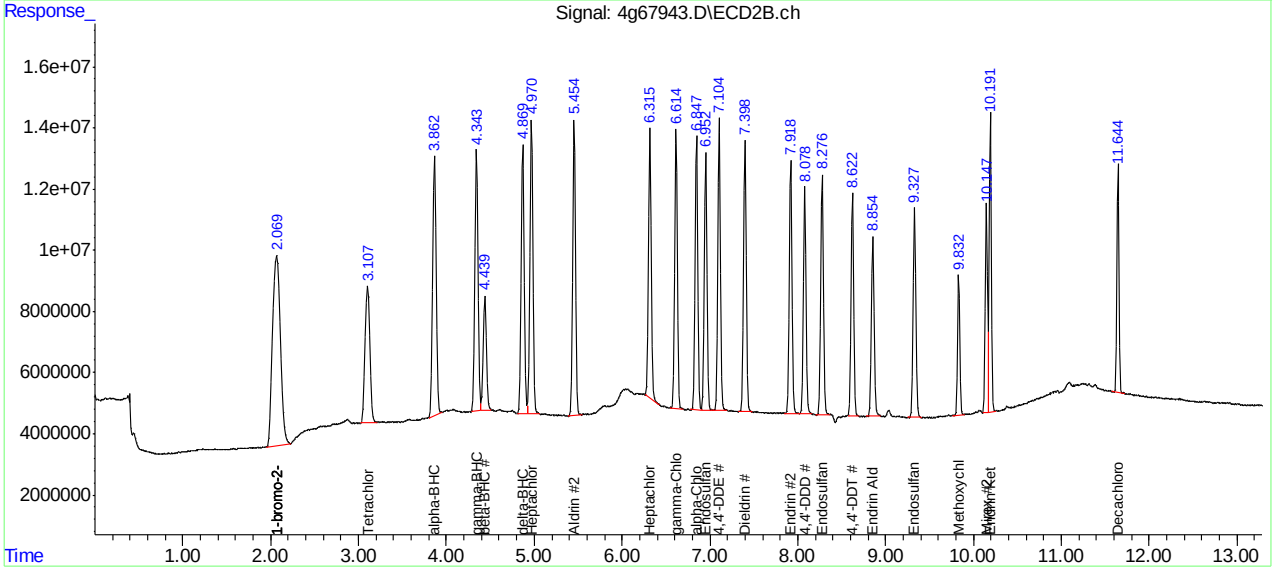
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67943.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 7:57 am
Operator : brittanp
Sample : cc1778-25
Misc : op93644,g4g1782,15.5,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 06 08:13:24 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 JC19644

Manual Integration Approval Summary

Sample Number:	G4G1782-CC1778	**Method:**	SW846 8081B
Lab FileID:	4G67943.D	**Analyst approved:**	05/06/16 09:43 Brittany Piercy
Injection Time:	05/06/16 07:57	**Supervisor approved:**	05/06/16 10:47 Gwendolyn Burns

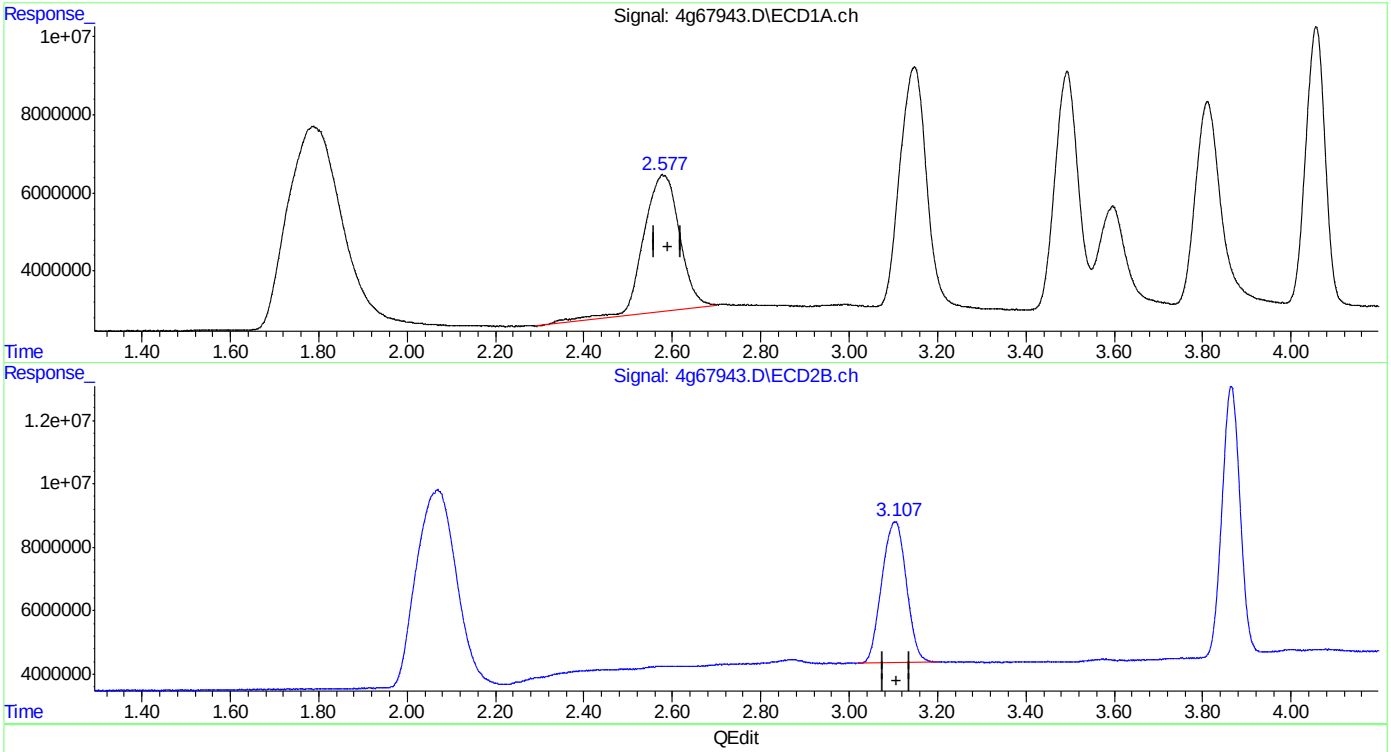
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	2.58	Poor instrument integration
4,4'-DDT	50-29-3	2	8.62	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67943.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 7:57 am
Operator : brittanp
Sample : cc1778-25
Misc : op93644,g4g1782,15.5,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 06 08:10:44 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)
2.576min 26.587 PPB
response 199282481

(2) Tetrachloro-m-xylene #2 (SAB)
3.106min 25.057 PPB
response 171444730

(+) = Expected Retention Time

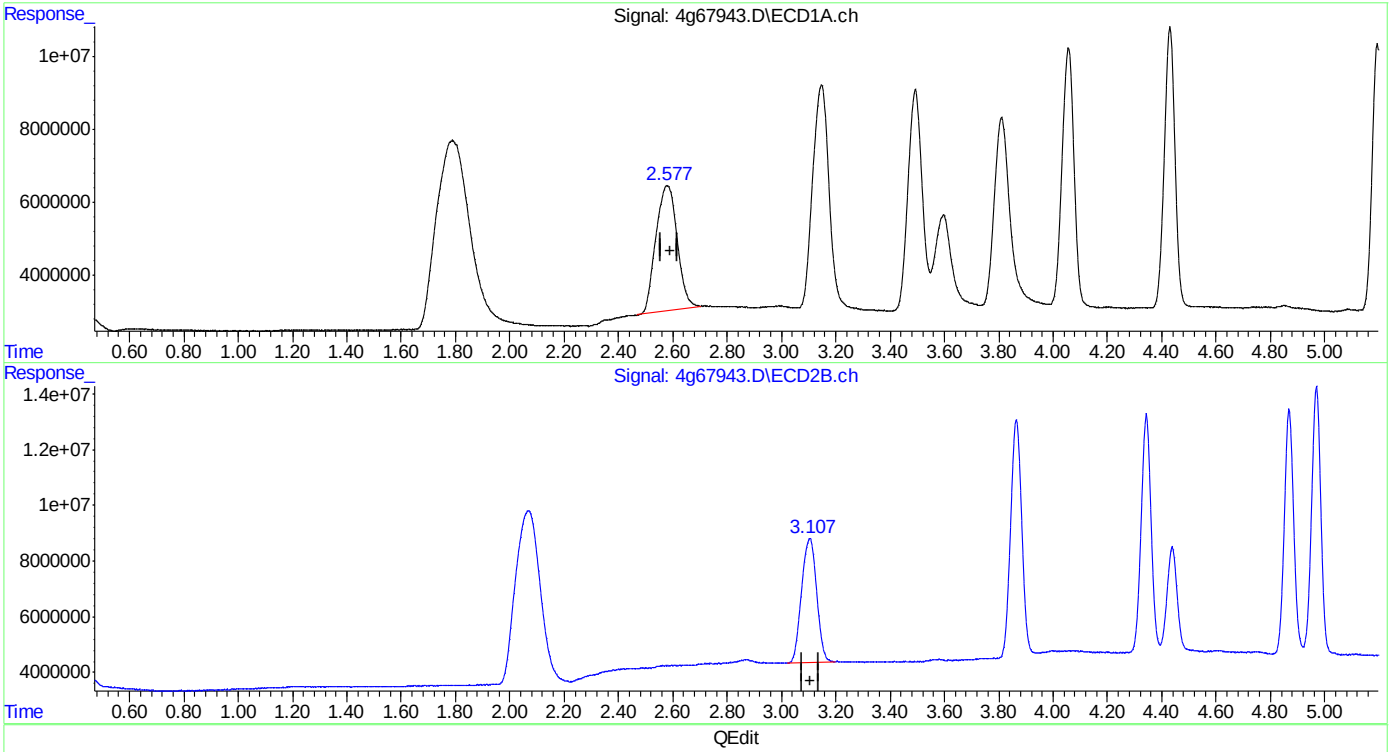
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67943.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 7:57 am
Operator : brittanp
Sample : cc1778-25
Misc : op93644,g4g1782,15.5,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 06 08:10:44 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)
2.577min 24.962 PPB m
response 187099682

(2) Tetrachloro-m-xylene #2 (SAB)
3.106min 25.057 PPB
response 171444730

(+) = Expected Retention Time
4PST1778.M Fri May 06 08:12:59 2016 RPT1

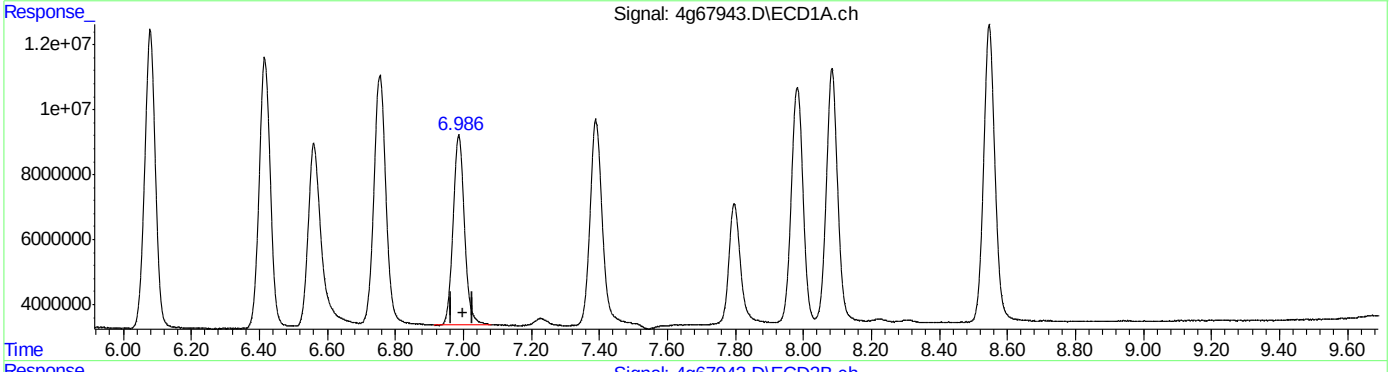
SGS ACCUTEST JC19644

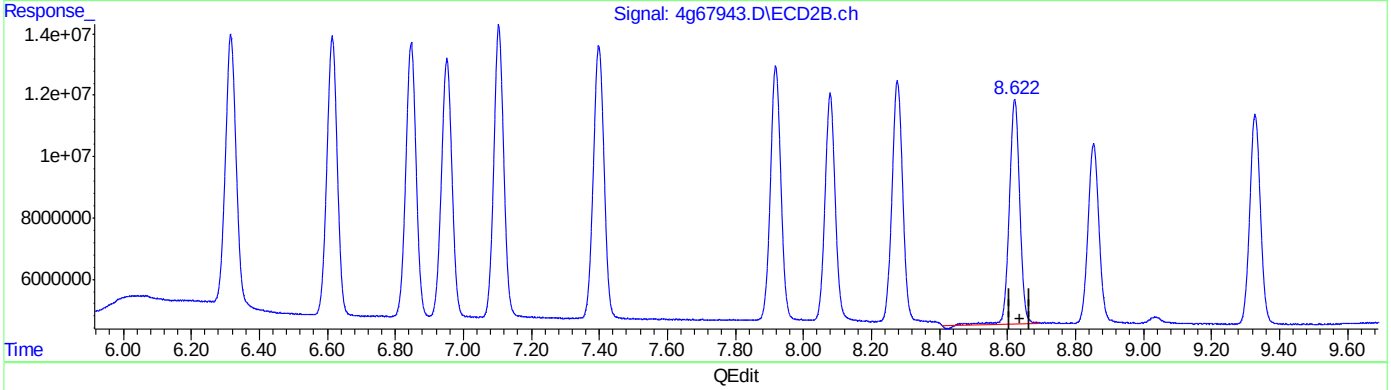
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67943.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 7:57 am
Operator : brittanp
Sample : cc1778-25
Misc : op93644,g4g1782,15.5,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 06 08:10:44 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)
6.987min 28.149 PPB
response 135520778

(18) 4,4'-DDT #2 (MA)
8.622min 27.934 PPB
response 155587265

(+) = Expected Retention Time

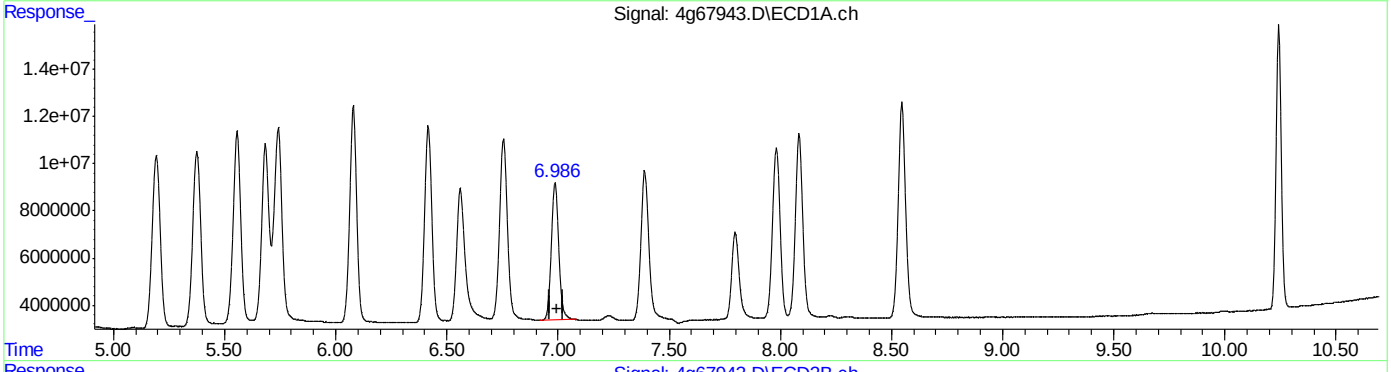
SGS ACCUTEST JC19644

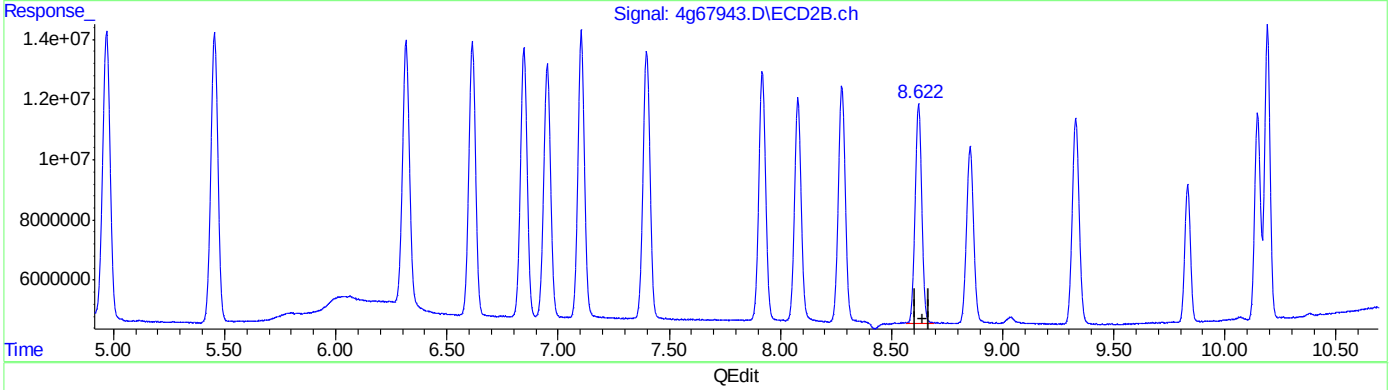
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67943.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 7:57 am
Operator : brittanp
Sample : cc1778-25
Misc : op93644,g4g1782,15.5,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 06 08:10:44 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)
6.987min 28.149 PPB
response 135520778

(18) 4,4'-DDT #2 (MA)
8.622min 27.228 PPB m
response 151657087

(+) = Expected Retention Time
4PST1778.M Fri May 06 08:13:12 2016 RPT1

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67973.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 2:57 pm
Operator : dharas
Sample : cc1778-50
Misc : op93657,g4g1782,100,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 06 15:15:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Fri May 06 15:02:24 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...	1.818f	2.088f	415.2E6	368.2E6	50.000	50.000	
25) I	1-bromo-2...	1.818	2.088	415.2E6	368.2E6	50.000	50.000	
31) I	1-bromo-2...	1.818	2.088	415.2E6	368.2E6	50.000	50.000	
	System Monitoring Compounds							
2) SAB	Tetrachlo...	2.594f	3.110	409.9E6	335.1E6	57.251	51.680	
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 143.13%	129.20%	
24) SA	Decachlor...	10.245	11.643	390.7E6	243.0E6	57.906	52.828	
	Spiked Amount	40.000			Recovery	= 144.76%	132.07%	
	Target Compounds							
3) A	alpha-BHC	3.156	3.868	532.8E6	499.1E6	54.388	52.649	
4) MA	gamma-BHC	3.501	4.346	466.7E6	447.1E6	54.477	53.065	
5) MA	Heptachlor	3.822	4.971	464.2E6	452.1E6	57.725	52.088	
6) B	beta-BHC	3.607	4.441	224.9E6	197.4E6	54.812	51.731	
7) B	delta-BHC	4.058	4.872	407.0E6	436.5E6	52.153	55.511	
8) MB	Aldrin	4.430	5.455	445.1E6	434.8E6	54.246	50.855	
9) B	Heptachlo...	5.195	6.318	394.3E6	390.4E6	53.777	50.570	
10) B	gamma-Chl...	5.377	6.615	398.1E6	391.4E6	54.309	52.455	
11) B	alpha-Chl...	5.557	6.847	408.3E6	379.5E6	51.675	50.645	
12) A	Endosulfan I	5.743	6.952	442.3E6	372.5E6	54.412	52.062	
13) B	4,4'-DDE	5.689	7.106	367.9E6	399.6E6	50.208	53.471	
14) MA	Dieldrin	6.080	7.400	438.4E6	402.2E6	56.896	53.894	
15) MA	Endrin	6.418	7.920	415.1E6	366.4E6	56.573	55.083	
16) A	4,4'-DDD	6.570	8.081	348.6E6	319.4E6	56.145	52.892	
17) B	Endosulfa...	6.759	8.278	421.7E6	349.8E6	59.733	53.197	
18) MA	4,4'-DDT	6.992	8.623	214.3E6	298.7E6	43.374	56.583	#
19) B	Endrin Al...	7.395	8.855	334.5E6	264.3E6	56.134	52.916	
20) B	Endosulfa...	8.089	9.331	384.6E6	298.6E6	59.435	54.262	
21) A	Methoxychlor	7.807	9.834	143.4E6	154.1E6	51.837	53.729	
22)	Mirex	7.982	10.147	351.7E6	238.9E6	54.505	51.749	
23) B	Endrin Ke...	8.551	10.192	424.4E6	335.4E6	56.706	55.511	

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

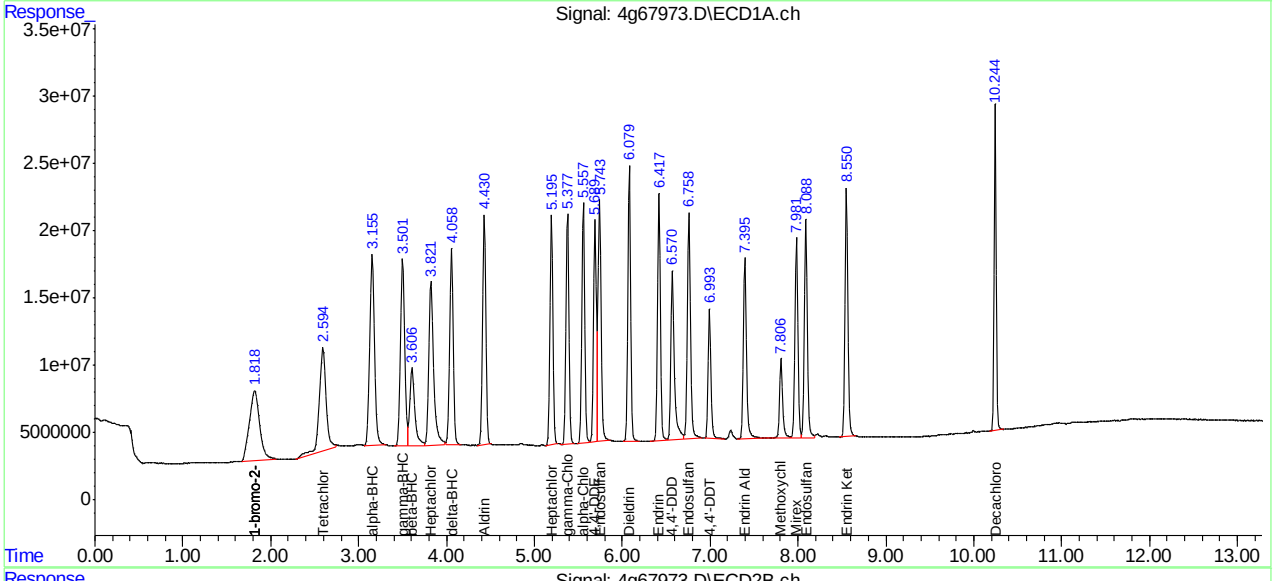
SGS ACCUTEST JC19644

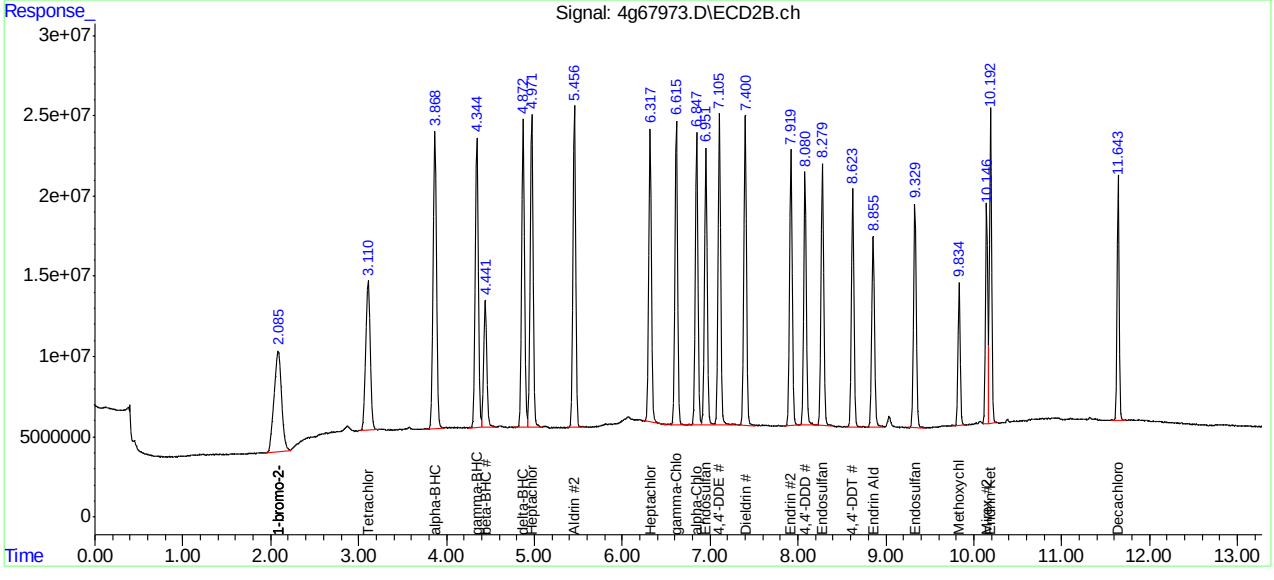
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67973.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 2:57 pm
Operator : dharas
Sample : cc1778-50
Misc : op93657,g4g1782,100,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 06 15:15:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Fri May 06 15:02:24 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
05/09/16 06:55

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67994.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 8:15 pm
Operator : dharas
Sample : cc1778-25
Misc : op93657,g4g1782,100,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 07 14:33:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Fri May 06 15:02:24 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...	1.813f	2.070	458.4E6	401.0E6	50.000	50.000	
25) I	1-bromo-2...	1.813	2.070	458.4E6	401.0E6	50.000	50.000	
31) I	1-bromo-2...	1.813	2.070	458.4E6	401.0E6	50.000	50.000	
	System Monitoring Compounds							
2) SAB	Tetrachlo...	2.599f	3.104	195.2E6	174.8E6	24.692	24.759	
	Spiked Amount 40.000	Range	30 - 150	Recovery	=	61.73%	61.90%	
24) SA	Decachlor...	10.248	11.644	173.9E6	119.9E6	23.344	23.943	
	Spiked Amount 40.000			Recovery	=	58.36%	59.86%	
	Target Compounds							
3) A	alpha-BHC	3.158	3.866	260.2E6	250.4E6	24.058	24.259	
4) MA	gamma-BHC	3.506	4.344	228.6E6	228.0E6	24.166	24.844	
5) MA	Heptachlor	3.849f	4.969	202.7E6	224.0E6	22.835m	23.702	
6) B	beta-BHC	3.631f	4.441	100.7E6	108.0E6	22.219m	26.004	
7) B	delta-BHC	4.056	4.874	212.0E6	215.0E6	24.601	25.109	
8) MB	Aldrin	4.430	5.455	228.3E6	226.2E6	25.205	24.291	
9) B	Heptachlo...	5.197	6.316	214.8E6	208.8E6	26.541	24.835	
10) B	gamma-Chl...	5.380	6.615	216.7E6	208.4E6	26.770	25.646	
11) B	alpha-Chl...	5.561	6.847	215.8E6	202.7E6	24.738	24.841	
12) A	Endosulfan I	5.742	6.953	287.0E6	197.5E6	31.976m	25.341	
13) B	4,4'-DDE	5.720f	7.107	111.5E6	210.9E6	13.783m	25.914	#
14) MA	Dieldrin	6.084	7.400	221.9E6	211.6E6	26.079	26.044	
15) MA	Endrin	6.422	7.920	179.8E6	165.4E6	22.193	22.841	
16) A	4,4'-DDD	6.604f	8.083	153.6E6	167.8E6	22.404m	25.513	
17) B	Endosulfa...	6.767	8.278	233.1E6	186.5E6	29.904	26.049	
18) MA	4,4'-DDT	7.011f	8.624	96948554	132.9E6	20.058	23.122	
19) B	Endrin Al...	7.404	8.856	184.6E6	150.0E6	28.054	27.567	
20) B	Endosulfa...	8.097	9.332	183.0E6	150.6E6	25.607	25.135	
21) A	Methoxychlor	7.832f	9.835	55355664	67124386	18.124m	21.486	
22)	Mirex	7.986	10.147	193.5E6	131.6E6	27.159	26.178	
23) B	Endrin Ke...	8.559	10.193	221.5E6	175.1E6	26.811	26.618	

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

11.6.17 11

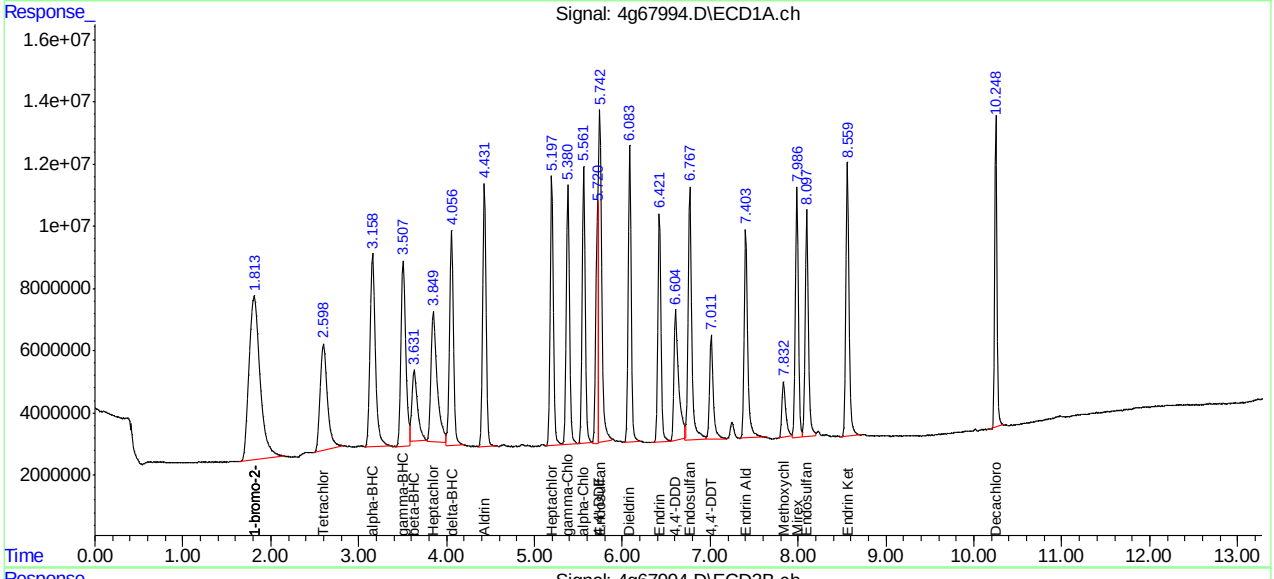
SGS ACCUTEST JC19644

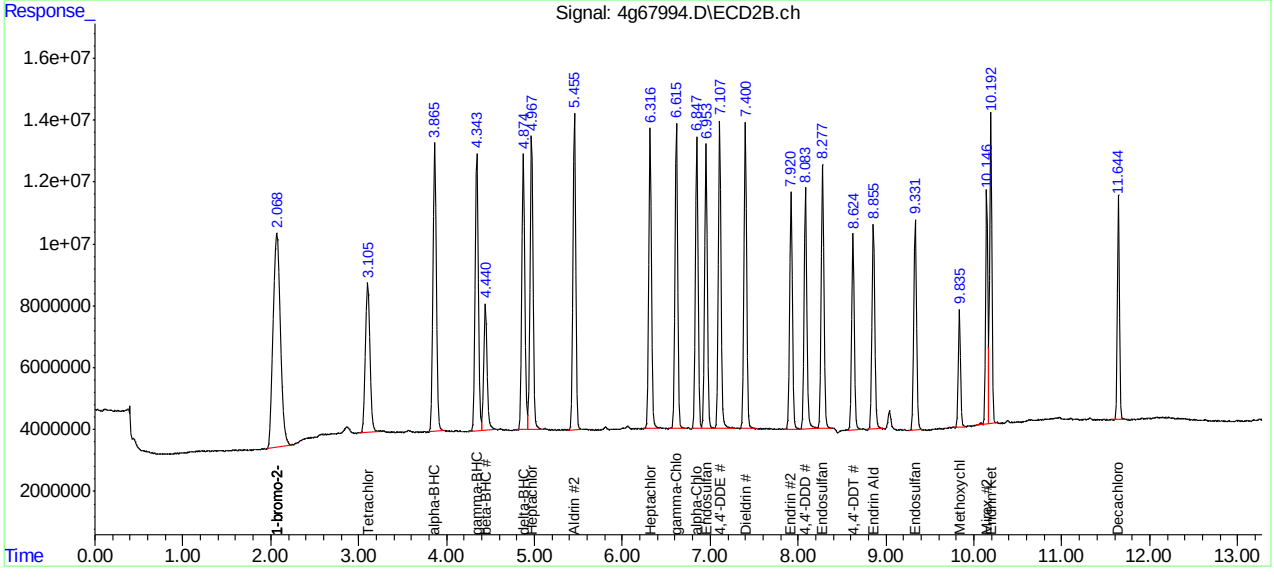
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67994.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 8:15 pm
Operator : dharas
Sample : cc1778-25
Misc : op93657,g4g1782,100,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 07 14:33:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Fri May 06 15:02:24 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:	G4G1782-CC1778	**Method:**	SW846 8081B
Lab FileID:	4G67994.D	**Analyst approved:**	05/07/16 16:59 Brittany Piercy
Injection Time:	05/06/16 20:15	**Supervisor approved:**	05/09/16 06:55 Gwendolyn Burns

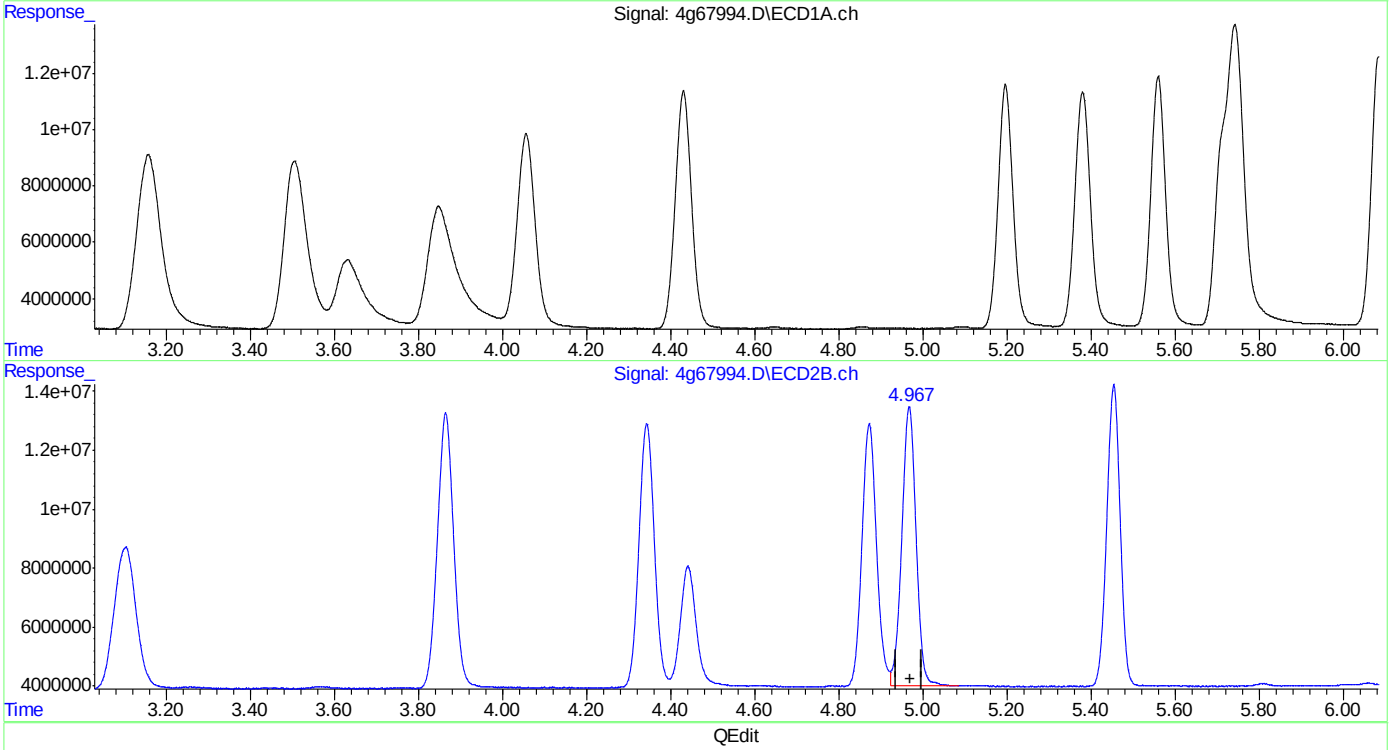
Parameter	CAS	Sig#	R.T. (min.)	Reason
beta-BHC	319-85-7	1	3.63	Poor instrument integration
Heptachlor	76-44-8	1	3.85	Poor instrument integration
4,4'-DDE	72-55-9	1	5.72	Poor instrument integration
Endosulfan-I	959-98-8	1	5.74	Poor instrument integration
4,4'-DDD	72-54-8	1	6.60	Poor instrument integration
Methoxychlor	72-43-5	1	7.83	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67994.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 8:15 pm
Operator : dharas
Sample : cc1778-25
Misc : op93657,g4g1782,100,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 07 14:30:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Fri May 06 15:02:24 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)
0.000min 0.000 PPB
response 0

(5) Heptachlor #2 (MA)
4.969min 23.702 PPB
response 224030055

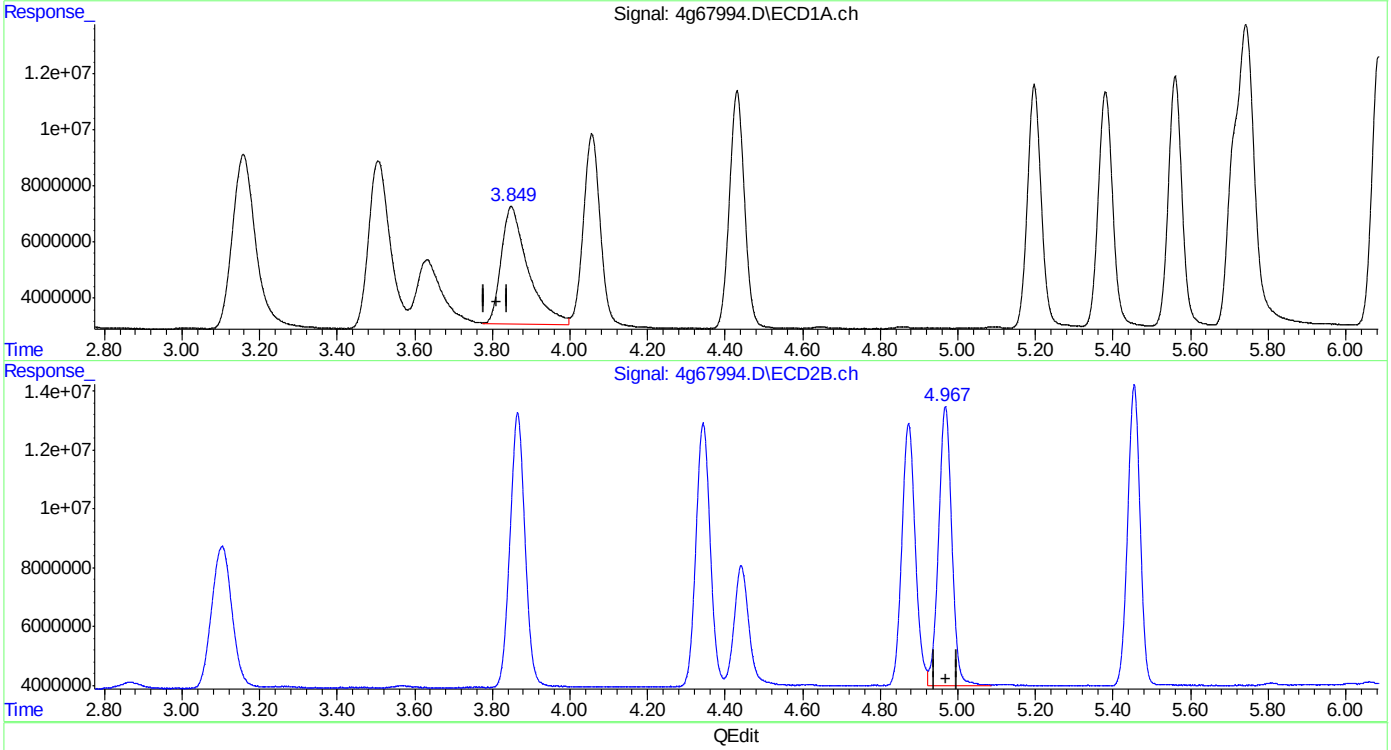
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67994.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 8:15 pm
Operator : dharas
Sample : cc1778-25
Misc : op93657,g4g1782,100,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 07 14:30:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Fri May 06 15:02:24 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)
3.849min 22.835 PPB m
response 202734368

