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Automated Report

Technical Report for

Anderson, Mulholland & Associates

BMSMC, Building 5 Area, PR

SM04.00.06

SGS Accutest Job Number: JC18516

Sampling Date: 04/14/16

Report to:

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

ATTN: Terry Taylor

Total number of pages in report: **1458**

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

Nancy Cole
Laboratory Director

Client Service contact: Tammy McCloskey 732-329-0200

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

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Sample Summary

Anderson, Mulholland & Associates

Job No: JC18516

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

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JC18516-1	04/14/16	11:50	NR	04/16/16	AQ	Equipment Blank	EB041416
JC18516-1A	04/14/16	11:50	NR	04/16/16	AQ	Equipment Blank	EB041416
JC18516-2	04/14/16	15:00	TT	04/16/16	SO	Soil	RA14 (9-9.7)
JC18516-2A	04/14/16	15:00	TT	04/16/16	SO	Soil	RA14 (9-9.7)
JC18516-3	04/14/16	15:50	NR	04/16/16	SO	Soil	S-43S (6-7)
JC18516-3A	04/14/16	15:50	NR	04/16/16	SO	Soil	S-43S (6-7)
JC18516-4	04/14/16	17:00	TT	04/16/16	AQ	Ground Water	RA14_GWS
JC18516-4A	04/14/16	17:00	TT	04/16/16	AQ	Ground Water	RA14_GWS

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

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Anderson, Mulholland & Associates	**Job No**	JC18516
Site:	BMSMC, Building 5 Area, PR	**Report Date**	5/4/2016 9:20:50 AM

On 04/16/2016, 4 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at Accutest Laboratories at a maximum corrected temperature of 2.7 C. Samples were intact and chemically preserved, unless noted below. An Accutest Job Number of JC18516 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:** OP93128

- All samples were extracted within the recommended method holding time.
- Sample(s) JC18366-2MS, JC18366-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC18516-4, OP93128-MS, OP93128-MSD have surrogates outside control limits.
- JC18516-4 for Terphenyl-d14: Outside control limits due to dilution.
- JC18516-4 for Phenol-d5: Outside control limits due to dilution.
- JC18516-4 for Nitrobenzene-d5: Outside control limits due to dilution.
- JC18516-4 for 2-Fluorophenol: Outside control limits due to dilution.
- JC18516-4 for 2-Fluorobiphenyl: Outside control limits due to dilution.
- JC18516-4 for 2,4,6-Tribromophenol: Outside control limits due to dilution.
- OP93128-MSD for 2-Fluorophenol: Outside of control limits, but within reasonable method recovery limits.
- OP93128-MS for 2-Fluorophenol: Outside of control limits, but within reasonable method recovery limits.

Matrix: SO **Batch ID:** OP93218

- All samples were extracted within the recommended method holding time.
- Sample(s) JC18417-5MS, JC18417-5MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for Benzaldehyde, Hexachlorocyclopentadiene are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for 4,6-Dinitro-o-cresol, Hexachlorocyclopentadiene, Benzaldehyde are outside control limits. Outside control limits due to matrix interference.
- RPD(s) for MS/MSD for Benzaldehyde are outside control limits. Analytical precision exceeds in-house control limits.

Extractables by GCMS By Method SW846 8270D BY SIM

Matrix: AQ **Batch ID:** OP93128A

- All samples were extracted within the recommended method holding time.
- Sample(s) JC18366-3MS, JC18366-3MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Matrix: SO **Batch ID:** OP93218A

- All samples were extracted within the recommended method holding time.
- Sample(s) JC18516-2MS, JC18516-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- JC18516-3 for 1,4-Dioxane: Not accredited for this compound at the time of analysis, but all method requirements were followed.
- JC18516-2 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

Matrix: AQ **Batch ID:** F:GXY2768

- The data for SW846 8015C meets quality control requirements.
- JC18516-1A: Analysis performed at Accutest Laboratories, Orlando FL.
- JC18516-4A: Analysis performed at Accutest Laboratories, Orlando FL.

Volatiles by GC By Method SW846 8015C MOD

Matrix: SO **Batch ID:** F:GXY2770

- The data for SW846 8015C MOD meets quality control requirements.
- JC18516-3A: Sample was received in a bulk container but was not preserved within 48 hours of sampling. Analysis performed at Accutest Laboratories, Orlando FL.
- JC18516-2A: Sample was received in a bulk container but was not preserved within 48 hours of sampling. Analysis performed at Accutest Laboratories, Orlando FL.

Extractables by GC By Method SW846 8081B

Matrix: AQ **Batch ID:** OP93156

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Matrix: SO **Batch ID:** OP93322

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JC18834-10MS, JC18834-10MSD were used as the QC samples indicated.

Wet Chemistry By Method SM2540 G-97

Matrix: SO **Batch ID:** GN44431

- 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

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Accutest New Jersey **Job No:** JC18516

Site: AMANYWP: BMSMC, Building 5 Area, PR **Report Date:** 4/28/2016 1:40:01 PM

4 Sample(s) were collected on 04/14/2016 and were received at SGS Accutest Southeast (SASE) on 04/26/2016 properly preserved, at 4.6 Deg. C and intact. These Samples received an SASE job number of JC18516. A listing of the Laboratory Sample ID, Client Sample ID and dates of collection are presented in the Results Summary Section.

Except as noted below, all method specified calibrations and quality control performance criteria were met for this job. For more information, please refer to QC summary pages.

Volatiles by GC By Method SW846 8015C

Matrix: AQ **Batch ID:** GXY2768

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) JC18516-4AMS, JC18516-4AMSD were used as the QC samples indicated.

Matrix: AQ **Batch ID:** GXY2770

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) JC18516-2AMS, JC18516-2AMSD were used as the QC samples indicated.

JC18516-2A: Sample was received in a bulk container but was not preserved within 48 hours of sampling.

JC18516-3A: Sample was received in a bulk container but was not preserved within 48 hours of sampling.

SGS Accutest (SASE) certifies that this report meets the project requirements for analytical data produced for the samples as received at SASE and as stated on the COC. SASE certifies that the data meets the Data Quality Objectives for precision, accuracy and completeness as specified in the SASE Quality Manual except as noted above. This report is to be used in its entirety. SASE is not responsible for any assumptions of data quality if partial data packages are used.

Narrative prepared by:

_____ Date: April 28, 2016

Kim Benham, Client Services (signature on file)

Manual Integration Summary

Lab Sample ID	Analysis Type	File ID	Manual Integrations
GXY2768-IC2768	GCVOA	XY064024.D	Hexanol
GXY2768-IC2768	GCVOA	XY064025.D	Hexanol
GXY2768-IC2768	GCVOA	XY064026.D	Hexanol
GXY2770-CC2768	GCVOA	XY064053.D	Isopropyl Alcohol

4 Manual Integrations were found for JC18516

Summary of Hits

Job Number: JC18516
Account: Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Collected: 04/14/16

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC18516-1	**EB041416**					
No hits reported in this sample.						
JC18516-1A	**EB041416**					
No hits reported in this sample.						
JC18516-2	**RA14 (9-9.7)**					
1,4-Dioxane [a]		21.5	4.3	0.86	ug/kg	SW846 8270D BY SIM
JC18516-2A	**RA14 (9-9.7)**					
No hits reported in this sample.						
JC18516-3	**S-43S (6-7)**					
1,4-Dioxane [a]		25.4	4.2	0.84	ug/kg	SW846 8270D BY SIM
JC18516-3A	**S-43S (6-7)**					
No hits reported in this sample.						
JC18516-4	**RA14_GWS**					
1,4-Dioxane		2900	110	73	ug/l	SW846 8270D
JC18516-4A	**RA14_GWS**					
No hits reported in this sample.						

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

Sample Results

Report of Analysis

SGS Accutest

Report of Analysis

Client Sample ID:	EB041416		
Lab Sample ID:	JC18516-1	**Date Sampled:**	04/14/16
Matrix:	AQ - Equipment Blank	**Date Received:**	04/16/16
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	P104263.D	1	04/18/16	LK	04/18/16	OP93128	EP4590
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.3	0.86	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.3	0.94	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.1	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.3	2.6	ug/l	
51-28-5	2,4-Dinitrophenol	ND	11	1.6	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.3	1.4	ug/l	
95-48-7	2-Methylphenol	ND	2.1	0.93	ug/l	
	3&4-Methylphenol	ND	2.1	0.93	ug/l	
88-75-5	2-Nitrophenol	ND	5.3	1.0	ug/l	
100-02-7	4-Nitrophenol	ND	11	1.2	ug/l	
87-86-5	Pentachlorophenol	ND	5.3	1.5	ug/l	
108-95-2	Phenol	ND	2.1	0.41	ug/l	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.3	1.5	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	5.3	1.4	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.3	0.97	ug/l	
83-32-9	Acenaphthene	ND	1.1	0.20	ug/l	
208-96-8	Acenaphthylene	ND	1.1	0.14	ug/l	
98-86-2	Acetophenone	ND	2.1	0.22	ug/l	
120-12-7	Anthracene	ND	1.1	0.22	ug/l	
1912-24-9	Atrazine	ND	2.1	0.47	ug/l	
100-52-7	Benzaldehyde	ND	5.3	0.30	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.1	0.21	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.1	0.22	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.1	0.22	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.1	0.36	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.1	0.22	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.1	0.43	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.1	0.48	ug/l	
92-52-4	1,1'-Biphenyl	ND	1.1	0.22	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.1	0.25	ug/l	
106-47-8	4-Chloroaniline	ND	5.3	0.36	ug/l	
86-74-8	Carbazole	ND	1.1	0.24	ug/l	

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

Report of Analysis

Client Sample ID:	EB041416		
Lab Sample ID:	JC18516-1	**Date Sampled:**	04/14/16
Matrix:	AQ - Equipment Blank	**Date Received:**	04/16/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	2.1	0.68	ug/l	
218-01-9	Chrysene	ND	1.1	0.19	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.1	0.29	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.1	0.26	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.1	0.42	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.1	0.39	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.1	0.58	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.1	0.50	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.1	0.53	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.1	0.35	ug/l	
132-64-9	Dibenzofuran	ND	5.3	0.23	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.1	0.52	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.1	0.25	ug/l	
84-66-2	Diethyl phthalate	ND	2.1	0.28	ug/l	
131-11-3	Dimethyl phthalate	ND	2.1	0.23	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.1	1.7	ug/l	
206-44-0	Fluoranthene	ND	1.1	0.18	ug/l	
86-73-7	Fluorene	ND	1.1	0.18	ug/l	
118-74-1	Hexachlorobenzene	ND	1.1	0.34	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.1	0.52	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	2.9	ug/l	
67-72-1	Hexachloroethane	ND	2.1	0.41	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.1	0.35	ug/l	
78-59-1	Isophorone	ND	2.1	0.29	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.1	0.28	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.1	0.22	ug/l	
88-74-4	2-Nitroaniline	ND	5.3	0.29	ug/l	
99-09-2	3-Nitroaniline	ND	5.3	0.41	ug/l	
100-01-6	4-Nitroaniline	ND	5.3	0.46	ug/l	
98-95-3	Nitrobenzene	ND	2.1	0.68	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.1	0.51	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.3	0.23	ug/l	
85-01-8	Phenanthrene	ND	1.1	0.18	ug/l	
129-00-0	Pyrene	ND	1.1	0.23	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.1	0.39	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	73%		14-88%
4165-62-2	Phenol-d5	52%		10-110%

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

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

Report of Analysis

Client Sample ID:	EB041416		
Lab Sample ID:	JC18516-1	**Date Sampled:**	04/14/16
Matrix:	AQ - Equipment Blank	**Date Received:**	04/16/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
118-79-6	2,4,6-Tribromophenol	78%		39-149%
4165-60-0	Nitrobenzene-d5	101%		32-128%
321-60-8	2-Fluorobiphenyl	98%		35-119%
1718-51-0	Terphenyl-d14	103%		10-126%

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

SGS Accutest

Report of Analysis

Client Sample ID:	EB041416		
Lab Sample ID:	JC18516-1	**Date Sampled:**	04/14/16
Matrix:	AQ - Equipment Blank	**Date Received:**	04/16/16
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	4M64831.D	1	04/19/16	LK	04/18/16	OP93128A	E4M2886
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
91-20-3	Naphthalene	ND	0.11	0.031	ug/l	
123-91-1	1,4-Dioxane	ND	0.11	0.051	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	109%		24-125%
321-60-8	2-Fluorobiphenyl	87%		19-127%
1718-51-0	Terphenyl-d14	105%		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:	EB041416		
Lab Sample ID:	JC18516-1	**Date Sampled:**	04/14/16
Matrix:	AQ - Equipment Blank	**Date Received:**	04/16/16
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	1G122262.D	1	04/19/16	BP	04/18/16	OP93156	G1G3966
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	84%		26-132%
877-09-8	Tetrachloro-m-xylene	83%		26-132%
2051-24-3	Decachlorobiphenyl	80%		10-118%
2051-24-3	Decachlorobiphenyl	69%		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:	EB041416		
Lab Sample ID:	JC18516-1A	**Date Sampled:**	04/14/16
Matrix:	AQ - Equipment Blank	**Date Received:**	04/16/16
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	XY064036.D	1	04/26/16	AFL	n/a	n/a	F:GXY2768
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
64-17-5	Ethanol	ND	5.0	1.0	mg/l	
78-83-1	Isobutyl Alcohol	ND	5.0	1.0	mg/l	
67-63-0	Isopropyl Alcohol	ND	5.0	1.0	mg/l	
71-23-8	n-Propyl Alcohol	ND	5.0	1.0	mg/l	
71-36-3	n-Butyl Alcohol	ND	5.0	1.0	mg/l	
67-56-1	Methanol	ND	5.0	1.0	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
111-27-3	Hexanol	86%		73-123%

(a) Analysis performed at Accutest Laboratories, Orlando FL.

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:	RA14 (9-9.7)		
Lab Sample ID:	JC18516-2	**Date Sampled:**	04/14/16
Matrix:	SO - Soil	**Date Received:**	04/16/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	76.5
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M123854.D	1	04/23/16	SD	04/20/16	OP93218	EM5235
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	86	32	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	210	39	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	210	34	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	210	78	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	210	190	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	210	81	ug/kg	
95-48-7	2-Methylphenol	ND	86	62	ug/kg	
	3&4-Methylphenol	ND	86	41	ug/kg	
88-75-5	2-Nitrophenol	ND	210	40	ug/kg	
100-02-7	4-Nitrophenol	ND	430	73	ug/kg	
87-86-5	Pentachlorophenol	ND	210	100	ug/kg	
108-95-2	Phenol	ND	86	32	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	210	40	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	210	39	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	210	35	ug/kg	
83-32-9	Acenaphthene	ND	43	40	ug/kg	
208-96-8	Acenaphthylene	ND	43	4.5	ug/kg	
98-86-2	Acetophenone	ND	210	7.3	ug/kg	
120-12-7	Anthracene	ND	43	3.7	ug/kg	
1912-24-9	Atrazine	ND	86	18	ug/kg	
56-55-3	Benzo(a)anthracene	ND	43	8.3	ug/kg	
50-32-8	Benzo(a)pyrene	ND	43	9.1	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	43	8.8	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	43	13	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	43	9.6	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	86	9.8	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	86	23	ug/kg	
92-52-4	1,1'-Biphenyl	ND	86	7.9	ug/kg	
100-52-7	Benzaldehyde	ND	210	11	ug/kg	
91-58-7	2-Chloronaphthalene	ND	86	6.1	ug/kg	
106-47-8	4-Chloroaniline	ND	210	11	ug/kg	
86-74-8	Carbazole	ND	86	4.8	ug/kg	

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

Report of Analysis

Client Sample ID:	RA14 (9-9.7)		
Lab Sample ID:	JC18516-2	**Date Sampled:**	04/14/16
Matrix:	SO - Soil	**Date Received:**	04/16/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	76.5
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	86	28	ug/kg	
218-01-9	Chrysene	ND	43	6.9	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	86	9.7	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	86	18	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	86	9.8	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	86	8.1	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	43	8.1	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	43	11	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	86	28	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	43	15	ug/kg	
132-64-9	Dibenzofuran	ND	86	6.0	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	86	5.1	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	86	5.8	ug/kg	
84-66-2	Diethyl phthalate	ND	86	5.4	ug/kg	
131-11-3	Dimethyl phthalate	ND	86	6.1	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	86	15	ug/kg	
206-44-0	Fluoranthene	ND	43	5.2	ug/kg	
86-73-7	Fluorene	ND	43	5.1	ug/kg	
118-74-1	Hexachlorobenzene	ND	86	8.4	ug/kg	
87-68-3	Hexachlorobutadiene	ND	43	11	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	430	68	ug/kg	
67-72-1	Hexachloroethane	ND	210	14	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	43	22	ug/kg	
78-59-1	Isophorone	ND	86	8.0	ug/kg	
90-12-0	1-Methylnaphthalene	ND	86	7.0	ug/kg	
91-57-6	2-Methylnaphthalene	ND	86	8.0	ug/kg	
88-74-4	2-Nitroaniline	ND	210	9.7	ug/kg	
99-09-2	3-Nitroaniline	ND	210	12	ug/kg	
100-01-6	4-Nitroaniline	ND	210	14	ug/kg	
98-95-3	Nitrobenzene	ND	86	14	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	86	13	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	210	23	ug/kg	
85-01-8	Phenanthrene	ND	43	4.8	ug/kg	
129-00-0	Pyrene	ND	43	5.4	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	210	10	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	69%		30-106%
4165-62-2	Phenol-d5	71%		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:	RA14 (9-9.7)		
Lab Sample ID:	JC18516-2	**Date Sampled:**	04/14/16
Matrix:	SO - Soil	**Date Received:**	04/16/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	76.5
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	80%		24-140%
4165-60-0	Nitrobenzene-d5	71%		26-122%
321-60-8	2-Fluorobiphenyl	72%		36-112%
1718-51-0	Terphenyl-d14	80%		36-132%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	RA14 (9-9.7)		
Lab Sample ID:	JC18516-2	**Date Sampled:**	04/14/16
Matrix:	SO - Soil	**Date Received:**	04/16/16
Method:	SW846 8270D BY SIM SW846 3546	**Percent Solids:**	76.5
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M65049.D	1	05/02/16	LK	04/20/16	OP93218A	E4M2900
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]	21.5	4.3	0.86	ug/kg	
91-20-3	Naphthalene	ND	4.3	0.52	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	98%		15-138%
321-60-8	2-Fluorobiphenyl	115%		12-148%
1718-51-0	Terphenyl-d14	86%		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:	RA14 (9-9.7)		
Lab Sample ID:	JC18516-2	**Date Sampled:**	04/14/16
Matrix:	SO - Soil	**Date Received:**	04/16/16
Method:	SW846 8081B SW846 3546	**Percent Solids:**	76.5
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G34406.D	1	04/25/16	BP	04/23/16	OP93322	G6G995
Run #2							

	Initial Weight	Final Volume
Run #1	16.1 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.81	0.72	ug/kg	
319-84-6	alpha-BHC	ND	0.81	0.54	ug/kg	
319-85-7	beta-BHC	ND	0.81	0.50	ug/kg	
319-86-8	delta-BHC	ND	0.81	0.32	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.81	0.37	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.81	0.43	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.81	0.62	ug/kg	
60-57-1	Dieldrin	ND	0.81	0.64	ug/kg	
72-54-8	4,4'-DDD	ND	0.81	0.30	ug/kg	
72-55-9	4,4'-DDE	ND	0.81	0.27	ug/kg	
50-29-3	4,4'-DDT	ND	0.81	0.31	ug/kg	
72-20-8	Endrin	ND	0.81	0.29	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.81	0.46	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.81	0.60	ug/kg	
959-98-8	Endosulfan-I	ND	0.81	0.27	ug/kg	
33213-65-9	Endosulfan-II	ND	0.81	0.77	ug/kg	
76-44-8	Heptachlor	ND	0.81	0.67	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.81	0.34	ug/kg	
72-43-5	Methoxychlor	ND	1.6	0.45	ug/kg	
53494-70-5	Endrin ketone	ND	0.81	0.43	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	99%		24-136%
877-09-8	Tetrachloro-m-xylene	98%		24-136%
2051-24-3	Decachlorobiphenyl	92%		10-153%
2051-24-3	Decachlorobiphenyl	92%		10-153%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	RA14 (9-9.7)		
Lab Sample ID:	JC18516-2A	**Date Sampled:**	04/14/16
Matrix:	SO - Soil	**Date Received:**	04/16/16
Method:	SW846 8015C MOD	**Percent Solids:**	76.5
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	XY064056.D	1	04/27/16	AFL	n/a	n/a	F:GXY2770
Run #2							

	Initial Weight	Final Volume
Run #1	4.87 g	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
64-17-5	Ethanol	ND	13	2.7	mg/kg	
78-83-1	Isobutyl Alcohol	ND	13	2.7	mg/kg	
67-63-0	Isopropyl Alcohol	ND	13	2.7	mg/kg	
71-23-8	n-Propyl Alcohol	ND	13	2.7	mg/kg	
71-36-3	n-Butyl Alcohol	ND	13	2.7	mg/kg	
67-56-1	Methanol	ND	13	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
111-27-3	Hexanol	119%		69-121%

(a) Sample was received in a bulk container but was not preserved within 48 hours of sampling. Analysis performed at Accutest Laboratories, Orlando FL.

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-43S (6-7)		
Lab Sample ID:	JC18516-3	**Date Sampled:**	04/14/16
Matrix:	SO - Soil	**Date Received:**	04/16/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	77.6
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M123913.D	1	04/26/16	AN	04/20/16	OP93218	EM5238
Run #2							

	Initial Weight	Final Volume
Run #1	30.7 g	1.0 ml
Run #2		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	84	31	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	210	38	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	210	34	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	210	77	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	210	180	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	210	80	ug/kg	
95-48-7	2-Methylphenol	ND	84	61	ug/kg	
	3&4-Methylphenol	ND	84	40	ug/kg	
88-75-5	2-Nitrophenol	ND	210	39	ug/kg	
100-02-7	4-Nitrophenol	ND	420	71	ug/kg	
87-86-5	Pentachlorophenol	ND	210	100	ug/kg	
108-95-2	Phenol	ND	84	31	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	210	39	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	210	38	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	210	34	ug/kg	
83-32-9	Acenaphthene	ND	42	40	ug/kg	
208-96-8	Acenaphthylene	ND	42	4.4	ug/kg	
98-86-2	Acetophenone	ND	210	7.1	ug/kg	
120-12-7	Anthracene	ND	42	3.6	ug/kg	
1912-24-9	Atrazine	ND	84	17	ug/kg	
56-55-3	Benzo(a)anthracene	ND	42	8.1	ug/kg	
50-32-8	Benzo(a)pyrene	ND	42	8.9	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	42	8.6	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	42	13	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	42	9.4	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	84	9.6	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	84	23	ug/kg	
92-52-4	1,1'-Biphenyl	ND	84	7.8	ug/kg	
100-52-7	Benzaldehyde	ND	210	10	ug/kg	
91-58-7	2-Chloronaphthalene	ND	84	6.0	ug/kg	
106-47-8	4-Chloroaniline	ND	210	11	ug/kg	
86-74-8	Carbazole	ND	84	4.7	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:	S-43S (6-7)		
Lab Sample ID:	JC18516-3	**Date Sampled:**	04/14/16
Matrix:	SO - Soil	**Date Received:**	04/16/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	77.6
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	84	27	ug/kg	
218-01-9	Chrysene	ND	42	6.8	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	84	9.5	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	84	18	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	84	9.6	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	84	7.9	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	42	7.9	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	42	11	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	84	27	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	42	15	ug/kg	
132-64-9	Dibenzofuran	ND	84	5.8	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	84	5.0	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	84	5.7	ug/kg	
84-66-2	Diethyl phthalate	ND	84	5.3	ug/kg	
131-11-3	Dimethyl phthalate	ND	84	6.0	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	84	15	ug/kg	
206-44-0	Fluoranthene	ND	42	5.1	ug/kg	
86-73-7	Fluorene	ND	42	5.0	ug/kg	
118-74-1	Hexachlorobenzene	ND	84	8.3	ug/kg	
87-68-3	Hexachlorobutadiene	ND	42	11	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	420	67	ug/kg	
67-72-1	Hexachloroethane	ND	210	14	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	42	22	ug/kg	
78-59-1	Isophorone	ND	84	7.8	ug/kg	
90-12-0	1-Methylnaphthalene	ND	84	6.8	ug/kg	
91-57-6	2-Methylnaphthalene	ND	84	7.8	ug/kg	
88-74-4	2-Nitroaniline	ND	210	9.5	ug/kg	
99-09-2	3-Nitroaniline	ND	210	12	ug/kg	
100-01-6	4-Nitroaniline	ND	210	14	ug/kg	
98-95-3	Nitrobenzene	ND	84	13	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	84	12	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	210	22	ug/kg	
85-01-8	Phenanthrene	ND	42	4.7	ug/kg	
129-00-0	Pyrene	ND	42	5.2	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	210	10	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	73%		30-106%
4165-62-2	Phenol-d5	75%		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:	S-43S (6-7)		
Lab Sample ID:	JC18516-3	**Date Sampled:**	04/14/16
Matrix:	SO - Soil	**Date Received:**	04/16/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	77.6
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	91%		24-140%
4165-60-0	Nitrobenzene-d5	79%		26-122%
321-60-8	2-Fluorobiphenyl	77%		36-112%
1718-51-0	Terphenyl-d14	86%		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:	S-43S (6-7)		
Lab Sample ID:	JC18516-3	**Date Sampled:**	04/14/16
Matrix:	SO - Soil	**Date Received:**	04/16/16
Method:	SW846 8270D BY SIM SW846 3546	**Percent Solids:**	77.6
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M65050.D	1	05/02/16	LK	04/20/16	OP93218A	E4M2900
Run #2							

	Initial Weight	Final Volume
Run #1	30.7 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane [a]	25.4	4.2	0.84	ug/kg	
91-20-3	Naphthalene	ND	4.2	0.51	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	102%		15-138%
321-60-8	2-Fluorobiphenyl	112%		12-148%
1718-51-0	Terphenyl-d14	100%		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:	S-43S (6-7)		
Lab Sample ID:	JC18516-3	**Date Sampled:**	04/14/16
Matrix:	SO - Soil	**Date Received:**	04/16/16
Method:	SW846 8081B SW846 3546	**Percent Solids:**	77.6
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G34407.D	1	04/25/16	BP	04/23/16	OP93322	G6G995
Run #2							

	Initial Weight	Final Volume
Run #1	15.2 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.85	0.76	ug/kg	
319-84-6	alpha-BHC	ND	0.85	0.57	ug/kg	
319-85-7	beta-BHC	ND	0.85	0.52	ug/kg	
319-86-8	delta-BHC	ND	0.85	0.33	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.85	0.39	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.85	0.45	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.85	0.65	ug/kg	
60-57-1	Dieldrin	ND	0.85	0.66	ug/kg	
72-54-8	4,4'-DDD	ND	0.85	0.31	ug/kg	
72-55-9	4,4'-DDE	ND	0.85	0.28	ug/kg	
50-29-3	4,4'-DDT	ND	0.85	0.32	ug/kg	
72-20-8	Endrin	ND	0.85	0.30	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.85	0.48	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.85	0.63	ug/kg	
959-98-8	Endosulfan-I	ND	0.85	0.28	ug/kg	
33213-65-9	Endosulfan-II	ND	0.85	0.80	ug/kg	
76-44-8	Heptachlor	ND	0.85	0.70	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.85	0.35	ug/kg	
72-43-5	Methoxychlor	ND	1.7	0.47	ug/kg	
53494-70-5	Endrin ketone	ND	0.85	0.45	ug/kg	
8001-35-2	Toxaphene	ND	21	15	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	94%		24-136%
877-09-8	Tetrachloro-m-xylene	94%		24-136%
2051-24-3	Decachlorobiphenyl	87%		10-153%
2051-24-3	Decachlorobiphenyl	83%		10-153%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	S-43S (6-7)		
Lab Sample ID:	JC18516-3A	**Date Sampled:**	04/14/16
Matrix:	SO - Soil	**Date Received:**	04/16/16
Method:	SW846 8015C MOD	**Percent Solids:**	77.6
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	XY064057.D	1	04/27/16	AFL	n/a	n/a	F:GXY2770
Run #2							

	Initial Weight	Final Volume
Run #1	5.08 g	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
64-17-5	Ethanol	ND	13	2.5	mg/kg	
78-83-1	Isobutyl Alcohol	ND	13	2.5	mg/kg	
67-63-0	Isopropyl Alcohol	ND	13	2.5	mg/kg	
71-23-8	n-Propyl Alcohol	ND	13	2.5	mg/kg	
71-36-3	n-Butyl Alcohol	ND	13	2.5	mg/kg	
67-56-1	Methanol	ND	13	2.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
111-27-3	Hexanol	120%		69-121%

(a) Sample was received in a bulk container but was not preserved within 48 hours of sampling. Analysis performed at Accutest Laboratories, Orlando FL.

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:	RA14_GWS		
Lab Sample ID:	JC18516-4	**Date Sampled:**	04/14/16
Matrix:	AQ - Ground Water	**Date Received:**	04/16/16
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	P104264.D	1	04/18/16	LK	04/18/16	OP93128	EP4590
Run #2	P104289.D	100	04/19/16	LK	04/18/16	OP93128	EP4592

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

ABN TCL Special List

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

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

Report of Analysis

Client Sample ID:	RA14_GWS		
Lab Sample ID:	JC18516-4	**Date Sampled:**	04/14/16
Matrix:	AQ - Ground Water	**Date Received:**	04/16/16
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	2900 [a]	110	73	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.1	0.37	ug/l	
132-64-9	Dibenzofuran	ND	5.6	0.24	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.2	0.55	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.2	0.26	ug/l	
84-66-2	Diethyl phthalate	ND	2.2	0.29	ug/l	
131-11-3	Dimethyl phthalate	ND	2.2	0.24	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	1.8	ug/l	
206-44-0	Fluoranthene	ND	1.1	0.19	ug/l	
86-73-7	Fluorene	ND	1.1	0.19	ug/l	
118-74-1	Hexachlorobenzene	ND	1.1	0.36	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.1	0.55	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	3.1	ug/l	
67-72-1	Hexachloroethane	ND	2.2	0.43	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.1	0.37	ug/l	
78-59-1	Isophorone	ND	2.2	0.31	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.1	0.29	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.1	0.23	ug/l	
88-74-4	2-Nitroaniline	ND	5.6	0.31	ug/l	
99-09-2	3-Nitroaniline	ND	5.6	0.43	ug/l	
100-01-6	4-Nitroaniline	ND	5.6	0.49	ug/l	
98-95-3	Nitrobenzene	ND	2.2	0.71	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.2	0.53	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.6	0.25	ug/l	
85-01-8	Phenanthrene	ND	1.1	0.19	ug/l	
129-00-0	Pyrene	ND	1.1	0.24	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.2	0.41	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	78%	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:	RA14_GWS		
Lab Sample ID:	JC18516-4	**Date Sampled:**	04/14/16
Matrix:	AQ - Ground Water	**Date Received:**	04/16/16
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	57%	0% [b]	10-110%
118-79-6	2,4,6-Tribromophenol	80%	0% [b]	39-149%
4165-60-0	Nitrobenzene-d5	104%	0% [b]	32-128%
321-60-8	2-Fluorobiphenyl	101%	0% [b]	35-119%
1718-51-0	Terphenyl-d14	101%	0% [b]	10-126%

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

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	RA14_GWS		
Lab Sample ID:	JC18516-4	**Date Sampled:**	04/14/16
Matrix:	AQ - Ground Water	**Date Received:**	04/16/16
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	4M64832.D	1	04/19/16	LK	04/18/16	OP93128A	E4M2886
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	112%		24-125%
321-60-8	2-Fluorobiphenyl	93%		19-127%
1718-51-0	Terphenyl-d14	108%		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:	RA14_GWS		
Lab Sample ID:	JC18516-4	**Date Sampled:**	04/14/16
Matrix:	AQ - Ground Water	**Date Received:**	04/16/16
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	1G122263.D	1	04/19/16	BP	04/18/16	OP93156	G1G3966
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	57%		26-132%
877-09-8	Tetrachloro-m-xylene	59%		26-132%
2051-24-3	Decachlorobiphenyl	59%		10-118%
2051-24-3	Decachlorobiphenyl	50%		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:	RA14_GWS		
Lab Sample ID:	JC18516-4A	**Date Sampled:**	04/14/16
Matrix:	AQ - Ground Water	**Date Received:**	04/16/16
Method:	SW846 8015C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	XY064037.D	1	04/26/16	AFL	n/a	n/a	F:GXY2768
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
64-17-5	Ethanol	ND	5.0	1.0	mg/l	
78-83-1	Isobutyl Alcohol	ND	5.0	1.0	mg/l	
67-63-0	Isopropyl Alcohol	ND	5.0	1.0	mg/l	
71-23-8	n-Propyl Alcohol	ND	5.0	1.0	mg/l	
71-36-3	n-Butyl Alcohol	ND	5.0	1.0	mg/l	
67-56-1	Methanol	ND	5.0	1.0	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
111-27-3	Hexanol	111%		73-123%

(a) Analysis performed at Accutest Laboratories, Orlando FL.

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- 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 1 OF 1

FED-EX Tracking # 801219535824
Bottle Order Control #
SGS Accutest Quote #
SGS Accutest Job # JC18516

Client / Reporting Information

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

Project Information

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

Billing Information (if different from Report to)

Company Name:
Street Address:
City State Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	SVOC - Method 8270D	LMA - Method 8015B	Pesticides - Method 8081B	1,4 Dioxane + Naphthalene by Method 8270D SIM	LAB USE ONLY
1	EB041416	*	4/14/16	1150	NR	AQ	~~2~~ 7									X	X	X	X	E24
2	RA14 (9-9.7)		4/14/16	1500	TT	SO	2									X	X	X	X	V1085
3	S-43S (6-7)		4/14/16	1550	NR	SO	2									X	X	X	X	F51
4	RA14-GWS	*	4/14/16	1700	TT	AQ	7 GW									X	X	X	X	

INITIAL ASESSMENT 3/10
LABEL VERIFICATION 6

Matrix Codes

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

Turnaround Time (Business days)

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

Emergency & Rush T/A data available VIA Lablink

Approved By (SGS Accutest PM): / Date:

Data Deliverable Information

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

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

Comments / Special Instructions

Add to Report: 1-Methyl naphthalene with SVOC by Method 8270D
* Rec'd 2x40ml NP for Pest 4/15/16

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	4/15/16 1400	1 Fed Ex	2 FX	4/16/16 9:45	2
3		3	4		4
5		5			

Custody Seal # 450 [ ] Intact [ ] Not intact
Preserved where applicable [ ]
On Ice [x]
Cooler Temp. 2.3C

5.1
5

JC18516: Chain of Custody
Page 1 of 2

SGS Accutest Sample Receipt Summary

Job Number: JC18516 **Client:** _____ **Project:** _____

Date / Time Received: 4/16/2016 9:45:00 AM **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Raw Measured) °C: Cooler 1: (2.3);

Cooler Temps (Corrected) °C: Cooler 1: (2.7);

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

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

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

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

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

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

Comments

JC18516: Chain of Custody
Page 2 of 2

Internal Sample Tracking Chronicle

Anderson, Mulholland & Associates

Job No: JC18516

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

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC18516-1 EB041416	Collected: 14-APR-16 11:50 By: NR		Received: 16-APR-16 By: DDH			
JC18516-1	SW846 8270D	18-APR-16 19:29	LK	18-APR-16	YB	AB8270SL
JC18516-1	SW846 8081B	19-APR-16 10:28	BP	18-APR-16	EC	P8081PESTTCL
JC18516-1	SW846 8270D BY SIM	19-APR-16 12:16	LK	18-APR-16	YB	B8270SIM14DIOX,BSIM + NAP
JC18516-2 RA14 (9-9.7)	Collected: 14-APR-16 15:00 By: TT		Received: 16-APR-16 By: DDH			
JC18516-2	SM2540 G-97	20-APR-16 13:00	KP			SOL104
JC18516-2	SW846 8270D	23-APR-16 04:43	SD	20-APR-16	AQ	AB8270SL
JC18516-2	SW846 8081B	25-APR-16 20:49	BP	23-APR-16	SG	P8081PESTTCL
JC18516-2	SW846 8270D BY SIM	02-MAY-16 12:46	LK	20-APR-16	AQ	B8270SIM14DIOX,BSIM + NAP
JC18516-3 S-43S (6-7)	Collected: 14-APR-16 15:50 By: NR		Received: 16-APR-16 By: DDH			
JC18516-3	SM2540 G-97	20-APR-16 13:00	KP			SOL104
JC18516-3	SW846 8081B	25-APR-16 21:05	BP	23-APR-16	SG	P8081PESTTCL
JC18516-3	SW846 8270D	26-APR-16 16:30	AN	20-APR-16	AQ	AB8270SL
JC18516-3	SW846 8270D BY SIM	02-MAY-16 13:18	LK	20-APR-16	AQ	B8270SIM14DIOX,BSIM + NAP
JC18516-4 RA14_GWS	Collected: 14-APR-16 17:00 By: TT		Received: 16-APR-16 By: DDH			
JC18516-4	SW846 8270D	18-APR-16 19:59	LK	18-APR-16	YB	AB8270SL
JC18516-4	SW846 8081B	19-APR-16 10:46	BP	18-APR-16	EC	P8081PESTTCL
JC18516-4	SW846 8270D BY SIM	19-APR-16 12:48	LK	18-APR-16	YB	BSIM + NAP
JC18516-4	SW846 8270D	19-APR-16 14:43	LK	18-APR-16	YB	AB8270SL
JC18516-1A EB041416	Collected: 14-APR-16 11:50 By: NR		Received: 16-APR-16 By: DDH			
JC18516-1A	SW846 8015C	26-APR-16 16:43	AFL			D8015LMA
JC18516-2A RA14 (9-9.7)	Collected: 14-APR-16 15:00 By: TT		Received: 16-APR-16 By: DDH			
JC18516-2A	SW846 8015C MOD	27-APR-16 09:07	AFL			D8015LMA

Internal Sample Tracking Chronicle

Anderson, Mulholland & Associates

Job No: JC18516

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

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC18516-3A	Collected: 14-APR-16 15:50 By: NR		Received: 16-APR-16 By: DDH			
S-43S (6-7)						
JC18516-3A	SW846 8015C MOD	27-APR-16 09:27	AFL			D8015LMA
JC18516-4A	Collected: 14-APR-16 17:00 By: TT		Received: 16-APR-16 By: DDH			
RA14_GWS						
JC18516-4A	SW846 8015C	26-APR-16 17:02	AFL			D8015LMA

SGS Accutest Internal Chain of Custody

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 04/16/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC18516-1.2	Secured Storage	Vikas Parikh	04/18/16 08:58	Retrieve from Storage
JC18516-1.2	Vikas Parikh		04/18/16 12:37	Depleted
JC18516-1.2.1	Vikas Parikh	Organics Prep	04/18/16 08:59	Extract from JC18516-1.2
JC18516-1.2.1	Organics Prep	Yaw Britwum	04/18/16 14:08	Extract from JC18516-1.2
JC18516-1.2.1	Yaw Britwum	Extract Storage	04/18/16 14:08	Return to Storage
JC18516-1.2.1	Extract Storage	Linsey Kirschmann	04/18/16 15:07	Retrieve from Storage
JC18516-1.2.1	Linsey Kirschmann	GCMSP	04/18/16 15:07	Load on Instrument
JC18516-1.2.1	GCMSP	Linsey Kirschmann	04/19/16 10:52	Unload from Instrument
JC18516-1.2.1	Linsey Kirschmann	GCMS4M	04/19/16 10:52	Load on Instrument
JC18516-1.2.1	GCMS4M	Linsey Kirschmann	04/20/16 12:21	Unload from Instrument
JC18516-1.2.1	Linsey Kirschmann	Extract Freezer	04/20/16 12:21	Return to Storage
JC18516-1.2.2	Vikas Parikh	Organics Prep	04/18/16 09:02	Extract from JC18516-1.2
JC18516-1.2.2	Organics Prep	Nicholas Goydish	04/18/16 11:29	Extract from JC18516-1.2
JC18516-1.2.2	Nicholas Goydish	Extract Storage	04/18/16 11:29	Return to Storage
JC18516-1.2.2	Extract Storage	Brittany Piercy	04/18/16 16:43	Retrieve from Storage
JC18516-1.2.2	Brittany Piercy	GC4G	04/18/16 16:43	Load on Instrument
JC18516-1.2.2	GC4G	Brittany Piercy	04/19/16 16:02	Unload from Instrument
JC18516-1.2.2	Brittany Piercy	Extract Freezer	04/19/16 16:02	Return to Storage
JC18516-1.4	Secured Storage	Vikas Parikh	04/18/16 09:00	Retrieve from Storage
JC18516-1.4	Vikas Parikh		04/18/16 12:37	Depleted
JC18516-1.4.1	Vikas Parikh	Organics Prep	04/18/16 09:02	Extract from JC18516-1.4
JC18516-1.4.1	Organics Prep	Nicholas Goydish	04/18/16 11:29	Extract from JC18516-1.4
JC18516-1.4.1	Nicholas Goydish	Extract Storage	04/18/16 11:29	Return to Storage
JC18516-1.4.1	Extract Storage	Brittany Piercy	04/18/16 16:43	Retrieve from Storage
JC18516-1.4.1	Brittany Piercy	GC4G	04/18/16 16:43	Load on Instrument
JC18516-1.4.1	GC4G	Brittany Piercy	04/18/16 16:44	Unload from Instrument
JC18516-1.4.1	Brittany Piercy	Extract Storage	04/18/16 16:44	Return to Storage
JC18516-1.5	Secured Storage	Oleg Berenzon	04/25/16 16:44	Retrieve from Storage
JC18516-1.5	Oleg Berenzon		04/25/16 16:44	Subcontract
JC18516-1.6	Secured Storage	Xu Liu	04/21/16 09:36	Retrieve from Storage
JC18516-1.6	Xu Liu	Secured Storage	04/21/16 15:40	Return to Storage
JC18516-1.6	Secured Storage	Xu Liu	04/22/16 10:01	Retrieve from Storage
JC18516-1.6	Xu Liu	Secured Storage	04/22/16 14:40	Return to Storage
JC18516-2.1	Secured Storage	Nicole Kern	04/20/16 06:28	Retrieve from Storage
JC18516-2.1	Nicole Kern	Humarah Bano	04/20/16 06:41	Custody Transfer
JC18516-2.1	Humarah Bano	Secured Storage	04/20/16 09:48	Return to Storage
JC18516-2.1	Secured Storage	Meilly Arbelo	04/23/16 07:44	Retrieve from Storage

SGS Accutest Internal Chain of Custody

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 04/16/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC18516-2.1	Meilly Arbelo	Secured Storage	04/23/16 13:39	Return to Storage
JC18516-2.1.1	Humarah Bano	Organics Prep	04/20/16 06:50	Extract from JC18516-2.1
JC18516-2.1.1	Organics Prep	Adil Quyser	04/20/16 12:45	Extract from JC18516-2.1
JC18516-2.1.1	Adil Quyser	Extract Storage	04/20/16 12:45	Return to Storage
JC18516-2.1.1	Extract Storage	Sean Block	04/22/16 21:23	Retrieve from Storage
JC18516-2.1.1	Sean Block	GCMSM	04/22/16 21:23	Load on Instrument
JC18516-2.1.1	GCMSM	Ashley Noble	04/25/16 11:55	Unload from Instrument
JC18516-2.1.1	Ashley Noble	Extract Freezer	04/25/16 11:55	Return to Storage
JC18516-2.1.2	Meilly Arbelo	Organics Prep	04/23/16 08:01	Extract from JC18516-2.1
JC18516-2.1.2	Organics Prep	Shanice Grant	04/23/16 16:46	Extract from JC18516-2.1
JC18516-2.1.2	Shanice Grant	Extract Storage	04/23/16 16:46	Return to Storage
JC18516-2.1.2	Extract Storage	Dhara Saparia	04/25/16 16:47	Retrieve from Storage
JC18516-2.1.2	Dhara Saparia	GC6G	04/25/16 16:47	Load on Instrument
JC18516-2.1.2	GC6G	Brittany Piercy	04/26/16 06:56	Unload from Instrument
JC18516-2.1.2	Brittany Piercy	Extract Freezer	04/26/16 06:56	Return to Storage
JC18516-2.2	Secured Storage	Sahara Feliciano	04/20/16 07:36	Retrieve from Storage
JC18516-2.2	Sahara Feliciano	Secured Staging Area	04/20/16 07:36	Return to Storage
JC18516-2.2	Secured Staging Area	Paula Velatesgui	04/20/16 08:15	Retrieve from Storage
JC18516-2.2	Paula Velatesgui	Secured Storage	04/20/16 14:10	Return to Storage
JC18516-2.2	Secured Storage	Xu Liu	04/21/16 08:07	Retrieve from Storage
JC18516-2.2	Xu Liu	Secured Storage	04/21/16 08:23	Return to Storage
JC18516-2.2	Secured Storage	Oleg Berenzon	04/25/16 16:44	Retrieve from Storage
JC18516-2.2	Oleg Berenzon		04/25/16 16:44	Subcontract
JC18516-3.1	Secured Storage	Nicole Kern	04/20/16 06:28	Retrieve from Storage
JC18516-3.1	Nicole Kern	Humarah Bano	04/20/16 06:41	Custody Transfer
JC18516-3.1	Humarah Bano	Secured Storage	04/20/16 09:48	Return to Storage
JC18516-3.1	Secured Storage	Meilly Arbelo	04/23/16 07:44	Retrieve from Storage
JC18516-3.1	Meilly Arbelo	Secured Storage	04/23/16 13:39	Return to Storage
JC18516-3.1.1	Humarah Bano	Organics Prep	04/20/16 06:50	Extract from JC18516-3.1
JC18516-3.1.1	Organics Prep	Adil Quyser	04/20/16 12:45	Extract from JC18516-3.1
JC18516-3.1.1	Adil Quyser	Extract Storage	04/20/16 12:45	Return to Storage
JC18516-3.1.1	Extract Storage	Sean Block	04/22/16 21:23	Retrieve from Storage
JC18516-3.1.1	Sean Block	GCMSM	04/22/16 21:23	Load on Instrument
JC18516-3.1.1	GCMSM	Ashley Noble	04/27/16 10:47	Unload from Instrument
JC18516-3.1.1	Ashley Noble	Extract Freezer	04/27/16 10:47	Return to Storage
JC18516-3.1.2	Meilly Arbelo	Organics Prep	04/23/16 08:01	Extract from JC18516-3.1
JC18516-3.1.2	Organics Prep	Shanice Grant	04/23/16 16:46	Extract from JC18516-3.1
JC18516-3.1.2	Shanice Grant	Extract Storage	04/23/16 16:46	Return to Storage

SGS Accutest Internal Chain of Custody

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 04/16/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC18516-3.1.2	Extract Storage	Dhara Saparia	04/25/16 16:47	Retrieve from Storage
JC18516-3.1.2	Dhara Saparia	GC6G	04/25/16 16:47	Load on Instrument
JC18516-3.1.2	GC6G	Brittany Piercy	04/26/16 06:56	Unload from Instrument
JC18516-3.1.2	Brittany Piercy	Extract Freezer	04/26/16 06:56	Return to Storage
JC18516-3.2	Secured Storage	Sahara Feliciano	04/20/16 07:36	Retrieve from Storage
JC18516-3.2	Sahara Feliciano	Secured Staging Area	04/20/16 07:36	Return to Storage
JC18516-3.2	Secured Staging Area	Paula Velatesgui	04/20/16 08:15	Retrieve from Storage
JC18516-3.2	Paula Velatesgui	Secured Storage	04/20/16 14:10	Return to Storage
JC18516-3.2	Secured Storage	Xu Liu	04/21/16 08:07	Retrieve from Storage
JC18516-3.2	Xu Liu	Secured Storage	04/21/16 08:23	Return to Storage
JC18516-3.2	Secured Storage	Oleg Berenzon	04/25/16 16:44	Retrieve from Storage
JC18516-3.2	Oleg Berenzon		04/25/16 16:44	Subcontract
JC18516-4.2	Secured Storage	Vikas Parikh	04/18/16 08:58	Retrieve from Storage
JC18516-4.2	Vikas Parikh		04/18/16 12:37	Depleted
JC18516-4.2.1	Vikas Parikh	Organics Prep	04/18/16 08:59	Extract from JC18516-4.2
JC18516-4.2.1	Organics Prep	Yaw Britwum	04/18/16 14:08	Extract from JC18516-4.2
JC18516-4.2.1	Yaw Britwum	Extract Storage	04/18/16 14:08	Return to Storage
JC18516-4.2.1	Extract Storage	Linsey Kirschmann	04/18/16 15:07	Retrieve from Storage
JC18516-4.2.1	Linsey Kirschmann	GCMSP	04/18/16 15:07	Load on Instrument
JC18516-4.2.1	GCMSP	Linsey Kirschmann	04/19/16 10:52	Unload from Instrument
JC18516-4.2.1	Linsey Kirschmann	GCMS4M	04/19/16 10:52	Load on Instrument
JC18516-4.2.1	GCMS4M	Linsey Kirschmann	04/20/16 12:21	Unload from Instrument
JC18516-4.2.1	Linsey Kirschmann	Extract Freezer	04/20/16 12:21	Return to Storage
JC18516-4.2.2	Vikas Parikh	Organics Prep	04/18/16 09:02	Extract from JC18516-4.2
JC18516-4.2.2	Organics Prep	Nicholas Goydish	04/18/16 11:29	Extract from JC18516-4.2
JC18516-4.2.2	Nicholas Goydish	Extract Storage	04/18/16 11:29	Return to Storage
JC18516-4.2.2	Extract Storage	Brittany Piercy	04/18/16 16:43	Retrieve from Storage
JC18516-4.2.2	Brittany Piercy	GC4G	04/18/16 16:43	Load on Instrument
JC18516-4.2.2	GC4G	Brittany Piercy	04/19/16 16:02	Unload from Instrument
JC18516-4.2.2	Brittany Piercy	Extract Freezer	04/19/16 16:02	Return to Storage
JC18516-4.4	Secured Storage	Vikas Parikh	04/18/16 09:00	Retrieve from Storage
JC18516-4.4	Vikas Parikh		04/18/16 12:37	Depleted
JC18516-4.4.1	Vikas Parikh	Organics Prep	04/18/16 09:02	Extract from JC18516-4.4
JC18516-4.4.1	Organics Prep	Nicholas Goydish	04/18/16 11:29	Extract from JC18516-4.4
JC18516-4.4.1	Nicholas Goydish	Extract Storage	04/18/16 11:29	Return to Storage
JC18516-4.4.1	Extract Storage	Brittany Piercy	04/18/16 16:43	Retrieve from Storage
JC18516-4.4.1	Brittany Piercy	GC4G	04/18/16 16:43	Load on Instrument
JC18516-4.4.1	GC4G	Brittany Piercy	04/18/16 16:44	Unload from Instrument

SGS Accutest Internal Chain of Custody

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 04/16/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC18516-4.4.1	Brittany Piercy	Extract Storage	04/18/16 16:44	Return to Storage
JC18516-4.5	Secured Storage	Oleg Berenzon	04/25/16 16:44	Retrieve from Storage
JC18516-4.5	Oleg Berenzon		04/25/16 16:44	Subcontract
JC18516-4.6	Secured Storage	Xu Liu	04/21/16 09:36	Retrieve from Storage
JC18516-4.6	Xu Liu	Secured Storage	04/21/16 15:40	Return to Storage
JC18516-4.6	Secured Storage	Xu Liu	04/22/16 10:01	Retrieve from Storage
JC18516-4.6	Xu Liu	Secured Storage	04/22/16 14:40	Return to Storage

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93128-MB1	P104255A.D	1	04/18/16	LK	04/18/16	OP93128	EP4590

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

JC18516-1, JC18516-4

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: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93128-MB1	P104255A.D	1	04/18/16	LK	04/18/16	OP93128	EP4590

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

JC18516-1, JC18516-4

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: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93128-MB1	P104255A.D	1	04/18/16	LK	04/18/16	OP93128	EP4590

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

JC18516-1, JC18516-4

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	77%	14-88%
4165-62-2	Phenol-d5	51%	10-110%
118-79-6	2,4,6-Tribromophenol	76%	39-149%
4165-60-0	Nitrobenzene-d5	101%	32-128%
321-60-8	2-Fluorobiphenyl	97%	35-119%
1718-51-0	Terphenyl-d14	103%	10-126%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	2.49	5	ug/l	J
	Internal standard added for SIM test	4.33	5.2	ug/l	J
	Internal standard added for SIM test	7.05	4.9	ug/l	J
	Internal standard added for SIM test	9.40	5	ug/l	J
	Internal standard added for SIM test	12.92	4.9	ug/l	J
	Internal standard added for SIM test	18.00	4.4	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

Method Blank Summary

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93128-MB1	2M83206.D	1	04/20/16	AN	04/18/16	OP93128	E2M3655

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

JC18516-1, JC18516-4

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: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93128-MB1	2M83206.D	1	04/20/16	AN	04/18/16	OP93128	E2M3655

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

JC18516-1, JC18516-4

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: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93128-MB1	2M83206.D	1	04/20/16	AN	04/18/16	OP93128	E2M3655

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

JC18516-1, JC18516-4

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	63%	14-88%
4165-62-2	Phenol-d5	42%	10-110%
118-79-6	2,4,6-Tribromophenol	114%	39-149%
4165-60-0	Nitrobenzene-d5	98%	32-128%
321-60-8	2-Fluorobiphenyl	93%	35-119%
1718-51-0	Terphenyl-d14	98%	10-126%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact/aldol-condensation	3.62	4.2	ug/l	J
	Internal standard added for SIM test	5.00	5.5	ug/l	J
	Internal standard added for SIM test	6.84	5.3	ug/l	J
	Internal standard added for SIM test	8.85	5.3	ug/l	J
	Internal standard added for SIM test	12.19	5.3	ug/l	J
	Internal standard added for SIM test	16.52	5.6	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

Method Blank Summary

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93218-MB1	M123745.D	1	04/20/16	AD	04/20/16	OP93218	EM5230

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

JC18516-2, JC18516-3

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: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93218-MB1	M123745.D	1	04/20/16	AD	04/20/16	OP93218	EM5230

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

JC18516-2, JC18516-3

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	94%	30-106%

Method Blank Summary

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93218-MB1	M123745.D	1	04/20/16	AD	04/20/16	OP93218	EM5230

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

JC18516-2, JC18516-3

CAS No.	Surrogate Recoveries		Limits
4165-62-2	Phenol-d5	92%	30-106%
118-79-6	2,4,6-Tribromophenol	91%	24-140%
4165-60-0	Nitrobenzene-d5	91%	26-122%
321-60-8	2-Fluorobiphenyl	89%	36-112%
1718-51-0	Terphenyl-d14	92%	36-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	2.24	170	ug/kg	J
	system artifact	3.08	470	ug/kg	J
	system artifact	3.40	350	ug/kg	J
	system artifact/aldol-condensation	3.45	1100	ug/kg	J
	Total TIC, Semi-Volatile		0	ug/kg	

Method Blank Summary

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93218-MB1	3E82750.D	1	04/29/16	AN	04/20/16	OP93218	E3E3626

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

JC18516-2, JC18516-3

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: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93218-MB1	3E82750.D	1	04/29/16	AN	04/20/16	OP93218	E3E3626

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

JC18516-2, JC18516-3

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	85%	30-106%

Method Blank Summary

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93218-MB1	3E82750.D	1	04/29/16	AN	04/20/16	OP93218	E3E3626

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

JC18516-2, JC18516-3

CAS No.	Surrogate Recoveries		Limits
4165-62-2	Phenol-d5	76%	30-106%
118-79-6	2,4,6-Tribromophenol	87%	24-140%
4165-60-0	Nitrobenzene-d5	87%	26-122%
321-60-8	2-Fluorobiphenyl	94%	36-112%
1718-51-0	Terphenyl-d14	102%	36-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	2.87	530	ug/kg	J
	system artifact	3.20	300	ug/kg	J
	system artifact/aldol-condensation	3.26	1500	ug/kg	J
	system artifact	5.11	250	ug/kg	J
	system artifact	6.13	600	ug/kg	J
	system artifact	7.27	380	ug/kg	J
	system artifact	8.44	260	ug/kg	J
	system artifact	9.51	210	ug/kg	J
	system artifact	10.49	150	ug/kg	J
	system artifact	11.40	130	ug/kg	J
	system artifact	12.23	140	ug/kg	J
	system artifact	12.99	140	ug/kg	J
	system artifact	13.71	160	ug/kg	J
	system artifact	14.39	160	ug/kg	J
	system artifact	15.03	210	ug/kg	J
	system artifact	15.62	170	ug/kg	J
	Total TIC, Semi-Volatile		0	ug/kg	

Method Blank Summary

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93128A-MB1	4M64803.D	1	04/18/16	LK	04/18/16	OP93128A	E4M2885

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

JC18516-1, JC18516-4

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

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	59%	14-81%
4165-62-2	Phenol-d5	39%	11-54%
118-79-6	2,4,6-Tribromophenol	98%	35-145%
4165-60-0	Nitrobenzene-d5	94%	24-125%
321-60-8	2-Fluorobiphenyl	103%	19-127%
1718-51-0	Terphenyl-d14	100%	10-119%

Method Blank Summary

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93128A-MB1	3M60786.D	1	04/22/16	LK	04/18/16	OP93128A	E3M2856

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

JC18516-1, JC18516-4

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

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	53%	14-81%
4165-62-2	Phenol-d5	35%	11-54%
118-79-6	2,4,6-Tribromophenol	89%	35-145%
4165-60-0	Nitrobenzene-d5	79%	24-125%
321-60-8	2-Fluorobiphenyl	81%	19-127%
1718-51-0	Terphenyl-d14	91%	10-119%

Method Blank Summary

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93218A-MB1	4M65047.D	1	05/02/16	LK	04/20/16	OP93218A	E4M2900

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

JC18516-2, JC18516-3

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	118%	15-138%
321-60-8	2-Fluorobiphenyl	139%	12-148%
1718-51-0	Terphenyl-d14	108%	10-157%

Blank Spike Summary

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93128-BS1	P104256.D	1	04/18/16	LK	04/18/16	OP93128	EP4590

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

JC18516-1, JC18516-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-57-8	2-Chlorophenol	50	50.1	100	48-106
59-50-7	4-Chloro-3-methyl phenol	50	52.0	104	49-113
120-83-2	2,4-Dichlorophenol	50	49.7	99	49-111
105-67-9	2,4-Dimethylphenol	50	52.7	105	42-117
51-28-5	2,4-Dinitrophenol	100	96.4	96	37-132
534-52-1	4,6-Dinitro-o-cresol	50	45.1	90	49-119
95-48-7	2-Methylphenol	50	49.0	98	42-103
	3&4-Methylphenol	50	45.9	92	39-110
88-75-5	2-Nitrophenol	50	53.4	107	49-114
100-02-7	4-Nitrophenol	50	27.7	55	16-95
87-86-5	Pentachlorophenol	50	37.1	74	30-136
108-95-2	Phenol	50	27.0	54	10-110
58-90-2	2,3,4,6-Tetrachlorophenol	50	41.6	83	47-118
95-95-4	2,4,5-Trichlorophenol	50	47.3	95	55-116
88-06-2	2,4,6-Trichlorophenol	50	46.9	94	56-115
83-32-9	Acenaphthene	50	44.3	89	54-112
208-96-8	Acenaphthylene	50	44.1	88	49-99
98-86-2	Acetophenone	50	51.8	104	52-111
120-12-7	Anthracene	50	49.2	98	58-112
1912-24-9	Atrazine	50	46.6	93	62-134
100-52-7	Benzaldehyde	50	49.9	100	40-129
56-55-3	Benzo(a)anthracene	50	51.3	103	44-120
50-32-8	Benzo(a)pyrene	50	54.1	108	41-127
205-99-2	Benzo(b)fluoranthene	50	53.8	108	41-129
191-24-2	Benzo(g,h,i)perylene	50	47.8	96	34-128
207-08-9	Benzo(k)fluoranthene	50	51.7	103	42-122
101-55-3	4-Bromophenyl phenyl ether	50	42.1	84	54-121
85-68-7	Butyl benzyl phthalate	50	64.7	129	20-143
92-52-4	1,1'-Biphenyl	50	45.0	90	51-106
91-58-7	2-Chloronaphthalene	50	39.7	79	48-104
106-47-8	4-Chloroaniline	50	23.9	48	10-110
86-74-8	Carbazole	50	52.3	105	56-110
105-60-2	Caprolactam	50	19.1	38	10-110
218-01-9	Chrysene	50	47.4	95	45-125
111-91-1	bis(2-Chloroethoxy)methane	50	52.4	105	47-117
111-44-4	bis(2-Chloroethyl)ether	50	53.2	106	48-115

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93128-BS1	P104256.D	1	04/18/16	LK	04/18/16	OP93128	EP4590

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

JC18516-1, JC18516-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
108-60-1	bis(2-Chloroisopropyl)ether	50	43.8	88	44-112
7005-72-3	4-Chlorophenyl phenyl ether	50	37.5	75	50-117
121-14-2	2,4-Dinitrotoluene	50	44.2	88	57-122
606-20-2	2,6-Dinitrotoluene	50	51.4	103	58-122
91-94-1	3,3'-Dichlorobenzidine	100	49.3	49	10-110
123-91-1	1,4-Dioxane	50	31.4	63	10-110
53-70-3	Dibenzo(a,h)anthracene	50	49.2	98	36-130
132-64-9	Dibenzofuran	50	45.9	92	55-108
84-74-2	Di-n-butyl phthalate	50	59.1	118	45-123
117-84-0	Di-n-octyl phthalate	50	67.0	134	37-144
84-66-2	Diethyl phthalate	50	48.2	96	23-130
131-11-3	Dimethyl phthalate	50	46.9	94	10-140
117-81-7	bis(2-Ethylhexyl)phthalate	50	53.7	107	36-138
206-44-0	Fluoranthene	50	49.4	99	58-116
86-73-7	Fluorene	50	44.5	89	57-113
118-74-1	Hexachlorobenzene	50	36.4	73	49-122
87-68-3	Hexachlorobutadiene	50	28.2	56	24-112
77-47-4	Hexachlorocyclopentadiene	100	48.4	48	14-119
67-72-1	Hexachloroethane	50	31.4	63	31-107
193-39-5	Indeno(1,2,3-cd)pyrene	50	51.3	103	34-128
78-59-1	Isophorone	50	54.3	109	52-119
90-12-0	1-Methylnaphthalene	50	45.2	90	46-103
91-57-6	2-Methylnaphthalene	50	43.8	88	45-107
88-74-4	2-Nitroaniline	50	58.1	116	51-127
99-09-2	3-Nitroaniline	50	34.4	69	10-110
100-01-6	4-Nitroaniline	50	55.7	111	50-112
98-95-3	Nitrobenzene	50	46.8	94	44-116
621-64-7	N-Nitroso-di-n-propylamine	50	50.6	101	49-117
86-30-6	N-Nitrosodiphenylamine	50	47.8	96	51-113
85-01-8	Phenanthrene	50	48.4	97	56-111
129-00-0	Pyrene	50	53.3	107	47-120
95-94-3	1,2,4,5-Tetrachlorobenzene	50	32.1	64	36-114

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93128-BS1	P104256.D	1	04/18/16	LK	04/18/16	OP93128	EP4590

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

JC18516-1, JC18516-4

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	82%	14-88%
4165-62-2	Phenol-d5	56%	10-110%
118-79-6	2,4,6-Tribromophenol	79%	39-149%
4165-60-0	Nitrobenzene-d5	102%	32-128%
321-60-8	2-Fluorobiphenyl	95%	35-119%
1718-51-0	Terphenyl-d14	101%	10-126%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93218-BS1	M123746.D	1	04/20/16	AD	04/20/16	OP93218	EM5230

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

JC18516-2, JC18516-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
95-57-8	2-Chlorophenol	1670	1480	89	54-98
59-50-7	4-Chloro-3-methyl phenol	1670	1480	89	52-107
120-83-2	2,4-Dichlorophenol	1670	1480	89	53-105
105-67-9	2,4-Dimethylphenol	1670	1520	91	49-115
51-28-5	2,4-Dinitrophenol	3330	3140	94	30-127
534-52-1	4,6-Dinitro-o-cresol	1670	1550	93	41-114
95-48-7	2-Methylphenol	1670	1480	89	53-103
	3&4-Methylphenol	1670	1470	88	53-102
88-75-5	2-Nitrophenol	1670	1480	89	52-104
100-02-7	4-Nitrophenol	1670	1340	80	36-143
87-86-5	Pentachlorophenol	1670	1390	83	29-128
108-95-2	Phenol	1670	1540	92	45-106
58-90-2	2,3,4,6-Tetrachlorophenol	1670	1370	82	47-113
95-95-4	2,4,5-Trichlorophenol	1670	1370	82	55-112
88-06-2	2,4,6-Trichlorophenol	1670	1420	85	57-108
83-32-9	Acenaphthene	1670	1380	83	60-108
208-96-8	Acenaphthylene	1670	1320	79	54-94
98-86-2	Acetophenone	1670	1400	84	53-110
120-12-7	Anthracene	1670	1440	86	59-109
1912-24-9	Atrazine	1670	1370	82	59-126
56-55-3	Benzo(a)anthracene	1670	1410	85	52-113
50-32-8	Benzo(a)pyrene	1670	1410	85	56-122
205-99-2	Benzo(b)fluoranthene	1670	1380	83	53-119
191-24-2	Benzo(g,h,i)perylene	1670	1360	82	48-117
207-08-9	Benzo(k)fluoranthene	1670	1430	86	52-115
101-55-3	4-Bromophenyl phenyl ether	1670	1460	88	58-114
85-68-7	Butyl benzyl phthalate	1670	1530	92	44-132
92-52-4	1,1'-Biphenyl	1670	1410	85	54-101
100-52-7	Benzaldehyde	1670	1530	92	39-117
91-58-7	2-Chloronaphthalene	1670	1350	81	54-103
106-47-8	4-Chloroaniline	1670	839	50	10-110
86-74-8	Carbazole	1670	1580	95	55-105
105-60-2	Caprolactam	1670	1430	86	42-111
218-01-9	Chrysene	1670	1430	86	51-119
111-91-1	bis(2-Chloroethoxy)methane	1670	1410	85	51-106
111-44-4	bis(2-Chloroethyl)ether	1670	1360	82	48-107

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93218-BS1	M123746.D	1	04/20/16	AD	04/20/16	OP93218	EM5230

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

JC18516-2, JC18516-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
108-60-1	bis(2-Chloroisopropyl)ether	1670	1170	70	46-103
7005-72-3	4-Chlorophenyl phenyl ether	1670	1350	81	54-112
121-14-2	2,4-Dinitrotoluene	1670	1490	89	56-116
606-20-2	2,6-Dinitrotoluene	1670	1470	88	56-115
91-94-1	3,3'-Dichlorobenzidine	3330	2050	62	22-103
53-70-3	Dibenzo(a,h)anthracene	1670	1410	85	49-118
132-64-9	Dibenzofuran	1670	1390	83	55-103
84-74-2	Di-n-butyl phthalate	1670	1530	92	56-117
117-84-0	Di-n-octyl phthalate	1670	1430	86	47-137
84-66-2	Diethyl phthalate	1670	1410	85	54-112
131-11-3	Dimethyl phthalate	1670	1390	83	56-108
117-81-7	bis(2-Ethylhexyl)phthalate	1670	1540	92	45-130
206-44-0	Fluoranthene	1670	1410	85	58-110
86-73-7	Fluorene	1670	1370	82	59-108
118-74-1	Hexachlorobenzene	1670	1410	85	55-114
87-68-3	Hexachlorobutadiene	1670	1290	77	44-118
77-47-4	Hexachlorocyclopentadiene	3330	2120	64	41-137
67-72-1	Hexachloroethane	1670	1230	74	50-107
193-39-5	Indeno(1,2,3-cd)pyrene	1670	1420	85	48-120
78-59-1	Isophorone	1670	1460	88	54-109
90-12-0	1-Methylnaphthalene	1670	1410	85	50-110
91-57-6	2-Methylnaphthalene	1670	1340	80	48-104
88-74-4	2-Nitroaniline	1670	1520	91	49-124
99-09-2	3-Nitroaniline	1670	1090	65	22-110
100-01-6	4-Nitroaniline	1670	1600	96	50-107
98-95-3	Nitrobenzene	1670	1370	82	47-108
621-64-7	N-Nitroso-di-n-propylamine	1670	1280	77	49-106
86-30-6	N-Nitrosodiphenylamine	1670	1530	92	53-112
85-01-8	Phenanthrene	1670	1430	86	57-105
129-00-0	Pyrene	1670	1470	88	50-117
95-94-3	1,2,4,5-Tetrachlorobenzene	1670	1300	78	52-109

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	98%	30-106%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93218-BS1	M123746.D	1	04/20/16	AD	04/20/16	OP93218	EM5230

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

JC18516-2, JC18516-3

CAS No.	Surrogate Recoveries	BSP	Limits
4165-62-2	Phenol-d5	95%	30-106%
118-79-6	2,4,6-Tribromophenol	102%	24-140%
4165-60-0	Nitrobenzene-d5	92%	26-122%
321-60-8	2-Fluorobiphenyl	88%	36-112%
1718-51-0	Terphenyl-d14	99%	36-132%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93128A-BS12	4M64804.D	1	04/18/16	LK	04/18/16	OP93128A	E4M2885

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

JC18516-1, JC18516-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
91-20-3	Naphthalene	1	0.918	92	40-119
123-91-1	1,4-Dioxane	1	0.404	40	20-160

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	61%	14-81%
4165-62-2	Phenol-d5	41%	11-54%
118-79-6	2,4,6-Tribromophenol	97%	35-145%
4165-60-0	Nitrobenzene-d5	95%	24-125%
321-60-8	2-Fluorobiphenyl	108%	19-127%
1718-51-0	Terphenyl-d14	99%	10-119%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93218A-BS12	4M65048.D	1	05/02/16	LK	04/20/16	OP93218A	E4M2900

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

JC18516-2, JC18516-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
123-91-1	1,4-Dioxane	167	18.4	11	10-100
91-20-3	Naphthalene	33.3	35.7	107	35-142

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	111%	15-138%
321-60-8	2-Fluorobiphenyl	134%	12-148%
1718-51-0	Terphenyl-d14	103%	10-157%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93128-MS	P104265.D	1	04/18/16	LK	04/18/16	OP93128	EP4590
OP93128-MSD	P104266.D	1	04/18/16	LK	04/18/16	OP93128	EP4590
JC18366-2	2M83200.D	1	04/19/16	AN	04/18/16	OP93128	E2M3654

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

JC18516-1, JC18516-4

CAS No.	Compound	JC18366-2 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	101	101	100	106	106	5	49-110/20
59-50-7	4-Chloro-3-methyl phenol	ND		100	106	106	100	109	109	3	44-121/18
120-83-2	2,4-Dichlorophenol	ND		100	95.5	96	100	100	100	5	42-120/19
105-67-9	2,4-Dimethylphenol	ND		100	112	110	100	115	113	3	33-132/23
51-28-5	2,4-Dinitrophenol	ND		200	209	105	200	220	110	5	21-145/26
534-52-1	4,6-Dinitro-o-cresol	ND		100	93.0	93	100	103	103	10	25-134/27
95-48-7	2-Methylphenol	1.6	J	100	108	106	100	109	107	1	47-112/18
	3&4-Methylphenol	5.3		100	112	105	100	114	107	2	44-113/19
88-75-5	2-Nitrophenol	ND		100	105	105	100	114	114	8	45-118/20
100-02-7	4-Nitrophenol	ND		100	82.1	82	100	82.7	83	1	23-144/28
87-86-5	Pentachlorophenol	ND		100	84.9	85	100	89.8	90	6	25-151/25
108-95-2	Phenol	2.0		100	83.8	81	100	80.4	78	4	22-100/22
58-90-2	2,3,4,6-Tetrachlorophenol	ND		100	87.0	87	100	91.6	92	5	44-122/21
95-95-4	2,4,5-Trichlorophenol	ND		100	95.2	95	100	99.2	99	4	51-124/20
88-06-2	2,4,6-Trichlorophenol	ND		100	95.3	95	100	102	102	7	53-120/21
83-32-9	Acenaphthene	15.3		100	106	89	100	111	94	5	52-120/23
208-96-8	Acenaphthylene	ND		100	89.6	90	100	91.5	92	2	50-101/22
98-86-2	Acetophenone	ND		100	102	102	100	105	105	3	31-141/23
120-12-7	Anthracene	6.2		100	104	97	100	109	102	5	54-117/22
1912-24-9	Atrazine	ND		100	88.3	88	100	93.3	93	6	42-152/23
100-52-7	Benzaldehyde	ND		100	92.5	93	100	96.6	97	4	10-164/30
56-55-3	Benzo(a)anthracene	5.1		100	103	97	100	111	105	7	40-123/24
50-32-8	Benzo(a)pyrene	4.3		100	103	98	100	117	112	13	41-127/25
205-99-2	Benzo(b)fluoranthene	5.6		100	106	100	100	117	111	10	39-127/27
191-24-2	Benzo(g,h,i)perylene	2.5		100	87.7	85	100	101	99	14	34-128/28
207-08-9	Benzo(k)fluoranthene	2.1		100	94.0	92	100	107	105	13	39-122/26
101-55-3	4-Bromophenyl phenyl ether	ND		100	85.7	86	100	92.3	92	7	51-124/23
85-68-7	Butyl benzyl phthalate	ND		100	126	126	100	133	133	5	21-146/28
92-52-4	1,1'-Biphenyl	1.0		100	89.4	88	100	91.4	90	2	27-142/23
91-58-7	2-Chloronaphthalene	ND		100	85.9	86	100	87.0	87	1	51-109/23
106-47-8	4-Chloroaniline	ND		100	35.3	35	100	37.1	37	5	10-110/55
86-74-8	Carbazole	21.4		100	126	102	100	132	108	5	52-116/22
105-60-2	Caprolactam	ND		100	80.8	81	100	74.6	75	8	10-106/34
218-01-9	Chrysene	4.9		100	94.6	89	100	103	98	9	41-128/24
111-91-1	bis(2-Chloroethoxy)methane	ND		100	101	101	100	106	106	5	46-120/24
111-44-4	bis(2-Chloroethyl)ether	ND		100	105	105	100	108	108	3	42-123/28

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93128-MS	P104265.D	1	04/18/16	LK	04/18/16	OP93128	EP4590
OP93128-MSD	P104266.D	1	04/18/16	LK	04/18/16	OP93128	EP4590
JC18366-2	2M83200.D	1	04/19/16	AN	04/18/16	OP93128	E2M3654

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

JC18516-1, JC18516-4

CAS No.	Compound	JC18366-2 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	89.0	89	100	93.3	93	5	41-117/25
7005-72-3	4-Chlorophenyl phenyl ether	ND		100	78.8	79	100	82.8	83	5	48-121/21
121-14-2	2,4-Dinitrotoluene	ND		100	84.3	84	100	88.0	88	4	54-123/27
606-20-2	2,6-Dinitrotoluene	ND		100	102	102	100	109	109	7	55-125/26
91-94-1	3,3'-Dichlorobenzidine	ND		200	87.6	44	200	85.6	43	2	10-107/47
123-91-1	1,4-Dioxane	ND		100	79.6	79	100	79.4	79	0	10-119/31
53-70-3	Dibenzo(a,h)anthracene	0.57	J	100	89.6	89	100	100	99	11	35-130/27
132-64-9	Dibenzofuran	10.3		100	99.6	89	100	103	92	3	53-112/22
84-74-2	Di-n-butyl phthalate	ND		100	115	115	100	118	118	3	38-129/23
117-84-0	Di-n-octyl phthalate	ND		100	126	126	100	140	140	11	35-145/26
84-66-2	Diethyl phthalate	ND		100	94.7	95	100	96.6	97	2	16-136/30
131-11-3	Dimethyl phthalate	ND		100	89.6	90	100	92.7	93	3	10-143/39
117-81-7	bis(2-Ethylhexyl)phthalate	ND		100	106	106	100	113	113	6	34-141/28
206-44-0	Fluoranthene	15.5		100	110	94	100	115	99	4	47-123/24
86-73-7	Fluorene	13.9		100	103	89	100	105	91	2	56-117/22
118-74-1	Hexachlorobenzene	ND		100	73.3	73	100	79.2	79	8	46-125/24
87-68-3	Hexachlorobutadiene	ND		100	65.7	66	100	70.8	71	7	26-121/24
77-47-4	Hexachlorocyclopentadiene	ND		200	120	60	200	131	66	9	10-133/31
67-72-1	Hexachloroethane	ND		100	72.0	72	100	74.7	75	4	35-111/26
193-39-5	Indeno(1,2,3-cd)pyrene	2.9		100	94.6	92	100	111	108	16	32-130/30
78-59-1	Isophorone	ND		100	106	106	100	109	109	3	47-126/23
90-12-0	1-Methylnaphthalene	ND		100	111	111	100	116	116	4	34-124/25
91-57-6	2-Methylnaphthalene	18.7		100	104	84	100	111	91	7	34-123/24
88-74-4	2-Nitroaniline	ND		100	117	117	100	115	115	2	46-137/23
99-09-2	3-Nitroaniline	ND		100	48.0	48	100	48.6	49	1	10-110/50
100-01-6	4-Nitroaniline	ND		100	107	107	100	110	110	3	38-118/25
98-95-3	Nitrobenzene	ND		100	92.4	92	100	96.9	97	5	35-130/25
621-64-7	N-Nitroso-di-n-propylamine	ND		100	97.7	98	100	99.8	100	2	45-123/22
86-30-6	N-Nitrosodiphenylamine	ND		100	96.6	97	100	103	103	6	46-123/24
85-01-8	Phenanthrene	31.2		100	128	93	100	134	99	5	48-121/23
129-00-0	Pyrene	10.6		100	116	103	100	126	113	8	43-124/26
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		100	73.3	73	100	75.9	76	3	25-142/24

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93128-MS	P104265.D	1	04/18/16	LK	04/18/16	OP93128	EP4590
OP93128-MSD	P104266.D	1	04/18/16	LK	04/18/16	OP93128	EP4590
JC18366-2	2M83200.D	1	04/19/16	AN	04/18/16	OP93128	E2M3654

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

JC18516-1, JC18516-4

CAS No.	Surrogate Recoveries	MS	MSD	JC18366-2	Limits
367-12-4	2-Fluorophenol	100%* [a]	100%* [a]	49%	14-88%
4165-62-2	Phenol-d5	85%	82%	34%	10-110%
118-79-6	2,4,6-Tribromophenol	82%	94%	92%	39-149%
4165-60-0	Nitrobenzene-d5	99%	107%	85%	32-128%
321-60-8	2-Fluorobiphenyl	92%	100%	85%	35-119%
1718-51-0	Terphenyl-d14	98%	106%	83%	10-126%

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

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93218-MS	M123862.D	2	04/25/16	AN	04/20/16	OP93218	EM5236
OP93218-MSD	M123863.D	2	04/25/16	AN	04/20/16	OP93218	EM5236
JC18417-5 [a]	M123861.D	2	04/25/16	AN	04/20/16	OP93218	EM5236

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

JC18516-2, JC18516-3

CAS No.	Compound	JC18417-5 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		1840	1160	63	1810	1010	56	14	33-106/35
59-50-7	4-Chloro-3-methyl phenol	ND		1840	1100	60	1810	912	51	19	27-124/34
120-83-2	2,4-Dichlorophenol	ND		1840	1110	60	1810	902	50	21	25-122/34
105-67-9	2,4-Dimethylphenol	ND		1840	1120	61	1810	925	51	19	23-133/34
51-28-5	2,4-Dinitrophenol	ND		3670	610	17	3610	526	15	15	10-110/51
534-52-1	4,6-Dinitro-o-cresol	ND		1840	251	14	1810	165	9* [b]	41	10-113/49
95-48-7	2-Methylphenol	ND		1840	1120	61	1810	1020	56	9	32-111/34
	3&4-Methylphenol	ND		1840	1120	61	1810	954	53	16	32-113/34
88-75-5	2-Nitrophenol	ND		1840	1180	64	1810	838	46	34	17-118/37
100-02-7	4-Nitrophenol	ND		1840	742	40	1810	740	41	0	14-154/39
87-86-5	Pentachlorophenol	ND		1840	1090	59	1810	904	50	19	10-131/43
108-95-2	Phenol	ND		1840	1120	61	1810	1010	56	10	25-112/33
58-90-2	2,3,4,6-Tetrachlorophenol	ND		1840	1120	61	1810	916	51	20	19-125/37
95-95-4	2,4,5-Trichlorophenol	ND		1840	1060	58	1810	871	48	20	30-125/35
88-06-2	2,4,6-Trichlorophenol	ND		1840	1170	64	1810	994	55	16	26-126/35
83-32-9	Acenaphthene	ND		1840	1160	63	1810	1010	56	14	34-125/36
208-96-8	Acenaphthylene	ND		1840	1080	59	1810	937	52	14	28-113/34
98-86-2	Acetophenone	ND		1840	2200	120	1810	1750	97	23	26-120/34
120-12-7	Anthracene	ND		1840	1140	62	1810	973	54	16	31-131/41
1912-24-9	Atrazine	ND		1840	976	53	1810	748	41	26	34-138/36
56-55-3	Benzo(a)anthracene	47.8	J	1840	1160	61	1810	967	51	18	23-136/43
50-32-8	Benzo(a)pyrene	69.6	J	1840	1210	62	1810	1020	53	17	22-144/42
205-99-2	Benzo(b)fluoranthene	98.4		1840	1350	68	1810	1070	54	23	18-145/43
191-24-2	Benzo(g,h,i)perylene	101		1840	1160	58	1810	971	48	18	20-138/43
207-08-9	Benzo(k)fluoranthene	ND		1840	1160	63	1810	1020	56	13	27-129/43
101-55-3	4-Bromophenyl phenyl ether	ND		1840	1170	64	1810	983	54	17	39-124/33
85-68-7	Butyl benzyl phthalate	ND		1840	1180	64	1810	1060	59	11	27-143/35
92-52-4	1,1'-Biphenyl	ND		1840	1230	67	1810	1030	57	18	33-116/32
100-52-7	Benzaldehyde	ND		1840	5000	272* [b]	1810	3400	188* [b]	38* [c]	20-129/34
91-58-7	2-Chloronaphthalene	ND		1840	1160	63	1810	993	55	16	38-110/32
106-47-8	4-Chloroaniline	ND		1840	692	38	1810	608	34	13	10-110/49
86-74-8	Carbazole	ND		1840	1140	62	1810	1010	56	12	27-129/38
105-60-2	Caprolactam	ND		1840	1310	71	1810	1050	58	22	18-127/35
218-01-9	Chrysene	118		1840	1260	62	1810	1040	51	19	21-142/43
111-91-1	bis(2-Chloroethoxy)methane	ND		1840	1310	71	1810	1010	56	26	32-116/33
111-44-4	bis(2-Chloroethyl)ether	ND		1840	1220	66	1810	1050	58	15	30-113/37

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93218-MS	M123862.D	2	04/25/16	AN	04/20/16	OP93218	EM5236
OP93218-MSD	M123863.D	2	04/25/16	AN	04/20/16	OP93218	EM5236
JC18417-5 [a]	M123861.D	2	04/25/16	AN	04/20/16	OP93218	EM5236

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

JC18516-2, JC18516-3

CAS No.	Compound	JC18417-5 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		1840	1160	63	1810	1030	57	12	28-110/33
7005-72-3	4-Chlorophenyl phenyl ether	ND		1840	1120	61	1810	932	52	18	38-119/33
121-14-2	2,4-Dinitrotoluene	ND		1840	971	53	1810	677	37	36	28-126/36
606-20-2	2,6-Dinitrotoluene	ND		1840	1020	56	1810	772	43	28	31-126/34
91-94-1	3,3'-Dichlorobenzidine	ND		3670	1680	46	3610	1450	40	15	10-115/44
53-70-3	Dibenzo(a,h)anthracene	31.3	J	1840	1100	58	1810	949	51	15	25-135/41
132-64-9	Dibenzofuran	ND		1840	1120	61	1810	973	54	14	30-125/35
84-74-2	Di-n-butyl phthalate	ND		1840	1150	63	1810	1010	56	13	32-131/34
117-84-0	Di-n-octyl phthalate	ND		1840	1310	71	1810	1110	61	17	28-144/35
84-66-2	Diethyl phthalate	ND		1840	1150	63	1810	958	53	18	35-124/32
131-11-3	Dimethyl phthalate	ND		1840	1150	63	1810	990	55	15	36-121/33
117-81-7	bis(2-Ethylhexyl)phthalate	ND		1840	1250	68	1810	1110	61	12	25-146/35
206-44-0	Fluoranthene	70.7	J	1840	1130	58	1810	951	49	17	15-143/46
86-73-7	Fluorene	ND		1840	1110	60	1810	934	52	17	30-129/37
118-74-1	Hexachlorobenzene	ND		1840	1100	60	1810	957	53	14	34-125/34
87-68-3	Hexachlorobutadiene	ND		1840	1130	62	1810	915	51	21	29-120/34
77-47-4	Hexachlorocyclopentadiene	ND		3670	ND	0* [b]	3610	ND	0* [b]	nc	10-127/46
67-72-1	Hexachloroethane	ND		1840	711	39	1810	539	30	28	21-109/38
193-39-5	Indeno(1,2,3-cd)pyrene	55.9	J	1840	1340	70	1810	1130	59	17	23-141/44
78-59-1	Isophorone	ND		1840	1260	69	1810	1020	56	21	31-124/32
90-12-0	1-Methylnaphthalene	ND		1840	1620	88	1810	1320	73	20	24-122/33
91-57-6	2-Methylnaphthalene	812		1840	2140	72	1810	1640	46	26	21-125/33
88-74-4	2-Nitroaniline	ND		1840	1160	63	1810	996	55	15	29-138/33
99-09-2	3-Nitroaniline	ND		1840	866	47	1810	737	41	16	12-112/38
100-01-6	4-Nitroaniline	ND		1840	982	53	1810	764	42	25	21-117/38
98-95-3	Nitrobenzene	ND		1840	1270	69	1810	1030	57	21	28-118/32
621-64-7	N-Nitroso-di-n-propylamine	ND		1840	1290	70	1810	1040	58	21	26-121/34
86-30-6	N-Nitrosodiphenylamine	ND		1840	1290	70	1810	1120	62	14	24-142/35
85-01-8	Phenanthrene	39.8	J	1840	1240	65	1810	1030	55	19	14-144/44
129-00-0	Pyrene	102		1840	1270	64	1810	1080	54	16	16-147/46
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		1840	1140	62	1810	971	54	16	37-115/32

CAS No.	Surrogate Recoveries	MS	MSD	JC18417-5	Limits
367-12-4	2-Fluorophenol	64%	61%	66%	30-106%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93218-MS	M123862.D	2	04/25/16	AN	04/20/16	OP93218	EM5236
OP93218-MSD	M123863.D	2	04/25/16	AN	04/20/16	OP93218	EM5236
JC18417-5 [a]	M123861.D	2	04/25/16	AN	04/20/16	OP93218	EM5236

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

JC18516-2, JC18516-3

CAS No.	Surrogate Recoveries	MS	MSD	JC18417-5	Limits
4165-62-2	Phenol-d5	66%	58%	60%	30-106%
118-79-6	2,4,6-Tribromophenol	73%	60%	74%	24-140%
4165-60-0	Nitrobenzene-d5	73%	60%	69%	26-122%
321-60-8	2-Fluorobiphenyl	71%	60%	73%	36-112%
1718-51-0	Terphenyl-d14	67%	59%	72%	36-132%

(a) Dilution required due to viscosity of the extract matrix
(b) Outside control limits due to matrix interference.
(c) Analytical precision exceeds in-house control limits.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93128A-MS	4M64822.D	1	04/19/16	LK	04/18/16	OP93128A	E4M2885
OP93128A-MSD	4M64823.D	1	04/19/16	LK	04/18/16	OP93128A	E4M2885
JC18366-3	4M64820.D	1	04/19/16	LK	04/18/16	OP93128A	E4M2885

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

JC18516-1, JC18516-4

CAS No.	Compound	JC18366-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
91-20-3	Naphthalene	ND		2	1.60	80	2	1.59	80	1	23-140/36
123-91-1	1,4-Dioxane	ND		2	0.994	50	2	0.971	49	2	20-160/30

CAS No.	Surrogate Recoveries	MS	MSD	JC18366-3	Limits
367-12-4	2-Fluorophenol	71%	68%	51%	14-81%
4165-62-2	Phenol-d5	57%* [a]	56%* [a]	33%	11-54%
118-79-6	2,4,6-Tribromophenol	88%	87%	85%	35-145%
4165-60-0	Nitrobenzene-d5	85%	82%	87%	24-125%
321-60-8	2-Fluorobiphenyl	93%	91%	94%	19-127%
1718-51-0	Terphenyl-d14	90%	92%	89%	10-119%

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

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93218A-MS	4M65051.D	1	05/02/16	LK	04/20/16	OP93218A	E4M2900
OP93218A-MSD	4M65052.D	1	05/02/16	LK	04/20/16	OP93218A	E4M2900
JC18516-2	4M65049.D	1	05/02/16	LK	04/20/16	OP93218A	E4M2900

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

JC18516-2, JC18516-3

CAS No.	Compound	JC18516-2 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	Spike ug/kg	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
123-91-1	1,4-Dioxane	21.5		43.3	33.0	76	43.3	36.8	85	11	50-150/30
91-20-3	Naphthalene	ND		43.3	37.4	86	43.1	39.0	90	4	10-190/36

CAS No.	Surrogate Recoveries	MS	MSD	JC18516-2	Limits
4165-60-0	Nitrobenzene-d5	88%	91%	98%	15-138%
321-60-8	2-Fluorobiphenyl	109%	118%	115%	12-148%
1718-51-0	Terphenyl-d14	95%	94%	86%	10-157%

* = Outside of Control Limits.

Instrument Performance Check (DFTPP)

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E2M3649-DFTPP
Lab File ID: 2M83065.D
Instrument ID: GCMS2M
Injection Date: 04/15/16
Injection Time: 08:54

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	37940	31.9		Pass
68	Less than 2.0% of mass 69	639	0.54	(1.37) [a]	Pass
69	Mass 69 relative abundance	46753	39.3		Pass
70	Less than 2.0% of mass 69	130	0.11	(0.28) [a]	Pass
127	40.0 - 60.0% of mass 198	66973	56.4		Pass
197	Less than 1.0% of mass 198	632	0.53		Pass
198	Base peak, 100% relative abundance	118837	100.0		Pass
199	5.0 - 9.0% of mass 198	7926	6.67		Pass
275	10.0 - 30.0% of mass 198	29432	24.8		Pass
365	1.0 - 100.0% of mass 198	4151	3.49		Pass
441	Present, but less than mass 443	13293	11.2	(70.6) [b]	Pass
442	40.0 - 100.0% of mass 198	96506	81.2		Pass
443	17.0 - 23.0% of mass 442	18829	15.8	(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
E2M3649-IC3649	2M83066.D	04/15/16	09:12	00:18	Initial cal 2
E2M3649-IC3649	2M83067.D	04/15/16	09:42	00:48	Initial cal 1
E2M3649-IC3649	2M83068.D	04/15/16	10:08	01:14	Initial cal 100
E2M3649-IC3649	2M83069.D	04/15/16	10:34	01:40	Initial cal 80
E2M3649-IC3649	2M83070.D	04/15/16	11:00	02:06	Initial cal 25
E2M3649-IC3649	2M83071.D	04/15/16	11:27	02:33	Initial cal 10
E2M3649-IC3649	2M83072.D	04/15/16	11:53	02:59	Initial cal 5
E2M3649-ICC3649	2M83073.D	04/15/16	12:19	03:25	Initial cal 50

Instrument Performance Check (DFTPP)

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E2M3651-DFTPP
Lab File ID: 2M83090.D
Instrument ID: GCMS2M
Injection Date: 04/15/16
Injection Time: 15:07

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	35073	30.3		Pass
68	Less than 2.0% of mass 69	641	0.55	(1.50) [a]	Pass
69	Mass 69 relative abundance	42662	36.9		Pass
70	Less than 2.0% of mass 69	262	0.23	(0.61) [a]	Pass
127	40.0 - 60.0% of mass 198	62040	53.6		Pass
197	Less than 1.0% of mass 198	757	0.65		Pass
198	Base peak, 100% relative abundance	115669	100.0		Pass
199	5.0 - 9.0% of mass 198	7581	6.55		Pass
275	10.0 - 30.0% of mass 198	29541	25.5		Pass
365	1.0 - 100.0% of mass 198	4378	3.78		Pass
441	Present, but less than mass 443	14617	12.6	(71.6) [b]	Pass
442	40.0 - 100.0% of mass 198	103277	89.3		Pass
443	17.0 - 23.0% of mass 442	20423	17.7	(19.8) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E2M3651-IC3651	2M83091.D	04/15/16	15:22	00:15	Initial cal 100
E2M3651-IC3651	2M83092.D	04/15/16	15:48	00:41	Initial cal 80
E2M3651-ICC3651	2M83093.D	04/15/16	16:15	01:08	Initial cal 50
E2M3651-IC3651	2M83094.D	04/15/16	16:47	01:40	Initial cal 10
E2M3651-IC3651	2M83095.D	04/15/16	17:14	02:07	Initial cal 5
E2M3651-IC3651	2M83096.D	04/15/16	17:40	02:33	Initial cal 2
E2M3651-IC3651	2M83097.D	04/15/16	18:07	03:00	Initial cal 1
E2M3651-IC3651	2M83098.D	04/15/16	18:33	03:26	Initial cal 25
E2M3651-ICV3649	2M83099.D	04/15/16	19:00	03:53	Initial cal verification 50
E2M3651-ICV3649	2M83100.D	04/15/16	19:26	04:19	Initial cal verification 50
E2M3651-ICV3649	2M83101.D	04/15/16	19:53	04:46	Initial cal verification 50
E2M3651-ICV3651	2M83102A.D	04/15/16	20:19	05:12	Initial cal verification 50
E2M3651-ICV3649	2M83102.D	04/15/16	20:19	05:12	Initial cal verification 50
E2M3651-ICV3651	2M83103A.D	04/15/16	20:46	05:39	Initial cal verification 50
E2M3651-ICV3649	2M83103.D	04/15/16	20:46	05:39	Initial cal verification 50
E2M3651-ICV3651	2M83104.D	04/15/16	21:12	06:05	Initial cal verification 50
E2M3651-ICV3649	2M83105.D	04/15/16	21:39	06:32	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E2M3655-DFTPP
Lab File ID: 2M83203.D
Instrument ID: GCMS2M
Injection Date: 04/20/16
Injection Time: 09:44

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	41865	33.1		Pass
68	Less than 2.0% of mass 69	620	0.49	(1.25) [a]	Pass
69	Mass 69 relative abundance	49635	39.3		Pass
70	Less than 2.0% of mass 69	65	0.05	(0.13) [a]	Pass
127	40.0 - 60.0% of mass 198	71540	56.6		Pass
197	Less than 1.0% of mass 198	251	0.20		Pass
198	Base peak, 100% relative abundance	126426	100.0		Pass
199	5.0 - 9.0% of mass 198	8436	6.67		Pass
275	10.0 - 30.0% of mass 198	31361	24.8		Pass
365	1.0 - 100.0% of mass 198	4572	3.62		Pass
441	Present, but less than mass 443	13728	10.9	(73.7) [b]	Pass
442	40.0 - 100.0% of mass 198	94642	74.9		Pass
443	17.0 - 23.0% of mass 442	18626	14.7	(19.7) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E2M3655-CC3649	2M83204.D	04/20/16	10:07	00:23	Continuing cal 25
E2M3655-CC3651	2M83205.D	04/20/16	10:33	00:49	Continuing cal 25
OP93128-MB1	2M83206.D	04/20/16	11:00	01:16	Method Blank
ZZZZZZ	2M83207.D	04/20/16	11:26	01:42	(unrelated sample)
ZZZZZZ	2M83208.D	04/20/16	11:52	02:08	(unrelated sample)
OP93224-MB1	2M83215.D	04/20/16	12:18	02:34	Method Blank
OP93224-BS1	2M83216.D	04/20/16	12:44	03:00	Blank Spike
JC18221-9	2M83217.D	04/20/16	13:10	03:26	(used for QC only; not part of job JC18516)
OP93224-MS	2M83218.D	04/20/16	13:36	03:52	Matrix Spike
OP93224-MSD	2M83219.D	04/20/16	14:02	04:18	Matrix Spike Duplicate

Instrument Performance Check (DFTPP)

Job Number: JC18516
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: JC18516
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: JC18516
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: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E3E3626-DFTPP
Lab File ID: 3E82746.D
Instrument ID: GCMS3E
Injection Date: 04/29/16
Injection Time: 09:34

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	53280	51.6		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	51099	49.4		Pass
70	Less than 2.0% of mass 69	645	0.62	(1.26) [a]	Pass
127	40.0 - 60.0% of mass 198	58080	56.2		Pass
197	Less than 1.0% of mass 198	332	0.32		Pass
198	Base peak, 100% relative abundance	103344	100.0		Pass
199	5.0 - 9.0% of mass 198	7064	6.84		Pass
275	10.0 - 30.0% of mass 198	27533	26.6		Pass
365	1.0 - 100.0% of mass 198	4769	4.61		Pass
441	Present, but less than mass 443	10694	10.3	(75.7) [b]	Pass
442	40.0 - 100.0% of mass 198	75085	72.7		Pass
443	17.0 - 23.0% of mass 442	14135	13.7	(18.8) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E3E3626-CC3623	3E82747.D	04/29/16	09:47	00:13	Continuing cal 25
E3E3626-CC3621	3E82749.D	04/29/16	10:38	01:04	Continuing cal 25
OP93218-MB1	3E82750.D	04/29/16	11:29	01:55	Method Blank
ZZZZZZ	3E82751.D	04/29/16	11:55	02:21	(unrelated sample)
ZZZZZZ	3E82752.D	04/29/16	12:20	02:46	(unrelated sample)
ZZZZZZ	3E82754.D	04/29/16	12:52	03:18	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC18516
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: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E3M2856-DFTPP
Lab File ID: 3M60775.D
Instrument ID: GCMS3M
Injection Date: 04/22/16
Injection Time: 09:08

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	183729	36.2		Pass
68	Less than 2.0% of mass 69	2249	0.44	(0.96) [a]	Pass
69	Mass 69 relative abundance	233456	46.0		Pass
70	Less than 2.0% of mass 69	1335	0.26	(0.57) [a]	Pass
127	40.0 - 60.0% of mass 198	249659	49.2		Pass
197	Less than 1.0% of mass 198	997	0.20		Pass
198	Base peak, 100% relative abundance	507554	100.0		Pass
199	5.0 - 9.0% of mass 198	34440	6.79		Pass
275	10.0 - 30.0% of mass 198	111976	22.1		Pass
365	1.0 - 100.0% of mass 198	12643	2.49		Pass
441	Present, but less than mass 443	59008	11.6	(81.7) [b]	Pass
442	40.0 - 100.0% of mass 198	381120	75.1		Pass
443	17.0 - 23.0% of mass 442	72259	14.2	(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
E3M2856-CC2855	3M60776.D	04/22/16	09:20	00:12	Continuing cal 1
OP93234A-MB1	3M60777.D	04/22/16	09:52	00:44	Method Blank
OP93234A-BS12	3M60778.D	04/22/16	10:24	01:16	Blank Spike
OP93234A-BSD12	3M60779.D	04/22/16	10:57	01:49	Blank Spike Duplicate
ZZZZZZ	3M60780.D	04/22/16	11:29	02:21	(unrelated sample)
ZZZZZZ	3M60781.D	04/22/16	12:01	02:53	(unrelated sample)
ZZZZZZ	3M60782.D	04/22/16	12:33	03:25	(unrelated sample)
OP93089A-MB1	3M60783.D	04/22/16	13:06	03:58	Method Blank
ZZZZZZ	3M60784.D	04/22/16	13:38	04:30	(unrelated sample)
ZZZZZZ	3M60785.D	04/22/16	14:11	05:03	(unrelated sample)
OP93128A-MB1	3M60786.D	04/22/16	14:43	05:35	Method Blank
ZZZZZZ	3M60787.D	04/22/16	15:15	06:07	(unrelated sample)
ZZZZZZ	3M60788.D	04/22/16	15:48	06:40	(unrelated sample)
OP93271A-MB1	3M60789.D	04/22/16	16:20	07:12	Method Blank
JC18447-2	3M60792.D	04/22/16	17:57	08:49	(used for QC only; not part of job JC18516)
ZZZZZZ	3M60798.D	04/22/16	20:39	11:31	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC18516
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: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E4M2885-DFTPP
Lab File ID: 4M64801.D
Instrument ID: GCMS4M
Injection Date: 04/18/16
Injection Time: 14:23

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	216165	37.8		Pass
68	Less than 2.0% of mass 69	3258	0.57	(1.50) [a]	Pass
69	Mass 69 relative abundance	217717	38.1		Pass
70	Less than 2.0% of mass 69	1751	0.31	(0.80) [a]	Pass
127	40.0 - 60.0% of mass 198	253856	44.4		Pass
197	Less than 1.0% of mass 198	2899	0.51		Pass
198	Base peak, 100% relative abundance	571968	100.0		Pass
199	5.0 - 9.0% of mass 198	38793	6.78		Pass
275	10.0 - 30.0% of mass 198	151552	26.5		Pass
365	1.0 - 100.0% of mass 198	20229	3.54		Pass
441	Present, but less than mass 443	82781	14.5	(81.5) [b]	Pass
442	40.0 - 100.0% of mass 198	537216	93.9		Pass
443	17.0 - 23.0% of mass 442	101600	17.8	(18.9) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4M2885-CC2881	4M64802.D	04/18/16	14:36	00:13	Continuing cal .5
OP93128A-MB1	4M64803.D	04/18/16	15:19	00:56	Method Blank
OP93128A-BS12	4M64804.D	04/18/16	15:53	01:30	Blank Spike
ZZZZZZ	4M64805.D	04/18/16	16:26	02:03	(unrelated sample)
OP92985A-MB1	4M64806.D	04/18/16	16:59	02:36	Method Blank
OP92985A-BS12	4M64807.D	04/18/16	17:32	03:09	Blank Spike
OP92985A-MS	4M64808.D	04/18/16	18:05	03:42	Matrix Spike
OP92985A-MSD	4M64809.D	04/18/16	18:38	04:15	Matrix Spike Duplicate
JC17959-8	4M64810.D	04/18/16	19:12	04:49	(used for QC only; not part of job JC18516)
ZZZZZZ	4M64811.D	04/18/16	19:45	05:22	(unrelated sample)
OP93052A-MS	4M64812.D	04/18/16	20:18	05:55	Matrix Spike
OP93052A-MSD	4M64813.D	04/18/16	20:51	06:28	Matrix Spike Duplicate
ZZZZZZ	4M64814.D	04/18/16	21:24	07:01	(unrelated sample)
JC18151-5	4M64815.D	04/18/16	21:56	07:33	(used for QC only; not part of job JC18516)
ZZZZZZ	4M64816.D	04/18/16	22:27	08:04	(unrelated sample)
ZZZZZZ	4M64817.D	04/18/16	22:59	08:36	(unrelated sample)
ZZZZZZ	4M64818.D	04/18/16	23:31	09:08	(unrelated sample)
ZZZZZZ	4M64819.D	04/19/16	00:02	09:39	(unrelated sample)
JC18366-3	4M64820.D	04/19/16	00:33	10:10	(used for QC only; not part of job JC18516)

Instrument Performance Check (DFTPP)

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E4M2885-DFTPP
Lab File ID: 4M64801.D
Instrument ID: GCMS4M
Injection Date: 04/18/16
Injection Time: 14:23

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	4M64821.D	04/19/16	01:04	10:41	(unrelated sample)
OP93128A-MS	4M64822.D	04/19/16	01:35	11:12	Matrix Spike
OP93128A-MSD	4M64823.D	04/19/16	02:06	11:43	Matrix Spike Duplicate

Instrument Performance Check (DFTPP)

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E4M2886-DFTPP
Lab File ID: 4M64824.D
Instrument ID: GCMS4M
Injection Date: 04/19/16
Injection Time: 08:59

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	299405	40.4		Pass
68	Less than 2.0% of mass 69	5428	0.73	(1.79) [a]	Pass
69	Mass 69 relative abundance	303885	41.0		Pass
70	Less than 2.0% of mass 69	577	0.08	(0.19) [a]	Pass
127	40.0 - 60.0% of mass 198	333215	44.9		Pass
197	Less than 1.0% of mass 198	1944	0.26		Pass
198	Base peak, 100% relative abundance	741589	100.0		Pass
199	5.0 - 9.0% of mass 198	51917	7.00		Pass
275	10.0 - 30.0% of mass 198	175211	23.6		Pass
365	1.0 - 100.0% of mass 198	23280	3.14		Pass
441	Present, but less than mass 443	88131	11.9	(74.5) [b]	Pass
442	40.0 - 100.0% of mass 198	624192	84.2		Pass
443	17.0 - 23.0% of mass 442	118331	16.0	(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
E4M2886-CC2881	4M64825.D	04/19/16	09:10	00:11	Continuing cal 1
OP93089A-MB1	4M64826.D	04/19/16	09:41	00:42	Method Blank
OP93089A-BS12	4M64827.D	04/19/16	10:12	01:13	Blank Spike
OP93127A-MB1	4M64828.D	04/19/16	10:43	01:44	Method Blank
OP93127A-BS12	4M64829.D	04/19/16	11:14	02:15	Blank Spike
OP93127A-BSD12	4M64830.D	04/19/16	11:45	02:46	Blank Spike Duplicate
JC18516-1	4M64831.D	04/19/16	12:16	03:17	EB041416
JC18516-4	4M64832.D	04/19/16	12:48	03:49	RA14_GWS
ZZZZZZ	4M64833.D	04/19/16	13:20	04:21	(unrelated sample)
ZZZZZZ	4M64834.D	04/19/16	13:52	04:53	(unrelated sample)
ZZZZZZ	4M64835.D	04/19/16	14:24	05:25	(unrelated sample)
ZZZZZZ	4M64836.D	04/19/16	14:57	05:58	(unrelated sample)
ZZZZZZ	4M64837.D	04/19/16	15:29	06:30	(unrelated sample)
ZZZZZZ	4M64838.D	04/19/16	16:00	07:01	(unrelated sample)
ZZZZZZ	4M64839.D	04/19/16	16:31	07:32	(unrelated sample)
ZZZZZZ	4M64840.D	04/19/16	17:03	08:04	(unrelated sample)
ZZZZZZ	4M64841.D	04/19/16	17:35	08:36	(unrelated sample)
ZZZZZZ	4M64842.D	04/19/16	18:07	09:08	(unrelated sample)
JC18242-1	4M64844.D	04/19/16	19:09	10:10	(used for QC only; not part of job JC18516)

Instrument Performance Check (DFTPP)

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample:	E4M2886-DFTPP	**Injection Date:**	04/19/16
Lab File ID:	4M64824.D	**Injection Time:**	08:59
Instrument ID:	GCMS4M		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	4M64845.D	04/19/16	19:40	10:41	(unrelated sample)
ZZZZZZ	4M64846.D	04/19/16	20:11	11:12	(unrelated sample)
OP93089A-MS	4M64847.D	04/19/16	20:42	11:43	Matrix Spike

Instrument Performance Check (DFTPP)

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E4M2900-DFTPP
Lab File ID: 4M65028.D
Instrument ID: GCMS4M
Injection Date: 05/02/16
Injection Time: 08:41

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	266323	36.4		Pass
68	Less than 2.0% of mass 69	3754	0.51	(1.36) [a]	Pass
69	Mass 69 relative abundance	276730	37.8		Pass
70	Less than 2.0% of mass 69	702	0.10	(0.25) [a]	Pass
127	40.0 - 60.0% of mass 198	311232	42.5		Pass
197	Less than 1.0% of mass 198	4009	0.55		Pass
198	Base peak, 100% relative abundance	731968	100.0		Pass
199	5.0 - 9.0% of mass 198	50597	6.91		Pass
275	10.0 - 30.0% of mass 198	176664	24.1		Pass
365	1.0 - 100.0% of mass 198	20150	2.75		Pass
441	Present, but less than mass 443	96325	13.2	(75.0) [b]	Pass
442	40.0 - 100.0% of mass 198	687168	93.9		Pass
443	17.0 - 23.0% of mass 442	128360	17.5	(18.7) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4M2900-CC2881	4M65029.D	05/02/16	08:55	00:14	Continuing cal 1
OP93487A-MB1	4M65030.D	05/02/16	09:35	00:54	Method Blank
OP93487A-BS12	4M65031.D	05/02/16	10:06	01:25	Blank Spike
ZZZZZZ	4M65032.D	05/02/16	10:38	01:57	(unrelated sample)
ZZZZZZ	4M65033.D	05/02/16	11:10	02:29	(unrelated sample)
OP93218A-MB1	4M65047.D	05/02/16	11:42	03:01	Method Blank
OP93218A-BS12	4M65048.D	05/02/16	12:14	03:33	Blank Spike
JC18516-2	4M65049.D	05/02/16	12:46	04:05	RA14 (9-9.7)
JC18516-3	4M65050.D	05/02/16	13:18	04:37	S-43S (6-7)
OP93218A-MS	4M65051.D	05/02/16	13:50	05:09	Matrix Spike
OP93218A-MSD	4M65052.D	05/02/16	14:22	05:41	Matrix Spike Duplicate
ZZZZZZ	4M65034.D	05/02/16	14:54	06:13	(unrelated sample)
ZZZZZZ	4M65035.D	05/02/16	15:26	06:45	(unrelated sample)
ZZZZZZ	4M65036.D	05/02/16	15:59	07:18	(unrelated sample)
ZZZZZZ	4M65037.D	05/02/16	16:31	07:50	(unrelated sample)
ZZZZZZ	4M65038.D	05/02/16	17:03	08:22	(unrelated sample)
ZZZZZZ	4M65039.D	05/02/16	17:36	08:55	(unrelated sample)
ZZZZZZ	4M65040.D	05/02/16	18:08	09:27	(unrelated sample)
ZZZZZZ	4M65041.D	05/02/16	18:40	09:59	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample:	E4M2900-DFTPP	**Injection Date:**	05/02/16
Lab File ID:	4M65028.D	**Injection Time:**	08:41
Instrument ID:	GCMS4M		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	4M65042.D	05/02/16	19:13	10:32	(unrelated sample)
ZZZZZZ	4M65043.D	05/02/16	19:45	11:04	(unrelated sample)
ZZZZZZ	4M65044.D	05/02/16	20:18	11:37	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

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

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

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

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

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

Instrument Performance Check (DFTPP)

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

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

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

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

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

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

Instrument Performance Check (DFTPP)

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

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

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

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EM5219-ICV5217	M123532.D	04/13/16	09:41	00:14	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EM5230-DFTPP
Lab File ID: M123739.D
Instrument ID: GCMSM
Injection Date: 04/20/16
Injection Time: 10:44

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	28294	34.7		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	38414	47.1		Pass
70	Less than 2.0% of mass 69	328	0.40	(0.85) [a]	Pass
127	40.0 - 60.0% of mass 198	42576	52.2		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	81565	100.0		Pass
199	5.0 - 9.0% of mass 198	6154	7.54		Pass
275	10.0 - 30.0% of mass 198	22697	27.8		Pass
365	1.0 - 100.0% of mass 198	3023	3.71		Pass
441	Present, but less than mass 443	11151	13.7	(83.9) [b]	Pass
442	40.0 - 100.0% of mass 198	66555	81.6		Pass
443	17.0 - 23.0% of mass 442	13285	16.3	(20.0) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EM5230-CC5217	M123740.D	04/20/16	11:00	00:16	Continuing cal 50
EM5230-CC5218	M123741.D	04/20/16	11:47	01:03	Continuing cal 50
ZZZZZZ	M123742.D	04/20/16	12:37	01:53	(unrelated sample)
OP93218-MB1	M123745.D	04/20/16	13:06	02:22	Method Blank
OP93218-BS1	M123746.D	04/20/16	13:34	02:50	Blank Spike
ZZZZZZ	M123747.D	04/20/16	14:03	03:19	(unrelated sample)
ZZZZZZ	M123749A.D	04/20/16	15:07	04:23	(unrelated sample)
ZZZZZZ	M123743.D	04/20/16	15:35	04:51	(unrelated sample)
ZZZZZZ	M123744.D	04/20/16	16:04	05:20	(unrelated sample)
ZZZZZZ	M123750.D	04/20/16	16:33	05:49	(unrelated sample)
ZZZZZZ	M123751.D	04/20/16	17:01	06:17	(unrelated sample)
ZZZZZZ	M123752.D	04/20/16	17:30	06:46	(unrelated sample)
ZZZZZZ	M123754B.D	04/20/16	19:09	08:25	(unrelated sample)
ZZZZZZ	M123756.D	04/20/16	20:06	09:22	(unrelated sample)
ZZZZZZ	M123757.D	04/20/16	20:34	09:50	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EM5235-DFTPP
Lab File ID: M123835A.D
Instrument ID: GCMSM
Injection Date: 04/22/16
Injection Time: 19:55

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	26993	38.4		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	36766	52.3		Pass
70	Less than 2.0% of mass 69	147	0.21	(0.40) [a]	Pass
127	40.0 - 60.0% of mass 198	38997	55.5		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	70301	100.0		Pass
199	5.0 - 9.0% of mass 198	5016	7.14		Pass
275	10.0 - 30.0% of mass 198	18516	26.3		Pass
365	1.0 - 100.0% of mass 198	2548	3.62		Pass
441	Present, but less than mass 443	8678	12.3	(77.2) [b]	Pass
442	40.0 - 100.0% of mass 198	56077	79.8		Pass
443	17.0 - 23.0% of mass 442	11234	16.0	(20.0) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EM5235-CC5217	M123836A.D	04/22/16	20:08	00:13	Continuing cal 50
EM5235-CC5218	M123837.D	04/22/16	20:36	00:41	Continuing cal 50
OP93292-MB1	M123838.D	04/22/16	21:05	01:10	Method Blank
OP93292-BS1	M123839.D	04/22/16	21:34	01:39	Blank Spike
ZZZZZZ	M123840.D	04/22/16	22:03	02:08	(unrelated sample)
ZZZZZZ	M123841.D	04/22/16	22:31	02:36	(unrelated sample)
ZZZZZZ	M123842.D	04/22/16	23:00	03:05	(unrelated sample)
ZZZZZZ	M123843.D	04/22/16	23:29	03:34	(unrelated sample)
ZZZZZZ	M123844.D	04/22/16	23:57	04:02	(unrelated sample)
ZZZZZZ	M123845.D	04/23/16	00:26	04:31	(unrelated sample)
ZZZZZZ	M123846.D	04/23/16	00:55	05:00	(unrelated sample)
ZZZZZZ	M123847.D	04/23/16	01:23	05:28	(unrelated sample)
JC18696-2	M123848.D	04/23/16	01:52	05:57	(used for QC only; not part of job JC18516)
ZZZZZZ	M123849.D	04/23/16	02:20	06:25	(unrelated sample)
ZZZZZZ	M123850.D	04/23/16	02:49	06:54	(unrelated sample)
ZZZZZZ	M123851.D	04/23/16	03:17	07:22	(unrelated sample)
OP93292-MS	M123852.D	04/23/16	03:46	07:51	Matrix Spike
OP93292-MSD	M123853.D	04/23/16	04:14	08:19	Matrix Spike Duplicate
JC18516-2	M123854.D	04/23/16	04:43	08:48	RA14 (9-9.7)

Instrument Performance Check (DFTPP)

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EM5236-DFTPP
Lab File ID: M123857.D
Instrument ID: GCMSM
Injection Date: 04/25/16
Injection Time: 12:51

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	29656	39.4		Pass
68	Less than 2.0% of mass 69	1	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	39886	53.0		Pass
70	Less than 2.0% of mass 69	232	0.31	(0.58) [a]	Pass
127	40.0 - 60.0% of mass 198	41405	55.1		Pass
197	Less than 1.0% of mass 198	172	0.23		Pass
198	Base peak, 100% relative abundance	75189	100.0		Pass
199	5.0 - 9.0% of mass 198	5025	6.68		Pass
275	10.0 - 30.0% of mass 198	19691	26.2		Pass
365	1.0 - 100.0% of mass 198	2477	3.29		Pass
441	Present, but less than mass 443	8826	11.7	(76.5) [b]	Pass
442	40.0 - 100.0% of mass 198	58424	77.7		Pass
443	17.0 - 23.0% of mass 442	11530	15.3	(19.7) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EM5236-CC5217	M123858.D	04/25/16	13:04	00:13	Continuing cal 25
EM5236-CC5218	M123859.D	04/25/16	13:34	00:43	Continuing cal 25
JC18417-5	M123861.D	04/25/16	14:31	01:40	(used for QC only; not part of job JC18516)
OP93218-MS	M123862.D	04/25/16	15:00	02:09	Matrix Spike
OP93218-MSD	M123863.D	04/25/16	15:28	02:37	Matrix Spike Duplicate
ZZZZZZ	M123867.D	04/25/16	17:23	04:32	(unrelated sample)
ZZZZZZ	M123868.D	04/25/16	17:52	05:01	(unrelated sample)
ZZZZZZ	M123869.D	04/25/16	18:21	05:30	(unrelated sample)
ZZZZZZ	M123870.D	04/25/16	18:49	05:58	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EM5238-DFTPP
Lab File ID: M123899.D
Instrument ID: GCMSM
Injection Date: 04/26/16
Injection Time: 10:03

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	28165	39.4		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	36608	51.3		Pass
70	Less than 2.0% of mass 69	194	0.27	(0.53) [a]	Pass
127	40.0 - 60.0% of mass 198	37618	52.7		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	71413	100.0		Pass
199	5.0 - 9.0% of mass 198	5325	7.46		Pass
275	10.0 - 30.0% of mass 198	18803	26.3		Pass
365	1.0 - 100.0% of mass 198	2957	4.14		Pass
441	Present, but less than mass 443	8778	12.3	(82.8) [b]	Pass
442	40.0 - 100.0% of mass 198	54094	75.7		Pass
443	17.0 - 23.0% of mass 442	10597	14.8	(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
EM5238-CC5217	M123900.D	04/26/16	10:16	00:13	Continuing cal 25
EM5238-CC5218	M123902.D	04/26/16	11:14	01:11	Continuing cal 25
ZZZZZZ	M123903.D	04/26/16	11:43	01:40	(unrelated sample)
ZZZZZZ	M123904.D	04/26/16	12:12	02:09	(unrelated sample)
JC18834-16	M123905.D	04/26/16	12:40	02:37	(used for QC only; not part of job JC18516)
ZZZZZZ	M123906.D	04/26/16	13:09	03:06	(unrelated sample)
ZZZZZZ	M123907.D	04/26/16	13:38	03:35	(unrelated sample)
ZZZZZZ	M123908.D	04/26/16	14:07	04:04	(unrelated sample)
ZZZZZZ	M123909.D	04/26/16	14:35	04:32	(unrelated sample)
ZZZZZZ	M123910.D	04/26/16	15:04	05:01	(unrelated sample)
ZZZZZZ	M123911.D	04/26/16	15:33	05:30	(unrelated sample)
ZZZZZZ	M123912.D	04/26/16	16:02	05:59	(unrelated sample)
JC18516-3	M123913.D	04/26/16	16:30	06:27	S-43S (6-7)
ZZZZZZ	M123914.D	04/26/16	16:59	06:56	(unrelated sample)
ZZZZZZ	M123915.D	04/26/16	17:28	07:25	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EP4514-DFTPP
Lab File ID: P102786.D
Instrument ID: GCMSP
Injection Date: 02/24/16
Injection Time: 01:55

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	18668	34.6		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	23706	44.0		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	30563	56.7		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	53930	100.0		Pass
199	5.0 - 9.0% of mass 198	3929	7.29		Pass
275	10.0 - 30.0% of mass 198	11130	20.6		Pass
365	1.0 - 100.0% of mass 198	1487	2.76		Pass
441	Present, but less than mass 443	6594	12.2	(77.6) [b]	Pass
442	40.0 - 100.0% of mass 198	42661	79.1		Pass
443	17.0 - 23.0% of mass 442	8492	15.7	(19.9) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP4514-IC4514	P102787.D	02/24/16	02:07	00:12	Initial cal 100
EP4514-IC4514	P102788.D	02/24/16	02:36	00:41	Initial cal 80
EP4514-IC4514	P102789.D	02/24/16	03:06	01:11	Initial cal 10
EP4514-IC4514	P102790.D	02/24/16	03:35	01:40	Initial cal 5
EP4514-IC4514	P102791.D	02/24/16	04:05	02:10	Initial cal 2
EP4514-IC4514	P102792.D	02/24/16	04:34	02:39	Initial cal 1
EP4514-IC4514	P102793.D	02/24/16	05:04	03:09	Initial cal 25
EP4514-ICC4514	P102794.D	02/24/16	05:33	03:38	Initial cal 50
EP4514-ICV4513	P102795.D	02/24/16	06:02	04:07	Initial cal verification 50
EP4514-ICV4513	P102796.D	02/24/16	06:32	04:37	Initial cal verification 50
EP4514-ICV4513	P102797.D	02/24/16	07:01	05:06	Initial cal verification 50
EP4514-ICV4514	P102798A.D	02/24/16	07:31	05:36	Initial cal verification 50
EP4514-ICV4513	P102798.D	02/24/16	07:31	05:36	Initial cal verification 50
EP4514-ICV4513	P102799.D	02/24/16	08:00	06:05	Initial cal verification 50
EP4514-ICV4514	P102799A.D	02/24/16	08:00	06:05	Initial cal verification 50
EP4514-ICV4514	P102800.D	02/24/16	08:29	06:34	Initial cal verification 50
EP4514-ICV4514	P102801A.D	02/24/16	08:58	07:03	Initial cal verification 50
EP4514-ICV4513	P102801.D	02/24/16	08:58	07:03	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EP4524-DFTPP
Lab File ID: P103010.D
Instrument ID: GCMSP
Injection Date: 03/02/16
Injection Time: 16:56

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	29961	34.4		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	38523	44.2		Pass
70	Less than 2.0% of mass 69	119	0.14	(0.31) [a]	Pass
127	40.0 - 60.0% of mass 198	48031	55.2		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	87088	100.0		Pass
199	5.0 - 9.0% of mass 198	5993	6.88		Pass
275	10.0 - 30.0% of mass 198	19109	21.9		Pass
365	1.0 - 100.0% of mass 198	2328	2.67		Pass
441	Present, but less than mass 443	9869	11.3	(79.2) [b]	Pass
442	40.0 - 100.0% of mass 198	65456	75.2		Pass
443	17.0 - 23.0% of mass 442	12454	14.3	(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
EP4524-IC4524	P103011.D	03/02/16	17:10	00:14	Initial cal 100
EP4524-IC4524	P103012.D	03/02/16	17:40	00:44	Initial cal 80
EP4524-IC4524	P103013.D	03/02/16	18:09	01:13	Initial cal 10
EP4524-IC4524	P103014.D	03/02/16	18:39	01:43	Initial cal 5
EP4524-IC4524	P103015.D	03/02/16	19:08	02:12	Initial cal 2
EP4524-IC4524	P103016.D	03/02/16	19:37	02:41	Initial cal 1
EP4524-ICC4524	P103017.D	03/02/16	20:06	03:10	Initial cal 50
EP4524-IC4524	P103018.D	03/02/16	20:36	03:40	Initial cal 25
EP4524-ICV4524	P103019.D	03/02/16	21:05	04:09	Initial cal verification 50
EP4524-ICV4524	P103020.D	03/02/16	21:34	04:38	Initial cal verification 50
EP4524-ICV4524	P103021.D	03/02/16	22:03	05:07	Initial cal verification 50
EP4524-ICV4524	P103022.D	03/02/16	22:32	05:36	Initial cal verification 50
EP4524-ICV4524	P103023.D	03/02/16	23:02	06:06	Initial cal verification 50
EP4524-ICV4524	P103024.D	03/02/16	23:31	06:35	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EP4587-DFTPP
Lab File ID: P104206.D
Instrument ID: GCMSP
Injection Date: 04/15/16
Injection Time: 08:47

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	22542	34.8		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	29712	45.9		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	37221	57.5		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	64784	100.0		Pass
199	5.0 - 9.0% of mass 198	4735	7.31		Pass
275	10.0 - 30.0% of mass 198	10861	16.8		Pass
365	1.0 - 100.0% of mass 198	1220	1.88		Pass
441	Present, but less than mass 443	4686	7.23	(84.3) [b]	Pass
442	40.0 - 100.0% of mass 198	28874	44.6		Pass
443	17.0 - 23.0% of mass 442	5559	8.58	(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
EP4587-IC4587	P104207.D	04/15/16	08:59	00:12	Initial cal 1000
EP4587-IC4587	P104208.D	04/15/16	09:28	00:41	Initial cal 500
EP4587-ICC4587	P104209.D	04/15/16	09:57	01:10	Initial cal 400
EP4587-IC4587	P104210.D	04/15/16	10:26	01:39	Initial cal 300
EP4587-IC4587	P104211.D	04/15/16	10:56	02:09	Initial cal 200
EP4587-IC4587	P104212.D	04/15/16	11:25	02:38	Initial cal 100
EP4587-IC4587	P104213.D	04/15/16	11:54	03:07	Initial cal 50
EP4587-ICV4587	P104214.D	04/15/16	12:24	03:37	Initial cal verification 500

Instrument Performance Check (DFTPP)

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EP4590-DFTPP
Lab File ID: P104240.D
Instrument ID: GCMSP
Injection Date: 04/18/16
Injection Time: 09:14

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	22371	34.1		Pass
68	Less than 2.0% of mass 69	448	0.68	(1.50) [a]	Pass
69	Mass 69 relative abundance	29917	45.7		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	37109	56.6		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	65514	100.0		Pass
199	5.0 - 9.0% of mass 198	4323	6.60		Pass
275	10.0 - 30.0% of mass 198	10899	16.6		Pass
365	1.0 - 100.0% of mass 198	1010	1.54		Pass
441	Present, but less than mass 443	4462	6.81	(85.5) [b]	Pass
442	40.0 - 100.0% of mass 198	27151	41.4		Pass
443	17.0 - 23.0% of mass 442	5218	7.96	(19.2) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP4590-CC4524	P104241.D	04/18/16	09:26	00:12	Continuing cal 25
EP4590-CC4514	P104242.D	04/18/16	09:55	00:41	Continuing cal 25
EP4590-CC4587	P104244.D	04/18/16	10:53	01:39	Continuing cal 25
OP92917-MB1	P104245.D	04/18/16	11:23	02:09	Method Blank
ZZZZZZ	P104246.D	04/18/16	11:52	02:38	(unrelated sample)
ZZZZZZ	P104247.D	04/18/16	12:22	03:08	(unrelated sample)
ZZZZZZ	P104248.D	04/18/16	12:51	03:37	(unrelated sample)
ZZZZZZ	P104249.D	04/18/16	13:21	04:07	(unrelated sample)
ZZZZZZ	P104250.D	04/18/16	13:51	04:37	(unrelated sample)
ZZZZZZ	P104251.D	04/18/16	14:21	05:07	(unrelated sample)
ZZZZZZ	P104252.D	04/18/16	14:51	05:37	(unrelated sample)
OP93128-MB1	P104255A.D	04/18/16	15:28	06:14	Method Blank
OP93128-BS1	P104256.D	04/18/16	15:58	06:44	Blank Spike
ZZZZZZ	P104257.D	04/18/16	16:28	07:14	(unrelated sample)
ZZZZZZ	P104258.D	04/18/16	16:58	07:44	(unrelated sample)
ZZZZZZ	P104259.D	04/18/16	17:28	08:14	(unrelated sample)
ZZZZZZ	P104261.D	04/18/16	18:29	09:15	(unrelated sample)
JC18516-1	P104263.D	04/18/16	19:29	10:15	EB041416
JC18516-4	P104264.D	04/18/16	19:59	10:45	RA14_GWS

Instrument Performance Check (DFTPP)

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample:	EP4590-DFTPP	**Injection Date:**	04/18/16
Lab File ID:	P104240.D	**Injection Time:**	09:14
Instrument ID:	GCMSP		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
OP93128-MS	P104265.D	04/18/16	20:29	11:15	Matrix Spike
OP93128-MSD	P104266.D	04/18/16	20:59	11:45	Matrix Spike Duplicate

Instrument Performance Check (DFTPP)

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EP4592-DFTPP
Lab File ID: P104285.D
Instrument ID: GCMSP
Injection Date: 04/19/16
Injection Time: 12:22

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	24880	37.6		Pass
68	Less than 2.0% of mass 69	120	0.18	(0.38) [a]	Pass
69	Mass 69 relative abundance	31872	48.1		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	38493	58.2		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	66194	100.0		Pass
199	5.0 - 9.0% of mass 198	4439	6.71		Pass
275	10.0 - 30.0% of mass 198	10801	16.3		Pass
365	1.0 - 100.0% of mass 198	1175	1.78		Pass
441	Present, but less than mass 443	4400	6.65	(82.4) [b]	Pass
442	40.0 - 100.0% of mass 198	26637	40.2		Pass
443	17.0 - 23.0% of mass 442	5339	8.07	(20.0) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EP4592-CC4524	P104286.D	04/19/16	12:34	00:12	Continuing cal 25
JC18516-4	P104289.D	04/19/16	14:43	02:21	RA14_GWS
ZZZZZZ	P104290.D	04/19/16	15:11	02:49	(unrelated sample)
ZZZZZZ	P104291.D	04/19/16	16:33	04:11	(unrelated sample)

Semivolatile Internal Standard Area Summary

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E2M3655-CC3649	**Injection Date:**	04/20/16
Lab File ID:	2M83204.D	**Injection Time:**	10:07
Instrument ID:	GCMS2M	**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	168024	4.87	674447	6.00	399683	8.11	616883	10.31	528633	14.52	535173	16.64
Upper Limit [a]	336048	5.37	1348894	6.50	799366	8.61	1233766	10.81	1057266	15.02	1070346	17.14
Lower Limit [b]	84012	4.37	337224	5.50	199842	7.61	308442	9.81	264317	14.02	267587	16.14

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
OP93128-MB1	187995	4.87	746515	6.00	437425	8.11	674751	10.31	594354	14.51	579151	16.64
ZZZZZZ	190656	4.87	739855	6.00	419364	8.11	637089	10.31	532236	14.51	550844	16.64
ZZZZZZ	206464	4.87	788984	6.00	438009	8.11	641372	10.31	503397	14.51	496990	16.64
OP93224-MB1	199536	4.87	766412	6.00	433652	8.11	634763	10.31	510300	14.51	495607	16.64
OP93224-BS1	181245	4.87	771498	6.00	392935	8.11	576021	10.31	454513	14.51	475063	16.64
JC18221-9	162722	4.87	631003	6.00	364887	8.11	527433	10.31	346665	14.54	290950	16.70
OP93224-MS	134783	4.87	572332	6.00	317449	8.11	455735	10.32	287917	14.55	250888*	16.72
OP93224-MSD	146366	4.87	632705	6.00	345232	8.12	499719	10.32	305738	14.55	271601	16.73

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: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E3E3626-CC3623	**Injection Date:**	04/29/16
Lab File ID:	3E82747.D	**Injection Time:**	09:47
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	244692	4.52	843777	5.58	463012	7.61	739497	9.77	684053	13.95	437368	16.06
Upper Limit [a]	489384	5.02	1687554	6.08	926024	8.11	1478994	10.27	1368106	14.45	874736	16.56
Lower Limit [b]	122346	4.02	421889	5.08	231506	7.11	369749	9.27	342027	13.45	218684	15.56

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
OP93218-MB1	269289	4.52	995431	5.58	536714	7.61	866025	9.77	810188	13.94	572899	16.06
ZZZZZZ	218368	4.52	784741	5.58	430274	7.60	632227	9.77	410232	13.95	311962	16.07
ZZZZZZ	179041	4.52	633078	5.58	327971	7.62	469094	9.78	300932*	13.96	260068	16.07
ZZZZZZ	177974	4.52	684561	5.58	344984	7.62	497985	9.78	321838*	13.96	280021	16.08

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: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E3M2856-CC2855	**Injection Date:**	04/22/16
Lab File ID:	3M60776.D	**Injection Time:**	09:20
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	477972	10.64	728628	13.64	1228462	17.84	974953	22.45
Upper Limit [a]	955944	11.14	1457256	14.14	2456924	18.34	1949906	22.95
Lower Limit [b]	238986	10.14	364314	13.14	614231	17.34	487477	21.95

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP93234A-MB1	437504	10.64	702444	13.64	1214146	17.84	916128	22.45
OP93234A-BS12	343492	10.64	537041	13.64	895829	17.84	673100	22.45
OP93234A-BSD12	351792	10.64	530467	13.64	901631	17.84	700649	22.45
ZZZZZZ	359404	10.64	542396	13.64	902919	17.84	696798	22.45
ZZZZZZ	332938	10.64	502620	13.64	908566	17.84	690474	22.45
ZZZZZZ	329956	10.64	503004	13.64	901923	17.84	696145	22.45
OP93089A-MB1	397025	10.64	589736	13.64	971652	17.84	764997	22.45
ZZZZZZ	446208	10.64	658623	13.64	1042585	17.84	857527	22.45
ZZZZZZ	459799	10.64	700340	13.64	1145880	17.84	927887	22.45
OP93128A-MB1	444360	10.64	661949	13.64	1100057	17.84	851521	22.45
ZZZZZZ	392020	10.64	523597	13.64	889382	17.84	646025	22.45
ZZZZZZ	398137	10.64	520802	13.64	823907	17.84	637664	22.45
OP93271A-MB1	547696	10.64	847567	13.64	1355163	17.84	1033522	22.45
JC18447-2	361253	10.64	548070	13.64	883875	17.84	723232	22.45
ZZZZZZ	637594	10.74	860151	13.80	1813128	17.95	976112	22.46

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: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E4M2885-CC2881	**Injection Date:**	04/18/16
Lab File ID:	4M64802.D	**Injection Time:**	14:36
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	246416	10.70	370942	13.68	662647	17.87	507705	22.47
Upper Limit [a]	492832	11.20	741884	14.18	1325294	18.37	1015410	22.97
Lower Limit [b]	123208	10.20	185471	13.18	331324	17.37	253853	21.97

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP93128A-MB1	214219	10.70	322553	13.68	616413	17.87	480009	22.47
OP93128A-BS12	257964	10.70	388075	13.68	706667	17.87	540108	22.47
ZZZZZZ	272191	10.70	402799	13.68	710460	17.87	563582	22.47
OP92985A-MB1	266152	10.70	408438	13.68	701433	17.87	533287	22.47
OP92985A-BS12	262009	10.70	385272	13.68	688663	17.87	525627	22.47
OP92985A-MS	282211	10.70	396391	13.68	682993	17.87	516402	22.47
OP92985A-MSD	282738	10.70	415274	13.68	722527	17.87	544205	22.47
JC17959-8	261469	10.70	367428	13.68	666788	17.87	491628	22.47
ZZZZZZ	308794	10.70	474184	13.68	796989	17.87	588895	22.47
OP93052A-MS	262145	10.70	388568	13.68	643917	17.87	501042	22.47
OP93052A-MSD	264639	10.70	369004	13.68	663853	17.87	510959	22.47
ZZZZZZ	274218	10.70	398068	13.68	690483	17.87	535777	22.47
JC18151-5	300365	10.70	454074	13.68	756092	17.89	547194	22.47
ZZZZZZ	290431	10.70	421960	13.68	792548	17.87	610950	22.47
ZZZZZZ	262690	10.70	389782	13.68	714853	17.87	525412	22.47
ZZZZZZ	267335	10.70	412958	13.68	741905	17.87	559001	22.47
ZZZZZZ	303981	10.70	478636	13.68	851026	17.89	637567	22.47
JC18366-3	282123	10.70	436606	13.68	813224	17.87	613786	22.47
ZZZZZZ	261396	10.70	415310	13.68	742000	17.87	586246	22.47
OP93128A-MS	303053	10.70	466637	13.68	816120	17.87	636670	22.47
OP93128A-MSD	316681	10.70	483493	13.68	863876	17.87	674671	22.47

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: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E4M2886-CC2881	**Injection Date:**	04/19/16
Lab File ID:	4M64825.D	**Injection Time:**	09:10
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	359166	10.70	588620	13.68	976377	17.87	727755	22.47
Upper Limit [a]	718332	11.20	1177240	14.18	1952754	18.37	1455510	22.97
Lower Limit [b]	179583	10.20	294310	13.18	488189	17.37	363878	21.97

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP93089A-MB1	359097	10.70	626995	13.68	869472	17.87	722171	22.47
OP93089A-BS12	500611	10.70	818735	13.68	1357367	17.87	1012983	22.47
OP93127A-MB1	274105	10.70	468032	13.68	732881	17.87	505564	22.47
OP93127A-BS12	291110	10.70	486071	13.68	743373	17.87	530123	22.47
OP93127A-BSD12	284629	10.70	459901	13.68	717542	17.87	478681	22.47
JC18516-1	229654	10.70	448576	13.68	695388	17.87	454212	22.47
JC18516-4	251770	10.70	433883	13.68	674390	17.87	479999	22.47
ZZZZZZ	247746	10.70	427415	13.68	639531	17.87	475138	22.47
ZZZZZZ	237897	10.70	342665	13.68	567396	17.87	439754	22.47
ZZZZZZ	250394	10.70	398681	13.68	654525	17.87	478708	22.47
ZZZZZZ	241940	10.70	433964	13.68	576222	17.87	466349	22.47
ZZZZZZ	234643	10.70	394122	13.68	607478	17.87	440074	22.47
ZZZZZZ	234108	10.70	372381	13.68	667559	17.87	502462	22.47
ZZZZZZ	237755	10.70	462531	13.68	653192	17.87	501646	22.47
ZZZZZZ	245233	10.70	384188	13.68	616115	17.87	434875	22.47
ZZZZZZ	242362	10.70	411199	13.68	587740	17.87	431117	22.47
ZZZZZZ	219990	10.70	439097	13.68	677261	17.87	447479	22.46
JC18242-1	399282	10.70	768324	13.68	1141346	17.87	620185	22.47
ZZZZZZ	248476	10.70	375702	13.68	550340	17.87	381114	22.47
ZZZZZZ	475822	10.67	322815	13.70	461581*	17.87	366707	22.47
OP93089A-MS	216910	10.70	394410	13.68	601370	17.87	446502	22.46

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: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E4M2900-CC2881	**Injection Date:**	05/02/16
Lab File ID:	4M65029.D	**Injection Time:**	08:55
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	174156	10.65	317888	13.63	550378	17.82	452374	22.42
Upper Limit [a]	348312	11.15	635776	14.13	1100756	18.32	904748	22.92
Lower Limit [b]	87078	10.15	158944	13.13	275189	17.32	226187	21.92

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP93487A-MB1	154811	10.65	267736	13.63	460101	17.82	380953	22.42
OP93487A-BS12	164908	10.65	277595	13.63	461047	17.82	373354	22.41
ZZZZZZ	160929	10.65	273121	13.63	480408	17.82	389712	22.42
ZZZZZZ	156901	10.65	263166	13.63	460477	17.82	392647	22.42
OP93218A-MB1	190001	10.65	317653	13.63	561037	17.84	428581	22.42
OP93218A-BS12	143591	10.65	242305	13.63	483411	17.84	383423	22.42
JC18516-2	182859	10.65	314979	13.63	619895	17.84	479924	22.42
JC18516-3	207530	10.65	337646	13.63	654888	17.84	498977	22.42
OP93218A-MS	160268	10.65	266988	13.63	518097	17.84	399895	22.42
OP93218A-MSD	152382	10.65	253375	13.63	500731	17.84	388852	22.42
ZZZZZZ	165491	10.65	277569	13.63	573689	17.84	479577	22.42
ZZZZZZ	155034	10.65	257555	13.63	508427	17.84	419728	22.42
ZZZZZZ	164448	10.65	274260	13.63	542233	17.84	458149	22.42
ZZZZZZ	156146	10.65	267277	13.63	520290	17.84	439317	22.42
ZZZZZZ	162365	10.65	263997	13.63	511640	17.82	418263	22.42
ZZZZZZ	181529	10.65	305750	13.63	581647	17.82	481346	22.42
ZZZZZZ	179931	10.65	286541	13.63	550643	17.84	458221	22.42
ZZZZZZ	178206	10.65	286576	13.63	551264	17.82	457357	22.42
ZZZZZZ	182537	10.65	296135	13.63	542681	17.82	466921	22.42
ZZZZZZ	178792	10.65	290583	13.63	537479	17.82	442003	22.41
ZZZZZZ	179790	10.65	295345	13.63	520214	17.82	417785	22.42

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: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	EM5230-CC5217	**Injection Date:**	04/20/16
Lab File ID:	M123740.D	**Injection Time:**	11:00
Instrument ID:	GCMSM	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	226298	4.70	846135	5.84	530266	8.19	948596	10.81	992712	16.00	1041338	18.62
Upper Limit [a]	452596	5.20	1692270	6.34	1060532	8.69	1897192	11.31	1985424	16.50	2082676	19.12
Lower Limit [b]	113149	4.20	423068	5.34	265133	7.69	474298	10.31	496356	15.50	520669	18.12

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
ZZZZZZ	306214	4.70	1147758	5.83	668052	8.18	1148738	10.81	1155240	15.98	1138353	18.61
OP93218-MB1	294181	4.70	1099787	5.83	644248	8.18	1120616	10.81	1112539	15.98	1101092	18.61
OP93218-BS1	280026	4.70	1039331	5.84	629919	8.18	1071301	10.81	1057284	15.99	1136654	18.61
ZZZZZZ	286417	4.70	1079058	5.83	647005	8.18	1130557	10.81	1105807	15.99	1058274	18.62
ZZZZZZ	304986	4.70	1122552	5.84	641893	8.18	1064898	10.81	1078850	15.98	1059544	18.62
ZZZZZZ	332599	4.70	1258087	5.84	735150	8.18	1269507	10.82	1263452	15.99	1252408	18.62
ZZZZZZ	361470	4.70	1383164	5.84	798827	8.19	1350627	10.81	1321594	15.99	1269044	18.62
ZZZZZZ	313130	4.70	1157131	5.83	670474	8.18	1138230	10.81	1112592	15.99	1120518	18.62
ZZZZZZ	322050	4.70	1210982	5.84	704143	8.19	1179468	10.82	1112814	15.99	1124094	18.63
ZZZZZZ	318517	4.71	1188072	5.84	683651	8.19	1157718	10.83	995580	16.03	1049088	18.66
ZZZZZZ	318038	4.70	1194982	5.84	704828	8.19	1162489	10.82	1118832	16.01	1062607	18.65
ZZZZZZ	324638	4.70	1251284	5.84	714020	8.20	1173809	10.83	1078938	16.01	1074575	18.65
ZZZZZZ	324695	4.71	1213858	5.85	676465	8.20	1089106	10.83	1012907	16.03	962763	18.68

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: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	EM5235-CC5217	**Injection Date:**	04/22/16
Lab File ID:	M123836A.D	**Injection Time:**	20:08
Instrument ID:	GCMSM	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	303098	4.66	1201393	5.79	736939	8.12	1277492	10.73	1417131	15.91	1517400	18.53
Upper Limit [a]	606196	5.16	2402786	6.29	1473878	8.62	2554984	11.23	2834262	16.41	3034800	19.03
Lower Limit [b]	151549	4.16	600697	5.29	368470	7.62	638746	10.23	708566	15.41	758700	18.03

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
OP93292-MB1	285567	4.66	1070680	5.78	649496	8.11	1209593	10.73	1266355	15.89	1319075	18.52
OP93292-BS1	298476	4.66	1108315	5.79	668460	8.11	1190045	10.73	1229054	15.90	1335187	18.52
ZZZZZZ	293896	4.66	1114289	5.78	665675	8.11	1231861	10.73	1281238	15.89	1341202	18.52
ZZZZZZ	304263	4.66	1133090	5.79	699036	8.11	1234291	10.73	1377996	15.90	1374484	18.52
ZZZZZZ	287218	4.66	1086744	5.79	685054	8.11	1183224	10.73	1321765	15.89	1290789	18.52
ZZZZZZ	278813	4.66	1082998	5.79	658818	8.11	1144276	10.73	1268684	15.89	1259823	18.52
ZZZZZZ	302602	4.66	1147891	5.79	683923	8.11	1201184	10.73	1330076	15.89	1325989	18.52
ZZZZZZ	283049	4.66	1060280	5.78	616091	8.11	1109827	10.72	1184599	15.89	1235492	18.52
ZZZZZZ	299124	4.66	1113404	5.79	653379	8.11	1212500	10.73	1265157	15.89	1325439	18.52
ZZZZZZ	287115	4.66	1078824	5.78	641824	8.11	1178359	10.73	1257496	15.89	1295919	18.52
JC18696-2	272093	4.66	1015565	5.78	610263	8.11	1137111	10.72	1200229	15.89	1247419	18.52
ZZZZZZ	277607	4.66	1037288	5.78	618756	8.11	1150603	10.73	1216790	15.89	1274978	18.52
ZZZZZZ	272965	4.66	1025520	5.78	641370	8.11	1128507	10.73	1250665	15.89	1228881	18.52
ZZZZZZ	308668	4.66	1148899	5.78	724248	8.11	1266808	10.73	1401458	15.89	1359741	18.52
OP93292-MS	290050	4.66	1091703	5.78	677370	8.11	1150196	10.73	1215237	15.90	1240917	18.52
OP93292-MSD	292882	4.66	1117525	5.79	675588	8.11	1126427	10.73	1195997	15.90	1209023	18.52
JC18516-2	307148	4.66	1138902	5.78	657229	8.11	1101439	10.73	1112380	15.89	1088694	18.51

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: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	EM5236-CC5217	**Injection Date:**	04/25/16
Lab File ID:	M123858.D	**Injection Time:**	13:04
Instrument ID:	GCMSM	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	314826	4.65	1175374	5.78	715717	8.10	1283910	10.72	1401125	15.89	1450053	18.51
Upper Limit [a]	629652	5.15	2350748	6.28	1431434	8.60	2567820	11.22	2802250	16.39	2900106	19.01
Lower Limit [b]	157413	4.15	587687	5.28	357859	7.60	641955	10.22	700563	15.39	725027	18.01

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
JC18417-5	323046	4.65	1166417	5.78	704759	8.10	1156625	10.72	1065303	15.90	1046240	18.55
OP93218-MS	347112	4.66	1209085	5.78	714617	8.11	1152209	10.73	1086229	15.93	1027802	18.59
OP93218-MSD	330361	4.66	1244665	5.79	714126	8.12	1122757	10.75	1082142	15.94	1032096	18.60
ZZZZZZ	311291	4.66	1144481	5.79	672034	8.12	1162808	10.75	1054444	15.92	1112401	18.55
ZZZZZZ	316763	4.66	1150997	5.79	687753	8.12	1162840	10.74	1102286	15.92	1125838	18.55
ZZZZZZ	353222	4.66	1272367	5.79	773667	8.12	1276914	10.75	1231900	15.92	1260303	18.55
ZZZZZZ	299193	4.66	1146454	5.79	673150	8.12	1133835	10.74	1140536	15.92	1170224	18.55

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: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	EM5238-CC5217	**Injection Date:**	04/26/16
Lab File ID:	M123900.D	**Injection Time:**	10:16
Instrument ID:	GCMSM	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	283484	4.64	1097418	5.76	669409	8.08	1150133	10.69	1272004	15.86	1277207	18.48
Upper Limit [a]	566968	5.14	2194836	6.26	1338818	8.58	2300266	11.19	2544008	16.36	2554414	18.98
Lower Limit [b]	141742	4.14	548709	5.26	334705	7.58	575067	10.19	636002	15.36	638604	17.98

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	279765	4.64	1019838	5.76	572153	8.08	973477	10.69	1015724	15.85	1029576	18.48
ZZZZZZ	286283	4.64	1015245	5.76	606388	8.08	1011902	10.69	1092252	15.85	1052469	18.48
JC18834-16	279345	4.64	1050553	5.76	582701	8.08	953068	10.69	1015368	15.85	995326	18.48
ZZZZZZ	300430	4.64	1097622	5.76	601902	8.08	1003258	10.70	1069831	15.85	1088721	18.48
ZZZZZZ	279944	4.64	1019861	5.76	560581	8.08	958093	10.69	1013252	15.85	1061094	18.48
ZZZZZZ	286953	4.64	1049742	5.76	584416	8.08	1013057	10.69	988024	15.86	1048327	18.48
ZZZZZZ	275428	4.64	998736	5.76	565006	8.08	960401	10.69	1056741	15.86	1047803	18.48
ZZZZZZ	276293	4.64	1019482	5.76	589859	8.08	980002	10.69	1052774	15.85	1057208	18.48
ZZZZZZ	278753	4.64	1026881	5.76	569617	8.08	927877	10.69	1030690	15.85	1039334	18.48
ZZZZZZ	286830	4.64	1047251	5.76	583010	8.08	1024745	10.70	1039650	15.86	1142373	18.49
JC18516-3	299665	4.64	1075685	5.76	604682	8.08	1078483	10.70	1069655	15.86	1114249	18.49
ZZZZZZ	312288	4.64	1122049	5.76	655660	8.08	1109564	10.69	1194057	15.86	1169201	18.49
ZZZZZZ	385609	4.64	1482090	5.76	865282	8.09	1504015	10.70	1565256	15.87	1574296	18.50

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: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	EP4590-CC4524	**Injection Date:**	04/18/16
Lab File ID:	P104241.D	**Injection Time:**	09:26
Instrument ID:	GCMSP	**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	180641	4.14	654737	5.87	365488	8.58	527886	10.93	454275	15.60	383447	18.15
Upper Limit [a]	361282	4.64	1309474	6.37	730976	9.08	1055772	11.43	908550	16.10	766894	18.65
Lower Limit [b]	90321	3.64	327369	5.37	182744	8.08	263943	10.43	227138	15.10	191724	17.65

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
OP92917-MB1	182869	4.13	670771	5.87	376526	8.58	556452	10.93	453166	15.59	384582	18.15
ZZZZZZ	159359	4.13	605387	5.87	331959	8.58	487170	10.93	385722	15.59	325796	18.14
ZZZZZZ	166563	4.13	615216	5.87	337043	8.58	495813	10.93	398593	15.59	337304	18.14
ZZZZZZ	177167	4.14	652839	5.87	359514	8.58	520404	10.93	414233	15.59	356973	18.15
ZZZZZZ	175841	4.14	641576	5.87	362749	8.58	526408	10.93	422239	15.59	362324	18.15
ZZZZZZ	168404	4.14	628350	5.87	351190	8.58	522551	10.93	409266	15.59	344865	18.15
ZZZZZZ	170066	4.13	637948	5.87	354173	8.58	513266	10.93	412505	15.59	343604	18.14
ZZZZZZ	194922	4.14	723264	5.87	402777	8.58	583945	10.93	466202	15.59	393969	18.15
OP93128-MB1	134788	4.14	505941	5.87	279688	8.58	409453	10.93	325800	15.59	271294	18.15
OP93128-BS1	144099	4.14	521517	5.87	286494	8.58	401080	10.93	330381	15.60	275969	18.15
ZZZZZZ	157195	4.14	594867	5.87	320853	8.58	463398	10.93	370787	15.59	315086	18.14
ZZZZZZ	154510	4.13	586888	5.87	323055	8.58	474217	10.93	369986	15.59	314900	18.14
ZZZZZZ	152570	4.14	573083	5.87	314827	8.58	460478	10.93	360500	15.59	303957	18.14
ZZZZZZ	162583	4.14	607162	5.87	337010	8.58	484763	10.93	388167	15.59	326182	18.14
JC18516-1	161664	4.13	609216	5.87	337576	8.58	484438	10.93	383041	15.59	321784	18.14
JC18516-4	151081	4.14	580561	5.87	316502	8.58	453591	10.93	359658	15.59	295654	18.14
OP93128-MS	166885	4.14	603140	5.87	332973	8.58	455954	10.93	384845	15.60	329283	18.15
OP93128-MSD	190525	4.14	670083	5.87	367966	8.58	485589	10.93	387659	15.60	317408	18.15

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: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	EP4592-CC4524	**Injection Date:**	04/19/16
Lab File ID:	P104286.D	**Injection Time:**	12:34
Instrument ID:	GCMSP	**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	87945	4.19	328238	5.93	175657	8.64	256714	11.00	206474	15.67	165336	18.23
Upper Limit [a]	175890	4.69	656476	6.43	351314	9.14	513428	11.50	412948	16.17	330672	18.73
Lower Limit [b]	43973	3.69	164119	5.43	87829	8.14	128357	10.50	103237	15.17	82668	17.73

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
JC18516-4	58699	4.20	212864	5.93	112708	8.64	163839	11.00	124525	15.67	101455	18.23
ZZZZZZ	47359	4.19	176614	5.93	96401	8.64	142143	10.99	106240	15.67	87587	18.22
ZZZZZZ	51690	4.19	195697	5.93	103734	8.64	149752	11.00	115344	15.67	93180	18.23

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: JC18516
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
JC18516-1	P104263.D	73	52	78	101	98	103
JC18516-4	P104264.D	78	57	80	104	101	101
JC18516-4	P104289.D	0* [a]	0* [a]	0* [a]	0* [a]	0* [a]	0* [a]
OP93128-BS1	P104256.D	82	56	79	102	95	101
OP93128-MB1	P104255A.D	77	51	76	101	97	103
OP93128-MB1	2M83206.D	63	42	114	98	93	98
OP93128-MS	P104265.D	100* [b]	85	82	99	92	98
OP93128-MSD	P104266.D	100* [b]	82	94	107	100	106

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.
(b) Outside of control limits, but within reasonable method recovery limits.

Semivolatile Surrogate Recovery Summary

Job Number: JC18516
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
JC18516-2	M123854.D	69	71	80	71	72	80
JC18516-3	M123913.D	73	75	91	79	77	86
OP93218-BS1	M123746.D	98	95	102	92	88	99
OP93218-MB1	M123745.D	94	92	91	91	89	92
OP93218-MB1	3E82750.D	85	76	87	87	94	102
OP93218-MS	M123862.D	64	66	73	73	71	67
OP93218-MSD	M123863.D	61	58	60	60	60	59

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: JC18516
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
JC18516-1	4M64831.D	109	87	105
JC18516-4	4M64832.D	112	93	108
OP93128A-BS12	4M64804.D	95	108	99
OP93128A-MB1	4M64803.D	94	103	100
OP93128A-MB1	3M60786.D	79	81	91
OP93128A-MS	4M64822.D	85	93	90
OP93128A-MSD	4M64823.D	82	91	92

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: JC18516
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
JC18516-2	4M65049.D	98	115	86
JC18516-3	4M65050.D	102	112	100
OP93218A-BS12	4M65048.D	111	134	103
OP93218A-MB1	4M65047.D	118	139	108
OP93218A-MS	4M65051.D	88	109	95
OP93218A-MSD	4M65052.D	91	118	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: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E2M3649-ICC3649
Lab FileID: 2M83073.D

Response Factor Report MS

Method : C:\MSDCHEM\1\METHODS\M2M3649.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Fri Apr 15 12:48:13 2016
Response via : Initial Calibration

Calibration Files
2 =2m83066.D 5 =2m83072.D 25 =2m83070.D 80 =2m83069.D
100 =2m83068.D 50 =2m83073.D 1 =2m83067.D 10 =2m83071.D

Compound	2	5	25	80	100	50	1	10	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	----------ISTD----------									
2) 1,4-Dioxane	0.734	0.708	0.625	0.628	0.626	0.630	0.784	0.615	0.669	9.59
3) Pyridine	1.753	1.754	1.573	1.588	1.592	1.590	1.787	1.548	1.648	5.94
4) N-Nitrosodim	1.058	1.024	0.944	0.962	0.947	0.959	1.098	0.919	0.989	6.39
5) 2-Fluorophen	1.633	1.563	1.458	1.455	1.418	1.461	1.620	1.395	1.501	6.12
6) Indene	2.983	2.907	2.410	1.940	1.785	2.163	3.022	2.533	2.468	19.44
7) Cumene	4.086	4.019	3.493	3.269	3.128	3.414	4.210	3.478	3.637	11.22
8) Phenol-d5	2.087	2.026	1.851	1.763	1.706	1.809	2.033	1.794	1.884	7.64
9) Phenol	2.356	2.298	2.031	1.881	1.787	1.976	2.401	2.009	2.092	10.98
10) Aniline	2.439	2.587	2.143	1.882	1.777	1.903	2.542	2.230	2.188	14.40
11) bis(2-Chloro	1.639	1.636	1.412	1.432	1.382	1.444	1.671	1.402	1.502	8.21
12) 2-Chlorophen	1.744	1.749	1.541	1.417	1.355	1.474	1.772	1.555	1.576	10.25
13) Decane	1.400	1.377	1.166	1.003	0.938	1.078	1.484	1.191	1.205	16.47
14) 1,3-Dichloro	1.954	1.908	1.663	1.540	1.471	1.601	1.943	1.688	1.721	11.04
15) 1,4-Dichloro	1.986	1.951	1.676	1.528	1.444	1.602	2.003	1.665	1.732	12.63
16) Benzyl alcoh	1.053	1.058	0.963	0.916	0.871	0.937	1.055	0.947	0.975	7.35
17) 1,2-Dichloro	1.851	1.841	1.545	1.400	1.303	1.459	1.895	1.569	1.608	14.11
18) Acetophenone	2.267	2.256	1.893	1.596	1.484	1.729	2.309	1.962	1.937	16.52
19) 2-Methylphen	1.605	1.543	1.318	1.087	0.999	1.198	1.561	1.356	1.333	17.04
20) 2,2'-oxybis(	1.908	1.815	1.486	1.161		1.320	1.995	1.559	1.606	19.41
21) 3&4-Methylph	1.607	1.660	1.388	1.133	1.037	1.251	1.732	1.424	1.404	17.99
22) n-Nitroso-di	1.122	1.087	0.938	0.787	0.728	0.863	1.155	0.960	0.955	16.48
23) Hexachloroet	0.515	0.528	0.463	0.446	0.422	0.452	0.539	0.459	0.478	9.02
24) I Naphthalene-d8	----------ISTD----------									
25) Nitrobenzene	0.397	0.408	0.371	0.351	0.339	0.356	0.411	0.365	0.375	7.28
26) Nitrobenzene	0.409	0.419	0.371	0.350	0.338	0.359	0.428	0.370	0.380	8.88
27) Quinoline	0.817	0.838	0.743	0.723	0.704	0.732	0.846	0.742	0.768	7.30
28) Isophorone	0.705	0.717	0.658	0.628	0.607	0.638	0.717	0.648	0.665	6.44
29) 2-Nitropheno	0.214	0.212	0.203	0.190	0.180	0.197	0.203	0.192	0.199	5.69
30) 2,4-Dimethyl	0.384	0.394	0.350	0.335	0.322	0.336	0.387	0.353	0.358	7.67
31) Benzoic acid	0.262	0.241	0.282	0.312	0.308	0.296	0.209	0.239	0.269	13.77
32) bis(2-Chloro	0.481	0.474	0.401	0.376	0.363	0.391	0.474	0.414	0.422	11.33
33) 2,4-Dichloro	0.318	0.322	0.291	0.274	0.260	0.284	0.321	0.288	0.295	7.89
34) 2,6-Dichloro	0.316	0.325	0.285	0.256	0.242	0.270	0.324	0.286	0.288	10.94
35) 1,3,5-Trichl	0.360	0.372	0.314	0.275	0.259	0.295	0.387	0.317	0.322	14.43
36) 1,2,4-Trichl	0.348	0.349	0.303	0.278	0.264	0.291	0.355	0.303	0.311	11.20
37) 1,2,3-Trichl	0.336	0.343	0.291	0.267	0.258	0.280	0.335	0.296	0.301	11.04
38) Naphthalene	1.339	1.340	1.129	1.006	0.959	1.074	1.359	1.153	1.170	13.54
39) 4-Chloroanil	0.480	0.528	0.434	0.385	0.360	0.395	0.488	0.452	0.440	13.11
40) 2,3-Dichloro	0.398	0.405	0.346	0.308	0.289	0.324	0.397	0.350	0.352	12.53
41) Caprolactam	0.142	0.142	0.136	0.140	0.138	0.138	0.138	0.129	0.138	2.89
42) Hexachlorobu	0.157	0.162	0.137	0.127	0.120	0.133	0.162	0.140	0.142	11.51
43) 4-Chloro-3-m	0.326	0.327	0.308	0.303	0.294	0.305	0.325	0.301	0.311	4.21
44) 2-Methylnaph	0.680	0.692	0.603	0.549	0.522	0.576	0.698	0.607	0.616	10.92
45) 1-Methylnaph	0.705	0.723	0.624	0.565	0.535	0.594	0.747	0.636	0.641	12.01

Initial Calibration Summary

Job Number: JC18516 **Sample:** E2M3649-ICC3649
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2M83073.D
Project: BMSMC, Building 5 Area, PR

```
46) Dimethylnaph 0.713 0.733 0.632 0.570 0.543 0.597 0.727 0.640 0.644  11.38

47) I   Acenaphthene-d10      ----------------ISTD---------------------
48) Hexachlorocy 0.260 0.282 0.270 0.246 0.230 0.260 0.256 0.262 0.258   6.07
49) 2,4,6-Trichl 0.342 0.344 0.318 0.284 0.268 0.296 0.353 0.313 0.315   9.74
50) 2,4,5-Trichl 0.348 0.371 0.344 0.329 0.319 0.335 0.353 0.334 0.342   4.69
51) 2-Fluorobiph 1.425 1.441 1.234 1.095 1.043 1.159 1.492 1.265 1.269  13.25
52) 2-Chloronaph 1.284 1.297 1.122 1.008 0.966 1.065 1.333 1.125 1.150  12.10
53) Biphenyl     1.702 1.765 1.483 1.299 1.234 1.388 1.772 1.520 1.520  13.74
54) 2-Nitroanili 0.321 0.321 0.315 0.309 0.303 0.309 0.307 0.303 0.311   2.41
55) Dimethylphth 1.359 1.415 1.254 1.191 1.143 1.212 1.401 1.244 1.277   7.96
56) Acenaphthyle 1.989 2.094 1.871 1.707 1.629 1.787 2.010 1.861 1.868   8.48
57) 2,6-Dinitrot 0.253 0.290 0.284 0.288 0.279 0.284 0.248 0.262 0.274   6.07
58) 3-Nitroanili 0.321 0.356 0.354 0.344 0.337 0.344 0.300 0.335 0.336   5.42
59) Acenaphthene 1.327 1.337 1.149 1.030 0.980 1.086 1.370 1.164 1.180  12.60
60) 2,4-Dinitrop 0.091 0.107 0.154 0.168 0.164 0.159 0.073 0.119 0.129  28.55
         ----- Quadratic regression -----                Coefficient =  0.9993
              Response Ratio = -0.01213 + 0.16385 *A + 0.00090 *A^2

61) 4-Nitropheno 0.148 0.156 0.159 0.167 0.164 0.160 0.137 0.146 0.155   6.56
62) Dibenzofuran 1.746 1.800 1.518 1.319 1.240 1.419 1.874 1.579 1.562  14.78
63) 2,4-Dinitrot 0.347 0.406 0.394 0.362 0.347 0.381 0.341 0.377 0.369   6.52
64) 2,3,4,6-Tetr 0.252 0.258 0.248 0.243 0.233 0.245 0.246 0.237 0.245   3.22
65) Diethylphtha 1.269 1.338 1.213 1.164 1.125 1.190 1.329 1.203 1.229   6.23
66) Fluorene     1.429 1.464 1.263 1.111 1.039 1.190 1.484 1.278 1.282  12.93
67) 4-Chlorophen 0.588 0.613 0.521 0.455 0.426 0.490 0.596 0.529 0.527  12.95
68) 4-Nitroanili 0.305 0.350 0.354 0.352 0.344 0.351 0.292 0.340 0.336   7.08

69) I   Phenanthrene-d10      ----------------ISTD---------------------
70) 4,6-Dinitro- 0.091 0.114 0.140 0.148 0.148 0.147       0.117 0.129  17.36
71) n-Nitrosodip 0.607 0.636 0.567 0.516 0.505 0.544 0.605 0.560 0.567   8.09
72) 1,2-Diphenyl 0.843 0.910 0.816 0.757 0.743 0.795 0.860 0.800 0.815   6.73
73) 2,4,6-Tribro 0.099 0.106 0.106 0.106 0.103 0.105 0.102 0.097 0.103   3.56
74) 4-Bromopheny 0.212 0.221 0.193 0.184 0.177 0.190 0.204 0.189 0.196   7.58
75) Hexachlorobe 0.237 0.256 0.222 0.204 0.197 0.212 0.255 0.217 0.225   9.94
76) Pentachlorop 0.133 0.133 0.137 0.129 0.125 0.135 0.124 0.126 0.130   3.80
77) Phenanthrene 1.367 1.394 1.175 1.047 1.010 1.125 1.431 1.204 1.219  13.22
78) Anthracene   1.293 1.358 1.202 1.063 1.021 1.146 1.295 1.206 1.198   9.79
79) Carbazole    1.186 1.236 1.100 1.009 0.981 1.058 1.180 1.092 1.105   8.11
80) Di-n-butylph 1.460 1.370 1.345 1.280 1.246 1.326 1.357 1.265 1.331   5.17
81) Fluoranthene 1.217 1.212 1.093 1.010 0.975 1.062 1.203 1.078 1.106   8.51
82) Octadecane   0.521 0.532 0.492 0.441 0.425 0.473 0.496 0.482 0.483   7.57

83) I   Chrysene-d12          ----------------ISTD---------------------
84) Pyrene       1.495 1.530 1.377 1.322 1.292 1.343 1.482 1.353 1.399   6.42
85) Terphenyl-d1 0.906 0.914 0.846 0.826 0.808 0.838 0.911 0.823 0.859   5.13
86) Butylbenzylp 0.738 0.667 0.698 0.728 0.726 0.709 0.680 0.629 0.697   5.24
87) Butyl steara 0.411 0.374 0.403 0.399 0.385 0.403 0.363 0.363 0.388   4.93
88) Benzo[a]anth 1.326 1.297 1.166 1.091 1.056 1.125 1.387 1.150 1.200  10.07
89) 3,3'-Dichlor 0.444 0.454 0.452 0.411 0.394 0.428 0.421 0.426 0.429   4.82
90) Chrysene     1.337 1.353 1.196 1.142 1.127 1.180 1.394 1.181 1.239   8.46
91) bis(2-Ethylh 0.960 0.918 0.967 0.981 0.971 0.974 0.898 0.872 0.943   4.35

92) I   Perylene-d12          ----------------ISTD---------------------
93) Di-n-octylph 1.621 1.477 1.608 1.625 1.573 1.623 1.380 1.436 1.543   6.33
94) Benzo[b]fluo 1.424 1.385 1.251 1.127 1.104 1.185 1.349 1.240 1.258   9.45
95) Benzo[k]fluo 1.352 1.392 1.226 1.128 1.057 1.190 1.345 1.247 1.242   9.40
96) Benzo[a]pyre 1.170 1.186 1.120 1.092 1.048 1.103 1.146 1.073 1.117   4.27
97) Indeno[1,2,3 1.031 1.061 1.086 1.157 1.169 1.126 0.982 0.985 1.075   6.76
98) Dibenz(a,h)a 0.984 1.041 1.039 1.035 1.002 1.032 0.857 0.956 0.993   6.35
```

Initial Calibration Summary

Job Number: JC18516 **Sample:** E2M3649-ICC3649
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2M83073.D
Project: BMSMC, Building 5 Area, PR

```
 99) Dibenz[a,h]a 1.219 1.278 1.233 1.197 1.150 1.214 1.263 1.172 1.216   3.55
100) 7,12-Dimethy 0.616 0.611 0.562 0.495 0.468 0.524 0.580 0.543 0.550   9.63
101) Benzo[g,h,i] 1.267 1.284 1.201 1.191 1.164 1.202 1.268 1.148 1.216   4.18
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          M2M3649.M         Fri Apr 15 12:48:34 2016
```

Initial Calibration Summary

Job Number: JC18516 **Sample:** E2M3651-ICC3651
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2M83093.D
Project: BMSMC, Building 5 Area, PR

Response Factor Report MS

```
Method       : C:\MSDCHEM\1\METHODS\M2M3651.M (RTE Integrator)
Title        : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update  : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration

Calibration Files
2   =2m83096.D  5   =2m83095.D  25  =2m83098.D  80  =2m83092.D
100 =2m83091.D  50  =2m83093.D  1   =2m83097.D  10  =2m83094.D

 Compound          2     5     25    80    100   50    1     10    Avg %RSD
 ---------------------------------------------------------------------------
102)     1,4-Dichlorobenzene-d ----------------ISTD---------------------
103) Benzaldehyde 1.235 1.243 1.107 0.921 0.759 1.057 1.201 1.136 1.082  15.53

104)     Acenaphthene-d10a     ----------------ISTD---------------------
105) 1,2,4,5-Tetr 0.541 0.546 0.473 0.426 0.411 0.451 0.569 0.478 0.487  12.06

106)     Chrysene-d12a         ----------------ISTD---------------------
107) Benzidine    0.367 0.518 0.554 0.500 0.473 0.586       0.532 0.504  14.05
108) 1-chloroocta 0.281 0.329 0.331 0.325 0.312 0.335 0.251 0.319 0.310   9.46

109)     Phenanthrene-d10a     ----------------ISTD---------------------
110) Atrazine     0.076 0.089 0.092 0.094 0.093 0.096 0.065 0.092 0.087  12.55
111) o-terphenyl  0.528 0.552 0.491 0.444 0.425 0.469 0.527 0.503 0.492   8.98

112)     Naphthalene-d8a       ----------------ISTD---------------------
113) Hydroquinone       0.214 0.317 0.341 0.337 0.336       0.280 0.304  16.39

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

          M2M3649.M         Mon Apr 18 08:29:42 2016
```

Initial Calibration Verification

Job Number: JC18516 **Sample:** E2M3651-ICV3649
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2M83099.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\e2m3651\2m83099.D          Vial: 10
Acq On    : 15 Apr 2016   7:00 pm                    Operator: ashleyn
Sample    : icv3649-50                               Inst    : MS
Misc      : op92470,e2m3651                          Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\M2M3649.M (RTE Integrator)
Title        : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update  : Mon Apr 18 08:29:31 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	114	0.00	4.89
9	t	Phenol	2.092	1.671	20.1	97	0.00	4.63
12	t	2-Chlorophenol	1.576	1.405	10.9	109	0.00	4.73
19	t	2-Methylphenol	1.333	1.231	7.7	118	0.00	5.10
21	t	3&4-Methylphenol	1.404	1.298	7.5	119	0.00	5.22
24	I	Naphthalene-d8	1.000	1.000	0.0	109	0.00	6.02
29	t	2-Nitrophenol	0.199	0.187	6.0	103	0.00	5.65
30	t	2,4-Dimethylphenol	0.358	0.337	5.9	109	0.00	5.69
31	t	Benzoic acid	0.269	0.238	11.5	87	-0.01	5.79
33	t	2,4-Dichlorophenol	0.295	0.275	6.8	106	0.00	5.88
34	t	2,6-Dichlorophenol	0.288	0.267	7.3	108	0.00	6.11
43	t	4-Chloro-3-methylphenol	0.311	0.277	10.9	99	-0.01	6.62
47	I	Acenaphthene-d10	1.000	1.000	0.0	102	0.00	8.14
49	t	2,4,6-Trichlorophenol	0.315	0.310	1.6	107	0.00	7.15
50	t	2,4,5-Trichlorophenol	0.342	0.309	9.6	94	-0.01	7.19
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	100.000	78.254	21.7	76	0.00	8.24
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.155	0.142	8.4	91	0.00	8.36
64		2,3,4,6-Tetrachlorophenol	0.245	0.226	7.8	94	0.00	8.62
69	I	Phenanthrene-d10	1.000	1.000	0.0	97	0.00	10.34
70	t	4,6-Dinitro-2-methylpheno	0.129	0.128	0.8	84	0.00	9.01
76	t	Pentachlorophenol	0.130	0.126	3.1	90	0.00	10.07

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2m83093a.D M2M3649.M Mon Apr 18 08:53:21 2016

Initial Calibration Verification

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E2M3651-ICV3649
Lab FileID: 2M83100.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\e2m3651\2m83100.D          Vial: 11
Acq On    : 15 Apr 2016   7:26 pm                    Operator: ashleyn
Sample    : icv3649-50                               Inst    : MS
Misc      : op92470,e2m3651                          Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\M2M3649.M (RTE Integrator)
Title        : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update  : Mon Apr 18 08:29:31 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	113	0.00	4.90
3	t	Pyridine	1.648	1.508	8.5	107	0.08	2.88
10		Aniline	2.188	2.092	4.4	124	0.00	4.65
16	t	Benzyl alcohol	0.975	0.926	5.0	111	0.00	5.01
24	I	Naphthalene-d8	1.000	1.000	0.0	114	0.00	6.02
39	t	4-Chloroaniline	0.440	0.389	11.6	113	0.00	6.10
44	t	2-Methylnaphthalene	0.616	0.547	11.2	109	0.00	6.80
47	I	Acenaphthene-d10	1.000	1.000	0.0	113	0.00	8.14
54	t	2-Nitroaniline	0.311	0.277	10.9	101	0.00	7.54
58	t	3-Nitroaniline	0.336	0.301	10.4	99	0.00	8.09
62	t	Dibenzofuran	1.562	1.436	8.1	114	0.00	8.43
68	t	4-Nitroaniline	0.336	0.302	10.1	97	-0.01	8.97
69	I	Phenanthrene-d10	1.000	1.000	0.0	108	0.00	10.34
79	t	Carbazole	1.105	1.016	8.1	104	0.00	10.73

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2m83093a.D M2M3649.M Mon Apr 18 08:53:22 2016

Initial Calibration Verification

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E2M3651-ICV3649
Lab FileID: 2M83101.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\e2m3651\2m83101.D          Vial: 12
Acq On    : 15 Apr 2016   7:53 pm                    Operator: ashleyn
Sample    : icv3649-50                               Inst    : MS
Misc      : op92470,e2m3651                          Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\M2M3649.M (RTE Integrator)
Title        : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update  : Mon Apr 18 08:29:31 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	118	0.00	4.89
5	S	2-Fluorophenol	1.501	1.411	6.0	114	0.00	3.91
8	S	Phenol-d5	1.884	1.709	9.3	112	0.00	4.62
24	I	Naphthalene-d8	1.000	1.000	0.0	111	0.00	6.02
25	S	Nitrobenzene-d5	0.375	0.377	-0.5	118	0.00	5.35
47	I	Acenaphthene-d10	1.000	1.000	0.0	102	0.00	8.14
51	S	2-Fluorobiphenyl	1.269	1.290	-1.7	114	0.00	7.25
69	I	Phenanthrene-d10	1.000	1.000	0.0	95	0.00	10.34
73	S	2,4,6-Tribromophenol	0.103	0.101	1.9	91	0.00	9.29
83	I	Chrysene-d12	1.000	1.000	0.0	92	0.00	14.54
85	S	Terphenyl-d14	0.859	0.883	-2.8	97	0.00	12.91

```
(#) = Out of Range              SPCC's out = 0  CCC's out = 0
 2m83093a.D M2M3649.M        Mon Apr 18 08:53:23 2016
```

Initial Calibration Verification

Job Number: JC18516 **Sample:** E2M3651-ICV3649
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2M83102.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\e2m3651\2m83102.D          Vial: 13
Acq On    : 15 Apr 2016   8:19 pm                    Operator: ashleyn
Sample    : icv3649-50                               Inst    : MS
Misc      : op92470,e2m3651                          Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\M2M3649.M (RTE Integrator)
Title        : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update  : Mon Apr 18 08:29:31 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	104	0.00	4.89
4	t	N-Nitrosodimethylamine	0.989	0.947	4.2	102	0.00	2.76
11	t	bis(2-Chloroethyl)ether	1.502	1.498	0.3	108	0.00	4.68
14	t	1,3-Dichlorobenzene	1.721	1.704	1.0	110	0.00	4.85
15	t	1,4-Dichlorobenzene	1.732	1.707	1.4	110	0.00	4.91
17	t	1,2-Dichlorobenzene	1.608	1.623	-0.9	115	0.00	5.03
20	t	2,2'-oxybis(1-Chloropropa	1.606	1.423	11.4	112	0.00	5.11
22	t	n-Nitroso-di-n-propylamin	0.955	0.964	-0.9	116	0.00	5.22
23	t	Hexachloroethane	0.478	0.496	-3.8	114	0.00	5.32
24	I	Naphthalene-d8	1.000	1.000	0.0	99	0.00	6.02
26	t	Nitrobenzene	0.380	0.378	0.5	104	0.00	5.37
28	t	Isophorone	0.665	0.712	-7.1	111	0.00	5.57
32	t	bis(2-Chloroethoxy)methan	0.422	0.411	2.6	104	0.00	5.77
36	t	1,2,4-Trichlorobenzene	0.311	0.321	-3.2	109	0.00	5.96
38	t	Naphthalene	1.170	1.164	0.5	107	0.00	6.04
42	t	Hexachlorobutadiene	0.142	0.151	-6.3	112	0.00	6.17
47	I	Acenaphthene-d10	1.000	1.000	0.0	93	0.00	8.14
48	t	Hexachlorocyclopentadiene	0.258	0.244	5.5	88	0.00	7.00
52	t	2-Chloronaphthalene	1.150	1.182	-2.8	104	0.00	7.40
55	t	Dimethylphthalate	1.277	1.286	-0.7	99	0.00	7.78
56	t	Acenaphthylene	1.868	1.871	-0.2	98	0.00	7.94
57	t	2,6-Dinitrotoluene	0.274	0.284	-3.6	93	0.00	7.86
59	t	Acenaphthene	1.180	1.176	0.3	101	0.00	8.19
63	t	2,4-Dinitrotoluene	0.369	0.360	2.4	88	0.00	8.42
65	t	Diethylphthalate	1.229	1.204	2.0	94	0.00	8.79
66	t	Fluorene	1.282	1.245	2.9	98	0.00	8.93
67	t	4-Chlorophenyl-phenylethe	0.527	0.521	1.1	99	0.00	8.94
69	I	Phenanthrene-d10	1.000	1.000	0.0	88	0.00	10.34
71	t	n-Nitrosodiphenylamine	0.567	0.599	-5.6	96	0.00	9.12
72	t	1,2-Diphenylhydrazine	0.815	0.871	-6.9	96	0.00	9.17
74	t	4-Bromophenyl-phenylether	0.196	0.212	-8.2	98	0.00	9.68
75	t	Hexachlorobenzene	0.225	0.232	-3.1	96	0.00	9.76
77	t	Phenanthrene	1.219	1.215	0.3	95	0.00	10.38
78	t	Anthracene	1.198	1.198	0.0	92	0.00	10.45
80	t	Di-n-butylphthalate	1.331	1.356	-1.9	90	0.00	11.35
81	t	Fluoranthene	1.106	1.111	-0.5	92	0.00	12.25
83	I	Chrysene-d12	1.000	1.000	0.0	82	0.00	14.55
84	t	Pyrene	1.399	1.515	-8.3	93	0.00	12.60

Initial Calibration Verification

Job Number: JC18516 **Sample:** E2M3651-ICV3649
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2M83102.D
Project: BMSMC, Building 5 Area, PR

86	t	Butylbenzylphthalate	0.697	0.728	-4.4	85	0.00	13.74
88	t	Benzo[a]anthracene	1.200	1.195	0.4	87	0.00	14.53
90	t	Chrysene	1.239	1.233	0.5	86	0.00	14.59
91	t	bis(2-Ethylhexyl)phthalat	0.943	1.006	-6.7	85	0.00	14.69
92	I	Perylene-d12	1.000	1.000	0.0	78	0.00	16.67
93	t	Di-n-octylphthalate	1.543	1.700	-10.2	82	0.00	15.68
94	t	Benzo[b]fluoranthene	1.258	1.261	-0.2	83	0.00	16.14
95	t	Benzo[k]fluoranthene	1.242	1.335	-7.5	88	0.00	16.19
96	t	Benzo[a]pyrene	1.117	1.188	-6.4	84	0.00	16.59
97	t	Indeno[1,2,3-cd]pyrene	1.075	1.205	-12.1	84	0.00	18.35
99	t	Dibenz[a,h]anthracene	1.216	1.263	-3.9	81	0.00	18.39
101	t	Benzo[g,h,i]perylene	1.216	1.264	-3.9	82	0.00	18.83

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2m83093a.D M2M3649.M Mon Apr 18 08:53:24 2016

Initial Calibration Verification

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E2M3651-ICV3651
Lab FileID: 2M83102A.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\e2m3651\2m83102a.D         Vial: 13
Acq On    : 15 Apr 2016   8:19 pm                    Operator: ashleyn
Sample    : icv3651-50                               Inst    : MS
Misc      : op92470,e2m3651                          Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\M2M3649.M (RTE Integrator)
Title        : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update  : Mon Apr 18 08:29:31 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.
104	Acenaphthene-d10a	1.000	1.000	0.0	96	0.00	8.14
105	1,2,4,5-Tetrachlorobenzen	0.487	0.496	-1.8	106	0.00	7.00
106	Chrysene-d12a	1.000	1.000	0.0	70	0.00	14.55
107	Benzidine	0.504	0.448	11.1	54	0.00	12.51

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2m83093a.D M2M3649.M Mon Apr 18 08:53:25 2016

Initial Calibration Verification

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E2M3651-ICV3651
Lab FileID: 2M83103A.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\e2m3651\2m83103a.D        Vial: 14
Acq On    : 15 Apr 2016   8:46 pm                   Operator: ashleyn
Sample    : icv3651-50                              Inst    : MS
Misc      : op92470,e2m3651                         Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\M2M3649.M (RTE Integrator)
Title        : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update  : Mon Apr 18 08:29:31 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.
102	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	107	0.00	4.89
103	Benzaldehyde	1.082	1.144	-5.7	116	0.00	4.56
109	Phenanthrene-d10a	1.000	1.000	0.0	91	0.00	10.34
110	Atrazine	0.087	0.102	-17.2	97	0.00	9.97

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2m83093a.D M2M3649.M Mon Apr 18 08:53:27 2016

Initial Calibration Verification

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E2M3651-ICV3649
Lab FileID: 2M83103.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e2m3651\2m83103.D Vial: 14
Acq On : 15 Apr 2016 8:46 pm Operator: ashleyn
Sample : icv3649-50 Inst : MS
Misc : op92470,e2m3651 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M2M3649.M (RTE Integrator)
Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update : Mon Apr 18 08:29:31 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	118	0.00	4.89
2	t	1,4-Dioxane	0.669	0.621	7.2	117	0.01	2.48
6	t	Indene	2.468	2.489	-0.9	136	0.00	5.10
7	t	Cumene	3.637	3.349	7.9	116	0.00	4.29
13	t	Decane	1.205	1.069	11.3	117	0.00	4.76
18	t	Acetophenone	1.937	1.842	4.9	126	0.00	5.22
24	I	Naphthalene-d8	1.000	1.000	0.0	129	0.00	6.02
27	t	Quinoline	0.768	0.607	21.0	107	-0.01	6.39
40	t	2,3-Dichloroaniline	0.352	0.247	29.8	98	0.00	7.14
41	t	Caprolactam	0.138	0.105	23.9	98	-0.03	6.45
45	t	1-Methylnaphthalene	0.641	0.503	21.5	109	0.00	6.92
46	t	Dimethylnaphthalene	0.644	0.503	21.9	109	0.00	7.58
47	I	Acenaphthene-d10	1.000	1.000	0.0	103	0.00	8.14
53	t	Biphenyl	1.520	1.469	3.4	109	0.00	7.37
69	I	Phenanthrene-d10	1.000	1.000	0.0	98	0.00	10.34
82	t	Octadecane	0.483	0.493	-2.1	103	0.00	10.27
92	I	Perylene-d12	1.000	1.000	0.0	85	0.00	16.67
100	t	7,12-Dimethylbenz(a)anthr	0.550	0.545	0.9	88	-0.01	16.14

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2m83093a.D M2M3649.M Mon Apr 18 08:53:26 2016

Initial Calibration Verification

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E2M3651-ICV3651
Lab FileID: 2M83104.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\e2m3651\2m83104.D          Vial: 15
Acq On    : 15 Apr 2016   9:12 pm                    Operator: ashleyn
Sample    : icv3651-50                               Inst    : MS
Misc      : op92470,e2m3651                          Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\M2M3649.M (RTE Integrator)
Title        : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update  : Mon Apr 18 08:29:31 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.
112	Naphthalene-d8a	1.000	1.000	0.0	93	0.00	6.02
113	Hydroquinone	0.304	0.353	-16.1	98	0.00	6.45

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2m83093a.D M2M3649.M Mon Apr 18 08:53:28 2016

Initial Calibration Verification

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E2M3651-ICV3649
Lab FileID: 2M83105.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\e2m3651\2m83105.D          Vial: 16
Acq On    : 15 Apr 2016   9:39 pm                    Operator: ashleyn
Sample    : icv3649-50                               Inst    : MS
Misc      : op92470,e2m3651                          Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\M2M3649.M (RTE Integrator)
Title        : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update  : Mon Apr 18 08:29:31 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	0.00	14.54
89 t	3,3'-Dichlorobenzidine	0.429	0.392	8.6	99	0.00	14.53

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2m83093a.D M2M3649.M Mon Apr 18 08:53:29 2016

Continuing Calibration Summary

Job Number: JC18516 **Sample:** E2M3655-CC3649
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2M83204.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\e2m3655\2m83204.D          Vial: 2
Acq On    : 20 Apr 2016  10:07 am                    Operator: ashleyn
Sample    : cc3649-25                                Inst    : MS
Misc      : op92330,e2m3655                          Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\M2M3649.M (RTE Integrator)
Title        : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update  : Mon Apr 18 20:20:49 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	95	-0.02	4.87
2	t	1,4-Dioxane	0.669	0.623	6.9	94	-0.03	2.45
3	t	Pyridine	1.648	1.607	2.5	97	-0.04	2.77
4	t	N-Nitrosodimethylamine	0.989	0.992	-0.3	99	-0.03	2.73
5	S	2-Fluorophenol	1.501	1.531	-2.0	99	-0.12	3.89
6	t	Indene	2.468	2.480	-0.5	97	-0.03	5.08
7	t	Cumene	3.637	3.674	-1.0	100	-0.03	4.26
8	S	Phenol-d5	1.884	1.928	-2.3	99	-0.02	4.60
9	t	Phenol	2.092	2.096	-0.2	98	-0.02	4.61
10		Aniline	2.188	1.957	10.6	86	-0.03	4.62
11	t	bis(2-Chloroethyl)ether	1.502	1.495	0.5	100	-0.03	4.66
12	t	2-Chlorophenol	1.576	1.618	-2.7	99	-0.02	4.72
13	t	Decane	1.205	1.214	-0.7	99	-0.02	4.74
14	t	1,3-Dichlorobenzene	1.721	1.750	-1.7	100	-0.03	4.83
15	t	1,4-Dichlorobenzene	1.732	1.745	-0.8	99	-0.03	4.88
16	t	Benzyl alcohol	0.975	1.027	-5.3	101	-0.02	4.99
17	t	1,2-Dichlorobenzene	1.608	1.627	-1.2	100	-0.03	5.01
18	t	Acetophenone	1.937	1.970	-1.7	99	-0.03	5.19
19	t	2-Methylphenol	1.333	1.312	1.6	94	-0.03	5.08
20	t	2,2'-oxybis(1-Chloropropa	1.606	1.559	2.9	99	-0.02	5.09
21	t	3&4-Methylphenol	1.404	1.446	-3.0	99	-0.02	5.21
22	t	n-Nitroso-di-n-propylamin	0.955	1.023	-7.1	103	-0.03	5.19
23	t	Hexachloroethane	0.478	0.499	-4.4	102	-0.03	5.29
24	I	Naphthalene-d8	1.000	1.000	0.0	96	-0.03	6.00
25	S	Nitrobenzene-d5	0.375	0.384	-2.4	100	-0.03	5.33
26	t	Nitrobenzene	0.380	0.391	-2.9	101	-0.03	5.34
27	t	Quinoline	0.768	0.769	-0.1	100	-0.04	6.37
28	t	Isophorone	0.665	0.695	-4.5	102	-0.03	5.55
29	t	2-Nitrophenol	0.199	0.217	-9.0	103	-0.03	5.63
30	t	2,4-Dimethylphenol	0.358	0.340	5.0	93	-0.03	5.67
31	t	Benzoic acid	0.269	0.303	-12.6	103	-0.05	5.76
32	t	bis(2-Chloroethoxy)methan	0.422	0.428	-1.4	103	-0.03	5.75
33	t	2,4-Dichlorophenol	0.295	0.311	-5.4	103	-0.03	5.86
34	t	2,6-Dichlorophenol	0.288	0.303	-5.2	102	-0.03	6.08
35		1,3,5-Trichlorobenzene	0.322	0.327	-1.6	100	-0.03	5.64
36	t	1,2,4-Trichlorobenzene	0.311	0.323	-3.9	103	-0.03	5.94
37		1,2,3-Trichlorobenzene	0.301	0.307	-2.0	102	-0.03	6.17
38	t	Naphthalene	1.170	1.152	1.5	98	-0.03	6.02
39	t	4-Chloroaniline	0.440	0.431	2.0	95	-0.03	6.07
40	t	2,3-Dichloroaniline	0.352	0.370	-5.1	103	-0.03	7.11
41	t	Caprolactam	0.138	0.149	-8.0	105	-0.04	6.45

Continuing Calibration Summary

Job Number: JC18516 **Sample:** E2M3655-CC3649
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2M83204.D
Project: BMSMC, Building 5 Area, PR

42	t	Hexachlorobutadiene	0.142	0.152	-7.0	107	-0.03	6.15
43	t	4-Chloro-3-methylphenol	0.311	0.341	-9.6	106	-0.03	6.61
44	t	2-Methylnaphthalene	0.616	0.633	-2.8	101	-0.03	6.77
45	t	1-Methylnaphthalene	0.641	0.652	-1.7	100	-0.03	6.89
46	t	Dimethylnaphthalene	0.644	0.663	-3.0	101	-0.03	7.55
47	I	Acenaphthene-d10	1.000	1.000	0.0	98	-0.03	8.11
48	t	Hexachlorocyclopentadiene	0.258	0.223	13.6	81	-0.03	6.96
49	t	2,4,6-Trichlorophenol	0.315	0.344	-9.2	106	-0.03	7.12
50	t	2,4,5-Trichlorophenol	0.342	0.367	-7.3	105	-0.03	7.17
51	S	2-Fluorobiphenyl	1.269	1.266	0.2	101	-0.03	7.22
52	t	2-Chloronaphthalene	1.150	1.177	-2.3	103	-0.03	7.37
53	t	Biphenyl	1.520	1.528	-0.5	101	-0.03	7.34
54	t	2-Nitroaniline	0.311	0.339	-9.0	106	-0.03	7.50
55	t	Dimethylphthalate	1.277	1.360	-6.5	107	-0.03	7.76
56	t	Acenaphthylene	1.868	1.932	-3.4	101	-0.03	7.92
57	t	2,6-Dinitrotoluene	0.274	0.314	-14.6	109	-0.03	7.83
58	t	3-Nitroaniline	0.336	0.361	-7.4	100	-0.04	8.06
59	t	Acenaphthene	1.180	1.151	2.5	98	-0.03	8.16
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	50.000	48.833	2.3	97	-0.03	8.21
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.155	0.184	-18.7	114	-0.02	8.35
62	t	Dibenzofuran	1.562	1.584	-1.4	103	-0.04	8.40
63	t	2,4-Dinitrotoluene	0.369	0.421	-14.1	105	-0.03	8.39
64		2,3,4,6-Tetrachlorophenol	0.245	0.279	-13.9	110	-0.03	8.59
65	t	Diethylphthalate	1.229	1.353	-10.1	110	-0.03	8.77
66	t	Fluorene	1.282	1.317	-2.7	102	-0.03	8.90
67	t	4-Chlorophenyl-phenylethe	0.527	0.566	-7.4	107	-0.03	8.91
68	t	4-Nitroaniline	0.336	0.368	-9.5	102	-0.04	8.94
69	I	Phenanthrene-d10	1.000	1.000	0.0	100	-0.03	10.31
70	t	4,6-Dinitro-2-methylpheno	0.129	0.144	-11.6	102	-0.03	8.99
71	t	n-Nitrosodiphenylamine	0.567	0.617	-8.8	109	-0.04	9.09
72	t	1,2-Diphenylhydrazine	0.815	0.837	-2.7	102	-0.04	9.14
73	S	2,4,6-Tribromophenol	0.103	0.119	-15.5	112	-0.03	9.25
74	t	4-Bromophenyl-phenylether	0.196	0.219	-11.7	114	-0.03	9.64
75	t	Hexachlorobenzene	0.225	0.240	-6.7	108	-0.03	9.73
76	t	Pentachlorophenol	0.130	0.150	-15.4	109	-0.03	10.04
77	t	Phenanthrene	1.219	1.203	1.3	102	-0.03	10.35
78	t	Anthracene	1.198	1.227	-2.4	102	-0.03	10.43
79	t	Carbazole	1.105	1.152	-4.3	104	-0.03	10.70
80	t	Di-n-butylphthalate	1.331	1.508	-13.3	112	-0.03	11.31
81	t	Fluoranthene	1.106	1.167	-5.5	107	-0.04	12.22
82	t	Octadecane	0.483	0.522	-8.1	106	-0.03	10.24
83	I	Chrysene-d12	1.000	1.000	0.0	101	-0.03	14.52
84	t	Pyrene	1.399	1.423	-1.7	104	-0.03	12.57
85	S	Terphenyl-d14	0.859	0.905	-5.4	108	-0.03	12.87
86	t	Butylbenzylphthalate	0.697	0.788	-13.1	114	-0.03	13.70
87		Butyl stearate	0.388	0.432	-11.3	108	-0.03	13.86
88	t	Benzo[a]anthracene	1.200	1.221	-1.8	106	-0.03	14.50
89	t	3,3'-Dichlorobenzidine	0.429	0.470	-9.6	105	-0.03	14.50
90	t	Chrysene	1.239	1.214	2.0	103	-0.04	14.55
91	t	bis(2-Ethylhexyl)phthalat	0.943	1.069	-13.4	112	-0.03	14.66
92	I	Perylene-d12	1.000	1.000	0.0	101	-0.03	16.64
93	t	Di-n-octylphthalate	1.543	1.867	-21.0#	118	-0.03	15.65

Continuing Calibration Summary

Job Number: JC18516 **Sample:** E2M3655-CC3649
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2M83204.D
Project: BMSMC, Building 5 Area, PR

94	t	Benzo[b]fluoranthene	1.258	1.288	-2.4	104	-0.04	16.11
95	t	Benzo[k]fluoranthene	1.242	1.258	-1.3	104	-0.04	16.15
96	t	Benzo[a]pyrene	1.117	1.167	-4.5	106	-0.03	16.56
97	t	Indeno[1,2,3-cd]pyrene	1.075	1.166	-8.5	109	-0.05	18.30
98	t	Dibenz(a,h)acridine	0.993	1.075	-8.3	105	-0.04	17.92
99	t	Dibenz[a,h]anthracene	1.216	1.202	1.2	99	-0.05	18.34
100	t	7,12-Dimethylbenz(a)anthr	0.550	0.554	-0.7	100	-0.04	16.11
101	t	Benzo[g,h,i]perylene	1.216	1.195	1.7	101	-0.06	18.77

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2m83098a.D M2M3649.M Wed Apr 20 13:19:48 2016

Continuing Calibration Summary

Job Number: JC18516 **Sample:** E2M3655-CC3651
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2M83205.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\e2m3655\2m83205.D          Vial: 3
Acq On    : 20 Apr 2016  10:33 am                     Operator: ashleyn
Sample    : cc3651-25                                 Inst    : MS
Misc      : op92330,e2m3655                           Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\M2M3649.M (RTE Integrator)
Title        : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
Last Update  : Mon Apr 18 20:20:49 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	88	-0.03	4.87
103	Benzaldehyde	1.082	1.182	-9.2	94	-0.02	4.54
104	Acenaphthene-d10a	1.000	1.000	0.0	99	-0.03	8.11
105	1,2,4,5-Tetrachlorobenzen	0.487	0.458	6.0	96	-0.03	6.98
106	Chrysene-d12a	1.000	1.000	0.0	91	-0.03	14.51
107	Benzidine	0.504	0.558	-10.7	92	-0.03	12.47
108	Phenanthrene-d10a	1.000	1.000	0.0	93	-0.03	10.31
109	Atrazine	0.087	0.113	-29.9#	114	-0.04	9.93
110	Naphthalene-d8a	1.000	1.000	0.0	85	-0.03	6.00
111	Hydroquinone	0.304	0.401	-31.9#	108	-0.01	6.44

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2m83098a.D M2M3649.M Wed Apr 20 13:19:49 2016

Initial Calibration Summary

Job Number: JC18516
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: JC18516
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: JC18516
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: JC18516
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: JC18516
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: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E3E3623-ICC3623
Lab FileID: 3E82697.D

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: JC18516 **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: JC18516 **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: JC18516 **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: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E3E3623-ICV3623
Lab FileID: 3E82705.D

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: JC18516
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: JC18516 **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: JC18516 **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

Initial Calibration Verification

Job Number: JC18516 **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: JC18516
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: JC18516 **Sample:** E3E3626-CC3623
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3E82747.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E3E3626\3E82747.D Vial: 2
Acq On : 29 Apr 2016 9:47 am Operator: ashleyn
Sample : cc3623-25 Inst : MS3E
Misc : op93161,e3e3626 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 Apr 29 12:32:30 2016
Last Update : Fri Apr 29 12:32:30 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	145	-0.02	4.52
2	t	1,4-Dioxane	0.365	0.273	25.2#	115	-0.02	2.01
3	t	Pyridine	1.037	0.685	33.9#	94	-0.02	2.35
4	t	N-Nitrosodimethylamine	0.590	0.391	33.7#	91	-0.02	2.32
5	S	2-Fluorophenol	1.226	1.160	5.4	135	-0.01	3.54
6	t	Indene	2.386	2.210	7.4	137	-0.02	4.71
7	t	Cumene	3.490	3.192	8.5	136	-0.02	3.91
8	S	Phenol-d5	1.595	1.508	5.5	139	0.00	4.28
9	t	Phenol	1.749	1.584	9.4	133	0.00	4.29
10		Aniline	2.031	1.707	16.0	121	-0.02	4.28
11	t	bis(2-Chloroethyl)ether	1.200	1.086	9.5	135	-0.02	4.33
12	t	2-Chlorophenol	1.449	1.357	6.3	137	-0.02	4.37
13	t	Decane	1.534	1.385	9.7	133	-0.02	4.39
14	t	1,3-Dichlorobenzene	1.585	1.519	4.2	141	-0.02	4.47
15	t	1,4-Dichlorobenzene	1.663	1.551	6.7	143	-0.02	4.53
16	t	Benzyl alcohol	0.884	0.839	5.1	136	-0.02	4.63
17	t	1,2-Dichlorobenzene	1.498	1.422	5.1	140	-0.02	4.64
18	t	Acetophenone	1.984	1.776	10.5	131	-0.02	4.83
19	t	2-Methylphenol	1.226	1.128	8.0	136	-0.01	4.74
20	t	2,2'-oxybis(1-Chloropropa	0.491	0.440	10.4	130	-0.02	4.73
21	t	3&4-Methylphenol	1.288	1.150	10.7	130	-0.01	4.86
22	t	n-Nitroso-di-n-propylamin	1.051	0.931	11.4	127	-0.02	4.83
23	t	Hexachloroethane	0.532	0.503	5.5	142	-0.02	4.90
24	I	Naphthalene-d8	1.000	1.000	0.0	129	-0.02	5.58
25	S	Nitrobenzene-d5	0.400	0.403	-0.8	129	-0.02	4.95
26	t	Nitrobenzene	0.413	0.409	1.0	128	-0.02	4.97
27	t	Quinoline	0.696	0.663	4.7	125	-0.03	5.94
28	t	Isophorone	0.671	0.658	1.9	129	-0.02	5.17
29	t	2-Nitrophenol	0.211	0.215	-1.9	135	-0.02	5.24
30	t	2,4-Dimethylphenol	0.364	0.369	-1.4	128	-0.02	5.29
31	t	Benzoic acid	0.268	0.252	6.0	114	-0.04	5.40
32	t	bis(2-Chloroethoxy)methan	0.365	0.359	1.6	131	-0.02	5.36
33	t	2,4-Dichlorophenol	0.284	0.297	-4.6	133	-0.02	5.47
34	t	2,6-Dichlorophenol	0.290	0.283	2.4	129	-0.02	5.67
35		1,3,5-Trichlorobenzene	0.343	0.358	-4.4	142	-0.02	5.24
36	t	1,2,4-Trichlorobenzene	0.324	0.324	0.0	135	-0.02	5.53
37		1,2,3-Trichlorobenzene	0.312	0.310	0.6	132	-0.02	5.74
38	t	Naphthalene	1.106	1.055	4.6	129	-0.03	5.60
39	t	4-Chloroaniline	0.451	0.385	14.6	111	-0.02	5.66
40	t	2,3-Dichloroaniline	0.358	0.341	4.7	127	-0.02	6.65
41	t	Caprolactam	0.151	0.138	8.6	113	-0.03	6.04

Continuing Calibration Summary

Job Number: JC18516 **Sample:** E3E3626-CC3623
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3E82747.D
Project: BMSMC, Building 5 Area, PR

42	t	Hexachlorobutadiene	0.194	0.194	0.0	134	-0.03	5.71
43	t	4-Chloro-3-methylphenol	0.324	0.300	7.4	120	-0.02	6.19
44	t	2-Methylnaphthalene	0.628	0.597	4.9	125	-0.02	6.32
45	t	1-Methylnaphthalene	0.655	0.624	4.7	125	-0.03	6.43
46	t	Dimethylnaphthalene	0.634	0.600	5.4	124	-0.03	7.07
47	I	Acenaphthene-d10	1.000	1.000	0.0	122	-0.03	7.61
		----------	True	Calc.	% Drift	----------		
48	t	Hexachlorocyclopentadiene	50.000	45.777	8.4	117	-0.02	6.49
		----------	AvgRF	CCRF	% Dev	----------		
49	t	2,4,6-Trichlorophenol	0.363	0.371	-2.2	126	-0.02	6.66
50	t	2,4,5-Trichlorophenol	0.404	0.409	-1.2	134	-0.01	6.73
51	S	2-Fluorobiphenyl	1.327	1.330	-0.2	128	-0.02	6.75
52	t	2-Chloronaphthalene	1.134	1.109	2.2	124	-0.03	6.89
53	t	Biphenyl	1.512	1.492	1.3	127	-0.03	6.87
54	t	2-Nitroaniline	0.420	0.395	6.0	116	-0.02	7.04
55	t	Dimethylphthalate	1.328	1.281	3.5	121	-0.03	7.28
56	t	Acenaphthylene	1.892	1.854	2.0	124	-0.03	7.42
57	t	2,6-Dinitrotoluene	0.297	0.291	2.0	120	-0.03	7.36
58	t	3-Nitroaniline	0.331	0.298	10.0	111	-0.03	7.59
59	t	Acenaphthene	1.257	1.189	5.4	124	-0.03	7.65
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	50.000	38.604	22.8#	99	0.00	7.74
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.214	0.208	2.8	118	0.00	7.91
62	t	Dibenzofuran	1.654	1.585	4.2	123	-0.03	7.89
63	t	2,4-Dinitrotoluene	0.407	0.402	1.2	119	-0.03	7.92
64		2,3,4,6-Tetrachlorophenol	0.299	0.310	-3.7	130	-0.02	8.09
65	t	Diethylphthalate	1.395	1.306	6.4	116	-0.03	8.27
66	t	Fluorene	1.385	1.331	3.9	122	-0.03	8.38
67	t	4-Chlorophenyl-phenylethe	0.631	0.610	3.3	122	-0.03	8.40
68	t	4-Nitroaniline	0.318	0.288	9.4	109	-0.03	8.45
69	I	Phenanthrene-d10	1.000	1.000	0.0	116	-0.03	9.77
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	25.000	21.521	13.9	102	-0.03	8.50
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.556	0.559	-0.5	121	-0.03	8.59
72	t	1,2-Diphenylhydrazine	0.828	0.796	3.9	113	-0.03	8.63
73	S	2,4,6-Tribromophenol	0.141	0.155	-9.9	128	-0.03	8.74
74	t	4-Bromophenyl-phenylether	0.238	0.245	-2.9	128	-0.03	9.12
75	t	Hexachlorobenzene	0.285	0.288	-1.1	125	-0.03	9.18
76	t	Pentachlorophenol	0.136	0.140	-2.9	117	-0.02	9.52
77	t	Phenanthrene	1.161	1.087	6.4	115	-0.03	9.81
78	t	Anthracene	1.163	1.115	4.1	115	-0.03	9.88
79	t	Carbazole	1.052	0.989	6.0	114	-0.03	10.17
80	t	Di-n-butylphthalate	1.359	1.283	5.6	110	-0.03	10.80
81	t	Fluoranthene	1.259	1.181	6.2	113	-0.03	11.66
82	t	Octadecane	0.473	0.449	5.1	114	-0.03	9.73
83	I	Chrysene-d12	1.000	1.000	0.0	100	-0.04	13.95
84	t	Pyrene	1.197	1.352	-12.9	115	-0.03	12.01
85	S	Terphenyl-d14	0.840	0.942	-12.1	113	-0.03	12.33
86	t	Butylbenzylphthalate	0.571	0.592	-3.7	101	-0.03	13.17

Continuing Calibration Summary

Job Number: JC18516 **Sample:** E3E3626-CC3623
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3E82747.D
Project: BMSMC, Building 5 Area, PR

87		Butyl stearate	0.300	0.288	4.0	94	-0.03	13.35
88	t	Benzo[a]anthracene	1.169	1.157	1.0	102	-0.03	13.94
89	t	3,3'-Dichlorobenzidine	0.435	0.401	7.8	90	-0.03	13.95
90	t	Chrysene	1.091	0.977	10.4	91	-0.03	13.99
91	t	bis(2-Ethylhexyl)phthalat	0.735	0.686	6.7	87	-0.03	14.14
92	I	Perylene-d12	1.000	1.000	0.0	71	-0.03	16.06
		----------	True	Calc.	% Drift	----------		
93	t	Di-n-octylphthalate	25.000	25.486	-1.9	73	-0.03	15.13
		----------	AvgRF	CCRF	% Dev	----------		
94	t	Benzo[b]fluoranthene	1.352	1.315	2.7	70	-0.04	15.54
95	t	Benzo[k]fluoranthene	1.207	1.197	0.8	72	-0.04	15.58
96	t	Benzo[a]pyrene	1.129	1.100	2.6	70	-0.04	15.98
97	t	Indeno[1,2,3-cd]pyrene	1.076	1.042	3.2	69	-0.05	17.52
98	t	Dibenz(a,h)acridine	1.012	0.971	4.1	69	-0.04	17.19
99	t	Dibenz[a,h]anthracene	1.068	1.102	-3.2	73	-0.05	17.55
100	t	7,12-Dimethylbenz(a)anthr	0.603	0.631	-4.6	73	-0.04	15.54
101	t	Benzo[g,h,i]perylene	1.036	1.061	-2.4	73	-0.05	17.92

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3E82672a.D M3E3623.M Fri Apr 29 12:36:59 2016 MS3E

6.7.26
6

Continuing Calibration Summary

Job Number: JC18516 **Sample:** E3E3626-CC3621
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3E82749.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E3E3626\3E82749.D Vial: 3
Acq On : 29 Apr 2016 10:38 am Operator: ashleyn
Sample : cc3621-25 Inst : MS3E
Misc : op93161,e3e3626 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 Apr 29 12:32:30 2016
Last Update : Fri Apr 29 12:32:30 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	81	-0.03	4.51
103	Benzaldehyde	1.084	0.949	12.5	72	-0.03	4.19
104	Acenaphthene-d10a	1.000	1.000	0.0	87	-0.03	7.61
105	1,2,4,5-Tetrachlorobenzen	0.495	0.576	-16.4	106	-0.03	6.51
106	Phenanthrene-d10a	1.000	1.000	0.0	94	-0.04	9.77
107	Atrazine	0.102	0.113	-10.8	107	-0.04	9.44
108 I	Chrysene-d12a	1.000	1.000	0.0	107	-0.05	13.94
109 T	benzidine	0.492	0.276	43.9#	59	-0.04	11.94
110 I	Naphthalene-d8a	1.000	1.000	0.0	78	-0.03	5.58
111 T	Hydroquinone	0.275	0.288	-4.7	77	-0.02	6.04

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3E82672a.D M3E3623.M Fri Apr 29 12:37:00 2016 MS3E

Continuing Calibration Summary

Job Number: JC18516 **Sample:** E3E3627-ECC3623
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3E82768.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\E3E3627\3E82768.D Vial: 11
Acq On : 29 Apr 2016 7:41 pm Operator: seanb1
Sample : ecc3623-50 Inst : MS3E
Misc : op93227,e3e3627 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 Apr 29 12:31:53 2016
Last Update : Fri Apr 29 12:31:53 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	111	-0.03	4.51
2	t	1,4-Dioxane	0.365	0.266	27.1	91	-0.03	2.00
3	t	Pyridine	1.037	0.765	26.2	82	-0.03	2.34
4	t	N-Nitrosodimethylamine	0.590	0.425	28.0	78	-0.03	2.31
5	S	2-Fluorophenol	1.226	1.202	2.0	108	-0.02	3.53
6	t	Indene	2.386	2.243	6.0	107	-0.03	4.70
7	t	Cumene	3.490	3.556	-1.9	116	-0.02	3.90
8	S	Phenol-d5	1.595	1.686	-5.7	116	-0.02	4.27
9	t	Phenol	1.749	1.742	0.4	108	-0.02	4.28
10		Aniline	2.031	1.921	5.4	100	-0.02	4.27
11	t	bis(2-Chloroethyl)ether	1.200	1.154	3.8	112	-0.02	4.32
12	t	2-Chlorophenol	1.449	1.472	-1.6	115	-0.02	4.36
13	t	Decane	1.534	1.571	-2.4	115	-0.03	4.38
14	t	1,3-Dichlorobenzene	1.585	1.585	0.0	115	-0.03	4.46
15	t	1,4-Dichlorobenzene	1.663	1.622	2.5	115	-0.02	4.52
16	t	Benzyl alcohol	0.884	0.896	-1.4	111	-0.02	4.63
17	t	1,2-Dichlorobenzene	1.498	1.467	2.1	113	-0.02	4.64
18	t	Acetophenone	1.984	1.916	3.4	109	-0.03	4.82
19	t	2-Methylphenol	1.226	1.082	11.7	101	-0.02	4.73
20	t	2,2'-oxybis(1-Chloropropa	0.491	0.454	7.5	106	-0.03	4.72
21	t	3&4-Methylphenol	1.288	1.141	11.4	100	-0.02	4.85
22	t	n-Nitroso-di-n-propylamin	1.051	1.000	4.9	105	-0.03	4.83
23	t	Hexachloroethane	0.532	0.484	9.0	109	-0.03	4.90
24	I	Naphthalene-d8	1.000	1.000	0.0	105	-0.03	5.57
25	S	Nitrobenzene-d5	0.400	0.422	-5.5	110	-0.03	4.95
26	t	Nitrobenzene	0.413	0.425	-2.9	108	-0.03	4.96
27	t	Quinoline	0.696	0.652	6.3	101	-0.03	5.94
28	t	Isophorone	0.671	0.677	-0.9	105	-0.03	5.17
29	t	2-Nitrophenol	0.211	0.222	-5.2	108	-0.03	5.23
30	t	2,4-Dimethylphenol	0.364	0.384	-5.5	107	-0.02	5.28
31	t	Benzoic acid	0.268	0.271	-1.1	98	-0.01	5.43
32	t	bis(2-Chloroethoxy)methan	0.365	0.355	2.7	103	-0.03	5.35
33	t	2,4-Dichlorophenol	0.284	0.295	-3.9	108	-0.03	5.46
34	t	2,6-Dichlorophenol	0.290	0.293	-1.0	108	-0.03	5.66
35		1,3,5-Trichlorobenzene	0.343	0.348	-1.5	109	-0.03	5.23
36	t	1,2,4-Trichlorobenzene	0.324	0.318	1.9	109	-0.03	5.52
37		1,2,3-Trichlorobenzene	0.312	0.292	6.4	103	-0.03	5.73
38	t	Naphthalene	1.106	1.086	1.8	106	-0.03	5.59
39	t	4-Chloroaniline	0.451	0.451	0.0	104	-0.03	5.66
40	t	2,3-Dichloroaniline	0.358	0.339	5.3	103	-0.03	6.64
41	t	Caprolactam	0.151	0.140	7.3	99	-0.02	6.05

Continuing Calibration Summary

Job Number: JC18516 **Sample:** E3E3627-ECC3623
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3E82768.D
Project: BMSMC, Building 5 Area, PR

42	t	Hexachlorobutadiene	0.194	0.192	1.0	111	-0.03	5.71
43	t	4-Chloro-3-methylphenol	0.324	0.322	0.6	107	-0.02	6.19
44	t	2-Methylnaphthalene	0.628	0.622	1.0	105	-0.03	6.31
45	t	1-Methylnaphthalene	0.655	0.631	3.7	104	-0.03	6.42
46	t	Dimethylnaphthalene	0.634	0.614	3.2	104	-0.03	7.06
47	I	Acenaphthene-d10	1.000	1.000	0.0	105	-0.04	7.60
		----------	True	Calc.	% Drift	----------		
48	t	Hexachlorocyclopentadiene	100.000	105.955	-6.0	109	-0.03	6.48
		----------	AvgRF	CCRF	% Dev	----------		
49	t	2,4,6-Trichlorophenol	0.363	0.375	-3.3	105	-0.03	6.66
50	t	2,4,5-Trichlorophenol	0.404	0.392	3.0	103	-0.02	6.72
51	S	2-Fluorobiphenyl	1.327	1.305	1.7	104	-0.03	6.74
52	t	2-Chloronaphthalene	1.134	1.138	-0.4	105	-0.03	6.89
53	t	Biphenyl	1.512	1.546	-2.2	106	-0.03	6.87
54	t	2-Nitroaniline	0.420	0.461	-9.8	114	-0.03	7.04
55	t	Dimethylphthalate	1.328	1.326	0.2	105	-0.03	7.28
56	t	Acenaphthylene	1.892	1.863	1.5	103	-0.03	7.41
57	t	2,6-Dinitrotoluene	0.297	0.300	-1.0	102	-0.03	7.36
58	t	3-Nitroaniline	0.331	0.335	-1.2	102	-0.03	7.58
59	t	Acenaphthene	1.257	1.259	-0.2	105	-0.03	7.65
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	100.000	103.239	-3.2	106	0.00	7.74
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.214	0.250	-16.8	113	-0.02	7.90
62	t	Dibenzofuran	1.654	1.608	2.8	104	-0.03	7.89
63	t	2,4-Dinitrotoluene	0.407	0.422	-3.7	102	-0.03	7.91
64		2,3,4,6-Tetrachlorophenol	0.299	0.295	1.3	100	-0.03	8.09
65	t	Diethylphthalate	1.395	1.453	-4.2	108	-0.04	8.27
66	t	Fluorene	1.385	1.373	0.9	104	-0.04	8.37
67	t	4-Chlorophenyl-phenylethe	0.631	0.604	4.3	103	-0.03	8.40
68	t	4-Nitroaniline	0.318	0.321	-0.9	99	-0.03	8.45
69	I	Phenanthrene-d10	1.000	1.000	0.0	103	-0.04	9.77
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	50.000	50.382	-0.8	102	-0.03	8.50
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.556	0.566	-1.8	102	-0.03	8.58
72	t	1,2-Diphenylhydrazine	0.828	0.907	-9.5	107	-0.04	8.63
73	S	2,4,6-Tribromophenol	0.141	0.148	-5.0	108	-0.04	8.73
74	t	4-Bromophenyl-phenylether	0.238	0.235	1.3	104	-0.04	9.11
75	t	Hexachlorobenzene	0.285	0.271	4.9	104	-0.04	9.18
76	t	Pentachlorophenol	0.136	0.141	-3.7	95	-0.03	9.51
77	t	Phenanthrene	1.161	1.132	2.5	103	-0.04	9.80
78	t	Anthracene	1.163	1.158	0.4	103	-0.04	9.88
79	t	Carbazole	1.052	1.034	1.7	100	-0.04	10.17
80	t	Di-n-butylphthalate	1.359	1.453	-6.9	104	-0.04	10.79
81	t	Fluoranthene	1.259	1.254	0.4	101	-0.04	11.65
82	t	Octadecane	0.473	0.502	-6.1	102	-0.04	9.72
83	I	Chrysene-d12	1.000	1.000	0.0	98	-0.04	13.94
84	t	Pyrene	1.197	1.255	-4.8	101	-0.04	12.00
85	S	Terphenyl-d14	0.840	0.868	-3.3	101	-0.04	12.32
86	t	Butylbenzylphthalate	0.571	0.641	-12.3	101	-0.04	13.17

Continuing Calibration Summary

Job Number: JC18516 **Sample:** E3E3627-ECC3623
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3E82768.D
Project: BMSMC, Building 5 Area, PR

87		Butyl stearate	0.300	0.333	-11.0	97	-0.04	13.34
88	t	Benzo[a]anthracene	1.169	1.135	2.9	97	-0.04	13.93
89	t	3,3'-Dichlorobenzidine	0.435	0.460	-5.7	101	-0.04	13.94
90	t	Chrysene	1.091	1.053	3.5	97	-0.04	13.99
91	t	bis(2-Ethylhexyl)phthalat	0.735	0.787	-7.1	99	-0.04	14.12
92	I	Perylene-d12	1.000	1.000	0.0	71	-0.04	16.05
		----------	True	Calc.	% Drift	----------		
93	t	Di-n-octylphthalate	50.000	50.147	-0.3	71	-0.04	15.12
		----------	AvgRF	CCRF	% Dev	----------		
94	t	Benzo[b]fluoranthene	1.352	1.419	-5.0	75	-0.04	15.54
95	t	Benzo[k]fluoranthene	1.207	1.179	2.3	68	-0.04	15.58
96	t	Benzo[a]pyrene	1.129	1.164	-3.1	72	-0.04	15.98
97	t	Indeno[1,2,3-cd]pyrene	1.076	1.101	-2.3	70	-0.05	17.51
98	t	Dibenz(a,h)acridine	1.012	0.956	5.5	64	-0.05	17.18
99	t	Dibenz[a,h]anthracene	1.068	1.090	-2.1	72	-0.05	17.55
100	t	7,12-Dimethylbenz(a)anthr	0.603	0.642	-6.5	71	-0.04	15.54
101	t	Benzo[g,h,i]perylene	1.036	1.040	-0.4	73	-0.05	17.92

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3E82671a.D M3E3623.M Mon May 02 09:01:59 2016 MS3E

6.7.28
6

Continuing Calibration Summary

Job Number: JC18516 **Sample:** E3E3627-ECC3621
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3E82769.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E3E3627\3E82769.D          Vial: 12
Acq On    : 29 Apr 2016   8:06 pm                    Operator: seanb1
Sample    : ecc3621-50                               Inst    : MS3E
Misc      : op93227,e3e3627                          Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\msdchem\1\METHODS\M3E3623eph.M (RTE Integrator)
Title        : Semi Volatile  GC/MS,zb-5msplus 30m x .25mm x .25MThu Apr 28 14:55:31 2016
Last Update  : Thu Apr 28 14:55:31 2016
Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	65	-0.03	4.51
103	Benzaldehyde	1.084	0.913	15.8	58	-0.03	4.19
104	Acenaphthene-d10a	1.000	1.000	0.0	72	-0.04	7.60
105	1,2,4,5-Tetrachlorobenzen	0.495	0.580	-17.2	87	-0.04	6.50
106	Phenanthrene-d10a	1.000	1.000	0.0	80	-0.05	9.76
107	Atrazine	0.102	0.112	-9.8	89	-0.05	9.43
108 s	o-Terphenyl	0.515	0.570	-10.7	92	-0.05	10.40
109 s	1-Chlorooctadecane	0.329	0.285	13.4	70	-0.05	11.62
110 I	Chrysene-d12a	1.000	1.000	0.0	90	-0.06	13.93
111 T	benzidine	0.492	0.443	10.0	93	-0.05	11.93
112 I	Naphthalene-d8a	1.000	1.000	0.0	64	-0.04	5.57
113 T	Hydroquinone	0.275	0.294	-6.9	62	-0.03	6.03

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3E82671a.D M3E3623eph.M Mon May 02 09:02:12 2016 MS3E

Initial Calibration Summary

Job Number: JC18516
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: JC18516 **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: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E3M2855-ICV2855
Lab FileID: 3M60772.D

Evaluate Continuing Calibration Report

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

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1-Methylnaphthalene-d10	1.000	1.000	0.0	117	0.00	10.64
5		Phenol	0.893	0.813	9.0	102	0.01	6.13
14	I	Fluorene-d10	1.000	1.000	0.0	119	0.00	13.64
		----------	True	Calc.	% Drift	----------		
18	t	4,6-dinitro-2-methylpheno	5.000	3.836	23.3	86	0.00	13.85
21	I	Fluoranthene-d10	1.000	1.000	0.0	111	0.00	17.84
		----------	True	Calc.	% Drift	----------		
23	t	Pentachlorophenol	5.000	4.338	13.2	93	0.00	15.20

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

Initial Calibration Verification

Job Number: JC18516 **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: JC18516
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: JC18516 **Sample:** E3M2856-CC2855
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3M60776.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E3M2856\3m60776.D          Vial: 2
Acq On    : 22 Apr 2016   9:20 am                    Operator: linseyk
Sample    : cc2855-1                                 Inst    : MS3M
Misc      : op93052a,e3m2856                         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 :  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	119	0.00	10.64
2	t	1,4-dioxane	0.207	0.194	6.3	111	-0.02	2.29
3	S	2-Fluorophenol	0.500	0.492	1.6	115	0.00	4.51
4	S	Phenol-d5	0.828	0.815	1.6	114	0.00	6.10
5		Phenol	0.893	0.889	0.4	114	0.01	6.13
6	t	bis(2-Chloroethyl)ether	0.675	0.619	8.3	104	0.00	6.29
7	S	Nitrobenzene-d5	0.770	0.698	9.4	103	0.00	7.73
8	t	Nitrobenzene	0.836	0.843	-0.8	117	0.00	7.76
9	t	Naphthalene	2.223	2.327	-4.7	126	0.00	9.14
10	t	Hexachlorobutadiene	0.387	0.380	1.8	113	0.00	9.42
11	t	2-Methylnaphthalene	1.158	1.224	-5.7	121	0.00	10.52
12	t	1-Methylnaphthalene	1.559	1.447	7.2	123	0.00	10.70
13		Hexachlorocyclopentadiene	0.308	0.326	-5.8	110	0.00	10.85
14	I	Fluorene-d10	1.000	1.000	0.0	116	0.00	13.64
15	S	2-Fluorobiphenyl	1.099	1.072	2.5	113	0.00	11.30
16	t	Acenaphthylene	1.385	1.453	-4.9	110	0.00	12.29
17	t	Acenaphthene	0.925	0.963	-4.1	114	0.00	12.65
		----------	True	Calc.	% Drift	----------		
18	t	4,6-dinitro-2-methylpheno	5.000	5.065	-1.3	118	0.00	13.85
		----------	AvgRF	CCRF	% Dev	----------		
19	t	Fluorene	1.110	1.121	-1.0	110	0.00	13.68
20	S	2,4,6-Tribromophenol	0.125	0.124	0.8	109	0.00	14.17
21	I	Fluoranthene-d10	1.000	1.000	0.0	114	0.00	17.84
22	t	Hexachlorobenzene	0.189	0.199	-5.3	119	0.00	14.78
		----------	True	Calc.	% Drift	----------		
23	t	Pentachlorophenol	5.000	5.113	-2.3	113	0.00	15.20
		----------	AvgRF	CCRF	% Dev	----------		
24	t	Phenanthrene	0.980	0.994	-1.4	114	0.00	15.60
25	t	Anthracene	0.865	0.946	-9.4	115	0.00	15.71
26	t	Fluoranthene	1.231	1.160	5.8	115	0.00	17.87
27	t	Pyrene	1.144	1.154	-0.9	112	0.00	18.26
28	S	Terphenyl-d14	0.580	0.578	0.3	117	0.00	18.65
29	t	Benzo[a]anthracene	1.097	1.042	5.0	111	0.00	20.35
30	t	Chrysene	1.051	1.080	-2.8	115	0.00	20.41
31	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	112	0.00	22.45

Continuing Calibration Summary

Job Number: JC18516 **Sample:** E3M2856-CC2855
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3M60776.D
Project: BMSMC, Building 5 Area, PR

32	t	Benzo[b]fluoranthene	1.331	1.588	-19.3	132	0.00	22.02
33	t	Benzo[k]fluoranthene	1.232	1.038	15.7	94	0.00	22.06
34	t	Benzo[a]pyrene	1.240	1.205	2.8	111	0.02	22.48
35	t	Indeno[1,2,3-cd]pyrene	1.260	1.262	-0.2	105	0.02	23.98
36	t	Dibenz[a,h]anthracene	1.039	1.078	-3.8	112	0.00	24.02
37	t	Benzo[g,h,i]perylene	1.095	1.122	-2.5	110	0.00	24.36

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3m60763a.D M3M2855SIM.M Fri Apr 22 12:51:49 2016 RPT1

Initial Calibration Summary

Job Number: JC18516
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: JC18516 **Sample:** E4M2881-ICC2881
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4M64724.D
Project: BMSMC, Building 5 Area, PR

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

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

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

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

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

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

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

Initial Calibration Verification

Job Number: JC18516
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: JC18516 **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: JC18516
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: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E4M2881-ICV2881
Lab FileID: 4M64734.D

Evaluate Continuing Calibration Report

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

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

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
35 I	1-Methylnaphthalene-d10a	1.000	1.000	0.0	118	0.00	10.75
	----------	AvgRF	CCRF	% Dev	----------		
37 t	1-Methylnaphthalene	0.935	0.885	5.3	116	0.00	10.82

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

Continuing Calibration Summary

Job Number: JC18516 **Sample:** E4M2885-CC2881
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4M64802.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E4M2885\4m64802.D          Vial: 2
Acq On    : 18 Apr 2016   2:36 pm                    Operator: linseyk
Sample    : cc2881-.5                                Inst    : GCMS4M
Misc      : op93089a,e4m2885                         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 :  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	81	-0.05	10.70
2	S	2-Fluorophenol	0.524	0.486	7.3	79	-0.03	4.71
3	S	Phenol-d5	0.881	0.825	6.4	79	-0.04	6.30
4	t	Phenol	0.902	0.862	4.4	79	-0.03	6.32
5	t	bis(2-Chloroethyl)ether	0.680	0.632	7.1	79	-0.04	6.39
6	S	Nitrobenzene-d5	0.790	0.760	3.8	79	-0.05	7.83
7	t	Naphthalene	2.251	2.069	8.1	78	-0.05	9.21
8	t	Hexachlorobutadiene	0.556	0.517	7.0	78	-0.05	9.52
9	t	2-Methylnaphthalene	0.979	1.179	-20.4#	101	-0.05	10.58
		----------	True	Calc.	% Drift	----------		
10	t	Hexachlorocyclopentadiene	1.000	1.168	-16.8	98	-0.05	10.94
		----------	AvgRF	CCRF	% Dev	----------		
11	S	2-Fluorobiphenyl	1.155	1.013	12.3	84	-0.05	11.37
12	I	Fluorene-d10	1.000	1.000	0.0	73	-0.05	13.68
13	t	Acenaphthylene	0.917	1.151	-25.5#	84	-0.04	12.34
14	t	Acenaphthene	0.590	0.754	-27.8#	88	-0.04	12.70
15	t	Dibenzofuran	0.879	0.997	-13.4	81	-0.04	13.05
16	t	Fluorene	1.067	1.045	2.1	69	-0.05	13.72
17	S	2,4,6-Tribromophenol	0.213	0.213	0.0	68	-0.05	14.23
18	t	Hexachlorobenzene	0.418	0.461	-10.3	79	-0.03	14.85
19	t	Pentachlorophenol	0.171	0.220	-28.7#	82	-0.03	15.28
20	t	Phenanthrene	1.438	1.684	-17.1	85	-0.05	15.64
21	t	Anthracene	1.362	1.640	-20.4#	83	-0.05	15.73
22	I	Fluoranthene-d10	1.000	1.000	0.0	86	-0.04	17.87
23	t	Fluoranthene	1.080	1.064	1.5	81	-0.04	17.90
24	t	Pyrene	1.065	1.080	-1.4	87	-0.06	18.28
25	S	Terphenyl-d14	0.540	0.568	-5.2	86	-0.04	18.68
26	t	Benzo[a]anthracene	0.987	1.017	-3.0	89	0.00	20.39
27	t	Chrysene	0.966	0.970	-0.4	88	-0.02	20.45
28	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	87	-0.03	22.47
29	t	Benzo[b]fluoranthene	1.439	1.397	2.9	83	-0.04	22.04
30	t	Benzo[k]fluoranthene	1.205	1.360	-12.9	97	-0.04	22.08
31	t	Benzo[a]pyrene	1.193	1.211	-1.5	86	-0.04	22.50
32	t	Indeno[1,2,3-cd]pyrene	1.492	1.502	-0.7	86	-0.04	24.03
33	t	Dibenz[a,h]anthracene	1.201	1.242	-3.4	87	-0.05	24.05
34	t	Benzo[g,h,i]perylene	1.260	1.274	-1.1	86	-0.04	24.41

Continuing Calibration Summary

Job Number: JC18516 **Sample:** E4M2885-CC2881
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4M64802.D
Project: BMSMC, Building 5 Area, PR

35	I	1-Methylnaphthalene-d10a	1.000	1.000	0.0	81	-0.05	10.70
		----------	True	Calc.	% Drift	----------		
36	t	1,4-Dioxane	0.500	0.516	-3.2	87	-0.03	2.43
		----------	AvgRF	CCRF	% Dev	----------		
37	t	1-Methylnaphthalene	0.935	1.060	-13.4	103	-0.05	10.77
38	I	Fluorene-d10a	1.000	1.000	0.0	73	-0.05	13.68
		----------	True	Calc.	% Drift	----------		
39	t	4,6-dinitro-2-methylpheno	2.500	3.399	-36.0#	120	-0.05	13.91
		----------	AvgRF	CCRF	% Dev	----------		
40	t	1,2-Diphenylhydrazine	0.947	0.928	2.0	70	-0.05	14.08
41	t	n-nitrosodiphenylamine	0.702	0.625	11.0	63	-0.05	14.03

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m64723a.D M4M2881SIM.M Mon Apr 18 16:49:56 2016 MANAGER

Continuing Calibration Summary

Job Number: JC18516 **Sample:** E4M2886-CC2881
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4M64825.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E4M2886\4m64825.D          Vial: 2
Acq On    : 19 Apr 2016   9:10 am                    Operator: linseyk
Sample    : cc2881-1                                 Inst    : GCMS4M
Misc      : op93128a,e4m2886                         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 :  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	114	0.00	10.70
2	S	2-Fluorophenol	0.524	0.487	7.1	100	-0.01	4.71
3	S	Phenol-d5	0.881	0.824	6.5	101	-0.01	6.30
4	t	Phenol	0.902	0.866	4.0	101	0.00	6.32
5	t	bis(2-Chloroethyl)ether	0.680	0.653	4.0	103	-0.01	6.39
6	S	Nitrobenzene-d5	0.790	0.775	1.9	106	-0.01	7.83
7	t	Naphthalene	2.251	2.115	6.0	103	0.00	9.21
8	t	Hexachlorobutadiene	0.556	0.525	5.6	102	0.00	9.52
9	t	2-Methylnaphthalene	0.979	1.027	-4.9	121	0.00	10.58
		----------	True	Calc.	% Drift	----------		
10	t	Hexachlorocyclopentadiene	2.000	2.101	-5.0	129	0.00	10.94
		----------	AvgRF	CCRF	% Dev	----------		
11	S	2-Fluorobiphenyl	1.155	0.950	17.7	100	0.00	11.37
12	I	Fluorene-d10	1.000	1.000	0.0	102	0.00	13.68
13	t	Acenaphthylene	0.917	0.958	-4.5	108	0.00	12.34
14	t	Acenaphthene	0.590	0.633	-7.3	111	0.00	12.70
15	t	Dibenzofuran	0.879	1.010	-14.9	108	0.00	13.05
16	t	Fluorene	1.067	1.117	-4.7	101	0.00	13.72
17	S	2,4,6-Tribromophenol	0.213	0.204	4.2	87	0.00	14.23
18	t	Hexachlorobenzene	0.418	0.447	-6.9	108	0.00	14.84
19	t	Pentachlorophenol	0.171	0.220	-28.7#	115	0.00	15.27
20	t	Phenanthrene	1.438	1.533	-6.6	107	0.00	15.64
21	t	Anthracene	1.362	1.588	-16.6	112	0.00	15.73
22	I	Fluoranthene-d10	1.000	1.000	0.0	109	0.00	17.87
23	t	Fluoranthene	1.080	1.016	5.9	109	0.00	17.90
24	t	Pyrene	1.065	1.112	-4.4	112	-0.02	18.28
25	S	Terphenyl-d14	0.540	0.595	-10.2	119	0.00	18.68
26	t	Benzo[a]anthracene	0.987	1.013	-2.6	111	0.02	20.39
27	t	Chrysene	0.966	0.965	0.1	110	0.00	20.45
28	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	109	0.00	22.47
29	t	Benzo[b]fluoranthene	1.439	1.660	-15.4	121	0.00	22.04
30	t	Benzo[k]fluoranthene	1.205	1.077	10.6	101	0.00	22.08
31	t	Benzo[a]pyrene	1.193	1.244	-4.3	111	-0.01	22.50
32	t	Indeno[1,2,3-cd]pyrene	1.492	1.529	-2.5	111	-0.01	24.03
33	t	Dibenz[a,h]anthracene	1.201	1.285	-7.0	124	-0.03	24.05
34	t	Benzo[g,h,i]perylene	1.260	1.324	-5.1	114	-0.01	24.41

Continuing Calibration Summary

Job Number: JC18516 **Sample:** E4M2886-CC2881
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4M64825.D
Project: BMSMC, Building 5 Area, PR

35	I	1-Methylnaphthalene-d10a	1.000	1.000	0.0	114	0.00	10.70
		----------	True	Calc.	% Drift	----------		
36	t	1,4-Dioxane	1.000	0.936	6.4	92	0.00	2.44
		----------	AvgRF	CCRF	% Dev	----------		
37	t	1-Methylnaphthalene	0.935	0.877	6.2	111	0.00	10.77
38	I	Fluorene-d10a	1.000	1.000	0.0	102	0.00	13.68
		----------	True	Calc.	% Drift	----------		
39	t	4,6-dinitro-2-methylpheno	5.000	6.186	-23.7#	133	0.00	13.91
		----------	AvgRF	CCRF	% Dev	----------		
40	t	1,2-Diphenylhydrazine	0.947	0.982	-3.7	92	0.00	14.08
41	t	n-nitrosodiphenylamine	0.702	0.657	6.4	85	0.00	14.03

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m64724.D M4M2881SIM.M Tue Apr 19 16:37:30 2016 MANAGER

Continuing Calibration Summary

Job Number: JC18516 **Sample:** E4M2900-CC2881
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4M65029.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E4M2900\4m65029.D          Vial: 2
Acq On    :  2 May 2016   8:55 am                    Operator: linseyk
Sample    : cc2881-1                                 Inst    : GCMS4M
Misc      : op90303a,e4m2900                         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	55	-0.04	10.65
2	S	2-Fluorophenol	0.524	0.607	-15.8	61	-0.04	4.68
3	S	Phenol-d5	0.881	1.034	-17.4	61	-0.05	6.26
4	t	Phenol	0.902	1.075	-19.2	61	-0.04	6.29
5	t	bis(2-Chloroethyl)ether	0.680	0.781	-14.9	60	-0.04	6.37
6	S	Nitrobenzene-d5	0.790	0.965	-22.2#	64	-0.05	7.79
7	t	Naphthalene	2.251	2.545	-13.1	60	-0.03	9.18
8	t	Hexachlorobutadiene	0.556	0.676	-21.6#	64	-0.05	9.48
9	t	2-Methylnaphthalene	0.979	1.414	-44.4#	81	-0.04	10.54
		----------	True	Calc.	% Drift	----------		
10	t	Hexachlorocyclopentadiene	2.000	3.191	-59.5#	98	-0.04	10.89
		----------	AvgRF	CCRF	% Dev	----------		
11	S	2-Fluorobiphenyl	1.155	1.498	-29.7#	76	-0.04	11.32
12	I	Fluorene-d10	1.000	1.000	0.0	55	-0.04	13.63
13	t	Acenaphthylene	0.917	1.077	-17.4	65	-0.04	12.30
14	t	Acenaphthene	0.590	0.690	-16.9	66	-0.04	12.66
15	t	Dibenzofuran	0.879	1.041	-18.4	60	-0.04	13.01
16	t	Fluorene	1.067	1.037	2.8	51	-0.04	13.68
17	S	2,4,6-Tribromophenol	0.213	0.231	-8.5	53	-0.04	14.18
18	t	Hexachlorobenzene	0.418	0.476	-13.9	62	-0.04	14.79
19	t	Pentachlorophenol	0.171	0.244	-42.7#	69	-0.04	15.23
20	t	Phenanthrene	1.438	1.640	-14.0	62	-0.05	15.58
21	t	Anthracene	1.362	1.638	-20.3#	63	-0.03	15.69
22	I	Fluoranthene-d10	1.000	1.000	0.0	61	-0.05	17.82
23	t	Fluoranthene	1.080	1.132	-4.8	68	-0.05	17.85
24	t	Pyrene	1.065	1.107	-3.9	63	-0.05	18.25
25	S	Terphenyl-d14	0.540	0.633	-17.2	72	-0.05	18.63
26	t	Benzo[a]anthracene	0.987	1.048	-6.2	65	0.00	20.34
27	t	Chrysene	0.966	1.036	-7.2	66	-0.05	20.40
28	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	68	0.00	22.42
29	t	Benzo[b]fluoranthene	1.439	1.336	7.2	61	0.00	22.00
30	t	Benzo[k]fluoranthene	1.205	1.235	-2.5	72	-0.05	22.04
31	t	Benzo[a]pyrene	1.193	1.169	2.0	65	0.00	22.45
32	t	Indeno[1,2,3-cd]pyrene	1.492	1.499	-0.5	67	0.00	23.96
33	t	Dibenz[a,h]anthracene	1.201	1.237	-3.0	74	-0.01	23.99
34	t	Benzo[g,h,i]perylene	1.260	1.285	-2.0	69	0.00	24.34

Continuing Calibration Summary

Job Number: JC18516 **Sample:** E4M2900-CC2881
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4M65029.D
Project: BMSMC, Building 5 Area, PR

35	I	1-Methylnaphthalene-d10a	1.000	1.000	0.0	55	-0.04	10.65
36	t	1,4-Dioxane	0.260	0.257	1.2	58	-0.06	2.40
37	t	1-Methylnaphthalene	0.935	1.393	-49.0#	86	-0.04	10.73
38	I	Fluorene-d10a	1.000	1.000	0.0	55	-0.04	13.63
		----------	True	Calc.	% Drift	----------		
39	t	4,6-dinitro-2-methylpheno	5.000	7.816	-56.3#	96	-0.04	13.87
		----------	AvgRF	CCRF	% Dev	----------		
40	t	1,2-Diphenylhydrazine	0.947	0.892	5.8	45#	-0.04	14.04
41	t	n-nitrosodiphenylamine	0.702	0.617	12.1	43#	-0.04	13.99

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m64724.D M4M2881SIM.M Mon May 02 15:40:35 2016 MANAGER

6.7.41

6

Initial Calibration Summary

Job Number: JC18516 **Sample:** EM5217-ICC5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M123513.D
Project: BMSMC, Building 5 Area, PR

Response Factor Report Instrument #1

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

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

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

Initial Calibration Summary

Job Number: JC18516 **Sample:** EM5217-ICC5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M123513.D
Project: BMSMC, Building 5 Area, PR

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

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

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

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

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

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

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

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

Initial Calibration Summary

Job Number: JC18516 **Sample:** EM5217-ICC5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M123513.D
Project: BMSMC, Building 5 Area, PR

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

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

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

Initial Calibration Summary

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EM5218-ICC5218
Lab FileID: M123517.D

Response Factor Report Instrument #1

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

Calibration Files
2 =M123521.D 5 =M123520.D 100 =M123515.D 50 =M123517.D
1 =M123522.D 10 =M123519.D 80 =M123516.D 25 =M123518.D

Compound	2	5	100	50	1	10	80	25	Avg	%RSD
102) I 1,4-Dichlorobenzene-d					ISTD					
103) Benzaldehyde	1.075	1.122		0.953	1.140	0.953	0.852	0.985	1.012	10.36
104) I Acenaphthene-d10a					ISTD					
105) 1,2,4,5-Tetr	0.738	0.711	0.548	0.604	0.734	0.621	0.560	0.622	0.642	11.81
106) Atrazine	0.236	0.238	0.206	0.214	0.238	0.218	0.210	0.225	0.223	5.79
107) I Chrysene-d12a					ISTD					
108) Benzidine	0.471	0.540	0.361	0.493		0.501	0.406	0.507	0.468	13.45
109) 1-chloroocta	0.260	0.273	0.228	0.240	0.250	0.241	0.232	0.244	0.246	5.97
110) I Phenanthrene-d10a					ISTD					
111) o-terphenyl	0.638	0.652	0.505	0.541	0.649	0.582	0.509	0.565	0.580	10.44
112) I Naphthalene-d8a					ISTD					
113) Hydroquinone		0.271	0.365	0.350		0.270	0.362	0.320	0.323	13.51

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

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

Initial Calibration Verification

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EM5218-ICV5217
Lab FileID: M123523.D

Evaluate Continuing Calibration Report

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

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	102	0.00	4.73
9	t	Phenol	1.646	1.612	2.1	95	0.00	4.52
12	t	2-Chlorophenol	1.371	1.373	-0.1	107	0.00	4.60
19	t	2-Methylphenol	1.136	1.184	-4.2	108	0.00	4.96
21	t	3&4-Methylphenol	1.245	1.274	-2.3	106	0.00	5.09
24	I	Naphthalene-d8	1.000	1.000	0.0	98	0.00	5.88
29	t	2-Nitrophenol	0.204	0.207	-1.5	101	0.00	5.50
30	t	2,4-Dimethylphenol	0.333	0.343	-3.0	110	0.00	5.56
31	t	Benzoic acid	0.219	0.222	-1.4	93	0.00	5.70
33	t	2,4-Dichlorophenol	0.305	0.319	-4.6	104	0.00	5.76
34	t	2,6-Dichlorophenol	0.308	0.310	-0.6	106	0.00	5.98
43	t	4-Chloro-3-methylphenol	0.305	0.301	1.3	102	-0.01	6.57
47	I	Acenaphthene-d10	1.000	1.000	0.0	102	0.00	8.23
		----------	AvgRF	CCRF	% Dev	----------		
49	t	2,4,6-Trichlorophenol	0.382	0.386	-1.0	108	0.00	7.12
50	t	2,4,5-Trichlorophenol	0.415	0.390	6.0	99	0.00	7.20
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	50.000	44.008	12.0	78	0.00	8.39
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.123	0.121	1.6	102	0.00	8.64
64	t	2,3,4,6-Tetrachlorophenol	0.321	0.311	3.1	99	0.00	8.83
69	I	Phenanthrene-d10	1.000	1.000	0.0	102	0.00	10.87
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	50.000	47.835	4.3	98	-0.01	9.31
		----------	True	Calc.	% Drift	----------		
76	t	Pentachlorophenol	50.000	44.297	11.4	84	0.00	10.57

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M123517a.D MM5217.M Wed Apr 13 12:19:50 2016 MSM

Initial Calibration Verification

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EM5218-ICV5217
Lab FileID: M123524.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5218\M123524.D          Vial: 11
Acq On    : 13 Apr 2016   2:34 am                   Operator: sarad
Sample    : icv5217-50                              Inst    : Instrument #1
Misc      : op92514,em5218                          Multiplr: 1.00
MS Integration Params: RTEINT.P

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	92	0.00	4.74
3	t	Pyridine	1.350	1.344	0.4	90	0.06	2.70
10	t	Aniline	1.915	1.978	-3.3	97	0.00	4.50
16	t	Benzyl alcohol	0.794	0.848	-6.8	97	0.00	4.86
24	I	Naphthalene-d8	1.000	1.000	0.0	92	0.00	5.88
39	t	4-Chloroaniline	0.451	0.438	2.9	91	0.00	5.96
44	t	2-Methylnaphthalene	0.626	0.559	10.7	87	0.00	6.71
47	I	Acenaphthene-d10	1.000	1.000	0.0	90	0.00	8.23
		----------	AvgRF	CCRF	% Dev	----------		
54	t	2-Nitroaniline	0.332	0.314	5.4	88	0.00	7.56
58	t	3-Nitroaniline	0.335	0.337	-0.6	90	0.00	8.20
		----------	AvgRF	CCRF	% Dev	----------		
62	t	Dibenzofuran	1.726	1.652	4.3	91	0.00	8.58
68	t	4-Nitroaniline	0.326	0.323	0.9	86	-0.01	9.25
69	I	Phenanthrene-d10	1.000	1.000	0.0	95	-0.01	10.86
		----------	AvgRF	CCRF	% Dev	----------		
79	t	Carbazole	1.064	0.996	6.4	93	0.00	11.36

```
(#) = Out of Range              SPCC's out = 0  CCC's out = 0
 M123517a.D MM5217.M         Wed Apr 13 12:19:52 2016   MSM
```

Initial Calibration Verification

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EM5218-ICV5218
Lab FileID: M123526A.D

Evaluate Continuing Calibration Report

```
  Data File : C:\msdchem\1\DATA\EM5218\M123526a.D          Vial: 13
  Acq On    : 13 Apr 2016   3:31 am                    Operator: sarad
  Sample    : icv5218-50                               Inst    : Instrument #1
  Misc      : op92514,em5218                           Multiplr: 1.00
  MS Integration Params: RTEINT.P

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

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
104 I	Acenaphthene-d10a	1.000	1.000	0.0	97	0.00	8.24
105 I	1,2,4,5-Tetrachlorobenzen	0.642	0.624	2.8	101	0.00	6.95

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M123517a.D MM5217.M Wed Apr 13 12:19:56 2016 MSM

Initial Calibration Verification

Job Number: JC18516 **Sample:** EM5218-ICV5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M123526.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EM5218\M123526.D Vial: 13
Acq On : 13 Apr 2016 3:31 am Operator: sarad
Sample : icv5217-50 Inst : Instrument #1
Misc : op92514,em5218 Multiplr: 1.00
MS Integration Params: RTEINT.P

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	98	0.00	4.73
4	t	N-Nitrosodimethylamine	0.591	0.550	6.9	91	0.00	2.59
11	t	bis(2-Chloroethyl)ether	1.282	1.236	3.6	105	0.00	4.53
14	t	1,3-Dichlorobenzene	1.563	1.494	4.4	99	0.00	4.69
15	t	1,4-Dichlorobenzene	1.549	1.494	3.6	100	0.00	4.75
17	t	1,2-Dichlorobenzene	1.458	1.427	2.1	103	0.00	4.87
20	t	2,2'-oxybis(1-Chloropropa	0.424	0.365	13.9	95	0.00	4.95
22	t	n-Nitroso-di-n-propylamin	0.983	0.878	10.7	95	0.00	5.05
23	t	Hexachloroethane	0.586	0.558	4.8	100	0.00	5.15
24	I	Naphthalene-d8	1.000	1.000	0.0	97	0.00	5.88
26	t	Nitrobenzene	0.360	0.339	5.8	97	0.00	5.21
28	t	Isophorone	0.647	0.630	2.6	100	0.00	5.42
32	t	bis(2-Chloroethoxy)methan	0.393	0.377	4.1	100	0.00	5.62
36	t	1,2,4-Trichlorobenzene	0.358	0.350	2.2	100	0.00	5.82
38	t	Naphthalene	1.048	1.000	4.6	99	0.00	5.90
42	t	Hexachlorobutadiene	0.206	0.199	3.4	100	0.00	6.03
47	I	Acenaphthene-d10	1.000	1.000	0.0	98	0.00	8.24
		----------	AvgRF	CCRF	% Dev	----------		
52	t	2-Chloronaphthalene	1.165	1.127	3.3	103	0.00	7.38
55	t	Dimethylphthalate	1.362	1.260	7.5	96	0.00	7.84
56	t	Acenaphthylene	1.927	1.679	12.9	92	0.00	8.01
57	t	2,6-Dinitrotoluene	0.303	0.285	5.9	93	0.00	7.93
59	t	Acenaphthene	1.161	1.061	8.6	98	0.00	8.29
		----------	AvgRF	CCRF	% Dev	----------		
63	t	2,4-Dinitrotoluene	0.397	0.375	5.5	92	0.00	8.60
65	t	Diethylphthalate	1.356	1.231	9.2	95	0.00	9.03
66	t	Fluorene	1.396	1.244	10.9	93	0.00	9.17
67	t	4-Chlorophenyl-phenylethe	0.666	0.611	8.3	96	0.00	9.19
69	I	Phenanthrene-d10	1.000	1.000	0.0	102	0.00	10.87
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.537	0.474	11.7	96	0.00	9.41
72	t	1,2-Diphenylhydrazine	0.688	0.598	13.1	93	0.00	9.47
74	t	4-Bromophenyl-phenylether	0.247	0.224	9.3	96	0.00	10.07
75	t	Hexachlorobenzene	0.291	0.248	14.8	92	0.00	10.17

Initial Calibration Verification

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EM5218-ICV5217
Lab FileID: M123526.D

			AvgRF	CCRF	% Dev			
77	t	Phenanthrene	1.115	0.989	11.3	96	0.00	10.91
78	t	Anthracene	1.155	0.988	14.5	92	0.00	11.00
80	t	Di-n-butylphthalate	1.321	1.207	8.6	96	0.00	12.14
81	t	Fluoranthene	1.307	1.172	10.3	96	0.00	13.21
83	I	Chrysene-d12	1.000	1.000	0.0	99	0.00	16.05
84	t	Pyrene	1.304	1.219	6.5	97	0.00	13.63
87	t	Butylbenzylphthalate	0.567	0.540	4.8	94	0.00	15.08
88	t	Benzo[a]anthracene	1.223	1.105	9.6	95	0.00	16.02
90	t	Chrysene	1.142	1.021	10.6	92	0.00	16.09
91	t	bis(2-Ethylhexyl)phthalat	0.765	0.708	7.5	94	0.00	16.29
92	I	Perylene-d12	1.000	1.000	0.0	97	0.00	18.67
93	t	Di-n-octylphthalate	1.298	1.148	11.6	87	0.00	17.52
94	t	Benzo[b]fluoranthene	1.229	1.064	13.4	91	0.00	18.03
95	t	Benzo[k]fluoranthene	1.185	1.065	10.1	94	0.00	18.08
96	t	Benzo[a]pyrene	1.135	1.036	8.7	94	0.00	18.57
97	t	Indeno[1,2,3-cd]pyrene	1.149	1.048	8.8	94	0.00	20.40
99	t	Dibenz[a,h]anthracene	1.168	1.053	9.8	95	0.00	20.45
101	t	Benzo[g,h,i]perylene	1.197	1.076	10.1	95	0.00	20.87

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M123517a.D MM5217.M Wed Apr 13 12:19:54 2016 MSM

6.7.47

6

Initial Calibration Verification

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EM5218-ICV5218
Lab FileID: M123527A.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5218\M123527a.D          Vial: 14
Acq On    : 13 Apr 2016   3:59 am                    Operator: sarad
Sample    : icv5218-50                               Inst    : Instrument #1
Misc      : op92514,em5218                           Multiplr: 1.00
MS Integration Params: RTEINT.P

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102	I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	95	0.00	4.73
103	t	Benzaldehyde	1.012	1.022	-1.0	102	0.00	4.40
104	I	Acenaphthene-d10a	1.000	1.000	0.0	98	0.00	8.23
106	t	Atrazine	0.223	0.202	9.4	92	0.00	10.46

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M123517a.D MM5217.M Wed Apr 13 12:20:00 2016 MSM

Initial Calibration Verification

Job Number: JC18516 **Sample:** EM5218-ICV5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M123527.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5218\M123527.D          Vial: 14
Acq On    : 13 Apr 2016   3:59 am                   Operator: sarad
Sample    : icv5217-50                              Inst    : Instrument #1
Misc      : op92514,em5218                          Multiplr: 1.00
MS Integration Params: RTEINT.P

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	102	0.00	4.73
2	t	1,4-Dioxane	0.555	0.498	10.3	99	-0.01	2.29
6	t	Indene	2.275	2.225	2.2	106	0.00	4.94
7	t	Cumene	3.052	2.880	5.6	100	0.00	4.13
13	t	Decane	1.300	1.185	8.8	106	0.00	4.61
18	t	Acetophenone	1.821	1.637	10.1	96	0.00	5.06
24	I	Naphthalene-d8	1.000	1.000	0.0	96	0.00	5.88
27	t	Quinoline	0.763	0.717	6.0	95	-0.02	6.27
40	t	2,3-Dichloroaniline	0.397	0.345	13.1	87	0.00	7.10
41	t	Caprolactam	0.165	0.145	12.1	92	-0.04	6.34
45	t	1-Methylnaphthalene	0.728	0.705	3.2	98	0.00	6.84
46	t	Dimethylnaphthalene	0.676	0.658	2.7	99	0.00	7.59
47	I	Acenaphthene-d10	1.000	1.000	0.0	99	0.00	8.23
		----------	True	Calc.	% Drift	----------		
48	t	Hexachlorocyclopentadiene	50.000	45.891	8.2	84	0.00	6.92
		----------	AvgRF	CCRF	% Dev	----------		
53	t	Biphenyl	1.488	1.394	6.3	100	0.00	7.35
		----------	AvgRF	CCRF	% Dev	----------		
69	I	Phenanthrene-d10	1.000	1.000	0.0	94	-0.01	10.86
		----------	AvgRF	CCRF	% Dev	----------		
82	t	Octadecane	0.430	0.433	-0.7	98	0.00	10.83
83	I	Chrysene-d12	1.000	1.000	0.0	102	-0.02	16.03
92	I	Perylene-d12	1.000	1.000	0.0	94	-0.01	18.66
100	t	7,12-Dimethylbenz(a)anthr	0.553	0.522	5.6	95	-0.02	18.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M123517a.D MM5217.M Wed Apr 13 12:19:58 2016 MSM

Initial Calibration Verification

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EM5218-ICV5218
Lab FileID: M123528.D

Evaluate Continuing Calibration Report

```
  Data File : C:\msdchem\1\DATA\EM5218\M123528.D          Vial: 15
  Acq On    : 13 Apr 2016   4:28 am                   Operator: sarad
  Sample    : icv5218-50                              Inst    : Instrument #1
  Misc      : op92514,em5218                          Multiplr: 1.00
  MS Integration Params: RTEINT.P

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

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
112 I	Naphthalene-d8a	1.000	1.000	0.0	91	0.00	5.88
113	Hydroquinone	0.323	0.336	-4.0	88	-0.08	6.40

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M123517a.D MM5217.M Wed Apr 13 12:20:02 2016 MSM

Initial Calibration Verification

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EM5218-ICV5217
Lab FileID: M123529.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5218\M123529.D          Vial: 16
Acq On    : 13 Apr 2016   4:57 am                   Operator: sarad
Sample    : icv5217-50                              Inst    : Instrument #1
Misc      : op92514,em5218                          Multiplr: 1.00
MS Integration Params: RTEINT.P

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
83	I	Chrysene-d12	1.000	1.000	0.0	107	-0.01	16.04
89	t	3,3'-Dichlorobenzidine	0.447	0.392	12.3	96	0.00	16.05

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M123517a.D MM5217.M Wed Apr 13 12:20:04 2016 MSM

Initial Calibration Verification

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EM5218-ICV5218
Lab FileID: M123529A.D

Evaluate Continuing Calibration Report

```
  Data File : C:\msdchem\1\DATA\EM5218\M123529a.D          Vial: 16
  Acq On    : 13 Apr 2016   4:57 am                     Operator: sarad
  Sample    : icv5218-50                                Inst    : Instrument #1
  Misc      : op92514,em5218                            Multiplr: 1.00
  MS Integration Params: RTEINT.P

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

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

        Compound                   AvgRF   CCRF      %Dev Area%  Dev(min)R.T.
  ---------------------------------------------------------------------------
107 I   Chrysene-d12a              1.000   1.000      0.0   86   0.00   16.04
108 t   Benzidine                  0.468   0.702    -50.0# 122  -0.02   13.55
 ---------------------------------------------------------------------------
 ---------------------------------------------------------------------------

    (#) = Out of Range              SPCC's out = 0  CCC's out = 0
     M123517a.D MM5217.M         Wed Apr 13 12:20:06 2016   MSM
```

Initial Calibration Verification

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EM5219-ICV5217
Lab FileID: M123532.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5219\M123532.D          Vial: 2
Acq On    : 13 Apr 2016   9:41 am                   Operator: seanb1
Sample    : icv5217-50                              Inst    : Instrument #1
Misc      : op92514,em5219                          Multiplr: 1.00
MS Integration Params: RTEINT.P

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	111	0.00	4.73
5	S	2-Fluorophenol	1.223	1.279	-4.6	116	-0.01	3.79
8	S	Phenol-d5	1.536	1.572	-2.3	114	-0.01	4.50
24	I	Naphthalene-d8	1.000	1.000	0.0	107	-0.01	5.87
25	S	Nitrobenzene-d5	0.356	0.366	-2.8	115	-0.01	5.19
47	I	Acenaphthene-d10	1.000	1.000	0.0	104	-0.02	8.22
		----------	AvgRF	CCRF	% Dev	----------		
51	S	2-Fluorobiphenyl	1.313	1.365	-4.0	118	-0.02	7.20
		----------	AvgRF	CCRF	% Dev	----------		
69	I	Phenanthrene-d10	1.000	1.000	0.0	102	-0.02	10.85
		----------	AvgRF	CCRF	% Dev	----------		
73	S	2,4,6-Tribromophenol	0.138	0.139	-0.7	102	-0.02	9.60
		----------	AvgRF	CCRF	% Dev	----------		
83	I	Chrysene-d12	1.000	1.000	0.0	105	-0.02	16.03
86	S	Terphenyl-d14	0.897	0.859	4.2	103	-0.02	14.03

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M123517a.D MM5217.M Wed Apr 13 13:02:35 2016 MSM

Continuing Calibration Summary

Job Number: JC18516 **Sample:** EM5230-CC5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M123740.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EM5230\M123740.D Vial: 2
Acq On : 20 Apr 2016 11:00 am Operator: ashleyd
Sample : cc5217-50 Inst : Instrument #1
Misc : op93063,em5230 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MM5217.M (RTE Integrator)
Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update : Tue Apr 19 00:08:51 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	73	-0.03	4.70
2	t	1,4-Dioxane	0.555	0.539	2.9	77	-0.05	2.25
3	t	Pyridine	1.350	1.356	-0.4	73	-0.04	2.59
4	t	N-Nitrosodimethylamine	0.591	0.561	5.1	69	-0.04	2.56
5	S	2-Fluorophenol	1.223	1.326	-8.4	79	-0.03	3.75
6	t	Indene	2.275	2.329	-2.4	80	-0.03	4.90
7	t	Cumene	3.052	3.194	-4.7	80	-0.03	4.10
8	S	Phenol-d5	1.536	1.664	-8.3	79	-0.03	4.47
9	t	Phenol	1.646	1.856	-12.8	79	-0.03	4.47
10	t	Aniline	1.915	1.517	20.8#	59	-0.02	4.46
11	t	bis(2-Chloroethyl)ether	1.282	1.243	3.0	78	-0.03	4.50
12	t	2-Chlorophenol	1.371	1.467	-7.0	82	-0.03	4.56
13	t	Decane	1.300	1.161	10.7	75	-0.03	4.57
14	t	1,3-Dichlorobenzene	1.563	1.605	-2.7	79	-0.03	4.66
15	t	1,4-Dichlorobenzene	1.549	1.599	-3.2	80	-0.03	4.71
16	t	Benzyl alcohol	0.794	0.867	-9.2	79	-0.03	4.82
17	t	1,2-Dichlorobenzene	1.458	1.491	-2.3	80	-0.03	4.84
18	t	Acetophenone	1.821	1.815	0.3	77	-0.03	5.02
19	t	2-Methylphenol	1.136	1.172	-3.2	77	-0.03	4.93
20	t	2,2'-oxybis(1-Chloropropa	0.424	0.432	-1.9	84	-0.03	4.91
21	t	3&4-Methylphenol	1.245	1.295	-4.0	77	-0.03	5.05
22	t	n-Nitroso-di-n-propylamin	0.983	0.940	4.4	76	-0.03	5.02
23	t	Hexachloroethane	0.586	0.551	6.0	73	-0.03	5.11
24	I	Naphthalene-d8	1.000	1.000	0.0	71	-0.03	5.84
25	S	Nitrobenzene-d5	0.356	0.358	-0.6	74	-0.02	5.16
26	t	Nitrobenzene	0.360	0.357	0.8	75	-0.02	5.17
27	t	Quinoline	0.763	0.769	-0.8	75	-0.03	6.24
28	t	Isophorone	0.647	0.638	1.4	74	-0.03	5.38
29	t	2-Nitrophenol	0.204	0.224	-9.8	80	-0.02	5.46
30	t	2,4-Dimethylphenol	0.333	0.318	4.5	74	-0.03	5.52
31	t	Benzoic acid	0.219	0.261	-19.2	80	-0.02	5.66
32	t	bis(2-Chloroethoxy)methan	0.393	0.404	-2.8	78	-0.03	5.58
33	t	2,4-Dichlorophenol	0.305	0.326	-6.9	78	-0.03	5.72
34	t	2,6-Dichlorophenol	0.308	0.308	0.0	77	-0.03	5.94
35	t	1,3,5-Trichlorobenzene	0.364	0.367	-0.8	76	-0.03	5.47
36	t	1,2,4-Trichlorobenzene	0.358	0.354	1.1	74	-0.03	5.78
37	t	1,2,3-Trichlorobenzene	0.346	0.340	1.7	73	-0.03	6.02
38	t	Naphthalene	1.048	1.060	-1.1	77	-0.03	5.86
39	t	4-Chloroaniline	0.451	0.428	5.1	69	-0.03	5.93
40	t	2,3-Dichloroaniline	0.397	0.409	-3.0	76	-0.03	7.05
41	t	Caprolactam	0.165	0.152	7.9	72	-0.01	6.34

Continuing Calibration Summary

Job Number: JC18516 **Sample:** EM5230-CC5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M123740.D
Project: BMSMC, Building 5 Area, PR

42	t	Hexachlorobutadiene	0.206	0.196	4.9	72	-0.03	5.99
43	t	4-Chloro-3-methylphenol	0.305	0.320	-4.9	79	-0.03	6.53
44	t	2-Methylnaphthalene	0.626	0.635	-1.4	77	-0.03	6.67
45	t	1-Methylnaphthalene	0.728	0.743	-2.1	76	-0.03	6.80
46	t	Dimethylnaphthalene	0.676	0.688	-1.8	77	-0.03	7.55
47	I	Acenaphthene-d10	1.000	1.000	0.0	72	-0.04	8.19
		----------	True	Calc.	% Drift	----------		
48	t	Hexachlorocyclopentadiene	100.000	81.176	18.8	57	-0.03	6.88
		----------	AvgRF	CCRF	% Dev	----------		
49	t	2,4,6-Trichlorophenol	0.382	0.387	-1.3	76	-0.03	7.08
50	t	2,4,5-Trichlorophenol	0.415	0.405	2.4	73	-0.04	7.15
51	S	2-Fluorobiphenyl	1.313	1.274	3.0	76	-0.04	7.17
52	t	2-Chloronaphthalene	1.165	1.153	1.0	77	-0.03	7.34
53	t	Biphenyl	1.488	1.497	-0.6	78	-0.03	7.31
54	t	2-Nitroaniline	0.332	0.334	-0.6	75	-0.03	7.51
55	t	Dimethylphthalate	1.362	1.421	-4.3	79	-0.03	7.79
56	t	Acenaphthylene	1.927	1.892	1.8	76	-0.04	7.96
57	t	2,6-Dinitrotoluene	0.303	0.331	-9.2	79	-0.03	7.89
58	t	3-Nitroaniline	0.335	0.366	-9.3	78	-0.03	8.17
59	t	Acenaphthene	1.161	1.164	-0.3	78	-0.04	8.24
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	100.000	108.499	-8.5	80	-0.03	8.35
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.123	0.118	4.1	70	-0.05	8.58
62	t	Dibenzofuran	1.726	1.727	-0.1	76	-0.04	8.53
63	t	2,4-Dinitrotoluene	0.397	0.447	-12.6	80	-0.03	8.56
64	t	2,3,4,6-Tetrachlorophenol	0.321	0.324	-0.9	72	-0.04	8.78
65	t	Diethylphthalate	1.356	1.434	-5.8	80	-0.03	8.99
66	t	Fluorene	1.396	1.401	-0.4	76	-0.04	9.12
67	t	4-Chlorophenyl-phenylethe	0.666	0.674	-1.2	78	-0.04	9.14
68	t	4-Nitroaniline	0.326	0.350	-7.4	74	-0.02	9.22
69	I	Phenanthrene-d10	1.000	1.000	0.0	72	-0.04	10.81
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	50.000	52.511	-5.0	77	-0.03	9.28
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.537	0.577	-7.4	82	-0.04	9.37
72	t	1,2-Diphenylhydrazine	0.688	0.680	1.2	75	-0.04	9.42
73	S	2,4,6-Tribromophenol	0.138	0.145	-5.1	76	-0.04	9.56
74	t	4-Bromophenyl-phenylether	0.247	0.258	-4.5	78	-0.04	10.01
75	t	Hexachlorobenzene	0.291	0.286	1.7	75	-0.04	10.11
		----------	True	Calc.	% Drift	----------		
76	t	Pentachlorophenol	100.000	97.927	2.1	70	-0.04	10.53
		----------	AvgRF	CCRF	% Dev	----------		
77	t	Phenanthrene	1.115	1.129	-1.3	77	-0.04	10.86
78	t	Anthracene	1.155	1.143	1.0	75	-0.04	10.96
79	t	Carbazole	1.064	1.104	-3.8	78	-0.04	11.32
80	t	Di-n-butylphthalate	1.321	1.450	-9.8	81	-0.04	12.09
81	t	Fluoranthene	1.307	1.281	2.0	74	-0.04	13.15
82	t	Octadecane	0.430	0.427	0.7	74	-0.04	10.78

Continuing Calibration Summary

Job Number: JC18516 **Sample:** EM5230-CC5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M123740.D
Project: BMSMC, Building 5 Area, PR

83	I	Chrysene-d12	1.000	1.000	0.0	75	-0.04	16.00
84	t	Pyrene	1.304	1.262	3.2	76	-0.05	13.58
85		Butyl stearate	0.298	0.300	-0.7	78	-0.05	15.26
86	S	Terphenyl-d14	0.897	0.896	0.1	77	-0.05	13.98
87	t	Butylbenzylphthalate	0.567	0.613	-8.1	80	-0.05	15.03
88	t	Benzo[a]anthracene	1.223	1.170	4.3	76	-0.05	15.97
89	t	3,3'-Dichlorobenzidine	0.447	0.471	-5.4	81	-0.05	16.00
90	t	Chrysene	1.142	1.143	-0.1	78	-0.05	16.04
91	t	bis(2-Ethylhexyl)phthalat	0.765	0.849	-11.0	85	-0.05	16.23
92	I	Perylene-d12	1.000	1.000	0.0	73	-0.05	18.62
93	t	Di-n-octylphthalate	1.298	1.386	-6.8	79	-0.06	17.46
94	t	Benzo[b]fluoranthene	1.229	1.204	2.0	78	-0.05	17.98
95	t	Benzo[k]fluoranthene	1.185	1.190	-0.4	79	-0.05	18.03
96	t	Benzo[a]pyrene	1.135	1.106	2.6	76	-0.05	18.52
97	t	Indeno[1,2,3-cd]pyrene	1.149	1.186	-3.2	80	-0.05	20.35
98	t	Dibenz(a,h)acridine	1.018	1.066	-4.7	82	-0.05	19.98
99	t	Dibenz[a,h]anthracene	1.168	1.201	-2.8	82	-0.06	20.39
100	t	7,12-Dimethylbenz(a)anthr	0.553	0.538	2.7	76	-0.05	17.98
101	t	Benzo[g,h,i]perylene	1.197	1.164	2.8	78	-0.06	20.82

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M123517a.D MM5217.M Wed Apr 20 14:02:21 2016 MSM

Continuing Calibration Summary

Job Number: JC18516 **Sample:** EM5230-CC5218
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M123741.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5230\M123741.D          Vial: 3
Acq On    : 20 Apr 2016  11:47 am                   Operator: ashleyd
Sample    : cc5218-50                               Inst    : Instrument #1
Misc      : op93063,em5230                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MM5217.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Tue Apr 19 00:08:51 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102	I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	77	-0.03	4.70
103	t	Benzaldehyde	1.012	0.839	17.1	67	-0.03	4.37
104	I	Acenaphthene-d10a	1.000	1.000	0.0	77	-0.04	8.18
105	I	1,2,4,5-Tetrachlorobenzen	0.642	0.550	14.3	71	-0.05	6.89
106	t	Atrazine	0.223	0.210	5.8	76	-0.03	10.41
107	I	Chrysene-d12a	1.000	1.000	0.0	68	-0.06	15.98
108	t	Benzidine	0.468	0.402	14.1	56	-0.07	13.49
109	I	Naphthalene-d8a	1.000	1.000	0.0	77	-0.03	5.83
110		Hydroquinone	0.323	0.354	-9.6	77	-0.11	6.35

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M123517a.D MM5217.M Wed Apr 20 14:02:24 2016 MSM

Continuing Calibration Summary

Job Number: JC18516 **Sample:** EM5235-CC5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M123836A.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\EM5235\M123836a.D Vial: 2
Acq On : 22 Apr 2016 8:08 pm Operator: seanb1
Sample : cc5217-50 Inst : Instrument #1
Misc : op93063,em5235 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\MM5217.M (RTE Integrator)
Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update : Thu Apr 21 17:40:51 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	98	-0.02	4.66
2	t	1,4-Dioxane	0.555	0.559	-0.7	107	-0.07	2.21
3	t	Pyridine	1.350	1.456	-7.9	104	-0.05	2.55
4	t	N-Nitrosodimethylamine	0.591	0.652	-10.3	107	-0.05	2.51
5	S	2-Fluorophenol	1.223	1.320	-7.9	105	-0.04	3.71
6	t	Indene	2.275	2.396	-5.3	110	-0.02	4.86
7	t	Cumene	3.052	3.194	-4.7	107	-0.02	4.06
8	S	Phenol-d5	1.536	1.678	-9.2	107	-0.02	4.42
9	t	Phenol	1.646	1.909	-16.0	108	-0.02	4.44
10	t	Aniline	1.915	1.491	22.1#	78	-0.01	4.42
11	t	bis(2-Chloroethyl)ether	1.282	1.283	-0.1	108	-0.01	4.46
12	t	2-Chlorophenol	1.371	1.473	-7.4	111	-0.02	4.52
13	t	Decane	1.300	1.228	5.5	106	-0.02	4.53
14	t	1,3-Dichlorobenzene	1.563	1.632	-4.4	108	-0.02	4.62
15	t	1,4-Dichlorobenzene	1.549	1.621	-4.6	109	-0.02	4.68
16	t	Benzyl alcohol	0.794	0.903	-13.7	110	-0.01	4.78
17	t	1,2-Dichlorobenzene	1.458	1.526	-4.7	110	-0.02	4.79
18	t	Acetophenone	1.821	1.946	-6.9	110	-0.01	4.99
19	t	2-Methylphenol	1.136	1.238	-9.0	108	-0.02	4.89
20	t	2,2'-oxybis(1-Chloropropa	0.424	0.442	-4.2	115	-0.01	4.87
21	t	3&4-Methylphenol	1.245	1.383	-11.1	111	-0.02	5.01
22	t	n-Nitroso-di-n-propylamin	0.983	1.034	-5.2	112	-0.01	4.99
23	t	Hexachloroethane	0.586	0.594	-1.4	106	-0.02	5.07
24	I	Naphthalene-d8	1.000	1.000	0.0	101	-0.02	5.79
25	S	Nitrobenzene-d5	0.356	0.368	-3.4	109	-0.01	5.11
26	t	Nitrobenzene	0.360	0.375	-4.2	112	-0.01	5.13
27	t	Quinoline	0.763	0.782	-2.5	109	-0.02	6.19
28	t	Isophorone	0.647	0.665	-2.8	110	-0.02	5.34
29	t	2-Nitrophenol	0.204	0.225	-10.3	114	-0.01	5.42
30	t	2,4-Dimethylphenol	0.333	0.330	0.9	109	-0.02	5.47
31	t	Benzoic acid	0.219	0.254	-16.0	110	0.00	5.62
32	t	bis(2-Chloroethoxy)methan	0.393	0.424	-7.9	116	-0.01	5.54
33	t	2,4-Dichlorophenol	0.305	0.331	-8.5	112	-0.02	5.67
34	t	2,6-Dichlorophenol	0.308	0.318	-3.2	113	-0.01	5.89
35	t	1,3,5-Trichlorobenzene	0.364	0.364	0.0	108	-0.02	5.42
36	t	1,2,4-Trichlorobenzene	0.358	0.359	-0.3	107	-0.02	5.73
37	t	1,2,3-Trichlorobenzene	0.346	0.346	0.0	106	-0.01	5.97
38	t	Naphthalene	1.048	1.073	-2.4	110	-0.02	5.81
39	t	4-Chloroaniline	0.451	0.430	4.7	98	-0.02	5.88
40	t	2,3-Dichloroaniline	0.397	0.418	-5.3	111	-0.02	6.99
41	t	Caprolactam	0.165	0.173	-4.8	116	0.00	6.30

Continuing Calibration Summary

Job Number: JC18516 **Sample:** EM5235-CC5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M123836A.D
Project: BMSMC, Building 5 Area, PR

42	t	Hexachlorobutadiene	0.206	0.204	1.0	106	-0.01	5.94
43	t	4-Chloro-3-methylphenol	0.305	0.330	-8.2	116	-0.02	6.48
44	t	2-Methylnaphthalene	0.626	0.636	-1.6	109	-0.02	6.61
45	t	1-Methylnaphthalene	0.728	0.748	-2.7	109	-0.02	6.74
46	t	Dimethylnaphthalene	0.676	0.680	-0.6	108	-0.01	7.48
47	I	Acenaphthene-d10	1.000	1.000	0.0	100	-0.02	8.12
		----------	True	Calc.	% Drift	----------		
48	t	Hexachlorocyclopentadiene	100.000	89.938	10.1	89	-0.02	6.82
		----------	AvgRF	CCRF	% Dev	----------		
49	t	2,4,6-Trichlorophenol	0.382	0.396	-3.7	108	-0.02	7.01
50	t	2,4,5-Trichlorophenol	0.415	0.411	1.0	102	-0.03	7.08
51	S	2-Fluorobiphenyl	1.313	1.301	0.9	108	-0.02	7.11
52	t	2-Chloronaphthalene	1.165	1.185	-1.7	110	-0.02	7.27
53	t	Biphenyl	1.488	1.533	-3.0	111	-0.02	7.25
54	t	2-Nitroaniline	0.332	0.359	-8.1	112	-0.01	7.45
55	t	Dimethylphthalate	1.362	1.449	-6.4	112	-0.01	7.73
56	t	Acenaphthylene	1.927	1.914	0.7	107	-0.02	7.89
57	t	2,6-Dinitrotoluene	0.303	0.330	-8.9	109	-0.01	7.82
58	t	3-Nitroaniline	0.335	0.361	-7.8	107	0.00	8.10
59	t	Acenaphthene	1.161	1.167	-0.5	109	-0.02	8.17
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	100.000	115.621	-15.6	120	0.00	8.29
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.123	0.122	0.8	101	-0.03	8.51
62	t	Dibenzofuran	1.726	1.723	0.2	106	-0.02	8.46
63	t	2,4-Dinitrotoluene	0.397	0.449	-13.1	111	0.00	8.49
64	t	2,3,4,6-Tetrachlorophenol	0.321	0.355	-10.6	110	-0.01	8.71
65	t	Diethylphthalate	1.356	1.425	-5.1	111	0.00	8.92
66	t	Fluorene	1.396	1.407	-0.8	107	-0.02	9.04
67	t	4-Chlorophenyl-phenylethe	0.666	0.683	-2.6	109	0.00	9.07
68	t	4-Nitroaniline	0.326	0.347	-6.4	102	0.00	9.15
69	I	Phenanthrene-d10	1.000	1.000	0.0	97	-0.03	10.73
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	50.000	56.294	-12.6	112	-0.02	9.20
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.537	0.594	-10.6	114	-0.03	9.29
72	t	1,2-Diphenylhydrazine	0.688	0.728	-5.8	108	-0.03	9.35
73	S	2,4,6-Tribromophenol	0.138	0.160	-15.9	113	-0.03	9.48
74	t	4-Bromophenyl-phenylether	0.247	0.271	-9.7	110	-0.03	9.94
75	t	Hexachlorobenzene	0.291	0.305	-4.8	108	-0.03	10.04
		----------	True	Calc.	% Drift	----------		
76	t	Pentachlorophenol	100.000	117.993	-18.0	114	-0.02	10.44
		----------	AvgRF	CCRF	% Dev	----------		
77	t	Phenanthrene	1.115	1.125	-0.9	104	-0.02	10.78
78	t	Anthracene	1.155	1.171	-1.4	104	-0.02	10.88
79	t	Carbazole	1.064	1.108	-4.1	105	-0.02	11.23
80	t	Di-n-butylphthalate	1.321	1.466	-11.0	110	0.00	12.01
81	t	Fluoranthene	1.307	1.351	-3.4	105	0.00	13.07
82	t	Octadecane	0.430	0.446	-3.7	104	-0.02	10.71

Continuing Calibration Summary

Job Number: JC18516 **Sample:** EM5235-CC5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M123836A.D
Project: BMSMC, Building 5 Area, PR

83	I	Chrysene-d12	1.000	1.000	0.0	107	-0.03	15.91
84	t	Pyrene	1.304	1.266	2.9	108	-0.05	13.49
85		Butyl stearate		----------NA----------				
86	S	Terphenyl-d14	0.897	0.918	-2.3	112	-0.04	13.90
87	t	Butylbenzylphthalate	0.567	0.602	-6.2	113	-0.03	14.95
88	t	Benzo[a]anthracene	1.223	1.185	3.1	110	-0.03	15.89
89	t	3,3'-Dichlorobenzidine	0.447	0.460	-2.9	113	-0.03	15.91
90	t	Chrysene	1.142	1.135	0.6	111	-0.03	15.96
91	t	bis(2-Ethylhexyl)phthalat	0.765	0.832	-8.8	119	-0.03	16.15
92	I	Perylene-d12	1.000	1.000	0.0	106	-0.03	18.53
93	t	Di-n-octylphthalate	1.298	1.339	-3.2	112	-0.04	17.38
94	t	Benzo[b]fluoranthene	1.229	1.181	3.9	111	-0.04	17.89
95	t	Benzo[k]fluoranthene	1.185	1.185	0.0	115	-0.04	17.94
96	t	Benzo[a]pyrene	1.135	1.097	3.3	109	-0.03	18.43
97	t	Indeno[1,2,3-cd]pyrene	1.149	1.253	-9.1	123	-0.05	20.24
98	t	Dibenz(a,h)acridine	1.018	1.107	-8.7	125	-0.05	19.88
99	t	Dibenz[a,h]anthracene	1.168	1.240	-6.2	123	-0.05	20.28
100	t	7,12-Dimethylbenz(a)anthr	0.553	0.534	3.4	110	-0.04	17.89
101	t	Benzo[g,h,i]perylene	1.197	1.238	-3.4	120	-0.06	20.70

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M123517a.D MM5217.M Mon Apr 25 09:44:37 2016 MSM

6.7.56

6

Continuing Calibration Summary

Job Number: JC18516 **Sample:** EM5235-CC5218
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M123837.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5235\M123837.D          Vial: 3
Acq On    : 22 Apr 2016   8:36 pm                   Operator: seanb1
Sample    : cc5218-50                               Inst    : Instrument #1
Misc      : op93063,em5235                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MM5217.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Thu Apr 21 17:40:51 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102	I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	86	-0.01	4.66
103	t	Benzaldehyde	1.012	0.820	19.0	74	-0.02	4.34
104	I	Acenaphthene-d10a	1.000	1.000	0.0	85	-0.03	8.11
105	I	1,2,4,5-Tetrachlorobenzen	0.642	0.553	13.9	78	-0.03	6.83
106	t	Atrazine	0.223	0.208	6.7	82	0.00	10.33
107	I	Chrysene-d12a	1.000	1.000	0.0	79	-0.04	15.89
108	t	Benzidine	0.468	0.386	17.5	62	-0.06	13.42
109	I	Naphthalene-d8a	1.000	1.000	0.0	84	-0.02	5.78
110		Hydroquinone	0.323	0.332	-2.8	80	-0.09	6.30

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M123517a.D MM5217.M Mon Apr 25 09:44:40 2016 MSM

Continuing Calibration Summary

Job Number: JC18516 **Sample:** EM5236-CC5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M123858.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5236\M123858.D          Vial: 2
Acq On    : 25 Apr 2016   1:04 pm                   Operator: ashleyn
Sample    : cc5217-25                               Inst    : Instrument #1
Misc      : op93063,em5236                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MM5217.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Thu Apr 21 17:40:51 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	101	-0.02	4.65
2	t	1,4-Dioxane	0.555	0.577	-4.0	114	-0.06	2.21
3	t	Pyridine	1.350	1.473	-9.1	112	-0.05	2.56
4	t	N-Nitrosodimethylamine	0.591	0.658	-11.3	114	-0.05	2.52
5	S	2-Fluorophenol	1.223	1.322	-8.1	110	-0.04	3.71
6	t	Indene	2.275	2.396	-5.3	110	-0.03	4.85
7	t	Cumene	3.052	3.322	-8.8	113	-0.03	4.06
8	S	Phenol-d5	1.536	1.666	-8.5	108	-0.03	4.42
9	t	Phenol	1.646	1.907	-15.9	119	-0.02	4.43
10	t	Aniline	1.915	1.551	19.0	80	-0.02	4.41
11	t	bis(2-Chloroethyl)ether	1.282	1.340	-4.5	112	-0.02	4.45
12	t	2-Chlorophenol	1.371	1.506	-9.8	113	-0.03	4.51
13	t	Decane	1.300	1.378	-6.0	114	-0.02	4.53
14	t	1,3-Dichlorobenzene	1.563	1.637	-4.7	111	-0.02	4.61
15	t	1,4-Dichlorobenzene	1.549	1.648	-6.4	112	-0.03	4.67
16	t	Benzyl alcohol	0.794	0.853	-7.4	108	-0.02	4.77
17	t	1,2-Dichlorobenzene	1.458	1.568	-7.5	112	-0.02	4.79
18	t	Acetophenone	1.821	1.902	-4.4	110	-0.02	4.97
19	t	2-Methylphenol	1.136	1.180	-3.9	105	-0.03	4.88
20	t	2,2'-oxybis(1-Chloropropa	0.424	0.428	-0.9	105	-0.02	4.86
21	t	3&4-Methylphenol	1.245	1.291	-3.7	105	-0.03	5.00
22	t	n-Nitroso-di-n-propylamin	0.983	1.036	-5.4	111	-0.02	4.97
23	t	Hexachloroethane	0.586	0.580	1.0	106	-0.03	5.06
24	I	Naphthalene-d8	1.000	1.000	0.0	98	-0.03	5.78
25	S	Nitrobenzene-d5	0.356	0.383	-7.6	110	-0.02	5.10
26	t	Nitrobenzene	0.360	0.389	-8.1	111	-0.02	5.12
27	t	Quinoline	0.763	0.767	-0.5	101	-0.03	6.17
28	t	Isophorone	0.647	0.693	-7.1	108	-0.03	5.33
29	t	2-Nitrophenol	0.204	0.224	-9.8	107	-0.02	5.41
30	t	2,4-Dimethylphenol	0.333	0.305	8.4	94	-0.03	5.46
31	t	Benzoic acid	0.219	0.243	-11.0	113	-0.03	5.59
32	t	bis(2-Chloroethoxy)methan	0.393	0.423	-7.6	110	-0.02	5.53
33	t	2,4-Dichlorophenol	0.305	0.321	-5.2	103	-0.03	5.66
34	t	2,6-Dichlorophenol	0.308	0.313	-1.6	104	-0.03	5.88
35	t	1,3,5-Trichlorobenzene	0.364	0.381	-4.7	106	-0.03	5.41
36	t	1,2,4-Trichlorobenzene	0.358	0.368	-2.8	104	-0.02	5.72
37	t	1,2,3-Trichlorobenzene	0.346	0.353	-2.0	102	-0.03	5.95
38	t	Naphthalene	1.048	1.098	-4.8	106	-0.03	5.80
39	t	4-Chloroaniline	0.451	0.426	5.5	93	-0.03	5.87
40	t	2,3-Dichloroaniline	0.397	0.406	-2.3	103	-0.03	6.98
41	t	Caprolactam	0.165	0.162	1.8	104	-0.03	6.26

Continuing Calibration Summary

Job Number: JC18516 **Sample:** EM5236-CC5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M123858.D
Project: BMSMC, Building 5 Area, PR

42	t	Hexachlorobutadiene	0.206	0.204	1.0	100	-0.02	5.93
43	t	4-Chloro-3-methylphenol	0.305	0.325	-6.6	109	-0.03	6.46
44	t	2-Methylnaphthalene	0.626	0.641	-2.4	104	-0.03	6.60
45	t	1-Methylnaphthalene	0.728	0.746	-2.5	103	-0.03	6.73
46	t	Dimethylnaphthalene	0.676	0.690	-2.1	104	-0.03	7.46
47	I	Acenaphthene-d10	1.000	1.000	0.0	97	-0.04	8.10
		----------	True	Calc.	% Drift	----------		
48	t	Hexachlorocyclopentadiene	50.000	38.620	22.8#	75	-0.03	6.81
		----------	AvgRF	CCRF	% Dev	----------		
49	t	2,4,6-Trichlorophenol	0.382	0.393	-2.9	102	-0.04	7.00
50	t	2,4,5-Trichlorophenol	0.415	0.393	5.3	98	-0.04	7.07
51	S	2-Fluorobiphenyl	1.313	1.326	-1.0	102	-0.03	7.10
52	t	2-Chloronaphthalene	1.165	1.200	-3.0	104	-0.04	7.26
53	t	Biphenyl	1.488	1.546	-3.9	105	-0.03	7.23
54	t	2-Nitroaniline	0.332	0.348	-4.8	105	-0.03	7.43
55	t	Dimethylphthalate	1.362	1.419	-4.2	104	-0.03	7.71
56	t	Acenaphthylene	1.927	1.926	0.1	100	-0.03	7.88
57	t	2,6-Dinitrotoluene	0.303	0.323	-6.6	106	-0.03	7.81
58	t	3-Nitroaniline	0.335	0.343	-2.4	102	-0.03	8.08
59	t	Acenaphthene	1.161	1.181	-1.7	102	-0.04	8.15
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	50.000	53.394	-6.8	119	-0.02	8.27
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.123	0.116	5.7	90	-0.02	8.52
62	t	Dibenzofuran	1.726	1.755	-1.7	102	-0.03	8.44
63	t	2,4-Dinitrotoluene	0.397	0.445	-12.1	107	-0.02	8.47
64	t	2,3,4,6-Tetrachlorophenol	0.321	0.340	-5.9	107	-0.03	8.69
65	t	Diethylphthalate	1.356	1.464	-8.0	109	-0.03	8.90
66	t	Fluorene	1.396	1.489	-6.7	107	-0.03	9.02
67	t	4-Chlorophenyl-phenylethe	0.666	0.713	-7.1	108	-0.03	9.05
68	t	4-Nitroaniline	0.326	0.326	0.0	96	-0.02	9.12
69	I	Phenanthrene-d10	1.000	1.000	0.0	98	-0.04	10.72
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	25.000	27.895	-11.6	113	-0.04	9.19
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.537	0.600	-11.7	113	-0.05	9.27
72	t	1,2-Diphenylhydrazine	0.688	0.746	-8.4	109	-0.05	9.33
73	S	2,4,6-Tribromophenol	0.138	0.160	-15.9	115	-0.05	9.46
74	t	4-Bromophenyl-phenylether	0.247	0.274	-10.9	112	-0.05	9.92
75	t	Hexachlorobenzene	0.291	0.317	-8.9	112	-0.05	10.02
		----------	True	Calc.	% Drift	----------		
76	t	Pentachlorophenol	50.000	57.224	-14.4	121	-0.04	10.43
		----------	AvgRF	CCRF	% Dev	----------		
77	t	Phenanthrene	1.115	1.151	-3.2	105	-0.04	10.76
78	t	Anthracene	1.155	1.181	-2.3	103	-0.04	10.86
79	t	Carbazole	1.064	1.101	-3.5	103	-0.04	11.21
80	t	Di-n-butylphthalate	1.321	1.422	-7.6	107	-0.02	11.99
81	t	Fluoranthene	1.307	1.311	-0.3	100	-0.02	13.05
82	t	Octadecane	0.430	0.483	-12.3	112	-0.03	10.70

Continuing Calibration Summary

Job Number: JC18516 **Sample:** EM5236-CC5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M123858.D
Project: BMSMC, Building 5 Area, PR

83	I	Chrysene-d12	1.000	1.000	0.0	102	-0.05	15.89
84	t	Pyrene	1.304	1.242	4.8	101	-0.07	13.47
85		Butyl stearate	0.298	0.297	0.3	105	-0.05	15.16
86	S	Terphenyl-d14	0.897	0.886	1.2	105	-0.06	13.88
87	t	Butylbenzylphthalate	0.567	0.571	-0.7	104	-0.05	14.93
88	t	Benzo[a]anthracene	1.223	1.199	2.0	106	-0.05	15.87
89	t	3,3'-Dichlorobenzidine	0.447	0.446	0.2	104	-0.05	15.89
90	t	Chrysene	1.142	1.151	-0.8	108	-0.05	15.93
91	t	bis(2-Ethylhexyl)phthalat	0.765	0.824	-7.7	113	-0.04	16.14
92	I	Perylene-d12	1.000	1.000	0.0	103	-0.05	18.51
93	t	Di-n-octylphthalate	1.298	1.419	-9.3	114	-0.06	17.36
94	t	Benzo[b]fluoranthene	1.229	1.279	-4.1	112	-0.06	17.87
95	t	Benzo[k]fluoranthene	1.185	1.260	-6.3	115	-0.07	17.91
96	t	Benzo[a]pyrene	1.135	1.152	-1.5	108	-0.06	18.41
97	t	Indeno[1,2,3-cd]pyrene	1.149	1.138	1.0	106	-0.08	20.21
98	t	Dibenz(a,h)acridine	1.018	1.083	-6.4	112	-0.07	19.85
99	t	Dibenz[a,h]anthracene	1.168	1.231	-5.4	111	-0.09	20.25
100	t	7,12-Dimethylbenz(a)anthr	0.553	0.536	3.1	102	-0.07	17.86
101	t	Benzo[g,h,i]perylene	1.197	1.227	-2.5	109	-0.10	20.66

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M123518a.D MM5217.M Mon Apr 25 15:32:50 2016 MSM

6.7.58

6

Continuing Calibration Summary

Job Number: JC18516 **Sample:** EM5236-CC5218
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M123859.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5236\M123859.D          Vial: 3
Acq On    : 25 Apr 2016   1:34 pm                   Operator: ashleyn
Sample    : cc5218-25                               Inst    : Instrument #1
Misc      : op93063,em5236                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MM5217.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Thu Apr 21 17:40:51 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102	I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	108	-0.02	4.65
103	t	Benzaldehyde	1.012	0.966	4.5	106	-0.03	4.33
104	I	Acenaphthene-d10a	1.000	1.000	0.0	106	-0.04	8.10
105	I	1,2,4,5-Tetrachlorobenzen	0.642	0.604	5.9	103	-0.04	6.82
106	t	Atrazine	0.223	0.208	6.7	98	-0.01	10.32
107	I	Chrysene-d12a	1.000	1.000	0.0	95	-0.05	15.88
108	t	Benzidine	0.468	0.390	16.7	73	-0.07	13.40
109	I	Naphthalene-d8a	1.000	1.000	0.0	107	-0.03	5.78
110		Hydroquinone	0.323	0.344	-6.5	115	-0.09	6.30

```
(#) = Out of Range                SPCC's out = 0  CCC's out = 0
 M123518a.D MM5217.M          Mon Apr 25 15:32:52 2016   MSM
```

Continuing Calibration Summary

Job Number: JC18516 **Sample:** EM5238-CC5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M123900.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5238\M123900.D          Vial: 2
Acq On    : 26 Apr 2016  10:16 am                   Operator: ashleyn
Sample    : cc5217-25                               Inst    : Instrument #1
Misc      : op93324,em5238                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MM5217.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Tue Apr 26 08:32:07 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	91	-0.04	4.64
2	t	1,4-Dioxane	0.555	0.590	-6.3	105	-0.08	2.20
3	t	Pyridine	1.350	1.496	-10.8	102	-0.06	2.54
4	t	N-Nitrosodimethylamine	0.591	0.715	-21.0#	112	-0.07	2.50
5	S	2-Fluorophenol	1.223	1.334	-9.1	100	-0.05	3.69
6	t	Indene	2.275	2.451	-7.7	101	-0.04	4.84
7	t	Cumene	3.052	3.344	-9.6	102	-0.05	4.04
8	S	Phenol-d5	1.536	1.713	-11.5	100	-0.04	4.41
9	t	Phenol	1.646	1.980	-20.3#	112	-0.04	4.42
10	t	Aniline	1.915	1.567	18.2	73	-0.03	4.40
11	t	bis(2-Chloroethyl)ether	1.282	1.385	-8.0	104	-0.03	4.44
12	t	2-Chlorophenol	1.371	1.488	-8.5	100	-0.04	4.50
13	t	Decane	1.300	1.454	-11.8	108	-0.03	4.52
14	t	1,3-Dichlorobenzene	1.563	1.654	-5.8	101	-0.04	4.60
15	t	1,4-Dichlorobenzene	1.549	1.665	-7.5	102	-0.04	4.65
16	t	Benzyl alcohol	0.794	0.888	-11.8	101	-0.04	4.76
17	t	1,2-Dichlorobenzene	1.458	1.564	-7.3	101	-0.04	4.77
18	t	Acetophenone	1.821	1.914	-5.1	100	-0.04	4.96
19	t	2-Methylphenol	1.136	1.225	-7.8	98	-0.05	4.86
20	t	2,2'-oxybis(1-Chloropropa	0.424	0.452	-6.6	100	-0.03	4.85
21	t	3&4-Methylphenol	1.245	1.323	-6.3	97	-0.04	4.99
22	t	n-Nitroso-di-n-propylamin	0.983	1.079	-9.8	104	-0.04	4.96
23	t	Hexachloroethane	0.586	0.589	-0.5	96	-0.04	5.04
24	I	Naphthalene-d8	1.000	1.000	0.0	91	-0.04	5.76
25	S	Nitrobenzene-d5	0.356	0.375	-5.3	100	-0.04	5.09
26	t	Nitrobenzene	0.360	0.387	-7.5	103	-0.04	5.10
27	t	Quinoline	0.763	0.783	-2.6	97	-0.05	6.15
28	t	Isophorone	0.647	0.678	-4.8	99	-0.04	5.31
29	t	2-Nitrophenol	0.204	0.219	-7.4	97	-0.02	5.39
30	t	2,4-Dimethylphenol	0.333	0.305	8.4	88	-0.04	5.44
31	t	Benzoic acid	0.219	0.243	-11.0	105	-0.05	5.57
32	t	bis(2-Chloroethoxy)methan	0.393	0.419	-6.6	102	-0.04	5.51
33	t	2,4-Dichlorophenol	0.305	0.325	-6.6	98	-0.04	5.64
34	t	2,6-Dichlorophenol	0.308	0.315	-2.3	98	-0.04	5.86
35	t	1,3,5-Trichlorobenzene	0.364	0.377	-3.6	97	-0.04	5.40
36	t	1,2,4-Trichlorobenzene	0.358	0.369	-3.1	97	-0.04	5.70
37	t	1,2,3-Trichlorobenzene	0.346	0.359	-3.8	97	-0.05	5.94
38	t	Naphthalene	1.048	1.084	-3.4	98	-0.05	5.78
39	t	4-Chloroaniline	0.451	0.428	5.1	87	-0.04	5.85
40	t	2,3-Dichloroaniline	0.397	0.412	-3.8	98	-0.05	6.96
41	t	Caprolactam	0.165	0.176	-6.7	105	-0.05	6.25

Continuing Calibration Summary

Job Number: JC18516 **Sample:** EM5238-CC5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M123900.D
Project: BMSMC, Building 5 Area, PR

42	t	Hexachlorobutadiene	0.206	0.216	-4.9	99	-0.05	5.91
43	t	4-Chloro-3-methylphenol	0.305	0.333	-9.2	104	-0.05	6.44
44	t	2-Methylnaphthalene	0.626	0.658	-5.1	100	-0.05	6.58
45	t	1-Methylnaphthalene	0.728	0.767	-5.4	99	-0.05	6.71
46	t	Dimethylnaphthalene	0.676	0.705	-4.3	99	-0.05	7.44
47	I	Acenaphthene-d10	1.000	1.000	0.0	91	-0.06	8.08
		----------	True	Calc.	% Drift	----------		
48	t	Hexachlorocyclopentadiene	50.000	35.230	29.5#	63	-0.05	6.79
		----------	AvgRF	CCRF	% Dev	----------		
49	t	2,4,6-Trichlorophenol	0.382	0.402	-5.2	98	-0.05	6.98
50	t	2,4,5-Trichlorophenol	0.415	0.425	-2.4	99	-0.06	7.05
51	S	2-Fluorobiphenyl	1.313	1.349	-2.7	97	-0.06	7.07
52	t	2-Chloronaphthalene	1.165	1.219	-4.6	99	-0.05	7.24
53	t	Biphenyl	1.488	1.570	-5.5	100	-0.05	7.21
54	t	2-Nitroaniline	0.332	0.370	-11.4	104	-0.05	7.41
55	t	Dimethylphthalate	1.362	1.448	-6.3	100	-0.05	7.69
56	t	Acenaphthylene	1.927	1.966	-2.0	95	-0.06	7.85
57	t	2,6-Dinitrotoluene	0.303	0.332	-9.6	102	-0.05	7.78
58	t	3-Nitroaniline	0.335	0.339	-1.2	94	-0.05	8.06
59	t	Acenaphthene	1.161	1.201	-3.4	97	-0.06	8.13
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	50.000	49.468	1.1	102	-0.03	8.25
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.123	0.118	4.1	86	-0.06	8.47
62	t	Dibenzofuran	1.726	1.757	-1.8	95	-0.05	8.42
63	t	2,4-Dinitrotoluene	0.397	0.437	-10.1	98	-0.04	8.45
64	t	2,3,4,6-Tetrachlorophenol	0.321	0.339	-5.6	100	-0.05	8.67
65	t	Diethylphthalate	1.356	1.429	-5.4	100	-0.04	8.88
66	t	Fluorene	1.396	1.421	-1.8	95	-0.05	9.00
67	t	4-Chlorophenyl-phenylethe	0.666	0.696	-4.5	98	-0.05	9.03
68	t	4-Nitroaniline	0.326	0.276	15.3	76	-0.04	9.10
69	I	Phenanthrene-d10	1.000	1.000	0.0	87	-0.06	10.69
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	25.000	26.050	-4.2	94	-0.06	9.17
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.537	0.587	-9.3	99	-0.07	9.25
72	t	1,2-Diphenylhydrazine	0.688	0.767	-11.5	101	-0.07	9.31
73	S	2,4,6-Tribromophenol	0.138	0.157	-13.8	101	-0.07	9.44
74	t	4-Bromophenyl-phenylether	0.247	0.275	-11.3	101	-0.07	9.90
75	t	Hexachlorobenzene	0.291	0.314	-7.9	99	-0.07	10.00
		----------	True	Calc.	% Drift	----------		
76	t	Pentachlorophenol	50.000	56.434	-12.9	107	-0.06	10.41
		----------	AvgRF	CCRF	% Dev	----------		
77	t	Phenanthrene	1.115	1.151	-3.2	94	-0.06	10.74
78	t	Anthracene	1.155	1.186	-2.7	92	-0.06	10.83
79	t	Carbazole	1.064	1.072	-0.8	90	-0.06	11.19
80	t	Di-n-butylphthalate	1.321	1.417	-7.3	96	-0.05	11.97
81	t	Fluoranthene	1.307	1.353	-3.5	92	-0.04	13.03
82	t	Octadecane	0.430	0.498	-15.8	104	-0.05	10.67

Continuing Calibration Summary

Job Number: JC18516 **Sample:** EM5238-CC5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M123900.D
Project: BMSMC, Building 5 Area, PR

83	I	Chrysene-d12	1.000	1.000	0.0	93	-0.07	15.86
84	t	Pyrene	1.304	1.301	0.2	96	-0.09	13.45
85		Butyl stearate	0.298	0.338	-13.4	108	-0.07	15.14
86	S	Terphenyl-d14	0.897	0.944	-5.2	102	-0.08	13.86
87	t	Butylbenzylphthalate	0.567	0.596	-5.1	98	-0.08	14.90
88	t	Benzo[a]anthracene	1.223	1.193	2.5	95	-0.07	15.84
89	t	3,3'-Dichlorobenzidine	0.447	0.420	6.0	89	-0.07	15.87
90	t	Chrysene	1.142	1.163	-1.8	99	-0.08	15.91
91	t	bis(2-Ethylhexyl)phthalat	0.765	0.821	-7.3	102	-0.07	16.11
92	I	Perylene-d12	1.000	1.000	0.0	91	-0.08	18.48
93	t	Di-n-octylphthalate	1.298	1.393	-7.3	99	-0.08	17.34
94	t	Benzo[b]fluoranthene	1.229	1.296	-5.5	100	-0.09	17.84
95	t	Benzo[k]fluoranthene	1.185	1.233	-4.1	99	-0.09	17.89
96	t	Benzo[a]pyrene	1.135	1.147	-1.1	95	-0.08	18.39
97	t	Indeno[1,2,3-cd]pyrene	1.149	1.194	-3.9	98	-0.11	20.19
98	t	Dibenz(a,h)acridine	1.018	1.077	-5.8	98	-0.10	19.82
99	t	Dibenz[a,h]anthracene	1.168	1.262	-8.0	100	-0.11	20.22
100	t	7,12-Dimethylbenz(a)anthr	0.553	0.536	3.1	90	-0.09	17.84
101	t	Benzo[g,h,i]perylene	1.197	1.277	-6.7	100	-0.13	20.63

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M123518a.D MM5217.M Tue Apr 26 12:58:19 2016 MSM

6.7.60

6

Continuing Calibration Summary

Job Number: JC18516 **Sample:** EM5238-CC5218
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M123902.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5238\M123902.D          Vial: 4
Acq On    : 26 Apr 2016  11:14 am                   Operator: ashleyn
Sample    : cc5218-25                               Inst    : Instrument #1
Misc      : op93324,em5238                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MM5217.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Tue Apr 26 08:32:07 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102	I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	125	-0.04	4.64
103	t	Benzaldehyde	1.012	1.006	0.6	128	-0.04	4.31
104	I	Acenaphthene-d10a	1.000	1.000	0.0	117	-0.06	8.08
105	I	1,2,4,5-Tetrachlorobenzen	0.642	0.604	5.9	113	-0.06	6.80
106	t	Atrazine	0.223	0.213	4.5	110	-0.03	10.30
107	I	Chrysene-d12a	1.000	1.000	0.0	102	-0.08	15.86
108	t	Benzidine	0.468	0.304	35.0#	61	-0.10	13.38
109	I	Naphthalene-d8a	1.000	1.000	0.0	120	-0.04	5.76
110		Hydroquinone	0.323	0.332	-2.8	125	-0.12	6.27

```
(#) = Out of Range                SPCC's out = 0  CCC's out = 0
 M123518a.D MM5217.M          Tue Apr 26 12:58:21 2016   MSM
```

Initial Calibration Summary

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EP4514-ICC4514
Lab FileID: P102794.D

```
                    Response Factor Report  MSP

  Method       : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
  Title        : Semi Volatile Extractables by GC/MS
  Last Update  : Wed Feb 24 16:59:22 2016
  Response via : Initial Calibration

  Calibration Files
  2   =P102791.D  5   =P102790.D  25  =P102793.D  80  =P102788.D
  100 =P102787.D  50  =P102794.D  10  =P102789.D  1   =P102792.D

   Compound          2     5     25    80    100   50    10    1     Avg %RSD
  ---------------------------------------------------------------------------
159) I   1,4-Dichlorobenzene-d ----------------ISTD---------------------
160) Benzaldehyde 1.493 1.438 1.178 0.968 0.861 1.070 1.264 1.347 1.202  18.71

161) I   Phenanthrene-d10b     ----------------ISTD---------------------
162) Atrazine     0.205 0.229 0.206 0.195 0.191 0.202 0.206 0.198 0.204   5.61

163) I   Chrysene-d12b         ----------------ISTD---------------------
164) Benzidine    0.801 0.928 0.737 0.484       0.617 0.814 0.548 0.704  22.70

165) I   Naphthalene-d8b       ----------------ISTD---------------------
166) Hydroquinone 0.277 0.369 0.396 0.399 0.390 0.390 0.346       0.367  11.94

167) I   Acenaphthene-d10b     ----------------ISTD---------------------
168) 1,2,4,5-Tetr 0.648 0.646 0.535 0.467 0.439 0.496 0.546 0.615 0.549  14.65
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           MP4513.M          Thu Feb 25 16:37:51 2016
```

6.7.62

6

Initial Calibration Verification

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EP4514-ICV4514
Lab FileID: P102798A.D

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\EP4513\P102798A.D          Vial: 21
Acq On    : 24 Feb 2016   7:31 am                    Operator: sarad
Sample    : icv4514-50                               Inst    : MSP
Misc      : op91338,ep4514                           Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Wed Feb 24 16:59:22 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  48%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
167 I	Acenaphthene-d10b	1.000	1.000	0.0	95	0.00	8.86
168	1,2,4,5-Tetrachlorobenzen	0.549	0.509	7.3	97	0.00	7.49

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P102805A.D MP4513.M Thu Feb 25 16:23:15 2016

Initial Calibration Verification

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EP4514-ICV4514
Lab FileID: P102799A.D

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\EP4513\P102799A.D          Vial: 22
Acq On    : 24 Feb 2016   8:00 am                    Operator: sarad
Sample    : icv4514-50                               Inst    : MSP
Misc      : op91338,ep4514                           Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Wed Feb 24 16:59:22 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  48%  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	95	0.00	4.37
160		Benzaldehyde	1.202	1.156	3.8	103	0.00	3.84
161	I	Phenanthrene-d10b	1.000	1.000	0.0	94	0.00	11.22
162		Atrazine	0.204	0.201	1.5	94	0.00	10.88

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P102805A.D MP4513.M Thu Feb 25 16:23:17 2016

Initial Calibration Verification

Job Number: JC18516 **Sample:** EP4514-ICV4514
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P102800.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\EP4513\P102800.D          Vial: 23
Acq On    : 24 Feb 2016   8:29 am                   Operator: sarad
Sample    : icv4514-50                              Inst    : MSP
Misc      : op91338,ep4514                          Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Wed Feb 24 16:59:22 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  48%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
165 I	Naphthalene-d8b	1.000	1.000	0.0	103	0.00	6.13
166	Hydroquinone	0.367	0.386	-5.2	102	0.00	6.81

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P102805A.D MP4513.M Thu Feb 25 16:23:18 2016

Initial Calibration Verification

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EP4514-ICV4514
Lab FileID: P102801A.D

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\EP4513\P102801A.D          Vial: 24
Acq On    : 24 Feb 2016   8:58 am                    Operator: sarad
Sample    : icv4514-50                               Inst    : MSP
Misc      : op91338,ep4514                           Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Wed Feb 24 16:59:22 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  48%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
163 I	Chrysene-d12b	1.000	1.000	0.0	113	0.00	15.95
164	Benzidine	0.704	1.090	-54.8#	199	0.00	13.59

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P102805A.D MP4513.M Thu Feb 25 16:23:20 2016

Initial Calibration Summary

Job Number: JC18516 **Sample:** EP4524-ICC4524
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P103017.D
Project: BMSMC, Building 5 Area, PR

Response Factor Report MSP

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 10:44:44 2016
Response via : Initial Calibration

Calibration Files
2 =P103015.D 5 =P103014.D 25 =P103018.D 80 =P103012.D
100 =P103011.D 50 =P103017.D 10 =P103013.D 1 =P103016.D

Compound	2	5	25	80	100	50	10	1	Avg	%RSD
1) I 1,4-Dichlorobenzene-d					ISTD					
2) 1,4-Dioxane	0.777	0.716	0.721	0.624	0.626	0.757	0.631	0.834	0.711	11.04
3) Pyridine	1.581	1.654	1.751	1.401	1.419	1.729	1.626	1.675	1.604	8.20
4) N-Nitrosodim	0.614	0.593	0.639	0.546	0.542	0.651	0.585	0.630	0.600	6.83
5) 2-Fluorophen	1.323	1.387	1.551	1.302	1.296	1.576	1.419	1.284	1.392	8.32
6) Indene	2.297	2.390	2.495	1.972	1.913	2.492	2.363	2.280	2.275	9.69
7) Cumene	3.409	3.405	3.648	2.649	2.520	3.496	3.392	3.773	3.287	13.83
8) Phenol-d5	1.776	1.728	1.873	1.465	1.425	1.874	1.763	1.685	1.699	9.99
9) Phenol	1.784	1.739	1.897	1.633	1.612	1.882	1.788	1.689	1.753	6.03
10) Aniline	2.052	2.064	2.156	1.506	1.449	1.969	2.005	2.079	1.910	14.30
11) bis(2-Chloro	1.413	1.288	1.330	1.122	1.128	1.343	1.281	1.413	1.290	8.75
12) 2-Chlorophen	1.441	1.367	1.438	1.165	1.131	1.437	1.406	1.241	1.328	9.74
13) Decane	1.204	1.083	1.130	0.870	0.839	1.086	1.091	1.153	1.057	12.45
14) 1,3-Dichloro	1.591	1.524	1.598	1.285	1.239	1.574	1.547	1.548	1.488	9.57
15) 1,4-Dichloro	1.552	1.437	1.566	1.239	1.206	1.529	1.469	1.435	1.429	9.59
16) Benzyl alcoh	0.777	0.790	0.887	0.706	0.687	0.908	0.818	0.745	0.790	10.05
17) 1,2-Dichloro	1.397	1.435	1.460	1.133	1.094	1.430	1.399	1.500	1.356	11.33
18) Acetophenone	1.790	1.873	1.977	1.586	1.554	1.954	1.818	1.840	1.799	8.63
19) 2-Methylphen	1.126	1.113	1.253	1.028	1.034	1.246	1.168	1.069	1.130	7.76
20) 2,2'-oxybis(	0.420	0.420	0.453	0.382	0.386	0.453	0.417	0.462	0.424	7.19
21) 3&4-Methylph	1.202	1.219	1.370	1.149	1.129	1.388	1.258	1.147	1.233	8.11
22) n-Nitroso-di	0.914	0.895	0.992	0.804	0.793	0.986	0.933	0.904	0.903	8.15
23) Hexachloroet	0.473	0.473	0.503	0.429	0.431	0.499	0.469	0.449	0.466	6.01
24) I Naphthalene-d8					ISTD					
25) Nitrobenzene	0.409	0.398	0.438	0.380	0.376	0.445	0.409	0.384	0.405	6.40
26) Nitrobenzene	0.382	0.397	0.415	0.352	0.342	0.413	0.395	0.414	0.389	7.32
27) Quinoline	0.709	0.738	0.786	0.669	0.652	0.799	0.705	0.709	0.721	7.18
28) Isophorone	0.614	0.665	0.744	0.615	0.600	0.756	0.684	0.593	0.659	9.75
29) 2-Nitropheno	0.175	0.178	0.219	0.192	0.188	0.225	0.191	0.156	0.191	11.94
30) 2,4-Dimethyl	0.290	0.312	0.362	0.328	0.322	0.384	0.322	0.270	0.324	11.16
31) Benzoic acid			0.240	0.278	0.271	0.284	0.184		0.251	16.36
32) bis(2-Chloro	0.417	0.422	0.458	0.381	0.370	0.462	0.411	0.408	0.416	7.78
33) 2,4-Dichloro	0.260	0.285	0.325	0.273	0.262	0.325	0.293	0.240	0.283	10.80
34) 2,6-Dichloro	0.252	0.281	0.303	0.254	0.245	0.303	0.277	0.258	0.271	8.40
35) 1,3,5-Trichl	0.321	0.331	0.343	0.271	0.262	0.339	0.320	0.349	0.317	10.33
36) 1,2,4-Trichl	0.319	0.333	0.332	0.278	0.267	0.331	0.318	0.328	0.313	8.35
37) 1,2,3-Trichl	0.317	0.301	0.302	0.245	0.235	0.301	0.299	0.302	0.288	10.51
38) Naphthalene	1.054	1.051	1.090	0.838	0.786	1.070	1.009	1.039	0.992	11.53
39) 4-Chloroanil	0.414	0.447	0.475	0.373	0.358	0.472	0.444	0.392	0.422	10.57
40) 2,3-Dichloro	0.366	0.375	0.394	0.329	0.321	0.402	0.361	0.326	0.359	8.71
41) Caprolactam	0.109	0.128	0.149	0.141	0.142	0.158	0.129	0.109	0.133	13.41
42) Hexachlorobu	0.162	0.164	0.167	0.139	0.135	0.165	0.153	0.161	0.156	7.80
43) 4-Chloro-3-m	0.259	0.300	0.353	0.303	0.298	0.369	0.314	0.220	0.302	15.74
44) 2-Methylnaph	0.557	0.577	0.604	0.480	0.456	0.598	0.576	0.549	0.550	9.80
45) 1-Methylnaph	0.693	0.715	0.736	0.588	0.561	0.727	0.690	0.652	0.670	9.70

Initial Calibration Summary

Job Number: JC18516 **Sample:** EP4524-ICC4524
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P103017.D
Project: BMSMC, Building 5 Area, PR

```
46) Dimethylnaph 0.586 0.605 0.648 0.513 0.496 0.645 0.604 0.593 0.586   9.45

47) I   Acenaphthene-d10      ----------------ISTD---------------------
48) Hexachlorocy 0.217 0.230 0.305 0.276 0.276 0.326 0.274 0.180 0.261  18.47
49) 2,4,6-Trichl 0.284 0.296 0.356 0.319 0.312 0.367 0.325 0.248 0.313  12.26
50) 2,4,5-Trichl 0.284 0.325 0.364 0.329 0.331 0.395 0.335 0.246 0.326  13.92
51) 2-Fluorobiph 1.305 1.294 1.293 1.016 0.980 1.290 1.266 1.265 1.214  11.05
52) 2-Chloronaph 1.154 1.133 1.128 0.877 0.854 1.110 1.086 1.063 1.051  11.21
53) Biphenyl     1.513 1.426 1.446 1.106 1.046 1.421 1.411 1.438 1.351  12.84
54) 2-Nitroanili 0.262 0.278 0.351 0.318 0.321 0.371 0.312 0.218 0.304  16.32
55) Dimethylphth 1.206 1.244 1.318 1.114 1.092 1.351 1.234 1.158 1.215   7.55
56) Acenaphthyle 1.703 1.754 1.864 1.436 1.376 1.850 1.719 1.725 1.678  10.67
57) 2,6-Dinitrot 0.198 0.238 0.295 0.275 0.273 0.320 0.276 0.198 0.259  17.03
58) 3-Nitroanili 0.250 0.291 0.358 0.317 0.313 0.379 0.320 0.211 0.305  17.86
59) Acenaphthene 1.053 1.077 1.142 0.906 0.884 1.147 1.054 1.083 1.043   9.42
60) 2,4-Dinitrop 0.026 0.053 0.126 0.160 0.162 0.162 0.087       0.111  50.86
         ----- Quadratic regression -----                Coefficient =  0.9983
              Response Ratio = -0.02896 + 0.16490 *A + 0.00063 *A^2

61) 4-Nitropheno 0.121 0.126 0.180 0.185 0.192 0.204 0.153       0.166  19.76
62) Dibenzofuran 1.533 1.549 1.623 1.278 1.225 1.609 1.500 1.442 1.470  10.02
63) 2,4-Dinitrot 0.261 0.314 0.400 0.352 0.351 0.413 0.348 0.195 0.329  21.86
         ----- Quadratic regression -----                Coefficient =  0.9979
              Response Ratio = -0.01311 + 0.45486 *A + -0.04135 *A^2

64) 2,3,4,6-Tetr 0.186 0.233 0.277 0.260 0.259 0.300 0.239       0.251  14.48
65) Diethylphtha 1.200 1.218 1.321 1.116 1.090 1.371 1.230 1.111 1.207   8.39
66) Fluorene     1.213 1.267 1.314 1.069 1.037 1.337 1.237 1.128 1.200   9.27
67) 4-Chlorophen 0.554 0.570 0.587 0.487 0.476 0.586 0.544 0.504 0.539   8.19
68) 4-Nitroanili 0.236 0.276 0.339 0.309 0.313 0.365 0.307       0.306  13.62

69) I   Phenanthrene-d10      ----------------ISTD---------------------
70) 4,6-Dinitro-       0.069 0.131 0.148 0.154 0.159 0.100       0.127  27.86
            ----- Linear regression -----  Coefficient =  0.9977
              Response Ratio = -0.01194 + 0.15773 *A

71) n-Nitrosodip 0.546 0.570 0.641 0.551 0.547 0.670 0.574 0.509 0.576   9.30
72) 1,2-Diphenyl 0.760 0.793 0.884 0.737 0.725 0.903 0.816 0.698 0.789   9.42
73) 2,4,6-Tribro 0.066 0.080 0.103 0.101 0.103 0.114 0.088       0.094  17.60
74) 4-Bromopheny 0.178 0.188 0.210 0.193 0.196 0.227 0.193 0.180 0.196   8.28
75) Hexachlorobe 0.214 0.207 0.220 0.197 0.201 0.231 0.209 0.220 0.212   5.30
76) Pentachlorop 0.048 0.069 0.118 0.127 0.130 0.139 0.094       0.103  33.32
         ----- Quadratic regression -----                Coefficient =  0.9978
              Response Ratio = -0.01809 + 0.14437 *A + -0.00235 *A^2

77) Phenanthrene 1.037 1.026 1.137 0.918 0.903 1.148 1.038 0.999 1.026   8.64
78) Anthracene   0.999 1.043 1.156 0.949 0.929 1.190 1.067 0.895 1.029  10.32
79) Carbazole    0.997 1.080 1.202 0.975 0.958 1.230 1.078 0.910 1.054  10.97
80) Di-n-butylph 0.997 1.176 1.462 1.220 1.191 1.541 1.316 0.923 1.228  17.17
81) Fluoranthene 1.023 1.082 1.246 1.045 1.024 1.289 1.127 0.998 1.104   9.86
82) Octadecane   0.374 0.389 0.456 0.385 0.376 0.487 0.406 0.349 0.403  11.47

83) I   Chrysene-d12          ----------------ISTD---------------------
84) Pyrene       1.223 1.275 1.447 1.202 1.155 1.428 1.291 1.163 1.273   8.82
85) Terphenyl-d1 0.745 0.751 0.866 0.769 0.754 0.903 0.768 0.744 0.788   7.78
86) Butylbenzylp 0.419 0.537 0.707 0.665 0.655 0.760 0.591       0.619  18.48
87) Butyl steara 0.170 0.244 0.348 0.324 0.311 0.372 0.283       0.293  23.39
         ----- Quadratic regression -----                Coefficient =  0.9985
              Response Ratio = -0.02367 + 0.43258 *A + -0.04551 *A^2
```

Initial Calibration Summary

Job Number: JC18516 **Sample:** EP4524-ICC4524
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P103017.D
Project: BMSMC, Building 5 Area, PR

```
 88) Benzo[a]anth 0.969 0.988 1.160 1.035 1.019 1.205 0.996 0.976 1.044   8.54
 89) 3,3'-Dichlor 0.241 0.306 0.423 0.407 0.405 0.452 0.351       0.369  20.10
          ----- Quadratic regression -----                Coefficient =  0.9988
               Response Ratio = -0.02261 + 0.49442 *A + -0.03344 *A^2

 90) Chrysene     1.038 0.993 1.143 0.986 0.977 1.151 1.022 0.954 1.033   7.24
 91) bis(2-Ethylh 0.477 0.661 0.928 0.879 0.847 1.001 0.763       0.794  22.42
          ----- Quadratic regression -----                Coefficient =  0.9986
               Response Ratio = -0.06180 + 1.15010 *A + -0.11255 *A^2


 92) I   Perylene-d12          ----------------ISTD---------------------
 93) Di-n-octylph 0.708 1.144 1.681 1.427 1.382 1.836 1.391       1.367  26.85
          ----- Quadratic regression -----                Coefficient =  0.9944
               Response Ratio = -0.12624 + 2.19676 *A + -0.31528 *A^2

 94) Benzo[b]fluo 1.065 1.146 1.275 1.087 1.067 1.352 1.159 0.951 1.138  11.17
 95) Benzo[k]fluo 1.066 1.142 1.251 0.962 0.951 1.249 1.104 1.041 1.096  10.49
 96) Benzo[a]pyre 0.879 0.999 1.179 0.964 0.951 1.215 1.054 0.787 1.004  14.32
 97) Indeno[1,2,3 0.723 0.849 1.037 0.907 0.929 1.110 0.895 0.637 0.886  17.34
 98) Dibenz(a,h)a 0.599 0.757 0.961 0.850 0.835 1.057 0.848       0.844  17.22
 99) Dibenz[a,h]a 0.873 0.922 1.092 0.945 0.946 1.175 0.956 0.728 0.955  14.09
100) 7,12-Dimethy 0.378 0.428 0.561 0.484 0.474 0.593 0.454       0.482  15.43
101) Benzo[g,h,i] 0.910 1.004 1.136 0.965 0.972 1.218 1.007 0.903 1.015  10.80
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           MP4524.M          Thu Mar 03 11:11:34 2016
```

6.7.67

6

Initial Calibration Verification

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EP4524-ICV4524
Lab FileID: P103019.D

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\EP4524\P103019.D          Vial: 10
Acq On    :  2 Mar 2016   9:05 pm                   Operator: sarad
Sample    : icv4524-50                              Inst    : MSP
Misc      : op91633,ep4524                          Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Thu Mar 03 10:44:44 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  48%  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	120	0.00	4.34
9	t	Phenol	1.753	1.661	5.2	106	0.00	3.98
12	t	2-Chlorophenol	1.328	1.289	2.9	108	0.00	4.11
19	t	2-Methylphenol	1.130	1.149	-1.7	111	-0.01	4.72
21	t	3&4-Methylphenol	1.233	1.212	1.7	105	0.00	4.93
24	I	Naphthalene-d8	1.000	1.000	0.0	115	0.00	6.10
29	t	2-Nitrophenol	0.191	0.202	-5.8	103	0.00	5.55
30	t	2,4-Dimethylphenol	0.324	0.361	-11.4	108	0.00	5.67
31	t	Benzoic acid	0.251	0.233	7.2	95	0.00	5.87
33	t	2,4-Dichlorophenol	0.283	0.281	0.7	100	0.00	5.95
34		2,6-Dichlorophenol	0.271	0.281	-3.7	107	0.00	6.25
43	t	4-Chloro-3-methylphenol	0.302	0.311	-3.0	97	-0.01	7.07
47	I	Acenaphthene-d10	1.000	1.000	0.0	116	0.00	8.82
49	t	2,4,6-Trichlorophenol	0.313	0.326	-4.2	103	0.00	7.67
50	t	2,4,5-Trichlorophenol	0.326	0.319	2.1	94	0.00	7.77
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	50.000	39.374	21.3	76	0.00	8.96
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.166	0.167	-0.6	95	0.00	9.26
		----------	AvgRF	CCRF	% Dev	----------		
64		2,3,4,6-Tetrachlorophenol	0.251	0.238	5.2	92	0.00	9.39
69	I	Phenanthrene-d10	1.000	1.000	0.0	116	0.00	11.18
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	50.000	42.455	15.1	91	0.00	9.81
		----------	True	Calc.	% Drift	----------		
76	t	Pentachlorophenol	50.000	43.186	15.1	9 0	0.00	10.93

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P103017A.D MP4524.M Thu Mar 03 11:09:38 2016

Initial Calibration Verification

Job Number: JC18516 **Sample:** EP4524-ICV4524
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P103020.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\EP4524\P103020.D          Vial: 11
Acq On    :  2 Mar 2016   9:34 pm                   Operator: sarad
Sample    : icv4524-50                              Inst    : MSP
Misc      : op91633,ep4524                          Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Thu Mar 03 10:44:44 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  48%  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	133	0.00	4.35
3	t	Pyridine	1.604	1.667	-3.9	128	0.08	2.05
10	t	Aniline	1.910	2.027	-6.1	137	0.01	3.96
16	t	Benzyl alcohol	0.790	0.848	-7.3	124	0.00	4.54
24	I	Naphthalene-d8	1.000	1.000	0.0	139	0.00	6.10
39	t	4-Chloroaniline	0.422	0.362	14.2	107	0.00	6.24
44	t	2-Methylnaphthalene	0.550	0.517	6.0	120	0.00	7.19
47	I	Acenaphthene-d10	1.000	1.000	0.0	130	0.00	8.82
54	t	2-Nitroaniline	0.304	0.346	-13.8	121	0.00	8.14
58	t	3-Nitroaniline	0.305	0.330	-8.2	113	0.00	8.80
62	t	Dibenzofuran	1.470	1.515	-3.1	123	0.00	9.15
68	t	4-Nitroaniline	0.306	0.335	-9.5	120	0.00	9.77
69	I	Phenanthrene-d10	1.000	1.000	0.0	142	0.00	11.18
79	t	Carbazole	1.054	1.026	2.7	118	0.00	11.61
83	I	Chrysene-d12	1.000	1.000	0.0	134	0.00	15.90

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P103017A.D MP4524.M Thu Mar 03 11:09:39 2016

Initial Calibration Verification

Job Number: JC18516 **Sample:** EP4524-ICV4524
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P103021.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EP4524\P103021.D Vial: 12
Acq On : 2 Mar 2016 10:03 pm Operator: sarad
Sample : icv4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 10:44:44 2016
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 48% 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	119	0.00	4.34
5	S	2-Fluorophenol	1.392	1.384	0.6	104	0.00	2.97
8	S	Phenol-d5	1.699	1.713	-0.8	109	0.00	3.96
24	I	Naphthalene-d8	1.000	1.000	0.0	118	0.00	6.09
25	S	Nitrobenzene-d5	0.405	0.405	0.0	107	0.00	5.07
47	I	Acenaphthene-d10	1.000	1.000	0.0	115	0.00	8.82
51	S	2-Fluorobiphenyl	1.214	1.195	1.6	106	0.00	7.79
69	I	Phenanthrene-d10	1.000	1.000	0.0	114	0.00	11.18
73	S	2,4,6-Tribromophenol	0.094	0.089	5.3	89	0.00	10.09
83	I	Chrysene-d12	1.000	1.000	0.0	109	-0.01	15.90
85	S	Terphenyl-d14	0.788	0.797	-1.1	96	0.00	14.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P103017A.D MP4524.M Thu Mar 03 11:09:40 2016

Initial Calibration Verification

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EP4524-ICV4524
Lab FileID: P103022.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EP4524\P103022.D Vial: 13
Acq On : 2 Mar 2016 10:32 pm Operator: sarad
Sample : icv4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 10:44:44 2016
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 48% 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	119	0.00	4.34
4	t	N-Nitrosodimethylamine	0.600	0.543	9.5	99	0.00	1.94
11	t	bis(2-Chloroethyl)ether	1.290	1.356	-5.1	120	0.00	4.02
14	t	1,3-Dichlorobenzene	1.488	1.444	3.0	109	0.00	4.28
15	t	1,4-Dichlorobenzene	1.429	1.376	3.7	107	0.00	4.36
17	t	1,2-Dichlorobenzene	1.356	1.367	-0.8	114	0.00	4.56
20	t	2,2'-oxybis(1-Chloropropa	0.424	0.383	9.7	101	0.00	4.70
22		n-Nitroso-di-n-propylamin	0.903	0.894	1.0	108	0.00	4.88
23	t	Hexachloroethane	0.466	0.461	1.1	110	0.00	5.00
24	I	Naphthalene-d8	1.000	1.000	0.0	115	0.00	6.10
26	t	Nitrobenzene	0.389	0.376	3.3	104	0.00	5.10
28	t	Isophorone	0.659	0.702	-6.5	107	0.00	5.44
32	t	bis(2-Chloroethoxy)methan	0.416	0.418	-0.5	104	0.00	5.78
36	t	1,2,4-Trichlorobenzene	0.313	0.310	1.0	108	0.00	6.02
38	t	Naphthalene	0.992	0.988	0.4	106	0.00	6.13
42	t	Hexachlorobutadiene	0.156	0.162	-3.8	112	0.00	6.34
47	I	Acenaphthene-d10	1.000	1.000	0.0	115	0.00	8.82
52	t	2-Chloronaphthalene	1.051	1.078	-2.6	112	0.00	7.94
55	t	Dimethylphthalate	1.215	1.170	3.7	100	0.00	8.47
56	t	Acenaphthylene	1.678	1.583	5.7	99	0.00	8.59
57	t	2,6-Dinitrotoluene	0.259	0.255	1.5	92	0.00	8.54
59	t	Acenaphthene	1.043	1.017	2.5	102	0.00	8.87
		----------	True	Calc.	% Drift		----------	
63	t	2,4-Dinitrotoluene	50.000	43.762	12.5	97	0.00	9.17
		----------	AvgRF	CCRF	% Dev		----------	
65	t	Diethylphthalate	1.207	1.155	4.3	97	0.00	9.60
66	t	Fluorene	1.200	1.168	2.7	101	0.00	9.69
67	t	4-Chlorophenyl-phenylethe	0.539	0.506	6.1	100	0.00	9.74
69	I	Phenanthrene-d10	1.000	1.000	0.0	119	0.00	11.18
		----------	AvgRF	CCRF	% Dev		----------	
71	t	n-Nitrosodiphenylamine	0.576	0.537	6.8	96	0.00	9.93
72	t	1,2-Diphenylhydrazine	0.789	0.743	5.8	98	0.00	9.98
74	t	4-Bromophenyl-phenylether	0.196	0.192	2.0	101	0.00	10.51
75	t	Hexachlorobenzene	0.212	0.189	10.8	98	0.00	10.58
		----------	AvgRF	CCRF	% Dev		----------	
77	t	Phenanthrene	1.026	0.983	4.2	102	0.00	11.22
78	t	Anthracene	1.029	0.974	5.3	98	0.00	11.30

Initial Calibration Verification

Job Number: JC18516 **Sample:** EP4524-ICV4524
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P103022.D
Project: BMSMC, Building 5 Area, PR

80	t	Di-n-butylphthalate	1.228	1.242	-1.1	96	0.00	12.29
81	t	Fluoranthene	1.104	1.075	2.6	99	0.00	13.24
83	I	Chrysene-d12	1.000	1.000	0.0	101	0.00	15.90
84	t	Pyrene	1.273	1.392	-9.3	99	0.00	13.63
86	t	Butylbenzylphthalate	0.619	0.697	-12.6	93	0.00	15.00
		----------	AvgRF	CCRF	% Dev	----------		
88	t	Benzo[a]anthracene	1.044	1.135	-8.7	95	0.00	15.89
		----------	AvgRF	CCRF	% Dev	----------		
90	t	Chrysene	1.033	1.076	-4.2	95	0.00	15.95
		----------	True	Calc.	% Drift	----------		
91	t	bis(2-Ethylhexyl)phthalat	50.000	46.469	7.1	91	0.00	16.17
		----------	AvgRF	CCRF	% Dev	----------		
92	I	Perylene-d12	1.000	1.000	0.0	99	0.00	18.47
		----------	True	Calc.	% Drift	----------		
93	t	Di-n-octylphthalate	50.000	48.962	2.1	90	0.00	17.38
		----------	AvgRF	CCRF	% Dev	----------		
94	t	Benzo[b]fluoranthene	1.138	1.192	-4.7	87	0.00	17.83
95	t	Benzo[k]fluoranthene	1.096	1.232	-12.4	97	-0.01	17.88
96	t	Benzo[a]pyrene	1.004	1.154	-14.9	94	0.00	18.37
97	t	Indeno[1,2,3-cd]pyrene	0.886	1.025	-15.7	91	0.00	20.09
99	t	Dibenz[a,h]anthracene	0.955	1.071	-12.1	90	0.00	20.14
101	t	Benzo[g,h,i]perylene	1.015	1.094	-7.8	89	0.00	20.46

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P103017A.D MP4524.M Thu Mar 03 11:09:41 2016

6.7.71

6

Initial Calibration Verification

Job Number: JC18516 **Sample:** EP4524-ICV4524
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P103023.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\EP4524\P103023.D          Vial: 14
Acq On    :  2 Mar 2016  11:02 pm                   Operator: sarad
Sample    : icv4524-50                              Inst    : MSP
Misc      : op91633,ep4524                          Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Thu Mar 03 10:44:44 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  48%  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	4.34
2	t	1,4-Dioxane	0.711	0.616	13.4	83	0.00	1.78
6	t	Indene	2.275	2.163	4.9	89	0.00	4.67
7	t	Cumene	3.287	3.030	7.8	89	0.00	3.43
13	t	Decane	1.057	0.961	9.1	91	0.00	4.16
18	t	Acetophenone	1.799	1.668	7.3	88	0.00	4.86
24	I	Naphthalene-d8	1.000	1.000	0.0	105	0.00	6.09
27	t	Quinoline	0.721	0.630	12.6	82	-0.01	6.63
40	t	2,3-Dichloroaniline	0.359	0.294	18.1	76	0.00	7.64
41	t	Caprolactam	0.133	0.121	9.0	80	-0.03	6.71
45	t	1-Methylnaphthalene	0.670	0.603	10.0	87	0.00	7.34
46	t	Dimethylnaphthalene	0.586	0.531	9.4	86	0.00	8.18
47	I	Acenaphthene-d10	1.000	1.000	0.0	101	0.00	8.82
48	t	Hexachlorocyclopentadiene	0.261	0.270	-3.4	84	0.00	7.46
53	t	Biphenyl	1.351	1.303	3.6	92	0.00	7.94
69	I	Phenanthrene-d10	1.000	1.000	0.0	96	0.00	11.18
82	t	Octadecane	0.403	0.414	-2.7	82	0.00	11.17
		----------	AvgRF	CCRF	% Dev	----------		
92	I	Perylene-d12	1.000	1.000	0.0	90	0.00	18.46
100	t	7,12-Dimethylbenz(a)anthr	0.482	0.516	-7.1	79	0.00	17.84

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P103017A.D MP4524.M Thu Mar 03 11:22:22 2016

Initial Calibration Verification

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EP4524-ICV4524
Lab FileID: P103024.D

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\EP4524\P103024.D          Vial: 15
Acq On    :  2 Mar 2016  11:31 pm                   Operator: sarad
Sample    : icv4524-50                              Inst    : MSP
Misc      : op91633,ep4524                          Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Thu Mar 03 10:44:44 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  48%  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  125  -0.01   15.90
           ----------------------- True    Calc.   % Drift  ------------
89 t   3,3'-Dichlorobenzidine     50.000  43.268     13.5  105   0.00   15.91
---------------------------------------------------------------------------
---------------------------------------------------------------------------

   (#) = Out of Range              SPCC's out = 0  CCC's out = 0
    P103017A.D MP4524.M         Thu Mar 03 11:09:43 2016
```

Initial Calibration Summary

Job Number: JC18516 **Sample:** EP4587-ICC4587
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P104209.D
Project: BMSMC, Building 5 Area, PR

```
                          Response Factor Report  MSP

  Method       : C:\MSDCHEM\1\METHODS\MP4587.M (RTE Integrator)
  Title        : Semi Volatile Extractables by GC/MS
  Last Update  : Sun Apr 17 13:33:43 2016
  Response via : Initial Calibration

  Calibration Files
  2   =P104213.D  5   =P104212.D  25  =P104210.D  80  =P104208.D
  100 =P104207.D  50  =P104209.D  10  =P104211.D  1   =

   Compound         2     5     25    80    100   50    10    1     Avg %RSD
  ---------------------------------------------------------------------------


180)     Naphthalene-d8d       ----------------ISTD---------------------
181) Salicylic ac 0.117 0.174 0.201 0.213 0.208 0.194 0.192       0.186  17.56
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           MP4524AP9.M        Sun Apr 17 13:36:31 2016
```

Initial Calibration Verification

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EP4587-ICV4587
Lab FileID: P104214.D

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\EP4587\P104214.D          Vial: 9
Acq On    : 15 Apr 2016  12:24 pm                   Operator: linseyk
Sample    : icv4587-500                             Inst    : MSP
Misc      : op93004,ep4587                          Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\MP4524AP9.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Sun Apr 17 13:33:43 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  48%  Max. R.T. Dev  0.50min
Max. RRF Dev :  30%     Max. Rel. Area : 200%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
180	Naphthalene-d8d	1.000	1.000	0.0	97	0.00	5.90
181 t	Salicylic acid	0.186	0.161	13.4	74	-0.07	7.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P103012A.D MP4524AP9.M Sun Apr 17 13:36:18 2016

Continuing Calibration Summary

Job Number: JC18516 **Sample:** EP4590-CC4524
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P104241.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EP4590\P104241.D Vial: 2
Acq On : 18 Apr 2016 9:26 am Operator: linseyk
Sample : cc4524-25 Inst : MSP
Misc : op93004,ep4590 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Apr 18 09:14:55 2016
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 48% 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	145	-0.04	4.14
2	t	1,4-Dioxane	0.711	0.795	-11.8	160	-0.02	1.65
3	t	Pyridine	1.604	1.837	-14.5	152	0.00	1.84
4	t	N-Nitrosodimethylamine	0.600	0.694	-15.7	158	-0.07	1.81
5	S	2-Fluorophenol	1.392	1.636	-17.5	153	-0.04	2.78
6	t	Indene	2.275	2.549	-12.0	148	-0.04	4.46
7	t	Cumene	3.287	3.416	-3.9	136	-0.04	3.24
8	S	Phenol-d5	1.699	2.022	-19.0	157	-0.05	3.74
9	t	Phenol	1.753	2.096	-19.6	160	-0.12	3.76
10	t	Aniline	1.910	1.843	3.5	124	-0.03	3.75
11	t	bis(2-Chloroethyl)ether	1.290	1.528	-18.4	167	-0.05	3.82
12	t	2-Chlorophenol	1.328	1.558	-17.3	157	-0.06	3.90
13	t	Decane	1.057	1.300	-23.0#	167	-0.05	3.96
14	t	1,3-Dichlorobenzene	1.488	1.617	-8.7	147	-0.05	4.07
15	t	1,4-Dichlorobenzene	1.429	1.568	-9.7	145	-0.05	4.16
16	t	Benzyl alcohol	0.790	0.970	-22.8#	159	-0.04	4.33
17	t	1,2-Dichlorobenzene	1.356	1.484	-9.4	147	-0.04	4.35
18	t	Acetophenone	1.799	2.038	-13.3	150	-0.03	4.66
19	t	2-Methylphenol	1.130	1.336	-18.2	155	-0.05	4.50
20	t	2,2'-oxybis(1-Chloropropa	0.424	0.489	-15.3	157	-0.04	4.50
21	t	3&4-Methylphenol	1.233	1.483	-20.3#	157	-0.06	4.72
22		n-Nitroso-di-n-propylamin	0.903	1.051	-16.4	154	-0.03	4.67
23	t	Hexachloroethane	0.466	0.455	2.4	131	-0.04	4.78
24	I	Naphthalene-d8	1.000	1.000	0.0	148	-0.04	5.87
25	S	Nitrobenzene-d5	0.405	0.420	-3.7	142	-0.06	4.86
26	t	Nitrobenzene	0.389	0.411	-5.7	147	-0.06	4.89
27	t	Quinoline	0.721	0.814	-12.9	153	-0.05	6.41
28	t	Isophorone	0.659	0.730	-10.8	145	-0.05	5.22
29	t	2-Nitrophenol	0.191	0.228	-19.4	154	-0.08	5.34
30	t	2,4-Dimethylphenol	0.324	0.349	-7.7	143	-0.05	5.45
31	t	Benzoic acid	0.251	0.306	-21.9#	189	-0.06	5.65
32	t	bis(2-Chloroethoxy)methan	0.416	0.497	-19.5	161	-0.04	5.56
33	t	2,4-Dichlorophenol	0.283	0.322	-13.8	147	-0.06	5.71
34		2,6-Dichlorophenol	0.271	0.307	-13.3	150	-0.08	6.03
35		1,3,5-Trichlorobenzene	0.317	0.323	-1.9	139	-0.05	5.35
36	t	1,2,4-Trichlorobenzene	0.313	0.314	-0.3	140	-0.04	5.80
37		1,2,3-Trichlorobenzene	0.288	0.298	-3.5	146	-0.04	6.13
38	t	Naphthalene	0.992	1.100	-10.9	149	-0.04	5.90
39	t	4-Chloroaniline	0.422	0.473	-12.1	148	-0.04	6.02
40	t	2,3-Dichloroaniline	0.359	0.382	-6.4	144	0.00	7.41
41	t	Caprolactam	0.133	0.177	-33.1#	176	-0.02	6.52

Continuing Calibration Summary

Job Number: JC18516 **Sample:** EP4590-CC4524
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P104241.D
Project: BMSMC, Building 5 Area, PR

42	t	Hexachlorobutadiene	0.156	0.138	11.5	122	-0.04	6.12
43	t	4-Chloro-3-methylphenol	0.302	0.356	-17.9	149	-0.15	6.84
44	t	2-Methylnaphthalene	0.550	0.591	-7.5	145	-0.04	6.96
45	t	1-Methylnaphthalene	0.670	0.718	-7.2	144	-0.02	7.11
46	t	Dimethylnaphthalene	0.586	0.607	-3.6	138	0.00	7.94
47	I	Acenaphthene-d10	1.000	1.000	0.0	141	-0.03	8.58
48	t	Hexachlorocyclopentadiene	0.261	0.200	23.4#	92	-0.07	7.22
49	t	2,4,6-Trichlorophenol	0.313	0.338	-8.0	134	-0.05	7.44
50	t	2,4,5-Trichlorophenol	0.326	0.367	-12.6	142	-0.05	7.51
51	S	2-Fluorobiphenyl	1.214	1.253	-3.2	137	-0.07	7.56
52	t	2-Chloronaphthalene	1.051	1.146	-9.0	143	-0.05	7.71
53	t	Biphenyl	1.351	1.441	-6.7	140	-0.05	7.70
54	t	2-Nitroaniline	0.304	0.381	-25.3#	153	-0.04	7.91
55	t	Dimethylphthalate	1.215	1.347	-10.9	144	-0.03	8.24
56	t	Acenaphthylene	1.678	1.907	-13.6	144	-0.04	8.35
57	t	2,6-Dinitrotoluene	0.259	0.300	-15.8	144	-0.03	8.31
58	t	3-Nitroaniline	0.305	0.395	-29.5#	156	-0.02	8.57
59	t	Acenaphthene	1.043	1.129	-8.2	139	-0.03	8.63
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	50.000	56.639	-13.3	184	-0.01	8.74
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.166	0.166	0.0	130	-0.10	8.96
62	t	Dibenzofuran	1.470	1.615	-9.9	140	-0.03	8.91
		----------	True	Calc.	% Drift	----------		
63	t	2,4-Dinitrotoluene	25.000	24.749	1.0	142	-0.01	8.94
		----------	AvgRF	CCRF	% Dev	----------		
64		2,3,4,6-Tetrachlorophenol	0.251	0.252	-0.4	128	-0.15	9.14
65	t	Diethylphthalate	1.207	1.363	-12.9	145	0.00	9.37
66	t	Fluorene	1.200	1.297	-8.1	139	-0.02	9.45
67	t	4-Chlorophenyl-phenylethe	0.539	0.530	1.7	127	-0.02	9.49
68	t	4-Nitroaniline	0.306	0.387	-26.5#	161	0.00	9.54
69	I	Phenanthrene-d10	1.000	1.000	0.0	134	-0.03	10.93
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	25.000	25.795	-3.2	147	-0.04	9.59
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.576	0.620	-7.6	130	-0.05	9.69
72	t	1,2-Diphenylhydrazine	0.789	0.946	-19.9	144	-0.05	9.74
73	S	2,4,6-Tribromophenol	0.094	0.081	13.8	105	-0.05	9.84
74	t	4-Bromophenyl-phenylether	0.196	0.195	0.5	124	-0.04	10.27
75	t	Hexachlorobenzene	0.212	0.185	12.7	113	-0.04	10.33
		----------	True	Calc.	% Drift	----------		
76	t	Pentachlorophenol	50.000	47.487	5.0	137	-0.04	10.68
		----------	AvgRF	CCRF	% Dev	----------		
77	t	Phenanthrene	1.026	1.122	-9.4	132	-0.04	10.97
78	t	Anthracene	1.029	1.159	-12.6	135	-0.04	11.05
79	t	Carbazole	1.054	1.230	-16.7	137	-0.06	11.35
80	t	Di-n-butylphthalate	1.228	1.628	-32.6#	149	-0.02	12.03
81	t	Fluoranthene	1.104	1.238	-12.1	133	-0.09	12.96
82	t	Octadecane	0.403	0.484	-20.1#	142	-0.02	10.93

Continuing Calibration Summary

Job Number: JC18516 **Sample:** EP4590-CC4524
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P104241.D
Project: BMSMC, Building 5 Area, PR

83	I	Chrysene-d12	1.000	1.000	0.0	128	-0.03	15.60
84	t	Pyrene	1.273	1.484	-16.6	131	-0.03	13.34
85	S	Terphenyl-d14	0.788	0.798	-1.3	118	-0.05	13.72
86	t	Butylbenzylphthalate	0.619	0.857	-38.4#	155	-0.04	14.71
		----------	True	Calc.	% Drift	----------		
87		Butyl stearate	25.000	33.581	-34.3#	181	-0.03	14.94
		----------	AvgRF	CCRF	% Dev	----------		
88	t	Benzo[a]anthracene	1.044	1.164	-11.5	128	-0.03	15.58
		----------	True	Calc.	% Drift	----------		
89	t	3,3'-Dichlorobenzidine	25.000	24.255	3.0	128	-0.03	15.61
		----------	AvgRF	CCRF	% Dev	----------		
90	t	Chrysene	1.033	1.093	-5.8	122	-0.04	15.65
		----------	True	Calc.	% Drift	----------		
91	t	bis(2-Ethylhexyl)phthalat	25.000	28.592	-14.4	155	-0.02	15.88
		----------	AvgRF	CCRF	% Dev	----------		
92	I	Perylene-d12	1.000	1.000	0.0	116	-0.03	18.15
		----------	True	Calc.	% Drift	----------		
93	t	Di-n-octylphthalate	25.000	32.769	-31.1#	162	-0.04	17.07
		----------	AvgRF	CCRF	% Dev	----------		
94	t	Benzo[b]fluoranthene	1.138	1.349	-18.5	123	-0.05	17.52
95	t	Benzo[k]fluoranthene	1.096	1.230	-12.2	114	-0.05	17.57
96	t	Benzo[a]pyrene	1.004	1.179	-17.4	116	-0.04	18.05
97	t	Indeno[1,2,3-cd]pyrene	0.886	1.027	-15.9	115	-0.02	19.77
98	t	Dibenz(a,h)acridine	0.844	0.946	-12.1	114	-0.02	19.46
99	t	Dibenz[a,h]anthracene	0.955	1.047	-9.6	111	-0.02	19.81
100	t	7,12-Dimethylbenz(a)anthr	0.482	0.528	-9.5	109	-0.05	17.53
101	t	Benzo[g,h,i]perylene	1.015	1.100	-8.4	112	-0.03	20.13

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P103018A.D MP4524.M Mon Apr 18 16:54:54 2016

6.7.76

6

Continuing Calibration Summary

Job Number: JC18516 **Sample:** EP4590-CC4514
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P104242.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\EP4590\P104242.D          Vial: 3
Acq On    : 18 Apr 2016   9:55 am                   Operator: linseyk
Sample    : cc4514-25                               Inst    : MSP
Misc      : op93004,ep4590                          Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Mon Apr 18 09:14:55 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  48%  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	140	-0.04	4.14
103		Benzaldehyde	1.202	1.186	1.3	141	-0.05	3.62
104	I	Phenanthrene-d10b	1.000	1.000	0.0	135	-0.04	10.93
105		Atrazine	0.204	0.195	4.4	128	-0.02	10.60
106	I	Chrysene-d12b	1.000	1.000	0.0	134	-0.04	15.60
107		Benzidine	0.704	0.734	-4.3	133	-0.05	13.27
108	I	Naphthalene-d8b	1.000	1.000	0.0	146	-0.04	5.87
109		Hydroquinone	0.367	0.435	-18.5	161	-0.03	6.63
110	I	Acenaphthene-d10b	1.000	1.000	0.0	143	-0.04	8.58
111		1,2,4,5-Tetrachlorobenzen	0.549	0.479	12.8	128	-0.05	7.23

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P103018A.D MP4524.M Mon Apr 18 16:54:55 2016

Continuing Calibration Summary

Job Number: JC18516 **Sample:** EP4590-CC4587
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P104244.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\EP4590\P104244.D          Vial: 5
Acq On    : 18 Apr 2016  10:53 am                   Operator: linseyk
Sample    : cc4587-25                               Inst    : MSP
Misc      : op93004,ep4590                          Multiplr: 1.00
MS Integration Params: rteint.p

Method       : C:\MSDCHEM\1\METHODS\MP4524AP9.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Wed Apr 20 16:55:11 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  48%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
180	Naphthalene-d8d	1.000	1.000	0.0	88	-0.03	5.87
181 t	Salicylic acid	0.186	0.199	-7.0	88	-0.12	6.96

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P103018A.D MP4524AP9.M Fri Apr 22 12:45:08 2016

Continuing Calibration Summary

Job Number: JC18516 **Sample:** EP4592-CC4524
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P104286.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\EP4592\P104286.D Vial: 2
Acq On : 19 Apr 2016 12:34 pm Operator: linseyk
Sample : cc4524-25 Inst : MSP
Misc : op93127,ep4592 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 19 12:44:38 2016
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 48% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	71	0.02	4.19
2	t	1,4-Dioxane	0.711	0.784	-10.3	77	0.00	1.68
3	t	Pyridine	1.604	1.810	-12.8	73	0.03	1.88
4	t	N-Nitrosodimethylamine	0.600	0.688	-14.7	76	-0.03	1.84
5	S	2-Fluorophenol	1.392	1.628	-17.0	74	0.01	2.82
6	t	Indene	2.275	2.510	-10.3	71	0.01	4.52
7	t	Cumene	3.287	3.571	-8.6	69	0.02	3.29
8	S	Phenol-d5	1.699	1.992	-17.2	75	0.00	3.80
9	t	Phenol	1.753	2.121	-21.0#	79	-0.06	3.81
10	t	Aniline	1.910	1.882	1.5	62	0.03	3.81
11	t	bis(2-Chloroethyl)ether	1.290	1.556	-20.6#	83	0.00	3.88
12	t	2-Chlorophenol	1.328	1.537	-15.7	76	0.00	3.95
13	t	Decane	1.057	1.395	-32.0#	87	0.00	4.01
14	t	1,3-Dichlorobenzene	1.488	1.581	-6.2	70	0.00	4.12
15	t	1,4-Dichlorobenzene	1.429	1.556	-8.9	70	0.00	4.21
16	t	Benzyl alcohol	0.790	0.985	-24.7#	78	0.02	4.38
17	t	1,2-Dichlorobenzene	1.356	1.463	-7.9	71	0.01	4.41
18	t	Acetophenone	1.799	2.007	-11.6	72	0.02	4.72
19	t	2-Methylphenol	1.130	1.314	-16.3	74	0.00	4.56
20	t	2,2'-oxybis(1-Chloropropa	0.424	0.495	-16.7	77	0.02	4.56
21	t	3&4-Methylphenol	1.233	1.421	-15.2	73	0.00	4.77
22		n-Nitroso-di-n-propylamin	0.903	1.054	-16.7	75	0.02	4.73
23	t	Hexachloroethane	0.466	0.440	5.6	62	0.02	4.85
24	I	Naphthalene-d8	1.000	1.000	0.0	74	0.02	5.93
25	S	Nitrobenzene-d5	0.405	0.398	1.7	67	0.00	4.92
26	t	Nitrobenzene	0.389	0.397	-2.1	71	0.00	4.95
27	t	Quinoline	0.721	0.749	-3.9	71	0.01	6.47
28	t	Isophorone	0.659	0.704	-6.8	70	0.00	5.28
29	t	2-Nitrophenol	0.191	0.210	-9.9	71	-0.02	5.39
30	t	2,4-Dimethylphenol	0.324	0.326	-0.6	67	0.00	5.51
31	t	Benzoic acid	0.251	0.261	-4.0	81	-0.03	5.67
32	t	bis(2-Chloroethoxy)methan	0.416	0.478	-14.9	77	0.02	5.62
33	t	2,4-Dichlorophenol	0.283	0.297	-4.9	68	0.00	5.77
34		2,6-Dichlorophenol	0.271	0.287	-5.9	71	-0.02	6.09
35		1,3,5-Trichlorobenzene	0.317	0.301	5.0	65	0.00	5.41
36	t	1,2,4-Trichlorobenzene	0.313	0.294	6.1	66	0.02	5.86
37		1,2,3-Trichlorobenzene	0.288	0.272	5.6	67	0.03	6.19
38	t	Naphthalene	0.992	1.078	-8.7	73	0.01	5.96
39	t	4-Chloroaniline	0.422	0.443	-5.0	69	0.02	6.08
40	t	2,3-Dichloroaniline	0.359	0.355	1.1	67	0.06	7.47
41	t	Caprolactam	0.133	0.160	-20.3#	80	0.03	6.57

Continuing Calibration Summary

Job Number: JC18516 **Sample:** EP4592-CC4524
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P104286.D
Project: BMSMC, Building 5 Area, PR

42	t	Hexachlorobutadiene	0.156	0.124	20.5#	55	0.02	6.18
43	t	4-Chloro-3-methylphenol	0.302	0.329	-8.9	69	-0.09	6.90
44	t	2-Methylnaphthalene	0.550	0.561	-2.0	69	0.02	7.02
45	t	1-Methylnaphthalene	0.670	0.672	-0.3	68	0.04	7.17
46	t	Dimethylnaphthalene	0.586	0.569	2.9	65	0.07	8.01
47	I	Acenaphthene-d10	1.000	1.000	0.0	68	0.03	8.64
48	t	Hexachlorocyclopentadiene	0.261	0.167	36.0#	37#	0.00	7.29
49	t	2,4,6-Trichlorophenol	0.313	0.320	-2.2	61	0.00	7.50
50	t	2,4,5-Trichlorophenol	0.326	0.339	-4.0	63	0.01	7.57
51	S	2-Fluorobiphenyl	1.214	1.230	-1.3	64	-0.01	7.62
52	t	2-Chloronaphthalene	1.051	1.146	-9.0	69	0.01	7.77
53	t	Biphenyl	1.351	1.469	-8.7	69	0.02	7.77
54	t	2-Nitroaniline	0.304	0.350	-15.1	68	0.02	7.97
55	t	Dimethylphthalate	1.215	1.268	-4.4	65	0.03	8.30
56	t	Acenaphthylene	1.678	1.892	-12.8	69	0.02	8.41
57	t	2,6-Dinitrotoluene	0.259	0.273	-5.4	63	0.02	8.36
58	t	3-Nitroaniline	0.305	0.360	-18.0	68	0.04	8.63
59	t	Acenaphthene	1.043	1.120	-7.4	66	0.03	8.70
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	50.000	44.925	10.2	68	0.05	8.80
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.166	0.141	15.1	53	0.07	9.03
62	t	Dibenzofuran	1.470	1.588	-8.0	66	0.03	8.97
		----------	True	Calc.	% Drift	----------		
63	t	2,4-Dinitrotoluene	25.000	22.222	11.1	61	0.06	9.01
		----------	AvgRF	CCRF	% Dev	----------		
64		2,3,4,6-Tetrachlorophenol	0.251	0.222	11.6	54	-0.09	9.21
65	t	Diethylphthalate	1.207	1.286	-6.5	66	0.04	9.43
66	t	Fluorene	1.200	1.264	-5.3	65	0.05	9.52
67	t	4-Chlorophenyl-phenylethe	0.539	0.494	8.3	57	0.05	9.56
68	t	4-Nitroaniline	0.306	0.362	-18.3	72	0.04	9.59
69	I	Phenanthrene-d10	1.000	1.000	0.0	65	0.03	11.00
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	25.000	21.125	15.5	57	0.03	9.65
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.576	0.592	-2.8	60	0.01	9.75
72	t	1,2-Diphenylhydrazine	0.789	0.947	-20.0#	70	0.01	9.80
73	S	2,4,6-Tribromophenol	0.094	0.064	31.9#	41#	0.01	9.91
74	t	4-Bromophenyl-phenylether	0.196	0.173	11.7	54	0.02	10.33
75	t	Hexachlorobenzene	0.212	0.167	21.2#	50	0.02	10.39
		----------	True	Calc.	% Drift	----------		
76	t	Pentachlorophenol	50.000	37.638	24.7#	51	0.02	10.74
		----------	AvgRF	CCRF	% Dev	----------		
77	t	Phenanthrene	1.026	1.077	-5.0	62	0.03	11.04
78	t	Anthracene	1.029	1.084	-5.3	61	0.03	11.12
79	t	Carbazole	1.054	1.168	-10.8	63	0.00	11.41
80	t	Di-n-butylphthalate	1.228	1.510	-23.0#	67	0.04	12.10
81	t	Fluoranthene	1.104	1.136	-2.9	60	-0.02	13.03
82	t	Octadecane	0.403	0.558	-38.5#	80	0.04	10.99

Continuing Calibration Summary

Job Number: JC18516 **Sample:** EP4592-CC4524
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** P104286.D
Project: BMSMC, Building 5 Area, PR

83	I	Chrysene-d12	1.000	1.000	0.0	58	0.04	15.67
84	t	Pyrene	1.273	1.487	-16.8	60	0.04	13.42
85	S	Terphenyl-d14	0.788	0.777	1.4	52	0.02	13.79
86	t	Butylbenzylphthalate	0.619	0.843	-36.2#	69	0.03	14.78
		----------	True	Calc.	% Drift	----------		
87		Butyl stearate	25.000	34.037	-36.1#	83	0.04	15.00
		----------	AvgRF	CCRF	% Dev	----------		
88	t	Benzo[a]anthracene	1.044	1.136	-8.8	57	0.04	15.66
		----------	True	Calc.	% Drift	----------		
89	t	3,3'-Dichlorobenzidine	25.000	22.938	8.2	55	0.04	15.69
		----------	AvgRF	CCRF	% Dev	----------		
90	t	Chrysene	1.033	1.085	-5.0	55	0.04	15.72
		----------	True	Calc.	% Drift	----------		
91	t	bis(2-Ethylhexyl)phthalat	25.000	27.982	-11.9	69	0.05	15.95
		----------	AvgRF	CCRF	% Dev	----------		
92	I	Perylene-d12	1.000	1.000	0.0	50	0.04	18.23
		----------	True	Calc.	% Drift	----------		
93	t	Di-n-octylphthalate	25.000	33.907	-35.6#	72	0.03	17.14
		----------	AvgRF	CCRF	% Dev	----------		
94	t	Benzo[b]fluoranthene	1.138	1.378	-21.1#	54	0.03	17.60
95	t	Benzo[k]fluoranthene	1.096	1.267	-15.6	51	0.02	17.64
96	t	Benzo[a]pyrene	1.004	1.209	-20.4#	51	0.04	18.12
97	t	Indeno[1,2,3-cd]pyrene	0.886	1.011	-14.1	49	0.06	19.84
98	t	Dibenz(a,h)acridine	0.844	0.901	-6.8	47#	0.05	19.54
99	t	Dibenz[a,h]anthracene	0.955	1.028	-7.6	47#	0.06	19.89
100	t	7,12-Dimethylbenz(a)anthr	0.482	0.532	-10.4	48#	0.02	17.60
101	t	Benzo[g,h,i]perylene	1.015	1.078	-6.2	47#	0.05	20.21

(#) = Out of Range SPCC's out = 0 CCC's out = 0
P103018A.D MP4524.M Tue Apr 19 14:26:53 2016

GC/MS Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104263.D Vial: 24
Acq On : 18 Apr 2016 7:29 pm Operator: linseyk
Sample : jc18516-1 Inst : MSP
Misc : op93128,ep4590,950 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 18 19:52:02 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Apr 18 16:58:37 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.13	152	161664	40.00	ppm	-0.04
24) Naphthalene-d8	5.87	136	609216	40.00	ppm	-0.04
47) Acenaphthene-d10	8.58	164	337576	40.00	ppm	-0.04
69) Phenanthrene-d10	10.93	188	484438	40.00	ppm	-0.04
83) Chrysene-d12	15.59	240	383041	40.00	ppm	-0.04
92) Perylene-d12	18.14	264	321784	40.00	ppm	-0.04
102) 1,4-Dichlorobenzene-d4b	4.13	152	161664	40.00	ppm	-0.04
104) Phenanthrene-d10b	10.93	188	484438	40.00	ppm	-0.04
106) Chrysene-d12b	15.59	240	383041	40.00	ppm	-0.04
108) Naphthalene-d8b	5.87	136	609216	40.00	ppm	-0.04
110) Acenaphthene-d10b	8.58	164	337576	40.00	ppm	-0.04

System Monitoring Compounds						
5) 2-Fluorophenol	2.78	112	205881	36.59	ppm	-0.04
Spiked Amount 50.000			Recovery = 73.18%			
8) Phenol-d5	3.74	99	179516	26.15	ppm	-0.05
Spiked Amount 50.000			Recovery = 52.30%			
25) Nitrobenzene-d5	4.86	82	312198	50.62	ppm	-0.06
Spiked Amount 50.000			Recovery = 101.24%			
51) 2-Fluorobiphenyl	7.56	172	504097	49.22	ppm	-0.07
Spiked Amount 50.000			Recovery = 98.44%			
73) 2,4,6-Tribromophenol	9.84	330	44265	39.08	ppm	-0.06
Spiked Amount 50.000			Recovery = 78.16%			
85) Terphenyl-d14	13.72	244	387169	51.33	ppm	-0.05
Spiked Amount 50.000			Recovery = 102.66%			

Target Compounds Qvalue

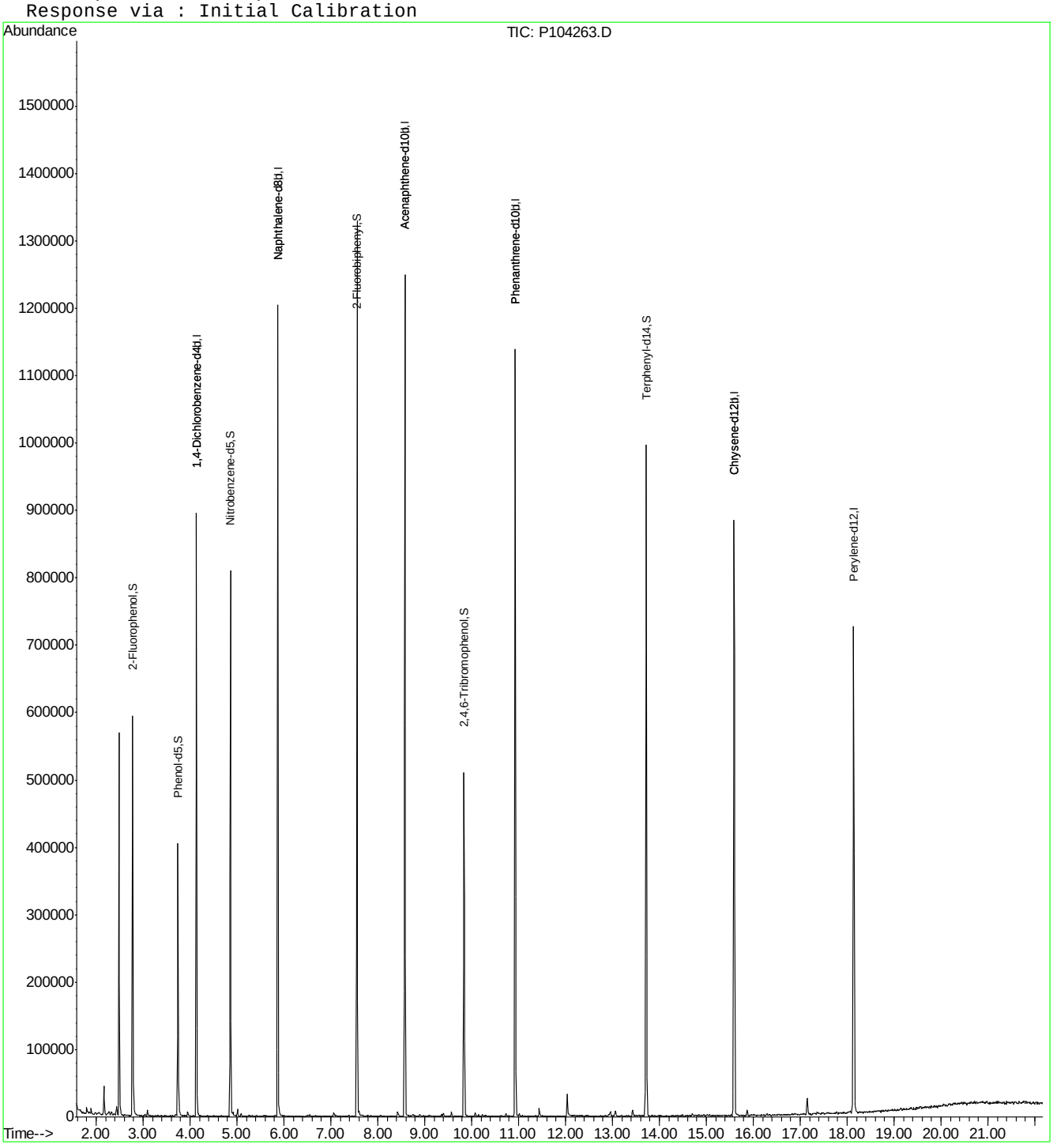
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104263.D Vial: 24
Acq On : 18 Apr 2016 7:29 pm Operator: linseyk
Sample : jc18516-1 Inst : MSP
Misc : op93128,ep4590,950 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 19 12:40 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Apr 18 16:58:37 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5235\
Data File : M123854.D
Acq On : 23 Apr 2016 4:43 am
Operator : seanb1
Sample : jc18516-2
Misc : op93218,em5235,30.5
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Apr 25 09:40:41 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 21 17:40:51 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	4.659	152	307148	40.00 ppm	-0.02
24) Naphthalene-d8	5.781	136	1138902	40.00 ppm	-0.02
47) Acenaphthene-d10	8.110	164	657229	40.00 ppm	-0.03
69) Phenanthrene-d10	10.727	188	1101439	40.00 ppm	-0.03
83) Chrysene-d12	15.892	240	1112380	40.00 ppm	-0.04
92) Perylene-d12	18.514	264	1088694	40.00 ppm	-0.05
102) 1,4-Dichlorobenzene-d4a	4.659	152	307148	40.00 ppm	-0.02
104) Acenaphthene-d10a	8.110	164	657229	40.00 ppm	-0.03
107) Chrysene-d12a	15.892	240	1112380	40.00 ppm	-0.04
109) Naphthalene-d8a	5.781	136	1138902	40.00 ppm	-0.02
System Monitoring Compounds					
5) 2-Fluorophenol	3.714	112	323319	34.42 ppm	-0.03
Spiked Amount 50.000			Recovery	= 68.84%	
8) Phenol-d5	4.424	99	420359	35.63 ppm	-0.02
Spiked Amount 50.000			Recovery	= 71.26%	
25) Nitrobenzene-d5	5.108	82	357081	35.26 ppm	-0.02
Spiked Amount 50.000			Recovery	= 70.52%	
51) 2-Fluorobiphenyl	7.100	172	773328	35.83 ppm	-0.03
Spiked Amount 50.000			Recovery	= 71.66%	
73) 2,4,6-Tribromophenol	9.472	330	151849	39.88 ppm	-0.04
Spiked Amount 50.000			Recovery	= 79.76%	
86) Terphenyl-d14	13.889	244	1003073	40.20 ppm	-0.05
Spiked Amount 50.000			Recovery	= 80.40%	

Target Compounds Qvalue

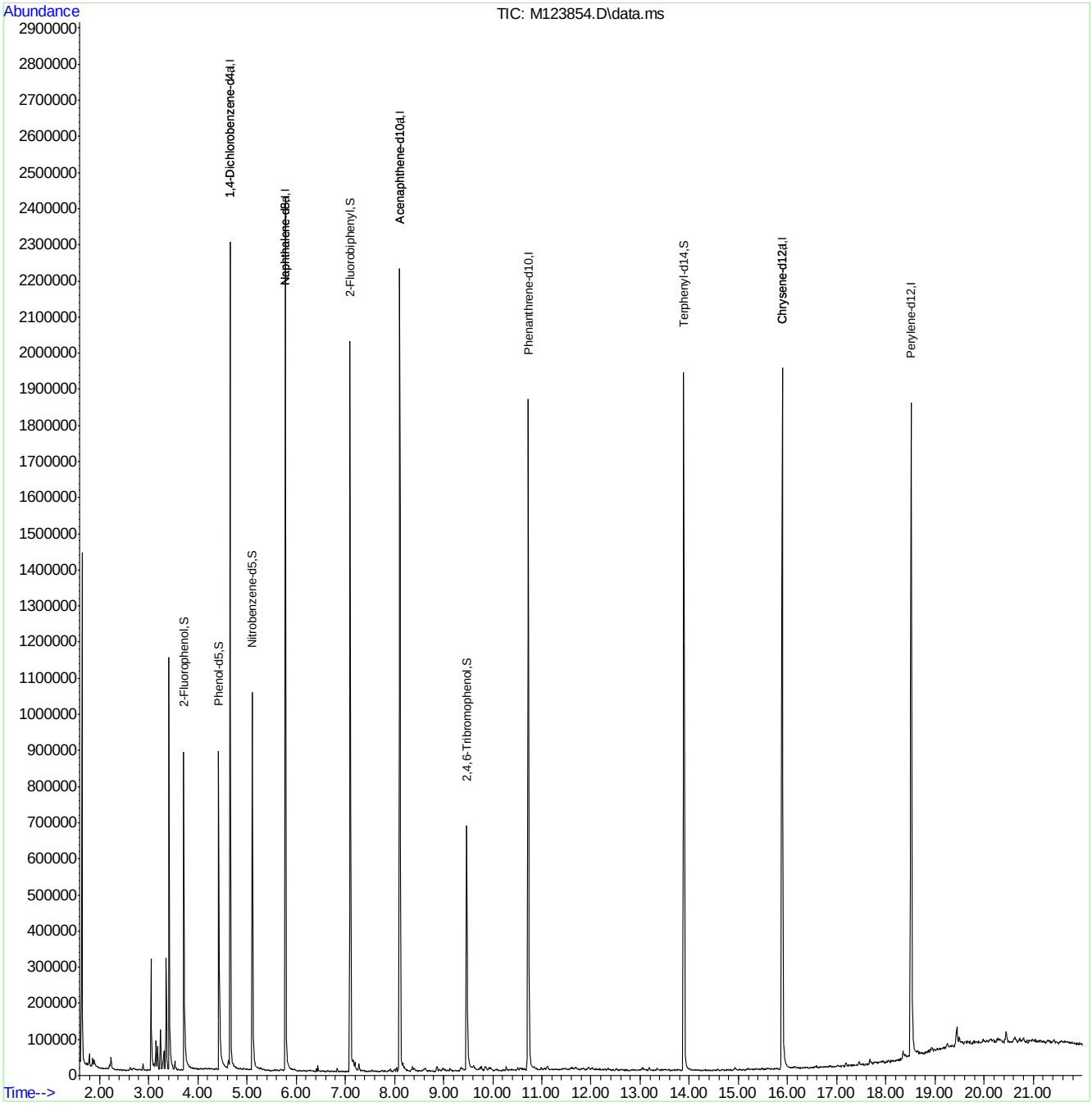
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5235\
Data File : M123854.D
Acq On : 23 Apr 2016 4:43 am
Operator : seanb1
Sample : jc18516-2
Misc : op93218,em5235,30.5
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Apr 25 09:40:41 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 21 17:40:51 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5238\
Data File : M123913.D
Acq On : 26 Apr 2016 4:30 pm
Operator : ashleyn
Sample : jc18516-3
Misc : op93218,em5238,30.7
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 26 17:03:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Apr 26 08:32:07 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	4.641	152	299665	40.00 ppm	-0.03
24) Naphthalene-d8	5.763	136	1075685	40.00 ppm	-0.04
47) Acenaphthene-d10	8.081	164	604682	40.00 ppm	-0.06
69) Phenanthrene-d10	10.698	188	1078483	40.00 ppm	-0.06
83) Chrysene-d12	15.863	240	1069655	40.00 ppm	-0.07
92) Perylene-d12	18.485	264	1114249	40.00 ppm	-0.08
102) 1,4-Dichlorobenzene-d4a	4.641	152	299665	40.00 ppm	-0.03
104) Acenaphthene-d10a	8.081	164	604682	40.00 ppm	-0.06
107) Chrysene-d12a	15.863	240	1069655	40.00 ppm	-0.07
109) Naphthalene-d8a	5.763	136	1075685	40.00 ppm	-0.04
System Monitoring Compounds					
5) 2-Fluorophenol	3.696	112	334485	36.50 ppm	-0.05
Spiked Amount 50.000			Recovery	= 73.00%	
8) Phenol-d5	4.411	99	429858	37.35 ppm	-0.04
Spiked Amount 50.000			Recovery	= 74.70%	
25) Nitrobenzene-d5	5.090	82	378984	39.62 ppm	-0.04
Spiked Amount 50.000			Recovery	= 79.24%	
51) 2-Fluorobiphenyl	7.077	172	763825	38.47 ppm	-0.05
Spiked Amount 50.000			Recovery	= 76.94%	
73) 2,4,6-Tribromophenol	9.443	330	170027	45.61 ppm	-0.07
Spiked Amount 50.000			Recovery	= 91.22%	
86) Terphenyl-d14	13.860	244	1032151	43.02 ppm	-0.08
Spiked Amount 50.000			Recovery	= 86.04%	

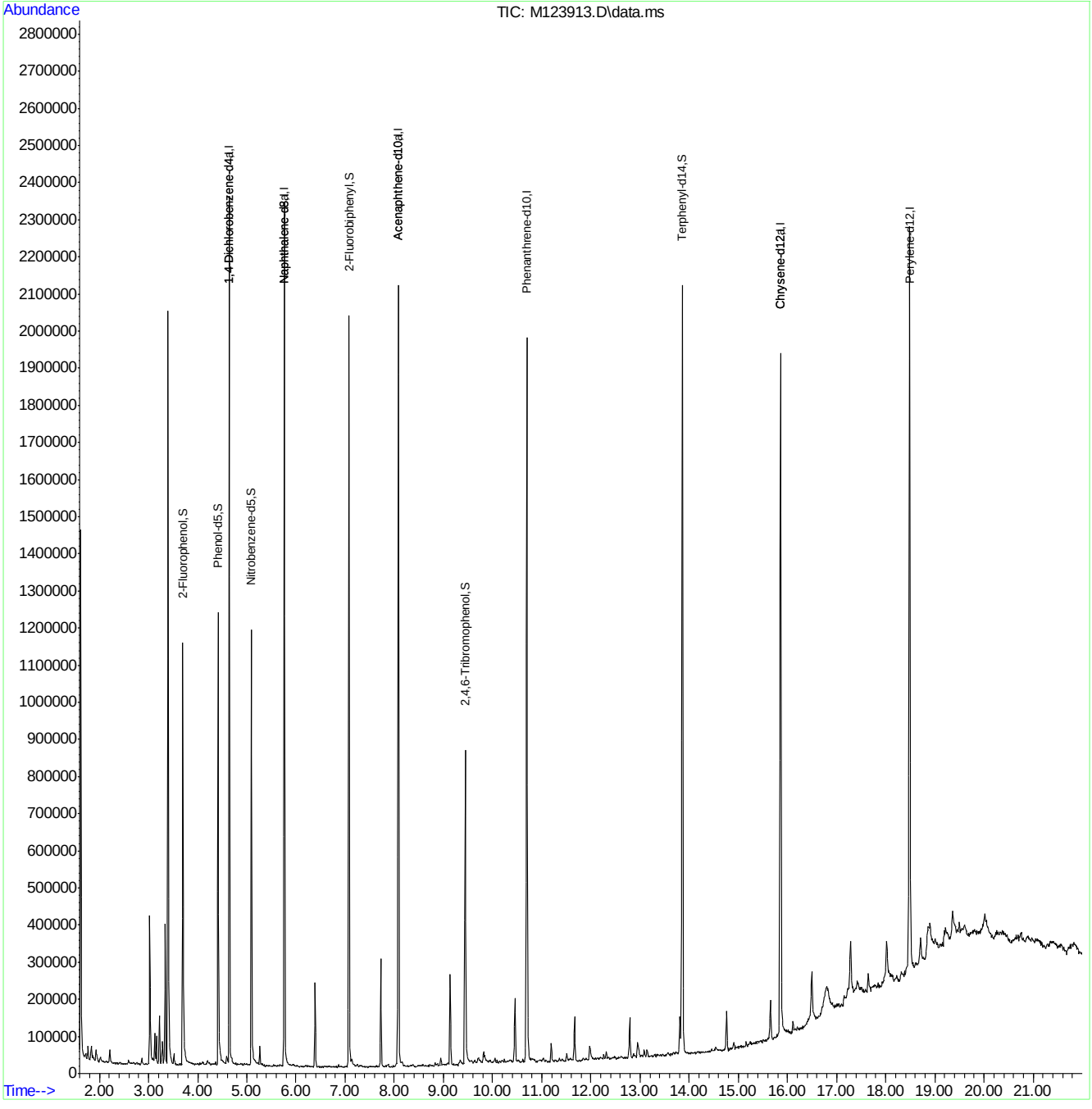
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5238\
Data File : M123913.D
Acq On : 26 Apr 2016 4:30 pm
Operator : ashleyn
Sample : jc18516-3
Misc : op93218,em5238,30.7
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 26 17:03:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Apr 26 08:32:07 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104264.D Vial: 25
Acq On : 18 Apr 2016 7:59 pm Operator: linseyk
Sample : jc18516-4 Inst : MSP
Misc : op93128,ep4590,900 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 18 20:22:10 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Apr 18 16:58:37 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.14	152	151081	40.00	ppm	-0.04
24) Naphthalene-d8	5.87	136	580561	40.00	ppm	-0.04
47) Acenaphthene-d10	8.58	164	316502	40.00	ppm	-0.04
69) Phenanthrene-d10	10.93	188	453591	40.00	ppm	-0.04
83) Chrysene-d12	15.59	240	359658	40.00	ppm	-0.04
92) Perylene-d12	18.14	264	295654	40.00	ppm	-0.04
102) 1,4-Dichlorobenzene-d4b	4.14	152	151081	40.00	ppm	-0.04
104) Phenanthrene-d10b	10.93	188	453591	40.00	ppm	-0.04
106) Chrysene-d12b	15.59	240	359658	40.00	ppm	-0.04
108) Naphthalene-d8b	5.87	136	580561	40.00	ppm	-0.04
110) Acenaphthene-d10b	8.58	164	316502	40.00	ppm	-0.04
System Monitoring Compounds						
5) 2-Fluorophenol	2.78	112	206176	39.21	ppm	-0.04
Spiked Amount 50.000			Recovery	=	78.42%	
8) Phenol-d5	3.74	99	184023	28.68	ppm	-0.05
Spiked Amount 50.000			Recovery	=	57.36%	
25) Nitrobenzene-d5	4.86	82	306974	52.23	ppm	-0.06
Spiked Amount 50.000			Recovery	=	104.46%	
51) 2-Fluorobiphenyl	7.56	172	486434	50.66	ppm	-0.07
Spiked Amount 50.000			Recovery	=	101.32%	
73) 2,4,6-Tribromophenol	9.84	330	42378	39.96	ppm	-0.06
Spiked Amount 50.000			Recovery	=	79.92%	
85) Terphenyl-d14	13.72	244	356546	50.35	ppm	-0.05
Spiked Amount 50.000			Recovery	=	100.70%	
Target Compounds						Qvalue
2) 1,4-Dioxane	1.66	88	2430333	905.40	ppm	99

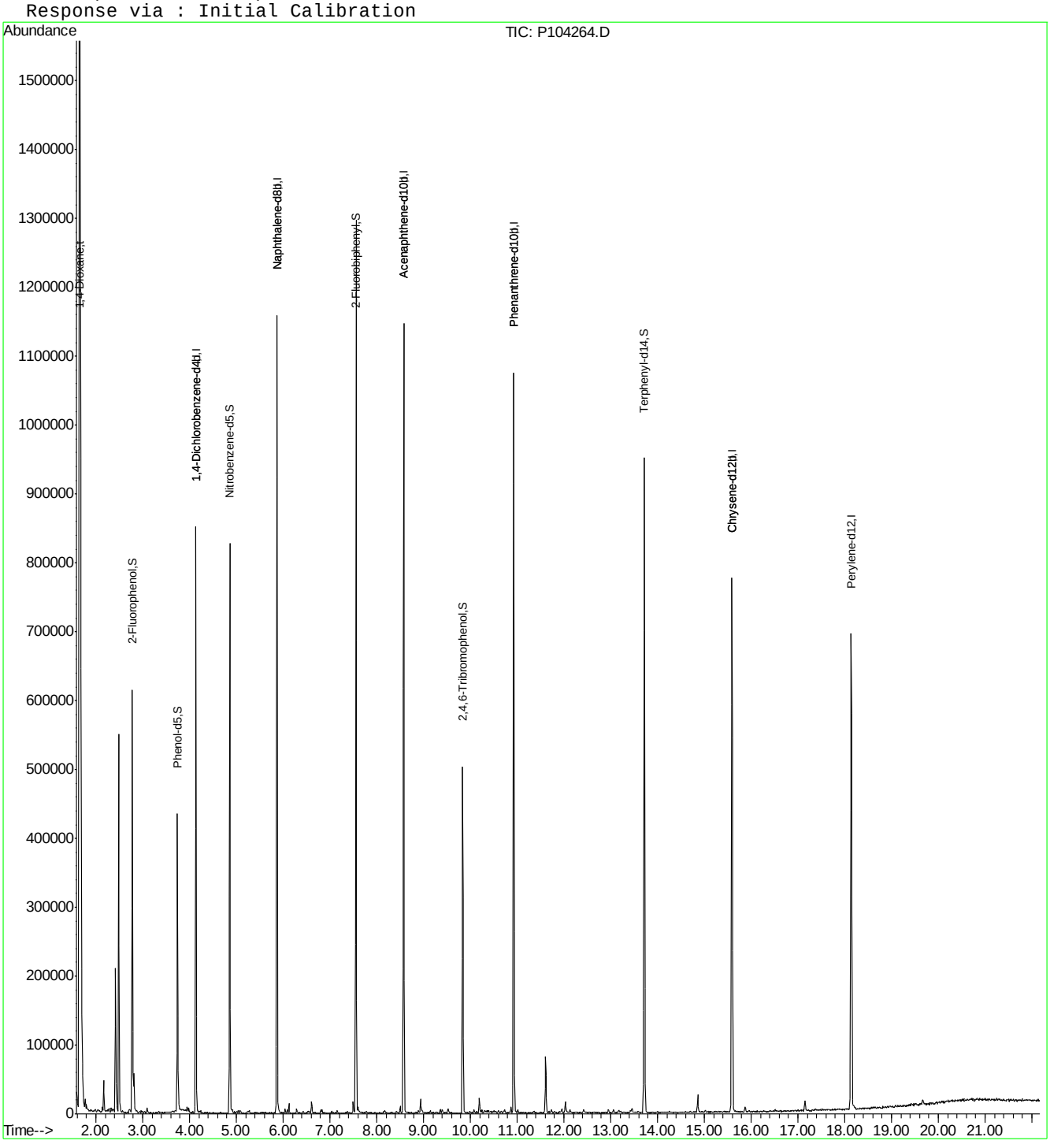
(#) = qualifier out of range (m) = manual integration (+) = signals summed

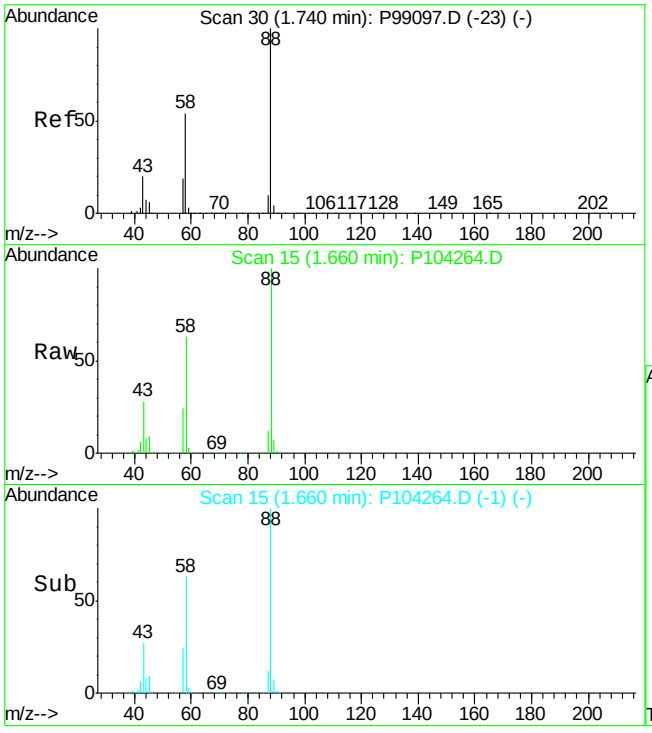
SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104264.D Vial: 25
Acq On : 18 Apr 2016 7:59 pm Operator: linseyk
Sample : jc18516-4 Inst : MSP
Misc : op93128,ep4590,900 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 19 12:43 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Apr 18 16:58:37 2016
Response via : Initial Calibration

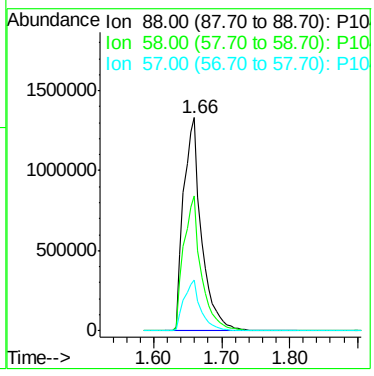




#2
1,4-Dioxane
Concen: 905.40 ppm
RT: 1.66 min Scan# 15
Delta R.T. -0.02 min
Lab File: P104264.D
Acq: 18 Apr 2016 7:59 pm

Tgt Ion: 88 Resp: 2430333

Ion	Ratio	Lower	Upper
88	100		
58	63.4	33.8	93.8
57	23.8	0.0	52.6



7.1.4

7

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4592\P104289.D Vial: 5
Acq On : 19 Apr 2016 2:43 pm Operator: linseyk
Sample : jc18516-4 Inst : MSP
Misc : op93128,ep4592,900,,,1,100 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 19 15:05:21 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 19 12:44:38 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.20	152	58699	40.00	ppm	0.02
24) Naphthalene-d8	5.93	136	212864	40.00	ppm	0.02
47) Acenaphthene-d10	8.64	164	112708	40.00	ppm	0.03
69) Phenanthrene-d10	11.00	188	163839	40.00	ppm	0.03
83) Chrysene-d12	15.67	240	124525	40.00	ppm	0.04
92) Perylene-d12	18.23	264	101455	40.00	ppm	0.04
102) 1,4-Dichlorobenzene-d4b	4.20	152	58699	40.00	ppm	0.02
104) Phenanthrene-d10b	11.00	188	163839	40.00	ppm	0.03
106) Chrysene-d12b	15.67	240	124525	40.00	ppm	0.04
108) Naphthalene-d8b	5.93	136	212864	40.00	ppm	0.02
110) Acenaphthene-d10b	8.64	164	112708	40.00	ppm	0.03

System Monitoring Compounds

5) 2-Fluorophenol	0.00	112	0d	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	1.68	88	27190	26.07	ppm	98

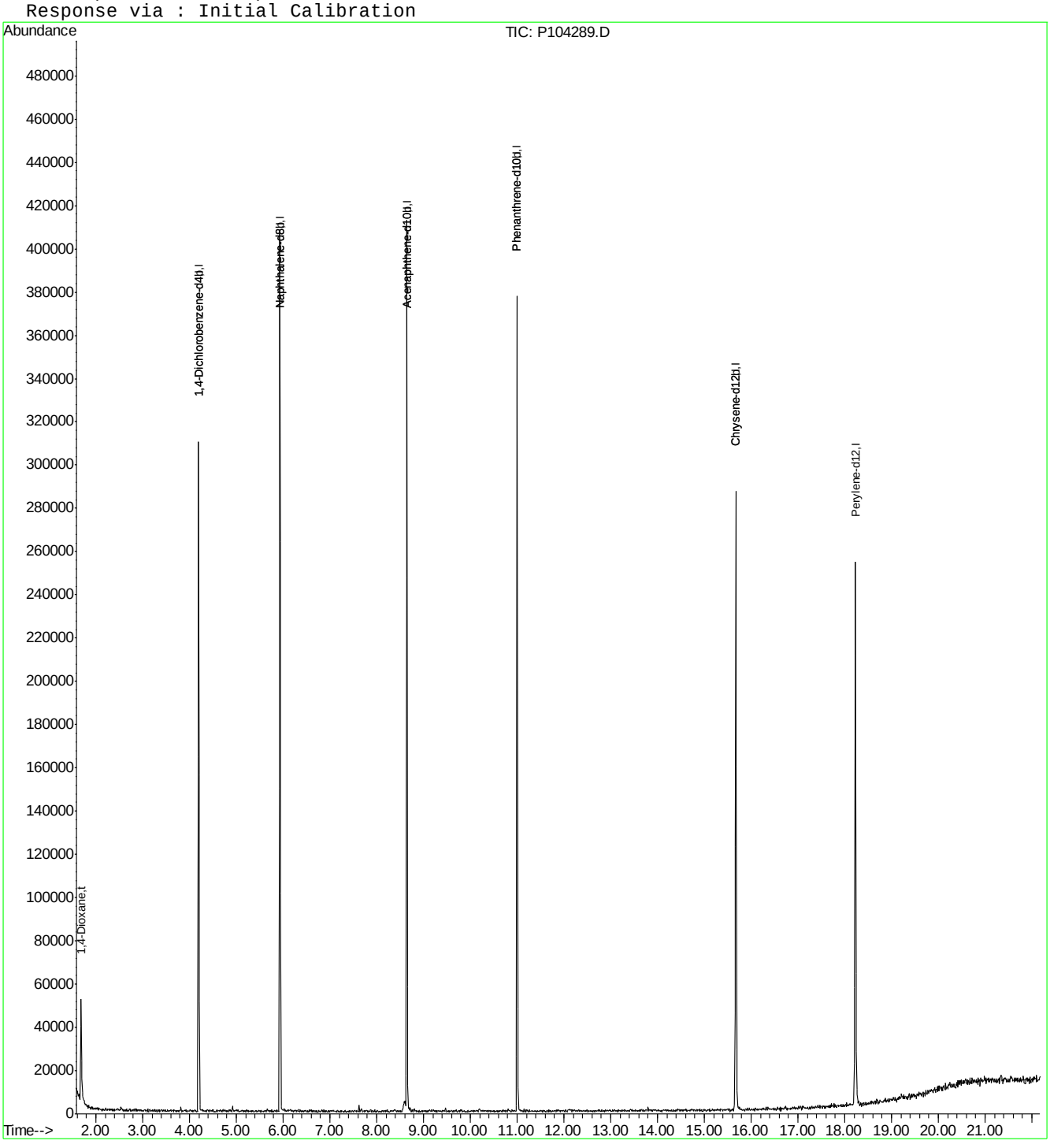
(#) = qualifier out of range (m) = manual integration (+) = signals summed
P104289.D MP4524.M Tue Apr 19 15:13:02 2016

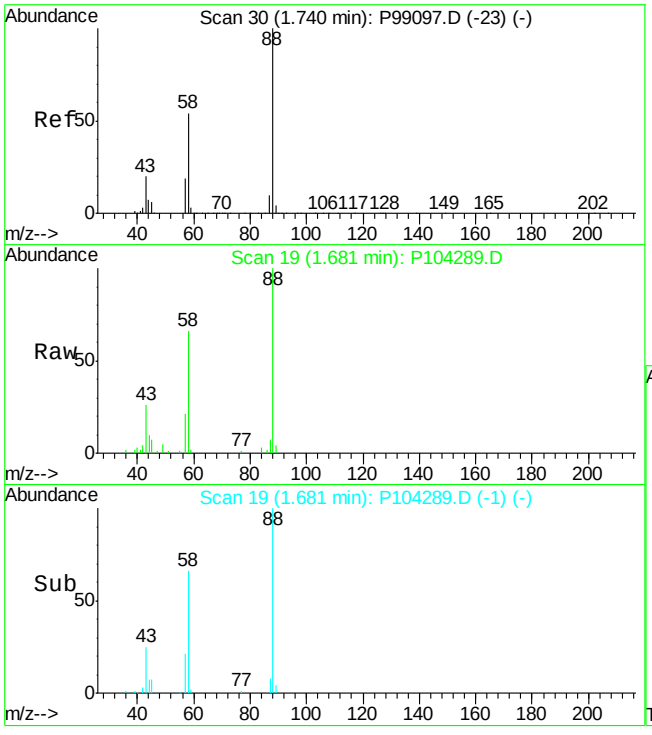
SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4592\P104289.D Vial: 5
Acq On : 19 Apr 2016 2:43 pm Operator: linseyk
Sample : jc18516-4 Inst : MSP
Misc : op93128,ep4592,900,,,1,100 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 19 15:12 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 19 12:44:38 2016
Response via : Initial Calibration

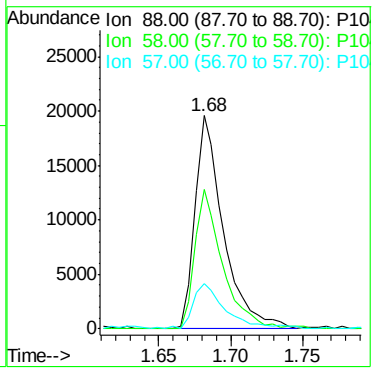




#2
1,4-Dioxane
Concen: 26.07 ppm
RT: 1.68 min Scan# 19
Delta R.T. 0.00 min
Lab File: P104289.D
Acq: 19 Apr 2016 2:43 pm

Tgt Ion: 88 Resp: 27190

Ion	Ratio	Lower	Upper
88	100		
58	65.0	33.8	93.8
57	20.7	0.0	52.6



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2886\
Data File : 4m64831.D
Acq On : 19 Apr 2016 12:16 pm
Operator : linseyk
Sample : jc18516-1
Misc : op93128a,e4m2886,950
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 19 14:45:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Apr 19 11:32:09 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.698	152	229654	4.00	ppm	-0.05
12) Fluorene-d10	13.676	176	448576	4.00	ppm	-0.05
22) Fluoranthene-d10	17.866	212	695388	4.00	ppm	-0.04
28) Benzo(a)pyrene-d12	22.470	264	454212	4.00	ppm	-0.03
35) 1-Methylnaphthalene-d10a	10.698	152	229654	4.00	ppm	-0.05
38) Fluorene-d10a	13.676	176	448576	4.00	ppm	-0.05
System Monitoring Compounds						
2) 2-Fluorophenol	4.710	112	1042393	34.67	ppm	-0.03
Spiked Amount 50.000	Range 11 - 58		Recovery = 69.34%#			
3) Phenol-d5	6.297	99	1181518	23.37	ppm	-0.04
Spiked Amount 50.000			Recovery = 46.74%			
6) Nitrobenzene-d5	7.833	82	2471261	54.50	ppm	-0.05
Spiked Amount 50.000			Recovery = 109.00%			
11) 2-Fluorobiphenyl	11.366	172	2895063	43.68	ppm	-0.05
Spiked Amount 50.000			Recovery = 87.36%			
17) 2,4,6-Tribromophenol	14.225	330	1016811	42.50	ppm	-0.05
Spiked Amount 50.000			Recovery = 85.00%			
25) Terphenyl-d14	18.676	244	4937286	52.55	ppm	-0.04
Spiked Amount 50.000			Recovery = 105.10%			
Target Compounds						Qvalue

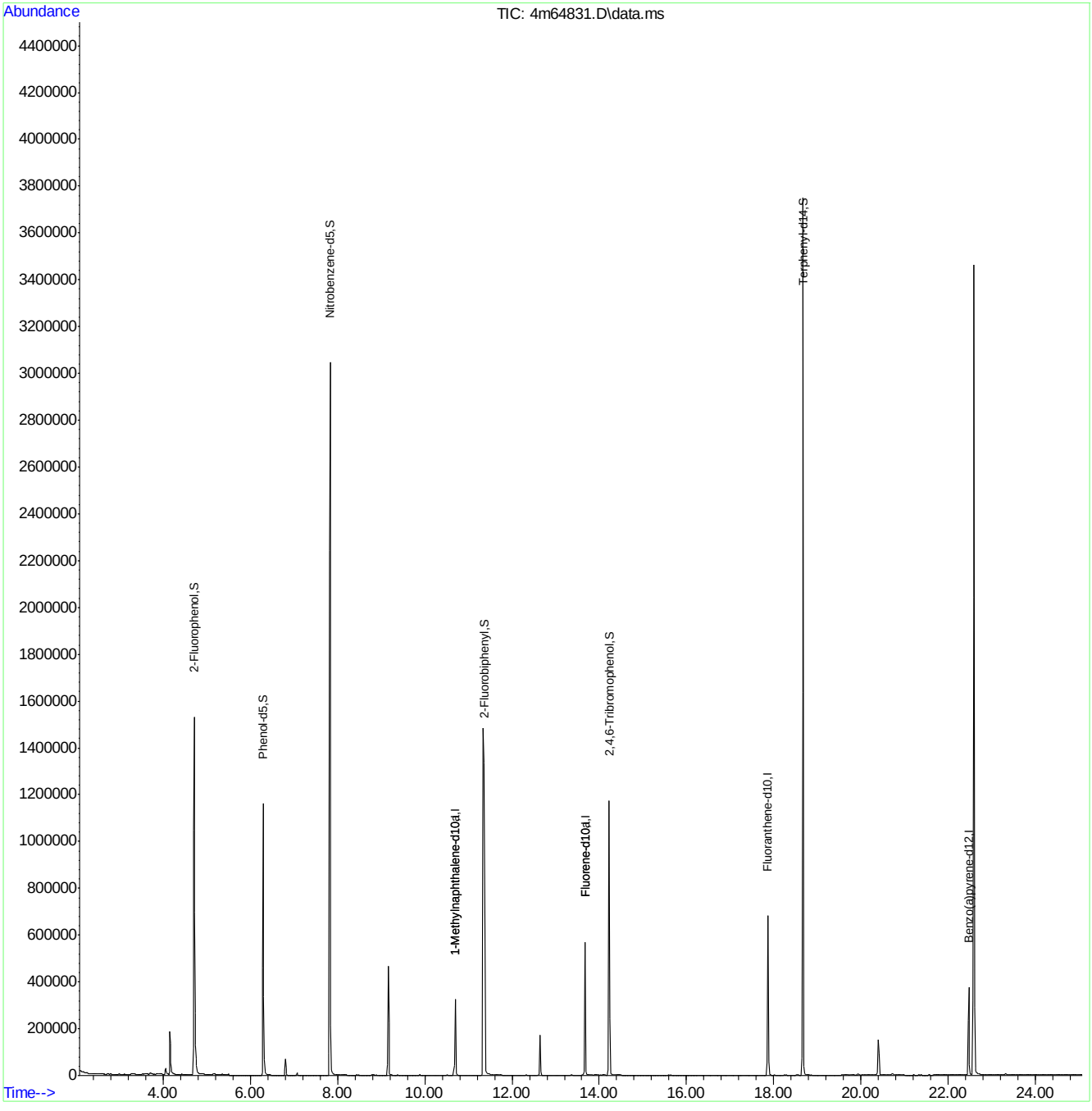
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2886\
Data File : 4m64831.D
Acq On : 19 Apr 2016 12:16 pm
Operator : linseyk
Sample : jc18516-1
Misc : op93128a,e4m2886,950
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 19 14:45:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Apr 19 11:32:09 2016
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 05/02/16 15:13

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2900\
Data File : 4m65049.D
Acq On : 2 May 2016 12:46 pm
Operator : linseyk
Sample : jc18516-2
Misc : op93218a,e4m2900,30.5
ALS Vial : 22 Sample Multiplier: 1

Quant Time: May 02 14:56:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Sat Apr 23 14:44:32 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.654	152	182859	4.00	ppm	#-0.04
12) Fluorene-d10	13.632	176	314979	4.00	ppm	-0.04
22) Fluoranthene-d10	17.836	212	619895	4.00	ppm	-0.03
28) Benzo(a)pyrene-d12	22.422	264	479924	4.00	ppm	0.02
35) 1-Methylnaphthalene-d10a	10.654	152	182859	4.00	ppm	#-0.04
38) Fluorene-d10a	13.632	176	314979	4.00	ppm	-0.04
System Monitoring Compounds						
2) 2-Fluorophenol	4.704	112	1129026	47.16	ppm	-0.02
Spiked Amount 50.000	Range 11 - 58		Recovery	=	94.32%#	
3) Phenol-d5	6.287	99	1856533	46.11	ppm	-0.02
Spiked Amount 50.000			Recovery	=	92.22%	
6) Nitrobenzene-d5	7.806	82	1768120	48.97	ppm	-0.04
Spiked Amount 50.000			Recovery	=	97.94%	
11) 2-Fluorobiphenyl	11.322	172	3022852	57.27	ppm	-0.04
Spiked Amount 50.000			Recovery	=	114.54%	
17) 2,4,6-Tribromophenol	14.205	330	916578	54.56	ppm	-0.02
Spiked Amount 50.000			Recovery	=	109.12%	
25) Terphenyl-d14	18.627	244	3619515	43.22	ppm	-0.05
Spiked Amount 50.000			Recovery	=	86.44%	
Target Compounds						Qvalue
26) Benzo[a]anthracene	20.359	228	21203m	0.14	ppm	
31) Benzo[a]pyrene	22.450	252	6800	0.05	ppm	97
36) 1,4-Dioxane	2.424	88	5951	0.50	ppm #	46

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

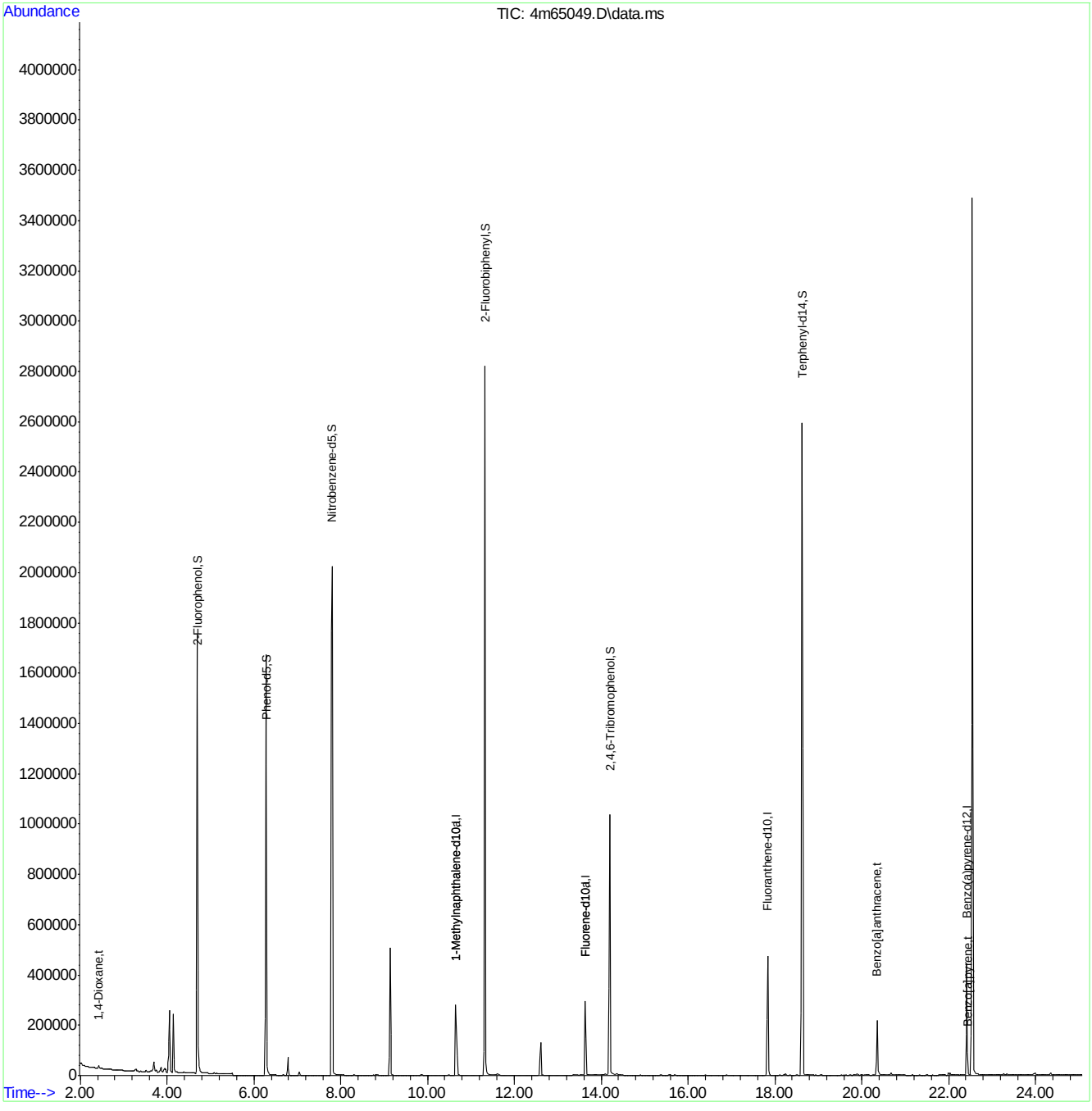
7.1.7

7

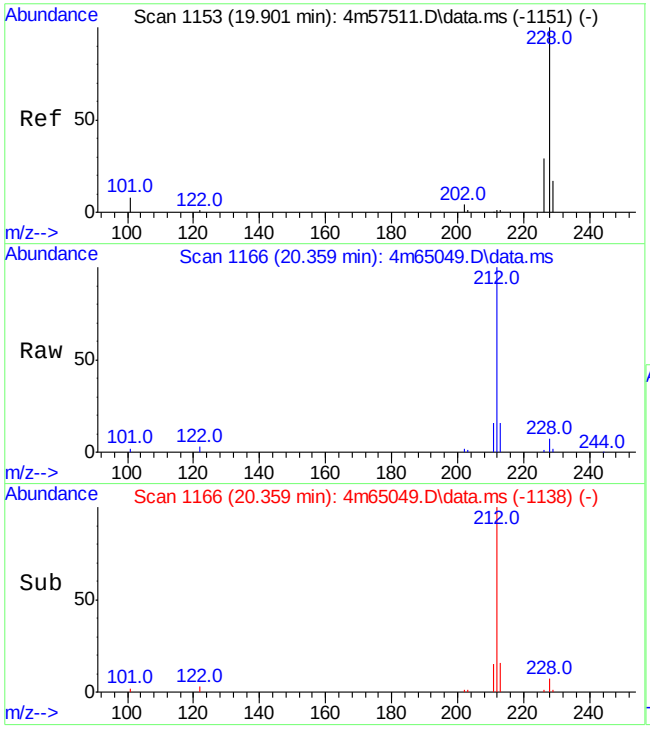
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2900\
Data File : 4m65049.D
Acq On : 2 May 2016 12:46 pm
Operator : linseyk
Sample : jc18516-2
Misc : op93218a,e4m2900,30.5
ALS Vial : 22 Sample Multiplier: 1

Quant Time: May 02 14:56:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Sat Apr 23 14:44:32 2016
Response via : Initial Calibration



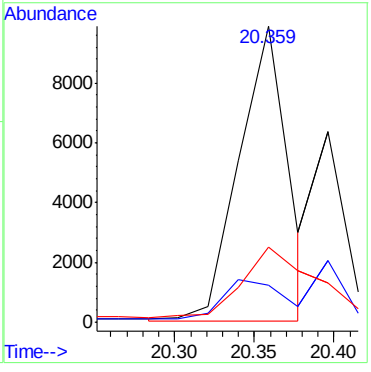
M4M2881SIM.M Mon May 02 14:56:09 2016 MANAGER

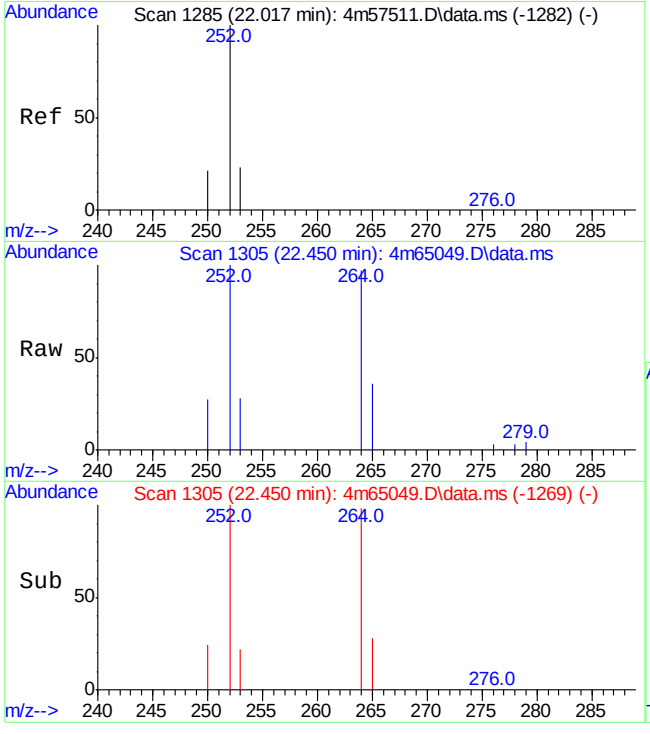


#26
Benzo[a]anthracene
Concen: 0.14 ppm m
RT: 20.359 min Scan# 1166
Delta R.T. 0.019 min
Lab File: 4m65049.D
Acq: 2 May 2016 12:46 pm

Tgt Ion:228 Resp: 21203

Ion	Ratio	Lower	Upper
228	100		
226	12.5	2.4	62.4
229	25.4	14.0	18.0#

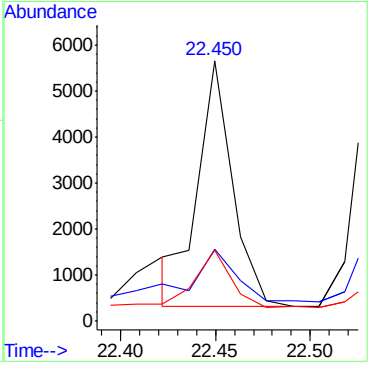


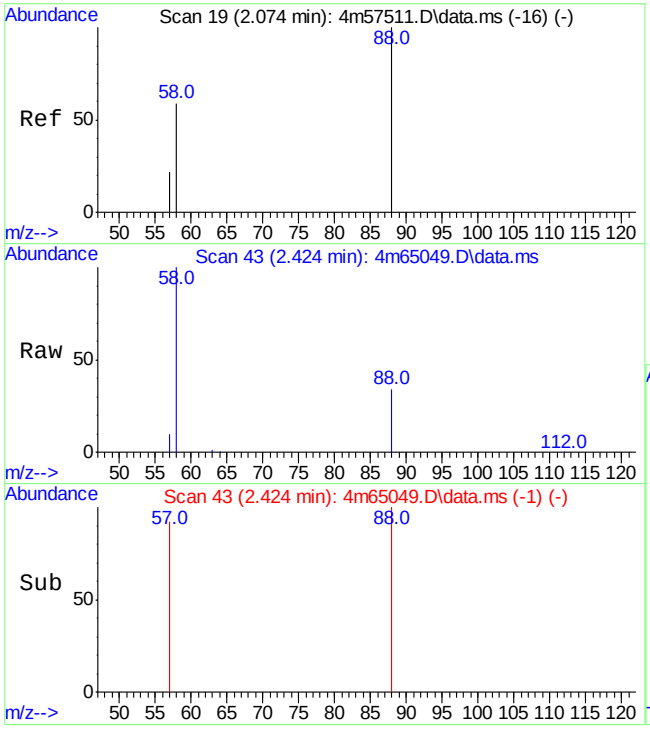


#31
Benzo[a]pyrene
Concen: 0.05 ppm
RT: 22.450 min Scan# 1305
Delta R.T. 0.000 min
Lab File: 4m65049.D
Acq: 2 May 2016 12:46 pm

Tgt Ion:252 Resp: 6800

Ion	Ratio	Lower	Upper
252	100		
253	19.5	0.0	48.6
250	24.9	0.0	57.0

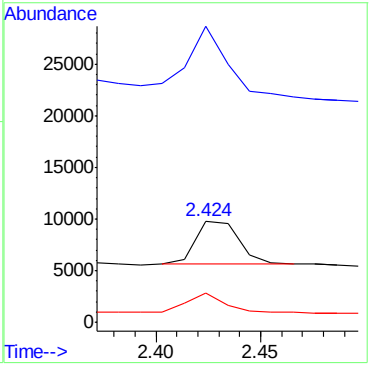




#36
1,4-Dioxane
Concen: 0.50 ppm
RT: 2.424 min Scan# 43
Delta R.T. -0.038 min
Lab File: 4m65049.D
Acq: 2 May 2016 12:46 pm

Tgt Ion: 88 Resp: 5951

Ion	Ratio	Lower	Upper
88	100		
58	148.1	71.7	111.7#
57	43.3	5.8	45.8



7.1.7

7

SGS ACCUTEST JC18516

Manual Integration Approval Summary

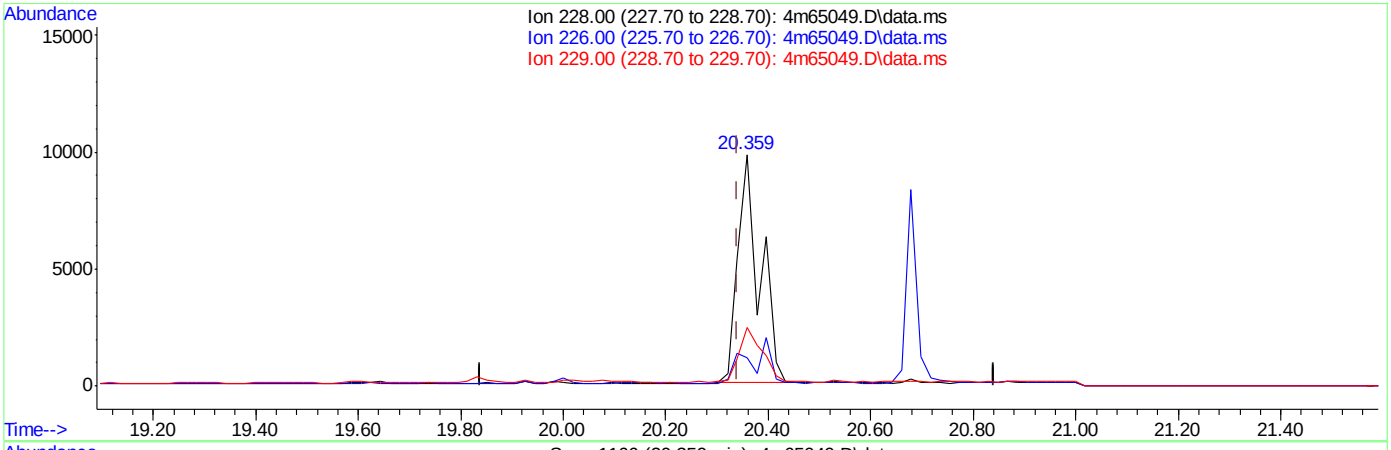
Sample Number:	JC18516-2	**Method:**	SW846 8270D BY SIM
Lab FileID:	4M65049.D	**Analyst approved:**	05/02/16 14:58 Linsey Kirschmann
Injection Time:	05/02/16 12:46	**Supervisor approved:**	05/02/16 15:13 Kristi Schollenberger

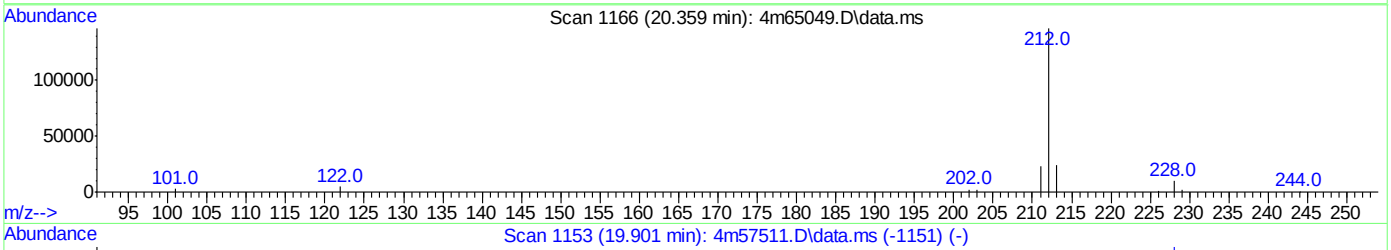
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(a)anthracene	56-55-3		20.36	Overlapping peak

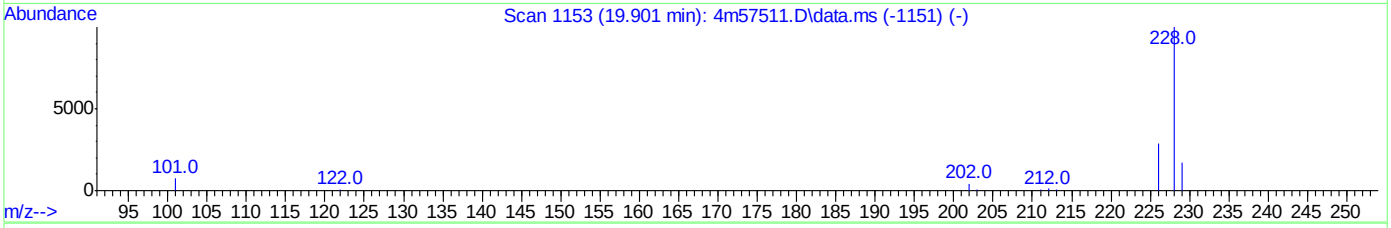
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2900\
Data File : 4m65049.D
Acq On : 2 May 2016 12:46 pm
Operator : linseyk
Sample : jc18516-2
Misc : op93218a,e4m2900,30.5
ALS Vial : 22 Sample Multiplier: 1

Quant Time: May 02 14:43:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Sat Apr 23 14:44:32 2016
Response via : Initial Calibration







TIC: 4m65049.D\data.ms

(26) Benzo[a]anthracene (t)

20.359min (+0.019) 0.19ppm

response 28781

Ion	Exp%	Act%
228.00	100	100
226.00	32.40	11.26
229.00	16.00	23.59#
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2900\
Data File : 4m65050.D
Acq On : 2 May 2016 1:18 pm
Operator : linseyk
Sample : jc18516-3
Misc : op93218a,e4m2900,30.7
ALS Vial : 23 Sample Multiplier: 1

Quant Time: May 02 14:56:41 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Sat Apr 23 14:44:32 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.654	152	207530	4.00	ppm	#-0.04
12) Fluorene-d10	13.632	176	337646	4.00	ppm	-0.04
22) Fluoranthene-d10	17.836	212	654888	4.00	ppm	-0.03
28) Benzo(a)pyrene-d12	22.422	264	498977	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.654	152	207530	4.00	ppm	#-0.04
38) Fluorene-d10a	13.632	176	337646	4.00	ppm	#-0.04
System Monitoring Compounds						
2) 2-Fluorophenol	4.704	112	1306738	48.09	ppm	-0.02
Spiked Amount 50.000	Range 11 - 58		Recovery = 96.18%#			
3) Phenol-d5	6.287	99	2155438	47.17	ppm	-0.02
Spiked Amount 50.000			Recovery = 94.34%			
6) Nitrobenzene-d5	7.806	82	2097142	51.18	ppm	-0.04
Spiked Amount 50.000			Recovery = 102.36%			
11) 2-Fluorobiphenyl	11.322	172	3363910	56.16	ppm	-0.04
Spiked Amount 50.000			Recovery = 112.32%			
17) 2,4,6-Tribromophenol	14.205	330	1106325	61.43	ppm	-0.02
Spiked Amount 50.000			Recovery = 122.86%			
25) Terphenyl-d14	18.645	244	4428590	50.06	ppm	-0.03
Spiked Amount 50.000			Recovery = 100.12%			
Target Compounds						Qvalue
36) 1,4-Dioxane	2.434	88	8156	0.60	ppm	# 79

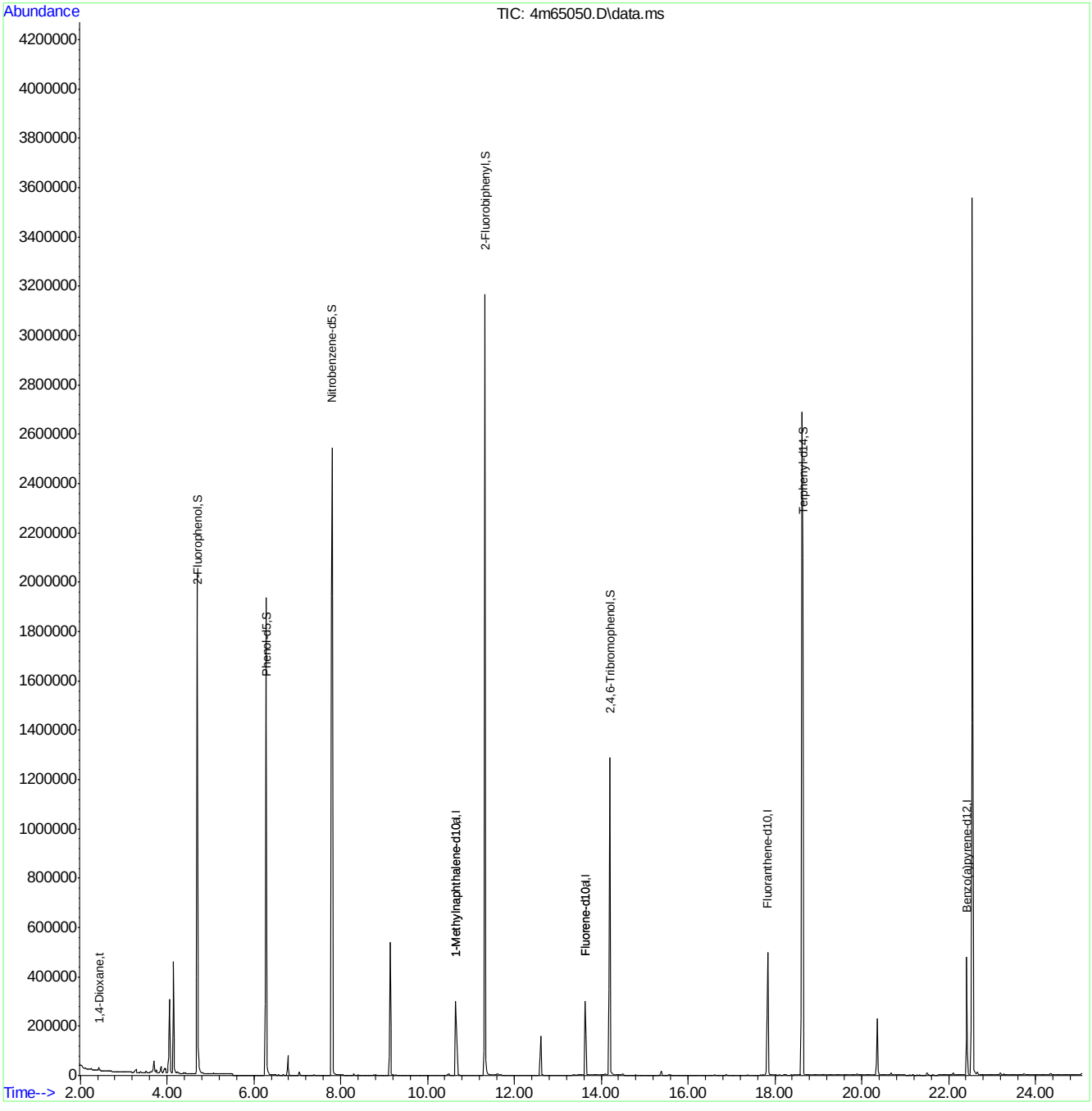
(#) = qualifier out of range (m) = manual integration (+) = signals summed

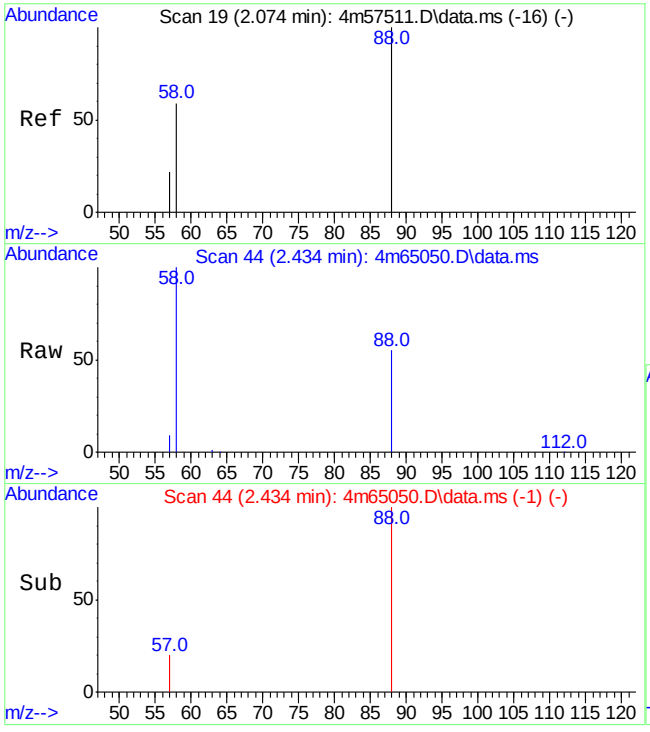
SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2900\
Data File : 4m65050.D
Acq On : 2 May 2016 1:18 pm
Operator : linseyk
Sample : jc18516-3
Misc : op93218a,e4m2900,30.7
ALS Vial : 23 Sample Multiplier: 1

Quant Time: May 02 14:56:41 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Sat Apr 23 14:44:32 2016
Response via : Initial Calibration

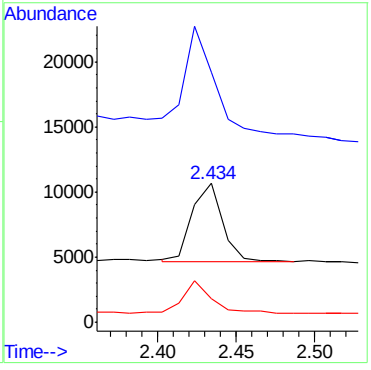




#36
1,4-Dioxane
Concen: 0.60 ppm
RT: 2.434 min Scan# 44
Delta R.T. -0.028 min
Lab File: 4m65050.D
Acq: 2 May 2016 1:18 pm

Tgt Ion: 88 Resp: 8156

Ion	Ratio	Lower	Upper
88	100		
58	70.4	71.7	111.7#
57	17.9	5.8	45.8



7.1.8

7

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/19/16 16:39

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2886\
Data File : 4m64832.D
Acq On : 19 Apr 2016 12:48 pm
Operator : linseyk
Sample : jc18516-4
Misc : op93128a,e4m2886,900
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 19 14:46:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Apr 19 14:45:57 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.698	152	251770	4.00	ppm	-0.05
12) Fluorene-d10	13.676	176	433883	4.00	ppm	-0.05
22) Fluoranthene-d10	17.866	212	674390	4.00	ppm	-0.04
28) Benzo(a)pyrene-d12	22.470	264	479999	4.00	ppm	-0.03
35) 1-Methylnaphthalene-d10a	10.698	152	251770	4.00	ppm	-0.05
38) Fluorene-d10a	13.676	176	433883	4.00	ppm	-0.05
System Monitoring Compounds						
2) 2-Fluorophenol	4.710	112	1142646	34.66	ppm	-0.03
Spiked Amount 50.000	Range 11 - 58		Recovery	=	69.32%#	
3) Phenol-d5	6.297	99	1346459	24.29	ppm	-0.04
Spiked Amount 50.000			Recovery	=	48.58%	
6) Nitrobenzene-d5	7.833	82	2775556	55.83	ppm	-0.05
Spiked Amount 50.000			Recovery	=	111.66%	
11) 2-Fluorobiphenyl	11.366	172	3367238	46.34	ppm	-0.05
Spiked Amount 50.000			Recovery	=	92.68%	
17) 2,4,6-Tribromophenol	14.225	330	977292	42.23	ppm	-0.05
Spiked Amount 50.000			Recovery	=	84.46%	
25) Terphenyl-d14	18.676	244	4932429	54.14	ppm	-0.04
Spiked Amount 50.000			Recovery	=	108.28%	
Target Compounds						Qvalue
36) 1,4-Dioxane	2.440	88	27181644m	1661.74	ppm	

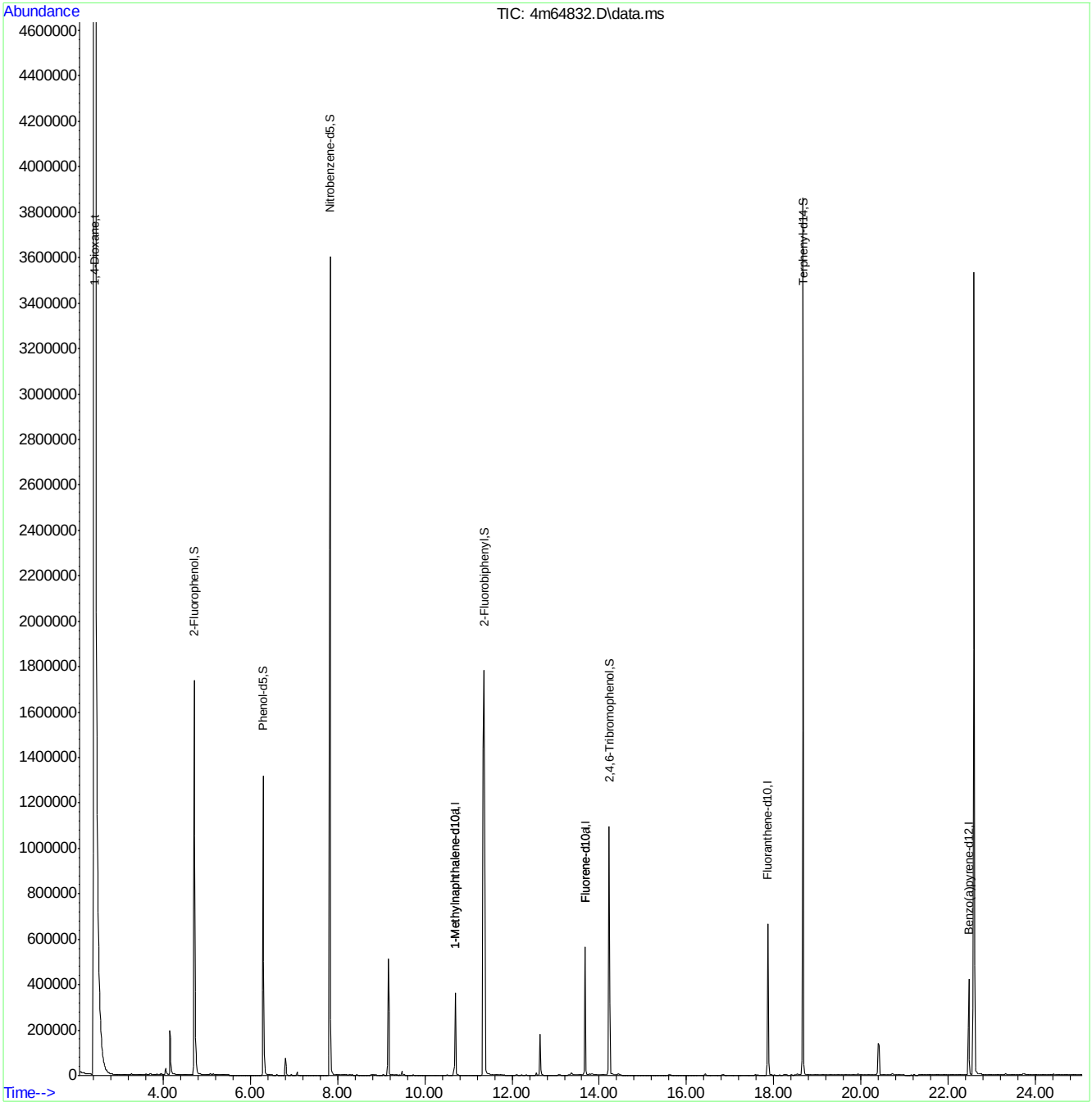
(#) = qualifier out of range (m) = manual integration (+) = signals summed

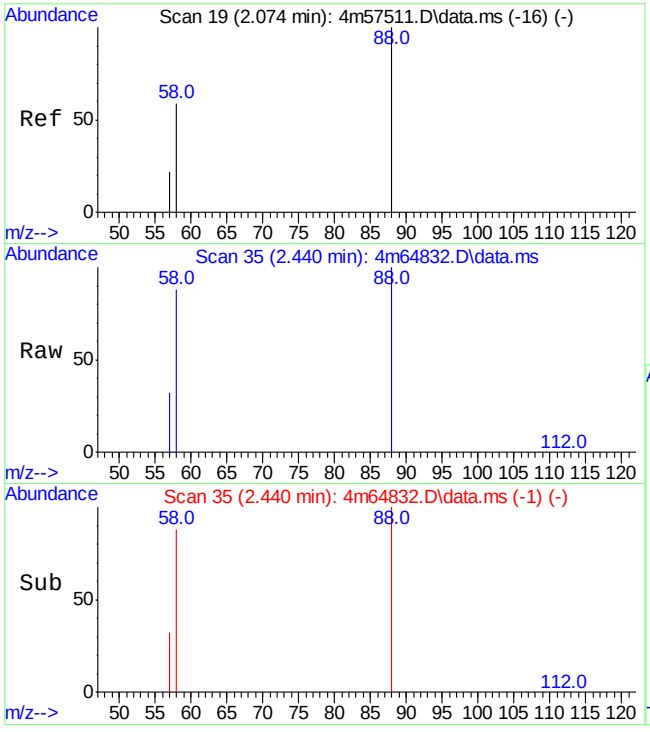
7.1.9
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2886\
Data File : 4m64832.D
Acq On : 19 Apr 2016 12:48 pm
Operator : linseyk
Sample : jc18516-4
Misc : op93128a,e4m2886,900
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 19 14:46:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Apr 19 14:45:57 2016
Response via : Initial Calibration

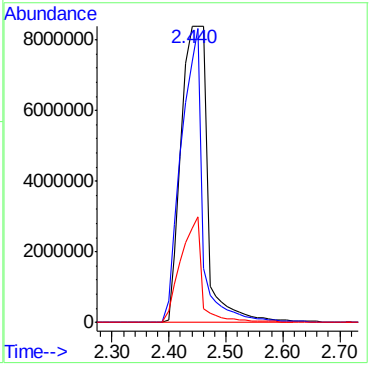




#36
1,4-Dioxane
Concen: 1661.74 ppm m
RT: 2.440 min Scan# 35
Delta R.T. -0.021 min
Lab File: 4m64832.D
Acq: 19 Apr 2016 12:48 pm

Tgt Ion: 88 Resp:27181644

Ion	Ratio	Lower	Upper
88	100		
58	88.2	63.2	103.2
57	31.9	5.7	45.7



Manual Integration Approval Summary

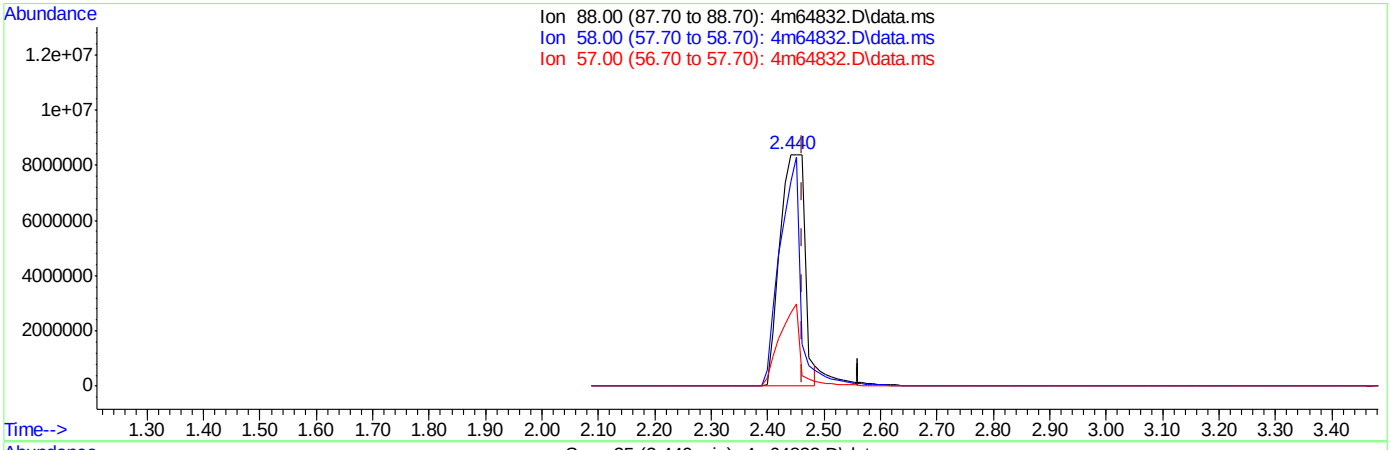
Sample Number:	JC18516-4	**Method:**	SW846 8270D BY SIM
Lab FileID:	4M64832.D	**Analyst approved:**	04/19/16 14:47 Linsey Kirschmann
Injection Time:	04/19/16 12:48	**Supervisor approved:**	04/19/16 16:39 Nina Pandya

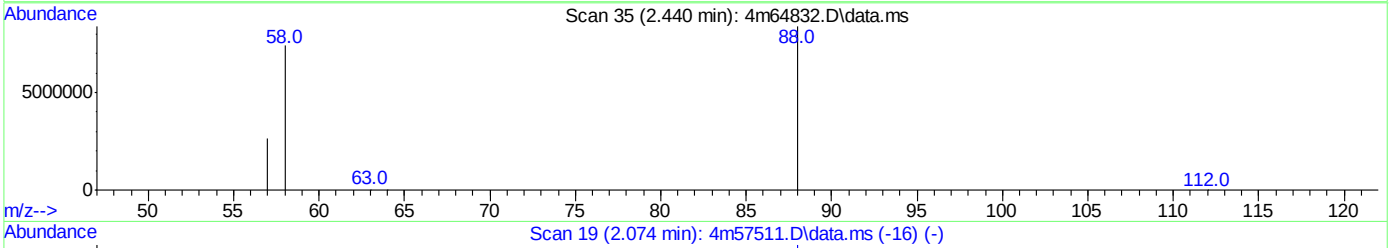
Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dioxane	123-91-1		2.44	Poor instrument integration

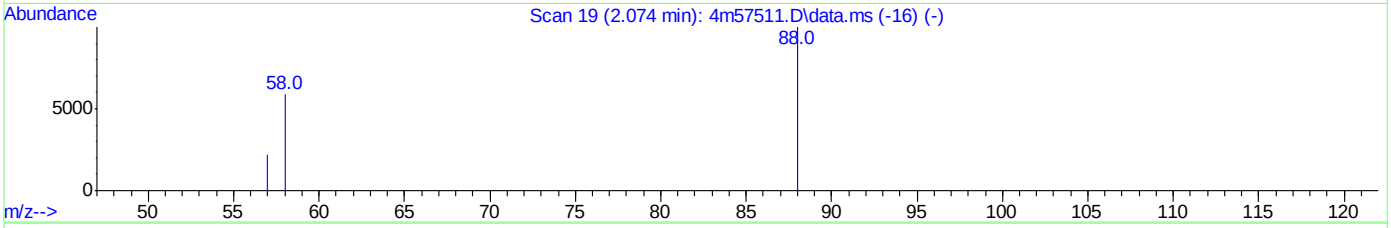
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2886\
Data File : 4m64832.D
Acq On : 19 Apr 2016 12:48 pm
Operator : linseyk
Sample : jc18516-4
Misc : op93128a,e4m2886,900
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 19 14:46:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Tue Apr 19 14:45:57 2016
Response via : Initial Calibration







TIC: 4m64832.D\data.ms

(36) 1,4-Dioxane (t)

2.440min (-0.021) 1563.22ppm

response 25570196

Ion	Exp%	Act%
88.00	100	100
58.00	83.20	88.73
57.00	25.70	32.16
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104255A.D Vial: 16
Acq On : 18 Apr 2016 3:28 pm Operator: linseyk
Sample : op93128-mb1 Inst : MSP
Misc : op93128,ep4590,1000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 18 15:50:30 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Apr 18 09:14:55 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.14	152	134788	40.00	ppm	-0.04
24) Naphthalene-d8	5.87	136	505941	40.00	ppm	-0.04
47) Acenaphthene-d10	8.58	164	279688	40.00	ppm	-0.04
69) Phenanthrene-d10	10.93	188	409453	40.00	ppm	-0.04
83) Chrysene-d12	15.59	240	325800	40.00	ppm	-0.04
92) Perylene-d12	18.15	264	271294	40.00	ppm	-0.04
102) 1,4-Dichlorobenzene-d4b	4.14	152	134788	40.00	ppm	-0.04
104) Phenanthrene-d10b	10.93	188	409453	40.00	ppm	-0.04
106) Chrysene-d12b	15.59	240	325800	40.00	ppm	-0.04
108) Naphthalene-d8b	5.87	136	505941	40.00	ppm	-0.04
110) Acenaphthene-d10b	8.58	164	279688	40.00	ppm	-0.04

System Monitoring Compounds						
5) 2-Fluorophenol	2.78	112	181046	38.59	ppm	-0.04
Spiked Amount 50.000			Recovery = 77.18%			
8) Phenol-d5	3.74	99	146946	25.67	ppm	-0.05
Spiked Amount 50.000			Recovery = 51.34%			
25) Nitrobenzene-d5	4.86	82	258733	50.52	ppm	-0.06
Spiked Amount 50.000			Recovery = 101.04%			
51) 2-Fluorobiphenyl	7.56	172	412770	48.65	ppm	-0.07
Spiked Amount 50.000			Recovery = 97.30%			
73) 2,4,6-Tribromophenol	9.84	330	36299	37.92	ppm	-0.06
Spiked Amount 50.000			Recovery = 75.84%			
85) Terphenyl-d14	13.72	244	328890	51.27	ppm	-0.05
Spiked Amount 50.000			Recovery = 102.54%			

Target Compounds Qvalue

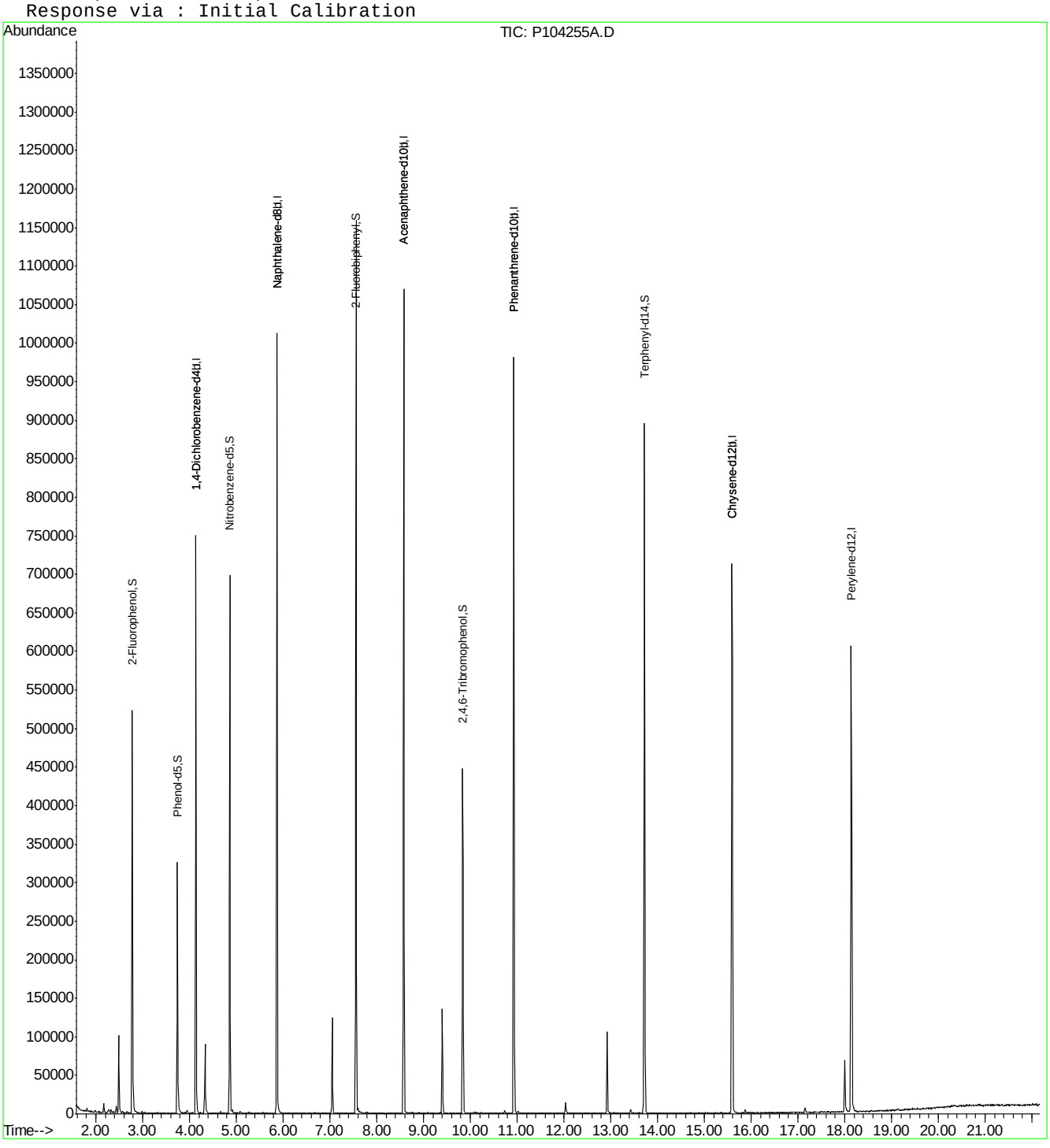
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104255A.D Vial: 16
Acq On : 18 Apr 2016 3:28 pm Operator: linseyk
Sample : op93128-mb1 Inst : MSP
Misc : op93128,ep4590,1000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 18 16:57 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Apr 18 09:14:55 2016
Response via : Initial Calibration



P104255A.D MP4524.M Mon Apr 18 16:57:31 2016 Page 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3655\
Data File : 2m83206.D
Acq On : 20 Apr 2016 11:00 am
Operator : ashleyn
Sample : op93128-mb1
Misc : op93128,e2m3655,1000
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 20 13:20:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 20:20:49 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.868	152	187995	40.00 ppm	-0.03
24) Naphthalene-d8	5.997	136	746515	40.00 ppm	-0.03
47) Acenaphthene-d10	8.109	164	437425	40.00 ppm	-0.03
69) Phenanthrene-d10	10.308	188	674751	40.00 ppm	-0.03
83) Chrysene-d12	14.512	240	594354	40.00 ppm	-0.04
92) Perylene-d12	16.640	264	579151	40.00 ppm	-0.03
102) 1,4-Dichlorobenzene-d4a	4.868	152	187995	40.00 ppm	-0.03
104) Acenaphthene-d10a	8.109	164	437425	40.00 ppm	-0.03
106) Chrysene-d12a	14.512	240	594354	40.00 ppm	-0.03
108) Phenanthrene-d10a	10.308	188	674751	40.00 ppm	-0.03
110) Naphthalene-d8a	5.997	136	746515	40.00 ppm	-0.03

System Monitoring Compounds					
5) 2-Fluorophenol	3.889	112	222061	31.49 ppm	-0.12
Spiked Amount 50.000			Recovery	= 62.98%	
8) Phenol-d5	4.601	99	184469	20.84 ppm	-0.02
Spiked Amount 50.000			Recovery	= 41.68%	
25) Nitrobenzene-d5	5.328	82	343347	49.09 ppm	-0.03
Spiked Amount 50.000			Recovery	= 98.18%	
51) 2-Fluorobiphenyl	7.216	172	646424	46.57 ppm	-0.03
Spiked Amount 50.000			Recovery	= 93.14%	
73) 2,4,6-Tribromophenol	9.254	330	99046	57.02 ppm	-0.03
Spiked Amount 50.000			Recovery	= 114.04%	
85) Terphenyl-d14	12.875	244	623634	48.86 ppm	-0.03
Spiked Amount 50.000			Recovery	= 97.72%	

Target Compounds	Qvalue

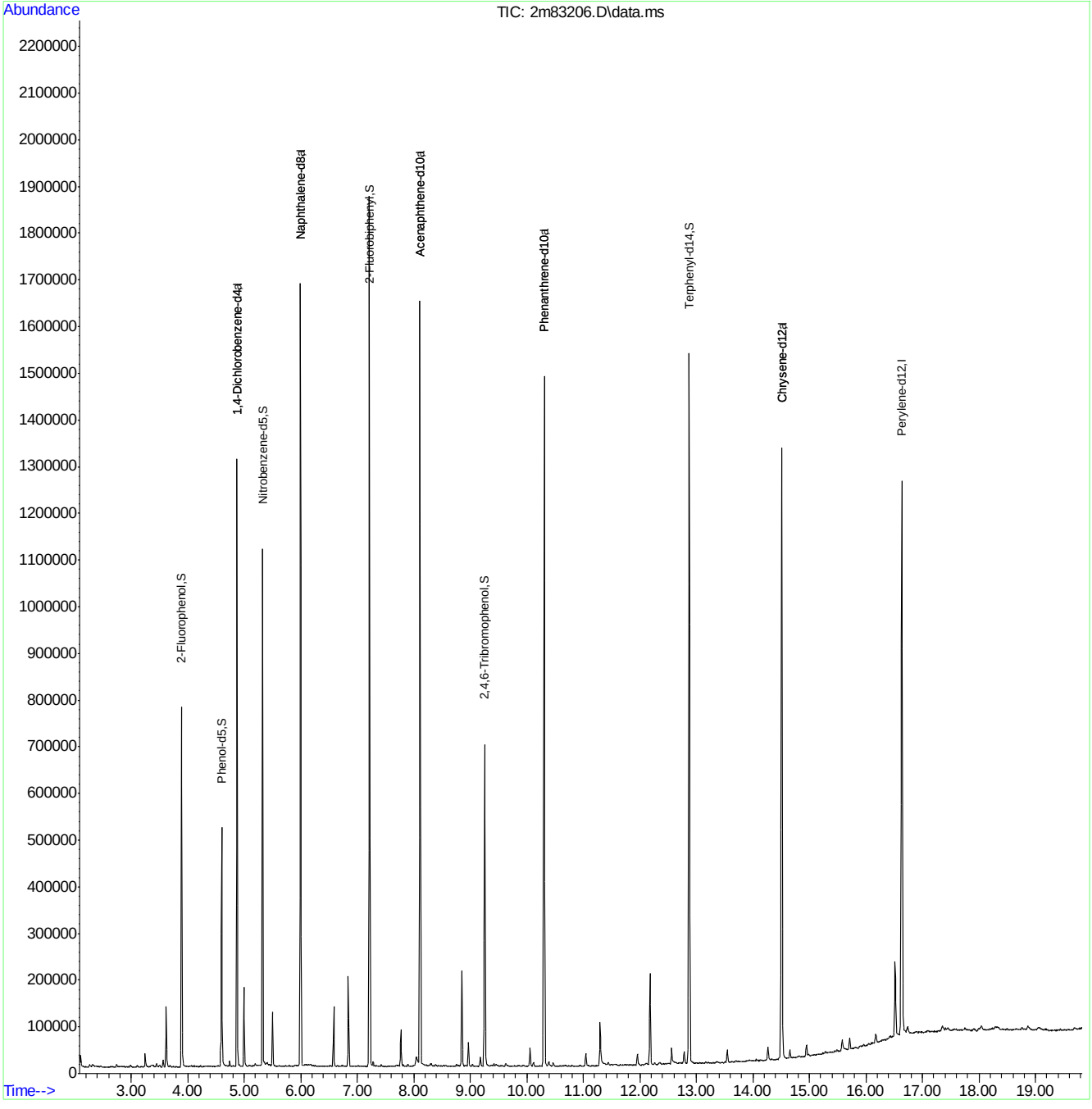
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3655\
Data File : 2m83206.D
Acq On : 20 Apr 2016 11:00 am
Operator : ashleyn
Sample : op93128-mb1
Misc : op93128,e2m3655,1000
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 20 13:20:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 20:20:49 2016
Response via : Initial Calibration



M2M3649.M Wed Apr 20 13:20:56 2016 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5230\
Data File : M123745.D
Acq On : 20 Apr 2016 1:06 pm
Operator : ashleyd
Sample : op93218-mb1
Misc : op93218,em5230,30.0
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 20 14:00:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Apr 19 00:08:51 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	4.697	152	294181	40.00 ppm	-0.03
24) Naphthalene-d8	5.835	136	1099787	40.00 ppm	-0.03
47) Acenaphthene-d10	8.180	164	644248	40.00 ppm	-0.04
69) Phenanthrene-d10	10.807	188	1120616	40.00 ppm	-0.05
83) Chrysene-d12	15.978	240	1112539	40.00 ppm	-0.06
92) Perylene-d12	18.611	264	1101092	40.00 ppm	-0.05
102) 1,4-Dichlorobenzene-d4a	4.697	152	294181	40.00 ppm	-0.03
104) Acenaphthene-d10a	8.180	164	644248	40.00 ppm	-0.04
107) Chrysene-d12a	15.978	240	1111822	40.00 ppm	-0.06
109) Naphthalene-d8a	5.835	136	1099949	40.00 ppm	-0.03
System Monitoring Compounds					
5) 2-Fluorophenol	3.752	112	422079	46.92 ppm	-0.04
Spiked Amount 50.000			Recovery	= 93.84%	
8) Phenol-d5	4.468	99	517613	45.81 ppm	-0.03
Spiked Amount 50.000			Recovery	= 91.62%	
25) Nitrobenzene-d5	5.151	82	446121	45.61 ppm	-0.03
Spiked Amount 50.000			Recovery	= 91.22%	
51) 2-Fluorobiphenyl	7.165	172	937247	44.30 ppm	-0.04
Spiked Amount 50.000			Recovery	= 88.60%	
73) 2,4,6-Tribromophenol	9.552	330	176360	45.53 ppm	-0.05
Spiked Amount 50.000			Recovery	= 91.06%	
86) Terphenyl-d14	13.975	244	1141840	45.75 ppm	-0.06
Spiked Amount 50.000			Recovery	= 91.50%	

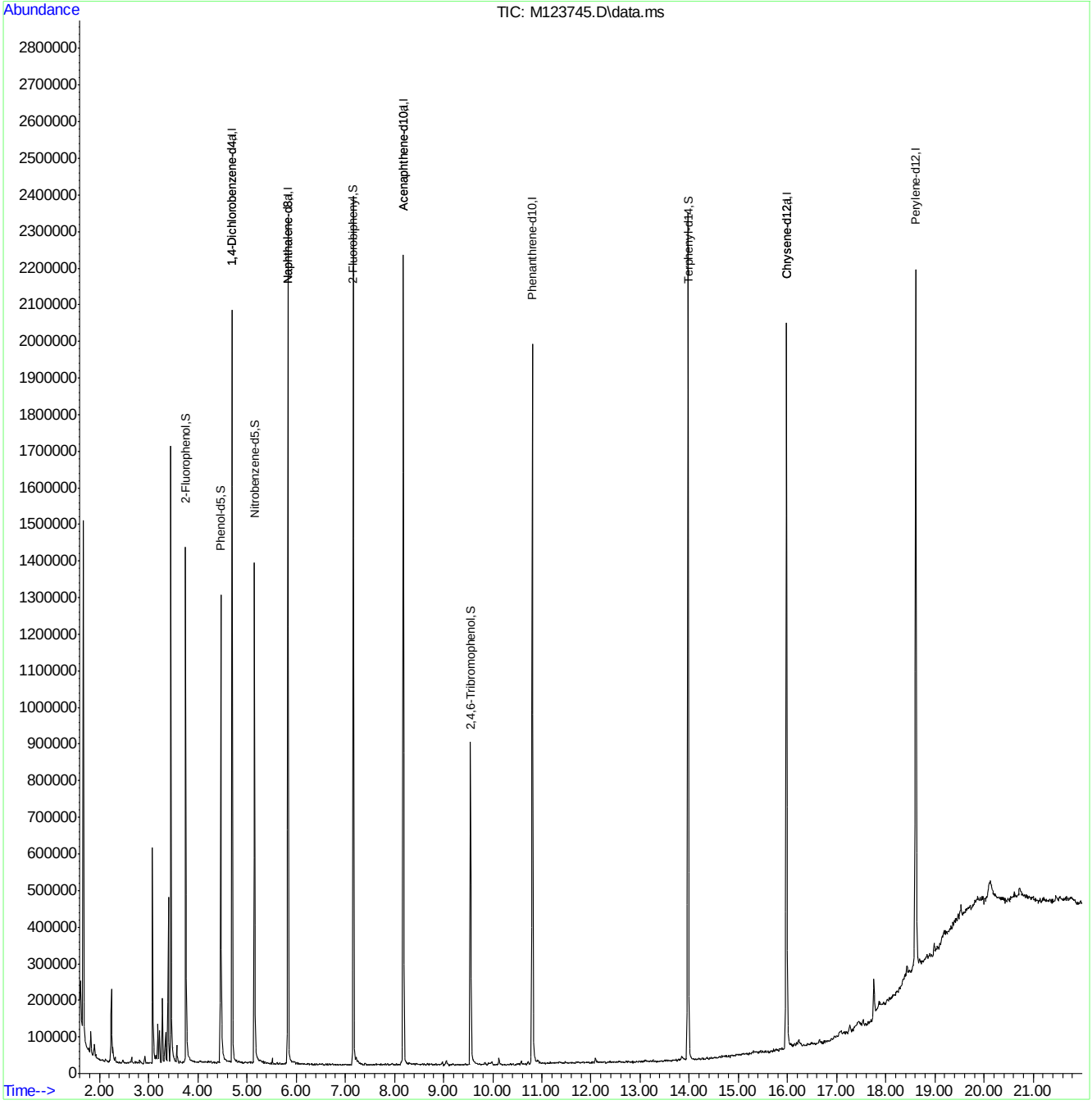
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5230\
Data File : M123745.D
Acq On : 20 Apr 2016 1:06 pm
Operator : ashleyd
Sample : op93218-mb1
Misc : op93218,em5230,30.0
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 20 14:00:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Apr 19 00:08:51 2016
Response via : Initial Calibration



MM5217.M Wed Apr 20 14:00:21 2016 MSM

SGS ACCUTEST JC18516

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3626\
Data File : 3E82750.D
Acq On : 29 Apr 2016 11:29 am
Operator : ashleyn
Sample : op93218-mb1
Misc : op93218,e3e3626,30.0
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 29 12:35:33 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MFri Apr 29 12:32:30 2016
QLast Update : Fri Apr 29 12:32:30 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.518	152	269289	40.00	ppm	-0.02
24) Naphthalene-d8	5.577	136	995431	40.00	ppm	-0.03
47) Acenaphthene-d10	7.610	164	536714	40.00	ppm	-0.03
69) Phenanthrene-d10	9.771	188	866025	40.00	ppm	-0.03
83) Chrysene-d12	13.943	240	810188	40.00	ppm	-0.04
92) Perylene-d12	16.055	264	572899	40.00	ppm	-0.04
102) 1,4-Dichlorobenzene-d4a	4.518	152	269289	40.00	ppm	-0.02
104) Acenaphthene-d10a	7.610	164	536714	40.00	ppm	-0.03
106) Phenanthrene-d10a	9.771	188	866025	40.00	ppm	-0.04
108) Chrysene-d12a	13.943	240	810188	40.00	ppm	-0.05
110) Naphthalene-d8a	5.577	136	995431	40.00	ppm	-0.03

System Monitoring Compounds						
5) 2-Fluorophenol	3.545	112	351099	42.53	ppm	0.00
Spiked Amount 50.000			Recovery = 85.06%			
8) Phenol-d5	4.278	99	409807	38.15	ppm	-0.01
Spiked Amount 50.000			Recovery = 76.30%			
25) Nitrobenzene-d5	4.952	82	431002	43.29	ppm	-0.02
Spiked Amount 50.000			Recovery = 86.58%			
51) 2-Fluorobiphenyl	6.754	172	834216	46.87	ppm	-0.02
Spiked Amount 50.000			Recovery = 93.74%			
73) 2,4,6-Tribromophenol	8.738	330	133508	43.71	ppm	-0.03
Spiked Amount 50.000			Recovery = 87.42%			
85) Terphenyl-d14	12.333	244	870405	51.18	ppm	-0.03
Spiked Amount 50.000			Recovery = 102.36%			

Target Compounds	Qvalue

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

7.2.4

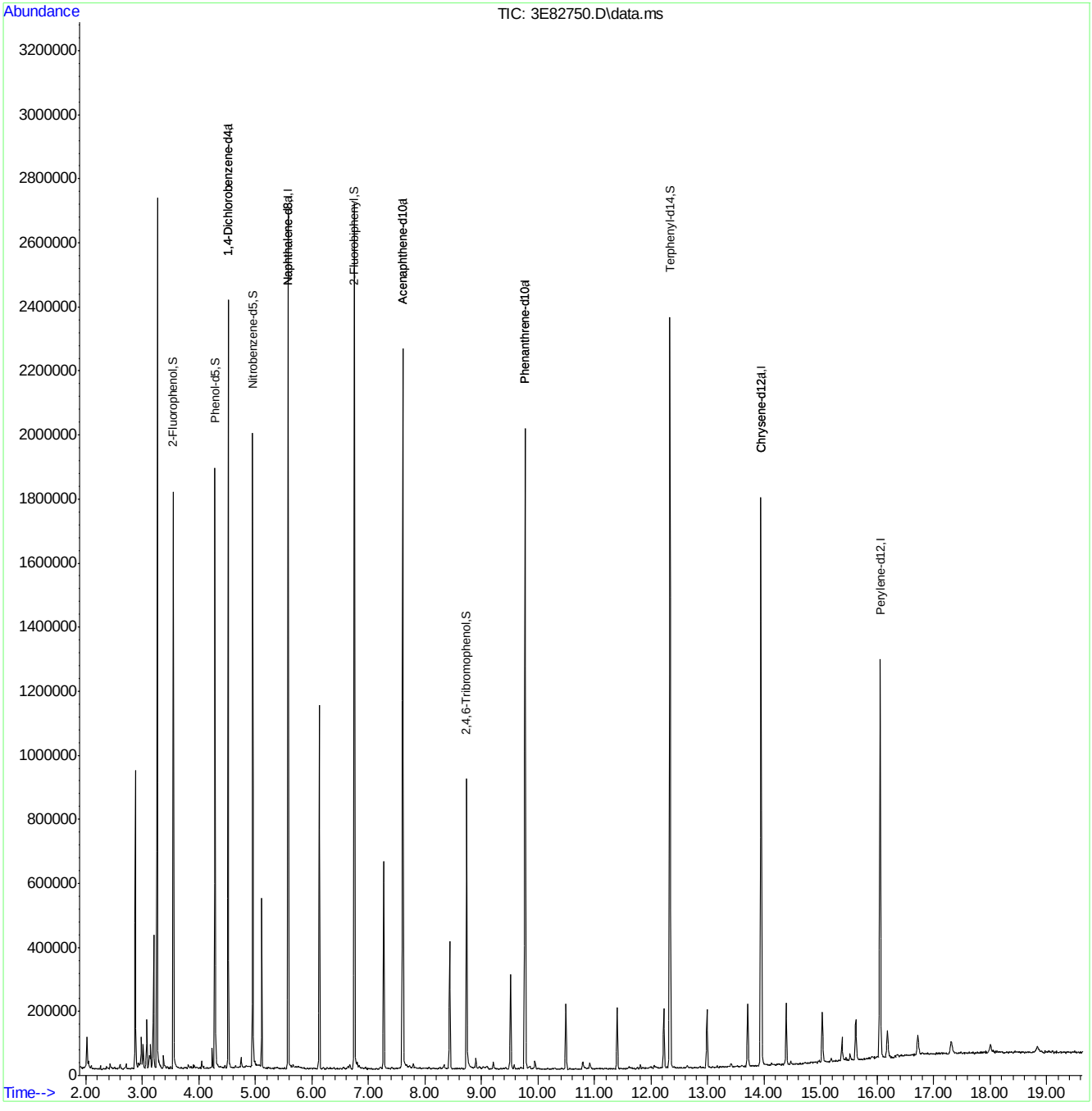
7

SGS ACCUTEST JC18516

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3626\
Data File : 3E82750.D
Acq On : 29 Apr 2016 11:29 am
Operator : ashleyn
Sample : op93218-mb1
Misc : op93218,e3e3626,30.0
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 29 12:35:33 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MFri Apr 29 12:32:30 2016
QLast Update : Fri Apr 29 12:32:30 2016
Response via : Initial Calibration



M3E3623.M Fri Apr 29 13:40:23 2016 MS3E

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2885\
Data File : 4m64803.D
Acq On : 18 Apr 2016 3:19 pm
Operator : linseyk
Sample : op93128a-mb1
Misc : op93128a,e4m2885,1000
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 18 16:51:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Mon Apr 18 14:07:51 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.698	152	214219	4.00	ppm	-0.05
12) Fluorene-d10	13.676	176	322553	4.00	ppm	-0.05
22) Fluoranthene-d10	17.866	212	616413	4.00	ppm	-0.04
28) Benzo(a)pyrene-d12	22.470	264	480009	4.00	ppm	-0.03
35) 1-Methylnaphthalene-d10a	10.698	152	214219	4.00	ppm	#-0.05
38) Fluorene-d10a	13.676	176	322553	4.00	ppm	-0.05
System Monitoring Compounds						
2) 2-Fluorophenol	4.720	112	833666	29.72	ppm	-0.02
Spiked Amount 50.000	Range 11 - 58		Recovery = 59.44%#			
3) Phenol-d5	6.310	99	909507	19.28	ppm	-0.03
Spiked Amount 50.000			Recovery = 38.56%			
6) Nitrobenzene-d5	7.833	82	1981293	46.84	ppm	-0.05
Spiked Amount 50.000			Recovery = 93.68%			
11) 2-Fluorobiphenyl	11.366	172	3188392	51.57	ppm	-0.05
Spiked Amount 50.000			Recovery = 103.14%			
17) 2,4,6-Tribromophenol	14.249	330	841470	48.91	ppm	-0.02
Spiked Amount 50.000			Recovery = 97.82%			
25) Terphenyl-d14	18.675	244	4174914	50.13	ppm	-0.04
Spiked Amount 50.000			Recovery = 100.26%			

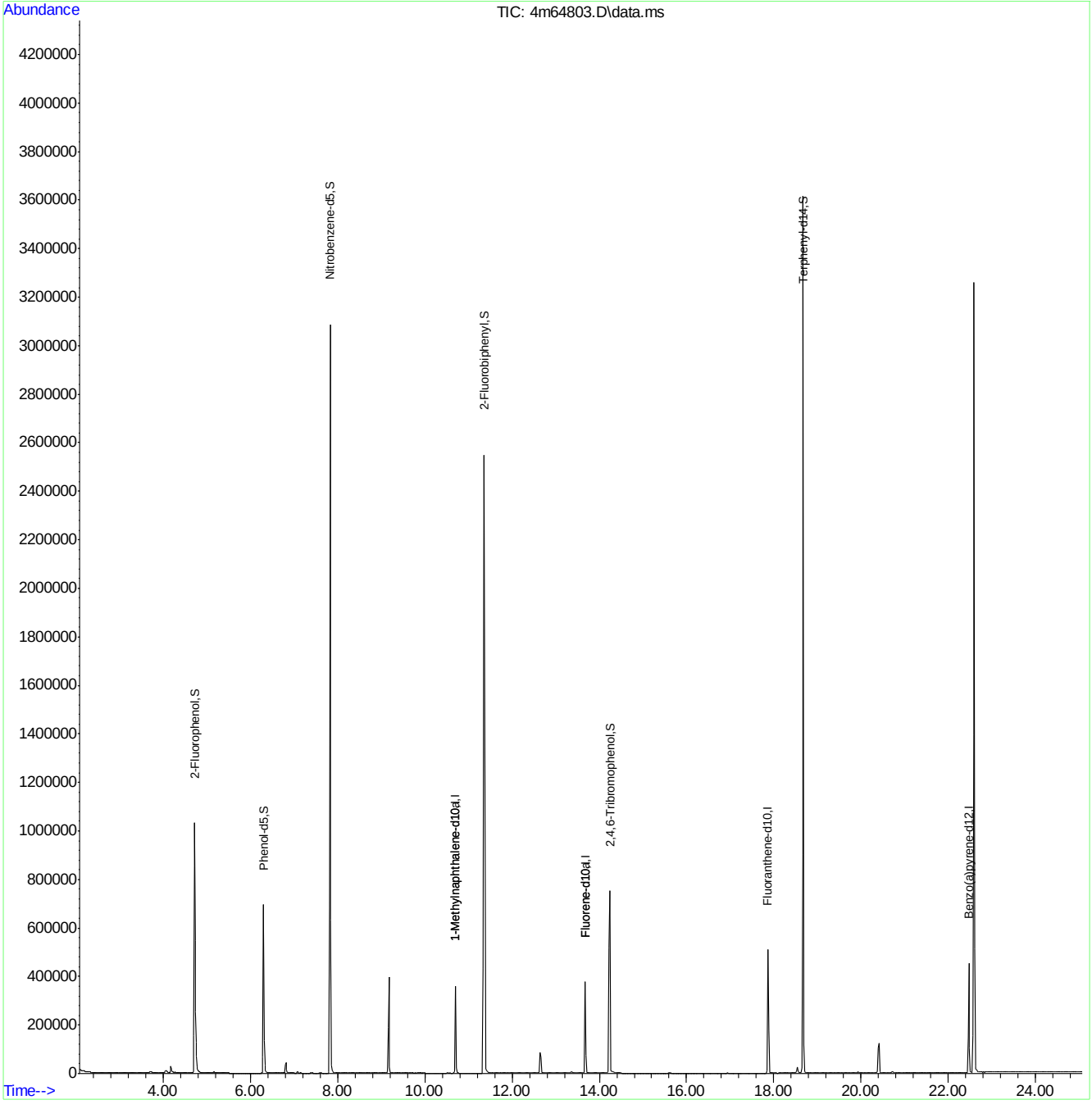
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2885\
Data File : 4m64803.D
Acq On : 18 Apr 2016 3:19 pm
Operator : linseyk
Sample : op93128a-mb1
Misc : op93128a,e4m2885,1000
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 18 16:51:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Mon Apr 18 14:07:51 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2856\
Data File : 3m60786.D
Acq On : 22 Apr 2016 2:43 pm
Operator : linseyk
Sample : op93128a-mb1
Misc : op93128a,e3m2856,1000
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 22 18:16:23 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	444360	4.00	ppm	0.00
14) Fluorene-d10	13.644	176	661949	4.00	ppm	0.00
21) Fluoranthene-d10	17.843	212	1100057	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.448	264	851521	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	4.515	112	1460119	26.26	ppm	0.00
Spiked Amount 50.000			Recovery = 52.52%			
4) Phenol-d5	6.116	99	1618837	17.60	ppm	0.01
Spiked Amount 50.000			Recovery = 35.20%			
7) Nitrobenzene-d5	7.745	82	3396956	39.72	ppm	0.02
Spiked Amount 50.000			Recovery = 79.44%			
15) 2-Fluorobiphenyl	11.303	172	7344529	40.38	ppm	0.00
Spiked Amount 50.000			Recovery = 80.76%			
20) 2,4,6-Tribromophenol	14.191	330	920541	44.43	ppm	0.02
Spiked Amount 50.000			Recovery = 88.86%			
28) Terphenyl-d14	18.662	244	7290010	45.68	ppm	0.02
Spiked Amount 50.000			Recovery = 91.36%			
Target Compounds						Qvalue

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

7.2.6

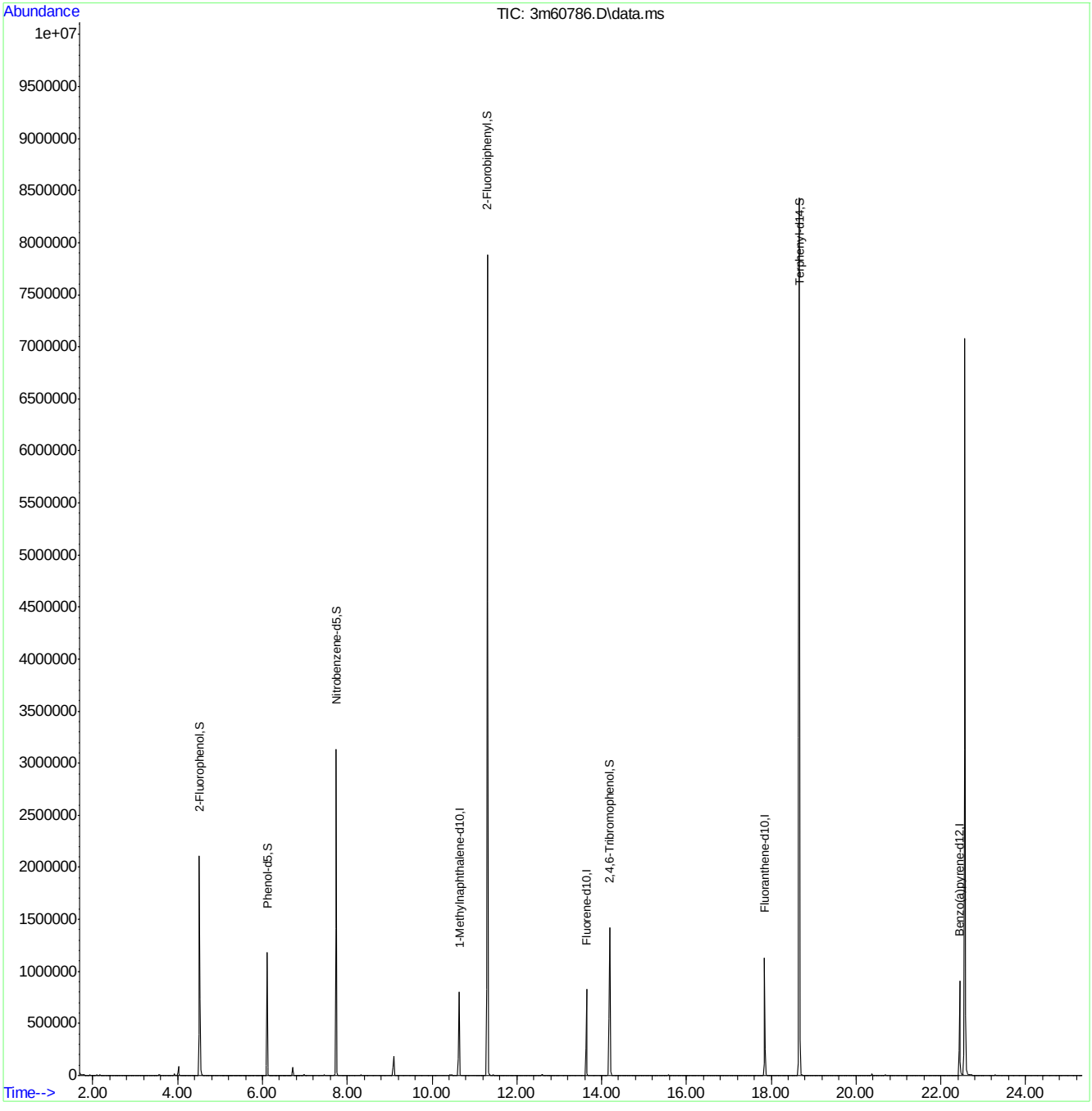
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2856\
Data File : 3m60786.D
Acq On : 22 Apr 2016 2:43 pm
Operator : linseyk
Sample : op93128a-mb1
Misc : op93128a,e3m2856,1000
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 22 18:16:23 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



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2900\
Data File : 4m65047.D
Acq On : 2 May 2016 11:42 am
Operator : linseyk
Sample : op93218a-mb1
Misc : op93218a,e4m2900,30.0
ALS Vial : 20 Sample Multiplier: 1

Quant Time: May 02 14:54:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Sat Apr 23 14:44:32 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.654	152	190001	4.00	ppm	#-0.04
12) Fluorene-d10	13.632	176	317653	4.00	ppm	-0.04
22) Fluoranthene-d10	17.836	212	561037	4.00	ppm	-0.03
28) Benzo(a)pyrene-d12	22.422	264	428581	4.00	ppm	0.02
35) 1-Methylnaphthalene-d10a	10.654	152	190001	4.00	ppm	#-0.04
38) Fluorene-d10a	13.632	176	317653	4.00	ppm	-0.04
System Monitoring Compounds						
2) 2-Fluorophenol	4.704	112	1373133	55.20	ppm	-0.02
Spiked Amount 50.000	Range 11 - 58		Recovery = 110.40%#			
3) Phenol-d5	6.273	99	2327792	55.64	ppm	-0.04
Spiked Amount 50.000			Recovery = 111.28%			
6) Nitrobenzene-d5	7.806	82	2217762	59.12	ppm	-0.04
Spiked Amount 50.000			Recovery = 118.24%			
11) 2-Fluorobiphenyl	11.323	172	3804649	69.38	ppm	-0.04
Spiked Amount 50.000			Recovery = 138.76%			
17) 2,4,6-Tribromophenol	14.206	330	825133	48.70	ppm	-0.02
Spiked Amount 50.000			Recovery = 97.40%			
25) Terphenyl-d14	18.627	244	4097556	54.06	ppm	-0.05
Spiked Amount 50.000			Recovery = 108.12%			
Target Compounds						Qvalue

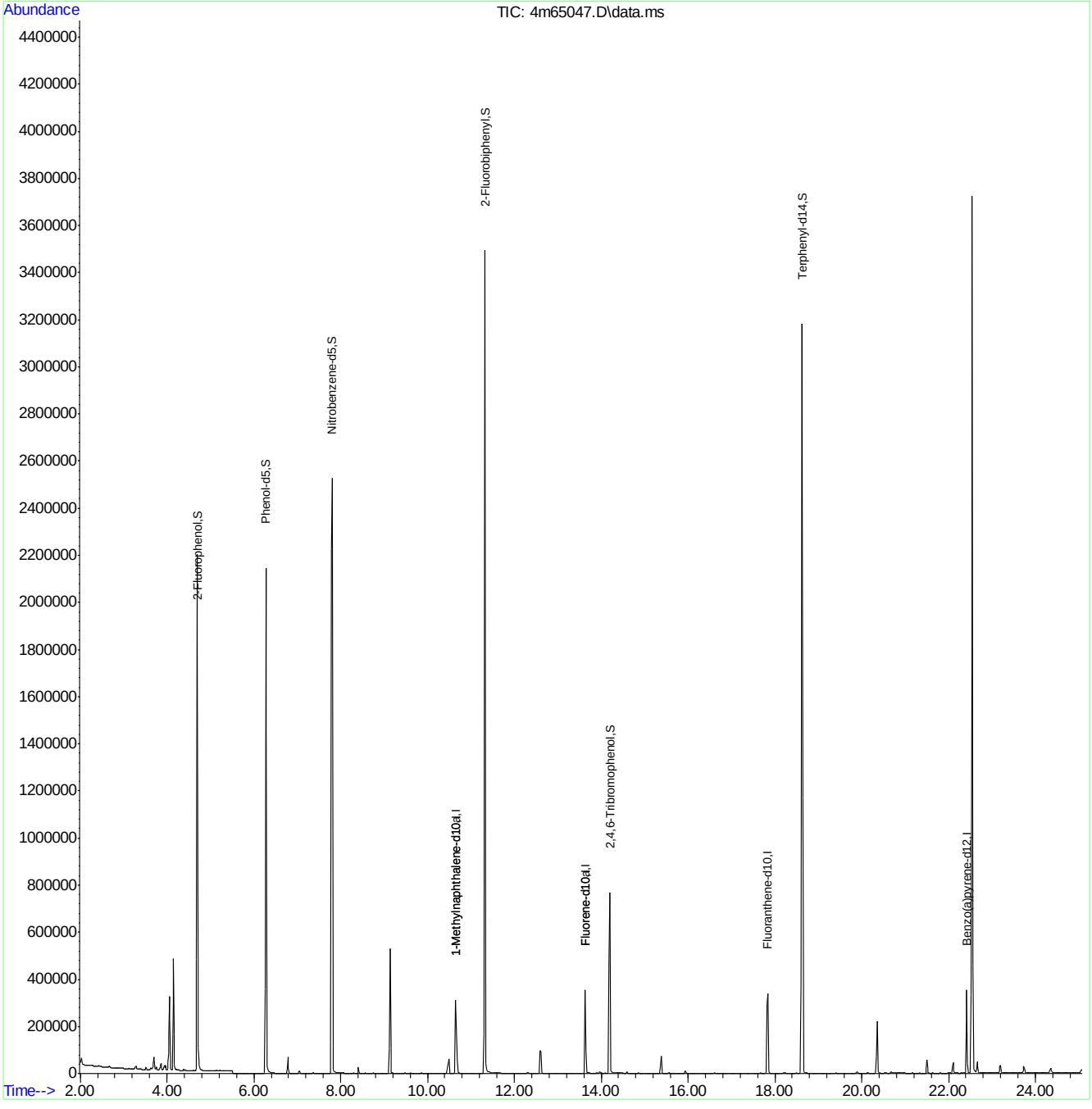
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2900\
Data File : 4m65047.D
Acq On : 2 May 2016 11:42 am
Operator : linseyk
Sample : op93218a-mb1
Misc : op93218a,e4m2900,30.0
ALS Vial : 20 Sample Multiplier: 1

Quant Time: May 02 14:54:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Sat Apr 23 14:44:32 2016
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/19/16 15:08

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104256.D Vial: 17
Acq On : 18 Apr 2016 3:58 pm Operator: linseyk
Sample : op93128-bs1 Inst : MSP
Misc : op93128,ep4590,1000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 18 16:58:40 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Apr 18 16:58:37 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.14	152	144099	40.00	ppm	-0.04
24) Naphthalene-d8	5.87	136	521517	40.00	ppm	-0.04
47) Acenaphthene-d10	8.58	164	286494	40.00	ppm	-0.04
69) Phenanthrene-d10	10.93	188	401080	40.00	ppm	-0.04
83) Chrysene-d12	15.60	240	330381	40.00	ppm	-0.04
92) Perylene-d12	18.15	264	275969	40.00	ppm	-0.04
102) 1,4-Dichlorobenzene-d4b	4.14	152	144099	40.00	ppm	-0.04
104) Phenanthrene-d10b	10.93	188	401080	40.00	ppm	-0.04
106) Chrysene-d12b	15.60	240	330381	40.00	ppm	-0.04
108) Naphthalene-d8b	5.87	136	521517	40.00	ppm	-0.04
110) Acenaphthene-d10b	8.58	164	286494	40.00	ppm	-0.04

System Monitoring Compounds						
5) 2-Fluorophenol	2.78	112	204682	40.81	ppm	-0.04
Spiked Amount 50.000			Recovery = 81.62%			
8) Phenol-d5	3.74	99	171216	27.98	ppm	-0.05
Spiked Amount 50.000			Recovery = 55.96%			
25) Nitrobenzene-d5	4.86	82	268405	50.84	ppm	-0.06
Spiked Amount 50.000			Recovery = 101.68%			
51) 2-Fluorobiphenyl	7.56	172	413746	47.60	ppm	-0.07
Spiked Amount 50.000			Recovery = 95.20%			
73) 2,4,6-Tribromophenol	9.84	330	37136	39.60	ppm	-0.05
Spiked Amount 50.000			Recovery = 79.20%			
85) Terphenyl-d14	13.72	244	330075	50.74	ppm	-0.05
Spiked Amount 50.000			Recovery = 101.48%			

Target Compounds						Qvalue
2) 1,4-Dioxane	1.65	88	80290	31.36	ppm	96
3) Pyridine	1.84	79	182151	31.51	ppm	98
4) N-Nitrosodimethylamine	1.81	42	80089	37.06	ppm	96
6) Indene	4.46	116	406189	49.56	ppm	97
7) Cumene	3.24	105	494190	41.74	ppm	98
9) Phenol	3.76	94	170254	26.96	ppm	91
10) Aniline	3.75	93	221179	32.15	ppm	94
11) bis(2-Chloroethyl)ether	3.82	93	247334	53.23	ppm	98
12) 2-Chlorophenol	3.90	128	239675	50.09	ppm	100
13) Decane	3.96	43	164842	43.30	ppm	94
14) 1,3-Dichlorobenzene	4.07	146	194141	36.21	ppm	99
15) 1,4-Dichlorobenzene	4.16	146	194066	37.69	ppm	99
16) Benzyl alcohol	4.33	108	149967	52.71	ppm	99
17) 1,2-Dichlorobenzene	4.35	146	186510	38.18	ppm	98
18) Acetophenone	4.66	105	335804	51.82	ppm	97
19) 2-Methylphenol	4.50	108	199613	49.05	ppm	98
20) 2,2'-oxybis(1-Chloropropan	4.50	121	66921m	43.80	ppm	
21) 3&4-Methylphenol	4.71	108	204027	45.94	ppm	98
22) n-Nitroso-di-n-propylamine	4.67	70	164594	50.61	ppm	93
23) Hexachloroethane	4.79	201	52736	31.43	ppm	84
26) Nitrobenzene	4.89	77	237128	46.81	ppm	96
27) Quinoline	6.41	129	483263	51.43	ppm	96
28) Isophorone	5.22	82	466266	54.28	ppm	98

(#) = qualifier out of range (m) = manual integration
P104256.D MP4524.M Mon Apr 18 16:59:37 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104256.D Vial: 17
Acq On : 18 Apr 2016 3:58 pm Operator: linseyk
Sample : op93128-bs1 Inst : MSP
Misc : op93128,ep4590,1000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 18 16:58:40 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Apr 18 16:58:37 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
29)	2-Nitrophenol	5.34	139	132726	53.41 ppm	#	63
30)	2,4-Dimethylphenol	5.45	107	222557	52.74 ppm		97
31)	Benzoic acid	5.63	105	75450	23.02 ppm		99
32)	bis(2-Chloroethoxy)methane	5.57	93	284394	52.43 ppm		98
33)	2,4-Dichlorophenol	5.70	162	183238	49.69 ppm		94
34)	2,6-Dichlorophenol	6.03	162	171662	48.51 ppm		97
36)	1,2,4-Trichlorobenzene	5.80	180	137693	33.70 ppm		95
38)	Naphthalene	5.90	128	543105	41.99 ppm		100
39)	4-Chloroaniline	6.02	127	131287	23.87 ppm		95
40)	2,3-Dichloroaniline	7.41	161	199985	42.68 ppm		97
41)	Caprolactam	6.52	55	33122	19.11 ppm		91
42)	Hexachlorobutadiene	6.12	225	57332	28.24 ppm		99
43)	4-Chloro-3-methylphenol	6.83	107	204883	52.01 ppm		95
44)	2-Methylnaphthalene	6.96	141	314109	43.84 ppm		97
45)	1-Methylnaphthalene	7.10	142	395278	45.22 ppm		97
46)	Dimethylnaphthalene	7.94	156	322333	42.16 ppm		98
48)	Hexachlorocyclopentadiene	7.22	237	90355	48.41 ppm		99
49)	2,4,6-Trichlorophenol	7.43	196	105329	46.93 ppm		100
50)	2,4,5-Trichlorophenol	7.50	196	110508	47.32 ppm		98
52)	2-Chloronaphthalene	7.71	162	298402	39.65 ppm		98
53)	Biphenyl	7.70	154	435438	45.00 ppm		99
54)	2-Nitroaniline	7.91	65	126394	58.08 ppm		92
55)	Dimethylphthalate	8.24	163	408400	46.95 ppm		99
56)	Acenaphthylene	8.35	152	530477	44.13 ppm		99
57)	2,6-Dinitrotoluene	8.31	165	95379	51.41 ppm		94
58)	3-Nitroaniline	8.56	138	75074	34.37 ppm		99
59)	Acenaphthene	8.63	153	331004	44.30 ppm		99
60)	2,4-Dinitrophenol	8.74	184	106659	96.44 ppm		97
61)	4-Nitrophenol	8.96	109	32916	27.69 ppm		96
62)	Dibenzofuran	8.91	168	483197	45.89 ppm		99
63)	2,4-Dinitrotoluene	8.94	165	125791	44.20 ppm		98
64)	2,3,4,6-Tetrachlorophenol	9.14	232	74729	41.64 ppm		95
65)	Diethylphthalate	9.37	149	416929	48.22 ppm		99
66)	Fluorene	9.45	166	382610	44.51 ppm		99
67)	4-Chlorophenyl-phenylether	9.49	204	144816	37.54 ppm		96
68)	4-Nitroaniline	9.54	138	122137	55.67 ppm		92
70)	4,6-Dinitro-2-methylphenol	9.59	198	66528	45.09 ppm		91
71)	n-Nitrosodiphenylamine	9.69	169	276319	47.84 ppm		99
72)	1,2-Diphenylhydrazine	9.74	77	439742	55.57 ppm		96
74)	4-Bromophenyl-phenylether	10.26	248	82530	42.06 ppm		92
75)	Hexachlorobenzene	10.33	284	77452	36.35 ppm		84
76)	Pentachlorophenol	10.68	266	45682	37.13 ppm		98
77)	Phenanthrene	10.97	178	497518	48.36 ppm		97
78)	Anthracene	11.05	178	507031	49.16 ppm		99
79)	Carbazole	11.35	167	552567	52.30 ppm		95
80)	Di-n-butylphthalate	12.03	149	727256	59.06 ppm		100
81)	Fluoranthene	12.96	202	547260	49.43 ppm		97
82)	Octadecane	10.93	57	247320	61.23 ppm		98
84)	Pyrene	13.34	202	560626	53.32 ppm		95

(#) = qualifier out of range (m) = manual integration
P104256.D MP4524.M Mon Apr 18 16:59:38 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104256.D Vial: 17
Acq On : 18 Apr 2016 3:58 pm Operator: linseyk
Sample : op93128-bs1 Inst : MSP
Misc : op93128,ep4590,1000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 18 16:58:40 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Apr 18 16:58:37 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
86)	Butylbenzylphthalate	14.71	149	330630	64.67	ppm	97
88)	Benzo[a]anthracene	15.58	228	442032	51.28	ppm	98
89)	3,3'-Dichlorobenzidine	15.61	252	177166	49.33	ppm	97
90)	Chrysene	15.65	228	404300	47.38	ppm	99
91)	bis(2-Ethylhexyl)phthalate	15.87	149	422547	53.68	ppm	98
93)	Di-n-octylphthalate	17.07	149	736118	66.95	ppm	98
94)	Benzo[b]fluoranthene	17.52	252	422374	53.81	ppm	94
95)	Benzo[k]fluoranthene	17.57	252	390799	51.68	ppm	94
96)	Benzo[a]pyrene	18.05	252	374239	54.05	ppm	94
97)	Indeno[1,2,3-cd]pyrene	19.77	276	313541	51.29	ppm	82
99)	Dibenz[a,h]anthracene	19.81	278	323689	49.15	ppm	90
100)	7,12-Dimethylbenz(a)anthra	17.53	256	184610	55.55	ppm	97
101)	Benzo[g,h,i]perylene	20.13	276	334862	47.84	ppm	84
103)	Benzaldehyde	3.62	105	216203	49.91	ppm	98
105)	Atrazine	10.60	200	95330	46.58	ppm	70
107)	Benzidine	13.27	184	236799	40.72	ppm	98
111)	1,2,4,5-Tetrachlorobenzene	7.23	216	126250	32.11	ppm	100

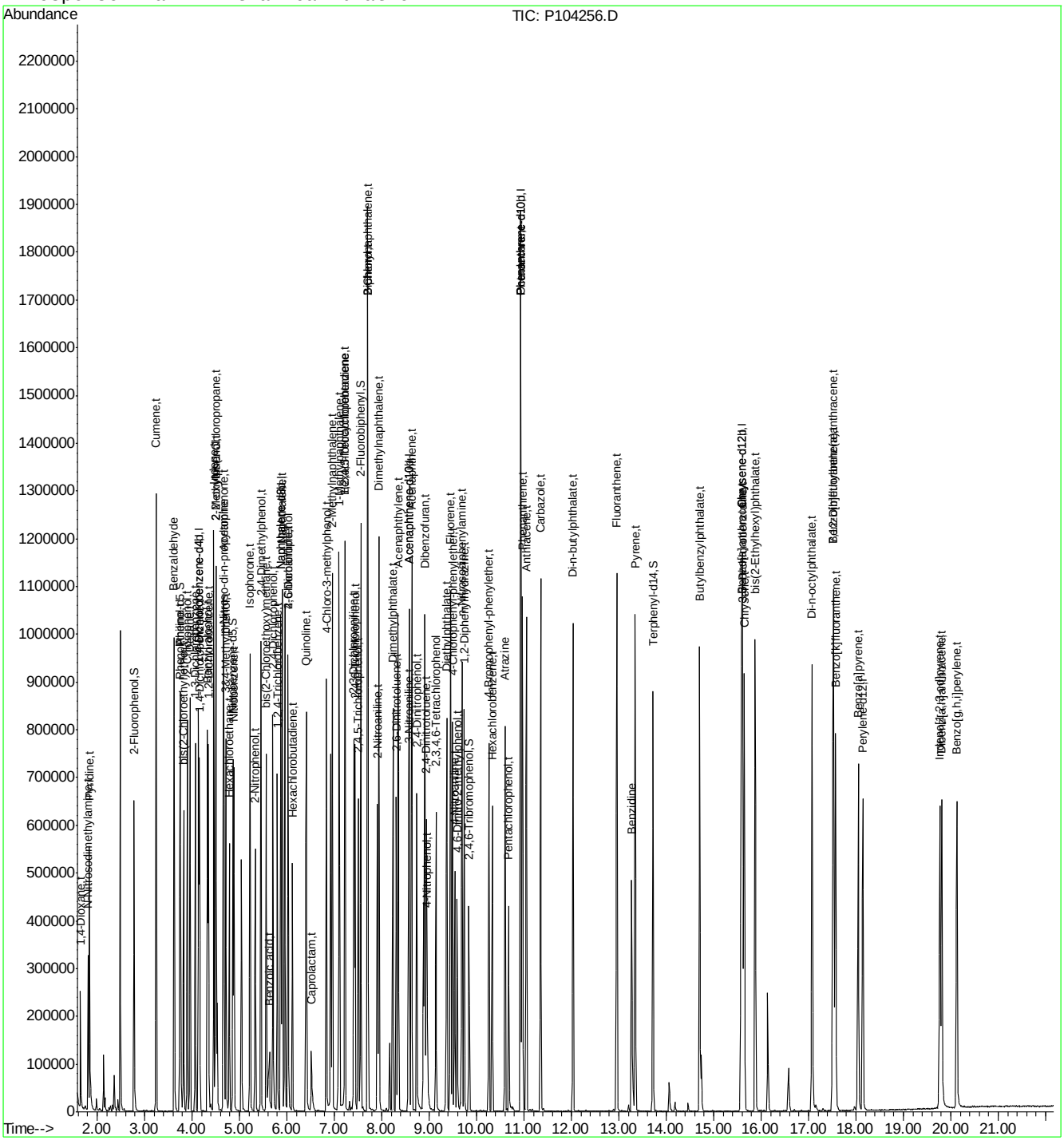
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104256.D Vial: 17
Acq On : 18 Apr 2016 3:58 pm Operator: linseyk
Sample : op93128-bs1 Inst : MSP
Misc : op93128,ep4590,1000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 18 16:59 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Apr 18 16:58:37 2016
Response via : Initial Calibration



Manual Integration Approval Summary

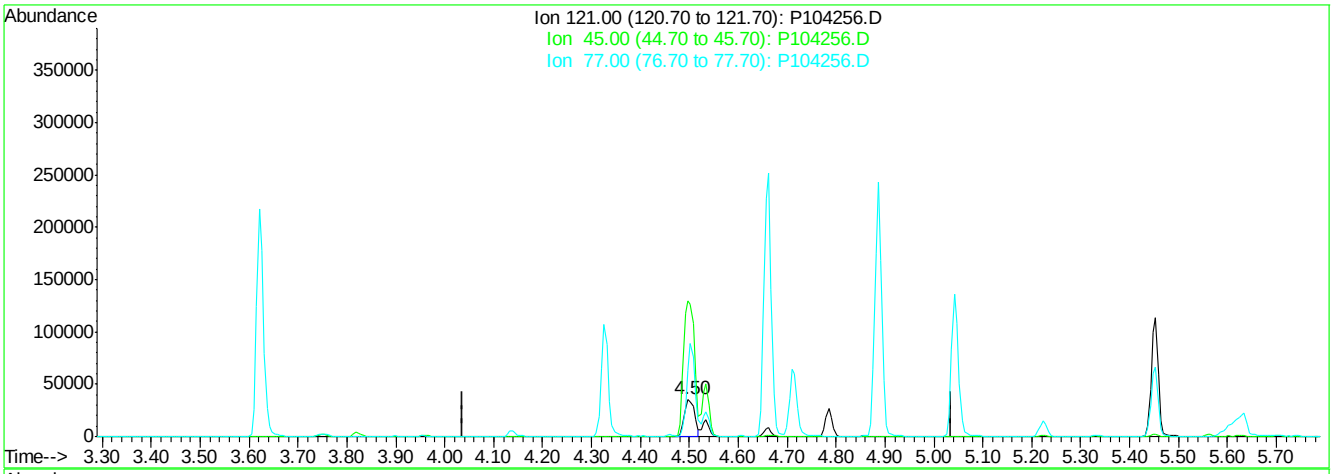
Sample Number:	OP93128-BS1	**Method:**	SW846 8270D
Lab FileID:	P104256.D	**Analyst approved:**	04/18/16 17:02 Linsey Kirschmann
Injection Time:	04/18/16 15:58	**Supervisor approved:**	04/19/16 15:08 Nina Pandya

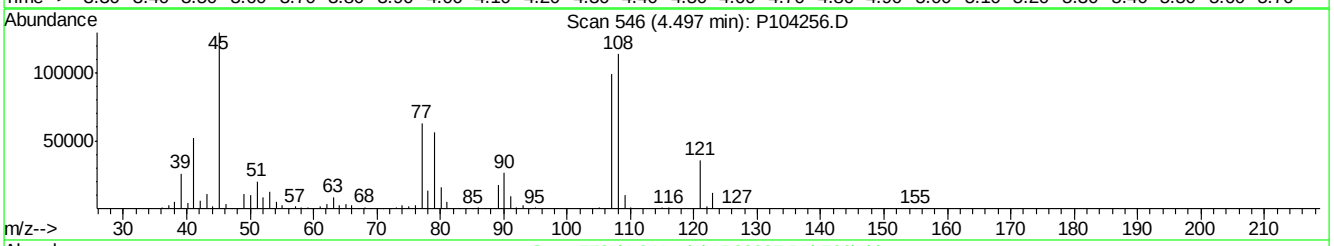
Parameter	CAS	Sig#	R.T. (min.)	Reason
bis(2-Chloroisopropyl)ether	108-60-1		4.50	Split peak

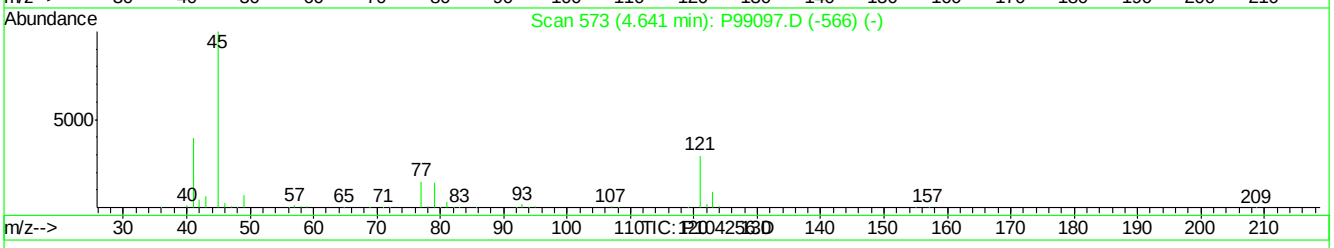
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104256.D Vial: 17
Acq On : 18 Apr 2016 3:58 pm Operator: linseyk
Sample : op93128-bs1 Inst : MSP
Misc : op93128,ep4590,1000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 18 16:20 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Apr 18 09:14:55 2016
Response via : Multiple Level Calibration







(20) 2,2'-oxybis(1-Chloropropane (t)

4.50min 33.54ppm

response 51251

Ion	Exp%	Act%
121.00	100	100
45.00	344.10	366.78
77.00	51.90	166.61#
0.00	0.00	0.00

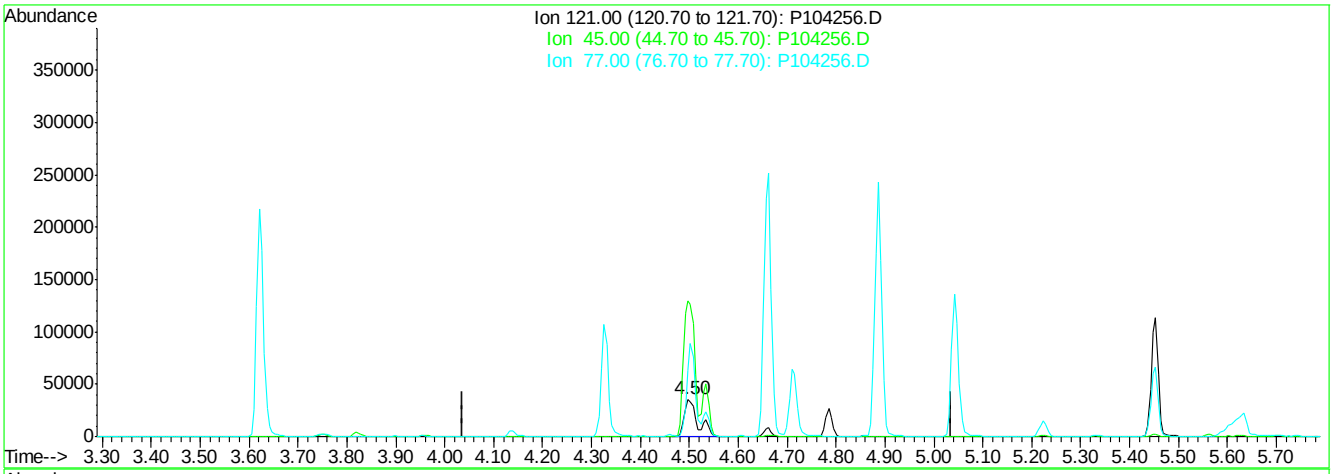
P104256.D MP4524.M Mon Apr 18 16:58:14 2016

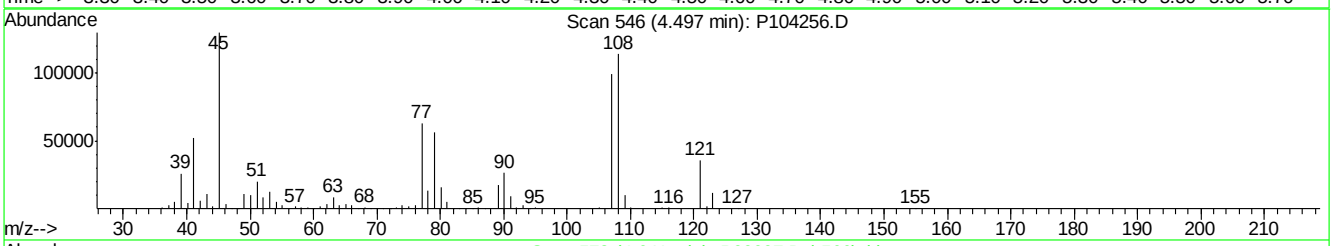
SGS ACCUTEST JC18516

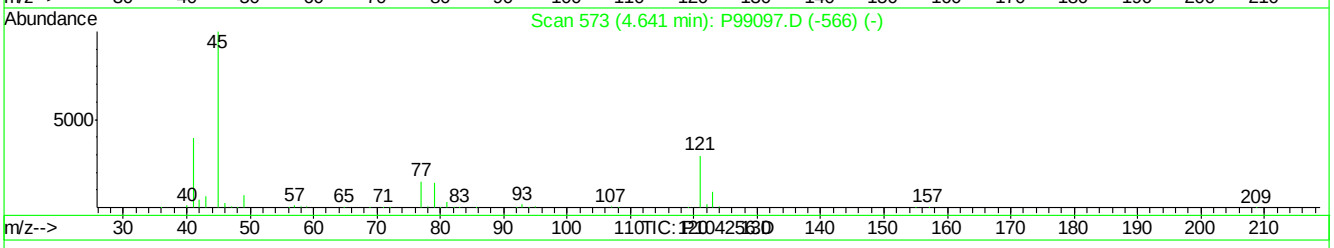
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104256.D Vial: 17
Acq On : 18 Apr 2016 3:58 pm Operator: linseyk
Sample : op93128-bs1 Inst : MSP
Misc : op93128,ep4590,1000 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 18 16:58 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Apr 18 16:58:37 2016
Response via : Multiple Level Calibration







(20) 2,2'-oxybis(1-Chloropropane (t)

4.50min 43.80ppm m

response 66921

Ion	Exp%	Act%
121.00	100	100
45.00	344.10	363.43
77.00	51.90	176.23#
0.00	0.00	0.00

P104256.D MP4524.M Mon Apr 18 16:58:58 2016

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 04/20/16 14:56

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5230\
Data File : M123746.D
Acq On : 20 Apr 2016 1:34 pm
Operator : ashleyd
Sample : op93218-bs1
Misc : op93218,em5230,30.0
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 20 14:01:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Apr 19 00:08:51 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.697	152	280026	40.00	ppm	-0.03
24) Naphthalene-d8	5.835	136	1039331	40.00	ppm	-0.03
47) Acenaphthene-d10	8.180	164	629919	40.00	ppm	-0.04
69) Phenanthrene-d10	10.813	188	1071301	40.00	ppm	-0.04
83) Chrysene-d12	15.988	240	1057284	40.00	ppm	-0.05
92) Perylene-d12	18.611	264	1136654	40.00	ppm	-0.05
102) 1,4-Dichlorobenzene-d4a	4.697	152	280026	40.00	ppm	-0.03
104) Acenaphthene-d10a	8.180	164	629919	40.00	ppm	-0.04
107) Chrysene-d12a	15.988	240	1057229	40.00	ppm	-0.05
109) Naphthalene-d8a	5.835	136	1039331	40.00	ppm	-0.03
System Monitoring Compounds						
5) 2-Fluorophenol	3.752	112	418946	48.92	ppm	-0.04
Spiked Amount 50.000			Recovery	=	97.84%	
8) Phenol-d5	4.468	99	508315	47.26	ppm	-0.03
Spiked Amount 50.000			Recovery	=	94.52%	
25) Nitrobenzene-d5	5.157	82	423224	45.79	ppm	-0.02
Spiked Amount 50.000			Recovery	=	91.58%	
51) 2-Fluorobiphenyl	7.165	172	908441	43.92	ppm	-0.04
Spiked Amount 50.000			Recovery	=	87.84%	
73) 2,4,6-Tribromophenol	9.553	330	188724	50.96	ppm	-0.05
Spiked Amount 50.000			Recovery	=	101.92%	
86) Terphenyl-d14	13.975	244	1176698	49.62	ppm	-0.06
Spiked Amount 50.000			Recovery	=	99.24%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.267	88	100589	25.91	ppm	98
3) Pyridine	2.598	79	316899	33.53	ppm	99
4) N-Nitrosodimethylamine	2.561	42	162212	39.18	ppm	99
6) Indene	4.900	116	687902	43.19	ppm	97
7) Cumene	4.099	105	837505	39.20	ppm	99
9) Phenol	4.473	94	533380	46.28	ppm	98
10) Aniline	4.457	93	383501	28.61	ppm	94
11) bis(2-Chloroethyl)ether	4.495	93	365985	40.78	ppm	95
12) 2-Chlorophenol	4.559	128	426060	44.39	ppm	98
13) Decane	4.569	43	336218	36.96	ppm	98
14) 1,3-Dichlorobenzene	4.655	146	424211	38.76	ppm	98
15) 1,4-Dichlorobenzene	4.713	146	430329	39.68	ppm	98
16) Benzyl alcohol	4.820	108	255545	45.97	ppm	91
17) 1,2-Dichlorobenzene	4.836	146	409585	40.12	ppm	98
18) Acetophenone	5.023	105	536976	42.13	ppm	83
19) 2-Methylphenol	4.927	108	353276	44.41	ppm	94
20) 2,2'-oxybis(1-Chloropr...	4.911	121	103801	35.01	ppm	99
21) 3&4-Methylphenol	5.055	108	383242	43.98	ppm	96
22) n-Nitroso-di-n-propyla...	5.023	70	263711	38.31	ppm	99
23) Hexachloroethane	5.109	201	150881	36.80	ppm	93
26) Nitrobenzene	5.173	77	385702	41.22	ppm	97
27) Quinoline	6.230	129	850459	42.92	ppm	99
28) Isophorone	5.381	82	735468	43.73	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5230\
Data File : M123746.D
Acq On : 20 Apr 2016 1:34 pm
Operator : ashleyd
Sample : op93218-bs1
Misc : op93218,em5230,30.0
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 20 14:01:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Apr 19 00:08:51 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
29) 2-Nitrophenol	5.461	139	234529	44.30	ppm		90
30) 2,4-Dimethylphenol	5.515	107	394652	45.55	ppm		95
31) Benzoic acid	5.643	105	262589	46.20	ppm		95
32) bis(2-Chloroethoxy)met...	5.579	93	430657	42.17	ppm		99
33) 2,4-Dichlorophenol	5.712	162	352043	44.43	ppm		96
34) 2,6-Dichlorophenol	5.937	162	337785	42.20	ppm		98
36) 1,2,4-Trichlorobenzene	5.776	180	368903	39.70	ppm		99
38) Naphthalene	5.856	128	1120407	41.16	ppm		99
39) 4-Chloroaniline	5.926	127	295158	25.17	ppm		98
40) 2,3-Dichloroaniline	7.053	161	390800	37.86	ppm		99
41) Caprolactam	6.332	55	183602	42.85	ppm		99
42) Hexachlorobutadiene	5.985	225	207447	38.81	ppm		98
43) 4-Chloro-3-methylphenol	6.529	107	351672	44.42	ppm		100
44) 2-Methylnaphthalene	6.668	141	656459	40.33	ppm		98
45) 1-Methylnaphthalene	6.797	142	801233	42.36	ppm		99
46) Dimethylnaphthalene	7.539	156	733574	41.78	ppm		100
48) Hexachlorocyclopentadiene	6.877	237	256456	63.72	ppm		99
49) 2,4,6-Trichlorophenol	7.074	196	255794	42.56	ppm		100
50) 2,4,5-Trichlorophenol	7.144	196	268670	41.07	ppm		97
52) 2-Chloronaphthalene	7.331	162	745350	40.62	ppm		99
53) Biphenyl	7.309	154	991196	42.28	ppm		99
54) 2-Nitroaniline	7.507	65	239084	45.70	ppm		96
55) Dimethylphthalate	7.790	163	892168	41.59	ppm		99
56) Acenaphthylene	7.956	152	1198609	39.51	ppm		100
57) 2,6-Dinitrotoluene	7.881	165	209918	44.02	ppm		97
58) 3-Nitroaniline	8.158	138	171830	32.56	ppm		99
59) Acenaphthene	8.233	153	756127	41.37	ppm		98
60) 2,4-Dinitrophenol	8.351	184	208277	94.26	ppm		97
61) 4-Nitrophenol	8.580	109	77700	40.27	ppm	#	84
62) Dibenzofuran	8.522	168	1137128	41.82	ppm		96
63) 2,4-Dinitrotoluene	8.554	165	278923	44.59	ppm		92
64) 2,3,4,6-Tetrachlorophenol	8.778	232	207895	41.08	ppm		99
65) Diethylphthalate	8.981	149	904213	42.33	ppm		100
66) Fluorene	9.109	166	900819	40.99	ppm		99
67) 4-Chlorophenyl-phenyle...	9.136	204	424057	40.44	ppm		99
68) 4-Nitroaniline	9.205	138	246078	47.95	ppm		99
70) 4,6-Dinitro-2-methylph...	9.275	198	162683	46.41	ppm		96
71) n-Nitrosodiphenylamine	9.360	169	661505	45.97	ppm		99
72) 1,2-Diphenylhydrazine	9.419	77	836753	45.40	ppm		98
74) 4-Bromophenyl-phenylether	10.012	248	290269	43.81	ppm		98
75) Hexachlorobenzene	10.113	284	330989	42.42	ppm		99
76) Pentachlorophenol	10.525	266	136553	41.62	ppm		97
77) Phenanthrene	10.856	178	1281994	42.92	ppm		99
78) Anthracene	10.952	178	1336097	43.20	ppm		99
79) Carbazole	11.310	167	1349762	47.38	ppm		99
80) Di-n-butylphthalate	12.084	149	1620968	45.83	ppm		99
81) Fluoranthene	13.147	202	1478742	42.26	ppm		98
82) Octadecane	10.781	57	568128	49.30	ppm		99
84) Pyrene	13.574	202	1520547	44.11	ppm		98
87) Butylbenzylphthalate	15.022	149	689146	45.98	ppm		97

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5230\
Data File : M123746.D
Acq On : 20 Apr 2016 1:34 pm
Operator : ashleyd
Sample : op93218-bs1
Misc : op93218,em5230,30.0
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 20 14:01:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Apr 19 00:08:51 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
88) Benzo[a]anthracene	15.967	228	1367163	42.30	ppm		100
89) 3,3'-Dichlorobenzidine	15.994	252	724809	61.41	ppm		99
90) Chrysene	16.037	228	1292416	42.81	ppm		100
91) bis(2-Ethylhexyl)phtha...	16.229	149	933855	46.21	ppm		99
93) Di-n-octylphthalate	17.452	149	1584900	42.96	ppm		99
94) Benzo[b]fluoranthene	17.975	252	1446169	41.41	ppm		97
95) Benzo[k]fluoranthene	18.018	252	1440099	42.78	ppm		99
96) Benzo[a]pyrene	18.515	252	1361789	42.22	ppm		98
97) Indeno[1,2,3-cd]pyrene	20.341	276	1392498m	42.67	ppm		
99) Dibenz[a,h]anthracene	20.379	278	1401800	42.24	ppm		100
100) 7,12-Dimethylbenz(a)an...	17.965	256	721839	45.93	ppm		99
101) Benzo[g,h,i]perylene	20.806	276	1384876	40.71	ppm		99
103) Benzaldehyde	4.372	105	324176	45.78	ppm		97
105) 1,2,4,5-Tetrachloroben...	6.893	216	394357	38.99	ppm		98
106) Atrazine	10.407	215	144101	41.00	ppm	#	69
108) Benzidine	13.494	184	615726	49.75	ppm		93

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

7.3.2

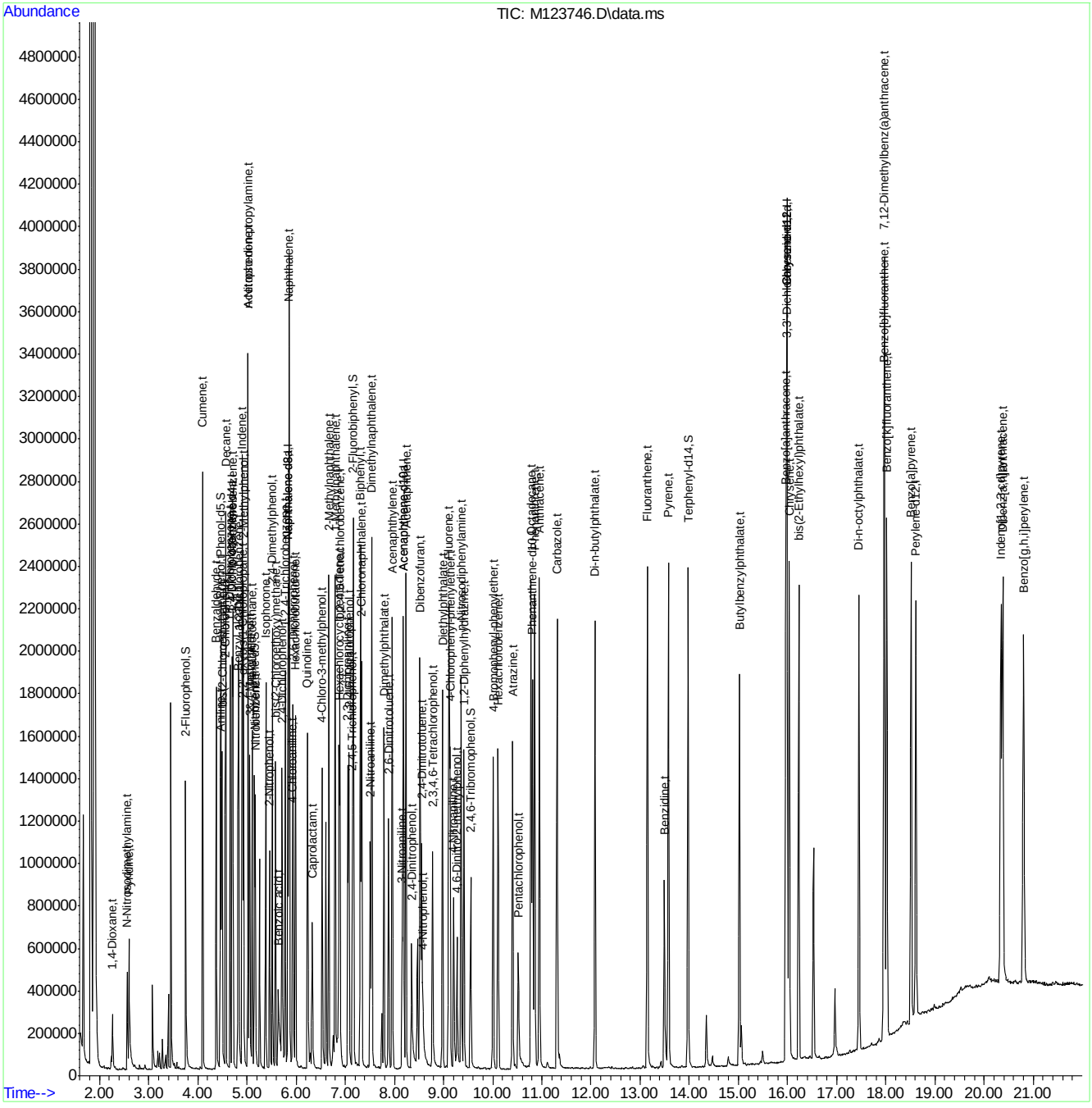
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5230\
Data File : M123746.D
Acq On : 20 Apr 2016 1:34 pm
Operator : ashleyd
Sample : op93218-bs1
Misc : op93218,em5230,30.0
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 20 14:01:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Apr 19 00:08:51 2016
Response via : Initial Calibration



SGS ACCUTEST JC18516

Manual Integration Approval Summary

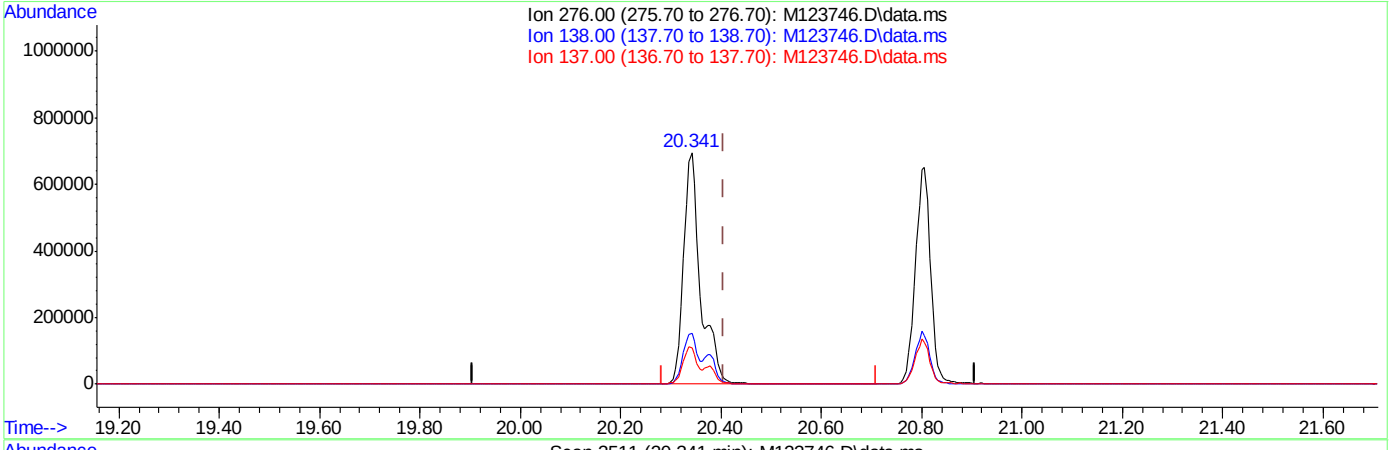
Sample Number:	OP93218-BS1	**Method:**	SW846 8270D
Lab FileID:	M123746.D	**Analyst approved:**	04/20/16 14:05 Ashley Dye
Injection Time:	04/20/16 13:34	**Supervisor approved:**	04/20/16 14:56 Kristi Schollenberger

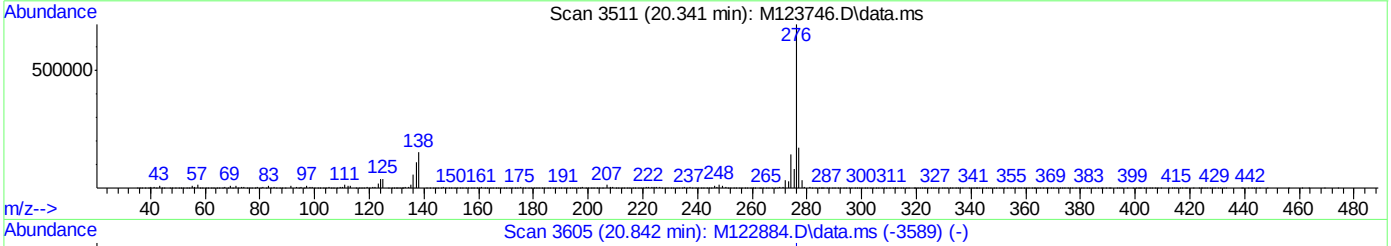
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		20.34	Overlapping peak

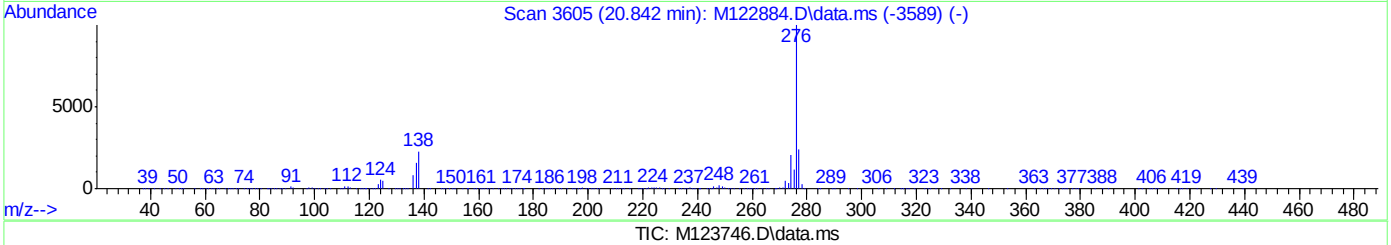
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5230\
Data File : M123746.D
Acq On : 20 Apr 2016 1:34 pm
Operator : ashleyd
Sample : op93218-bs1
Misc : op93218,em5230,30.0
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 20 13:56:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Apr 19 00:08:51 2016
Response via : Initial Calibration







TIC: M123746.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

20.341min (-0.065) 50.55ppm

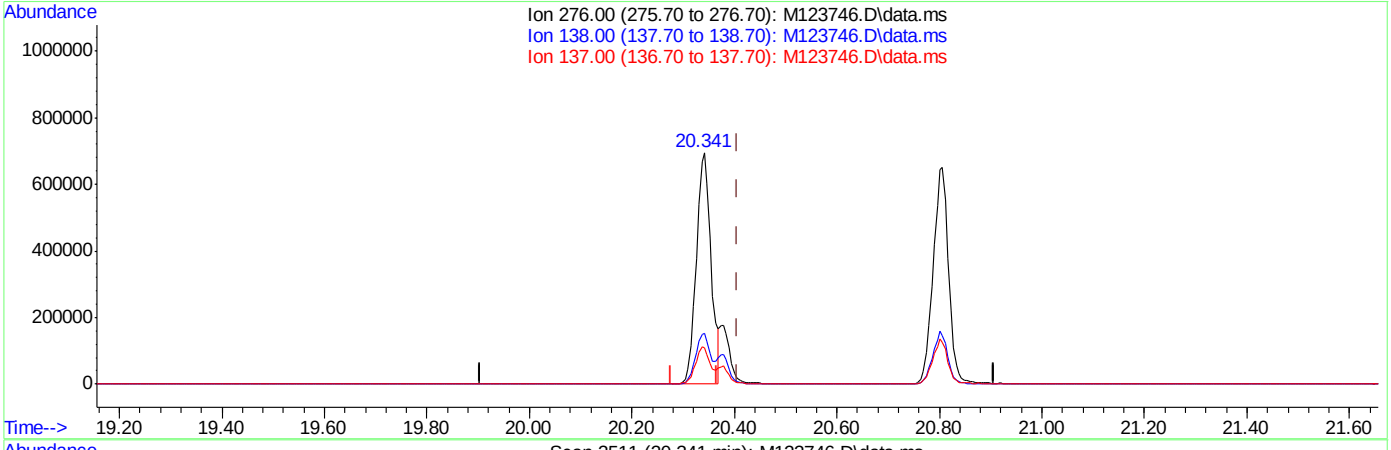
response 1649781

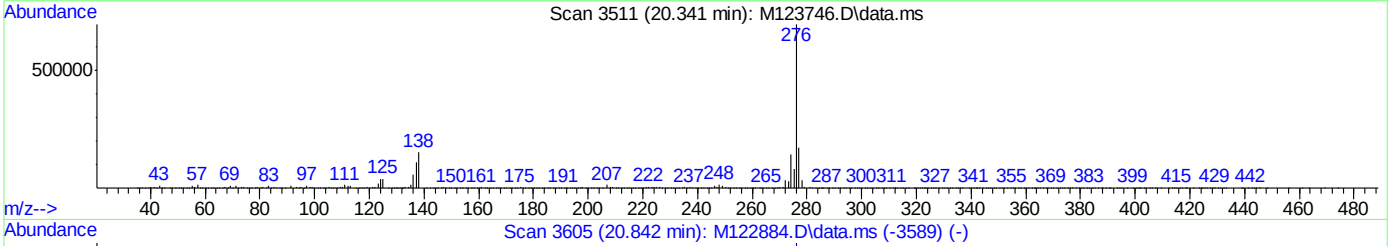
Ion	Exp%	Act%
276.00	100	100
138.00	17.70	22.04
137.00	13.00	15.29
0.00	0.00	0.00

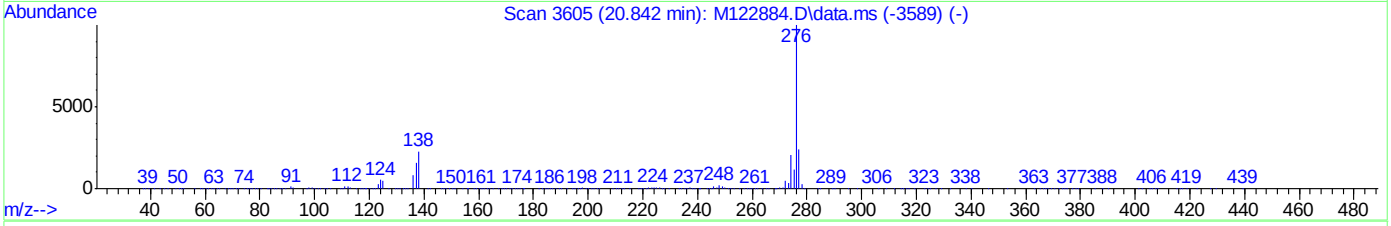
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5230\
Data File : M123746.D
Acq On : 20 Apr 2016 1:34 pm
Operator : ashleyd
Sample : op93218-bs1
Misc : op93218,em5230,30.0
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 20 13:56:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Apr 19 00:08:51 2016
Response via : Initial Calibration







TIC: M123746.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

20.341min (-0.065) 42.67ppm m

response 1392498

Ion	Exp%	Act%
276.00	100	100
138.00	17.70	22.13
137.00	13.00	15.60
0.00	0.00	0.00

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2885\
Data File : 4m64804.D
Acq On : 18 Apr 2016 3:53 pm
Operator : linseyk
Sample : op93128a-bs12
Misc : op93128a,e4m2885,1000
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 18 16:51:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Mon Apr 18 16:04:01 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.698	152	257964	4.00	ppm	-0.05
12) Fluorene-d10	13.676	176	388075	4.00	ppm	-0.05
22) Fluoranthene-d10	17.866	212	706667	4.00	ppm	-0.04
28) Benzo(a)pyrene-d12	22.470	264	540108	4.00	ppm	-0.03
35) 1-Methylnaphthalene-d10a	10.698	152	257964	4.00	ppm	#-0.05
38) Fluorene-d10a	13.676	176	388075	4.00	ppm	-0.05
System Monitoring Compounds						
2) 2-Fluorophenol	4.721	112	1032969	30.58	ppm	-0.02
Spiked Amount 50.000	Range 11 - 58		Recovery = 61.16%#			
3) Phenol-d5	6.311	99	1164701	20.51	ppm	-0.03
Spiked Amount 50.000			Recovery = 41.02%			
6) Nitrobenzene-d5	7.833	82	2407212	47.26	ppm	-0.05
Spiked Amount 50.000			Recovery = 94.52%			
11) 2-Fluorobiphenyl	11.366	172	4008964	53.84	ppm	-0.05
Spiked Amount 50.000			Recovery = 107.68%			
17) 2,4,6-Tribromophenol	14.249	330	1000086	48.31	ppm	-0.02
Spiked Amount 50.000			Recovery = 96.62%			
25) Terphenyl-d14	18.676	244	4747173	49.72	ppm	-0.04
Spiked Amount 50.000			Recovery = 99.44%			
Target Compounds						Qvalue
4) Phenol	6.324	94	131982	2.27	ppm	88
5) bis(2-Chloroethyl)ether	6.393	93	40384	0.92	ppm	93
7) Naphthalene	9.210	128	133242	0.92	ppm	97
8) Hexachlorobutadiene	9.519	225	28466	0.79	ppm	90
9) 2-Methylnaphthalene	10.578	142	73462	1.16	ppm	88
10) Hexachlorocyclopentadiene	10.936	237	15238	0.82	ppm	89
13) Acenaphthylene	12.343	152	101809	1.14	ppm	98
14) Acenaphthene	12.698	153	68839	1.20	ppm	95
15) Dibenzofuran	13.053	168	89829	1.05	ppm	76
16) Fluorene	13.724	166	92803	0.90	ppm	88
18) Hexachlorobenzene	14.852	284	40250	0.99	ppm	74
19) Pentachlorophenol	15.285	266	99137	5.97	ppm	84
20) Phenanthrene	15.641	178	151845	1.09	ppm	99
21) Anthracene	15.733	178	144911	1.10	ppm	98
23) Fluoranthene	17.904	202	172017	0.90	ppm	98
24) Pyrene	18.280	202	177181	0.94	ppm	82
26) Benzo[a]anthracene	20.389	228	157445	0.90	ppm	97
27) Chrysene	20.445	228	147927	0.87	ppm	77
29) Benzo[b]fluoranthene	22.043	252	142348	0.73	ppm	95
30) Benzo[k]fluoranthene	22.084	252	147054	0.90	ppm	95
31) Benzo[a]pyrene	22.497	252	127854	0.79	ppm	97
32) Indeno[1,2,3-cd]pyrene	24.026	276	139641	0.69	ppm	99
33) Dibenz[a,h]anthracene	24.053	278	115554	0.71	ppm	74
34) Benzo[g,h,i]perylene	24.411	276	116756	0.69	ppm	99
36) 1,4-Dioxane	2.430	88	6716	0.40	ppm #	80
39) 4,6-dinitro-2-methylph...	13.915	198	80765	6.97	ppm	90
40) 1,2-Diphenylhydrazine	14.106	77	83199	0.91	ppm	82

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2885\
Data File : 4m64804.D
Acq On : 18 Apr 2016 3:53 pm
Operator : linseyk
Sample : op93128a-bs12
Misc : op93128a,e4m2885,1000
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 18 16:51:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Mon Apr 18 16:04:01 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) n-nitrosodiphenylamine	14.034	169	58121	0.85	ppm	85

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

7.3.3

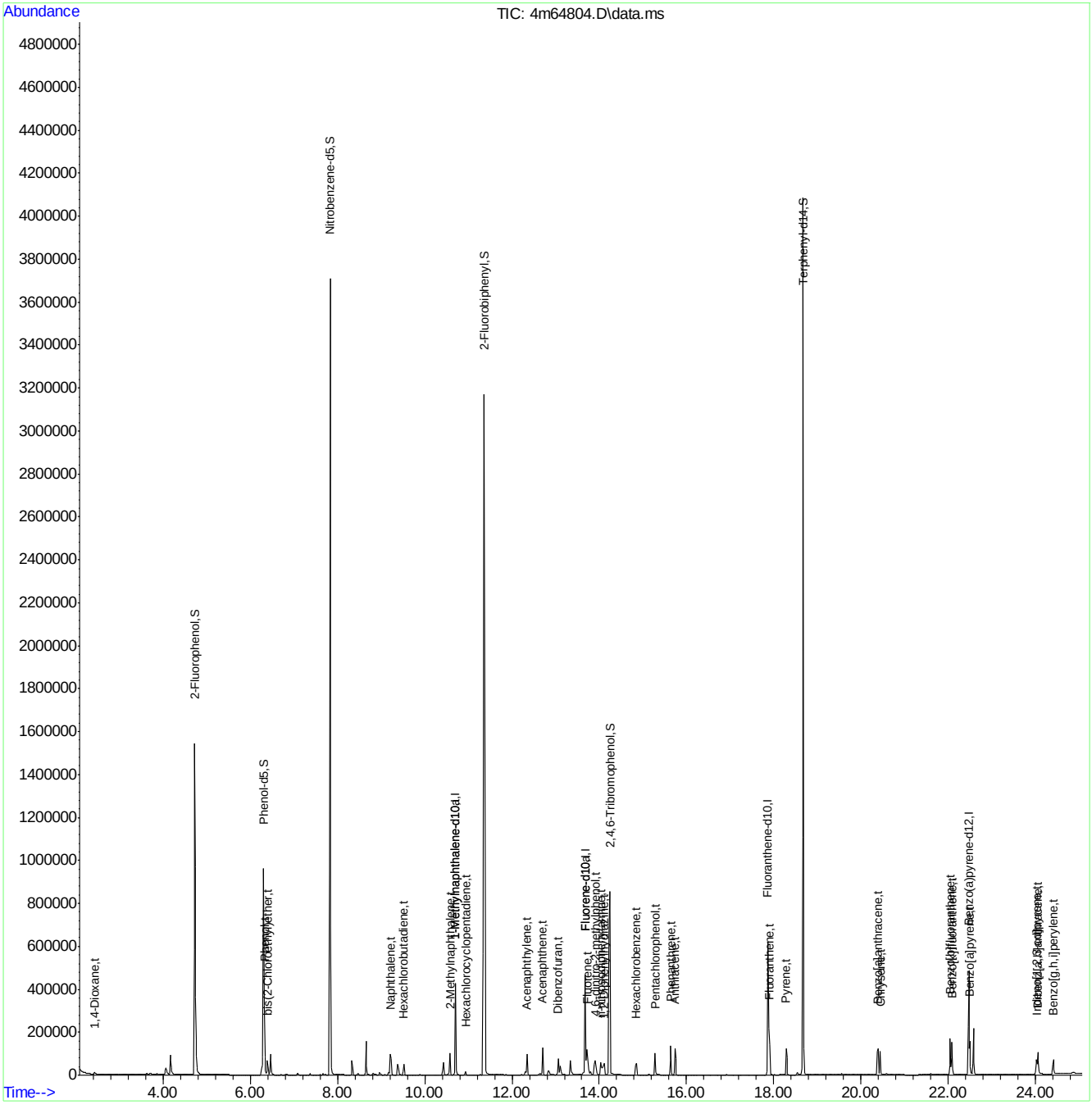
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2885\
Data File : 4m64804.D
Acq On : 18 Apr 2016 3:53 pm
Operator : linseyk
Sample : op93128a-bs12
Misc : op93128a,e4m2885,1000
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 18 16:51:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Mon Apr 18 16:04:01 2016
Response via : Initial Calibration



SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2900\
Data File : 4m65048.D
Acq On : 2 May 2016 12:14 pm
Operator : linseyk
Sample : op93218a-bs12
Misc : op93218a,e4m2900,30.0
ALS Vial : 21 Sample Multiplier: 1

Quant Time: May 02 15:41:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Sat Apr 23 14:44:32 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.654	152	143591	4.00	ppm	#-0.04
12) Fluorene-d10	13.632	176	242305	4.00	ppm	-0.04
22) Fluoranthene-d10	17.836	212	483411	4.00	ppm	-0.03
28) Benzo(a)pyrene-d12	22.422	264	383423	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.654	152	143591	4.00	ppm	#-0.04
38) Fluorene-d10a	13.632	176	242305	4.00	ppm	-0.04
System Monitoring Compounds						
2) 2-Fluorophenol	4.693	112	1017078	54.10	ppm	-0.03
Spiked Amount 50.000	Range 11 - 58		Recovery = 108.20%#			
3) Phenol-d5	6.273	99	1666672	52.71	ppm	-0.04
Spiked Amount 50.000			Recovery = 105.42%			
6) Nitrobenzene-d5	7.790	82	1567302	55.28	ppm	-0.05
Spiked Amount 50.000			Recovery = 110.56%			
11) 2-Fluorobiphenyl	11.322	172	2773445	66.92	ppm	-0.04
Spiked Amount 50.000			Recovery = 133.84%			
17) 2,4,6-Tribromophenol	14.205	330	793309	61.38	ppm	-0.02
Spiked Amount 50.000			Recovery = 122.76%			
25) Terphenyl-d14	18.627	244	3352237	51.33	ppm	-0.05
Spiked Amount 50.000			Recovery = 102.66%			
Target Compounds						Qvalue
4) Phenol	6.301	94	164910	5.09	ppm	82
5) bis(2-Chloroethyl)ether	6.370	93	26607	1.09	ppm #	53
7) Naphthalene	9.183	128	86646	1.07	ppm	99
8) Hexachlorobutadiene	9.477	225	20765	1.04	ppm	73
9) 2-Methylnaphthalene	10.535	142	40481	1.15	ppm	68
10) Hexachlorocyclopentadiene	10.893	237	10662	1.00	ppm	68
13) Acenaphthylene	12.303	152	70739	1.27	ppm	97
14) Acenaphthene	12.658	153	47493	1.33	ppm	93
15) Dibenzofuran	13.013	168	58127	1.09	ppm	86
16) Fluorene	13.680	166	57704	0.89	ppm	77
18) Hexachlorobenzene	14.810	284	29263	1.16	ppm	78
19) Pentachlorophenol	15.243	266	65412	6.31	ppm	89
20) Phenanthrene	15.598	178	107471	1.23	ppm	97
21) Anthracene	15.691	178	102370	1.24	ppm	97
23) Fluoranthene	17.855	202	135175	1.04	ppm	97
24) Pyrene	18.250	202	139650	1.09	ppm	93
26) Benzo[a]anthracene	20.340	228	129374	1.09	ppm #	87
27) Chrysene	20.396	228	130297	1.12	ppm	92
29) Benzo[b]fluoranthene	21.995	252	139634	1.01	ppm	96
30) Benzo[k]fluoranthene	22.036	252	99071	0.86	ppm	99
31) Benzo[a]pyrene	22.450	252	113527	0.99	ppm	93
32) Indeno[1,2,3-cd]pyrene	23.964	276	130041	0.91	ppm	99
33) Dibenz[a,h]anthracene	23.992	278	107160	0.93	ppm	92
34) Benzo[g,h,i]perylene	24.350	276	110102	0.91	ppm	98
36) 1,4-Dioxane	2.424	88	5154	0.55	ppm #	60
39) 4,6-dinitro-2-methylph...	13.871	198	59325	7.95	ppm	61
40) 1,2-Diphenylhydrazine	14.062	77	63795	1.11	ppm	88

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2900\
Data File : 4m65048.D
Acq On : 2 May 2016 12:14 pm
Operator : linseyk
Sample : op93218a-bs12
Misc : op93218a,e4m2900,30.0
ALS Vial : 21 Sample Multiplier: 1

Quant Time: May 02 15:41:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Sat Apr 23 14:44:32 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) n-nitrosodiphenylamine	14.014	169	46598	1.10	ppm	78

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

7.3.4

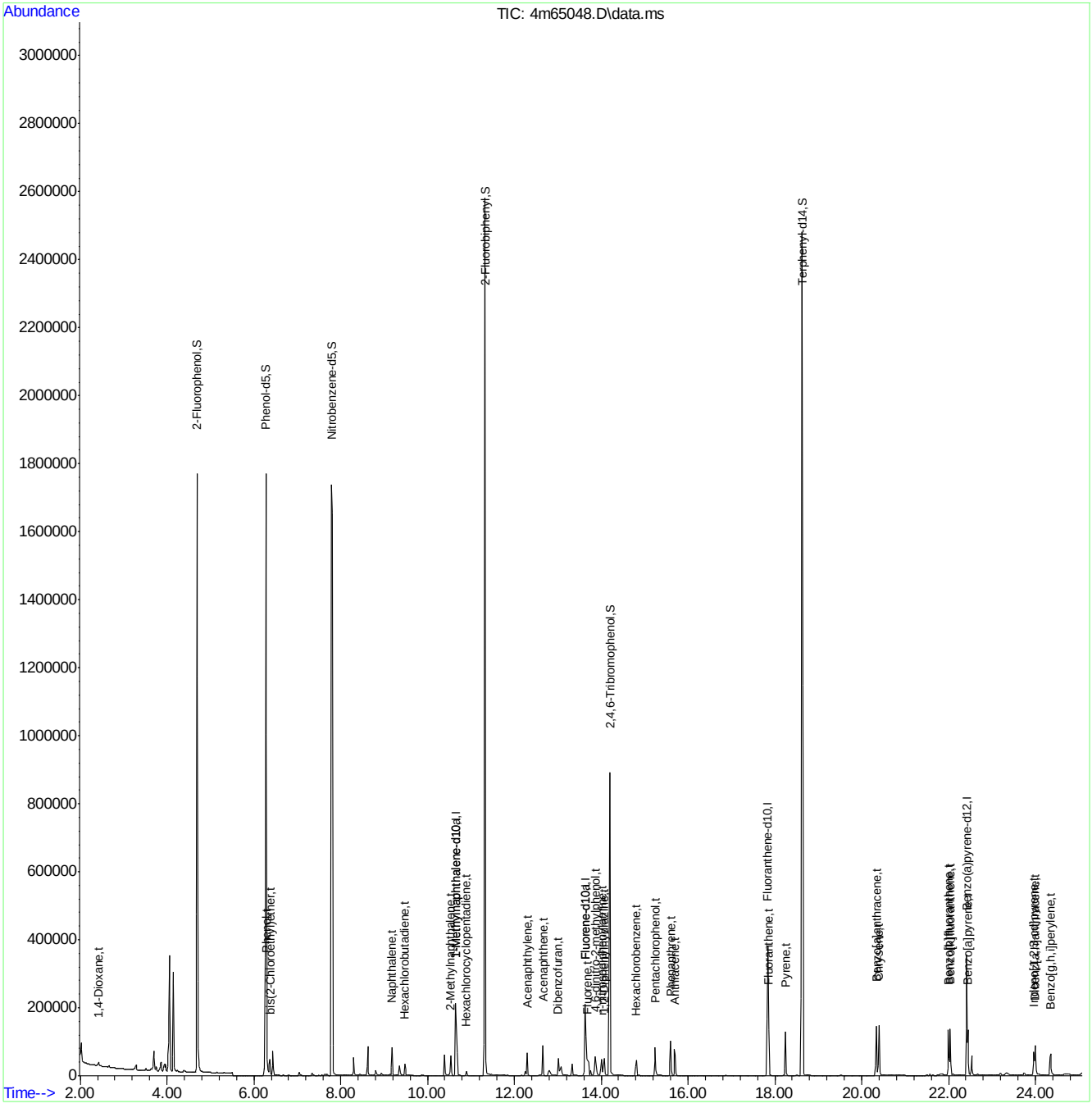
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2900\
Data File : 4m65048.D
Acq On : 2 May 2016 12:14 pm
Operator : linseyk
Sample : op93218a-bs12
Misc : op93218a,e4m2900,30.0
ALS Vial : 21 Sample Multiplier: 1

Quant Time: May 02 15:41:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Sat Apr 23 14:44:32 2016
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/21/16 09:20

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104265.D Vial: 26
Acq On : 18 Apr 2016 8:29 pm Operator: linseyk
Sample : op93128-ms Inst : MSP
Misc : op93128,ep4590,500 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 19 12:44:40 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 19 12:44:38 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.14	152	166885	40.00	ppm	-0.04
24) Naphthalene-d8	5.87	136	603140	40.00	ppm	-0.04
47) Acenaphthene-d10	8.58	164	332973	40.00	ppm	-0.04
69) Phenanthrene-d10	10.93	188	455954	40.00	ppm	-0.03
83) Chrysene-d12	15.60	240	384845	40.00	ppm	-0.03
92) Perylene-d12	18.15	264	329283	40.00	ppm	-0.04
102) 1,4-Dichlorobenzene-d4b	4.14	152	166885	40.00	ppm	-0.04
104) Phenanthrene-d10b	10.93	188	455954	40.00	ppm	-0.03
106) Chrysene-d12b	15.60	240	384845	40.00	ppm	-0.03
108) Naphthalene-d8b	5.87	136	603140	40.00	ppm	-0.04
110) Acenaphthene-d10b	8.58	164	332973	40.00	ppm	-0.04

System Monitoring Compounds						
5) 2-Fluorophenol	2.78	112	289434	49.83	ppm	-0.04
Spiked Amount 50.000			Recovery = 99.66%			
8) Phenol-d5	3.74	99	301381	42.52	ppm	-0.05
Spiked Amount 50.000			Recovery = 85.04%			
25) Nitrobenzene-d5	4.86	82	301222	49.33	ppm	-0.06
Spiked Amount 50.000			Recovery = 98.66%			
51) 2-Fluorobiphenyl	7.56	172	465756	46.11	ppm	-0.07
Spiked Amount 50.000			Recovery = 92.22%			
73) 2,4,6-Tribromophenol	9.84	330	43879	41.16	ppm	-0.05
Spiked Amount 50.000			Recovery = 82.32%			
85) Terphenyl-d14	13.72	244	370228	48.86	ppm	-0.05
Spiked Amount 50.000			Recovery = 97.72%			

Target Compounds						Qvalue
2) 1,4-Dioxane	1.65	88	118071	39.82	ppm	98
3) Pyridine	1.84	79	207935	31.06	ppm	98
4) N-Nitrosodimethylamine	1.81	42	115987	46.34	ppm	99
6) Indene	4.46	116	461180	48.59	ppm	99
7) Cumene	3.24	105	584295	42.61	ppm	97
9) Phenol	3.76	94	306581	41.92	ppm	96
10) Aniline	3.75	93	248991	31.25	ppm	92
11) bis(2-Chloroethyl)ether	3.82	93	283383	52.66	ppm	98
12) 2-Chlorophenol	3.90	128	280979	50.70	ppm	100
13) Decane	3.96	43	214635	48.68	ppm	94
14) 1,3-Dichlorobenzene	4.07	146	246876	39.76	ppm	100
15) 1,4-Dichlorobenzene	4.16	146	245680	41.20	ppm	99
16) Benzyl alcohol	4.33	108	197109	59.82	ppm	96
17) 1,2-Dichlorobenzene	4.35	146	237078	41.91	ppm	100
18) Acetophenone	4.66	105	384284	51.20	ppm	97
19) 2-Methylphenol	4.51	108	253629	53.81	ppm	99
20) 2,2'-oxybis(1-Chloropropan	4.50	121	78752m	44.50	ppm	
21) 3&4-Methylphenol	4.72	108	287867	55.97	ppm	99
22) n-Nitroso-di-n-propylamine	4.68	70	183908	48.83	ppm	94
23) Hexachloroethane	4.79	201	69920	35.98	ppm	87
26) Nitrobenzene	4.89	77	270785	46.22	ppm	95
27) Quinoline	6.43	129	538363	49.54	ppm	97
28) Isophorone	5.22	82	525294	52.88	ppm	97

(#) = qualifier out of range (m) = manual integration
P104265.D MP4524.M Tue Apr 19 12:46:08 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104265.D Vial: 26
Acq On : 18 Apr 2016 8:29 pm Operator: linseyk
Sample : op93128-ms Inst : MSP
Misc : op93128,ep4590,500 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 19 12:44:40 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 19 12:44:38 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
29)	2-Nitrophenol	5.34	139	151259	52.63 ppm	#	66
30)	2,4-Dimethylphenol	5.45	107	274415	56.23 ppm		98
31)	Benzoic acid	5.74	105	457042m	120.56 ppm		
32)	bis(2-Chloroethoxy)methane	5.56	93	317709	50.64 ppm		97
33)	2,4-Dichlorophenol	5.71	162	203634	47.75 ppm		95
34)	2,6-Dichlorophenol	6.03	162	198040	48.39 ppm		96
36)	1,2,4-Trichlorobenzene	5.80	180	178639	37.81 ppm		98
38)	Naphthalene	5.90	128	785410	52.51 ppm		99
39)	4-Chloroaniline	6.02	127	112116	17.63 ppm		97
40)	2,3-Dichloroaniline	7.41	161	192143	35.46 ppm		99
41)	Caprolactam	6.56	55	80961	40.38 ppm		90
42)	Hexachlorobutadiene	6.12	225	77107	32.84 ppm		97
43)	4-Chloro-3-methylphenol	6.84	107	241011	52.90 ppm	#	34
44)	2-Methylnaphthalene	6.96	141	429664	51.85 ppm		98
45)	1-Methylnaphthalene	7.11	142	561409	55.54 ppm		96
46)	Dimethylnaphthalene	7.94	156	422435	47.78 ppm		98
48)	Hexachlorocyclopentadiene	7.23	237	130297	60.07 ppm		99
49)	2,4,6-Trichlorophenol	7.43	196	124263	47.64 ppm		94
50)	2,4,5-Trichlorophenol	7.51	196	129240	47.61 ppm		98
52)	2-Chloronaphthalene	7.71	162	375723	42.96 ppm		97
53)	Biphenyl	7.70	154	502813	44.71 ppm		99
54)	2-Nitroaniline	7.91	65	147693	58.40 ppm		95
55)	Dimethylphthalate	8.24	163	452941	44.80 ppm		100
56)	Acenaphthylene	8.35	152	625945	44.80 ppm		99
57)	2,6-Dinitrotoluene	8.31	165	110510	51.25 ppm		96
58)	3-Nitroaniline	8.57	138	60877	23.98 ppm		95
59)	Acenaphthene	8.63	153	462007	53.20 ppm		97
60)	2,4-Dinitrophenol	8.74	184	134907	104.26 ppm		99
61)	4-Nitrophenol	8.97	109	56745	41.07 ppm		93
62)	Dibenzofuran	8.91	168	609192	49.78 ppm		98
63)	2,4-Dinitrotoluene	8.95	165	139901m	42.14 ppm		
64)	2,3,4,6-Tetrachlorophenol	9.14	232	90768	43.52 ppm		98
65)	Diethylphthalate	9.37	149	475969	47.37 ppm		100
66)	Fluorene	9.45	166	514537	51.50 ppm		98
67)	4-Chlorophenyl-phenylether	9.49	204	176546	39.38 ppm		96
68)	4-Nitroaniline	9.54	138	136392	53.49 ppm		93
70)	4,6-Dinitro-2-methylphenol	9.59	198	78135	46.49 ppm		94
71)	n-Nitrosodiphenylamine	9.69	169	317191	48.31 ppm		99
72)	1,2-Diphenylhydrazine	9.74	77	506982	56.35 ppm		98
74)	4-Bromophenyl-phenylether	10.26	248	95639	42.87 ppm		92
75)	Hexachlorobenzene	10.33	284	88824	36.67 ppm		84
76)	Pentachlorophenol	10.68	266	60437	42.47 ppm		98
77)	Phenanthrene	10.97	178	748678	64.02 ppm		96
78)	Anthracene	11.05	178	608856	51.93 ppm		97
79)	Carbazole	11.36	167	757312	63.06 ppm		94
80)	Di-n-butylphthalate	12.03	149	807457	57.68 ppm		99
81)	Fluoranthene	12.96	202	694880	55.21 ppm		98
82)	Octadecane	10.93	57	259828	56.59 ppm		98
84)	Pyrene	13.35	202	708764	57.87 ppm		97

(#) = qualifier out of range (m) = manual integration
P104265.D MP4524.M Tue Apr 19 12:46:08 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104265.D Vial: 26
Acq On : 18 Apr 2016 8:29 pm Operator: linseyk
Sample : op93128-ms Inst : MSP
Misc : op93128,ep4590,500 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 19 12:44:40 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 19 12:44:38 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
86)	Butylbenzylphthalate	14.71	149	374138	62.82	ppm	99
88)	Benzo[a]anthracene	15.58	228	518172	51.60	ppm	100
89)	3,3'-Dichlorobenzidine	15.61	252	184228	43.80	ppm	97
90)	Chrysene	15.65	228	470347	47.32	ppm	98
91)	bis(2-Ethylhexyl)phthalate	15.87	149	488485	53.23	ppm	99
93)	Di-n-octylphthalate	17.07	149	839830	62.96	ppm	99
94)	Benzo[b]fluoranthene	17.52	252	494287	52.78	ppm	95
95)	Benzo[k]fluoranthene	17.57	252	424009	47.00	ppm	95
96)	Benzo[a]pyrene	18.05	252	426515	51.63	ppm	95
97)	Indeno[1,2,3-cd]pyrene	19.77	276	345102	47.32	ppm	79
99)	Dibenz[a,h]anthracene	19.81	278	351973	44.79	ppm	91
100)	7,12-Dimethylbenz(a)anthra	17.53	256	186732	47.09	ppm	96
101)	Benzo[g,h,i]perylene	20.13	276	366191	43.84	ppm	87
103)	Benzaldehyde	3.62	105	232102	46.27	ppm	97
105)	Atrazine	10.62	200	102715	44.15	ppm	75
111)	1,2,4,5-Tetrachlorobenzene	7.23	216	167576	36.67	ppm	98

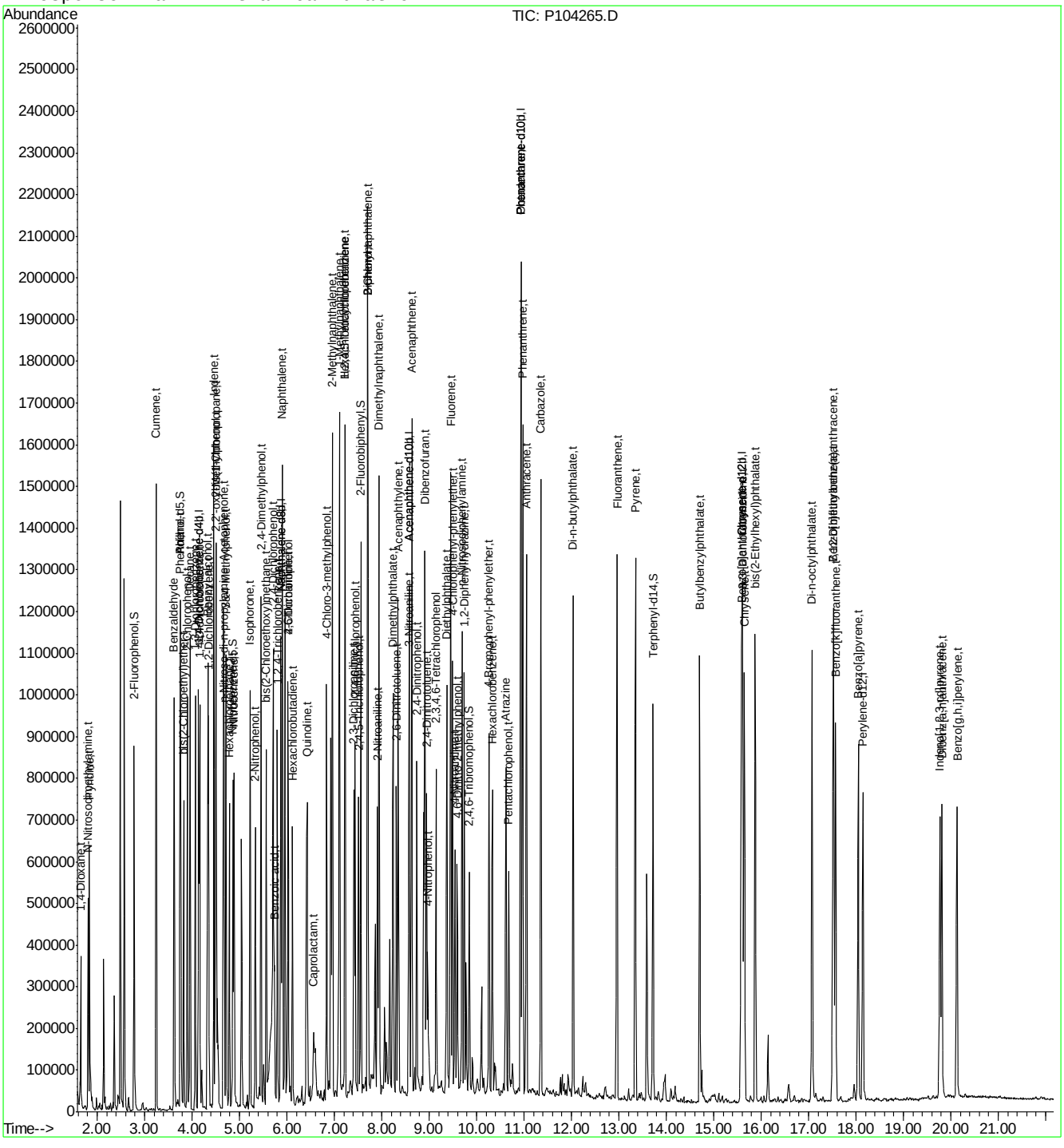
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104265.D Vial: 26
Acq On : 18 Apr 2016 8:29 pm Operator: linseyk
Sample : op93128-ms Inst : MSP
Misc : op93128,ep4590,500 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 19 12:46 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 19 12:44:38 2016
Response via : Initial Calibration



SGS ACCUTEST JC18516

Manual Integration Approval Summary

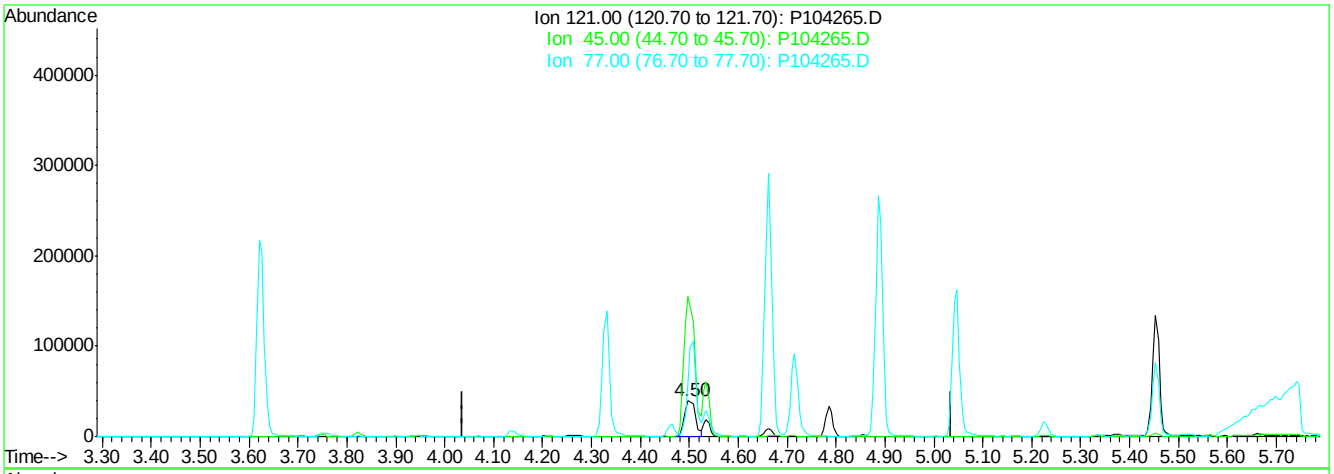
Sample Number:	OP93128-MS	**Method:**	SW846 8270D
Lab FileID:	P104265.D	**Analyst approved:**	04/19/16 12:49 Linsey Kirschmann
Injection Time:	04/18/16 20:29	**Supervisor approved:**	04/21/16 09:20 Nina Pandya

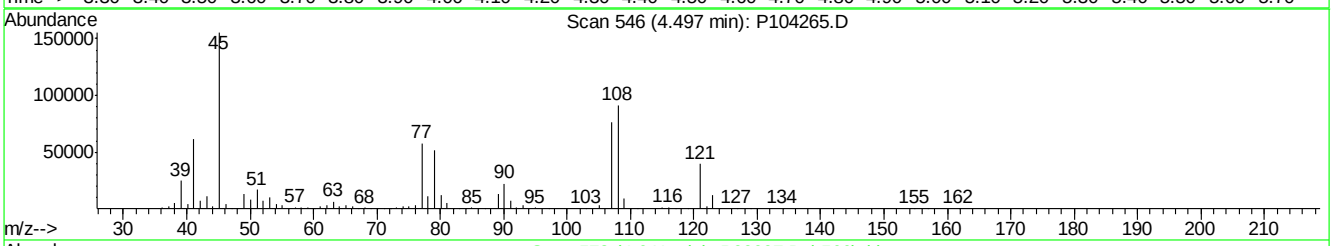
Parameter	CAS	Sig#	R.T. (min.)	Reason
bis(2-Chloroisopropyl)ether	108-60-1		4.50	Split peak
Benzoic Acid	65-85-0		5.74	Split peak
2,4-Dinitrotoluene	121-14-2		8.95	Poor instrument integration

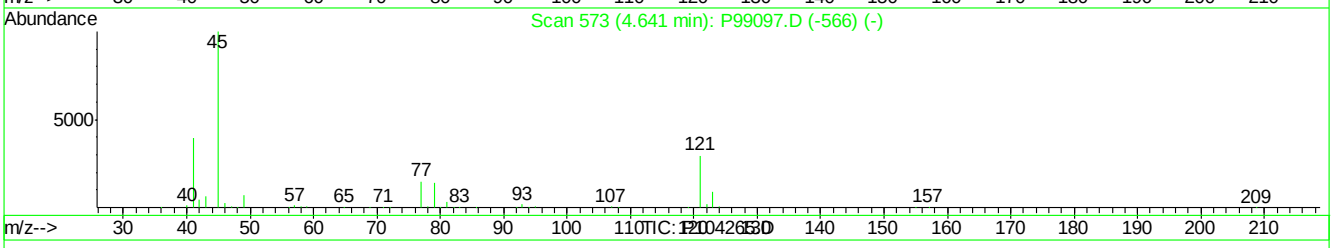
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104265.D Vial: 26
Acq On : 18 Apr 2016 8:29 pm Operator: linseyk
Sample : op93128-ms Inst : MSP
Misc : op93128,ep4590,500 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 18 20:51 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Apr 18 16:58:37 2016
Response via : Multiple Level Calibration







(20) 2,2'-oxybis(1-Chloropropane (t)

4.50min 34.74ppm

response 61472

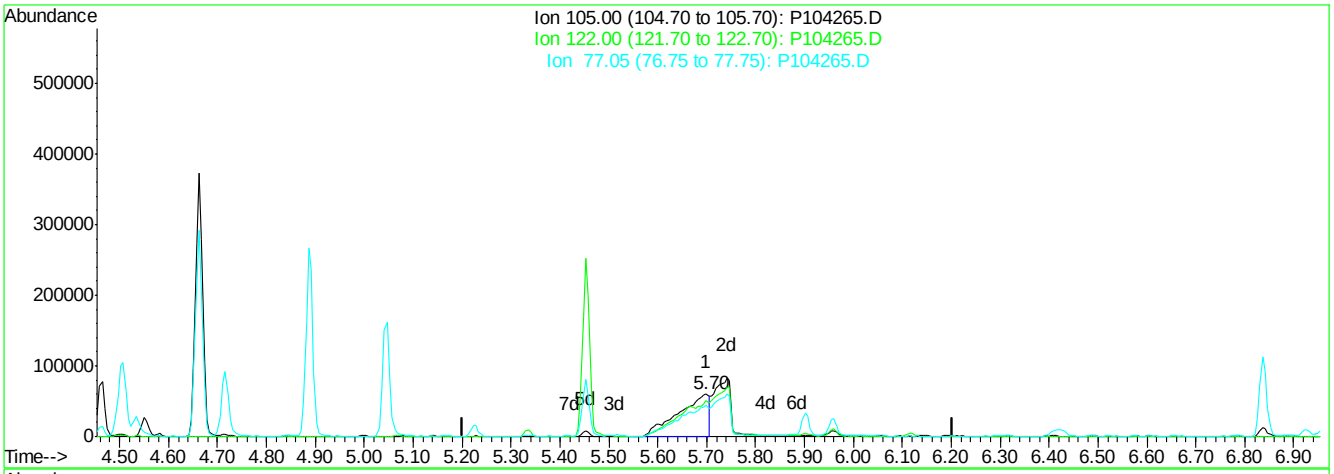
Ion	Exp%	Act%
121.00	100	100
45.00	344.10	391.86#
77.00	51.90	127.30#
0.00	0.00	0.00

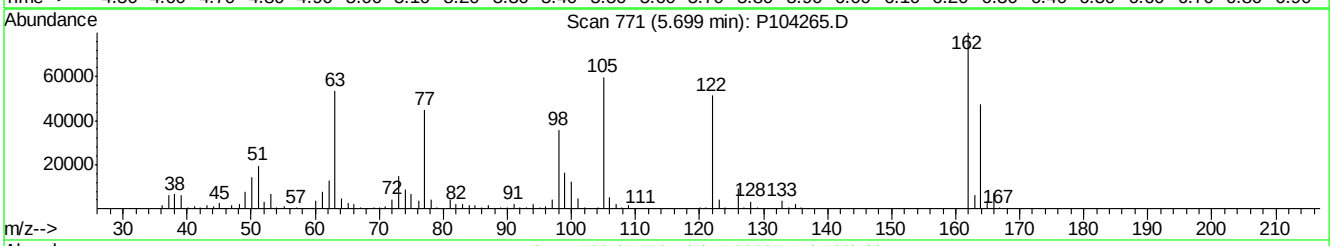
P104265.D MP4524.M Tue Apr 19 12:44:07 2016

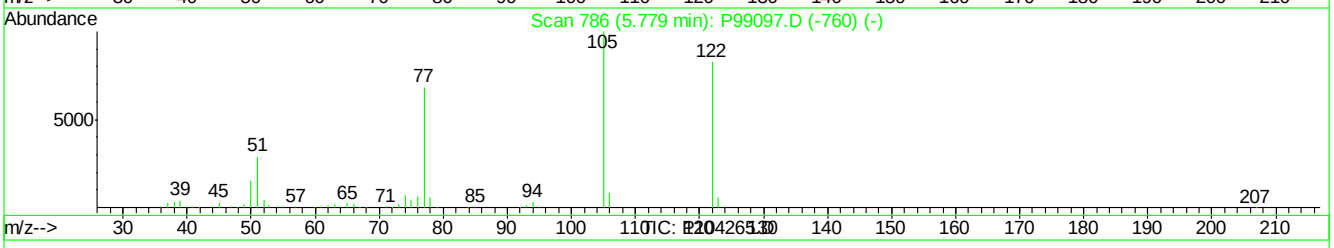
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104265.D Vial: 26
Acq On : 18 Apr 2016 8:29 pm Operator: linseyk
Sample : op93128-ms Inst : MSP
Misc : op93128,ep4590,500 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 19 12:44 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Apr 18 16:58:37 2016
Response via : Multiple Level Calibration







(31) Benzoic acid (t)

5.70min 68.74ppm

response 260599

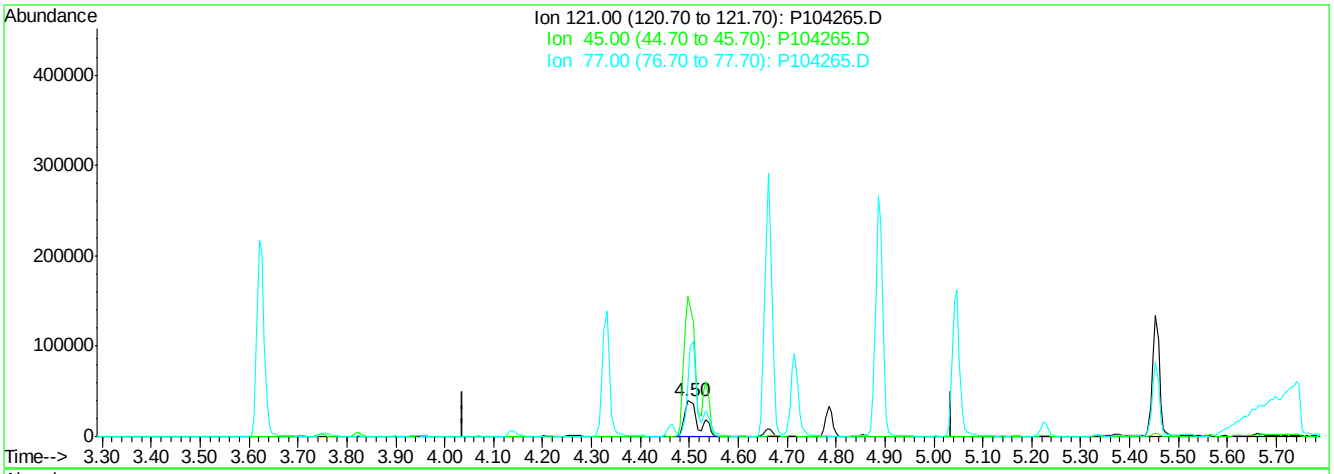
Ion	Exp%	Act%
105.00	100	100
122.00	81.90	86.92
77.05	71.50	78.08
0.00	0.00	0.00

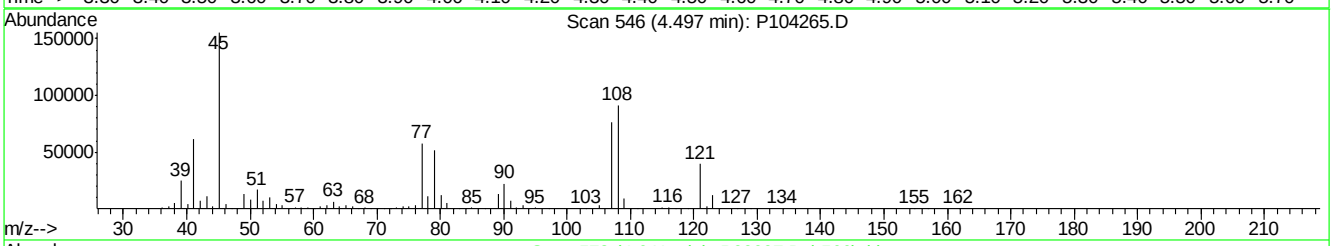
P104265.D MP4524.M Tue Apr 19 12:44:13 2016

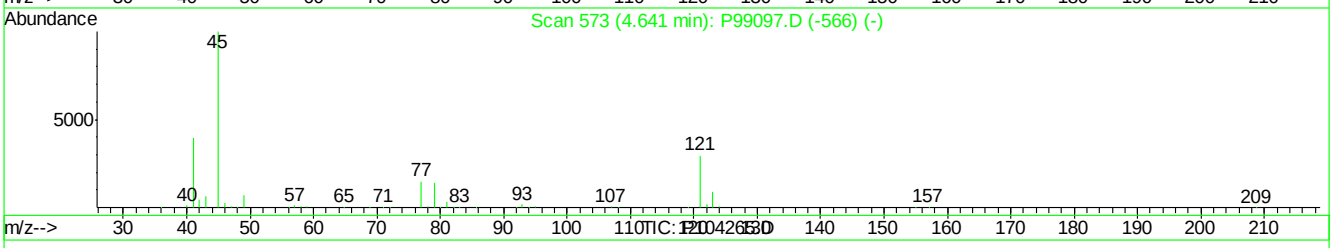
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104265.D Vial: 26
Acq On : 18 Apr 2016 8:29 pm Operator: linseyk
Sample : op93128-ms Inst : MSP
Misc : op93128,ep4590,500 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 19 12:45 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 19 12:44:38 2016
Response via : Multiple Level Calibration







(20) 2,2'-oxybis(1-Chloropropane (t)

4.50min 44.50ppm m

response 78752

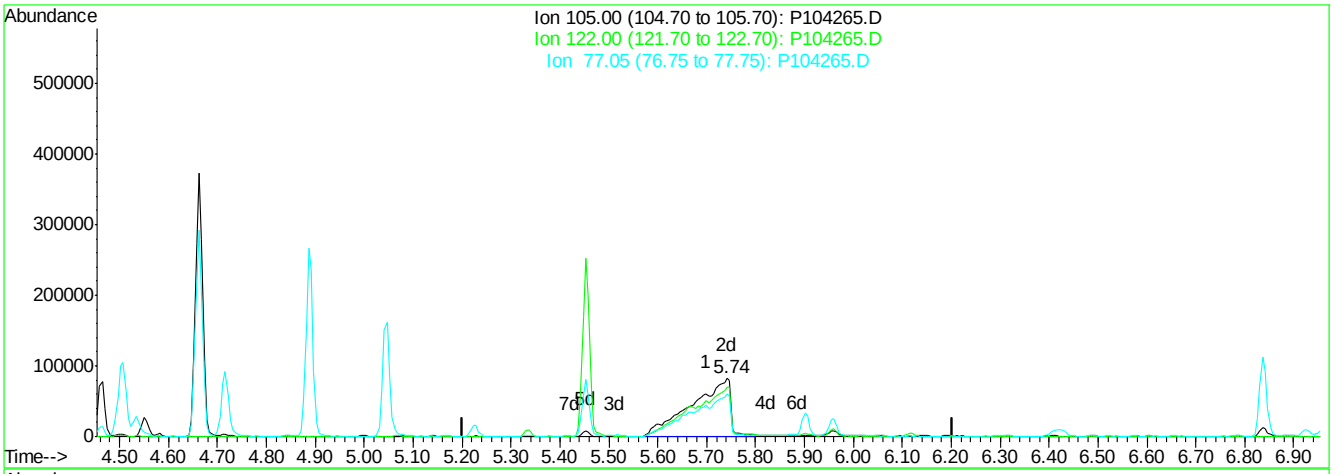
Ion	Exp%	Act%
121.00	100	100
45.00	344.10	391.53#
77.00	51.90	145.07#
0.00	0.00	0.00

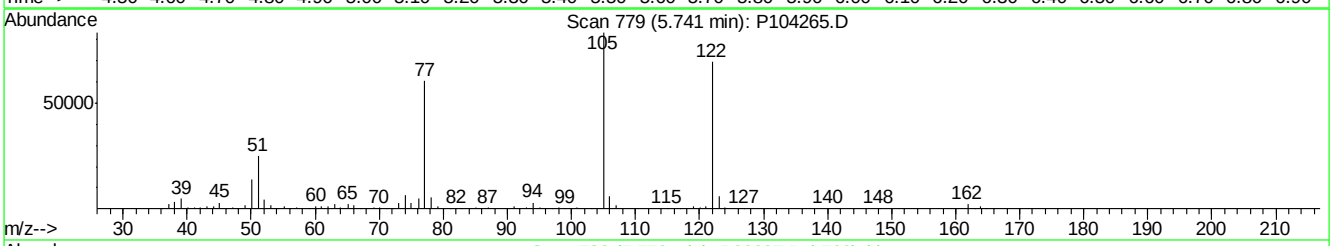
P104265.D MP4524.M Tue Apr 19 12:45:13 2016

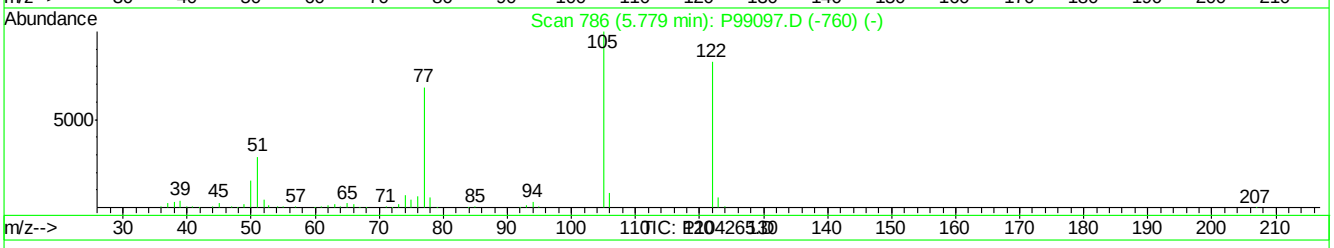
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104265.D Vial: 26
Acq On : 18 Apr 2016 8:29 pm Operator: linseyk
Sample : op93128-ms Inst : MSP
Misc : op93128,ep4590,500 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 19 12:45 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 19 12:44:38 2016
Response via : Multiple Level Calibration







(31) Benzoic acid (t)

5.74min 120.56ppm m

response 457042

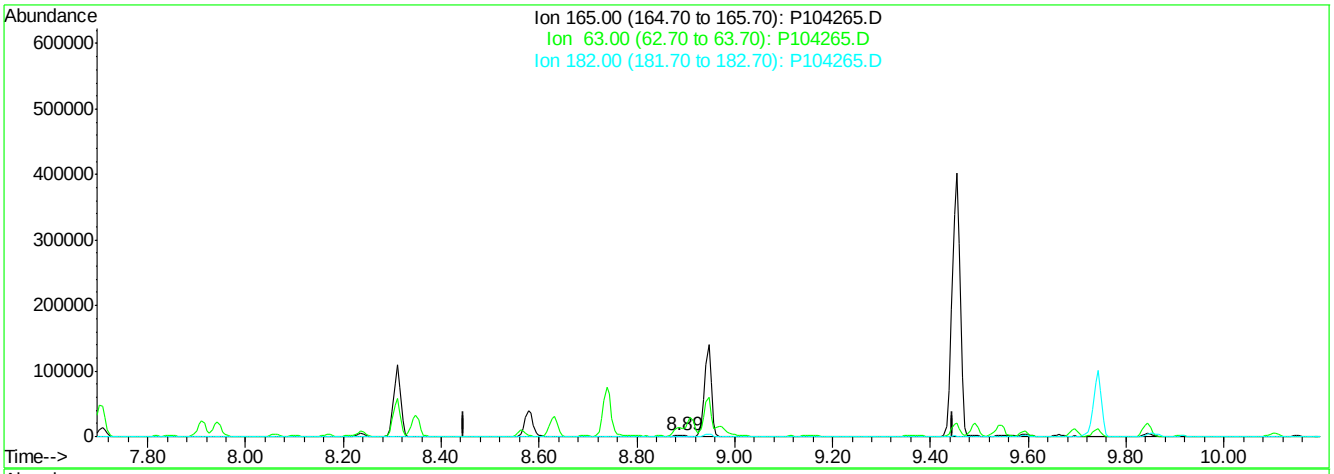
Ion	Exp%	Act%
105.00	100	100
122.00	81.90	83.37
77.05	71.50	72.43
0.00	0.00	0.00

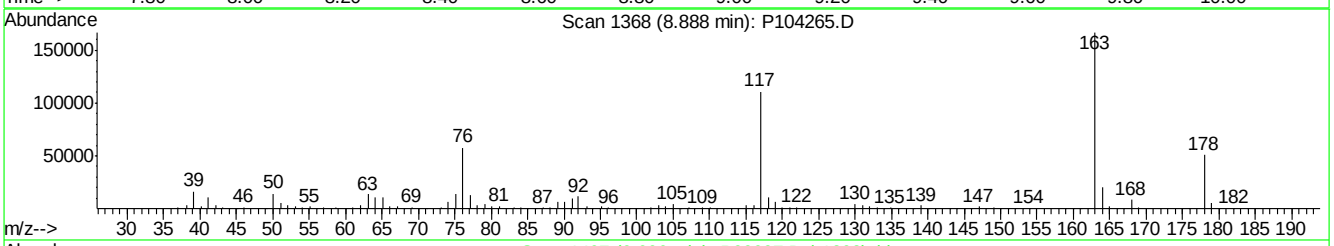
P104265.D MP4524.M Tue Apr 19 12:45:22 2016

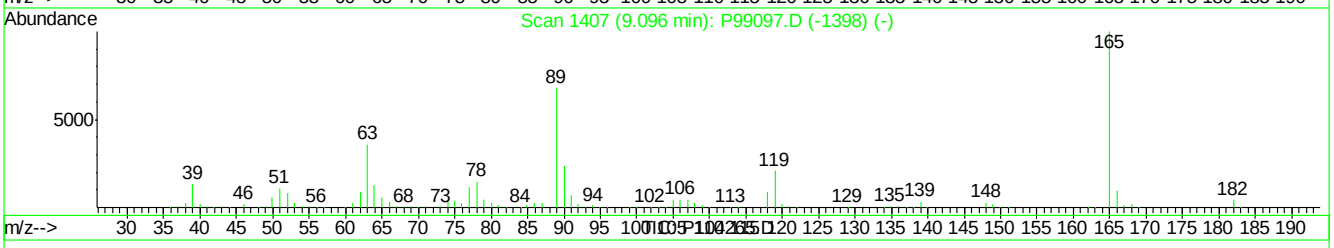
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104265.D Vial: 26
Acq On : 18 Apr 2016 8:29 pm Operator: linseyk
Sample : op93128-ms Inst : MSP
Misc : op93128,ep4590,500 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 19 12:45 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 19 12:44:38 2016
Response via : Multiple Level Calibration







(63) 2,4-Dinitrotoluene (t)

8.89min 2.03ppm

response 3285

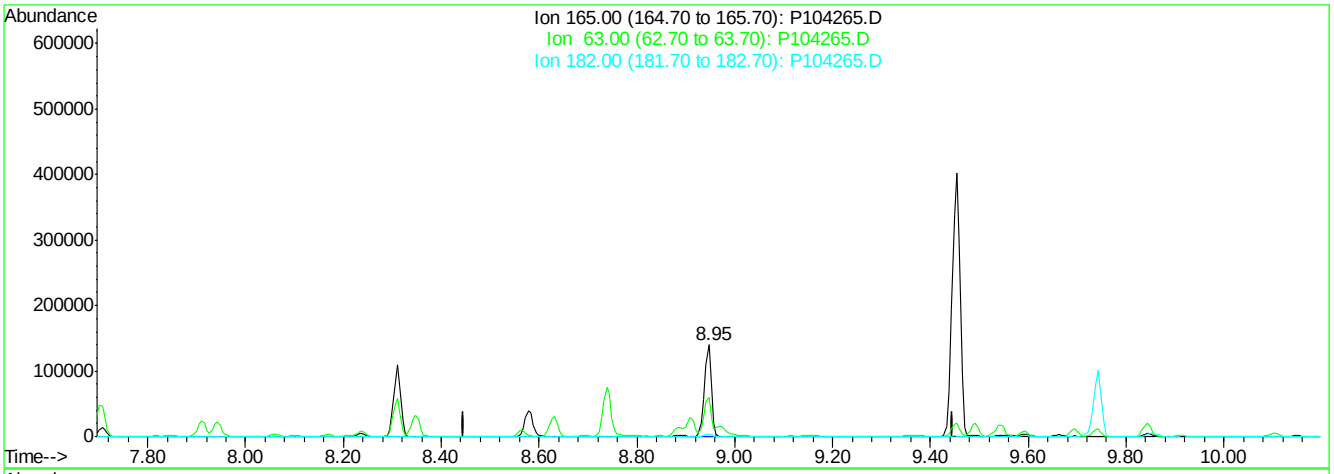
Ion	Exp%	Act%
165.00	100	100
63.00	42.60	65.25
182.00	3.10	18.86
0.00	0.00	0.00

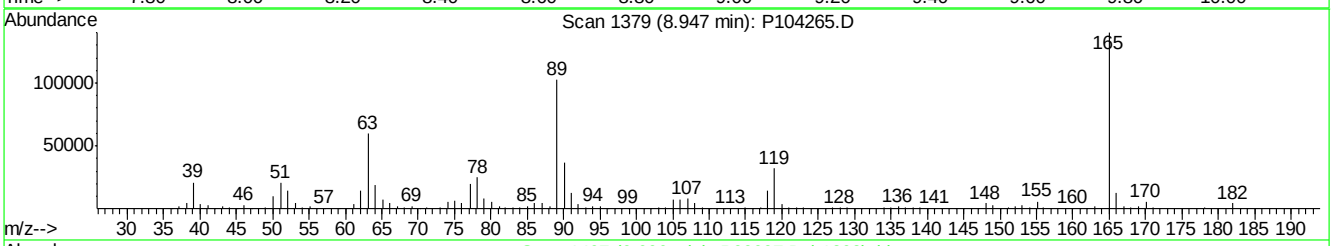
P104265.D MP4524.M Tue Apr 19 12:45:37 2016

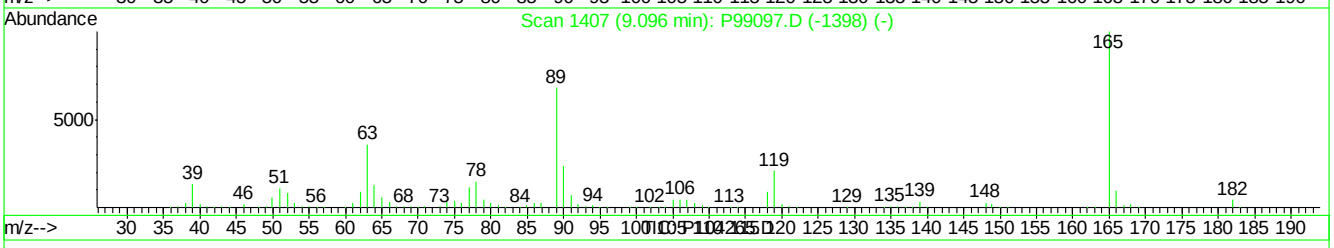
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104265.D Vial: 26
Acq On : 18 Apr 2016 8:29 pm Operator: linseyk
Sample : op93128-ms Inst : MSP
Misc : op93128,ep4590,500 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 19 12:45 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 19 12:44:38 2016
Response via : Multiple Level Calibration







(63) 2,4-Dinitrotoluene (t)

8.95min 42.14ppm m

response 139901

Ion	Exp%	Act%
165.00	100	100
63.00	42.60	42.63
182.00	3.10	3.08
0.00	0.00	0.00

P104265.D MP4524.M Tue Apr 19 12:45:40 2016

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/21/16 09:20

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104266.D Vial: 27
Acq On : 18 Apr 2016 8:59 pm Operator: linseyk
Sample : op93128-msd Inst : MSP
Misc : op93128,ep4590,500 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 18 21:21:58 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Apr 18 16:58:37 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.14	152	190525	40.00	ppm	-0.04
24) Naphthalene-d8	5.87	136	670083	40.00	ppm	-0.04
47) Acenaphthene-d10	8.58	164	367966	40.00	ppm	-0.03
69) Phenanthrene-d10	10.93	188	485589	40.00	ppm	-0.03
83) Chrysene-d12	15.60	240	387659	40.00	ppm	-0.03
92) Perylene-d12	18.15	264	317408	40.00	ppm	-0.03
102) 1,4-Dichlorobenzene-d4b	4.14	152	190525	40.00	ppm	-0.04
104) Phenanthrene-d10b	10.93	188	485589	40.00	ppm	-0.03
106) Chrysene-d12b	15.60	240	387659	40.00	ppm	-0.03
108) Naphthalene-d8b	5.87	136	670083	40.00	ppm	-0.04
110) Acenaphthene-d10b	8.58	164	367966	40.00	ppm	-0.03
System Monitoring Compounds						
5) 2-Fluorophenol	2.78	112	330856	49.89	ppm	-0.04
Spiked Amount 50.000			Recovery = 99.78%			
8) Phenol-d5	3.74	99	333772	41.25	ppm	-0.05
Spiked Amount 50.000			Recovery = 82.50%			
25) Nitrobenzene-d5	4.87	82	364173	53.68	ppm	-0.05
Spiked Amount 50.000			Recovery = 107.36%			
51) 2-Fluorobiphenyl	7.56	172	557097	49.90	ppm	-0.07
Spiked Amount 50.000			Recovery = 99.80%			
73) 2,4,6-Tribromophenol	9.85	330	53105	46.77	ppm	-0.05
Spiked Amount 50.000			Recovery = 93.54%			
85) Terphenyl-d14	13.72	244	405161	53.08	ppm	-0.05
Spiked Amount 50.000			Recovery = 106.16%			
Target Compounds						Qvalue
2) 1,4-Dioxane	1.66	88	134472	39.72	ppm	97
3) Pyridine	1.84	79	213133	27.89	ppm	98
4) N-Nitrosodimethylamine	1.81	42	131928	46.17	ppm	100
6) Indene	4.46	116	534067	49.28	ppm	98
7) Cumene	3.24	105	677468	43.28	ppm	98
9) Phenol	3.76	94	335530	40.18	ppm	95
10) Aniline	3.75	93	294875	32.41	ppm	72
11) bis(2-Chloroethyl)ether	3.82	93	331085	53.90	ppm	97
12) 2-Chlorophenol	3.90	128	335910	53.10	ppm	100
13) Decane	3.96	43	246065	48.88	ppm	92
14) 1,3-Dichlorobenzene	4.07	146	288208	40.66	ppm	99
15) 1,4-Dichlorobenzene	4.16	146	292046	42.90	ppm	100
16) Benzyl alcohol	4.33	108	230313	61.23	ppm	93
17) 1,2-Dichlorobenzene	4.35	146	275936	42.73	ppm	99
18) Acetophenone	4.66	105	450293	52.55	ppm	96
19) 2-Methylphenol	4.51	108	292869	54.43	ppm	99
20) 2,2'-oxybis(1-Chloropropan	4.50	121	94251m	46.65	ppm	
21) 3&4-Methylphenol	4.72	108	334036	56.89	ppm	96
22) n-Nitroso-di-n-propylamine	4.68	70	214473	49.88	ppm	94
23) Hexachloroethane	4.79	201	82835	37.34	ppm	89
26) Nitrobenzene	4.89	77	315307	48.45	ppm	93
27) Quinoline	6.43	129	628684	52.07	ppm	97
28) Isophorone	5.23	82	604172	54.74	ppm	98

(#) = qualifier out of range (m) = manual integration
P104266.D MP4524.M Tue Apr 19 12:47:29 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104266.D Vial: 27
Acq On : 18 Apr 2016 8:59 pm Operator: linseyk
Sample : op93128-msd Inst : MSP
Misc : op93128,ep4590,500 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 18 21:21:58 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Apr 18 16:58:37 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
29) 2-Nitrophenol	5.34	139	181420	56.82 ppm #	67
30) 2,4-Dimethylphenol	5.45	107	312066	57.55 ppm	96
31) Benzoic acid	5.76	105	537470m	127.61 ppm	
32) bis(2-Chloroethoxy)methane	5.56	93	368983	52.94 ppm	97
33) 2,4-Dichlorophenol	5.71	162	237497	50.13 ppm	97
34) 2,6-Dichlorophenol	6.03	162	234155	51.50 ppm	97
36) 1,2,4-Trichlorobenzene	5.80	180	206543	39.34 ppm	97
38) Naphthalene	5.91	128	903201	54.35 ppm	99
39) 4-Chloroaniline	6.02	127	131050	18.55 ppm	91
40) 2,3-Dichloroaniline	7.41	161	217974	36.21 ppm	99
41) Caprolactam	6.57	55	83135	37.32 ppm	87
42) Hexachlorobutadiene	6.12	225	92310	35.38 ppm	97
43) 4-Chloro-3-methylphenol	6.84	107	274671	54.27 ppm	92
44) 2-Methylnaphthalene	6.96	141	509568	55.35 ppm	98
45) 1-Methylnaphthalene	7.11	142	653044	58.15 ppm	96
46) Dimethylnaphthalene	7.94	156	488787	49.76 ppm	99
48) Hexachlorocyclopentadiene	7.23	237	156517	65.30 ppm	99
49) 2,4,6-Trichlorophenol	7.44	196	146605	50.86 ppm	99
50) 2,4,5-Trichlorophenol	7.51	196	148791	49.60 ppm	97
52) 2-Chloronaphthalene	7.71	162	420670	43.52 ppm	100
53) Biphenyl	7.70	154	568067	45.71 ppm	99
54) 2-Nitroaniline	7.92	65	161299	57.71 ppm	93
55) Dimethylphthalate	8.24	163	517735	46.34 ppm	99
56) Acenaphthylene	8.35	152	706506	45.76 ppm	99
57) 2,6-Dinitrotoluene	8.32	165	129603	54.39 ppm	97
58) 3-Nitroaniline	8.57	138	68116	24.28 ppm	96
59) Acenaphthene	8.63	153	530402	55.27 ppm	97
60) 2,4-Dinitrophenol	8.74	184	158087	110.07 ppm	97
61) 4-Nitrophenol	8.97	109	63127	41.35 ppm	97
62) Dibenzofuran	8.91	168	698965	51.69 ppm	99
63) 2,4-Dinitrotoluene	8.95	165	160937	44.02 ppm	87
64) 2,3,4,6-Tetrachlorophenol	9.15	232	105571	45.81 ppm	96
65) Diethylphthalate	9.37	149	536308	48.30 ppm	99
66) Fluorene	9.45	166	581860	52.70 ppm	98
67) 4-Chlorophenyl-phenylether	9.49	204	205074	41.39 ppm	99
68) 4-Nitroaniline	9.55	138	154547	54.84 ppm	93
70) 4,6-Dinitro-2-methylphenol	9.60	198	92953	51.57 ppm	96
71) n-Nitrosodiphenylamine	9.69	169	358921	51.33 ppm	98
72) 1,2-Diphenylhydrazine	9.74	77	561034	58.55 ppm	97
74) 4-Bromophenyl-phenylether	10.27	248	109647	46.15 ppm	100
75) Hexachlorobenzene	10.34	284	102165	39.61 ppm	91
76) Pentachlorophenol	10.68	266	68505	44.92 ppm	96
77) Phenanthrene	10.98	178	837343	67.23 ppm	97
78) Anthracene	11.05	178	678415	54.33 ppm	98
79) Carbazole	11.36	167	847227	66.24 ppm	94
80) Di-n-butylphthalate	12.03	149	881743	59.14 ppm	99
81) Fluoranthene	12.96	202	768710	57.35 ppm	98
82) Octadecane	10.93	57	276696	56.58 ppm	98
84) Pyrene	13.35	202	780129	63.23 ppm	98

(#) = qualifier out of range (m) = manual integration

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104266.D Vial: 27
Acq On : 18 Apr 2016 8:59 pm Operator: linseyk
Sample : op93128-msd Inst : MSP
Misc : op93128,ep4590,500 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 18 21:21:58 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Apr 18 16:58:37 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
86)	Butylbenzylphthalate	14.71	149	397556	66.27	ppm	97
88)	Benzo[a]anthracene	15.59	228	561385	55.50	ppm	98
89)	3,3'-Dichlorobenzidine	15.61	252	181490	42.80	ppm	96
90)	Chrysene	15.65	228	513114	51.25	ppm	99
91)	bis(2-Ethylhexyl)phthalate	15.88	149	520380	56.70	ppm	96
93)	Di-n-octylphthalate	17.07	149	873989	70.04	ppm	99
94)	Benzo[b]fluoranthene	17.52	252	529350	58.63	ppm	96
95)	Benzo[k]fluoranthene	17.57	252	463643	53.31	ppm	95
96)	Benzo[a]pyrene	18.06	252	465017	58.40	ppm	96
97)	Indeno[1,2,3-cd]pyrene	19.77	276	389726	55.43	ppm	80
99)	Dibenz[a,h]anthracene	19.81	278	379294	50.08	ppm	88
100)	7,12-Dimethylbenz(a)anthra	17.53	256	197578	51.69	ppm	97
101)	Benzo[g,h,i]perylene	20.13	276	408205	50.70	ppm	83
103)	Benzaldehyde	3.63	105	276564	48.29	ppm	99
105)	Atrazine	10.62	200	115602	46.65	ppm	77
111)	1,2,4,5-Tetrachlorobenzene	7.23	216	191679	37.96	ppm	98

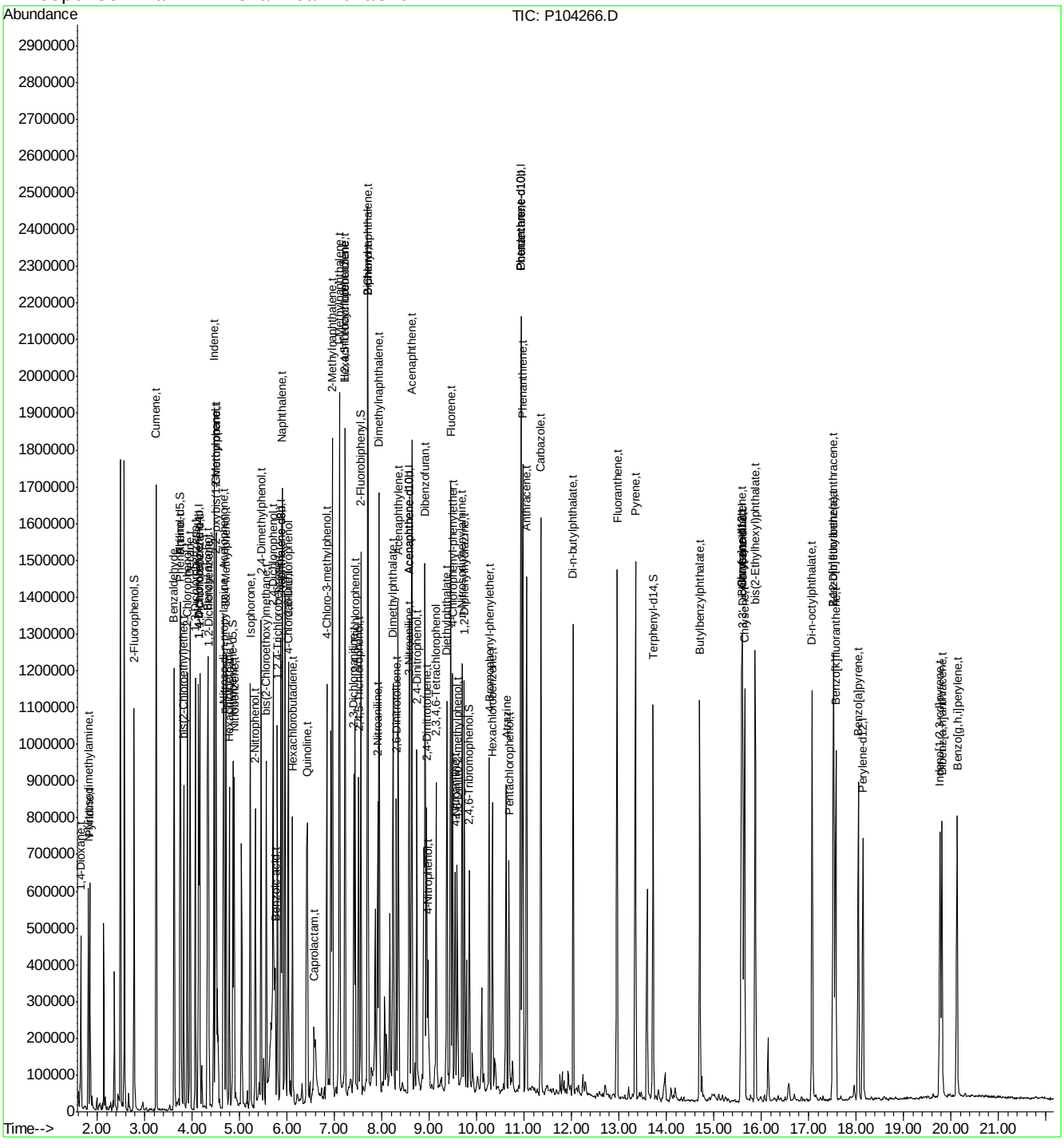
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104266.D Vial: 27
Acq On : 18 Apr 2016 8:59 pm Operator: linseyk
Sample : op93128-msd Inst : MSP
Misc : op93128,ep4590,500 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 19 12:47 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 19 12:44:38 2016
Response via : Initial Calibration



SGS ACCUTEST JC18516

Manual Integration Approval Summary

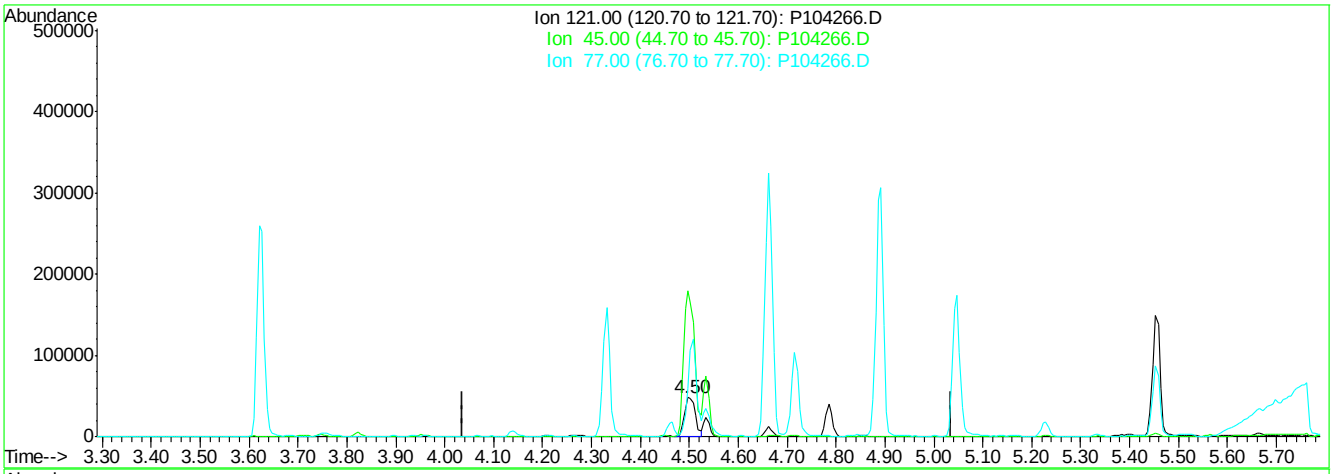
Sample Number:	OP93128-MSD	**Method:**	SW846 8270D
Lab FileID:	P104266.D	**Analyst approved:**	04/19/16 12:49 Linsey Kirschmann
Injection Time:	04/18/16 20:59	**Supervisor approved:**	04/21/16 09:20 Nina Pandya

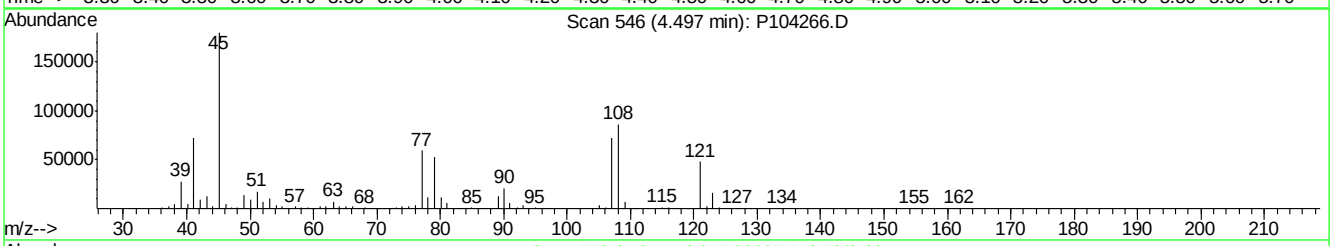
Parameter	CAS	Sig#	R.T. (min.)	Reason
bis(2-Chloroisopropyl)ether	108-60-1		4.50	Split peak
Benzoic Acid	65-85-0		5.76	Split peak

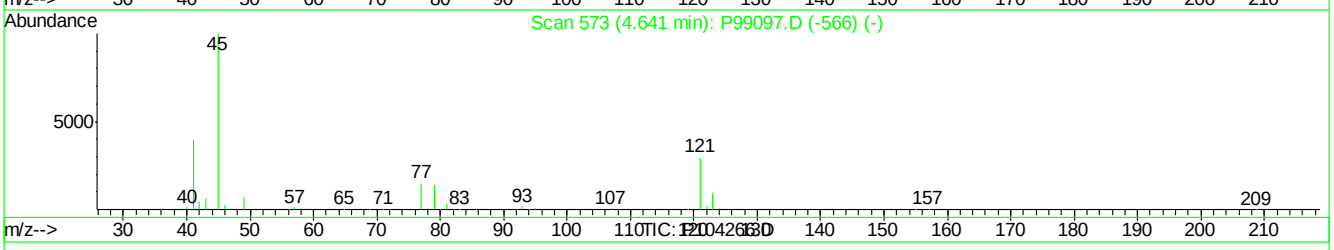
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104266.D Vial: 27
Acq On : 18 Apr 2016 8:59 pm Operator: linseyk
Sample : op93128-msd Inst : MSP
Misc : op93128,ep4590,500 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 18 21:21 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 19 12:44:38 2016
Response via : Multiple Level Calibration







(20) 2,2'-oxybis(1-Chloropropane (t)

4.50min 36.40ppm

response 73535

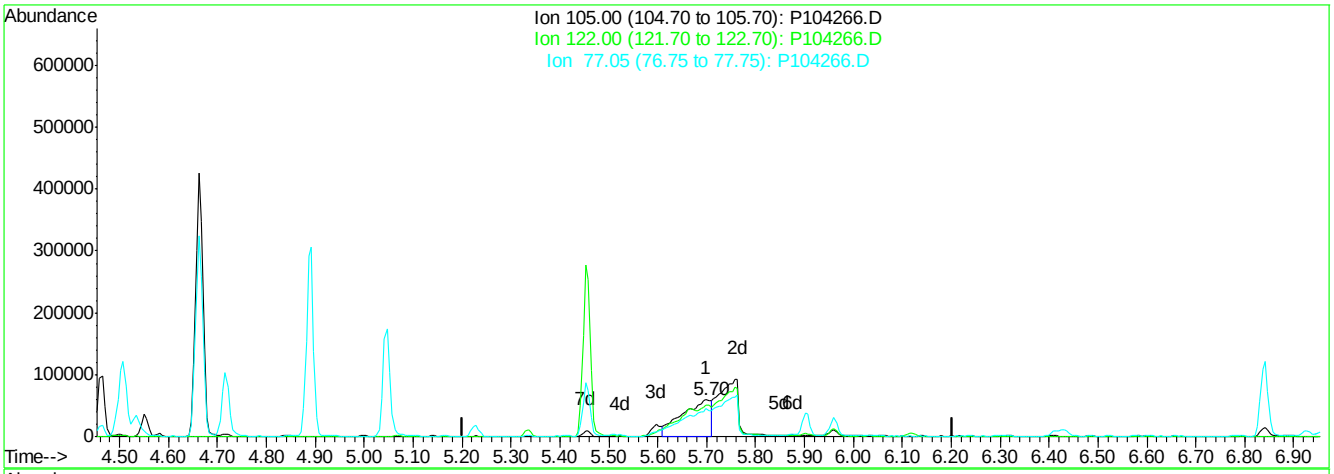
Ion	Exp%	Act%
121.00	100	100
45.00	344.10	375.91#
77.00	51.90	101.28#
0.00	0.00	0.00

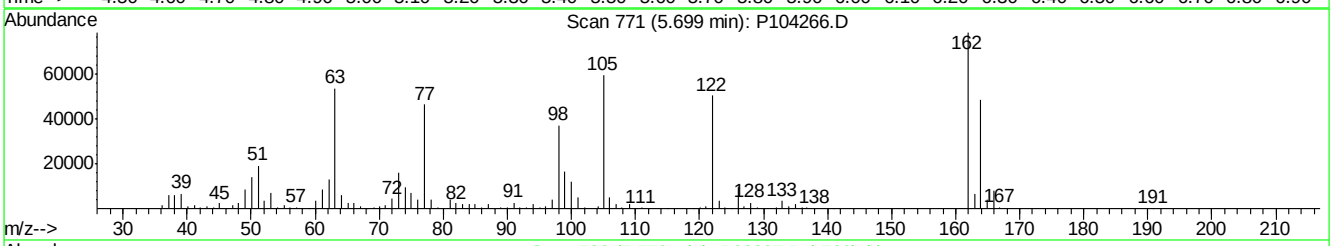
P104266.D MP4524.M Tue Apr 19 12:46:29 2016

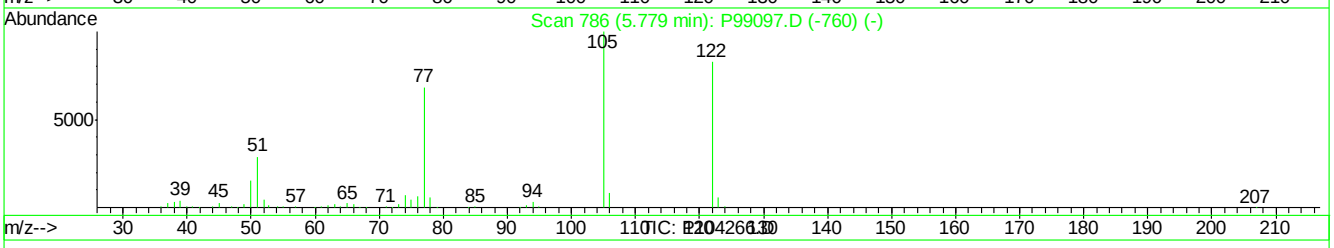
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104266.D Vial: 27
Acq On : 18 Apr 2016 8:59 pm Operator: linseyk
Sample : op93128-msd Inst : MSP
Misc : op93128,ep4590,500 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 19 12:46 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 19 12:44:38 2016
Response via : Multiple Level Calibration







(31) Benzoic acid (t)

5.70min 58.02ppm

response 244381

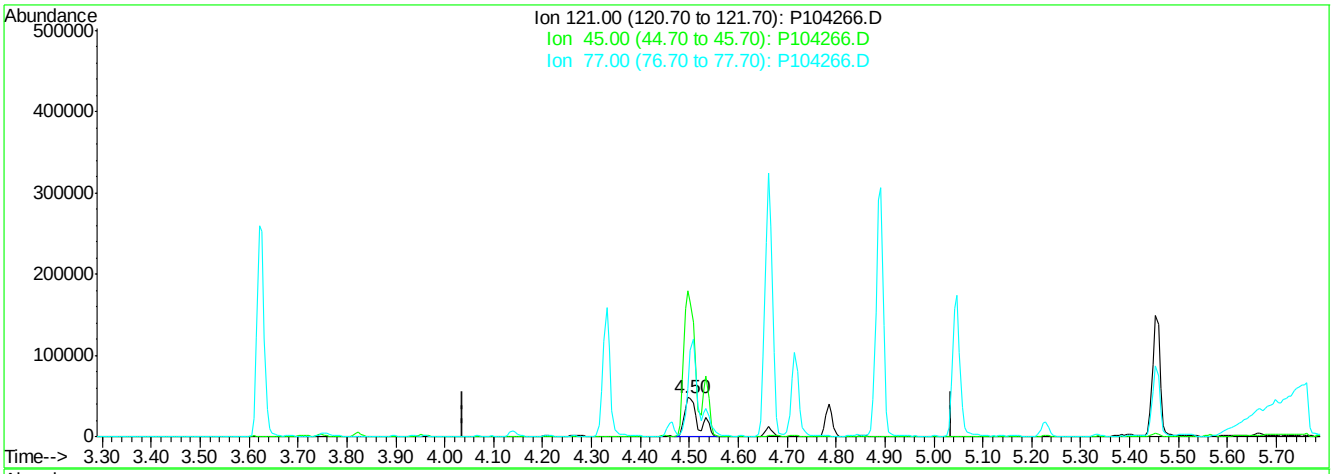
Ion	Exp%	Act%
105.00	100	100
122.00	81.90	92.33
77.05	71.50	88.65
0.00	0.00	0.00

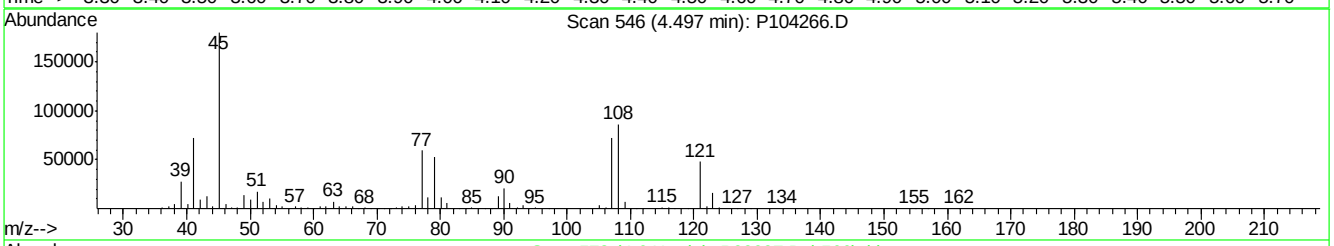
P104266.D MP4524.M Tue Apr 19 12:46:36 2016

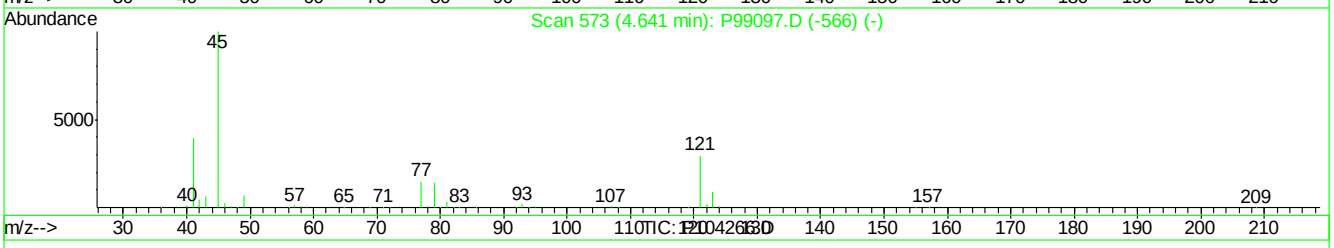
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104266.D Vial: 27
Acq On : 18 Apr 2016 8:59 pm Operator: linseyk
Sample : op93128-msd Inst : MSP
Misc : op93128,ep4590,500 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 19 12:46 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 19 12:44:38 2016
Response via : Multiple Level Calibration







(20) 2,2'-oxybis(1-Chloropropane (t)

4.50min 46.65ppm m

response 94251

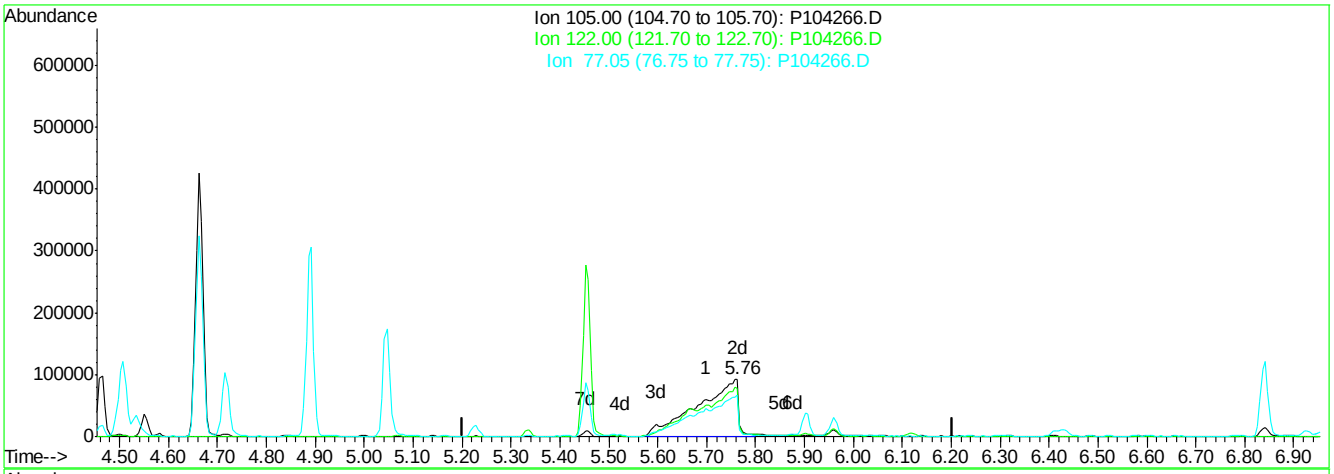
Ion	Exp%	Act%
121.00	100	100
45.00	344.10	375.86#
77.00	51.90	123.76#
0.00	0.00	0.00

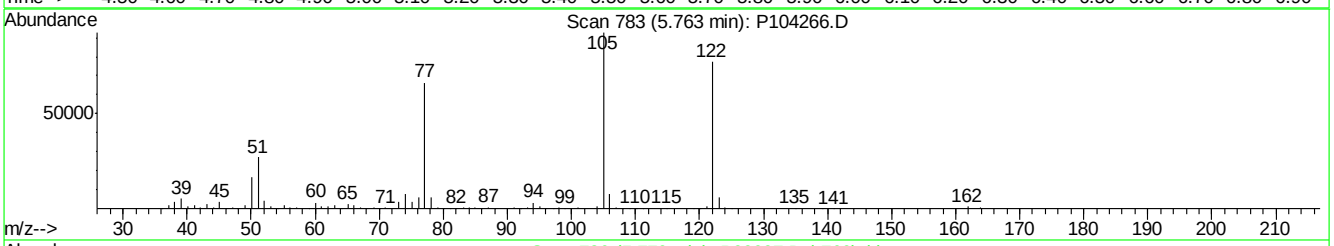
P104266.D MP4524.M Tue Apr 19 12:47:00 2016

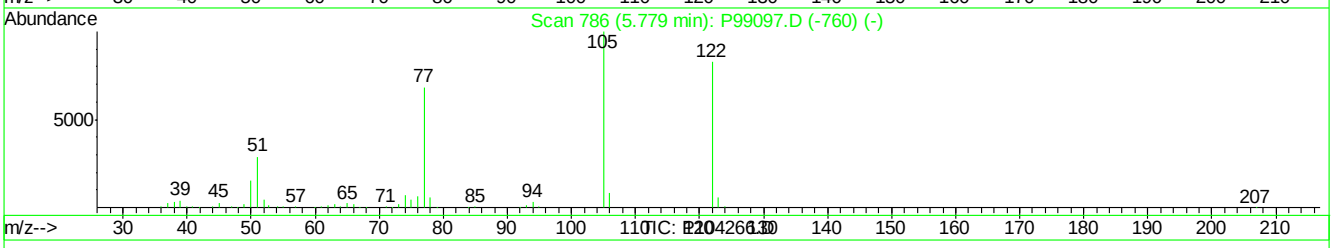
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104266.D Vial: 27
Acq On : 18 Apr 2016 8:59 pm Operator: linseyk
Sample : op93128-msd Inst : MSP
Misc : op93128,ep4590,500 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 19 12:46 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 19 12:44:38 2016
Response via : Multiple Level Calibration







(31) Benzoic acid (t)

5.76min 127.61ppm m

response 537470

Ion	Exp%	Act%
105.00	100	100
122.00	81.90	83.40
77.05	71.50	71.70
0.00	0.00	0.00

P104266.D MP4524.M Tue Apr 19 12:47:03 2016

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/26/16 10:25

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5236\
Data File : M123862.D
Acq On : 25 Apr 2016 3:00 pm
Operator : ashleyn
Sample : op93218-ms
Misc : op93218,em5236,30.3,,,1,2
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 25 15:58:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Mon Apr 25 15:34:17 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.656	152	347112	40.00	ppm	-0.02
24) Naphthalene-d8	5.783	136	1209085	40.00	ppm	-0.02
47) Acenaphthene-d10	8.112	164	714617	40.00	ppm	-0.02
69) Phenanthrene-d10	10.734	188	1152209	40.00	ppm	-0.02
83) Chrysene-d12	15.926	240	1086229	40.00	ppm	0.00
92) Perylene-d12	18.591	264	1027802	40.00	ppm	0.03
102) 1,4-Dichlorobenzene-d4a	4.656	152	347112	40.00	ppm	-0.02
104) Acenaphthene-d10a	8.112	164	714617	40.00	ppm	-0.02
107) Chrysene-d12a	15.926	240	1086229	40.00	ppm	0.00
109) Naphthalene-d8a	5.783	136	1209085	40.00	ppm	-0.02
System Monitoring Compounds						
5) 2-Fluorophenol	3.716	112	169899	16.01	ppm	-0.03
Spiked Amount 50.000			Recovery	=	32.02%	
8) Phenol-d5	4.427	99	219333	16.45	ppm	-0.02
Spiked Amount 50.000			Recovery	=	32.90%	
25) Nitrobenzene-d5	5.110	82	196953	18.32	ppm	-0.02
Spiked Amount 50.000			Recovery	=	36.64%	
51) 2-Fluorobiphenyl	7.102	172	413881	17.64	ppm	-0.03
Spiked Amount 50.000			Recovery	=	35.28%	
73) 2,4,6-Tribromophenol	9.479	330	72639	18.24	ppm	-0.03
Spiked Amount 50.000			Recovery	=	36.48%	
86) Terphenyl-d14	13.907	244	406818	16.70	ppm	-0.03
Spiked Amount 50.000			Recovery	=	33.40%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.210	88	41746	8.67	ppm	91
3) Pyridine	2.568	79	149791	12.79	ppm	99
4) N-Nitrosodimethylamine	2.525	42	73015	14.23	ppm	92
6) Indene	4.859	116	374567	18.97	ppm	97
7) Cumene	4.058	105	410620	15.50	ppm	98
9) Phenol	4.437	94	218490	15.29	ppm	95
10) Aniline	4.421	93	112773	6.79	ppm	82
11) bis(2-Chloroethyl)ether	4.459	93	184698	16.60	ppm	93
12) 2-Chlorophenol	4.517	128	187533	15.76	ppm	94
13) Decane	4.533	43	343838	30.49	ppm	99
14) 1,3-Dichlorobenzene	4.619	146	191192	14.09	ppm	99
15) 1,4-Dichlorobenzene	4.672	146	193762	14.41	ppm	99
16) Benzyl alcohol	4.779	108	111065	16.12	ppm	97
17) 1,2-Dichlorobenzene	4.795	146	184066	14.54	ppm	97
18) Acetophenone	4.966	105	472903	29.93	ppm #	24
19) 2-Methylphenol	4.886	108	150028	15.22	ppm	97
20) 2,2'-oxybis(1-Chloropr...	4.870	121	57875	15.75	ppm	97
21) 3&4-Methylphenol	5.014	108	164119	15.19	ppm	97
22) n-Nitroso-di-n-propyla...	4.977	70	150313	17.62	ppm	93
23) Hexachloroethane	5.062	201	49240	9.69	ppm #	43
26) Nitrobenzene	5.126	77	188649	17.33	ppm	99
27) Quinoline	6.178	129	370249	16.06	ppm	100
28) Isophorone	5.335	82	336921	17.22	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5236\
Data File : M123862.D
Acq On : 25 Apr 2016 3:00 pm
Operator : ashleyn
Sample : op93218-ms
Misc : op93218,em5236,30.3,,,1,2
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 25 15:58:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Mon Apr 25 15:34:17 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
29) 2-Nitrophenol	5.415	139	98928	16.06	ppm		94
30) 2,4-Dimethylphenol	5.468	107	153574	15.24	ppm		99
31) Benzoic acid	5.602	105	119214	18.03	ppm	#	23
32) bis(2-Chloroethoxy)met...	5.532	93	212261	17.86	ppm		97
33) 2,4-Dichlorophenol	5.671	162	138934	15.07	ppm		94
34) 2,6-Dichlorophenol	5.885	162	140166	15.05	ppm		95
36) 1,2,4-Trichlorobenzene	5.730	180	166874	15.44	ppm		96
38) Naphthalene	5.805	128	1219310	38.51	ppm		98
39) 4-Chloroaniline	5.874	127	128542	9.42	ppm		96
40) 2,3-Dichloroaniline	6.990	161	184194	15.34	ppm		99
41) Caprolactam	6.264	55	89239	17.90	ppm		90
42) Hexachlorobutadiene	5.933	225	95415	15.34	ppm		98
43) 4-Chloro-3-methylphenol	6.472	107	137606	14.94	ppm		95
44) 2-Methylnaphthalene	6.606	141	551383	29.12	ppm		99
45) 1-Methylnaphthalene	6.734	142	486472	22.11	ppm		97
46) Dimethylnaphthalene	7.476	156	348558	17.06	ppm		99
49) 2,4,6-Trichlorophenol	7.012	196	108626	15.93	ppm		99
50) 2,4,5-Trichlorophenol	7.086	196	106690	14.38	ppm		97
52) 2-Chloronaphthalene	7.268	162	329450	15.83	ppm		99
53) Biphenyl	7.241	154	443959	16.69	ppm		100
54) 2-Nitroaniline	7.444	65	93491	15.75	ppm		97
55) Dimethylphthalate	7.717	163	380767	15.65	ppm		98
56) Acenaphthylene	7.882	152	506362	14.71	ppm		99
57) 2,6-Dinitrotoluene	7.813	165	75512	13.96	ppm		96
58) 3-Nitroaniline	8.091	138	70602	11.79	ppm		98
59) Acenaphthene	8.165	153	328225	15.83	ppm		99
60) 2,4-Dinitrophenol	8.315	184	4204m	8.31	ppm		
61) 4-Nitrophenol	8.550	109	22114	10.10	ppm		79
62) Dibenzofuran	8.454	168	472575	15.32	ppm		100
63) 2,4-Dinitrotoluene	8.486	165	93849	13.22	ppm		84
64) 2,3,4,6-Tetrachlorophenol	8.710	232	87407	15.23	ppm		100
65) Diethylphthalate	8.908	149	380441	15.70	ppm		99
66) Fluorene	9.036	166	377913	15.16	ppm		97
67) 4-Chlorophenyl-phenyle...	9.063	204	181946	15.30	ppm		99
68) 4-Nitroaniline	9.132	138	77891	13.38	ppm		92
70) 4,6-Dinitro-2-methylph...	9.212	198	7800	3.42	ppm		95
71) n-Nitrosodiphenylamine	9.287	169	272199	17.59	ppm		100
72) 1,2-Diphenylhydrazine	9.340	77	334690	16.88	ppm		97
74) 4-Bromophenyl-phenylether	9.939	248	113424	15.92	ppm		96
75) Hexachlorobenzene	10.040	284	126122	15.03	ppm		94
76) Pentachlorophenol	10.451	266	44028	14.79	ppm		98
77) Phenanthrene	10.777	178	542453	16.89	ppm		99
78) Anthracene	10.873	178	517897	15.57	ppm		99
79) Carbazole	11.236	167	477425	15.58	ppm		99
80) Di-n-butylphthalate	12.011	149	593483	15.60	ppm		99
81) Fluoranthene	13.079	202	580070	15.41	ppm		98
82) Octadecane	10.713	57	218182	17.60	ppm		98
84) Pyrene	13.506	202	610413	17.24	ppm		99
87) Butylbenzylphthalate	14.959	149	246754	16.03	ppm		97
88) Benzo[a]anthracene	15.910	228	523401	15.76	ppm		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5236\
Data File : M123862.D
Acq On : 25 Apr 2016 3:00 pm
Operator : ashleyn
Sample : op93218-ms
Misc : op93218,em5236,30.3,,,1,2
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 25 15:58:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Mon Apr 25 15:34:17 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
89) 3,3'-Dichlorobenzidine	15.931	252	277741	22.90	ppm		98
90) Chrysene	15.974	228	533949	17.22	ppm		98
91) bis(2-Ethylhexyl)phtha...	16.177	149	353837	17.04	ppm		98
93) Di-n-octylphthalate	17.411	149	595365	17.85	ppm		97
94) Benzo[b]fluoranthene	17.934	252	581287m	18.41	ppm		
95) Benzo[k]fluoranthene	17.982	252	480985	15.80	ppm		92
96) Benzo[a]pyrene	18.495	252	481769	16.52	ppm		95
97) Indeno[1,2,3-cd]pyrene	20.354	276	537985	18.23	ppm		83
99) Dibenz[a,h]anthracene	20.386	278	448636	14.95	ppm		96
100) 7,12-Dimethylbenz(a)an...	17.923	256	254614	17.92	ppm		98
101) Benzo[g,h,i]perylene	20.824	276	486755	15.82	ppm		92
103) Benzaldehyde	4.336	105	598322	68.16	ppm	#	31
105) 1,2,4,5-Tetrachloroben...	6.830	216	177720	15.49	ppm		97
106) Atrazine	10.334	215	52974	13.29	ppm		77

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

7.4.3

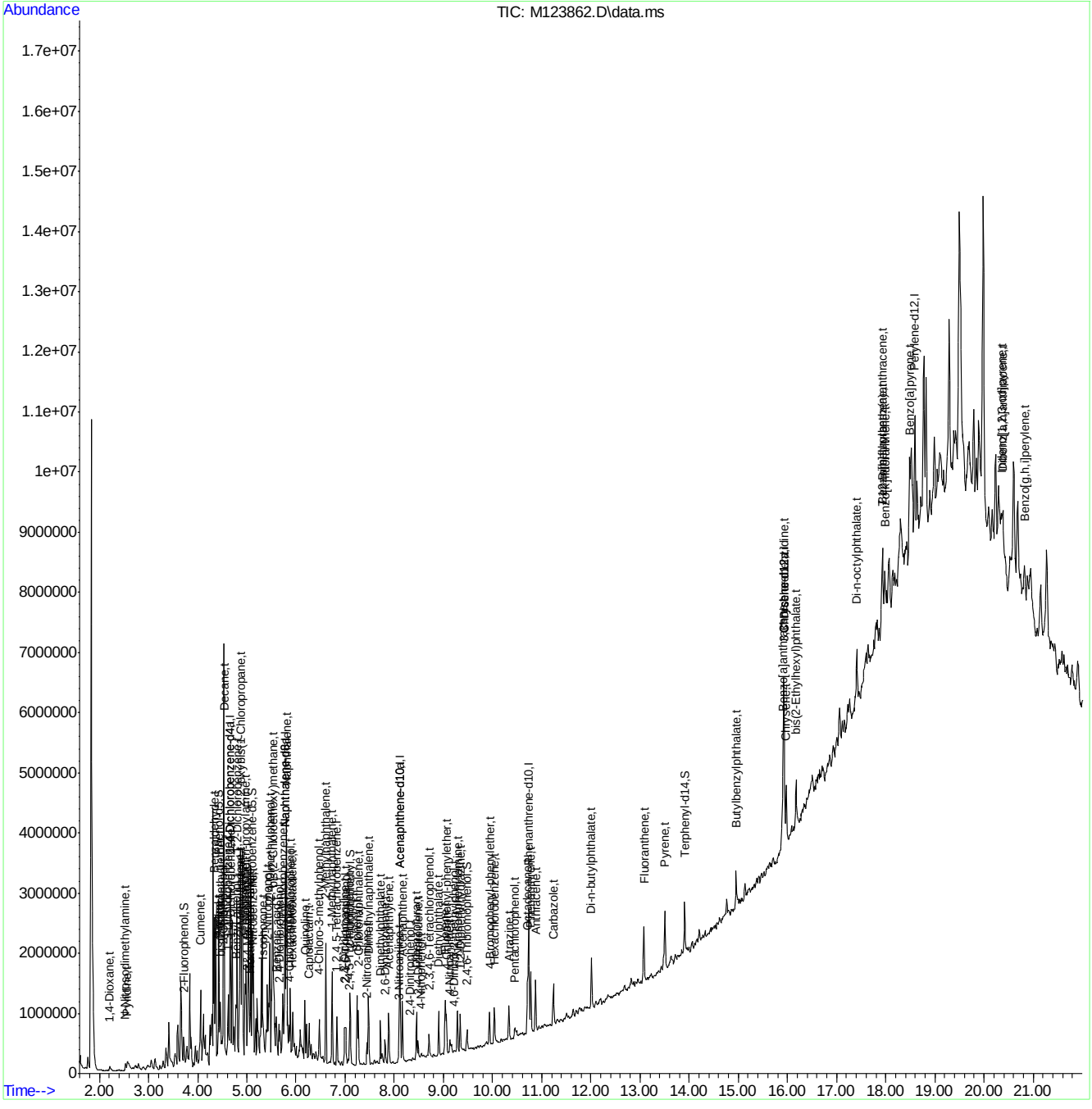
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5236\
Data File : M123862.D
Acq On : 25 Apr 2016 3:00 pm
Operator : ashleyn
Sample : op93218-ms
Misc : op93218,em5236,30.3,,,1,2
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 25 15:58:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Mon Apr 25 15:34:17 2016
Response via : Initial Calibration



MM5217.M Mon Apr 25 15:58:19 2016 MSM

SGS ACCUTEST JC18516

Manual Integration Approval Summary

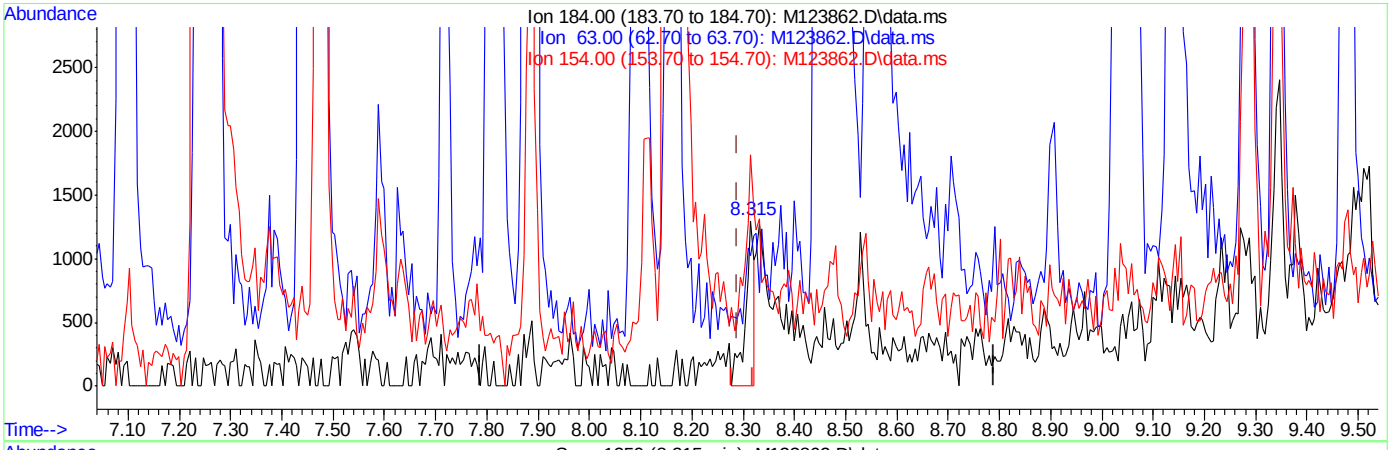
Sample Number:	OP93218-MS	**Method:**	SW846 8270D
Lab FileID:	M123862.D	**Analyst approved:**	04/25/16 15:59 Ashley Noble
Injection Time:	04/25/16 15:00	**Supervisor approved:**	04/26/16 10:25 Nina Pandya

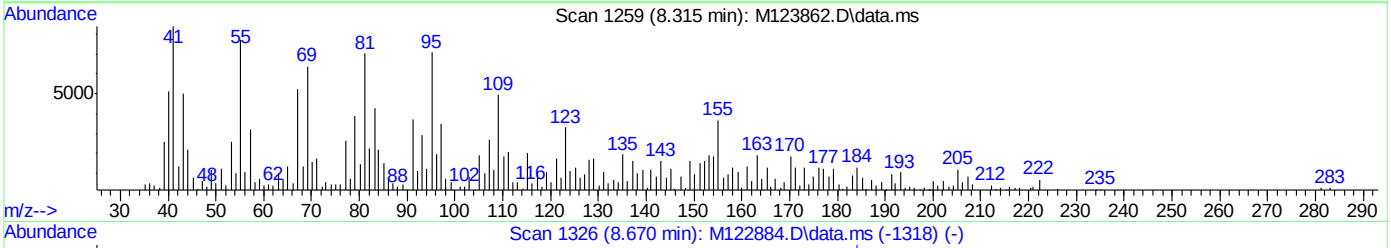
Parameter	CAS	Sig#	R.T. (min.)	Reason
2,4-Dinitrophenol	51-28-5		8.31	Poor instrument integration
Benzo(b)fluoranthene	205-99-2		17.93	Poor instrument integration

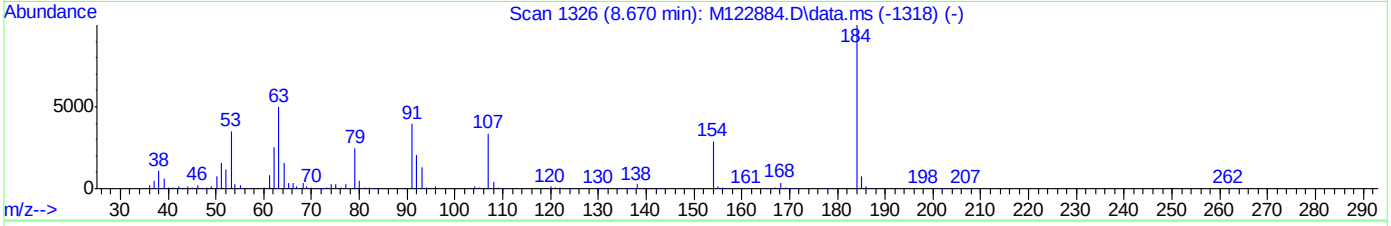
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5236\
Data File : M123862.D
Acq On : 25 Apr 2016 3:00 pm
Operator : ashleyn
Sample : op93218-ms
Misc : op93218,em5236,30.3,,,1,2
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 25 15:34:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Mon Apr 25 15:34:17 2016
Response via : Initial Calibration







TIC: M123862.D\data.ms

(60) 2,4-Dinitrophenol (t)

8.315min (+0.026) 7.20ppm

response 1451

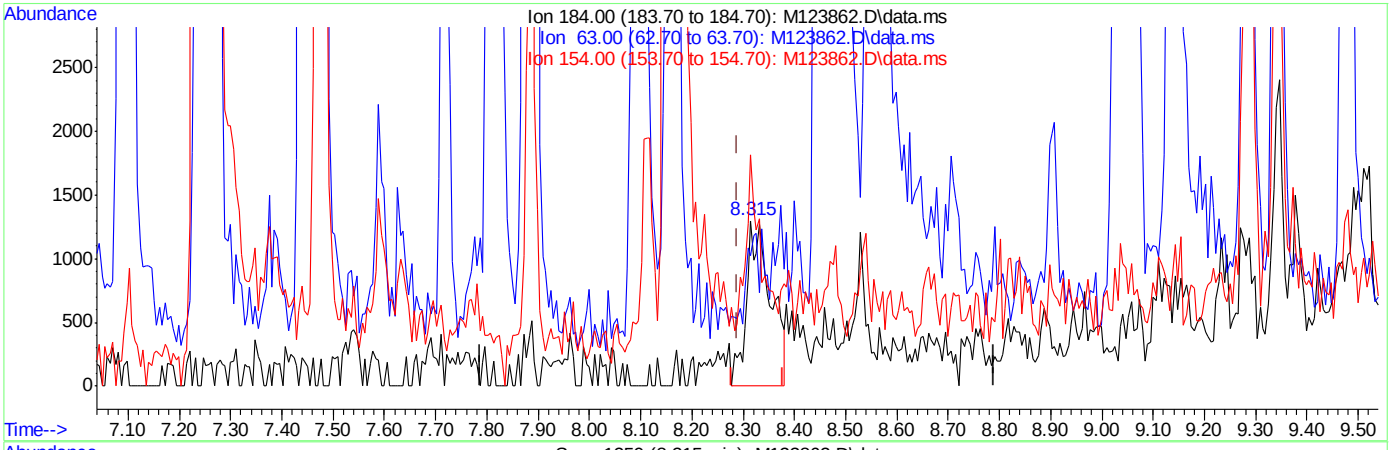
Ion	Exp%	Act%
184.00	100	100
63.00	51.00	19.66#
154.00	44.70	101.87#
0.00	0.00	0.00

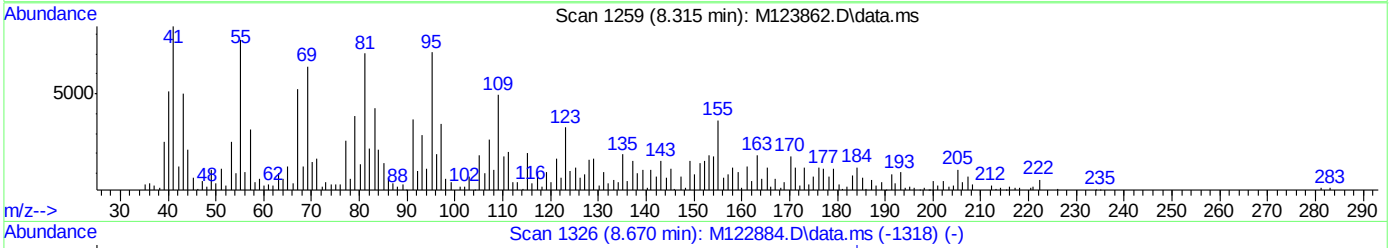
SGS ACCUTEST JC18516

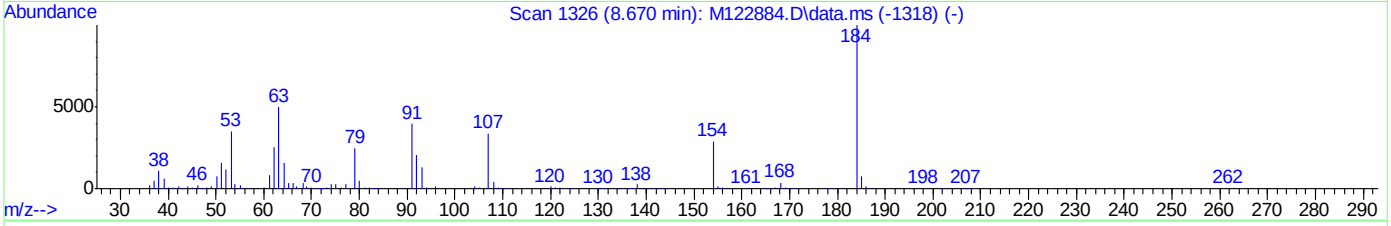
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5236\
Data File : M123862.D
Acq On : 25 Apr 2016 3:00 pm
Operator : ashleyn
Sample : op93218-ms
Misc : op93218,em5236,30.3,,,1,2
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 25 15:34:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Mon Apr 25 15:34:17 2016
Response via : Initial Calibration







TIC: M123862.D\data.ms

(60) 2,4-Dinitrophenol (t)

8.315min (+0.026) 8.31ppm m

response 4204

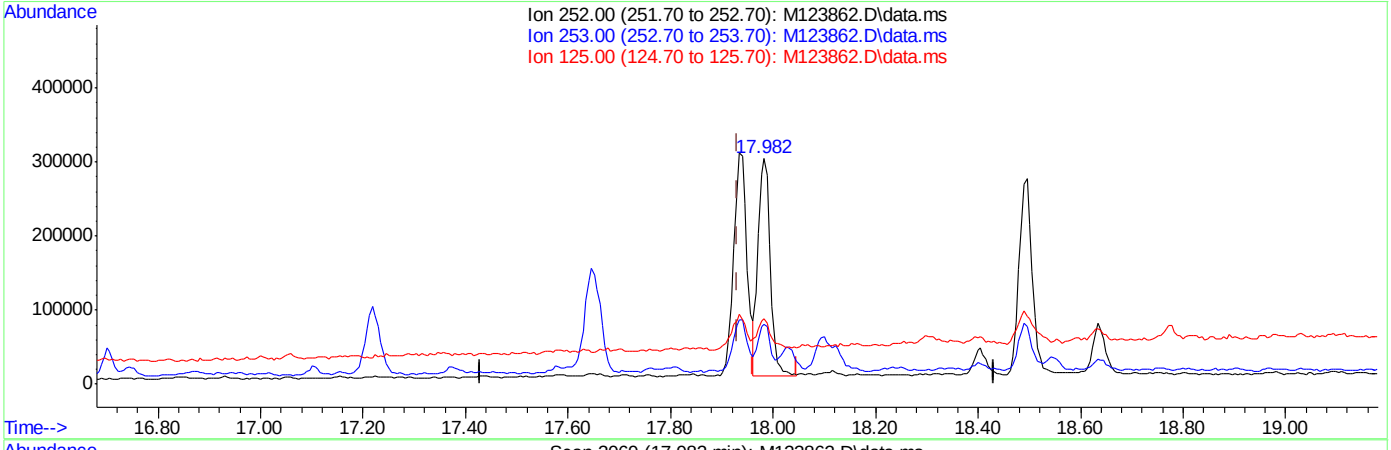
Ion	Exp%	Act%
184.00	100	100
63.00	51.00	78.72
154.00	44.70	140.17#
0.00	0.00	0.00

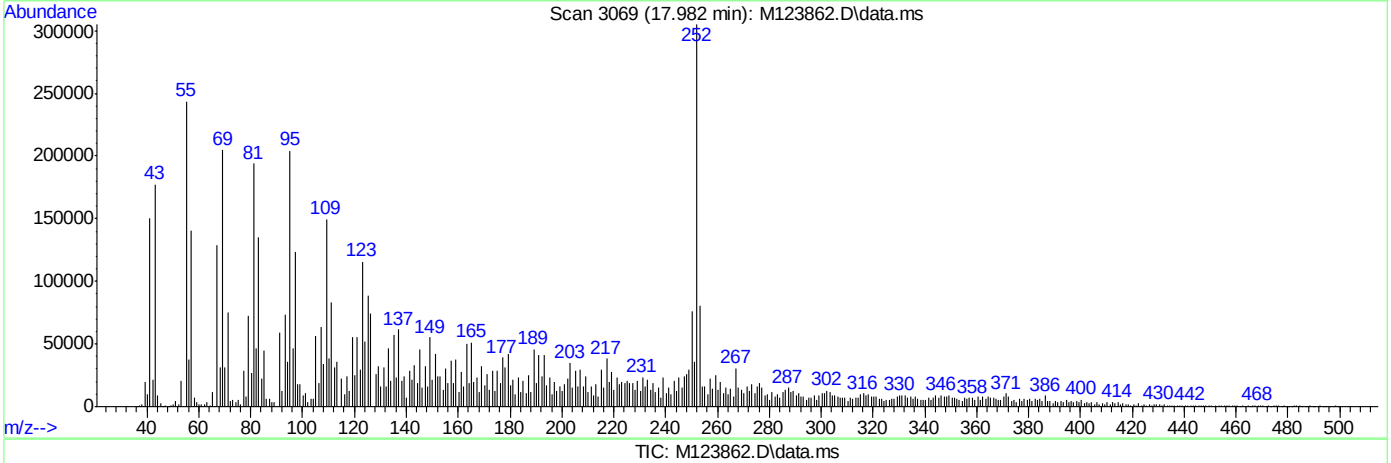
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5236\
Data File : M123862.D
Acq On : 25 Apr 2016 3:00 pm
Operator : ashleyn
Sample : op93218-ms
Misc : op93218,em5236,30.3,,,1,2
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 25 15:53:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Mon Apr 25 15:34:17 2016
Response via : Initial Calibration





TIC: M123862.D\data.ms

(94) Benzo[b]fluoranthene (t)

17.982min (+0.052) 15.23ppm

response 480875

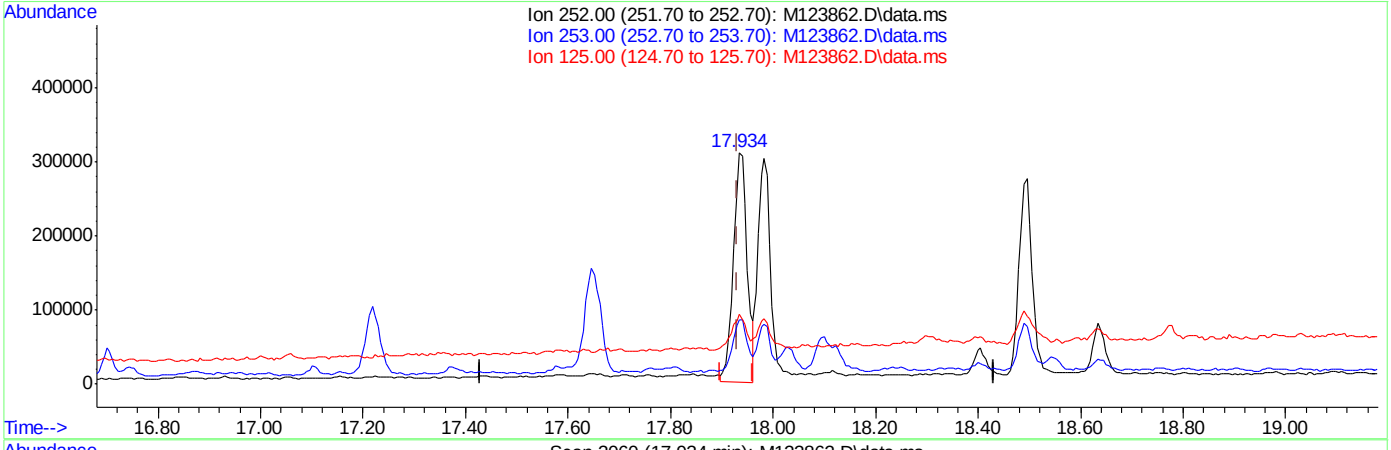
Ion	Exp%	Act%
252.00	100	100
253.00	25.50	18.17
125.00	13.70	13.08
0.00	0.00	0.00

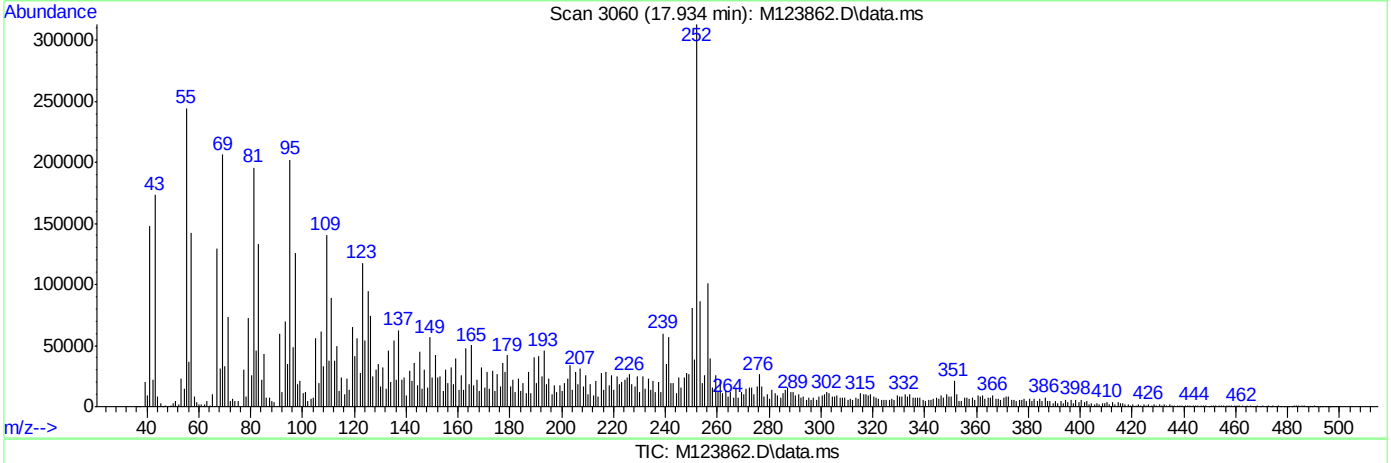
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5236\
Data File : M123862.D
Acq On : 25 Apr 2016 3:00 pm
Operator : ashleyn
Sample : op93218-ms
Misc : op93218,em5236,30.3,,,1,2
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 25 15:53:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Mon Apr 25 15:34:17 2016
Response via : Initial Calibration





TIC: M123862.D\data.ms

(94) Benzo[b]fluoranthene (t)

17.934min (+0.003) 18.41ppm m

response 581287

Ion	Exp%	Act%
252.00	100	100
253.00	25.50	27.58
125.00	13.70	30.21
0.00	0.00	0.00

SGS ACCUTEST JC18516

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/26/16 10:25

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5236\
Data File : M123863.D
Acq On : 25 Apr 2016 3:28 pm
Operator : ashleyn
Sample : op93218-msd
Misc : op93218,em5236,30.8,,,1,2
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 25 15:57:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 21 17:40:51 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.661	152	330361	40.00	ppm	-0.01
24) Naphthalene-d8	5.788	136	1244665	40.00	ppm	-0.01
47) Acenaphthene-d10	8.122	164	714126	40.00	ppm	-0.01
69) Phenanthrene-d10	10.750	188	1122757	40.00	ppm	0.00
83) Chrysene-d12	15.941	240	1082142	40.00	ppm	0.00
92) Perylene-d12	18.601	264	1032096	40.00	ppm	0.04
102) 1,4-Dichlorobenzene-d4a	4.661	152	330361	40.00	ppm	-0.01
104) Acenaphthene-d10a	8.122	164	714126	40.00	ppm	-0.01
107) Chrysene-d12a	15.941	240	1082142	40.00	ppm	0.00
109) Naphthalene-d8a	5.788	136	1244665	40.00	ppm	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.721	112	154323	15.28	ppm	-0.03
Spiked Amount 50.000			Recovery	=	30.56%	
8) Phenol-d5	4.437	99	184255	14.52	ppm	-0.01
Spiked Amount 50.000			Recovery	=	29.04%	
25) Nitrobenzene-d5	5.115	82	164745	14.88	ppm	-0.01
Spiked Amount 50.000			Recovery	=	29.76%	
51) 2-Fluorobiphenyl	7.107	172	353637	15.08	ppm	-0.02
Spiked Amount 50.000			Recovery	=	30.16%	
73) 2,4,6-Tribromophenol	9.489	330	58490	15.07	ppm	-0.02
Spiked Amount 50.000			Recovery	=	30.14%	
86) Terphenyl-d14	13.917	244	360296	14.84	ppm	-0.02
Spiked Amount 50.000			Recovery	=	29.68%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.215	88	39755	8.68	ppm	96
3) Pyridine	2.573	79	140678	12.62	ppm	98
4) N-Nitrosodimethylamine	2.530	42	62322	12.76	ppm	98
6) Indene	4.864	116	315712	16.80	ppm	97
7) Cumene	4.063	105	354009	14.04	ppm	98
9) Phenol	4.447	94	190407	14.00	ppm	92
10) Aniline	4.426	93	111556	7.05	ppm	79
11) bis(2-Chloroethyl)ether	4.458	93	153873	14.53	ppm	94
12) 2-Chlorophenol	4.522	128	158096	13.96	ppm	94
13) Decane	4.533	43	256159	23.87	ppm	99
14) 1,3-Dichlorobenzene	4.618	146	161663	12.52	ppm	97
15) 1,4-Dichlorobenzene	4.677	146	168587	13.18	ppm	100
16) Benzyl alcohol	4.784	108	92798	14.15	ppm	95
17) 1,2-Dichlorobenzene	4.795	146	158098	13.13	ppm	97
18) Acetophenone	4.981	105	365361	24.30	ppm	93
19) 2-Methylphenol	4.891	108	132433	14.11	ppm	91
20) 2,2'-oxybis(1-Chloropr...	4.875	121	49985	14.29	ppm	94
21) 3&4-Methylphenol	5.019	108	135833	13.21	ppm	96
22) n-Nitroso-di-n-propyla...	4.981	70	116907	14.40	ppm	95
23) Hexachloroethane	5.067	201	36091	7.46	ppm	91
26) Nitrobenzene	5.131	77	160303	14.31	ppm	99
27) Quinoline	6.183	129	312688	13.18	ppm	99
28) Isophorone	5.339	82	283070	14.05	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5236\
Data File : M123863.D
Acq On : 25 Apr 2016 3:28 pm
Operator : ashleyn
Sample : op93218-msd
Misc : op93218,em5236,30.8,,,1,2
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 25 15:57:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 21 17:40:51 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
29) 2-Nitrophenol	5.419	139	73555	11.60	ppm		85
30) 2,4-Dimethylphenol	5.473	107	132828	12.80	ppm		99
31) Benzoic acid	5.606	105	95119	13.98	ppm	#	23
32) bis(2-Chloroethoxy)met...	5.537	93	171370	14.01	ppm		97
33) 2,4-Dichlorophenol	5.681	162	118439	12.48	ppm		97
34) 2,6-Dichlorophenol	5.889	162	121402	12.66	ppm		99
36) 1,2,4-Trichlorobenzene	5.735	180	142398	12.79	ppm		99
38) Naphthalene	5.809	128	933492	28.64	ppm		97
39) 4-Chloroaniline	5.879	127	118274	8.42	ppm		98
40) 2,3-Dichloroaniline	6.995	161	157149	12.71	ppm		98
41) Caprolactam	6.274	55	74466	14.51	ppm		94
42) Hexachlorobutadiene	5.938	225	81062	12.66	ppm		97
43) 4-Chloro-3-methylphenol	6.482	107	119759	12.63	ppm		97
44) 2-Methylnaphthalene	6.616	141	443871	22.77	ppm		96
45) 1-Methylnaphthalene	6.739	142	413456	18.25	ppm		99
46) Dimethylnaphthalene	7.481	156	303631	14.44	ppm		98
49) 2,4,6-Trichlorophenol	7.022	196	93781	13.76	ppm		98
50) 2,4,5-Trichlorophenol	7.097	196	89453	12.06	ppm		97
52) 2-Chloronaphthalene	7.278	162	285974	13.75	ppm		99
53) Biphenyl	7.251	154	380235	14.31	ppm		97
54) 2-Nitroaniline	7.449	65	81745	13.78	ppm		96
55) Dimethylphthalate	7.727	163	333419	13.71	ppm		98
56) Acenaphthylene	7.898	152	446380	12.98	ppm		99
57) 2,6-Dinitrotoluene	7.823	165	57777	10.69	ppm		91
58) 3-Nitroaniline	8.101	138	61053	10.21	ppm		96
59) Acenaphthene	8.175	153	288449	13.92	ppm		98
60) 2,4-Dinitrophenol	8.330	184	1650	7.28	ppm		79
61) 4-Nitrophenol	8.560	109	22402	10.24	ppm		91
62) Dibenzofuran	8.464	168	415350	13.48	ppm		98
63) 2,4-Dinitrotoluene	8.501	165	66492	9.38	ppm		74
64) 2,3,4,6-Tetrachlorophenol	8.720	232	72719	12.68	ppm		97
65) Diethylphthalate	8.912	149	321184	13.26	ppm		99
66) Fluorene	9.046	166	322212	12.93	ppm		100
67) 4-Chlorophenyl-phenyle...	9.073	204	153390	12.90	ppm		98
68) 4-Nitroaniline	9.142	138	61506	10.57	ppm		95
70) 4,6-Dinitro-2-methylph...	9.233	198	3561	2.28	ppm		68
71) n-Nitrosodiphenylamine	9.292	169	234531	15.55	ppm		98
72) 1,2-Diphenylhydrazine	9.350	77	271243	14.04	ppm		97
74) 4-Bromophenyl-phenylether	9.949	248	94484	13.61	ppm		93
75) Hexachlorobenzene	10.050	284	108355	13.25	ppm		98
76) Pentachlorophenol	10.467	266	34427	12.51	ppm		95
77) Phenanthrene	10.793	178	444714	14.21	ppm		99
78) Anthracene	10.889	178	436520	13.47	ppm		98
79) Carbazole	11.247	167	416242	13.94	ppm		100
80) Di-n-butylphthalate	12.021	149	520671	14.05	ppm		99
81) Fluoranthene	13.089	202	482627	13.16	ppm		97
82) Octadecane	10.718	57	195763	16.21	ppm		98
84) Pyrene	13.517	202	527300	14.94	ppm		99
87) Butylbenzylphthalate	14.964	149	224522	14.64	ppm		95
88) Benzo[a]anthracene	15.920	228	443117	13.39	ppm		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5236\
Data File : M123863.D
Acq On : 25 Apr 2016 3:28 pm
Operator : ashleyn
Sample : op93218-msd
Misc : op93218,em5236,30.8,,,1,2
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 25 15:57:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 21 17:40:51 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units		Dev(Min)
89) 3,3'-Dichlorobenzidine	15.941	252	243042	20.12 ppm		99
90) Chrysene	15.989	228	446796	14.46 ppm		99
91) bis(2-Ethylhexyl)phtha...	16.182	149	317089	15.33 ppm		95
93) Di-n-octylphthalate	17.415	149	513156	15.32 ppm		99
94) Benzo[b]fluoranthene	17.944	252	471270m	14.86 ppm		
95) Benzo[k]fluoranthene	17.987	252	431028	14.10 ppm		91
96) Benzo[a]pyrene	18.494	252	411890	14.06 ppm		96
97) Indeno[1,2,3-cd]pyrene	20.348	276	465512	15.71 ppm		76
99) Dibenz[a,h]anthracene	20.380	278	396068	13.14 ppm		94
100) 7,12-Dimethylbenz(a)an...	17.928	256	225949	15.83 ppm		99
101) Benzo[g,h,i]perylene	20.818	276	415236	13.44 ppm		90
103) Benzaldehyde	4.335	105	392958	47.04 ppm	#	32
105) 1,2,4,5-Tetrachloroben...	6.840	216	154215	13.45 ppm		98
106) Atrazine	10.344	215	41281	10.36 ppm	#	69

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

7.4.4

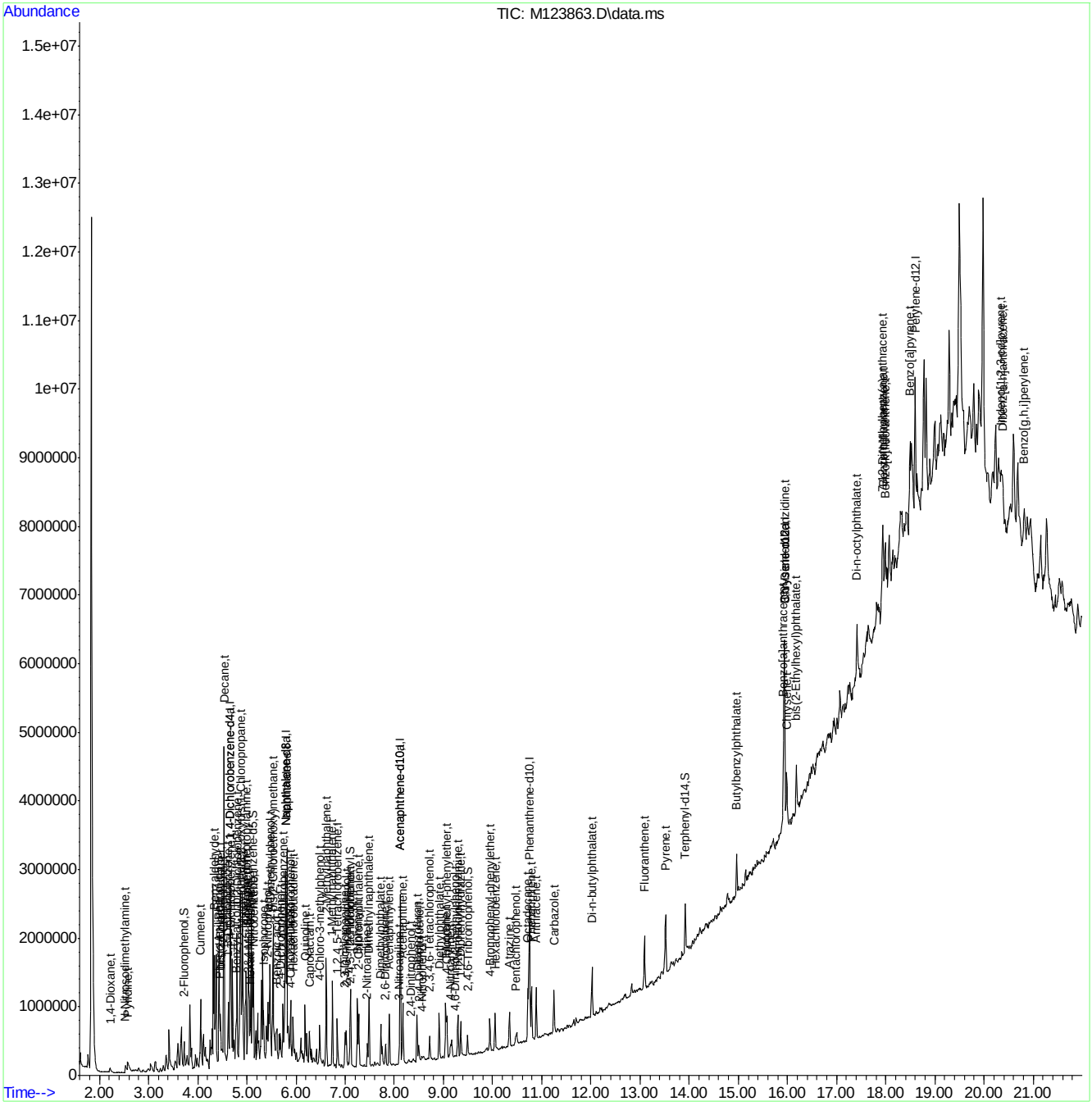
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5236\
Data File : M123863.D
Acq On : 25 Apr 2016 3:28 pm
Operator : ashleyn
Sample : op93218-msd
Misc : op93218,em5236,30.8,,,1,2
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 25 15:57:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 21 17:40:51 2016
Response via : Initial Calibration



MM5217.M Mon Apr 25 15:57:29 2016 MSM

Page: 4

SGS ACCUTEST JC18516

Manual Integration Approval Summary

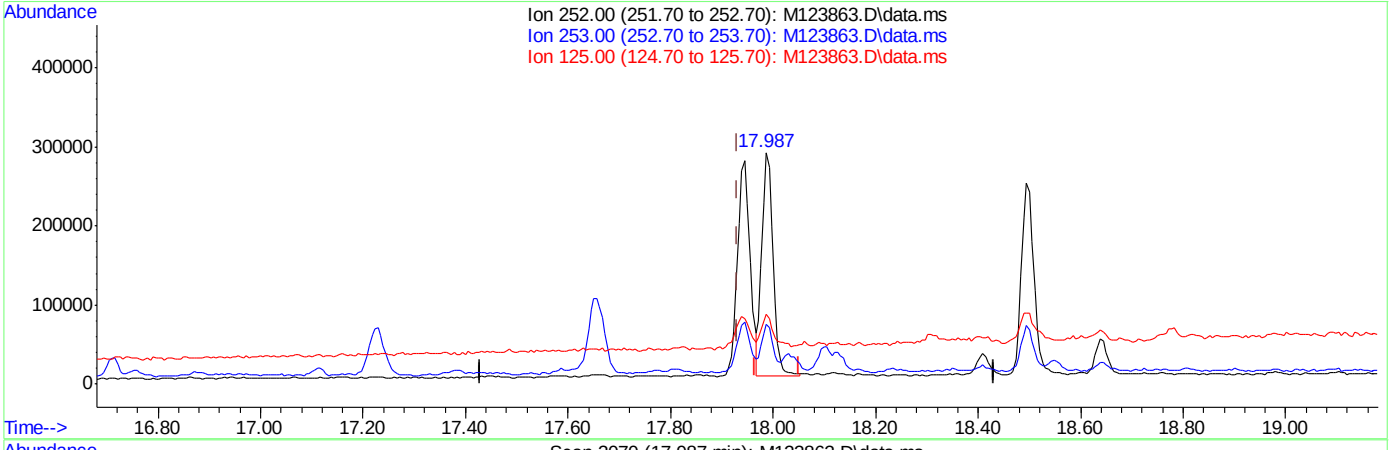
Sample Number:	OP93218-MSD	**Method:**	SW846 8270D
Lab FileID:	M123863.D	**Analyst approved:**	04/25/16 15:59 Ashley Noble
Injection Time:	04/25/16 15:28	**Supervisor approved:**	04/26/16 10:25 Nina Pandya

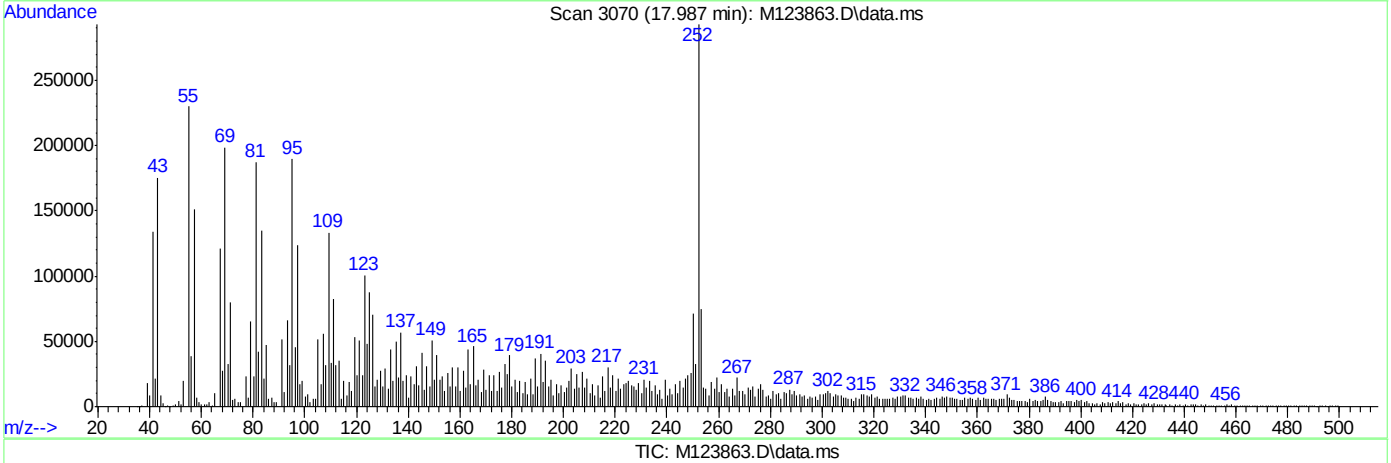
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(b)fluoranthene	205-99-2		17.94	Poor instrument integration

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\EM5236\
Data File : M123863.D
Acq On    : 25 Apr 2016   3:28 pm
Operator  : ashleyn
Sample    : op93218-msd
Misc      : op93218,em5236,30.8,,,1,2
ALS Vial  : 7   Sample Multiplier: 1

Quant Time: Apr 25 15:51:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title  : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 21 17:40:51 2016
Response via : Initial Calibration
```





(94) Benzo[b]fluoranthene (t)

17.987min (+0.056) 13.56ppm

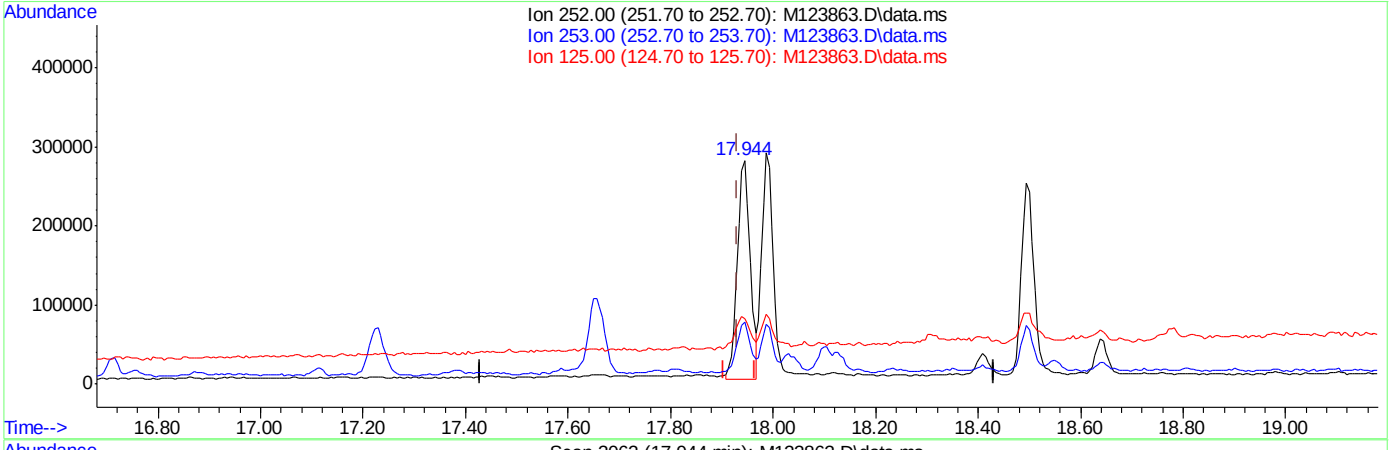
response 430064

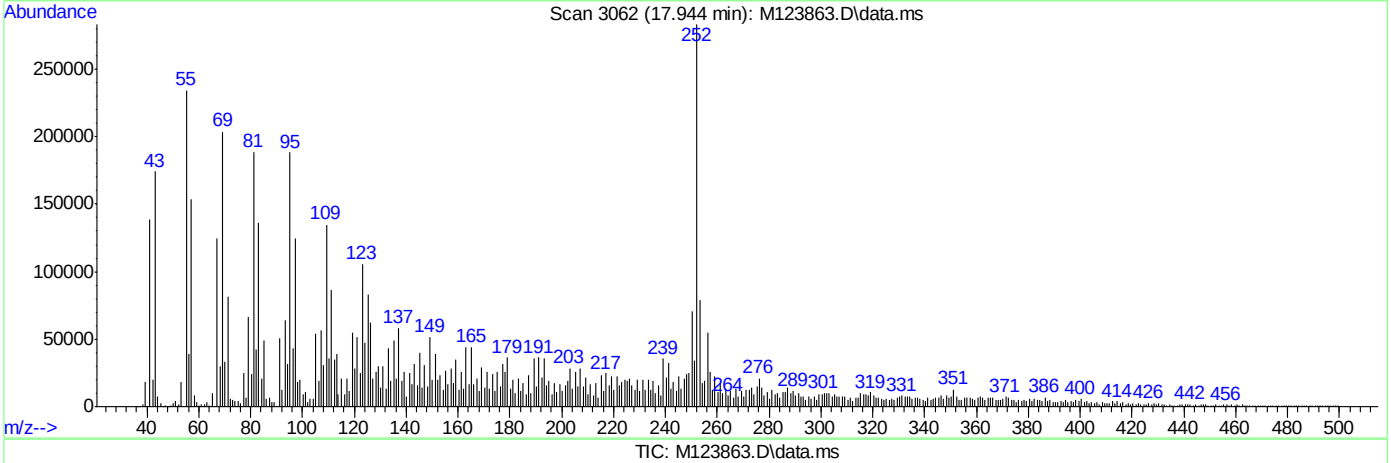
Ion	Exp%	Act%
252.00	100	100
253.00	25.50	18.28
125.00	13.70	14.25
0.00	0.00	0.00

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\EM5236\
Data File : M123863.D
Acq On    : 25 Apr 2016   3:28 pm
Operator  : ashleyn
Sample    : op93218-msd
Misc      : op93218,em5236,30.8,,,1,2
ALS Vial  : 7   Sample Multiplier: 1

Quant Time: Apr 25 15:51:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title  : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 21 17:40:51 2016
Response via : Initial Calibration
```





TIC: M123863.D\data.ms

(94) Benzo[b]fluoranthene (t)

17.944min (+0.014) 14.86ppm m

response 471270

Ion	Exp%	Act%
252.00	100	100
253.00	25.50	27.74
125.00	13.70	29.43
0.00	0.00	0.00

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2885\
Data File : 4m64822.D
Acq On : 19 Apr 2016 1:35 am
Operator : linseyk
Sample : op93128a-ms
Misc : op93128a,e4m2885,500
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Apr 19 12:00:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Mon Apr 18 16:04:01 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.698	152	303053	4.00	ppm	-0.05
12) Fluorene-d10	13.676	176	466637	4.00	ppm	-0.05
22) Fluoranthene-d10	17.866	212	816120	4.00	ppm	-0.04
28) Benzo(a)pyrene-d12	22.470	264	636670	4.00	ppm	-0.03
35) 1-Methylnaphthalene-d10a	10.698	152	303053	4.00	ppm	-0.05
38) Fluorene-d10a	13.676	176	466637	4.00	ppm	-0.05
System Monitoring Compounds						
2) 2-Fluorophenol	4.731	112	1403106	35.36	ppm	-0.01
Spiked Amount 50.000	Range 11 - 58		Recovery = 70.72%#			
3) Phenol-d5	6.311	99	1892579	28.36	ppm	-0.03
Spiked Amount 50.000			Recovery = 56.72%			
6) Nitrobenzene-d5	7.833	82	2545078	42.53	ppm	-0.05
Spiked Amount 50.000			Recovery = 85.06%			
11) 2-Fluorobiphenyl	11.366	172	4050552	46.31	ppm	-0.05
Spiked Amount 50.000			Recovery = 92.62%			
17) 2,4,6-Tribromophenol	14.249	330	1091238	43.84	ppm	-0.02
Spiked Amount 50.000			Recovery = 87.68%			
25) Terphenyl-d14	18.676	244	4934664	44.76	ppm	-0.04
Spiked Amount 50.000			Recovery = 89.52%			
Target Compounds						Qvalue
4) Phenol	6.324	94	250983	3.67	ppm	35
5) bis(2-Chloroethyl)ether	6.393	93	42799	0.83	ppm	93
7) Naphthalene	9.210	128	136108	0.80	ppm	98
8) Hexachlorobutadiene	9.519	225	31683	0.75	ppm	96
9) 2-Methylnaphthalene	10.579	142	71931	0.97	ppm	88
10) Hexachlorocyclopentadiene	10.937	237	16348	0.76	ppm	96
13) Acenaphthylene	12.343	152	106730	1.00	ppm	99
14) Acenaphthene	12.698	153	72360	1.05	ppm	97
15) Dibenzofuran	13.053	168	97529	0.95	ppm	74
16) Fluorene	13.724	166	104945	0.84	ppm	91
18) Hexachlorobenzene	14.837	284	44733	0.92	ppm	95
19) Pentachlorophenol	15.285	266	122192	6.12	ppm	85
20) Phenanthrene	15.641	178	164879	0.98	ppm	98
21) Anthracene	15.733	178	156616	0.99	ppm	98
23) Fluoranthene	17.904	202	184862	0.84	ppm	98
24) Pyrene	18.280	202	190567	0.88	ppm	82
26) Benzo[a]anthracene	20.389	228	162063	0.81	ppm	98
27) Chrysene	20.445	228	157132	0.80	ppm	78
29) Benzo[b]fluoranthene	22.043	252	141233	0.62	ppm	92
30) Benzo[k]fluoranthene	22.084	252	144233	0.75	ppm	92
31) Benzo[a]pyrene	22.497	252	128059	0.67	ppm	94
32) Indeno[1,2,3-cd]pyrene	24.026	276	125721	0.53	ppm	99
33) Dibenz[a,h]anthracene	24.053	278	106877	0.56	ppm	89
34) Benzo[g,h,i]perylene	24.411	276	105245	0.52	ppm	100
36) 1,4-Dioxane	2.430	88	9172	0.50	ppm #	69
39) 4,6-dinitro-2-methylph...	13.915	198	114329	7.95	ppm	90
40) 1,2-Diphenylhydrazine	14.082	77	93236	0.84	ppm	96

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2885\
Data File : 4m64822.D
Acq On : 19 Apr 2016 1:35 am
Operator : linseyk
Sample : op93128a-ms
Misc : op93128a,e4m2885,500
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Apr 19 12:00:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Mon Apr 18 16:04:01 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) n-nitrosodiphenylamine	14.034	169	62129	0.76	ppm	84

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

7.4.5

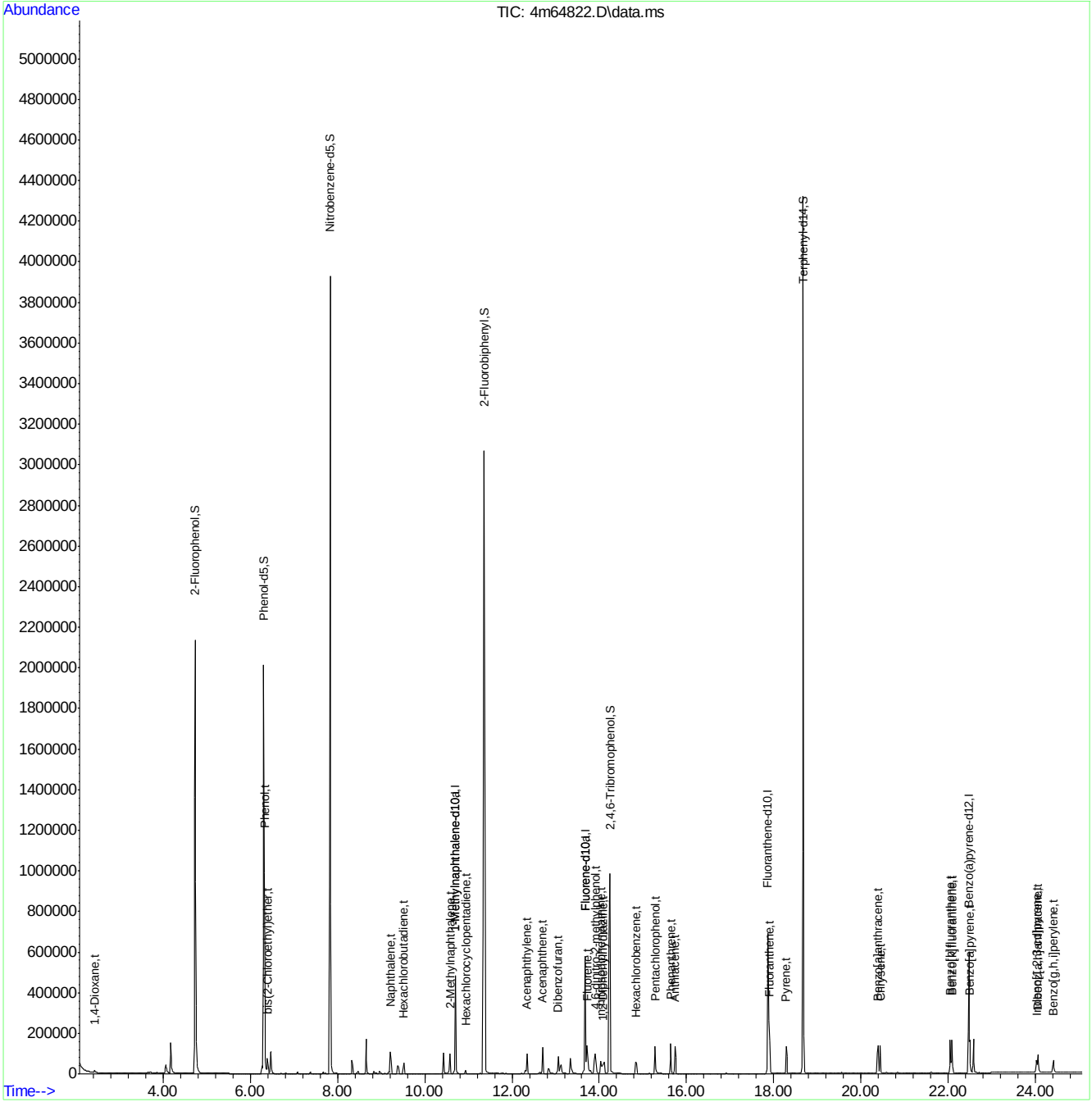
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2885\
Data File : 4m64822.D
Acq On : 19 Apr 2016 1:35 am
Operator : linseyk
Sample : op93128a-ms
Misc : op93128a,e4m2885,500
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Apr 19 12:00:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Mon Apr 18 16:04:01 2016
Response via : Initial Calibration



SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2885\
Data File : 4m64823.D
Acq On : 19 Apr 2016 2:06 am
Operator : linseyk
Sample : op93128a-msd
Misc : op93128a,e4m2885,500
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Apr 19 12:01:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Mon Apr 18 16:04:01 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.698	152	316681	4.00	ppm	-0.05
12) Fluorene-d10	13.676	176	483493	4.00	ppm	-0.05
22) Fluoranthene-d10	17.866	212	863876	4.00	ppm	-0.04
28) Benzo(a)pyrene-d12	22.470	264	674671	4.00	ppm	-0.03
35) 1-Methylnaphthalene-d10a	10.698	152	316681	4.00	ppm	-0.05
38) Fluorene-d10a	13.676	176	483493	4.00	ppm	-0.05
System Monitoring Compounds						
2) 2-Fluorophenol	4.731	112	1408422	33.97	ppm	-0.01
Spiked Amount 50.000	Range 11 - 58		Recovery = 67.94%#			
3) Phenol-d5	6.311	99	1954734	28.03	ppm	-0.03
Spiked Amount 50.000			Recovery = 56.06%			
6) Nitrobenzene-d5	7.833	82	2572815	41.15	ppm	-0.05
Spiked Amount 50.000			Recovery = 82.30%			
11) 2-Fluorobiphenyl	11.366	172	4161747	45.53	ppm	-0.05
Spiked Amount 50.000			Recovery = 91.06%			
17) 2,4,6-Tribromophenol	14.249	330	1127905	43.74	ppm	-0.02
Spiked Amount 50.000			Recovery = 87.48%			
25) Terphenyl-d14	18.676	244	5361709	45.94	ppm	-0.04
Spiked Amount 50.000			Recovery = 91.88%			
Target Compounds						Qvalue
4) Phenol	6.324	94	233435	3.27	ppm	60
5) bis(2-Chloroethyl)ether	6.393	93	43759	0.81	ppm	97
7) Naphthalene	9.210	128	141649	0.79	ppm	97
8) Hexachlorobutadiene	9.519	225	32834	0.75	ppm	96
9) 2-Methylnaphthalene	10.579	142	74875	0.97	ppm	91
10) Hexachlorocyclopentadiene	10.937	237	16583	0.75	ppm	95
13) Acenaphthylene	12.343	152	108317	0.98	ppm	99
14) Acenaphthene	12.698	153	71247	1.00	ppm	99
15) Dibenzofuran	13.053	168	102174	0.96	ppm	82
16) Fluorene	13.724	166	110818	0.86	ppm	91
18) Hexachlorobenzene	14.837	284	46053	0.91	ppm	97
19) Pentachlorophenol	15.285	266	110897	5.36	ppm	85
20) Phenanthrene	15.641	178	172358	0.99	ppm	99
21) Anthracene	15.733	178	164752	1.00	ppm	99
23) Fluoranthene	17.904	202	190660	0.82	ppm	97
24) Pyrene	18.280	202	202892	0.88	ppm	83
26) Benzo[a]anthracene	20.389	228	166219	0.78	ppm	97
27) Chrysene	20.446	228	157785	0.76	ppm	77
29) Benzo[b]fluoranthene	22.043	252	141478	0.58	ppm	93
30) Benzo[k]fluoranthene	22.084	252	144988	0.71	ppm	94
31) Benzo[a]pyrene	22.497	252	123761	0.62	ppm	95
32) Indeno[1,2,3-cd]pyrene	24.026	276	114944	0.46	ppm	97
33) Dibenz[a,h]anthracene	24.053	278	98871	0.49	ppm	92
34) Benzo[g,h,i]perylene	24.411	276	93470	0.44	ppm	99
36) 1,4-Dioxane	2.430	88	9420	0.49	ppm	95
39) 4,6-dinitro-2-methylph...	13.915	198	99691	6.91	ppm	91
40) 1,2-Diphenylhydrazine	14.082	77	95885	0.84	ppm	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2885\
Data File : 4m64823.D
Acq On : 19 Apr 2016 2:06 am
Operator : linseyk
Sample : op93128a-msd
Misc : op93128a,e4m2885,500
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Apr 19 12:01:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Mon Apr 18 16:04:01 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) n-nitrosodiphenylamine	14.034	169	65798	0.77	ppm	87

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

7.4.6

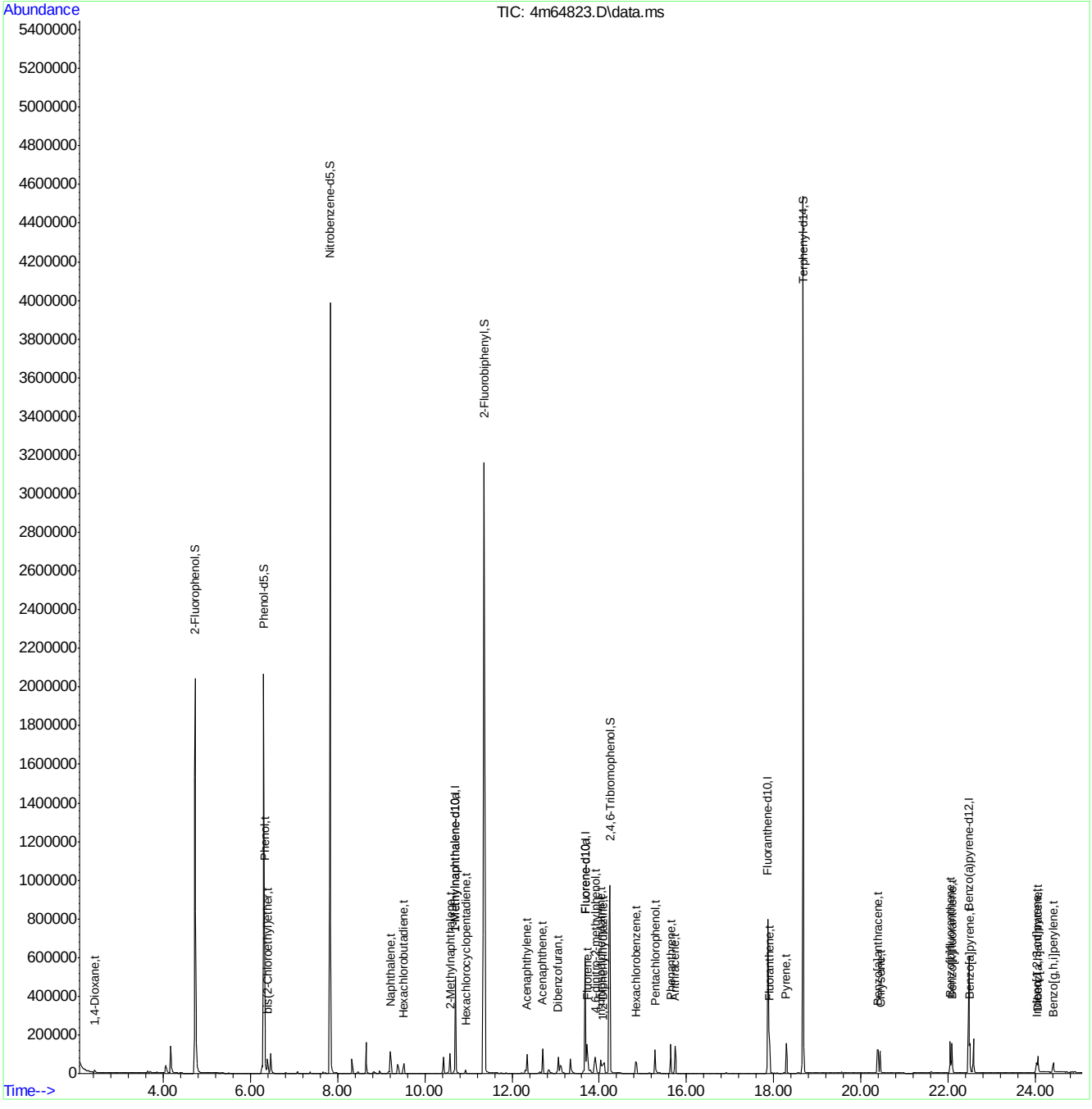
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2885\
Data File : 4m64823.D
Acq On : 19 Apr 2016 2:06 am
Operator : linseyk
Sample : op93128a-msd
Misc : op93128a,e4m2885,500
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Apr 19 12:01:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Mon Apr 18 16:04:01 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2900\
Data File : 4m65051.D
Acq On : 2 May 2016 1:50 pm
Operator : linseyk
Sample : op93218a-ms
Misc : op93218a,e4m2900,30.2
ALS Vial : 24 Sample Multiplier: 1

Quant Time: May 02 15:42:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Sat Apr 23 14:44:32 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1-Methylnaphthalene-d10	10.654	152	160268	4.00	ppm		#-0.04
12) Fluorene-d10	13.632	176	266988	4.00	ppm		-0.04
22) Fluoranthene-d10	17.836	212	518097	4.00	ppm		-0.03
28) Benzo(a)pyrene-d12	22.422	264	399895	4.00	ppm		0.00
35) 1-Methylnaphthalene-d10a	10.654	152	160268	4.00	ppm		#-0.04
38) Fluorene-d10a	13.632	176	266988	4.00	ppm		-0.04
System Monitoring Compounds							
2) 2-Fluorophenol	4.704	112	903270	43.04	ppm		-0.02
Spiked Amount 50.000	Range 11 - 58		Recovery = 86.08%#				
3) Phenol-d5	6.287	99	1515260	42.94	ppm		-0.02
Spiked Amount 50.000			Recovery = 85.88%				
6) Nitrobenzene-d5	7.806	82	1386994	43.83	ppm		-0.04
Spiked Amount 50.000			Recovery = 87.66%				
11) 2-Fluorobiphenyl	11.322	172	2516126	54.39	ppm		-0.04
Spiked Amount 50.000			Recovery = 108.78%				
17) 2,4,6-Tribromophenol	14.206	330	840760	59.04	ppm		-0.02
Spiked Amount 50.000			Recovery = 118.08%				
25) Terphenyl-d14	18.627	244	3336518	47.67	ppm		-0.05
Spiked Amount 50.000			Recovery = 95.34%				
Target Compounds							Qvalue
4) Phenol	6.301	94	165513	4.58	ppm		71
5) bis(2-Chloroethyl)ether	6.370	93	23895	0.88	ppm	#	68
7) Naphthalene	9.183	128	77873	0.86	ppm		100
8) Hexachlorobutadiene	9.477	225	17812	0.80	ppm		71
9) 2-Methylnaphthalene	10.535	142	36021	0.92	ppm		65
10) Hexachlorocyclopentadiene	10.893	237	5012	0.50	ppm		67
13) Acenaphthylene	12.303	152	67945	1.11	ppm		96
14) Acenaphthene	12.658	153	44781	1.14	ppm		91
15) Dibenzofuran	13.013	168	55902	0.95	ppm		88
16) Fluorene	13.704	166	57925	0.81	ppm		76
18) Hexachlorobenzene	14.810	284	30127	1.08	ppm		81
19) Pentachlorophenol	15.243	266	78976	6.91	ppm		90
20) Phenanthrene	15.598	178	113137	1.18	ppm		98
21) Anthracene	15.691	178	110292	1.21	ppm		97
23) Fluoranthene	17.855	202	142032	1.02	ppm		95
24) Pyrene	18.250	202	152410	1.11	ppm		91
26) Benzo[a]anthracene	20.340	228	159684	1.25	ppm	#	88
27) Chrysene	20.396	228	154764	1.24	ppm		90
29) Benzo[b]fluoranthene	21.995	252	166043	1.15	ppm		94
30) Benzo[k]fluoranthene	22.037	252	129720	1.08	ppm		98
31) Benzo[a]pyrene	22.450	252	129344	1.08	ppm		95
32) Indeno[1,2,3-cd]pyrene	23.964	276	165763	1.11	ppm		99
33) Dibenz[a,h]anthracene	23.992	278	135586	1.13	ppm		92
34) Benzo[g,h,i]perylene	24.350	276	140026	1.11	ppm		98
36) 1,4-Dioxane	2.445	88	7932	0.76	ppm	#	78
39) 4,6-dinitro-2-methylph...	13.871	198	33166	4.55	ppm		52
40) 1,2-Diphenylhydrazine	14.062	77	67489	1.07	ppm		88

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2900\
Data File : 4m65051.D
Acq On : 2 May 2016 1:50 pm
Operator : linseyk
Sample : op93218a-ms
Misc : op93218a,e4m2900,30.2
ALS Vial : 24 Sample Multiplier: 1

Quant Time: May 02 15:42:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Sat Apr 23 14:44:32 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
41) n-nitrosodiphenylamine	14.014	169	50880	1.09 ppm	78

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

7.4.7

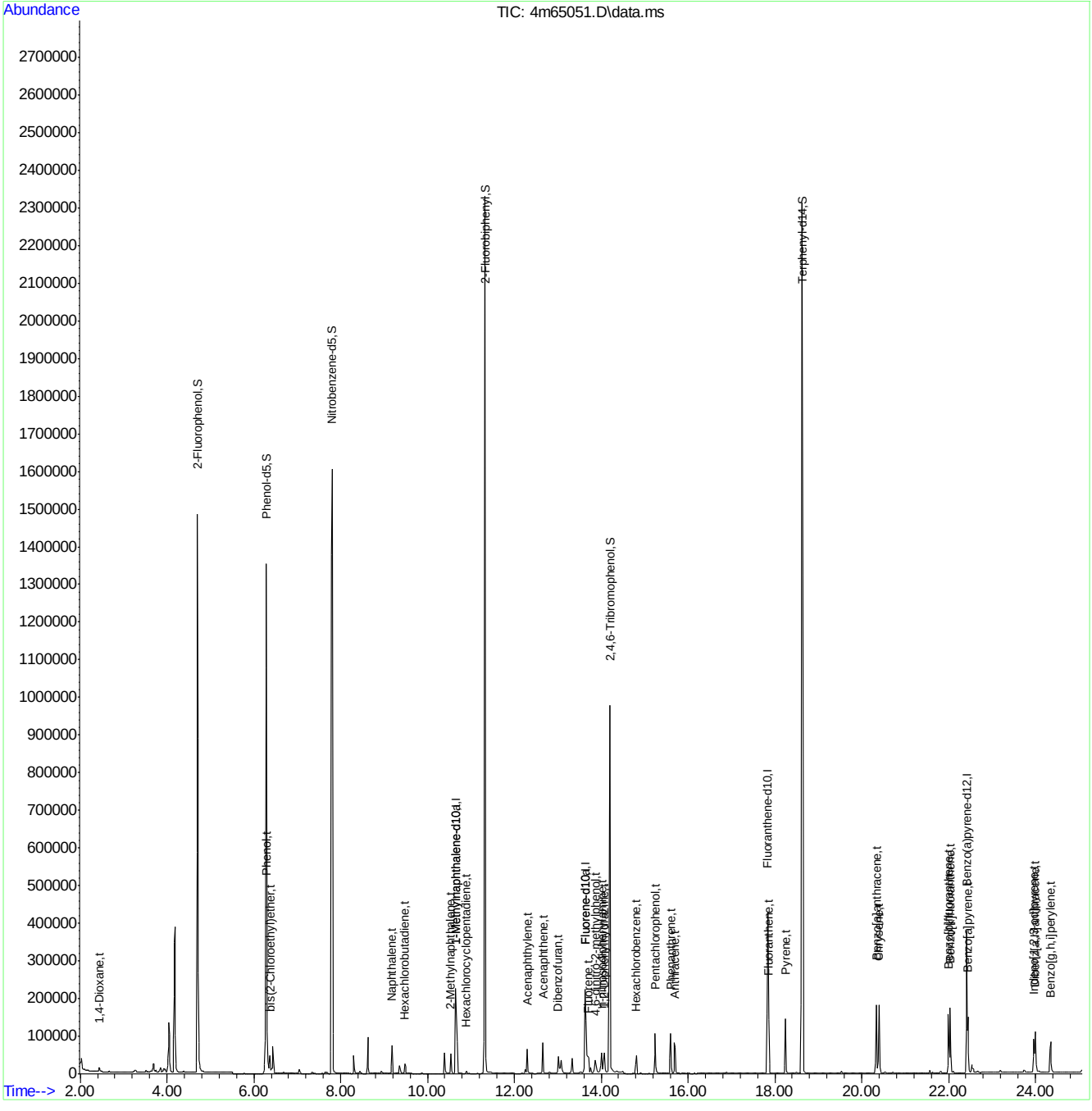
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2900\
Data File : 4m65051.D
Acq On : 2 May 2016 1:50 pm
Operator : linseyk
Sample : op93218a-ms
Misc : op93218a,e4m2900,30.2
ALS Vial : 24 Sample Multiplier: 1

Quant Time: May 02 15:42:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Sat Apr 23 14:44:32 2016
Response via : Initial Calibration



M4M2881SIM.M Mon May 02 15:42:19 2016 MANAGER Page: 3

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2900\
Data File : 4m65052.D
Acq On : 2 May 2016 2:22 pm
Operator : linseyk
Sample : op93218a-msd
Misc : op93218a,e4m2900,30.3
ALS Vial : 25 Sample Multiplier: 1

Quant Time: May 02 15:42:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Sat Apr 23 14:44:32 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1-Methylnaphthalene-d10	10.654	152	152382	4.00	ppm		#-0.04
12) Fluorene-d10	13.632	176	253375	4.00	ppm		-0.04
22) Fluoranthene-d10	17.836	212	500731	4.00	ppm		-0.03
28) Benzo(a)pyrene-d12	22.422	264	388852	4.00	ppm		0.00
35) 1-Methylnaphthalene-d10a	10.654	152	152382	4.00	ppm		#-0.04
38) Fluorene-d10a	13.632	176	253375	4.00	ppm		#-0.04
System Monitoring Compounds							
2) 2-Fluorophenol	4.704	112	887015	44.46	ppm		-0.02
Spiked Amount 50.000	Range 11 - 58		Recovery = 88.92%#				
3) Phenol-d5	6.273	99	1502431	44.78	ppm		-0.04
Spiked Amount 50.000			Recovery = 89.56%				
6) Nitrobenzene-d5	7.790	82	1363845	45.33	ppm		-0.05
Spiked Amount 50.000			Recovery = 90.66%				
11) 2-Fluorobiphenyl	11.322	172	2588625	58.86	ppm		-0.04
Spiked Amount 50.000			Recovery = 117.72%				
17) 2,4,6-Tribromophenol	14.205	330	824140	60.98	ppm		-0.02
Spiked Amount 50.000			Recovery = 121.96%				
25) Terphenyl-d14	18.627	244	3168256	46.83	ppm		-0.05
Spiked Amount 50.000			Recovery = 93.66%				
Target Compounds							Qvalue
4) Phenol	6.301	94	164440	4.78	ppm		97
5) bis(2-Chloroethyl)ether	6.370	93	23212	0.90	ppm	#	63
7) Naphthalene	9.183	128	77578	0.90	ppm		99
8) Hexachlorobutadiene	9.477	225	18242	0.86	ppm		72
9) 2-Methylnaphthalene	10.535	142	36586	0.98	ppm		68
10) Hexachlorocyclopentadiene	10.893	237	8041	0.75	ppm		68
13) Acenaphthylene	12.303	152	68892	1.19	ppm		96
14) Acenaphthene	12.658	153	46248	1.24	ppm		91
15) Dibenzofuran	13.013	168	56036	1.01	ppm		99
16) Fluorene	13.704	166	58002	0.86	ppm		77
18) Hexachlorobenzene	14.810	284	29128	1.10	ppm		80
19) Pentachlorophenol	15.243	266	79126	7.30	ppm		90
20) Phenanthrene	15.598	178	110429	1.21	ppm		97
21) Anthracene	15.691	178	107003	1.24	ppm		96
23) Fluoranthene	17.855	202	133997	0.99	ppm		95
24) Pyrene	18.250	202	138677	1.04	ppm		93
26) Benzo[a]anthracene	20.340	228	128526	1.04	ppm	#	88
27) Chrysene	20.396	228	122930	1.02	ppm		90
29) Benzo[b]fluoranthene	21.995	252	135572	0.97	ppm		96
30) Benzo[k]fluoranthene	22.037	252	93313	0.80	ppm		97
31) Benzo[a]pyrene	22.450	252	105935	0.91	ppm		93
32) Indeno[1,2,3-cd]pyrene	23.964	276	129183	0.89	ppm		99
33) Dibenz[a,h]anthracene	23.992	278	106684	0.91	ppm		93
34) Benzo[g,h,i]perylene	24.350	276	109602	0.89	ppm		98
36) 1,4-Dioxane	2.434	88	8442	0.85	ppm	#	78
39) 4,6-dinitro-2-methylph...	13.871	198	39430	5.49	ppm		54
40) 1,2-Diphenylhydrazine	14.062	77	67006	1.12	ppm		88

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2900\
Data File : 4m65052.D
Acq On : 2 May 2016 2:22 pm
Operator : linseyk
Sample : op93218a-msd
Misc : op93218a,e4m2900,30.3
ALS Vial : 25 Sample Multiplier: 1

Quant Time: May 02 15:42:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Sat Apr 23 14:44:32 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) n-nitrosodiphenylamine	14.014	169	49921	1.12	ppm	78

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

7.4.8

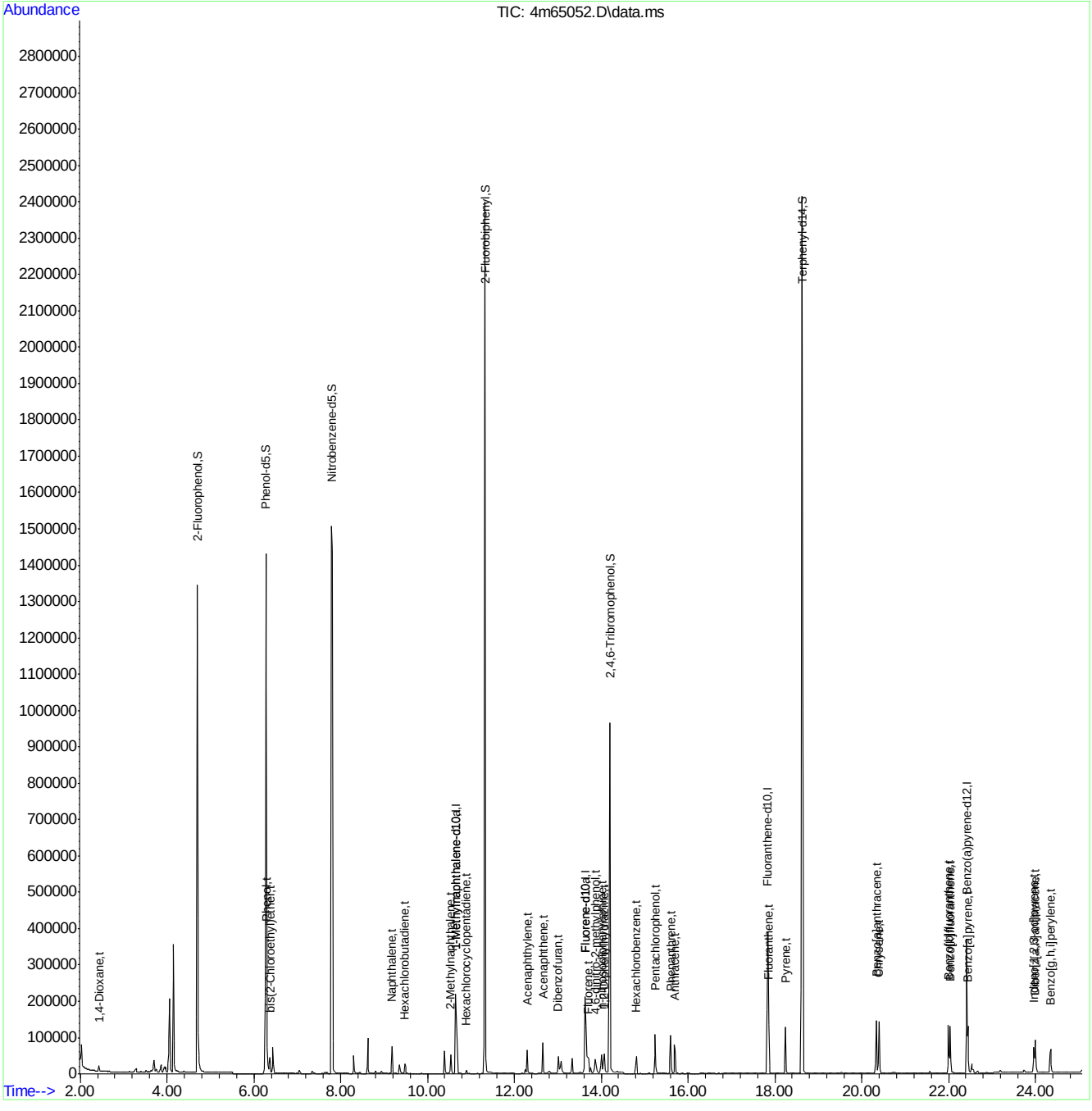
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2900\
Data File : 4m65052.D
Acq On : 2 May 2016 2:22 pm
Operator : linseyk
Sample : op93218a-msd
Misc : op93218a,e4m2900,30.3
ALS Vial : 25 Sample Multiplier: 1

Quant Time: May 02 15:42:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Sat Apr 23 14:44:32 2016
Response via : Initial Calibration



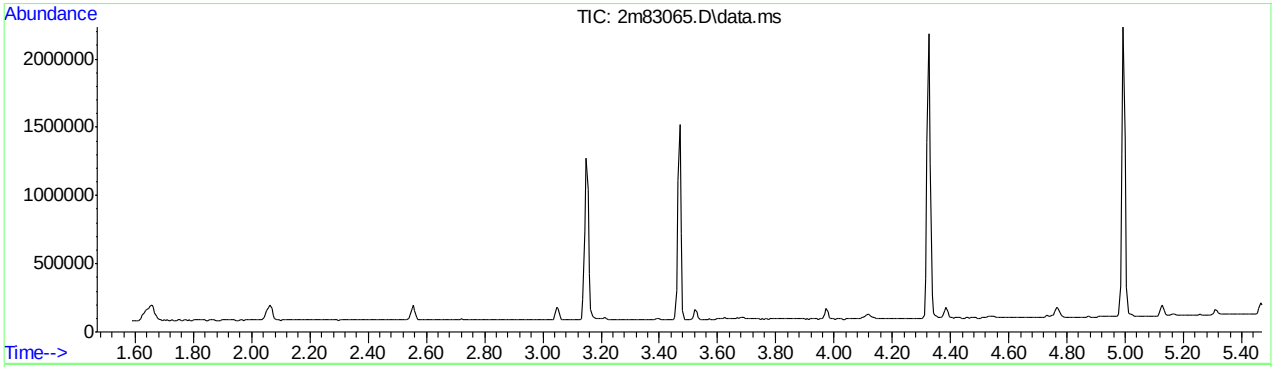
M4M2881SIM.M Mon May 02 15:42:44 2016 MANAGER Page: 3

DFTPP

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83065.D
Acq On : 15 Apr 2016 8:54 am
Operator : ashleyn
Sample : dftpp
Misc : op92470,e2m3649
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\dftpp2m.M
Title : Semi Volatile GC/MS,zb-5msi30mx .25mmx .25umMon TuThu Mar 24 11:54:32 2016
Last Update : Thu Mar 24 11:54:32 2016



AutoFind: Scans 352, 353, 354; Background Corrected with Scan 347

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	31.9	37940	PASS
68	69	0.00	2	1.4	639	PASS
69	198	0.00	100	39.3	46753	PASS
70	69	0.00	2	0.3	130	PASS
127	198	40	60	56.4	66973	PASS
197	198	0.00	1	0.5	632	PASS
198	198	100	100	100.0	118837	PASS
199	198	5	9	6.7	7926	PASS
275	198	10	30	24.8	29432	PASS
365	198	1	100	3.5	4151	PASS
441	443	0.10	100	70.6	13293	PASS
442	198	40	100	81.2	96506	PASS
443	442	17	23	19.5	18829	PASS

SGS ACCUTEST JC18516

Average of 3.464 to 3.475 min.: 2m83065.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
38.00	290	58.00	113	70.00	130	82.00	937
39.05	2435	59.95	52	71.05	47	82.95	909
40.00	86	61.05	504	73.05	265	85.00	530
45.00	41	62.00	585	74.05	4421	87.00	390
50.05	9741	63.10	1841	75.10	7535	88.95	136
51.05	37940	64.00	233	76.10	2806	91.00	819
52.05	2019	64.95	911	77.05	58880	92.00	995
53.00	33	65.95	15	78.05	4283	93.00	5719
55.00	79	66.95	15	79.00	3225	94.00	339
56.00	1072	68.05	639	79.95	2658	95.00	126
57.00	2566	69.00	46753	80.95	3902	95.95	361

Average of 3.464 to 3.475 min.: 2m83065.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
96.90	122	108.05	2980	118.95	201	130.00	2165
98.00	4222	109.00	541	120.00	232	131.00	445
99.00	3803	110.00	34410	120.95	123	132.00	206
100.00	332	111.00	5041	122.05	1222	132.95	91
101.00	2260	112.00	551	123.00	1829	134.00	662
101.95	158	112.95	251	124.00	823	135.00	2013
102.95	701	113.95	53	125.00	854	136.00	826
104.00	1314	114.90	34	126.15	340	137.10	1083
105.00	1397	116.05	995	127.10	66973	138.00	235
105.95	393	117.00	12815	128.05	5159	138.95	163
107.00	17506	118.00	954	129.00	25263	139.95	279

Average of 3.464 to 3.475 min.: 2m83065.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
141.00	3091	151.95	222	162.95	125	174.00	1247
142.05	1051	153.00	1033	163.95	164	175.05	2337
143.00	610	154.00	657	165.00	1180	176.10	735
144.00	197	155.05	1688	166.00	975	177.00	1045
145.05	178	156.10	2815	166.95	6255	178.00	356
146.00	529	157.05	505	168.00	3146	179.00	4418
147.00	1545	158.00	525	169.05	536	180.10	3138
148.00	3762	159.00	433	169.95	193	181.00	1507
149.00	652	160.00	1011	170.90	229	182.05	259
150.00	197	161.00	1315	172.00	575	182.95	141
151.00	295	162.05	407	173.00	736	184.00	336

Average of 3.464 to 3.475 min.: 2m83065.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
185.00	2086	194.90	143	206.10	28538	216.00	617
186.10	16833	195.10	96	207.10	3611	217.00	7122
187.10	4729	196.05	3640	208.00	1001	218.05	862
188.05	504	197.10	632	209.00	262	218.90	21
189.00	1016	198.00	118837	210.10	451	219.05	61
189.90	102	199.00	7926	211.10	1005	220.10	51
190.10	39	200.00	579	211.70	85	221.05	5621
191.05	512	201.50	455	212.00	95	222.10	419
192.05	1373	203.00	799	212.95	78	223.00	1505
193.05	1496	204.10	4004	214.00	17	224.10	15262
194.00	309	205.10	6616	214.95	291	225.10	3944

Average of 3.464 to 3.475 min.: 2m83065.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
226.10	409	237.00	539	247.95	120	259.00	623
227.10	6236	238.00	75	249.00	412	259.95	101
228.00	918	239.00	232	249.90	101	260.95	100
229.05	1352	239.95	201	251.05	140	262.90	22

230.05	166	241.00	323	252.05	155	263.90	38
231.05	528	242.10	747	253.00	252	265.00	1388
232.05	136	243.10	784	254.05	537	265.90	174
233.00	122	244.10	11661	255.10	61797	266.95	41
234.00	357	245.10	1593	256.10	9238	267.90	10
235.00	531	246.05	2189	257.05	676	269.00	28
236.00	273	247.00	437	258.05	3502	269.95	90

Average of 3.464 to 3.475 min.: 2m83065.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
271.00	103	281.95	102	292.05	98	303.10	1036
272.00	64	283.05	225	293.05	507	304.00	290
272.15	118	283.85	75	294.00	163	308.00	117
273.05	1981	284.10	160	294.95	156	308.95	88
274.10	5162	285.05	434	296.10	7969	309.70	21
275.10	29432	286.00	89	297.05	1142	310.05	99
276.10	3996	288.00	23	297.95	82	310.90	20
277.05	2291	289.00	67	300.90	25	312.95	54
278.00	405	289.95	78	301.05	72	314.00	482
279.00	108	291.00	83	301.90	39	315.05	933
281.05	2	291.80	25	302.10	101	316.05	500

Average of 3.464 to 3.475 min.: 2m83065.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
317.05	82	329.90	18	347.00	108	370.00	93
320.00	27	332.05	258	351.00	50	371.00	261
320.90	263	333.05	332	352.05	936	372.10	1849
321.95	151	334.10	2074	353.05	657	373.05	473
323.10	2860	335.05	542	354.05	984	374.00	32
324.05	583	336.00	69	355.05	202	377.10	35
325.00	42	339.10	33	359.00	93	383.00	497
326.00	31	341.05	346	364.00	34	383.95	142
327.05	557	342.05	101	365.00	4151	385.00	42
327.95	301	345.20	19	366.00	634	390.00	244
329.10	60	346.05	676	367.00	22	391.00	155

Average of 3.464 to 3.475 min.: 2m83065.D\data.ms
dftpp
Modified:subtracted

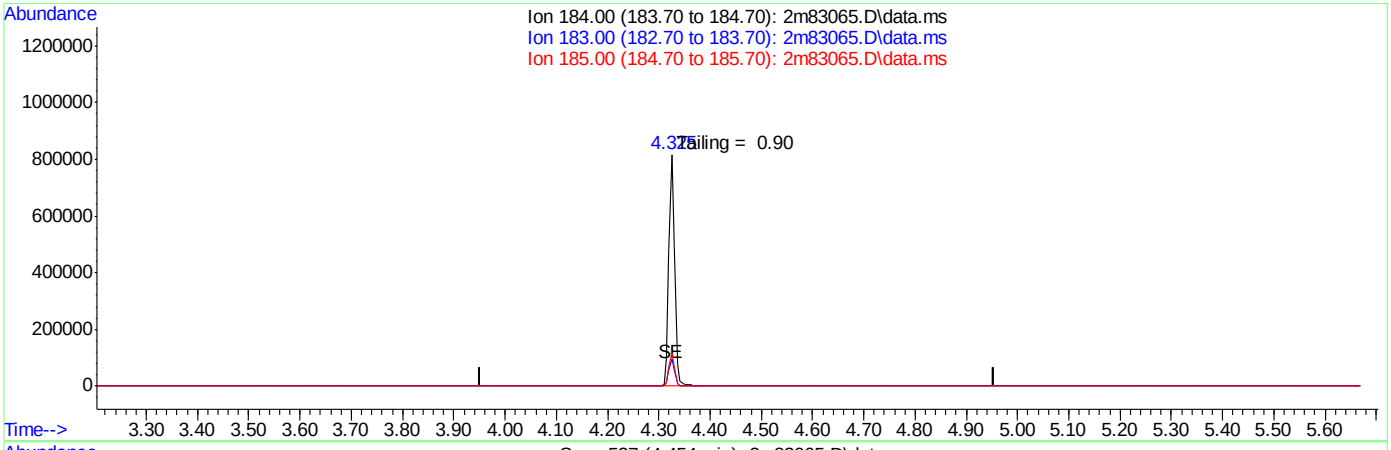
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
392.00	122	424.10	1423				
401.05	110	425.00	144				
402.00	666	429.20	17				
403.05	1101	440.20	17				
404.05	377	441.10	13293				
405.05	58	442.10	96506				
410.00	27	443.10	18829				
415.00	83	444.10	1711				
421.00	889	445.05	90				
422.10	824						
423.10	6831						

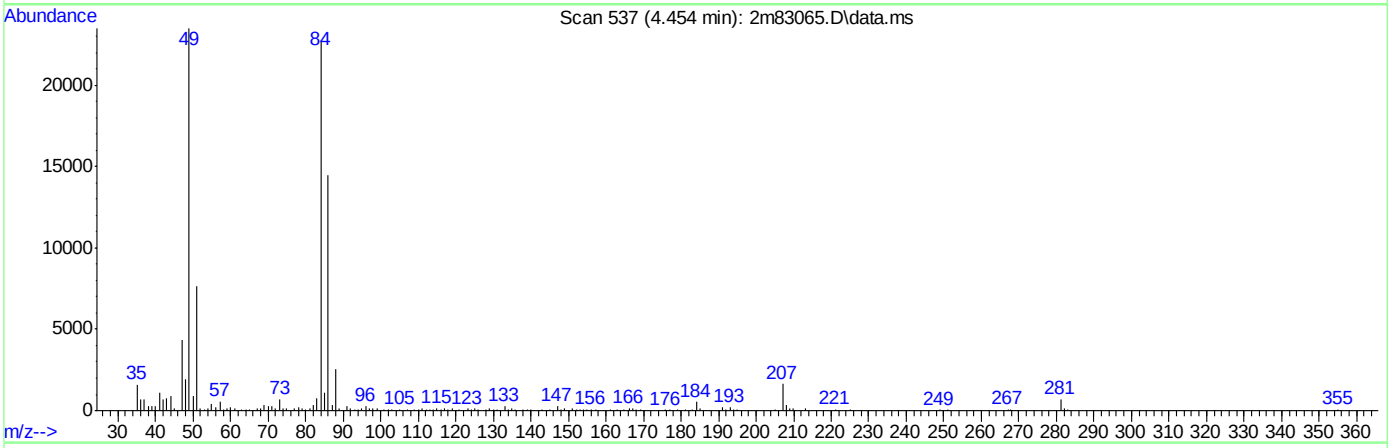
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83065.D
Acq On : 15 Apr 2016 8:54 am
Operator : ashleyn
Sample : dftpp
Misc : op92470,e2m3649
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 15 09:05:14 2016
Quant Method : C:\msdchem\1\METHODS\dftpp2m.M
Quant Title : Semi Volatile GC/MS,zb-5msi30mx .25mmx .25umMon TuThu Mar 24 11:54:32 2016
QLast Update : Thu Mar 24 11:54:32 2016
Response via : Initial Calibration





TIC: 2m83065.D\data.ms

(1) Benzidine

4.454min (-4.454) 0.00

response 0

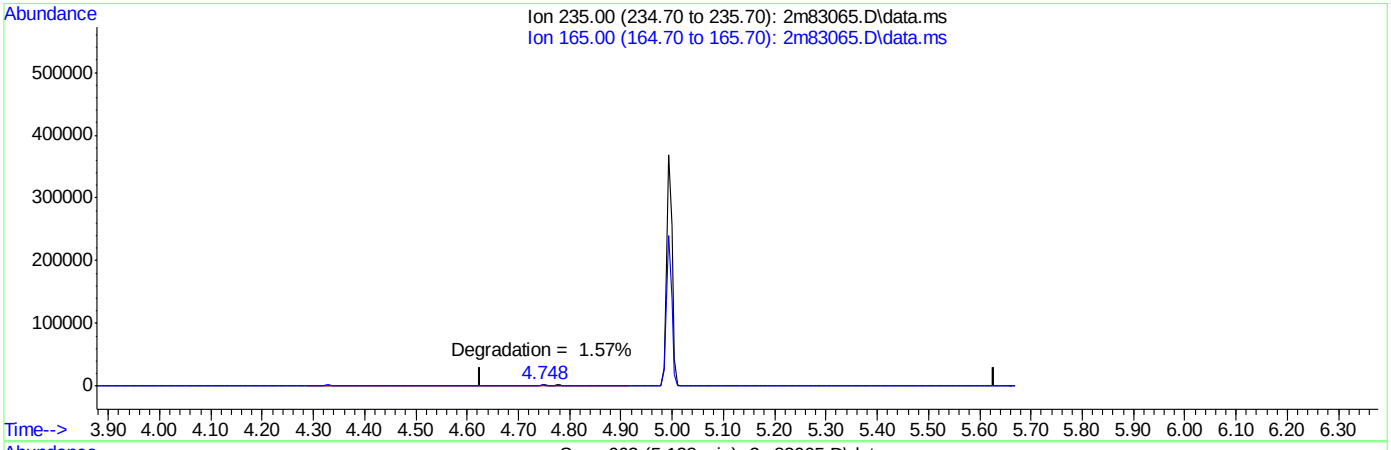
Ion	Exp%	Act%
184.00	100	0.00
183.00	0.00	0.00
185.00	0.00	0.00
0.00	0.00	0.00

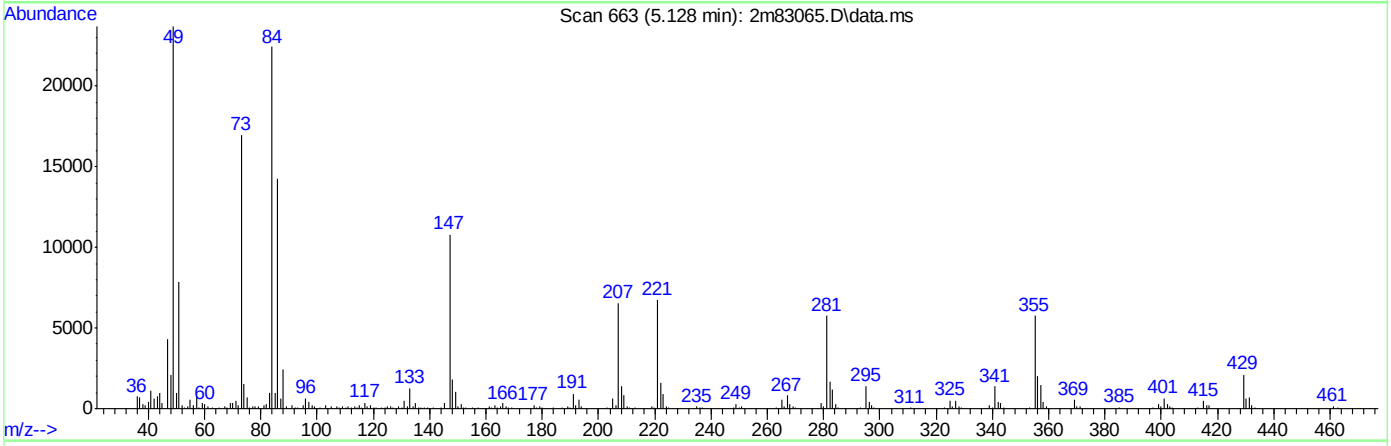
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83065.D
Acq On : 15 Apr 2016 8:54 am
Operator : ashleyn
Sample : dftpp
Misc : op92470,e2m3649
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 15 09:05:14 2016
Quant Method : C:\msdchem\1\METHODS\dftpp2m.M
Quant Title : Semi Volatile GC/MS,zb-5msi30mx .25mmx .25umMon TuThu Mar 24 11:54:32 2016
QLast Update : Thu Mar 24 11:54:32 2016
Response via : Initial Calibration





TIC: 2m83065.D\data.ms

(2) ddt

5.128min (-5.128) 0.00

response 0

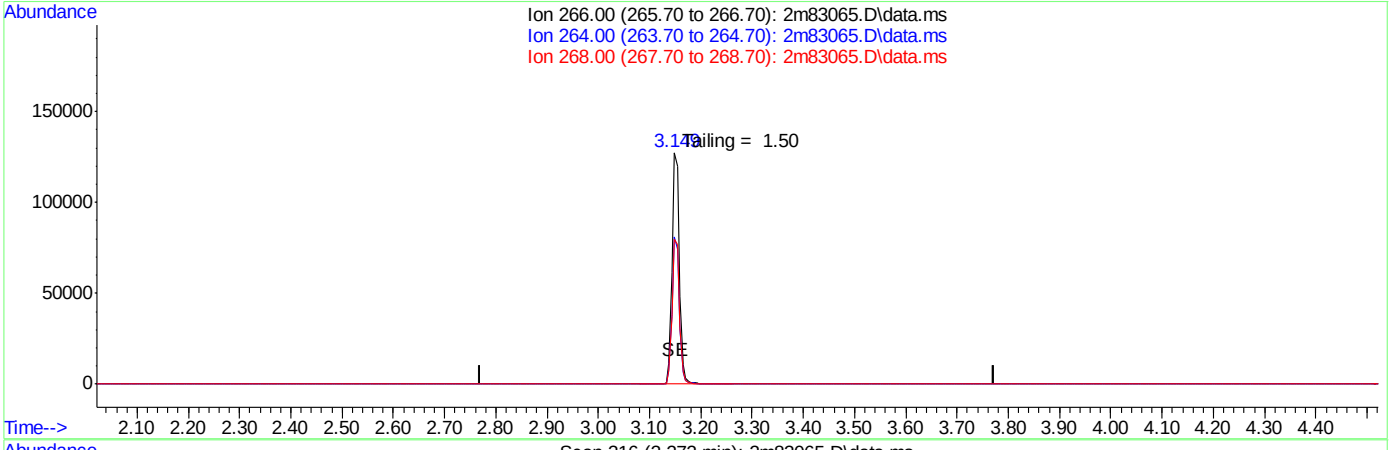
Ion	Exp%	Act%
235.00	100	0.00
165.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

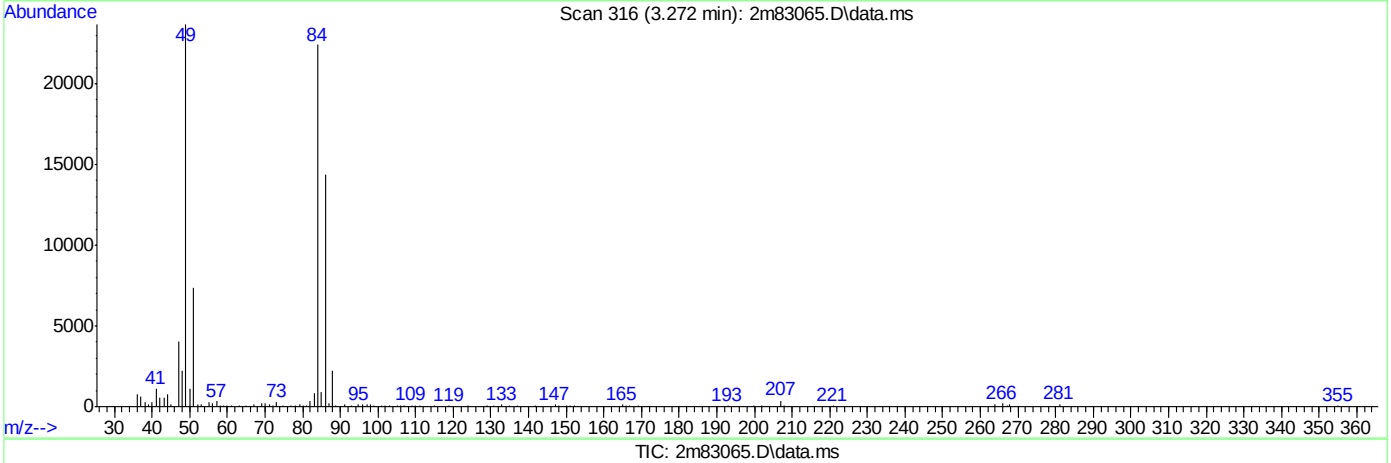
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83065.D
Acq On    : 15 Apr 2016   8:54 am
Operator  : ashleyn
Sample    : dftpp
Misc      : op92470,e2m3649
ALS Vial  : 1   Sample Multiplier: 1

Quant Time: Apr 15 09:05:14 2016
Quant Method : C:\msdchem\1\METHODS\dftpp2m.M
Quant Title  : Semi Volatile GC/MS,zb-5msi30mx .25mmx .25umMon TuThu Mar 24 11:54:32 2016
QLast Update : Thu Mar 24 11:54:32 2016
Response via : Initial Calibration
```