(5) Heptachlor #2 (MA)
4.969min 23.702 PPB
response 224030055

(+) = Expected Retention Time

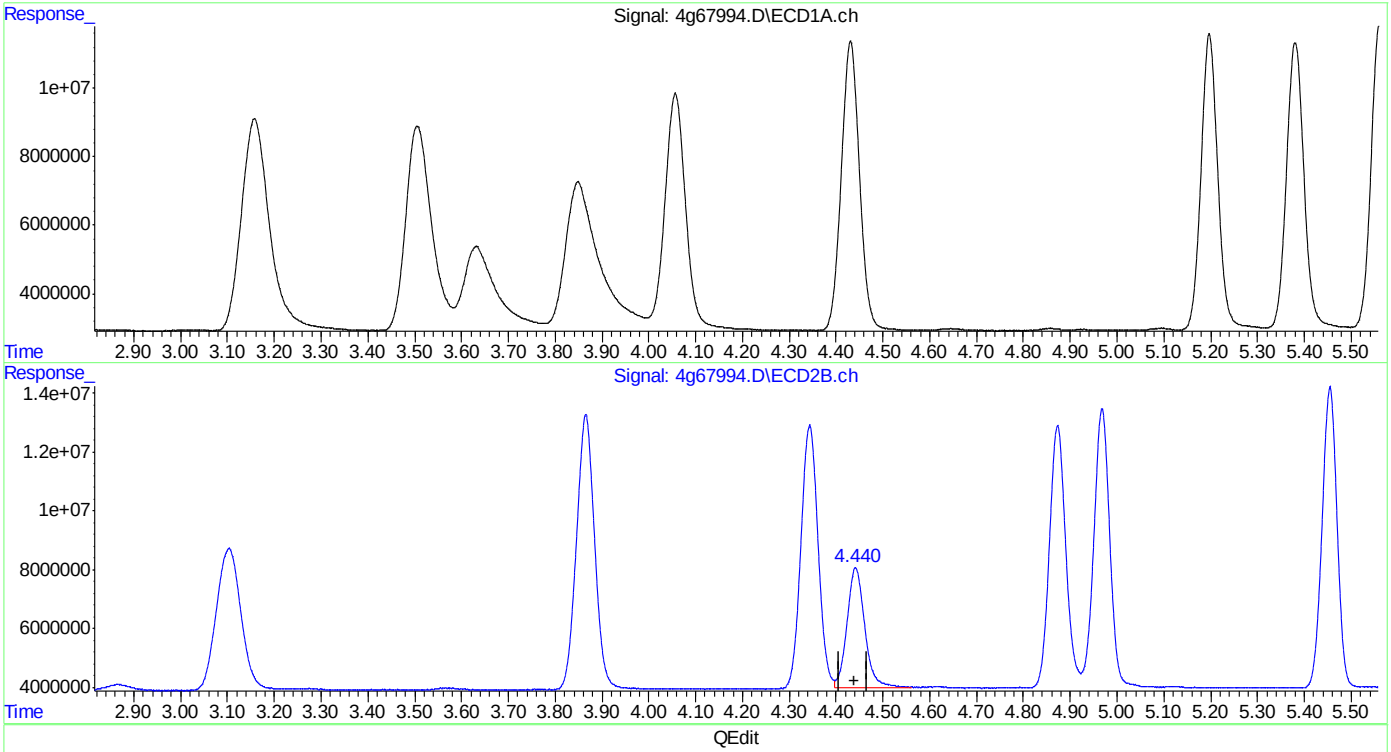
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67994.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 8:15 pm
Operator : dharas
Sample : cc1778-25
Misc : op93657,g4g1782,100,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 07 14:30:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Fri May 06 15:02:24 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)
4.441min 26.004 PPB
response 108043261

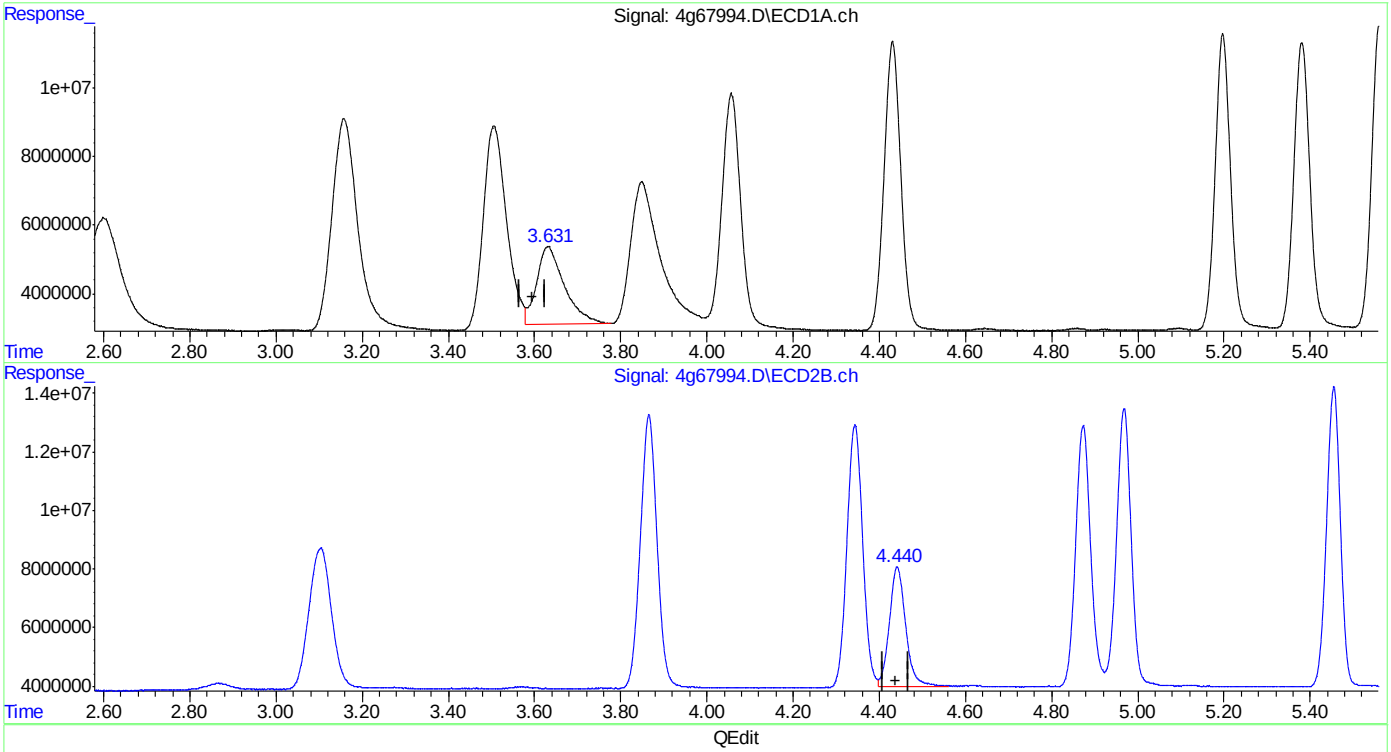
(+) = Expected Retention Time
4PST1778.M Sat May 07 14:30:54 2016 RPT1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67994.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 8:15 pm
Operator : dharas
Sample : cc1778-25
Misc : op93657,g4g1782,100,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 07 14:30:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Fri May 06 15:02:24 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)
3.631min 22.219 PPB m
response 100659402

(6) beta-BHC #2 (B)
4.441min 26.004 PPB
response 108043261

(+) = Expected Retention Time
4PST1778.M Sat May 07 14:31:03 2016 RPT1

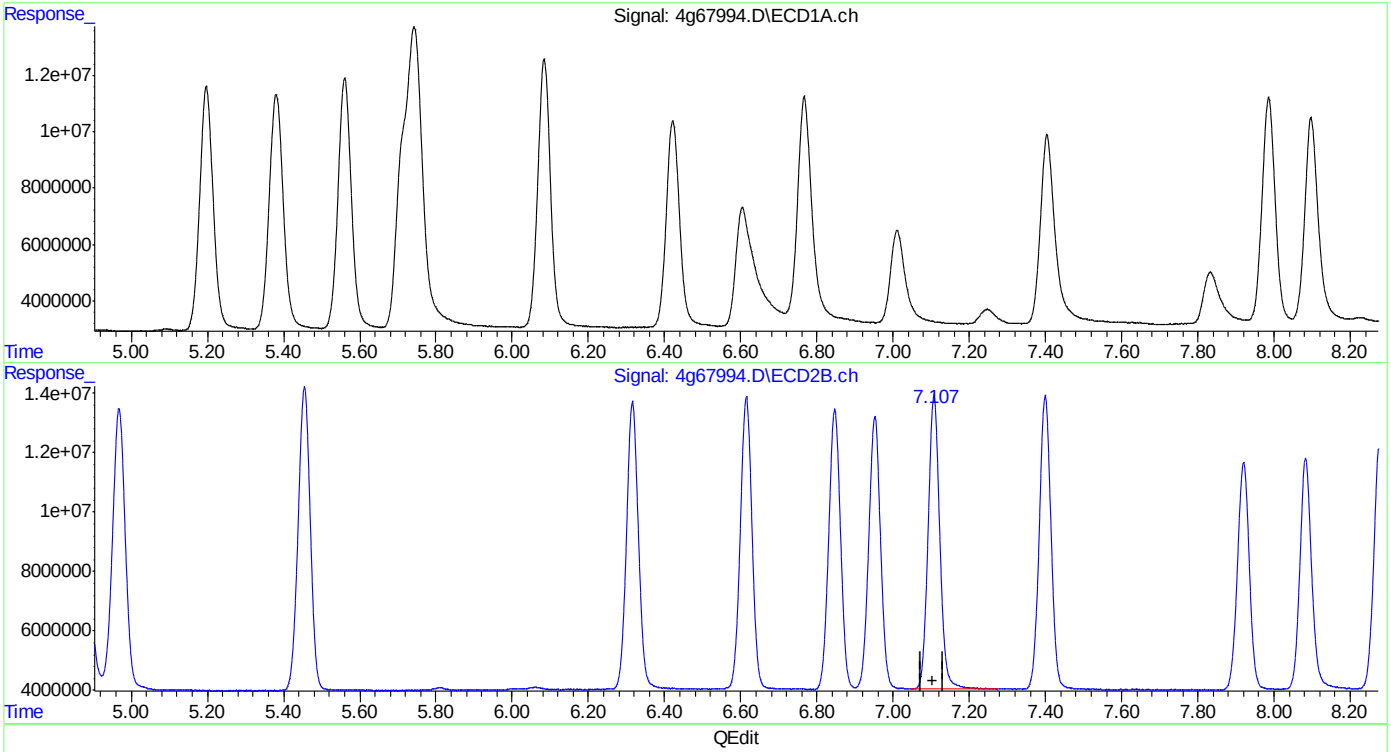
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67994.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 8:15 pm
Operator : dharas
Sample : cc1778-25
Misc : op93657,g4g1782,100,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 07 14:30:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Fri May 06 15:02:24 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)
0.000min 0.000 PPB
response 0

(13) 4,4'-DDE #2 (B)
7.107min 25.914 PPB
response 210921696

(+) = Expected Retention Time

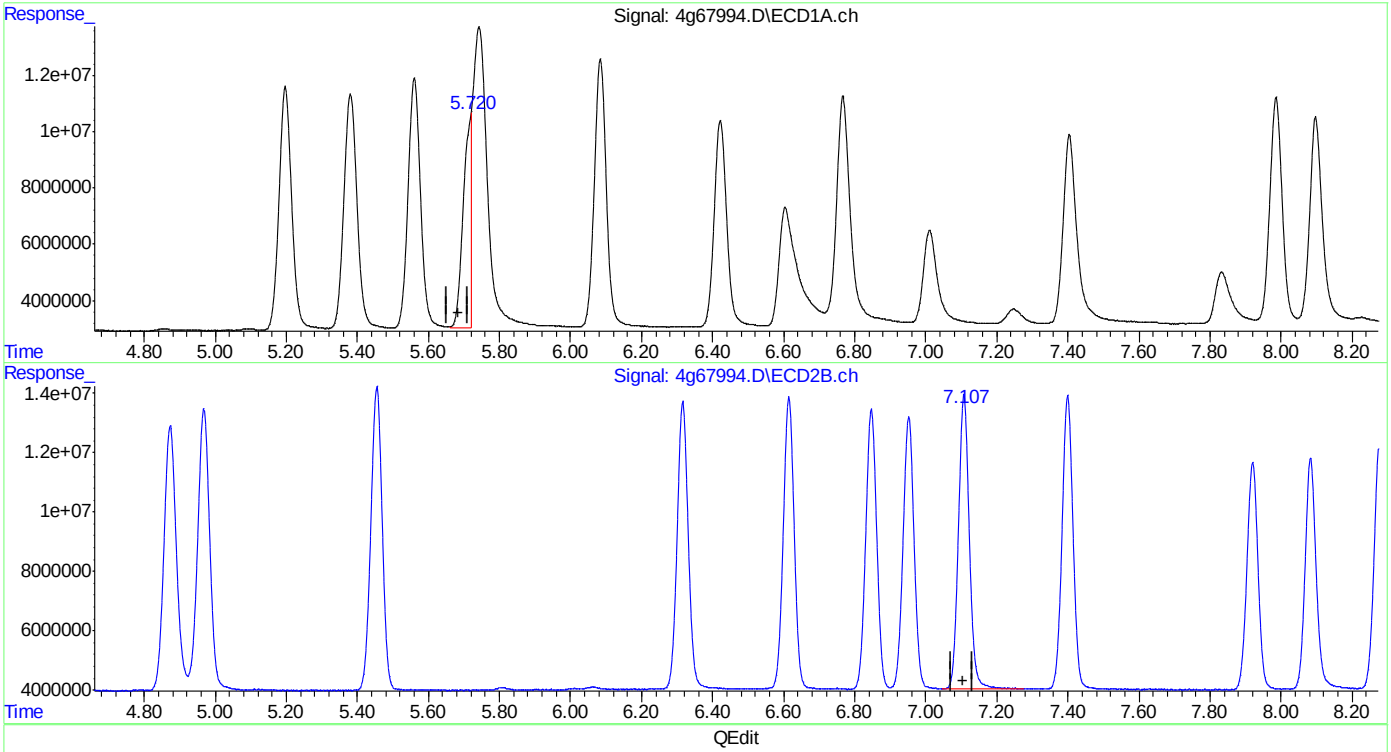
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67994.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 8:15 pm
Operator : dharas
Sample : cc1778-25
Misc : op93657,g4g1782,100,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 07 14:30:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Fri May 06 15:02:24 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)
5.720min 13.783 PPB m
response 111521699

(13) 4,4'-DDE #2 (B)
7.107min 25.914 PPB
response 210921696

(+) = Expected Retention Time
4PST1778.M Sat May 07 14:31:31 2016 RPT1

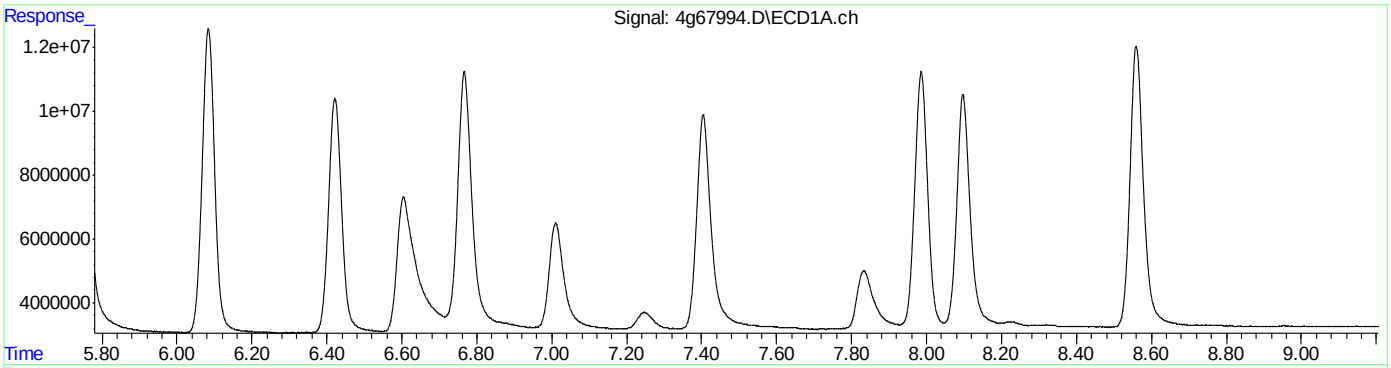
SGS ACCUTEST JC19644

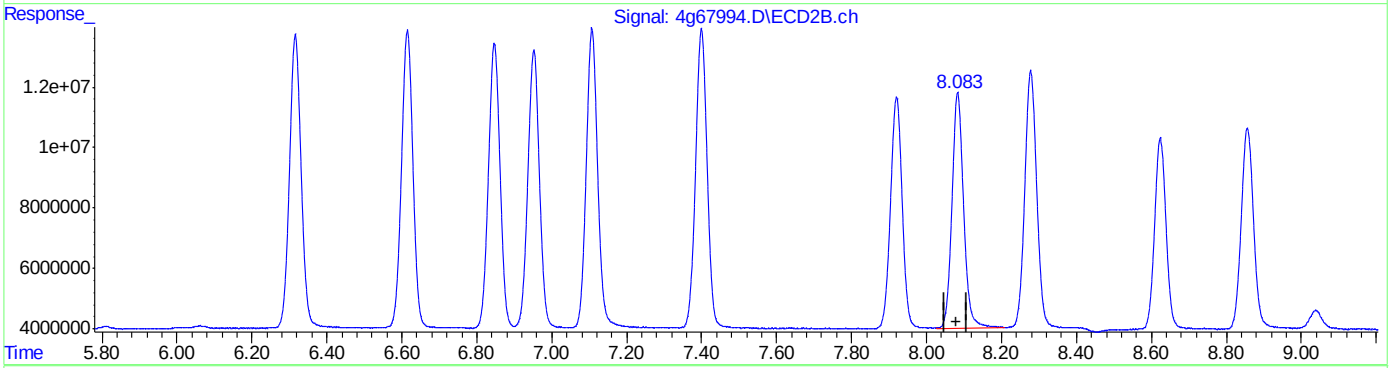
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67994.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 8:15 pm
Operator : dharas
Sample : cc1778-25
Misc : op93657,g4g1782,100,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 07 14:30:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Fri May 06 15:02:24 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)
0.000min 0.000 PPB
response 0

(16) 4,4'-DDD #2 (A)
8.083min 25.513 PPB
response 167784874

(+) = Expected Retention Time

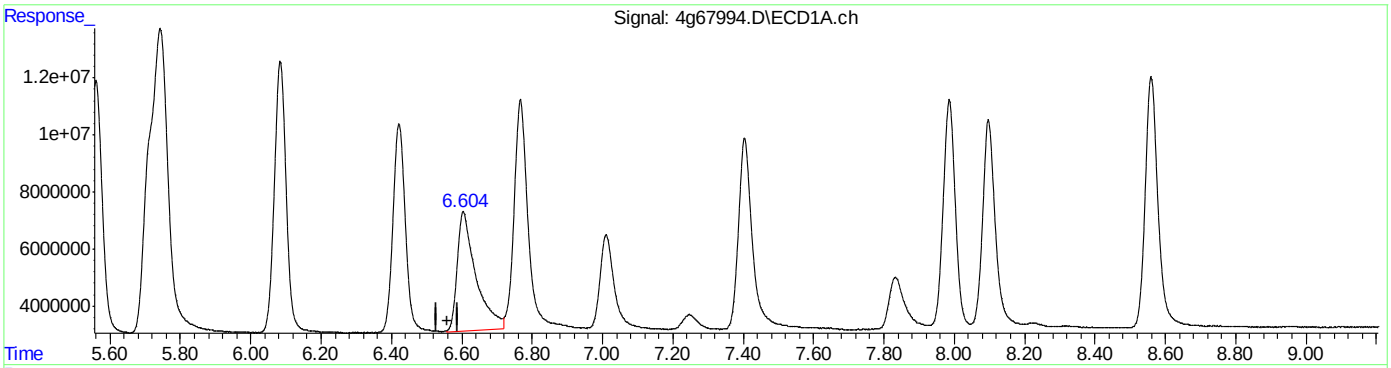
SGS ACCUTEST JC19644

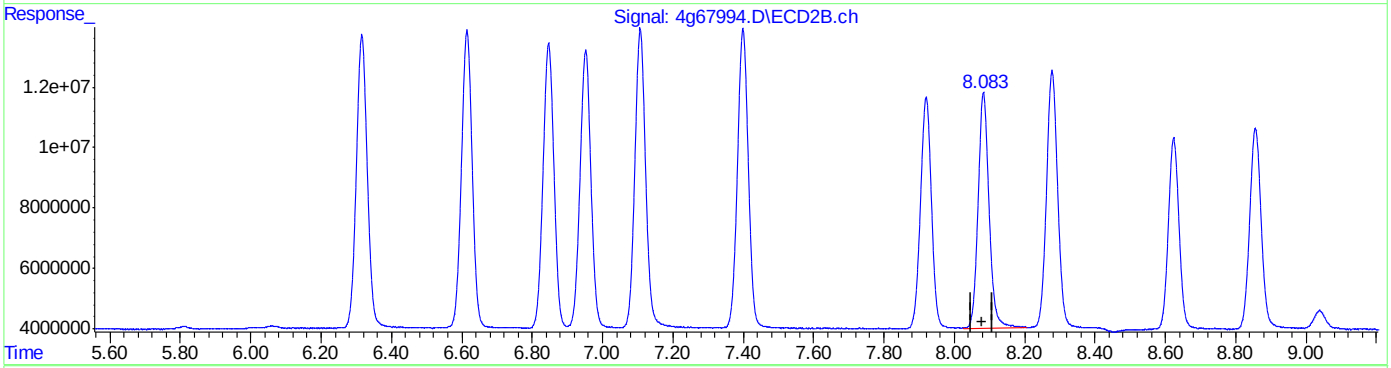
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67994.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 8:15 pm
Operator : dharas
Sample : cc1778-25
Misc : op93657,g4g1782,100,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 07 14:30:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Fri May 06 15:02:24 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)
6.604min 22.404 PPB m
response 153600472

(16) 4,4'-DDD #2 (A)
8.083min 25.513 PPB
response 167784874

(+) = Expected Retention Time

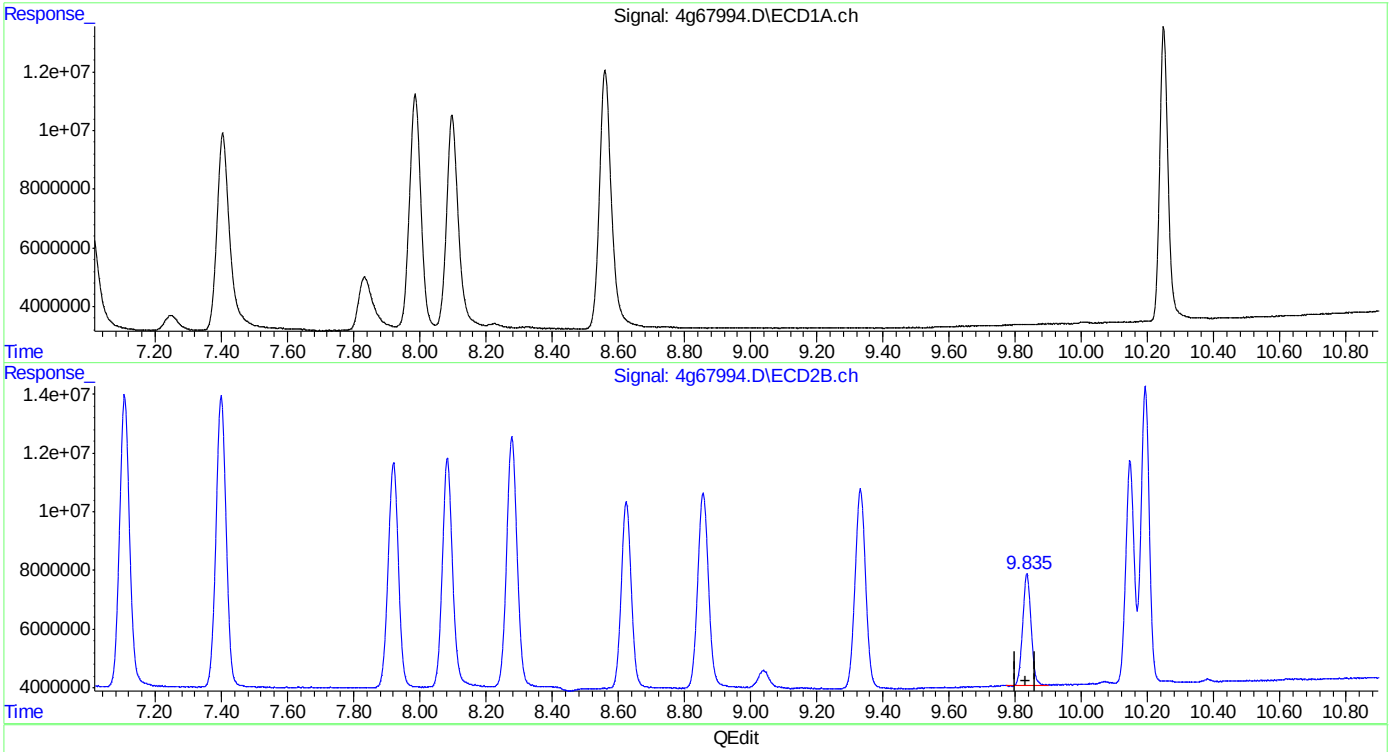
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67994.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 8:15 pm
Operator : dharas
Sample : cc1778-25
Misc : op93657,g4g1782,100,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 07 14:30:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Fri May 06 15:02:24 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)
0.000min 0.000 PPB
response 0

(21) Methoxychlor #2 (A)
9.835min 21.486 PPB
response 67124386

(+) = Expected Retention Time
4PST1778.M Sat May 07 14:32:18 2016 RPT1

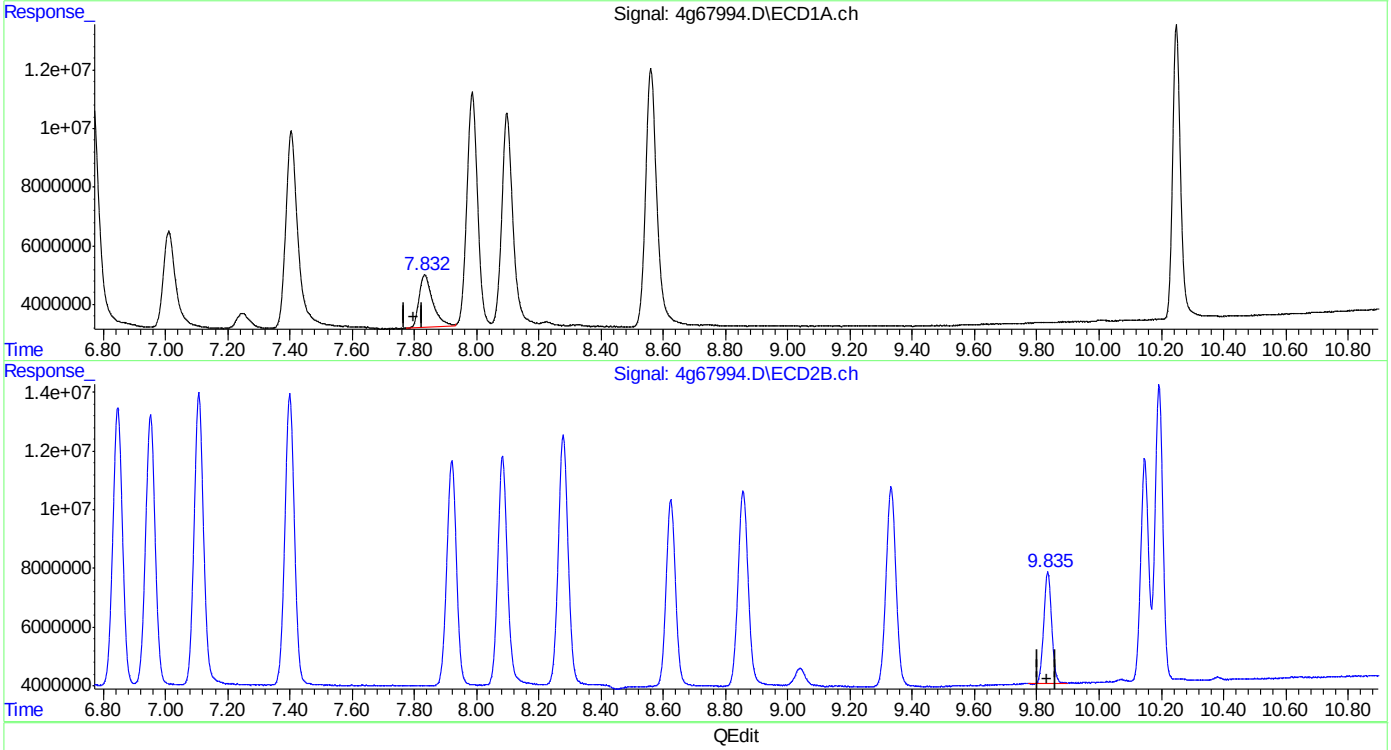
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67994.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 8:15 pm
Operator : dharas
Sample : cc1778-25
Misc : op93657,g4g1782,100,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 07 14:30:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Fri May 06 15:02:24 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)
7.832min 18.124 PPB m
response 55355664

(21) Methoxychlor #2 (A)
9.835min 21.486 PPB
response 67124386

(+) = Expected Retention Time

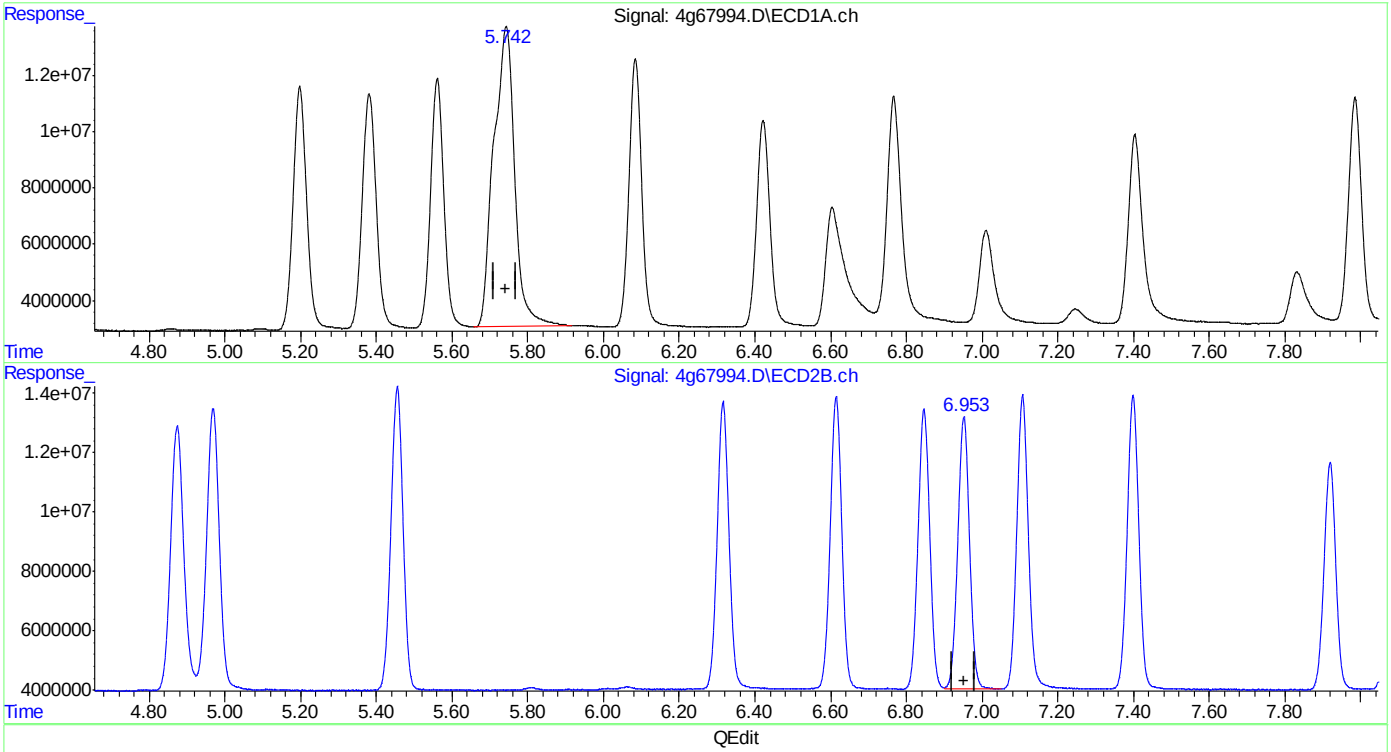
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67994.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 8:15 pm
Operator : dharas
Sample : cc1778-25
Misc : op93657,g4g1782,100,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 07 14:32:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Fri May 06 15:02:24 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



(12) Endosulfan I (A)
5.742min 45.802 PPB
response 411033355

(12) Endosulfan I #2 (A)
6.953min 25.341 PPB
response 197475536

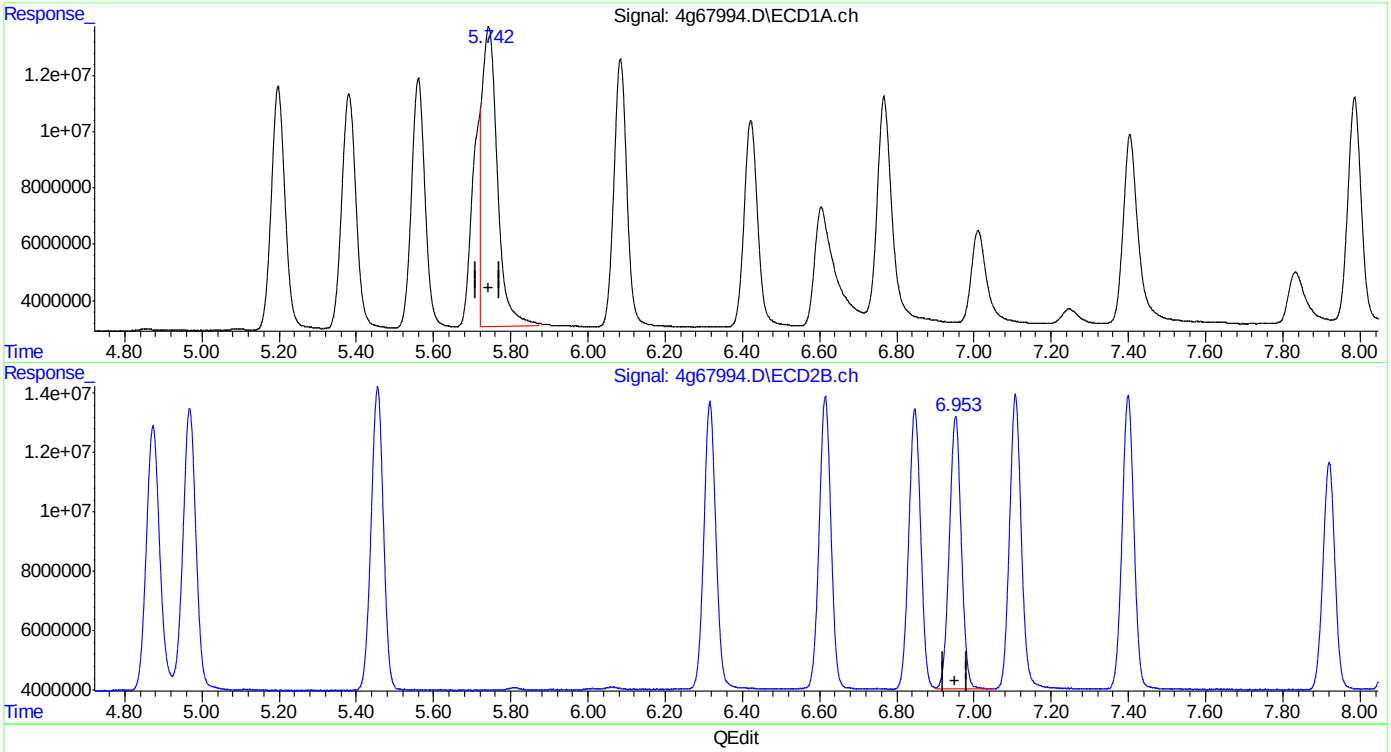
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1782\
Data File : 4g67994.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 6 May 2016 8:15 pm
Operator : dharas
Sample : cc1778-25
Misc : op93657,g4g1782,100,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 07 14:32:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Fri May 06 15:02:24 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

(12) Endosulfan I (A)
5.742min 31.976 PPB m
response 286955218

(12) Endosulfan I #2 (A)
6.953min 25.341 PPB
response 197475536

(+) = Expected Retention Time

SGS ACCUTEST JC19644

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
05/09/16 15:01

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1783\
Data File : 4g68010.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 7 May 2016 3:13 pm
Operator : brittanp
Sample : cc1778-50
Misc : op93683,g4g1783,15.0,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 07 15:33:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Fri May 06 15:02:24 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...	1.784	2.050f	440.4E6	378.1E6	50.000	50.000
25) I	1-bromo-2...	1.784	2.050	440.4E6	378.1E6	50.000	50.000
31) I	1-bromo-2...	1.784	2.050	440.4E6	378.1E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	2.567	3.091f	375.3E6	345.7E6	49.430m	51.923
Spiked Amount		40.000 Range	30 - 150	Recovery	=	123.57%	129.81%
24) SA	Decachlor...	10.242	11.640	398.7E6	248.1E6	55.723	52.529
Spiked Amount		40.000		Recovery	=	139.31%	131.32%
	Target Compounds						
3) A	alpha-BHC	3.137	3.857	546.2E6	508.7E6	52.570	52.256
4) MA	gamma-BHC	3.487	4.337	461.8E6	453.7E6	50.824	52.437
5) MA	Heptachlor	3.809	4.964	467.8E6	471.8E6	54.849	52.942
6) B	beta-BHC	3.592	4.433	229.4E6	200.9E6	52.711	51.271
7) B	delta-BHC	4.048	4.865	460.0E6	448.8E6	55.586	55.580
8) MB	Aldrin	4.422	5.450	452.3E6	446.7E6	51.974	50.879
9) B	Heptachlo...	5.188	6.313	393.9E6	396.1E6	50.662	49.963
10) B	gamma-Chl...	5.370	6.611	401.0E6	401.6E6	51.587	52.417
11) B	alpha-Chl...	5.552	6.843	413.6E6	389.6E6	49.352	50.624
12) A	Endosulfan I	5.738	6.948	464.3E6	381.0E6	53.858	51.847
13) B	4,4'-DDE	5.684	7.103	360.4E6	407.1E6	46.370	53.040
14) MA	Dieldrin	6.075	7.397	445.7E6	412.7E6	54.534	53.862
15) MA	Endrin	6.414	7.916	418.9E6	373.6E6	53.841	54.704
16) A	4,4'-DDD	6.566	8.077	342.4E6	325.8E6	51.992	52.548
17) B	Endosulfa...	6.755	8.274	435.8E6	358.7E6	58.209	53.130
18) MA	4,4'-DDT	6.988	8.620	308.5E6	329.2E6	55.984	60.737
19) B	Endrin Al...	7.391	8.852	341.4E6	272.9E6	54.013	53.207
20) B	Endosulfa...	8.085	9.328	393.1E6	311.0E6	57.287	55.037
21) A	Methoxychlor	7.803	9.832	177.5E6	166.6E6	60.509	56.563
22)	Mirex	7.980	10.144	362.7E6	248.5E6	53.002	52.434
23) B	Endrin Ke...	8.548	10.190	455.0E6	348.4E6	57.326	56.160

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

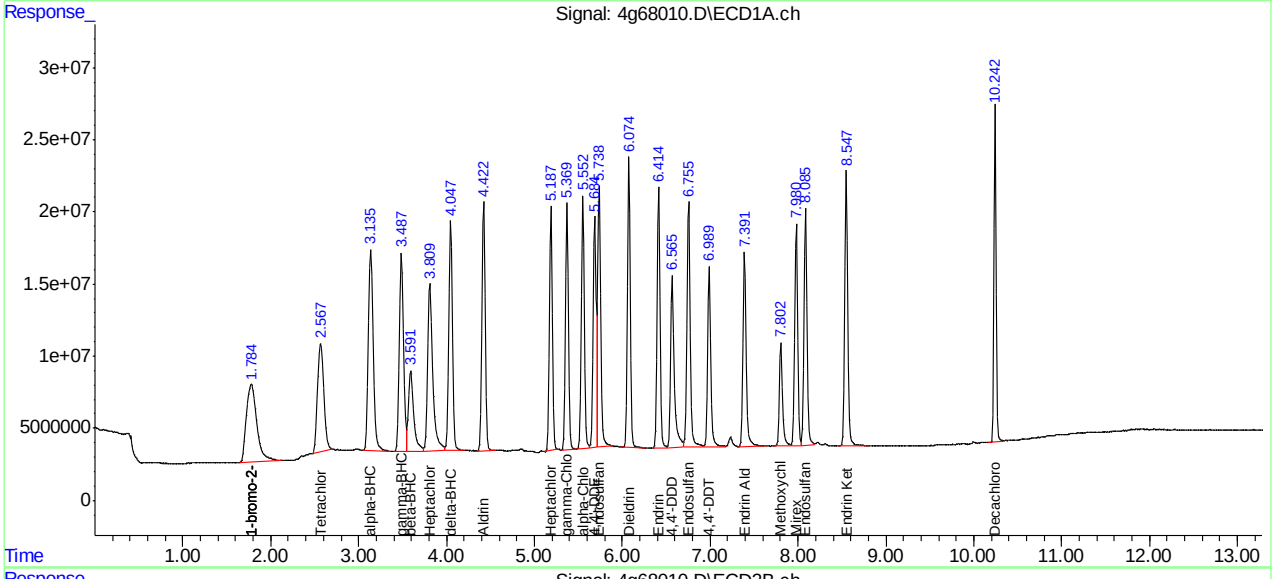
11.6.18 11

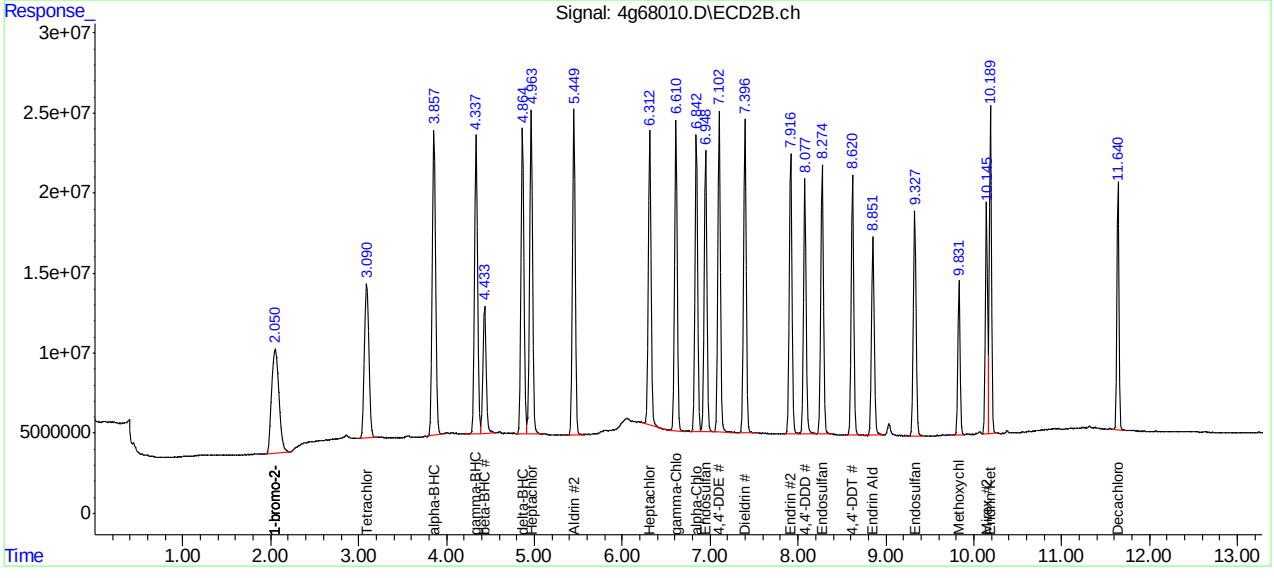
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\4G1783\
Data File : 4g68010.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 7 May 2016 3:13 pm
Operator : brittanp
Sample : cc1778-50
Misc : op93683,g4g1783,15.0,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 07 15:33:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Fri May 06 15:02:24 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:	G4G1783-CC1778	**Method:**	SW846 8081B
Lab FileID:	4G68010.D	**Analyst approved:**	05/09/16 09:19 Brittany Piercy
Injection Time:	05/07/16 15:13	**Supervisor approved:**	05/09/16 15:01 Gwendolyn Burns

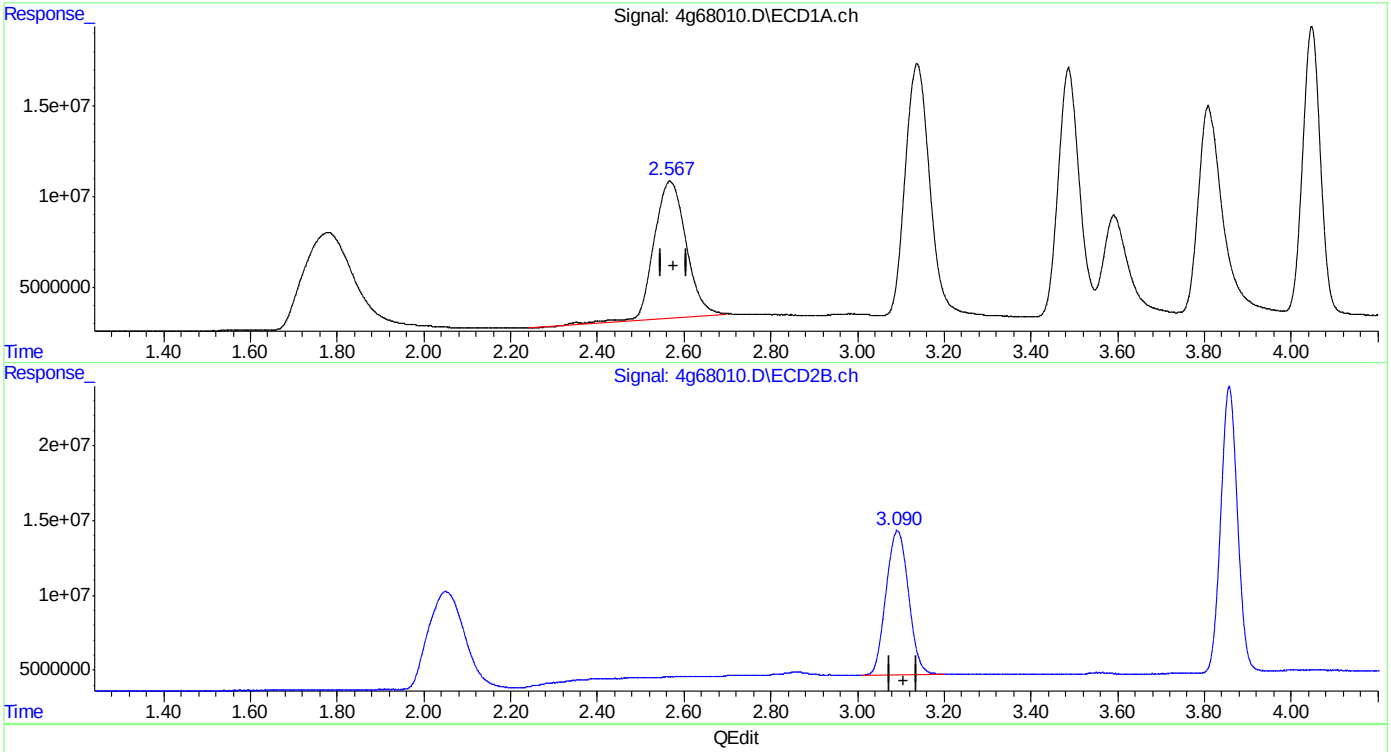
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	2.57	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1783\
Data File : 4g68010.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 7 May 2016 3:13 pm
Operator : brittanp
Sample : cc1778-50
Misc : op93683,g4g1783,15.0,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 07 15:32:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Fri May 06 15:02:24 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)
2.567min 51.641 PPB
response 392105404

(2) Tetrachloro-m-xylene #2 (SAB)
3.091min 51.923 PPB
response 345744814

(+) = Expected Retention Time
4PST1778.M Sat May 07 15:32:58 2016 RPT1

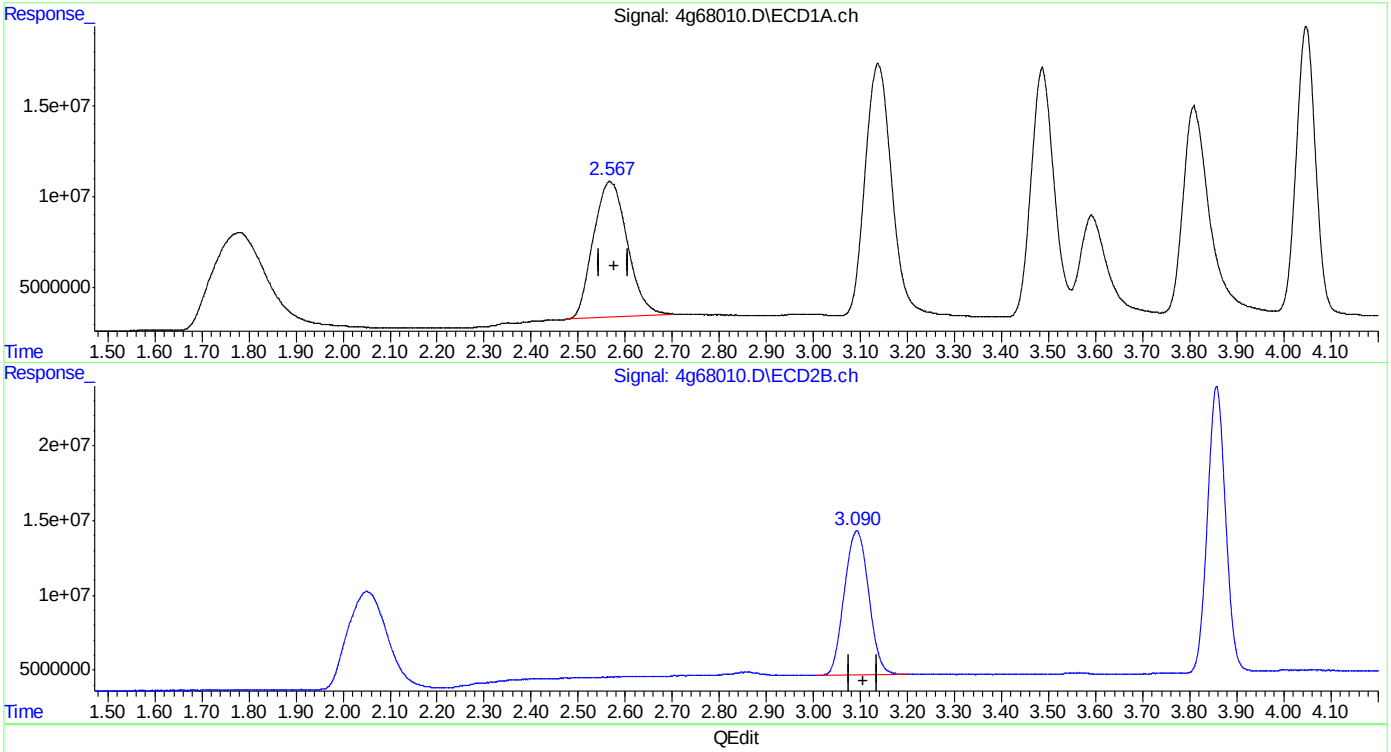
SGS ACCUTEST JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\4G1783\
Data File : 4g68010.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 7 May 2016 3:13 pm
Operator : brittanp
Sample : cc1778-50
Misc : op93683,g4g1783,15.0,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 07 15:32:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\4PST1778.M
Quant Title : PEST/PCB
QLast Update : Fri May 06 15:02:24 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)
2.567min 49.430 PPB m
response 375322418

(2) Tetrachloro-m-xylene #2 (SAB)
3.091min 51.923 PPB
response 345744814

(+) = Expected Retention Time
4PST1778.M Sat May 07 15:33:05 2016 RPT1

SGS ACCUTEST JC19644

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.

11.6.19 11

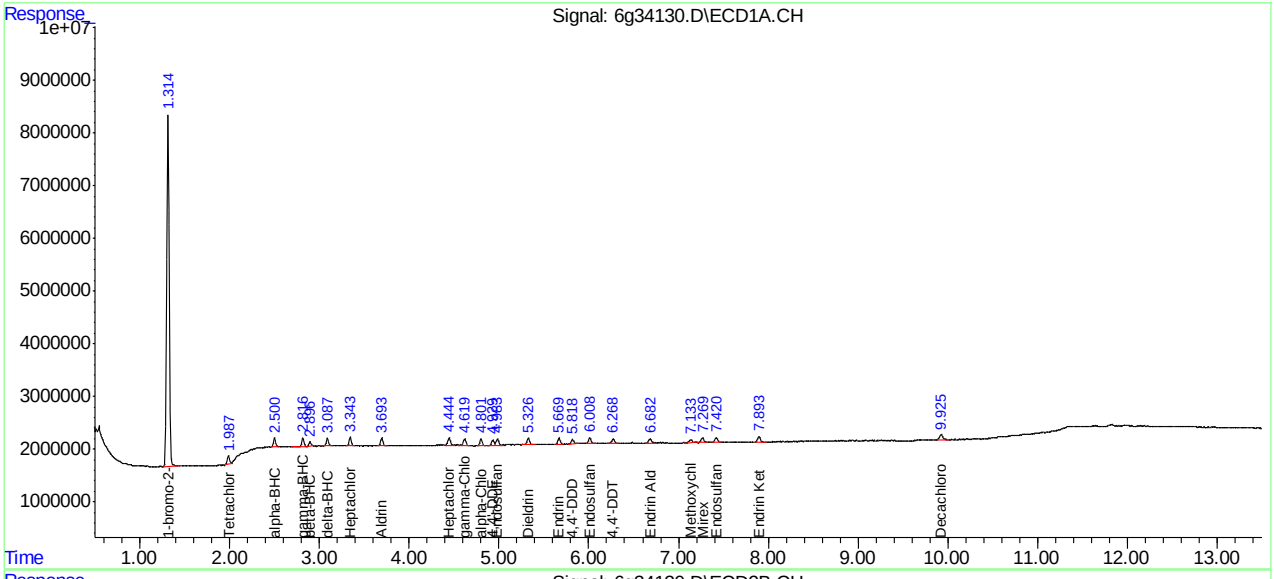
SGS ACCUTEST JC19644

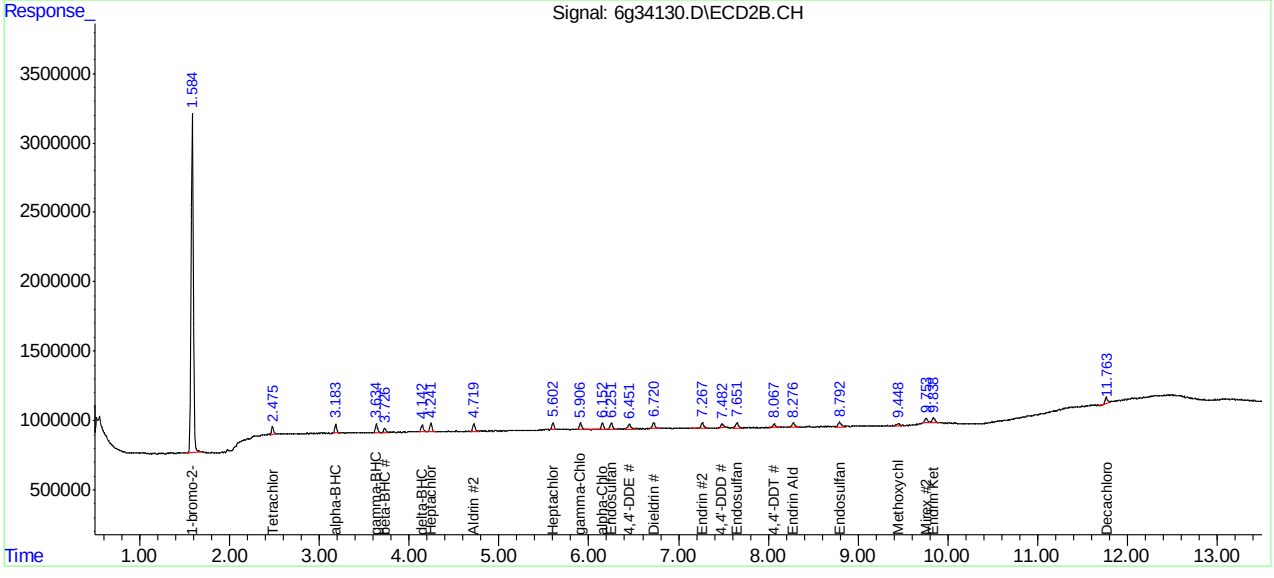
Quantitation Report (QT Reviewed)

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

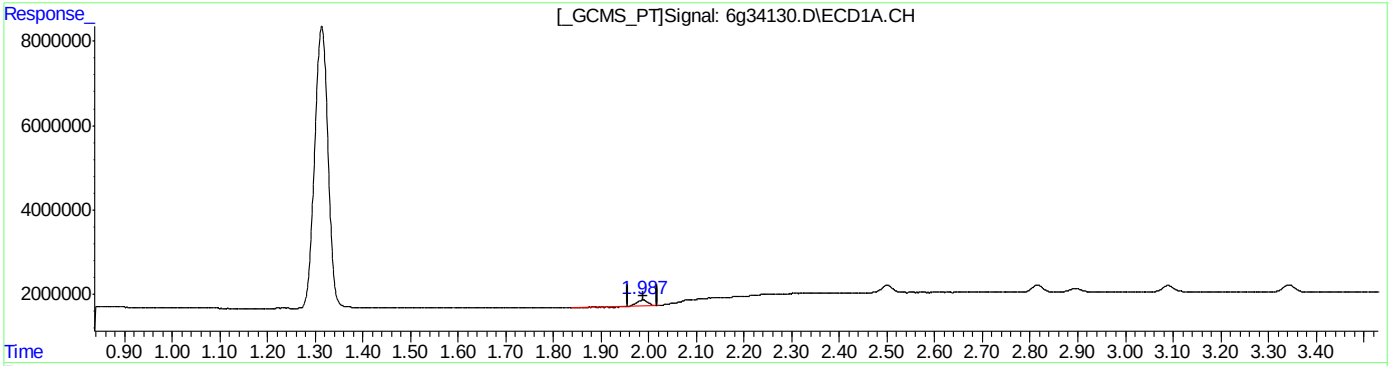
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	1.99	Poor instrument integration
Tetrachloro-m-xylene	877-09-8	2	2.48	Poor instrument integration
alpha-BHC	319-84-6	1	2.50	Poor instrument integration
beta-BHC	319-85-7	1	2.90	Poor instrument integration
beta-BHC	319-85-7	2	3.73	Poor 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

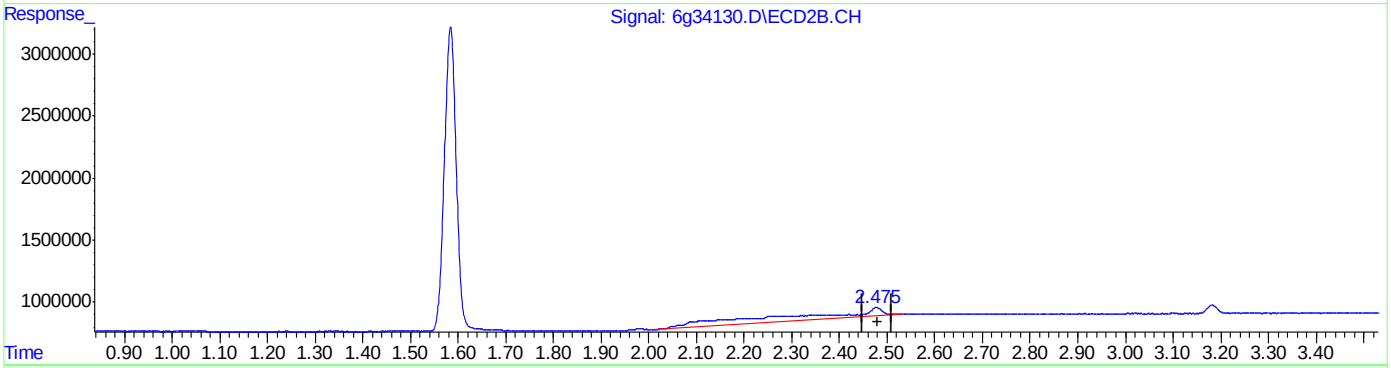
Quantitation Report (Qedit)

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

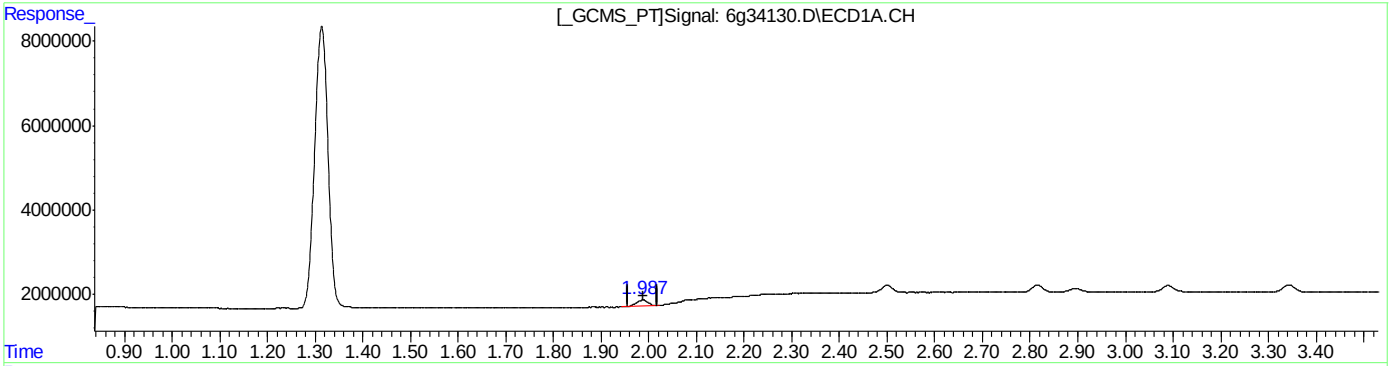
(+) = Expected Retention Time

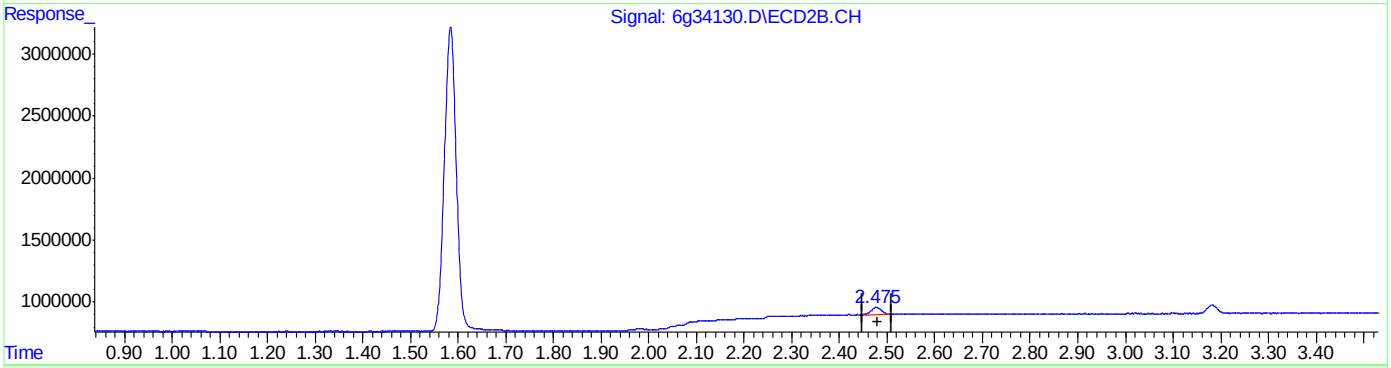
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34130.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:49 pm
Operator : dharas
Sample : ic987-1
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:51:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(2) Tetrachloro-m-xylene (SAB)
1.987min 1.118PPB m
response 2576583

(2) Tetrachloro-m-xylene #2 (SAB)
2.475min 1.051PPB m
response 827902

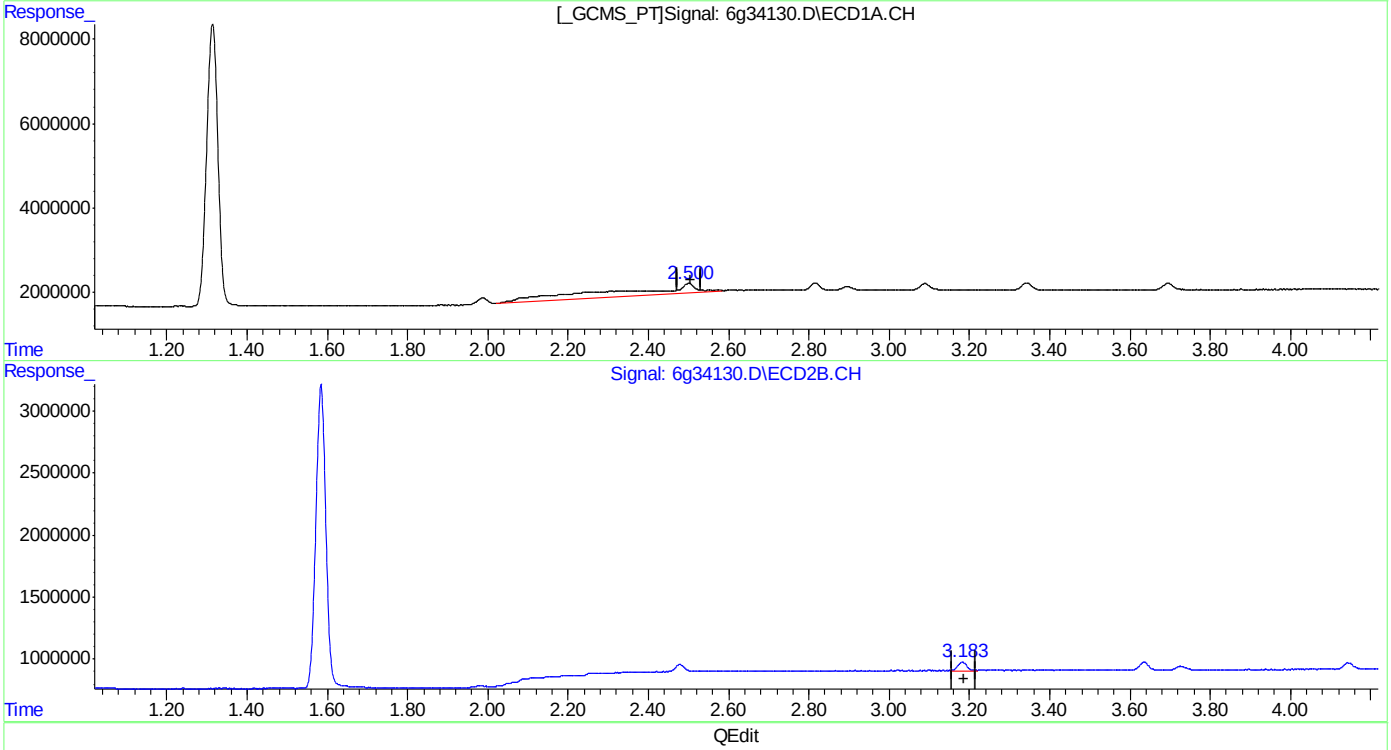
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34130.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:49 pm
Operator : dharas
Sample : ic987-1
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:51:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(3) alpha-BHC (A)
2.501min 11.218PPB
response 32431486