TIC: 2m83065.D\data.ms

(3) Pentachlorophenol

3.272min (-3.272) 0.00

response 0

Ion	Exp%	Act%
266.00	100	0.00
264.00	0.00	0.00
268.00	0.00	0.00
0.00	0.00	0.00

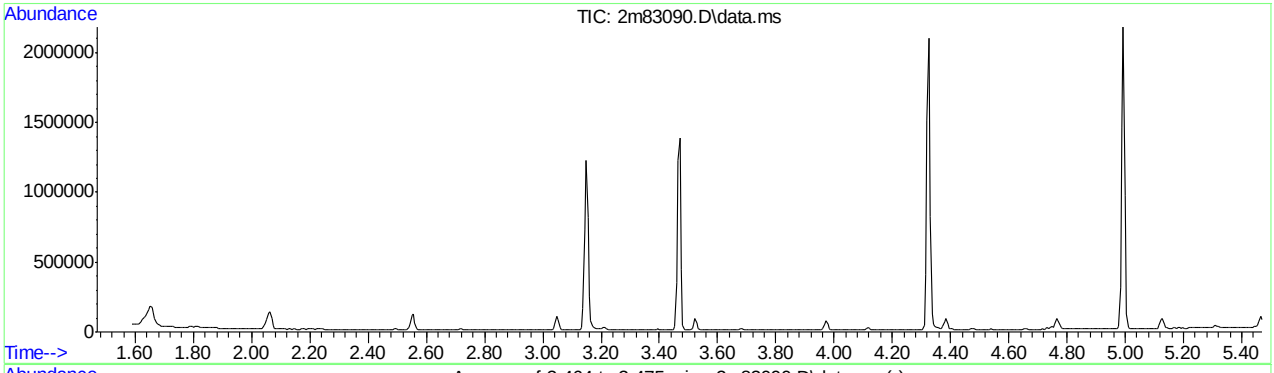
SGS ACCUTEST JC18516

DFTPP

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83090.D
Acq On : 15 Apr 2016 3:07 pm
Operator : ashleyn
Sample : dftpp
Misc : op92470,e2m3651
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\dftpp2m.M
Title : Semi Volatile GC/MS,zb-5msi30mx .25mmx .25umMon TuThu Mar 24 11:54:32 2016
Last Update : Thu Mar 24 11:54:32 2016



AutoFind: Scans 352, 353, 354; Background Corrected with Scan 346

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	30.3	35073	PASS
68	69	0.00	2	1.5	641	PASS
69	198	0.00	100	36.9	42662	PASS
70	69	0.00	2	0.6	262	PASS
127	198	40	60	53.6	62040	PASS
197	198	0.00	1	0.7	757	PASS
198	198	100	100	100.0	115669	PASS
199	198	5	9	6.6	7581	PASS
275	198	10	30	25.5	29541	PASS
365	198	1	100	3.8	4378	PASS
441	443	0.10	100	71.6	14617	PASS
442	198	40	100	89.3	103277	PASS
443	442	17	23	19.8	20423	PASS

SGS ACCUTEST JC18516

Average of 3.464 to 3.475 min.: 2m83090.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.00	71	54.20	22	65.10	852	76.10	2432
38.00	339	55.05	123	66.05	49	77.10	53691
39.05	2235	56.00	1133	67.00	8	78.05	3536
40.00	10	57.00	2531	68.05	641	79.00	3206
45.05	110	58.00	144	69.00	42662	80.00	2523
47.00	6	58.95	63	70.00	262	81.00	3693
47.95	10	60.05	50	70.90	19	82.00	831
50.10	8849	61.00	391	71.10	18	82.95	714
51.05	35073	62.00	513	73.00	343	85.00	687
52.10	1954	63.00	1668	74.10	4349	86.00	776
53.00	82	64.00	179	75.05	6904	86.95	455

Average of 3.464 to 3.475 min.: 2m83090.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
87.95	150	100.00	334	111.00	4855	120.95	96
89.00	137	101.00	2169	112.00	529	122.00	1044
91.00	885	102.00	141	113.05	200	123.00	1697
92.00	877	103.00	636	113.80	23	124.00	751
93.00	5366	104.00	1417	114.05	50	125.00	726
94.00	439	105.00	1236	115.05	81	126.15	302
94.95	85	106.00	377	116.00	898	127.00	62040
95.95	286	107.00	16622	117.00	11872	128.00	4698
96.95	83	108.00	2691	118.00	933	129.00	23403
98.00	4146	109.00	477	119.00	149	130.00	2037
99.00	3747	110.00	31535	119.95	214	131.00	436

Average of 3.464 to 3.475 min.: 2m83090.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
132.05	188	143.00	687	153.00	994	164.00	166
132.95	71	144.00	196	154.00	692	165.00	1107
134.00	608	144.95	148	155.05	1611	166.00	892
135.00	1853	146.00	568	156.10	2657	167.00	5716
136.00	837	147.00	1425	157.00	425	168.05	2908
137.05	1140	148.00	3301	157.95	540	169.00	548
138.00	217	149.05	785	159.00	482	170.05	191
138.90	123	150.00	216	160.00	913	171.00	252
140.00	241	151.00	342	161.00	1482	172.00	554
141.00	2993	151.50	31	162.00	320	173.05	709
142.00	911	151.90	89	163.05	97	174.05	1211

Average of 3.464 to 3.475 min.: 2m83090.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
175.10	2264	185.05	1873	196.10	3284	207.05	3663
176.10	574	186.10	15800	197.10	757	208.00	826
177.00	1016	187.10	4447	198.00	115669	208.95	220
177.90	330	188.05	469	199.00	7581	210.20	401
179.00	4291	189.00	933	200.00	680	211.00	1083
180.05	2867	189.90	159	200.80	17	212.05	133
181.05	1349	191.00	341	201.60	501	213.05	59
182.00	247	192.00	1338	203.00	728	215.00	357
183.00	72	193.05	1453	204.10	3869	216.05	548
183.20	46	194.10	300	205.10	6423	217.00	7036
184.00	383	195.05	179	206.10	27478	218.00	929

Average of 3.464 to 3.475 min.: 2m83090.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
218.95	75	230.00	164	240.00	120	251.10	81
219.60	22	231.00	481	240.95	313	251.85	87
221.10	5261	232.00	73	242.10	795	252.10	23
222.00	123	232.95	136	243.10	834	253.05	266

dftpp2m.M Fri Apr 15 17:47:56 2016 Page: 2

223.05	1585	234.00	387	244.10	11373	254.00	136
224.10	14802	235.00	412	245.10	1526	254.20	352
225.10	3895	236.00	296	246.05	2177	255.10	61197
226.00	413	237.00	482	247.00	501	256.10	8941
227.05	6022	238.05	76	248.00	122	257.05	677
228.00	805	239.00	234	249.00	469	258.05	3627
229.00	1228	239.80	63	250.00	86	259.00	615

Average of 3.464 to 3.475 min.: 2m83090.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
259.95	125	273.05	1720	285.05	470	297.95	101
260.95	121	274.10	4914	286.05	77	300.95	104
263.00	25	275.10	29541	289.00	122	301.95	125
263.90	87	276.10	4033	290.10	88	303.10	1076
265.00	1502	277.10	2500	291.00	21	304.00	259
265.90	201	278.00	409	292.05	117	305.10	41
267.00	23	278.95	76	293.00	533	308.05	117
267.90	24	281.05	20	294.00	142	309.00	71
270.00	68	282.00	98	295.05	151	310.00	110
271.10	146	283.00	230	296.10	8184	313.00	75
272.10	166	284.05	208	297.10	1143	314.05	426

Average of 3.464 to 3.475 min.: 2m83090.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
315.05	878	328.05	281	341.05	364	361.00	17
316.05	568	329.05	49	342.00	127	365.00	4378
317.00	126	332.00	196	346.00	657	366.00	615
320.00	21	333.00	290	346.95	105	366.90	17
321.05	302	334.10	1987	350.00	18	370.00	124
322.05	178	335.10	639	351.00	49	371.00	197
323.10	2907	335.90	17	352.10	882	372.10	1896
324.10	493	336.10	23	353.05	639	373.10	426
325.10	36	338.80	17	354.05	973	374.10	17
326.00	38	339.10	26	355.05	219	377.05	55
327.00	534	340.10	20	359.00	33	383.00	540

Average of 3.464 to 3.475 min.: 2m83090.D\data.ms
dftpp
Modified:subtracted

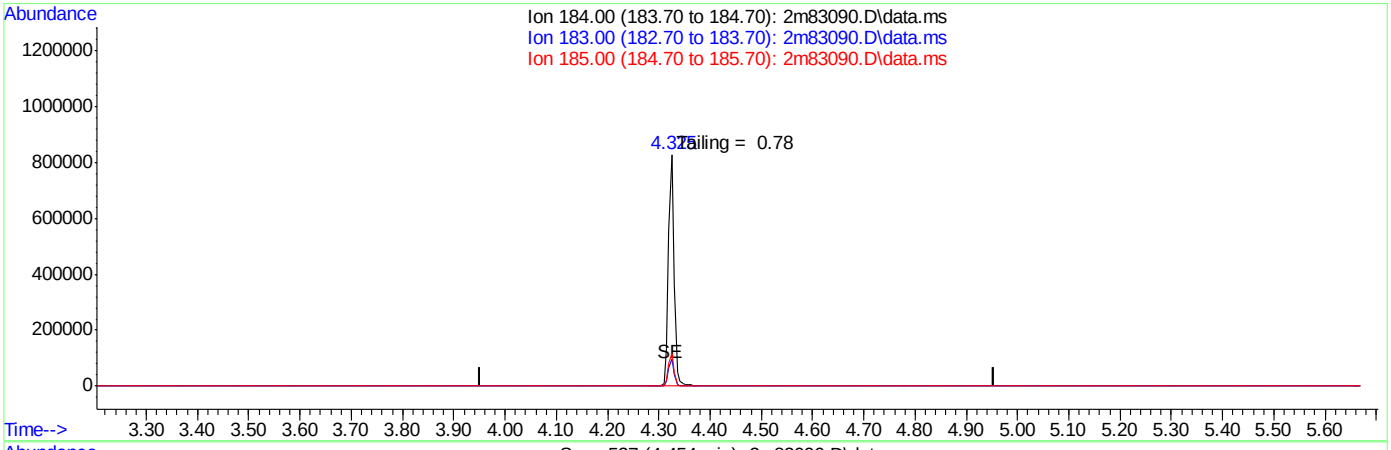
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
384.00	148	415.00	39	443.10	20423		
385.00	17	420.10	17	444.10	1940		
390.00	278	421.05	959	445.05	125		
391.10	200	422.05	876				
392.05	97	423.10	6873				
401.05	113	424.10	1567				
402.05	796	425.05	178				
403.10	1207	434.10	21				
404.00	385	434.90	17				
405.00	18	441.10	14617				
410.00	19	442.10	103277				

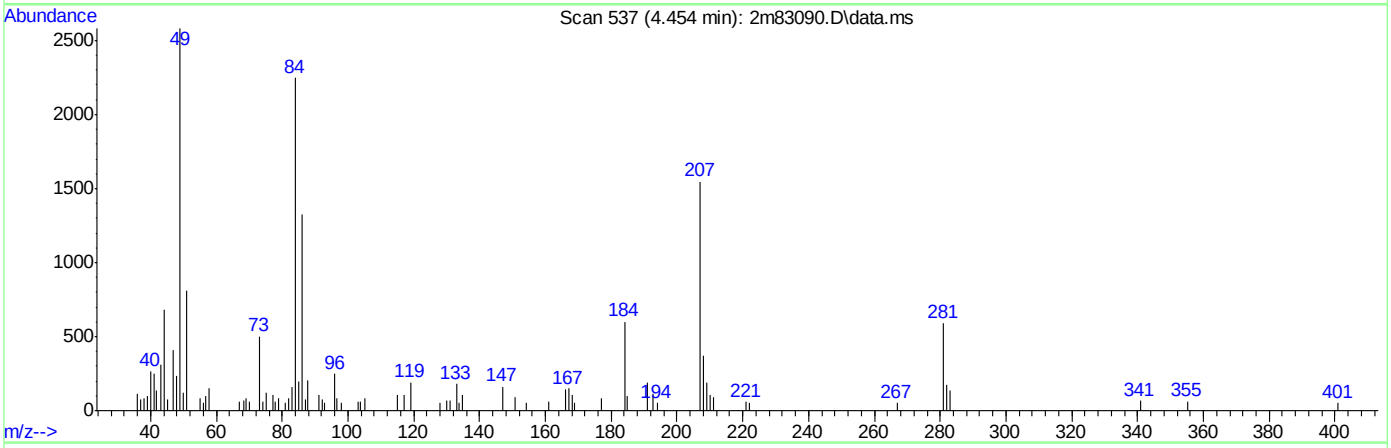
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83090.D
Acq On : 15 Apr 2016 3:07 pm
Operator : ashleyn
Sample : dftpp
Misc : op92470,e2m3651
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 15 15:16:23 2016
Quant Method : C:\msdchem\1\METHODS\dftpp2m.M
Quant Title : Semi Volatile GC/MS,zb-5msi30mx .25mmx .25umMon TuThu Mar 24 11:54:32 2016
QLast Update : Thu Mar 24 11:54:32 2016
Response via : Initial Calibration





TIC: 2m83090.D\data.ms

(1) Benzidine

4.454min (-4.454) 0.00

response 0

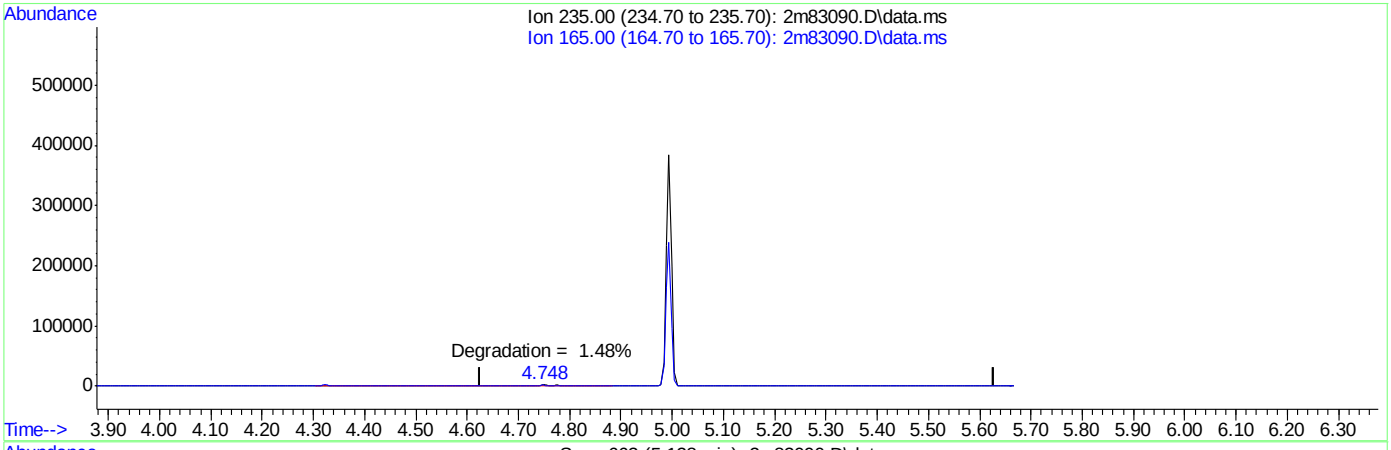
Ion	Exp%	Act%
184.00	100	0.00
183.00	0.00	0.00
185.00	0.00	0.00
0.00	0.00	0.00

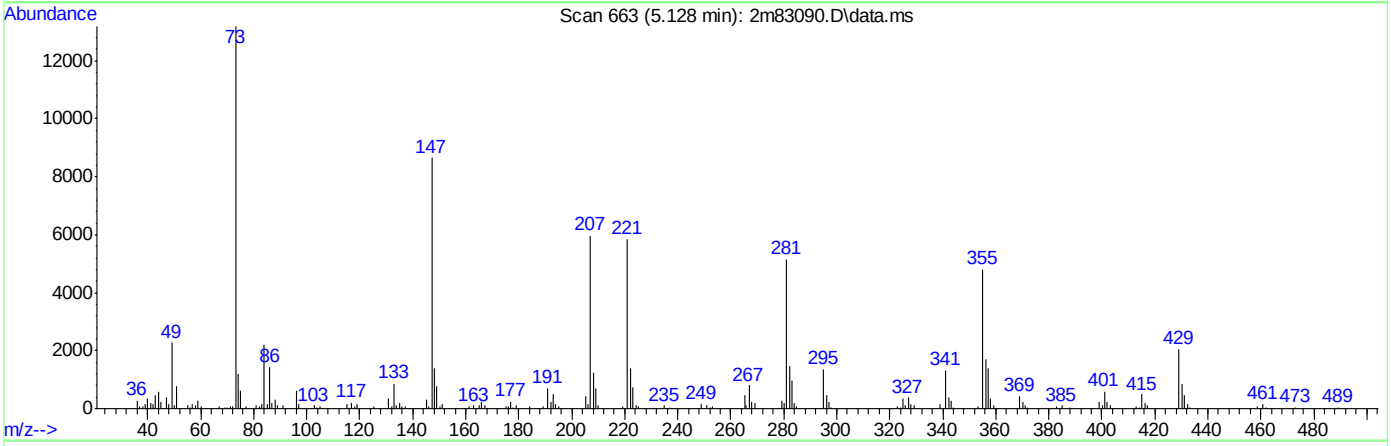
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83090.D
Acq On : 15 Apr 2016 3:07 pm
Operator : ashleyn
Sample : dftpp
Misc : op92470,e2m3651
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 15 15:16:23 2016
Quant Method : C:\msdchem\1\METHODS\dftpp2m.M
Quant Title : Semi Volatile GC/MS,zb-5msi30mx .25mmx .25umMon TuThu Mar 24 11:54:32 2016
QLast Update : Thu Mar 24 11:54:32 2016
Response via : Initial Calibration





TIC: 2m83090.D\data.ms

(2) ddt

5.128min (-5.128) 0.00

response 0

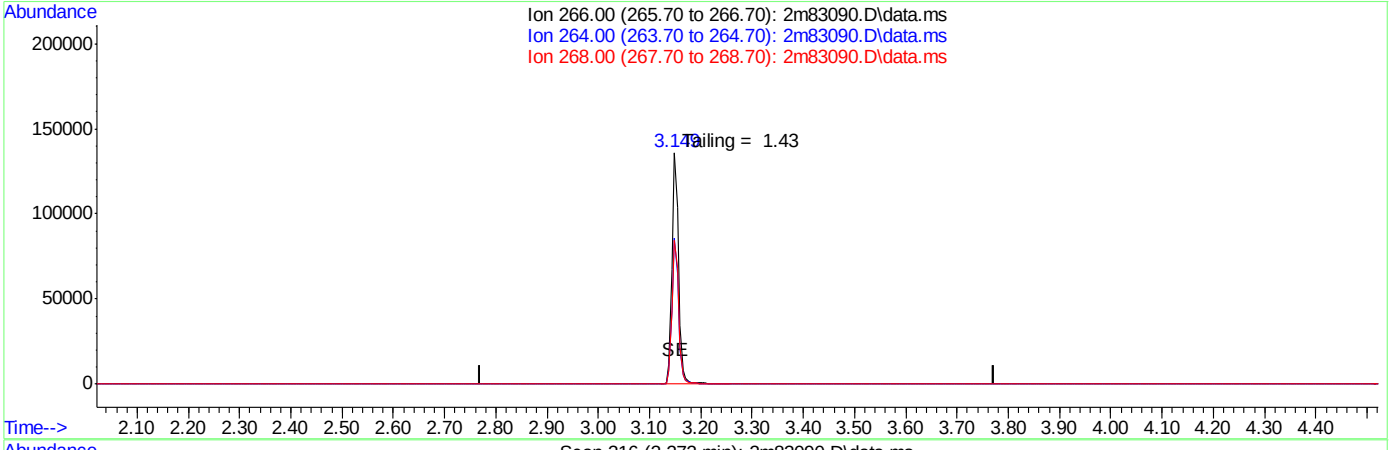
Ion	Exp%	Act%
235.00	100	0.00
165.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

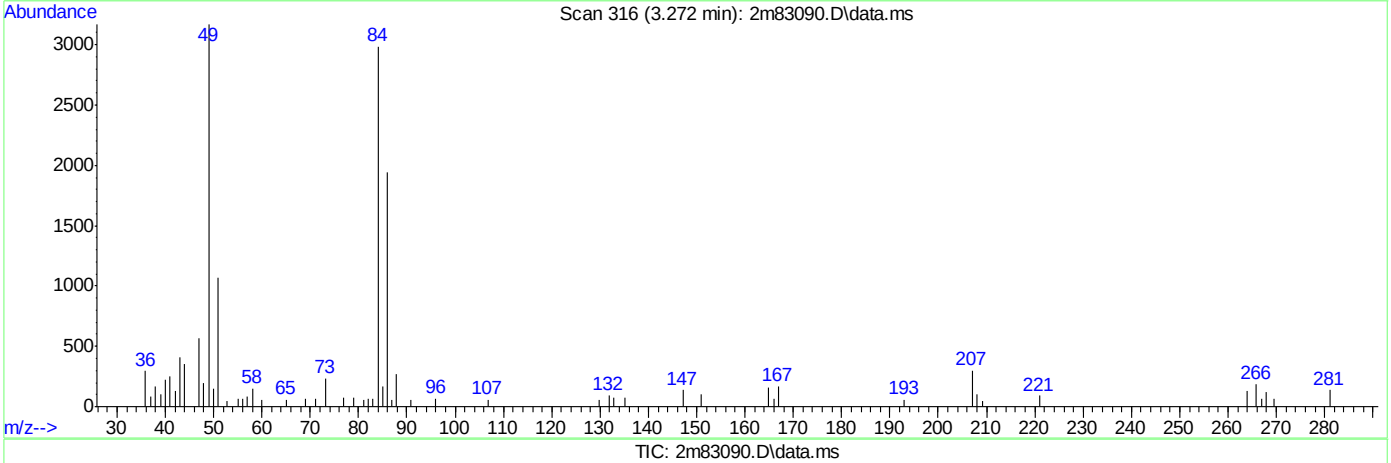
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83090.D
Acq On    : 15 Apr 2016   3:07 pm
Operator  : ashleyn
Sample    : dftpp
Misc      : op92470,e2m3651
ALS Vial  : 1   Sample Multiplier: 1

Quant Time: Apr 15 15:16:23 2016
Quant Method : C:\msdchem\1\METHODS\dftpp2m.M
Quant Title  : Semi Volatile GC/MS,zb-5msi30mx .25mmx .25umMon TuThu Mar 24 11:54:32 2016
QLast Update : Thu Mar 24 11:54:32 2016
Response via : Initial Calibration
```





TIC: 2m83090.D\data.ms

(3) Pentachlorophenol

3.272min (-3.272) 0.00

response 0

Ion	Exp%	Act%
266.00	100	0.00
264.00	0.00	0.00
268.00	0.00	0.00
0.00	0.00	0.00

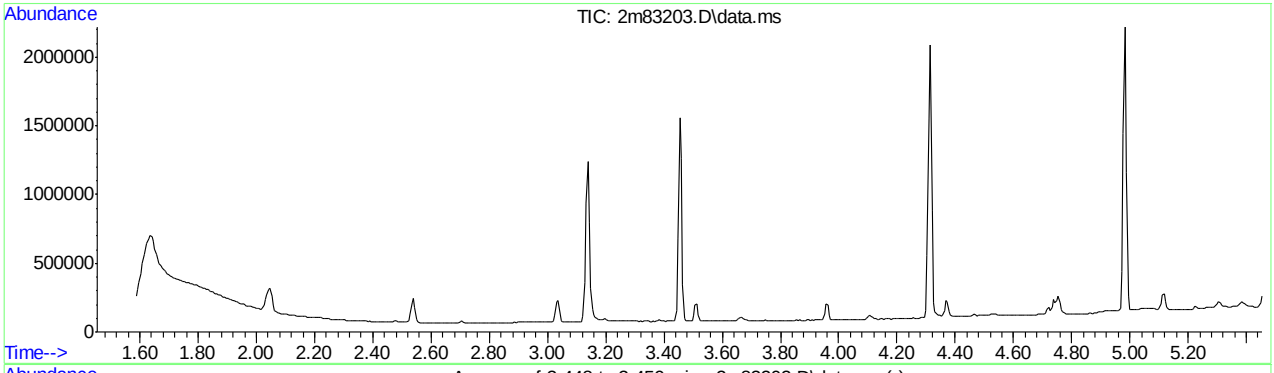
SGS ACCUTEST JC18516

DFTPP

Data Path : C:\msdchem\1\DATA\e2m3655\
Data File : 2m83203.D
Acq On : 20 Apr 2016 9:44 am
Operator : ashleyn
Sample : dftpp
Misc : op92330,e2m3655
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\msdchem\1\METHODS\dftpp2m.M
Title : Semi Volatile GC/MS,zb-5msi30mx .25mmx .25umMon TuThu Mar 24 11:54:32 2016
Last Update : Thu Mar 24 11:54:32 2016



AutoFind: Scans 349, 350, 351; Background Corrected with Scan 341

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	33.1	41865	PASS
68	69	0.00	2	1.2	620	PASS
69	198	0.00	100	39.3	49635	PASS
70	69	0.00	2	0.1	65	PASS
127	198	40	60	56.6	71540	PASS
197	198	0.00	1	0.2	251	PASS
198	198	100	100	100.0	126426	PASS
199	198	5	9	6.7	8436	PASS
275	198	10	30	24.8	31361	PASS
365	198	1	100	3.6	4572	PASS
441	443	0.10	100	73.7	13728	PASS
442	198	40	100	74.9	94642	PASS
443	442	17	23	19.7	18626	PASS

SGS ACCUTEST JC18516

Average of 3.448 to 3.459 min.: 2m83203.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.00	96	58.00	80	73.00	93	85.05	667
38.00	460	61.00	484	74.05	4892	86.00	926
39.05	2915	62.00	656	75.05	8068	87.00	333
40.00	110	63.05	1804	76.05	2744	87.95	204
45.00	9	64.00	283	77.10	61383	89.00	77
50.05	10469	65.00	1025	78.05	4026	91.05	728
51.05	41865	66.00	135	79.00	3465	92.00	992
52.10	2195	68.05	620	80.00	2933	93.00	6241
53.00	35	69.00	49635	81.00	4052	94.00	430
56.00	1112	70.00	65	82.05	932	95.00	37
57.10	2547	72.05	19	83.05	722	96.00	167

Average of 3.448 to 3.459 min.: 2m83203.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
97.10	7	108.05	3017	119.00	39	129.95	2395
98.00	4733	109.00	435	120.00	275	130.95	479
99.00	3996	110.00	36153	121.00	132	131.95	307
99.90	295	111.00	5639	122.00	1216	133.00	43
101.00	2409	112.00	614	123.00	1873	134.00	756
101.90	82	113.05	263	124.00	800	135.00	2240
103.00	875	114.00	24	125.00	720	136.00	795
104.00	1492	115.00	14	126.00	263	137.00	1062
105.00	1250	116.00	1051	127.05	71540	137.95	344
105.95	499	117.00	13800	128.00	5293	139.00	77
107.05	19650	118.00	1087	129.00	27452	140.00	327

Average of 3.448 to 3.459 min.: 2m83203.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
141.00	3389	151.90	116	162.00	528	173.00	612
142.00	1133	152.00	177	163.00	53	174.00	1352
143.00	763	153.05	977	163.95	140	175.10	2627
143.95	229	154.00	840	165.00	1063	176.05	677
145.00	194	155.05	1860	166.00	1020	177.00	1249
146.05	667	156.05	2945	167.05	6332	178.05	406
147.05	1805	157.05	492	168.05	2783	179.00	4817
148.00	3715	158.05	547	169.00	563	180.05	3383
149.00	871	159.00	510	170.00	144	181.05	1481
150.00	182	160.00	1018	171.00	231	182.00	163
151.10	343	161.00	1668	171.90	606	183.05	122

Average of 3.448 to 3.459 min.: 2m83203.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
184.00	466	195.10	208	206.10	30635	218.00	961
185.10	2198	196.00	3449	207.05	4042	219.05	112
186.10	18113	197.10	251	208.05	830	219.90	29
187.05	4994	198.00	126426	209.05	322	220.10	118
188.05	477	199.00	8436	210.10	458	221.10	5322
189.00	1139	200.05	614	211.10	1206	221.70	171
189.95	171	201.00	10	212.10	41	223.00	1566
191.00	452	201.45	502	214.00	47	224.05	16612
192.05	1468	203.00	714	215.05	443	225.05	4251
193.05	1660	204.05	4413	216.05	668	226.05	435
194.05	391	205.10	7333	217.00	7633	227.10	7119

Average of 3.448 to 3.459 min.: 2m83203.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
228.00	959	237.10	528	248.00	126	259.05	602
229.00	1265	238.00	128	249.00	534	260.10	133
229.95	160	239.05	233	250.10	79	261.05	124
231.00	613	240.05	243	251.00	172	262.00	16

dftpp2m.M Wed Apr 20 13:15:55 2016 Page: 2

231.90	19	241.05	320	252.00	184	263.10	62
232.05	55	242.10	816	253.05	267	263.90	24
232.80	49	243.10	901	254.10	557	265.10	1503
233.15	113	244.10	12205	255.10	66966	265.95	192
234.05	475	245.10	1668	256.10	9572	267.00	15
235.05	501	246.10	2528	257.00	709	267.95	13
236.00	361	247.00	457	258.05	3926	269.00	45

Average of 3.448 to 3.459 min.: 2m83203.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
270.10	64	280.30	19	292.05	143	303.10	1143
271.05	168	281.05	110	293.05	585	304.00	276
272.05	190	282.05	146	294.00	140	304.90	23
273.10	2025	283.00	294	295.05	163	305.20	19
274.10	5344	284.15	112	296.10	8396	307.10	22
275.10	31361	285.10	422	297.05	1336	308.05	133
276.10	4448	286.00	70	298.05	108	308.90	17
277.05	2608	288.05	48	299.10	18	309.05	87
278.00	437	289.05	148	300.00	20	310.10	104
279.00	134	290.05	100	301.05	132	311.00	25
280.00	17	291.10	56	302.15	217	313.00	24

Average of 3.448 to 3.459 min.: 2m83203.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
313.15	84	326.15	289	339.10	66	352.10	889
314.10	439	327.00	553	340.05	55	353.10	737
315.00	1025	328.00	340	341.10	369	354.10	916
316.05	526	328.90	18	342.00	107	355.10	209
317.00	91	329.10	61	342.20	4	356.10	22
320.05	67	330.10	24	342.90	24	359.10	72
321.05	310	332.00	264	344.20	21	360.00	24
321.95	135	333.05	314	346.05	722	361.15	34
323.10	2965	334.10	2192	347.05	145	364.10	17
324.10	576	335.10	542	350.10	18	365.10	4572
325.05	78	336.05	36	351.05	55	366.00	632

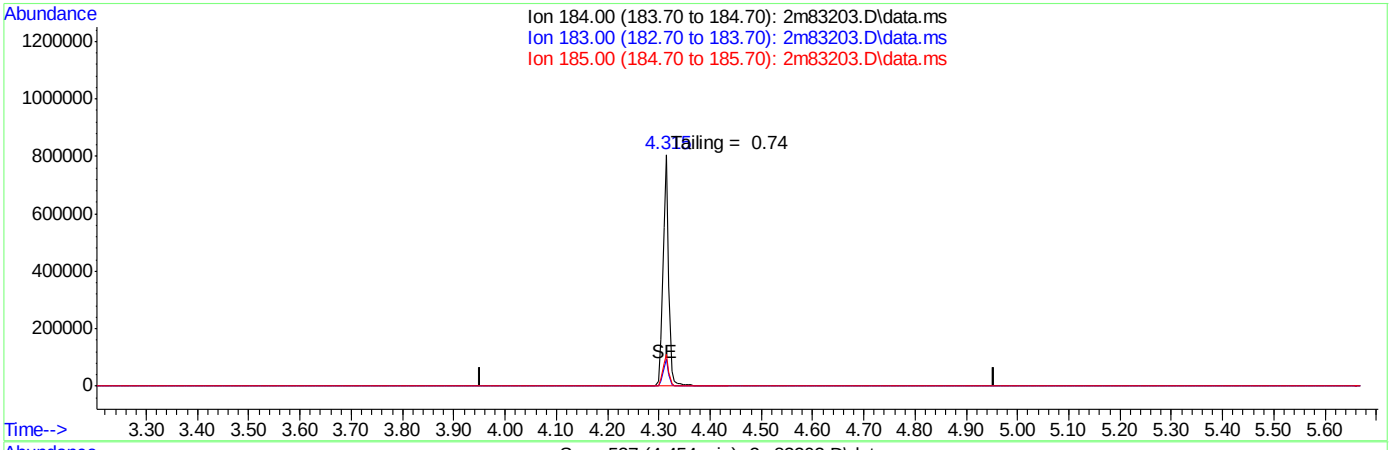
Average of 3.448 to 3.459 min.: 2m83203.D\data.ms
dftpp
Modified:subtracted

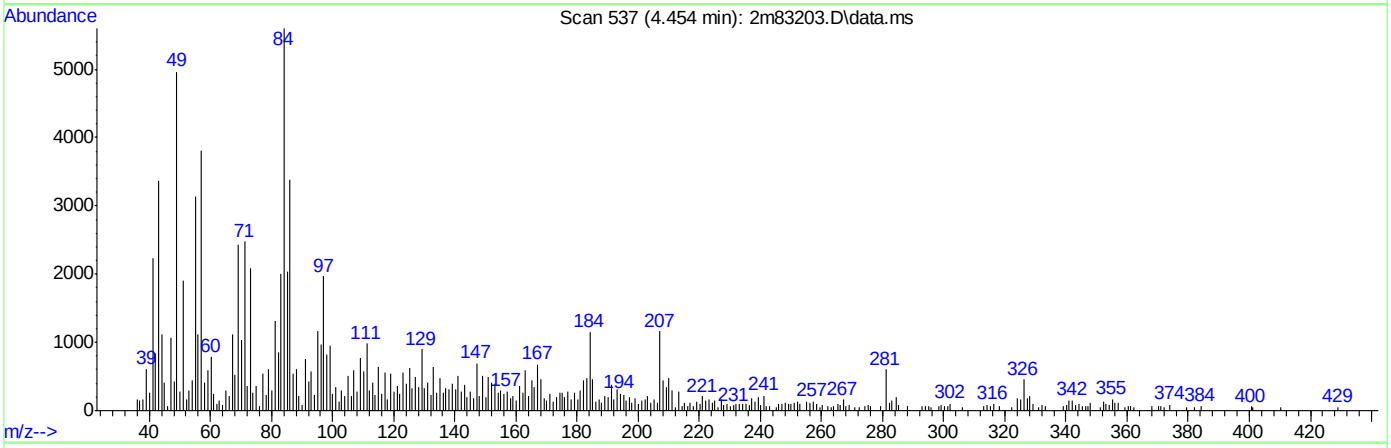
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
367.00	56	390.10	310	409.95	45	435.40	19
369.90	46	390.90	19	415.00	46	437.10	16
370.10	38	391.10	153	421.10	1010	439.10	24
371.05	278	392.05	143	422.10	777	441.10	13728
372.10	1919	392.90	17	423.10	6662	442.15	94642
373.10	515	396.80	18	424.10	1231	443.10	18626
374.05	68	401.05	131	425.10	135	444.10	1904
377.20	22	402.10	786	429.00	21	445.05	77
383.00	469	403.10	1110	432.40	17		
384.10	146	404.05	396	433.10	20		
385.00	31	405.05	71	434.50	17		

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e2m3655\
Data File : 2m83203.D
Acq On : 20 Apr 2016 9:44 am
Operator : ashleyn
Sample : dftpp
Misc : op92330,e2m3655
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 20 10:02:25 2016
Quant Method : C:\msdchem\1\METHODS\dftpp2m.M
Quant Title : Semi Volatile GC/MS,zb-5msi30mx .25mmx .25umMon TuThu Mar 24 11:54:32 2016
QLast Update : Thu Mar 24 11:54:32 2016
Response via : Initial Calibration





TIC: 2m83203.D\data.ms

(1) Benzidine

4.454min (-4.454) 0.00

response 0

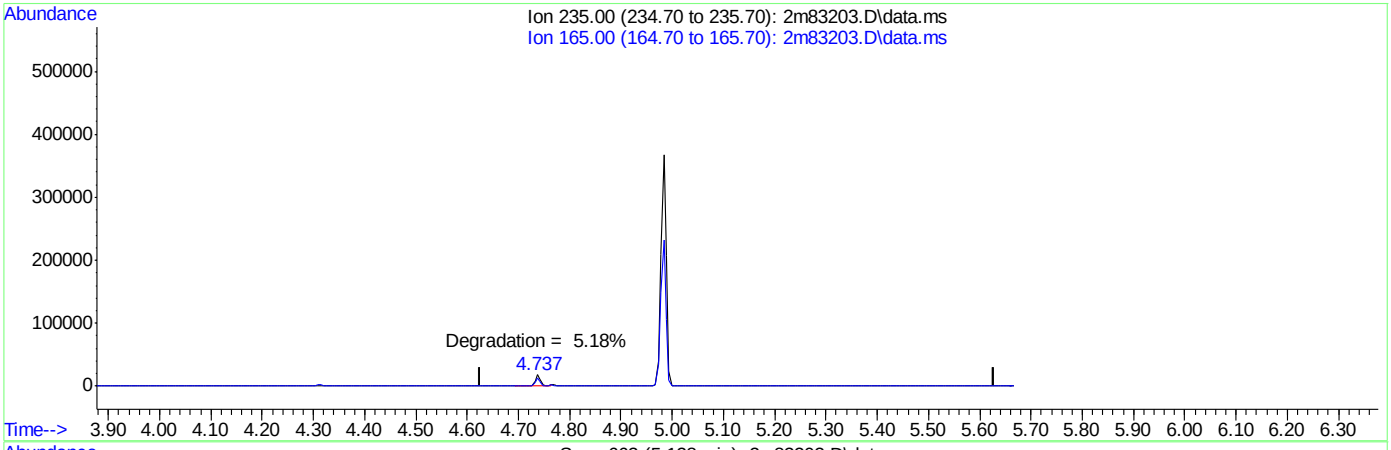
Ion	Exp%	Act%
184.00	100	0.00
183.00	0.00	0.00
185.00	0.00	0.00
0.00	0.00	0.00

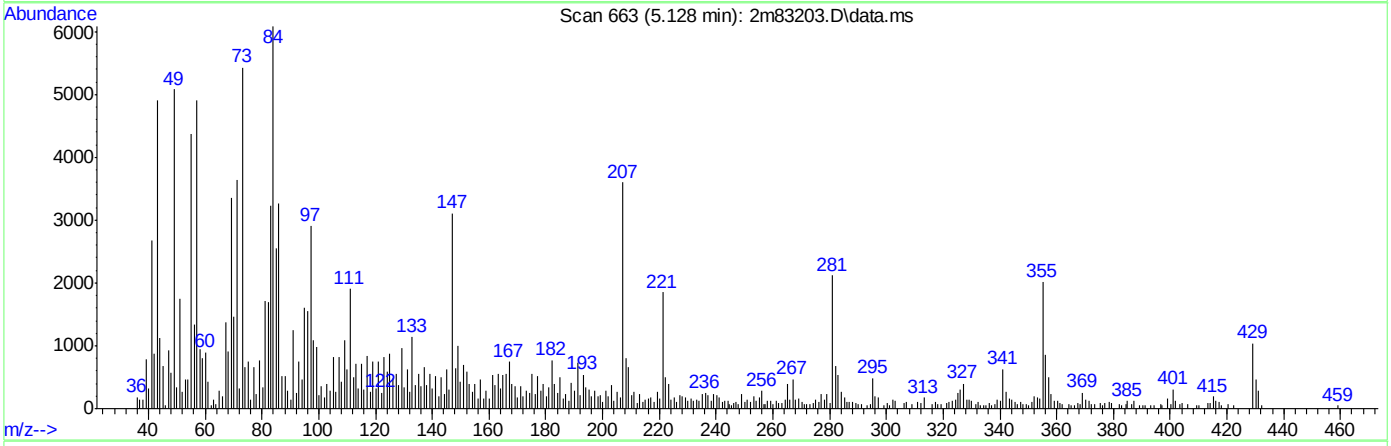
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e2m3655\
Data File : 2m83203.D
Acq On : 20 Apr 2016 9:44 am
Operator : ashleyn
Sample : dftpp
Misc : op92330,e2m3655
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 20 10:02:25 2016
Quant Method : C:\msdchem\1\METHODS\dftpp2m.M
Quant Title : Semi Volatile GC/MS,zb-5msi30mx .25mmx .25umMon TuThu Mar 24 11:54:32 2016
QLast Update : Thu Mar 24 11:54:32 2016
Response via : Initial Calibration





TIC: 2m83203.D\data.ms

(2) ddt

5.128min (-5.128) 0.00

response 0

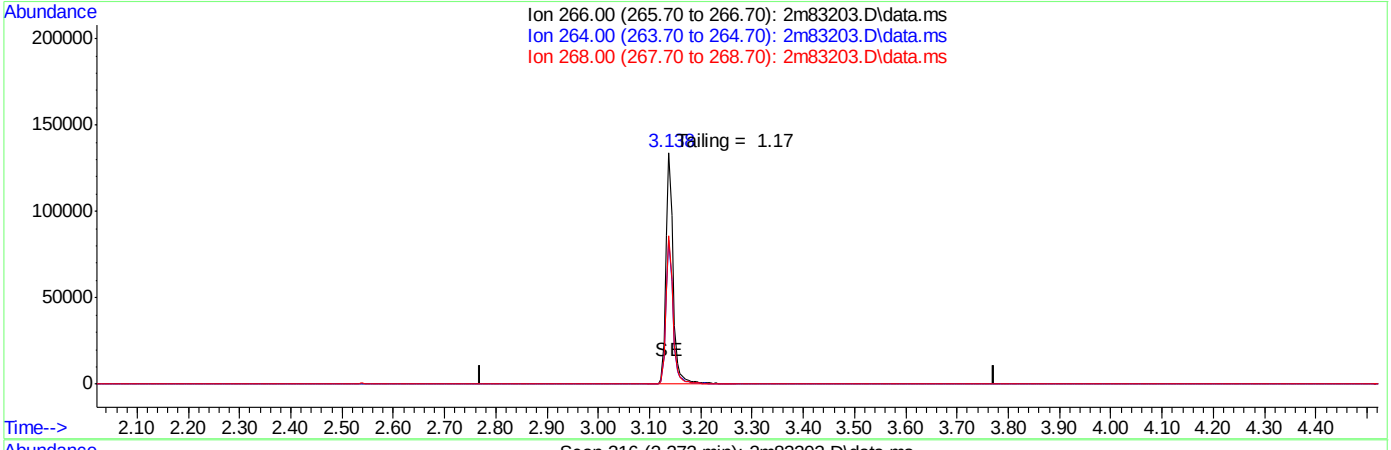
Ion	Exp%	Act%
235.00	100	0.00
165.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

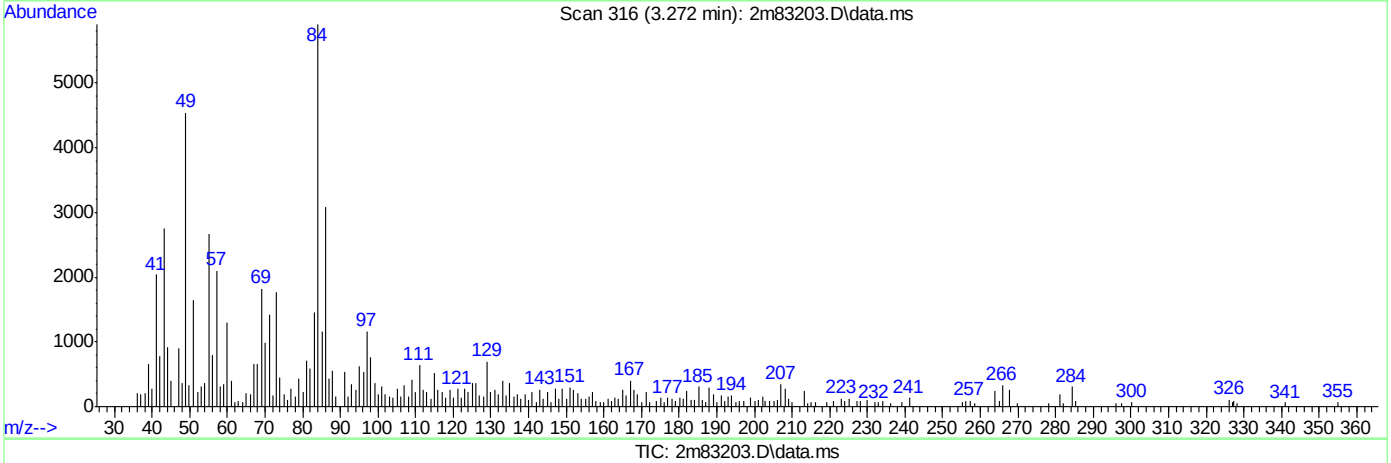
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e2m3655\
Data File : 2m83203.D
Acq On : 20 Apr 2016 9:44 am
Operator : ashleyn
Sample : dftpp
Misc : op92330,e2m3655
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 20 10:02:25 2016
Quant Method : C:\msdchem\1\METHODS\dftpp2m.M
Quant Title : Semi Volatile GC/MS,zb-5msi30mx .25mmx .25umMon TuThu Mar 24 11:54:32 2016
QLast Update : Thu Mar 24 11:54:32 2016
Response via : Initial Calibration





TIC: 2m83203.D\data.ms

(3) Pentachlorophenol

3.272min (-3.272) 0.00

response 0

Ion	Exp%	Act%
266.00	100	0.00
264.00	0.00	0.00
268.00	0.00	0.00
0.00	0.00	0.00

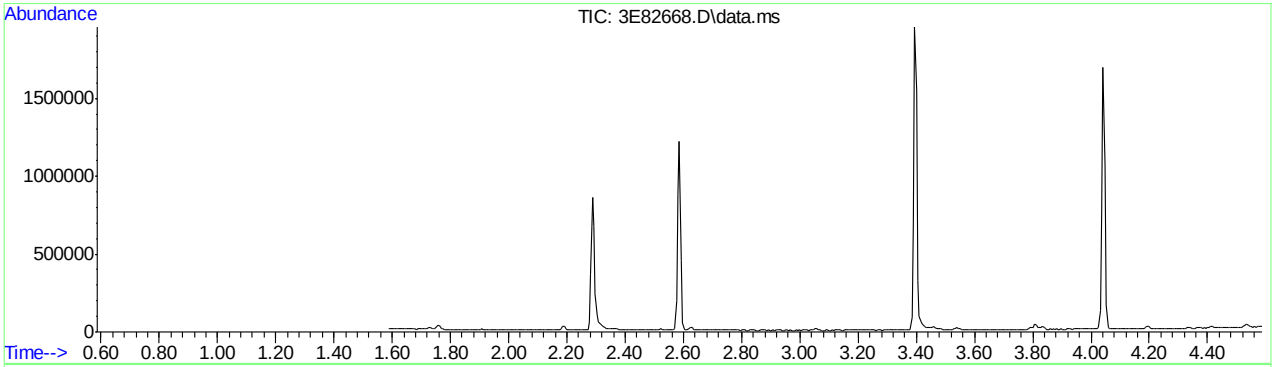
SGS ACCUTEST JC18516

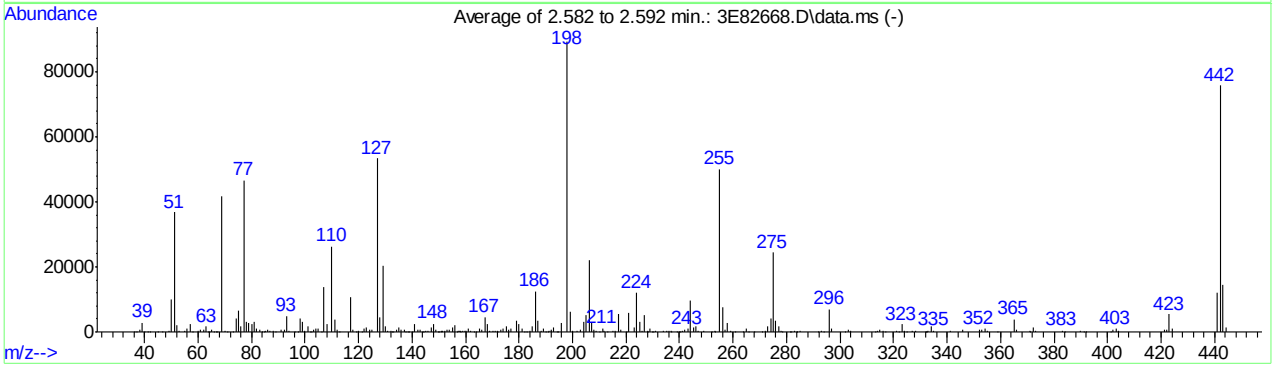
DFTPP

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 JC18516

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

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

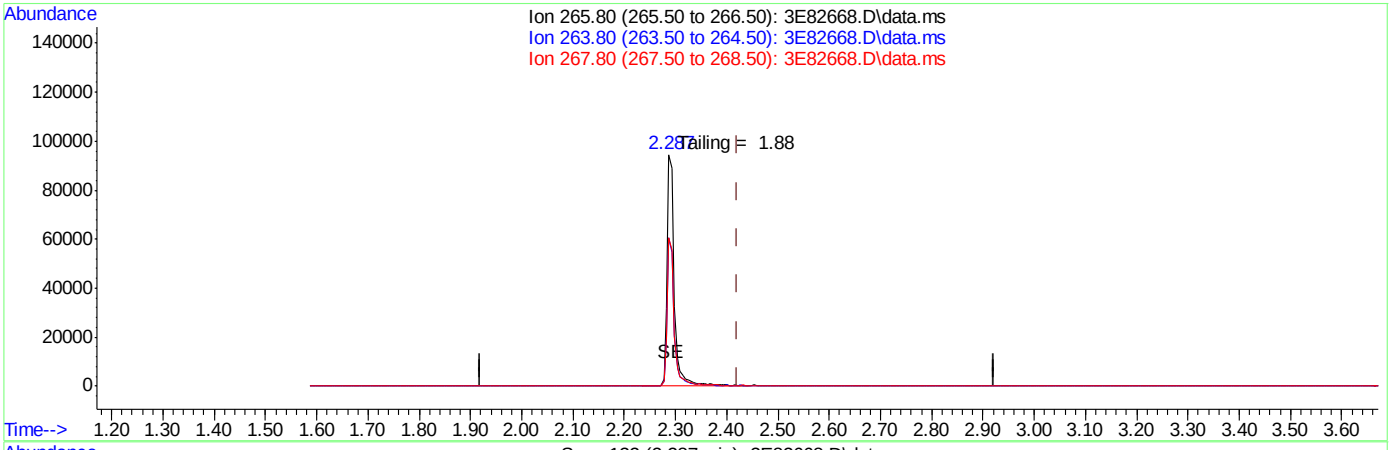
Average of 2.582 to 2.592 min.: 3E82668.D\data.ms
dftpp
Modified:subtracted

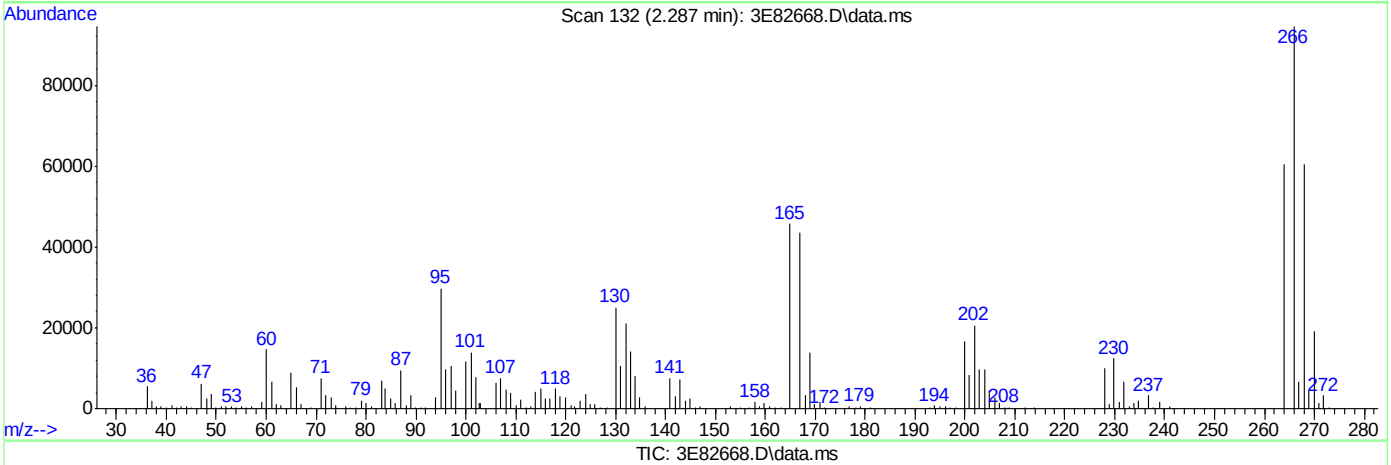
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
341.05	307	372.05	1521	421.10	837		
346.00	551	373.10	351	422.05	810		
352.10	859	382.95	364	423.10	5503		
353.05	597	384.10	115	424.05	1177		
354.05	947	390.05	232	441.15	11945		
355.10	201	391.10	53	442.10	75784		
359.00	52	392.00	56	443.10	14615		
365.05	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

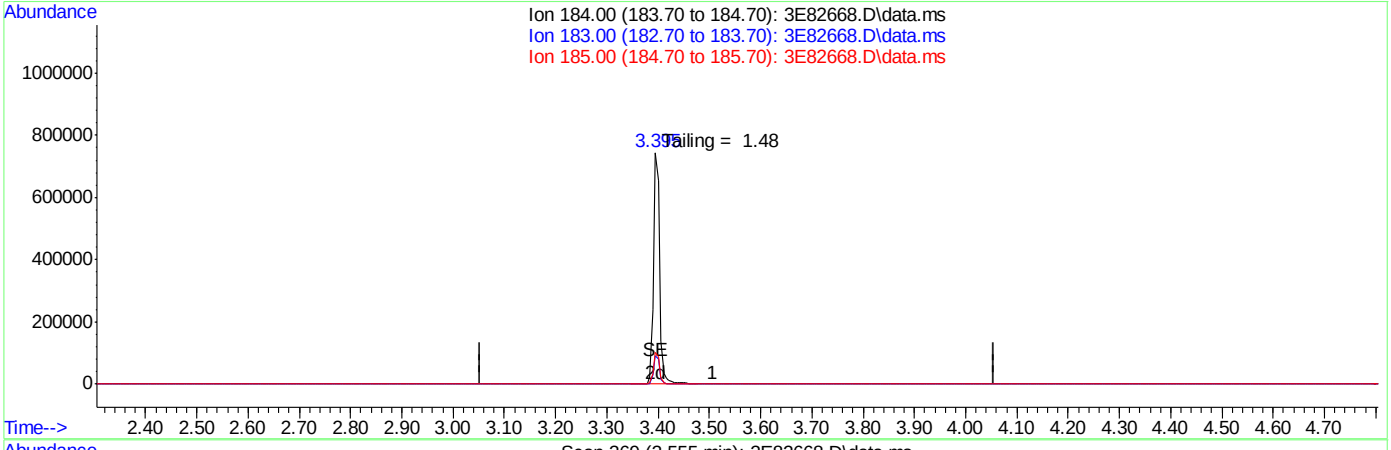
response 93631

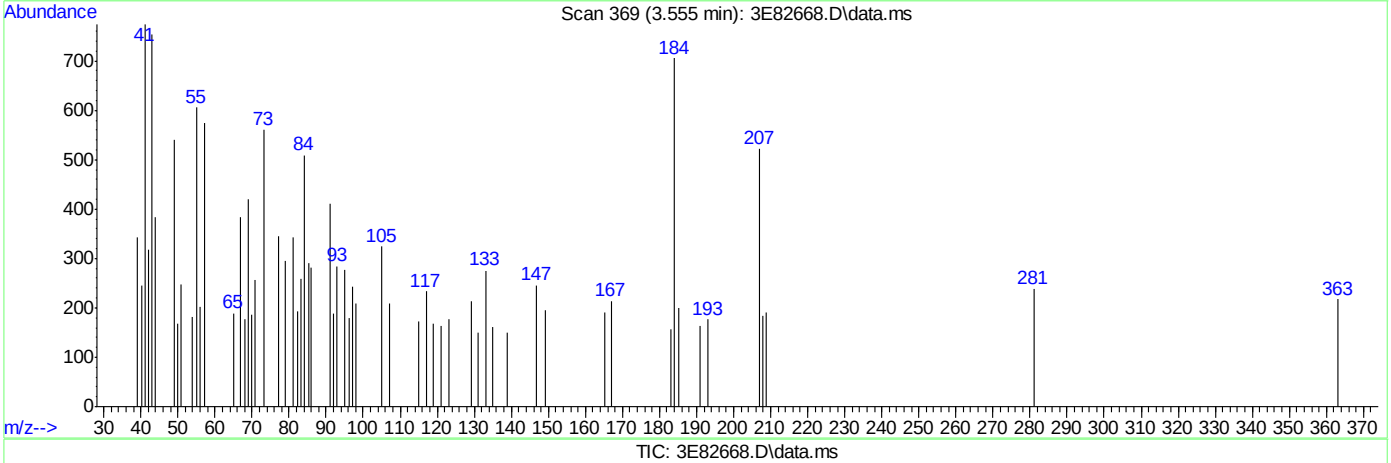
Ion	Exp%	Act%
265.80	100	100
263.80	62.20	63.87
267.80	64.70	63.95
0.00	0.00	0.00

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

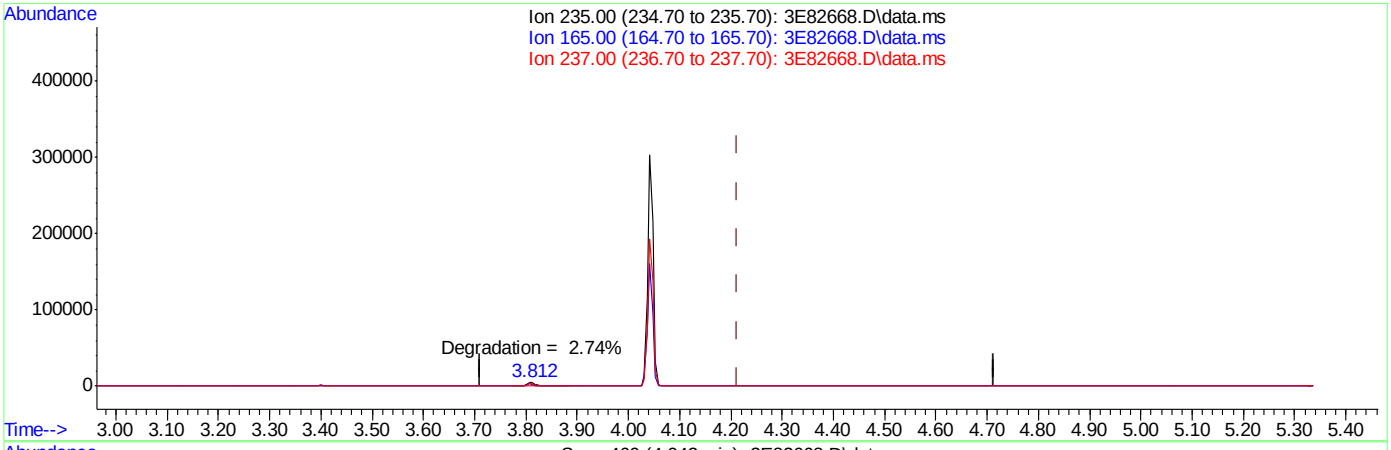
Ion	Exp%	Act%
184.00	100	0.00
183.00	13.20	0.00
185.00	15.40	0.00
0.00	0.00	0.00

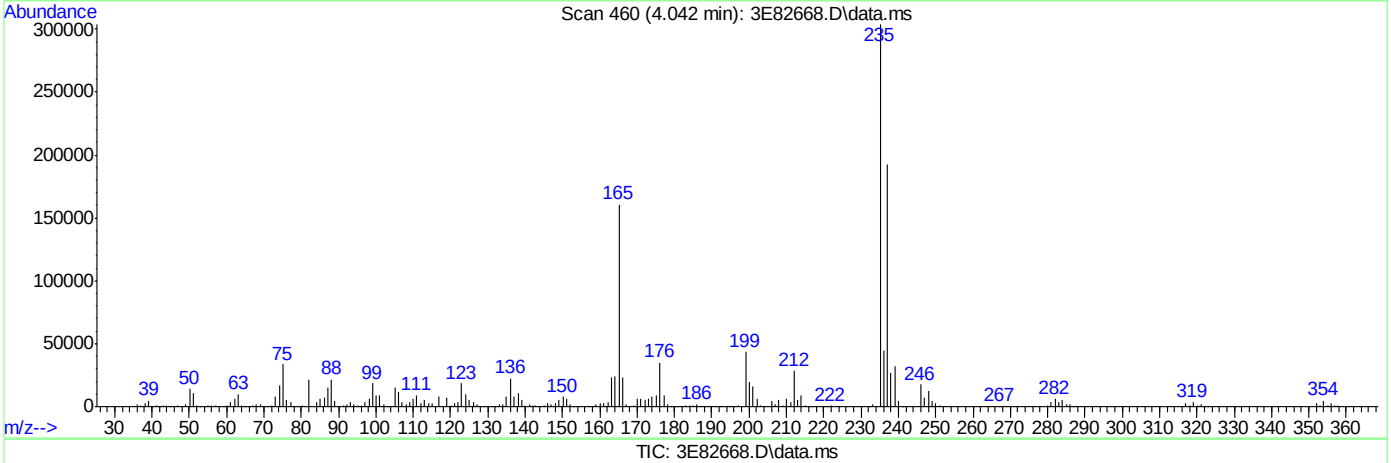
SGS ACCUTEST JC18516

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

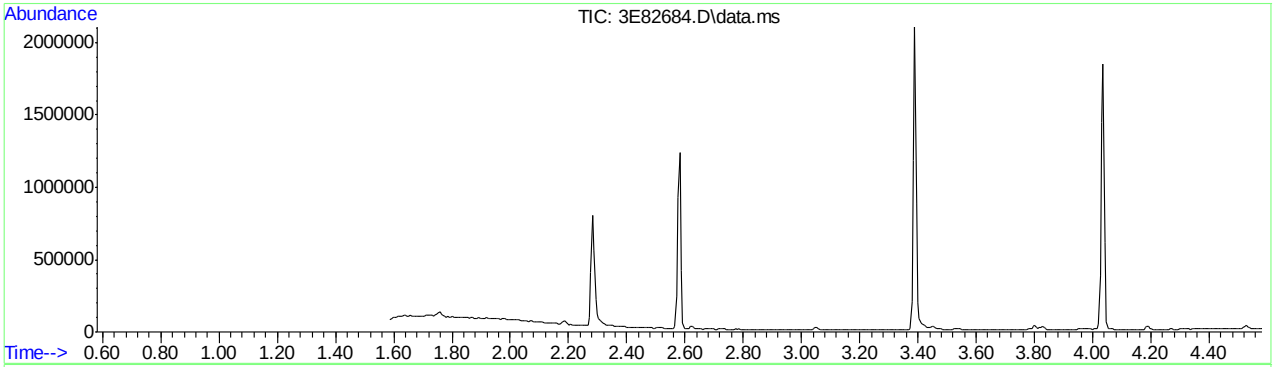
SGS ACCUTEST JC18516

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 JC18516

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

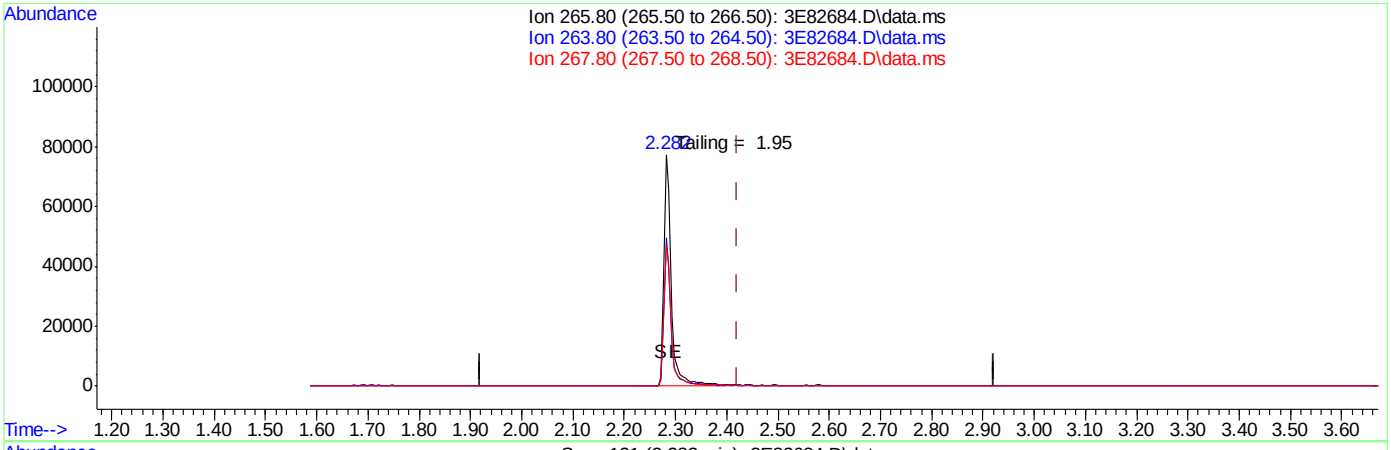
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
353.15	576	391.00	72	441.10	8486		
354.05	873	392.10	51	442.10	56685		
355.15	196	401.20	56	443.10	11103		
365.05	3692	402.05	525	444.15	990		
366.05	638	402.95	637				
371.05	159	404.05	218				
372.10	1557	421.10	538				
373.10	374	422.05	745				
383.05	342	423.10	4236				
384.10	64	424.05	756				
389.95	111	438.30	57				

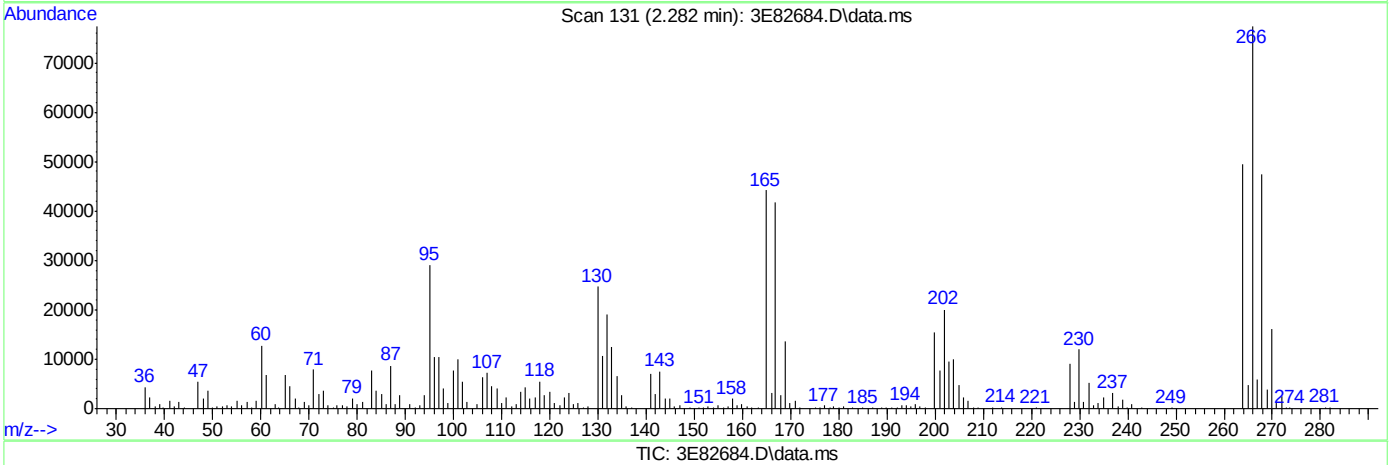
SGS ACCUTEST JC18516

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





(1) Pentachlorophenol (t)

2.282min (-0.139) 48.87ppb

response 76381

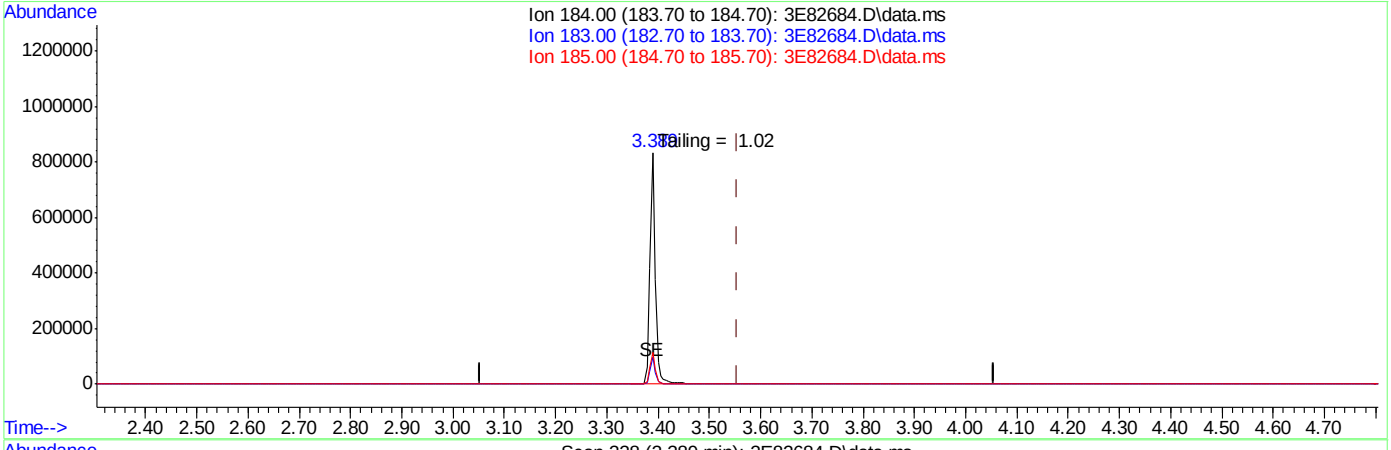
Ion	Exp%	Act%
265.80	100	100
263.80	62.20	63.83
267.80	64.70	60.95
0.00	0.00	0.00

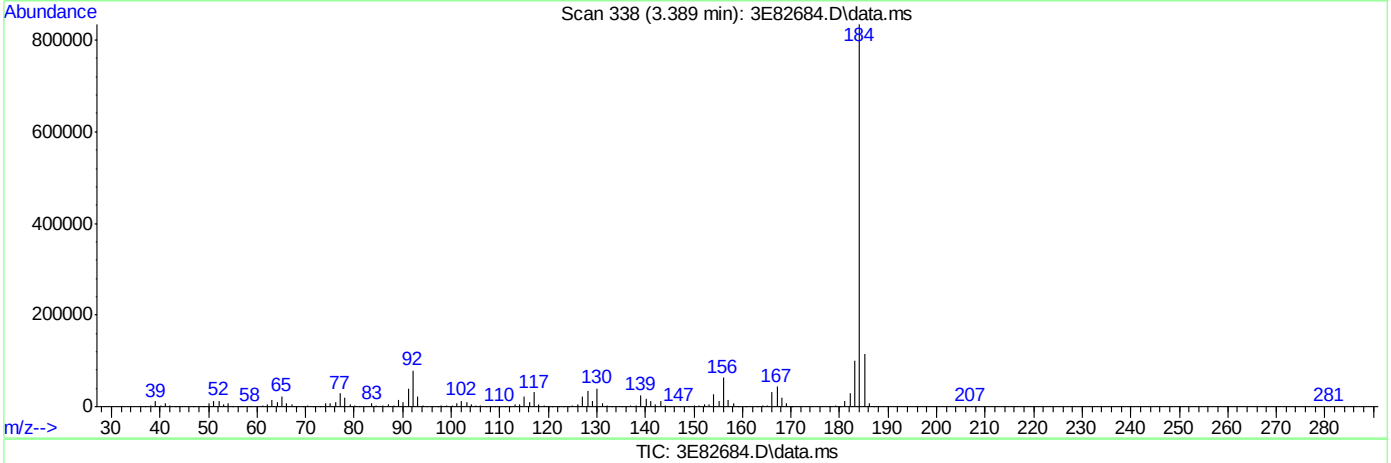
SGS ACCUTEST JC18516

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

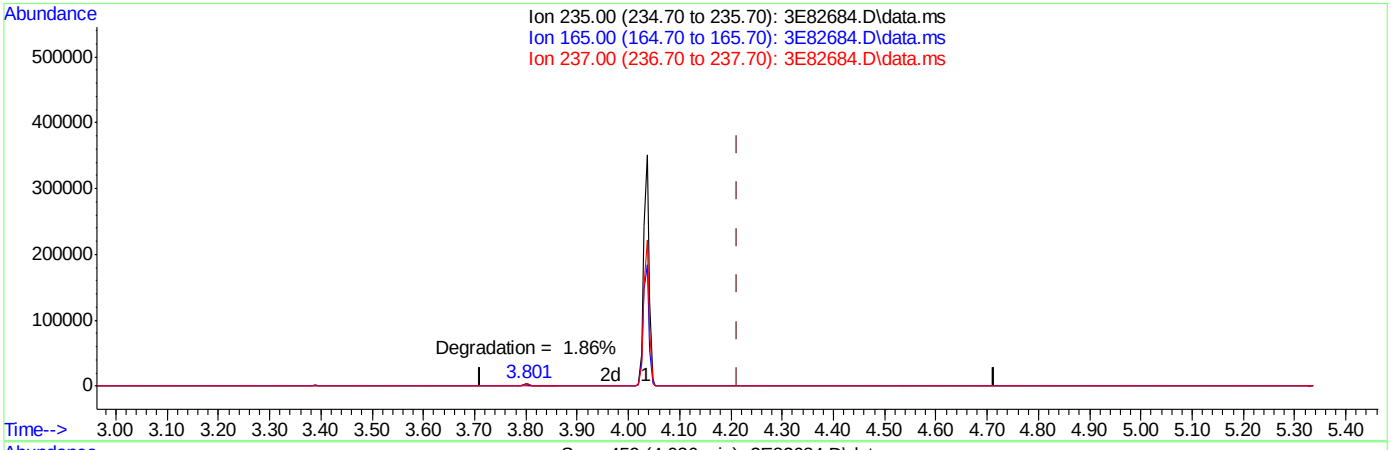
Ion	Exp%	Act%
184.00	100	100
183.00	13.20	11.94
185.00	15.40	13.92
0.00	0.00	0.00

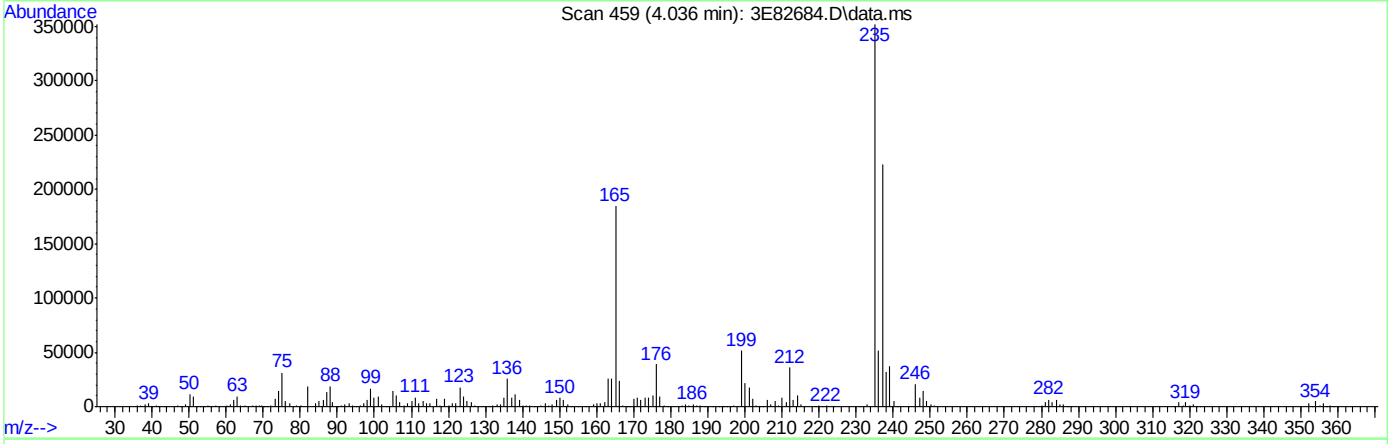
SGS ACCUTEST JC18516

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

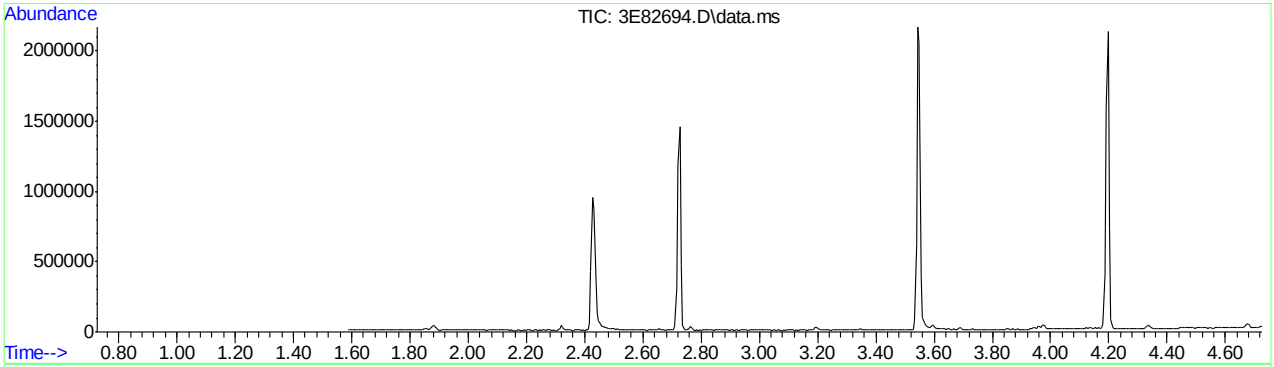
SGS ACCUTEST JC18516

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

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

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

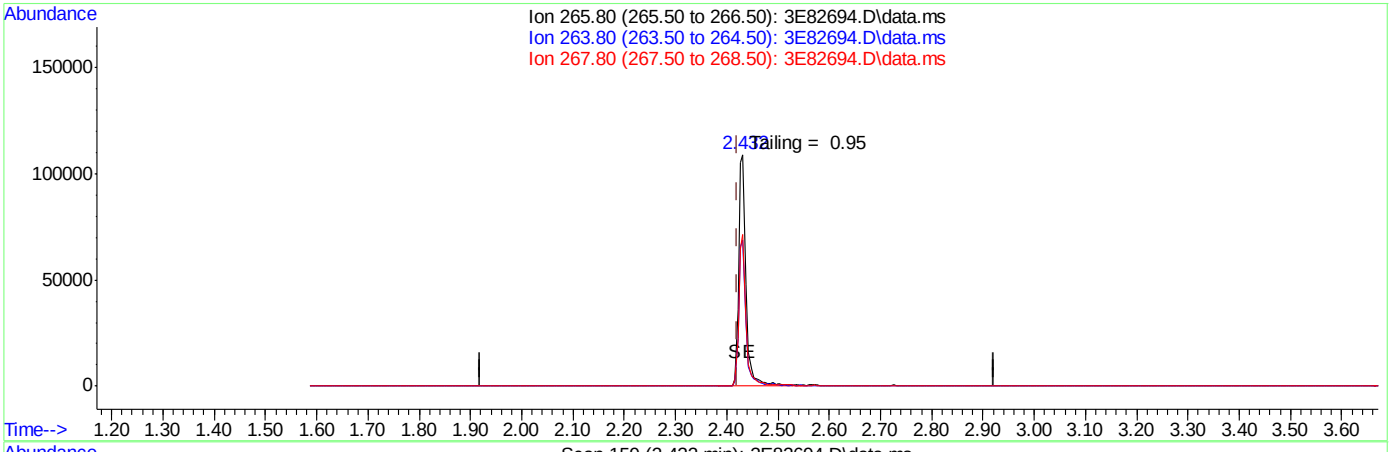
Average of 2.721 to 2.731 min.: 3E82694.D\data.ms
dftpp
Modified:subtracted

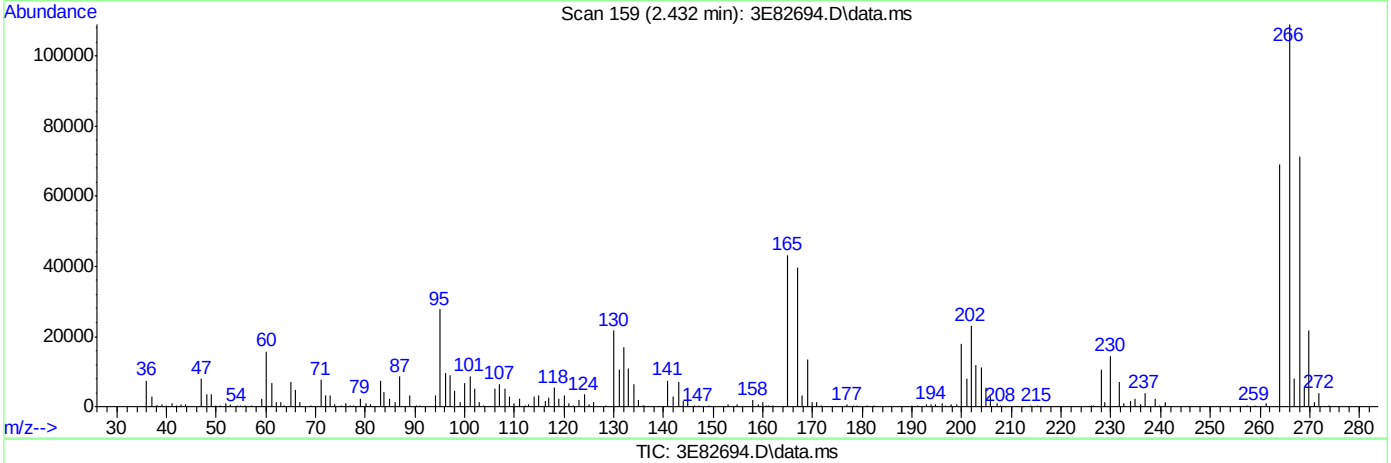
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
385.00	63	421.05	918	435.55	241	442.10	92170
389.80	51	422.10	542	436.25	211	443.10	18045
390.05	175	423.10	5770	436.90	128	444.10	1790
390.90	114	424.05	1230	437.10	99	445.00	64
392.00	164	425.10	111	437.75	275		
394.10	56	430.20	91	438.15	362		
401.05	176	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

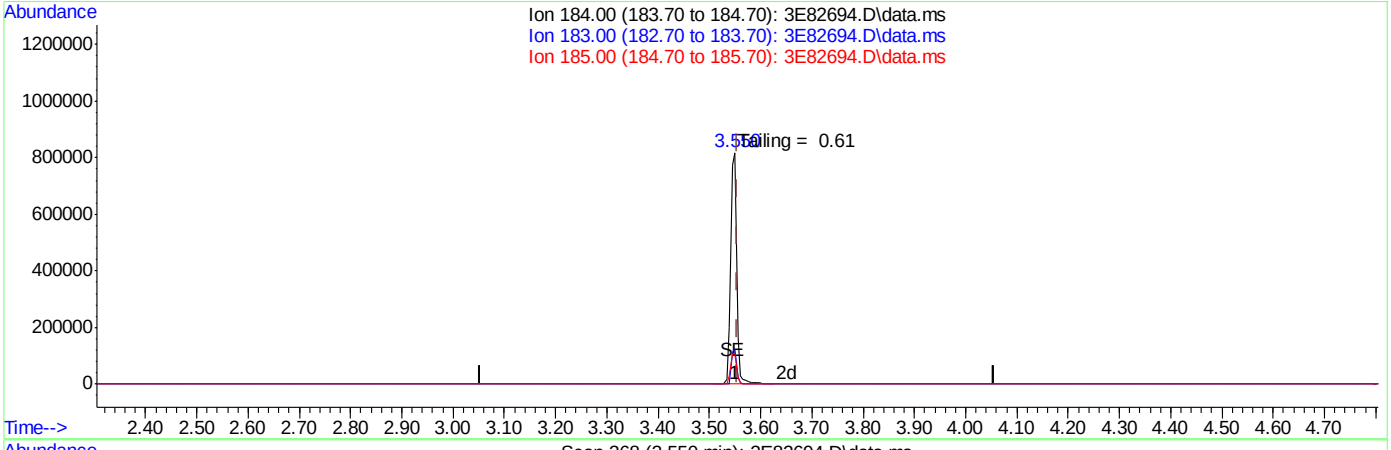
Ion	Exp%	Act%
265.80	100	100
263.80	62.20	63.18
267.80	64.70	65.25
0.00	0.00	0.00

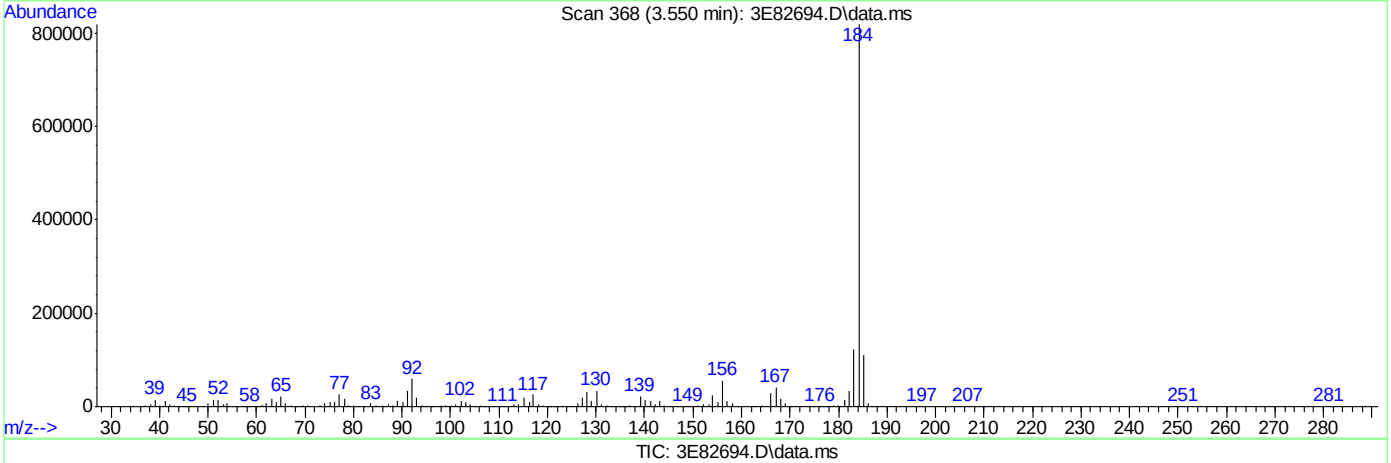
SGS ACCUTEST JC18516

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

(2) Benzidine (t)

3.550min (-0.005) 63.38ppb

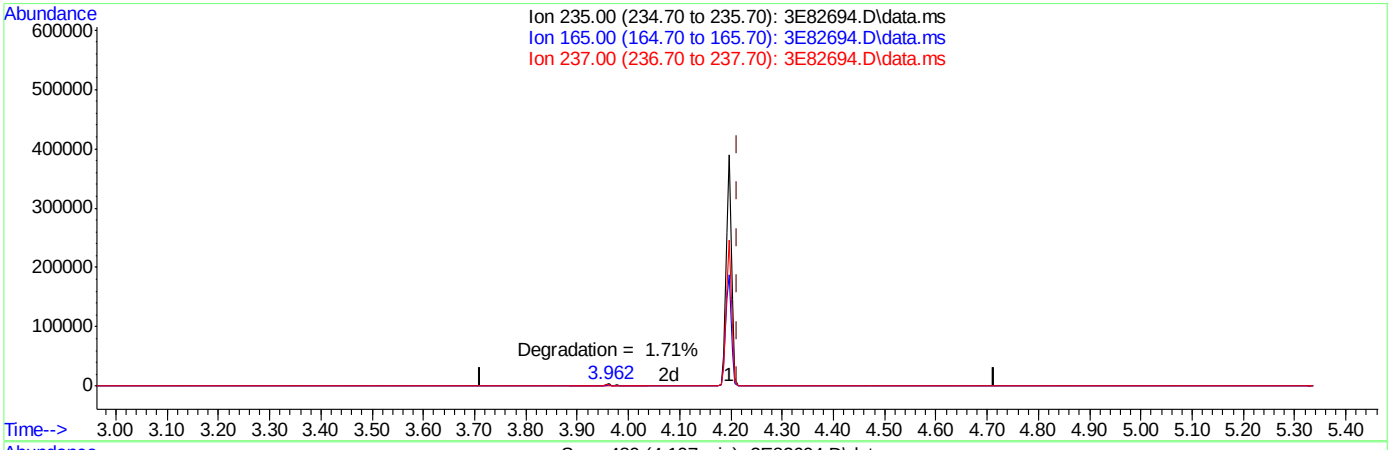
response 665561

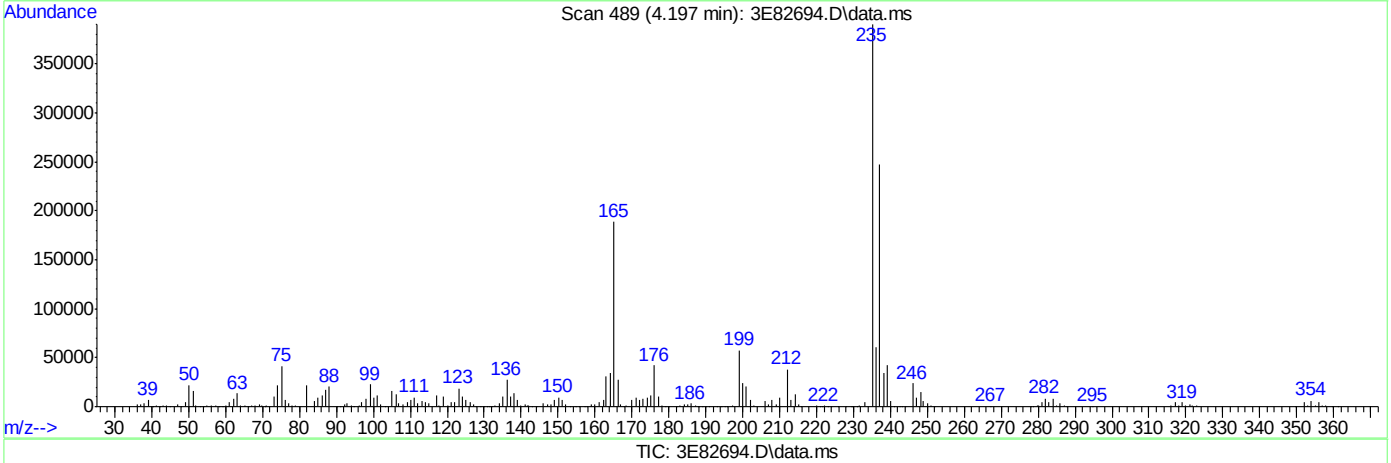
Ion	Exp%	Act%
184.00	100	100
183.00	13.20	14.96
185.00	15.40	13.44
0.00	0.00	0.00

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

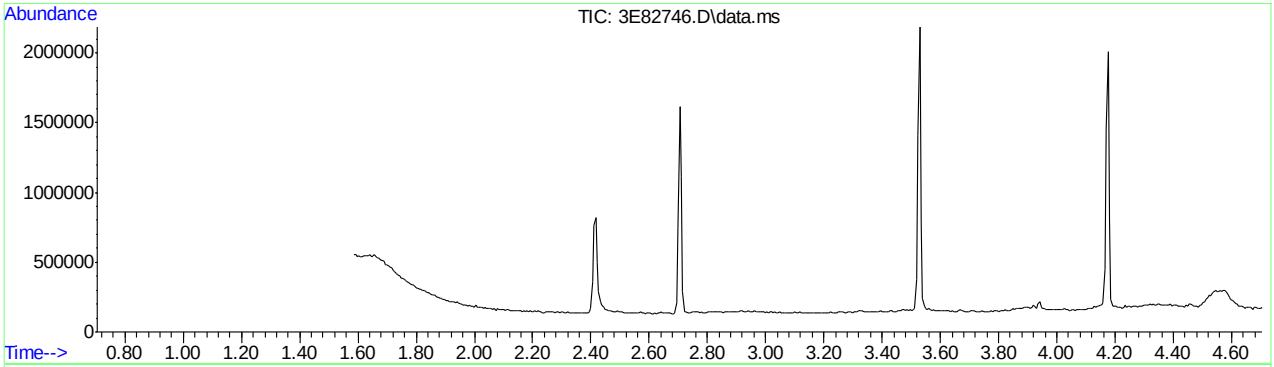
SGS ACCUTEST JC18516

DFTPP

Data Path : C:\msdchem\1\DATA\E3E3626\
Data File : 3E82746.D
Acq On : 29 Apr 2016 9:34 am
Operator : ashleyn
Sample : dftpp
Misc : op93161,e3e3626
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 209, 210, 211; Background Corrected with Scan 204

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	51.6	53280	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	49.4	51099	PASS
70	69	0.00	2	1.3	645	PASS
127	198	40	60	56.2	58080	PASS
197	198	0.00	1	0.3	332	PASS
198	198	100	100	100.0	103344	PASS
199	198	5	9	6.8	7064	PASS
275	198	10	30	26.6	27533	PASS
365	198	1	100	4.6	4769	PASS
441	443	0.10	100	75.7	10694	PASS
442	198	40	100	72.7	75085	PASS
443	442	17	23	18.8	14135	PASS

SGS ACCUTEST JC18516

Average of 2.699 to 2.710 min.: 3E82746.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.10	1698	45.90	227	57.00	3037	67.05	168
35.95	126	47.00	46	58.00	66	69.00	51099
37.00	522	48.05	277	58.30	161	70.00	645
38.00	1235	49.00	2634	59.00	206	71.05	485
39.00	5052	50.05	15836	59.10	87	72.05	243
40.05	232	51.05	53280	60.90	309	73.10	229
41.10	511	52.05	2516	61.00	108	74.00	5791
42.05	343	52.95	301	62.00	662	75.00	8401
43.10	630	54.20	234	63.00	2066	76.10	2782
44.00	807	55.00	592	64.00	224	77.05	53721
45.05	266	56.00	1601	65.00	664	78.05	3974

Average of 2.699 to 2.710 min.: 3E82746.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
79.00	3775	89.00	132	99.00	3864	111.05	4772
80.00	3310	89.90	113	100.15	347	111.90	211
81.00	3894	90.95	926	101.00	1930	112.05	185
82.00	1009	91.90	773	102.10	309	113.00	49
83.00	300	92.20	377	102.90	845	114.20	91
84.00	2213	93.05	6975	103.30	204	115.00	40
85.05	2344	93.90	98	104.05	1688	115.95	531
86.00	2346	94.20	367	105.00	1285	117.00	16986
86.85	493	94.95	246	107.05	17916	118.00	1265
87.95	376	95.95	373	108.00	3065	119.05	620
88.80	142	98.05	5750	110.00	27575	120.00	310

Average of 2.699 to 2.710 min.: 3E82746.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
121.05	92	131.90	32	141.05	3409	149.05	729
122.00	1161	132.30	105	142.05	794	150.20	246
123.00	2239	132.95	94	143.00	786	151.10	222
124.05	1251	133.95	441	143.90	122	151.85	325
125.05	1101	134.20	354	144.20	69	153.00	1128
127.05	58080	135.00	1874	145.05	42	154.10	978
128.10	4976	135.95	836	146.15	288	155.00	1809
129.00	23973	137.05	936	147.00	535	156.00	2281
130.00	1934	137.95	405	147.20	1002	156.90	227
130.95	204	139.00	143	148.10	4228	157.15	355
131.20	196	139.90	411	148.90	50	157.50	136

Average of 2.699 to 2.710 min.: 3E82746.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
157.80	231	164.70	249	172.60	103	182.95	234
158.05	605	165.05	1050	173.05	706	184.00	672
158.80	72	166.15	1137	174.00	1219	185.00	1954
159.10	501	167.05	6417	175.05	2588	186.05	16111
159.80	384	168.05	2593	176.00	818	187.05	4978
160.10	657	169.10	474	176.95	1174	188.05	584
161.00	1192	169.40	89	178.10	439	188.95	826
162.05	461	169.95	194	179.00	4326	189.20	546
163.10	113	170.30	52	180.05	3291	190.05	255
163.50	70	170.90	205	181.00	1538	191.00	247
164.10	313	171.95	533	182.05	488	192.05	1435

Average of 2.699 to 2.710 min.: 3E82746.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
193.00	1533	201.65	637	211.00	1101	218.80	83
194.10	147	202.20	100	211.80	139	219.00	150
194.30	137	203.00	1128	212.20	80	219.40	94
195.05	518	204.05	4113	213.15	88	220.05	326

196.05	3531	205.10	7065	214.30	59	221.10	4095
196.80	332	206.10	26735	214.80	110	221.80	701
198.00	103344	207.00	3471	215.00	205	222.05	842
199.05	7064	208.05	853	215.30	157	223.00	1307
200.05	508	208.95	341	216.20	251	223.20	611
201.00	163	210.10	212	217.00	7231	224.05	14610
201.20	250	210.30	194	218.00	1005	225.10	3977

Average of 2.699 to 2.710 min.: 3E82746.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
226.05	479	234.95	454	243.00	556	252.70	304
227.00	6430	236.00	229	244.10	11432	253.00	509
228.00	938	236.90	629	245.10	1461	253.70	123
229.00	1302	238.05	114	246.05	2438	255.00	57760
229.80	86	239.00	420	247.05	592	256.10	8706
230.00	106	239.80	107	247.90	86	257.00	657
230.95	422	240.25	206	248.10	108	258.05	3662
231.20	179	240.85	430	249.00	637	259.10	652
232.05	254	241.10	174	250.05	142	260.90	160
232.90	194	241.95	851	250.85	249	261.90	53
233.95	499	242.30	342	251.95	356	263.10	52

Average of 2.699 to 2.710 min.: 3E82746.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
263.30	58	272.30	264	282.05	301	294.10	121
263.70	85	273.05	2493	283.00	297	294.35	222
264.10	372	274.00	5023	284.15	265	294.90	133
265.05	1620	275.05	27533	285.10	521	296.10	8574
265.80	160	276.05	3592	286.05	134	297.05	1090
266.80	257	277.05	2747	288.70	51	297.95	117
267.85	178	277.90	72	289.20	60	298.20	51
269.80	146	278.10	502	290.20	61	301.10	139
271.05	220	279.00	59	291.40	55	301.90	66
271.40	51	279.90	68	291.95	154	302.30	112
272.10	54	281.30	128	293.00	668	303.05	1085

Average of 2.699 to 2.710 min.: 3E82746.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
304.00	237	315.50	52	326.90	112	342.90	53
305.00	51	316.05	545	327.10	671	345.30	80
307.70	67	317.15	156	327.95	269	345.80	75
308.00	95	319.70	62	328.90	57	346.05	855
308.30	56	320.00	96	332.05	247	347.25	190
309.00	61	320.90	129	333.00	227	352.10	802
310.05	156	321.10	176	334.10	1794	353.05	689
313.20	95	322.00	84	335.05	479	354.10	947
313.70	58	322.25	159	340.70	73	355.05	120
314.00	407	323.10	2866	341.00	481	360.00	52
315.00	1050	324.15	512	342.00	102	361.00	63

Average of 2.699 to 2.710 min.: 3E82746.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
363.00	72	383.10	414	403.20	491	422.10	660
363.70	64	385.10	50	403.95	246	423.05	5128
365.00	4769	390.05	188	405.00	57	424.10	815
366.05	620	391.10	53	410.00	77	424.40	76
368.40	52	391.90	112	414.90	78	424.80	70
370.00	69	400.70	59	418.10	54	426.00	50
370.30	108	401.30	52	418.60	58	427.50	73
371.00	191	401.90	203	419.40	56	429.10	70
372.05	1353	402.20	484	420.80	56	429.40	54
373.00	383	402.40	197	421.10	849	430.20	79
380.30	59	403.00	546	421.80	80	432.00	58

Average of 2.699 to 2.710 min.: 3E82746.D\data.ms

dftpp3e.M Fri Apr 29 13:40:06 2016 MS3E Page: 3

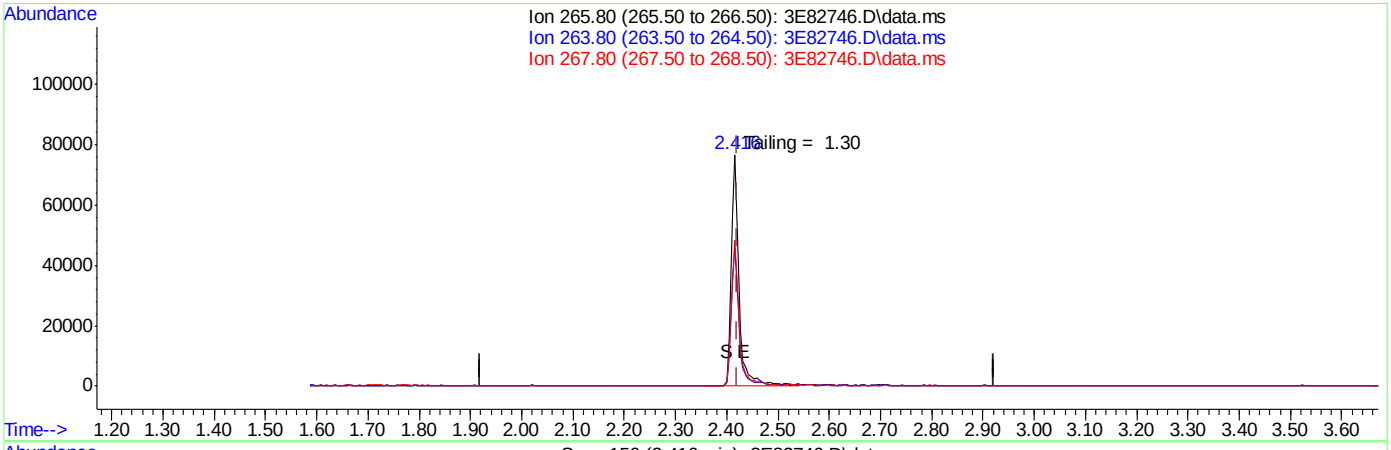
dftpp
Modified:subtracted

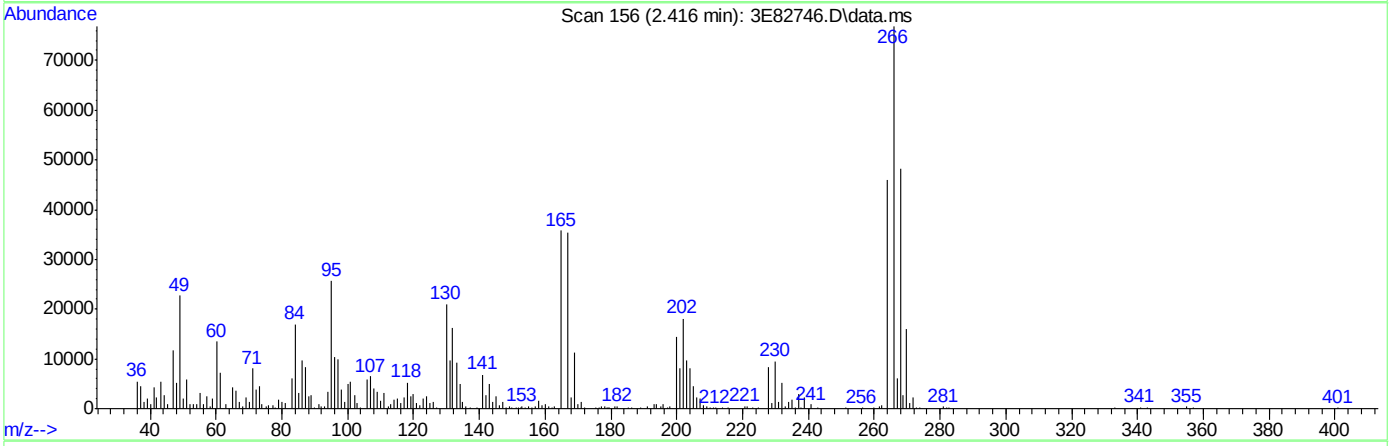
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
433.00	51	439.30	104				
433.20	53	439.80	133				
434.25	180	440.10	125				
434.80	114	441.10	10694				
435.40	173	442.10	75085				
436.20	80	443.10	14135				
436.65	121	444.05	1165				
437.45	199	445.10	66				
438.00	86						
438.50	91						
438.70	128						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3626\
Data File : 3E82746.D
Acq On : 29 Apr 2016 9:34 am
Operator : ashleyn
Sample : dftpp
Misc : op93161,e3e3625
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 29 09:41:28 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)

2.416min (-0.005) 50.16ppb

response 78398

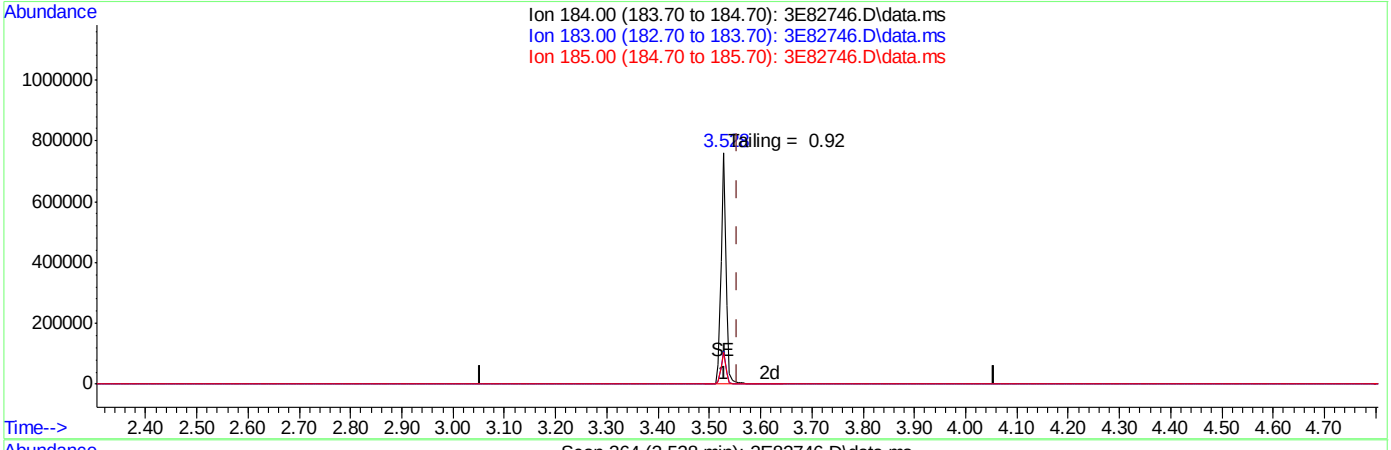
Ion	Exp%	Act%
265.80	100	100
263.80	62.20	59.71
267.80	64.70	62.70
0.00	0.00	0.00

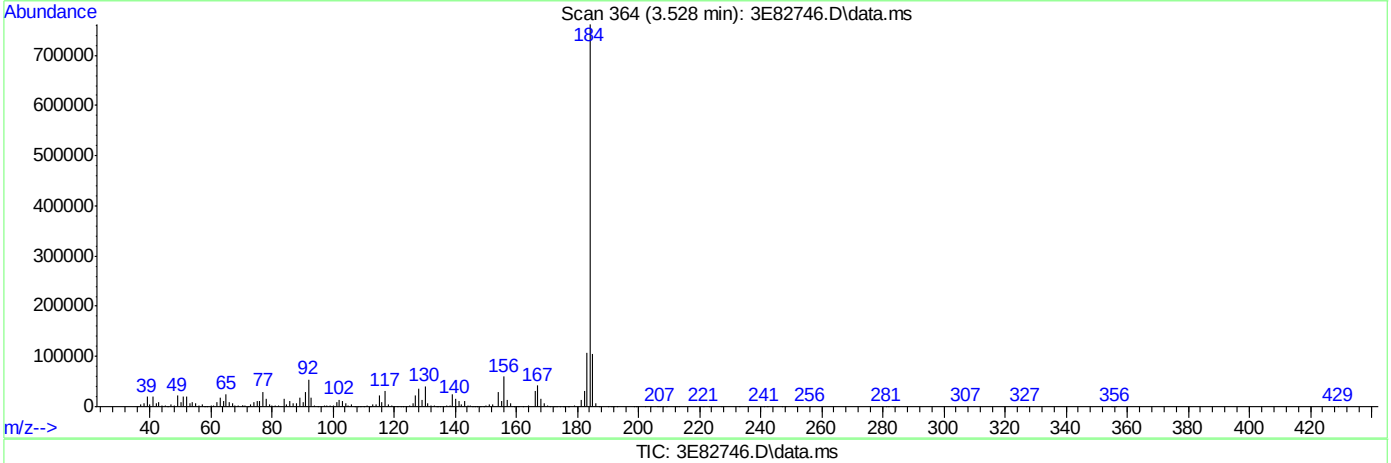
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3626\
Data File : 3E82746.D
Acq On : 29 Apr 2016 9:34 am
Operator : ashleyn
Sample : dftpp
Misc : op93161,e3e3625
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 29 09:41:28 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: 3E82746.D\data.ms

(2) Benzidine (t)

3.528min (-0.027) 48.19ppb

response 506056

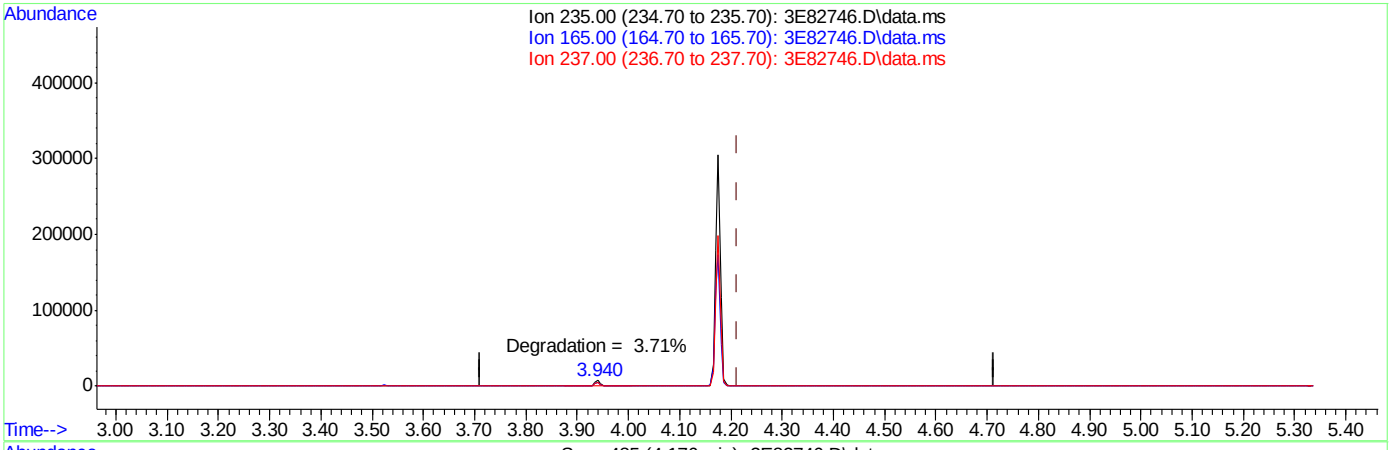
Ion	Exp%	Act%
184.00	100	100
183.00	13.20	13.99
185.00	15.40	13.71
0.00	0.00	0.00

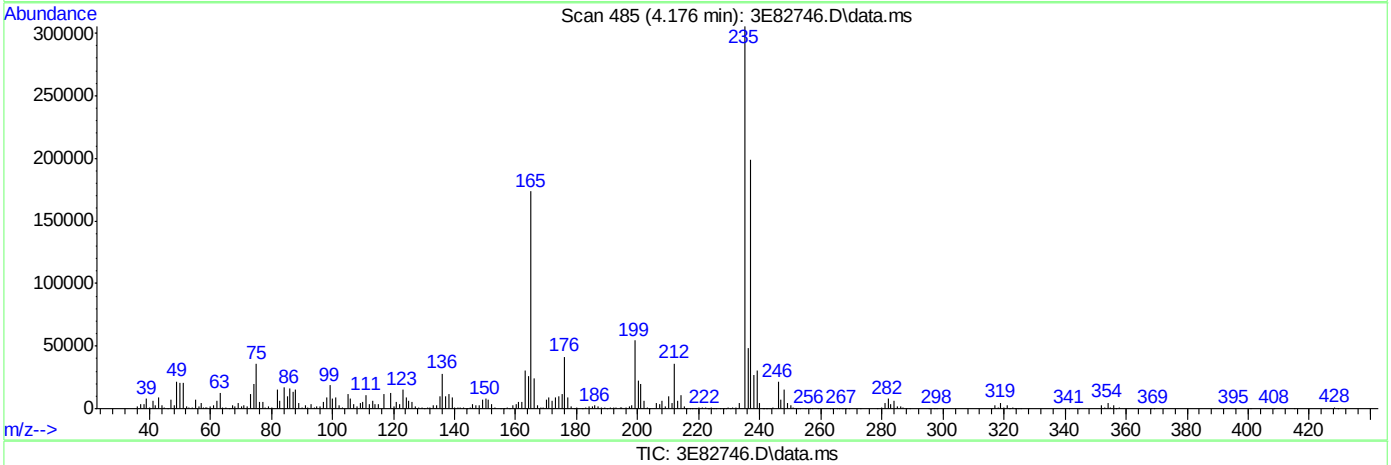
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3E3626\
Data File : 3E82746.D
Acq On : 29 Apr 2016 9:34 am
Operator : ashleyn
Sample : dftpp
Misc : op93161,e3e3625
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 29 09:41:28 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: 3E82746.D\data.ms

(3) PP-DDT (t)

4.176min (-0.037) 49.89ppb

response 207109

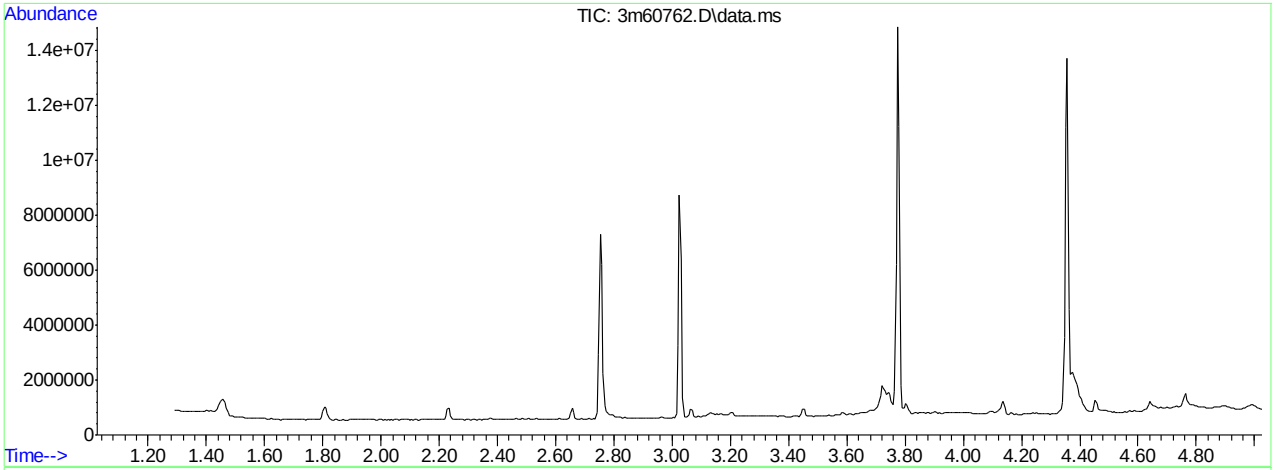
Ion	Exp%	Act%
235.00	100	100
165.00	0.10	60.36#
237.00	0.10	64.20#
0.00	0.00	0.00

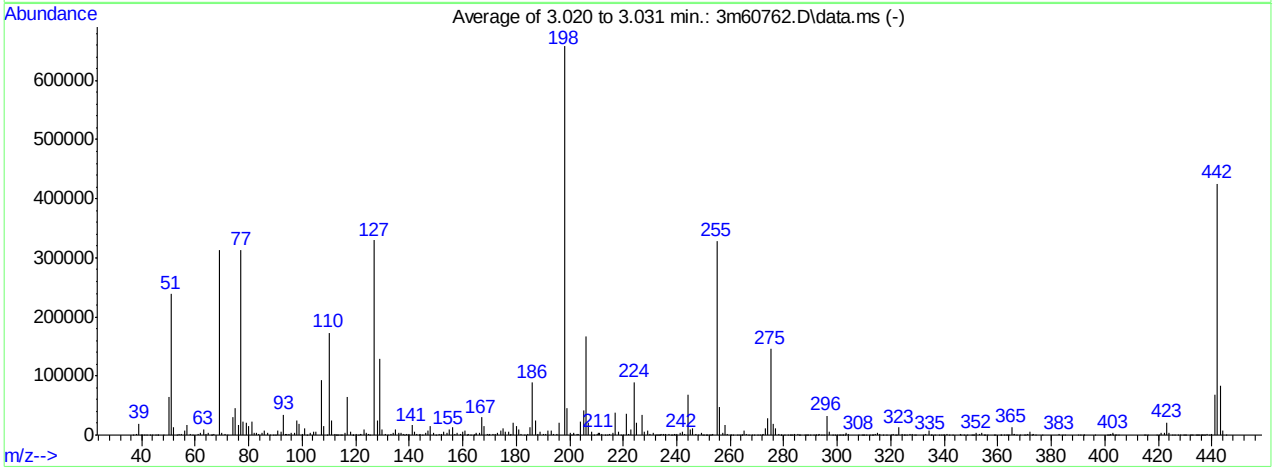
SGS ACCUTEST JC18516

DFTPP

Data File : C:\msdchem\1\DATA\E3M2855\3m60762.D Vial: 1
Acq On : 21 Apr 2016 1:31 pm Operator: linseyk
Sample : dftpp Inst : MS3M
Misc : op93052a,e3m2855 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\DFTPP3M.M (RTE Integrator)
Title : DFTPP, RXI-5MS 30m x .25mm x .25um





AutoFind: Scans 324, 325, 326; Background Corrected with Scan 320

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	36.2	238296	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	47.6	313116	PASS
70	69	0.00	2	1.0	3204	PASS
127	198	40	60	50.1	329840	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	657712	PASS
199	198	5	9	6.9	45100	PASS
275	198	10	30	22.1	145467	PASS
365	198	1	100	2.2	14264	PASS
441	443	0.10	100	81.8	68134	PASS
442	198	40	100	64.7	425304	PASS
443	442	17	23	19.6	83298	PASS

3m60762.D DFTPP3M.M Fri Apr 22 08:16:22 2016 RPT1

Average of 3.020 to 3.031 min.: 3m60762.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.00	661	46.20	436	58.95	251	71.05	1475
38.05	2794	48.00	244	61.00	2709	72.05	358
39.00	19760	50.00	65143	62.10	4250	74.05	29550
39.90	449	51.00	238296	63.00	10102	75.00	46243
40.00	755	52.00	12545	64.10	1997	76.10	17126
41.00	329	53.00	307	65.00	4739	77.05	313473
42.00	277	54.15	1115	65.95	419	78.00	22267
43.05	106	55.00	1105	66.20	319	79.00	21188
44.00	839	56.00	7453	66.95	1508	79.95	15917
45.10	137	57.00	17977	69.00	313116	81.00	21946
45.90	229	58.00	1593	70.05	3204	81.95	3804

Average of 3.020 to 3.031 min.: 3m60762.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
82.95	3997	93.95	1295	104.05	6580	114.10	398
83.90	2325	94.20	1080	105.00	6653	114.80	426
85.10	3907	95.00	1155	107.00	92226	116.00	4552
85.95	7333	95.95	2921	108.00	15158	117.00	65517
87.05	3225	97.15	3059	109.10	399	117.95	5021
87.95	160	98.00	25203	110.00	173137	118.85	1004
89.00	451	99.00	19270	111.00	25260	119.10	235
90.05	395	100.00	1366	112.05	2622	120.05	1481
90.95	6840	100.95	10715	112.70	729	120.85	926
92.00	6037	101.90	978	113.00	737	121.85	2893
93.00	35134	102.95	4167	113.60	216	122.05	1962

Average of 3.020 to 3.031 min.: 3m60762.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
123.00	8863	134.05	4029	143.80	49	154.05	4207
124.00	3789	134.95	9126	144.15	1336	154.95	9598
124.90	2681	136.00	4526	144.90	554	156.05	12971
125.20	659	137.05	4746	146.00	3191	157.05	2135
127.00	329840	137.80	1581	147.00	6974	158.00	2979
127.95	25688	138.05	8	147.95	15969	159.05	1815
129.00	128464	139.15	1213	149.00	3586	160.00	5213
129.95	10423	140.05	2181	149.90	649	160.90	6930
131.00	2043	141.00	16241	151.05	2905	161.80	620
131.90	739	142.05	4918	151.90	1498	162.10	1571
133.10	1078	142.95	2672	152.95	5232	162.90	286

Average of 3.020 to 3.031 min.: 3m60762.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
164.00	491	171.95	2596	181.95	1754	193.00	6861
164.10	623	173.05	4093	182.90	780	194.05	2190
164.80	1232	174.05	6735	184.10	2113	195.05	1948
165.00	4676	175.05	10999	185.00	13065	196.00	21652
166.05	4746	176.05	4833	186.00	88408	198.00	657712
166.95	29813	176.95	6189	187.05	24010	199.00	45100
167.95	14663	177.70	742	188.10	2813	200.00	3024
169.05	2335	178.00	1490	188.90	5044	200.70	236
169.70	466	179.00	21463	190.05	1319	201.35	3553
170.15	1305	180.00	14698	191.00	2618	201.65	2514
171.10	1248	181.00	9205	191.95	7793	202.80	1702

Average of 3.020 to 3.031 min.: 3m60762.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
203.00	2781	213.05	528	224.10	89368	233.80	461
204.10	23086	214.00	433	225.05	21868	234.10	1557
205.10	41149	215.05	1578	227.05	34358	234.80	391
206.05	167835	216.05	4006	228.00	4859	235.05	2665

207.00	21445	217.00	38342	229.00	6933	235.95	2072
208.00	6458	218.05	5162	229.85	1303	237.05	2533
209.00	896	219.20	990	231.00	3173	237.90	238
210.15	1189	220.00	429	231.90	223	238.15	279
210.75	4358	221.05	36080	232.30	136	238.95	1672
211.10	3392	221.80	1095	232.90	149	239.30	482
211.85	2397	223.00	9572	233.10	789	240.10	1273

Average of 3.020 to 3.031 min.: 3m60762.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
241.05	3311	250.80	152	259.90	493	269.00	206
242.05	4890	251.15	707	260.20	97	270.05	831
243.10	2235	251.95	870	261.00	468	271.05	922
244.10	68677	252.40	139	262.60	86	271.70	207
245.05	9760	252.90	981	263.25	515	272.10	1838
246.00	12142	253.40	1728	264.10	501	273.05	11001
247.00	2344	255.05	329205	264.30	560	274.05	29108
248.00	837	256.00	47298	265.00	7222	275.10	145467
249.05	3015	257.15	4289	265.90	1481	276.05	18900
249.80	449	258.00	17582	266.75	355	277.00	11300
250.25	600	259.00	2516	268.20	147	278.00	1854

Average of 3.020 to 3.031 min.: 3m60762.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
278.80	205	287.70	119	294.70	95	303.10	3964
279.15	477	288.15	310	296.05	32985	304.05	1309
280.10	279	288.60	87	297.00	5136	307.90	846
281.60	120	289.15	281	298.10	167	309.00	398
282.10	626	289.95	519	298.90	166	309.70	112
282.90	419	291.10	296	300.00	85	310.15	371
283.10	836	291.80	318	300.90	148	310.95	354
284.15	1540	292.10	662	301.15	590	312.00	87
285.15	2843	292.80	196	301.80	536	312.80	156
285.80	310	293.05	2426	302.10	353	313.10	231
286.10	133	294.10	917	302.80	384	313.95	1898

Average of 3.020 to 3.031 min.: 3m60762.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
315.00	3718	325.20	137	336.25	305	348.30	141
316.00	2484	325.95	441	338.10	80	350.05	338
317.05	541	327.05	2247	339.00	94	350.60	76
318.20	109	328.00	1248	339.70	149	351.10	136
320.15	285	328.80	179	339.90	100	352.05	3729
321.00	1507	329.20	147	341.00	1301	353.10	2441
321.70	413	332.05	947	341.95	432	354.00	4692
322.00	251	332.95	1265	343.20	134	354.95	265
323.10	12425	334.10	8059	345.90	234	355.20	159
324.15	2124	334.90	772	346.05	2044	356.15	415
324.90	281	335.10	980	347.05	266	358.40	195

Average of 3.020 to 3.031 min.: 3m60762.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
359.10	253	368.00	93	385.05	288	403.05	3094
360.90	94	369.90	367	390.05	558	403.80	336
361.25	176	370.40	117	391.00	594	404.05	985
362.50	298	371.05	1415	391.90	84	405.05	371
363.10	278	372.10	6694	392.20	500	414.80	78
363.40	159	372.90	577	396.30	97	415.10	95
364.00	309	373.10	1038	400.75	279	416.00	104
365.05	14264	374.00	194	401.20	249	419.25	304
365.90	1395	376.70	189	401.90	271	420.30	329
366.10	1077	382.95	1487	402.05	2235	421.05	4050
366.90	270	384.00	498	402.80	202	422.15	3505

Average of 3.020 to 3.031 min.: 3m60762.D\data.ms

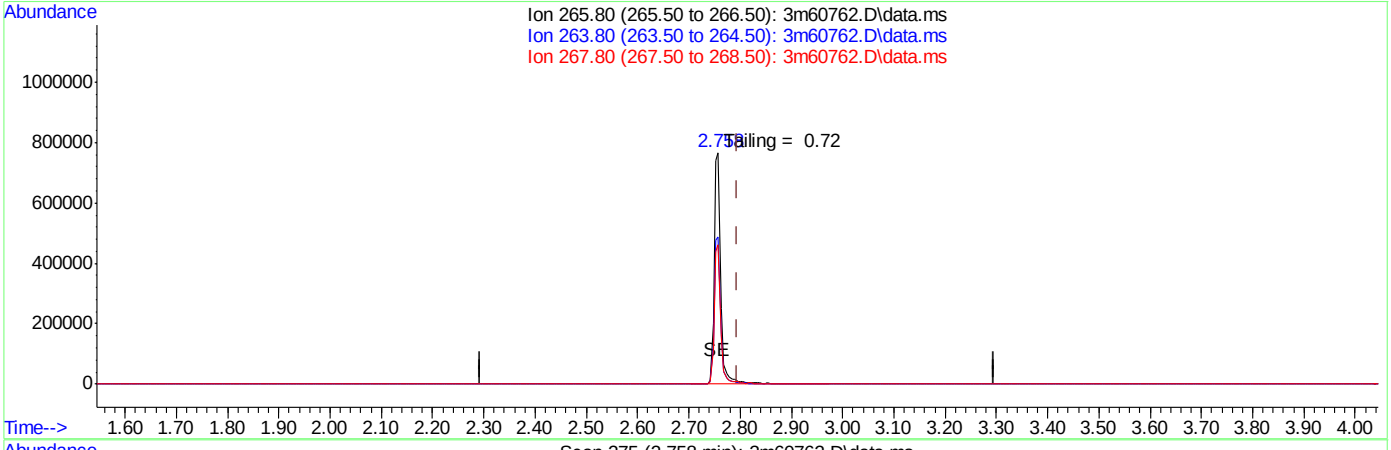
dftpp
Modified:subtracted

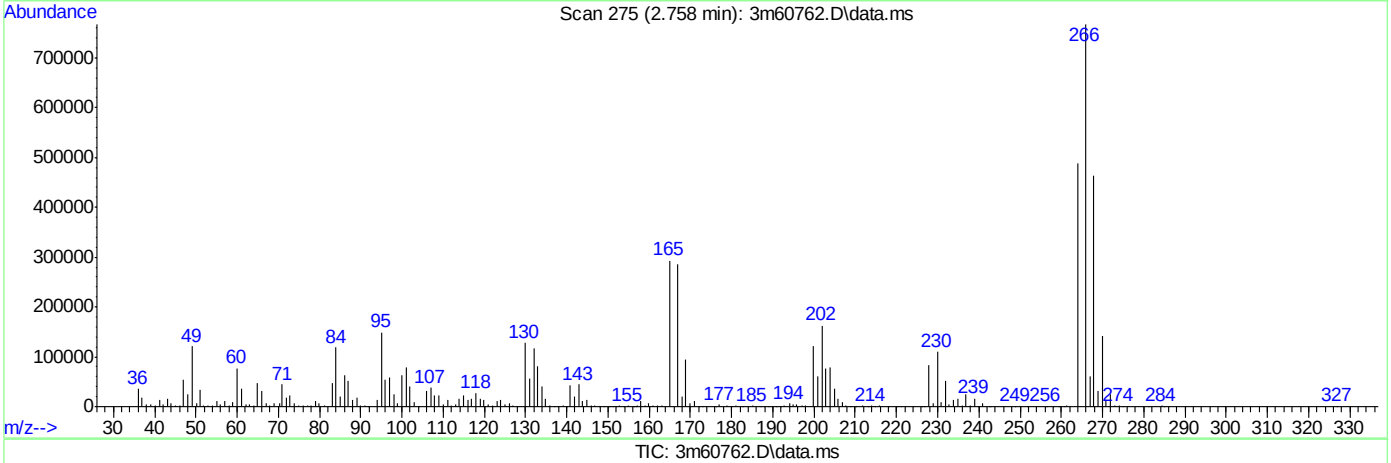
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
423.10	21736	432.90	494	438.80	912		
424.10	4461	433.85	400	439.90	2031		
425.00	512	434.50	189	441.10	68134		
426.10	183	434.80	226	442.10	425304		
427.20	203	435.40	731	443.10	83298		
428.30	259	435.90	455	444.10	7637		
429.50	82	436.25	476	445.10	306		
429.70	297	436.60	319				
430.25	389	436.95	928				
431.75	392	437.50	435				
432.50	347	438.30	1141				

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60762.D
Acq On : 21 Apr 2016 1:31 pm
Operator : linseyk
Sample : dftpp
Misc : op93052a,e3m2855
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 21 13:36:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP3M.M
Quant Title : DFTPP, RXI-5MS 30m x .25mm x .25um
QLast Update : Wed Dec 09 10:32:40 2015
Response via : Initial Calibration





TIC: 3m60762.D\data.ms

(1) Pentachlorophenol (t)

2.758min (-0.037) 190.28ppb

response 701808

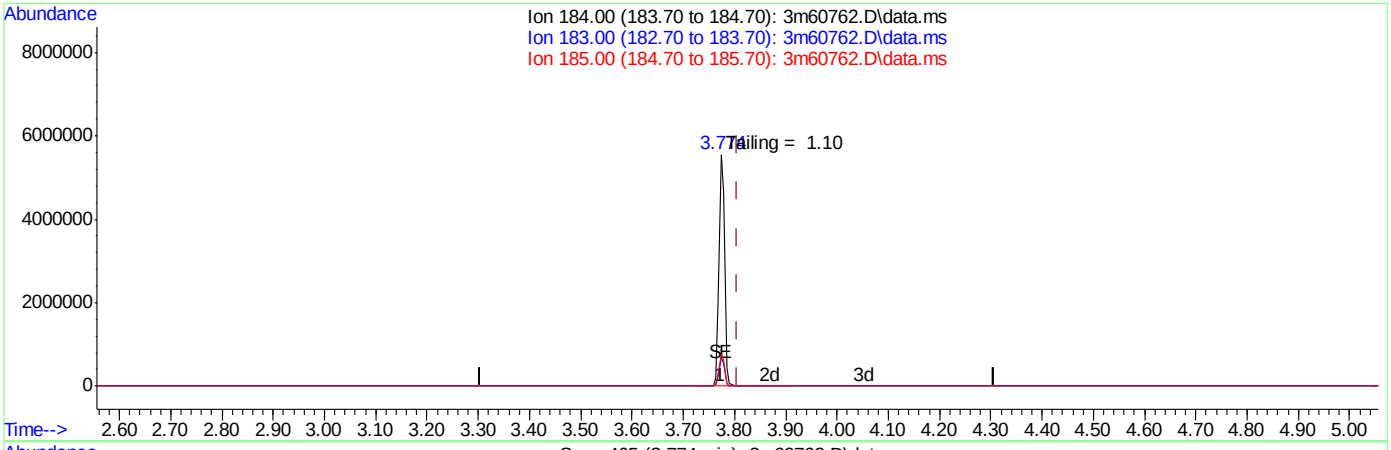
Ion	Exp%	Act%
265.80	100	100
263.80	62.80	63.64
267.80	64.10	60.34
0.00	0.00	0.00

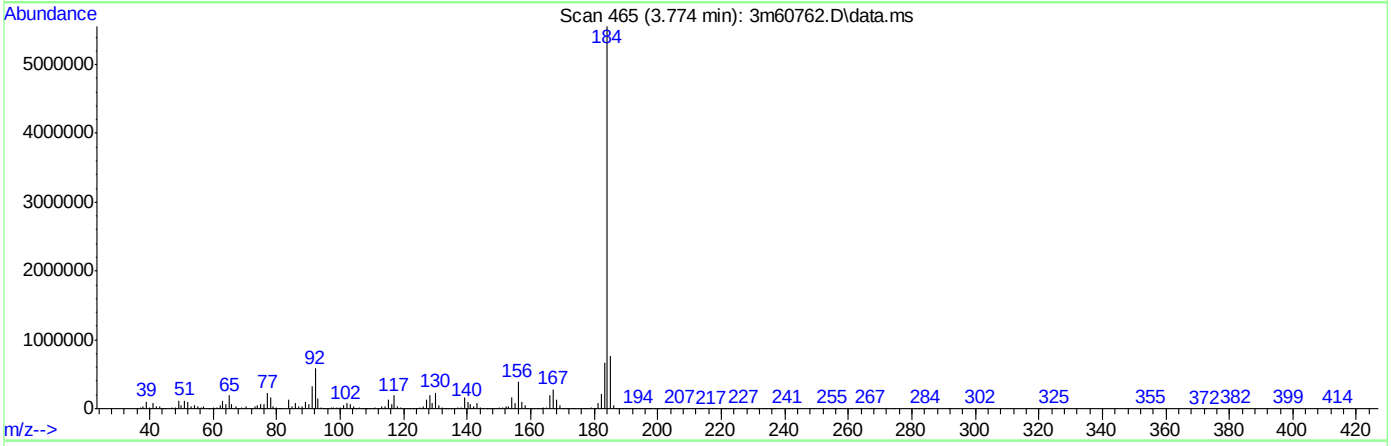
SGS ACCUTEST JC18516

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

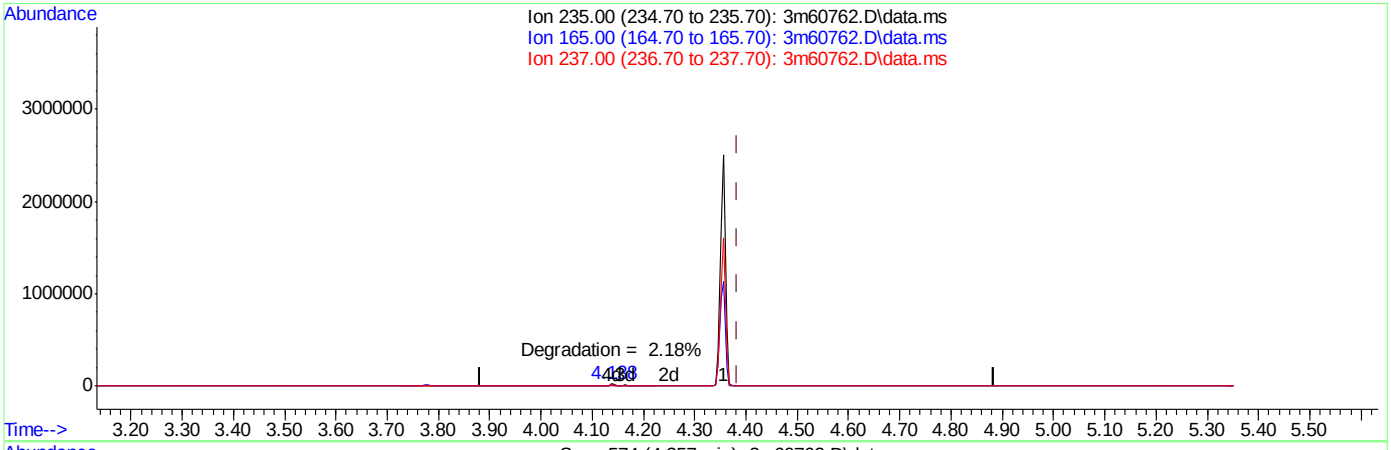
response 4170192

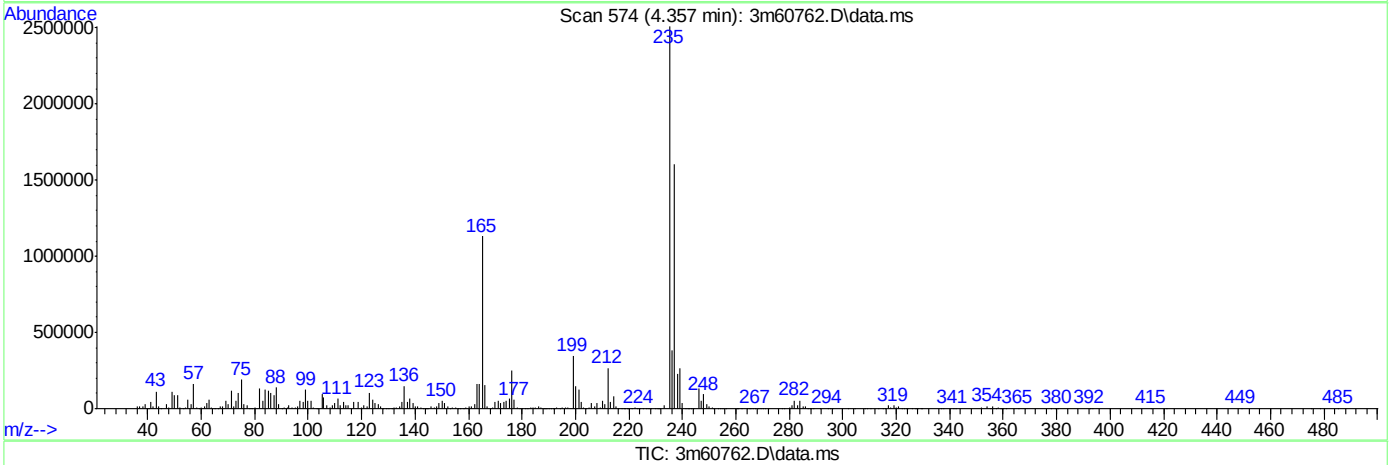
Ion	Exp%	Act%
184.00	100	100
183.00	11.50	12.07
185.00	14.40	13.67
0.00	0.00	0.00

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

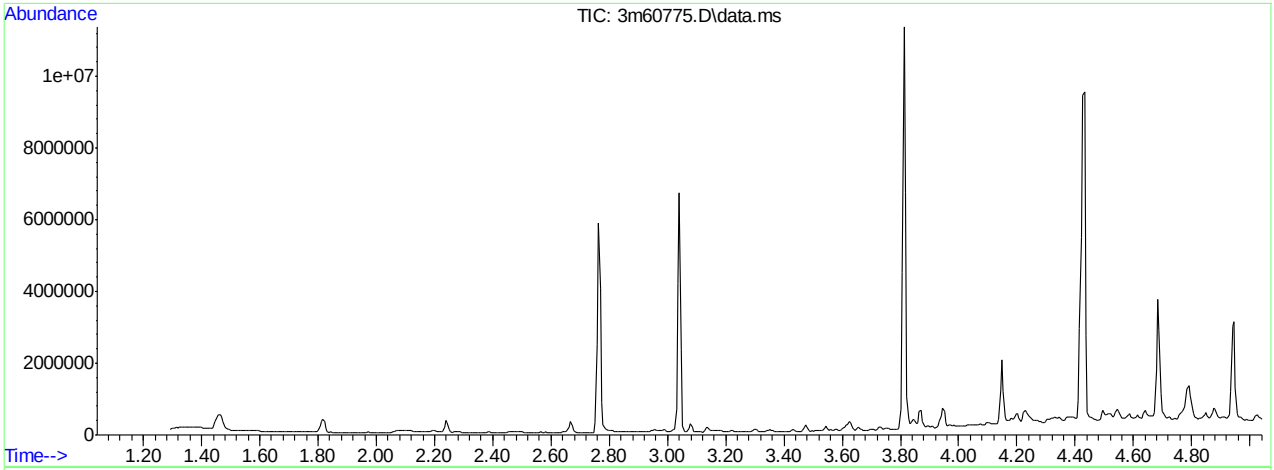
Ion	Exp%	Act%
235.00	100	100
165.00	0.00	48.45#
237.00	0.00	63.48#
0.00	0.00	0.00

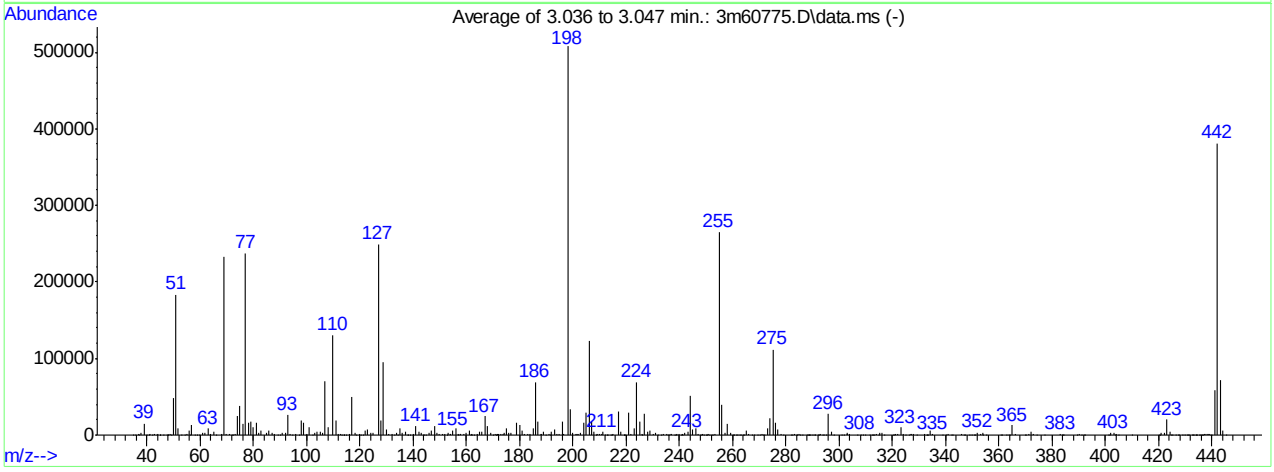
SGS ACCUTEST JC18516

DFTPP

Data File : C:\msdchem\1\DATA\E3M2856\3m60775.D Vial: 1
Acq On : 22 Apr 2016 9:08 am Operator: linseyk
Sample : dftpp Inst : MS3M
Misc : op93052a,e3m2856 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 327, 328, 329; Background Corrected with Scan 321

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	36.2	183729	PASS
68	69	0.00	2	1.0	2249	PASS
69	198	0.00	100	46.0	233456	PASS
70	69	0.00	2	0.6	1335	PASS
127	198	40	60	49.2	249659	PASS
197	198	0.00	1	0.2	997	PASS
198	198	100	100	100.0	507554	PASS
199	198	5	9	6.8	34440	PASS
275	198	10	30	22.1	111976	PASS
365	198	1	100	2.5	12643	PASS
441	443	0.10	100	81.7	59008	PASS
442	198	40	100	75.1	381120	PASS
443	442	17	23	19.0	72259	PASS

3m60775.D DFTPP3M.M Fri Apr 22 12:50:59 2016 RPT1

Average of 3.036 to 3.047 min.: 3m60775.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.10	399	43.90	490	51.05	183729	61.00	2464
35.85	394	44.10	800	51.95	9393	62.00	3279
36.95	864	44.90	141	53.00	547	63.05	8296
37.20	193	45.10	377	54.20	112	64.05	1443
38.00	2497	46.20	89	55.00	1535	65.05	4477
39.10	15063	47.40	128	56.00	5564	66.20	453
39.90	778	47.90	236	56.20	558	68.00	2249
41.00	256	48.05	297	57.00	13116	69.00	233456
41.20	925	48.90	828	58.05	634	70.00	1335
42.00	125	49.20	467	58.95	562	71.05	896
43.05	1063	50.00	48342	59.85	372	71.80	95

Average of 3.036 to 3.047 min.: 3m60775.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
72.30	207	83.05	5532	94.80	481	105.00	4868
73.10	1159	85.00	3247	96.00	1169	106.10	2952
74.05	24440	85.95	5994	97.10	506	107.00	71003
75.00	37445	87.10	2471	97.95	18863	108.00	10677
76.15	14691	88.00	1090	98.95	16434	110.00	130784
77.05	237279	89.10	561	99.80	651	111.00	18746
78.10	16169	90.20	167	100.00	1157	112.00	1660
79.00	17268	91.05	3629	101.00	9914	112.85	1021
79.95	10932	91.95	3547	102.10	318	113.20	467
81.00	16656	93.00	25799	102.90	2864	113.85	322
82.00	3496	94.00	2038	104.05	5100	114.10	239

Average of 3.036 to 3.047 min.: 3m60775.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
115.00	133	125.05	3596	136.00	2676	144.95	695
116.10	1647	127.00	249659	137.00	4276	146.05	2490
117.00	50505	128.05	19200	137.90	599	147.05	5803
118.05	3221	128.95	95365	138.15	757	148.00	11766
118.70	332	129.90	7803	138.85	440	149.10	2453
119.85	899	131.00	2090	140.05	1641	149.95	1111
120.40	131	132.10	1434	141.00	12172	151.20	1795
121.20	297	133.15	665	142.05	4224	152.00	1583
122.00	5232	133.90	2410	142.95	3447	152.80	541
123.00	6965	134.10	59	143.90	295	153.10	2604
123.95	3204	135.00	8903	144.10	680	153.95	1481

Average of 3.036 to 3.047 min.: 3m60775.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
154.20	1121	161.90	1505	171.10	218	180.00	12646
155.00	6563	162.10	389	171.30	297	181.00	5939
156.00	9475	162.90	483	171.90	1018	181.95	1406
156.80	321	164.15	1273	172.10	1750	183.15	884
157.10	2258	164.95	4097	173.00	2190	184.00	1600
157.80	1175	166.00	4263	173.90	1969	185.00	8765
158.00	1027	167.05	24776	174.10	3306	186.00	69333
159.05	2054	168.00	11111	174.95	8978	187.00	18362
160.00	3423	169.05	2768	176.00	3109	187.90	832
161.00	5898	169.95	228	176.95	3464	188.05	1146
161.60	314	170.95	1078	179.00	16889	189.00	3800

Average of 3.036 to 3.047 min.: 3m60775.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
189.95	572	200.00	2866	209.05	888	218.00	4249
191.00	2020	201.30	1702	209.90	1929	219.05	111
191.40	587	201.60	1511	210.80	1024	219.40	441
191.95	5055	202.15	1489	211.05	4268	219.70	178

193.00	6960	202.90	3081	212.00	684	221.00	29784
193.90	1698	204.00	16553	212.80	298	221.80	1670
195.00	1287	205.00	29163	213.05	195	223.00	8911
196.05	17171	206.10	122995	214.15	223	224.05	69189
196.70	997	207.05	17137	214.70	192	225.05	18120
198.00	507554	208.00	3819	215.05	1527	225.90	748
199.00	34440	208.80	343	217.00	31423	226.10	1288

Average of 3.036 to 3.047 min.: 3m60775.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
227.00	28177	236.85	1393	244.10	51163	251.20	219
228.05	4539	237.10	1442	245.00	7874	251.95	545
228.95	5816	238.00	330	246.10	9214	252.50	205
230.10	1131	238.70	276	247.05	1819	253.20	1704
231.00	2756	239.05	999	247.80	343	255.00	265323
232.00	768	240.00	1399	248.20	169	256.00	39712
233.00	626	240.70	280	248.90	1170	257.15	3087
233.95	1976	241.00	1643	249.10	433	258.00	14682
235.10	1822	241.30	303	249.90	267	259.05	2596
235.80	547	242.15	3433	250.25	225	260.10	74
236.10	578	243.10	4018	250.85	916	260.50	211

Average of 3.036 to 3.047 min.: 3m60775.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
261.15	601	270.00	527	281.85	347	288.80	199
261.90	136	271.00	1143	282.30	133	289.00	172
262.70	102	271.60	151	283.05	1221	290.05	387
263.15	304	272.00	186	284.00	246	290.70	161
263.80	285	273.05	9194	284.15	643	290.90	133
264.15	736	274.05	21979	284.95	1646	291.90	498
265.00	6565	275.05	111976	285.30	288	292.30	215
266.05	972	276.05	15696	286.15	271	293.05	2020
267.10	167	277.05	8065	287.90	303	293.85	392
268.10	325	278.00	1801	288.30	126	294.30	214
269.30	131	279.00	643	288.60	78	294.85	462

Average of 3.036 to 3.047 min.: 3m60775.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
296.00	27243	309.95	462	320.60	167	332.10	1041
297.05	4063	311.50	79	321.10	1388	332.85	411
297.80	242	312.20	132	322.15	1107	333.10	564
301.00	556	312.55	396	323.10	9876	333.40	330
301.85	411	313.00	144	324.15	1833	334.10	6250
302.80	1221	314.05	1848	325.10	442	335.05	1438
303.10	2857	314.60	395	326.10	205	338.90	87
304.05	1467	315.10	3288	326.80	1122	340.20	149
306.70	76	316.05	2610	327.00	1116	341.05	1319
307.95	683	317.10	515	328.00	827	342.05	234
309.05	503	320.40	79	329.20	83	342.60	108

Average of 3.036 to 3.047 min.: 3m60775.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
346.00	2069	355.05	694	372.10	5029	392.00	184
346.90	216	360.80	88	373.05	1699	392.20	180
347.30	115	361.20	107	374.05	248	401.10	235
348.80	109	362.90	102	377.10	156	401.40	94
349.90	78	363.50	106	383.10	1411	402.10	2290
350.70	101	363.95	395	383.70	118	403.05	2421
351.05	218	365.05	12643	383.90	298	403.80	201
352.00	3293	366.00	1701	384.10	112	404.10	1003
353.00	2181	369.80	186	389.50	154	405.05	211
353.90	663	370.05	247	390.10	1245	410.00	79
354.05	2840	371.00	1071	391.10	332	420.05	242

Average of 3.036 to 3.047 min.: 3m60775.D\data.ms

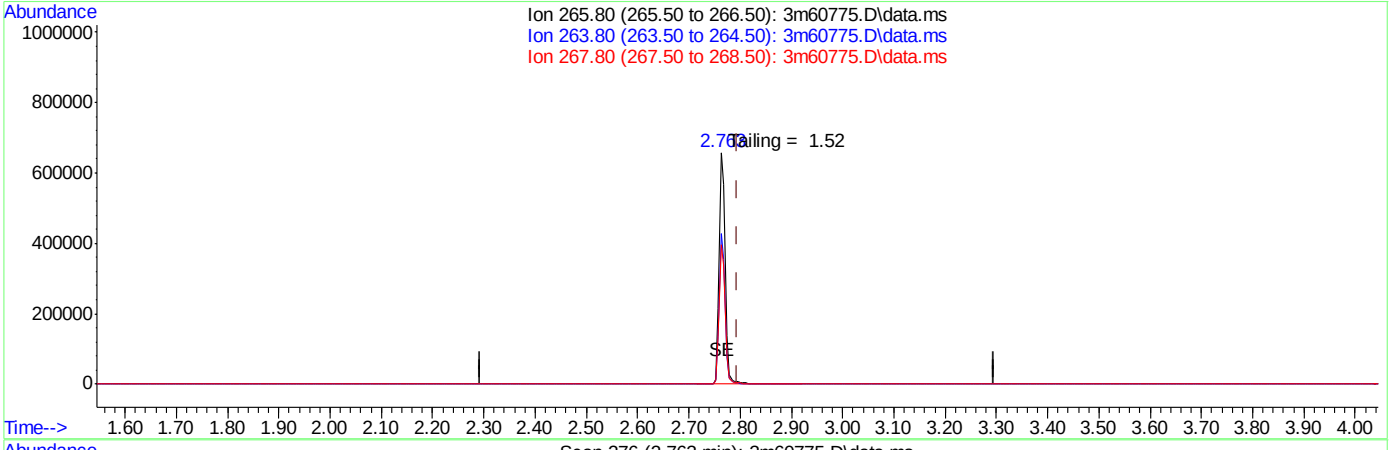
dftpp
Modified:subtracted

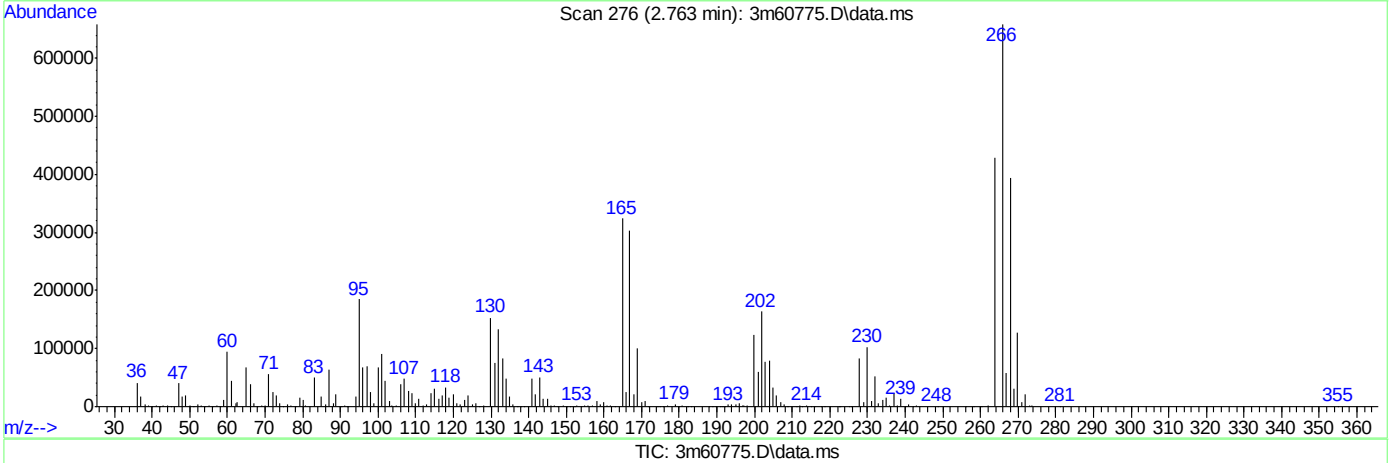
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
420.40	123	429.70	113	435.60	492	441.10	59008
421.05	2721	430.60	187	435.90	103	442.10	381120
422.15	2761	430.90	127	436.40	239	443.10	72259
423.05	19885	431.25	339	436.60	369	444.10	6149
424.10	4372	432.60	219	437.10	814	445.10	294
424.80	311	432.80	104	437.45	1190		
425.25	211	433.10	163	438.05	1621		
426.20	83	433.70	134	438.55	923		
427.00	104	433.90	638	439.15	2217		
427.40	81	434.45	734	439.40	719		
428.90	113	435.00	153	439.70	408		

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2856\
Data File : 3m60775.D
Acq On : 22 Apr 2016 9:08 am
Operator : linseyk
Sample : dftpp
Misc : op93052a,e3m2856
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 22 09:12:44 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)

2.763min (-0.032) 144.89ppb

response 534391

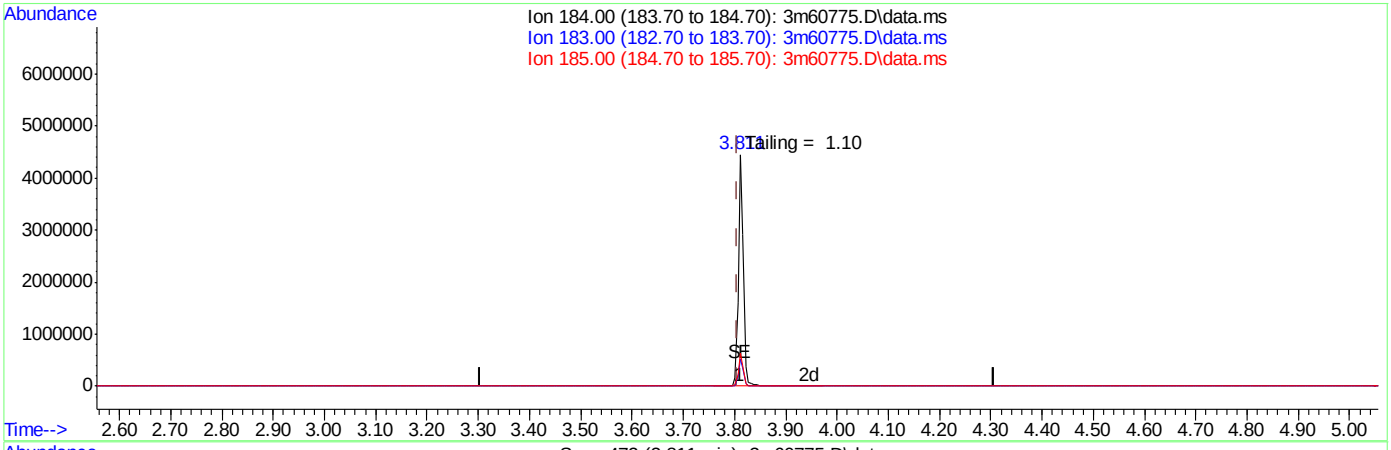
Ion	Exp%	Act%
265.80	100	100
263.80	62.80	65.04
267.80	64.10	59.96
0.00	0.00	0.00

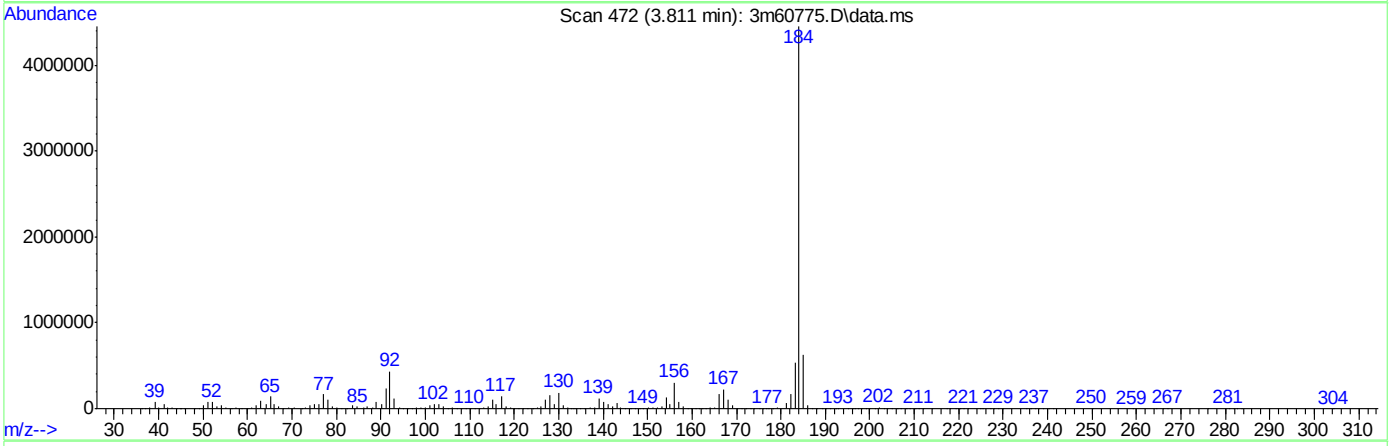
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2856\
Data File : 3m60775.D
Acq On : 22 Apr 2016 9:08 am
Operator : linseyk
Sample : dftpp
Misc : op93052a,e3m2856
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 22 09:12:44 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: 3m60775.D\data.ms

(2) Benzidine (t)

3.811min (+0.006) 172.16ppb

response 3132803

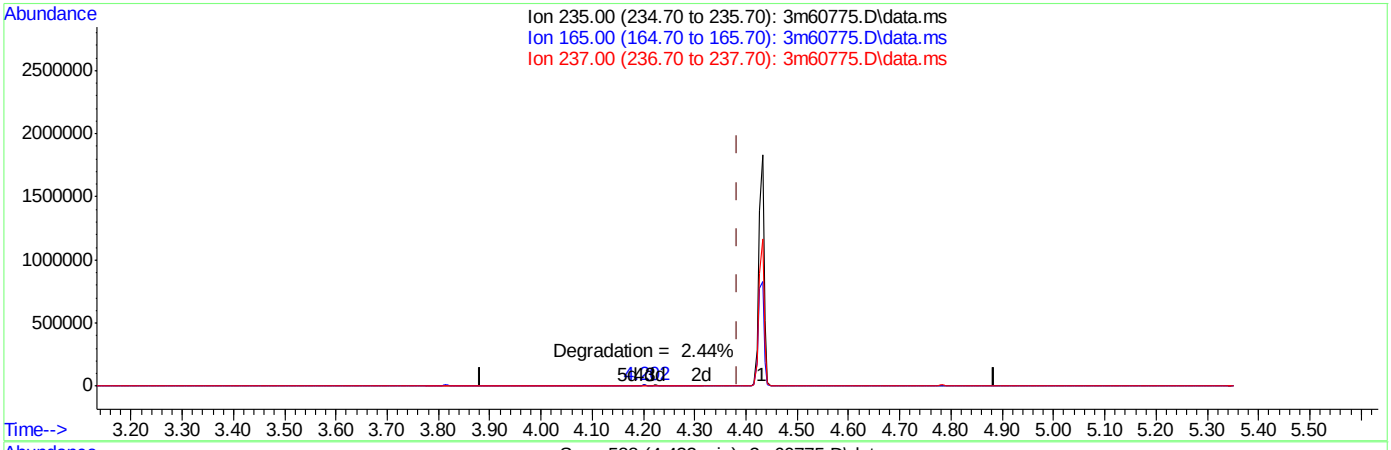
Ion	Exp%	Act%
184.00	100	100
183.00	11.50	11.89
185.00	14.40	13.96
0.00	0.00	0.00

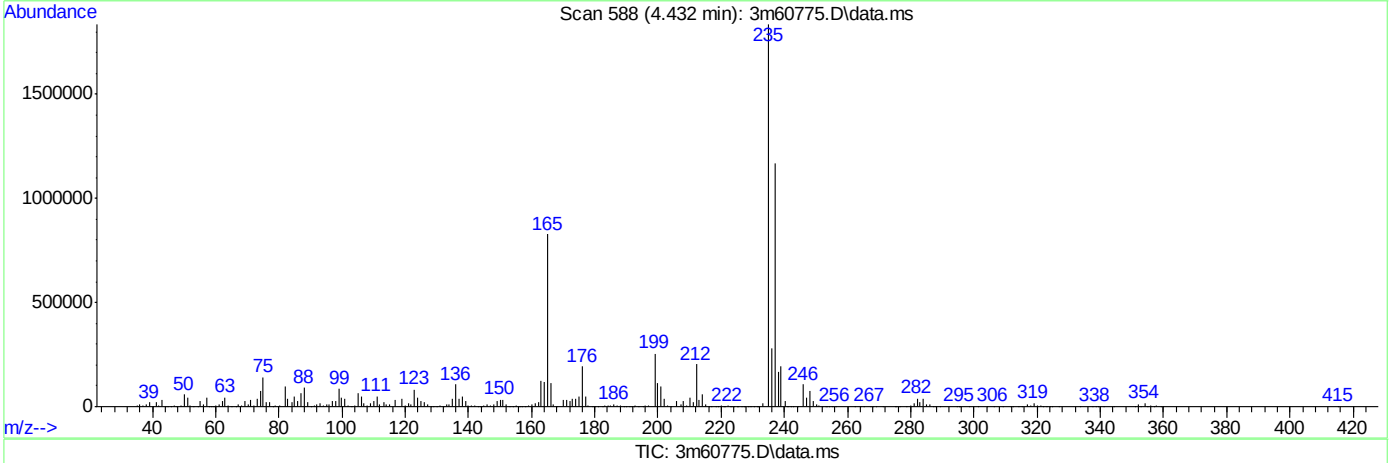
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\E3M2856\
Data File : 3m60775.D
Acq On    : 22 Apr 2016   9:08 am
Operator  : linseyk
Sample    : dftpp
Misc      : op93052a,e3m2856
ALS Vial  : 1   Sample Multiplier: 1

Quant Time: Apr 22 09:12:44 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: 3m60775.D\data.ms

(3) PP-DDT (t)

4.432min (+0.048) 175.60ppb

response 1308024

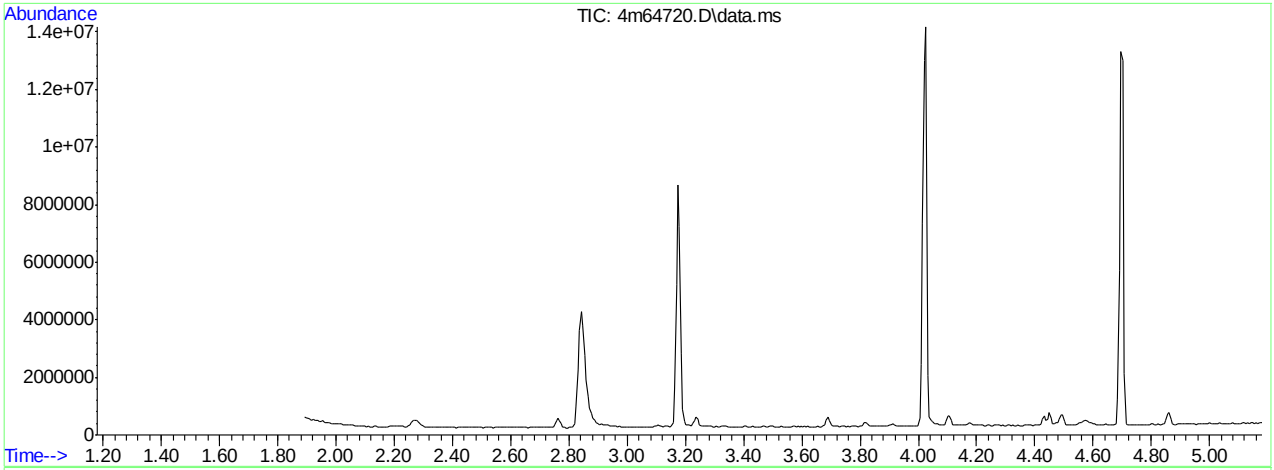
Ion	Exp%	Act%
235.00	100	100
165.00	0.00	49.10#
237.00	0.00	63.98#
0.00	0.00	0.00

SGS ACCUTEST JC18516

DFTPP

Data File : C:\msdchem\1\DATA\E4M2881\4m64720.D Vial: 1
Acq On : 14 Apr 2016 9:05 am Operator: linseyk
Sample : dftpp Inst : GCMS4M
Misc : op92998a,e4m2881 Multiplr: 1.00
MS Integration Params: events3.e

Method : C:\MSDCHEM\1\METHODS\DFTPP4M.M (ChemStation Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um



AutoFind: Scans 225, 226, 227; Background Corrected with Scan 208

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	36.3	258280	PASS
68	69	0.00	2	1.6	4287	PASS
69	198	0.00	100	37.8	268929	PASS
70	69	0.00	2	0.9	2537	PASS
127	198	40	60	42.9	305536	PASS
197	198	0.00	1	0.6	4427	PASS
198	198	100	100	100.0	711488	PASS
199	198	5	9	6.6	46648	PASS
275	198	10	30	24.9	177016	PASS
365	198	1	100	3.4	24255	PASS
441	443	0.01	100	77.5	100995	PASS
442	198	40	100	96.6	687531	PASS
443	442	17	23	19.0	130315	PASS

4m64720.D DFTPP4M.M Thu Apr 14 17:23:44 2016 MANAGER

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
50.05	59733	60.00	457	71.05	45	82.00	3891
51.05	258280	60.95	2678	71.90	622	83.00	5071
51.95	12358	62.05	3823	73.00	9177	85.00	2914
53.00	186	63.05	10823	74.00	20144	85.95	7237
53.20	923	64.05	1402	75.00	38614	86.90	2228
53.85	408	65.00	5253	76.05	12303	87.90	789
56.00	7193	66.00	478	77.10	291176	89.10	798
57.00	20601	67.00	82	78.00	19044	90.00	181
57.95	640	68.05	4287	79.00	17419	91.05	4835
58.20	383	69.00	268929	80.05	12571	92.00	3669
59.05	543	70.00	2537	81.00	18508	93.00	24515

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
94.05	2541	103.90	4777	116.05	3605	125.00	3741
95.00	895	105.00	5877	117.00	48560	125.95	348
95.95	779	106.00	2485	118.05	3075	126.20	636
97.15	2316	106.95	88755	118.80	620	127.00	305536
98.00	16613	108.05	12214	119.20	215	128.00	23012
99.00	16199	109.05	2422	120.05	375	129.00	114200
99.95	1254	110.00	166575	120.70	174	129.90	9530
100.90	9998	111.00	24379	121.15	456	131.05	2380
101.85	176	112.05	3159	122.00	4961	131.90	114
103.00	2632	112.90	992	123.00	7911	132.20	424
103.20	406	114.05	581	123.95	3501	132.90	482

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
133.70	311	143.00	1643	151.00	2319	158.95	2293
133.95	1878	143.85	195	151.20	262	159.95	4700
135.00	7204	144.15	596	151.70	1172	161.00	7679
136.00	4006	144.60	357	152.10	379	162.00	2024
137.05	4208	145.15	1487	153.00	4763	162.95	887
137.85	196	145.95	2061	154.00	3534	164.05	614
138.85	503	147.00	12335	155.10	7868	165.00	4310
140.05	1684	148.00	12963	156.00	12995	165.95	4544
141.00	12121	149.00	4103	157.00	2880	167.00	24350
142.00	4450	149.80	169	157.80	1810	168.00	11917
142.80	799	150.00	706	158.00	1559	169.05	3197

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
170.20	1030	180.00	15550	190.05	860	200.95	38
170.60	727	181.00	7487	190.95	2833	201.40	2324
171.00	742	182.00	1147	191.95	7105	201.80	329
172.00	2495	183.00	730	193.05	6769	202.95	4648
173.05	3867	183.50	555	194.05	1386	204.05	23832
174.05	6120	184.00	1539	195.00	1415	205.10	38998
175.00	12082	185.05	11088	196.05	22627	206.10	163456
176.00	3990	186.00	88595	197.00	4427	207.10	23332
177.00	3562	187.00	25789	198.00	711488	208.00	5882
178.05	2032	188.05	2540	199.00	46648	209.00	1628
178.95	20312	189.00	4726	199.95	4431	210.20	3008

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
211.05	7001	219.10	1376	228.00	4753	236.00	1429
211.80	264	219.70	317	229.00	7916	236.95	1291
212.50	118	220.10	811	229.90	1145	237.20	1406
213.10	343	221.10	43960	231.05	4425	238.00	703

M4M2881SIM.M Thu Apr 14 17:02:12 2016 MANAGER Page: 0

213.50	160	221.80	3763	232.00	1293	238.90	1387
214.10	203	222.05	3811	232.80	756	240.00	1127
215.00	1974	223.00	11574	233.20	189	241.00	2142
215.80	726	224.05	100086	233.90	1180	242.05	4545
216.10	3291	225.10	24836	234.10	1520	242.80	559
217.00	42592	226.05	2623	235.00	3019	243.05	5893
218.00	6216	227.00	39165	235.70	174	244.10	77501

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
245.10	10548	252.10	944	261.15	295	271.00	706
246.00	13587	253.15	1948	262.10	97	271.30	600
247.00	2554	254.10	1469	263.90	841	272.10	1096
247.60	95	255.00	393813	264.10	85	273.00	12304
247.90	655	256.00	58016	265.05	8314	274.05	32919
248.15	385	257.00	4804	265.95	1264	275.00	177016
248.70	1297	258.05	20468	266.90	170	276.00	21876
248.95	397	258.80	334	267.30	236	277.05	13725
249.90	937	259.10	3164	268.20	135	278.05	1847
251.15	1085	259.85	844	268.90	160	278.80	508
251.60	120	261.00	398	269.95	781	279.10	487

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
279.90	97	289.65	492	298.00	371	308.90	180
281.15	3645	290.05	414	300.70	209	309.50	68
282.00	571	290.80	189	301.05	509	309.80	136
282.20	320	291.05	458	302.00	1242	310.00	228
283.00	3052	292.05	1119	303.05	7446	311.50	189
284.10	1574	293.05	3652	303.95	1659	312.30	438
284.70	625	294.00	550	304.90	120	313.05	655
285.05	2194	294.80	223	307.60	77	314.05	3006
286.00	243	295.10	1890	307.95	828	315.00	5281
286.20	82	296.00	50648	308.20	185	316.05	3288
288.95	296	297.10	6591	308.60	117	317.00	557

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
319.90	249	328.20	555	340.95	2487	353.00	4422
321.00	1400	328.90	433	342.10	910	354.10	5044
322.05	1021	330.00	185	343.00	381	355.05	4717
323.10	17235	332.05	1488	344.05	473	355.80	350
324.10	3221	333.05	1447	345.00	91	356.10	958
324.80	308	334.10	13095	346.00	4050	357.00	1042
325.15	381	335.05	2912	347.10	989	358.15	194
325.60	169	336.00	564	349.80	109	359.10	315
326.00	204	339.05	501	350.90	148	359.90	75
327.10	3992	339.90	84	351.20	323	361.90	82
327.95	875	340.05	154	352.20	5622	363.80	101

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
365.00	24255	384.30	311	404.10	2425	424.05	6189
366.00	3411	384.70	108	405.05	334	424.90	213
367.00	289	385.00	105	409.15	192	425.05	410
369.20	430	389.80	374	410.20	74	426.40	190
370.05	894	390.05	1404	414.10	70	428.00	89
371.00	1350	391.05	1482	414.95	322	429.05	1531
372.10	11350	391.70	321	416.10	70	430.05	705
373.20	2681	392.15	272	419.60	100	431.05	478
374.10	120	401.05	1198	421.00	5303	431.80	78
383.05	2662	402.00	4961	422.10	6085	432.40	297
383.90	339	403.10	6080	423.10	34179	433.90	84

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms

M4M2881SIM.M Thu Apr 14 17:02:12 2016 MANAGER Page: 1

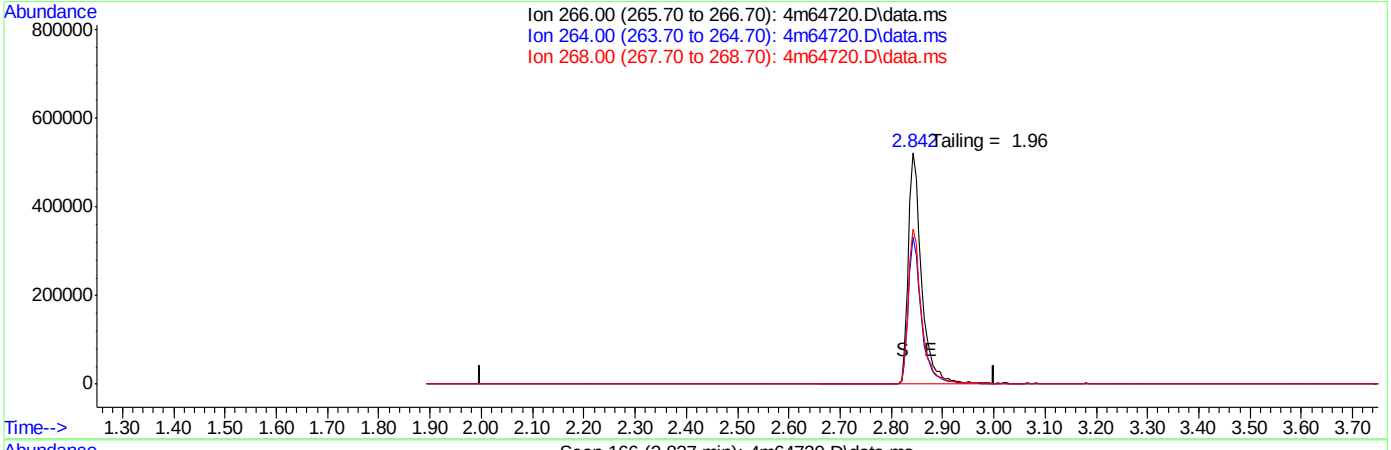
dftpp
Modified:subtracted

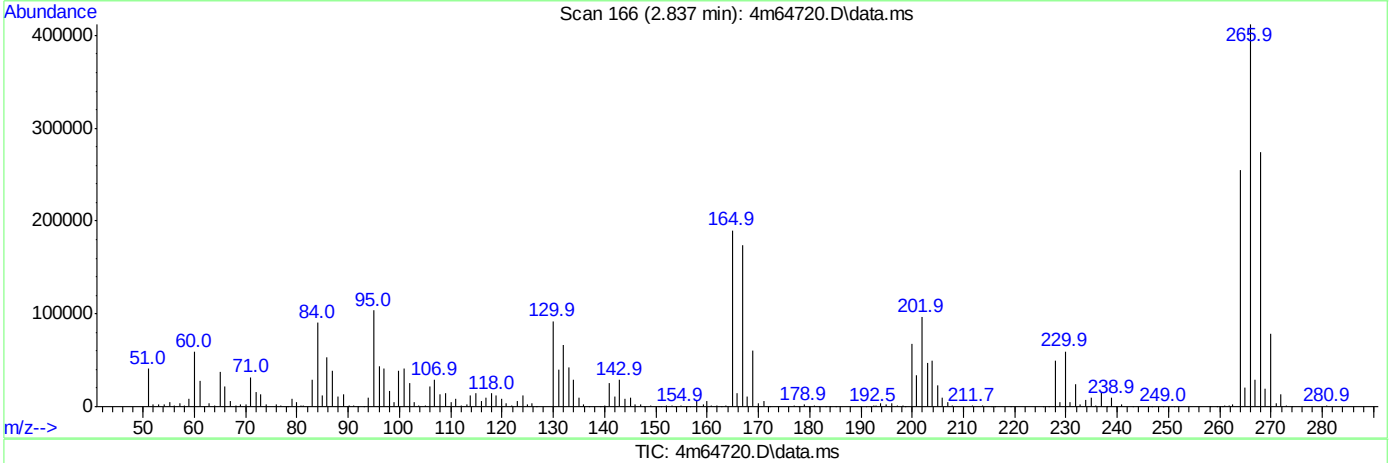
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
434.90	128	459.15	493				
435.30	158	503.00	77				
435.95	261	504.00	208				
436.40	88	535.90	70				
438.00	91						
439.15	323						
441.10	100995						
442.10	687531						
443.10	130315						
444.10	11143						
445.10	553						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64720.D
Acq On : 14 Apr 2016 9:05 am
Operator : linseyk
Sample : dftpp
Misc : op92998a,e4m2881
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 14 09:11:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP4M.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Mon Jul 29 12:02:51 2013
Response via : Initial Calibration





TIC: 4m64720.D\data.ms

(1) pentachlorophenol (t)

2.500min (-2.500) 0.00ppb

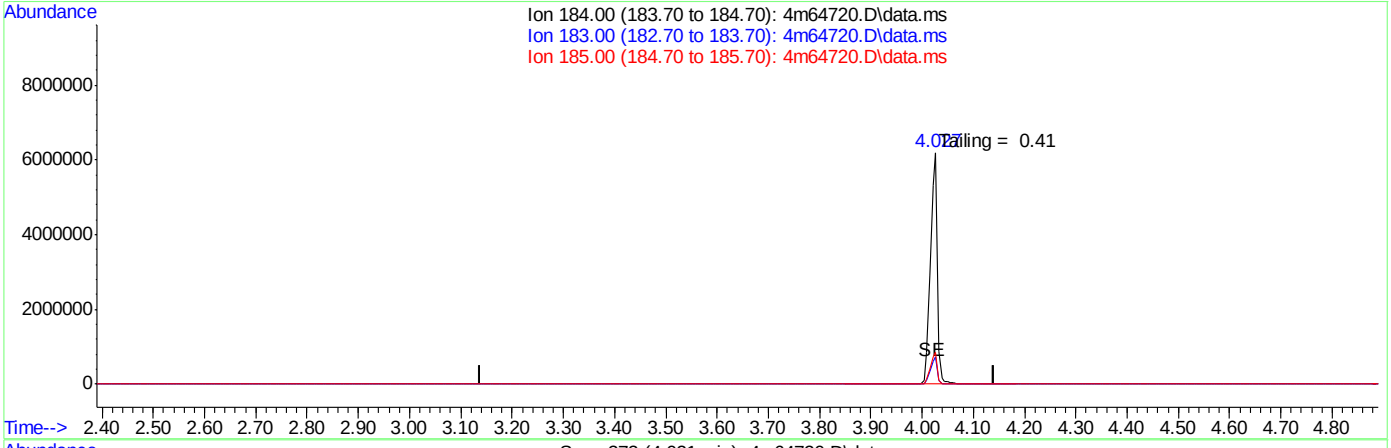
response 0

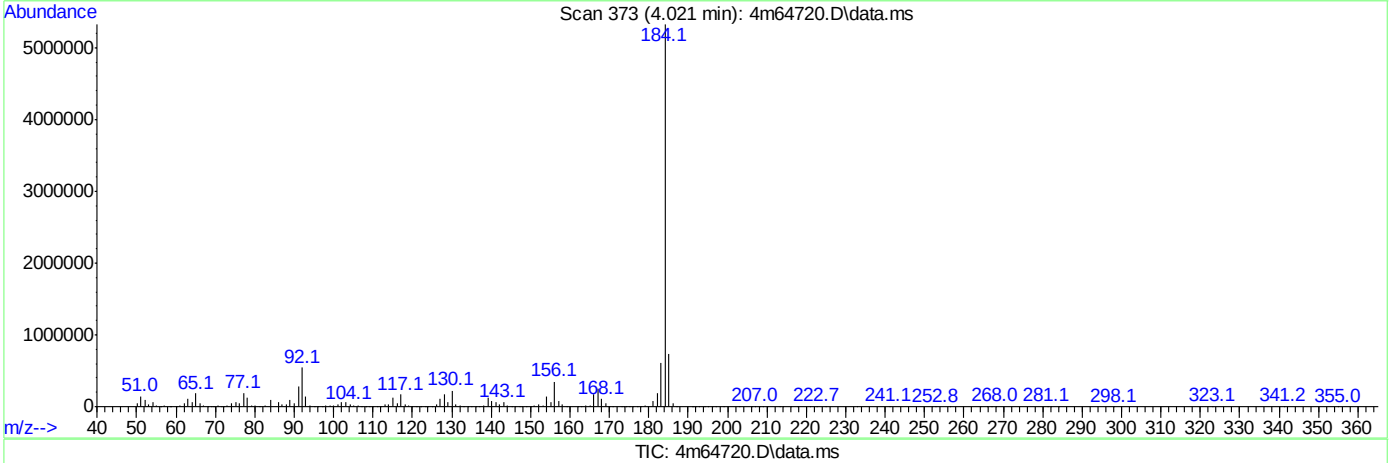
Ion	Exp%	Act%
266.00	100	0.00
264.00	58.00	0.00#
268.00	62.00	0.00#
0.00	0.00	0.00

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

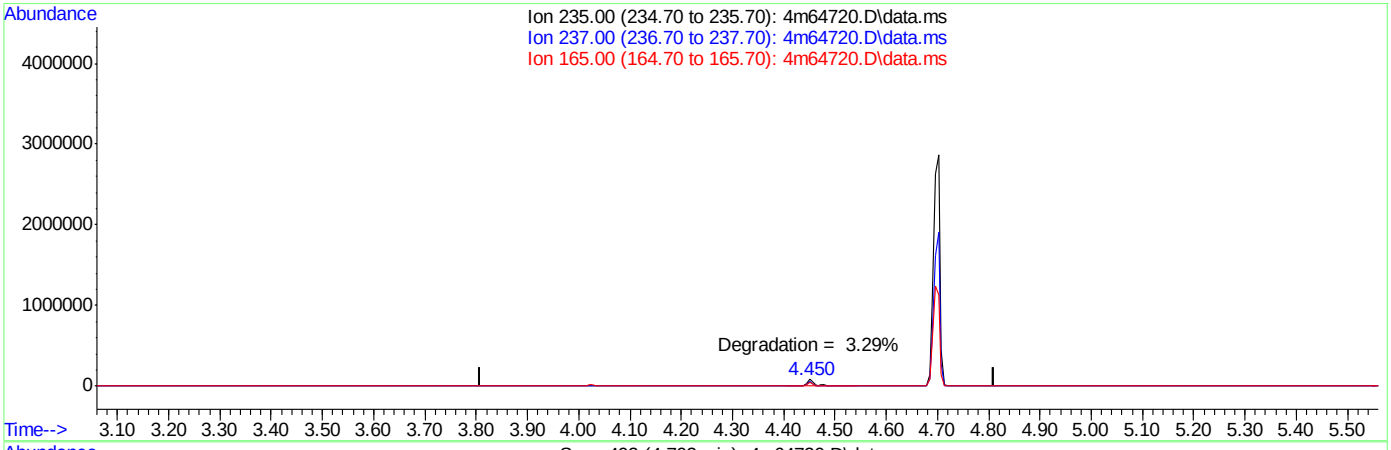
response 0

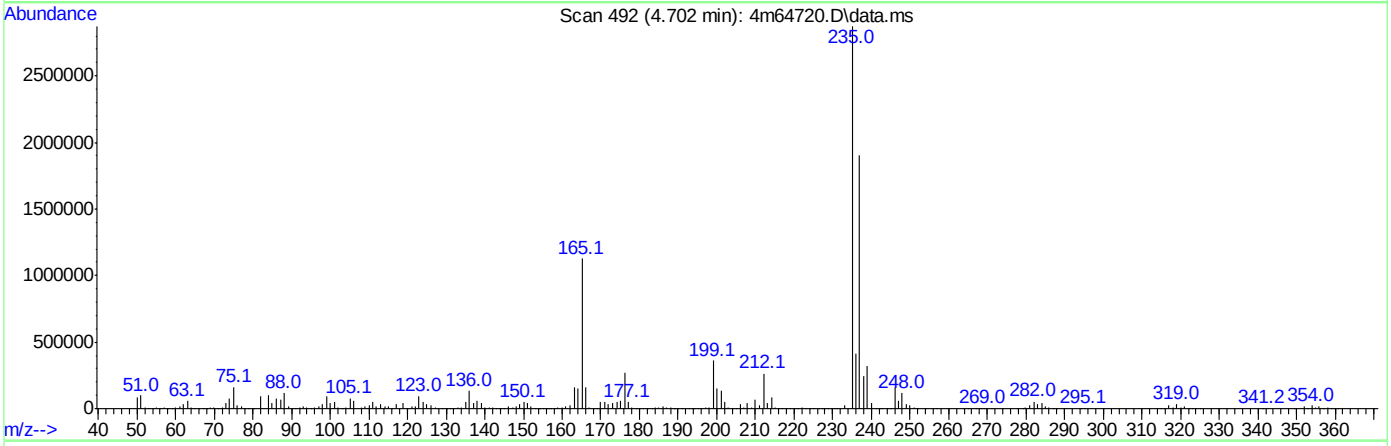
Ion	Exp%	Act%
184.00	100	0.00
183.00	10.60	0.00#
185.00	13.40	0.00#
0.00	0.00	0.00

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

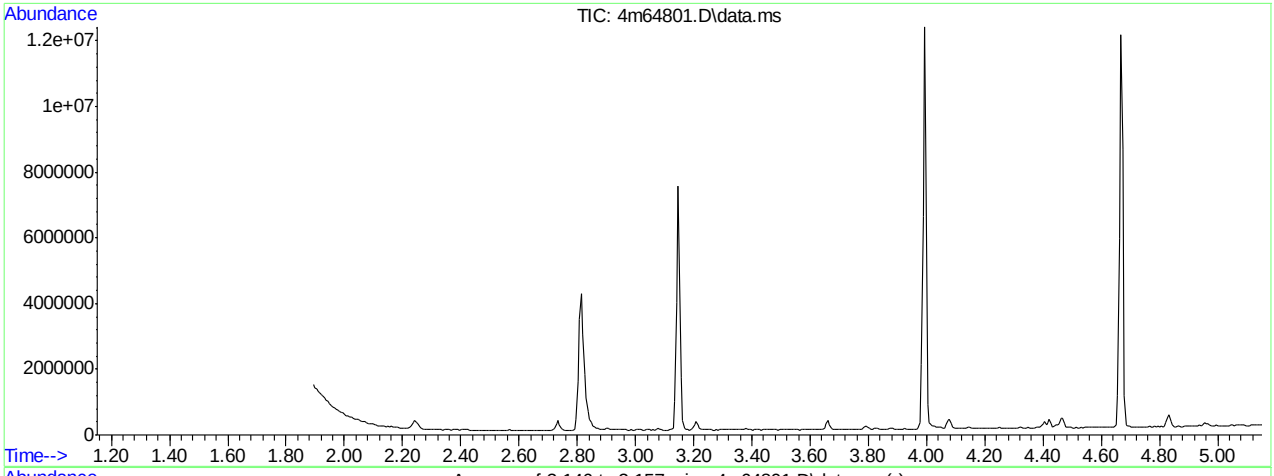
Ion	Exp%	Act%
235.00	100	0.00
237.00	63.70	0.00#
165.00	48.70	0.00#
0.00	0.00	0.00

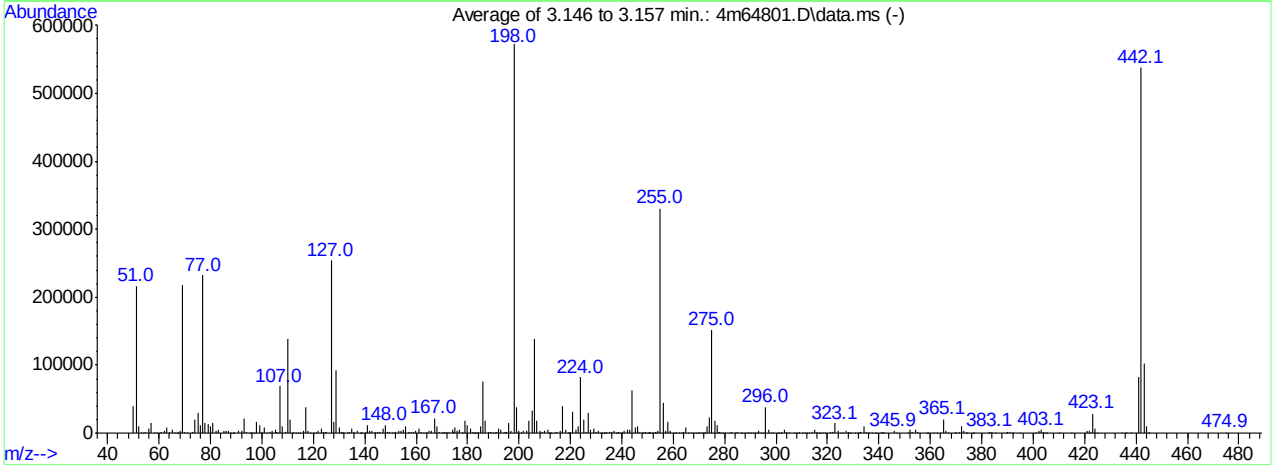
SGS ACCUTEST JC18516

DFTPP

Data File : C:\msdchem\1\DATA\E4M2885\4m64801.D Vial: 1
Acq On : 18 Apr 2016 2:23 pm Operator: linseyk
Sample : dftpp Inst : GCMS4M
Misc : op93089a,e4m2885 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 220, 221, 222; Background Corrected with Scan 215

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	37.8	216165	PASS
68	69	0.00	2	1.5	3258	PASS
69	198	0.00	100	38.1	217717	PASS
70	69	0.00	2	0.8	1751	PASS
127	198	40	60	44.4	253856	PASS
197	198	0.00	1	0.5	2899	PASS
198	198	100	100	100.0	571968	PASS
199	198	5	9	6.8	38793	PASS
275	198	10	30	26.5	151552	PASS
365	198	1	100	3.5	20229	PASS
441	443	0.01	100	81.5	82781	PASS
442	198	40	100	93.9	537216	PASS
443	442	17	23	18.9	101600	PASS

4m64801.D DFTPP4M.M Mon Apr 18 16:49:00 2016 MANAGER

Average of 3.146 to 3.157 min.: 4m64801.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
50.10	38903	62.00	2632	71.00	93	83.00	4386
51.00	216165	63.00	8722	73.00	1291	85.00	2688
52.05	10064	63.80	73	74.00	19889	85.90	3181
53.00	729	64.05	685	75.00	29967	86.85	2555
54.00	624	65.00	4374	76.05	11181	87.90	524
54.90	1447	66.00	109	77.00	232203	88.70	130
56.00	6587	67.00	294	78.00	15341	89.00	459
57.00	15431	67.30	282	79.00	12487	90.95	3150
58.20	794	68.05	3258	80.00	10178	92.00	3455
59.00	775	69.00	217717	81.00	15197	93.00	21941
61.00	2299	69.95	1751	82.00	3232	94.00	2212

Average of 3.146 to 3.157 min.: 4m64801.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
95.05	756	105.85	1493	116.00	3696	127.00	253856
95.95	1159	106.10	333	116.95	38611	128.05	16719
97.00	597	107.00	68710	118.05	3549	129.00	92227
98.00	16135	107.95	10702	119.00	829	130.05	8285
99.00	12059	109.05	2276	119.95	780	130.80	1199
100.05	1186	110.00	138380	121.05	570	131.10	362
101.00	8622	111.00	19109	121.95	3490	131.95	1444
101.85	173	112.05	1274	123.00	6744	133.00	184
102.95	2169	112.90	652	123.90	2325	133.95	2070
104.00	3985	114.10	379	124.90	1086	135.00	6675
105.05	5212	114.95	606	125.00	1607	135.90	2037

Average of 3.146 to 3.157 min.: 4m64801.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
137.00	2865	146.00	2314	156.00	10423	167.00	21531
138.20	243	147.00	6115	157.05	2475	168.00	9550
138.40	101	148.00	11789	158.05	1988	169.05	2140
139.00	431	148.95	1797	159.05	1576	169.85	450
139.95	770	149.90	931	159.95	3465	170.30	244
140.20	181	150.80	621	161.10	6152	170.60	88
140.95	10825	151.30	840	162.10	1640	171.00	1365
142.05	4074	152.00	1129	163.00	534	171.90	1963
142.90	3362	153.10	3854	164.10	1050	173.00	2373
144.00	954	154.00	4020	164.95	3757	174.05	5223
145.05	1065	155.00	5473	166.00	3365	174.80	941

Average of 3.146 to 3.157 min.: 4m64801.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
175.05	9134	184.00	1952	193.00	5742	203.00	3206
176.05	3283	185.00	9997	194.05	1742	203.95	18147
176.95	4498	186.00	75507	194.70	96	205.00	33760
178.00	1899	187.00	18387	195.05	1374	206.05	139096
178.95	18373	188.00	1749	196.00	15702	207.05	18646
180.00	12255	188.90	1925	196.85	2899	208.00	3535
180.95	6214	189.10	1161	198.00	571968	208.95	1295
181.90	1598	190.05	406	198.95	38793	210.10	2652
182.30	186	190.70	296	200.05	2867	211.05	4818
183.00	549	191.00	2130	200.70	186	211.60	849
183.20	126	192.05	6969	201.50	2579	212.10	288

Average of 3.146 to 3.157 min.: 4m64801.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
212.75	525	223.00	9161	232.90	518	239.80	497
214.05	430	224.00	82405	233.10	656	240.00	444
214.90	1669	225.00	20486	233.70	307	240.95	2729
216.05	3277	226.00	1797	234.00	1704	242.05	4211

M4M2881SIM.M Mon Apr 18 16:48:46 2016 MANAGER Page: 0

217.00	39095	227.00	30470	235.00	2416	243.05	4668
218.05	5630	228.00	4869	236.05	1426	244.05	61992
218.95	571	229.05	6369	237.05	2549	245.05	8703
219.50	674	230.00	1404	237.90	263	246.05	10120
220.15	1060	231.05	3419	238.05	281	247.05	1631
221.00	32130	231.90	332	238.85	1386	247.90	708
222.05	5536	232.10	274	239.10	345	248.30	431

Average of 3.146 to 3.157 min.: 4m64801.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
249.00	2432	255.00	330819	265.00	7610	273.00	9990
249.20	186	256.00	45355	265.90	561	274.00	23736
250.00	417	257.10	3352	267.10	174	275.00	151552
250.50	92	258.00	17306	267.80	47	276.00	18400
250.70	258	258.95	2851	268.80	156	277.00	11498
251.00	960	260.00	787	269.80	250	277.60	99
251.90	352	260.75	575	270.10	248	277.95	1486
252.20	586	261.10	115	271.15	750	278.20	91
253.00	1367	262.20	248	271.60	145	279.05	514
253.20	699	263.15	176	271.90	735	280.20	75
254.00	3419	264.00	1464	272.10	559	282.05	414

Average of 3.146 to 3.157 min.: 4m64801.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
282.95	1535	292.80	389	302.00	339	313.00	259
284.15	771	293.10	2690	303.05	5088	314.05	1839
285.00	2325	294.15	720	304.05	940	315.05	4978
286.15	341	295.00	601	305.00	330	316.05	2464
286.80	280	296.00	38566	307.00	97	316.80	196
288.10	348	297.00	4193	307.95	671	317.20	357
288.95	553	298.00	183	308.75	561	318.05	161
289.20	78	298.70	75	309.00	130	319.00	252
290.00	538	300.40	89	310.05	677	321.05	1561
291.00	319	301.10	646	310.90	216	321.90	1029
292.05	870	301.75	287	311.80	88	323.05	14483

Average of 3.146 to 3.157 min.: 4m64801.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
324.00	2841	333.00	1682	342.05	552	362.40	105
324.90	192	334.05	9799	345.95	2769	363.90	115
325.90	204	335.00	2527	347.00	561	365.05	20229
327.00	3334	335.80	136	351.20	201	366.00	2909
328.00	1409	336.00	156	352.05	4744	366.90	326
328.60	100	337.10	123	353.05	2524	369.70	280
329.00	353	338.70	111	354.05	4569	370.00	89
330.85	231	339.15	374	355.00	916	371.15	1044
331.70	526	340.80	705	358.80	193	372.05	10536
332.05	574	341.00	1017	359.00	115	373.05	2552
332.50	163	341.70	85	361.30	150	373.90	146

Average of 3.146 to 3.157 min.: 4m64801.D\data.ms
dftpp
Modified:subtracted

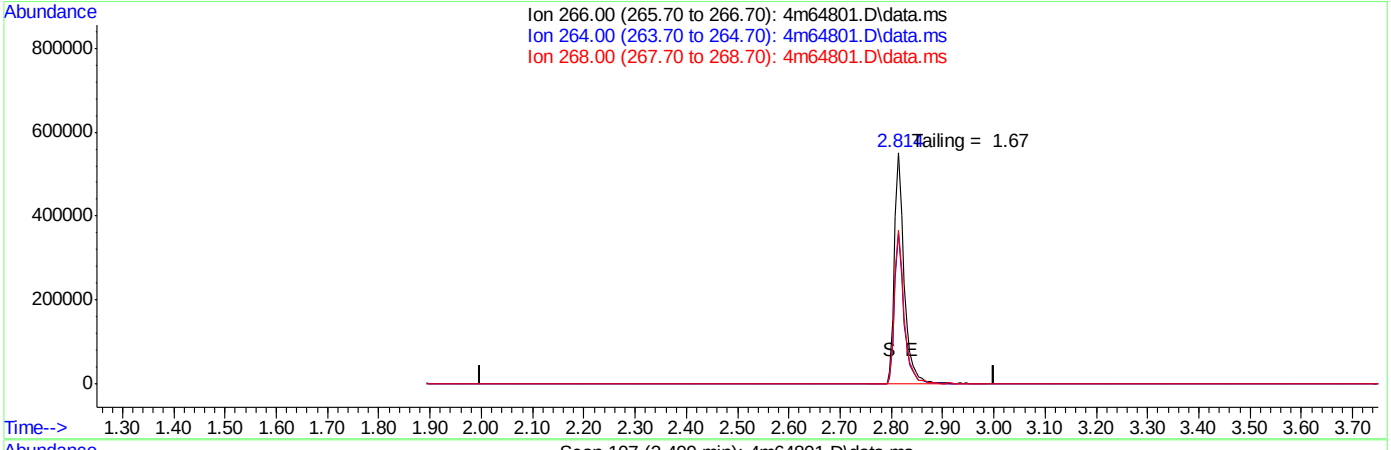
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
374.20	77	392.10	484	414.90	96	441.10	82781
376.60	69	395.00	257	421.05	3926	442.10	537216
377.10	166	400.95	895	422.00	2726	443.10	101600
382.70	227	402.00	2935	422.20	530	444.10	10320
383.05	1900	403.10	4240	423.10	28084	444.90	428
384.00	990	403.80	537	424.00	5859	445.10	412
385.00	149	403.90	430	424.90	346	474.85	305
389.70	241	404.05	1590	434.65	224		
390.05	1280	404.70	113	436.00	181		
391.05	1055	405.15	274	436.30	94		
391.80	139	410.05	224	438.10	74		

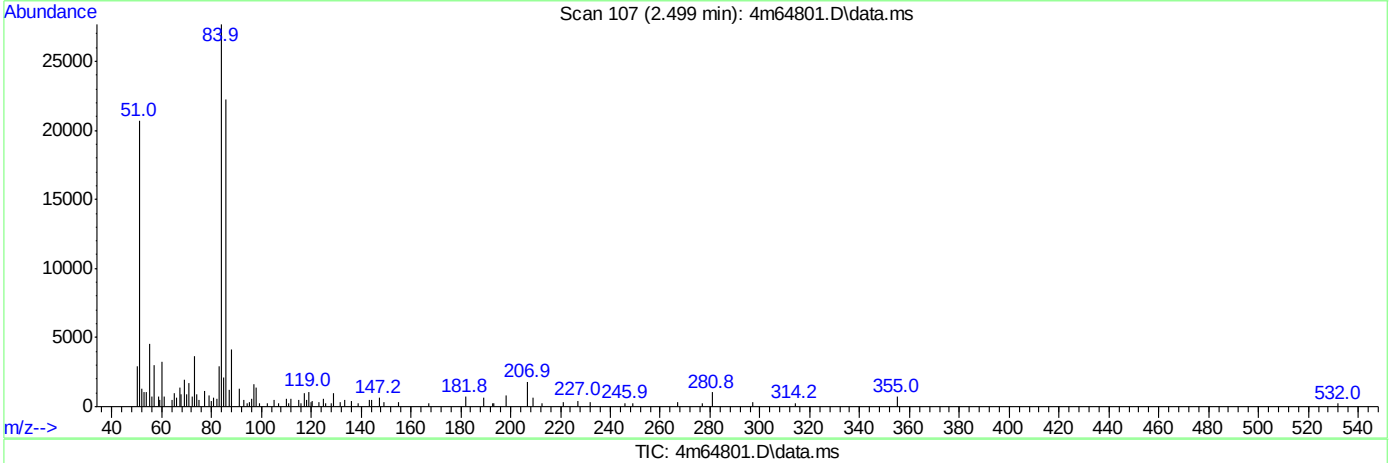
M4M2881SIM.M Mon Apr 18 16:48:46 2016 MANAGER Page: 1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2885\
Data File : 4m64801.D
Acq On : 18 Apr 2016 2:23 pm
Operator : linseyk
Sample : dftpp
Misc : op93089a,e4m2885
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 18 14:28:46 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: 4m64801.D\data.ms

(1) pentachlorophenol (t)

2.500min (-2.500) 0.00ppb

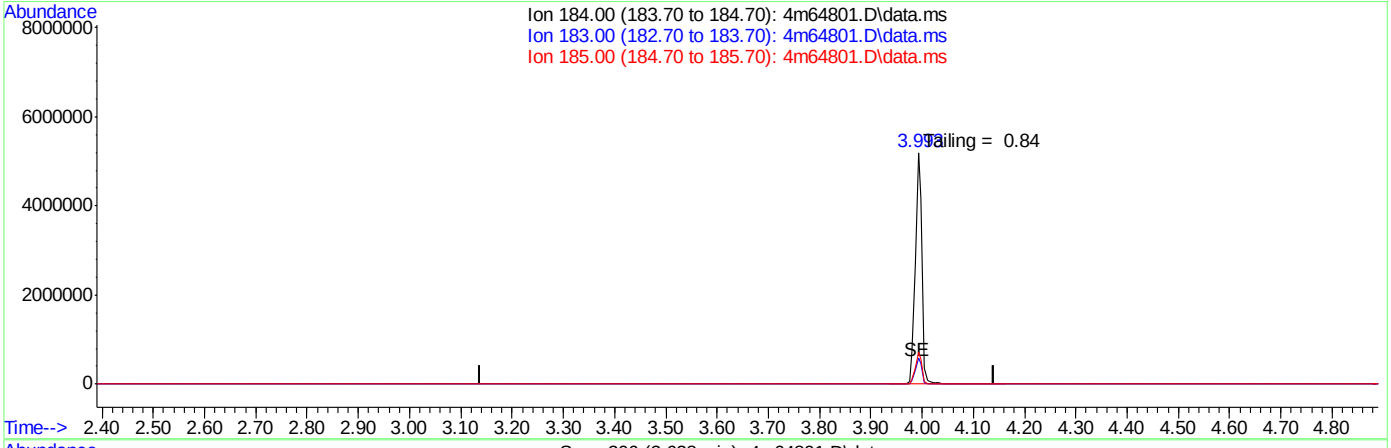
response 0

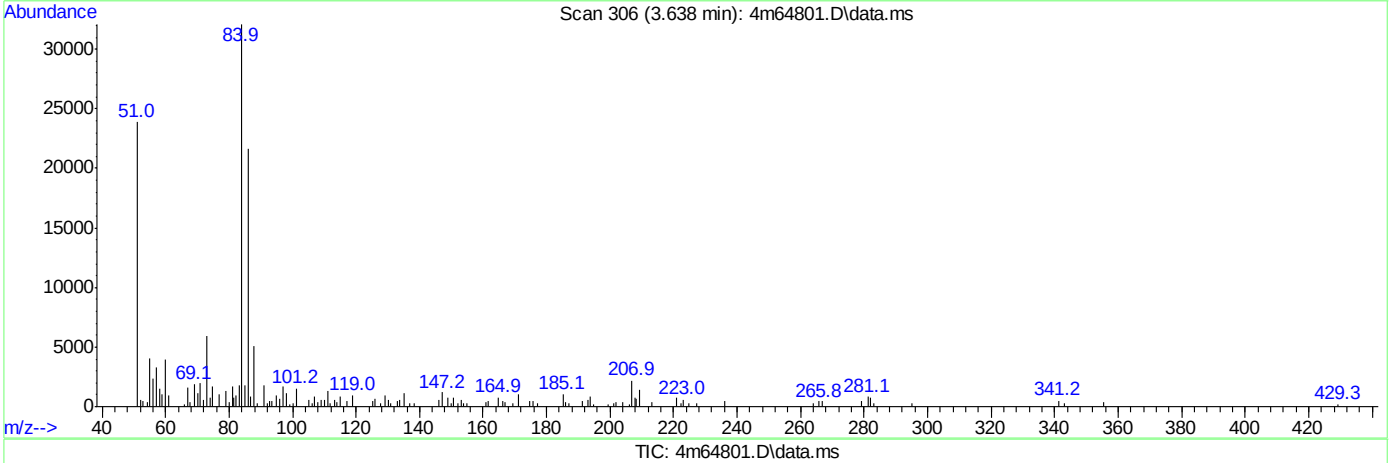
Ion	Exp%	Act%
266.00	100	0.00
264.00	58.00	0.00#
268.00	62.00	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2885\
Data File : 4m64801.D
Acq On : 18 Apr 2016 2:23 pm
Operator : linseyk
Sample : dftpp
Misc : op93089a,e4m2885
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 18 14:28:46 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: 4m64801.D\data.ms

(2) benzidine (t)

3.640min (-3.640) 0.00ppb

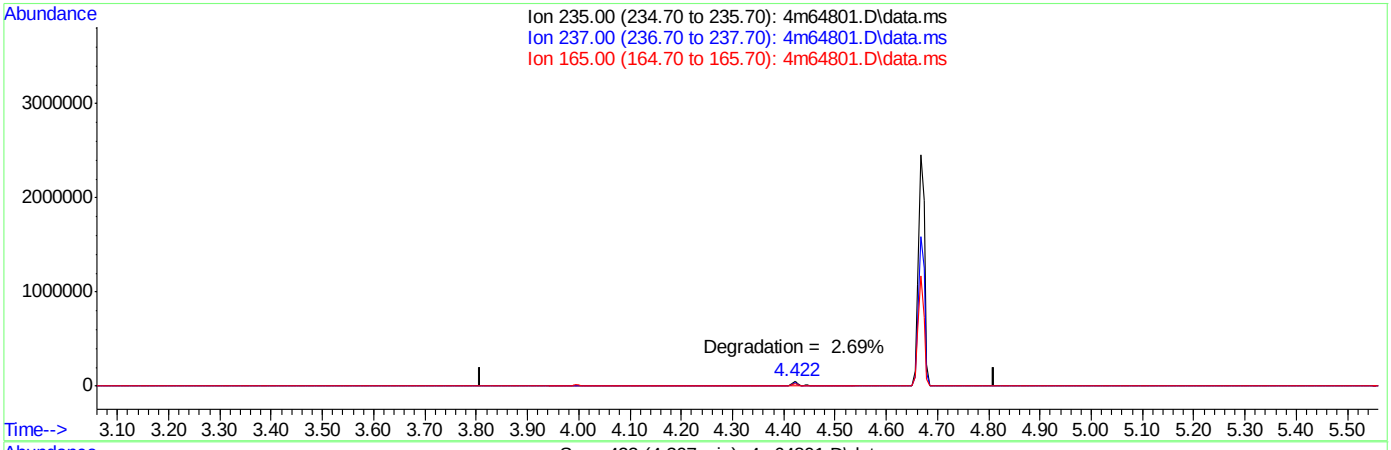
response 0

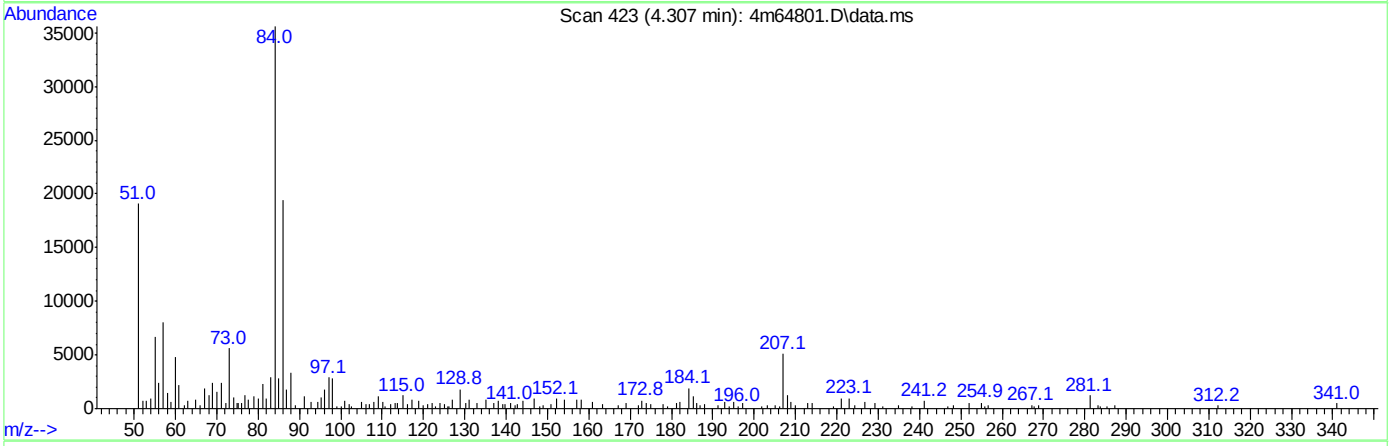
Ion	Exp%	Act%
184.00	100	0.00
183.00	10.60	0.00#
185.00	13.40	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\E4M2885\
Data File : 4m64801.D
Acq On    : 18 Apr 2016   2:23 pm
Operator  : linseyk
Sample    : dftpp
Misc      : op93089a,e4m2885
ALS Vial  : 1   Sample Multiplier: 1

Quant Time: Apr 18 14:28:46 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: 4m64801.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

7.5.11.3

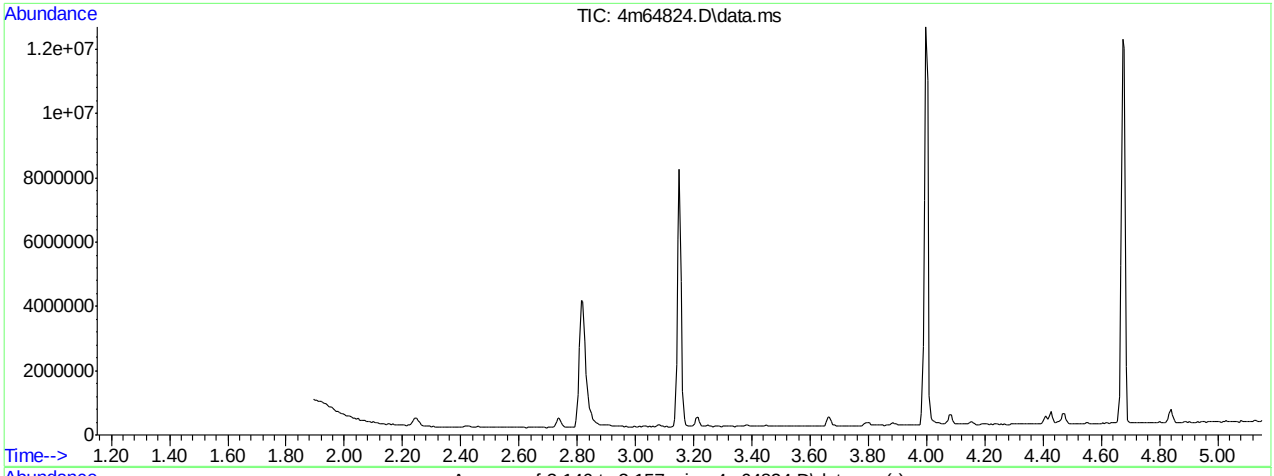
7

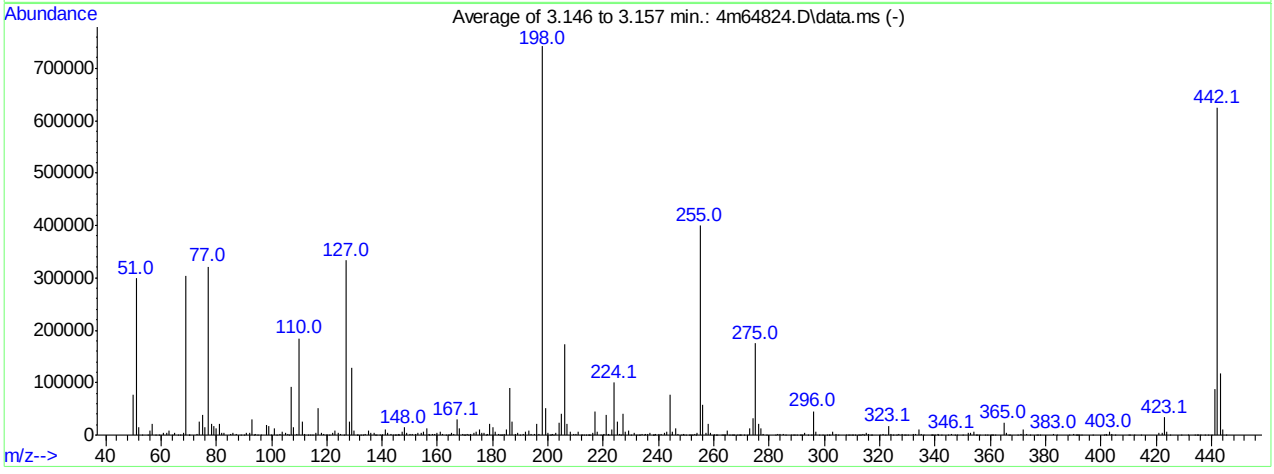
SGS ACCUTEST JC18516

DFTPP

Data File : C:\msdchem\1\DATA\E4M2886\4m64824.D Vial: 1
Acq On : 19 Apr 2016 8:59 am Operator: linseyk
Sample : dftpp Inst : GCMS4M
Misc : op93128a,e4m2886 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 220, 221, 222; Background Corrected with Scan 205

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	40.4	299405	PASS
68	69	0.00	2	1.8	5428	PASS
69	198	0.00	100	41.0	303885	PASS
70	69	0.00	2	0.2	577	PASS
127	198	40	60	44.9	333215	PASS
197	198	0.00	1	0.3	1944	PASS
198	198	100	100	100.0	741589	PASS
199	198	5	9	7.0	51917	PASS
275	198	10	30	23.6	175211	PASS
365	198	1	100	3.1	23280	PASS
441	443	0.01	100	74.5	88131	PASS
442	198	40	100	84.2	624192	PASS
443	442	17	23	19.0	118331	PASS

4m64824.D DFTPP4M.M Tue Apr 19 14:43:46 2016 MANAGER

Average of 3.146 to 3.157 min.: 4m64824.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
50.10	76731	63.00	9434	75.00	39561	87.10	2995
51.00	299405	64.05	1038	76.05	15405	88.80	550
52.05	15946	65.00	4882	77.05	321812	89.90	300
53.05	463	66.00	532	78.10	22507	91.00	4160
55.05	996	67.05	287	79.00	18259	91.95	4120
56.00	9188	68.00	5428	79.95	12308	93.00	30336
57.00	20420	69.00	303885	81.00	21123	93.90	697
58.00	996	70.00	577	81.95	5225	94.05	1505
59.05	1024	70.30	494	82.95	5087	94.95	320
60.95	4210	73.05	1469	85.00	3174	96.00	968
62.05	3799	74.00	24854	85.90	3803	98.00	19434

Average of 3.146 to 3.157 min.: 4m64824.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
99.00	16343	109.00	2148	119.85	465	130.00	8764
99.90	750	110.00	184051	120.20	716	130.90	838
101.00	13419	111.00	26477	120.80	745	131.20	592
101.90	655	112.00	2475	122.00	4223	132.15	600
103.00	2873	113.00	1112	123.00	7793	133.00	67
103.95	6230	114.05	647	124.00	3759	134.00	3065
104.95	5438	115.00	511	124.90	3255	135.05	7643
105.95	2370	116.00	3926	126.10	504	136.05	3378
106.20	616	117.00	52214	127.00	333215	137.00	3670
106.95	92169	118.05	3548	128.00	25238	137.70	750
107.95	14736	119.00	1158	129.00	127498	138.05	483

Average of 3.146 to 3.157 min.: 4m64824.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
139.15	630	146.20	604	157.00	749	165.05	4245
139.80	491	147.05	7165	157.15	1909	166.05	3240
140.05	915	148.00	14955	158.00	2826	167.10	29180
141.00	11799	149.00	3325	159.05	1782	167.95	13543
141.95	4490	150.10	1622	160.00	4538	169.05	2278
143.00	2656	150.95	1724	160.95	6510	169.70	152
144.05	487	152.05	1707	161.90	1701	169.95	917
144.80	199	153.00	3953	162.95	920	170.90	1685
145.00	705	154.05	4127	163.90	780	171.10	215
145.80	376	155.05	6784	164.15	37	171.95	2041
146.00	1674	156.05	13140	164.80	1144	173.00	4694

Average of 3.146 to 3.157 min.: 4m64824.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
174.00	5474	183.10	241	193.05	7592	201.90	1109
175.05	10323	183.30	269	194.00	1897	203.00	4483
176.10	3532	184.00	2466	195.05	1379	204.05	24280
177.00	4625	185.00	10284	196.05	21306	205.00	39783
177.80	626	186.00	90154	196.80	1944	206.10	172651
178.05	1801	187.00	25602	198.00	741589	207.00	22243
178.95	21677	188.05	2347	199.00	51917	208.05	5897
179.95	15482	188.90	4127	199.95	3765	209.10	2260
180.95	6899	189.95	874	200.70	172	210.05	1425
181.95	1397	191.00	3010	201.00	434	211.10	7418
182.70	199	191.95	6558	201.55	2496	212.00	910

Average of 3.146 to 3.157 min.: 4m64824.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
212.20	585	220.20	2526	229.00	8728	237.95	713
213.05	453	221.05	38325	230.00	972	238.20	247
213.90	75	221.70	2814	231.05	4597	238.50	218
214.40	114	222.00	956	231.95	793	239.00	1323

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214.90	351	223.00	11418	232.95	477	240.05	1658
215.05	945	224.05	99861	233.30	345	241.00	2144
216.05	3682	225.05	26221	234.05	2751	242.00	4734
217.00	45915	225.95	2181	234.90	482	243.00	5624
217.95	5717	226.20	911	235.05	2308	244.05	76899
218.85	699	227.00	41360	236.00	2164	244.90	2734
219.80	266	228.05	5714	237.00	4017	245.10	7066

Average of 3.146 to 3.157 min.: 4m64824.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
246.00	12670	253.40	447	262.75	210	269.40	97
247.05	2854	254.00	4177	263.20	87	269.70	166
248.10	1124	255.00	399189	263.60	201	270.90	840
248.90	903	256.05	58157	263.90	631	272.00	1063
249.10	1949	257.00	4765	265.05	8240	273.05	13682
250.00	704	257.95	21942	265.80	478	274.00	31715
251.05	1126	258.95	3485	266.60	184	275.00	175211
251.60	125	259.90	145	266.80	415	276.05	22056
252.00	548	260.10	789	267.30	247	277.05	13866
252.25	836	260.85	421	268.60	102	278.00	2772
253.00	1926	261.20	251	269.15	326	278.95	293

Average of 3.146 to 3.157 min.: 4m64824.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
282.10	537	292.05	742	303.10	6745	313.15	424
282.95	1537	293.00	3832	304.05	1981	313.95	1972
284.05	1258	294.00	866	304.85	635	314.20	771
285.05	2218	295.10	878	307.95	547	314.95	5006
285.85	671	296.00	45256	308.80	73	316.00	3082
287.80	85	297.05	5769	309.05	318	316.85	449
288.60	297	297.95	269	309.90	441	317.10	248
289.05	683	299.25	290	310.20	461	319.90	275
290.05	700	301.05	453	311.20	189	321.05	1547
291.10	251	301.60	123	312.10	180	322.00	625
291.80	79	301.95	957	312.70	86	323.10	17353

Average of 3.146 to 3.157 min.: 4m64824.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
324.05	3129	335.00	2517	347.15	343	360.00	88
324.80	301	336.00	439	348.00	135	360.70	90
325.95	265	338.60	90	350.10	77	360.90	103
326.95	2991	339.00	250	352.05	4433	361.90	74
328.05	2387	339.15	354	353.00	3537	365.00	23280
328.95	180	339.80	278	354.05	5761	365.95	3363
329.30	111	340.90	1074	354.80	171	366.70	267
330.20	206	341.05	1718	355.10	923	367.05	466
332.00	1405	342.15	354	356.00	91	369.90	100
333.05	2036	344.70	81	358.00	224	371.10	1689
334.00	10743	346.05	3079	359.00	487	372.10	10349

Average of 3.146 to 3.157 min.: 4m64824.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
372.95	2495	391.70	219	410.30	71	434.90	190
374.15	293	392.00	867	412.00	104	435.15	195
376.65	409	393.00	101	414.60	163	436.00	68
377.00	142	397.05	301	421.05	4609	437.80	150
377.90	193	401.05	723	422.05	4056	438.90	111
383.00	2385	401.90	833	423.10	33669	439.90	79
384.10	754	402.10	3141	424.00	6927	441.10	88131
388.70	77	403.00	5443	425.05	1002	442.10	624192
390.00	1564	404.05	2262	429.20	73	443.10	118331
390.90	319	405.20	255	431.70	272	444.05	10952
391.20	181	409.90	207	433.80	238	445.15	1066

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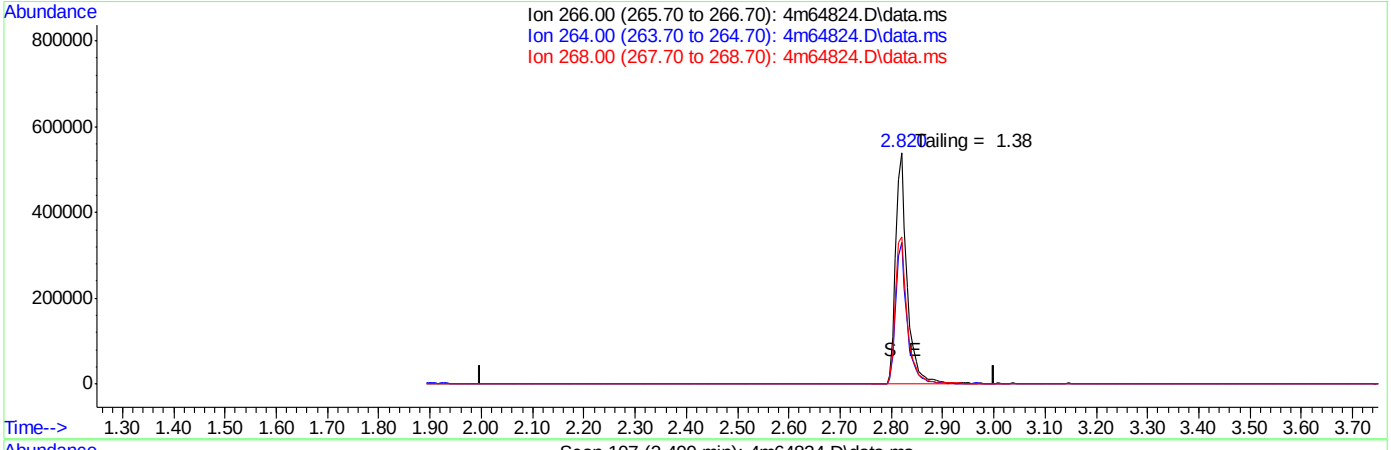
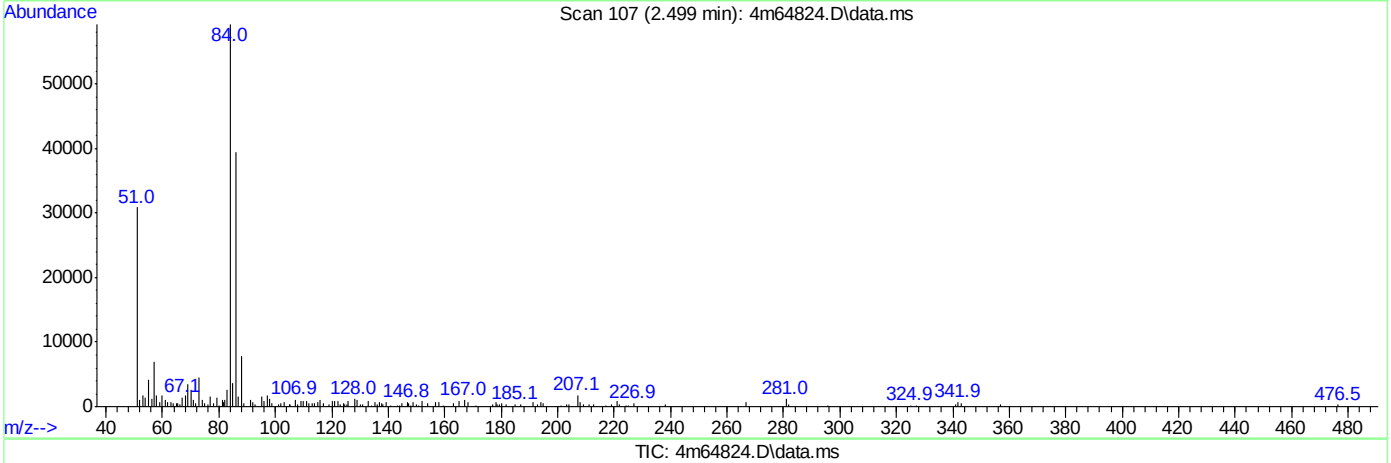
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2886\
Data File : 4m64824.D
Acq On : 19 Apr 2016 8:59 am
Operator : linseyk
Sample : dftpp
Misc : op93128a,e4m2886
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 19 09:05:10 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: 4m64824.D\data.ms

(1) pentachlorophenol (t)

2.500min (-2.500) 0.00ppb

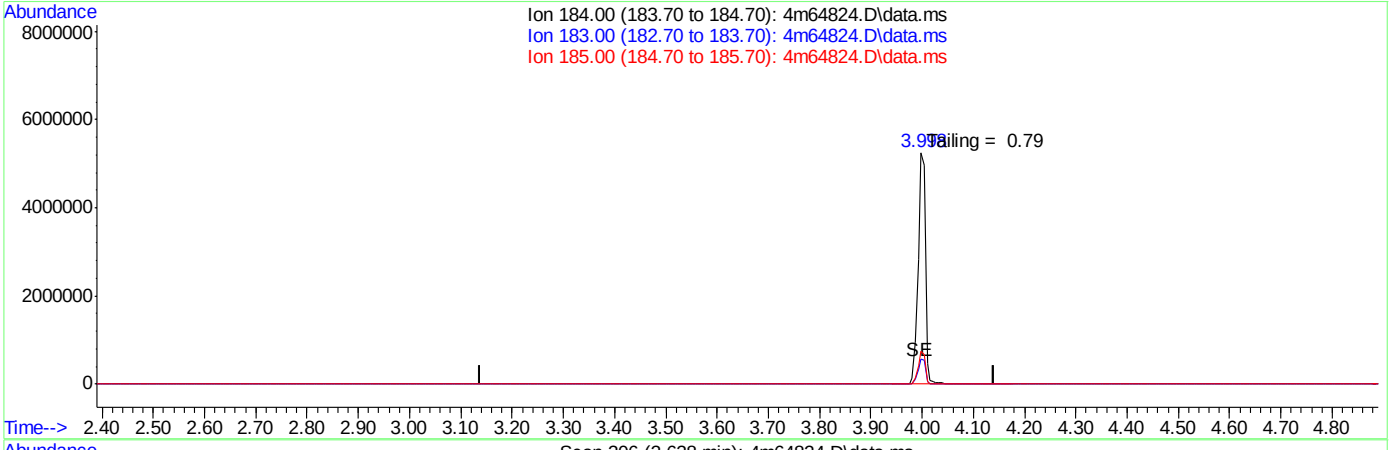
response 0

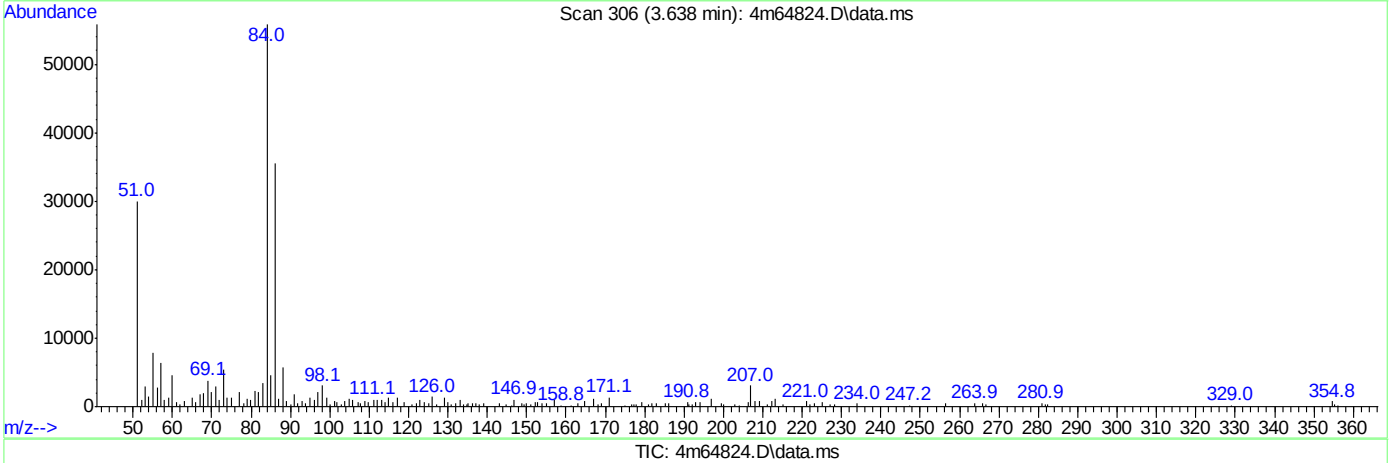
Ion	Exp%	Act%
266.00	100	0.00
264.00	58.00	0.00#
268.00	62.00	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2886\
Data File : 4m64824.D
Acq On : 19 Apr 2016 8:59 am
Operator : linseyk
Sample : dftpp
Misc : op93128a,e4m2886
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 19 09:05:10 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: 4m64824.D\data.ms

(2) benzidine (t)

3.640min (-3.640) 0.00ppb

response 0

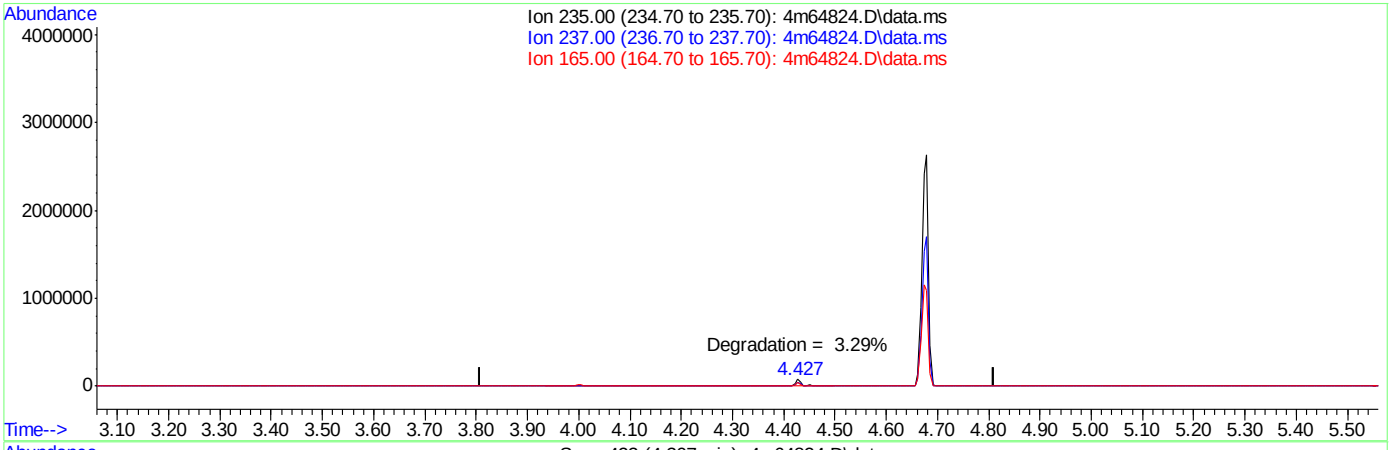
Ion	Exp%	Act%
184.00	100	0.00
183.00	10.60	0.00#
185.00	13.40	0.00#
0.00	0.00	0.00

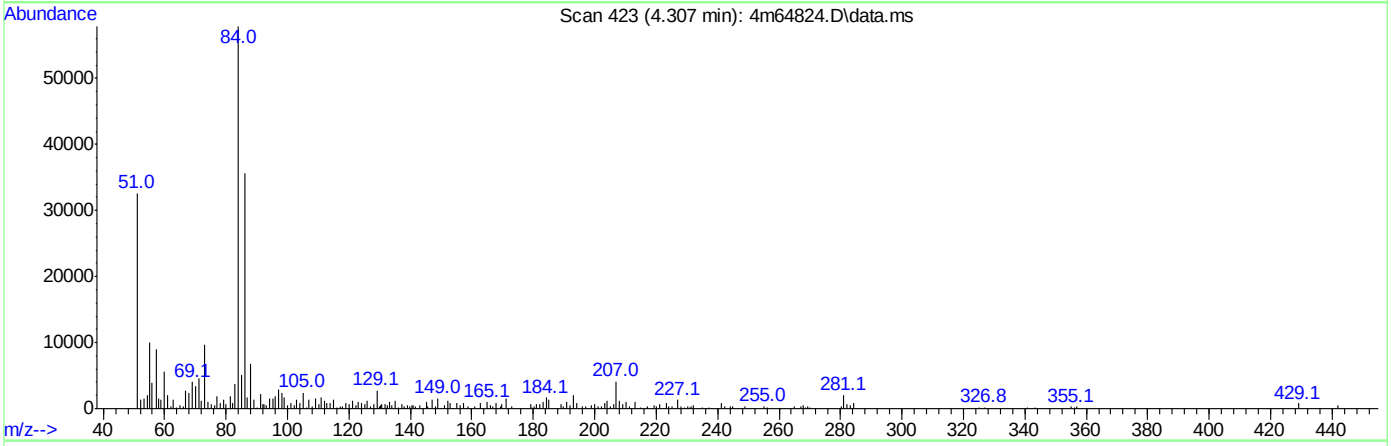
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2886\
Data File : 4m64824.D
Acq On : 19 Apr 2016 8:59 am
Operator : linseyk
Sample : dftpp
Misc : op93128a,e4m2886
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 19 09:05:10 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: 4m64824.D\data.ms

(3) ddt (t)

4.310min (-4.310) 0.00ppb

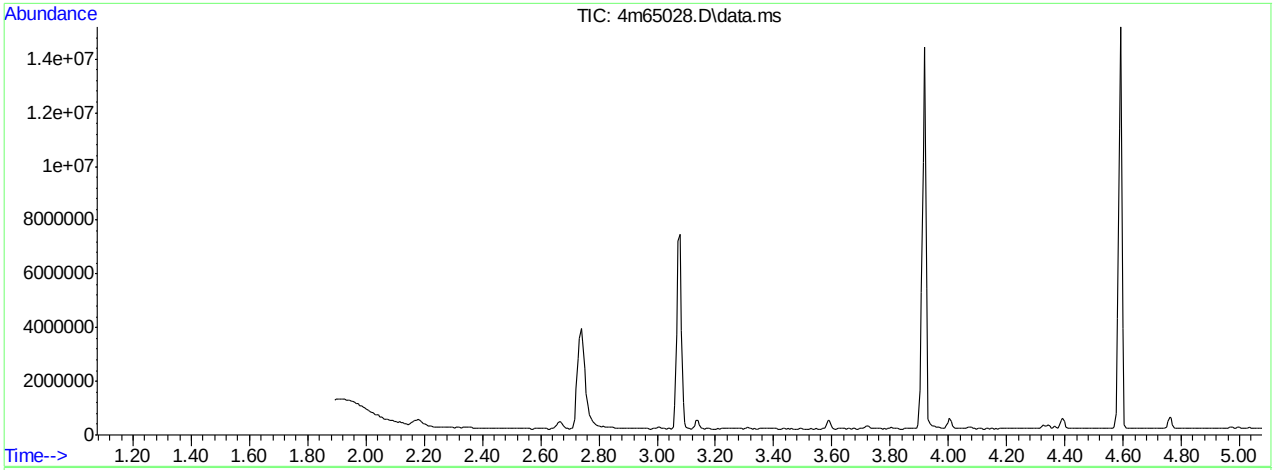
response 0

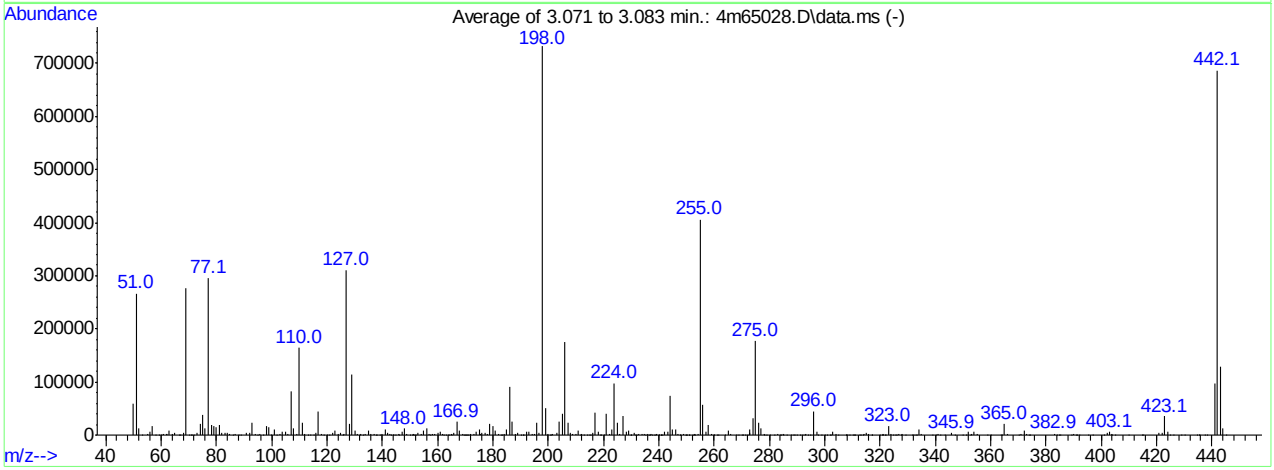
Ion	Exp%	Act%
235.00	100	0.00
237.00	63.70	0.00#
165.00	48.70	0.00#
0.00	0.00	0.00

DFTPP

Data File : C:\msdchem\1\DATA\E4M2900\4m65028.D Vial: 1
Acq On : 2 May 2016 8:41 am Operator: linseyk
Sample : dftpp Inst : GCMS4M
Misc : op90303a,e4m2900 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 207, 208, 209; Background Corrected with Scan 201

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	36.4	266323	PASS
68	69	0.00	2	1.4	3754	PASS
69	198	0.00	100	37.8	276730	PASS
70	69	0.00	2	0.3	702	PASS
127	198	40	60	42.5	311232	PASS
197	198	0.00	1	0.5	4009	PASS
198	198	100	100	100.0	731968	PASS
199	198	5	9	6.9	50597	PASS
275	198	10	30	24.1	176664	PASS
365	198	1	100	2.8	20150	PASS
441	443	0.01	100	75.0	96325	PASS
442	198	40	100	93.9	687168	PASS
443	442	17	23	18.7	128360	PASS

4m65028.D DFTPP4M.M Mon May 02 14:39:36 2016 MANAGER

Average of 3.071 to 3.083 min.: 4m65028.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
50.10	59765	61.90	1397	71.10	84	82.00	4050
51.05	266323	62.10	1762	71.70	124	82.95	3344
52.00	12936	63.05	8703	73.00	3537	84.00	3531
53.00	340	64.10	1189	74.05	20368	84.95	1260
55.05	1515	65.05	4404	75.00	37368	86.00	461
56.00	6592	66.60	231	76.00	12771	87.00	2924
57.00	17824	67.05	396	77.10	295759	87.90	943
57.95	526	67.95	3754	78.10	18976	89.00	1081
59.05	896	69.00	276730	79.00	16134	91.00	3370
60.00	256	70.00	702	80.00	13802	92.00	4951
60.95	2697	70.90	318	81.00	19897	93.05	24217

Average of 3.071 to 3.083 min.: 4m65028.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
93.90	1604	105.00	5506	116.00	4688	126.10	1164
95.05	873	106.00	2750	117.00	44677	127.00	311232
95.90	2011	106.95	82584	117.95	3146	128.00	20842
97.05	637	108.00	12138	118.85	437	129.00	114787
98.00	17230	109.00	2629	119.95	1133	130.00	8291
99.00	14633	110.00	164237	121.05	212	131.10	1423
99.80	534	111.05	22869	121.95	4517	131.80	301
101.00	11066	112.00	2493	123.00	7678	132.20	1276
101.95	565	113.00	1130	124.00	2595	132.95	373
102.95	2958	114.00	315	124.95	3693	133.95	3053
104.00	5933	115.15	889	125.80	382	135.00	7513

Average of 3.071 to 3.083 min.: 4m65028.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
136.00	2535	144.10	150	151.65	936	161.00	6190
136.95	3106	144.95	970	152.10	992	161.90	1344
137.70	396	145.80	298	153.00	4693	162.10	1013
138.00	399	146.10	1948	153.90	2432	162.95	598
139.10	684	147.05	5961	155.00	7913	163.70	158
139.95	1688	148.00	12077	156.00	11767	164.05	578
141.05	11644	149.00	2394	157.05	2222	164.90	2854
141.95	4087	150.00	615	157.50	383	165.10	895
142.85	1871	150.70	331	157.95	1595	166.00	5079
143.05	280	151.10	1554	159.05	1788	166.95	24741
143.80	630	151.40	332	160.05	3677	168.05	9057

Average of 3.071 to 3.083 min.: 4m65028.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
169.05	2748	176.05	3782	186.00	90064	196.00	23949
169.70	233	177.00	4783	187.00	24851	196.85	4009
170.00	603	178.05	1962	188.00	1921	198.00	731968
170.30	192	179.00	20877	189.00	4869	199.00	50597
170.60	372	180.05	16335	190.05	861	200.00	3056
171.10	956	181.00	8281	190.85	669	200.80	549
172.00	1931	181.90	1437	191.10	919	201.20	675
172.95	2660	182.90	423	192.00	7288	201.55	3074
174.10	7104	183.10	130	193.00	7309	202.95	4804
175.05	11586	184.00	1804	194.05	2299	204.05	25267
175.70	1190	184.95	10217	195.05	1879	205.10	40939

Average of 3.071 to 3.083 min.: 4m65028.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
206.05	175507	215.20	273	225.00	23319	234.00	2421
207.10	24198	216.00	3643	226.00	1440	234.85	1425
207.95	3481	217.00	42640	227.00	36685	235.10	860
208.95	1408	218.00	5821	228.10	5647	235.90	1489

210.20	2584	218.90	106	229.00	9119	236.20	380
210.95	7662	219.15	881	229.85	921	236.80	590
211.50	457	220.15	1096	230.10	1075	237.00	2517
212.05	1203	221.00	40425	231.00	3537	237.80	224
213.05	659	222.00	2586	231.60	125	238.30	680
214.00	291	223.00	10206	231.95	1036	238.80	626
214.95	1147	224.00	97861	232.90	1194	239.10	1537

Average of 3.071 to 3.083 min.: 4m65028.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
239.85	795	247.60	112	253.15	1583	263.90	637
240.10	136	247.90	145	254.05	2712	265.00	7932
240.70	348	248.95	2210	255.00	405589	266.00	2717
241.00	1130	249.70	373	256.00	56816	268.00	935
241.30	490	249.90	185	257.00	5625	268.80	88
242.05	5671	250.30	106	258.00	20096	270.05	727
243.10	5479	250.80	184	259.05	2817	270.60	269
244.05	74912	251.10	615	259.85	438	271.05	1130
245.10	11490	252.05	746	260.05	299	272.05	1103
246.00	10852	252.70	706	261.05	997	272.90	4921
247.05	2445	253.00	769	261.70	97	273.05	9938

Average of 3.071 to 3.083 min.: 4m65028.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
274.00	31992	284.20	272	293.10	2396	303.05	6126
275.00	176664	284.90	731	294.00	798	304.10	2054
276.00	23222	285.10	1631	294.80	906	304.70	99
277.00	12804	286.10	156	296.00	45219	307.70	117
278.00	1897	288.00	117	297.05	6744	307.90	445
278.20	335	288.80	225	297.80	360	308.20	109
279.05	444	289.05	836	298.70	122	309.00	679
280.10	87	290.10	556	300.00	74	310.05	517
281.90	154	291.05	528	300.95	1065	310.70	121
283.00	1732	292.00	558	301.95	941	311.00	73
283.95	1000	292.90	609	302.20	235	312.70	139

Average of 3.071 to 3.083 min.: 4m65028.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
313.00	1062	321.90	673	331.60	496	345.95	3537
313.90	1088	322.10	347	332.05	867	346.90	612
314.15	1428	323.00	17978	333.00	663	350.10	381
314.90	4574	324.10	2720	333.15	920	351.10	420
316.00	2726	324.85	403	334.05	9583	352.05	5645
316.90	441	325.70	92	335.05	2826	352.80	520
317.10	462	325.95	299	339.00	122	353.05	2708
320.00	124	326.90	2978	340.05	259	354.10	5642
320.60	180	327.80	507	340.95	2113	355.15	1564
321.00	1427	328.05	1382	341.90	830	358.85	546
321.20	321	329.05	593	343.25	329	359.90	161

Average of 3.071 to 3.083 min.: 4m65028.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
363.65	467	383.95	609	402.05	4535	424.15	6289
364.10	155	384.80	173	403.05	6193	424.95	971
365.00	20150	385.00	124	403.70	422	426.00	67
366.05	2980	389.10	89	404.00	1289	429.05	257
370.00	1084	390.00	1569	405.00	153	430.05	247
371.10	2252	390.80	414	410.00	102	434.55	215
372.05	8945	391.05	775	414.80	82	435.40	190
372.95	2254	392.10	951	415.20	319	435.60	214
373.90	167	395.10	117	421.00	4995	437.50	92
374.05	162	396.95	241	421.95	4582	438.10	105
382.95	2578	401.00	945	423.05	35171	441.05	96325

Average of 3.071 to 3.083 min.: 4m65028.D\data.ms

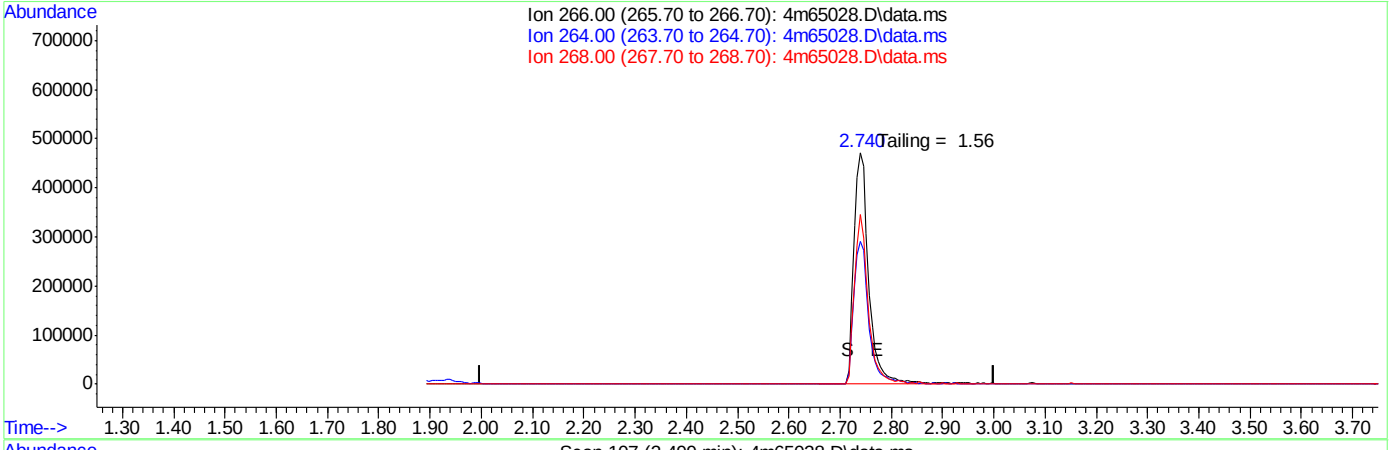
dftpp
Modified:subtracted

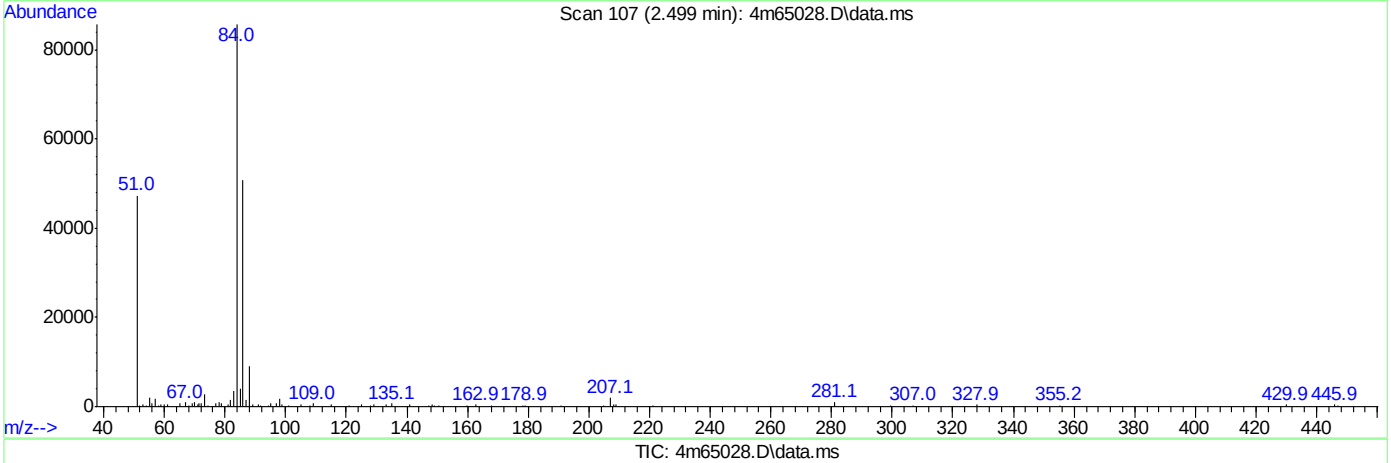
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
442.05	687168						
443.05	128360						
444.05	12169						
445.00	831						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2900\
Data File : 4m65028.D
Acq On : 2 May 2016 8:41 am
Operator : linseyk
Sample : dftpp
Misc : op90303a,e4m2900
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 02 08:46:49 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: 4m65028.D\data.ms

(1) pentachlorophenol (t)

2.500min (-2.500) 0.00ppb

response 0

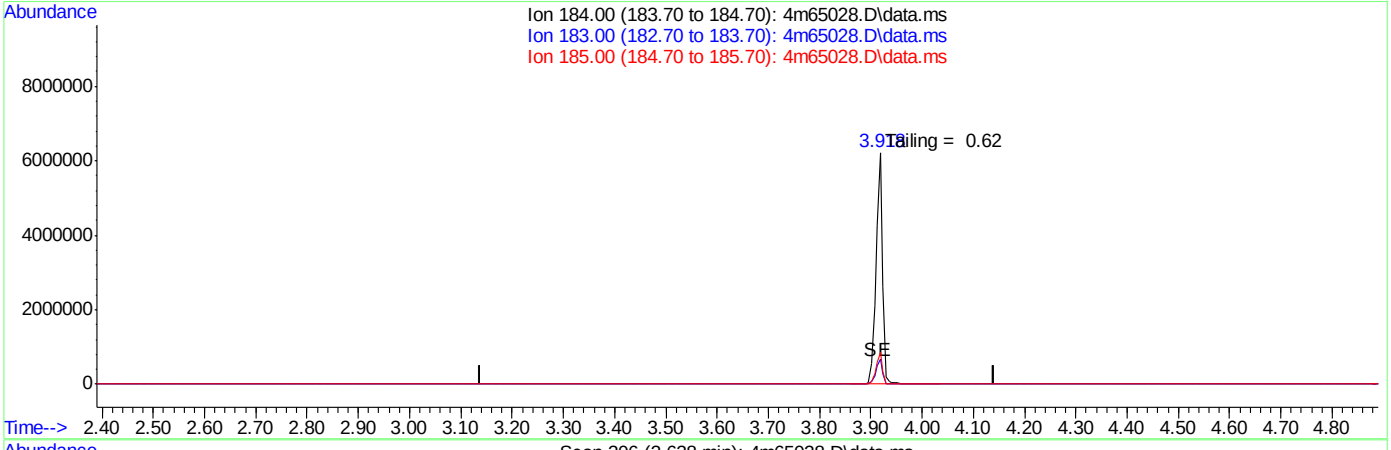
Ion	Exp%	Act%
266.00	100	0.00
264.00	58.00	0.00#
268.00	62.00	0.00#
0.00	0.00	0.00

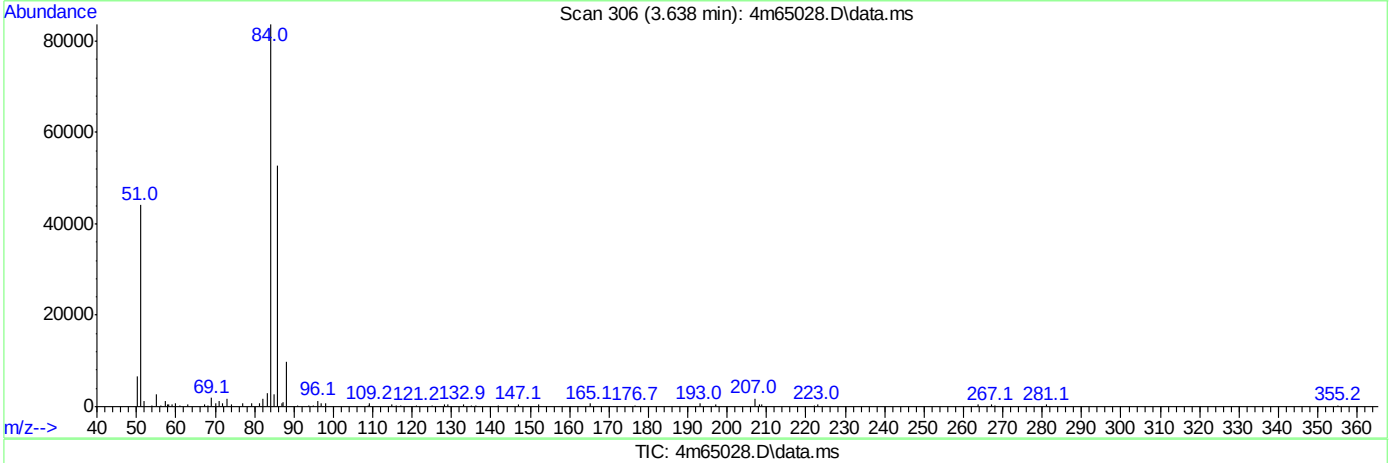
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2900\
Data File : 4m65028.D
Acq On : 2 May 2016 8:41 am
Operator : linseyk
Sample : dftpp
Misc : op90303a,e4m2900
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 02 08:46:49 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: 4m65028.D\data.ms

(2) benzidine (t)

3.640min (-3.640) 0.00ppb

response 0

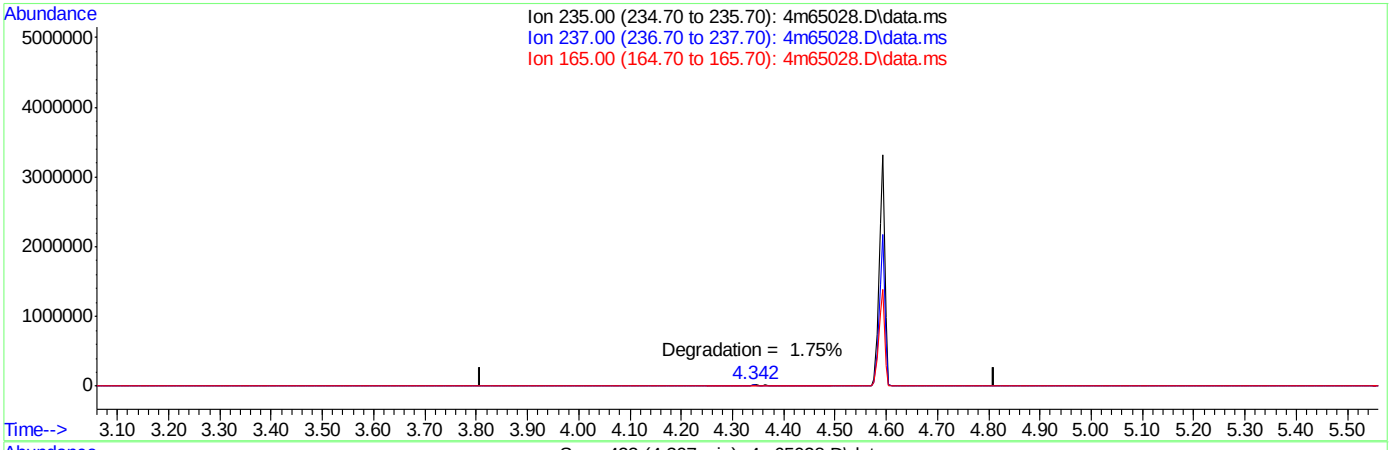
Ion	Exp%	Act%
184.00	100	0.00
183.00	10.60	0.00#
185.00	13.40	0.00#
0.00	0.00	0.00

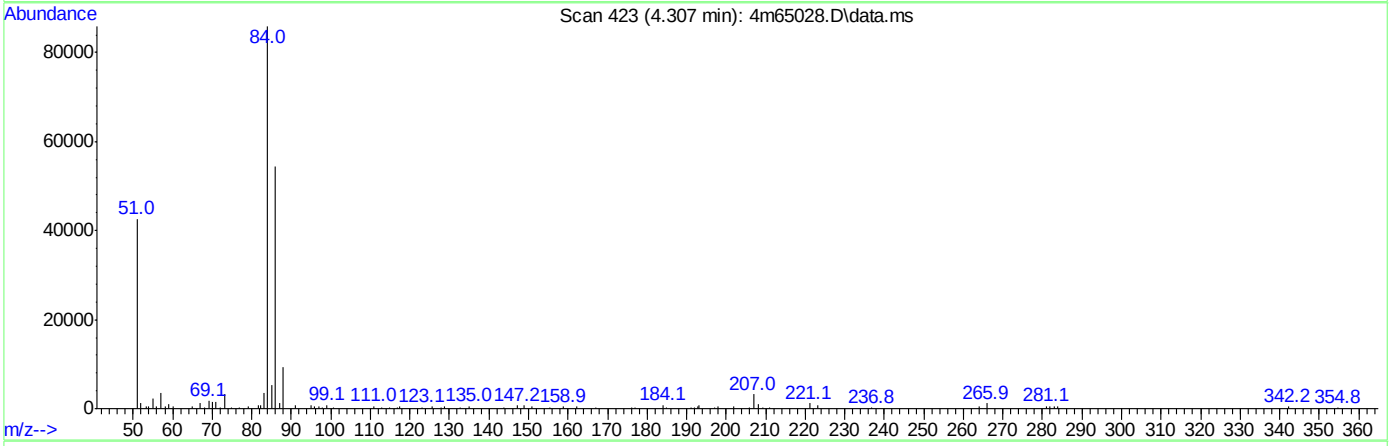
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2900\
Data File : 4m65028.D
Acq On : 2 May 2016 8:41 am
Operator : linseyk
Sample : dftpp
Misc : op90303a,e4m2900
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 02 08:46:49 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: 4m65028.D\data.ms

(3) ddt (t)

4.310min (-4.310) 0.00ppb

response 0

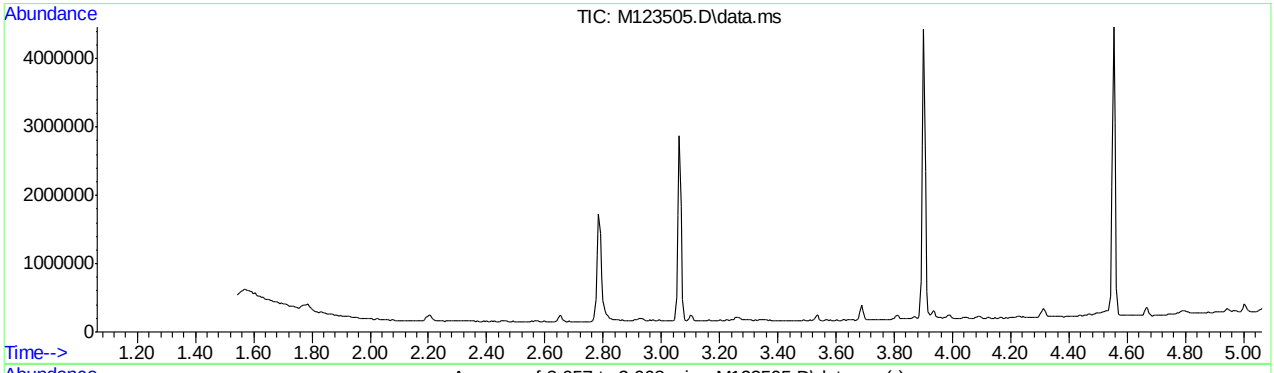
Ion	Exp%	Act%
235.00	100	0.00
237.00	63.70	0.00#
165.00	48.70	0.00#
0.00	0.00	0.00

DFTPPR

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123505.D
Acq On : 12 Apr 2016 5:38 pm
Operator : sarad
Sample : DFTPP
Misc : op92514,em5217
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mMon Mar 28 09:49:46 2016
Last Update : Mon Mar 28 09:49:46 2016



AutoFind: Scans 284, 285, 286; Background Corrected with Scan 279

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	32.1	74912	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	39.3	91845	PASS
70	69	0.00	2	0.5	416	PASS
127	198	40	60	48.1	112346	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	233621	PASS
199	198	5	9	6.8	15774	PASS
275	198	10	30	27.1	63400	PASS
365	198	1	100	3.5	8159	PASS
441	443	0.10	100	79.2	29433	PASS
442	198	40	100	83.3	194493	PASS
443	442	17	23	19.1	37146	PASS

SGS ACCUTEST JC18516

Average of 3.057 to 3.068 min.: M123505.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.05	278	52.15	3777	64.10	631	78.10	5891
38.10	839	54.15	32	65.10	1521	79.05	5501
39.15	6220	55.15	49	66.10	26	80.05	4669
40.05	613	56.10	2317	67.10	431	81.05	6533
41.15	350	57.10	4924	69.05	91845	82.05	1443
43.15	137	58.05	71	70.05	416	83.10	1460
45.05	41	59.10	131	73.10	204	84.05	353
46.15	76	60.10	117	74.05	8024	85.15	1051
47.05	251	61.05	1043	75.00	13540	86.05	391
50.10	19074	62.10	1057	76.10	4298	87.05	911
51.10	74912	63.10	3396	77.15	94109	89.05	46

Average of 3.057 to 3.068 min.: M123505.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
91.00	1469	102.05	461	115.05	386	128.00	8480
92.05	2019	103.00	927	116.10	1629	129.05	41444
93.05	9782	104.05	2170	117.05	19895	130.05	3823
94.10	645	105.05	2460	118.05	1420	131.00	715
95.10	324	107.05	29030	119.05	152	131.95	278
96.10	245	108.05	4951	120.00	495	133.05	227
97.10	248	110.05	54952	122.10	1968	134.05	1109
98.05	6713	111.05	7584	123.05	2719	135.05	3150
99.05	5791	112.05	796	124.00	1038	136.05	1087
100.10	724	113.10	224	125.05	1229	137.00	1466
101.00	3204	114.10	180	127.05	112346	138.05	401

Average of 3.057 to 3.068 min.: M123505.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
139.00	526	150.15	491	160.00	1799	171.00	589
140.10	685	151.05	696	161.05	2478	172.00	987
141.00	4846	152.00	434	162.00	407	173.05	1568
142.05	1264	153.00	1795	163.15	203	174.05	2314
143.05	1007	154.00	1184	164.00	463	175.05	4157
144.05	468	155.05	2751	165.00	2030	176.05	980
145.00	204	156.05	4439	166.05	1425	177.05	1618
146.00	963	156.95	243	167.00	10879	178.05	815
147.05	2558	157.10	749	168.05	5213	179.05	8255
148.05	6216	158.00	942	169.00	836	180.05	6155
149.05	1210	159.10	973	170.05	402	181.00	2488

Average of 3.057 to 3.068 min.: M123505.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
182.00	525	193.05	2651	204.00	7785	213.05	117
183.10	214	194.10	721	205.00	14180	214.95	787
184.00	867	195.05	370	206.05	59442	216.10	1383
185.10	3713	196.05	7120	207.05	7486	217.05	15893
186.05	30402	198.00	233621	208.05	1788	217.95	2128
187.05	8478	199.00	15774	209.00	436	218.95	112
188.05	1098	200.10	1348	210.25	1329	219.10	224
189.00	1646	201.40	844	210.45	653	219.85	132
190.05	219	201.65	303	210.95	666	221.05	10612
191.05	669	202.05	31	211.10	1726	223.00	3810
192.05	2612	203.05	1250	211.95	153	224.05	32424

Average of 3.057 to 3.068 min.: M123505.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
225.05	8638	235.00	1271	246.00	4974	258.05	7557
226.15	529	236.00	664	247.05	1026	259.00	1400
227.05	12942	237.10	1292	247.95	339	259.90	227
228.05	1919	237.85	163	249.00	1062	261.00	347

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229.00	2696	238.95	554	250.05	215	262.85	74
229.90	237	239.95	461	251.00	263	263.85	143
231.00	1249	241.10	843	251.95	402	265.05	3119
231.85	72	242.05	1907	253.05	597	265.80	315
232.00	233	243.10	2266	255.05	136557	266.90	194
233.10	367	244.05	26362	256.05	20847	268.95	93
234.05	877	245.05	3846	257.10	1363	269.80	243

Average of 3.057 to 3.068 min.: M123505.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
270.15	74	281.95	151	293.85	137	309.05	71
270.90	220	283.05	383	294.15	162	309.95	204
271.85	101	284.10	507	296.00	17758	310.15	116
272.00	438	285.10	1137	297.05	2426	312.90	231
273.00	4503	285.95	93	297.85	153	314.05	1008
274.05	11631	286.15	133	300.95	321	315.00	1778
275.05	63400	289.00	215	302.05	272	316.00	1259
276.05	8279	290.05	161	303.05	2155	316.95	247
277.00	5248	291.10	135	304.05	659	321.05	601
278.00	1029	292.10	176	305.95	69	321.75	86
279.00	256	293.00	984	308.05	350	322.15	160

Average of 3.057 to 3.068 min.: M123505.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
323.05	5658	336.05	200	366.05	1347	400.95	252
324.00	1110	339.95	75	369.95	197	402.00	1431
324.95	67	341.05	682	371.00	595	403.05	2296
325.85	112	342.00	232	372.05	3110	404.00	625
326.95	1188	346.00	1366	373.05	783	405.15	68
328.00	666	347.00	216	383.00	976	410.05	73
329.10	161	352.00	2155	384.05	245	414.95	154
332.05	725	353.10	1432	384.95	75	421.00	1580
333.00	576	354.05	1785	390.00	351	422.05	1469
334.05	3819	355.05	296	391.00	256	423.05	12013
335.05	1094	365.00	8159	392.00	240	423.95	2624

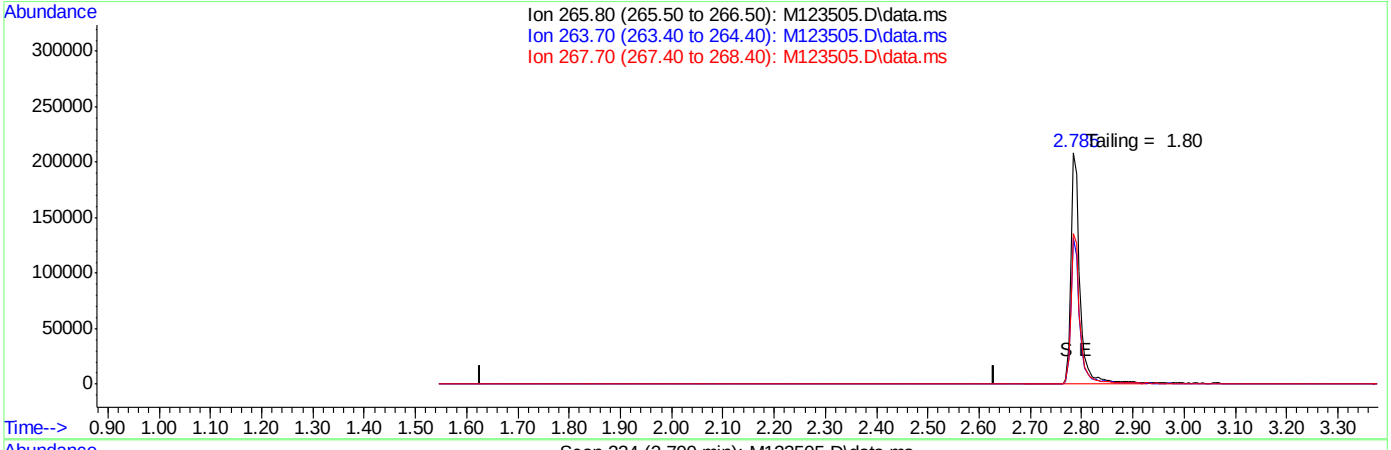
Average of 3.057 to 3.068 min.: M123505.D\data.ms
DFTPP
Modified:subtracted

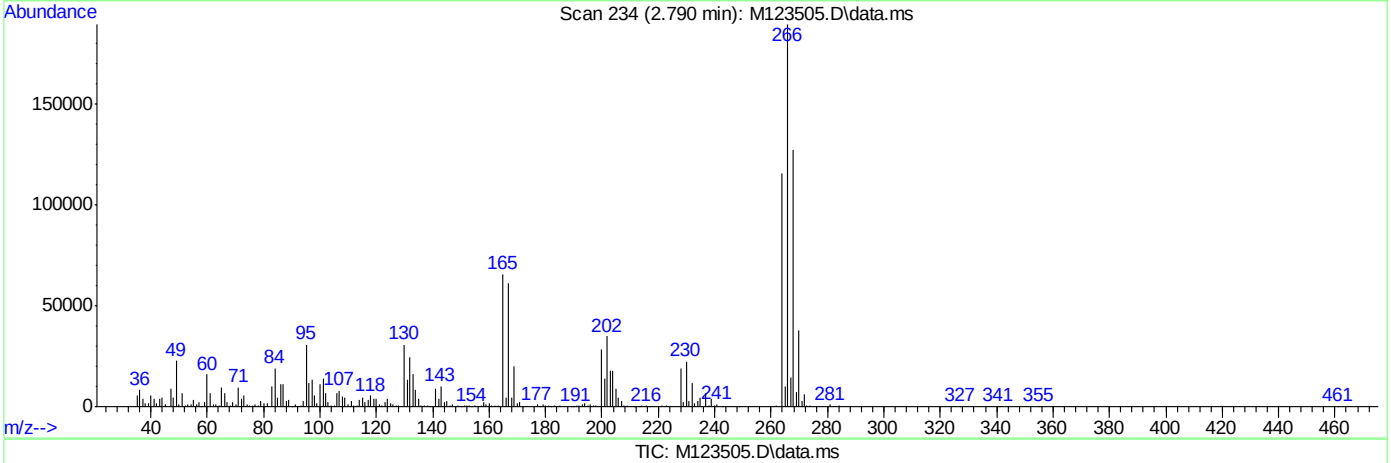
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
425.10	188						
436.85	99						
437.45	88						
438.45	87						
438.75	86						
439.35	103						
441.05	29433						
442.05	194493						
443.05	37146						
444.05	3208						
445.10	243						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123505.D
Acq On : 12 Apr 2016 5:38 pm
Operator : sarad
Sample : DFTPP
Misc : op92514,em5217
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 12 17:54:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mMon Mar 28 09:49:46 2016
QLast Update : Mon Mar 28 09:49:46 2016
Response via : Continuing Cal File:





TIC: M123505.D\data.ms

(1) Pentachlorophenol (MC)

2.129min (-2.129) 0.00ppm

response 0

Ion	Exp%	Act%
265.80	100	0.00
263.70	61.60	0.00#
267.70	61.70	0.00#
0.00	0.00	0.00

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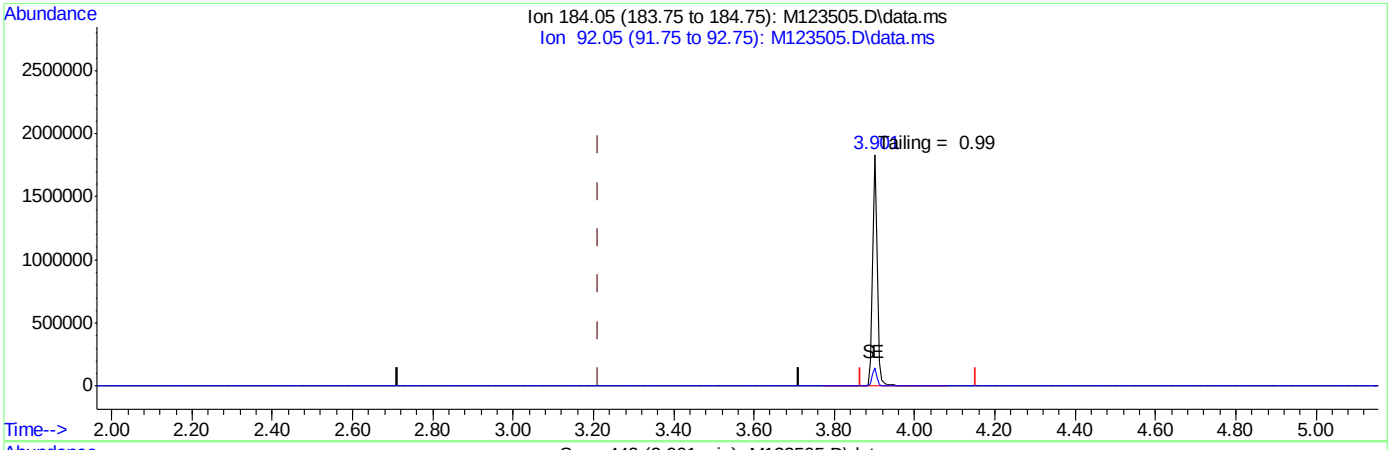
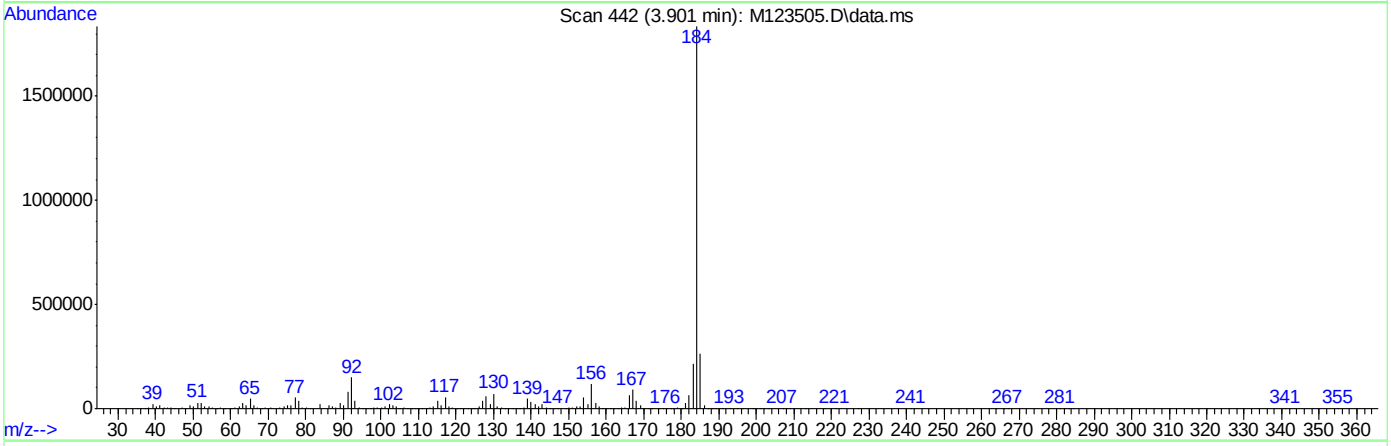
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123505.D
Acq On : 12 Apr 2016 5:38 pm
Operator : sarad
Sample : DFTPP
Misc : op92514,em5217
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 12 17:54:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mMon Mar 28 09:49:46 2016
QLast Update : Mon Mar 28 09:49:46 2016
Response via : Continuing Cal File:





TIC: M123505.D\data.ms

(2) Benzidine (M)

3.901min (+0.688) 0.00ppm m

response 1448333

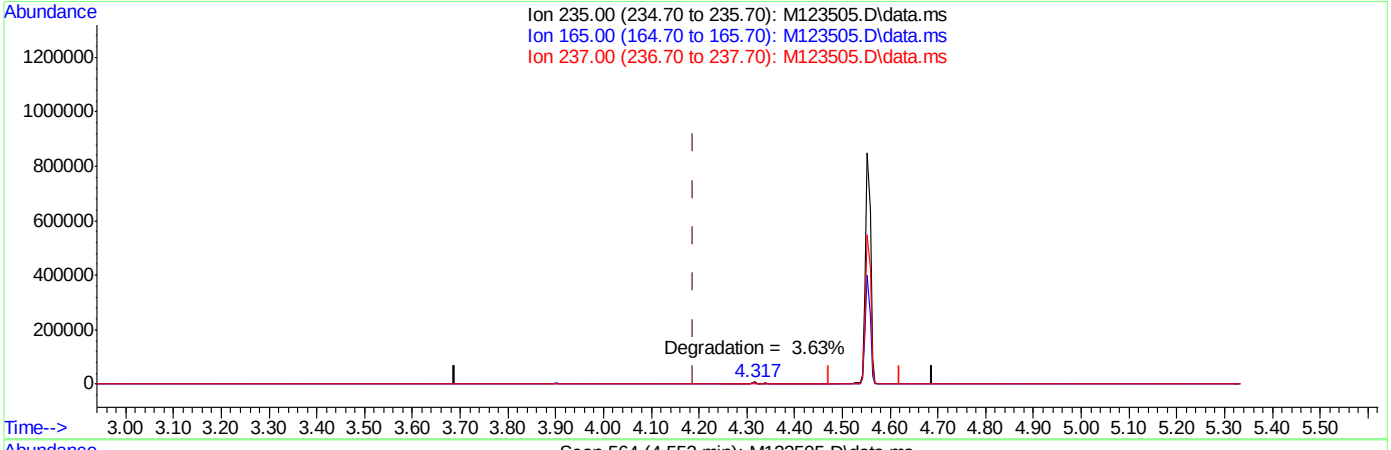
Ion	Exp%	Act%
184.05	100	100
92.05	10.70	8.15
0.00	0.00	0.00
0.00	0.00	0.00

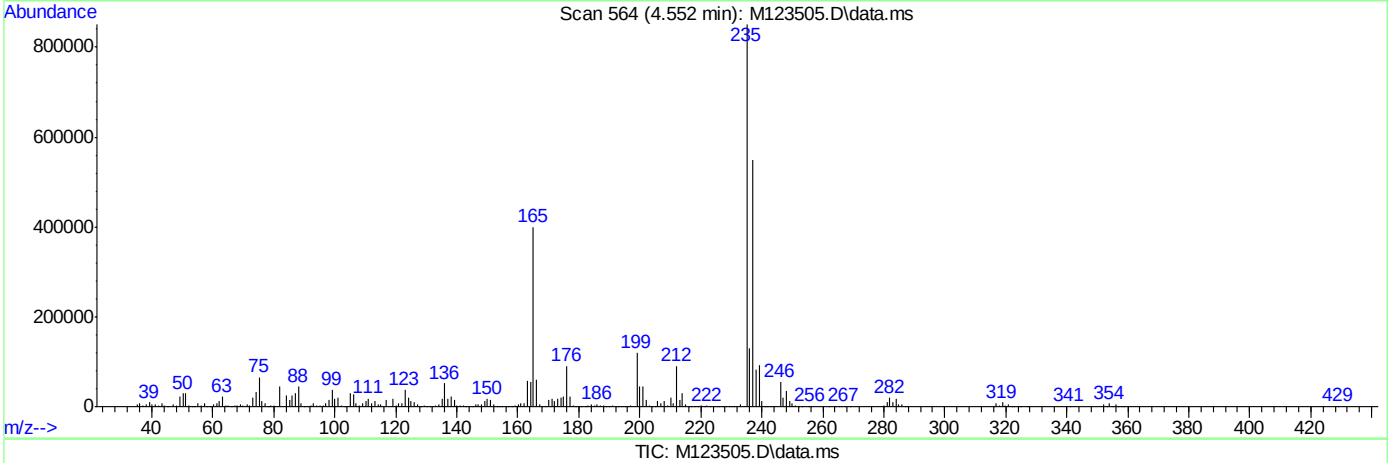
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123505.D
Acq On : 12 Apr 2016 5:38 pm
Operator : sarad
Sample : DFTPP
Misc : op92514,em5217
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 12 17:54:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mMon Mar 28 09:49:46 2016
QLast Update : Mon Mar 28 09:49:46 2016
Response via : Continuing Cal File:





TIC: M123505.D\data.ms

(3) PP-DDT (MC)

4.552min (+0.363) 0.00ppm m

response 643812

Ion	Exp%	Act%
235.00	100	100
165.00	46.90	47.07
237.00	64.20	64.49
0.00	0.00	0.00

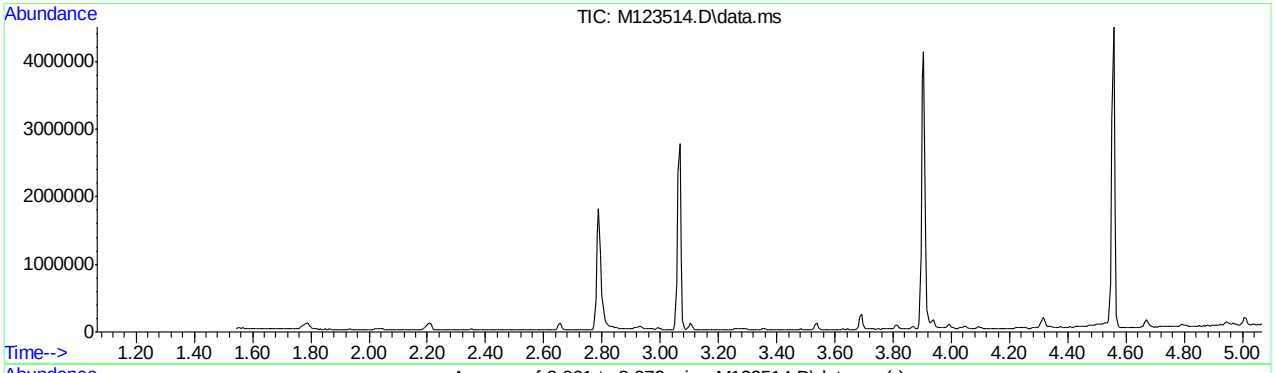
SGS ACCUTEST JC18516

DFTPPR

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123514.D
Acq On : 12 Apr 2016 9:57 pm
Operator : sarad
Sample : DFTPP
Misc : op92514,em5218
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mMon Mar 28 09:49:46 2016
Last Update : Mon Mar 28 09:49:46 2016



AutoFind: Scans 285, 286, 287; Background Corrected with Scan 280

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	30.9	72654	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	37.8	89061	PASS
70	69	0.00	2	0.5	437	PASS
127	198	40	60	48.0	113120	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	235437	PASS
199	198	5	9	6.5	15398	PASS
275	198	10	30	27.6	64960	PASS
365	198	1	100	3.8	9013	PASS
441	443	0.10	100	78.4	31349	PASS
442	198	40	100	91.0	214165	PASS
443	442	17	23	18.7	40010	PASS

SGS ACCUTEST JC18516

Average of 3.061 to 3.072 min.: M123514.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.05	248	55.10	160	69.05	89061	82.05	1712
38.10	886	56.10	2073	70.05	437	83.05	1612
39.15	6141	57.05	5361	73.10	433	85.15	677
44.05	334	58.10	253	74.05	7823	86.05	1649
45.10	241	59.15	84	75.05	12686	87.10	960
48.10	215	61.10	955	76.15	4558	88.05	515
49.05	749	62.10	1017	77.15	93821	89.10	252
50.15	19579	63.15	3214	78.15	6651	91.10	1302
51.10	72654	64.10	438	79.05	5041	92.10	1620
52.15	3665	65.10	1697	80.05	4394	93.05	9310
53.00	168	66.05	344	81.05	6393	94.05	701

Average of 3.061 to 3.072 min.: M123514.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
95.15	277	107.05	28706	118.05	1293	130.05	3675
96.05	130	108.05	4564	119.05	78	131.10	746
97.00	8	110.05	52957	120.05	373	132.00	550
98.05	7117	111.00	7803	121.15	125	133.05	122
99.05	5957	111.95	988	122.05	1913	134.05	902
100.10	582	113.05	403	123.05	2779	135.05	3237
101.05	3458	113.25	121	124.10	1306	136.05	1464
102.15	265	114.10	166	125.05	1358	137.05	1829
103.05	1271	115.15	228	127.05	113120	138.10	540
104.05	2276	116.05	1553	128.05	8419	139.05	245
105.05	2136	117.05	20105	129.05	43086	140.10	610

Average of 3.061 to 3.072 min.: M123514.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
141.05	5144	151.85	159	162.95	186	173.05	1307
142.05	1705	153.05	1449	163.15	75	174.05	2292
143.05	1044	154.05	1146	163.95	425	175.05	4315
144.05	431	155.05	3070	164.95	1731	176.05	1324
145.05	395	156.05	4389	166.15	1836	177.05	1827
146.05	971	157.10	1055	167.00	11191	178.05	862
147.00	2727	158.00	1095	168.05	5146	179.05	8953
148.05	5722	159.00	896	169.00	853	180.05	5370
149.05	1359	160.05	1759	170.15	381	181.05	2568
149.95	516	161.05	2506	171.00	618	182.05	568
151.10	867	162.10	785	172.00	1028	183.15	293

Average of 3.061 to 3.072 min.: M123514.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
184.05	701	194.05	627	205.05	14255	215.00	571
185.05	3993	195.00	640	206.05	59037	216.05	1044
186.05	32046	196.05	7474	207.00	8477	217.00	15582
187.05	8911	198.00	235437	208.00	1693	218.00	1877
188.05	996	199.00	15398	209.00	465	219.00	295
188.95	1923	200.05	1262	210.05	241	221.05	11374
189.85	195	200.75	69	210.95	1050	221.95	1161
190.05	126	201.25	441	211.10	1473	223.05	3598
191.00	815	201.55	983	211.75	364	224.05	33861
192.05	2727	203.05	1615	212.95	97	225.05	8177
193.10	3103	204.05	8751	214.75	115	226.10	927

Average of 3.061 to 3.072 min.: M123514.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
227.05	14316	237.85	66	248.05	246	258.95	1156
228.05	2028	238.05	72	249.00	1208	259.95	169
229.05	2777	239.00	478	250.05	281	261.10	289
230.00	619	240.05	558	250.95	103	263.95	117

231.05	1294	241.00	800	251.25	82	265.00	3456
231.95	185	242.05	1897	252.00	317	265.85	123
233.05	184	243.10	2060	253.05	740	269.85	363
233.95	918	244.05	28279	255.05	144258	270.85	204
235.00	1216	245.05	3897	256.05	21867	271.10	246
235.90	694	246.05	5087	257.00	1638	272.10	508
237.00	1226	247.00	991	258.05	8107	273.00	4291

Average of 3.061 to 3.072 min.: M123514.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
274.05	11576	285.95	93	297.05	2741	313.95	1040
275.05	64960	289.05	202	298.00	166	315.00	2399
276.05	8839	290.15	116	300.90	375	316.05	1204
277.00	4786	291.05	70	301.85	113	317.05	115
278.00	873	291.75	94	302.15	266	319.75	84
279.15	96	292.05	103	303.00	2013	321.00	708
281.95	90	293.05	1337	304.05	594	322.05	419
282.10	173	294.05	320	308.05	416	323.05	6798
283.05	794	294.45	70	309.10	163	324.05	1443
284.10	420	294.95	157	310.00	359	325.05	102
285.10	1064	296.05	18548	312.90	208	326.95	1161

Average of 3.061 to 3.072 min.: M123514.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
327.95	545	350.95	77	370.65	78	392.05	204
331.95	567	352.00	2053	371.10	517	400.90	190
333.05	726	353.05	1422	372.05	3166	402.00	1728
334.05	4024	354.05	2093	373.00	1062	403.05	2140
334.95	572	354.85	142	373.95	98	404.05	778
335.15	521	355.05	253	376.85	68	405.15	76
336.05	67	358.95	150	383.00	1025	417.15	73
341.00	754	364.95	9013	384.00	293	421.00	1703
342.00	223	366.00	1347	389.95	693	422.00	1952
346.00	1385	366.95	68	390.90	167	423.05	12883
346.95	335	369.90	180	391.15	183	424.05	2230

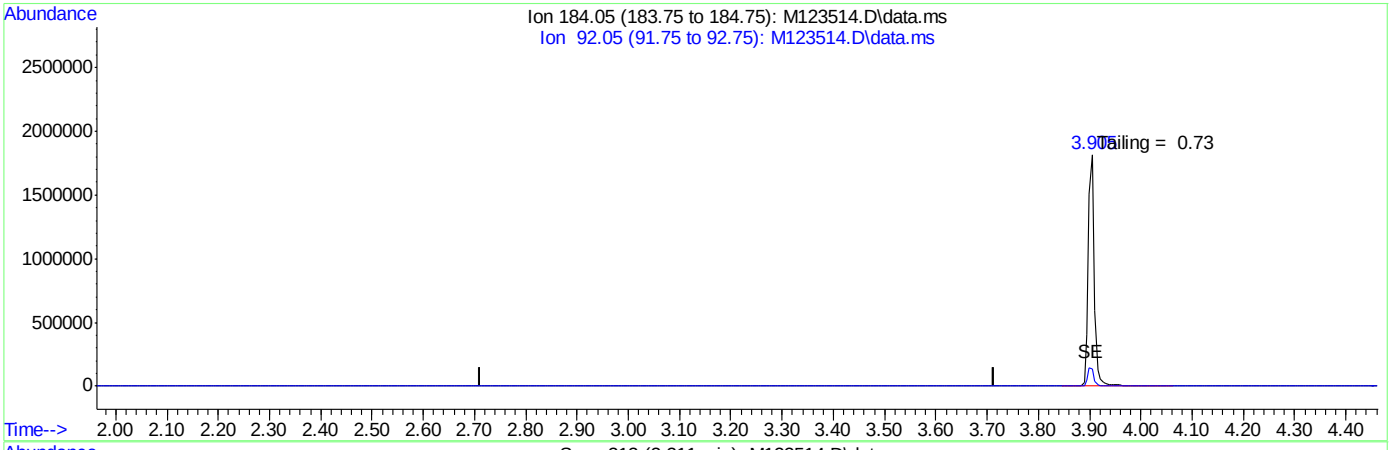
Average of 3.061 to 3.072 min.: M123514.D\data.ms
DFTPP
Modified:subtracted

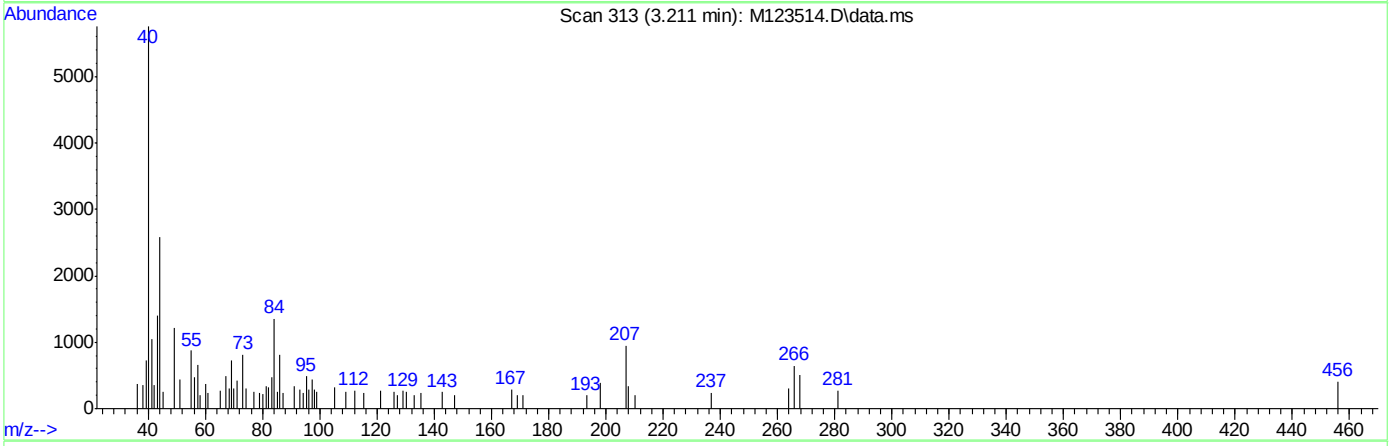
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
424.80	173	444.05	3985				
425.15	223	445.05	127				
433.85	84						
436.05	70						
437.05	96						
438.35	168						
439.25	81						
439.85	112						
441.05	31349						
442.05	214165						
443.05	40010						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123514.D
Acq On : 12 Apr 2016 9:57 pm
Operator : sarad
Sample : DFTPP
Misc : op92514,em5218
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 12 22:02:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mMon Mar 28 09:49:46 2016
QLast Update : Mon Mar 28 09:49:46 2016
Response via : Continuing Cal File:





TIC: M123514.D\data.ms

(2) Benzidine (M)

3.213min (-3.213) 0.00ppm

response 0

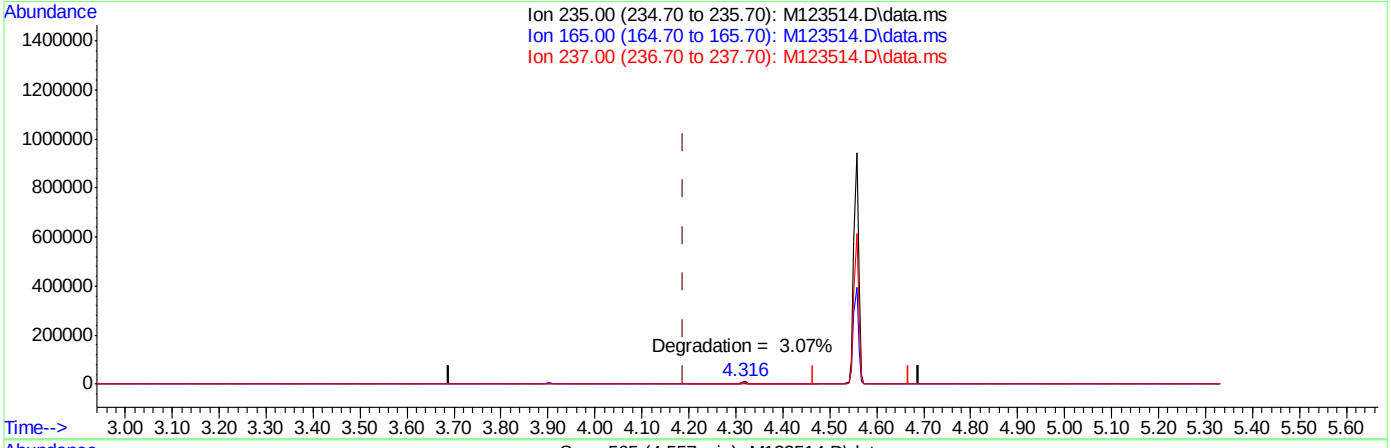
Ion	Exp%	Act%
184.05	100	0.00
92.05	10.70	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

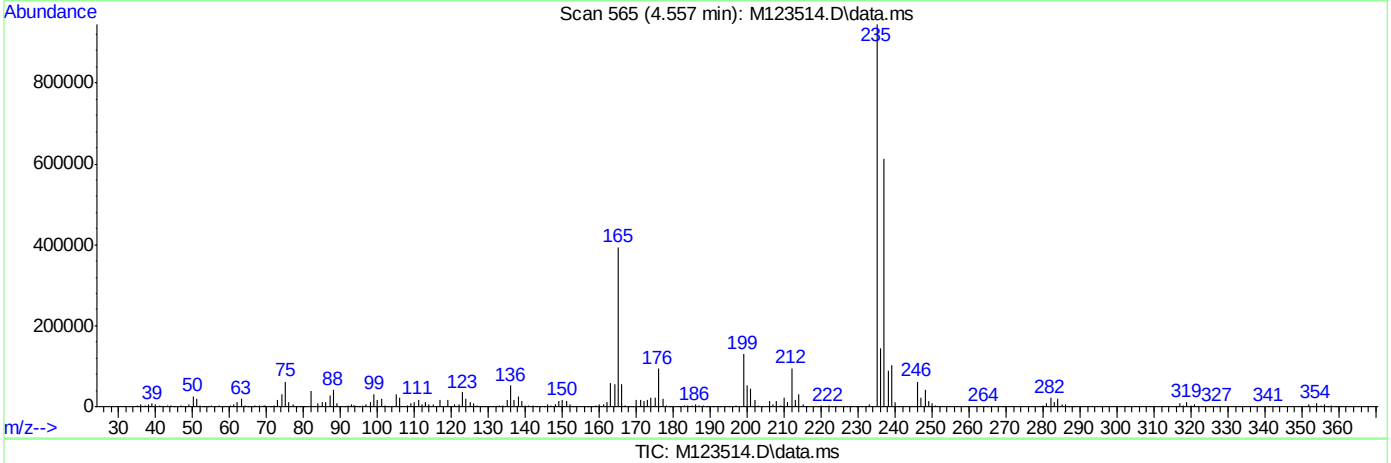
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123514.D
Acq On : 12 Apr 2016 9:57 pm
Operator : sarad
Sample : DFTPP
Misc : op92514,em5218
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 12 22:02:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mMon Mar 28 09:49:46 2016
QLast Update : Mon Mar 28 09:49:46 2016
Response via : Continuing Cal File:





TIC: M123514.D\data.ms

(3) PP-DDT (MC)

4.557min (+0.367) 0.00ppm m

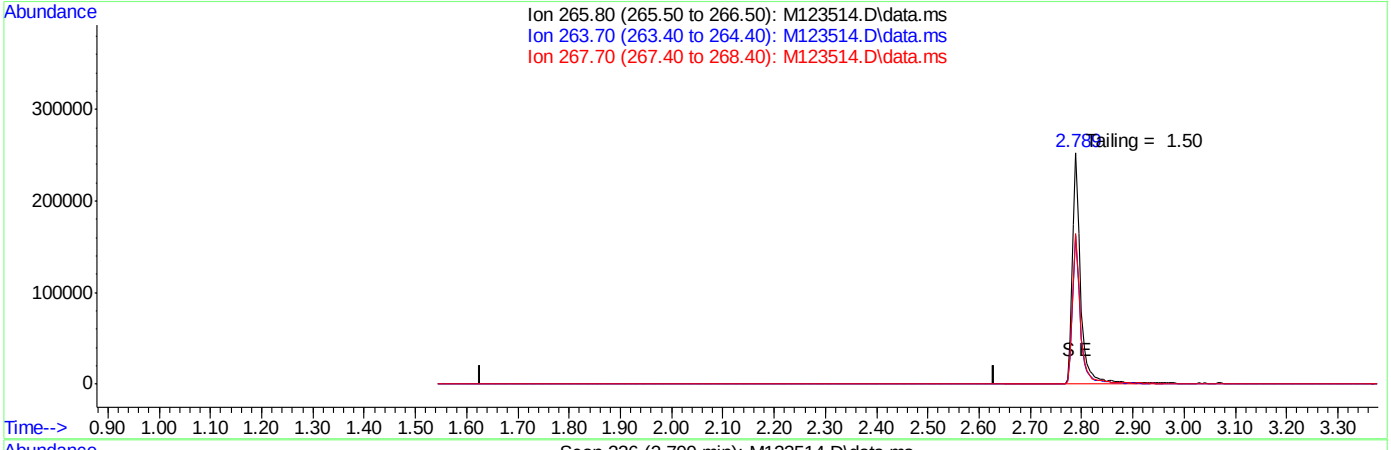
response 682383

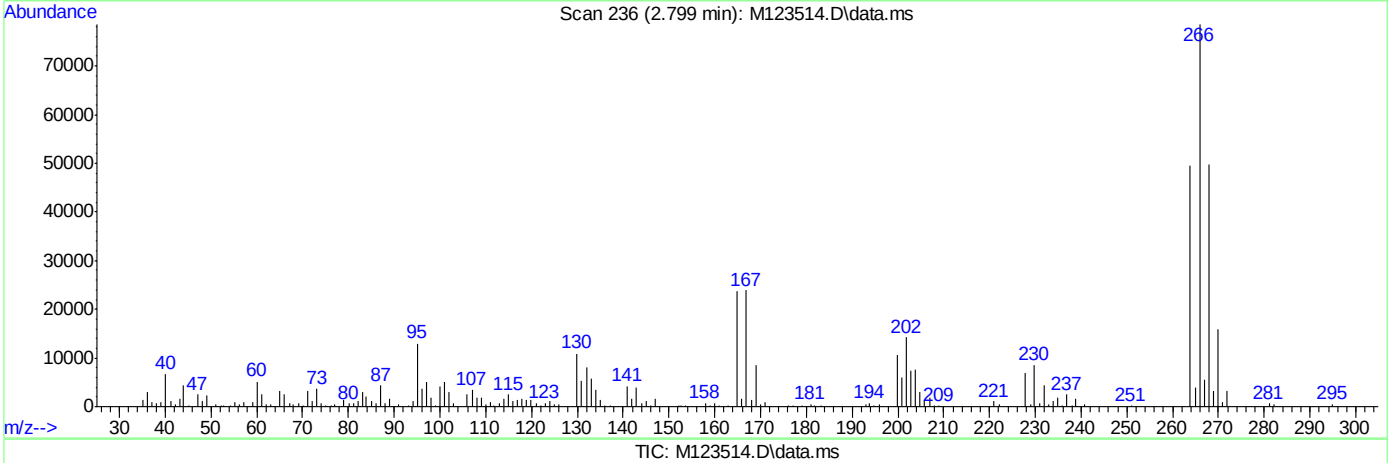
Ion	Exp%	Act%
235.00	100	100
165.00	46.90	41.76
237.00	64.20	64.83
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123514.D
Acq On : 12 Apr 2016 9:57 pm
Operator : sarad
Sample : DFTPP
Misc : op92514,em5218
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 12 22:10:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mMon Mar 28 09:49:46 2016
QLast Update : Mon Mar 28 09:49:46 2016
Response via : Continuing Cal File:





TIC: M123514.D\data.ms

(1) Pentachlorophenol (MC)

2.129min (-2.129) 0.00ppm

response 0

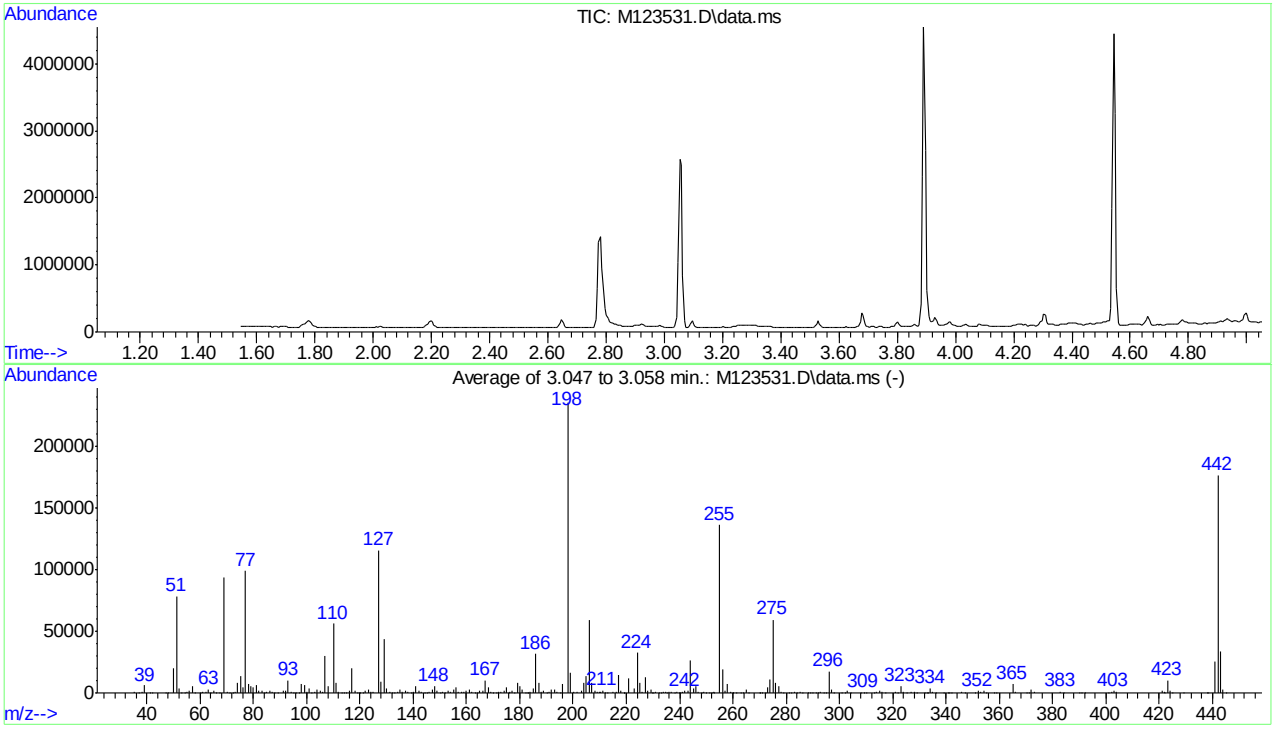
Ion	Exp%	Act%
265.80	100	0.00
263.70	61.60	0.00#
267.70	61.70	0.00#
0.00	0.00	0.00

DFTPPR

Data Path : C:\msdchem\1\DATA\EM5219\
Data File : M123531.D
Acq On : 13 Apr 2016 9:27 am
Operator : ashleyd
Sample : DFTPP
Misc : op92514,em5219
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mMon Mar 28 09:49:46 2016
Last Update : Mon Mar 28 09:49:46 2016



AutoFind: Scans 282, 283, 284; Background Corrected with Scan 277

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	33.2	78247	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	39.9	93834	PASS
70	69	0.00	2	0.6	568	PASS
127	198	40	60	49.2	115728	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	235442	PASS
199	198	5	9	7.1	16612	PASS
275	198	10	30	25.2	59290	PASS
365	198	1	100	3.0	7084	PASS
441	443	0.10	100	77.7	25886	PASS
442	198	40	100	75.0	176602	PASS
443	442	17	23	18.9	33324	PASS

SGS ACCUTEST JC18516

Average of 3.047 to 3.058 min.: M123531.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.10	723	53.05	72	65.15	1545	77.10	98799
37.10	362	54.05	175	66.15	14	78.15	7069
38.10	688	55.15	572	67.05	179	79.05	5315
39.15	6098	56.10	2157	69.05	93834	80.05	4552
41.15	173	57.10	5282	70.10	568	81.05	6225
42.10	3	58.15	315	71.05	50	82.10	1777
47.05	28	60.10	194	72.15	151	83.10	1498
48.10	271	61.10	1164	73.15	671	84.05	122
50.10	19925	62.10	1287	74.05	7863	85.05	999
51.10	78247	63.15	3183	75.05	13424	86.00	1692
52.10	3905	64.05	420	76.15	4823	87.05	882

Average of 3.047 to 3.058 min.: M123531.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
88.00	260	100.10	595	112.05	1246	122.05	1761
89.05	71	101.00	3789	113.05	478	123.05	2979
91.10	1654	101.95	285	114.05	67	124.00	1293
92.05	1856	103.05	1192	115.00	162	125.05	1350
93.05	10053	104.05	2357	116.05	1985	127.05	115728
94.05	665	105.05	2059	117.05	20003	128.05	8741
95.05	168	106.15	737	118.05	1615	129.05	43585
96.05	405	107.00	29703	119.10	304	130.05	3755
97.15	93	108.05	5093	119.85	185	131.05	643
98.05	7407	110.00	56266	120.05	299	131.95	231
99.05	6430	111.05	8406	121.00	217	133.05	274

Average of 3.047 to 3.058 min.: M123531.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
134.05	1168	145.05	145	156.05	4409	167.00	10249
135.05	3171	146.05	985	157.00	841	168.05	4782
136.05	1314	147.05	2842	158.00	874	169.00	847
137.05	1411	148.05	5793	159.05	859	170.05	349
138.10	491	149.05	1612	160.00	1574	171.00	487
139.10	309	150.10	442	161.00	2714	172.00	973
140.10	594	151.05	537	162.05	902	173.00	1336
141.05	5390	151.65	486	163.10	316	174.00	2167
142.05	1915	153.05	1888	164.05	436	175.05	4415
143.00	1327	154.05	1376	164.95	1862	175.95	274
144.05	449	155.05	3106	166.00	1583	176.10	1001

Average of 3.047 to 3.058 min.: M123531.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
177.00	1824	187.05	8200	199.00	16612	210.35	592
178.00	204	188.10	930	200.05	1384	211.05	2186
179.05	8509	189.00	1645	201.55	1351	211.95	75
180.05	5361	190.05	406	203.00	1642	213.00	212
181.05	3015	191.05	964	204.05	8637	214.95	657
182.05	469	192.00	2366	205.05	14047	216.05	853
182.85	137	193.05	3074	206.05	59165	217.00	14740
183.05	90	194.05	857	207.05	7982	218.00	1946
184.00	627	195.00	451	208.05	1873	218.95	81
185.05	4027	196.00	6989	209.05	833	219.35	132
186.05	31765	198.00	235442	210.10	691	221.05	11769

Average of 3.047 to 3.058 min.: M123531.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
223.05	3310	232.90	216	242.05	1794	252.85	118
224.05	32528	234.00	862	243.10	1572	253.00	593
225.05	8288	234.90	744	244.05	26592	255.05	136101
226.10	865	235.15	164	245.10	3623	256.05	19340

DFTPPM.M Wed Apr 13 13:00:17 2016 MSM

Page: 2

227.05	13162	236.05	637	246.05	5047	257.05	1686
228.05	2050	237.00	1276	247.00	1058	258.05	7590
229.05	2791	237.95	76	248.00	216	259.05	1329
229.85	109	239.00	652	249.00	987	259.85	179
230.05	403	239.95	152	250.00	198	260.05	110
231.05	1173	240.15	183	251.05	269	261.10	205
232.00	395	241.00	851	252.05	226	262.95	80

Average of 3.047 to 3.058 min.: M123531.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
263.85	152	277.05	5184	290.00	160	303.05	2193
265.00	3088	278.05	808	290.95	73	304.05	303
265.85	298	279.10	196	291.95	252	307.90	220
269.90	271	281.05	50	293.00	1291	309.05	299
270.15	132	282.05	115	294.00	283	310.00	217
271.00	463	283.00	507	295.05	88	312.95	87
272.00	484	284.00	470	296.05	17400	314.00	922
273.05	4644	285.05	882	297.05	2520	314.95	1972
274.05	11026	286.15	176	297.95	145	316.05	1321
275.05	59290	288.05	71	301.00	184	317.05	210
276.05	8187	289.05	353	302.10	386	321.00	633

Average of 3.047 to 3.058 min.: M123531.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
322.00	280	335.00	1060	354.05	1618	384.00	313
323.05	5625	336.05	99	355.05	421	390.05	454
324.05	1175	338.95	67	358.05	74	391.00	291
325.05	72	340.95	365	358.95	176	392.10	200
326.95	1229	341.15	239	365.05	7084	401.00	241
328.10	520	342.05	229	366.00	1258	402.00	1206
329.05	88	346.00	1168	370.05	205	403.05	1704
332.10	418	347.00	188	371.10	339	404.00	782
332.85	88	351.05	96	372.05	2893	421.05	1393
333.05	381	352.05	1741	373.05	830	421.85	82
334.05	3718	353.05	1152	383.00	947	422.00	1116

Average of 3.047 to 3.058 min.: M123531.D\data.ms
DFTPP
Modified:subtracted

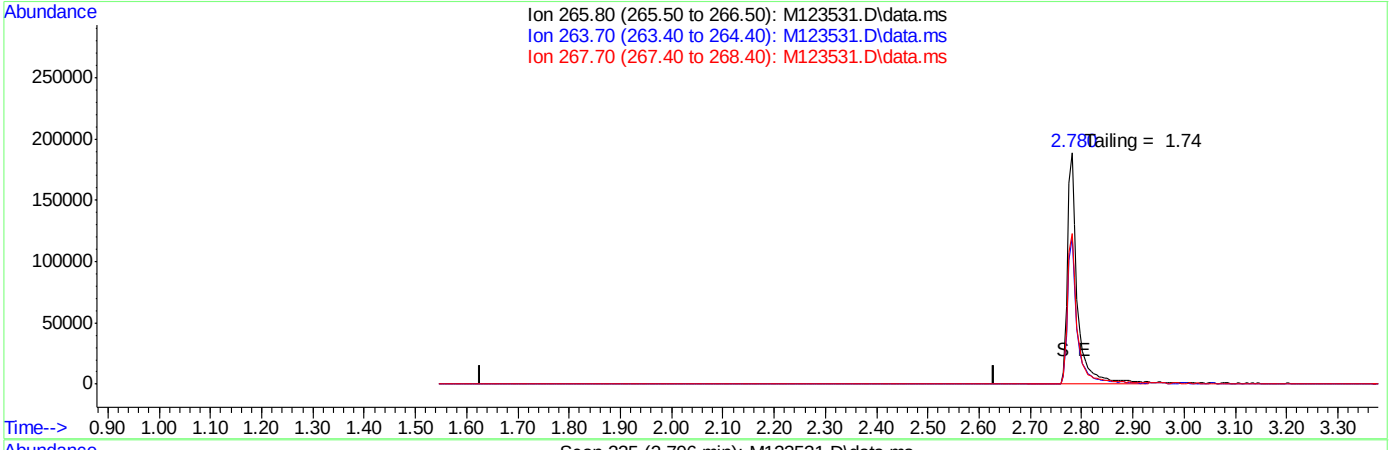
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
423.05	10276						
424.00	1908						
425.05	231						
429.25	67						
437.95	107						
438.55	101						
441.05	25886						
442.05	176602						
443.05	33324						
444.05	3133						
444.95	87						

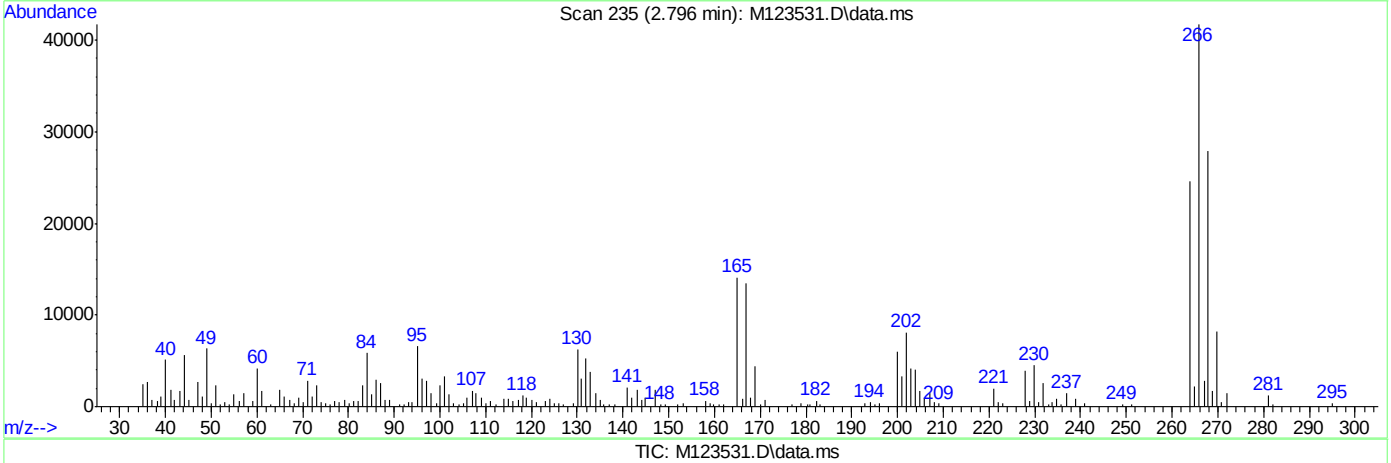
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5219\
Data File : M123531.D
Acq On : 13 Apr 2016 9:27 am
Operator : ashleyd
Sample : DFTPP
Misc : op92514,em5219
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 13 09:32:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mMon Mar 28 09:49:46 2016
QLast Update : Mon Mar 28 09:49:46 2016
Response via : Continuing Cal File:





(1) Pentachlorophenol (MC)

2.129min (-2.129) 0.00ppm

response 0

Ion	Exp%	Act%
265.80	100	0.00
263.70	61.60	0.00#
267.70	61.70	0.00#
0.00	0.00	0.00

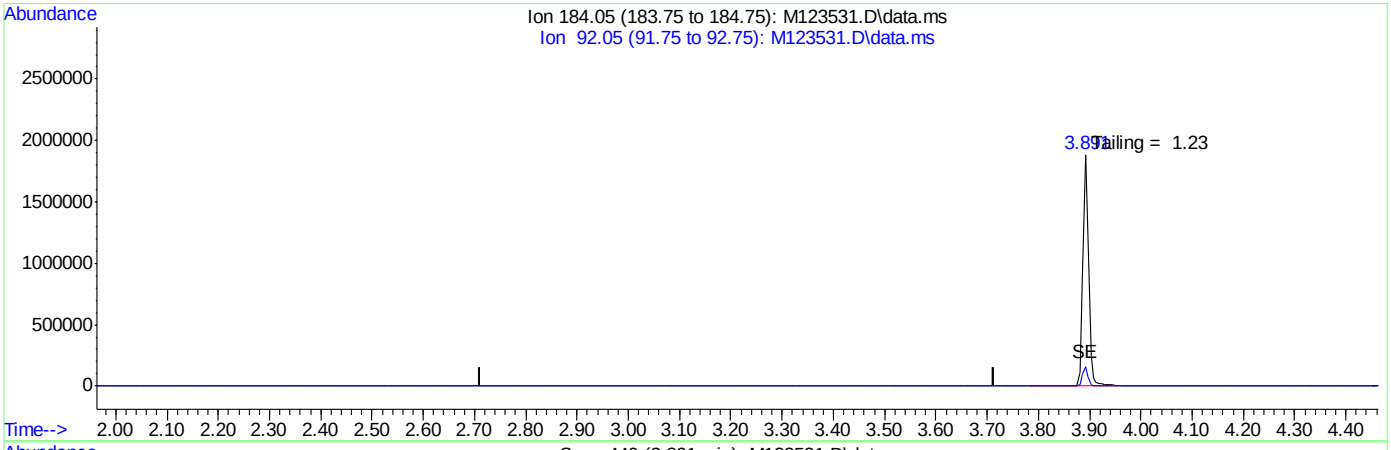
DFTPPM.M Wed Apr 13 12:28:24 2016 MSM

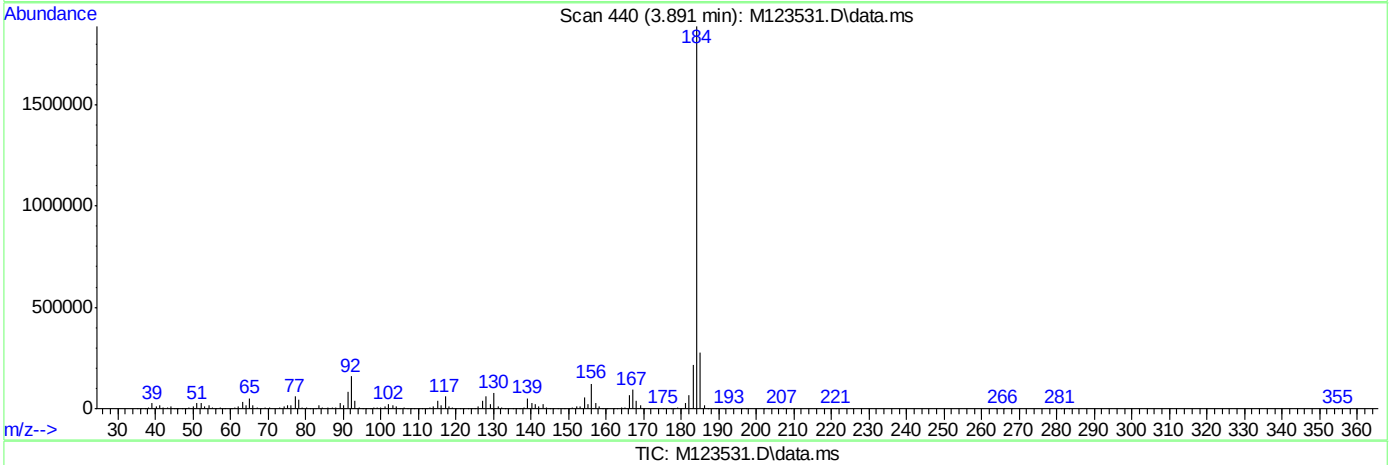
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5219\
Data File : M123531.D
Acq On : 13 Apr 2016 9:27 am
Operator : ashleyd
Sample : DFTPP
Misc : op92514,em5219
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 13 09:32:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mMon Mar 28 09:49:46 2016
QLast Update : Mon Mar 28 09:49:46 2016
Response via : Continuing Cal File:





TIC: M123531.D\data.ms

(2) Benzidine (M)

3.213min (-3.213) 0.00ppm

response 0

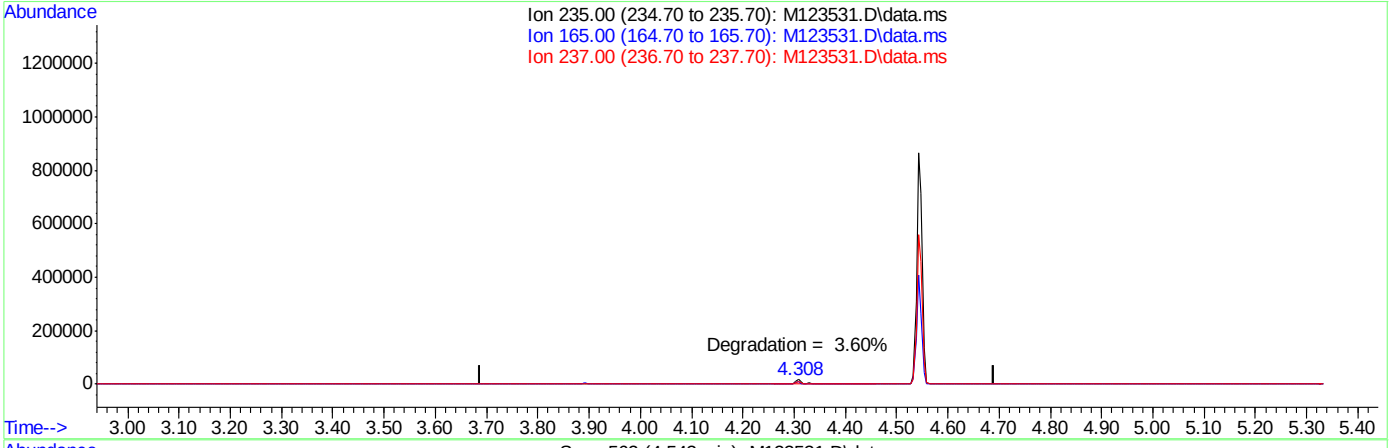
Ion	Exp%	Act%
184.05	100	0.00
92.05	10.70	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

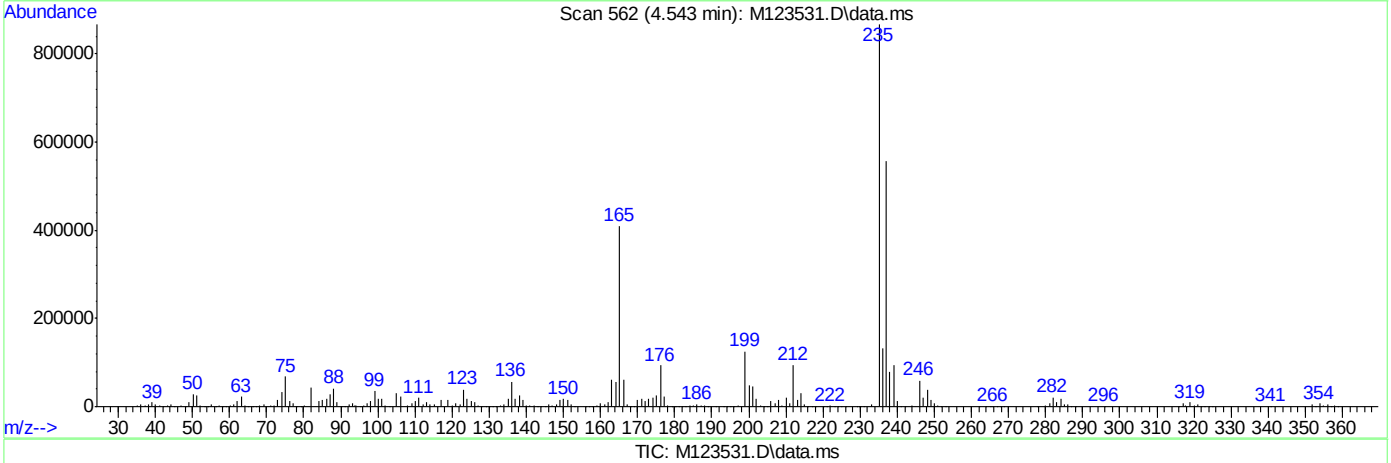
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5219\
Data File : M123531.D
Acq On : 13 Apr 2016 9:27 am
Operator : ashleyd
Sample : DFTPP
Misc : op92514,em5219
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 13 09:32:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mMon Mar 28 09:49:46 2016
QLast Update : Mon Mar 28 09:49:46 2016
Response via : Continuing Cal File:





TIC: M123531.D\data.ms

(3) PP-DDT (MC)

4.190min 0.00ppm d

response 0

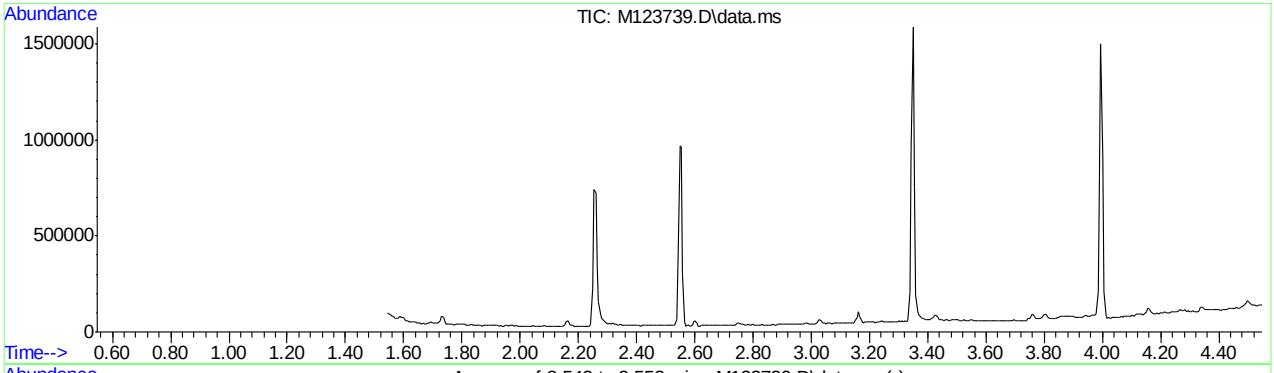
Ion	Exp%	Act%
235.00	100	0.00
165.00	46.90	0.00
237.00	64.20	0.00
0.00	0.00	0.00

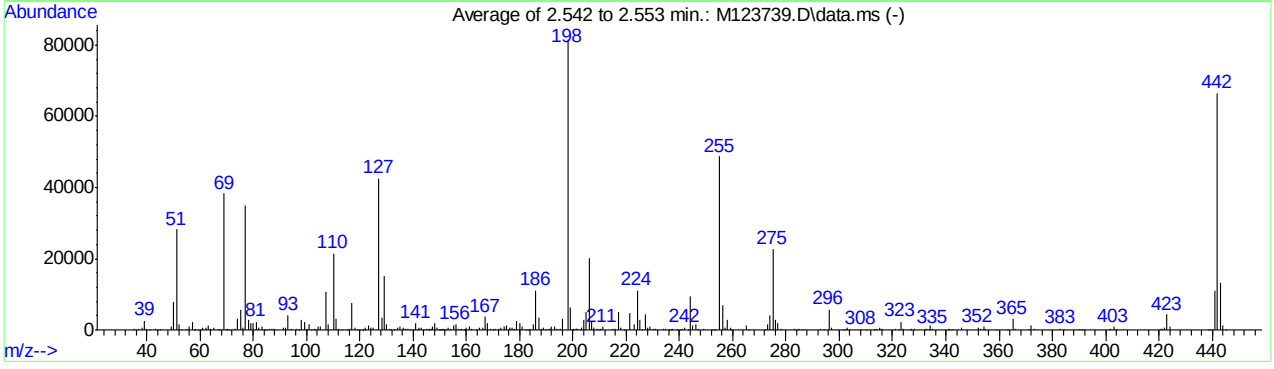
DFTPPR

Data Path : C:\msdchem\1\DATA\EM5230\
Data File : M123739.D
Acq On : 20 Apr 2016 10:44 am
Operator : ashleyd
Sample : dftpp
Misc : op93063,em5230
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Apr 17 09:39:22 2016
Last Update : Sun Apr 17 09:39:22 2016





AutoFind: Scans 188, 189, 190; Background Corrected with Scan 184

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	34.7	28294	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	47.1	38414	PASS
70	69	0.00	2	0.9	328	PASS
127	198	40	60	52.2	42576	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	81565	PASS
199	198	5	9	7.5	6154	PASS
275	198	10	30	27.8	22697	PASS
365	198	1	100	3.7	3023	PASS
441	443	0.10	100	83.9	11151	PASS
442	198	40	100	81.6	66555	PASS
443	442	17	23	20.0	13285	PASS

SGS ACCUTEST JC18516

Average of 2.542 to 2.553 min.: M123739.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.10	385	51.10	28294	62.10	525	74.10	3096
37.10	447	52.15	1556	63.10	1202	75.05	5630
38.10	563	53.05	71	64.05	219	76.15	669
39.15	2587	55.05	477	65.10	775	77.15	35053
40.05	250	56.05	1053	67.05	75	78.10	2849
41.05	34	57.10	2360	67.25	158	79.00	1968
43.15	199	57.95	97	69.05	38414	80.05	1772
44.00	86	58.15	90	69.85	75	81.05	2260
45.05	16	59.15	107	70.10	328	82.05	655
49.05	896	60.05	3	71.10	48	83.05	1024
50.05	7997	61.05	568	73.05	469	84.05	140

Average of 2.542 to 2.553 min.: M123739.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
85.05	47	99.10	2330	111.05	3145	121.95	152
86.05	252	100.10	214	112.05	452	122.10	641
86.95	483	101.05	1569	113.15	152	123.10	1190
87.85	171	101.95	95	115.05	41	124.00	580
91.05	604	102.85	102	116.20	425	125.10	533
92.05	686	103.05	436	117.05	7425	127.05	42576
93.05	4203	104.10	889	118.00	667	128.10	3469
94.15	181	105.05	813	119.10	158	129.05	15019
96.15	441	107.05	10671	120.05	79	130.05	1595
96.95	118	108.10	1655	121.05	70	131.05	416
98.10	2963	110.05	21457	121.25	73	131.85	144

Average of 2.542 to 2.553 min.: M123739.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
132.85	84	143.00	485	150.75	82	158.00	302
134.00	538	144.05	97	151.05	199	158.95	71
135.05	876	145.05	185	151.25	124	159.25	124
136.10	549	145.90	246	151.65	96	160.00	665
137.10	471	146.15	126	152.25	119	161.10	941
138.05	180	146.95	187	153.05	671	162.10	255
138.95	87	147.10	814	154.10	483	163.55	77
140.15	94	148.05	1858	155.10	1251	165.00	535
141.05	1893	149.00	633	156.00	1659	166.15	517
141.75	101	149.95	69	157.10	428	167.05	3648
142.10	625	150.15	75	157.75	102	168.05	1822

Average of 2.542 to 2.553 min.: M123739.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
169.05	200	180.05	2004	190.85	232	201.15	185
169.75	114	181.10	1111	191.45	283	201.35	242
170.95	231	182.15	53	192.00	995	201.65	427
172.10	366	182.95	67	193.10	1105	202.75	100
173.05	522	184.00	274	194.10	181	203.10	743
174.00	864	185.20	1584	195.05	212	204.05	2763
175.05	1363	186.05	11038	196.10	3087	205.00	4956
176.10	523	187.05	3394	198.05	81565	206.05	20202
177.05	718	188.10	411	199.05	6154	207.00	2540
177.95	264	189.05	753	199.95	81	208.00	642
179.00	2495	189.95	126	200.10	424	209.05	270

Average of 2.542 to 2.553 min.: M123739.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
209.65	88	225.10	2806	236.85	74	249.05	355
210.55	367	226.05	144	237.10	296	252.15	72
211.10	861	227.05	4401	238.95	94	253.05	125
214.95	265	228.00	752	240.05	88	253.45	68

DFTPPM.M Wed Apr 20 13:53:19 2016 MSM Page: 2

215.95	210	229.00	912	240.90	277	255.05	48693
216.95	5056	230.10	201	242.05	637	256.05	7094
218.00	723	231.00	449	243.25	136	257.05	586
219.15	87	233.95	425	244.05	9389	258.05	2729
221.10	4773	234.90	391	245.05	1324	259.00	493
223.05	1589	235.85	127	246.05	1567	259.35	70
224.05	11171	236.10	161	247.05	453	265.05	1206

Average of 2.542 to 2.553 min.: M123739.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
265.85	81	286.05	70	313.15	69	331.95	77
272.05	88	293.05	422	314.10	309	332.15	81
273.05	1686	294.05	71	315.00	711	332.90	205
274.05	3957	296.05	5772	316.10	465	333.85	160
275.05	22697	297.05	775	321.05	245	334.05	1249
276.05	2765	301.25	71	322.15	126	335.00	412
277.05	1835	302.05	94	323.05	2281	340.95	73
278.00	306	303.05	647	324.00	363	341.15	178
283.05	191	303.95	101	326.75	118	342.05	69
284.15	117	308.05	146	326.95	213	346.00	498
285.00	294	309.95	89	328.05	178	352.00	633

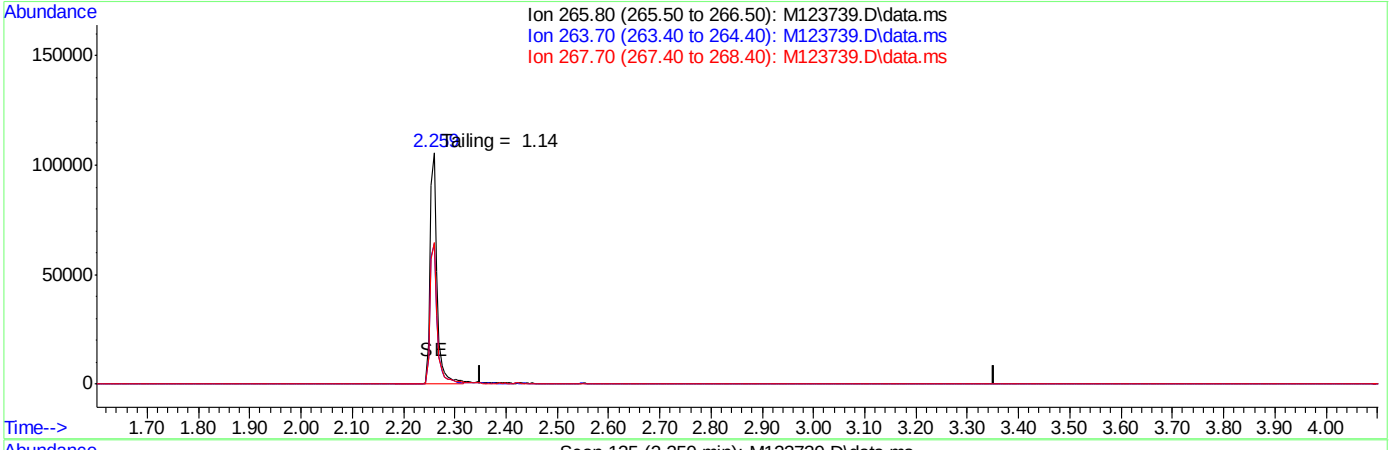
Average of 2.542 to 2.553 min.: M123739.D\data.ms
dftpp
Modified:subtracted

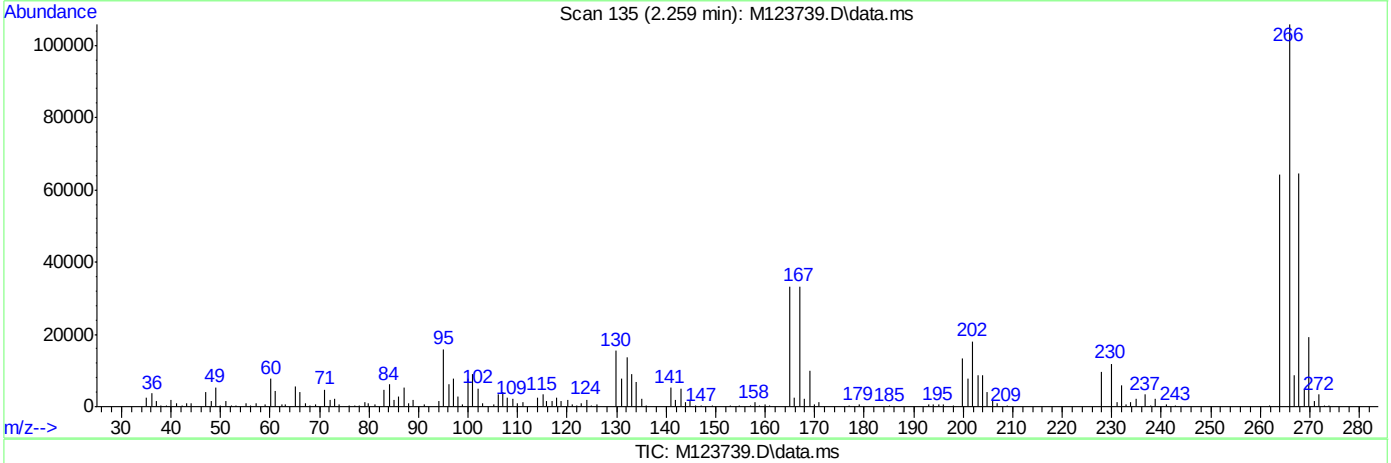
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
353.10	394	384.05	164	422.05	662		
354.10	828	390.15	78	423.05	4305		
354.85	127	391.05	88	424.05	969		
358.85	78	391.95	68	438.45	67		
363.05	99	401.35	77	439.15	70		
365.05	3023	402.05	432	441.05	11151		
365.95	369	403.00	801	442.05	66555		
371.05	137	403.85	74	443.05	13285		
372.05	1325	404.05	84	444.05	1180		
373.05	307	420.75	189	445.05	87		
383.05	370	421.05	326				

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5230\
Data File : M123739.D
Acq On : 20 Apr 2016 10:44 am
Operator : ashleyd
Sample : dftpp
Misc : op93063,em5230
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 20 10:49:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Apr 17 09:39:22 2016
QLast Update : Sun Apr 17 09:39:22 2016
Response via : Continuing Cal File:





(1) Pentachlorophenol (MC)

2.852min (-2.852) 0.00ppm

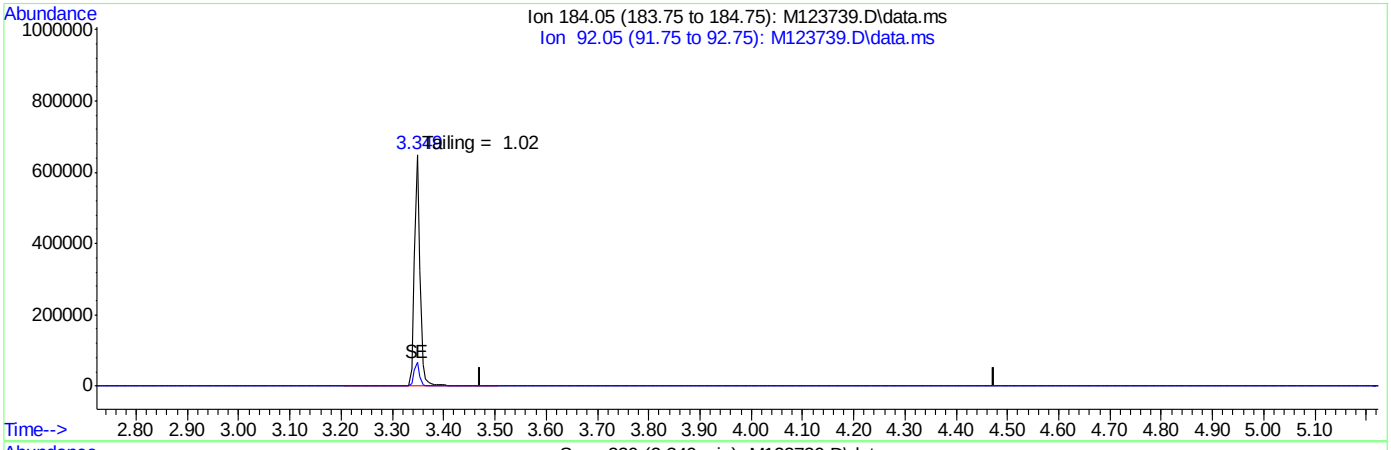
response 0

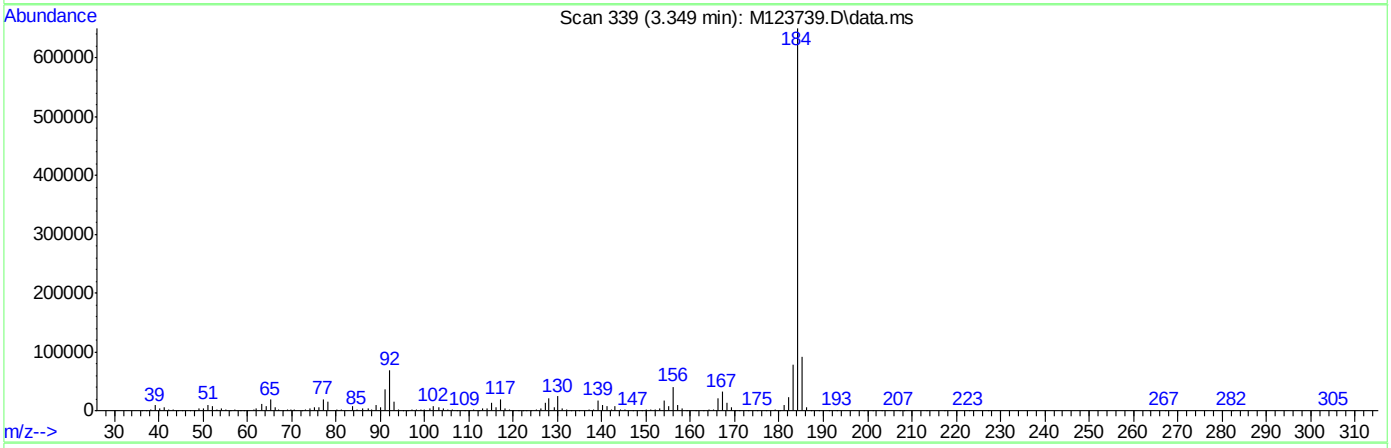
Ion	Exp%	Act%
265.80	100	0.00
263.70	61.60	0.00#
267.70	61.70	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5230\
Data File : M123739.D
Acq On : 20 Apr 2016 10:44 am
Operator : ashleyd
Sample : dftpp
Misc : op93063,em5230
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 20 10:49:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Apr 17 09:39:22 2016
QLast Update : Sun Apr 17 09:39:22 2016
Response via : Continuing Cal File:





TIC: M123739.D\data.ms

(2) Benzidine (M)

3.973min (-3.973) 0.00ppm

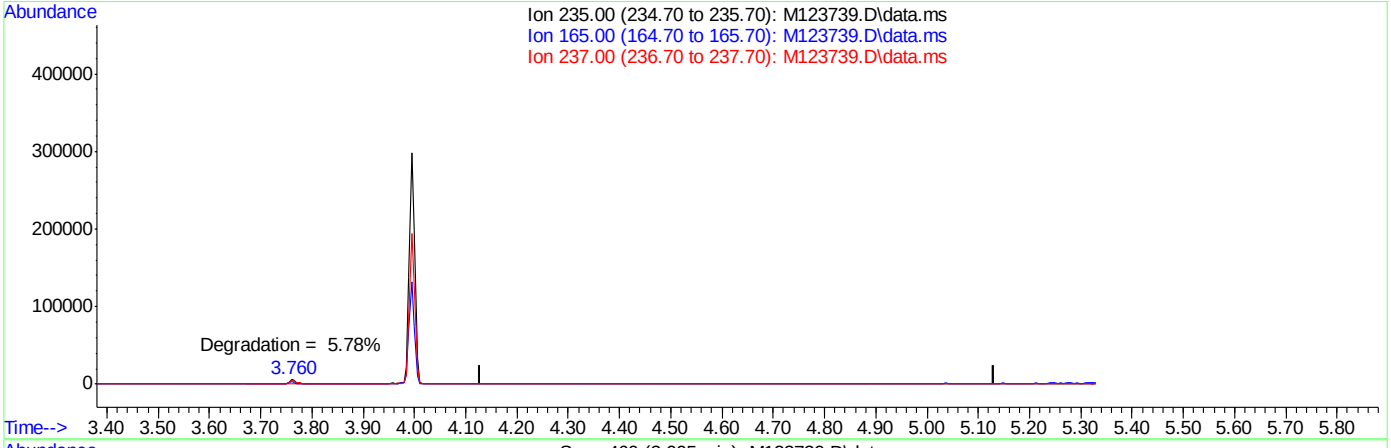
response 0

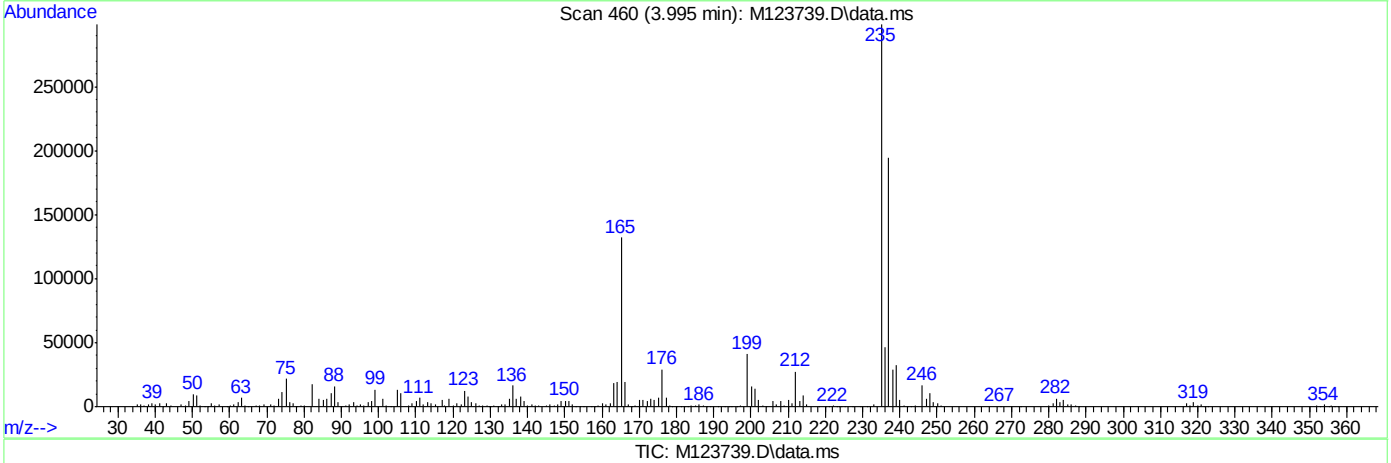
Ion	Exp%	Act%
184.05	100	0.00
92.05	10.70	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5230\
Data File : M123739.D
Acq On : 20 Apr 2016 10:44 am
Operator : ashleyd
Sample : dftpp
Misc : op93063,em5230
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 20 10:49:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Apr 17 09:39:22 2016
QLast Update : Sun Apr 17 09:39:22 2016
Response via : Continuing Cal File:





TIC: M123739.D\data.ms

(3) PP-DDT (MC)

4.630min 0.00ppm d

response 0

Ion	Exp%	Act%
235.00	100	0.00
165.00	46.90	0.00
237.00	64.20	0.00
0.00	0.00	0.00

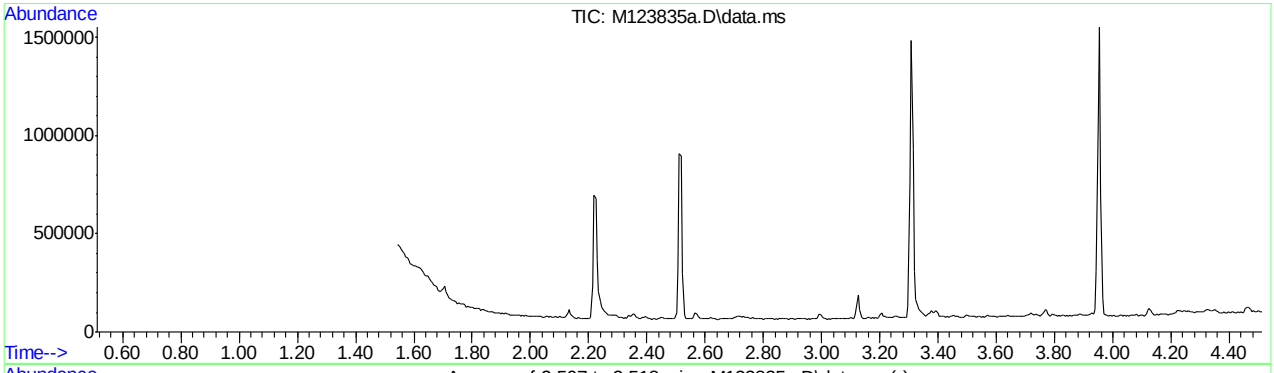
SGS ACCUTEST JC18516

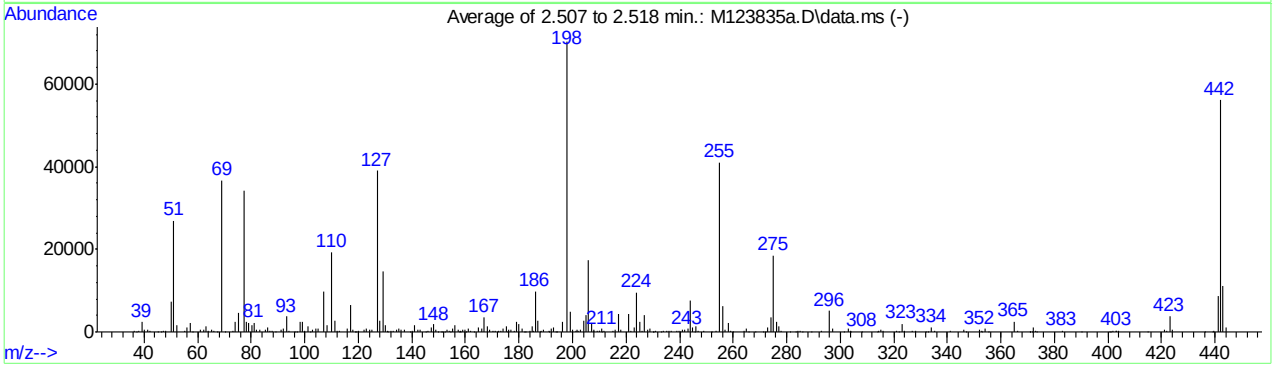
DFTPPR

Data Path : C:\msdchem\1\DATA\EM5235\
Data File : M123835a.D
Acq On : 22 Apr 2016 7:55 pm
Operator : sarad
Sample : dftpp
Misc : op93063,em5235,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Apr 17 09:39:22 2016
Last Update : Sun Apr 17 09:39:22 2016





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

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	38.4	26993	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	52.3	36766	PASS
70	69	0.00	2	0.4	147	PASS
127	198	40	60	55.5	38997	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	70301	PASS
199	198	5	9	7.1	5016	PASS
275	198	10	30	26.3	18516	PASS
365	198	1	100	3.6	2548	PASS
441	443	0.10	100	77.2	8678	PASS
442	198	40	100	79.8	56077	PASS
443	442	17	23	20.0	11234	PASS

SGS ACCUTEST JC18516

Average of 2.507 to 2.518 min.: M123835a.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	286	50.15	7449	65.15	666	80.10	1677
37.10	125	51.10	26993	66.00	234	81.05	2279
38.10	246	52.15	1634	67.05	74	82.05	540
39.15	2380	55.15	395	69.05	36766	83.10	514
40.10	520	56.10	1128	70.05	147	85.05	474
41.15	589	57.05	2163	73.05	319	86.05	1175
42.15	168	58.05	49	74.05	2449	87.05	375
45.05	76	61.05	455	75.10	4601	87.95	281
46.15	81	62.10	566	77.15	34128	89.05	79
47.05	174	63.10	1265	78.10	2431	91.05	624
48.10	203	64.05	215	79.10	2281	92.10	735

Average of 2.507 to 2.518 min.: M123835a.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
93.05	3719	105.05	867	119.15	88	131.00	375
94.10	167	107.05	9839	120.10	204	131.95	252
96.05	117	108.10	1666	121.95	545	132.95	155
97.10	40	110.05	19401	123.05	702	134.10	479
98.05	2400	111.10	2857	124.15	589	135.00	884
99.05	2320	112.05	329	125.00	505	136.10	505
100.00	217	113.05	307	127.05	38997	137.10	642
101.05	1315	116.00	776	128.10	2791	139.15	103
102.15	94	117.05	6645	129.05	14554	140.05	166
103.00	537	118.10	538	130.05	1716	141.05	1677
104.00	873	118.95	139	130.85	76	142.10	674

Average of 2.507 to 2.518 min.: M123835a.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
143.00	442	153.95	296	161.10	859	172.15	151
145.15	91	154.35	98	162.05	194	173.00	403
146.05	284	155.05	898	163.05	111	174.05	702
147.10	986	156.05	1523	165.00	974	175.10	1239
148.10	1898	157.15	567	166.10	833	175.75	92
149.00	539	157.75	92	167.05	3601	176.20	567
149.95	68	157.95	86	168.05	1472	176.90	601
151.15	26	158.15	183	169.10	462	178.10	283
151.55	105	158.95	474	170.10	256	179.00	2466
152.05	121	160.00	486	171.00	215	180.05	1849
153.05	588	160.25	83	171.95	144	181.10	898

Average of 2.507 to 2.518 min.: M123835a.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
182.05	138	191.35	137	202.15	155	210.85	146
182.25	107	192.05	703	202.95	559	211.00	701
183.90	208	193.05	1128	204.05	2682	211.55	245
185.00	1232	193.85	67	205.05	4196	215.10	204
185.25	187	194.15	72	206.05	17370	216.00	463
186.05	9905	196.05	2571	207.00	2288	217.00	4483
187.10	2702	198.05	70301	207.85	217	218.05	675
187.95	112	198.95	5016	208.05	530	221.05	4294
188.15	171	200.05	417	209.00	320	221.85	357
188.95	493	201.45	178	209.95	148	223.10	970
191.05	355	201.70	438	210.25	186	224.05	9546

Average of 2.507 to 2.518 min.: M123835a.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
225.05	2375	236.05	285	246.05	1444	264.00	221
226.10	362	237.05	354	246.95	336	265.05	853
227.00	4142	239.05	152	249.05	256	265.85	32
227.95	578	239.95	150	252.05	84	268.15	93

DFTPPM.M Mon Apr 25 08:51:10 2016 MSM Page: 2

229.05	765	240.15	104	253.40	290	271.15	72
229.95	79	241.00	469	255.05	41110	271.95	85
230.15	91	242.05	602	256.05	6332	273.00	1175
231.00	300	243.05	715	257.00	514	274.10	3603
233.05	84	244.05	7576	258.05	2124	275.05	18516
234.05	241	245.00	1111	259.05	390	276.05	2578
235.10	322	245.75	126	259.95	89	277.05	1500

Average of 2.507 to 2.518 min.: M123835a.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
277.95	321	303.05	702	324.05	290	352.85	94
281.05	109	303.85	86	327.00	314	353.05	278
283.15	102	304.05	176	328.05	164	354.10	769
284.00	200	308.05	71	332.05	120	355.15	108
285.00	235	313.95	107	332.85	103	365.00	2548
285.95	126	314.15	191	334.05	1145	366.05	252
289.15	77	314.95	621	335.05	287	370.75	87
293.10	386	316.05	364	341.05	191	371.05	105
296.05	5146	321.15	154	345.95	588	371.85	119
297.05	750	322.05	80	347.00	145	372.05	1013
301.15	75	323.05	1962	352.05	635	373.05	184

Average of 2.507 to 2.518 min.: M123835a.D\data.ms
dftpp
Modified:subtracted

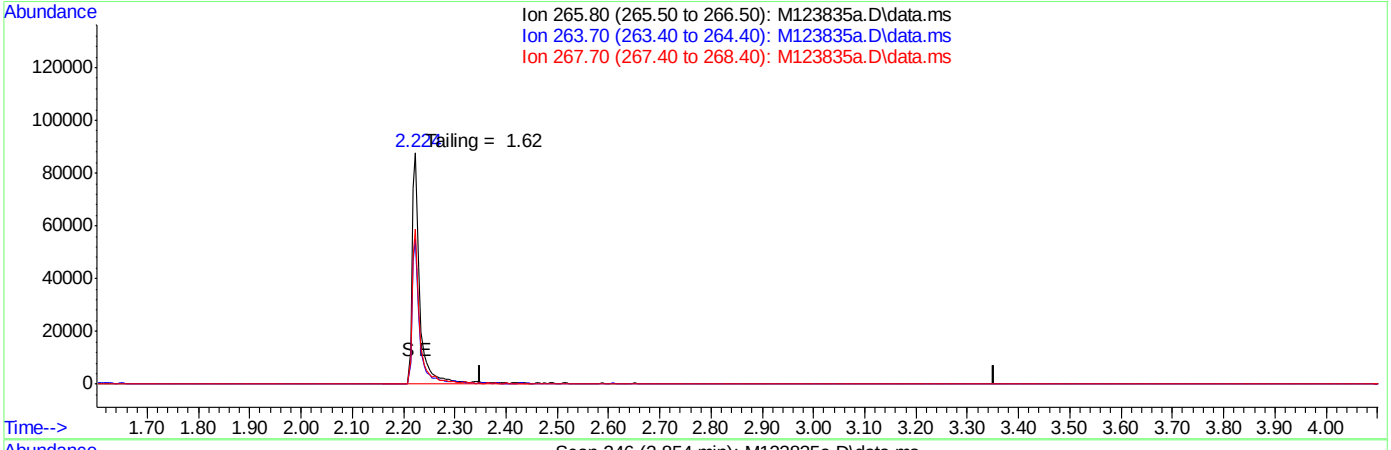
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
373.25	80	422.05	392				
383.00	299	423.05	3828				
389.95	95	424.00	527				
400.75	96	436.15	73				
401.05	77	438.95	96				
402.05	364	439.50	207				
402.95	312	441.05	8678				
403.15	413	442.05	56077				
404.10	239	443.05	11234				
414.95	80	444.00	992				
421.00	466						

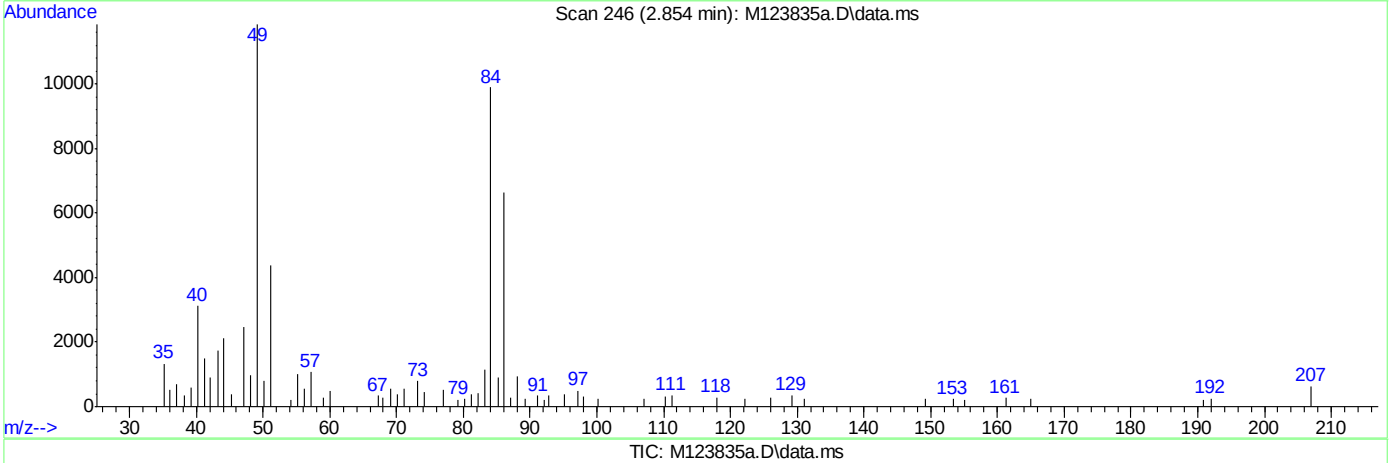
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5235\
Data File : M123835a.D
Acq On : 22 Apr 2016 7:55 pm
Operator : sarad
Sample : dftpp
Misc : op93063,em5235,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 22 20:00:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Apr 17 09:39:22 2016
QLast Update : Sun Apr 17 09:39:22 2016
Response via : Continuing Cal File:





TIC: M123835a.D\data.ms

(1) Pentachlorophenol (MC)

2.852min (-2.852) 0.00ppm

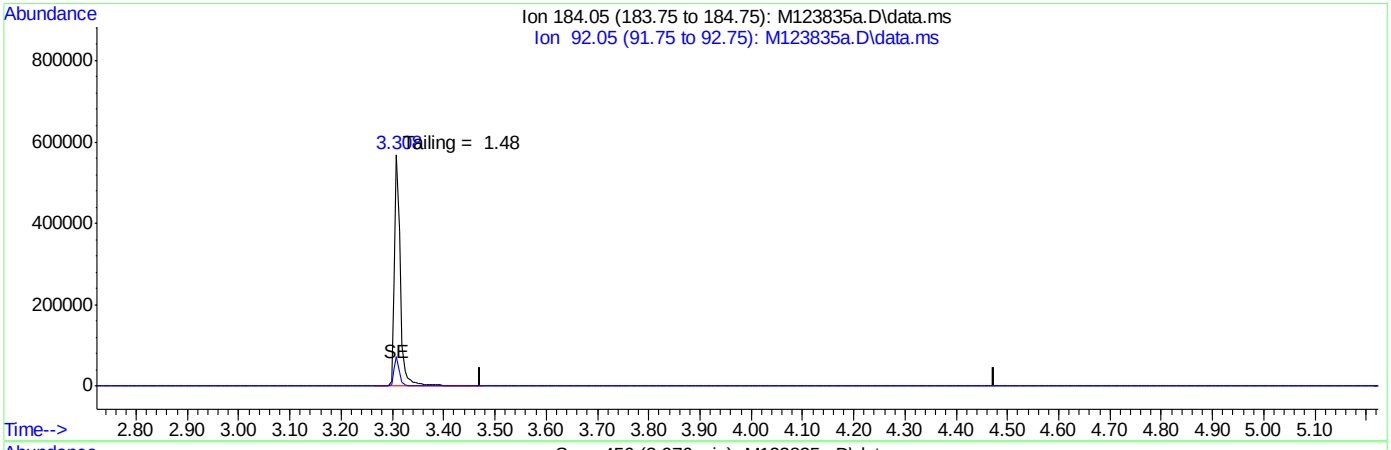
response 0

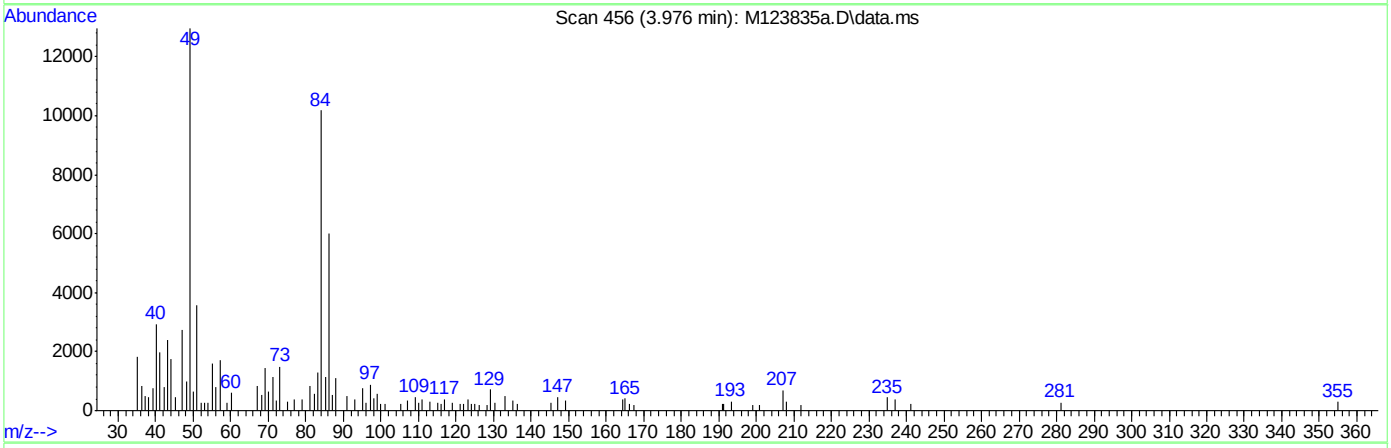
Ion	Exp%	Act%
265.80	100	0.00
263.70	61.60	0.00#
267.70	61.70	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5235\
Data File : M123835a.D
Acq On : 22 Apr 2016 7:55 pm
Operator : sarad
Sample : dftpp
Misc : op93063,em5235,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 22 20:00:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Apr 17 09:39:22 2016
QLast Update : Sun Apr 17 09:39:22 2016
Response via : Continuing Cal File:





TIC: M123835a.D\data.ms

(2) Benzidine (M)

3.973min (-3.973) 0.00ppm

response 0

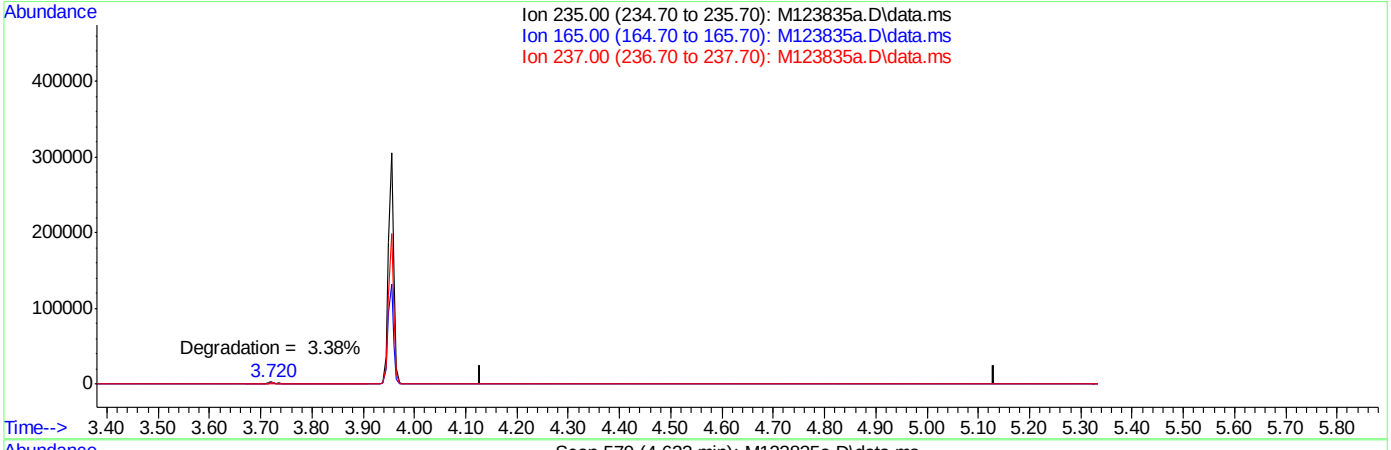
Ion	Exp%	Act%
184.05	100	0.00
92.05	10.70	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

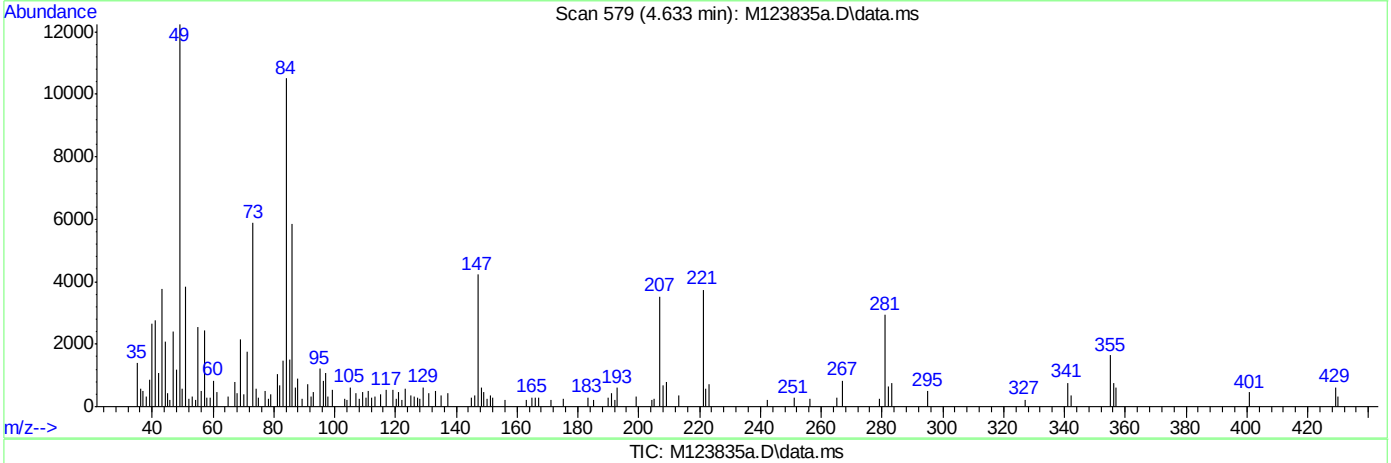
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5235\
Data File : M123835a.D
Acq On : 22 Apr 2016 7:55 pm
Operator : sarad
Sample : dftpp
Misc : op93063,em5235,1000,,,1,1
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 22 20:00:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Apr 17 09:39:22 2016
QLast Update : Sun Apr 17 09:39:22 2016
Response via : Continuing Cal File:





TIC: M123835a.D\data.ms

(3) PP-DDT (MC)

4.630min (-4.630) 0.00ppm

response 0

Ion	Exp%	Act%
235.00	100	0.00
165.00	46.90	0.00#
237.00	64.20	0.00#
0.00	0.00	0.00

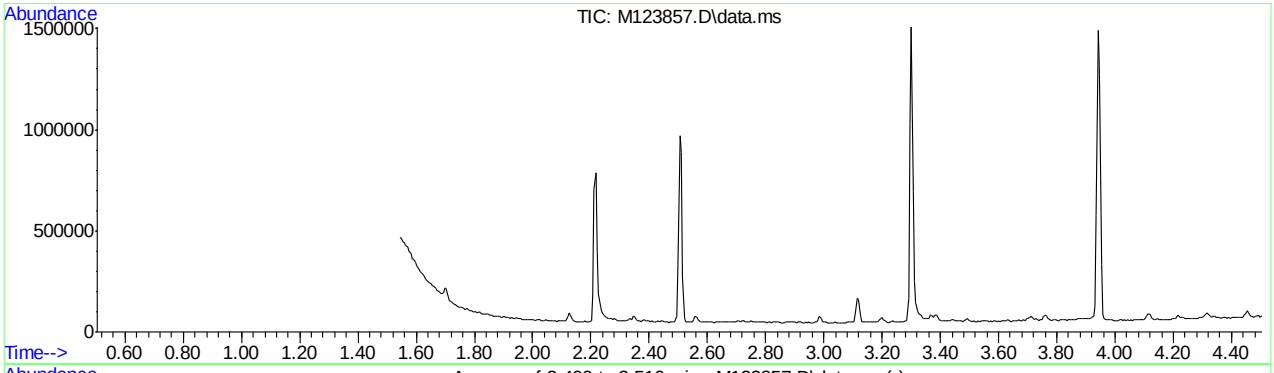
SGS ACCUTEST JC18516

DFTPPR

Data Path : C:\msdchem\1\DATA\EM5236\
Data File : M123857.D
Acq On : 25 Apr 2016 12:51 pm
Operator : ashleyn
Sample : dftpp
Misc : op93063,em5236
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Apr 17 09:39:22 2016
Last Update : Sun Apr 17 09:39:22 2016



AutoFind: Scans 180, 181, 182; Background Corrected with Scan 176

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	39.4	29656	PASS
68	69	0.00	2	0.0	1	PASS
69	198	0.00	100	53.0	39886	PASS
70	69	0.00	2	0.6	232	PASS
127	198	40	60	55.1	41405	PASS
197	198	0.00	1	0.2	172	PASS
198	198	100	100	100.0	75189	PASS
199	198	5	9	6.7	5025	PASS
275	198	10	30	26.2	19691	PASS
365	198	1	100	3.3	2477	PASS
441	443	0.10	100	76.5	8826	PASS
442	198	40	100	77.7	58424	PASS
443	442	17	23	19.7	11530	PASS

Average of 2.499 to 2.510 min.: M123857.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
38.10	467	53.10	99	63.95	77	76.15	1043
39.15	2274	54.35	110	64.15	137	77.15	36650
41.10	88	55.15	379	65.10	972	78.10	2783
44.10	937	56.15	863	65.95	87	79.10	1933
45.15	2	57.15	2427	67.05	279	80.05	1674
46.15	95	58.10	319	68.05	1	81.10	2042
48.05	259	59.15	116	69.05	39886	82.05	544
49.05	158	60.00	127	70.10	232	83.05	763
50.10	8336	61.10	517	73.10	637	84.05	607
51.10	29656	62.15	454	74.05	3163	85.10	364
52.10	1477	63.10	1244	75.05	4894	86.05	694

Average of 2.499 to 2.510 min.: M123857.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
87.10	175	100.00	281	111.05	3306	120.05	166
88.05	220	101.10	1553	111.95	104	122.05	778
91.05	802	102.15	109	112.15	414	123.05	1291
92.10	795	103.05	566	113.05	154	124.05	554
93.05	3828	104.05	758	114.95	34	125.10	553
93.95	194	105.10	989	115.65	83	127.05	41405
94.15	161	106.15	160	115.85	81	128.10	3332
96.10	469	107.05	10441	116.15	481	129.05	14489
97.15	71	108.05	1654	117.05	7315	130.05	809
98.05	2627	108.95	227	118.15	403	130.95	103
99.10	2220	110.05	21467	119.15	36	131.15	254

Average of 2.499 to 2.510 min.: M123857.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
131.95	125	143.05	504	151.45	132	160.85	125
132.95	143	144.05	74	153.00	664	161.05	591
134.05	391	145.15	89	154.00	490	162.05	105
134.95	1018	145.95	186	154.95	899	162.85	108
136.10	426	146.15	102	156.10	1280	163.25	79
137.05	418	147.05	1129	156.85	116	164.95	616
139.10	209	148.00	2062	157.05	160	166.10	820
140.10	240	149.00	392	157.85	122	167.05	3906
140.45	141	150.00	145	158.10	236	168.00	1956
141.05	1733	150.95	302	159.10	158	169.10	427
142.10	634	151.25	83	160.10	416	170.45	78

Average of 2.499 to 2.510 min.: M123857.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
170.65	84	179.00	2604	188.95	661	201.65	383
172.00	407	180.10	1864	191.05	328	203.00	568
173.10	340	181.05	1156	192.00	825	204.00	2444
174.05	793	182.15	114	193.10	1109	205.05	4537
175.10	1501	183.15	147	193.95	118	206.05	18157
176.10	396	183.95	192	194.95	99	207.05	2128
176.35	72	184.15	117	196.05	3189	207.85	94
176.85	112	185.10	1170	196.75	172	208.05	583
177.05	712	186.05	10275	198.05	75189	208.95	181
177.75	96	187.05	2715	199.05	5025	209.95	74
178.15	138	187.95	218	200.00	450	210.15	132

Average of 2.499 to 2.510 min.: M123857.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
210.35	195	223.00	1251	236.00	247	248.10	162
210.75	309	224.05	10385	237.05	324	249.05	464
211.05	413	225.05	2600	238.95	91	251.95	80
212.05	82	226.10	387	240.15	151	253.05	291

DFTPPM.M Mon Apr 25 15:31:14 2016 MSM

Page: 2

215.10	204	227.05	3857	241.10	251	255.05	44829
215.95	133	228.05	633	242.00	569	256.05	6964
216.15	299	229.05	1023	243.05	533	257.00	539
217.00	4741	230.05	87	244.05	8237	258.00	2148
218.00	444	231.05	532	245.10	1345	259.05	321
221.05	4557	234.00	257	246.05	1465	263.15	67
222.05	318	235.00	454	247.05	467	265.00	937

Average of 2.499 to 2.510 min.: M123857.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
266.15	110	283.95	133	310.15	112	333.15	152
269.85	90	285.00	464	312.75	79	334.05	1390
272.15	74	291.05	67	314.05	245	335.05	181
273.05	1526	292.15	74	315.00	600	341.00	318
274.05	3614	293.05	416	315.95	377	342.05	96
275.05	19691	296.05	5788	321.00	180	345.95	584
276.05	3067	296.95	586	322.05	141	352.10	538
277.00	1406	301.05	92	323.05	1948	353.05	331
278.05	284	302.95	384	324.05	361	353.95	213
282.95	241	303.15	239	327.05	370	354.15	265
283.45	68	304.00	148	328.05	70	354.95	110

Average of 2.499 to 2.510 min.: M123857.D\data.ms
dftpp
Modified:subtracted

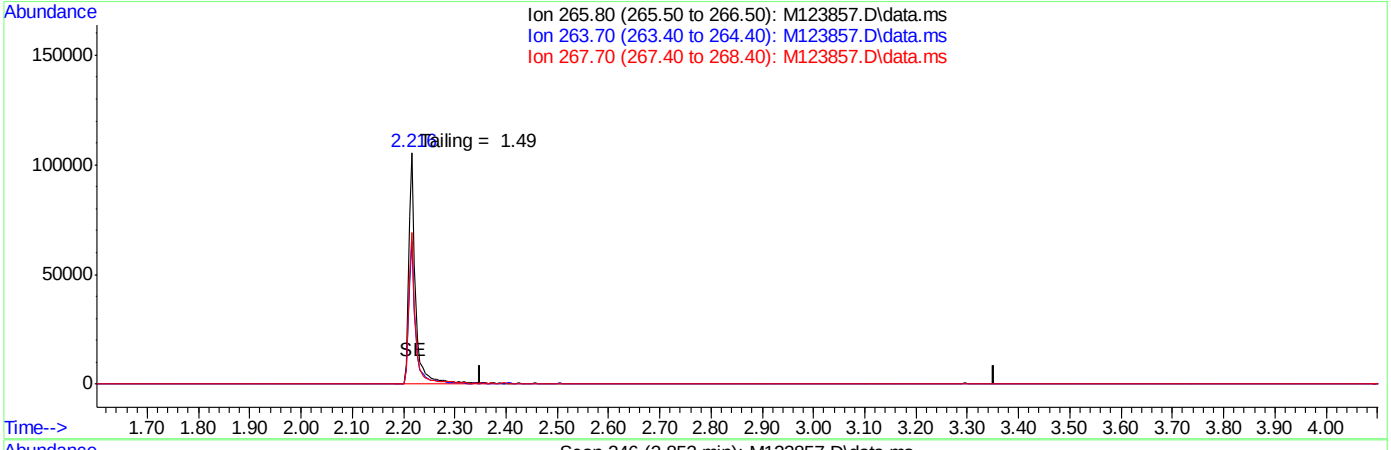
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
357.95	69	403.05	668	444.05	1028		
365.00	2477	404.00	240				
366.00	354	421.00	554				
371.15	173	422.05	514				
372.00	1139	423.05	3369				
373.00	320	424.10	816				
383.00	272	436.65	76				
384.05	71	439.30	271				
389.95	93	441.05	8826				
391.05	82	442.05	58424				
402.05	434	443.05	11530				

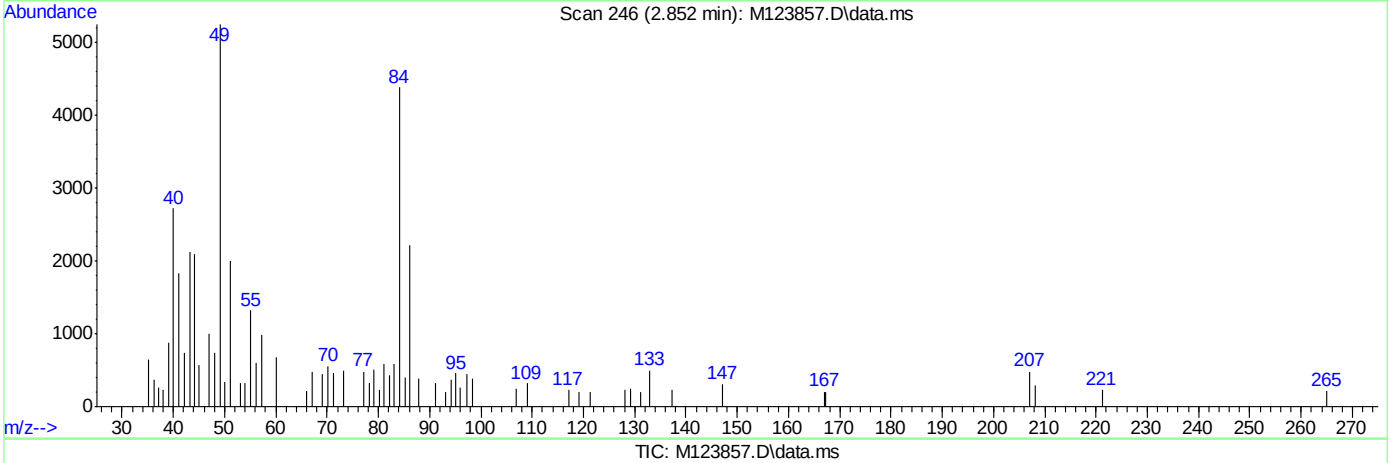
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5236\
Data File : M123857.D
Acq On : 25 Apr 2016 12:51 pm
Operator : ashleyn
Sample : dftpp
Misc : op93063,em5236
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 25 12:59:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Apr 17 09:39:22 2016
QLast Update : Sun Apr 17 09:39:22 2016
Response via : Continuing Cal File:





(1) Pentachlorophenol (MC)

2.852min (-2.852) 0.00ppm

response 0

Ion	Exp%	Act%
265.80	100	0.00
263.70	61.60	0.00#
267.70	61.70	0.00#
0.00	0.00	0.00

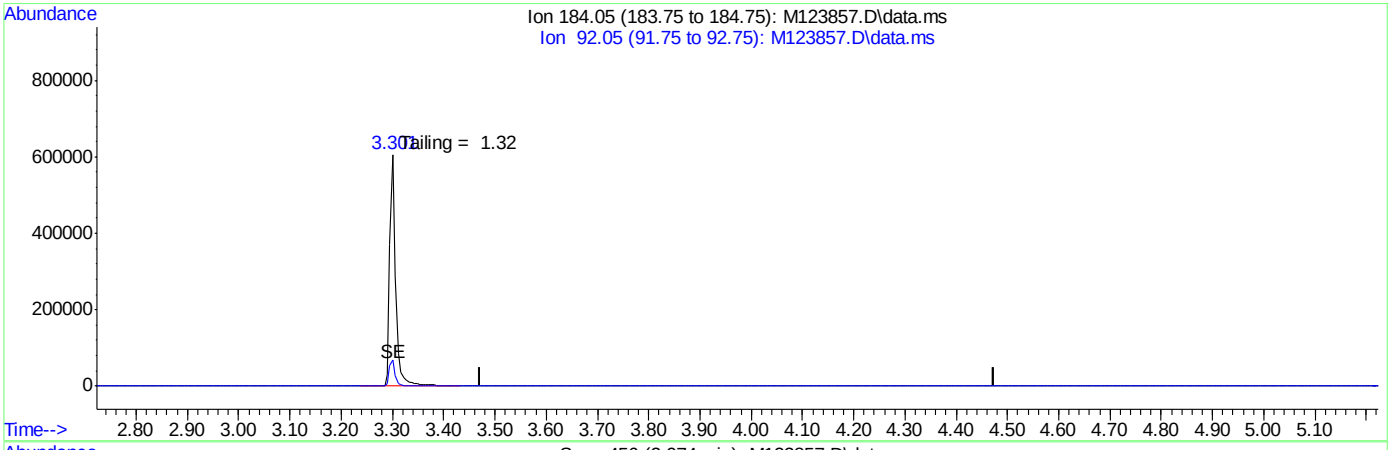
DFTPPM.M Mon Apr 25 15:30:51 2016 MSM

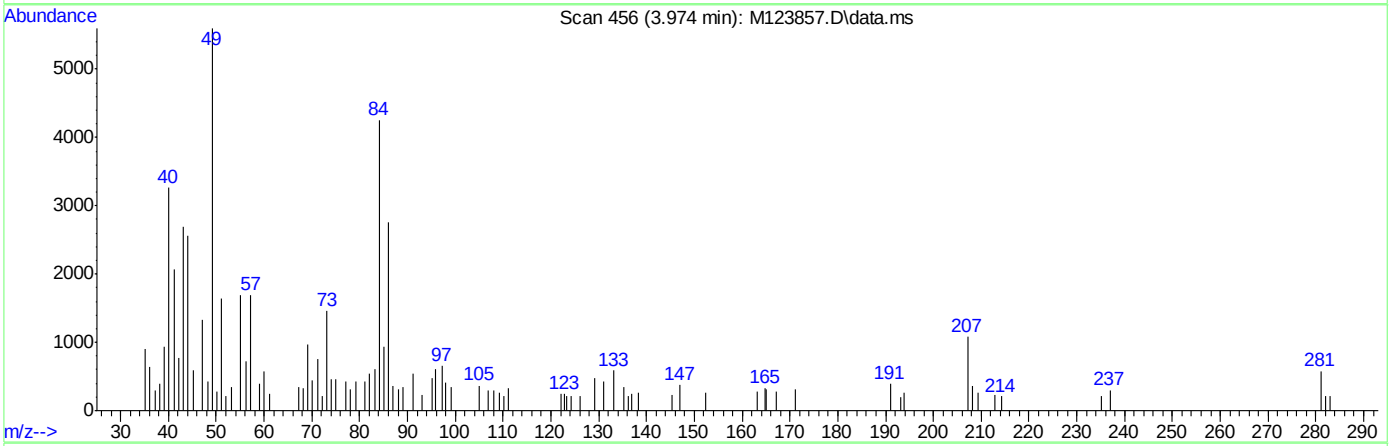
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5236\
Data File : M123857.D
Acq On : 25 Apr 2016 12:51 pm
Operator : ashleyn
Sample : dftpp
Misc : op93063,em5236
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 25 12:59:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Apr 17 09:39:22 2016
QLast Update : Sun Apr 17 09:39:22 2016
Response via : Continuing Cal File:





TIC: M123857.D\data.ms

(2) Benzidine (M)

3.973min 0.00ppm d

response 0

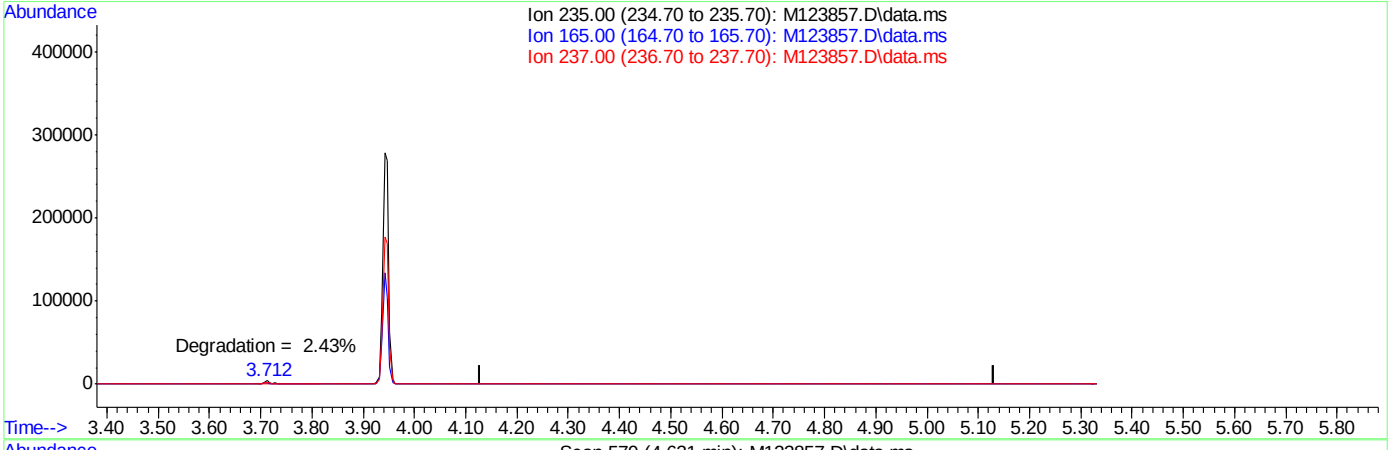
Ion	Exp%	Act%
184.05	100	0.00
92.05	10.70	0.00
0.00	0.00	0.00
0.00	0.00	0.00

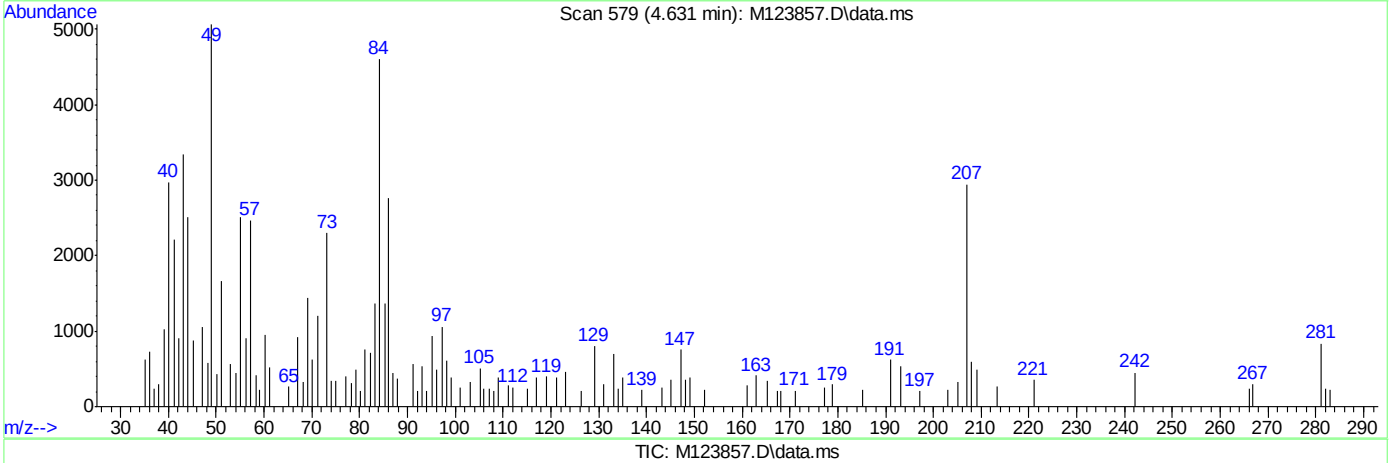
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5236\
Data File : M123857.D
Acq On : 25 Apr 2016 12:51 pm
Operator : ashleyn
Sample : dftpp
Misc : op93063,em5236
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 25 12:59:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Apr 17 09:39:22 2016
QLast Update : Sun Apr 17 09:39:22 2016
Response via : Continuing Cal File:





TIC: M123857.D\data.ms

(3) PP-DDT (MC)

4.630min (-4.630) 0.00ppm

response 0

Ion	Exp%	Act%
235.00	100	0.00
165.00	46.90	0.00#
237.00	64.20	0.00#
0.00	0.00	0.00

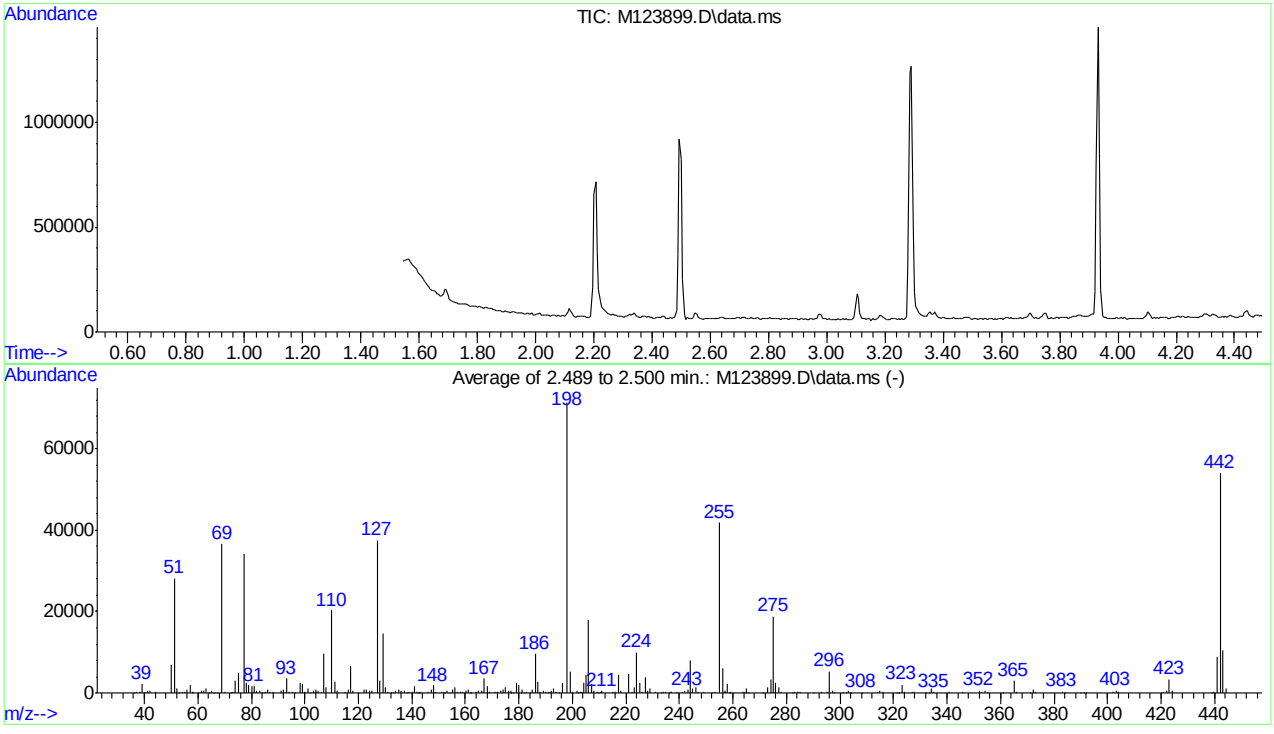
SGS ACCUTEST JC18516

DFTPPR

Data Path : C:\msdchem\1\DATA\EM5238\
Data File : M123899.D
Acq On : 26 Apr 2016 10:03 am
Operator : ashleyn
Sample : dftpp
Misc : op93324,em5238
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Apr 17 09:39:22 2016
Last Update : Sun Apr 17 09:39:22 2016



AutoFind: Scans 178, 179, 180; Background Corrected with Scan 174

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	39.4	28165	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	51.3	36608	PASS
70	69	0.00	2	0.5	194	PASS
127	198	40	60	52.7	37618	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	71413	PASS
199	198	5	9	7.5	5325	PASS
275	198	10	30	26.3	18803	PASS
365	198	1	100	4.1	2957	PASS
441	443	0.10	100	82.8	8778	PASS
442	198	40	100	75.7	54094	PASS
443	442	17	23	19.6	10597	PASS

Average of 2.489 to 2.500 min.: M123899.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	18	53.15	78	64.15	99	77.10	34156
37.05	168	54.05	272	65.15	609	78.10	2392
38.10	323	55.10	253	65.95	80	79.10	2022
39.15	2202	56.10	849	66.15	70	80.05	1680
40.05	110	57.10	1898	67.15	127	81.05	1722
41.15	468	58.05	119	69.05	36608	82.05	487
42.15	460	58.20	176	70.05	194	83.10	603
44.15	291	60.05	58	72.15	77	84.05	79
50.15	7022	61.15	513	73.10	335	85.10	345
51.15	28165	62.10	458	74.10	3107	86.05	811
52.10	1162	63.10	1214	75.05	5008	87.10	410

Average of 2.489 to 2.500 min.: M123899.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
88.05	192	102.15	109	115.10	334	129.05	14710
91.10	442	103.05	576	116.05	723	130.10	1254
92.05	721	103.95	210	117.05	6496	131.05	371
93.10	3471	104.15	713	118.05	608	132.15	69
94.10	373	105.10	672	120.05	81	132.85	106
95.15	182	106.10	372	122.10	738	134.00	501
96.10	123	107.05	9640	123.00	767	135.05	749
98.05	2576	108.05	1330	124.05	556	136.05	587
99.10	2178	110.05	20284	125.05	638	137.10	432
100.05	214	111.05	2884	127.05	37618	138.15	134
101.00	1110	112.10	432	128.10	3004	139.05	197

Average of 2.489 to 2.500 min.: M123899.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
140.05	203	151.95	93	161.85	122	174.00	791
141.00	1680	152.15	88	162.05	130	175.05	1398
141.95	354	153.10	555	164.10	181	176.05	435
142.25	67	154.00	117	165.00	462	176.85	68
142.75	119	155.05	937	166.10	492	177.10	476
143.10	267	156.10	1527	167.05	3543	177.95	128
146.10	250	157.05	329	168.10	1719	179.00	2429
147.10	952	158.15	163	169.00	349	180.05	1910
148.05	1916	159.00	298	171.05	165	180.85	110
149.05	264	160.05	450	172.00	337	181.05	786
151.00	406	161.10	855	173.05	485	182.10	76

Average of 2.489 to 2.500 min.: M123899.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
182.95	213	193.10	1030	203.25	210	214.90	189
184.05	146	193.80	175	204.05	2568	216.00	361
185.10	877	194.15	219	205.10	4445	217.00	4459
186.05	9612	194.95	82	206.05	18027	217.95	586
187.05	2821	196.05	2382	207.05	2294	221.05	4599
188.00	330	198.05	71413	208.05	690	222.05	179
189.05	508	199.05	5325	209.10	355	223.05	1292
190.10	170	199.95	378	209.85	135	224.05	9929
190.85	112	201.60	641	210.35	299	225.05	2605
191.05	379	202.15	133	210.75	396	226.10	208
192.00	680	202.95	289	211.10	504	227.05	3781

Average of 2.489 to 2.500 min.: M123899.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
228.05	681	242.05	515	256.95	429	273.05	1304
229.00	1048	243.10	818	257.15	223	274.10	3291
231.10	317	244.05	8136	258.05	2233	275.05	18803
233.05	72	245.05	1232	258.85	69	276.05	2436

DFTPPM.M Tue Apr 26 12:53:30 2016 MSM

234.00	210	246.05	1342	259.10	321	277.00	1393
234.95	289	246.90	254	263.75	207	278.05	239
236.15	91	249.00	367	263.95	68	281.95	80
236.75	164	252.05	106	264.95	95	283.10	199
236.95	166	253.15	336	265.05	1096	284.10	200
238.90	163	255.05	41852	265.85	31	285.05	378
241.05	179	256.05	6151	271.05	70	289.95	68

Average of 2.489 to 2.500 min.: M123899.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
293.00	294	313.95	157	333.15	92	365.95	320
295.05	176	315.00	656	334.00	1006	371.05	78
296.05	5255	316.05	292	335.05	263	372.05	875
297.05	686	321.15	104	340.95	243	373.05	260
297.75	67	321.75	86	345.95	376	383.05	358
301.05	97	322.05	81	352.00	645	383.95	76
302.15	79	323.05	1987	353.10	358	389.95	134
303.05	693	324.00	385	354.00	684	390.95	72
303.75	78	326.95	332	354.85	104	392.05	86
304.05	72	328.00	193	361.05	87	402.00	393
307.95	100	332.05	78	364.95	2957	403.05	600

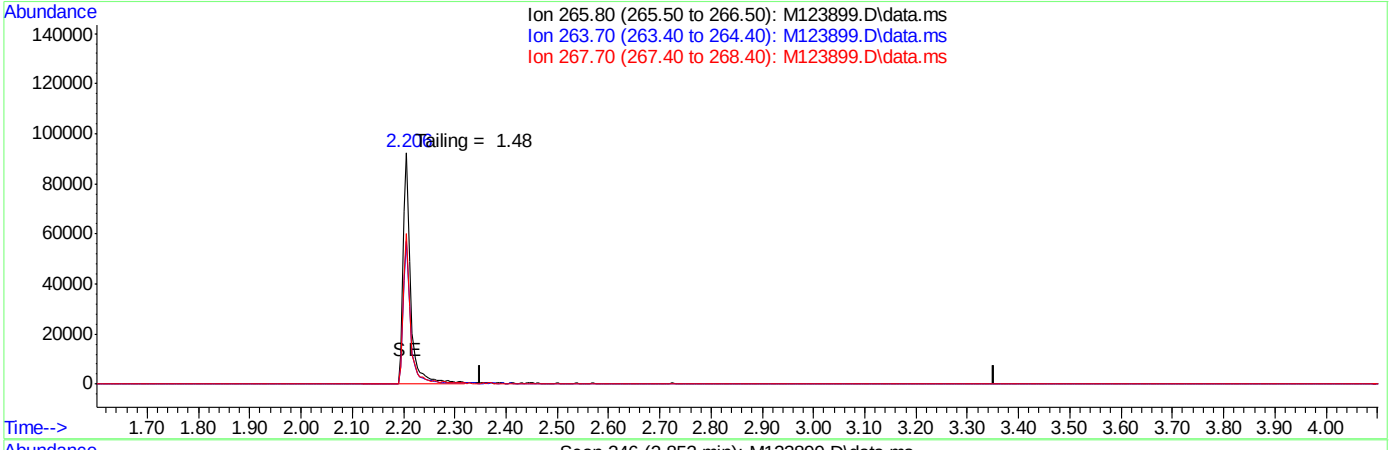
Average of 2.489 to 2.500 min.: M123899.D\data.ms
dftpp
Modified:subtracted

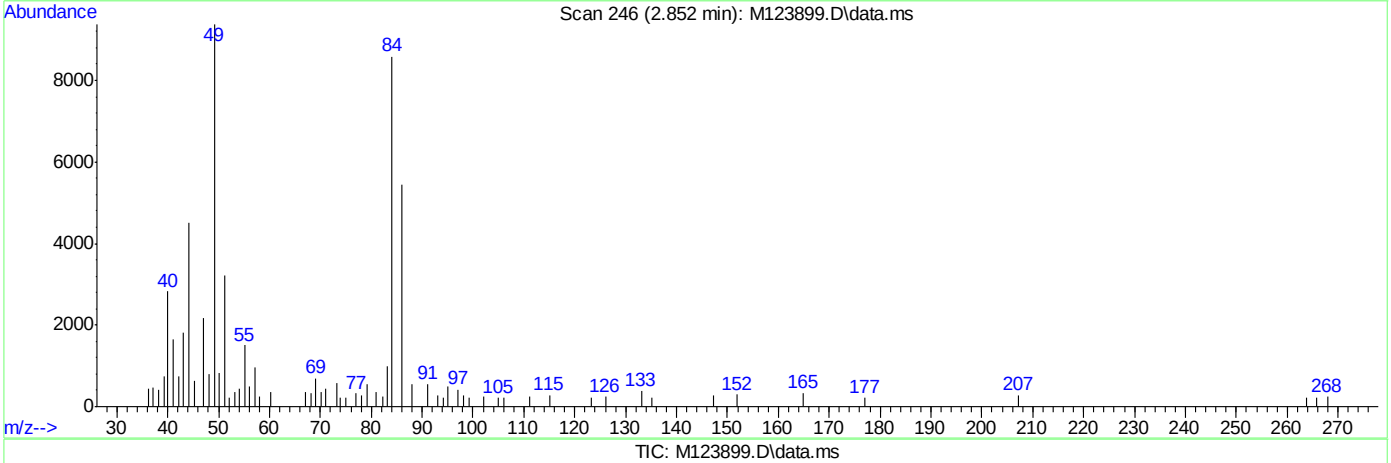
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
404.05	228						
421.00	415						
422.05	529						
423.05	3445						
424.00	680						
438.75	67						
439.70	196						
441.05	8778						
442.05	54094						
443.05	10597						
444.10	1045						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5238\
Data File : M123899.D
Acq On : 26 Apr 2016 10:03 am
Operator : ashleyn
Sample : dftpp
Misc : op93324,em5238
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 26 10:08:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Apr 17 09:39:22 2016
QLast Update : Sun Apr 17 09:39:22 2016
Response via : Continuing Cal File:





TIC: M123899.D\data.ms

(1) Pentachlorophenol (MC)

2.852min (-2.852) 0.00ppm

response 0

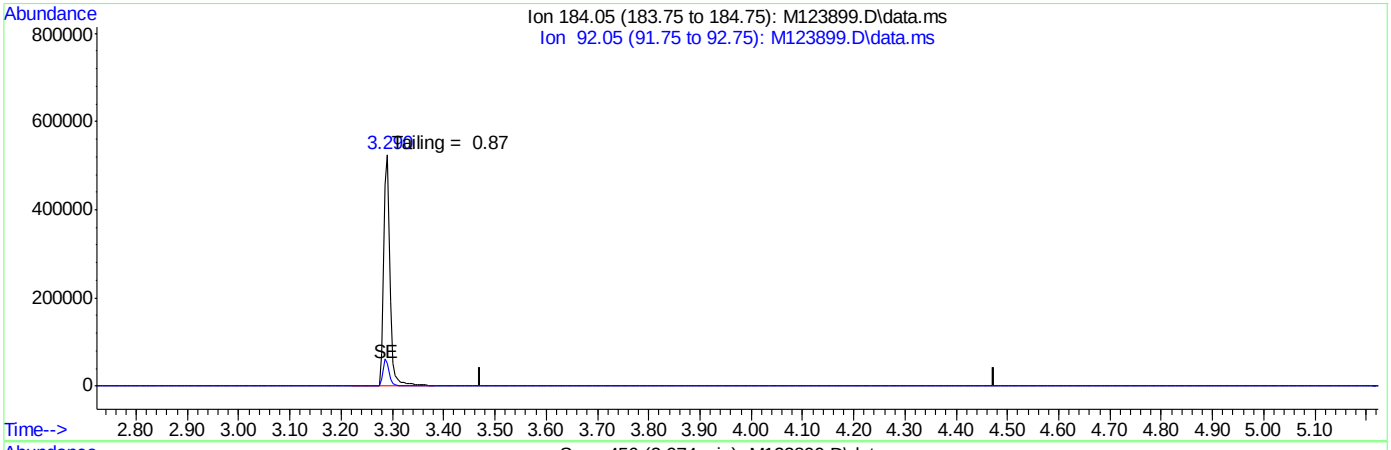
Ion	Exp%	Act%
265.80	100	0.00
263.70	61.60	0.00#
267.70	61.70	0.00#
0.00	0.00	0.00

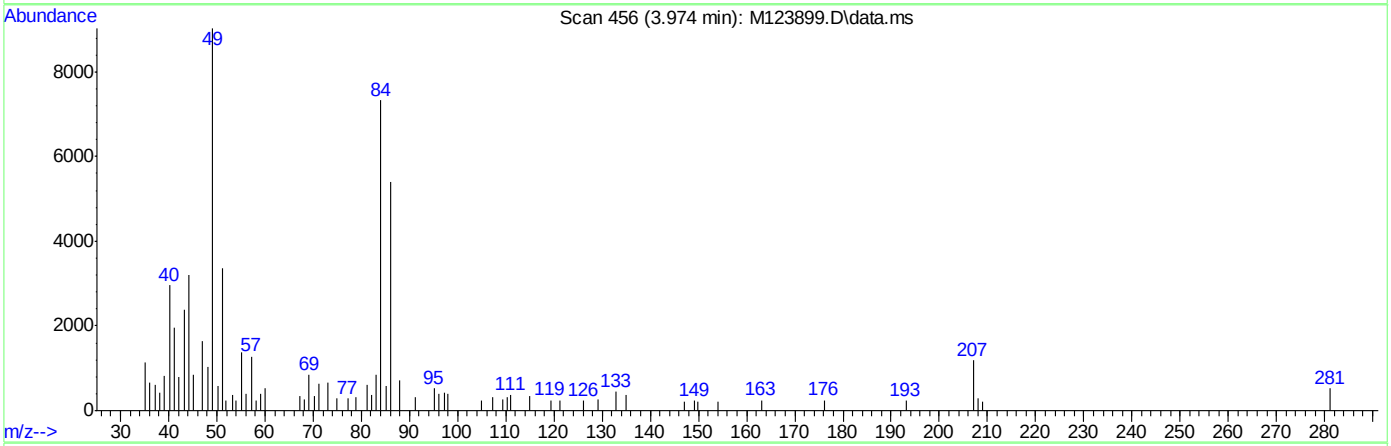
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\EM5238\
Data File : M123899.D
Acq On    : 26 Apr 2016  10:03 am
Operator  : ashleyn
Sample    : dftpp
Misc      : op93324,em5238
ALS Vial  : 1   Sample Multiplier: 1

Quant Time: Apr 26 10:08:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title  : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Apr 17 09:39:22 2016
QLast Update : Sun Apr 17 09:39:22 2016
Response via : Continuing Cal File:
```