(3) alpha-BHC #2 (A)
3.182min 1.076PPB
response 1037508

(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:52:32 2016

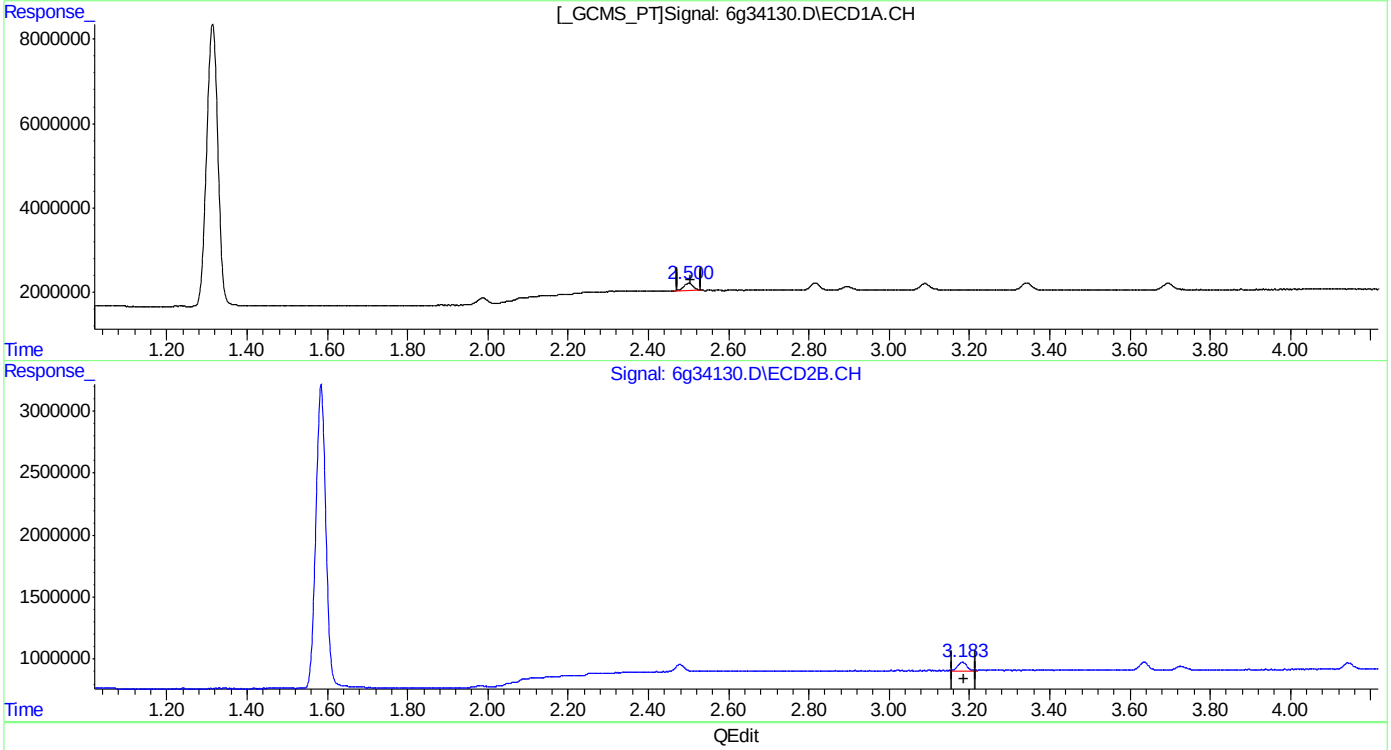
SGS ACCUTEST JC19644

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

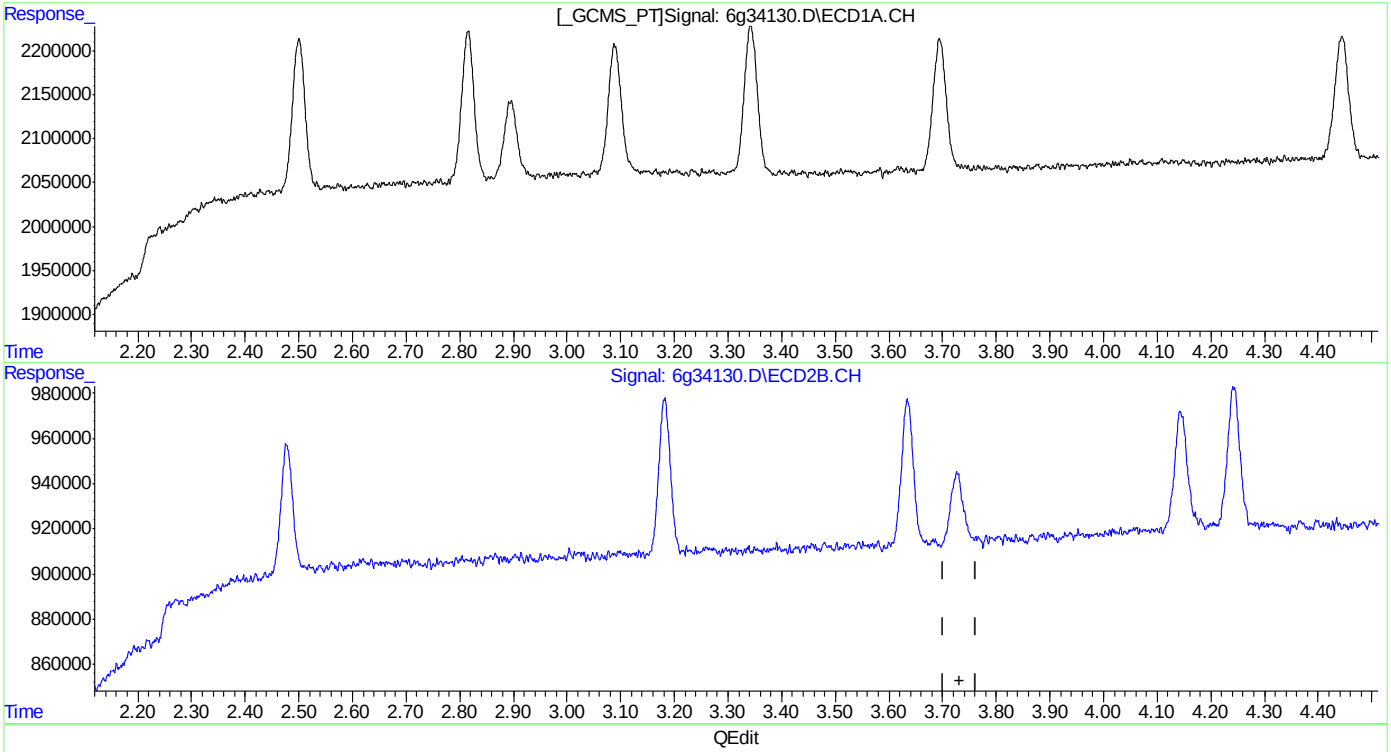
SGS ACCUTEST JC19644

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

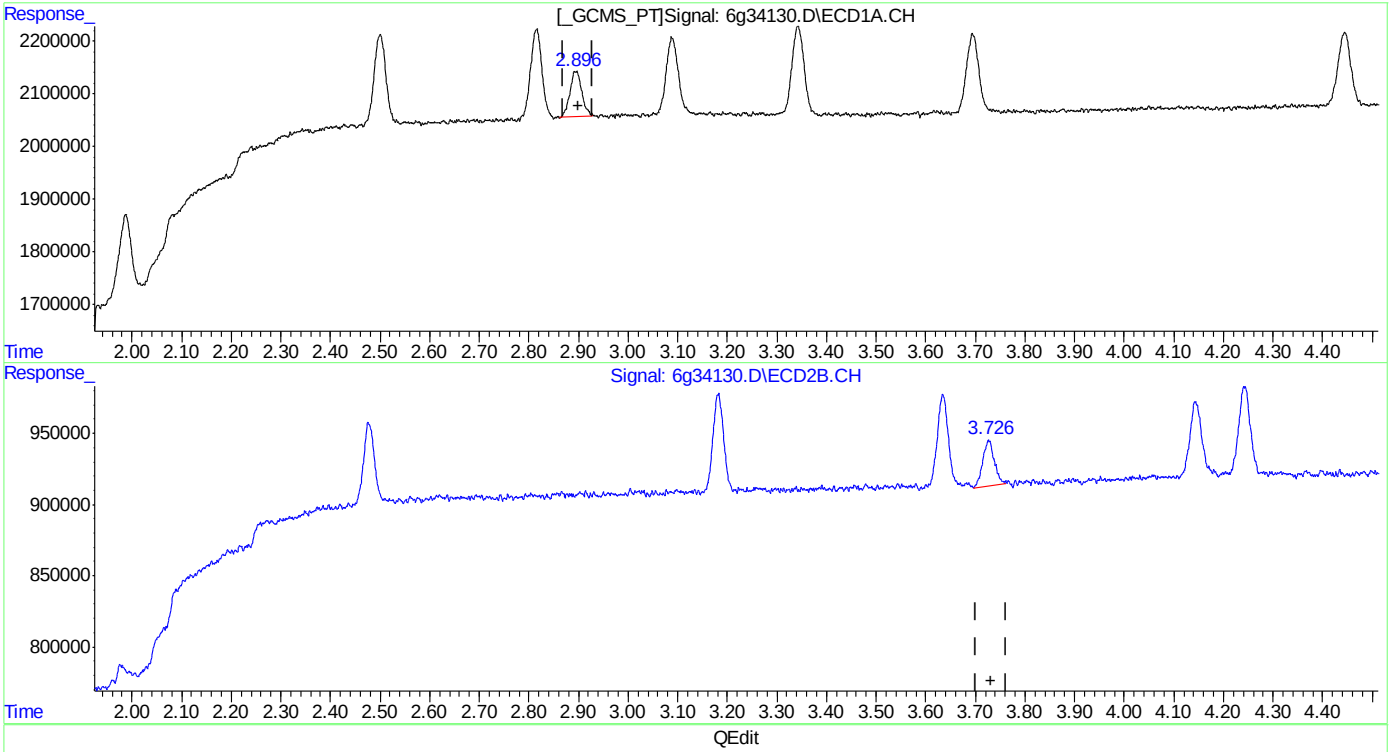
SGS ACCUTEST JC19644

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

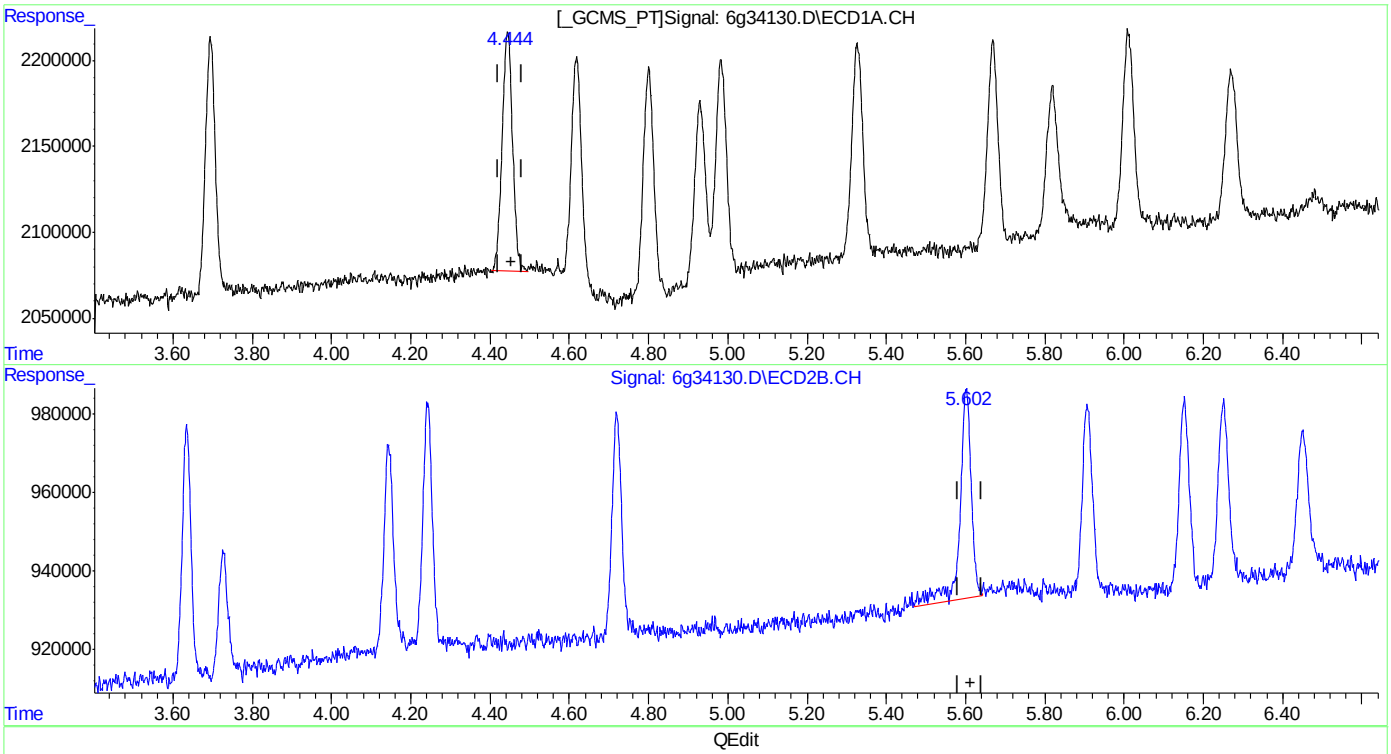
SGS ACCUTEST JC19644

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

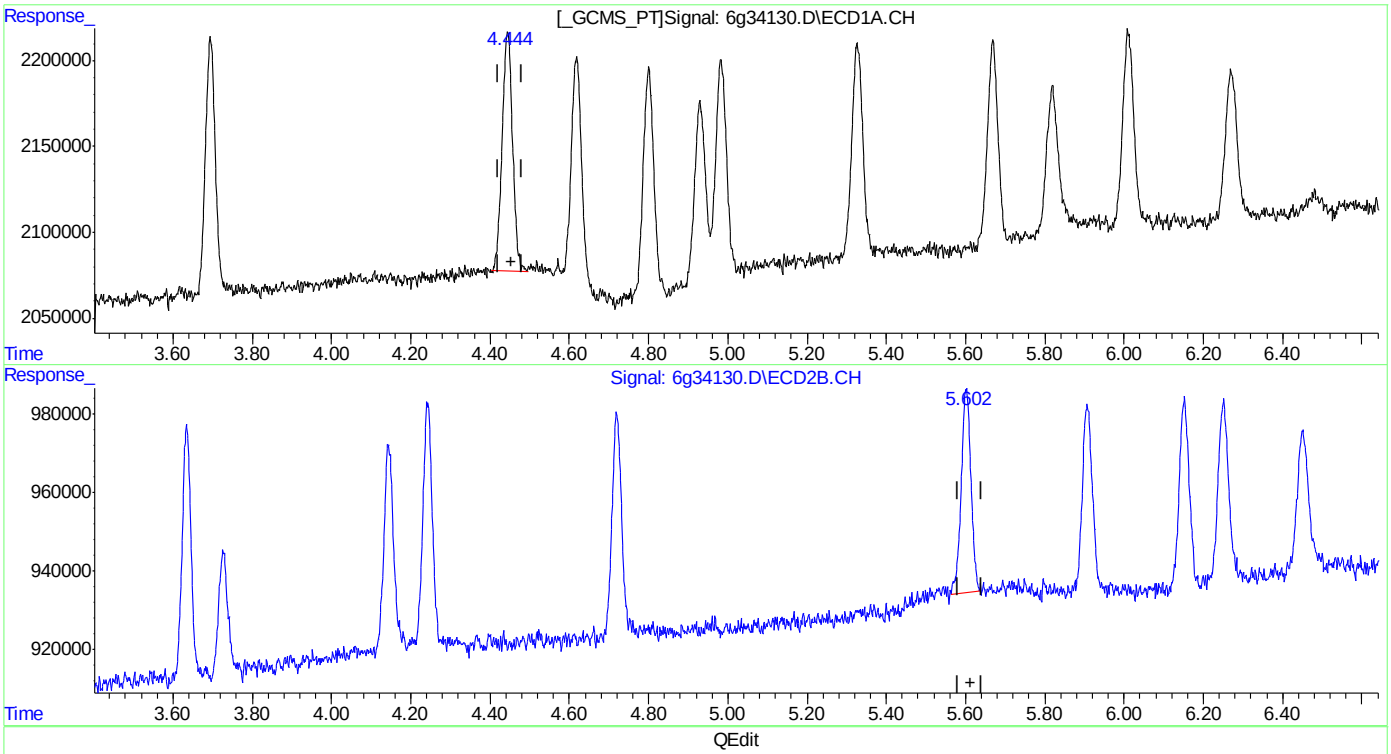
SGS ACCUTEST JC19644

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

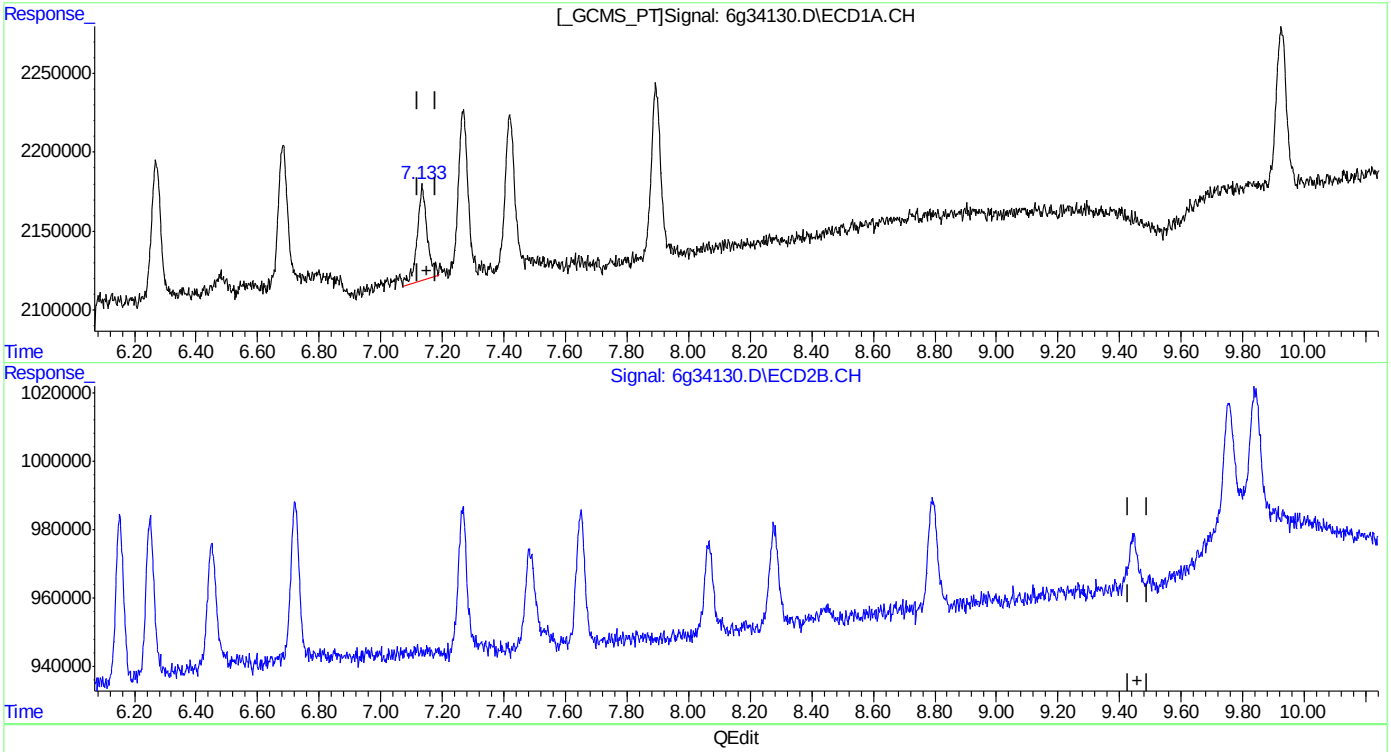
SGS ACCUTEST JC19644

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

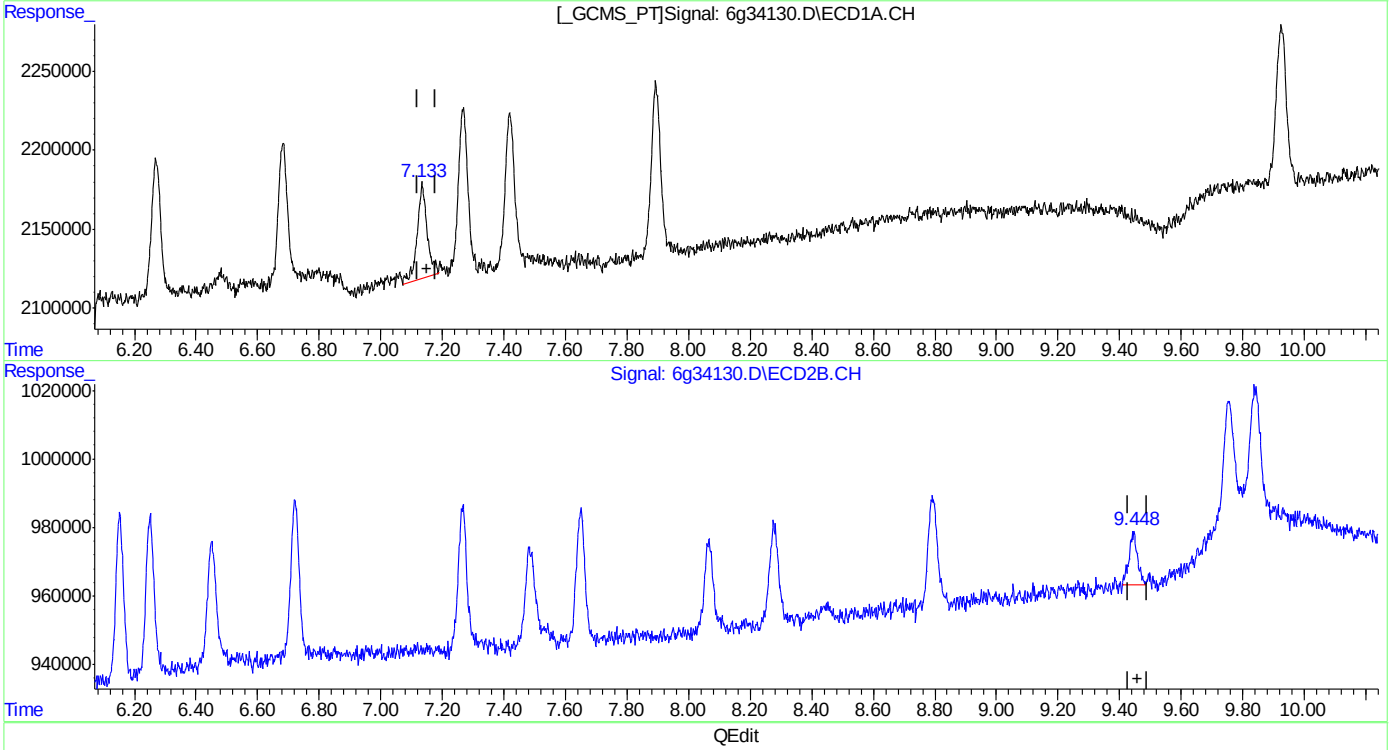
(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:53:36 2016

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

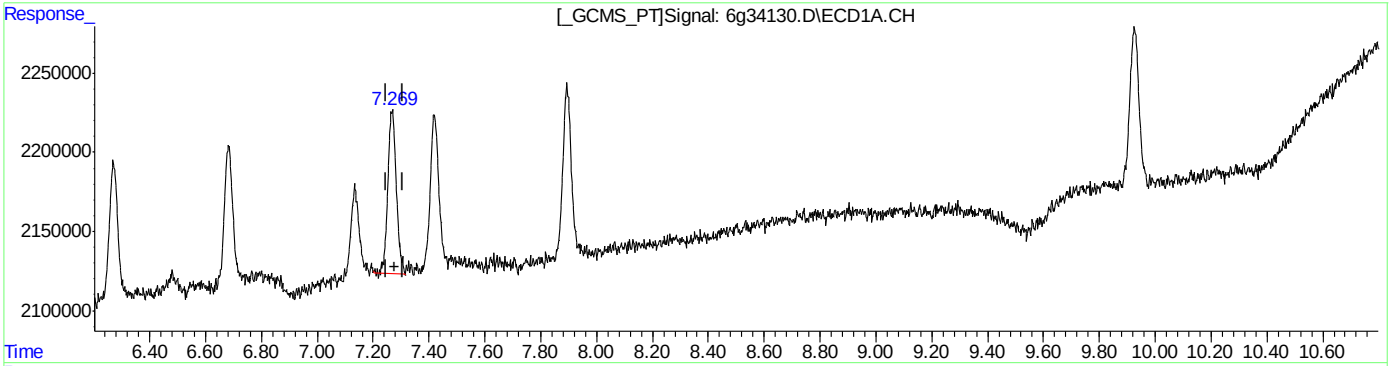
SGS ACCUTEST JC19644

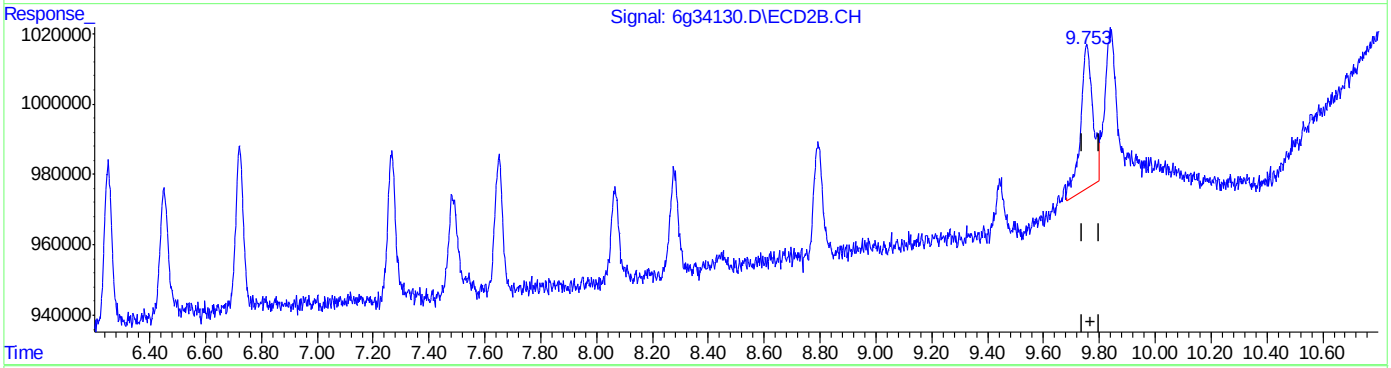
Quantitation Report (Qedit)

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

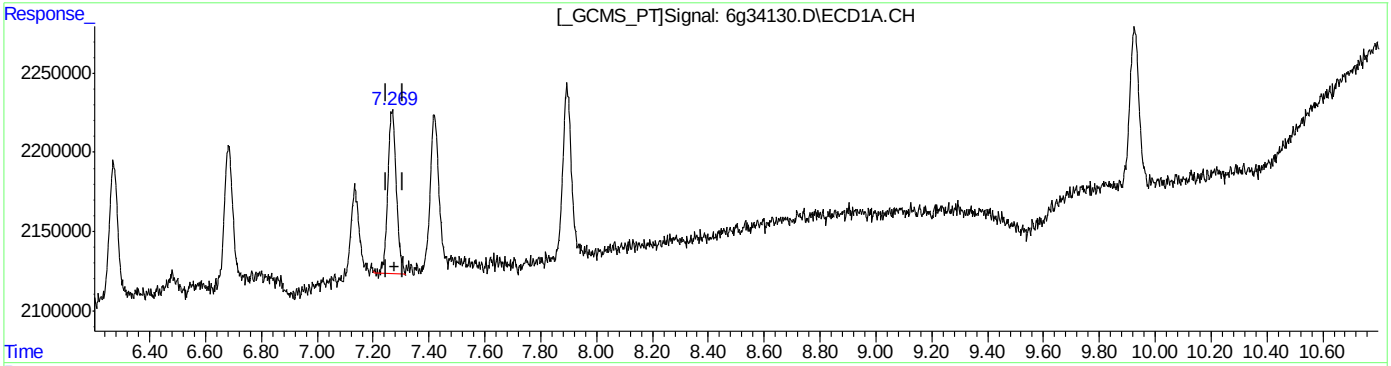
SGS ACCUTEST JC19644

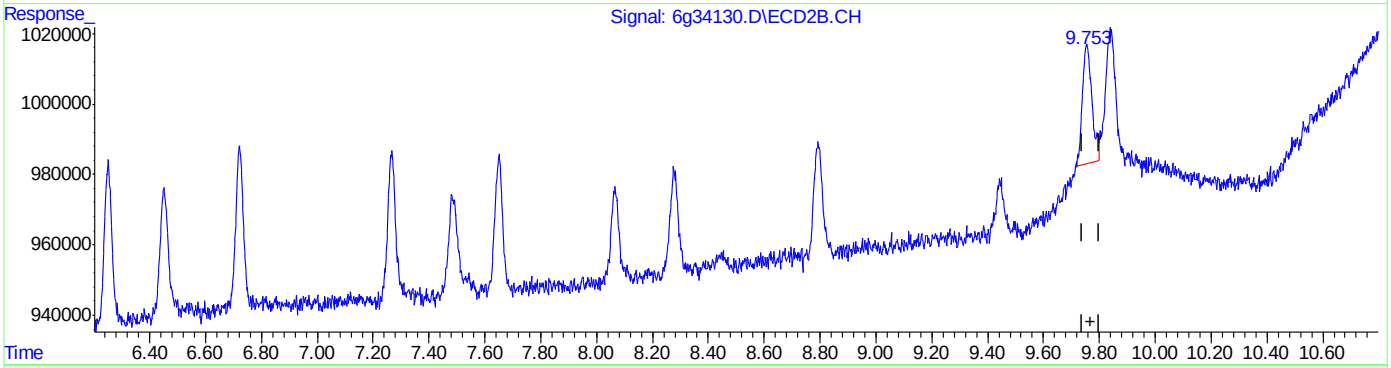
Quantitation Report (Qedit)

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
6PST987.M Mon Apr 18 10:54:08 2016

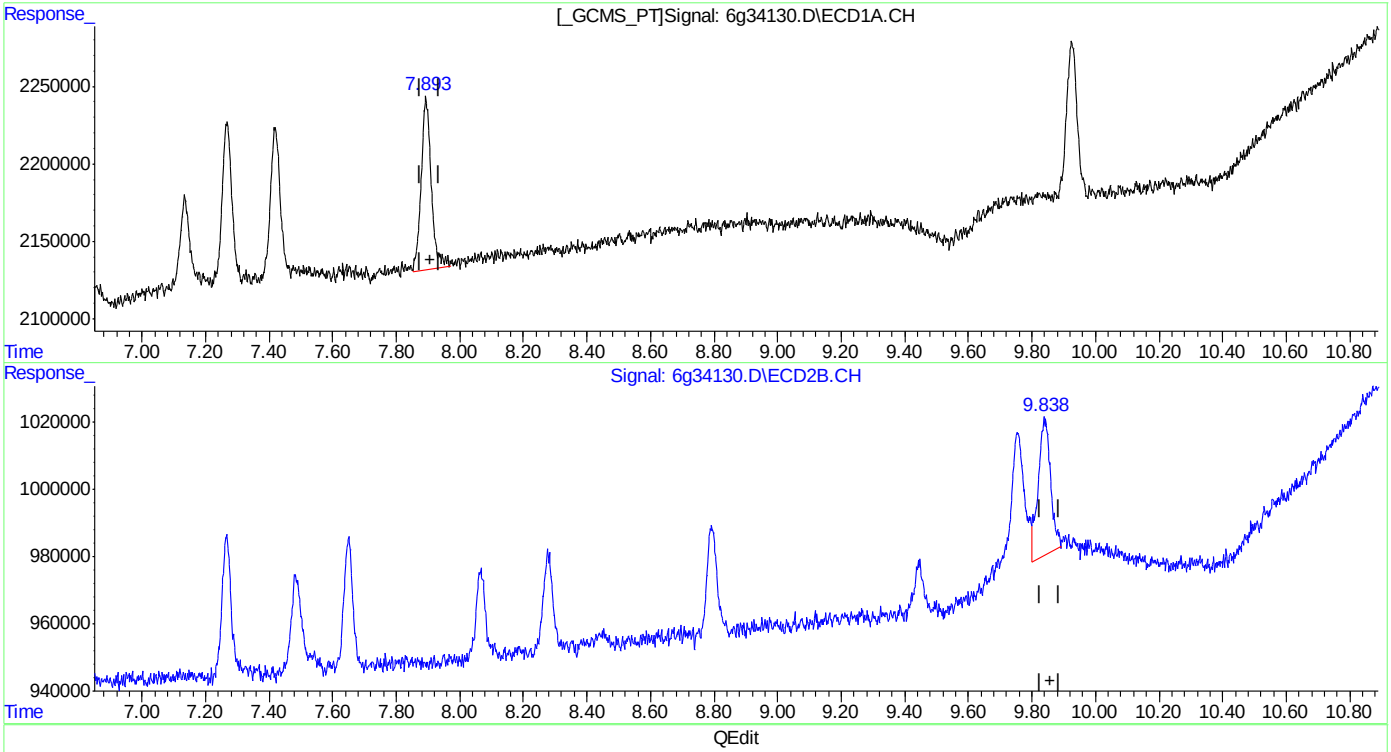
SGS ACCUTEST JC19644

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

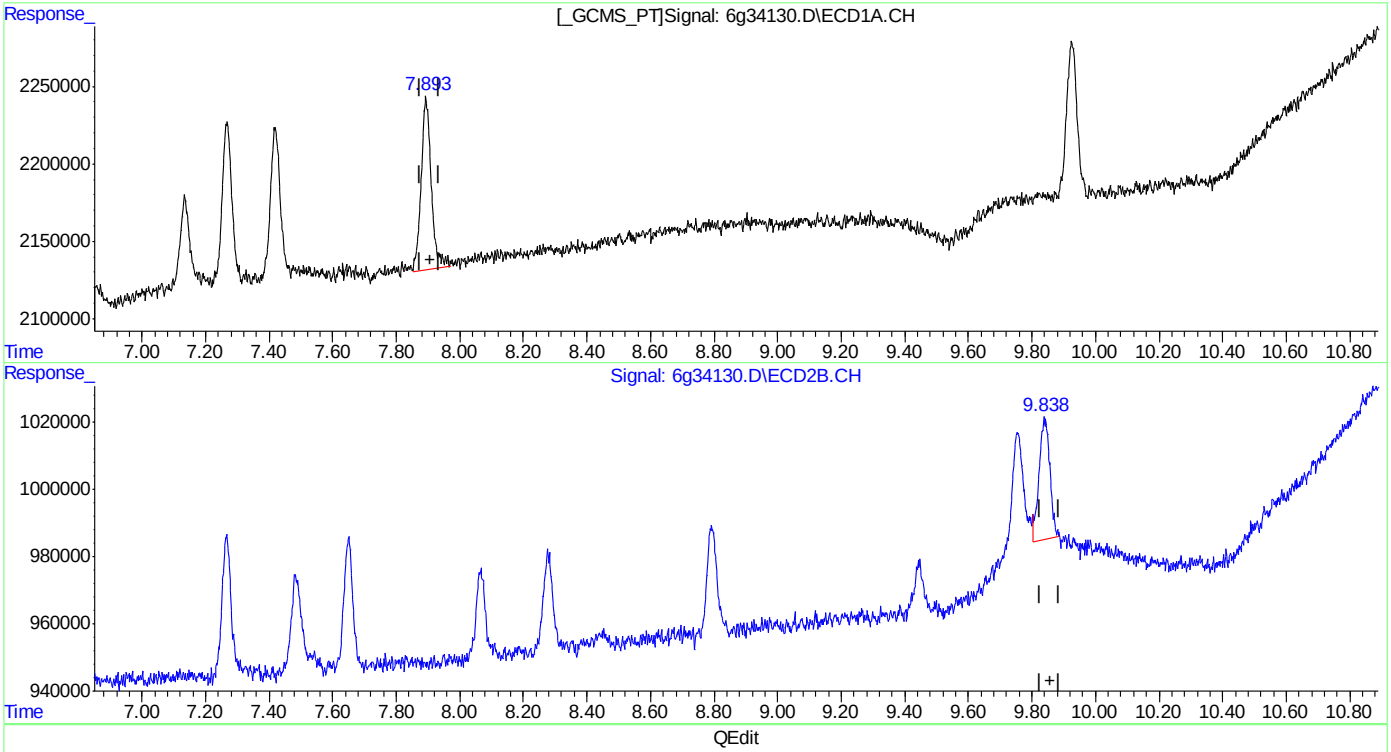
SGS ACCUTEST JC19644

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 JC19644

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.

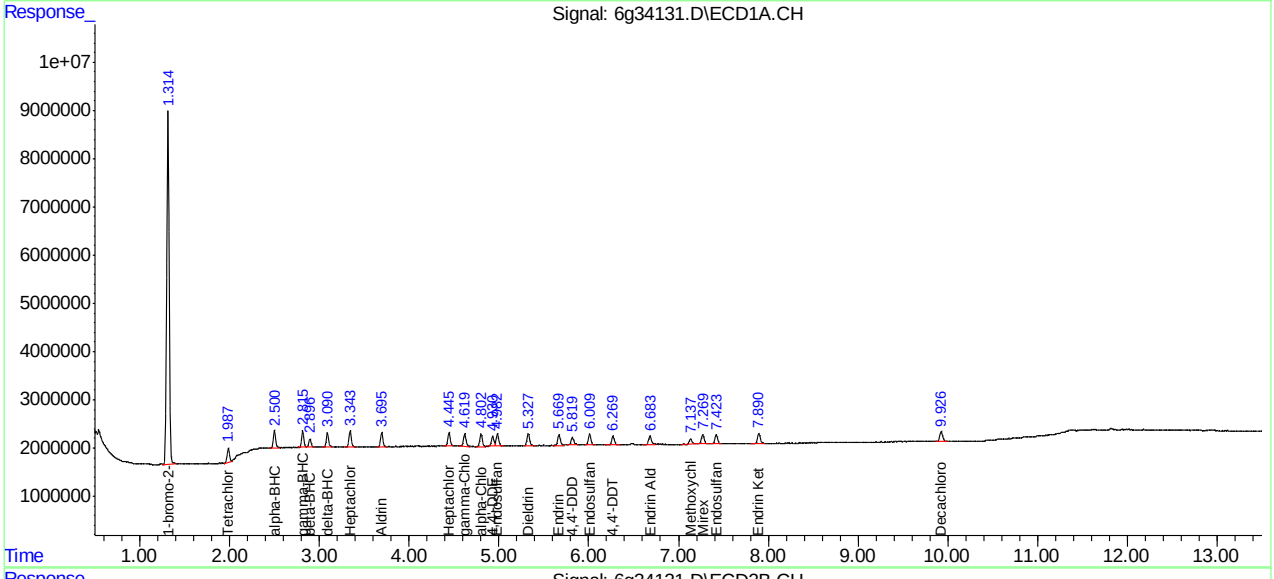
11.6.20 11

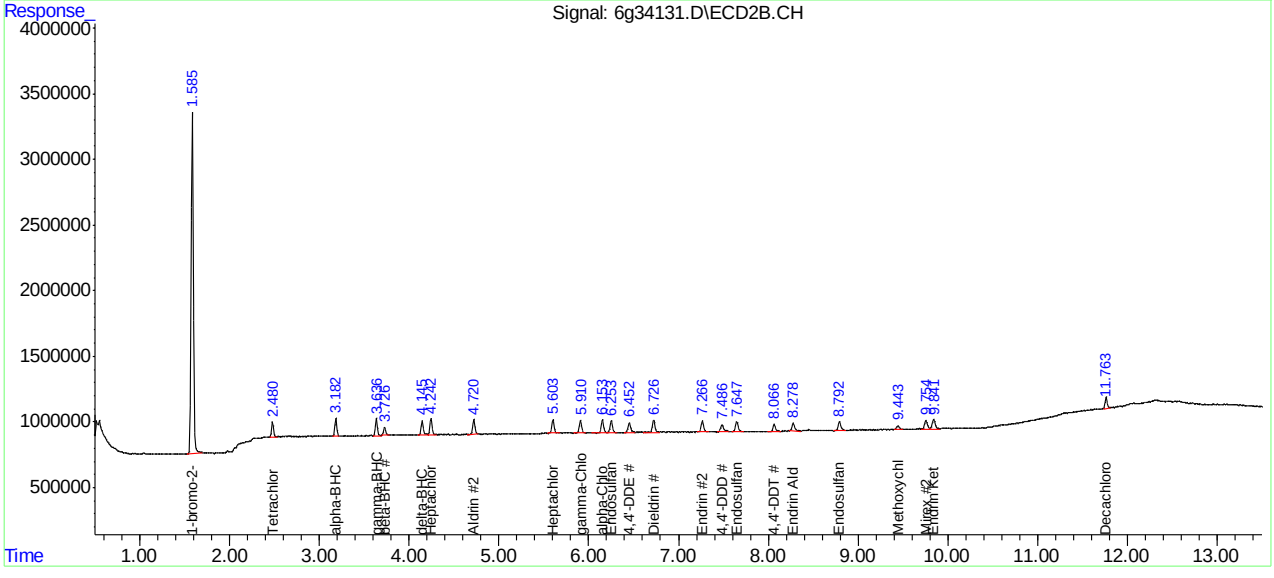
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34131.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 4:05 pm
Operator : dharas
Sample : ic987-2
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:18:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G6G987-IC987	**Method:**	SW846 8081B
Lab FileID:	6G34131.D	**Analyst approved:**	04/18/16 12:23 Dhara Saparia
Injection Time:	04/14/16 16:05	**Supervisor approved:**	04/18/16 14:12 Gwendolyn Burns

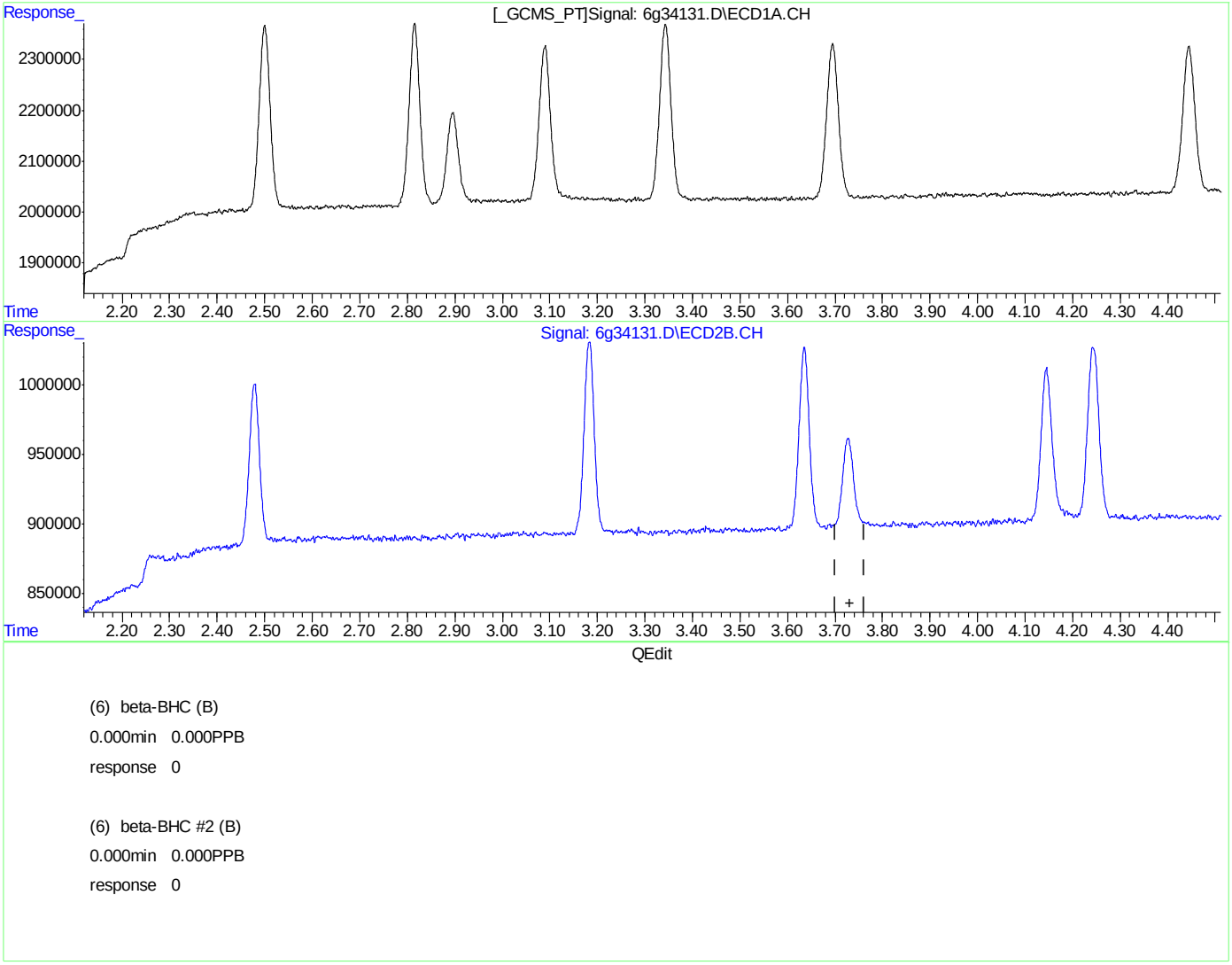
Parameter	CAS	Sig#	R.T. (min.)	Reason
beta-BHC	319-85-7	1	2.90	Poor instrument integration
beta-BHC	319-85-7	2	3.73	Poor instrument integration
Methoxychlor	72-43-5	2	9.44	Poor instrument integration
Decachlorobiphenyl	2051-24-3	2	11.76	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34131.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 4:05 pm
Operator : dharas
Sample : ic987-2
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:41:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(6) beta-BHC (B)
0.000min 0.000PPB
response 0

(6) beta-BHC #2 (B)
0.000min 0.000PPB
response 0

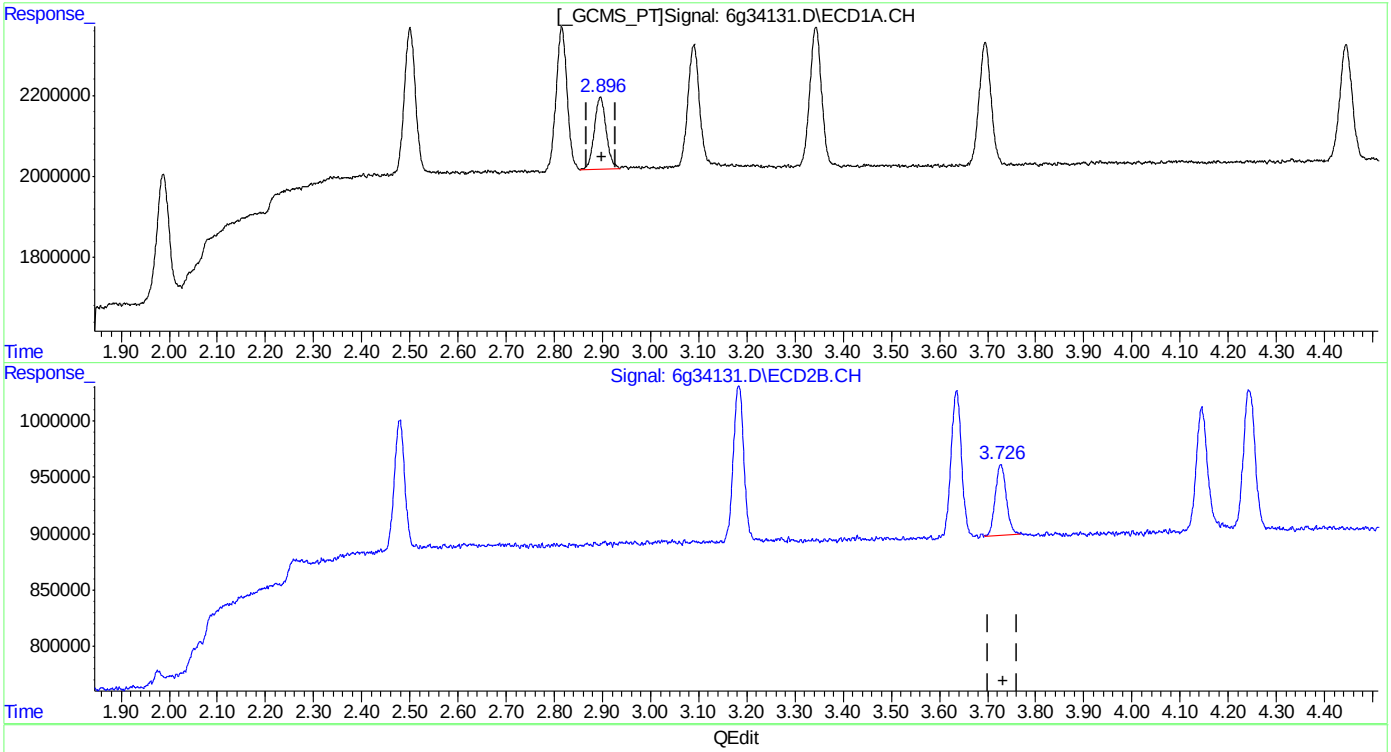
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34131.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 4:05 pm
Operator : dharas
Sample : ic987-2
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:41:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(6) beta-BHC (B)
2.896min 2.186PPB m
response 3076723

(6) beta-BHC #2 (B)
3.726min 2.096PPB m
response 981586

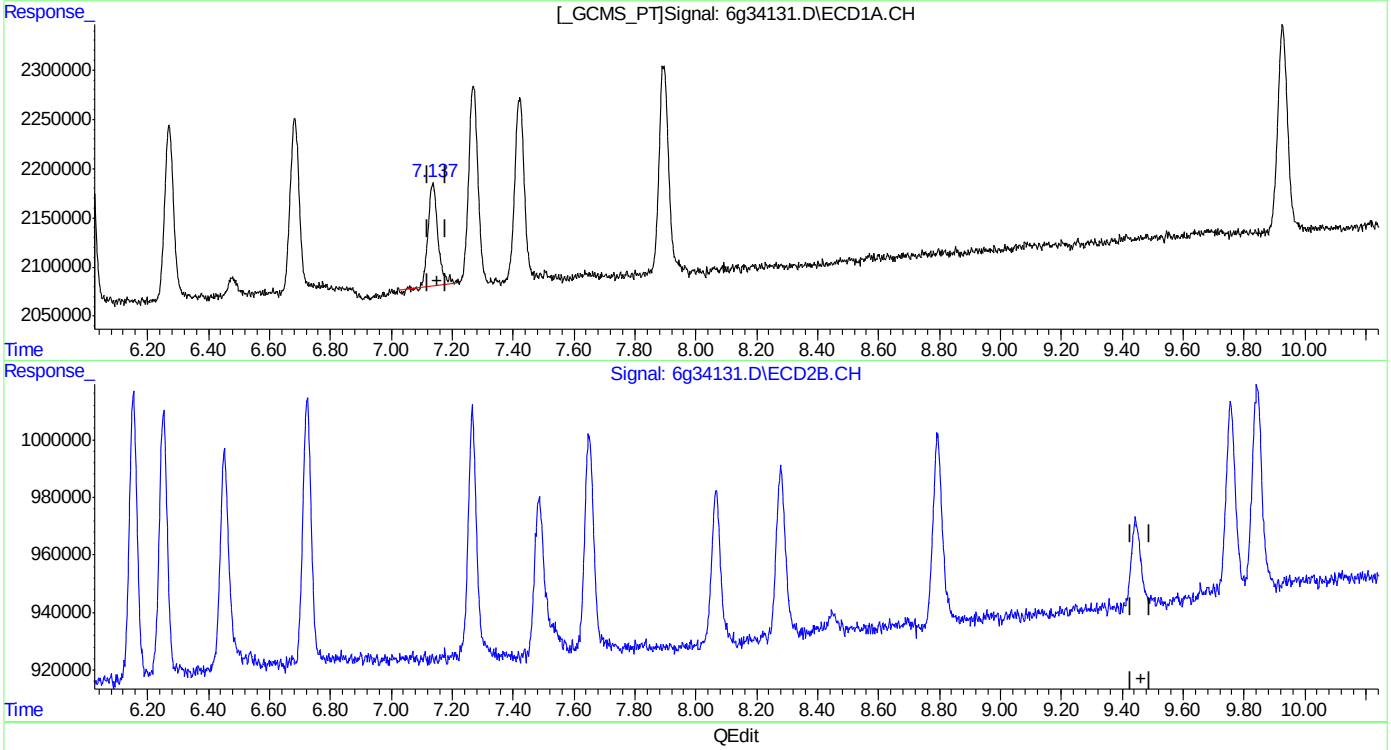
(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:41:59 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34131.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 4:05 pm
Operator : dharas
Sample : ic987-2
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:41:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(21) Methoxychlor (A)
7.137min 2.273PPB
response 2283360

(21) Methoxychlor #2 (A)
0.000min 0.000PPB
response 0

(+) = Expected Retention Time

SGS ACCUTEST JC19644

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
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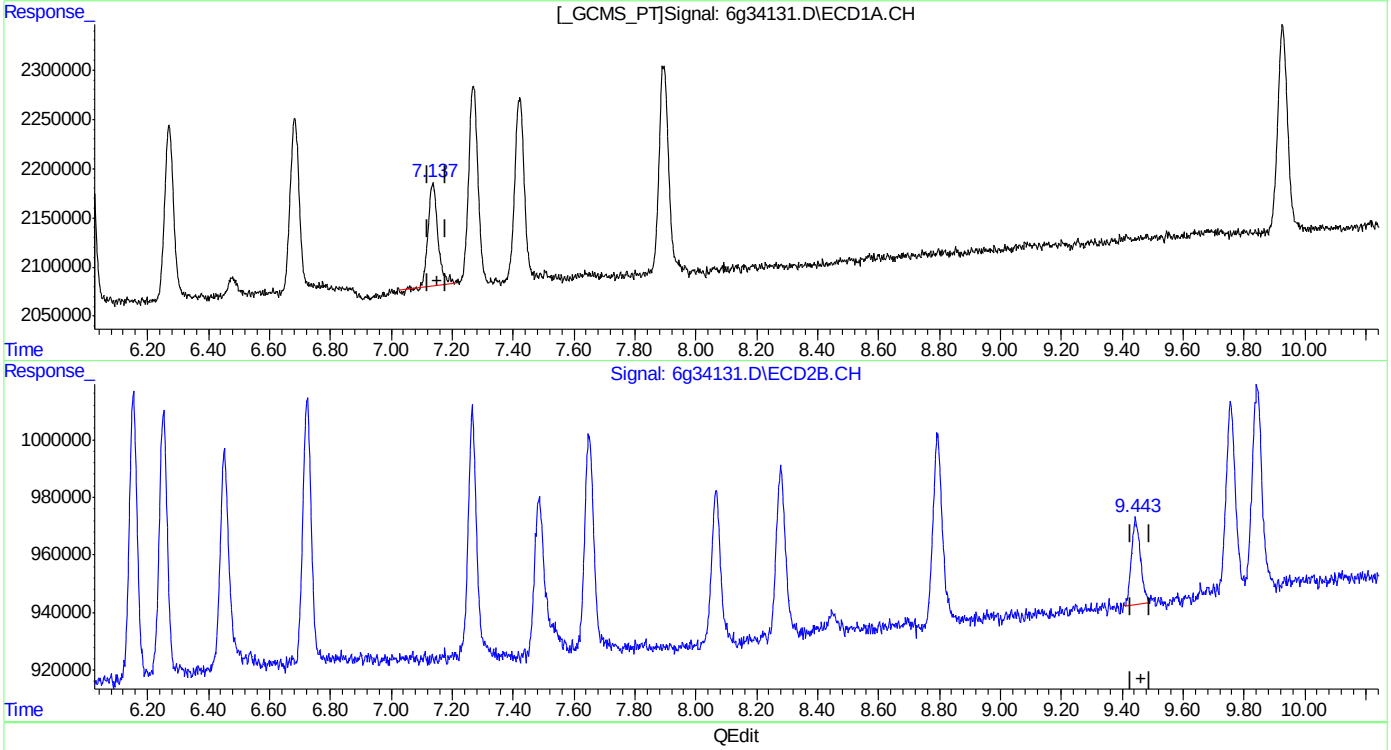
Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(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 JC19644

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34131.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
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Sample : ic987-2
Misc : op92908,g6g987,6.8,,,10,1
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Integration File signal 1: autoint1.e
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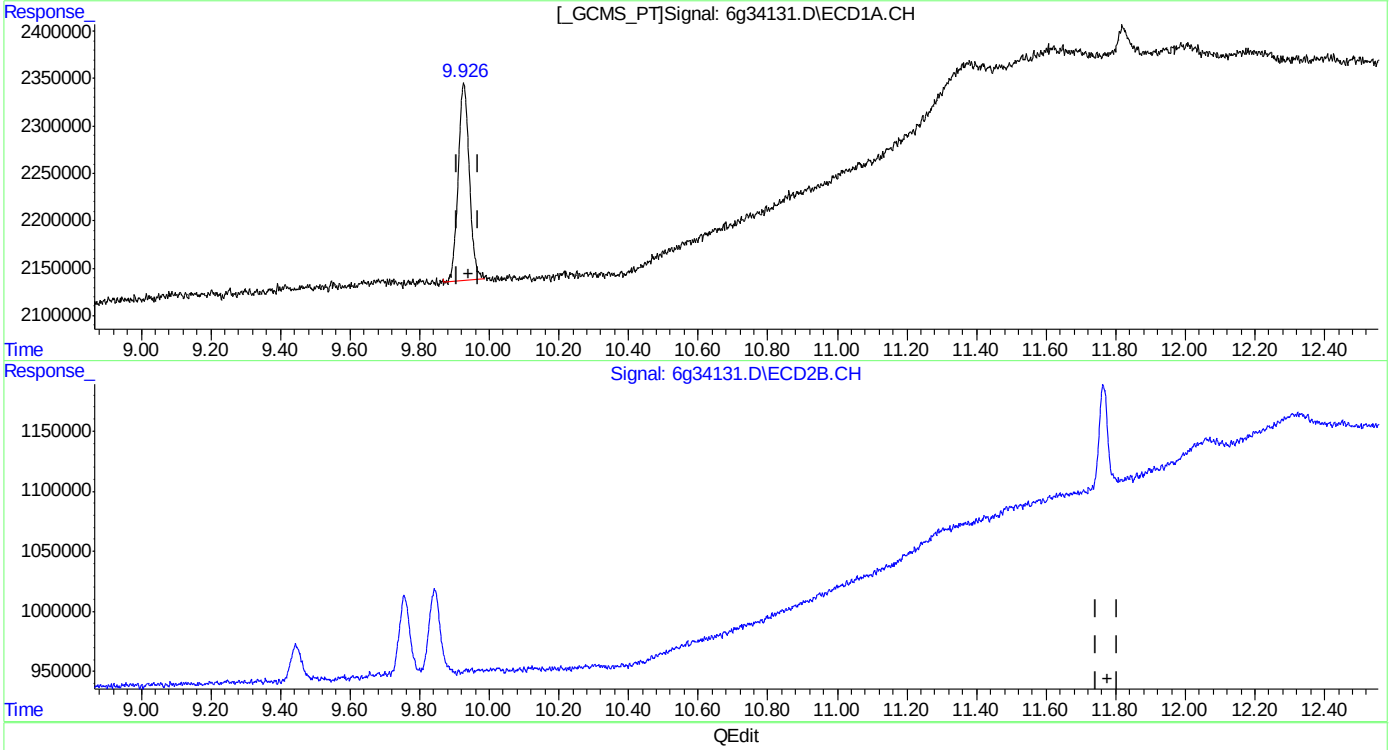
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(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

SGS ACCUTEST JC19644

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
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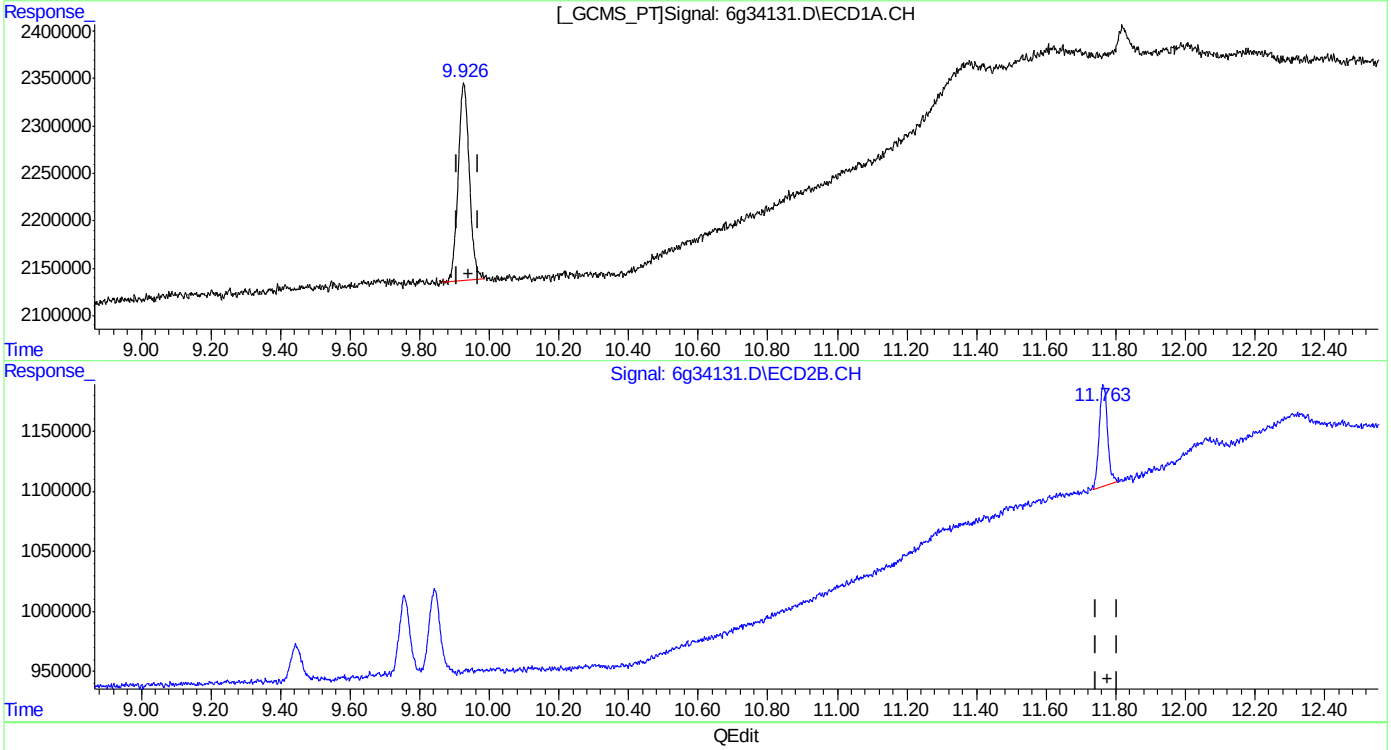
Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(24) Decachlorobiphenyl (SAB)
9.926min 2.107PPB
response 4607200

(24) Decachlorobiphenyl #2 (SAB)
11.763min 2.277PPB m
response 1403506

(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:42:34 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 : 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.

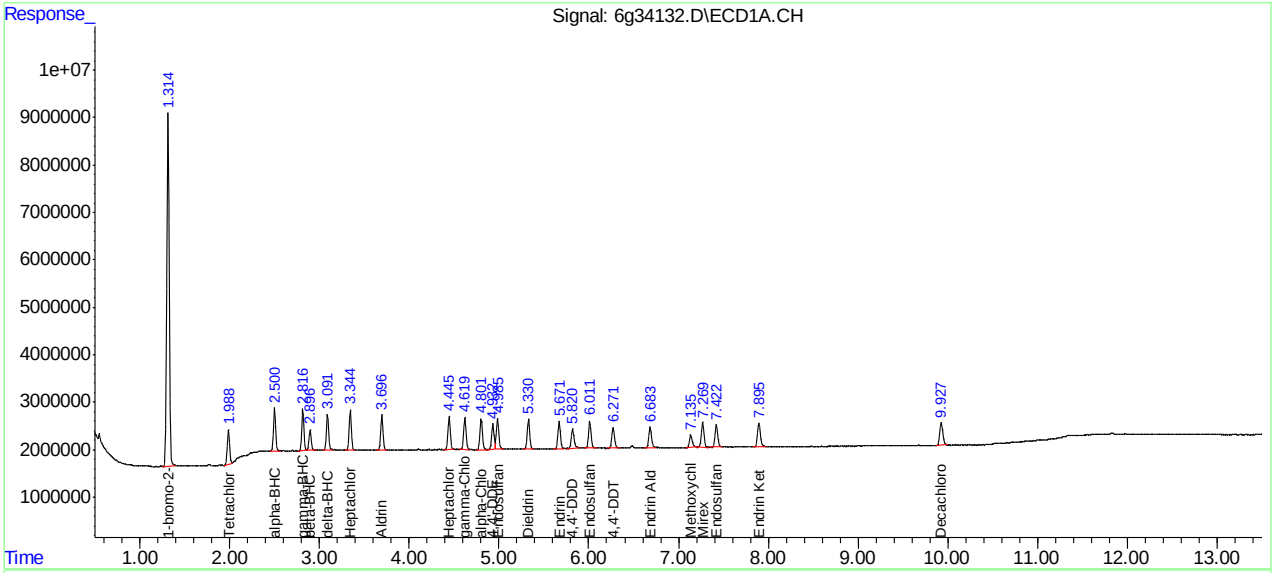
11.6.21 11

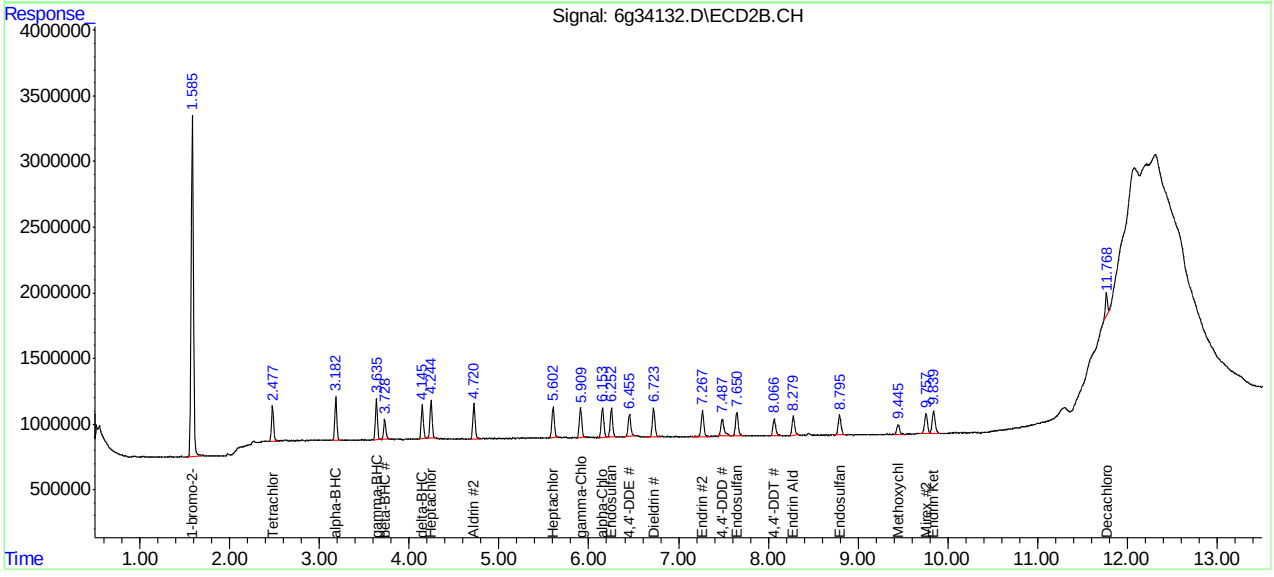
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34132.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 4:22 pm
Operator : dharas
Sample : ic987-5
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:18:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC19644

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

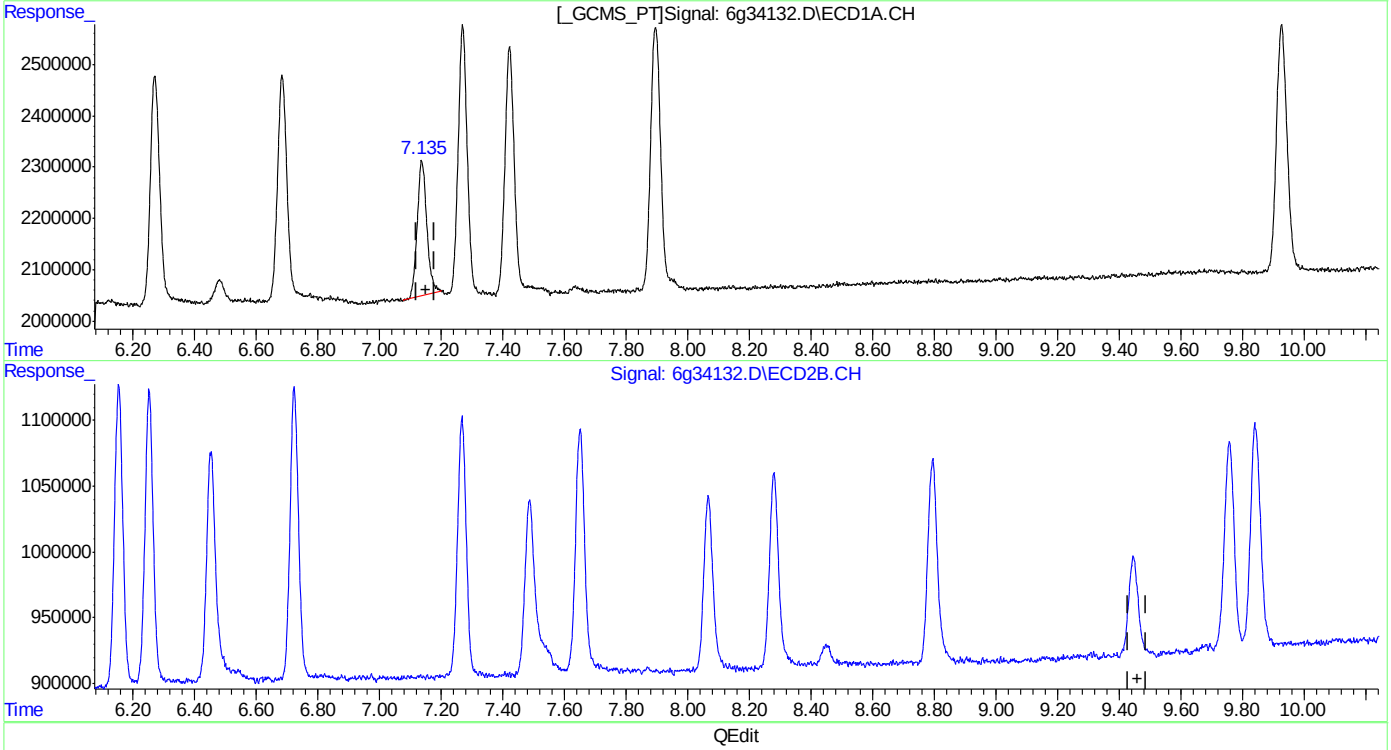
Parameter	CAS	Sig#	R.T. (min.)	Reason
Methoxychlor	72-43-5	2	9.44	Poor instrument integration
Decachlorobiphenyl	2051-24-3	2	11.77	Poor instrument integration

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

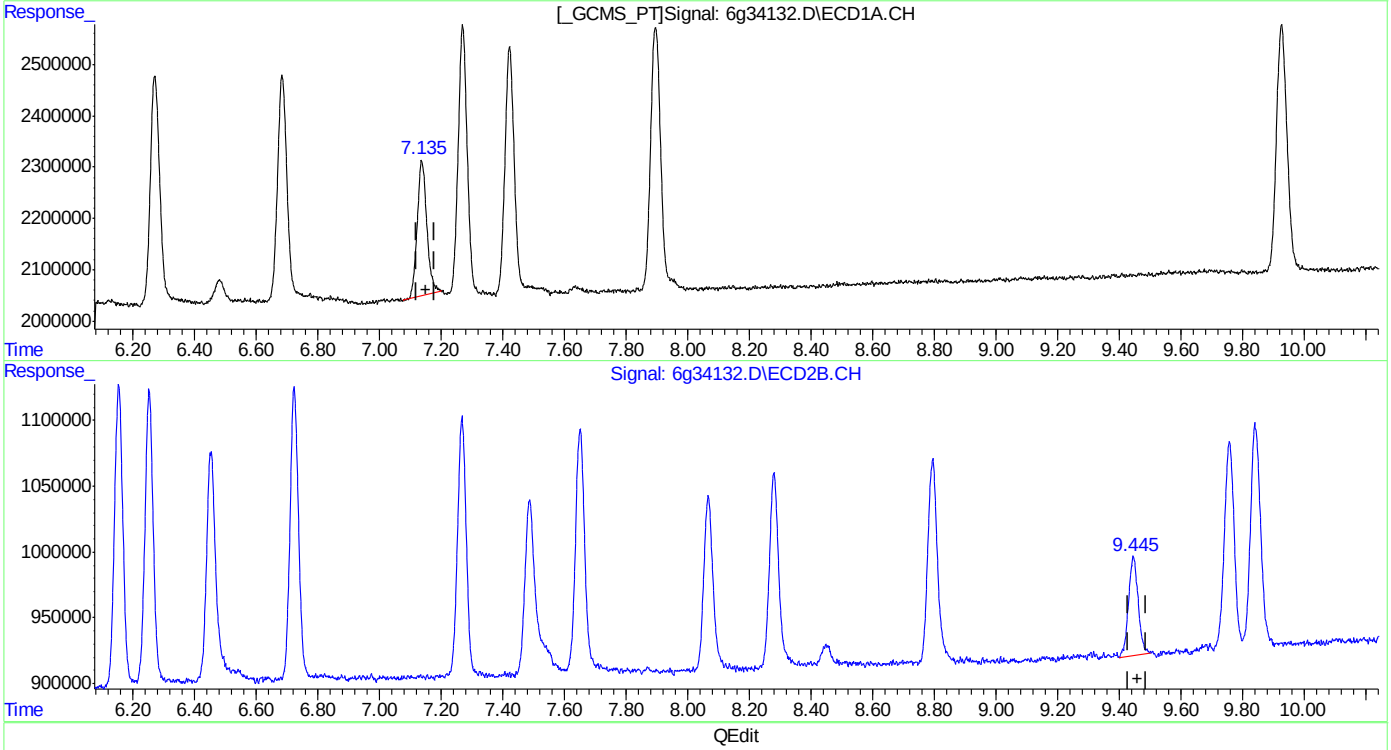
(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:36:47 2016

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

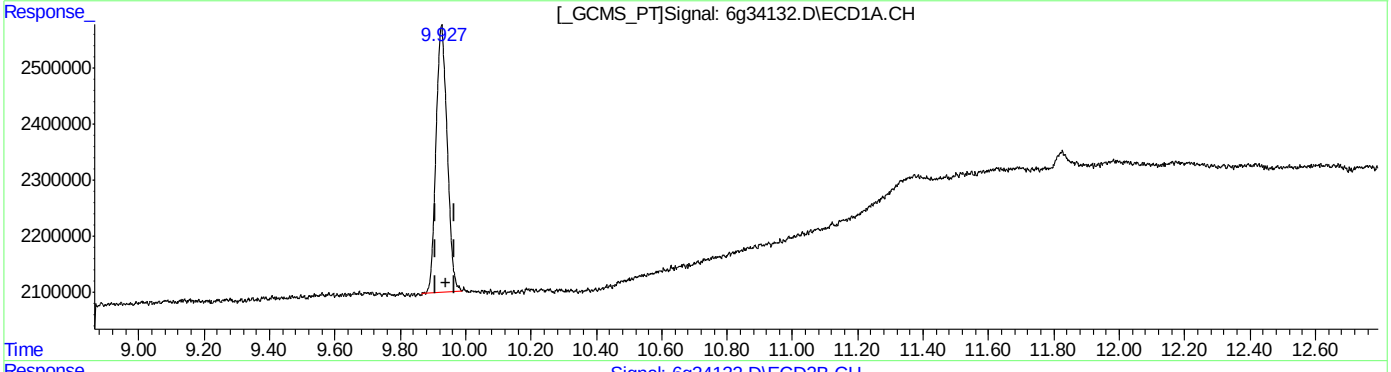
SGS ACCUTEST JC19644

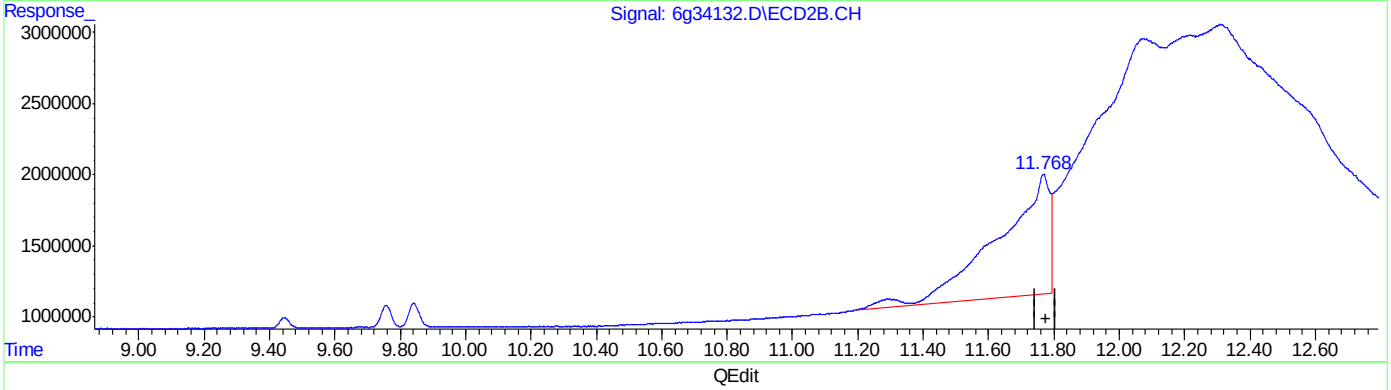
Quantitation Report (Qedit)

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

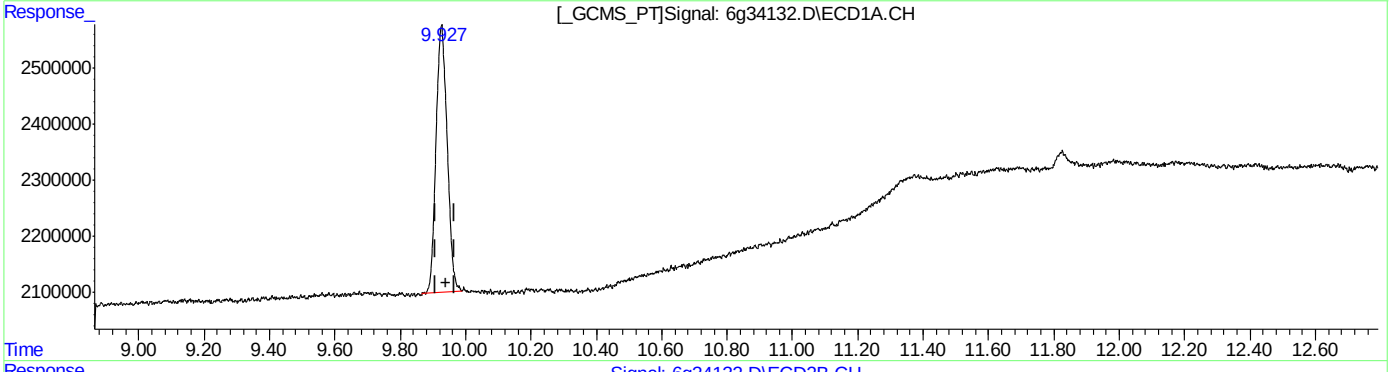
(+) = Expected Retention Time

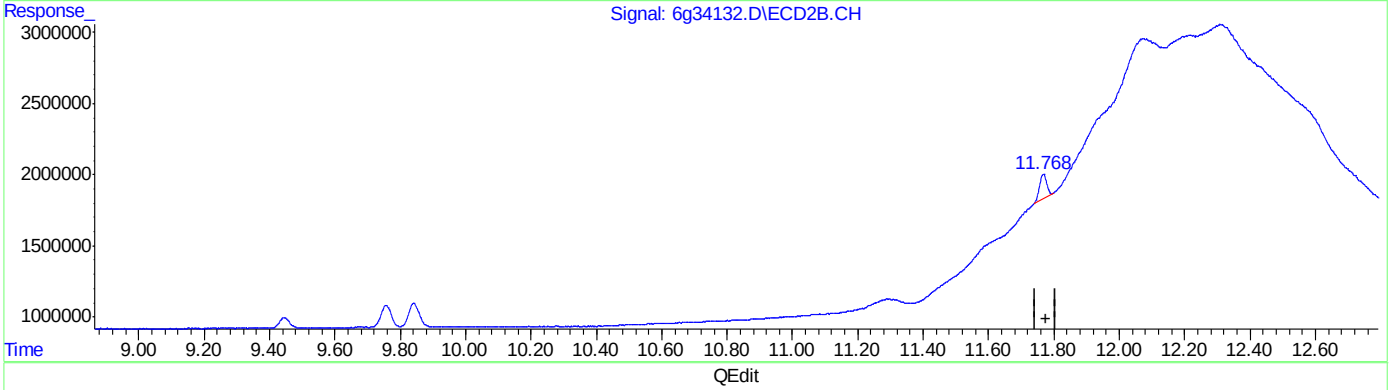
Quantitation Report (Qedit)

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 JC19644

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.

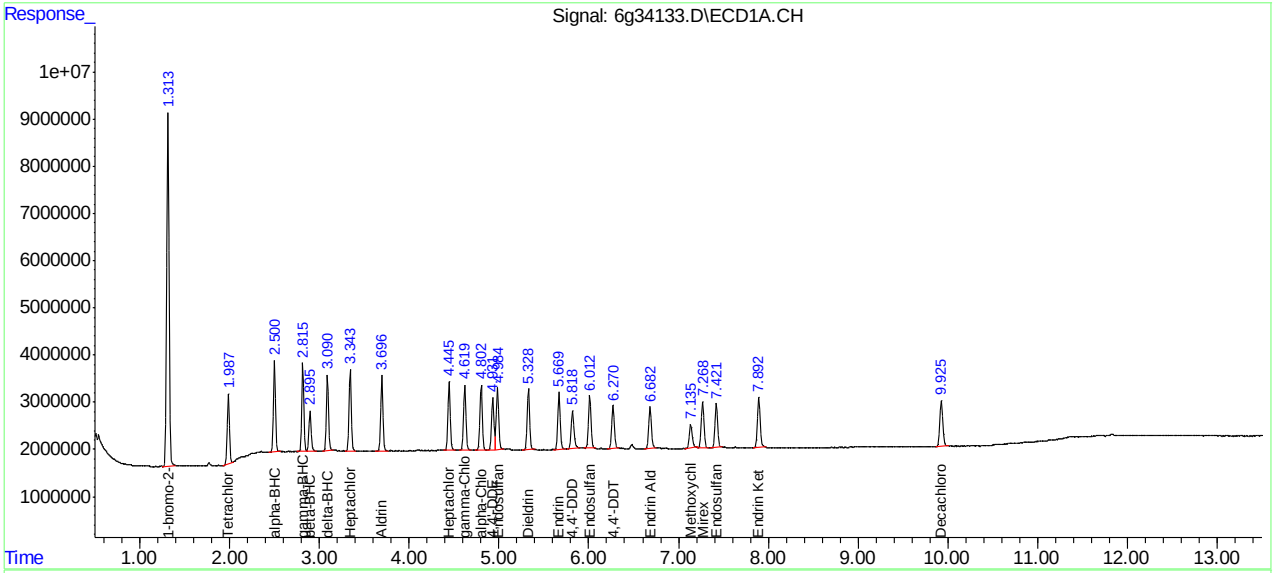
11.6.22 11

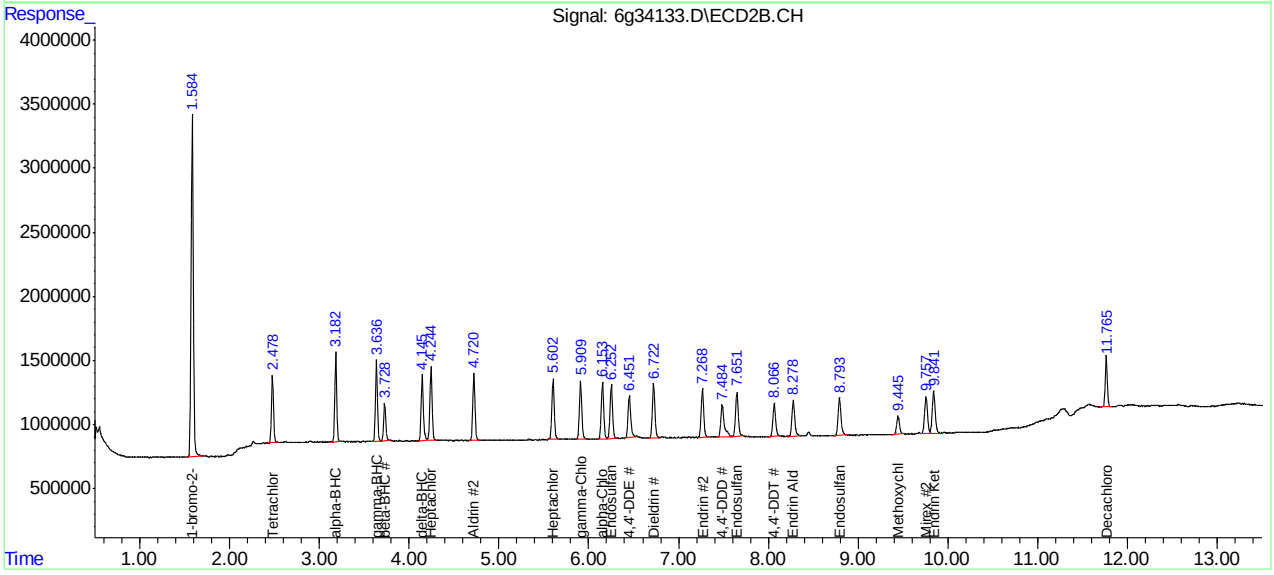
Quantitation Report (QT Reviewed)

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 JC19644

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.