TIC: M123899.D\data.ms

(2) Benzidine (M)

3.973min 0.00ppm d

response 0

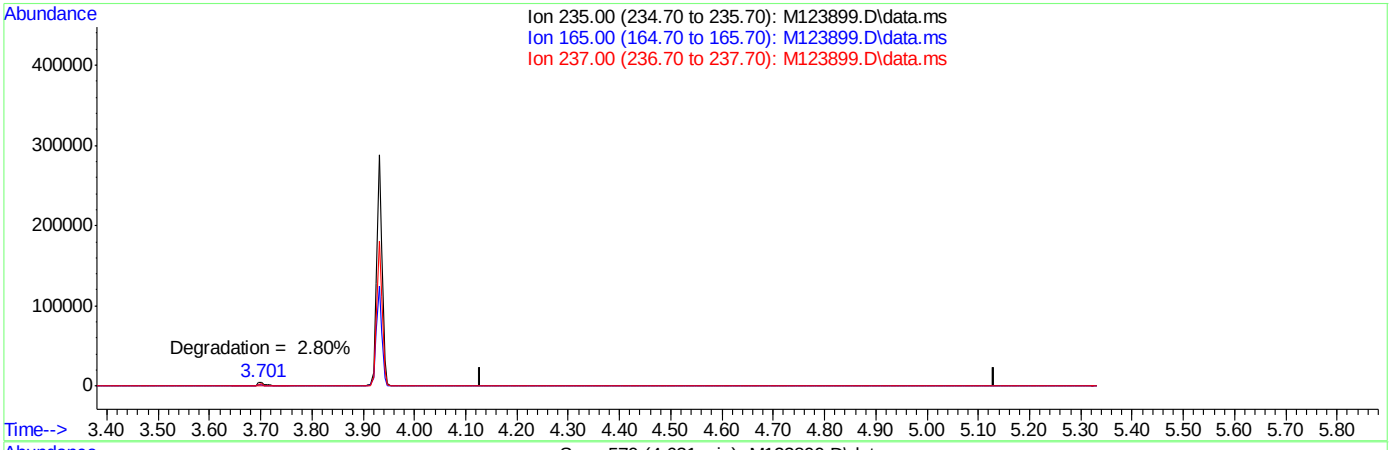
Ion	Exp%	Act%
184.05	100	0.00
92.05	10.70	0.00
0.00	0.00	0.00
0.00	0.00	0.00

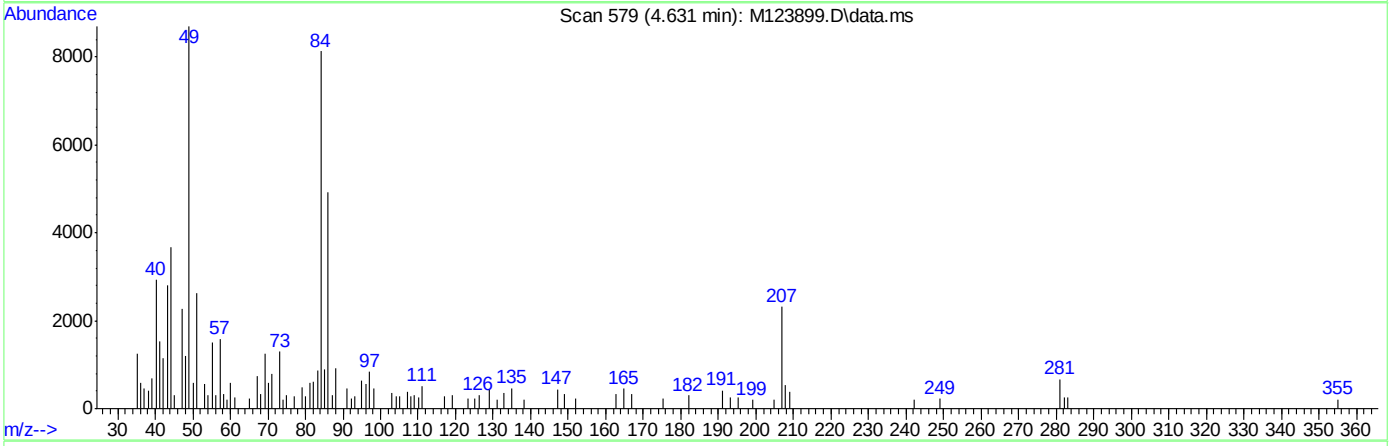
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5238\
Data File : M123899.D
Acq On : 26 Apr 2016 10:03 am
Operator : ashleyn
Sample : dftpp
Misc : op93324,em5238
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 26 10:08:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Apr 17 09:39:22 2016
QLast Update : Sun Apr 17 09:39:22 2016
Response via : Continuing Cal File:





TIC: M123899.D\data.ms

(3) PP-DDT (MC)

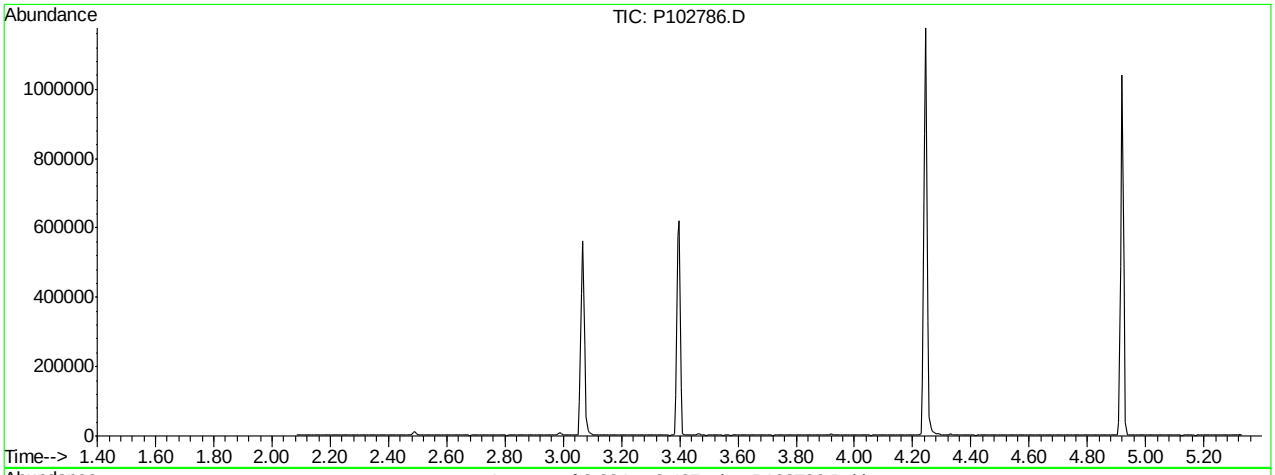
4.630min (-4.630) 0.00ppm

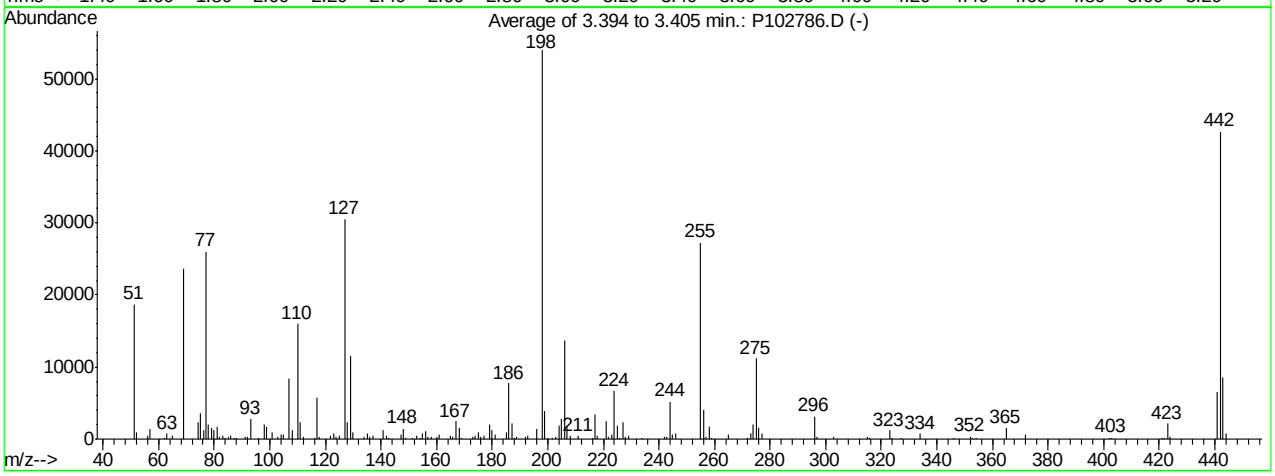
response 0

Ion	Exp%	Act%
235.00	100	0.00
165.00	46.90	0.00#
237.00	64.20	0.00#
0.00	0.00	0.00

DFTPP

Data File : C:\MSDCHEM\1\DATA\EP4513\P102786.D Vial: 1
Acq On : 24 Feb 2016 1:55 am Operator: sarad
Sample : dftpp Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um





AutoFind: Scans 230, 231, 232; Background Corrected with Scan 225

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	34.6	18668	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	44.0	23706	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	56.7	30563	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	53930	PASS
199	198	5	9	7.3	3929	PASS
275	198	10	30	20.6	11130	PASS
365	198	1	100	2.8	1487	PASS
441	443	0.10	100	77.6	6594	PASS
442	198	40	100	79.1	42661	PASS
443	442	17	23	19.9	8492	PASS

P102786.D DFTPPP.M Wed Feb 24 09:01:28 2016

Average of 3.394 to 3.405 min.: P102786.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
51.00	18668	77.00	25986	87.80	123	107.00	8385
52.00	1008	78.00	1975	90.95	354	107.95	1240
56.00	521	79.00	1614	91.90	370	110.00	16002
57.00	1408	80.00	1188	93.00	2756	110.95	2304
61.90	150	80.90	1772	96.00	127	111.90	295
63.00	732	81.90	308	98.00	1975	116.00	174
65.00	509	83.00	507	98.90	1792	116.95	5691
68.90	23706	83.90	130	101.00	991	117.85	289
74.00	2320	84.95	350	102.90	352	121.95	447
75.00	3660	85.90	529	103.95	575	123.00	744
76.05	1258	87.00	131	105.00	557	123.90	378

Average of 3.394 to 3.405 min.: P102786.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
124.95	433	142.70	123	157.95	265	175.95	329
127.00	30563	142.90	119	159.90	357	176.95	496
128.00	2341	147.00	667	160.95	653	178.90	2001
129.00	11491	147.95	1469	164.90	515	179.95	1291
129.95	900	149.00	167	165.90	372	180.90	568
133.90	306	151.10	132	166.95	2444	185.00	906
134.90	787	153.00	403	168.00	1599	186.00	7768
135.95	393	154.00	208	169.00	150	186.95	2228
136.95	401	155.00	718	172.85	274	187.90	150
140.90	1203	156.00	1028	173.95	530	188.90	327
141.95	404	156.95	276	174.95	962	191.90	381

Average of 3.394 to 3.405 min.: P102786.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
192.95	536	207.90	435	226.90	2401	256.95	321
196.00	1467	210.95	444	227.90	291	257.90	1713
197.90	53930	216.00	185	228.90	425	259.00	122
198.90	3929	216.90	3425	233.90	128	264.90	553
199.90	136	217.90	476	241.95	361	271.90	125
201.50	165	220.95	2531	242.95	355	272.90	792
203.00	341	221.90	280	244.00	5140	273.90	1999
204.00	1911	222.90	679	244.95	621	274.90	11130
205.00	2868	224.00	6671	245.90	848	275.95	1583
206.00	13678	224.95	1834	254.90	27247	276.90	804
207.00	1679	225.90	119	255.90	4037	295.90	3150

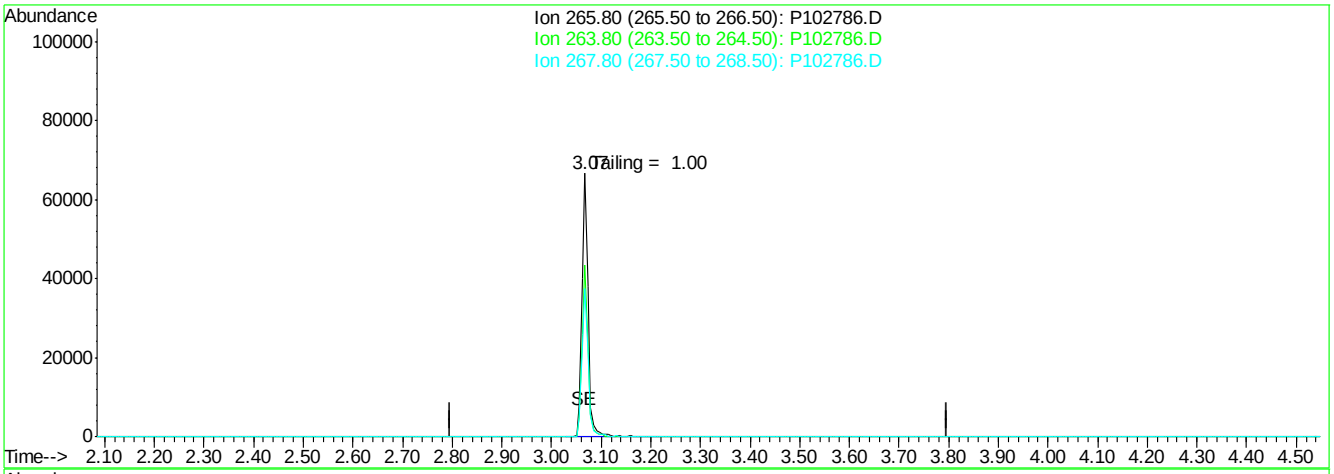
Average of 3.394 to 3.405 min.: P102786.D
dftpp
Modified:subtracted

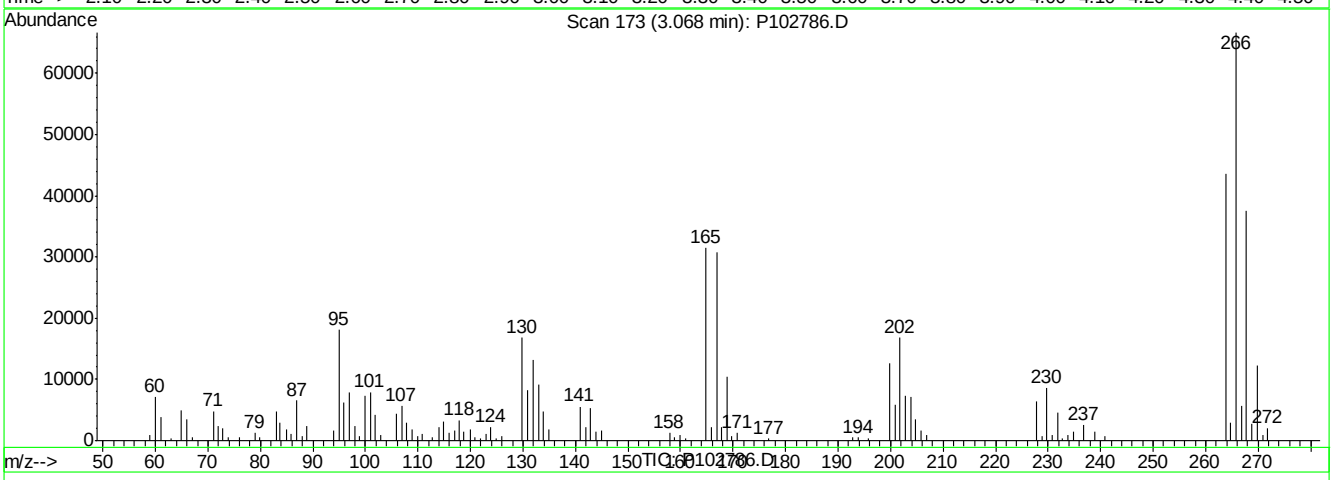
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
296.80	367	353.90	213	442.90	8492		
302.90	248	364.90	1487	443.90	828		
314.85	382	371.85	664				
315.90	135	401.90	176				
323.00	1207	402.90	188				
323.80	122	420.90	148				
326.90	153	422.00	160				
333.95	711	422.95	2166				
345.90	161	423.90	241				
352.00	322	440.95	6594				
353.00	153	441.90	42661				

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102786.D Vial: 1
Acq On : 24 Feb 2016 1:55 am Operator: sarad
Sample : dftpp Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 24 2:00 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Wed Jan 06 10:49:26 2016
Response via : Single Level Calibration





(1) Pentachlorophenol (t)

3.07min 208.02ppb

response 57519

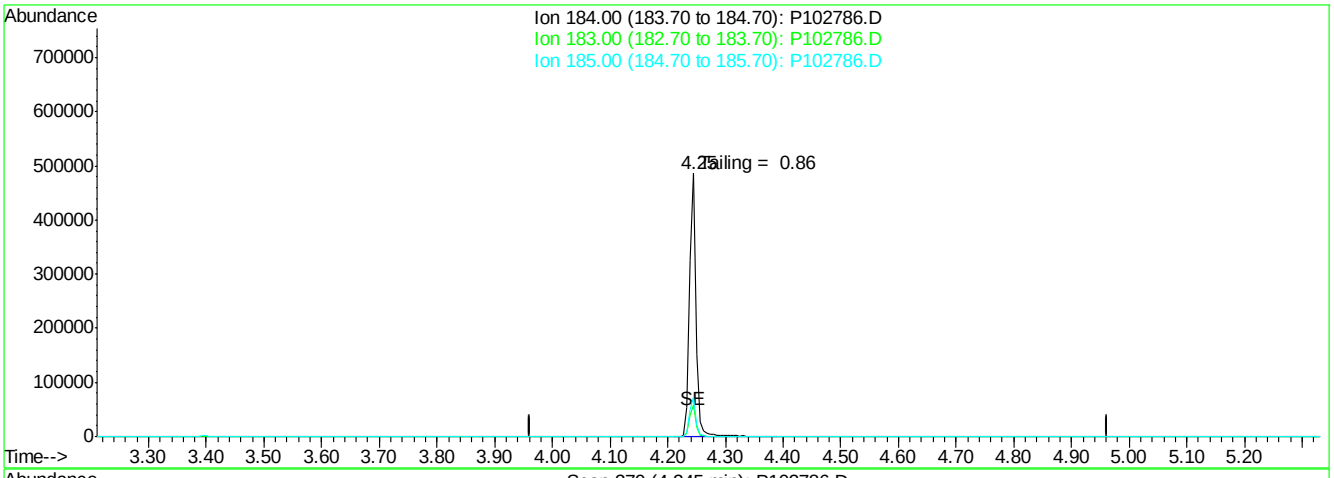
Ion	Exp%	Act%
265.80	100	100
263.80	63.10	65.27
267.80	63.20	55.97
0.00	0.00	0.00

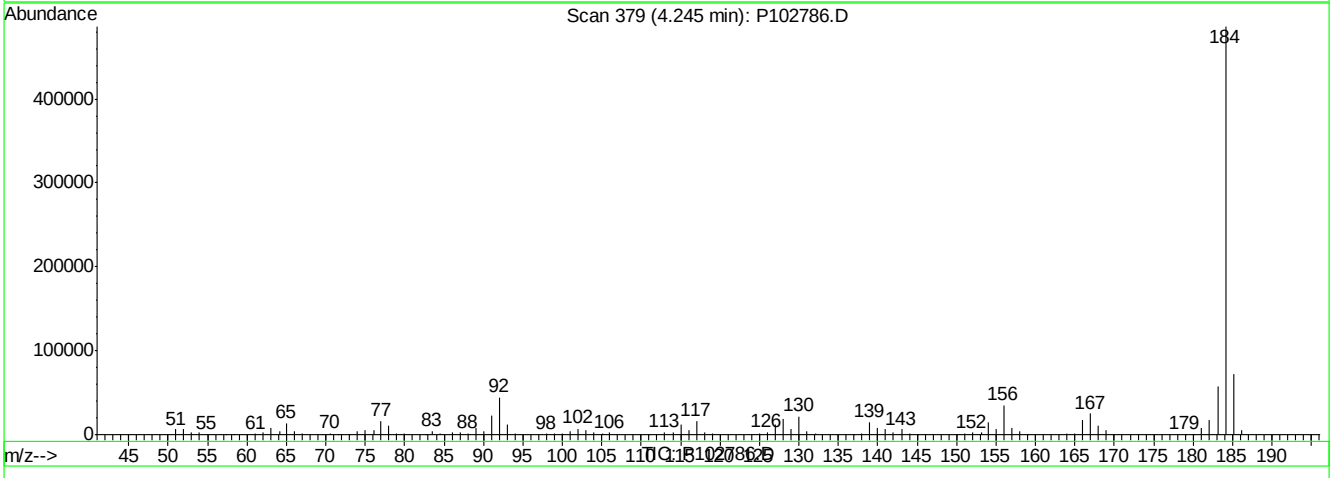
P102786.D DFTPPP.M Wed Feb 24 09:01:35 2016

Quantitation Report (Qedit)

```
Data File : C:\MSDCHEM\1\DATA\EP4513\P102786.D          Vial: 1
Acq On    : 24 Feb 2016   1:55 am                   Operator: sarad
Sample    : dftpp                                   Inst    : MSP
Misc      : op91338,ep4514                          Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 24  2:00 2016              Quant Results File: temp.res

Method       : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title        : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update  : Wed Jan 06 10:49:26 2016
Response via : Single Level Calibration
```





(2) Benzidine (t)

4.25min 132.10ppb

response 375509

Ion	Exp%	Act%
184.00	100	100
183.00	0.00	11.47
185.00	0.00	14.61
0.00	0.00	0.00

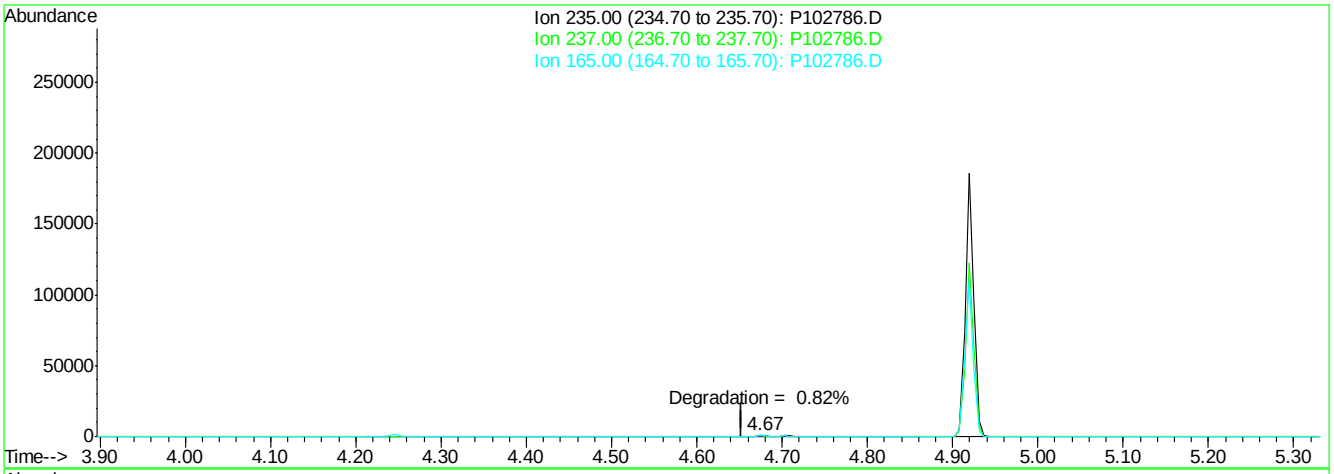
P102786.D DFTPPP.M Wed Feb 24 09:01:39 2016

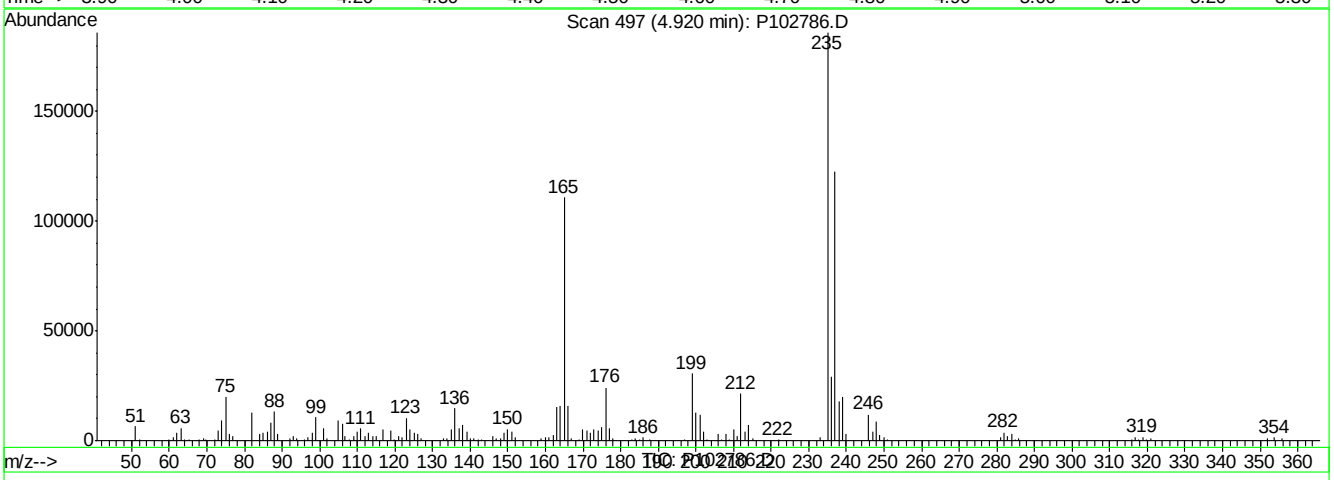
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102786.D Vial: 1
Acq On : 24 Feb 2016 1:55 am Operator: sarad
Sample : dftpp Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Feb 24 2:00 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Wed Jan 06 10:49:26 2016
Response via : Single Level Calibration





(3) ddt

4.92min 98.65ppb

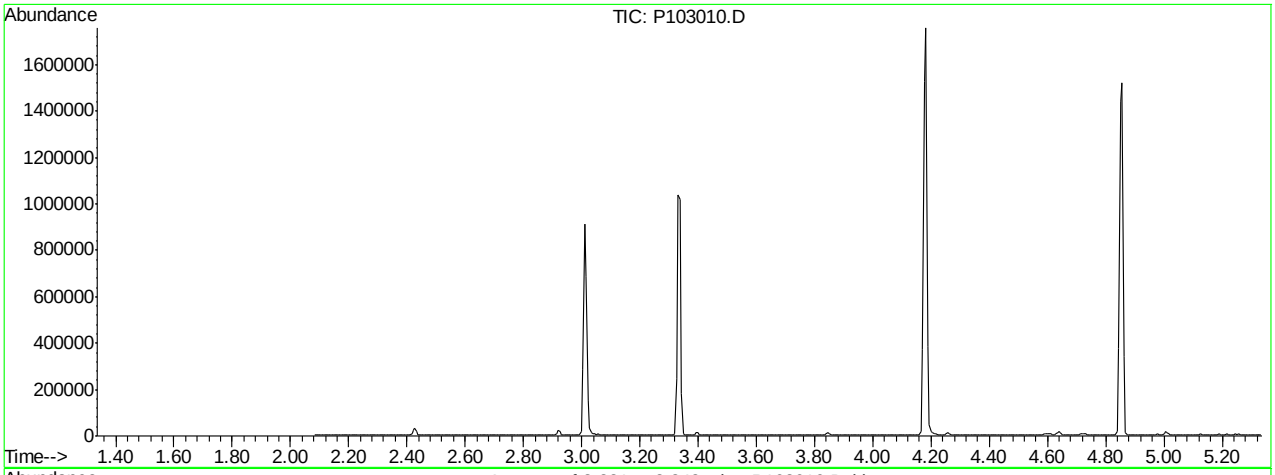
response 128279

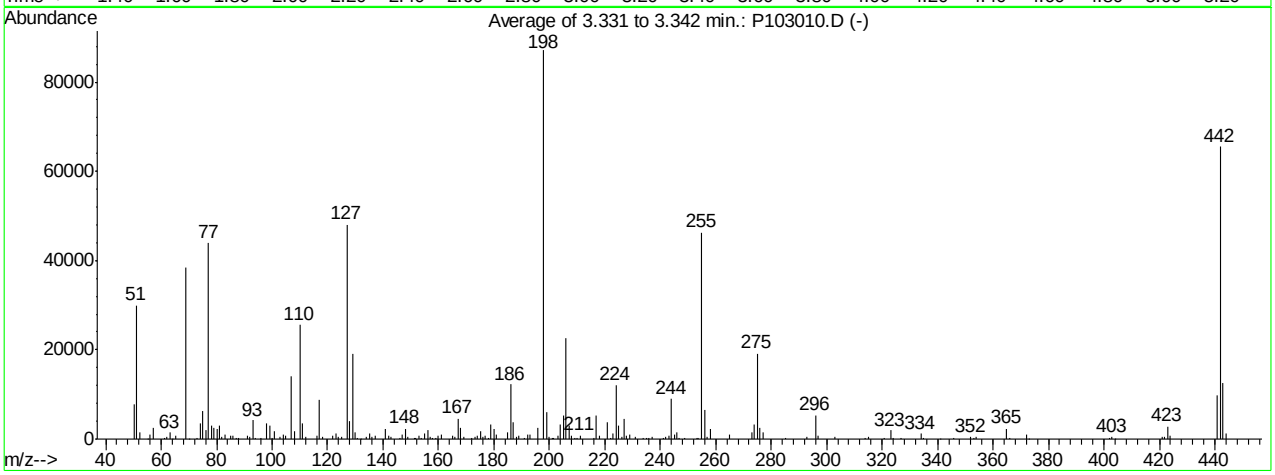
Ion	Exp%	Act%
235.00	100	100
237.00	65.40	66.06
165.00	55.50	60.08
0.00	0.00	0.00

P102786.D DFTPPP.M Wed Feb 24 09:01:46 2016

DFTPP

Data File : C:\MSDCHEM\1\DATA\EP4524\P103010.D Vial: 1
Acq On : 2 Mar 2016 4:56 pm Operator: sarad
Sample : dftpp Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um





AutoFind: Scans 219, 220, 221; Background Corrected with Scan 214

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	34.4	29961	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	44.2	38523	PASS
70	69	0.00	2	0.3	119	PASS
127	198	40	60	55.2	48031	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	87088	PASS
199	198	5	9	6.9	5993	PASS
275	198	10	30	21.9	19109	PASS
365	198	1	100	2.7	2328	PASS
441	443	0.10	100	79.2	9869	PASS
442	198	40	100	75.2	65456	PASS
443	442	17	23	19.0	12454	PASS

P103010.D DFTPPP.M Thu Mar 03 08:55:28 2016

Average of 3.331 to 3.342 min.: P103010.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
50.10	7918	69.00	38523	81.95	617	98.00	3529
51.05	29961	69.90	119	83.05	909	99.00	3032
52.10	1568	72.95	325	85.00	779	100.05	324
55.10	127	74.05	3401	85.90	815	101.00	1657
56.00	892	75.00	6289	86.95	355	103.00	508
57.00	2405	76.10	2020	87.95	273	104.00	895
61.05	310	77.10	43879	91.00	685	105.00	849
62.00	456	78.10	3069	92.00	603	107.00	13956
63.05	1416	79.00	2571	93.05	4266	108.00	1737
64.10	118	80.00	2196	94.00	348	110.00	25592
65.05	756	81.00	3087	96.00	138	111.00	3642

Average of 3.331 to 3.342 min.: P103010.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
112.05	454	130.00	1463	147.00	1042	158.95	278
116.05	636	130.90	139	148.00	2369	160.00	700
117.00	8823	132.10	117	148.90	462	161.00	1024
118.05	627	133.95	525	151.20	143	165.00	714
122.00	747	135.00	1252	151.80	156	166.00	615
123.00	1240	136.00	598	152.95	661	167.00	4618
124.00	545	137.05	797	153.90	358	168.00	2478
125.00	611	141.00	2341	155.00	1349	169.00	395
127.00	48031	142.05	647	156.00	1990	171.90	385
128.00	3925	143.00	527	157.05	465	173.00	482
129.00	19067	146.00	259	157.90	357	174.00	866

Average of 3.331 to 3.342 min.: P103010.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
175.00	1760	189.00	759	204.00	3341	221.00	3814
175.95	453	190.95	343	205.00	5296	222.00	340
177.00	741	192.00	902	206.00	22535	222.90	1343
177.95	327	193.00	1098	207.00	3106	224.00	12115
179.00	3264	196.00	2527	207.95	672	225.00	3045
180.00	2227	198.00	87088	209.00	158	226.05	412
181.00	920	198.95	5993	210.00	192	226.95	4563
185.00	1582	199.90	427	211.00	835	227.95	656
186.00	12226	200.90	140	216.00	188	228.90	1024
187.00	3749	201.55	345	217.00	5332	230.95	445
188.00	408	203.00	695	217.95	791	234.00	200

Average of 3.331 to 3.342 min.: P103010.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
234.90	221	253.10	230	276.95	1590	326.95	281
235.95	278	253.80	143	285.00	328	334.00	1172
237.00	449	255.00	46267	293.00	409	334.90	175
240.95	294	256.00	6608	295.95	5356	340.90	123
242.00	605	256.85	522	296.90	724	345.90	375
243.00	751	257.90	2386	302.95	595	351.95	489
244.00	8992	265.00	902	314.00	173	353.00	341
245.00	1094	273.00	1566	314.95	552	353.95	426
246.00	1451	273.95	3350	320.80	136	364.90	2328
246.95	335	275.00	19109	323.00	1903	365.95	354
248.90	172	276.00	2456	324.05	306	371.95	941

Average of 3.331 to 3.342 min.: P103010.D
dftpp
Modified:subtracted

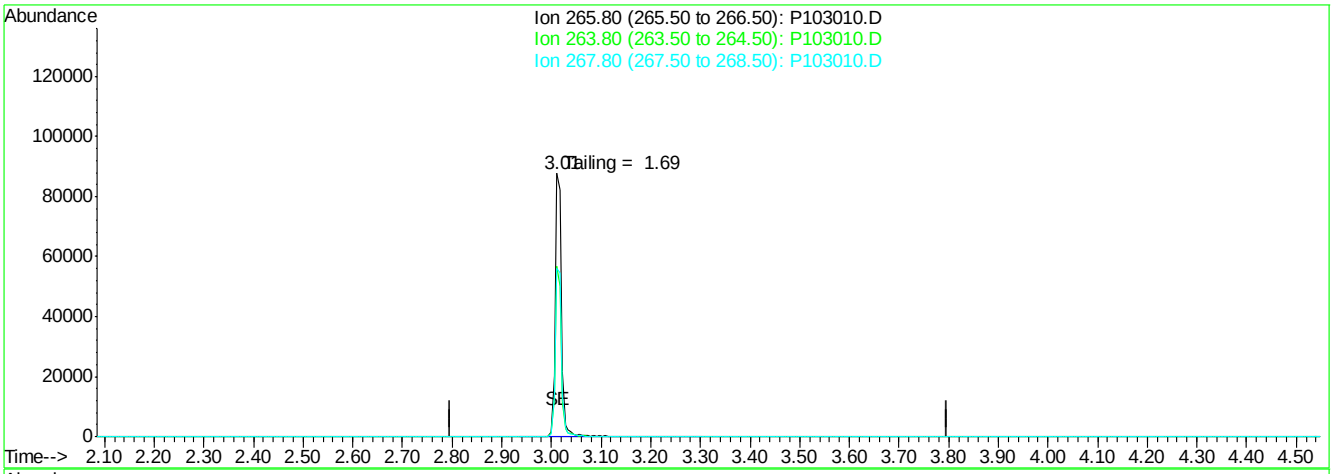
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
373.00	123	443.90	1215				
401.95	295						
402.95	437						
404.00	120						

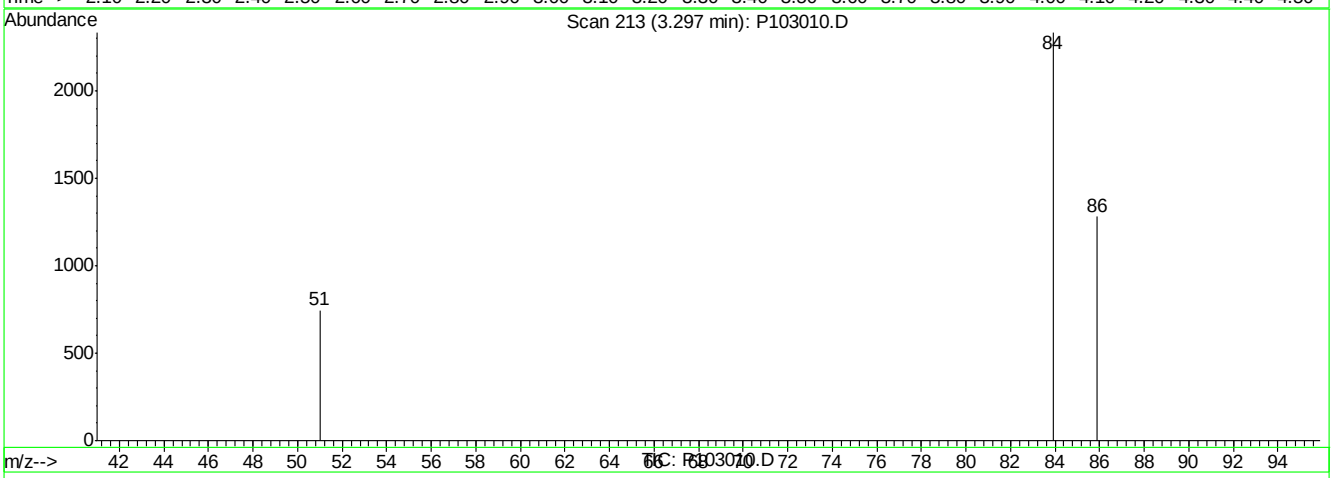
420.95	490
421.95	391
422.95	2864
423.90	772
441.00	9869
442.00	65456
443.00	12454

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103010.D Vial: 1
Acq On : 2 Mar 2016 4:56 pm Operator: sarad
Sample : dftpp Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 2 17:01 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Wed Jan 06 10:49:26 2016
Response via : Single Level Calibration





(1) Pentachlorophenol (t)

3.30min 0.00ppb

response 0

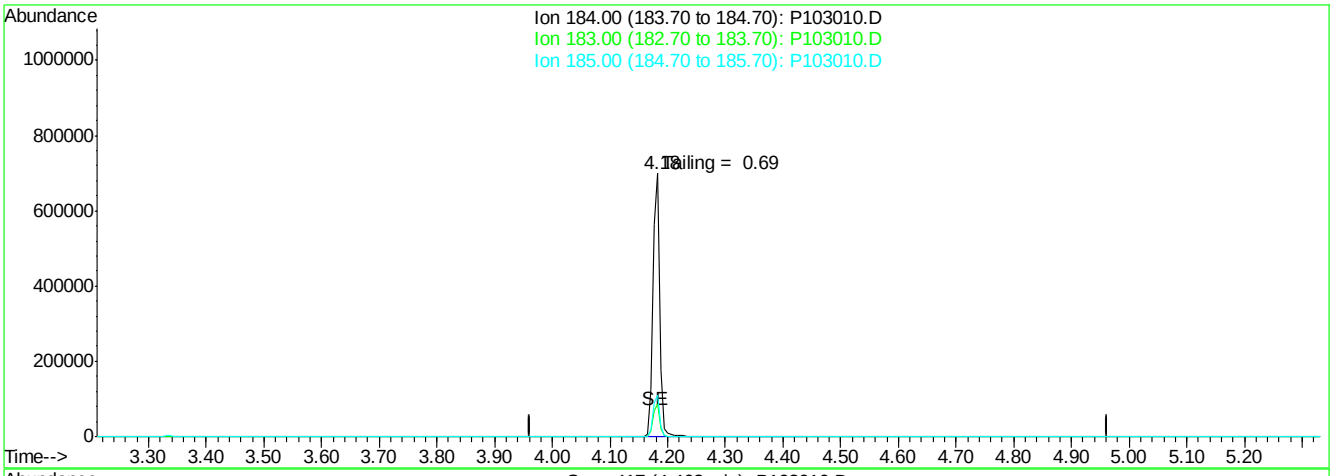
Ion	Exp%	Act%
265.80	100	0.00
263.80	63.10	0.00#
267.80	63.20	0.00#
0.00	0.00	0.00

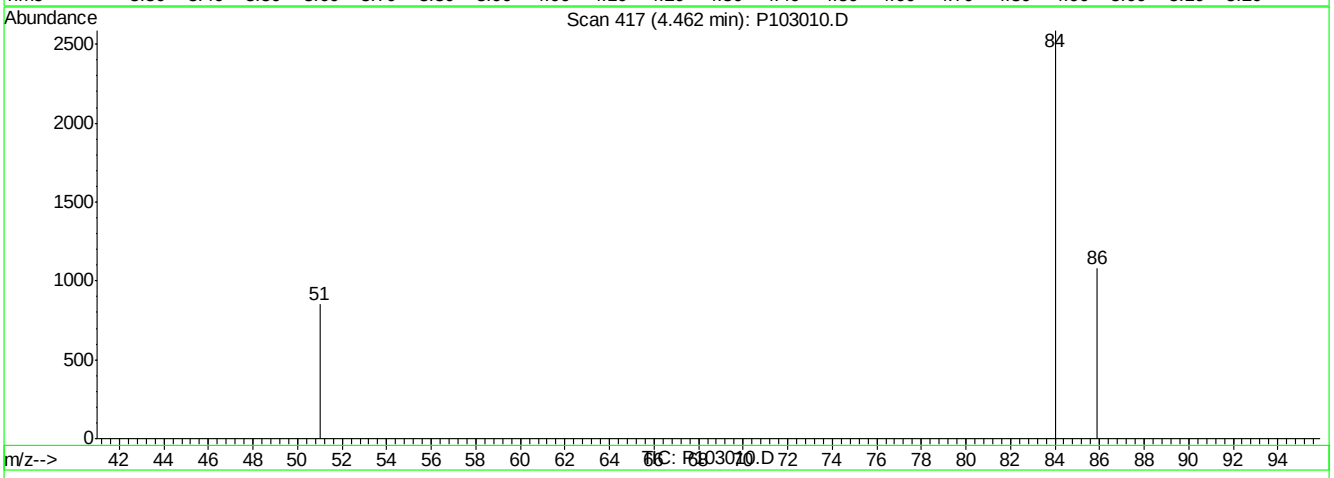
P103010.D DFTPPP.M Wed Mar 02 17:02:42 2016

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103010.D Vial: 1
Acq On : 2 Mar 2016 4:56 pm Operator: sarad
Sample : dftpp Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 2 17:01 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Wed Jan 06 10:49:26 2016
Response via : Single Level Calibration





(2) Benzidine (t)

4.46min 0.00ppb

response 0

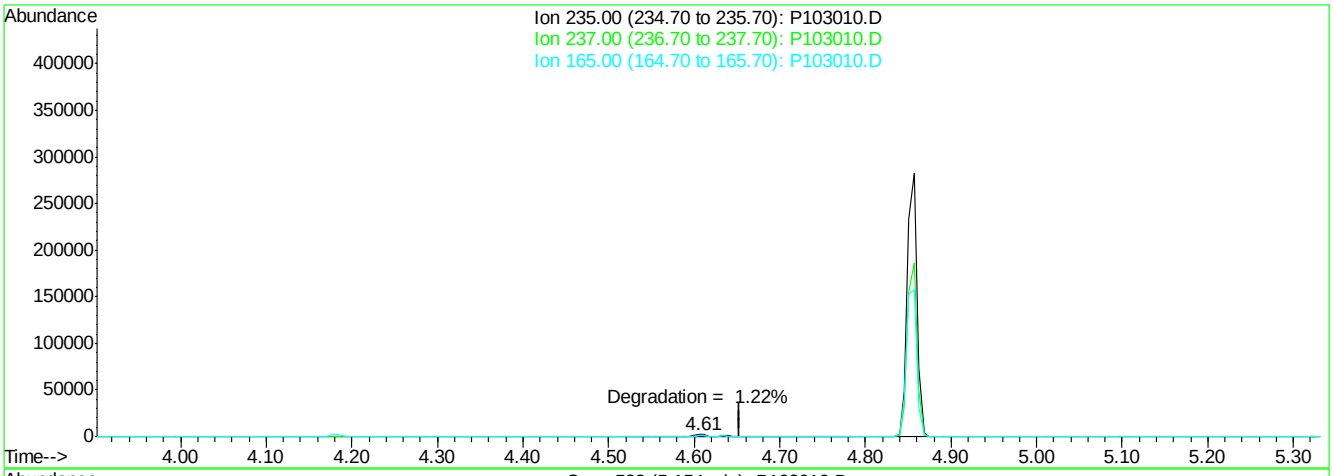
Ion	Exp%	Act%
184.00	100	0.00
183.00	0.00	0.00
185.00	0.00	0.00
0.00	0.00	0.00

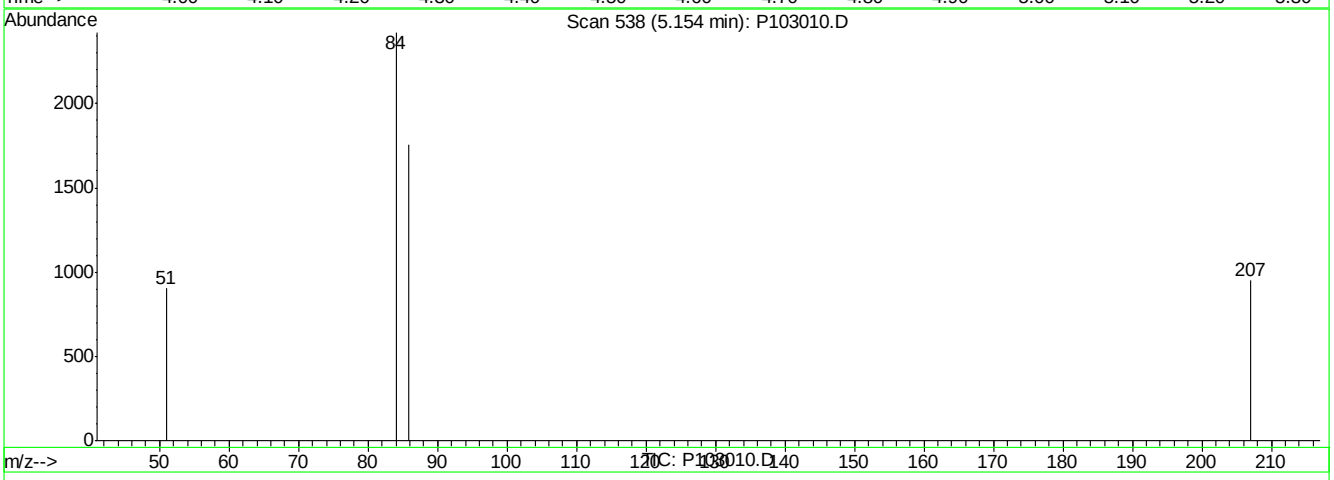
P103010.D DFTPPP.M Wed Mar 02 17:02:49 2016

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103010.D Vial: 1
Acq On : 2 Mar 2016 4:56 pm Operator: sarad
Sample : dftpp Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 2 17:01 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Wed Jan 06 10:49:26 2016
Response via : Single Level Calibration





(3) ddt

5.15min 0.00ppb

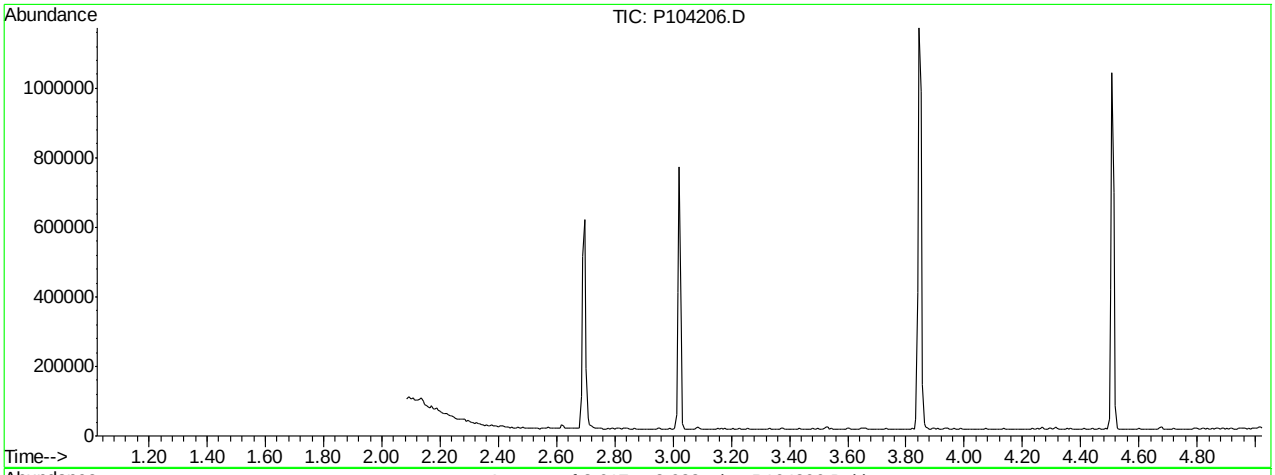
response 0

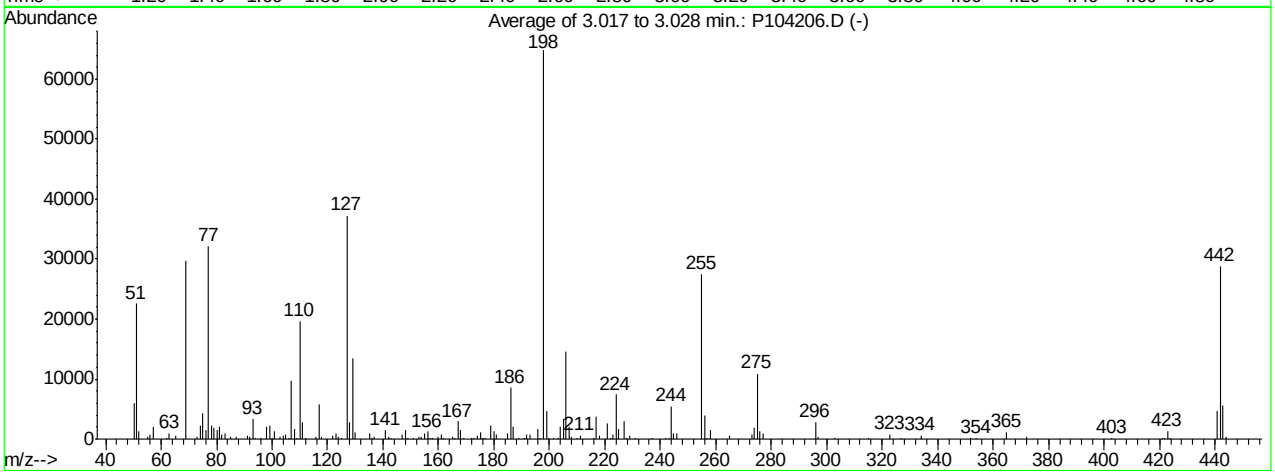
Ion	Exp%	Act%
235.00	100	0.00
237.00	65.40	0.00#
165.00	55.50	0.00#
0.00	0.00	0.00

P103010.D DFTPPP.M Wed Mar 02 17:02:56 2016

DFTPP

Data File : C:\MSDCHEM\1\DATA\EP4587\P104206.D Vial: 1
Acq On : 15 Apr 2016 8:47 am Operator: linseyk
Sample : dftpp Inst : MSP
Misc : op93004,ep4587 Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um





AutoFind: Scans 164, 165, 166; Background Corrected with Scan 160

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	34.8	22542	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	45.9	29712	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	57.5	37221	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	64784	PASS
199	198	5	9	7.3	4735	PASS
275	198	10	30	16.8	10861	PASS
365	198	1	100	1.9	1220	PASS
441	443	0.10	100	84.3	4686	PASS
442	198	40	100	44.6	28874	PASS
443	442	17	23	19.3	5559	PASS

P104206.D DFTPPP.M Sun Apr 17 13:36:47 2016

Average of 3.017 to 3.028 min.: P104206.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
50.10	5992	74.00	2274	86.95	359	103.90	659
51.05	22542	75.00	4254	90.95	554	105.00	771
52.00	1385	76.05	1571	92.00	474	106.10	182
55.05	417	77.10	32159	93.00	3318	107.00	9796
56.00	802	78.05	2317	94.00	132	108.00	1639
57.10	1968	79.00	1824	96.00	120	109.00	154
62.00	220	80.00	1565	98.00	2144	110.00	19624
63.00	972	81.00	2146	99.00	2186	111.00	2801
65.05	638	82.00	737	100.00	133	112.00	173
69.00	29712	83.00	960	101.00	1292	115.95	431
73.00	346	85.00	381	102.95	305	117.00	5866

Average of 3.017 to 3.028 min.: P104206.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
117.90	392	136.95	436	156.00	1233	171.90	150
121.95	642	140.95	1526	157.00	201	172.90	231
123.00	970	142.00	344	157.90	116	173.95	562
123.95	341	142.90	257	159.90	356	175.00	1084
125.00	253	147.00	770	160.95	785	176.00	194
127.00	37221	147.95	1465	161.90	125	176.90	219
127.95	2748	148.90	185	164.90	416	178.90	2249
129.00	13553	151.10	118	166.00	249	180.00	1376
129.90	1158	152.95	358	167.00	2905	181.00	738
135.00	1017	153.95	420	168.00	1554	184.95	1009
136.00	172	154.95	884	169.00	131	186.00	8571

Average of 3.017 to 3.028 min.: P104206.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
187.00	2155	203.00	172	220.90	2541	243.00	211
189.00	248	203.95	2031	221.90	267	243.95	5478
191.00	136	204.95	3320	222.90	841	244.90	860
191.90	769	206.00	14504	224.00	7425	245.90	857
193.00	815	207.00	2094	225.00	1722	254.90	27514
195.90	1686	208.00	339	226.95	2932	255.90	3943
196.60	170	209.90	120	227.90	173	257.00	128
197.90	64784	211.00	640	228.95	629	257.90	1423
198.90	4735	216.00	128	230.90	223	264.90	500
199.90	221	216.90	3703	236.90	118	272.95	807
201.40	137	217.90	652	242.00	162	273.95	1819

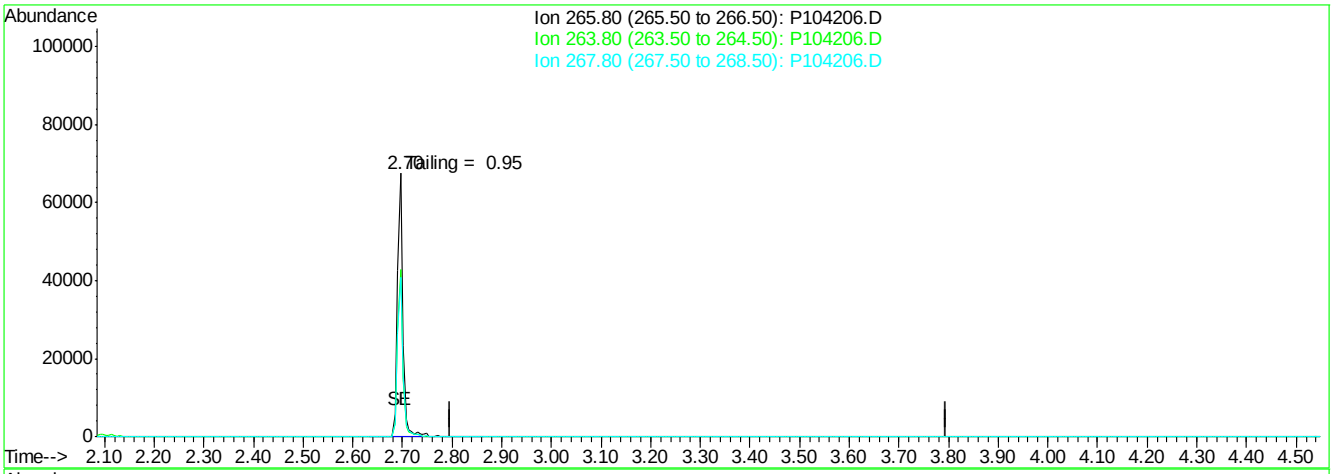
Average of 3.017 to 3.028 min.: P104206.D
dftpp
Modified:subtracted

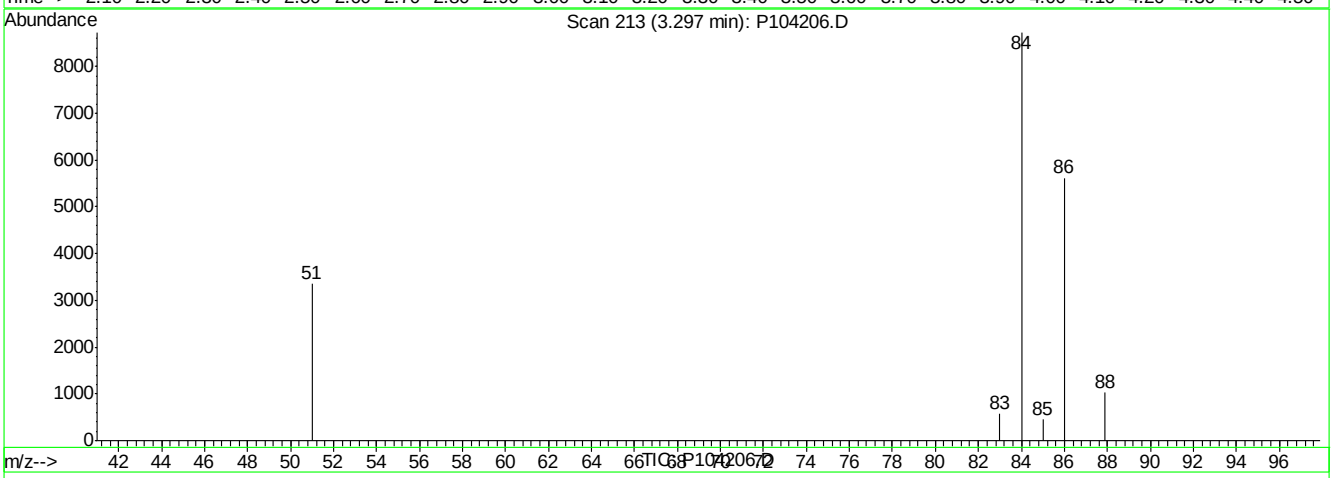
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
274.90	10861	353.90	157	443.85	446		
275.95	1230	364.85	1220				
276.90	892	371.90	430				
295.90	2897	402.90	121				
296.90	400	420.90	133				
302.90	199	421.90	147				
314.90	204	422.90	1385				
322.90	803	423.90	178				
326.80	149	440.90	4686				
333.90	626	441.90	28874				
352.00	122	442.90	5559				

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4587\P104206.D Vial: 1
Acq On : 15 Apr 2016 8:47 am Operator: linseyk
Sample : dftpp Inst : MSP
Misc : op93004,ep4587 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 15 8:52 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Wed Jan 06 10:49:26 2016
Response via : Single Level Calibration





(1) Pentachlorophenol (t)

3.30min 0.00ppb

response 0

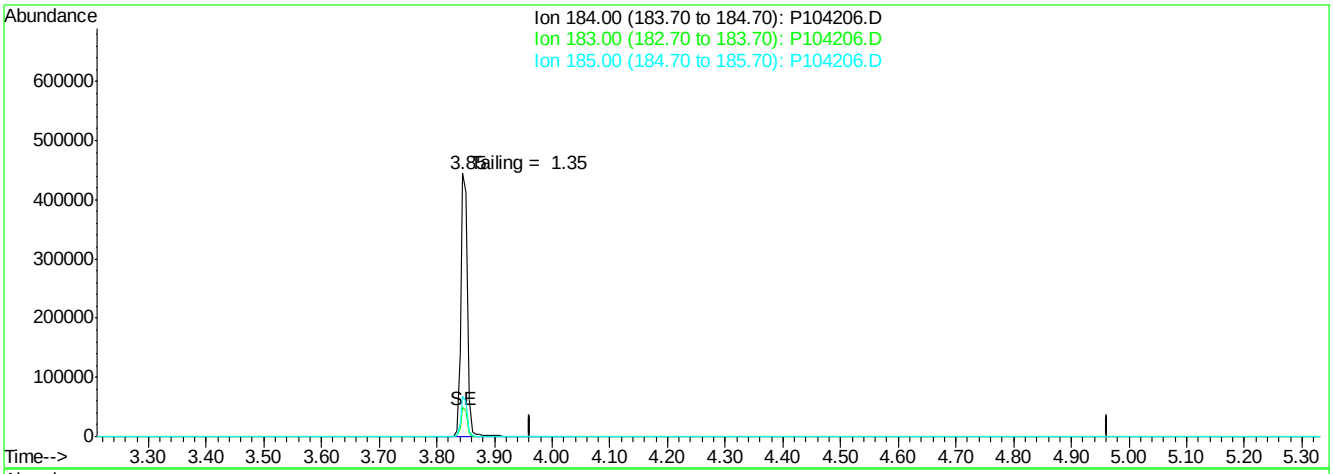
Ion	Exp%	Act%
265.80	100	0.00
263.80	63.10	0.00#
267.80	63.20	0.00#
0.00	0.00	0.00

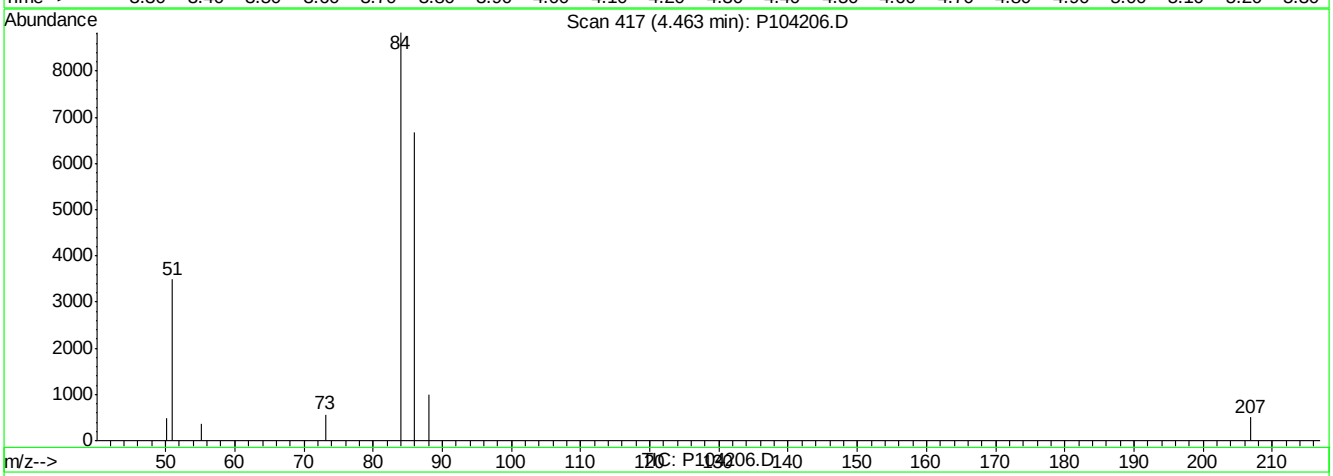
P104206.D DFTPPP.M Sun Apr 17 13:36:53 2016

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4587\P104206.D Vial: 1
Acq On : 15 Apr 2016 8:47 am Operator: linseyk
Sample : dftpp Inst : MSP
Misc : op93004,ep4587 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 15 8:52 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Wed Jan 06 10:49:26 2016
Response via : Single Level Calibration





(2) Benzidine (t)

4.46min 0.00ppb

response 0

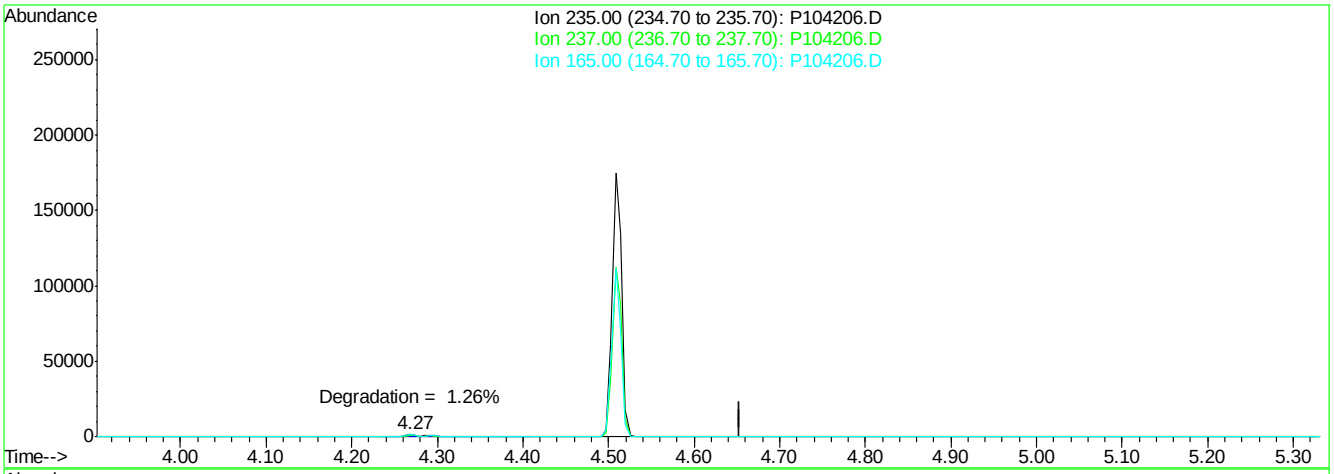
Ion	Exp%	Act%
184.00	100	0.00
183.00	0.00	0.00
185.00	0.00	0.00
0.00	0.00	0.00

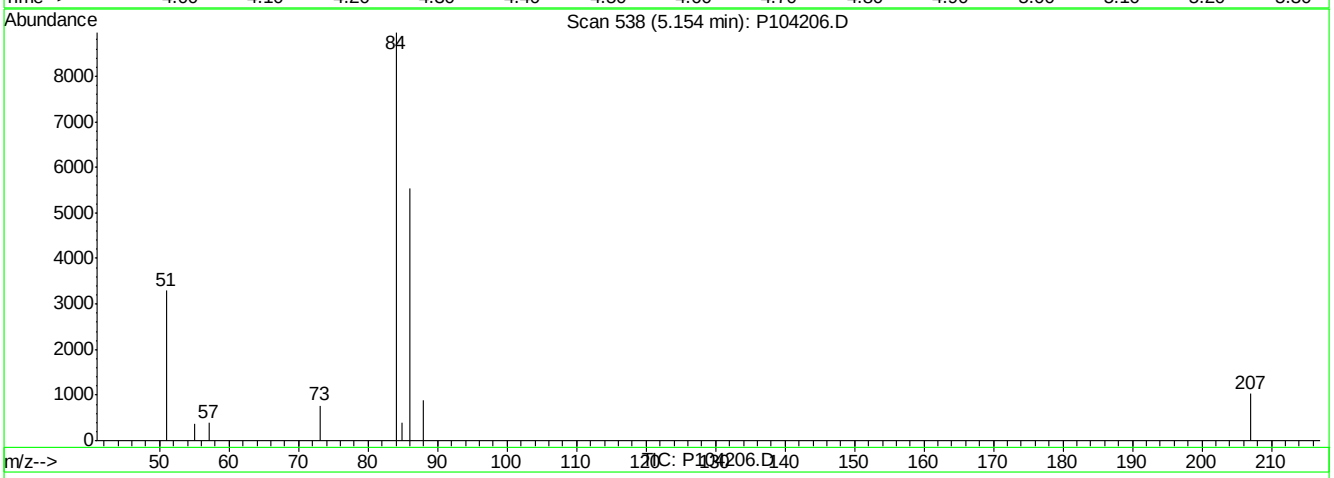
P104206.D DFTPPP.M Sun Apr 17 13:36:59 2016

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4587\P104206.D Vial: 1
Acq On : 15 Apr 2016 8:47 am Operator: linseyk
Sample : dftpp Inst : MSP
Misc : op93004,ep4587 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 15 8:52 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Wed Jan 06 10:49:26 2016
Response via : Single Level Calibration





(3) ddt

5.15min 0.00ppb

response 0

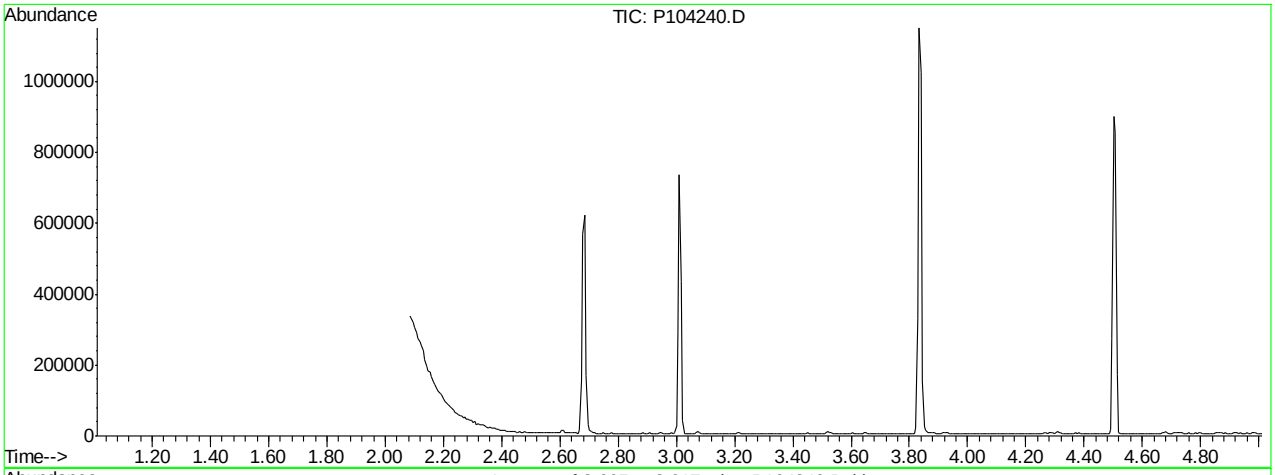
Ion	Exp%	Act%
235.00	100	0.00
237.00	65.40	0.00#
165.00	55.50	0.00#
0.00	0.00	0.00

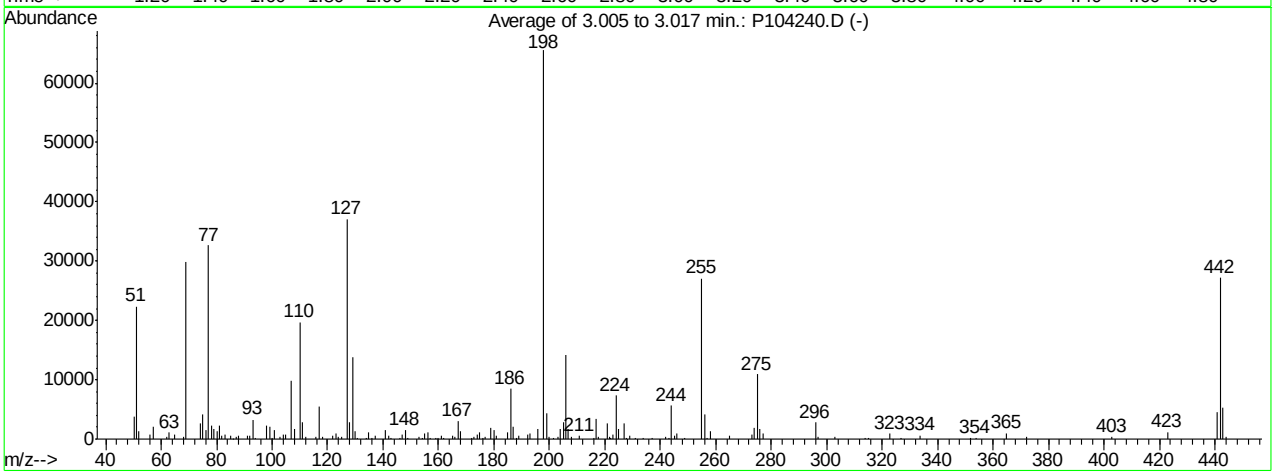
P104206.D DFTPPP.M Sun Apr 17 13:37:06 2016

SGS ACCUTEST JC18516

DFTPP

```
Data File : C:\MSDCHEM\1\DATA\EP4590\P104240.D          Vial: 1
Acq On    : 18 Apr 2016   9:14 am                   Operator: linseyk
Sample    : dftpp                                   Inst    : MSP
Misc      : op93004,ep4590                          Multiplr: 1.00
MS Integration Params: RTEINT.P
Method    : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title     : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
```





AutoFind: Scans 162, 163, 164; Background Corrected with Scan 158

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	34.1	22371	PASS
68	69	0.00	2	1.5	448	PASS
69	198	0.00	100	45.7	29917	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	56.6	37109	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	65514	PASS
199	198	5	9	6.6	4323	PASS
275	198	10	30	16.6	10899	PASS
365	198	1	100	1.5	1010	PASS
441	443	0.10	100	85.5	4462	PASS
442	198	40	100	41.4	27151	PASS
443	442	17	23	19.2	5218	PASS

P104240.D DFTPPP.M Mon Apr 18 16:53:50 2016

Average of 3.005 to 3.017 min.: P104240.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
50.10	3790	75.00	4111	87.00	301	103.95	716
51.05	22371	76.00	1480	87.95	493	104.95	717
52.05	1373	77.05	32664	91.00	561	107.00	9899
56.05	708	78.00	2345	91.95	645	108.00	1657
57.00	2078	79.00	1803	93.00	3243	110.00	19712
62.00	317	80.00	1248	94.00	133	111.00	2870
63.00	1091	81.00	2199	97.95	2254	112.00	314
64.95	698	81.95	642	99.00	2112	115.95	450
67.95	448	83.00	805	100.00	129	117.00	5522
69.00	29917	85.00	609	101.00	1441	118.00	380
74.00	2658	85.90	34	102.95	306	122.00	550

Average of 3.005 to 3.017 min.: P104240.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
122.95	899	137.00	636	156.00	1127	172.95	416
123.90	355	140.90	1566	156.95	271	173.90	755
125.00	378	142.00	608	159.00	123	174.95	1214
127.00	37109	142.90	198	159.90	254	176.00	152
128.00	2778	145.90	279	160.95	561	176.90	351
128.95	13783	146.95	793	161.90	168	178.90	1887
129.95	1298	147.95	1606	164.90	565	179.90	1481
130.90	121	149.00	242	165.85	385	180.90	562
134.00	224	152.95	351	166.95	3046	184.95	1082
134.95	1080	154.00	190	167.95	1418	186.00	8453
136.00	211	154.90	906	172.00	137	186.95	2132

Average of 3.005 to 3.017 min.: P104240.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
188.00	161	204.95	2924	222.90	751	243.95	5597
188.90	531	206.00	14132	223.95	7337	245.00	667
192.00	681	206.90	1681	224.90	1761	245.95	940
192.95	870	207.90	404	226.90	2693	248.90	122
195.90	1727	210.95	485	227.90	172	254.90	27069
197.90	65514	215.90	193	228.90	638	255.90	4237
198.90	4323	216.90	3496	231.00	150	256.95	291
199.90	306	217.85	395	233.90	124	257.90	1391
201.60	122	220.95	2564	236.90	159	264.95	509
202.95	341	221.60	415	241.95	361	272.90	762
203.95	1746	221.90	222	243.00	187	273.90	1979

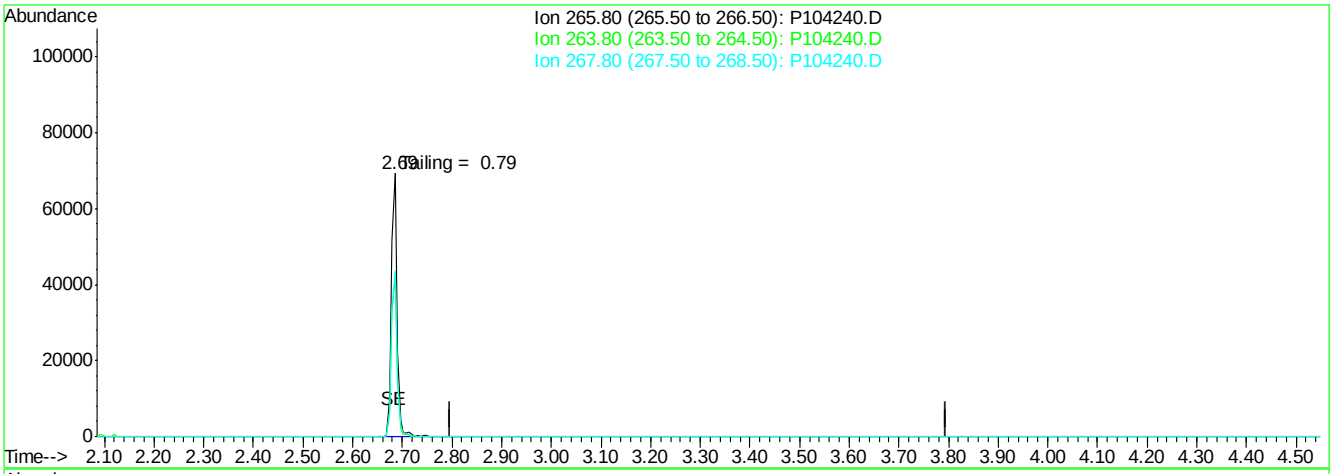
Average of 3.005 to 3.017 min.: P104240.D
dftpp
Modified:subtracted

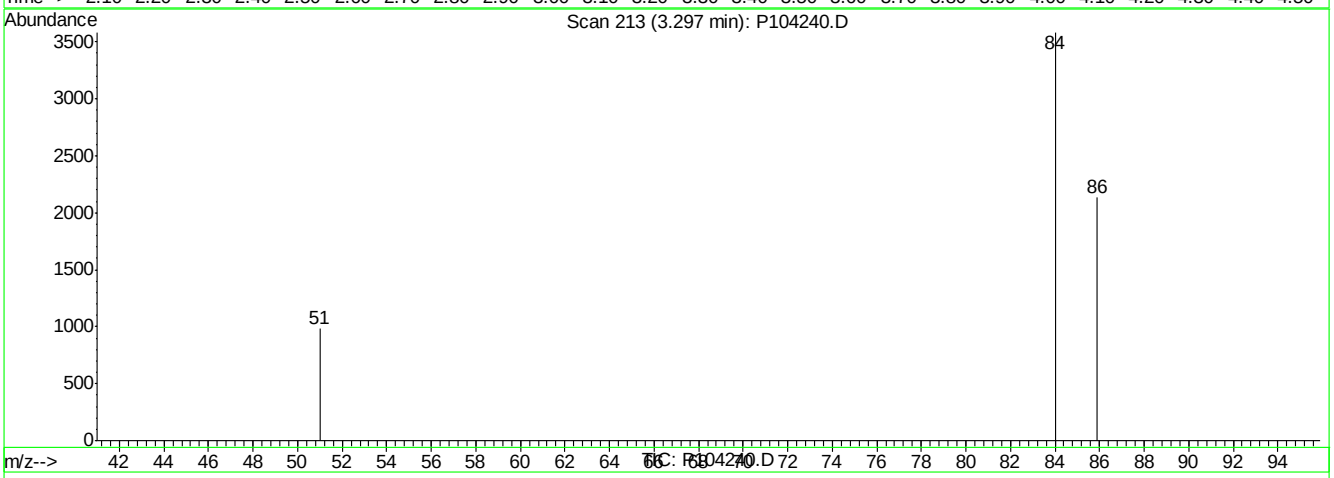
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
274.90	10899	352.00	125				
275.90	1640	353.90	187				
276.90	884	364.85	1010				
295.90	2803	371.90	447				
296.90	346	402.90	350				
303.00	348	422.90	1223				
314.00	132	440.90	4462				
314.90	138	441.90	27151				
322.90	933	442.90	5218				
326.80	120	443.90	436				
333.85	581						

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104240.D Vial: 1
Acq On : 18 Apr 2016 9:14 am Operator: linseyk
Sample : dftpp Inst : MSP
Misc : op93004,ep4590 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 18 9:20 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Wed Jan 06 10:49:26 2016
Response via : Single Level Calibration





(1) Pentachlorophenol (t)

3.30min 0.00ppb

response 0

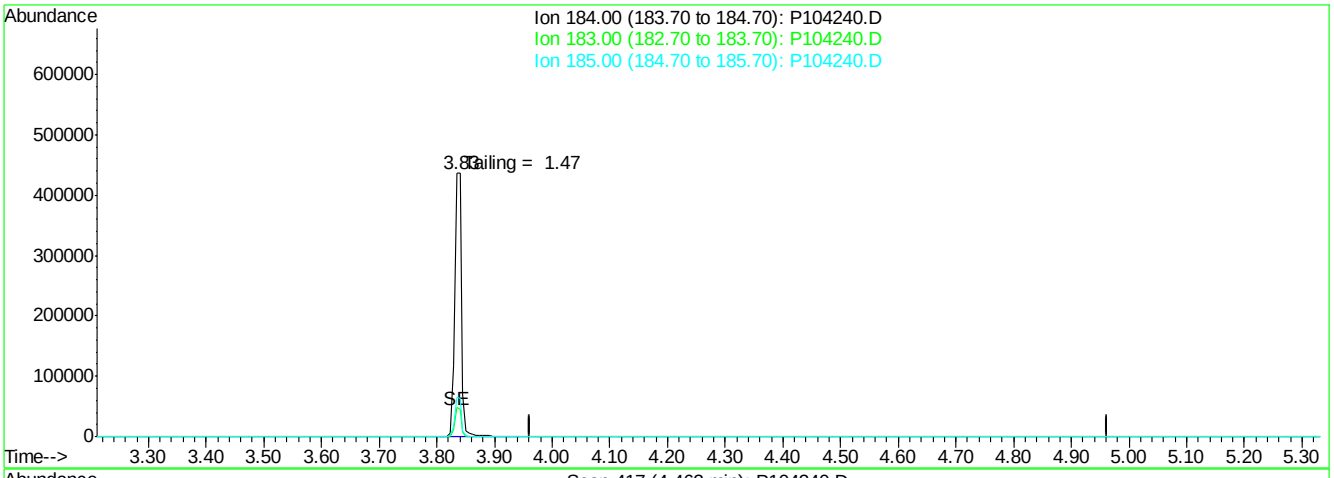
Ion	Exp%	Act%
265.80	100	0.00
263.80	63.10	0.00#
267.80	63.20	0.00#
0.00	0.00	0.00

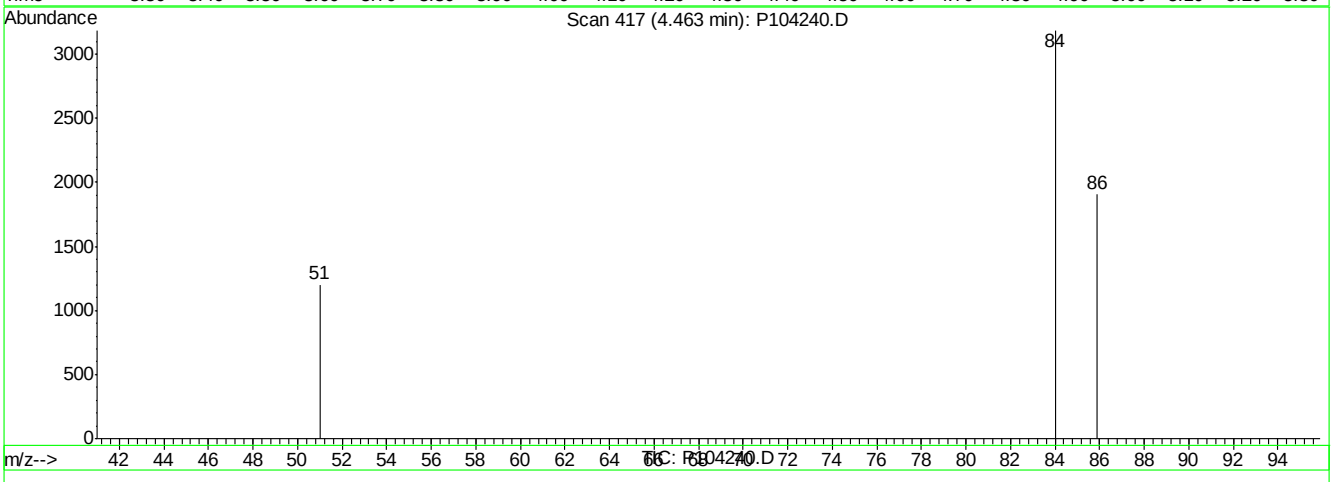
P104240.D DFTPPP.M Mon Apr 18 16:53:57 2016

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104240.D Vial: 1
Acq On : 18 Apr 2016 9:14 am Operator: linseyk
Sample : dftpp Inst : MSP
Misc : op93004,ep4590 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 18 9:20 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Wed Jan 06 10:49:26 2016
Response via : Single Level Calibration





(2) Benzidine (t)

4.46min 0.00ppb

response 0

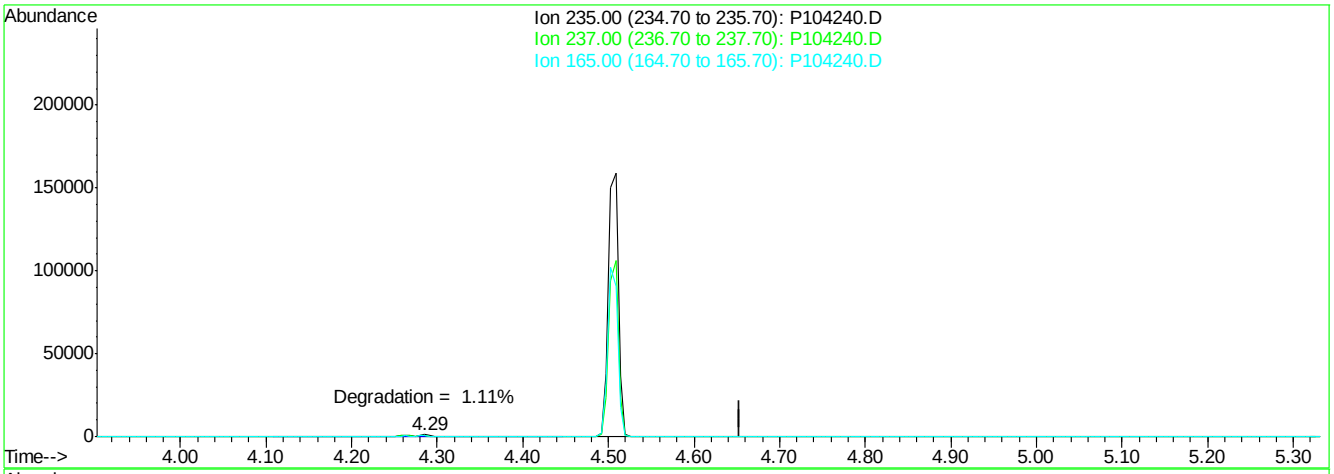
Ion	Exp%	Act%
184.00	100	0.00
183.00	0.00	0.00
185.00	0.00	0.00
0.00	0.00	0.00

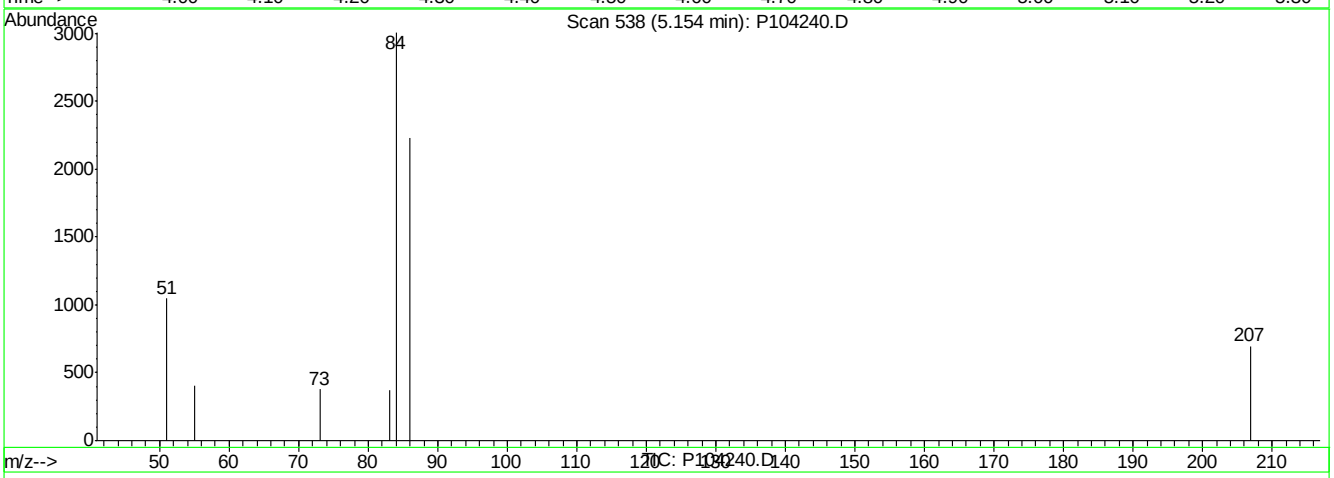
P104240.D DFTPPP.M Mon Apr 18 16:54:02 2016

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104240.D Vial: 1
Acq On : 18 Apr 2016 9:14 am Operator: linseyk
Sample : dftpp Inst : MSP
Misc : op93004,ep4590 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 18 9:20 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Wed Jan 06 10:49:26 2016
Response via : Single Level Calibration





(3) ddt

5.15min 0.00ppb

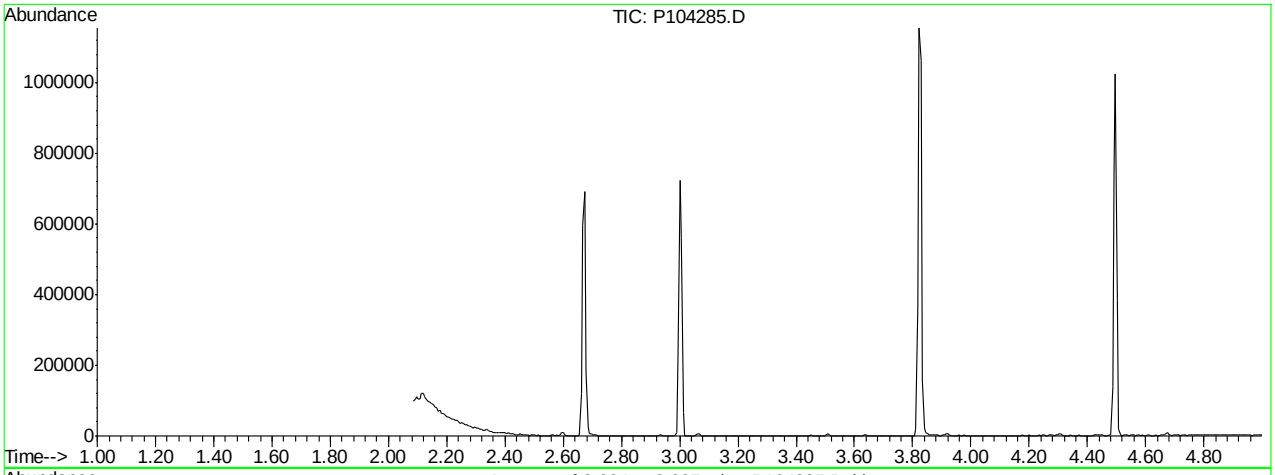
response 0

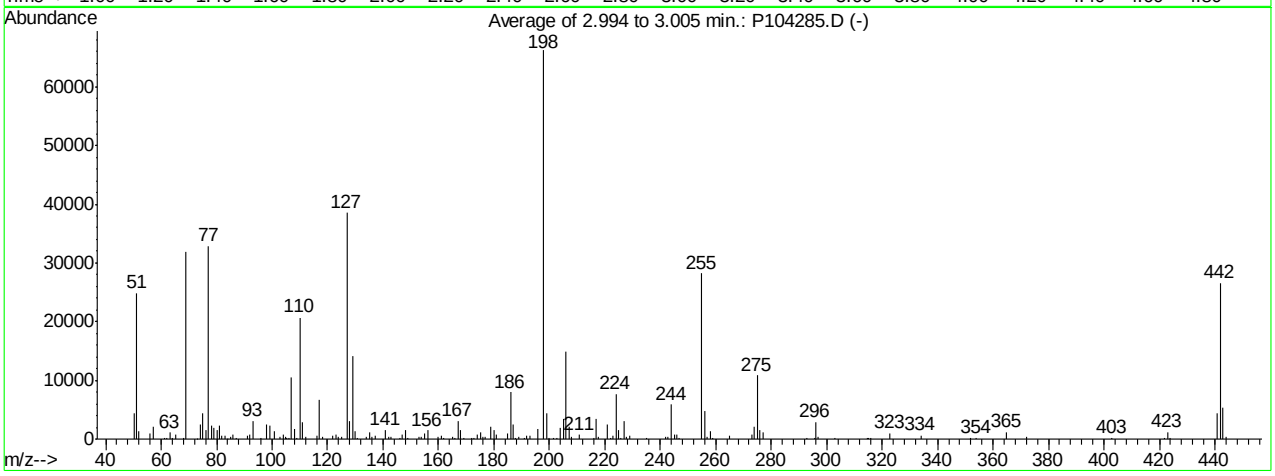
Ion	Exp%	Act%
235.00	100	0.00
237.00	65.40	0.00#
165.00	55.50	0.00#
0.00	0.00	0.00

P104240.D DFTPPP.M Mon Apr 18 16:54:07 2016

DFTPP

Data File : C:\MSDCHEM\1\DATA\EP4592\P104285.D Vial: 1
Acq On : 19 Apr 2016 12:22 pm Operator: linseyk
Sample : dftpp Inst : MSP
Misc : op93127,ep4592 Multiplr: 1.00
MS Integration Params: RTEINT.P
Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um





AutoFind: Scans 160, 161, 162; Background Corrected with Scan 156

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	37.6	24880	PASS
68	69	0.00	2	0.4	120	PASS
69	198	0.00	100	48.1	31872	PASS
70	69	0.00	2	0.0	0	PASS
127	198	40	60	58.2	38493	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	66194	PASS
199	198	5	9	6.7	4439	PASS
275	198	10	30	16.3	10801	PASS
365	198	1	100	1.8	1175	PASS
441	443	0.10	100	82.4	4400	PASS
442	198	40	100	40.2	26637	PASS
443	442	17	23	20.0	5339	PASS

P104285.D DFTPPP.M Tue Apr 19 14:26:10 2016

Average of 2.994 to 3.005 min.: P104285.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
50.10	4443	69.00	31872	83.00	501	100.95	1292
51.10	24880	73.00	70	83.90	69	102.95	397
52.05	1379	74.05	2509	85.00	364	104.00	749
56.00	899	75.00	4304	85.95	837	104.90	324
57.00	2140	76.05	1455	87.00	161	105.10	205
61.00	185	77.10	32922	91.00	597	105.90	126
62.00	284	78.10	2324	92.00	729	107.00	10450
63.05	1077	79.00	1885	93.00	3144	107.95	1710
64.00	128	80.00	1557	95.90	190	109.00	147
65.05	803	81.00	2296	98.00	2409	110.00	20674
68.00	120	82.00	642	99.00	2247	110.95	2833

Average of 2.994 to 3.005 min.: P104285.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
111.95	329	130.00	1252	147.95	1578	167.00	3102
116.00	553	130.90	148	148.90	134	168.00	1521
116.95	6644	133.95	300	153.00	429	169.00	166
118.00	467	135.00	1113	153.95	321	171.90	120
122.00	576	135.95	467	155.00	922	172.90	165
122.95	857	137.00	510	156.00	1482	173.95	780
123.90	332	140.95	1607	159.95	354	175.00	1151
124.95	384	141.95	469	160.95	561	175.95	351
127.00	38493	142.90	338	161.90	131	176.85	404
128.00	3016	145.90	134	164.90	472	178.90	2173
129.00	14142	146.95	762	166.00	286	180.00	1562

Average of 2.994 to 3.005 min.: P104285.D
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
180.95	677	198.90	4439	216.90	3486	228.90	603
185.00	1048	199.90	141	217.85	482	234.90	122
186.00	7983	201.40	122	220.95	2578	241.95	357
187.00	2421	202.85	281	222.00	150	242.90	374
187.90	119	204.00	2003	222.90	635	244.00	5860
188.95	374	205.00	3405	224.00	7661	245.00	682
191.00	119	206.00	14876	224.80	167	245.95	862
191.90	655	206.95	2028	225.00	1621	246.80	142
192.95	608	207.90	450	225.90	237	254.90	28186
195.90	1652	210.95	689	226.90	3039	255.90	4703
197.90	66194	215.90	193	227.95	435	256.85	354

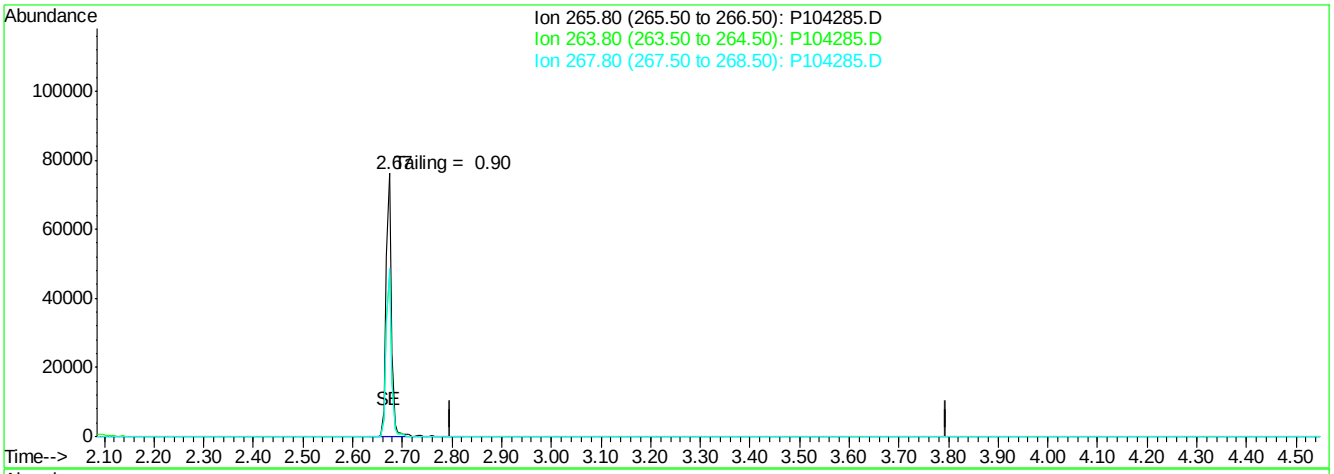
Average of 2.994 to 3.005 min.: P104285.D
dftpp
Modified:subtracted

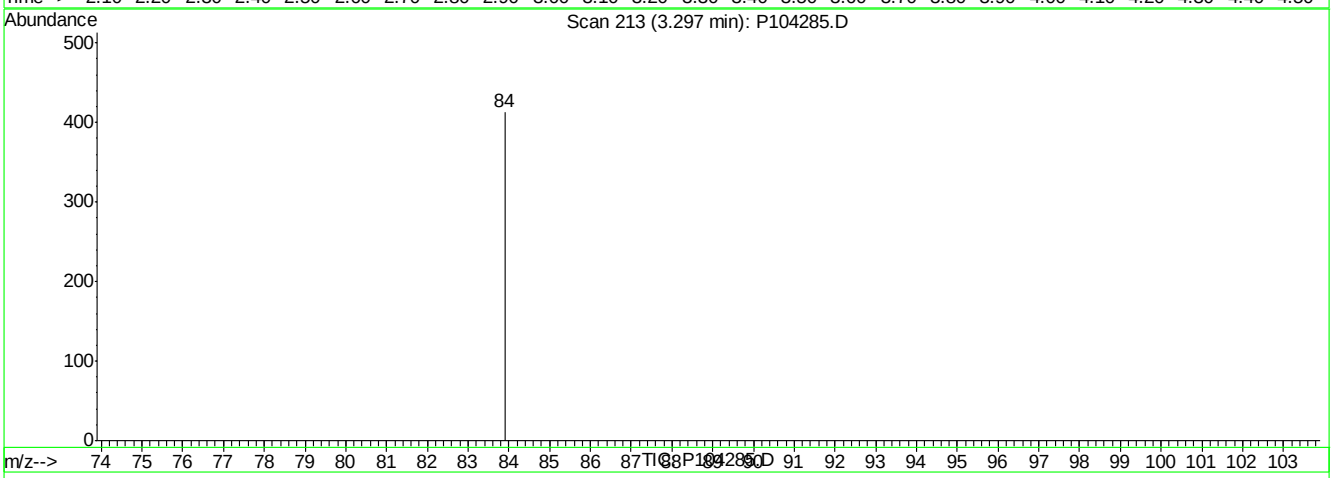
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
257.95	1390	296.90	297	402.90	142		
258.90	164	302.95	290	421.90	124		
264.85	606	314.80	117	422.90	1161		
272.90	807	315.00	124	423.90	124		
273.90	2092	316.00	139	440.90	4400		
274.90	10801	322.95	1023	441.90	26637		
275.95	1615	333.90	591	442.90	5339		
276.90	1083	351.90	165	443.90	331		
292.90	155	354.00	186				
295.80	221	364.90	1175				
295.95	2906	372.00	432				

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4592\P104285.D Vial: 1
Acq On : 19 Apr 2016 12:22 pm Operator: linseyk
Sample : dftpp Inst : MSP
Misc : op93127,ep4592 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 12:28 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Wed Jan 06 10:49:26 2016
Response via : Single Level Calibration





(1) Pentachlorophenol (t)

3.30min 0.00ppb

response 0

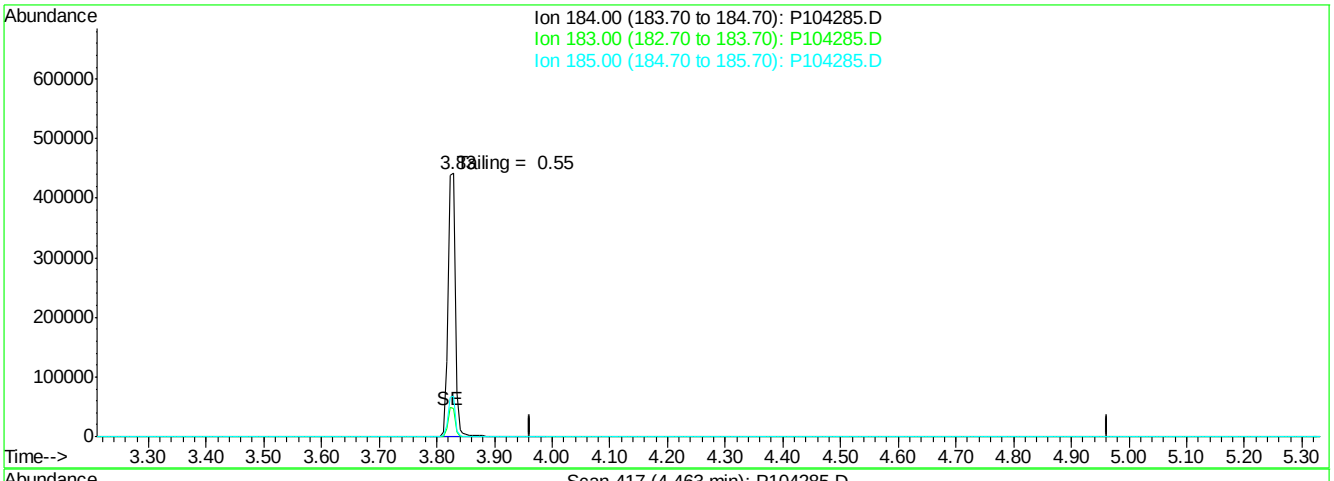
Ion	Exp%	Act%
265.80	100	0.00
263.80	63.10	0.00#
267.80	63.20	0.00#
0.00	0.00	0.00

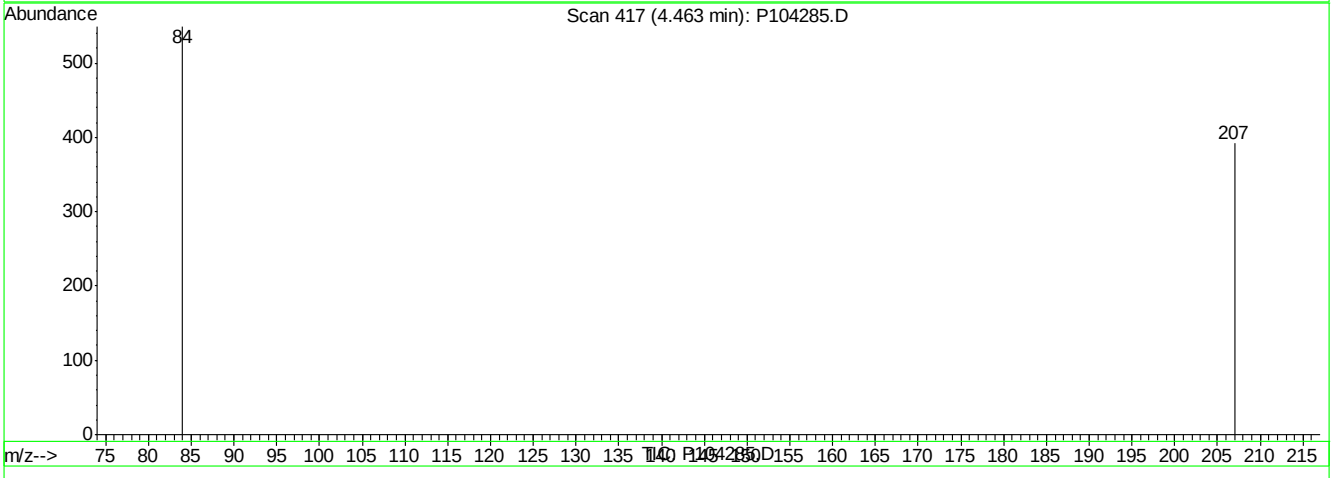
P104285.D DFTPPP.M Tue Apr 19 14:26:18 2016

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4592\P104285.D Vial: 1
Acq On : 19 Apr 2016 12:22 pm Operator: linseyk
Sample : dftpp Inst : MSP
Misc : op93127,ep4592 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 12:28 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Wed Jan 06 10:49:26 2016
Response via : Single Level Calibration





(2) Benzidine (t)

4.46min 0.00ppb

response 0

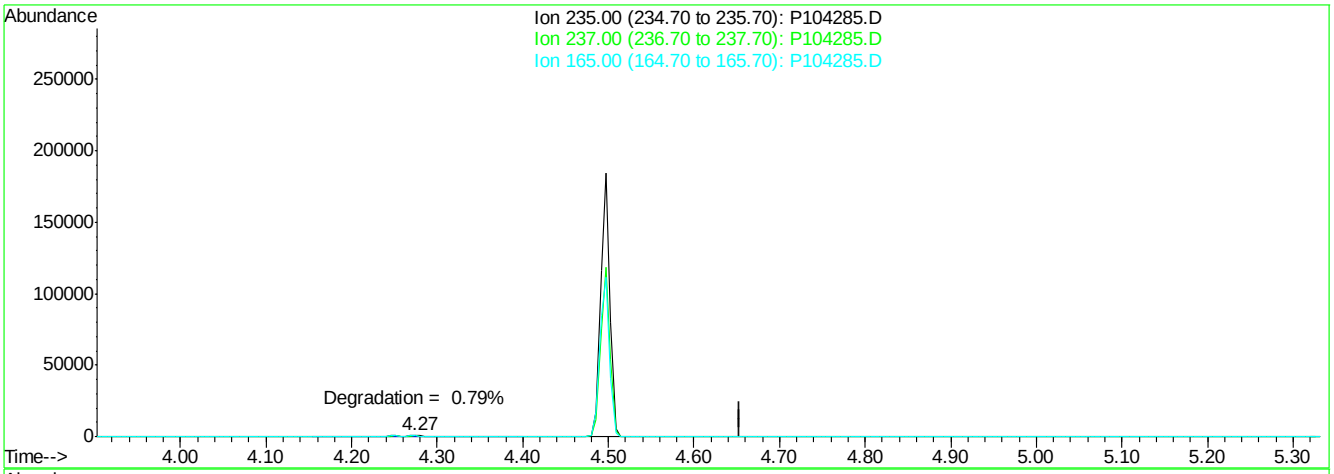
Ion	Exp%	Act%
184.00	100	0.00
183.00	0.00	0.00
185.00	0.00	0.00
0.00	0.00	0.00

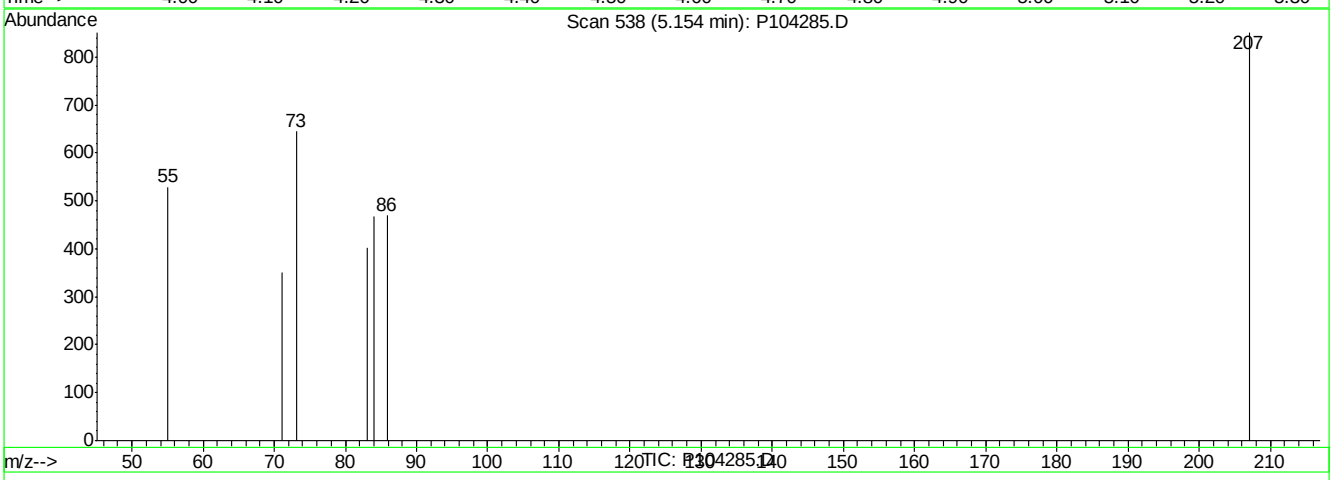
P104285.D DFTPPP.M Tue Apr 19 14:26:23 2016

Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4592\P104285.D Vial: 1
Acq On : 19 Apr 2016 12:22 pm Operator: linseyk
Sample : dftpp Inst : MSP
Misc : op93127,ep4592 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Apr 19 12:28 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\DFTPPP.M (RTE Integrator)
Title : Semi Volatile GC/MS, ZB-5MSi 30m x .25mm x .25um
Last Update : Wed Jan 06 10:49:26 2016
Response via : Single Level Calibration





(3) ddt

5.15min 0.00ppb

response 0

Ion	Exp%	Act%
235.00	100	0.00
237.00	65.40	0.00#
165.00	55.50	0.00#
0.00	0.00	0.00

P104285.D DFTPPP.M Tue Apr 19 14:26:29 2016

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/18/16 10:23

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83066.D
Acq On : 15 Apr 2016 9:12 am
Operator : ashleyn
Sample : ic3649-2
Misc : op92470,e2m3649
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 15 11:21:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:19:34 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	170025	40.00	ppm	0.00
24) Naphthalene-d8	6.023	136	678734	40.00	ppm	0.00
47) Acenaphthene-d10	8.141	164	393840	40.00	ppm	0.00
69) Phenanthrene-d10	10.340	188	589479	40.00	ppm	0.00
83) Chrysene-d12	14.544	240	509988	40.00	ppm	-0.01
92) Perylene-d12	16.672	264	503883	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	170025	40.00	ppm	0.00
104) Acenaphthene-d10a	8.141	164	393840	40.00	ppm	0.00
106) Chrysene-d12a	14.544	240	509988	40.00	ppm	-0.01
109) Phenanthrene-d10a	10.340	188	589479	40.00	ppm	0.00
112) Naphthalene-d8a	6.023	136	678734	40.00	ppm	0.00
114) Chrysene-d12b	14.544	240	509988	40.00	ppm	-0.01

System Monitoring Compounds						
5) 2-Fluorophenol	3.911	112	13883	2.30	ppm	0.00
Spiked Amount 50.000			Recovery = 4.60%			
8) Phenol-d5	4.617	99	17743	2.45	ppm	0.01
Spiked Amount 50.000			Recovery = 4.90%			
25) Nitrobenzene-d5	5.349	82	13469	2.34	ppm	0.00
Spiked Amount 50.000			Recovery = 4.68%			
51) 2-Fluorobiphenyl	7.248	172	28061	2.73	ppm	-0.01
Spiked Amount 50.000			Recovery = 5.46%			
73) 2,4,6-Tribromophenol	9.286	330	2913	1.93	ppm	-0.01
Spiked Amount 50.000			Recovery = 3.86%			
85) Terphenyl-d14	12.902	244	23101	2.24	ppm	-0.02
Spiked Amount 50.000			Recovery = 4.48%			
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds						Qvalue
2) 1,4-Dioxane	2.483	88	6241	2.35	ppm	95
3) Pyridine	2.825	79	14900	2.20	ppm	97
4) N-Nitrosodimethylamine	2.771	74	8991	2.23	ppm	98
6) Indene	5.103	116	25355	3.34	ppm	97
7) Cumene	4.290	105	34733	2.61	ppm	100
9) Phenol	4.627	94	20030	2.64	ppm	86
10) Aniline	4.643	93	20736	2.75	ppm	97
11) bis(2-Chloroethyl)ether	4.681	93	13931	2.37	ppm	94
12) 2-Chlorophenol	4.740	128	14830	2.57	ppm	99
13) Decane	4.761	43	11900	2.98	ppm	94
14) 1,3-Dichlorobenzene	4.852	146	16615	2.66	ppm	99
15) 1,4-Dichlorobenzene	4.905	146	16883	2.75	ppm	98
16) Benzyl alcohol	5.007	108	8949	2.42	ppm	97
17) 1,2-Dichlorobenzene	5.034	146	15736	2.84	ppm	98
18) Acetophenone	5.221	105	19275	3.06	ppm	83
19) 2-Methylphenol	5.098	108	13643	3.21	ppm	98
20) 2,2'-oxybis(1-Chloropr...	5.109	45	16223	3.61	ppm	91
21) 3&4-Methylphenol	5.221	108	13662	3.10	ppm	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83066.D
Acq On : 15 Apr 2016 9:12 am
Operator : ashleyn
Sample : ic3649-2
Misc : op92470,e2m3649
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 15 11:21:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:19:34 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
22) n-Nitroso-di-n-propyla...	5.216	70	9538	3.08 ppm		90
23) Hexachloroethane	5.317	201	4379	2.44 ppm		99
26) Nitrobenzene	5.365	77	13882	2.42 ppm		98
27) Quinoline	6.398	129	27712	2.32 ppm		97
28) Isophorone	5.579	82	23933	2.32 ppm		96
29) 2-Nitrophenol	5.654	139	7250	2.38 ppm		92
30) 2,4-Dimethylphenol	5.686	107	13046	2.39 ppm		94
31) Benzoic acid	5.740	105	8877	1.70 ppm		98
32) bis(2-Chloroethoxy)met...	5.772	93	16332	2.66 ppm		97
33) 2,4-Dichlorophenol	5.884	162	10788	2.44 ppm		99
34) 2,6-Dichlorophenol	6.109	162	10726	2.61 ppm		97
35) 1,3,5-Trichlorobenzene	5.665	180	12212	2.78 ppm		98
36) 1,2,4-Trichlorobenzene	5.965	180	11797	2.63 ppm		97
37) 1,2,3-Trichlorobenzene	6.194	180	11416	2.61 ppm		95
38) Naphthalene	6.045	128	45428	2.79 ppm		99
39) 4-Chloroaniline	6.098	127	16292	2.67 ppm		95
40) 2,3-Dichloroaniline	7.141	161	13508	2.75 ppm		99
41) Caprolactam	6.446	55	4823	2.06 ppm		91
42) Hexachlorobutadiene	6.173	225	5336	2.63 ppm		95
43) 4-Chloro-3-methylphenol	6.622	107	11063	2.22 ppm		98
44) 2-Methylnaphthalene	6.799	141	23077	2.61 ppm		96
45) 1-Methylnaphthalene	6.917	141	23926	2.63 ppm		98
46) Dimethylnaphthalene	7.574	156	24207	2.63 ppm		98
48) Hexachlorocyclopentadiene	6.997	237	10254	4.53 ppm		95
49) 2,4,6-Trichlorophenol	7.147	196	6736	2.56 ppm		99
50) 2,4,5-Trichlorophenol	7.189	196	6850	2.18 ppm		98
52) 2-Chloronaphthalene	7.398	162	25278	2.66 ppm		97
53) Biphenyl	7.371	154	33517	2.76 ppm		98
54) 2-Nitroaniline	7.532	65	6329	2.12 ppm		91
55) Dimethylphthalate	7.783	163	26753	2.38 ppm		98
56) Acenaphthylene	7.944	152	39169	2.44 ppm		99
57) 2,6-Dinitrotoluene	7.853	165	4976	1.81 ppm		90
58) 3-Nitroaniline	8.088	138	6329	1.91 ppm		96
59) Acenaphthene	8.184	153	26123	2.71 ppm		98
60) 2,4-Dinitrophenol	8.238	184	3579	2.21 ppm	#	73
61) 4-Nitrophenol	8.361	109	2907	1.80 ppm		96
62) Dibenzofuran	8.430	168	34388	2.82 ppm		95
63) 2,4-Dinitrotoluene	8.420	165	6827	2.00 ppm		81
64) 2,3,4,6-Tetrachlorophenol	8.617	232	4958	2.16 ppm		94
65) Diethylphthalate	8.794	149	24985	2.26 ppm		99
66) Fluorene	8.922	166	28143	2.75 ppm		95
67) 4-Chlorophenyl-phenyle...	8.938	204	11571	2.76 ppm		98
68) 4-Nitroaniline	8.965	138	6006	1.77 ppm		97
70) 4,6-Dinitro-2-methylph...	9.013	198	2683	1.23 ppm		96
71) n-Nitrosodiphenylamine	9.120	169	17883	2.40 ppm		99
72) 1,2-Diphenylhydrazine	9.174	77	24857	2.27 ppm		97
74) 4-Bromophenyl-phenylether	9.671	248	6243	2.39 ppm		95
75) Hexachlorobenzene	9.757	284	6988	2.41 ppm		99
76) Pentachlorophenol	10.067	266	7835	4.24 ppm		99
77) Phenanthrene	10.372	178	40304	2.71 ppm		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83066.D
Acq On : 15 Apr 2016 9:12 am
Operator : ashleyn
Sample : ic3649-2
Misc : op92470,e2m3649
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 15 11:21:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:19:34 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
78) Anthracene	10.452	178	38124	2.53 ppm	100
79) Carbazole	10.725	167	34957	2.42 ppm	98
80) Di-n-butylphthalate	11.345	149	43024	2.34 ppm	100
81) Fluoranthene	12.249	202	35858	2.49 ppm	99
82) Octadecane	10.270	57	15368	2.45 ppm	96
84) Pyrene	12.597	202	38110	2.31 ppm	98
86) Butylbenzylphthalate	13.736	149	18808	2.03 ppm	94
87) Butyl stearate	13.891	56	10481	2.13 ppm	96
88) Benzo[a]anthracene	14.528	228	33804	2.51 ppm	100
89) 3,3'-Dichlorobenzidine	14.528	252	11316	2.25 ppm	98
90) Chrysene	14.581	228	34082	2.37 ppm	99
91) bis(2-Ethylhexyl)phtha...	14.694	149	24490	1.98 ppm	99
93) Di-n-octylphthalate	15.683	149	40828	2.06 ppm	100
94) Benzo[b]fluoranthene	16.138	252	35876	2.58 ppm	94
95) Benzo[k]fluoranthene	16.175	252	34062	2.56 ppm	97
96) Benzo[a]pyrene	16.587	252	29482	2.23 ppm	96
97) Indeno[1,2,3-cd]pyrene	18.331	276	25983m	1.76 ppm	
98) Dibenz(a,h)acridine	17.951	279	24785	1.96 ppm	98
99) Dibenz[a,h]anthracene	18.379	278	30723	2.12 ppm	97
100) 7,12-Dimethylbenz(a)an...	16.138	256	15525	2.63 ppm	97
101) Benzo[g,h,i]perylene	18.812	276	31910	2.18 ppm	98

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

7.6.1

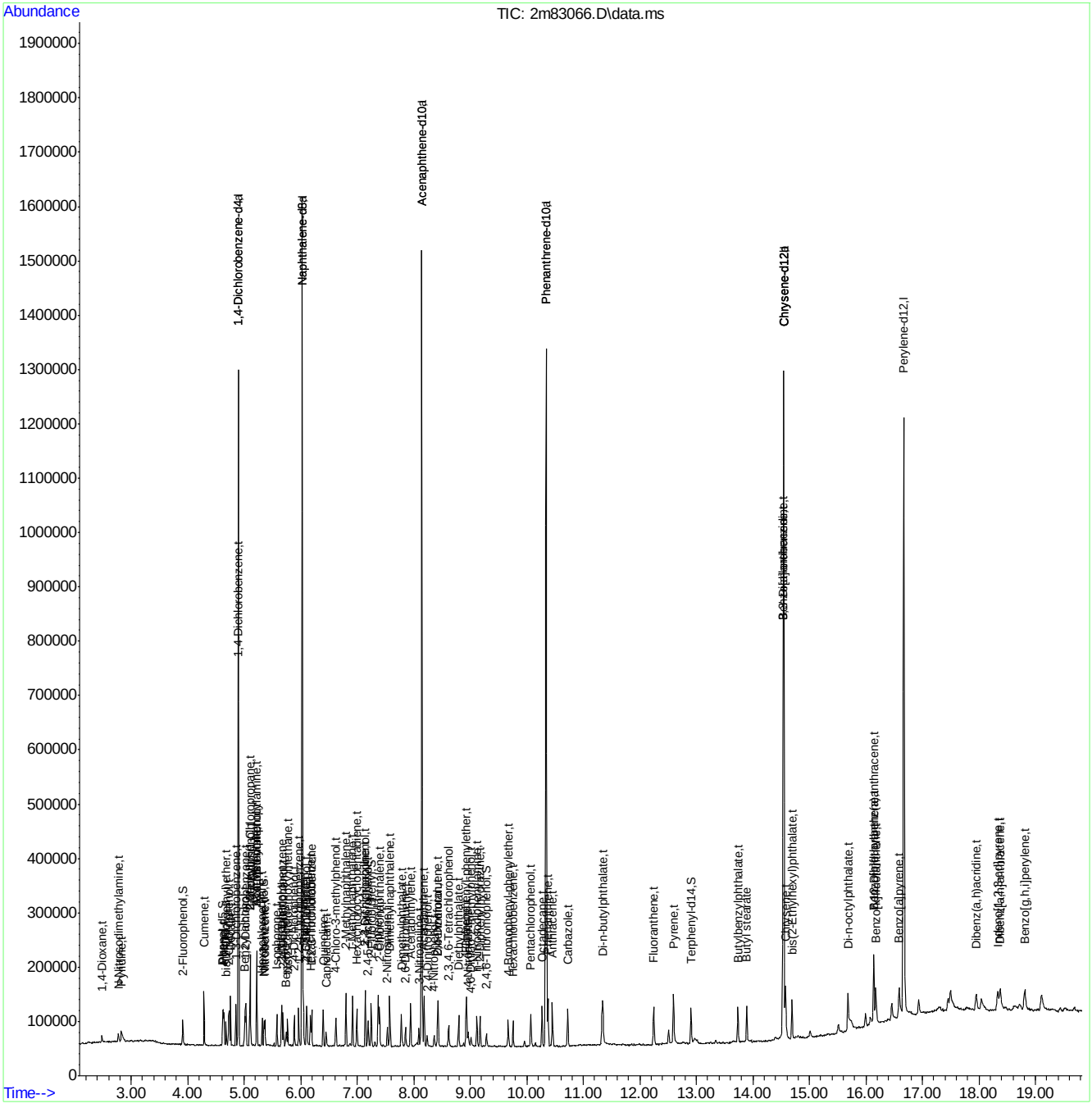
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83066.D
Acq On : 15 Apr 2016 9:12 am
Operator : ashleyn
Sample : ic3649-2
Misc : op92470,e2m3649
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 15 11:21:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:19:34 2016
Response via : Initial Calibration



SGS ACCUTEST JC18516

Manual Integration Approval Summary

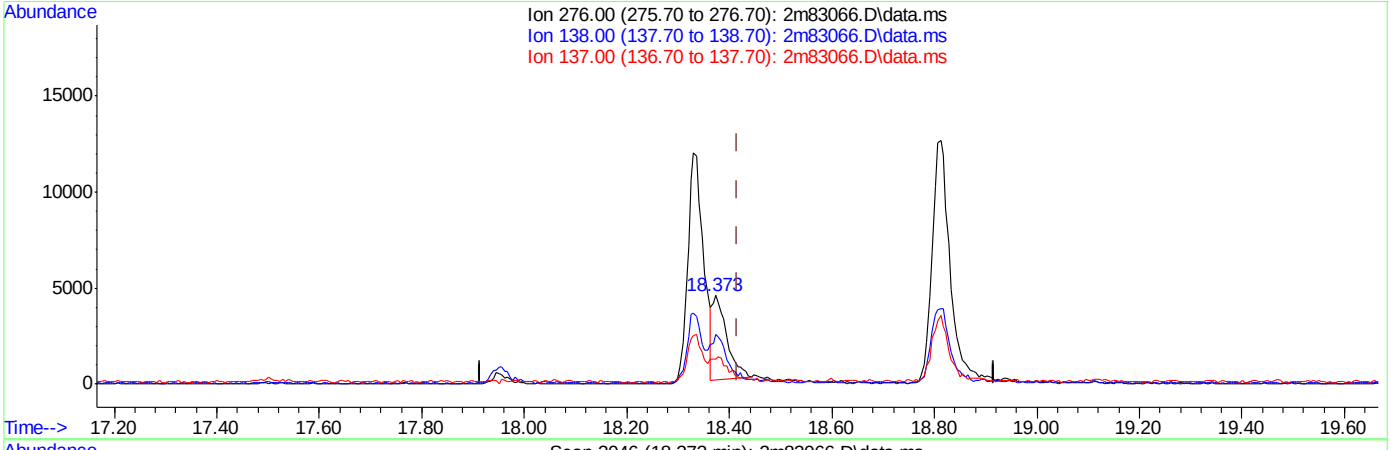
Sample Number:	E2M3649-IC3649	**Method:**	SW846 8270D
Lab FileID:	2M83066.D	**Analyst approved:**	04/15/16 17:43 Ashley Noble
Injection Time:	04/15/16 09:12	**Supervisor approved:**	04/18/16 10:23 Nina Pandya

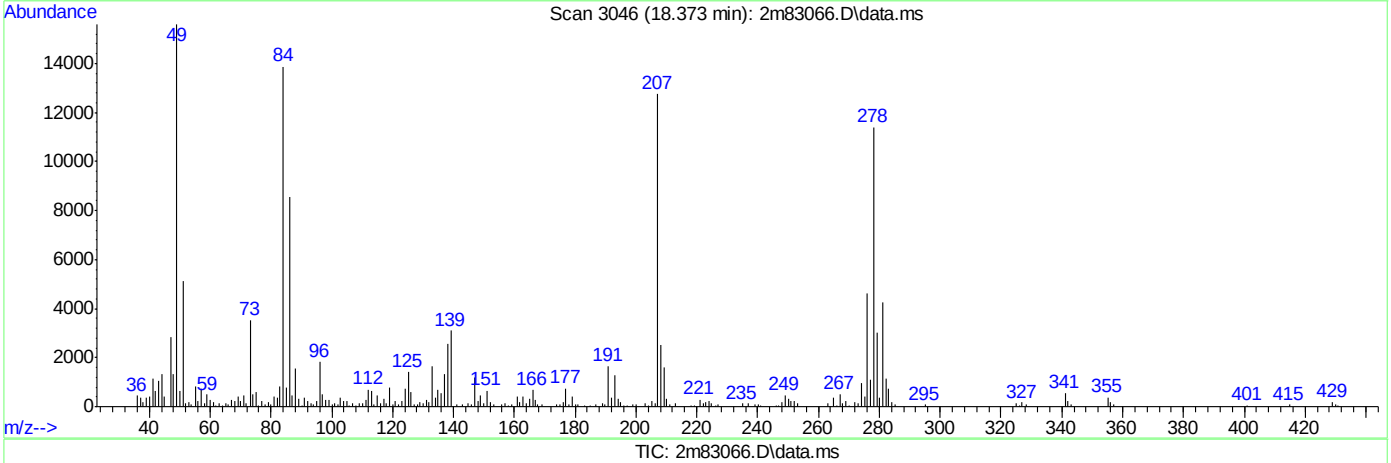
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		18.33	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83066.D
Acq On : 15 Apr 2016 9:12 am
Operator : ashleyn
Sample : ic3649-2
Misc : op92470,e2m3649
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 15 11:20:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:19:34 2016
Response via : Initial Calibration





TIC: 2m83066.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

18.373min (-0.043) 0.59ppm

response 8684

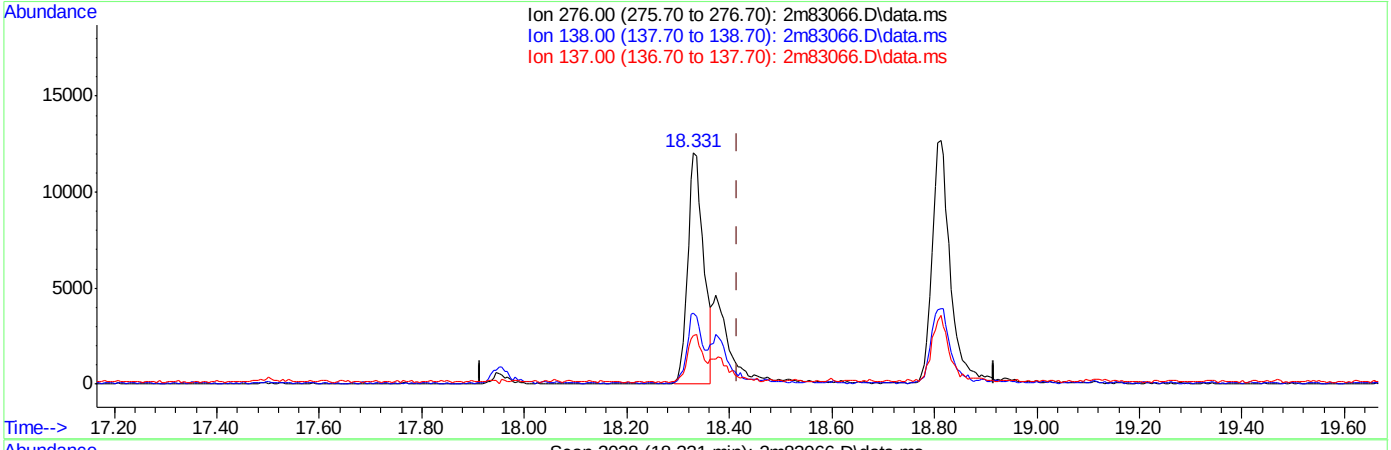
Ion	Exp%	Act%
276.00	100	100
138.00	28.30	56.76
137.00	20.20	21.89
0.00	0.00	0.00

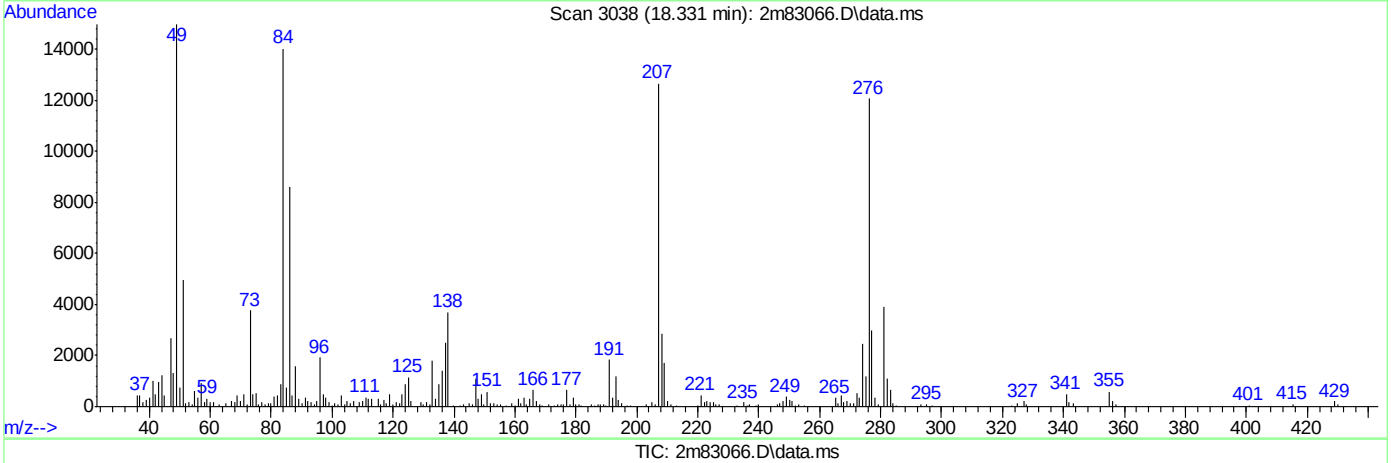
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83066.D
Acq On : 15 Apr 2016 9:12 am
Operator : ashleyn
Sample : ic3649-2
Misc : op92470,e2m3649
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 15 11:20:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:19:34 2016
Response via : Initial Calibration





TIC: 2m83066.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

18.331min (-0.085) 1.76ppm m

response 25983

Ion	Exp%	Act%
276.00	100	100
138.00	28.30	30.64
137.00	20.20	20.89
0.00	0.00	0.00

SGS ACCUTEST JC18516

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/18/16 10:23

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83067.D
Acq On : 15 Apr 2016 9:42 am
Operator : ashleyn
Sample : ic3649-1
Misc : op92470,e2m3649
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 15 11:27:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:22:37 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	176178	40.00	ppm	0.00
24) Naphthalene-d8	6.023	136	698744	40.00	ppm	0.00
47) Acenaphthene-d10	8.142	164	402224	40.00	ppm	0.00
69) Phenanthrene-d10	10.340	188	603430	40.00	ppm	0.00
83) Chrysene-d12	14.544	240	522218	40.00	ppm	-0.01
92) Perylene-d12	16.673	264	516486	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	176178	40.00	ppm	0.00
104) Acenaphthene-d10a	8.142	164	402224	40.00	ppm	0.00
106) Chrysene-d12a	14.544	240	522218	40.00	ppm	-0.01
109) Phenanthrene-d10a	10.340	188	603430	40.00	ppm	0.00
112) Naphthalene-d8a	6.023	136	698744	40.00	ppm	0.00
114) Chrysene-d12b	14.544	240	522218	40.00	ppm	-0.01

System Monitoring Compounds						
5) 2-Fluorophenol	3.916	112	7137	1.06	ppm	0.00
Spiked Amount 50.000			Recovery = 2.12%			
8) Phenol-d5	4.617	99	8955	1.07	ppm	0.01
Spiked Amount 50.000			Recovery = 2.14%			
25) Nitrobenzene-d5	5.350	82	7180	1.12	ppm	0.00
Spiked Amount 50.000			Recovery = 2.24%			
51) 2-Fluorobiphenyl	7.248	172	14998	1.21	ppm	-0.01
Spiked Amount 50.000			Recovery = 2.42%			
73) 2,4,6-Tribromophenol	9.281	330	1536	1.01	ppm	-0.02
Spiked Amount 50.000			Recovery = 2.02%			
85) Terphenyl-d14	12.902	244	11893	1.06	ppm	-0.02
Spiked Amount 50.000			Recovery = 2.12%			
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds						Qvalue
2) 1,4-Dioxane	2.483	88	3451	1.15	ppm	95
3) Pyridine	2.836	79	7872	1.07	ppm	97
4) N-Nitrosodimethylamine	2.777	74	4836	1.10	ppm	99
6) Indene	5.104	116	13312	1.27	ppm	99
7) Cumene	4.290	105	18544	1.17	ppm	99
9) Phenol	4.627	94	10577	1.16	ppm	86
10) Aniline	4.644	93	11196	1.21	ppm	97
11) bis(2-Chloroethyl)ether	4.686	93	7362	1.11	ppm	99
12) 2-Chlorophenol	4.740	128	7806	1.14	ppm	97
13) Decane	4.761	43	6537	1.27	ppm	91
14) 1,3-Dichlorobenzene	4.852	146	8556	1.13	ppm	98
15) 1,4-Dichlorobenzene	4.906	146	8820	1.17	ppm	99
16) Benzyl alcohol	5.007	108	4646	1.10	ppm	98
17) 1,2-Dichlorobenzene	5.034	146	8348	1.20	ppm	96
18) Acetophenone	5.221	105	10169	1.23	ppm	89
19) 2-Methylphenol	5.098	108	6877	1.20	ppm	97
20) 2,2'-oxybis(1-Chloropr...	5.109	45	8786	1.35	ppm	98
21) 3&4-Methylphenol	5.221	108	7627	1.31	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83067.D
Acq On : 15 Apr 2016 9:42 am
Operator : ashleyn
Sample : ic3649-1
Misc : op92470,e2m3649
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 15 11:27:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:22:37 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
22) n-Nitroso-di-n-propyla...	5.216	70	5087	1.25	ppm		85
23) Hexachloroethane	5.317	201	2375	1.15	ppm		89
26) Nitrobenzene	5.371	77	7475	1.15	ppm		97
27) Quinoline	6.398	129	14779	1.11	ppm		96
28) Isophorone	5.580	82	12528	1.09	ppm		99
29) 2-Nitrophenol	5.654	139	3541	1.03	ppm		95
30) 2,4-Dimethylphenol	5.686	107	6762	1.10	ppm		95
31) Benzoic acid	5.735	105	3656	0.73	ppm		91
32) bis(2-Chloroethoxy)met...	5.772	93	8282	1.12	ppm		97
33) 2,4-Dichlorophenol	5.884	162	5603	1.11	ppm		96
34) 2,6-Dichlorophenol	6.109	162	5661	1.16	ppm		98
35) 1,3,5-Trichlorobenzene	5.665	180	6753	1.25	ppm		97
36) 1,2,4-Trichlorobenzene	5.965	180	6196	1.16	ppm		96
37) 1,2,3-Trichlorobenzene	6.195	180	5849	1.13	ppm		98
38) Naphthalene	6.045	128	23746	1.18	ppm		98
39) 4-Chloroaniline	6.098	127	8527	1.16	ppm		97
40) 2,3-Dichloroaniline	7.141	161	6934	1.15	ppm		97
41) Caprolactam	6.446	55	2408	0.98	ppm		91
42) Hexachlorobutadiene	6.173	225	2823	1.17	ppm		96
43) 4-Chloro-3-methylphenol	6.622	107	5686	1.05	ppm		97
44) 2-Methylnaphthalene	6.799	141	12191	1.16	ppm		98
45) 1-Methylnaphthalene	6.917	141	13049	1.20	ppm		98
46) Dimethylnaphthalene	7.575	156	12698	1.16	ppm		97
48) Hexachlorocyclopentadiene	6.997	237	5152	2.09	ppm		97
49) 2,4,6-Trichlorophenol	7.147	196	3551	1.16	ppm		95
50) 2,4,5-Trichlorophenol	7.189	196	3550	1.06	ppm		96
52) 2-Chloronaphthalene	7.398	162	13408	1.19	ppm		97
53) Biphenyl	7.371	154	17816	1.21	ppm		98
54) 2-Nitroaniline	7.532	65	3083	0.98	ppm		89
55) Dimethylphthalate	7.783	163	14088	1.12	ppm		96
56) Acenaphthylene	7.944	152	20211	1.11	ppm		99
57) 2,6-Dinitrotoluene	7.853	165	2495	0.93	ppm		88
58) 3-Nitroaniline	8.088	138	3020	0.91	ppm		95
59) Acenaphthene	8.184	153	13776	1.19	ppm		98
60) 2,4-Dinitrophenol	8.238	184	1462	1.14	ppm	#	55
61) 4-Nitrophenol	8.361	109	1378	0.88	ppm		95
62) Dibenzofuran	8.430	168	18842	1.26	ppm		96
63) 2,4-Dinitrotoluene	8.420	165	3432	0.98	ppm		83
64) 2,3,4,6-Tetrachlorophenol	8.623	232	2471	1.01	ppm		82
65) Diethylphthalate	8.794	149	13368	1.11	ppm		99
66) Fluorene	8.922	166	14923	1.20	ppm		99
67) 4-Chlorophenyl-phenyle...	8.938	204	5989	1.18	ppm		98
68) 4-Nitroaniline	8.965	138	2938	0.90	ppm		96
70) 4,6-Dinitro-2-methylph...	9.013	198	1155	0.64	ppm		95
71) n-Nitrosodiphenylamine	9.115	169	9123	1.09	ppm		99
72) 1,2-Diphenylhydrazine	9.174	77	12973	1.08	ppm		96
74) 4-Bromophenyl-phenylether	9.671	248	3077	1.05	ppm		85
75) Hexachlorobenzene	9.757	284	3845	1.17	ppm		92
76) Pentachlorophenol	10.072	266	3744	1.92	ppm		98
77) Phenanthrene	10.372	178	21589	1.20	ppm		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83067.D
Acq On : 15 Apr 2016 9:42 am
Operator : ashleyn
Sample : ic3649-1
Misc : op92470,e2m3649
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 15 11:27:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:22:37 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
78) Anthracene	10.452	178	19530	1.12 ppm	99
79) Carbazole	10.725	167	17800	1.09 ppm	96
80) Di-n-butylphthalate	11.345	149	20467	1.00 ppm	98
81) Fluoranthene	12.249	202	18154	1.10 ppm	98
82) Octadecane	10.270	57	7485	1.05 ppm	93
84) Pyrene	12.597	202	19350	1.06 ppm	96
86) Butylbenzylphthalate	13.736	149	8881	0.93 ppm	95
87) Butyl stearate	13.897	56	4733	0.91 ppm	89
88) Benzo[a]anthracene	14.528	228	18111	1.16 ppm	98
89) 3,3'-Dichlorobenzidine	14.528	252	5501	1.01 ppm	90
90) Chrysene	14.581	228	18195	1.13 ppm	97
91) bis(2-Ethylhexyl)phtha...	14.694	149	11728	0.93 ppm	90
93) Di-n-octylphthalate	15.683	149	17818	0.86 ppm	98
94) Benzo[b]fluoranthene	16.138	252	17417	1.07 ppm	95
95) Benzo[k]fluoranthene	16.175	252	17370	1.12 ppm	98
96) Benzo[a]pyrene	16.587	252	14795	1.03 ppm	96
97) Indeno[1,2,3-cd]pyrene	18.331	276	12683m	0.89 ppm	
98) Dibenz(a,h)acridine	17.951	279	11061	0.86 ppm	97
99) Dibenz[a,h]anthracene	18.379	278	16310	1.07 ppm	96
100) 7,12-Dimethylbenz(a)an...	16.138	256	7491	1.07 ppm	96
101) Benzo[g,h,i]perylene	18.812	276	16369	1.04 ppm	96

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

7.6.2

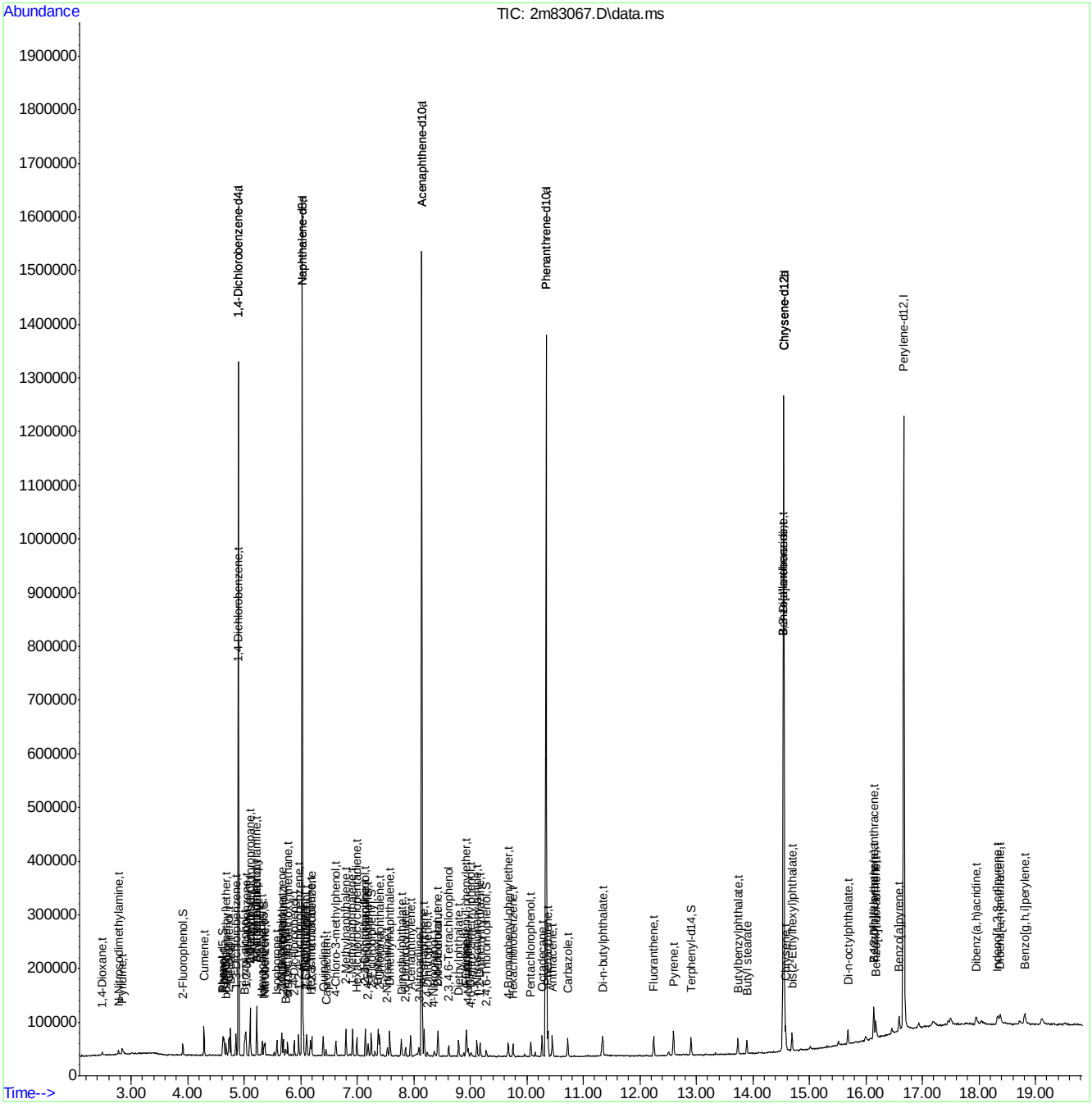
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83067.D
Acq On : 15 Apr 2016 9:42 am
Operator : ashleyn
Sample : ic3649-1
Misc : op92470,e2m3649
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 15 11:27:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:22:37 2016
Response via : Initial Calibration



Manual Integration Approval Summary

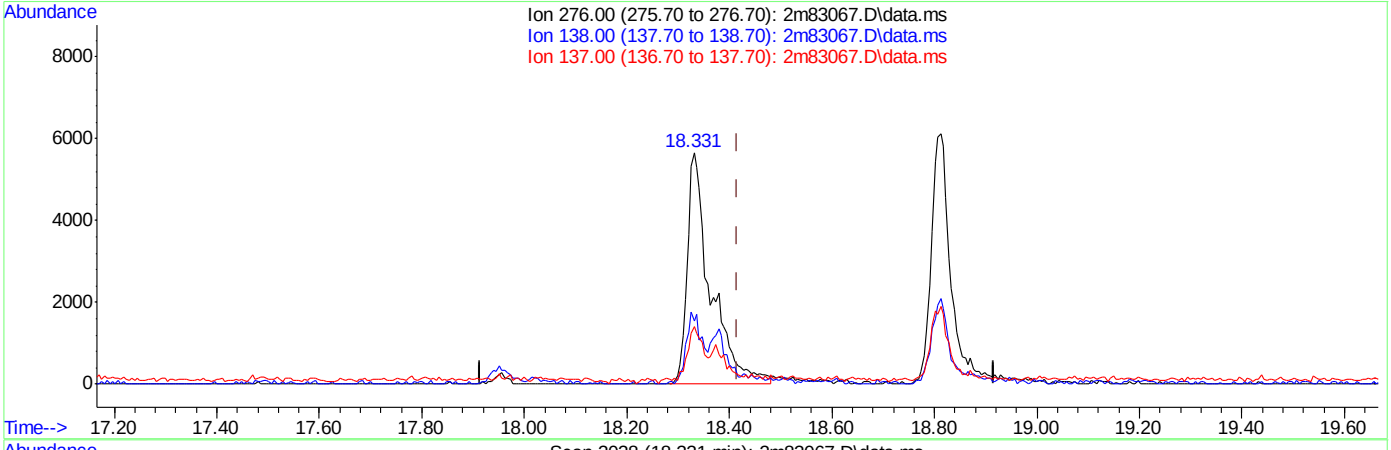
Sample Number:	E2M3649-IC3649	**Method:**	SW846 8270D
Lab FileID:	2M83067.D	**Analyst approved:**	04/15/16 17:43 Ashley Noble
Injection Time:	04/15/16 09:42	**Supervisor approved:**	04/18/16 10:23 Nina Pandya

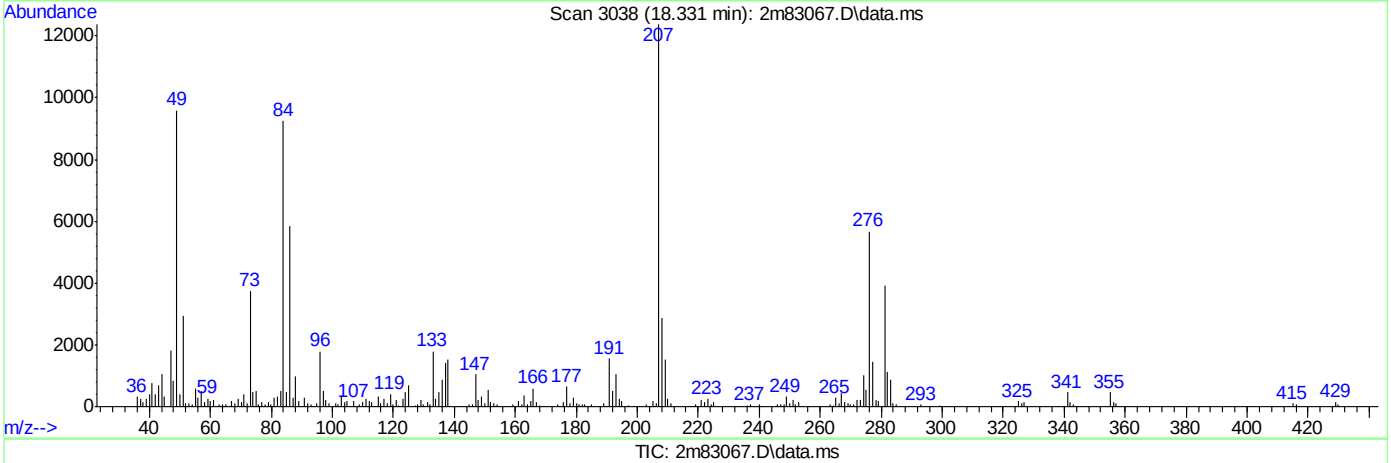
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		18.33	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83067.D
Acq On : 15 Apr 2016 9:42 am
Operator : ashleyn
Sample : ic3649-1
Misc : op92470,e2m3649
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 15 11:22:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:22:37 2016
Response via : Initial Calibration





(97) Indeno[1,2,3-cd]pyrene (t)

18.331min (-0.085) 1.27ppm

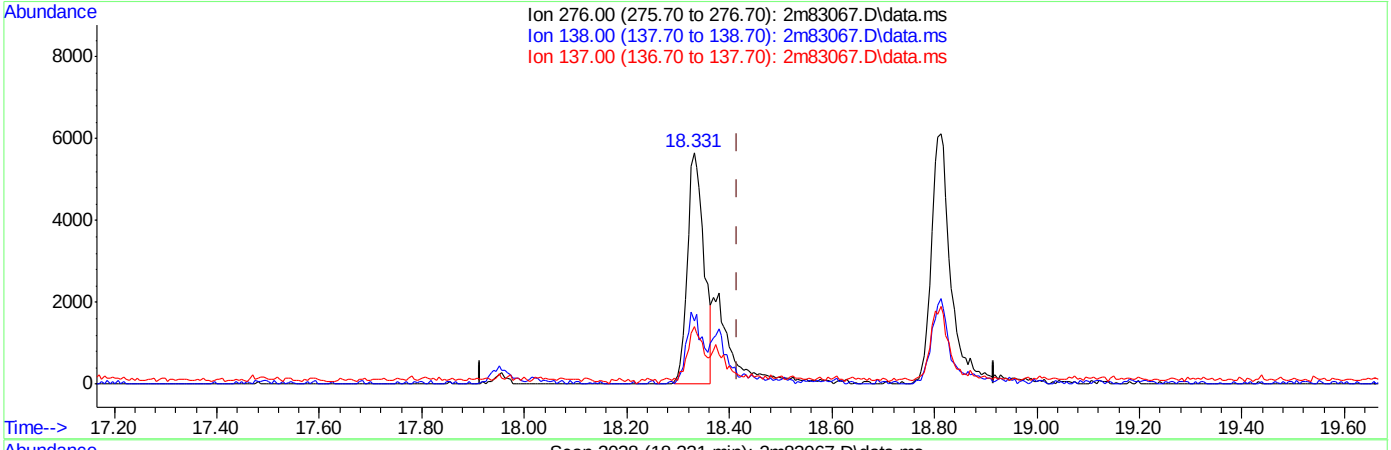
response 18000

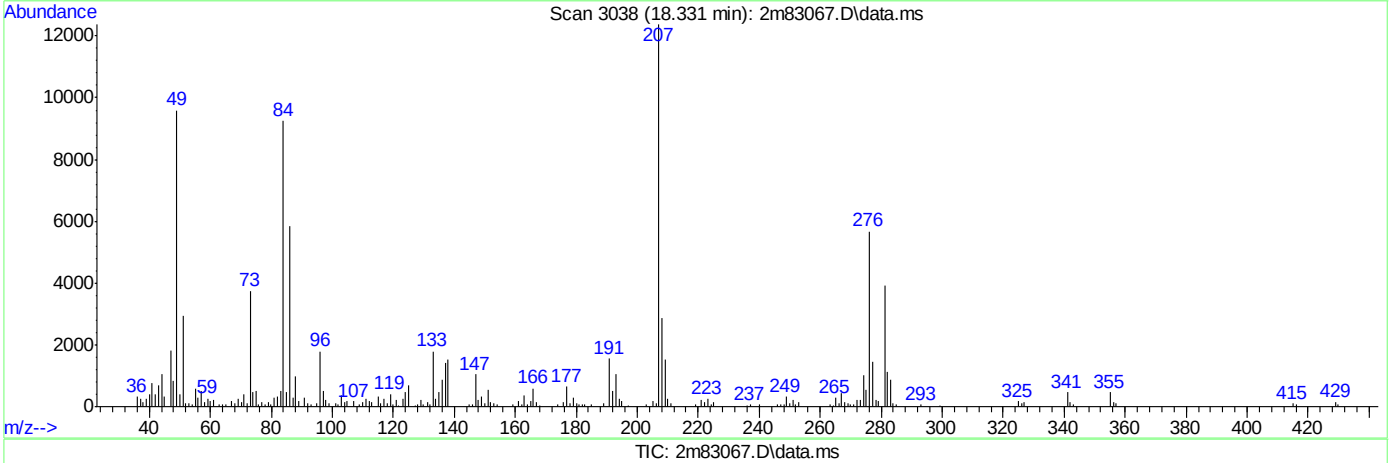
Ion	Exp%	Act%
276.00	100	100
138.00	28.30	25.77
137.00	20.20	21.34
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83067.D
Acq On : 15 Apr 2016 9:42 am
Operator : ashleyn
Sample : ic3649-1
Misc : op92470,e2m3649
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 15 11:22:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:22:37 2016
Response via : Initial Calibration





(97) Indeno[1,2,3-cd]pyrene (t)

18.331min (-0.085) 0.89ppm m

response 12683

Ion	Exp%	Act%
276.00	100	100
138.00	28.30	27.25
137.00	20.20	24.81
0.00	0.00	0.00

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83068.D
Acq On : 15 Apr 2016 10:08 am
Operator : ashleyn
Sample : ic3649-100
Misc : op92470,e2m3649
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 15 11:19:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:19:34 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	160582	40.00	ppm	0.00
24) Naphthalene-d8	6.029	136	647966	40.00	ppm	0.00
47) Acenaphthene-d10	8.147	164	380537	40.00	ppm	0.00
69) Phenanthrene-d10	10.345	188	578561	40.00	ppm	0.00
83) Chrysene-d12	14.554	240	452602	40.00	ppm	0.00
92) Perylene-d12	16.678	264	493837	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	160582	40.00	ppm	0.00
104) Acenaphthene-d10a	8.147	164	380537	40.00	ppm	0.00
106) Chrysene-d12a	14.554	240	452602	40.00	ppm	0.00
109) Phenanthrene-d10a	10.345	188	578561	40.00	ppm	0.00
112) Naphthalene-d8a	6.029	136	647966	40.00	ppm	0.00
114) Chrysene-d12b	14.554	240	452602	40.00	ppm	0.00

System Monitoring Compounds						
5) 2-Fluorophenol	3.916	112	569463	100.00	ppm	0.00
Spiked Amount 50.000			Recovery = 200.00%			
8) Phenol-d5	4.627	99	684734	100.00	ppm	0.02
Spiked Amount 50.000			Recovery = 200.00%			
25) Nitrobenzene-d5	5.355	82	549823	100.00	ppm	0.00
Spiked Amount 50.000			Recovery = 200.00%			
51) 2-Fluorobiphenyl	7.253	172	992369	100.00	ppm	0.00
Spiked Amount 50.000			Recovery = 200.00%			
73) 2,4,6-Tribromophenol	9.297	330	148515	100.00	ppm	0.00
Spiked Amount 50.000			Recovery = 200.00%			
85) Terphenyl-d14	12.912	244	914104	100.00	ppm	0.00
Spiked Amount 50.000			Recovery = 200.00%			
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds						Qvalue
2) 1,4-Dioxane	2.472	88	251112	100.00	ppm	98
3) Pyridine	2.798	79	639127	100.00	ppm	95
4) N-Nitrosodimethylamine	2.755	74	380193	100.00	ppm	95
6) Indene	5.103	116	716572	100.00	ppm	97
7) Cumene	4.290	105	1255742	100.00	ppm	99
9) Phenol	4.638	94	717232	100.00	ppm	75
10) Aniline	4.649	93	713445	100.00	ppm	95
11) bis(2-Chloroethyl)ether	4.686	93	554737	100.00	ppm	96
12) 2-Chlorophenol	4.740	128	544087	100.00	ppm	93
13) Decane	4.766	43	376555	100.00	ppm	99
14) 1,3-Dichlorobenzene	4.852	146	590525	100.00	ppm	99
15) 1,4-Dichlorobenzene	4.911	146	579570	100.00	ppm	100
16) Benzyl alcohol	5.012	108	349711	100.00	ppm	95
17) 1,2-Dichlorobenzene	5.034	146	522920	100.00	ppm	99
18) Acetophenone	5.226	105	595680	100.00	ppm	78
19) 2-Methylphenol	5.103	108	400967	100.00	ppm	97
20) 2,2'-oxybis(1-Chloropr...	5.114	45	424630	100.00	ppm	88
21) 3&4-Methylphenol	5.232	108	416190	100.00	ppm	100

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83068.D
Acq On : 15 Apr 2016 10:08 am
Operator : ashleyn
Sample : ic3649-100
Misc : op92470,e2m3649
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 15 11:19:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:19:34 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
22) n-Nitroso-di-n-propyla...	5.226	70	292367	100.00	ppm	94
23) Hexachloroethane	5.317	201	169506	100.00	ppm	98
26) Nitrobenzene	5.376	77	547396	100.00	ppm	100
27) Quinoline	6.414	129	1141145	100.00	ppm	99
28) Isophorone	5.585	82	983833	100.00	ppm	99
29) 2-Nitrophenol	5.660	139	290976	100.00	ppm	86
30) 2,4-Dimethylphenol	5.697	107	521234	100.00	ppm	97
31) Benzoic acid	5.831	105	499223	100.00	ppm	98
32) bis(2-Chloroethoxy)met...	5.777	93	587249	100.00	ppm	99
33) 2,4-Dichlorophenol	5.895	162	421532	100.00	ppm	100
34) 2,6-Dichlorophenol	6.114	162	391966	100.00	ppm	98
35) 1,3,5-Trichlorobenzene	5.670	180	419260	100.00	ppm	99
36) 1,2,4-Trichlorobenzene	5.970	180	427938	100.00	ppm	99
37) 1,2,3-Trichlorobenzene	6.200	180	418164	100.00	ppm	98
38) Naphthalene	6.050	128	1553321	100.00	ppm	99
39) 4-Chloroaniline	6.103	127	582462	100.00	ppm	96
40) 2,3-Dichloroaniline	7.146	161	468789	100.00	ppm	97
41) Caprolactam	6.510	55	223603	100.00	ppm	96
42) Hexachlorobutadiene	6.178	225	193930	100.00	ppm	98
43) 4-Chloro-3-methylphenol	6.638	107	476370	100.00	ppm	100
44) 2-Methylnaphthalene	6.804	141	845237	100.00	ppm	99
45) 1-Methylnaphthalene	6.922	141	866978	100.00	ppm	98
46) Dimethylnaphthalene	7.585	156	879448	100.00	ppm	99
48) Hexachlorocyclopentadiene	6.997	237	437072	200.00	ppm	99
49) 2,4,6-Trichlorophenol	7.152	196	254625	100.00	ppm	99
50) 2,4,5-Trichlorophenol	7.205	196	303207	100.00	ppm	99
52) 2-Chloronaphthalene	7.403	162	919290	100.00	ppm	99
53) Biphenyl	7.382	154	1173856	100.00	ppm	100
54) 2-Nitroaniline	7.548	65	288300	100.00	ppm	96
55) Dimethylphthalate	7.794	163	1087371	100.00	ppm	99
56) Acenaphthylene	7.949	152	1549808	100.00	ppm	99
57) 2,6-Dinitrotoluene	7.869	165	265778	100.00	ppm	99
58) 3-Nitroaniline	8.104	138	320344	100.00	ppm	99
59) Acenaphthene	8.195	153	932785	100.00	ppm	97
60) 2,4-Dinitrophenol	8.248	184	312655	200.00	ppm	70
61) 4-Nitrophenol	8.377	109	156247	100.00	ppm	96
62) Dibenzofuran	8.441	168	1179395	100.00	ppm	98
63) 2,4-Dinitrotoluene	8.435	165	329689	100.00	ppm	76
64) 2,3,4,6-Tetrachlorophenol	8.628	232	221576	100.00	ppm	95
65) Diethylphthalate	8.805	149	1070315	100.00	ppm	100
66) Fluorene	8.933	166	988498	100.00	ppm	99
67) 4-Chlorophenyl-phenyle...	8.949	204	405327	100.00	ppm	98
68) 4-Nitroaniline	8.997	138	327029	100.00	ppm	97
70) 4,6-Dinitro-2-methylph...	9.035	198	214511	100.00	ppm	95
71) n-Nitrosodiphenylamine	9.131	169	730500	100.00	ppm	99
72) 1,2-Diphenylhydrazine	9.184	77	1075089	100.00	ppm	98
74) 4-Bromophenyl-phenylether	9.682	248	256583	100.00	ppm	98
75) Hexachlorobenzene	9.767	284	284907	100.00	ppm	96
76) Pentachlorophenol	10.078	266	362304	200.00	ppm	100
77) Phenanthrene	10.382	178	1460596	100.00	ppm	100

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83068.D
Acq On : 15 Apr 2016 10:08 am
Operator : ashleyn
Sample : ic3649-100
Misc : op92470,e2m3649
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 15 11:19:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:19:34 2016
Response via : Initial Calibration

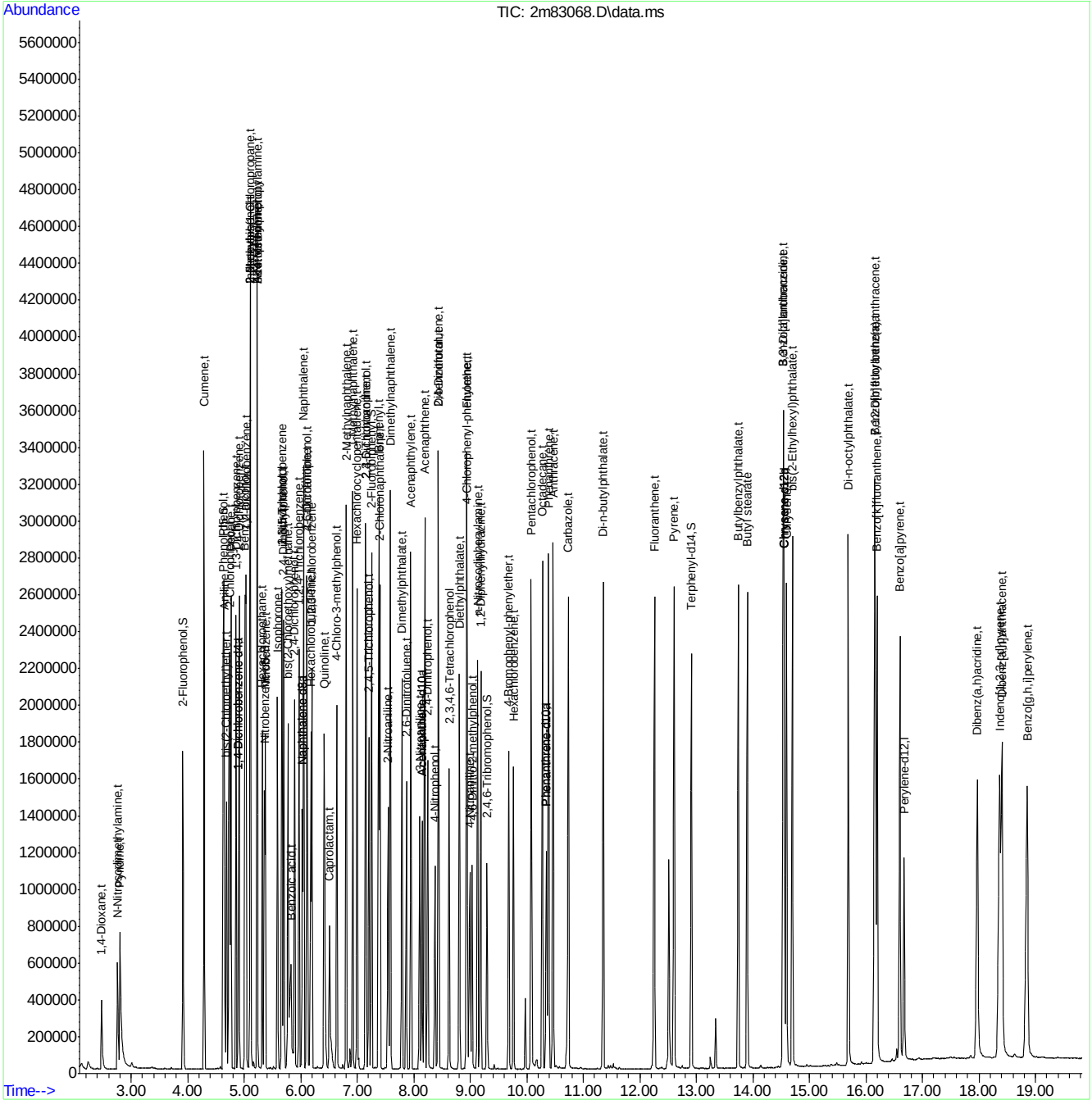
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
78) Anthracene	10.463	178	1476887	100.00 ppm	99
79) Carbazole	10.735	167	1419032	100.00 ppm	99
80) Di-n-butylphthalate	11.351	149	1802455	100.00 ppm	100
81) Fluoranthene	12.260	202	1410861	100.00 ppm	98
82) Octadecane	10.275	57	615203	100.00 ppm	98
84) Pyrene	12.613	202	1461807	100.00 ppm	100
86) Butylbenzylphthalate	13.741	149	821538	100.00 ppm	98
87) Butyl stearate	13.896	56	436193	100.00 ppm	95
88) Benzo[a]anthracene	14.533	228	1194754	100.00 ppm	99
89) 3,3'-Dichlorobenzidine	14.538	252	446044	100.00 ppm	99
90) Chrysene	14.597	228	1275381	100.00 ppm	99
91) bis(2-Ethylhexyl)phtha...	14.699	149	1099208	100.00 ppm	98
93) Di-n-octylphthalate	15.688	149	1941557	100.00 ppm	100
94) Benzo[b]fluoranthene	16.154	252	1362523	100.00 ppm	97
95) Benzo[k]fluoranthene	16.202	252	1304717	100.00 ppm	96
96) Benzo[a]pyrene	16.603	252	1293570	100.00 ppm	98
97) Indeno[1,2,3-cd]pyrene	18.368	276	1442943	100.00 ppm	93
98) Dibenz(a,h)acridine	17.972	279	1237106	100.00 ppm	98
99) Dibenz[a,h]anthracene	18.411	278	1419685	100.00 ppm	97
100) 7,12-Dimethylbenz(a)an...	16.164	256	577923	100.00 ppm	97
101) Benzo[g,h,i]perylene	18.855	276	1436835	100.00 ppm	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83068.D
Acq On : 15 Apr 2016 10:08 am
Operator : ashleyn
Sample : ic3649-100
Misc : op92470,e2m3649
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 15 11:19:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:19:34 2016
Response via : Initial Calibration



SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83069.D
Acq On : 15 Apr 2016 10:34 am
Operator : ashleyn
Sample : ic3649-80
Misc : op92470,e2m3649
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 15 11:29:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:27:52 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	160389	40.00	ppm	0.00
24) Naphthalene-d8	6.029	136	647316	40.00	ppm	0.00
47) Acenaphthene-d10	8.147	164	380610	40.00	ppm	0.00
69) Phenanthrene-d10	10.345	188	587483	40.00	ppm	0.00
83) Chrysene-d12	14.555	240	467299	40.00	ppm	0.00
92) Perylene-d12	16.678	264	497654	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	160389	40.00	ppm	0.00
104) Acenaphthene-d10a	8.147	164	380610	40.00	ppm	0.00
106) Chrysene-d12a	14.555	240	467299	40.00	ppm	0.00
109) Phenanthrene-d10a	10.345	188	587483	40.00	ppm	0.00
112) Naphthalene-d8a	6.029	136	647316	40.00	ppm	0.00
114) Chrysene-d12b	14.555	240	467299	40.00	ppm	0.00

System Monitoring Compounds						
5) 2-Fluorophenol	3.916	112	466687	74.74	ppm	0.00
Spiked Amount 50.000			Recovery = 149.48%			
8) Phenol-d5	4.627	99	565562	72.63	ppm	0.03
Spiked Amount 50.000			Recovery = 145.26%			
25) Nitrobenzene-d5	5.355	82	454512	73.44	ppm	0.00
Spiked Amount 50.000			Recovery = 146.88%			
51) 2-Fluorobiphenyl	7.248	172	833219	66.34	ppm	-0.01
Spiked Amount 50.000			Recovery = 132.68%			
73) 2,4,6-Tribromophenol	9.291	330	124643	83.93	ppm	0.00
Spiked Amount 50.000			Recovery = 167.86%			
85) Terphenyl-d14	12.907	244	772157	75.54	ppm	-0.02
Spiked Amount 50.000			Recovery = 151.08%			
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds						Qvalue
2) 1,4-Dioxane	2.472	88	201407	70.31	ppm	98
3) Pyridine	2.798	79	509359	74.26	ppm	97
4) N-Nitrosodimethylamine	2.755	74	308620	74.42	ppm	96
6) Indene	5.104	116	622189	59.76	ppm	98
7) Cumene	4.291	105	1048559	68.67	ppm	99
9) Phenol	4.638	94	603372	68.98	ppm	72
10) Aniline	4.649	93	603858	66.85	ppm	97
11) bis(2-Chloroethyl)ether	4.686	93	459316	73.24	ppm	97
12) 2-Chlorophenol	4.740	128	454695	69.83	ppm	95
13) Decane	4.761	43	321602	62.96	ppm	96
14) 1,3-Dichlorobenzene	4.852	146	493980	68.85	ppm	98
15) 1,4-Dichlorobenzene	4.911	146	490171	67.51	ppm	100
16) Benzyl alcohol	5.013	108	293834	73.81	ppm	98
17) 1,2-Dichlorobenzene	5.034	146	449097	66.55	ppm	99
18) Acetophenone	5.227	105	511835	63.19	ppm	78
19) 2-Methylphenol	5.104	108	348789	62.66	ppm	98
20) 2,2'-oxybis(1-Chloropr...	5.114	45	372296	56.15	ppm	92
21) 3&4-Methylphenol	5.227	108	363451	62.15	ppm	99

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83069.D
Acq On : 15 Apr 2016 10:34 am
Operator : ashleyn
Sample : ic3649-80
Misc : op92470,e2m3649
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 15 11:29:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:27:52 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
22) n-Nitroso-di-n-propyla...	5.221	70	252588	62.89	ppm		92
23) Hexachloroethane	5.317	201	143131	72.53	ppm		99
26) Nitrobenzene	5.371	77	452490	71.40	ppm		98
27) Quinoline	6.409	129	935708	73.28	ppm		98
28) Isophorone	5.585	82	813170	74.27	ppm		99
29) 2-Nitrophenol	5.660	139	246425	76.65	ppm		87
30) 2,4-Dimethylphenol	5.697	107	433077	73.43	ppm		99
31) Benzoic acid	5.826	105	403692	96.06	ppm		98
32) bis(2-Chloroethoxy)met...	5.772	93	486925	68.49	ppm		98
33) 2,4-Dichlorophenol	5.890	162	354316	73.07	ppm		98
34) 2,6-Dichlorophenol	6.114	162	331844	69.74	ppm		99
35) 1,3,5-Trichlorobenzene	5.670	180	355947	65.64	ppm		100
36) 1,2,4-Trichlorobenzene	5.970	180	359951	69.04	ppm		99
37) 1,2,3-Trichlorobenzene	6.200	180	345307	68.88	ppm		98
38) Naphthalene	6.050	128	1302948	66.05	ppm		99
39) 4-Chloroaniline	6.104	127	499004	69.67	ppm		97
40) 2,3-Dichloroaniline	7.147	161	398957	68.20	ppm		98
41) Caprolactam	6.500	55	181132	80.33	ppm		96
42) Hexachlorobutadiene	6.179	225	164081	69.36	ppm		99
43) 4-Chloro-3-methylphenol	6.639	107	392423	76.94	ppm		99
44) 2-Methylnaphthalene	6.804	141	711342	69.42	ppm		99
45) 1-Methylnaphthalene	6.922	141	731358	68.23	ppm		99
46) Dimethylnaphthalene	7.580	156	737854	68.97	ppm		99
48) Hexachlorocyclopentadiene	6.997	237	374524	158.23	ppm		99
49) 2,4,6-Trichlorophenol	7.152	196	216185	70.79	ppm		98
50) 2,4,5-Trichlorophenol	7.200	196	250811	77.56	ppm		99
52) 2-Chloronaphthalene	7.403	162	767544	67.53	ppm		99
53) Biphenyl	7.377	154	989182	66.25	ppm		99
54) 2-Nitroaniline	7.542	65	234944	79.56	ppm		98
55) Dimethylphthalate	7.794	163	906539	73.24	ppm		100
56) Acenaphthylene	7.949	152	1299264	72.78	ppm		99
57) 2,6-Dinitrotoluene	7.869	165	219233	88.60	ppm		96
58) 3-Nitroaniline	8.099	138	261926	86.16	ppm		100
59) Acenaphthene	8.190	153	783963	67.22	ppm		99
60) 2,4-Dinitrophenol	8.248	184	255950	246.11	ppm	#	80
61) 4-Nitrophenol	8.372	109	126747	89.02	ppm		94
62) Dibenzofuran	8.436	168	1004417	65.16	ppm		90
63) 2,4-Dinitrotoluene	8.430	165	275611	83.99	ppm		79
64) 2,3,4,6-Tetrachlorophenol	8.623	232	185316	79.99	ppm		96
65) Diethylphthalate	8.805	149	885901	75.02	ppm		99
66) Fluorene	8.933	166	846081	67.49	ppm		99
67) 4-Chlorophenyl-phenyle...	8.944	204	346336	67.85	ppm		98
68) 4-Nitroaniline	8.992	138	268185	89.86	ppm		98
70) 4,6-Dinitro-2-methylph...	9.029	198	174143	112.60	ppm		96
71) n-Nitrosodiphenylamine	9.126	169	606273	72.14	ppm		100
72) 1,2-Diphenylhydrazine	9.179	77	888947	74.22	ppm		99
74) 4-Bromophenyl-phenylether	9.677	248	215948	74.36	ppm		94
75) Hexachlorobenzene	9.762	284	239194	70.92	ppm		98
76) Pentachlorophenol	10.078	266	303589	162.23	ppm		98
77) Phenanthrene	10.383	178	1230735	66.01	ppm		100

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83069.D
Acq On : 15 Apr 2016 10:34 am
Operator : ashleyn
Sample : ic3649-80
Misc : op92470,e2m3649
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 15 11:29:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:27:52 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
78) Anthracene	10.463	178	1249460	70.71 ppm	100
79) Carbazole	10.736	167	1185346	72.34 ppm	100
80) Di-n-butylphthalate	11.351	149	1503443	75.59 ppm	100
81) Fluoranthene	12.255	202	1186990	71.41 ppm	98
82) Octadecane	10.276	57	517885	73.31 ppm	99
84) Pyrene	12.608	202	1235596	74.33 ppm	99
86) Butylbenzylphthalate	13.742	149	680246	81.48 ppm	96
87) Butyl stearate	13.897	56	373155	82.67 ppm	94
88) Benzo[a]anthracene	14.533	228	1019793	69.49 ppm	99
89) 3,3'-Dichlorobenzidine	14.539	252	384550	78.41 ppm	99
90) Chrysene	14.597	228	1067768	71.08 ppm	99
91) bis(2-Ethylhexyl)phtha...	14.699	149	917082	83.21 ppm	98
93) Di-n-octylphthalate	15.688	149	1617149	85.27 ppm	99
94) Benzo[b]fluoranthene	16.154	252	1121299	69.75 ppm	96
95) Benzo[k]fluoranthene	16.197	252	1122381	72.09 ppm	97
96) Benzo[a]pyrene	16.598	252	1087150	77.93 ppm	99
97) Indeno[1,2,3-cd]pyrene	18.363	276	1151368	87.24 ppm	93
98) Dibenz(a,h)acridine	17.972	279	1029728	87.35 ppm	99
99) Dibenz[a,h]anthracene	18.406	278	1191363	79.08 ppm	97
100) 7,12-Dimethylbenz(a)an...	16.159	256	492181	71.30 ppm	97
101) Benzo[g,h,i]perylene	18.849	276	1185447	77.30 ppm	98

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

7.6.4

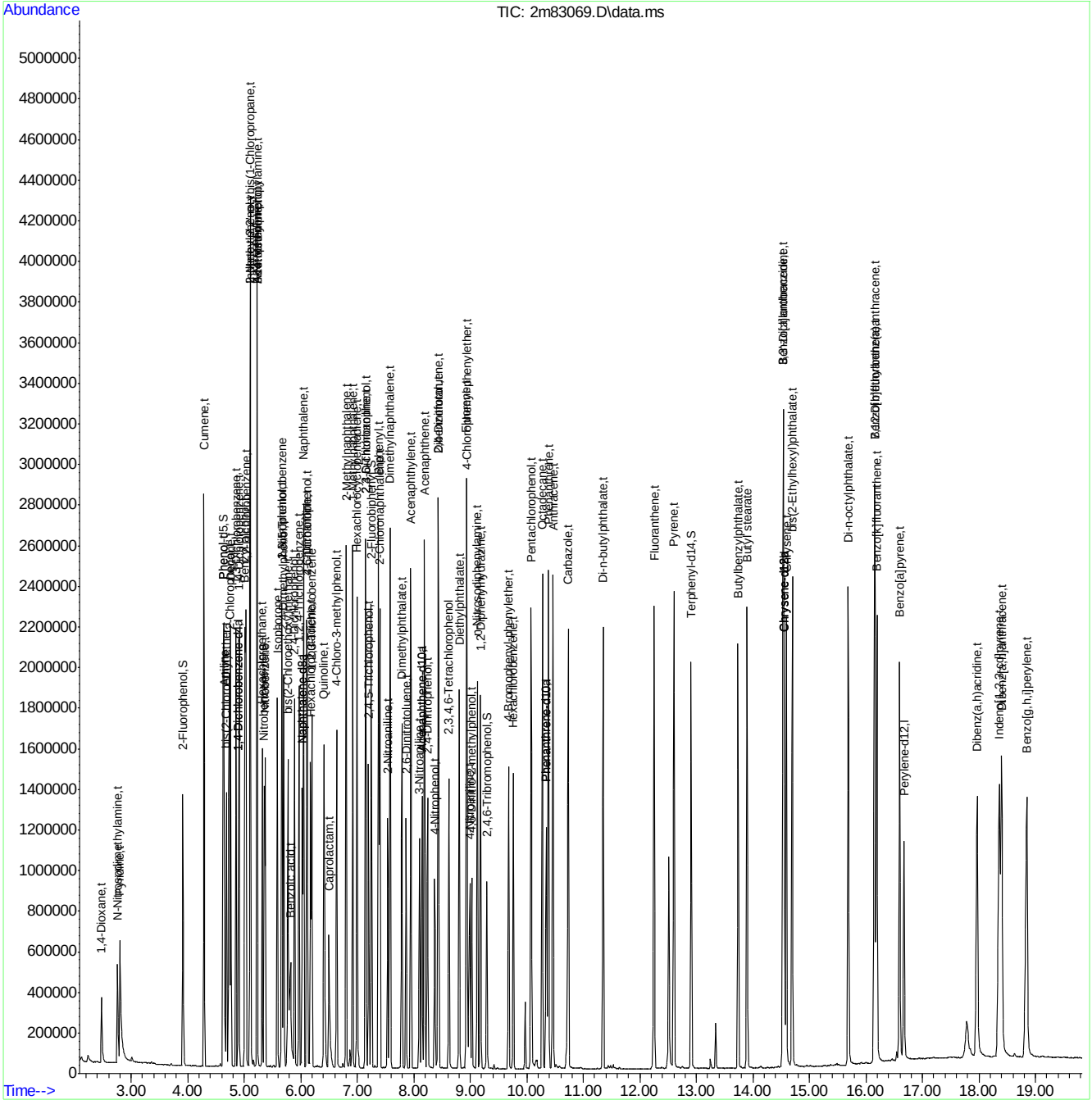
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83069.D
Acq On : 15 Apr 2016 10:34 am
Operator : ashleyn
Sample : ic3649-80
Misc : op92470,e2m3649
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 15 11:29:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:27:52 2016
Response via : Initial Calibration



SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83070.D
Acq On : 15 Apr 2016 11:00 am
Operator : ashleyn
Sample : ic3649-25
Misc : op92470,e2m3649
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 15 11:31:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:30:08 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	177563	40.00 ppm	0.00
24) Naphthalene-d8	6.023	136	700902	40.00 ppm	0.00
47) Acenaphthene-d10	8.142	164	406709	40.00 ppm	0.00
69) Phenanthrene-d10	10.340	188	617884	40.00 ppm	0.00
83) Chrysene-d12	14.549	240	523152	40.00 ppm	0.00
92) Perylene-d12	16.673	264	528141	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	177563	40.00 ppm	0.00
104) Acenaphthene-d10a	8.142	164	406709	40.00 ppm	0.00
106) Chrysene-d12a	14.549	240	523152	40.00 ppm	0.00
109) Phenanthrene-d10a	10.340	188	617884	40.00 ppm	0.00
112) Naphthalene-d8a	6.023	136	700902	40.00 ppm	0.00
114) Chrysene-d12b	14.549	240	523152	40.00 ppm	0.00

System Monitoring Compounds					
5) 2-Fluorophenol	3.911	112	161814	23.80 ppm	0.00
Spiked Amount 50.000			Recovery = 47.60%		
8) Phenol-d5	4.622	99	205402	24.39 ppm	0.02
Spiked Amount 50.000			Recovery = 48.78%		
25) Nitrobenzene-d5	5.350	82	162519	24.76 ppm	0.00
Spiked Amount 50.000			Recovery = 49.52%		
51) 2-Fluorobiphenyl	7.248	172	313797	24.42 ppm	-0.01
Spiked Amount 50.000			Recovery = 48.84%		
73) 2,4,6-Tribromophenol	9.286	330	41102	26.00 ppm	-0.01
Spiked Amount 50.000			Recovery = 52.00%		
85) Terphenyl-d14	12.902	244	276645	24.52 ppm	-0.02
Spiked Amount 50.000			Recovery = 49.04%		
108) 1-chlorooctadecane	0.000	57	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		
111) o-terphenyl	0.000	230	0	0.00 ppm	
Spiked Amount 50.000			Recovery = 0.00%		

Target Compounds					Qvalue
2) 1,4-Dioxane	2.472	88	69395	22.57 ppm	96
3) Pyridine	2.798	79	174607	23.41 ppm	95
4) N-Nitrosodimethylamine	2.761	74	104814	23.24 ppm	97
6) Indene	5.103	116	267466	24.77 ppm	98
7) Cumene	4.290	105	387685	23.78 ppm	99
9) Phenol	4.633	94	225435	24.11 ppm	80
10) Aniline	4.644	93	237858	24.80 ppm	97
11) bis(2-Chloroethyl)ether	4.686	93	156669	23.05 ppm	99
12) 2-Chlorophenol	4.740	128	171057	24.51 ppm	99
13) Decane	4.761	43	129433	24.17 ppm	93
14) 1,3-Dichlorobenzene	4.852	146	184532	24.07 ppm	100
15) 1,4-Dichlorobenzene	4.911	146	185971	24.08 ppm	99
16) Benzyl alcohol	5.007	108	106824	24.72 ppm	99
17) 1,2-Dichlorobenzene	5.034	146	171506	23.96 ppm	99
18) Acetophenone	5.221	105	210060	24.72 ppm	84
19) 2-Methylphenol	5.098	108	146272	25.09 ppm	99
20) 2,2'-oxybis(1-Chloropr...	5.109	45	164887	24.27 ppm	91
21) 3&4-Methylphenol	5.221	108	154007	25.19 ppm	99

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83070.D
Acq On : 15 Apr 2016 11:00 am
Operator : ashleyn
Sample : ic3649-25
Misc : op92470,e2m3649
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 15 11:31:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:30:08 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
22) n-Nitroso-di-n-propyla...	5.216	70	104073	24.73	ppm		91
23) Hexachloroethane	5.317	201	51432	24.10	ppm		96
26) Nitrobenzene	5.366	77	162480	24.33	ppm		97
27) Quinoline	6.398	129	325516	24.05	ppm		100
28) Isophorone	5.580	82	288043	24.74	ppm		99
29) 2-Nitrophenol	5.654	139	88760	25.77	ppm		94
30) 2,4-Dimethylphenol	5.692	107	153473	24.54	ppm		99
31) Benzoic acid	5.783	105	123711	25.89	ppm		98
32) bis(2-Chloroethoxy)met...	5.772	93	175682	23.67	ppm		97
33) 2,4-Dichlorophenol	5.884	162	127386	24.80	ppm		99
34) 2,6-Dichlorophenol	6.109	162	124875	25.04	ppm		99
35) 1,3,5-Trichlorobenzene	5.665	180	137441	24.51	ppm		99
36) 1,2,4-Trichlorobenzene	5.965	180	132643	24.33	ppm		99
37) 1,2,3-Trichlorobenzene	6.195	180	127560	24.35	ppm		98
38) Naphthalene	6.045	128	494686	24.22	ppm		100
39) 4-Chloroaniline	6.098	127	190226	25.35	ppm		96
40) 2,3-Dichloroaniline	7.141	161	151568	24.85	ppm		97
41) Caprolactam	6.467	55	59736	24.44	ppm		97
42) Hexachlorobutadiene	6.173	225	59890	24.18	ppm		98
43) 4-Chloro-3-methylphenol	6.628	107	135135	24.70	ppm		99
44) 2-Methylnaphthalene	6.799	141	264186	24.62	ppm		99
45) 1-Methylnaphthalene	6.917	141	273503	24.46	ppm		100
46) Dimethylnaphthalene	7.580	156	276946	24.76	ppm		97
48) Hexachlorocyclopentadiene	6.997	237	137421	54.48	ppm		99
49) 2,4,6-Trichlorophenol	7.147	196	80915	25.53	ppm		97
50) 2,4,5-Trichlorophenol	7.195	196	87555	25.53	ppm		99
52) 2-Chloronaphthalene	7.398	162	285258	24.44	ppm		99
53) Biphenyl	7.371	154	377092	24.70	ppm		99
54) 2-Nitroaniline	7.537	65	80085	25.41	ppm		97
55) Dimethylphthalate	7.783	163	318766	24.62	ppm		99
56) Acenaphthylene	7.944	152	475493	25.50	ppm		99
57) 2,6-Dinitrotoluene	7.858	165	72064	26.54	ppm		100
58) 3-Nitroaniline	8.093	138	89962	27.17	ppm		96
59) Acenaphthene	8.184	153	292157	24.42	ppm		99
60) 2,4-Dinitrophenol	8.238	184	78330	62.13	ppm	#	78
61) 4-Nitrophenol	8.361	109	40431	25.85	ppm		99
62) Dibenzofuran	8.430	168	385783	24.56	ppm		99
63) 2,4-Dinitrotoluene	8.425	165	100267	28.24	ppm		85
64) 2,3,4,6-Tetrachlorophenol	8.623	232	63142	25.51	ppm		91
65) Diethylphthalate	8.799	149	308463	24.83	ppm		98
66) Fluorene	8.928	166	321088	24.95	ppm		100
67) 4-Chlorophenyl-phenyle...	8.938	204	132426	25.24	ppm		99
68) 4-Nitroaniline	8.971	138	90003	27.38	ppm		98
70) 4,6-Dinitro-2-methylph...	9.019	198	54235	30.26	ppm		97
71) n-Nitrosodiphenylamine	9.120	169	218905	25.39	ppm		99
72) 1,2-Diphenylhydrazine	9.174	77	314971	25.46	ppm		99
74) 4-Bromophenyl-phenylether	9.677	248	74485	24.82	ppm		97
75) Hexachlorobenzene	9.757	284	85629	24.84	ppm		98
76) Pentachlorophenol	10.072	266	105973	53.66	ppm		98
77) Phenanthrene	10.377	178	453617	24.19	ppm		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83070.D
Acq On : 15 Apr 2016 11:00 am
Operator : ashleyn
Sample : ic3649-25
Misc : op92470,e2m3649
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 15 11:31:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:30:08 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
78) Anthracene	10.452	178	464132	25.72 ppm	99
79) Carbazole	10.725	167	424988	25.26 ppm	100
80) Di-n-butylphthalate	11.345	149	519449	25.18 ppm	100
81) Fluoranthene	12.249	202	422124	24.81 ppm	97
82) Octadecane	10.270	57	189941	26.11 ppm	97
84) Pyrene	12.602	202	450325	24.64 ppm	99
86) Butylbenzylphthalate	13.736	149	228213	24.30 ppm	96
87) Butyl stearate	13.891	56	131713	25.85 ppm	98
88) Benzo[a]anthracene	14.528	228	381356	24.00 ppm	100
89) 3,3'-Dichlorobenzidine	14.533	252	147907	27.07 ppm	97
90) Chrysene	14.587	228	390943	23.91 ppm	99
91) bis(2-Ethylhexyl)phtha...	14.694	149	316174	25.37 ppm	96
93) Di-n-octylphthalate	15.683	149	530708	25.94 ppm	100
94) Benzo[b]fluoranthene	16.143	252	412821	25.00 ppm	98
95) Benzo[k]fluoranthene	16.181	252	404680	25.11 ppm	98
96) Benzo[a]pyrene	16.587	252	369654	25.13 ppm	99
97) Indeno[1,2,3-cd]pyrene	18.341	276	358427	25.02 ppm	96
98) Dibenz(a,h)acridine	17.956	279	343104	26.81 ppm	100
99) Dibenz[a,h]anthracene	18.384	278	406952	25.53 ppm	99
100) 7,12-Dimethylbenz(a)an...	16.143	256	185466	26.02 ppm	99
101) Benzo[g,h,i]perylene	18.823	276	396481	24.57 ppm	99

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

7.6.5

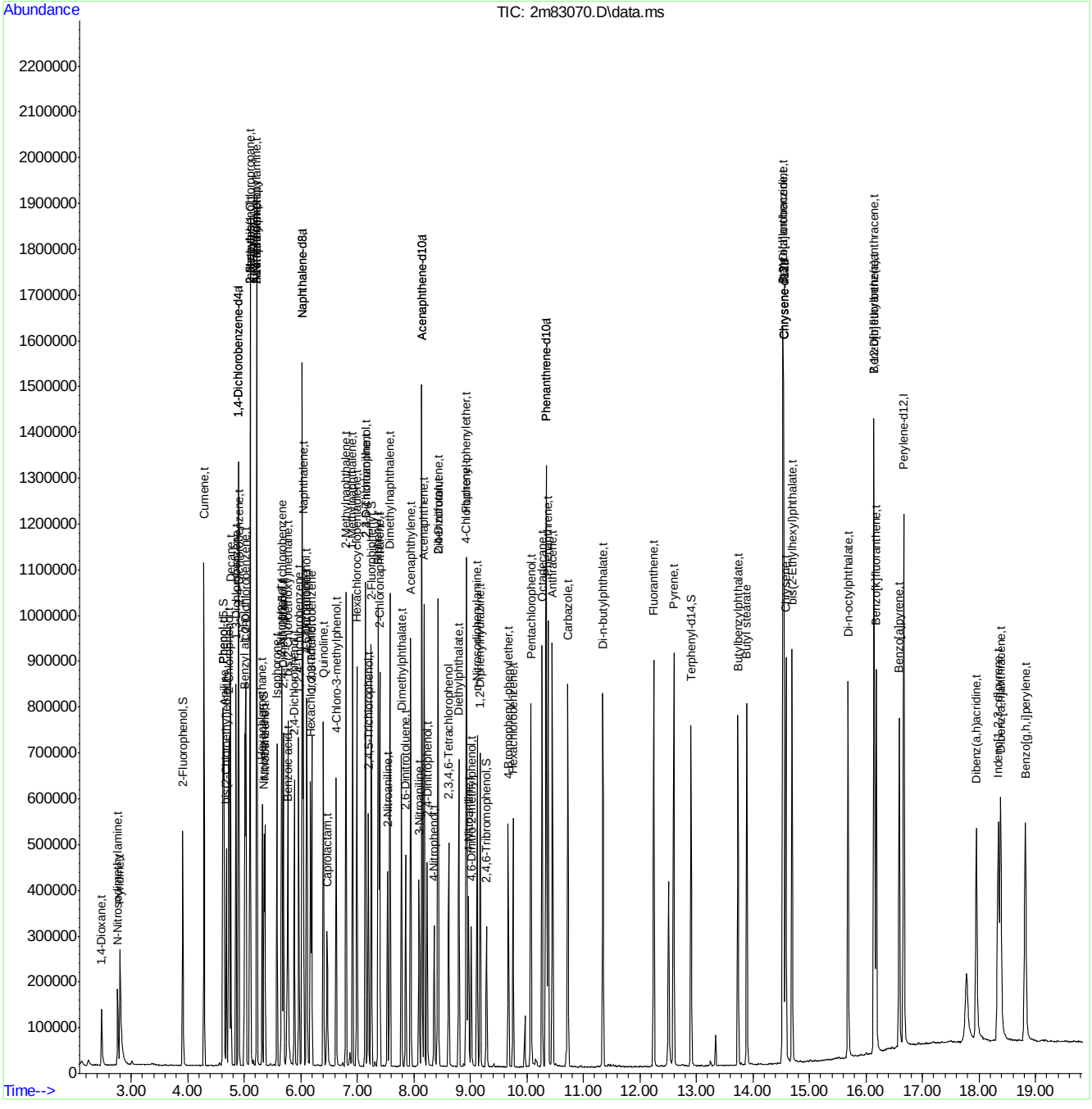
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83070.D
Acq On : 15 Apr 2016 11:00 am
Operator : ashleyn
Sample : ic3649-25
Misc : op92470,e2m3649
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 15 11:31:09 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:30:08 2016
Response via : Initial Calibration



SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83071.D
Acq On : 15 Apr 2016 11:27 am
Operator : ashleyn
Sample : ic3649-10
Misc : op92470,e2m3649
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 15 12:19:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:31:27 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	177644	40.00	ppm	0.00
24) Naphthalene-d8	6.023	136	696666	40.00	ppm	0.00
47) Acenaphthene-d10	8.141	164	401062	40.00	ppm	0.00
69) Phenanthrene-d10	10.340	188	611792	40.00	ppm	0.00
83) Chrysene-d12	14.544	240	525904	40.00	ppm	-0.01
92) Perylene-d12	16.672	264	520114	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	177644	40.00	ppm	0.00
104) Acenaphthene-d10a	8.141	164	401062	40.00	ppm	0.00
106) Chrysene-d12a	14.544	240	525904	40.00	ppm	-0.01
109) Phenanthrene-d10a	10.340	188	611792	40.00	ppm	0.00
112) Naphthalene-d8a	6.023	136	696666	40.00	ppm	0.00
114) Chrysene-d12b	14.544	240	525904	40.00	ppm	-0.01

System Monitoring Compounds						
5) 2-Fluorophenol	3.911	112	61954	9.20	ppm	0.00
Spiked Amount 50.000			Recovery = 18.40%			
8) Phenol-d5	4.617	99	79679	9.50	ppm	0.01
Spiked Amount 50.000			Recovery = 19.00%			
25) Nitrobenzene-d5	5.349	82	63526	9.76	ppm	0.00
Spiked Amount 50.000			Recovery = 19.52%			
51) 2-Fluorobiphenyl	7.243	172	126865	10.06	ppm	-0.02
Spiked Amount 50.000			Recovery = 20.12%			
73) 2,4,6-Tribromophenol	9.286	330	14795	9.38	ppm	-0.01
Spiked Amount 50.000			Recovery = 18.76%			
85) Terphenyl-d14	12.902	244	108171	9.57	ppm	-0.02
Spiked Amount 50.000			Recovery = 19.14%			
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds						Qvalue
2) 1,4-Dioxane	2.477	88	27315	9.05	ppm	98
3) Pyridine	2.809	79	68742	9.33	ppm	96
4) N-Nitrosodimethylamine	2.766	74	40835	9.18	ppm	95
6) Indene	5.103	116	112483	10.43	ppm	98
7) Cumene	4.290	105	154457	9.56	ppm	99
9) Phenol	4.627	94	89214	9.61	ppm	84
10) Aniline	4.643	93	99016	10.34	ppm	98
11) bis(2-Chloroethyl)ether	4.681	93	62261	9.30	ppm	95
12) 2-Chlorophenol	4.734	128	69038	9.93	ppm	95
13) Decane	4.761	43	52907	9.94	ppm	94
14) 1,3-Dichlorobenzene	4.852	146	74947	9.85	ppm	99
15) 1,4-Dichlorobenzene	4.905	146	73938	9.64	ppm	100
16) Benzyl alcohol	5.007	108	42058	9.75	ppm	97
17) 1,2-Dichlorobenzene	5.034	146	69692	9.81	ppm	99
18) Acetophenone	5.221	105	87128	10.27	ppm	85
19) 2-Methylphenol	5.098	108	60216	10.32	ppm	98
20) 2,2'-oxybis(1-Chloropr...	5.109	45	69228	10.25	ppm	93
21) 3&4-Methylphenol	5.221	108	63232	10.32	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83071.D
Acq On : 15 Apr 2016 11:27 am
Operator : ashleyn
Sample : ic3649-10
Misc : op92470,e2m3649
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 15 12:19:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:31:27 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
22) n-Nitroso-di-n-propyla...	5.216	70	42650	10.15	ppm		91
23) Hexachloroethane	5.317	201	20405	9.63	ppm		96
26) Nitrobenzene	5.365	77	64381	9.75	ppm		98
27) Quinoline	6.392	129	129219	9.68	ppm		99
28) Isophorone	5.574	82	112823	9.77	ppm		98
29) 2-Nitrophenol	5.654	139	33515	9.73	ppm		88
30) 2,4-Dimethylphenol	5.686	107	61419	9.92	ppm		97
31) Benzoic acid	5.756	105	41687	8.71	ppm		95
32) bis(2-Chloroethoxy)met...	5.772	93	72161	9.89	ppm		98
33) 2,4-Dichlorophenol	5.884	162	50122	9.83	ppm		98
34) 2,6-Dichlorophenol	6.109	162	49764	10.04	ppm		98
35) 1,3,5-Trichlorobenzene	5.665	180	55178	9.94	ppm		99
36) 1,2,4-Trichlorobenzene	5.964	180	52751	9.79	ppm		99
37) 1,2,3-Trichlorobenzene	6.194	180	51576	9.96	ppm		97
38) Naphthalene	6.045	128	200831	9.95	ppm		99
39) 4-Chloroaniline	6.098	127	78697	10.52	ppm		98
40) 2,3-Dichloroaniline	7.141	161	60914	10.06	ppm		99
41) Caprolactam	6.451	55	22544	9.32	ppm		95
42) Hexachlorobutadiene	6.173	225	24409	9.98	ppm		96
43) 4-Chloro-3-methylphenol	6.622	107	52377	9.66	ppm		97
44) 2-Methylnaphthalene	6.799	141	105796	9.95	ppm		98
45) 1-Methylnaphthalene	6.916	141	110726	10.01	ppm		99
46) Dimethylnaphthalene	7.574	156	111458	10.05	ppm		98
48) Hexachlorocyclopentadiene	6.997	237	52463	20.72	ppm		99
49) 2,4,6-Trichlorophenol	7.146	196	31432	10.01	ppm		99
50) 2,4,5-Trichlorophenol	7.189	196	33452	9.85	ppm		98
52) 2-Chloronaphthalene	7.393	162	112835	9.85	ppm		99
53) Biphenyl	7.371	154	152417	10.15	ppm		99
54) 2-Nitroaniline	7.532	65	30349	9.73	ppm		98
55) Dimethylphthalate	7.783	163	124690	9.80	ppm		99
56) Acenaphthylene	7.943	152	186566	10.11	ppm		99
57) 2,6-Dinitrotoluene	7.858	165	26312	9.71	ppm		97
58) 3-Nitroaniline	8.088	138	33555	10.10	ppm		97
59) Acenaphthene	8.184	153	116692	9.94	ppm		96
60) 2,4-Dinitrophenol	8.232	184	23820	18.27	ppm	#	65
61) 4-Nitrophenol	8.355	109	14653	9.44	ppm		95
62) Dibenzofuran	8.430	168	158329	10.26	ppm		97
63) 2,4-Dinitrotoluene	8.419	165	37796	10.52	ppm		91
64) 2,3,4,6-Tetrachlorophenol	8.617	232	23736	9.68	ppm		95
65) Diethylphthalate	8.794	149	120605	9.86	ppm		99
66) Fluorene	8.922	166	128108	10.10	ppm		99
67) 4-Chlorophenyl-phenyle...	8.938	204	53071	10.24	ppm		99
68) 4-Nitroaniline	8.965	138	34108	10.33	ppm		98
70) 4,6-Dinitro-2-methylph...	9.013	198	17827	9.64	ppm		97
71) n-Nitrosodiphenylamine	9.115	169	85635	10.00	ppm		99
72) 1,2-Diphenylhydrazine	9.174	77	122401	9.96	ppm		97
74) 4-Bromophenyl-phenylether	9.671	248	28914	9.75	ppm		95
75) Hexachlorobenzene	9.757	284	33177	9.73	ppm		96
76) Pentachlorophenol	10.067	266	38428	19.37	ppm		99
77) Phenanthrene	10.372	178	184082	9.98	ppm		99

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83071.D
Acq On : 15 Apr 2016 11:27 am
Operator : ashleyn
Sample : ic3649-10
Misc : op92470,e2m3649
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 15 12:19:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:31:27 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
78) Anthracene	10.452	178	184418	10.26 ppm	99
79) Carbazole	10.725	167	167069	10.01 ppm	98
80) Di-n-butylphthalate	11.345	149	193455	9.46 ppm	99
81) Fluoranthene	12.244	202	164893	9.80 ppm	98
82) Octadecane	10.270	57	73648	10.14 ppm	96
84) Pyrene	12.597	202	177921	9.71 ppm	99
86) Butylbenzylphthalate	13.736	149	82748	8.82 ppm	95
87) Butyl stearate	13.891	56	47735	9.26 ppm	99
88) Benzo[a]anthracene	14.528	228	151234	9.54 ppm	98
89) 3,3'-Dichlorobenzidine	14.528	252	56000	10.03 ppm	97
90) Chrysene	14.581	228	155326	9.53 ppm	99
91) bis(2-Ethylhexyl)phtha...	14.693	149	114647	9.12 ppm	98
93) Di-n-octylphthalate	15.683	149	186658	9.20 ppm	99
94) Benzo[b]fluoranthene	16.138	252	161193	9.91 ppm	96
95) Benzo[k]fluoranthene	16.175	252	162150	10.21 ppm	98
96) Benzo[a]pyrene	16.587	252	139507	9.62 ppm	99
97) Indeno[1,2,3-cd]pyrene	18.336	276	128143	9.08 ppm	94
98) Dibenz(a,h)acridine	17.951	279	124283	9.72 ppm	97
99) Dibenz[a,h]anthracene	18.379	278	152331	9.66 ppm	98
100) 7,12-Dimethylbenz(a)an...	16.143	256	70590	9.98 ppm	96
101) Benzo[g,h,i]perylene	18.812	276	149337	9.43 ppm	98

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

7.6.6

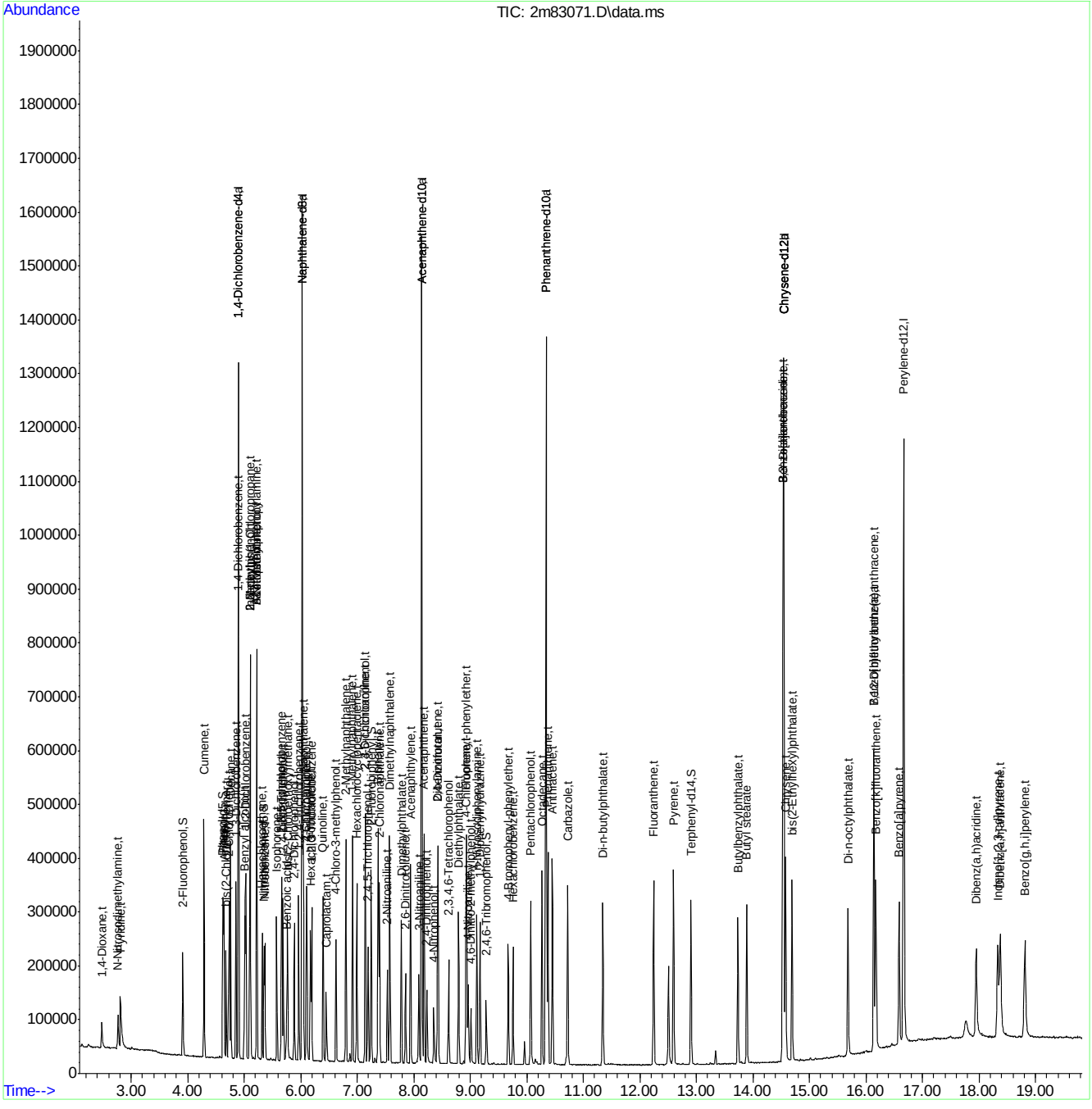
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83071.D
Acq On : 15 Apr 2016 11:27 am
Operator : ashleyn
Sample : ic3649-10
Misc : op92470,e2m3649
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 15 12:19:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 11:31:27 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83072.D
Acq On : 15 Apr 2016 11:53 am
Operator : ashleyn
Sample : ic3649-5
Misc : op92470,e2m3649
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 15 12:21:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 12:20:06 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	178589	40.00	ppm	0.00
24) Naphthalene-d8	6.023	136	698844	40.00	ppm	0.00
47) Acenaphthene-d10	8.141	164	403450	40.00	ppm	0.00
69) Phenanthrene-d10	10.340	188	608010	40.00	ppm	0.00
83) Chrysene-d12	14.544	240	523167	40.00	ppm	-0.01
92) Perylene-d12	16.673	264	514485	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	178589	40.00	ppm	0.00
104) Acenaphthene-d10a	8.141	164	403450	40.00	ppm	0.00
106) Chrysene-d12a	14.544	240	523167	40.00	ppm	-0.01
109) Phenanthrene-d10a	10.340	188	608010	40.00	ppm	0.00
112) Naphthalene-d8a	6.023	136	698844	40.00	ppm	0.00
114) Chrysene-d12b	14.544	240	523167	40.00	ppm	-0.01

System Monitoring Compounds						
5) 2-Fluorophenol	3.911	112	34884	5.22	ppm	0.00
Spiked Amount 50.000			Recovery = 10.44%			
8) Phenol-d5	4.617	99	45228	5.41	ppm	0.01
Spiked Amount 50.000			Recovery = 10.82%			
25) Nitrobenzene-d5	5.349	82	35665	5.48	ppm	0.00
Spiked Amount 50.000			Recovery = 10.96%			
51) 2-Fluorobiphenyl	7.243	172	72665	5.72	ppm	-0.02
Spiked Amount 50.000			Recovery = 11.44%			
73) 2,4,6-Tribromophenol	9.281	330	8069	5.20	ppm	-0.02
Spiked Amount 50.000			Recovery = 10.40%			
85) Terphenyl-d14	12.902	244	59793	5.36	ppm	-0.02
Spiked Amount 50.000			Recovery = 10.72%			
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds						Qvalue
2) 1,4-Dioxane	2.477	88	15797	5.29	ppm	94
3) Pyridine	2.814	79	39149	5.35	ppm	94
4) N-Nitrosodimethylamine	2.766	74	22857	5.18	ppm	98
6) Indene	5.103	116	64898	5.94	ppm	98
7) Cumene	4.290	105	89714	5.57	ppm	99
9) Phenol	4.627	94	51299	5.53	ppm	83
10) Aniline	4.643	93	57747	5.96	ppm	99
11) bis(2-Chloroethyl)ether	4.681	93	36526	5.49	ppm	97
12) 2-Chlorophenol	4.740	128	39036	5.59	ppm	99
13) Decane	4.761	43	30743	5.75	ppm	93
14) 1,3-Dichlorobenzene	4.852	146	42586	5.58	ppm	98
15) 1,4-Dichlorobenzene	4.906	146	43551	5.68	ppm	99
16) Benzyl alcohol	5.007	108	23617	5.47	ppm	98
17) 1,2-Dichlorobenzene	5.034	146	41103	5.78	ppm	99
18) Acetophenone	5.221	105	50361	5.88	ppm	83
19) 2-Methylphenol	5.098	108	34448	5.84	ppm	98
20) 2,2'-oxybis(1-Chloropr...	5.109	45	40518	5.94	ppm	92
21) 3&4-Methylphenol	5.221	108	37062	5.99	ppm	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83072.D
Acq On : 15 Apr 2016 11:53 am
Operator : ashleyn
Sample : ic3649-5
Misc : op92470,e2m3649
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 15 12:21:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 12:20:06 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
22) n-Nitroso-di-n-propyla...	5.216	70	24262	5.73	ppm		94
23) Hexachloroethane	5.317	201	11792	5.57	ppm		98
26) Nitrobenzene	5.366	77	36619	5.55	ppm		96
27) Quinoline	6.392	129	73166	5.49	ppm		99
28) Isophorone	5.574	82	62634	5.43	ppm		99
29) 2-Nitrophenol	5.654	139	18479	5.37	ppm		93
30) 2,4-Dimethylphenol	5.686	107	34386	5.54	ppm		95
31) Benzoic acid	5.751	105	21055	4.48	ppm		98
32) bis(2-Chloroethoxy)met...	5.767	93	41368	5.66	ppm		99
33) 2,4-Dichlorophenol	5.884	162	28154	5.52	ppm		99
34) 2,6-Dichlorophenol	6.109	162	28425	5.71	ppm		100
35) 1,3,5-Trichlorobenzene	5.665	180	32491	5.84	ppm		99
36) 1,2,4-Trichlorobenzene	5.965	180	30501	5.66	ppm		97
37) 1,2,3-Trichlorobenzene	6.195	180	29971	5.77	ppm		98
38) Naphthalene	6.045	128	117051	5.79	ppm		100
39) 4-Chloroaniline	6.098	127	46137	6.10	ppm		98
40) 2,3-Dichloroaniline	7.141	161	35369	5.82	ppm		99
41) Caprolactam	6.446	55	12389	5.17	ppm		92
42) Hexachlorobutadiene	6.173	225	14195	5.79	ppm		96
43) 4-Chloro-3-methylphenol	6.622	107	28594	5.29	ppm		99
44) 2-Methylnaphthalene	6.799	141	60419	5.67	ppm		98
45) 1-Methylnaphthalene	6.917	141	63122	5.69	ppm		99
46) Dimethylnaphthalene	7.574	156	63990	5.75	ppm		96
48) Hexachlorocyclopentadiene	6.997	237	28493	11.12	ppm		98
49) 2,4,6-Trichlorophenol	7.147	196	17336	5.49	ppm		98
50) 2,4,5-Trichlorophenol	7.189	196	18687	5.48	ppm		100
52) 2-Chloronaphthalene	7.398	162	65422	5.69	ppm		96
53) Biphenyl	7.371	154	88997	5.88	ppm		99
54) 2-Nitroaniline	7.532	65	16203	5.19	ppm		95
55) Dimethylphthalate	7.783	163	71372	5.59	ppm		99
56) Acenaphthylene	7.944	152	105613	5.68	ppm		100
57) 2,6-Dinitrotoluene	7.853	165	14620	5.39	ppm		96
58) 3-Nitroaniline	8.088	138	17940	5.36	ppm		97
59) Acenaphthene	8.184	153	67445	5.72	ppm		100
60) 2,4-Dinitrophenol	8.238	184	10767	8.33	ppm	#	71
61) 4-Nitrophenol	8.355	109	7876	5.09	ppm		95
62) Dibenzofuran	8.430	168	90785	5.82	ppm		97
63) 2,4-Dinitrotoluene	8.420	165	20488	5.62	ppm		87
64) 2,3,4,6-Tetrachlorophenol	8.617	232	12996	5.30	ppm		95
65) Diethylphthalate	8.794	149	67471	5.50	ppm		98
66) Fluorene	8.922	166	73818	5.77	ppm		100
67) 4-Chlorophenyl-phenyle...	8.938	204	30931	5.91	ppm		98
68) 4-Nitroaniline	8.965	138	17643	5.28	ppm		94
70) 4,6-Dinitro-2-methylph...	9.013	198	8665	4.74	ppm		100
71) n-Nitrosodiphenylamine	9.115	169	48338	5.68	ppm		96
72) 1,2-Diphenylhydrazine	9.174	77	69170	5.67	ppm		95
74) 4-Bromophenyl-phenylether	9.671	248	16826	5.73	ppm		99
75) Hexachlorobenzene	9.757	284	19482	5.78	ppm		91
76) Pentachlorophenol	10.067	266	20272	10.33	ppm		98
77) Phenanthrene	10.372	178	105967	5.78	ppm		99

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83072.D
Acq On : 15 Apr 2016 11:53 am
Operator : ashleyn
Sample : ic3649-5
Misc : op92470,e2m3649
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 15 12:21:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 12:20:06 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
78) Anthracene	10.452	178	103215	5.75 ppm	98
79) Carbazole	10.725	167	93917	5.66 ppm	98
80) Di-n-butylphthalate	11.345	149	104122	5.17 ppm	99
81) Fluoranthene	12.244	202	92112	5.53 ppm	98
82) Octadecane	10.270	57	40436	5.59 ppm	96
84) Pyrene	12.597	202	100085	5.52 ppm	99
86) Butylbenzylphthalate	13.731	149	43626	4.77 ppm	99
87) Butyl stearate	13.891	56	24475	4.83 ppm	97
88) Benzo[a]anthracene	14.528	228	84844	5.42 ppm	99
89) 3,3'-Dichlorobenzidine	14.528	252	29704	5.35 ppm	99
90) Chrysene	14.581	228	88501	5.50 ppm	100
91) bis(2-Ethylhexyl)phtha...	14.694	149	60031	4.87 ppm	99
93) Di-n-octylphthalate	15.683	149	94982	4.79 ppm	99
94) Benzo[b]fluoranthene	16.138	252	89067	5.54 ppm	97
95) Benzo[k]fluoranthene	16.175	252	89496	5.68 ppm	99
96) Benzo[a]pyrene	16.587	252	76257	5.35 ppm	98
97) Indeno[1,2,3-cd]pyrene	18.331	276	68246	4.97 ppm	96
98) Dibenz(a,h)acridine	17.951	279	66967	5.32 ppm	97
99) Dibenz[a,h]anthracene	18.379	278	82185	5.30 ppm	97
100) 7,12-Dimethylbenz(a)an...	16.138	256	39274	5.61 ppm	96
101) Benzo[g,h,i]perylene	18.812	276	82544	5.32 ppm	99

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

7.6.7

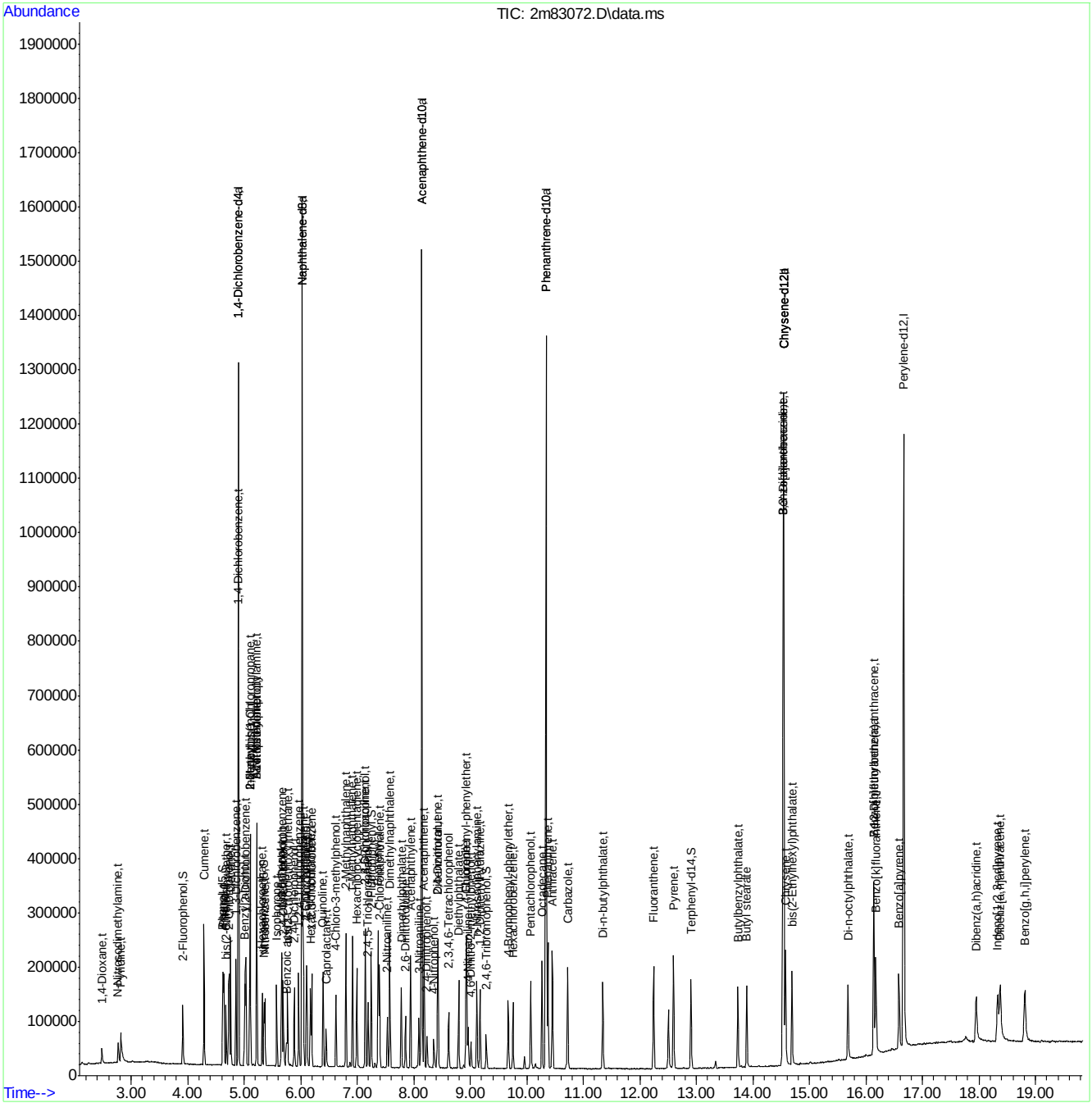
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83072.D
Acq On : 15 Apr 2016 11:53 am
Operator : ashleyn
Sample : ic3649-5
Misc : op92470,e2m3649
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 15 12:21:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 12:20:06 2016
Response via : Initial Calibration



SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83073.D
Acq On : 15 Apr 2016 12:19 pm
Operator : ashleyn
Sample : icc3649-50
Misc : op92470,e2m3649
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 15 12:41:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 12:27:24 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	170345	40.00	ppm	0.00
24) Naphthalene-d8	6.023	136	678216	40.00	ppm	0.00
47) Acenaphthene-d10	8.141	164	396153	40.00	ppm	0.00
69) Phenanthrene-d10	10.340	188	600031	40.00	ppm	0.00
83) Chrysene-d12	14.549	240	499079	40.00	ppm	0.00
92) Perylene-d12	16.672	264	518892	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	170345	40.00	ppm	0.00
104) Acenaphthene-d10a	8.141	164	396153	40.00	ppm	0.00
106) Chrysene-d12a	14.549	240	499079	40.00	ppm	0.00
109) Phenanthrene-d10a	10.340	188	600031	40.00	ppm	0.00
112) Naphthalene-d8a	6.023	136	678216	40.00	ppm	0.00
114) Chrysene-d12b	14.549	240	499079	40.00	ppm	0.00

System Monitoring Compounds						
5) 2-Fluorophenol	3.911	112	311194	48.52	ppm	0.00
Spiked Amount 50.000			Recovery = 97.04%			
8) Phenol-d5	4.622	99	385248	47.76	ppm	0.02
Spiked Amount 50.000			Recovery = 95.52%			
25) Nitrobenzene-d5	5.355	82	301534	47.11	ppm	0.00
Spiked Amount 50.000			Recovery = 94.22%			
51) 2-Fluorobiphenyl	7.248	172	574097	45.11	ppm	-0.01
Spiked Amount 50.000			Recovery = 90.22%			
73) 2,4,6-Tribromophenol	9.286	330	78833	51.18	ppm	-0.01
Spiked Amount 50.000			Recovery = 102.36%			
85) Terphenyl-d14	12.907	244	522697	48.60	ppm	-0.02
Spiked Amount 50.000			Recovery = 97.20%			
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds						Qvalue
2) 1,4-Dioxane	2.472	88	134074	46.70	ppm	99
3) Pyridine	2.803	79	338658	48.01	ppm	96
4) N-Nitrosodimethylamine	2.755	74	204217	48.28	ppm	95
6) Indene	5.103	116	460624	43.07	ppm	98
7) Cumene	4.290	105	726855	46.52	ppm	100
9) Phenol	4.633	94	420782	46.85	ppm	84
10) Aniline	4.643	93	405193	42.69	ppm	90
11) bis(2-Chloroethyl)ether	4.686	93	307411	47.79	ppm	98
12) 2-Chlorophenol	4.740	128	313869	46.34	ppm	96
13) Decane	4.761	43	229584	44.09	ppm	96
14) 1,3-Dichlorobenzene	4.852	146	341001	46.07	ppm	99
15) 1,4-Dichlorobenzene	4.911	146	341137	45.77	ppm	99
16) Benzyl alcohol	5.007	108	199462	47.78	ppm	96
17) 1,2-Dichlorobenzene	5.034	146	310728	44.78	ppm	98
18) Acetophenone	5.221	105	368250	43.97	ppm	83
19) 2-Methylphenol	5.103	108	255062	44.27	ppm	98
20) 2,2'-oxybis(1-Chloropr...	5.109	45	281072	42.07	ppm	84
21) 3&4-Methylphenol	5.226	108	266479	43.89	ppm	100

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83073.D
Acq On : 15 Apr 2016 12:19 pm
Operator : ashleyn
Sample : icc3649-50
Misc : op92470,e2m3649
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 15 12:41:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 12:27:24 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
22) n-Nitroso-di-n-propyla...	5.221	70	183780	44.57	ppm		94
23) Hexachloroethane	5.317	201	96201	46.87	ppm		97
26) Nitrobenzene	5.371	77	304729	46.87	ppm		99
27) Quinoline	6.403	129	620434	47.33	ppm		99
28) Isophorone	5.579	82	540561	47.68	ppm		99
29) 2-Nitrophenol	5.654	139	166953	49.48	ppm		92
30) 2,4-Dimethylphenol	5.692	107	284560	46.54	ppm		99
31) Benzoic acid	5.804	105	251284	55.97	ppm		97
32) bis(2-Chloroethoxy)met...	5.772	93	331615	45.90	ppm		99
33) 2,4-Dichlorophenol	5.890	162	240727	47.93	ppm		99
34) 2,6-Dichlorophenol	6.114	162	228762	46.42	ppm		99
35) 1,3,5-Trichlorobenzene	5.665	180	249975	45.21	ppm		99
36) 1,2,4-Trichlorobenzene	5.970	180	246884	46.34	ppm		100
37) 1,2,3-Trichlorobenzene	6.194	180	237665	46.14	ppm		99
38) Naphthalene	6.050	128	910836	45.38	ppm		100
39) 4-Chloroaniline	6.098	127	334974	44.22	ppm		96
40) 2,3-Dichloroaniline	7.141	161	274322	45.43	ppm		98
41) Caprolactam	6.483	55	116762	49.93	ppm		96
42) Hexachlorobutadiene	6.173	225	112823	46.36	ppm		97
43) 4-Chloro-3-methylphenol	6.633	107	258445	48.83	ppm		98
44) 2-Methylnaphthalene	6.799	141	488195	46.32	ppm		99
45) 1-Methylnaphthalene	6.917	141	503254	45.82	ppm		99
46) Dimethylnaphthalene	7.580	156	505729	45.81	ppm		100
48) Hexachlorocyclopentadiene	6.997	237	257735	100.83	ppm		98
49) 2,4,6-Trichlorophenol	7.147	196	146740	46.67	ppm		99
50) 2,4,5-Trichlorophenol	7.200	196	165851	48.89	ppm		99
52) 2-Chloronaphthalene	7.398	162	527202	45.80	ppm		100
53) Biphenyl	7.377	154	687550	45.10	ppm		99
54) 2-Nitroaniline	7.537	65	153035	49.65	ppm		98
55) Dimethylphthalate	7.788	163	600173	47.10	ppm		99
56) Acenaphthylene	7.949	152	884895	47.52	ppm		99
57) 2,6-Dinitrotoluene	7.863	165	140799	52.27	ppm		98
58) 3-Nitroaniline	8.099	138	170489	51.35	ppm		97
59) Acenaphthene	8.190	153	537593	45.46	ppm		99
60) 2,4-Dinitrophenol	8.243	184	157818	127.39	ppm	#	80
61) 4-Nitrophenol	8.366	109	79465	52.16	ppm		96
62) Dibenzofuran	8.436	168	702810	44.85	ppm		98
63) 2,4-Dinitrotoluene	8.425	165	188799	51.84	ppm		86
64) 2,3,4,6-Tetrachlorophenol	8.623	232	121429	49.99	ppm		93
65) Diethylphthalate	8.799	149	589147	48.19	ppm		99
66) Fluorene	8.928	166	589277	45.93	ppm		99
67) 4-Chlorophenyl-phenyle...	8.944	204	242629	46.00	ppm		97
68) 4-Nitroaniline	8.981	138	173696	52.52	ppm		98
70) 4,6-Dinitro-2-methylph...	9.024	198	110521	61.76	ppm		93
71) n-Nitrosodiphenylamine	9.126	169	408378	47.70	ppm		99
72) 1,2-Diphenylhydrazine	9.179	77	596024	48.55	ppm		98
74) 4-Bromophenyl-phenylether	9.676	248	142331	48.12	ppm		99
75) Hexachlorobenzene	9.762	284	159351	46.84	ppm		93
76) Pentachlorophenol	10.072	266	202286	104.00	ppm		99
77) Phenanthrene	10.377	178	843868	45.64	ppm		100

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83073.D
Acq On : 15 Apr 2016 12:19 pm
Operator : ashleyn
Sample : icc3649-50
Misc : op92470,e2m3649
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 15 12:41:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 12:27:24 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
78) Anthracene	10.457	178	859230	47.52 ppm	100
79) Carbazole	10.730	167	793838	47.59 ppm	99
80) Di-n-butylphthalate	11.345	149	994294	49.77 ppm	100
81) Fluoranthene	12.254	202	796796	47.74 ppm	97
82) Octadecane	10.270	57	354946	48.87 ppm	97
84) Pyrene	12.602	202	837638	47.70 ppm	99
86) Butylbenzylphthalate	13.736	149	442236	50.99 ppm	99
87) Butyl stearate	13.897	56	251158	52.22 ppm	95
88) Benzo[a]anthracene	14.533	228	701905	46.47 ppm	100
89) 3,3'-Dichlorobenzidine	14.533	252	266954	49.87 ppm	98
90) Chrysene	14.592	228	736444	47.33 ppm	99
91) bis(2-Ethylhexyl)phtha...	14.693	149	607695	51.91 ppm	98
93) Di-n-octylphthalate	15.683	149	1052743	53.00 ppm	100
94) Benzo[b]fluoranthene	16.148	252	768296	46.70 ppm	97
95) Benzo[k]fluoranthene	16.191	252	771942	47.63 ppm	96
96) Benzo[a]pyrene	16.592	252	715440	49.28 ppm	99
97) Indeno[1,2,3-cd]pyrene	18.352	276	730596	52.76 ppm	94
98) Dibenz(a,h)acridine	17.961	279	669350	52.24 ppm	99
99) Dibenz[a,h]anthracene	18.395	278	787668	49.93 ppm	97
100) 7,12-Dimethylbenz(a)an...	16.154	256	339949	47.35 ppm	100
101) Benzo[g,h,i]perylene	18.833	276	779813	49.38 ppm	99

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

7.6.8

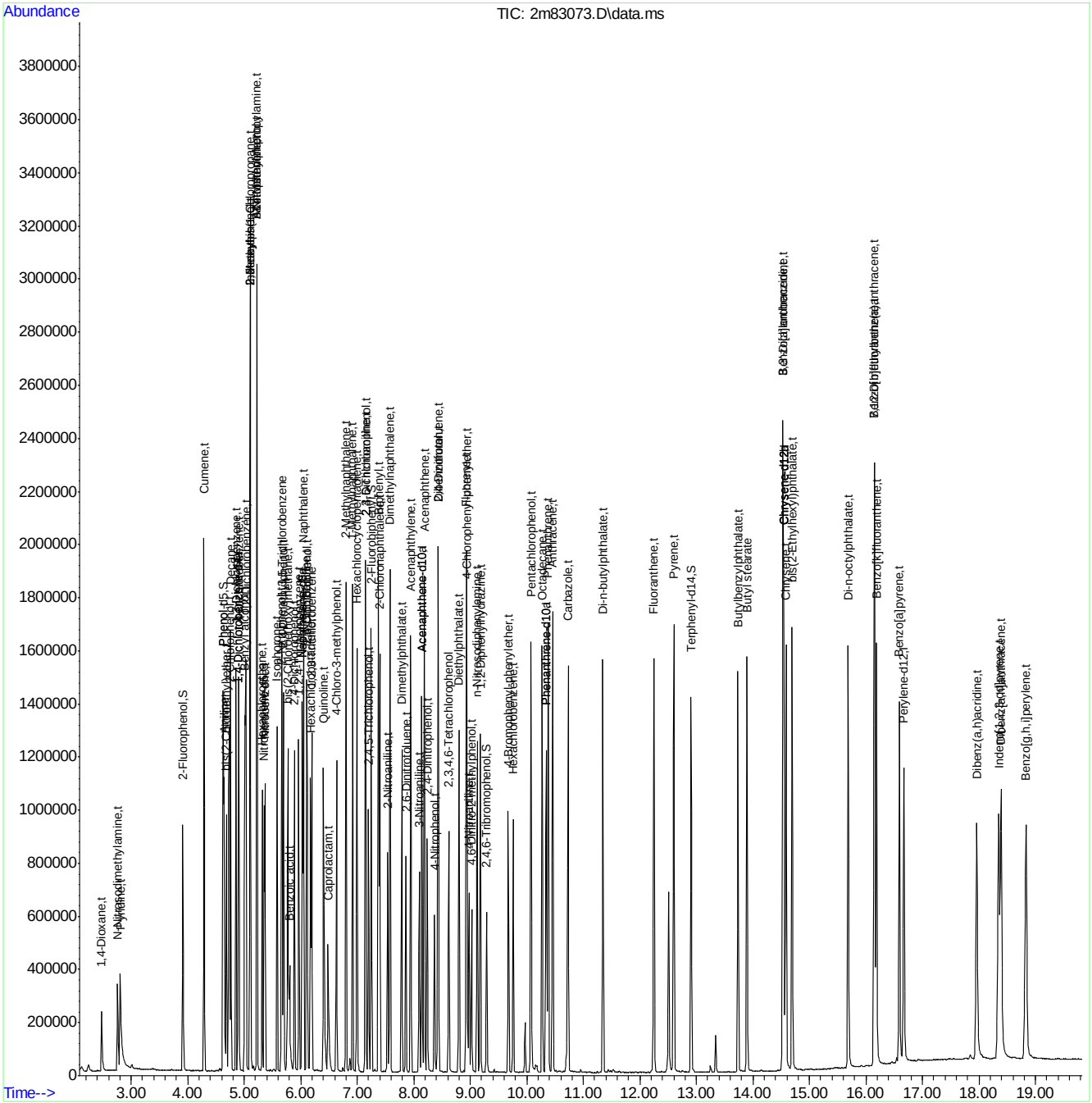
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3649\
Data File : 2m83073.D
Acq On : 15 Apr 2016 12:19 pm
Operator : ashleyn
Sample : icc3649-50
Misc : op92470,e2m3649
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 15 12:41:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 12:27:24 2016
Response via : Initial Calibration



SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83091.D
Acq On : 15 Apr 2016 3:22 pm
Operator : ashleyn
Sample : ic3651-100
Misc : op92470,e2m3651
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 15 17:37:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 17:37:24 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	186989	40.00 ppm	0.00
24) Naphthalene-d8	6.023	136	748605	40.00 ppm	0.00
47) Acenaphthene-d10	8.141	164	377121	40.00 ppm	0.00
69) Phenanthrene-d10	10.339	188	626732	40.00 ppm	0.00
83) Chrysene-d12	14.544	240	545568	40.00 ppm	0.00
92) Perylene-d12	16.672	264	582007	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	186989	40.00 ppm	0.00
104) Acenaphthene-d10a	8.141	164	377121	40.00 ppm	0.00
106) Chrysene-d12a	14.544	240	545568	40.00 ppm	0.00
109) Phenanthrene-d10a	10.339	188	626732	40.00 ppm	0.00
112) Naphthalene-d8a	6.023	136	748605	40.00 ppm	0.00
114) Chrysene-d12b	14.544	240	545568	40.00 ppm	0.00

System Monitoring Compounds					
5) 2-Fluorophenol	0.000	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
8) Phenol-d5	0.000	99	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
85) Terphenyl-d14	0.000	244	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
108) 1-chlorooctadecane	12.179	57	426138	100.00 ppm	0.09
Spiked Amount 50.000			Recovery	= 200.00%	
111) o-terphenyl	10.987	230	665759	100.00 ppm	-0.11
Spiked Amount 50.000			Recovery	= 200.00%	

Target Compounds					Qvalue
103) Benzaldehyde	4.558	105	354875	100.00 ppm	86
105) 1,2,4,5-Tetrachloroben...	7.002	216	387792	100.00 ppm	99
107) Benzidine	12.511	184	644696	100.00 ppm	99
110) Atrazine	9.976	215	146113	100.00 ppm	90
113) Hydroquinone	6.467	110	630480	100.00 ppm	78

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

7.6.9

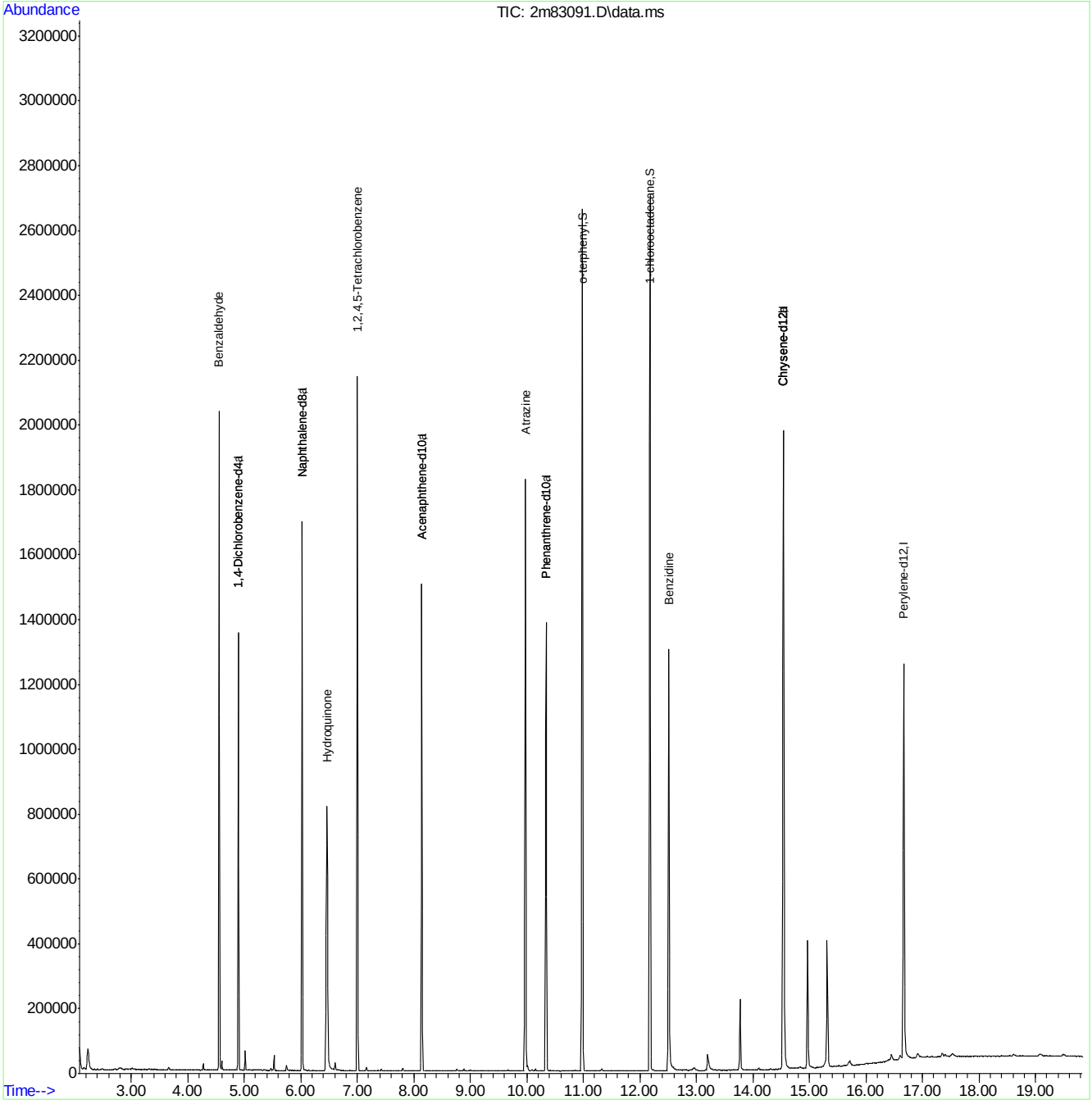
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83091.D
Acq On : 15 Apr 2016 3:22 pm
Operator : ashleyn
Sample : ic3651-100
Misc : op92470,e2m3651
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 15 17:37:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 17:37:24 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83092.D
Acq On : 15 Apr 2016 3:48 pm
Operator : ashleyn
Sample : ic3651-80
Misc : op92470,e2m3651
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 15 17:38:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 17:37:24 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	182816	40.00	ppm	0.00
24) Naphthalene-d8	6.023	136	740046	40.00	ppm	0.00
47) Acenaphthene-d10	8.142	164	376350	40.00	ppm	0.00
69) Phenanthrene-d10	10.340	188	630998	40.00	ppm	0.00
83) Chrysene-d12	14.544	240	556066	40.00	ppm	0.00
92) Perylene-d12	16.673	264	591495	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	182816	40.00	ppm	0.00
104) Acenaphthene-d10a	8.142	164	376350	40.00	ppm	0.00
106) Chrysene-d12a	14.544	240	556066	40.00	ppm	0.00
109) Phenanthrene-d10a	10.340	188	630998	40.00	ppm	0.00
112) Naphthalene-d8a	6.023	136	740046	40.00	ppm	0.00
114) Chrysene-d12b	14.544	240	556066	40.00	ppm	0.00

System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) 1-chlorooctadecane	12.180	57	361093	83.14	ppm	0.09
Spiked Amount 50.000			Recovery	=	166.28%	
111) o-terphenyl	10.987	230	559813	83.52	ppm	-0.11
Spiked Amount 50.000			Recovery	=	167.04%	

Target Compounds							Qvalue
103) Benzaldehyde	4.558	105	336826	97.08	ppm		87
105) 1,2,4,5-Tetrachloroben...	7.002	216	320939	82.93	ppm		99
107) Benzidine	12.511	184	555589	84.55	ppm		99
110) Atrazine	9.976	215	119212	81.04	ppm	#	91
113) Hydroquinone	6.457	110	505083	81.04	ppm		78

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

7.6.10

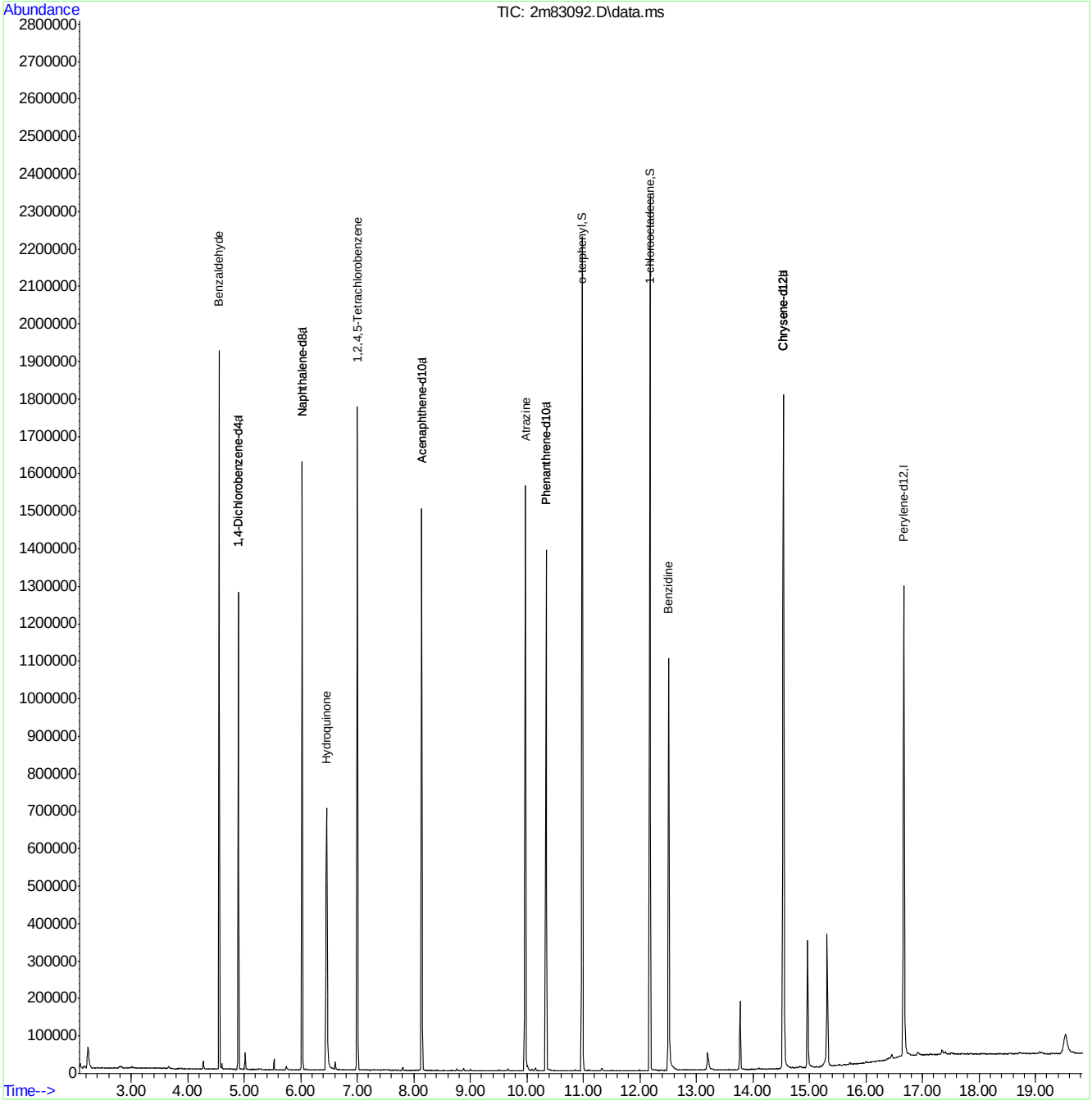
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83092.D
Acq On : 15 Apr 2016 3:48 pm
Operator : ashleyn
Sample : ic3651-80
Misc : op92470,e2m3651
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 15 17:38:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 17:37:24 2016
Response via : Initial Calibration



SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83093.D
Acq On : 15 Apr 2016 4:15 pm
Operator : ashleyn
Sample : icc3651-50
Misc : op92470,e2m3651
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 15 17:39:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 17:37:24 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	188287	40.00	ppm	0.00
24) Naphthalene-d8	6.023	136	754554	40.00	ppm	0.00
47) Acenaphthene-d10	8.142	164	383524	40.00	ppm	0.00
69) Phenanthrene-d10	10.340	188	647808	40.00	ppm	0.00
83) Chrysene-d12	14.544	240	583172	40.00	ppm	0.00
92) Perylene-d12	16.673	264	612562	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	188287	40.00	ppm	0.00
104) Acenaphthene-d10a	8.142	164	383524	40.00	ppm	0.00
106) Chrysene-d12a	14.544	240	583172	40.00	ppm	0.00
109) Phenanthrene-d10a	10.340	188	647808	40.00	ppm	0.00
112) Naphthalene-d8a	6.023	136	754554	40.00	ppm	0.00
114) Chrysene-d12b	14.544	240	583172	40.00	ppm	0.00

System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) 1-chlorooctadecane	12.180	57	244421	53.66	ppm	0.09
Spiked Amount 50.000			Recovery	=	107.32%	
111) o-terphenyl	10.982	230	379419	55.14	ppm	-0.11
Spiked Amount 50.000			Recovery	=	110.28%	

Target Compounds							Qvalue
103) Benzaldehyde	4.558	105	248745	69.61	ppm		86
105) 1,2,4,5-Tetrachloroben...	7.002	216	216044	54.78	ppm		99
107) Benzidine	12.506	184	427451	62.03	ppm		98
110) Atrazine	9.971	215	77837	51.54	ppm	#	90
113) Hydroquinone	6.451	110	316542	49.81	ppm		78

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

7.6.11

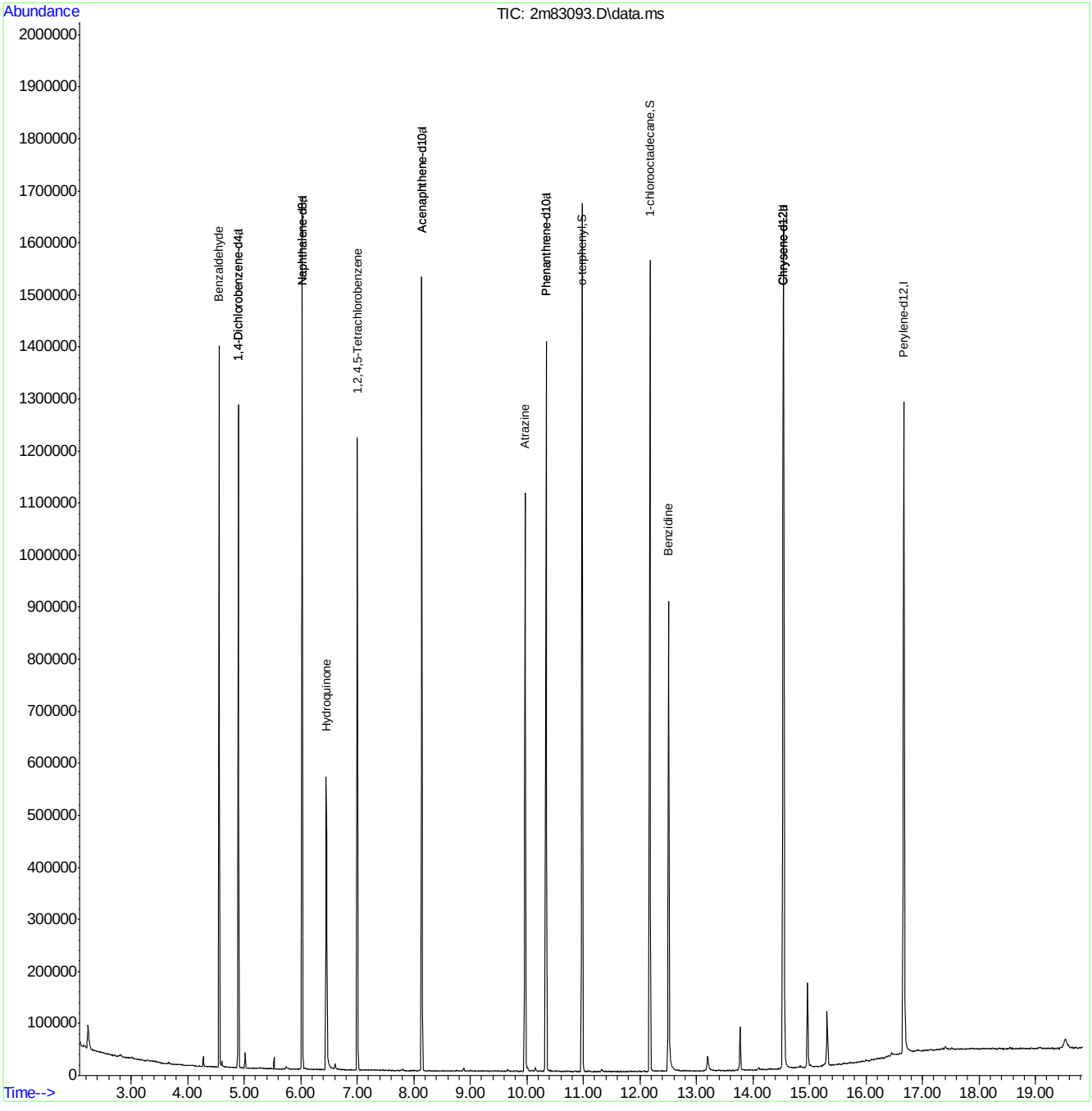
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83093.D
Acq On : 15 Apr 2016 4:15 pm
Operator : ashleyn
Sample : icc3651-50
Misc : op92470,e2m3651
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 15 17:39:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 17:37:24 2016
Response via : Initial Calibration



M2M3649.M Fri Apr 15 17:40:24 2016 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83094.D
Acq On : 15 Apr 2016 4:47 pm
Operator : ashleyn
Sample : ic3651-10
Misc : op92470,e2m3651
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 15 17:41:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 17:37:24 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	196901	40.00 ppm	0.00
24) Naphthalene-d8	6.023	136	794673	40.00 ppm	0.00
47) Acenaphthene-d10	8.141	164	409528	40.00 ppm	0.00
69) Phenanthrene-d10	10.340	188	689324	40.00 ppm	0.00
83) Chrysene-d12	14.544	240	627250	40.00 ppm	0.00
92) Perylene-d12	16.678	264	642620	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	196901	40.00 ppm	0.00
104) Acenaphthene-d10a	8.141	164	409528	40.00 ppm	0.00
106) Chrysene-d12a	14.544	240	627250	40.00 ppm	0.00
109) Phenanthrene-d10a	10.340	188	689324	40.00 ppm	0.00
112) Naphthalene-d8a	6.023	136	794673	40.00 ppm	0.00
114) Chrysene-d12b	14.544	240	627250	40.00 ppm	0.00

System Monitoring Compounds					
5) 2-Fluorophenol	0.000	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
8) Phenol-d5	0.000	99	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
85) Terphenyl-d14	0.000	244	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
108) 1-chlorooctadecane	12.180	57	49972	10.20 ppm	0.09
Spiked Amount 50.000			Recovery	= 20.40%	
111) o-terphenyl	10.981	230	86765	11.85 ppm	-0.11
Spiked Amount 50.000			Recovery	= 23.70%	

Target Compounds						Qvalue
103) Benzaldehyde	4.558	105	55905	14.96 ppm		86
105) 1,2,4,5-Tetrachloroben...	7.002	216	48987	11.63 ppm		99
107) Benzidine	12.506	184	83458	11.26 ppm		98
110) Atrazine	9.965	215	15898	9.89 ppm	#	81
113) Hydroquinone	6.446	110	55528	8.30 ppm		78

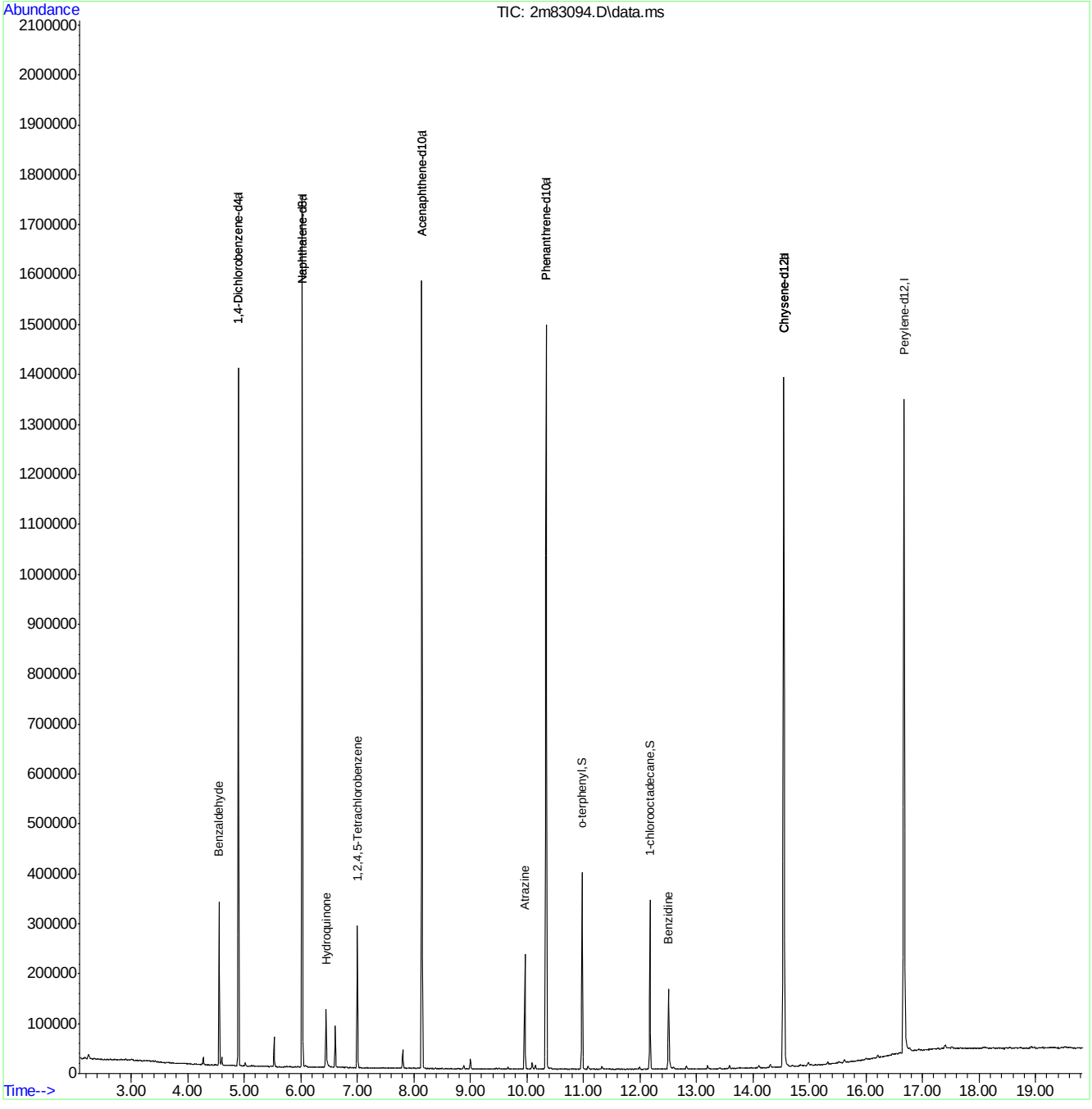
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83094.D
Acq On : 15 Apr 2016 4:47 pm
Operator : ashleyn
Sample : ic3651-10
Misc : op92470,e2m3651
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 15 17:41:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 17:37:24 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83095.D
Acq On : 15 Apr 2016 5:14 pm
Operator : ashleyn
Sample : ic3651-5
Misc : op92470,e2m3651
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 15 17:41:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 17:37:24 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	199913	40.00 ppm	0.00
24) Naphthalene-d8	6.023	136	806162	40.00 ppm	0.00
47) Acenaphthene-d10	8.141	164	410101	40.00 ppm	0.00
69) Phenanthrene-d10	10.340	188	694277	40.00 ppm	0.00
83) Chrysene-d12	14.544	240	625421	40.00 ppm	0.00
92) Perylene-d12	16.678	264	639829	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	199913	40.00 ppm	0.00
104) Acenaphthene-d10a	8.141	164	410101	40.00 ppm	0.00
106) Chrysene-d12a	14.544	240	625421	40.00 ppm	0.00
109) Phenanthrene-d10a	10.340	188	694277	40.00 ppm	0.00
112) Naphthalene-d8a	6.023	136	806162	40.00 ppm	0.00
114) Chrysene-d12b	14.544	240	625421	40.00 ppm	0.00

System Monitoring Compounds					
5) 2-Fluorophenol	0.000	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
8) Phenol-d5	0.000	99	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
85) Terphenyl-d14	0.000	244	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
108) 1-chlorooctadecane	12.174	57	25727	5.27 ppm	0.09
Spiked Amount 50.000			Recovery	= 10.54%	
111) o-terphenyl	10.976	230	47925	6.50 ppm	-0.12
Spiked Amount 50.000			Recovery	= 13.00%	

Target Compounds						Qvalue
103) Benzaldehyde	4.558	105	31073	8.19 ppm		87
105) 1,2,4,5-Tetrachloroben...	7.002	216	27980	6.63 ppm		99
107) Benzidine	12.506	184	40489	5.48 ppm		98
110) Atrazine	9.960	215	7726	4.77 ppm	#	87
113) Hydroquinone	6.446	110	21525	3.17 ppm		77

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

7.6.13

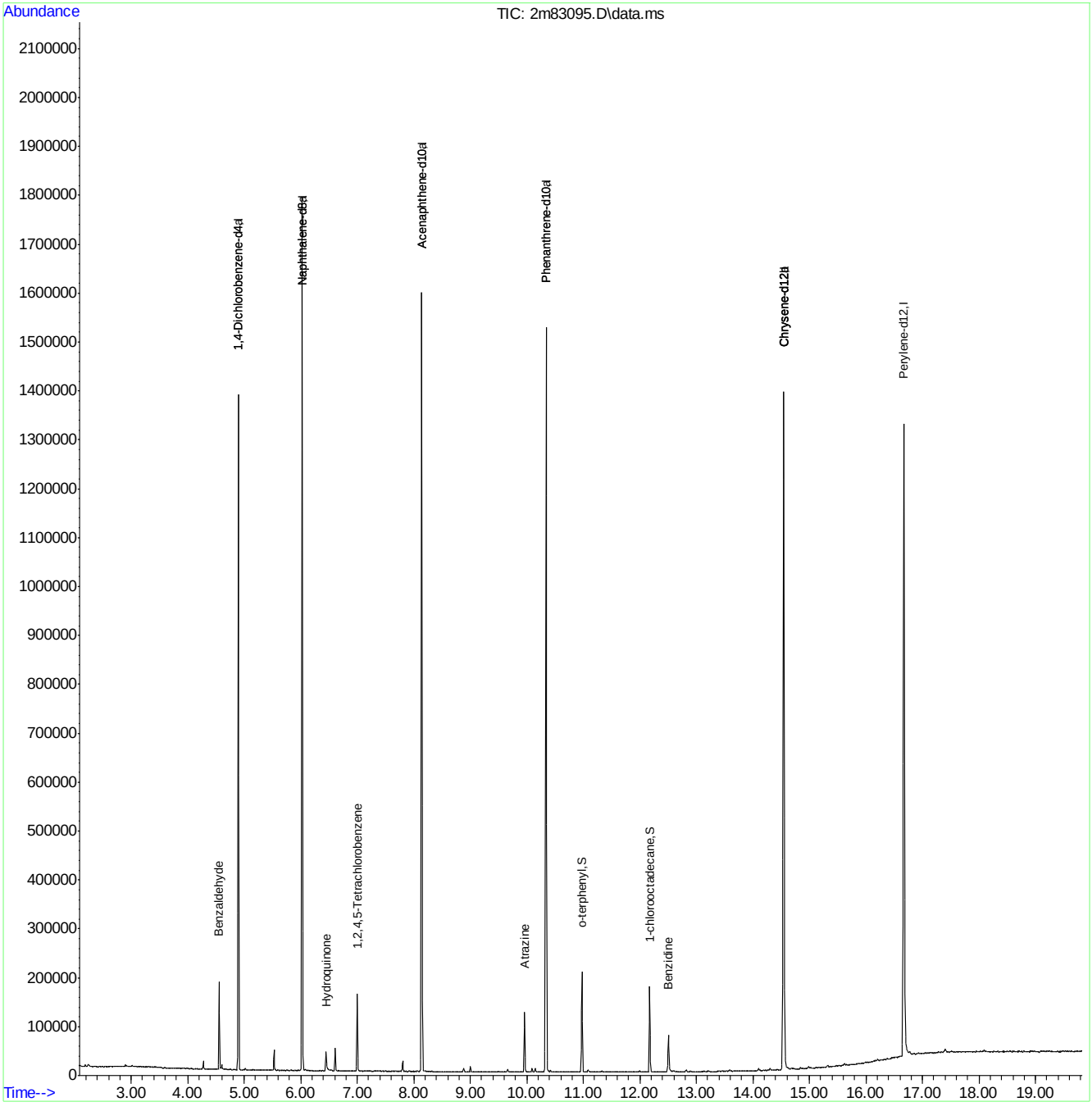
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83095.D
Acq On : 15 Apr 2016 5:14 pm
Operator : ashleyn
Sample : ic3651-5
Misc : op92470,e2m3651
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 15 17:41:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 17:37:24 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83096.D
Acq On : 15 Apr 2016 5:40 pm
Operator : ashleyn
Sample : ic3651-2
Misc : op92470,e2m3651
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 18 08:18:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 17:47:15 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	216514	40.00	ppm	0.00
24) Naphthalene-d8	6.023	136	876012	40.00	ppm	0.00
47) Acenaphthene-d10	8.141	164	449853	40.00	ppm	0.00
69) Phenanthrene-d10	10.340	188	751450	40.00	ppm	0.00
83) Chrysene-d12	14.544	240	681999	40.00	ppm	0.00
92) Perylene-d12	16.678	264	698051	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	216514	40.00	ppm	0.00
104) Acenaphthene-d10a	8.141	164	449853	40.00	ppm	0.00
106) Chrysene-d12a	14.544	240	681999	40.00	ppm	0.00
109) Phenanthrene-d10a	10.340	188	751450	40.00	ppm	0.00
112) Naphthalene-d8a	6.023	136	876012	40.00	ppm	0.00
114) Chrysene-d12b	14.544	240	681999	40.00	ppm	0.00

System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) 1-chlorooctadecane	12.174	57	9590	1.74	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.48%	
111) o-terphenyl	10.982	230	19850	2.21	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.42%	

Target Compounds						Qvalue
103) Benzaldehyde	4.558	105	13368	2.41	ppm	96
105) 1,2,4,5-Tetrachloroben...	7.002	216	12170	2.34	ppm	98
107) Benzidine	12.501	184	12511	1.41	ppm	97
110) Atrazine	9.960	215	2865	1.64	ppm	95
113) Hydroquinone	6.451	110	5391	0.82	ppm	92

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

7.6.14

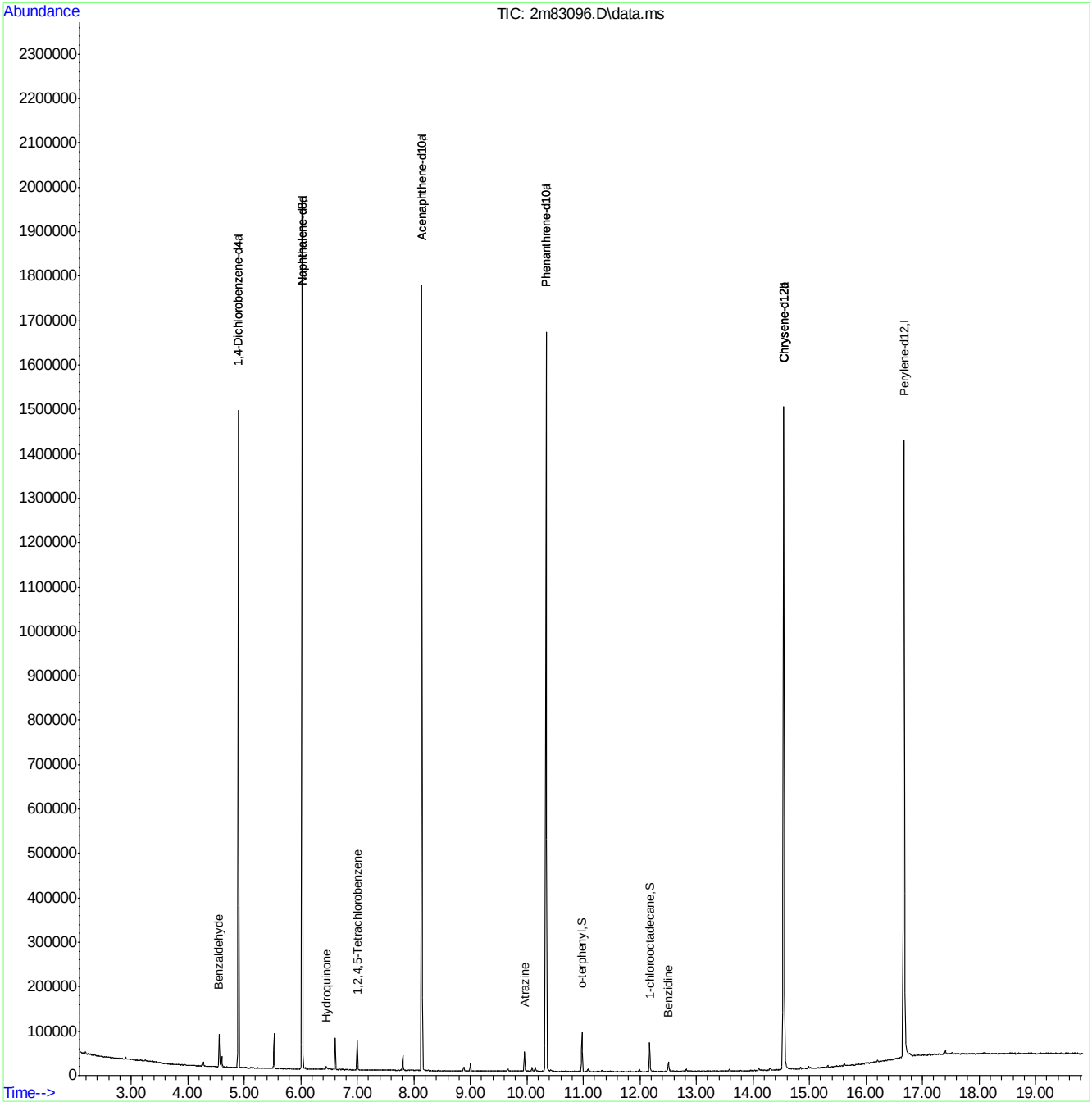
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83096.D
Acq On : 15 Apr 2016 5:40 pm
Operator : ashleyn
Sample : ic3651-2
Misc : op92470,e2m3651
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 18 08:18:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 17:47:15 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83097.D
Acq On : 15 Apr 2016 6:07 pm
Operator : ashleyn
Sample : ic3651-1
Misc : op92470,e2m3651
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 18 08:19:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 17:47:15 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	207905	40.00	ppm	0.00
24) Naphthalene-d8	6.023	136	835937	40.00	ppm	0.00
47) Acenaphthene-d10	8.141	164	427825	40.00	ppm	0.00
69) Phenanthrene-d10	10.340	188	712464	40.00	ppm	0.00
83) Chrysene-d12	14.544	240	644938	40.00	ppm	0.00
92) Perylene-d12	16.672	264	659772	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	207905	40.00	ppm	0.00
104) Acenaphthene-d10a	8.141	164	427825	40.00	ppm	0.00
106) Chrysene-d12a	14.544	240	644938	40.00	ppm	0.00
109) Phenanthrene-d10a	10.340	188	712464	40.00	ppm	0.00
112) Naphthalene-d8a	6.023	136	835937	40.00	ppm	0.00
114) Chrysene-d12b	14.544	240	644938	40.00	ppm	0.00

System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) 1-chlorooctadecane	12.174	57	4046	0.77	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.54%	
111) o-terphenyl	10.982	230	9382	1.10	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.20%	

Target Compounds							Qvalue
103) Benzaldehyde	4.563	105	6241	1.17	ppm		93
105) 1,2,4,5-Tetrachloroben...	7.002	216	6088	1.23	ppm		95
107) Benzidine	12.506	184	4646	0.55	ppm		95
110) Atrazine	9.960	215	1156	0.70	ppm	#	82
113) Hydroquinone	6.451	110	2319	0.37	ppm		90

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

7.6.15

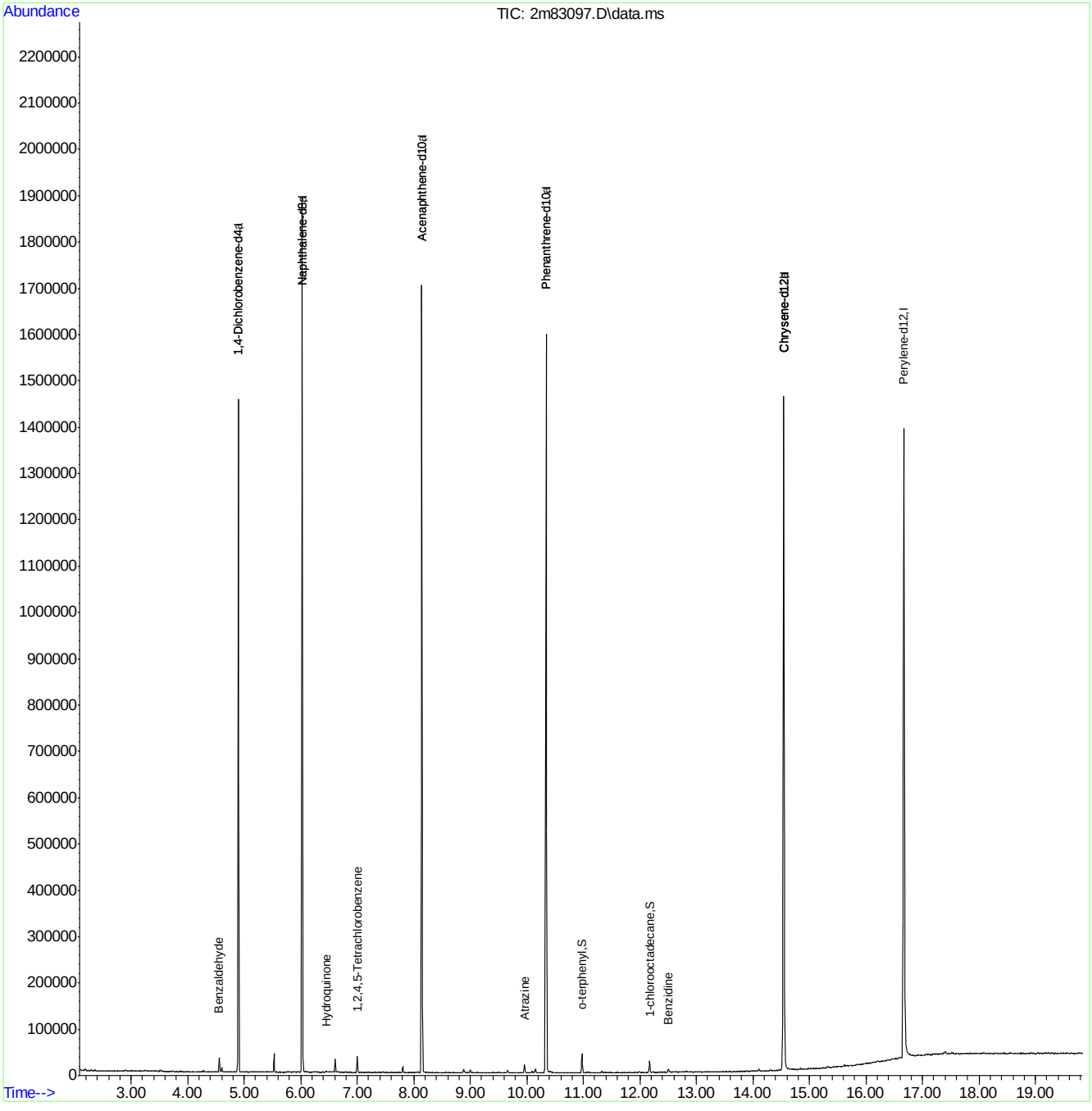
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83097.D
Acq On : 15 Apr 2016 6:07 pm
Operator : ashleyn
Sample : ic3651-1
Misc : op92470,e2m3651
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 18 08:19:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 17:47:15 2016
Response via : Initial Calibration



M2M3649.M Mon Apr 18 08:19:51 2016 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83098.D
Acq On : 15 Apr 2016 6:33 pm
Operator : ashleyn
Sample : ic3651-25
Misc : op92470,e2m3651
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 18 08:20:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 17:47:15 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	189739	40.00	ppm	0.00
24) Naphthalene-d8	6.024	136	774701	40.00	ppm	0.00
47) Acenaphthene-d10	8.142	164	391499	40.00	ppm	0.00
69) Phenanthrene-d10	10.340	188	660804	40.00	ppm	0.00
83) Chrysene-d12	14.544	240	603592	40.00	ppm	0.00
92) Perylene-d12	16.673	264	612627	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	189739	40.00	ppm	0.00
104) Acenaphthene-d10a	8.142	164	391499	40.00	ppm	0.00
106) Chrysene-d12a	14.544	240	603592	40.00	ppm	0.00
109) Phenanthrene-d10a	10.340	188	660804	40.00	ppm	0.00
112) Naphthalene-d8a	6.024	136	774701	40.00	ppm	0.00
114) Chrysene-d12b	14.544	240	603592	40.00	ppm	0.00

System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) 1-chlorooctadecane	12.174	57	124723	25.51	ppm	0.00
Spiked Amount 50.000			Recovery = 51.02%			
111) o-terphenyl	10.982	230	202710	25.64	ppm	0.00
Spiked Amount 50.000			Recovery = 51.28%			

Target Compounds						Qvalue
103) Benzaldehyde	4.558	105	131277	27.05	ppm	100
105) 1,2,4,5-Tetrachloroben...	7.002	216	115633	25.54	ppm	100
107) Benzidine	12.506	184	209157	26.57	ppm	100
110) Atrazine	9.965	215	38102	24.79	ppm	97
113) Hydroquinone	6.446	110	153406	26.28	ppm	99

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

7.6.16

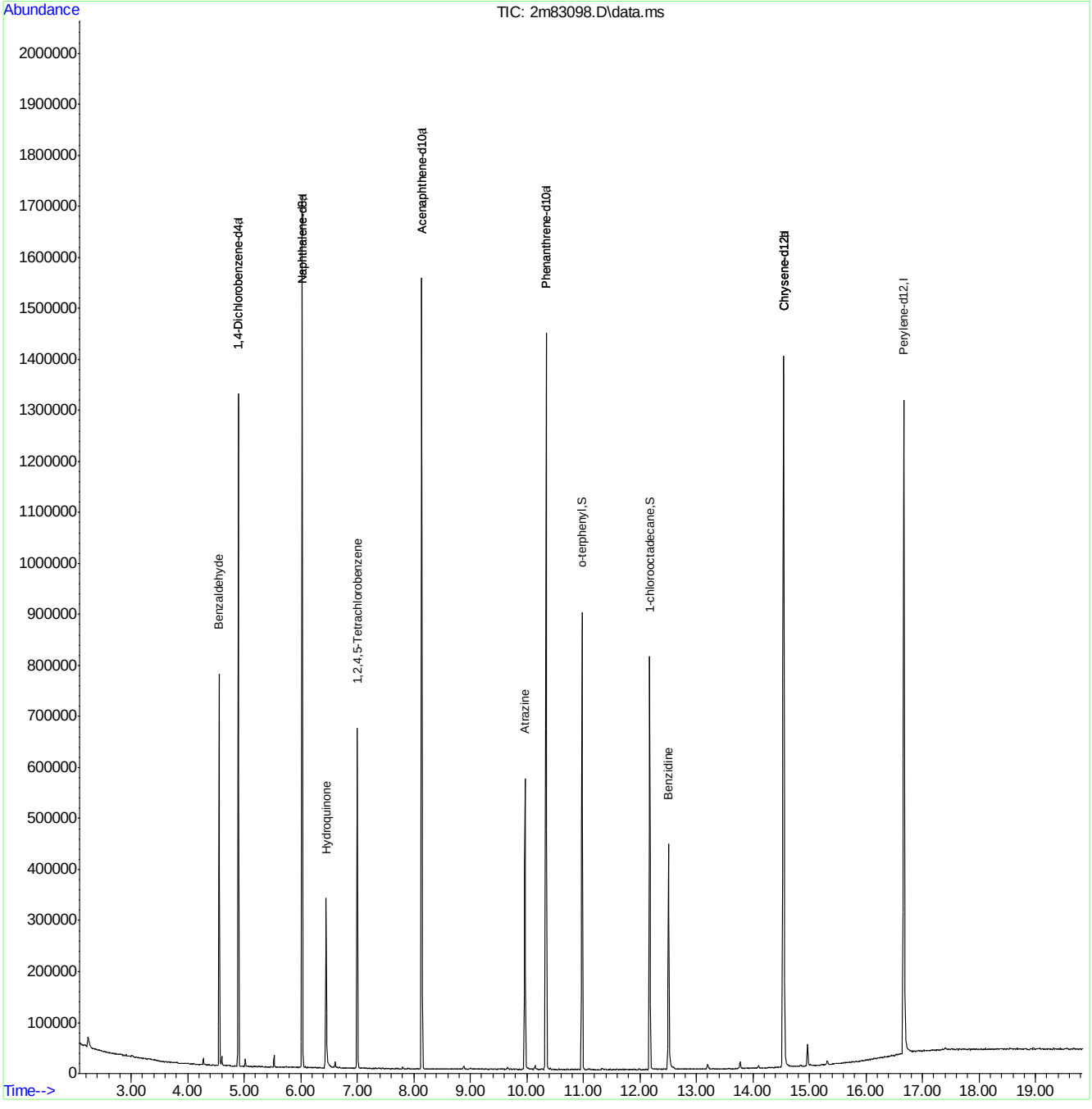
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83098.D
Acq On : 15 Apr 2016 6:33 pm
Operator : ashleyn
Sample : ic3651-25
Misc : op92470,e2m3651
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 18 08:20:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Fri Apr 15 17:47:15 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83099.D
Acq On : 15 Apr 2016 7:00 pm
Operator : ashleyn
Sample : icv3649-50
Misc : op92470,e2m3651
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 18 08:40:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	194977	40.00	ppm	0.00
24) Naphthalene-d8	6.023	136	737985	40.00	ppm	0.00
47) Acenaphthene-d10	8.141	164	405519	40.00	ppm	0.00
69) Phenanthrene-d10	10.340	188	579653	40.00	ppm	0.00
83) Chrysene-d12	14.544	240	470456	40.00	ppm	0.00
92) Perylene-d12	16.672	264	447214	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	194977	40.00	ppm	0.00
104) Acenaphthene-d10a	8.141	164	405519	40.00	ppm	0.00
106) Chrysene-d12a	14.544	240	470456	40.00	ppm	0.00
109) Phenanthrene-d10a	10.340	188	579653	40.00	ppm	0.00
112) Naphthalene-d8a	6.023	136	737985	40.00	ppm	0.00
114) Chrysene-d12b	14.544	240	470456	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	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds						Qvalue
9) Phenol	4.627	94	407243	39.93	ppm	100
12) 2-Chlorophenol	4.734	128	342474	44.58	ppm	99
19) 2-Methylphenol	5.098	108	299937	46.15	ppm	99
21) 3&4-Methylphenol	5.221	108	316458	46.24	ppm	99
29) 2-Nitrophenol	5.654	139	172491	47.05	ppm	94
30) 2,4-Dimethylphenol	5.692	107	311110	47.17	ppm	100
31) Benzoic acid	5.793	105	219806	44.33	ppm	99
33) 2,4-Dichlorophenol	5.884	162	254035	46.73	ppm	99
34) 2,6-Dichlorophenol	6.109	162	246715	46.42	ppm	98
43) 4-Chloro-3-methylphenol	6.622	107	255611	44.51	ppm	99
49) 2,4,6-Trichlorophenol	7.146	196	156928	49.16	ppm	98
50) 2,4,5-Trichlorophenol	7.189	196	156403	45.16	ppm	99
60) 2,4-Dinitrophenol	8.238	184	60426	39.13	ppm	95
61) 4-Nitrophenol	8.361	109	72231	46.07	ppm	98
64) 2,3,4,6-Tetrachlorophenol	8.617	232	114321	45.98	ppm	97
70) 4,6-Dinitro-2-methylph...	9.013	198	92467	49.31	ppm	93
76) Pentachlorophenol	10.067	266	91622	48.52	ppm	98

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83099.D
Acq On : 15 Apr 2016 7:00 pm
Operator : ashleyn
Sample : icv3649-50
Misc : op92470,e2m3651
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 18 08:40:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration

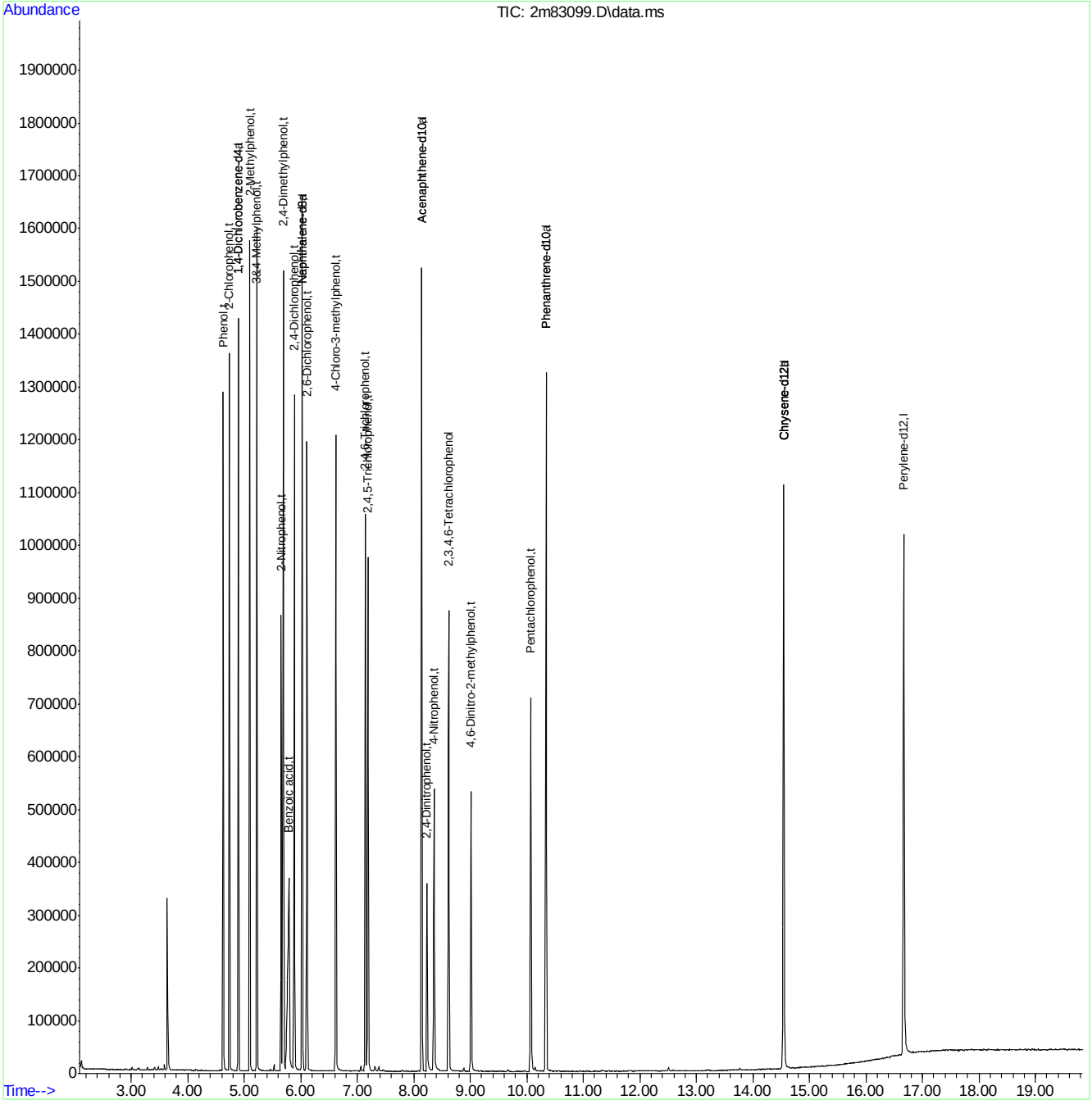
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83099.D
Acq On : 15 Apr 2016 7:00 pm
Operator : ashleyn
Sample : icv3649-50
Misc : op92470,e2m3651
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 18 08:40:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83100.D
Acq On : 15 Apr 2016 7:26 pm
Operator : ashleyn
Sample : icv3649-50
Misc : op92470,e2m3651
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 18 08:41:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.900	152	191905	40.00 ppm	0.00
24) Naphthalene-d8	6.023	136	775866	40.00 ppm	0.00
47) Acenaphthene-d10	8.141	164	447194	40.00 ppm	0.00
69) Phenanthrene-d10	10.340	188	649883	40.00 ppm	0.00
83) Chrysene-d12	14.544	240	520887	40.00 ppm	0.00
92) Perylene-d12	16.672	264	475465	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.900	152	191905	40.00 ppm	0.00
104) Acenaphthene-d10a	8.141	164	447194	40.00 ppm	0.00
106) Chrysene-d12a	14.544	240	520887	40.00 ppm	0.00
109) Phenanthrene-d10a	10.340	188	649883	40.00 ppm	0.00
112) Naphthalene-d8a	6.023	136	775866	40.00 ppm	0.00
114) Chrysene-d12b	14.544	240	520887	40.00 ppm	0.00

System Monitoring Compounds					
5) 2-Fluorophenol	0.000	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
8) Phenol-d5	0.000	99	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
25) Nitrobenzene-d5	0.000	82	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
51) 2-Fluorobiphenyl	0.000	172	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
73) 2,4,6-Tribromophenol	0.000	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
85) Terphenyl-d14	0.000	244	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
108) 1-chlorooctadecane	0.000	57	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
111) o-terphenyl	0.000	230	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%

Target Compounds					Qvalue
3) Pyridine	2.884	79	361697	45.74 ppm	100
10) Aniline	4.649	93	501713	47.80 ppm	92
16) Benzyl alcohol	5.012	108	222079	47.48 ppm	95
39) 4-Chloroaniline	6.098	127	376852	44.12 ppm	99
44) 2-Methylnaphthalene	6.799	141	530981	44.45 ppm	99
54) 2-Nitroaniline	7.537	65	154650	44.48 ppm	98
58) 3-Nitroaniline	8.093	138	168036	44.68 ppm	95
62) Dibenzofuran	8.430	168	802874	45.98 ppm	100
68) 4-Nitroaniline	8.970	138	168896	44.96 ppm	99
79) Carbazole	10.730	167	825716	45.98 ppm	100

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

7.6.18

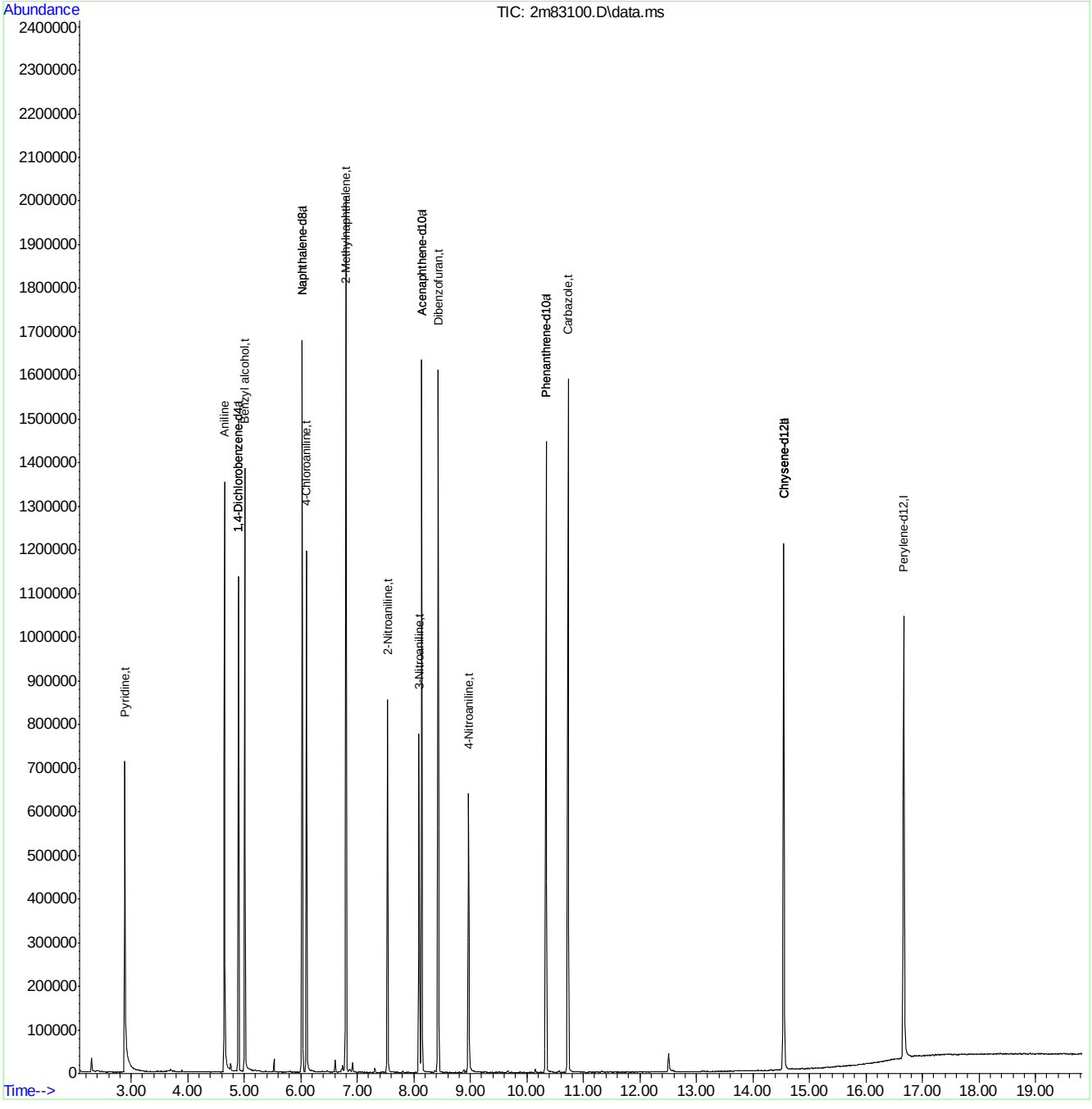
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83100.D
Acq On : 15 Apr 2016 7:26 pm
Operator : ashleyn
Sample : icv3649-50
Misc : op92470,e2m3651
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 18 08:41:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration



M2M3649.M Mon Apr 18 08:42:37 2016 Page: 2

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83101.D
Acq On : 15 Apr 2016 7:53 pm
Operator : ashleyn
Sample : icv3649-50
Misc : op92470,e2m3651
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 18 08:42:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	201601	40.00 ppm	0.00
24) Naphthalene-d8	6.023	136	755504	40.00 ppm	0.00
47) Acenaphthene-d10	8.141	164	405586	40.00 ppm	0.00
69) Phenanthrene-d10	10.340	188	569441	40.00 ppm	0.00
83) Chrysene-d12	14.544	240	457910	40.00 ppm	0.00
92) Perylene-d12	16.673	264	434076	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	201601	40.00 ppm	0.00
104) Acenaphthene-d10a	8.141	164	405586	40.00 ppm	0.00
106) Chrysene-d12a	14.544	240	457910	40.00 ppm	0.00
109) Phenanthrene-d10a	10.340	188	569441	40.00 ppm	0.00
112) Naphthalene-d8a	6.023	136	755504	40.00 ppm	0.00
114) Chrysene-d12b	14.544	240	457910	40.00 ppm	0.00

System Monitoring Compounds					
5) 2-Fluorophenol	3.911	112	355591	47.02 ppm	0.00
Spiked Amount 50.000			Recovery	= 94.04%	
8) Phenol-d5	4.617	99	430586	45.36 ppm	0.00
Spiked Amount 50.000			Recovery	= 90.72%	
25) Nitrobenzene-d5	5.349	82	356298	50.34 ppm	0.00
Spiked Amount 50.000			Recovery	= 100.68%	
51) 2-Fluorobiphenyl	7.248	172	654211	50.83 ppm	0.00
Spiked Amount 50.000			Recovery	= 101.66%	
73) 2,4,6-Tribromophenol	9.286	330	71584	48.83 ppm	0.00
Spiked Amount 50.000			Recovery	= 97.66%	
85) Terphenyl-d14	12.907	244	505353	51.39 ppm	0.00
Spiked Amount 50.000			Recovery	= 102.78%	
108) 1-chlorooctadecane	0.000	57	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
111) o-terphenyl	0.000	230	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	

Target Compounds	Qvalue

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

7.6.19

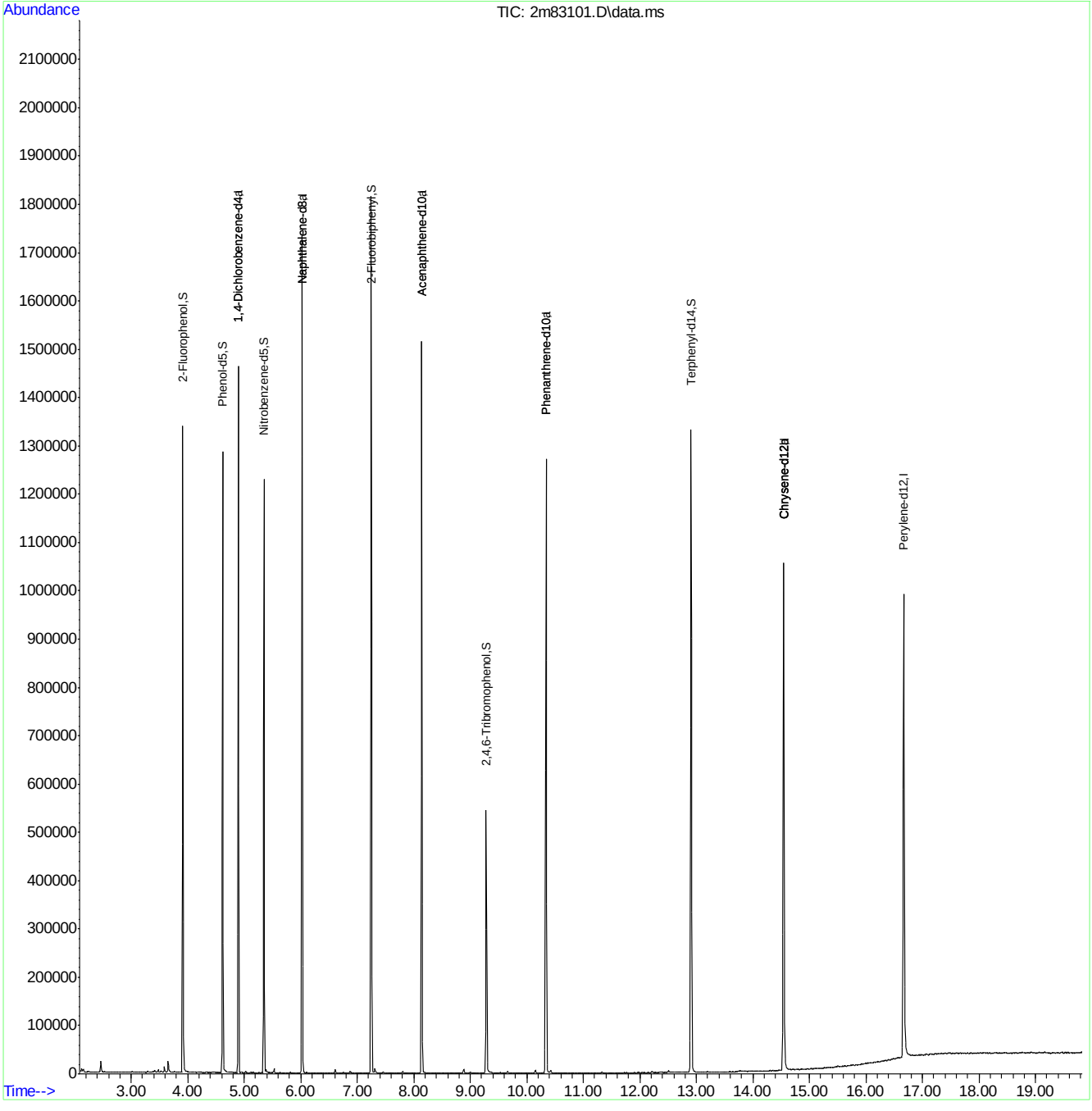
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83101.D
Acq On : 15 Apr 2016 7:53 pm
Operator : ashleyn
Sample : icv3649-50
Misc : op92470,e2m3651
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 18 08:42:08 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration



M2M3649.M Mon Apr 18 08:42:24 2016 Page: 2

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83102a.D
Acq On : 15 Apr 2016 8:19 pm
Operator : ashleyn
Sample : icv3651-50
Misc : op92470,e2m3651
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 18 08:45:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	176555	40.00 ppm	0.00
24) Naphthalene-d8	6.023	136	671776	40.00 ppm	0.00
47) Acenaphthene-d10	8.142	164	369659	40.00 ppm	0.00
69) Phenanthrene-d10	10.340	188	525868	40.00 ppm	0.00
83) Chrysene-d12	14.549	240	410715	40.00 ppm	0.00
92) Perylene-d12	16.673	264	405970	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	176555	40.00 ppm	0.00
104) Acenaphthene-d10a	8.142	164	369659	40.00 ppm	0.00
106) Chrysene-d12a	14.549	240	410715	40.00 ppm	0.00
109) Phenanthrene-d10a	10.340	188	525868	40.00 ppm	0.00
112) Naphthalene-d8a	6.023	136	671776	40.00 ppm	0.00
114) Chrysene-d12b	14.549	240	410715	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	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
108) 1-chlorooctadecane	0.000	57	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
111) o-terphenyl	0.000	230	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%

Target Compounds					Qvalue
105) 1,2,4,5-Tetrachloroben...	7.002	216	228997	50.89 ppm	99
107) Benzidine	12.506	184	459502	88.74 ppm	100

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

7.6.20

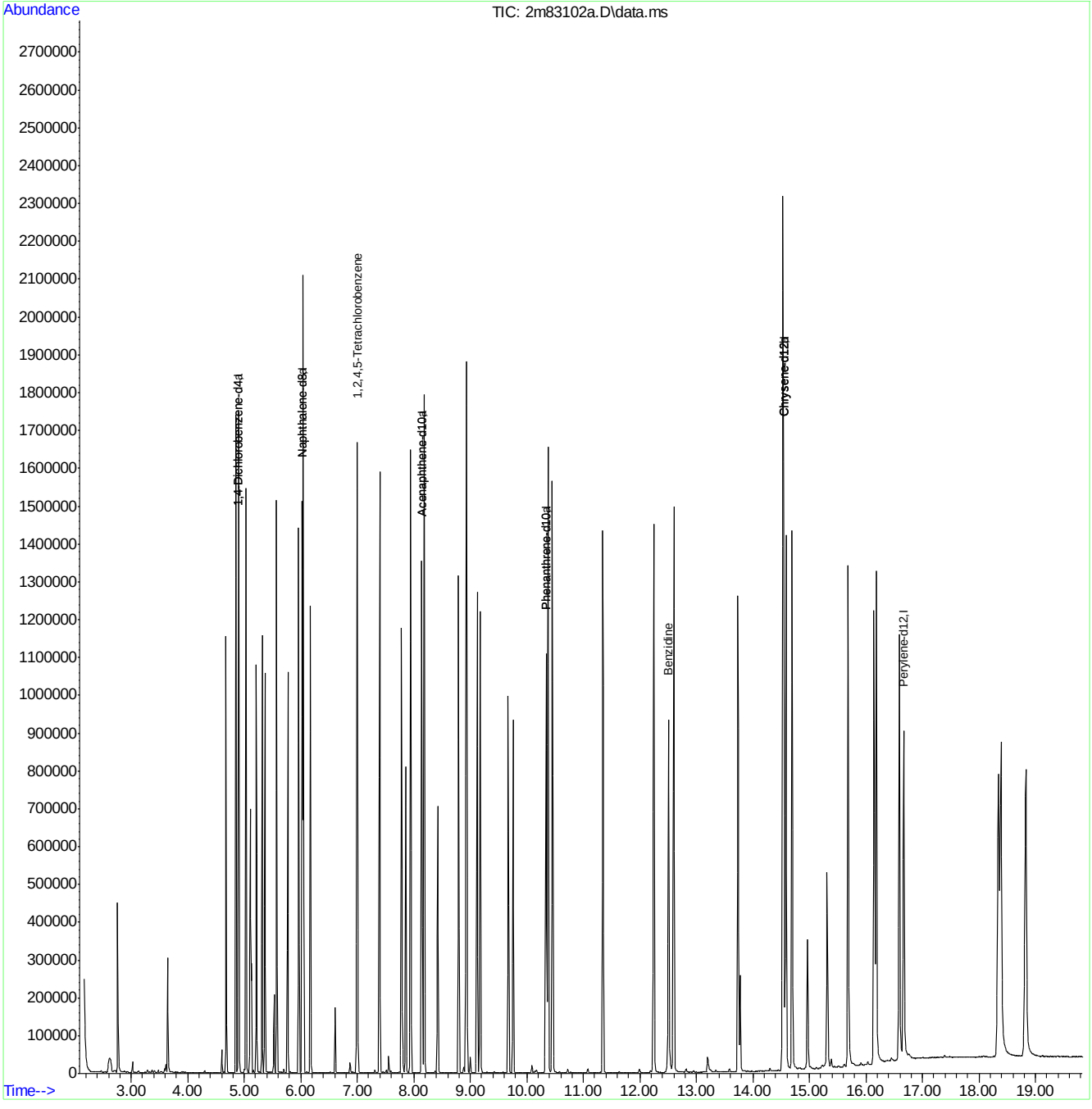
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83102a.D
Acq On : 15 Apr 2016 8:19 pm
Operator : ashleyn
Sample : icv3651-50
Misc : op92470,e2m3651
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 18 08:45:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration



M2M3649.M Mon Apr 18 08:46:10 2016 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83102.D
Acq On : 15 Apr 2016 8:19 pm
Operator : ashleyn
Sample : icv3649-50
Misc : op92470,e2m3651
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 18 08:46:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	176555	40.00 ppm	0.00
24) Naphthalene-d8	6.023	136	671776	40.00 ppm	0.00
47) Acenaphthene-d10	8.142	164	369659	40.00 ppm	0.00
69) Phenanthrene-d10	10.340	188	525868	40.00 ppm	0.00
83) Chrysene-d12	14.549	240	410715	40.00 ppm	0.00
92) Perylene-d12	16.673	264	405970	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	176555	40.00 ppm	0.00
104) Acenaphthene-d10a	8.142	164	369659	40.00 ppm	0.00
106) Chrysene-d12a	14.549	240	410715	40.00 ppm	0.00
109) Phenanthrene-d10a	10.340	188	525868	40.00 ppm	0.00
112) Naphthalene-d8a	6.023	136	671776	40.00 ppm	0.00
114) Chrysene-d12b	14.549	240	410715	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	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
108) 1-chlorooctadecane	0.000	57	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
111) o-terphenyl	0.000	230	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%

Target Compounds					Qvalue
4) N-Nitrosodimethylamine	2.761	74	208991	47.88 ppm	98
11) bis(2-Chloroethyl)ether	4.681	93	330502	49.85 ppm	100
14) 1,3-Dichlorobenzene	4.852	146	376139	49.52 ppm	99
15) 1,4-Dichlorobenzene	4.906	146	376614	49.27 ppm	98
17) 1,2-Dichlorobenzene	5.034	146	358153	50.46 ppm	99
20) 2,2'-oxybis(1-Chloropr...	5.109	45	314029	44.29 ppm	85
22) n-Nitroso-di-n-propyla...	5.216	70	212695	50.45 ppm	99
23) Hexachloroethane	5.317	201	109569	51.91 ppm	95
26) Nitrobenzene	5.366	77	317007	49.61 ppm	98
28) Isophorone	5.574	82	598275	53.59 ppm	100
32) bis(2-Chloroethoxy)met...	5.772	93	345244	48.74 ppm	100
36) 1,2,4-Trichlorobenzene	5.965	180	269705	51.58 ppm	99
38) Naphthalene	6.045	128	977546	49.75 ppm	99
42) Hexachlorobutadiene	6.173	225	126479	52.95 ppm	99
48) Hexachlorocyclopentadiene	6.997	237	112866	47.27 ppm	99
52) 2-Chloronaphthalene	7.398	162	546307	51.40 ppm	98
55) Dimethylphthalate	7.783	163	594099	50.33 ppm	99
56) Acenaphthylene	7.944	152	864338	50.06 ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83102.D
Acq On : 15 Apr 2016 8:19 pm
Operator : ashleyn
Sample : icv3649-50
Misc : op92470,e2m3651
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 18 08:46:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
57) 2,6-Dinitrotoluene	7.858	165	131309	51.94 ppm	97
59) Acenaphthene	8.190	153	543581	49.83 ppm	99
63) 2,4-Dinitrotoluene	8.425	165	166160	48.67 ppm	84
65) Diethylphthalate	8.794	149	556151	48.97 ppm	100
66) Fluorene	8.928	166	575366	48.55 ppm	100
67) 4-Chlorophenyl-phenyle...	8.938	204	240957	49.45 ppm	94
71) n-Nitrosodiphenylamine	9.120	169	393453	52.74 ppm	99
72) 1,2-Diphenylhydrazine	9.174	77	572649	53.41 ppm	99
74) 4-Bromophenyl-phenylether	9.677	248	139436	54.04 ppm	98
75) Hexachlorobenzene	9.757	284	152654	51.61 ppm	95
77) Phenanthrene	10.377	178	798988	49.85 ppm	99
78) Anthracene	10.452	178	787581	50.01 ppm	99
80) Di-n-butylphthalate	11.345	149	891279	50.94 ppm	100
81) Fluoranthene	12.249	202	730175	50.20 ppm	99
84) Pyrene	12.602	202	777719	54.13 ppm	99
86) Butylbenzylphthalate	13.736	149	373742	52.23 ppm	99
88) Benzo[a]anthracene	14.528	228	613313	49.78 ppm	99
90) Chrysene	14.587	228	632868	49.75 ppm	99
91) bis(2-Ethylhexyl)phtha...	14.694	149	516310	53.33 ppm	100
93) Di-n-octylphthalate	15.683	149	862756	55.10 ppm	99
94) Benzo[b]fluoranthene	16.143	252	640025	50.13 ppm	95
95) Benzo[k]fluoranthene	16.186	252	677306	53.73 ppm	99
96) Benzo[a]pyrene	16.592	252	602849	53.17 ppm	98
97) Indeno[1,2,3-cd]pyrene	18.347	276	611519	56.06 ppm	98
99) Dibenz[a,h]anthracene	18.390	278	641117	51.96 ppm	99
101) Benzo[g,h,i]perylene	18.828	276	641595	52.01 ppm	99

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

7.6.21

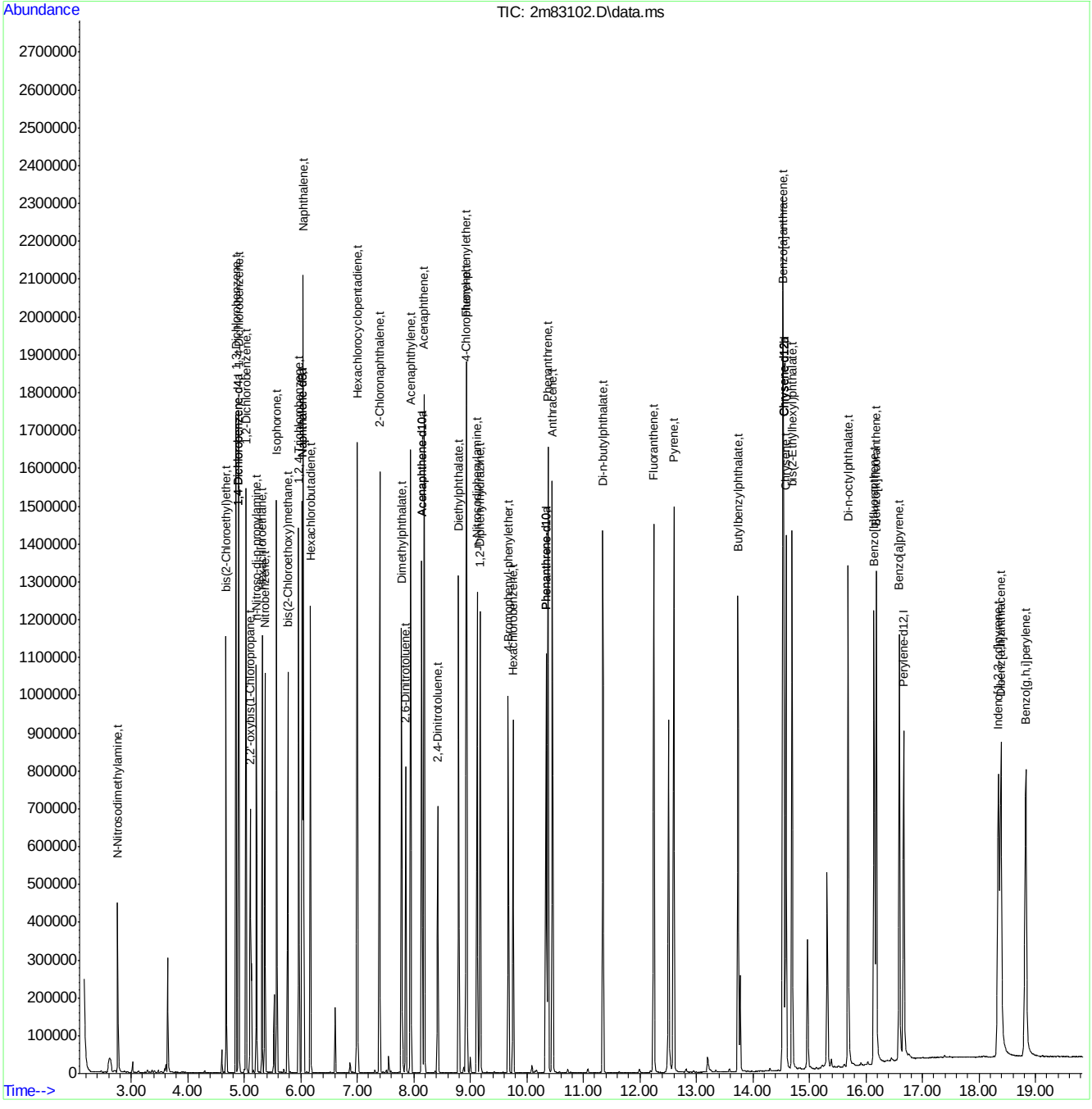
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83102.D
Acq On : 15 Apr 2016 8:19 pm
Operator : ashleyn
Sample : icv3649-50
Misc : op92470,e2m3651
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 18 08:46:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration



SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83103.D
Acq On : 15 Apr 2016 8:46 pm
Operator : ashleyn
Sample : icv3649-50
Misc : op92470,e2m3651
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 18 08:48:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	201538	40.00 ppm	0.00
24) Naphthalene-d8	6.023	136	874181	40.00 ppm	0.00
47) Acenaphthene-d10	8.141	164	409982	40.00 ppm	0.00
69) Phenanthrene-d10	10.340	188	589902	40.00 ppm	0.00
83) Chrysene-d12	14.544	240	470229	40.00 ppm	0.00
92) Perylene-d12	16.672	264	438650	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	201538	40.00 ppm	0.00
104) Acenaphthene-d10a	8.141	164	409982	40.00 ppm	0.00
106) Chrysene-d12a	14.544	240	470229	40.00 ppm	0.00
109) Phenanthrene-d10a	10.340	188	589902	40.00 ppm	0.00
112) Naphthalene-d8a	6.023	136	874181	40.00 ppm	0.00
114) Chrysene-d12b	14.544	240	470229	40.00 ppm	0.00

System Monitoring Compounds					
5) 2-Fluorophenol	0.000	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
8) Phenol-d5	0.000	99	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
25) Nitrobenzene-d5	0.000	82	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
51) 2-Fluorobiphenyl	0.000	172	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
73) 2,4,6-Tribromophenol	0.000	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
85) Terphenyl-d14	0.000	244	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
108) 1-chlorooctadecane	0.000	57	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
111) o-terphenyl	0.000	230	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%

Target Compounds					Qvalue
2) 1,4-Dioxane	2.482	88	156509	46.46 ppm	99
6) Indene	5.103	116	626912	50.42 ppm	99
7) Cumene	4.290	105	843614	46.04 ppm	100
13) Decane	4.761	43	269386	44.38 ppm	97
18) Acetophenone	5.216	105	464008	47.55 ppm	85
27) Quinoline	6.392	129	663623	39.54 ppm	99
40) 2,3-Dichloroaniline	7.141	161	270013	35.09 ppm	98
41) Caprolactam	6.451	55	114273	37.92 ppm	99
45) 1-Methylnaphthalene	6.916	141	549874	39.25 ppm	100
46) Dimethylnaphthalene	7.580	156	549341	39.01 ppm	99
53) Biphenyl	7.371	154	752633	48.29 ppm	99
82) Octadecane	10.270	57	363875	51.11 ppm	99
100) 7,12-Dimethylbenz(a)an...	16.143	256	298715	49.54 ppm	99

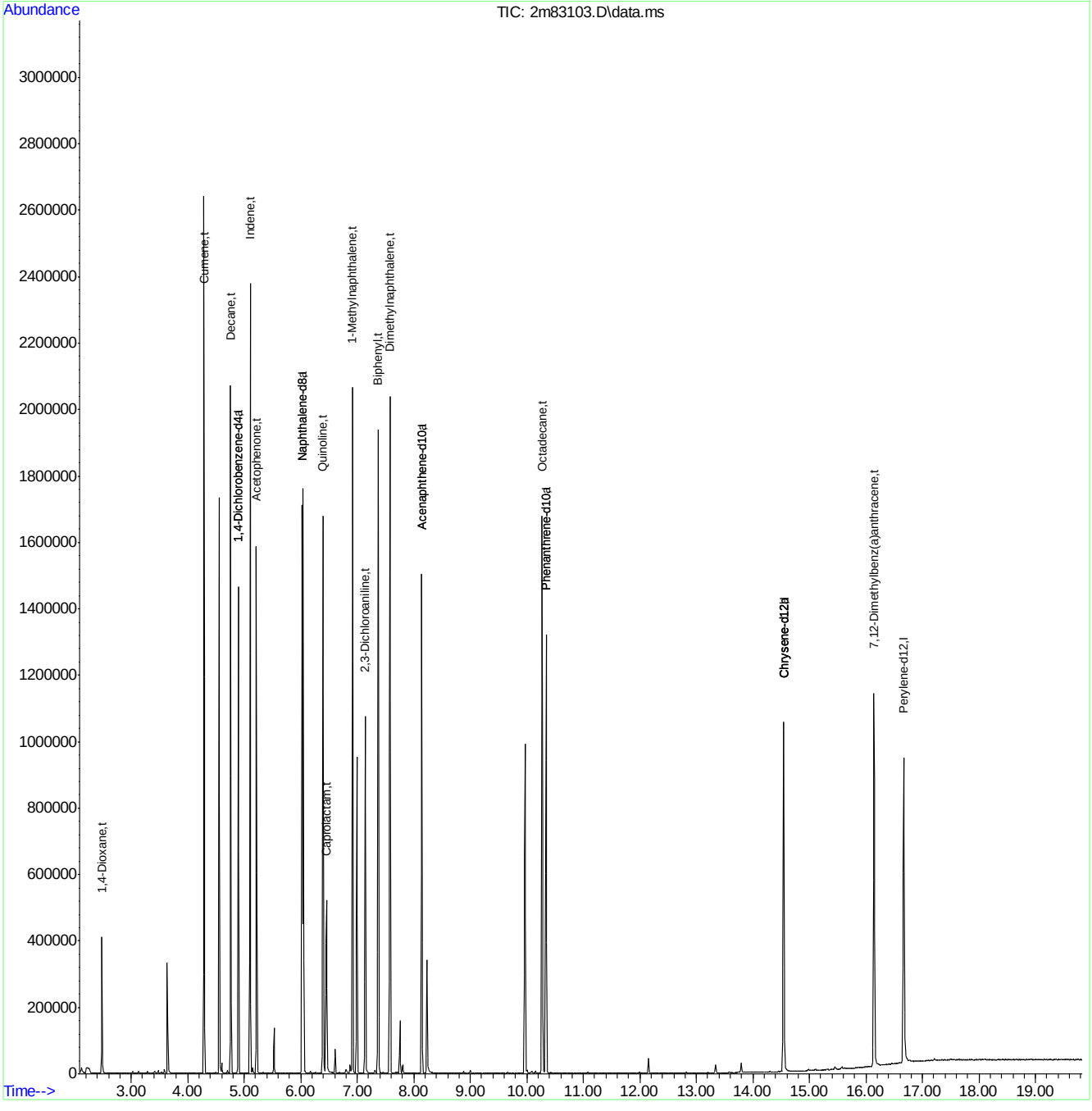
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83103.D
Acq On : 15 Apr 2016 8:46 pm
Operator : ashleyn
Sample : icv3649-50
Misc : op92470,e2m3651
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 18 08:48:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration



SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83103a.D
Acq On : 15 Apr 2016 8:46 pm
Operator : ashleyn
Sample : icv3651-50
Misc : op92470,e2m3651
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 18 08:48:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	201538	40.00	ppm	0.00
24) Naphthalene-d8	6.023	136	874181	40.00	ppm	0.00
47) Acenaphthene-d10	8.141	164	409982	40.00	ppm	0.00
69) Phenanthrene-d10	10.340	188	589902	40.00	ppm	0.00
83) Chrysene-d12	14.544	240	470229	40.00	ppm	0.00
92) Perylene-d12	16.672	264	438650	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	201538	40.00	ppm	0.00
104) Acenaphthene-d10a	8.141	164	409982	40.00	ppm	0.00
106) Chrysene-d12a	14.544	240	470229	40.00	ppm	0.00
109) Phenanthrene-d10a	10.340	188	589902	40.00	ppm	0.00
112) Naphthalene-d8a	6.023	136	874181	40.00	ppm	0.00
114) Chrysene-d12b	14.544	240	470229	40.00	ppm	0.00

System Monitoring Compounds

5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds						Qvalue
103) Benzaldehyde	4.558	105	288180	52.84	ppm	99
110) Atrazine	9.971	215	75379	58.54	ppm	95

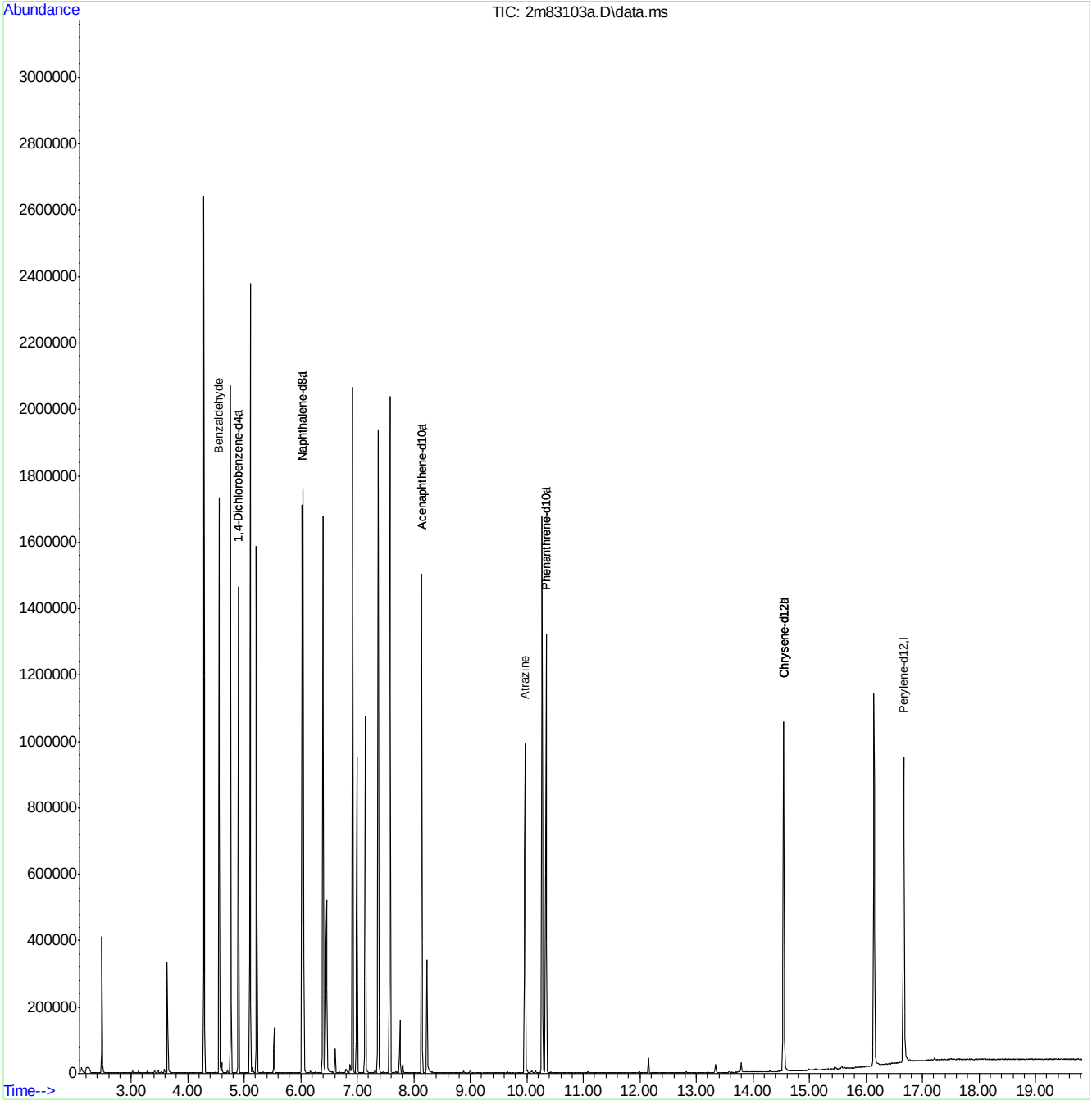
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83103a.D
Acq On : 15 Apr 2016 8:46 pm
Operator : ashleyn
Sample : icv3651-50
Misc : op92470,e2m3651
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 18 08:48:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration



M2M3649.M Mon Apr 18 08:48:37 2016 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83104.D
Acq On : 15 Apr 2016 9:12 pm
Operator : ashleyn
Sample : icv3651-50
Misc : op92470,e2m3651
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 18 08:51:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	180584	40.00 ppm	0.00
24) Naphthalene-d8	6.023	136	704371	40.00 ppm	0.00
47) Acenaphthene-d10	8.141	164	405315	40.00 ppm	0.00
69) Phenanthrene-d10	10.340	188	612567	40.00 ppm	0.00
83) Chrysene-d12	14.544	240	523256	40.00 ppm	0.00
92) Perylene-d12	16.673	264	510996	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	180584	40.00 ppm	0.00
104) Acenaphthene-d10a	8.141	164	405315	40.00 ppm	0.00
106) Chrysene-d12a	14.544	240	523256	40.00 ppm	0.00
109) Phenanthrene-d10a	10.340	188	612567	40.00 ppm	0.00
112) Naphthalene-d8a	6.023	136	704371	40.00 ppm	0.00
114) Chrysene-d12b	14.544	240	523256	40.00 ppm	0.00

System Monitoring Compounds					
5) 2-Fluorophenol	0.000	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
8) Phenol-d5	0.000	99	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
25) Nitrobenzene-d5	0.000	82	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
51) 2-Fluorobiphenyl	0.000	172	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
73) 2,4,6-Tribromophenol	0.000	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
85) Terphenyl-d14	0.000	244	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
108) 1-chlorooctadecane	0.000	57	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
111) o-terphenyl	0.000	230	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%

Target Compounds					Qvalue
113) Hydroquinone	6.446	110	310770	58.06 ppm	99

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

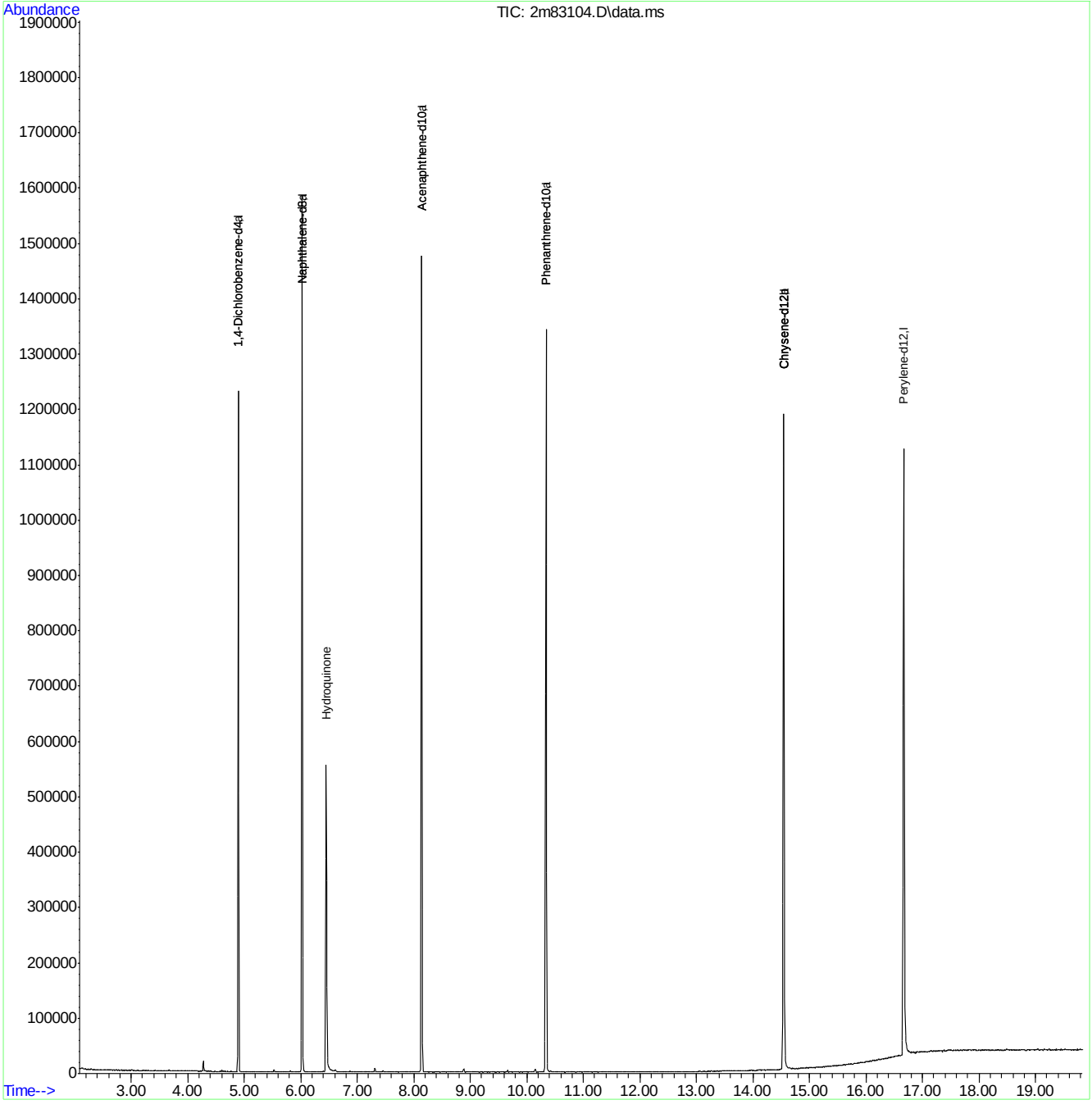
7.6.24

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83104.D
Acq On : 15 Apr 2016 9:12 pm
Operator : ashleyn
Sample : icv3651-50
Misc : op92470,e2m3651
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 18 08:51:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83105.D
Acq On : 15 Apr 2016 9:39 pm
Operator : ashleyn
Sample : icv3649-50
Misc : op92470,e2m3651
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 18 08:51:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.895	152	178981	40.00 ppm	0.00
24) Naphthalene-d8	6.024	136	704023	40.00 ppm	0.00
47) Acenaphthene-d10	8.142	164	404112	40.00 ppm	0.00
69) Phenanthrene-d10	10.340	188	616308	40.00 ppm	0.00
83) Chrysene-d12	14.544	240	540388	40.00 ppm	0.00
92) Perylene-d12	16.673	264	529669	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.895	152	178981	40.00 ppm	0.00
104) Acenaphthene-d10a	8.142	164	404112	40.00 ppm	0.00
106) Chrysene-d12a	14.544	240	540388	40.00 ppm	0.00
109) Phenanthrene-d10a	10.340	188	616308	40.00 ppm	0.00
112) Naphthalene-d8a	6.024	136	704023	40.00 ppm	0.00
114) Chrysene-d12b	14.544	240	540388	40.00 ppm	0.00

System Monitoring Compounds					
5) 2-Fluorophenol	0.000	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
8) Phenol-d5	0.000	99	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
25) Nitrobenzene-d5	0.000	82	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
51) 2-Fluorobiphenyl	0.000	172	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
73) 2,4,6-Tribromophenol	0.000	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
85) Terphenyl-d14	0.000	244	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
108) 1-chlorooctadecane	0.000	57	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%
111) o-terphenyl	0.000	230	0	0.00 ppm	
Spiked Amount 50.000			Recovery	=	0.00%

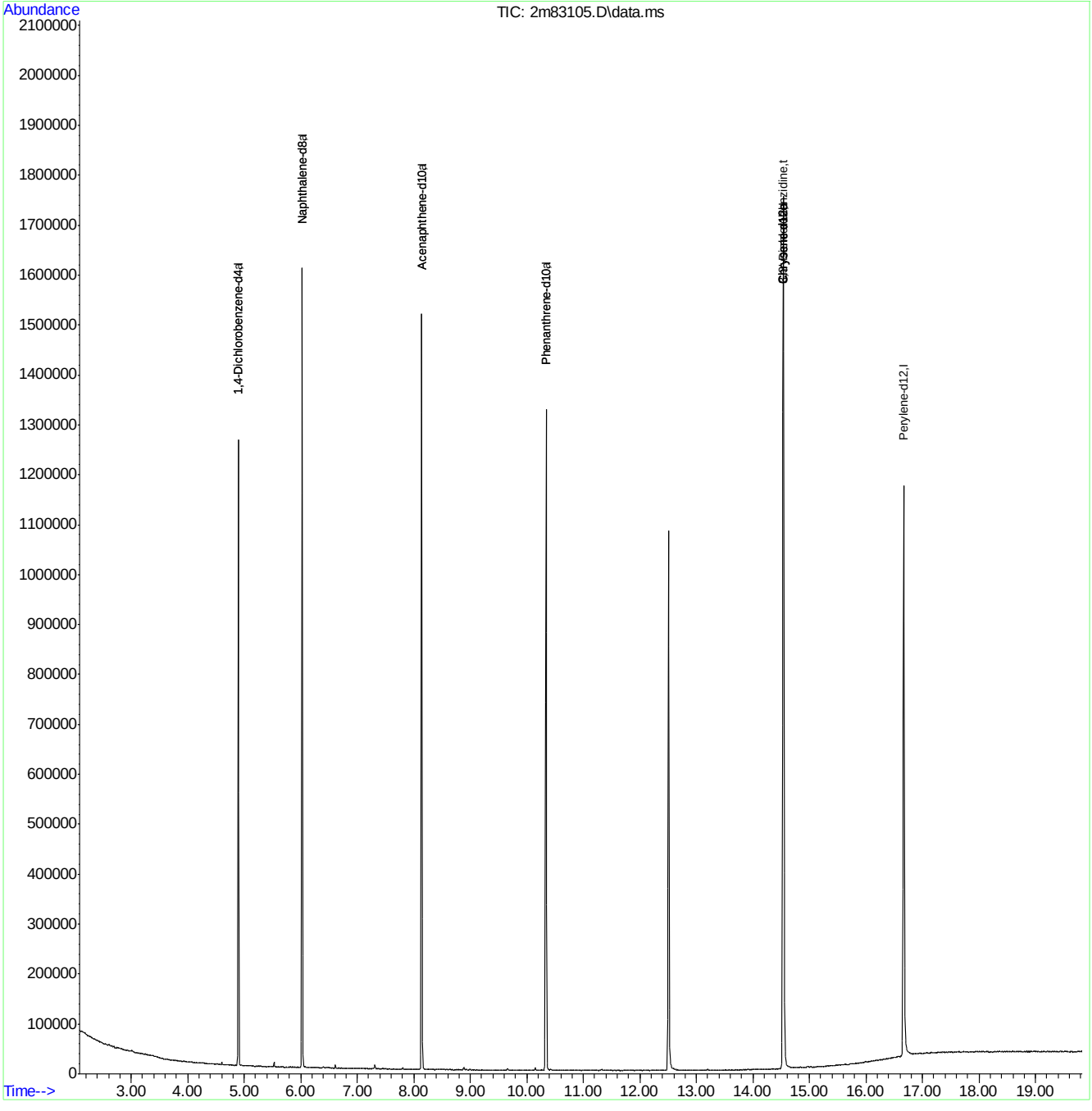
Target Compounds					Qvalue
89) 3,3'-Dichlorobenzidine	14.533	252	264478	45.64 ppm	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3651\
Data File : 2m83105.D
Acq On : 15 Apr 2016 9:39 pm
Operator : ashleyn
Sample : icv3649-50
Misc : op92470,e2m3651
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 18 08:51:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 08:29:31 2016
Response via : Initial Calibration



M2M3649.M Mon Apr 18 08:52:28 2016 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3655\
Data File : 2m83204.D
Acq On : 20 Apr 2016 10:07 am
Operator : ashleyn
Sample : cc3649-25
Misc : op92330,e2m3655
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 20 13:16:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 20:20:49 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.873	152	168024	40.00 ppm	-0.02
24) Naphthalene-d8	5.997	136	674447	40.00 ppm	-0.03
47) Acenaphthene-d10	8.109	164	399683	40.00 ppm	-0.03
69) Phenanthrene-d10	10.308	188	616883	40.00 ppm	-0.03
83) Chrysene-d12	14.517	240	528633	40.00 ppm	-0.03
92) Perylene-d12	16.640	264	535173	40.00 ppm	-0.03
102) 1,4-Dichlorobenzene-d4a	4.873	152	168024	40.00 ppm	-0.02
104) Acenaphthene-d10a	8.109	164	399683	40.00 ppm	-0.03
106) Chrysene-d12a	14.517	240	528633	40.00 ppm	-0.03
108) Phenanthrene-d10a	10.308	188	616883	40.00 ppm	-0.03
110) Naphthalene-d8a	5.997	136	674447	40.00 ppm	-0.03

System Monitoring Compounds					
5) 2-Fluorophenol	3.889	112	160817	25.51 ppm	-0.12
Spiked Amount 50.000			Recovery	= 51.02%	
8) Phenol-d5	4.601	99	202478	25.59 ppm	-0.02
Spiked Amount 50.000			Recovery	= 51.18%	
25) Nitrobenzene-d5	5.328	82	162060	25.65 ppm	-0.03
Spiked Amount 50.000			Recovery	= 51.30%	
51) 2-Fluorobiphenyl	7.216	172	316248	24.94 ppm	-0.03
Spiked Amount 50.000			Recovery	= 49.88%	
73) 2,4,6-Tribromophenol	9.254	330	45929	28.92 ppm	-0.03
Spiked Amount 50.000			Recovery	= 57.84%	
85) Terphenyl-d14	12.875	244	298944	26.33 ppm	-0.03
Spiked Amount 50.000			Recovery	= 52.66%	

Target Compounds					Qvalue
2) 1,4-Dioxane	2.445	88	65449	23.30 ppm	99
3) Pyridine	2.766	79	168770	24.38 ppm	97
4) N-Nitrosodimethylamine	2.729	74	104146	25.07 ppm	94
6) Indene	5.077	116	260386	25.12 ppm	98
7) Cumene	4.264	105	385875	25.26 ppm	99
9) Phenol	4.611	94	220157	25.05 ppm	84
10) Aniline	4.617	93	205483	22.36 ppm	70
11) bis(2-Chloroethyl)ether	4.659	93	157012	24.88 ppm	98
12) 2-Chlorophenol	4.718	128	169889	25.66 ppm	97
13) Decane	4.740	43	127499	25.20 ppm	98
14) 1,3-Dichlorobenzene	4.825	146	183786	25.42 ppm	100
15) 1,4-Dichlorobenzene	4.884	146	183211	25.19 ppm	98
16) Benzyl alcohol	4.986	108	107840	26.33 ppm	97
17) 1,2-Dichlorobenzene	5.007	146	170870	25.30 ppm	100
18) Acetophenone	5.194	105	206926	25.43 ppm	89
19) 2-Methylphenol	5.077	108	137743	24.59 ppm	100
20) 2,2'-oxybis(1-Chloropr...	5.087	45	163722	24.27 ppm	95
21) 3&4-Methylphenol	5.205	108	151820	25.74 ppm	97
22) n-Nitroso-di-n-propyla...	5.194	70	107478	26.79 ppm	99
23) Hexachloroethane	5.291	201	52385	26.08 ppm	97
26) Nitrobenzene	5.344	77	164706	25.68 ppm	99
27) Quinoline	6.366	129	324314	25.04 ppm	99
28) Isophorone	5.553	82	293167	26.16 ppm	99

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3655\
Data File : 2m83204.D
Acq On : 20 Apr 2016 10:07 am
Operator : ashleyn
Sample : cc3649-25
Misc : op92330,e2m3655
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 20 13:16:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 20:20:49 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
29) 2-Nitrophenol	5.628	139	91544	27.32	ppm	99
30) 2,4-Dimethylphenol	5.665	107	143151	23.75	ppm	99
31) Benzoic acid	5.756	105	127805	28.20	ppm	99
32) bis(2-Chloroethoxy)met...	5.745	93	180615	25.40	ppm	99
33) 2,4-Dichlorophenol	5.863	162	130892	26.34	ppm	99
34) 2,6-Dichlorophenol	6.082	162	127626	26.28	ppm	98
35) 1,3,5-Trichlorobenzene	5.638	180	137897	25.38	ppm	99
36) 1,2,4-Trichlorobenzene	5.938	180	136022	25.91	ppm	100
37) 1,2,3-Trichlorobenzene	6.168	180	129534	25.54	ppm	99
38) Naphthalene	6.018	128	485422	24.61	ppm	99
39) 4-Chloroaniline	6.072	127	181470	24.44	ppm	98
40) 2,3-Dichloroaniline	7.114	161	156000	26.28	ppm	99
41) Caprolactam	6.446	55	62740	26.98	ppm	98
42) Hexachlorobutadiene	6.146	225	63944	26.67	ppm	99
43) 4-Chloro-3-methylphenol	6.606	107	143636	27.37	ppm	99
44) 2-Methylnaphthalene	6.772	141	266647	25.68	ppm	100
45) 1-Methylnaphthalene	6.890	141	274867	25.43	ppm	100
46) Dimethylnaphthalene	7.548	156	279302	25.71	ppm	99
48) Hexachlorocyclopentadiene	6.965	237	111477	43.18	ppm	98
49) 2,4,6-Trichlorophenol	7.120	196	85926	27.31	ppm	100
50) 2,4,5-Trichlorophenol	7.173	196	91603	26.84	ppm	99
52) 2-Chloronaphthalene	7.366	162	293958	25.58	ppm	98
53) Biphenyl	7.345	154	381798	25.13	ppm	100
54) 2-Nitroaniline	7.505	65	84799	27.29	ppm	96
55) Dimethylphthalate	7.756	163	339801	26.62	ppm	99
56) Acenaphthylene	7.917	152	482606	25.85	ppm	100
57) 2,6-Dinitrotoluene	7.831	165	78433	28.70	ppm	100
58) 3-Nitroaniline	8.061	138	90275	26.86	ppm	96
59) Acenaphthene	8.157	153	287617	24.39	ppm	99
60) 2,4-Dinitrophenol	8.211	184	75639	48.83	ppm	92
61) 4-Nitrophenol	8.350	109	45992	29.76	ppm	99
62) Dibenzofuran	8.398	168	395638	25.35	ppm	98
63) 2,4-Dinitrotoluene	8.393	165	105166	28.49	ppm	99
64) 2,3,4,6-Tetrachlorophenol	8.591	232	69663	28.43	ppm	99
65) Diethylphthalate	8.767	149	337878	27.52	ppm	98
66) Fluorene	8.896	166	329082	25.68	ppm	99
67) 4-Chlorophenyl-phenyle...	8.912	204	141415	26.84	ppm	99
68) 4-Nitroaniline	8.944	138	91964	27.39	ppm	98
70) 4,6-Dinitro-2-methylph...	8.992	198	55430	27.77	ppm	98
71) n-Nitrosodiphenylamine	9.088	169	238008	27.20	ppm	99
72) 1,2-Diphenylhydrazine	9.142	77	322634	25.65	ppm	99
74) 4-Bromophenyl-phenylether	9.644	248	84581	27.95	ppm	95
75) Hexachlorobenzene	9.730	284	92615	26.69	ppm	99
76) Pentachlorophenol	10.040	266	115739	57.59	ppm	99
77) Phenanthrene	10.345	178	463637	24.66	ppm	99
78) Anthracene	10.425	178	473224	25.61	ppm	99
79) Carbazole	10.698	167	443984	26.04	ppm	99
80) Di-n-butylphthalate	11.313	149	581456	28.33	ppm	99
81) Fluoranthene	12.217	202	449944	26.37	ppm	99
82) Octadecane	10.238	57	201340	27.04	ppm	99

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3655\
Data File : 2m83204.D
Acq On : 20 Apr 2016 10:07 am
Operator : ashleyn
Sample : cc3649-25
Misc : op92330,e2m3655
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 20 13:16:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 20:20:49 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
84) Pyrene	12.570	202	470287	25.43 ppm	99
86) Butylbenzylphthalate	13.704	149	260244	28.26 ppm	96
87) Butyl stearate	13.864	56	142575	27.83 ppm	99
88) Benzo[a]anthracene	14.501	228	403316	25.43 ppm	99
89) 3,3'-Dichlorobenzidine	14.501	252	155177	27.38 ppm	99
90) Chrysene	14.554	228	401079	24.50 ppm	99
91) bis(2-Ethylhexyl)phtha...	14.661	149	353090	28.34 ppm	100
93) Di-n-octylphthalate	15.651	149	624353	30.25 ppm	99
94) Benzo[b]fluoranthene	16.111	252	430715	25.59 ppm	98
95) Benzo[k]fluoranthene	16.154	252	420912	25.33 ppm	99
96) Benzo[a]pyrene	16.560	252	390290	26.11 ppm	97
97) Indeno[1,2,3-cd]pyrene	18.299	276	390103	27.13 ppm	97
98) Dibenz(a,h)acridine	17.919	279	359695	27.07 ppm	100
99) Dibenz[a,h]anthracene	18.341	278	402188	24.73 ppm	98
100) 7,12-Dimethylbenz(a)an...	16.111	256	185198	25.18 ppm	99
101) Benzo[g,h,i]perylene	18.775	276	399751	24.58 ppm	95

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

7.6.26

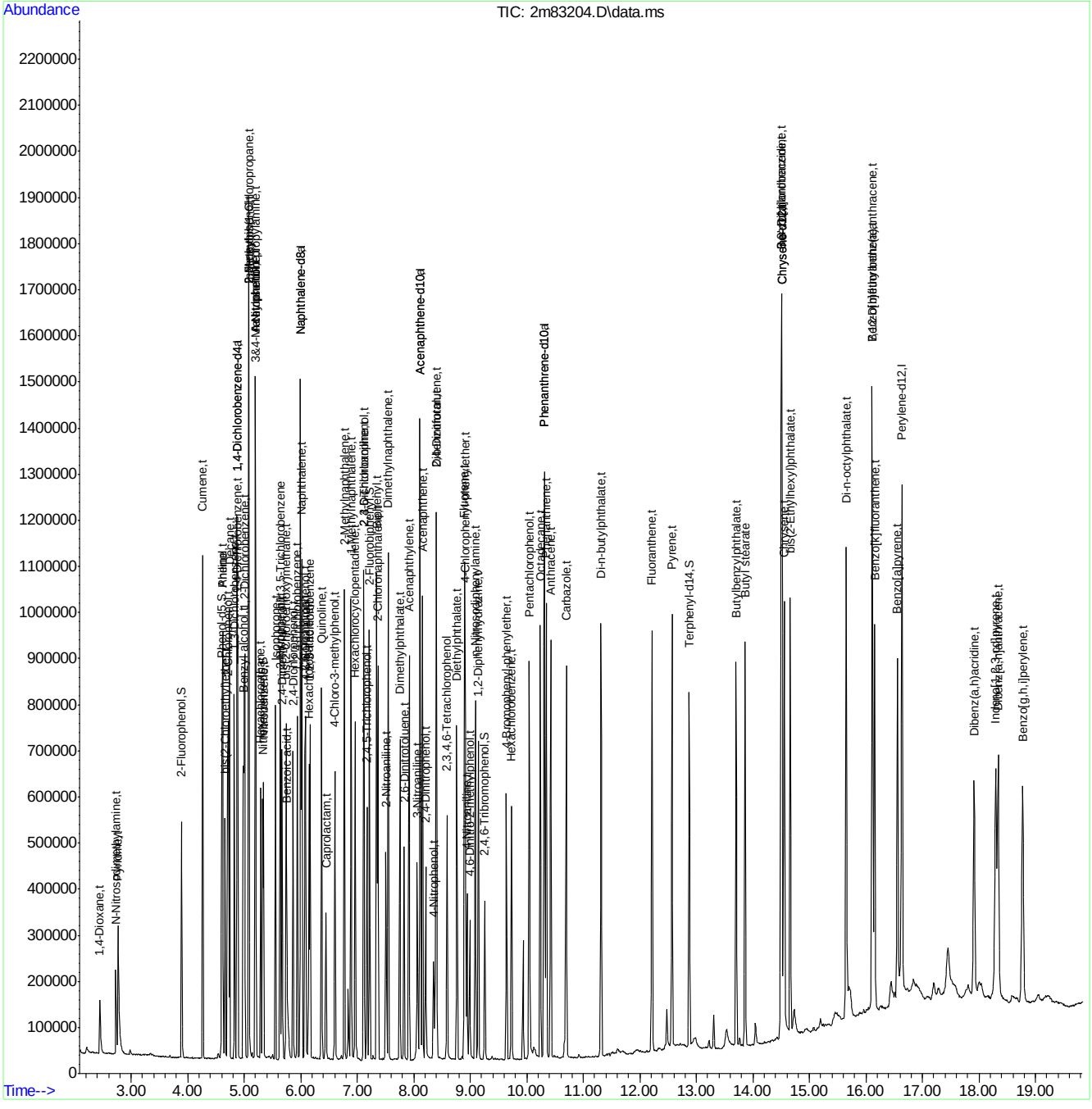
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3655\
Data File : 2m83204.D
Acq On : 20 Apr 2016 10:07 am
Operator : ashleyn
Sample : cc3649-25
Misc : op92330,e2m3655
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 20 13:16:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 20:20:49 2016
Response via : Initial Calibration



SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3655\
Data File : 2m83205.D
Acq On : 20 Apr 2016 10:33 am
Operator : ashleyn
Sample : cc3651-25
Misc : op92330,e2m3655
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 20 13:19:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 20:20:49 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.868	152	167611	40.00	ppm	-0.03
24) Naphthalene-d8	5.997	136	657992	40.00	ppm	-0.03
47) Acenaphthene-d10	8.109	164	386140	40.00	ppm	-0.03
69) Phenanthrene-d10	10.308	188	613576	40.00	ppm	-0.03
83) Chrysene-d12	14.512	240	550756	40.00	ppm	-0.04
92) Perylene-d12	16.640	264	556033	40.00	ppm	-0.03
102) 1,4-Dichlorobenzene-d4a	4.868	152	167611	40.00	ppm	-0.03
104) Acenaphthene-d10a	8.109	164	386140	40.00	ppm	-0.03
106) Chrysene-d12a	14.512	240	550756	40.00	ppm	-0.03
108) Phenanthrene-d10a	10.308	188	613576	40.00	ppm	-0.03
110) Naphthalene-d8a	5.997	136	657992	40.00	ppm	-0.03

System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	

Target Compounds						Qvalue
103) Benzaldehyde	4.536	105	123860	27.31	ppm	97
105) 1,2,4,5-Tetrachloroben...	6.975	216	110592	23.53	ppm	99
107) Benzidine	12.474	184	192157	27.67	ppm	99
109) Atrazine	9.933	215	43258	32.30	ppm	99
111) Hydroquinone	6.440	110	165098	33.02	ppm	99

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

7.6.27

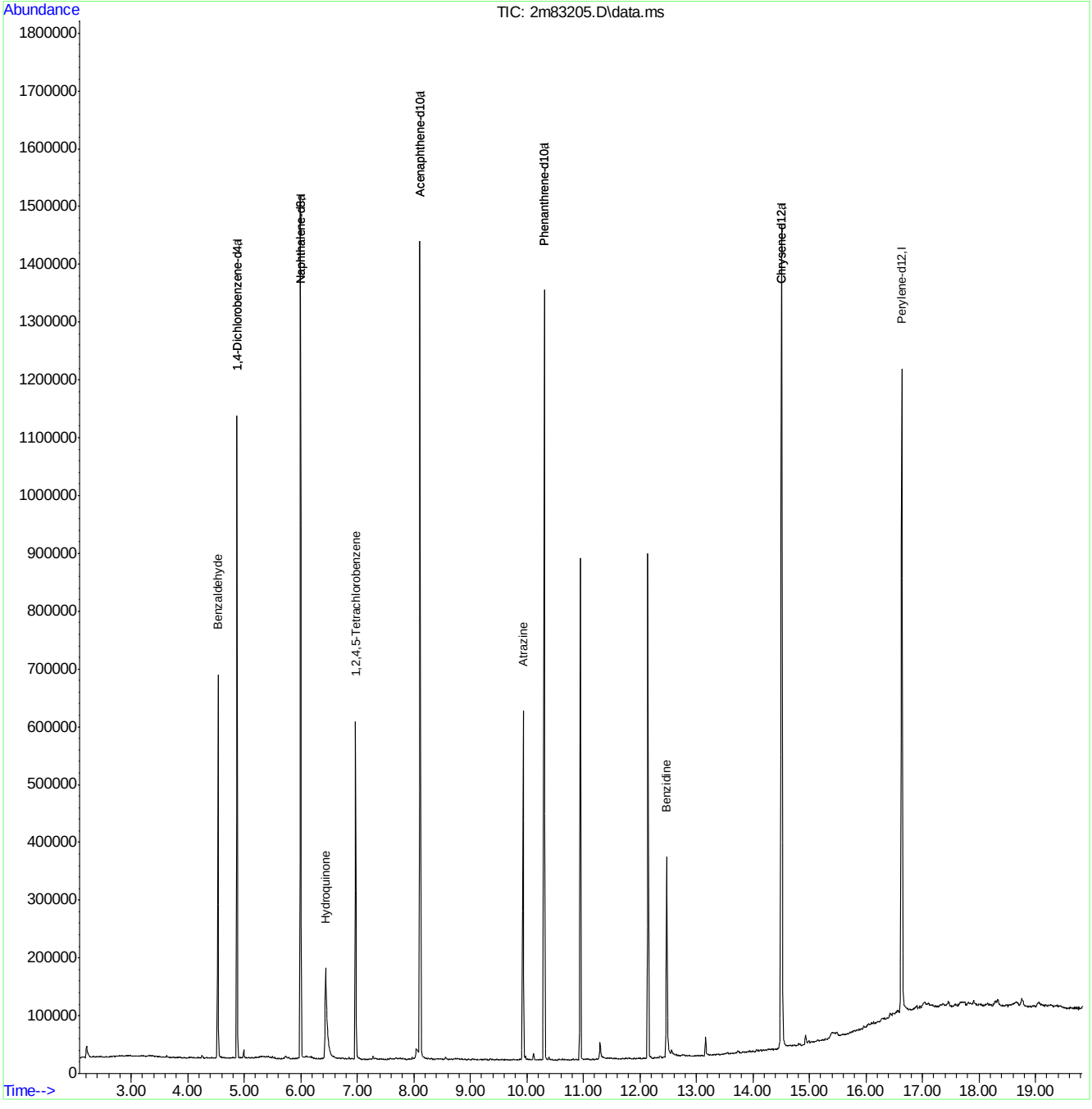
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e2m3655\
Data File : 2m83205.D
Acq On : 20 Apr 2016 10:33 am
Operator : ashleyn
Sample : cc3651-25
Misc : op92330,e2m3655
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 20 13:19:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2M3649.M
Quant Title : Semi Volatile GC/MS,rxi 5sil ms 30m .25mm .25um
QLast Update : Mon Apr 18 20:20:49 2016
Response via : Initial Calibration



M2M3649.M Wed Apr 20 13:19:39 2016 Page: 2

SGS ACCUTEST JC18516

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

7.6.28

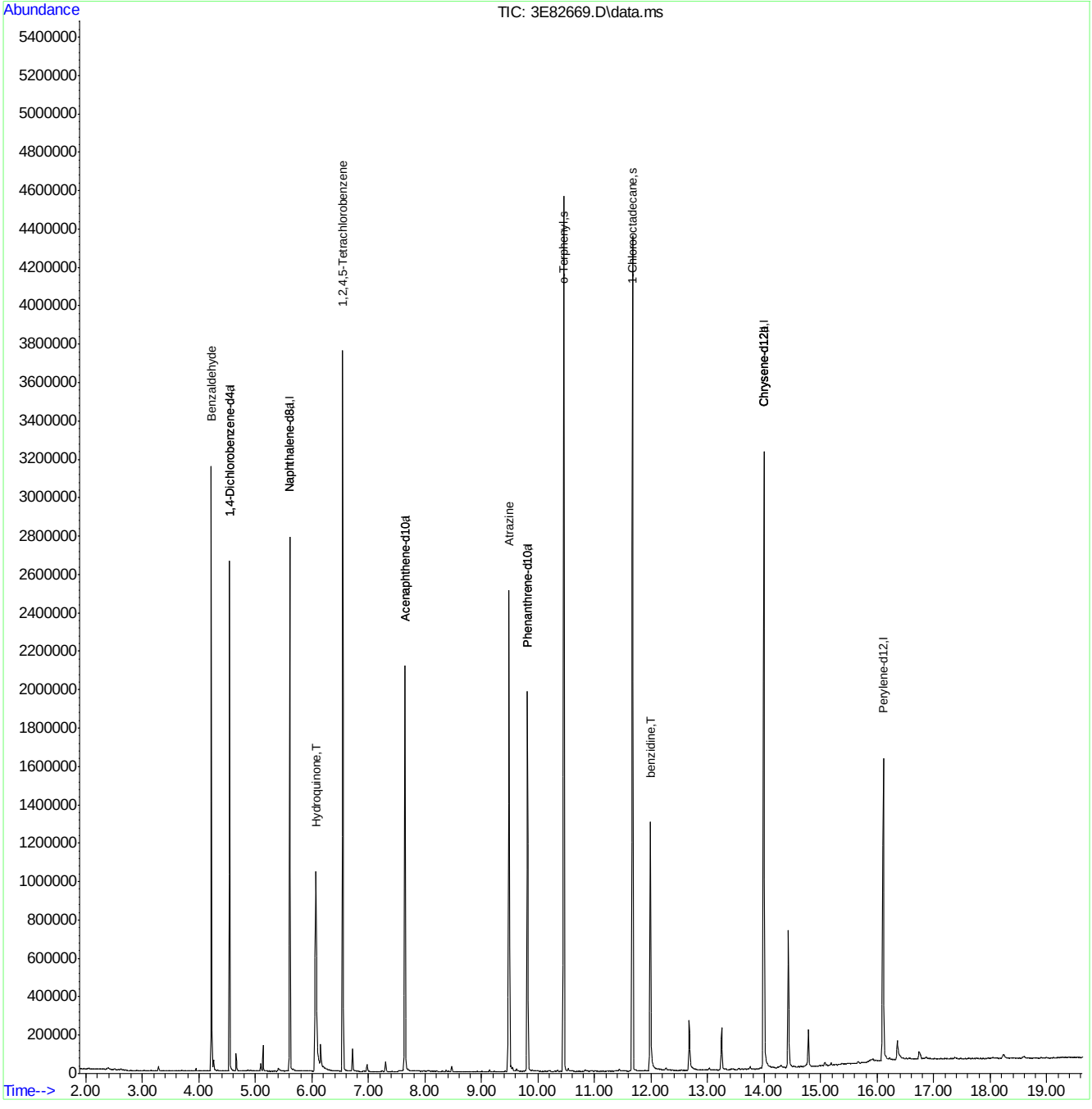
7

SGS ACCUTEST JC18516

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



SGS ACCUTEST JC18516

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

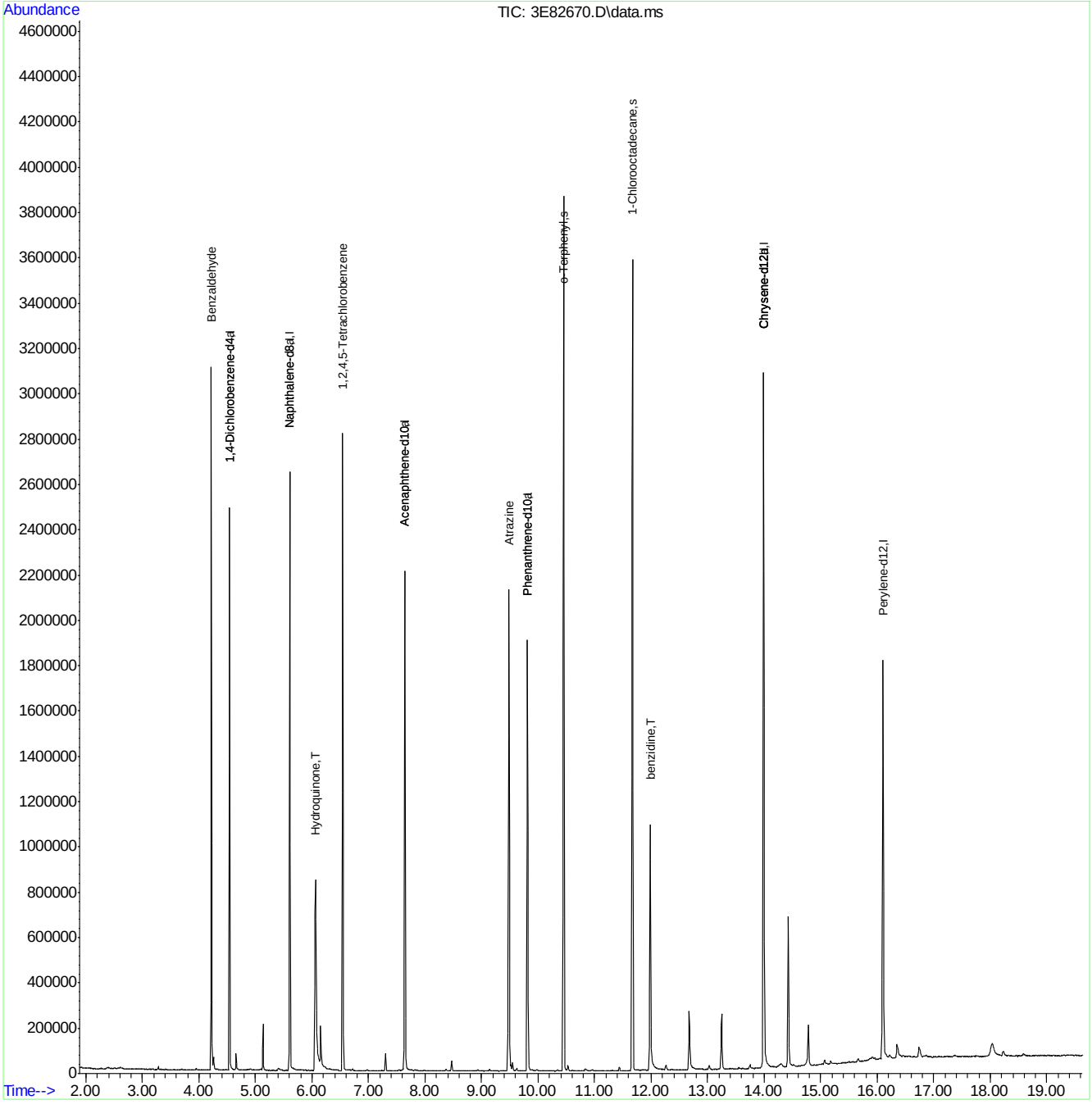
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

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



M3E3620.M Wed Apr 27 08:58:26 2016 MS3E Page: 2

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

7.6.30

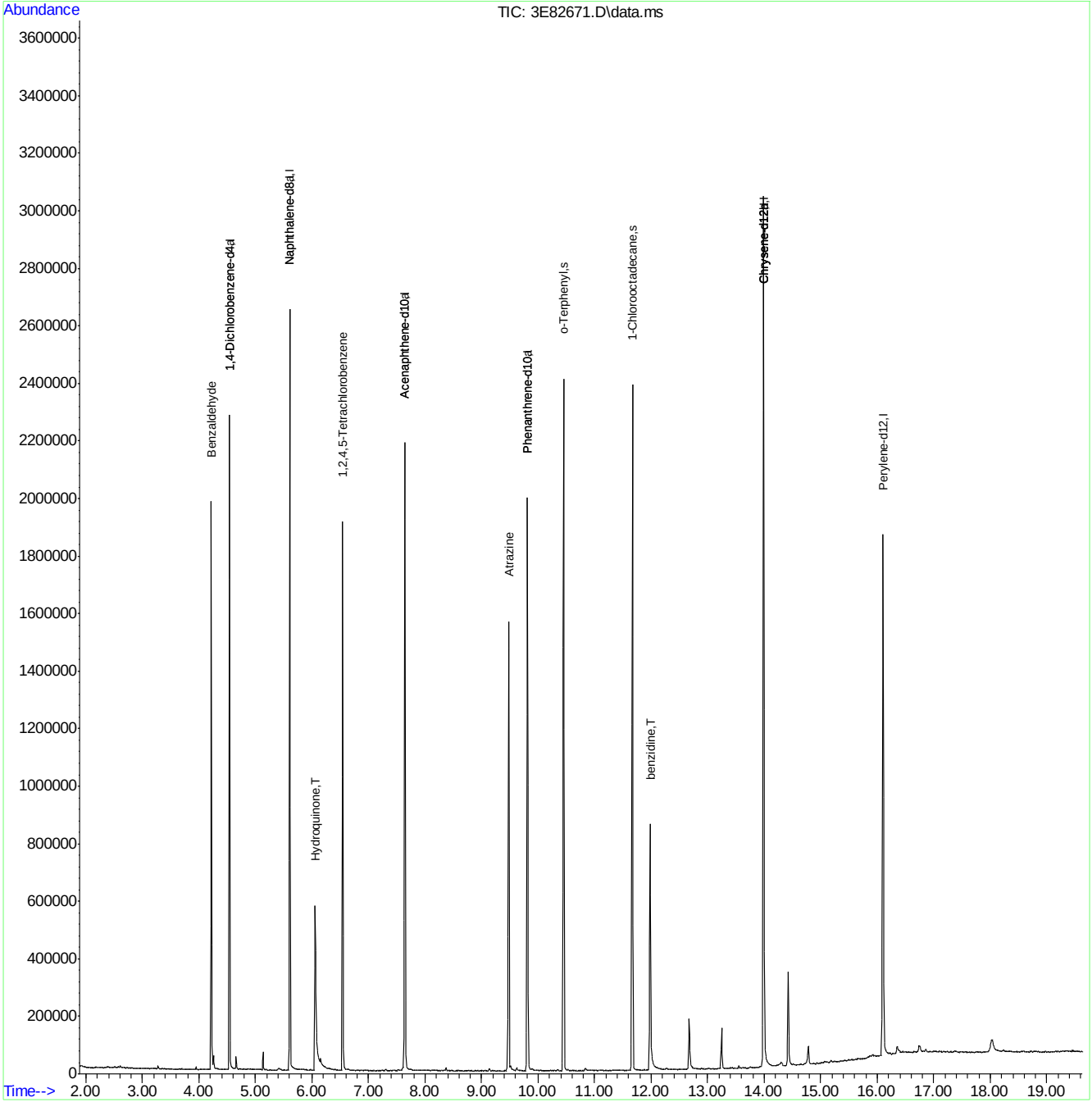
7

SGS ACCUTEST JC18516

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

SGS ACCUTEST JC18516

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

7.6.31

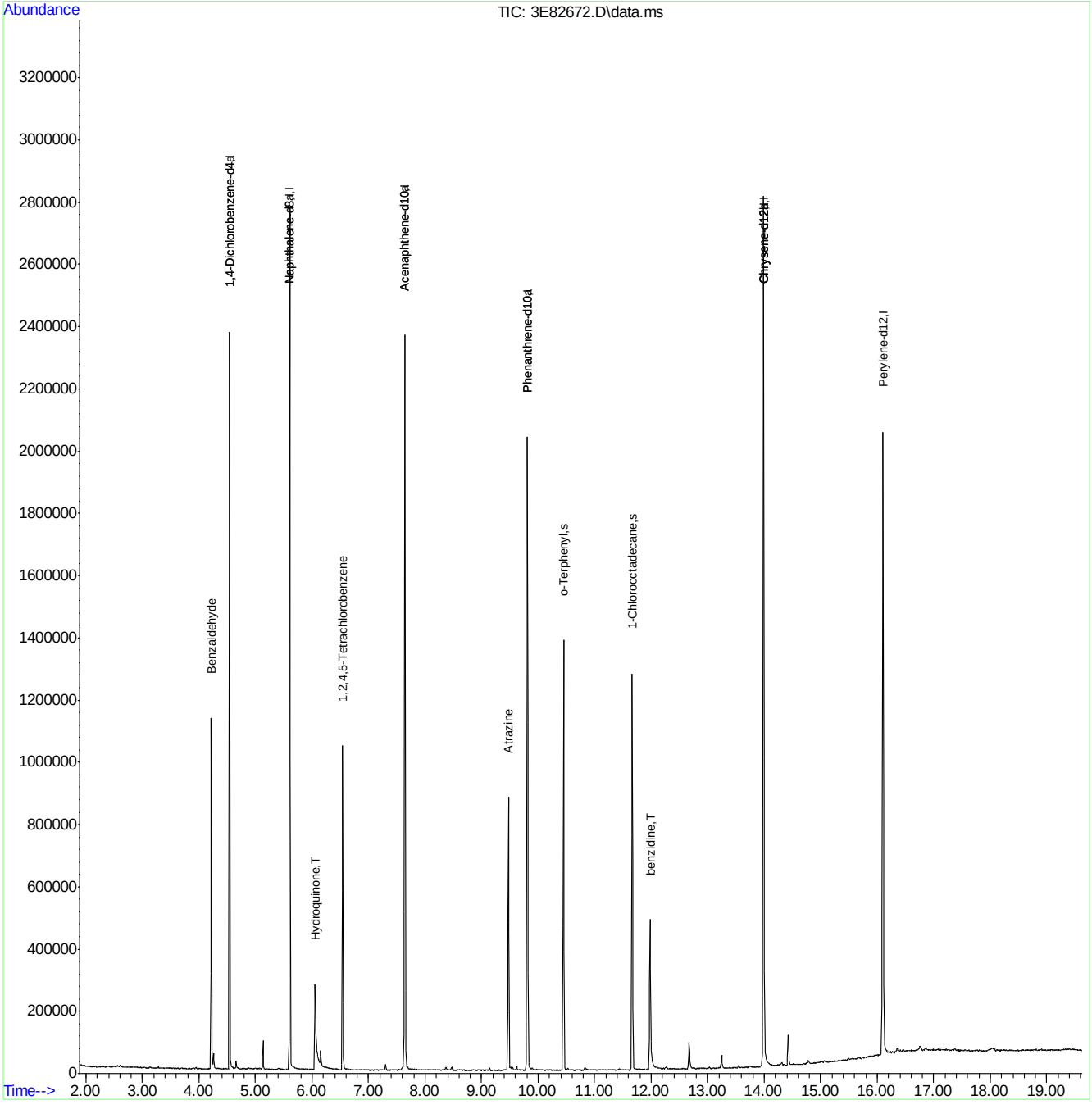
7

SGS ACCUTEST JC18516

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

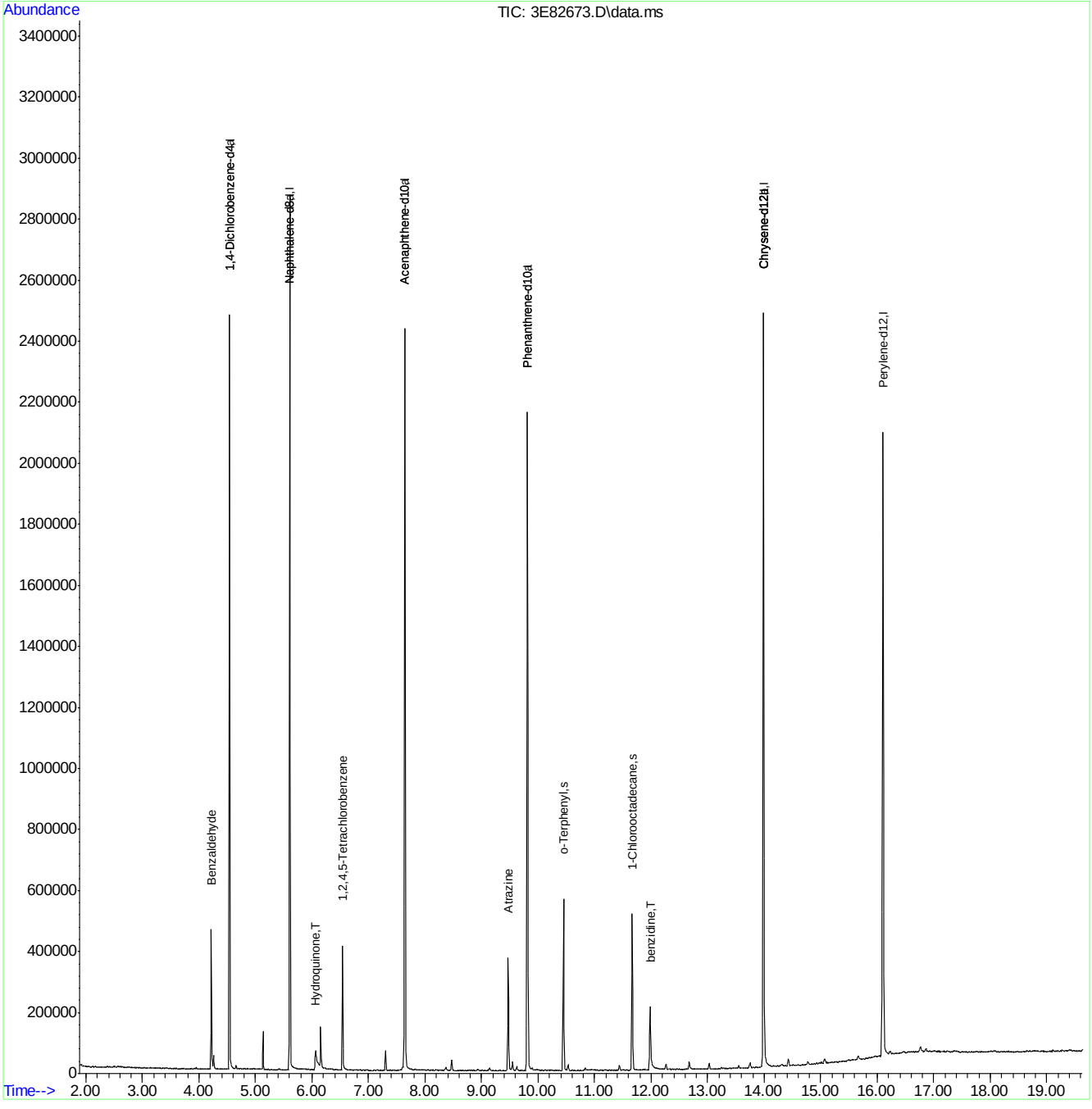
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

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

7.6.33

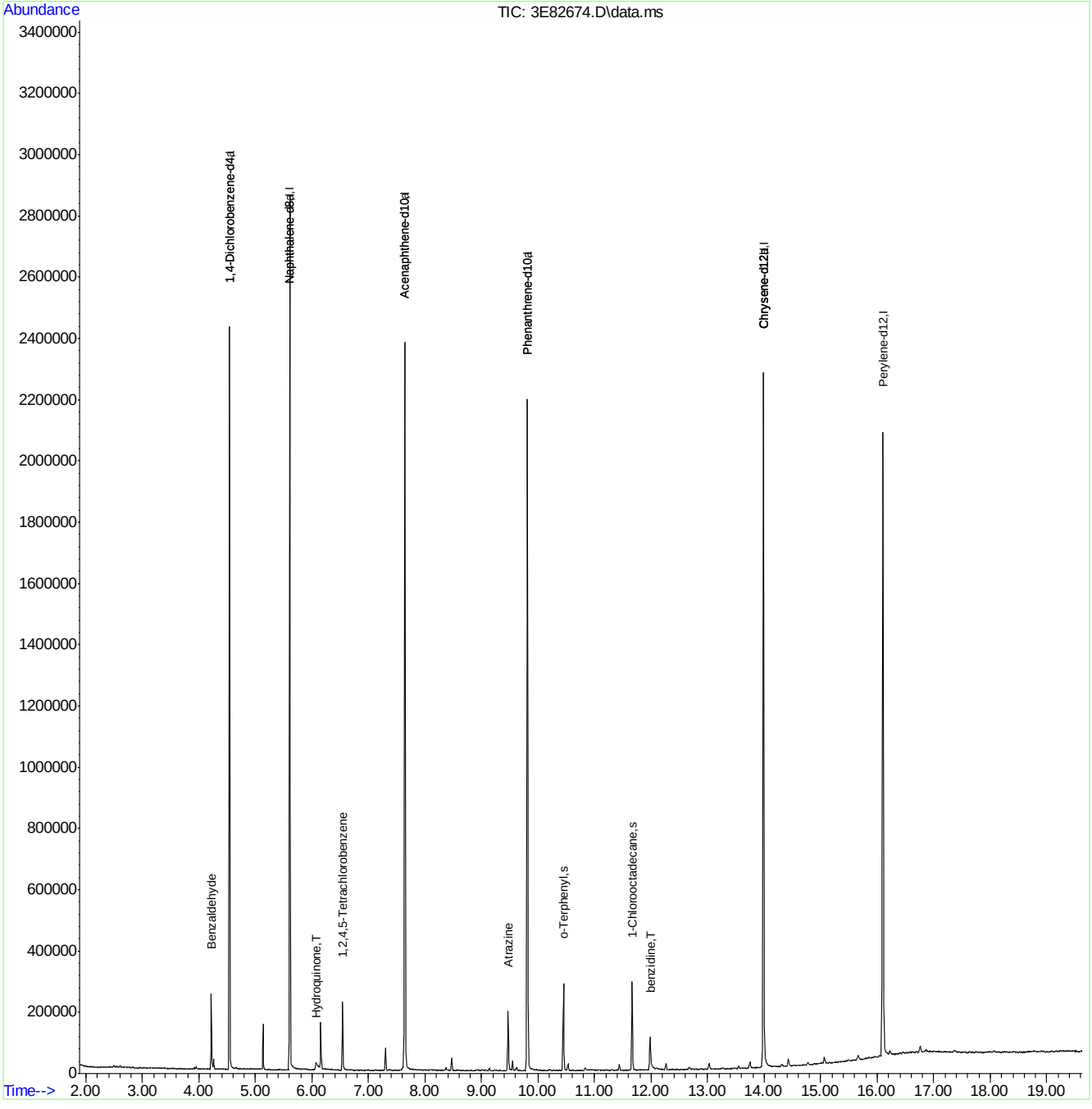
7

SGS ACCUTEST JC18516

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

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

7.6.34

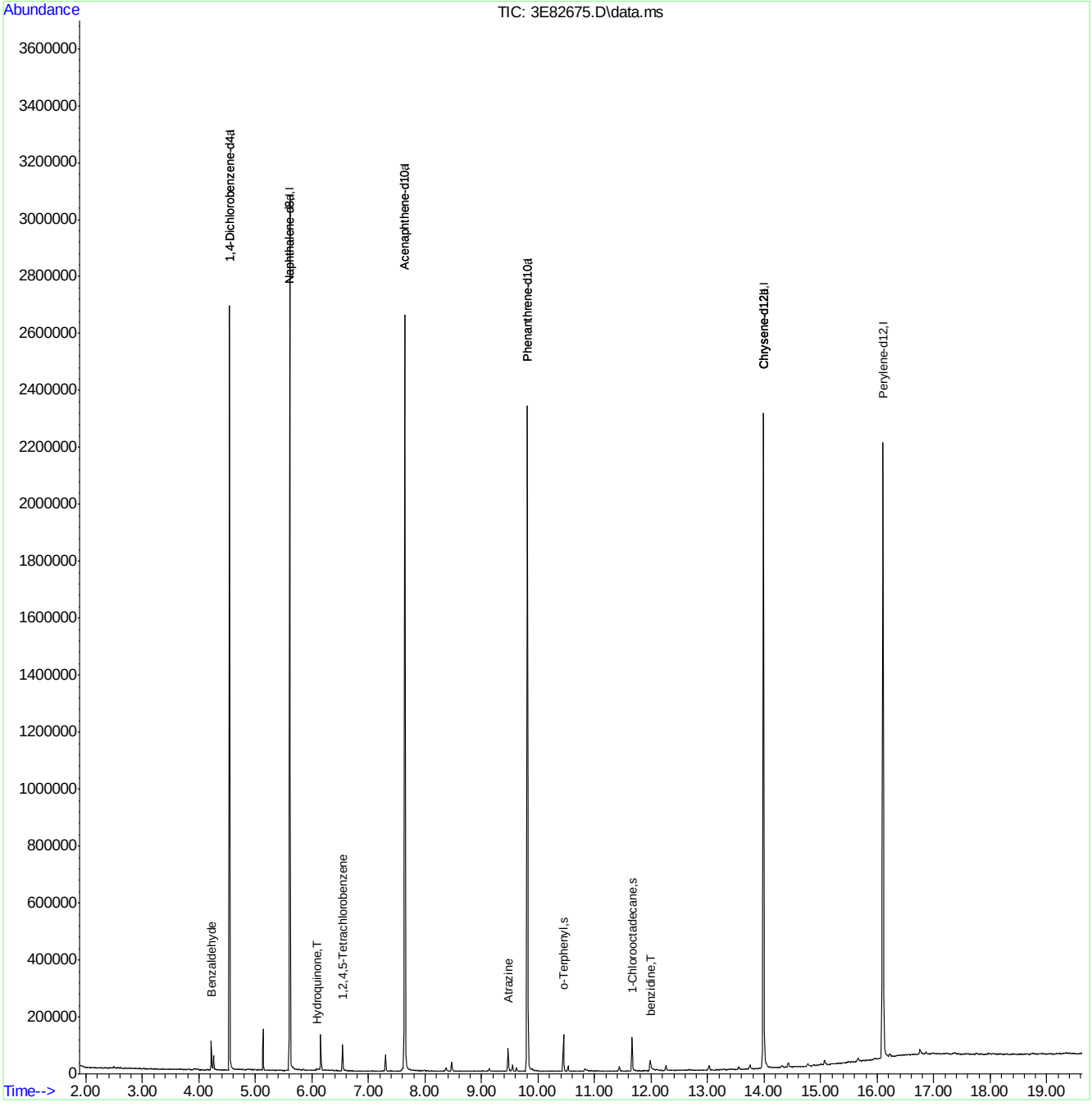
7

SGS ACCUTEST JC18516

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

7.6.35

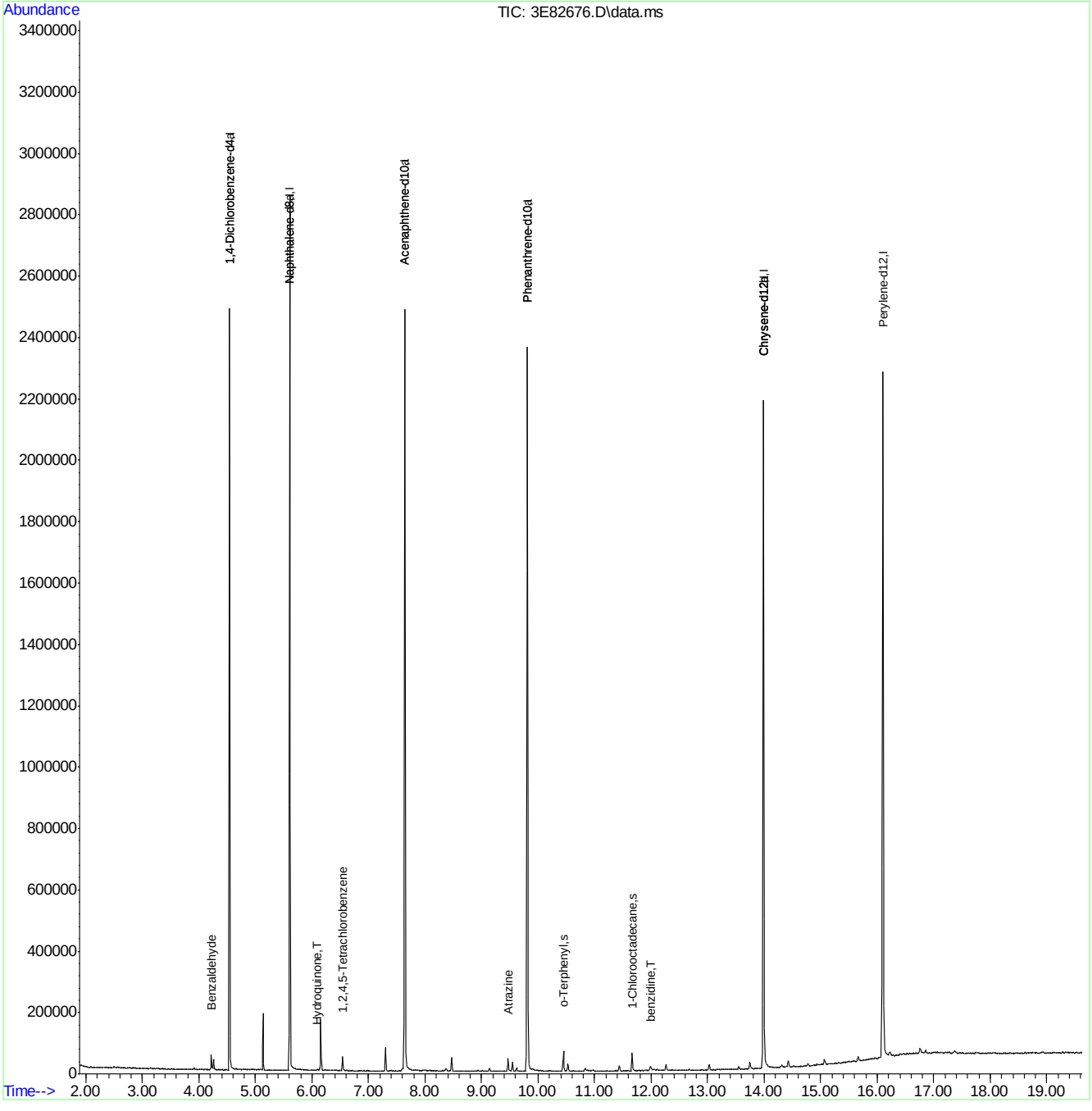
7

SGS ACCUTEST JC18516

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

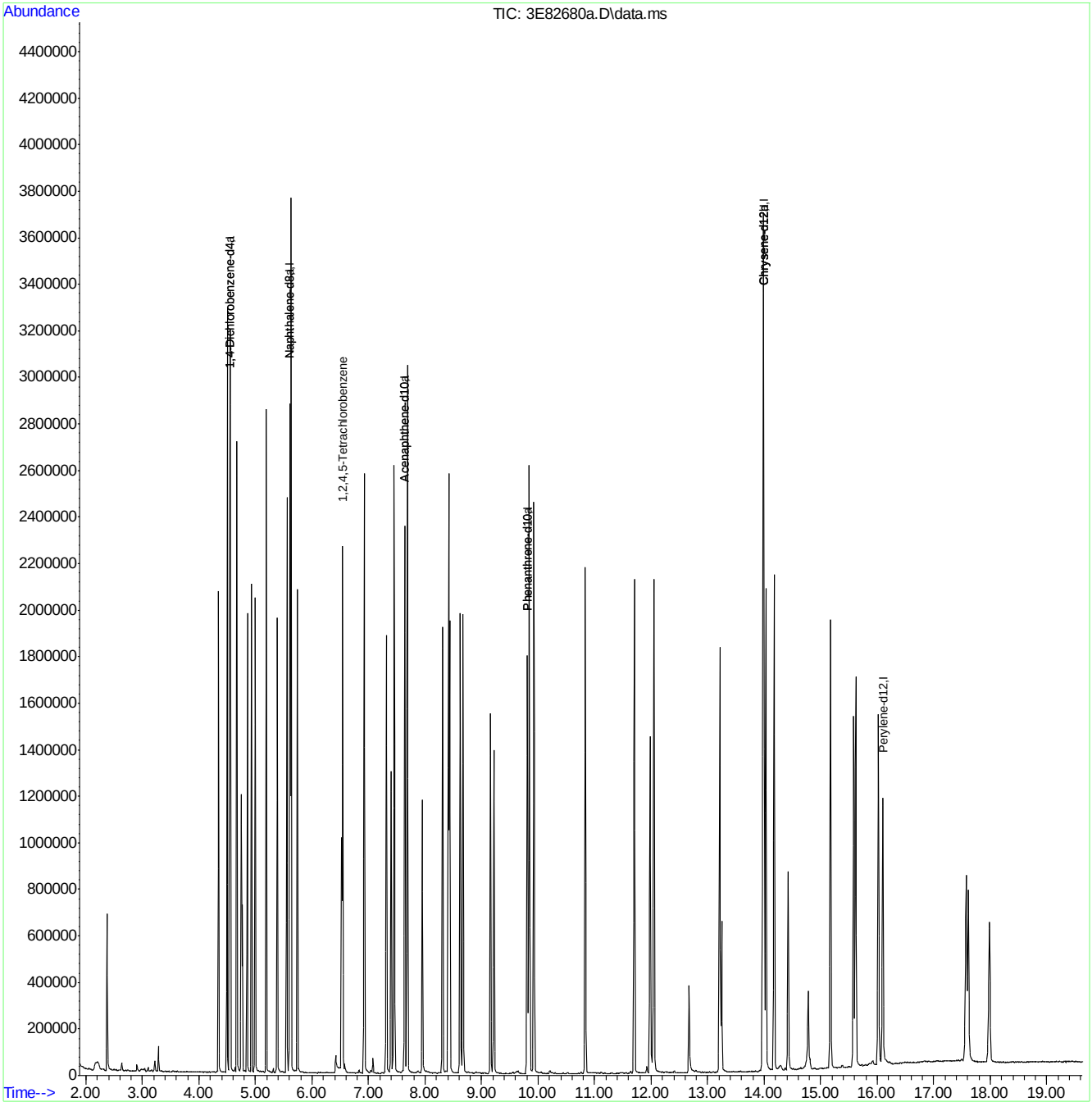
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

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%

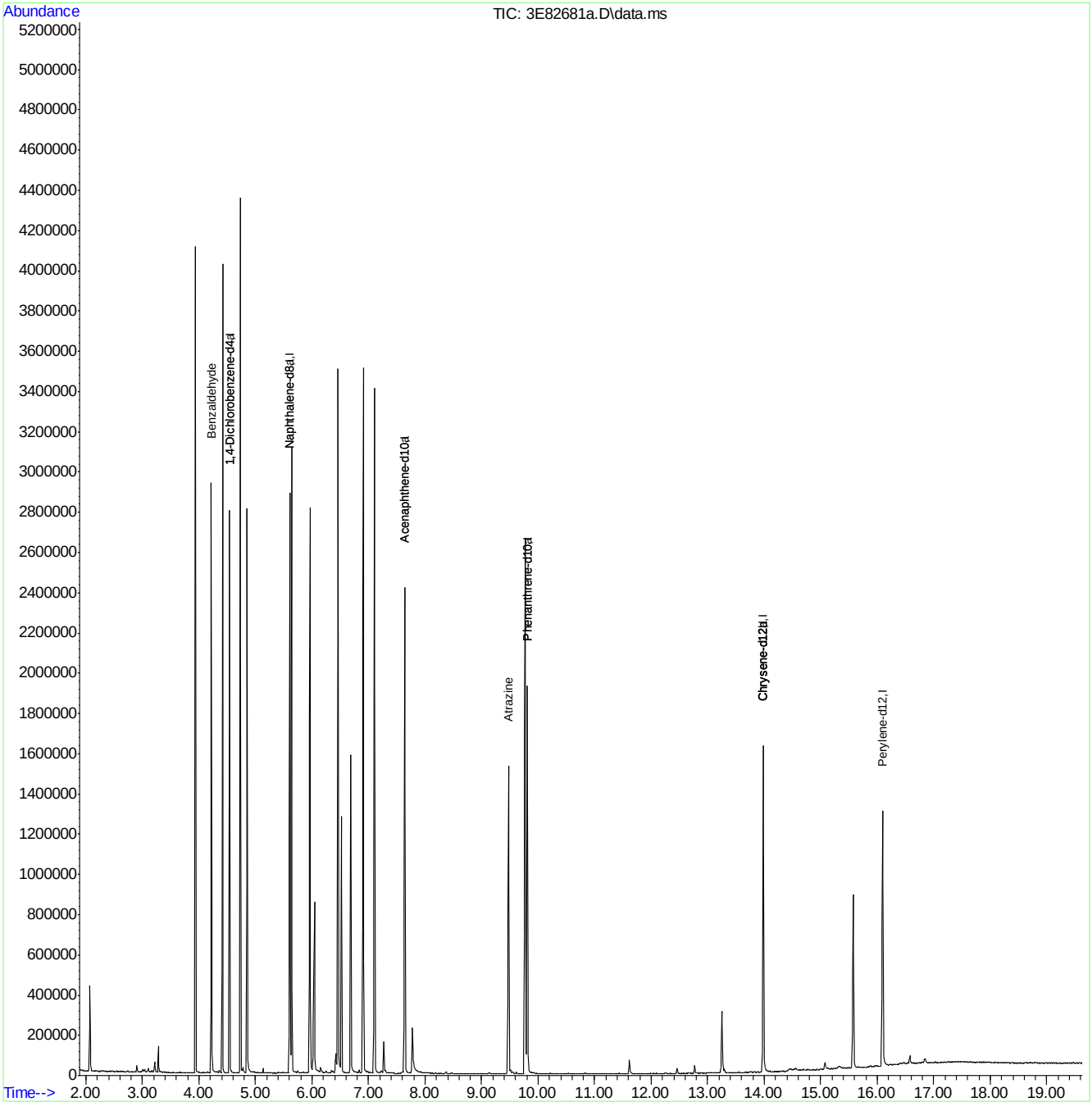
Target Compounds					Qvalue
103) Benzaldehyde	4.219	105	427003	52.55 ppm	96
107) Atrazine	9.476	215	102078	49.29 ppm	93

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

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 JC18516

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%		

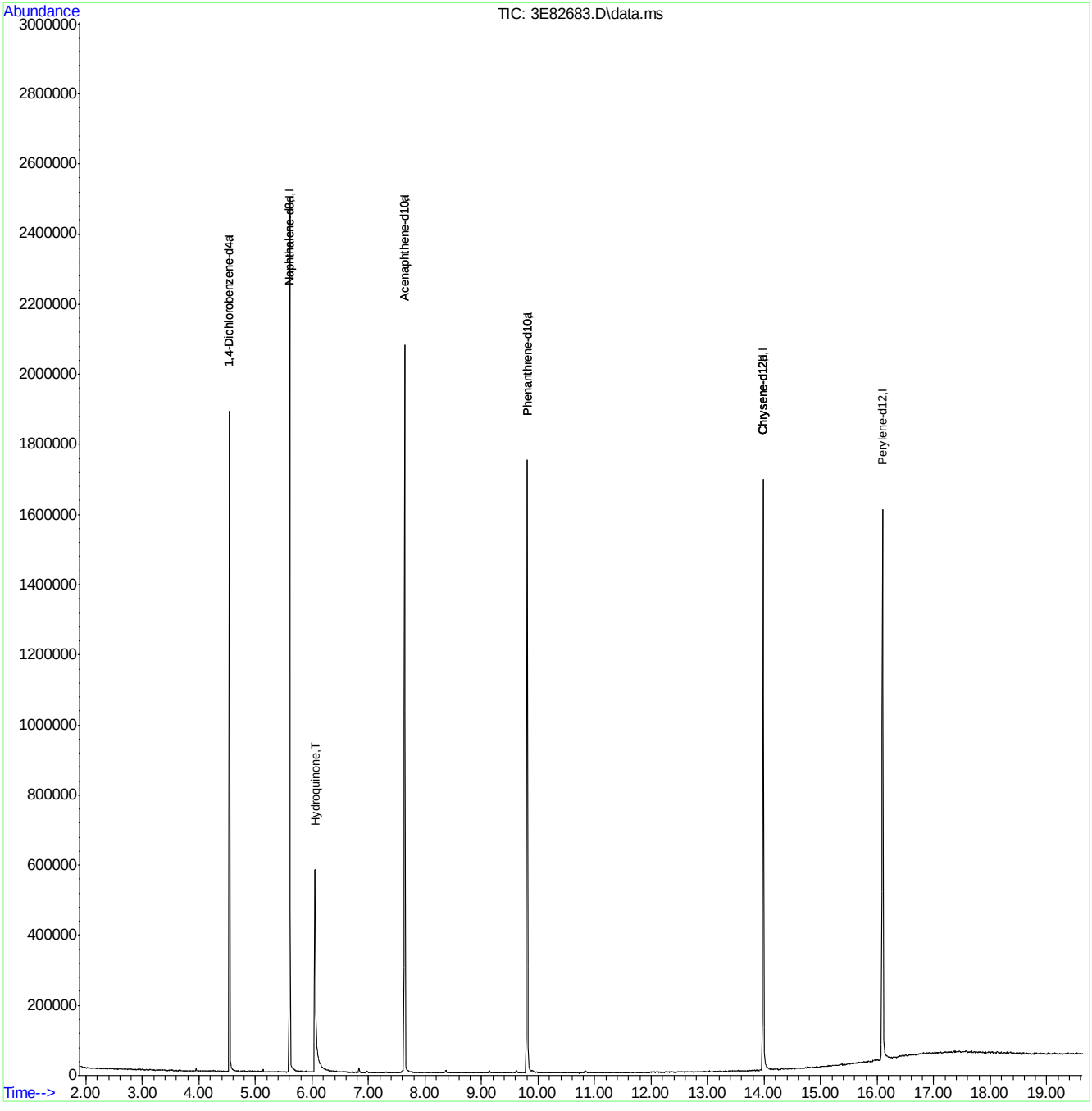
Target Compounds					Qvalue
113) Hydroquinone	6.053	110	402910	57.91 ppm	99

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

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

SGS ACCUTEST JC18516

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%			

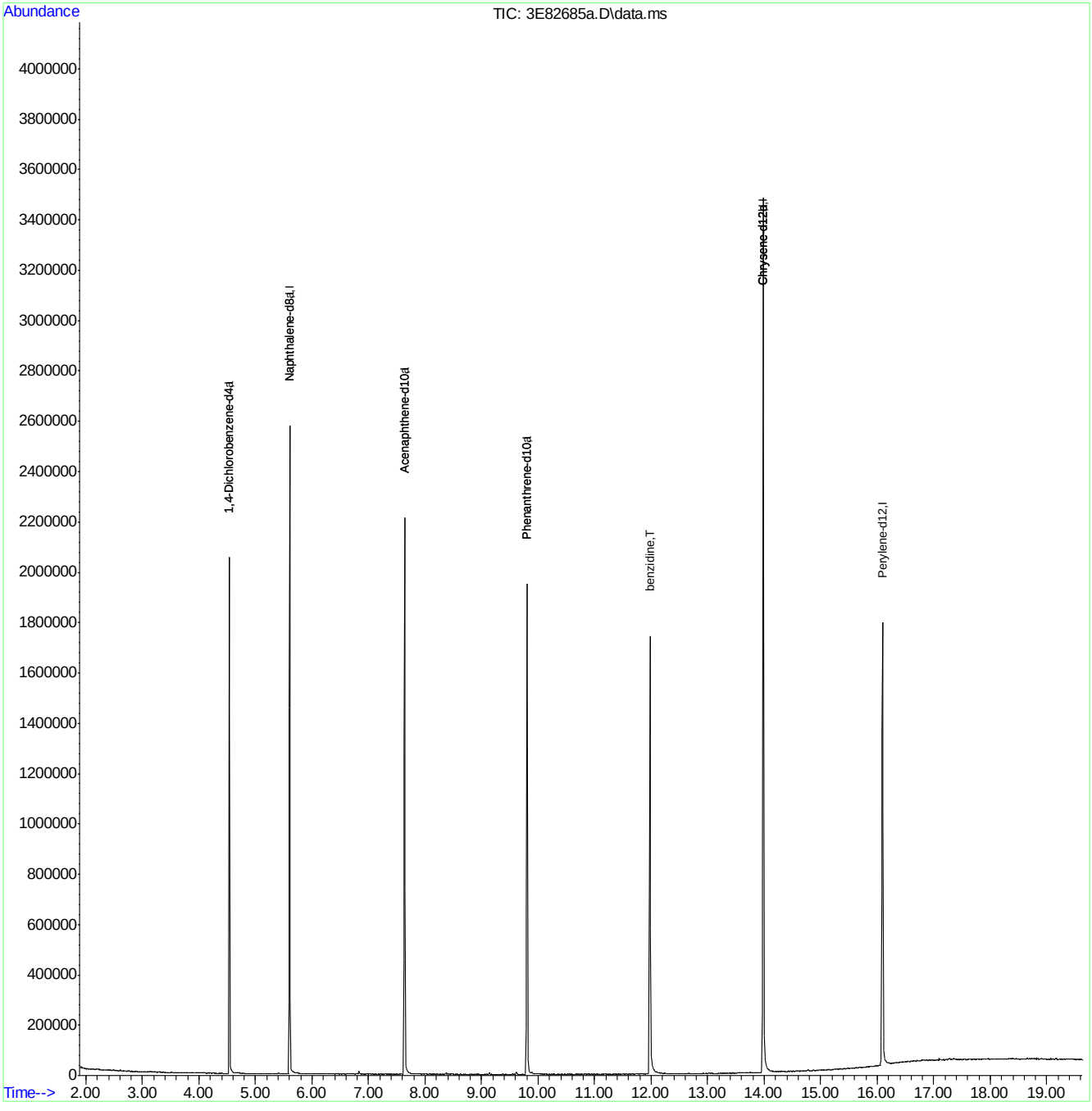
Target Compounds						Qvalue
111) benzidine	11.980	184	860560	83.76	ppm	99

(#) = 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 JC18516

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 JC18516

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

7.6.40

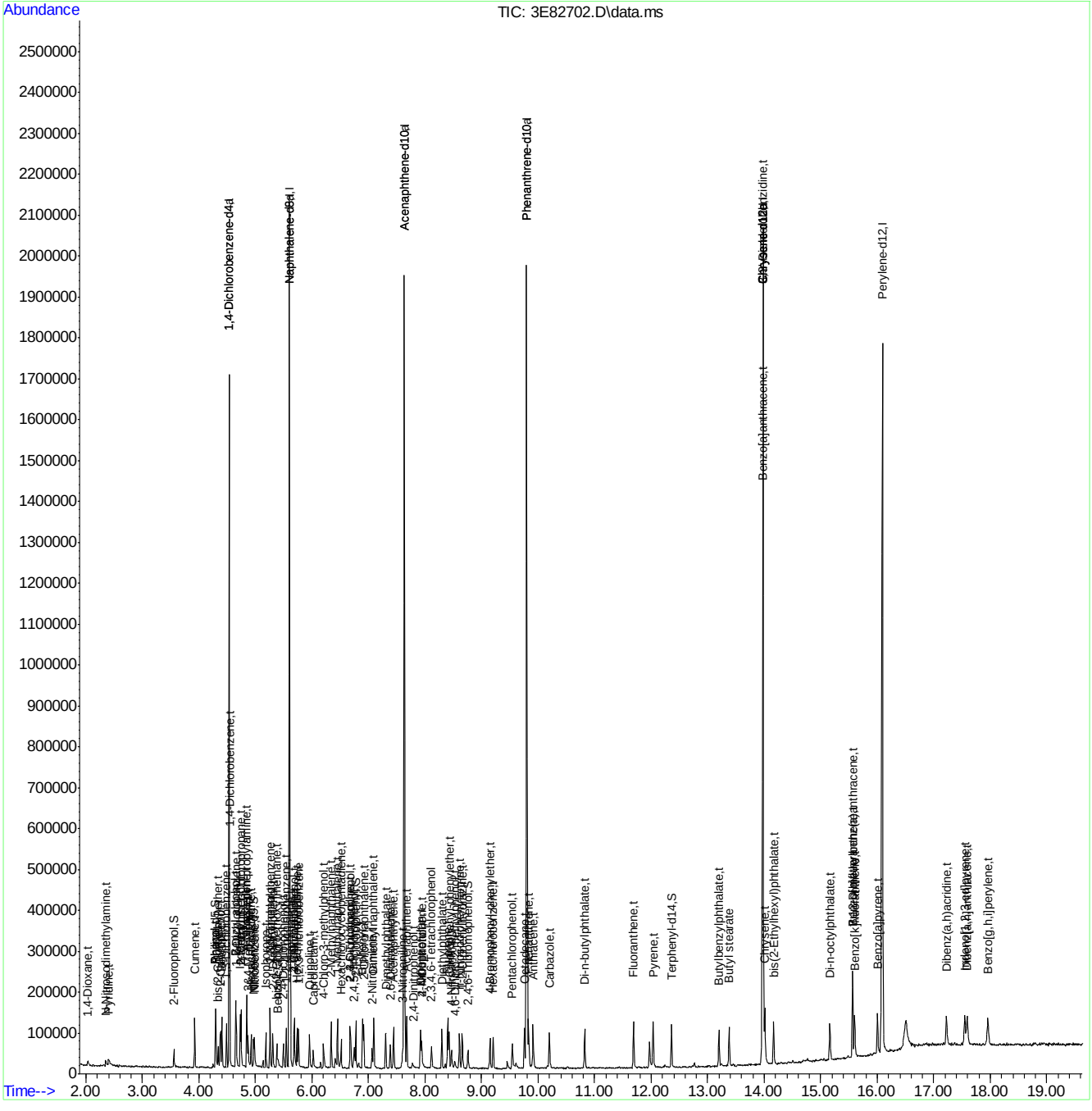
7

SGS ACCUTEST JC18516

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 JC18516

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 JC18516

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 JC18516

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

7.6.41

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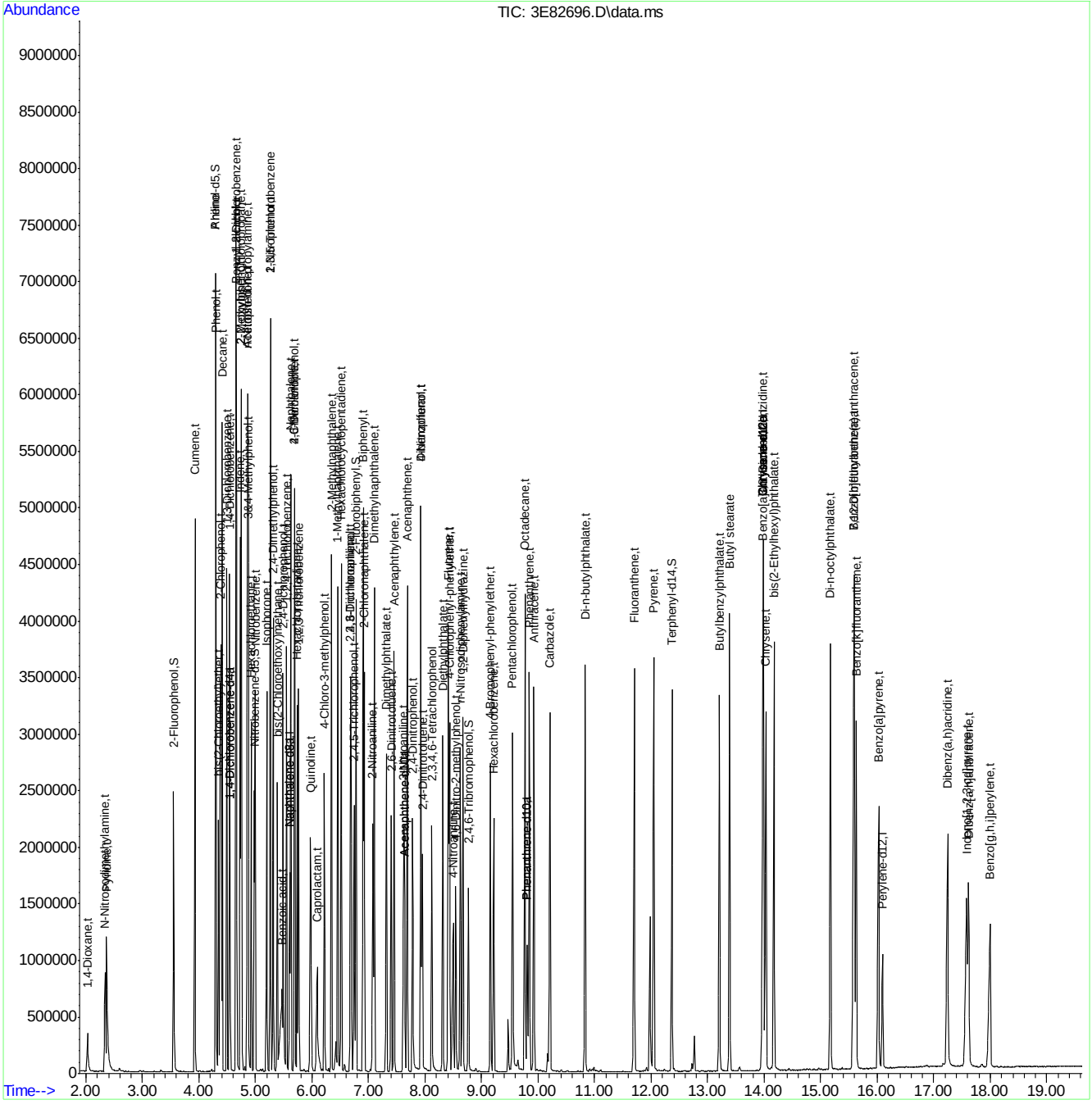
SGS ACCUTEST JC18516

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



SGS ACCUTEST JC18516

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 JC18516

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 JC18516

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

7.6.42

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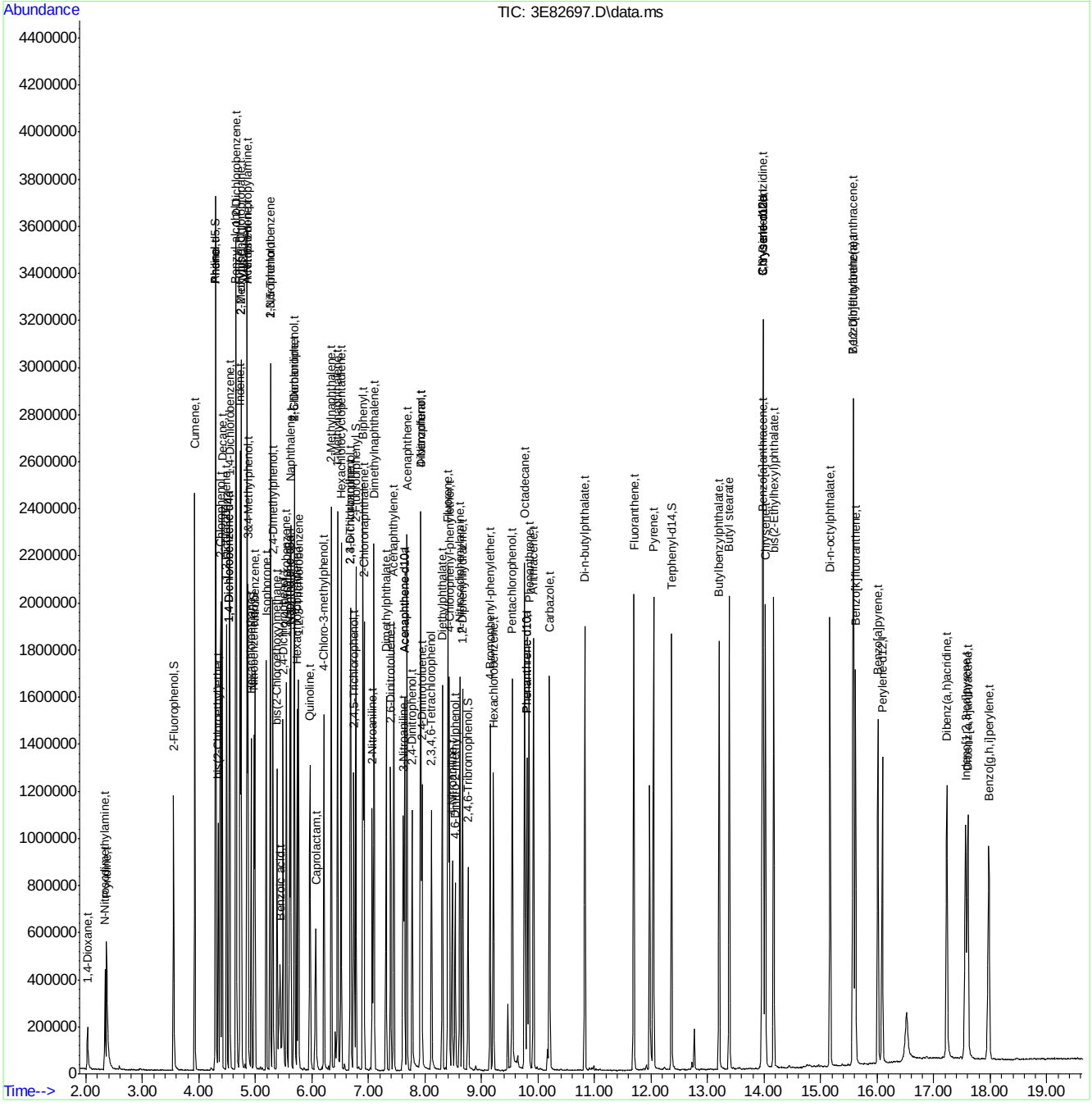
SGS ACCUTEST JC18516

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

SGS ACCUTEST JC18516

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 JC18516

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

7.6.43

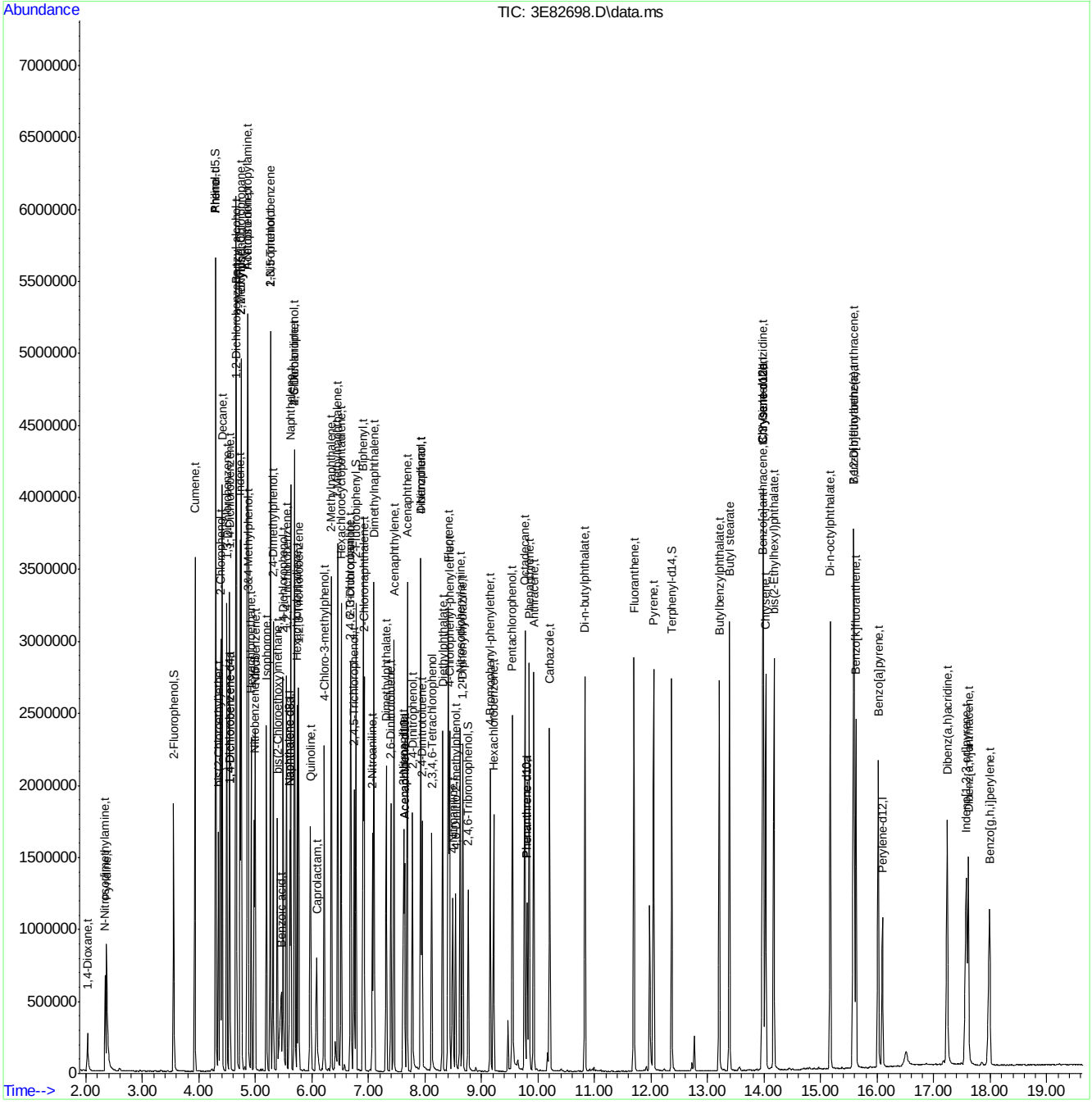
7

SGS ACCUTEST JC18516

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



SGS ACCUTEST JC18516

Manual Integration Approval Summary

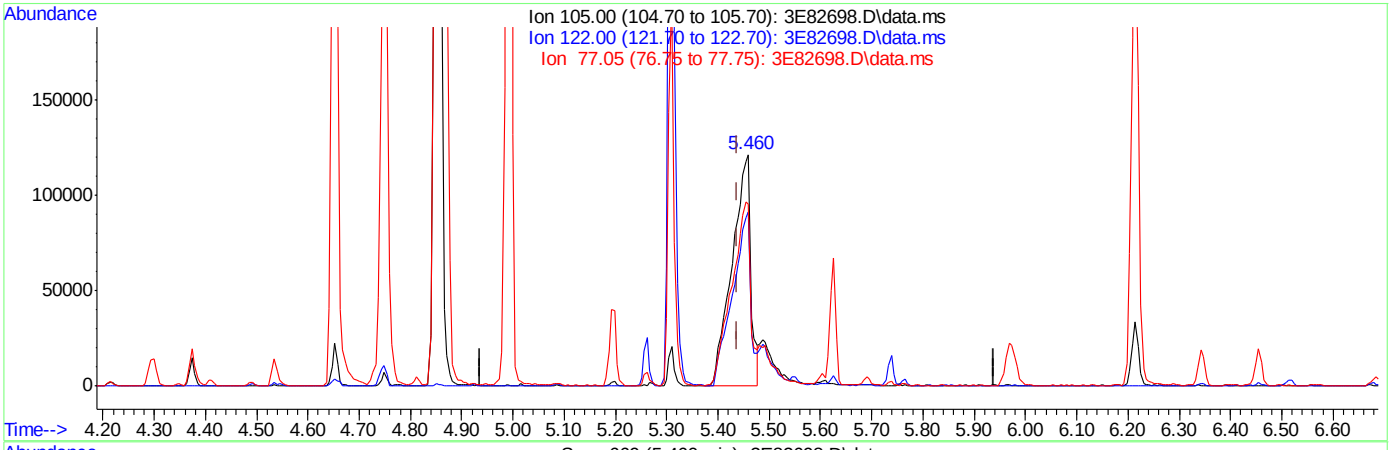
Sample Number:	E3E3623-IC3623	**Method:**	SW846 8270D
Lab FileID:	3E82698.D	**Analyst approved:**	04/28/16 10:43 Ashley Noble
Injection Time:	04/27/16 17:27	**Supervisor approved:**	04/28/16 16:14 Kristi Schollenberger

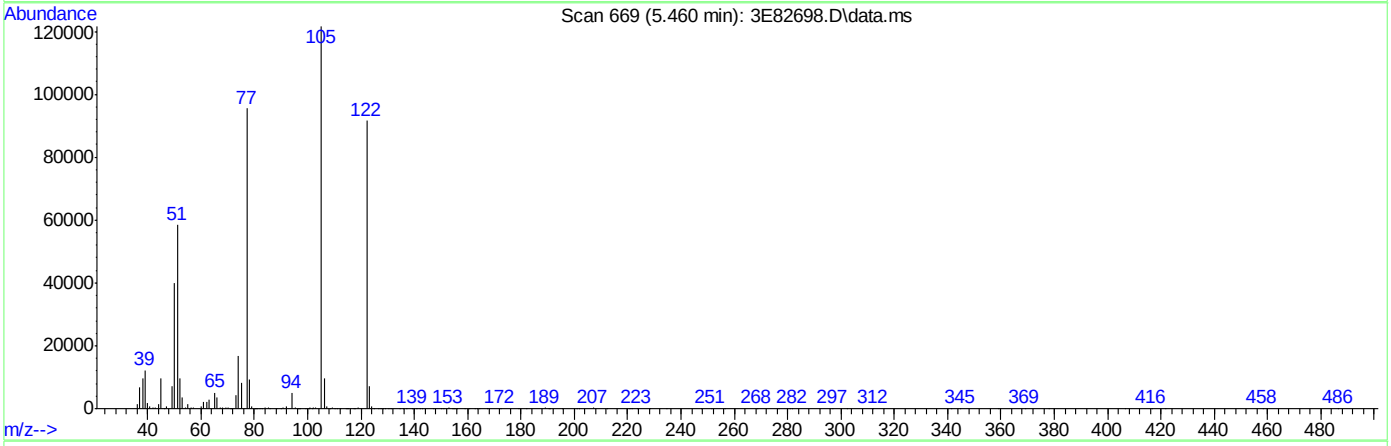
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic acid	65-85-0		5.46	Split peak

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

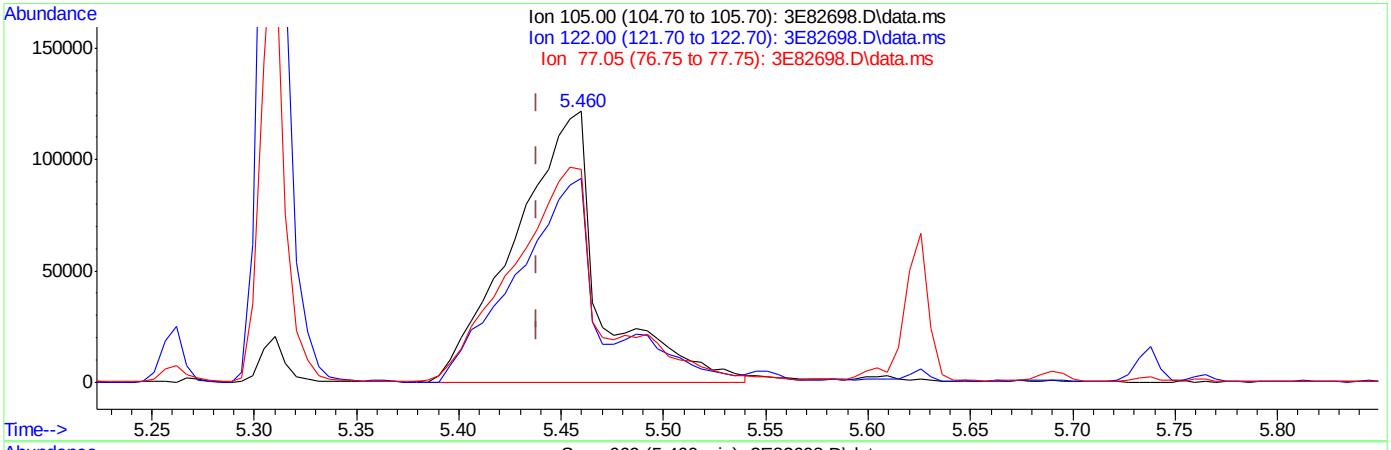
Ion	Exp%	Act%
105.00	100	100
122.00	74.00	74.72
77.05	79.10	77.32
0.00	0.00	0.00

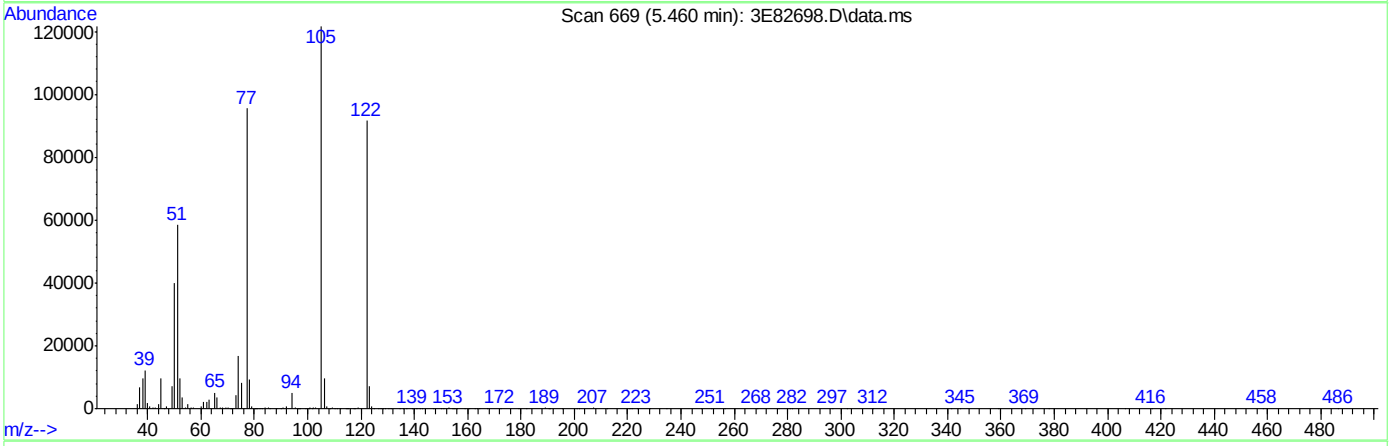
SGS ACCUTEST JC18516

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

SGS ACCUTEST JC18516

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 JC18516

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

7.6.44

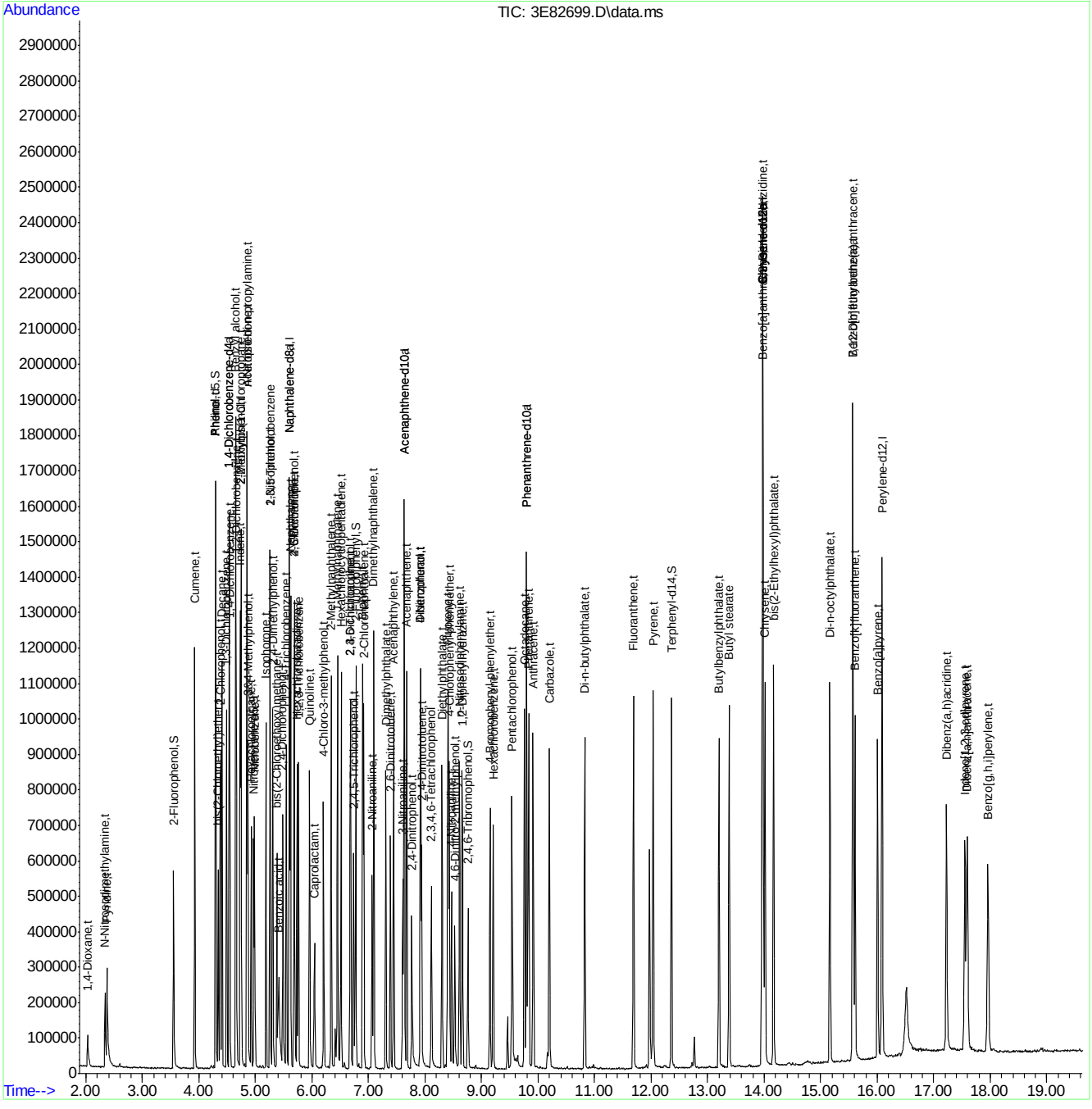
7

SGS ACCUTEST JC18516

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 JC18516

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 JC18516

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

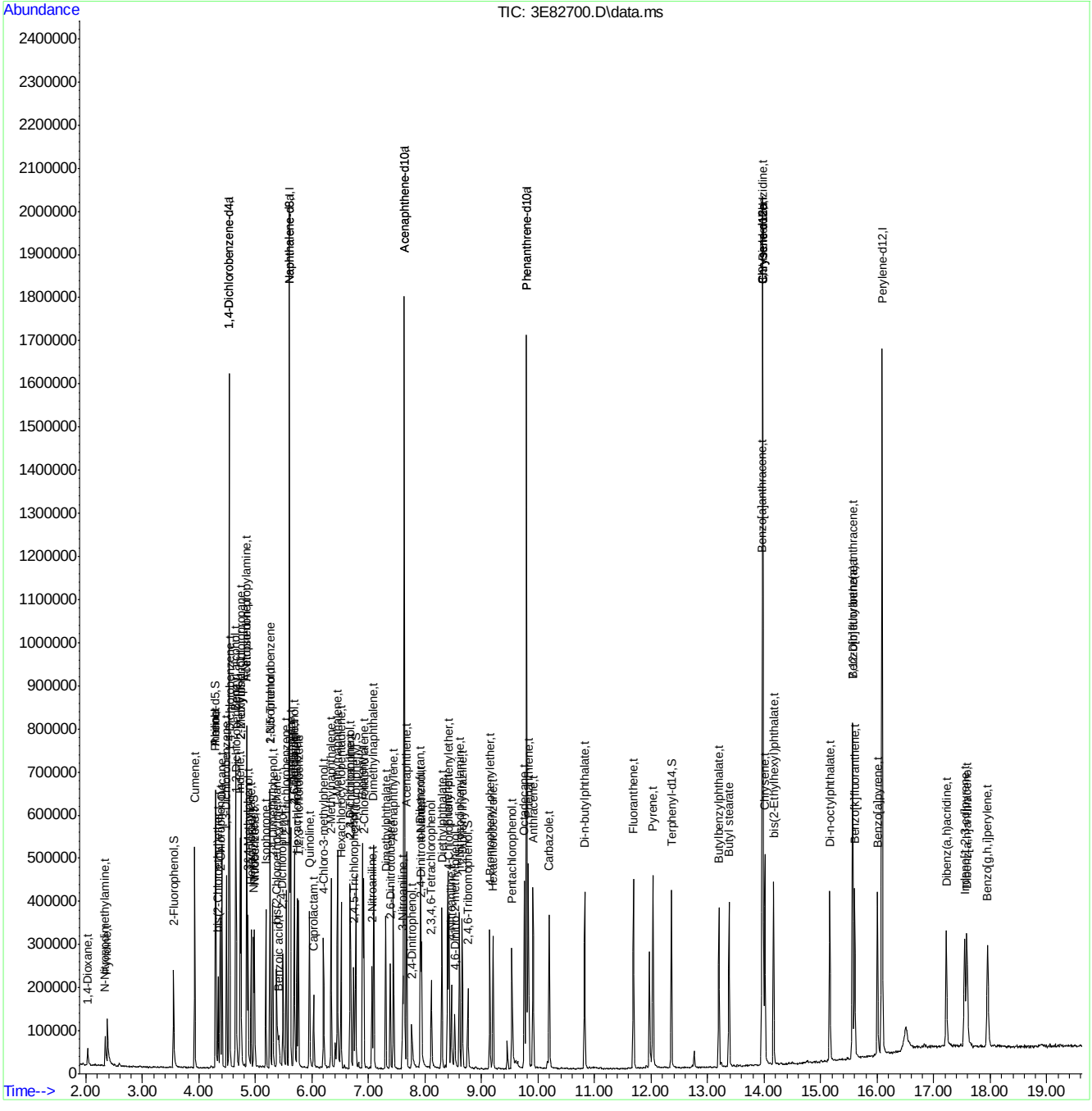
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

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



M3E3623.M Thu Apr 28 09:22:36 2016 MS3E Page: 4

Manual Integration Approval Summary

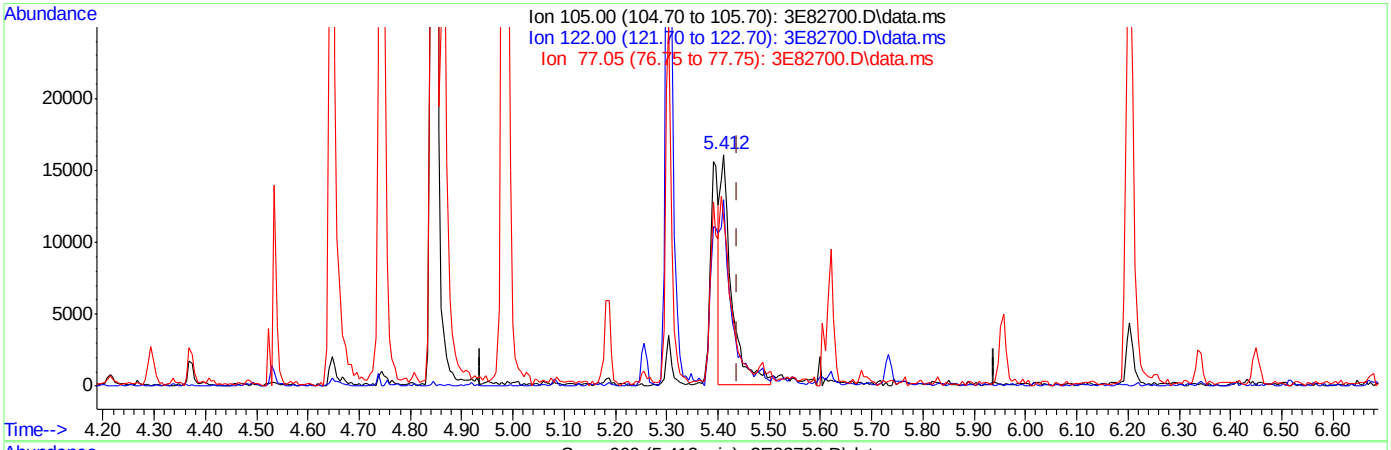
Sample Number:	E3E3623-IC3623	**Method:**	SW846 8270D
Lab FileID:	3E82700.D	**Analyst approved:**	04/28/16 10:43 Ashley Noble
Injection Time:	04/27/16 18:18	**Supervisor approved:**	04/28/16 16:14 Kristi Schollenberger

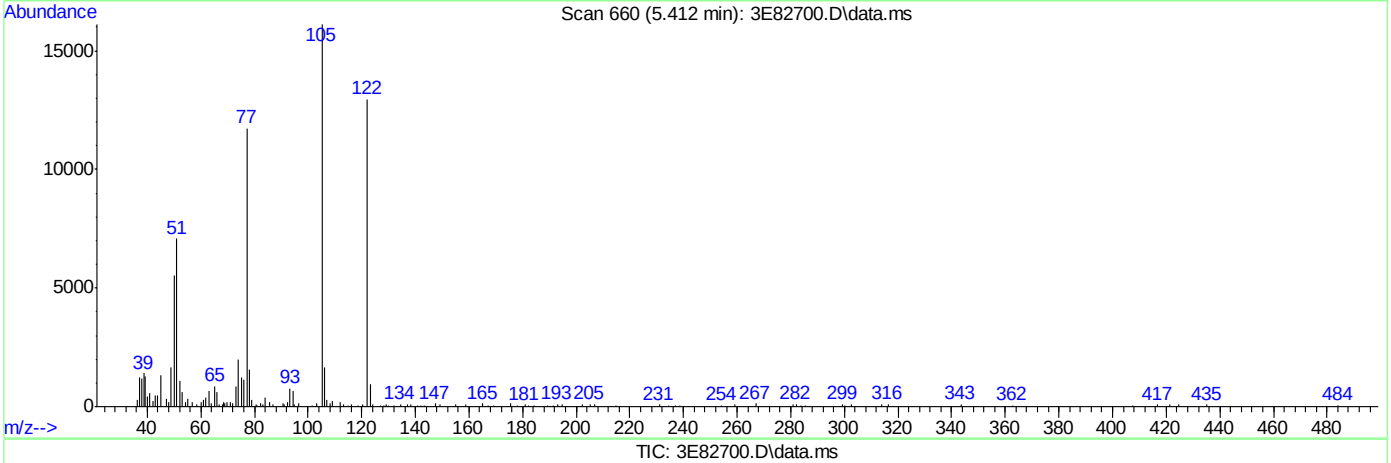
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic acid	65-85-0		5.41	Split peak

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

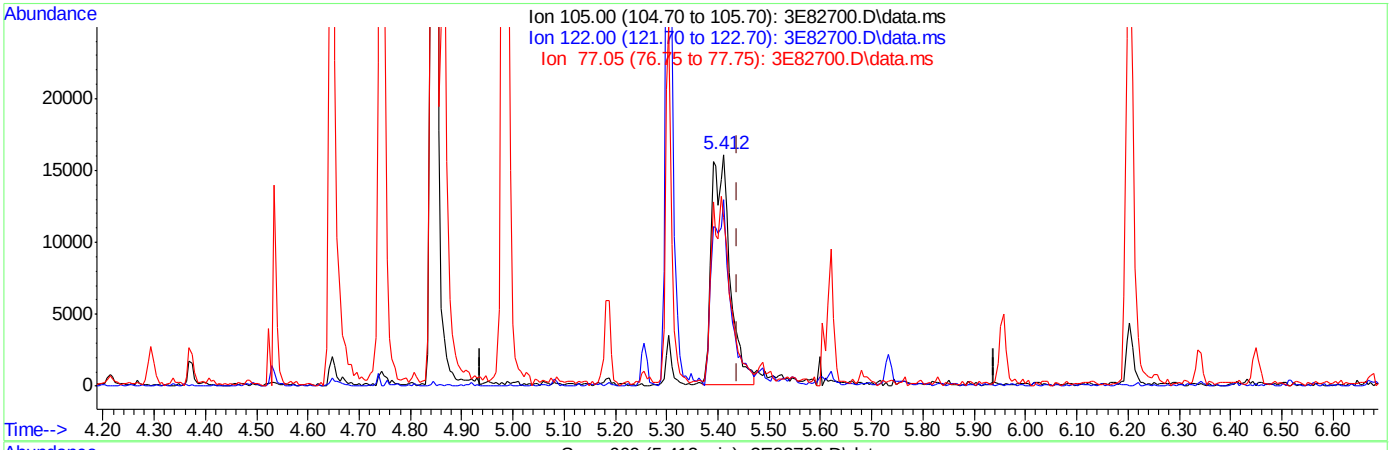
response 24058

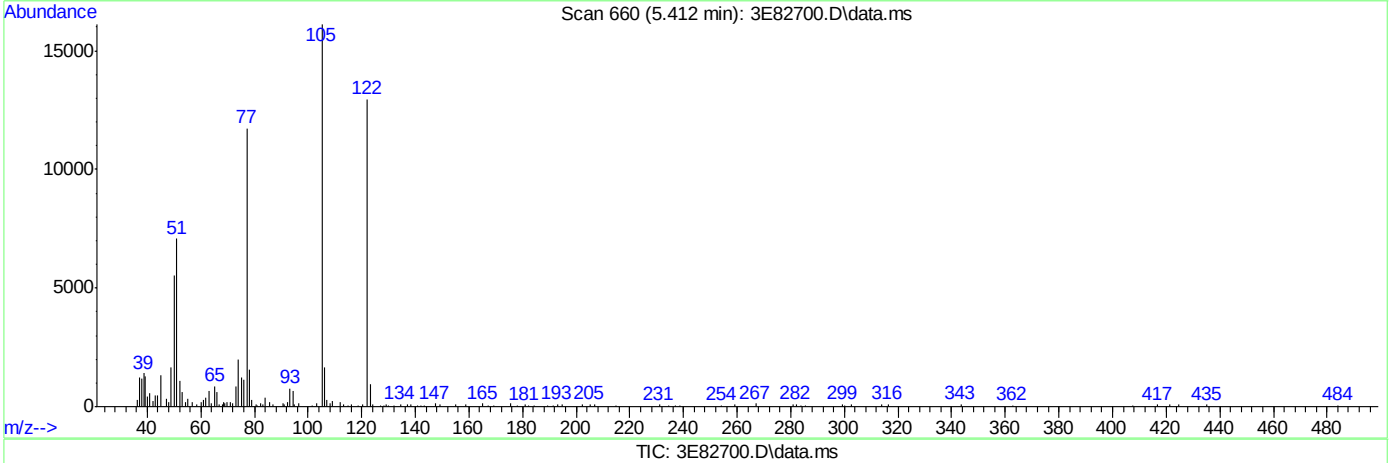
Ion	Exp%	Act%
105.00	100	100
122.00	74.00	78.66
77.05	79.10	64.40
0.00	0.00	0.00

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 JC18516

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 JC18516

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

7.6.46

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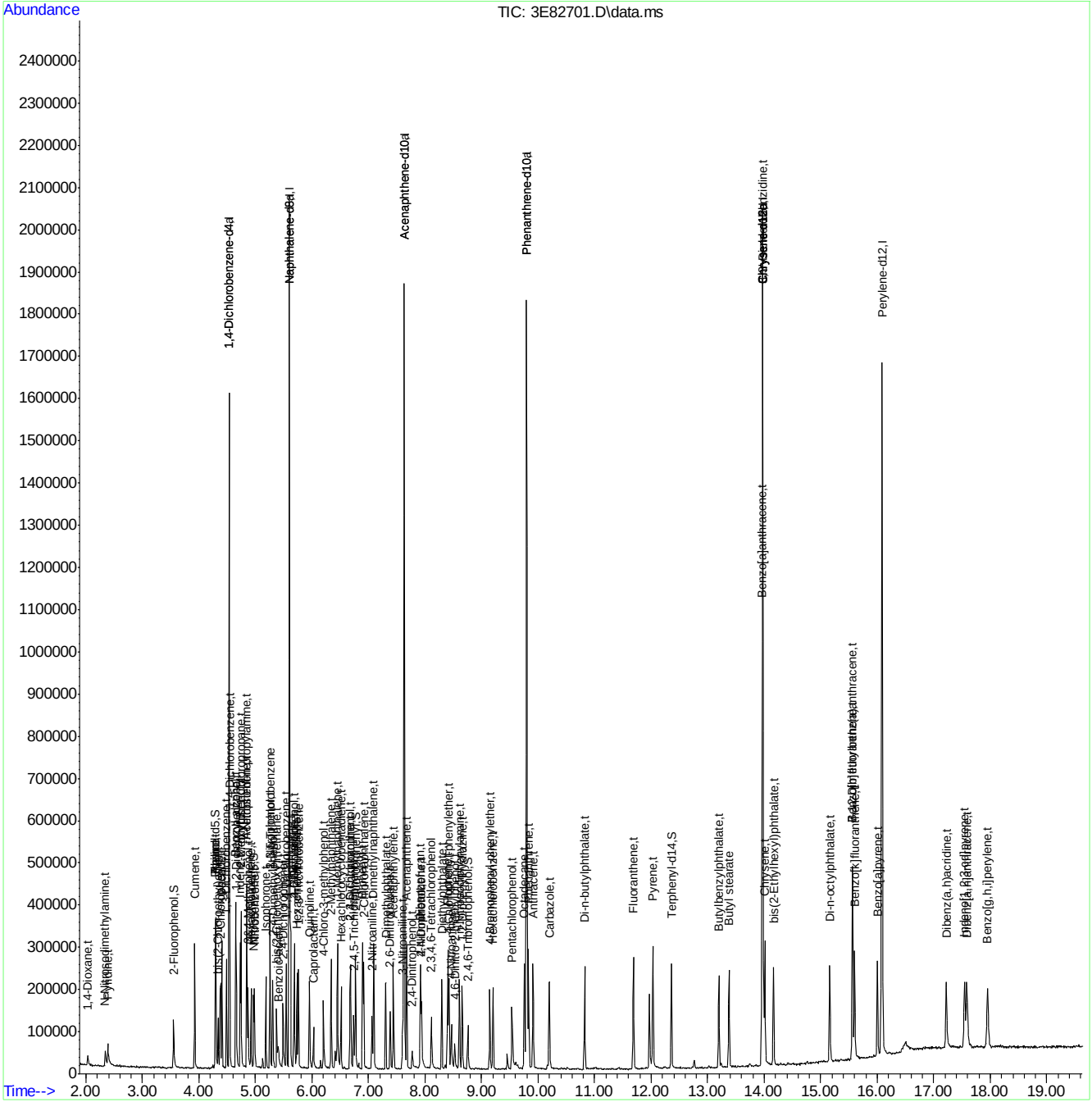
SGS ACCUTEST JC18516

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



M3E3623.M Thu Apr 28 09:26:37 2016 MS3E Page: 4

SGS ACCUTEST JC18516

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 JC18516

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

7.6.47

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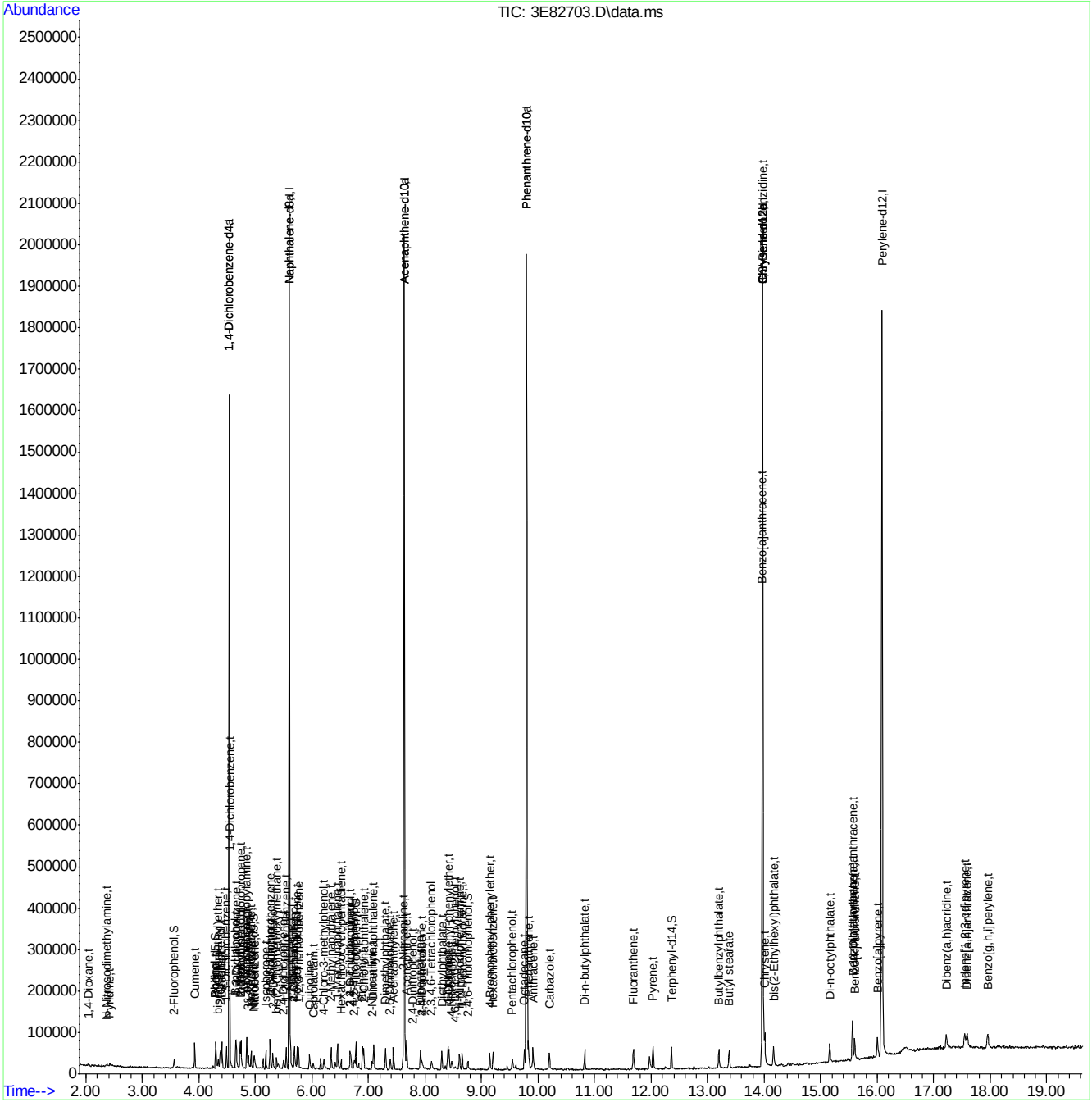
SGS ACCUTEST JC18516

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 JC18516

Manual Integration Approval Summary

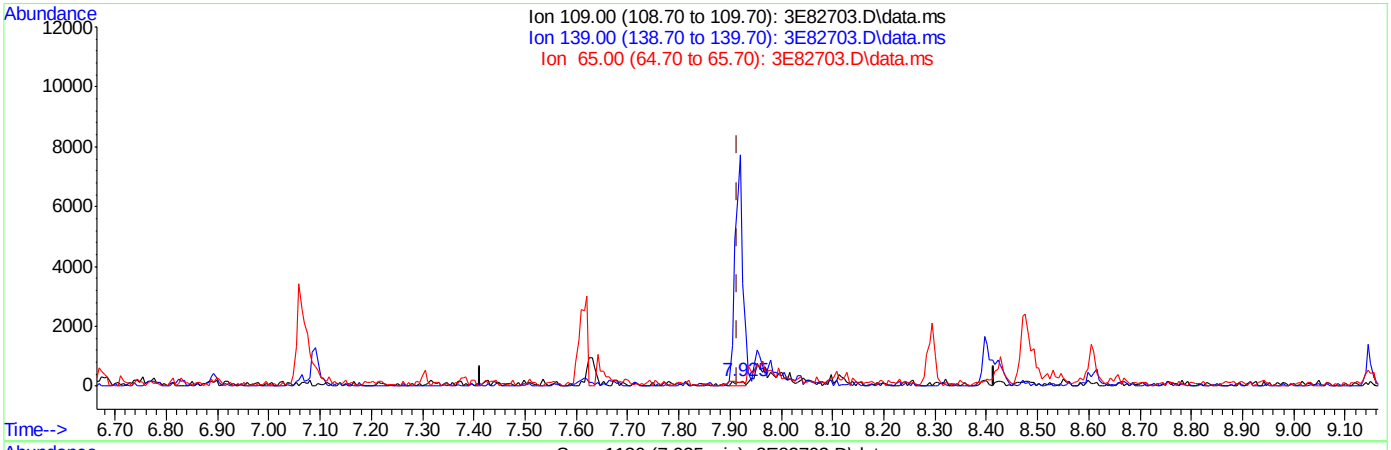
Sample Number:	E3E3623-IC3623	**Method:**	SW846 8270D
Lab FileID:	3E82703.D	**Analyst approved:**	04/28/16 10:43 Ashley Noble
Injection Time:	04/27/16 19:10	**Supervisor approved:**	04/28/16 16:14 Kristi Schollenberger

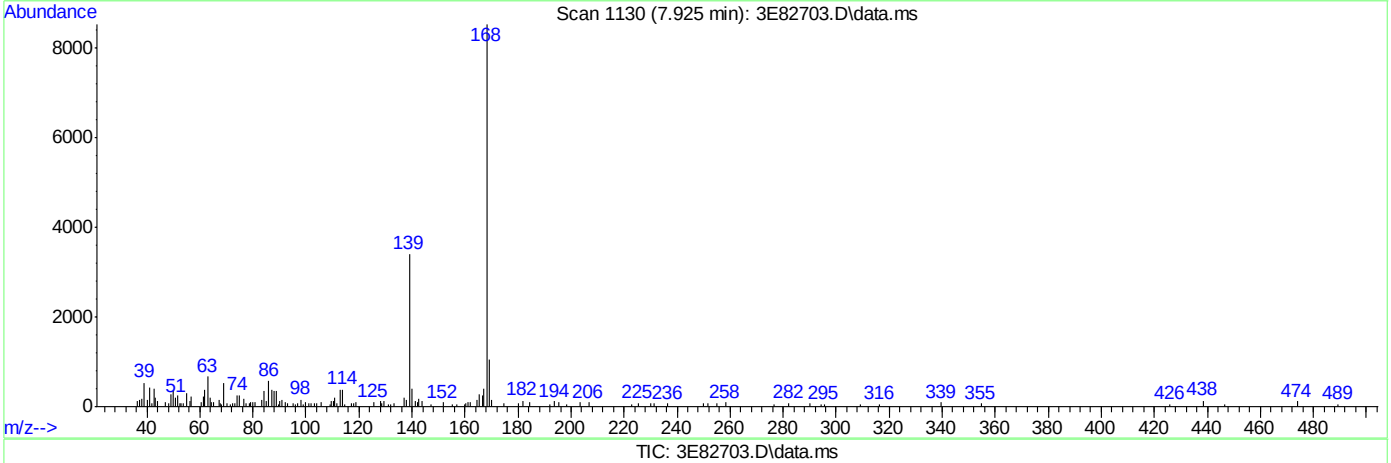
Parameter	CAS	Sig#	R.T. (min.)	Reason
4-Nitrophenol	100-02-7		7.95	Poor instrument integration

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

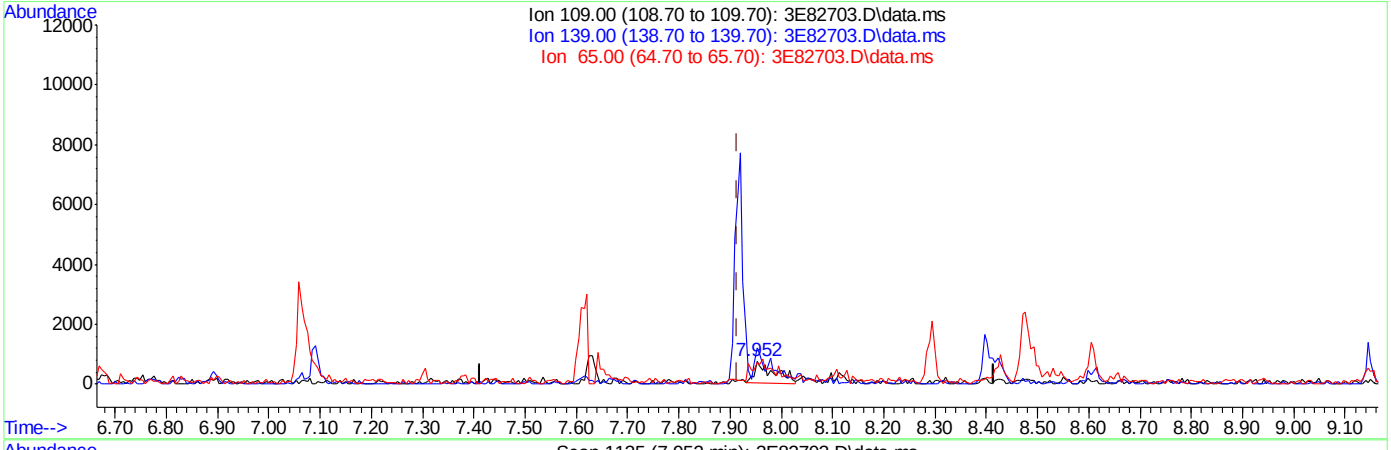
response 231

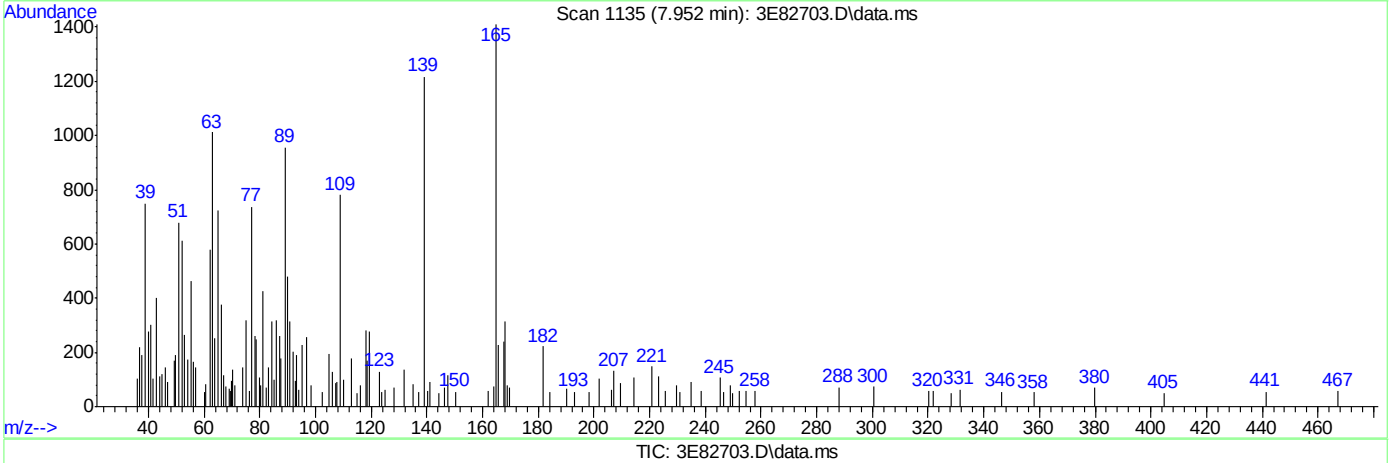
Ion	Exp%	Act%
109.00	100	100
139.00	369.70	1748.75#
65.00	133.80	0.00#
0.00	0.00	0.00

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 JC18516

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 JC18516

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

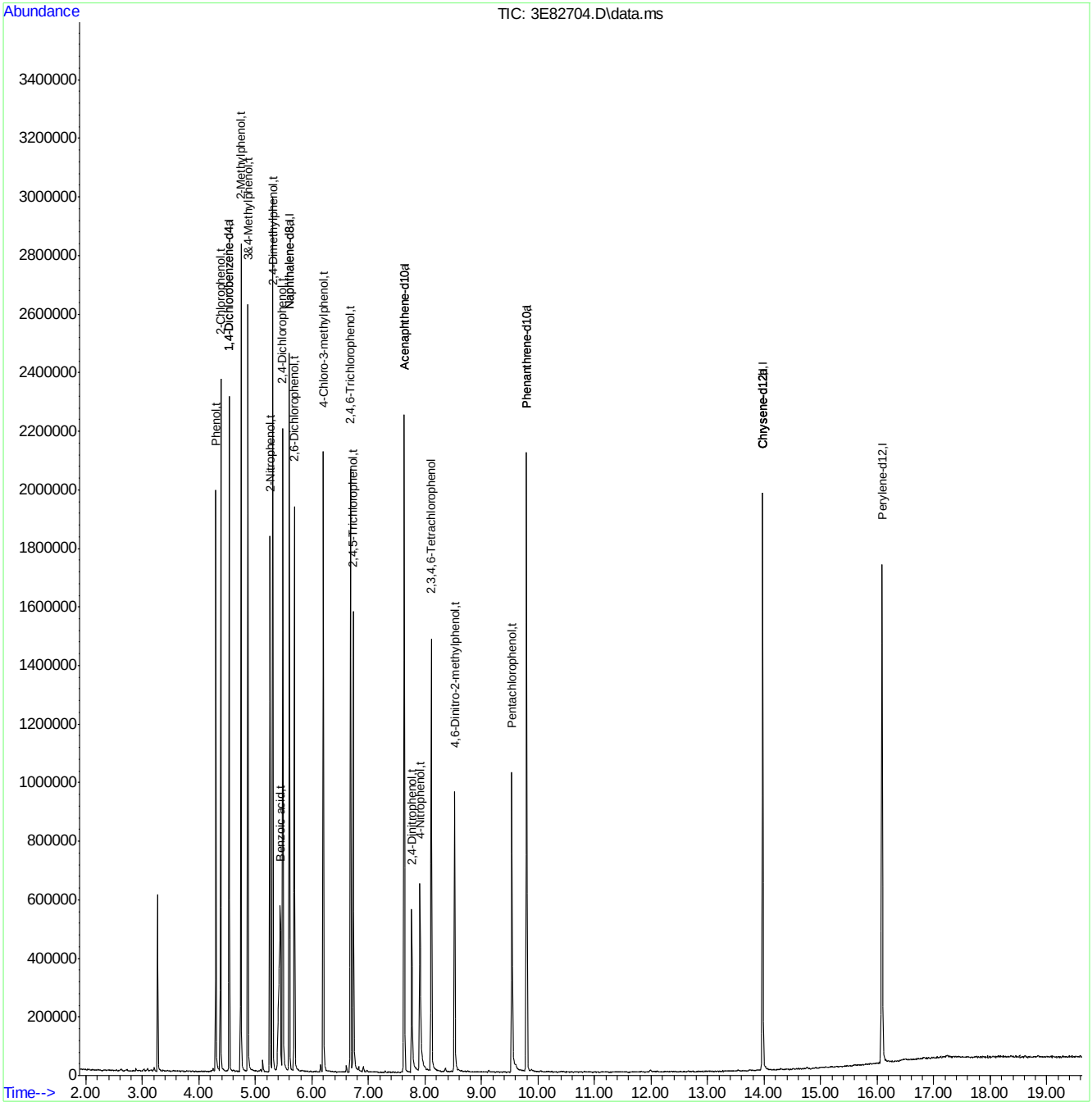
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = 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

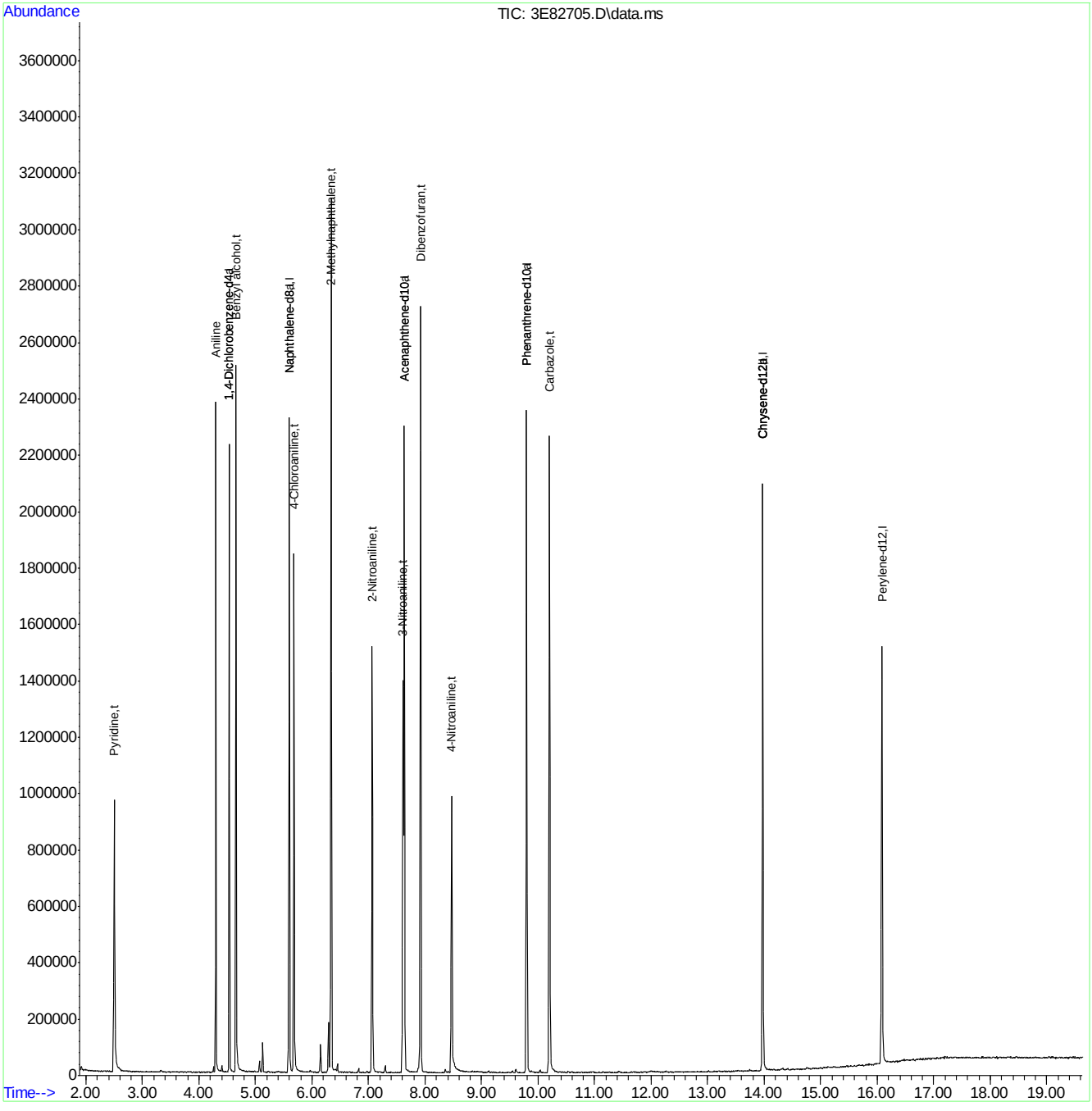
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

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 Page: 2

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

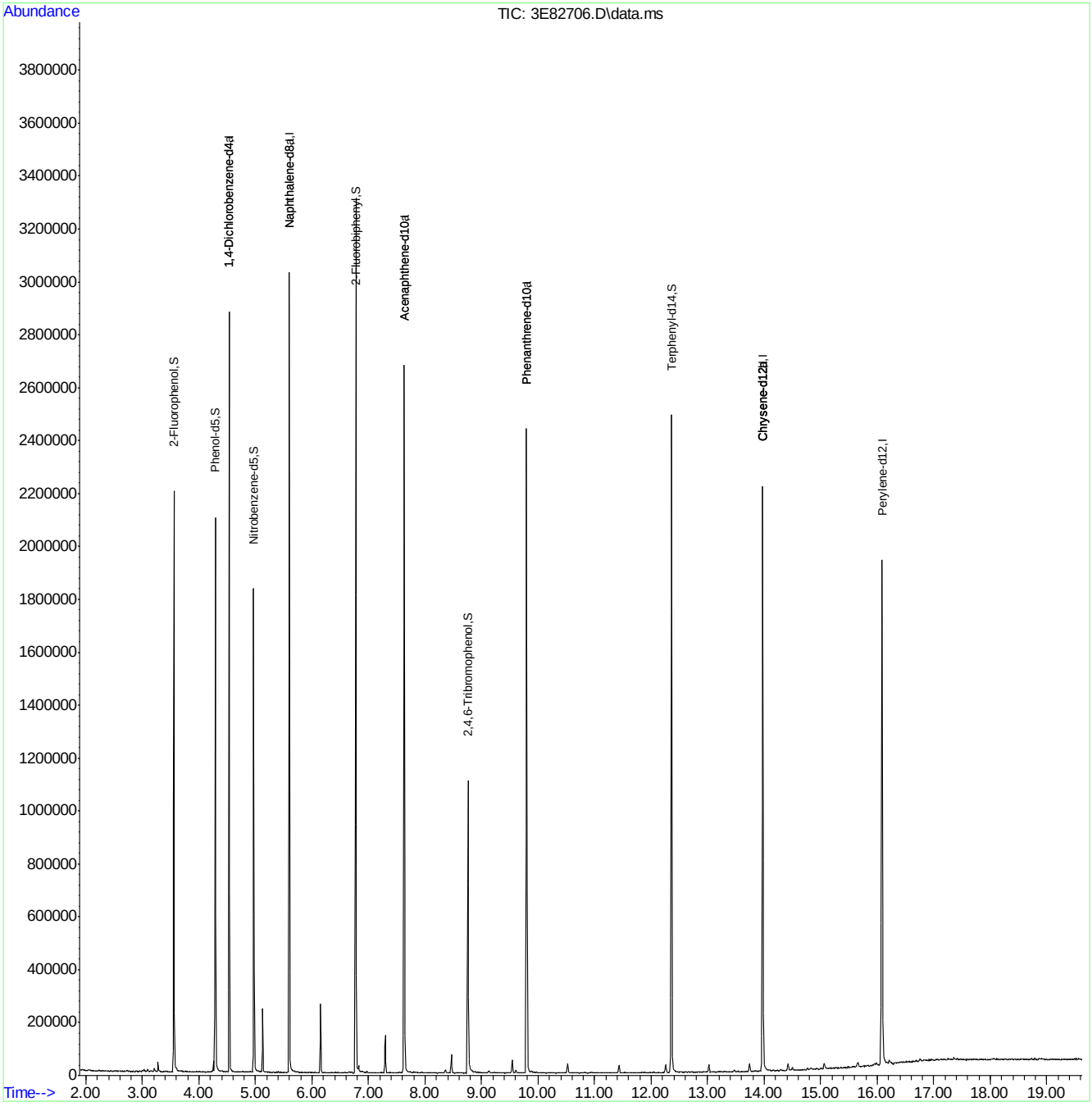
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

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 JC18516

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 JC18516

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

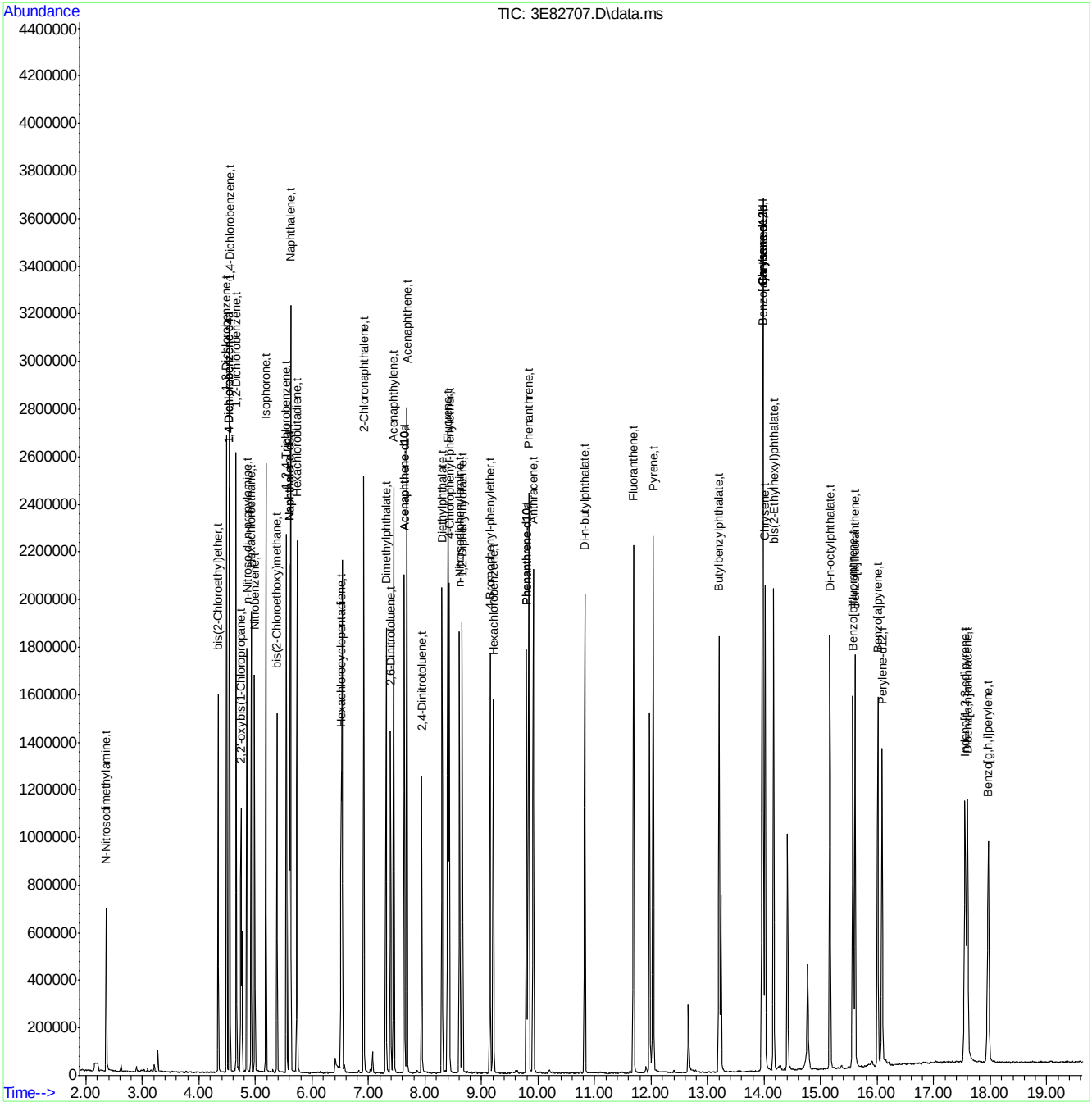
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

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



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

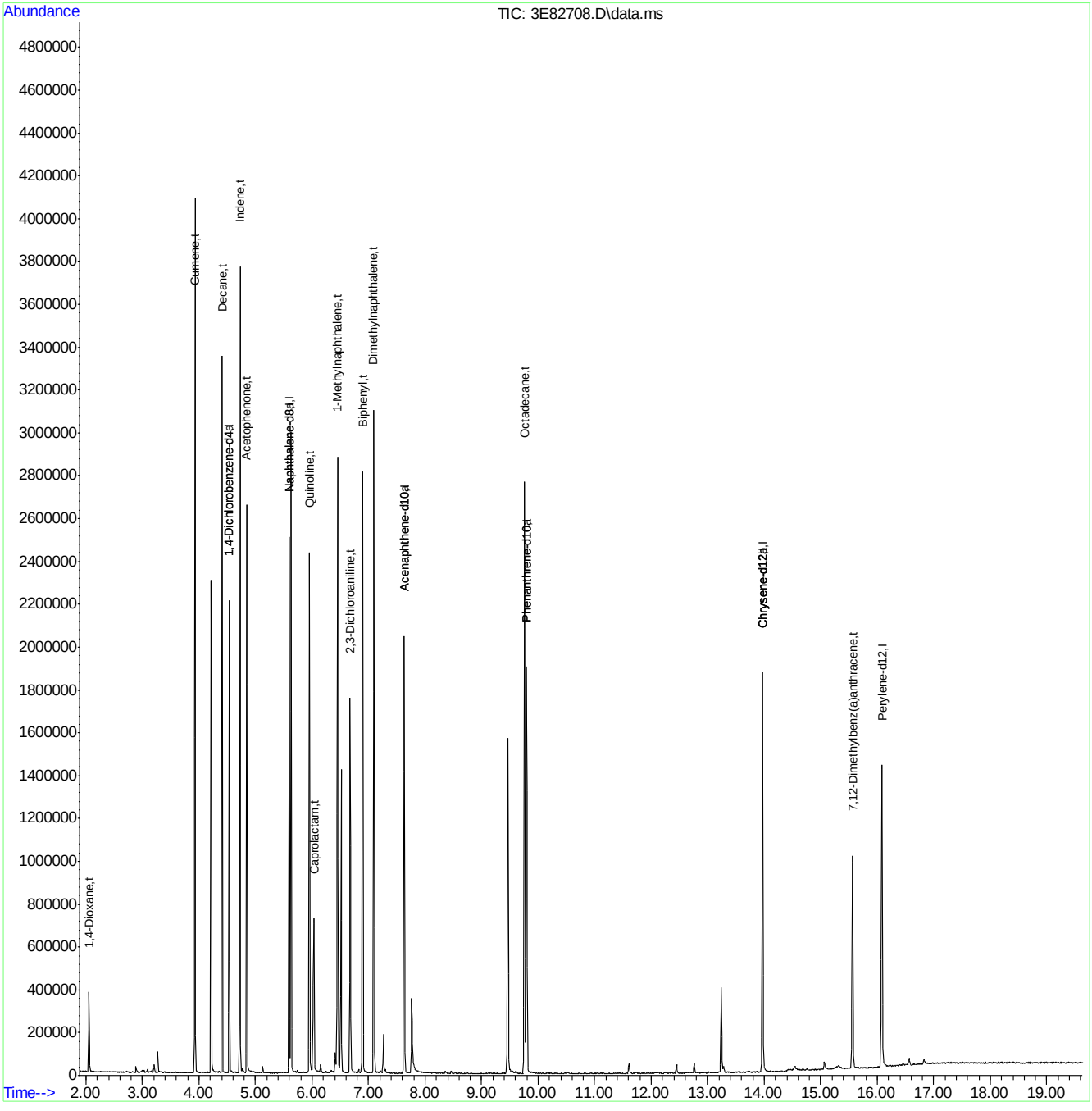
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

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

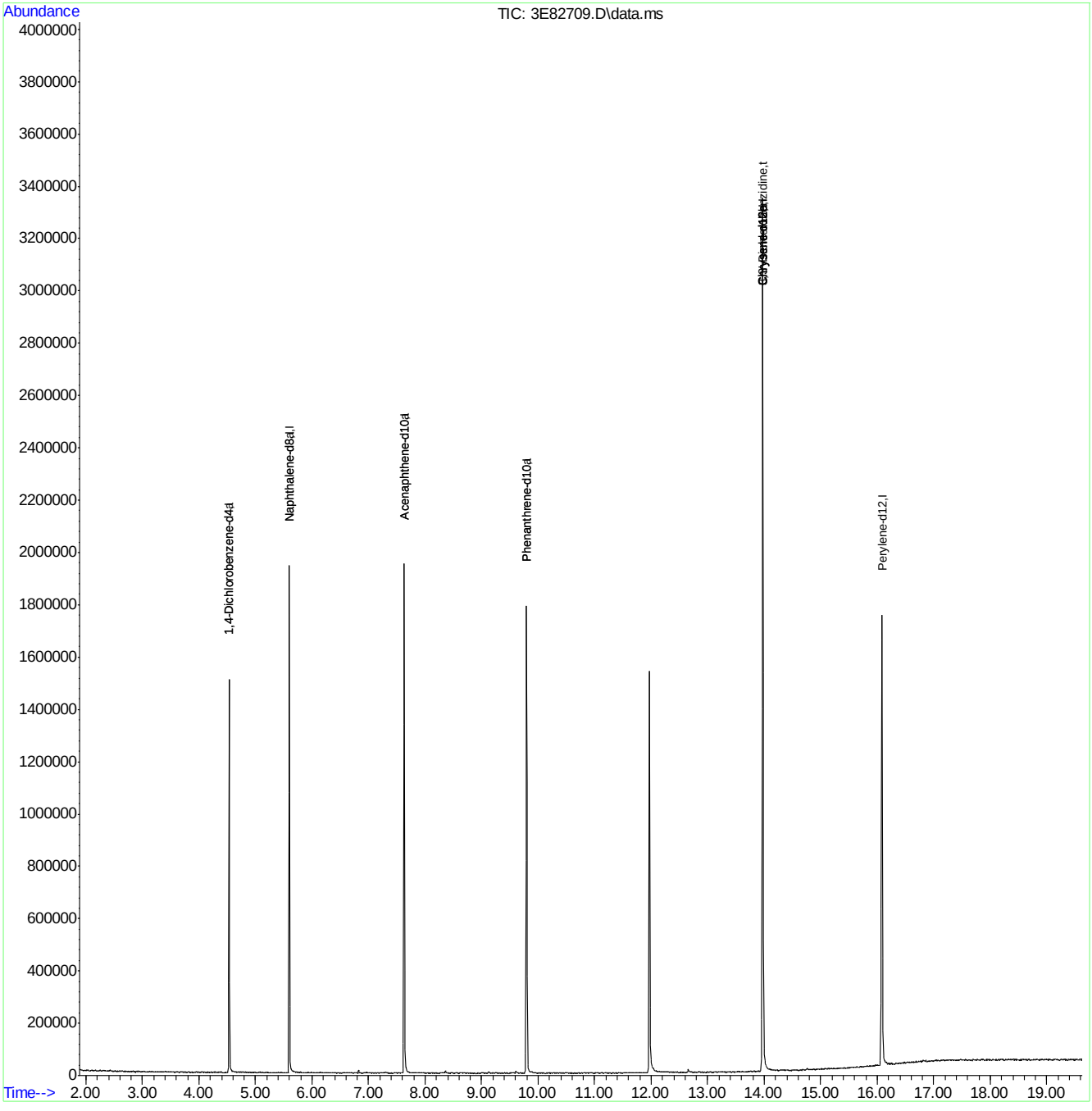
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

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\E3E3626\
Data File : 3E82747.D
Acq On : 29 Apr 2016 9:47 am
Operator : ashleyn
Sample : cc3623-25
Misc : op93161,e3e3626
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 29 12:33:01 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MFri Apr 29 12:31:53 2016
QLast Update : Fri Apr 29 12:32:30 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.518	152	244692	40.00	ppm	-0.02
24) Naphthalene-d8	5.583	136	843777	40.00	ppm	-0.02
47) Acenaphthene-d10	7.610	164	463012	40.00	ppm	-0.03
69) Phenanthrene-d10	9.771	188	739497	40.00	ppm	-0.03
83) Chrysene-d12	13.948	240	684053	40.00	ppm	-0.04
92) Perylene-d12	16.061	264	437368	40.00	ppm	-0.03
102) 1,4-Dichlorobenzene-d4a	4.518	152	244692	40.00	ppm	-0.02
104) Acenaphthene-d10a	7.610	164	463012	40.00	ppm	-0.03
106) Phenanthrene-d10a	9.771	188	739497	40.00	ppm	-0.04
108) Chrysene-d12a	13.948	240	684053	40.00	ppm	-0.04
110) Naphthalene-d8a	5.583	136	843777	40.00	ppm	-0.03
System Monitoring Compounds						
5) 2-Fluorophenol	3.540	112	177365	23.64	ppm	-0.01
Spiked Amount 50.000			Recovery = 47.28%			
8) Phenol-d5	4.283	99	230657	23.63	ppm	0.00
Spiked Amount 50.000			Recovery = 47.26%			
25) Nitrobenzene-d5	4.952	82	212450	25.18	ppm	-0.02
Spiked Amount 50.000			Recovery = 50.36%			
51) 2-Fluorobiphenyl	6.754	172	384775	25.06	ppm	-0.02
Spiked Amount 50.000			Recovery = 50.12%			
73) 2,4,6-Tribromophenol	8.738	330	71438	27.39	ppm	-0.03
Spiked Amount 50.000			Recovery = 54.78%			
85) Terphenyl-d14	12.333	244	402559	28.03	ppm	-0.03
Spiked Amount 50.000			Recovery = 56.06%			

Target Compounds						Qvalue
2) 1,4-Dioxane	2.010	88	41799	18.74	ppm	97
3) Pyridine	2.352	79	104810	16.53	ppm	97
4) N-Nitrosodimethylamine	2.320	74	59847	16.58	ppm	90
6) Indene	4.711	116	337953	23.15	ppm	96
7) Cumene	3.909	105	488235	22.87	ppm	97
9) Phenol	4.294	94	242221	22.64	ppm	83
10) Aniline	4.278	93	261001	21.01	ppm	76
11) bis(2-Chloroethyl)ether	4.326	93	166084	22.63	ppm	95
12) 2-Chlorophenol	4.369	128	207478	23.40	ppm	100
13) Decane	4.390	43	211872	22.57	ppm	98
14) 1,3-Dichlorobenzene	4.470	146	232233	23.95	ppm	97
15) 1,4-Dichlorobenzene	4.529	146	237228	23.31	ppm	97
16) Benzyl alcohol	4.631	108	128294	23.74	ppm	94
17) 1,2-Dichlorobenzene	4.641	146	217466	23.73	ppm	97
18) Acetophenone	4.829	105	271659	22.38	ppm	100
19) 2-Methylphenol	4.738	108	172475	23.00	ppm	96
20) 2,2'-oxybis(1-Chloropr...	4.727	121	67340	22.40	ppm #	58
21) 3&4-Methylphenol	4.855	108	175849	22.32	ppm	95
22) n-Nitroso-di-n-propyla...	4.834	70	142447	22.17	ppm	99
23) Hexachloroethane	4.903	201	76950	23.65	ppm	97
26) Nitrobenzene	4.968	77	215768	24.76	ppm	100
27) Quinoline	5.936	129	349686	23.83	ppm	99
28) Isophorone	5.171	82	347227	24.55	ppm	95

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3626\
Data File : 3E82747.D
Acq On : 29 Apr 2016 9:47 am
Operator : ashleyn
Sample : cc3623-25
Misc : op93161,e3e3626
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 29 12:33:01 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MFri Apr 29 12:31:53 2016
QLast Update : Fri Apr 29 12:32:30 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
29) 2-Nitrophenol	5.235	139	113183	25.38	ppm		95
30) 2,4-Dimethylphenol	5.289	107	194601	25.35	ppm		98
31) Benzoic acid	5.401	105	133066	23.53	ppm		96
32) bis(2-Chloroethoxy)met...	5.358	93	189455	24.60	ppm		99
33) 2,4-Dichlorophenol	5.470	162	156786	26.19	ppm		97
34) 2,6-Dichlorophenol	5.674	162	149287	24.42	ppm		96
35) 1,3,5-Trichlorobenzene	5.240	180	188551	26.06	ppm		99
36) 1,2,4-Trichlorobenzene	5.529	180	171074	25.05	ppm		96
37) 1,2,3-Trichlorobenzene	5.743	180	163383	24.84	ppm		98
38) Naphthalene	5.599	128	556447	23.85	ppm		99
39) 4-Chloroaniline	5.663	127	203179	21.38	ppm		97
40) 2,3-Dichloroaniline	6.652	161	179905	23.85	ppm		97
41) Caprolactam	6.037	55	73025	22.86	ppm		97
42) Hexachlorobutadiene	5.711	225	102170	24.96	ppm		97
43) 4-Chloro-3-methylphenol	6.192	107	158316	23.18	ppm		99
44) 2-Methylnaphthalene	6.321	141	314865	23.78	ppm		100
45) 1-Methylnaphthalene	6.428	141	328881	23.81	ppm		98
46) Dimethylnaphthalene	7.070	156	316451	23.67	ppm		99
48) Hexachlorocyclopentadiene	6.492	237	162717	45.78	ppm		98
49) 2,4,6-Trichlorophenol	6.663	196	107472	25.60	ppm		98
50) 2,4,5-Trichlorophenol	6.727	196	118338	25.31	ppm		99
52) 2-Chloronaphthalene	6.893	162	320960	24.46	ppm		97
53) Biphenyl	6.872	154	431815	24.67	ppm		99
54) 2-Nitroaniline	7.043	65	114289	23.50	ppm		89
55) Dimethylphthalate	7.284	163	370615	24.11	ppm		99
56) Acenaphthylene	7.417	152	536541	24.49	ppm		96
57) 2,6-Dinitrotoluene	7.364	165	84317	24.50	ppm		95
58) 3-Nitroaniline	7.588	138	86103	22.46	ppm		99
59) Acenaphthene	7.653	153	343978	23.65	ppm		94
60) 2,4-Dinitrophenol	7.744	184	60844	38.60	ppm		99
61) 4-Nitrophenol	7.915	109	60090	24.27	ppm	#	15
62) Dibenzofuran	7.893	168	458575	23.95	ppm		86
63) 2,4-Dinitrotoluene	7.920	165	116437	24.73	ppm		71
64) 2,3,4,6-Tetrachlorophenol	8.091	232	89704	25.88	ppm		94
65) Diethylphthalate	8.273	149	378059	23.41	ppm		99
66) Fluorene	8.380	166	385219	24.03	ppm		98
67) 4-Chlorophenyl-phenyle...	8.401	204	176647	24.17	ppm		96
68) 4-Nitroaniline	8.450	138	83241	22.59	ppm		98
70) 4,6-Dinitro-2-methylph...	8.503	198	53654	21.52	ppm		97
71) n-Nitrosodiphenylamine	8.589	169	258295	25.15	ppm		96
72) 1,2-Diphenylhydrazine	8.631	77	367674	24.03	ppm		98
74) 4-Bromophenyl-phenylether	9.124	248	113458	25.81	ppm		95
75) Hexachlorobenzene	9.182	284	133098	25.24	ppm		92
76) Pentachlorophenol	9.519	266	129758	51.70	ppm		96
77) Phenanthrene	9.808	178	502588	23.42	ppm		99
78) Anthracene	9.883	178	515455	23.98	ppm		99
79) Carbazole	10.172	167	457027	23.50	ppm		99
80) Di-n-butylphthalate	10.798	149	593151	23.62	ppm		99
81) Fluoranthene	11.664	202	545687	23.45	ppm		98
82) Octadecane	9.733	57	207481	23.75	ppm		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3626\
Data File : 3E82747.D
Acq On : 29 Apr 2016 9:47 am
Operator : ashleyn
Sample : cc3623-25
Misc : op93161,e3e3626
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 29 12:33:01 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MFri Apr 29 12:31:53 2016
QLast Update : Fri Apr 29 12:32:30 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
84) Pyrene	12.012	202	577911	28.22 ppm	100
86) Butylbenzylphthalate	13.172	149	253132	25.92 ppm	97
87) Butyl stearate	13.349	56	123312	24.05 ppm	93
88) Benzo[a]anthracene	13.937	228	494627	24.74 ppm	99
89) 3,3'-Dichlorobenzidine	13.953	252	171617	23.08 ppm	99
90) Chrysene	13.991	228	417865	22.40 ppm	98
91) bis(2-Ethylhexyl)phtha...	14.141	149	293075	23.32 ppm	99
93) Di-n-octylphthalate	15.130	149	424588	25.49 ppm	98
94) Benzo[b]fluoranthene	15.542	252	359420	24.31 ppm	95
95) Benzo[k]fluoranthene	15.579	252	327187	24.80 ppm	99
96) Benzo[a]pyrene	15.980	252	300580	24.35 ppm	97
97) Indeno[1,2,3-cd]pyrene	17.516	276	284872	24.22 ppm	97
98) Dibenz(a,h)acridine	17.195	279	265354	23.97 ppm	100
99) Dibenz[a,h]anthracene	17.553	278	301216	25.78 ppm	95
100) 7,12-Dimethylbenz(a)an...	15.537	256	172512	26.17 ppm	96
101) Benzo[g,h,i]perylene	17.922	276	290091	25.60 ppm	95

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

7.6.54

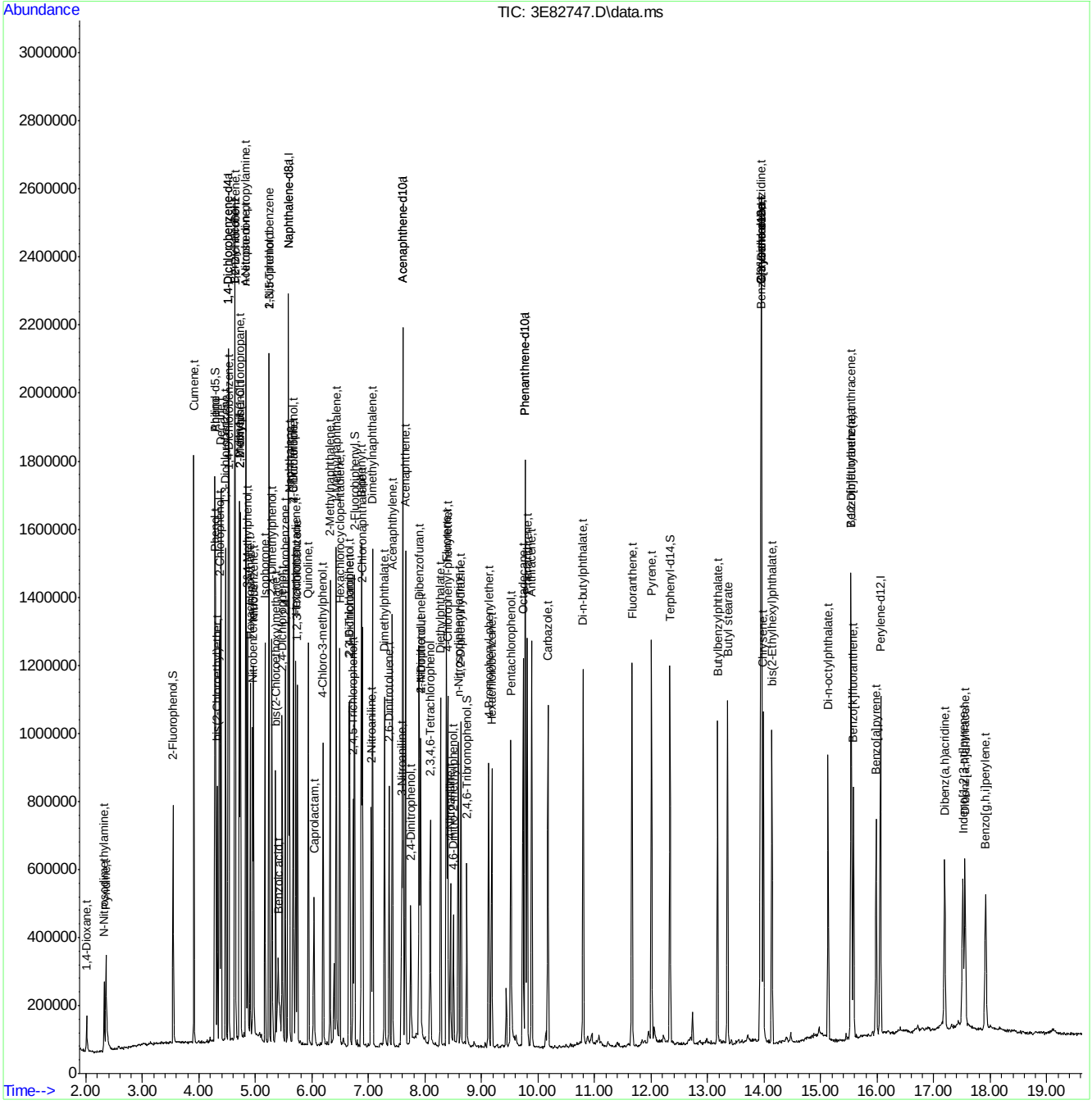
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3626\
Data File : 3E82747.D
Acq On : 29 Apr 2016 9:47 am
Operator : ashleyn
Sample : cc3623-25
Misc : op93161,e3e3626
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 29 12:33:01 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MFri Apr 29 12:31:53 2016
QLast Update : Fri Apr 29 12:32:30 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3626\
Data File : 3E82749.D
Acq On : 29 Apr 2016 10:38 am
Operator : ashleyn
Sample : cc3621-25
Misc : op93161,e3e3626
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 29 12:33:30 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MFri Apr 29 12:32:30 2016
QLast Update : Fri Apr 29 12:32:30 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.513	152	235563	40.00	ppm	-0.02
24) Naphthalene-d8	5.577	136	926369	40.00	ppm	-0.03
47) Acenaphthene-d10	7.610	164	479602	40.00	ppm	-0.03
69) Phenanthrene-d10	9.771	188	896593	40.00	ppm	-0.03
83) Chrysene-d12	13.943	240	970428	40.00	ppm	-0.04
92) Perylene-d12	16.061	264	861831	40.00	ppm	-0.03
102) 1,4-Dichlorobenzene-d4a	4.513	152	235563	40.00	ppm	-0.03
104) Acenaphthene-d10a	7.610	164	479602	40.00	ppm	-0.03
106) Phenanthrene-d10a	9.771	188	896593	40.00	ppm	-0.04
108) Chrysene-d12a	13.943	240	970428	40.00	ppm	-0.05
110) Naphthalene-d8a	5.577	136	926369	40.00	ppm	-0.03

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	4.192	105	139735	21.88	ppm	89
105) 1,2,4,5-Tetrachloroben...	6.508	216	172625	29.07	ppm	99
107) Atrazine	9.439	215	63445	27.80	ppm	92
109) benzidine	11.942	184	167151	13.99	ppm	97
111) Hydroquinone	6.037	110	166601	26.16	ppm	77

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

7.6.55

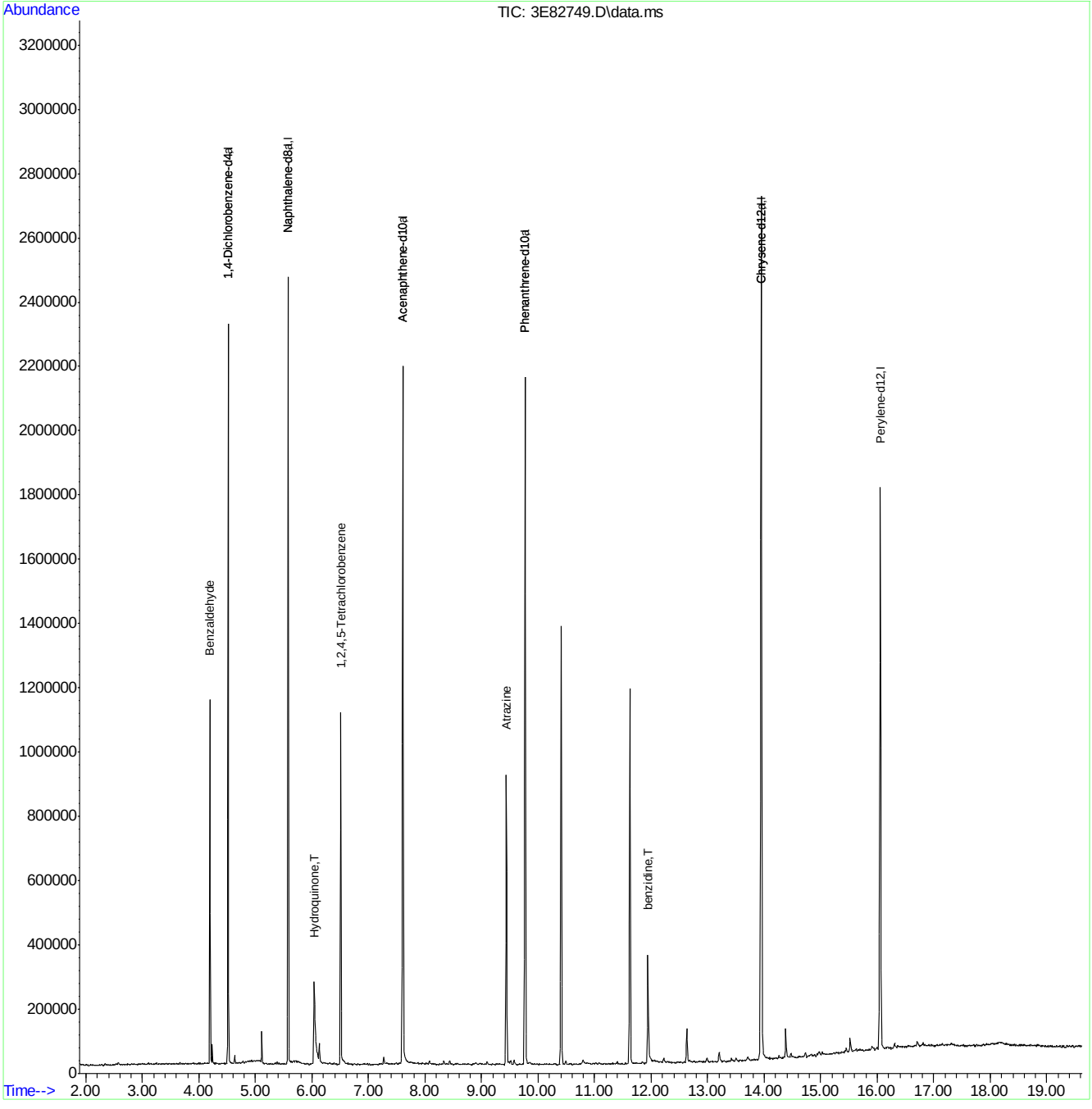
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3626\
Data File : 3E82749.D
Acq On : 29 Apr 2016 10:38 am
Operator : ashleyn
Sample : cc3621-25
Misc : op93161,e3e3626
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 29 12:33:30 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MFri Apr 29 12:32:30 2016
QLast Update : Fri Apr 29 12:32:30 2016
Response via : Initial Calibration



M3E3623.M Fri Apr 29 13:39:45 2016 MS3E

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3627\
Data File : 3E82768.D
Acq On : 29 Apr 2016 7:41 pm
Operator : seanb1
Sample : ecc3623-50
Misc : op93227,e3e3627
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 02 09:01:27 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MFri Apr 29 12:31:53 2016
QLast Update : Fri Apr 29 12:31:53 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.508	152	195900	40.00	ppm	-0.03
24) Naphthalene-d8	5.572	136	684830	40.00	ppm	-0.03
47) Acenaphthene-d10	7.599	164	370723	40.00	ppm	-0.04
69) Phenanthrene-d10	9.765	188	601790	40.00	ppm	-0.04
83) Chrysene-d12	13.943	240	614616	40.00	ppm	-0.04
92) Perylene-d12	16.050	264	382002	40.00	ppm	-0.04
102) 1,4-Dichlorobenzene-d4a	4.508	152	195900	40.00	ppm	-0.03
104) Acenaphthene-d10a	7.599	164	370723	40.00	ppm	-0.04
106) Phenanthrene-d10a	9.765	188	601790	40.00	ppm	-0.04
108) Chrysene-d12a	13.943	240	614616	40.00	ppm	-0.05
110) Naphthalene-d8a	5.572	136	684830	40.00	ppm	-0.04

System Monitoring Compounds						
5) 2-Fluorophenol	3.534	112	294446	49.03	ppm	-0.02
Spiked Amount 50.000			Recovery = 98.06%			
8) Phenol-d5	4.272	99	412950	52.85	ppm	-0.02
Spiked Amount 50.000			Recovery = 105.70%			
25) Nitrobenzene-d5	4.946	82	361057	52.72	ppm	-0.03
Spiked Amount 50.000			Recovery = 105.44%			
51) 2-Fluorobiphenyl	6.743	172	604871	49.20	ppm	-0.03
Spiked Amount 50.000			Recovery = 98.40%			
73) 2,4,6-Tribromophenol	8.728	330	111538	52.55	ppm	-0.04
Spiked Amount 50.000			Recovery = 105.10%			
85) Terphenyl-d14	12.322	244	666588	51.66	ppm	-0.04
Spiked Amount 50.000			Recovery = 103.32%			

Target Compounds							Qvalue
2) 1,4-Dioxane	1.999	88	65053	36.42	ppm		99
3) Pyridine	2.341	79	187397	36.91	ppm		93
4) N-Nitrosodimethylamine	2.309	74	104081	36.02	ppm	#	59
6) Indene	4.700	116	549354	47.01	ppm		99
7) Cumene	3.903	105	870821	50.95	ppm		99
9) Phenol	4.283	94	426659	49.82	ppm		94
10) Aniline	4.272	93	470454	47.30	ppm		61
11) bis(2-Chloroethyl)ether	4.320	93	282539	48.09	ppm		97
12) 2-Chlorophenol	4.363	128	360549	50.79	ppm		99
13) Decane	4.385	43	384582	51.18	ppm		95
14) 1,3-Dichlorobenzene	4.465	146	388087	50.00	ppm		99
15) 1,4-Dichlorobenzene	4.524	146	397163	48.75	ppm		99
16) Benzyl alcohol	4.631	108	219485	50.72	ppm		94
17) 1,2-Dichlorobenzene	4.636	146	359195	48.96	ppm		99
18) Acetophenone	4.823	105	469114	48.27	ppm		96
19) 2-Methylphenol	4.727	108	264883	44.12	ppm		99
20) 2,2'-oxybis(1-Chloropr...	4.721	121	111276	46.23	ppm	#	70
21) 3&4-Methylphenol	4.850	108	279298	44.27	ppm		97
22) n-Nitroso-di-n-propyla...	4.828	70	244828	47.59	ppm		88
23) Hexachloroethane	4.898	201	118560	45.52	ppm		97
26) Nitrobenzene	4.962	77	363832	51.44	ppm		95
27) Quinoline	5.936	129	557994	46.85	ppm		97
28) Isophorone	5.165	82	579921	50.51	ppm		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3627\
Data File : 3E82768.D
Acq On : 29 Apr 2016 7:41 pm
Operator : seanb1
Sample : ecc3623-50
Misc : op93227,e3e3627
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 02 09:01:27 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MFri Apr 29 12:31:53 2016
QLast Update : Fri Apr 29 12:31:53 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
29) 2-Nitrophenol	5.230	139	189833	52.44	ppm		91
30) 2,4-Dimethylphenol	5.283	107	329141	52.83	ppm		97
31) Benzoic acid	5.427	105	231696	50.48	ppm		96
32) bis(2-Chloroethoxy)met...	5.353	93	303860	48.62	ppm		98
33) 2,4-Dichlorophenol	5.460	162	252399	51.95	ppm		97
34) 2,6-Dichlorophenol	5.663	162	250536	50.49	ppm		97
35) 1,3,5-Trichlorobenzene	5.235	180	297949	50.74	ppm		100
36) 1,2,4-Trichlorobenzene	5.518	180	272570	49.17	ppm		97
37) 1,2,3-Trichlorobenzene	5.732	180	249621	46.77	ppm		96
38) Naphthalene	5.593	128	929534	49.09	ppm		99
39) 4-Chloroaniline	5.657	127	386165	50.06	ppm		99
40) 2,3-Dichloroaniline	6.642	161	290391	47.42	ppm		97
41) Caprolactam	6.048	55	120082	46.31	ppm		96
42) Hexachlorobutadiene	5.706	225	164116	49.40	ppm		99
43) 4-Chloro-3-methylphenol	6.187	107	275551	49.72	ppm		96
44) 2-Methylnaphthalene	6.310	141	532294	49.53	ppm		97
45) 1-Methylnaphthalene	6.422	141	540288	48.19	ppm		97
46) Dimethylnaphthalene	7.064	156	525980	48.48	ppm		97
48) Hexachlorocyclopentadiene	6.481	237	330598	105.95	ppm		99
49) 2,4,6-Trichlorophenol	6.658	196	173855	51.72	ppm		99
50) 2,4,5-Trichlorophenol	6.716	196	181704	48.54	ppm		99
52) 2-Chloronaphthalene	6.888	162	527438	50.19	ppm		97
53) Biphenyl	6.866	154	716511	51.13	ppm		100
54) 2-Nitroaniline	7.037	65	213445	54.81	ppm		98
55) Dimethylphthalate	7.278	163	614265	49.90	ppm		99
56) Acenaphthylene	7.412	152	863113	49.21	ppm		98
57) 2,6-Dinitrotoluene	7.358	165	139057	50.46	ppm		94
58) 3-Nitroaniline	7.583	138	155214	50.57	ppm		93
59) Acenaphthene	7.647	153	583655	50.11	ppm		96
60) 2,4-Dinitrophenol	7.743	184	152463	103.24	ppm		89
61) 4-Nitrophenol	7.899	109	115629	58.34	ppm	#	25
62) Dibenzofuran	7.888	168	745245	48.61	ppm		93
63) 2,4-Dinitrotoluene	7.915	165	195420	51.84	ppm		63
64) 2,3,4,6-Tetrachlorophenol	8.086	232	136647	49.24	ppm		96
65) Diethylphthalate	8.268	149	673130	52.06	ppm		99
66) Fluorene	8.369	166	636151	49.56	ppm		100
67) 4-Chlorophenyl-phenyle...	8.396	204	280105	47.86	ppm		99
68) 4-Nitroaniline	8.455	138	148533	50.35	ppm		86
70) 4,6-Dinitro-2-methylph...	8.503	198	111496	50.38	ppm		87
71) n-Nitrosodiphenylamine	8.583	169	425766	50.94	ppm		97
72) 1,2-Diphenylhydrazine	8.626	77	681984	54.77	ppm		97
74) 4-Bromophenyl-phenylether	9.113	248	176893	49.44	ppm		93
75) Hexachlorobenzene	9.177	284	204030	47.55	ppm		95
76) Pentachlorophenol	9.508	266	212137	103.87	ppm		99
77) Phenanthrene	9.803	178	851349	48.76	ppm		99
78) Anthracene	9.878	178	870869	49.79	ppm		99
79) Carbazole	10.166	167	777909	49.15	ppm		99
80) Di-n-butylphthalate	10.792	149	1092651	53.46	ppm		98
81) Fluoranthene	11.653	202	943472	49.82	ppm		99
82) Octadecane	9.722	57	377503	53.10	ppm		93

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3627\
Data File : 3E82768.D
Acq On : 29 Apr 2016 7:41 pm
Operator : seanb1
Sample : ecc3623-50
Misc : op93227,e3e3627
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 02 09:01:27 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MFri Apr 29 12:31:53 2016
QLast Update : Fri Apr 29 12:31:53 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
84) Pyrene	12.001	202	964446	52.42 ppm	99
86) Butylbenzylphthalate	13.167	149	492206	56.10 ppm	97
87) Butyl stearate	13.343	56	255630	55.49 ppm	93
88) Benzo[a]anthracene	13.926	228	871927	48.54 ppm	98
89) 3,3'-Dichlorobenzidine	13.943	252	353629	52.93 ppm	99
90) Chrysene	13.985	228	809075	48.26 ppm	99
91) bis(2-Ethylhexyl)phtha...	14.124	149	604938	53.57 ppm	98
93) Di-n-octylphthalate	15.125	149	784929	50.15 ppm	98
94) Benzo[b]fluoranthene	15.542	252	677393	52.45 ppm	95
95) Benzo[k]fluoranthene	15.579	252	562831	48.84 ppm	98
96) Benzo[a]pyrene	15.975	252	555674	51.54 ppm	97
97) Indeno[1,2,3-cd]pyrene	17.510	276	525916	51.20 ppm	96
98) Dibenz(a,h)acridine	17.184	279	456726	47.24 ppm	100
99) Dibenz[a,h]anthracene	17.553	278	520683	51.03 ppm	96
100) 7,12-Dimethylbenz(a)an...	15.536	256	306438	53.23 ppm	93
101) Benzo[g,h,i]perylene	17.922	276	496626	50.19 ppm	96

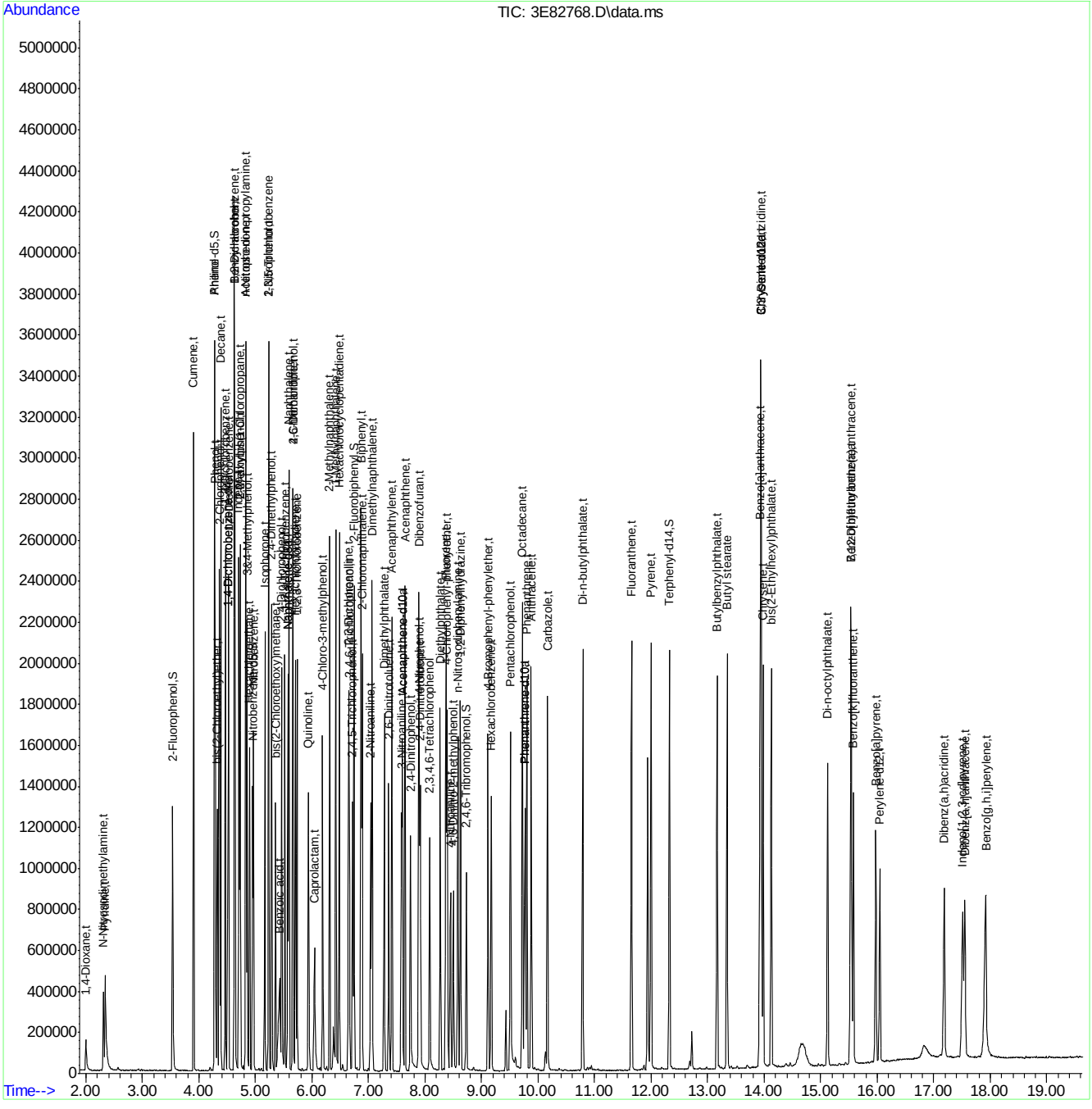
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3627\
Data File : 3E82768.D
Acq On : 29 Apr 2016 7:41 pm
Operator : seanb1
Sample : ecc3623-50
Misc : op93227,e3e3627
ALS Vial : 11 Sample Multiplier: 1

Quant Time: May 02 09:01:27 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MFri Apr 29 12:31:53 2016
QLast Update : Fri Apr 29 12:31:53 2016
Response via : Initial Calibration



SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3627\
Data File : 3E82769.D
Acq On : 29 Apr 2016 8:06 pm
Operator : seanb1
Sample : ecc3621-50
Misc : op93227,e3e3627
ALS Vial : 12 Sample Multiplier: 1

Quant Time: May 02 08:59:58 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623eph.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MMon May 02 08:57:34 2016
QLast Update : Mon May 02 08:57:34 2016
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.508	152	180505	40.00	ppm	-0.03
24) Naphthalene-d8	5.572	136	731971	40.00	ppm	-0.03
47) Acenaphthene-d10	7.599	164	373293	40.00	ppm	-0.04
69) Phenanthrene-d10	9.760	188	710772	40.00	ppm	-0.04
83) Chrysene-d12	13.932	240	761980	40.00	ppm	-0.05
92) Perylene-d12	16.045	264	631707	40.00	ppm	-0.05
102) 1,4-Dichlorobenzene-d4a	4.508	152	180505	40.00	ppm	-0.03
104) Acenaphthene-d10a	7.599	164	373293	40.00	ppm	-0.04
106) Phenanthrene-d10a	9.760	188	710772	40.00	ppm	-0.05
110) Chrysene-d12a	13.932	240	761980	40.00	ppm	-0.06
112) Naphthalene-d8a	5.572	136	731971	40.00	ppm	-0.04
114) Chrysene-d12b	13.932	240	761980	40.00	ppm	-0.06

System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) o-Terphenyl	10.402	230	506844	55.34	ppm	-0.05
Spiked Amount 50.000			Recovery = 110.68%			
109) 1-Chlorooctadecane	11.616	57	252806	43.19	ppm	-0.05
Spiked Amount 50.000			Recovery = 86.38%			

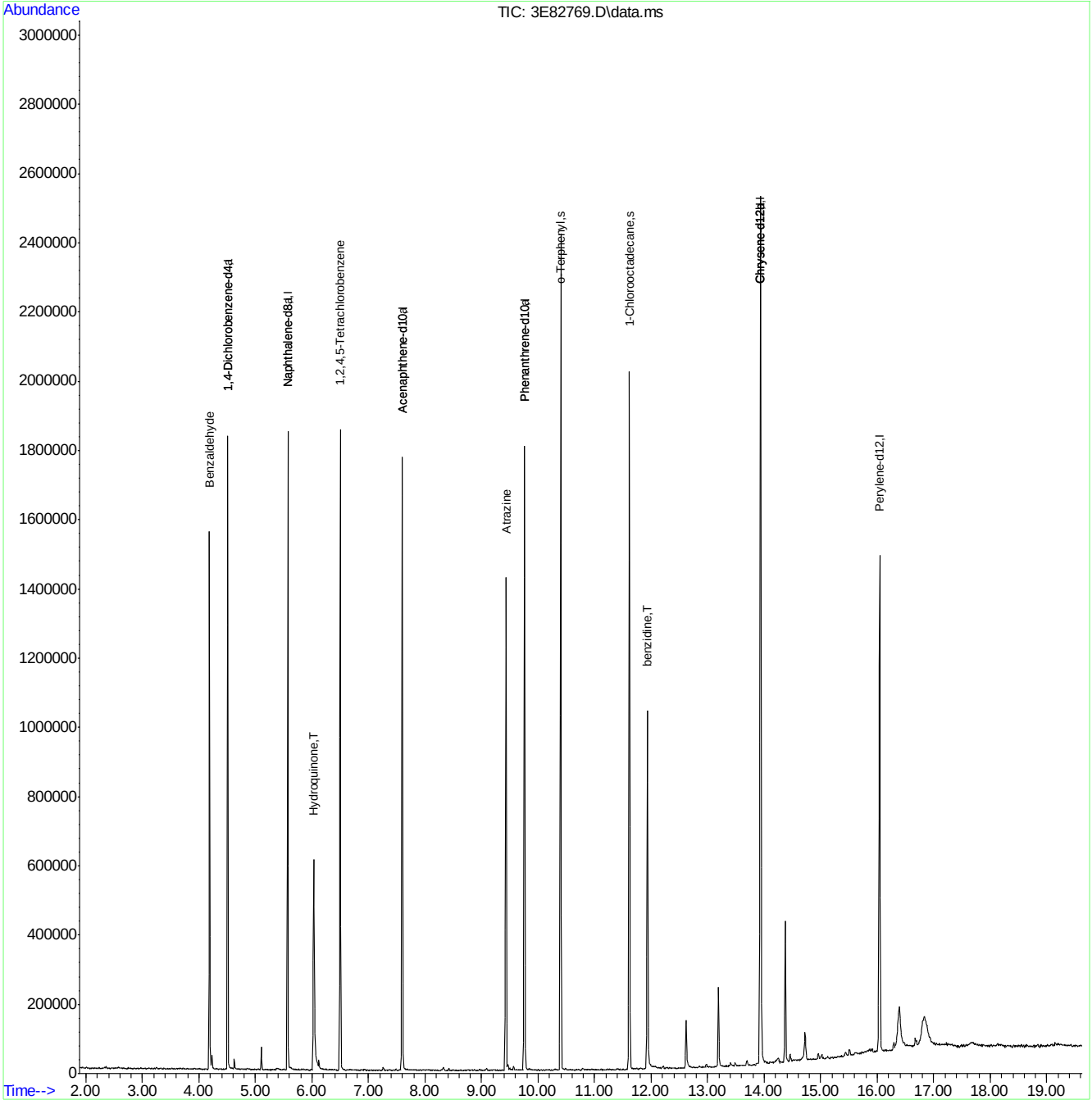
Target Compounds						Qvalue
103) Benzaldehyde	4.187	105	205909	42.08	ppm	88
105) 1,2,4,5-Tetrachloroben...	6.497	216	270509	58.53	ppm	99
107) Atrazine	9.434	215	99721	55.13	ppm	91
111) benzidine	11.932	184	422157	45.01	ppm	95
113) Hydroquinone	6.032	110	268792	53.41	ppm	70

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3E3627\
Data File : 3E82769.D
Acq On : 29 Apr 2016 8:06 pm
Operator : seanb1
Sample : ecc3621-50
Misc : op93227,e3e3627
ALS Vial : 12 Sample Multiplier: 1

Quant Time: May 02 08:59:58 2016
Quant Method : C:\msdchem\1\METHODS\M3E3623eph.M
Quant Title : Semi Volatile GC/MS,zb-5msplus 30m x .25mm x .25MMon May 02 08:57:34 2016
QLast Update : Mon May 02 08:57:34 2016
Response via : Initial Calibration



M3E3623eph.M Mon May 02 09:00:35 2016 MS3E

SGS ACCUTEST JC18516

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 JC18516

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

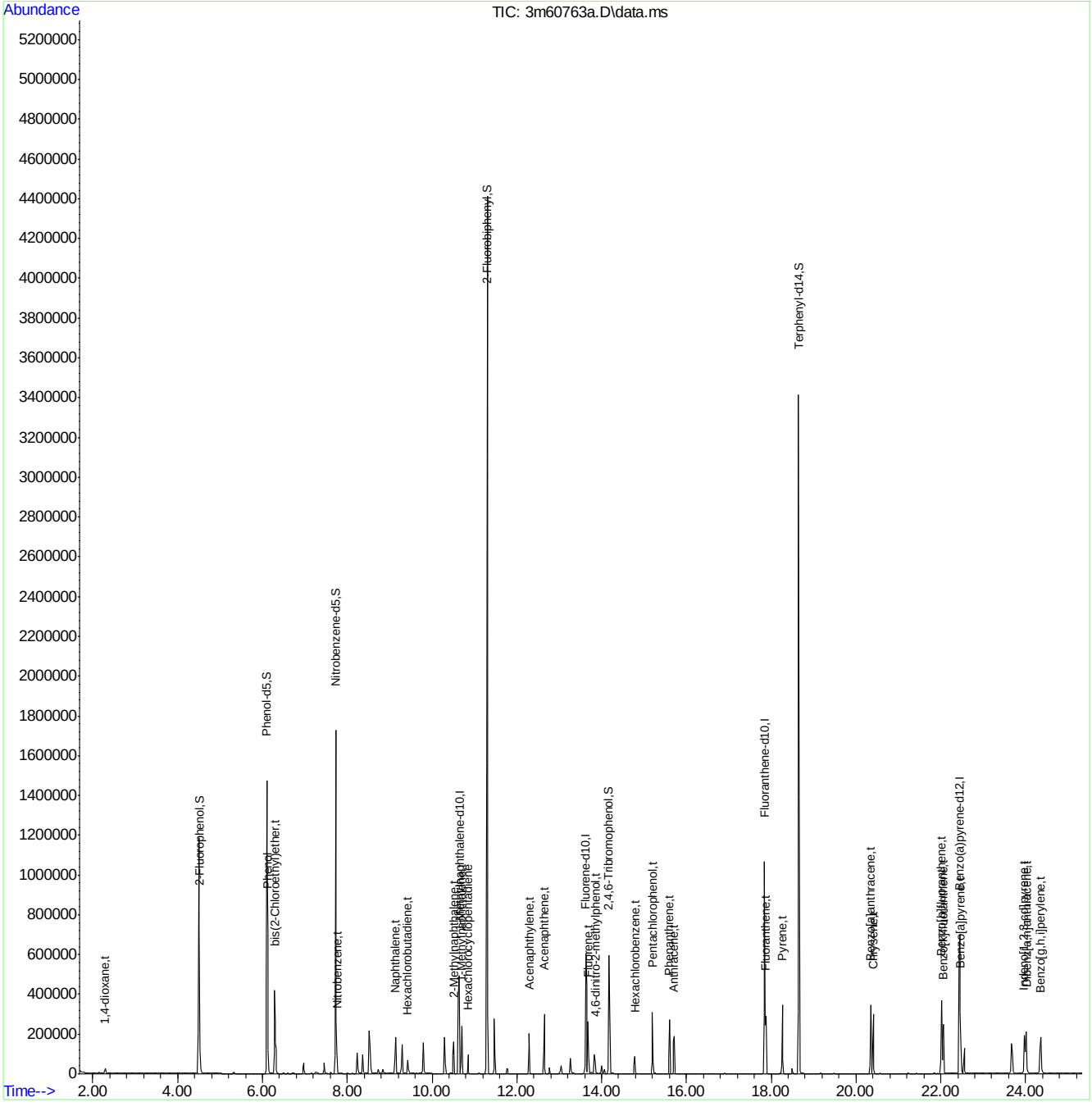
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

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



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 JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60764a.D
Acq On : 21 Apr 2016 3:07 pm
Operator : linseyk
Sample : ic2855-0.5
Misc : op93052a,e3m2855
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 22 08:26:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:26:05 2016
Response via : Initial Calibration

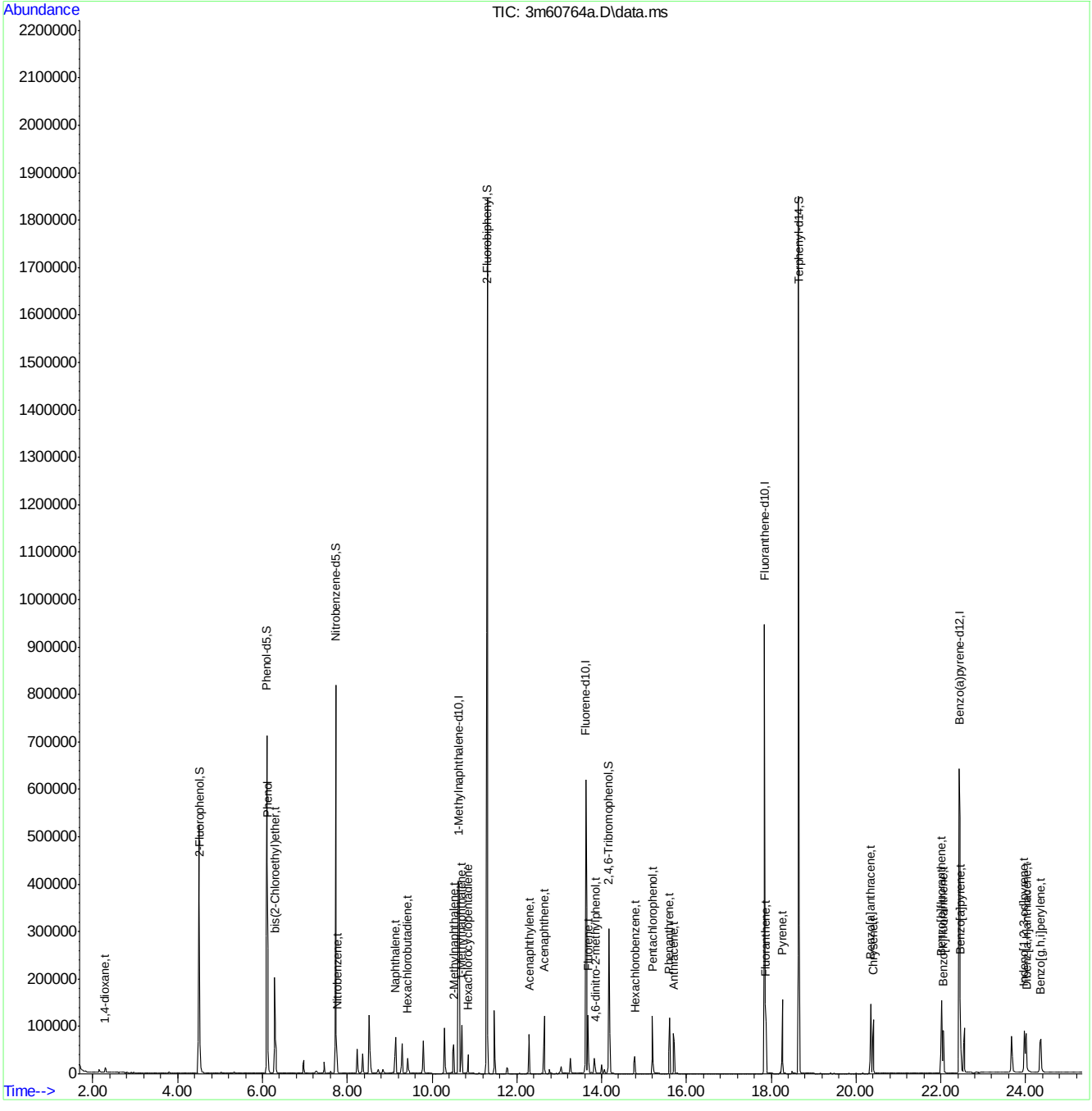
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60764a.D
Acq On : 21 Apr 2016 3:07 pm
Operator : linseyk
Sample : ic2855-0.5
Misc : op93052a,e3m2855
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 22 08:26:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:26:05 2016
Response via : Initial Calibration



SGS ACCUTEST JC18516

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 JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60765a.D
Acq On : 21 Apr 2016 3:39 pm
Operator : linseyk
Sample : ic2855-0.2
Misc : op93052a,e3m2855
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 22 08:26:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:26:46 2016
Response via : Initial Calibration

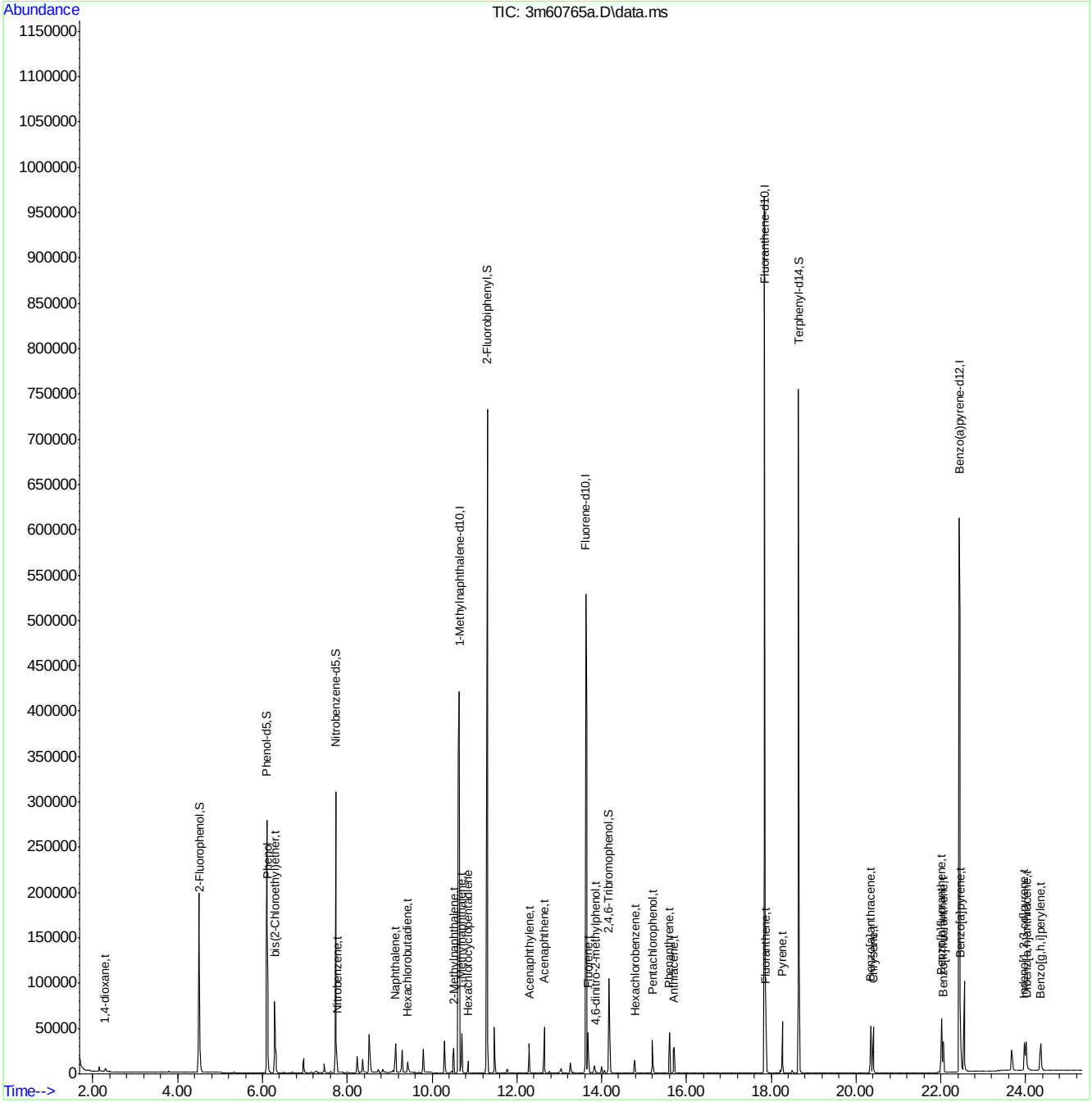
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60765a.D
Acq On : 21 Apr 2016 3:39 pm
Operator : linseyk
Sample : ic2855-0.2
Misc : op93052a,e3m2855
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 22 08:26:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:26:46 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60766.D
Acq On : 21 Apr 2016 4:12 pm
Operator : linseyk
Sample : ic2855-0.1
Misc : op93052a,e3m2855
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 22 08:27:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:27:18 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.641	150	340968	4.00	ppm	0.00
14) Fluorene-d10	13.644	176	502575	4.00	ppm	0.02
21) Fluoranthene-d10	17.844	212	887342	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.448	264	703545	4.00	ppm	0.02
System Monitoring Compounds						
3) 2-Fluorophenol	4.515	112	86528	1.97	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.94%	
4) Phenol-d5	6.104	99	144256	1.94	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.88%	
7) Nitrobenzene-d5	7.726	82	129224	1.86	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.72%	
15) 2-Fluorobiphenyl	11.303	172	294276	2.08	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.16%	
20) 2,4,6-Tribromophenol	14.172	330	28910	1.75	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.50%	
28) Terphenyl-d14	18.647	244	266058	2.03	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.06%	
Target Compounds						Qvalue
2) 1,4-dioxane	2.305	88	1953	0.11	ppm	93
5) Phenol	6.116	94	38102	0.48	ppm #	73
6) bis(2-Chloroethyl)ether	6.285	93	5932	0.10	ppm	92
8) Nitrobenzene	7.764	77	6815	0.10	ppm	96
9) Naphthalene	9.139	128	19053	0.10	ppm	99
10) Hexachlorobutadiene	9.421	225	3313	0.10	ppm	99
11) 2-Methylnaphthalene	10.517	141	9659	0.10	ppm	97
12) 1-Methylnaphthalene	10.702	141	12284	0.10	ppm	94
13) Hexachlorocyclopentadiene	10.846	237	4166	0.15	ppm	100
16) Acenaphthylene	12.293	152	17405	0.09	ppm	100
17) Acenaphthene	12.648	153	11953	0.10	ppm	99
18) 4,6-dinitro-2-methylph...	13.852	198	2417	0.21	ppm	96
19) Fluorene	13.682	166	14084	0.10	ppm	100
22) Hexachlorobenzene	14.783	284	4120	0.10	ppm	99
23) Pentachlorophenol	15.201	266	9313	0.35	ppm	100
24) Phenanthrene	15.602	178	20817	0.10	ppm	100
25) Anthracene	15.711	178	17457	0.09	ppm	100
26) Fluoranthene	17.874	202	24361	0.10	ppm	99
27) Pyrene	18.261	202	23618	0.09	ppm	99
29) Benzo[a]anthracene	20.347	228	21304	0.09	ppm	99
30) Chrysene	20.408	228	22498	0.10	ppm	99
32) Benzo[b]fluoranthene	22.015	252	22115	0.10	ppm	99
33) Benzo[k]fluoranthene	22.062	252	22174	0.11	ppm	99
34) Benzo[a]pyrene	22.463	252	19014	0.09	ppm	99
35) Indeno[1,2,3-cd]pyrene	23.963	276	22099	0.10	ppm	98
36) Dibenz[a,h]anthracene	24.020	278	18120	0.10	ppm	100
37) Benzo[g,h,i]perylene	24.358	276	19184	0.10	ppm	99

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60766.D
Acq On : 21 Apr 2016 4:12 pm
Operator : linseyk
Sample : ic2855-0.1
Misc : op93052a,e3m2855
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 22 08:27:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:27:18 2016
Response via : Initial Calibration

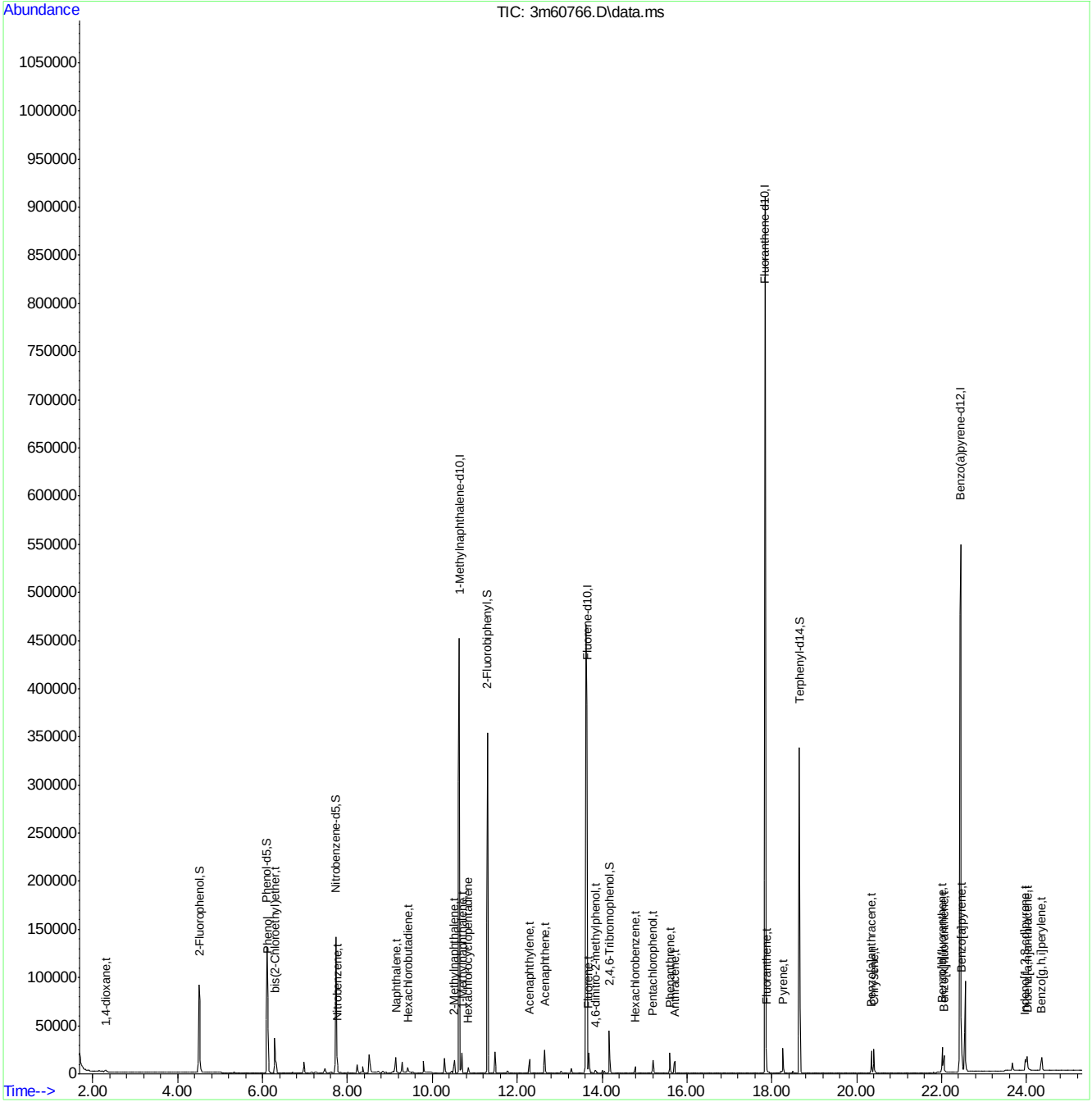
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60766.D
Acq On : 21 Apr 2016 4:12 pm
Operator : linseyk
Sample : ic2855-0.1
Misc : op93052a,e3m2855
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 22 08:27:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:27:18 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60767.D
Acq On : 21 Apr 2016 4:44 pm
Operator : linseyk
Sample : ic2855-0.05
Misc : op93052a,e3m2855
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 22 08:34:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:32:39 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.641	150	339033	4.00	ppm	0.00
14) Fluorene-d10	13.626	176	520555	4.00	ppm	-0.02
21) Fluoranthene-d10	17.844	212	888983	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.432	264	706519	4.00	ppm	-0.02
System Monitoring Compounds						
3) 2-Fluorophenol	4.515	112	42704	1.01	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.02%	
4) Phenol-d5	6.104	99	70262	1.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.00%	
7) Nitrobenzene-d5	7.726	82	63026	0.97	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.94%	
15) 2-Fluorobiphenyl	11.303	172	145045	1.01	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.02%	
20) 2,4,6-Tribromophenol	14.172	330	13489	0.83	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.66%	
28) Terphenyl-d14	18.647	244	135801	1.05	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.10%	
Target Compounds						Qvalue
2) 1,4-dioxane	2.305	88	1056	0.06	ppm	90
5) Phenol	6.116	94	18706	0.25	ppm #	73
6) bis(2-Chloroethyl)ether	6.285	93	3013	0.05	ppm	88
8) Nitrobenzene	7.764	77	3438	0.05	ppm	92
9) Naphthalene	9.139	128	9285	0.05	ppm	99
10) Hexachlorobutadiene	9.421	225	1685	0.05	ppm	99
11) 2-Methylnaphthalene	10.518	141	4767	0.05	ppm	96
12) 1-Methylnaphthalene	10.702	141	6629	0.05	ppm	95
13) Hexachlorocyclopentadiene	10.846	237	2049	0.08	ppm	97
16) Acenaphthylene	12.293	152	8346	0.05	ppm	99
17) Acenaphthene	12.648	153	5946	0.05	ppm	99
18) 4,6-dinitro-2-methylph...	13.852	198	948	0.07	ppm	91
19) Fluorene	13.682	166	7106	0.05	ppm	100
22) Hexachlorobenzene	14.783	284	2065	0.05	ppm	96
23) Pentachlorophenol	15.201	266	4271	0.17	ppm	98
24) Phenanthrene	15.603	178	10238	0.05	ppm	99
25) Anthracene	15.711	178	8587	0.04	ppm	98
26) Fluoranthene	17.875	202	12772	0.05	ppm	99
27) Pyrene	18.261	202	11982	0.05	ppm	98
29) Benzo[a]anthracene	20.347	228	11591	0.05	ppm	100
30) Chrysene	20.408	228	11884	0.05	ppm	99
32) Benzo[b]fluoranthene	22.015	252	11635	0.04	ppm	99
33) Benzo[k]fluoranthene	22.062	252	11007	0.05	ppm	100
34) Benzo[a]pyrene	22.463	252	12936	0.06	ppm	98
35) Indeno[1,2,3-cd]pyrene	23.963	276	10547	0.05	ppm	100
36) Dibenz[a,h]anthracene	24.020	278	8444	0.05	ppm	100
37) Benzo[g,h,i]perylene	24.358	276	9475	0.05	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60767.D
Acq On : 21 Apr 2016 4:44 pm
Operator : linseyk
Sample : ic2855-0.05
Misc : op93052a,e3m2855
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 22 08:34:05 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:32:39 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

7.6.62

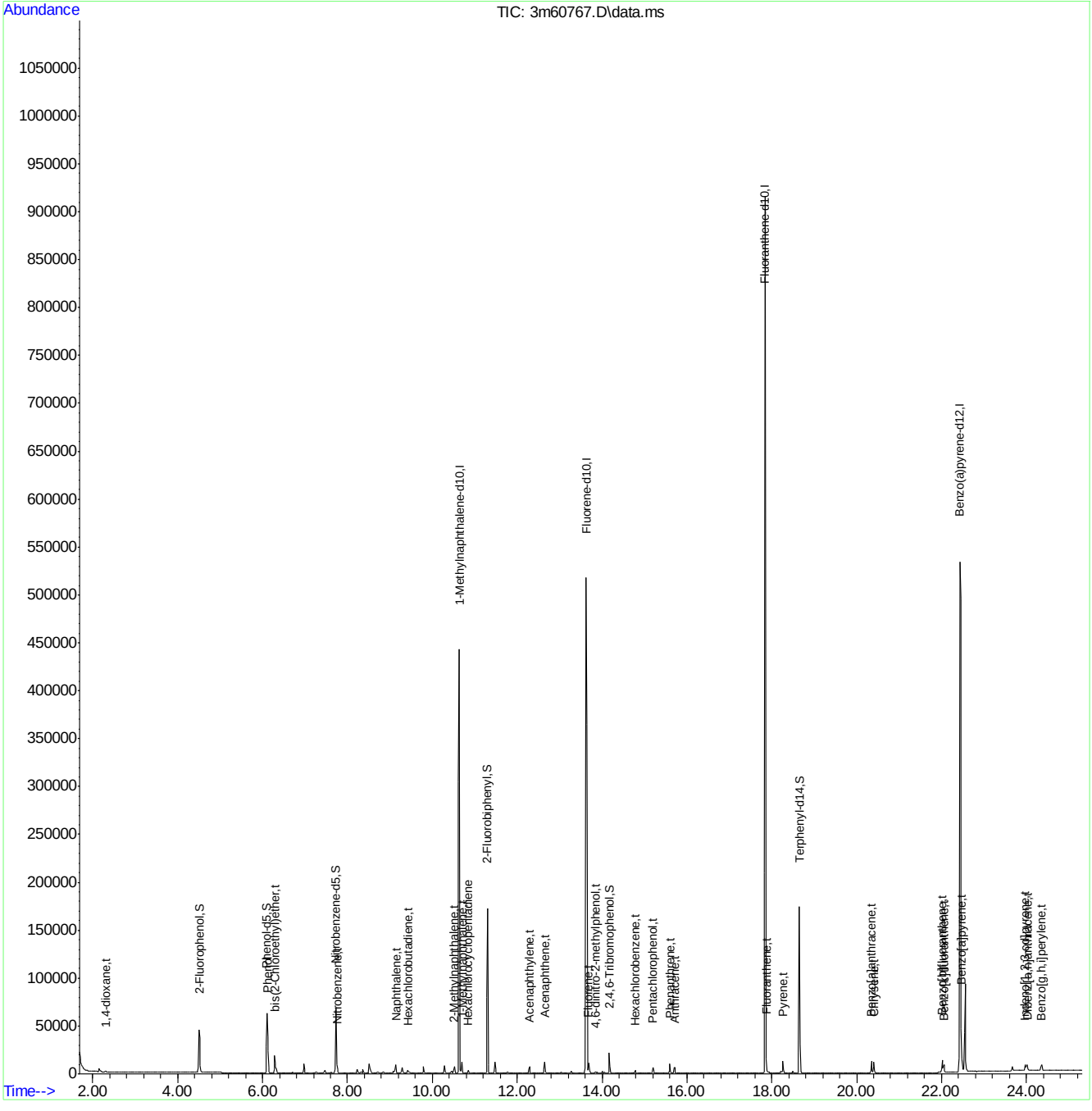
7

SGS ACCUTEST JC18516

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 JC18516

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

7.6.63

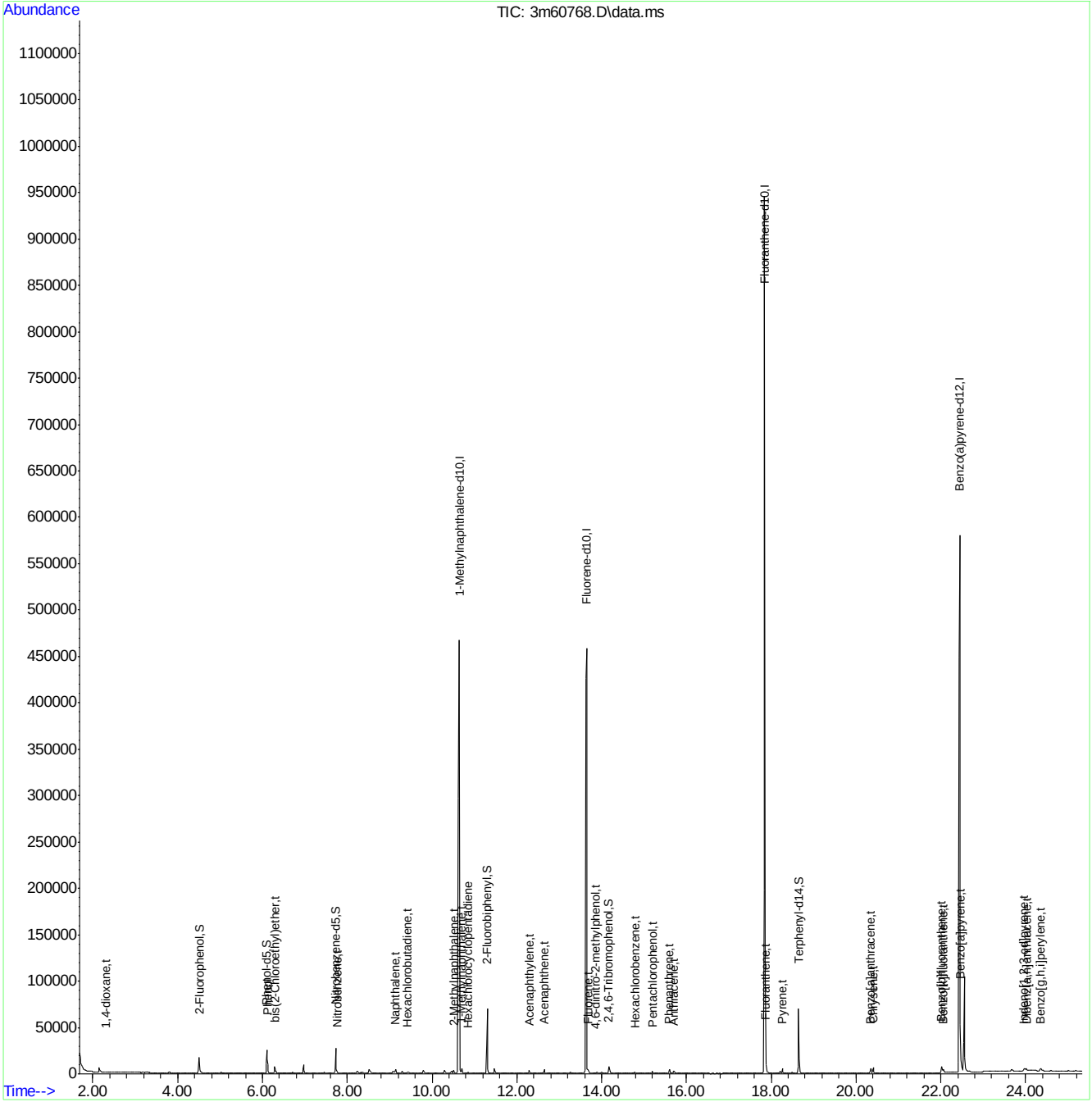
7

SGS ACCUTEST JC18516

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



M3M2855SIM.M Fri Apr 22 08:29:59 2016 RPT1 Page: 3

SGS ACCUTEST JC18516

Manual Integration Approval Summary

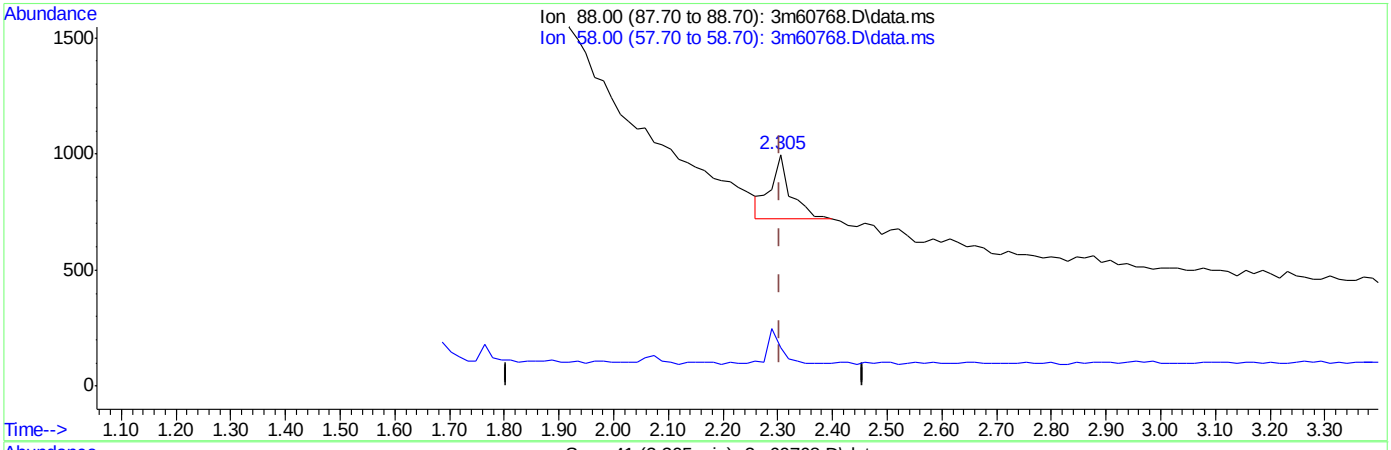
Sample Number:	E3M2855-IC2855	**Method:**	SW846 8270D BY SIM
Lab FileID:	3M60768.D	**Analyst approved:**	04/22/16 09:15 Linsey Kirschmann
Injection Time:	04/21/16 17:17	**Supervisor approved:**	04/22/16 12:27 Nina Pandya

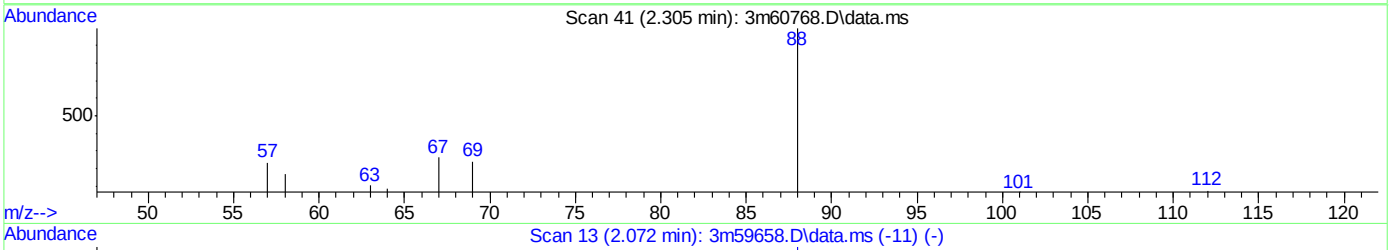
Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dioxane	123-91-1		2.30	Baseline ripple
Benzo(a)pyrene	50-32-8		22.46	Baseline ripple

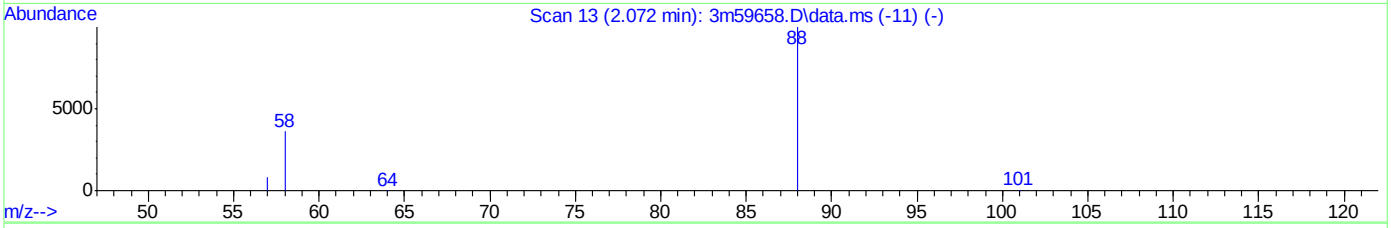
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60768.D
Acq On : 21 Apr 2016 5:17 pm
Operator : linseyk
Sample : ic2855-0.02
Misc : op93052a,e3m2855
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 22 08:28:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:28:25 2016
Response via : Initial Calibration







TIC: 3m60768.D\data.ms

(2) 1,4-dioxane (t)

2.305min (-0.000) 0.04ppm

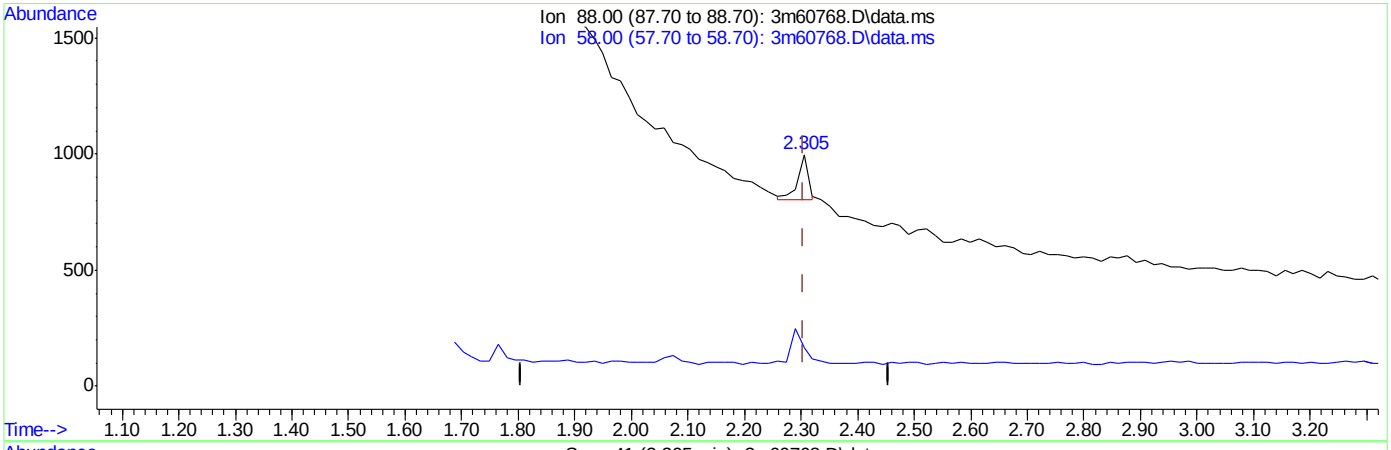
response 710

Ion	Exp%	Act%
88.00	100	100
58.00	32.40	28.23
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60768.D
Acq On : 21 Apr 2016 5:17 pm
Operator : linseyk
Sample : ic2855-0.02
Misc : op93052a,e3m2855
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 22 08:28:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:28:25 2016
Response via : Initial Calibration



(2) 1,4-dioxane (t)

2.305min (-0.000) 0.01ppm m

response 245

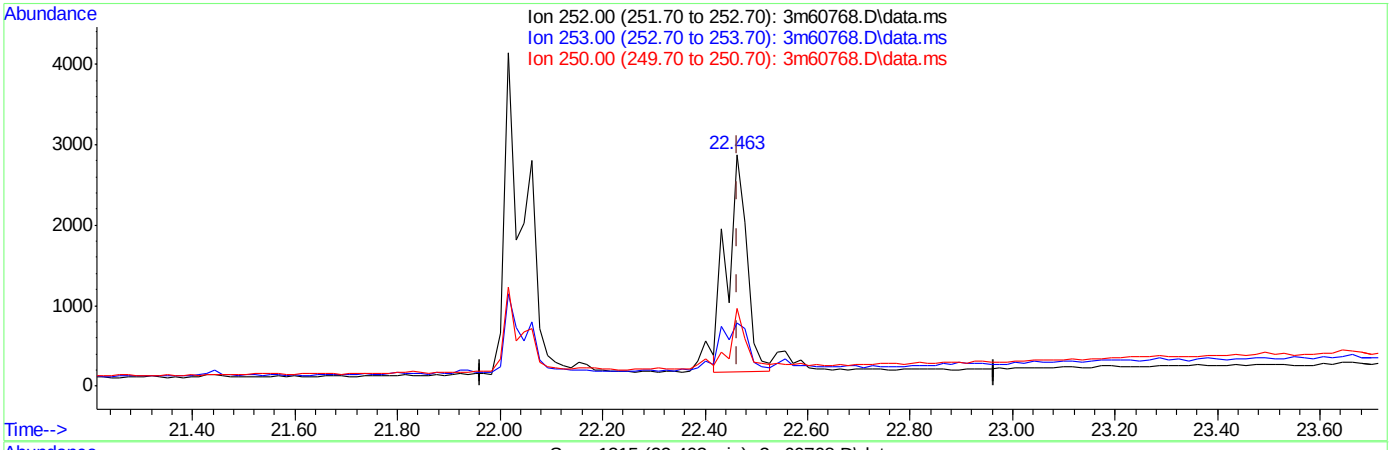
Ion	Exp%	Act%
88.00	100	100
58.00	32.40	16.63
0.00	0.00	0.00
0.00	0.00	0.00

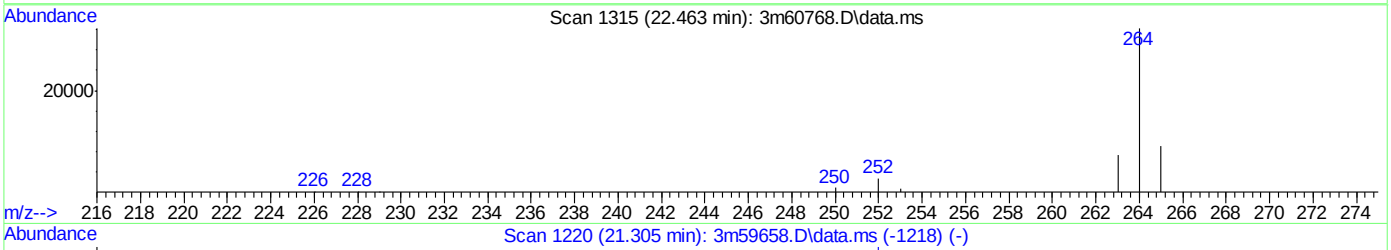
SGS ACCUTEST JC18516

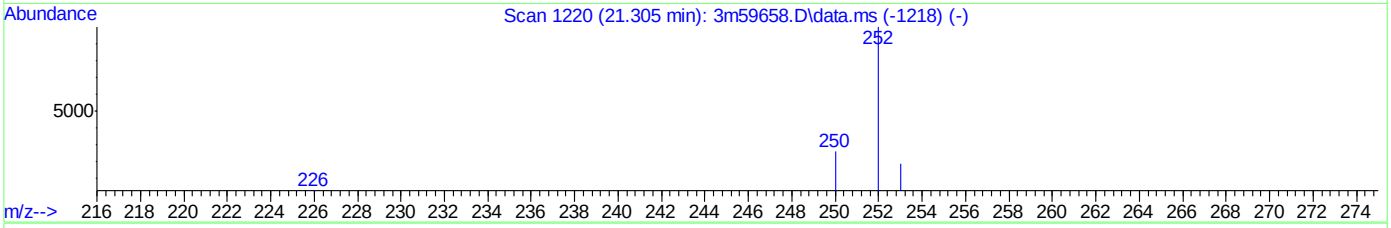
Quantitation Report (Qedit)

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

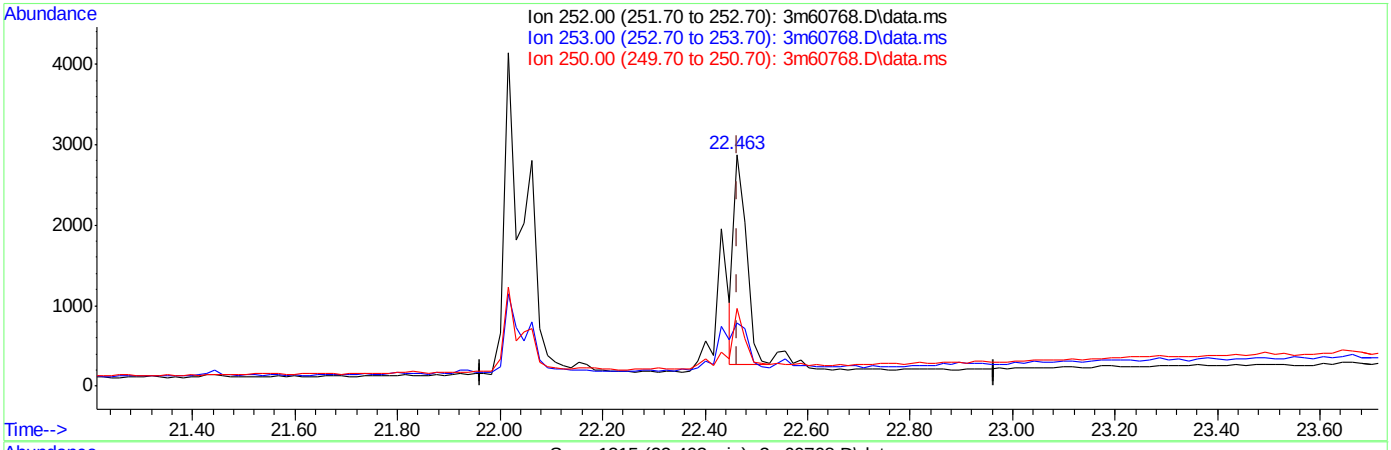
Ion	Exp%	Act%
252.00	100	100
253.00	18.80	20.93
250.00	26.10	27.47
0.00	0.00	0.00

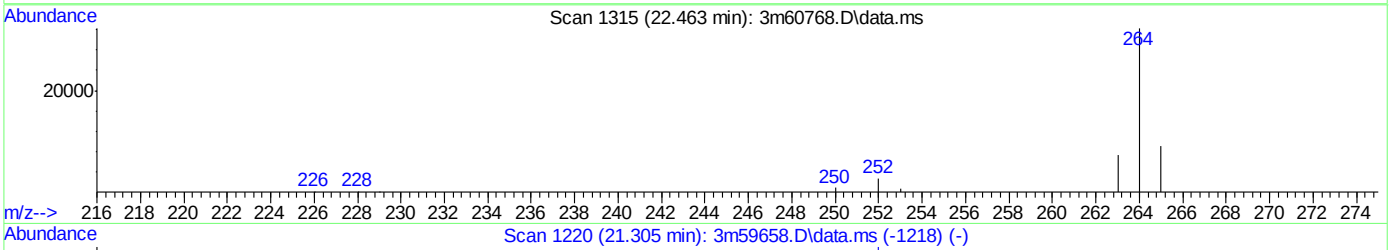
SGS ACCUTEST JC18516

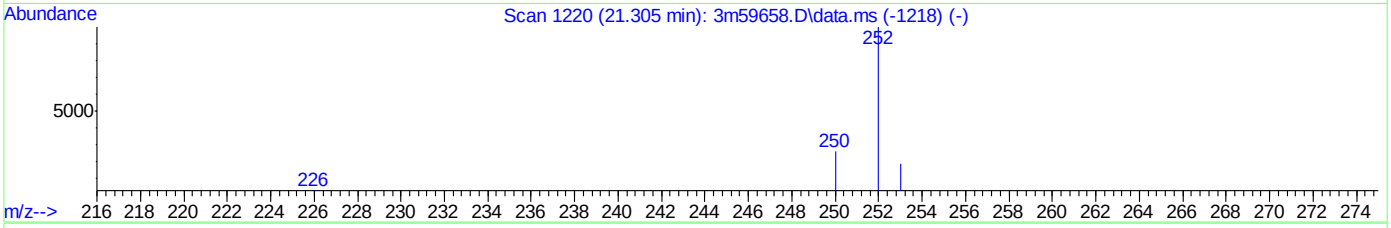
Quantitation Report (Qedit)

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

7.6.64

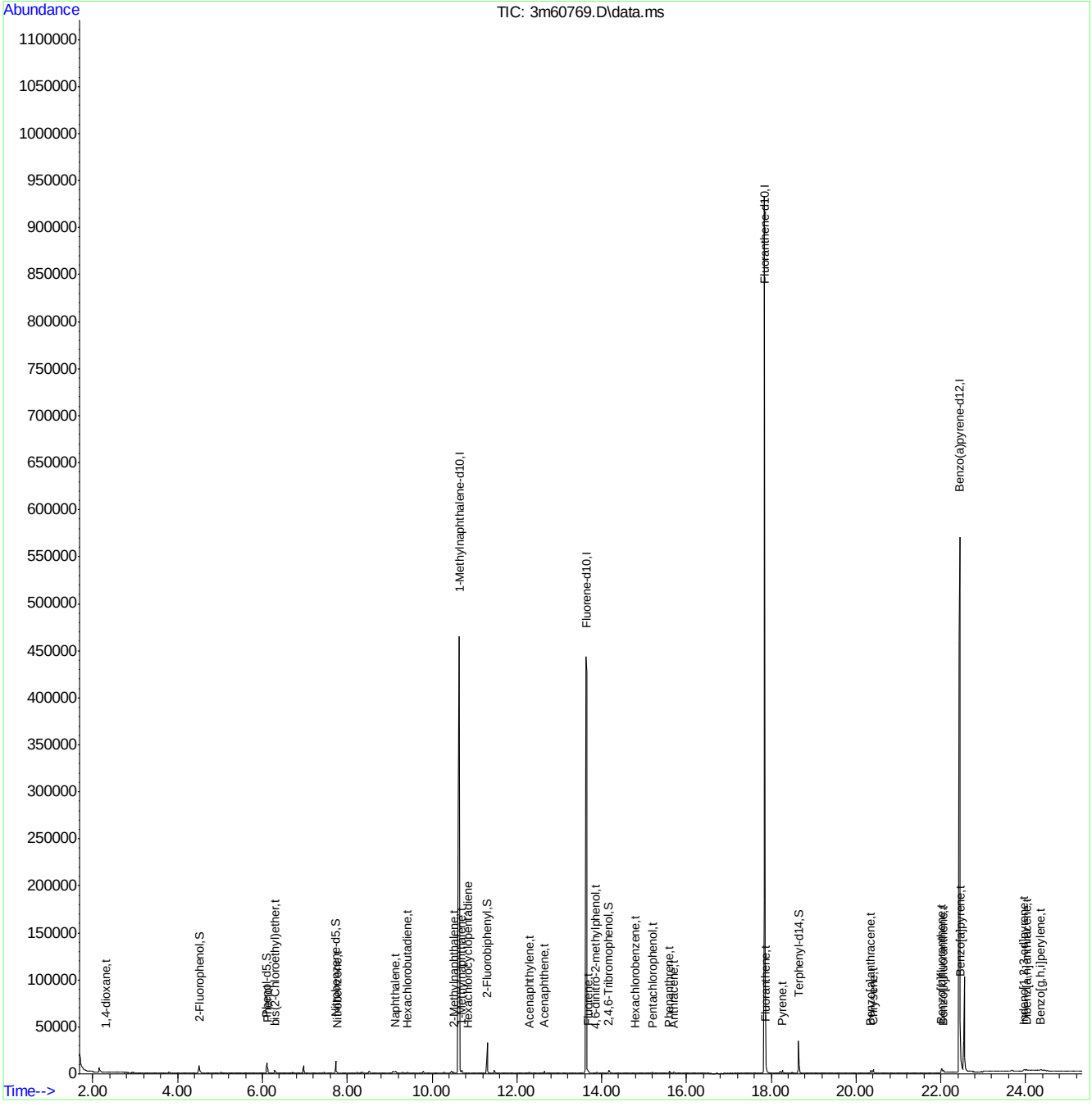
7

SGS ACCUTEST JC18516

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



Manual Integration Approval Summary

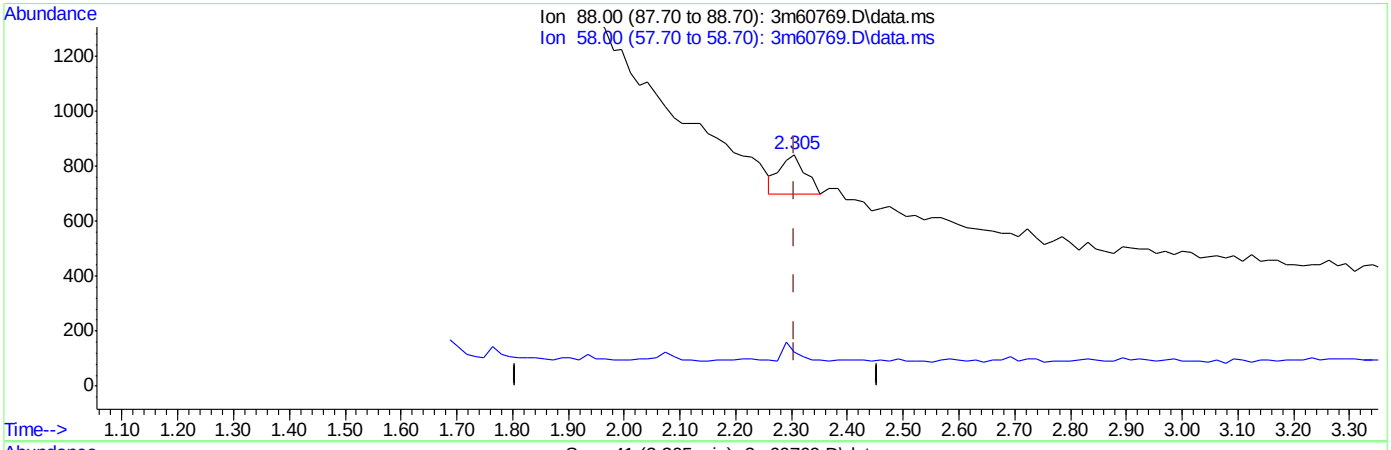
Sample Number:	E3M2855-IC2855	**Method:**	SW846 8270D BY SIM
Lab FileID:	3M60769.D	**Analyst approved:**	04/22/16 09:15 Linsey Kirschmann
Injection Time:	04/21/16 17:49	**Supervisor approved:**	04/22/16 12:27 Nina Pandya

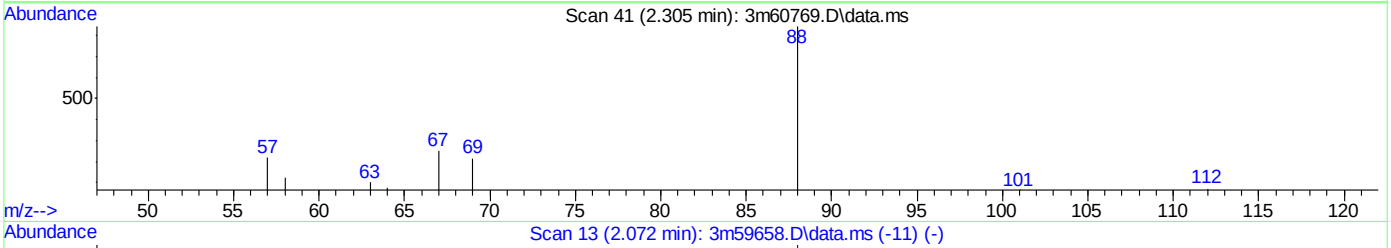
Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dioxane	123-91-1		2.31	Baseline ripple

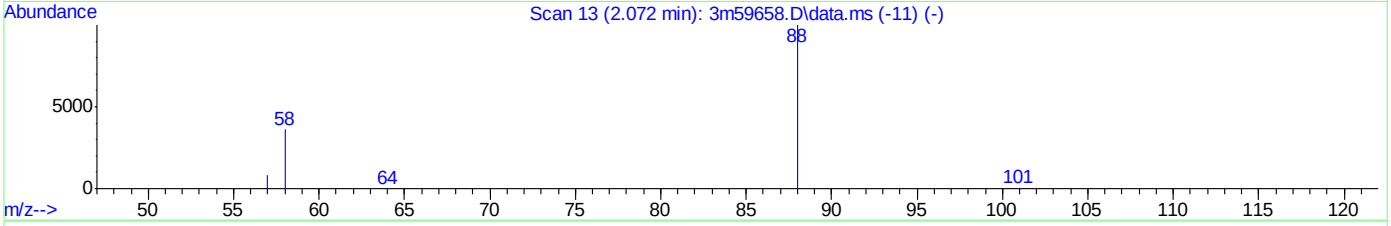
Quantitation Report (Qedit)

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

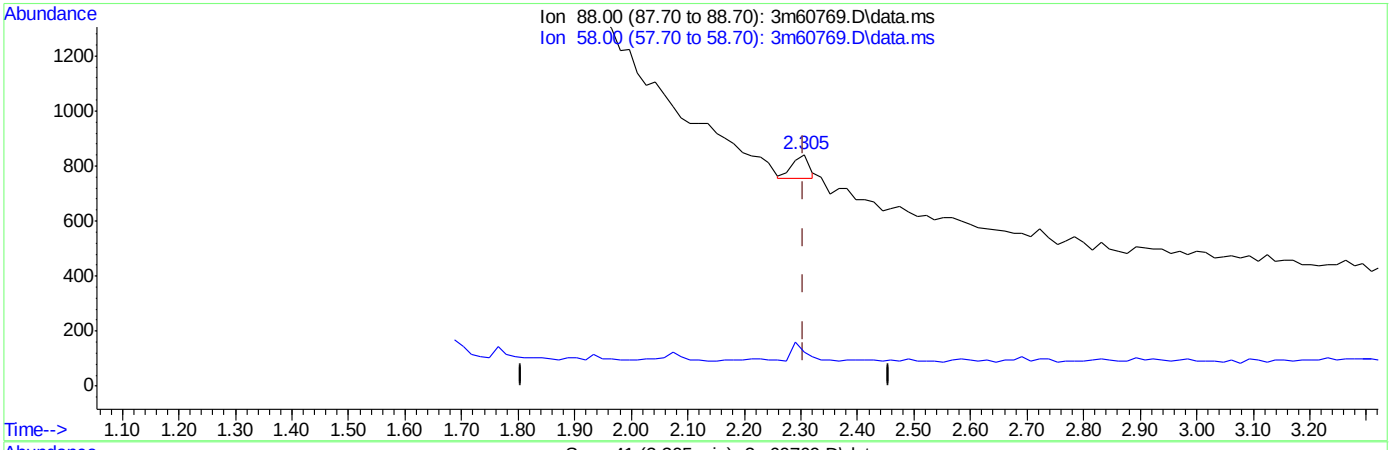
Ion	Exp%	Act%
88.00	100	100
58.00	32.40	25.45
0.00	0.00	0.00
0.00	0.00	0.00

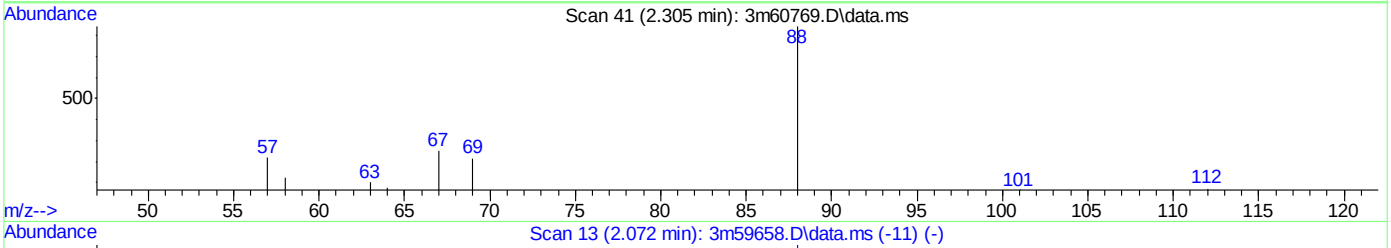
SGS ACCUTEST JC18516

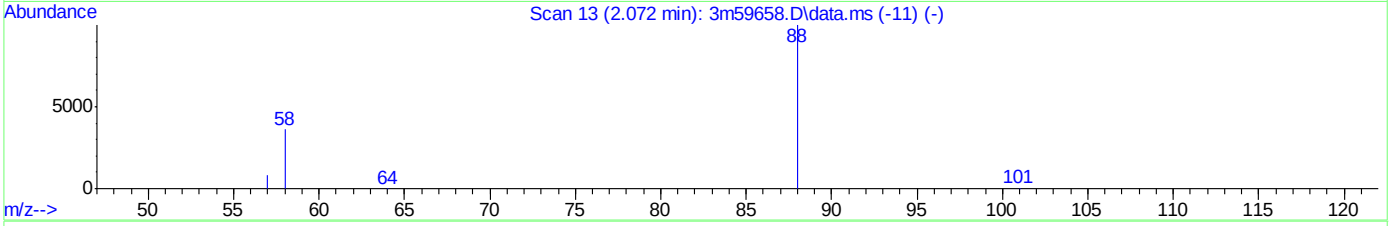
Quantitation Report (Qedit)

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 JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60770.D
Acq On : 21 Apr 2016 6:22 pm
Operator : linseyk
Sample : ic2855-5.0
Misc : op93052a,e3m2855
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 22 08:30:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:30:48 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.641	150	366417	4.00	ppm	0.00
14) Fluorene-d10	13.644	176	628480	4.00	ppm	0.00
21) Fluoranthene-d10	17.844	212	939162	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.448	264	756981	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	4.515	112	4214444	90.43	ppm	0.00
Spiked Amount 50.000			Recovery = 180.86%			
4) Phenol-d5	6.128	99	7328789	95.76	ppm	0.02
Spiked Amount 50.000			Recovery = 191.52%			
7) Nitrobenzene-d5	7.745	82	7395086	102.34	ppm	0.02
Spiked Amount 50.000			Recovery = 204.68%			
15) 2-Fluorobiphenyl	11.319	172	14347827	81.47	ppm	0.02
Spiked Amount 50.000			Recovery = 162.94%			
20) 2,4,6-Tribromophenol	14.191	330	1892615	94.39	ppm	0.02
Spiked Amount 50.000			Recovery = 188.78%			
28) Terphenyl-d14	18.662	244	11761490	83.98	ppm	0.02
Spiked Amount 50.000			Recovery = 167.96%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.290	88	94789	4.85	ppm	75
5) Phenol	6.140	94	1983163	23.95	ppm #	79
6) bis(2-Chloroethyl)ether	6.298	93	266705	4.16	ppm #	60
8) Nitrobenzene	7.764	77	406472	5.38	ppm #	58
9) Naphthalene	9.139	128	1024731	5.04	ppm	98
10) Hexachlorobutadiene	9.421	225	174841	4.87	ppm	95
11) 2-Methylnaphthalene	10.517	141	553815	5.26	ppm	96
12) 1-Methylnaphthalene	10.702	141	647057	4.41	ppm	93
13) Hexachlorocyclopentadiene	10.846	237	345119	13.01	ppm	95
16) Acenaphthylene	12.293	152	1074573	4.94	ppm	99
17) Acenaphthene	12.648	153	680855	4.63	ppm	99
18) 4,6-dinitro-2-methylph...	13.852	198	689664	56.92	ppm	74
19) Fluorene	13.682	166	778408	4.36	ppm	94
22) Hexachlorobenzene	14.783	284	229525	5.21	ppm	94
23) Pentachlorophenol	15.201	266	786510	32.34	ppm	95
24) Phenanthrene	15.603	178	1190802	5.25	ppm	99
25) Anthracene	15.711	178	1181627	5.75	ppm	98
26) Fluoranthene	17.874	202	1318777	5.01	ppm	99
27) Pyrene	18.261	202	1382848	5.27	ppm	98
29) Benzo[a]anthracene	20.347	228	1195931	5.01	ppm	96
30) Chrysene	20.408	228	1263858	5.17	ppm	98
32) Benzo[b]fluoranthene	22.015	252	1201158	4.18	ppm	95
33) Benzo[k]fluoranthene	22.062	252	1191473	5.12	ppm	97
34) Benzo[a]pyrene	22.463	252	1113412	4.67	ppm	98
35) Indeno[1,2,3-cd]pyrene	23.982	276	1248948	5.29	ppm	89
36) Dibenz[a,h]anthracene	24.020	278	1051200	5.43	ppm	100
37) Benzo[g,h,i]perylene	24.358	276	1074162	5.23	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60770.D
Acq On : 21 Apr 2016 6:22 pm
Operator : linseyk
Sample : ic2855-5.0
Misc : op93052a,e3m2855
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 22 08:30:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:30:48 2016
Response via : Initial Calibration

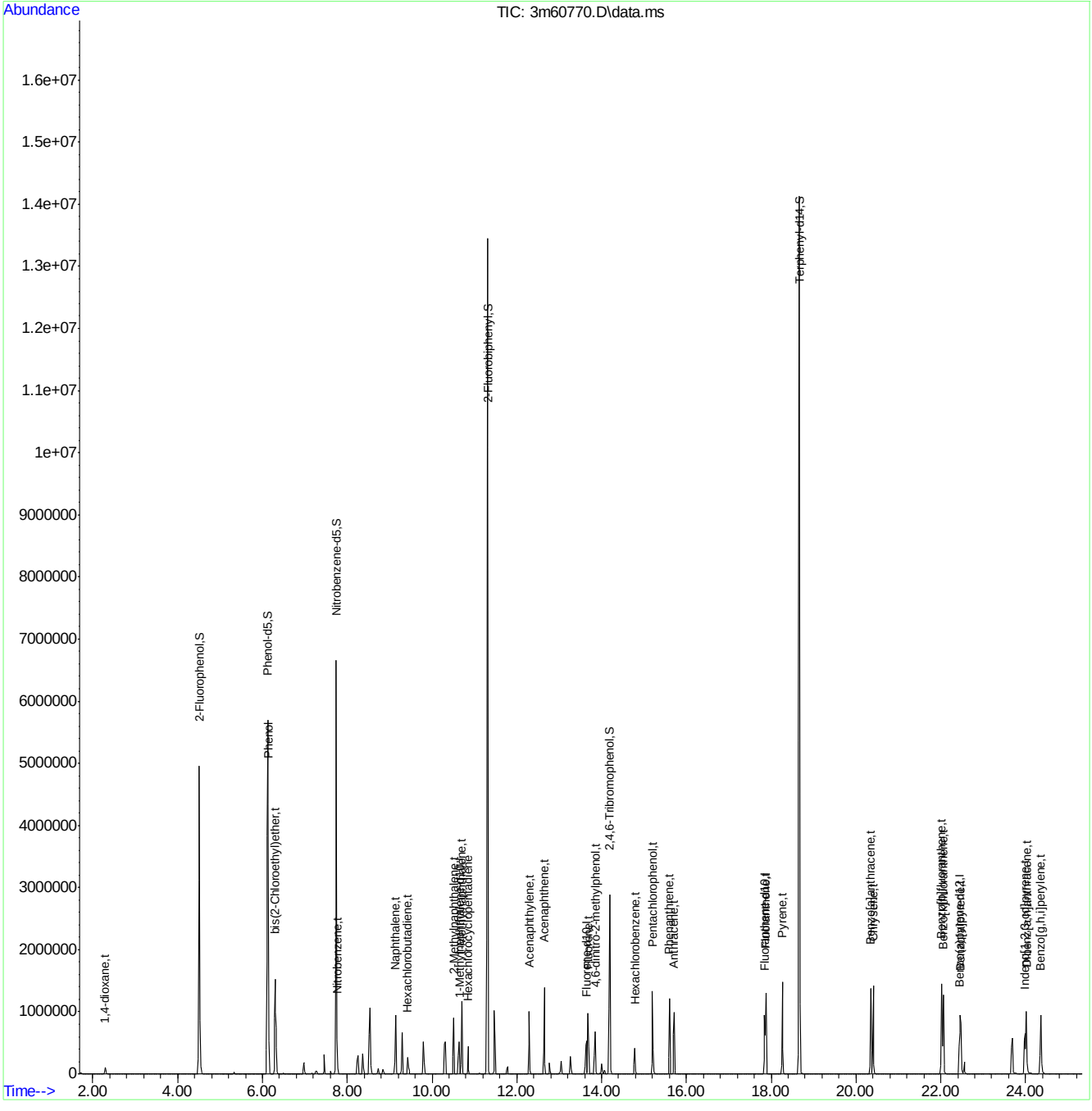
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

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



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

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

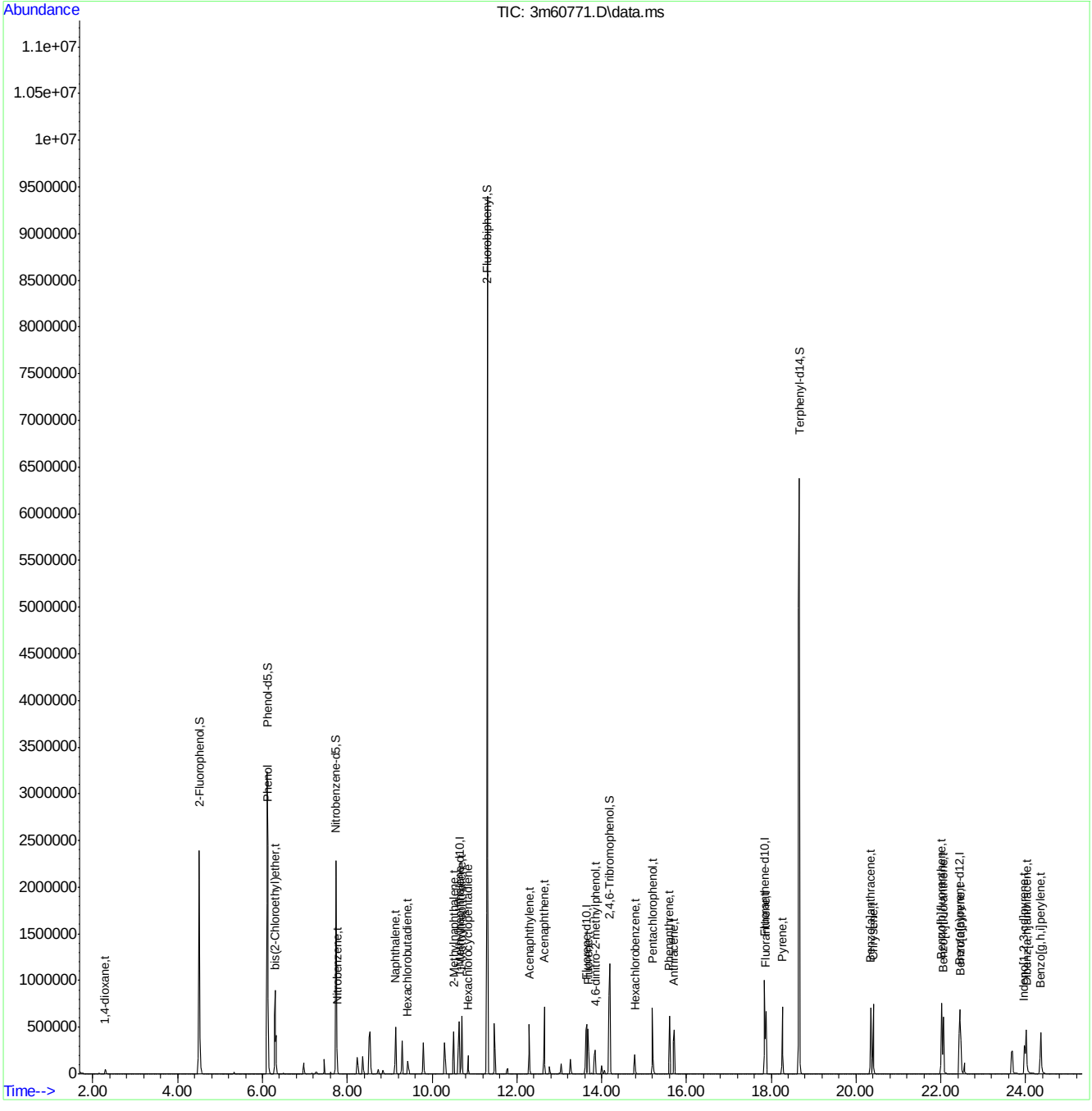
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = 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 JC18516

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

7.6.67

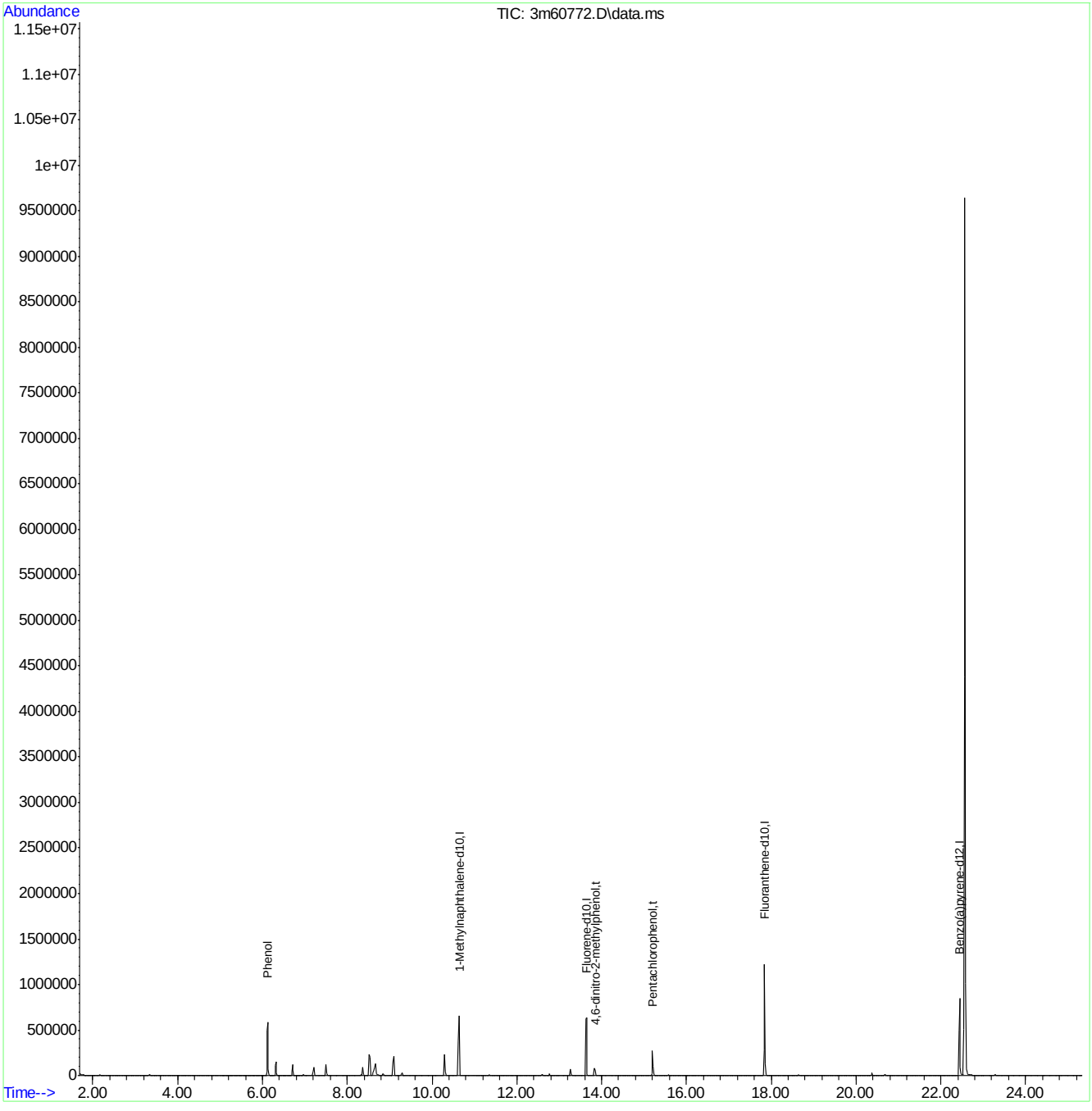
7

SGS ACCUTEST JC18516

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



SGS ACCUTEST JC18516

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

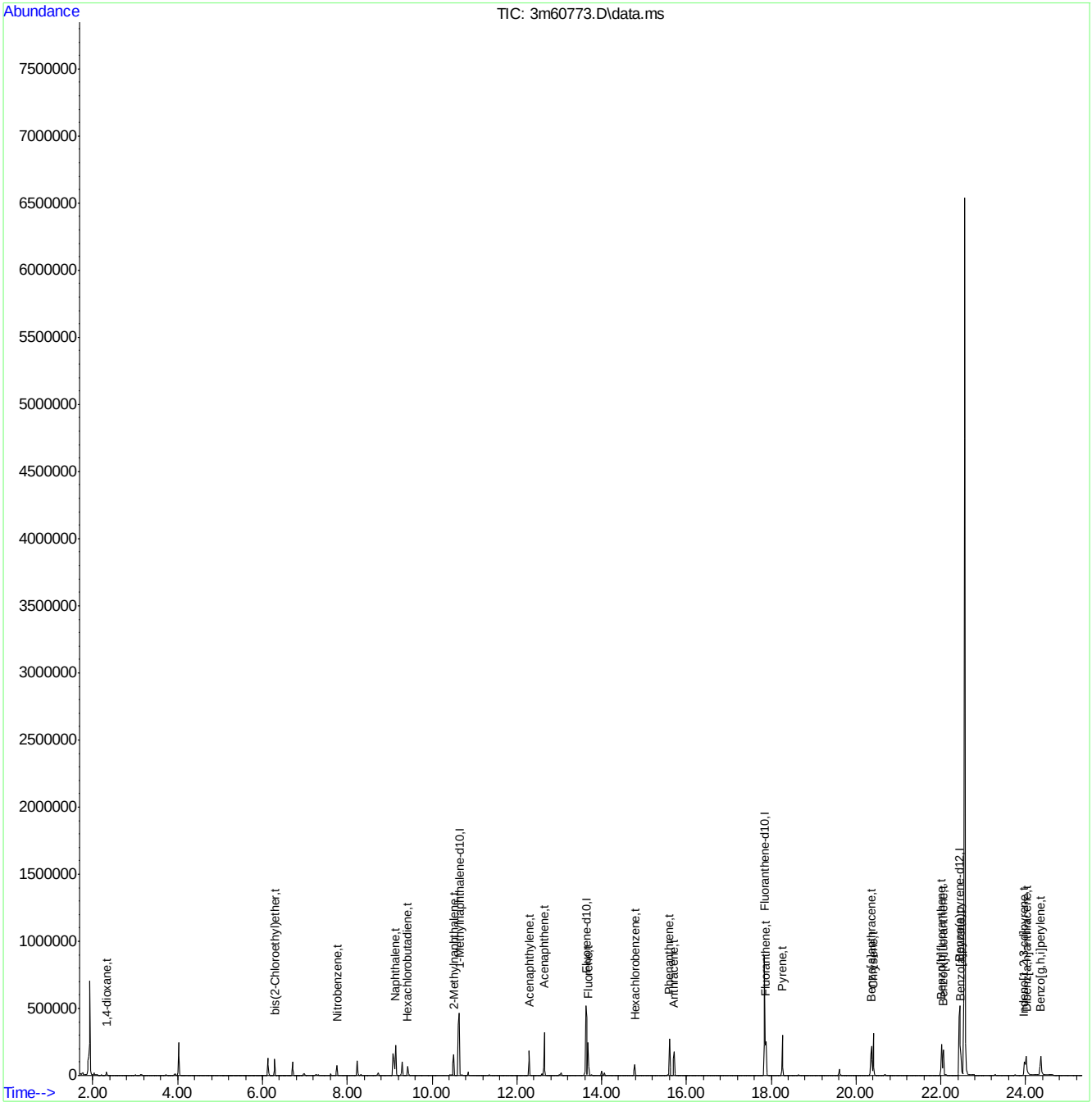
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

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 JC18516

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

7.6.69

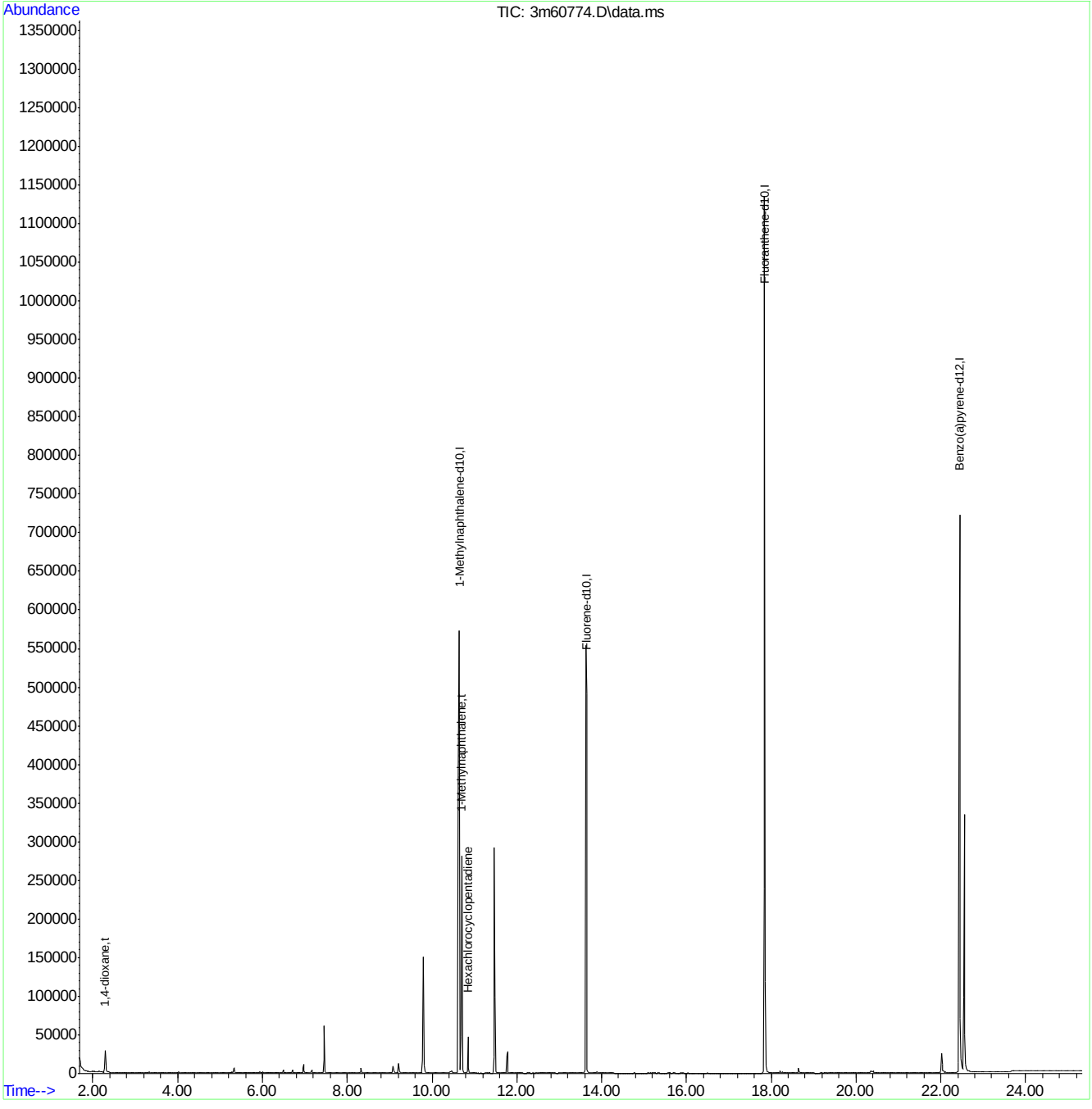
7

SGS ACCUTEST JC18516

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



SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2856\
Data File : 3m60776.D
Acq On : 22 Apr 2016 9:20 am
Operator : linseyk
Sample : cc2855-1
Misc : op93052a,e3m2856
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 22 09:44:36 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	477972	4.00	ppm	0.00
14) Fluorene-d10	13.644	176	728628	4.00	ppm	0.00
21) Fluoranthene-d10	17.844	212	1228462	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.448	264	974953	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	4.515	112	1176138	19.67	ppm	0.00
Spiked Amount 50.000			Recovery = 39.34%			
4) Phenol-d5	6.104	99	1946961	19.68	ppm	0.00
Spiked Amount 50.000			Recovery = 39.36%			
7) Nitrobenzene-d5	7.726	82	1669162	18.14	ppm	0.00
Spiked Amount 50.000			Recovery = 36.28%			
15) 2-Fluorobiphenyl	11.303	172	3906551	19.51	ppm	0.00
Spiked Amount 50.000			Recovery = 39.02%			
20) 2,4,6-Tribromophenol	14.172	330	449991	19.73	ppm	0.00
Spiked Amount 50.000			Recovery = 39.46%			
28) Terphenyl-d14	18.647	244	3551614	19.93	ppm	0.00
Spiked Amount 50.000			Recovery = 39.86%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.290	88	23123	0.94	ppm #	28
5) Phenol	6.128	94	531432	4.98	ppm	92
6) bis(2-Chloroethyl)ether	6.285	93	73949	0.92	ppm #	65
8) Nitrobenzene	7.764	77	100732	1.01	ppm	83
9) Naphthalene	9.139	128	278039	1.05	ppm	98
10) Hexachlorobutadiene	9.421	225	45400	0.98	ppm	95
11) 2-Methylnaphthalene	10.517	141	146247	1.06	ppm	92
12) 1-Methylnaphthalene	10.702	141	172889	0.93	ppm	91
13) Hexachlorocyclopentadiene	10.846	237	77914	2.12	ppm	93
16) Acenaphthylene	12.293	152	264635	1.05	ppm	98
17) Acenaphthene	12.648	153	175401	1.04	ppm	95
18) 4,6-dinitro-2-methylph...	13.852	198	120620	5.07	ppm	94
19) Fluorene	13.682	166	204136	1.01	ppm	94
22) Hexachlorobenzene	14.783	284	60976	1.05	ppm	93
23) Pentachlorophenol	15.201	266	205480	5.11	ppm	97
24) Phenanthrene	15.602	178	305180	1.01	ppm	98
25) Anthracene	15.711	178	290381	1.09	ppm	97
26) Fluoranthene	17.874	202	356293	0.94	ppm	99
27) Pyrene	18.261	202	354438	1.01	ppm	96
29) Benzo[a]anthracene	20.347	228	319986	0.95	ppm	95
30) Chrysene	20.408	228	331617	1.03	ppm	98
32) Benzo[b]fluoranthene	22.015	252	387160	1.19	ppm	100
33) Benzo[k]fluoranthene	22.062	252	252987	0.84	ppm	98
34) Benzo[a]pyrene	22.479	252	293706	0.97	ppm	85
35) Indeno[1,2,3-cd]pyrene	23.982	276	307580	1.00	ppm	90
36) Dibenz[a,h]anthracene	24.020	278	262760	1.04	ppm	100
37) Benzo[g,h,i]perylene	24.358	276	273492	1.03	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2856\
Data File : 3m60776.D
Acq On : 22 Apr 2016 9:20 am
Operator : linseyk
Sample : cc2855-1
Misc : op93052a,e3m2856
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 22 09:44:36 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)

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

7.6.70

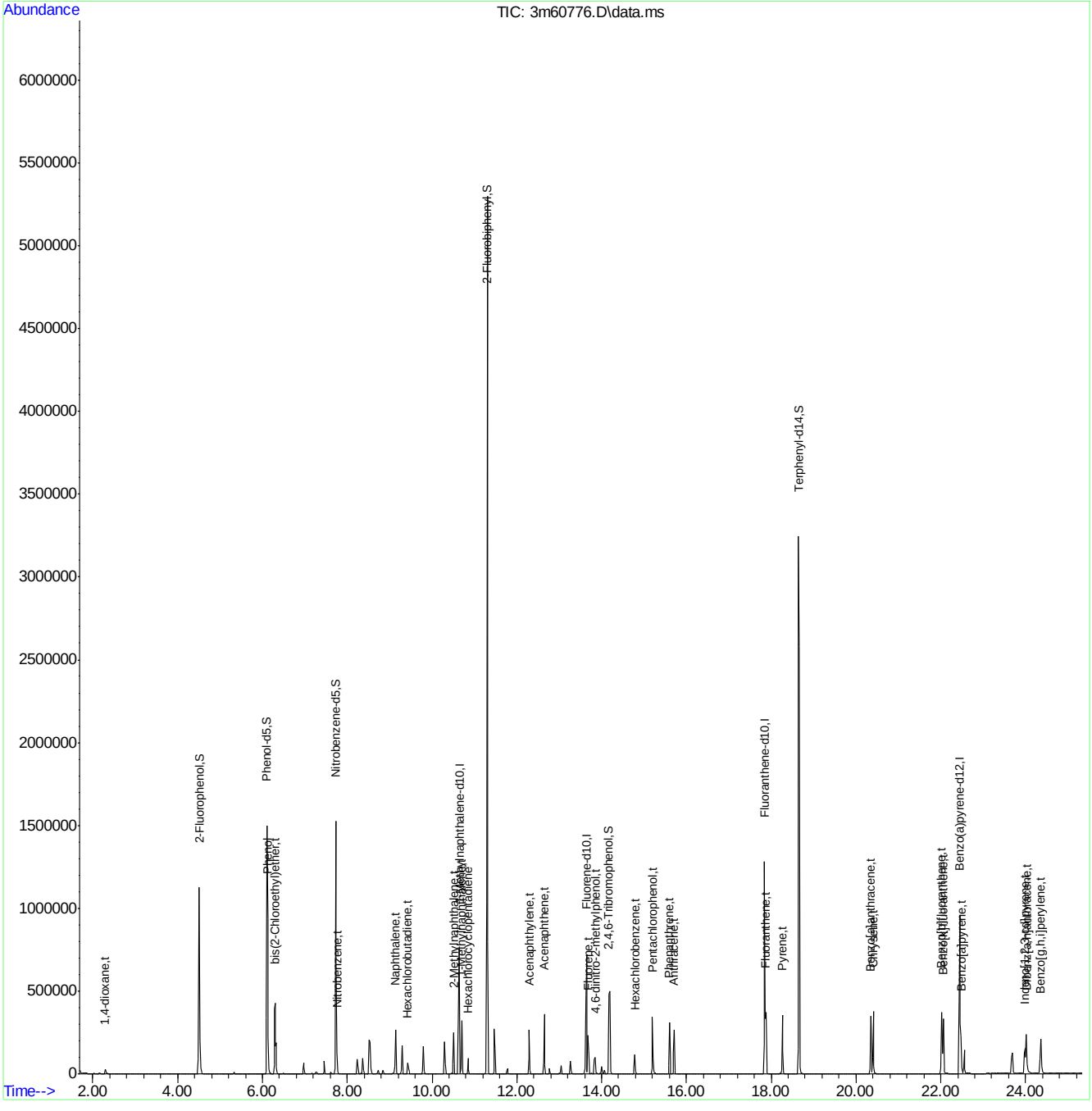
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2856\
Data File : 3m60776.D
Acq On : 22 Apr 2016 9:20 am
Operator : linseyk
Sample : cc2855-1
Misc : op93052a,e3m2856
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 22 09:44:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:34:22 2016
Response via : Initial Calibration



SGS ACCUTEST JC18516

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 JC18516

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

7.6.71

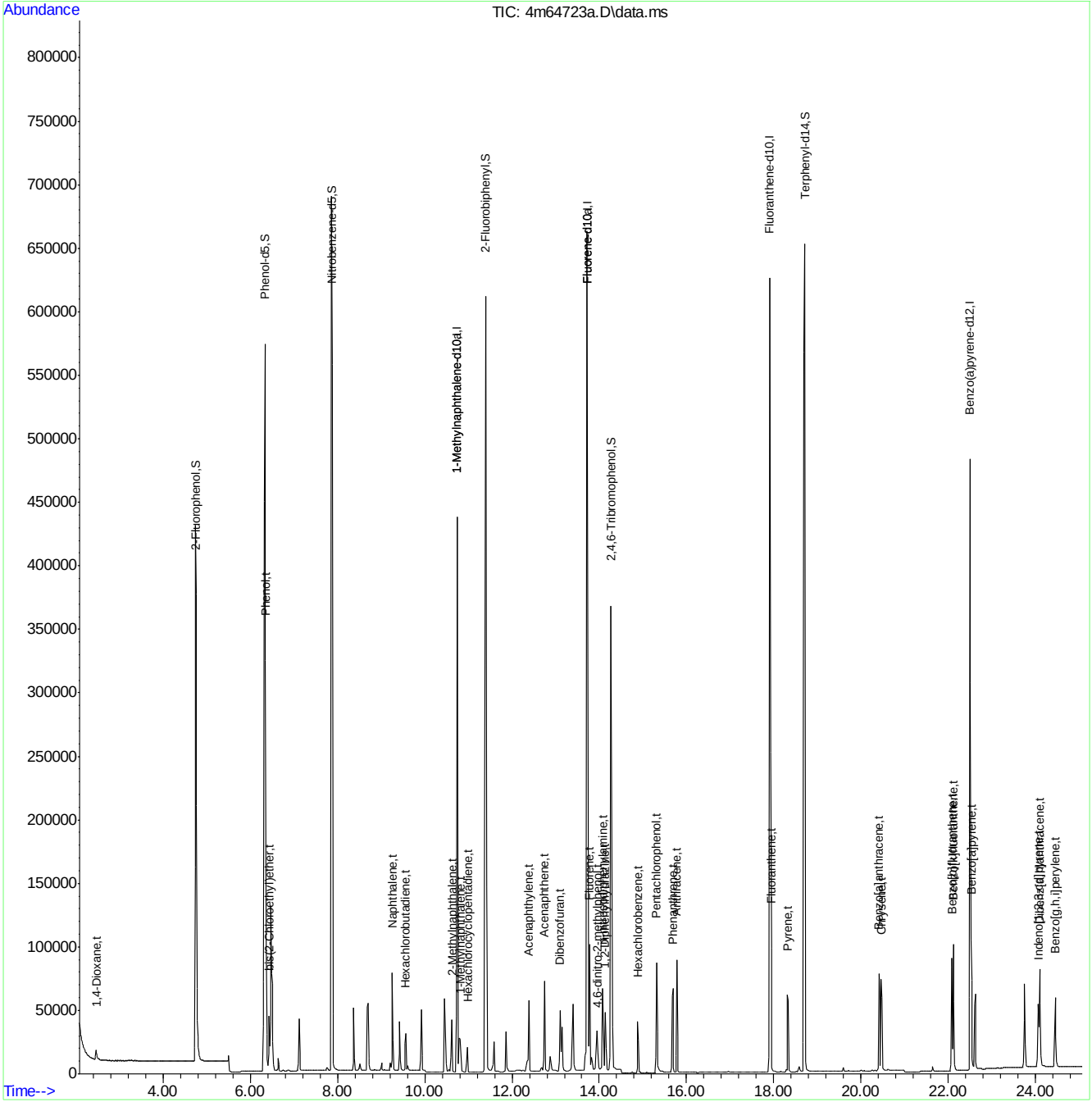
7

SGS ACCUTEST JC18516

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

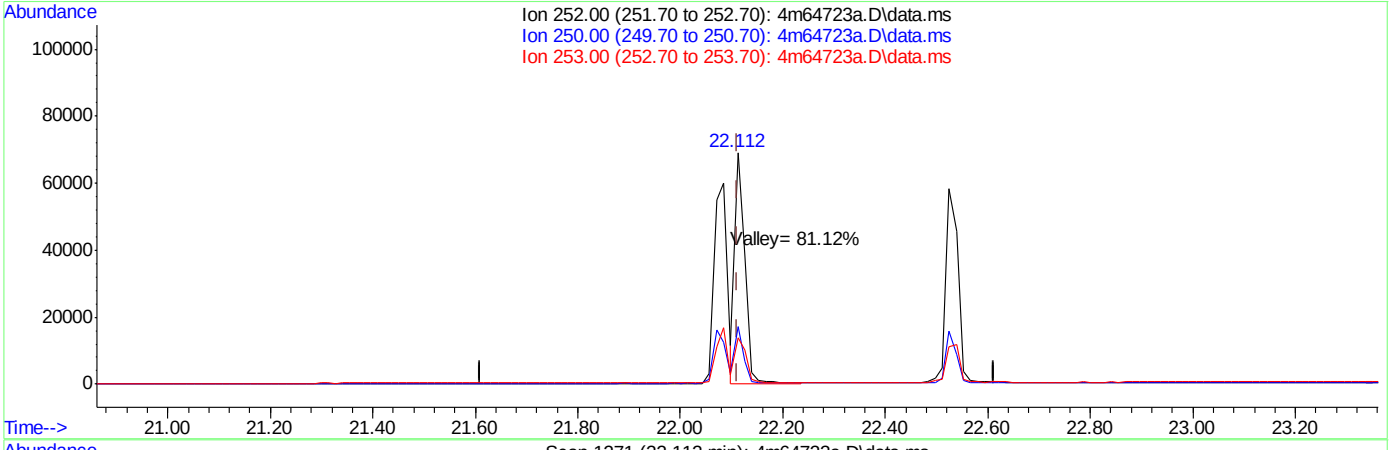


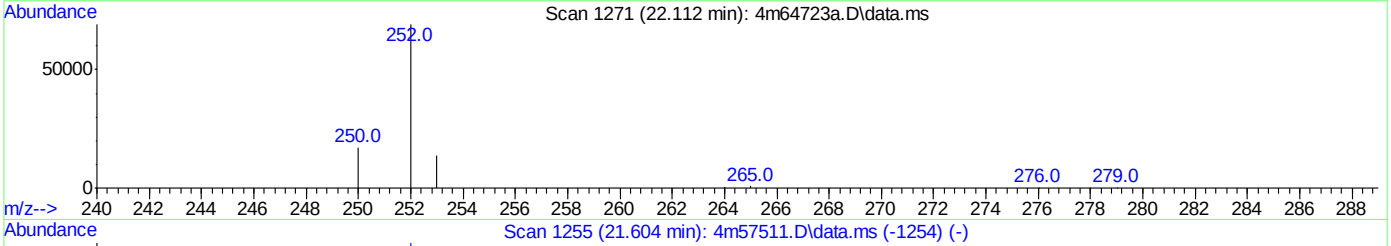
M4M2881SIM.M Thu Apr 14 15:17:42 2016 MANAGER Page: 3

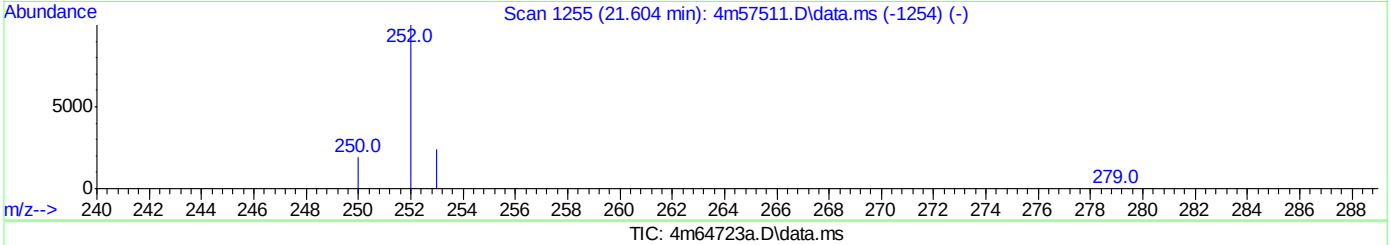
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64723a.D
Acq On : 14 Apr 2016 10:42 am
Operator : linseyk
Sample : ic2881-0.5
Misc : op92998a,e4m2881
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 14 15:11:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:11:05 2016
Response via : Initial Calibration







TIC: 4m64723a.D\data.ms

(30) Benzo[k]fluoranthene (t)

22.112min (0.000) 0.48ppm

response 89387

Ion	Exp%	Act%
252.00	100	100
250.00	24.80	24.21
253.00	19.80	18.89
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64724.D
Acq On : 14 Apr 2016 11:13 am
Operator : linseyk
Sample : icc2881-1.0
Misc : op92998a,e4m2881
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 14 15:13:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:12:42 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.745	152	314071	4.00	ppm	0.00
12) Fluorene-d10	13.724	176	575712	4.00	ppm	0.00
22) Fluoranthene-d10	17.904	212	896605	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	22.497	264	668555	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.745	152	314071	4.00	ppm	0.00
38) Fluorene-d10a	13.724	176	575712	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	4.741	112	870474	21.06	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 42.12%			
3) Phenol-d5	6.338	99	1467617	20.99	ppm	0.00
Spiked Amount 50.000			Recovery = 41.98%			
6) Nitrobenzene-d5	7.864	82	1309697	20.73	ppm	0.00
Spiked Amount 50.000			Recovery = 41.46%			
11) 2-Fluorobiphenyl	11.390	172	1712072	21.09	ppm	0.00
Spiked Amount 50.000			Recovery = 42.18%			
17) 2,4,6-Tribromophenol	14.273	330	687312	20.45	ppm	0.00
Spiked Amount 50.000			Recovery = 40.90%			
25) Terphenyl-d14	18.713	244	2436254	19.56	ppm	0.00
Spiked Amount 50.000			Recovery = 39.12%			
Target Compounds						Qvalue
4) Phenol	6.352	94	382897	5.26	ppm	100
5) bis(2-Chloroethyl)ether	6.434	93	57037	1.06	ppm	100
7) Naphthalene	9.256	128	184826	1.05	ppm	100
8) Hexachlorobutadiene	9.550	225	46074	1.05	ppm	100
9) 2-Methylnaphthalene	10.626	142	75929	1.01	ppm	100
10) Hexachlorocyclopentadiene	10.984	237	47859	2.04	ppm	100
13) Acenaphthylene	12.387	152	131086	0.95	ppm	100
14) Acenaphthene	12.742	153	83653	0.96	ppm	100
15) Dibenzofuran	13.097	168	137682	1.03	ppm	100
16) Fluorene	13.771	166	163177	1.01	ppm	100
18) Hexachlorobenzene	14.883	284	61023	1.00	ppm	100
19) Pentachlorophenol	15.316	266	141117	5.00	ppm	100
20) Phenanthrene	15.671	178	210035	1.00	ppm	100
21) Anthracene	15.780	178	207976	1.00	ppm	100
23) Fluoranthene	17.941	202	228185	0.95	ppm	100
24) Pyrene	18.318	202	241719	1.00	ppm	100
26) Benzo[a]anthracene	20.408	228	223352	1.01	ppm	100
27) Chrysene	20.464	228	214850	1.00	ppm	100
29) Benzo[b]fluoranthene	22.070	252	249096	1.01	ppm	100
30) Benzo[k]fluoranthene	22.112	252	194533	0.97	ppm	100
31) Benzo[a]pyrene	22.525	252	203335	1.00	ppm	100
32) Indeno[1,2,3-cd]pyrene	24.053	276	251378	1.00	ppm	100
33) Dibenz[a,h]anthracene	24.094	278	187914	0.95	ppm	100
34) Benzo[g,h,i]perylene	24.452	276	211099	0.99	ppm	100
36) 1,4-Dioxane	2.472	88	19420	1.36	ppm	98
37) 1-Methylnaphthalene	10.793	142	70806	1.04	ppm	100
39) 4,6-dinitro-2-methylph...	13.938	198	79406	5.65	ppm	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64724.D
Acq On : 14 Apr 2016 11:13 am
Operator : linseyk
Sample : icc2881-1.0
Misc : op92998a,e4m2881
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 14 15:13:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:12:42 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) 1,2-Diphenylhydrazine	14.130	77	157240	1.06	ppm	100
41) n-nitrosodiphenylamine	14.082	169	114035	1.04	ppm	100

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

7.6.72

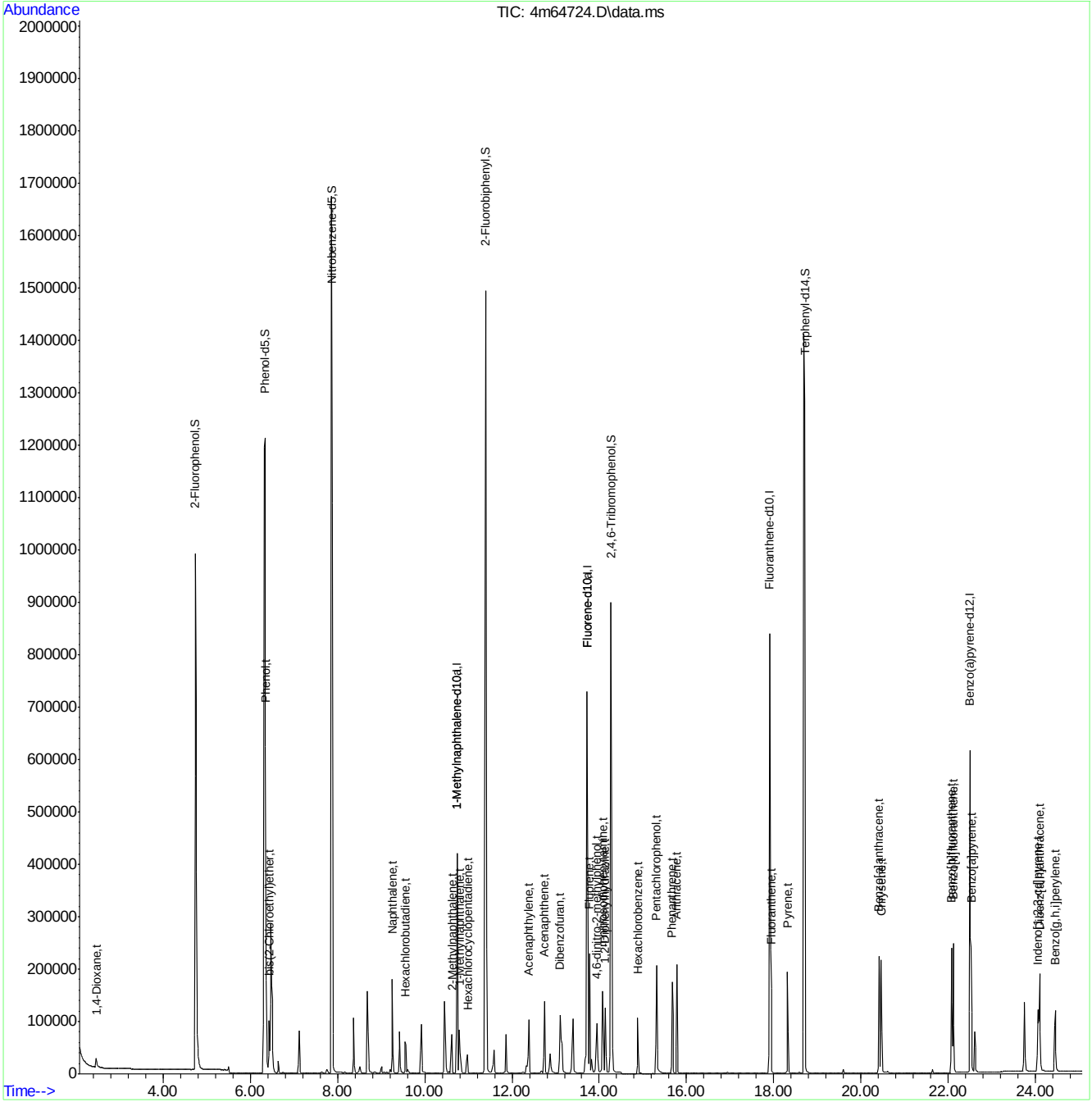
7

SGS ACCUTEST JC18516

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

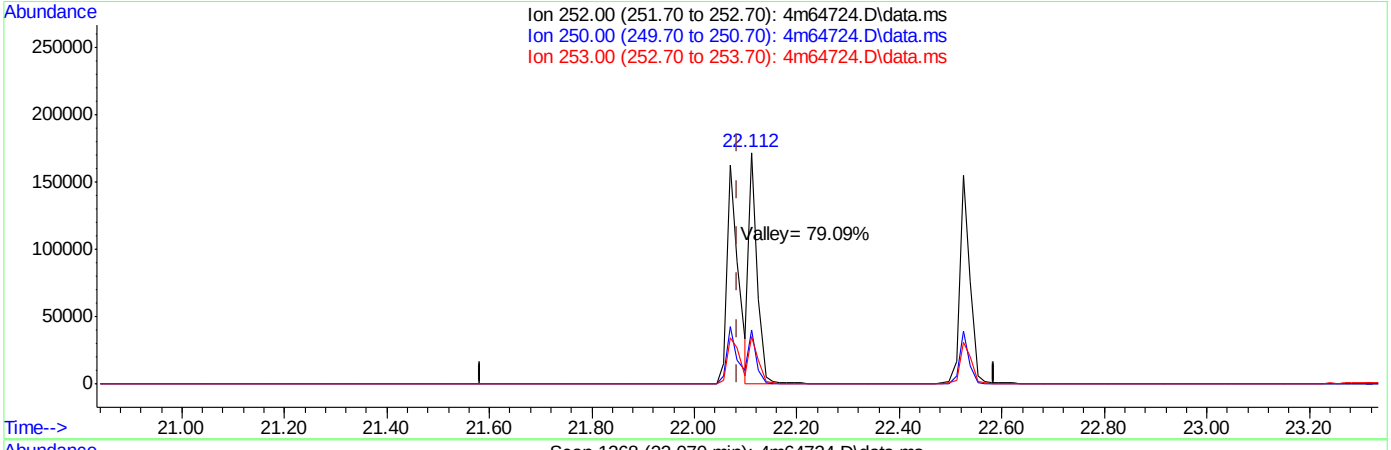


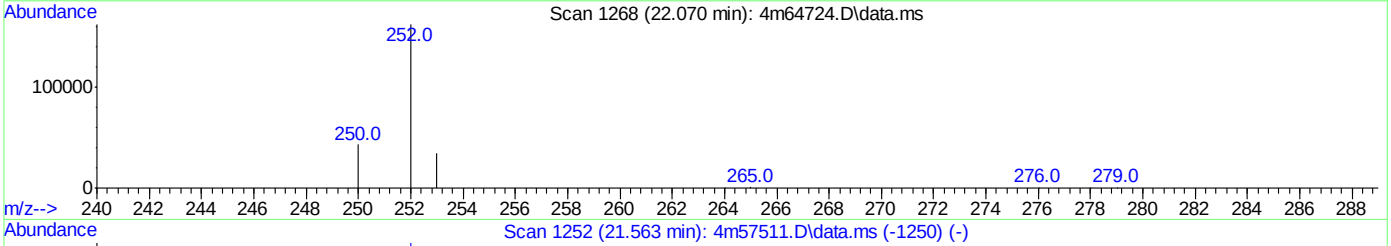
SGS ACCUTEST JC18516

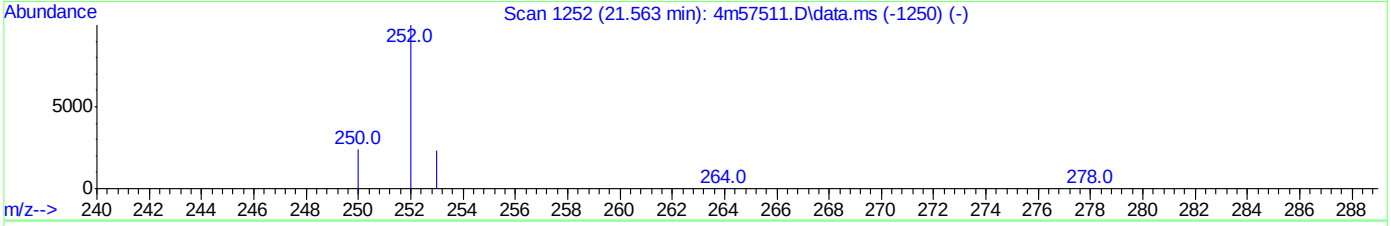
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64724.D
Acq On : 14 Apr 2016 11:13 am
Operator : linseyk
Sample : icc2881-1.0
Misc : op92998a,e4m2881
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 14 15:12:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:12:00 2016
Response via : Initial Calibration







TIC: 4m64724.D\data.ms

(29) Benzo[b]fluoranthene (t)

22.070min (-0.014) 1.02ppm

response 249096

Ion	Exp%	Act%
252.00	100	100
250.00	19.90	25.97
253.00	27.70	21.20
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64725.D
Acq On : 14 Apr 2016 11:44 am
Operator : linseyk
Sample : ic2881-0.2
Misc : op92998a,e4m2881
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 14 15:28:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:28:49 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.746	152	284988	4.00	ppm	0.00
12) Fluorene-d10	13.724	176	506257	4.00	ppm	0.00
22) Fluoranthene-d10	17.904	212	790251	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	22.497	264	600983	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.746	152	284988	4.00	ppm	0.00
38) Fluorene-d10a	13.724	176	506257	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	4.741	112	154379	4.07	ppm	-0.01
Spiked Amount 50.000	Range 11 - 58		Recovery = 8.14%#			
3) Phenol-d5	6.338	99	261565	4.08	ppm	0.00
Spiked Amount 50.000			Recovery = 8.16%			
6) Nitrobenzene-d5	7.864	82	233647	4.07	ppm	0.00
Spiked Amount 50.000			Recovery = 8.14%			
11) 2-Fluorobiphenyl	11.390	172	352568	4.28	ppm	0.00
Spiked Amount 50.000			Recovery = 8.56%			
17) 2,4,6-Tribromophenol	14.273	330	121131	4.17	ppm	0.00
Spiked Amount 50.000			Recovery = 8.34%			
25) Terphenyl-d14	18.694	244	437958	4.00	ppm	0.00
Spiked Amount 50.000			Recovery = 8.00%			
Target Compounds						Qvalue
4) Phenol	6.352	94	66443	1.01	ppm	94
5) bis(2-Chloroethyl)ether	6.434	93	9934	0.20	ppm	94
7) Naphthalene	9.256	128	33060	0.20	ppm	99
8) Hexachlorobutadiene	9.565	225	7994	0.20	ppm	99
9) 2-Methylnaphthalene	10.626	142	13532	0.20	ppm	99
10) Hexachlorocyclopentadiene	10.984	237	6597	0.35	ppm	100
13) Acenaphthylene	12.388	152	22912	0.20	ppm	99
14) Acenaphthene	12.743	153	14986	0.20	ppm	98
15) Dibenzofuran	13.097	168	23893	0.20	ppm	97
16) Fluorene	13.771	166	28326	0.20	ppm	99
18) Hexachlorobenzene	14.883	284	10972	0.20	ppm	98
19) Pentachlorophenol	15.316	266	19930	0.97	ppm	97
20) Phenanthrene	15.671	178	37427	0.20	ppm	100
21) Anthracene	15.780	178	35181	0.20	ppm	99
23) Fluoranthene	17.941	202	41945	0.20	ppm	99
24) Pyrene	18.318	202	42201	0.20	ppm	99
26) Benzo[a]anthracene	20.408	228	39404	0.20	ppm	98
27) Chrysene	20.464	228	38354	0.20	ppm	99
29) Benzo[b]fluoranthene	22.070	252	44250	0.20	ppm	99
30) Benzo[k]fluoranthene	22.112	252	35796	0.20	ppm	98
31) Benzo[a]pyrene	22.525	252	36721	0.21	ppm	98
32) Indeno[1,2,3-cd]pyrene	24.053	276	45470	0.20	ppm	94
33) Dibenz[a,h]anthracene	24.094	278	36670	0.20	ppm	99
34) Benzo[g,h,i]perylene	24.452	276	38801	0.20	ppm	100
36) 1,4-Dioxane	2.472	88	4064	0.17	ppm	80
37) 1-Methylnaphthalene	10.793	142	12503	0.20	ppm	99
39) 4,6-dinitro-2-methylph...	13.963	198	7678	0.88	ppm	96

SGS ACCUTEST JC18516

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

7.6.73

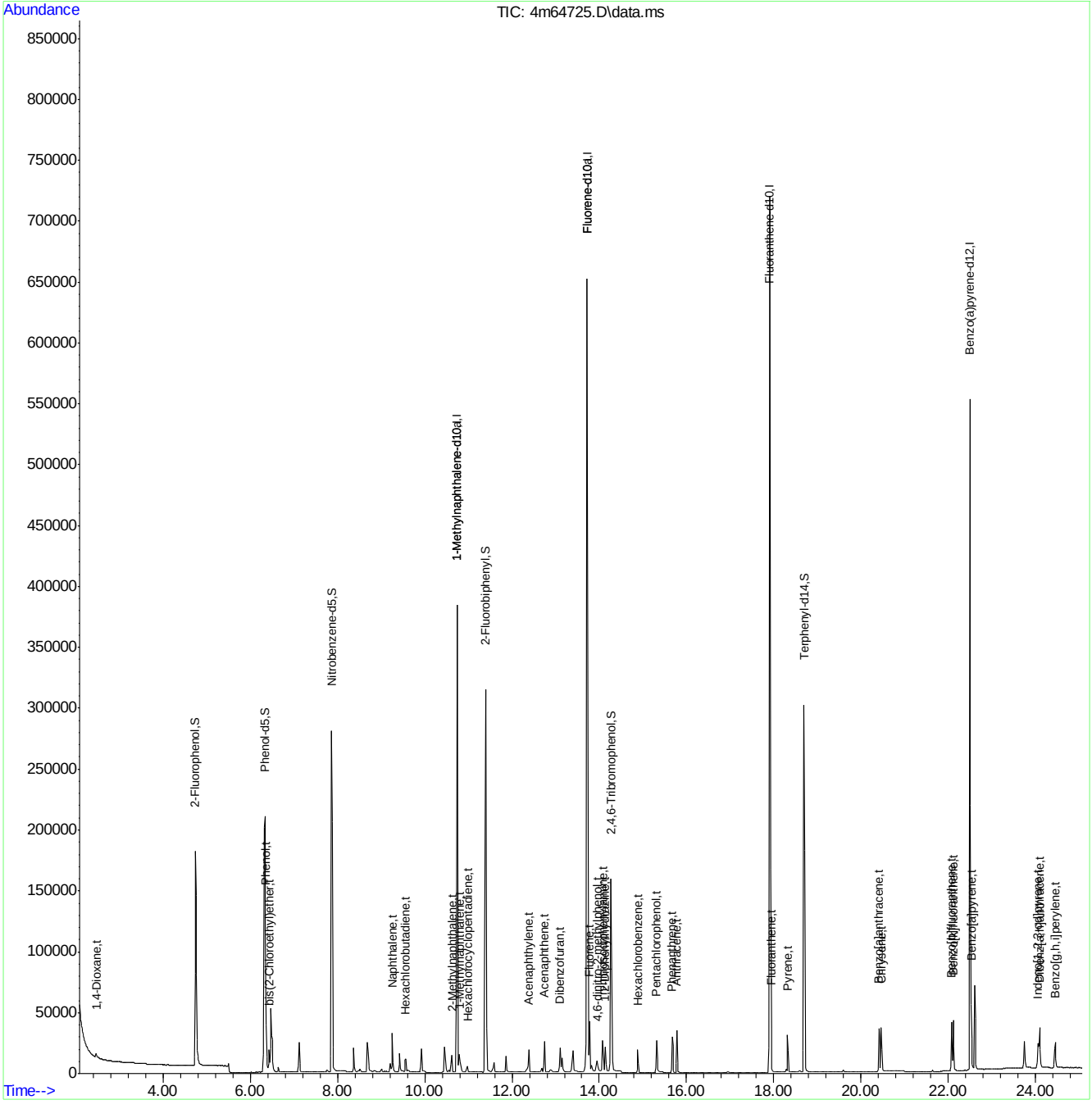
7

SGS ACCUTEST JC18516

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



M4M2881SIM.M Thu Apr 14 15:29:16 2016 MANAGER Page: 3

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64726.D
Acq On : 14 Apr 2016 12:15 pm
Operator : linseyk
Sample : ic2881-0.1
Misc : op92998a,e4m2881
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 14 15:28:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:25:00 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.745	152	282673	4.00	ppm	0.00
12) Fluorene-d10	13.724	176	506012	4.00	ppm	0.00
22) Fluoranthene-d10	17.904	212	798340	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	22.497	264	598363	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.745	152	282673	4.00	ppm	0.00
38) Fluorene-d10a	13.724	176	506012	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	4.752	112	73705	1.96	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery	=	3.92%#	
3) Phenol-d5	6.338	99	124726	1.96	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.92%	
6) Nitrobenzene-d5	7.864	82	111828	1.96	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.92%	
11) 2-Fluorobiphenyl	11.390	172	169128	2.07	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.14%	
17) 2,4,6-Tribromophenol	14.273	330	57224	1.97	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.94%	
25) Terphenyl-d14	18.694	244	218853	1.98	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.96%	
Target Compounds						Qvalue
4) Phenol	6.352	94	31501	0.48	ppm	95
5) bis(2-Chloroethyl)ether	6.434	93	4753	0.10	ppm #	64
7) Naphthalene	9.256	128	16167	0.10	ppm	99
8) Hexachlorobutadiene	9.565	225	3842	0.10	ppm	97
9) 2-Methylnaphthalene	10.626	142	6570	0.10	ppm	100
10) Hexachlorocyclopentadiene	10.984	237	3033	0.16	ppm	98
13) Acenaphthylene	12.387	152	11490	0.10	ppm	98
14) Acenaphthene	12.742	153	7351	0.10	ppm	97
15) Dibenzofuran	13.097	168	11211	0.10	ppm	86
16) Fluorene	13.771	166	13581	0.10	ppm	98
18) Hexachlorobenzene	14.883	284	5347	0.10	ppm	96
19) Pentachlorophenol	15.316	266	8706	0.42	ppm	98
20) Phenanthrene	15.671	178	18048	0.10	ppm	99
21) Anthracene	15.780	178	16875	0.10	ppm	98
23) Fluoranthene	17.941	202	20368	0.10	ppm	98
24) Pyrene	18.318	202	20517	0.10	ppm	100
26) Benzo[a]anthracene	20.408	228	18521	0.09	ppm	97
27) Chrysene	20.464	228	18694	0.10	ppm	97
29) Benzo[b]fluoranthene	22.070	252	21229	0.10	ppm	99
30) Benzo[k]fluoranthene	22.112	252	17514	0.10	ppm	98
31) Benzo[a]pyrene	22.525	252	16991	0.10	ppm	98
32) Indeno[1,2,3-cd]pyrene	24.067	276	21723	0.10	ppm	94
33) Dibenz[a,h]anthracene	24.094	278	17411	0.10	ppm	70
34) Benzo[g,h,i]perylene	24.452	276	18457	0.10	ppm	99
36) 1,4-Dioxane	2.461	88	3108	0.11	ppm	87
37) 1-Methylnaphthalene	10.793	142	6136	0.10	ppm	99
39) 4,6-dinitro-2-methylph...	13.962	198	3170	0.36	ppm	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64726.D
Acq On : 14 Apr 2016 12:15 pm
Operator : linseyk
Sample : ic2881-0.1
Misc : op92998a,e4m2881
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 14 15:28:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:25:00 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) 1,2-Diphenylhydrazine	14.130	77	12073	0.09	ppm	98
41) n-nitrosodiphenylamine	14.082	169	9095	0.10	ppm	95

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

7.6.74

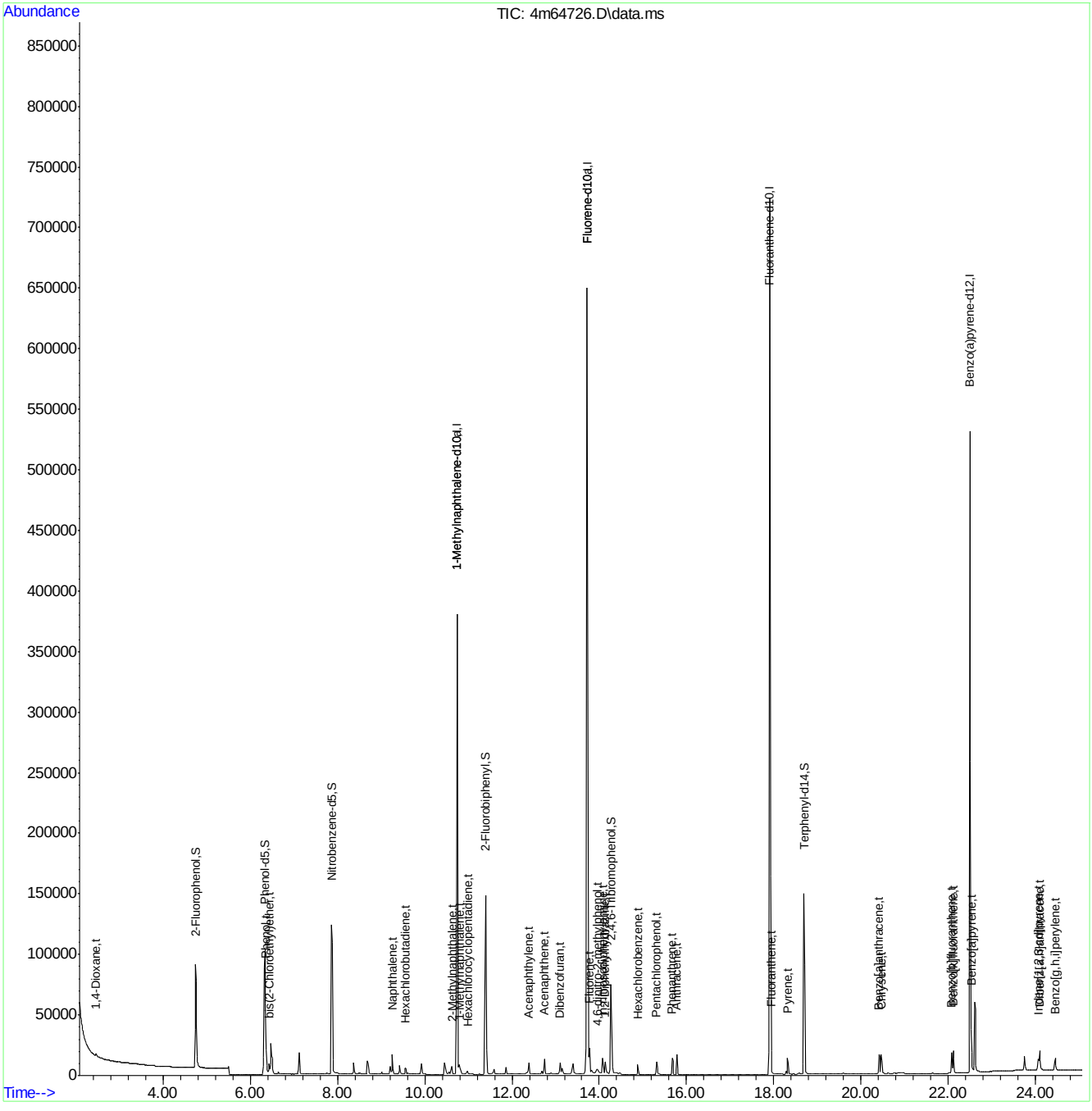
7

SGS ACCUTEST JC18516

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



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

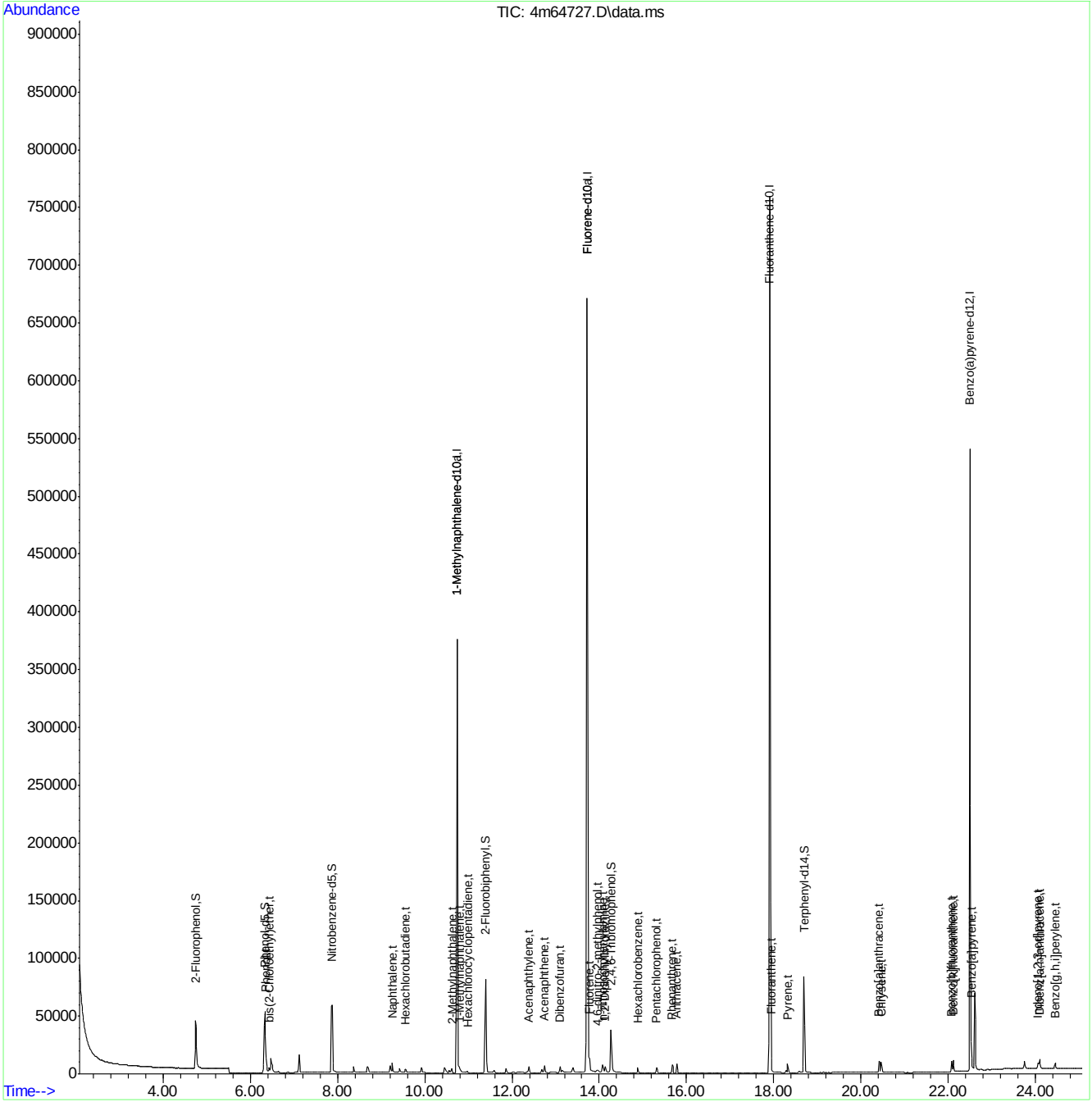
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
41) n-nitrosodiphenylamine	14.082	169	4526	0.05 ppm	95

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64727.D
Acq On : 14 Apr 2016 12:45 pm
Operator : linseyk
Sample : ic2881-0.05
Misc : op92998a,e4m2881
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 14 15:19:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:19:41 2016
Response via : Initial Calibration



M4M2881SIM.M Thu Apr 14 15:24:57 2016 MANAGER Page: 3

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64728.D
Acq On : 14 Apr 2016 1:16 pm
Operator : linseyk
Sample : ic2881-0.02
Misc : op92998a,e4m2881
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 14 15:30:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:29:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.746	152	280672	4.00	ppm	0.00
12) Fluorene-d10	13.724	176	514038	4.00	ppm	0.00
22) Fluoranthene-d10	17.904	212	790910	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	22.497	264	599819	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.746	152	280672	4.00	ppm	0.00
38) Fluorene-d10a	13.724	176	514038	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	4.752	112	15109	0.40	ppm	0.01
Spiked Amount 50.000	Range 11 - 58		Recovery = 0.80%#			
3) Phenol-d5	6.338	99	24875	0.39	ppm	0.00
Spiked Amount 50.000			Recovery = 0.78%			
6) Nitrobenzene-d5	7.879	82	22009	0.39	ppm	0.02
Spiked Amount 50.000			Recovery = 0.78%			
11) 2-Fluorobiphenyl	11.390	172	35367	0.44	ppm	0.00
Spiked Amount 50.000			Recovery = 0.88%			
17) 2,4,6-Tribromophenol	14.273	330	10404	0.35	ppm	0.00
Spiked Amount 50.000			Recovery = 0.70%			
25) Terphenyl-d14	18.694	244	42409	0.39	ppm	0.00
Spiked Amount 50.000			Recovery = 0.78%			
Target Compounds						Qvalue
4) Phenol	6.352	94	6339	0.10	ppm	72
5) bis(2-Chloroethyl)ether	6.434	93	980	0.02	ppm	83
7) Naphthalene	9.256	128	3340	0.02	ppm	98
8) Hexachlorobutadiene	9.565	225	796	0.02	ppm	97
9) 2-Methylnaphthalene	10.626	142	1501	0.02	ppm	97
10) Hexachlorocyclopentadiene	10.984	237	450	0.02	ppm	95
13) Acenaphthylene	12.388	152	2239	0.02	ppm	98
14) Acenaphthene	12.743	153	1496	0.02	ppm	97
15) Dibenzofuran	13.097	168	2271	0.02	ppm	100
16) Fluorene	13.771	166	2703	0.02	ppm	97
18) Hexachlorobenzene	14.883	284	1113	0.02	ppm	99
19) Pentachlorophenol	15.316	266	1632	0.08	ppm	94
20) Phenanthrene	15.671	178	3896	0.02	ppm	96
21) Anthracene	15.780	178	3355	0.02	ppm	99
23) Fluoranthene	17.941	202	4884	0.02	ppm	99
24) Pyrene	18.318	202	4158	0.02	ppm	99
26) Benzo[a]anthracene	20.408	228	4066	0.02	ppm	99
27) Chrysene	20.464	228	3857	0.02	ppm	99
29) Benzo[b]fluoranthene	22.070	252	4712	0.02	ppm	95
30) Benzo[k]fluoranthene	22.112	252	3502	0.02	ppm	99
31) Benzo[a]pyrene	22.525	252	3641	0.02	ppm	98
32) Indeno[1,2,3-cd]pyrene	24.067	276	4414	0.02	ppm	95
33) Dibenz[a,h]anthracene	24.094	278	3705	0.02	ppm	97
34) Benzo[g,h,i]perylene	24.452	276	3835	0.02	ppm	99
37) 1-Methylnaphthalene	10.793	142	1512	0.02	ppm	99
39) 4,6-dinitro-2-methylph...	13.963	198	582	0.07	ppm	79
40) 1,2-Diphenylhydrazine	14.130	77	2462	0.02	ppm	95

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

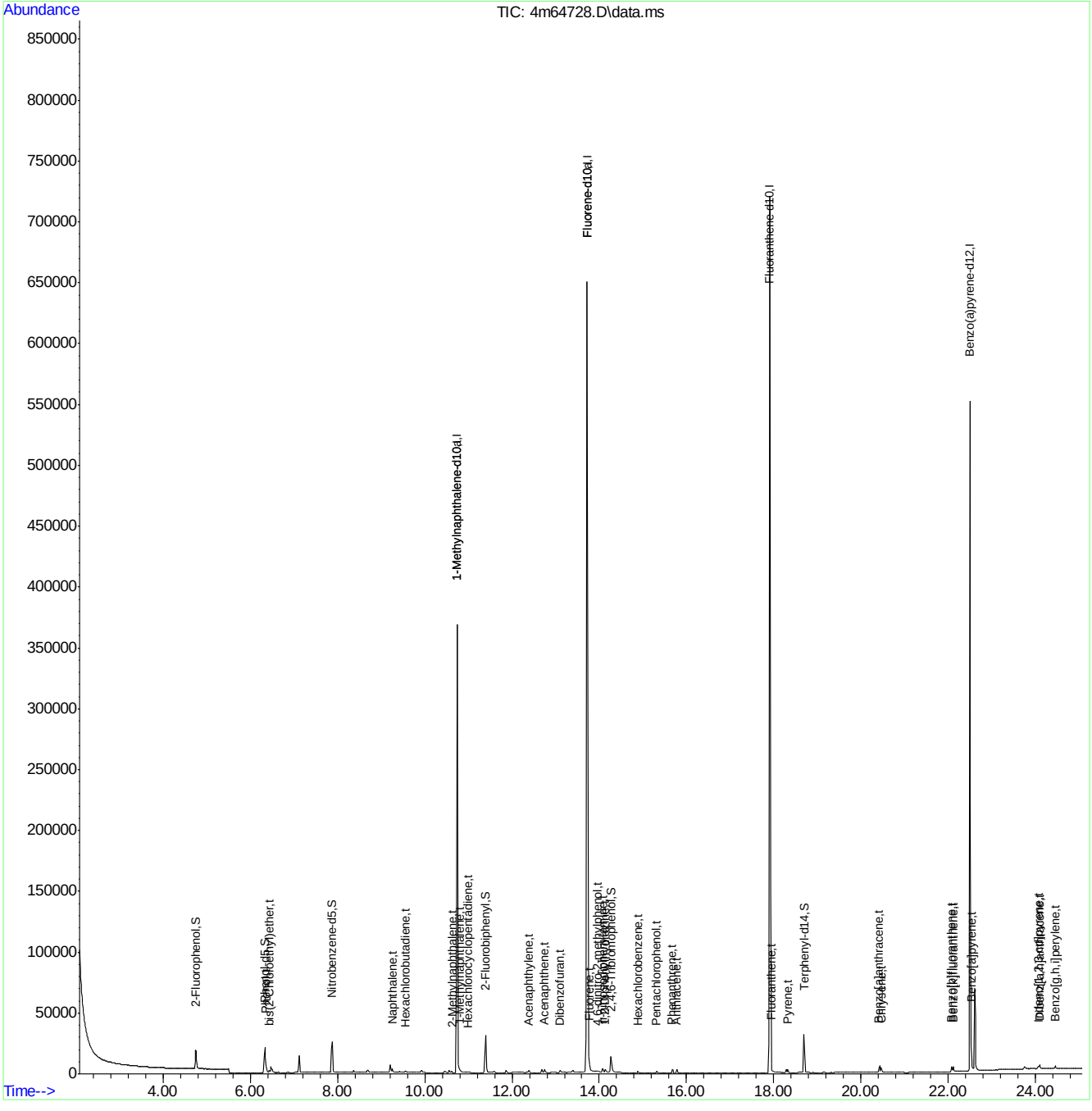
7.6.76

7

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



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

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

7.6.77

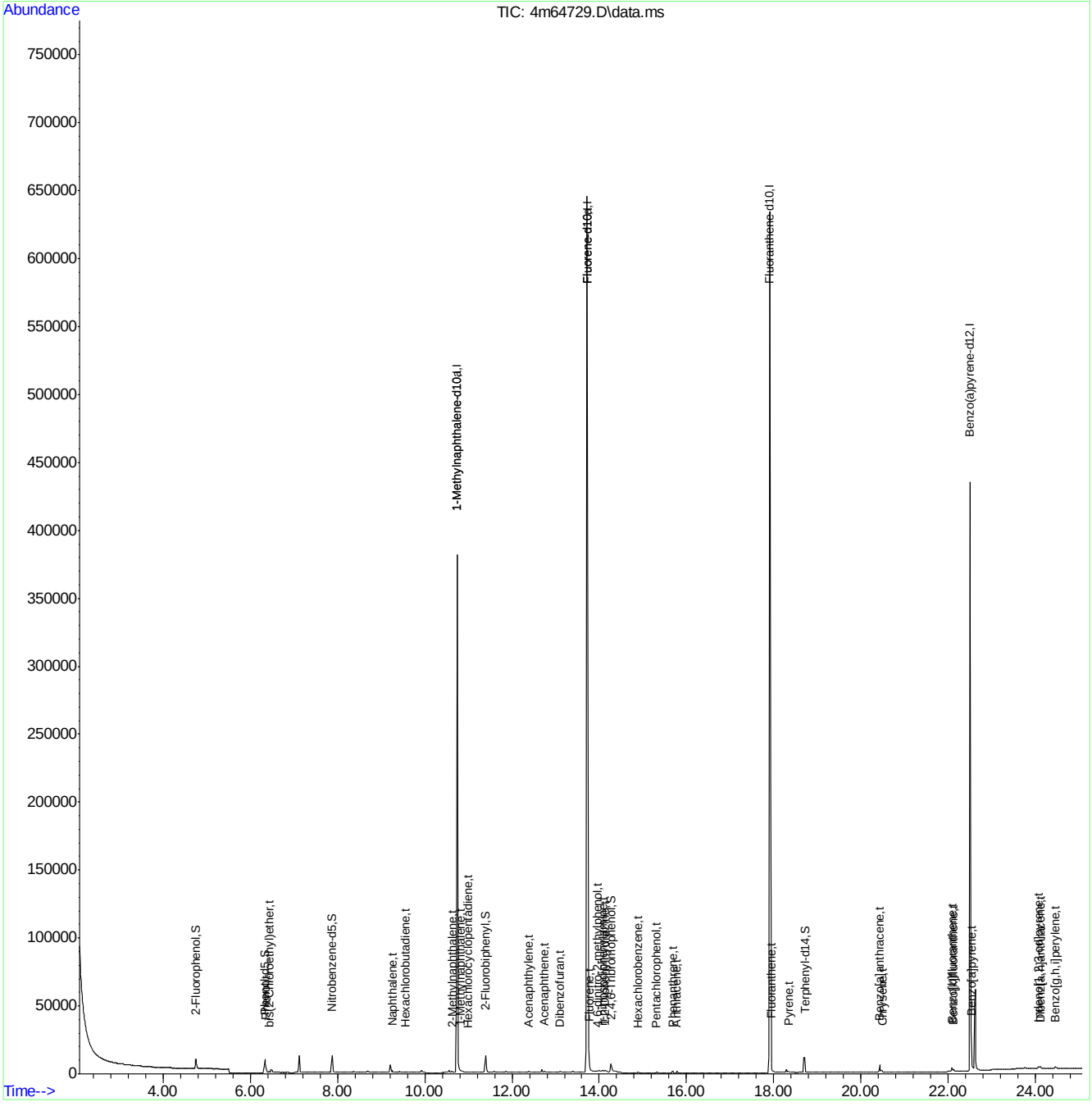
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64729.D
Acq On : 14 Apr 2016 1:48 pm
Operator : linseyk
Sample : ic2881-0.01
Misc : op92998a,e4m2881
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 14 15:53:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:30:56 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64730.D
Acq On : 14 Apr 2016 2:20 pm
Operator : linseyk
Sample : ic2881-5.0
Misc : op92998a,e4m2881
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 14 15:53:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:53:47 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.745	152	294505	4.00	ppm	0.00
12) Fluorene-d10	13.724	176	539967	4.00	ppm	0.00
22) Fluoranthene-d10	17.904	212	760249	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	22.511	264	580666	4.00	ppm	0.01
35) 1-Methylnaphthalene-d10a	10.745	152	294505	4.00	ppm	0.00
38) Fluorene-d10a	13.724	176	539967	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	4.741	112	3610118	91.93	ppm	-0.01
Spiked Amount 50.000	Range 11 - 58		Recovery	=	183.86%#	
3) Phenol-d5	6.338	99	5956548	90.09	ppm	0.00
Spiked Amount 50.000			Recovery	=	180.18%	
6) Nitrobenzene-d5	7.879	82	5414807	91.71	ppm	0.00
Spiked Amount 50.000			Recovery	=	183.42%	
11) 2-Fluorobiphenyl	11.414	172	9016987	104.26	ppm	0.02
Spiked Amount 50.000			Recovery	=	208.52%	
17) 2,4,6-Tribromophenol	14.297	330	2295112	74.09	ppm	0.02
Spiked Amount 50.000			Recovery	=	148.18%	
25) Terphenyl-d14	18.713	244	9092042	86.79	ppm	0.00
Spiked Amount 50.000			Recovery	=	173.58%	
Target Compounds						Qvalue
4) Phenol	6.352	94	1528983	22.64	ppm	75
5) bis(2-Chloroethyl)ether	6.448	93	235976	4.65	ppm	70
7) Naphthalene	9.256	128	771791	4.58	ppm	99
8) Hexachlorobutadiene	9.565	225	190954	4.58	ppm	92
9) 2-Methylnaphthalene	10.626	142	361705	5.01	ppm	99
10) Hexachlorocyclopentadiene	10.984	237	271381	14.12	ppm	96
13) Acenaphthylene	12.387	152	618832	5.01	ppm	92
14) Acenaphthene	12.742	153	401217	5.04	ppm	97
15) Dibenzofuran	13.097	168	535298	4.40	ppm	50
16) Fluorene	13.771	166	639751	4.34	ppm	89
18) Hexachlorobenzene	14.883	284	258380	4.51	ppm	98
19) Pentachlorophenol	15.316	266	648135	29.53	ppm	93
20) Phenanthrene	15.687	178	889577	4.50	ppm	97
21) Anthracene	15.780	178	899214	4.88	ppm	97
23) Fluoranthene	17.941	202	1057860	5.23	ppm	99
24) Pyrene	18.337	202	1025148	5.11	ppm	97
26) Benzo[a]anthracene	20.426	228	956396	5.15	ppm	97
27) Chrysene	20.483	228	944067	5.22	ppm	99
29) Benzo[b]fluoranthene	22.084	252	995427	4.69	ppm	90
30) Benzo[k]fluoranthene	22.125	252	919603	5.35	ppm	85
31) Benzo[a]pyrene	22.538	252	893992	5.20	ppm	89
32) Indeno[1,2,3-cd]pyrene	24.067	276	1083965	4.99	ppm	98
33) Dibenz[a,h]anthracene	24.108	278	874305	5.02	ppm	97
34) Benzo[g,h,i]perylene	24.452	276	900771	4.90	ppm	92
36) 1,4-Dioxane	2.461	88	64218	2.90	ppm #	67
37) 1-Methylnaphthalene	10.817	142	312404	4.41	ppm	97
39) 4,6-dinitro-2-methylph...	13.962	198	605702	64.80	ppm	65

SGS ACCUTEST JC18516

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

7.6.78

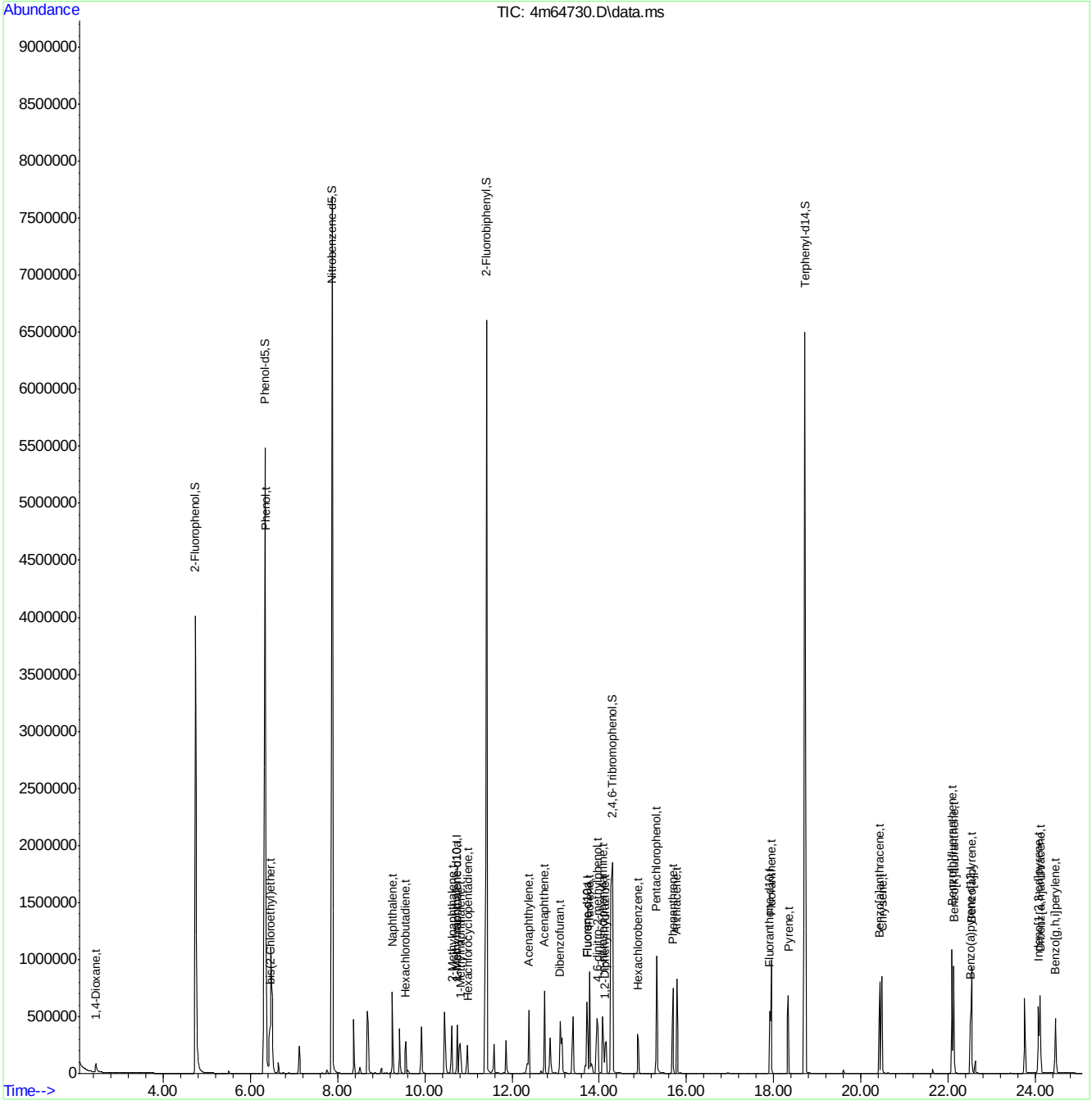
7

SGS ACCUTEST JC18516

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



M4M2881SIM.M Thu Apr 14 15:54:20 2016 MANAGER Page: 3

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64731.D
Acq On : 14 Apr 2016 2:53 pm
Operator : linseyk
Sample : ic2881-2.5
Misc : op92998a,e4m2881
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 14 15:54:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:54:24 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.746	152	324649	4.00	ppm	0.00
12) Fluorene-d10	13.724	176	581080	4.00	ppm	0.00
22) Fluoranthene-d10	17.904	212	845045	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	22.497	264	670517	4.00	ppm	-0.01
35) 1-Methylnaphthalene-d10a	10.746	152	324649	4.00	ppm	0.00
38) Fluorene-d10a	13.724	176	581080	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	4.742	112	2026720	47.36	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 94.72%#			
3) Phenol-d5	6.338	99	3444661	47.94	ppm	0.00
Spiked Amount 50.000			Recovery = 95.88%			
6) Nitrobenzene-d5	7.879	82	3129845	48.66	ppm	0.00
Spiked Amount 50.000			Recovery = 97.32%			
11) 2-Fluorobiphenyl	11.414	172	3910650	40.77	ppm	0.00
Spiked Amount 50.000			Recovery = 81.54%			
17) 2,4,6-Tribromophenol	14.273	330	1278690	40.09	ppm	-0.02
Spiked Amount 50.000			Recovery = 80.18%			
25) Terphenyl-d14	18.713	244	5679415	49.71	ppm	0.00
Spiked Amount 50.000			Recovery = 99.42%			
Target Compounds						Qvalue
4) Phenol	6.352	94	894753	12.18	ppm	# 57
5) bis(2-Chloroethyl)ether	6.435	93	133511	2.41	ppm	# 28
7) Naphthalene	9.256	128	433332	2.36	ppm	100
8) Hexachlorobutadiene	9.566	225	106234	2.34	ppm	98
9) 2-Methylnaphthalene	10.626	142	194348	2.44	ppm	100
10) Hexachlorocyclopentadiene	10.984	237	143850	6.27	ppm	98
13) Acenaphthylene	12.388	152	339981	2.56	ppm	100
14) Acenaphthene	12.743	153	213873	2.49	ppm	97
15) Dibenzofuran	13.098	168	297774	2.31	ppm	70
16) Fluorene	13.772	166	365612	2.34	ppm	96
18) Hexachlorobenzene	14.883	284	145932	2.39	ppm	99
19) Pentachlorophenol	15.316	266	351671	14.45	ppm	97
20) Phenanthrene	15.687	178	502638	2.39	ppm	99
21) Anthracene	15.780	178	498266	2.52	ppm	99
23) Fluoranthene	17.941	202	592841	2.62	ppm	100
24) Pyrene	18.337	202	577158	2.58	ppm	99
26) Benzo[a]anthracene	20.427	228	534703	2.58	ppm	98
27) Chrysene	20.483	228	533551	2.64	ppm	98
29) Benzo[b]fluoranthene	22.084	252	581595	2.40	ppm	97
30) Benzo[k]fluoranthene	22.126	252	522902	2.60	ppm	97
31) Benzo[a]pyrene	22.539	252	502861	2.52	ppm	98
32) Indeno[1,2,3-cd]pyrene	24.067	276	617190	2.46	ppm	100
33) Dibenz[a,h]anthracene	24.108	278	501777	2.49	ppm	99
34) Benzo[g,h,i]perylene	24.452	276	525302	2.48	ppm	100
36) 1,4-Dioxane	2.461	88	36555	1.63	ppm	88
37) 1-Methylnaphthalene	10.817	142	169119	2.20	ppm	100
39) 4,6-dinitro-2-methylph...	13.963	198	254485	19.99	ppm	98

SGS ACCUTEST JC18516

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

7.6.79

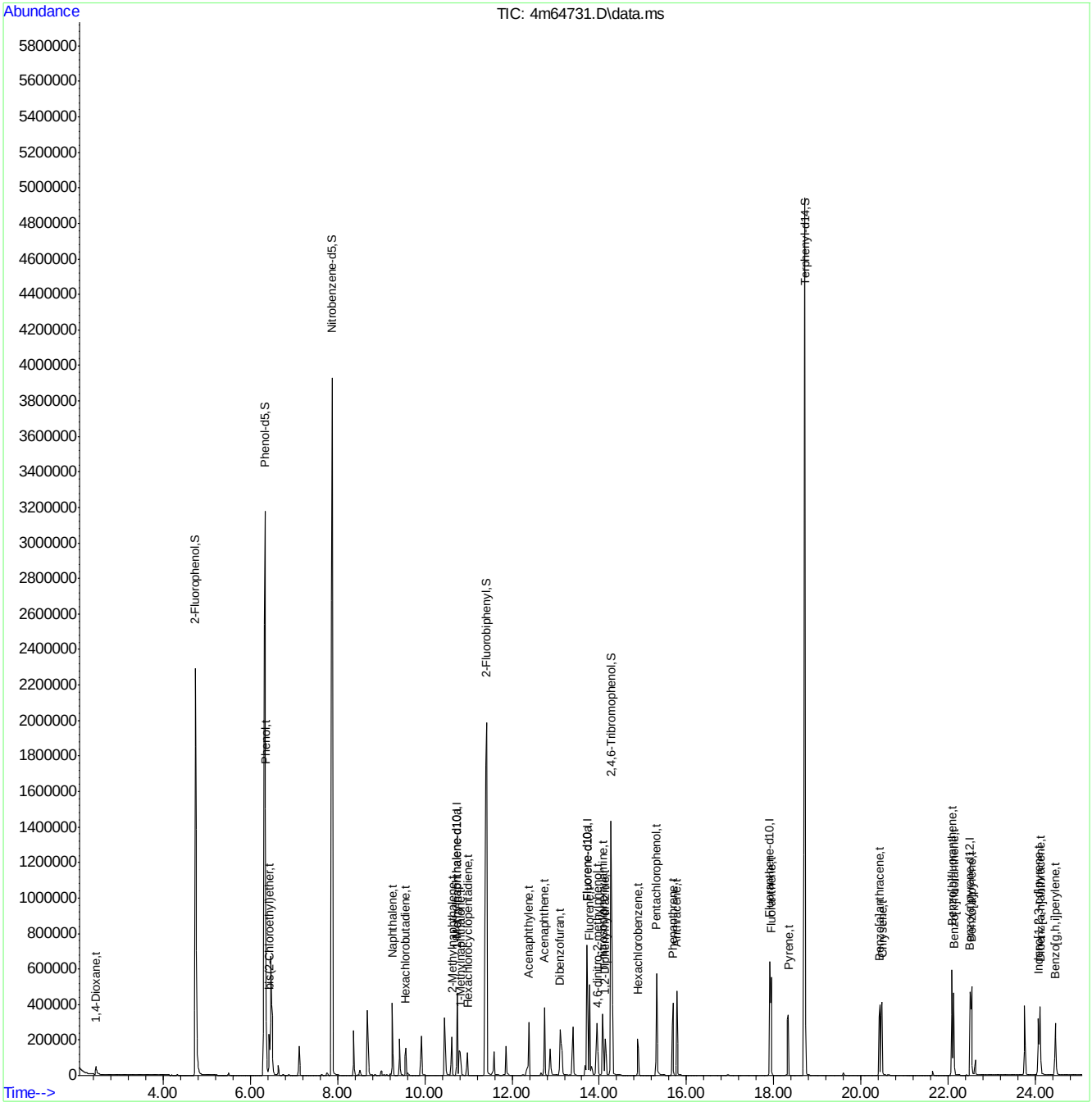
7

SGS ACCUTEST JC18516

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 JC18516

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

7.6.80

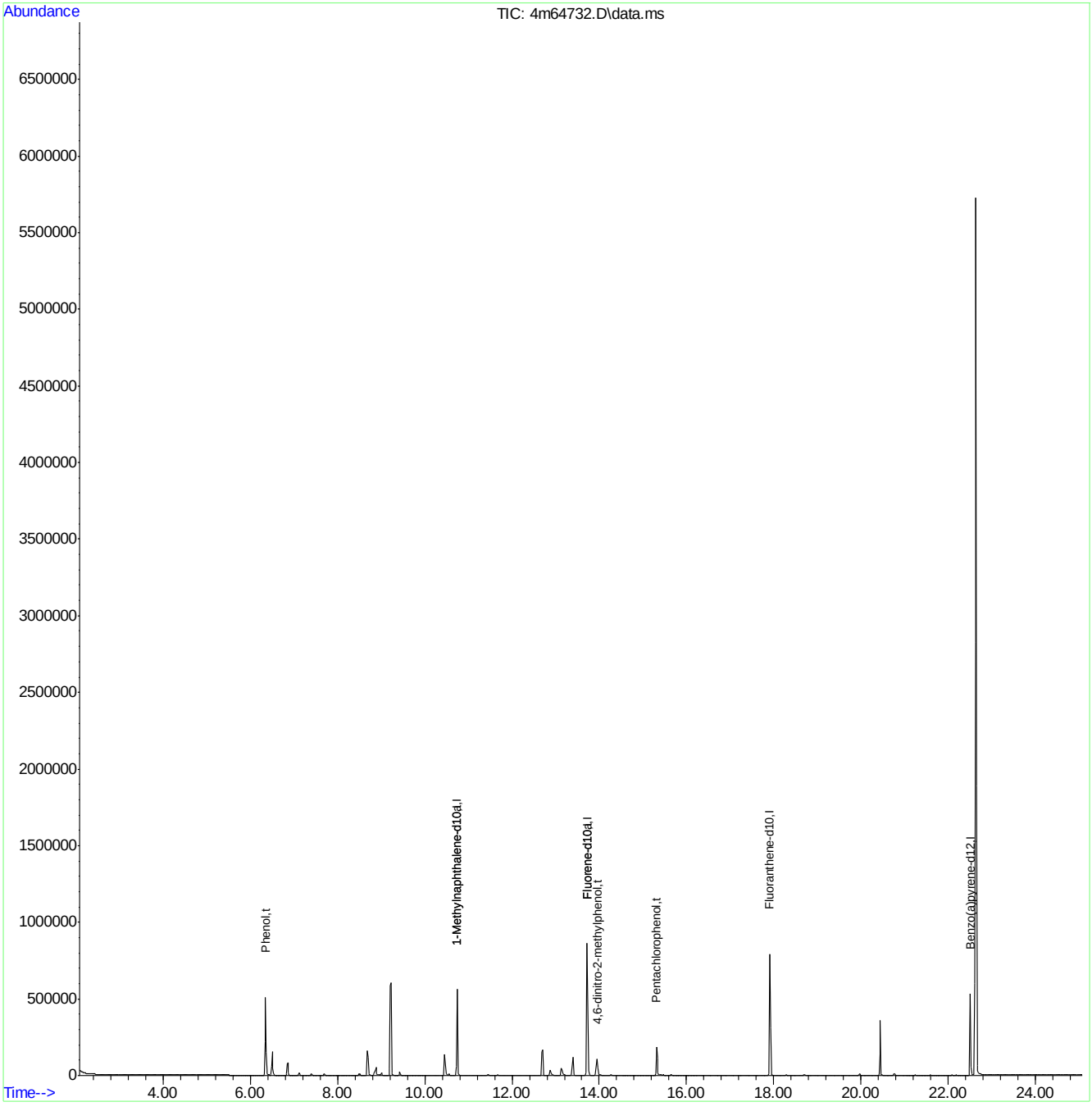
7

SGS ACCUTEST JC18516

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

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

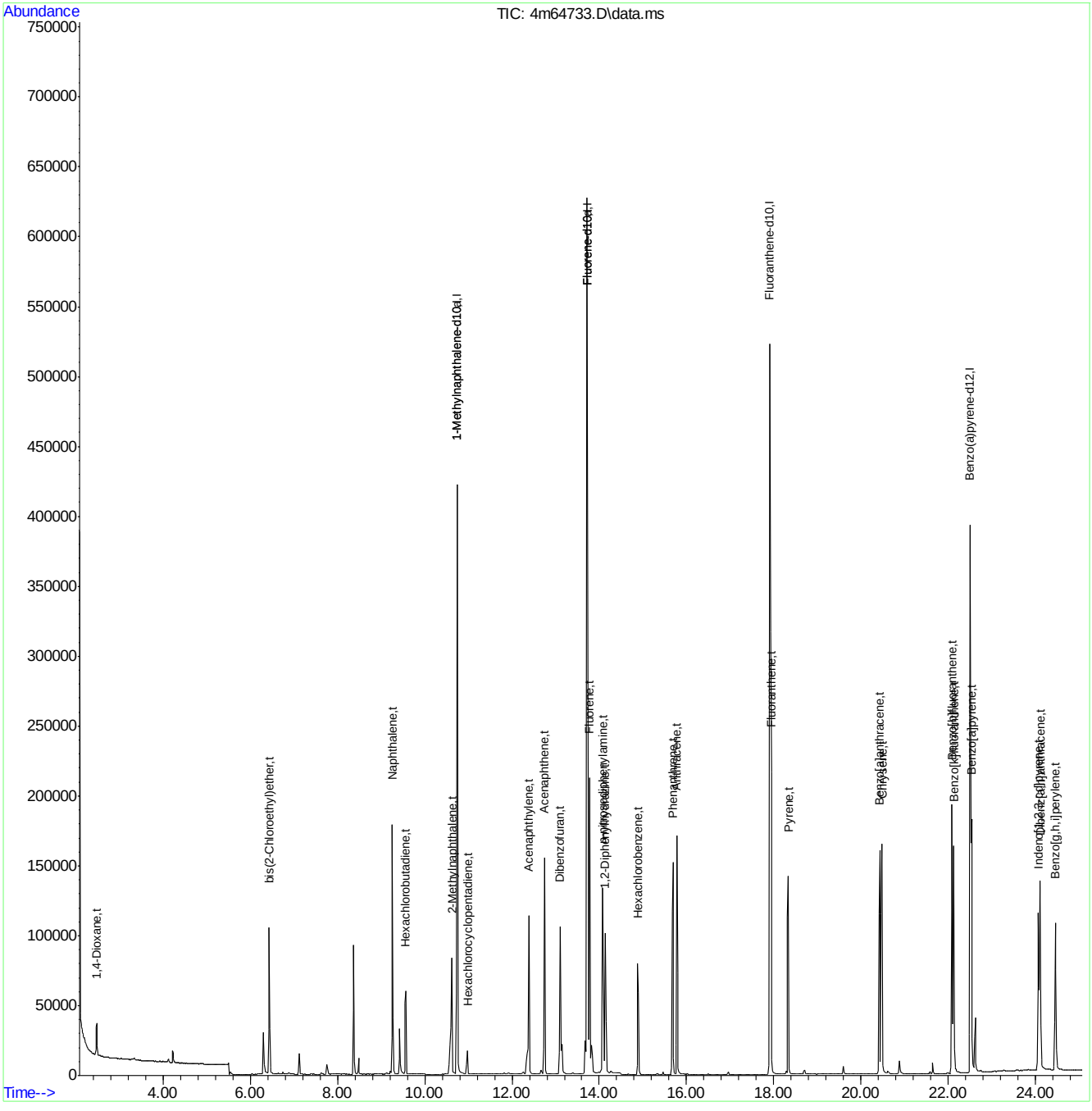
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

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 JC18516

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

7.6.82

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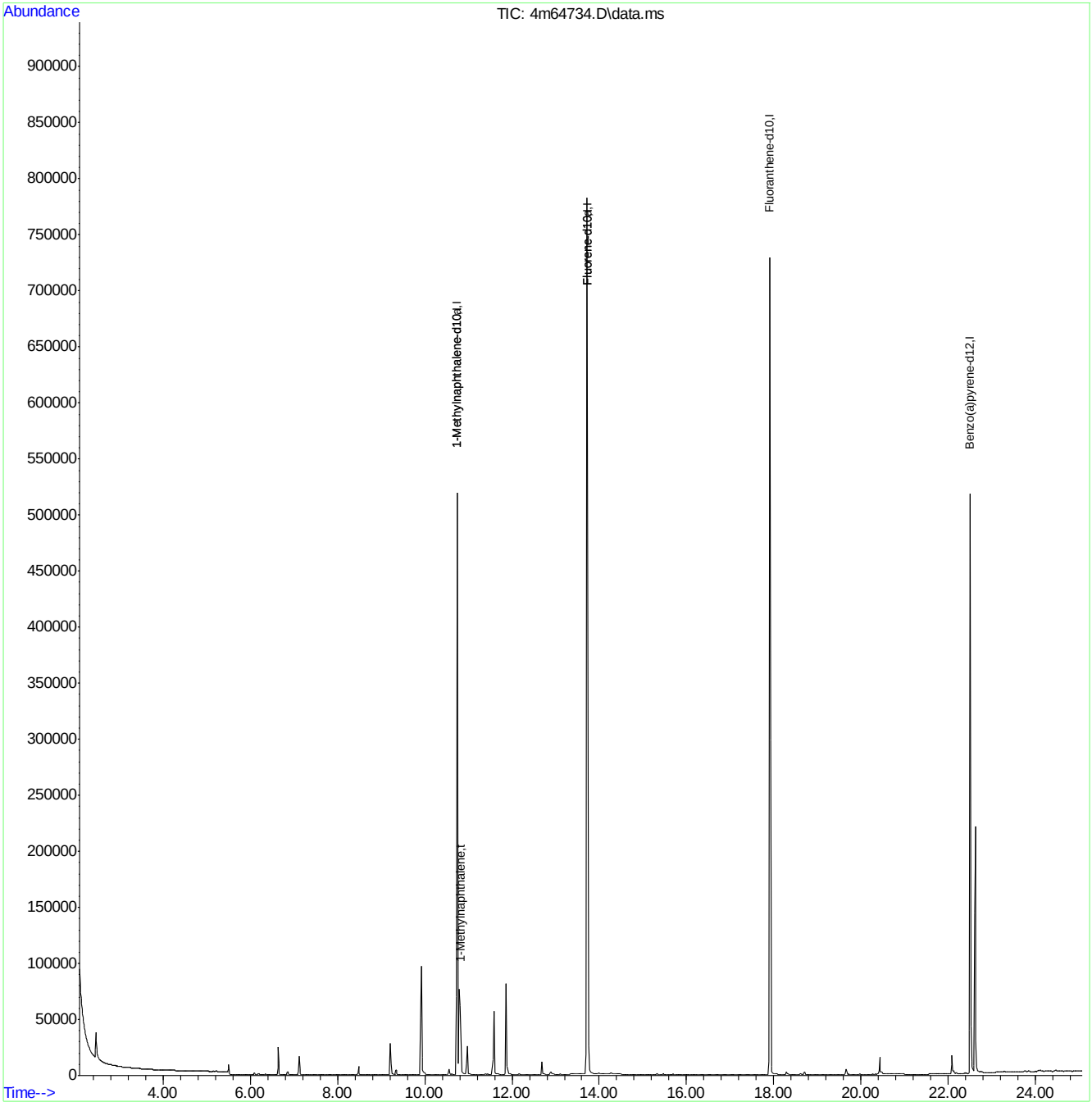
SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64734.D
Acq On : 14 Apr 2016 4:28 pm
Operator : linseyk
Sample : icv2881-1.0
Misc : op92998a,e4m2881
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 14 17:01:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:54:58 2016
Response via : Initial Calibration



M4M2881SIM.M Thu Apr 14 17:02:12 2016 MANAGER

Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2885\
Data File : 4m64802.D
Acq On : 18 Apr 2016 2:36 pm
Operator : linseyk
Sample : cc2881-.5
Misc : op93089a,e4m2885
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 18 15:09:58 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	10.698	152	246416	4.00	ppm	-0.05
12) Fluorene-d10	13.676	176	370942	4.00	ppm	-0.05
22) Fluoranthene-d10	17.866	212	662647	4.00	ppm	-0.04
28) Benzo(a)pyrene-d12	22.470	264	507705	4.00	ppm	-0.03
35) 1-Methylnaphthalene-d10a	10.698	152	246416	4.00	ppm	-0.05
38) Fluorene-d10a	13.676	176	370942	4.00	ppm	-0.05
System Monitoring Compounds						
2) 2-Fluorophenol	4.710	112	299306	9.28	ppm	-0.03
Spiked Amount 50.000	Range 11 - 58		Recovery = 18.56%			
3) Phenol-d5	6.297	99	508272	9.37	ppm	-0.04
Spiked Amount 50.000			Recovery = 18.74%			
6) Nitrobenzene-d5	7.833	82	467883	9.62	ppm	-0.05
Spiked Amount 50.000			Recovery = 19.24%			
11) 2-Fluorobiphenyl	11.366	172	624173	8.78	ppm	-0.05
Spiked Amount 50.000			Recovery = 17.56%			
17) 2,4,6-Tribromophenol	14.225	330	197660	9.99	ppm	-0.05
Spiked Amount 50.000			Recovery = 19.98%			
25) Terphenyl-d14	18.676	244	941241	10.51	ppm	-0.04
Spiked Amount 50.000			Recovery = 21.02%			
Target Compounds						Qvalue
4) Phenol	6.324	94	132695	2.39	ppm	92
5) bis(2-Chloroethyl)ether	6.393	93	19481	0.47	ppm	91
7) Naphthalene	9.210	128	63731	0.46	ppm	97
8) Hexachlorobutadiene	9.519	225	15915	0.46	ppm	89
9) 2-Methylnaphthalene	10.578	142	36318	0.60	ppm	87
10) Hexachlorocyclopentadiene	10.936	237	22020	1.17	ppm	91
13) Acenaphthylene	12.343	152	53365	0.63	ppm	98
14) Acenaphthene	12.698	153	34951	0.64	ppm	95
15) Dibenzofuran	13.053	168	46218	0.57	ppm	96
16) Fluorene	13.724	166	48448	0.49	ppm	90
18) Hexachlorobenzene	14.852	284	21366	0.55	ppm	72
19) Pentachlorophenol	15.285	266	50986	3.21	ppm	85
20) Phenanthrene	15.640	178	78095	0.59	ppm	98
21) Anthracene	15.733	178	76057	0.60	ppm	98
23) Fluoranthene	17.904	202	88117	0.49	ppm	98
24) Pyrene	18.280	202	89479	0.51	ppm	83
26) Benzo[a]anthracene	20.389	228	84271	0.52	ppm #	87
27) Chrysene	20.445	228	80340	0.50	ppm	77
29) Benzo[b]fluoranthene	22.043	252	88651	0.49	ppm	96
30) Benzo[k]fluoranthene	22.084	252	86279	0.56	ppm	95
31) Benzo[a]pyrene	22.497	252	76848	0.51	ppm	97
32) Indeno[1,2,3-cd]pyrene	24.025	276	95326	0.50	ppm	95
33) Dibenz[a,h]anthracene	24.053	278	78806	0.52	ppm	94
34) Benzo[g,h,i]perylene	24.411	276	80830	0.51	ppm	100
36) 1,4-Dioxane	2.430	88	7667	0.52	ppm	95
37) 1-Methylnaphthalene	10.769	142	32641	0.57	ppm	90
39) 4,6-dinitro-2-methylph...	13.915	198	32407	3.40	ppm	91

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2885\
Data File : 4m64802.D
Acq On : 18 Apr 2016 2:36 pm
Operator : linseyk
Sample : cc2881-.5
Misc : op93089a,e4m2885
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 18 15:09:58 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)
40) 1,2-Diphenylhydrazine	14.082	77	43040	0.49	ppm	96
41) n-nitrosodiphenylamine	14.034	169	28981	0.44	ppm	86

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

7.6.83

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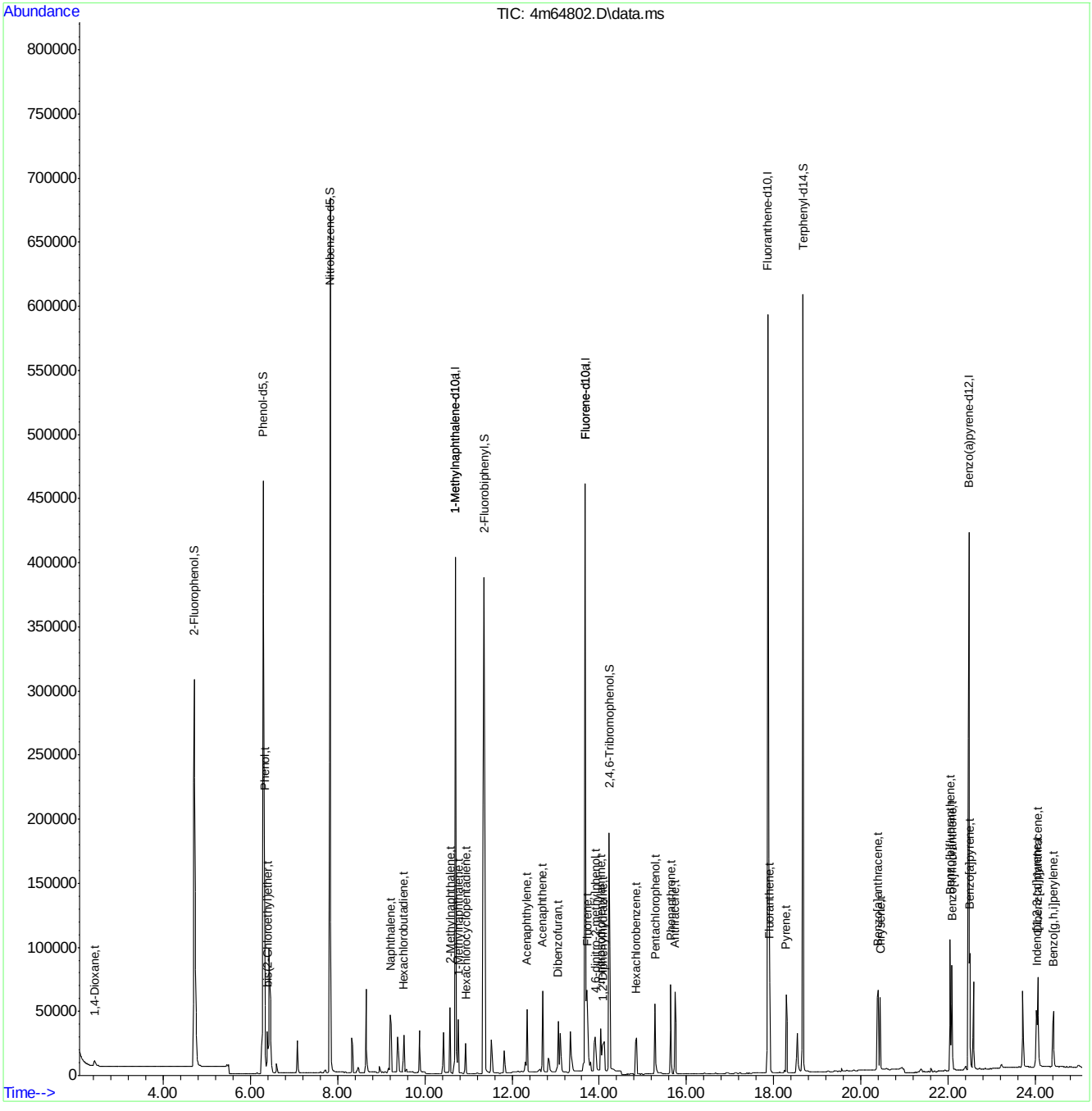
SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2885\
Data File : 4m64802.D
Acq On : 18 Apr 2016 2:36 pm
Operator : linseyk
Sample : cc2881-.5
Misc : op93089a,e4m2885
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 18 15:09:58 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



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2886\
Data File : 4m64825.D
Acq On : 19 Apr 2016 9:10 am
Operator : linseyk
Sample : cc2881-1
Misc : op93128a,e4m2886
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 19 09:35:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Mon Apr 18 16:04:01 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.698	152	359166	4.00	ppm	-0.05
12) Fluorene-d10	13.676	176	588620	4.00	ppm	-0.05
22) Fluoranthene-d10	17.866	212	976377	4.00	ppm	-0.04
28) Benzo(a)pyrene-d12	22.470	264	727755	4.00	ppm	-0.03
35) 1-Methylnaphthalene-d10a	10.698	152	359166	4.00	ppm	-0.05
38) Fluorene-d10a	13.676	176	588620	4.00	ppm	-0.05
System Monitoring Compounds						
2) 2-Fluorophenol	4.710	112	873709	18.58	ppm	-0.03
Spiked Amount 50.000	Range 11 - 58		Recovery = 37.16%			
3) Phenol-d5	6.297	99	1479959	18.71	ppm	-0.04
Spiked Amount 50.000			Recovery = 37.42%			
6) Nitrobenzene-d5	7.833	82	1391832	19.63	ppm	-0.05
Spiked Amount 50.000			Recovery = 39.26%			
11) 2-Fluorobiphenyl	11.366	172	1706192	16.46	ppm	-0.05
Spiked Amount 50.000			Recovery = 32.92%			
17) 2,4,6-Tribromophenol	14.225	330	599267	19.09	ppm	-0.05
Spiked Amount 50.000			Recovery = 38.18%			
25) Terphenyl-d14	18.676	244	2903603	22.01	ppm	-0.04
Spiked Amount 50.000			Recovery = 44.02%			
Target Compounds						Qvalue
4) Phenol	6.324	94	388579	4.80	ppm	88
5) bis(2-Chloroethyl)ether	6.393	93	58659	0.96	ppm #	49
7) Naphthalene	9.210	128	189896	0.94	ppm	99
8) Hexachlorobutadiene	9.519	225	47117	0.94	ppm	99
9) 2-Methylnaphthalene	10.578	142	92217	1.05	ppm	97
10) Hexachlorocyclopentadiene	10.936	237	61705	2.10	ppm	99
13) Acenaphthylene	12.343	152	141039	1.05	ppm	99
14) Acenaphthene	12.698	153	93093	1.07	ppm	95
15) Dibenzofuran	13.053	168	148675	1.15	ppm	71
16) Fluorene	13.724	166	164337	1.05	ppm	97
18) Hexachlorobenzene	14.837	284	65773	1.07	ppm	98
19) Pentachlorophenol	15.269	266	162162	6.44	ppm	93
20) Phenanthrene	15.641	178	225519	1.07	ppm	99
21) Anthracene	15.733	178	233715	1.17	ppm	99
23) Fluoranthene	17.904	202	247960	0.94	ppm	96
24) Pyrene	18.280	202	271504	1.04	ppm	84
26) Benzo[a]anthracene	20.389	228	247248	1.03	ppm	95
27) Chrysene	20.445	228	235594	1.00	ppm	78
29) Benzo[b]fluoranthene	22.043	252	302075	1.15	ppm	95
30) Benzo[k]fluoranthene	22.084	252	196022	0.89	ppm	97
31) Benzo[a]pyrene	22.497	252	226397	1.04	ppm	94
32) Indeno[1,2,3-cd]pyrene	24.026	276	278218	1.03	ppm	100
33) Dibenz[a,h]anthracene	24.053	278	233759	1.07	ppm	90
34) Benzo[g,h,i]perylene	24.411	276	240823	1.05	ppm	100
36) 1,4-Dioxane	2.441	88	17933	0.94	ppm #	64
37) 1-Methylnaphthalene	10.769	142	78744	0.94	ppm	98
39) 4,6-dinitro-2-methylph...	13.915	198	105978	6.19	ppm	99

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2886\
Data File : 4m64825.D
Acq On : 19 Apr 2016 9:10 am
Operator : linseyk
Sample : cc2881-1
Misc : op93128a,e4m2886
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 19 09:35:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Mon Apr 18 16:04:01 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
40) 1,2-Diphenylhydrazine	14.082	77	144454	1.04 ppm	99
41) n-nitrosodiphenylamine	14.034	169	96661	0.94 ppm	95

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

7.6.84

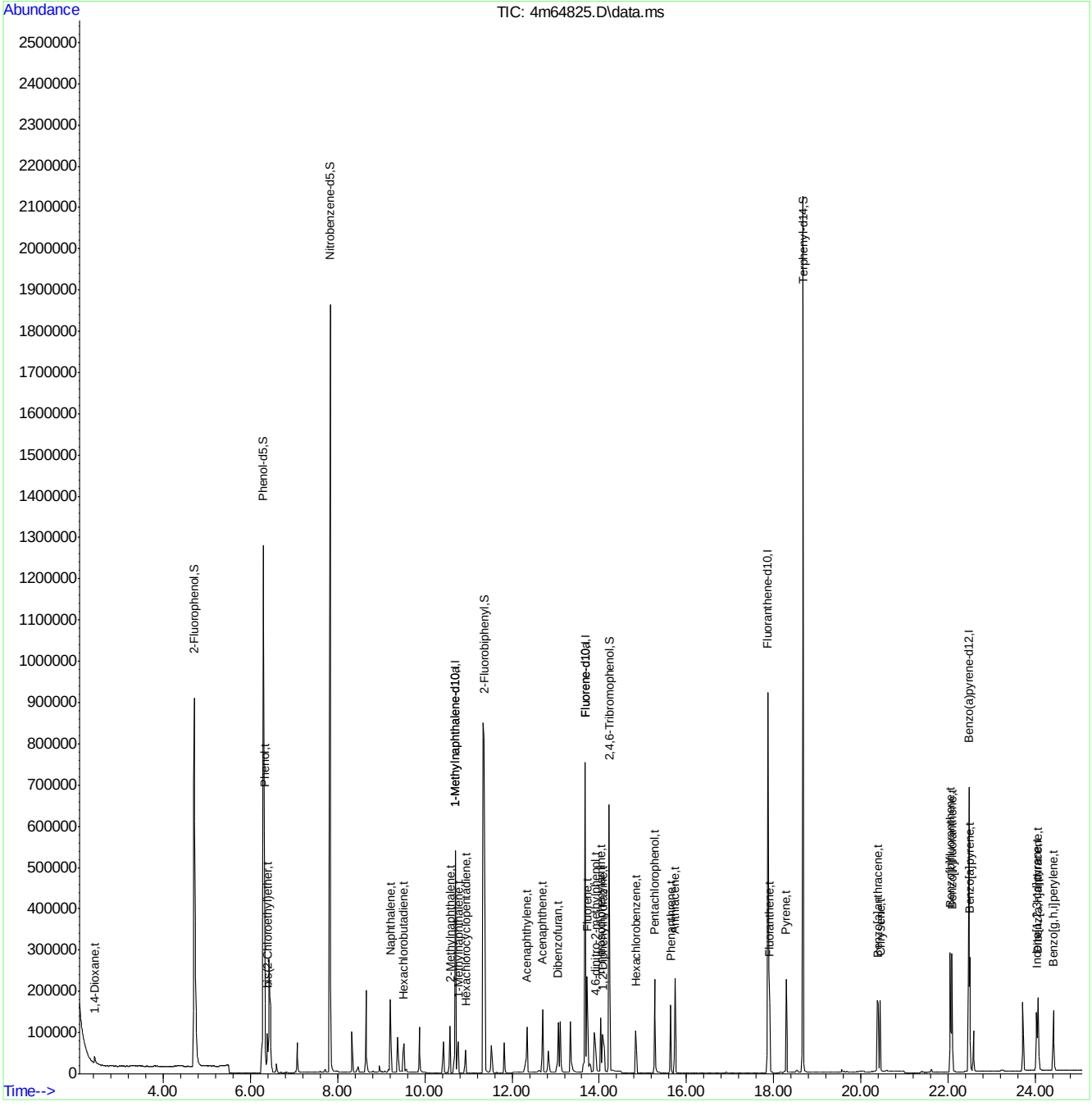
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2886\
Data File : 4m64825.D
Acq On : 19 Apr 2016 9:10 am
Operator : linseyk
Sample : cc2881-1
Misc : op93128a,e4m2886
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 19 09:35:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Mon Apr 18 16:04:01 2016
Response via : Initial Calibration



SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2900\
Data File : 4m65029.D
Acq On : 2 May 2016 8:55 am
Operator : linseyk
Sample : cc2881-1
Misc : op90303a,e4m2900
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 02 15:39:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Mon May 02 15:39:52 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1-Methylnaphthalene-d10	10.654	152	174156	4.00	ppm		#-0.04
12) Fluorene-d10	13.632	176	317888	4.00	ppm		-0.04
22) Fluoranthene-d10	17.817	212	550378	4.00	ppm		-0.05
28) Benzo(a)pyrene-d12	22.422	264	452374	4.00	ppm		0.00
35) 1-Methylnaphthalene-d10a	10.654	152	174156	4.00	ppm		#-0.04
38) Fluorene-d10a	13.632	176	317888	4.00	ppm		-0.04
System Monitoring Compounds							
2) 2-Fluorophenol	4.683	112	528934	23.20	ppm		-0.04
Spiked Amount 50.000	Range 11 - 58		Recovery = 46.40%				
3) Phenol-d5	6.260	99	900094	23.47	ppm		-0.05
Spiked Amount 50.000			Recovery = 46.94%				
6) Nitrobenzene-d5	7.791	82	840130	24.43	ppm		-0.05
Spiked Amount 50.000			Recovery = 48.86%				
11) 2-Fluorobiphenyl	11.323	172	1304851	25.96	ppm		-0.04
Spiked Amount 50.000			Recovery = 51.92%				
17) 2,4,6-Tribromophenol	14.182	330	367139	21.65	ppm		-0.04
Spiked Amount 50.000			Recovery = 43.30%				
25) Terphenyl-d14	18.627	244	1742486	23.43	ppm		-0.05
Spiked Amount 50.000			Recovery = 46.86%				
Target Compounds							Qvalue
4) Phenol	6.287	94	233991	5.96	ppm		86
5) bis(2-Chloroethyl)ether	6.370	93	33994	1.15	ppm	#	30
7) Naphthalene	9.183	128	110801	1.13	ppm		97
8) Hexachlorobutadiene	9.477	225	29433	1.22	ppm		81
9) 2-Methylnaphthalene	10.535	142	61567	1.44	ppm		80
10) Hexachlorocyclopentadiene	10.893	237	47005	3.19	ppm		81
13) Acenaphthylene	12.303	152	85621	1.18	ppm		100
14) Acenaphthene	12.658	153	54825	1.17	ppm		99
15) Dibenzofuran	13.013	168	82707	1.18	ppm		71
16) Fluorene	13.680	166	82439	0.97	ppm		91
18) Hexachlorobenzene	14.794	284	37850	1.14	ppm		100
19) Pentachlorophenol	15.227	266	96811	7.11	ppm		94
20) Phenanthrene	15.583	178	130365	1.14	ppm		89
21) Anthracene	15.691	178	130175	1.20	ppm		98
23) Fluoranthene	17.855	202	155712	1.05	ppm		98
24) Pyrene	18.250	202	152383	1.04	ppm		98
26) Benzo[a]anthracene	20.340	228	144231	1.06	ppm	#	82
27) Chrysene	20.397	228	142604	1.07	ppm		96
29) Benzo[b]fluoranthene	21.995	252	151077	0.93	ppm		97
30) Benzo[k]fluoranthene	22.037	252	139707	1.03	ppm		98
31) Benzo[a]pyrene	22.450	252	132151	0.98	ppm		90
32) Indeno[1,2,3-cd]pyrene	23.964	276	169533	1.00	ppm		96
33) Dibenz[a,h]anthracene	23.992	278	139944	1.03	ppm		97
34) Benzo[g,h,i]perylene	24.336	276	145273	1.02	ppm		99
36) 1,4-Dioxane	2.403	88	11204	0.99	ppm		87
37) 1-Methylnaphthalene	10.726	142	60648	1.49	ppm		81
39) 4,6-dinitro-2-methylph...	13.871	198	76246	7.82	ppm		88

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2900\
Data File : 4m65029.D
Acq On : 2 May 2016 8:55 am
Operator : linseyk
Sample : cc2881-1
Misc : op90303a,e4m2900
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 02 15:39:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Mon May 02 15:39:52 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
40) 1,2-Diphenylhydrazine	14.038	77	70860	0.94 ppm	96
41) n-nitrosodiphenylamine	13.991	169	49056	0.88 ppm	86

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

7.6.85

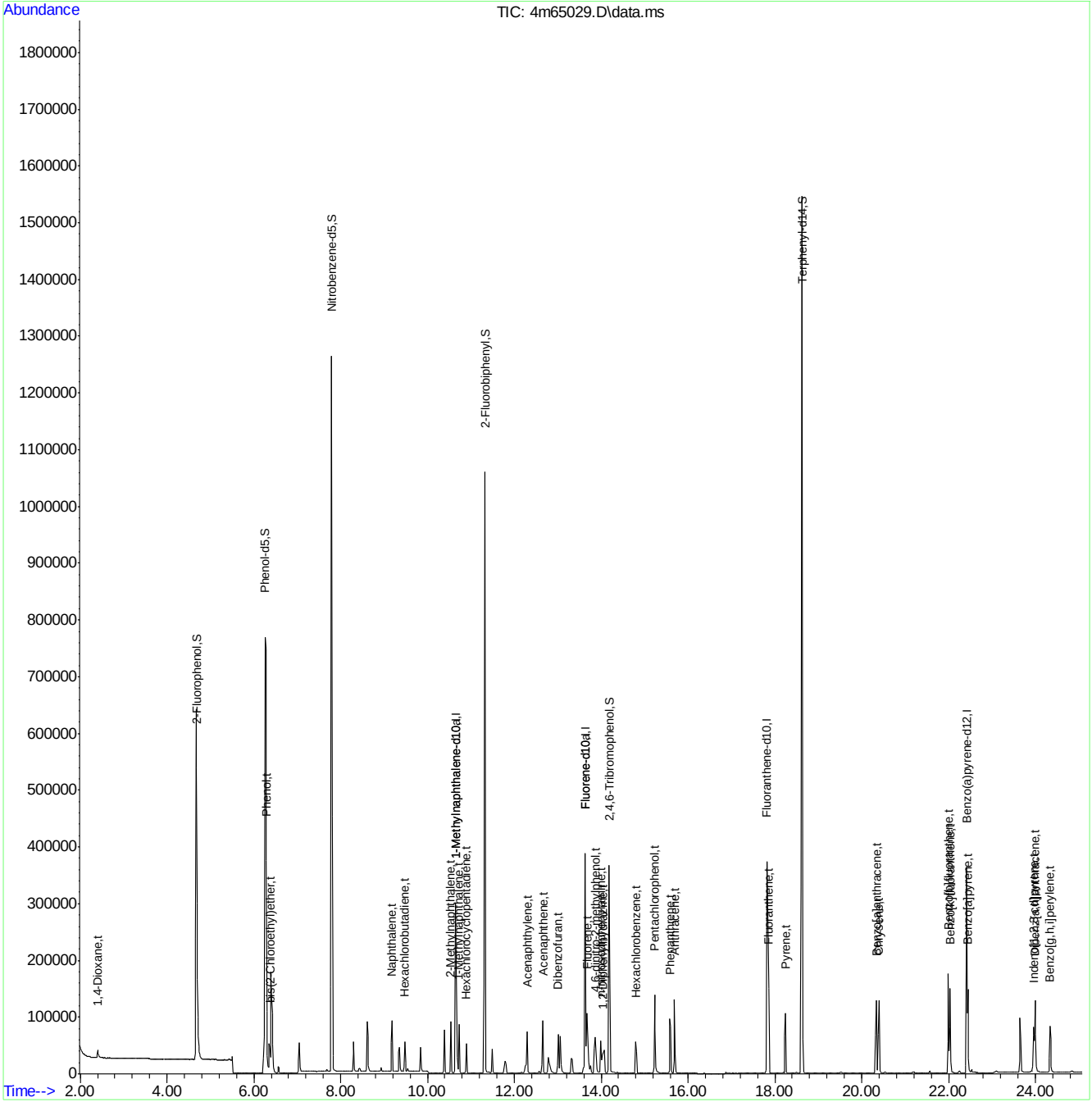
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2900\
Data File : 4m65029.D
Acq On : 2 May 2016 8:55 am
Operator : linseyk
Sample : cc2881-1
Misc : op90303a,e4m2900
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 02 15:39:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Mon May 02 15:39:52 2016
Response via : Initial Calibration



M4M2881SIM.M Mon May 02 15:40:28 2016 MANAGER Page: 3

SGS ACCUTEST JC18516

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/13/16 13:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123506.D
Acq On : 12 Apr 2016 6:04 pm
Operator : sarad
Sample : ic5217-2
Misc : op92514,em5217
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 13 08:42:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:39:45 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.740	152	353054	40.00	ppm	0.00
24) Naphthalene-d8	5.883	136	1349163	40.00	ppm	0.00
47) Acenaphthene-d10	8.238	164	827850	40.00	ppm	0.00
69) Phenanthrene-d10	10.871	188	1457128	40.00	ppm	0.00
83) Chrysene-d12	16.047	240	1501120	40.00	ppm	0.00
92) Perylene-d12	18.675	264	1487177	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.740	152	353054	40.00	ppm	0.00
104) Acenaphthene-d10a	8.238	164	827850	40.00	ppm	0.00
107) Chrysene-d12a	16.047	240	1501046	40.00	ppm	0.00
110) Phenanthrene-d10a	10.871	188	1457128	40.00	ppm	0.00
112) Naphthalene-d8a	5.883	136	1349163	40.00	ppm	0.00
114) Chrysene-d12b	16.047	240	1501120	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.805	112	22608	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
8) Phenol-d5	4.515	99	27492	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
25) Nitrobenzene-d5	5.194	82	24685	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
51) 2-Fluorobiphenyl	7.218	172	62456	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
73) 2,4,6-Tribromophenol	9.611	330	10165	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
86) Terphenyl-d14	14.039	244	73873	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.315	88	10502	2.00	ppm	100
3) Pyridine	2.683	79	26188	2.00	ppm	100
4) N-Nitrosodimethylamine	2.619	42	11153	2.00	ppm	100
6) Indene	4.943	116	43867	2.00	ppm	100
7) Cumene	4.136	105	59159	2.00	ppm	100
9) Phenol	4.526	94	29661	2.00	ppm	100
10) Aniline	4.494	93	34516	2.00	ppm	100
11) bis(2-Chloroethyl)ether	4.531	93	24153	2.00	ppm	100
12) 2-Chlorophenol	4.601	128	26773	2.00	ppm	100
13) Decane	4.606	43	27279	2.00	ppm	100
14) 1,3-Dichlorobenzene	4.697	146	29862	2.00	ppm	100
15) 1,4-Dichlorobenzene	4.750	146	29310	2.00	ppm	100
16) Benzyl alcohol	4.863	108	14560	2.00	ppm	100
17) 1,2-Dichlorobenzene	4.873	146	28085	2.00	ppm	100
18) Acetophenone	5.066	105	34759	2.00	ppm	100
19) 2-Methylphenol	4.975	108	21233	2.00	ppm	100
20) 2,2'-oxybis(1-Chloropr...	4.953	121	7957	2.00	ppm	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123506.D
Acq On : 12 Apr 2016 6:04 pm
Operator : sarad
Sample : ic5217-2
Misc : op92514,em5217
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 13 08:42:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:39:45 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	5.103	108	23720	2.00	ppm	100
22) n-Nitroso-di-n-propyla...	5.060	70	19149	2.00	ppm	100
23) Hexachloroethane	5.151	201	11178	2.00	ppm	100
26) Nitrobenzene	5.210	77	27081	2.00	ppm	100
27) Quinoline	6.283	129	56131	2.00	ppm	100
28) Isophorone	5.423	82	47220	2.00	ppm	100
29) 2-Nitrophenol	5.503	139	13787	2.00	ppm	100
30) 2,4-Dimethylphenol	5.562	107	24589	2.00	ppm	100
31) Benzoic acid	5.674	105	10770	2.00	ppm	100
32) bis(2-Chloroethoxy)met...	5.621	93	28779	2.00	ppm	100
33) 2,4-Dichlorophenol	5.781	162	22290	2.00	ppm	100
34) 2,6-Dichlorophenol	5.984	162	23146	2.00	ppm	100
35) 1,3,5-Trichlorobenzene	5.509	180	26764	2.00	ppm	100
36) 1,2,4-Trichlorobenzene	5.824	180	25945	2.00	ppm	100
37) 1,2,3-Trichlorobenzene	6.064	180	26089	2.00	ppm	100
38) Naphthalene	5.904	128	77451	2.00	ppm	100
39) 4-Chloroaniline	5.973	127	31402	2.00	ppm	100
40) 2,3-Dichloroaniline	7.106	161	29187	2.00	ppm	100
41) Caprolactam	6.347	55	13868	2.00	ppm	100
42) Hexachlorobutadiene	6.032	225	15142	2.00	ppm	100
43) 4-Chloro-3-methylphenol	6.588	107	22283	2.00	ppm	100
44) 2-Methylnaphthalene	6.716	141	45834	2.00	ppm	100
45) 1-Methylnaphthalene	6.844	142	54890	2.00	ppm	100
46) Dimethylnaphthalene	7.592	156	49916	2.00	ppm	100
48) Hexachlorocyclopentadiene	6.930	237	10609	4.00	ppm	100
49) 2,4,6-Trichlorophenol	7.127	196	17392	2.00	ppm	100
50) 2,4,5-Trichlorophenol	7.218	196	19406	2.00	ppm	100
52) 2-Chloronaphthalene	7.384	162	54805	2.00	ppm	100
53) Biphenyl	7.362	154	67614	2.00	ppm	100
54) 2-Nitroaniline	7.560	65	15136	2.00	ppm	100
55) Dimethylphthalate	7.838	163	61502	2.00	ppm	100
56) Acenaphthylene	8.008	152	87080	2.00	ppm	100
57) 2,6-Dinitrotoluene	7.928	165	13081	2.00	ppm	100
58) 3-Nitroaniline	8.211	138	14184	2.00	ppm	100
59) Acenaphthene	8.292	153	53595	2.00	ppm	100
60) 2,4-Dinitrophenol	8.409	184	4262	4.00	ppm	100
61) 4-Nitrophenol	8.697	109	5914	2.00	ppm	100
62) Dibenzofuran	8.580	168	80037	2.00	ppm	100
63) 2,4-Dinitrotoluene	8.601	165	16573	2.00	ppm	100
64) 2,3,4,6-Tetrachlorophenol	8.836	232	13115	2.00	ppm	100
65) Diethylphthalate	9.029	149	61137	2.00	ppm	100
66) Fluorene	9.167	166	62899	2.00	ppm	100
67) 4-Chlorophenyl-phenyle...	9.194	204	30288	2.00	ppm	100
68) 4-Nitroaniline	9.258	138	12733	2.00	ppm	100
70) 4,6-Dinitro-2-methylph...	9.322	198	5814	2.00	ppm	100
71) n-Nitrosodiphenylamine	9.413	169	41611	2.00	ppm	100
72) 1,2-Diphenylhydrazine	9.472	77	53751	2.00	ppm	100
74) 4-Bromophenyl-phenylether	10.070	248	19351	2.00	ppm	100
75) Hexachlorobenzene	10.166	284	22945	2.00	ppm	100
76) Pentachlorophenol	10.588	266	13056	4.00	ppm	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123506.D
Acq On : 12 Apr 2016 6:04 pm
Operator : sarad
Sample : ic5217-2
Misc : op92514,em5217
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 13 08:42:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:39:45 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) Phenanthrene	10.914	178	89686	2.00	ppm	100
78) Anthracene	11.010	178	91624	2.00	ppm	100
79) Carbazole	11.368	167	83031	2.00	ppm	100
80) Di-n-butylphthalate	12.142	149	102303	2.00	ppm	100
81) Fluoranthene	13.211	202	102466	2.00	ppm	100
82) Octadecane	10.845	57	33688	2.00	ppm	100
84) Pyrene	13.638	202	106409	2.00	ppm	100
85) Butyl stearate	15.320	56	24468	2.00	ppm	100
87) Butylbenzylphthalate	15.085	149	43311	2.00	ppm	100
88) Benzo[a]anthracene	16.031	228	101109	2.00	ppm	100
89) 3,3'-Dichlorobenzidine	16.057	252	34359	2.00	ppm	100
90) Chrysene	16.095	228	92503	2.00	ppm	100
91) bis(2-Ethylhexyl)phtha...	16.298	149	59710	2.00	ppm	100
93) Di-n-octylphthalate	17.521	149	105240	2.00	ppm	100
94) Benzo[b]fluoranthene	18.023	252	105635	2.00	ppm	100
95) Benzo[k]fluoranthene	18.071	252	101433	2.00	ppm	100
96) Benzo[a]pyrene	18.573	252	94954	2.00	ppm	100
97) Indeno[1,2,3-cd]pyrene	20.405	276	97557m	2.00	ppm	
98) Dibenz(a,h)acridine	20.031	279	84434	2.00	ppm	100
99) Dibenz[a,h]anthracene	20.448	278	100256	2.00	ppm	100
100) 7,12-Dimethylbenz(a)an...	18.023	256	46980	2.00	ppm	100
101) Benzo[g,h,i]perylene	20.870	276	104970	2.00	ppm	100

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

7.6.86

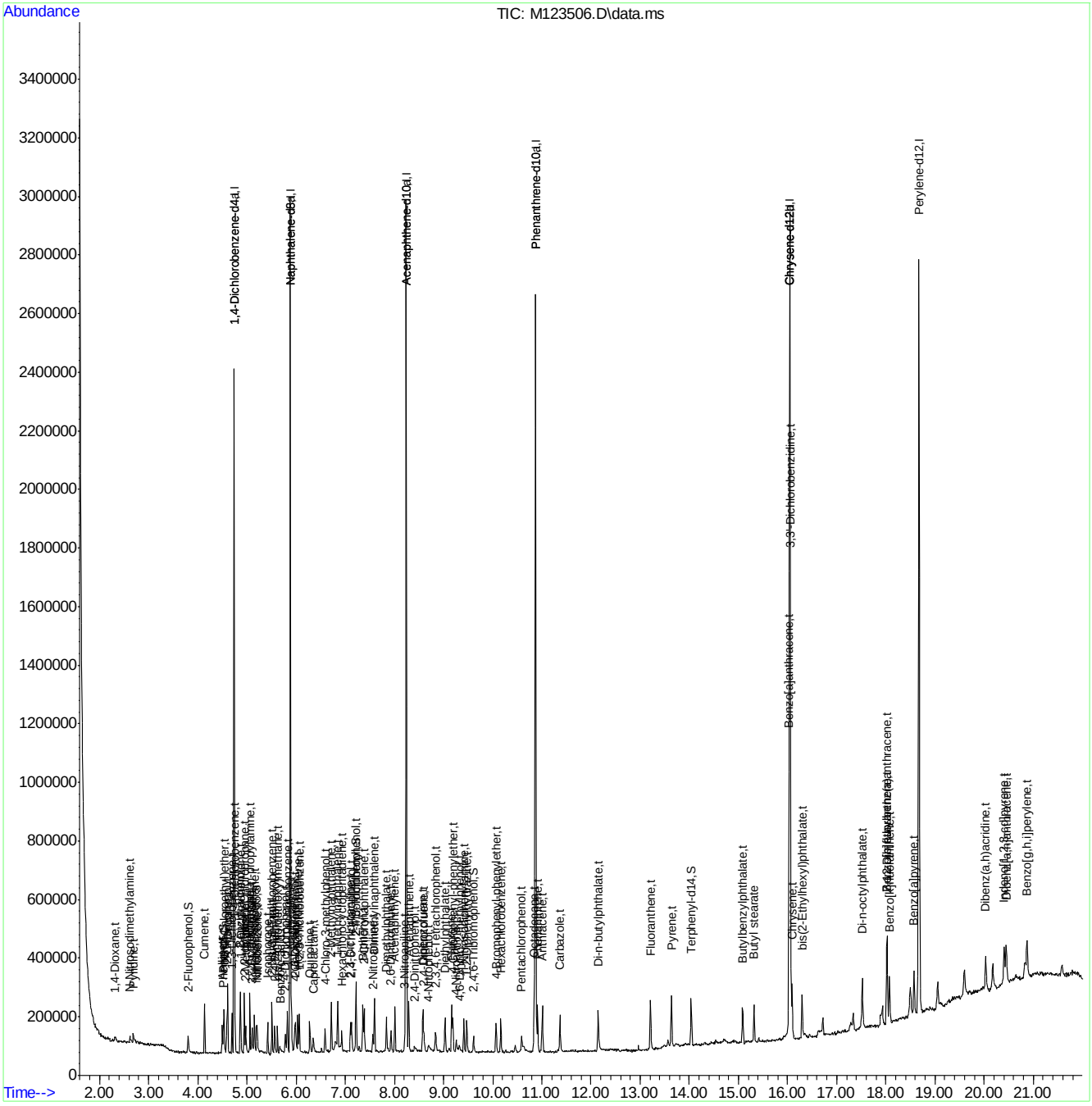
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123506.D
Acq On : 12 Apr 2016 6:04 pm
Operator : sarad
Sample : ic5217-2
Misc : op92514,em5217
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 13 08:42:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:39:45 2016
Response via : Initial Calibration



SGS ACCUTEST JC18516

Manual Integration Approval Summary

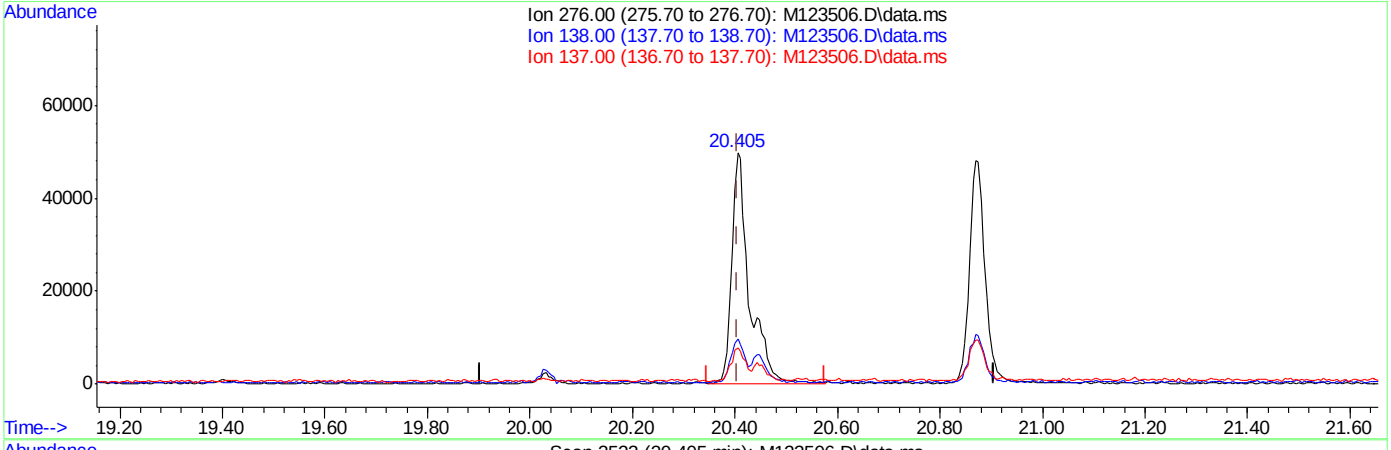
Sample Number:	EM5217-IC5217	**Method:**	SW846 8270D
Lab FileID:	M123506.D	**Analyst approved:**	04/13/16 13:03 Ashley Dye
Injection Time:	04/12/16 18:04	**Supervisor approved:**	04/13/16 13:43 Nina Pandya

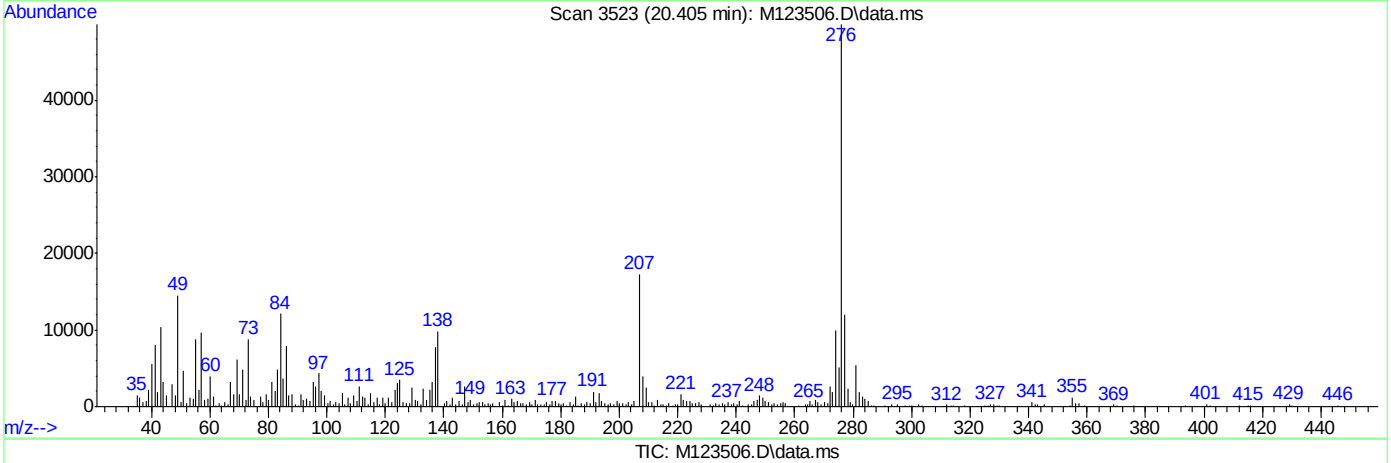
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		20.41	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123506.D
Acq On : 12 Apr 2016 6:04 pm
Operator : sarad
Sample : ic5217-2
Misc : op92514,em5217
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 13 08:38:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:37:50 2016
Response via : Initial Calibration





(97) Indeno[1,2,3-cd]pyrene (t)

20.405min (0.000) 2.49ppm

response 121176

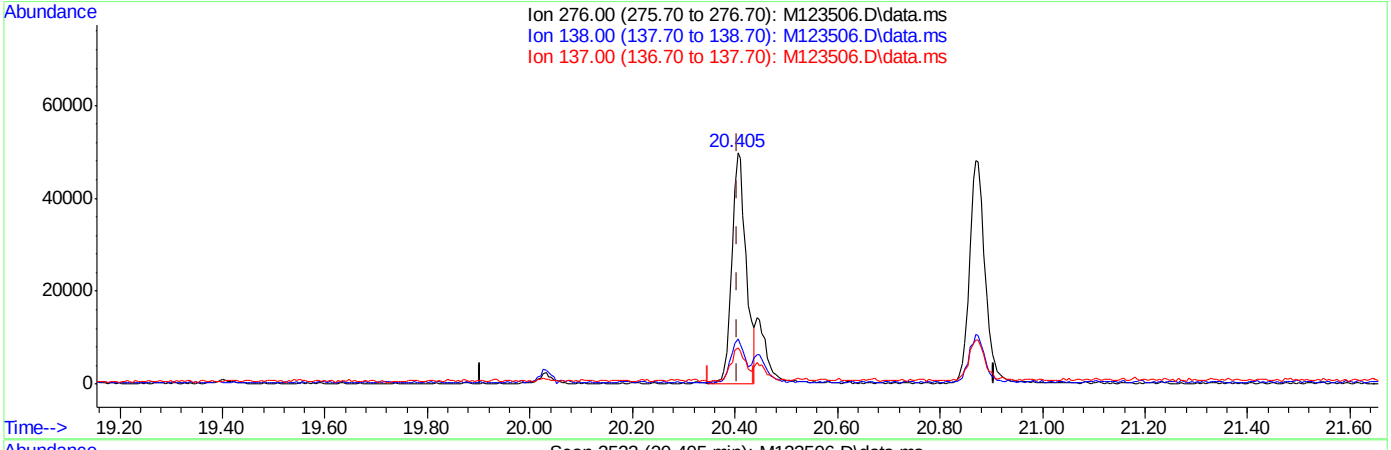
Ion	Exp%	Act%
276.00	100	100
138.00	15.30	18.78
137.00	12.70	13.78
0.00	0.00	0.00

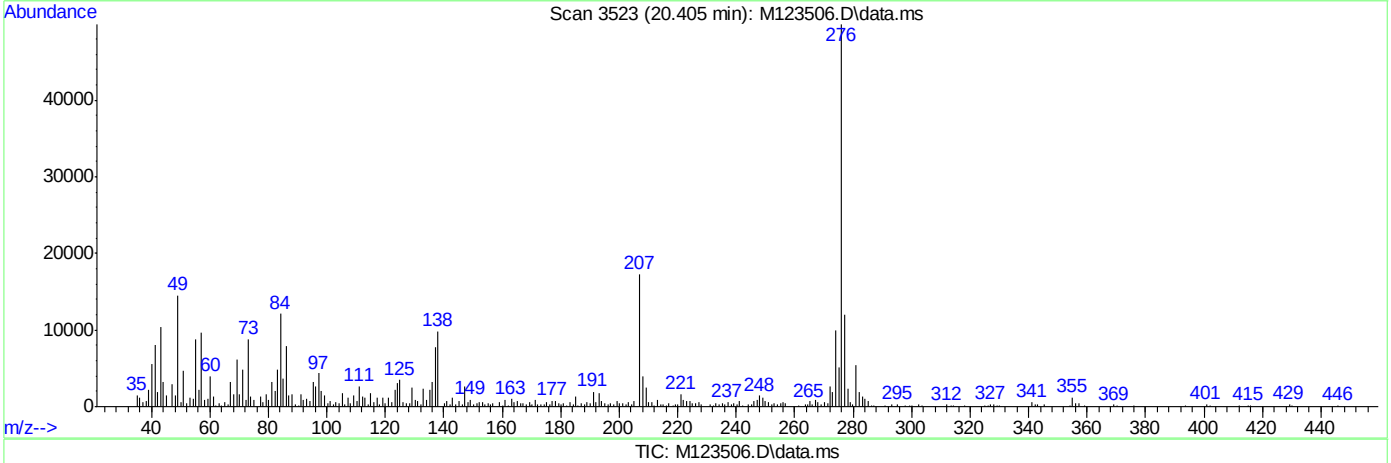
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123506.D
Acq On : 12 Apr 2016 6:04 pm
Operator : sarad
Sample : ic5217-2
Misc : op92514,em5217
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 13 08:42:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:39:45 2016
Response via : Initial Calibration





(97) Indeno[1,2,3-cd]pyrene (t)

20.405min (0.000) 2.00ppm m

response 97557

Ion	Exp%	Act%
276.00	100	100
138.00	19.70	19.66
137.00	15.40	15.43
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/13/16 13:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123507.D
Acq On : 12 Apr 2016 6:33 pm
Operator : sarad
Sample : ic5217-100
Misc : op92514,em5217
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 13 08:43:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:42:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.741	152	298398	40.00	ppm	0.00
24) Naphthalene-d8	5.884	136	1152427	40.00	ppm	0.00
47) Acenaphthene-d10	8.245	164	700074	40.00	ppm	0.00
69) Phenanthrene-d10	10.878	188	1239766	40.00	ppm	0.00
83) Chrysene-d12	16.059	240	1214118	40.00	ppm	0.01
92) Perylene-d12	18.682	264	1368506	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.741	152	298398	40.00	ppm	0.00
104) Acenaphthene-d10a	8.245	164	700074	40.00	ppm	0.00
107) Chrysene-d12a	16.059	240	1214118	40.00	ppm	0.01
110) Phenanthrene-d10a	10.878	188	1239766	40.00	ppm	0.00
112) Naphthalene-d8a	5.884	136	1152427	40.00	ppm	0.00
114) Chrysene-d12b	16.059	240	1214118	40.00	ppm	0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.796	112	951540	99.60	ppm	0.00
Spiked Amount 50.000			Recovery	=	199.20%	
8) Phenol-d5	4.506	99	1136576	97.83	ppm	0.00
Spiked Amount 50.000			Recovery	=	195.66%	
25) Nitrobenzene-d5	5.201	82	956605	90.74	ppm	0.00
Spiked Amount 50.000			Recovery	=	181.48%	
51) 2-Fluorobiphenyl	7.225	172	1988546	75.30	ppm	0.00
Spiked Amount 50.000			Recovery	=	150.60%	
73) 2,4,6-Tribromophenol	9.618	330	422855	97.78	ppm	0.00
Spiked Amount 50.000			Recovery	=	195.56%	
86) Terphenyl-d14	14.051	244	2568843	85.99	ppm	0.01
Spiked Amount 50.000			Recovery	=	171.98%	
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.306	88	382552	86.20	ppm	98
3) Pyridine	2.637	79	986649	89.15	ppm	97
4) N-Nitrosodimethylamine	2.600	42	431529	91.56	ppm	87
6) Indene	4.944	116	1541587	83.16	ppm	94
7) Cumene	4.138	105	2074156	82.97	ppm	98
9) Phenol	4.517	94	1258943	100.44	ppm	89
10) Aniline	4.496	93	1371300	94.01	ppm	87
11) bis(2-Chloroethyl)ether	4.533	93	827671	81.09	ppm	92
12) 2-Chlorophenol	4.597	128	963903	85.19	ppm	98
13) Decane	4.613	43	783248	67.94	ppm	90
14) 1,3-Dichlorobenzene	4.699	146	1061198	84.09	ppm	96
15) 1,4-Dichlorobenzene	4.752	146	1054411	85.13	ppm	99
16) Benzyl alcohol	4.864	108	592973	96.37	ppm	94
17) 1,2-Dichlorobenzene	4.875	146	956594	80.60	ppm	97
18) Acetophenone	5.067	105	1260578	85.82	ppm	82
19) 2-Methylphenol	4.976	108	825170	91.96	ppm	95
20) 2,2'-oxybis(1-Chloropr...	4.955	121	277103	82.41	ppm	91

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123507.D
Acq On : 12 Apr 2016 6:33 pm
Operator : sarad
Sample : ic5217-100
Misc : op92514,em5217
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 13 08:43:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:42:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.099	108	909113	90.69	ppm		93
22) n-Nitroso-di-n-propyla...	5.073	70	646663	79.91	ppm		95
23) Hexachloroethane	5.153	201	395733	83.77	ppm		94
26) Nitrobenzene	5.217	77	944077	81.63	ppm		96
27) Quinoline	6.290	129	2005928	83.67	ppm		96
28) Isophorone	5.430	82	1715873	85.08	ppm		98
29) 2-Nitrophenol	5.505	139	566158	96.15	ppm		87
30) 2,4-Dimethylphenol	5.564	107	887260	84.49	ppm		96
31) Benzoic acid	5.735	105	711610	154.71	ppm		96
32) bis(2-Chloroethoxy)met...	5.628	93	1051276	85.53	ppm		97
33) 2,4-Dichlorophenol	5.767	162	838581	88.09	ppm		94
34) 2,6-Dichlorophenol	5.991	162	783839	79.29	ppm		100
35) 1,3,5-Trichlorobenzene	5.516	180	921542	80.62	ppm		98
36) 1,2,4-Trichlorobenzene	5.826	180	918334	82.88	ppm		94
37) 1,2,3-Trichlorobenzene	6.066	180	888747	79.76	ppm		97
38) Naphthalene	5.906	128	2714969	82.08	ppm		98
39) 4-Chloroaniline	5.975	127	1215274	90.61	ppm		93
40) 2,3-Dichloroaniline	7.108	161	1048050	84.08	ppm		98
41) Caprolactam	6.403	55	426473	72.00	ppm		96
42) Hexachlorobutadiene	6.039	225	526337	81.39	ppm		95
43) 4-Chloro-3-methylphenol	6.589	107	819254	86.08	ppm	#	28
44) 2-Methylnaphthalene	6.723	141	1594012	81.43	ppm		99
45) 1-Methylnaphthalene	6.851	142	1882961	80.32	ppm		96
46) Dimethylnaphthalene	7.604	156	1714658	80.43	ppm		98
48) Hexachlorocyclopentadiene	6.931	237	995955	444.05	ppm		96
49) 2,4,6-Trichlorophenol	7.134	196	629933	85.66	ppm		98
50) 2,4,5-Trichlorophenol	7.209	196	666926	81.28	ppm		92
52) 2-Chloronaphthalene	7.391	162	1792006	77.33	ppm		98
53) Biphenyl	7.369	154	2325581	81.35	ppm		99
54) 2-Nitroaniline	7.567	65	557169	87.06	ppm		96
55) Dimethylphthalate	7.850	163	2200638	84.62	ppm		96
56) Acenaphthylene	8.016	152	2994283	81.32	ppm		100
57) 2,6-Dinitrotoluene	7.941	165	518352	93.72	ppm		92
58) 3-Nitroaniline	8.224	138	586768	97.84	ppm		98
59) Acenaphthene	8.299	153	1835614	81.00	ppm		92
60) 2,4-Dinitrophenol	8.405	184	547077	607.16	ppm		84
61) 4-Nitrophenol	8.646	109	227031	90.79	ppm		80
62) Dibenzofuran	8.587	168	2701250	79.82	ppm		97
63) 2,4-Dinitrotoluene	8.614	165	682058	97.33	ppm		98
64) 2,3,4,6-Tetrachlorophenol	8.843	232	552694	99.67	ppm		96
65) Diethylphthalate	9.046	149	2185603	84.55	ppm		94
66) Fluorene	9.180	166	2195905	82.57	ppm		96
67) 4-Chlorophenyl-phenyle...	9.201	204	1016641	79.38	ppm		97
68) 4-Nitroaniline	9.281	138	588174	109.25	ppm		77
70) 4,6-Dinitro-2-methylph...	9.335	198	440384	178.05	ppm		93
71) n-Nitrosodiphenylamine	9.431	169	1538073	86.89	ppm		95
72) 1,2-Diphenylhydrazine	9.484	77	1960822	85.75	ppm		98
74) 4-Bromophenyl-phenylether	10.083	248	703778	85.49	ppm		97
75) Hexachlorobenzene	10.179	284	797822	81.73	ppm		97
76) Pentachlorophenol	10.590	266	826172	297.49	ppm		88

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123507.D
Acq On : 12 Apr 2016 6:33 pm
Operator : sarad
Sample : ic5217-100
Misc : op92514,em5217
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 13 08:43:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:42:15 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) Phenanthrene	10.926	178	3117540	81.71	ppm	99
78) Anthracene	11.023	178	3234215	82.98	ppm	98
79) Carbazole	11.380	167	3064870	86.77	ppm	97
80) Di-n-butylphthalate	12.155	149	3873526	89.00	ppm	99
81) Fluoranthene	13.223	202	3603133	82.66	ppm	97
82) Octadecane	10.852	57	1243246	86.75	ppm	94
84) Pyrene	13.650	202	3648361	84.78	ppm	100
85) Butyl stearate	15.327	56	886841	89.63	ppm	96
87) Butylbenzylphthalate	15.098	149	1739618	99.32	ppm	96
88) Benzo[a]anthracene	16.043	228	3423312	83.72	ppm	98
89) 3,3'-Dichlorobenzidine	16.065	252	1312530	94.46	ppm	98
90) Chrysene	16.118	228	3231698	86.39	ppm	96
91) bis(2-Ethylhexyl)phtha...	16.305	149	2304530	95.44	ppm	98
93) Di-n-octylphthalate	17.533	149	4090162	84.47	ppm	95
94) Benzo[b]fluoranthene	18.062	252	3682371	75.76	ppm	99
95) Benzo[k]fluoranthene	18.105	252	3365217m	72.11	ppm	
96) Benzo[a]pyrene	18.596	252	3393225	77.67	ppm	98
97) Indeno[1,2,3-cd]pyrene	20.439	276	3610192	80.43	ppm	96
98) Dibenz(a,h)acridine	20.054	279	3104766	79.92	ppm	98
99) Dibenz[a,h]anthracene	20.476	278	3491522	75.69	ppm	98
100) 7,12-Dimethylbenz(a)an...	18.051	256	1646711	76.18	ppm	97
101) Benzo[g,h,i]perylene	20.909	276	3563850	73.79	ppm	98

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

7.6.87

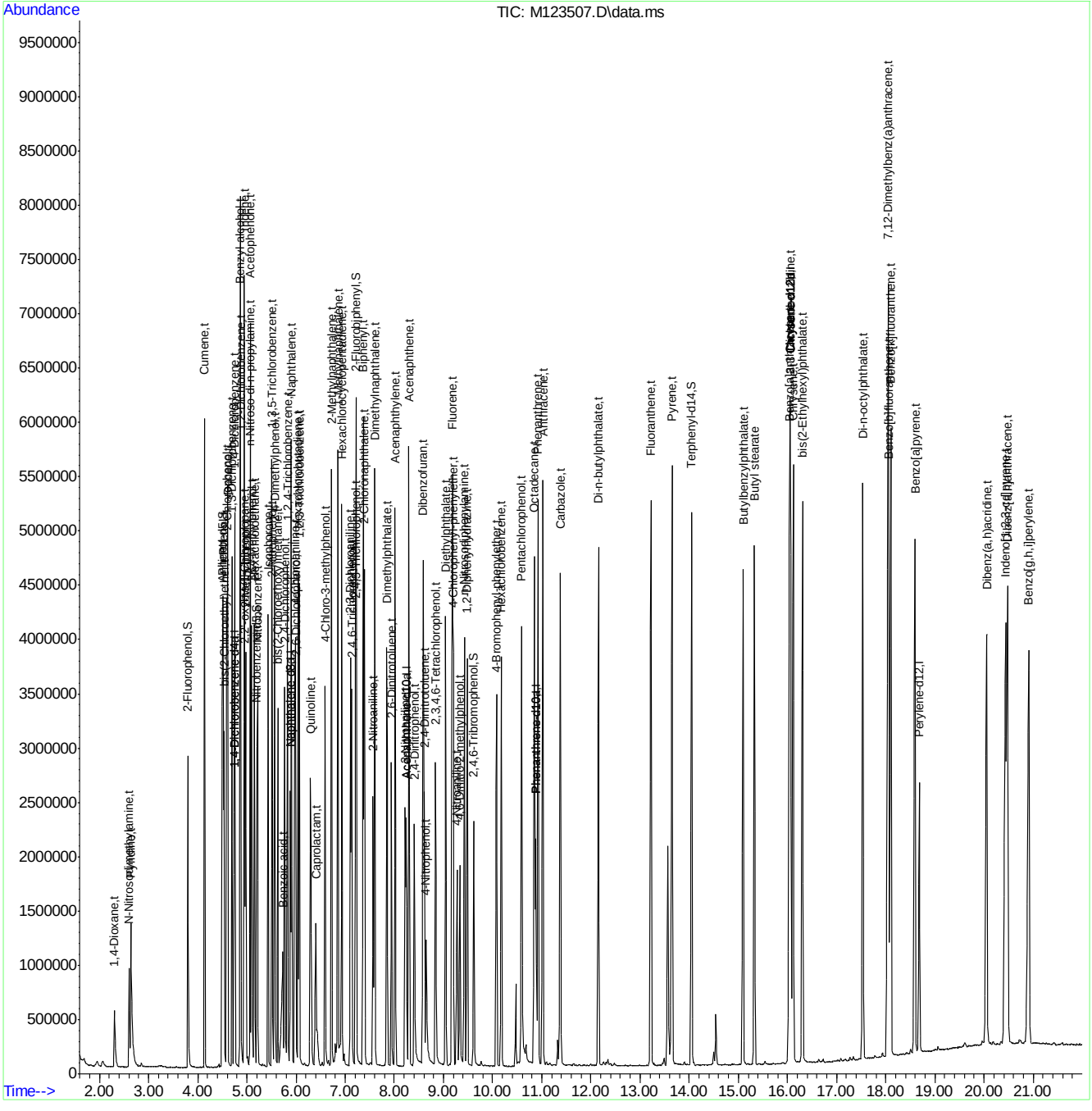
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123507.D
Acq On : 12 Apr 2016 6:33 pm
Operator : sarad
Sample : ic5217-100
Misc : op92514,em5217
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 13 08:43:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:42:15 2016
Response via : Initial Calibration



SGS ACCUTEST JC18516

Manual Integration Approval Summary

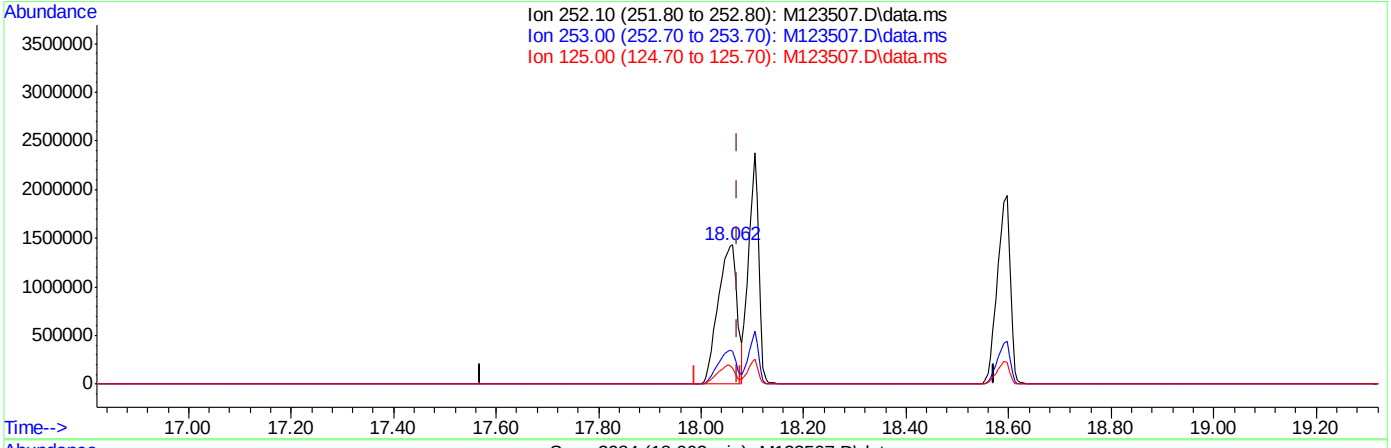
Sample Number:	EM5217-IC5217	**Method:**	SW846 8270D
Lab FileID:	M123507.D	**Analyst approved:**	04/13/16 13:03 Ashley Dye
Injection Time:	04/12/16 18:33	**Supervisor approved:**	04/13/16 13:43 Nina Pandya

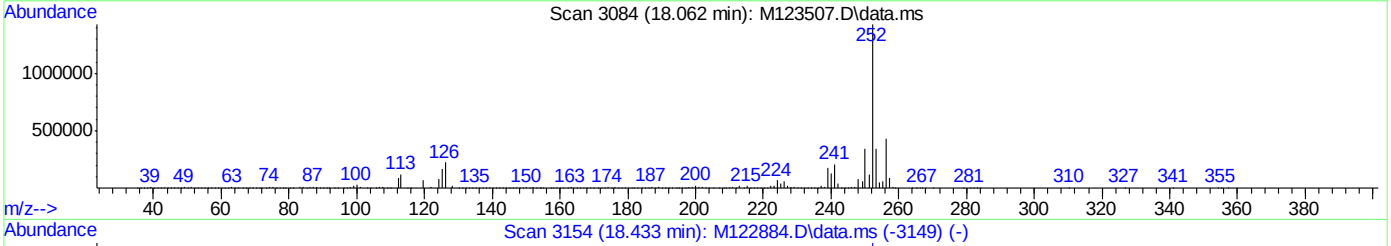
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		18.10	Poor instrument integration

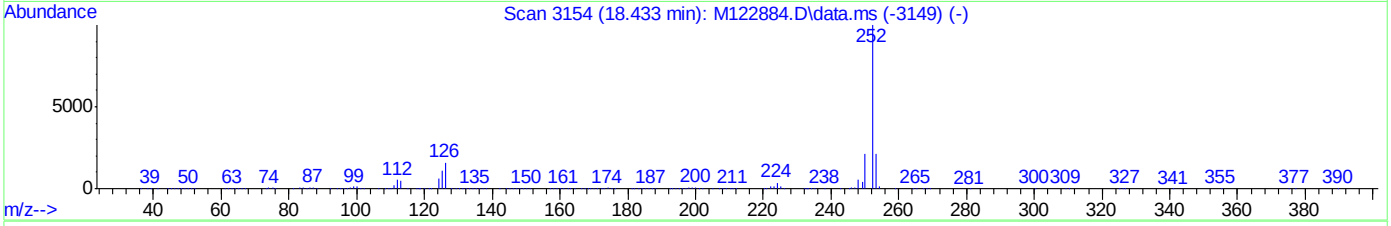
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123507.D
Acq On : 12 Apr 2016 6:33 pm
Operator : sarad
Sample : ic5217-100
Misc : op92514,em5217
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 13 08:42:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:42:15 2016
Response via : Initial Calibration







TIC: M123507.D\data.ms

(95) Benzo[k]fluoranthene (t)

18.062min (-0.009) 78.90ppm

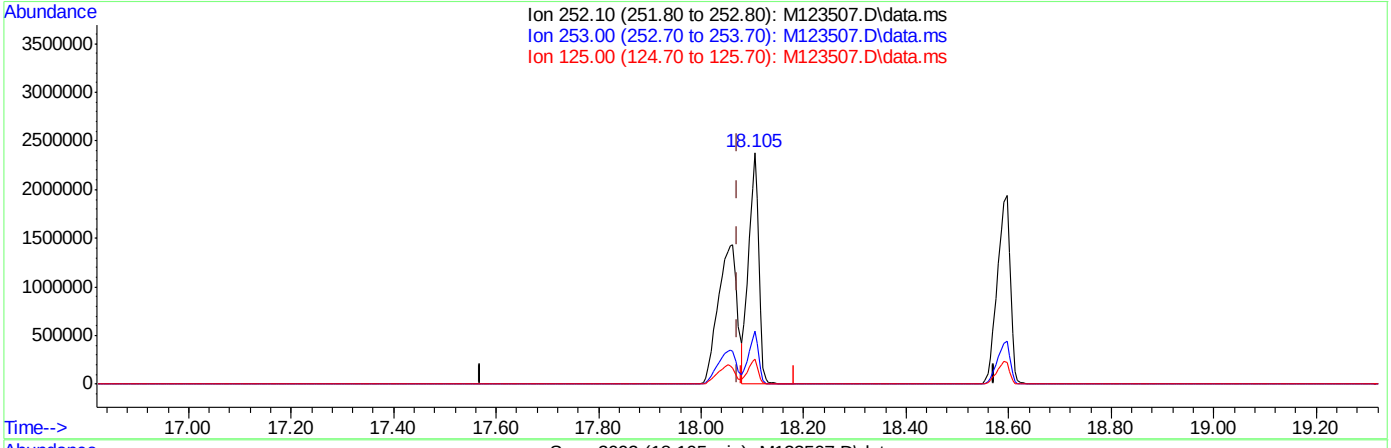
response 3682371

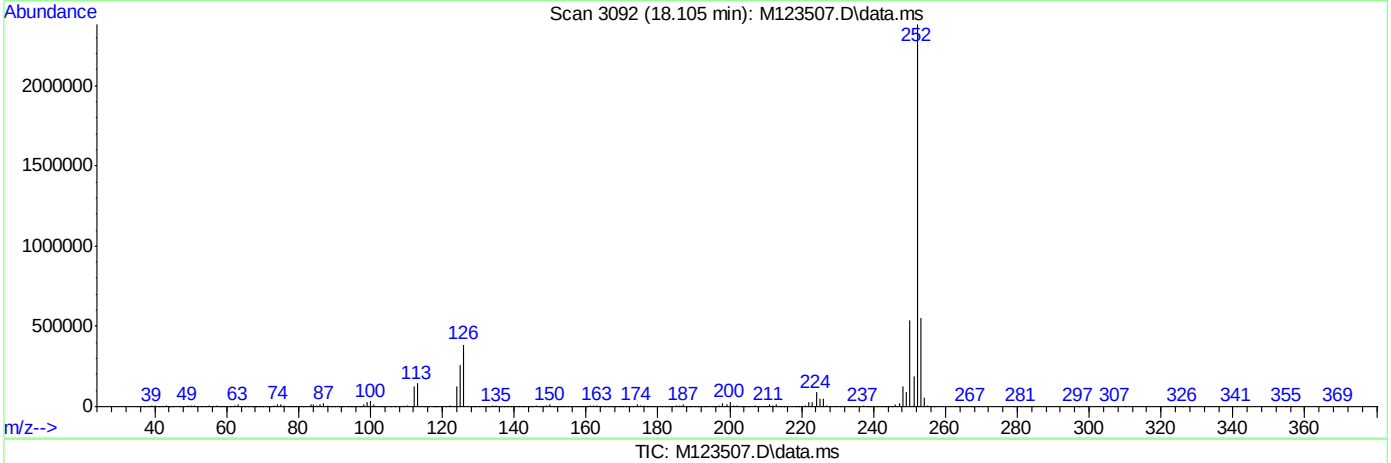
Ion	Exp%	Act%
252.10	100	100
253.00	20.70	23.89
125.00	9.70	11.62
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123507.D
Acq On : 12 Apr 2016 6:33 pm
Operator : sarad
Sample : ic5217-100
Misc : op92514,em5217
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 13 08:43:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:42:15 2016
Response via : Initial Calibration





TIC: M123507.D\data.ms

(95) Benzo[k]fluoranthene (t)

18.105min (+0.034) 72.11ppm m

response 3365217

Ion	Exp%	Act%
252.10	100	100
253.00	20.70	23.03
125.00	9.70	10.83
0.00	0.00	0.00

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123508.D
Acq On : 12 Apr 2016 7:02 pm
Operator : sarad
Sample : ic5217-80
Misc : op92514,em5217
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 13 08:44:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:43:24 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.739	152	338996	40.00	ppm	0.00
24) Naphthalene-d8	5.882	136	1304699	40.00	ppm	0.00
47) Acenaphthene-d10	8.243	164	795794	40.00	ppm	0.00
69) Phenanthrene-d10	10.876	188	1395633	40.00	ppm	0.00
83) Chrysene-d12	16.062	240	1398398	40.00	ppm	0.00
92) Perylene-d12	18.685	264	1581079	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.739	152	338996	40.00	ppm	0.00
104) Acenaphthene-d10a	8.243	164	795794	40.00	ppm	0.00
107) Chrysene-d12a	16.062	240	1398398	40.00	ppm	0.00
110) Phenanthrene-d10a	10.876	188	1395633	40.00	ppm	0.00
112) Naphthalene-d8a	5.882	136	1304699	40.00	ppm	0.00
114) Chrysene-d12b	16.062	240	1398398	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.799	112	871890	80.49	ppm	0.00
Spiked Amount 50.000			Recovery	=	160.98%	
8) Phenol-d5	4.510	99	1064454	81.53	ppm	0.00
Spiked Amount 50.000			Recovery	=	163.06%	
25) Nitrobenzene-d5	5.199	82	893645	78.51	ppm	0.00
Spiked Amount 50.000			Recovery	=	157.02%	
51) 2-Fluorobiphenyl	7.223	172	1860771	70.72	ppm	0.00
Spiked Amount 50.000			Recovery	=	141.44%	
73) 2,4,6-Tribromophenol	9.616	330	390687	81.15	ppm	0.00
Spiked Amount 50.000			Recovery	=	162.30%	
86) Terphenyl-d14	14.049	244	2413819	75.44	ppm	0.00
Spiked Amount 50.000			Recovery	=	150.88%	
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.304	88	352358	75.07	ppm	98
3) Pyridine	2.635	79	949501	79.85	ppm	99
4) N-Nitrosodimethylamine	2.598	42	411585	80.26	ppm	99
6) Indene	4.942	116	1454204	75.40	ppm	99
7) Cumene	4.141	105	1958543	75.38	ppm	100
9) Phenol	4.515	94	1169370	81.94	ppm	97
10) Aniline	4.494	93	1316012	81.87	ppm	94
11) bis(2-Chloroethyl)ether	4.536	93	766690	73.02	ppm	97
12) 2-Chlorophenol	4.601	128	888727	74.67	ppm	95
13) Decane	4.611	43	737596	67.07	ppm	99
14) 1,3-Dichlorobenzene	4.697	146	993442	75.28	ppm	99
15) 1,4-Dichlorobenzene	4.755	146	980894	75.31	ppm	98
16) Benzyl alcohol	4.862	108	553141	80.59	ppm	97
17) 1,2-Dichlorobenzene	4.873	146	898624	73.81	ppm	98
18) Acetophenone	5.065	105	1169422	75.43	ppm	72
19) 2-Methylphenol	4.974	108	768955	78.59	ppm	99
20) 2,2'-oxybis(1-Chloropr...	4.953	121	263363	75.59	ppm	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123508.D
Acq On : 12 Apr 2016 7:02 pm
Operator : sarad
Sample : ic5217-80
Misc : op92514,em5217
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 13 08:44:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:43:24 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.097	108	840983	77.45	ppm		97
22) n-Nitroso-di-n-propyla...	5.071	70	609664	73.72	ppm		99
23) Hexachloroethane	5.151	201	360392	73.09	ppm		96
26) Nitrobenzene	5.215	77	882603	74.22	ppm		98
27) Quinoline	6.288	129	1883841	75.58	ppm		99
28) Isophorone	5.428	82	1616046	76.49	ppm		99
29) 2-Nitrophenol	5.508	139	529040	80.92	ppm		88
30) 2,4-Dimethylphenol	5.562	107	815504	74.36	ppm		99
31) Benzoic acid	5.727	105	652903	98.45	ppm		98
32) bis(2-Chloroethoxy)met...	5.626	93	974076	75.46	ppm		100
33) 2,4-Dichlorophenol	5.765	162	777999	76.76	ppm		99
34) 2,6-Dichlorophenol	5.989	162	727434	72.51	ppm		99
35) 1,3,5-Trichlorobenzene	5.514	180	851013	72.82	ppm		99
36) 1,2,4-Trichlorobenzene	5.824	180	846105	73.76	ppm		99
37) 1,2,3-Trichlorobenzene	6.064	180	814656	71.85	ppm		99
38) Naphthalene	5.909	128	2516406	73.81	ppm		100
39) 4-Chloroaniline	5.973	127	1140137	78.79	ppm		100
40) 2,3-Dichloroaniline	7.111	161	972755	74.89	ppm		98
41) Caprolactam	6.400	55	399201	69.22	ppm		98
42) Hexachlorobutadiene	6.037	225	486523	73.27	ppm		99
43) 4-Chloro-3-methylphenol	6.587	107	766994	76.51	ppm	#	99
44) 2-Methylnaphthalene	6.721	141	1485022	73.87	ppm		99
45) 1-Methylnaphthalene	6.849	142	1767055	73.85	ppm		99
46) Dimethylnaphthalene	7.602	156	1601249	73.54	ppm		100
48) Hexachlorocyclopentadiene	6.929	237	911624	222.07	ppm		99
49) 2,4,6-Trichlorophenol	7.132	196	555171	71.54	ppm		98
50) 2,4,5-Trichlorophenol	7.212	196	626265	74.08	ppm		99
52) 2-Chloronaphthalene	7.394	162	1658900	71.03	ppm		99
53) Biphenyl	7.367	154	2180649	74.00	ppm		99
54) 2-Nitroaniline	7.565	65	519078	76.29	ppm		97
55) Dimethylphthalate	7.848	163	2030273	74.40	ppm		99
56) Acenaphthylene	8.019	152	2812775	74.13	ppm		100
57) 2,6-Dinitrotoluene	7.944	165	484678	79.59	ppm		97
58) 3-Nitroaniline	8.222	138	548411	81.32	ppm		98
59) Acenaphthene	8.297	153	1691495	72.56	ppm		100
60) 2,4-Dinitrophenol	8.403	184	513662	248.53	ppm		98
61) 4-Nitrophenol	8.649	109	203733	75.13	ppm		98
62) Dibenzofuran	8.590	168	2514896	72.71	ppm		95
63) 2,4-Dinitrotoluene	8.612	165	636776	81.02	ppm		97
64) 2,3,4,6-Tetrachlorophenol	8.841	232	518427	82.38	ppm		99
65) Diethylphthalate	9.044	149	2042389	75.32	ppm		100
66) Fluorene	9.178	166	2060396	74.66	ppm		100
67) 4-Chlorophenyl-phenyle...	9.199	204	945088	72.38	ppm		98
68) 4-Nitroaniline	9.279	138	549638	85.84	ppm		99
70) 4,6-Dinitro-2-methylph...	9.333	198	398239	102.88	ppm		98
71) n-Nitrosodiphenylamine	9.429	169	1427362	76.65	ppm		98
72) 1,2-Diphenylhydrazine	9.482	77	1863568	77.95	ppm		98
74) 4-Bromophenyl-phenylether	10.080	248	643898	74.92	ppm		99
75) Hexachlorobenzene	10.177	284	740404	74.15	ppm		99
76) Pentachlorophenol	10.588	266	763760	196.43	ppm		100

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123508.D
Acq On : 12 Apr 2016 7:02 pm
Operator : sarad
Sample : ic5217-80
Misc : op92514,em5217
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 13 08:44:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:43:24 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77)	Phenanthrene	10.924	178	2879566	73.79	ppm	99
78)	Anthracene	11.020	178	2985438	74.37	ppm	100
79)	Carbazole	11.378	167	2843918	76.59	ppm	100
80)	Di-n-butylphthalate	12.153	149	3564128	76.98	ppm	100
81)	Fluoranthene	13.221	202	3373878	75.28	ppm	100
82)	Octadecane	10.850	57	1148564	76.24	ppm	99
84)	Pyrene	13.648	202	3411303	74.49	ppm	99
85)	Butyl stearate	15.325	56	836866	77.45	ppm	98
87)	Butylbenzylphthalate	15.096	149	1638799	81.51	ppm	99
88)	Benzo[a]anthracene	16.041	228	3260137	75.36	ppm	99
89)	3,3'-Dichlorobenzidine	16.068	252	1257074	80.79	ppm	99
90)	Chrysene	16.116	228	3073370	76.54	ppm	100
91)	bis(2-Ethylhexyl)phtha...	16.303	149	2225457	81.89	ppm	98
93)	Di-n-octylphthalate	17.531	149	3910020	75.78	ppm	100
94)	Benzo[b]fluoranthene	18.055	252	3502266	70.97	ppm	97
95)	Benzo[k]fluoranthene	18.103	252	3185383	68.65	ppm	99
96)	Benzo[a]pyrene	18.594	252	3210405	71.60	ppm	100
97)	Indeno[1,2,3-cd]pyrene	20.437	276	3468372	74.14	ppm	100
98)	Dibenz(a,h)acridine	20.052	279	2988968	74.03	ppm	100
99)	Dibenz[a,h]anthracene	20.474	278	3366031	71.90	ppm	100
100)	7,12-Dimethylbenz(a)an...	18.049	256	1562522	71.03	ppm	99
101)	Benzo[g,h,i]perylene	20.907	276	3434073	70.83	ppm	100

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

7.6.88

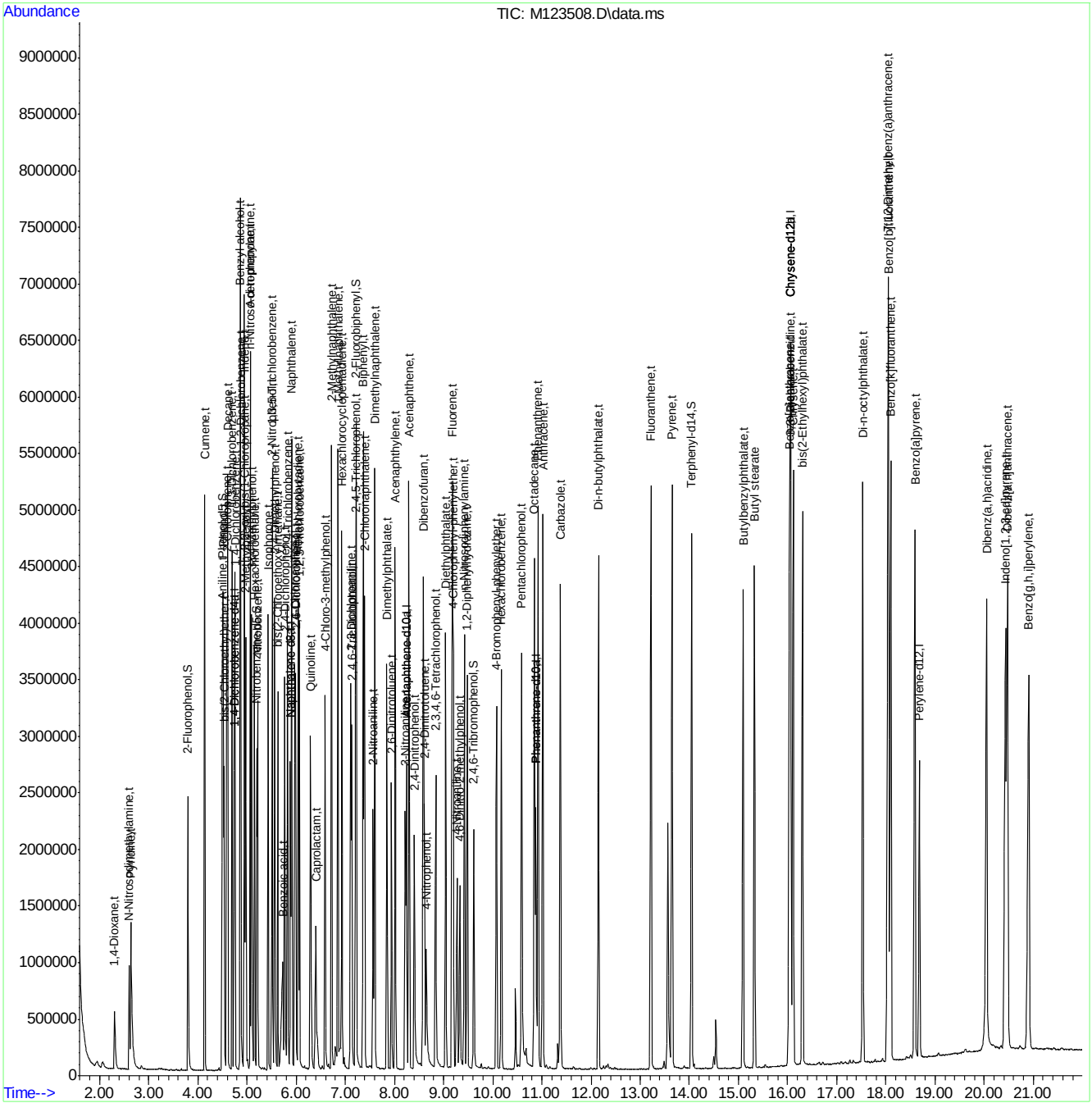
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123508.D
Acq On : 12 Apr 2016 7:02 pm
Operator : sarad
Sample : ic5217-80
Misc : op92514,em5217
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 13 08:44:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:43:24 2016
Response via : Initial Calibration



SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123509.D
Acq On : 12 Apr 2016 7:31 pm
Operator : sarad
Sample : ic5217-25
Misc : op92514,em5217
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 13 08:45:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:44:21 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.739	152	311069	40.00	ppm	0.00
24) Naphthalene-d8	5.882	136	1203874	40.00	ppm	0.00
47) Acenaphthene-d10	8.238	164	738360	40.00	ppm	0.00
69) Phenanthrene-d10	10.871	188	1315790	40.00	ppm	0.00
83) Chrysene-d12	16.052	240	1373892	40.00	ppm	-0.01
92) Perylene-d12	18.674	264	1402025	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.739	152	311069	40.00	ppm	0.00
104) Acenaphthene-d10a	8.238	164	738360	40.00	ppm	0.00
107) Chrysene-d12a	16.052	240	1373892	40.00	ppm	-0.01
110) Phenanthrene-d10a	10.871	188	1315790	40.00	ppm	0.00
112) Naphthalene-d8a	5.882	136	1203874	40.00	ppm	0.00
114) Chrysene-d12b	16.052	240	1373892	40.00	ppm	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.799	112	235519	23.65	ppm	0.00
Spiked Amount 50.000			Recovery	=	47.30%	
8) Phenol-d5	4.510	99	303209	25.15	ppm	0.00
Spiked Amount 50.000			Recovery	=	50.30%	
25) Nitrobenzene-d5	5.193	82	256271	24.55	ppm	0.00
Spiked Amount 50.000			Recovery	=	49.10%	
51) 2-Fluorobiphenyl	7.218	172	582573	24.82	ppm	0.00
Spiked Amount 50.000			Recovery	=	49.64%	
73) 2,4,6-Tribromophenol	9.610	330	112332	24.63	ppm	0.00
Spiked Amount 50.000			Recovery	=	49.26%	
86) Terphenyl-d14	14.044	244	737832	23.92	ppm	0.00
Spiked Amount 50.000			Recovery	=	47.84%	
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.309	88	99531	23.59	ppm	97
3) Pyridine	2.646	79	259510	23.80	ppm	99
4) N-Nitrosodimethylamine	2.603	42	113553	24.10	ppm	97
6) Indene	4.942	116	430211	24.78	ppm	99
7) Cumene	4.136	105	580389	24.82	ppm	97
9) Phenol	4.520	94	314052	23.79	ppm	93
10) Aniline	4.494	93	379827	25.55	ppm	99
11) bis(2-Chloroethyl)ether	4.531	93	235784	25.21	ppm	95
12) 2-Chlorophenol	4.600	128	262416	24.57	ppm	99
13) Decane	4.611	43	238463	24.98	ppm	98
14) 1,3-Dichlorobenzene	4.697	146	291264	24.54	ppm	99
15) 1,4-Dichlorobenzene	4.750	146	289995	24.75	ppm	97
16) Benzyl alcohol	4.857	108	155559	24.64	ppm	93
17) 1,2-Dichlorobenzene	4.873	146	275490	25.31	ppm	97
18) Acetophenone	5.065	105	339345	24.32	ppm	96
19) 2-Methylphenol	4.969	108	220696	24.73	ppm	99
20) 2,2'-oxybis(1-Chloropr...	4.953	121	80492	25.65	ppm	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123509.D
Acq On : 12 Apr 2016 7:31 pm
Operator : sarad
Sample : ic5217-25
Misc : op92514,em5217
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 13 08:45:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:44:21 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	5.097	108	241491	24.50	ppm	96
22) n-Nitroso-di-n-propyla...	5.060	70	183269	24.80	ppm	94
23) Hexachloroethane	5.151	201	108105	24.60	ppm	96
26) Nitrobenzene	5.209	77	257992	24.09	ppm	100
27) Quinoline	6.278	129	556079	24.63	ppm	98
28) Isophorone	5.423	82	469208	24.42	ppm	99
29) 2-Nitrophenol	5.503	139	154697	25.55	ppm	82
30) 2,4-Dimethylphenol	5.562	107	237148	24.00	ppm	96
31) Benzoic acid	5.679	105	158635	24.07	ppm	96
32) bis(2-Chloroethoxy)met...	5.621	93	282750	24.20	ppm	99
33) 2,4-Dichlorophenol	5.765	162	228733	24.79	ppm	98
34) 2,6-Dichlorophenol	5.984	162	219992	24.53	ppm	100
35) 1,3,5-Trichlorobenzene	5.514	180	265254	25.36	ppm	99
36) 1,2,4-Trichlorobenzene	5.824	180	260515	25.27	ppm	99
37) 1,2,3-Trichlorobenzene	6.064	180	253356	25.07	ppm	99
38) Naphthalene	5.904	128	761883	24.86	ppm	100
39) 4-Chloroaniline	5.968	127	336818	25.35	ppm	99
40) 2,3-Dichloroaniline	7.105	161	289303	24.66	ppm	99
41) Caprolactam	6.363	55	114724	22.57	ppm	98
42) Hexachlorobutadiene	6.037	225	149166	25.05	ppm	97
43) 4-Chloro-3-methylphenol	6.582	107	218592	23.98	ppm	99
44) 2-Methylnaphthalene	6.716	141	452432	25.03	ppm	100
45) 1-Methylnaphthalene	6.844	142	531678	24.71	ppm	99
46) Dimethylnaphthalene	7.591	156	487215	24.92	ppm	98
48) Hexachlorocyclopentadiene	6.929	237	222538	51.74	ppm	99
49) 2,4,6-Trichlorophenol	7.127	196	171657	24.71	ppm	98
50) 2,4,5-Trichlorophenol	7.207	196	179593	23.47	ppm	98
52) 2-Chloronaphthalene	7.383	162	516816	24.78	ppm	98
53) Biphenyl	7.362	154	659581	24.74	ppm	100
54) 2-Nitroaniline	7.559	65	148691	23.92	ppm	97
55) Dimethylphthalate	7.843	163	608158	24.59	ppm	99
56) Acenaphthylene	8.008	152	863346	25.14	ppm	99
57) 2,6-Dinitrotoluene	7.933	165	136573	24.21	ppm	99
58) 3-Nitroaniline	8.211	138	150919	23.99	ppm	99
59) Acenaphthene	8.291	153	519008	24.76	ppm	98
60) 2,4-Dinitrophenol	8.398	184	102039	44.92	ppm	95
61) 4-Nitrophenol	8.660	109	57564	23.35	ppm	96
62) Dibenzofuran	8.580	168	770730	24.77	ppm	99
63) 2,4-Dinitrotoluene	8.601	165	185724	25.36	ppm	94
64) 2,3,4,6-Tetrachlorophenol	8.836	232	141890	24.06	ppm	98
65) Diethylphthalate	9.034	149	600044	24.33	ppm	99
66) Fluorene	9.167	166	623407	24.90	ppm	96
67) 4-Chlorophenyl-phenyle...	9.194	204	296190	25.25	ppm	96
68) 4-Nitroaniline	9.253	138	152482	25.06	ppm	99
70) 4,6-Dinitro-2-methylph...	9.322	198	98996	24.77	ppm	98
71) n-Nitrosodiphenylamine	9.418	169	426115	24.62	ppm	98
72) 1,2-Diphenylhydrazine	9.477	77	548062	24.53	ppm	98
74) 4-Bromophenyl-phenylether	10.075	248	196375	24.76	ppm	98
75) Hexachlorobenzene	10.171	284	227241	24.74	ppm	95
76) Pentachlorophenol	10.582	266	190602	48.33	ppm	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123509.D
Acq On : 12 Apr 2016 7:31 pm
Operator : sarad
Sample : ic5217-25
Misc : op92514,em5217
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 13 08:45:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:44:21 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
77) Phenanthrene	10.914	178	881979	24.61 ppm	100
78) Anthracene	11.010	178	923458	24.99 ppm	99
79) Carbazole	11.368	167	860331	24.93 ppm	99
80) Di-n-butylphthalate	12.147	149	1062444	24.65 ppm	99
81) Fluoranthene	13.210	202	1054816	25.47 ppm	99
82) Octadecane	10.844	57	344993	24.68 ppm	98
84) Pyrene	13.638	202	1080811	24.59 ppm	98
85) Butyl stearate	15.320	56	249160	23.72 ppm	99
87) Butylbenzylphthalate	15.090	149	481413	24.22 ppm	99
88) Benzo[a]anthracene	16.030	228	994023	23.85 ppm	99
89) 3,3'-Dichlorobenzidine	16.057	252	375224	24.46 ppm	99
90) Chrysene	16.100	228	930984	23.94 ppm	99
91) bis(2-Ethylhexyl)phtha...	16.297	149	640423	23.80 ppm	99
93) Di-n-octylphthalate	17.526	149	1124214	25.01 ppm	99
94) Benzo[b]fluoranthene	18.033	252	1035882	24.60 ppm	97
95) Benzo[k]fluoranthene	18.081	252	990302	25.26 ppm	99
96) Benzo[a]pyrene	18.578	252	965192	25.16 ppm	97
97) Indeno[1,2,3-cd]pyrene	20.410	276	970123	23.97 ppm	98
98) Dibenz(a,h)acridine	20.031	279	879381	25.19 ppm	99
99) Dibenz[a,h]anthracene	20.453	278	1007273	25.11 ppm	98
100) 7,12-Dimethylbenz(a)an...	18.028	256	474896	25.29 ppm	99
101) Benzo[g,h,i]perylene	20.880	276	1020269	24.67 ppm	98

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

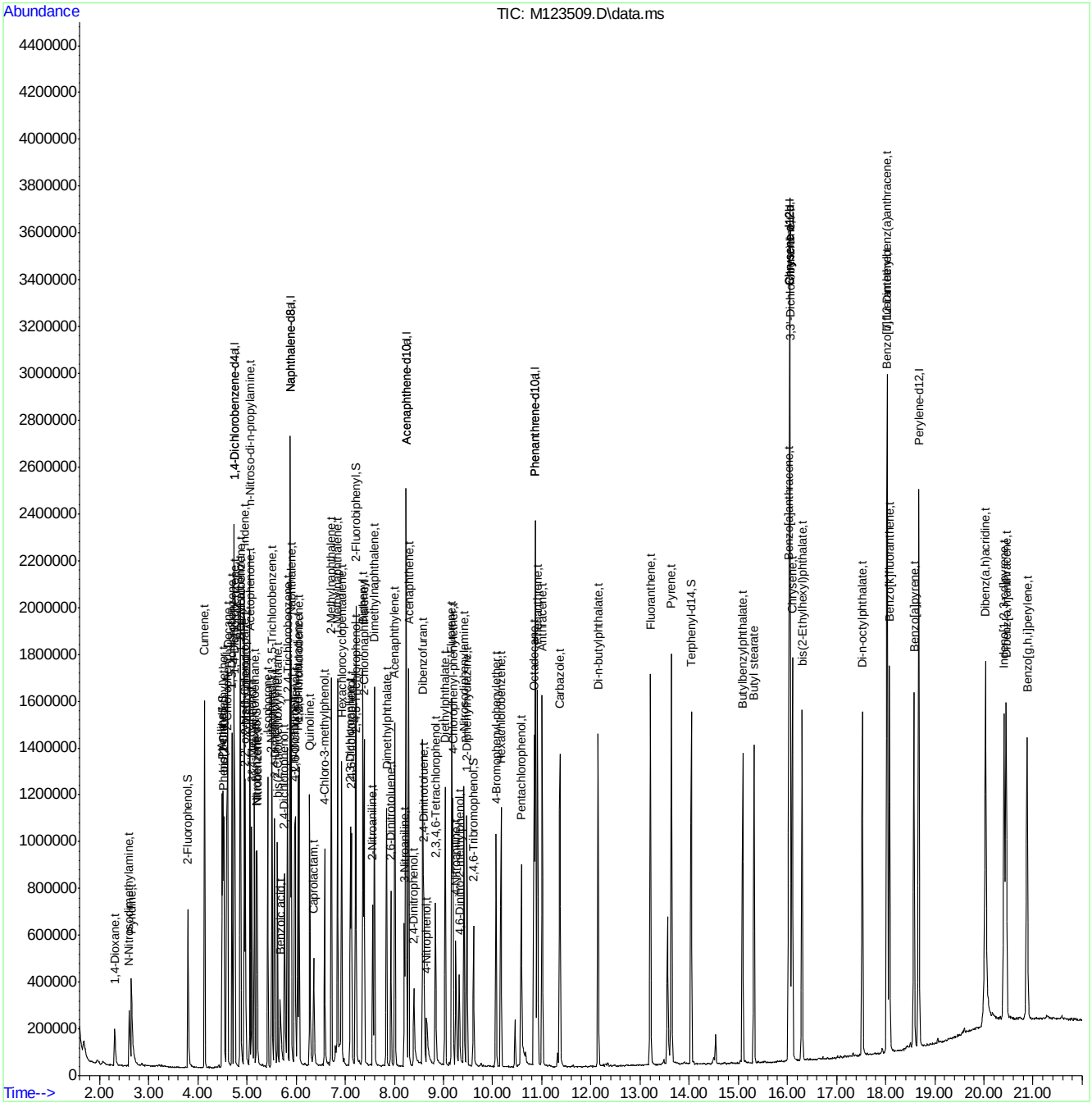
7.6.89

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123509.D
Acq On : 12 Apr 2016 7:31 pm
Operator : sarad
Sample : ic5217-25
Misc : op92514,em5217
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 13 08:45:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:44:21 2016
Response via : Initial Calibration



SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123510.D
Acq On : 12 Apr 2016 8:00 pm
Operator : sarad
Sample : ic5217-10
Misc : op92514,em5217
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 13 08:47:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:45:37 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.740	152	316034	40.00	ppm	0.00
24) Naphthalene-d8	5.883	136	1220543	40.00	ppm	0.00
47) Acenaphthene-d10	8.238	164	774010	40.00	ppm	0.00
69) Phenanthrene-d10	10.871	188	1408926	40.00	ppm	0.00
83) Chrysene-d12	16.047	240	1458483	40.00	ppm	0.00
92) Perylene-d12	18.675	264	1471669	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.740	152	316034	40.00	ppm	0.00
104) Acenaphthene-d10a	8.238	164	774010	40.00	ppm	0.00
107) Chrysene-d12a	16.047	240	1458483	40.00	ppm	0.00
110) Phenanthrene-d10a	10.871	188	1408926	40.00	ppm	0.00
112) Naphthalene-d8a	5.883	136	1220543	40.00	ppm	0.00
114) Chrysene-d12b	16.047	240	1458483	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.800	112	89082	8.92	ppm	0.00
Spiked Amount 50.000			Recovery	=	17.84%	
8) Phenol-d5	4.510	99	117277	9.56	ppm	0.00
Spiked Amount 50.000			Recovery	=	19.12%	
25) Nitrobenzene-d5	5.194	82	104421	9.91	ppm	0.00
Spiked Amount 50.000			Recovery	=	19.82%	
51) 2-Fluorobiphenyl	7.218	172	244577	9.96	ppm	0.00
Spiked Amount 50.000			Recovery	=	19.92%	
73) 2,4,6-Tribromophenol	9.611	330	45744	9.40	ppm	0.00
Spiked Amount 50.000			Recovery	=	18.80%	
86) Terphenyl-d14	14.039	244	307655	9.50	ppm	0.00
Spiked Amount 50.000			Recovery	=	19.00%	
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.310	88	41422	9.80	ppm	97
3) Pyridine	2.657	79	102693	9.38	ppm	98
4) N-Nitrosodimethylamine	2.609	42	41255	8.70	ppm	99
6) Indene	4.943	116	170140	9.67	ppm	95
7) Cumene	4.136	105	229462	9.68	ppm	99
9) Phenol	4.521	94	120984	9.13	ppm	98
10) Aniline	4.494	93	144944	9.54	ppm	94
11) bis(2-Chloroethyl)ether	4.532	93	99279	10.43	ppm	97
12) 2-Chlorophenol	4.601	128	104535	9.68	ppm	98
13) Decane	4.606	43	99239	10.23	ppm	97
14) 1,3-Dichlorobenzene	4.697	146	116578	9.71	ppm	99
15) 1,4-Dichlorobenzene	4.751	146	117147	9.86	ppm	98
16) Benzyl alcohol	4.857	108	61759	9.66	ppm	85
17) 1,2-Dichlorobenzene	4.873	146	111591	10.06	ppm	98
18) Acetophenone	5.060	105	139671	9.92	ppm	96
19) 2-Methylphenol	4.970	108	86191	9.53	ppm	98
20) 2,2'-oxybis(1-Chloropr...	4.948	121	31457	9.80	ppm #	85

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123510.D
Acq On : 12 Apr 2016 8:00 pm
Operator : sarad
Sample : ic5217-10
Misc : op92514,em5217
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 13 08:47:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:45:37 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	5.098	108	92069	9.24	ppm	96
22) n-Nitroso-di-n-propyla...	5.055	70	77082	10.29	ppm	98
23) Hexachloroethane	5.151	201	44353	9.97	ppm	93
26) Nitrobenzene	5.210	77	105443	9.80	ppm	98
27) Quinoline	6.278	129	223785	9.81	ppm	99
28) Isophorone	5.418	82	189698	9.80	ppm	99
29) 2-Nitrophenol	5.504	139	59099	9.57	ppm	86
30) 2,4-Dimethylphenol	5.557	107	94872	9.57	ppm	97
31) Benzoic acid	5.675	105	53273	8.05	ppm	97
32) bis(2-Chloroethoxy)met...	5.621	93	116361	9.90	ppm	99
33) 2,4-Dichlorophenol	5.771	162	90347	9.68	ppm	95
34) 2,6-Dichlorophenol	5.984	162	86725	9.58	ppm	97
35) 1,3,5-Trichlorobenzene	5.509	180	107410	10.09	ppm	99
36) 1,2,4-Trichlorobenzene	5.824	180	105015	10.02	ppm	96
37) 1,2,3-Trichlorobenzene	6.064	180	102211	9.97	ppm	99
38) Naphthalene	5.904	128	302955	9.76	ppm	100
39) 4-Chloroaniline	5.968	127	131793	9.75	ppm	98
40) 2,3-Dichloroaniline	7.101	161	118838	10.03	ppm	98
41) Caprolactam	6.348	55	47058	9.36	ppm	96
42) Hexachlorobutadiene	6.032	225	61558	10.19	ppm	96
43) 4-Chloro-3-methylphenol	6.577	107	86333	9.44	ppm	97
44) 2-Methylnaphthalene	6.716	141	184219	10.05	ppm	98
45) 1-Methylnaphthalene	6.844	142	217780	10.01	ppm	99
46) Dimethylnaphthalene	7.592	156	201364	10.17	ppm	96
48) Hexachlorocyclopentadiene	6.930	237	66925	14.71	ppm	97
49) 2,4,6-Trichlorophenol	7.122	196	70449	9.70	ppm	99
50) 2,4,5-Trichlorophenol	7.207	196	75217	9.52	ppm	98
52) 2-Chloronaphthalene	7.384	162	215648	9.88	ppm	98
53) Biphenyl	7.357	154	274239	9.84	ppm	98
54) 2-Nitroaniline	7.555	65	59858	9.29	ppm	93
55) Dimethylphthalate	7.838	163	247314	9.58	ppm	99
56) Acenaphthylene	8.009	152	354425	9.83	ppm	99
57) 2,6-Dinitrotoluene	7.928	165	55361	9.44	ppm	99
58) 3-Nitroaniline	8.206	138	61238	9.38	ppm	96
59) Acenaphthene	8.286	153	211322	9.64	ppm	99
60) 2,4-Dinitrophenol	8.404	184	28023	12.08	ppm	97
61) 4-Nitrophenol	8.671	109	17907	7.05	ppm	90
62) Dibenzofuran	8.580	168	317903	9.77	ppm	98
63) 2,4-Dinitrotoluene	8.601	165	75407	9.79	ppm	90
64) 2,3,4,6-Tetrachlorophenol	8.836	232	59598	9.73	ppm	98
65) Diethylphthalate	9.029	149	249928	9.73	ppm	99
66) Fluorene	9.168	166	260696	9.94	ppm	97
67) 4-Chlorophenyl-phenyle...	9.189	204	126778	10.28	ppm	98
68) 4-Nitroaniline	9.253	138	59622	9.34	ppm	96
70) 4,6-Dinitro-2-methylph...	9.317	198	33101	7.75	ppm	99
71) n-Nitrosodiphenylamine	9.413	169	174054	9.43	ppm	98
72) 1,2-Diphenylhydrazine	9.472	77	227544	9.55	ppm	99
74) 4-Bromophenyl-phenylether	10.070	248	81336	9.60	ppm	93
75) Hexachlorobenzene	10.166	284	96654	9.85	ppm	99
76) Pentachlorophenol	10.583	266	60439	14.43	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123510.D
Acq On : 12 Apr 2016 8:00 pm
Operator : sarad
Sample : ic5217-10
Misc : op92514,em5217
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 13 08:47:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:45:37 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77)	Phenanthrene	10.914	178	370265	9.69	ppm	99
78)	Anthracene	11.005	178	395169	9.99	ppm	100
79)	Carbazole	11.368	167	355612	9.63	ppm	99
80)	Di-n-butylphthalate	12.143	149	442559	9.62	ppm	99
81)	Fluoranthene	13.211	202	434382	9.75	ppm	99
82)	Octadecane	10.839	57	146883	9.84	ppm	99
84)	Pyrene	13.638	202	458324	9.86	ppm	99
85)	Butyl stearate	15.320	56	98659	8.96	ppm	97
87)	Butylbenzylphthalate	15.085	149	192086	9.17	ppm	100
88)	Benzo[a]anthracene	16.026	228	410079	9.38	ppm	100
89)	3,3'-Dichlorobenzidine	16.052	252	151031	9.33	ppm	97
90)	Chrysene	16.095	228	386697	9.47	ppm	98
91)	bis(2-Ethylhexyl)phtha...	16.293	149	256790	9.10	ppm	99
93)	Di-n-octylphthalate	17.521	149	458050	9.71	ppm	99
94)	Benzo[b]fluoranthene	18.023	252	447932	10.17	ppm	99
95)	Benzo[k]fluoranthene	18.071	252	419916	10.18	ppm	97
96)	Benzo[a]pyrene	18.573	252	403359	10.00	ppm	98
97)	Indeno[1,2,3-cd]pyrene	20.405	276	386672	9.20	ppm	97
98)	Dibenz(a,h)acridine	20.031	279	351759	9.58	ppm	84
99)	Dibenz[a,h]anthracene	20.448	278	410656	9.74	ppm	97
100)	7,12-Dimethylbenz(a)an...	18.023	256	198743	10.05	ppm	98
101)	Benzo[g,h,i]perylene	20.870	276	409140	9.46	ppm	98

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

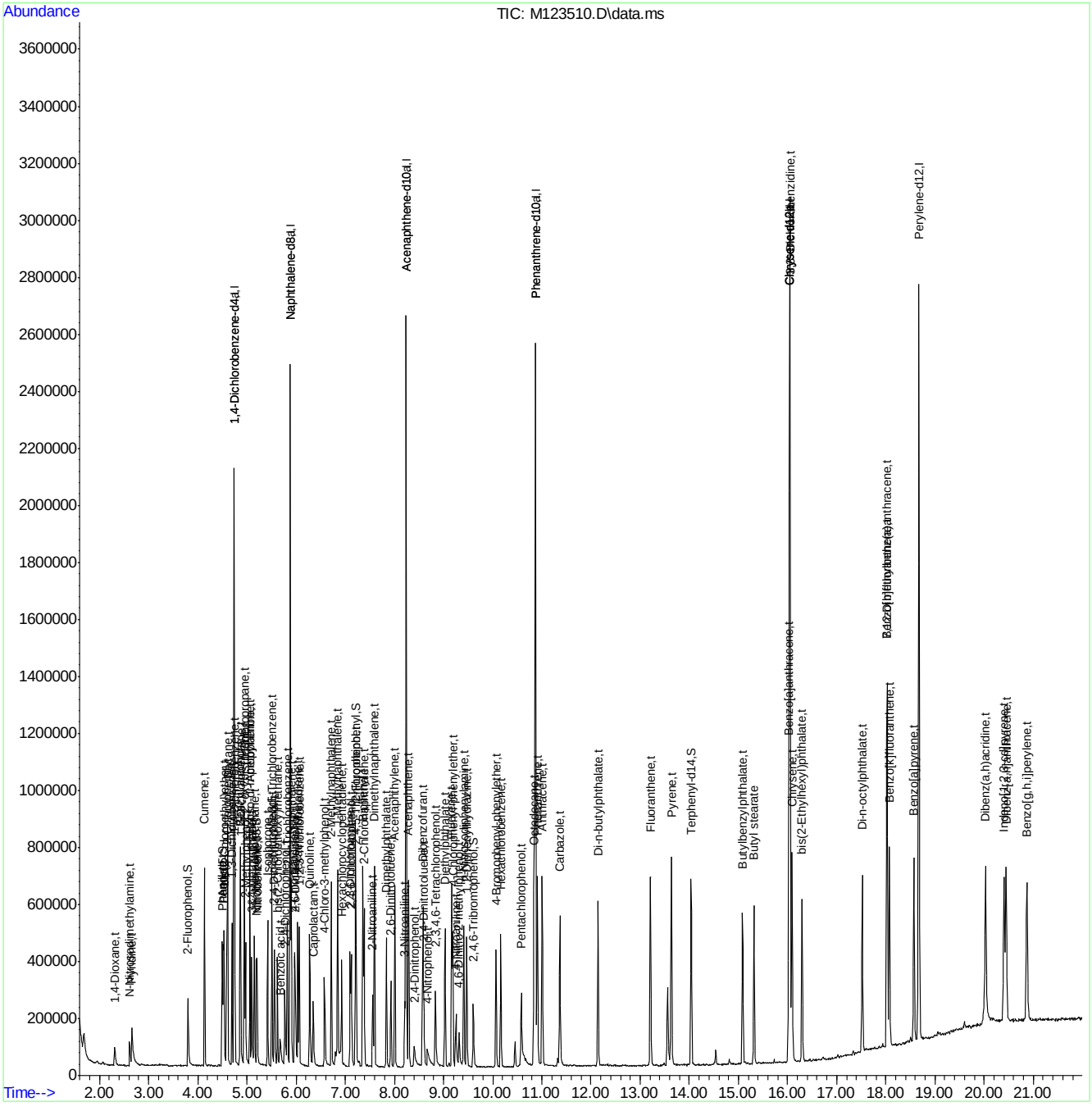
7.6.90 7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123510.D
Acq On : 12 Apr 2016 8:00 pm
Operator : sarad
Sample : ic5217-10
Misc : op92514,em5217
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 13 08:47:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:45:37 2016
Response via : Initial Calibration



SGS ACCUTEST JC18516

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/13/16 13:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123511.D
Acq On : 12 Apr 2016 8:29 pm
Operator : sarad
Sample : ic5217-5
Misc : op92514,em5217
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 13 08:49:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:48:04 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.740	152	350655	40.00	ppm	0.00
24) Naphthalene-d8	5.883	136	1349345	40.00	ppm	0.00
47) Acenaphthene-d10	8.238	164	854216	40.00	ppm	0.00
69) Phenanthrene-d10	10.866	188	1499661	40.00	ppm	0.00
83) Chrysene-d12	16.047	240	1610256	40.00	ppm	0.00
92) Perylene-d12	18.675	264	1597690	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.740	152	350655	40.00	ppm	0.00
104) Acenaphthene-d10a	8.238	164	854216	40.00	ppm	0.00
107) Chrysene-d12a	16.047	240	1610256	40.00	ppm	0.00
110) Phenanthrene-d10a	10.866	188	1499661	40.00	ppm	0.00
112) Naphthalene-d8a	5.883	136	1349345	40.00	ppm	0.00
114) Chrysene-d12b	16.047	240	1610256	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.800	112	54568	5.04	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.08%	
8) Phenol-d5	4.516	99	72786	5.40	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.80%	
25) Nitrobenzene-d5	5.194	82	64583	5.55	ppm	0.00
Spiked Amount 50.000			Recovery	=	11.10%	
51) 2-Fluorobiphenyl	7.218	172	154610	5.71	ppm	0.00
Spiked Amount 50.000			Recovery	=	11.42%	
73) 2,4,6-Tribromophenol	9.611	330	28504	5.57	ppm	0.00
Spiked Amount 50.000			Recovery	=	11.14%	
86) Terphenyl-d14	14.039	244	193404	5.46	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.92%	
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.310	88	24773	5.30	ppm	99
3) Pyridine	2.662	79	64511	5.38	ppm	98
4) N-Nitrosodimethylamine	2.614	42	26770	5.22	ppm	93
6) Indene	4.943	116	109494	5.65	ppm	98
7) Cumene	4.136	105	147820	5.65	ppm	99
9) Phenol	4.521	94	76666	5.31	ppm	95
10) Aniline	4.494	93	89105	5.34	ppm	97
11) bis(2-Chloroethyl)ether	4.532	93	63194	5.93	ppm	97
12) 2-Chlorophenol	4.601	128	64038	5.38	ppm	94
13) Decane	4.607	43	64775	5.99	ppm	99
14) 1,3-Dichlorobenzene	4.697	146	75851	5.73	ppm	96
15) 1,4-Dichlorobenzene	4.751	146	74641	5.68	ppm	99
16) Benzyl alcohol	4.858	108	37072	5.26	ppm	96
17) 1,2-Dichlorobenzene	4.874	146	72802	5.91	ppm	97
18) Acetophenone	5.061	105	89842	5.76	ppm	99
19) 2-Methylphenol	4.970	108	54583	5.49	ppm	96
20) 2,2'-oxybis(1-Chloropr...	4.948	121	21615	6.09	ppm	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123511.D
Acq On : 12 Apr 2016 8:29 pm
Operator : sarad
Sample : ic5217-5
Misc : op92514,em5217
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 13 08:49:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:48:04 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.098	108	58583	5.38	ppm		84
22) n-Nitroso-di-n-propyla...	5.055	70	47658	5.70	ppm		95
23) Hexachloroethane	5.151	201	28351	5.75	ppm		95
26) Nitrobenzene	5.210	77	68563	5.79	ppm		97
27) Quinoline	6.278	129	141740	5.64	ppm		96
28) Isophorone	5.418	82	119534	5.61	ppm		98
29) 2-Nitrophenol	5.504	139	37399	5.53	ppm		99
30) 2,4-Dimethylphenol	5.563	107	62972	5.79	ppm		96
31) Benzoic acid	5.675	105	33179	4.72	ppm		91
32) bis(2-Chloroethoxy)met...	5.621	93	72095	5.56	ppm		98
33) 2,4-Dichlorophenol	5.771	162	58004	5.66	ppm		94
34) 2,6-Dichlorophenol	5.985	162	58181	5.86	ppm		96
35) 1,3,5-Trichlorobenzene	5.509	180	69873	5.93	ppm		97
36) 1,2,4-Trichlorobenzene	5.824	180	67623	5.83	ppm		98
37) 1,2,3-Trichlorobenzene	6.059	180	64928	5.73	ppm		97
38) Naphthalene	5.904	128	193240	5.66	ppm		98
39) 4-Chloroaniline	5.968	127	83829	5.64	ppm		95
40) 2,3-Dichloroaniline	7.101	161	73645	5.62	ppm		96
41) Caprolactam	6.342	55	27822	5.07	ppm		94
42) Hexachlorobutadiene	6.033	225	38837	5.79	ppm		98
43) 4-Chloro-3-methylphenol	6.583	107	54779	5.48	ppm	#	26
44) 2-Methylnaphthalene	6.716	141	115057	5.67	ppm		95
45) 1-Methylnaphthalene	6.844	142	133516	5.55	ppm		96
46) Dimethylnaphthalene	7.592	156	127260	5.79	ppm		97
48) Hexachlorocyclopentadiene	6.925	237	33281	7.00	ppm		98
49) 2,4,6-Trichlorophenol	7.128	196	44456	5.58	ppm		97
50) 2,4,5-Trichlorophenol	7.213	196	48407	5.61	ppm		99
52) 2-Chloronaphthalene	7.384	162	136338	5.68	ppm		96
53) Biphenyl	7.357	154	172753	5.63	ppm		97
54) 2-Nitroaniline	7.555	65	37087	5.29	ppm		97
55) Dimethylphthalate	7.838	163	154381	5.46	ppm		98
56) Acenaphthylene	8.009	152	226669	5.72	ppm		98
57) 2,6-Dinitrotoluene	7.929	165	34093	5.33	ppm		99
58) 3-Nitroaniline	8.206	138	36922	5.19	ppm		100
59) Acenaphthene	8.287	153	134169	5.59	ppm		99
60) 2,4-Dinitrophenol	8.409	184	15475	6.56	ppm		91
61) 4-Nitrophenol	8.692	109	12703	4.81	ppm		83
62) Dibenzofuran	8.580	168	200729	5.61	ppm		98
63) 2,4-Dinitrotoluene	8.602	165	44798	5.29	ppm		98
64) 2,3,4,6-Tetrachlorophenol	8.837	232	36315	5.40	ppm		92
65) Diethylphthalate	9.029	149	157452	5.58	ppm		98
66) Fluorene	9.162	166	164591	5.69	ppm		98
67) 4-Chlorophenyl-phenyle...	9.189	204	80327	5.87	ppm		95
68) 4-Nitroaniline	9.253	138	36416	5.24	ppm		95
70) 4,6-Dinitro-2-methylph...	9.317	198	18774	4.32	ppm		97
71) n-Nitrosodiphenylamine	9.413	169	111912	5.76	ppm		99
72) 1,2-Diphenylhydrazine	9.472	77	139809	5.56	ppm		99
74) 4-Bromophenyl-phenylether	10.070	248	51610	5.77	ppm		97
75) Hexachlorobenzene	10.167	284	62067	5.96	ppm		98
76) Pentachlorophenol	10.583	266	37642	8.94	ppm		94

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123511.D
Acq On : 12 Apr 2016 8:29 pm
Operator : sarad
Sample : ic5217-5
Misc : op92514,em5217
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 13 08:49:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:48:04 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77)	Phenanthrene	10.909	178	233787	5.78	ppm	99
78)	Anthracene	11.005	178	238517	5.66	ppm	98
79)	Carbazole	11.368	167	220302	5.65	ppm	98
80)	Di-n-butylphthalate	12.143	149	267571	5.51	ppm	97
81)	Fluoranthene	13.206	202	272732	5.78	ppm	97
82)	Octadecane	10.840	57	88593	5.60	ppm	98
84)	Pyrene	13.633	202	286335	5.60	ppm	99
85)	Butyl stearate	15.315	56	61237	5.15	ppm	95
87)	Butylbenzylphthalate	15.086	149	117178	5.15	ppm	96
88)	Benzo[a]anthracene	16.026	228	263056	5.52	ppm	98
89)	3,3'-Dichlorobenzidine	16.052	252	95203	5.40	ppm	99
90)	Chrysene	16.090	228	255761	5.73	ppm	99
91)	bis(2-Ethylhexyl)phtha...	16.293	149	162403	5.31	ppm	99
93)	Di-n-octylphthalate	17.521	149	286453	5.62	ppm	99
94)	Benzo[b]fluoranthene	18.023	252	270518	5.64	ppm	99
95)	Benzo[k]fluoranthene	18.071	252	270665	6.02	ppm	99
96)	Benzo[a]pyrene	18.568	252	250638	5.72	ppm	99
97)	Indeno[1,2,3-cd]pyrene	20.400	276	241525m	5.38	ppm	
98)	Dibenz(a,h)acridine	20.026	279	221605	5.61	ppm	99
99)	Dibenz[a,h]anthracene	20.443	278	257602	5.66	ppm	98
100)	7,12-Dimethylbenz(a)an...	18.018	256	122710	5.71	ppm	97
101)	Benzo[g,h,i]perylene	20.870	276	260602	5.61	ppm	95

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

7.6.91

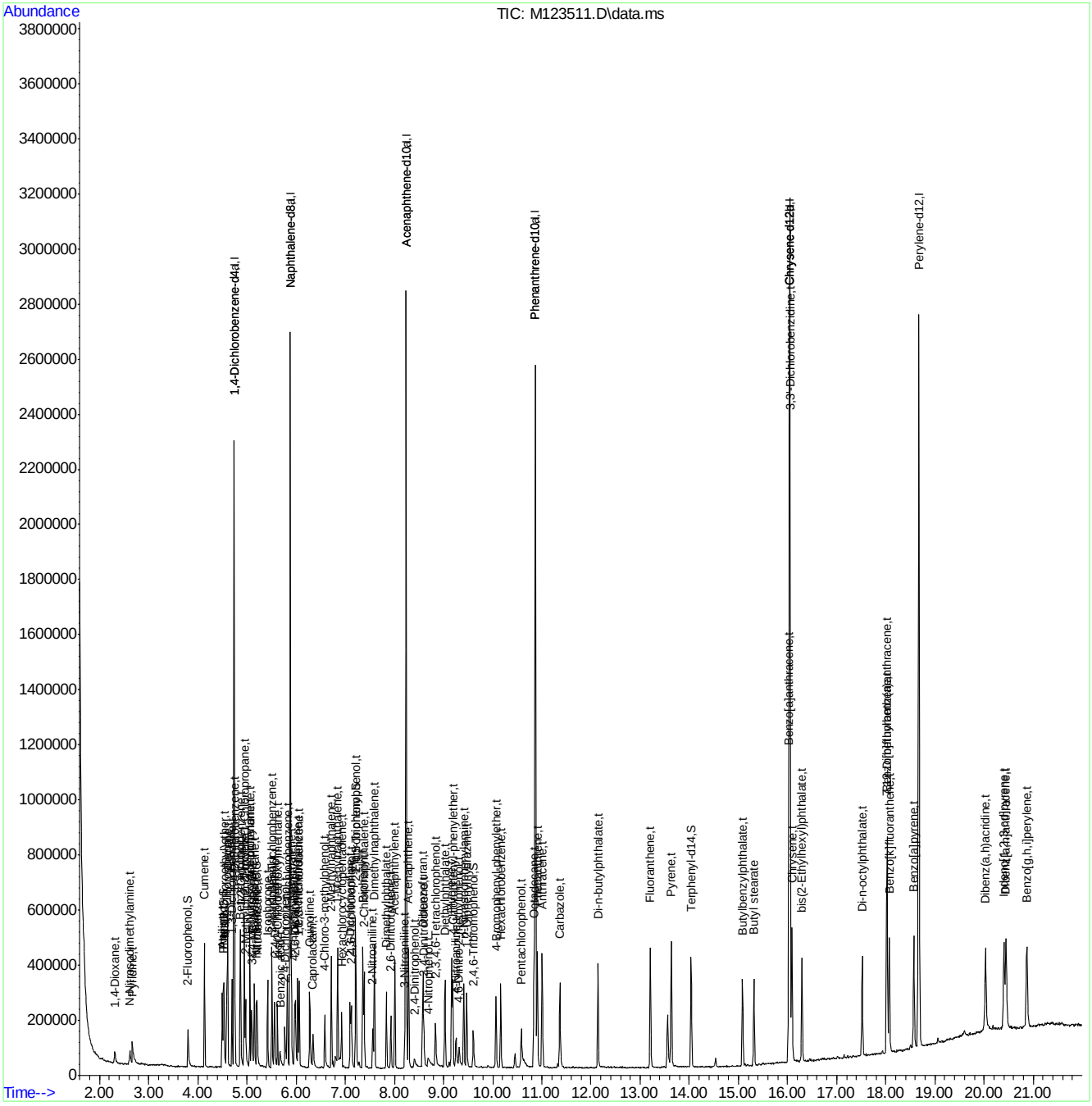
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123511.D
Acq On : 12 Apr 2016 8:29 pm
Operator : sarad
Sample : ic5217-5
Misc : op92514,em5217
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 13 08:49:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:48:04 2016
Response via : Initial Calibration



SGS ACCUTEST JC18516

Manual Integration Approval Summary

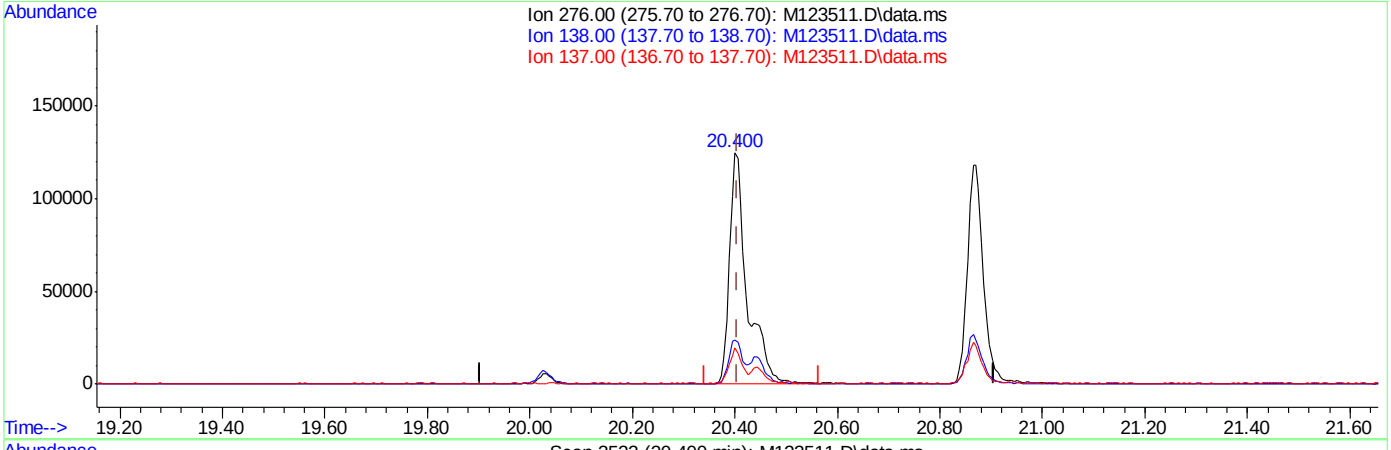
Sample Number:	EM5217-IC5217	**Method:**	SW846 8270D
Lab FileID:	M123511.D	**Analyst approved:**	04/13/16 13:03 Ashley Dye
Injection Time:	04/12/16 20:29	**Supervisor approved:**	04/13/16 13:43 Nina Pandya

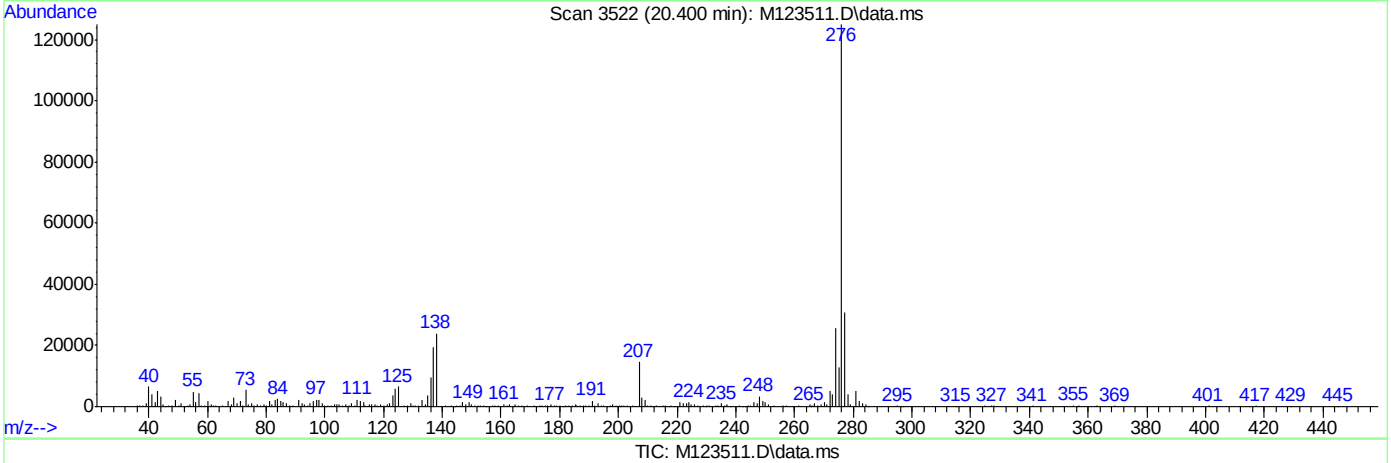
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		20.40	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123511.D
Acq On : 12 Apr 2016 8:29 pm
Operator : sarad
Sample : ic5217-5
Misc : op92514,em5217
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 13 08:48:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:48:04 2016
Response via : Initial Calibration





TIC: M123511.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

20.400min (-0.005) 6.72ppm

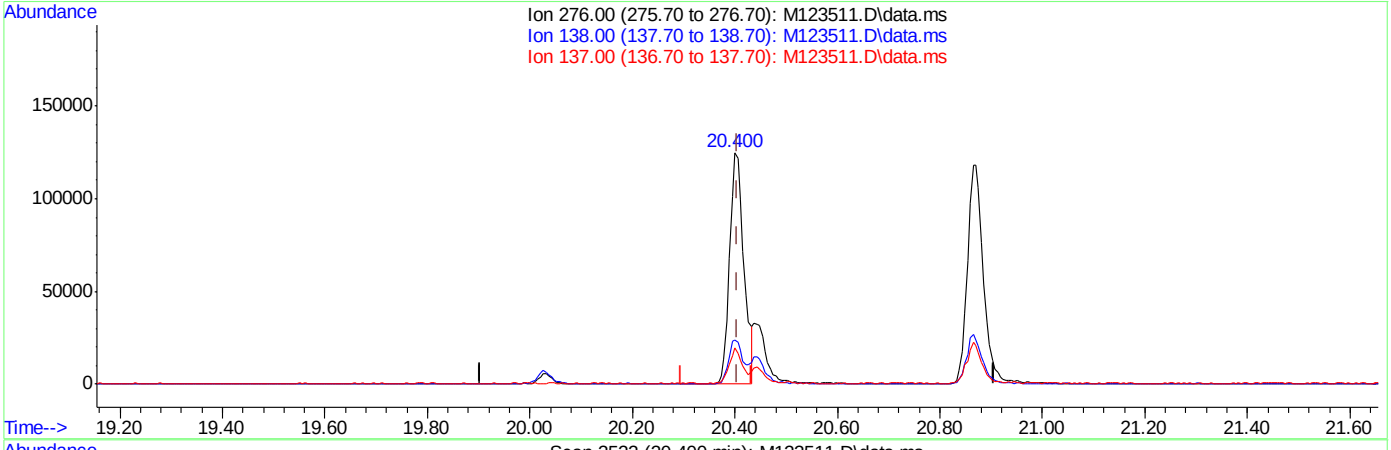
response 301851

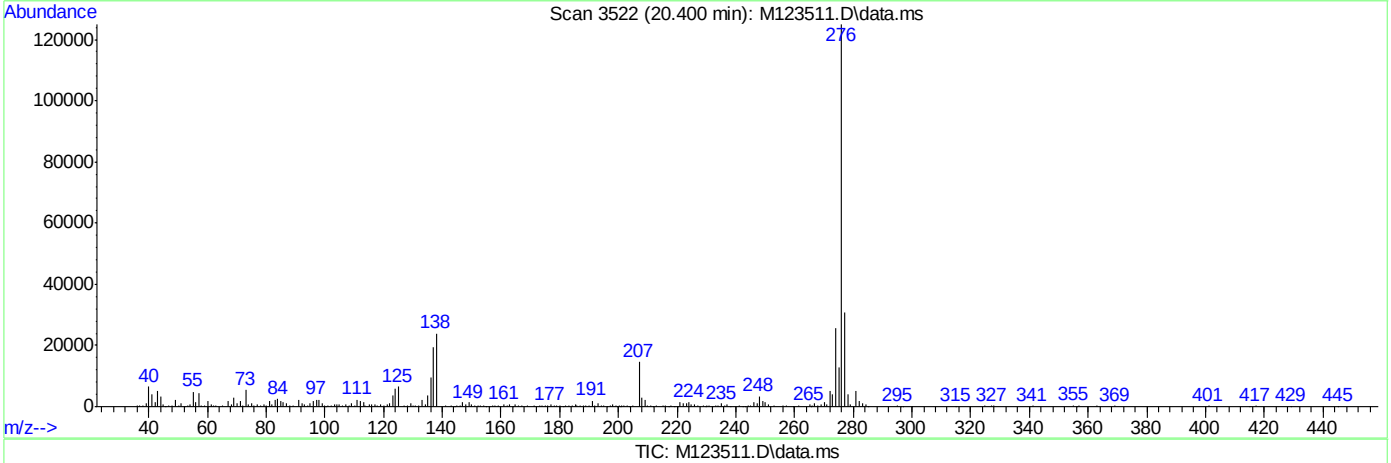
Ion	Exp%	Act%
276.00	100	100
138.00	17.80	19.00
137.00	12.90	15.19
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123511.D
Acq On : 12 Apr 2016 8:29 pm
Operator : sarad
Sample : ic5217-5
Misc : op92514,em5217
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 13 08:49:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:48:04 2016
Response via : Initial Calibration





TIC: M123511.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

20.400min (-0.005) 5.38ppm m

response 241525

Ion	Exp%	Act%
276.00	100	100
138.00	17.80	19.21
137.00	12.90	15.51
0.00	0.00	0.00

SGS ACCUTEST JC18516

M123512.D

Manual Integrations APPROVED (compounds with "m" flag)

Nina Pandya
04/13/16 13:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123512.D
Acq On : 12 Apr 2016 8:57 pm
Operator : sarad
Sample : ic5217-1
Misc : op92514,em5217
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 13 08:50:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:49:48 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.737	152	360169	40.00	ppm	0.00
24) Naphthalene-d8	5.880	136	1372967	40.00	ppm	0.00
47) Acenaphthene-d10	8.240	164	830731	40.00	ppm	0.00
69) Phenanthrene-d10	10.868	188	1485058	40.00	ppm	0.00
83) Chrysene-d12	16.044	240	1603028	40.00	ppm	0.00
92) Perylene-d12	18.671	264	1583851	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.737	152	360169	40.00	ppm	0.00
104) Acenaphthene-d10a	8.240	164	830731	40.00	ppm	0.00
107) Chrysene-d12a	16.044	240	1603111	40.00	ppm	0.00
110) Phenanthrene-d10a	10.868	188	1485058	40.00	ppm	0.00
112) Naphthalene-d8a	5.880	136	1372967	40.00	ppm	0.00
114) Chrysene-d12b	16.044	240	1603028	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.807	112	10135	0.91	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.82%	
8) Phenol-d5	4.523	99	12591	0.90	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.80%	
25) Nitrobenzene-d5	5.201	82	13616	1.13	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.26%	
51) 2-Fluorobiphenyl	7.215	172	31523	1.17	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.34%	
73) 2,4,6-Tribromophenol	9.618	330	4967	0.96	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.92%	
86) Terphenyl-d14	14.041	244	38019	1.06	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.12%	
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.317	88	6259	1.29	ppm	90
3) Pyridine	2.702	79	10097	0.81	ppm	89
4) N-Nitrosodimethylamine	2.632	42	5405	1.02	ppm	90
6) Indene	4.945	116	22568	1.11	ppm	97
7) Cumene	4.138	105	28808	1.05	ppm	98
9) Phenol	4.534	94	13131	0.88	ppm	76
10) Aniline	4.496	93	16952	0.98	ppm	92
11) bis(2-Chloroethyl)ether	4.534	93	14205	1.26	ppm	98
12) 2-Chlorophenol	4.603	128	12722	1.03	ppm	94
13) Decane	4.608	43	14540	1.27	ppm	91
14) 1,3-Dichlorobenzene	4.694	146	15726	1.13	ppm	98
15) 1,4-Dichlorobenzene	4.753	146	15617	1.13	ppm	97
16) Benzyl alcohol	4.875	108	6180	0.85	ppm	85
17) 1,2-Dichlorobenzene	4.875	146	14594	1.12	ppm	95
18) Acetophenone	5.068	105	16979	1.03	ppm	94
19) 2-Methylphenol	4.977	108	9524	0.92	ppm	97
20) 2,2'-oxybis(1-Chloropr...	4.956	121	4467	1.18	ppm #	56

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123512.D
Acq On : 12 Apr 2016 8:57 pm
Operator : sarad
Sample : ic5217-1
Misc : op92514,em5217
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 13 08:50:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:49:48 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.105	108	10710	0.95	ppm		91
22) n-Nitroso-di-n-propyla...	5.062	70	9920	1.13	ppm		93
23) Hexachloroethane	5.153	201	6087	1.17	ppm		85
26) Nitrobenzene	5.217	77	12998	1.05	ppm		96
27) Quinoline	6.285	129	27854	1.07	ppm		95
28) Isophorone	5.420	82	23918	1.08	ppm		98
29) 2-Nitrophenol	5.506	139	7063	1.01	ppm		93
30) 2,4-Dimethylphenol	5.570	107	12968	1.14	ppm		96
31) Benzoic acid	5.698	105	5689	0.80	ppm	#	38
32) bis(2-Chloroethoxy)met...	5.623	93	14659	1.09	ppm		96
33) 2,4-Dichlorophenol	5.794	162	9484	0.89	ppm		91
34) 2,6-Dichlorophenol	5.992	162	12475	1.20	ppm		95
35) 1,3,5-Trichlorobenzene	5.511	180	13917	1.13	ppm		94
36) 1,2,4-Trichlorobenzene	5.826	180	13843	1.14	ppm		98
37) 1,2,3-Trichlorobenzene	6.061	180	12795	1.08	ppm		96
38) Naphthalene	5.901	128	40888	1.15	ppm		99
39) 4-Chloroaniline	5.976	127	16041	1.04	ppm		96
40) 2,3-Dichloroaniline	7.108	161	14316	1.05	ppm		95
41) Caprolactam	6.344	55	6536	1.17	ppm		91
42) Hexachlorobutadiene	6.034	225	7828	1.12	ppm		99
43) 4-Chloro-3-methylphenol	6.595	107	11739	1.14	ppm	#	85
44) 2-Methylnaphthalene	6.718	141	25149	1.19	ppm		89
45) 1-Methylnaphthalene	6.846	142	26616	1.07	ppm		94
46) Dimethylnaphthalene	7.594	156	26067	1.14	ppm		95
48) Hexachlorocyclopentadiene	6.926	237	2486	0.57	ppm		83
49) 2,4,6-Trichlorophenol	7.129	196	8457	1.07	ppm		92
50) 2,4,5-Trichlorophenol	7.226	196	9308	1.09	ppm		95
52) 2-Chloronaphthalene	7.386	162	28001	1.17	ppm		96
53) Biphenyl	7.359	154	36030	1.18	ppm		98
54) 2-Nitroaniline	7.567	65	7250	1.05	ppm		94
55) Dimethylphthalate	7.834	163	32051	1.15	ppm		94
56) Acenaphthylene	8.011	152	46069	1.17	ppm		98
57) 2,6-Dinitrotoluene	7.925	165	6311	1.00	ppm		91
58) 3-Nitroaniline	8.230	138	6916	0.99	ppm	#	1
59) Acenaphthene	8.288	153	27813	1.17	ppm		93
62) Dibenzofuran	8.582	168	40254	1.13	ppm		92
63) 2,4-Dinitrotoluene	8.604	165	7764	0.93	ppm		89
64) 2,3,4,6-Tetrachlorophenol	8.844	232	6973	1.05	ppm		90
65) Diethylphthalate	9.031	149	31068	1.11	ppm		98
66) Fluorene	9.164	166	32000	1.11	ppm		93
67) 4-Chlorophenyl-phenyle...	9.191	204	15525	1.13	ppm		88
68) 4-Nitroaniline	9.282	138	6237	0.92	ppm		86
70) 4,6-Dinitro-2-methylph...	9.335	198	2391	0.57	ppm		84
71) n-Nitrosodiphenylamine	9.415	169	22479	1.14	ppm		93
72) 1,2-Diphenylhydrazine	9.474	77	28053	1.11	ppm		97
74) 4-Bromophenyl-phenylether	10.067	248	10130	1.11	ppm		94
75) Hexachlorobenzene	10.163	284	12552	1.18	ppm		89
76) Pentachlorophenol	10.596	266	3855	0.94	ppm		77
77) Phenanthrene	10.911	178	45781	1.11	ppm		98
78) Anthracene	11.007	178	46745	1.10	ppm		93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123512.D
Acq On : 12 Apr 2016 8:57 pm
Operator : sarad
Sample : ic5217-1
Misc : op92514,em5217
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 13 08:50:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:49:48 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
79)	Carbazole	11.370	167	41312	1.05	ppm	96
80)	Di-n-butylphthalate	12.145	149	50879	1.04	ppm	95
81)	Fluoranthene	13.208	202	54153	1.13	ppm	99
82)	Octadecane	10.841	57	16430	1.03	ppm	95
84)	Pyrene	13.635	202	56591	1.09	ppm	96
85)	Butyl stearate	15.317	56	12583	1.06	ppm	82
87)	Butylbenzylphthalate	15.082	149	22472	0.99	ppm	96
88)	Benzo[a]anthracene	16.028	228	56102	1.16	ppm	98
89)	3,3'-Dichlorobenzidine	16.060	252	18925	1.06	ppm	96
90)	Chrysene	16.092	228	49445	1.09	ppm	98
91)	bis(2-Ethylhexyl)phtha...	16.295	149	30565	0.99	ppm	94
93)	Di-n-octylphthalate	17.518	149	51488	1.00	ppm	99
94)	Benzo[b]fluoranthene	18.025	252	52986	1.09	ppm	97
95)	Benzo[k]fluoranthene	18.073	252	55282	1.20	ppm	98
96)	Benzo[a]pyrene	18.570	252	50456	1.13	ppm	95
97)	Indeno[1,2,3-cd]pyrene	20.402	276	50350m	1.12	ppm	
98)	Dibenz(a,h)acridine	20.033	279	45243	1.13	ppm	98
99)	Dibenz[a,h]anthracene	20.445	278	50743	1.10	ppm	93
100)	7,12-Dimethylbenz(a)an...	18.020	256	24000	1.10	ppm	93
101)	Benzo[g,h,i]perylene	20.867	276	53868	1.15	ppm	96

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

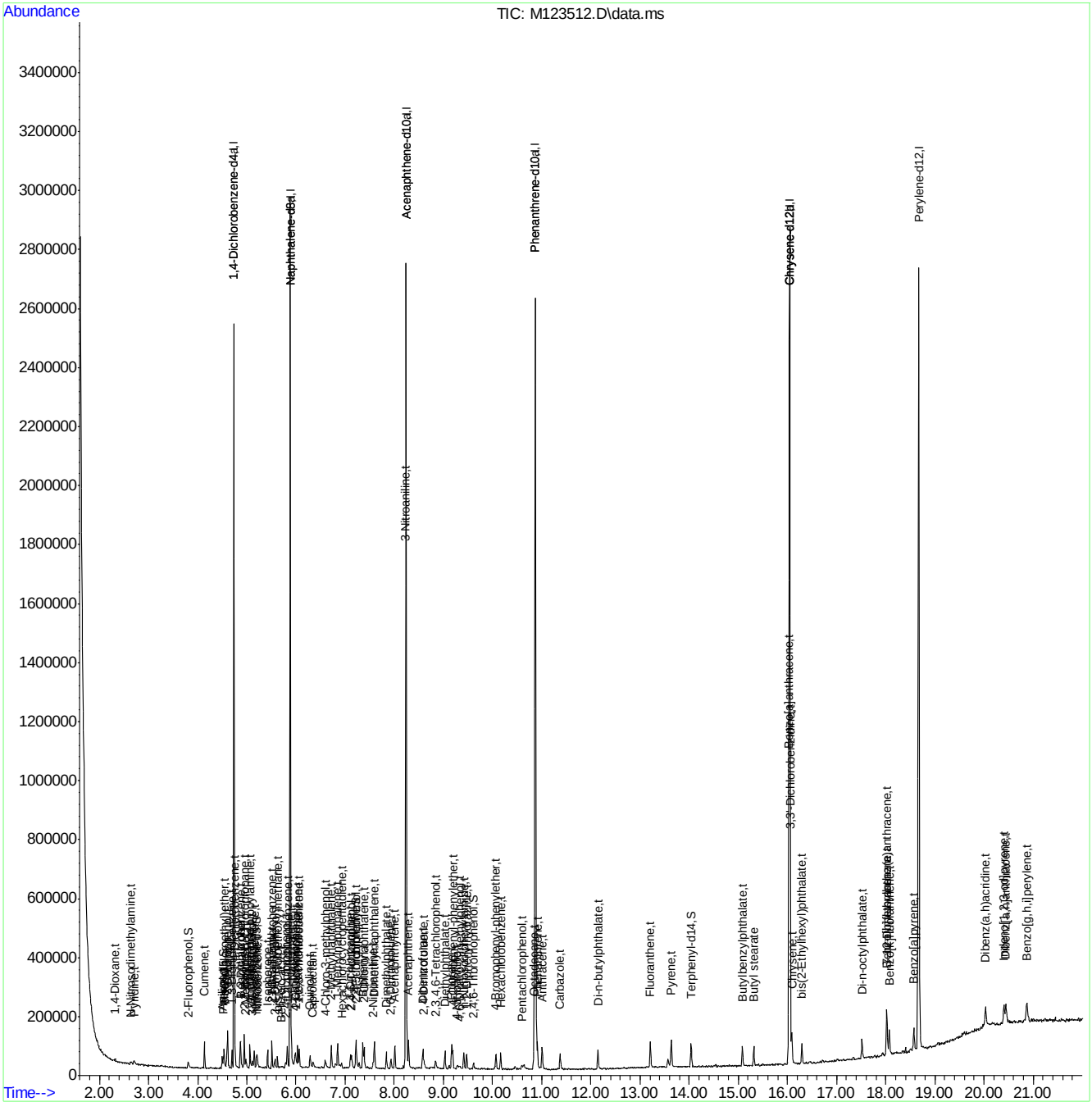
7.6.92

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123512.D
Acq On : 12 Apr 2016 8:57 pm
Operator : sarad
Sample : ic5217-1
Misc : op92514,em5217
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 13 08:50:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:49:48 2016
Response via : Initial Calibration



MM5217.M Wed Apr 13 12:12:06 2016 MSM

SGS ACCUTEST JC18516

Manual Integration Approval Summary

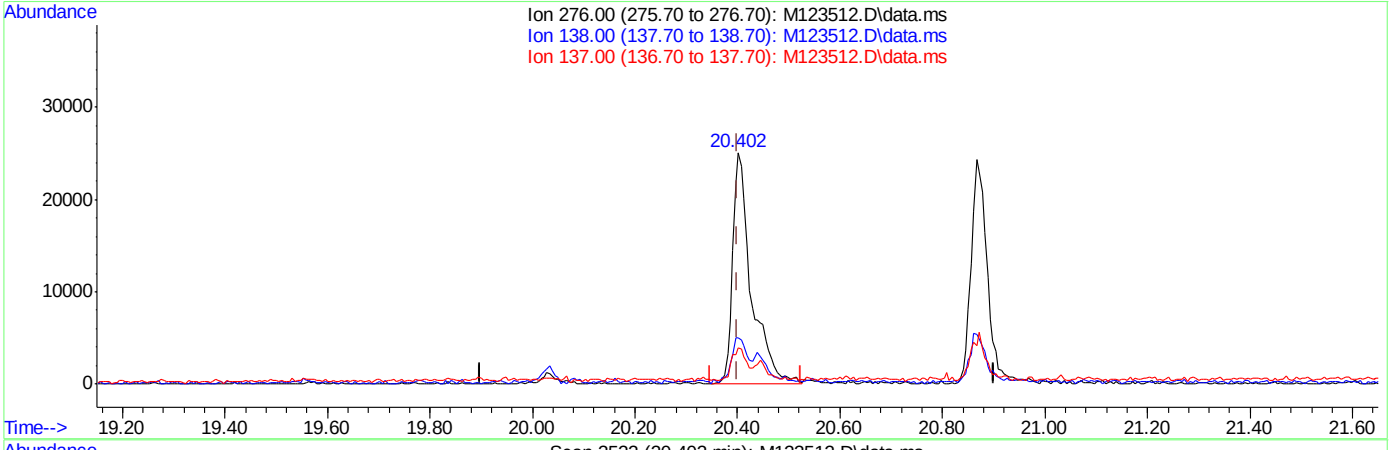
Sample Number:	EM5217-IC5217	**Method:**	SW846 8270D
Lab FileID:	M123512.D	**Analyst approved:**	04/13/16 13:03 Ashley Dye
Injection Time:	04/12/16 20:57	**Supervisor approved:**	04/13/16 13:43 Nina Pandya

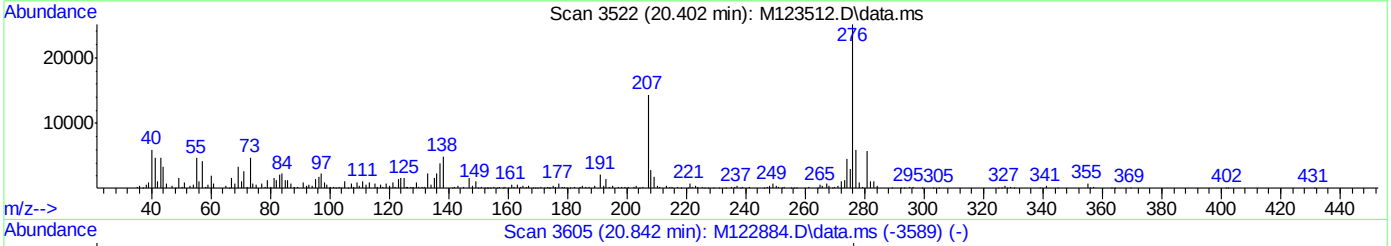
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		20.40	Overlapping peak

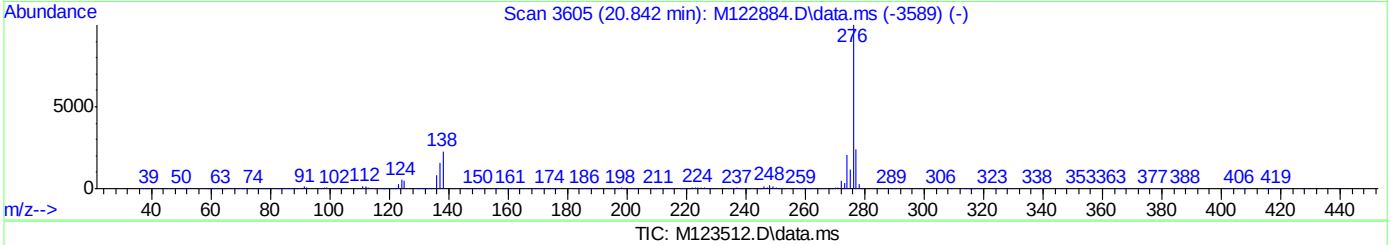
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123512.D
Acq On : 12 Apr 2016 8:57 pm
Operator : sarad
Sample : ic5217-1
Misc : op92514,em5217
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 13 08:49:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:49:48 2016
Response via : Initial Calibration







TIC: M123512.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

20.402min (+0.002) 1.40ppm

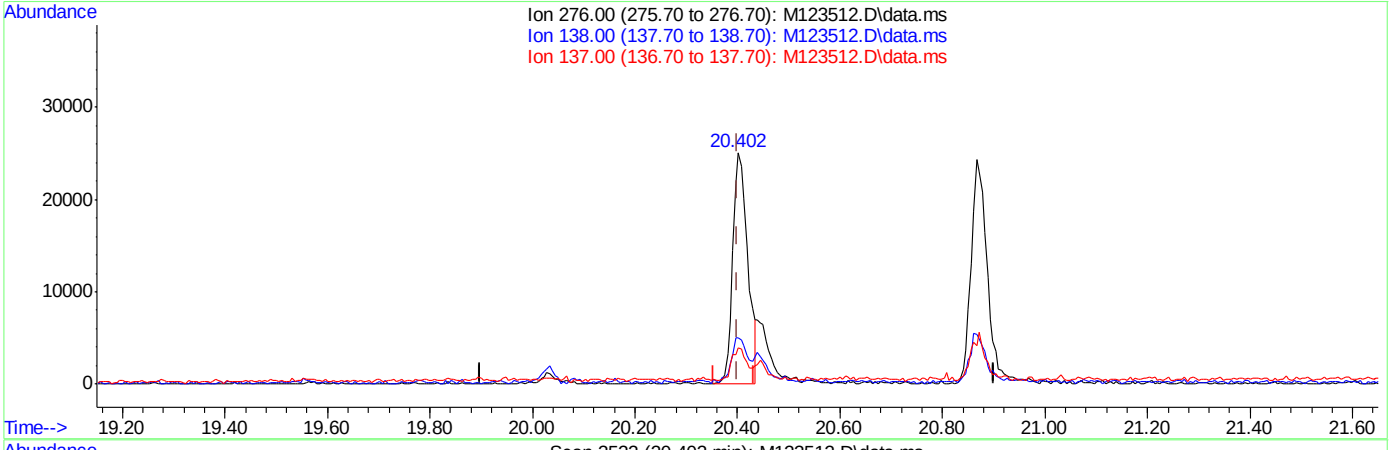
response 63148

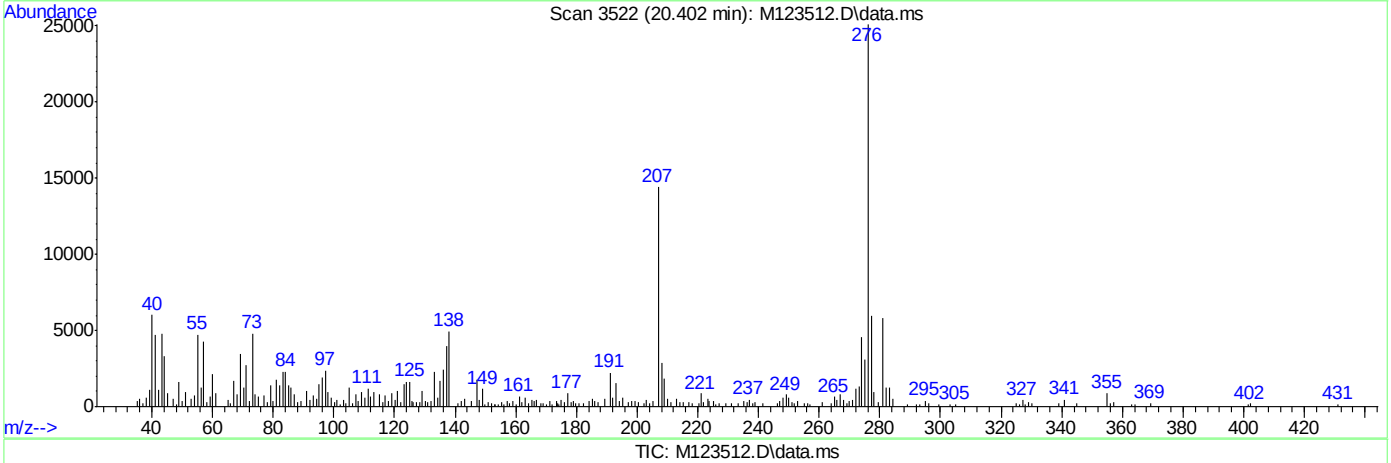
Ion	Exp%	Act%
276.00	100	100
138.00	19.20	19.27
137.00	15.50	14.26
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123512.D
Acq On : 12 Apr 2016 8:57 pm
Operator : sarad
Sample : ic5217-1
Misc : op92514,em5217
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 13 08:50:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:49:48 2016
Response via : Initial Calibration





TIC: M123512.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

20.402min (+0.002) 1.12ppm m

response 50350

Ion	Exp%	Act%
276.00	100	100
138.00	19.20	19.80
137.00	15.50	15.87
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123513.D
Acq On : 12 Apr 2016 9:26 pm
Operator : sarad
Sample : icc5217-50
Misc : op92514,em5217
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 13 08:53:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:51:40 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.737	152	309527	40.00	ppm	0.00
24) Naphthalene-d8	5.880	136	1187893	40.00	ppm	0.00
47) Acenaphthene-d10	8.241	164	738795	40.00	ppm	0.00
69) Phenanthrene-d10	10.874	188	1319007	40.00	ppm	0.00
83) Chrysene-d12	16.049	240	1329148	40.00	ppm	0.00
92) Perylene-d12	18.672	264	1425597	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.737	152	309527	40.00	ppm	0.00
104) Acenaphthene-d10a	8.241	164	738795	40.00	ppm	0.00
107) Chrysene-d12a	16.049	240	1329737	40.00	ppm	0.00
110) Phenanthrene-d10a	10.874	188	1319007	40.00	ppm	0.00
112) Naphthalene-d8a	5.880	136	1187893	40.00	ppm	0.00
114) Chrysene-d12b	16.049	240	1329148	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.797	112	477536	49.86	ppm	0.00
Spiked Amount 50.000			Recovery	=	99.72%	
8) Phenol-d5	4.507	99	594691	49.29	ppm	0.00
Spiked Amount 50.000			Recovery	=	98.58%	
25) Nitrobenzene-d5	5.196	82	509154	48.84	ppm	0.00
Spiked Amount 50.000			Recovery	=	97.68%	
51) 2-Fluorobiphenyl	7.221	172	1109462	46.27	ppm	0.00
Spiked Amount 50.000			Recovery	=	92.54%	
73) 2,4,6-Tribromophenol	9.613	330	227393	49.58	ppm	0.00
Spiked Amount 50.000			Recovery	=	99.16%	
86) Terphenyl-d14	14.041	244	1448442	48.82	ppm	0.00
Spiked Amount 50.000			Recovery	=	97.64%	
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.307	88	198515	47.67	ppm	97
3) Pyridine	2.638	79	528775	49.32	ppm	98
4) N-Nitrosodimethylamine	2.601	42	230624	50.60	ppm	93
6) Indene	4.945	116	826161	47.24	ppm	97
7) Cumene	4.139	105	1135387	48.15	ppm	98
9) Phenol	4.513	94	667086	51.78	ppm	95
10) Aniline	4.491	93	727474	48.81	ppm	99
11) bis(2-Chloroethyl)ether	4.534	93	448581	46.25	ppm	95
12) 2-Chlorophenol	4.598	128	503854	47.34	ppm	96
13) Decane	4.609	43	440420	44.68	ppm	97
14) 1,3-Dichlorobenzene	4.694	146	571259	47.71	ppm	97
15) 1,4-Dichlorobenzene	4.753	146	565255	47.65	ppm	98
16) Benzyl alcohol	4.860	108	310734	49.54	ppm	95
17) 1,2-Dichlorobenzene	4.876	146	525152	46.86	ppm	99
18) Acetophenone	5.063	105	670940	47.52	ppm	99
19) 2-Methylphenol	4.972	108	432382	48.49	ppm	95
20) 2,2'-oxybis(1-Chloropr...	4.951	121	145629	44.88	ppm	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123513.D
Acq On : 12 Apr 2016 9:26 pm
Operator : sarad
Sample : icc5217-50
Misc : op92514,em5217
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 13 08:53:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:51:40 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.095	108	473090	48.61	ppm		90
22) n-Nitroso-di-n-propyla...	5.063	70	351383	46.52	ppm		97
23) Hexachloroethane	5.154	201	212587	47.65	ppm		95
26) Nitrobenzene	5.212	77	504596	47.15	ppm		97
27) Quinoline	6.286	129	1078240	47.74	ppm		98
28) Isophorone	5.426	82	910000	47.52	ppm		98
29) 2-Nitrophenol	5.501	139	296435	48.91	ppm		81
30) 2,4-Dimethylphenol	5.559	107	453804	46.20	ppm		95
31) Benzoic acid	5.698	105	346076	56.43	ppm		91
32) bis(2-Chloroethoxy)met...	5.624	93	546695	47.01	ppm		98
33) 2,4-Dichlorophenol	5.762	162	444557	48.20	ppm		97
34) 2,6-Dichlorophenol	5.981	162	424141	47.20	ppm		99
35) 1,3,5-Trichlorobenzene	5.511	180	508359	47.52	ppm		96
36) 1,2,4-Trichlorobenzene	5.821	180	503459	48.00	ppm		98
37) 1,2,3-Trichlorobenzene	6.062	180	489712	47.94	ppm		98
38) Naphthalene	5.907	128	1460651	47.55	ppm		98
39) 4-Chloroaniline	5.971	127	656204	49.09	ppm		96
40) 2,3-Dichloroaniline	7.103	161	565893	48.04	ppm		96
41) Caprolactam	6.377	55	223443	46.15	ppm		94
42) Hexachlorobutadiene	6.035	225	287891	47.53	ppm		99
43) 4-Chloro-3-methylphenol	6.580	107	428859	47.95	ppm	#	97
44) 2-Methylnaphthalene	6.719	141	876437	48.00	ppm		97
45) 1-Methylnaphthalene	6.847	142	1027227	47.64	ppm		99
46) Dimethylnaphthalene	7.594	156	945030	47.61	ppm		99
48) Hexachlorocyclopentadiene	6.927	237	491238	125.76	ppm		99
49) 2,4,6-Trichlorophenol	7.124	196	336928	47.98	ppm		98
50) 2,4,5-Trichlorophenol	7.205	196	369990	48.57	ppm		97
52) 2-Chloronaphthalene	7.386	162	990048	46.60	ppm		97
53) Biphenyl	7.359	154	1271064	46.94	ppm		98
54) 2-Nitroaniline	7.557	65	294867	48.16	ppm		98
55) Dimethylphthalate	7.840	163	1195310	48.17	ppm		98
56) Acenaphthylene	8.011	152	1650540	47.00	ppm		99
57) 2,6-Dinitrotoluene	7.936	165	277749	49.63	ppm		97
58) 3-Nitroaniline	8.209	138	310116	50.08	ppm		98
59) Acenaphthene	8.294	153	984103	46.47	ppm		99
60) 2,4-Dinitrophenol	8.396	184	258046	134.22	ppm		94
61) 4-Nitrophenol	8.647	109	111661	49.23	ppm	#	69
62) Dibenzofuran	8.583	168	1499433	47.52	ppm		98
63) 2,4-Dinitrotoluene	8.604	165	371457	50.24	ppm		94
64) 2,3,4,6-Tetrachlorophenol	8.834	232	296448	50.32	ppm		92
65) Diethylphthalate	9.037	149	1181333	47.52	ppm		99
66) Fluorene	9.170	166	1215101	47.51	ppm		97
67) 4-Chlorophenyl-phenyle...	9.191	204	575545	47.27	ppm		94
68) 4-Nitroaniline	9.261	138	312224	51.52	ppm		95
70) 4,6-Dinitro-2-methylph...	9.325	198	214965	57.60	ppm		94
71) n-Nitrosodiphenylamine	9.421	169	832281	47.50	ppm		97
72) 1,2-Diphenylhydrazine	9.475	77	1077786	47.87	ppm		98
74) 4-Bromophenyl-phenylether	10.073	248	392504	48.64	ppm		98
75) Hexachlorobenzene	10.174	284	450451	47.67	ppm		98
76) Pentachlorophenol	10.580	266	432163	118.82	ppm		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123513.D
Acq On : 12 Apr 2016 9:26 pm
Operator : sarad
Sample : icc5217-50
Misc : op92514,em5217
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 13 08:53:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:51:40 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) Phenanthrene	10.917	178	1729456	47.40	ppm	98
78) Anthracene	11.013	178	1800583	47.57	ppm	98
79) Carbazole	11.371	167	1679850	47.92	ppm	99
80) Di-n-butylphthalate	12.145	149	2123133	48.86	ppm	98
81) Fluoranthene	13.213	202	2053874	48.23	ppm	98
82) Octadecane	10.842	57	685293	48.25	ppm	99
84) Pyrene	13.641	202	2066626	47.98	ppm	98
85) Butyl stearate	15.323	56	479890	48.62	ppm	94
87) Butylbenzylphthalate	15.088	149	946394	50.18	ppm	96
88) Benzo[a]anthracene	16.033	228	1915946	47.85	ppm	98
89) 3,3'-Dichlorobenzidine	16.055	252	724795	49.13	ppm	100
90) Chrysene	16.103	228	1813446	48.07	ppm	100
91) bis(2-Ethylhexyl)phtha...	16.295	149	1239846	48.59	ppm	99
93) Di-n-octylphthalate	17.523	149	2274106	49.02	ppm	99
94) Benzo[b]fluoranthene	18.036	252	2021895	46.26	ppm	95
95) Benzo[k]fluoranthene	18.084	252	1958211	47.22	ppm	96
96) Benzo[a]pyrene	18.576	252	1905062	47.61	ppm	100
97) Indeno[1,2,3-cd]pyrene	20.413	276	1933460	47.65	ppm	95
98) Dibenz(a,h)acridine	20.039	279	1683781	46.80	ppm	99
99) Dibenz[a,h]anthracene	20.456	278	1911886	46.05	ppm	95
100) 7,12-Dimethylbenz(a)an...	18.036	256	917200	46.74	ppm	97
101) Benzo[g,h,i]perylene	20.883	276	1953713	46.19	ppm	97

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

7.6.93

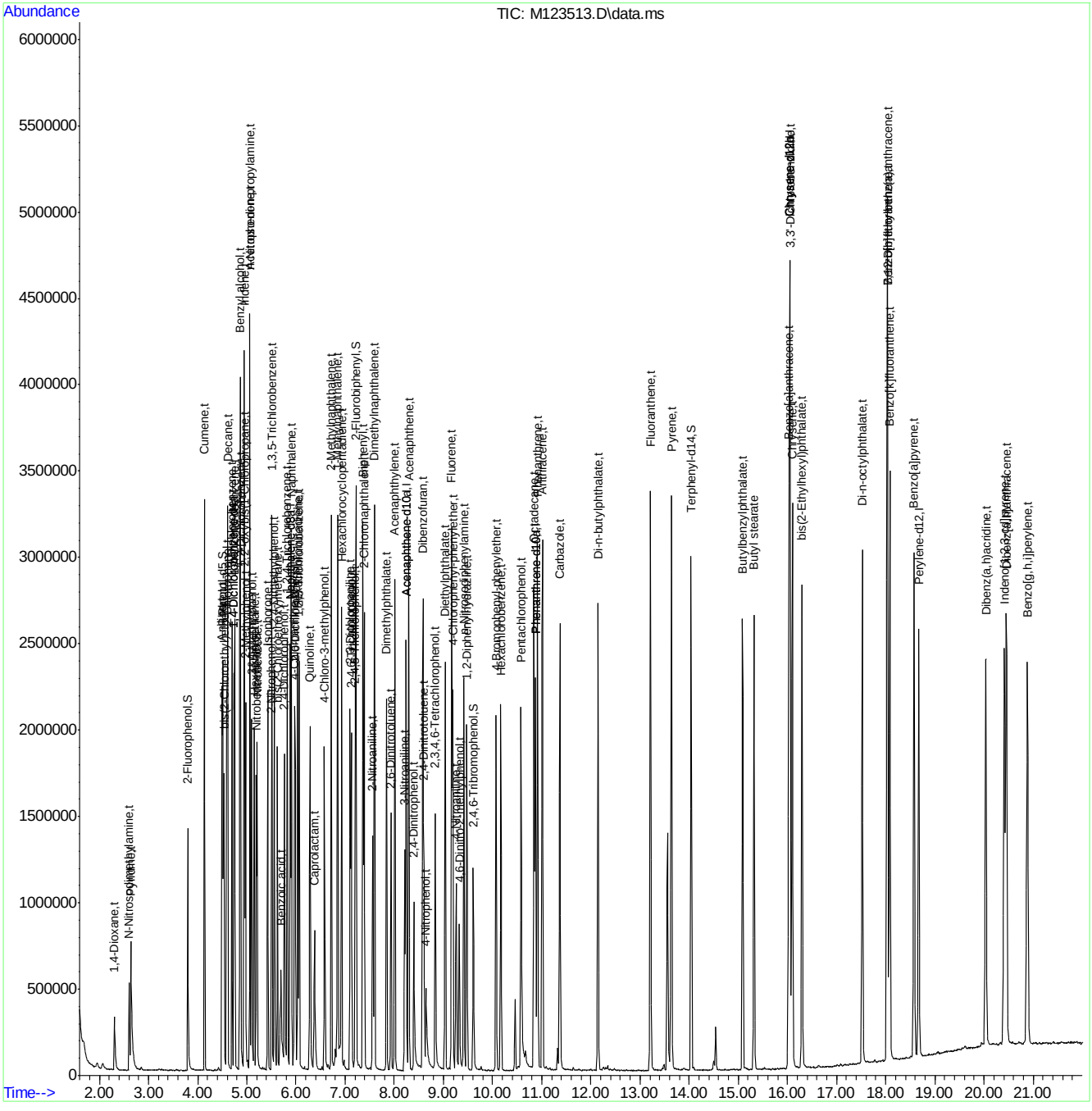
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123513.D
Acq On : 12 Apr 2016 9:26 pm
Operator : sarad
Sample : icc5217-50
Misc : op92514,em5217
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 13 08:53:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:51:40 2016
Response via : Initial Calibration



MM5217.M Wed Apr 13 12:12:10 2016 MSM

Page: 4

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123515.D
Acq On : 12 Apr 2016 10:15 pm
Operator : sarad
Sample : ic5218-100
Misc : op92514,em5218
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 13 08:59:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:58:26 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.735	152	326610	40.00	ppm	0.00
24) Naphthalene-d8	5.878	136	1256019	40.00	ppm	0.00
47) Acenaphthene-d10	8.239	164	733502	40.00	ppm	0.00
69) Phenanthrene-d10	10.867	188	1472685	40.00	ppm	0.00
83) Chrysene-d12	16.042	240	1644110	40.00	ppm	0.00
92) Perylene-d12	18.675	264	1738257	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.735	152	326610	40.00	ppm	0.00
104) Acenaphthene-d10a	8.239	164	733502	40.00	ppm	0.00
107) Chrysene-d12a	16.042	240	1644110	40.00	ppm	0.00
110) Phenanthrene-d10a	10.867	188	1472685	40.00	ppm	0.00
112) Naphthalene-d8a	5.878	136	1256019	40.00	ppm	0.00
114) Chrysene-d12b	16.042	240	1644110	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-chlorooctadecane	13.185	57	938289	99.55	ppm	0.00
Spiked Amount 50.000			Recovery	=	199.10%	
111) o-terphenyl	11.673	230	1858900	100.81	ppm	0.00
Spiked Amount 50.000			Recovery	=	201.62%	
Target Compounds						Qvalue
103) Benzaldehyde	4.409	105	560231	100.00	ppm	100
105) 1,2,4,5-Tetrachloroben...	6.946	216	1004802	100.00	ppm	100
106) Atrazine	10.477	215	378670	161.88	ppm	100
108) Benzidine	13.559	184	1482217	97.76	ppm	100
113) Hydroquinone	6.407	110	1144699	103.23	ppm	100

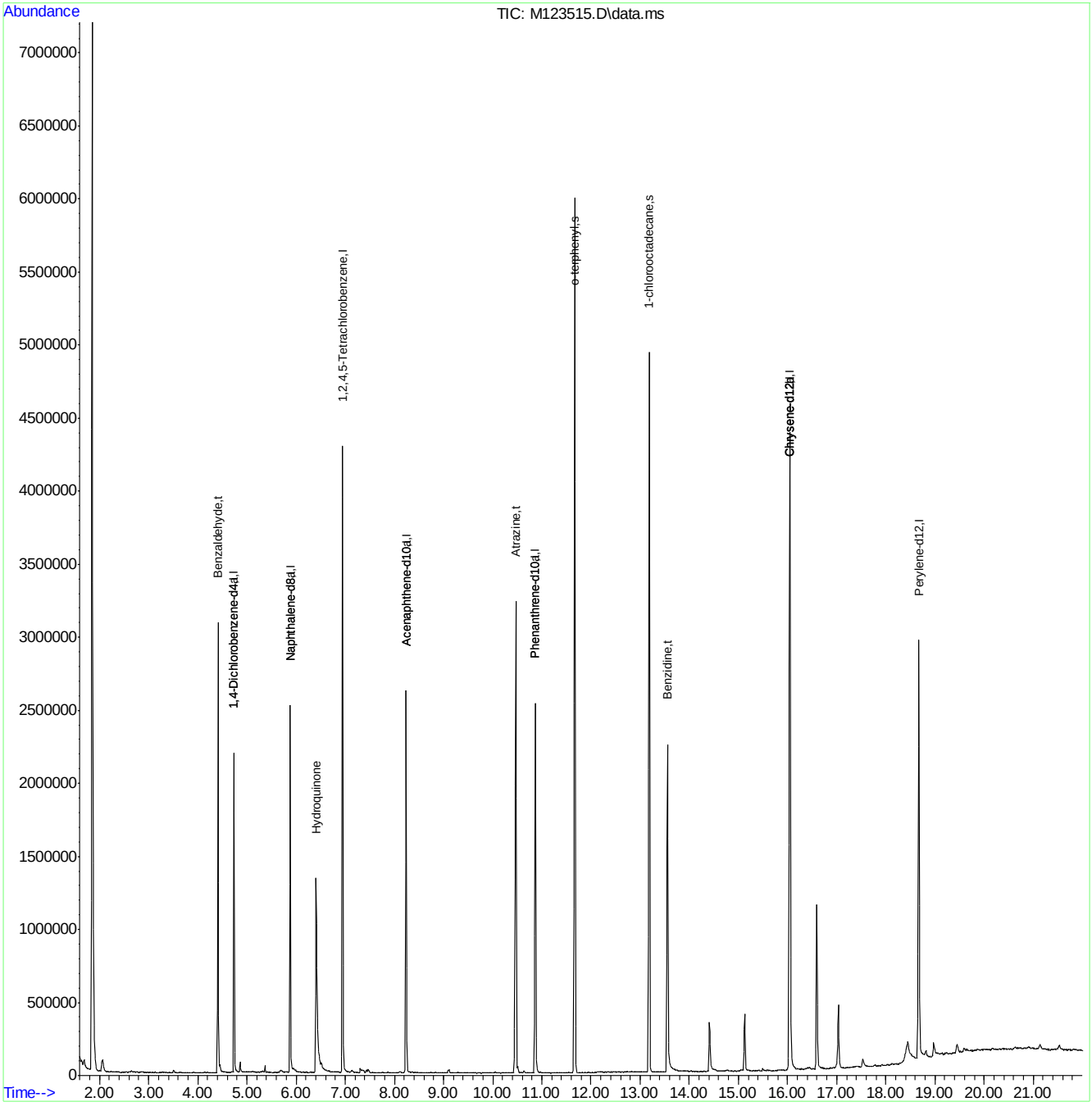
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123515.D
Acq On : 12 Apr 2016 10:15 pm
Operator : sarad
Sample : ic5218-100
Misc : op92514,em5218
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 13 08:59:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:58:26 2016
Response via : Initial Calibration



SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123516.D
Acq On : 12 Apr 2016 10:44 pm
Operator : sarad
Sample : ic5218-80
Misc : op92514,em5218
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 13 09:01:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:58:26 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.735	152	318439	40.00	ppm	0.00
24) Naphthalene-d8	5.878	136	1220599	40.00	ppm	0.00
47) Acenaphthene-d10	8.239	164	723045	40.00	ppm	0.00
69) Phenanthrene-d10	10.866	188	1475742	40.00	ppm	0.00
83) Chrysene-d12	16.042	240	1615421	40.00	ppm	0.00
92) Perylene-d12	18.670	264	1698668	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.735	152	318439	40.00	ppm	0.00
104) Acenaphthene-d10a	8.239	164	723045	40.00	ppm	0.00
107) Chrysene-d12a	16.042	240	1615421	40.00	ppm	0.00
110) Phenanthrene-d10a	10.866	188	1475742	40.00	ppm	0.00
112) Naphthalene-d8a	5.878	136	1220599	40.00	ppm	0.00
114) Chrysene-d12b	16.042	240	1615421	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-chlorooctadecane	13.184	57	748877	80.87	ppm	0.00
Spiked Amount 50.000			Recovery = 161.74%			
111) o-terphenyl	11.668	230	1502924	81.34	ppm	0.00
Spiked Amount 50.000			Recovery = 162.68%			
Target Compounds						Qvalue
103) Benzaldehyde	4.409	105	542680	99.35	ppm	98
105) 1,2,4,5-Tetrachloroben...	6.946	216	809937	81.77	ppm	99
106) Atrazine	10.471	215	303403	131.58	ppm	99
108) Benzidine	13.553	184	1311688	88.05	ppm	99
113) Hydroquinone	6.407	110	883303	81.97	ppm	99

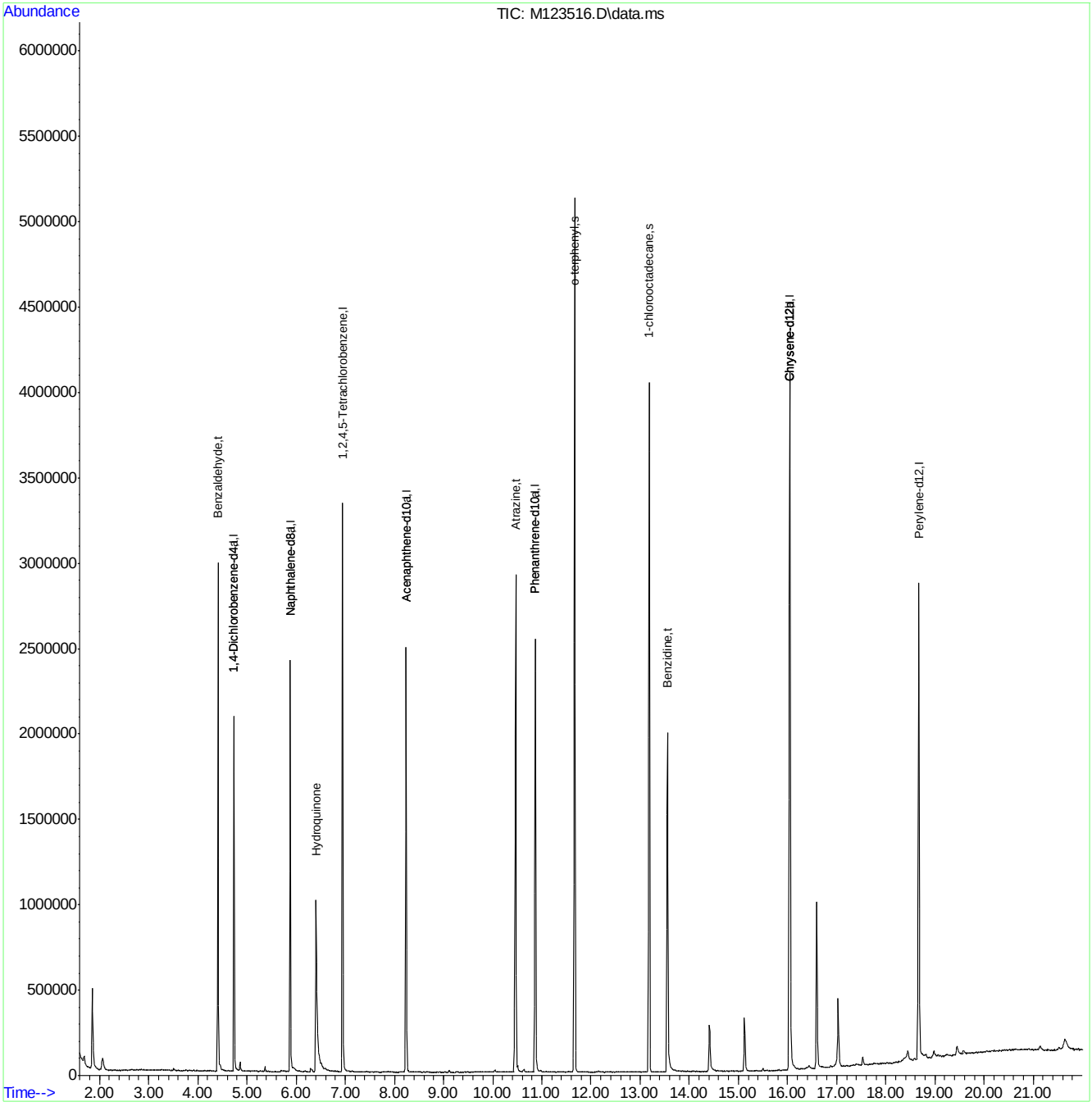
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123516.D
Acq On : 12 Apr 2016 10:44 pm
Operator : sarad
Sample : ic5218-80
Misc : op92514,em5218
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 13 09:01:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:58:26 2016
Response via : Initial Calibration



SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123517.D
Acq On : 12 Apr 2016 11:13 pm
Operator : sarad
Sample : icc5218-50
Misc : op92514,em5218
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 13 09:02:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:58:26 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.736	152	332216	40.00	ppm	0.00
24) Naphthalene-d8	5.879	136	1293563	40.00	ppm	0.00
47) Acenaphthene-d10	8.235	164	746788	40.00	ppm	0.00
69) Phenanthrene-d10	10.868	188	1498185	40.00	ppm	0.00
83) Chrysene-d12	16.038	240	1658352	40.00	ppm	-0.01
92) Perylene-d12	18.666	264	1738257	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.736	152	332216	40.00	ppm	0.00
104) Acenaphthene-d10a	8.235	164	746788	40.00	ppm	0.00
107) Chrysene-d12a	16.038	240	1658352	40.00	ppm	0.00
110) Phenanthrene-d10a	10.868	188	1498185	40.00	ppm	0.00
112) Naphthalene-d8a	5.879	136	1293563	40.00	ppm	0.00
114) Chrysene-d12b	16.038	240	1658352	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-chlorooctadecane	13.180	57	498196	52.40	ppm	0.00
Spiked Amount 50.000			Recovery	=	104.80%	
111) o-terphenyl	11.664	230	1013789	54.04	ppm	0.00
Spiked Amount 50.000			Recovery	=	108.08%	
Target Compounds						Qvalue
103) Benzaldehyde	4.405	105	395650	69.43	ppm	95
105) 1,2,4,5-Tetrachloroben...	6.942	216	563453	55.08	ppm	99
106) Atrazine	10.462	215	200232	84.07	ppm	97
108) Benzidine	13.554	184	1021313	66.78	ppm	99
113) Hydroquinone	6.403	110	566423	49.60	ppm	98

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

7.6.96

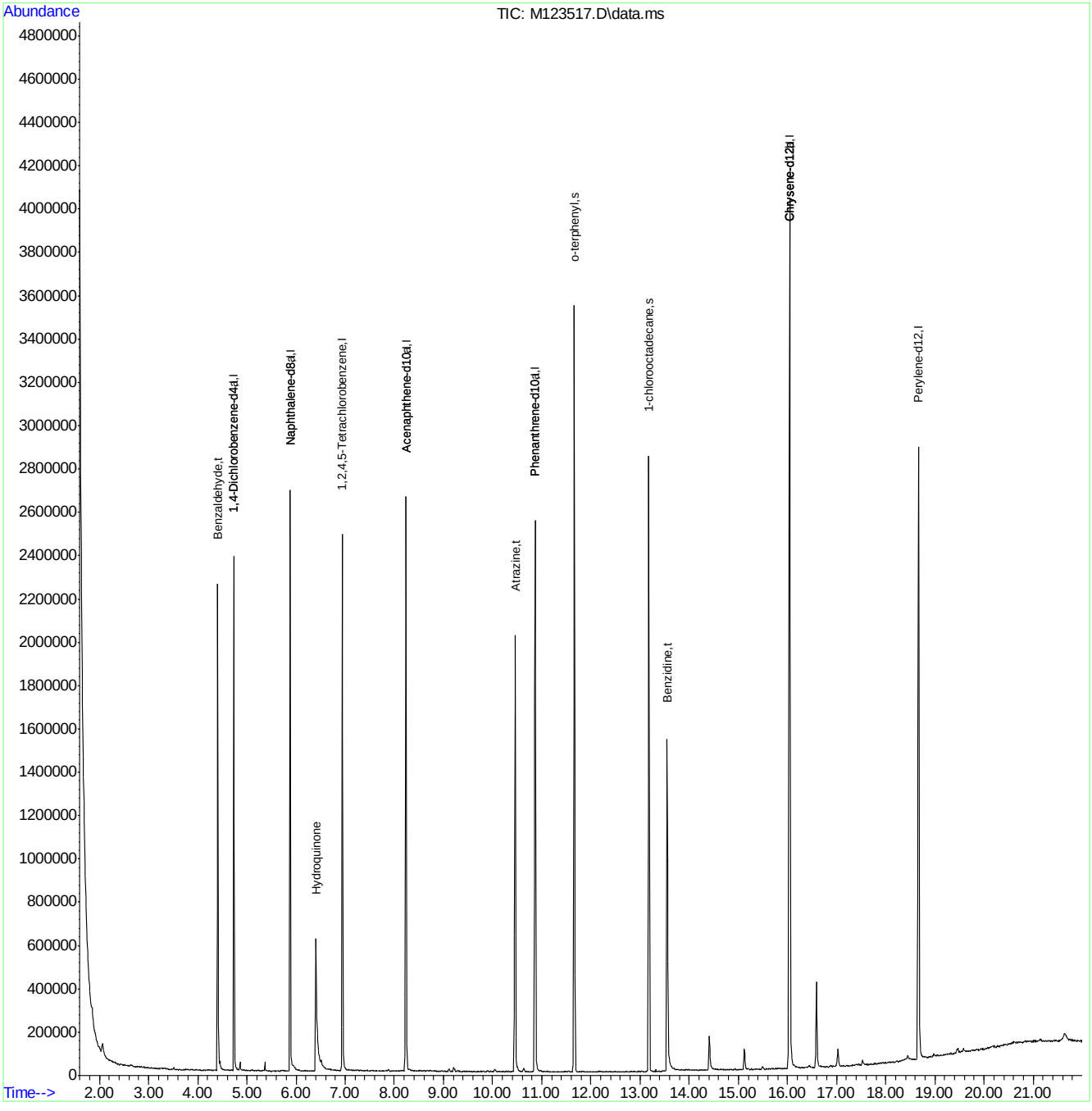
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123517.D
Acq On : 12 Apr 2016 11:13 pm
Operator : sarad
Sample : icc5218-50
Misc : op92514,em5218
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 13 09:02:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:58:26 2016
Response via : Initial Calibration



MM5217.M Wed Apr 13 09:02:13 2016 MSM

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123518.D
Acq On : 12 Apr 2016 11:41 pm
Operator : sarad
Sample : ic5218-25
Misc : op92514,em5218
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 13 09:02:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:58:26 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.734	152	340548	40.00	ppm	0.00
24) Naphthalene-d8	5.877	136	1329521	40.00	ppm	0.00
47) Acenaphthene-d10	8.233	164	769547	40.00	ppm	0.00
69) Phenanthrene-d10	10.866	188	1571172	40.00	ppm	0.00
83) Chrysene-d12	16.041	240	1723067	40.00	ppm	0.00
92) Perylene-d12	18.669	264	1815993	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.734	152	340548	40.00	ppm	0.00
104) Acenaphthene-d10a	8.233	164	769547	40.00	ppm	0.00
107) Chrysene-d12a	16.041	240	1723067	40.00	ppm	0.00
110) Phenanthrene-d10a	10.866	188	1571172	40.00	ppm	0.00
112) Naphthalene-d8a	5.877	136	1329521	40.00	ppm	0.00
114) Chrysene-d12b	16.041	240	1723067	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-chlorooctadecane	13.178	57	262838	26.61	ppm	0.00
Spiked Amount 50.000			Recovery = 53.22%			
111) o-terphenyl	11.662	230	554389	28.18	ppm	-0.01
Spiked Amount 50.000			Recovery = 56.36%			
Target Compounds						Qvalue
103) Benzaldehyde	4.408	105	209745	35.91	ppm	97
105) 1,2,4,5-Tetrachloroben...	6.940	216	299353	28.40	ppm	98
106) Atrazine	10.454	215	108136	44.06	ppm	96
108) Benzidine	13.547	184	545858	34.35	ppm	98
113) Hydroquinone	6.401	110	265668	22.63	ppm	99

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

7.6.97

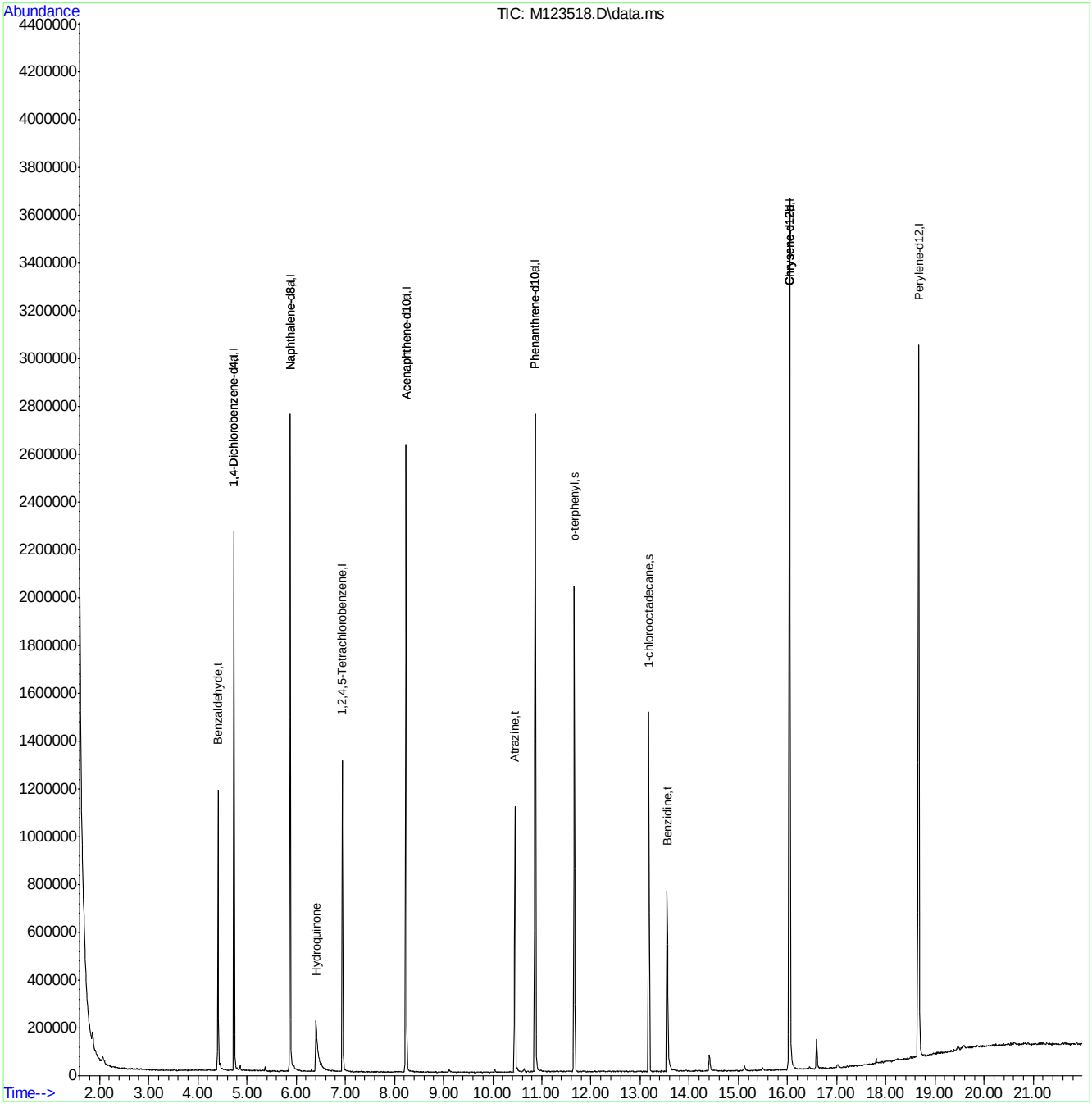
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123518.D
Acq On : 12 Apr 2016 11:41 pm
Operator : sarad
Sample : ic5218-25
Misc : op92514,em5218
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 13 09:02:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:58:26 2016
Response via : Initial Calibration



MM5217.M Wed Apr 13 09:02:51 2016 MSM

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123519.D
Acq On : 13 Apr 2016 12:10 am
Operator : sarad
Sample : ic5218-10
Misc : op92514,em5218
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 13 09:03:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:58:26 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.734	152	353184	40.00	ppm	0.00
24) Naphthalene-d8	5.877	136	1394586	40.00	ppm	0.00
47) Acenaphthene-d10	8.237	164	805702	40.00	ppm	0.00
69) Phenanthrene-d10	10.865	188	1643499	40.00	ppm	0.00
83) Chrysene-d12	16.041	240	1834019	40.00	ppm	0.00
92) Perylene-d12	18.668	264	1902538	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.734	152	353184	40.00	ppm	0.00
104) Acenaphthene-d10a	8.237	164	805702	40.00	ppm	0.00
107) Chrysene-d12a	16.041	240	1834019	40.00	ppm	0.00
110) Phenanthrene-d10a	10.865	188	1643499	40.00	ppm	0.00
112) Naphthalene-d8a	5.877	136	1394586	40.00	ppm	0.00
114) Chrysene-d12b	16.041	240	1834019	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-chlorooctadecane	13.178	57	110711	10.53	ppm	0.00
Spiked Amount 50.000			Recovery = 21.06%			
111) o-terphenyl	11.661	230	239271	11.63	ppm	-0.01
Spiked Amount 50.000			Recovery = 23.26%			
Target Compounds						Qvalue
103) Benzaldehyde	4.408	105	84116	13.88	ppm	89
105) 1,2,4,5-Tetrachloroben...	6.939	216	125133	11.34	ppm	99
106) Atrazine	10.454	215	43842	17.06	ppm	98
108) Benzidine	13.552	184	229482	13.57	ppm	97
113) Hydroquinone	6.437	110	94074	7.64	ppm	96

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

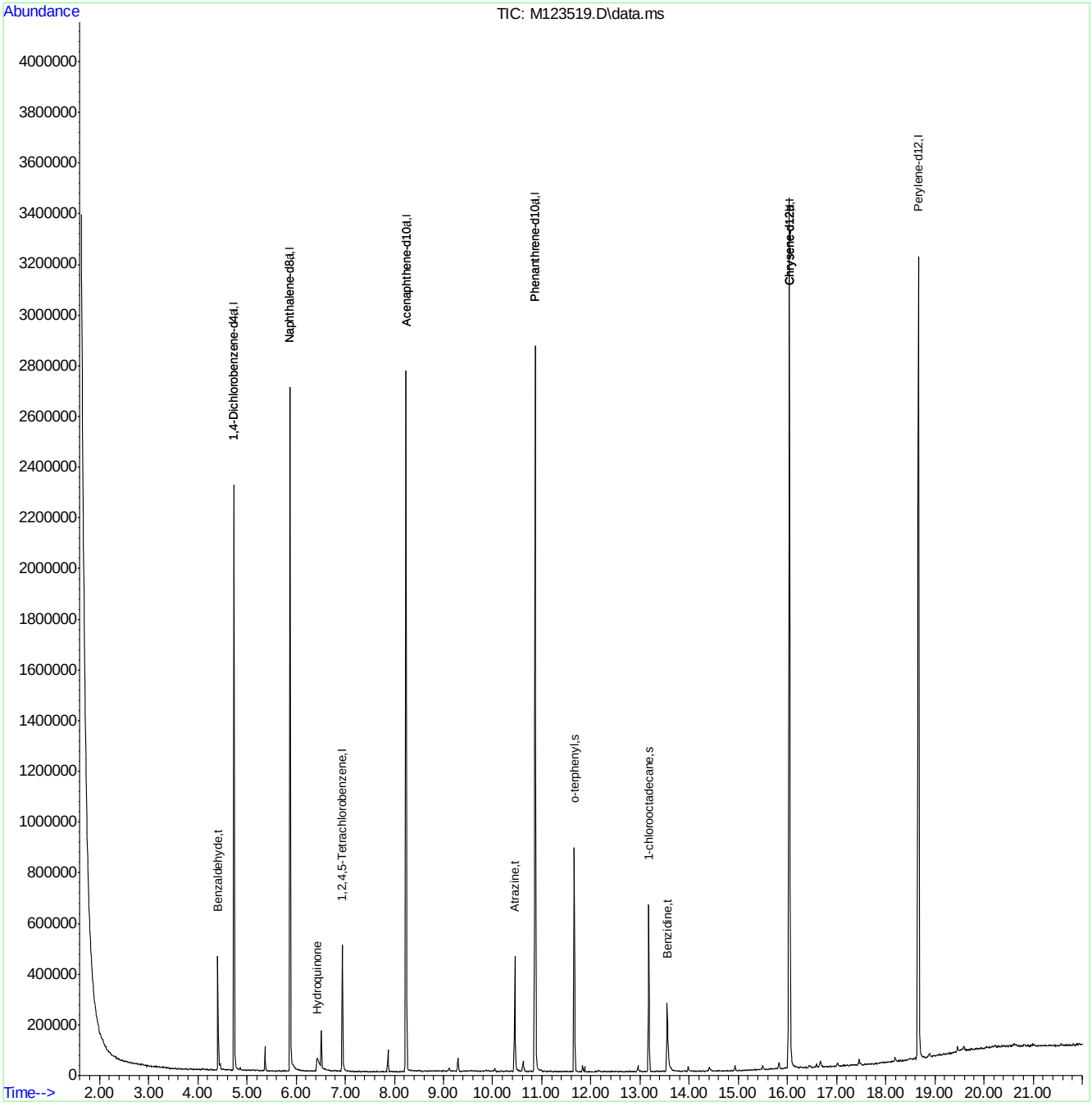
7.6.98

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123519.D
Acq On : 13 Apr 2016 12:10 am
Operator : sarad
Sample : ic5218-10
Misc : op92514,em5218
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 13 09:03:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:58:26 2016
Response via : Initial Calibration



SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123520.D
Acq On : 13 Apr 2016 12:39 am
Operator : sarad
Sample : ic5218-5
Misc : op92514,em5218
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 13 09:04:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:58:26 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.734	152	360558	40.00	ppm	0.00
24) Naphthalene-d8	5.877	136	1428106	40.00	ppm	0.00
47) Acenaphthene-d10	8.232	164	776911	40.00	ppm	0.00
69) Phenanthrene-d10	10.866	188	1548484	40.00	ppm	0.00
83) Chrysene-d12	16.041	240	1729681	40.00	ppm	0.00
92) Perylene-d12	18.669	264	1778834	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.734	152	360558	40.00	ppm	0.00
104) Acenaphthene-d10a	8.232	164	776911	40.00	ppm	0.00
107) Chrysene-d12a	16.041	240	1729681	40.00	ppm	0.00
110) Phenanthrene-d10a	10.866	188	1548484	40.00	ppm	0.00
112) Naphthalene-d8a	5.877	136	1428106	40.00	ppm	0.00
114) Chrysene-d12b	16.041	240	1729681	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-chlorooctadecane	13.178	57	59010	5.95	ppm	0.00
Spiked Amount 50.000			Recovery	=	11.90%	
111) o-terphenyl	11.661	230	126160	6.51	ppm	-0.01
Spiked Amount 50.000			Recovery	=	13.02%	
Target Compounds						Qvalue
103) Benzaldehyde	4.408	105	50560	8.18	ppm	96
105) 1,2,4,5-Tetrachloroben...	6.940	216	69035	6.49	ppm	99
106) Atrazine	10.449	215	23154	9.35	ppm	95
108) Benzidine	13.557	184	116854	7.33	ppm	98
113) Hydroquinone	6.475	110	48393	3.84	ppm	93

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

7.6.99

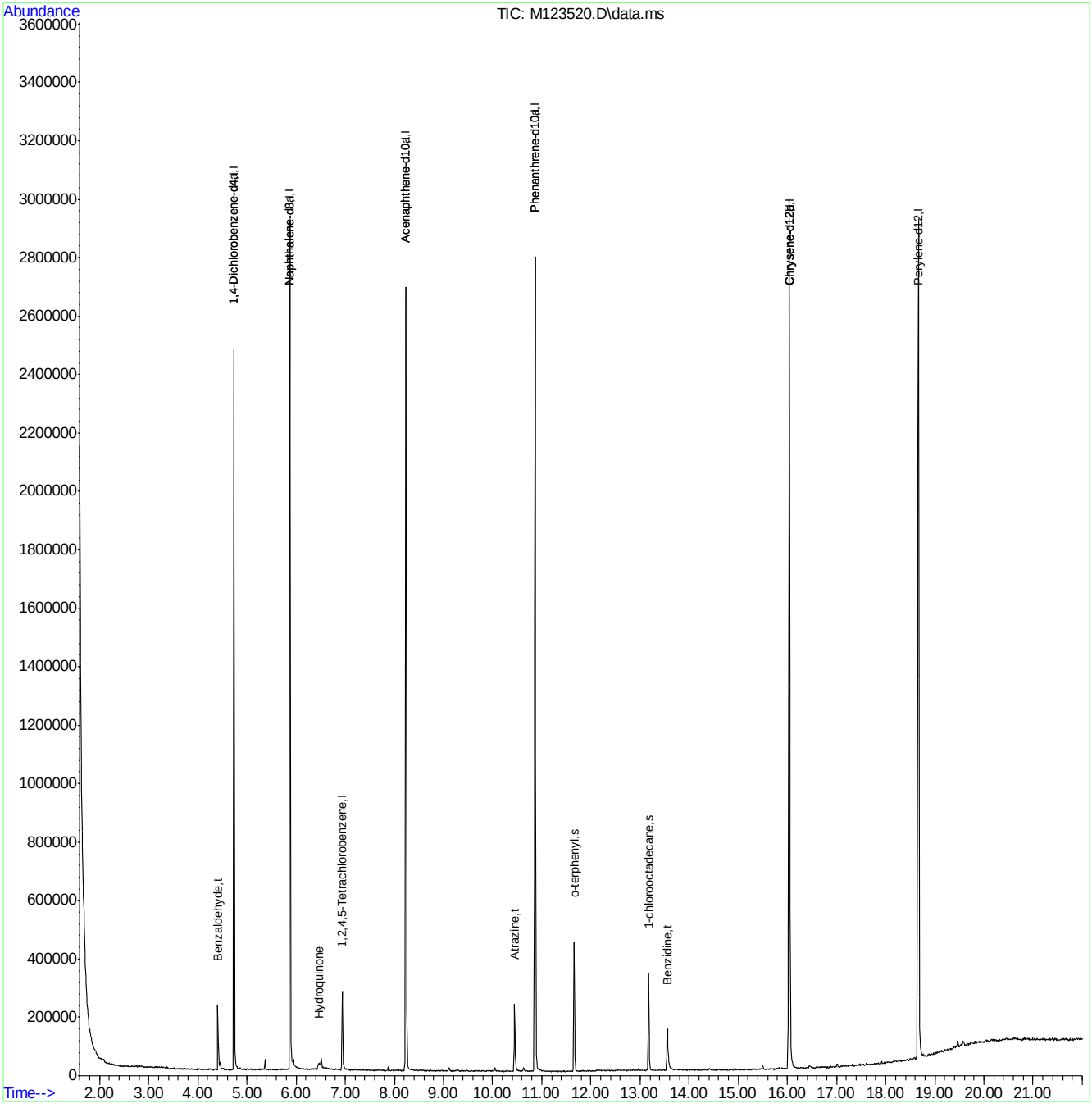
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123520.D
Acq On : 13 Apr 2016 12:39 am
Operator : sarad
Sample : ic5218-5
Misc : op92514,em5218
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 13 09:04:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:58:26 2016
Response via : Initial Calibration



SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123521.D
Acq On : 13 Apr 2016 1:08 am
Operator : sarad
Sample : ic5218-2
Misc : op92514,em5218
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 13 09:05:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:58:26 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.736	152	376565	40.00	ppm	0.00
24) Naphthalene-d8	5.879	136	1481342	40.00	ppm	0.00
47) Acenaphthene-d10	8.235	164	848740	40.00	ppm	0.00
69) Phenanthrene-d10	10.868	188	1737235	40.00	ppm	0.00
83) Chrysene-d12	16.038	240	1913022	40.00	ppm	-0.01
92) Perylene-d12	18.671	264	1998128	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.736	152	376565	40.00	ppm	0.00
104) Acenaphthene-d10a	8.235	164	848740	40.00	ppm	0.00
107) Chrysene-d12a	16.038	240	1913022	40.00	ppm	0.00
110) Phenanthrene-d10a	10.868	188	1737235	40.00	ppm	0.00
112) Naphthalene-d8a	5.879	136	1481342	40.00	ppm	0.00
114) Chrysene-d12b	16.038	240	1913022	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-chlorooctadecane	13.175	57	24879	2.27	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.54%	
111) o-terphenyl	11.658	230	55388	2.55	ppm	-0.01
Spiked Amount 50.000			Recovery	=	5.10%	
Target Compounds						Qvalue
103) Benzaldehyde	4.410	105	20249	3.13	ppm	92
105) 1,2,4,5-Tetrachloroben...	6.942	216	31335	2.70	ppm	97
106) Atrazine	10.451	215	10005	3.70	ppm	92
108) Benzidine	13.560	184	45032	2.55	ppm	95

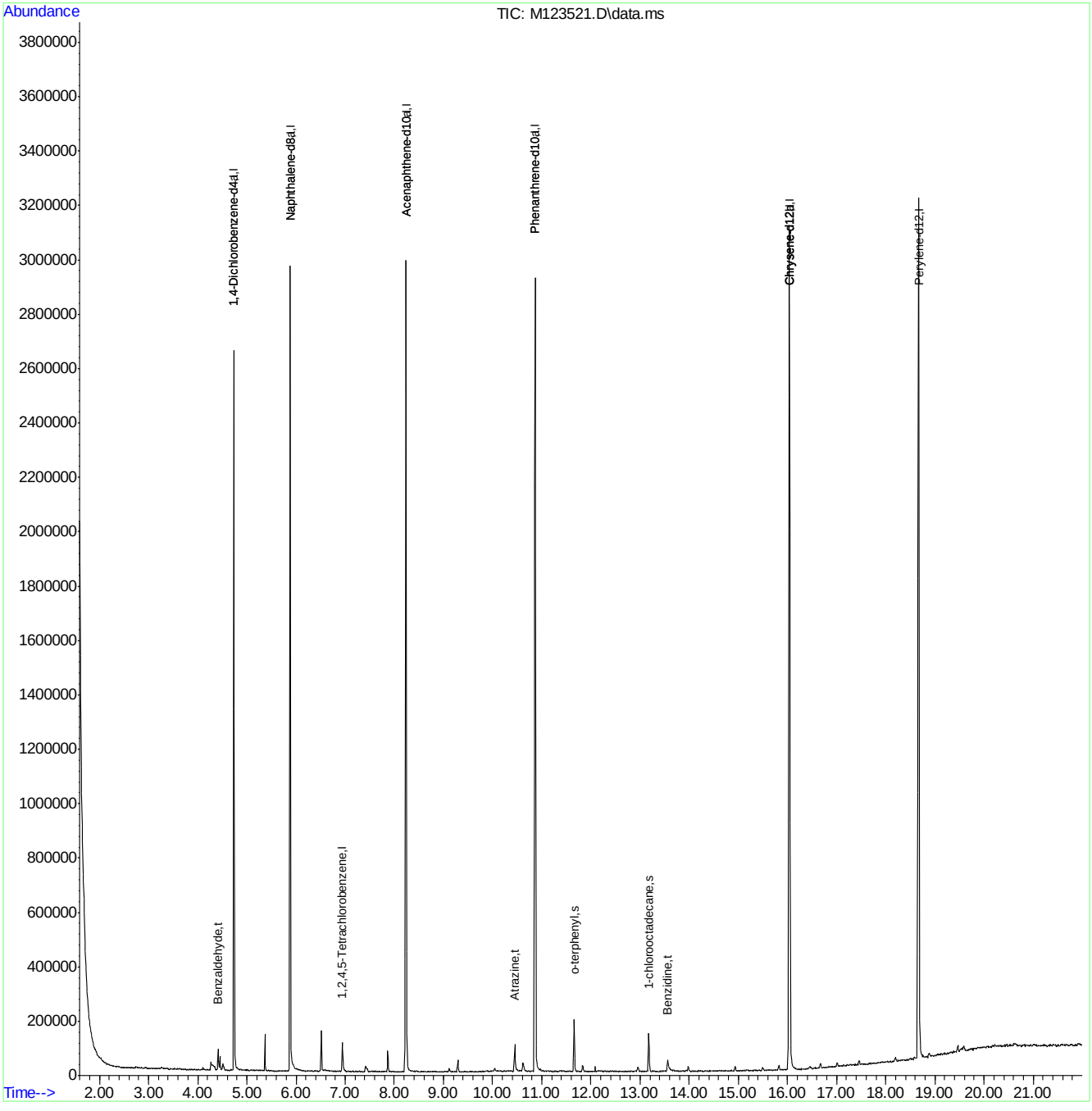
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123521.D
Acq On : 13 Apr 2016 1:08 am
Operator : sarad
Sample : ic5218-2
Misc : op92514,em5218
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 13 09:05:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:58:26 2016
Response via : Initial Calibration



MM5217.M Wed Apr 13 09:05:28 2016 MSM Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123522.D
Acq On : 13 Apr 2016 1:36 am
Operator : sarad
Sample : ic5218-1
Misc : op92514,em5218
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 13 09:06:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:58:26 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.734	152	345672	40.00	ppm	0.00
24) Naphthalene-d8	5.877	136	1374711	40.00	ppm	0.00
47) Acenaphthene-d10	8.232	164	785980	40.00	ppm	0.00
69) Phenanthrene-d10	10.865	188	1603899	40.00	ppm	0.00
83) Chrysene-d12	16.041	240	1813553	40.00	ppm	0.00
92) Perylene-d12	18.668	264	1828000	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.734	152	345672	40.00	ppm	0.00
104) Acenaphthene-d10a	8.232	164	785980	40.00	ppm	0.00
107) Chrysene-d12a	16.041	240	1813553	40.00	ppm	0.00
110) Phenanthrene-d10a	10.865	188	1603899	40.00	ppm	0.00
112) Naphthalene-d8a	5.877	136	1374711	40.00	ppm	0.00
114) Chrysene-d12b	16.041	240	1813553	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-chlorooctadecane	13.178	57	11342	1.09	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.18%	
111) o-terphenyl	11.661	230	26040	1.30	ppm	-0.01
Spiked Amount 50.000			Recovery	=	2.60%	
Target Compounds						Qvalue
103) Benzaldehyde	4.413	105	9855	1.66	ppm	94
105) 1,2,4,5-Tetrachloroben...	6.945	216	14418	1.34	ppm	99
106) Atrazine	10.449	215	4673	1.86	ppm #	78
108) Benzidine	13.568	184	16495	0.99	ppm	93

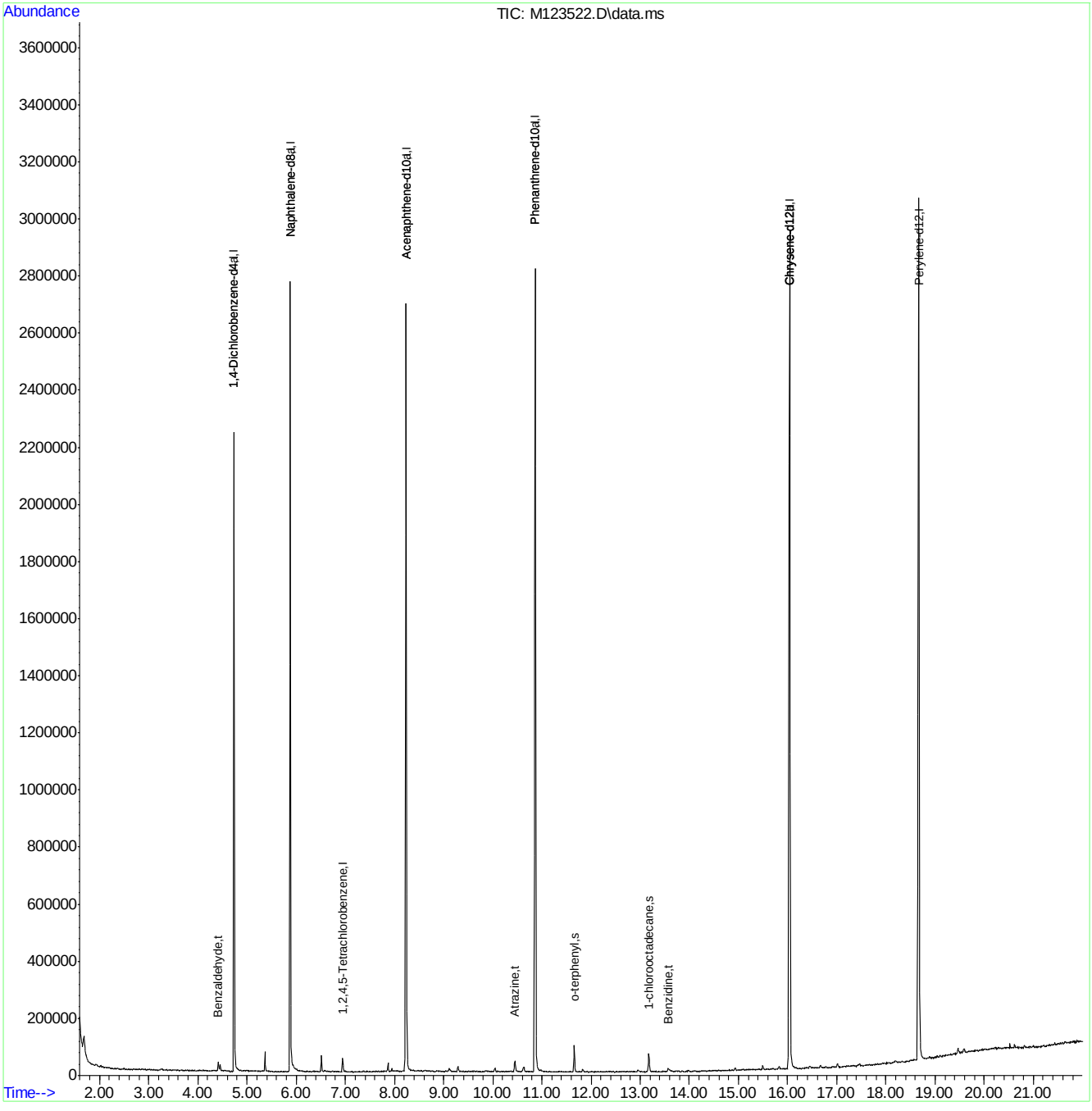
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123522.D
Acq On : 13 Apr 2016 1:36 am
Operator : sarad
Sample : ic5218-1
Misc : op92514,em5218
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 13 09:06:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:58:26 2016
Response via : Initial Calibration



MM5217.M Wed Apr 13 09:06:05 2016 MSM

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123523.D
Acq On : 13 Apr 2016 2:05 am
Operator : sarad
Sample : icv5217-50
Misc : op92514,em5218
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 13 09:15:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.734	152	314976	40.00	ppm	0.00
24) Naphthalene-d8	5.877	136	1159891	40.00	ppm	0.00
47) Acenaphthene-d10	8.233	164	752452	40.00	ppm	0.00
69) Phenanthrene-d10	10.866	188	1345328	40.00	ppm	0.00
83) Chrysene-d12	16.041	240	1418559	40.00	ppm	0.00
92) Perylene-d12	18.669	264	1416009	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.734	152	314976	40.00	ppm	0.00
104) Acenaphthene-d10a	8.233	164	752452	40.00	ppm	0.00
107) Chrysene-d12a	16.041	240	1418559	40.00	ppm	0.00
110) Phenanthrene-d10a	10.866	188	1345328	40.00	ppm	0.00
112) Naphthalene-d8a	5.877	136	1159891	40.00	ppm	0.00
114) Chrysene-d12b	16.041	240	1418559	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
9) Phenol	4.515	94	634812	48.97	ppm	93
12) 2-Chlorophenol	4.595	128	540404	50.05	ppm	99
19) 2-Methylphenol	4.964	108	466299	52.12	ppm	97
21) 3&4-Methylphenol	5.092	108	501664	51.18	ppm #	98
29) 2-Nitrophenol	5.498	139	300290	50.82	ppm	94
30) 2,4-Dimethylphenol	5.557	107	497322	51.43	ppm	99
31) Benzoic acid	5.696	105	321438	50.68	ppm	99
33) 2,4-Dichlorophenol	5.760	162	461986	52.25	ppm	100
34) 2,6-Dichlorophenol	5.979	162	449769	50.35	ppm	99
43) 4-Chloro-3-methylphenol	6.566	107	436970	49.46	ppm	96
49) 2,4,6-Trichlorophenol	7.116	196	363435	50.62	ppm	99
50) 2,4,5-Trichlorophenol	7.196	196	366621	46.91	ppm	100
60) 2,4-Dinitrophenol	8.393	184	101304	44.01	ppm	100
61) 4-Nitrophenol	8.638	109	113792	49.37	ppm	96
64) 2,3,4,6-Tetrachlorophenol	8.831	232	292575	48.40	ppm	99
70) 4,6-Dinitro-2-methylph...	9.311	198	211194	47.84	ppm	100
76) Pentachlorophenol	10.572	266	183549	44.30	ppm	97

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123523.D
Acq On : 13 Apr 2016 2:05 am
Operator : sarad
Sample : icv5217-50
Misc : op92514,em5218
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 13 09:15:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration

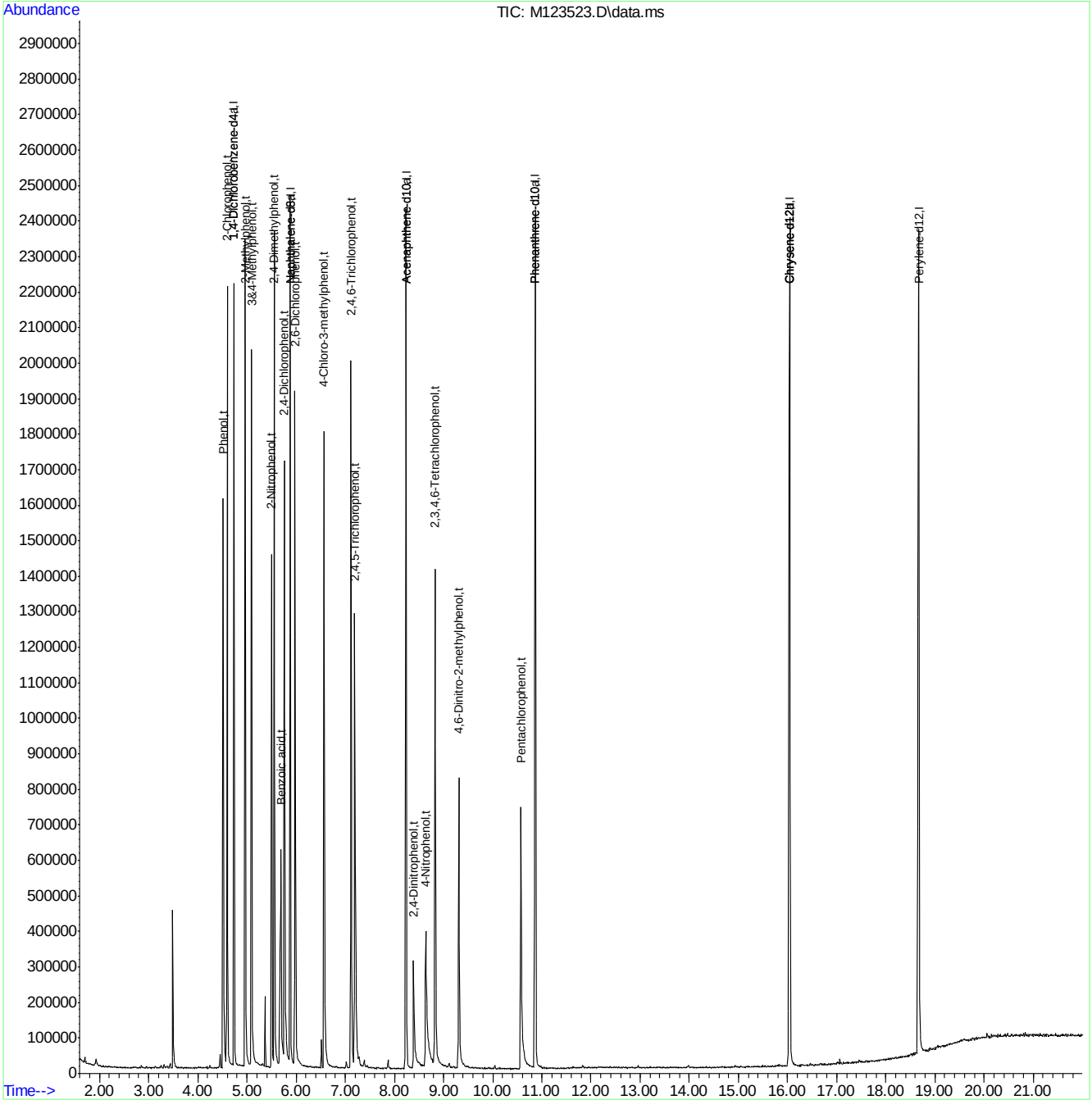
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123523.D
Acq On : 13 Apr 2016 2:05 am
Operator : sarad
Sample : icv5217-50
Misc : op92514,em5218
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 13 09:15:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration



MM5217.M Wed Apr 13 09:15:08 2016 MSM

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123524.D
Acq On : 13 Apr 2016 2:34 am
Operator : sarad
Sample : icv5217-50
Misc : op92514,em5218
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 13 09:18:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.736	152	284462	40.00	ppm	0.00
24) Naphthalene-d8	5.879	136	1094377	40.00	ppm	0.00
47) Acenaphthene-d10	8.235	164	661926	40.00	ppm	0.00
69) Phenanthrene-d10	10.863	188	1254653	40.00	ppm	-0.01
83) Chrysene-d12	16.038	240	1278815	40.00	ppm	-0.01
92) Perylene-d12	18.666	264	1165549	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.736	152	284462	40.00	ppm	0.00
104) Acenaphthene-d10a	8.235	164	661926	40.00	ppm	0.00
107) Chrysene-d12a	16.038	240	1278882	40.00	ppm	0.00
110) Phenanthrene-d10a	10.863	188	1254653	40.00	ppm	0.00
112) Naphthalene-d8a	5.879	136	1094377	40.00	ppm	0.00
114) Chrysene-d12b	16.038	240	1278815	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
3) Pyridine	2.696	79	477835	49.77	ppm	99
10) Aniline	4.496	93	703426	51.66	ppm	83
16) Benzyl alcohol	4.859	108	301469	53.38	ppm	89
39) 4-Chloroaniline	5.965	127	598927	48.51	ppm	97
44) 2-Methylnaphthalene	6.713	141	765334	44.65	ppm	100
54) 2-Nitroaniline	7.556	65	259771	47.26	ppm	90
58) 3-Nitroaniline	8.203	138	279017	50.32	ppm	98
62) Dibenzofuran	8.577	168	1366967	47.85	ppm	98
68) 4-Nitroaniline	9.250	138	267401	49.59	ppm	99
79) Carbazole	11.365	167	1561300	46.79	ppm	99

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

7.6.103

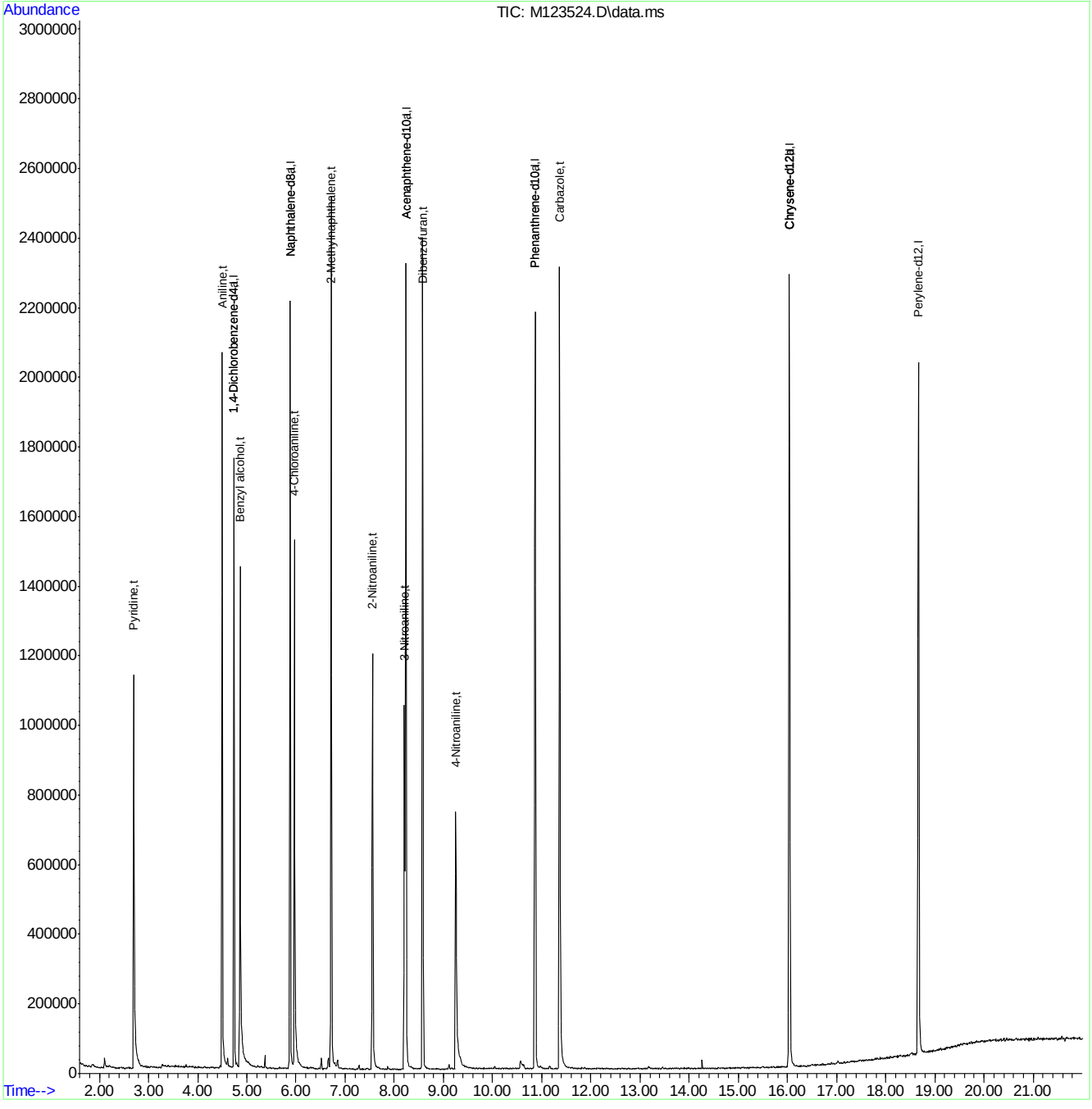
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123524.D
Acq On : 13 Apr 2016 2:34 am
Operator : sarad
Sample : icv5217-50
Misc : op92514,em5218
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 13 09:18:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration



MM5217.M Wed Apr 13 09:18:47 2016 MSM

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123526a.D
Acq On : 13 Apr 2016 3:31 am
Operator : sarad
Sample : icv5218-50
Misc : op92514,em5218
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 13 12:17:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.734	152	304041	40.00	ppm	0.00
24) Naphthalene-d8	5.882	136	1156622	40.00	ppm	0.00
47) Acenaphthene-d10	8.238	164	725951	40.00	ppm	0.00
69) Phenanthrene-d10	10.865	188	1345063	40.00	ppm	0.00
83) Chrysene-d12	16.046	240	1314417	40.00	ppm	0.00
92) Perylene-d12	18.669	264	1385257	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.734	152	304041	40.00	ppm	0.00
104) Acenaphthene-d10a	8.238	164	725951	40.00	ppm	0.00
107) Chrysene-d12a	16.046	240	1314417	40.00	ppm	0.00
110) Phenanthrene-d10a	10.865	188	1345063	40.00	ppm	0.00
112) Naphthalene-d8a	5.882	136	1156622	40.00	ppm	0.00
114) Chrysene-d12b	16.046	240	1314417	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
105) 1,2,4,5-Tetrachloroben...	6.945	216	566426	48.59	ppm	99

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

7.6.104

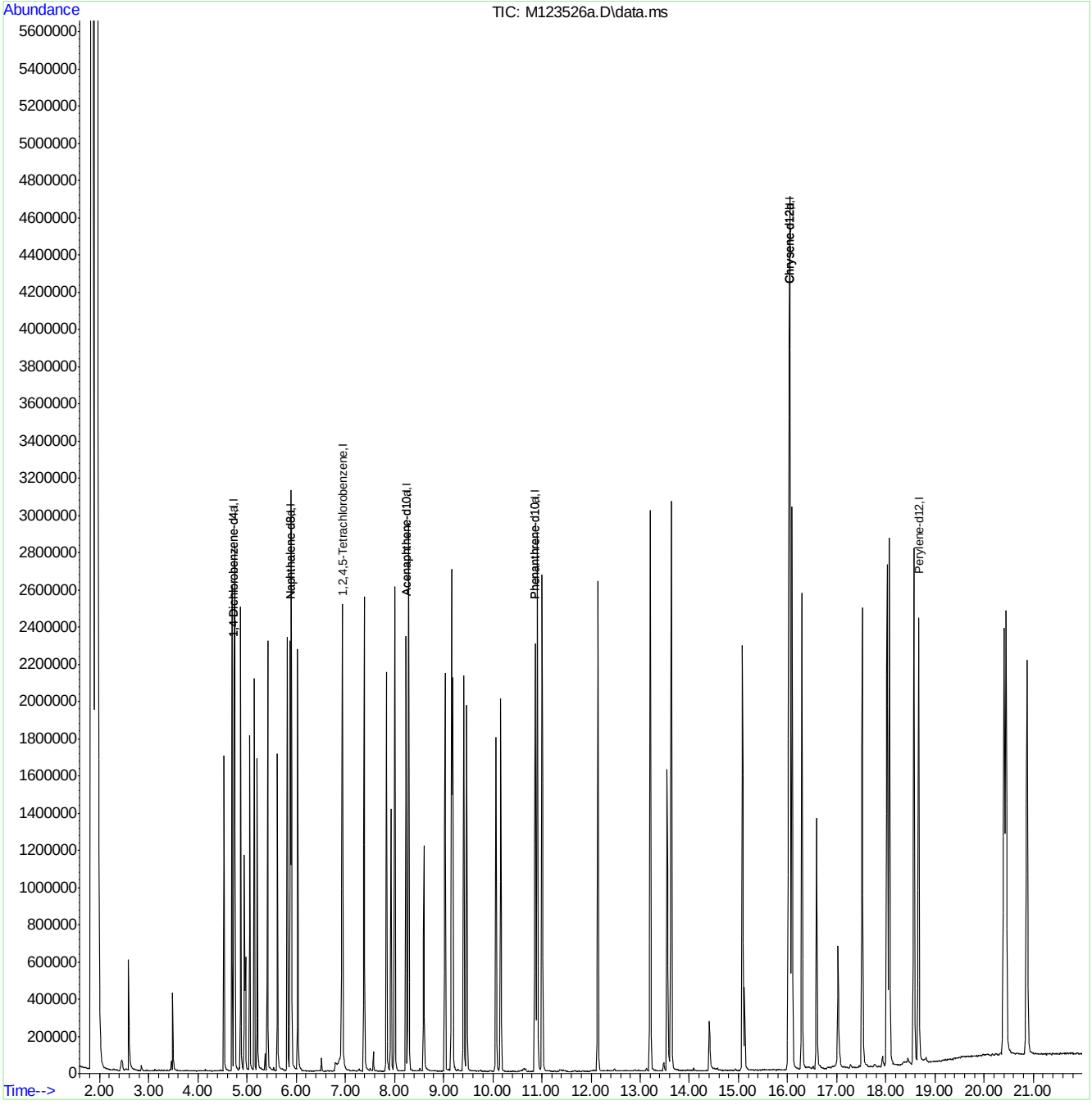
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123526a.D
Acq On : 13 Apr 2016 3:31 am
Operator : sarad
Sample : icv5218-50
Misc : op92514,em5218
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 13 12:17:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration



MM5217.M Wed Apr 13 12:17:19 2016 MSM

Page: 2

SGS ACCUTEST JC18516

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/13/16 13:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123526.D
Acq On : 13 Apr 2016 3:31 am
Operator : sarad
Sample : icv5217-50
Misc : op92514,em5218
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 13 12:16:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.734	152	304041	40.00	ppm	0.00
24) Naphthalene-d8	5.882	136	1156622	40.00	ppm	0.00
47) Acenaphthene-d10	8.238	164	725951	40.00	ppm	0.00
69) Phenanthrene-d10	10.865	188	1345063	40.00	ppm	0.00
83) Chrysene-d12	16.046	240	1314417	40.00	ppm	0.00
92) Perylene-d12	18.669	264	1385257	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.734	152	304041	40.00	ppm	0.00
104) Acenaphthene-d10a	8.238	164	725951	40.00	ppm	0.00
107) Chrysene-d12a	16.046	240	1314417	40.00	ppm	0.00
110) Phenanthrene-d10a	10.865	188	1345063	40.00	ppm	0.00
112) Naphthalene-d8a	5.882	136	1156622	40.00	ppm	0.00
114) Chrysene-d12b	16.046	240	1314417	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
4) N-Nitrosodimethylamine	2.592	42	208903	46.48	ppm	98
11) bis(2-Chloroethyl)ether	4.531	93	469893	48.22	ppm	96
14) 1,3-Dichlorobenzene	4.691	146	567685	47.77	ppm	99
15) 1,4-Dichlorobenzene	4.750	146	567979	48.24	ppm	98
17) 1,2-Dichlorobenzene	4.873	146	542217	48.91	ppm	100
20) 2,2'-oxybis(1-Chloropr...	4.947	121	138723	43.09	ppm	98
22) n-Nitroso-di-n-propyla...	5.054	70	333856	44.67	ppm	99
23) Hexachloroethane	5.150	201	211929	47.61	ppm	97
26) Nitrobenzene	5.209	77	489694	47.03	ppm	99
28) Isophorone	5.418	82	910157	48.63	ppm	99
32) bis(2-Chloroethoxy)met...	5.620	93	544719	47.93	ppm	99
36) 1,2,4-Trichlorobenzene	5.823	180	505494	48.88	ppm	98
38) Naphthalene	5.904	128	1446303	47.75	ppm	100
42) Hexachlorobutadiene	6.032	225	287220	48.28	ppm	99
52) 2-Chloronaphthalene	7.383	162	1022899	48.37	ppm	99
55) Dimethylphthalate	7.837	163	1143153	46.24	ppm	99
56) Acenaphthylene	8.008	152	1523476	43.57	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123526.D
Acq On : 13 Apr 2016 3:31 am
Operator : sarad
Sample : icv5217-50
Misc : op92514,em5218
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 13 12:16:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
57) 2,6-Dinitrotoluene	7.928	165	258607	47.05	ppm	98
59) Acenaphthene	8.286	153	962362	45.69	ppm	98
63) 2,4-Dinitrotoluene	8.601	165	340124	47.18	ppm	96
65) Diethylphthalate	9.033	149	1117366	45.39	ppm	100
66) Fluorene	9.167	166	1128587	44.56	ppm	99
67) 4-Chlorophenyl-phenyle...	9.188	204	554869	45.92	ppm	99
71) n-Nitrosodiphenylamine	9.413	169	797630	44.15	ppm	99
72) 1,2-Diphenylhydrazine	9.471	77	1005320	43.44	ppm	98
74) 4-Bromophenyl-phenylether	10.070	248	376706	45.28	ppm	95
75) Hexachlorobenzene	10.166	284	416395	42.50	ppm	97
77) Phenanthrene	10.908	178	1662084	44.32	ppm	99
78) Anthracene	11.004	178	1661429	42.78	ppm	100
80) Di-n-butylphthalate	12.142	149	2030119	45.72	ppm	100
81) Fluoranthene	13.210	202	1970724	44.85	ppm	99
84) Pyrene	13.632	202	2003333	46.74	ppm	99
87) Butylbenzylphthalate	15.085	149	887482	47.63	ppm	99
88) Benzo[a]anthracene	16.025	228	1815774	45.19	ppm	99
90) Chrysene	16.094	228	1677104	44.69	ppm	99
91) bis(2-Ethylhexyl)phtha...	16.292	149	1162552	46.27	ppm	100
93) Di-n-octylphthalate	17.520	149	1988513	44.23	ppm	99
94) Benzo[b]fluoranthene	18.028	252	1842475	43.29	ppm	92
95) Benzo[k]fluoranthene	18.076	252	1844616	44.96	ppm	98
96) Benzo[a]pyrene	18.573	252	1794029	45.64	ppm	98
97) Indeno[1,2,3-cd]pyrene	20.405	276	1815036m	45.63	ppm	
99) Dibenz[a,h]anthracene	20.447	278	1822856	45.07	ppm	99
101) Benzo[g,h,i]perylene	20.875	276	1863553	44.95	ppm	100

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

7.6.105

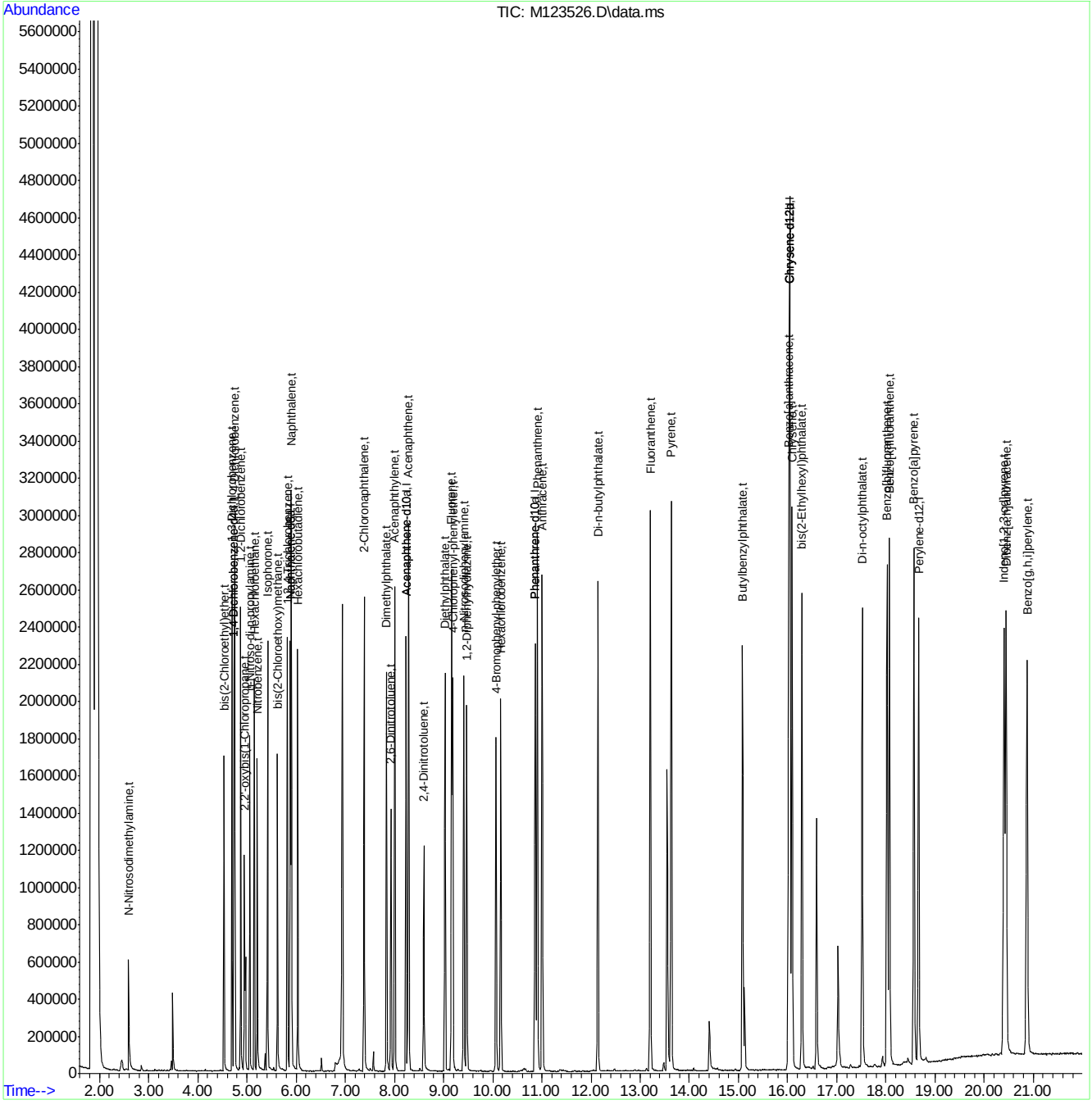
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123526.D
Acq On : 13 Apr 2016 3:31 am
Operator : sarad
Sample : icv5217-50
Misc : op92514,em5218
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 13 12:16:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration



Manual Integration Approval Summary

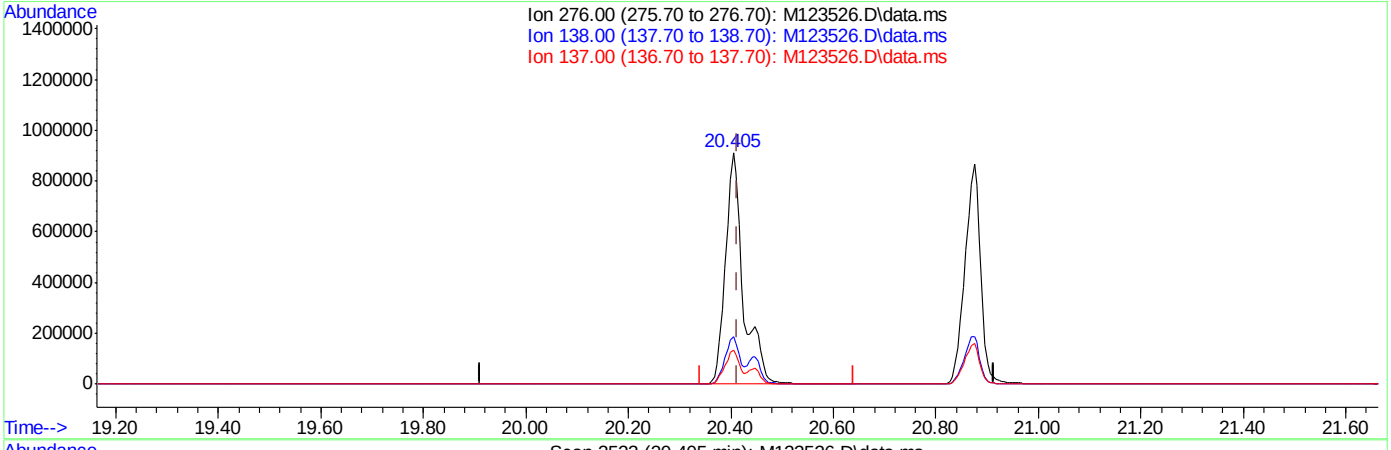
Sample Number:	EM5218-ICV5217	**Method:**	SW846 8270D
Lab FileID:	M123526.D	**Analyst approved:**	04/13/16 13:04 Ashley Dye
Injection Time:	04/13/16 03:31	**Supervisor approved:**	04/13/16 13:43 Nina Pandya

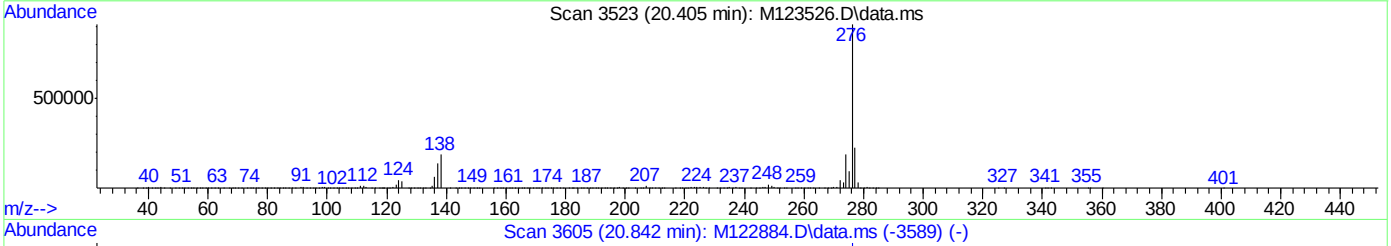
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		20.40	Overlapping peak

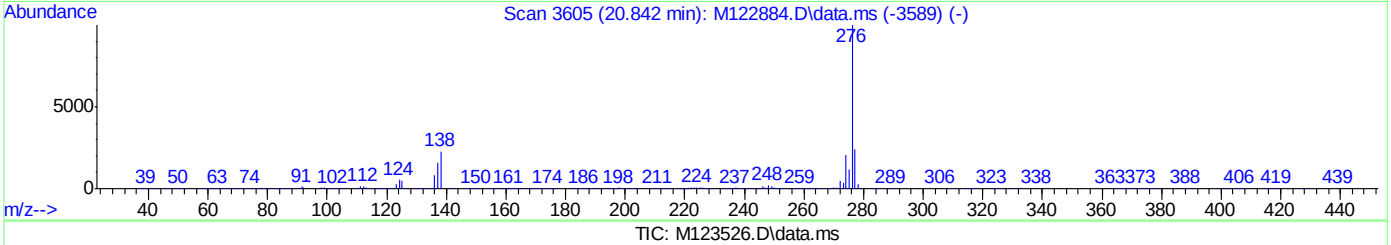
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123526.D
Acq On : 13 Apr 2016 3:31 am
Operator : sarad
Sample : icv5217-50
Misc : op92514,em5218
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 13 09:19:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration







TIC: M123526.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

20.405min (-0.008) 55.37ppm

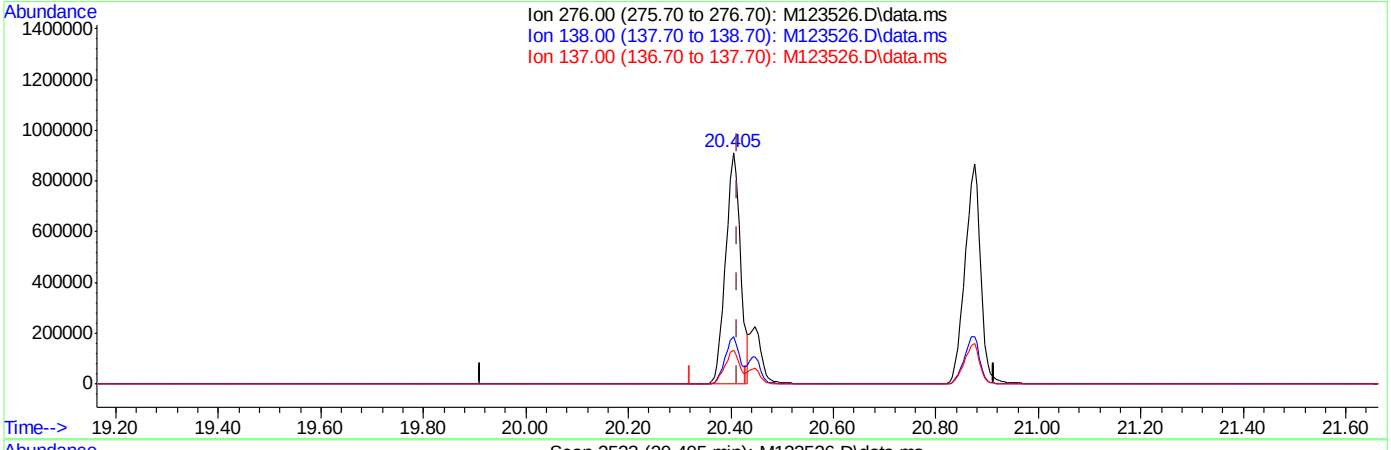
response 2202246

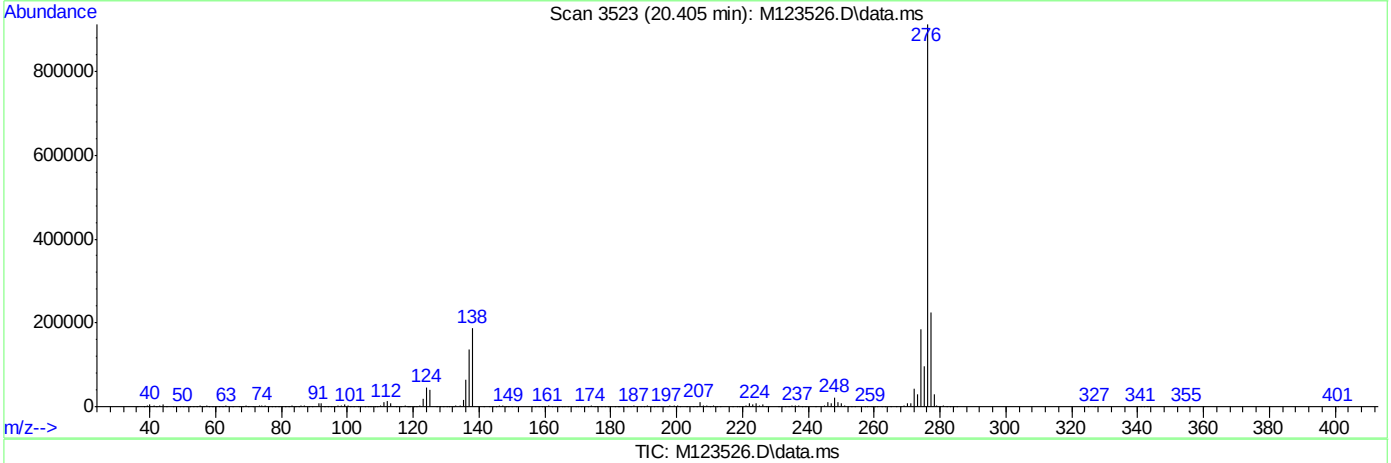
Ion	Exp%	Act%
276.00	100	100
138.00	17.70	20.52
137.00	13.00	14.84
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123526.D
Acq On : 13 Apr 2016 3:31 am
Operator : sarad
Sample : icv5217-50
Misc : op92514,em5218
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 13 12:16:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration





TIC: M123526.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

20.405min (-0.008) 45.63ppm m

response 1815036

Ion	Exp%	Act%
276.00	100	100
138.00	17.70	20.54
137.00	13.00	14.86
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123527.D
Acq On : 13 Apr 2016 3:59 am
Operator : sarad
Sample : icv5217-50
Misc : op92514,em5218
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 13 12:17:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.735	152	314565	40.00	ppm	0.00
24) Naphthalene-d8	5.878	136	1141540	40.00	ppm	0.00
47) Acenaphthene-d10	8.233	164	729564	40.00	ppm	0.00
69) Phenanthrene-d10	10.861	188	1242418	40.00	ppm	-0.01
83) Chrysene-d12	16.031	240	1358400	40.00	ppm	-0.02
92) Perylene-d12	18.659	264	1335206	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.735	152	314565	40.00	ppm	0.00
104) Acenaphthene-d10a	8.233	164	729564	40.00	ppm	0.00
107) Chrysene-d12a	16.031	240	1358400	40.00	ppm	0.00
110) Phenanthrene-d10a	10.861	188	1242418	40.00	ppm	0.00
112) Naphthalene-d8a	5.878	136	1141540	40.00	ppm	0.00
114) Chrysene-d12b	16.031	240	1358400	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.294	88	195719	44.87	ppm	99
6) Indene	4.938	116	874747	48.89	ppm	100
7) Cumene	4.131	105	1132317	47.18	ppm	99
13) Decane	4.607	43	465863	45.58	ppm	98
18) Acetophenone	5.055	105	643823	44.96	ppm	98
27) Quinoline	6.268	129	1022890	47.00	ppm	100
40) 2,3-Dichloroaniline	7.095	161	491592	43.36	ppm	99
41) Caprolactam	6.337	55	206377	43.86	ppm	99
45) 1-Methylnaphthalene	6.839	142	1005963	48.42	ppm	100
46) Dimethylnaphthalene	7.587	156	939565	48.72	ppm	99
48) Hexachlorocyclopentadiene	6.925	237	206586	45.89	ppm	100
53) Biphenyl	7.352	154	1271198	46.82	ppm	99
82) Octadecane	10.834	57	672212	50.30	ppm	99
100) 7,12-Dimethylbenz(a)an...	18.018	256	870423	47.15	ppm	97

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

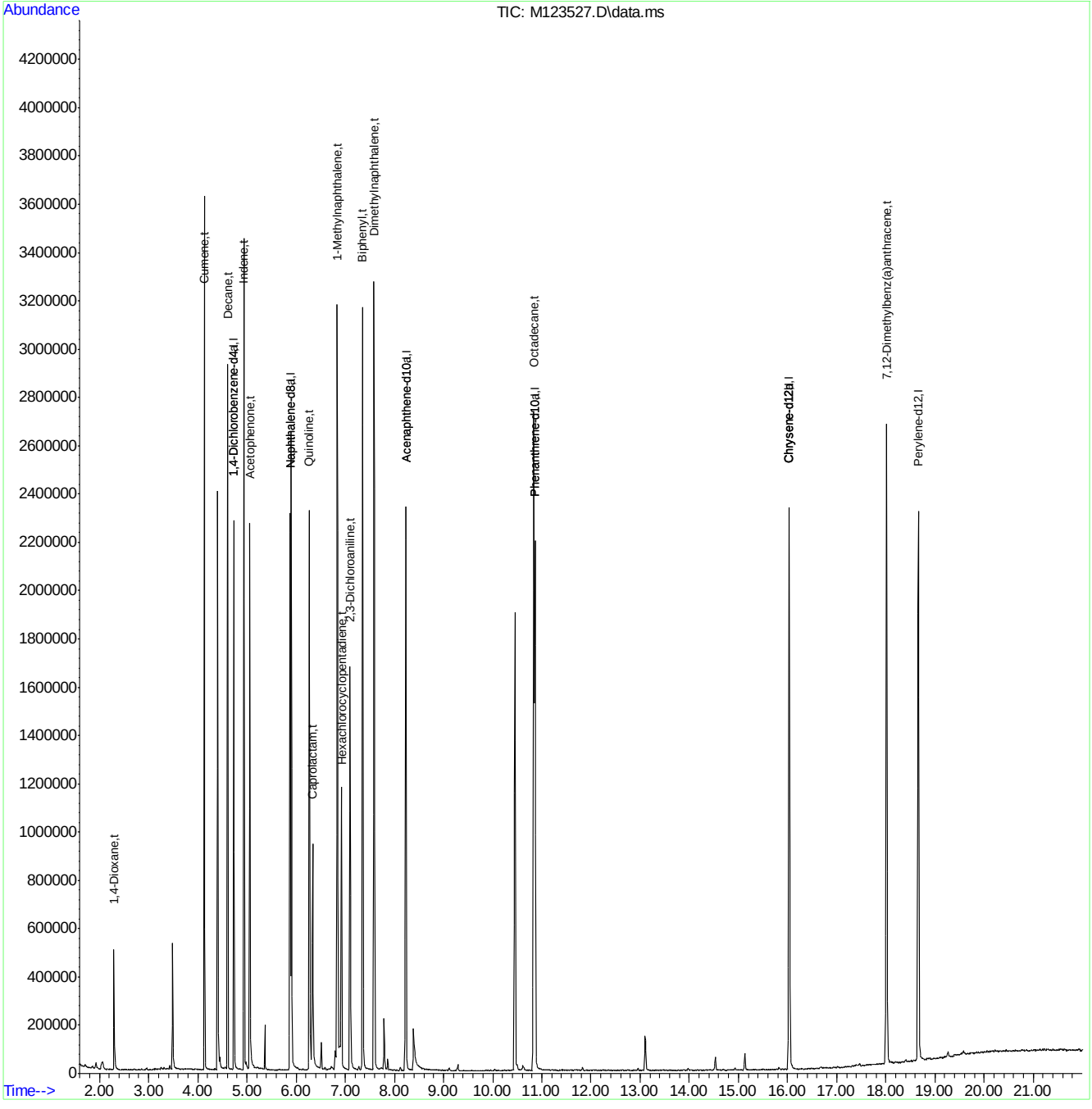
MM5217.M Wed Apr 13 12:17:33 2016 MSM

Page: 1

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123527.D
Acq On : 13 Apr 2016 3:59 am
Operator : sarad
Sample : icv5217-50
Misc : op92514,em5218
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 13 12:17:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration



MM5217.M Wed Apr 13 12:17:33 2016 MSM

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123527a.D
Acq On : 13 Apr 2016 3:59 am
Operator : sarad
Sample : icv5218-50
Misc : op92514,em5218
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 13 12:18:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.735	152	314565	40.00	ppm	0.00
24) Naphthalene-d8	5.878	136	1141540	40.00	ppm	0.00
47) Acenaphthene-d10	8.233	164	729564	40.00	ppm	0.00
69) Phenanthrene-d10	10.861	188	1242418	40.00	ppm	-0.01
83) Chrysene-d12	16.031	240	1358400	40.00	ppm	-0.02
92) Perylene-d12	18.659	264	1335206	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.735	152	314565	40.00	ppm	0.00
104) Acenaphthene-d10a	8.233	164	729564	40.00	ppm	0.00
107) Chrysene-d12a	16.031	240	1358400	40.00	ppm	0.00
110) Phenanthrene-d10a	10.861	188	1242418	40.00	ppm	0.00
112) Naphthalene-d8a	5.878	136	1141540	40.00	ppm	0.00
114) Chrysene-d12b	16.031	240	1358400	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
103) Benzaldehyde	4.404	105	401881	50.52	ppm	96
106) Atrazine	10.455	215	183896	45.18	ppm #	75

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

7.6.107

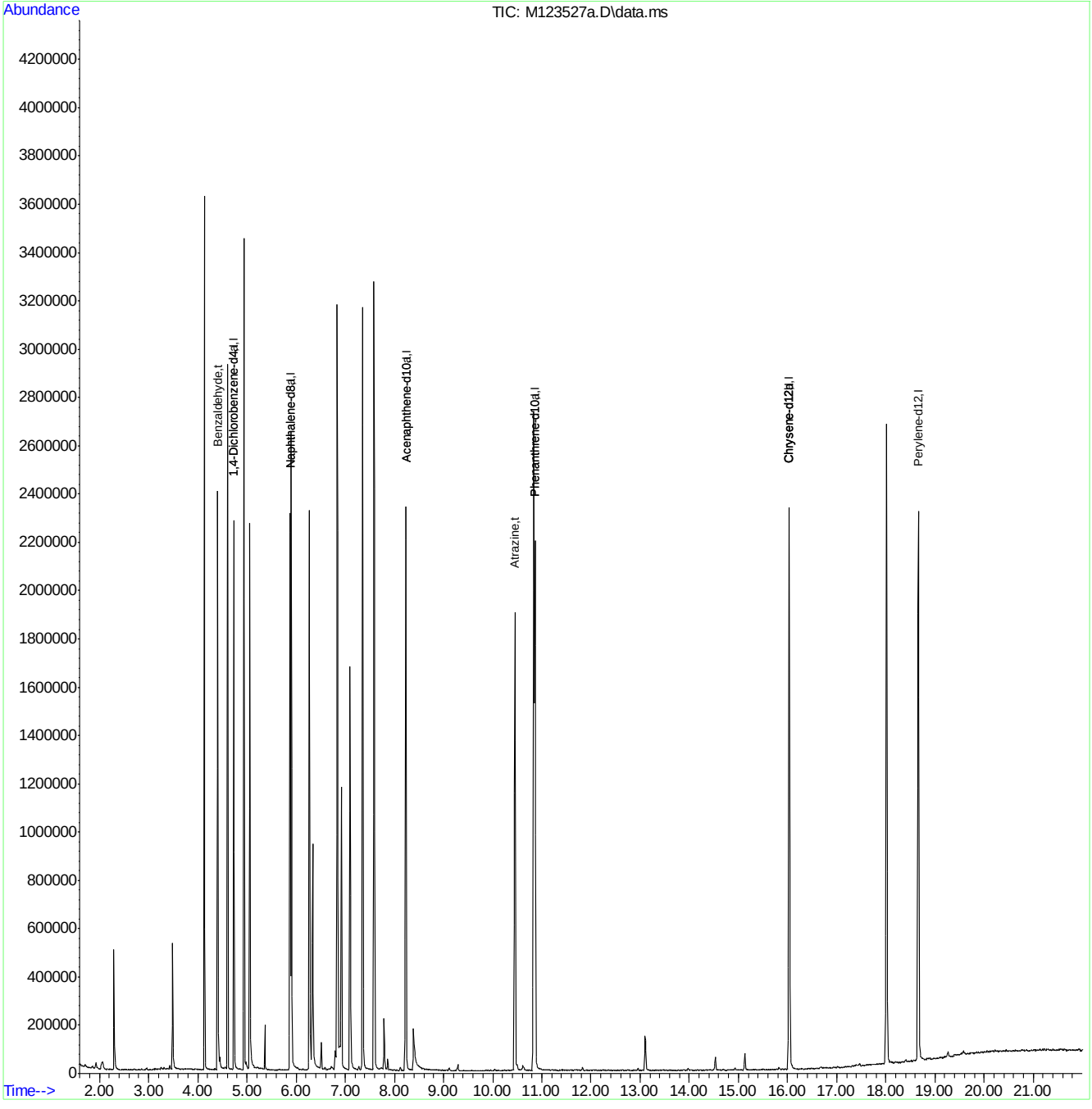
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123527a.D
Acq On : 13 Apr 2016 3:59 am
Operator : sarad
Sample : icv5218-50
Misc : op92514,em5218
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 13 12:18:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration



MM5217.M Wed Apr 13 12:18:03 2016 MSM

Page: 2

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123528.D
Acq On : 13 Apr 2016 4:28 am
Operator : sarad
Sample : icv5218-50
Misc : op92514,em5218
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 13 09:23:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.734	152	313097	40.00	ppm	0.00
24) Naphthalene-d8	5.877	136	1181340	40.00	ppm	0.00
47) Acenaphthene-d10	8.232	164	764211	40.00	ppm	0.00
69) Phenanthrene-d10	10.860	188	1392819	40.00	ppm	-0.01
83) Chrysene-d12	16.036	240	1487629	40.00	ppm	-0.01
92) Perylene-d12	18.664	264	1450361	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.734	152	313097	40.00	ppm	0.00
104) Acenaphthene-d10a	8.232	164	764211	40.00	ppm	0.00
107) Chrysene-d12a	16.036	240	1487629	40.00	ppm	0.00
110) Phenanthrene-d10a	10.860	188	1392819	40.00	ppm	0.00
112) Naphthalene-d8a	5.877	136	1181340	40.00	ppm	0.00
114) Chrysene-d12b	16.036	240	1487629	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
113) Hydroquinone	6.395	110	496595	52.08	ppm	92

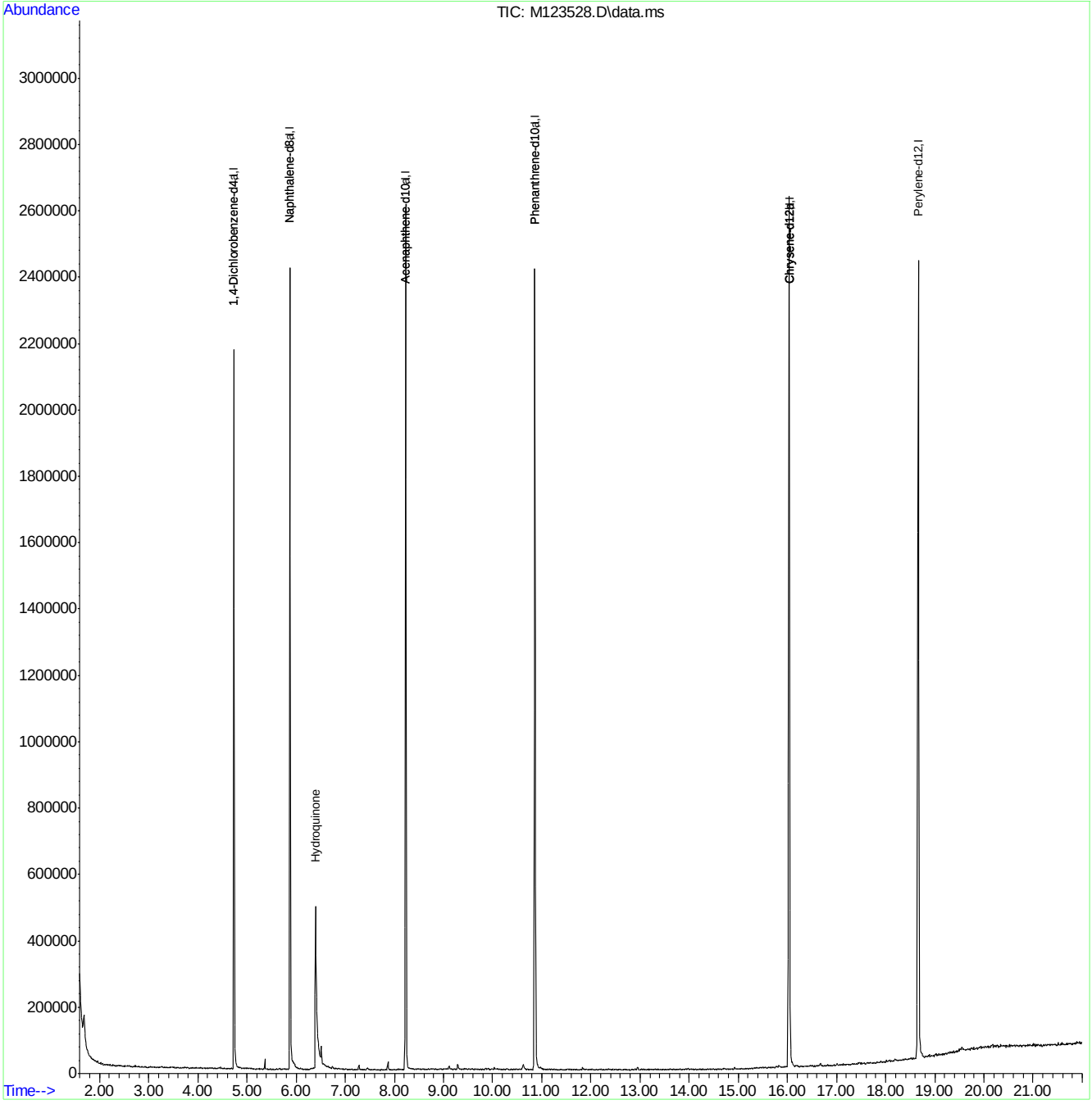
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123528.D
Acq On : 13 Apr 2016 4:28 am
Operator : sarad
Sample : icv5218-50
Misc : op92514,em5218
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 13 09:23:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123529.D
Acq On : 13 Apr 2016 4:57 am
Operator : sarad
Sample : icv5217-50
Misc : op92514,em5218
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 13 12:18:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.733	152	303622	40.00	ppm	0.00
24) Naphthalene-d8	5.876	136	1209036	40.00	ppm	0.00
47) Acenaphthene-d10	8.232	164	775029	40.00	ppm	0.00
69) Phenanthrene-d10	10.860	188	1399892	40.00	ppm	-0.01
83) Chrysene-d12	16.035	240	1422338	40.00	ppm	-0.01
92) Perylene-d12	18.663	264	1429361	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.733	152	303622	40.00	ppm	0.00
104) Acenaphthene-d10a	8.232	164	775029	40.00	ppm	0.00
107) Chrysene-d12a	16.035	240	1422338	40.00	ppm	0.00
110) Phenanthrene-d10a	10.860	188	1399892	40.00	ppm	0.00
112) Naphthalene-d8a	5.876	136	1209036	40.00	ppm	0.00
114) Chrysene-d12b	16.035	240	1422338	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
89) 3,3'-Dichlorobenzidine	16.046	252	696414	43.86	ppm	99

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

7.6.109

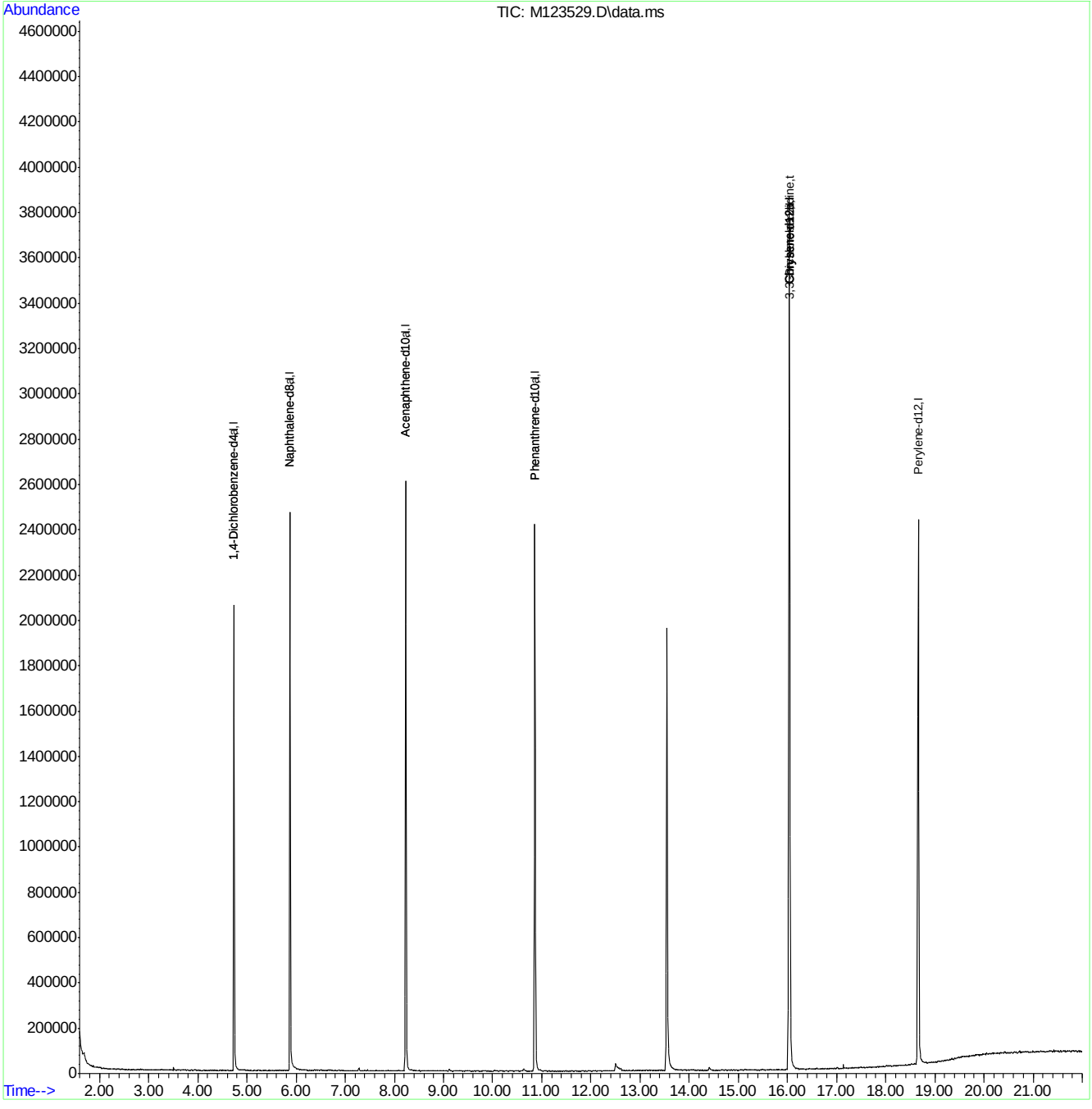
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123529.D
Acq On : 13 Apr 2016 4:57 am
Operator : sarad
Sample : icv5217-50
Misc : op92514,em5218
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 13 12:18:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration



MM5217.M Wed Apr 13 12:18:22 2016 MSM

Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123529a.D
Acq On : 13 Apr 2016 4:57 am
Operator : sarad
Sample : icv5218-50
Misc : op92514,em5218
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 13 12:18:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.733	152	303622	40.00	ppm	0.00
24) Naphthalene-d8	5.876	136	1209036	40.00	ppm	0.00
47) Acenaphthene-d10	8.232	164	775029	40.00	ppm	0.00
69) Phenanthrene-d10	10.860	188	1399892	40.00	ppm	-0.01
83) Chrysene-d12	16.035	240	1422338	40.00	ppm	-0.01
92) Perylene-d12	18.663	264	1429361	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.733	152	303622	40.00	ppm	0.00
104) Acenaphthene-d10a	8.232	164	775029	40.00	ppm	0.00
107) Chrysene-d12a	16.035	240	1422338	40.00	ppm	0.00
110) Phenanthrene-d10a	10.860	188	1399892	40.00	ppm	0.00
112) Naphthalene-d8a	5.876	136	1209036	40.00	ppm	0.00
114) Chrysene-d12b	16.035	240	1422338	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
108) Benzidine	13.546	184	1248473	74.98	ppm	96

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

7.6.110

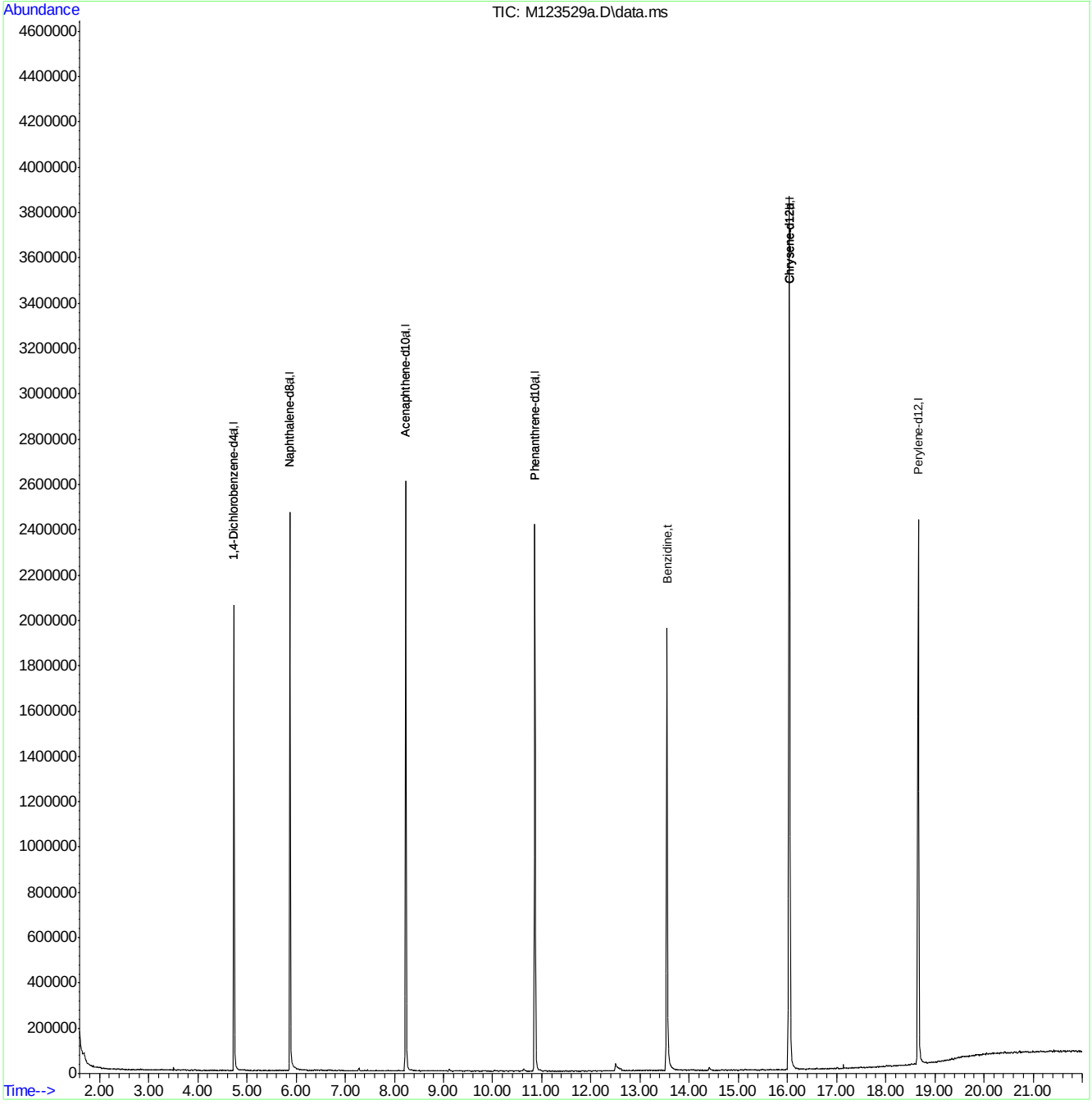
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123529a.D
Acq On : 13 Apr 2016 4:57 am
Operator : sarad
Sample : icv5218-50
Misc : op92514,em5218
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 13 12:18:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration



MM5217.M Wed Apr 13 12:18:34 2016 MSM

Page: 2

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5219\
Data File : M123532.D
Acq On : 13 Apr 2016 9:41 am
Operator : seanb1
Sample : icv5217-50
Misc : op92514,em5219
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 13 10:07:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.732	152	345103	40.00	ppm	0.00
24) Naphthalene-d8	5.869	136	1274666	40.00	ppm	-0.01
47) Acenaphthene-d10	8.225	164	764854	40.00	ppm	-0.02
69) Phenanthrene-d10	10.853	188	1342778	40.00	ppm	-0.02
83) Chrysene-d12	16.028	240	1390134	40.00	ppm	-0.02
92) Perylene-d12	18.651	264	1353164	40.00	ppm	-0.02
102) 1,4-Dichlorobenzene-d4a	4.732	152	345103	40.00	ppm	0.00
104) Acenaphthene-d10a	8.225	164	764854	40.00	ppm	0.00
107) Chrysene-d12a	16.028	240	1390134	40.00	ppm	-0.01
110) Phenanthrene-d10a	10.853	188	1342778	40.00	ppm	-0.01
112) Naphthalene-d8a	5.869	136	1274666	40.00	ppm	0.00
114) Chrysene-d12b	16.028	240	1390134	40.00	ppm	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.786	112	551767	52.28	ppm	-0.01
Spiked Amount 50.000			Recovery	=	104.56%	
8) Phenol-d5	4.497	99	678049	51.15	ppm	-0.01
Spiked Amount 50.000			Recovery	=	102.30%	
25) Nitrobenzene-d5	5.186	82	583677	51.49	ppm	-0.01
Spiked Amount 50.000			Recovery	=	102.98%	
51) 2-Fluorobiphenyl	7.205	172	1305485	51.98	ppm	-0.02
Spiked Amount 50.000			Recovery	=	103.96%	
73) 2,4,6-Tribromophenol	9.597	330	232986	50.20	ppm	-0.02
Spiked Amount 50.000			Recovery	=	100.40%	
86) Terphenyl-d14	14.025	244	1493290	47.89	ppm	-0.02
Spiked Amount 50.000			Recovery	=	95.78%	
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	

Target Compounds Qvalue

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

7.6.111

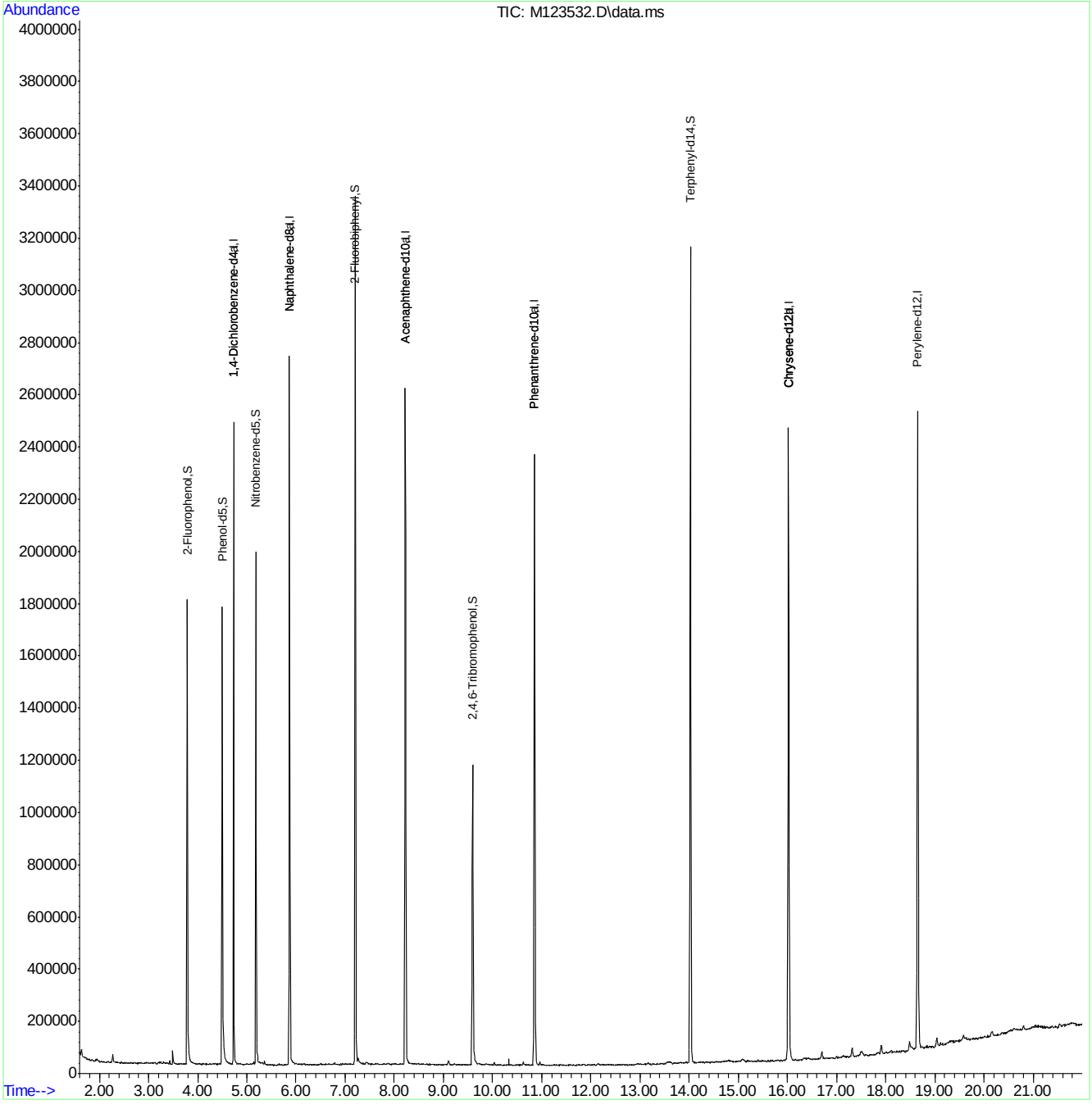
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5219\
Data File : M123532.D
Acq On : 13 Apr 2016 9:41 am
Operator : seanb1
Sample : icv5217-50
Misc : op92514,em5219
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 13 10:07:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration



SGS ACCUTEST JC18516

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/21/16 09:49

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5230\
Data File : M123740.D
Acq On : 20 Apr 2016 11:00 am
Operator : ashleyd
Sample : cc5217-50
Misc : op93063,em5230
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 20 13:55:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Apr 19 00:08:51 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.699	152	226298	40.00	ppm	-0.03
24) Naphthalene-d8	5.836	136	846135	40.00	ppm	-0.03
47) Acenaphthene-d10	8.186	164	530266	40.00	ppm	-0.04
69) Phenanthrene-d10	10.814	188	948596	40.00	ppm	-0.04
83) Chrysene-d12	15.995	240	992712	40.00	ppm	-0.04
92) Perylene-d12	18.618	264	1041338	40.00	ppm	-0.05
102) 1,4-Dichlorobenzene-d4a	4.699	152	226298	40.00	ppm	-0.03
104) Acenaphthene-d10a	8.186	164	530266	40.00	ppm	-0.04
107) Chrysene-d12a	15.995	240	992712	40.00	ppm	-0.04
109) Naphthalene-d8a	5.836	136	846135	40.00	ppm	-0.03
System Monitoring Compounds						
5) 2-Fluorophenol	3.753	112	375143	54.21	ppm	-0.03
Spiked Amount 50.000			Recovery	=	108.42%	
8) Phenol-d5	4.469	99	470711	54.16	ppm	-0.03
Spiked Amount 50.000			Recovery	=	108.32%	
25) Nitrobenzene-d5	5.158	82	379115	50.38	ppm	-0.02
Spiked Amount 50.000			Recovery	=	100.76%	
51) 2-Fluorobiphenyl	7.166	172	844614	48.51	ppm	-0.04
Spiked Amount 50.000			Recovery	=	97.02%	
73) 2,4,6-Tribromophenol	9.559	330	171710	52.37	ppm	-0.04
Spiked Amount 50.000			Recovery	=	104.74%	
86) Terphenyl-d14	13.982	244	1111888	49.93	ppm	-0.05
Spiked Amount 50.000			Recovery	=	99.86%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.253	88	152358	48.56	ppm	98
3) Pyridine	2.589	79	383497	50.21	ppm	99
4) N-Nitrosodimethylamine	2.557	42	158732	47.45	ppm	89
6) Indene	4.902	116	658731	51.17	ppm	100
7) Cumene	4.101	105	903587	52.33	ppm	99
9) Phenol	4.474	94	525044	56.37	ppm	99
10) Aniline	4.458	93	429235	39.62	ppm	95
11) bis(2-Chloroethyl)ether	4.496	93	351538	48.47	ppm	99
12) 2-Chlorophenol	4.560	128	415113	53.52	ppm	98
13) Decane	4.571	43	328375	44.66	ppm	97
14) 1,3-Dichlorobenzene	4.656	146	453869	51.32	ppm	99
15) 1,4-Dichlorobenzene	4.715	146	452302	51.61	ppm	99
16) Benzyl alcohol	4.822	108	245184	54.58	ppm	94
17) 1,2-Dichlorobenzene	4.838	146	421813	51.12	ppm	99
18) Acetophenone	5.025	105	513491	49.85	ppm	97
19) 2-Methylphenol	4.928	108	331567	51.58	ppm	99
20) 2,2'-oxybis(1-Chloropr...	4.912	121	122181	50.99	ppm #	84
21) 3&4-Methylphenol	5.051	108	366304	52.01	ppm	98
22) n-Nitroso-di-n-propyla...	5.025	70	266013	47.82	ppm	98
23) Hexachloroethane	5.110	201	155937	47.07	ppm	92
26) Nitrobenzene	5.174	77	377774	49.59	ppm	96
27) Quinoline	6.237	129	813654	50.44	ppm	100
28) Isophorone	5.382	82	674676	49.27	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5230\
Data File : M123740.D
Acq On : 20 Apr 2016 11:00 am
Operator : ashleyd
Sample : cc5217-50
Misc : op93063,em5230
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 20 13:55:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Apr 19 00:08:51 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
29) 2-Nitrophenol	5.463	139	237190	55.03	ppm	86
30) 2,4-Dimethylphenol	5.516	107	336479	47.70	ppm	99
31) Benzoic acid	5.660	105	275646	59.57	ppm	96
32) bis(2-Chloroethoxy)met...	5.580	93	427578	51.42	ppm	99
33) 2,4-Dichlorophenol	5.719	162	344624	53.43	ppm	99
34) 2,6-Dichlorophenol	5.938	162	325338	49.92	ppm	99
35) 1,3,5-Trichlorobenzene	5.468	180	387992	50.44	ppm	99
36) 1,2,4-Trichlorobenzene	5.778	180	374852	49.55	ppm	99
37) 1,2,3-Trichlorobenzene	6.018	180	359163	49.10	ppm	97
38) Naphthalene	5.858	128	1120615	50.57	ppm	99
39) 4-Chloroaniline	5.927	127	452239	47.38	ppm	99
40) 2,3-Dichloroaniline	7.054	161	432771	51.50	ppm	99
41) Caprolactam	6.344	55	160421	45.99	ppm	96
42) Hexachlorobutadiene	5.991	225	207418	47.66	ppm	98
43) 4-Chloro-3-methylphenol	6.531	107	338245	52.48	ppm	99
44) 2-Methylnaphthalene	6.670	141	671743	50.69	ppm	97
45) 1-Methylnaphthalene	6.798	142	785652	51.02	ppm	99
46) Dimethylnaphthalene	7.546	156	727288	50.87	ppm	100
48) Hexachlorocyclopentadiene	6.878	237	281517	81.18	ppm	100
49) 2,4,6-Trichlorophenol	7.076	196	256622	50.72	ppm	98
50) 2,4,5-Trichlorophenol	7.150	196	268316	48.72	ppm	98
52) 2-Chloronaphthalene	7.337	162	764401	49.49	ppm	99
53) Biphenyl	7.311	154	992079	50.28	ppm	99
54) 2-Nitroaniline	7.513	65	221119	50.21	ppm	87
55) Dimethylphthalate	7.791	163	941745	52.15	ppm	99
56) Acenaphthylene	7.957	152	1254129	49.10	ppm	100
57) 2,6-Dinitrotoluene	7.887	165	219442	54.66	ppm	99
58) 3-Nitroaniline	8.165	138	242447	54.58	ppm	96
59) Acenaphthene	8.240	153	771285	50.13	ppm	99
60) 2,4-Dinitrophenol	8.352	184	206458	108.50	ppm	98
61) 4-Nitrophenol	8.582	109	78072	48.06	ppm	98
62) Dibenzofuran	8.528	168	1144709	50.01	ppm	99
63) 2,4-Dinitrotoluene	8.560	165	296184	56.24	ppm	98
64) 2,3,4,6-Tetrachlorophenol	8.779	232	214862	50.44	ppm	94
65) Diethylphthalate	8.988	149	950437	52.86	ppm	99
66) Fluorene	9.116	166	928511	50.19	ppm	99
67) 4-Chlorophenyl-phenyle...	9.137	204	447055	50.65	ppm	100
68) 4-Nitroaniline	9.217	138	232180	53.74	ppm	95
70) 4,6-Dinitro-2-methylph...	9.281	198	165024	52.51	ppm	95
71) n-Nitrosodiphenylamine	9.367	169	683746	53.66	ppm	99
72) 1,2-Diphenylhydrazine	9.420	77	806565	49.42	ppm	97
74) 4-Bromophenyl-phenylether	10.013	248	306330	52.21	ppm	99
75) Hexachlorobenzene	10.115	284	339344	49.12	ppm	97
76) Pentachlorophenol	10.526	266	301758	97.93	ppm	99
77) Phenanthrene	10.862	178	1338131	50.60	ppm	99
78) Anthracene	10.959	178	1355580	49.50	ppm	99
79) Carbazole	11.316	167	1309457	51.91	ppm	100
80) Di-n-butylphthalate	12.085	149	1719198	54.90	ppm	99
81) Fluoranthene	13.154	202	1519103	49.03	ppm	98
82) Octadecane	10.782	57	506361	49.62	ppm	97

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5230\
Data File : M123740.D
Acq On : 20 Apr 2016 11:00 am
Operator : ashleyd
Sample : cc5217-50
Misc : op93063,em5230
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 20 13:55:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Apr 19 00:08:51 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
84) Pyrene	13.581	202	1566425	48.40 ppm	99
85) Butyl stearate	15.258	56	372272	50.31 ppm	97
87) Butylbenzylphthalate	15.028	149	760374	54.03 ppm	97
88) Benzo[a]anthracene	15.974	228	1451549	47.83 ppm	100
89) 3,3'-Dichlorobenzidine	15.995	252	584286	52.72 ppm	99
90) Chrysene	16.043	228	1418582	50.05 ppm	100
91) bis(2-Ethylhexyl)phtha...	16.230	149	1053846	55.54 ppm	99
93) Di-n-octylphthalate	17.459	149	1804469	53.39 ppm	100
94) Benzo[b]fluoranthene	17.982	252	1567591	49.00 ppm	98
95) Benzo[k]fluoranthene	18.030	252	1549229	50.24 ppm	99
96) Benzo[a]pyrene	18.521	252	1440133	48.74 ppm	98
97) Indeno[1,2,3-cd]pyrene	20.353	276	1544203m	51.65 ppm	
98) Dibenz(a,h)acridine	19.980	279	1387360	52.34 ppm	99
99) Dibenz[a,h]anthracene	20.391	278	1562783	51.40 ppm	98
100) 7,12-Dimethylbenz(a)an...	17.977	256	699754	48.60 ppm	98
101) Benzo[g,h,i]perylene	20.818	276	1515640	48.63 ppm	97

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

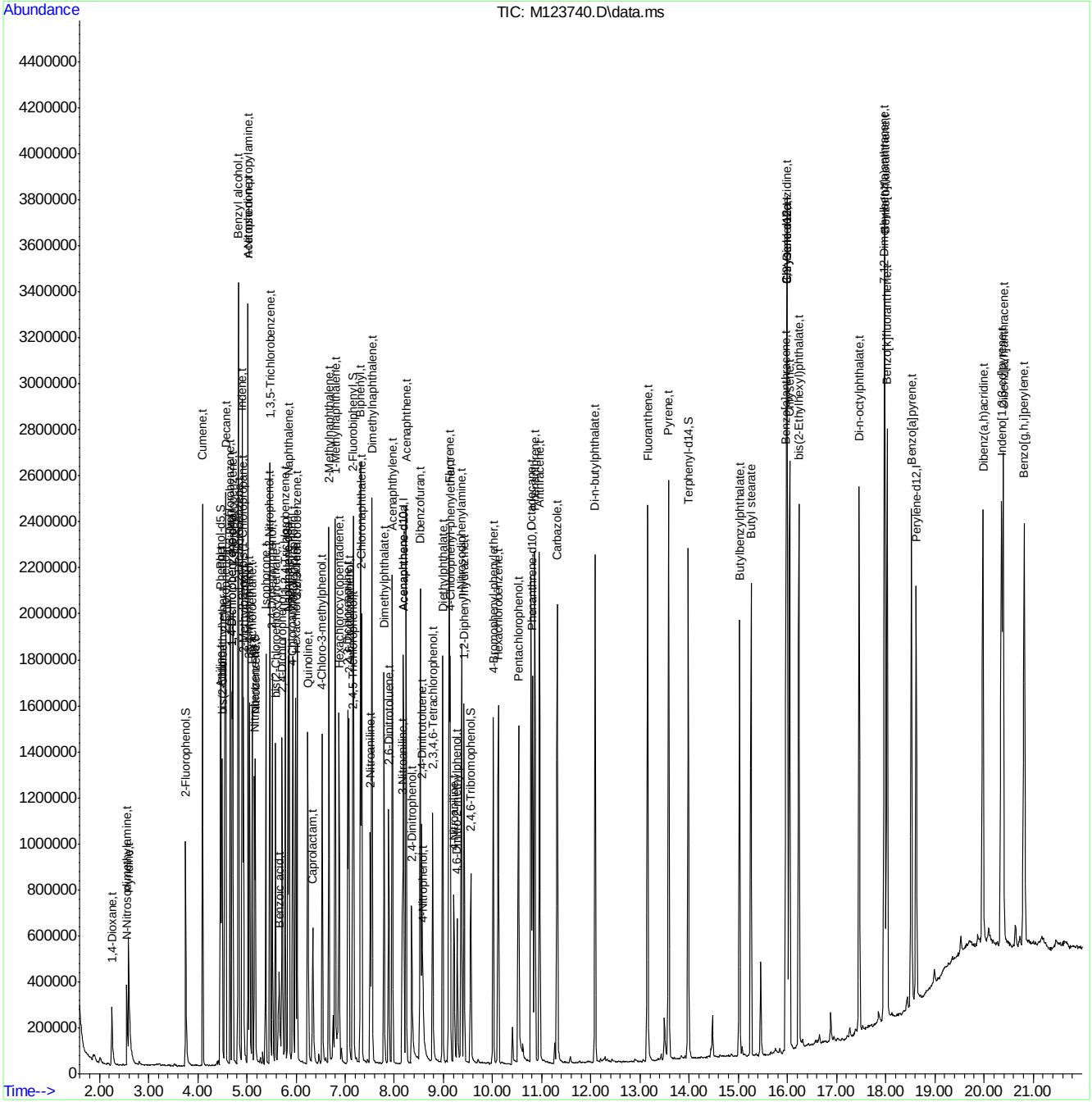
7.6.112

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5230\
Data File : M123740.D
Acq On : 20 Apr 2016 11:00 am
Operator : ashleyd
Sample : cc5217-50
Misc : op93063,em5230
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 20 13:55:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Apr 19 00:08:51 2016
Response via : Initial Calibration



MM5217.M Wed Apr 20 13:55:52 2016 MSM

Manual Integration Approval Summary

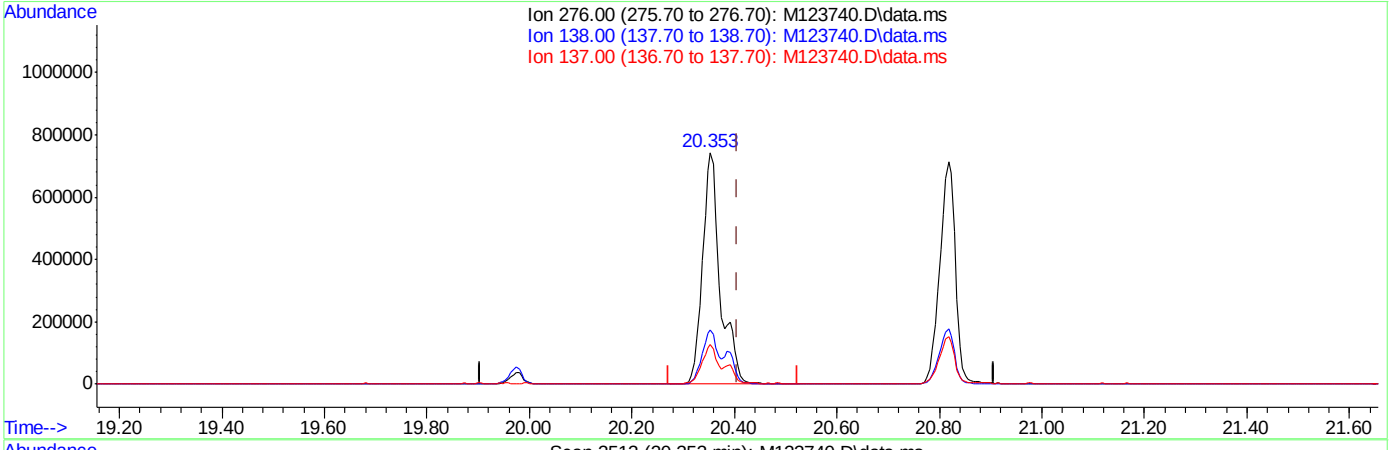
Sample Number:	EM5230-CC5217	**Method:**	EPA 625
Lab FileID:	M123740.D	**Analyst approved:**	04/20/16 14:04 Ashley Dye
Injection Time:	04/20/16 11:00	**Supervisor approved:**	04/21/16 09:49 Nina Pandya

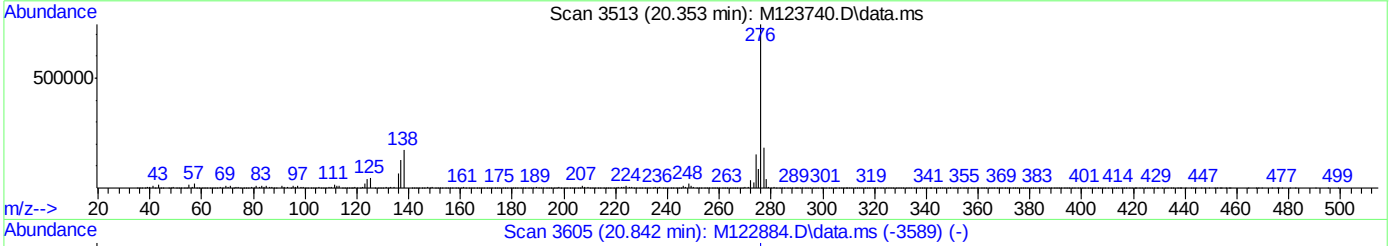
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		20.35	Overlapping peak

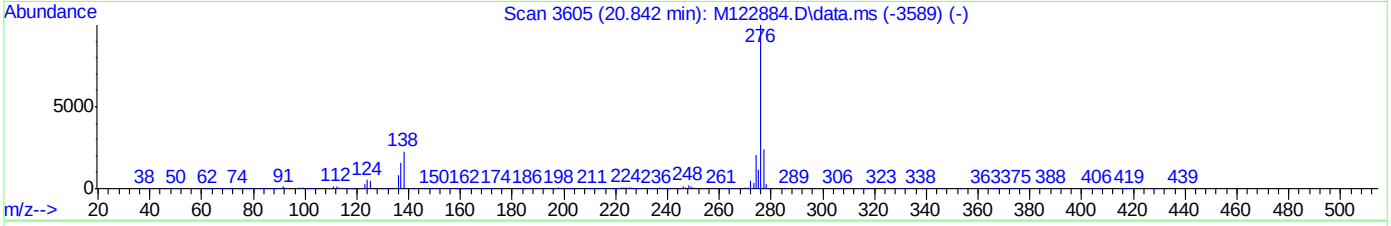
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5230\
Data File : M123740.D
Acq On : 20 Apr 2016 11:00 am
Operator : ashleyd
Sample : cc5217-50
Misc : op93063,em5230
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 20 11:41:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Apr 19 00:08:51 2016
Response via : Initial Calibration







TIC: M123740.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

20.353min (-0.053) 60.30ppm

response 1802820

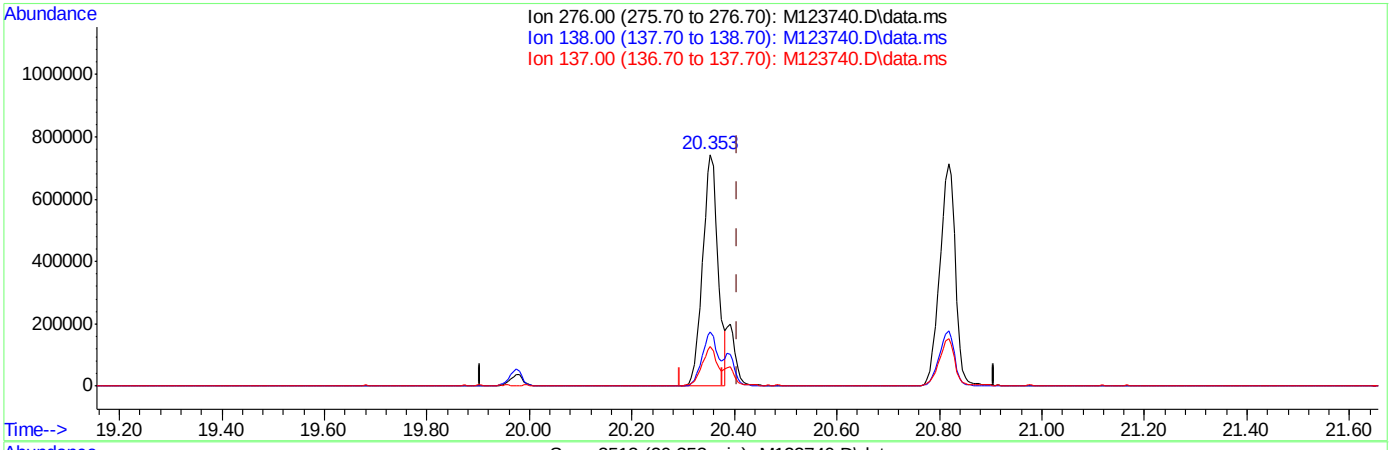
Ion	Exp%	Act%
276.00	100	100
138.00	17.70	23.10
137.00	13.00	16.92
0.00	0.00	0.00

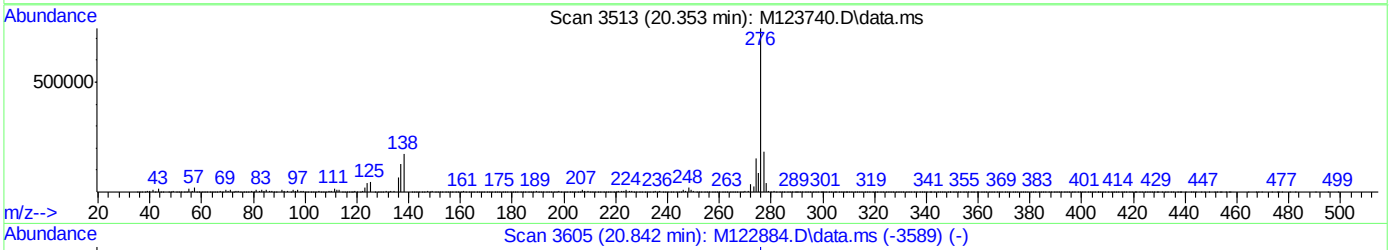
SGS ACCUTEST JC18516

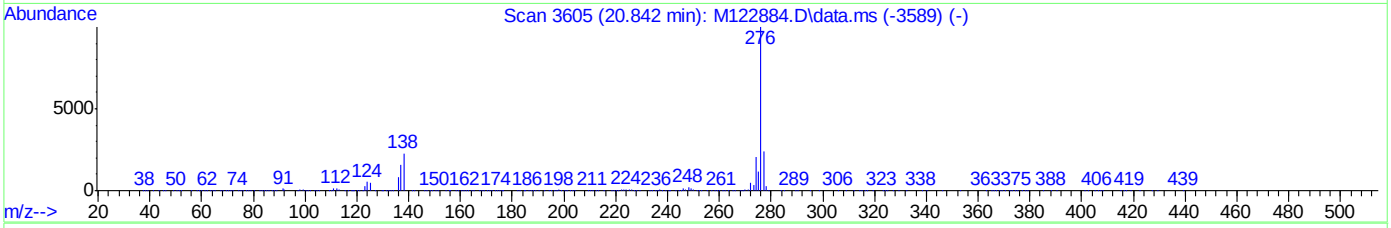
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5230\
Data File : M123740.D
Acq On : 20 Apr 2016 11:00 am
Operator : ashleyd
Sample : cc5217-50
Misc : op93063,em5230
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 20 11:41:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Apr 19 00:08:51 2016
Response via : Initial Calibration







TIC: M123740.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

20.353min (-0.053) 51.65ppm m

response 1544203

Ion	Exp%	Act%
276.00	100	100
138.00	17.70	23.22
137.00	13.00	17.24
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5230\
Data File : M123741.D
Acq On : 20 Apr 2016 11:47 am
Operator : ashleyd
Sample : cc5218-50
Misc : op93063,em5230
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 20 13:56:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Apr 19 00:08:51 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.697	152	254300	40.00	ppm	-0.03
24) Naphthalene-d8	5.835	136	992206	40.00	ppm	-0.03
47) Acenaphthene-d10	8.179	164	577310	40.00	ppm	-0.04
69) Phenanthrene-d10	10.807	188	1062963	40.00	ppm	-0.05
83) Chrysene-d12	15.983	240	1132834	40.00	ppm	-0.06
92) Perylene-d12	18.610	264	1171957	40.00	ppm	-0.06
102) 1,4-Dichlorobenzene-d4a	4.697	152	254300	40.00	ppm	-0.03
104) Acenaphthene-d10a	8.179	164	577310	40.00	ppm	-0.04
107) Chrysene-d12a	15.983	240	1132834	40.00	ppm	-0.06
109) Naphthalene-d8a	5.835	136	992206	40.00	ppm	-0.03
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
103) Benzaldehyde	4.371	105	266770	41.48	ppm	95
105) 1,2,4,5-Tetrachloroben...	6.892	216	397235	42.85	ppm	98
106) Atrazine	10.412	215	151221	46.95	ppm	80
108) Benzidine	13.494	184	568972	42.90	ppm	93
110) Hydroquinone	6.353	110	438907	54.80	ppm	92

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

7.6.113

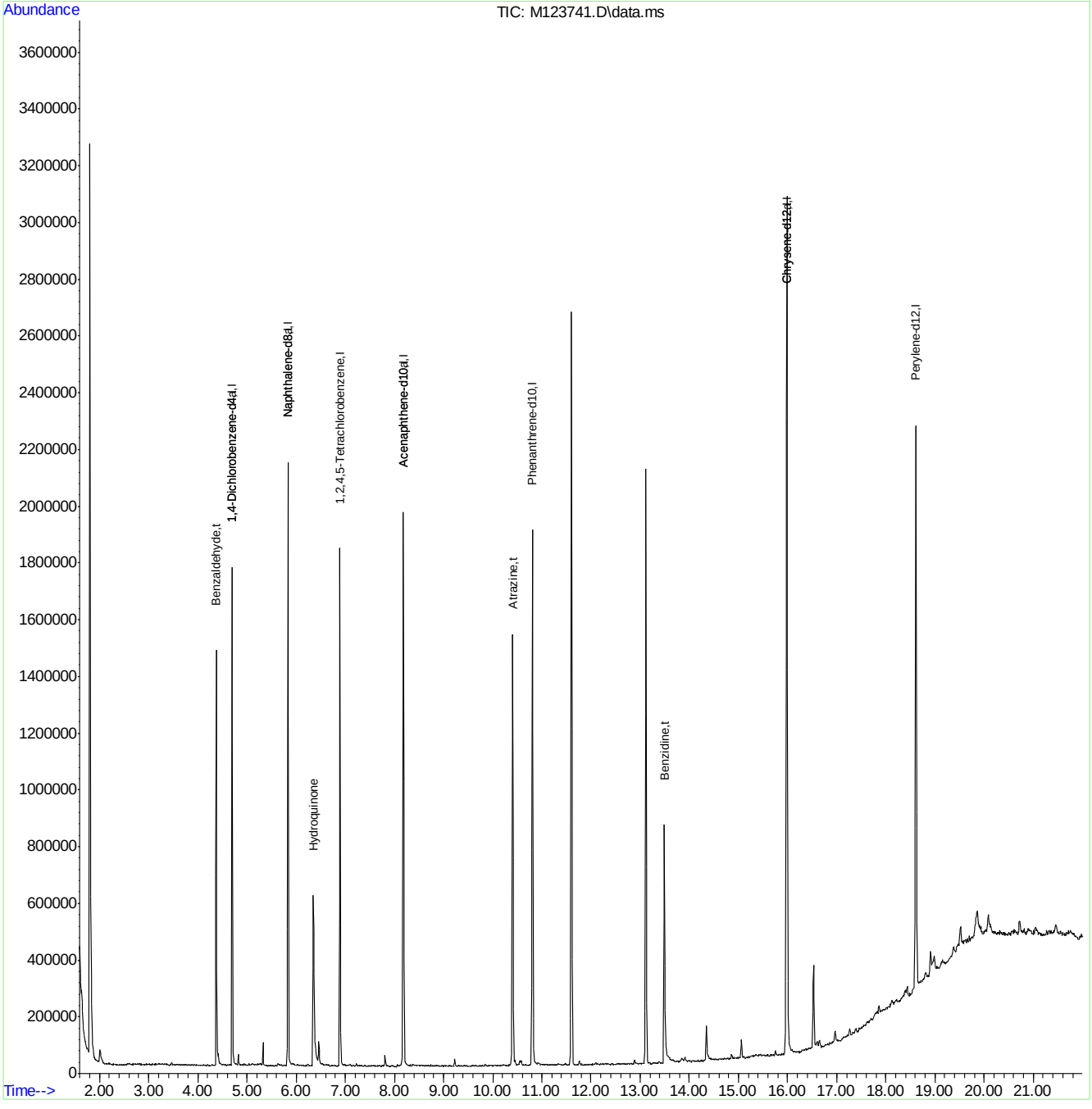
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5230\
Data File : M123741.D
Acq On : 20 Apr 2016 11:47 am
Operator : ashleyd
Sample : cc5218-50
Misc : op93063,em5230
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 20 13:56:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Apr 19 00:08:51 2016
Response via : Initial Calibration



MM5217.M Wed Apr 20 13:56:38 2016 MSM

SGS ACCUTEST JC18516

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/25/16 18:18

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5235\
Data File : M123836a.D
Acq On : 22 Apr 2016 8:08 pm
Operator : seanb1
Sample : cc5217-50
Misc : op93063,em5235
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 25 08:52:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 21 17:40:51 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.659	152	303098	40.00	ppm	-0.02
24) Naphthalene-d8	5.786	136	1201393	40.00	ppm	-0.02
47) Acenaphthene-d10	8.115	164	736939	40.00	ppm	-0.02
69) Phenanthrene-d10	10.732	188	1277492	40.00	ppm	-0.03
83) Chrysene-d12	15.908	240	1417131	40.00	ppm	-0.03
92) Perylene-d12	18.530	264	1517400	40.00	ppm	-0.03
102) 1,4-Dichlorobenzene-d4a	4.659	152	303098	40.00	ppm	-0.02
104) Acenaphthene-d10a	8.115	164	736939	40.00	ppm	-0.02
107) Chrysene-d12a	15.908	240	1417131	40.00	ppm	-0.03
109) Naphthalene-d8a	5.786	136	1201393	40.00	ppm	-0.02
System Monitoring Compounds						
5) 2-Fluorophenol	3.709	112	500090	53.95	ppm	-0.04
Spiked Amount 50.000			Recovery	=	107.90%	
8) Phenol-d5	4.424	99	635607	54.60	ppm	-0.02
Spiked Amount 50.000			Recovery	=	109.20%	
25) Nitrobenzene-d5	5.113	82	552674	51.73	ppm	-0.01
Spiked Amount 50.000			Recovery	=	103.46%	
51) 2-Fluorobiphenyl	7.106	172	1198418	49.52	ppm	-0.02
Spiked Amount 50.000			Recovery	=	99.04%	
73) 2,4,6-Tribromophenol	9.477	330	256072	57.99	ppm	-0.03
Spiked Amount 50.000			Recovery	=	115.98%	
86) Terphenyl-d14	13.899	244	1626662	51.17	ppm	-0.04
Spiked Amount 50.000			Recovery	=	102.34%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.208	88	211895	50.42	ppm	99
3) Pyridine	2.550	79	551523	53.91	ppm	97
4) N-Nitrosodimethylamine	2.512	42	247205	55.17	ppm	95
6) Indene	4.862	116	907885	52.66	ppm	100
7) Cumene	4.061	105	1210154	52.33	ppm	100
9) Phenol	4.435	94	723309	57.98	ppm	99
10) Aniline	4.419	93	564980	38.94	ppm	89
11) bis(2-Chloroethyl)ether	4.462	93	485950	50.02	ppm	97
12) 2-Chlorophenol	4.515	128	558146	53.72	ppm	96
13) Decane	4.531	43	465079	47.23	ppm	97
14) 1,3-Dichlorobenzene	4.617	146	618494	52.21	ppm	100
15) 1,4-Dichlorobenzene	4.675	146	614285	52.33	ppm	99
16) Benzyl alcohol	4.782	108	342034	56.84	ppm	98
17) 1,2-Dichlorobenzene	4.793	146	578204	52.32	ppm	97
18) Acetophenone	4.985	105	737243	53.44	ppm	98
19) 2-Methylphenol	4.889	108	468916	54.46	ppm	99
20) 2,2'-oxybis(1-Chloropr...	4.873	121	167361	52.15	ppm	95
21) 3&4-Methylphenol	5.012	108	524125	55.56	ppm	96
22) n-Nitroso-di-n-propyla...	4.985	70	391835	52.59	ppm	98
23) Hexachloroethane	5.065	201	224918	50.69	ppm	93
26) Nitrobenzene	5.129	77	563216	52.07	ppm	100
27) Quinoline	6.187	129	1174891	51.30	ppm	99
28) Isophorone	5.338	82	999198	51.39	ppm	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5235\
Data File : M123836a.D
Acq On : 22 Apr 2016 8:08 pm
Operator : seanb1
Sample : cc5217-50
Misc : op93063,em5235
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 25 08:52:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 21 17:40:51 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
29) 2-Nitrophenol	5.418	139	337217	55.10	ppm	80
30) 2,4-Dimethylphenol	5.471	107	495986	49.52	ppm	98
31) Benzoic acid	5.621	105	381960	58.14	ppm	98
32) bis(2-Chloroethoxy)met...	5.535	93	636721	53.93	ppm	99
33) 2,4-Dichlorophenol	5.669	162	497001	54.27	ppm	99
34) 2,6-Dichlorophenol	5.888	162	477818	51.64	ppm	99
35) 1,3,5-Trichlorobenzene	5.423	180	547334	50.11	ppm	97
36) 1,2,4-Trichlorobenzene	5.728	180	539820	50.25	ppm	98
37) 1,2,3-Trichlorobenzene	5.968	180	520259	50.09	ppm	97
38) Naphthalene	5.808	128	1610791	51.19	ppm	99
39) 4-Chloroaniline	5.877	127	646128	47.67	ppm	99
40) 2,3-Dichloroaniline	6.993	161	627425	52.59	ppm	98
41) Caprolactam	6.299	55	259852	52.47	ppm	97
42) Hexachlorobutadiene	5.941	225	306384	49.59	ppm	99
43) 4-Chloro-3-methylphenol	6.475	107	496249	54.22	ppm	80
44) 2-Methylnaphthalene	6.609	141	955637	50.79	ppm	99
45) 1-Methylnaphthalene	6.737	142	1122647	51.35	ppm	99
46) Dimethylnaphthalene	7.480	156	1021035	50.30	ppm	100
48) Hexachlorocyclopentadiene	6.817	237	437700	89.94	ppm	99
49) 2,4,6-Trichlorophenol	7.015	196	364482	51.83	ppm	99
50) 2,4,5-Trichlorophenol	7.084	196	378398	49.44	ppm	97
52) 2-Chloronaphthalene	7.271	162	1091423	50.84	ppm	99
53) Biphenyl	7.250	154	1411735	51.48	ppm	100
54) 2-Nitroaniline	7.447	65	330500	54.00	ppm	95
55) Dimethylphthalate	7.731	163	1335133	53.20	ppm	100
56) Acenaphthylene	7.891	152	1762679	49.66	ppm	99
57) 2,6-Dinitrotoluene	7.821	165	303959	54.48	ppm	99
58) 3-Nitroaniline	8.099	138	332619	53.88	ppm	99
59) Acenaphthene	8.169	153	1074863	50.27	ppm	100
60) 2,4-Dinitrophenol	8.286	184	308943	115.62	ppm	98
61) 4-Nitrophenol	8.505	109	112344	49.76	ppm	93
62) Dibenzofuran	8.457	168	1587421	49.91	ppm	99
63) 2,4-Dinitrotoluene	8.489	165	413618	56.52	ppm	100
64) 2,3,4,6-Tetrachlorophenol	8.708	232	326757	55.19	ppm	98
65) Diethylphthalate	8.916	149	1312741	52.53	ppm	99
66) Fluorene	9.039	166	1296436	50.42	ppm	99
67) 4-Chlorophenyl-phenyle...	9.066	204	628754	51.26	ppm	99
68) 4-Nitroaniline	9.146	138	319503	53.22	ppm	96
70) 4,6-Dinitro-2-methylph...	9.205	198	240003	56.29	ppm	97
71) n-Nitrosodiphenylamine	9.290	169	948157	55.26	ppm	99
72) 1,2-Diphenylhydrazine	9.349	77	1162775	52.90	ppm	95
74) 4-Bromophenyl-phenylether	9.936	248	433444	54.85	ppm	98
75) Hexachlorobenzene	10.038	284	487671	52.41	ppm	98
76) Pentachlorophenol	10.444	266	494546	117.99	ppm	99
77) Phenanthrene	10.780	178	1797001	50.46	ppm	99
78) Anthracene	10.876	178	1870459	50.71	ppm	99
79) Carbazole	11.234	167	1770119	52.10	ppm	99
80) Di-n-butylphthalate	12.014	149	2340482	55.49	ppm	99
81) Fluoranthene	13.072	202	2156993	51.69	ppm	99
82) Octadecane	10.711	57	712622	51.86	ppm	99

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5235\
Data File : M123836a.D
Acq On : 22 Apr 2016 8:08 pm
Operator : seanb1
Sample : cc5217-50
Misc : op93063,em5235
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 25 08:52:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 21 17:40:51 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
84) Pyrene	13.494	202	2241926	48.52	ppm	99
87) Butylbenzylphthalate	14.946	149	1066653	53.10	ppm	97
88) Benzo[a]anthracene	15.886	228	2099142	48.45	ppm	99
89) 3,3'-Dichlorobenzidine	15.913	252	815728	51.56	ppm	100
90) Chrysene	15.956	228	2011091	49.70	ppm	99
91) bis(2-Ethylhexyl)phtha...	16.153	149	1473577	54.40	ppm	99
93) Di-n-octylphthalate	17.382	149	2540113	51.58	ppm	99
94) Benzo[b]fluoranthene	17.895	252	2240513	48.06	ppm	98
95) Benzo[k]fluoranthene	17.943	252	2246798	50.00	ppm	99
96) Benzo[a]pyrene	18.434	252	2080982	48.33	ppm	99
97) Indeno[1,2,3-cd]pyrene	20.245	276	2377361m	54.57	ppm	
98) Dibenz(a,h)acridine	19.876	279	2100044	54.37	ppm	98
99) Dibenz[a,h]anthracene	20.282	278	2351815	53.08	ppm	98
100) 7,12-Dimethylbenz(a)an...	17.889	256	1012849	48.27	ppm	99
101) Benzo[g,h,i]perylene	20.699	276	2347472	51.69	ppm	98

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

7.6.114

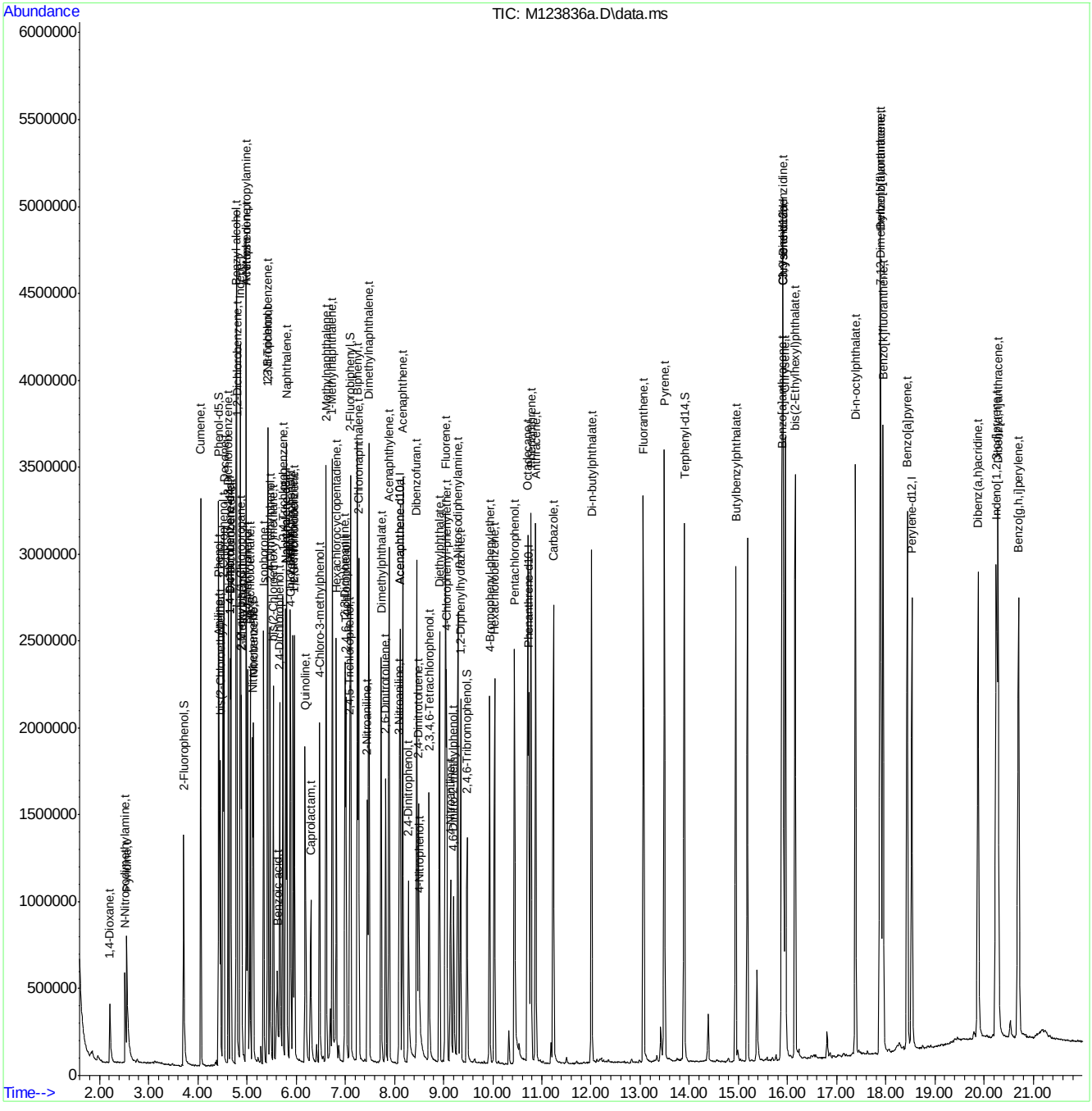
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5235\
Data File : M123836a.D
Acq On : 22 Apr 2016 8:08 pm
Operator : seanb1
Sample : cc5217-50
Misc : op93063,em5235
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 25 08:52:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 21 17:40:51 2016
Response via : Initial Calibration



MM5217.M Mon Apr 25 08:53:04 2016 MSM

Page: 4

SGS ACCUTEST JC18516

Manual Integration Approval Summary

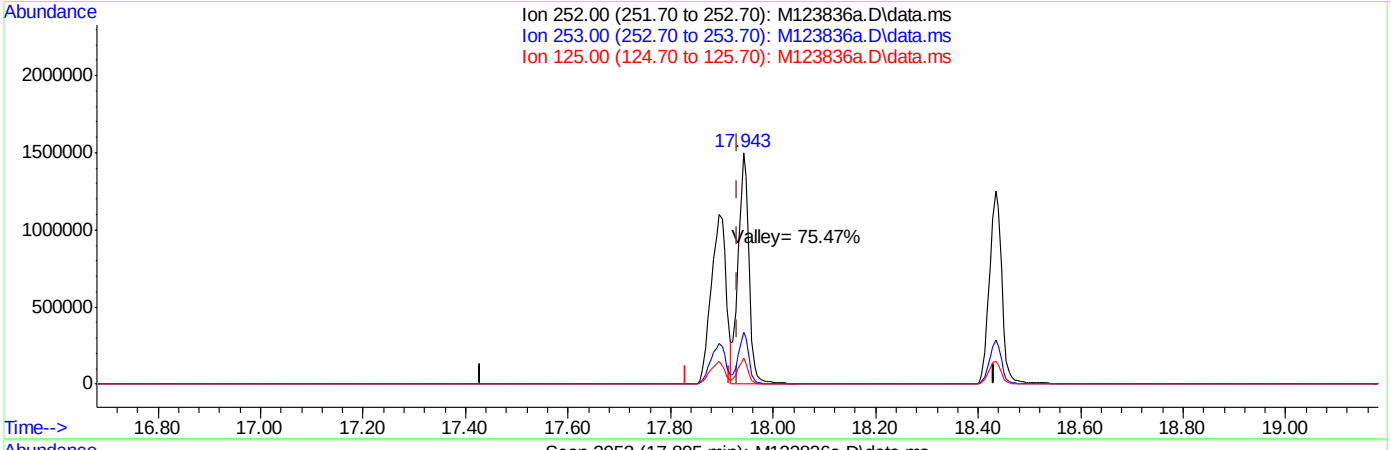
Sample Number:	EM5235-CC5217	**Method:**	EPA 625
Lab FileID:	M123836A.D	**Analyst approved:**	04/25/16 09:51 Kristi Schollenberger
Injection Time:	04/22/16 20:08	**Supervisor approved:**	04/25/16 18:18 Nina Pandya

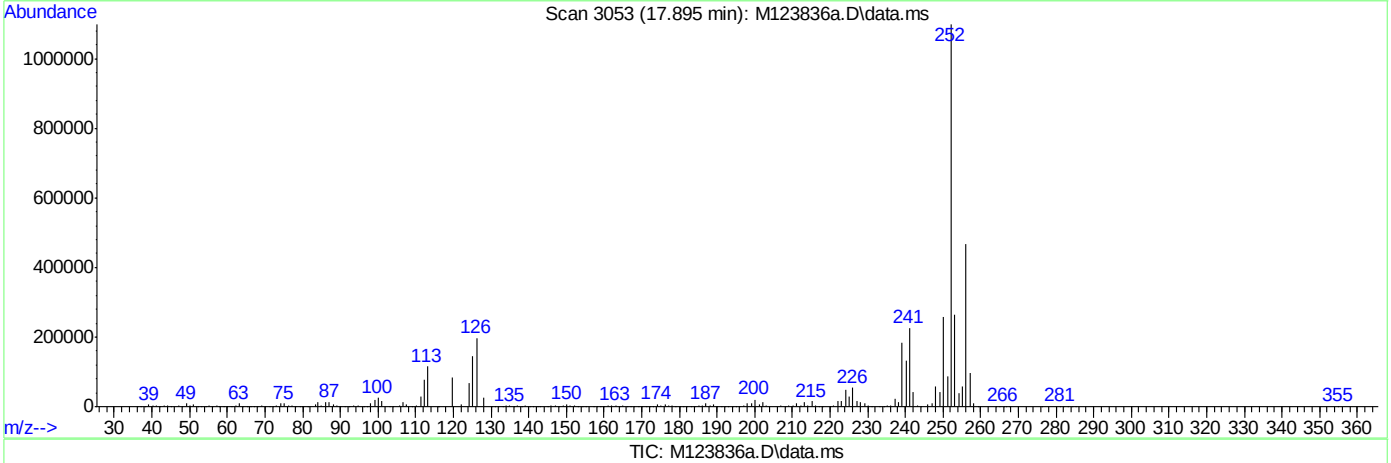
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		20.24	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5235\
Data File : M123836a.D
Acq On : 22 Apr 2016 8:08 pm
Operator : seanb1
Sample : cc5217-50
Misc : op93063,em5235
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 22 20:30:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 21 17:40:51 2016
Response via : Initial Calibration





TIC: M123836a.D\data.ms

(94) Benzo[b]fluoranthene (t)

17.895min (-0.036) 48.06ppm

response 2240513

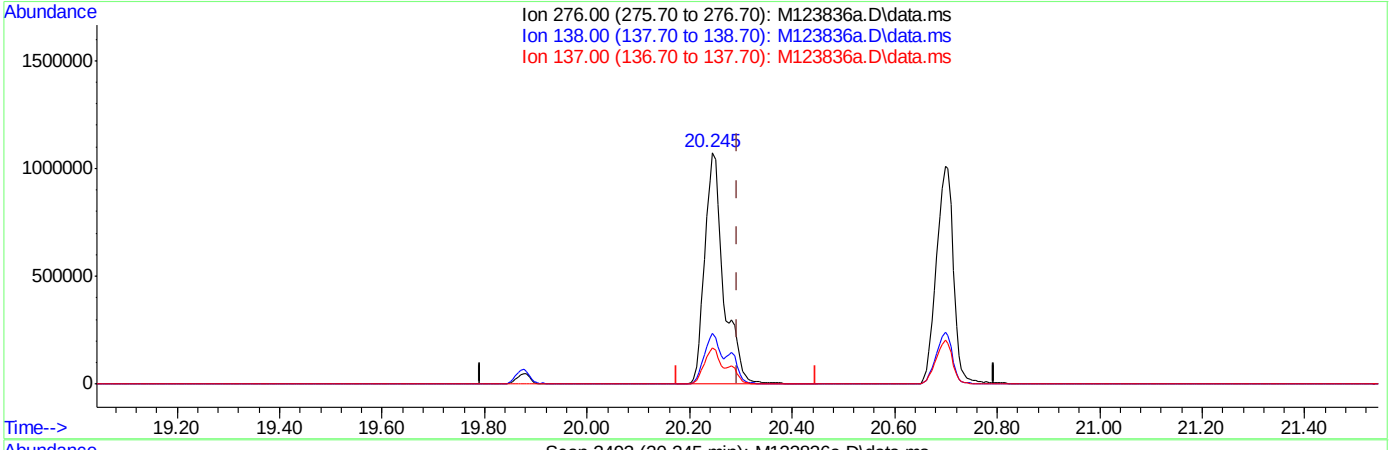
Ion	Exp%	Act%
252.00	100	100
253.00	25.50	24.31
125.00	13.70	13.55
0.00	0.00	0.00

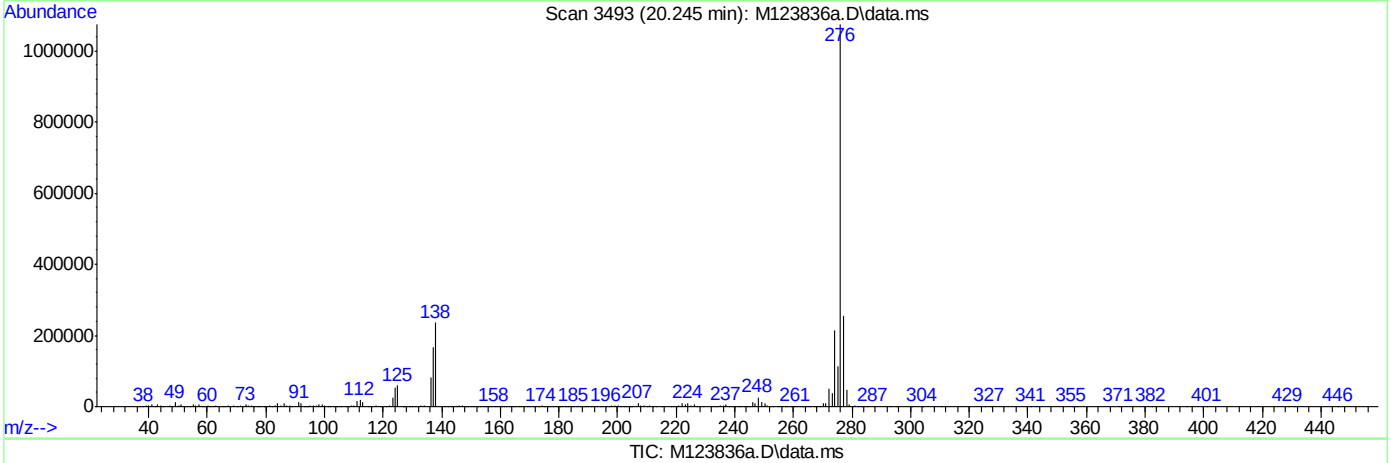
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5235\
Data File : M123836a.D
Acq On : 22 Apr 2016 8:08 pm
Operator : seanb1
Sample : cc5217-50
Misc : op93063,em5235
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 22 20:30:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 21 17:40:51 2016
Response via : Initial Calibration





(97) Indeno[1,2,3-cd]pyrene (t)

20.245min (-0.049) 63.01ppm

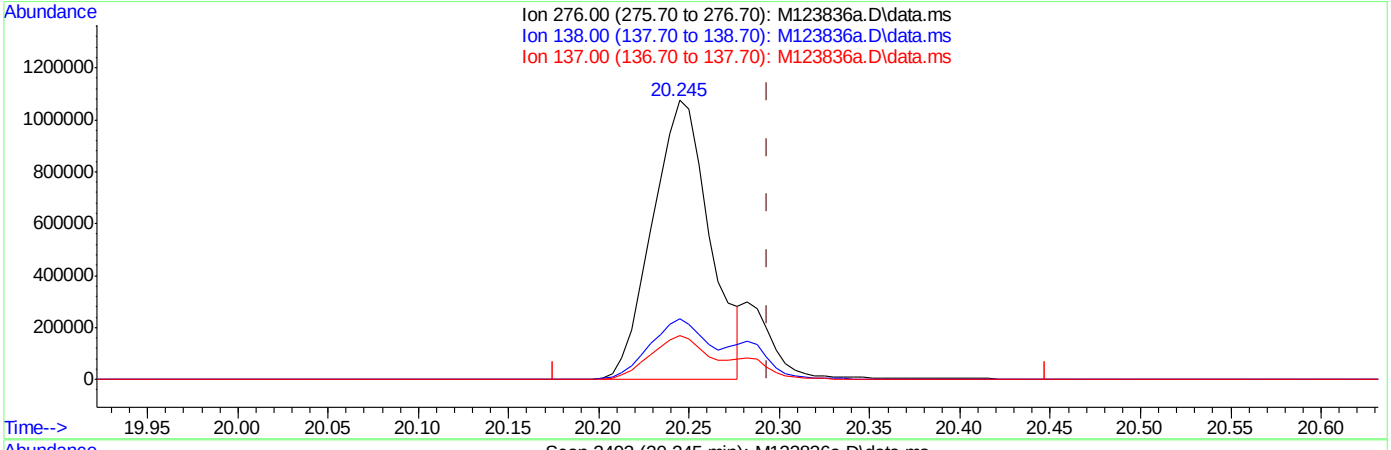
response 2745097

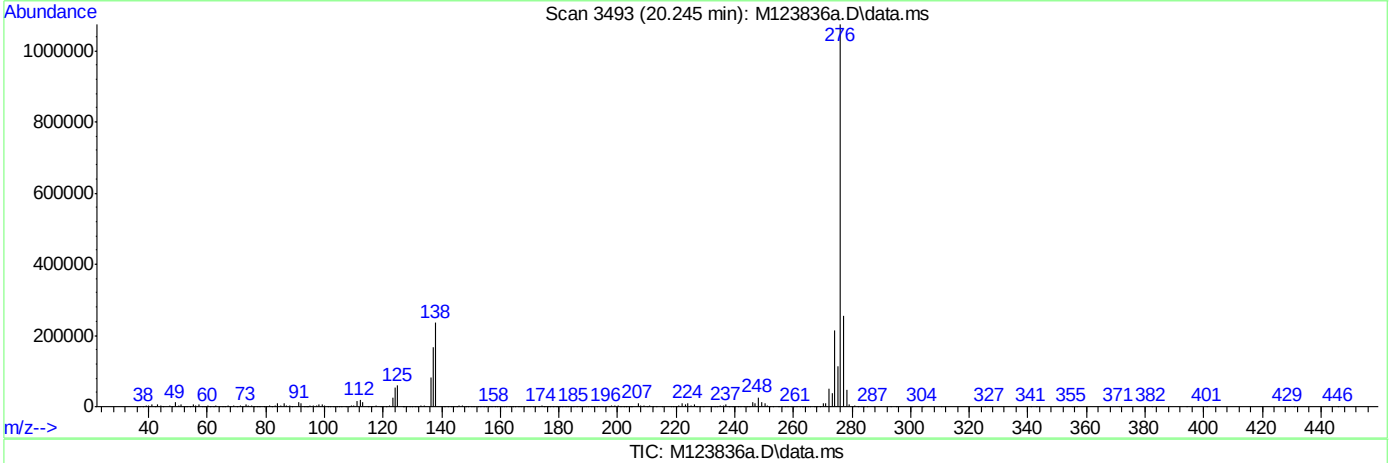
Ion	Exp%	Act%
276.00	100	100
138.00	17.70	21.91
137.00	13.00	15.47
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5235\
Data File : M123836a.D
Acq On : 22 Apr 2016 8:08 pm
Operator : seanb1
Sample : cc5217-50
Misc : op93063,em5235
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 22 20:30:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 21 17:40:51 2016
Response via : Initial Calibration





TIC: M123836a.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

20.245min (-0.049) 54.57ppm m

response 2377361

Ion	Exp%	Act%
276.00	100	100
138.00	17.70	21.94
137.00	13.00	15.55
0.00	0.00	0.00

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5235\
Data File : M123837.D
Acq On : 22 Apr 2016 8:36 pm
Operator : seanb1
Sample : cc5218-50
Misc : op93063,em5235
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 25 10:05:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 21 17:40:51 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.661	152	285473	40.00	ppm	-0.01
24) Naphthalene-d8	5.783	136	1087284	40.00	ppm	-0.02
47) Acenaphthene-d10	8.111	164	633616	40.00	ppm	-0.03
69) Phenanthrene-d10	10.729	188	1162523	40.00	ppm	-0.03
83) Chrysene-d12	15.893	240	1316729	40.00	ppm	-0.04
92) Perylene-d12	18.521	264	1416117	40.00	ppm	-0.04
102) 1,4-Dichlorobenzene-d4a	4.661	152	285473	40.00	ppm	-0.01
104) Acenaphthene-d10a	8.111	164	633616	40.00	ppm	-0.03
107) Chrysene-d12a	15.893	240	1316729	40.00	ppm	-0.04
109) Naphthalene-d8a	5.783	136	1087284	40.00	ppm	-0.02
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%	
86) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
103) Benzaldehyde	4.335	105	292748	40.55	ppm	96
105) 1,2,4,5-Tetrachloroben...	6.835	216	437705	43.02	ppm	99
106) Atrazine	10.333	215	164796	46.62	ppm	75
108) Benzidine	13.415	184	634537	41.16	ppm	94
110) Hydroquinone	6.301	110	450835	51.37	ppm	92

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

7.6.115

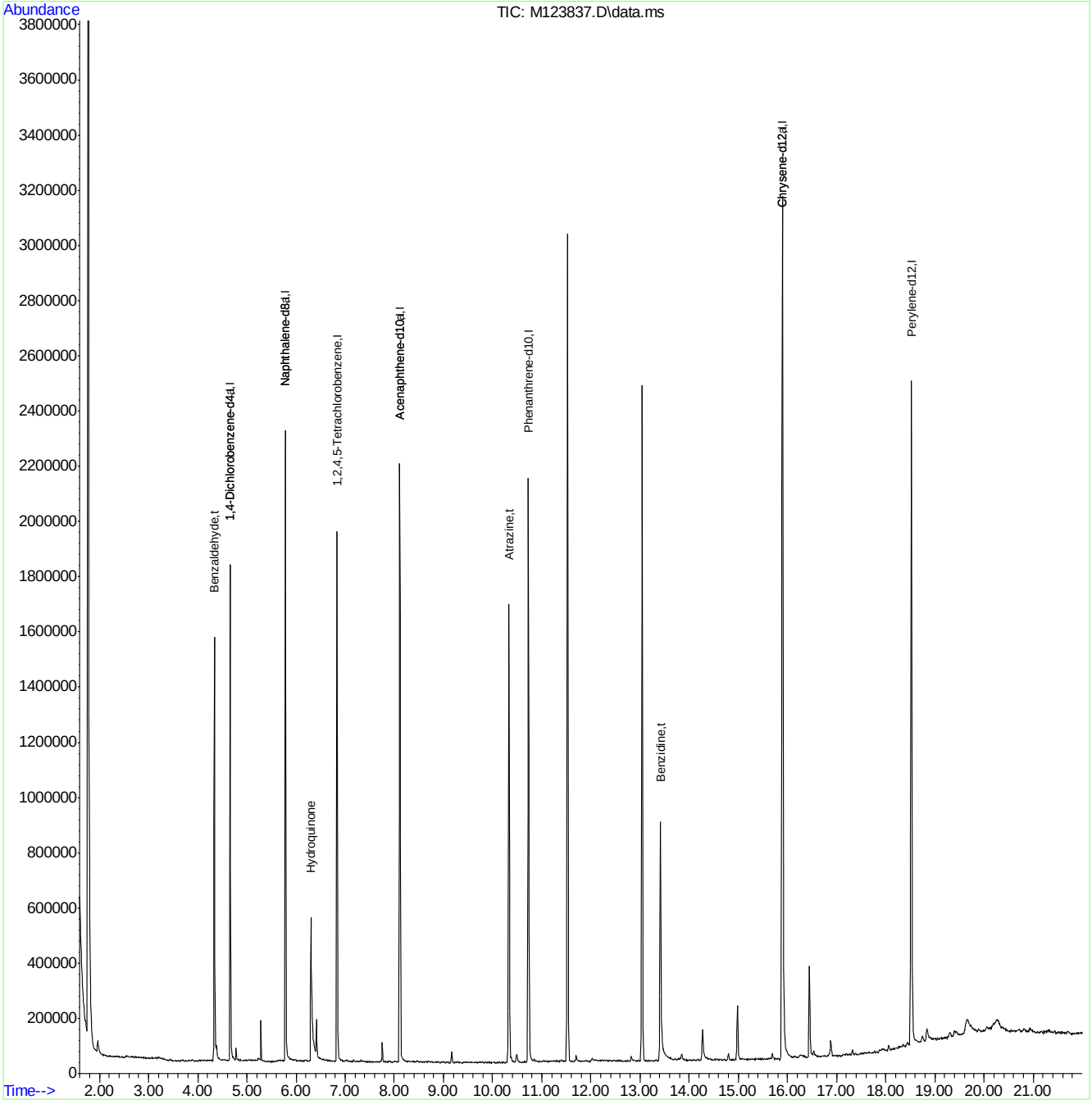
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5235\
Data File : M123837.D
Acq On : 22 Apr 2016 8:36 pm
Operator : seanb1
Sample : cc5218-50
Misc : op93063,em5235
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 25 10:05:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 21 17:40:51 2016
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/26/16 10:21

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5236\
Data File : M123858.D
Acq On : 25 Apr 2016 1:04 pm
Operator : ashleyn
Sample : cc5217-25
Misc : op93063,em5236
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 25 15:31:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 21 17:40:51 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.655	152	314826	40.00	ppm	-0.02
24) Naphthalene-d8	5.776	136	1175374	40.00	ppm	-0.03
47) Acenaphthene-d10	8.100	164	715717	40.00	ppm	-0.04
69) Phenanthrene-d10	10.717	188	1283910	40.00	ppm	-0.04
83) Chrysene-d12	15.887	240	1401125	40.00	ppm	-0.05
92) Perylene-d12	18.509	264	1450053	40.00	ppm	-0.05
102) 1,4-Dichlorobenzene-d4a	4.655	152	314826	40.00	ppm	-0.02
104) Acenaphthene-d10a	8.100	164	715717	40.00	ppm	-0.04
107) Chrysene-d12a	15.887	240	1401125	40.00	ppm	-0.05
109) Naphthalene-d8a	5.776	136	1175374	40.00	ppm	-0.03
System Monitoring Compounds						
5) 2-Fluorophenol	3.709	112	260200	27.03	ppm	-0.04
Spiked Amount 50.000			Recovery	=	54.06%	
8) Phenol-d5	4.420	99	327729	27.10	ppm	-0.03
Spiked Amount 50.000			Recovery	=	54.20%	
25) Nitrobenzene-d5	5.103	82	281470	26.93	ppm	-0.02
Spiked Amount 50.000			Recovery	=	53.86%	
51) 2-Fluorobiphenyl	7.095	172	593138	25.24	ppm	-0.03
Spiked Amount 50.000			Recovery	=	50.48%	
73) 2,4,6-Tribromophenol	9.461	330	128718	29.00	ppm	-0.05
Spiked Amount 50.000			Recovery	=	58.00%	
86) Terphenyl-d14	13.879	244	776035	24.69	ppm	-0.06
Spiked Amount 50.000			Recovery	=	49.38%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.214	88	113502	26.00	ppm	98
3) Pyridine	2.555	79	289822	27.27	ppm	98
4) N-Nitrosodimethylamine	2.518	42	129439	27.81	ppm	94
6) Indene	4.852	116	471419	26.32	ppm	99
7) Cumene	4.056	105	653620	27.21	ppm	100
9) Phenol	4.430	94	375171	28.95	ppm	93
10) Aniline	4.414	93	305144	20.25	ppm	91
11) bis(2-Chloroethyl)ether	4.452	93	263658	26.13	ppm	93
12) 2-Chlorophenol	4.510	128	296356	27.46	ppm	96
13) Decane	4.526	43	271124	26.51	ppm	98
14) 1,3-Dichlorobenzene	4.612	146	322046	26.17	ppm	100
15) 1,4-Dichlorobenzene	4.665	146	324288	26.60	ppm	98
16) Benzyl alcohol	4.772	108	167818	26.85	ppm	85
17) 1,2-Dichlorobenzene	4.788	146	308493	26.88	ppm	98
18) Acetophenone	4.975	105	374307	26.12	ppm	99
19) 2-Methylphenol	4.879	108	232163	25.96	ppm	98
20) 2,2'-oxybis(1-Chloropr...	4.863	121	84247	25.27	ppm #	84
21) 3&4-Methylphenol	5.002	108	254041	25.93	ppm	96
22) n-Nitroso-di-n-propyla...	4.975	70	203936	26.35	ppm	98
23) Hexachloroethane	5.055	201	114197	24.78	ppm	87
26) Nitrobenzene	5.119	77	285435	26.98	ppm	97
27) Quinoline	6.171	129	563467	25.15	ppm	99
28) Isophorone	5.327	82	508726	26.75	ppm	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5236\
Data File : M123858.D
Acq On : 25 Apr 2016 1:04 pm
Operator : ashleyn
Sample : cc5217-25
Misc : op93063,em5236
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 25 15:31:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 21 17:40:51 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
29) 2-Nitrophenol	5.408	139	164797	27.52	ppm	82
30) 2,4-Dimethylphenol	5.461	107	223740	22.83	ppm	99
31) Benzoic acid	5.589	105	178510	27.77	ppm	97
32) bis(2-Chloroethoxy)met...	5.525	93	310466	26.88	ppm	98
33) 2,4-Dichlorophenol	5.659	162	235546	26.29	ppm	96
34) 2,6-Dichlorophenol	5.878	162	229690	25.37	ppm	98
35) 1,3,5-Trichlorobenzene	5.413	180	280069	26.21	ppm	98
36) 1,2,4-Trichlorobenzene	5.723	180	270282	25.72	ppm	97
37) 1,2,3-Trichlorobenzene	5.952	180	259409	25.53	ppm	97
38) Naphthalene	5.798	128	806397	26.20	ppm	99
39) 4-Chloroaniline	5.867	127	313166	23.62	ppm	97
40) 2,3-Dichloroaniline	6.983	161	297936	25.52	ppm	98
41) Caprolactam	6.262	55	119314	24.62	ppm	96
42) Hexachlorobutadiene	5.931	225	149817	24.78	ppm	98
43) 4-Chloro-3-methylphenol	6.460	107	238862	26.68	ppm	94
44) 2-Methylnaphthalene	6.599	141	471204	25.60	ppm	98
45) 1-Methylnaphthalene	6.727	142	547930	25.62	ppm	98
46) Dimethylnaphthalene	7.464	156	506589	25.51	ppm	99
48) Hexachlorocyclopentadiene	6.807	237	167004	38.62	ppm	96
49) 2,4,6-Trichlorophenol	6.999	196	175597	25.71	ppm	97
50) 2,4,5-Trichlorophenol	7.074	196	175804	23.65	ppm	99
52) 2-Chloronaphthalene	7.256	162	536785	25.75	ppm	99
53) Biphenyl	7.234	154	691420	25.96	ppm	100
54) 2-Nitroaniline	7.432	65	155568	26.17	ppm	98
55) Dimethylphthalate	7.715	163	634614	26.04	ppm	100
56) Acenaphthylene	7.875	152	861483	24.99	ppm	98
57) 2,6-Dinitrotoluene	7.806	165	144404	26.65	ppm	98
58) 3-Nitroaniline	8.078	138	153293	25.57	ppm	93
59) Acenaphthene	8.153	153	528079	25.43	ppm	99
60) 2,4-Dinitrophenol	8.270	184	121623	53.39	ppm	97
61) 4-Nitrophenol	8.516	109	51782	23.62	ppm	95
62) Dibenzofuran	8.441	168	785143	25.42	ppm	100
63) 2,4-Dinitrotoluene	8.473	165	198932	27.99	ppm	99
64) 2,3,4,6-Tetrachlorophenol	8.692	232	152264	26.48	ppm	100
65) Diethylphthalate	8.895	149	654801	26.98	ppm	99
66) Fluorene	9.024	166	666107	26.67	ppm	99
67) 4-Chlorophenyl-phenyle...	9.050	204	319119	26.79	ppm	99
68) 4-Nitroaniline	9.120	138	145929	25.03	ppm	96
70) 4,6-Dinitro-2-methylph...	9.189	198	111765	27.89	ppm	96
71) n-Nitrosodiphenylamine	9.275	169	481252	27.91	ppm	97
72) 1,2-Diphenylhydrazine	9.328	77	598595	27.10	ppm	98
74) 4-Bromophenyl-phenylether	9.921	248	219817	27.68	ppm	98
75) Hexachlorobenzene	10.017	284	254646	27.23	ppm	99
76) Pentachlorophenol	10.428	266	230919	57.22	ppm	97
77) Phenanthrene	10.759	178	923739	25.81	ppm	100
78) Anthracene	10.855	178	947753	25.57	ppm	99
79) Carbazole	11.213	167	883341	25.87	ppm	99
80) Di-n-butylphthalate	11.993	149	1140827	26.91	ppm	100
81) Fluoranthene	13.051	202	1052278	25.09	ppm	99
82) Octadecane	10.695	57	387660	28.07	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5236\
Data File : M123858.D
Acq On : 25 Apr 2016 1:04 pm
Operator : ashleyn
Sample : cc5217-25
Misc : op93063,em5236
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 25 15:31:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 21 17:40:51 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
84)	Pyrene	13.473	202	1087913	23.81	ppm	98
85)	Butyl stearate	15.160	56	260494	24.94	ppm	99
87)	Butylbenzylphthalate	14.925	149	499701	25.16	ppm	95
88)	Benzo[a]anthracene	15.865	228	1050180	24.52	ppm	98
89)	3,3'-Dichlorobenzidine	15.892	252	390422	24.96	ppm	98
90)	Chrysene	15.935	228	1007823	25.19	ppm	99
91)	bis(2-Ethylhexyl)phtha...	16.138	149	721312	26.93	ppm	99
93)	Di-n-octylphthalate	17.361	149	1286458	27.33	ppm	99
94)	Benzo[b]fluoranthene	17.868	252	1158696	26.01	ppm	95
95)	Benzo[k]fluoranthene	17.911	252	1142020	26.59	ppm	99
96)	Benzo[a]pyrene	18.408	252	1043877	25.37	ppm	99
97)	Indeno[1,2,3-cd]pyrene	20.213	276	1031512m	24.78	ppm	
98)	Dibenz(a,h)acridine	19.850	279	981846	26.60	ppm	99
99)	Dibenz[a,h]anthracene	20.250	278	1115930	26.36	ppm	100
100)	7,12-Dimethylbenz(a)an...	17.858	256	485738	24.23	ppm	99
101)	Benzo[g,h,i]perylene	20.662	276	1112404	25.63	ppm	100

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

7.6.116

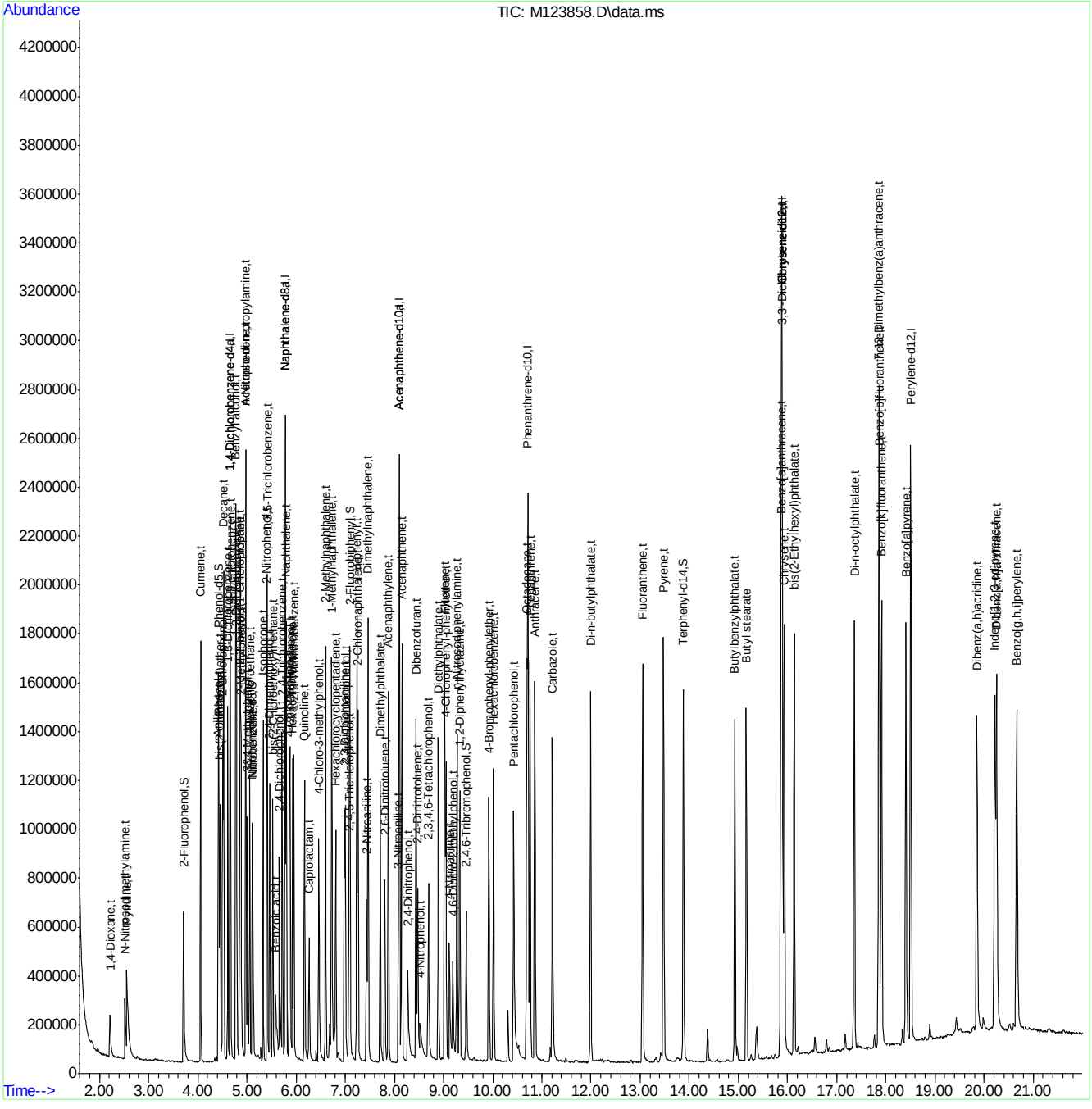
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5236\
Data File : M123858.D
Acq On : 25 Apr 2016 1:04 pm
Operator : ashleyn
Sample : cc5217-25
Misc : op93063,em5236
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 25 15:31:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 21 17:40:51 2016
Response via : Initial Calibration



Manual Integration Approval Summary

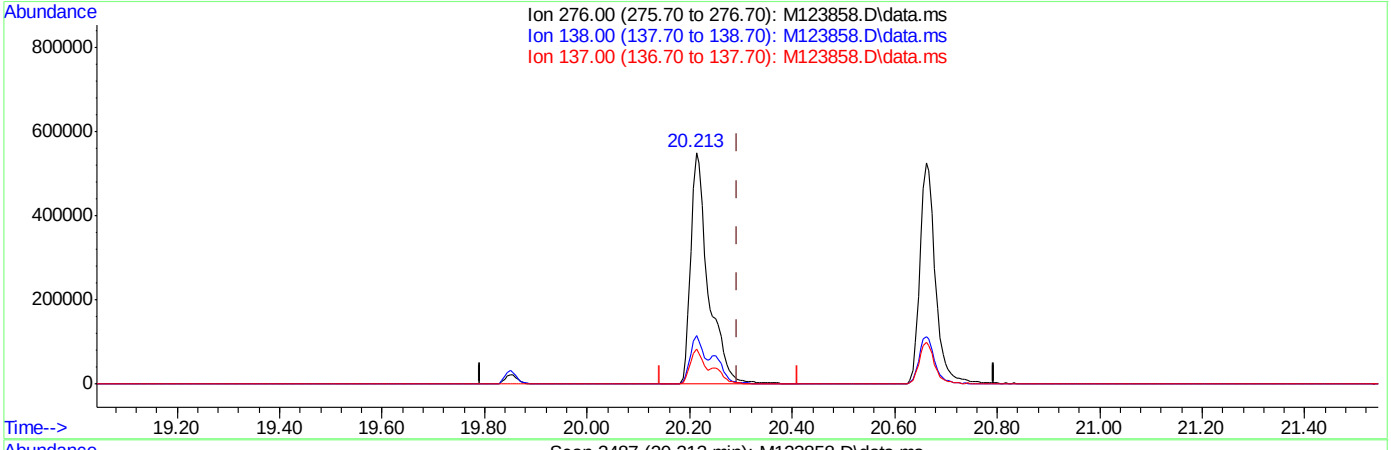
Sample Number:	EM5236-CC5217	**Method:**	EPA 625
Lab FileID:	M123858.D	**Analyst approved:**	04/25/16 15:59 Ashley Noble
Injection Time:	04/25/16 13:04	**Supervisor approved:**	04/26/16 10:21 Nina Pandya

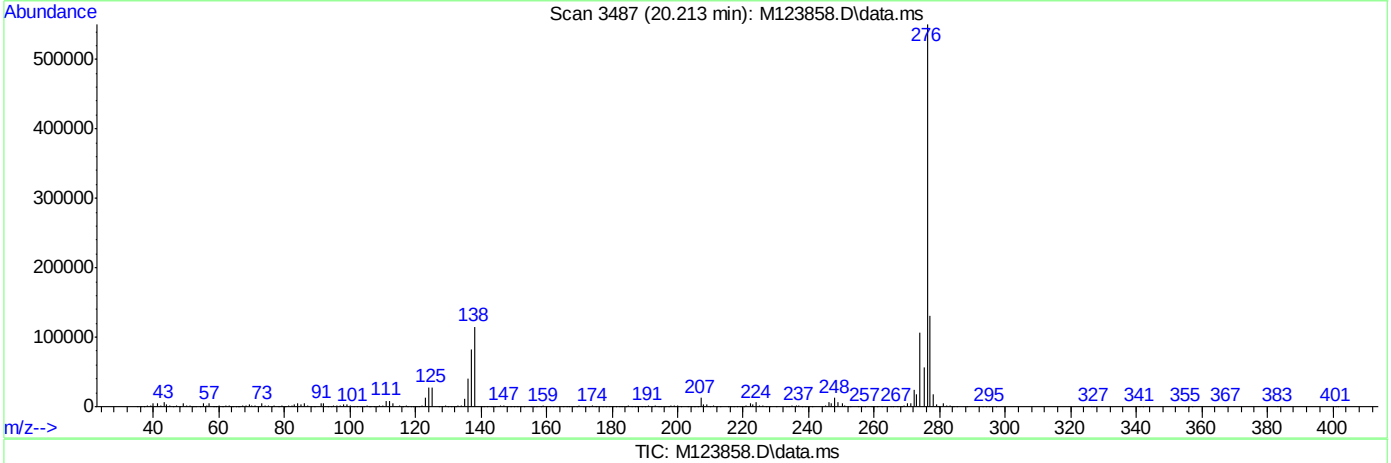
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		20.21	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5236\
Data File : M123858.D
Acq On : 25 Apr 2016 1:04 pm
Operator : ashleyn
Sample : cc5217-25
Misc : op93063,em5236
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 25 13:26:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 21 17:40:51 2016
Response via : Initial Calibration





TIC: M123858.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

20.213min (-0.080) 31.44ppm

response 1309013

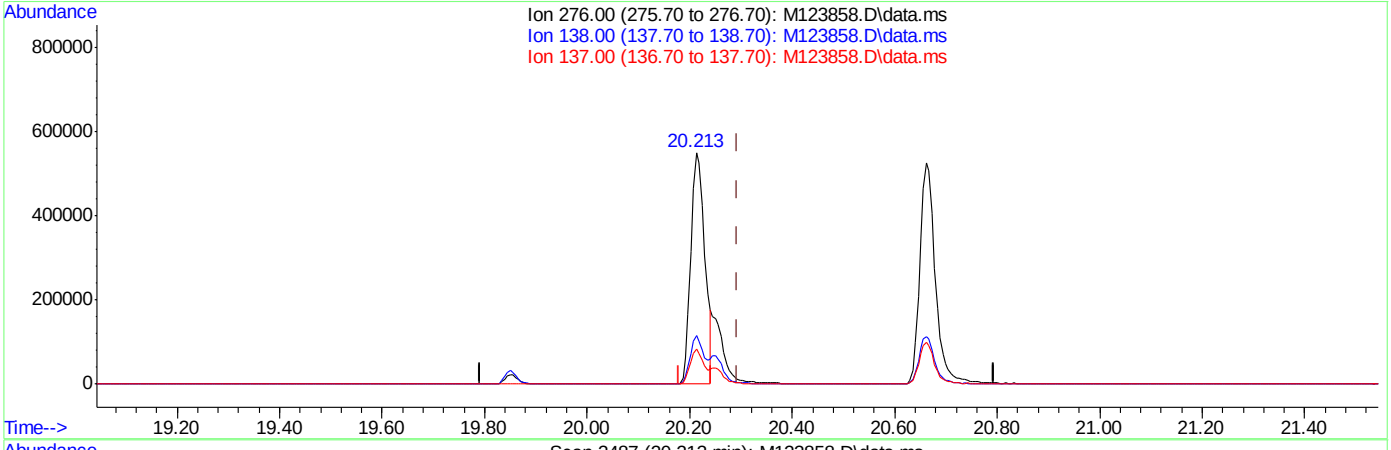
Ion	Exp%	Act%
276.00	100	100
138.00	17.70	20.95
137.00	13.00	15.00
0.00	0.00	0.00