11.6.23 11

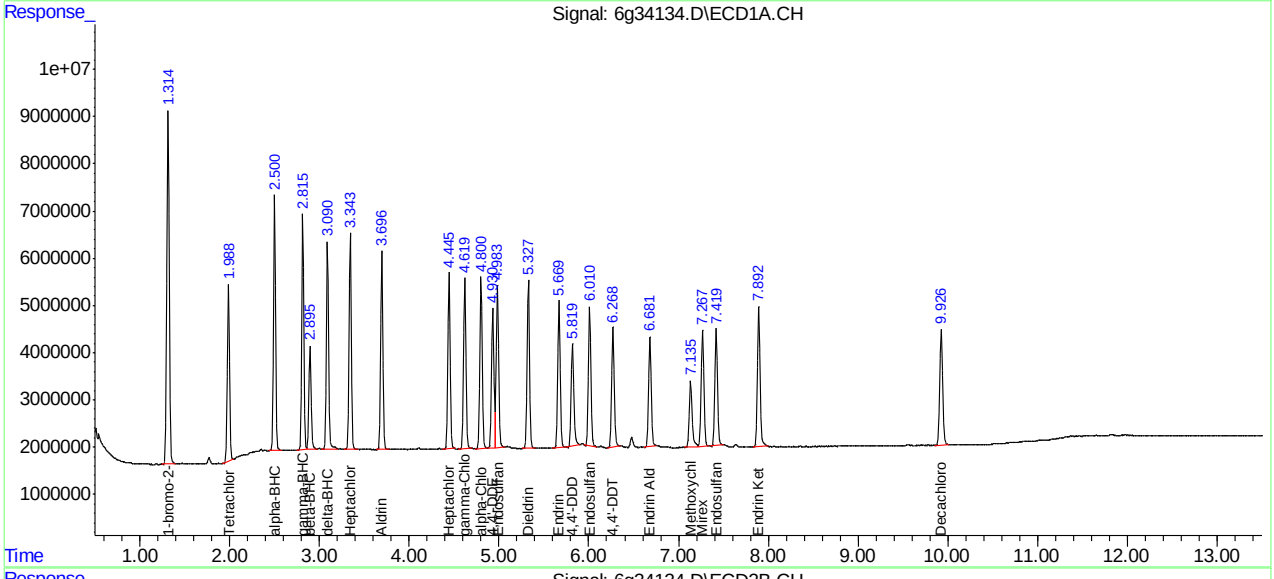
SGS ACCUTEST JC19644

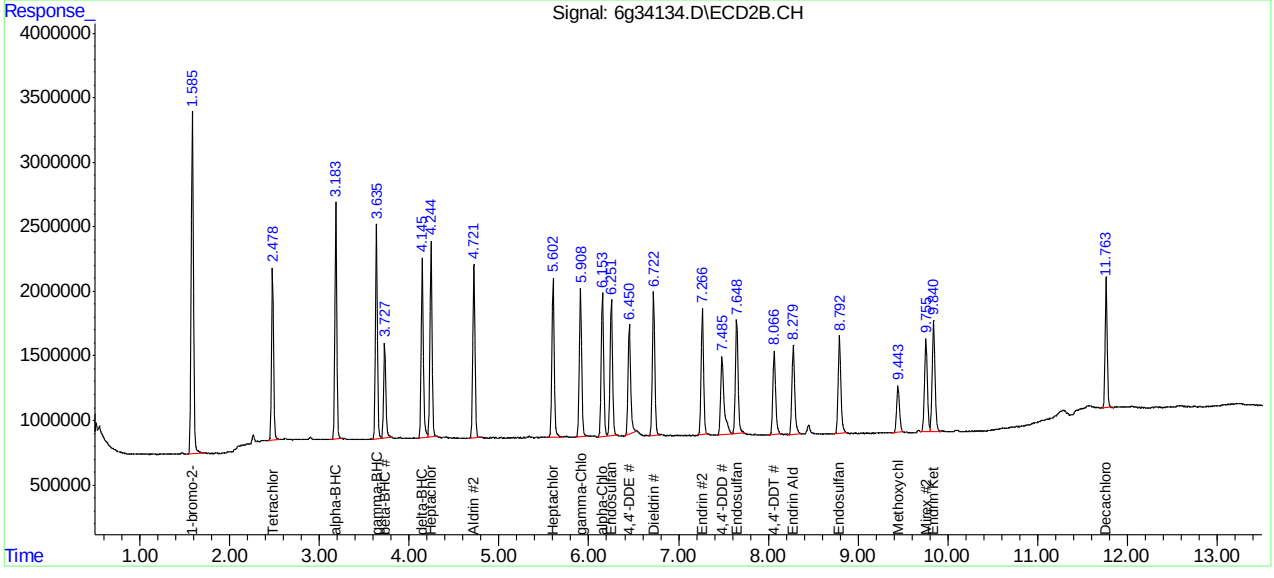
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34134.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 4:55 pm
Operator : dharas
Sample : icc987-25
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:18:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34135.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 5:11 pm
Operator : dharas
Sample : ic987-50
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:19:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.314	1.585	142.7E6	46649119	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.988	2.478	128.5E6	40284945	50.949	46.728
Spiked Amount		40.000	Range	30 - 150	Recovery	= 127.37%	116.82%
24) SAB	Decachlor...	9.925	11.763	108.7E6	31076249	48.273	48.814
Spiked Amount		40.000			Recovery	= 120.68%	122.04%
	Target Compounds						
3) A	alpha-BHC	2.501	3.183	182.7E6	55587963	57.741	52.643
4) MA	gamma-BHC	2.816	3.636	166.5E6	51304864	56.774	52.570
5) MA	Heptachlor	3.343	4.244	161.4E6	50151025	56.220	53.182
6) B	beta-BHC	2.895	3.727	75958143	24516481	52.404	50.690
7) B	delta-BHC	3.090	4.145	160.4E6	48099314	61.164	54.847
8) MB	Aldrin	3.696	4.721	150.9E6	46332889	55.762	50.677
9) B	Heptachlo...	4.444	5.602	138.5E6	43160248	53.903	50.341
10) B	gamma-Chl...	4.619	5.909	140.3E6	42029500	53.189	50.166
11) B	alpha-Chl...	4.801	6.153	137.8E6	41514883	53.193	49.455
12) A	Endosulfan I	4.984	6.252	135.3E6	40039193	51.179	48.926
13) B	4,4'-DDE	4.931	6.452	117.7E6	37863127	59.271	50.214
14) MA	Dieldrin	5.328	6.722	136.4E6	41112386	54.346	49.021
15) MA	Endrin	5.669	7.266	123.5E6	37204386	54.308	50.202
16) A	4,4'-DDD	5.817	7.485	99644782	32810805	57.654	47.452
17) B	Endosulfa...	6.011	7.649	121.6E6	37437820	53.336	48.878
18) MA	4,4'-DDT	6.271	8.065	106.4E6	29173841	58.383	63.623
19) B	Endrin Al...	6.682	8.278	96135294	30002664	52.182	48.669
20) B	Endosulfa...	7.420	8.792f	103.7E6	31655587	52.894	49.235
21) A	Methoxychlor	7.134f	9.443f	62221581	16358936	60.141	67.447
22)	Mirex	7.267	9.756	102.6E6	29870142	47.691	45.770
23) B	Endrin Ke...	7.894	9.841f	127.4E6	37439358	59.481	54.458

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

11.6.24 11

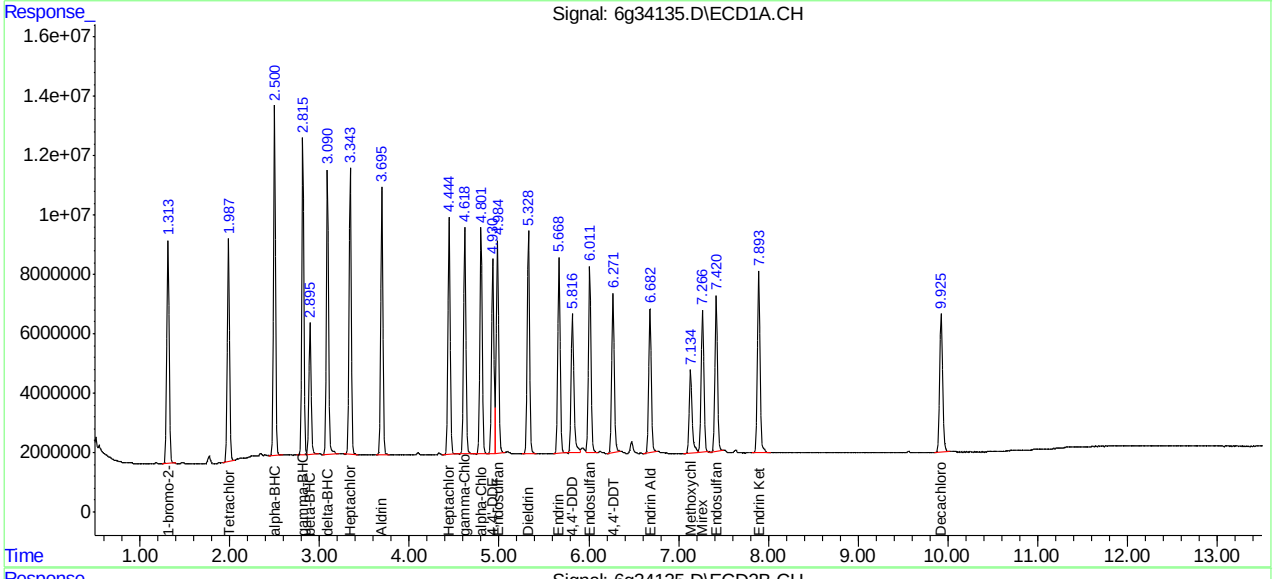
SGS ACCUTEST JC19644

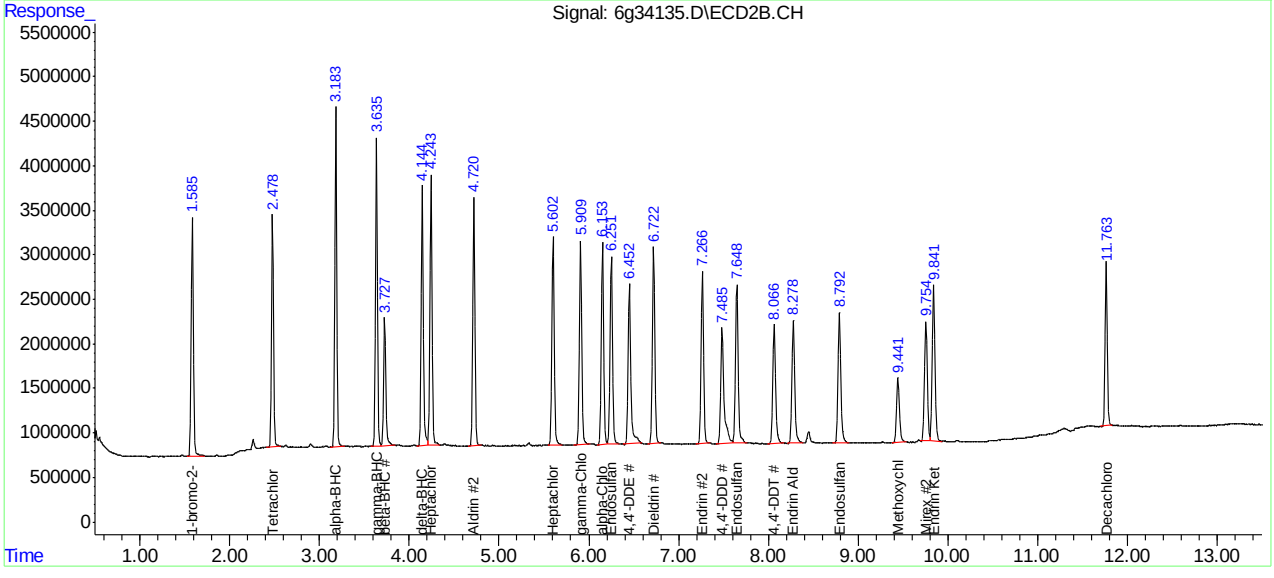
Quantitation Report (QT Reviewed)

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.

11.6.25 11

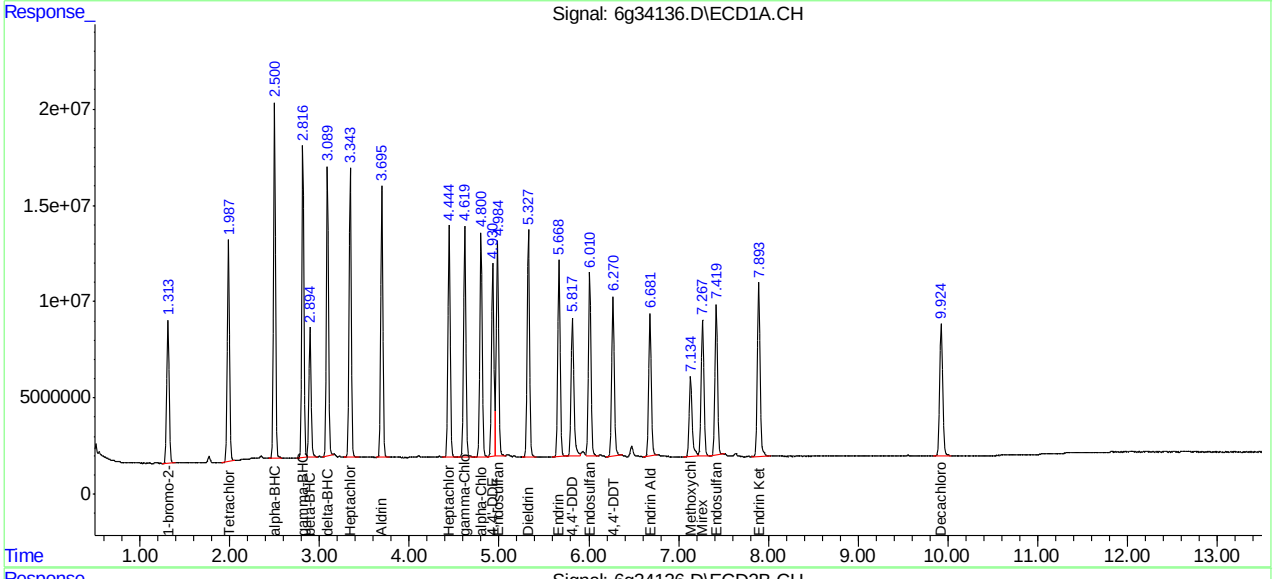
SGS ACCUTEST JC19644

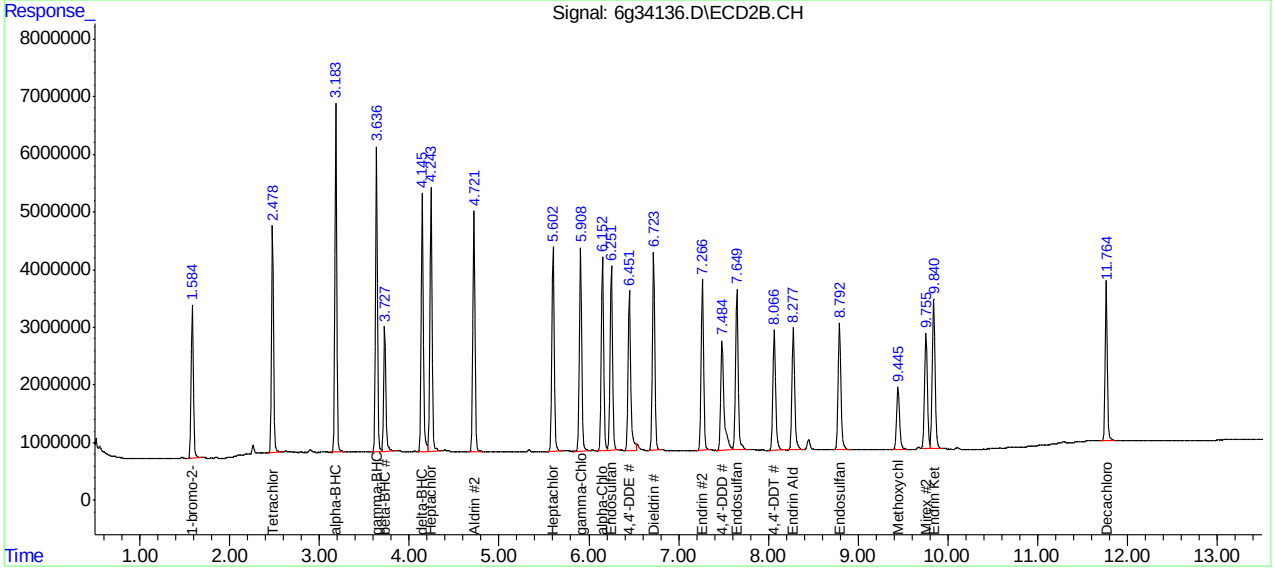
Quantitation Report (QT Reviewed)

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





SGS ACCUTEST JC19644

Manual Integration Approval Summary

Sample Number:	G6G987-IC987	**Method:**	SW846 8081B
Lab FileID:	6G34136.D	**Analyst approved:**	04/18/16 12:23 Dhara Saparia
Injection Time:	04/14/16 17:27	**Supervisor approved:**	04/18/16 14:12 Gwendolyn Burns

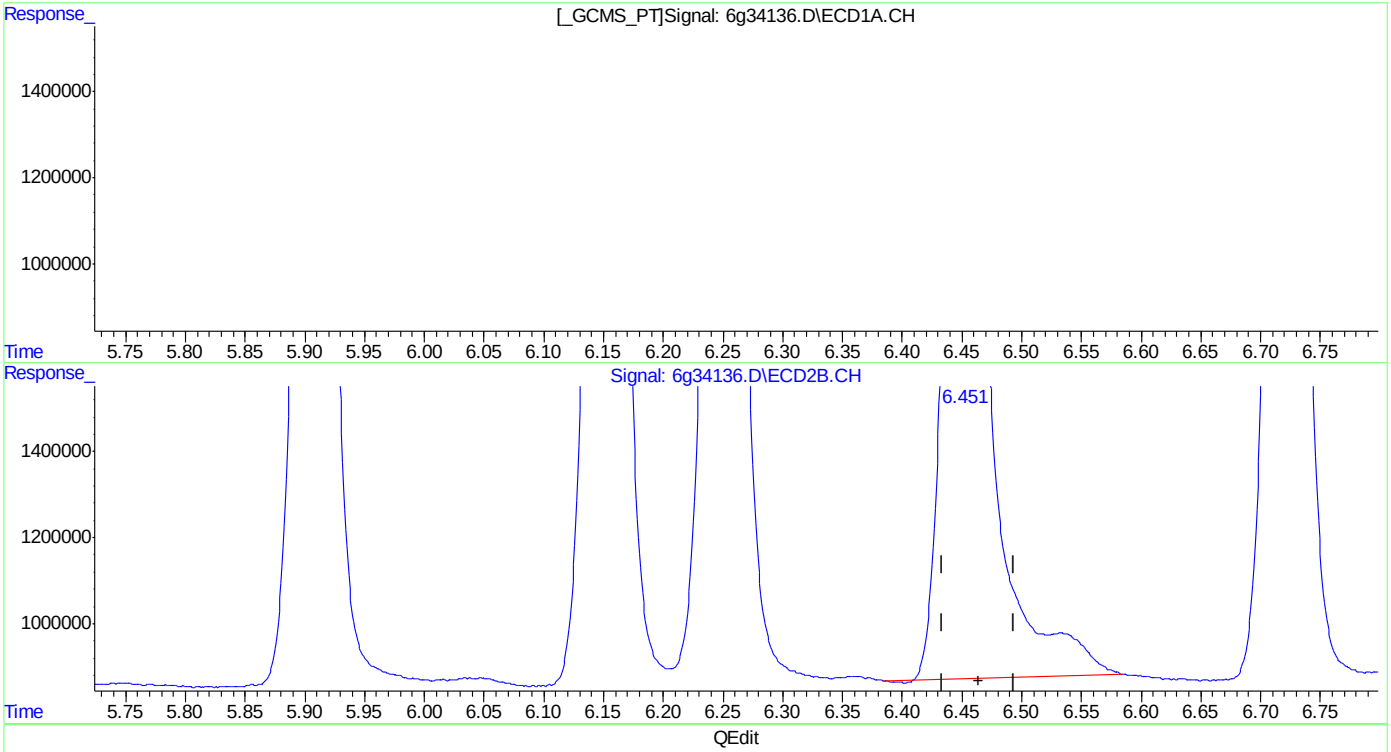
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	2	6.45	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34136.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 5:27 pm
Operator : dharas
Sample : ic987-75
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:24:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(13) 4,4'-DDE (B)
4.931min 93.299PPB
response 184683755

(13) 4,4'-DDE #2 (B)
6.451min 76.395PPB
response 57463273

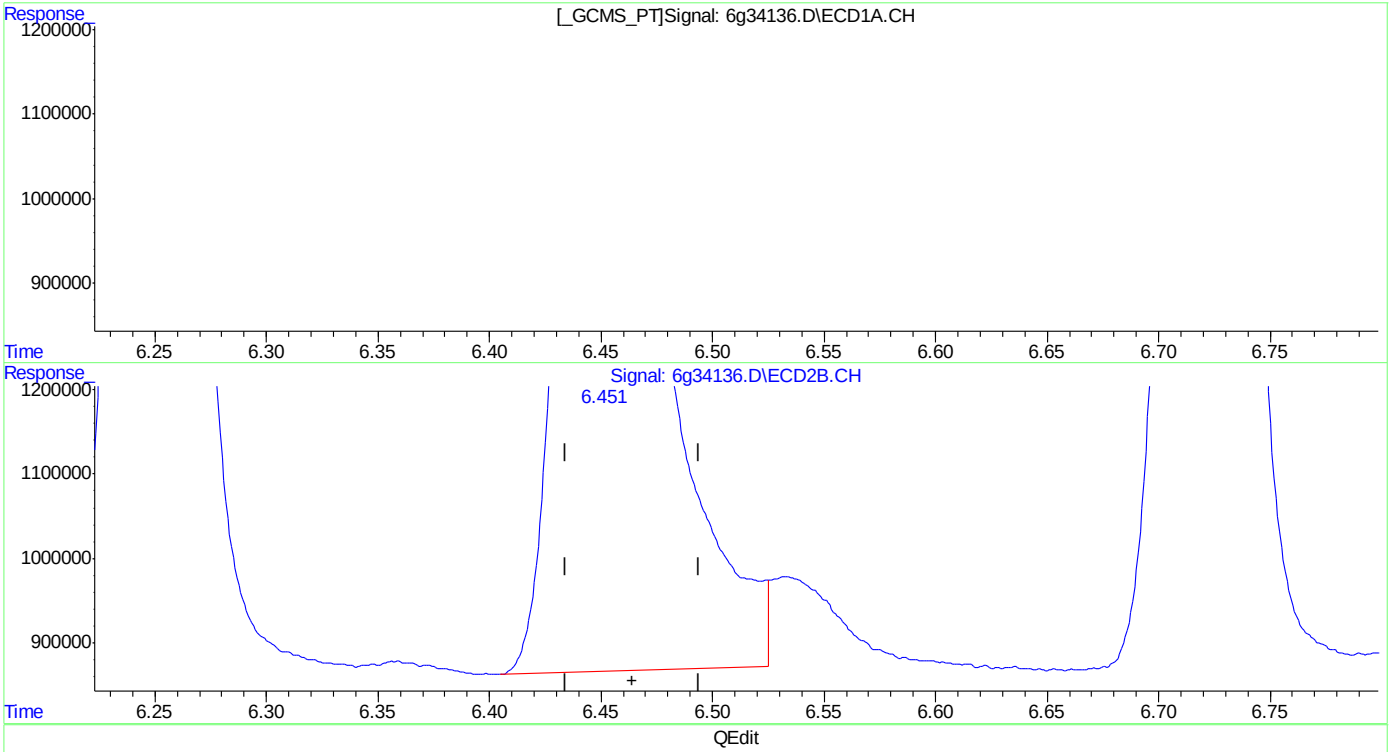
(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:25:21 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34136.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 5:27 pm
Operator : dharas
Sample : ic987-75
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:24:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(13) 4,4'-DDE (B)
4.931min 93.299PPB
response 184683755

(13) 4,4'-DDE #2 (B)
6.451min 74.382PPB m
response 55949391

(+) = Expected Retention Time

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/18/16 14:12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34137.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 5:44 pm
Operator : dharas
Sample : ic987-100
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:19:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.313	1.584	144.2E6	47061020	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.987	2.478	272.5E6	83192568	106.915	95.654
Spiked Amount		40.000	Range	30 - 150	Recovery	= 267.29%#	239.14%#
24) SAB	Decachlor...	9.925	11.764	218.5E6	61817376	96.056	96.252
Spiked Amount		40.000			Recovery	= 240.14%	240.63%
	Target Compounds						
3) A	alpha-BHC	2.500	3.183	405.7E6	120.6E6	126.925	113.257
4) MA	gamma-BHC	2.814	3.635	363.8E6	109.3E6	122.801	111.008
5) MA	Heptachlor	3.343	4.244	347.0E6	103.8E6	119.655	109.162
6) B	beta-BHC	2.894	3.727	155.8E6	49110274	106.406	100.652
7) B	delta-BHC	3.089	4.145	345.0E6	103.0E6	130.262	116.398
8) MB	Aldrin	3.695	4.721	328.0E6	97370488	119.971	105.568
9) B	Heptachlo...	4.444	5.603	293.6E6	88909536	113.171	102.795
10) B	gamma-Chl...	4.618	5.909	299.9E6	86940726	112.581	102.863
11) B	alpha-Chl...	4.800	6.152	292.8E6	85054640	111.873	100.435
12) A	Endosulfan I	4.983	6.251	288.9E6	81968430	108.152	99.285
13) B	4,4'-DDE	4.931	6.452	258.4E6	77237419	128.766	101.535m
14) MA	Dieldrin	5.328	6.723	295.4E6	85669631	116.508	101.256
15) MA	Endrin	5.667	7.267	264.1E6	77041181	114.962	103.046
16) A	4,4'-DDD	5.818	7.484	214.3E6	66667046	122.739	95.573
17) B	Endosulfa...	6.011	7.649	257.1E6	76718084	111.662	99.284
18) MA	4,4'-DDT	6.270	8.066	237.9E6	61734502	129.179	133.453
19) B	Endrin Al...	6.683	8.277	208.9E6	60964018	112.232	98.027
20) B	Endosulfa...	7.419	8.792f	220.0E6	64603260	111.082	99.599
21) A	Methoxychlor	7.134f	9.444f	127.3E6	33797951	121.808	138.128
22)	Mirex	7.267	9.756	206.5E6	58928864	94.978	89.507
23) B	Endrin Ke...	7.893	9.841f	267.8E6	77889496	123.785	112.304

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

11.6.26 11

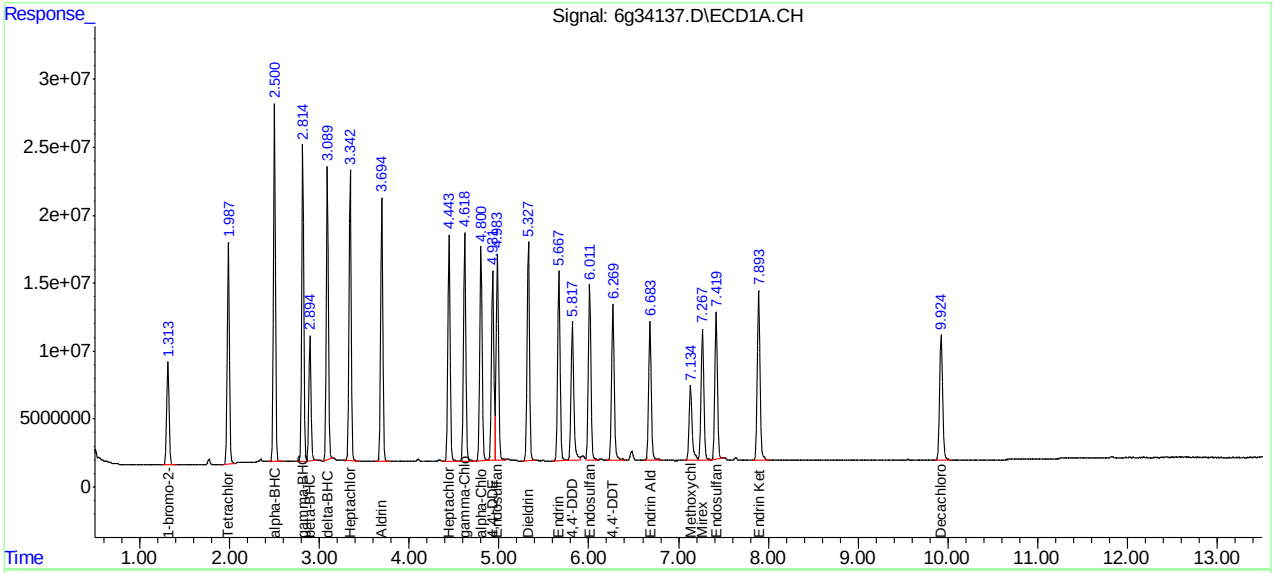
SGS ACCUTEST JC19644

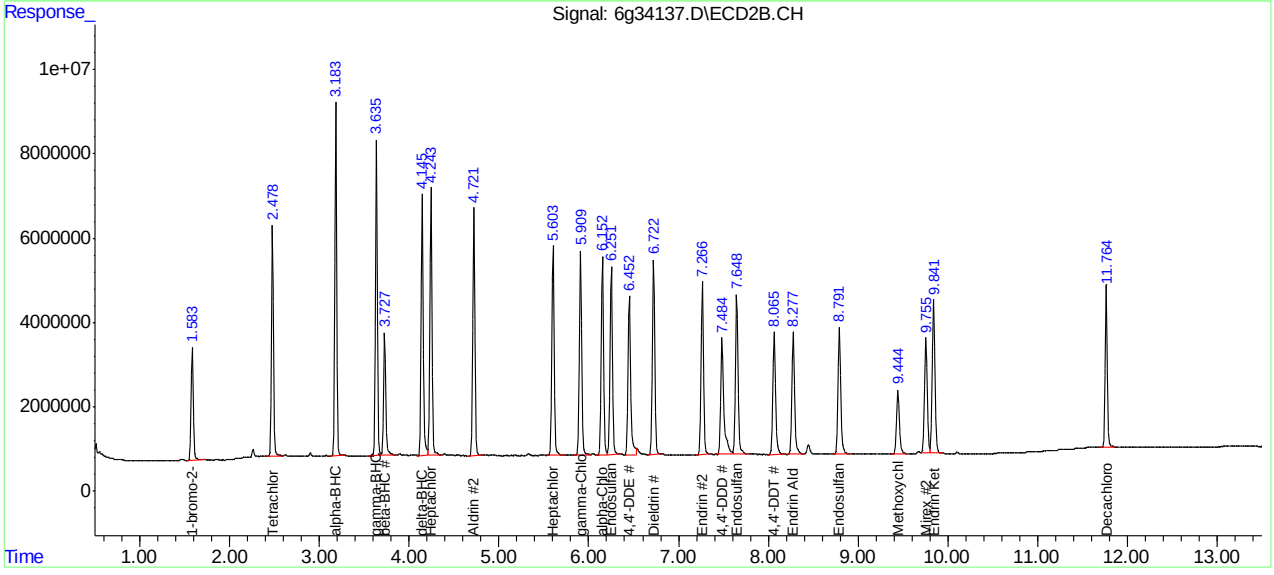
Quantitation Report (QT Reviewed)

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





SGS ACCUTEST JC19644

Manual Integration Approval Summary

Sample Number:	G6G987-IC987	**Method:**	SW846 8081B
Lab FileID:	6G34137.D	**Analyst approved:**	04/18/16 12:23 Dhara Saparia
Injection Time:	04/14/16 17:44	**Supervisor approved:**	04/18/16 14:12 Gwendolyn Burns

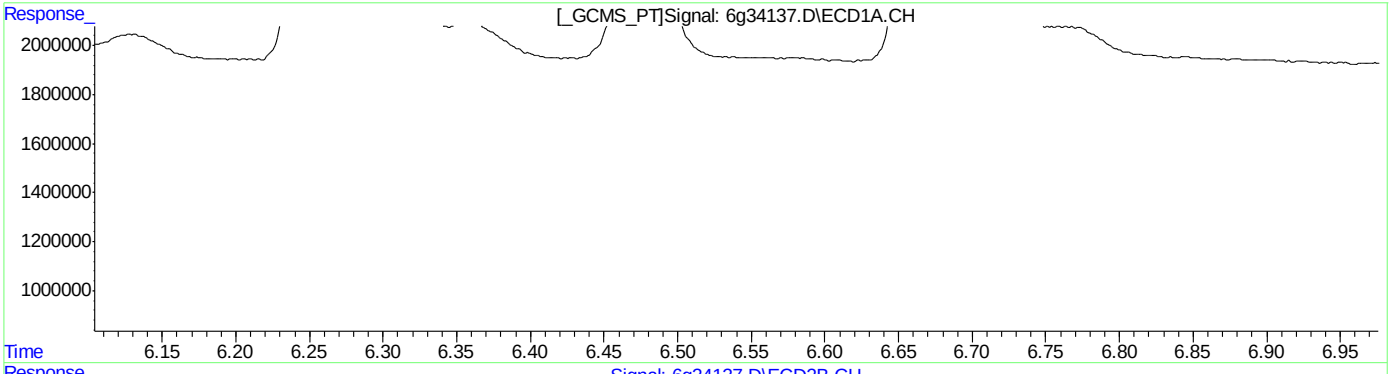
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	2	6.45	Poor instrument integration

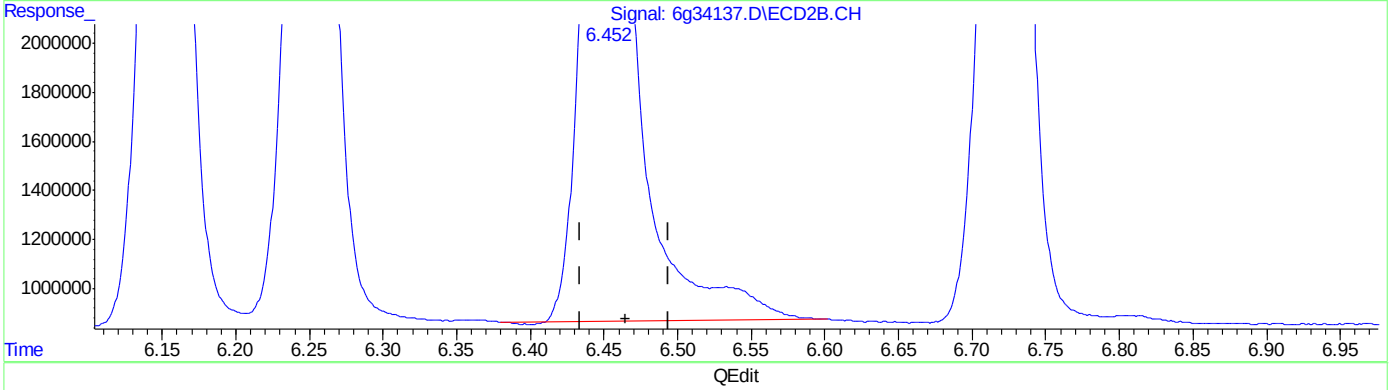
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34137.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 5:44 pm
Operator : dharas
Sample : ic987-100
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:25:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(13) 4,4'-DDE (B)
4.931min 128.766PPB
response 258364552

(13) 4,4'-DDE #2 (B)
6.452min 103.914PPB
response 79046664

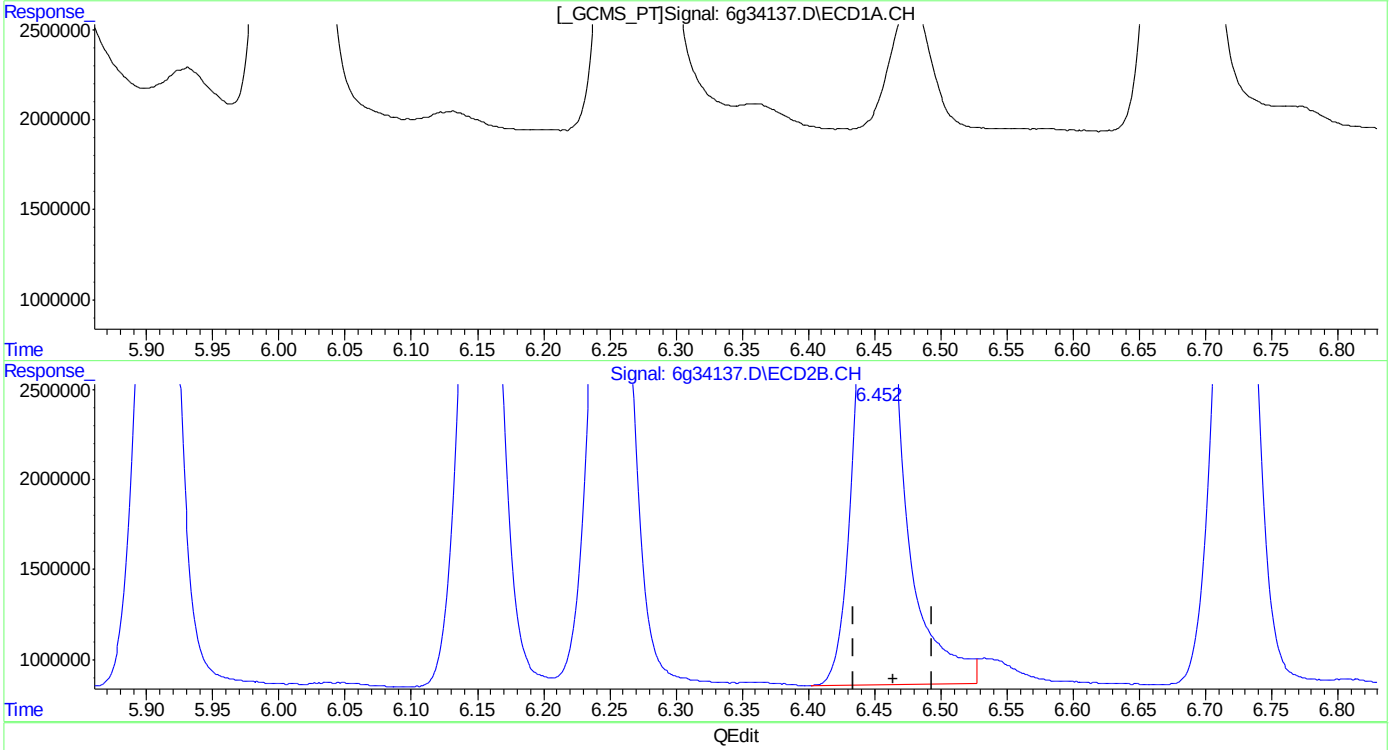
(+) = Expected Retention Time

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
6PST987.M Mon Apr 18 10:27:22 2016

SGS ACCUTEST JC19644

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.

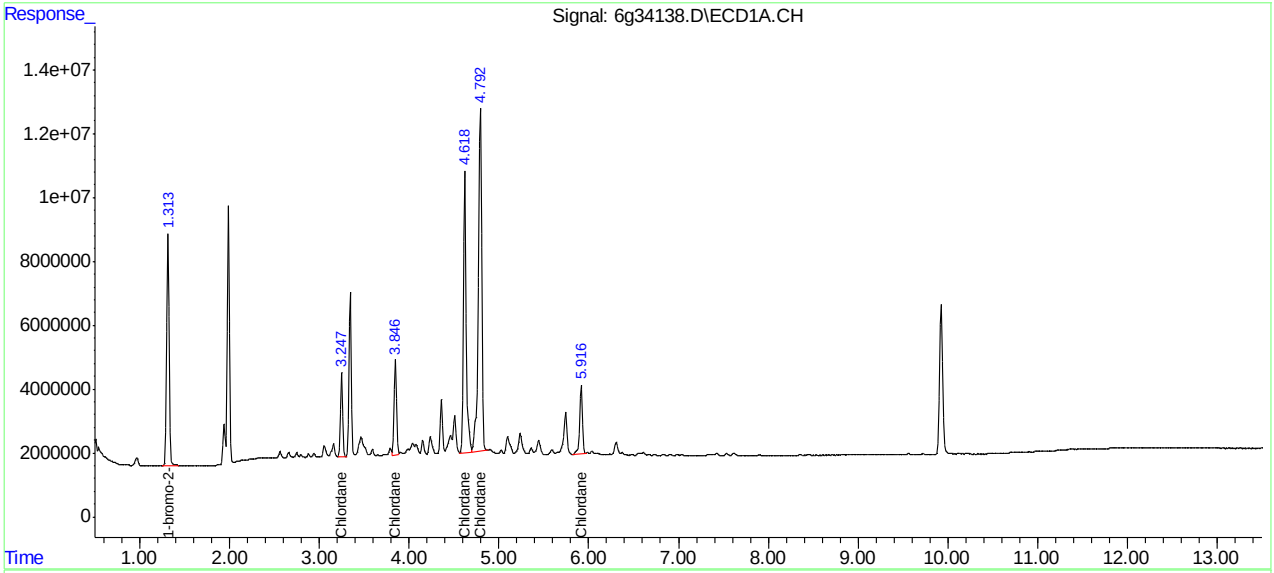
11.6.27 11

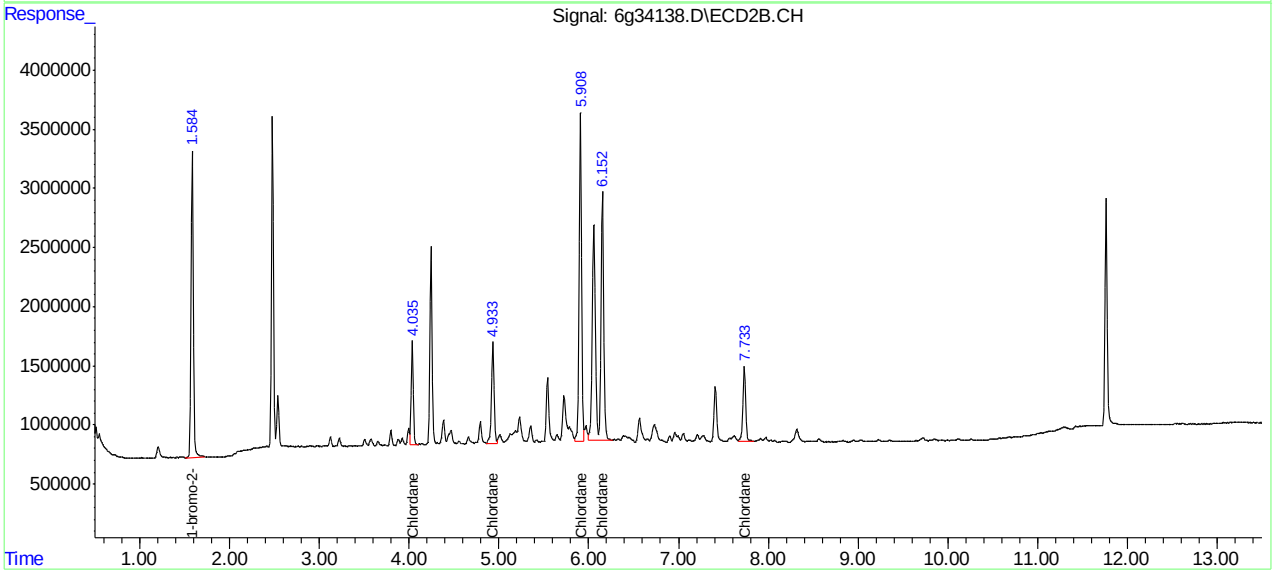
Quantitation Report (QT Reviewed)

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 JC19644

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

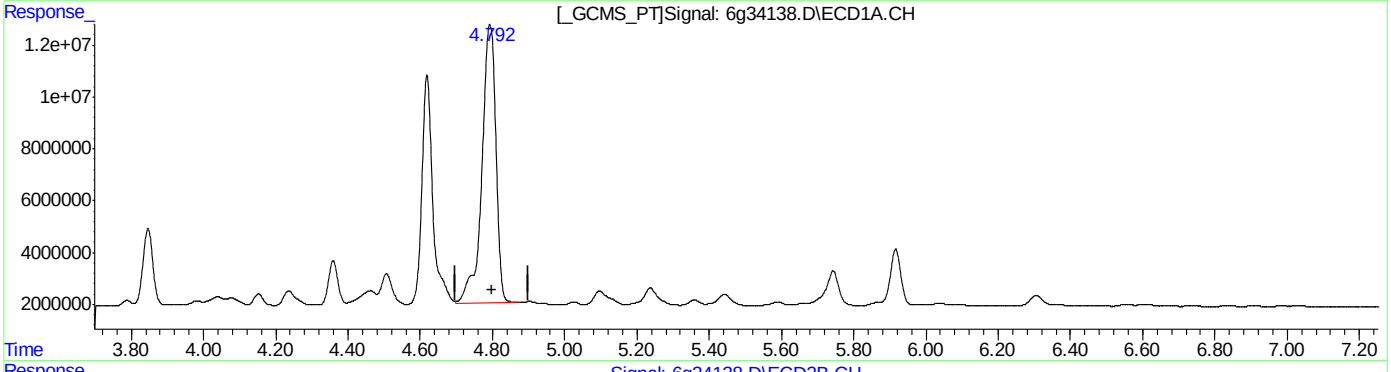
Parameter	CAS	Sig#	R.T. (min.)	Reason
Chlordane-D		2	6.15	Poor instrument integration

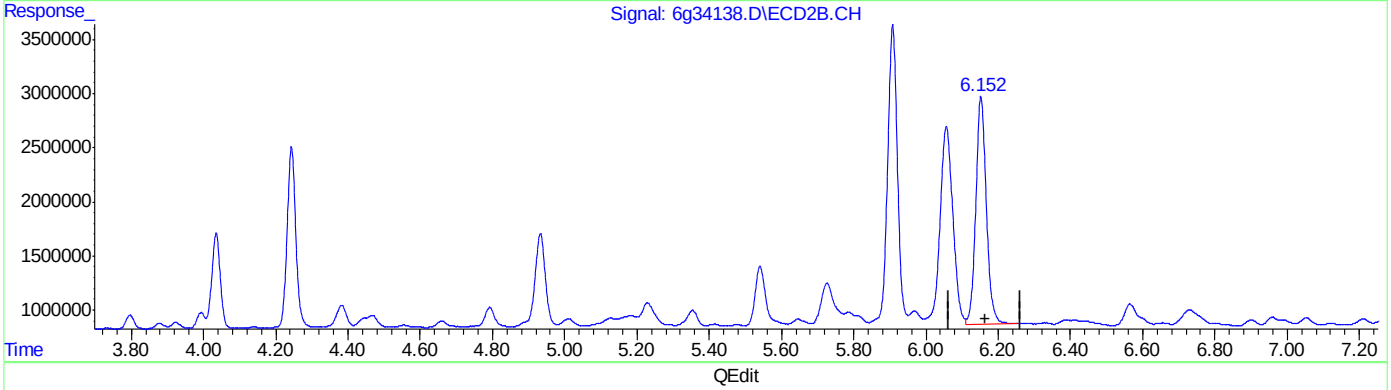
Quantitation Report (Qedit)

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

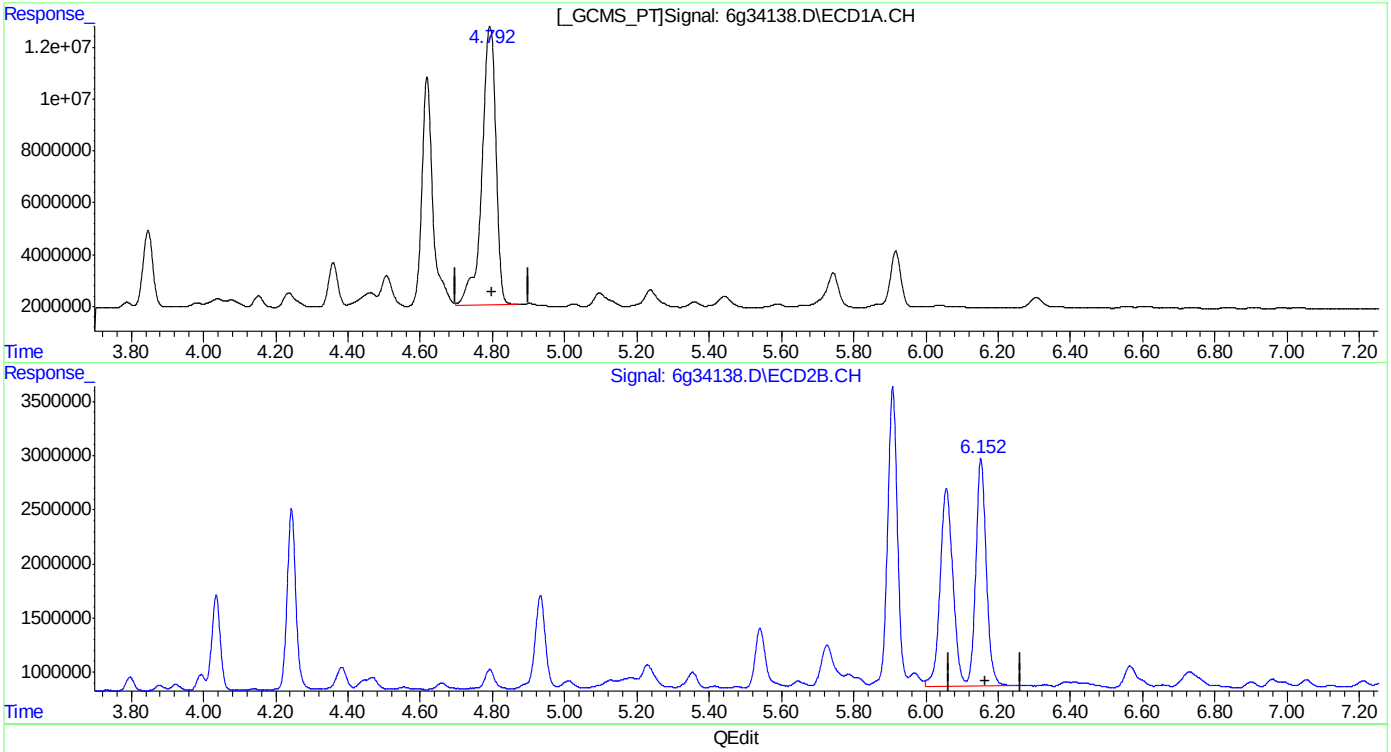
SGS ACCUTEST JC19644

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



(35) Chlordane {D}
4.793min 519.746PPB
response 290776008

(35) Chlordane {D} #2
6.152min 550.227PPB m
response 87553858

(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:58:50 2016

SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34139.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 6:17 pm
Operator : dharas
Sample : ic987-500
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:21:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB	
	Internal Standards							
25) I	1-bromo-2...	1.314	1.584	145.3E6	47702945	50.000	50.000	
	System Monitoring Compounds							
	Target Compounds							
26) L8	Toxaphene{A}	5.337	6.690	19675744	6930166	478.099	595.711	
27) L8	Toxaphene{B}	5.731	7.617	41619408	12190780	531.705	784.503	#
28) L8	Toxaphene{C}	5.999	7.796	62803296	18739048	548.104	699.346	#
29) L8	Toxaphene{D}	6.560	8.280	35573856	12374350	424.850	688.687	#
30) L8	Toxaphene{E}	7.255	9.261	39819050	10533999	580.669	507.727	
	SemiQuant Compounds - Not Calibrated on this Instrument							

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

11.6.28 11

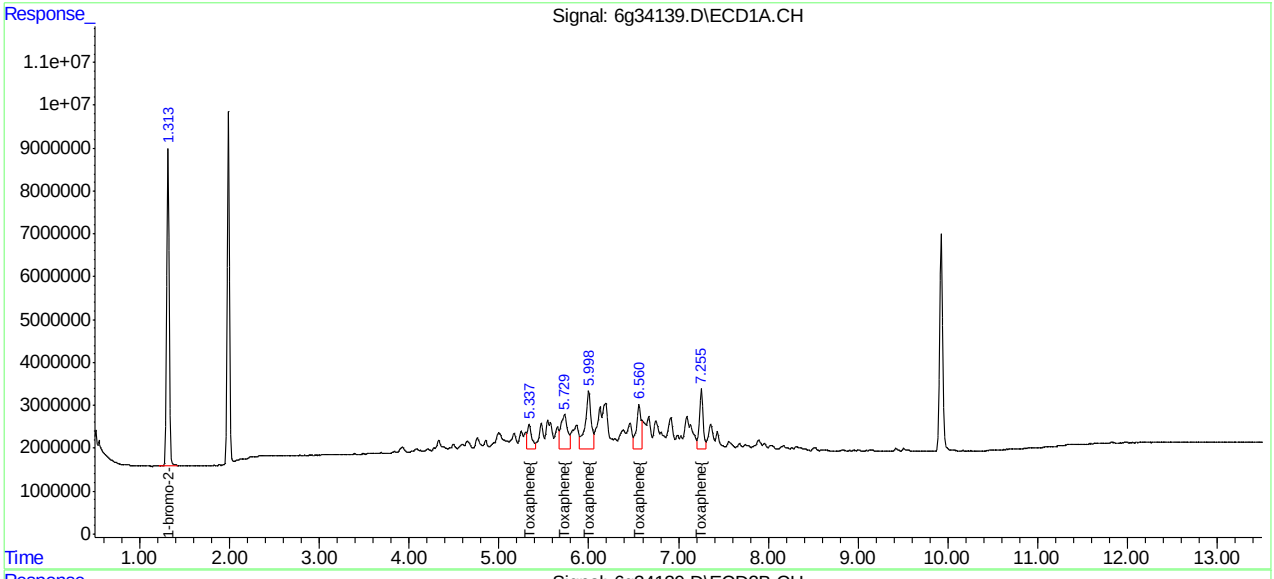
SGS ACCUTEST JC19644

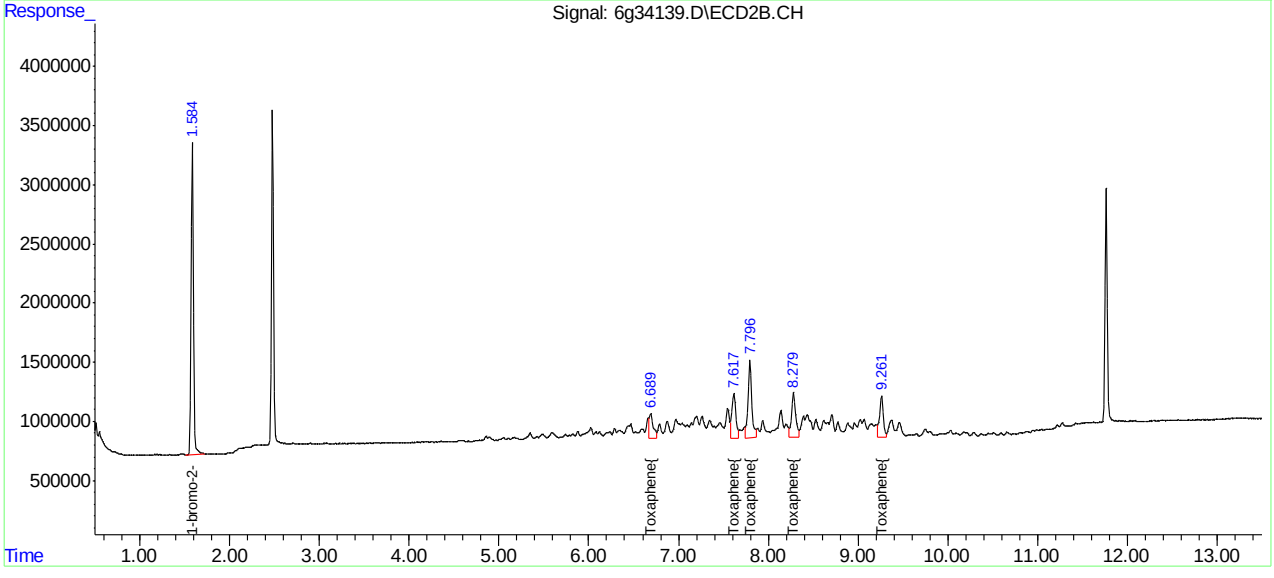
Quantitation Report (QT Reviewed)

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 JC19644

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.

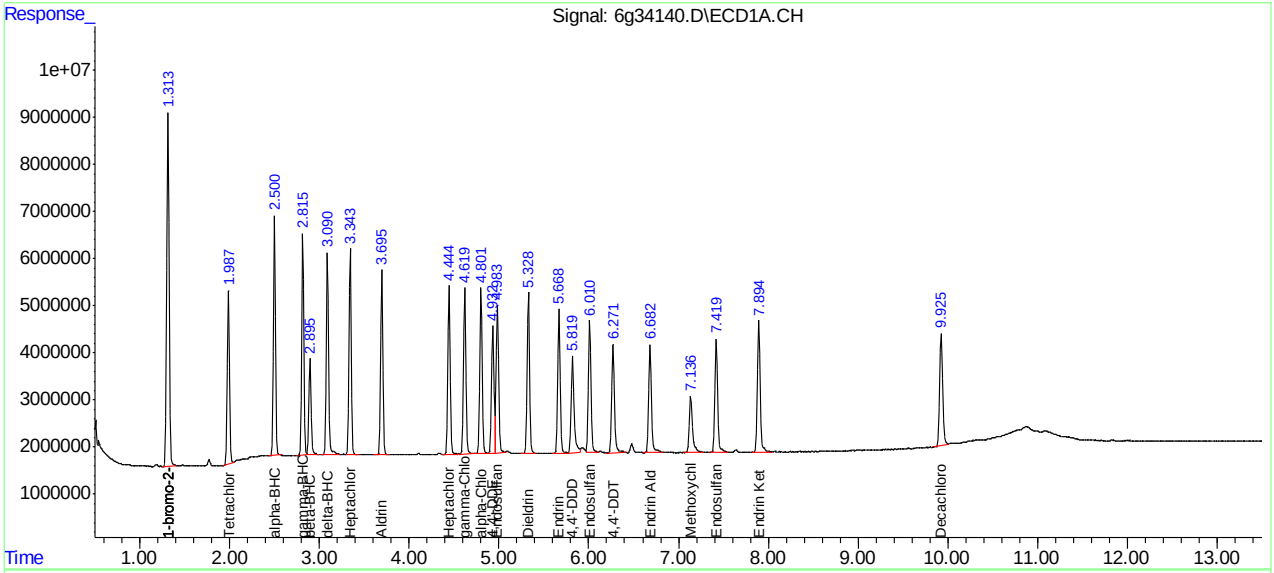
SGS ACCUTEST JC19644

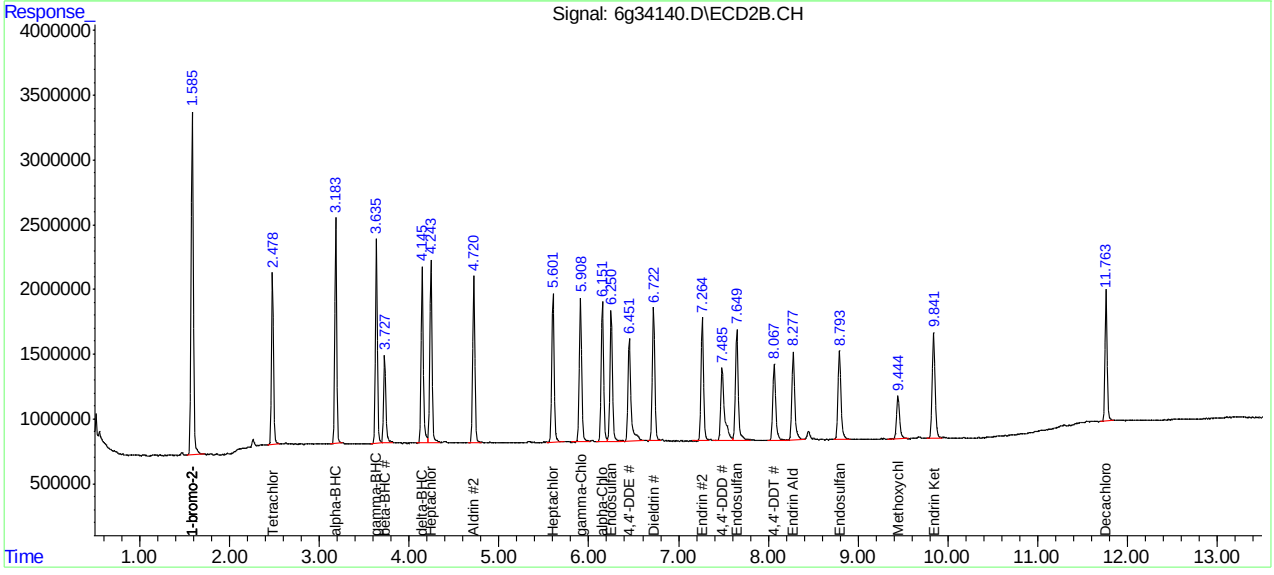
Quantitation Report (QT Reviewed)

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





SGS ACCUTEST JC19644

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.

11.6.30 11

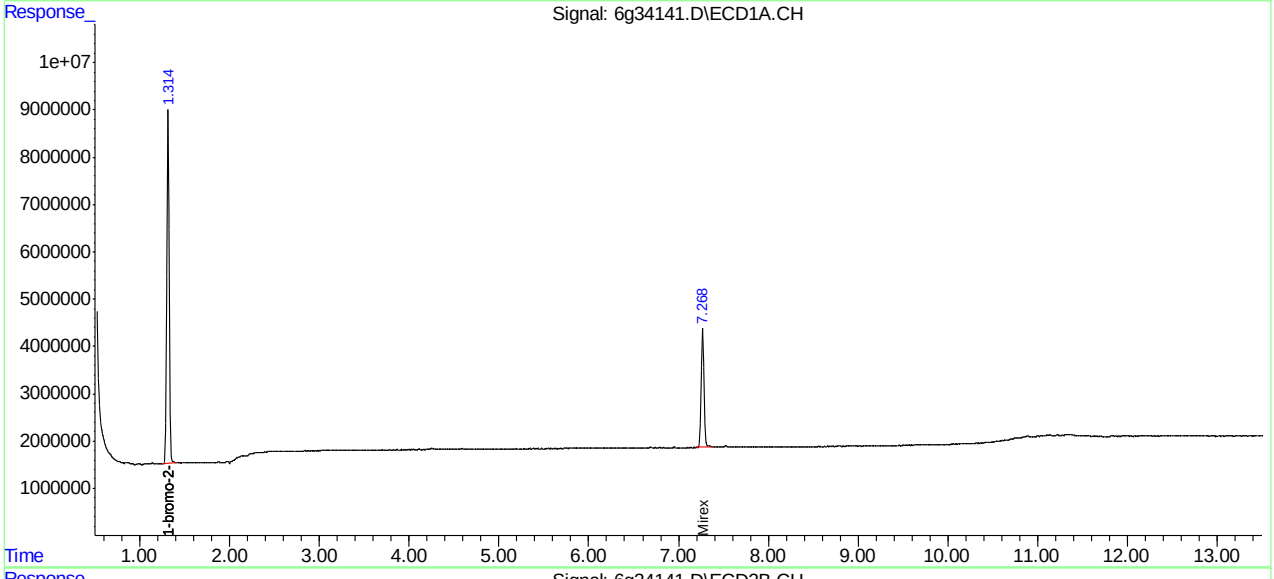
SGS ACCUTEST JC19644

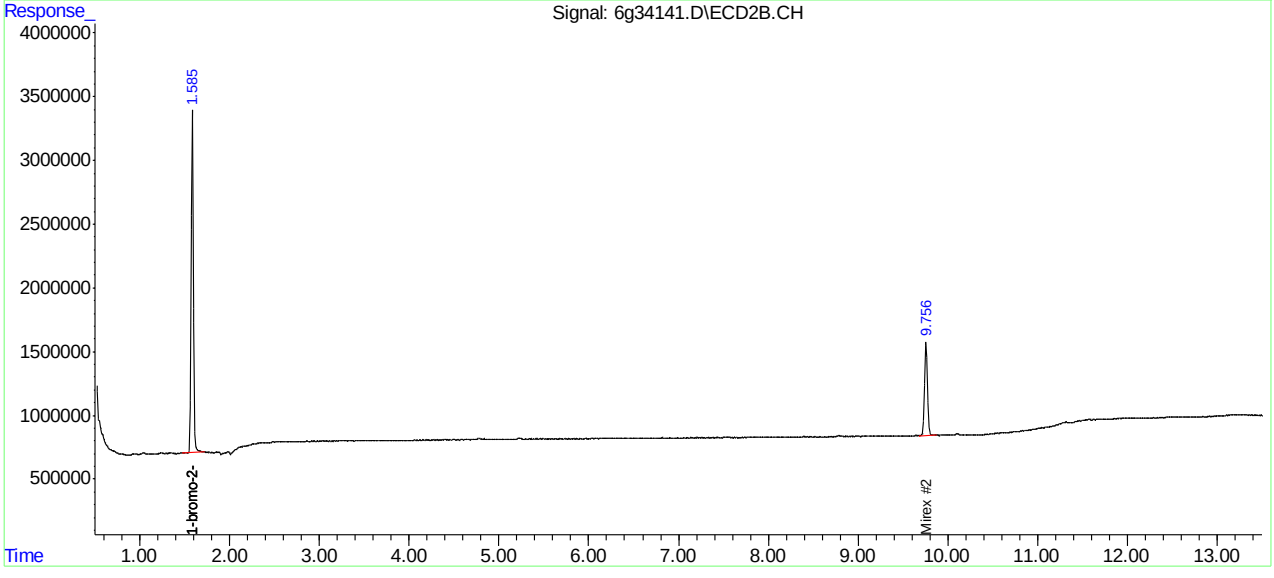
Quantitation Report (QT Reviewed)

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.

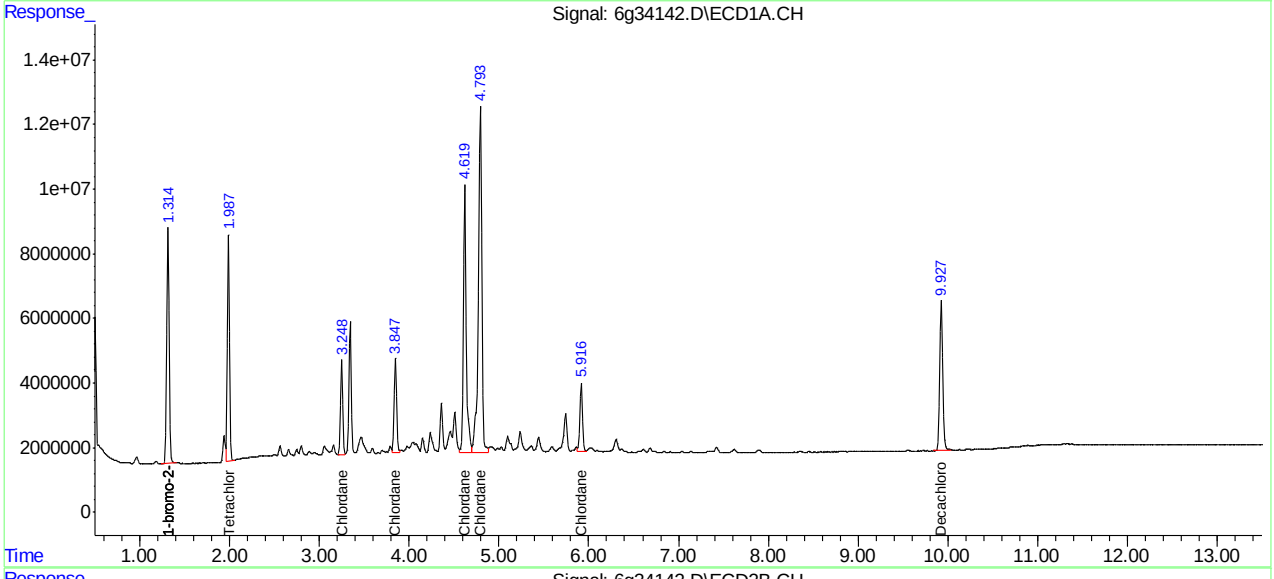
11.6.31 11

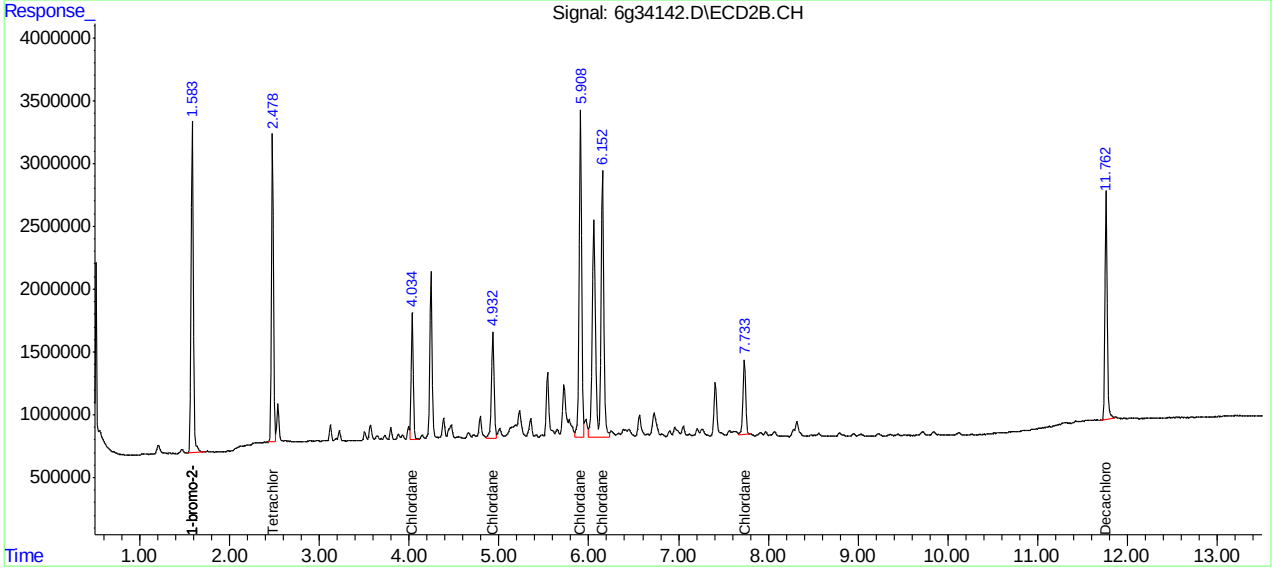
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34142.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 7:06 pm
Operator : dharas
Sample : icv987-500
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:37:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G6G987-ICV987	**Method:**	SW846 8081B
Lab FileID:	6G34142.D	**Analyst approved:**	04/18/16 12:23 Dhara Saparia
Injection Time:	04/14/16 19:06	**Supervisor approved:**	04/18/16 14:12 Gwendolyn Burns

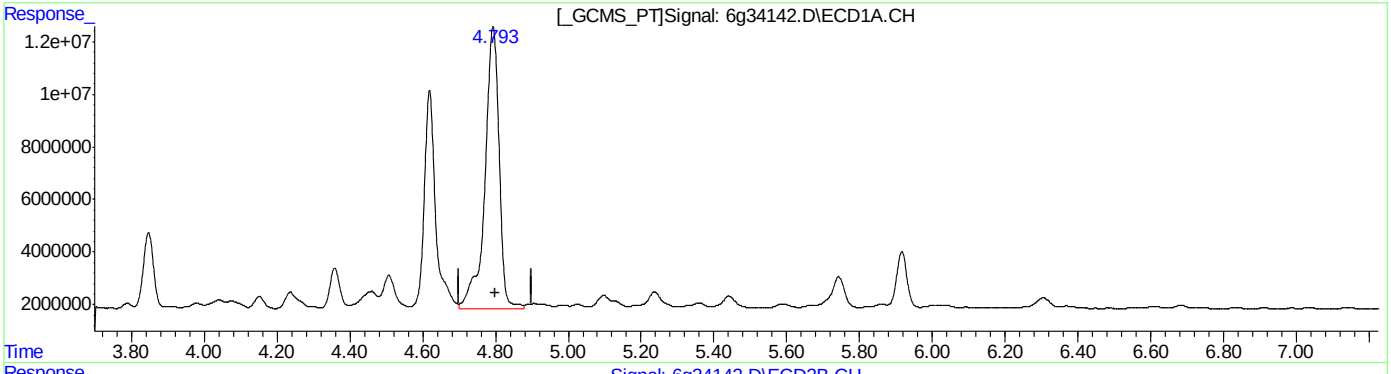
Parameter	CAS	Sig#	R.T. (min.)	Reason
Chlordane-D		2	6.15	Poor instrument integration

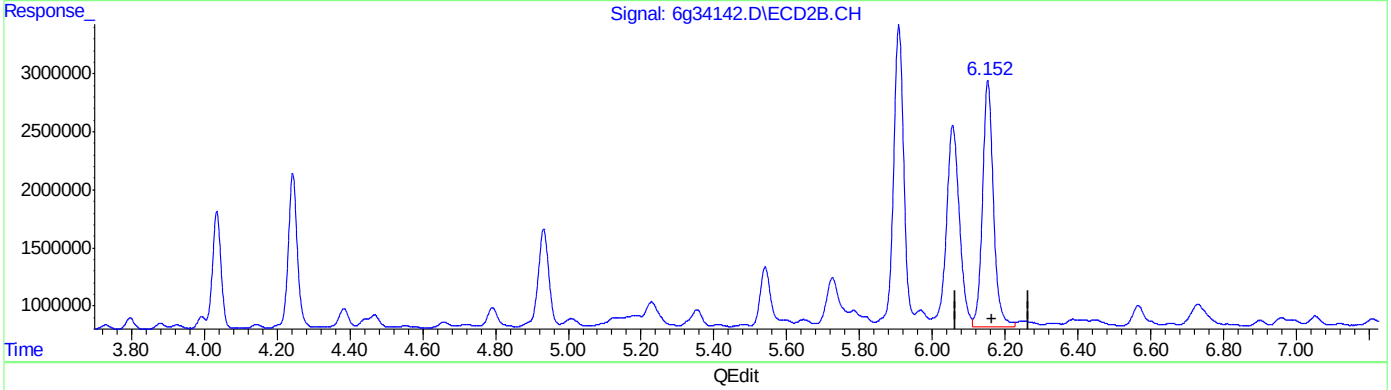
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34142.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 7:06 pm
Operator : dharas
Sample : icv987-500
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:36:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(35) Chlordane {D}
4.793min 507.996PPB
response 291002130

(35) Chlordane {D} #2
6.152min 250.802PPB
response 44256937

(+) = Expected Retention Time

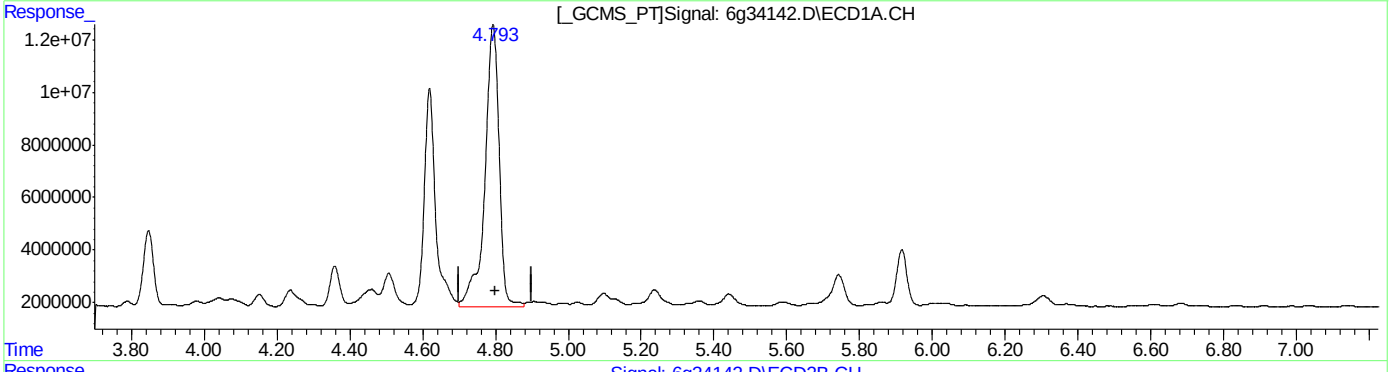
SGS ACCUTEST JC19644

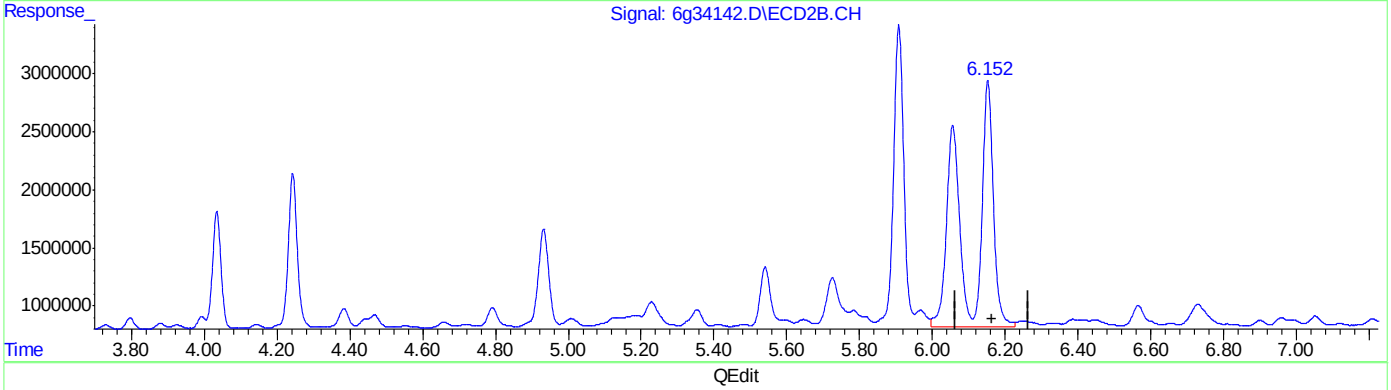
Quantitation Report (Qedit)

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 JC19644

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.