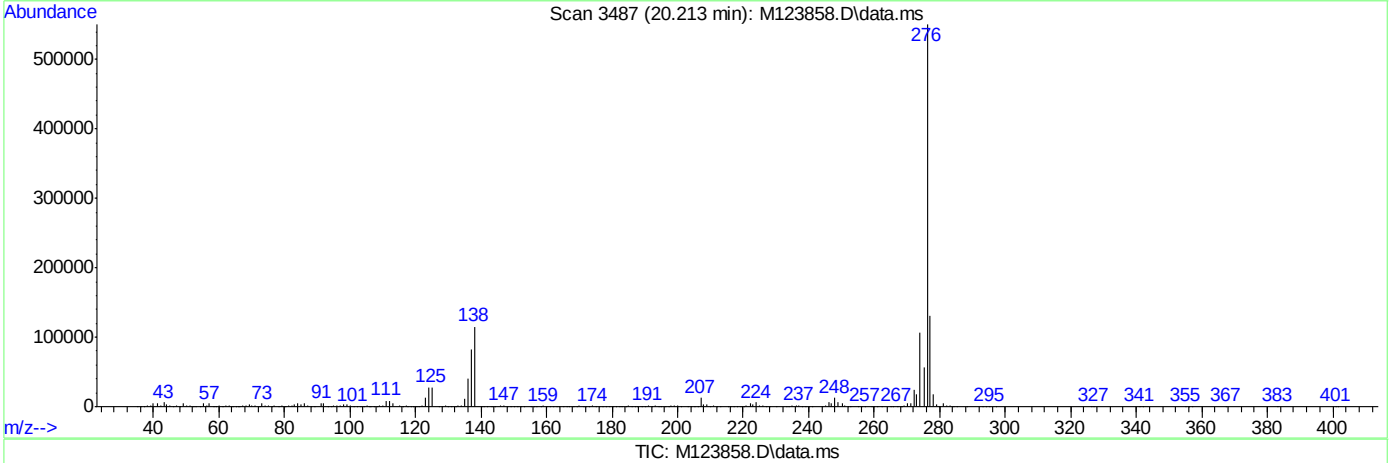
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5236\
Data File : M123858.D
Acq On : 25 Apr 2016 1:04 pm
Operator : ashleyn
Sample : cc5217-25
Misc : op93063,em5236
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 25 13:26:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 21 17:40:51 2016
Response via : Initial Calibration





TIC: M123858.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

20.213min (-0.080) 24.78ppm m

response 1031512

Ion	Exp%	Act%
276.00	100	100
138.00	17.70	20.96
137.00	13.00	15.08
0.00	0.00	0.00

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5236\
Data File : M123859.D
Acq On : 25 Apr 2016 1:34 pm
Operator : ashleyn
Sample : cc5218-25
Misc : op93063,em5236
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 25 15:32:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 21 17:40:51 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.654	152	367923	40.00	ppm	-0.02
24) Naphthalene-d8	5.776	136	1417621	40.00	ppm	-0.03
47) Acenaphthene-d10	8.099	164	815228	40.00	ppm	-0.04
69) Phenanthrene-d10	10.716	188	1436762	40.00	ppm	-0.04
83) Chrysene-d12	15.881	240	1636156	40.00	ppm	-0.05
92) Perylene-d12	18.509	264	1660169	40.00	ppm	-0.05
102) 1,4-Dichlorobenzene-d4a	4.654	152	367923	40.00	ppm	-0.02
104) Acenaphthene-d10a	8.099	164	815228	40.00	ppm	-0.04
107) Chrysene-d12a	15.881	240	1636156	40.00	ppm	-0.05
109) Naphthalene-d8a	5.776	136	1417621	40.00	ppm	-0.03
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
103) Benzaldehyde	4.328	105	222168	23.88	ppm	98
105) 1,2,4,5-Tetrachloroben...	6.823	216	307721	23.51	ppm	99
106) Atrazine	10.316	215	105896	23.28	ppm	75
108) Benzidine	13.403	184	399020	20.83	ppm	96
110) Hydroquinone	6.299	110	305162	26.67	ppm	92

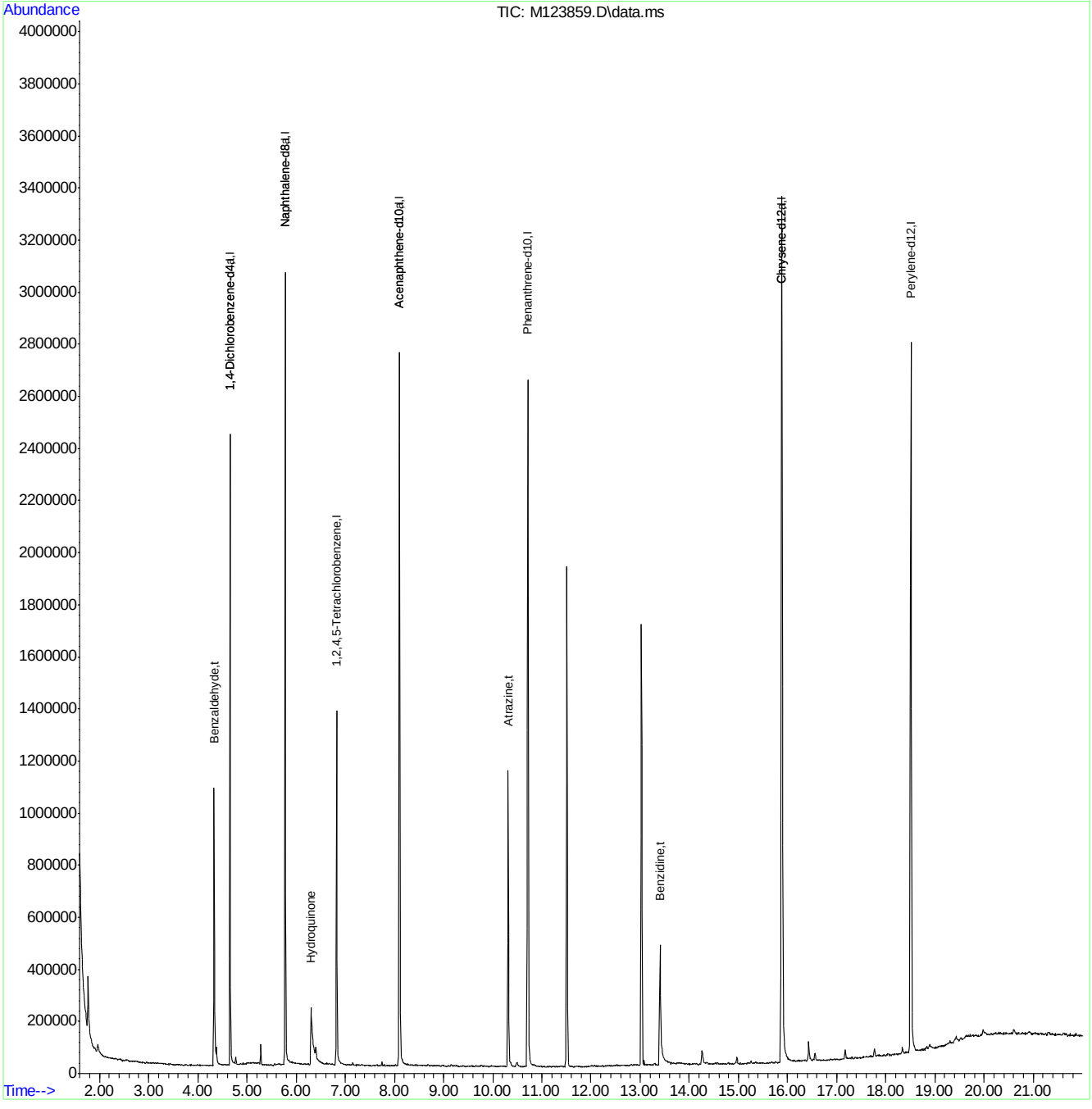
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5236\
Data File : M123859.D
Acq On : 25 Apr 2016 1:34 pm
Operator : ashleyn
Sample : cc5218-25
Misc : op93063,em5236
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 25 15:32:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 21 17:40:51 2016
Response via : Initial Calibration



MM5217.M Mon Apr 25 15:32:42 2016 MSM

Page: 2

SGS ACCUTEST JC18516

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/26/16 13:26

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5238\
Data File : M123900.D
Acq On : 26 Apr 2016 10:16 am
Operator : ashleyn
Sample : cc5217-25
Misc : op93324,em5238
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 26 12:54:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Apr 26 08:32:07 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.638	152	283484	40.00	ppm	-0.04
24) Naphthalene-d8	5.760	136	1097418	40.00	ppm	-0.04
47) Acenaphthene-d10	8.078	164	669409	40.00	ppm	-0.06
69) Phenanthrene-d10	10.695	188	1150133	40.00	ppm	-0.06
83) Chrysene-d12	15.860	240	1272004	40.00	ppm	-0.07
92) Perylene-d12	18.482	264	1277207	40.00	ppm	-0.08
102) 1,4-Dichlorobenzene-d4a	4.638	152	283484	40.00	ppm	-0.04
104) Acenaphthene-d10a	8.078	164	669409	40.00	ppm	-0.06
107) Chrysene-d12a	15.860	240	1271921	40.00	ppm	-0.07
109) Naphthalene-d8a	5.760	136	1097418	40.00	ppm	-0.04
System Monitoring Compounds						
5) 2-Fluorophenol	3.693	112	236320	27.26	ppm	-0.05
Spiked Amount 50.000			Recovery	=	54.52%	
8) Phenol-d5	4.409	99	303473	27.87	ppm	-0.04
Spiked Amount 50.000			Recovery	=	55.74%	
25) Nitrobenzene-d5	5.087	82	256870	26.32	ppm	-0.04
Spiked Amount 50.000			Recovery	=	52.64%	
51) 2-Fluorobiphenyl	7.074	172	564316	25.67	ppm	-0.06
Spiked Amount 50.000			Recovery	=	51.34%	
73) 2,4,6-Tribromophenol	9.440	330	112930	28.41	ppm	-0.07
Spiked Amount 50.000			Recovery	=	56.82%	
86) Terphenyl-d14	13.857	244	750543	26.30	ppm	-0.08
Spiked Amount 50.000			Recovery	=	52.60%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.197	88	104581	26.61	ppm	99
3) Pyridine	2.539	79	265142	27.71	ppm	96
4) N-Nitrosodimethylamine	2.502	42	126672	30.23	ppm	92
6) Indene	4.841	116	434334	26.94	ppm	100
7) Cumene	4.040	105	592449	27.39	ppm	98
9) Phenol	4.419	94	350877	30.07	ppm	99
10) Aniline	4.403	93	277661	20.46	ppm	92
11) bis(2-Chloroethyl)ether	4.441	93	245384	27.01	ppm	96
12) 2-Chlorophenol	4.499	128	263579	27.13	ppm	96
13) Decane	4.515	43	257600	27.97	ppm	98
14) 1,3-Dichlorobenzene	4.595	146	293013	26.45	ppm	98
15) 1,4-Dichlorobenzene	4.654	146	294962	26.87	ppm	98
16) Benzyl alcohol	4.761	108	157317	27.95	ppm	88
17) 1,2-Dichlorobenzene	4.772	146	277027	26.80	ppm	98
18) Acetophenone	4.959	105	339099	26.28	ppm	95
19) 2-Methylphenol	4.863	108	217127	26.96	ppm	99
20) 2,2'-oxybis(1-Chloropr...	4.852	121	80107	26.69	ppm	95
21) 3&4-Methylphenol	4.991	108	234446	26.57	ppm #	96
22) n-Nitroso-di-n-propyla...	4.959	70	191212	27.44	ppm	98
23) Hexachloroethane	5.044	201	104306	25.13	ppm	96
26) Nitrobenzene	5.103	77	265752	26.90	ppm	95
27) Quinoline	6.150	129	536873	25.66	ppm	99
28) Isophorone	5.311	82	464735	26.17	ppm	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5238\
Data File : M123900.D
Acq On : 26 Apr 2016 10:16 am
Operator : ashleyn
Sample : cc5217-25
Misc : op93324,em5238
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 26 12:54:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Apr 26 08:32:07 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
29) 2-Nitrophenol	5.391	139	150093	26.85	ppm	91
30) 2,4-Dimethylphenol	5.445	107	209312	22.88	ppm	97
31) Benzoic acid	5.573	105	166481	27.74	ppm	99
32) bis(2-Chloroethoxy)met...	5.509	93	287534	26.66	ppm	98
33) 2,4-Dichlorophenol	5.642	162	223142	26.67	ppm	99
34) 2,6-Dichlorophenol	5.861	162	216173	25.58	ppm	98
35) 1,3,5-Trichlorobenzene	5.397	180	258563	25.91	ppm	99
36) 1,2,4-Trichlorobenzene	5.701	180	253314	25.82	ppm	99
37) 1,2,3-Trichlorobenzene	5.936	180	245984	25.93	ppm	99
38) Naphthalene	5.781	128	743563	25.87	ppm	100
39) 4-Chloroaniline	5.851	127	293372	23.70	ppm	97
40) 2,3-Dichloroaniline	6.962	161	282895	25.96	ppm	99
41) Caprolactam	6.246	55	120450	26.63	ppm	98
42) Hexachlorobutadiene	5.909	225	148177	26.25	ppm	99
43) 4-Chloro-3-methylphenol	6.444	107	228240	27.30	ppm	88
44) 2-Methylnaphthalene	6.577	141	451012	26.24	ppm	98
45) 1-Methylnaphthalene	6.705	142	526129	26.34	ppm	99
46) Dimethylnaphthalene	7.442	156	483481	26.08	ppm	98
48) Hexachlorocyclopentadiene	6.785	237	140743	35.23	ppm	98
49) 2,4,6-Trichlorophenol	6.983	196	167985	26.30	ppm	98
50) 2,4,5-Trichlorophenol	7.052	196	177797	25.57	ppm	99
52) 2-Chloronaphthalene	7.239	162	509979	26.15	ppm	100
53) Biphenyl	7.213	154	656683	26.36	ppm	100
54) 2-Nitroaniline	7.410	65	154955	27.87	ppm	96
55) Dimethylphthalate	7.693	163	605690	26.57	ppm	100
56) Acenaphthylene	7.854	152	822639	25.51	ppm	98
57) 2,6-Dinitrotoluene	7.784	165	138833	27.39	ppm	95
58) 3-Nitroaniline	8.056	138	141760	25.28	ppm	90
59) Acenaphthene	8.131	153	502279	25.86	ppm	99
60) 2,4-Dinitrophenol	8.254	184	103822	49.47	ppm	98
61) 4-Nitrophenol	8.473	109	49482	24.13	ppm	96
62) Dibenzofuran	8.420	168	735084	25.44	ppm	98
63) 2,4-Dinitrotoluene	8.452	165	182846	27.50	ppm	94
64) 2,3,4,6-Tetrachlorophenol	8.671	232	141624	26.34	ppm	99
65) Diethylphthalate	8.879	149	597804	26.34	ppm	100
66) Fluorene	9.002	166	594598	25.46	ppm	100
67) 4-Chlorophenyl-phenyle...	9.029	204	291162	26.13	ppm	97
68) 4-Nitroaniline	9.103	138	115560	21.19	ppm	95
70) 4,6-Dinitro-2-methylph...	9.167	198	92915	26.05	ppm	92
71) n-Nitrosodiphenylamine	9.253	169	422209	27.33	ppm	100
72) 1,2-Diphenylhydrazine	9.306	77	551550	27.87	ppm	97
74) 4-Bromophenyl-phenylether	9.899	248	197616	27.78	ppm	96
75) Hexachlorobenzene	9.995	284	225812	26.96	ppm	99
76) Pentachlorophenol	10.407	266	203800	56.43	ppm	99
77) Phenanthrene	10.738	178	827110	25.79	ppm	99
78) Anthracene	10.834	178	852882	25.68	ppm	99
79) Carbazole	11.192	167	770352	25.19	ppm	100
80) Di-n-butylphthalate	11.972	149	1018492	26.82	ppm	100
81) Fluoranthene	13.029	202	972780	25.89	ppm	99
82) Octadecane	10.674	57	357843	28.92	ppm	98

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5238\
Data File : M123900.D
Acq On : 26 Apr 2016 10:16 am
Operator : ashleyn
Sample : cc5217-25
Misc : op93324,em5238
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 26 12:54:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Apr 26 08:32:07 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
84) Pyrene	13.451	202	1033942	24.93	ppm	99
85) Butyl stearate	15.139	56	269020	28.37	ppm	97
87) Butylbenzylphthalate	14.904	149	473505	26.26	ppm	95
88) Benzo[a]anthracene	15.844	228	948466	24.39	ppm	100
89) 3,3'-Dichlorobenzidine	15.865	252	333843	23.51	ppm	97
90) Chrysene	15.908	228	924768	25.46	ppm	100
91) bis(2-Ethylhexyl)phtha...	16.111	149	652939	26.86	ppm	97
93) Di-n-octylphthalate	17.339	149	1111950	26.82	ppm	98
94) Benzo[b]fluoranthene	17.841	252	1034353	26.36	ppm	95
95) Benzo[k]fluoranthene	17.889	252	984187	26.02	ppm	99
96) Benzo[a]pyrene	18.386	252	915904	25.27	ppm	98
97) Indeno[1,2,3-cd]pyrene	20.186	276	953142m	25.99	ppm	
98) Dibenz(a,h)acridine	19.823	279	859586	26.44	ppm	99
99) Dibenz[a,h]anthracene	20.223	278	1007570	27.02	ppm	98
100) 7,12-Dimethylbenz(a)an...	17.836	256	427937	24.23	ppm	97
101) Benzo[g,h,i]perylene	20.629	276	1019500	26.67	ppm	100

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

7.6.118

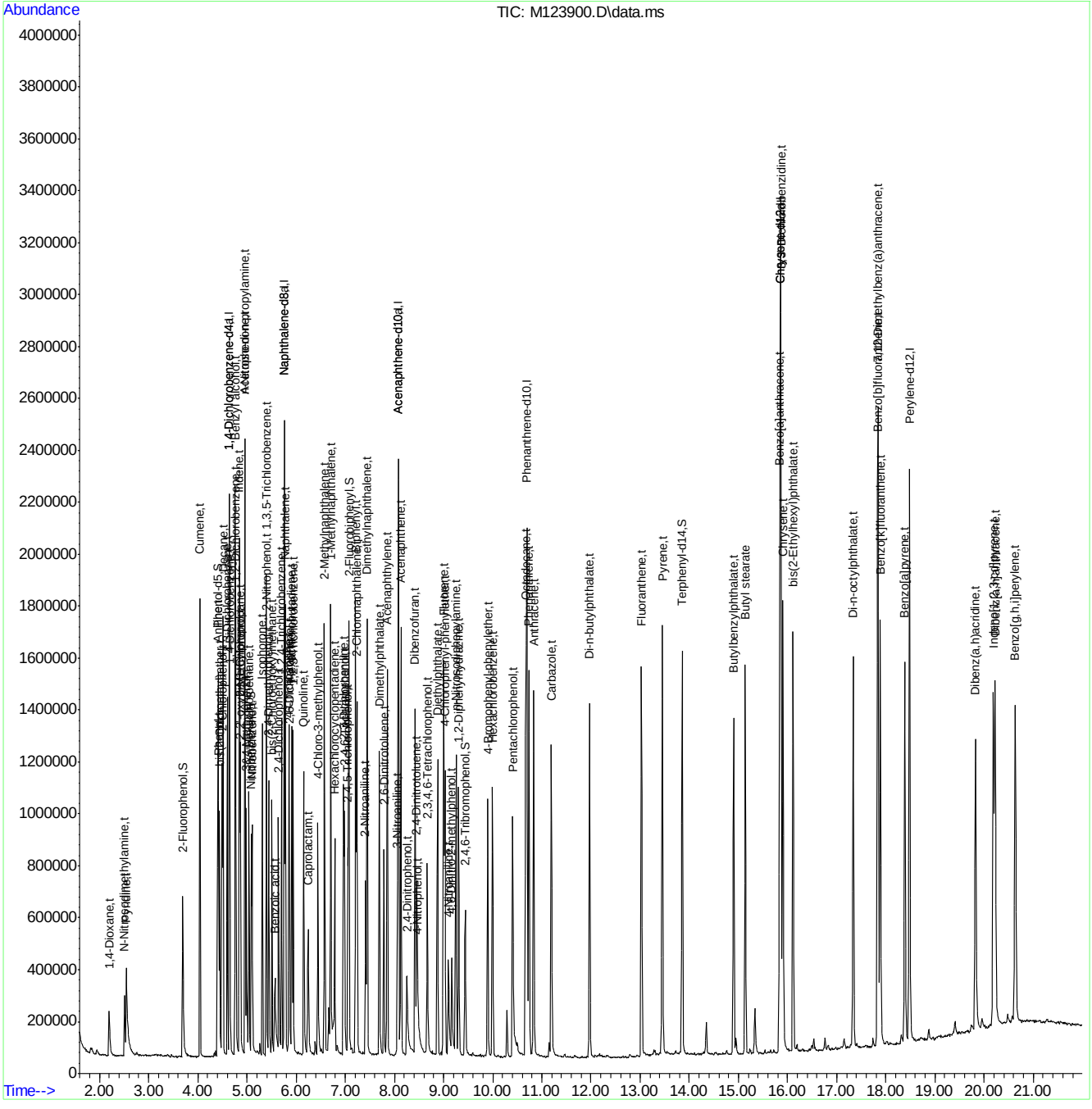
7

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5238\
Data File : M123900.D
Acq On : 26 Apr 2016 10:16 am
Operator : ashleyn
Sample : cc5217-25
Misc : op93324,em5238
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 26 12:54:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Apr 26 08:32:07 2016
Response via : Initial Calibration



MM5217.M Tue Apr 26 12:55:10 2016 MSM

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Manual Integration Approval Summary

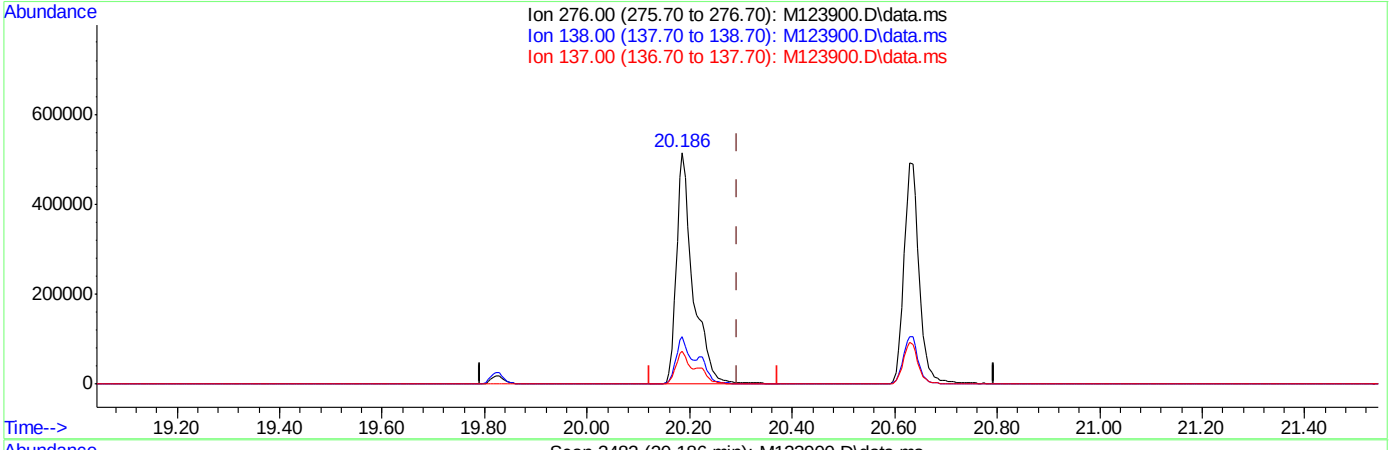
Sample Number:	EM5238-CC5217	**Method:**	SW846 8270D
Lab FileID:	M123900.D	**Analyst approved:**	04/26/16 13:03 Ashley Noble
Injection Time:	04/26/16 10:16	**Supervisor approved:**	04/26/16 13:26 Nina Pandya

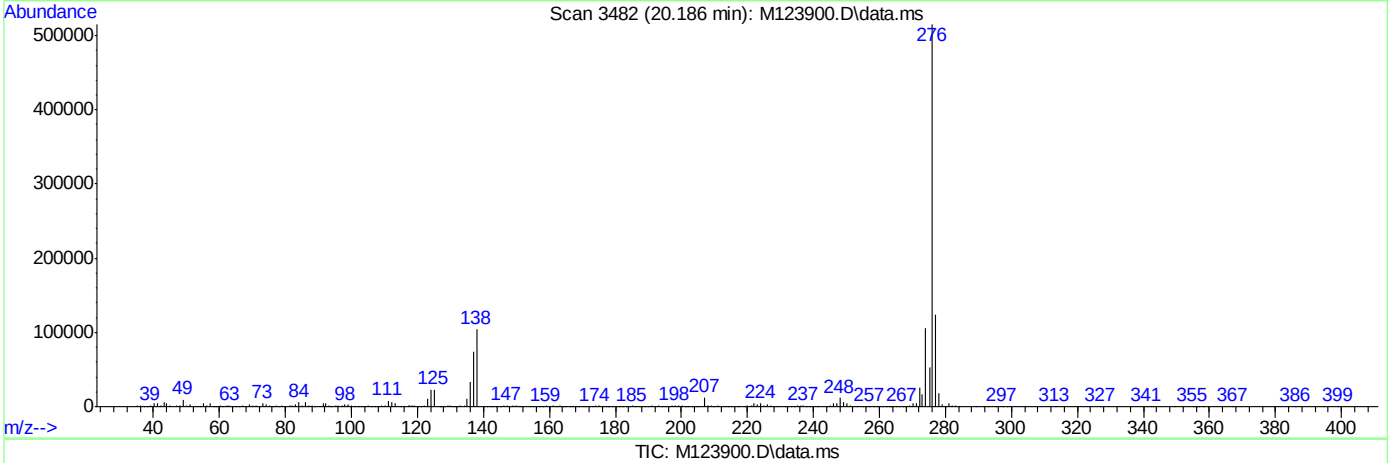
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		20.19	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5238\
Data File : M123900.D
Acq On : 26 Apr 2016 10:16 am
Operator : ashleyn
Sample : cc5217-25
Misc : op93324,em5238
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 26 10:38:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Apr 26 08:32:07 2016
Response via : Initial Calibration





TIC: M123900.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

20.186min (-0.107) 31.91ppm

response 1170218

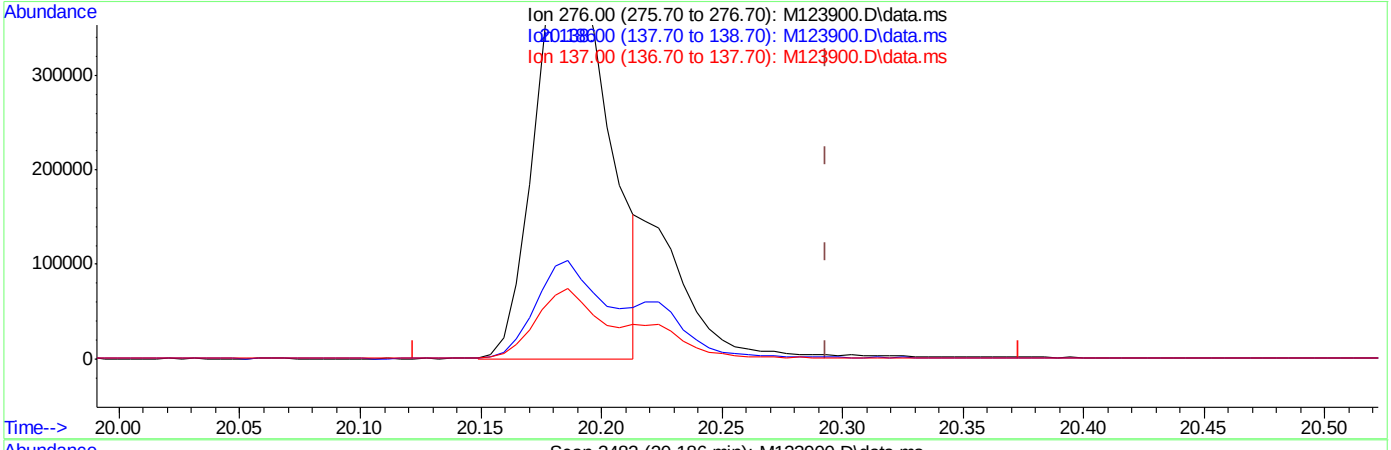
Ion	Exp%	Act%
276.00	100	100
138.00	17.70	20.24
137.00	13.00	14.34
0.00	0.00	0.00

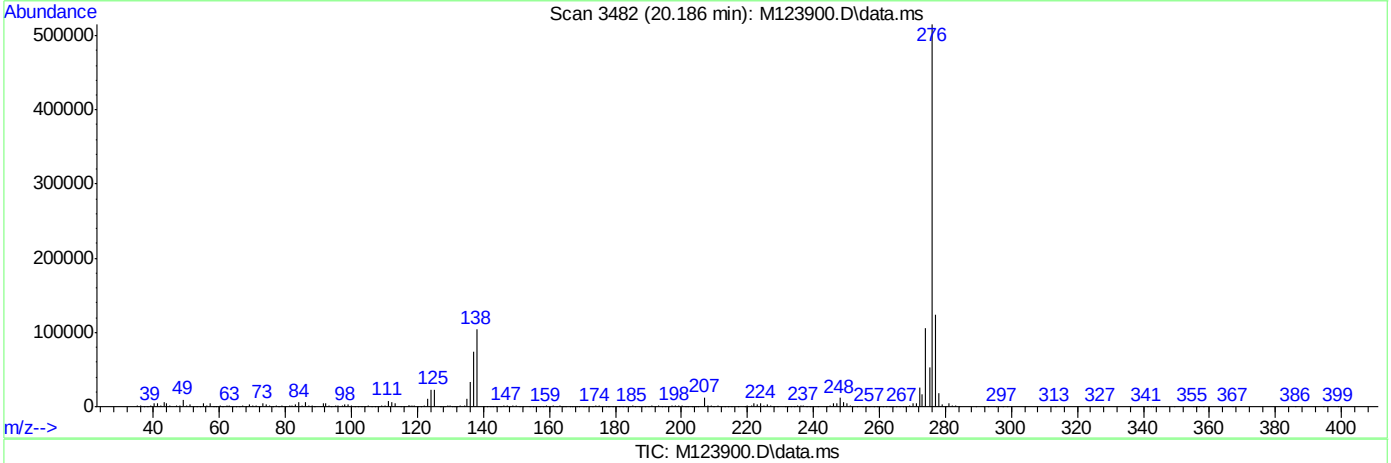
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5238\
Data File : M123900.D
Acq On : 26 Apr 2016 10:16 am
Operator : ashleyn
Sample : cc5217-25
Misc : op93324,em5238
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 26 10:38:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Apr 26 08:32:07 2016
Response via : Initial Calibration





(97) Indeno[1,2,3-cd]pyrene (t)

20.186min (-0.107) 25.99ppm m

response 953142

Ion	Exp%	Act%
276.00	100	100
138.00	17.70	20.32
137.00	13.00	14.44
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5238\
Data File : M123902.D
Acq On : 26 Apr 2016 11:14 am
Operator : ashleyn
Sample : cc5218-25
Misc : op93324,em5238
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 26 12:57:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Apr 26 08:32:07 2016
Response via : Initial Calibration

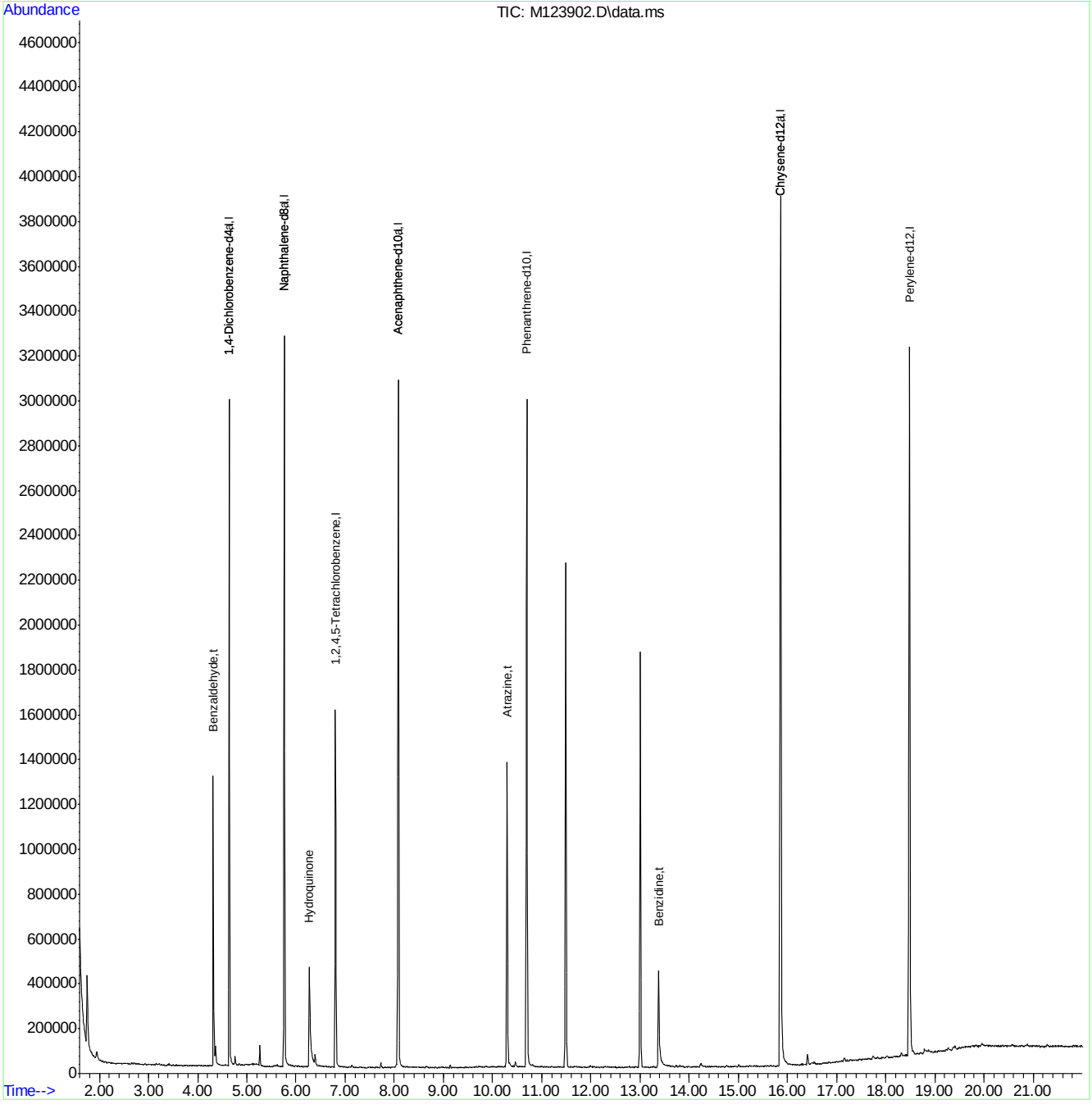
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.640	152	427160	40.00	ppm	-0.04
24) Naphthalene-d8	5.762	136	1598517	40.00	ppm	-0.04
47) Acenaphthene-d10	8.080	164	896898	40.00	ppm	-0.06
69) Phenanthrene-d10	10.697	188	1668426	40.00	ppm	-0.06
83) Chrysene-d12	15.857	240	1754301	40.00	ppm	-0.08
92) Perylene-d12	18.484	264	1919403	40.00	ppm	-0.08
102) 1,4-Dichlorobenzene-d4a	4.640	152	427160	40.00	ppm	-0.04
104) Acenaphthene-d10a	8.080	164	896898	40.00	ppm	-0.06
107) Chrysene-d12a	15.857	240	1754301	40.00	ppm	-0.08
109) Naphthalene-d8a	5.762	136	1598517	40.00	ppm	-0.04
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
103) Benzaldehyde	4.314	105	268593	24.87	ppm	98
105) 1,2,4,5-Tetrachloroben...	6.803	216	338702	23.52	ppm	98
106) Atrazine	10.296	215	119258	23.83	ppm #	72
108) Benzidine	13.378	184	333803	16.25	ppm	95
110) Hydroquinone	6.269	110	331818	25.72	ppm	93

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5238\
Data File : M123902.D
Acq On : 26 Apr 2016 11:14 am
Operator : ashleyn
Sample : cc5218-25
Misc : op93324,em5238
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 26 12:57:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Tue Apr 26 08:32:07 2016
Response via : Initial Calibration



MM5217.M Tue Apr 26 12:57:34 2016 MSM

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102787.D Vial: 10
Acq On : 24 Feb 2016 2:07 am Operator: sarad
Sample : ic4514-100 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:33:43 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 14:32:58 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	126755	40.00 ppm	0.00
24) Naphthalene-d8	6.13	136	450907	40.00 ppm	0.00
47) Acenaphthene-d10	8.86	164	254484	40.00 ppm	0.00
69) Phenanthrene-d10	11.22	188	412235	40.00 ppm	0.00
83) Chrysene-d12	15.95	240	351857	40.00 ppm	0.00
92) Perylene-d12	18.52	264	355480	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	126755	40.00 ppm	0.00
112) Naphthalene-d8A	6.13	136	450907	40.00 ppm	0.00
121) Acenaphthene-d10A	8.86	164	254484	40.00 ppm	0.00
132) Phenanthrene-d10A	11.22	188	412235	40.00 ppm	0.00
147) Chrysene-d12A	15.95	240	351857	40.00 ppm	0.00
155) Perylene-d12A	18.52	264	355480	40.00 ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.37	152	126755	40.00 ppm	0.00
161) Phenanthrene-d10b	11.22	188	412235	40.00 ppm	0.00
163) Chrysene-d12b	15.95	240	351857	40.00 ppm	0.00
165) Naphthalene-d8b	6.13	136	450907	40.00 ppm	0.00
167) Acenaphthene-d10b	8.86	164	254484	40.00 ppm	0.00
169) Naphthalene-d8c	6.13	136	450907	40.00 ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	126755	40.00 ppm	-0.08
176) Chrysene-d12c	15.95	240	351857	40.00 ppm	0.00
178) Chrysene-d12d	15.95	240	351857	40.00 ppm	0.00
180) Naphthalene-d8a	6.13	136	450907	40.00 ppm	0.16

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
160) Benzaldehyde	3.84	105	272885	71.62 ppm	99
162) Atrazine	10.88	200	197090	93.69 ppm	93
164) Benzidine	13.59	184	399210	67.45 ppm	99
166) Hydroquinone	6.81	110	439864	106.41 ppm	97
168) 1,2,4,5-Tetrachlorobenzene	7.49	216	279294	79.97 ppm	99

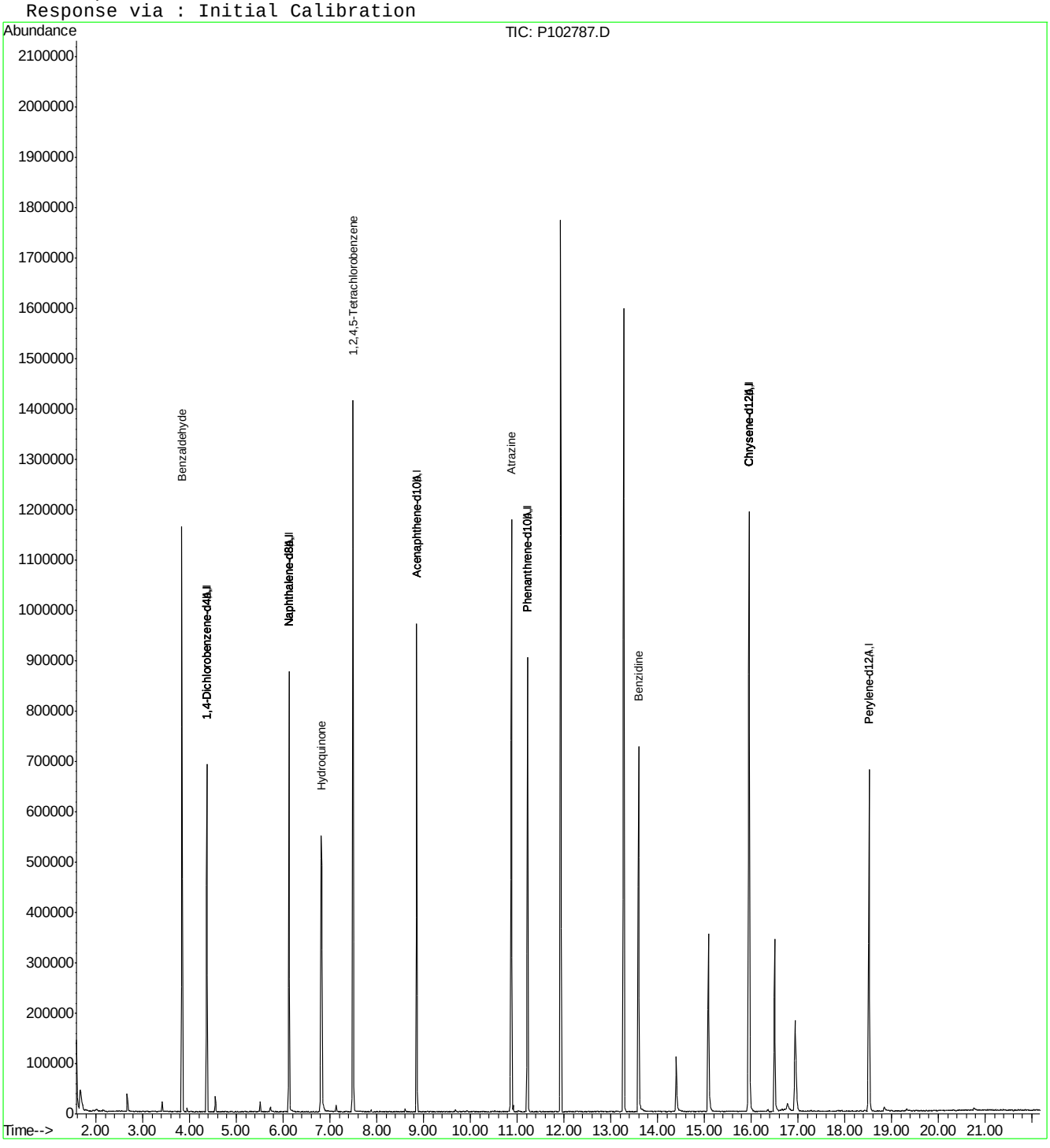
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102787.D Vial: 10
Acq On : 24 Feb 2016 2:07 am Operator: sarad
Sample : ic4514-100 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:34 2016 Quant Results File: MP4513.RES

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 14:32:58 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102788.D Vial: 11
Acq On : 24 Feb 2016 2:36 am Operator: sarad
Sample : ic4514-80 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:33:07 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 14:32:58 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	119957	40.00	ppm	0.00
24) Naphthalene-d8	6.13	136	428470	40.00	ppm	0.00
47) Acenaphthene-d10	8.86	164	236592	40.00	ppm	0.00
69) Phenanthrene-d10	11.23	188	390766	40.00	ppm	0.00
83) Chrysene-d12	15.95	240	333749	40.00	ppm	0.00
92) Perylene-d12	18.52	264	337313	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	119957	40.00	ppm	0.00
112) Naphthalene-d8A	6.13	136	428470	40.00	ppm	0.00
121) Acenaphthene-d10A	8.86	164	236592	40.00	ppm	0.00
132) Phenanthrene-d10A	11.23	188	390766	40.00	ppm	0.00
147) Chrysene-d12A	15.95	240	333749	40.00	ppm	0.00
155) Perylene-d12A	18.52	264	337313	40.00	ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.37	152	119957	40.00	ppm	0.00
161) Phenanthrene-d10b	11.23	188	390766	40.00	ppm	0.00
163) Chrysene-d12b	15.95	240	333749	40.00	ppm	0.00
165) Naphthalene-d8b	6.13	136	428470	40.00	ppm	0.00
167) Acenaphthene-d10b	8.86	164	236592	40.00	ppm	0.00
169) Naphthalene-d8c	6.13	136	428470	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	119957	40.00	ppm	-0.08
176) Chrysene-d12c	15.95	240	333749	40.00	ppm	0.00
178) Chrysene-d12d	15.95	240	333749	40.00	ppm	0.00
180) Naphthalene-d8a	6.13	136	428470	40.00	ppm	0.16

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
160) Benzaldehyde	3.84	105	232196	64.39	ppm	99
162) Atrazine	10.88	200	152338	76.39	ppm	97
164) Benzidine	13.59	184	323040	57.54	ppm	99
166) Hydroquinone	6.81	110	341882	87.04	ppm	98
168) 1,2,4,5-Tetrachlorobenzene	7.49	216	220907	68.03	ppm	98

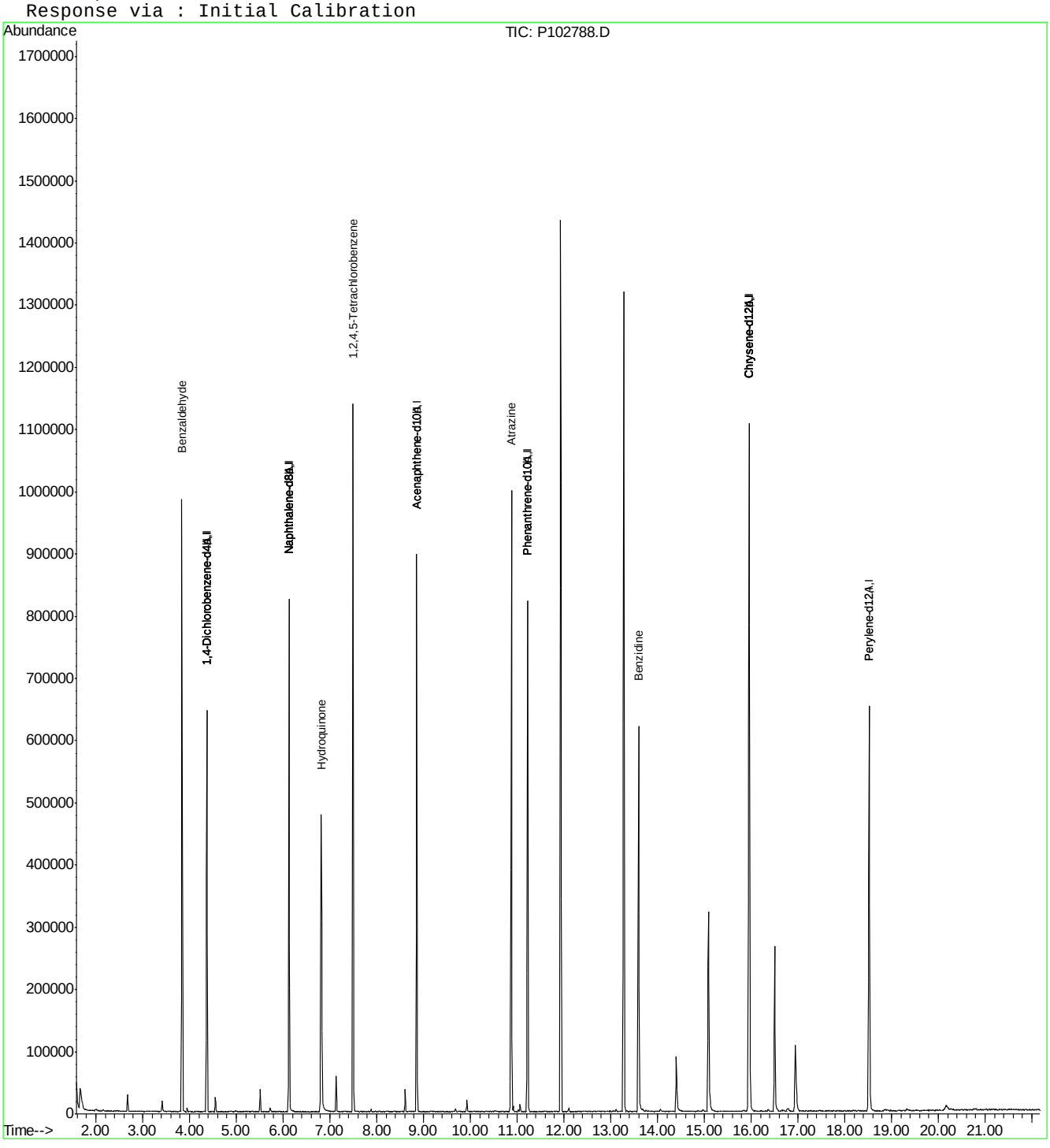
(#) = qualifier out of range (m) = manual integration (+) = signals summed
P102788.D MP4513.M Wed Feb 24 14:35:08 2016

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102788.D Vial: 11
Acq On : 24 Feb 2016 2:36 am Operator: sarad
Sample : ic4514-80 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:34 2016 Quant Results File: MP4513.RES

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 14:32:58 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102789.D Vial: 12
Acq On : 24 Feb 2016 3:06 am Operator: sarad
Sample : ic4514-10 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:33:10 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 14:32:58 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	136729	40.00	ppm	0.00
24) Naphthalene-d8	6.13	136	481198	40.00	ppm	0.00
47) Acenaphthene-d10	8.86	164	270846	40.00	ppm	0.00
69) Phenanthrene-d10	11.22	188	430378	40.00	ppm	0.00
83) Chrysene-d12	15.95	240	374718	40.00	ppm	0.00
92) Perylene-d12	18.52	264	368292	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	136729	40.00	ppm	0.00
112) Naphthalene-d8A	6.13	136	481198	40.00	ppm	0.00
121) Acenaphthene-d10A	8.86	164	270846	40.00	ppm	0.00
132) Phenanthrene-d10A	11.22	188	430378	40.00	ppm	0.00
147) Chrysene-d12A	15.95	240	374718	40.00	ppm	0.00
155) Perylene-d12A	18.52	264	368292	40.00	ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.37	152	136729	40.00	ppm	0.00
161) Phenanthrene-d10b	11.22	188	430378	40.00	ppm	0.00
163) Chrysene-d12b	15.95	240	374718	40.00	ppm	0.00
165) Naphthalene-d8b	6.13	136	481198	40.00	ppm	0.00
167) Acenaphthene-d10b	8.86	164	270846	40.00	ppm	0.00
169) Naphthalene-d8c	6.13	136	481198	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	136729	40.00	ppm	-0.08
176) Chrysene-d12c	15.95	240	374718	40.00	ppm	0.00
178) Chrysene-d12d	15.95	240	374718	40.00	ppm	0.00
180) Naphthalene-d8a	6.13	136	481198	40.00	ppm	0.16

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
160) Benzaldehyde	3.84	105	43208	10.51	ppm	98
162) Atrazine	10.86	200	22196	10.11	ppm	90
164) Benzidine	13.59	184	76244	12.10	ppm	99
166) Hydroquinone	6.80	110	41650	9.44	ppm	98
168) 1,2,4,5-Tetrachlorobenzene	7.49	216	37002	9.95	ppm	98

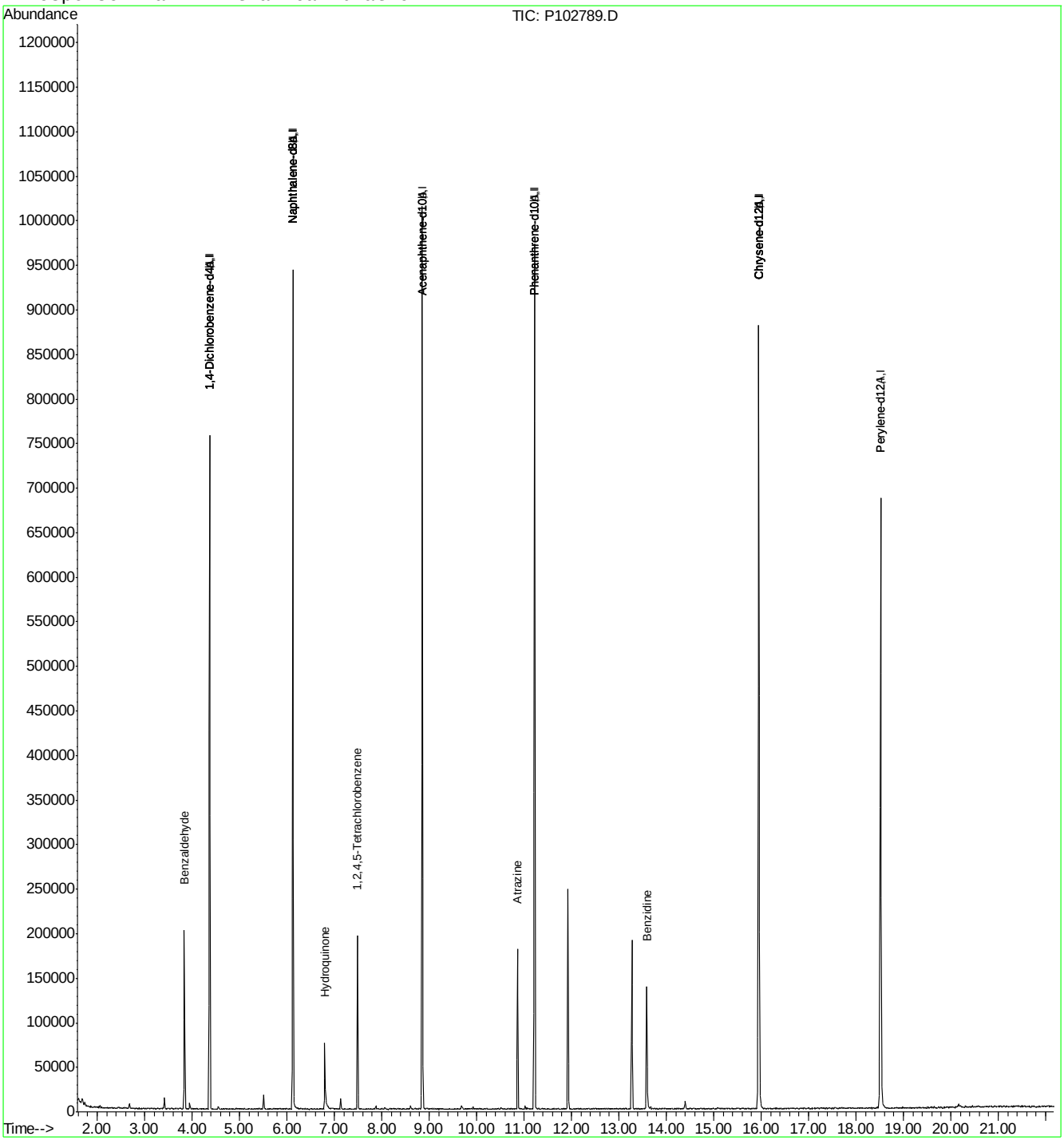
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102789.D Vial: 12
Acq On : 24 Feb 2016 3:06 am Operator: sarad
Sample : ic4514-10 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:35 2016 Quant Results File: MP4513.RES

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 14:32:58 2016
Response via : Initial Calibration



P102789.D MP4513.M Wed Feb 24 14:35:39 2016 Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102790.D Vial: 13
Acq On : 24 Feb 2016 3:35 am Operator: sarad
Sample : ic4514-5 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:33:14 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 14:32:58 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	164954	40.00	ppm	0.00
24) Naphthalene-d8	6.13	136	563561	40.00	ppm	0.00
47) Acenaphthene-d10	8.86	164	313072	40.00	ppm	0.00
69) Phenanthrene-d10	11.22	188	511186	40.00	ppm	0.00
83) Chrysene-d12	15.95	240	452088	40.00	ppm	0.00
92) Perylene-d12	18.52	264	443331	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	164954	40.00	ppm	0.00
112) Naphthalene-d8A	6.13	136	563561	40.00	ppm	0.00
121) Acenaphthene-d10A	8.86	164	313072	40.00	ppm	0.00
132) Phenanthrene-d10A	11.22	188	511186	40.00	ppm	0.00
147) Chrysene-d12A	15.95	240	452088	40.00	ppm	0.00
155) Perylene-d12A	18.52	264	443331	40.00	ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.37	152	164954	40.00	ppm	0.00
161) Phenanthrene-d10b	11.22	188	511186	40.00	ppm	0.00
163) Chrysene-d12b	15.95	240	452088	40.00	ppm	0.00
165) Naphthalene-d8b	6.13	136	563561	40.00	ppm	0.00
167) Acenaphthene-d10b	8.86	164	313072	40.00	ppm	0.00
169) Naphthalene-d8c	6.13	136	563561	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	164954	40.00	ppm	-0.08
176) Chrysene-d12c	15.95	240	452088	40.00	ppm	0.00
178) Chrysene-d12d	15.95	240	452088	40.00	ppm	0.00
180) Naphthalene-d8a	6.13	136	563561	40.00	ppm	0.16

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
160) Benzaldehyde	3.84	105	29655	5.98	ppm	99
162) Atrazine	10.86	200	14635	5.61	ppm	98
164) Benzidine	13.59	184	52465	6.90	ppm	98
166) Hydroquinone	6.80	110	26007	5.03	ppm	94
168) 1,2,4,5-Tetrachlorobenzene	7.49	216	25271	5.88	ppm	98

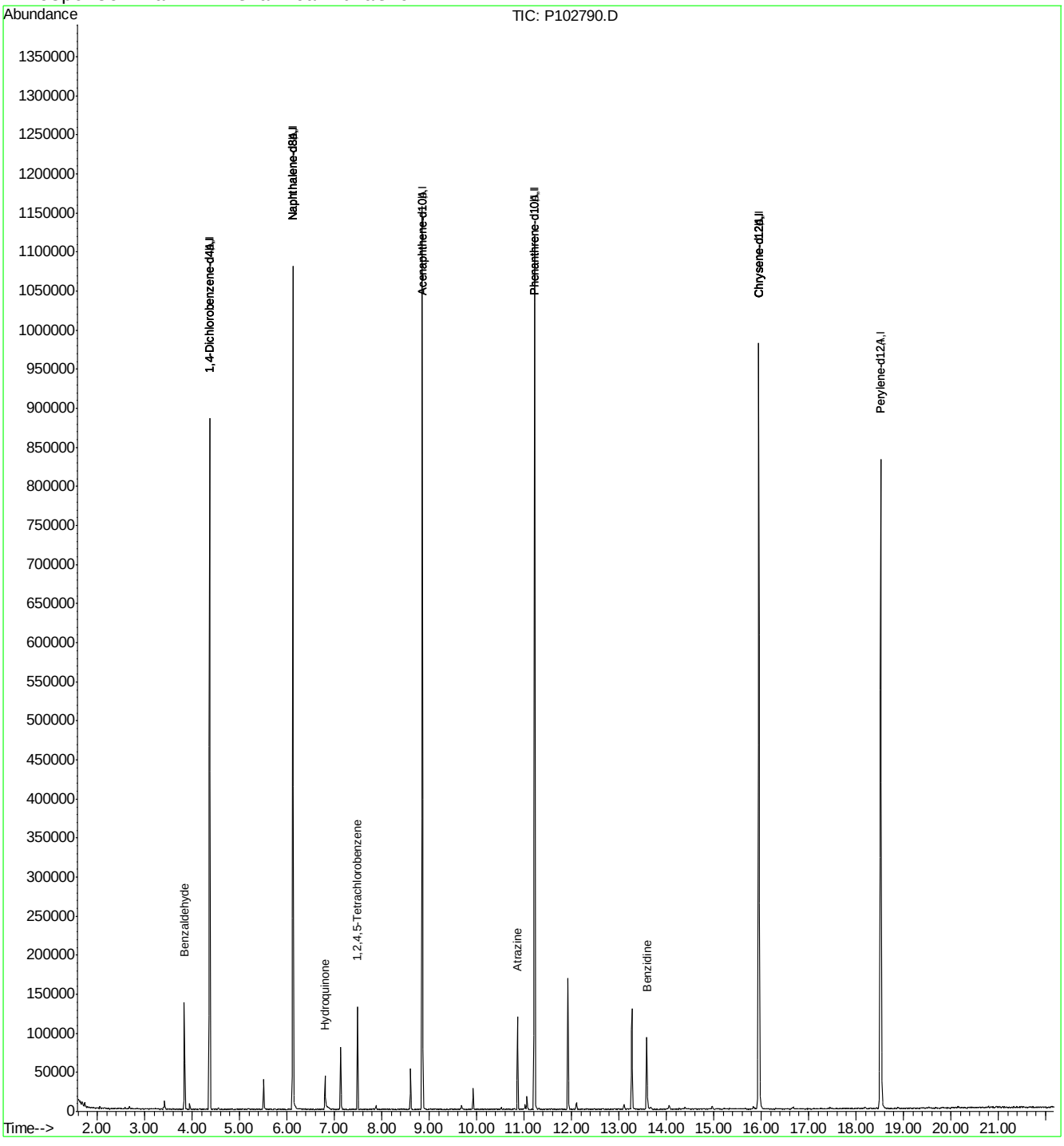
(#) = qualifier out of range (m) = manual integration (+) = signals summed
P102790.D MP4513.M Wed Feb 24 14:36:07 2016

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102790.D Vial: 13
Acq On : 24 Feb 2016 3:35 am Operator: sarad
Sample : ic4514-5 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:35 2016 Quant Results File: MP4513.RES

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 14:32:58 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102791.D Vial: 14
Acq On : 24 Feb 2016 4:05 am Operator: sarad
Sample : ic4514-2 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:33:19 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 14:32:58 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	157400	40.00 ppm	0.00
24) Naphthalene-d8	6.13	136	549331	40.00 ppm	0.00
47) Acenaphthene-d10	8.86	164	307207	40.00 ppm	0.00
69) Phenanthrene-d10	11.22	188	486864	40.00 ppm	0.00
83) Chrysene-d12	15.95	240	411356	40.00 ppm	0.00
92) Perylene-d12	18.52	264	397949	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	157400	40.00 ppm	0.00
112) Naphthalene-d8A	6.13	136	549331	40.00 ppm	0.00
121) Acenaphthene-d10A	8.86	164	307207	40.00 ppm	0.00
132) Phenanthrene-d10A	11.22	188	486864	40.00 ppm	0.00
147) Chrysene-d12A	15.95	240	411356	40.00 ppm	0.00
155) Perylene-d12A	18.52	264	397949	40.00 ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.37	152	157400	40.00 ppm	0.00
161) Phenanthrene-d10b	11.22	188	486864	40.00 ppm	0.00
163) Chrysene-d12b	15.95	240	411356	40.00 ppm	0.00
165) Naphthalene-d8b	6.13	136	549331	40.00 ppm	0.00
167) Acenaphthene-d10b	8.86	164	307207	40.00 ppm	0.00
169) Naphthalene-d8c	6.13	136	549331	40.00 ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	157400	40.00 ppm	-0.09
176) Chrysene-d12c	15.95	240	411356	40.00 ppm	0.00
178) Chrysene-d12d	15.95	240	411356	40.00 ppm	0.00
180) Naphthalene-d8a	6.13	136	549331	40.00 ppm	0.16

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
160) Benzaldehyde	3.84	105	11747	2.48 ppm	96
162) Atrazine	10.86	200	4998	2.01 ppm	93
164) Benzidine	13.59	184	16474	2.38 ppm	99
166) Hydroquinone	6.81	110	7600	1.51 ppm	92
168) 1,2,4,5-Tetrachlorobenzene	7.49	216	9946	2.36 ppm	92

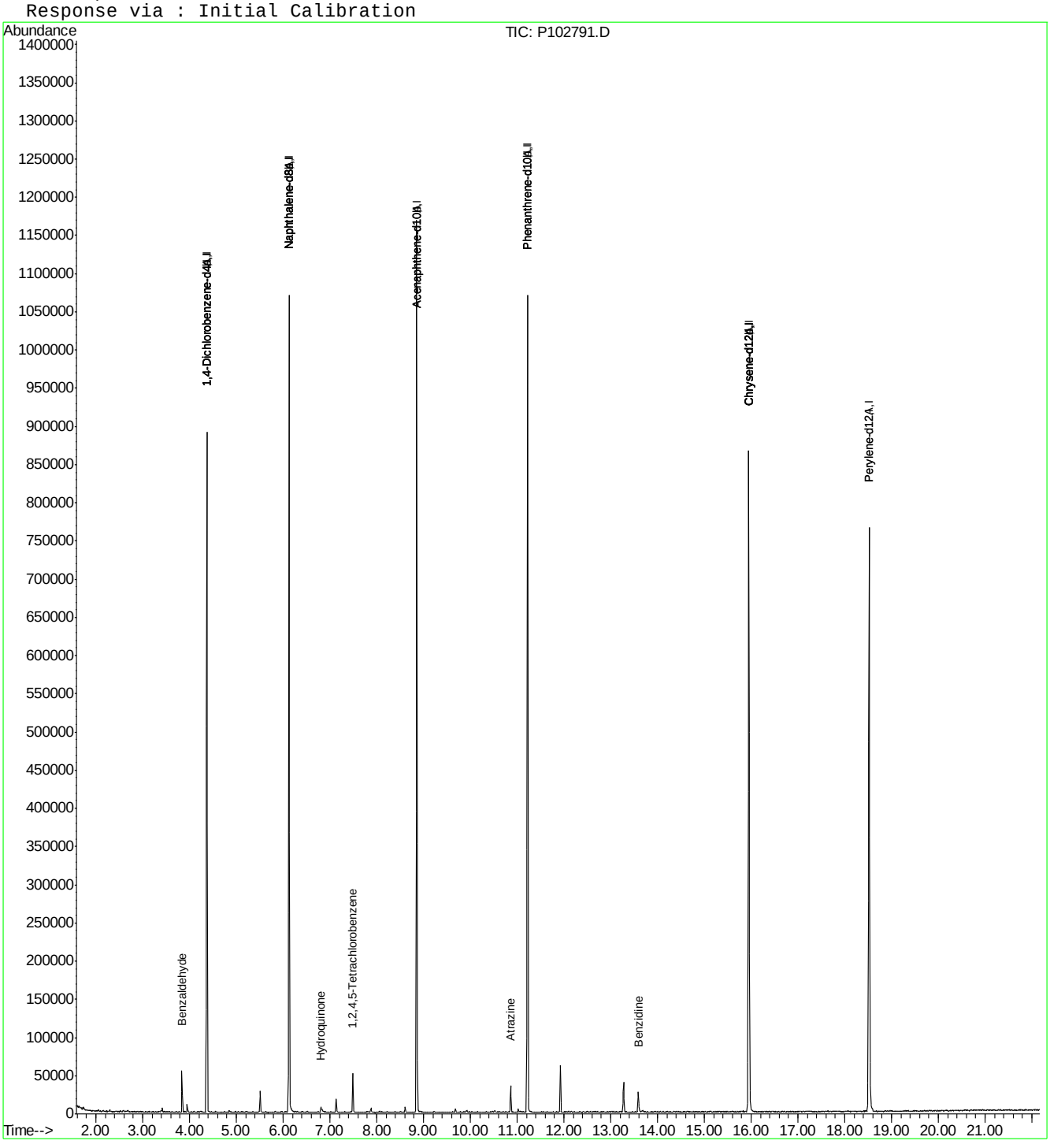
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102791.D Vial: 14
Acq On : 24 Feb 2016 4:05 am Operator: sarad
Sample : ic4514-2 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:36 2016 Quant Results File: MP4513.RES

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 14:32:58 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102792.D Vial: 15
Acq On : 24 Feb 2016 4:34 am Operator: sarad
Sample : ic4514-1 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:33:21 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 14:32:58 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	135191	40.00	ppm	0.00
24) Naphthalene-d8	6.13	136	472196	40.00	ppm	0.00
47) Acenaphthene-d10	8.86	164	264454	40.00	ppm	0.00
69) Phenanthrene-d10	11.22	188	432389	40.00	ppm	0.00
83) Chrysene-d12	15.95	240	378494	40.00	ppm	0.00
92) Perylene-d12	18.52	264	356091	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	135191	40.00	ppm	0.00
112) Naphthalene-d8A	6.13	136	472196	40.00	ppm	0.00
121) Acenaphthene-d10A	8.86	164	264454	40.00	ppm	0.00
132) Phenanthrene-d10A	11.22	188	432389	40.00	ppm	0.00
147) Chrysene-d12A	15.95	240	378494	40.00	ppm	0.00
155) Perylene-d12A	18.52	264	356091	40.00	ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.37	152	135191	40.00	ppm	0.00
161) Phenanthrene-d10b	11.22	188	432389	40.00	ppm	0.00
163) Chrysene-d12b	15.95	240	378494	40.00	ppm	0.00
165) Naphthalene-d8b	6.13	136	472196	40.00	ppm	0.00
167) Acenaphthene-d10b	8.86	164	264454	40.00	ppm	0.00
169) Naphthalene-d8c	6.13	136	472196	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	135191	40.00	ppm	-0.08
176) Chrysene-d12c	15.95	240	378441	40.00	ppm	0.00
178) Chrysene-d12d	15.95	240	378441	40.00	ppm	0.00
180) Naphthalene-d8a	6.13	136	472196	40.00	ppm	0.16

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
160) Benzaldehyde	3.84	105	4552	1.12	ppm		97
162) Atrazine	10.86	200	2144	0.97	ppm		82
164) Benzidine	13.59	184	5187	0.81	ppm	#	66
168) 1,2,4,5-Tetrachlorobenzene	7.49	216	4065	1.12	ppm		96

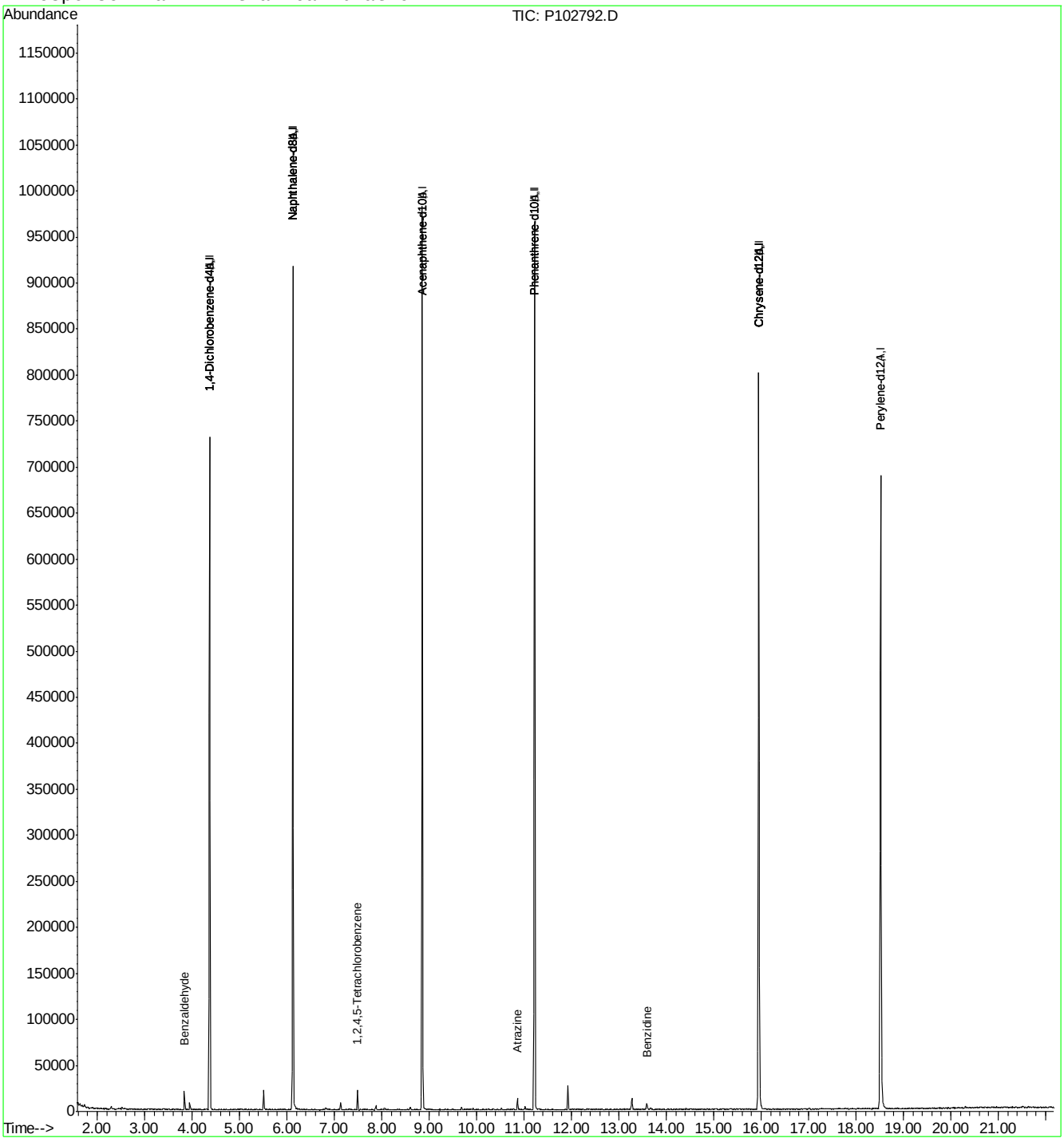
(#) = qualifier out of range (m) = manual integration (+) = signals summed
P102792.D MP4513.M Wed Feb 24 14:37:07 2016

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102792.D Vial: 15
Acq On : 24 Feb 2016 4:34 am Operator: sarad
Sample : ic4514-1 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:37 2016 Quant Results File: MP4513.RES

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 14:32:58 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102793.D Vial: 16
Acq On : 24 Feb 2016 5:04 am Operator: sarad
Sample : ic4514-25 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:33:28 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 14:32:58 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	124747	40.00 ppm	0.00
24) Naphthalene-d8	6.13	136	436946	40.00 ppm	0.00
47) Acenaphthene-d10	8.86	164	242658	40.00 ppm	0.00
69) Phenanthrene-d10	11.22	188	388953	40.00 ppm	0.00
83) Chrysene-d12	15.95	240	333803	40.00 ppm	0.00
92) Perylene-d12	18.51	264	324604	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	124747	40.00 ppm	0.00
112) Naphthalene-d8A	6.13	136	436946	40.00 ppm	0.00
121) Acenaphthene-d10A	8.86	164	242658	40.00 ppm	0.00
132) Phenanthrene-d10A	11.22	188	388953	40.00 ppm	0.00
147) Chrysene-d12A	15.95	240	333803	40.00 ppm	0.00
155) Perylene-d12A	18.51	264	324604	40.00 ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.37	152	124747	40.00 ppm	0.00
161) Phenanthrene-d10b	11.22	188	388953	40.00 ppm	0.00
163) Chrysene-d12b	15.95	240	333803	40.00 ppm	0.00
165) Naphthalene-d8b	6.13	136	436946	40.00 ppm	0.00
167) Acenaphthene-d10b	8.86	164	242658	40.00 ppm	0.00
169) Naphthalene-d8c	6.13	136	436946	40.00 ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	124747	40.00 ppm	-0.08
176) Chrysene-d12c	15.95	240	333803	40.00 ppm	0.00
178) Chrysene-d12d	15.95	240	333803	40.00 ppm	0.00
180) Naphthalene-d8a	6.13	136	436946	40.00 ppm	0.16

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
160) Benzaldehyde	3.84	105	91859	24.50 ppm	96
162) Atrazine	10.87	200	50010	25.20 ppm	97
164) Benzidine	13.59	184	153732	27.38 ppm	99
166) Hydroquinone	6.80	110	108014	26.96 ppm	99
168) 1,2,4,5-Tetrachlorobenzene	7.49	216	81204	24.38 ppm	98

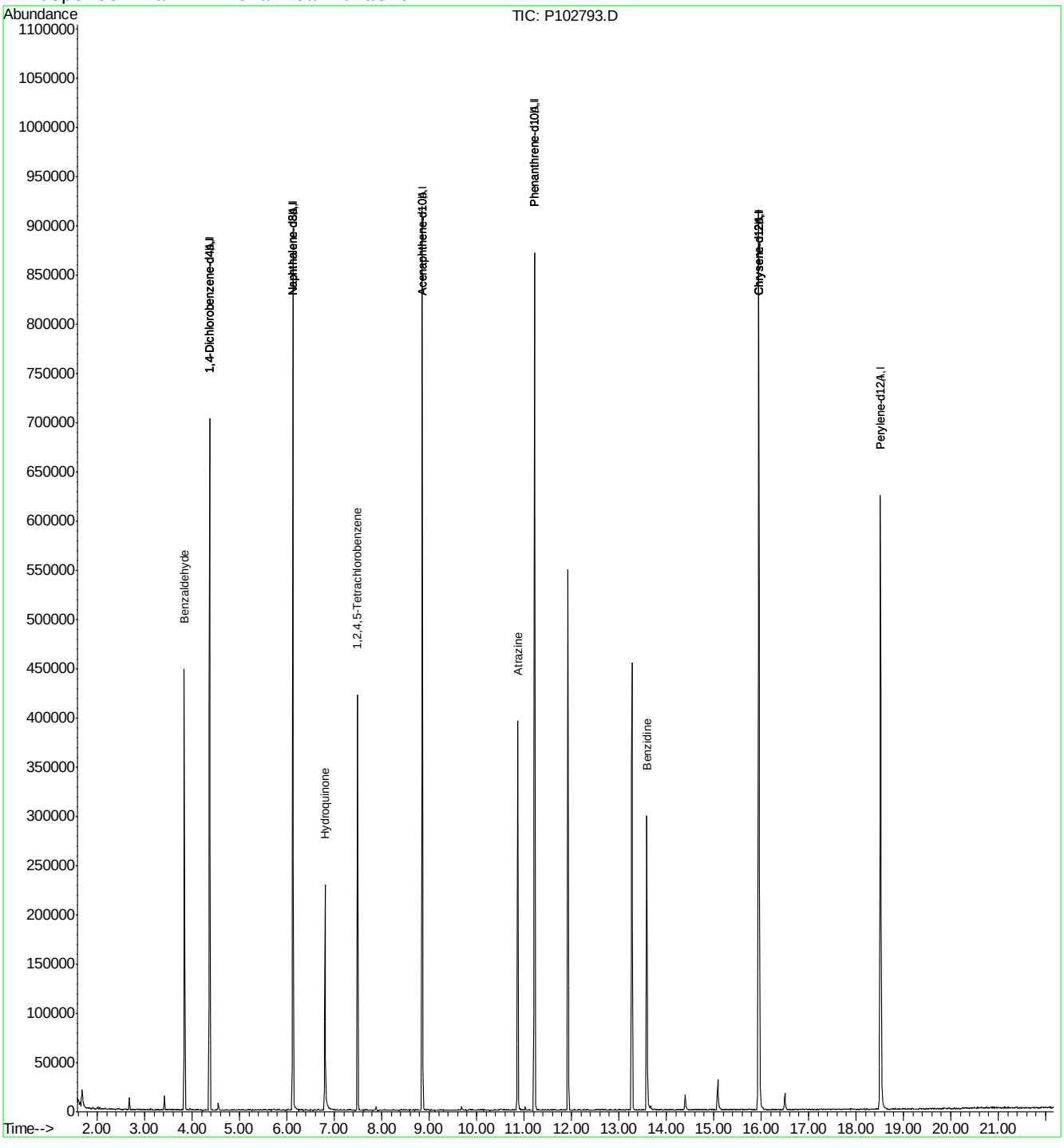
(#) = qualifier out of range (m) = manual integration (+) = signals summed
P102793.D MP4513.M Wed Feb 24 14:37:38 2016

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102793.D Vial: 16
Acq On : 24 Feb 2016 5:04 am Operator: sarad
Sample : ic4514-25 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:37 2016 Quant Results File: MP4513.RES

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 14:32:58 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102794.D Vial: 17
Acq On : 24 Feb 2016 5:33 am Operator: sarad
Sample : icc4514-50 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:33:33 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 14:32:58 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	123738	40.00 ppm	0.00
24) Naphthalene-d8	6.13	136	444756	40.00 ppm	0.00
47) Acenaphthene-d10	8.86	164	244838	40.00 ppm	0.00
69) Phenanthrene-d10	11.22	188	386844	40.00 ppm	0.00
83) Chrysene-d12	15.95	240	326980	40.00 ppm	0.00
92) Perylene-d12	18.52	264	322241	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	123738	40.00 ppm	0.00
112) Naphthalene-d8A	6.13	136	444756	40.00 ppm	0.00
121) Acenaphthene-d10A	8.86	164	244838	40.00 ppm	0.00
132) Phenanthrene-d10A	11.22	188	386844	40.00 ppm	0.00
147) Chrysene-d12A	15.95	240	326980	40.00 ppm	0.00
155) Perylene-d12A	18.52	264	322241	40.00 ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.37	152	123738	40.00 ppm	0.00
161) Phenanthrene-d10b	11.22	188	386844	40.00 ppm	0.00
163) Chrysene-d12b	15.95	240	326980	40.00 ppm	0.00
165) Naphthalene-d8b	6.13	136	444756	40.00 ppm	0.00
167) Acenaphthene-d10b	8.86	164	244838	40.00 ppm	0.00
169) Naphthalene-d8c	6.13	136	444756	40.00 ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	123738	40.00 ppm	-0.08
176) Chrysene-d12c	15.95	240	326980	40.00 ppm	0.00
178) Chrysene-d12d	15.95	240	326980	40.00 ppm	0.00
180) Naphthalene-d8a	6.13	136	444756	40.00 ppm	0.16

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%		

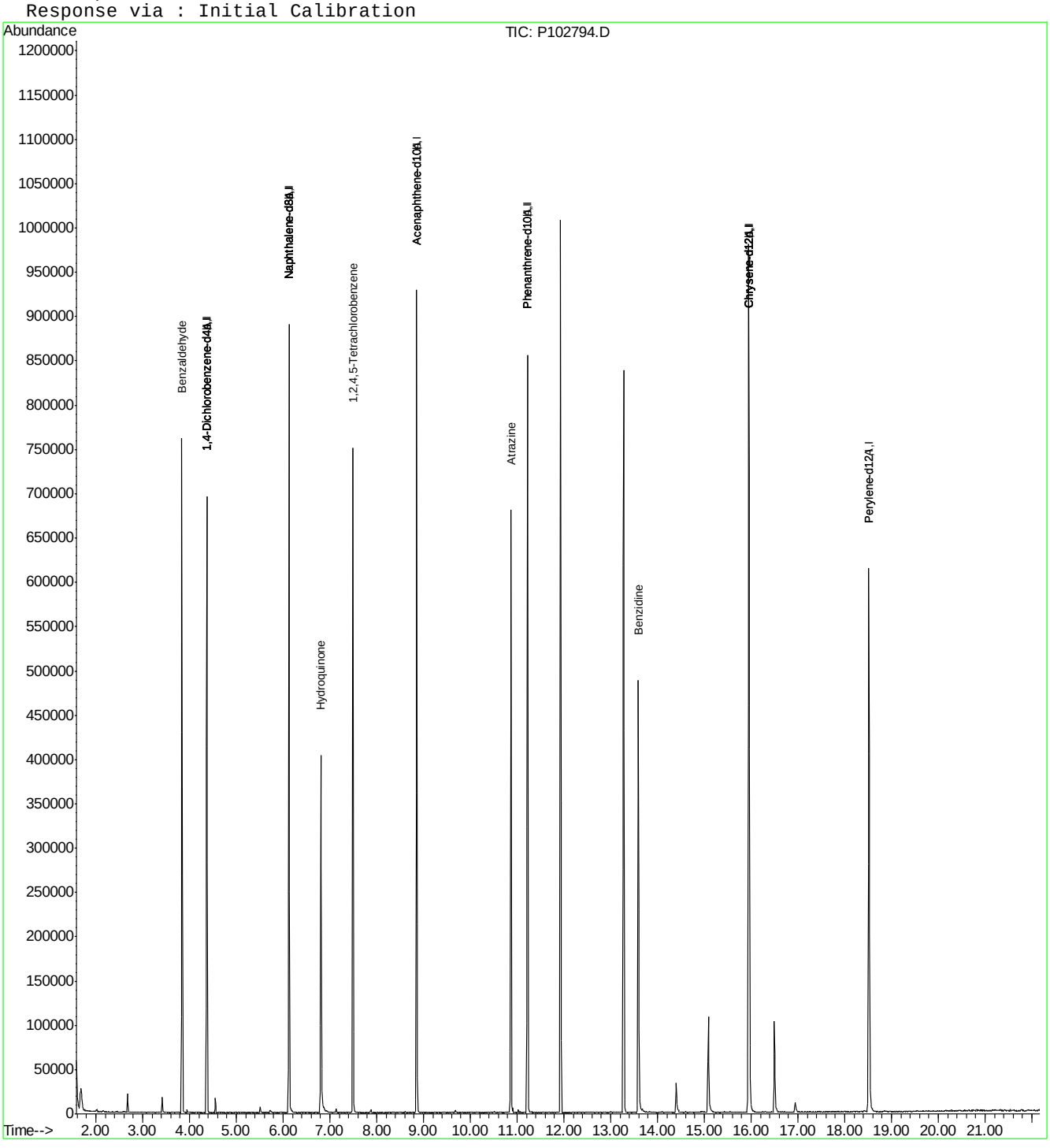
Target Compounds					Qvalue
160) Benzaldehyde	3.84	105	165508	44.50 ppm	100
162) Atrazine	10.88	200	97727	49.51 ppm	100
164) Benzidine	13.59	184	251988	45.82 ppm	100
166) Hydroquinone	6.81	110	216907	53.20 ppm	100
168) 1,2,4,5-Tetrachlorobenzene	7.49	216	151776	45.17 ppm	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed
P102794.D MP4513.M Wed Feb 24 14:38:12 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102794.D Vial: 17
Acq On : 24 Feb 2016 5:33 am Operator: sarad
Sample : icc4514-50 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 14:37 2016 Quant Results File: MP4513.RES

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 14:32:58 2016
Response via : Initial Calibration



P102794.D MP4513.M Wed Feb 24 14:38:12 2016 Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102798A.D Vial: 21
Acq On : 24 Feb 2016 7:31 am Operator: sarad
Sample : icv4514-50 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 12:54:33 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 12:45:32 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	117275	40.00	ppm	0.00
24) Naphthalene-d8	6.13	136	407577	40.00	ppm	0.00
47) Acenaphthene-d10	8.86	164	231457	40.00	ppm	0.00
69) Phenanthrene-d10	11.22	188	379681	40.00	ppm	0.00
83) Chrysene-d12	15.96	240	296388	40.00	ppm	0.00
92) Perylene-d12	18.52	264	300664	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	117275	40.00	ppm	0.00
112) Naphthalene-d8A	6.13	136	407577	40.00	ppm	0.00
121) Acenaphthene-d10A	8.86	164	231457	40.00	ppm	0.00
132) Phenanthrene-d10A	11.22	188	379681	40.00	ppm	0.00
147) Chrysene-d12A	15.96	240	296388	40.00	ppm	0.00
155) Perylene-d12A	18.52	264	300664	40.00	ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.37	152	117275	40.00	ppm	0.00
161) Phenanthrene-d10b	11.22	188	379681	40.00	ppm	0.00
163) Chrysene-d12b	15.96	240	296388	40.00	ppm	0.00
165) Naphthalene-d8b	6.13	136	407577	40.00	ppm	0.00
167) Acenaphthene-d10b	8.86	164	231457	40.00	ppm	0.00
169) Naphthalene-d8c	6.13	136	407577	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	117275	40.00	ppm	-0.08
176) Chrysene-d12c	15.96	240	296388	40.00	ppm	0.00
178) Chrysene-d12d	15.96	240	296388	40.00	ppm	0.00
180) Naphthalene-d8a	6.13	136	407577	40.00	ppm	0.16

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	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds						Qvalue
168) 1,2,4,5-Tetrachlorobenzene	7.49	216	147147	46.32	ppm	100

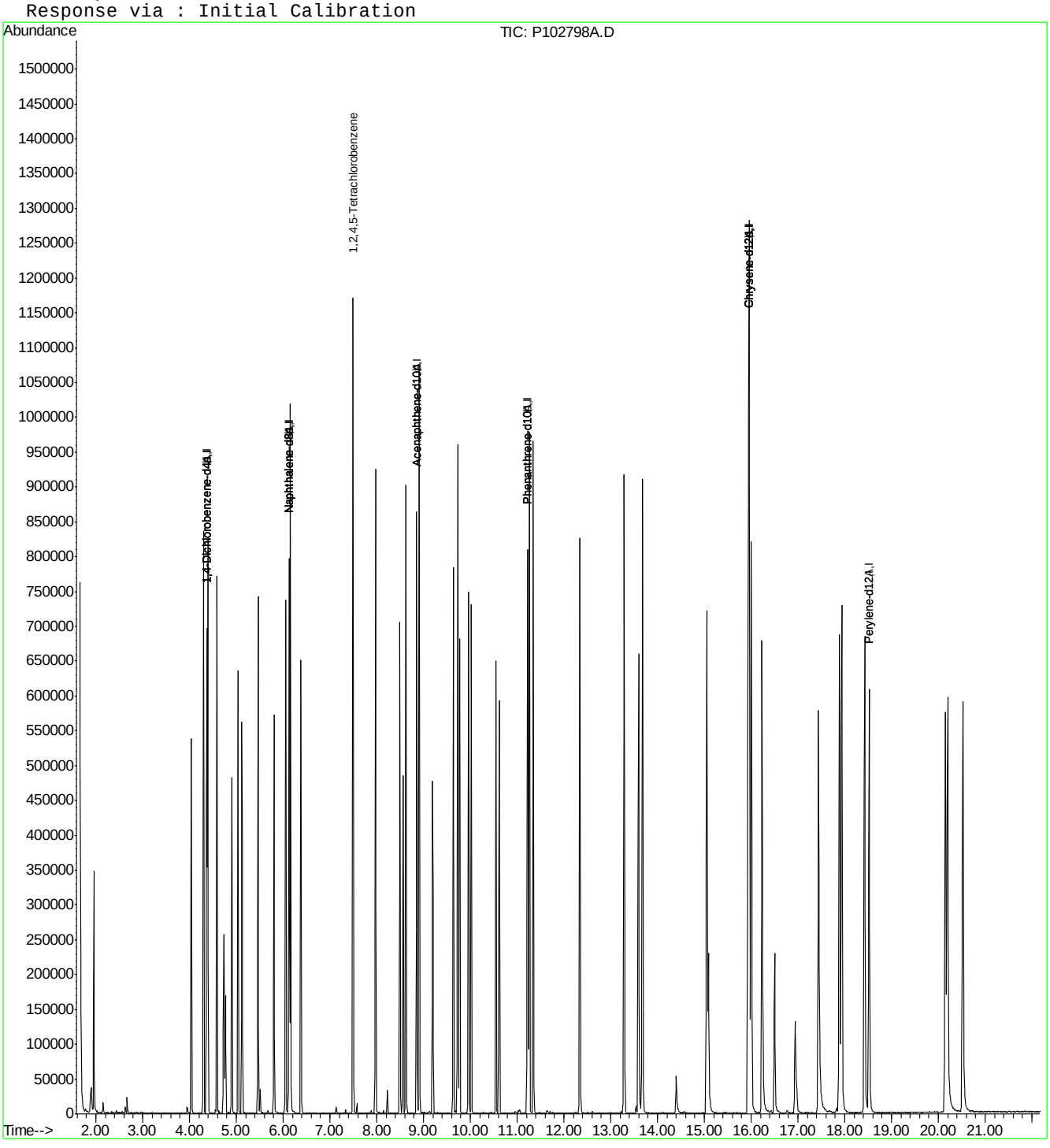
(#) = qualifier out of range (m) = manual integration (+) = signals summed
P102798A.D MP4513.M Thu Feb 25 16:21:01 2016

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102798A.D Vial: 21
Acq On : 24 Feb 2016 7:31 am Operator: sarad
Sample : icv4514-50 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 25 16:19 2016 Quant Results File: MP4513.RES

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 16:59:22 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102799A.D Vial: 22
Acq On : 24 Feb 2016 8:00 am Operator: sarad
Sample : icv4514-50 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 12:59:11 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 12:45:32 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	117905	40.00	ppm	0.00
24) Naphthalene-d8	6.13	136	432668	40.00	ppm	0.00
47) Acenaphthene-d10	8.86	164	239323	40.00	ppm	0.00
69) Phenanthrene-d10	11.22	188	363483	40.00	ppm	0.00
83) Chrysene-d12	15.95	240	338502	40.00	ppm	0.00
92) Perylene-d12	18.51	264	316787	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	117905	40.00	ppm	0.00
112) Naphthalene-d8A	6.13	136	432668	40.00	ppm	0.00
121) Acenaphthene-d10A	8.86	164	239323	40.00	ppm	0.00
132) Phenanthrene-d10A	11.22	188	363483	40.00	ppm	0.00
147) Chrysene-d12A	15.95	240	338502	40.00	ppm	0.00
155) Perylene-d12A	18.51	264	316787	40.00	ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.37	152	117905	40.00	ppm	0.00
161) Phenanthrene-d10b	11.22	188	363483	40.00	ppm	0.00
163) Chrysene-d12b	15.95	240	338502	40.00	ppm	0.00
165) Naphthalene-d8b	6.13	136	432668	40.00	ppm	0.00
167) Acenaphthene-d10b	8.86	164	239323	40.00	ppm	0.00
169) Naphthalene-d8c	6.13	136	432668	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	117905	40.00	ppm	-0.08
176) Chrysene-d12c	15.95	240	338502	40.00	ppm	0.00
178) Chrysene-d12d	15.95	240	338502	40.00	ppm	0.00
180) Naphthalene-d8a	6.13	136	432668	40.00	ppm	0.16

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
160) Benzaldehyde	3.84	105	170305	48.05	ppm	97
162) Atrazine	10.88	200	91512	49.34	ppm	98

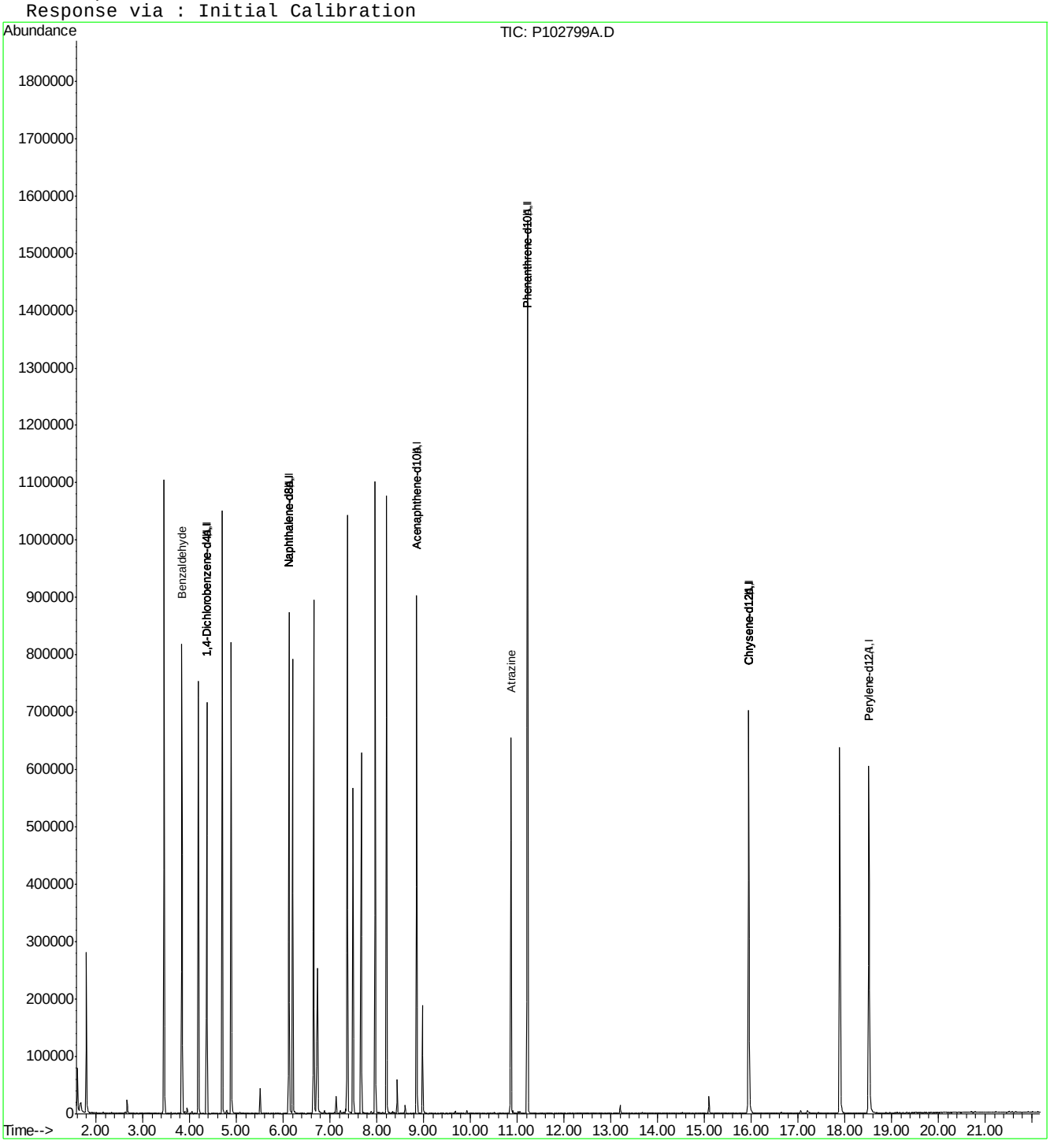
(#) = qualifier out of range (m) = manual integration (+) = signals summed
P102799A.D MP4513.M Thu Feb 25 16:21:13 2016

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102799A.D Vial: 22
Acq On : 24 Feb 2016 8:00 am Operator: sarad
Sample : icv4514-50 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 25 16:20 2016 Quant Results File: MP4513.RES

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 16:59:22 2016
Response via : Initial Calibration



P102799A.D MP4513.M Thu Feb 25 16:21:13 2016 Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102800.D Vial: 23
Acq On : 24 Feb 2016 8:29 am Operator: sarad
Sample : icv4514-50 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 13:00:48 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 12:45:32 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	131165	40.00	ppm	0.00
24) Naphthalene-d8	6.13	136	459959	40.00	ppm	0.00
47) Acenaphthene-d10	8.86	164	224297	40.00	ppm	0.00
69) Phenanthrene-d10	11.22	188	391280	40.00	ppm	0.00
83) Chrysene-d12	15.95	240	349495	40.00	ppm	0.00
92) Perylene-d12	18.52	264	345730	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	131165	40.00	ppm	0.00
112) Naphthalene-d8A	6.13	136	459959	40.00	ppm	0.00
121) Acenaphthene-d10A	8.86	164	224297	40.00	ppm	0.00
132) Phenanthrene-d10A	11.22	188	391280	40.00	ppm	0.00
147) Chrysene-d12A	15.95	240	349495	40.00	ppm	0.00
155) Perylene-d12A	18.52	264	345730	40.00	ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.37	152	131165	40.00	ppm	0.00
161) Phenanthrene-d10b	11.22	188	391280	40.00	ppm	0.00
163) Chrysene-d12b	15.95	240	349495	40.00	ppm	0.00
165) Naphthalene-d8b	6.13	136	459959	40.00	ppm	0.00
167) Acenaphthene-d10b	8.86	164	224297	40.00	ppm	0.00
169) Naphthalene-d8c	6.13	136	459959	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	131165	40.00	ppm	-0.08
176) Chrysene-d12c	15.95	240	349495	40.00	ppm	0.00
178) Chrysene-d12d	15.95	240	349495	40.00	ppm	0.00
180) Naphthalene-d8a	6.13	136	459959	40.00	ppm	0.16

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%			

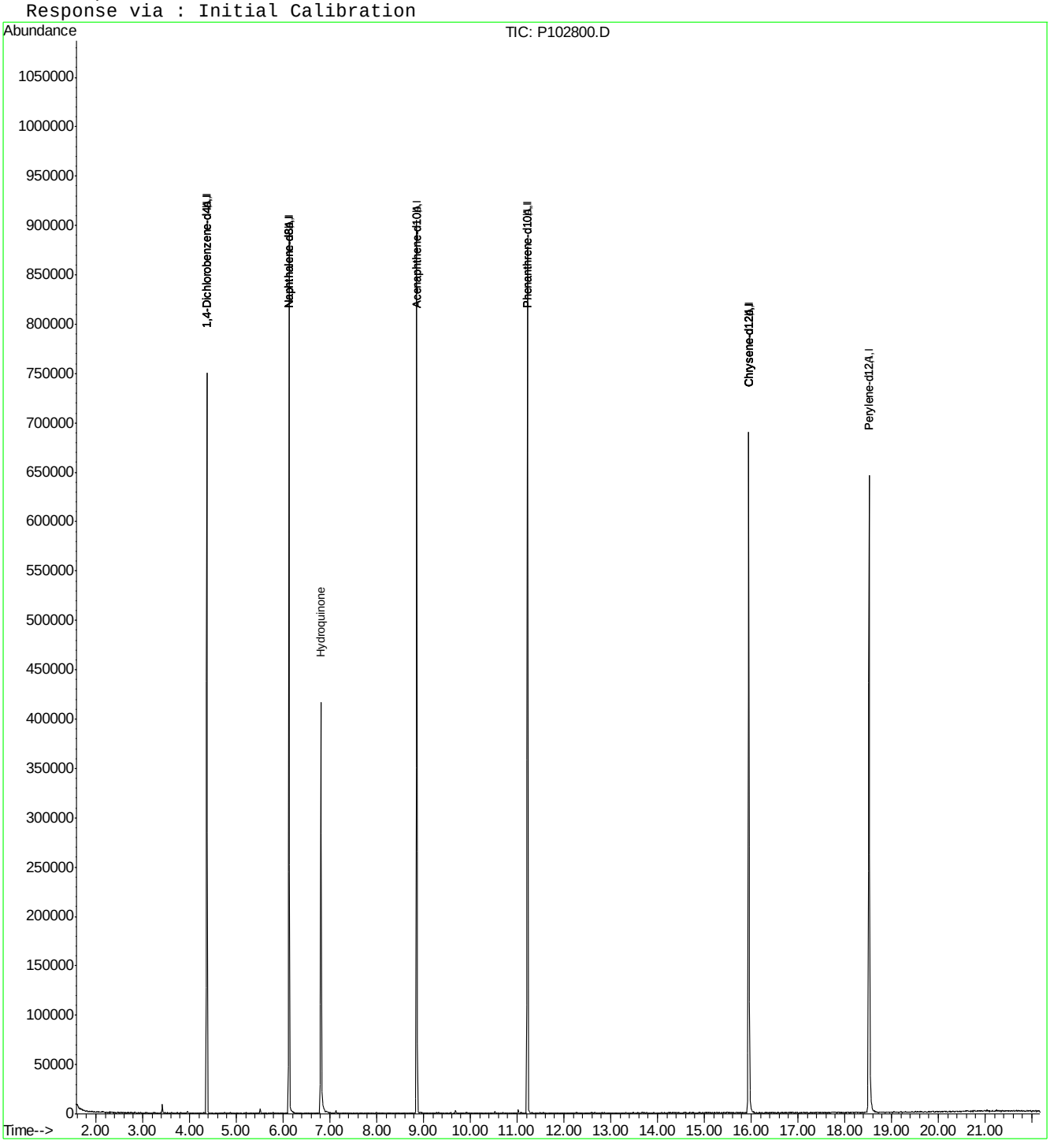
Target Compounds						Qvalue
166) Hydroquinone	6.81	110	221965	52.64	ppm	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed
P102800.D MP4513.M Wed Feb 24 13:01:22 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102800.D Vial: 23
Acq On : 24 Feb 2016 8:29 am Operator: sarad
Sample : icv4514-50 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 13:01 2016 Quant Results File: MP4513.RES

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 12:45:32 2016
Response via : Initial Calibration



P102800.D MP4513.M Wed Feb 24 13:01:22 2016 Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102801A.D Vial: 24
Acq On : 24 Feb 2016 8:58 am Operator: sarad
Sample : icv4514-50 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 24 13:01:35 2016 Quant Results File: MP4513.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 12:45:32 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.37	152	151289	40.00	ppm	0.00
24) Naphthalene-d8	6.13	136	527124	40.00	ppm	0.00
47) Acenaphthene-d10	8.86	164	254350	40.00	ppm	0.00
69) Phenanthrene-d10	11.22	188	443644	40.00	ppm	0.00
83) Chrysene-d12	15.95	240	368888	40.00	ppm	0.00
92) Perylene-d12	18.52	264	382458	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.37	152	151289	40.00	ppm	0.00
112) Naphthalene-d8A	6.13	136	527124	40.00	ppm	0.00
121) Acenaphthene-d10A	8.86	164	254350	40.00	ppm	0.00
132) Phenanthrene-d10A	11.22	188	443644	40.00	ppm	0.00
147) Chrysene-d12A	15.95	240	368888	40.00	ppm	0.00
155) Perylene-d12A	18.52	264	382458	40.00	ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.37	152	151289	40.00	ppm	0.00
161) Phenanthrene-d10b	11.22	188	443644	40.00	ppm	0.00
163) Chrysene-d12b	15.95	240	368888	40.00	ppm	0.00
165) Naphthalene-d8b	6.13	136	527124	40.00	ppm	0.00
167) Acenaphthene-d10b	8.86	164	254350	40.00	ppm	0.00
169) Naphthalene-d8c	6.13	136	527124	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.37	152	151289	40.00	ppm	-0.08
176) Chrysene-d12c	15.95	240	368888	40.00	ppm	0.00
178) Chrysene-d12d	15.95	240	368888	40.00	ppm	0.00
180) Naphthalene-d8a	6.13	136	527124	40.00	ppm	0.16

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
164) Benzidine	13.59	184	502401	77.37	ppm	99

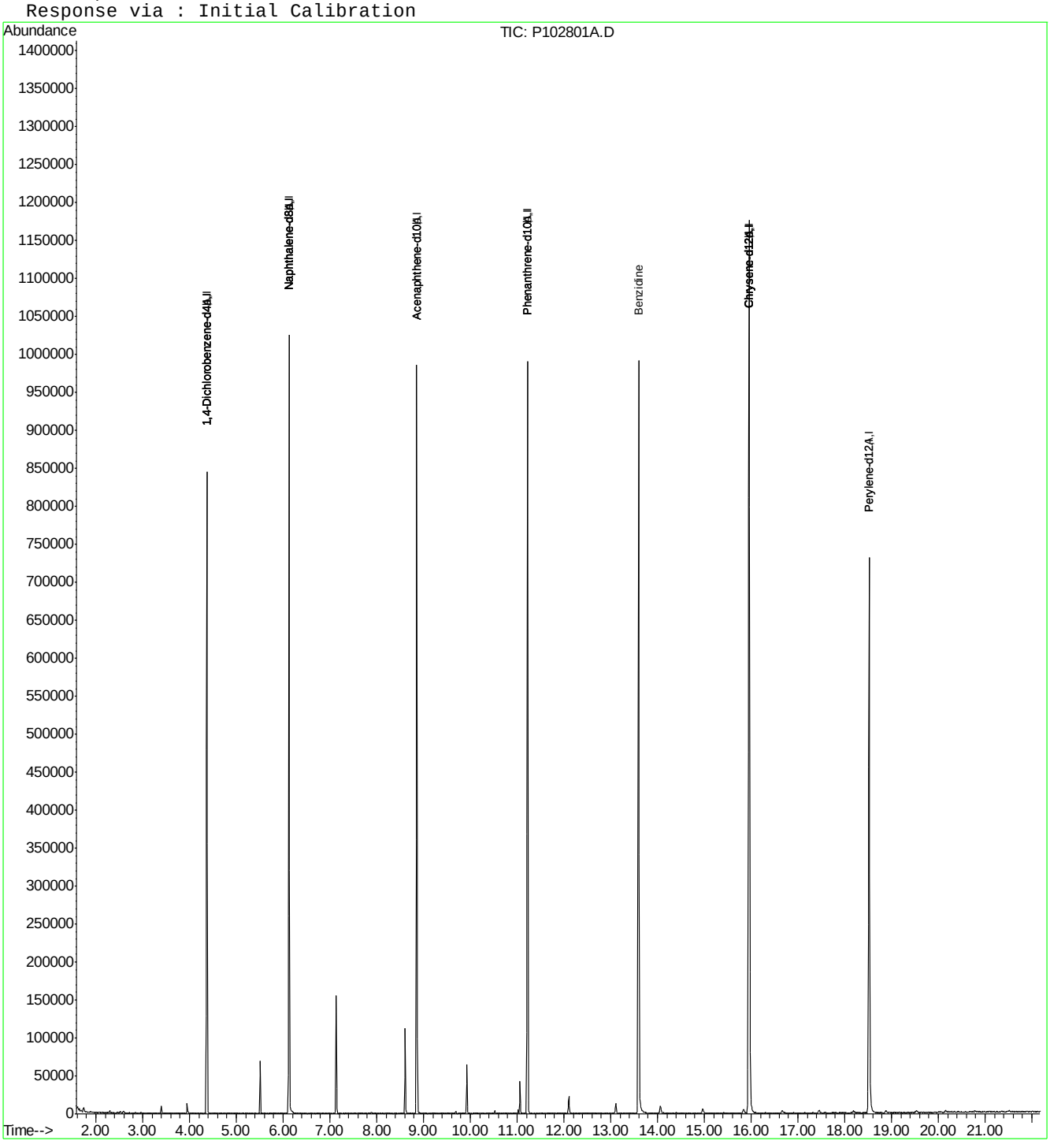
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4513\P102801A.D Vial: 24
Acq On : 24 Feb 2016 8:58 am Operator: sarad
Sample : icv4514-50 Inst : MSP
Misc : op91338,ep4514 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 25 16:21 2016 Quant Results File: MP4513.RES

Method : C:\MSDCHEM\1\METHODS\MP4513.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Feb 24 16:59:22 2016
Response via : Initial Calibration



P102801A.D MP4513.M Thu Feb 25 16:22:00 2016 Page 2

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
03/03/16 15:11

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103011.D Vial: 2
Acq On : 2 Mar 2016 5:10 pm Operator: sarad
Sample : ic4524-100 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 08:58:29 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 08:58:05 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.35	152	176183	40.00	ppm	0.00
24) Naphthalene-d8	6.10	136	619829	40.00	ppm	0.00
47) Acenaphthene-d10	8.83	164	355407	40.00	ppm	0.00
69) Phenanthrene-d10	11.20	188	512187	40.00	ppm	0.00
83) Chrysene-d12	15.92	240	467796	40.00	ppm	0.00
92) Perylene-d12	18.48	264	486176	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.35	152	176183	40.00	ppm	-0.02
112) Naphthalene-d8A	6.10	136	619829	40.00	ppm	-0.02
121) Acenaphthene-d10A	8.83	164	355407	40.00	ppm	-0.03
132) Phenanthrene-d10A	11.20	188	512187	40.00	ppm	-0.03
147) Chrysene-d12A	15.92	240	467796	40.00	ppm	-0.03
155) Perylene-d12A	18.48	264	486176	40.00	ppm	-0.04
159) 1,4-Dichlorobenzene-d4b	4.35	152	176183	40.00	ppm	-0.02
161) Phenanthrene-d10b	11.20	188	512187	40.00	ppm	-0.03
163) Chrysene-d12b	15.92	240	467796	40.00	ppm	-0.03
165) Naphthalene-d8b	6.10	136	619829	40.00	ppm	-0.02
167) Acenaphthene-d10b	8.83	164	355407	40.00	ppm	-0.03
169) Naphthalene-d8c	6.10	136	619829	40.00	ppm	-0.02
174) 1,4-Dichlorobenzene-d4a	4.35	152	176183	40.00	ppm	-0.11
176) Chrysene-d12c	15.92	240	467796	40.00	ppm	-0.03
178) Chrysene-d12d	15.92	240	467796	40.00	ppm	-0.03
180) Naphthalene-d8a	6.10	136	619829	40.00	ppm	0.14

System Monitoring Compounds						
5) 2-Fluorophenol	2.97	112	570985	93.30	ppm	0.00
Spiked Amount 50.000			Recovery = 186.60%			
8) Phenol-d5	3.96	99	627844	83.61	ppm	0.00
Spiked Amount 50.000			Recovery = 167.22%			
25) Nitrobenzene-d5	5.08	82	582783	98.09	ppm	0.00
Spiked Amount 50.000			Recovery = 196.18%			
51) 2-Fluorobiphenyl	7.80	172	870565	80.04	ppm	0.00
Spiked Amount 50.000			Recovery = 160.08%			
73) 2,4,6-Tribromophenol	10.11	330	131612	118.89	ppm	0.00
Spiked Amount 50.000			Recovery = 237.78%			
85) Terphenyl-d14	14.02	244	882195	98.61	ppm	0.00
Spiked Amount 50.000			Recovery = 197.22%			

Target Compounds						Qvalue
2) 1,4-Dioxane	1.78	88	275570	89.87	ppm	98
3) Pyridine	1.97	79	625045	93.10	ppm	92
4) N-Nitrosodimethylamine	1.94	42	238728	96.60	ppm	94
6) Indene	4.68	116	842496	86.20	ppm	97
7) Cumene	3.44	105	1110136	77.47	ppm	94
9) Phenol	3.98	94	709824	95.03	ppm	89
10) Aniline	3.95	93	638029	73.70	ppm	77
11) bis(2-Chloroethyl)ether	4.03	93	497004	93.03	ppm	98
12) 2-Chlorophenol	4.12	128	498225	86.03	ppm	95
13) Decane	4.17	43	369574	82.31	ppm	96
14) 1,3-Dichlorobenzene	4.28	146	545682	82.60	ppm	98
15) 1,4-Dichlorobenzene	4.37	146	531119	83.51	ppm	97

(#) = qualifier out of range (m) = manual integration
P103011.D MP4524.M Thu Mar 03 09:00:36 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103011.D Vial: 2
Acq On : 2 Mar 2016 5:10 pm Operator: sarad
Sample : ic4524-100 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 08:58:29 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 08:58:05 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
16)	Benzyl alcohol	4.54	108	302600	85.76	ppm		96
17)	1,2-Dichlorobenzene	4.57	146	481791	78.82	ppm		95
18)	Acetophenone	4.88	105	684389	85.99	ppm		96
19)	2-Methylphenol	4.73	108	455556	92.82	ppm		100
20)	2,2'-oxybis(1-Chloropropan	4.71	121	169965	94.83	ppm	#	99
21)	3&4-Methylphenol	4.94	108	497101	96.56	ppm		97
22)	n-Nitroso-di-n-propylamine	4.90	70	349466	94.00	ppm		98
23)	Hexachloroethane	5.01	201	189667	96.96	ppm		92
26)	Nitrobenzene	5.11	77	529194	92.25	ppm		96
27)	Quinoline	6.66	129	1009644	91.70	ppm		97
28)	Isophorone	5.45	82	929548	91.48	ppm		97
29)	2-Nitrophenol	5.56	139	291563	100.49	ppm		88
30)	2,4-Dimethylphenol	5.69	107	498439	97.43	ppm		96
31)	Benzoic acid	5.96	105	420356	112.35	ppm		96
32)	bis(2-Chloroethoxy)methane	5.79	93	572823	92.08	ppm		97
33)	2,4-Dichlorophenol	5.95	162	405260	96.09	ppm		97
34)	2,6-Dichlorophenol	6.26	162	380206	93.29	ppm		96
35)	1,3,5-Trichlorobenzene	5.58	180	406052	81.82	ppm		98
36)	1,2,4-Trichlorobenzene	6.03	180	413411	84.87	ppm		99
37)	1,2,3-Trichlorobenzene	6.36	180	363649	80.87	ppm		98
38)	Naphthalene	6.14	128	1217903	80.13	ppm		95
39)	4-Chloroaniline	6.25	127	554419	82.52	ppm		99
40)	2,3-Dichloroaniline	7.65	161	496811	94.91	ppm		96
41)	Caprolactam	6.79	55	219369m	107.52	ppm		
42)	Hexachlorobutadiene	6.36	225	209515	93.01	ppm		99
43)	4-Chloro-3-methylphenol	7.09	107	462362	99.17	ppm	#	42
44)	2-Methylnaphthalene	7.20	141	706818	83.64	ppm		97
45)	1-Methylnaphthalene	7.35	142	869043	84.23	ppm		97
46)	Dimethylnaphthalene	8.19	156	769096	85.59	ppm		98
48)	Hexachlorocyclopentadiene	7.47	237	490346	194.12	ppm		98
49)	2,4,6-Trichlorophenol	7.69	196	276998	101.75	ppm		99
50)	2,4,5-Trichlorophenol	7.78	196	293890	101.38	ppm		99
52)	2-Chloronaphthalene	7.96	162	758937	82.32	ppm		97
53)	Biphenyl	7.95	154	928981	76.13	ppm		96
54)	2-Nitroaniline	8.16	65	285397	105.21	ppm		95
55)	Dimethylphthalate	8.48	163	970545	90.20	ppm		97
56)	Acenaphthylene	8.60	152	1222694	78.81	ppm		95
57)	2,6-Dinitrotoluene	8.55	165	242513	110.57	ppm		98
58)	3-Nitroaniline	8.81	138	278297	96.07	ppm		92
59)	Acenaphthene	8.88	153	785358	83.79	ppm		100
60)	2,4-Dinitrophenol	8.98	184	287438	203.82	ppm		98
61)	4-Nitrophenol	9.26	109	170879	114.27	ppm		97
62)	Dibenzofuran	9.17	168	1087992	84.28	ppm		97
63)	2,4-Dinitrotoluene	9.19	165	311807	103.79	ppm		99
64)	2,3,4,6-Tetrachlorophenol	9.40	232	230485	108.28	ppm		98
65)	Diethylphthalate	9.62	149	968281	89.11	ppm		97
66)	Fluorene	9.71	166	921407	88.88	ppm		99
67)	4-Chlorophenyl-phenylether	9.74	204	422718	93.14	ppm		98
68)	4-Nitroaniline	9.81	138	278252	106.61	ppm		96

(#) = qualifier out of range (m) = manual integration
P103011.D MP4524.M Thu Mar 03 09:00:36 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103011.D Vial: 2
Acq On : 2 Mar 2016 5:10 pm Operator: sarad
Sample : ic4524-100 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 08:58:29 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 08:58:05 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
70)	4,6-Dinitro-2-methylphenol	9.84	198	196683	105.35	ppm	97
71)	n-Nitrosodiphenylamine	9.95	169	700545	101.13	ppm	99
72)	1,2-Diphenylhydrazine	9.99	77	928012	94.85	ppm	99
74)	4-Bromophenyl-phenylether	10.52	248	251581	105.30	ppm	100
75)	Hexachlorobenzene	10.59	284	257612	102.37	ppm	92
76)	Pentachlorophenol	10.94	266	332916	203.41	ppm	97
77)	Phenanthrene	11.24	178	1156803	88.24	ppm	96
78)	Anthracene	11.32	178	1189353	89.49	ppm	96
79)	Carbazole	11.62	167	1226554	94.89	ppm	97
80)	Di-n-butylphthalate	12.30	149	1524547	95.65	ppm	96
81)	Fluoranthene	13.26	202	1310898	99.03	ppm	99
82)	Octadecane	11.18	57	481755	105.14	ppm	95
84)	Pyrene	13.65	202	1350284	87.92	ppm	99
86)	Butylbenzylphthalate	15.01	149	765646	104.04	ppm	97
87)	Butyl stearate	15.23	56	363522	105.15	ppm	97
88)	Benzo[a]anthracene	15.90	228	1191767	96.57	ppm	98
89)	3,3'-Dichlorobenzidine	15.93	252	473076	111.18	ppm	97
90)	Chrysene	15.98	228	1142770	93.42	ppm	98
91)	bis(2-Ethylhexyl)phthalate	16.18	149	991080	101.19	ppm	92
93)	Di-n-octylphthalate	17.39	149	1680169	99.74	ppm	95
94)	Benzo[b]fluoranthene	17.85	252	1296844	98.82	ppm	97
95)	Benzo[k]fluoranthene	17.92	252	1156230	89.91	ppm	98
96)	Benzo[a]pyrene	18.39	252	1156450	97.79	ppm	97
97)	Indeno[1,2,3-cd]pyrene	20.12	276	1128833	106.11	ppm	95
98)	Dibenz(a,h)acridine	19.81	279	1014285	105.93	ppm	98
99)	Dibenz[a,h]anthracene	20.17	278	1149581	103.89	ppm	96
100)	7,12-Dimethylbenz(a)anthra	17.87	256	576640	103.98	ppm	98
101)	Benzo[g,h,i]perylene	20.50	276	1181370	101.52	ppm	98

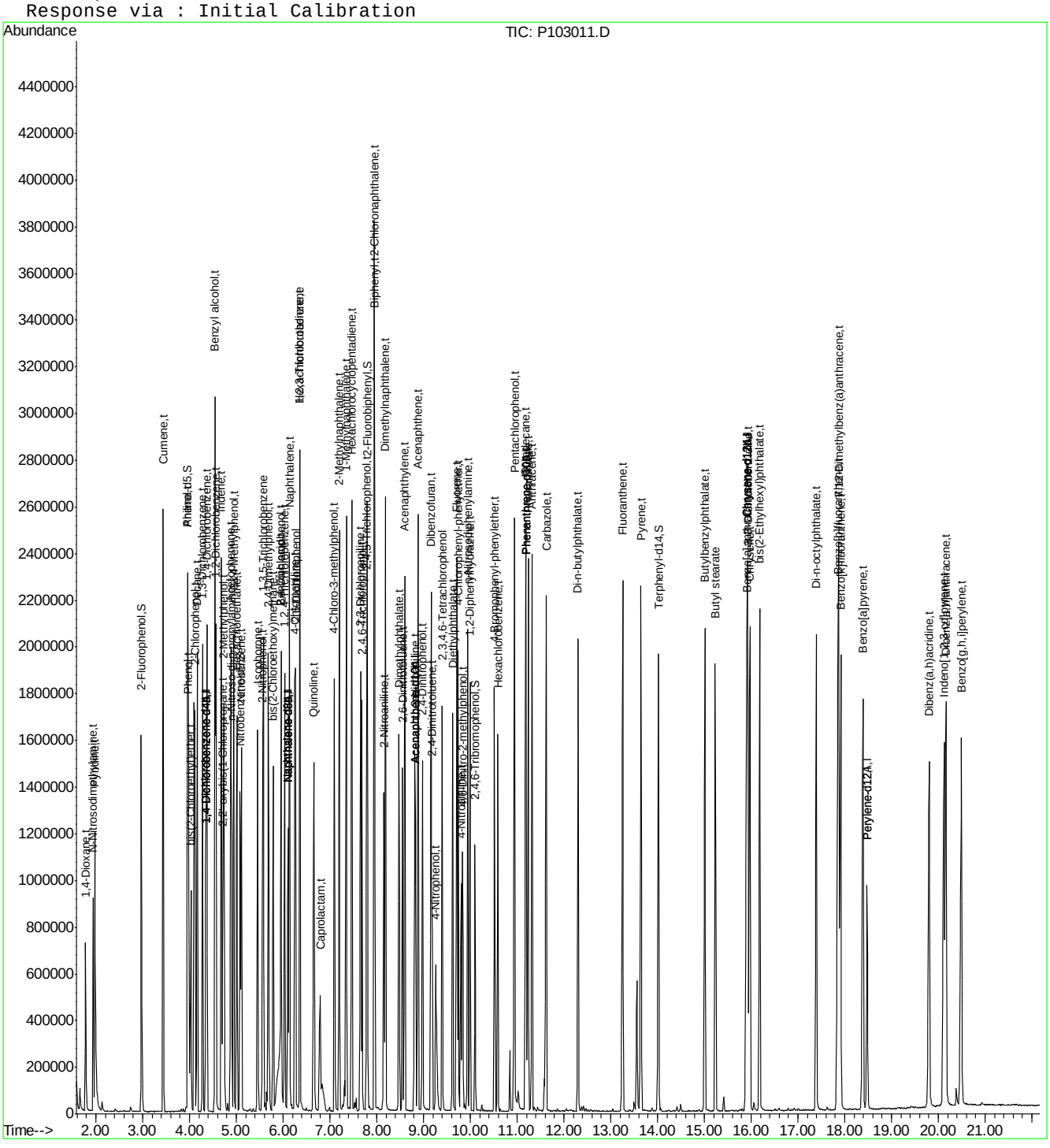
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103011.D Vial: 2
Acq On : 2 Mar 2016 5:10 pm Operator: sarad
Sample : ic4524-100 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 9:00 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 08:58:05 2016
Response via : Initial Calibration



Manual Integration Approval Summary

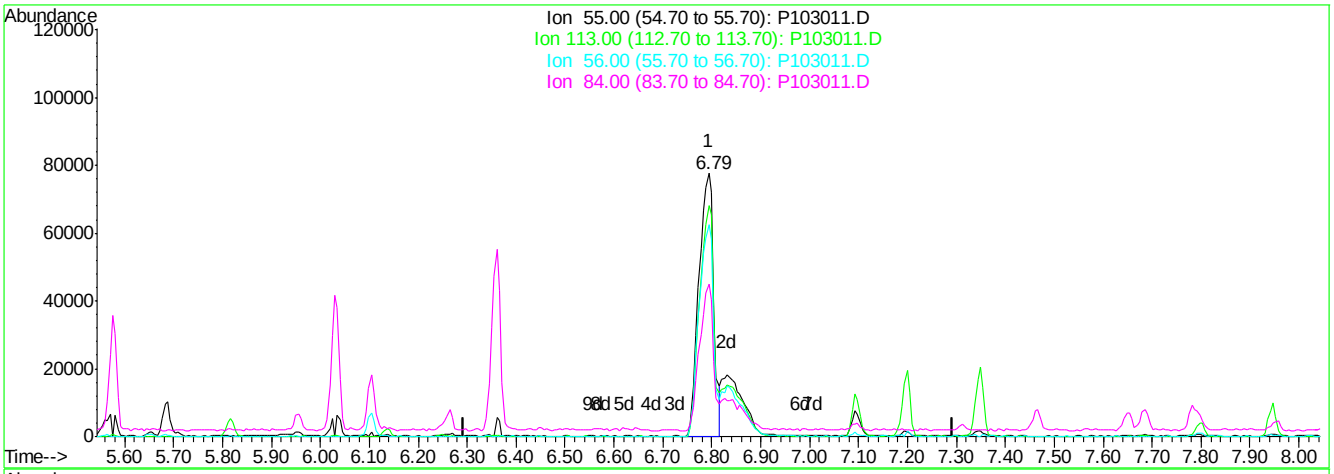
Sample Number:	EP4524-IC4524	**Method:**	SW846 8270D
Lab FileID:	P103011.D	**Analyst approved:**	03/03/16 11:25 Linsey Kirschmann
Injection Time:	03/02/16 17:10	**Supervisor approved:**	03/03/16 15:11 Nina Pandya

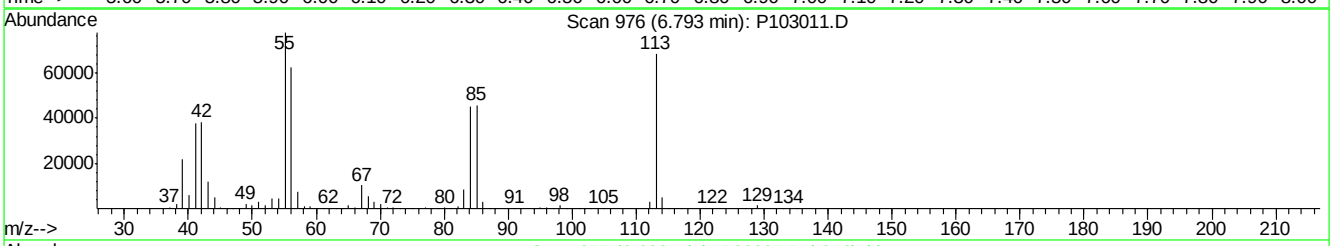
Parameter	CAS	Sig#	R.T. (min.)	Reason
Caprolactam	105-60-2		6.79	Split peak

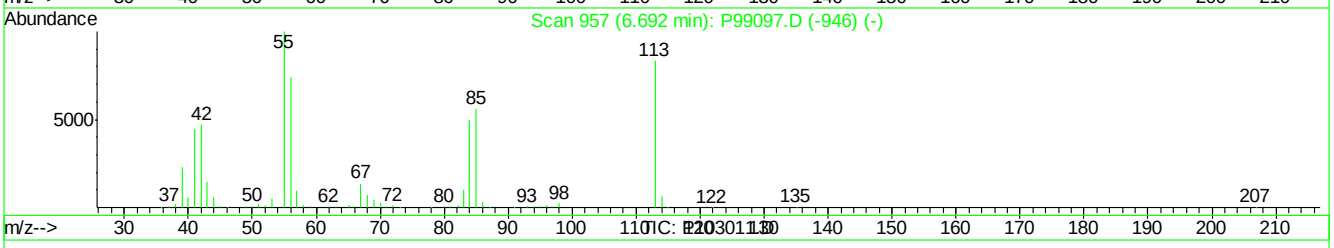
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103011.D Vial: 2
Acq On : 2 Mar 2016 5:10 pm Operator: sarad
Sample : ic4524-100 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 8:58 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 08:58:05 2016
Response via : Multiple Level Calibration







(41) Caprolactam (t)

6.79min 79.82ppm

response 162838

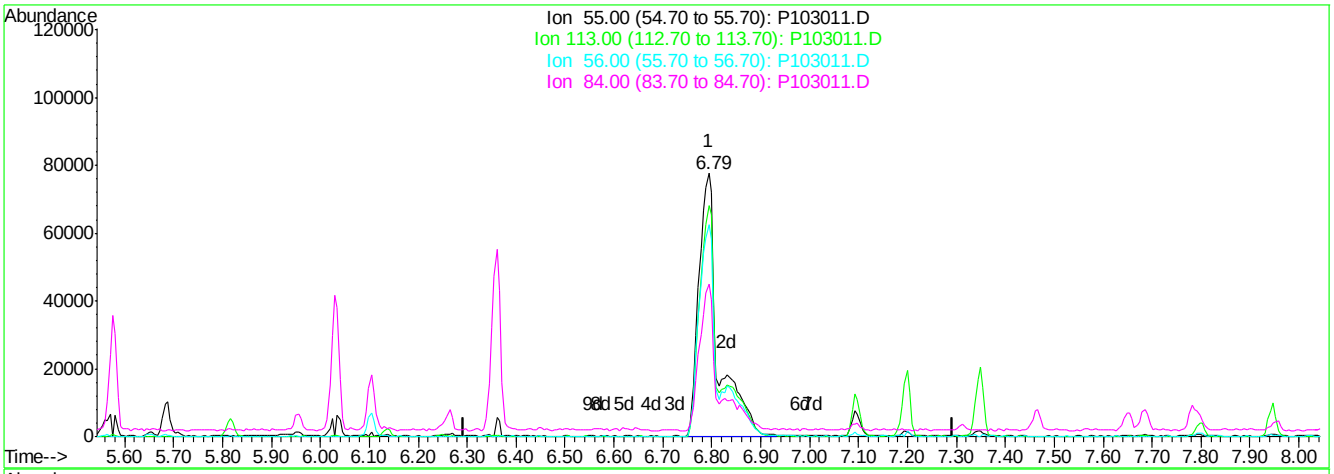
Ion	Exp%	Act%
55.00	100	100
113.00	88.10	87.95
56.00	77.60	81.09
84.00	52.10	55.97

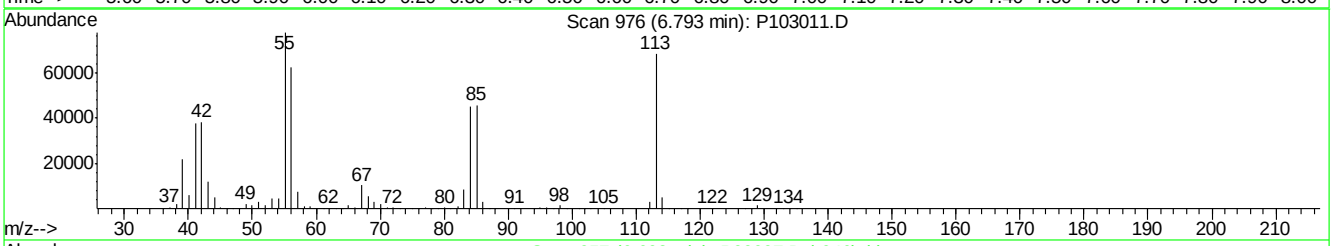
P103011.D MP4524.M Thu Mar 03 08:59:22 2016

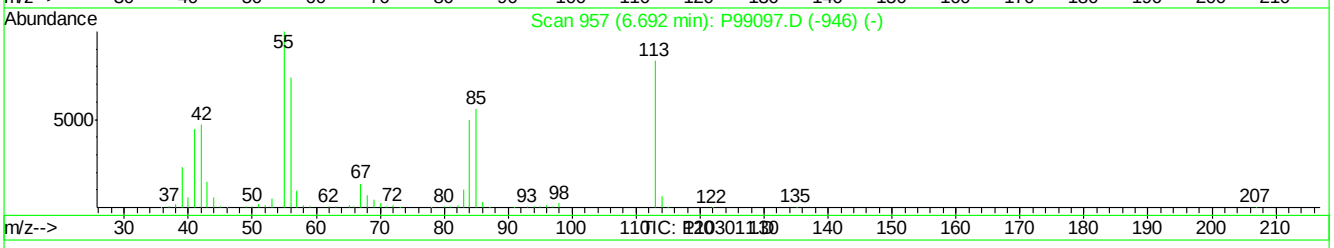
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103011.D Vial: 2
Acq On : 2 Mar 2016 5:10 pm Operator: sarad
Sample : ic4524-100 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 8:59 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 08:58:05 2016
Response via : Multiple Level Calibration







(41) Caprolactam (t)

6.79min 107.52ppm m

response 219369

Ion	Exp%	Act%
55.00	100	100
113.00	88.10	87.80
56.00	77.60	80.48
84.00	52.10	57.88

P103011.D MP4524.M Thu Mar 03 08:59:31 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103012.D Vial: 3
Acq On : 2 Mar 2016 5:40 pm Operator: sarad
Sample : ic4524-80 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 08:58:31 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 08:58:05 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.35	152	178586	40.00	ppm	0.00
24) Naphthalene-d8	6.10	136	620528	40.00	ppm	0.00
47) Acenaphthene-d10	8.83	164	360281	40.00	ppm	0.00
69) Phenanthrene-d10	11.20	188	528608	40.00	ppm	0.00
83) Chrysene-d12	15.92	240	473646	40.00	ppm	0.00
92) Perylene-d12	18.48	264	491928	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.35	152	178586	40.00	ppm	-0.02
112) Naphthalene-d8A	6.10	136	620528	40.00	ppm	-0.02
121) Acenaphthene-d10A	8.83	164	360281	40.00	ppm	-0.03
132) Phenanthrene-d10A	11.20	188	528608	40.00	ppm	-0.03
147) Chrysene-d12A	15.92	240	473646	40.00	ppm	-0.03
155) Perylene-d12A	18.48	264	491928	40.00	ppm	-0.04
159) 1,4-Dichlorobenzene-d4b	4.35	152	178586	40.00	ppm	-0.02
161) Phenanthrene-d10b	11.20	188	528608	40.00	ppm	-0.03
163) Chrysene-d12b	15.92	240	473646	40.00	ppm	-0.03
165) Naphthalene-d8b	6.10	136	620528	40.00	ppm	-0.02
167) Acenaphthene-d10b	8.83	164	360281	40.00	ppm	-0.03
169) Naphthalene-d8c	6.10	136	620528	40.00	ppm	-0.02
174) 1,4-Dichlorobenzene-d4a	4.35	152	178586	40.00	ppm	-0.11
176) Chrysene-d12c	15.92	240	473646	40.00	ppm	-0.04
178) Chrysene-d12d	15.92	240	473646	40.00	ppm	-0.04
180) Naphthalene-d8a	6.10	136	620528	40.00	ppm	0.14

System Monitoring Compounds						
5) 2-Fluorophenol	2.97	112	465094	74.97	ppm	0.00
Spiked Amount 50.000			Recovery = 149.94%			
8) Phenol-d5	3.96	99	523320	68.75	ppm	0.00
Spiked Amount 50.000			Recovery = 137.50%			
25) Nitrobenzene-d5	5.08	82	471793	79.32	ppm	0.00
Spiked Amount 50.000			Recovery = 158.64%			
51) 2-Fluorobiphenyl	7.80	172	732307	66.42	ppm	0.00
Spiked Amount 50.000			Recovery = 132.84%			
73) 2,4,6-Tribromophenol	10.10	330	106345	93.08	ppm	0.00
Spiked Amount 50.000			Recovery = 186.16%			
85) Terphenyl-d14	14.02	244	728869	80.47	ppm	0.00
Spiked Amount 50.000			Recovery = 160.94%			

Target Compounds						Qvalue
2) 1,4-Dioxane	1.78	88	222785	71.68	ppm	98
3) Pyridine	1.97	79	500405	73.53	ppm	93
4) N-Nitrosodimethylamine	1.94	42	194874	77.79	ppm	93
6) Indene	4.68	116	704226	71.09	ppm	96
7) Cumene	3.44	105	946025	65.13	ppm	96
9) Phenol	3.98	94	583308	77.04	ppm	92
10) Aniline	3.95	93	537736	61.28	ppm	78
11) bis(2-Chloroethyl)ether	4.03	93	400655	73.98	ppm	97
12) 2-Chlorophenol	4.12	128	416149	70.89	ppm	96
13) Decane	4.17	43	310686	68.27	ppm	97
14) 1,3-Dichlorobenzene	4.28	146	458830	68.52	ppm	100
15) 1,4-Dichlorobenzene	4.37	146	442639	68.66	ppm	98

(#) = qualifier out of range (m) = manual integration
P103012.D MP4524.M Thu Mar 03 09:01:53 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103012.D Vial: 3
Acq On : 2 Mar 2016 5:40 pm Operator: sarad
Sample : ic4524-80 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 08:58:31 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 08:58:05 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
16)	Benzyl alcohol	4.54	108	252119	70.49	ppm		97
17)	1,2-Dichlorobenzene	4.57	146	404580	65.29	ppm		97
18)	Acetophenone	4.88	105	566522	70.23	ppm		97
19)	2-Methylphenol	4.73	108	367071	73.78	ppm		100
20)	2,2'-oxybis(1-Chloropropan	4.72	121	136332	75.04	ppm	#	95
21)	3&4-Methylphenol	4.94	108	410262	78.62	ppm		99
22)	n-Nitroso-di-n-propylamine	4.90	70	286991	76.16	ppm		98
23)	Hexachloroethane	5.01	201	153332	77.33	ppm		92
26)	Nitrobenzene	5.11	77	436257	75.96	ppm		97
27)	Quinoline	6.65	129	829668	75.27	ppm		97
28)	Isophorone	5.45	82	762842	74.99	ppm		98
29)	2-Nitrophenol	5.56	139	238435	82.08	ppm		90
30)	2,4-Dimethylphenol	5.68	107	407424	79.55	ppm		99
31)	Benzoic acid	5.94	105	344557	91.99	ppm		98
32)	bis(2-Chloroethoxy)methane	5.79	93	473263	75.99	ppm		99
33)	2,4-Dichlorophenol	5.95	162	338773	80.23	ppm		98
34)	2,6-Dichlorophenol	6.26	162	314906	77.18	ppm		97
35)	1,3,5-Trichlorobenzene	5.58	180	336682	67.77	ppm		99
36)	1,2,4-Trichlorobenzene	6.03	180	344599	70.67	ppm		98
37)	1,2,3-Trichlorobenzene	6.36	180	303801	67.48	ppm		98
38)	Naphthalene	6.14	128	1040109	68.36	ppm		96
39)	4-Chloroaniline	6.25	127	462641	68.78	ppm		98
40)	2,3-Dichloroaniline	7.65	161	408885	78.02	ppm		96
41)	Caprolactam	6.78	55	174783	85.57	ppm		96
42)	Hexachlorobutadiene	6.35	225	172834	76.64	ppm		100
43)	4-Chloro-3-methylphenol	7.09	107	375944	80.55	ppm	#	30
44)	2-Methylnaphthalene	7.19	141	595854	70.43	ppm		97
45)	1-Methylnaphthalene	7.35	142	729873	70.66	ppm		99
46)	Dimethylnaphthalene	8.19	156	636599	70.76	ppm		99
48)	Hexachlorocyclopentadiene	7.47	237	397814	155.36	ppm		98
49)	2,4,6-Trichlorophenol	7.69	196	229870	83.30	ppm		99
50)	2,4,5-Trichlorophenol	7.78	196	236902	80.62	ppm		98
52)	2-Chloronaphthalene	7.95	162	632054	67.63	ppm		98
53)	Biphenyl	7.94	154	796865	64.42	ppm		98
54)	2-Nitroaniline	8.15	65	229126	83.33	ppm		94
55)	Dimethylphthalate	8.48	163	802593	73.58	ppm		97
56)	Acenaphthylene	8.60	152	1034752	65.79	ppm		98
57)	2,6-Dinitrotoluene	8.55	165	198006	89.06	ppm		99
58)	3-Nitroaniline	8.81	138	228215	77.72	ppm		91
59)	Acenaphthene	8.88	153	652927	68.71	ppm		98
60)	2,4-Dinitrophenol	8.97	184	230535	164.09	ppm		100
61)	4-Nitrophenol	9.26	109	133510	88.07	ppm		99
62)	Dibenzofuran	9.16	168	920930	70.38	ppm		98
63)	2,4-Dinitrotoluene	9.18	165	253510	80.31	ppm		100
64)	2,3,4,6-Tetrachlorophenol	9.40	232	187545	86.91	ppm		98
65)	Diethylphthalate	9.62	149	804416	73.03	ppm		97
66)	Fluorene	9.70	166	770464	73.31	ppm		98
67)	4-Chlorophenyl-phenylether	9.74	204	351230	76.35	ppm		96
68)	4-Nitroaniline	9.80	138	222666	84.16	ppm		93

(#) = qualifier out of range (m) = manual integration
P103012.D MP4524.M Thu Mar 03 09:01:53 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103012.D Vial: 3
Acq On : 2 Mar 2016 5:40 pm Operator: sarad
Sample : ic4524-80 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 08:58:31 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 08:58:05 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
70)	4,6-Dinitro-2-methylphenol	9.83	198	155961	82.07	ppm	94
71)	n-Nitrosodiphenylamine	9.95	169	583030	81.55	ppm	99
72)	1,2-Diphenylhydrazine	9.99	77	778787	77.13	ppm	99
74)	4-Bromophenyl-phenylether	10.52	248	204104	82.78	ppm	96
75)	Hexachlorobenzene	10.59	284	208450	80.26	ppm	96
76)	Pentachlorophenol	10.94	266	268273	150.32	ppm	98
77)	Phenanthrene	11.23	178	970432	71.73	ppm	97
78)	Anthracene	11.31	178	1003378	73.15	ppm	98
79)	Carbazole	11.62	167	1030855	77.27	ppm	98
80)	Di-n-butylphthalate	12.30	149	1289557	78.39	ppm	96
81)	Fluoranthene	13.25	202	1105211	80.90	ppm	99
82)	Octadecane	11.18	57	406806	86.03	ppm	95
84)	Pyrene	13.65	202	1138686	73.23	ppm	97
86)	Butylbenzylphthalate	15.00	149	630046	84.56	ppm	96
87)	Butyl stearate	15.23	56	306617	87.60	ppm	95
88)	Benzo[a]anthracene	15.90	228	980886	78.50	ppm	99
89)	3,3'-Dichlorobenzidine	15.93	252	385724	89.53	ppm	96
90)	Chrysene	15.97	228	934208	75.43	ppm	99
91)	bis(2-Ethylhexyl)phthalate	16.18	149	832867	83.98	ppm	95
93)	Di-n-octylphthalate	17.39	149	1403680	73.23	ppm	96
94)	Benzo[b]fluoranthene	17.85	252	1069927	80.57	ppm	99
95)	Benzo[k]fluoranthene	17.91	252	946696	72.76	ppm	96
96)	Benzo[a]pyrene	18.39	252	948815	79.29	ppm	98
97)	Indeno[1,2,3-cd]pyrene	20.11	276	891968	82.87	ppm	100
98)	Dibenz(a,h)acridine	19.80	279	835853	86.28	ppm	100
99)	Dibenz[a,h]anthracene	20.15	278	929880	83.06	ppm	97
100)	7,12-Dimethylbenz(a)anthra	17.86	256	476117	84.85	ppm	98
101)	Benzo[g,h,i]perylene	20.49	276	949594	80.65	ppm	98

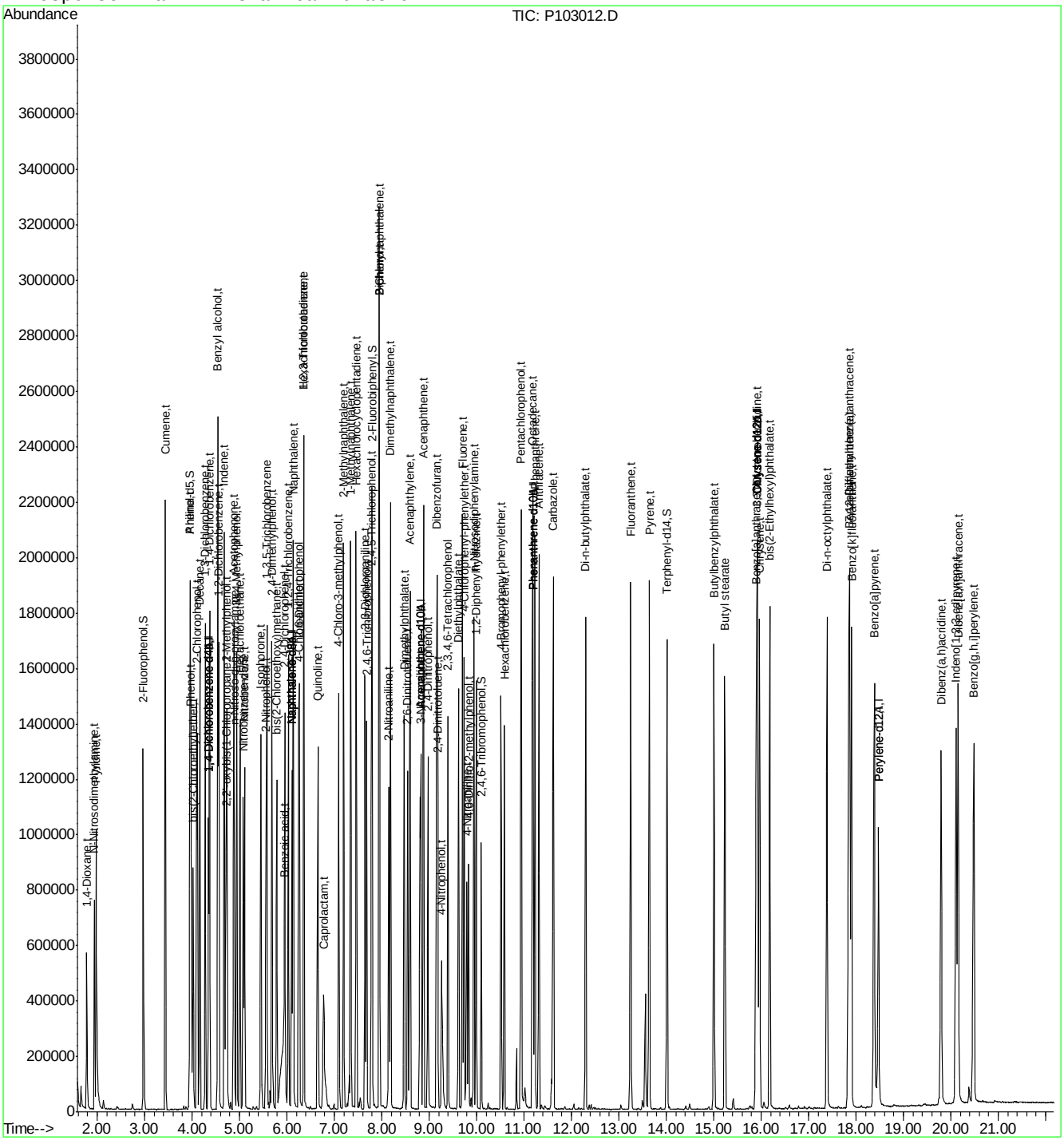
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103012.D Vial: 3
Acq On : 2 Mar 2016 5:40 pm Operator: sarad
Sample : ic4524-80 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 9:01 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 08:58:05 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103013.D Vial: 4
Acq On : 2 Mar 2016 6:09 pm Operator: sarad
Sample : ic4524-10 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 09:05:20 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 09:05:16 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.35	152	155426	40.00	ppm	0.00
24) Naphthalene-d8	6.10	136	552817	40.00	ppm	0.00
47) Acenaphthene-d10	8.82	164	324485	40.00	ppm	0.00
69) Phenanthrene-d10	11.18	188	498966	40.00	ppm	-0.01
83) Chrysene-d12	15.91	240	463163	40.00	ppm	-0.02
92) Perylene-d12	18.47	264	421054	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4A	4.35	152	155426	40.00	ppm	-0.02
112) Naphthalene-d8A	6.10	136	552817	40.00	ppm	-0.03
121) Acenaphthene-d10A	8.82	164	324485	40.00	ppm	-0.03
132) Phenanthrene-d10A	11.18	188	498966	40.00	ppm	-0.04
147) Chrysene-d12A	15.91	240	463163	40.00	ppm	-0.04
155) Perylene-d12A	18.47	264	421054	40.00	ppm	-0.05
159) 1,4-Dichlorobenzene-d4b	4.35	152	155426	40.00	ppm	-0.02
161) Phenanthrene-d10b	11.18	188	498966	40.00	ppm	-0.04
163) Chrysene-d12b	15.91	240	463163	40.00	ppm	-0.04
165) Naphthalene-d8b	6.10	136	552817	40.00	ppm	-0.03
167) Acenaphthene-d10b	8.82	164	324485	40.00	ppm	-0.03
169) Naphthalene-d8c	6.10	136	552817	40.00	ppm	-0.03
174) 1,4-Dichlorobenzene-d4a	4.35	152	155426	40.00	ppm	-0.11
176) Chrysene-d12c	15.91	240	463163	40.00	ppm	-0.05
178) Chrysene-d12d	15.91	240	463163	40.00	ppm	-0.05
180) Naphthalene-d8a	6.10	136	552817	40.00	ppm	0.13

System Monitoring Compounds						
5) 2-Fluorophenol	2.97	112	55136	10.21	ppm	0.00
Spiked Amount 50.000			Recovery = 20.42%			
8) Phenol-d5	3.97	99	68507	10.34	ppm	0.01
Spiked Amount 50.000			Recovery = 20.68%			
25) Nitrobenzene-d5	5.07	82	56575	10.68	ppm	-0.01
Spiked Amount 50.000			Recovery = 21.36%			
51) 2-Fluorobiphenyl	7.79	172	102683	10.34	ppm	-0.02
Spiked Amount 50.000			Recovery = 20.68%			
73) 2,4,6-Tribromophenol	10.09	330	10993	10.19	ppm	-0.02
Spiked Amount 50.000			Recovery = 20.38%			
85) Terphenyl-d14	14.01	244	88944	10.04	ppm	-0.02
Spiked Amount 50.000			Recovery = 20.08%			

Target Compounds						Qvalue
2) 1,4-Dioxane	1.78	88	24506	9.06	ppm	95
3) Pyridine	1.97	79	63167	10.66	ppm	93
4) N-Nitrosodimethylamine	1.94	42	22730	10.43	ppm	94
6) Indene	4.68	116	91808	10.65	ppm	97
7) Cumene	3.44	105	131818	10.43	ppm	99
9) Phenol	3.99	94	69485	10.54	ppm	97
10) Aniline	3.95	93	77890	10.20	ppm	99
11) bis(2-Chloroethyl)ether	4.02	93	49772	10.56	ppm	97
12) 2-Chlorophenol	4.12	128	54613	10.69	ppm	99
13) Decane	4.16	43	42382	10.70	ppm	97
14) 1,3-Dichlorobenzene	4.28	146	60103	10.31	ppm	99
15) 1,4-Dichlorobenzene	4.37	146	57065	10.17	ppm	99

(#) = qualifier out of range (m) = manual integration
P103013.D MP4524.M Thu Mar 03 09:06:42 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103013.D Vial: 4
Acq On : 2 Mar 2016 6:09 pm Operator: sarad
Sample : ic4524-10 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 09:05:20 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 09:05:16 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
16) Benzyl alcohol	4.53	108	31766	10.21 ppm		98
17) 1,2-Dichlorobenzene	4.56	146	54367	10.08 ppm		99
18) Acetophenone	4.87	105	70625	10.06 ppm		99
19) 2-Methylphenol	4.73	108	45378	10.48 ppm		95
20) 2,2'-oxybis(1-Chloropropan	4.71	121	16189	10.24 ppm	#	99
21) 3&4-Methylphenol	4.94	108	48892	10.77 ppm		95
22) n-Nitroso-di-n-propylamine	4.88	70	36256	11.06 ppm		96
23) Hexachloroethane	5.01	201	18214	10.55 ppm		91
26) Nitrobenzene	5.10	77	54545	10.66 ppm		97
27) Quinoline	6.63	129	97447	9.92 ppm		97
28) Isophorone	5.44	82	94489	10.43 ppm		97
29) 2-Nitrophenol	5.55	139	26353	10.18 ppm		86
30) 2,4-Dimethylphenol	5.68	107	44496	9.75 ppm		96
31) Benzoic acid	5.82	105	25492	7.64 ppm		91
32) bis(2-Chloroethoxy)methane	5.78	93	56753	10.23 ppm		98
33) 2,4-Dichlorophenol	5.95	162	40441	10.75 ppm		98
34) 2,6-Dichlorophenol	6.25	162	38262	10.53 ppm		98
35) 1,3,5-Trichlorobenzene	5.57	180	44259	10.00 ppm		97
36) 1,2,4-Trichlorobenzene	6.02	180	43968	10.12 ppm		94
37) 1,2,3-Trichlorobenzene	6.36	180	41326	10.30 ppm		97
38) Naphthalene	6.13	128	139418	10.29 ppm		97
39) 4-Chloroaniline	6.24	127	61411	10.25 ppm		98
40) 2,3-Dichloroaniline	7.64	161	49954	10.70 ppm		99
41) Caprolactam	6.71	55	17813	9.79 ppm		97
42) Hexachlorobutadiene	6.35	225	21189	10.55 ppm		99
43) 4-Chloro-3-methylphenol	7.09	107	43449	10.45 ppm		99
44) 2-Methylnaphthalene	7.19	141	79541	10.55 ppm		99
45) 1-Methylnaphthalene	7.34	142	95406	10.37 ppm		98
46) Dimethylnaphthalene	8.18	156	83542	10.42 ppm		100
48) Hexachlorocyclopentadiene	7.46	237	44535	19.31 ppm		96
49) 2,4,6-Trichlorophenol	7.67	196	26349	10.60 ppm		95
50) 2,4,5-Trichlorophenol	7.78	196	27159	10.26 ppm		96
52) 2-Chloronaphthalene	7.94	162	88123	10.47 ppm		99
53) Biphenyl	7.94	154	114437	10.27 ppm		97
54) 2-Nitroaniline	8.13	65	25270	10.20 ppm		92
55) Dimethylphthalate	8.46	163	100109	10.19 ppm		99
56) Acenaphthylene	8.59	152	139479	9.85 ppm		97
57) 2,6-Dinitrotoluene	8.53	165	22361	11.17 ppm		100
58) 3-Nitroaniline	8.79	138	25976	9.82 ppm		98
59) Acenaphthene	8.87	153	85464	9.99 ppm		96
60) 2,4-Dinitrophenol	8.96	184	14131	16.88 ppm		93
61) 4-Nitrophenol	9.28	109	12377	9.07 ppm		91
62) Dibenzofuran	9.15	168	121720	10.33 ppm		97
63) 2,4-Dinitrotoluene	9.17	165	28231	9.50 ppm		94
64) 2,3,4,6-Tetrachlorophenol	9.39	232	19384	9.97 ppm		94
65) Diethylphthalate	9.60	149	99740	10.05 ppm		97
66) Fluorene	9.69	166	100352	10.60 ppm		98
67) 4-Chlorophenyl-phenylether	9.74	204	44163	10.66 ppm		96
68) 4-Nitroaniline	9.76	138	24865	10.43 ppm		95

(#) = qualifier out of range (m) = manual integration
P103013.D MP4524.M Thu Mar 03 09:06:42 2016

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103013.D Vial: 4
Acq On : 2 Mar 2016 6:09 pm Operator: sarad
Sample : ic4524-10 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 09:05:20 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 09:05:16 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
70)	4,6-Dinitro-2-methylphenol	9.81	198	12476	11.42	ppm	90
71)	n-Nitrosodiphenylamine	9.93	169	71605	10.61	ppm	99
72)	1,2-Diphenylhydrazine	9.98	77	101728	10.67	ppm	95
74)	4-Bromophenyl-phenylether	10.51	248	24024	10.32	ppm	97
75)	Hexachlorobenzene	10.58	284	26016	10.61	ppm	88
76)	Pentachlorophenol	10.93	266	23396	15.80	ppm	97
77)	Phenanthrene	11.22	178	129538	10.14	ppm	98
78)	Anthracene	11.30	178	133090	10.28	ppm	98
79)	Carbazole	11.61	167	134489	10.68	ppm	99
80)	Di-n-butylphthalate	12.30	149	164165	10.57	ppm	98
81)	Fluoranthene	13.24	202	140545	10.90	ppm	97
82)	Octadecane	11.17	57	50585	11.33	ppm	97
84)	Pyrene	13.63	202	149529	9.83	ppm	98
86)	Butylbenzylphthalate	15.00	149	68466	9.40	ppm	98
87)	Butyl stearate	15.22	56	32764	9.57	ppm	96
88)	Benzo[a]anthracene	15.89	228	115379	9.44	ppm	99
89)	3,3'-Dichlorobenzidine	15.91	252	40668	9.65	ppm	96
90)	Chrysene	15.95	228	118321	9.77	ppm	97
91)	bis(2-Ethylhexyl)phthalate	16.17	149	88395	9.12	ppm	99
93)	Di-n-octylphthalate	17.38	149	146382	9.00	ppm	98
94)	Benzo[b]fluoranthene	17.83	252	121995	10.73	ppm	97
95)	Benzo[k]fluoranthene	17.87	252	116254	10.44	ppm	99
96)	Benzo[a]pyrene	18.36	252	110921	10.83	ppm	99
97)	Indeno[1,2,3-cd]pyrene	20.09	276	94257	10.23	ppm	95
98)	Dibenz(a,h)acridine	19.78	279	89244	10.76	ppm	100
99)	Dibenz[a,h]anthracene	20.13	278	100671	10.51	ppm	99
100)	7,12-Dimethylbenz(a)anthra	17.84	256	47828	9.96	ppm	97
101)	Benzo[g,h,i]perylene	20.45	276	106051	10.52	ppm	97

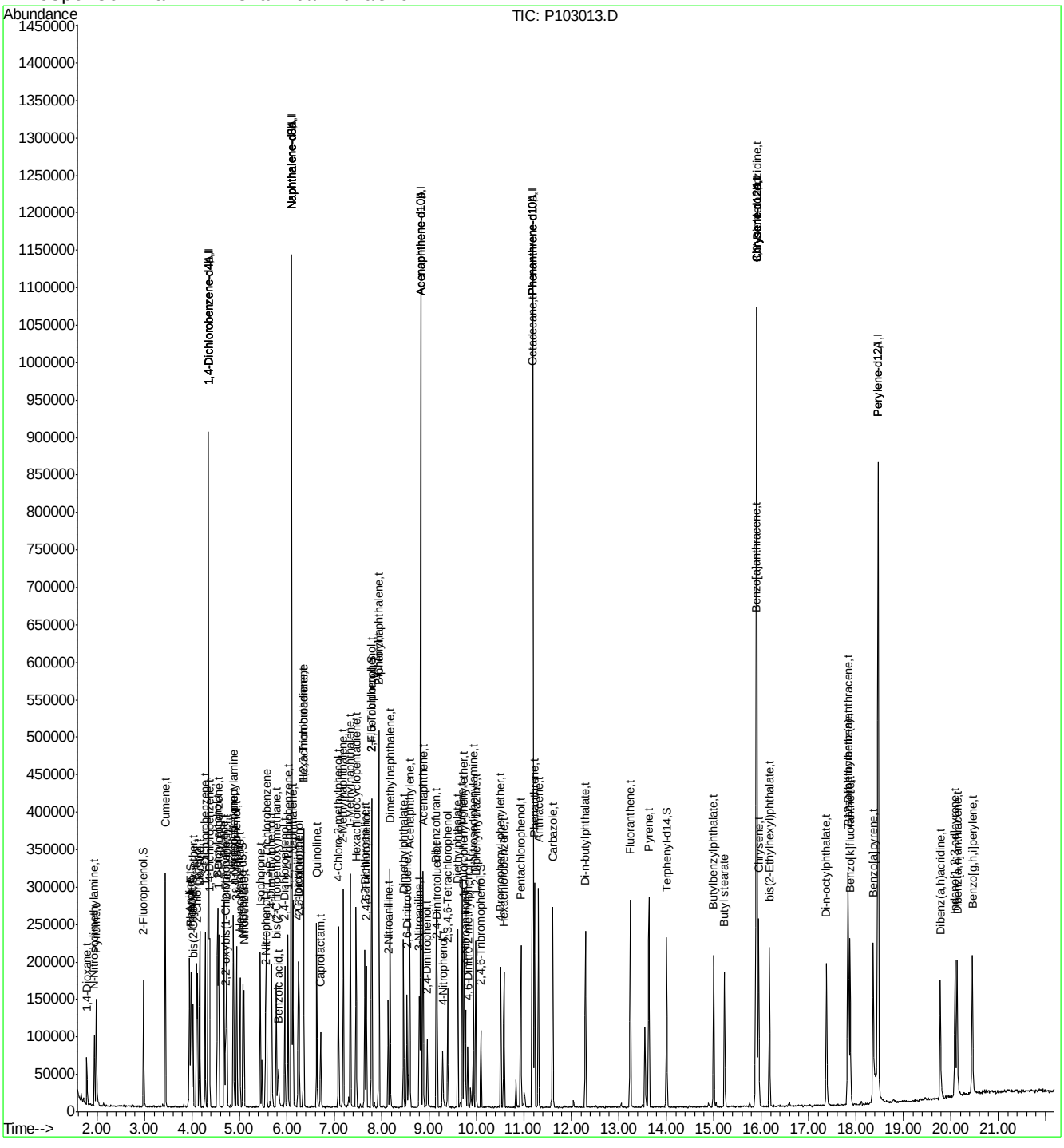
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103013.D Vial: 4
Acq On : 2 Mar 2016 6:09 pm Operator: sarad
Sample : ic4524-10 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 9:06 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 09:05:16 2016
Response via : Initial Calibration



SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103014.D Vial: 5
Acq On : 2 Mar 2016 6:39 pm Operator: sarad
Sample : ic4524-5 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 08:58:35 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 08:58:05 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.35	152	155607	40.00	ppm	0.00
24) Naphthalene-d8	6.10	136	540889	40.00	ppm	0.00
47) Acenaphthene-d10	8.82	164	318775	40.00	ppm	0.00
69) Phenanthrene-d10	11.18	188	495165	40.00	ppm	-0.01
83) Chrysene-d12	15.90	240	453126	40.00	ppm	-0.02
92) Perylene-d12	18.47	264	406577	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4A	4.35	152	155607	40.00	ppm	-0.02
112) Naphthalene-d8A	6.10	136	540889	40.00	ppm	-0.03
121) Acenaphthene-d10A	8.82	164	318775	40.00	ppm	-0.03
132) Phenanthrene-d10A	11.18	188	495165	40.00	ppm	-0.04
147) Chrysene-d12A	15.90	240	453126	40.00	ppm	-0.05
155) Perylene-d12A	18.47	264	406577	40.00	ppm	-0.05
159) 1,4-Dichlorobenzene-d4b	4.35	152	155607	40.00	ppm	-0.02
161) Phenanthrene-d10b	11.18	188	495165	40.00	ppm	-0.04
163) Chrysene-d12b	15.90	240	453126	40.00	ppm	-0.05
165) Naphthalene-d8b	6.10	136	540889	40.00	ppm	-0.03
167) Acenaphthene-d10b	8.82	164	318775	40.00	ppm	-0.03
169) Naphthalene-d8c	6.10	136	540889	40.00	ppm	-0.03
174) 1,4-Dichlorobenzene-d4a	4.35	152	155607	40.00	ppm	-0.11
176) Chrysene-d12c	15.90	240	453126	40.00	ppm	-0.05
178) Chrysene-d12d	15.90	240	453126	40.00	ppm	-0.05
180) Naphthalene-d8a	6.10	136	540889	40.00	ppm	0.13

System Monitoring Compounds						
5) 2-Fluorophenol	2.97	112	26969	4.99	ppm	0.00
Spiked Amount 50.000			Recovery = 9.98%			
8) Phenol-d5	3.97	99	33602	5.07	ppm	0.01
Spiked Amount 50.000			Recovery = 10.14%			
25) Nitrobenzene-d5	5.07	82	26904	5.19	ppm	-0.01
Spiked Amount 50.000			Recovery = 10.38%			
51) 2-Fluorobiphenyl	7.79	172	51547	5.28	ppm	-0.02
Spiked Amount 50.000			Recovery = 10.56%			
73) 2,4,6-Tribromophenol	10.09	330	4944	4.62	ppm	-0.02
Spiked Amount 50.000			Recovery = 9.24%			
85) Terphenyl-d14	14.01	244	42527	4.91	ppm	-0.02
Spiked Amount 50.000			Recovery = 9.82%			

Target Compounds						Qvalue
2) 1,4-Dioxane	1.78	88	13932	5.14	ppm	96
3) Pyridine	1.98	79	32165	5.42	ppm	98
4) N-Nitrosodimethylamine	1.94	42	11536	5.29	ppm	89
6) Indene	4.67	116	46488	5.39	ppm	96
7) Cumene	3.44	105	66227	5.23	ppm	97
9) Phenol	3.99	94	33826	5.13	ppm	98
10) Aniline	3.95	93	40145	5.25	ppm	94
11) bis(2-Chloroethyl)ether	4.02	93	25050	5.31	ppm	98
12) 2-Chlorophenol	4.12	128	26588	5.20	ppm	96
13) Decane	4.16	43	21057	5.31	ppm	98
14) 1,3-Dichlorobenzene	4.28	146	29636	5.08	ppm	99
15) 1,4-Dichlorobenzene	4.37	146	27956	4.98	ppm	97

(#) = qualifier out of range (m) = manual integration
P103014.D MP4524.M Thu Mar 03 09:08:06 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103014.D Vial: 5
Acq On : 2 Mar 2016 6:39 pm Operator: sarad
Sample : ic4524-5 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 08:58:35 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 08:58:05 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
16)	Benzyl alcohol	4.53	108	15363	4.93	ppm		95
17)	1,2-Dichlorobenzene	4.56	146	27909	5.17	ppm		97
18)	Acetophenone	4.87	105	36422	5.18	ppm		96
19)	2-Methylphenol	4.73	108	21653	4.99	ppm		99
20)	2,2'-oxybis(1-Chloropropan	4.71	121	8174	5.16	ppm	#	94
21)	3&4-Methylphenol	4.94	108	23708	5.21	ppm		98
22)	n-Nitroso-di-n-propylamine	4.88	70	17413	5.30	ppm		98
23)	Hexachloroethane	5.01	201	9201	5.33	ppm		92
26)	Nitrobenzene	5.10	77	26808	5.36	ppm		96
27)	Quinoline	6.63	129	49913	5.19	ppm		98
28)	Isophorone	5.44	82	44969	5.07	ppm		97
29)	2-Nitrophenol	5.55	139	12006	4.74	ppm		85
30)	2,4-Dimethylphenol	5.68	107	21081	4.72	ppm		99
31)	Benzoic acid	5.81	105	9949	3.05	ppm		94
32)	bis(2-Chloroethoxy)methane	5.78	93	28551	5.26	ppm		98
33)	2,4-Dichlorophenol	5.95	162	19286	5.24	ppm		97
34)	2,6-Dichlorophenol	6.25	162	19007	5.34	ppm		95
35)	1,3,5-Trichlorobenzene	5.57	180	22364	5.16	ppm		98
36)	1,2,4-Trichlorobenzene	6.02	180	22530	5.30	ppm		92
37)	1,2,3-Trichlorobenzene	6.35	180	20382	5.19	ppm		91
38)	Naphthalene	6.13	128	71028	5.36	ppm		99
39)	4-Chloroaniline	6.24	127	30237	5.16	ppm		99
40)	2,3-Dichloroaniline	7.64	161	25352	5.55	ppm		98
41)	Caprolactam	6.71	55	8639	4.85	ppm		94
42)	Hexachlorobutadiene	6.35	225	11099	5.65	ppm		94
43)	4-Chloro-3-methylphenol	7.09	107	20273	4.98	ppm		96
44)	2-Methylnaphthalene	7.19	141	39005	5.29	ppm		97
45)	1-Methylnaphthalene	7.34	142	48329	5.37	ppm		97
46)	Dimethylnaphthalene	8.18	156	40886	5.21	ppm		98
48)	Hexachlorocyclopentadiene	7.46	237	18369	8.11	ppm		98
49)	2,4,6-Trichlorophenol	7.67	196	11786	4.83	ppm		96
50)	2,4,5-Trichlorophenol	7.78	196	12956	4.98	ppm		94
52)	2-Chloronaphthalene	7.94	162	45135	5.46	ppm		98
53)	Biphenyl	7.94	154	56812	5.19	ppm		96
54)	2-Nitroaniline	8.13	65	11086	4.56	ppm		94
55)	Dimethylphthalate	8.46	163	49583	5.14	ppm		98
56)	Acenaphthylene	8.59	152	69909	5.02	ppm		96
57)	2,6-Dinitrotoluene	8.53	165	9473	4.82	ppm		92
58)	3-Nitroaniline	8.79	138	11577	4.46	ppm		88
59)	Acenaphthene	8.87	153	42922	5.11	ppm		95
60)	2,4-Dinitrophenol	8.96	184	4195	9.06	ppm		93
61)	4-Nitrophenol	9.29	109	5034	3.75	ppm		90
62)	Dibenzofuran	9.15	168	61714	5.33	ppm		95
63)	2,4-Dinitrotoluene	9.17	165	12512	4.60	ppm		99
64)	2,3,4,6-Tetrachlorophenol	9.39	232	9273	4.86	ppm		94
65)	Diethylphthalate	9.60	149	48549	4.98	ppm		99
66)	Fluorene	9.69	166	50498	5.43	ppm		96
67)	4-Chlorophenyl-phenylether	9.73	204	22699	5.58	ppm		91
68)	4-Nitroaniline	9.76	138	10988	4.69	ppm		96

(#) = qualifier out of range (m) = manual integration

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103014.D Vial: 5
Acq On : 2 Mar 2016 6:39 pm Operator: sarad
Sample : ic4524-5 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 08:58:35 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 08:58:05 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
70)	4,6-Dinitro-2-methylphenol	9.81	198	4274	7.14	ppm	94
71)	n-Nitrosodiphenylamine	9.93	169	35277	5.27	ppm	99
72)	1,2-Diphenylhydrazine	9.98	77	49064	5.19	ppm	95
74)	4-Bromophenyl-phenylether	10.51	248	11636	5.04	ppm	91
75)	Hexachlorobenzene	10.58	284	12826	5.27	ppm	95
76)	Pentachlorophenol	10.93	266	8538	8.36	ppm	94
77)	Phenanthrene	11.22	178	63535	5.01	ppm	100
78)	Anthracene	11.30	178	64555	5.02	ppm	99
79)	Carbazole	11.61	167	66824	5.35	ppm	98
80)	Di-n-butylphthalate	12.30	149	72767	4.72	ppm	98
81)	Fluoranthene	13.24	202	66948	5.23	ppm	97
82)	Octadecane	11.17	57	24057	5.43	ppm	95
84)	Pyrene	13.63	202	72231	4.86	ppm	99
86)	Butylbenzylphthalate	15.00	149	30411	4.27	ppm	94
87)	Butyl stearate	15.22	56	13848	4.14	ppm	91
88)	Benzo[a]anthracene	15.89	228	55988	4.68	ppm	97
89)	3,3'-Dichlorobenzidine	15.91	252	17340	4.21	ppm	91
90)	Chrysene	15.94	228	56260	4.75	ppm	98
91)	bis(2-Ethylhexyl)phthalate	16.17	149	37454	3.95	ppm	100
93)	Di-n-octylphthalate	17.38	149	58128	5.00	ppm	98
94)	Benzo[b]fluoranthene	17.83	252	58241	5.31	ppm	99
95)	Benzo[k]fluoranthene	17.87	252	58022	5.40	ppm	95
96)	Benzo[a]pyrene	18.36	252	50767	5.13	ppm	96
97)	Indeno[1,2,3-cd]pyrene	20.08	276	43144	4.85	ppm	95
98)	Dibenz(a,h)acridine	19.77	279	38461	4.80	ppm	96
99)	Dibenz[a,h]anthracene	20.13	278	46854	5.06	ppm	96
100)	7,12-Dimethylbenz(a)anthra	17.84	256	21729	4.69	ppm	99
101)	Benzo[g,h,i]perylene	20.45	276	51032	5.24	ppm	98

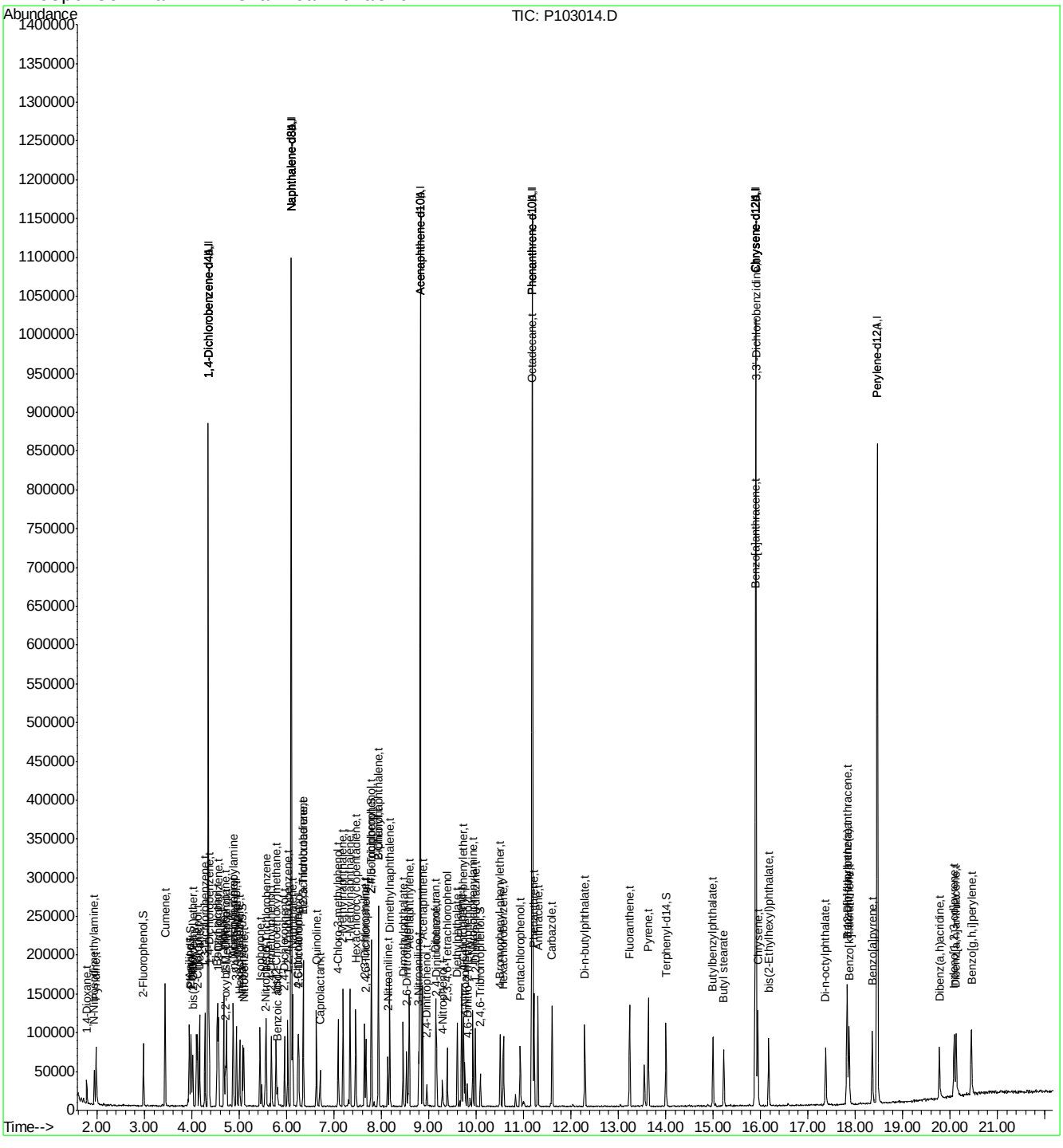
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103014.D Vial: 5
Acq On : 2 Mar 2016 6:39 pm Operator: sarad
Sample : ic4524-5 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 9:07 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 09:05:16 2016
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
03/03/16 15:11

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103015.D Vial: 6
Acq On : 2 Mar 2016 7:08 pm Operator: sarad
Sample : ic4524-2 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 09:08:34 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 09:08:31 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.35	152	148071	40.00	ppm	0.00
24) Naphthalene-d8	6.10	136	519283	40.00	ppm	0.00
47) Acenaphthene-d10	8.82	164	303889	40.00	ppm	0.00
69) Phenanthrene-d10	11.18	188	468881	40.00	ppm	-0.01
83) Chrysene-d12	15.90	240	427194	40.00	ppm	-0.02
92) Perylene-d12	18.47	264	384484	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4A	4.35	152	148071	40.00	ppm	-0.02
112) Naphthalene-d8A	6.10	136	519283	40.00	ppm	-0.03
121) Acenaphthene-d10A	8.82	164	303889	40.00	ppm	-0.03
132) Phenanthrene-d10A	11.18	188	468881	40.00	ppm	-0.04
147) Chrysene-d12A	15.90	240	427194	40.00	ppm	-0.05
155) Perylene-d12A	18.47	264	384484	40.00	ppm	-0.05
159) 1,4-Dichlorobenzene-d4b	4.35	152	148071	40.00	ppm	-0.02
161) Phenanthrene-d10b	11.18	188	468881	40.00	ppm	-0.04
163) Chrysene-d12b	15.90	240	427194	40.00	ppm	-0.05
165) Naphthalene-d8b	6.10	136	519283	40.00	ppm	-0.03
167) Acenaphthene-d10b	8.82	164	303889	40.00	ppm	-0.03
169) Naphthalene-d8c	6.10	136	519283	40.00	ppm	-0.03
174) 1,4-Dichlorobenzene-d4a	4.35	152	148071	40.00	ppm	-0.11
176) Chrysene-d12c	15.90	240	427194	40.00	ppm	-0.05
178) Chrysene-d12d	15.90	240	427194	40.00	ppm	-0.05
180) Naphthalene-d8a	6.10	136	519283	40.00	ppm	0.13

System Monitoring Compounds						
5) 2-Fluorophenol	2.98	112	9792	1.90	ppm	0.01
Spiked Amount 50.000			Recovery = 3.80%			
8) Phenol-d5	3.98	99	13152	2.08	ppm	0.02
Spiked Amount 50.000			Recovery = 4.16%			
25) Nitrobenzene-d5	5.07	82	10608	2.13	ppm	-0.01
Spiked Amount 50.000			Recovery = 4.26%			
51) 2-Fluorobiphenyl	7.79	172	19830	2.13	ppm	-0.02
Spiked Amount 50.000			Recovery = 4.26%			
73) 2,4,6-Tribromophenol	10.09	330	1548	1.53	ppm	-0.02
Spiked Amount 50.000			Recovery = 3.06%			
85) Terphenyl-d14	14.01	244	15913	1.95	ppm	-0.02
Spiked Amount 50.000			Recovery = 3.90%			

Target Compounds						Qvalue
2) 1,4-Dioxane	1.78	88	5752	2.23	ppm	92
3) Pyridine	1.98	79	11702	2.07	ppm	96
4) N-Nitrosodimethylamine	1.94	42	4545	2.19	ppm	92
6) Indene	4.67	116	17006	2.07	ppm	95
7) Cumene	3.44	105	25241	2.10	ppm	97
9) Phenol	3.99	94	13209	2.10	ppm	97
10) Aniline	3.95	93	15193	2.09	ppm	79
11) bis(2-Chloroethyl)ether	4.02	93	10462	2.33	ppm	96
12) 2-Chlorophenol	4.12	128	10670	2.19	ppm	97
13) Decane	4.16	43	8913	2.36	ppm	89
14) 1,3-Dichlorobenzene	4.28	146	11777	2.12	ppm	89
15) 1,4-Dichlorobenzene	4.37	146	11491	2.15	ppm	89

(#) = qualifier out of range (m) = manual integration
P103015.D MP4524.M Thu Mar 03 09:10:04 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103015.D Vial: 6
Acq On : 2 Mar 2016 7:08 pm Operator: sarad
Sample : ic4524-2 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 09:08:34 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 09:08:31 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
16) Benzyl alcohol	4.53	108	5754	1.94 ppm		83
17) 1,2-Dichlorobenzene	4.56	146	10342	2.01 ppm		95
18) Acetophenone	4.87	105	13254	1.98 ppm		92
19) 2-Methylphenol	4.73	108	8340	2.02 ppm		96
20) 2,2'-oxybis(1-Chloropropan	4.72	121	3109	2.06 ppm		95
21) 3&4-Methylphenol	4.95	108	8900	2.06 ppm		98
22) n-Nitroso-di-n-propylamine	4.88	70	6765	2.17 ppm		97
23) Hexachloroethane	5.01	201	3499	2.13 ppm		90
26) Nitrobenzene	5.10	77	9920	2.06 ppm		95
27) Quinoline	6.63	129	18405	2.00 ppm		95
28) Isophorone	5.44	82	15954	1.87 ppm		95
29) 2-Nitrophenol	5.55	139	4542	1.87 ppm		91
30) 2,4-Dimethylphenol	5.68	107	7536	1.76 ppm		95
31) Benzoic acid	5.79	105	2676	0.85 ppm		87
32) bis(2-Chloroethoxy)methane	5.78	93	10818	2.08 ppm		92
33) 2,4-Dichlorophenol	5.96	162	6748	1.91 ppm		84
34) 2,6-Dichlorophenol	6.25	162	6535	1.91 ppm		91
35) 1,3,5-Trichlorobenzene	5.57	180	8324	2.00 ppm		95
36) 1,2,4-Trichlorobenzene	6.02	180	8294	2.03 ppm		89
37) 1,2,3-Trichlorobenzene	6.36	180	8219	2.18 ppm		95
38) Naphthalene	6.13	128	27359	2.15 ppm		96
39) 4-Chloroaniline	6.24	127	10739	1.91 ppm		94
40) 2,3-Dichloroaniline	7.64	161	9506	2.17 ppm		97
41) Caprolactam	6.70	55	2827	1.65 ppm		78
42) Hexachlorobutadiene	6.35	225	4199	2.22 ppm		95
43) 4-Chloro-3-methylphenol	7.09	107	6722	1.72 ppm		95
44) 2-Methylnaphthalene	7.19	141	14472	2.04 ppm		92
45) 1-Methylnaphthalene	7.34	142	17995	2.08 ppm		94
46) Dimethylnaphthalene	8.18	156	15216	2.02 ppm		92
48) Hexachlorocyclopentadiene	7.46	237	6584	3.05 ppm		96
49) 2,4,6-Trichlorophenol	7.67	196	4312	1.85 ppm		99
50) 2,4,5-Trichlorophenol	7.79	196	4313	1.74 ppm		95
52) 2-Chloronaphthalene	7.94	162	17541	2.23 ppm		94
53) Biphenyl	7.94	154	22996	2.20 ppm		97
54) 2-Nitroaniline	8.13	65	3978	1.72 ppm		83
55) Dimethylphthalate	8.46	163	18317	1.99 ppm		99
56) Acenaphthylene	8.59	152	25872	1.95 ppm		94
57) 2,6-Dinitrotoluene	8.53	165	3010	1.60 ppm		93
58) 3-Nitroaniline	8.79	138	3802	1.53 ppm		98
59) Acenaphthene	8.87	153	15999	2.00 ppm		93
60) 2,4-Dinitrophenol	8.96	184	785	6.33 ppm		82
61) 4-Nitrophenol	9.29	109	1841	1.44 ppm	#	83
62) Dibenzofuran	9.15	168	23300	2.11 ppm		98
63) 2,4-Dinitrotoluene	9.17	165	3967	1.95 ppm		92
64) 2,3,4,6-Tetrachlorophenol	9.39	232	2826	1.55 ppm		80
65) Diethylphthalate	9.60	149	18236	1.96 ppm		95
66) Fluorene	9.69	166	18432	2.08 ppm		93
67) 4-Chlorophenyl-phenylether	9.73	204	8412	2.17 ppm		98
68) 4-Nitroaniline	9.76	138	3584	1.61 ppm		94

(#) = qualifier out of range (m) = manual integration
P103015.D MP4524.M Thu Mar 03 09:10:04 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103015.D Vial: 6
Acq On : 2 Mar 2016 7:08 pm Operator: sarad
Sample : ic4524-2 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 09:08:34 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 09:08:31 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
70)	4,6-Dinitro-2-methylphenol	9.81	198	1004	5.44	ppm	92
71)	n-Nitrosodiphenylamine	9.93	169	12791	2.02	ppm	95
72)	1,2-Diphenylhydrazine	9.98	77	17812	1.99	ppm	91
74)	4-Bromophenyl-phenylether	10.51	248	4180	1.91	ppm	92
75)	Hexachlorobenzene	10.58	284	5013	2.18	ppm	90
76)	Pentachlorophenol	10.93	266	2234	5.26	ppm	89
77)	Phenanthrene	11.22	178	24318	2.03	ppm	98
78)	Anthracene	11.30	178	23432	1.93	ppm	99
79)	Carbazole	11.60	167	23377	1.98	ppm	99
80)	Di-n-butylphthalate	12.29	149	23363	1.60	ppm	93
81)	Fluoranthene	13.24	202	23983	1.98	ppm	97
82)	Octadecane	11.17	57	8767	2.09	ppm	97
84)	Pyrene	13.63	202	26127	1.86	ppm	93
86)	Butylbenzylphthalate	14.99	149	8941	1.33	ppm	90
87)	Butyl stearate	15.22	56	3624	1.15	ppm	87
88)	Benzo[a]anthracene	15.89	228	20705	1.84	ppm	99
89)	3,3'-Dichlorobenzidine	15.91	252	5154	1.33	ppm	87
90)	Chrysene	15.94	228	22166	1.98	ppm	98
91)	bis(2-Ethylhexyl)phthalate	16.17	149	10184	1.14	ppm	92
93)	Di-n-octylphthalate	17.38	149	13602	2.95	ppm	97
94)	Benzo[b]fluoranthene	17.83	252	20465	1.97	ppm	94
95)	Benzo[k]fluoranthene	17.87	252	20495	2.02	ppm	91
96)	Benzo[a]pyrene	18.36	252	16901	1.81	ppm	99
97)	Indeno[1,2,3-cd]pyrene	20.08	276	13908m	1.65	ppm	
98)	Dibenz(a,h)acridine	19.78	279	11517	1.52	ppm	97
99)	Dibenz[a,h]anthracene	20.13	278	16778	1.92	ppm	92
100)	7,12-Dimethylbenz(a)anthra	17.83	256	7263	1.66	ppm	87
101)	Benzo[g,h,i]perylene	20.45	276	17502	1.90	ppm	98

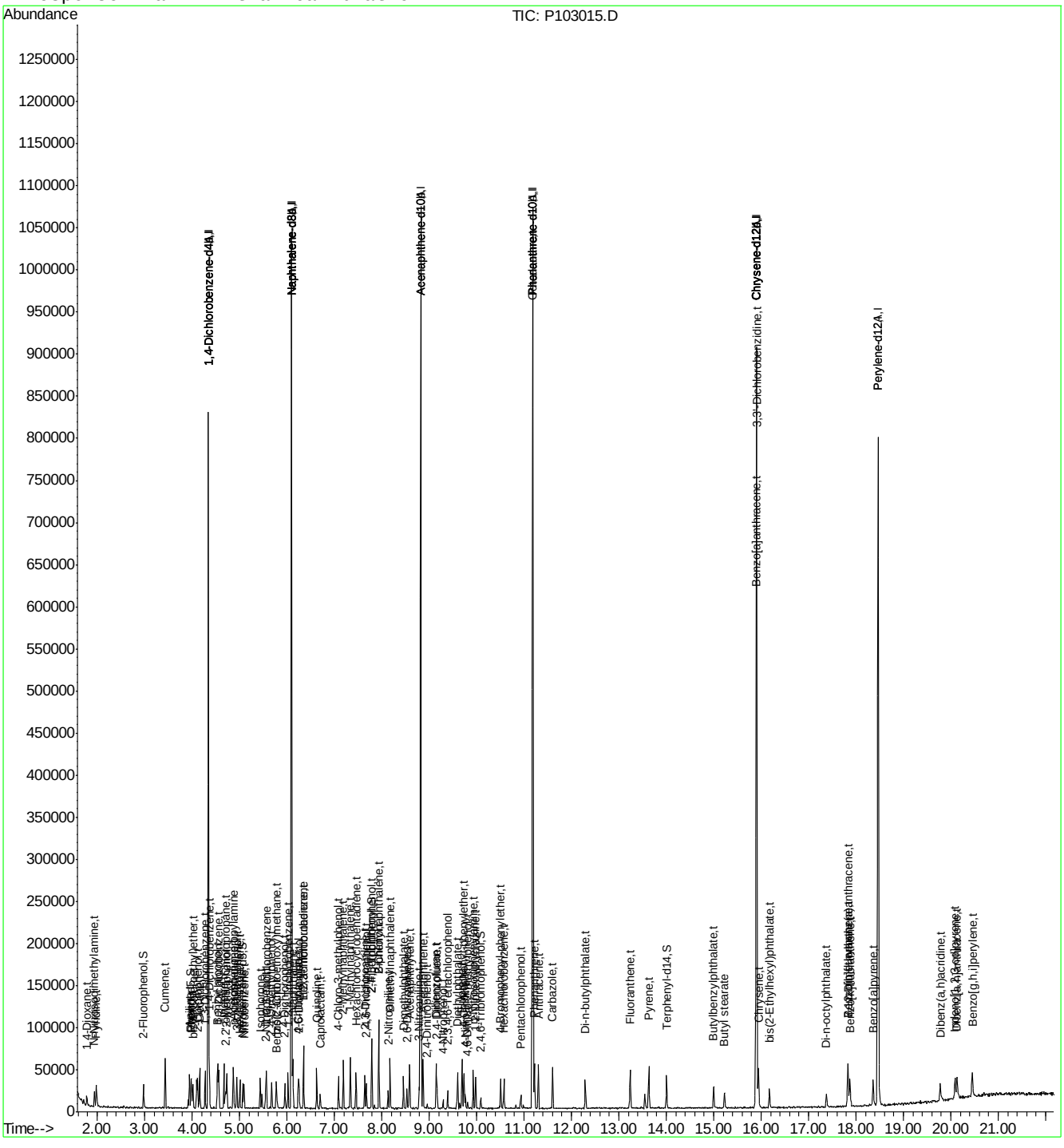
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103015.D Vial: 6
Acq On : 2 Mar 2016 7:08 pm Operator: sarad
Sample : ic4524-2 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 9:09 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 09:08:31 2016
Response via : Initial Calibration



Manual Integration Approval Summary

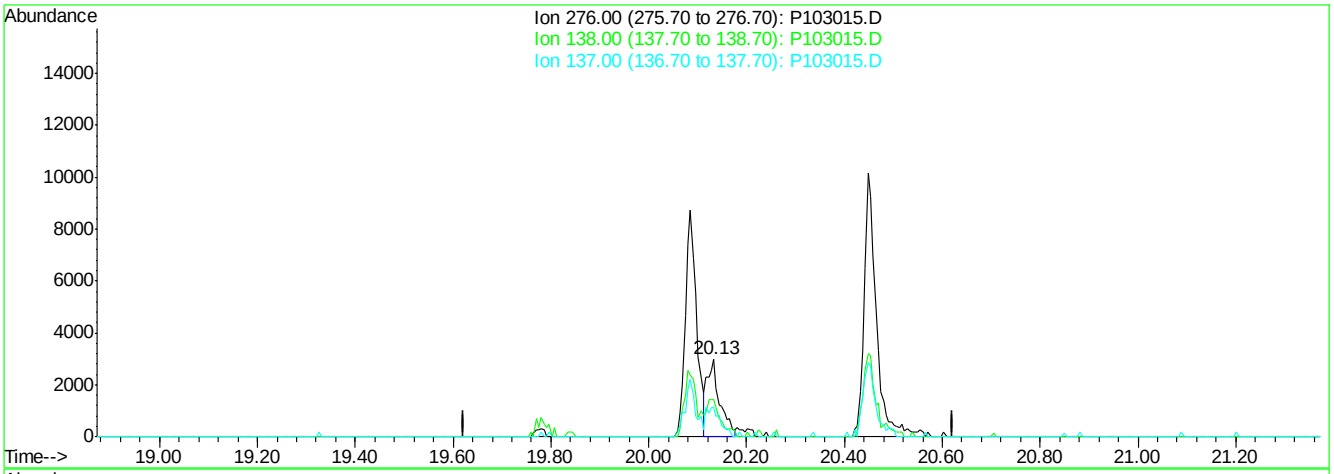
Sample Number:	EP4524-IC4524	**Method:**	SW846 8270D
Lab FileID:	P103015.D	**Analyst approved:**	03/03/16 11:25 Linsey Kirschmann
Injection Time:	03/02/16 19:08	**Supervisor approved:**	03/03/16 15:11 Nina Pandya

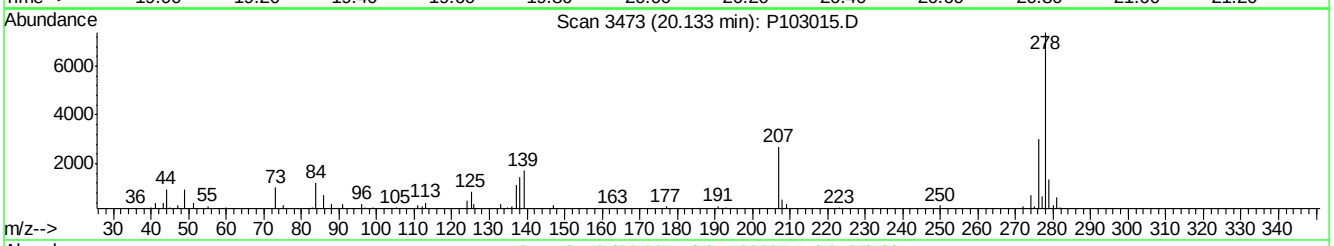
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		20.08	Poor instrument integration

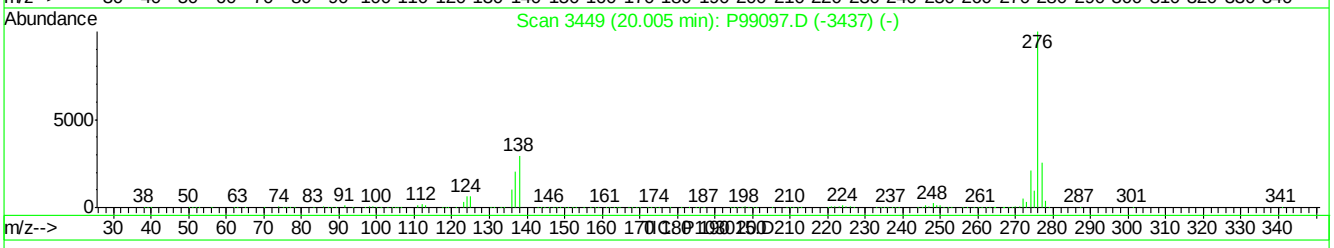
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103015.D Vial: 6
Acq On : 2 Mar 2016 7:08 pm Operator: sarad
Sample : ic4524-2 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 9:08 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 09:08:31 2016
Response via : Multiple Level Calibration







(97) Indeno[1,2,3-cd]pyrene (t)

20.13min 0.65ppm

response 5497

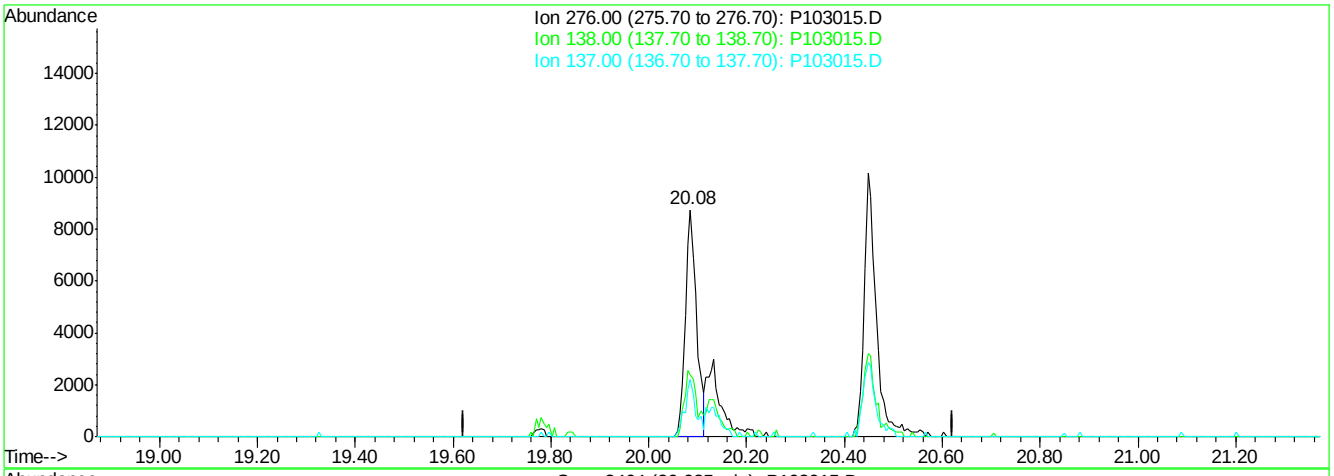
Ion	Exp%	Act%
276.00	100	100
138.00	28.90	45.22
137.00	20.50	50.31
0.00	0.00	0.00

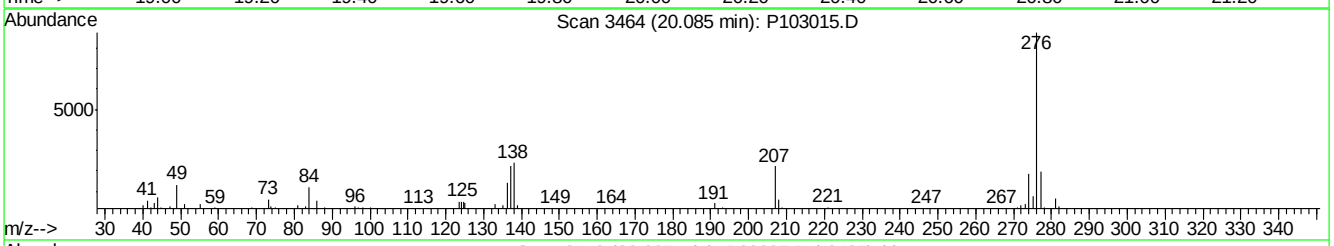
P103015.D MP4524.M Thu Mar 03 09:09:23 2016

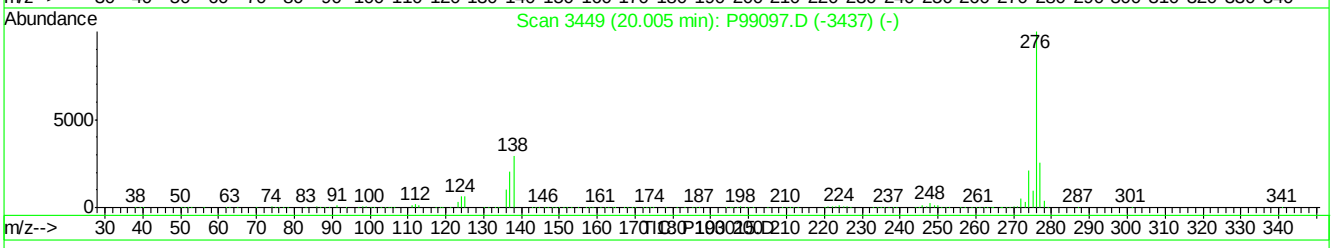
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103015.D Vial: 6
Acq On : 2 Mar 2016 7:08 pm Operator: sarad
Sample : ic4524-2 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 9:09 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 09:08:31 2016
Response via : Multiple Level Calibration







(97) Indeno[1,2,3-cd]pyrene (t)

20.08min 1.65ppm m

response 13908

Ion	Exp%	Act%
276.00	100	100
138.00	28.90	27.33
137.00	20.50	25.37
0.00	0.00	0.00

P103015.D MP4524.M Thu Mar 03 09:09:29 2016

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
03/03/16 15:11

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103016.D Vial: 7
Acq On : 2 Mar 2016 7:37 pm Operator: sarad
Sample : ic4524-1 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 08:58:39 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 08:58:05 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.35	152	155171	40.00	ppm	0.00
24) Naphthalene-d8	6.10	136	555275	40.00	ppm	0.00
47) Acenaphthene-d10	8.82	164	323538	40.00	ppm	0.00
69) Phenanthrene-d10	11.18	188	495080	40.00	ppm	-0.01
83) Chrysene-d12	15.90	240	448414	40.00	ppm	-0.02
92) Perylene-d12	18.47	264	398461	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4A	4.35	152	155171	40.00	ppm	-0.02
112) Naphthalene-d8A	6.10	136	555275	40.00	ppm	-0.03
121) Acenaphthene-d10A	8.82	164	323538	40.00	ppm	-0.03
132) Phenanthrene-d10A	11.18	188	495080	40.00	ppm	-0.04
147) Chrysene-d12A	15.90	240	448414	40.00	ppm	-0.05
155) Perylene-d12A	18.47	264	398461	40.00	ppm	-0.05
159) 1,4-Dichlorobenzene-d4b	4.35	152	155171	40.00	ppm	-0.02
161) Phenanthrene-d10b	11.18	188	495080	40.00	ppm	-0.04
163) Chrysene-d12b	15.90	240	448414	40.00	ppm	-0.05
165) Naphthalene-d8b	6.10	136	555275	40.00	ppm	-0.03
167) Acenaphthene-d10b	8.82	164	323538	40.00	ppm	-0.03
169) Naphthalene-d8c	6.10	136	555275	40.00	ppm	-0.03
174) 1,4-Dichlorobenzene-d4a	4.35	152	155171	40.00	ppm	-0.11
176) Chrysene-d12c	15.90	240	448414	40.00	ppm	-0.05
178) Chrysene-d12d	15.90	240	448414	40.00	ppm	-0.05
180) Naphthalene-d8a	6.10	136	555275	40.00	ppm	0.13

System Monitoring Compounds						
5) 2-Fluorophenol	2.97	112	4980	0.92	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.84%	
8) Phenol-d5	3.98	99	6538	0.99	ppm	0.02
Spiked Amount 50.000			Recovery	=	1.98%	
25) Nitrobenzene-d5	5.07	82	5331	1.00	ppm	-0.01
Spiked Amount 50.000			Recovery	=	2.00%	
51) 2-Fluorobiphenyl	7.79	172	10228	1.03	ppm	-0.02
Spiked Amount 50.000			Recovery	=	2.06%	
73) 2,4,6-Tribromophenol	10.09	330	673	0.63	ppm	-0.02
Spiked Amount 50.000			Recovery	=	1.26%	
85) Terphenyl-d14	14.01	244	8345	0.97	ppm	-0.02
Spiked Amount 50.000			Recovery	=	1.94%	

Target Compounds						Qvalue
2) 1,4-Dioxane	1.78	88	3235	1.20	ppm	91
3) Pyridine	1.99	79	6499	1.10	ppm	98
4) N-Nitrosodimethylamine	1.94	42	2444	1.12	ppm	90
6) Indene	4.67	116	8844	1.03	ppm	91
7) Cumene	3.44	105	14638	1.16	ppm	92
9) Phenol	3.99	94	6552	1.00	ppm	93
10) Aniline	3.95	93	8065	1.06	ppm	87
11) bis(2-Chloroethyl)ether	4.02	93	5482	1.17	ppm	98
12) 2-Chlorophenol	4.12	128	4814	0.94	ppm	97
13) Decane	4.16	43	4471	1.13	ppm	89
14) 1,3-Dichlorobenzene	4.28	146	6006	1.03	ppm	99
15) 1,4-Dichlorobenzene	4.36	146	5565	0.99	ppm	82

(#) = qualifier out of range (m) = manual integration
P103016.D MP4524.M Thu Mar 03 09:14:57 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103016.D Vial: 7
Acq On : 2 Mar 2016 7:37 pm Operator: sarad
Sample : ic4524-1 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 08:58:39 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 08:58:05 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
16)	Benzyl alcohol	4.53	108	2890	0.93	ppm		97
17)	1,2-Dichlorobenzene	4.56	146	5817	1.08	ppm		95
18)	Acetophenone	4.87	105	7136	1.02	ppm		95
19)	2-Methylphenol	4.73	108	4147	0.96	ppm		91
20)	2,2'-oxybis(1-Chloropropan	4.72	121	1794	1.14	ppm		98
21)	3&4-Methylphenol	4.94	108	4450	0.98	ppm		86
22)	n-Nitroso-di-n-propylamine	4.88	70	3507	1.07	ppm		89
23)	Hexachloroethane	5.00	201	1742	1.01	ppm		90
26)	Nitrobenzene	5.09	77	5747	1.12	ppm		89
27)	Quinoline	6.63	129	9837	1.00	ppm		90
28)	Isophorone	5.44	82	8238	0.91	ppm		95
29)	2-Nitrophenol	5.55	139	2172	0.84	ppm		84
30)	2,4-Dimethylphenol	5.68	107	3754	0.82	ppm		90
31)	Benzoic acid	5.79	105	835	0.25	ppm		95
32)	bis(2-Chloroethoxy)methane	5.78	93	5666	1.02	ppm		95
33)	2,4-Dichlorophenol	5.96	162	3337	0.88	ppm		97
34)	2,6-Dichlorophenol	6.25	162	3575	0.98	ppm		94
35)	1,3,5-Trichlorobenzene	5.57	180	4850	1.09	ppm		85
36)	1,2,4-Trichlorobenzene	6.02	180	4557	1.04	ppm		86
37)	1,2,3-Trichlorobenzene	6.35	180	4197	1.04	ppm		93
38)	Naphthalene	6.13	128	14418	1.06	ppm		98
39)	4-Chloroaniline	6.24	127	5443	0.90	ppm		97
40)	2,3-Dichloroaniline	7.64	161	4523	0.96	ppm		91
41)	Caprolactam	6.70	55	1510	0.83	ppm	#	76
42)	Hexachlorobutadiene	6.35	225	2229	1.10	ppm		90
43)	4-Chloro-3-methylphenol	7.09	107	3059	0.73	ppm	#	67
44)	2-Methylnaphthalene	7.19	141	7623	1.01	ppm		98
45)	1-Methylnaphthalene	7.34	142	9057	0.98	ppm		93
46)	Dimethylnaphthalene	8.18	156	8233	1.02	ppm		96
48)	Hexachlorocyclopentadiene	7.46	237	2913	1.27	ppm		88
49)	2,4,6-Trichlorophenol	7.68	196	2008	0.81	ppm		98
50)	2,4,5-Trichlorophenol	7.79	196	1993	0.76	ppm		97
52)	2-Chloronaphthalene	7.94	162	8595	1.02	ppm		90
53)	Biphenyl	7.94	154	11633	1.05	ppm		95
54)	2-Nitroaniline	8.13	65	1760	0.71	ppm		95
55)	Dimethylphthalate	8.46	163	9365	0.96	ppm		96
56)	Acenaphthylene	8.59	152	13949	0.99	ppm		95
57)	2,6-Dinitrotoluene	8.53	165	1603	0.80	ppm		93
58)	3-Nitroaniline	8.79	138	1709	0.65	ppm		73
59)	Acenaphthene	8.87	153	8759	1.03	ppm		92
60)	2,4-Dinitrophenol	8.96	184	259	5.87	ppm	#	22
61)	4-Nitrophenol	9.30	109	572	0.42	ppm	#	56
62)	Dibenzofuran	9.15	168	11667	0.99	ppm		98
63)	2,4-Dinitrotoluene	9.17	165	1578	1.12	ppm		88
64)	2,3,4,6-Tetrachlorophenol	9.39	232	1177	0.61	ppm		89
65)	Diethylphthalate	9.60	149	8984	0.91	ppm		98
66)	Fluorene	9.69	166	9121	0.97	ppm		89
67)	4-Chlorophenyl-phenylether	9.73	204	4077	0.99	ppm		96
68)	4-Nitroaniline	9.76	138	1447	0.61	ppm		92

(#) = qualifier out of range (m) = manual integration
P103016.D MP4524.M Thu Mar 03 09:14:57 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103016.D Vial: 7
Acq On : 2 Mar 2016 7:37 pm Operator: sarad
Sample : ic4524-1 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 08:58:39 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 08:58:05 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

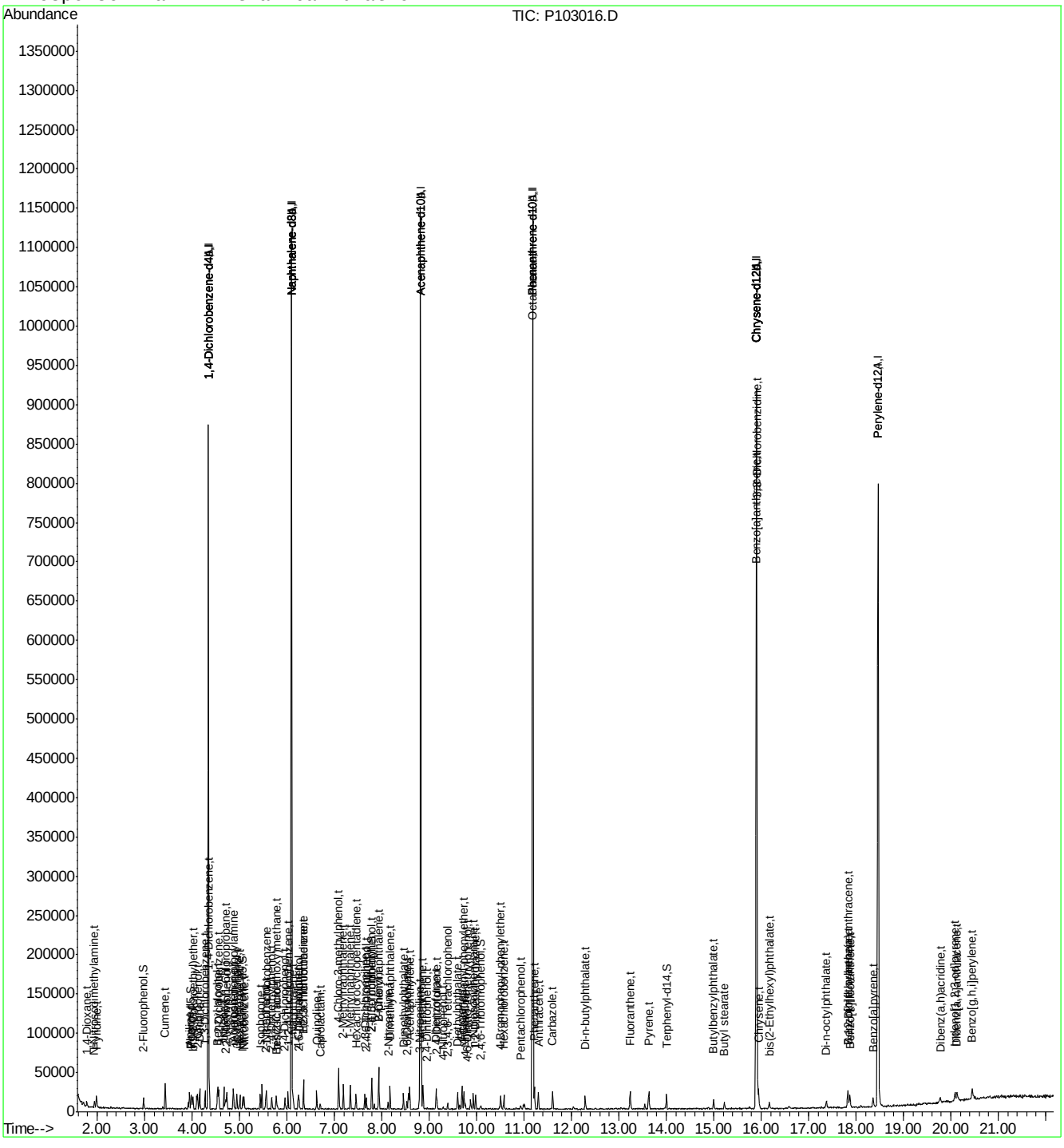
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
70)	4,6-Dinitro-2-methylphenol	9.81	198	406	5.09	ppm	#	29
71)	n-Nitrosodiphenylamine	9.93	169	6294	0.94	ppm		96
72)	1,2-Diphenylhydrazine	9.98	77	8640	0.91	ppm		90
74)	4-Bromophenyl-phenylether	10.51	248	2225	0.96	ppm		96
75)	Hexachlorobenzene	10.58	284	2726	1.12	ppm		95
76)	Pentachlorophenol	10.93	266	748	4.45	ppm		78
77)	Phenanthrene	11.22	178	12359	0.98	ppm		98
78)	Anthracene	11.30	178	11081	0.86	ppm		93
79)	Carbazole	11.60	167	11258	0.90	ppm		93
80)	Di-n-butylphthalate	12.29	149	11428	0.74	ppm		98
81)	Fluoranthene	13.24	202	12351	0.97	ppm		94
82)	Octadecane	11.17	57	4325	0.98	ppm		95
84)	Pyrene	13.63	202	13036	0.89	ppm		96
86)	Butylbenzylphthalate	15.00	149	3399	0.48	ppm		87
87)	Butyl stearate	15.22	56	1463	0.44	ppm		73
88)	Benzo[a]anthracene	15.89	228	10942	0.92	ppm		97
89)	3,3'-Dichlorobenzidine	15.91	252	2232	0.55	ppm		86
90)	Chrysene	15.94	228	10699	0.91	ppm		93
91)	bis(2-Ethylhexyl)phthalate	16.17	149	3603	0.38	ppm		96
93)	Di-n-octylphthalate	17.38	149	5368	2.53	ppm		95
94)	Benzo[b]fluoranthene	17.83	252	9472	0.88	ppm		98
95)	Benzo[k]fluoranthene	17.87	252	10371	0.98	ppm		91
96)	Benzo[a]pyrene	18.36	252	7839	0.81	ppm		97
97)	Indeno[1,2,3-cd]pyrene	20.09	276	6348m	0.73	ppm		
98)	Dibenz(a,h)acridine	19.78	279	5613	0.72	ppm		86
99)	Dibenz[a,h]anthracene	20.13	278	7251	0.80	ppm		92
100)	7,12-Dimethylbenz(a)anthra	17.84	256	2773	0.61	ppm		87
101)	Benzo[g,h,i]perylene	20.45	276	8994	0.94	ppm		87

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103016.D Vial: 7
Acq On : 2 Mar 2016 7:37 pm Operator: sarad
Sample : ic4524-1 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 9:14 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 09:08:31 2016
Response via : Initial Calibration



SGS ACCUTEST JC18516

Manual Integration Approval Summary

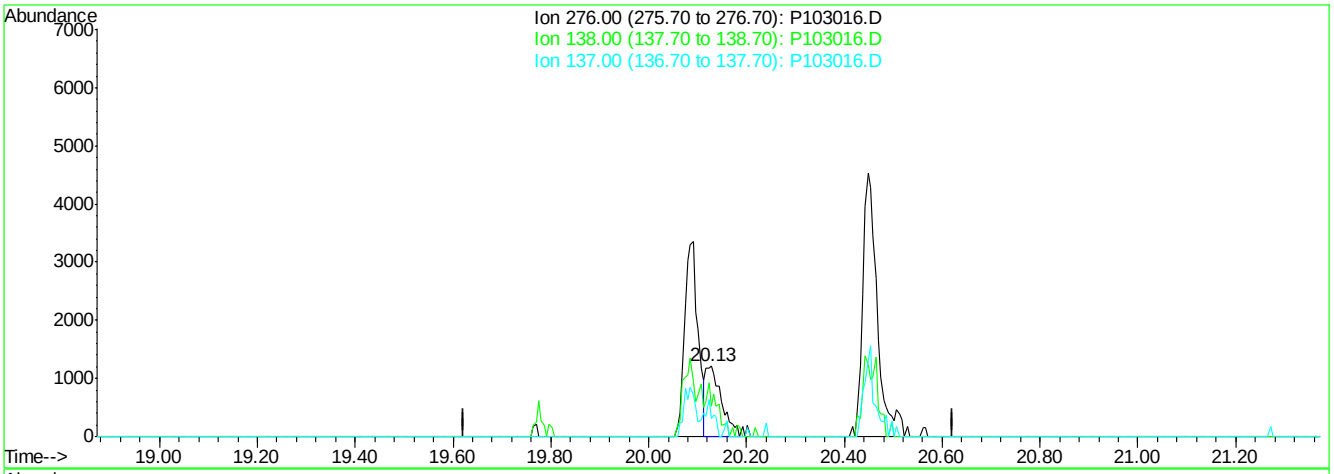
Sample Number:	EP4524-IC4524	**Method:**	SW846 8270D
Lab FileID:	P103016.D	**Analyst approved:**	03/03/16 11:25 Linsey Kirschmann
Injection Time:	03/02/16 19:37	**Supervisor approved:**	03/03/16 15:11 Nina Pandya

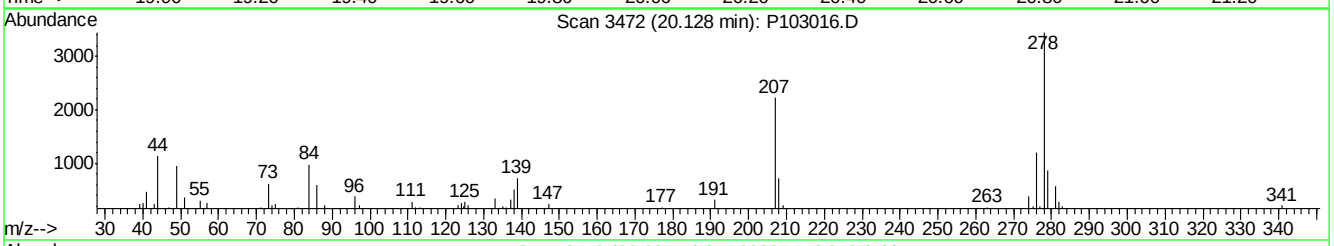
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		20.09	Poor instrument integration

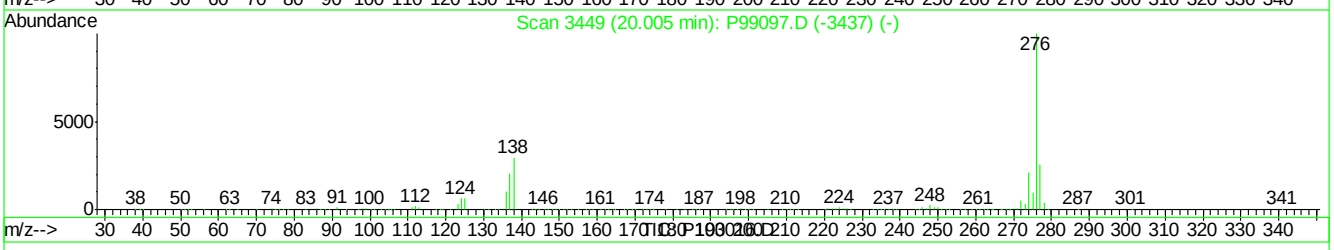
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103016.D Vial: 7
Acq On : 2 Mar 2016 7:37 pm Operator: sarad
Sample : ic4524-1 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 8:58 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 09:08:31 2016
Response via : Multiple Level Calibration







(97) Indeno[1,2,3-cd]pyrene (t)

20.13min 0.32ppm

response 2751

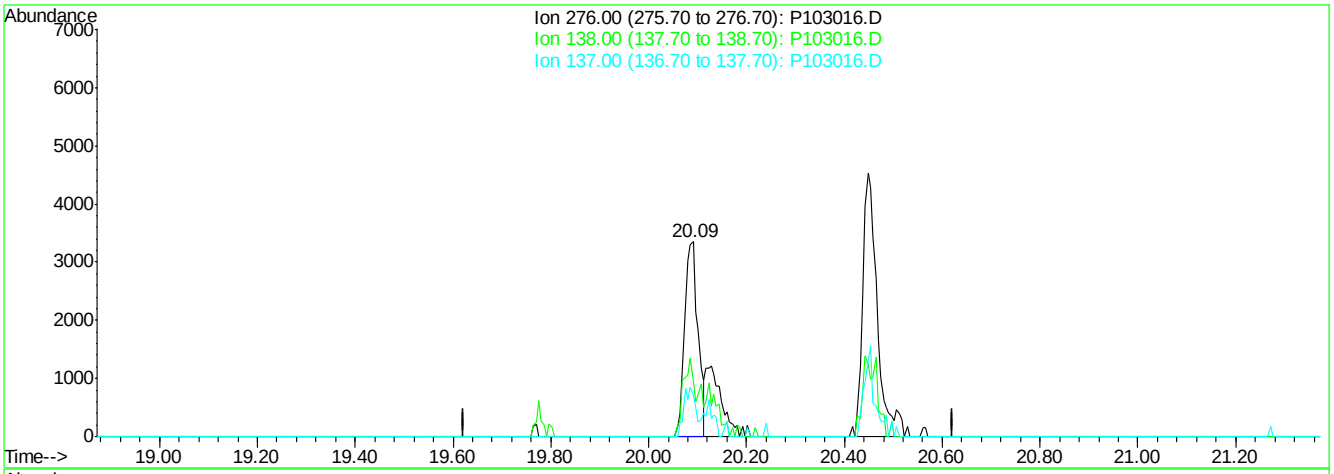
Ion	Exp%	Act%
276.00	100	100
138.00	28.90	24.11
137.00	20.50	15.27
0.00	0.00	0.00

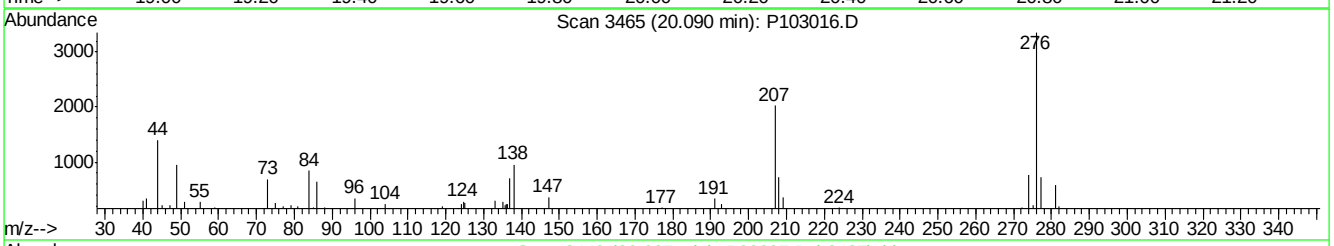
P103016.D MP4524.M Thu Mar 03 09:14:13 2016

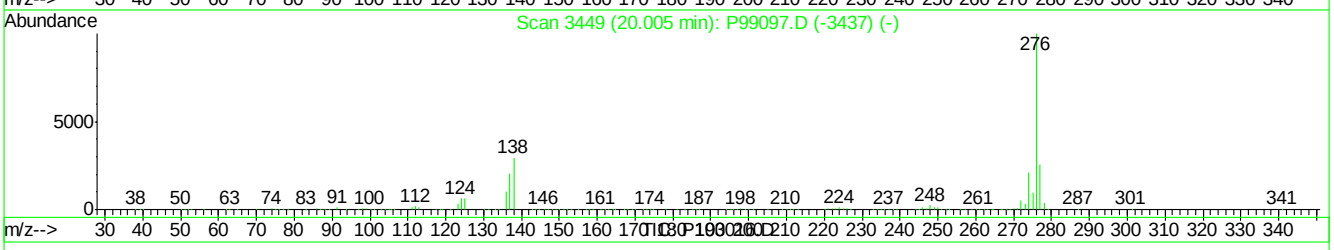
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103016.D Vial: 7
Acq On : 2 Mar 2016 7:37 pm Operator: sarad
Sample : ic4524-1 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 9:14 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 09:08:31 2016
Response via : Multiple Level Calibration







(97) Indeno[1,2,3-cd]pyrene (t)

20.09min 0.73ppm m

response 6348

Ion	Exp%	Act%
276.00	100	100
138.00	28.90	28.36
137.00	20.50	21.29
0.00	0.00	0.00

P103016.D MP4524.M Thu Mar 03 09:14:20 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103017.D Vial: 8
Acq On : 2 Mar 2016 8:06 pm Operator: sarad
Sample : icc4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 09:15:05 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 09:08:31 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.35	152	124231	40.00	ppm	0.00
24) Naphthalene-d8	6.10	136	437439	40.00	ppm	0.00
47) Acenaphthene-d10	8.82	164	253741	40.00	ppm	0.00
69) Phenanthrene-d10	11.18	188	378134	40.00	ppm	-0.01
83) Chrysene-d12	15.91	240	350683	40.00	ppm	-0.02
92) Perylene-d12	18.47	264	328054	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4A	4.35	152	124231	40.00	ppm	-0.02
112) Naphthalene-d8A	6.10	136	437439	40.00	ppm	-0.03
121) Acenaphthene-d10A	8.82	164	253741	40.00	ppm	-0.03
132) Phenanthrene-d10A	11.18	188	378134	40.00	ppm	-0.04
147) Chrysene-d12A	15.91	240	350683	40.00	ppm	-0.04
155) Perylene-d12A	18.47	264	328054	40.00	ppm	-0.05
159) 1,4-Dichlorobenzene-d4b	4.35	152	124231	40.00	ppm	-0.02
161) Phenanthrene-d10b	11.18	188	378134	40.00	ppm	-0.04
163) Chrysene-d12b	15.91	240	350683	40.00	ppm	-0.04
165) Naphthalene-d8b	6.10	136	437439	40.00	ppm	-0.03
167) Acenaphthene-d10b	8.82	164	253741	40.00	ppm	-0.03
169) Naphthalene-d8c	6.10	136	437439	40.00	ppm	-0.03
174) 1,4-Dichlorobenzene-d4a	4.35	152	124231	40.00	ppm	-0.11
176) Chrysene-d12c	15.91	240	350683	40.00	ppm	-0.05
178) Chrysene-d12d	15.91	240	350683	40.00	ppm	-0.05
180) Naphthalene-d8a	6.10	136	437439	40.00	ppm	0.13

System Monitoring Compounds						
5) 2-Fluorophenol	2.97	112	244782	56.72	ppm	0.00
Spiked Amount 50.000			Recovery = 113.44%			
8) Phenol-d5	3.96	99	291076	54.97	ppm	0.00
Spiked Amount 50.000			Recovery = 109.94%			
25) Nitrobenzene-d5	5.07	82	243526	58.08	ppm	-0.01
Spiked Amount 50.000			Recovery = 116.16%			
51) 2-Fluorobiphenyl	7.79	172	409109	52.68	ppm	-0.01
Spiked Amount 50.000			Recovery = 105.36%			
73) 2,4,6-Tribromophenol	10.09	330	54000	66.07	ppm	-0.01
Spiked Amount 50.000			Recovery = 132.14%			
85) Terphenyl-d14	14.01	244	395789	59.01	ppm	-0.01
Spiked Amount 50.000			Recovery = 118.02%			

Target Compounds						Qvalue
2) 1,4-Dioxane	1.78	88	117581	54.38	ppm	95
3) Pyridine	1.97	79	268554	56.73	ppm	95
4) N-Nitrosodimethylamine	1.94	42	101045	57.99	ppm	98
6) Indene	4.68	116	387000	56.16	ppm	98
7) Cumene	3.44	105	542916	53.73	ppm	99
9) Phenol	3.98	94	292195	55.48	ppm	91
10) Aniline	3.95	93	305737	50.09	ppm	93
11) bis(2-Chloroethyl)ether	4.02	93	208557	55.36	ppm	97
12) 2-Chlorophenol	4.11	128	223091	54.63	ppm	97
13) Decane	4.16	43	168665	53.28	ppm	99
14) 1,3-Dichlorobenzene	4.28	146	244389	52.47	ppm	99
15) 1,4-Dichlorobenzene	4.37	146	237485	52.96	ppm	100

(#) = qualifier out of range (m) = manual integration
P103017.D MP4524.M Thu Mar 03 09:16:27 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103017.D Vial: 8
Acq On : 2 Mar 2016 8:06 pm Operator: sarad
Sample : icc4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 09:15:05 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 09:08:31 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
16)	Benzyl alcohol	4.53	108	141064	56.70	ppm		99
17)	1,2-Dichlorobenzene	4.56	146	222053	51.52	ppm		99
18)	Acetophenone	4.87	105	303490	54.08	ppm		97
19)	2-Methylphenol	4.73	108	193523	55.92	ppm		98
20)	2,2'-oxybis(1-Chloropropan	4.71	121	70318	55.64	ppm	#	84
21)	3&4-Methylphenol	4.94	108	215516	59.37	ppm		99
22)	n-Nitroso-di-n-propylamine	4.89	70	153156	58.43	ppm		97
23)	Hexachloroethane	5.01	201	77555	56.23	ppm		94
26)	Nitrobenzene	5.10	77	225838	55.78	ppm		98
27)	Quinoline	6.64	129	437092	56.25	ppm		99
28)	Isophorone	5.44	82	413211	57.62	ppm		99
29)	2-Nitrophenol	5.55	139	123178	60.15	ppm		92
30)	2,4-Dimethylphenol	5.68	107	209702	58.08	ppm		98
31)	Benzoic acid	5.88	105	155312	58.82	ppm		96
32)	bis(2-Chloroethoxy)methane	5.78	93	252768	57.57	ppm		98
33)	2,4-Dichlorophenol	5.95	162	177728	59.71	ppm		99
34)	2,6-Dichlorophenol	6.26	162	165495	57.54	ppm		97
35)	1,3,5-Trichlorobenzene	5.57	180	185172	52.87	ppm		99
36)	1,2,4-Trichlorobenzene	6.02	180	181262	52.73	ppm		95
37)	1,2,3-Trichlorobenzene	6.36	180	164492	51.83	ppm		99
38)	Naphthalene	6.13	128	585134	54.55	ppm		99
39)	4-Chloroaniline	6.24	127	257943	54.40	ppm		98
40)	2,3-Dichloroaniline	7.64	161	220036	59.56	ppm		98
41)	Caprolactam	6.75	55	86330	59.96	ppm		97
42)	Hexachlorobutadiene	6.35	225	90265	56.78	ppm		99
43)	4-Chloro-3-methylphenol	7.08	107	201867	61.35	ppm		95
44)	2-Methylnaphthalene	7.19	141	326822	54.80	ppm		98
45)	1-Methylnaphthalene	7.34	142	397618	54.61	ppm		99
46)	Dimethylnaphthalene	8.18	156	352622	55.60	ppm		100
48)	Hexachlorocyclopentadiene	7.46	237	206540	114.53	ppm		100
49)	2,4,6-Trichlorophenol	7.67	196	116436	59.91	ppm		100
50)	2,4,5-Trichlorophenol	7.78	196	125359	60.57	ppm		99
52)	2-Chloronaphthalene	7.95	162	352021	53.48	ppm		99
53)	Biphenyl	7.94	154	450733	51.74	ppm		100
54)	2-Nitroaniline	8.14	65	117767	60.81	ppm		91
55)	Dimethylphthalate	8.47	163	428351	55.76	ppm		98
56)	Acenaphthylene	8.59	152	586858	52.98	ppm		100
57)	2,6-Dinitrotoluene	8.54	165	101635	64.90	ppm		94
58)	3-Nitroaniline	8.80	138	120352	58.19	ppm		95
59)	Acenaphthene	8.87	153	363738	54.35	ppm		97
60)	2,4-Dinitrophenol	8.96	184	102911	107.60	ppm		98
61)	4-Nitrophenol	9.26	109	64581	60.49	ppm		97
62)	Dibenzofuran	9.15	168	510264	55.37	ppm		98
63)	2,4-Dinitrotoluene	9.17	165	131015	57.04	ppm		98
64)	2,3,4,6-Tetrachlorophenol	9.39	232	95041	62.54	ppm		97
65)	Diethylphthalate	9.61	149	434775	56.04	ppm		99
66)	Fluorene	9.70	166	423992	57.28	ppm		100
67)	4-Chlorophenyl-phenylether	9.74	204	185974	57.40	ppm		97
68)	4-Nitroaniline	9.78	138	115638	62.06	ppm		100

(#) = qualifier out of range (m) = manual integration

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103017.D Vial: 8
Acq On : 2 Mar 2016 8:06 pm Operator: sarad
Sample : icc4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 09:15:05 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 09:08:31 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
70)	4,6-Dinitro-2-methylphenol	9.82	198	74923	56.72	ppm	96
71)	n-Nitrosodiphenylamine	9.93	169	316794	61.94	ppm	99
72)	1,2-Diphenylhydrazine	9.98	77	426774	59.08	ppm	95
74)	4-Bromophenyl-phenylether	10.51	248	107403	60.89	ppm	99
75)	Hexachlorobenzene	10.58	284	109393	58.88	ppm	94
76)	Pentachlorophenol	10.93	266	131524	98.75	ppm	97
77)	Phenanthrene	11.23	178	542665	56.07	ppm	99
78)	Anthracene	11.31	178	562547	57.33	ppm	99
79)	Carbazole	11.61	167	581354	60.92	ppm	99
80)	Di-n-butylphthalate	12.30	149	728458	61.91	ppm	100
81)	Fluoranthene	13.25	202	609214	62.34	ppm	98
82)	Octadecane	11.17	57	230371	68.10	ppm	97
84)	Pyrene	13.64	202	625809	54.36	ppm	97
86)	Butylbenzylphthalate	15.00	149	332955	60.35	ppm	98
87)	Butyl stearate	15.23	56	163184	62.97	ppm	94
88)	Benzo[a]anthracene	15.89	228	528127	57.08	ppm	100
89)	3,3'-Dichlorobenzidine	15.92	252	197984	62.07	ppm	98
90)	Chrysene	15.96	228	504341	55.00	ppm	99
91)	bis(2-Ethylhexyl)phthalate	16.17	149	438733	59.75	ppm	98
93)	Di-n-octylphthalate	17.38	149	753065	55.08	ppm	98
94)	Benzo[b]fluoranthene	17.84	252	554377	62.60	ppm	99
95)	Benzo[k]fluoranthene	17.89	252	512346	59.04	ppm	100
96)	Benzo[a]pyrene	18.37	252	498096	62.42	ppm	99
97)	Indeno[1,2,3-cd]pyrene	20.10	276	455306	63.43	ppm	98
98)	Dibenz(a,h)acridine	19.79	279	433348	67.08	ppm	98
99)	Dibenz[a,h]anthracene	20.14	278	481767	64.53	ppm	99
100)	7,12-Dimethylbenz(a)anthra	17.85	256	243106	64.97	ppm	99
101)	Benzo[g,h,i]perylene	20.47	276	499527	63.61	ppm	98

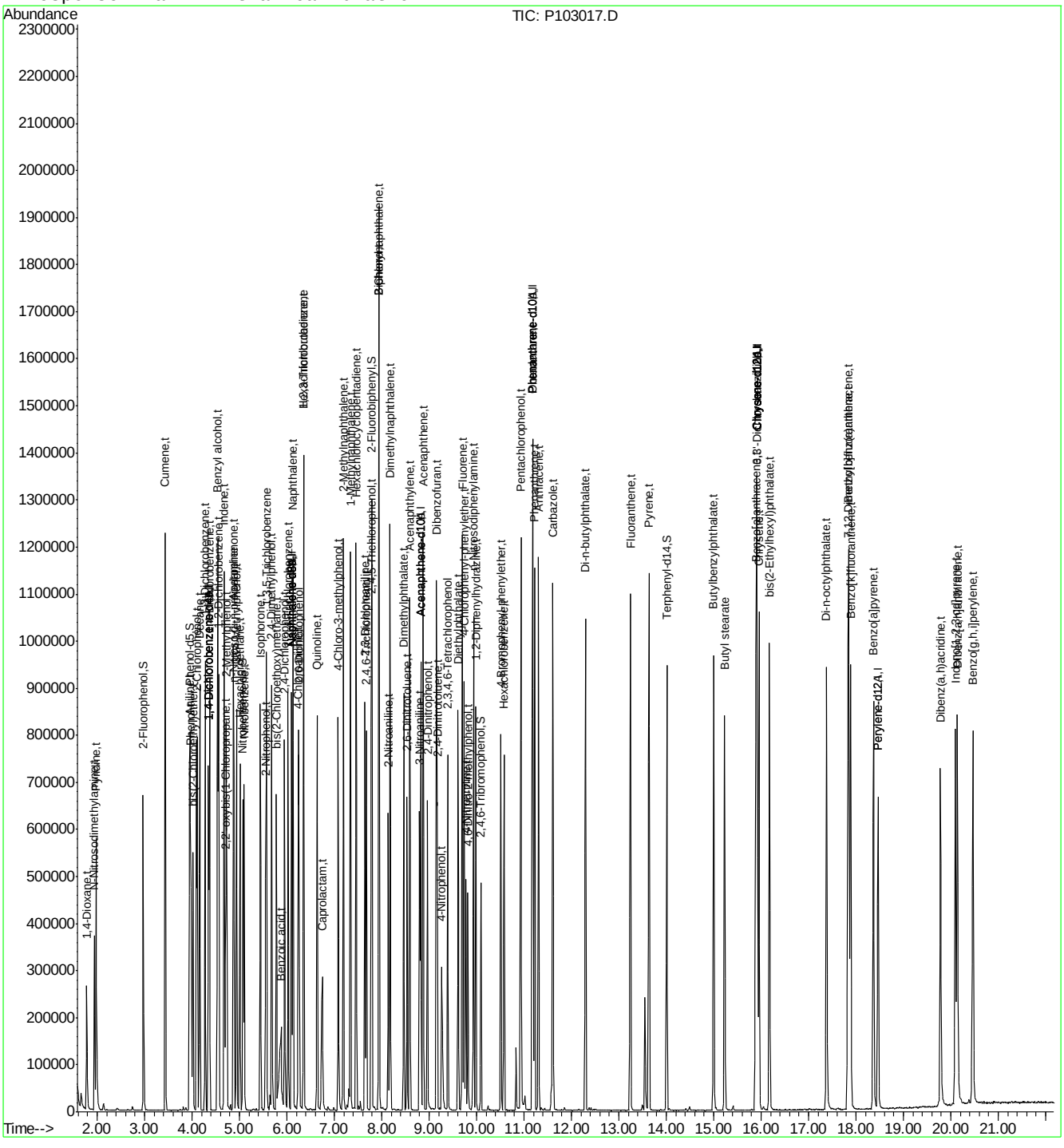
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103017.D Vial: 8
Acq On : 2 Mar 2016 8:06 pm Operator: sarad
Sample : icc4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 9:16 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 09:08:31 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103018.D Vial: 9
Acq On : 2 Mar 2016 8:36 pm Operator: sarad
Sample : ic4524-25 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 08:58:43 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 08:58:05 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.35	152	124470	40.00	ppm	0.00
24) Naphthalene-d8	6.10	136	442285	40.00	ppm	0.00
47) Acenaphthene-d10	8.82	164	259301	40.00	ppm	0.00
69) Phenanthrene-d10	11.18	188	393353	40.00	ppm	-0.01
83) Chrysene-d12	15.90	240	355354	40.00	ppm	-0.02
92) Perylene-d12	18.47	264	330253	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4A	4.35	152	124470	40.00	ppm	-0.02
112) Naphthalene-d8A	6.10	136	442285	40.00	ppm	-0.03
121) Acenaphthene-d10A	8.82	164	259301	40.00	ppm	-0.03
132) Phenanthrene-d10A	11.18	188	393353	40.00	ppm	-0.04
147) Chrysene-d12A	15.90	240	355354	40.00	ppm	-0.05
155) Perylene-d12A	18.47	264	330253	40.00	ppm	-0.05
159) 1,4-Dichlorobenzene-d4b	4.35	152	124470	40.00	ppm	-0.02
161) Phenanthrene-d10b	11.18	188	393353	40.00	ppm	-0.04
163) Chrysene-d12b	15.90	240	355354	40.00	ppm	-0.05
165) Naphthalene-d8b	6.10	136	442285	40.00	ppm	-0.03
167) Acenaphthene-d10b	8.82	164	259301	40.00	ppm	-0.03
169) Naphthalene-d8c	6.10	136	442285	40.00	ppm	-0.03
174) 1,4-Dichlorobenzene-d4a	4.35	152	124470	40.00	ppm	-0.11
176) Chrysene-d12c	15.90	240	355354	40.00	ppm	-0.05
178) Chrysene-d12d	15.90	240	355354	40.00	ppm	-0.05
180) Naphthalene-d8a	6.10	136	442285	40.00	ppm	0.13

System Monitoring Compounds						
5) 2-Fluorophenol	2.97	112	120675	27.91	ppm	0.00
Spiked Amount 50.000			Recovery = 55.82%			
8) Phenol-d5	3.97	99	145695	27.46	ppm	0.00
Spiked Amount 50.000			Recovery = 54.92%			
25) Nitrobenzene-d5	5.07	82	121082	28.56	ppm	-0.01
Spiked Amount 50.000			Recovery = 57.12%			
51) 2-Fluorobiphenyl	7.79	172	209611	26.41	ppm	-0.01
Spiked Amount 50.000			Recovery = 52.82%			
73) 2,4,6-Tribromophenol	10.09	330	25324	29.79	ppm	-0.02
Spiked Amount 50.000			Recovery = 59.58%			
85) Terphenyl-d14	14.01	244	192291	28.30	ppm	-0.02
Spiked Amount 50.000			Recovery = 56.60%			

Target Compounds						Qvalue
2) 1,4-Dioxane	1.78	88	56098	25.90	ppm	96
3) Pyridine	1.97	79	136188	28.71	ppm	97
4) N-Nitrosodimethylamine	1.94	42	49690	28.46	ppm	99
6) Indene	4.67	116	194064	28.11	ppm	98
7) Cumene	3.43	105	283811	28.04	ppm	98
9) Phenol	3.98	94	147604	27.97	ppm	97
10) Aniline	3.95	93	167753	27.43	ppm	82
11) bis(2-Chloroethyl)ether	4.02	93	103434	27.40	ppm	99
12) 2-Chlorophenol	4.11	128	111889	27.35	ppm	96
13) Decane	4.16	43	87928	27.72	ppm	97
14) 1,3-Dichlorobenzene	4.28	146	124339	26.64	ppm	97
15) 1,4-Dichlorobenzene	4.37	146	121849	27.12	ppm	98

(#) = qualifier out of range (m) = manual integration
P103018.D MP4524.M Thu Mar 03 09:17:56 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103018.D Vial: 9
Acq On : 2 Mar 2016 8:36 pm Operator: sarad
Sample : ic4524-25 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 08:58:43 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 08:58:05 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
16) Benzyl alcohol	4.53	108	69022	27.69 ppm		96
17) 1,2-Dichlorobenzene	4.56	146	113594	26.30 ppm		100
18) Acetophenone	4.87	105	153764	27.35 ppm		99
19) 2-Methylphenol	4.73	108	97495	28.12 ppm		99
20) 2,2'-oxybis(1-Chloropropan	4.71	121	35279	27.86 ppm	#	88
21) 3&4-Methylphenol	4.94	108	106602	29.31 ppm		98
22) n-Nitroso-di-n-propylamine	4.88	70	77193	29.39 ppm		97
23) Hexachloroethane	5.01	201	39144	28.32 ppm		92
26) Nitrobenzene	5.10	77	114670	28.01 ppm		98
27) Quinoline	6.63	129	217173	27.64 ppm		98
28) Isophorone	5.44	82	205558	28.35 ppm		97
29) 2-Nitrophenol	5.55	139	60673	29.31 ppm		91
30) 2,4-Dimethylphenol	5.68	107	99929	27.38 ppm		99
31) Benzoic acid	5.84	105	66251	24.82 ppm		97
32) bis(2-Chloroethoxy)methane	5.78	93	126470	28.49 ppm		98
33) 2,4-Dichlorophenol	5.95	162	89796	29.84 ppm		97
34) 2,6-Dichlorophenol	6.25	162	83622	28.76 ppm		99
35) 1,3,5-Trichlorobenzene	5.57	180	94745	26.75 ppm		99
36) 1,2,4-Trichlorobenzene	6.02	180	91759	26.40 ppm		98
37) 1,2,3-Trichlorobenzene	6.36	180	83571	26.04 ppm		98
38) Naphthalene	6.13	128	301381	27.79 ppm		98
39) 4-Chloroaniline	6.24	127	131232	27.37 ppm		98
40) 2,3-Dichloroaniline	7.64	161	108904	29.16 ppm		99
41) Caprolactam	6.72	55	41224	28.32 ppm		98
42) Hexachlorobutadiene	6.35	225	46039	28.64 ppm		97
43) 4-Chloro-3-methylphenol	7.08	107	97636	29.35 ppm		98
44) 2-Methylnaphthalene	7.19	141	166891	27.68 ppm		97
45) 1-Methylnaphthalene	7.34	142	203584	27.65 ppm		99
46) Dimethylnaphthalene	8.18	156	179244	27.95 ppm		99
48) Hexachlorocyclopentadiene	7.46	237	98948	53.69 ppm		99
49) 2,4,6-Trichlorophenol	7.67	196	57772	29.09 ppm		97
50) 2,4,5-Trichlorophenol	7.78	196	58929	27.86 ppm		97
52) 2-Chloronaphthalene	7.94	162	182832	27.18 ppm		99
53) Biphenyl	7.94	154	234397	26.33 ppm		99
54) 2-Nitroaniline	8.13	65	56891	28.75 ppm		90
55) Dimethylphthalate	8.46	163	213580	27.21 ppm		99
56) Acenaphthylene	8.59	152	302131	26.69 ppm		98
57) 2,6-Dinitrotoluene	8.54	165	47737	29.83 ppm		97
58) 3-Nitroaniline	8.79	138	58009	27.45 ppm		95
59) Acenaphthene	8.87	153	185046	27.06 ppm		97
60) 2,4-Dinitrophenol	8.96	184	40855	45.93 ppm		98
61) 4-Nitrophenol	9.27	109	29246	26.81 ppm		98
62) Dibenzofuran	9.15	168	263103	27.94 ppm		97
63) 2,4-Dinitrotoluene	9.17	165	64864	26.76 ppm		94
64) 2,3,4,6-Tetrachlorophenol	9.39	232	44863	28.89 ppm		96
65) Diethylphthalate	9.60	149	214134	27.01 ppm		98
66) Fluorene	9.69	166	212970	28.16 ppm		99
67) 4-Chlorophenyl-phenylether	9.73	204	95178	28.75 ppm		98
68) 4-Nitroaniline	9.77	138	55005	28.89 ppm		97

(#) = qualifier out of range (m) = manual integration
P103018.D MP4524.M Thu Mar 03 09:17:56 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103018.D Vial: 9
Acq On : 2 Mar 2016 8:36 pm Operator: sarad
Sample : ic4524-25 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 08:58:43 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 08:58:05 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
70)	4,6-Dinitro-2-methylphenol	9.81	198	32324	26.38	ppm	96
71)	n-Nitrosodiphenylamine	9.93	169	157662	29.63	ppm	98
72)	1,2-Diphenylhydrazine	9.98	77	217259	28.91	ppm	97
74)	4-Bromophenyl-phenylether	10.51	248	51682	28.17	ppm	96
75)	Hexachlorobenzene	10.58	284	54145	28.02	ppm	98
76)	Pentachlorophenol	10.93	266	57853	41.80	ppm	100
77)	Phenanthrene	11.22	178	279626	27.77	ppm	98
78)	Anthracene	11.30	178	284194	27.84	ppm	98
79)	Carbazole	11.61	167	295428	29.76	ppm	99
80)	Di-n-butylphthalate	12.29	149	359469	29.37	ppm	99
81)	Fluoranthene	13.24	202	306291	30.13	ppm	98
82)	Octadecane	11.17	57	112226	31.89	ppm	95
84)	Pyrene	13.63	202	321366	27.55	ppm	97
86)	Butylbenzylphthalate	15.00	149	156979	28.08	ppm	99
87)	Butyl stearate	15.22	56	77227	29.41	ppm	93
88)	Benzo[a]anthracene	15.89	228	257688	27.49	ppm	99
89)	3,3'-Dichlorobenzidine	15.91	252	94027	29.09	ppm	99
90)	Chrysene	15.95	228	253919	27.33	ppm	97
91)	bis(2-Ethylhexyl)phthalate	16.17	149	206131	27.70	ppm	99
93)	Di-n-octylphthalate	17.38	149	346960	23.67	ppm	99
94)	Benzo[b]fluoranthene	17.83	252	263165	29.52	ppm	98
95)	Benzo[k]fluoranthene	17.88	252	258312	29.57	ppm	97
96)	Benzo[a]pyrene	18.36	252	243353	30.29	ppm	99
97)	Indeno[1,2,3-cd]pyrene	20.09	276	214090	29.63	ppm	96
98)	Dibenz(a,h)acridine	19.78	279	198286	30.49	ppm	99
99)	Dibenz[a,h]anthracene	20.13	278	225316	29.98	ppm	98
100)	7,12-Dimethylbenz(a)anthra	17.84	256	115782	30.74	ppm	99
101)	Benzo[g,h,i]perylene	20.46	276	234554	29.67	ppm	98

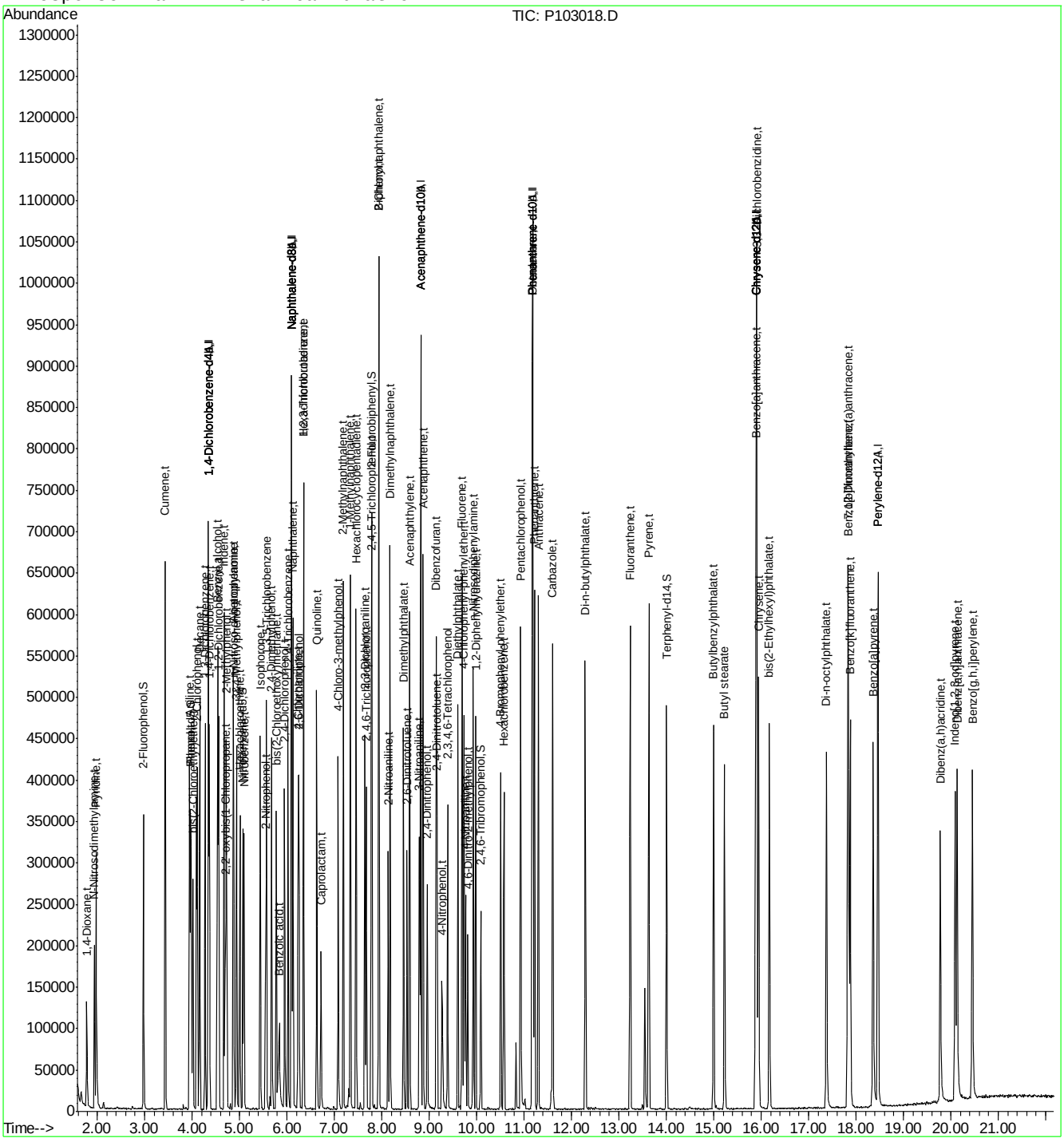
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103018.D Vial: 9
Acq On : 2 Mar 2016 8:36 pm Operator: sarad
Sample : ic4524-25 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 9:17 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 09:08:31 2016
Response via : Initial Calibration



SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103019.D Vial: 10
Acq On : 2 Mar 2016 9:05 pm Operator: sarad
Sample : icv4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 10:47:37 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 10:44:44 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.34	152	149576	40.00	ppm	0.00
24) Naphthalene-d8	6.10	136	503799	40.00	ppm	0.00
47) Acenaphthene-d10	8.82	164	294376	40.00	ppm	0.00
69) Phenanthrene-d10	11.18	188	436802	40.00	ppm	0.00
83) Chrysene-d12	15.90	240	397805	40.00	ppm	-0.01
92) Perylene-d12	18.46	264	355781	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.34	152	149576	40.00	ppm	-0.03
112) Naphthalene-d8A	6.10	136	503799	40.00	ppm	-0.03
121) Acenaphthene-d10A	8.82	164	294376	40.00	ppm	-0.04
132) Phenanthrene-d10A	11.18	188	436802	40.00	ppm	-0.04
147) Chrysene-d12A	15.90	240	397805	40.00	ppm	-0.05
155) Perylene-d12A	18.46	264	355781	40.00	ppm	-0.06
159) 1,4-Dichlorobenzene-d4b	4.34	152	149576	40.00	ppm	-0.03
161) Phenanthrene-d10b	11.18	188	436802	40.00	ppm	-0.04
163) Chrysene-d12b	15.90	240	397805	40.00	ppm	-0.05
165) Naphthalene-d8b	6.10	136	503799	40.00	ppm	-0.03
167) Acenaphthene-d10b	8.82	164	294376	40.00	ppm	-0.04
169) Naphthalene-d8c	6.10	136	503799	40.00	ppm	-0.03
174) 1,4-Dichlorobenzene-d4a	4.34	152	149576	40.00	ppm	-0.11
176) Chrysene-d12c	15.90	240	397753	40.00	ppm	-0.06
178) Chrysene-d12d	15.90	240	397753	40.00	ppm	-0.06
180) Naphthalene-d8a	6.10	136	503799	40.00	ppm	0.13

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	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds						Qvalue
9) Phenol	3.98	94	310486	47.36	ppm	88
12) 2-Chlorophenol	4.11	128	241093	48.54	ppm	99
19) 2-Methylphenol	4.72	108	214907	50.87	ppm	98
21) 3&4-Methylphenol	4.93	108	226649	49.17	ppm	99
29) 2-Nitrophenol	5.55	139	127036	52.92	ppm	98
30) 2,4-Dimethylphenol	5.67	107	227368	55.77	ppm	99
31) Benzoic acid	5.87	105	147006	46.42	ppm	97
33) 2,4-Dichlorophenol	5.95	162	177172	49.74	ppm	96
34) 2,6-Dichlorophenol	6.25	162	177036	51.78	ppm	96
43) 4-Chloro-3-methylphenol	7.07	107	196038	51.51	ppm	99
49) 2,4,6-Trichlorophenol	7.67	196	120063	52.06	ppm	100
50) 2,4,5-Trichlorophenol	7.77	196	117443	48.94	ppm	97

(#) = qualifier out of range (m) = manual integration
P103019.D MP4524.M Thu Mar 03 10:49:19 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103019.D Vial: 10
Acq On : 2 Mar 2016 9:05 pm Operator: sarad
Sample : icv4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 10:47:37 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 10:44:44 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
60)	2,4-Dinitrophenol	8.96	184	39439	39.37	ppm	96
61)	4-Nitrophenol	9.26	109	61537	50.38	ppm	99
64)	2,3,4,6-Tetrachlorophenol	9.39	232	87709	47.57	ppm	97
70)	4,6-Dinitro-2-methylphenol	9.81	198	67907	42.45	ppm	96
76)	Pentachlorophenol	10.93	266	58985	43.19	ppm	98

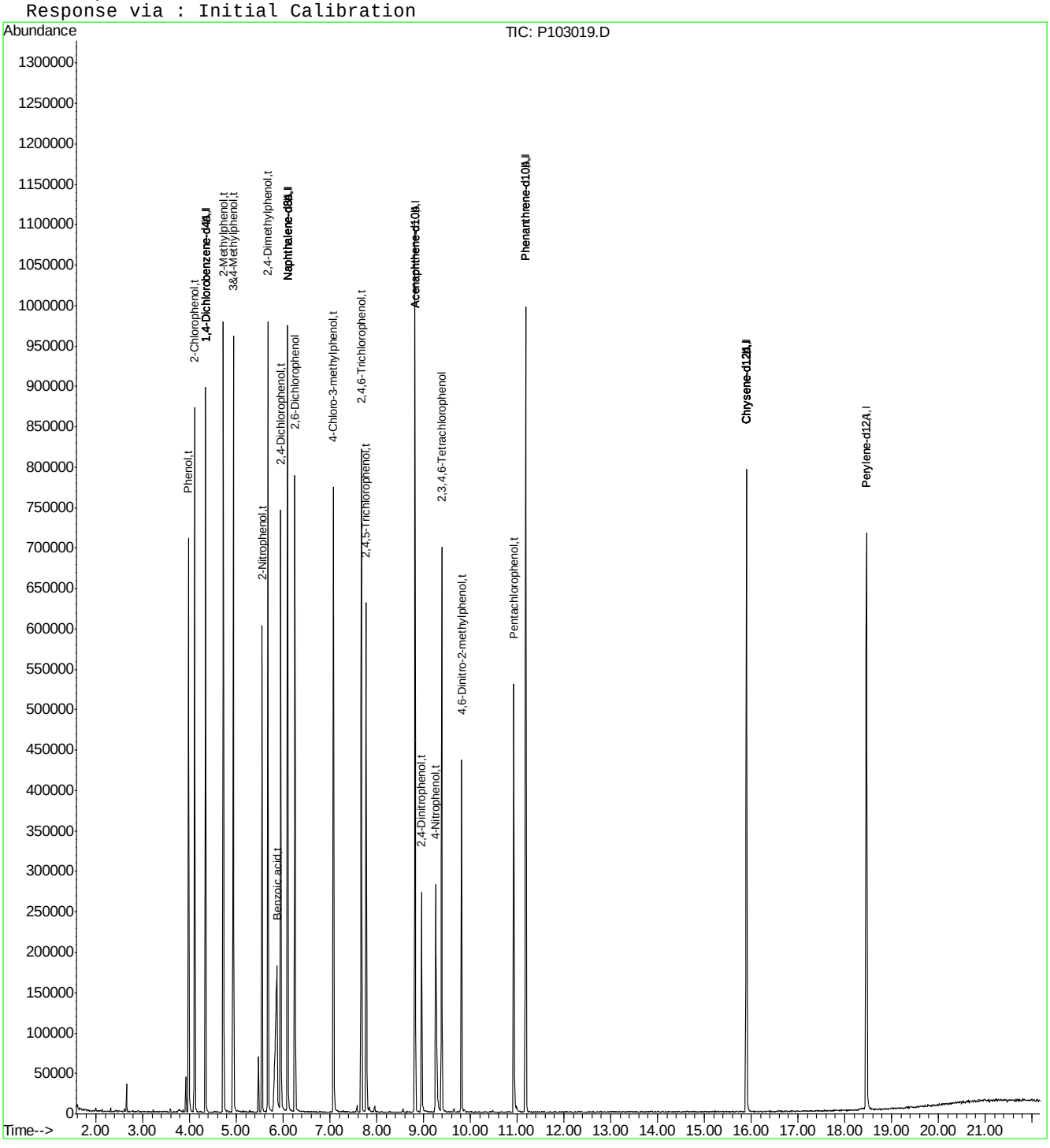
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103019.D Vial: 10
Acq On : 2 Mar 2016 9:05 pm Operator: sarad
Sample : icv4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 10:49 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 10:44:44 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103020.D Vial: 11
Acq On : 2 Mar 2016 9:34 pm Operator: sarad
Sample : icv4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 10:51:46 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 10:44:44 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.35	152	165057	40.00	ppm	0.00
24) Naphthalene-d8	6.10	136	607388	40.00	ppm	0.00
47) Acenaphthene-d10	8.82	164	330896	40.00	ppm	0.00
69) Phenanthrene-d10	11.18	188	536143	40.00	ppm	0.00
83) Chrysene-d12	15.90	240	470505	40.00	ppm	0.00
92) Perylene-d12	18.47	264	408173	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.35	152	165057	40.00	ppm	-0.02
112) Naphthalene-d8A	6.10	136	607388	40.00	ppm	-0.03
121) Acenaphthene-d10A	8.82	164	330896	40.00	ppm	-0.03
132) Phenanthrene-d10A	11.18	188	536143	40.00	ppm	-0.04
147) Chrysene-d12A	15.90	240	470505	40.00	ppm	-0.05
155) Perylene-d12A	18.47	264	408173	40.00	ppm	-0.05
159) 1,4-Dichlorobenzene-d4b	4.35	152	165057	40.00	ppm	-0.02
161) Phenanthrene-d10b	11.18	188	536143	40.00	ppm	-0.04
163) Chrysene-d12b	15.90	240	470505	40.00	ppm	-0.05
165) Naphthalene-d8b	6.10	136	607388	40.00	ppm	-0.03
167) Acenaphthene-d10b	8.82	164	330896	40.00	ppm	-0.03
169) Naphthalene-d8c	6.10	136	607388	40.00	ppm	-0.03
174) 1,4-Dichlorobenzene-d4a	4.35	152	165057	40.00	ppm	-0.11
176) Chrysene-d12c	15.90	240	470505	40.00	ppm	-0.05
178) Chrysene-d12d	15.90	240	470505	40.00	ppm	-0.05
180) Naphthalene-d8a	6.10	136	607388	40.00	ppm	0.13

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	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
3) Pyridine	2.05	79	343881	51.94	ppm	97
10) Aniline	3.96	93	418196	53.06	ppm	82
16) Benzyl alcohol	4.54	108	174956	53.69	ppm	98
39) 4-Chloroaniline	6.24	127	275208	42.97	ppm	99
44) 2-Methylnaphthalene	7.19	141	392398	47.02	ppm	97
54) 2-Nitroaniline	8.14	65	143073	56.92	ppm	96
58) 3-Nitroaniline	8.80	138	136496	54.11	ppm	98
62) Dibenzofuran	9.15	168	626653	51.53	ppm	99
68) 4-Nitroaniline	9.77	138	138652	54.71	ppm	96
79) Carbazole	11.61	167	687445	48.68	ppm	100

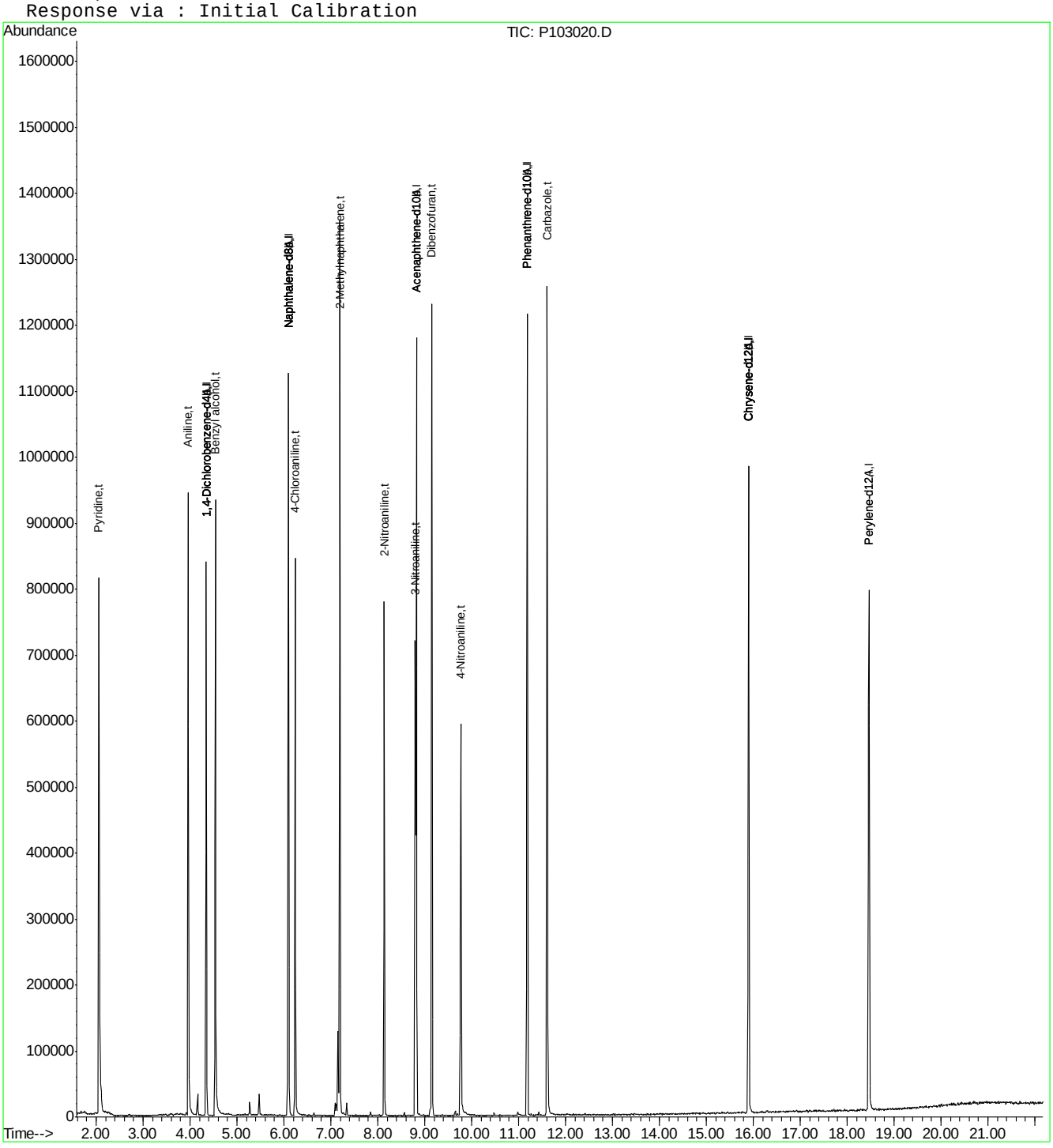
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103020.D Vial: 11
Acq On : 2 Mar 2016 9:34 pm Operator: sarad
Sample : icv4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 10:53 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 10:44:44 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103021.D Vial: 12
Acq On : 2 Mar 2016 10:03 pm Operator: sarad
Sample : icv4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 10:53:33 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 10:44:44 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.34	152	147735	40.00	ppm	0.00
24) Naphthalene-d8	6.09	136	516601	40.00	ppm	0.00
47) Acenaphthene-d10	8.82	164	290907	40.00	ppm	0.00
69) Phenanthrene-d10	11.18	188	432489	40.00	ppm	0.00
83) Chrysene-d12	15.90	240	382422	40.00	ppm	-0.01
92) Perylene-d12	18.46	264	337814	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.34	152	147735	40.00	ppm	-0.03
112) Naphthalene-d8A	6.09	136	516601	40.00	ppm	-0.03
121) Acenaphthene-d10A	8.82	164	290907	40.00	ppm	-0.04
132) Phenanthrene-d10A	11.18	188	432489	40.00	ppm	-0.04
147) Chrysene-d12A	15.90	240	382422	40.00	ppm	-0.05
155) Perylene-d12A	18.46	264	337814	40.00	ppm	-0.06
159) 1,4-Dichlorobenzene-d4b	4.34	152	147735	40.00	ppm	-0.03
161) Phenanthrene-d10b	11.18	188	432489	40.00	ppm	-0.04
163) Chrysene-d12b	15.90	240	382422	40.00	ppm	-0.05
165) Naphthalene-d8b	6.09	136	516601	40.00	ppm	-0.03
167) Acenaphthene-d10b	8.82	164	290907	40.00	ppm	-0.04
169) Naphthalene-d8c	6.09	136	516601	40.00	ppm	-0.03
174) 1,4-Dichlorobenzene-d4a	4.34	152	147735	40.00	ppm	-0.11
176) Chrysene-d12c	15.90	240	382422	40.00	ppm	-0.06
178) Chrysene-d12d	15.90	240	382422	40.00	ppm	-0.06
180) Naphthalene-d8a	6.09	136	516601	40.00	ppm	0.13

System Monitoring Compounds						
5) 2-Fluorophenol	2.97	112	255627	49.71	ppm	0.00
Spiked Amount 50.000			Recovery = 99.42%			
8) Phenol-d5	3.96	99	316260	50.41	ppm	0.00
Spiked Amount 50.000			Recovery = 100.82%			
25) Nitrobenzene-d5	5.07	82	261274	49.96	ppm	0.00
Spiked Amount 50.000			Recovery = 99.92%			
51) 2-Fluorobiphenyl	7.79	172	434452	49.23	ppm	0.00
Spiked Amount 50.000			Recovery = 98.46%			
73) 2,4,6-Tribromophenol	10.09	330	48286	47.75	ppm	0.00
Spiked Amount 50.000			Recovery = 95.50%			
85) Terphenyl-d14	14.01	244	381107	50.61	ppm	0.00
Spiked Amount 50.000			Recovery = 101.22%			

Target Compounds Qvalue

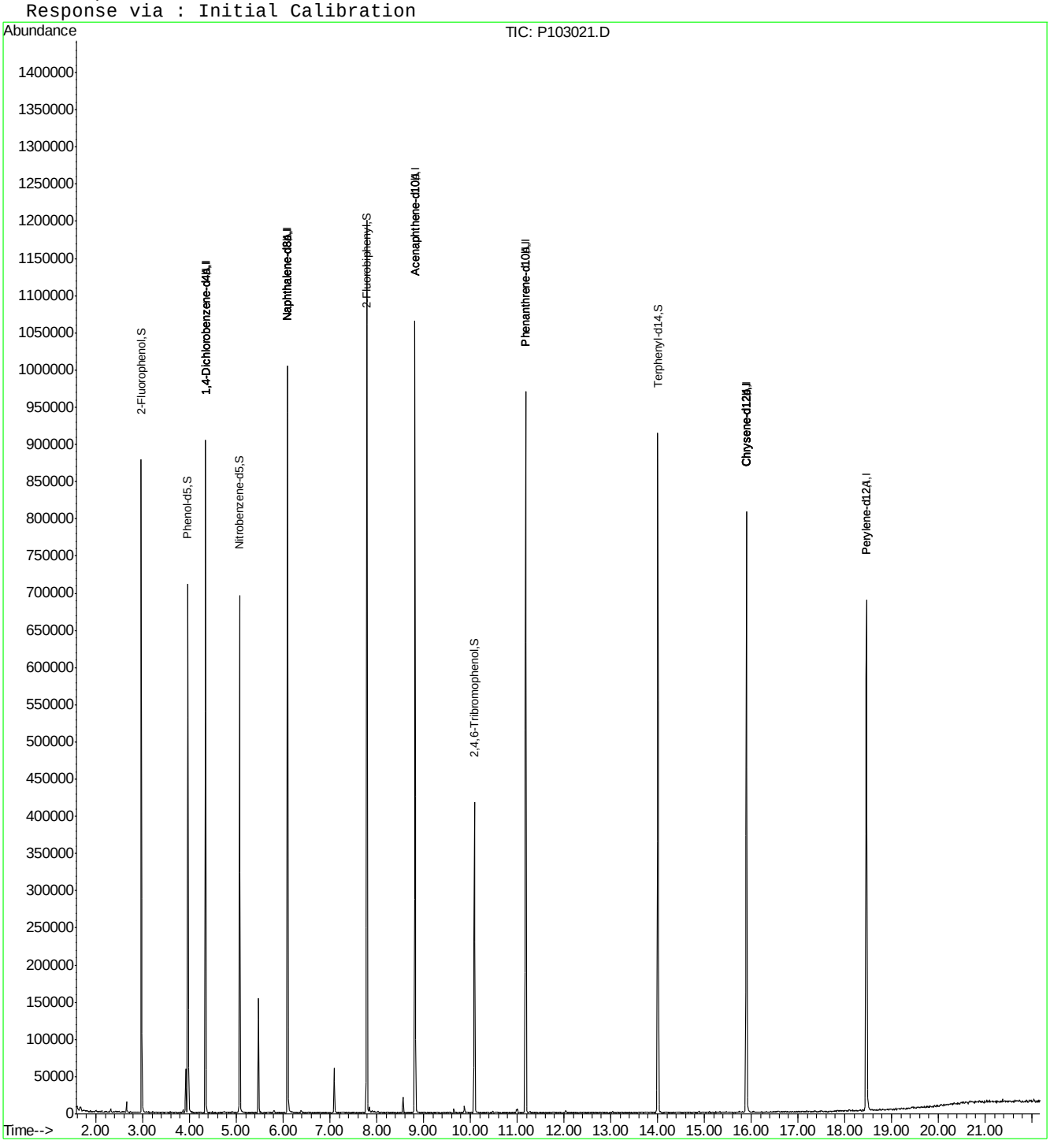
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103021.D Vial: 12
Acq On : 2 Mar 2016 10:03 pm Operator: sarad
Sample : icv4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 10:55 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 10:44:44 2016
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
03/03/16 15:11

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103022.D Vial: 13
Acq On : 2 Mar 2016 10:32 pm Operator: sarad
Sample : icv4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 10:55:57 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 10:44:44 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.34	152	147977	40.00	ppm	0.00
24) Naphthalene-d8	6.10	136	502321	40.00	ppm	0.00
47) Acenaphthene-d10	8.82	164	292838	40.00	ppm	0.00
69) Phenanthrene-d10	11.18	188	450924	40.00	ppm	0.00
83) Chrysene-d12	15.90	240	354813	40.00	ppm	0.00
92) Perylene-d12	18.47	264	324202	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.34	152	147977	40.00	ppm	-0.03
112) Naphthalene-d8A	6.10	136	502321	40.00	ppm	-0.03
121) Acenaphthene-d10A	8.82	164	292838	40.00	ppm	-0.03
132) Phenanthrene-d10A	11.18	188	450924	40.00	ppm	-0.04
147) Chrysene-d12A	15.90	240	354813	40.00	ppm	-0.05
155) Perylene-d12A	18.47	264	324202	40.00	ppm	-0.05
159) 1,4-Dichlorobenzene-d4b	4.34	152	147977	40.00	ppm	-0.03
161) Phenanthrene-d10b	11.18	188	450924	40.00	ppm	-0.04
163) Chrysene-d12b	15.90	240	354813	40.00	ppm	-0.05
165) Naphthalene-d8b	6.10	136	502321	40.00	ppm	-0.03
167) Acenaphthene-d10b	8.82	164	292838	40.00	ppm	-0.03
169) Naphthalene-d8c	6.10	136	502321	40.00	ppm	-0.03
174) 1,4-Dichlorobenzene-d4a	4.34	152	147977	40.00	ppm	-0.11
176) Chrysene-d12c	15.90	240	354813	40.00	ppm	-0.05
178) Chrysene-d12d	15.90	240	354813	40.00	ppm	-0.05
180) Naphthalene-d8a	6.10	136	502321	40.00	ppm	0.13

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	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
4) N-Nitrosodimethylamine	1.94	42	100466	45.27	ppm	97
11) bis(2-Chloroethyl)ether	4.02	93	250856	52.58	ppm	97
14) 1,3-Dichlorobenzene	4.28	146	267100	48.52	ppm	100
15) 1,4-Dichlorobenzene	4.36	146	254446	48.13	ppm	96
17) 1,2-Dichlorobenzene	4.56	146	252827	50.40	ppm	99
20) 2,2'-oxybis(1-Chloropropan	4.70	121	70906m	45.19	ppm	
22) n-Nitroso-di-n-propylamine	4.88	70	165394	49.53	ppm	98
23) Hexachloroethane	5.00	201	85287	49.50	ppm	93
26) Nitrobenzene	5.10	77	235985	48.37	ppm	96
28) Isophorone	5.44	82	440842	53.28	ppm	99
32) bis(2-Chloroethoxy)methane	5.78	93	262567	50.25	ppm	97
36) 1,2,4-Trichlorobenzene	6.02	180	194922	49.53	ppm	96

(#) = qualifier out of range (m) = manual integration
P103022.D MP4524.M Thu Mar 03 11:02:09 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103022.D Vial: 13
Acq On : 2 Mar 2016 10:32 pm Operator: sarad
Sample : icv4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 10:55:57 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 10:44:44 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
38)	Naphthalene	6.13	128	620274	49.79	ppm	99
42)	Hexachlorobutadiene	6.34	225	101443	51.87	ppm	99
52)	2-Chloronaphthalene	7.94	162	394779	51.32	ppm	98
55)	Dimethylphthalate	8.47	163	428353	48.18	ppm	99
56)	Acenaphthylene	8.59	152	579395	47.15	ppm	99
57)	2,6-Dinitrotoluene	8.54	165	93484	49.29	ppm	91
59)	Acenaphthene	8.87	153	372302	48.75	ppm	99
63)	2,4-Dinitrotoluene	9.17	165	127397	43.76	ppm	96
65)	Diethylphthalate	9.60	149	422921	47.86	ppm	99
66)	Fluorene	9.69	166	427669	48.67	ppm	99
67)	4-Chlorophenyl-phenylether	9.74	204	185257	46.99	ppm	97
71)	n-Nitrosodiphenylamine	9.93	169	302754	46.62	ppm	97
72)	1,2-Diphenylhydrazine	9.98	77	418609	47.05	ppm	97
74)	4-Bromophenyl-phenylether	10.51	248	108414	49.14	ppm	94
75)	Hexachlorobenzene	10.58	284	106751	44.57	ppm	96
77)	Phenanthrene	11.22	178	553887	47.89	ppm	100
78)	Anthracene	11.30	178	548726	47.32	ppm	98
80)	Di-n-butylphthalate	12.29	149	700159	50.57	ppm	100
81)	Fluoranthene	13.24	202	605721	48.66	ppm	100
84)	Pyrene	13.63	202	617401	54.68	ppm	99
86)	Butylbenzylphthalate	15.00	149	309331	56.34	ppm	98
88)	Benzo[a]anthracene	15.89	228	503192	54.35	ppm	99
90)	Chrysene	15.95	228	477209	52.08	ppm	98
91)	bis(2-Ethylhexyl)phthalate	16.17	149	398242	46.47	ppm	99
93)	Di-n-octylphthalate	17.38	149	677691	48.96	ppm	99
94)	Benzo[b]fluoranthene	17.83	252	483064	52.39	ppm	98
95)	Benzo[k]fluoranthene	17.88	252	499185	56.20	ppm	98
96)	Benzo[a]pyrene	18.37	252	467487	57.48	ppm	97
97)	Indeno[1,2,3-cd]pyrene	20.09	276	415393	57.85	ppm	98
99)	Dibenz[a,h]anthracene	20.14	278	434182	56.12	ppm	98
101)	Benzo[g,h,i]perylene	20.46	276	443324	53.91	ppm	99

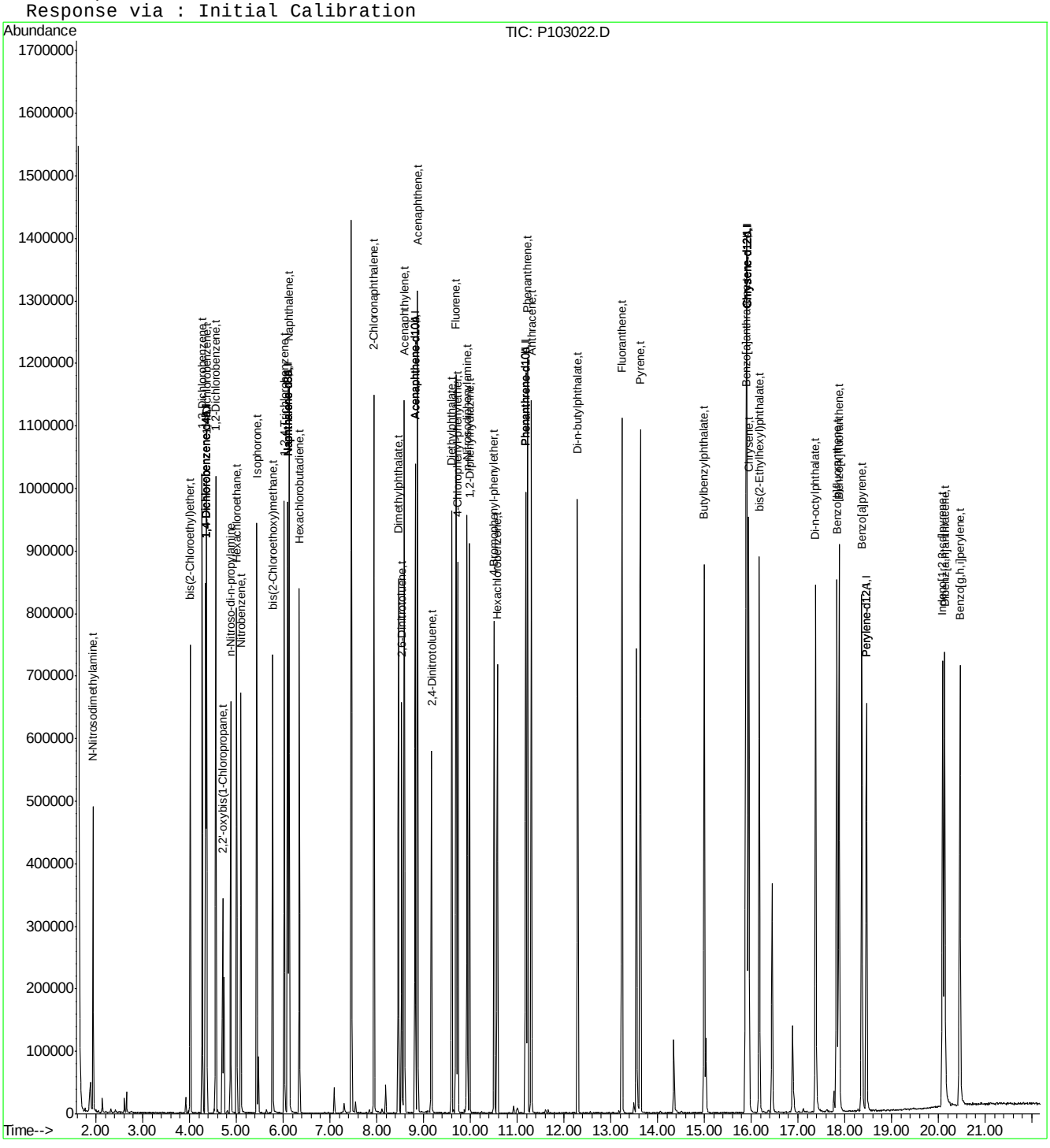
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103022.D Vial: 13
Acq On : 2 Mar 2016 10:32 pm Operator: sarad
Sample : icv4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 11:02 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 10:44:44 2016
Response via : Initial Calibration



Manual Integration Approval Summary

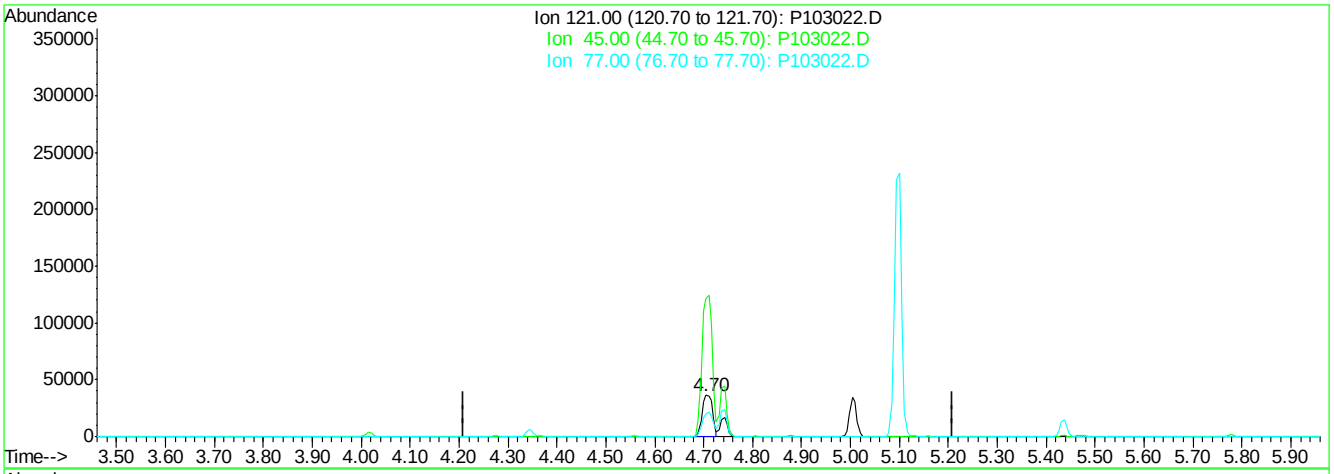
Sample Number:	EP4524-ICV4524	**Method:**	SW846 8270D
Lab FileID:	P103022.D	**Analyst approved:**	03/03/16 11:25 Linsey Kirschmann
Injection Time:	03/02/16 22:32	**Supervisor approved:**	03/03/16 15:11 Nina Pandya

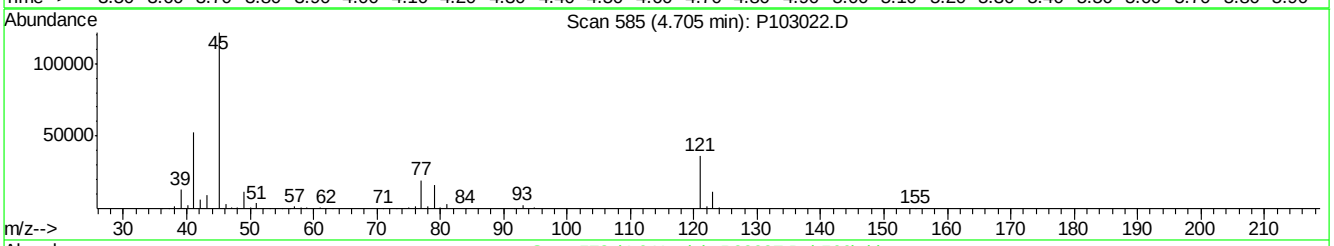
Parameter	CAS	Sig#	R.T. (min.)	Reason
bis(2-Chloroisopropyl)ether	108-60-1		4.70	Split peak

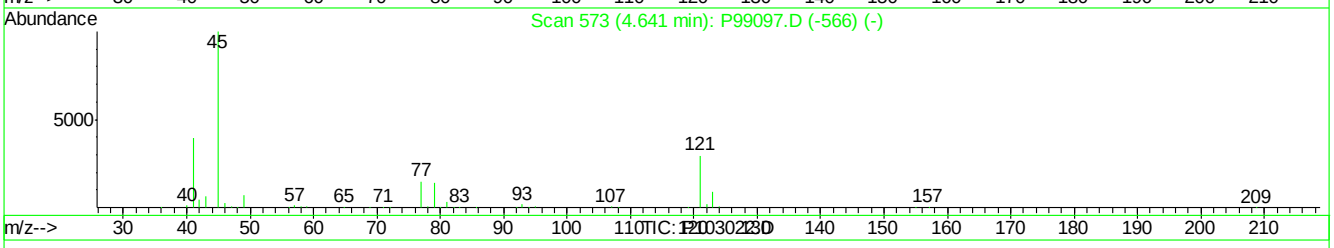
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103022.D Vial: 13
Acq On : 2 Mar 2016 10:32 pm Operator: sarad
Sample : icv4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 10:56 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 10:44:44 2016
Response via : Multiple Level Calibration







(20) 2,2'-oxybis(1-Chloropropane (t)

4.70min 34.84ppm

response 54660

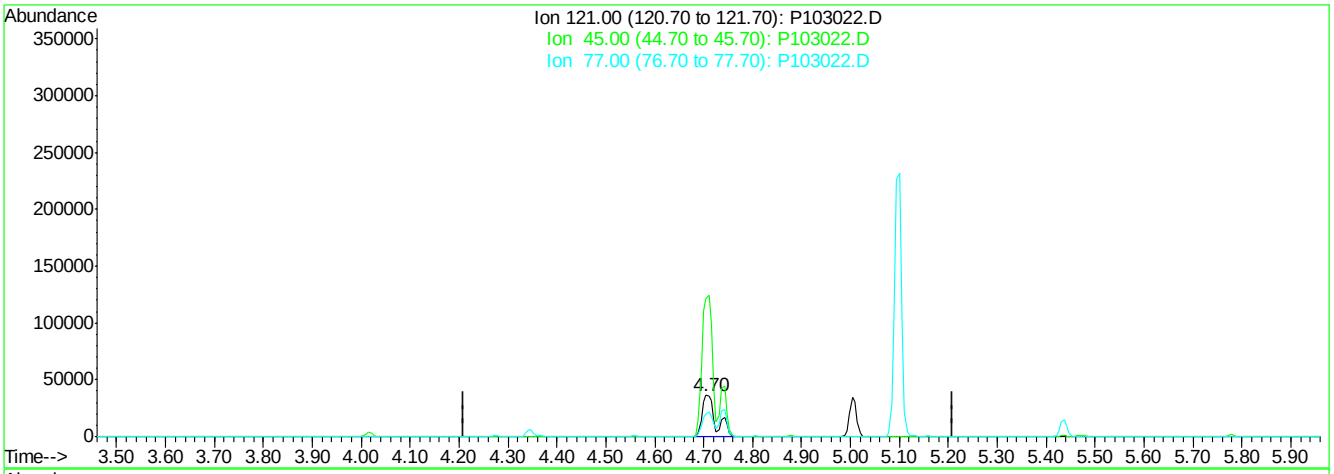
Ion	Exp%	Act%
121.00	100	100
45.00	344.10	335.24
77.00	51.90	46.67
0.00	0.00	0.00

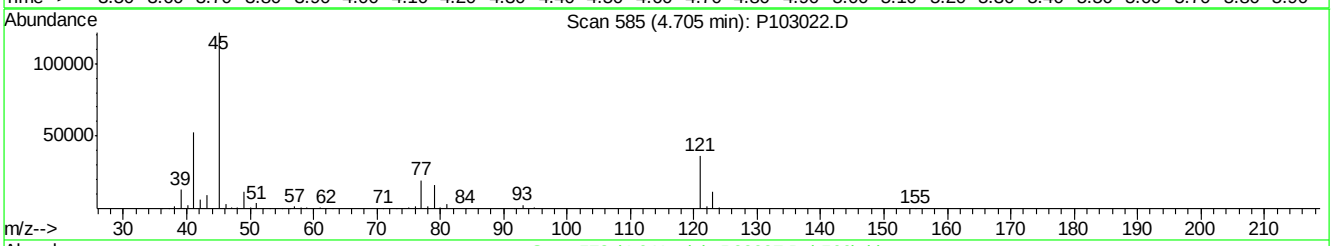
P103022.D MP4524.M Thu Mar 03 10:56:43 2016

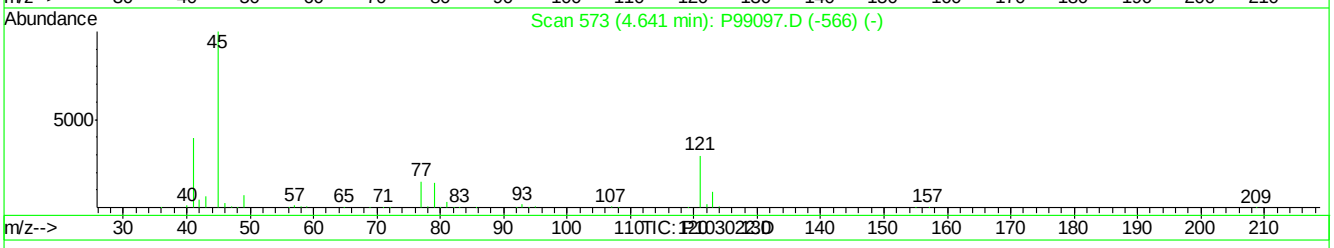
Quantitation Report (Qedit)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103022.D Vial: 13
Acq On : 2 Mar 2016 10:32 pm Operator: sarad
Sample : icv4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 10:56 2016 Quant Results File: temp.res

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 10:44:44 2016
Response via : Multiple Level Calibration







(20) 2,2'-oxybis(1-Chloropropane (t)

4.70min 45.19ppm m

response 70906

Ion	Exp%	Act%
121.00	100	100
45.00	344.10	333.44
77.00	51.90	53.69
0.00	0.00	0.00

P103022.D MP4524.M Thu Mar 03 10:56:49 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103023.D Vial: 14
Acq On : 2 Mar 2016 11:02 pm Operator: sarad
Sample : icv4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 11:20:23 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 10:44:44 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.34	152	127339	40.00	ppm	0.00
24) Naphthalene-d8	6.09	136	457549	40.00	ppm	0.00
47) Acenaphthene-d10	8.82	164	255729	40.00	ppm	0.00
69) Phenanthrene-d10	11.18	188	363505	40.00	ppm	0.00
83) Chrysene-d12	15.90	240	347332	40.00	ppm	-0.01
92) Perylene-d12	18.46	264	296697	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.34	152	127339	40.00	ppm	-0.03
112) Naphthalene-d8A	6.09	136	457549	40.00	ppm	-0.03
121) Acenaphthene-d10A	8.82	164	255729	40.00	ppm	-0.04
132) Phenanthrene-d10A	11.18	188	363505	40.00	ppm	-0.04
147) Chrysene-d12A	15.90	240	347332	40.00	ppm	-0.05
155) Perylene-d12A	18.46	264	296697	40.00	ppm	-0.06
159) 1,4-Dichlorobenzene-d4b	4.34	152	127339	40.00	ppm	-0.03
161) Phenanthrene-d10b	11.18	188	363505	40.00	ppm	-0.04
163) Chrysene-d12b	15.90	240	347332	40.00	ppm	-0.05
165) Naphthalene-d8b	6.09	136	457549	40.00	ppm	-0.03
167) Acenaphthene-d10b	8.82	164	255729	40.00	ppm	-0.04
169) Naphthalene-d8c	6.09	136	457549	40.00	ppm	-0.03
174) 1,4-Dichlorobenzene-d4a	4.34	152	127339	40.00	ppm	-0.11
176) Chrysene-d12c	15.90	240	347332	40.00	ppm	-0.06
178) Chrysene-d12d	15.90	240	347332	40.00	ppm	-0.06
180) Naphthalene-d8a	6.09	136	457549	40.00	ppm	0.13

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	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
2) 1,4-Dioxane	1.78	88	98061	43.34	ppm	91
6) Indene	4.67	116	344256	47.53	ppm	98
7) Cumene	3.43	105	482301	46.10	ppm	99
13) Decane	4.16	43	153028	45.48	ppm	98
18) Acetophenone	4.86	105	265568	46.37	ppm	98
27) Quinoline	6.63	129	360557	43.73	ppm	99
40) 2,3-Dichloroaniline	7.64	161	168248	40.93	ppm	99
41) Caprolactam	6.71	55	69184	45.49	ppm	93
45) 1-Methylnaphthalene	7.34	142	345005	44.99	ppm	100
46) Dimethylnaphthalene	8.18	156	303892	45.31	ppm	99
48) Hexachlorocyclopentadiene	7.46	237	86594	51.98	ppm	99
53) Biphenyl	7.94	154	416380	48.21	ppm	99

(#) = qualifier out of range (m) = manual integration
P103023.D MP4524.M Thu Mar 03 11:22:12 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103023.D Vial: 14
Acq On : 2 Mar 2016 11:02 pm Operator: sarad
Sample : icv4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 11:20:23 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 10:44:44 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
82)	Octadecane	11.17	57	187929	51.34	ppm	97
100)	7,12-Dimethylbenz(a)anthra	17.84	256	191465	53.59	ppm	99

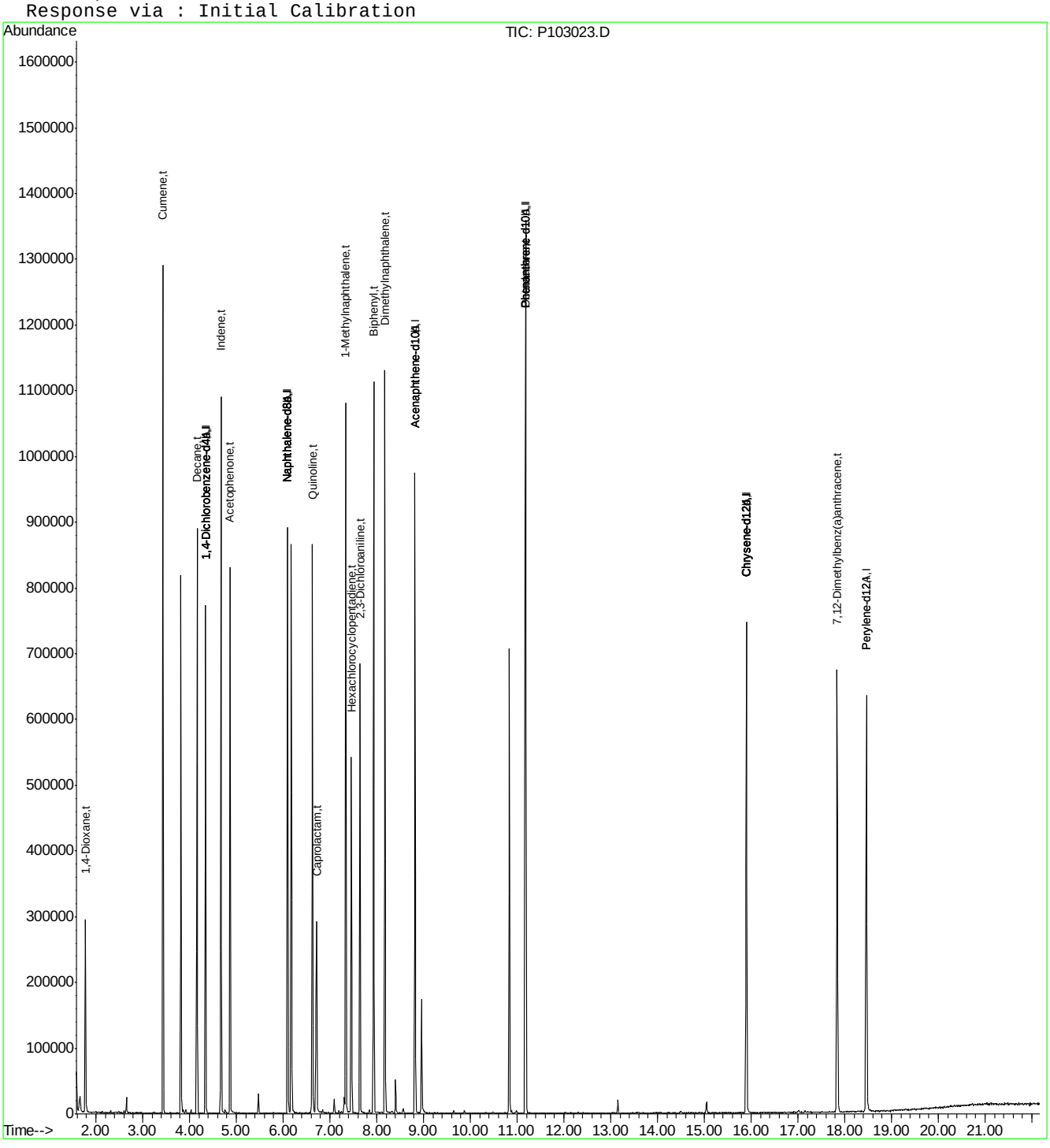
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103023.D Vial: 14
Acq On : 2 Mar 2016 11:02 pm Operator: sarad
Sample : icv4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 11:22 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 10:44:44 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103024.D Vial: 15
Acq On : 2 Mar 2016 11:31 pm Operator: sarad
Sample : icv4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 03 11:03:32 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 10:44:44 2016
Response via : Initial Calibration
DataAcq Meth : MP4513

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.34	152	158201	40.00	ppm	0.00
24) Naphthalene-d8	6.10	136	545592	40.00	ppm	0.00
47) Acenaphthene-d10	8.82	164	322768	40.00	ppm	0.00
69) Phenanthrene-d10	11.18	188	489171	40.00	ppm	0.00
83) Chrysene-d12	15.90	240	437455	40.00	ppm	-0.01
92) Perylene-d12	18.46	264	397000	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.34	152	158201	40.00	ppm	-0.03
112) Naphthalene-d8A	6.10	136	545592	40.00	ppm	-0.03
121) Acenaphthene-d10A	8.82	164	322768	40.00	ppm	-0.04
132) Phenanthrene-d10A	11.18	188	489171	40.00	ppm	-0.04
147) Chrysene-d12A	15.90	240	437455	40.00	ppm	-0.05
155) Perylene-d12A	18.46	264	397000	40.00	ppm	-0.06
159) 1,4-Dichlorobenzene-d4b	4.34	152	158201	40.00	ppm	-0.03
161) Phenanthrene-d10b	11.18	188	489171	40.00	ppm	-0.04
163) Chrysene-d12b	15.90	240	437455	40.00	ppm	-0.05
165) Naphthalene-d8b	6.10	136	545592	40.00	ppm	-0.03
167) Acenaphthene-d10b	8.82	164	322768	40.00	ppm	-0.04
169) Naphthalene-d8c	6.10	136	545592	40.00	ppm	-0.03
174) 1,4-Dichlorobenzene-d4a	4.34	152	158201	40.00	ppm	-0.11
176) Chrysene-d12c	15.90	240	437455	40.00	ppm	-0.06
178) Chrysene-d12d	15.90	240	437455	40.00	ppm	-0.06
180) Naphthalene-d8a	6.10	136	545592	40.00	ppm	0.13

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%			

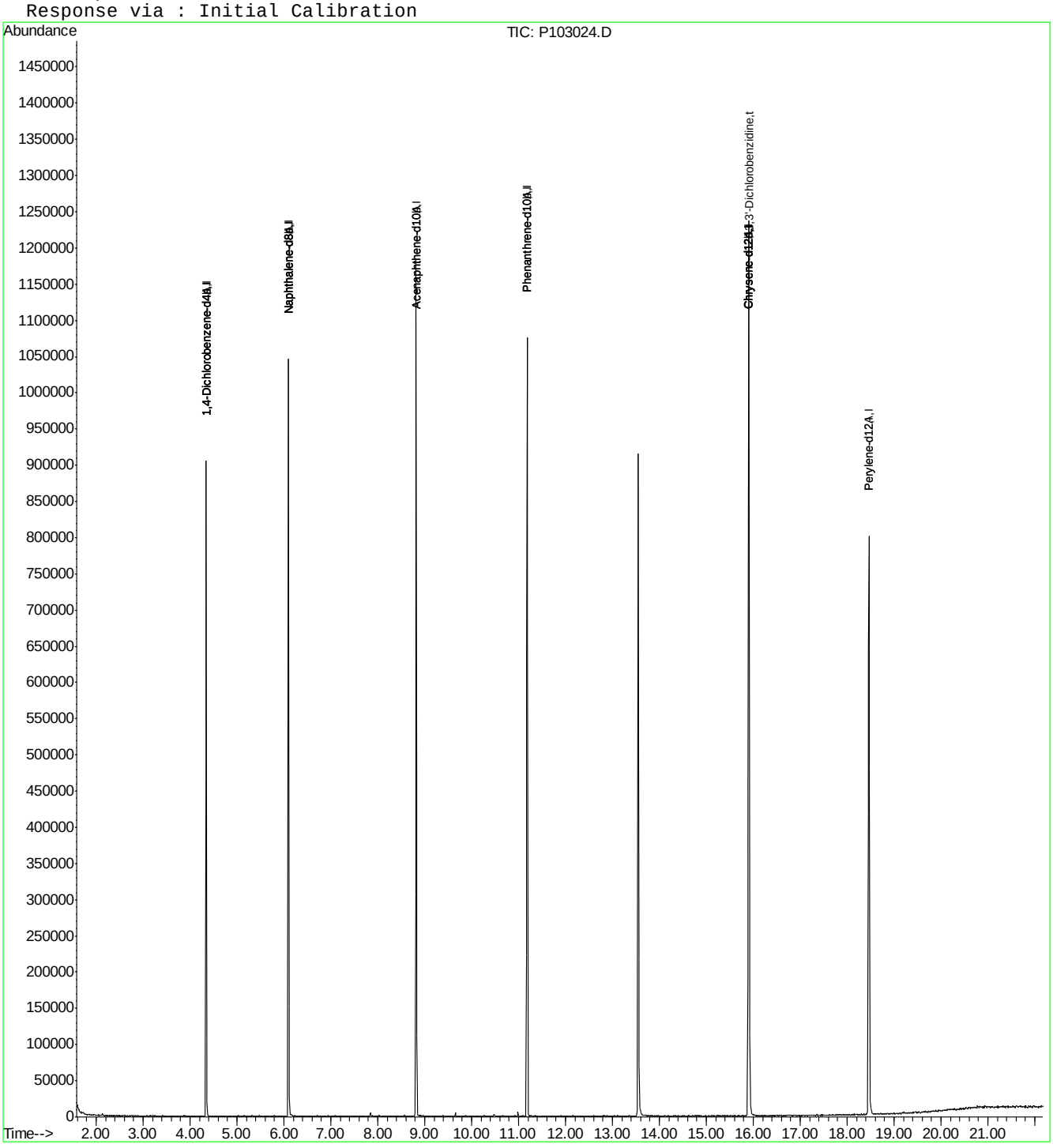
Target Compounds						Qvalue
89) 3,3'-Dichlorobenzidine	15.91	252	206949	43.27	ppm	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed
P103024.D MP4524.M Thu Mar 03 11:04:27 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4524\P103024.D Vial: 15
Acq On : 2 Mar 2016 11:31 pm Operator: sarad
Sample : icv4524-50 Inst : MSP
Misc : op91633,ep4524 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Mar 3 11:04 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Thu Mar 03 10:44:44 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4587\P104207.D Vial: 2
Acq On : 15 Apr 2016 8:59 am Operator: linseyk
Sample : ic4587-1000 Inst : MSP
Misc : op93004,ep4587 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 13:20:45 2016 Quant Results File: MP4524AP9.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sun Apr 17 13:20:42 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.17	152	176058	40.00	ppm	0.00
24) Naphthalene-d8	5.90	136	644821	40.00	ppm	0.00
47) Acenaphthene-d10	8.61	164	358204	40.00	ppm	0.00
69) Phenanthrene-d10	10.96	188	525939	40.00	ppm	0.00
83) Chrysene-d12	15.63	240	421877	40.00	ppm	0.00
92) Perylene-d12	18.18	264	362716	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.17	152	176058	40.00	ppm	0.00
112) Naphthalene-d8A	5.90	136	644821	40.00	ppm	0.00
121) Acenaphthene-d10A	8.61	164	358204	40.00	ppm	0.00
132) Phenanthrene-d10A	10.96	188	525939	40.00	ppm	0.00
147) Chrysene-d12A	15.63	240	421877	40.00	ppm	0.00
155) Perylene-d12A	18.18	264	362716	40.00	ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.17	152	176058	40.00	ppm	0.00
161) Phenanthrene-d10b	10.96	188	525939	40.00	ppm	0.00
163) Chrysene-d12b	15.63	240	421877	40.00	ppm	0.00
165) Naphthalene-d8b	5.90	136	644821	40.00	ppm	0.00
167) Acenaphthene-d10b	8.61	164	358204	40.00	ppm	0.00
169) Naphthalene-d8c	5.90	136	644821	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.17	152	176058	40.00	ppm	0.00
176) Chrysene-d12c	15.63	240	421877	40.00	ppm	0.00
178) Chrysene-d12d	15.63	240	421877	40.00	ppm	0.00
180) Naphthalene-d8d	5.90	136	644821	40.00	ppm	0.00

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	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
181) Salicylic acid	7.08	120	3358508	995.88	ppm	# 1

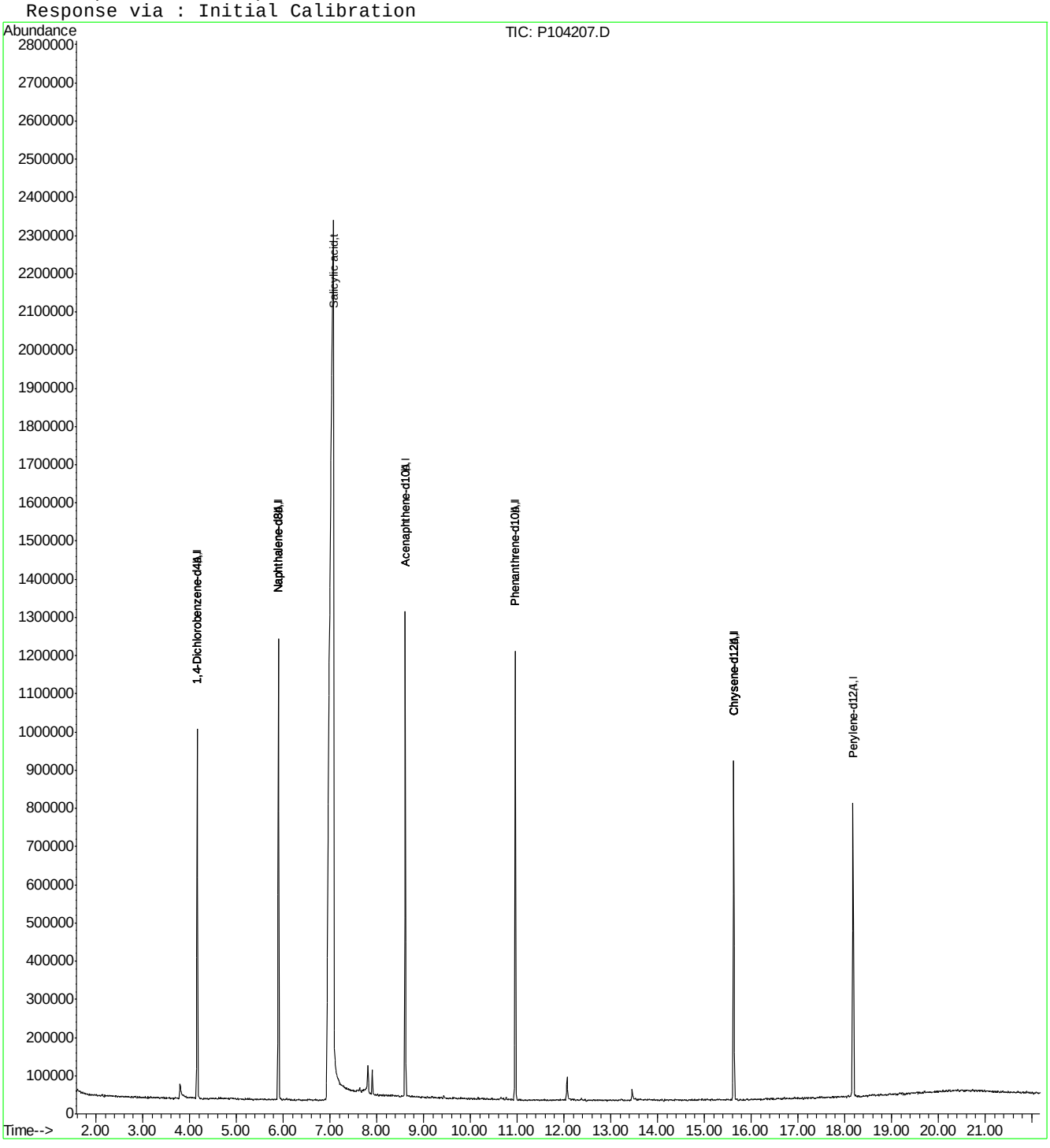
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4587\P104207.D Vial: 2
Acq On : 15 Apr 2016 8:59 am Operator: linseyk
Sample : ic4587-1000 Inst : MSP
Misc : op93004,ep4587 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 13:21 2016 Quant Results File: MP4524AP9.RES

Method : C:\MSDCHEM\1\METHODS\MP4524AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sun Apr 17 13:20:42 2016
Response via : Initial Calibration



P104207.D MP4524AP9.M Sun Apr 17 13:21:46 2016 Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4587\P104208.D Vial: 3
Acq On : 15 Apr 2016 9:28 am Operator: linseyk
Sample : ic4587-500 Inst : MSP
Misc : op93004,ep4587 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 13:22:10 2016 Quant Results File: MP4524AP9.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sun Apr 17 13:20:42 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.17	152	179979	40.00 ppm	0.00
24) Naphthalene-d8	5.90	136	664969	40.00 ppm	0.00
47) Acenaphthene-d10	8.61	164	365351	40.00 ppm	0.00
69) Phenanthrene-d10	10.96	188	534319	40.00 ppm	0.00
83) Chrysene-d12	15.63	240	437013	40.00 ppm	0.00
92) Perylene-d12	18.18	264	364875	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.17	152	179979	40.00 ppm	0.00
112) Naphthalene-d8A	5.90	136	664969	40.00 ppm	0.00
121) Acenaphthene-d10A	8.61	164	365351	40.00 ppm	0.00
132) Phenanthrene-d10A	10.96	188	534319	40.00 ppm	0.00
147) Chrysene-d12A	15.63	240	437013	40.00 ppm	0.00
155) Perylene-d12A	18.18	264	364875	40.00 ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.17	152	179979	40.00 ppm	0.00
161) Phenanthrene-d10b	10.96	188	534319	40.00 ppm	0.00
163) Chrysene-d12b	15.63	240	437013	40.00 ppm	0.00
165) Naphthalene-d8b	5.90	136	664969	40.00 ppm	0.00
167) Acenaphthene-d10b	8.61	164	365351	40.00 ppm	0.00
169) Naphthalene-d8c	5.90	136	664969	40.00 ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.17	152	179979	40.00 ppm	0.00
176) Chrysene-d12c	15.63	240	437013	40.00 ppm	0.00
178) Chrysene-d12d	15.63	240	437013	40.00 ppm	0.00
180) Naphthalene-d8d	5.90	136	664969	40.00 ppm	0.00

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	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
181) Salicylic acid	7.03	120	1767840	508.33 ppm	# 1

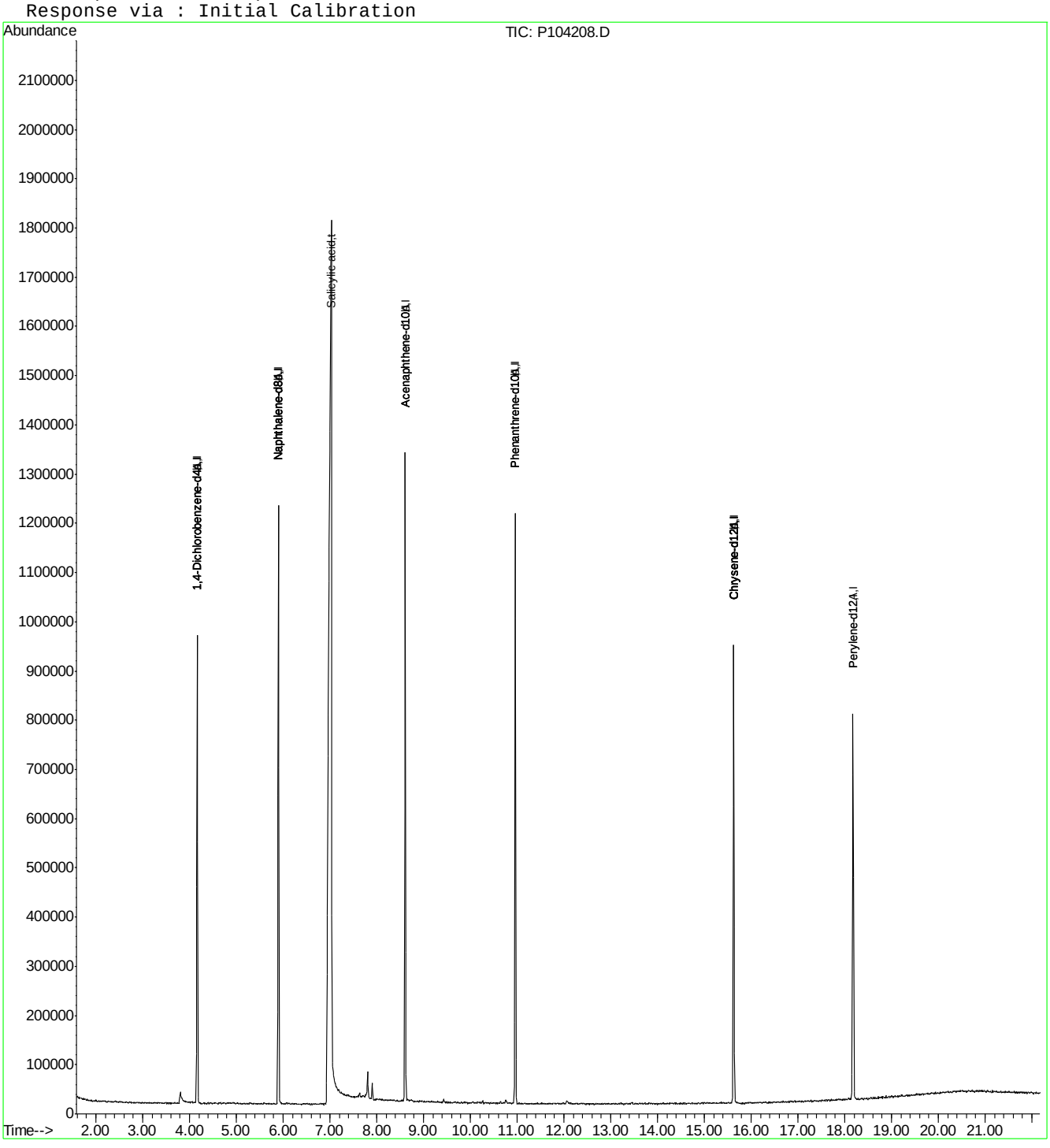
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4587\P104208.D Vial: 3
Acq On : 15 Apr 2016 9:28 am Operator: linseyk
Sample : ic4587-500 Inst : MSP
Misc : op93004,ep4587 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 13:23 2016 Quant Results File: MP4524AP9.RES

Method : C:\MSDCHEM\1\METHODS\MP4524AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sun Apr 17 13:20:42 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4587\P104209.D Vial: 4
Acq On : 15 Apr 2016 9:57 am Operator: linseyk
Sample : icc4587-400 Inst : MSP
Misc : op93004,ep4587 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 13:24:23 2016 Quant Results File: MP4524AP9.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sun Apr 17 13:20:42 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.17	152	191859	40.00	ppm	0.00
24) Naphthalene-d8	5.90	136	695264	40.00	ppm	0.00
47) Acenaphthene-d10	8.61	164	383233	40.00	ppm	0.00
69) Phenanthrene-d10	10.96	188	558497	40.00	ppm	0.00
83) Chrysene-d12	15.63	240	447272	40.00	ppm	0.00
92) Perylene-d12	18.18	264	376973	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.17	152	191859	40.00	ppm	0.00
112) Naphthalene-d8A	5.90	136	695264	40.00	ppm	0.00
121) Acenaphthene-d10A	8.61	164	383233	40.00	ppm	0.00
132) Phenanthrene-d10A	10.96	188	558497	40.00	ppm	0.00
147) Chrysene-d12A	15.63	240	447272	40.00	ppm	0.00
155) Perylene-d12A	18.18	264	376973	40.00	ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.17	152	191859	40.00	ppm	0.00
161) Phenanthrene-d10b	10.96	188	558497	40.00	ppm	0.00
163) Chrysene-d12b	15.63	240	447272	40.00	ppm	0.00
165) Naphthalene-d8b	5.90	136	695264	40.00	ppm	0.00
167) Acenaphthene-d10b	8.61	164	383233	40.00	ppm	0.00
169) Naphthalene-d8c	5.90	136	695264	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.17	152	191859	40.00	ppm	0.00
176) Chrysene-d12c	15.63	240	447272	40.00	ppm	0.00
178) Chrysene-d12d	15.63	240	447272	40.00	ppm	0.00
180) Naphthalene-d8d	5.90	136	695264	40.00	ppm	0.00

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
181) Salicylic acid	7.01	120	1349457	371.12	ppm	# 1

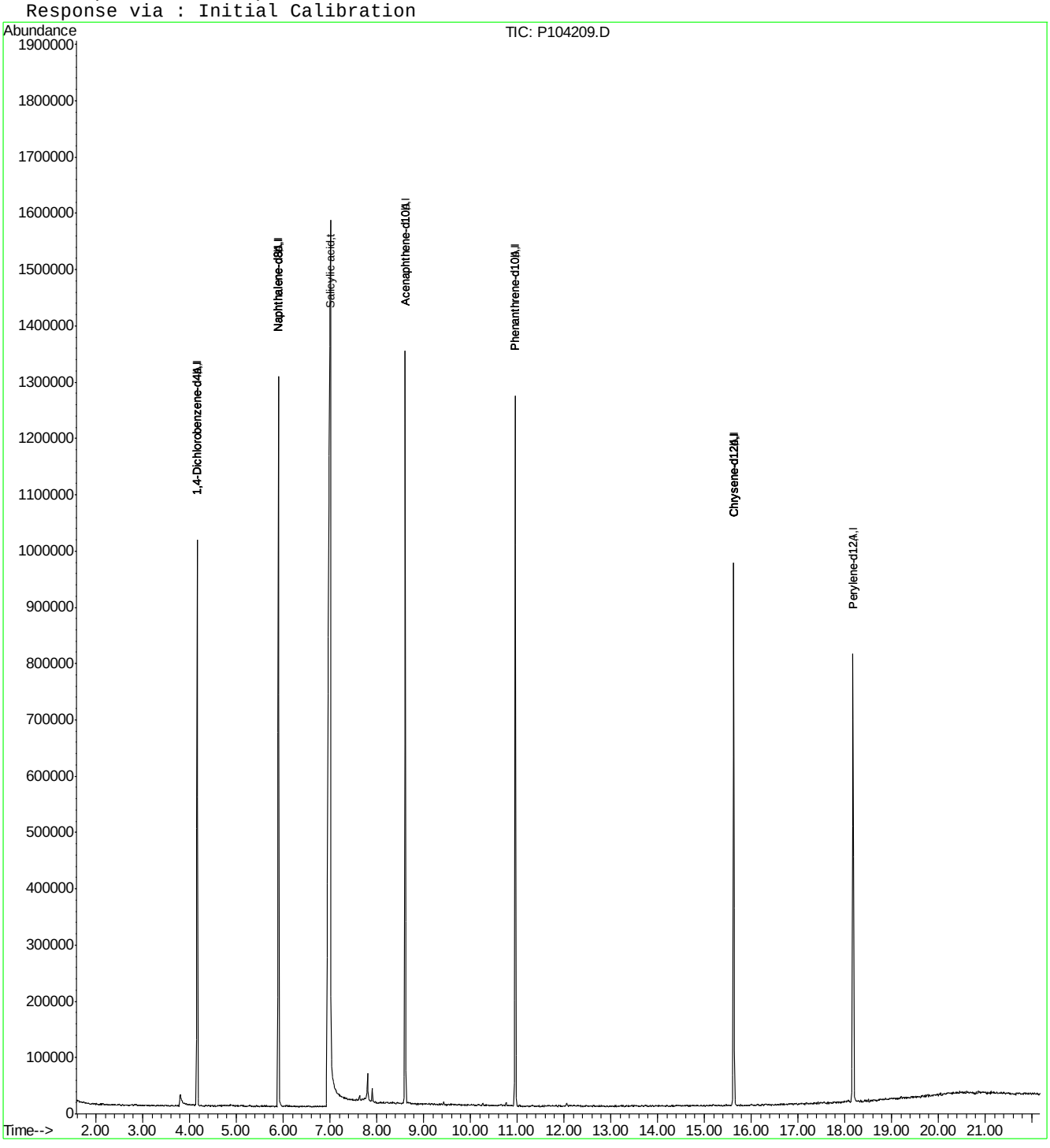
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4587\P104209.D Vial: 4
Acq On : 15 Apr 2016 9:57 am Operator: linseyk
Sample : icc4587-400 Inst : MSP
Misc : op93004,ep4587 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 13:25 2016 Quant Results File: MP4524AP9.RES

Method : C:\MSDCHEM\1\METHODS\MP4524AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sun Apr 17 13:20:42 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4587\P104210.D Vial: 5
Acq On : 15 Apr 2016 10:26 am Operator: linseyk
Sample : ic4587-300 Inst : MSP
Misc : op93004,ep4587 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 13:25:39 2016 Quant Results File: MP4524AP9.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sun Apr 17 13:20:42 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.16	152	188524	40.00	ppm	0.00
24) Naphthalene-d8	5.90	136	688173	40.00	ppm	0.00
47) Acenaphthene-d10	8.61	164	379620	40.00	ppm	0.00
69) Phenanthrene-d10	10.96	188	552551	40.00	ppm	0.00
83) Chrysene-d12	15.63	240	444207	40.00	ppm	0.00
92) Perylene-d12	18.18	264	375752	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.16	152	188524	40.00	ppm	0.00
112) Naphthalene-d8A	5.90	136	688173	40.00	ppm	0.00
121) Acenaphthene-d10A	8.61	164	379620	40.00	ppm	0.00
132) Phenanthrene-d10A	10.96	188	552551	40.00	ppm	0.00
147) Chrysene-d12A	15.63	240	444207	40.00	ppm	0.00
155) Perylene-d12A	18.18	264	375752	40.00	ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.16	152	188524	40.00	ppm	0.00
161) Phenanthrene-d10b	10.96	188	552551	40.00	ppm	0.00
163) Chrysene-d12b	15.63	240	444207	40.00	ppm	0.00
165) Naphthalene-d8b	5.90	136	688173	40.00	ppm	0.00
167) Acenaphthene-d10b	8.61	164	379620	40.00	ppm	0.00
169) Naphthalene-d8c	5.90	136	688173	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.16	152	188524	40.00	ppm	0.00
176) Chrysene-d12c	15.63	240	444207	40.00	ppm	0.00
178) Chrysene-d12d	15.63	240	444207	40.00	ppm	0.00
180) Naphthalene-d8d	5.90	136	688173	40.00	ppm	0.00

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
181) Salicylic acid	7.00	120	1037971	288.40	ppm	# 1

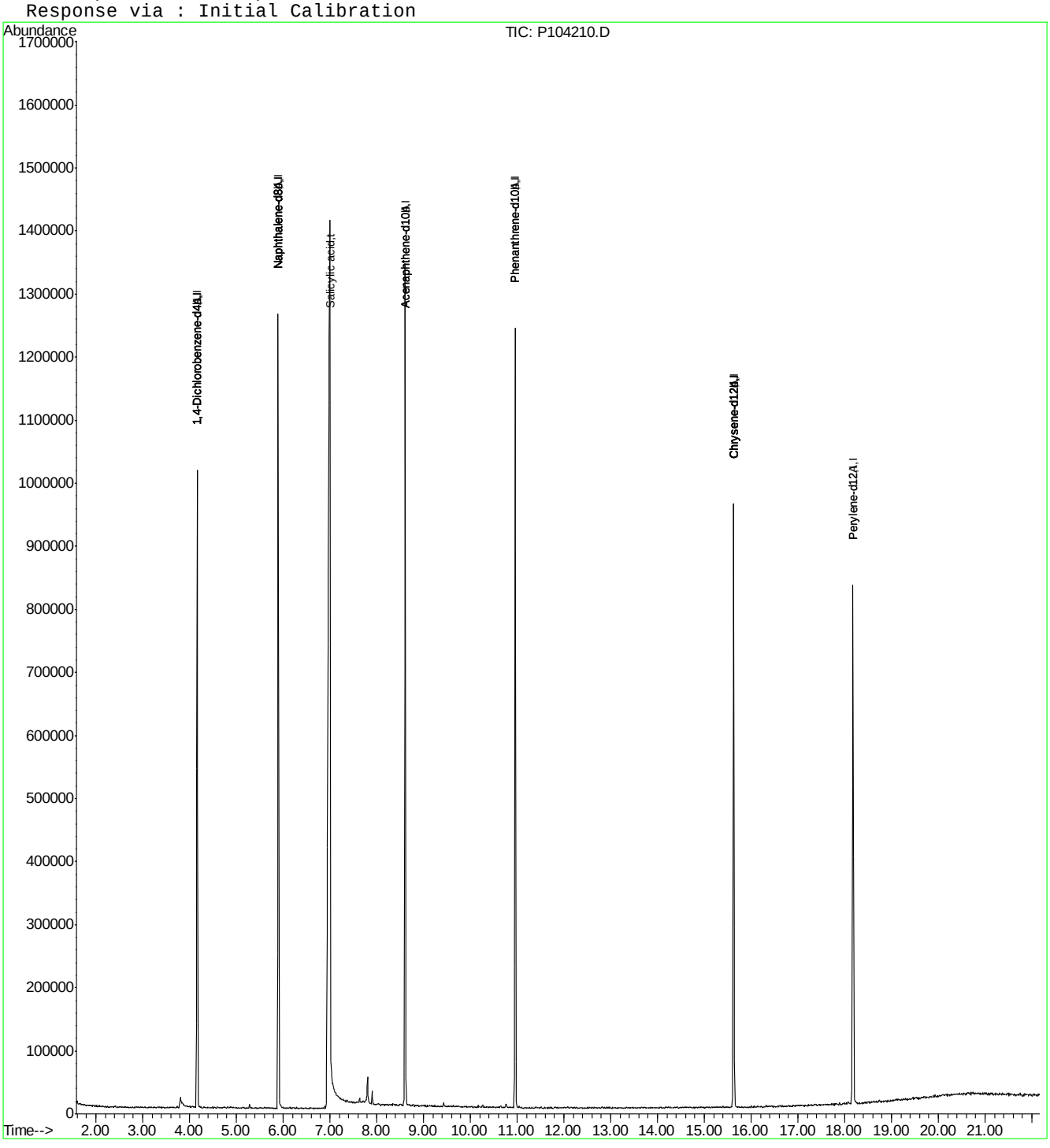
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4587\P104210.D Vial: 5
Acq On : 15 Apr 2016 10:26 am Operator: linseyk
Sample : ic4587-300 Inst : MSP
Misc : op93004,ep4587 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 13:26 2016 Quant Results File: MP4524AP9.RES

Method : C:\MSDCHEM\1\METHODS\MP4524AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sun Apr 17 13:20:42 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4587\P104211.D Vial: 6
Acq On : 15 Apr 2016 10:56 am Operator: linseyk
Sample : ic4587-200 Inst : MSP
Misc : op93004,ep4587 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 13:26:39 2016 Quant Results File: MP4524AP9.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sun Apr 17 13:20:42 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.16	152	182274	40.00 ppm	0.00
24) Naphthalene-d8	5.90	136	665021	40.00 ppm	0.00
47) Acenaphthene-d10	8.61	164	363622	40.00 ppm	0.00
69) Phenanthrene-d10	10.96	188	529427	40.00 ppm	0.00
83) Chrysene-d12	15.63	240	425509	40.00 ppm	0.00
92) Perylene-d12	18.18	264	352889	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.16	152	182274	40.00 ppm	0.00
112) Naphthalene-d8A	5.90	136	665021	40.00 ppm	0.00
121) Acenaphthene-d10A	8.61	164	363622	40.00 ppm	0.00
132) Phenanthrene-d10A	10.96	188	529427	40.00 ppm	0.00
147) Chrysene-d12A	15.63	240	425509	40.00 ppm	0.00
155) Perylene-d12A	18.18	264	352889	40.00 ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.16	152	182274	40.00 ppm	0.00
161) Phenanthrene-d10b	10.96	188	529427	40.00 ppm	0.00
163) Chrysene-d12b	15.63	240	425509	40.00 ppm	0.00
165) Naphthalene-d8b	5.90	136	665021	40.00 ppm	0.00
167) Acenaphthene-d10b	8.61	164	363622	40.00 ppm	0.00
169) Naphthalene-d8c	5.90	136	665021	40.00 ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.16	152	182274	40.00 ppm	0.00
176) Chrysene-d12c	15.63	240	425509	40.00 ppm	0.00
178) Chrysene-d12d	15.63	240	425509	40.00 ppm	0.00
180) Naphthalene-d8d	5.90	136	665021	40.00 ppm	0.00

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

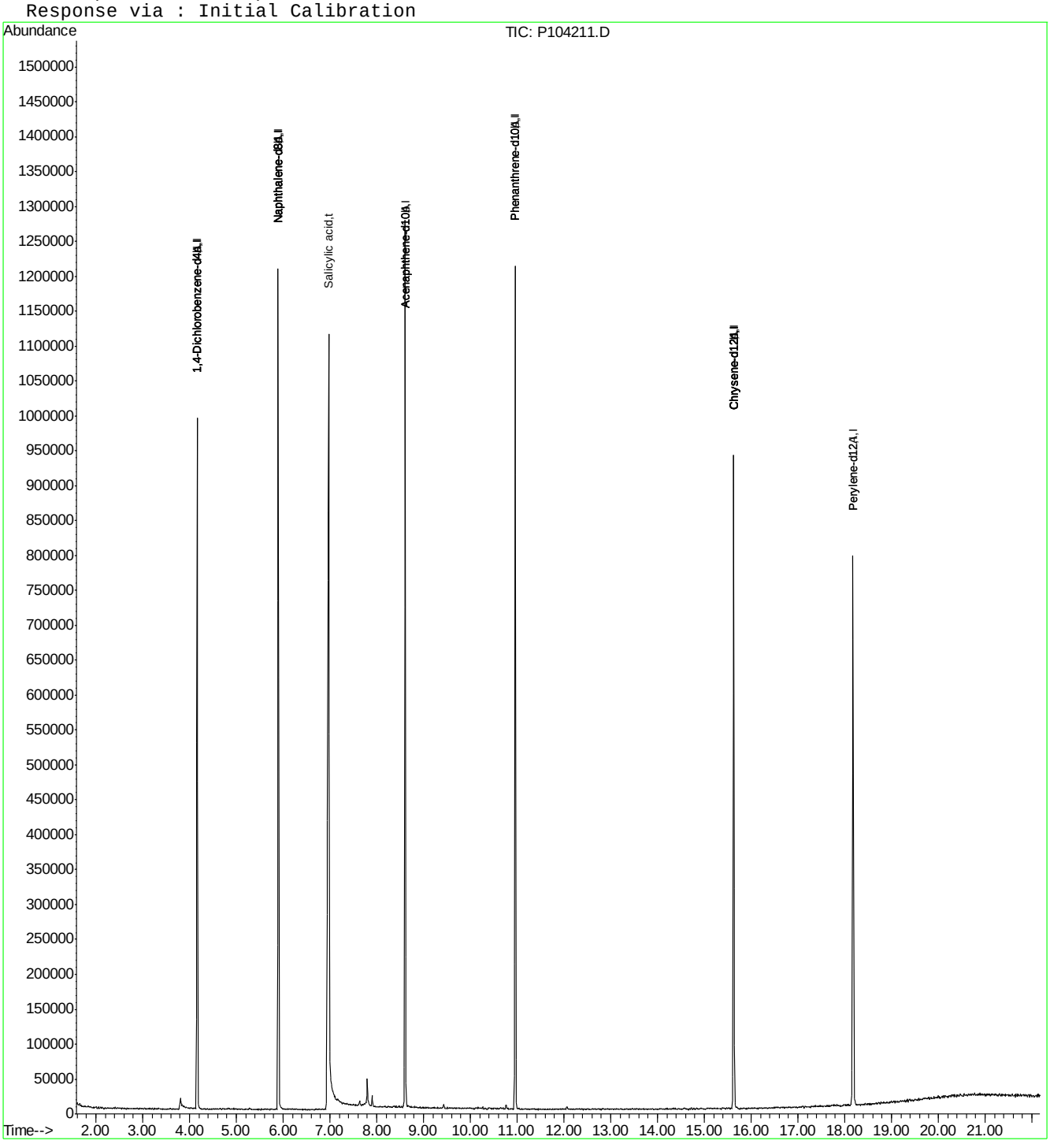
					Qvalue
181) Salicylic acid	6.98	120	639363	183.83 ppm	# 1

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4587\P104211.D Vial: 6
Acq On : 15 Apr 2016 10:56 am Operator: linseyk
Sample : ic4587-200 Inst : MSP
Misc : op93004,ep4587 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 13:27 2016 Quant Results File: MP4524AP9.RES

Method : C:\MSDCHEM\1\METHODS\MP4524AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sun Apr 17 13:20:42 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4587\P104212.D Vial: 7
Acq On : 15 Apr 2016 11:25 am Operator: linseyk
Sample : ic4587-100 Inst : MSP
Misc : op93004,ep4587 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 13:27:41 2016 Quant Results File: MP4524AP9.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sun Apr 17 13:20:42 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.16	152	185492	40.00	ppm	0.00
24) Naphthalene-d8	5.90	136	671622	40.00	ppm	0.00
47) Acenaphthene-d10	8.61	164	363397	40.00	ppm	0.00
69) Phenanthrene-d10	10.96	188	528375	40.00	ppm	0.00
83) Chrysene-d12	15.62	240	418791	40.00	ppm	0.00
92) Perylene-d12	18.18	264	350835	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.16	152	185492	40.00	ppm	0.00
112) Naphthalene-d8A	5.90	136	671622	40.00	ppm	0.00
121) Acenaphthene-d10A	8.61	164	363397	40.00	ppm	0.00
132) Phenanthrene-d10A	10.96	188	528375	40.00	ppm	0.00
147) Chrysene-d12A	15.62	240	418791	40.00	ppm	0.00
155) Perylene-d12A	18.18	264	350835	40.00	ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.16	152	185492	40.00	ppm	0.00
161) Phenanthrene-d10b	10.96	188	528375	40.00	ppm	0.00
163) Chrysene-d12b	15.62	240	418791	40.00	ppm	0.00
165) Naphthalene-d8b	5.90	136	671622	40.00	ppm	0.00
167) Acenaphthene-d10b	8.61	164	363397	40.00	ppm	0.00
169) Naphthalene-d8c	5.90	136	671622	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.16	152	185492	40.00	ppm	0.00
176) Chrysene-d12c	15.62	240	418791	40.00	ppm	0.00
178) Chrysene-d12d	15.62	240	418791	40.00	ppm	0.00
180) Naphthalene-d8d	5.90	136	671622	40.00	ppm	0.00

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
181) Salicylic acid	6.96	120	292599	83.30	ppm	# 1

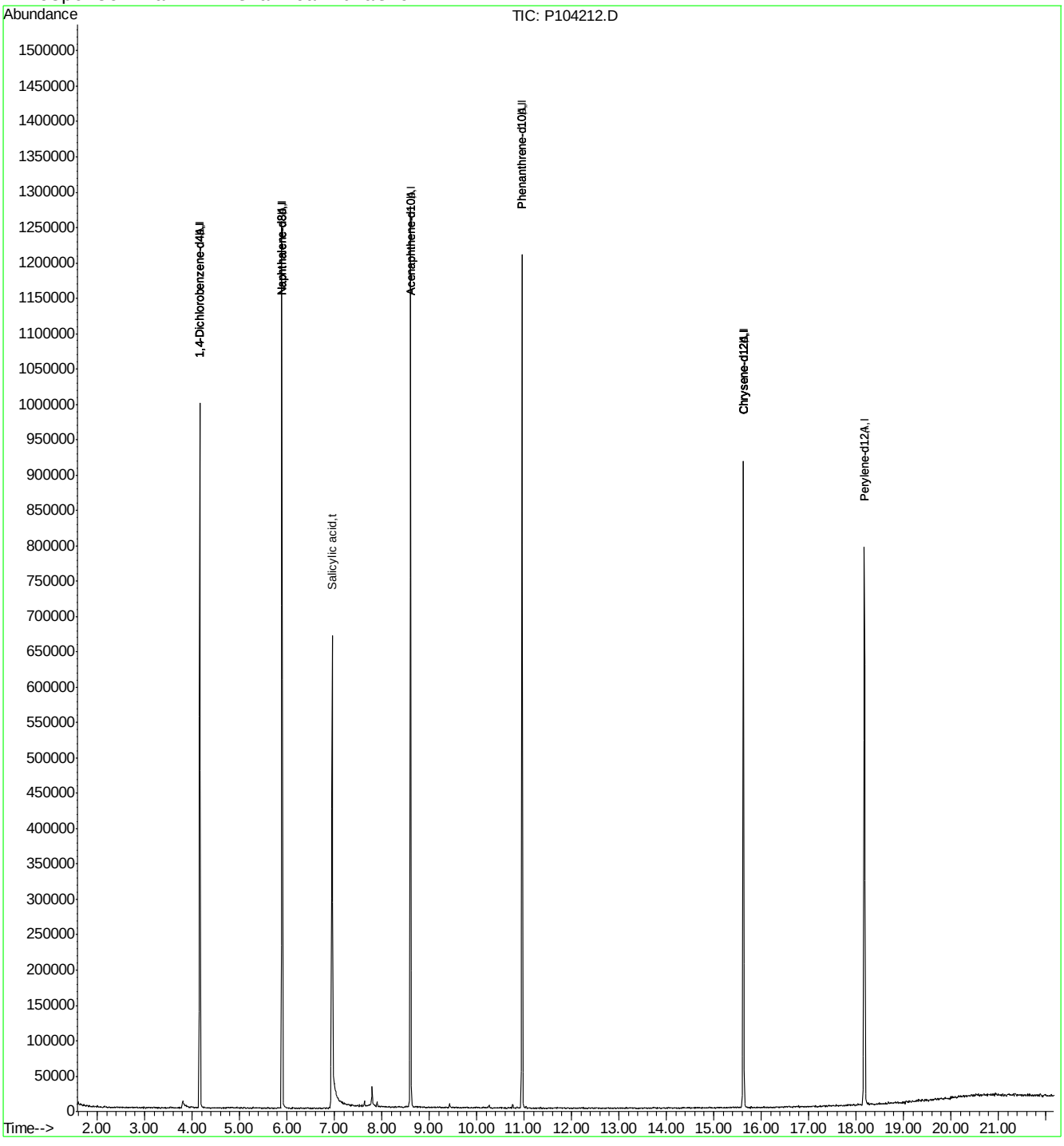
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4587\P104212.D Vial: 7
Acq On : 15 Apr 2016 11:25 am Operator: linseyk
Sample : ic4587-100 Inst : MSP
Misc : op93004,ep4587 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 13:28 2016 Quant Results File: MP4524AP9.RES

Method : C:\MSDCHEM\1\METHODS\MP4524AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sun Apr 17 13:20:42 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4587\P104213.D Vial: 8
Acq On : 15 Apr 2016 11:54 am Operator: linseyk
Sample : ic4587-50 Inst : MSP
Misc : op93004,ep4587 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 13:28:33 2016 Quant Results File: MP4524AP9.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sun Apr 17 13:20:42 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.16	152	176586	40.00	ppm	0.00
24) Naphthalene-d8	5.90	136	649489	40.00	ppm	0.00
47) Acenaphthene-d10	8.60	164	361230	40.00	ppm	0.00
69) Phenanthrene-d10	10.96	188	520223	40.00	ppm	0.00
83) Chrysene-d12	15.63	240	410187	40.00	ppm	0.00
92) Perylene-d12	18.18	264	343795	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.16	152	176586	40.00	ppm	0.00
112) Naphthalene-d8A	5.90	136	649489	40.00	ppm	0.00
121) Acenaphthene-d10A	8.60	164	361230	40.00	ppm	0.00
132) Phenanthrene-d10A	10.96	188	520223	40.00	ppm	0.00
147) Chrysene-d12A	15.63	240	410187	40.00	ppm	0.00
155) Perylene-d12A	18.18	264	343795	40.00	ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.16	152	176586	40.00	ppm	0.00
161) Phenanthrene-d10b	10.96	188	520223	40.00	ppm	0.00
163) Chrysene-d12b	15.63	240	410187	40.00	ppm	0.00
165) Naphthalene-d8b	5.90	136	649489	40.00	ppm	0.00
167) Acenaphthene-d10b	8.60	164	361230	40.00	ppm	0.00
169) Naphthalene-d8c	5.90	136	649489	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.16	152	176586	40.00	ppm	0.00
176) Chrysene-d12c	15.63	240	410187	40.00	ppm	0.00
178) Chrysene-d12d	15.63	240	410187	40.00	ppm	0.00
180) Naphthalene-d8d	5.90	136	649489	40.00	ppm	0.00

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
181) Salicylic acid	6.94	120	95336	28.07	ppm	# 1

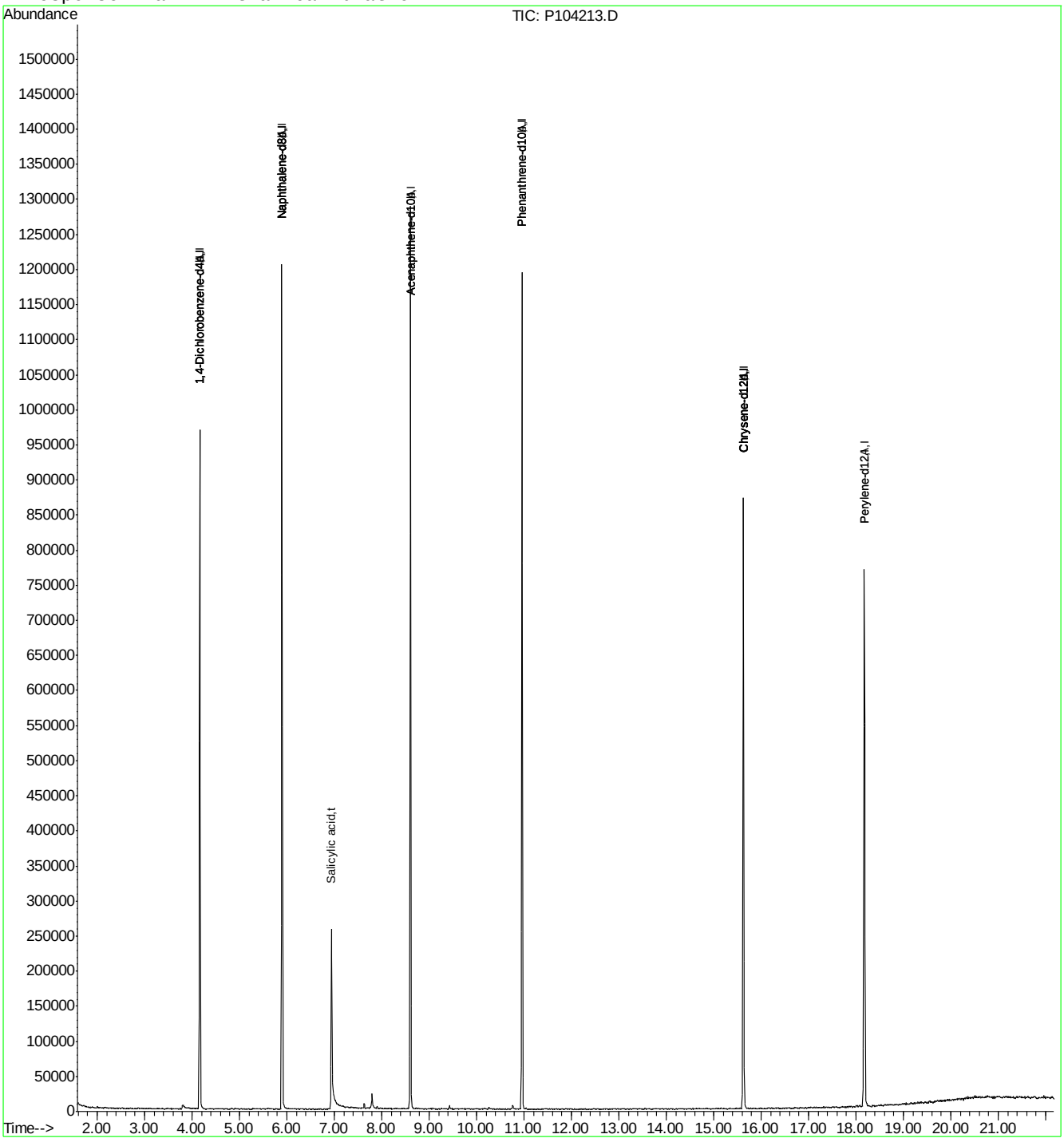
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4587\P104213.D Vial: 8
Acq On : 15 Apr 2016 11:54 am Operator: linseyk
Sample : ic4587-50 Inst : MSP
Misc : op93004,ep4587 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 13:29 2016 Quant Results File: MP4524AP9.RES

Method : C:\MSDCHEM\1\METHODS\MP4524AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sun Apr 17 13:20:42 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4587\P104214.D Vial: 9
Acq On : 15 Apr 2016 12:24 pm Operator: linseyk
Sample : icv4587-500 Inst : MSP
Misc : op93004,ep4587 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 13:34:03 2016 Quant Results File: MP4524AP9.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sun Apr 17 13:33:43 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.16	152	178292	40.00	ppm	0.00
24) Naphthalene-d8	5.90	136	648299	40.00	ppm	0.00
47) Acenaphthene-d10	8.61	164	346399	40.00	ppm	0.00
69) Phenanthrene-d10	10.96	188	505876	40.00	ppm	0.00
83) Chrysene-d12	15.62	240	394642	40.00	ppm	0.00
92) Perylene-d12	18.17	264	322835	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4A	4.16	152	178292	40.00	ppm	0.00
112) Naphthalene-d8A	5.90	136	648299	40.00	ppm	0.00
121) Acenaphthene-d10A	8.61	164	346399	40.00	ppm	0.00
132) Phenanthrene-d10A	10.96	188	505876	40.00	ppm	0.00
147) Chrysene-d12A	15.62	240	394642	40.00	ppm	0.00
155) Perylene-d12A	18.17	264	322835	40.00	ppm	0.00
159) 1,4-Dichlorobenzene-d4b	4.16	152	178292	40.00	ppm	0.00
161) Phenanthrene-d10b	10.96	188	505876	40.00	ppm	0.00
163) Chrysene-d12b	15.62	240	394642	40.00	ppm	0.00
165) Naphthalene-d8b	5.90	136	648299	40.00	ppm	0.00
167) Acenaphthene-d10b	8.61	164	346399	40.00	ppm	0.00
169) Naphthalene-d8c	5.90	136	648299	40.00	ppm	0.00
174) 1,4-Dichlorobenzene-d4a	4.16	152	178292	40.00	ppm	0.00
176) Chrysene-d12c	15.62	240	394642	40.00	ppm	0.00
178) Chrysene-d12d	15.62	240	394642	40.00	ppm	0.00
180) Naphthalene-d8d	5.90	136	648299	40.00	ppm	0.00

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%			

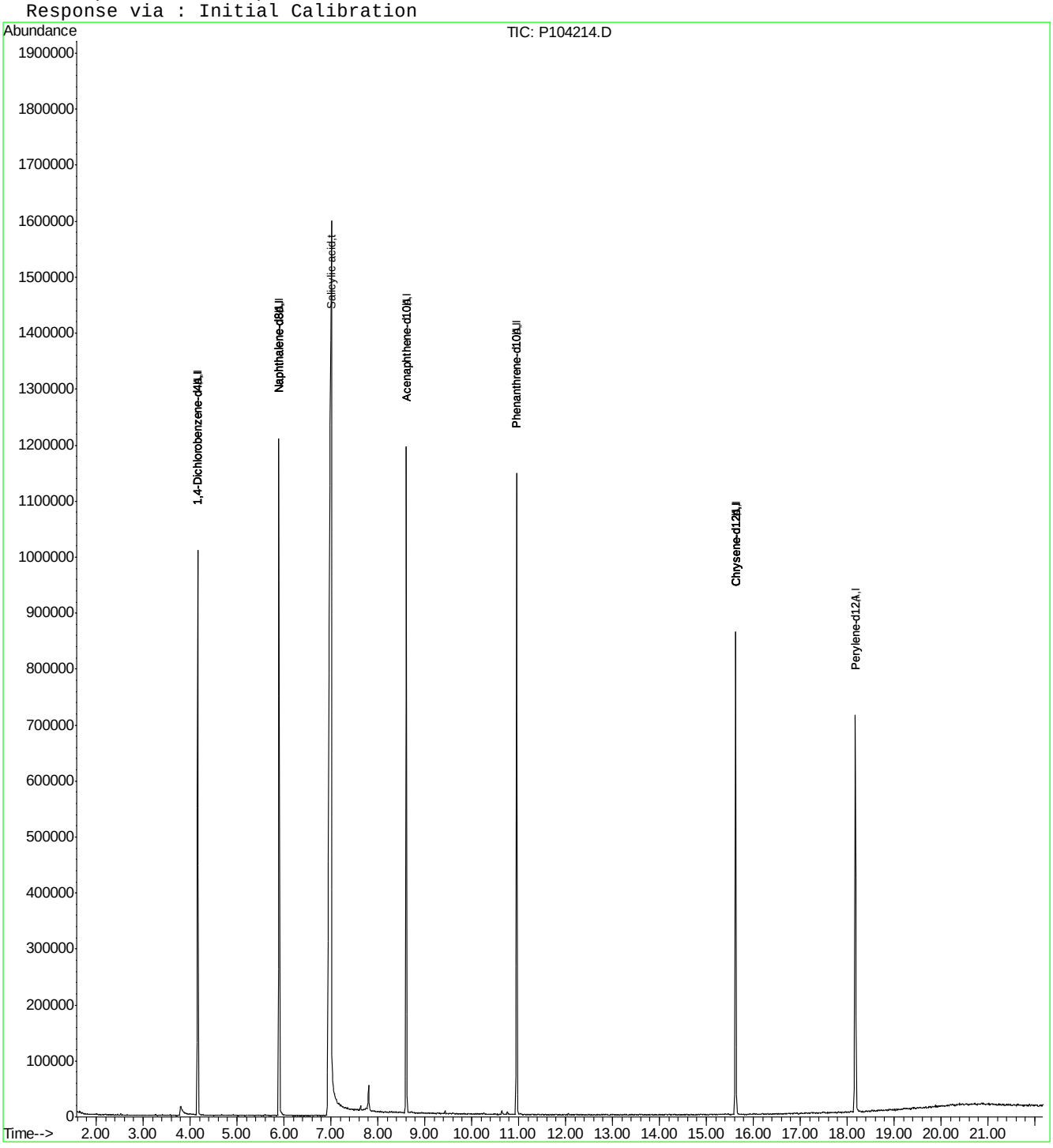
Target Compounds						Qvalue
181) Salicylic acid	7.01	120	1304123	433.20	ppm	# 1

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4587\P104214.D Vial: 9
Acq On : 15 Apr 2016 12:24 pm Operator: linseyk
Sample : icv4587-500 Inst : MSP
Misc : op93004,ep4587 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 17 13:34 2016 Quant Results File: MP4524AP9.RES

Method : C:\MSDCHEM\1\METHODS\MP4524AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Sun Apr 17 13:33:43 2016
Response via : Initial Calibration



P104214.D MP4524AP9.M Sun Apr 17 13:34:57 2016 Page 2

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104241.D Vial: 2
Acq On : 18 Apr 2016 9:26 am Operator: linseyk
Sample : cc4524-25 Inst : MSP
Misc : op93004,ep4590 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 18 09:48:48 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Apr 18 09:14:55 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.14	152	180641	40.00	ppm	-0.04
24) Naphthalene-d8	5.87	136	654737	40.00	ppm	-0.04
47) Acenaphthene-d10	8.58	164	365488	40.00	ppm	-0.03
69) Phenanthrene-d10	10.93	188	527886	40.00	ppm	-0.03
83) Chrysene-d12	15.60	240	454275	40.00	ppm	-0.03
92) Perylene-d12	18.15	264	383447	40.00	ppm	-0.03
102) 1,4-Dichlorobenzene-d4b	4.14	152	180641	40.00	ppm	-0.04
104) Phenanthrene-d10b	10.93	188	527886	40.00	ppm	-0.03
106) Chrysene-d12b	15.60	240	454275	40.00	ppm	-0.03
108) Naphthalene-d8b	5.87	136	654737	40.00	ppm	-0.04
110) Acenaphthene-d10b	8.58	164	365488	40.00	ppm	-0.03

System Monitoring Compounds

5) 2-Fluorophenol	2.78	112	184670	29.37	ppm	-0.04
Spiked Amount 50.000			Recovery = 58.74%			
8) Phenol-d5	3.74	99	228269	29.75	ppm	-0.05
Spiked Amount 50.000			Recovery = 59.50%			
25) Nitrobenzene-d5	4.86	82	171792	25.92	ppm	-0.06
Spiked Amount 50.000			Recovery = 51.84%			
51) 2-Fluorobiphenyl	7.56	172	286207	25.81	ppm	-0.07
Spiked Amount 50.000			Recovery = 51.62%			
73) 2,4,6-Tribromophenol	9.84	330	26646	21.59	ppm	-0.05
Spiked Amount 50.000			Recovery = 43.18%			
85) Terphenyl-d14	13.72	244	226626	25.34	ppm	-0.05
Spiked Amount 50.000			Recovery = 50.68%			

Target Compounds

							Qvalue
2) 1,4-Dioxane	1.65	88	89764	27.97	ppm		99
3) Pyridine	1.84	79	207384	28.62	ppm		96
4) N-Nitrosodimethylamine	1.81	42	78401	28.94	ppm		95
6) Indene	4.46	116	287780	28.01	ppm		99
7) Cumene	3.24	105	385706	25.99	ppm		97
9) Phenol	3.76	94	236670	29.90	ppm		94
10) Aniline	3.75	93	208093	24.13	ppm		90
11) bis(2-Chloroethyl)ether	3.82	93	172494	29.62	ppm		96
12) 2-Chlorophenol	3.90	128	175888	29.32	ppm		98
13) Decane	3.96	43	146742	30.74	ppm		93
14) 1,3-Dichlorobenzene	4.07	146	182595	27.17	ppm		98
15) 1,4-Dichlorobenzene	4.16	146	177057	27.43	ppm		98
16) Benzyl alcohol	4.33	108	109526	30.71	ppm		94
17) 1,2-Dichlorobenzene	4.35	146	167526	27.36	ppm		99
18) Acetophenone	4.66	105	230071	28.32	ppm		94
19) 2-Methylphenol	4.50	108	150852	29.57	ppm		96
20) 2,2'-oxybis(1-Chloropropan	4.50	121	55215	28.83	ppm	#	60
21) 3&4-Methylphenol	4.72	108	167446	30.08	ppm		97
22) n-Nitroso-di-n-propylamine	4.67	70	118663	29.11	ppm		94
23) Hexachloroethane	4.78	201	51322	24.40	ppm		88
26) Nitrobenzene	4.89	77	168180	26.45	ppm		93
27) Quinoline	6.41	129	333298	28.25	ppm		97
28) Isophorone	5.22	82	298901	27.72	ppm		99

(#) = qualifier out of range (m) = manual integration
P104241.D MP4524.M Mon Apr 18 16:54:23 2016

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104241.D Vial: 2
Acq On : 18 Apr 2016 9:26 am Operator: linseyk
Sample : cc4524-25 Inst : MSP
Misc : op93004,ep4590 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 18 09:48:48 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Apr 18 09:14:55 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
29) 2-Nitrophenol	5.34	139	93288	29.90 ppm #	70
30) 2,4-Dimethylphenol	5.45	107	142785	26.95 ppm	95
31) Benzoic acid	5.65	105	125198	30.42 ppm	98
32) bis(2-Chloroethoxy)methane	5.56	93	203314	29.85 ppm	98
33) 2,4-Dichlorophenol	5.71	162	131678	28.44 ppm	98
34) 2,6-Dichlorophenol	6.03	162	125781	28.31 ppm	97
35) 1,3,5-Trichlorobenzene	5.35	180	132048	25.45 ppm	97
36) 1,2,4-Trichlorobenzene	5.80	180	128399	25.03 ppm	95
37) 1,2,3-Trichlorobenzene	6.13	180	121788	25.86 ppm	97
38) Naphthalene	5.90	128	449977	27.71 ppm	99
39) 4-Chloroaniline	6.02	127	193620	28.04 ppm	93
40) 2,3-Dichloroaniline	7.41	161	156387	26.59 ppm	96
41) Caprolactam	6.52	55	72467	33.30 ppm	93
42) Hexachlorobutadiene	6.12	225	56311	22.09 ppm	98
43) 4-Chloro-3-methylphenol	6.84	107	145571	29.43 ppm	91
44) 2-Methylnaphthalene	6.96	141	241934	26.89 ppm	96
45) 1-Methylnaphthalene	7.11	142	293725	26.77 ppm	96
46) Dimethylnaphthalene	7.94	156	248187	25.86 ppm	97
48) Hexachlorocyclopentadiene	7.22	237	91348	38.37 ppm	99
49) 2,4,6-Trichlorophenol	7.44	196	77185	26.96 ppm	98
50) 2,4,5-Trichlorophenol	7.51	196	83887	28.16 ppm	98
52) 2-Chloronaphthalene	7.71	162	261701	27.26 ppm	99
53) Biphenyl	7.70	154	329127	26.66 ppm	98
54) 2-Nitroaniline	7.91	65	87074	31.36 ppm	89
55) Dimethylphthalate	8.24	163	307700	27.73 ppm	98
56) Acenaphthylene	8.35	152	435586	28.40 ppm	98
57) 2,6-Dinitrotoluene	8.31	165	68612	28.99 ppm	93
58) 3-Nitroaniline	8.57	138	90295	32.41 ppm	93
59) Acenaphthene	8.63	153	257787	27.05 ppm	98
60) 2,4-Dinitrophenol	8.74	184	75220	56.64 ppm	98
61) 4-Nitrophenol	8.96	109	37935	25.02 ppm	93
62) Dibenzofuran	8.91	168	368888	27.46 ppm	97
63) 2,4-Dinitrotoluene	8.94	165	92285	24.75 ppm	91
64) 2,3,4,6-Tetrachlorophenol	9.14	232	57615	25.17 ppm	93
65) Diethylphthalate	9.37	149	311279	28.22 ppm	99
66) Fluorene	9.45	166	296327	27.02 ppm	100
67) 4-Chlorophenyl-phenylether	9.49	204	121091	24.61 ppm	98
68) 4-Nitroaniline	9.54	138	88297	31.55 ppm	88
70) 4,6-Dinitro-2-methylphenol	9.59	198	47390	25.80 ppm	90
71) n-Nitrosodiphenylamine	9.69	169	204610	26.92 ppm	98
72) 1,2-Diphenylhydrazine	9.74	77	312106	29.96 ppm	97
74) 4-Bromophenyl-phenylether	10.27	248	64175	24.85 ppm	98
75) Hexachlorobenzene	10.33	284	60989	21.75 ppm	88
76) Pentachlorophenol	10.68	266	79176	47.49 ppm	97
77) Phenanthrene	10.97	178	370329	27.35 ppm	99
78) Anthracene	11.05	178	382455	28.17 ppm	100
79) Carbazole	11.35	167	405888	29.19 ppm	94
80) Di-n-butylphthalate	12.03	149	537126	33.14 ppm	99
81) Fluoranthene	12.96	202	408304	28.02 ppm	96

(#) = qualifier out of range (m) = manual integration
P104241.D MP4524.M Mon Apr 18 16:54:23 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104241.D Vial: 2
Acq On : 18 Apr 2016 9:26 am Operator: linseyk
Sample : cc4524-25 Inst : MSP
Misc : op93004,ep4590 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 18 09:48:48 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Apr 18 09:14:55 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
82)	Octadecane	10.93	57	159656	30.03	ppm	99
84)	Pyrene	13.34	202	421404	29.15	ppm	95
86)	Butylbenzylphthalate	14.71	149	243357	34.62	ppm	96
87)	Butyl stearate	14.94	56	139654	33.58	ppm	85
88)	Benzo[a]anthracene	15.58	228	330455	27.88	ppm	98
89)	3,3'-Dichlorobenzidine	15.61	252	120334	24.25	ppm	96
90)	Chrysene	15.65	228	310232	26.44	ppm	99
91)	bis(2-Ethylhexyl)phthalate	15.88	149	319262	28.59	ppm	99
93)	Di-n-octylphthalate	17.07	149	560523	32.77	ppm	99
94)	Benzo[b]fluoranthene	17.52	252	323359	29.65	ppm	94
95)	Benzo[k]fluoranthene	17.57	252	294864	28.07	ppm	94
96)	Benzo[a]pyrene	18.05	252	282650	29.38	ppm	94
97)	Indeno[1,2,3-cd]pyrene	19.77	276	246116	28.98	ppm	79
98)	Dibenz(a,h)acridine	19.46	279	226739	28.04	ppm	100
99)	Dibenz[a,h]anthracene	19.81	278	250932	27.42	ppm	87
100)	7,12-Dimethylbenz(a)anthra	17.53	256	126650	27.43	ppm	98
101)	Benzo[g,h,i]perylene	20.13	276	263711	27.11	ppm	84

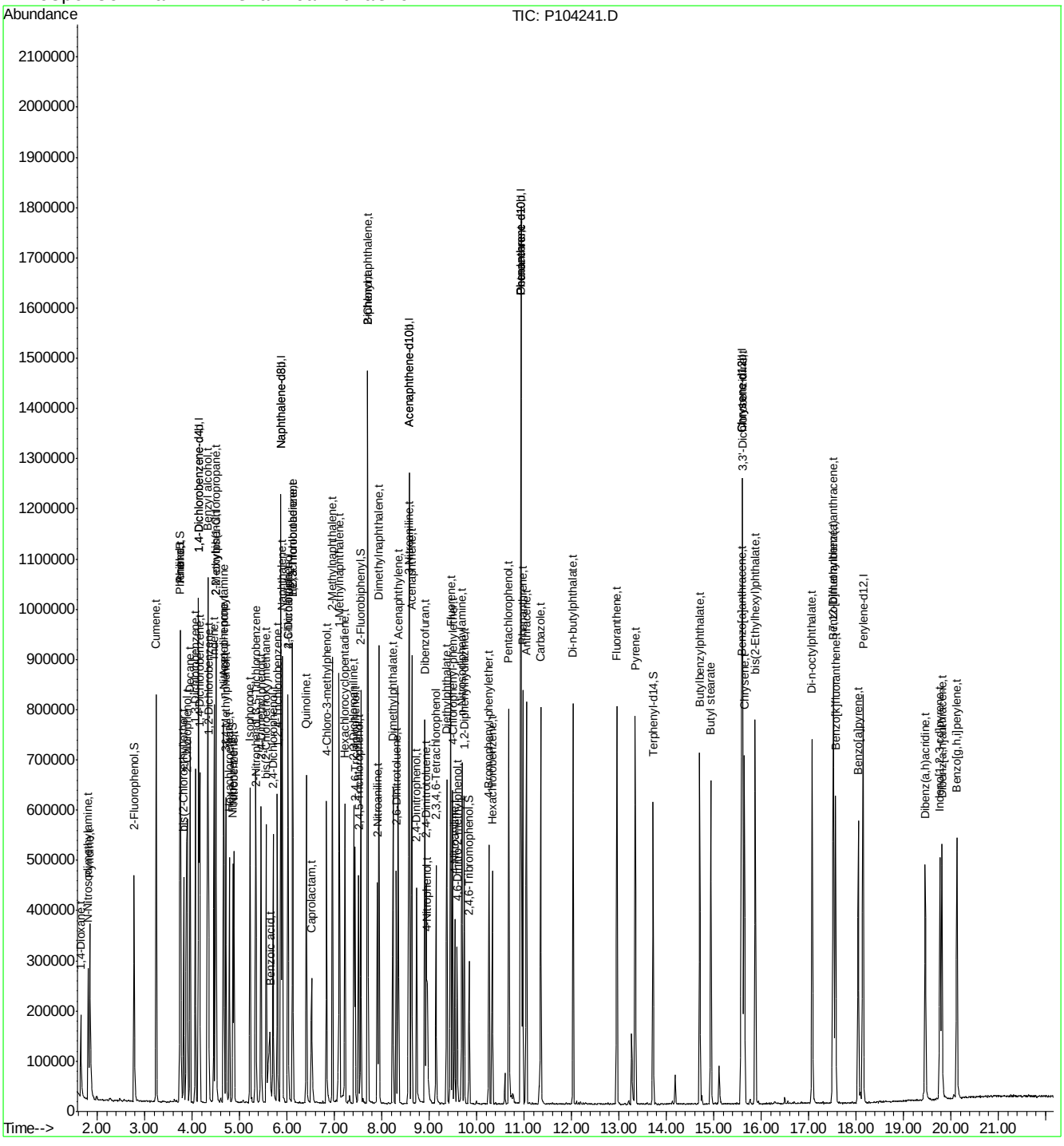
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104241.D Vial: 2
Acq On : 18 Apr 2016 9:26 am Operator: linseyk
Sample : cc4524-25 Inst : MSP
Misc : op93004,ep4590 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 18 9:50 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Apr 18 09:14:55 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104242.D Vial: 3
Acq On : 18 Apr 2016 9:55 am Operator: linseyk
Sample : cc4514-25 Inst : MSP
Misc : op93004,ep4590 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 18 10:17:43 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Apr 18 09:14:55 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.14	152	174490	40.00	ppm	-0.04
24) Naphthalene-d8	5.87	136	639650	40.00	ppm	-0.04
47) Acenaphthene-d10	8.58	164	346864	40.00	ppm	-0.04
69) Phenanthrene-d10	10.93	188	525453	40.00	ppm	-0.04
83) Chrysene-d12	15.60	240	446076	40.00	ppm	-0.04
92) Perylene-d12	18.15	264	386458	40.00	ppm	-0.04
102) 1,4-Dichlorobenzene-d4b	4.14	152	174490	40.00	ppm	-0.04
104) Phenanthrene-d10b	10.93	188	525453	40.00	ppm	-0.04
106) Chrysene-d12b	15.60	240	446076	40.00	ppm	-0.04
108) Naphthalene-d8b	5.87	136	639650	40.00	ppm	-0.04
110) Acenaphthene-d10b	8.58	164	346864	40.00	ppm	-0.04

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
103) Benzaldehyde	3.62	105	129354	24.66	ppm	97
105) Atrazine	10.60	200	64081	23.90	ppm	88
107) Benzidine	13.27	184	204530	26.05	ppm	97
109) Hydroquinone	6.63	110	174019	29.68	ppm	96
111) 1,2,4,5-Tetrachlorobenzene	7.23	216	103928	21.83	ppm	98

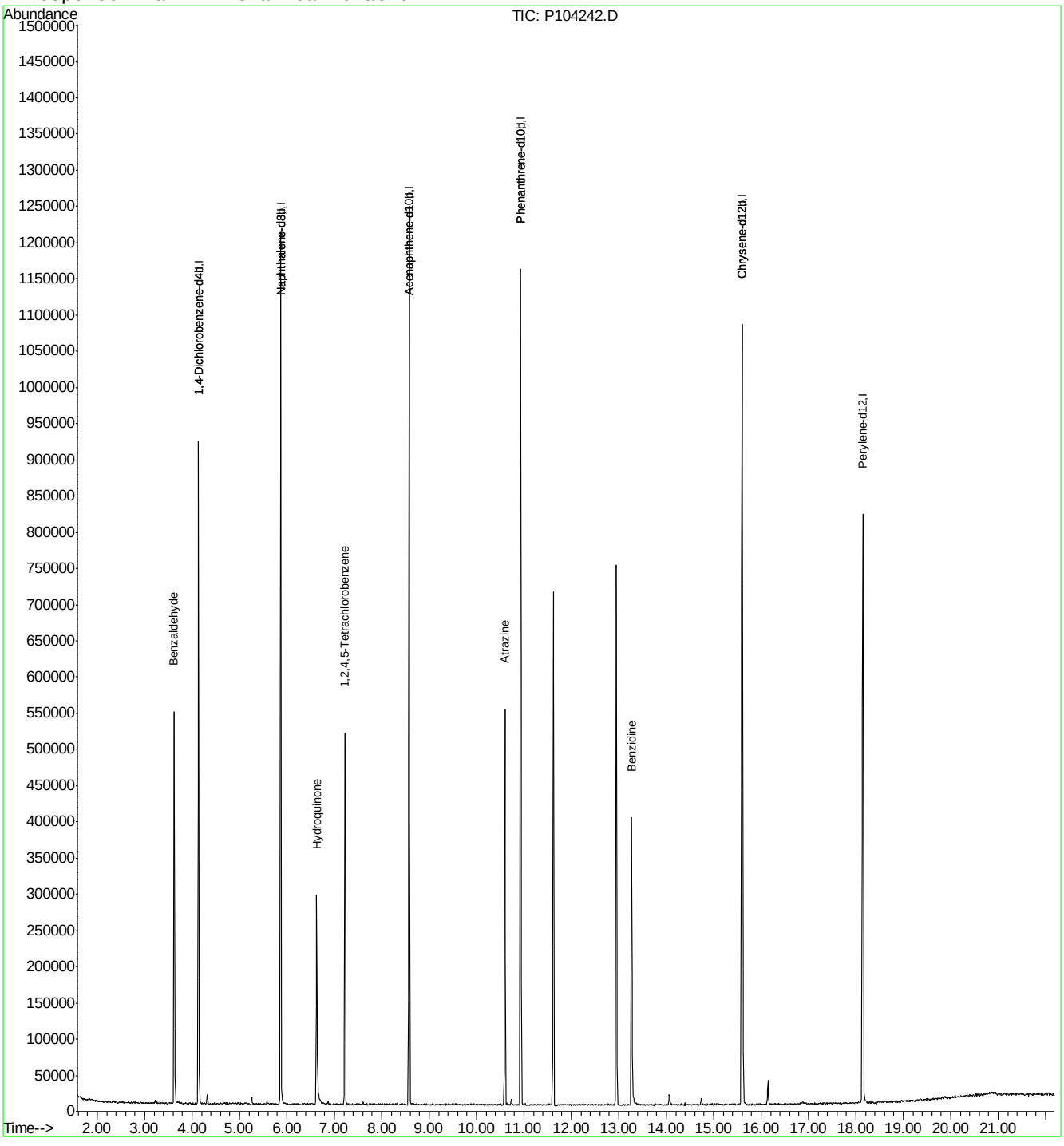
(#) = qualifier out of range (m) = manual integration (+) = signals summed
P104242.D MP4524.M Mon Apr 18 16:54:40 2016

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104242.D Vial: 3
Acq On : 18 Apr 2016 9:55 am Operator: linseyk
Sample : cc4514-25 Inst : MSP
Misc : op93004,ep4590 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 18 10:34 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Apr 18 09:14:55 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104244.D Vial: 5
Acq On : 18 Apr 2016 10:53 am Operator: linseyk
Sample : cc4587-25 Inst : MSP
Misc : op93004,ep4590 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 18 11:16:40 2016 Quant Results File: MP4524AP9.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Apr 18 09:38:41 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.14	152	163706	40.00 ppm	-0.03
24) Naphthalene-d8	5.87	136	609000	40.00 ppm	-0.03
47) Acenaphthene-d10	8.58	164	335341	40.00 ppm	-0.03
69) Phenanthrene-d10	10.93	188	497331	40.00 ppm	-0.03
83) Chrysene-d12	15.59	240	406622	40.00 ppm	-0.04
92) Perylene-d12	18.15	264	344019	40.00 ppm	-0.03
102) 1,4-Dichlorobenzene-d4A	4.14	152	163706	40.00 ppm	-0.03
112) Naphthalene-d8A	5.87	136	609000	40.00 ppm	-0.03
121) Acenaphthene-d10A	8.58	164	335341	40.00 ppm	-0.03
132) Phenanthrene-d10A	10.93	188	497331	40.00 ppm	-0.03
147) Chrysene-d12A	15.59	240	406622	40.00 ppm	-0.04
155) Perylene-d12A	18.15	264	344019	40.00 ppm	-0.03
159) 1,4-Dichlorobenzene-d4b	4.14	152	163706	40.00 ppm	-0.03
161) Phenanthrene-d10b	10.93	188	497331	40.00 ppm	-0.03
163) Chrysene-d12b	15.59	240	406622	40.00 ppm	-0.04
165) Naphthalene-d8b	5.87	136	609000	40.00 ppm	-0.03
167) Acenaphthene-d10b	8.58	164	335341	40.00 ppm	-0.03
169) Naphthalene-d8c	5.87	136	609000	40.00 ppm	-0.03
174) 1,4-Dichlorobenzene-d4a	4.14	152	163706	40.00 ppm	-0.03
176) Chrysene-d12c	15.59	240	406622	40.00 ppm	-0.04
178) Chrysene-d12d	15.59	240	406622	40.00 ppm	-0.04
180) Naphthalene-d8d	5.87	136	609000	40.00 ppm	-0.03

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%		

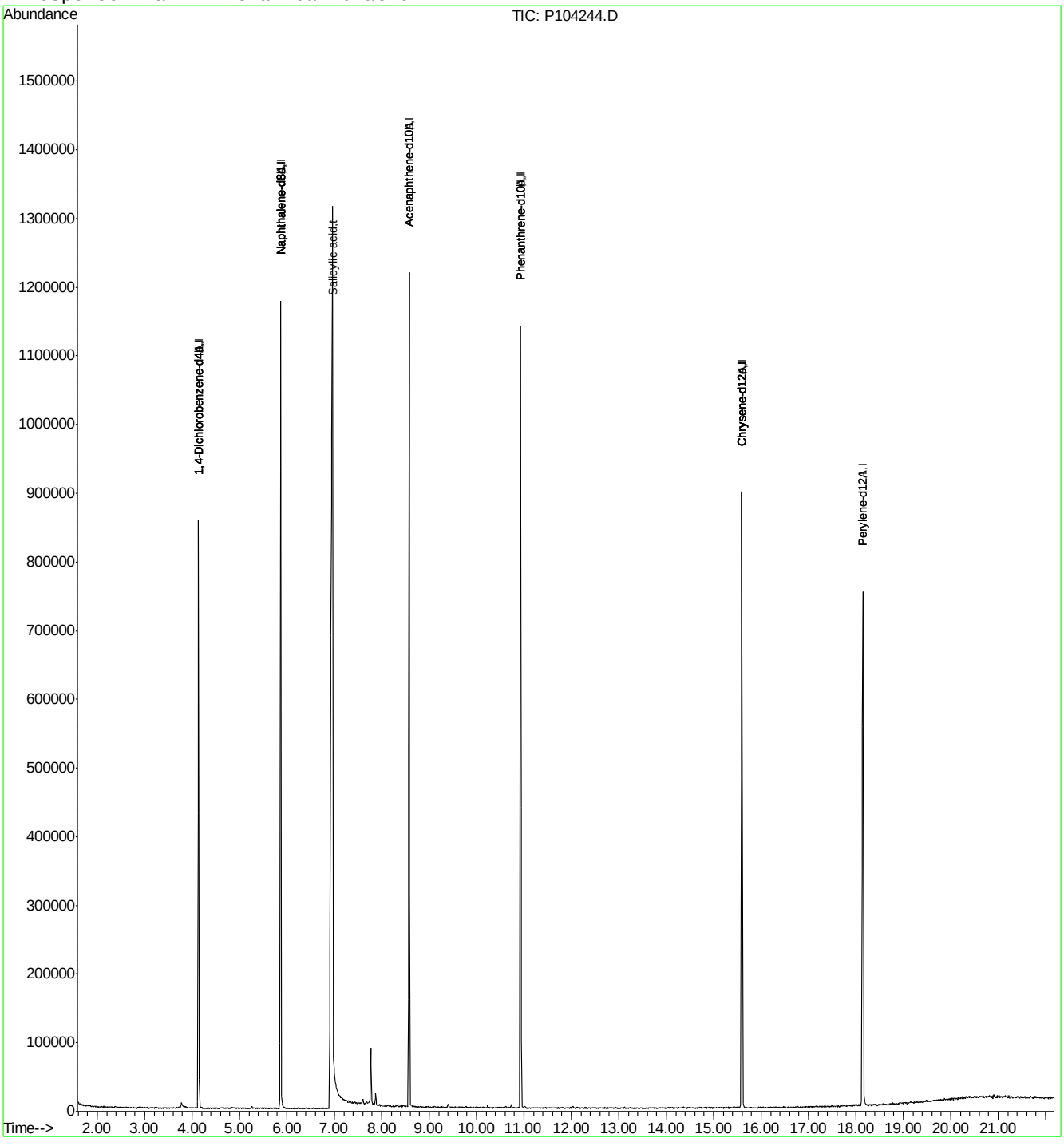
Target Compounds					Qvalue
181) Salicylic acid	6.96	120	910101	321.83 ppm	# 1

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

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4590\P104244.D Vial: 5
Acq On : 18 Apr 2016 10:53 am Operator: linseyk
Sample : cc4587-25 Inst : MSP
Misc : op93004,ep4590 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 18 11:17 2016 Quant Results File: MP4524AP9.RES

Method : C:\MSDCHEM\1\METHODS\MP4524AP9.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Wed Apr 20 16:55:11 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4592\P104286.D Vial: 2
Acq On : 19 Apr 2016 12:34 pm Operator: linseyk
Sample : cc4524-25 Inst : MSP
Misc : op93127,ep4592 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 19 12:56:36 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 19 12:44:38 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	4.19	152	87945	40.00	ppm	0.02
24) Naphthalene-d8	5.93	136	328238	40.00	ppm	0.02
47) Acenaphthene-d10	8.64	164	175657	40.00	ppm	0.03
69) Phenanthrene-d10	11.00	188	256714	40.00	ppm	0.03
83) Chrysene-d12	15.67	240	206474	40.00	ppm	0.04
92) Perylene-d12	18.23	264	165336	40.00	ppm	0.04
102) 1,4-Dichlorobenzene-d4b	4.19	152	87945	40.00	ppm	0.02
104) Phenanthrene-d10b	11.00	188	256714	40.00	ppm	0.03
106) Chrysene-d12b	15.67	240	206474	40.00	ppm	0.04
108) Naphthalene-d8b	5.93	136	328238	40.00	ppm	0.02
110) Acenaphthene-d10b	8.64	164	175657	40.00	ppm	0.03

System Monitoring Compounds						
5) 2-Fluorophenol	2.82	112	89484	29.23	ppm	0.01
Spiked Amount 50.000			Recovery = 58.46%			
8) Phenol-d5	3.80	99	109465	29.31	ppm	0.00
Spiked Amount 50.000			Recovery = 58.62%			
25) Nitrobenzene-d5	4.92	82	81680	24.58	ppm	0.00
Spiked Amount 50.000			Recovery = 49.16%			
51) 2-Fluorobiphenyl	7.62	172	135029	25.34	ppm	-0.01
Spiked Amount 50.000			Recovery = 50.68%			
73) 2,4,6-Tribromophenol	9.91	330	10258	17.09	ppm	0.01
Spiked Amount 50.000			Recovery = 34.18%			
85) Terphenyl-d14	13.79	244	100290	24.67	ppm	0.02
Spiked Amount 50.000			Recovery = 49.34%			

Target Compounds							Qvalue
2) 1,4-Dioxane	1.68	88	43082	27.57	ppm		95
3) Pyridine	1.88	79	99463	28.20	ppm		96
4) N-Nitrosodimethylamine	1.84	42	37813	28.67	ppm		97
6) Indene	4.52	116	137948	27.58	ppm		100
7) Cumene	3.29	105	196283	27.16	ppm		97
9) Phenol	3.81	94	116602	30.25	ppm		95
10) Aniline	3.81	93	103455	24.64	ppm		71
11) bis(2-Chloroethyl)ether	3.88	93	85552	30.17	ppm		99
12) 2-Chlorophenol	3.95	128	84495	28.93	ppm		98
13) Decane	4.01	43	76667	32.99	ppm		92
14) 1,3-Dichlorobenzene	4.12	146	86908	26.56	ppm		98
15) 1,4-Dichlorobenzene	4.21	146	85548	27.23	ppm		96
16) Benzyl alcohol	4.38	108	54164	31.19	ppm		94
17) 1,2-Dichlorobenzene	4.41	146	80402	26.97	ppm		99
18) Acetophenone	4.72	105	110300	27.89	ppm		95
19) 2-Methylphenol	4.56	108	72206	29.07	ppm		99
20) 2,2'-oxybis(1-Chloropropan	4.56	121	27205	29.17	ppm	#	64
21) 3&4-Methylphenol	4.77	108	78107	28.82	ppm		98
22) n-Nitroso-di-n-propylamine	4.73	70	57936	29.19	ppm		93
23) Hexachloroethane	4.85	201	24173	23.61	ppm		93
26) Nitrobenzene	4.95	77	81546	25.58	ppm		94
27) Quinoline	6.47	129	153582	25.97	ppm		97
28) Isophorone	5.28	82	144375	26.71	ppm		99

(#) = qualifier out of range (m) = manual integration
P104286.D MP4524.M Tue Apr 19 14:26:41 2016

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4592\P104286.D Vial: 2
Acq On : 19 Apr 2016 12:34 pm Operator: linseyk
Sample : cc4524-25 Inst : MSP
Misc : op93127,ep4592 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 19 12:56:36 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 19 12:44:38 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
29) 2-Nitrophenol	5.39	139	42992	27.49 ppm #	69
30) 2,4-Dimethylphenol	5.51	107	66782	25.14 ppm	97
31) Benzoic acid	5.67	105	53462	25.91 ppm	95
32) bis(2-Chloroethoxy)methane	5.62	93	97966	28.69 ppm	98
33) 2,4-Dichlorophenol	5.77	162	60864	26.23 ppm	96
34) 2,6-Dichlorophenol	6.09	162	58962	26.47 ppm	98
35) 1,3,5-Trichlorobenzene	5.41	180	61794	23.76 ppm	98
36) 1,2,4-Trichlorobenzene	5.86	180	60287	23.44 ppm	96
37) 1,2,3-Trichlorobenzene	6.19	180	55851	23.65 ppm	99
38) Naphthalene	5.96	128	221101	27.16 ppm	98
39) 4-Chloroaniline	6.08	127	90940	26.27 ppm	94
40) 2,3-Dichloroaniline	7.47	161	72784	24.68 ppm	95
41) Caprolactam	6.57	55	32795	30.06 ppm	90
42) Hexachlorobutadiene	6.18	225	25522	19.97 ppm	96
43) 4-Chloro-3-methylphenol	6.90	107	67406	27.19 ppm	88
44) 2-Methylnaphthalene	7.02	141	115129	25.53 ppm	95
45) 1-Methylnaphthalene	7.17	142	137901	25.07 ppm	97
46) Dimethylnaphthalene	8.01	156	116719	24.26 ppm	99
48) Hexachlorocyclopentadiene	7.29	237	36651	32.03 ppm	98
49) 2,4,6-Trichlorophenol	7.50	196	35179	25.56 ppm	97
50) 2,4,5-Trichlorophenol	7.57	196	37248	26.01 ppm	98
52) 2-Chloronaphthalene	7.77	162	125809	27.27 ppm	99
53) Biphenyl	7.77	154	161246	27.18 ppm	99
54) 2-Nitroaniline	7.97	65	38452	28.82 ppm	87
55) Dimethylphthalate	8.30	163	139233	26.11 ppm	97
56) Acenaphthylene	8.41	152	207767	28.19 ppm	97
57) 2,6-Dinitrotoluene	8.36	165	29918	26.30 ppm	95
58) 3-Nitroaniline	8.63	138	39571	29.55 ppm	99
59) Acenaphthene	8.70	153	122987	26.85 ppm	98
60) 2,4-Dinitrophenol	8.80	184	27586	44.93 ppm	91
61) 4-Nitrophenol	9.03	109	15446	21.19 ppm	83
62) Dibenzofuran	8.97	168	174367	27.01 ppm	92
63) 2,4-Dinitrotoluene	9.01	165	39845	22.22 ppm	74
64) 2,3,4,6-Tetrachlorophenol	9.21	232	24352	22.13 ppm	95
65) Diethylphthalate	9.43	149	141217	26.64 ppm	99
66) Fluorene	9.52	166	138757	26.32 ppm	97
67) 4-Chlorophenyl-phenylether	9.56	204	54243	22.93 ppm	98
68) 4-Nitroaniline	9.59	138	39694	29.51 ppm	88
70) 4,6-Dinitro-2-methylphenol	9.65	198	18318	21.12 ppm	92
71) n-Nitrosodiphenylamine	9.75	169	94991	25.70 ppm	97
72) 1,2-Diphenylhydrazine	9.80	77	151882	29.98 ppm	98
74) 4-Bromophenyl-phenylether	10.33	248	27711	22.06 ppm	91
75) Hexachlorobenzene	10.39	284	26820	19.67 ppm	82
76) Pentachlorophenol	10.74	266	29695	37.64 ppm	99
77) Phenanthrene	11.04	178	172799	26.24 ppm	99
78) Anthracene	11.12	178	173919	26.35 ppm	99
79) Carbazole	11.41	167	187420	27.72 ppm	95
80) Di-n-butylphthalate	12.10	149	242249	30.73 ppm	98
81) Fluoranthene	13.03	202	182265	25.72 ppm	95

(#) = qualifier out of range (m) = manual integration

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4592\P104286.D Vial: 2
Acq On : 19 Apr 2016 12:34 pm Operator: linseyk
Sample : cc4524-25 Inst : MSP
Misc : op93127,ep4592 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 19 12:56:36 2016 Quant Results File: MP4524.RES

Quant Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 19 12:44:38 2016
Response via : Initial Calibration
DataAcq Meth : MP4524

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
82)	Octadecane	10.99	57	89572	34.65	ppm	98
84)	Pyrene	13.42	202	191839	29.19	ppm	91
86)	Butylbenzylphthalate	14.78	149	108802	34.05	ppm	99
87)	Butyl stearate	15.00	56	64312	34.04	ppm	88
88)	Benzo[a]anthracene	15.66	228	146550	27.20	ppm	98
89)	3,3'-Dichlorobenzidine	15.69	252	51602	22.94	ppm	91
90)	Chrysene	15.72	228	140012	26.26	ppm	98
91)	bis(2-Ethylhexyl)phthalate	15.95	149	141984	27.98	ppm	98
93)	Di-n-octylphthalate	17.14	149	249551	33.91	ppm	98
94)	Benzo[b]fluoranthene	17.60	252	142412	30.28	ppm	93
95)	Benzo[k]fluoranthene	17.64	252	130956	28.91	ppm	91
96)	Benzo[a]pyrene	18.12	252	124920	30.12	ppm	91
97)	Indeno[1,2,3-cd]pyrene	19.84	276	104486	28.53	ppm	70
98)	Dibenz(a,h)acridine	19.54	279	93076	26.69	ppm	96
99)	Dibenz[a,h]anthracene	19.89	278	106238	26.93	ppm	83
100)	7,12-Dimethylbenz(a)anthra	17.60	256	55003	27.63	ppm	97
101)	Benzo[g,h,i]perylene	20.21	276	111410	26.57	ppm	81

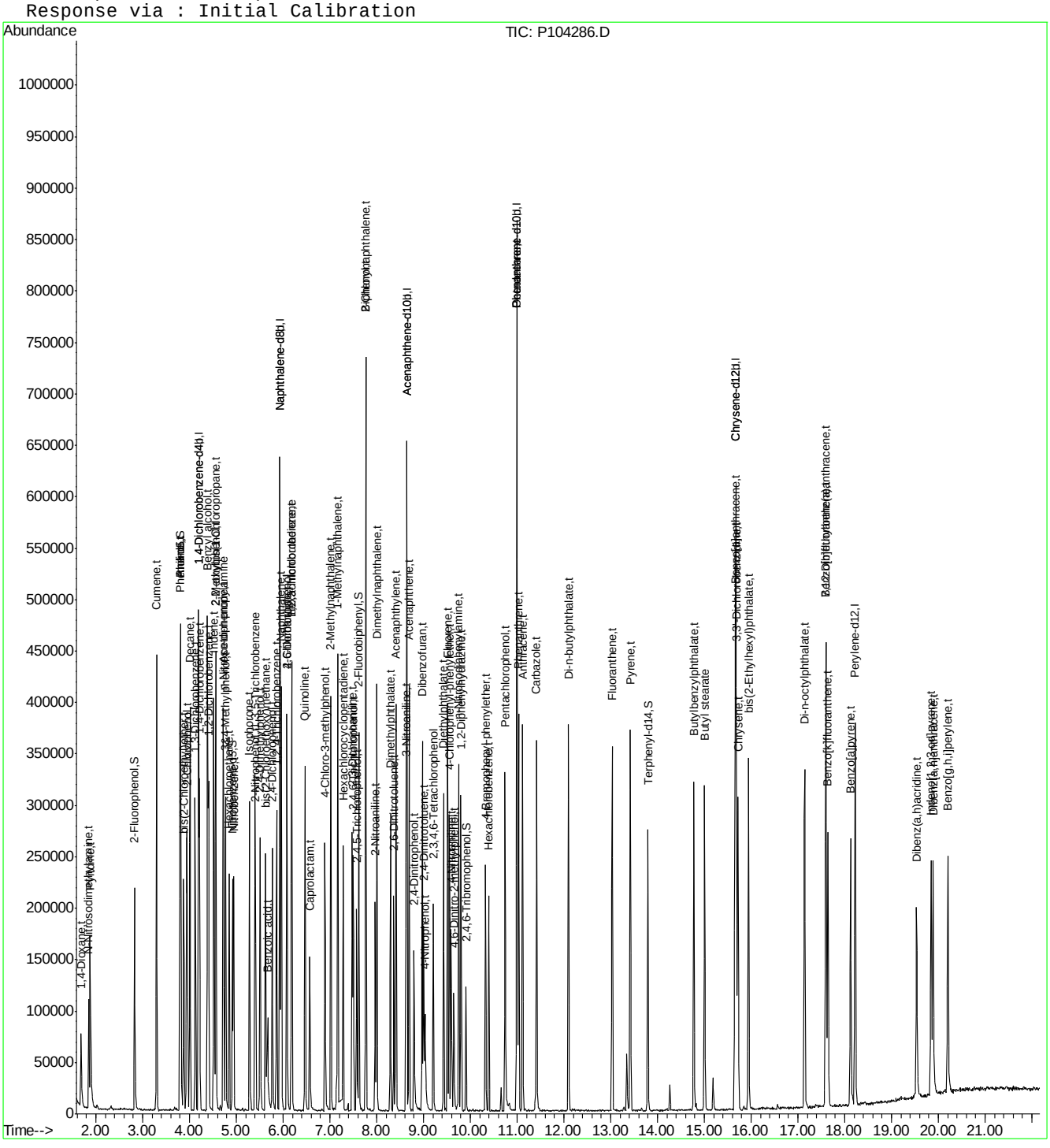
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\EP4592\P104286.D Vial: 2
Acq On : 19 Apr 2016 12:34 pm Operator: linseyk
Sample : cc4524-25 Inst : MSP
Misc : op93127,ep4592 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Apr 19 12:59 2016 Quant Results File: MP4524.RES

Method : C:\MSDCHEM\1\METHODS\MP4524.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Tue Apr 19 12:44:38 2016
Response via : Initial Calibration



SGS ACCUTEST JC18516

SGS ACCUTEST

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID E2M3649

Print Analyst Name: Ashley N.