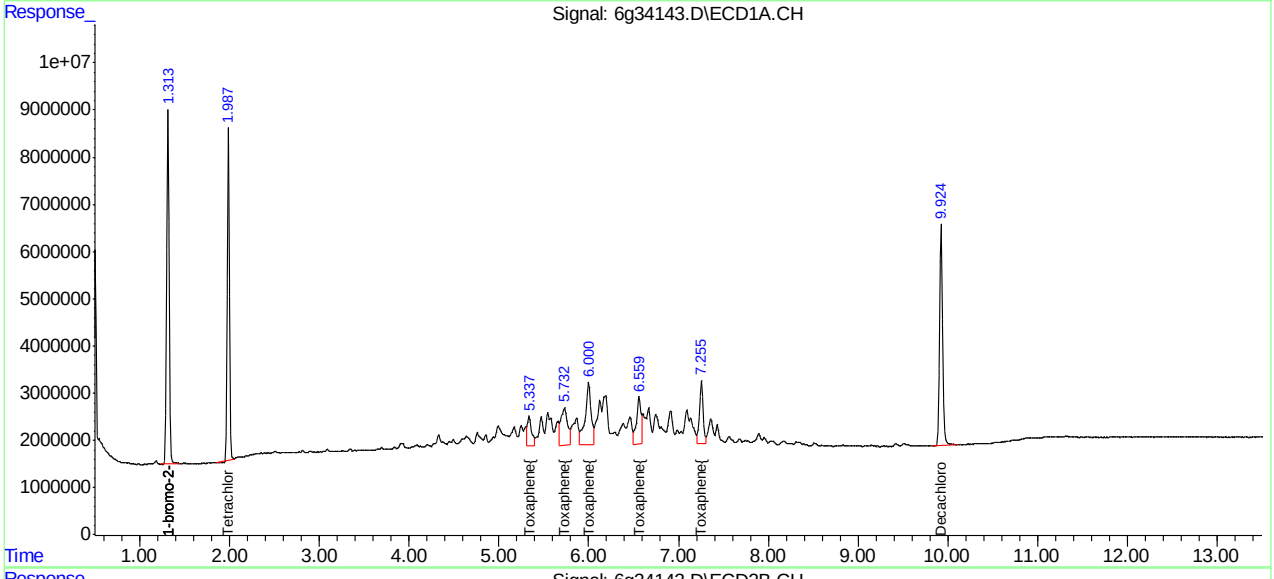
11.6.32 11

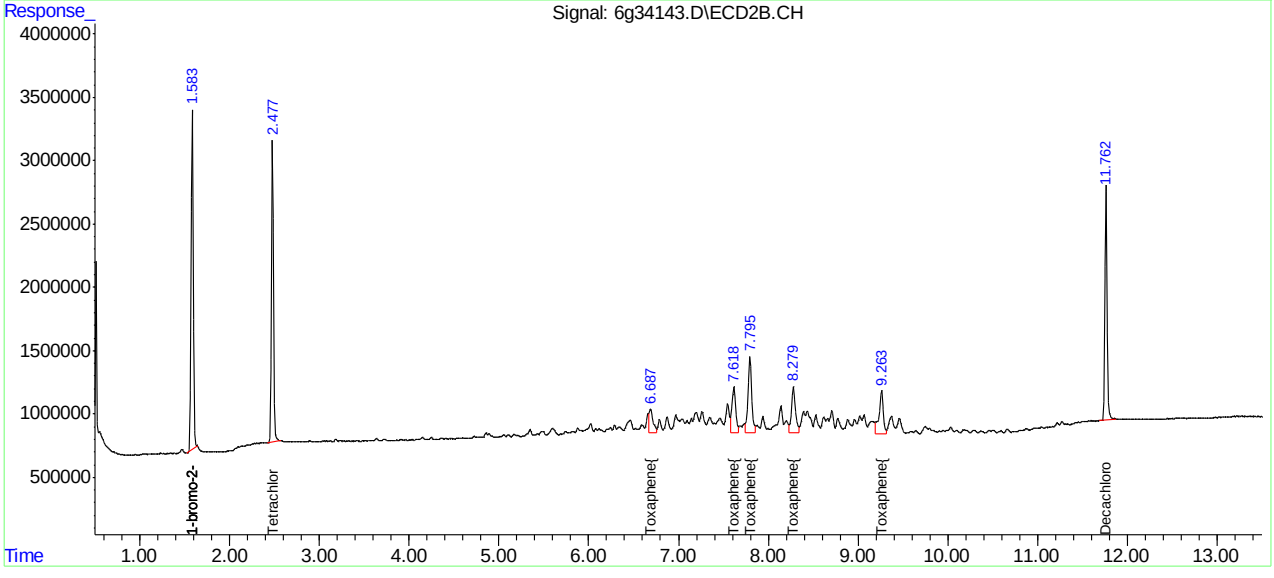
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34143.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 7:22 pm
Operator : dharas
Sample : icv987-500
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:34:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





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

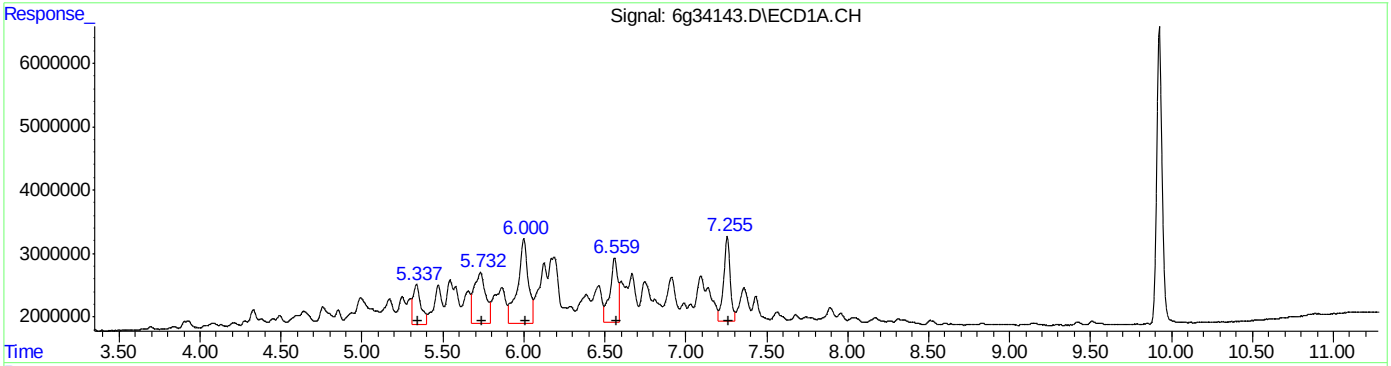
Parameter	CAS	Sig#	R.T. (min.)	Reason
Toxaphene-A		2	6.69	Poor instrument integration

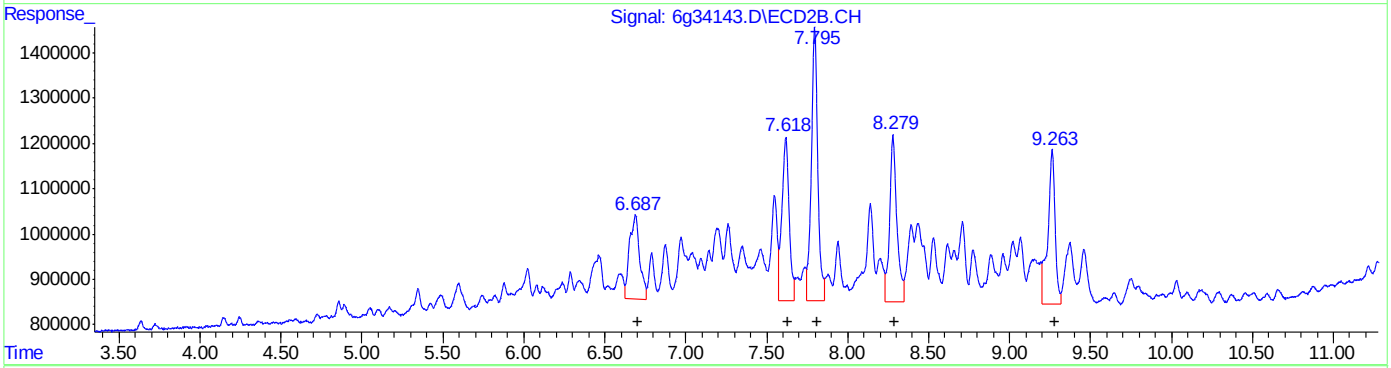
Quantitation Report (Qedit)

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

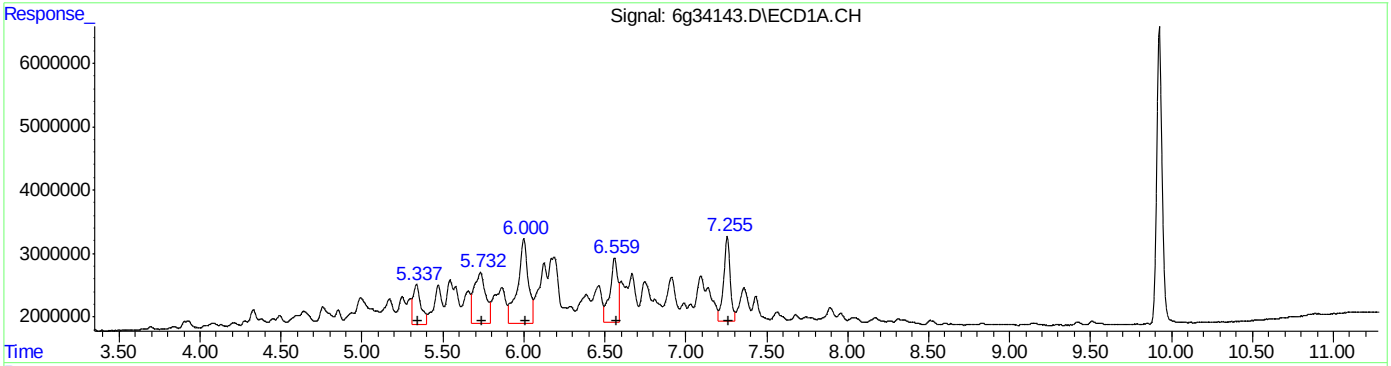
SGS ACCUTEST JC19644

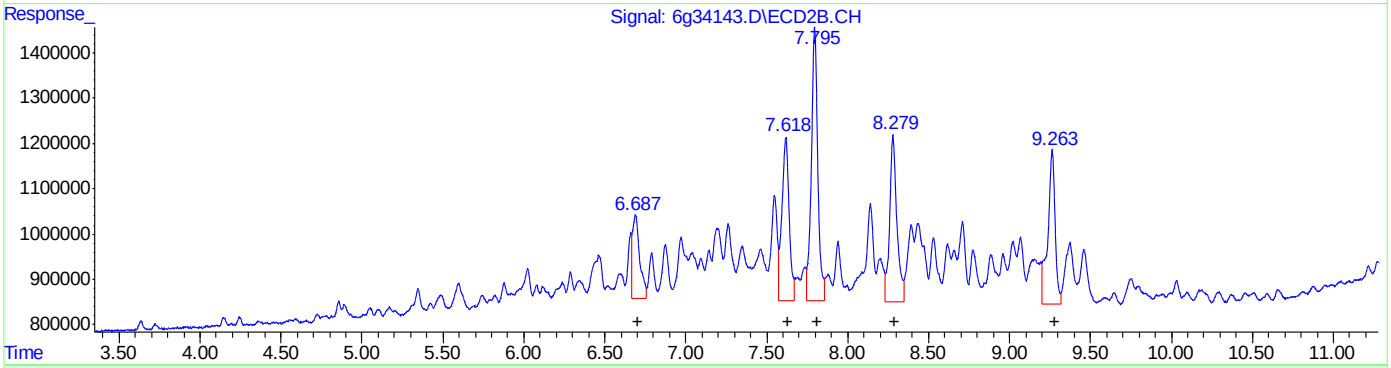
Quantitation Report (Qedit)

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 JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1007\
Data File : 6g34895.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 May 2016 9:53 am
Operator : rebeccak
Sample : cc987-25
Misc : op93642,g6g1007,1000,,,5,5
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 10 10:19:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.297	1.567	132.1E6	50344821	50.000	50.000
25) I	1-bromo-2...	1.297	1.567	132.1E6	50344821	50.000	50.000
31) I	1-bromo-2...	1.297	1.567	132.1E6	50344821	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.971	2.460	58811150	21979942	24.297	24.165
	Spiked Amount 40.000	Range	30 - 150	Recovery	=	60.74%	60.41%
24)	SAB Decachlor...	9.893f	11.738	50584389	18883316	24.034	27.612
	Spiked Amount 40.000			Recovery	=	60.09%	69.03%
	Target Compounds						
3) A	alpha-BHC	2.484	3.161	78349985	29406955	25.109	24.815
4) MA	gamma-BHC	2.798	3.612	72335183	27303231	24.900	24.608
5) MA	Heptachlor	3.324	4.217	66953929	24976096	22.960	22.274
6) B	beta-BHC	2.879	3.704	35433825	12563696	24.848	23.241
7) B	delta-BHC	3.073	4.120	68501552	25494648	25.302	24.657
8) MB	Aldrin	3.675	4.692	64219622	24569242	23.845	23.563
9) B	Heptachlo...	4.421f	5.570	59928960	22800445	23.767	23.461
10) B	gamma-Chl...	4.596f	5.875	57541304	22461237	22.676	23.642
11) B	alpha-Chl...	4.777f	6.118	58672484	22580588	23.297	23.924
12) A	Endosulfan I	4.959f	6.216	59183537	21910716	23.804	23.895
13) B	4,4'-DDE	4.908f	6.416	52200959	20136488	25.013	24.741
14) MA	Dieldrin	5.302f	6.686	60151182	22926958	24.468	24.478
15) MA	Endrin	5.641f	7.228	54912312	20924485	24.623	24.588
16) A	4,4'-DDD	5.793f	7.447	44471688	18062928	25.206	25.716
17) B	Endosulfa...	5.984f	7.610	54381449	20299934	24.715	24.390
18) MA	4,4'-DDT	6.243f	8.028	41234846	14745728	21.487	23.129
19) B	Endrin Al...	6.653f	8.238	44753965	17009262	24.954	25.205
20) B	Endosulfa...	7.388f	8.753	48651926	17847842	25.178	24.368
21) A	Methoxychlor	7.107f	9.404	24742951	8077078	21.511	22.993
22)	Mirex	7.238f	9.712	47425957	17290949	24.072	23.976
23) B	Endrin Ke...	7.862	9.799	56782982	21169099	24.711	24.727

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

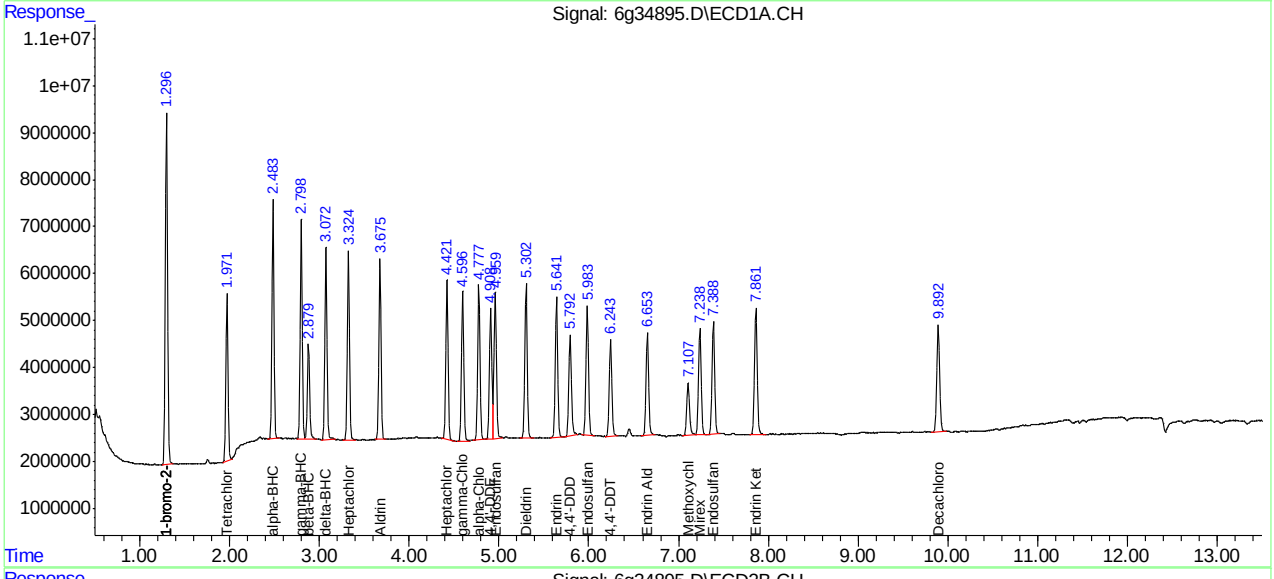
SGS ACCUTEST JC19644

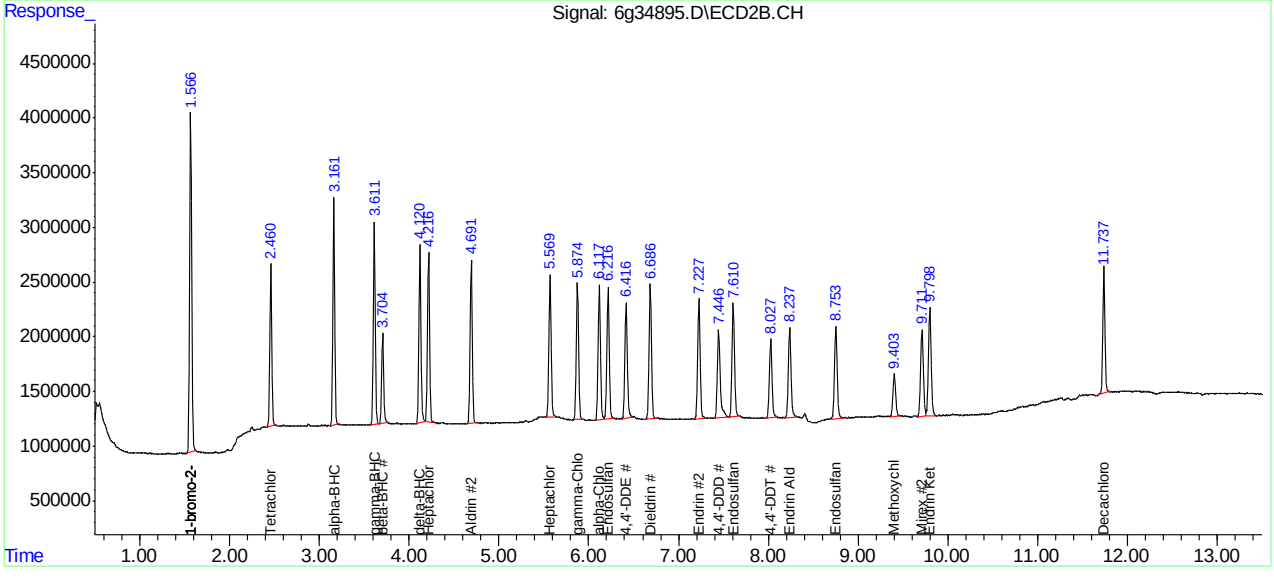
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1007\
Data File : 6g34895.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 May 2016 9:53 am
Operator : rebeccak
Sample : cc987-25
Misc : op93642,g6g1007,1000,,,5,5
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 10 10:19:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC19644

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1007\
Data File : 6g34909.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 May 2016 2:56 pm
Operator : dharas
Sample : cc987-50
Misc : op93736,g6g1007,15.1,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 10 15:29:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.304	1.568	136.2E6	50864871	50.000	50.000
25) I	1-bromo-2...	1.304	1.568	136.2E6	50864871	50.000	50.000
31) I	1-bromo-2...	1.304	1.568	136.2E6	50864871	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.980	2.461	115.5E6	42427131	46.262	46.168
	Spiked Amount 40.000 Range 30 - 150 Recovery = 115.66% 115.42%						
24)	SAB Decachlor...	9.900	11.742	101.9E6	35909781	46.967	51.971
	Spiked Amount 40.000 Recovery = 117.42% 129.93%						
	Target Compounds						
3) A	alpha-BHC	2.492	3.163	164.3E6	59027235	51.062	49.302
4) MA	gamma-BHC	2.807	3.613	150.3E6	53842927	50.176	48.031
5) MA	Heptachlor	3.334	4.218	143.4E6	50103308	47.709	44.225
6) B	beta-BHC	2.888	3.706	68845482	24451480	46.825	44.769
7) B	delta-BHC	3.081	4.121	144.8E6	51979842	51.871	49.758
8) MB	Aldrin	3.685	4.694	135.2E6	47651639	48.679	45.233
9) B	Heptachlo...	4.429	5.571	117.5E6	43476292	45.186	44.279
10) B	gamma-Chl...	4.605	5.877	118.7E6	43146486	45.383	44.951
11) B	alpha-Chl...	4.787	6.120	120.4E6	42896246	46.366	44.984
12) A	Endosulfan I	4.968	6.218	119.6E6	41343041	46.659	44.626
13) B	4,4'-DDE	4.917	6.418	109.8E6	39561888	51.034	48.111
14) MA	Dieldrin	5.311	6.687	124.0E6	43192510	48.932	45.644
15) MA	Endrin	5.651	7.230	113.4E6	39476053	49.336	45.914
16) A	4,4'-DDD	5.802	7.449	96306438	34623270	52.942	48.789
17) B	Endosulfa...	5.992	7.613	112.4E6	38923202	49.554	46.287
18) MA	4,4'-DDT	6.254	8.029	90937705	30234892	45.959	46.940
19) B	Endrin Al...	6.662	8.239	92610237	32519751	50.084	47.697
20) B	Endosulfa...	7.396	8.754	102.4E6	35470691	51.384	47.933
21) A	Methoxychlor	7.116	9.405	53836522	17365724	45.396	48.930
22)	Mirex	7.248	9.714	94779149	32757062	46.659	44.957
23) B	Endrin Ke...	7.869	9.799	123.1E6	42842546	51.957	49.532

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

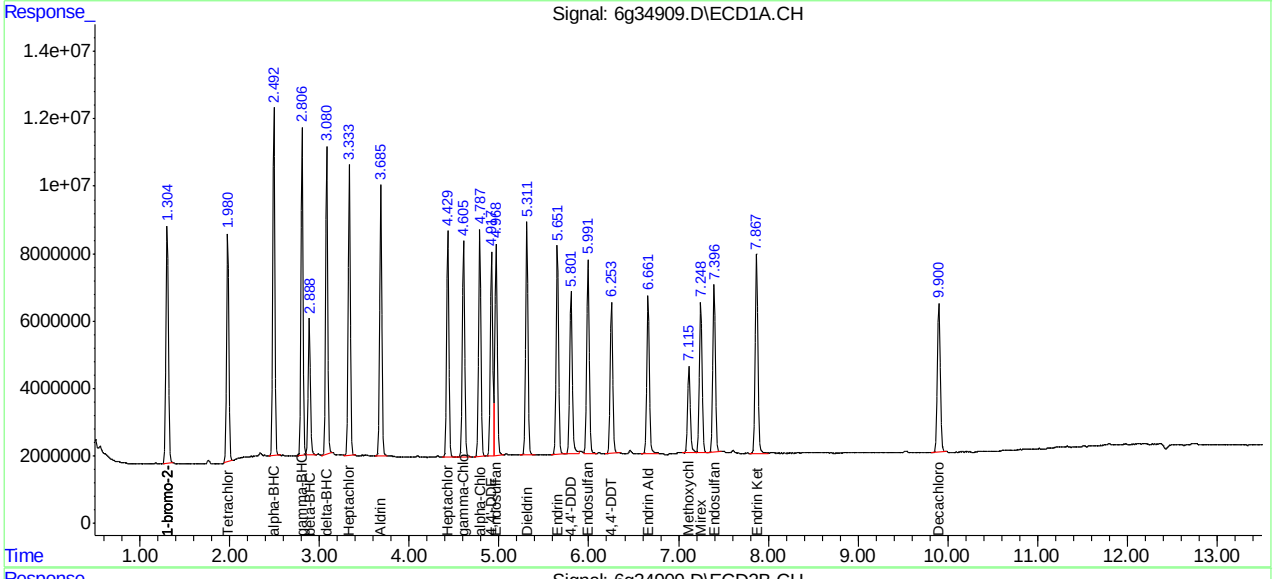
SGS ACCUTEST JC19644

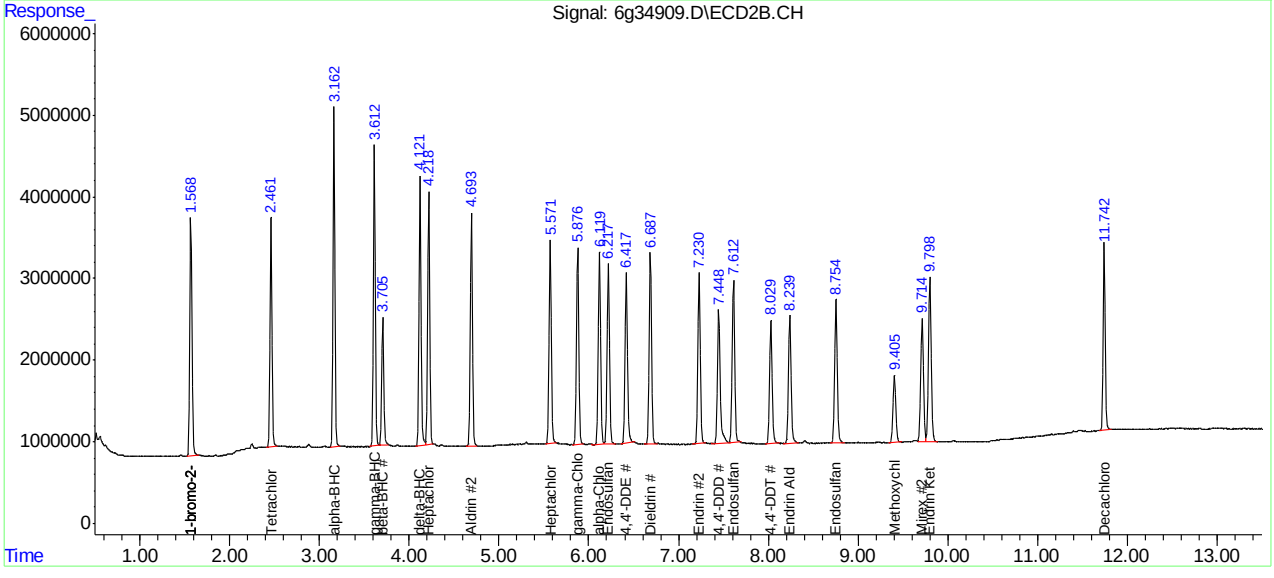
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\1007\
Data File : 6g34909.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 10 May 2016 2:56 pm
Operator : dharas
Sample : cc987-50
Misc : op93736,g6g1007,15.1,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: May 10 15:29:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Sat May 07 14:59:36 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST

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 1615724-1HSA	Pest mix 1st source	25 ppb
-1HSB		50
-1HSC		1
-1HSD		2
-1HSE		5
-1HSF		10
-1HSG		25
-1HSH		100
1515624-137	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 JC19644

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: G4G1782

Print Analyst Name: Brittany Piercy

Date: 05/06/2016

Analyst Signature: B.P.

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SM16874-125	Pest ISTD	5ppm
-79	Dem	10-250ppb
-148A	Pest Mix	25 ppb
-148B	1	50
-87	I.B.	20
1608063	Hexane (Fisher)	—

Columns: ZBCLPI / ZBCLPII

Method 8081/1608

Initial Cal. Method 4PST 1778

Injection Volume: 1µL

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: JP **Date:** 5/9/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	4g 67942	ddt			W	1				OK	
	943	cc1778-25				2				OK	
	944	I.B.				3				OK	
	945	OP93657-MB1	93657-1	8081 TCLP	W	5				OK	
	946	-BS1				6				OK	
	947	OP93667-MB1	93667-1	8081 TCL	W	7				NOT RUN	Cut from Sequence
	948	-BS1				8				↓	↓
	949	-BSD				9				↓	↓
	950	JC19523-1	93657-1	8081 TCLP	W	10				OK	
	951	JC18915-5R				11				OK	
	952	JC19524-1				12				OK	
	953	JC19569-1				13				NOT RUN	Cut from Seque
	954	-2				14				↓	↓
	955	JC19559-1				15				↓	↓
	956	JC19558-7A				16				↓	↓
	957	JC19573-6A				17				↓	↓
	958	-13A				18				↓	↓
	959	OP93657-LB28				19				↓	↓
	960	-LB29				20				NOT RUN	Cut from Sequence

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: G4G1782

Print Analyst Name: Brittany Pierce

Analyst Signature: B.P.

Date: 05/06/2016

Columns: ZBCLPI / ZBCLPII

Method 8081 / 608

Initial Cal. Method 4PST 1778

Injection Volume: 1 µl

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
8M61874-136	Pest ISTD	5ppm
-79	Pem	10250ppb
-148B	Pest Mix	50
-148A	1	25
-87	I.B.	20
1608663	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: JP **Date:** 5/9/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	4g 67951	OP93657-LS15	93657-1	8081 TCLP	W	21				NOT RUN	Cut from sequence. +MS also
	962	-MSD				22				↓	↓
	963	JC13380-46	93667-1	8081 TCL	W	23				NOT RUN	Cut from Sequence
	947	OP93665-MB1	93665-1	8081 TCL	W S	7				OK	
	948	-BS1		BPS/6/16		8				OK	
	960	JC19644-1				20				OK	Ran Before "4g67952"
	961	-2				21				OK	
	962	-3				22				OK	
	963	OP93665-MS				23				NOT RUN	cut from seqeu
	964	-MSD				24				NOT RUN	↓
	963	OP93683-MB1	93683	8081 TCL	S	23				OK	
	964	-BS1				24				OK	
	965	-BS13				25				OK	
	966	JC19505-1				26				OK	
	967	-2				27				OK	
	968	-3				28				OK	
	969	JC19509-1				29				OK	
	970	-2				30				OK	
	971	JC19559-1	93657	8081 TCLP	W	31				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: G4G 1782

Print Analyst Name: Dhara Saporia

Date: 5/6/16

Analyst Signature:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV16187-DS	Pest ISTD	50 ppm
-79	PCM	10-250 ppb
-87	DB	20 ppb
-100	Pest mix	25
-100	Pest mix	50
1605-63	Methanol (Fisher)	–

Columns: 2DCLPP | 2DCLPM

Method 8081

Initial Cal. Method LPS1 1778

Injection Volume: 1.0 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: JR Date: 5/9/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	h267972	blk				1				ok	
	973	cc1778-50				2				ok	
	974	DB				3				ok	
	975	OP93694-MS1	93694	8081 TCL	W	5				ok	
	976	-MSD1				6				ok	
	977	-MS				7				ok	
	978	-MSD				8				ok	
	979	JC19759-1				9				ok	
	980	-2				10				ok	
	981	-3				11				ok	
	982	-4				12				ok	
	983	-5				13				ok	
	984	-6				14				ok	
	985	JC19569-1	93657	8081 TCLP	W	15				ok	
	986	-2				16				ok	
	987	JC19558-7A				17				ok	
	988	JC19573-6A				18				ok	
	989	-13A				19				ok	
	990	OP93657-2BR				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

Form: OR016-08
Rev. Date: 1/19/16

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: anc-1782

Print Analyst Name: Dhara Sudarsia

Date: 5/6/16

Analyst Signature:

Columns: 2DCLPD1 2DCLPD2

Method 8081

Initial Cal. Method hpst 1778

Injection Volume: 1.0uL

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
161216-135	Pest IRTD	5 ppm
-79	RGM	10-250 ppb
-87	TB	20 ppb
-1wm	Pest mix	25
-1wm	Pest mix	50
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: JR

Date: 5/9/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	h267991	OP93657-2029	93657	8081 TCLP	W	21				OK	
	992	-2515				22				OK	+ ms
	993	-MSD				23				OK	
	994	CC1778-25				2				OK	Endosulfan I ↑ 1st DDE & Methoxychlor ↓ 1st
	995	IB				3				OK	
	996	OP93665-MS	93665	8081 TCL	W	24				OK	
	997	-MSD				25				OK	
	998	OP93683-MS	93683	8081 TCL	S	26				OK	
	999	-MSD				27				OK	
	h268000	JC19462-NO				28				OK	
	001	-45				29				OK	
	002	-50				30				OK	
	003	-55				31				OK	
	004	JC19423-1				32				OK	
	005	JC19424-1				33				OK	
	006	JC19445-1				34				OK	
	007	JC19473-3				35				OK	
	008	JC19477-1		TCL/CHL		36				OK	

BP 05/07/16

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 JC19644

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G4G1783

Print Analyst Name: Brittany Pierce

Analyst Signature: BP.

Date: 05/07/2016

Columns: ZBCLPI / ZBCLPII

Method 8081/608

Initial Cal. Method 4PST1778

Injection Volume: 1µL

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
8M16874-135	Pest ISTD	5ppm
-79	Dem	10-250ppb
-148B	Pest Mix	50 ppb
-148A	1	25
-87	I.B.	DW
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: JR Date: 5/9/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	4968009	ddt			W	1				OK	
	010	cc 1778-50				4				OK	DDT ↑ 2nd. Methoxychlor ↑ 1st
	011	I.B.				3				OK	
	012	OP93657-MB2	93699-1 93657-D	8081 TCLP	W	5				OK	
	013	-BS2				6				OK	
	014	JC19575-13A			W	7				OK	
	015	-14A				8				OK	
	016	OP93699-LB32	93699-1			9				OK	
	017	-LS16				10				OK	+MS Also
	018	-MSD				11				OK	
	019	JC19492-1A				12				OK	
	020	-2A				13				OK	
	021	-3A				14				OK	
	022	-4A				15				OK	
	023	-5A				16				OK	
	024	-6A				17				OK	
	025	-7A				18				OK	
	026	-8A				19				OK	
	027	-9A				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

Form: OR016-08
Rev. Date: 1/19/16

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G4G1783

Print Analyst Name: Brittany Pietral

Analyst Signature: BP

Date: 05/07/2016

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV160874-135	Pest ISTD	5ppm
-79	Pem	10-250ppb
-148A	Pest Mix	25
-148B	1	50
-87	I.B.	20
160863		
160183 BP 5/9/16	Hexane (Fisher)	—

Columns: ZBCLPI / ZBCLPII

Method 8081/608

Initial Cal. Method 4PST1778

Injection Volume: 1µL

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: JP **Date:** 5/9/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	49 68028	JC19492-10A	93699-1	8081 TCLP	W	21		/	/	OK	
	029	-11A				22		/	/	OK	
	030	-12A				23		/	/	OK	
	031	CC 1778-25				2		/	/	OK	Endosulfan II ↓ 1st
	032	I.B.				3		/	/	OK	
	033	JC19492-13A				24		/	/	OK	
	034	-14A				25		/	/	OK	
	035	-15A				26		/	/	OK	
	036	-16A				27		/	/	OK	
	037	-17A				28		/	/	OK	
	038	-18A				29		/	/	OK	
											BP 05/07/16

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

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Form: OR016-08
Rev. Date: 1/19/16

SGS ACCUTEST JC19644

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G6G1007

Print Analyst Name: Rebecca Krug

Analyst Signature: RK

Date: 5/10/16

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.
SV 1611MMD	Pest DBTD	5 ppm
-79	PEM	10-250 ppb
-1MM	Pest mix	25 ppb
-1MM	Pest mix	50
1613J-09	IB	20
1605-63	Hexane (Final)	–

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
	6g34894	ddt				1				OK	
	895	cc987-25				2				OK	
	896	IB				3				OK	
	897	OP93736-MS1	93736	8081	S	5				OK	
	898	-MS1				6				OK	
	899	-MS				7				OK	
	900	-MSD				8				OK	
	901	JC198(2)-1		dilution		9				OK	
	902	-2				10				OK	
	903	-3				11				OK	
	904	-4				12				OK	
	905	-5				13				OK	
	906	JC196 hh-4		TCL		14				OK	
	907	-5				15				OK	
	908	ddt				1				OK	
	909	cc987-50				4				OK	
	910	IB				3				OK	
	911	OP93749-MS1	93749	8081	S	5				OK	
	912	-MS1				6				OK	

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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

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SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G6G-1007

Print Analyst Name: Dhara Saparia

Date: 5/10/16

Analyst Signature: [signature]

Columns: 2BCLPD1 / 2BCLPT

Method 8081

Initial Cal. Method 6ps+987

Injection Volume: 1.0ul

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV 161874-135	Pest DSTD	5 ppm
-79	PEM	10-250 ppb
-1004	Pest mix	25 ppb
-1007	Pest mix	50
161933-09	IB	20
160863	Internal Chiral	-

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
	8234913	JC19814-1	93749	8081 TCL	S	7				Not using	Bad injection
	914	OP93749-MS				8				OK	
	915	-MSD				9				OK	
	916	JC19824-11				10				OK	
	917	-21				11				OK	
	918	JC19851-1		PPL		12				OK	
	919	JC19852-1				13				OK	
	920	-2				14				OK	
	921	JC19844-2		TCL		15				OK	RR ILS, Y-solved
	922	-5				16				OK	
	923	-6				17				OK	
	924	-7				18				OK	
	925	JC19814-1				7				OK	
	926	JC19844-2				15	5			OK	

OK 5/17/16

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

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Form: OR016-08
Rev. Date: 1/19/16

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SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G6G987

Print Analyst Name: Dhara Sapania

Date: 04/14/16

Analyst Signature: [signature]

Columns: 2BCLPD / 2DCLPD

Method 8081, 608

Initial Cal. Method G8ST987

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	ICV987-25	Pest			13	10			OK	
	141	-25	mirex			14	10			OK	OP15256437 - 250 PPb (mirex
	142	-500	CHL			15				OK	
	143	-500	Tox			16				OK	

BP 4/17/16

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.

Sample volume/weight refer to extraction log.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Form: OR016-08
Rev. Date: 1/19/16

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LOGBOOK ID: 6-1735

Pest/PCB Extraction Log - Aqueous

Date Started: ~~5/5~~ 5/5/16 Time Started: 5:46pm
Date Finished: 5/5/16 Time Finished: 10:00pm

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Separatory Funnel: SW846 3510C/CLP/other ✓
Continuous Liquid Liquid: SW846 3520C/CLP/other

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:

SPECIAL PROCESSING INSTRUCTIONS
Rx Reason:
Spiking:
Weights/Volumes:
Required MS/MSD:
Final Volume:
Other:

	Sample #	Analysis Type	Sample Bottle #	pH	Sample Description	Sample Volume (mL)	Final Extract Color	Final Extract Vol(mL)	GPC	Copper	H2SO4	Florisil	Comments
	MB1	Pest			DI H2O	300	clear	2		–			
	BS1	LVI			DI H2O	300	clr	2		–			
	JC19644-1 MS			4	yellow	150	clr	2		–			
	↓ MSD			4	yellow	150	clear	2		–			
	BS												
	MS												
	MSD												
1	JC19644-1	Pest		3	yellow	300	clear	2		–			
2	-2	LVI		3	yellow	300	clr	2		–			
3	-3			~~4~~	yellow	300	clr	2		–			
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													

1d TAT

Comments: okay to split MS/MSD, not enough bottles

BATCH # GC 93665 RACK# pest-21

Extracted by: AOC
Concentrated by: AOC
Vialed by: AOC, ~~50~~ 30 5/5
Relinquished by:
Accepted by:
Supervisor Review: DH 5/6/16

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)	3	65	–	–	OK
Buchi Chiller	DJ	71	–	–	OK
Waterbath (70-80°C)	~~E2~~	75/75	0.5/0.1	75/75	~~OK~~ 50/N/A
Waterbath Chiller (GPM)	F-2	2	N/A	N/A	OK
NEVAP (32-38°C, LPM)					

SURROGATE	LOT #	CONC (ppb)	AMT (mL)
PPCB	16 PR 89	400	0.2

WITNESS SIGN: AOC SPIKE SIGN: KS

MATRIX SPIKE	LOT #	CONC	AMT (mL)
PEST	16 PR 77D	250ppb	0.2
PCB			

WITNESS SIGN: AOC SPIKE SIGN: KS

SOLVENT	LOT #	BRAND	AMT (mL)
METH CHLOR	162661	Fisher	315
HEXANE	160963	Fisher	58

REAGENT	LOT #	BRAND
Sodium Sulfate	168420	Fisher
Glass Wool	020205-2	Lab
Filter Paper		
Copper	16 PR 60	Alfa Aesar
Florisil		
1:1 Sulfuric Acid		
Chlorine Strips		

SGS ACCUTEST INC.
Form: OP021A-06
Rev Date: 1/13/16

LOGBOOK ID: 6-1722

Pest / PCB Extraction Log - Soils

Date Started: 5/9/16 Time Started: 6:30 AM
Date Finished: 5/9/16 Time Finished: 11:30 AM

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Microwave SW3546 √ Sonication SW3550C ____
Waste Dilution SW3580A ____ Soxhlet SW3540 ____

BATCH # GC93736 RACK# Pest 101
Weighed/Extracted by: BG
Concentrated by: SC/SZ
Vialed by: SZ
Relinquished by:
Accepted by:
Supervisor Review: 5/9/16

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 / 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		/	/		
	JC19823-1 MS		1	soil	16.4		/	4	Clear	10		/	/		
	MSD		1	soil	18.9		/	4	Clear	10		/	/		
	BS														
	MS														
	MSD														
1	JC19823-1	Pest	1	sand	18.8		/	4	Clear	10		/	/		
2	-2		1	soil	18.9		/	4	Clear	10		/	/		
3	-3		1	soil	18.3		/	4	Clear	10		/	/		
4	-4		1	soil	16.1		/	4	Clear	10		/	/		
5	-5		1	soil	15.2		/	4	Clear	10		/	/		
6	JC19644-4		1	clay/sand	16.3		/	4	Clear	10		/	/		
7	-5		1	sand	15.1		/	4	Clear	10		/	/		
8															
9															
10															
11															
12															
13															
14															
15															
16															
17															
18															
19															
20															

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason:

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other:

Comments:

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)	4	65	—	—	OK
Buchi Chiller	B4	11	—	—	OK
Waterbath (70-80°C)					
Waterbath Chiller (GPM)					
NEVAP (32-38°C, LPM)	2	35	+0.1	35	10psi
Balance	B47	N/A	N/A	N/A	N/A

SURROGATE	LOT #	CONC (ppb)	AMT (mL)
PPCB	OP16171284	400	1

WITNESS SIGN: SZ SPIKE SIGN: NK

MATRIX SPIKE	LOT #	CONC	AMT (mL)
PEST	16171277D	250ppb	1
PCB			

WITNESS SIGN: SZ SPIKE SIGN: NK

SOLVENT	LOT #	BRAND	AMT (mL)
2:1 HEXANE/ ACETONE	157124 / 158571	FISHER / FISHER	30
1:1 METH CHLOR/ ACETONE			
HEXANE			

REAGENT	LOT #	BRAND
HYDROMATRIX	6280850	AGILENT
SODIUM SULFATE	140420	FISHER
FILTER PAPER	9627994	FISHER
FLORISIL	S213057	PHENOMENEX
1:1 SULFURIC ACID		
COPPER	OP16171260	ALDRICH

MATRIX	LOT #	BRAND
SAND	6GA160113114	FISHER

SGS ACCUTEST INC.
Form: OP018A-05
Rev Date: 11/20/15

Prep Log OP93736 page 1 of 1
SGS ACCUTEST JC19644
1303 of 1305
11.8.2 11

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Percent Solids Raw Data Summary

Percent Solids Raw Data Summary

Job Number: JC19644
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: JC19644-4 **Analyzed:** 09-MAY-16 by RK **Method:** SM2540 G-97
ClientID: RA-11 (10-11)

Wet Weight (Total)	29.67	g
Tare Weight	23.83	g
Dry Weight (Total)	28.35	g
Solids, Percent	77.4	%

Sample: JC19644-5 **Analyzed:** 09-MAY-16 by RK **Method:** SM2540 G-97
ClientID: RA-10 (5.5-6.5)

Wet Weight (Total)	30.53	g
Tare Weight	23.02	g
Dry Weight (Total)	29.01	g
Solids, Percent	79.8	%