Date: 4-15-2016

Analyst Signature: [illegible]

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV15827-108	dftpp	50ppm
CM5732	Internal Standard	4000ppm
162417	dcm (DSW)	—

Columns: Rxi5Sil MS 30m x .25mm x .25µm

Method 8270D/625

Initial Cal. Method M2M3649

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: 4/15/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	M83064	dftpp			W	1					NG	S1T reinjected
	83065	dftpp				1					OK	8:54AM
	83066	ic 3649-2		BNA		2					OK	SV15827-106H
	83067	ic 3649-1				3					OK	-106I
	83068	-100				4					OK	-106A
	83069	-80				5					OK	-106B
	83070	-75				6					OK	-106D
	83071	-10				7					OK	-106E
	83072	-5				8					OK	-106G
	83073	icc 3649-50				9					OK	-106C 12:19pm

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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Form: OR015-07
Rev. Date: 1/19/16

SGS ACCUTEST JC18516

SGS ACCUTEST

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: E2M3651

Print Analyst Name: Ashley N.

Date: 4-15-16

Analyst Signature: AN

Columns: Rxi5sil ms30mx.25mmx.25µm

Method: 8270D 1625

Initial Cal. Method: M2M3649

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV151809-108	dfTPP	50ppm
CM5732	Internal Std	4000 ppm
102417	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: AMM

Date: 4/15/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	2M83090	dfTPP			W	1					OK	3:07 pm
	83091	ic 3651-100		TCL42		2					OK	SV151827-73A
	83092	-80				3					OK	-73B
	83093	icc 3651 ~~-25~~ 50	AN 4/15/16			4					OK	-73D
	83094	ic 3651 -10				5					OK	-73E
	83095	-5				6					OK	-73G
	83096	-2				7					OK	-73H
	83097	-1				8					OK	-73I
	83098	IC 3651-25 ~~ICC 3651 -50~~	AN 4/15/16			9					OK	-73C
	83099	icv 3649-50		Acids		10					OK	SV151827-114
	83100	-50		Anilines		11					OK	-115
	83101	-50		Abn Sim		12					OK	CP 1617125 5
	83102	-50		BN1		13					OK	MO 33 DCB SV151827-113
	83103	-50		BN2		14					OK	-95
	83104	icv 3651-50		HQ		15					OK	-98C
	83105	icv 3649-50		Benzidine 3rd		16					OK	3:3 DCB only! -38F 9:39 pm

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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7.7.2

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: E2M3655

Print Analyst Name: Ashley N.

Analyst Signature: [illegible]

Date: 4-20-2016

Columns: Rxi SSilms 30mx.25mmx.25µm

Method: 8270D 1625

Initial Cal. Method: M2M3649

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
151829-108	OFtpp	50ppm
151827-6/L	BNA	25ppm
-7/D	TCL42	↓
CMS732	Internal Std	4000ppm
162417	dcm (Fisher)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [illegible]

Date: 4/20/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	2M83203	OFtpp			W	1					OK	9:44AM
	83204	CC3649-25		BNA		2					OK	93↑
	83205	CC3651-25		TCL42		3					OK	Atrazine + HQ↑
R	83206	OP93128-MB1	93128-1	AB8270®	W	4		+			OK	
R	83207	JC18246-3		AB1CC20®		5	2				OK	
	83208	JC18260-9				6		+			OK	
	83209	-10				7					RR	cb
	83210	-11				8						
	83211	-12				9						
	83212	-13				10						
	83213	JC18246-6				11					RR	C/O 4:13 PM clean instrument
	83214	-5				12					not run	sequence stopped
	83215	OP93224-MB1	93224-1	AB8270	S	13					OK	ran before 2M83209 VF=2mL
	83216	-BS1				14					OK	
	83217	JC18221-9 (x)		BPAH		15					OK	
	83218	OP93224-MS		AB8270		16					OK	
	83219	-MSD		↓		17					OK	

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07
Rev. Date: 1/19/16

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E3E3620

Print Analyst Name: Ashley N.

Analyst Signature: AN

Date: 4-26-16 AWO 4/26/16

Columns: ZB5msplus30mx.1mmx.25µ

Method 8270D/625

Initial Cal. Method M3E3594 620

Injection Volume: 1µL AWO 4/26

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV 151829-108	DF4pp	50ppm
151829-107E	BNA	25ppm
126116	1ccc17	↓
(W)		
CM5732	Internal Std	4000ppm
Y62418	DCM (Fisher)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AWO Date: 4/26/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	3E82656	DF4pp			W	1					NG	1271 reinject
	82657	DF4pp				1					OK	8:40AM
	82658	CC3591-25		BNA		2					not sing	2L/34,22,54,57, run new NBC(SW)
	82659	~~CC3591-25~~ iC3620 AWO 4/26/16		BNA		3					OK	use as 1st point. PAHs ↓ + ↑ Recalibrate
	82660	iCC3620-50				4					OK	SVIS 827-107E
	82661	iC3620-2				5					OK	-106H
	82662	-1				6					OK	-106I
	82663	-100				7					OK	-106A
	82664	-80				8					OK	-106B
	82665	-10				9					OK	-106E
	82666	-5				10					OK	1236PM -106G
												AWO

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07
Rev. Date: 1/19/16

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: ZB5msplus30mx0.25mmx0.5µ

Method 8270D/625

Initial Cal. Method ~~V13E3594~~ 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~~ TCL42(W) AMD 4/26/16		2					OK	SV151827-73A
	82670	-80				3					OK	-73B
	82671	ICC3621-50				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 SUR		12					OK	OP161712.33
	82680	ICV3620-50		BN1		13					OK	SV161935-1 benzidine No #89
	82681	ICV3620-50		BN2		14					OK	SV151827-134 ~~#100~~
	82682	ICV3621-50		Benzidines		15		AMD 4/26/16			~~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 JC18516

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E3E3622

Print Analyst Name: Ashley N.

Analyst Signature: AM

Date: 4/27/16

Columns: ZB5msplus 30m x 25mm x 25

Method 8270D/625

Initial Cal. Method M3E3620

Injection Volume: 4µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV151827-91	dftpp	50ppm
QUS732	Internal std	4000ppm
162418	dcm (Fisher)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AWO

Date: 4/27/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	E82684	dftpp			W	1					OK	9:39AM
	82685	ICV3620-50		Benzidine std		2					OK	SV16193514B 11:46 benzidine
												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 JC18516

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					↓	2:49 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~~ 5					OK	SV151827-107E
	82697	ic3623-100				~~32~~ 3					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-SD		Acids		10					OK	~~-129~~ -114 AN 4/27/16
	82705	icv 3623-SD		Anilines		11					OK	~~-130~~ -115 AN 4/27
	82706	icv 3623-SD		ABNsum		12					OK	OP16171233
	82707	icv 3623-SD		BN1		13					OK	SV161935-1 [No ~~8~~
	82708	icv 3623-SD		BN2		14					OK	AN 4/27/16 134 contin SV151877 ~~35E~~ [100 ↓ NOS
	82709	icv 3623-SD		Benzidine 3rd		15					OK	SV161935-14B
	~~82710~~ AN 4/27/16											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

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E3E3626

Print Analyst Name: Ashley N.

Analyst Signature: AN

Date: 4-29-2016

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV151827-91	DFTPP	50 ppm
-107E	BNA	25 ppm
-177D	TCL42	↓
QM5732	internal std	4000 ppm
162418	DCM (Fisher)	—

Columns: ZB5msplus30mx.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: AMO

Date: 5/2/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	3E82744	dftpp			W	1					NG	bad inj. RR
	82745	dftpp				1					↓	RCR↑ (ernstbell)
	82746	dftpp				1					ok	9:34 Am
	82747	CC3623-25		BNA		2					ok	#2,3,4,6 ↓
	82748	CC3621-25		TCL42		3					not using	not using run diff lot #
	82749	CC3621-25		TCL42		3					ok	ICOD ↓ SV151827-73D
	82750	DP93218-MB1	93218	ABS270	S	4		+	/	\	OK	
	82751	JC184-19-22		ABS270 + 1200A + BNA + TCL42		5		+	/	\	OK	WE 5mL
	82752	-38		↓		6		+	S ↓	\	ok	(RR std.)
	82753	bnaverif-1ppm		—		7					OK	ran before 3E82750 SV151827-62E
D	82754	JC184-19-38				6			S ↓	\	OK	DF1 12:52pm
												AN

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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SGS ACCUTEST

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: E3E3627A

Date: 4-29-16

Print Analyst Name: Ashley N.

Analyst Signature: AN

Columns: ZB5ms plus 30m x 2mm x 2 Fy

Method: 8270D/1625

Initial Cal. Method: M3E3623

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SVS8779	dfTPP	50ppm
-107	BNA	↓
-936	TCL42	
CMS732	Internal Std	4000ppm
162418	2cm (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: 5/2/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	3E82755A	dfTPP			W	1					NOT USING	data file lost ran as file. 157PM.
	82756	CC3623-50		BNA	W	2					↓	3E4SST reinstall
	82757	dfTPP			W	1					No	1271 reinject
	82758	dfTPP				1					OK	321PM.
	82759	CC3623-50		BNA		2					OK	
	82760	CC3621-50		TCL42		3					OK	
	82761	OP93227-mb1	93227	EPA Map 2MMap	S	4			✓	✓	OK	
	82762	-bs1				5			✓	✓	OK	
	82763	-bsd				6			✓	✓	OK	
	82764	J218480-3				7			✓	✓	OK	
	82765	-4				8			✓	✓	OK	221:10PM.
	82766	OP93227-ms				9			✓	✓	OK	
	82767	-msd				10			✓	✓	OK	
	82768	ccc3623-50				11					OK	
	82769	ccc3621-50				12					OK	806PM.

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: JK

Columns: Rxi-5SilMS 30m x .25mm x .25um

Method 8270D/625

Initial Cal. Method M8M2855sim

Injection Volume: 1ul

Standard Data		
Lot #	Description	Conc.
		1/4/2016

Standard Data		
Lot #	Description	Conc.
SVIS1827-08	DFTPP	50ppm
SVIS1827-03	SIM Internal	400ppm
159148	Dimethylsulfone	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 4-22-2016

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	3m60750	Condition			W	100					Condition	
	60755	↓			W	100					↓	
	60760	Condition			W	99						
	60761	DFTPP ~~ICC2855-1.0~~ 4/21/16		4/21/16 ~~BRASIM~~	W	1					~~ok~~	deg ↑ reinstead
	60762	DFTPP			W	1					OK	1:31pm
	60763A	ICC2855-1.0			W	2					ok	SVIS1827-12AC
	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

7.7.9

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ACCUTEST

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: E3M2856

Date: 4/22/16

Analyst Signature: JK

Columns: Rxi-5Sil MS 30m x .25mm x 0.25um

Method 8270D/625

Initial Cal. Method M3M2855sim

Injection Volume: 1ul

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SVLS1824-05	DFTPP	50ppm
SVLS827-04	SIM std.	10ppm
-03	SIM internal	400ppm
162418	DCM (Fisher)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [illegible]

Date: 4-28-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	3M60775	DFTPP			W	1					OK	9:08AM
	60776	CC2855-10		BNasim	W	2					OK	
	60777	OP93234-MB	93234-1	BS270	W	3	1ml 4/22/16		/	/	OK	
	60778	-bs12				4			/	/	OK	
	60779	-bs12				5			/	/	OK	
	60780	JC1777-1-3T		SPPQ1H		6			/	/	OK	
	60781	JC1777-5T				7			/	/	OK	
	60782	-8T				8			/	/	OK	
	60783	OP93089-MB	93089-1	ABS270	W	9			✓	✓	OK	
R	60784	JC18254-1		1,4dioxane		10			✓	✓	OK	
R	60785	-2				11			✓	✓	OK	
	60786	OP93128-MB	93128-1	ABS270		12			✓	✓	OK	
R	60787	JC18373-2		1,4dioxane		13			✓	✓	OK	Allsyn in
R	60788	-3				14			✓	✓	OK	
	60789	OP93271-MB	93271-1	ABS270		15			✓	✓	OK	
	60790	-bs12				16			✓	✓	OK	
	60791	JC18447-1		1,4dioxane		17			✓	✓	OK	

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample volume/weight used and final volumes refer to extraction log.

All strikeouts must be initialed, dated and reason code applied as follows:
1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

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Form: OR015-05
Rev. Date: 1/16/2006

ACCUTEST

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: E3M2856

Date: E3M 4/22/16 (16 4/22/16)

Analyst Signature: JC

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	See pg 173	

Columns: Rxi-5sil MS 30m x .25mm x .25um

Method 8270 D/625

Initial Cal. Method M3M2855SIM

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: dm

Date: 4-28-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	3M60792	JC18447-2	93271-1	1,4dioX	W	18			✓	✓	OK	
	60793	-3				19			41 ↓		RR	injection failure
	60794	JC18450-10		ABSIMMS T1,4dioX		20			✓	✓	OK	
	60795	-11				21			✓	✓	OK	
	60796	JC18433-2		1,4dioX		22					RR	bad injection
	60797	-3				23					Not run	see changed
	60798	JC18414-4	93289-1	BSIMMS T1,4dioX		24			✓	✓	OK	8:39pm
	60799	OP93271-MS		ABS270		25					Not rad ↓	outside 12 h clock ↓
	60800	-MSD				26						

TX = Matrix. Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

ample volume/weight used and final volumes refer to extraction log.

ll strikeouts must be initialed, dated and reason code applied as follows:
= reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

rm: OR015-05
v. Date: 1/16/2006

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7.7.10

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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.
SVS1829A68	LFMP	50 ppm
SVS1827-103	SIM internal	400 ppm
162342	DCM (Fisher)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AMB

Date: 4/14/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	4M64719	DFPP			W	1					NG	PCP↑ rerun
	64720	DFPP			W	1					OK	9:05AM
	64721	CC2881-05		BNASIM	W	2					not using	
	64722	4400 x test				2					not using	test split changed. flow and oven temp
	64723A	IC2881-5		BNASIM	W	2					OK	SVS1827-104D vorran as "A" file no bottle
	64724	IC2881-1.0				3					OK	SVS1827-104C
	64725	IC2881-0.2				4					OK	-104E
	64726	IC2881-0.1				5					OK	-104F
	64727	IC2881-0.05				6					OK	-104G
	64728	IC2881-0.02				7					OK	-104H
	64729	IC2881-0.01				8					OK	-104I
	64730	IC2881-5.0				9					OK	-104A
	64731	IC2881-2.5				10					OK	-104B
	64732	IC2881-1.0		Acids		11					OK	SVS1827-27
	64733	IC2881-1.0		BN1		12					OK	OP157624-73
	64734	IC2881-1.0		BN2		13					OK	SVS1829-85

AMB

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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Form: OR015-07
Rev. Date: 1/19/16

7.7.11

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E4M2885

Print Analyst Name: Linsey K.

Analyst Signature: LK

Date: 4/18/16

Columns: RtX-5Sil MS 30m x 25mm x 25um

Method 8270 D/625

Initial Cal. Method M4M2881Sim

Injection Volume: 1µl

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SMS184408	DFTPP	50ppm
SMS182704	SimStd	0.5ppm
-105	SimInternal	40ppm
1165148	2,4-Methanol	—

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: 4-19-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	4M1604PP	DFTPP			W	1					ng	11:54AM
	604800	CC2881-05		BrasIm	W	2						bion ↑ reinstall
	604801	DFTPP			W	1					OK	2:23pm
	604802	CC2881-05		BrasIm	W	2					OK	
	604803	OP93128-mb1	93128-1	ABS270	W	3			/	/	OK	
	604804	-bs12				4			/	/	OK	
	604805	JC18452-1 rx		BSIMNJ +14dioxane		5			/	/	OK	
	604806	OP92985-mb1	92985-1	ABS270		6			/	/	OK	
	604807	-bs1				7			/	/	OK	
	604808	-ms				8			/	/	OK	
	604809	-msd				9			/	/	OK	
	604810	JC17959-8		1,4dioxane		10			/	/	OK	
	604811	JC18160-8	93052-1	ABSIMNJ +14dioxane		11			/	/	OK	
	604812	OP93052-ms		ABS270		12			/	/	OK	
	604813	msd				13			/	/	OK	
	604814	JC18233-11	93052-1	ABSIMNJ		14			/	/	OK	
	604815	JC18151-5	93052-1	BSIMNJ +14dioxane		15			/	/	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

7.7.12

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

JK 4/19/16

Batch ID E4M2881S

Print Analyst Name: Linsey K

Analyst Signature: JK

Date: 4/18/16

Columns: Rxi-5Silms 30m x 0.25mm x 0.25um

Method 8270D/625

Initial Cal. Method M4M2881Sm

Injection Volume: 1ul

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	Surg 113	

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: 4-19-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	4m04816	JC18364-1	93128-1	Part	W	16			/	/	OK	
	04817	-2				17			/	/	OK	
	04818	-3				18			/	/	OK	
	04819	JC18366-2		ABS/MS +1/2 dilx		19			/	/	OK	
	04820	-3				20			/	/	OK	
	04821	-4				21			/	/	OK	
	04822	093128-MS		ABS270		22			/	/	OK	
	04823	-MSD				23			/	/	OK	2:06AM

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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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: E4M2886 4/19/16

Print Analyst Name: Linsey K.

Analyst Signature: LK

Date: 4/19/16

Columns: Rxi-5Silms 30m x .25mm x .25um

Method: 8270D/625

Initial Cal. Method: M4M2881Sim

Injection Volume: 1ul

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SMS0214105	DFTPP	50ppm
SMS1127-104	SimStd.	1.0ppm
-103	SimInternal	40ppm
159148	DSM (Ext 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: [illegible] Date: 4-22-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	4M64824	DFTPP			W	1					OK	8:59AM
	64825	CC2881-10		BrSim	W	2					OK	19:39PM
	64826	OP93289-mbl	93289-1	ABS270	W	3			✓	✓	OK	
	64827	-6612				4			✓	✓	OK	
	64828	OP93127-mbl	93127-1	ABS270	W	5			✓	✓	OK	
	64829	-6612				6			✓	✓	OK	
	64830	-6612				7			✓	✓	OK	
	64831	JC18516-1	93128-1	1,4dox+nap		8			✓	✓	OK	
	64832	-4				9			✓	✓	OK	
	64833	JC18308-11		Phen		10			✓	✓	OK	
	64834	JC18373-1		1,4dox		11			✓	4	OK	run by 8270. RR for sur
	64835	-2				12			✓	4	OK	RR for sur
	64836	-3				13			✓	4	OK	RR for sur.
	64837	-4				14			✓	✓	OK	run by 8270.
	64838	JC18348-41		1,4dox		15			✓	✓	OK	
	64839	-2				16			✓	✓	OK	
	64840	-3				17			✓	✓	OK	

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E4M2886

Print Analyst Name: Linsey K.

Date: 4/19/16

Analyst Signature: LK

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	See Pg 117	

Columns: Rtx-5Silms 30mx.25mmx.25um

Method 8270D/625

Initial Cal. Method M4M2881sim

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: [illegible]

Date: 4-22-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	4M64841	JC18384-4	93127-1	1,4dioxane	W	18			/	/	OK	
	64842	-5				19			/	/	OK	
	64843	JC18233-11	93089-1	ABSimms +1,4dioxane	W	20			/	/	OK	
	64844	JC18242-1		ABSimms +1,4dioxane		21			/	/	OK	
	64845	JC18283-2	93127-1	ABSimsl	W	22			/	/	OK	
	64846	JC18245-5		ABSimsl		23			3/	1/	OK	VF=10mL pH:2
	64847	OP93089-MS	93089-1	ABS270		24			/	/	OK	8:42pm
	64848	msd				25			/		W	Out of Check 9:13pm

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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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: E4M2900

Print Analyst Name: Linsey K

Analyst Signature: LK

Date: 5/2/16

Columns: Rxi-5sil MS 30m x .25mm x .25um

Method: 8270D/1625

Initial Cal. Method: M4M2881SIM

Injection Volume: 1 ul

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SM5182408	DFTPP	50ppm
CVIA93516	SIMSTD	1.0ppm
-7	SIM Internal	40ppm
1624589	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: AMW.

Date: 5/3/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	4M05028	DFTPP			W	1					OK	8:41AM
	05029	CC2881-1.0		BrasIm	W	2					OK	
	05030	OP93187-MB1	93187-1	BS8270	W	3			✓	✓	OK	
	05031	-BS2				4			✓	✓	OK	
	05032	JCP9243-1		1,4dioxane		5			✓	✓	OK	
	05033	-2				6			✓	/	OK	
	05034	-3				7			/	/	OK	~~AMW 5/3/16~~ LK 5/3/16
	05035	-4				8			/	/	OK	
	05036	JCP9244-2		1,4dioxane		9			/	/	OK	
	05037	-3				10			/	/	OK	
	05038	-4				11			/	/	OK	
	05039	-5				12			/	/	OK	
	05040	-7				13			/	/	OK	
	05041	-9				14			/	/	OK	
	05042	-10				15			/	/	OK	
	05043	-11				16			/	/	OK	
	05044	-6				17			/	/	OK	8:18pm

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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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E4M2900

Print Analyst Name: Linseyk

Analyst Signature: LK

Date: 5/2/16

Columns: & RXI-5SILMS 30mx.25mmx.25um

Method 8270D/625

Initial Cal. Method MH/M2581SIM

Injection Volume: 1ul

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	Surr 155	

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: Anwo

Date: 5/3/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	4m65045	OP93187-ms	931871	BS270	W	18			/		RR	out of clock 8:50pm
	65046	-msd				19			/		RR	out of clock 9:22pm
	65047	op93218-mb1	932181	BS600	S	20			/	/	OK	ran after 4M65033
	65048	-bs12				21			/	/	OK	
	65049	JC18516-2		naphtadiox		22			/	/	OK	
	65050	-3				23			/	/	OK	
	65051	op93218-ms		BS270		24			/	/	OK	
	65052	-msd.				25			/	/	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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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EM5217

Print Analyst Name: Sean Black

Analyst Signature: Sean T. Black

Date: 4/12/16

Columns: Rxi-5Sil MS 30m x .25mm x .25µm

Method 8270D/625

Initial Cal. Method MM5217

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.
SV151827-106A	BNA	100 ppm SU
-106B	↓	80
-106C		50
-106D		25
-106E		10
-106G	↓	5

Standard Data

Lot #	Description	Conc.
151824-108	DFTPP	50 ppm
SV151827-106H	BNA	2 ppm
-106I	↓	1 ↓
CM5732	Internal Std	4000 ppm
162342	DCM (Fisher)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AMO

Date: 4/13/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	M123504	DFTPP				1					NG	peak tailing
	123505	DFTPP				1					OK	538am
	123506	ic5217-2		BNA		2					OK	
	123507	-100				3					OK	
	123508	-80				4					OK	
	123509	-25				5					OK	
	123510	-10				6					OK	
	123511	-5				7					OK	
	123512	-1				8					OK	
	123513	ic5217-50				9					OK	926PM

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EM5218

Print Analyst Name: Sara Davis

Analyst Signature: SED

Date: 4/12/2016

Columns: Rx-5sil ms 30m x .25mm x .25u

Method 8270D/625

Initial Cal. Method MM5217

Injection Volume: 1 ul

Standard Data

Lot #	Description	Conc.
SV151827-73A	TCL42	100
-73B	↓	80
-73C		50
-73D		25
-73E		10
-73G	↓	5

Standard Data

Lot #	Description	Conc.
SV151829-108	DFTPP	50 ppm
SV151827-73H	TCL42	2 ppm
-73I	↓	1 ↓
CM-5732	Internal Std	4000 ppm
162342	DCM (Fisher)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AWO

Date: 4/13/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	M123514	DFTPP			W	1					ok	957PM
	123515	ic5218-100 ~~cc5217~~		TCL42	W	2					ok	
	123516	-80				3					ok	
	123517	icc5218-50				4					ok	
	123518	ic5218-25				5					ok	
	123519	-10				6					ok	
	123520	-5				7					ok	
	123521	-2				8					ok	
	123522	-1				9					ok	
	123523	icv5217-50		Acids		10					ok	SV151827-87
	123524	-50		Anilines		11					ok	-94
	123525	-50		ABNsurr		12					RR	OP161711233 Doesn't meet DOD 20%
	123526	-50		BN1		13					ok	SV151827-88
	123527	-50		BN2		14					ok	-95
	123528	icv5218-50		HQ		15					ok	-98A
	123529	-50		Benzidine std		16					ok	-38E BZD ↑ cannot report.
												457am. AWO

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: EM5219

Print Analyst Name: ASHLEY MDYR

Date: 4/13/2016.

Analyst Signature: ANO

Columns: Rxi 5Si/ms 30m x 0.25mm x 0.25µm

Method: 8270D/625

Initial Cal. Method: MM5217

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SVS829102	DFTPP	50ppm
CM5732	Internal Std.	4000ppm
162342	DCM (Fisher)	— "

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [illegible]

Date: 4/13/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	M123530	DFTPP				1					not using	ions out range
	123531	DFTPP				1					OK	927am.
	123532	IC5217-50		ABN Surr		2					OK	OP1617255

ANO

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EM5230

Print Analyst Name: Ashley/MDap

Date: 4/20/2016

Analyst Signature: AMO

Columns: RXI5Sil ms30m x 0.25mm x

Method 8270D/625

Initial Cal. Method MM5217

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SVS189103	DFTPP	50 ppm
SVS187410	BNA	50 ppm
SVS187411	TCL42	50 ppm
OM1732	Internal Std	40000 ppm
159148	DCM (Fisher)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AM

Date: 4-21-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	M123736	DFTPP				1					not using	442T reinject
	123737	DFTPP				1					not using	442T retune
	123738	DFTPP				1					not using	442T retune
	123739	DFTPP				1					ok	1044am
	123740	CC5217-50		BNA	W	2					OK	H10↓
	123741	CC5218-50		TCL42		3					OK	
	123742	JC18194-5	93122-1	ABTCN0+, DDPH+NDMA+ 1320		4		+	✓	✓	OK	
	123743	JC18207-2		BTCL20+		5		+	✓	✓	OK	rerun data M123749
	123744	JC18195-5		ABTCN0+ 12DPH+NDMA 12		6		+	✓	✓	OK	
	123745	OP93218-MB1	93218	ABTCN0+ 1320	S	7		+	✓	✓	OK	rerun data M123742
	123746	BS1				8			✓	✓	OK	↓
	123747	JC18221-5RX		BNA		9			✓	✓	OK	↓ Vf=5mL
	123748	bcm			W	10					—	cleanup-bd sample
	123749	JC18542-1	93218	BTCL20+	S	11		+	✓	✓	OK	"Rasica" plunger
	123750	JC18419-3	93218	ABTCL20+ 12DPH+ 3,NZDNE NDMA		12		+	✓	✓	OK	rerun data M123744
	123751	11				13		+	✓	✓	OK	
	123752	15				14		+	✓	✓	OK	RR 1.5

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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SGS ACCUTEST JC18516

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: EM5230

Print Analyst Name: Andrea Cooper

Analyst Signature:

Date: 4/20/16

Columns: Rx: 5 silm 30m x 25mx.25u

Method: 8270D/625

Initial Cal. Method: MM5217

Injection Volume: 1ul

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	SP 625	

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: 4-21-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	MM23753	JC18419-38	93218	ABTCL20+ 120ml MMA BNZ/MA	S	15		+	/	✓	OK	
	123754 ~~AB~~	SD@ 4/20/16 7				16		+	/	✓	OK	Plunger error, RR as ~~AB~~ file SD@ 4/20/16
	123755	22				17		+	/	✓	OK	
	123756	26				18		+	/	✓	OK	
	123757	30				19		+	/	✓	OK	8:34pm
	123758	JC18450-6		GPAH		20					Not ran	Plunger error, sequence stopped
	123759	7		ABTCL20+		21						
	123760	JC18417-5		ABTCL20+ 120ml MMA BNZ/MA		22						
	123761	JP93218-MS				23						
	123762	MSD				24						

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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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EM5235

Print Analyst Name: Sara Davis

Analyst Signature: SED

Date: 4/22/2016

Columns: Rx-5sil ms 30m x .25mm x .25

Method 8270D/625

Initial Cal. Method MM5217

Injection Volume: 1 µl

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV151824-108	DFTPP	50 ppm
SV 157827-610	BNA	50 ppm
SV 157827-74K	TCL42	50 ppm
CM-5732	Internal std	4000 ppm
159148	DCM (GSL)	—

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: 4-25-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	M123835A	DFTPP			W	1					d	No bottle, RR as A file 7:55pm
	123836A	CC5217-50		BNA		2					d	stopped sequence before run Pesticides on A-7 file #10
	123837	CC5218-50		TCL42		3					d	SD @ 4/22/16 #10
	123838	OP93292-MB1	93292	ABS8270+	W	4		X	/	/	d	
	123839	-BS1	↓	↓		5			/	/	d	
	123840	JC18531-8A	93269	TCLP		6			/	/	d	
	123841	-9A				7			/	/	d	
	123842	-10A				8			/	/	d	
	123843	-11A	↓	↓		9			/	/	d	
	123844	JC18670-12	93292	ABSTCL20+		10		X	/	/	d	
	123845	JC18724-28		BNJTCL42+		11		X	/	/	d	
	123846	JC18693-3		ABSTCL20+		12		X	/	/	d	
	123847	JC18696-1		BNJTCL20+		13		X	/	/	d	
	123848	-2				14		X	/	/	d	
	123849	-3				15		X	/	/	d	
	123850	-4				16		X	/	/	d	
	123851	-5A	↓	↓	↓	17		X	/	/	d	

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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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EM5235

Print Analyst Name: Sean Black

Analyst Signature: Sean D Black

Date: 4/22/16

Columns: Rtx-5Sil ms 30m x 25mm x 2

Method 8270D/625

Initial Cal. Method MM5217

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	see page 41	

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: [illegible] Date: 4-25-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	M123852	OP93292-ms	93292	AB8270+	W	18						
	123853	-msd	↓	↓	↓	19						
	123854	JC18516-2	93218	ABSL + MNSP + ZMNSP	S	20						9:43am
	123855	-3		↓		21						Sequence Stopped-
	123856	JC18450-7		AB7CL20+		22						Systems
R	123857	JC18417-5		AB7CL20+ +BNZ +DPH +NDMA		23	2					
R	123858	OP93218-ms		AB8270+		24	2					
R	123859	-msd	↓	↓	↓	25	2					
R	123860	JC18419-15	↓	AB7CL20+ +BNZ +DPH +NDMA		26	5					

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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SGS ACCUTEST

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID EM5236

Print Analyst Name: Ashley N.

Date: 4-25-2016

Analyst Signature: AN

Columns: Rtx5Silms 30mx.25mmx.25µm

Method 8270D/625

Initial Cal. Method MM5217

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV 151829-168	DFTPP	50ppm
171827-619	BNA	25ppm
-74L	TCL42	↓
CM5732	Internal Std	4000ppm
167148	DCM (Fisher)	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AWO

Date: 4/26/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	M123855	DFTPP			W	1					NG	RCP↑ reinject
	123856	DFTPP				1					↓	RCP↑ reinstall
	123857	DFTPP				1					OK	12:51pm
	123858	CC5217-25		BNA		2					OK	hicpo ↓
	123859	CC5218-25		TCL42		3					OK	
	123860	bnaverif-1ppm				4					OK	SV151829-62H
	123861	JC18417-5		ABTCL20 + BNZ + 12DPH + NDMA		5	2	+	✓	✓	OK	diluted due to viscosity
	123862	OP93218-MS		ABSL270		6	2		✓	✓	OK	
	123863	-MSD		↓		7	2		✓	✓	OK	↓
	123864	JC18450-7		ABTCL20		8					RR	c/o.
	123865	JC18516-3		ABSL + 2MNAP + TMSB		9						
	123866	JC18419-15		ABTCL20 + 12DPH + BNZO + NDMA		10	5				↓	
	123867	JC18738-1	93292-1	A24DNP + PN	W	11			J	J	OK	
	123868	-2		↓		12			J	J	OK	
	123869	-3		↓		13			J	J	OK	
	123870	JC18746-16		ABTCL11		14			J	J	OK	649PM

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

AWO

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

7.7.20

7

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EM5238

Print Analyst Name: Ashley N.

Date: 4-26-16

Analyst Signature: AN

Columns: Rxi 5Silms 30 mx .25mm x .25µm

Method 8270D 1625

Initial Cal. Method MM5217

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV151829-100	dfTPP	50ppm
-618	BNA	75ppm
-71L	TCL42	↓
CM5732	Internal Std	4000ppm
162948	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: 4/27/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
M	123899	dfTPP			W	1					OK	10:03AM
	123900	CC5217-25		BNA		2					OK	#14T #9T / hccpdl
	123901	bnavenf-1ppm				3					OK	SV151827-62F
	123902	CC5218-25		TCL42		4					OK	benzidine ↓
	123903	JC18834-1	932241	ABPPL+	S	5		+	/	\	OK	
	123904	-10				6		+	/	\	OK	
	123905	-16				7		+	/	/	OK	
	123906	-27				8		+	/	/	OK	
	123907	JC18835-1		ABPPL+		9		+	/	\	OK	
	123908	-9				10		+	/	\	OK	
	123909	JC18788-14		ABTCLP01+		11		+	/	\	OK	
	123910	-17				12		+	✓	✓	OK	
	123911	-13				13		+	✓	✓	OK	
	123912	JC18793-1		Pan		14			✓	✓	OK	
	123913	JC18516-3	932181	ABSL +napthalene		15			✓	✓	OK	
	123914	JC18450-7		ABTCLP01+		16		+	✓	✓	OK	
	123915	JC18419-15		ABTCLP01+, 12DPH+B2D+ NDMA		17	5	+	✓	✓	OK	5.25

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.

AMO

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Form: OR015-07
Rev. Date: 1/19/16

7.7.21

7

ACCUTEST

SEMI-VOLATILE by GCMS ANALYSIS LOG

SD ② 2/24/16

Batch ID: EP4514

Date: 2/~~23~~ 24/ 2016

Analyst Signature: SED

Standard Data

Lot #	Description	Conc.
SV151828-102	TCL42	100 ppm
-103	↓	80
-105		10
-106		5
-107		2
-108	↓	1 ↓

Standard Data

Lot #	Description	Conc.
SV151828-108	DFTPP	50 ppm
SV151829-107A	TCL42	50 ppm
-107B	↓	25 ppm
CM-5732	SD ② ~~CM-5732~~ I Std	4000 ppm
160168	2/24/16 ~~Internal S~~ Dcm (Surr)	—

Columns: Rxi-5sil ms 30m x .25mm x .25um

Method 8270 D/625

Initial Cal. Method MP4513

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: [signature] Date: 2/29/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	P102786	DFTPP			W	1					OK	1:55 am
	102787	TC4514-100		TCL42	W	10					OK	
	102788	-80				11					OK	
	102789	-10				12					OK	
	102790	-5				13					OK	
	102791	-2				14					OK	
	102792	-1				15					OK	
	102793	-25				16					OK	
	102794	TCC4514-50				17					OK	
	102795	TCV4513-50		Acids		18					OK	SV151829-128 ~~Lot~~
	102796	-50		Aniline		19					OK	-129
	102797	-50		ABN SURR		20					OK	OP15162442
	102798	-50		BN1		21					OK	SV151827-26
	102799	-50		BN2		22					OK	SV151829-116
	102800	TCV4514-50		HQ		23					OK	-64D
	102801	-50		Benzidine 3rd		24					OK	-88C 8:58 am

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.

123

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

ACCUTEST

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: EP4524

Date: 3/2/16

Analyst Signature: [illegible]

Standard Data

Lot #	Description	Conc.
SV151824-134A	BNA	100
-134B		80
-134E		10
-134F		5
-134G		2
-134H		1

Standard Data

Lot #	Description	Conc.
SV151829-108	DFTPP	50 ppm
SV151827-30A	BNA	50 ppm
-30B	↓	25 ppm
CM-5732	Internal Std	4000 ppm
160906	DCM (Fisher)	—

Columns: Rxi-5ilms 30mx.25mmx.25um

Method 8270D/625

Initial Cal. Method MP4513 24 JK3216

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: [illegible]

Date: 3/3/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	P102997	DFTPP			W	1					NG	127↑ reinject
	102998	DFTPP			W	1					↓	127↑ reinjec
	102999	DFTPP			W	1					NG	127↑ retune
	103000	DFTPP			W	1					↓	127↑ reinject JK3216
	103001	DFTPP			W	1					↓	127↑ retune
	103002	DFTPP			W	1					NG	127↑ retune
	103003	DFTPP			W	1					NG	12:38pm
	103004	CC451350		BNA	W	2					↓	RT↑ reinjec
	103005	DFTPP			W	1					NG	127↑ reinject
	103006	DFTPP			W	1					↓	127↑ reinjec
	103007	DFTPP			W	1					NG	127↑, retune
	103008	DFTPP			W	1					↓	127↑, retune
	103009	DFTPP			W	1					↓	127↑, retune
	103010	DFTPP			W	1					OK	
	103011	IC4524-100		BNA		2					OK	
	103012	-80				3					OK	
	103013	-10				4					OK	

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample volume/weight used and final volumes refer to extraction log.

All strikeouts must be initialed, dated and reason code applied as follows:
1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

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Form: OR015-05
Rev. Date: 1/16/2006

ACCUTEST

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: EP4524

Date: 3/2/2016

Analyst Signature: SED

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	see page 151	

Columns: Rxi-5 silms 30m x .25mm x .25um

Method 8270 D/625

Initial Cal. Method MP4524

Injection Volume: 1 µl

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AMO Date: 3/3/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	P103014	ICC4524-5		BNA	W	5					OK	
	103015	-2				6					OK	
	103016	-1				7					OK	
	103017	ICC4524-~~25~~ 50	SD ② 3/2/16			8					OK	
	103018	ICC4524-25 ~~ICC4524-50~~				9					OK	
	103019	ICV4524-50		Acids		10					OK	SV151829-128
	103020	-50		Aniline		11					OK	-114
	103021	-50		ABN surr		12					OK	OP1516244 2
	103022	-50		BN1		13					OK	SV151827-26
	103023	-50		BN2		14					OK	-2
	103024	-50		Benzidine 3rd		15					OK	-38F

TX = Matrix. Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

ample volume/weight used and final volumes refer to extraction log.

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ll strikeouts must be initialed, dated and reason code applied as follows:
= reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

rm: OR015-05
ev. Date: 1/16/2006

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: EP4587

Print Analyst Name: Lynsey/K

Analyst Signature: JK

Date: 4/15/16

Columns: RtX-5SilMS 30m x 25mm x 25.2um

Method: 8270D/625

Initial Cal. Method: MP4524

Injection Volume: 2ul

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
CMS829-105	DFTPP	50ppm
CMS932	Internal std	400ppm
162417	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: 4/17/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	P104206	DFTPP			W	1					OK	8:47AM
	104207	IC4587-1000		S.A	W	2					OK	SY151829-109A
	104208	IC4587-500				3					OK	-109B
	104209	IC4587-400				4					OK	-102B
	104210	IC4587-300				5					OK	-102A
	104211	IC4587-200				6					OK	-109C
	104212	IC4587-100				7					OK	-109E
	104213	IC4587-50				8					OK	-109F
	104214	IC4587-500		S.A. second		9					OK	OP151564-117

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

7.7.24

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: EP4590

Print Analyst Name: Linsey K.

Analyst Signature: LK

Date: 4/18/16

Columns: Rxi-5Sil MS 30m x 0.25mm x .25um

Method: 8270 D / 1625

Initial Cal. Method: MP4524

Injection Volume: 1µl

Standard Data

Lot #	Description	Conc.
SIS1829-102A	S.A.	25ppm

Standard Data

Lot #	Description	Conc.
SIS1829-108	DFTPP	50ppm
SIS1827-61F	Bna	25ppm
745	TCL42	25ppm
CM5732	Internal Std.	400ppm
1602417	DCM-(Fisher)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [illegible]

Date: 4-22-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	P104240	DFTPP			W	1					OK	9:14AM
	104241	CC4524-25		Bna	W	2					OK	21,41,54,58,60,80,93,57
	104242	CC4514-25		TCL42	W	3					OK	
	104243	Brewer-1ppm			W	4					OK	SIS1827-62D
	104244	CC4587-25		S.A.	W	5					OK	
	104245	OP92917-MB	92917-1	SA Lorien	W	6			/	/	OK	
	104246	JC11945-3E				7			/	/	OK	bs1
	104247	-3E				8			/	/	OK	bs2
	104248	-3E				9			/	/	OK	bs3
	104249	-3E				10			/	/	OK	bs4
	104250	-3E				11			/	/	OK	bs5
	104251	-3E				12			/	/	OK	bs6
	104252	-3E				13			/	/	OK	bs7
	104253	-3E				14			/		Not run	bs8 Seq changed
	104254	JC11945A-3E				15					↓	bs9
	104255	OP93128-MB1	93128-1	ABS270		16			/	/	OK	Manual Area Balance
	104256	bs1				17			/	/	OK	

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07
Rev. Date: 1/19/16

SGS ACCUTEST JC18516

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EP4590

Print Analyst Name: LINSEY K.

Date: 4/18/16

Analyst Signature: [signature]

Columns: Rtx-5Sil MS 30m x 0.25mm x 0.25um

Method 8270D/625

Initial Cal. Method MP4524

Injection Volume: 1uL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	SOP Pg 161	

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: 4-22-16

R	Data File	Sample ID 1644816	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	P104257	JC18458-1	93258-1	BNJTCL20	W	18		+	/	/	OK	
	104258	JC18308-1 1644816		BTCL20		19		+	/	/	OK	
	104259	JC18350-1		ABTCL40		20		+	/	/	OK	
	104260	JC18306-2		ABNJTCL20		21		+	/	/	OK	
	104261	-3				22		+	/	/	OK	
	104262	-4				23		+	/	/	OK	
	104263	JC18516-1		ABLT 2mg+1mg		24			/	/	OK	
	104264	-4				25			/	/	OK	M 1:20
	104265	OP93270-MS		AB8270		26			/	/	OK	
	104266	-MSD				27			/	/	OK	8:59pm

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 EP4592

Print Analyst Name: Linsey K

Analyst Signature: LK

Date: 4/19/16

Columns: RXi-5Silms 30m x 25mm x .25um

Method 8270D/1625

Initial Cal. Method MA4524

Injection Volume: 1ul

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SMS184108	DFTPP	50ppm
SMS1827-61	BNA	25ppm
CM5732	Internal Std.	400ppm
159148	Dim-Cresols	—

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: 4-21-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	P104285	DFTPP			W	1					OK	12:22pm
	104286	CC4524-25		BNA	W	2					OK	42,48-75,75,76 9,11,41,80,86,93,94,96
	104287	JC18516-4	93128-1	ABSL+2mmap +1mmap		3	20		/		Rerun	rr 1:100
	104288	JC18455	93024-1	APBSL		4	2500		/	-	OK	
	104289	JC18516-4	93128-1	+1mmap ABSL+2mmap		5	100		/	-	OK	
	104290	JC18455 5x	93127-1	APBSL		6	50		/	-	OK	VF=10mL rr 1:250
	104291	5x				7	250		/	-	OK	↓ 4:33pm

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

7.7.26

7

6-1736

LOGBOOK ID:

Date Started: 04/18/2016 Time Started: 0900

Date Finished: 04/18/2016 Time Finished: 1400

ABN Aqueous Extraction Logbook

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):

Separatory Funnel: SW846 3510C/CLP/other ✓ 3510C SIM_____

Continuous Liquid Liquid: SW846 3520C/CLP/other_____

BATCH # MS 93128	RACK# A-5
Extracted by:	YB, VP, ENG, BOJ, NSG
Concentrated by:	M.P.
Vialed by:	YB
Relinquished by:	
Accepted by:	
Supervisor Review:	4/18/16

Special Client Spike Instructions

QC ID# for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt. Spiked

WITNESS SIGN: SPIKE SIGN:

Manager/Supervisor/Team Lead Approval:

	Sample #	Analysis Type	Sample Bottle #	Sample Description	Sample Volume (mL)	pH Adjust(mL) <2 H2SO4	pH Adjust(mL) >11 NaOH	Final Extract Color	Final Extract Vol(mL)	Misc. GPC Cleanup	Misc. Comments
	MB1	ABN		DIH2O	1000	1	4	Clear	1		
	BS1			DIH2O	1000	1	4	Yellow	1		
	JC18366-2 MS		2	Yellow	500	1	4	Brown	1		
	MSD		2	Yellow	500	1	4	Brown	1		
	BS	12SIM		DIH2O	1000	1	4	Yellow	1		
	JC18366-3 MS		1	Clear	500	1	4	Yellow	1		
	MSD		1	Clear	500	1	4	Yellow	1		
1	JC18364-1	ABN	2	Yellow	1000	1	4	Yellow	1		
2	-2		1	Yellow	950	1	4	Yellow	1		
3	-3		1	Yellow	950	1	4	Yellow	1		
4	JC18350-1		2	Clear	1000	1	4	Clear	1		
5	JC18366-2		1	Yellow	1000	1	4	Brown	1		
6	-3		2	Clear	1000	1	4	Yellow	1		
7	-4		2	Yellow	1000	1	4	Brown	1		
8	JC18308-11		2	Clear	970	1	4	clear	1		
9	JC18373-1		1	Clear	980	1	4	clear	1		
10	-2		1	Clear	950	1	4	clear	1		
11	-3		2	Clear	950	1	4	clear	1		
12	-4		1	Clear	950	1	4	Clear	1		
13	JC18384-1		2	Clear	950	1	4	Yellow	1		
14	-2		1	Clear	950	1	4	clear	1		
15	-3		2	Clear	950	1	4	yellow	1		
16	-4		1	Clear	950	1	4	Yellow	1		
17	-5		1	Clear	900	1	4	clear	1		
18	JC18458-1 rx		2	Yellow	1000	1	4	Yellow	1		
19	JC18516-1		2	Yellow	950	1	4	Clear	1		
20	-4		2	Yellow	900	1	4	yellow	1		

30 day HT

due today

ideal HT

Comments: okay to split ms/msd sim ms/msd not enough in bottles.

BNI lot # 15182713

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)					
Buchi Chiller					
Waterbath (70-80°C)	V7, V3	75,75,75	0.5,0.0	76,75,75	n/a
Waterbath Chiller (GPM)	V3, F2	0.8, 0	—	—	0.8, 2
NEVAP (32-38°C; LPM)					

SURROGATE	LOT #	CONC (ppm)	AMT (mL)
ABN	16171269	50	1

WITNESS SIGN: VP SPIKE SIGN: YB

MATRIX SPIKE	LOT #	CONC (ppm)	AMT (mL)
Acid	15182714	50 PPM	Acid: 1
Acid (for SIM)			A(SIM): .1
Base #1	~~15182793~~	50 PPM	1
Base #2	15182795	50 PPM	1
Anilines	15182794	50 PPM	1
BSIM	16171266	1	1

WITNESS SIGN: VP SPIKE SIGN: YB

SOLVENT	LOT #	BRAND	AMT (mL)
METH CHLOR	159148	Pesticl	6160

REAGENT	LOT #	BRAND
NaOH	153503	Pesticl
H2SO4	2601910	Riccia
Sodium Sulfate	158459	Pesticl
Glass Wool	02905-2	J&B
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

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6-1736

LOGBOOK ID:

ABN Aqueous Extraction Logbook

Date Started: 04/18/2016 Time Started: 0900

Date Finished: 04/18/2016 Time Finished: 1400

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):

Separatory Funnel: SW846 3510C/CLP/other ✓ 3510C SIM_____

Continuous Liquid Liquid: SW846 3520C/CLP/other_____

BATCH # MS 93128	RACK# A-5
Extracted by:	YB, VP, ENG, BOJ, NSG
Concentrated by:	M.P.
Vialed by:	YB
Relinquished by:	
Accepted by:	
Supervisor Review:	4/18/16

Special Client Spike Instructions

QC ID# for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt. Spiked

WITNESS SIGN: SPIKE SIGN:

Manager/Supervisor/Team Lead Approval:

	Sample #	Analysis Type	Sample Bottle #	Sample Description	Sample Volume (mL)	pH Adjust(mL) <2 H2SO4	pH Adjust(mL) >11 NaOH	Final Extract Color	Final Extract Vol(mL)	Misc. GPC Cleanup	Misc. Comments
	MB1	ABN		DIH2O	1000	1	4	Clear	1		
	BS1			DIH2O	1000	1	4	Yellow	1		
	JC18366-2 MS		2	Yellow	500	1	4	Brown	1		
	↓ MSD		2	Yellow	500	1	4	Brown	1		
	BS	12SIM		DIH2O	1000	1	4	Yellow	1		
	JC18366-3 MS		1	Clear	500	1	4	Yellow	1		
	↓ MSD		1	Clear	500	1	4	Yellow	1		
1	JC18364-1	ABN	2	Yellow	1000	1	4	Yellow	1		
2	-2		1	Yellow	950	1	4	Yellow	1		
3	-3		1	Yellow	950	1	4	Yellow	1		
4	JC18350-1		2	Clear	1000	1	4	Clear	1		
5	JC18366-2		1	Yellow	1000	1	4	Brown	1		
6	-3		2	Clear	1000	1	4	Yellow	1		
7	-4		2	Yellow	1000	1	4	Brown	1		
8	JC18308-11		2	Clear	970	1	4	clear	1		
9	JC18373-1		1	Clear	980	1	4	clear	1		
10	-2		1	Clear	950	1	4	clear	1		
11	-3		2	Clear	950	1	4	clear	1		
12	-4		1	Clear	950	1	4	Clear	1		
13	JC18384-1		2	Clear	950	1	4	Yellow	1		
14	-2		1	Clear	950	1	4	clear	1		
15	-3		2	Clear	950	1	4	yellow	1		
16	-4		1	Clear	950	1	4	Yellow	1		
17	-5		1	Clear	900	1	4	clear	1		
18	JC18458-1 rx		2	Yellow	1000	1	4	Yellow	1		
19	JC18516-1		2	Yellow	950	1	4	Clear	1		
20	-4		2	Yellow	900	1	4	yellow	1		

30 day AT

due today

ideal AT

Comments: okay to split ms/msd sim ms/msd not enough in bottles.

BNI lot # 15182713

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)					
Buchi Chiller					
Waterbath (70-80°C)	V7, V3	75,75,75	0.5,0.0	76,75,75	n/a
Waterbath Chiller (GPM)	V3, F2	0.8, 0	—	—	0.8, 2
NEVAP (32-38°C; LPM)					

SURROGATE	LOT #	CONC (ppm)	AMT (mL)
ABN	16171269	50	1

WITNESS SIGN: VP SPIKE SIGN: YB

MATRIX SPIKE	LOT #	CONC (ppm)	AMT (mL)
Acid	15182714	50 PPM	Acid: 1
Acid (for SIM)			A(SIM): .1
Base #1	~~15182793~~ 15182796	50 PPM	1
Base #2	15182795	50 PPM	1
Anilines	15182794	50 PPM	1
BSIM	16171266	1	1

WITNESS SIGN: VP SPIKE SIGN: YB

SOLVENT	LOT #	BRAND	AMT (mL)
METH CHLOR	159148	Fisher	6/60

REAGENT	LOT #	BRAND
NaOH	153503	Fisher
H2SO4	2601910	Ricca
Sodium Sulfate	158459	Fisher
Glass Wool	02905-2	J&J
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

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LOGBOOK ID: 6-1743

ABN Extraction Log - Solids

Date started: 4/20/16 Time started: 9:30am
Date finished: 4/20/16 Time finished: 12:45pm

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Microwave SW3546 √ Sonication SW3550C ____
Waste Dil. SW3580A ____ Soxhlet SW3540C ____

BATCH # MS 93218 RACK# B-12

Weighed/Extracted by: HB
Concentrated by: NR AQ
Vialed by: NR HB
Relinquished by: AQ
Accepted by:
Supervisor Review: 4/20/16

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 #	ABN 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			5		Clear	1		
	BS1			SAND	30.0			5		Yellow	1		
	JC18417-5 MS		1	Soil	30.3		✓	5		black	1		
	MSD		1	Soil	30.8		✓	5		black	1		
	BS12 SIM		1	Sand	30.0			5		clear	1		
	JC18516-2 MSA		1	SAND	30.2		✓	5		Yellow	1		
	MSDA		1	SAND	30.3		✓	5		yellow	1		
1	JC18417-5	ABN	1	Soil	30.3		✓	5		black	1		
2	JC18418-1		1	Soil	31.1		✓	5		brown	1		
3	JC18419-7		2	Soil	30.8		✓	5		black	1		
4	-11		2	Soil	31.9		✓	5		brown	1		
5	-15		2	Soil	30.3		✓	5		brown	1		
6	-22		2	Soil	31.5		✓	5		black	5		*
7	-26		3	Soil	30.6		✓	5		Black	5		*
8	-30		1	Soil	31.5		✓	5		Black	5		*
9	-33		2	Soil	30.9		✓	5		yellow	1		
10	-38		3	Soil	31.0		✓	5		brown	1		
11	JC18450-6		1	SAND	31.1		✓	5		brown	1		
12	-7		1	SAND	31.7		✓	5		brown	1		
13	JC18516-2		1	SAND	30.5	HB	✓	5		Yellow	1		
14	-3		1	SAND	30.7		✓	5		Yellow	1		
15	JC18572-1		1	Rock	31.5		✓	5		brown	1		
16	JC18221-5 Dx		1	Soil	30.8		✓	5		yellow	5		*
17													
18													
19													
20													

2d — due today

Comments: * Samples would only concentrate to 1ml, was raised with methylene chloride and vialed at 5ml.

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason:

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other: 5im (A) batch

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	73.6,73.9	0.6,1.5	73.0,75.2	N/A,N/A
Waterbath Chiller (GPM)	M-2,M-3	7,5	—	—	1.6,1.7
NEVAP (32-38°C, LPM)	2	36.0	0.1	36.1	10
Balance	B-47	N/A	N/A	N/A	N/A

SURROGATE	LOT #	CONC (ppm)	AMT (mL)
ABN OP	16171269	50	1

WITNESS SIGN: AQ SPIKE SIGN: HB

MATRIX SPIKE	LOT #	CONC (ppm)	AMT (mL)
Acid SV	15182711 4	50	Acid: 1
Acid (for SIM)			A(SIM): 0.1
Base #1 SV	15182711 3	50	1
Base #2 SV	15182710 2	50	1
Aniline SV	15182794 4	50	1
BSIM OP	16171266	1	1

WITNESS SIGN: AQ SPIKE SIGN: HB

SOLVENT	LOT #	BRAND	AMT (mL)
1:1 METH CHLOR/ ACETONE	162108 / 158571	Fisher / Fisher	30
METH CHLOR	159148	Fisher	Var

REAGENT	LOT #	BRAND
HYDROMATRIX	6294128	Agilent
SODIUM SULFATE	158459	Fisher
FILTER PAPER	9626794	Fisher

MATRIX	LOT #	BRAND
SAND	6GRT160113111T	Fisher

SGS ACCUTEST INC.
Form: OP019A-06
Rev Date: 11/20/15

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LOGBOOK ID: 6-1743

ABN Extraction Log - Solids

Date started: 4/20/16 Time started: 9:30am
Date finished: 4/20/16 Time finished: 12:45pm

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Microwave SW3546 √ Sonication SW3550C ____
Waste Dil. SW3580A ____ Soxhlet SW3540C ____

BATCH # MS 93218 RACK# B-12

Weighed/Extracted by:	HB
Concentrated by:	NR AQ
Vialed by:	NR HB
Relinquished by:	AQ
Accepted by:	
Supervisor Review:	4/20/16

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 #	ABN 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			5		Clear	1		
	BS1			SAND	30.0			5		Yellow	1		
	JC18417-5 MS		1	Soil	30.3		✓	5		black	1		
	MSD		1	Soil	30.8		✓	5		black	1		
	BS 12 SIM		1	Sand	30.0			5		clear	1		
	JC18516-2 MSA		1	SAND	30.2		✓	5		Yellow	1		
	MSDA		1	SAND	30.3		✓	5		yellow	1		
1	JC18417-5	ABN	1	Soil	30.3		✓	5		black	1		
2	JC18418-1		1	Soil	31.1		✓	5		brown	1		
3	JC18419-7		2	Soil	30.8		✓	5		black	1		
4	-11		2	Soil	31.9		✓	5		brown	1		
5	-15		2	Soil	30.3		✓	5		brown	1		
6	-22		2	Soil	31.5		✓	5		black	5		*
7	-26		3	Soil	30.6		✓	5		Black	5		*
8	-30		1	Soil	31.5		✓	5		Black	5		*
9	-33		2	Soil	30.9		✓	5		yellow	1		
10	-38		3	Soil	31.0		✓	5		brown	1		
11	JC18450-6		1	SAND	31.1		✓	5		brown	1		
12	-7		1	SAND	31.7		✓	5		brown	1		
13	JC18516-2		1	SAND	30.5	HB	✓	5		Yellow	1		
14	-3		1	SAND	30.7		✓	5		Yellow	1		
15	JC18572-1		1	Rock	31.5		✓	5		brown	1		
16	JC18221-5 Dx		1	Soil	30.8		✓	5		yellow	5		*
17													
18													
19													
20													

2d - due today

Comments: * Samples would only concentrate to 1ml, was raised with methylene chloride and vialed at 5ml.

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason:

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other: 5im (A) batch

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	73.6,73.9	0.6,1.5	73.0,75.2	N/A,N/A
Waterbath Chiller (GPM)	M-2,M-3	7,5	—	—	1.6,1.7
NEVAP (32-38°C, LPM)	2	36.0	0.1	36.1	10
Balance	B-47	N/A	N/A	N/A	N/A

SURROGATE	LOT #	CONC (ppm)	AMT (mL)
ABN OP	16171269	50	1

WITNESS SIGN: AQ SPIKE SIGN: HB

MATRIX SPIKE	LOT #	CONC (ppm)	AMT (mL)
Acid SV	15182711 4	50	Acid: 1
Acid (for SIM)			A(SIM): 0.1
Base #1 SV	15182711 3	50	1
Base #2 SV	15182710 2	50	1
Aniline SV	15182794 4	50	1
BSIM OP	16171266	1	1

WITNESS SIGN: AQ SPIKE SIGN: HB

SOLVENT	LOT #	BRAND	AMT (mL)
1:1 METH CHLOR/ ACETONE	162108 / 158571	Fisher / Fisher	30
METH CHLOR	159148	Fisher	Var

REAGENT	LOT #	BRAND
HYDROMATRIX	6294128	Agilent
SODIUM SULFATE	158459	Fisher
FILTER PAPER	9626794	Fisher

MATRIX	LOT #	BRAND
SAND	6GRT160113111T	Fisher

SGS ACCUTEST INC.
Form: OP019A-06
Rev Date: 11/20/15

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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: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93156-MB1	1G122259.D	1	04/19/16	BP	04/18/16	OP93156	G1G3966

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC18516-1, JC18516-4

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	92%	26-132%
877-09-8	Tetrachloro-m-xylene	91%	26-132%
2051-24-3	Decachlorobiphenyl	108%	10-118%
2051-24-3	Decachlorobiphenyl	95%	10-118%

Method Blank Summary

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93322-MB1	6G34376.D	1	04/25/16	BP	04/23/16	OP93322	G6G995

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC18516-2, JC18516-3

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	92%	24-136%
877-09-8	Tetrachloro-m-xylene	93%	24-136%
2051-24-3	Decachlorobiphenyl	95%	10-153%
2051-24-3	Decachlorobiphenyl	90%	10-153%

Blank Spike Summary

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93322-BS1	6G34377.D	1	04/25/16	BP	04/23/16	OP93322	G6G995

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC18516-2, JC18516-3

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
309-00-2	Aldrin	16.7	14.2	85	40-135
319-84-6	alpha-BHC	16.7	13.7	82	37-134
319-85-7	beta-BHC	16.7	13.8	83	37-131
319-86-8	delta-BHC	16.7	12.3	74	34-132
58-89-9	gamma-BHC (Lindane)	16.7	13.9	83	36-128
5103-71-9	alpha-Chlordane	16.7	13.9	83	40-131
5103-74-2	gamma-Chlordane	16.7	14.2	85	41-133
60-57-1	Dieldrin	16.7	12.0	72	33-133
72-54-8	4,4'-DDD	16.7	14.6	88	37-132
72-55-9	4,4'-DDE	16.7	14.8	89	39-133
50-29-3	4,4'-DDT	16.7	15.1	91	26-150
72-20-8	Endrin	16.7	14.4	86	41-134
1031-07-8	Endosulfan sulfate	16.7	13.9	83	38-138
7421-93-4	Endrin aldehyde	16.7	13.1	79	37-129
959-98-8	Endosulfan-I	16.7	13.2	79	39-130
33213-65-9	Endosulfan-II	16.7	14.0	84	40-134
76-44-8	Heptachlor	16.7	13.7	82	36-132
1024-57-3	Heptachlor epoxide	16.7	13.3	80	39-131
72-43-5	Methoxychlor	16.7	15.3	92	28-149
53494-70-5	Endrin ketone	16.7	13.4	80	31-138

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	93%	24-136%
877-09-8	Tetrachloro-m-xylene	92%	24-136%
2051-24-3	Decachlorobiphenyl	103%	10-153%
2051-24-3	Decachlorobiphenyl	90%	10-153%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93156-BS1	1G122260.D	1	04/19/16	BP	04/18/16	OP93156	G1G3966
OP93156-BSD	1G122261.D	1	04/19/16	BP	04/18/16	OP93156	G1G3966

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC18516-1, JC18516-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
309-00-2	Aldrin	0.167	0.14	84	0.14	84	0	38-138/30
319-84-6	alpha-BHC	0.167	0.14	84	0.14	84	0	51-144/30
319-85-7	beta-BHC	0.167	0.14	84	0.14	84	7	55-137/30
319-86-8	delta-BHC	0.167	0.14	84	0.14	84	0	33-148/30
58-89-9	gamma-BHC (Lindane)	0.167	0.14	84	0.14	84	0	53-142/30
5103-71-9	alpha-Chlordane	0.167	0.14	84	0.14	84	0	52-137/30
5103-74-2	gamma-Chlordane	0.167	0.14	84	0.14	84	0	52-140/30
60-57-1	Dieldrin	0.167	0.14	84	0.14	84	0	54-144/30
72-54-8	4,4'-DDD	0.167	0.14	84	0.14	84	0	46-151/30
72-55-9	4,4'-DDE	0.167	0.14	84	0.14	84	0	51-142/30
50-29-3	4,4'-DDT	0.167	0.14	84	0.14	84	0	53-158/30
72-20-8	Endrin	0.167	0.15	90	0.15	90	0	53-149/30
1031-07-8	Endosulfan sulfate	0.167	0.15	90	0.15	90	0	49-148/30
7421-93-4	Endrin aldehyde	0.167	0.14	84	0.14	84	0	45-137/30
53494-70-5	Endrin ketone	0.167	0.15	90	0.15	90	0	48-142/30
959-98-8	Endosulfan-I	0.167	0.14	84	0.14	84	0	54-139/30
33213-65-9	Endosulfan-II	0.167	0.14	84	0.14	84	0	54-142/30
76-44-8	Heptachlor	0.167	0.14	84	0.14	84	0	45-137/30
1024-57-3	Heptachlor epoxide	0.167	0.14	84	0.15	90	7	54-140/30
72-43-5	Methoxychlor	0.167	0.14	84	0.14	84	0	51-157/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	77%	77%	26-132%
877-09-8	Tetrachloro-m-xylene	77%	78%	26-132%
2051-24-3	Decachlorobiphenyl	74%	88%	10-118%
2051-24-3	Decachlorobiphenyl	67%	78%	10-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93322-MS	6G34381.D	1	04/25/16	BP	04/23/16	OP93322	G6G995
OP93322-MSD	6G34382.D	1	04/25/16	BP	04/23/16	OP93322	G6G995
JC18834-10	6G34387.D	1	04/25/16	BP	04/23/16	OP93322	G6G995

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC18516-2, JC18516-3

CAS No.	Compound	JC18834-10 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		17.8	17.9	100	18.2	14.3	79	22	19-147/48
319-84-6	alpha-BHC	ND		17.8	17.5	98	18.2	14.2	78	21	13-155/50
319-85-7	beta-BHC	ND		17.8	18.3	103	18.2	15.0	83	20	10-145/53
319-86-8	delta-BHC	ND		17.8	16.5	93	18.2	13.5	74	20	11-148/51
58-89-9	gamma-BHC (Lindane)	ND		17.8	18.0	101	18.2	14.5	80	22	16-143/47
5103-71-9	alpha-Chlordane	ND		17.8	18.3	103	18.2	15.1	83	19	15-151/50
5103-74-2	gamma-Chlordane	ND		17.8	17.9	100	18.2	14.7	81	20	13-151/50
60-57-1	Dieldrin	ND		17.8	17.7	99	18.2	15.2	84	15	10-157/54
72-54-8	4,4'-DDD	ND		17.8	19.2	108	18.2	15.7	86	20	10-157/52
72-55-9	4,4'-DDE	ND		17.8	19.0	107	18.2	15.6	86	20	10-155/49
50-29-3	4,4'-DDT	ND		17.8	19.3	108	18.2	16.2	89	17	10-187/49
72-20-8	Endrin	ND		17.8	19.7	110	18.2	16.2	89	19	14-154/53
1031-07-8	Endosulfan sulfate	ND		17.8	18.3	103	18.2	15.2	84	19	16-140/55
7421-93-4	Endrin aldehyde	ND		17.8	18.9	106	18.2	14.8	81	24	10-156/51
959-98-8	Endosulfan-I	ND		17.8	17.0	95	18.2	13.9	76	20	12-142/47
33213-65-9	Endosulfan-II	ND		17.8	18.6	104	18.2	15.2	84	20	10-150/52
76-44-8	Heptachlor	ND		17.8	18.3	103	18.2	14.6	80	22	10-159/49
1024-57-3	Heptachlor epoxide	ND		17.8	17.1	96	18.2	13.8	76	21	16-150/51
72-43-5	Methoxychlor	ND		17.8	19.5	109	18.2	15.7	86	22	10-166/52
53494-70-5	Endrin ketone	ND		17.8	18.9	106	18.2	15.7	86	18	10-171/52
8001-35-2	Toxaphene	ND			ND			ND		nc	50-150/30

CAS No.	Surrogate Recoveries	MS	MSD	JC18834-10	Limits
877-09-8	Tetrachloro-m-xylene	108%	86%	106%	24-136%
877-09-8	Tetrachloro-m-xylene	108%	86%	107%	24-136%
2051-24-3	Decachlorobiphenyl	110%	90%	106%	10-153%
2051-24-3	Decachlorobiphenyl	105%	87%	102%	10-153%

* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G1G3966-CC3951	**Injection Date:**	04/19/16
Lab File ID:	1G122257.D	**Injection Time:**	09:00
Instrument ID:	GC1G	**Method:**	SW846 8081B

	IS 1 AREA	RT	IS 2 AREA	RT
Check Std	828317480	1.53	62047044	1.16
Upper Limit [a]	1656634960	2.03	124094088	1.66
Lower Limit [b]	414158740	1.03	31023522	0.66

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
OP93156-MB1	916522896	1.53	69837321	1.16
OP93156-BS1	902903196	1.53	68259431	1.16
OP93156-BSD	903507758	1.53	68767571	1.16
JC18516-1	882424421	1.53	65985626	1.16
JC18516-4	905130067	1.53	67654100	1.16
ZZZZZZ	854380961	1.53	65055261	1.16
ZZZZZZ	904104731	1.53	70439818	1.16
ZZZZZZ	660664500	1.53	53863175	1.16
ZZZZZZ	818117752	1.53	65982893	1.16
ZZZZZZ	835087536	1.53	63495248	1.16

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: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G995-CC987	**Injection Date:**	04/25/16
Lab File ID:	6G34372.D	**Injection Time:**	10:07
Instrument ID:	GC6G	**Method:**	SW846 8081B

	IS 1 AREA	RT	IS 2 AREA	RT
Check Std	49841087	1.57	135941310	1.30
Upper Limit [a]	99682174	2.07	271882620	1.80
Lower Limit [b]	24920544	1.07	67970655	0.80

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
OP93282-MB1	49207046	1.58	136785777	1.30
OP93282-BS1	50999986	1.58	142750268	1.30
OP93282-BSD	50038298	1.57	140465768	1.30
OP93322-MB1	49873992	1.58	139310432	1.30
OP93322-BS1	46225976	1.57	129203119	1.30
ZZZZZZ	50386582	1.58	142130692	1.30
ZZZZZZ	51422677	1.58	145405777	1.31
OP93322-MS	45777358	1.57	127347688	1.30
OP93322-MSD	48400218	1.57	135899923	1.30
ZZZZZZ	47332816	1.58	138424508	1.31
ZZZZZZ	49784280	1.57	143527117	1.30
ZZZZZZ	48560653	1.57	139795507	1.30
ZZZZZZ	47265566	1.58	133147796	1.30
JC18834-10	47972478	1.58	135556754	1.30
ZZZZZZ	48285016	1.57	135500283	1.30
ZZZZZZ	49203901	1.57	137492022	1.30
ZZZZZZ	48852790	1.57	143362512	1.30
ZZZZZZ	50466369	1.58	143609108	1.30
ZZZZZZ	45525722	1.57	130258481	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.

Semivolatile Internal Standard Area Summary

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G995-CC987	**Injection Date:**	04/25/16
Lab File ID:	6G34403.D	**Injection Time:**	20:00
Instrument ID:	GC6G	**Method:**	SW846 8081B

	IS 1 AREA	RT	IS 2 AREA	RT
Check Std	52770040	1.58	151964312	1.30
Upper Limit [a]	105540080	2.08	303928624	1.80
Lower Limit [b]	26385020	1.08	75982156	0.80

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
ZZZZZZ	46379132	1.58	128004864	1.30
JC18516-2	49671030	1.57	140882074	1.30
JC18516-3	49273828	1.58	140642097	1.30
ZZZZZZ	47001932	1.58	135006056	1.30
ZZZZZZ	48103677	1.57	135868180	1.30
ZZZZZZ	50100426	1.57	142797480	1.30
ZZZZZZ	49736381	1.57	140393422	1.30
ZZZZZZ	48509469	1.58	138993104	1.30
ZZZZZZ	48533344	1.57	140208094	1.30
ZZZZZZ	46108008	1.58	133391580	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: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: G1G3951-DDT
Lab File ID: 1G121638.D
Instrument ID: GC1G
Injection Date: 04/01/16
Injection Time: 10:37

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	2081667	26843936
4,4'-DDE	1293527	17237832
4,4'-DDT	138550612	1157819905
DDT Breakdown [a]	2.4 %	3.7 %
Endrin aldehyde	1241326	14533971
Endrin ketone	3577865	33672314
Endrin	70219660	687490125
Endrin Breakdown [b]	6.4 %	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
G1G3951-IC3951	1G121640.D	04/01/16	11:12	00:35	Initial cal 1
G1G3951-IC3951	1G121641.D	04/01/16	11:30	00:53	Initial cal 2
G1G3951-IC3951	1G121642.D	04/01/16	11:48	01:11	Initial cal 5
G1G3951-IC3951	1G121643.D	04/01/16	12:05	01:28	Initial cal 10
G1G3951-ICC3951	1G121644.D	04/01/16	12:23	01:46	Initial cal 25
G1G3951-IC3951	1G121645.D	04/01/16	12:41	02:04	Initial cal 50
G1G3951-IC3951	1G121646.D	04/01/16	12:58	02:21	Initial cal 75
G1G3951-IC3951	1G121647.D	04/01/16	13:16	02:40	Initial cal 100
G1G3951-IC3951	1G121648.D	04/01/16	13:34	02:57	Initial cal 500
G1G3951-IC3951	1G121649.D	04/01/16	13:51	03:15	Initial cal 500
G1G3951-ICV3951	1G121650.D	04/01/16	14:09	03:33	Initial cal verification 25
G1G3951-ICV3951	1G121651.D	04/01/16	14:27	03:50	Initial cal verification 25
G1G3951-ICV3951	1G121652.D	04/01/16	14:44	04:08	Initial cal verification 500
G1G3951-ICV3951	1G121653.D	04/01/16	15:02	04:26	Initial cal verification 500

DDT/Endrin Breakdown Check

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: G1G3966-DDT
Lab File ID: 1G122256.D
Instrument ID: GC1G
Injection Date: 04/19/16
Injection Time: 08:43

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	2938960	29220756
4,4'-DDE	1204456	15816856
4,4'-DDT	137516218	1045886928
DDT Breakdown [a]	2.9 %	4.1 %
Endrin aldehyde	1091175	8695509
Endrin ketone	4408150	29151652
Endrin	73186500	658732519
Endrin Breakdown [b]	7 %	5.4 %

(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
G1G3966-CC3951	1G122257.D	04/19/16	09:00	00:18	Continuing cal 25
OP93156-MB1	1G122259.D	04/19/16	09:36	00:53	Method Blank
OP93156-BS1	1G122260.D	04/19/16	09:53	01:10	Blank Spike
OP93156-BSD	1G122261.D	04/19/16	10:11	01:28	Blank Spike Duplicate
JC18516-1	1G122262.D	04/19/16	10:28	01:45	EB041416
JC18516-4	1G122263.D	04/19/16	10:46	02:03	RA14_GWS
ZZZZZZ	1G122264.D	04/19/16	11:04	02:21	(unrelated sample)
ZZZZZZ	1G122265.D	04/19/16	11:21	02:38	(unrelated sample)
ZZZZZZ	1G122266.D	04/19/16	11:39	02:56	(unrelated sample)
ZZZZZZ	1G122268.D	04/19/16	13:27	04:44	(unrelated sample)
ZZZZZZ	1G122275.D	04/19/16	14:37	05:55	(unrelated sample)

DDT/Endrin Breakdown Check

Job Number: JC18516
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 JC18516)
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: JC18516
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: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: G6G995-DDT
Lab File ID: 6G34371A.D
Instrument ID: GC6G
Injection Date: 04/25/16
Injection Time: 09:50

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	1948326	996545
4,4'-DDE	1232422	542611
4,4'-DDT	222158660	66427045
DDT Breakdown [a]	1.4 %	2.3 %
Endrin aldehyde	852181	432241
Endrin ketone	4679405	1647017
Endrin	112470677	36720545
Endrin Breakdown [b]	4.7 %	5.4 %

(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
G6G995-CC987	6G34372.D	04/25/16	10:07	00:17	Continuing cal 25
OP93282-MB1	6G34374.D	04/25/16	10:39	00:49	Method Blank
OP93282-BS1	6G34375.D	04/25/16	10:56	01:06	Blank Spike
OP93282-BSD	6G34378.D	04/25/16	11:12	01:22	Blank Spike Duplicate
OP93322-MB1	6G34376.D	04/25/16	11:29	01:39	Method Blank
OP93322-BS1	6G34377.D	04/25/16	11:45	01:55	Blank Spike
ZZZZZZ	6G34379.D	04/25/16	12:02	02:12	(unrelated sample)
ZZZZZZ	6G34380.D	04/25/16	12:18	02:28	(unrelated sample)
OP93322-MS	6G34381.D	04/25/16	12:34	02:44	Matrix Spike
OP93322-MSD	6G34382.D	04/25/16	12:51	03:01	Matrix Spike Duplicate
ZZZZZZ	6G34383.D	04/25/16	13:07	03:17	(unrelated sample)
ZZZZZZ	6G34384.D	04/25/16	13:24	03:34	(unrelated sample)
ZZZZZZ	6G34385.D	04/25/16	13:40	03:50	(unrelated sample)
ZZZZZZ	6G34386.D	04/25/16	13:56	04:06	(unrelated sample)
JC18834-10	6G34387.D	04/25/16	14:13	04:23	(used for QC only; not part of job JC18516)
ZZZZZZ	6G34388.D	04/25/16	14:29	04:39	(unrelated sample)
ZZZZZZ	6G34389.D	04/25/16	14:46	04:56	(unrelated sample)
ZZZZZZ	6G34390.D	04/25/16	15:02	05:12	(unrelated sample)
ZZZZZZ	6G34391.D	04/25/16	15:18	05:28	(unrelated sample)
ZZZZZZ	6G34392.D	04/25/16	15:35	05:45	(unrelated sample)

DDT/Endrin Breakdown Check

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: G6G995-DDT
Lab File ID: 6G34393.D
Instrument ID: GC6G
Injection Date: 04/25/16
Injection Time: 17:16

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	2755069	2647372
4,4'-DDE	888704	396032
4,4'-DDT	269742992	73100962
DDT Breakdown [a]	1.3 %	4 %
Endrin aldehyde	1155619	472844
Endrin ketone	6312819	3220307
Endrin	141140520	43026549
Endrin Breakdown [b]	5 %	7.9 %

(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100
(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
G6G995-CC987	6G34394.D	04/25/16	17:32	00:16	Continuing cal 50
OP93251-MB1	6G34396.D	04/25/16	18:05	00:49	Method Blank
OP93251-BS1	6G34397.D	04/25/16	18:21	01:05	Blank Spike
ZZZZZZ	6G34398.D	04/25/16	18:38	01:22	(unrelated sample)
ZZZZZZ	6G34399.D	04/25/16	18:54	01:38	(unrelated sample)
JC18617-3	6G34400.D	04/25/16	19:10	01:54	(used for QC only; not part of job JC18516)
OP93251-MS	6G34401.D	04/25/16	19:27	02:11	Matrix Spike
OP93251-MSD	6G34402.D	04/25/16	19:43	02:27	Matrix Spike Duplicate
G6G995-CC987	6G34403.D	04/25/16	20:00	02:44	Continuing cal 25
ZZZZZZ	6G34405.D	04/25/16	20:32	03:16	(unrelated sample)
JC18516-2	6G34406.D	04/25/16	20:49	03:33	RA14 (9-9.7)
JC18516-3	6G34407.D	04/25/16	21:05	03:49	S-43S (6-7)
ZZZZZZ	6G34408.D	04/25/16	21:22	04:06	(unrelated sample)
ZZZZZZ	6G34409.D	04/25/16	21:38	04:22	(unrelated sample)
ZZZZZZ	6G34410.D	04/25/16	21:55	04:39	(unrelated sample)
ZZZZZZ	6G34411.D	04/25/16	22:11	04:55	(unrelated sample)
ZZZZZZ	6G34412.D	04/25/16	22:27	05:11	(unrelated sample)
ZZZZZZ	6G34413.D	04/25/16	22:44	05:28	(unrelated sample)
ZZZZZZ	6G34414.D	04/25/16	23:00	05:44	(unrelated sample)

GC Identification Summary

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G1G3966-CC3951	**Injection Date:**	04/19/16
Lab File ID:	1G122257.D	**Injection Time:**	09:00
Instrument ID:	GC1G	**Method:**	SW846 8081B

Sample ID:	OP93156-BS1	**Injection Date:**	04/19/16
Lab File ID:	1G122260.D	**Injection Time:**	09:53
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1	3.30	3.30	0.15		ug/l	6.9
Aldrin	2 [a]	4.50	4.49	0.14		ug/l	
alpha-BHC	1 [a]	2.22	2.22	0.14		ug/l	0.0
alpha-BHC	2	3.04	3.04	0.14		ug/l	
beta-BHC	1	2.58	2.58	0.15		ug/l	6.9
beta-BHC	2 [a]	3.56	3.56	0.14		ug/l	
delta-BHC	1	2.76	2.76	0.15		ug/l	6.9
delta-BHC	2 [a]	3.95	3.95	0.14		ug/l	
gamma-BHC (Lindane)	1	2.50	2.50	0.15		ug/l	6.9
gamma-BHC (Lindane)	2 [a]	3.47	3.47	0.14		ug/l	
alpha-Chlordane	1	4.31	4.31	0.16		ug/l	13.3
alpha-Chlordane	2 [a]	5.83	5.83	0.14		ug/l	
gamma-Chlordane	1	4.15	4.15	0.16		ug/l	13.3
gamma-Chlordane	2 [a]	5.60	5.60	0.14		ug/l	
Dieldrin	1	4.80	4.80	0.15		ug/l	6.9
Dieldrin	2 [a]	6.36	6.36	0.14		ug/l	
4,4'-DDD	1	5.25	5.25	0.14		ug/l	0.0
4,4'-DDD	2 [a]	7.05	7.05	0.14		ug/l	
4,4'-DDE	1	4.43	4.43	0.15		ug/l	6.9
4,4'-DDE	2 [a]	6.10	6.10	0.14		ug/l	
4,4'-DDT	1	5.65	5.65	0.15		ug/l	6.9
4,4'-DDT	2 [a]	7.58	7.58	0.14		ug/l	
Endrin	1	5.11	5.11	0.16		ug/l	6.5
Endrin	2 [a]	6.86	6.86	0.15		ug/l	
Endosulfan sulfate	1	6.73	6.73	0.16		ug/l	6.5
Endosulfan sulfate	2 [a]	8.26	8.26	0.15		ug/l	
Endrin aldehyde	1	6.06	6.05	0.17		ug/l	19.4
Endrin aldehyde	2 [a]	7.79	7.79	0.14		ug/l	
Endrin ketone	1	7.16	7.16	0.16		ug/l	6.5
Endrin ketone	2 [a]	9.22	9.22	0.15		ug/l	
Endosulfan-I	1	4.49	4.49	0.16		ug/l	13.3
Endosulfan-I	2 [a]	5.92	5.92	0.14		ug/l	
Endosulfan-II	1	5.43	5.43	0.15		ug/l	6.9
Endosulfan-II	2 [a]	7.21	7.21	0.14		ug/l	
Heptachlor	1	2.98	2.98	0.15		ug/l	6.9
Heptachlor	2 [a]	4.05	4.05	0.14		ug/l	
Heptachlor epoxide	1	3.99	3.99	0.15		ug/l	6.9
Heptachlor epoxide	2 [a]	5.32	5.32	0.14		ug/l	
Methoxychlor	1	6.44	6.43	0.15		ug/l	6.9
Methoxychlor	2 [a]	8.83	8.83	0.14		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G995-CC987	**Injection Date:**	04/25/16
Lab File ID:	6G34372.D	**Injection Time:**	10:07
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP93322-BS1	**Injection Date:**	04/25/16
Lab File ID:	6G34377.D	**Injection Time:**	11:45
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1	3.69	3.69	14.6		ug/kg	2.8
Aldrin	2 [a]	4.71	4.71	14.2		ug/kg	
alpha-BHC	1 [a]	2.49	2.49	13.7		ug/kg	0.7
alpha-BHC	2	3.18	3.18	13.8		ug/kg	
beta-BHC	1	2.89	2.89	14.3		ug/kg	3.6
beta-BHC	2 [a]	3.72	3.72	13.8		ug/kg	
delta-BHC	1	3.08	3.08	12.7		ug/kg	3.2
delta-BHC	2 [a]	4.14	4.14	12.3		ug/kg	
gamma-BHC (Lindane)	1 [a]	2.81	2.81	13.9		ug/kg	0.0
gamma-BHC (Lindane)	2	3.63	3.63	13.9		ug/kg	
alpha-Chlordane	1	4.79	4.80	14.2		ug/kg	2.1
alpha-Chlordane	2 [a]	6.14	6.14	13.9		ug/kg	
gamma-Chlordane	1 [a]	4.61	4.61	14.2		ug/kg	5.5
gamma-Chlordane	2	5.90	5.90	15.0		ug/kg	
Dieldrin	1 [a]	5.32	5.32	12.0		ug/kg	21.6
Dieldrin	2	6.71	6.71	14.9		ug/kg	
4,4'-DDD	1 [a]	5.81	5.81	14.6		ug/kg	0.7
4,4'-DDD	2	7.47	7.47	14.7		ug/kg	
4,4'-DDE	1	4.92	4.93	15.2		ug/kg	2.7
4,4'-DDE	2 [a]	6.44	6.44	14.8		ug/kg	
4,4'-DDT	1	6.26	6.26	15.1		ug/kg	0.0
4,4'-DDT	2 [a]	8.05	8.06	15.1		ug/kg	
Endrin	1	5.66	5.66	17.3		ug/kg	18.3
Endrin	2 [a]	7.25	7.26	14.4		ug/kg	
Endosulfan sulfate	1	7.41	7.41	14.7		ug/kg	5.6
Endosulfan sulfate	2 [a]	8.78	8.78	13.9		ug/kg	
Endrin aldehyde	1 [a]	6.67	6.67	13.1		ug/kg	1.5
Endrin aldehyde	2	8.27	8.27	13.3		ug/kg	
Endosulfan-I	1 [a]	4.98	4.98	13.2		ug/kg	3.7
Endosulfan-I	2	6.24	6.24	13.7		ug/kg	
Endosulfan-II	1	6.00	6.00	15.0		ug/kg	6.9
Endosulfan-II	2 [a]	7.64	7.64	14.0		ug/kg	
Heptachlor	1	3.34	3.34	14.1		ug/kg	2.9
Heptachlor	2 [a]	4.24	4.24	13.7		ug/kg	
Heptachlor epoxide	1 [a]	4.44	4.44	13.3		ug/kg	3.0
Heptachlor epoxide	2	5.59	5.59	13.7		ug/kg	
Methoxychlor	1 [a]	7.12	7.13	15.3		ug/kg	1.3
Methoxychlor	2	9.43	9.43	15.5		ug/kg	
Endrin ketone	1	7.88	7.88	14.6		ug/kg	8.6
Endrin ketone	2 [a]	9.83	9.83	13.4		ug/kg	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G1G3966-CC3951	**Injection Date:**	04/19/16
Lab File ID:	1G122257.D	**Injection Time:**	09:00
Instrument ID:	GC1G	**Method:**	SW846 8081B

Sample ID:	OP93156-BSD	**Injection Date:**	04/19/16
Lab File ID:	1G122261.D	**Injection Time:**	10:11
Client ID:	Blank Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1	3.30	3.30	0.14		ug/l	0.0
Aldrin	2 [a]	4.50	4.49	0.14		ug/l	
alpha-BHC	1 [a]	2.22	2.22	0.14		ug/l	0.0
alpha-BHC	2	3.04	3.04	0.14		ug/l	
beta-BHC	1 [a]	2.58	2.58	0.14		ug/l	0.0
beta-BHC	2	3.56	3.56	0.14		ug/l	
delta-BHC	1	2.76	2.76	0.15		ug/l	6.9
delta-BHC	2 [a]	3.95	3.95	0.14		ug/l	
gamma-BHC (Lindane)	1	2.50	2.50	0.14		ug/l	0.0
gamma-BHC (Lindane)	2 [a]	3.47	3.47	0.14		ug/l	
alpha-Chlordane	1	4.31	4.31	0.15		ug/l	6.9
alpha-Chlordane	2 [a]	5.83	5.83	0.14		ug/l	
gamma-Chlordane	1	4.15	4.15	0.16		ug/l	13.3
gamma-Chlordane	2 [a]	5.60	5.60	0.14		ug/l	
Dieldrin	1	4.80	4.80	0.15		ug/l	6.9
Dieldrin	2 [a]	6.36	6.36	0.14		ug/l	
4,4'-DDD	1	5.25	5.25	0.15		ug/l	6.9
4,4'-DDD	2 [a]	7.05	7.05	0.14		ug/l	
4,4'-DDE	1	4.43	4.43	0.15		ug/l	6.9
4,4'-DDE	2 [a]	6.10	6.10	0.14		ug/l	
4,4'-DDT	1	5.65	5.65	0.15		ug/l	6.9
4,4'-DDT	2 [a]	7.58	7.58	0.14		ug/l	
Endrin	1	5.11	5.11	0.16		ug/l	6.5
Endrin	2 [a]	6.86	6.86	0.15		ug/l	
Endosulfan sulfate	1	6.73	6.73	0.16		ug/l	6.5
Endosulfan sulfate	2 [a]	8.26	8.26	0.15		ug/l	
Endrin aldehyde	1	6.06	6.05	0.17		ug/l	19.4
Endrin aldehyde	2 [a]	7.79	7.79	0.14		ug/l	
Endrin ketone	1	7.16	7.16	0.16		ug/l	6.5
Endrin ketone	2 [a]	9.22	9.22	0.15		ug/l	
Endosulfan-I	1	4.49	4.49	0.15		ug/l	6.9
Endosulfan-I	2 [a]	5.92	5.92	0.14		ug/l	
Endosulfan-II	1	5.44	5.43	0.15		ug/l	6.9
Endosulfan-II	2 [a]	7.21	7.21	0.14		ug/l	
Heptachlor	1	2.98	2.98	0.15		ug/l	6.9
Heptachlor	2 [a]	4.05	4.05	0.14		ug/l	
Heptachlor epoxide	1	3.99	3.99	0.16		ug/l	6.5
Heptachlor epoxide	2 [a]	5.32	5.32	0.15		ug/l	
Methoxychlor	1	6.44	6.43	0.14		ug/l	0.0
Methoxychlor	2 [a]	8.83	8.83	0.14		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G995-CC987	**Injection Date:**	04/25/16
Lab File ID:	6G34372.D	**Injection Time:**	10:07
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP93322-MS	**Injection Date:**	04/25/16
Lab File ID:	6G34381.D	**Injection Time:**	12:34
Client ID:	Matrix Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	3.69	3.69	17.9		ug/kg	1.7
Aldrin	2	4.71	4.71	17.6		ug/kg	
alpha-BHC	1 [a]	2.49	2.49	17.5		ug/kg	0.0
alpha-BHC	2	3.18	3.18	17.5		ug/kg	
beta-BHC	1 [a]	2.89	2.89	18.3		ug/kg	3.9
beta-BHC	2	3.72	3.72	17.6		ug/kg	
delta-BHC	1 [a]	3.08	3.08	16.5		ug/kg	3.1
delta-BHC	2	4.14	4.14	16.0		ug/kg	
gamma-BHC (Lindane)	1 [a]	2.81	2.81	18.0		ug/kg	1.1
gamma-BHC (Lindane)	2	3.63	3.63	17.8		ug/kg	
alpha-Chlordane	1 [a]	4.79	4.80	18.3		ug/kg	5.6
alpha-Chlordane	2	6.14	6.14	17.3		ug/kg	
gamma-Chlordane	1 [a]	4.61	4.61	17.9		ug/kg	2.3
gamma-Chlordane	2	5.90	5.90	17.5		ug/kg	
Dieldrin	1 [a]	5.32	5.32	17.7		ug/kg	0.0
Dieldrin	2	6.71	6.71	17.7		ug/kg	
4,4'-DDD	1 [a]	5.81	5.81	19.2		ug/kg	4.8
4,4'-DDD	2	7.47	7.47	18.3		ug/kg	
4,4'-DDE	1 [a]	4.92	4.93	19.0		ug/kg	5.4
4,4'-DDE	2	6.44	6.44	18.0		ug/kg	
4,4'-DDT	1 [a]	6.26	6.26	19.3		ug/kg	0.5
4,4'-DDT	2	8.05	8.06	19.2		ug/kg	
Endrin	1 [a]	5.66	5.66	19.7		ug/kg	8.5
Endrin	2	7.26	7.26	18.1		ug/kg	
Endosulfan sulfate	1 [a]	7.41	7.41	18.3		ug/kg	5.6
Endosulfan sulfate	2	8.78	8.78	17.3		ug/kg	
Endrin aldehyde	1 [a]	6.67	6.67	18.9		ug/kg	8.3
Endrin aldehyde	2	8.27	8.27	17.4		ug/kg	
Endosulfan-I	1 [a]	4.98	4.98	17.0		ug/kg	0.6
Endosulfan-I	2	6.24	6.24	17.1		ug/kg	
Endosulfan-II	1 [a]	6.00	6.00	18.6		ug/kg	6.7
Endosulfan-II	2	7.64	7.64	17.4		ug/kg	
Heptachlor	1 [a]	3.34	3.34	18.3		ug/kg	9.1
Heptachlor	2	4.24	4.24	16.7		ug/kg	
Heptachlor epoxide	1 [a]	4.44	4.44	17.1		ug/kg	1.7
Heptachlor epoxide	2	5.59	5.59	17.4		ug/kg	
Methoxychlor	1 [a]	7.12	7.13	19.5		ug/kg	0.5
Methoxychlor	2	9.43	9.43	19.6		ug/kg	
Endrin ketone	1 [a]	7.88	7.88	18.9		ug/kg	10.6
Endrin ketone	2	9.83	9.83	17.0		ug/kg	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G995-CC987	**Injection Date:**	04/25/16
Lab File ID:	6G34372.D	**Injection Time:**	10:07
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP93322-MSD	**Injection Date:**	04/25/16
Lab File ID:	6G34382.D	**Injection Time:**	12:51
Client ID:	Matrix Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	3.69	3.69	14.3		ug/kg	0.7
Aldrin	2	4.71	4.71	14.4		ug/kg	
alpha-BHC	1 [a]	2.49	2.49	14.2		ug/kg	0.0
alpha-BHC	2	3.18	3.18	14.2		ug/kg	
beta-BHC	1 [a]	2.89	2.89	15.0		ug/kg	2.0
beta-BHC	2	3.72	3.72	14.7		ug/kg	
delta-BHC	1 [a]	3.08	3.08	13.5		ug/kg	4.5
delta-BHC	2	4.14	4.14	12.9		ug/kg	
gamma-BHC (Lindane)	1 [a]	2.81	2.81	14.5		ug/kg	0.0
gamma-BHC (Lindane)	2	3.63	3.63	14.5		ug/kg	
alpha-Chlordane	1 [a]	4.79	4.80	15.1		ug/kg	4.7
alpha-Chlordane	2	6.14	6.14	14.4		ug/kg	
gamma-Chlordane	1 [a]	4.61	4.61	14.7		ug/kg	1.4
gamma-Chlordane	2	5.90	5.90	14.5		ug/kg	
Dieldrin	1 [a]	5.32	5.32	15.2		ug/kg	5.4
Dieldrin	2	6.71	6.71	14.4		ug/kg	
4,4'-DDD	1 [a]	5.81	5.81	15.7		ug/kg	4.6
4,4'-DDD	2	7.47	7.47	15.0		ug/kg	
4,4'-DDE	1 [a]	4.92	4.93	15.6		ug/kg	4.6
4,4'-DDE	2	6.44	6.44	14.9		ug/kg	
4,4'-DDT	1 [a]	6.26	6.26	16.2		ug/kg	3.1
4,4'-DDT	2	8.06	8.06	15.7		ug/kg	
Endrin	1 [a]	5.66	5.66	16.2		ug/kg	8.4
Endrin	2	7.26	7.26	14.9		ug/kg	
Endosulfan sulfate	1 [a]	7.41	7.41	15.2		ug/kg	4.7
Endosulfan sulfate	2	8.78	8.78	14.5		ug/kg	
Endrin aldehyde	1 [a]	6.67	6.67	14.8		ug/kg	7.7
Endrin aldehyde	2	8.27	8.27	13.7		ug/kg	
Endosulfan-I	1 [a]	4.98	4.98	13.9		ug/kg	2.1
Endosulfan-I	2	6.24	6.24	14.2		ug/kg	
Endosulfan-II	1 [a]	6.00	6.00	15.2		ug/kg	4.7
Endosulfan-II	2	7.64	7.64	14.5		ug/kg	
Heptachlor	1 [a]	3.34	3.34	14.6		ug/kg	8.6
Heptachlor	2	4.24	4.24	13.4		ug/kg	
Heptachlor epoxide	1 [a]	4.44	4.44	13.8		ug/kg	4.3
Heptachlor epoxide	2	5.59	5.59	14.4		ug/kg	
Methoxychlor	1 [a]	7.13	7.13	15.7		ug/kg	1.9
Methoxychlor	2	9.43	9.43	16.0		ug/kg	
Endrin ketone	1 [a]	7.88	7.88	15.7		ug/kg	10.7
Endrin ketone	2	9.83	9.83	14.1		ug/kg	

(a) QC results reported from this column.

Semivolatile Surrogate Recovery Summary

Job Number: JC18516
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]
JC18516-1	1G122262.D	84	83	80	69
JC18516-4	1G122263.D	57	59	59	50
OP93156-BS1	1G122260.D	77	77	74	67
OP93156-BSD	1G122261.D	77	78	88	78
OP93156-MB1	1G122259.D	92	91	108	95

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: JC18516
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]
JC18516-2	6G34406.D	99	98	92	92
JC18516-3	6G34407.D	94	94	87	83
OP93322-BS1	6G34377.D	93	92	103	90
OP93322-MB1	6G34376.D	92	93	95	90
OP93322-MS	6G34381.D	108	108	110	105
OP93322-MSD	6G34382.D	86	86	90	87

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: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G995-CC987	**Injection Date:**	04/25/16
Lab File ID:	6G34403.D	**Injection Time:**	20:00
Instrument ID:	GC6G	**Method:**	SW846 8081B

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	1.98	2.47	9.92	11.76

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
ZZZZZZ	6G34405.D	04/25/16	20:32	1.98	2.47	9.92	11.75
JC18516-2	6G34406.D	04/25/16	20:49	1.98	2.47	9.92	11.76
JC18516-3	6G34407.D	04/25/16	21:05	1.98	2.47	9.92	11.76
ZZZZZZ	6G34408.D	04/25/16	21:22	1.98	2.47	9.92	11.76
ZZZZZZ	6G34409.D	04/25/16	21:38	1.98	2.47	9.92	11.75
ZZZZZZ	6G34410.D	04/25/16	21:55	1.98	2.47	9.92	11.75
ZZZZZZ	6G34411.D	04/25/16	22:11	1.98	2.47	9.92	11.75
ZZZZZZ	6G34412.D	04/25/16	22:27	1.98	2.47	9.92	11.75
ZZZZZZ	6G34413.D	04/25/16	22:44	1.98	2.47	9.91	11.75
ZZZZZZ	6G34414.D	04/25/16	23:00	1.98	2.47	9.92	11.76

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: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G1G3966-CC3951	**Injection Date:**	04/19/16
Lab File ID:	1G122257.D	**Injection Time:**	09:00
Instrument ID:	GC1G	**Method:**	SW846 8081B

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	1.75	2.37	8.94	10.87

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP93156-MB1	1G122259.D	04/19/16	09:36	1.74	2.38	8.94	10.86
OP93156-BS1	1G122260.D	04/19/16	09:53	1.75	2.38	8.94	10.87
OP93156-BSD	1G122261.D	04/19/16	10:11	1.75	2.38	8.93	10.87
JC18516-1	1G122262.D	04/19/16	10:28	1.75	2.38	8.94	10.87
JC18516-4	1G122263.D	04/19/16	10:46	1.75	2.38	8.94	10.87
ZZZZZZ	1G122264.D	04/19/16	11:04	1.75	2.38	8.94	10.87
ZZZZZZ	1G122265.D	04/19/16	11:21	1.75	2.38	8.94	10.87
ZZZZZZ	1G122266.D	04/19/16	11:39	1.75	2.38	8.93	10.87
ZZZZZZ	1G122268.D	04/19/16	13:27	1.75	2.38	8.94	10.87
ZZZZZZ	1G122275.D	04/19/16	14:37	1.75	2.38	8.93	10.87

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: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G995-CC987	**Injection Date:**	04/25/16
Lab File ID:	6G34372.D	**Injection Time:**	10:07
Instrument ID:	GC6G	**Method:**	SW846 8081B

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	1.98	2.47	9.92	11.76

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP93282-MB1	6G34374.D	04/25/16	10:39	1.98	2.47	9.92	11.76
OP93282-BS1	6G34375.D	04/25/16	10:56	1.98	2.47	9.92	11.76
OP93282-BSD	6G34378.D	04/25/16	11:12	1.98	2.47	9.92	11.76
OP93322-MB1	6G34376.D	04/25/16	11:29	1.98	2.47	9.91	11.76
OP93322-BS1	6G34377.D	04/25/16	11:45	1.98	2.47	9.92	11.76
ZZZZZZ	6G34379.D	04/25/16	12:02	1.98	2.47	9.91	11.76
ZZZZZZ	6G34380.D	04/25/16	12:18	1.98	2.47	9.91	11.76
OP93322-MS	6G34381.D	04/25/16	12:34	1.98	2.47	9.92	11.76
OP93322-MSD	6G34382.D	04/25/16	12:51	1.98	2.47	9.92	11.76
ZZZZZZ	6G34383.D	04/25/16	13:07	1.98	2.47	9.92	11.76
ZZZZZZ	6G34384.D	04/25/16	13:24	1.98	2.47	9.92	11.76
ZZZZZZ	6G34385.D	04/25/16	13:40	1.98	2.47	9.92	11.76
ZZZZZZ	6G34386.D	04/25/16	13:56	1.98	2.47	9.92	11.76
JC18834-10	6G34387.D	04/25/16	14:13	1.98	2.47	9.92	11.76
ZZZZZZ	6G34388.D	04/25/16	14:29	1.98	2.47	9.92	11.76
ZZZZZZ	6G34389.D	04/25/16	14:46	1.98	2.47	9.92	11.76
ZZZZZZ	6G34390.D	04/25/16	15:02	1.98	2.47	9.91	11.76
ZZZZZZ	6G34391.D	04/25/16	15:18	1.98	2.47	9.92	11.76
ZZZZZZ	6G34392.D	04/25/16	15:35	1.98	2.47	9.92	11.76

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: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G1G3951-ICC3951
Lab FileID: 1G121644.D

Response Factor Report GC1G

Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Initial Calibration

Calibration Files
2 =1G121641.D 5 =1G121642.D 10 =1G121643.D 25 =1G121644.D
50 =1G121645.D 100 =1G121647.D 1 =1G121640.D 75 =1G121646.D

Compound	2	5	10	25	50	100	1	75	Avg	%RSD
1) I 1-bromo-2-nitrobenzen	ISTD									
2) Tetrachloro-	0.919	0.923	0.919	0.939	0.922	0.985	1.081	0.958	0.956	5.83
3) alpha-BHC	1.043	0.968	1.009	1.125	1.201	1.392	1.031	1.312	1.135	13.53
4) gamma-BHC	0.959	0.935	0.975	1.077	1.134	1.283	1.083	1.218	1.083	11.56
5) Heptachlor	1.094	1.071	1.090	1.163	1.190	1.316	1.125	1.259	1.163	7.48
6) beta-BHC	0.538	0.518	0.510	0.537	0.535	0.559	0.667	0.545	0.551	8.95
7) delta-BHC	0.835	0.827	0.859	0.965	1.025	1.172	0.841	1.105	0.954	14.15
8) Aldrin	1.056	0.957	0.991	1.071	1.113	1.244	1.047	1.189	1.083	8.86
9) Heptachlor E	1.047	1.013	1.031	1.080	1.089	1.182	1.043	1.141	1.078	5.38
10) gamma-Chlord	1.141	1.038	1.030	1.087	1.093	1.193	1.363	1.146	1.136	9.42
11) alpha-Chlord	1.115	1.039	1.014	1.080	1.090	1.183	1.103	1.139	1.095	4.89
12) Endosulfan I	1.027	0.964	0.976	1.030	1.045	1.135	1.062	1.092	1.042	5.42
13) 4,4'-DDE	0.929	0.920	0.925	0.993	1.028	1.143	0.978	1.090	1.001	8.20
14) Dieldrin	0.974	0.957	0.971	1.038	1.076	1.199	1.078	1.143	1.055	8.25
15) Endrin	0.993	0.880	0.903	0.953	0.972	1.083	1.073	1.035	0.986	7.56
16) 4,4'-DDD	0.799	0.741	0.759	0.803	0.842	0.942	0.872	0.893	0.831	8.29
17) Endosulfan I	1.014	0.932	0.952	0.996	1.005	1.084	0.976	1.048	1.001	4.94
18) 4,4'-DDT	0.737	0.691	0.723	0.797	0.834	0.950	0.707	0.898	0.792	12.00
19) Endrin Aldeh	0.851	0.803	0.820	0.836	0.836	0.883	0.862	0.895	0.848	3.65
20) Endosulfan S	0.893	0.859	0.876	0.905	0.907	0.963	0.936	0.938	0.910	3.79
21) Methoxychlor	0.506	0.498	0.503	0.530	0.526	0.557	0.609	0.538	0.534	6.81
22) Mirex	1.049	0.997	1.020	1.014	0.975	0.976	1.087	0.969	1.011	4.06
23) Endrin Keton	0.976	0.957	0.980	1.047	1.058	1.146	1.227	1.107	1.062	8.82
24) Decachlorobi	1.351	1.307	1.296	1.301	1.246	1.251	1.565	1.246	1.320	7.98
25) I 1-bromo-2-nitrobenzen	ISTD									
26) Toxaphene{A}					0.018				0.018	0.00
27) Toxaphene{B}					0.047				0.047	0.00
28) Toxaphene{C}					0.036				0.036	0.00
29) Toxaphene{D}					0.036				0.036	0.00
30) Toxaphene{E}					0.032				0.032	0.00
31) I 1-bromo-2-nitrobenzen	ISTD									
32) Chlordane {A					0.033				0.033	0.00
33) Chlordane {B					0.044				0.044	0.00
34) Chlordane {C					0.149				0.149	0.00
35) Chlordane {D					0.235				0.235	0.00
36) Chlordane {E					0.033				0.033	0.00

Signal #2

1) I 1-bromo-2-nitrobenzen	ISTD									
2) Tetrachloro-	0.820	0.797	0.810	0.783	0.752	0.783	0.775	0.774	0.787	2.76
3) alpha-BHC	1.216	1.171	1.196	1.181	1.137	1.176	1.263	1.157	1.187	3.26
4) gamma-BHC	1.142	1.058	1.076	1.052	1.013	1.049	1.111	1.034	1.067	3.93

Initial Calibration Summary

Job Number: JC18516 **Sample:** G1G3951-ICC3951
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G121644.D
Project: BMSMC, Building 5 Area, PR

5)	Heptachlor	1.009	0.960	0.965	0.940	0.909	0.931	1.037	0.921	0.959	4.61
6)	beta-BHC	0.474	0.460	0.446	0.455	0.430	0.431	0.502	0.428	0.453	5.64
7)	delta-BHC	0.953	0.971	0.991	0.991	0.965	1.011	0.966	0.988	0.980	1.93
8)	Aldrin	0.986	0.949	0.975	0.953	0.902	0.916	1.079	0.909	0.959	6.00
9)	Heptachlor E	0.885	0.871	0.883	0.871	0.821	0.830	0.958	0.824	0.868	5.20
10)	gamma-Chlord	0.898	0.877	0.868	0.860	0.822	0.832	0.968	0.821	0.868	5.61
11)	alpha-Chlord	0.875	0.837	0.842	0.832	0.779	0.790	0.978	0.783	0.840	7.79
12)	Endosulfan I	0.856	0.852	0.829	0.826	0.773	0.775	0.877	0.771	0.820	5.13
13)	4,4'-DDE	0.895	0.845	0.864	0.858	0.811	0.823	1.003	0.817	0.864	7.25
14)	Dieldrin	0.992	0.911	0.910	0.895	0.848	0.861	1.070	0.856	0.918	8.37
15)	Endrin	0.816	0.811	0.802	0.799	0.752	0.770	0.857	0.763	0.796	4.27
16)	4,4'-DDD	0.736	0.756	0.732	0.734	0.698	0.702	0.814	0.695	0.734	5.33
17)	Endosulfan I	0.840	0.825	0.792	0.789	0.740	0.743	0.876	0.740	0.793	6.46
18)	4,4'-DDT	0.571	0.501	0.539	0.609	0.616	0.630	0.511	0.614	0.574	8.92
19)	Endrin Aldeh	0.617	0.645	0.624	0.624	0.597	0.588	0.636	0.587	0.615	3.53
20)	Endosulfan S	0.667	0.659	0.663	0.674	0.633	0.639	0.767	0.637	0.667	6.43
21)	Methoxychlor	0.302	0.277	0.295	0.313	0.309	0.316	0.312	0.313	0.305	4.33
22)	Mirex	0.556	0.512	0.504	0.520	0.494	0.489	0.527	0.480	0.510	4.77
23)	Endrin Keton	0.701	0.709	0.720	0.741	0.705	0.716	0.681	0.708	0.710	2.43
24)	Decachlorobi	0.521	0.518	0.514	0.513	0.481	0.482	0.630	0.481	0.517	9.38

25) I 1-bromo-2-nitrobenzen ----------ISTD----------

26)	Toxaphene{A}	0.022	0.022	0.00
27)	Toxaphene{B}	0.025	0.025	0.00
28)	Toxaphene{C}	0.048	0.048	0.00
29)	Toxaphene{D}	0.028	0.028	0.00
30)	Toxaphene{E}	0.022	0.022	0.00

31) I 1-bromo-2-nitrobenzen ----------ISTD----------

32)	Chlordane {A	0.029	0.029	0.00
33)	Chlordane {B	0.030	0.030	0.00
34)	Chlordane {C	0.101	0.101	0.00
35)	Chlordane {D	0.165	0.165	0.00
36)	Chlordane {E	0.031	0.031	0.00

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

1PST3951.M Fri Apr 01 16:53:35 2016 RPT1

8.10.1

8

Initial Calibration Verification

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G1G3951-ICV3951
Lab FileID: 1G121650.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121650.D\ECD1A.CH Vial: 13
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121650.D\ECD2B.CH
Acq On : 4-1-16 02:09:36 PM Operator: dharas
Sample : icv3951-25 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	109	0.00	1.14- 1.20
2	SAB	Tetrachloro-m-xylene	0.956	0.816	14.6	95	0.00	1.72- 1.78
3	A	alpha-BHC	1.135	0.994	12.4	96	0.00	2.19- 2.25
4	MA	gamma-BHC	1.083	0.951	12.2	96	0.00	2.48- 2.54
5	MA	Heptachlor	1.163	1.024	12.0	96	0.00	2.95- 3.01
6	B	beta-BHC	0.551	0.482	12.5	98	0.00	2.56- 2.62
7	B	delta-BHC	0.954	0.888	6.9	100	0.00	2.74- 2.80
8	MB	Aldrin	1.083	0.942	13.0	96	0.00	3.27- 3.33
9	B	Heptachlor Epoxide	1.078	0.953	11.6	96	0.00	3.97- 4.03
10	B	gamma-Chlordane	1.136	0.967	14.9	97	0.00	4.13- 4.19
11	B	alpha-Chlordane	1.095	0.962	12.1	97	0.00	4.29- 4.35
12	A	Endosulfan I	1.042	0.891	14.5	94	0.00	4.47- 4.53
13	B	4,4'-DDE	1.001	0.882	11.9	97	0.00	4.41- 4.47
14	MA	Dieldrin	1.055	0.934	11.5	98	0.00	4.78- 4.84
15	MA	Endrin	0.986	0.860	12.8	98	0.00	5.09- 5.15
16	A	4,4'-DDD	0.831	0.711	14.4	96	0.00	5.22- 5.29
17	B	Endosulfan II	1.001	0.875	12.6	96	0.00	5.41- 5.47
18	MA	4,4'-DDT	0.792	0.692	12.6	94	0.00	5.63- 5.69
19	B	Endrin Aldehyde	0.848	0.784	7.5	102	0.00	6.04- 6.10
20	B	Endosulfan Sulfate	0.910	0.808	11.2	97	0.00	6.71- 6.77
21	A	Methoxychlor	0.534	0.473	11.4	97	0.00	6.41- 6.47
23	B	Endrin Ketone	1.062	0.938	11.7	98	0.00	7.14- 7.20
24	SA	Decachlorobiphenyl	1.320	1.226	7.1	103	0.00	8.91- 8.97

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	108	0.00	1.51- 1.57
2	SAB	Tetrachloro-m-xylene	0.787	0.711	9.7	98	0.00	2.35- 2.41
3	A	alpha-BHC	1.187	1.047	11.8	95	0.00	3.02- 3.08
4	MA	gamma-BHC	1.067	0.946	11.3	97	0.00	3.45- 3.51
5	MA	Heptachlor	0.959	0.853	11.1	98	0.00	4.02- 4.08
6	B	beta-BHC	0.453	0.402	11.3	95	0.00	3.54- 3.60
7	B	delta-BHC	0.980	0.938	4.3	102	0.00	3.93- 3.99
8	MB	Aldrin	0.959	0.864	9.9	97	0.00	4.47- 4.53
9	B	Heptachlor Epoxide	0.868	0.803	7.5	99	0.00	5.30- 5.36
10	B	gamma-Chlordane	0.868	0.809	6.8	101	0.00	5.58- 5.64
11	B	alpha-Chlordane	0.840	0.761	9.4	98	0.00	5.81- 5.87
12	A	Endosulfan I	0.820	0.737	10.1	96	0.00	5.90- 5.96
13	B	4,4'-DDE	0.864	0.790	8.6	99	0.00	6.07- 6.13
14	MA	Dieldrin	0.918	0.834	9.2	100	0.00	6.34- 6.40

Initial Calibration Verification

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G1G3951-ICV3951
Lab FileID: 1G121650.D

15	MA	Endrin	0.796	0.746	6.3	101	0.00	6.84- 6.90
16	A	4,4'-DDD	0.734	0.687	6.4	101	0.00	7.03- 7.09
17	B	Endosulfan II	0.793	0.715	9.8	97	0.00	7.19- 7.25
18	MA	4,4'-DDT	0.574	0.579	-0.9	102	0.00	7.56- 7.62
19	B	Endrin Aldehyde	0.615	0.613	0.3	106	0.00	7.77- 7.83
20	B	Endosulfan Sulfate	0.667	0.618	7.3	99	0.00	8.24- 8.30
21	A	Methoxychlor	0.305	0.285	6.6	98	0.00	8.81- 8.87
23	B	Endrin Ketone	0.710	0.679	4.4	99	0.00	9.20- 9.26
24	SA	Decachlorobiphenyl	0.517	0.494	4.4	103	0.00	10.85-10.91

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1G121644.D 1PST3951.M Fri Apr 01 17:06:49 2016 RPT1

8.10.2

8

Initial Calibration Verification

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: G1G3951-ICV3951
Lab FileID: 1G121651.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121651.D\ECD1A.CH Vial: 14
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121651.D\ECD2B.CH
Acq On    : 4-1-16 02:27:16 PM                       Operator: dharas
Sample    : icv3951-25                               Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	108	0.00	1.14- 1.20
22	Mirex	1.011	0.999	1.2	106	0.00	6.51- 6.57
***** Signal #2 *****							
1 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.51- 1.57
22	Mirex	0.510	0.516	-1.2	106	0.00	9.13- 9.19

```
(#) = Out of Range              SPCC's out = 0  CCC's out = 0
 1G121644.D 1PST3951.M       Fri Apr 01 17:06:50 2016   RPT1
```

8.10.3

8

Initial Calibration Verification

Job Number: JC18516 **Sample:** G1G3951-ICV3951
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G121652.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121652.D\ECD1A.CH Vial: 15
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121652.D\ECD2B.CH
Acq On    : 4-1-16 02:44:56 PM                        Operator: dharas
Sample    : icv3951-500                               Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
31 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	105	0.00	1.07- 1.27
32	Chlordane {A}	0.033	0.037	-12.1	120	0.00	2.80- 3.00
33	Chlordane {B}	0.044	0.044	0.0	104	0.00	3.35- 3.55
34	Chlordane {C}	0.149	0.141	5.4	99	0.00	4.06- 4.26
35	Chlordane {D}	0.235	0.228	3.0	102	0.00	4.21- 4.41
36	Chlordane {E}	0.033	0.032	3.0	104	0.00	5.24- 5.44

***** Signal #2 *****

31 I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.44- 1.64
32	Chlordane {A}	0.029	0.033	-13.8	118	0.00	3.76- 3.96
33	Chlordane {B}	0.030	0.031	-3.3	106	0.00	4.60- 4.80
34	Chlordane {C}	0.101	0.101	0.0	103	0.00	5.51- 5.71
35	Chlordane {D}	0.165	0.168	-1.8	105	0.00	5.74- 5.94
36	Chlordane {E}	0.031	0.032	-3.2	106	0.00	7.20- 7.40

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1G121645.D 1PST3951.M Fri Apr 01 17:07:16 2016 RPT1

8.10.4

8

Initial Calibration Verification

Job Number: JC18516 **Sample:** G1G3951-ICV3951
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G121653.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121653.D\ECD1A.CH Vial: 16
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121653.D\ECD2B.CH
Acq On    : 4-1-16 03:02:33 PM                       Operator: dharas
Sample    : icv3951-500                              Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	0.00	1.07- 1.27
26	L8	Toxaphene{A}	0.018	0.017	5.6	96	0.00	4.72- 4.92
27	L8	Toxaphene{B}	0.047	0.044	6.4	95	0.00	5.33- 5.53
28	L8	Toxaphene{C}	0.036	0.033	8.3	93	0.00	5.50- 5.70
29	L8	Toxaphene{D}	0.036	0.033	8.3	91	0.00	5.83- 6.03
30	L8	Toxaphene{E}	0.032	0.030	6.3	96	0.00	6.47- 6.67

***** Signal #2 *****

25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	100	0.00	1.44- 1.64
26	L8	Toxaphene{A}	0.022	0.021	4.5	99	0.00	6.23- 6.43
27	L8	Toxaphene{B}	0.025	0.024	4.0	96	0.00	7.09- 7.29
28	L8	Toxaphene{C}	0.048	0.046	4.2	96	0.00	7.26- 7.46
29	L8	Toxaphene{D}	0.028	0.027	3.6	96	0.00	7.70- 7.90
30	L8	Toxaphene{E}	0.022	0.019	13.6	90	0.00	8.60- 8.80

```
(#) = Out of Range              SPCC's out = 0  CCC's out = 0
 1G121645.D 1PST3951.M       Fri Apr 01 17:07:17 2016   RPT1
```

Continuing Calibration Summary

Job Number: JC18516 **Sample:** G1G3966-CC3951
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G122257.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3966\1G122257.D\ECD1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\1G3966\1G122257.D\ECD2B.CH
Acq On    : 4-19-16 09:00:56 AM                      Operator: brittanp
Sample    : cc3951-25                                Inst    : GC1G
Misc      : op93101,g1g3966,15.6,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Tue Apr 19 11:57:37 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	89	0.00	1.13- 1.19
2	SAB	Tetrachloro-m-xylene	0.956	0.991	-3.7	94	0.00	1.72- 1.78
3	A	alpha-BHC	1.135	1.256	-10.7	99	0.00	2.19- 2.25
4	MA	gamma-BHC	1.083	1.195	-10.3	98	0.00	2.47- 2.53
5	MA	Heptachlor	1.163	1.311	-12.7	100	0.00	2.95- 3.01
6	B	beta-BHC	0.551	0.555	-0.7	92	0.00	2.55- 2.61
7	B	delta-BHC	0.954	1.034	-8.4	95	0.00	2.73- 2.79
8	MB	Aldrin	1.083	1.204	-11.2	100	0.00	3.27- 3.33
9	B	Heptachlor Epoxide	1.078	1.187	-10.1	98	0.00	3.96- 4.02
10	B	gamma-Chlordane	1.136	1.177	-3.6	96	0.00	4.12- 4.18
11	B	alpha-Chlordane	1.095	1.253	-14.4	103	0.00	4.28- 4.34
12	A	Endosulfan I	1.042	1.167	-12.0	100	0.00	4.46- 4.52
13	B	4,4'-DDE	1.001	1.108	-10.7	99	0.00	4.40- 4.46
14	MA	Dieldrin	1.055	1.176	-11.5	100	0.00	4.77- 4.83
15	MA	Endrin	0.986	1.102	-11.8	103	0.00	5.08- 5.14
16	A	4,4'-DDD	0.831	0.885	-6.5	98	0.00	5.21- 5.28
17	B	Endosulfan II	1.001	1.106	-10.5	98	0.00	5.40- 5.46
18	MA	4,4'-DDT	0.792	0.889	-12.2	99	0.00	5.62- 5.68
19	B	Endrin Aldehyde	0.848	0.905	-6.7	96	0.00	6.02- 6.08
20	B	Endosulfan Sulfate	0.910	1.016	-11.6	100	0.00	6.70- 6.76
21	A	Methoxychlor	0.534	0.588	-10.1	98	0.00	6.40- 6.46
22		Mirex	1.011	1.096	-8.4	96	0.00	6.50- 6.56
23	B	Endrin Ketone	1.062	1.161	-9.3	98	0.00	7.13- 7.19
24	SA	Decachlorobiphenyl	1.320	1.560	-18.2	106	0.00	8.91- 8.97
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.06- 1.26
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.06- 1.26
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

***** Signal #2 *****

Continuing Calibration Summary

Job Number: JC18516 **Sample:** G1G3966-CC3951
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G122257.D
Project: BMSMC, Building 5 Area, PR

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	90	0.00	1.50- 1.56
2	SAB	Tetrachloro-m-xylene	0.787	0.877	-11.4	101	0.00	2.34- 2.40
3	A	alpha-BHC	1.187	1.223	-3.0	93	0.00	3.01- 3.07
4	MA	gamma-BHC	1.067	1.097	-2.8	94	0.00	3.44- 3.50
5	MA	Heptachlor	0.959	0.982	-2.4	94	0.00	4.02- 4.08
6	B	beta-BHC	0.453	0.452	0.2	90	0.00	3.53- 3.59
7	B	delta-BHC	0.980	1.024	-4.5	93	0.00	3.92- 3.98
8	MB	Aldrin	0.959	0.969	-1.0	91	0.00	4.46- 4.52
9	B	Heptachlor Epoxide	0.868	0.866	0.2	89	0.00	5.29- 5.35
10	B	gamma-Chlordane	0.868	0.855	1.5	89	0.00	5.57- 5.63
11	B	alpha-Chlordane	0.840	0.823	2.0	89	0.00	5.80- 5.86
12	A	Endosulfan I	0.820	0.822	-0.2	90	0.00	5.89- 5.95
13	B	4,4'-DDE	0.864	0.841	2.7	88	0.00	6.07- 6.13
14	MA	Dieldrin	0.918	0.898	2.2	90	0.00	6.33- 6.39
15	MA	Endrin	0.796	0.821	-3.1	93	0.00	6.83- 6.89
16	A	4,4'-DDD	0.734	0.734	0.0	90	0.00	7.02- 7.08
17	B	Endosulfan II	0.793	0.777	2.0	89	0.00	7.18- 7.24
18	MA	4,4'-DDT	0.574	0.617	-7.5	91	0.00	7.55- 7.61
19	B	Endrin Aldehyde	0.615	0.608	1.1	88	0.00	7.76- 7.82
20	B	Endosulfan Sulfate	0.667	0.653	2.1	87	0.00	8.23- 8.29
21	A	Methoxychlor	0.305	0.288	5.6	83	0.00	8.80- 8.86
22		Mirex	0.510	0.476	6.7	82	0.00	9.12- 9.18
23	B	Endrin Ketone	0.710	0.709	0.1	86	0.00	9.19- 9.25
24	SA	Decachlorobiphenyl	0.517	0.541	-4.6	95	0.00	10.84-10.90
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.43- 1.63
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.43- 1.63
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
1G121644.D 1PST3951.M Tue Apr 19 12:46:26 2016 RPT1

8.10.6

8

Continuing Calibration Summary

Job Number: JC18516 **Sample:** G1G3966-CC3951
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G122277.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3966\1G122277.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3966\1G122277.D\ECD2B.CH
Acq On    : 4-19-16 04:33:19 PM                      Operator: dharas
Sample    : cc3951-50                                Inst    : GC1G
Misc      : op93135,g1g3966,15.6,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	86	0.00	1.14- 1.20
2	SAB	Tetrachloro-m-xylene	0.956	1.040	-8.8	97	0.00	1.72- 1.78
3	A	alpha-BHC	1.135	1.856	-63.5#	133	0.00	2.19- 2.25
4	MA	gamma-BHC	1.083	1.290	-19.1	98	0.00	2.48- 2.54
5	MA	Heptachlor	1.163	1.378	-18.5	100	0.00	2.95- 3.01
6	B	beta-BHC	0.551	0.585	-6.2	94	0.00	2.56- 2.62
7	B	delta-BHC	0.954	1.137	-19.2	95	0.00	2.73- 2.79
8	MB	Aldrin	1.083	1.308	-20.8#	101	0.00	3.27- 3.33
9	B	Heptachlor Epoxide	1.078	1.291	-19.8	102	0.00	3.96- 4.02
10	B	gamma-Chlordane	1.136	1.290	-13.6	101	0.00	4.12- 4.18
11	B	alpha-Chlordane	1.095	1.293	-18.1	102	0.00	4.28- 4.34
12	A	Endosulfan I	1.042	1.307	-25.4#	107	0.00	4.46- 4.52
13	B	4,4'-DDE	1.001	1.194	-19.3	100	0.00	4.40- 4.46
14	MA	Dieldrin	1.055	1.295	-22.7#	103	-0.01	4.77- 4.83
15	MA	Endrin	0.986	1.212	-22.9#	107	-0.01	5.08- 5.14
16	A	4,4'-DDD	0.831	1.014	-22.0#	104	0.00	5.22- 5.29
17	B	Endosulfan II	1.001	1.190	-18.9	102	0.00	5.40- 5.46
18	MA	4,4'-DDT	0.792	0.868	-9.6	89	0.00	5.62- 5.68
19	B	Endrin Aldehyde	0.848	0.948	-11.8	98	0.00	6.03- 6.09
20	B	Endosulfan Sulfate	0.910	1.073	-17.9	102	0.00	6.70- 6.76
21	A	Methoxychlor	0.534	0.586	-9.7	96	0.00	6.41- 6.47
22		Mirex	1.011	1.148	-13.6	101	-0.01	6.50- 6.56
23	B	Endrin Ketone	1.062	1.131	-6.5	92	-0.01	7.13- 7.19
24	SA	Decachlorobiphenyl	1.320	1.637	-24.0#	113	-0.01	8.91- 8.97
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	81	0.00	1.07- 1.27
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	85	0.00	1.07- 1.27
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

***** Signal #2 *****

8.10.7

8

Continuing Calibration Summary

Job Number: JC18516 **Sample:** G1G3966-CC3951
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G122277.D
Project: BMSMC, Building 5 Area, PR

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	87	0.00	1.50- 1.56
2	SAB	Tetrachloro-m-xylene	0.787	0.859	-9.1	100	0.00	2.35- 2.41
3	A	alpha-BHC	1.187	1.253	-5.6	96	0.00	3.01- 3.07
4	MA	gamma-BHC	1.067	1.104	-3.5	95	0.00	3.44- 3.50
5	MA	Heptachlor	0.959	0.992	-3.4	95	0.00	4.02- 4.08
6	B	beta-BHC	0.453	0.446	1.5	91	0.00	3.53- 3.59
7	B	delta-BHC	0.980	1.041	-6.2	94	0.00	3.93- 3.99
8	MB	Aldrin	0.959	0.991	-3.3	96	0.00	4.47- 4.53
9	B	Heptachlor Epoxide	0.868	0.895	-3.1	95	0.00	5.29- 5.35
10	B	gamma-Chlordane	0.868	0.892	-2.8	95	0.00	5.57- 5.63
11	B	alpha-Chlordane	0.840	0.851	-1.3	96	0.00	5.80- 5.86
12	A	Endosulfan I	0.820	0.853	-4.0	96	0.00	5.89- 5.95
13	B	4,4'-DDE	0.864	0.872	-0.9	94	0.00	6.07- 6.13
14	MA	Dieldrin	0.918	0.938	-2.2	97	0.00	6.33- 6.39
15	MA	Endrin	0.796	0.860	-8.0	100	0.00	6.83- 6.89
16	A	4,4'-DDD	0.734	0.765	-4.2	96	0.00	7.02- 7.08
17	B	Endosulfan II	0.793	0.803	-1.3	95	0.00	7.18- 7.24
18	MA	4,4'-DDT	0.574	0.546	4.9	78	0.00	7.55- 7.61
19	B	Endrin Aldehyde	0.615	0.616	-0.2	90	-0.01	7.76- 7.82
20	B	Endosulfan Sulfate	0.667	0.661	0.9	91	-0.01	8.23- 8.29
21	A	Methoxychlor	0.305	0.254	16.7	72	0.00	8.81- 8.87
22		Mirex	0.510	0.513	-0.6	91	-0.01	9.12- 9.18
23	B	Endrin Ketone	0.710	0.673	5.2	84	-0.01	9.19- 9.25
24	SA	Decachlorobiphenyl	0.517	0.583	-12.8	106	-0.01	10.84-10.90
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	84	0.00	1.43- 1.63
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	87	0.00	1.43- 1.63
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
1G121645.D 1PST3951.M Wed Apr 20 11:00:39 2016 RPT1

8.10.7

8

Initial Calibration Summary

Job Number: JC18516 **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: JC18516 **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

8.10.8

8

Initial Calibration Verification

Job Number: JC18516 **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 *****

Initial Calibration Verification

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: G6G987-ICV987
Lab FileID: 6G34140.D

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	100	0.00	1.55- 1.61
2	SAB	Tetrachloro-m-xylene	0.903	0.865	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

8.10.9

8

Initial Calibration Verification

Job Number: JC18516 **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: JC18516 **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

Initial Calibration Verification

Job Number: JC18516 **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: JC18516 **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

Initial Calibration Verification

Job Number: JC18516 **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: JC18516 **Sample:** G6G987-ICV987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34143.D
Project: BMSMC, Building 5 Area, PR

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

8.10.12

8

Continuing Calibration Summary

Job Number: JC18516 **Sample:** G6G995-CC987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34372.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\995\6g34372.D\ECD1A.CH     Vial: 2
Signal #2 : C:\msdchem\1\DATA\995\6g34372.D\ECD2B.CH
Acq On    : 25 Apr 2016  10:07 am                    Operator: brittanp
Sample    : cc987-25                                 Inst    : HP G1530A
Misc      : op93284,g6g995,15.2,,,10,10              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  : Fri Apr 22 09:12:46 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	94	0.00	1.27- 1.33
2	SAB	Tetrachloro-m-xylene	0.916	0.918	-0.2	98	0.00	1.95- 2.01
3	A	alpha-BHC	1.181	1.224	-3.6	98	0.00	2.46- 2.52
4	MA	gamma-BHC	1.100	1.130	-2.7	98	0.00	2.78- 2.84
5	MA	Heptachlor	1.104	1.108	-0.4	97	0.00	3.31- 3.37
6	B	beta-BHC	0.540	0.539	0.2	96	0.00	2.86- 2.92
7	B	delta-BHC	1.025	1.037	-1.2	95	0.00	3.05- 3.11
8	MB	Aldrin	1.020	1.024	-0.4	97	0.00	3.66- 3.73
9	B	Heptachlor Epoxide	0.955	0.956	-0.1	97	0.00	4.41- 4.47
10	B	gamma-Chlordane	0.961	0.930	3.2	93	0.00	4.58- 4.64
11	B	alpha-Chlordane	0.954	0.930	2.5	94	0.00	4.77- 4.83
12	A	Endosulfan I	0.941	0.908	3.5	94	0.00	4.95- 5.01
13	B	4,4'-DDE	0.790	0.793	-0.4	98	0.00	4.90- 4.96
14	MA	Dieldrin	0.931	0.923	0.9	96	0.00	5.29- 5.35
15	MA	Endrin	0.844	0.850	-0.7	97	0.00	5.63- 5.69
16	A	4,4'-DDD	0.668	0.680	-1.8	101	0.00	5.78- 5.84
17	B	Endosulfan II	0.833	0.823	1.2	98	0.00	5.97- 6.03
18	MA	4,4'-DDT	0.727	0.721	0.8	96	0.00	6.23- 6.29
19	B	Endrin Aldehyde	0.679	0.669	1.5	96	0.00	6.64- 6.70
20	B	Endosulfan Sulfate	0.732	0.742	-1.4	99	0.00	7.38- 7.44
21	A	Methoxychlor	0.436	0.440	-0.9	96	0.00	7.10- 7.16
22		Mirex	0.746	0.732	1.9	94	0.00	7.23- 7.29
23	B	Endrin Ketone	0.870	0.850	2.3	94	0.00	7.85- 7.91
24	SAB	Decachlorobiphenyl	0.797	0.761	4.5	93	0.00	9.89- 9.95

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	106	0.00	1.54- 1.60
2	SAB	Tetrachloro-m-xylene	0.903	0.903	0.0	110	0.00	2.44- 2.50
3	A	alpha-BHC	1.177	1.187	-0.8	111	0.00	3.15- 3.21
4	MA	gamma-BHC	1.102	1.101	0.1	110	0.00	3.60- 3.66
5	MA	Heptachlor	1.114	1.037	6.9	105	0.00	4.21- 4.27
6	B	beta-BHC	0.537	0.519	3.4	108	0.00	3.69- 3.75
7	B	delta-BHC	1.027	1.019	0.8	109	0.00	4.11- 4.17
8	MB	Aldrin	1.036	0.992	4.2	107	0.00	4.68- 4.74
9	B	Heptachlor Epoxide	0.965	0.914	5.3	104	0.00	5.56- 5.62
10	B	gamma-Chlordane	0.944	0.889	5.8	105	0.00	5.87- 5.93
11	B	alpha-Chlordane	0.937	0.886	5.4	105	0.00	6.11- 6.17
12	A	Endosulfan I	0.911	0.857	5.9	106	0.00	6.21- 6.27

Continuing Calibration Summary

Job Number: JC18516 **Sample:** G6G995-CC987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34372.D
Project: BMSMC, Building 5 Area, PR

13	B	4,4'-DDE	0.808	0.798	1.2	119	0.00	6.41- 6.47
14	MA	Dieldrin	0.930	0.870	6.5	106	0.00	6.68- 6.74
15	MA	Endrin	0.845	0.784	7.2	106	0.00	7.23- 7.29
16	A	4,4'-DDD	0.698	0.694	0.6	108	0.00	7.44- 7.50
17	B	Endosulfan II	0.827	0.792	4.2	109	0.00	7.61- 7.67
18	MA	4,4'-DDT	0.633	0.595	6.0	106	0.00	8.03- 8.09
19	B	Endrin Aldehyde	0.670	0.622	7.2	104	0.00	8.24- 8.30
20	B	Endosulfan Sulfate	0.727	0.671	7.7	105	0.00	8.75- 8.81
21	A	Methoxychlor	0.349	0.336	3.7	104	0.00	9.40- 9.46
22		Mirex	0.716	0.639	10.8	103	0.00	9.71- 9.77
23	B	Endrin Ketone	0.850	0.762	10.4	102	0.00	9.80- 9.86
24	SAB	Decachlorobiphenyl	0.679	0.616	9.3	97	0.00	11.73-11.79

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g34134.D 6PST987.M Mon Apr 25 11:05:57 2016

8.10.13

8

Continuing Calibration Summary

Job Number: JC18516 **Sample:** G6G995-CC987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34394.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\995\6g34394.D\ECD1A.CH     Vial: 4
Signal #2 : C:\msdchem\1\DATA\995\6g34394.D\ECD2B.CH
Acq On    : 25 Apr 2016   5:32 pm                    Operator: dharas
Sample    : cc987-50                                 Inst    : HP G1530A
Misc      : op93322,g6g995,15.0,,,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	1.27- 1.33
2	SAB	Tetrachloro-m-xylene	0.916	0.899	1.9	98	0.00	1.95- 2.01
3	A	alpha-BHC	1.181	1.291	-9.3	98	0.00	2.46- 2.52
4	MA	gamma-BHC	1.100	1.175	-6.8	98	-0.01	2.78- 2.84
5	MA	Heptachlor	1.104	1.148	-4.0	99	-0.01	3.31- 3.37
6	B	beta-BHC	0.540	0.527	2.4	97	-0.01	2.86- 2.92
7	B	delta-BHC	1.025	1.116	-8.9	97	-0.01	3.05- 3.11
8	MB	Aldrin	1.020	1.078	-5.7	99	-0.01	3.65- 3.72
9	B	Heptachlor Epoxide	0.955	0.988	-3.5	99	-0.02	4.41- 4.47
10	B	gamma-Chlordane	0.961	0.992	-3.2	99	-0.01	4.58- 4.64
11	B	alpha-Chlordane	0.954	0.975	-2.2	99	-0.01	4.76- 4.82
12	A	Endosulfan I	0.941	0.963	-2.3	99	-0.02	4.95- 5.01
13	B	4,4'-DDE	0.790	0.847	-7.2	100	-0.02	4.89- 4.95
14	MA	Dieldrin	0.931	0.976	-4.8	100	-0.02	5.29- 5.35
15	MA	Endrin	0.844	0.893	-5.8	101	-0.02	5.63- 5.69
16	A	4,4'-DDD	0.668	0.724	-8.4	101	-0.02	5.78- 5.84
17	B	Endosulfan II	0.833	0.864	-3.7	99	-0.02	5.97- 6.03
18	MA	4,4'-DDT	0.727	0.761	-4.7	100	-0.02	6.23- 6.29
19	B	Endrin Aldehyde	0.679	0.694	-2.2	101	-0.02	6.64- 6.70
20	B	Endosulfan Sulfate	0.732	0.765	-4.5	103	-0.02	7.38- 7.44
21	A	Methoxychlor	0.436	0.445	-2.1	100	-0.03	7.09- 7.15
22		Mirex	0.746	0.730	2.1	99	-0.02	7.23- 7.29
23	B	Endrin Ketone	0.870	0.945	-8.6	103	-0.02	7.85- 7.91
24	SAB	Decachlorobiphenyl	0.797	0.765	4.0	98	-0.02	9.89- 9.95
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	96	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	99	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 *****

Continuing Calibration Summary

Job Number: JC18516 **Sample:** G6G995-CC987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34394.D
Project: BMSMC, Building 5 Area, PR

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	103	0.00	1.55- 1.61
2	SAB	Tetrachloro-m-xylene	0.903	0.863	4.4	103	0.00	2.44- 2.50
3	A	alpha-BHC	1.177	1.181	-0.3	102	-0.01	3.15- 3.21
4	MA	gamma-BHC	1.102	1.074	2.5	100	-0.01	3.60- 3.66
5	MA	Heptachlor	1.114	1.001	10.1	96	-0.02	4.21- 4.27
6	B	beta-BHC	0.537	0.493	8.2	97	-0.01	3.69- 3.75
7	B	delta-BHC	1.027	1.010	1.7	101	-0.01	4.11- 4.17
8	MB	Aldrin	1.036	0.958	7.5	99	-0.02	4.68- 4.74
9	B	Heptachlor Epoxide	0.965	0.880	8.8	98	-0.02	5.56- 5.62
10	B	gamma-Chlordane	0.944	0.864	8.5	99	-0.02	5.87- 5.93
11	B	alpha-Chlordane	0.937	0.863	7.9	100	-0.02	6.11- 6.17
12	A	Endosulfan I	0.911	0.834	8.5	100	-0.02	6.21- 6.27
13	B	4,4'-DDE	0.808	0.789	2.4	100	-0.02	6.41- 6.47
14	MA	Dieldrin	0.930	0.862	7.3	101	-0.02	6.68- 6.74
15	MA	Endrin	0.845	0.779	7.8	101	-0.02	7.23- 7.29
16	A	4,4'-DDD	0.698	0.705	-1.0	103	-0.03	7.44- 7.50
17	B	Endosulfan II	0.827	0.795	3.9	102	-0.02	7.61- 7.67
18	MA	4,4'-DDT	0.633	0.598	5.5	98	-0.03	8.02- 8.08
19	B	Endrin Aldehyde	0.670	0.637	4.9	102	-0.03	8.24- 8.30
20	B	Endosulfan Sulfate	0.727	0.687	5.5	104	-0.03	8.75- 8.81
21	A	Methoxychlor	0.349	0.333	4.6	98	-0.03	9.40- 9.46
22		Mirex	0.716	0.631	11.9	101	-0.03	9.71- 9.77
23	B	Endrin Ketone	0.850	0.828	2.6	106	-0.03	9.80- 9.86
24	SAB	Decachlorobiphenyl	0.679	0.633	6.8	98	-0.02	11.73-11.79
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	101	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	104	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 Tue Apr 26 12:06:47 2016

8.10.14

8

Continuing Calibration Summary

Job Number: JC18516 **Sample:** G6G995-CC987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34403.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\995\6g34403.D\ECD1A.CH     Vial: 2
Signal #2 : C:\msdchem\1\DATA\995\6g34403.D\ECD2B.CH
Acq On    : 25 Apr 2016   8:00 pm                    Operator: dharas
Sample    : cc987-25                                 Inst    : HP G1530A
Misc      : op93251,g6g995,500,,,5,1                 Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\6PST987.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : 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	105	0.00	1.27- 1.33
2	SAB	Tetrachloro-m-xylene	0.916	0.912	0.4	109	0.00	1.95- 2.01
3	A	alpha-BHC	1.181	1.234	-4.5	111	0.00	2.46- 2.52
4	MA	gamma-BHC	1.100	1.143	-3.9	110	-0.01	2.78- 2.84
5	MA	Heptachlor	1.104	1.138	-3.1	111	-0.01	3.31- 3.37
6	B	beta-BHC	0.540	0.537	0.6	107	0.00	2.86- 2.92
7	B	delta-BHC	1.025	1.069	-4.3	109	-0.01	3.05- 3.11
8	MB	Aldrin	1.020	1.063	-4.2	113	-0.01	3.66- 3.73
9	B	Heptachlor Epoxide	0.955	0.994	-4.1	112	-0.01	4.41- 4.47
10	B	gamma-Chlordane	0.961	1.001	-4.2	112	-0.01	4.58- 4.64
11	B	alpha-Chlordane	0.954	1.000	-4.8	113	-0.01	4.76- 4.82
12	A	Endosulfan I	0.941	0.988	-5.0	114	-0.01	4.95- 5.01
13	B	4,4'-DDE	0.790	0.805	-1.9	111	-0.01	4.89- 4.95
14	MA	Dieldrin	0.931	0.972	-4.4	113	-0.02	5.29- 5.35
15	MA	Endrin	0.844	0.875	-3.7	112	-0.02	5.63- 5.69
16	A	4,4'-DDD	0.668	0.673	-0.7	112	-0.02	5.78- 5.84
17	B	Endosulfan II	0.833	0.855	-2.6	113	-0.02	5.97- 6.03
18	MA	4,4'-DDT	0.727	0.728	-0.1	109	-0.02	6.23- 6.29
19	B	Endrin Aldehyde	0.679	0.712	-4.9	115	-0.02	6.64- 6.70
20	B	Endosulfan Sulfate	0.732	0.780	-6.6	117	-0.02	7.38- 7.44
21	A	Methoxychlor	0.436	0.447	-2.5	109	-0.02	7.10- 7.16
22		Mirex	0.746	0.787	-5.5	114	-0.02	7.23- 7.29
23	B	Endrin Ketone	0.870	0.975	-12.1	120	-0.02	7.86- 7.92
24	SAB	Decachlorobiphenyl	0.797	0.807	-1.3	110	-0.02	9.89- 9.95

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	112	0.00	1.55- 1.61
2	SAB	Tetrachloro-m-xylene	0.903	0.909	-0.7	117	0.00	2.44- 2.50
3	A	alpha-BHC	1.177	1.204	-2.3	119	-0.01	3.15- 3.21
4	MA	gamma-BHC	1.102	1.113	-1.0	118	-0.01	3.60- 3.66
5	MA	Heptachlor	1.114	1.072	3.8	115	-0.02	4.21- 4.27
6	B	beta-BHC	0.537	0.523	2.6	115	-0.01	3.69- 3.75
7	B	delta-BHC	1.027	1.044	-1.7	119	-0.01	4.11- 4.17
8	MB	Aldrin	1.036	1.034	0.2	118	-0.02	4.68- 4.74
9	B	Heptachlor Epoxide	0.965	0.969	-0.4	117	-0.02	5.56- 5.62
10	B	gamma-Chlordane	0.944	0.942	0.2	118	-0.02	5.87- 5.93
11	B	alpha-Chlordane	0.937	0.946	-1.0	119	-0.02	6.11- 6.17
12	A	Endosulfan I	0.911	0.915	-0.4	120	-0.02	6.21- 6.27

Continuing Calibration Summary

Job Number: JC18516 **Sample:** G6G995-CC987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34403.D
Project: BMSMC, Building 5 Area, PR

13	B	4,4'-DDE	0.808	0.842	-4.2	133	-0.02	6.41-	6.47
14	MA	Dieldrin	0.930	0.923	0.8	119	-0.02	6.68-	6.74
15	MA	Endrin	0.845	0.812	3.9	116	-0.02	7.23-	7.29
16	A	4,4'-DDD	0.698	0.747	-7.0	123	-0.02	7.44-	7.50
17	B	Endosulfan II	0.827	0.857	-3.6	125	-0.02	7.61-	7.67
18	MA	4,4'-DDT	0.633	0.612	3.3	115	-0.02	8.03-	8.09
19	B	Endrin Aldehyde	0.670	0.690	-3.0	122	-0.03	8.24-	8.30
20	B	Endosulfan Sulfate	0.727	0.737	-1.4	122	-0.03	8.75-	8.81
21	A	Methoxychlor	0.349	0.342	2.0	112	-0.03	9.40-	9.46
22		Mirex	0.716	0.704	1.7	120	-0.03	9.71-	9.77
23	B	Endrin Ketone	0.850	0.885	-4.1	126	-0.03	9.80-	9.86
24	SAB	Decachlorobiphenyl	0.679	0.670	1.3	111	-0.02	11.73-	11.79

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g34134.D 6PST987.M Tue Apr 26 12:07:03 2016

8.10.15

8

Continuing Calibration Summary

Job Number: JC18516 **Sample:** G6G996-CC987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34416.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\996\6g34416.D\ECD1A.CH     Vial: 4
Signal #2 : C:\msdchem\1\DATA\996\6g34416.D\ECD2B.CH
Acq On    : 26 Apr 2016   7:53 am                    Operator: brittanp
Sample    : cc987-50                                 Inst    : HP G1530A
Misc      : op93322,g6g996,16.0,,,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	103	0.02	1.30- 1.36
2	SAB	Tetrachloro-m-xylene	0.916	0.881	3.8	101	0.00	1.97- 2.03
3	A	alpha-BHC	1.181	1.256	-6.4	101	0.00	2.48- 2.54
4	MA	gamma-BHC	1.100	1.148	-4.4	102	0.00	2.79- 2.85
5	MA	Heptachlor	1.104	1.055	4.4	96	0.00	3.32- 3.38
6	B	beta-BHC	0.540	0.529	2.0	103	0.00	2.87- 2.93
7	B	delta-BHC	1.025	1.064	-3.8	98	0.00	3.06- 3.12
8	MB	Aldrin	1.020	0.997	2.3	98	0.00	3.66- 3.73
9	B	Heptachlor Epoxide	0.955	0.908	4.9	97	-0.01	4.41- 4.47
10	B	gamma-Chlordane	0.961	0.862	10.3	91	0.00	4.59- 4.65
11	B	alpha-Chlordane	0.954	0.877	8.1	94	0.00	4.77- 4.83
12	A	Endosulfan I	0.941	0.872	7.3	95	-0.01	4.95- 5.01
13	B	4,4'-DDE	0.790	0.781	1.1	98	-0.01	4.90- 4.96
14	MA	Dieldrin	0.931	0.900	3.3	97	-0.01	5.29- 5.35
15	MA	Endrin	0.844	0.840	0.5	100	-0.01	5.63- 5.69
16	A	4,4'-DDD	0.668	0.659	1.3	98	-0.02	5.78- 5.84
17	B	Endosulfan II	0.833	0.806	3.2	98	-0.01	5.98- 6.04
18	MA	4,4'-DDT	0.727	0.742	-2.1	103	-0.02	6.23- 6.29
19	B	Endrin Aldehyde	0.679	0.676	0.4	104	-0.02	6.65- 6.71
20	B	Endosulfan Sulfate	0.732	0.741	-1.2	105	-0.02	7.38- 7.44
21	A	Methoxychlor	0.436	0.433	0.7	103	-0.02	7.10- 7.16
22		Mirex	0.746	0.673	9.8	97	-0.02	7.23- 7.29
23	B	Endrin Ketone	0.870	0.914	-5.1	106	-0.02	7.86- 7.92
24	SAB	Decachlorobiphenyl	0.797	0.728	8.7	99	-0.02	9.89- 9.95

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.02	1.57- 1.63
2	SAB	Tetrachloro-m-xylene	0.903	0.849	6.0	106	0.00	2.46- 2.52
3	A	alpha-BHC	1.177	1.162	1.3	105	0.00	3.15- 3.21
4	MA	gamma-BHC	1.102	1.063	3.5	104	0.00	3.61- 3.67
5	MA	Heptachlor	1.114	0.986	11.5	98	0.00	4.21- 4.27
6	B	beta-BHC	0.537	0.497	7.4	102	0.00	3.70- 3.76
7	B	delta-BHC	1.027	1.030	-0.3	107	0.00	4.11- 4.17
8	MB	Aldrin	1.036	0.916	11.6	99	-0.01	4.69- 4.75
9	B	Heptachlor Epoxide	0.965	0.843	12.6	98	-0.02	5.57- 5.63
10	B	gamma-Chlordane	0.944	0.819	13.2	98	-0.02	5.87- 5.93
11	B	alpha-Chlordane	0.937	0.814	13.1	98	-0.02	6.12- 6.18
12	A	Endosulfan I	0.911	0.788	13.5	99	-0.02	6.21- 6.27

Continuing Calibration Summary

Job Number: JC18516 **Sample:** G6G996-CC987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34416.D
Project: BMSMC, Building 5 Area, PR

13	B	4,4'-DDE	0.808	0.757	6.3	100	-0.02	6.41- 6.47
14	MA	Dieldrin	0.930	0.813	12.6	99	-0.02	6.68- 6.74
15	MA	Endrin	0.845	0.757	10.4	102	-0.02	7.23- 7.29
16	A	4,4'-DDD	0.698	0.657	5.9	100	-0.02	7.45- 7.51
17	B	Endosulfan II	0.827	0.753	8.9	101	-0.02	7.61- 7.67
18	MA	4,4'-DDT	0.633	0.623	1.6	107	-0.02	8.02- 8.08
19	B	Endrin Aldehyde	0.670	0.613	8.5	102	-0.03	8.24- 8.30
20	B	Endosulfan Sulfate	0.727	0.673	7.4	106	-0.03	8.75- 8.81
21	A	Methoxychlor	0.349	0.356	-2.0	109	-0.03	9.40- 9.46
22		Mirex	0.716	0.601	16.1	101	-0.03	9.71- 9.77
23	B	Endrin Ketone	0.850	0.818	3.8	109	-0.03	9.80- 9.86
24	SAB	Decachlorobiphenyl	0.679	0.613	9.7	99	-0.02	11.73-11.79

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g34135.D 6PST987.M Tue Apr 26 13:20:47 2016

8.10.16

8

GC Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3966\1G122262.D\ECD1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\1G3966\1G122262.D\ECD2B.CH
Acq On    : 19 Apr 2016  10:28 am                    Operator: brittanp
Sample    : jc18516-1                                Inst    : GC1G
Misc      : op93156,g1g3966,300,,,2,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 19 12:43 2016  Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Tue Apr 19 11:57:37 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.50um   Signal #2 Info : 30m x .32mm x .25um
```

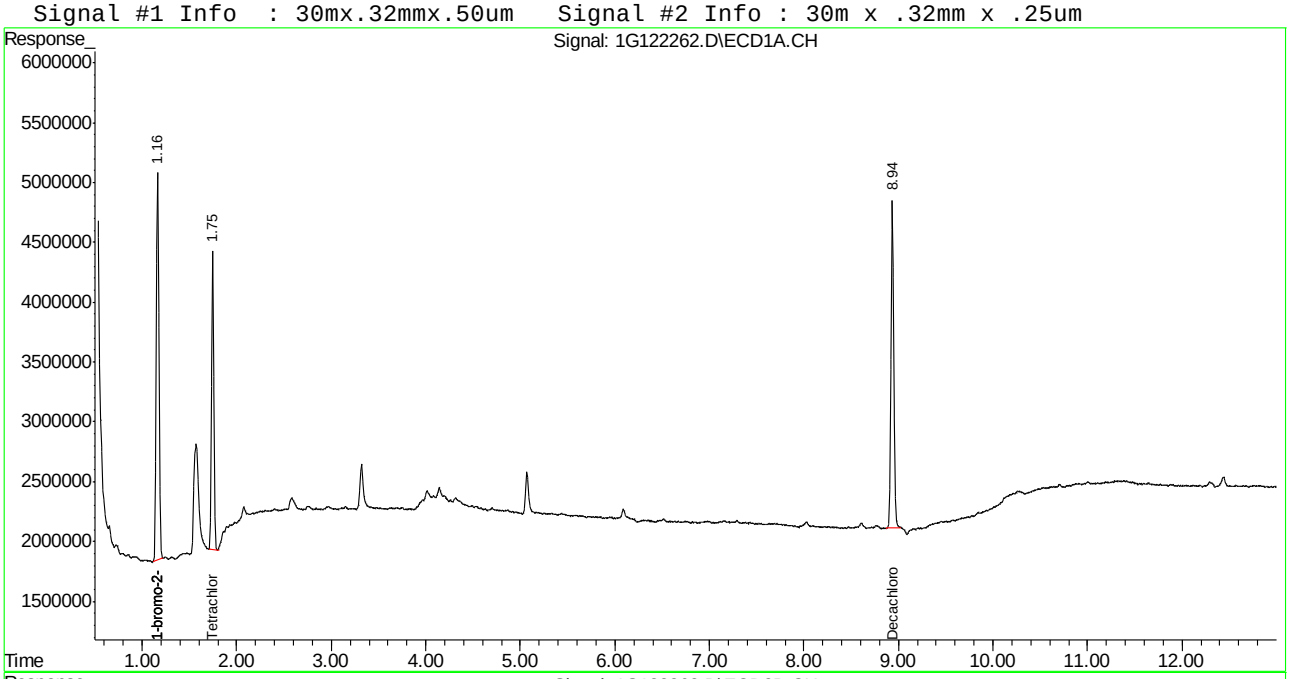
Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
Internal Standards						
1) I 1-bromo-2-nitrob	1.16	1.53	65985626	882.4E6	50.000	50.000
25) I 1-bromo-2-nitrob	1.16	1.53	65985626	882.4E6	50.000	50.000
31) I 1-bromo-2-nitrob	1.16	1.53	65985626	882.4E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachloro-m-xy	1.75	2.38	42510552	461.4E6	33.700	33.225
Spiked Amount 40.000	Range 30 - 150		Recovery =		84.25%	83.06%
24) SA Decachlorobiphen	8.94	10.87	55586236	253.6E6	31.902	27.767
Spiked Amount 40.000			Recovery =		79.75%	69.42%
Target Compounds						

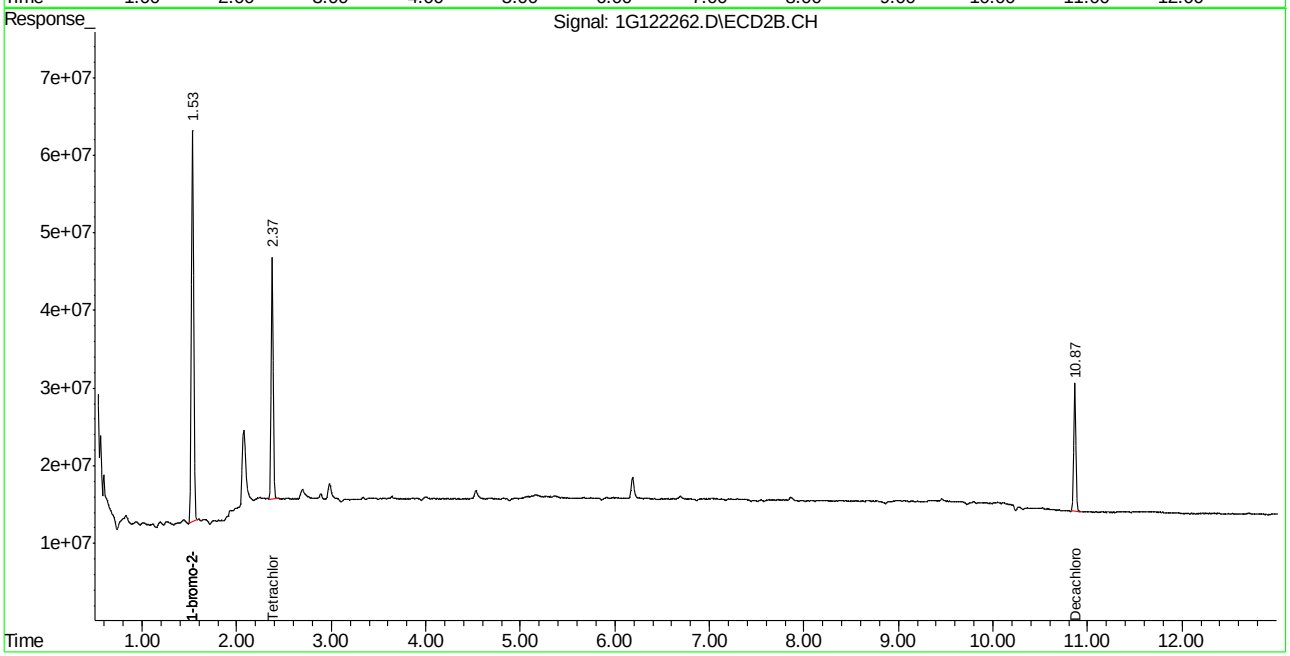
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3966\1G122262.D\ECD1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\1G3966\1G122262.D\ECD2B.CH
Acq On : 19 Apr 2016 10:28 am Operator: brittanp
Sample : jc18516-1 Inst : GC1G
Misc : op93156,g1g3966,300,,,2,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 19 12:43 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Tue Apr 19 11:57:37 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #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\995\
Data File : 6g34406.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 8:49 pm
Operator : dharas
Sample : jc18516-2
Misc : op93322,g6g995,16.1,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 26 11:26:44 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...	1.302	1.574	140.9E6	49671030	50.000	50.000
25) I	1-bromo-2...	1.302	1.574	140.9E6	49671030	50.000	50.000
31) I	1-bromo-2...	1.302	1.574	140.9E6	49671030	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.980	2.471	101.8E6	35162048	39.434	39.182
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 98.58%	97.95%
24)	SAB Decachlor...	9.916f	11.757f	82639930	24878507	36.804	36.871
	Spiked Amount	40.000			Recovery	= 92.01%	92.18%

Target Compounds

SemiQuant Compounds - Not Calibrated on this Instrument

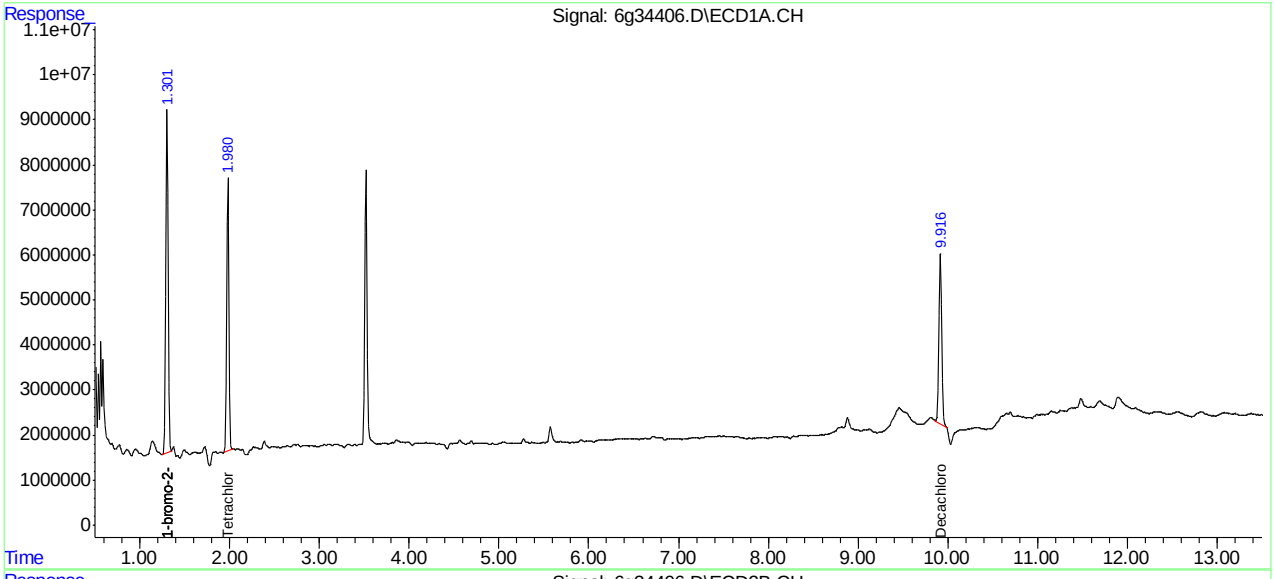
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

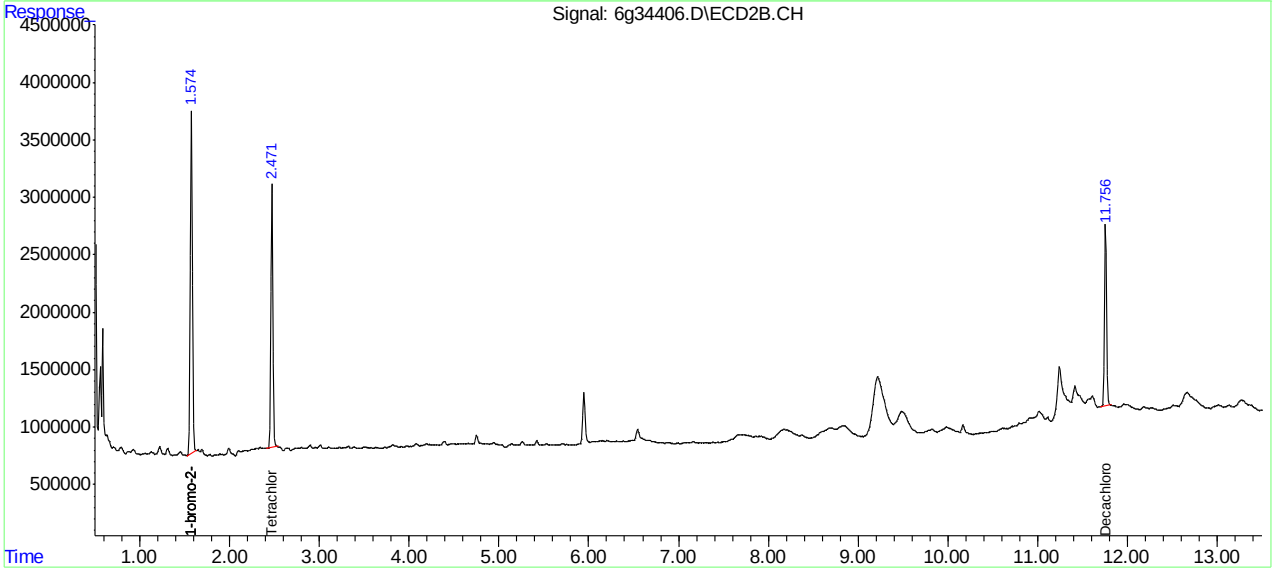
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34406.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 8:49 pm
Operator : dharas
Sample : jc18516-2
Misc : op93322,g6g995,16.1,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 26 11:26:44 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 JC18516

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34407.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 9:05 pm
Operator : dharas
Sample : jc18516-3
Misc : op93322,g6g995,15.2,,,10,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 26 11:27:52 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...	1.303	1.575	140.6E6	49273828	50.000	50.000
25) I	1-bromo-2...	1.303	1.575	140.6E6	49273828	50.000	50.000
31) I	1-bromo-2...	1.303	1.575	140.6E6	49273828	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.981	2.472	97072072	33499536	37.656	37.630
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 94.14%	94.08%
24)	SAB Decachlor...	9.917f	11.757f	77919300	22339374	34.761	33.375
	Spiked Amount	40.000			Recovery	= 86.90%	83.44%

Target Compounds

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

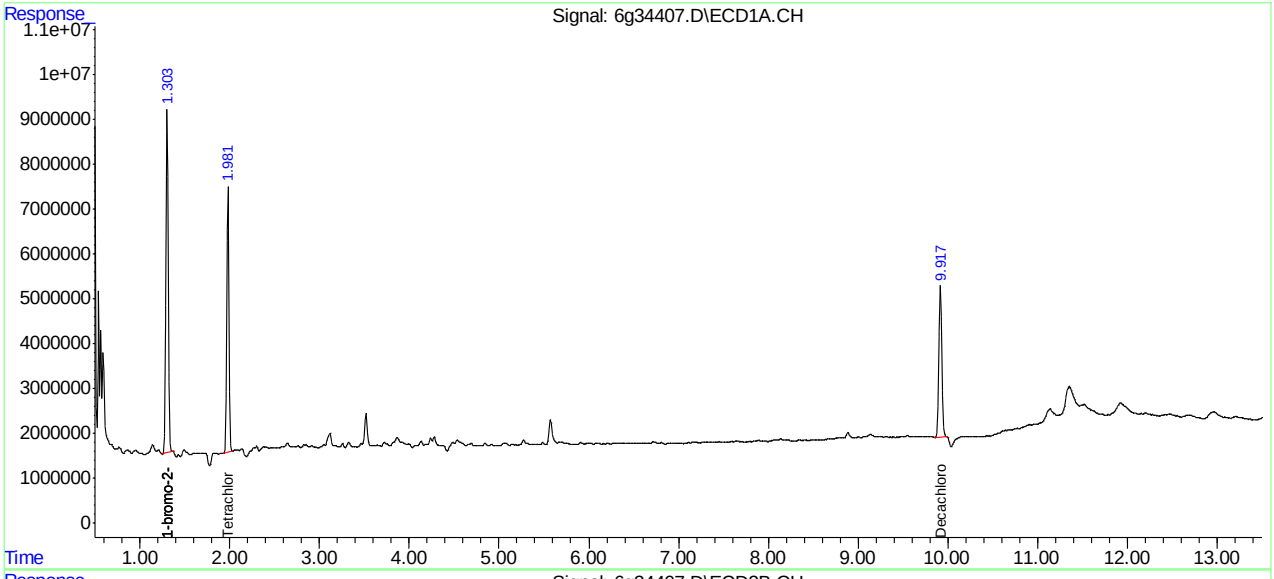
SGS ACCUTEST JC18516

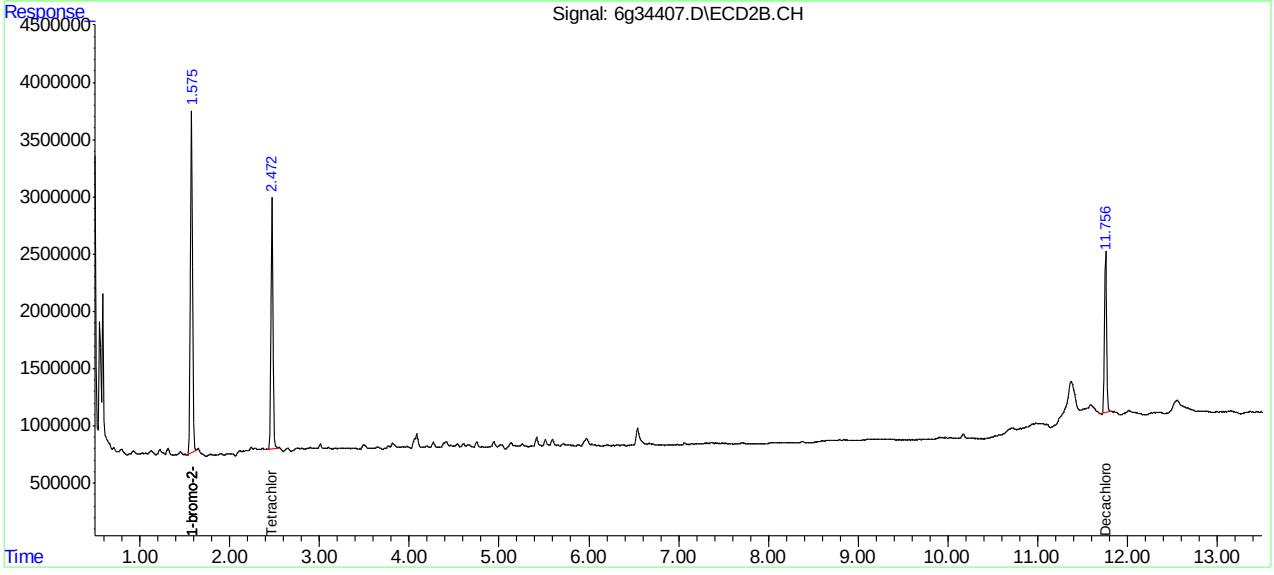
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34407.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 9:05 pm
Operator : dharas
Sample : jc18516-3
Misc : op93322,g6g995,15.2,,,10,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 26 11:27:52 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Quantitation Report (QT Reviewed)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3966\1G122263.D\ECD1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\1G3966\1G122263.D\ECD2B.CH
Acq On    : 19 Apr 2016  10:46 am                    Operator: brittanp
Sample    : jc18516-4                                Inst    : GC1G
Misc      : op93156,g1g3966,300,,,2,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 19 12:44 2016  Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Tue Apr 19 11:57:37 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj.     : 1ul/column
Signal #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-nitrob	1.16	1.53	67654100	905.1E6	50.000	50.000
25) I 1-bromo-2-nitrob	1.16	1.53	67654100	905.1E6	50.000	50.000
31) I 1-bromo-2-nitrob	1.16	1.53	67654100	905.1E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachloro-m-xy	1.75	2.38	29537857	335.9E6	22.838	23.586
Spiked Amount 40.000	Range 30 - 150		Recovery =		57.10%	58.97%
24) SA Decachlorobiphen	8.94	10.87	41879671	189.0E6	23.442	20.175
Spiked Amount 40.000			Recovery =		58.60%	50.44%
Target Compounds						

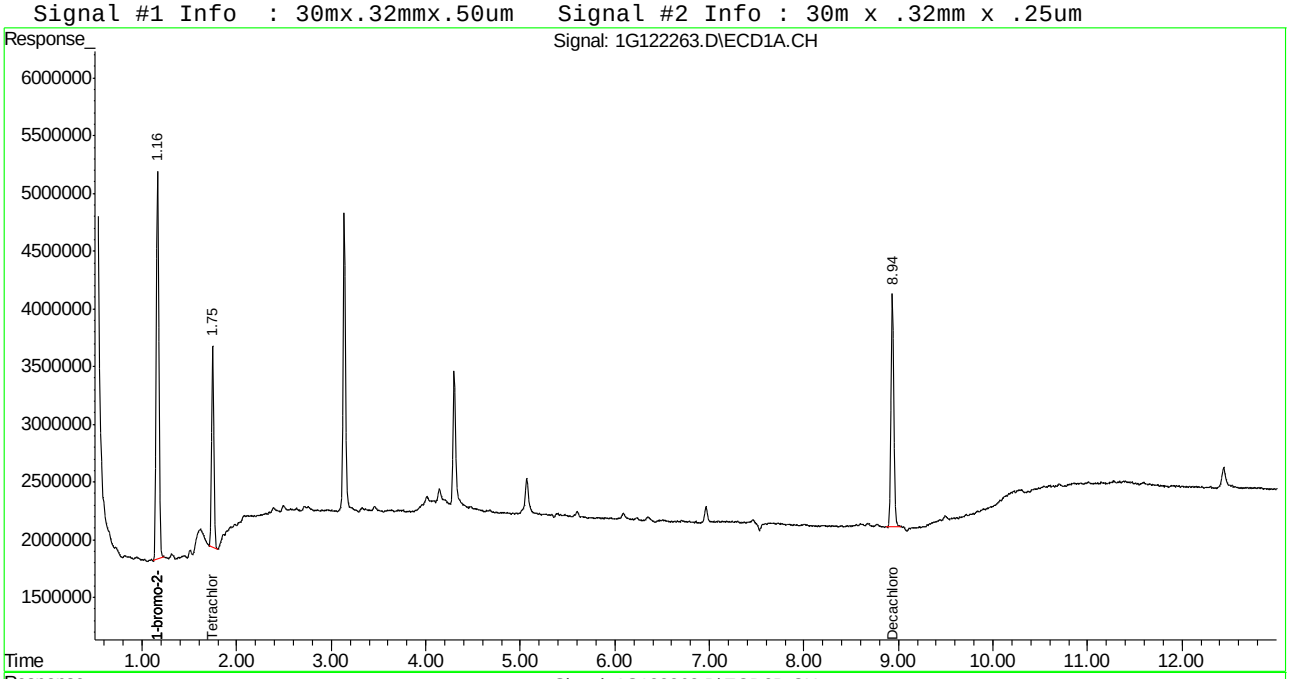
```
(f)=RT Delta > 1/2 Window                          (m)=manual int.
1G122263.D  1PST3951.M      Tue Apr 19 12:44:12 2016      RPT1
```

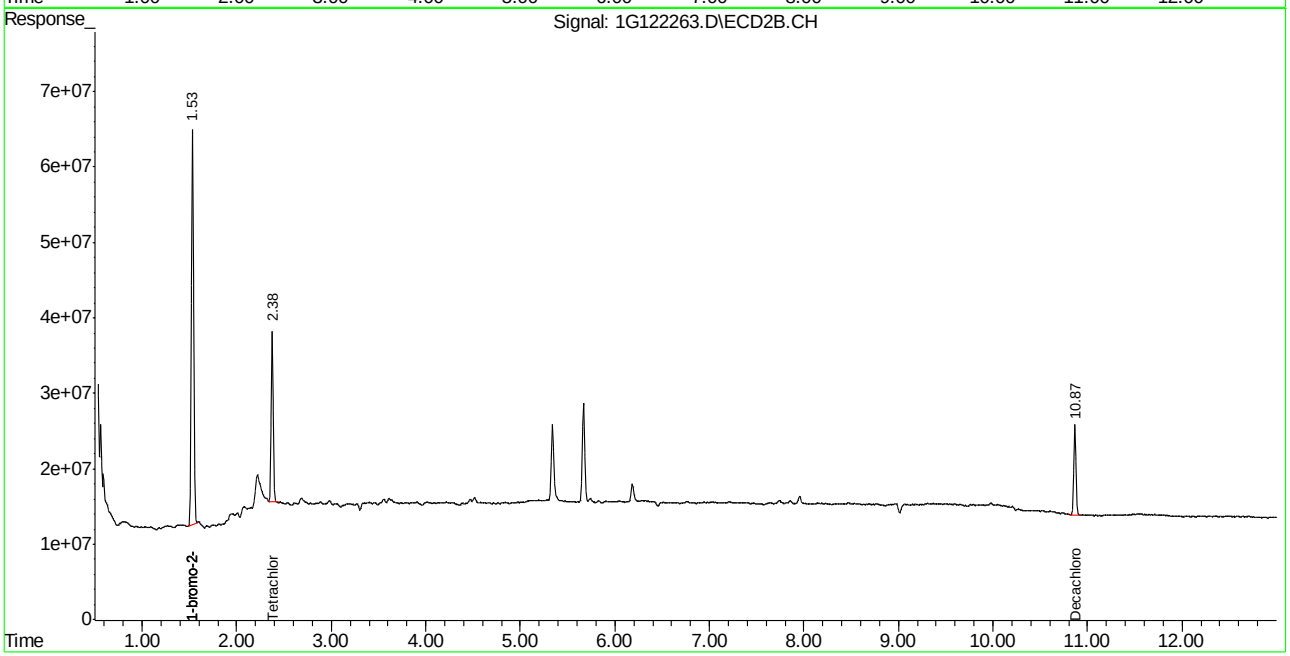
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3966\1G122263.D\ECD1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\1G3966\1G122263.D\ECD2B.CH
Acq On : 19 Apr 2016 10:46 am Operator: brittanp
Sample : jc18516-4 Inst : GC1G
Misc : op93156,g1g3966,300,,,2,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 19 12:44 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Tue Apr 19 11:57:37 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #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)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3966\1G122259.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G3966\1G122259.D\ECD2B.CH
Acq On    : 4-19-16 09:36:03 AM                      Operator: brittanp
Sample    : op93156-mb1                              Inst    : GC1G
Misc      : op93156,g1g3966,300,,,2,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 19 12:33 2016  Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Tue Apr 19 11:57:37 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj.     : 1ul/column
Signal #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-nitrob	1.16	1.53	69837321	916.5E6	50.000	50.000
25) I 1-bromo-2-nitrob	1.16	1.53	69837321	916.5E6	50.000	50.000
31) I 1-bromo-2-nitrob	1.16	1.53	69837321	916.5E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachloro-m-xy	1.74	2.38	49224848	523.3E6	36.870	36.286
Spiked Amount 40.000	Range 30 - 150		Recovery =		92.17%	90.72%
24) SA Decachlorobiphen	8.94	10.86	79502952	358.7E6	43.111	37.818
Spiked Amount 40.000			Recovery =		107.78%	94.54%
Target Compounds						

```
(f)=RT Delta > 1/2 Window                          (m)=manual int.
1G122259.D  1PST3951.M      Tue Apr 19 12:33:55 2016      RPT1
```

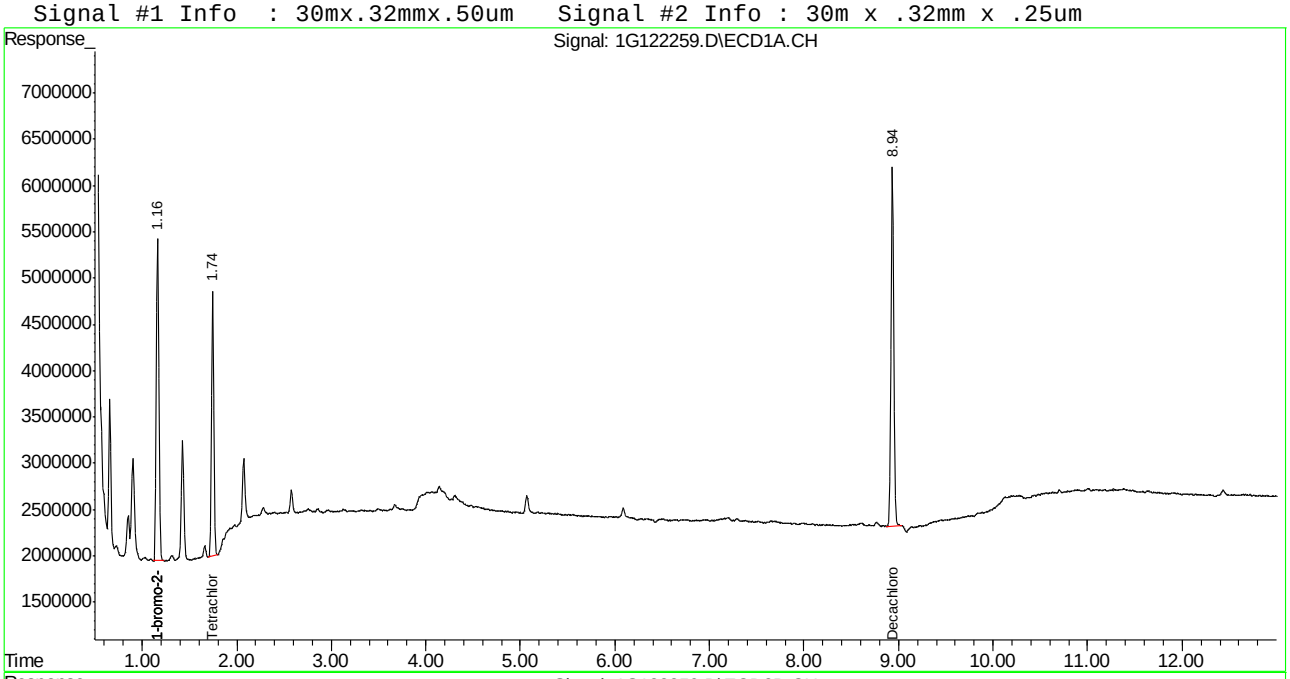

SGS ACCUTEST JC18516

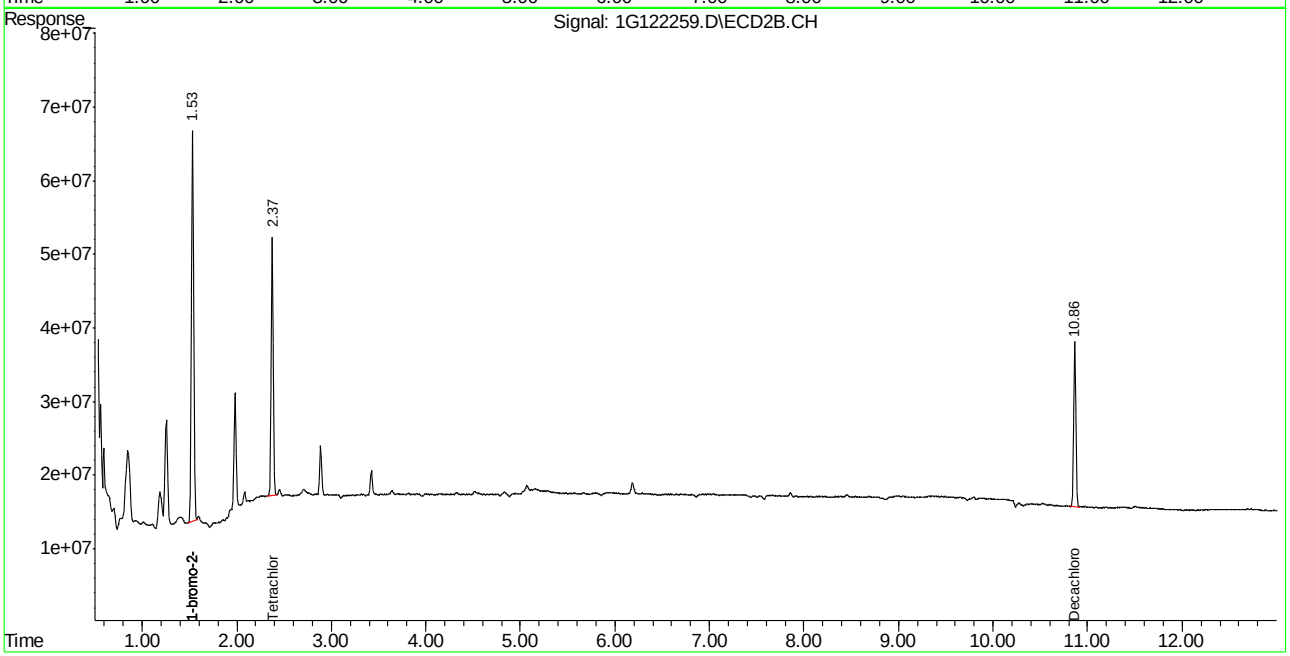
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3966\1G122259.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G3966\1G122259.D\ECD2B.CH
Acq On : 4-19-16 09:36:03 AM Operator: brittanp
Sample : op93156-mb1 Inst : GC1G
Misc : op93156,g1g3966,300,,,2,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 19 12:33 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Tue Apr 19 11:57:37 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #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\995\
Data File : 6g34376.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 25 Apr 2016  11:29 am
Operator  : brittanp
Sample    : op93322-mb1
Misc      : op93322,g6g995,15.0,,,10,1
ALS Vial  : 7   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 11:49:39 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...	1.304	1.575	139.3E6	49873992	50.000	50.000
25) I	1-bromo-2...	1.304	1.575	139.3E6	49873992	50.000	50.000
31) I	1-bromo-2...	1.304	1.575	139.3E6	49873992	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.981	2.472	94456686	33364466	36.991	37.027
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 92.48%	92.57%
24) SAB	Decachlor...	9.914f	11.762	84329111	24381227	37.980	35.987
	Spiked Amount	40.000			Recovery	= 94.95%	89.97%
	Target Compounds						
	SemiQuant Compounds - Not Calibrated on this Instrument						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

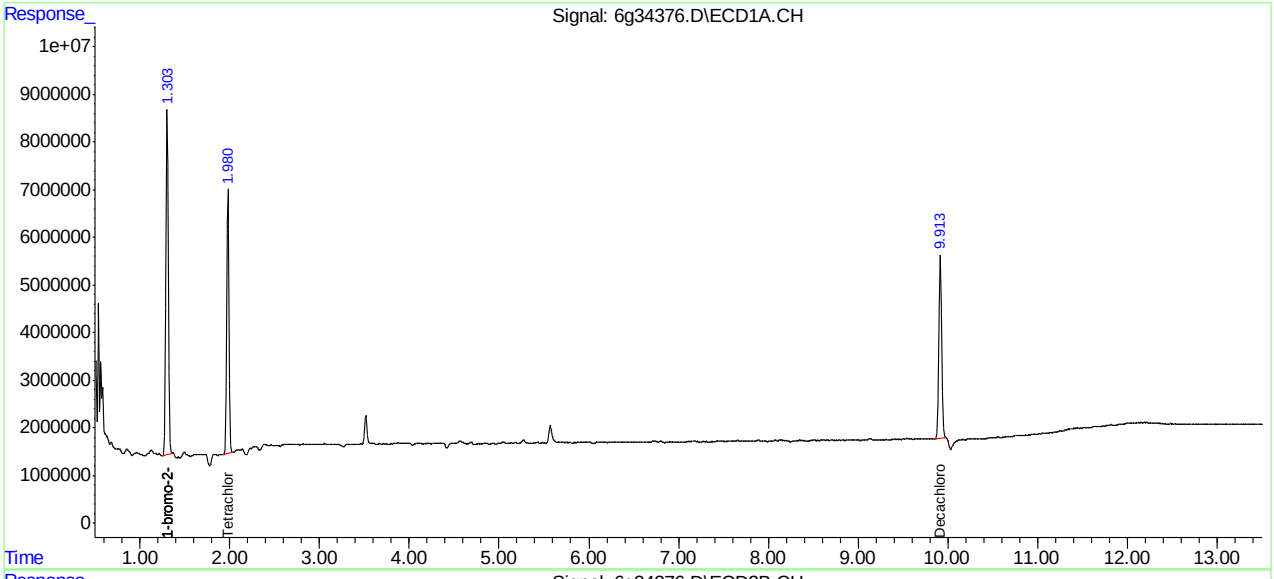
SGS ACCUTEST JC18516

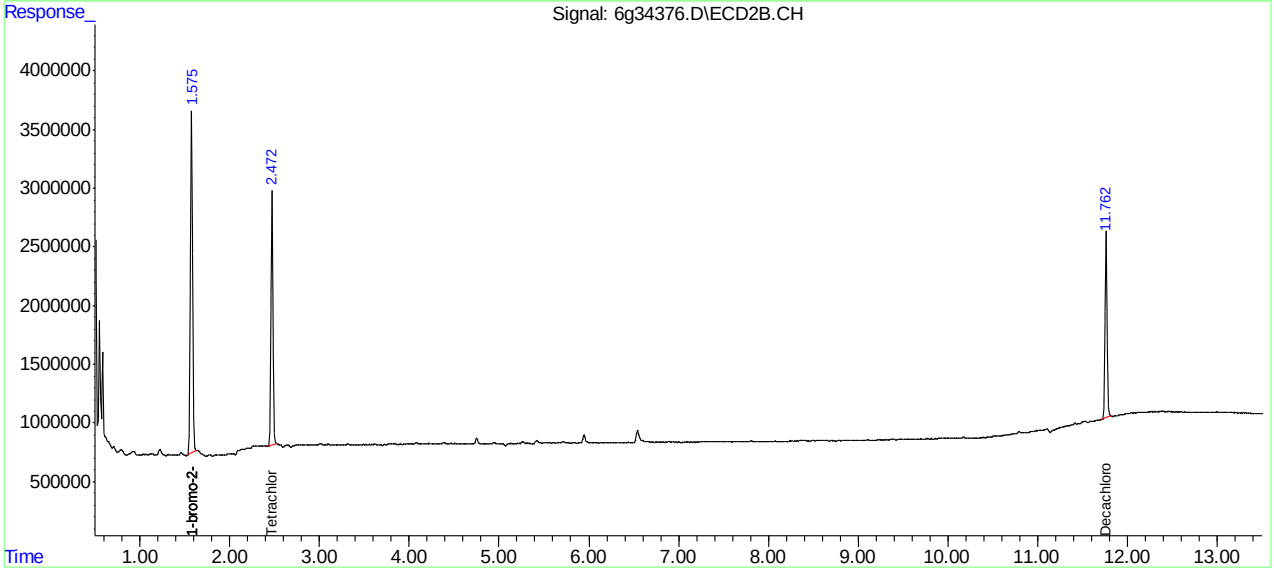
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34376.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 11:29 am
Operator : brittanp
Sample : op93322-mb1
Misc : op93322,g6g995,15.0,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 11:49:39 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 04/19/16 14:16

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3966\1G122260.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3966\1G122260.D\ECD2B.CH
Acq On : 4-19-16 09:53:45 AM Operator: brittanp
Sample : op93156-bs1 Inst : GC1G
Misc : op93156,g1g3966,300,,,2,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 19 12:34 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Tue Apr 19 11:57:37 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #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-nitrob	1.16	1.53	68259431	902.9E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.16	1.53	68259431	902.9E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.16	1.53	68259431	902.9E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	40279662	439.0E6	30.868	30.895
Spiked Amount	40.000	Range	30 - 150	Recovery	=	77.17%	77.24%
24) SA	Decachlorobiphen	8.94	10.87	53285700	249.5E6	29.563	26.697
Spiked Amount	40.000			Recovery	=	73.91%	66.74%
	Target Compounds						
3) A	alpha-BHC	2.22	3.04	33242710	464.3E6	21.454	21.655
4) MA	gamma-BHC	2.50	3.47	33140577	413.5E6	22.412	21.462
5) MA	Heptachlor	2.98	4.05	35827857	366.5E6	22.558	21.163
6) B	beta-BHC	2.58	3.56	16766575	177.1E6	22.281	21.639
7) B	delta-BHC	2.76	3.95	29585798	380.3E6	22.724	21.497
8) MB	Aldrin	3.30	4.50	32171674	368.8E6	21.752	21.305
9) B	Heptachlor Epoxi	3.99	5.32	33758443	340.9E6	22.935m	21.748
10) B	gamma-Chlordane	4.15	5.60	36958810	332.5E6	23.824	21.203
11) B	alpha-Chlordane	4.31	5.83	34822144	315.7E6	23.286	20.826
12) A	Endosulfan I	4.49	5.92	33326992	319.1E6	23.437	21.555
13) B	4,4'-DDE	4.43	6.10	30486412	319.8E6	22.314	20.489
14) MA	Dieldrin	4.80	6.36	33435823	354.9E6	23.225	21.413
15) MA	Endrin	5.11	6.86	33176482	322.4E6	24.636	22.422
16) A	4,4'-DDD	5.25	7.05	24578608	284.8E6	21.656	21.498
17) B	Endosulfan II	5.43	7.21	31614791	304.9E6	23.135	21.293
18) MA	4,4'-DDT	5.65	7.58	24953599	217.4E6	23.073	20.971
19) B	Endrin Aldehyde	6.06	7.79	29461044	234.7E6	25.443	21.145
20) B	Endosulfan Sulfa	6.73	8.26	29882764	266.9E6	24.064	22.140
21) A	Methoxychlor	6.44	8.83	16020764	111.5E6	21.996	20.267
23) B	Endrin Ketone	7.16	9.22	35488872	294.0E6	24.469	22.933

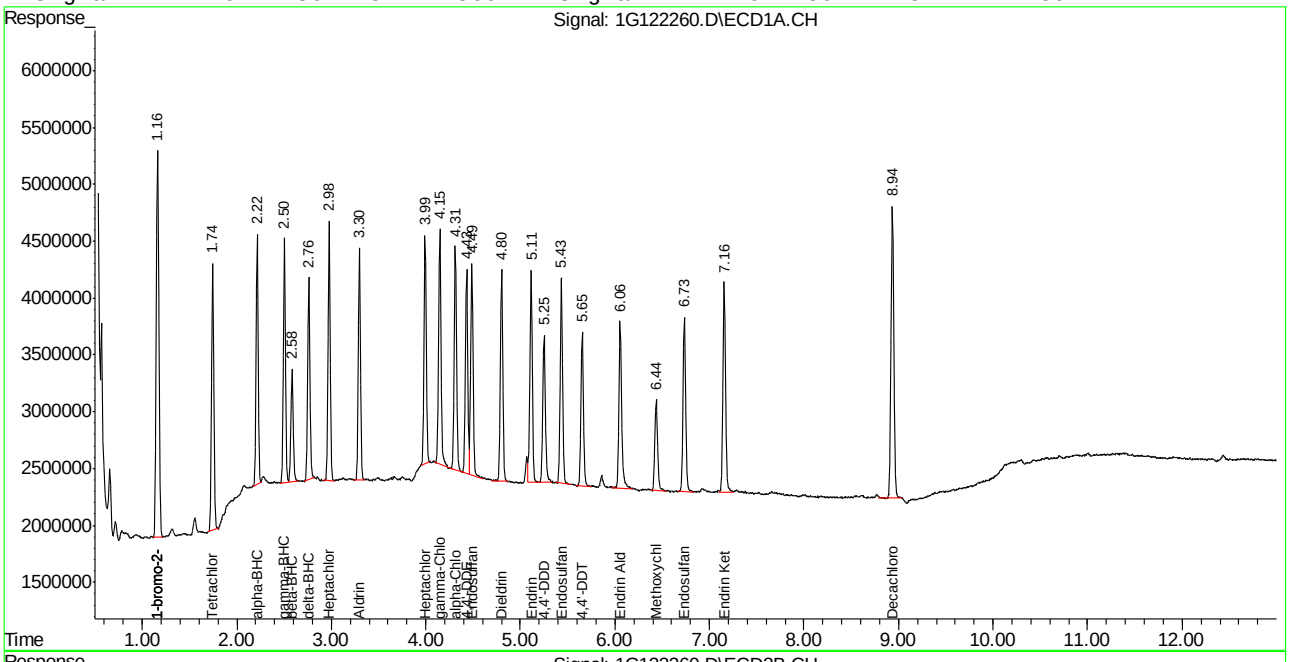
(f)=RT Delta > 1/2 Window (m)=manual int.

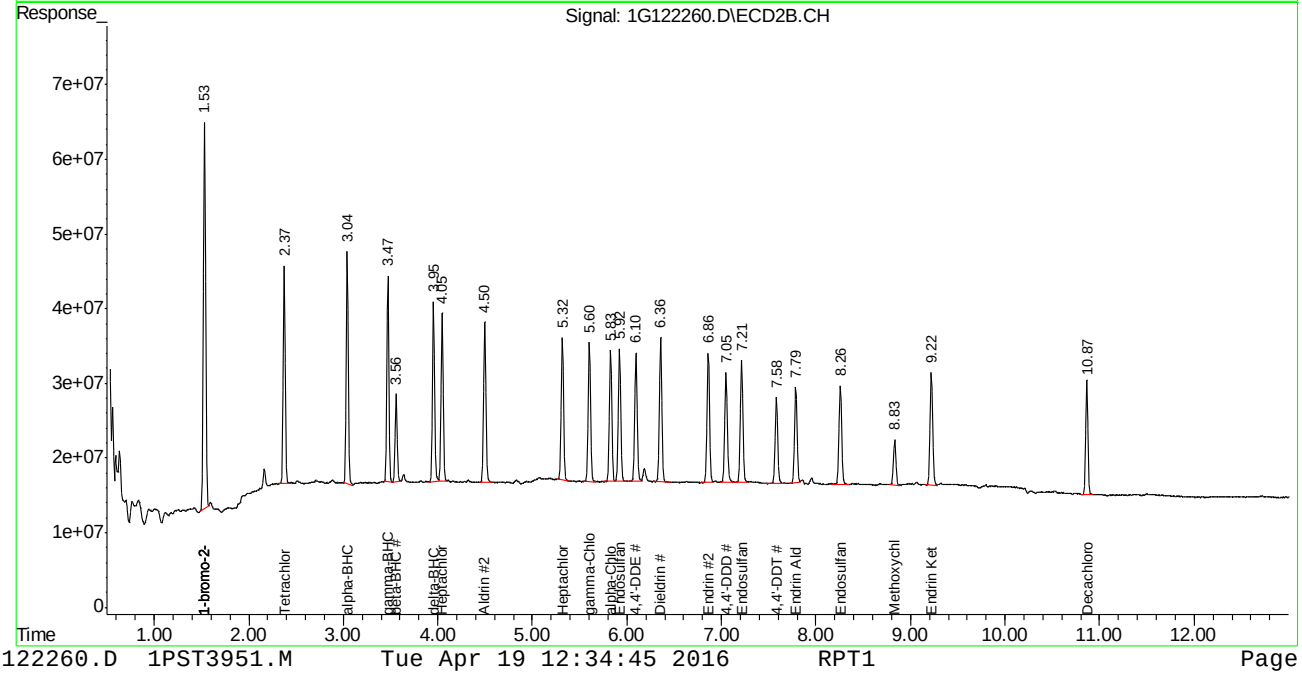
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3966\1G122260.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3966\1G122260.D\ECD2B.CH
Acq On : 4-19-16 09:53:45 AM Operator: brittanp
Sample : op93156-bs1 Inst : GC1G
Misc : op93156,g1g3966,300,,,2,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 19 12:34 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Tue Apr 19 11:57:37 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #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

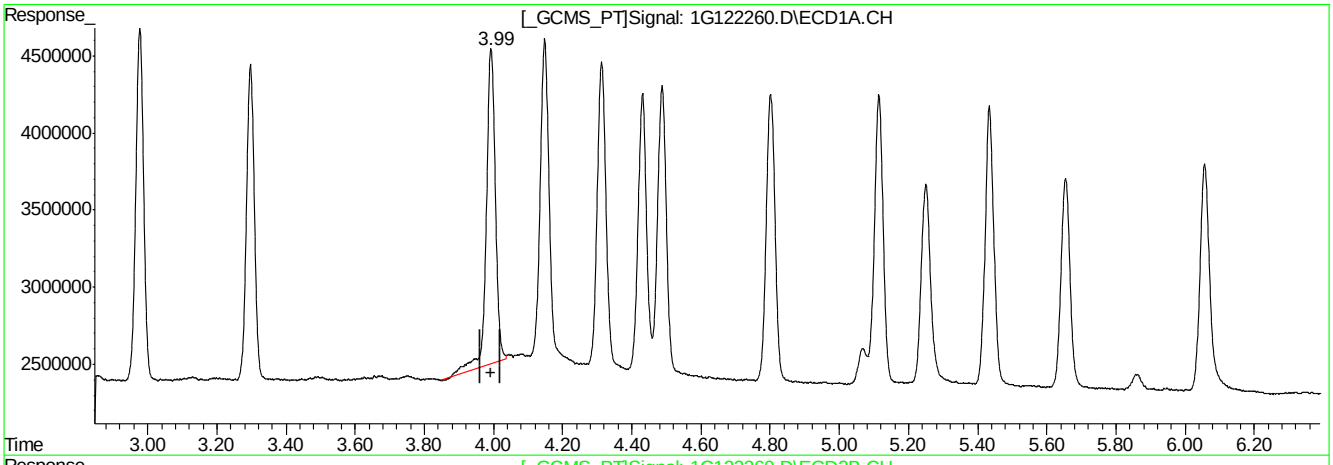
Sample Number:	OP93156-BS1	**Method:**	SW846 8081B
Lab FileID:	1G122260.D	**Analyst approved:**	04/19/16 12:48 Dhara Saparia
Injection Time:	04/19/16 09:53	**Supervisor approved:**	04/19/16 14:16 Gwendolyn Burns

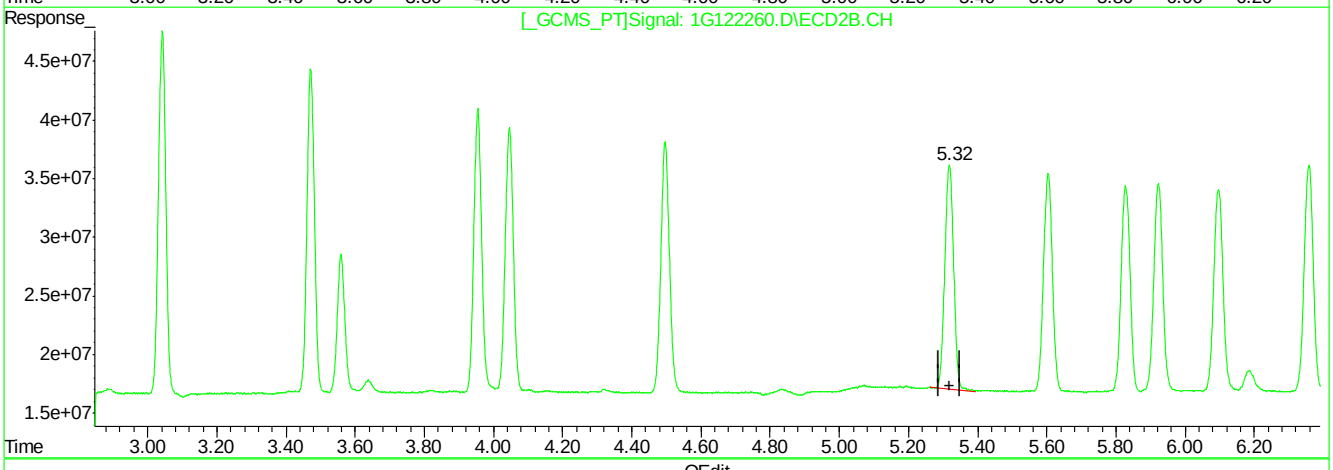
Parameter	CAS	Sig#	R.T. (min.)	Reason
Heptachlor epoxide	1024-57-3	1	3.99	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3966\1G122260.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3966\1G122260.D\ECD2B.CH
Acq On    : 4-19-16 09:53:45 AM                      Operator: brittanp
Sample    : op93156-bs1                              Inst    : GC1G
Misc      : op93156,g1g3966,300,,,2,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 19 12:34 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Tue Apr 19 11:57:37 2016
Response via : Multiple Level Calibration
```





QEdit

(9) Heptachlor Epoxide (B)

3.99min 25.636PPB

response 37734278

(9) Heptachlor Epoxide #2 (B)

5.32min 21.748PPB

response 340888045

(+) = Expected Retention Time

1G122260.D 1PST3951.M Tue Apr 19 12:34:14 2016 RPT1

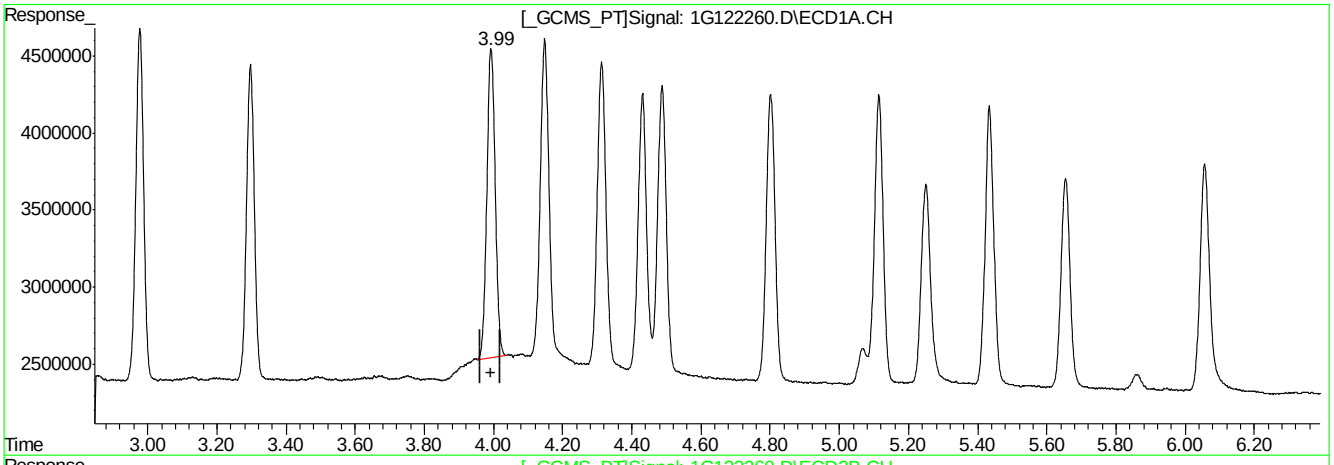
9.3.1.2

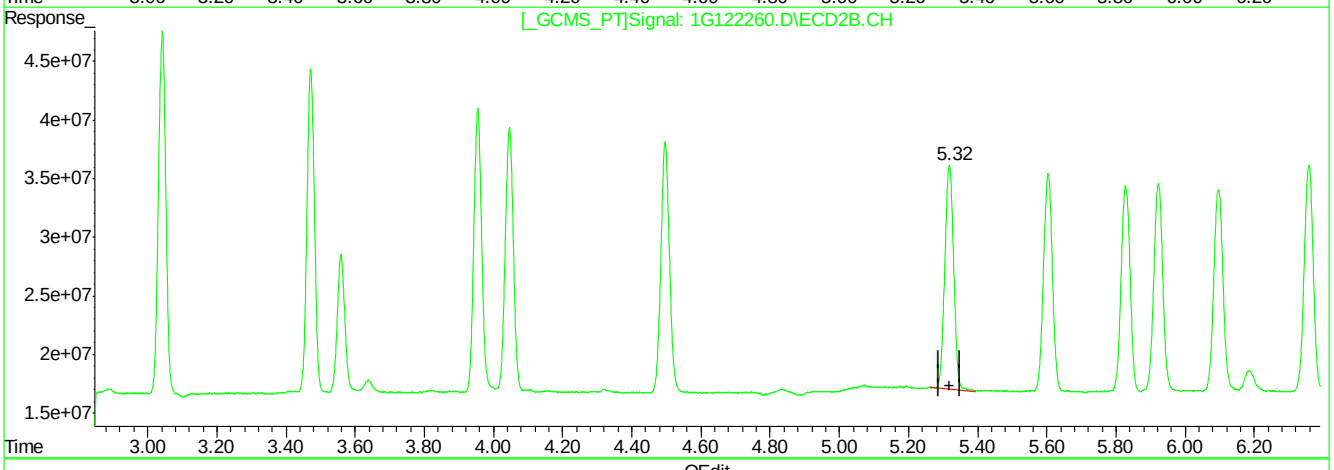
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3966\1G122260.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3966\1G122260.D\ECD2B.CH
Acq On    : 4-19-16 09:53:45 AM                      Operator: brittanp
Sample    : op93156-bs1                              Inst    : GC1G
Misc      : op93156,g1g3966,300,,,2,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 19 12:34 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Tue Apr 19 11:57:37 2016
Response via : Multiple Level Calibration
```





QEdit

(9) Heptachlor Epoxide (B)

3.99min 22.935PPB m

response 33758443

(9) Heptachlor Epoxide #2 (B)

5.32min 21.748PPB

response 340888045

(+) = Expected Retention Time

1G122260.D 1PST3951.M Tue Apr 19 12:34:21 2016 RPT1

9.3.1.3

9

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3966\1G122261.D\ECD1A.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\1G3966\1G122261.D\ECD2B.CH
Acq On : 19 Apr 2016 10:11 am Operator: brittanp
Sample : op93156-bsd Inst : GC1G
Misc : op93156,g1g3966,300,,,2,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 19 12:35 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Tue Apr 19 11:57:37 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #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-nitrob	1.16	1.53	68767571	903.5E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.16	1.53	68767571	903.5E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.16	1.53	68767571	903.5E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	40639894	446.2E6	30.914	31.382
Spiked Amount	40.000	Range	30 - 150	Recovery	=	77.28%	78.46%
24) SA	Decachlorobiphen	8.93	10.87	63983206	292.1E6	35.235	31.243
Spiked Amount	40.000			Recovery	=	88.09%	78.11%
	Target Compounds						
3) A	alpha-BHC	2.22	3.04	32473246	455.4E6	20.803	21.228
4) MA	gamma-BHC	2.50	3.47	32177385	406.9E6	21.600	21.108
5) MA	Heptachlor	2.98	4.05	35031238	355.6E6	21.893	20.519
6) B	beta-BHC	2.58	3.56	16051384	176.1E6	21.173	21.501
7) B	delta-BHC	2.76	3.95	28711043	376.2E6	21.889	21.252
8) MB	Aldrin	3.30	4.50	31521959	363.4E6	21.155	20.975
9) B	Heptachlor Epoxi	3.99	5.32	35080077	341.3E6	23.656	21.757
10) B	gamma-Chlordane	4.15	5.60	36444595	329.9E6	23.319	21.023
11) B	alpha-Chlordane	4.31	5.83	34519954	315.9E6	22.913	20.822
12) A	Endosulfan I	4.49	5.92	32775484	314.1E6	22.879	21.206
13) B	4,4'-DDE	4.43	6.10	30740266	322.3E6	22.334	20.635
14) MA	Dieldrin	4.80	6.36	33094692	352.8E6	22.818	21.270
15) MA	Endrin	5.11	6.86	32765547	323.1E6	24.151	22.454
16) A	4,4'-DDD	5.25	7.05	24952044	285.0E6	21.822	21.502
17) B	Endosulfan II	5.44	7.21	31147444	305.0E6	22.624	21.286
18) MA	4,4'-DDT	5.65	7.58	24847984	223.9E6	22.806	21.586
19) B	Endrin Aldehyde	6.06	7.79	29978762	239.4E6	25.699	21.550
20) B	Endosulfan Sulfa	6.73	8.26	29347252	265.9E6	23.458	22.049
21) A	Methoxychlor	6.44	8.83	15671396	112.2E6	21.357	20.389
23) B	Endrin Ketone	7.16	9.22	34634695	289.9E6	23.704	22.595

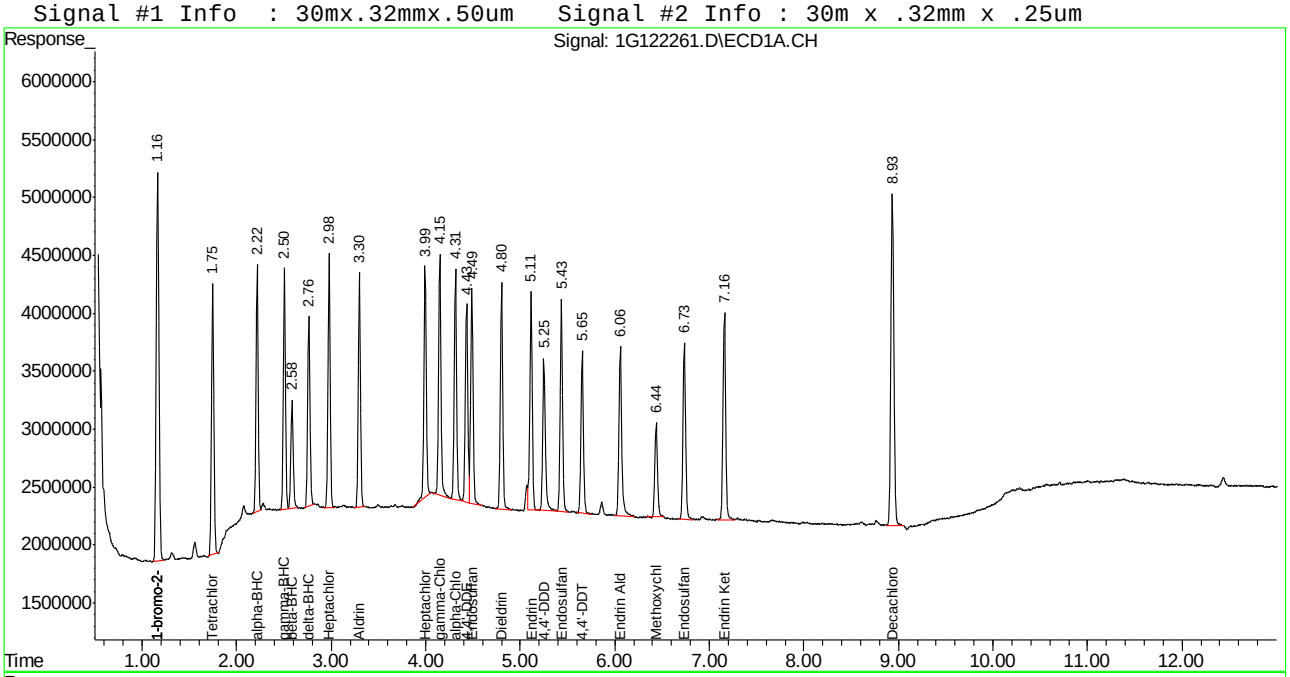
(f)=RT Delta > 1/2 Window (m)=manual int.
1G122261.D 1PST3951.M Tue Apr 19 12:35:25 2016 RPT1 Page 1

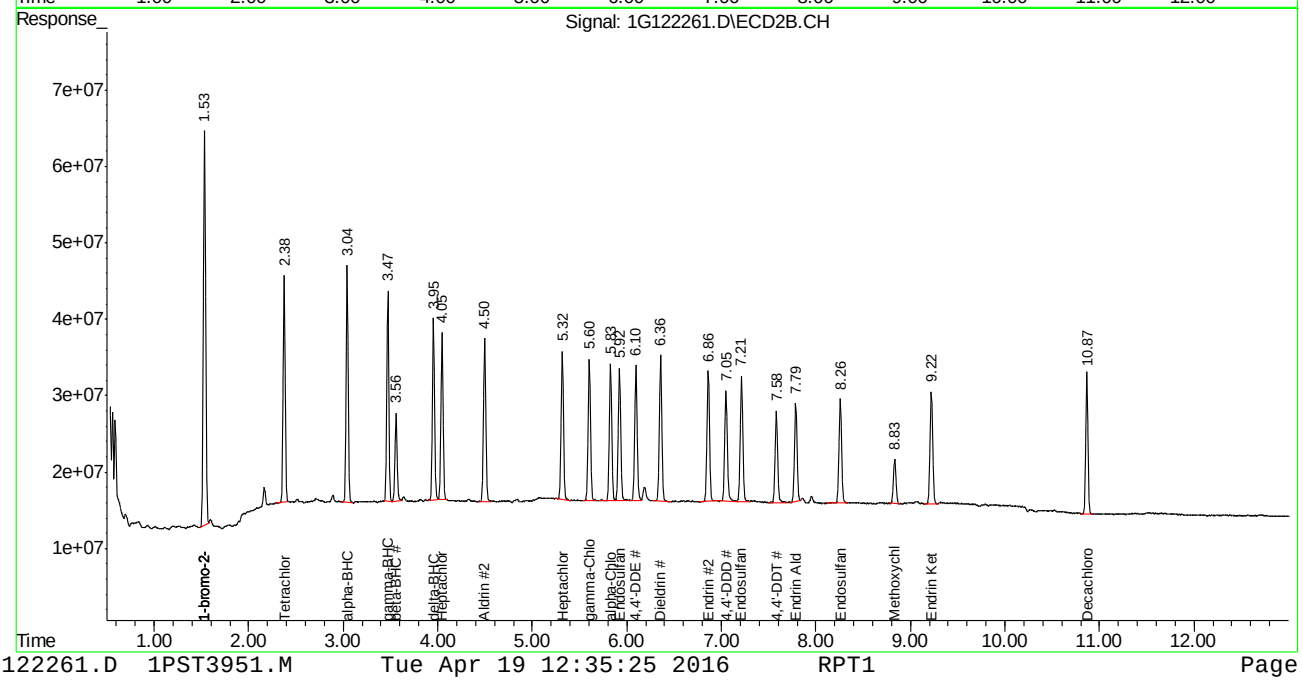
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3966\1G122261.D\ECD1A.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\1G3966\1G122261.D\ECD2B.CH
Acq On : 19 Apr 2016 10:11 am Operator: brittanp
Sample : op93156-bsd Inst : GC1G
Misc : op93156,g1g3966,300,,,2,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 19 12:35 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Tue Apr 19 11:57:37 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #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)
Jennifer Laidlaw
04/25/16 21:58

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34377.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 11:45 am
Operator : brittanp
Sample : op93322-bs1
Misc : op93322,g6g995,15.0,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 12:07:45 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...	1.303	1.575	129.2E6	46225976	50.000	50.000
25) I	1-bromo-2...	1.303	1.575	129.2E6	46225976	50.000	50.000
31) I	1-bromo-2...	1.303	1.575	129.2E6	46225976	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.980	2.472	87641314	30813361	37.007	36.895
Spiked Amount		40.000 Range	30 - 150	Recovery	=	92.52%	92.24%
24) SAB	Decachlor...	9.916f	11.761	84479328	22684878	41.024	36.126
Spiked Amount		40.000		Recovery	=	102.56%	90.31%
	Target Compounds						
3) A	alpha-BHC	2.495	3.176	62577927	22548629	20.497	20.723
4) MA	gamma-BHC	2.810	3.629	59238832	21315276	20.842	20.923
5) MA	Heptachlor	3.338	4.236	60432723	21211884	21.181	20.602
6) B	beta-BHC	2.890	3.721	29854928	10309072	21.398	20.769
7) B	delta-BHC	3.084	4.138	50593062	17477888	19.100	18.410
8) MB	Aldrin	3.690	4.713f	57718671	20434524	21.904	21.344
9) B	Heptachlo...	4.438	5.593f	49196450	18359408	19.941	20.575
10) B	gamma-Chl...	4.612	5.899f	52910983	19572358	21.312	22.437
11) B	alpha-Chl...	4.794	6.143f	52651142	18031136	21.368	20.806
12) A	Endosulfan I	4.977	6.241f	48317215	17315712	19.863	20.566
13) B	4,4'-DDE	4.925	6.441f	46409360	16607499	22.729	22.223
14) MA	Dieldrin	5.317f	6.713f	43432613	19200417	18.057m	22.326
15) MA	Endrin	5.661f	7.255f	56544488	16933063	25.915	21.671
16) A	4,4'-DDD	5.808f	7.472f	37702041	14243177	21.841	22.085
17) B	Endosulfa...	6.003f	7.638f	48516939	16073100	22.537	21.032
18) MA	4,4'-DDT	6.261f	8.053f	42484966	13220290	22.627	22.584
19) B	Endrin Al...	6.673f	8.266f	34523834	12324949	19.675	19.891
20) B	Endosulfa...	7.410f	8.780f	41794601	13984088	22.107	20.794
21) A	Methoxychlor	7.124f	9.429f	25893414	7507164	23.009	23.275m
23) B	Endrin Ke...	7.884f	9.830f	49080556	15844386	21.831	20.157

SemiQuant Compounds - Not Calibrated on this Instrument

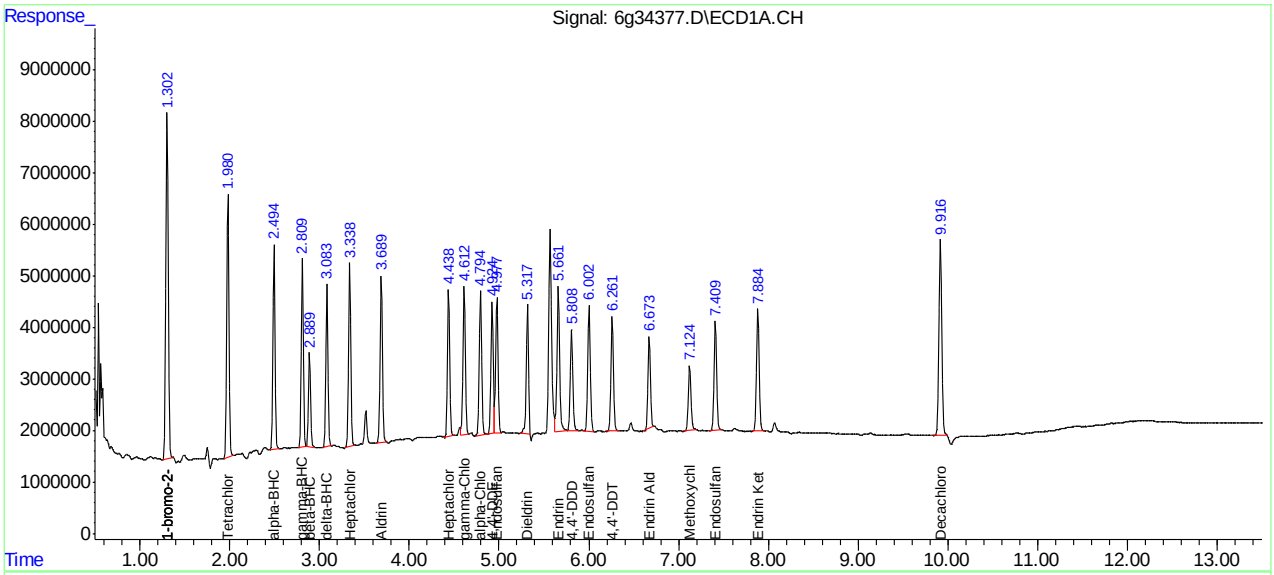
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

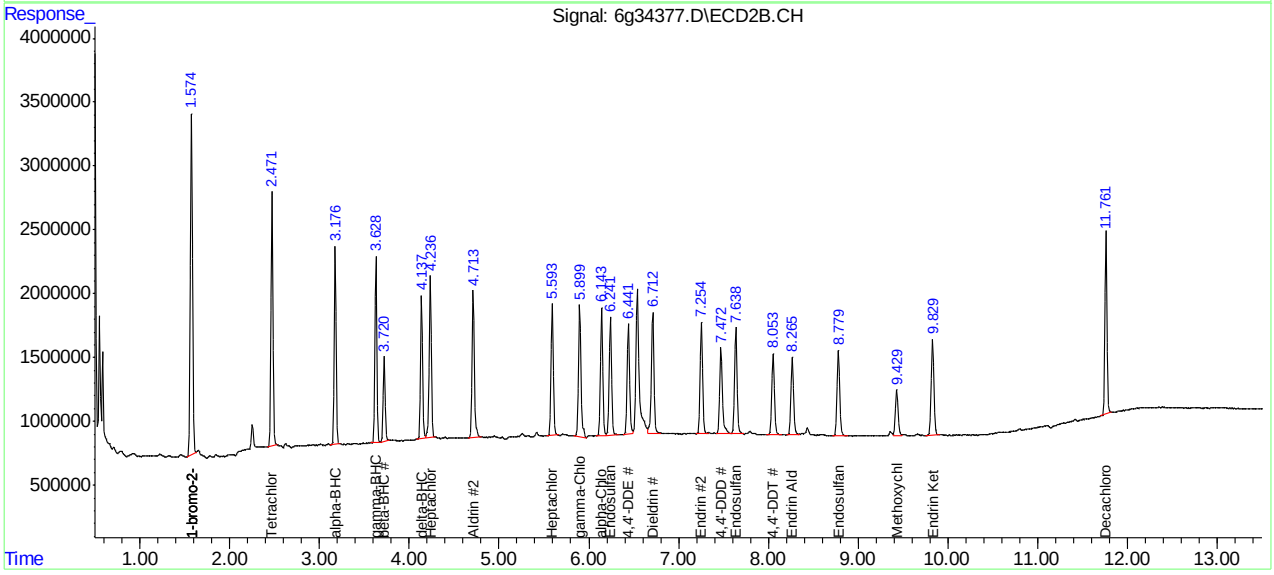
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34377.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 11:45 am
Operator : brittanp
Sample : op93322-bs1
Misc : op93322,g6g995,15.0,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 12:07:45 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:	OP93322-BS1	**Method:**	SW846 8081B
Lab FileID:	6G34377.D	**Analyst approved:**	04/25/16 12:08 Brittany Piercy
Injection Time:	04/25/16 11:45	**Supervisor approved:**	04/25/16 21:58 Jennifer Laidlaw

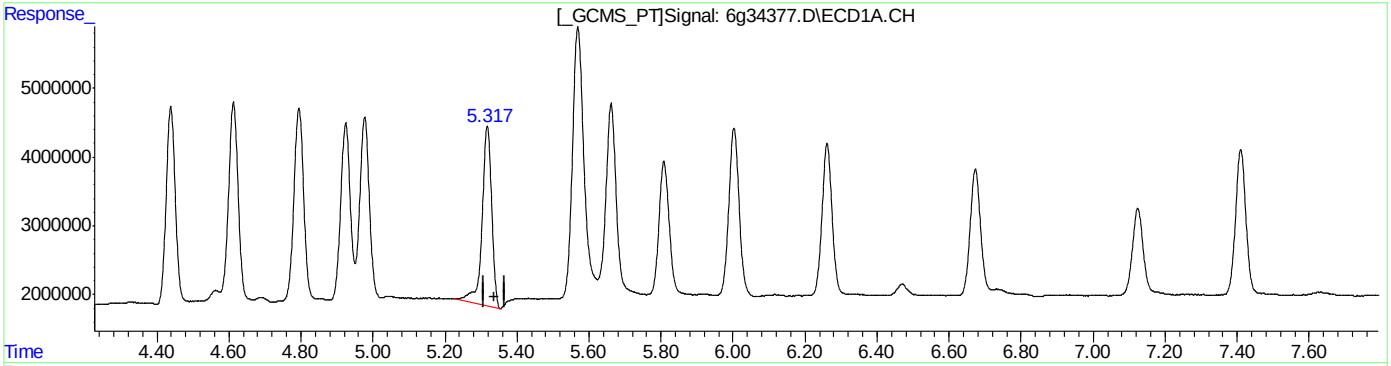
Parameter	CAS	Sig#	R.T. (min.)	Reason
Dieldrin	60-57-1	1	5.32	Poor instrument integration
Methoxychlor	72-43-5	2	9.43	Poor instrument integration

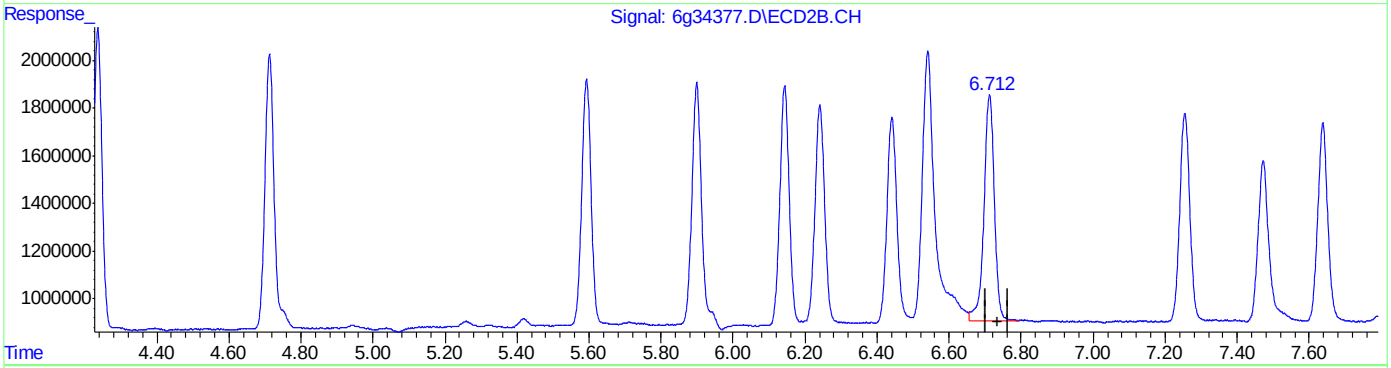
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34377.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 11:45 am
Operator : brittanp
Sample : op93322-bs1
Misc : op93322,g6g995,15.0,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 11:59:04 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

(14) Dieldrin (MA)
5.318min 20.117PPB
response 48387507

(14) Dieldrin #2 (MA)
6.713min 22.326PPB
response 19200417

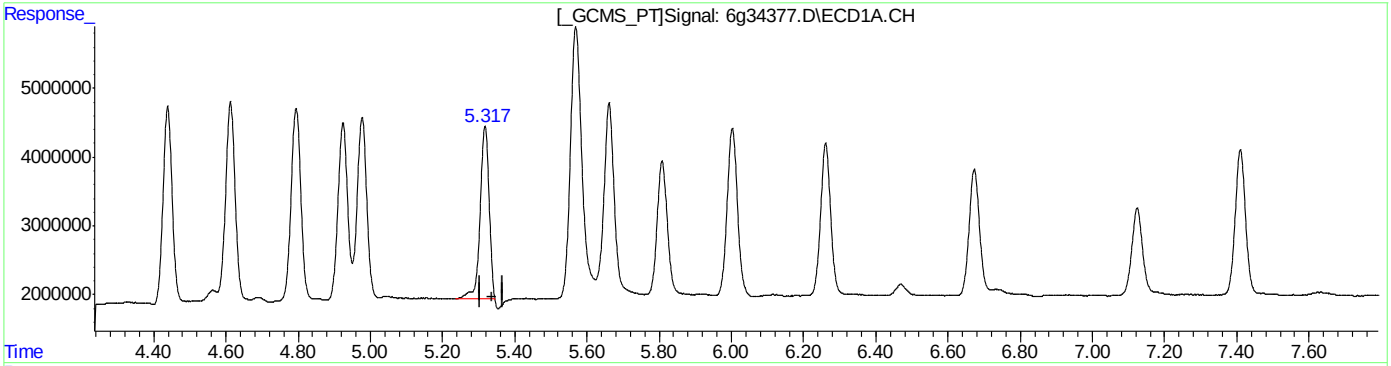
(+) = Expected Retention Time
6PST987.M Mon Apr 25 12:07:05 2016

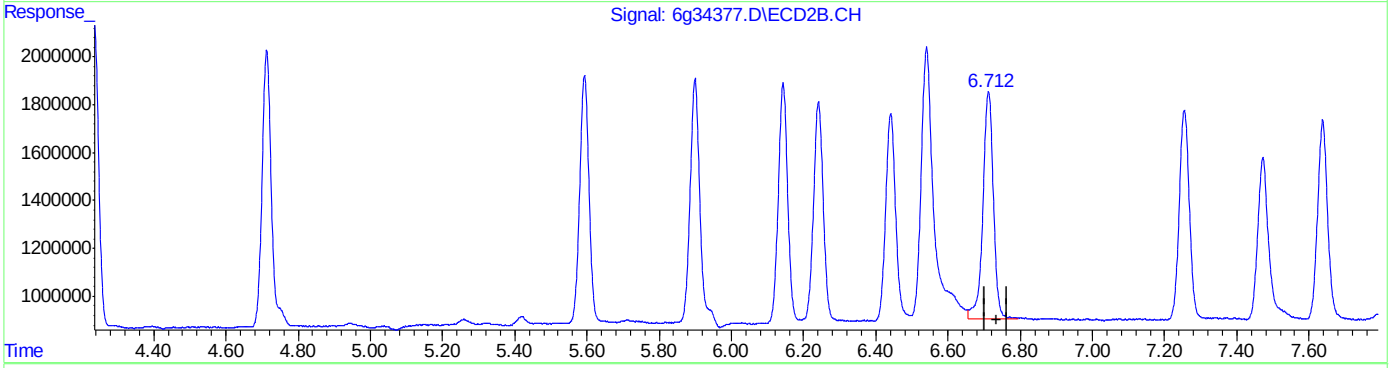
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34377.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 11:45 am
Operator : brittanp
Sample : op93322-bs1
Misc : op93322,g6g995,15.0,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 11:59:04 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

(14) Dieldrin (MA)
5.317min 18.057PPB m
response 43432613

(14) Dieldrin #2 (MA)
6.713min 22.326PPB
response 19200417

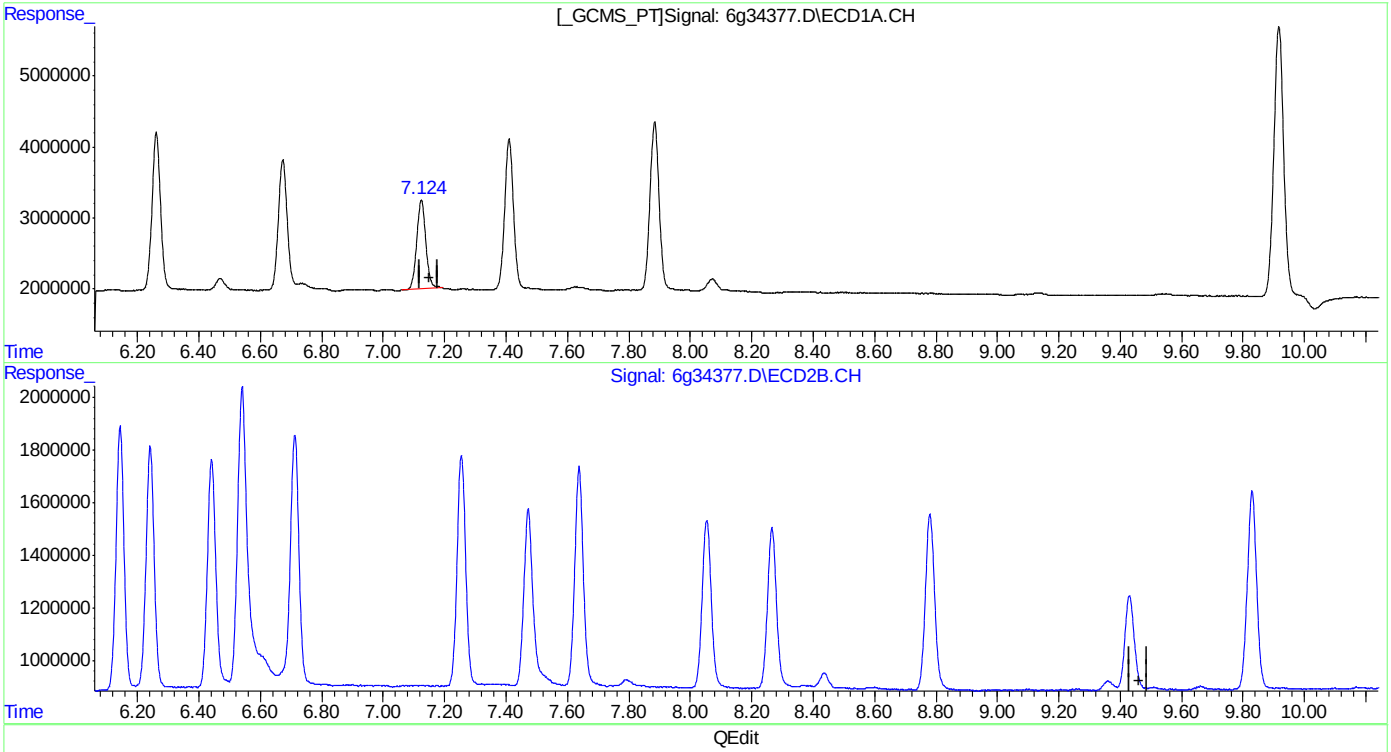
(+) = Expected Retention Time
6PST987.M Mon Apr 25 12:07:19 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34377.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 11:45 am
Operator : brittanp
Sample : op93322-bs1
Misc : op93322,g6g995,15.0,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 11:59:04 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

(21) Methoxychlor (A)
7.124min 23.009PPB
response 25893414

(21) Methoxychlor #2 (A)
0.000min 0.000PPB
response 0

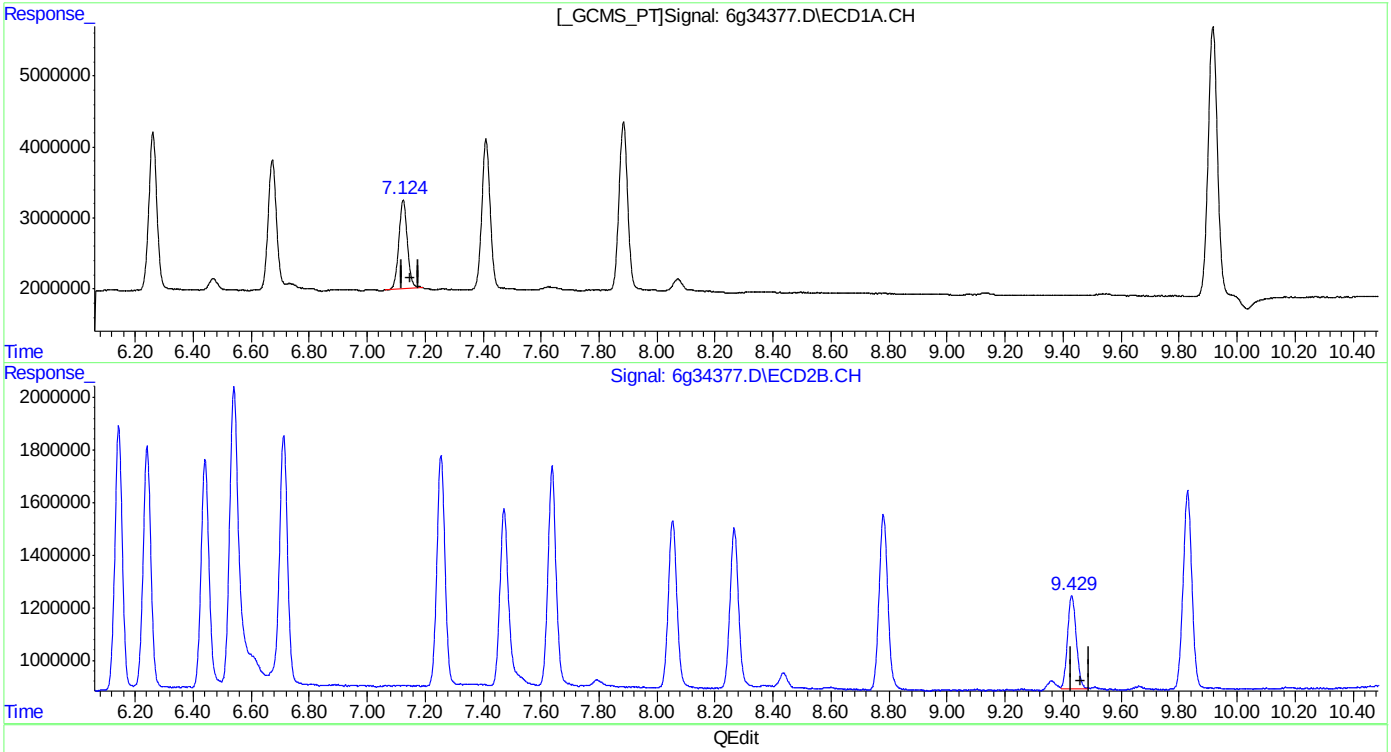
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34377.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 11:45 am
Operator : brittanp
Sample : op93322-bs1
Misc : op93322,g6g995,15.0,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 11:59:04 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



(21) Methoxychlor (A)
7.124min 23.009PPB
response 25893414

(21) Methoxychlor #2 (A)
9.429min 23.275PPB m
response 7507164

(+) = Expected Retention Time

Manual Integrations
APPROVED
(compounds with "m" flag)
Jennifer Laidlaw
04/25/16 21:58

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34381.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 12:34 pm
Operator : brittanp
Sample : op9332-ms
Misc : op93322,g6g995,16.0,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 13:15:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Fri Apr 22 09:12:46 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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...	1.303	1.575	127.3E6	45777358	50.000	50.000
25) I	1-bromo-2...	1.303	1.575	127.3E6	45777358	50.000	50.000
31) I	1-bromo-2...	1.303	1.575	127.3E6	45777358	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.980	2.472	101.2E6	35633487	43.342	43.085
	Spiked Amount 40.000 Range 30 - 150 Recovery = 108.36% 107.71%						
24)	SAB Decachlor...	9.915	11.762	89081376	26125695	43.889	42.013
	Spiked Amount 40.000 Recovery = 109.72% 105.03%						
	Target Compounds						
3) A	alpha-BHC	2.495	3.176	73863348	26492725	24.546	24.587
4) MA	gamma-BHC	2.810	3.628	70669311	25102782	25.226	24.882
5) MA	Heptachlor	3.337	4.236	72132518	23866234	25.650	23.407
6) B	beta-BHC	2.890	3.721	35233819	12153900	25.622	24.726
7) B	delta-BHC	3.084	4.138	60371002	21103484	23.123	22.446
8) MB	Aldrin	3.690	4.712	65242774	23339404	25.120	24.617
9) B	Heptachlo...	4.439	5.593	58292531	21492241	23.972	24.322
10) B	gamma-Chl...	4.612	5.898	61309816	21197859	25.054	24.539m
11) B	alpha-Chl...	4.794	6.143	62311229	20867875	25.656	24.315
12) A	Endosulfan I	4.977	6.241	57106925	19971497	23.818	23.953
13) B	4,4'-DDE	4.923	6.441	53724743	18632800	26.695	25.178
14) MA	Dieldrin	5.320	6.712	58968768	21068460	24.874	24.739
15) MA	Endrin	5.662	7.256	59250241	19579379	27.551	25.303
16) A	4,4'-DDD	5.809	7.473	45730268	16355977	26.878	25.609
17) B	Endosulfa...	6.002	7.638	55256619	18491543	26.041	24.434
18) MA	4,4'-DDT	6.262	8.053	50160727	15586683	27.104	26.888
19) B	Endrin Al...	6.674	8.265	45903699	14949802	26.542	24.364
20) B	Endosulfa...	7.410	8.781	47916669	16145879	25.714m	24.243
21) A	Methoxychlor	7.124	9.431	30276078	8766692	27.295	27.446
23) B	Endrin Ke...	7.884	9.829	58741342	18519891	26.508	23.791

SemiQuant Compounds - Not Calibrated on this Instrument

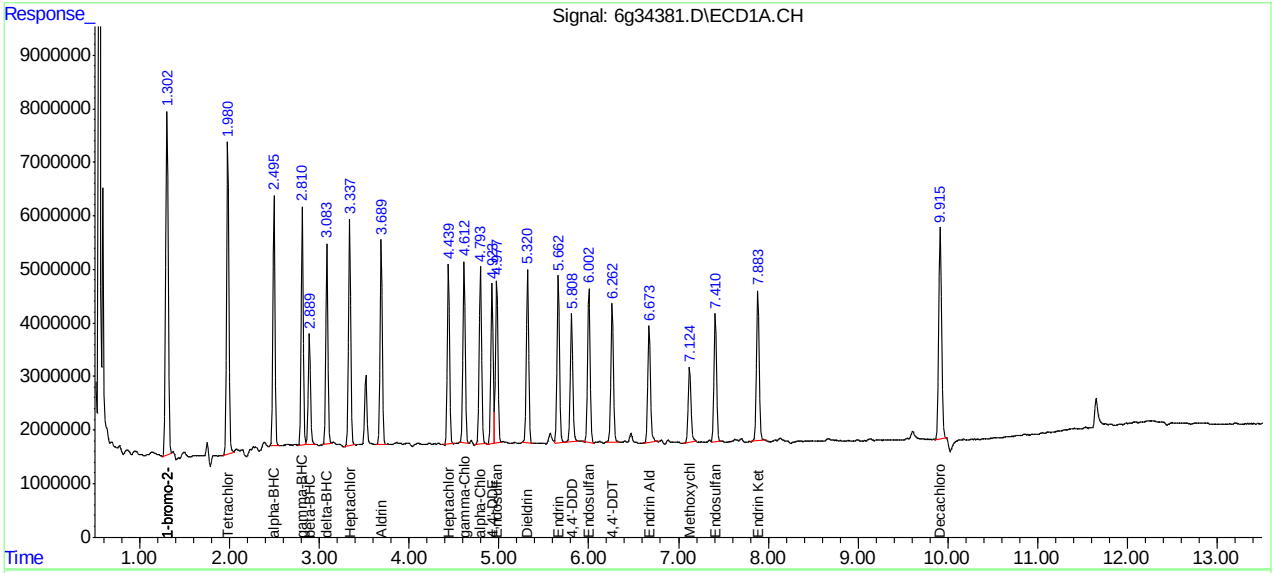
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

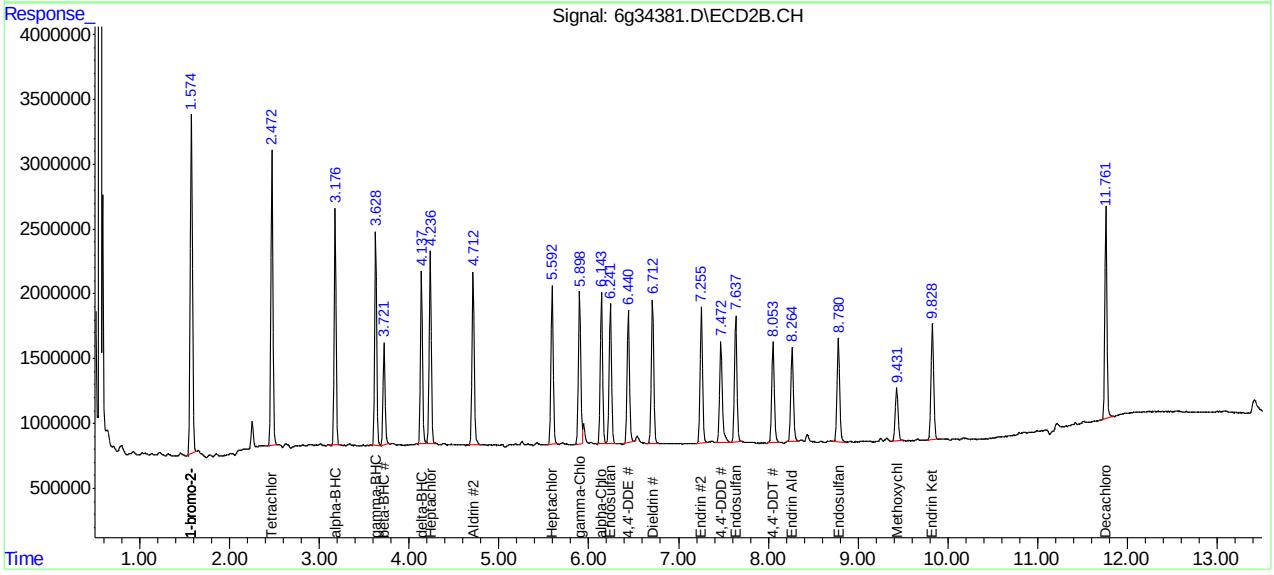
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34381.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 12:34 pm
Operator : brittanp
Sample : op9332-ms
Misc : op93322,g6g995,16.0,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 13:15:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Fri Apr 22 09:12:46 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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:	OP93322-MS	**Method:**	SW846 8081B
Lab FileID:	6G34381.D	**Analyst approved:**	04/25/16 15:01 Brittany Piercy
Injection Time:	04/25/16 12:34	**Supervisor approved:**	04/25/16 21:58 Jennifer Laidlaw

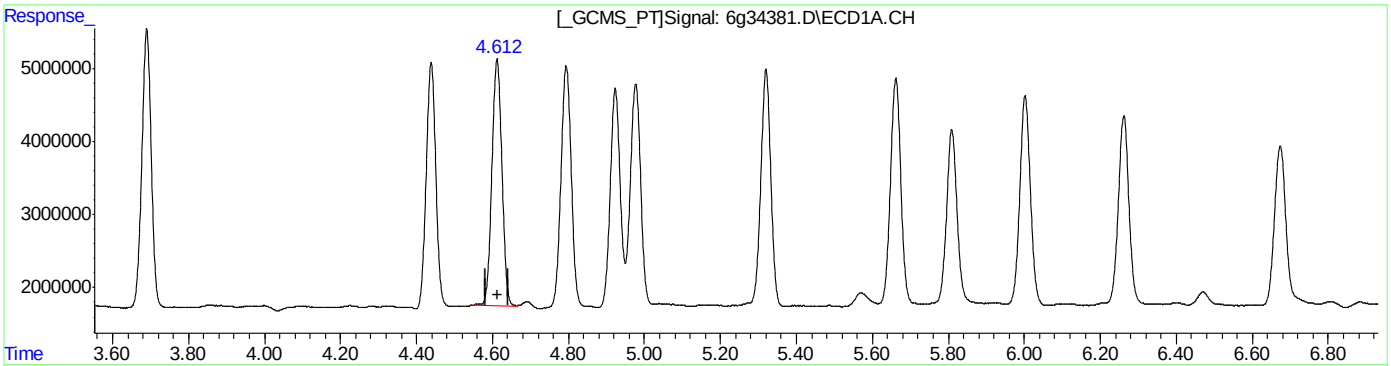
Parameter	CAS	Sig#	R.T. (min.)	Reason
gamma-Chlordane	5103-74-2	2	5.90	Poor instrument integration
Endosulfan sulfate	1031-07-8	1	7.41	Poor instrument integration

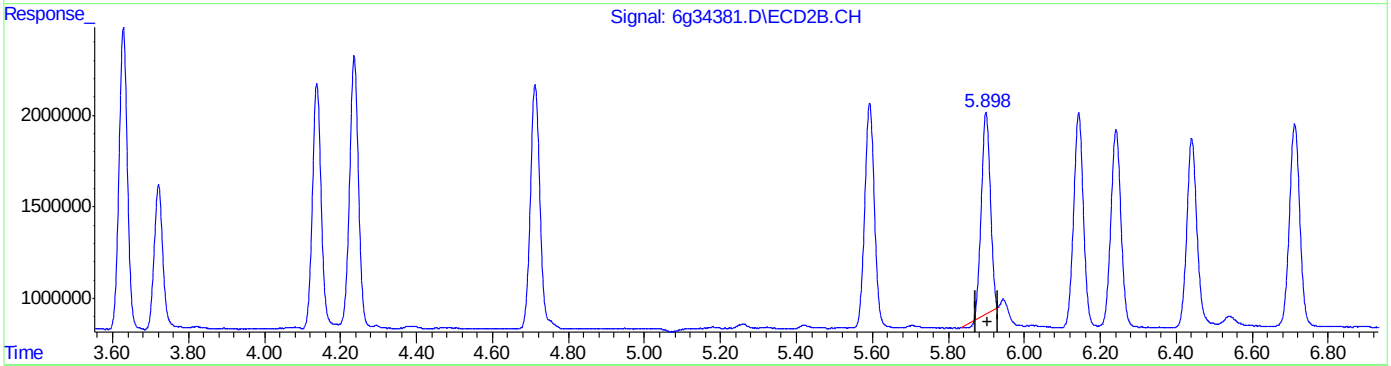
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34381.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 12:34 pm
Operator : brittanp
Sample : op9332-ms
Misc : op93322,g6g995,16.0,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 13:14:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Fri Apr 22 09:12:46 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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

(10) gamma-Chlordane (B)
4.612min 25.054PPB
response 61309816

(10) gamma-Chlordane #2 (B)
5.899min 20.910PPB
response 18062652

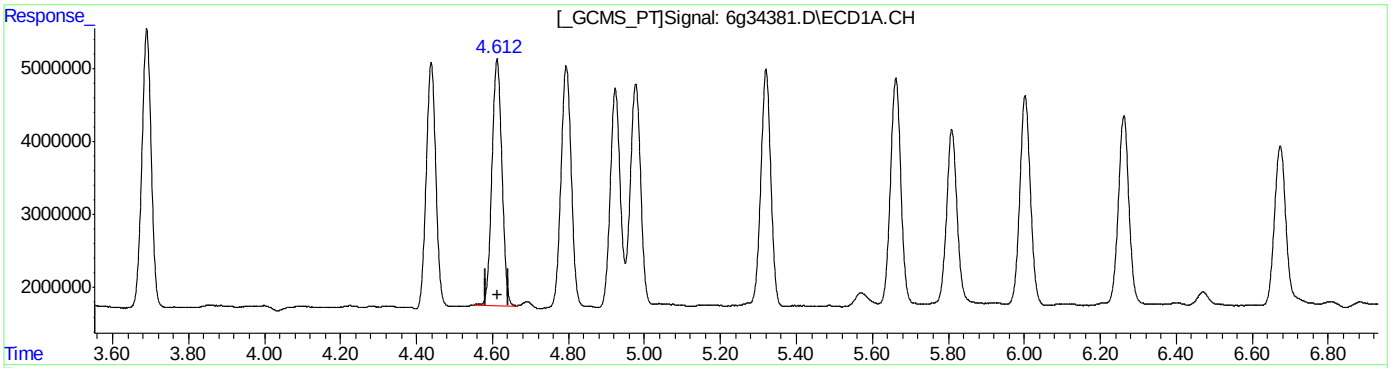
(+) = Expected Retention Time
6PST987.M Mon Apr 25 13:14:34 2016

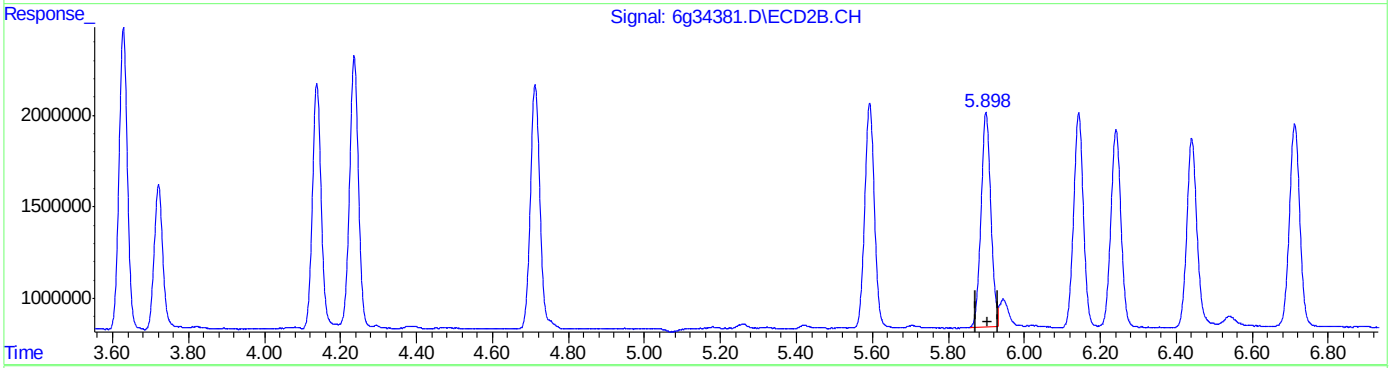
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34381.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 12:34 pm
Operator : brittanp
Sample : op9332-ms
Misc : op93322,g6g995,16.0,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 13:14:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Fri Apr 22 09:12:46 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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

(10) gamma-Chlordane (B)
4.612min 25.054PPB
response 61309816

(10) gamma-Chlordane #2 (B)
5.898min 24.539PPB m
response 21197859

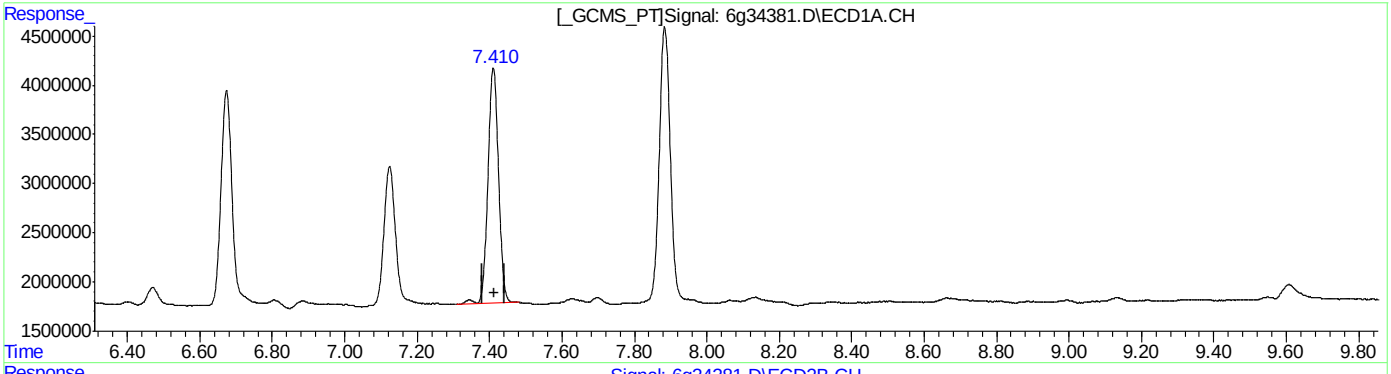
(+) = Expected Retention Time
6PST987.M Mon Apr 25 13:14:43 2016

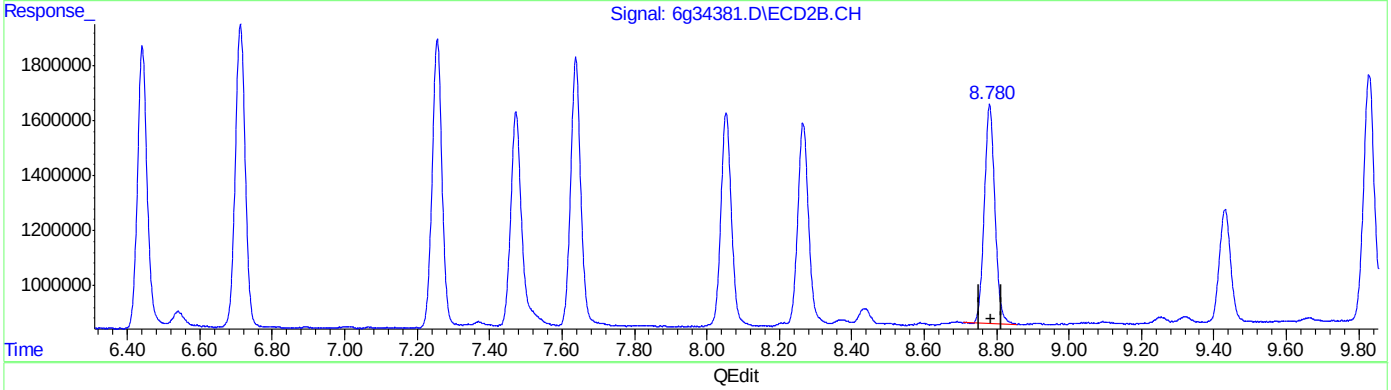
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34381.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 12:34 pm
Operator : brittanp
Sample : op9332-ms
Misc : op93322,g6g995,16.0,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 13:14:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Fri Apr 22 09:12:46 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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

(20) Endosulfan Sulfate (B)
7.410min 26.251PPB
response 48917898

(20) Endosulfan Sulfate #2 (B)
8.781min 24.243PPB
response 16145879

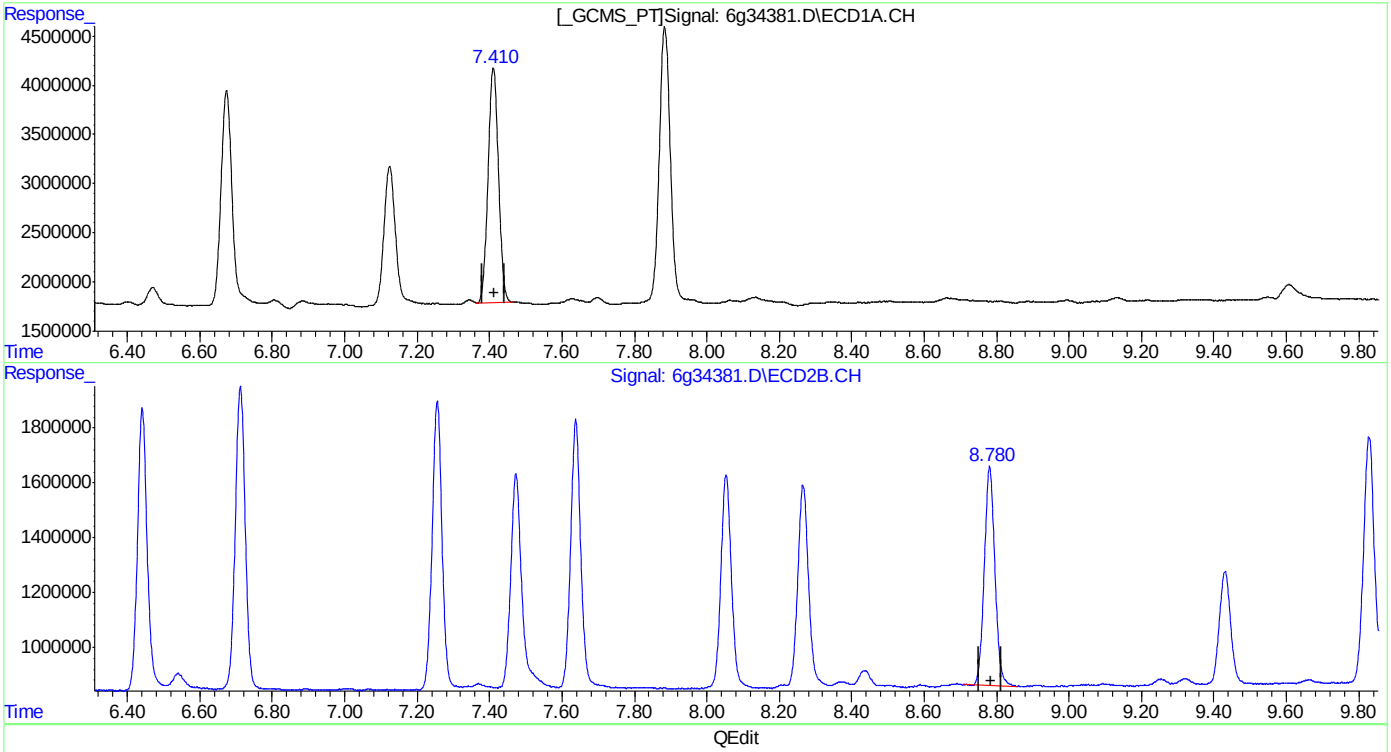
(+) = Expected Retention Time
6PST987.M Mon Apr 25 13:14:55 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34381.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 12:34 pm
Operator : brittanp
Sample : op9332-ms
Misc : op93322,g6g995,16.0,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 13:14:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Fri Apr 22 09:12:46 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(20) Endosulfan Sulfate (B)
7.410min 25.714PPB m
response 47916669

(20) Endosulfan Sulfate #2 (B)
8.781min 24.243PPB
response 16145879

(+) = Expected Retention Time
6PST987.M Mon Apr 25 13:15:00 2016

Manual Integrations APPROVED (compounds with "m" flag)
Jennifer Laidlaw
04/25/16 21:58

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34382.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 12:51 pm
Operator : brittanp
Sample : op9332-msd
Misc : op93322,g6g995,15.7,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 13:16:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Fri Apr 22 09:12:46 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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...	1.303	1.575	135.9E6	48400218	50.000	50.000
25) I	1-bromo-2...	1.303	1.575	135.9E6	48400218	50.000	50.000
31) I	1-bromo-2...	1.303	1.575	135.9E6	48400218	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.981	2.472	85815066	30063171	34.450	34.380
	Spiked Amount 40.000	Range	30 - 150	Recovery	=	86.13%	85.95%
24)	SAB Decachlor...	9.916	11.762	77672989	22861527	35.860	34.772
	Spiked Amount 40.000			Recovery	=	89.65%	86.93%
	Target Compounds						
3) A	alpha-BHC	2.494	3.176	62674849	22289239	19.517	19.565
4) MA	gamma-BHC	2.810	3.628	59628080	21267615	19.945	19.938
5) MA	Heptachlor	3.337	4.236	60262552	19926260	20.080	18.484
6) B	beta-BHC	2.889	3.721	30339794	10499520	20.674	20.203
7) B	delta-BHC	3.083	4.138	51680715	17668115	18.549	17.774
8) MB	Aldrin	3.689	4.713	54693964	19818096	19.733	19.770
9) B	Heptachlo...	4.439	5.593	49286488	18498860	18.993	19.800
10) B	gamma-Chl...	4.612	5.899	52633990	18270916	20.155	20.004m
11) B	alpha-Chl...	4.794	6.143	53780231	17919583	20.750	19.749
12) A	Endosulfan I	4.978	6.242	48972236	17193292	19.140	19.504
13) B	4,4'-DDE	4.924	6.441	45995852	16001013	21.416	20.450
14) MA	Dieldrin	5.321	6.713	52968757	17874336	20.937	19.851
15) MA	Endrin	5.662	7.256	51119032	16789532	22.274	20.522
16) A	4,4'-DDD	5.809	7.474	39310776	13923675	21.651	20.620
17) B	Endosulfa...	6.003	7.638	47204327	15908471	20.847	19.881
18) MA	4,4'-DDT	6.262	8.055	43996908	13247896	22.277	21.615
19) B	Endrin Al...	6.674	8.267	37653894	12226858	20.402	18.846
20) B	Endosulfa...	7.410	8.781	41445872	14030771	20.842	19.926
21) A	Methoxychlor	7.125	9.431	25535062	7448301	21.572	22.055
23) B	Endrin Ke...	7.885	9.830	50981239	16011441	21.559	19.454

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

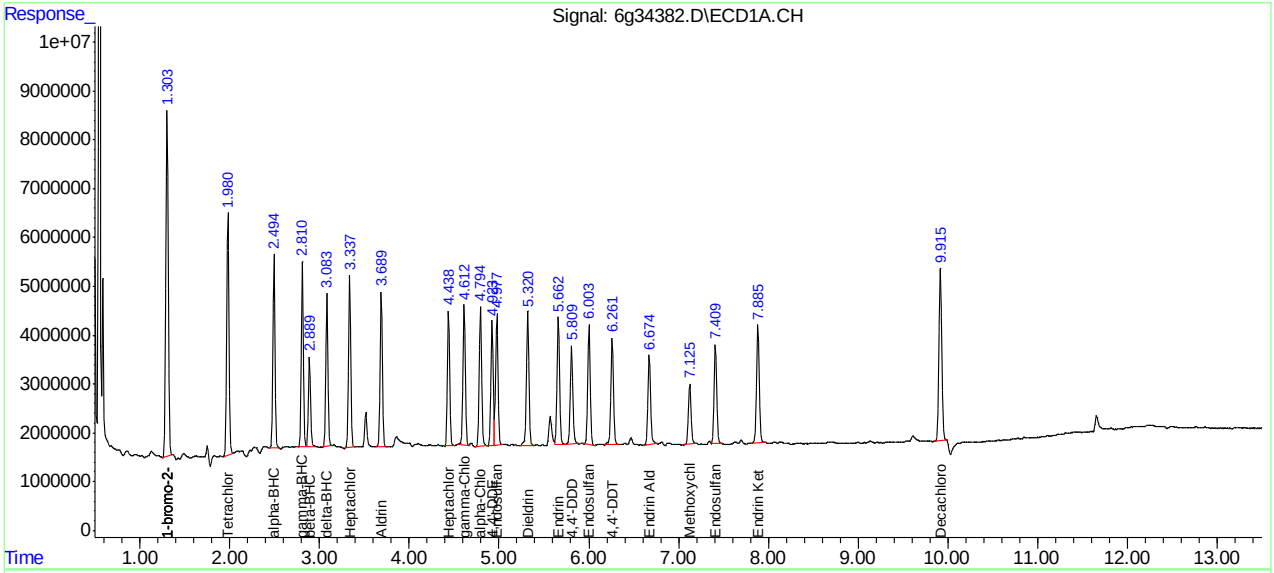
SGS ACCUTEST JC18516

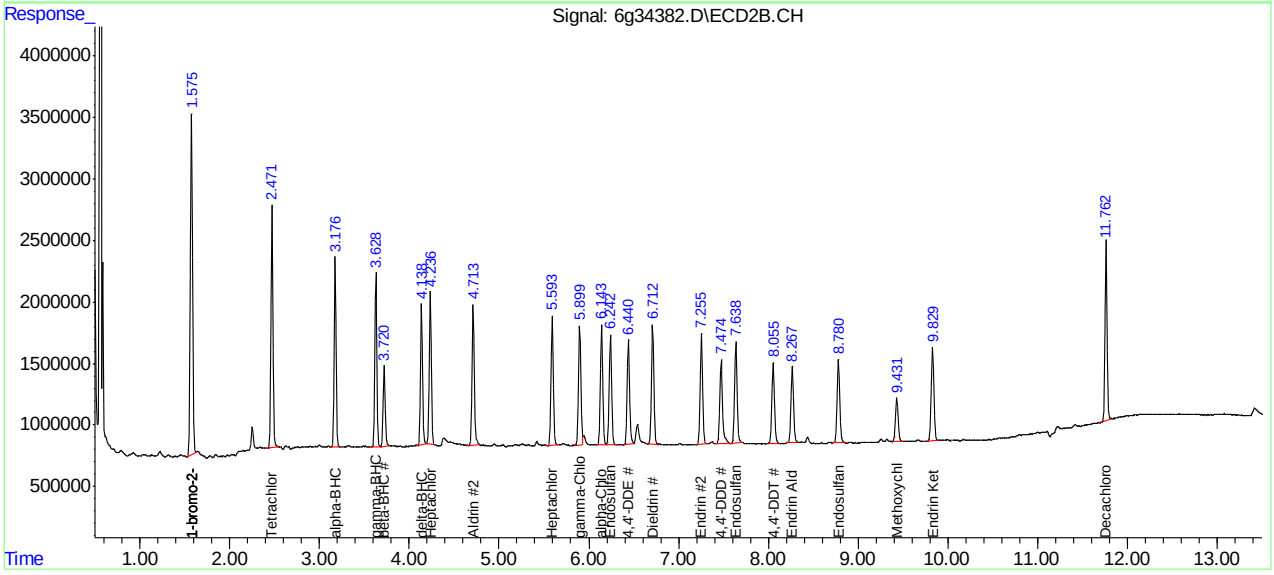
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34382.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 12:51 pm
Operator : brittanp
Sample : op9332-msd
Misc : op93322,g6g995,15.7,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 13:16:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Fri Apr 22 09:12:46 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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 JC18516

Manual Integration Approval Summary

Sample Number:	OP93322-MSD	**Method:**	SW846 8081B
Lab FileID:	6G34382.D	**Analyst approved:**	04/25/16 15:01 Brittany Piercy
Injection Time:	04/25/16 12:51	**Supervisor approved:**	04/25/16 21:58 Jennifer Laidlaw

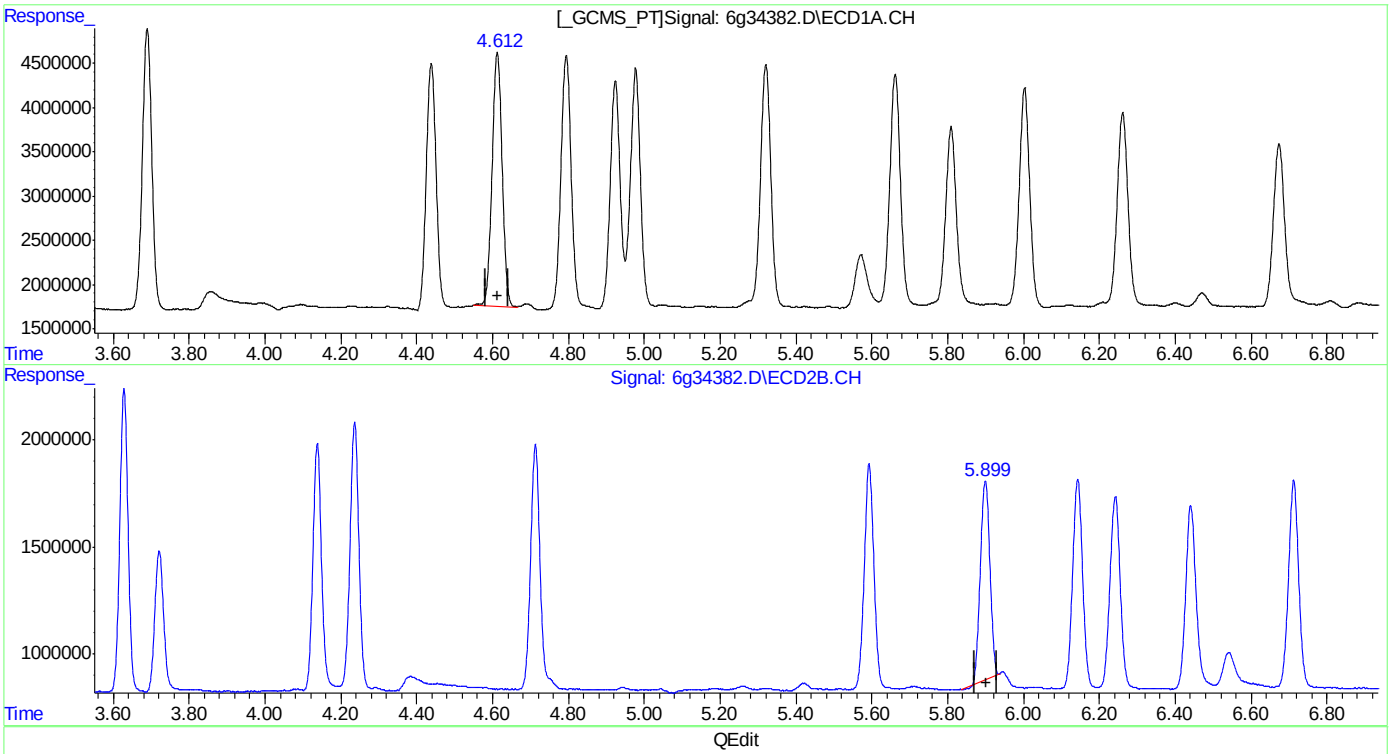
Parameter	CAS	Sig#	R.T. (min.)	Reason
gamma-Chlordane	5103-74-2	2	5.90	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34382.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 12:51 pm
Operator : brittanp
Sample : op9332-msd
Misc : op93322,g6g995,15.7,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 13:15:41 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Fri Apr 22 09:12:46 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(10) gamma-Chlordane (B)
4.612min 20.155PPB
response 52633990

(10) gamma-Chlordane #2 (B)
5.900min 17.827PPB
response 16282163

(+) = Expected Retention Time

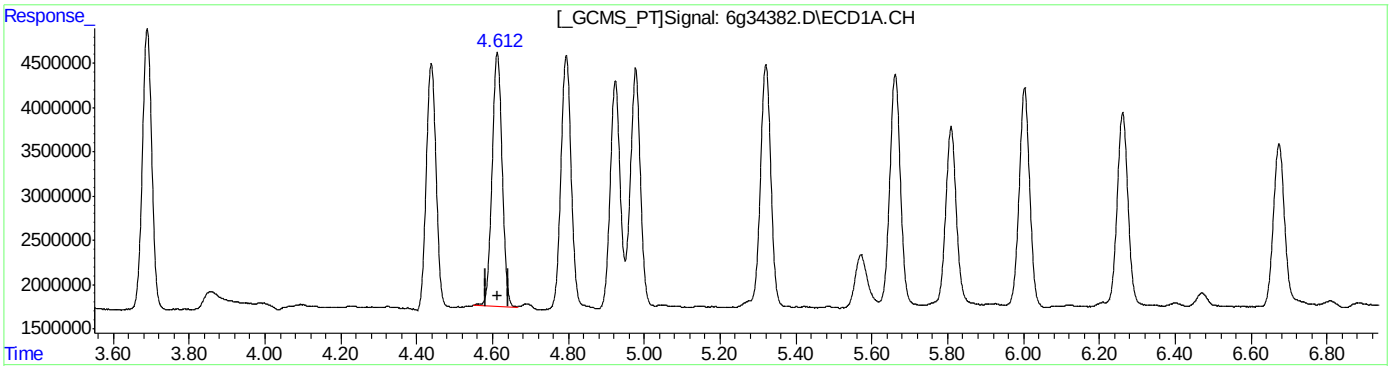
SGS ACCUTEST JC18516

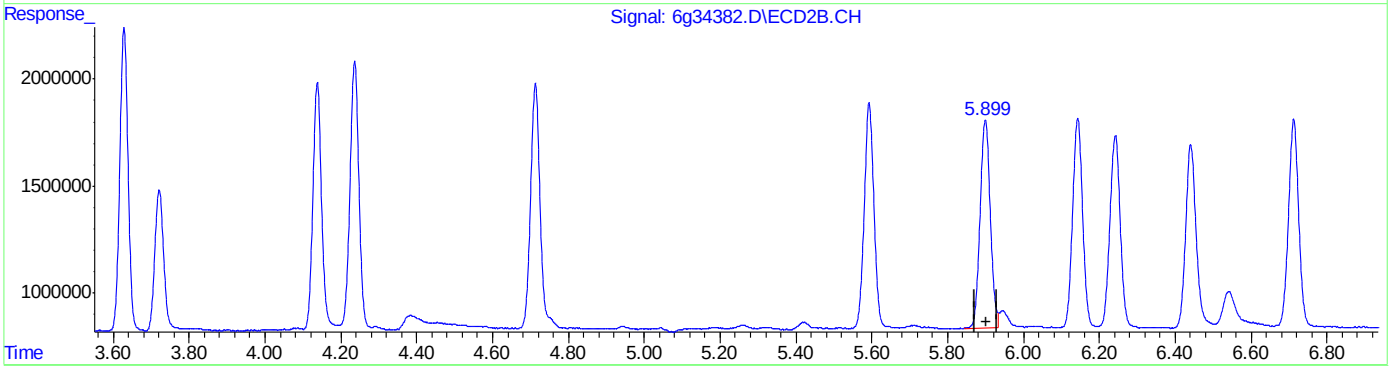
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34382.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 12:51 pm
Operator : brittanp
Sample : op9332-msd
Misc : op93322,g6g995,15.7,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 13:15:41 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Fri Apr 22 09:12:46 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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

(10) gamma-Chlordane (B)
4.612min 20.155PPB
response 52633990

(10) gamma-Chlordane #2 (B)
5.899min 20.004PPB m
response 18270916

(+) = Expected Retention Time
6PST987.M Mon Apr 25 13:15:58 2016

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/04/16 12:58

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121638.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121638.D\ECD2B.CH
Acq On : 01 Apr 2016 10:37 am Operator: dharas
Sample : ddt Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:25 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 15:59:16 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #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-nitrob	1.17	1.54	65968593	847.6E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.17	1.54	65968593	847.6E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.17	1.54	65968593	847.6E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.76	2.38	24690596	281.2E6	16.374	17.286
Spiked Amount	40.000	Range	30 - 150	Recovery	=	40.94%	43.22%
24) SA	Decachlorobiphen	8.96	10.88	35680104	189.8E6	19.712	20.111m
Spiked Amount	40.000			Recovery	=	49.28%	50.28%
	Target Compounds						
13) B	4,4'-DDE	4.45	6.11	1293527	17237832	0.940	1.033
15) MA	Endrin	5.14	6.88	70219660	687.5E6	49.945	42.035
16) A	4,4'-DDD	5.27	7.06	2081667	26843936	1.766	1.858
18) MA	4,4'-DDT	5.68	7.60	138.6E6	1157.8E6	123.056	113.957m
19) B	Endrin Aldehyde	6.08	7.80	1241326	14533971	0.977	1.218m
23) B	Endrin Ketone	7.18	9.24	3577865	33672314	2.267	2.402m

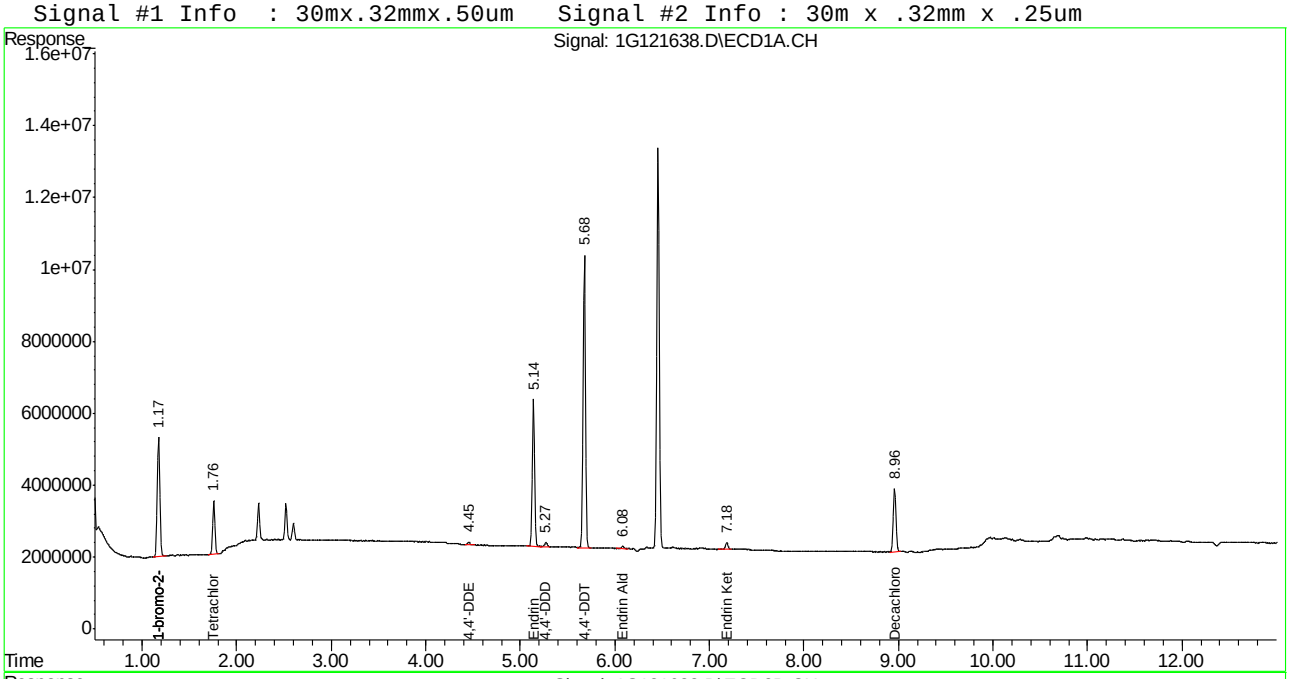
(f)=RT Delta > 1/2 Window (m)=manual int.
1G121638.D 1PST3951.M Fri Apr 01 16:25:07 2016 RPT1 Page 1

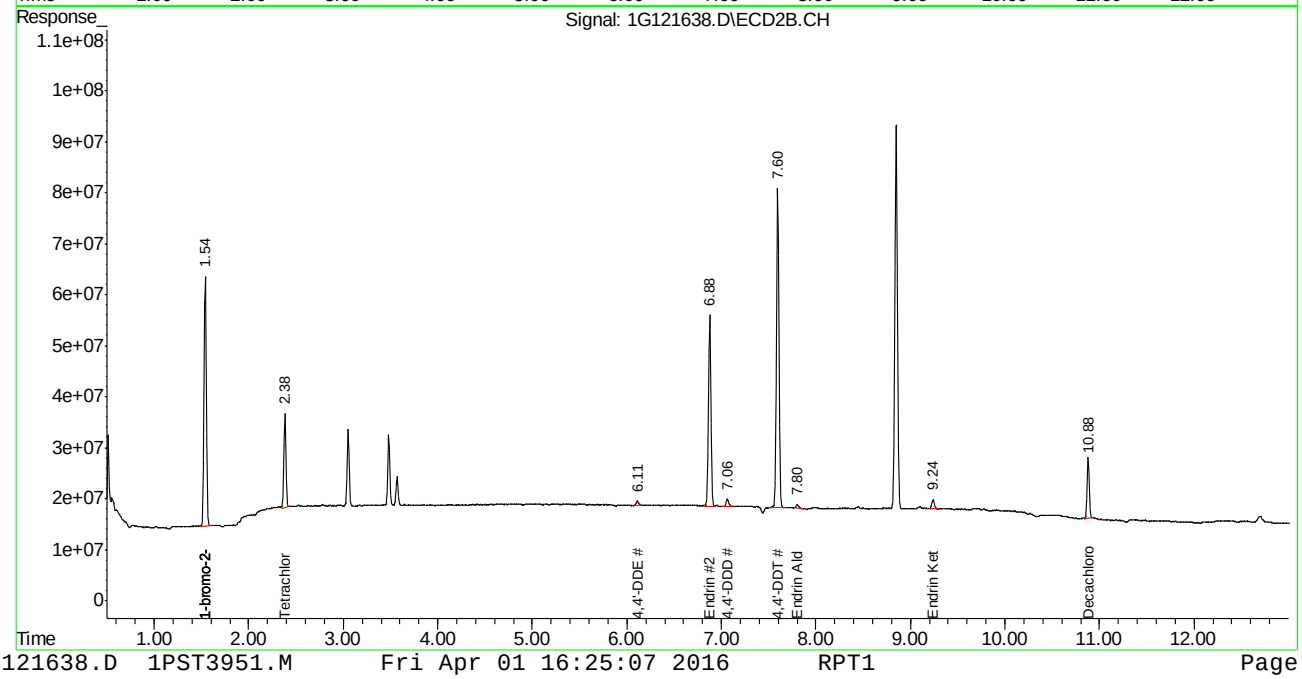
Quantitation Report (QT Reviewed)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121638.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121638.D\ECD2B.CH
Acq On    : 01 Apr 2016  10:37 am                    Operator: dharas
Sample    : ddt                                      Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:25 2016  Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj.     : 1ul/column
Signal #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

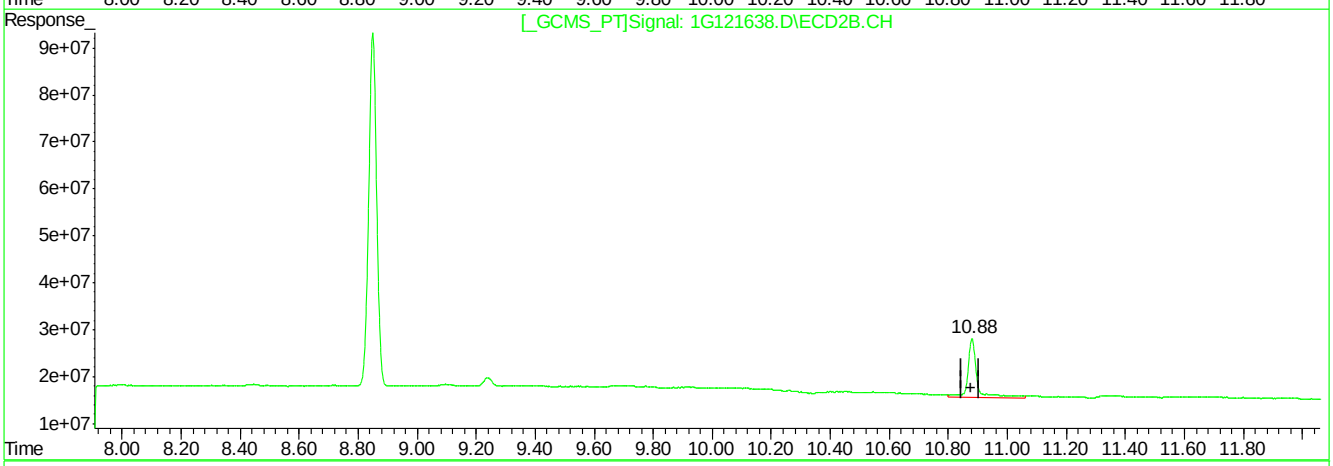
Sample Number:	G1G3951-DDT	**Method:**	SW846 8081B
Lab FileID:	1G121638.D	**Analyst approved:**	04/01/16 16:29 Joseph Ravino
Injection Time:	04/01/16 10:37	**Supervisor approved:**	04/04/16 12:58 Gwendolyn Burns

Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDT	50-29-3	2	7.60	Poorly defined baseline
Endrin aldehyde	7421-93-4	2	7.80	Poorly defined baseline
Endrin ketone	53494-70-5	2	9.24	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	2	10.88	Poorly defined baseline

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121638.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121638.D\ECD2B.CH
Acq On    : 01 Apr 2016  10:37 am                    Operator: dharas
Sample    : ddt                                      Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:23 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```



QEdit

(24) Decachlorobiphenyl (SA)

8.96min 19.712PPB

response 35680104

(24) Decachlorobiphenyl #2 (SA)

10.88min 28.256PPB

response 266630809

(+) = Expected Retention Time

1G121638.D 1PST3951.M Fri Apr 01 16:24:17 2016 RPT1

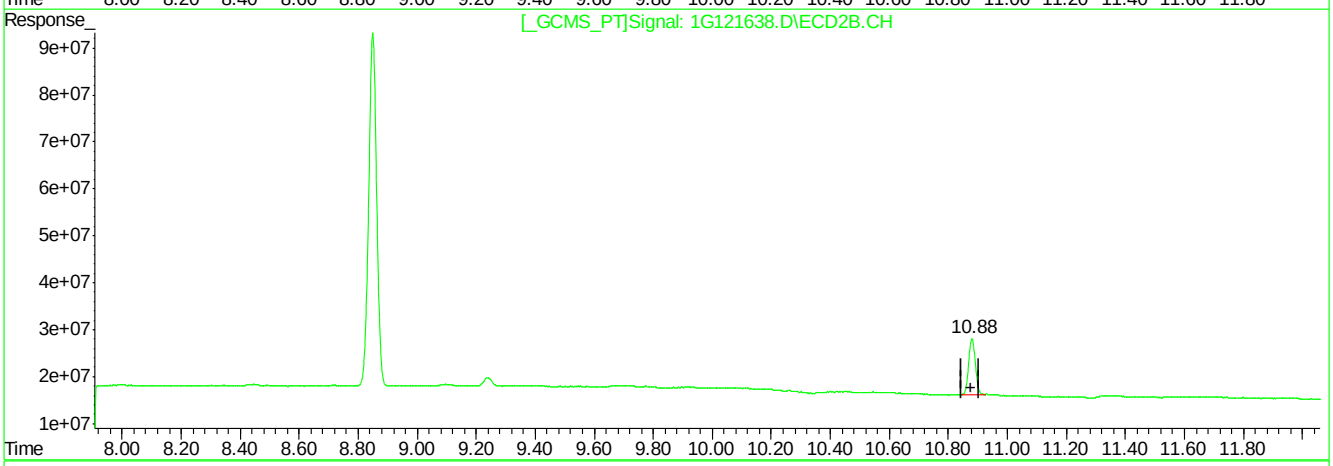
9.5.1.2

9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121638.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121638.D\ECD2B.CH
Acq On    : 01 Apr 2016  10:37 am                    Operator: dharas
Sample    : ddt                                      Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:23 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```



QEdit

(24) Decachlorobiphenyl (SA)

8.96min 19.712PPB

response 35680104

(24) Decachlorobiphenyl #2 (SA)

10.88min 20.111PPB m

response 189773025

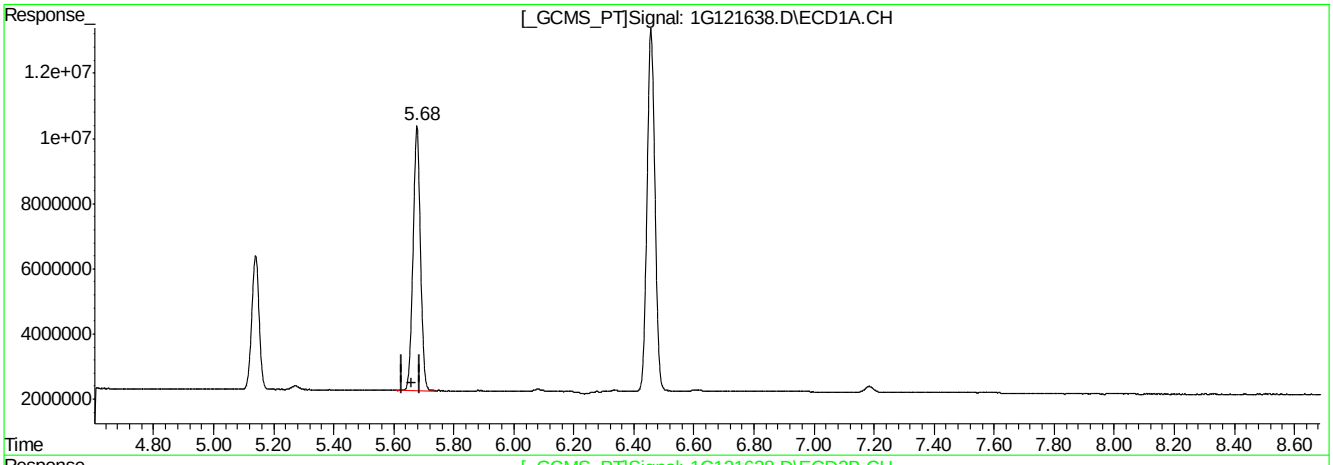
(+) = Expected Retention Time

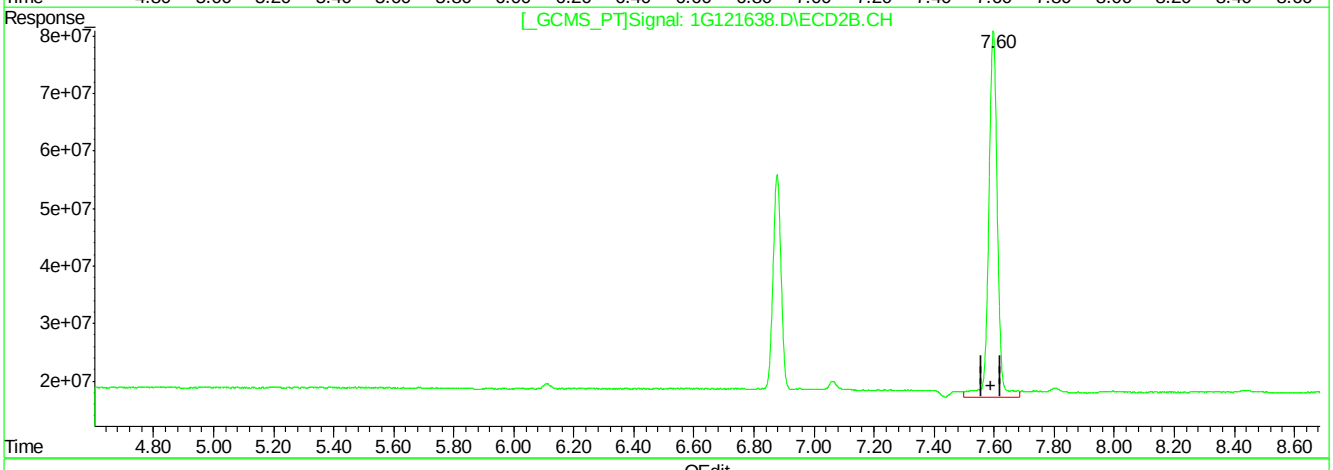
1G121638.D 1PST3951.M Fri Apr 01 16:24:22 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121638.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121638.D\ECD2B.CH
Acq On    : 01 Apr 2016  10:37 am                    Operator: dharas
Sample    : ddt                                      Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:23 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(18) 4,4'-DDT (MA)

5.68min 123.056PPB

response 138550612

(18) 4,4'-DDT #2 (MA)

7.60min 125.765PPB

response 1277788102

(+) = Expected Retention Time

1G121638.D 1PST3951.M Fri Apr 01 16:24:35 2016 RPT1

9.5.1.4

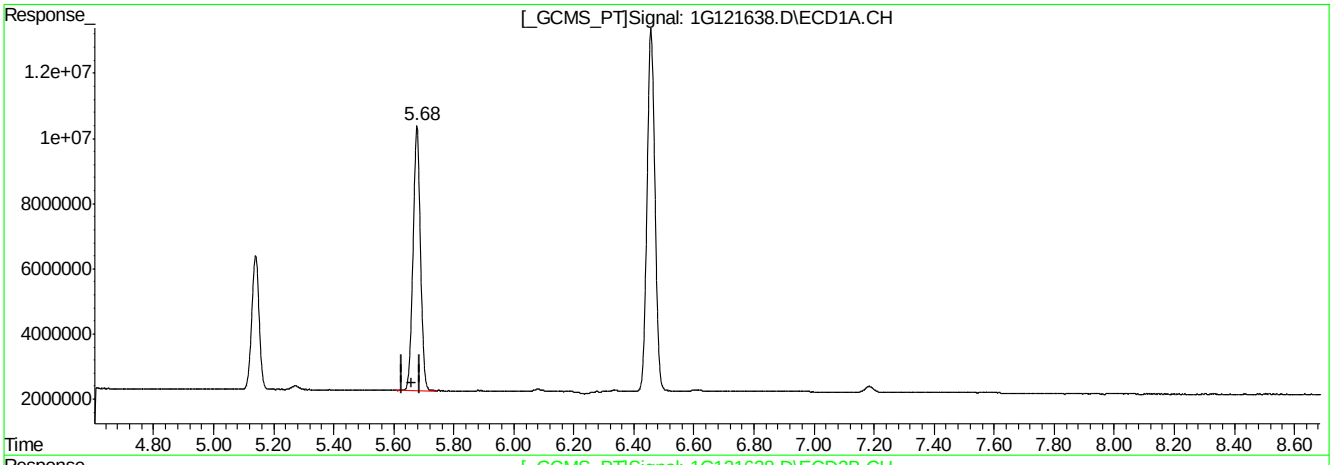
9

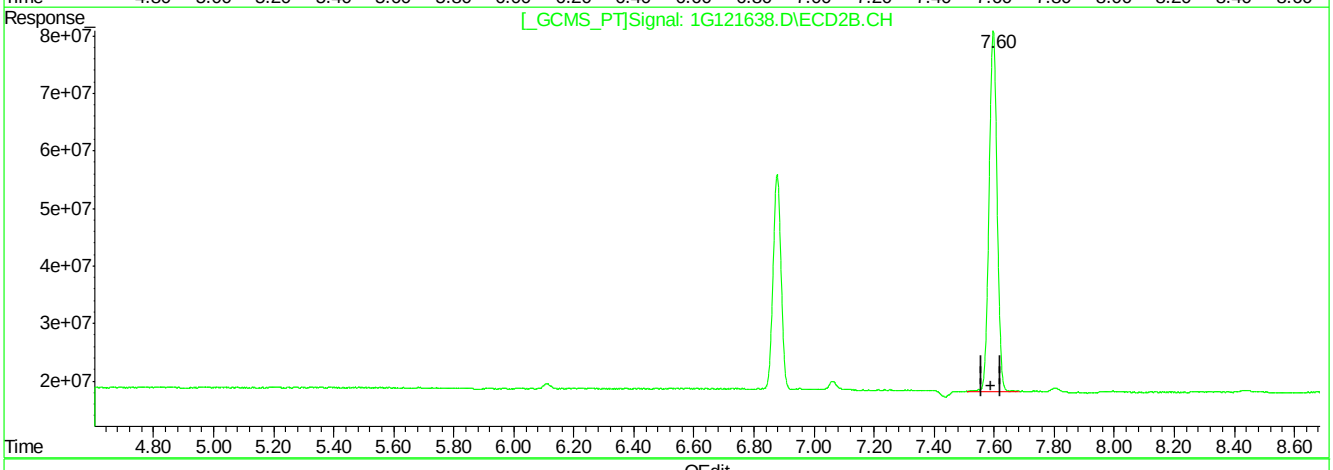
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121638.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121638.D\ECD2B.CH
Acq On    : 01 Apr 2016  10:37 am                    Operator: dharas
Sample    : ddt                                      Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:23 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(18) 4,4'-DDT (MA)

5.68min 123.056PPB

response 138550612

(18) 4,4'-DDT #2 (MA)

7.60min 113.957PPB m

response 1157819905

(+) = Expected Retention Time

1G121638.D 1PST3951.M Fri Apr 01 16:24:40 2016 RPT1

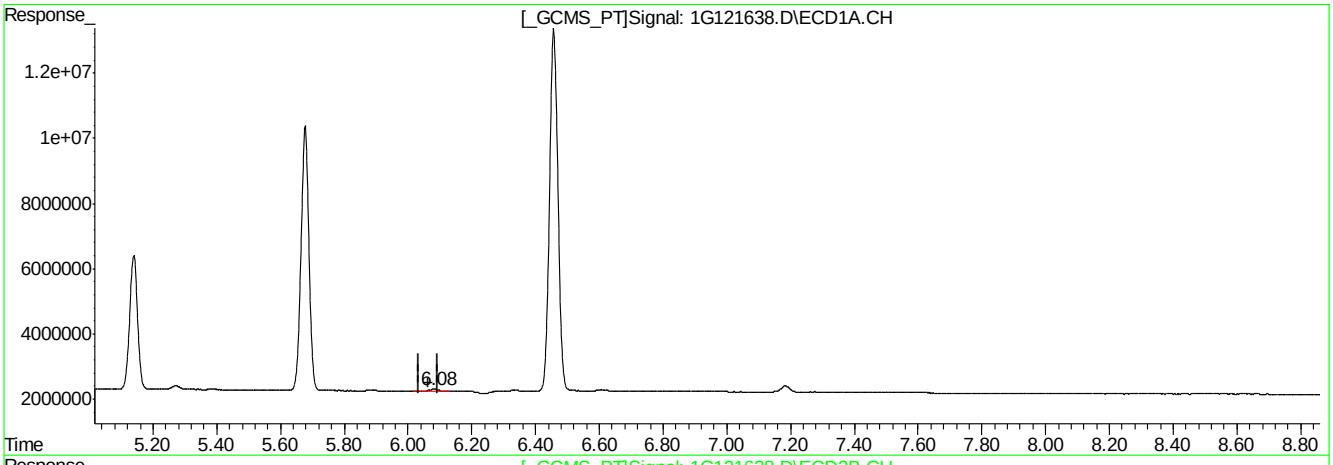
9.5.1.5

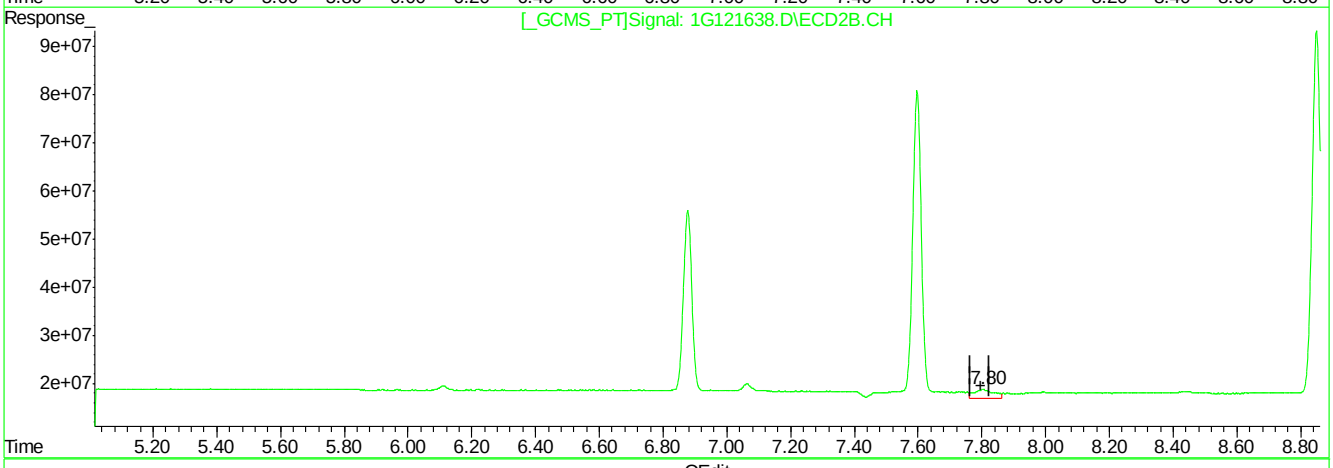
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121638.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121638.D\ECD2B.CH
Acq On    : 01 Apr 2016  10:37 am                    Operator: dharas
Sample    : ddt                                      Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:23 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(19) Endrin Aldehyde (B)

6.08min 0.977PPB

response 1241326

(19) Endrin Aldehyde #2 (B)

7.80min 6.526PPB

response 77854319

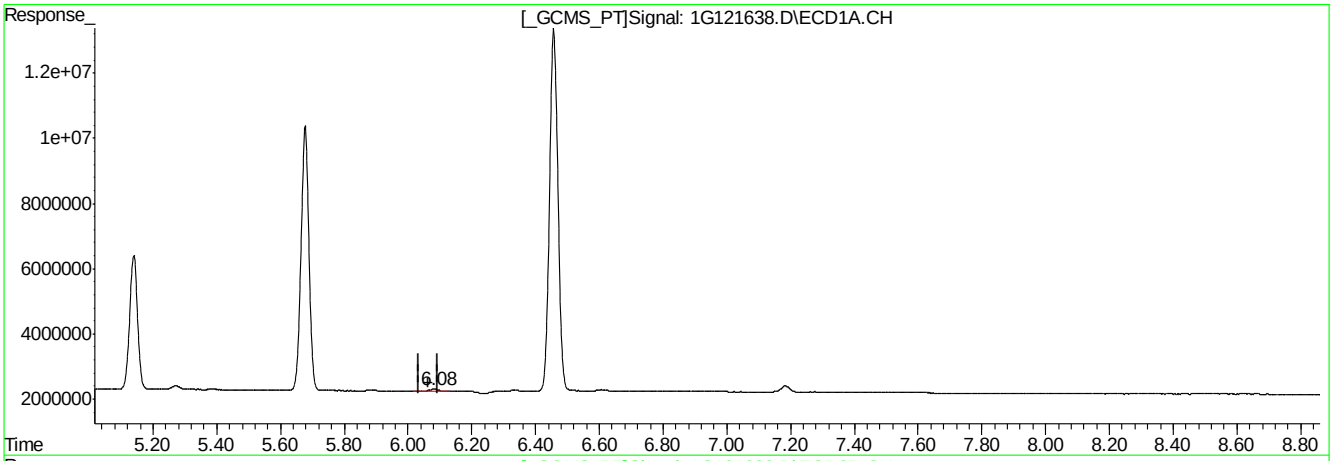
(+) = Expected Retention Time

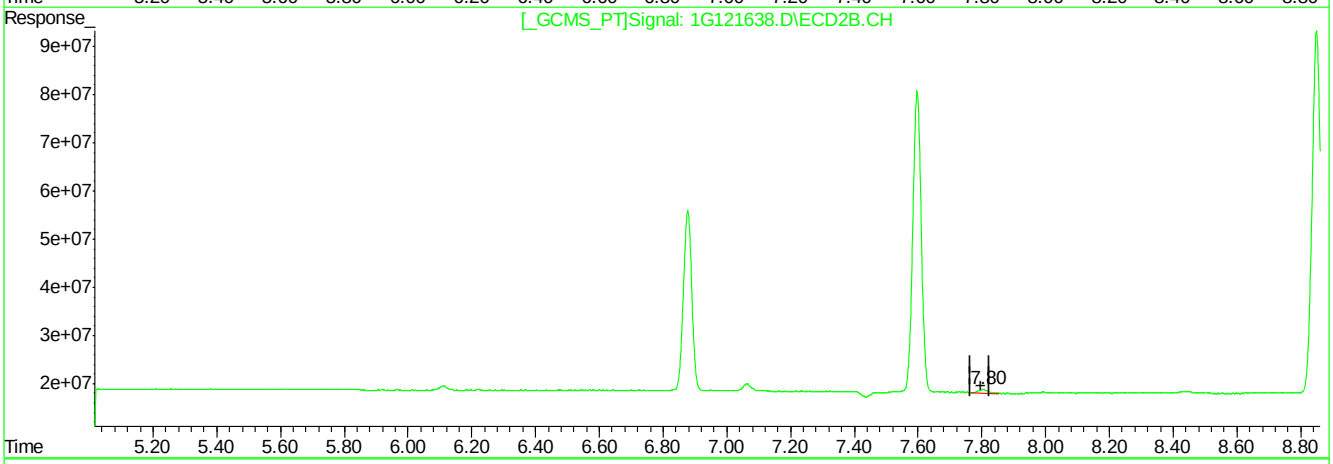
1G121638.D 1PST3951.M Fri Apr 01 16:24:43 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121638.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121638.D\ECD2B.CH
Acq On    : 01 Apr 2016  10:37 am                    Operator: dharas
Sample    : ddt                                      Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:23 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(19) Endrin Aldehyde (B)

6.08min 0.977PPB

response 1241326

(19) Endrin Aldehyde #2 (B)

7.80min 1.218PPB m

response 14533971

(+) = Expected Retention Time

1G121638.D 1PST3951.M Fri Apr 01 16:24:50 2016 RPT1

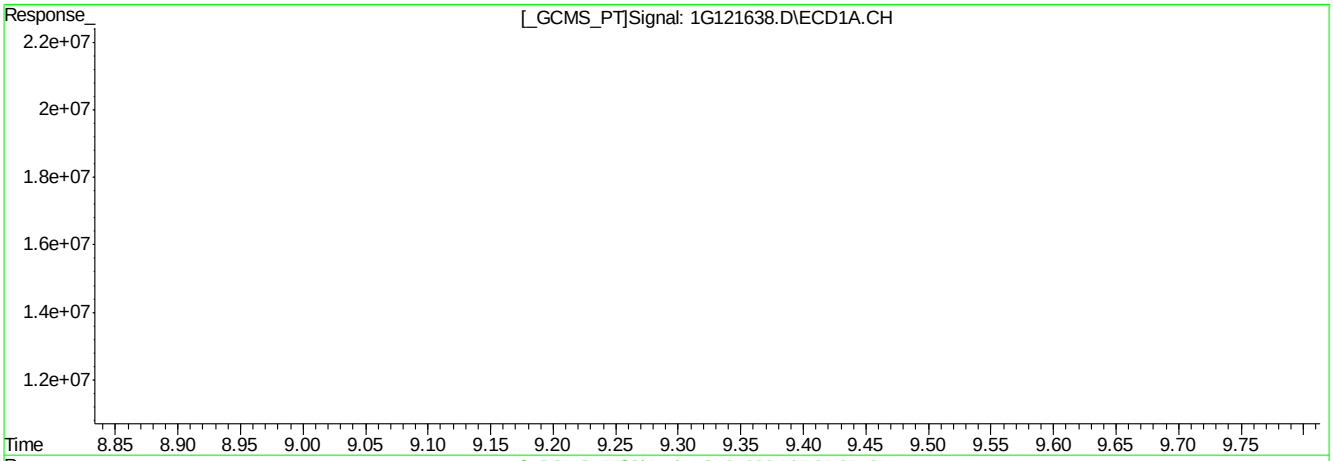
9.5.1.7

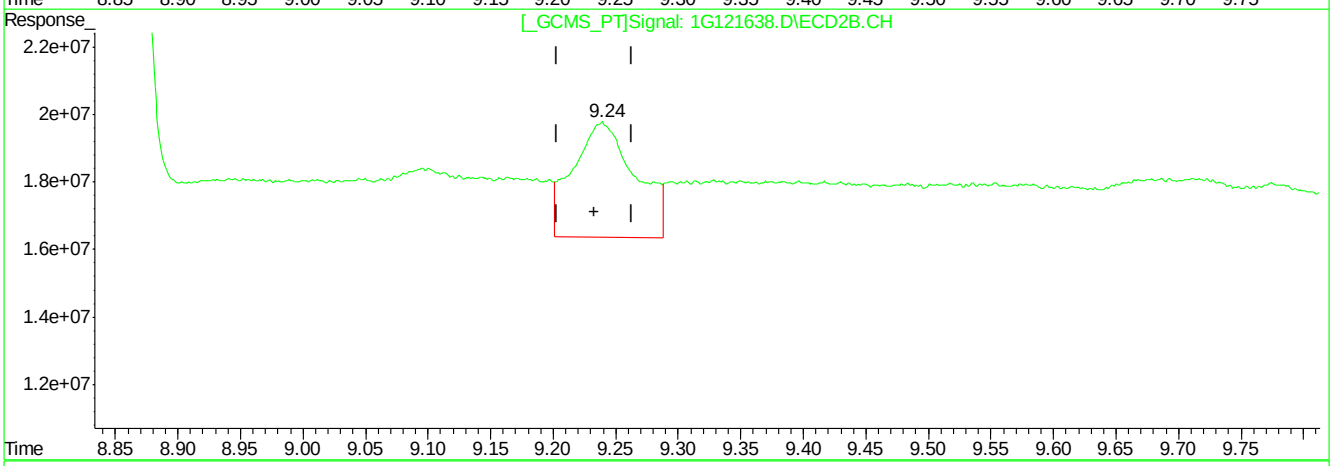
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121638.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121638.D\ECD2B.CH
Acq On    : 01 Apr 2016  10:37 am                    Operator: dharas
Sample    : ddt                                      Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:23 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(23) Endrin Ketone (B)

7.18min 2.267PPB

response 3577865

(23) Endrin Ketone #2 (B)

9.24min 8.425PPB

response 118095464

(+) = Expected Retention Time

1G121638.D 1PST3951.M Fri Apr 01 16:24:58 2016 RPT1

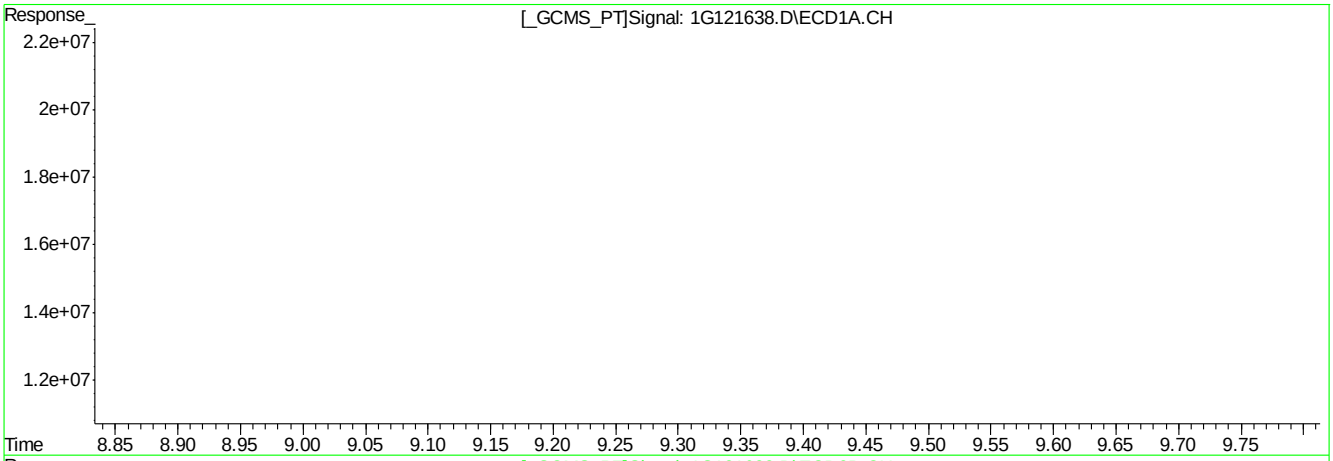
9.5.1.8

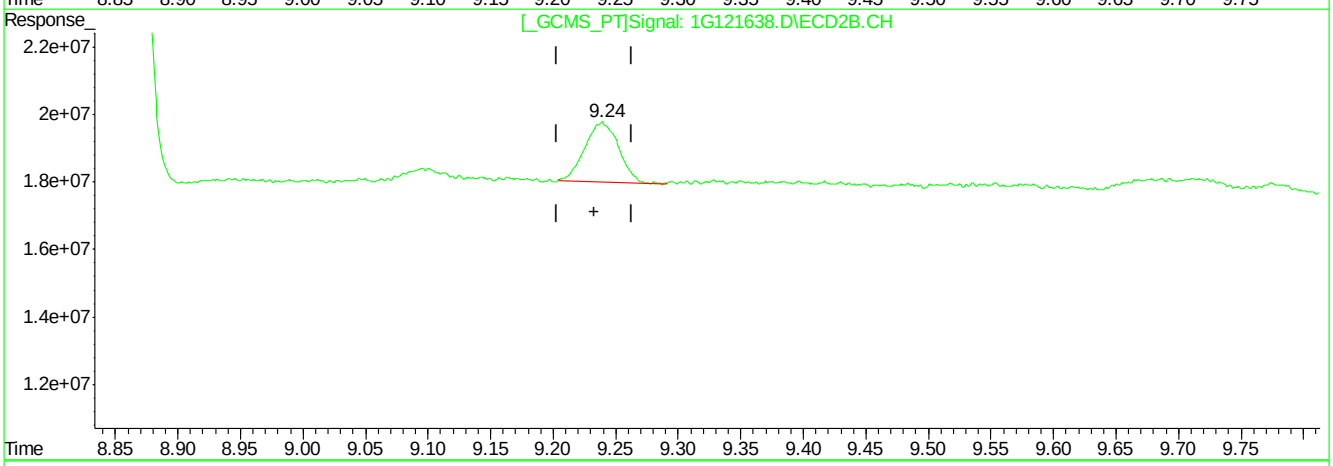
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121638.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121638.D\ECD2B.CH
Acq On    : 01 Apr 2016  10:37 am                    Operator: dharas
Sample    : ddt                                      Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:23 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(23) Endrin Ketone (B)

7.18min 2.267PPB

response 3577865

(23) Endrin Ketone #2 (B)

9.24min 2.402PPB m

response 33672314

(+) = Expected Retention Time

1G121638.D 1PST3951.M Fri Apr 01 16:25:02 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/19/16 14:13

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3966\1G122256.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3966\1G122256.D\ECD2B.CH
Acq On : 4-19-16 08:43:20 AM Operator: brittanp
Sample : ddt Inst : GC1G
Misc : op93101,g1g3966,15.6,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 19 12:32 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Tue Apr 19 11:57:37 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #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-nitrob	1.16	1.53	60368448	802.3E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.16	1.53	60368448	802.3E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.16	1.53	60368448	802.3E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.74	2.37	24306584	281.8E6	21.062	22.317
Spiked Amount	40.000	Range	30 - 150	Recovery	=	52.66%	55.79%
24) SA	Decachlorobiphen	8.92	10.86	39505556	174.0E6	24.782	20.960m
Spiked Amount	40.000			Recovery	=	61.96%	52.40%
	Target Compounds						
13) B	4,4'-DDE	4.42	6.09	1204456	15816856	0.997m	1.140m
15) MA	Endrin	5.10	6.86	73186500	658.7E6	61.449	51.554
16) A	4,4'-DDD	5.24	7.05	2938960	29220756	2.928	2.483
18) MA	4,4'-DDT	5.64	7.58	137.5E6	1045.9E6	143.773	113.566
19) B	Endrin Aldehyde	6.05	7.78	1091175	8695509	1.066m	0.882m
23) B	Endrin Ketone	7.15	9.22	4408150	29151652	3.437	2.559

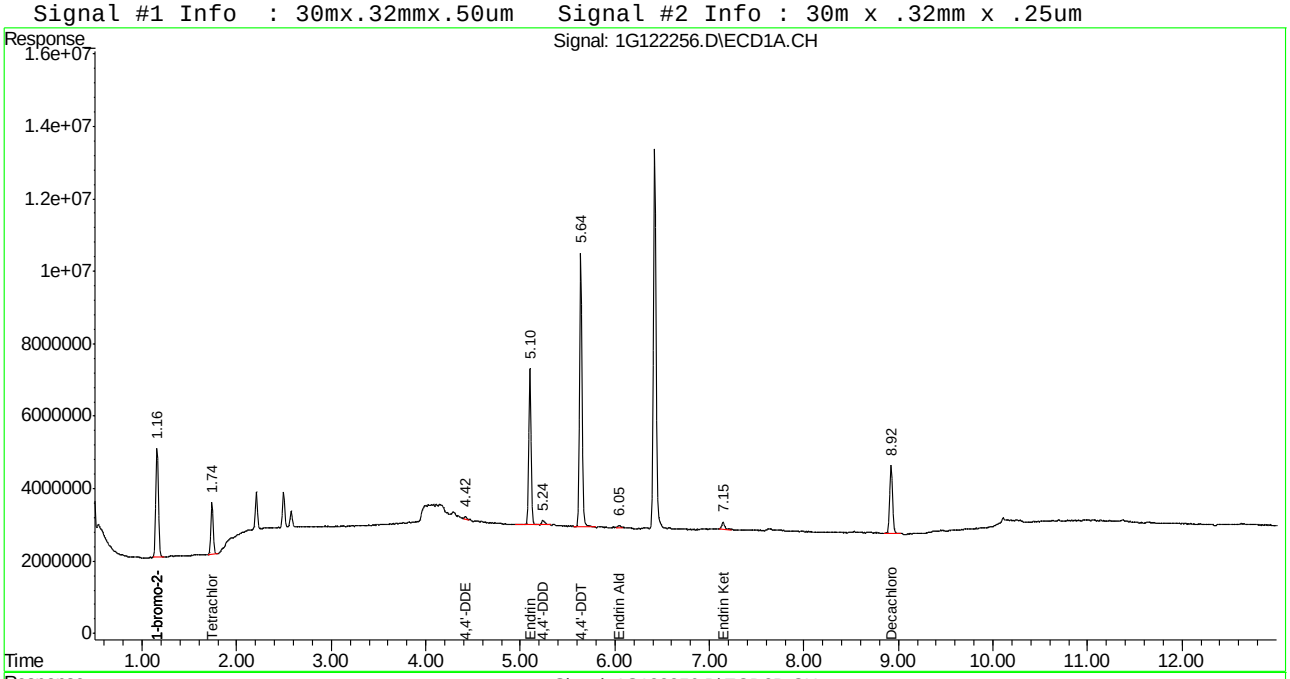
(f)=RT Delta > 1/2 Window (m)=manual int.
1G122256.D 1PST3951.M Tue Apr 19 12:32:18 2016 RPT1 Page 1

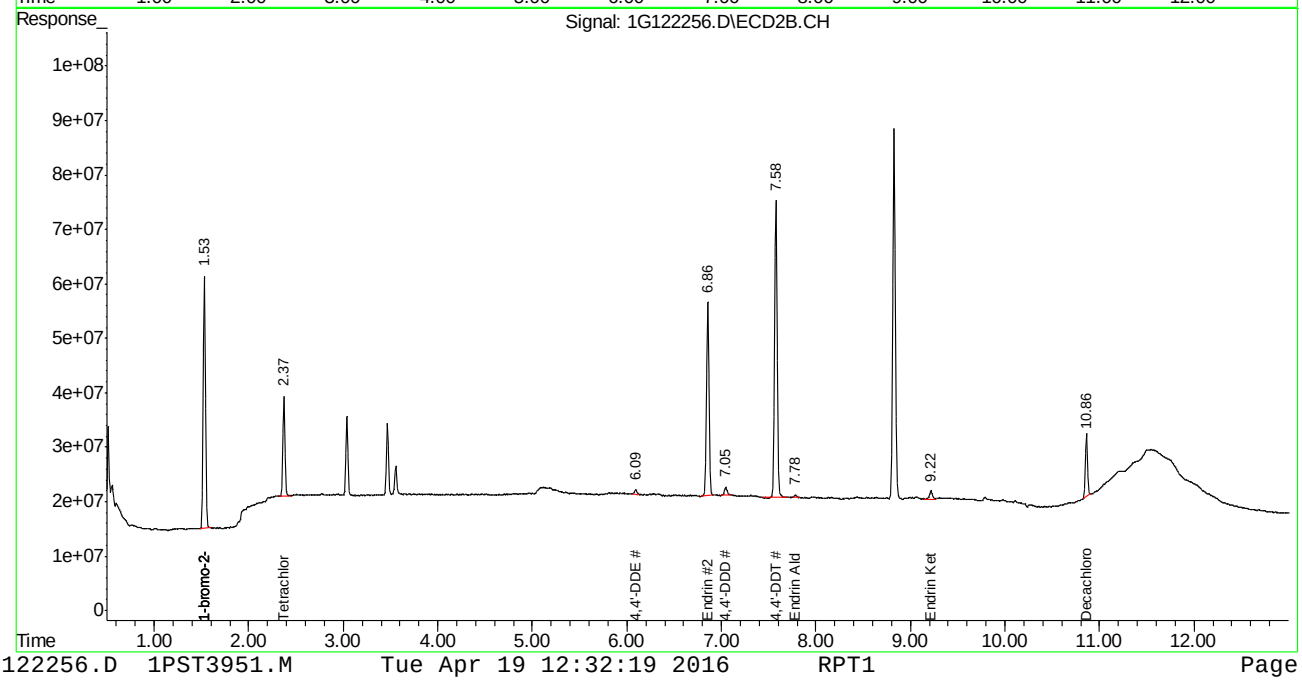
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3966\1G122256.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3966\1G122256.D\ECD2B.CH
Acq On : 4-19-16 08:43:20 AM Operator: brittanp
Sample : ddt Inst : GC1G
Misc : op93101,g1g3966,15.6,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 19 12:32 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Tue Apr 19 11:57:37 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #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

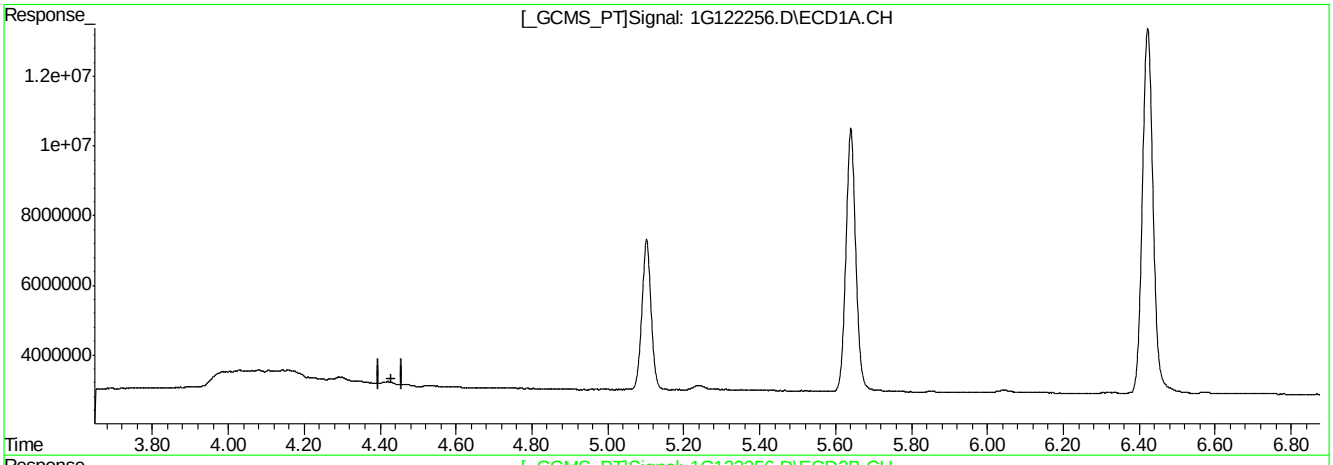
Sample Number:	G1G3966-DDT	**Method:**	SW846 8081B
Lab FileID:	1G122256.D	**Analyst approved:**	04/19/16 12:48 Dhara Saparia
Injection Time:	04/19/16 08:43	**Supervisor approved:**	04/19/16 14:13 Gwendolyn Burns

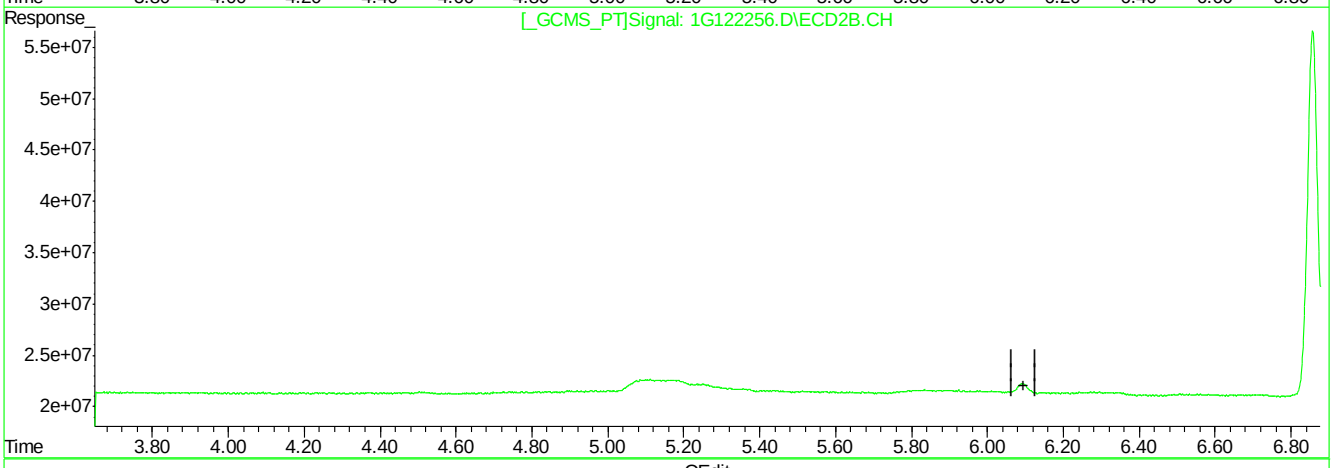
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	1	4.42	Poor instrument integration
Endrin aldehyde	7421-93-4	1	6.05	Poor instrument integration
4,4'-DDE	72-55-9	2	6.09	Poor instrument integration
Endrin aldehyde	7421-93-4	2	7.78	Poor instrument integration
Decachlorobiphenyl	2051-24-3	2	10.86	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3966\1G122256.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3966\1G122256.D\ECD2B.CH
Acq On    : 4-19-16 08:43:20 AM                      Operator: brittanp
Sample    : ddt                                      Inst    : GC1G
Misc      : op93101,g1g3966,15.6,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 19 12:30 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Tue Apr 19 11:57:37 2016
Response via : Multiple Level Calibration
```





QEdit

(13) 4,4'-DDE (B)

0.00min 0.000PPB

response 0

(13) 4,4'-DDE #2 (B)

0.00min 0.000PPB

response 0

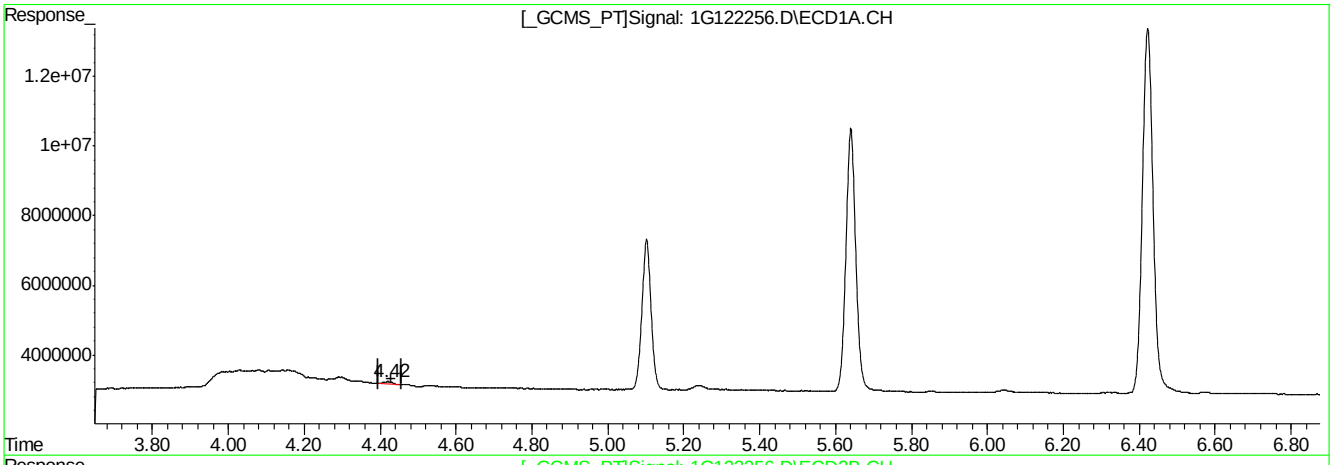
(+) = Expected Retention Time

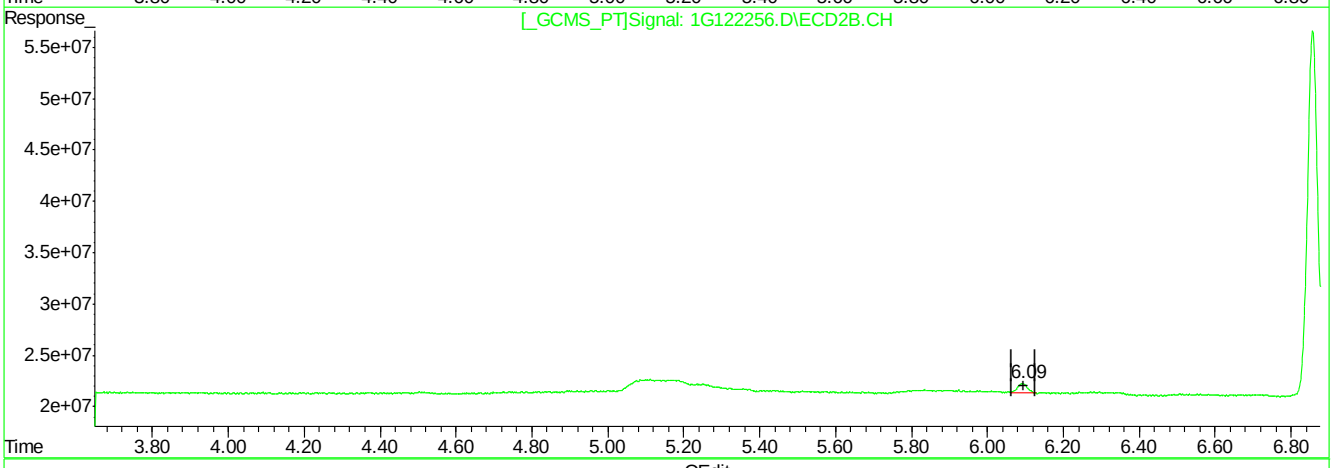
1G122256.D 1PST3951.M Tue Apr 19 12:31:17 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3966\1G122256.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3966\1G122256.D\ECD2B.CH
Acq On    : 4-19-16 08:43:20 AM                      Operator: brittanp
Sample    : ddt                                      Inst    : GC1G
Misc      : op93101,g1g3966,15.6,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 19 12:30 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Tue Apr 19 11:57:37 2016
Response via : Multiple Level Calibration
```





QEdit

(13) 4,4'-DDE (B)

4.42min 0.997PPB m

response 1204456

(13) 4,4'-DDE #2 (B)

6.09min 1.140PPB m

response 15816856

(+) = Expected Retention Time

1G122256.D 1PST3951.M Tue Apr 19 12:31:29 2016 RPT1

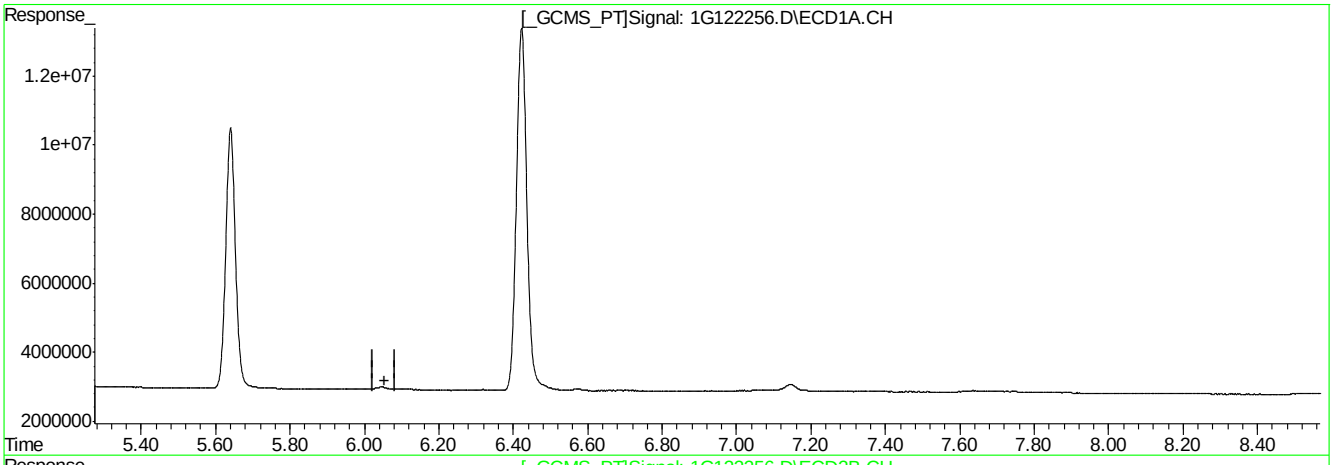
9.5.2.3

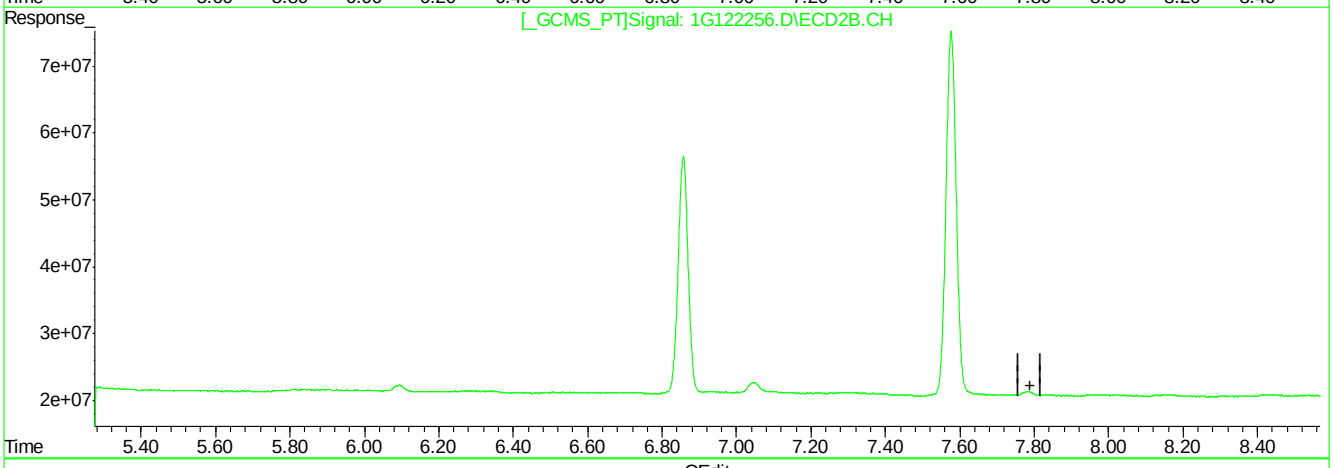
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3966\1G122256.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3966\1G122256.D\ECD2B.CH
Acq On    : 4-19-16 08:43:20 AM                      Operator: brittanp
Sample    : ddt                                      Inst    : GC1G
Misc      : op93101,g1g3966,15.6,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 19 12:30 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Tue Apr 19 11:57:37 2016
Response via : Multiple Level Calibration
```





QEdit

(19) Endrin Aldehyde (B)

0.00min 0.000PPB

response 0

(19) Endrin Aldehyde #2 (B)

0.00min 0.000PPB

response 0

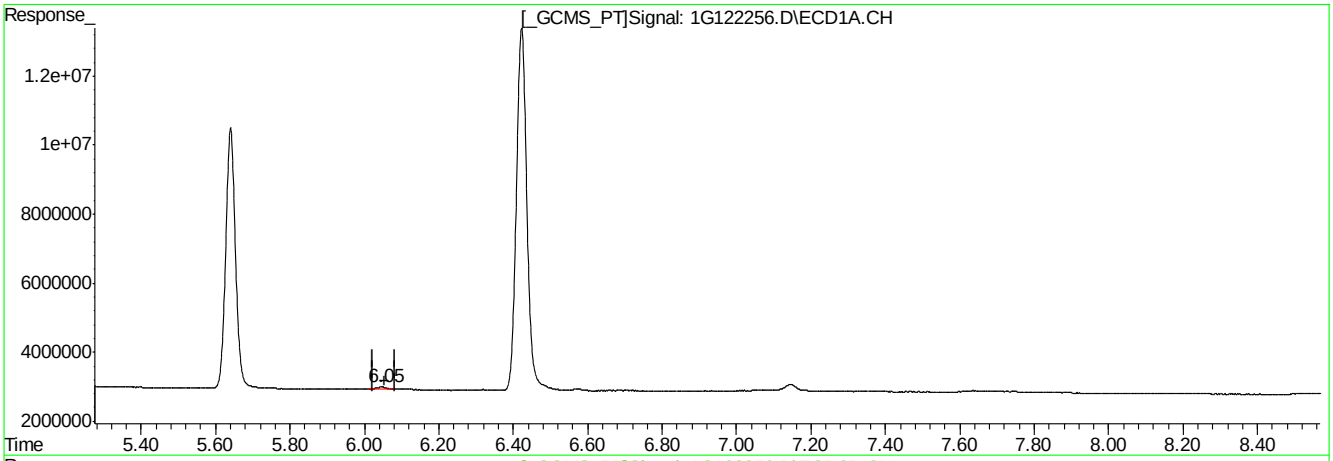
(+) = Expected Retention Time

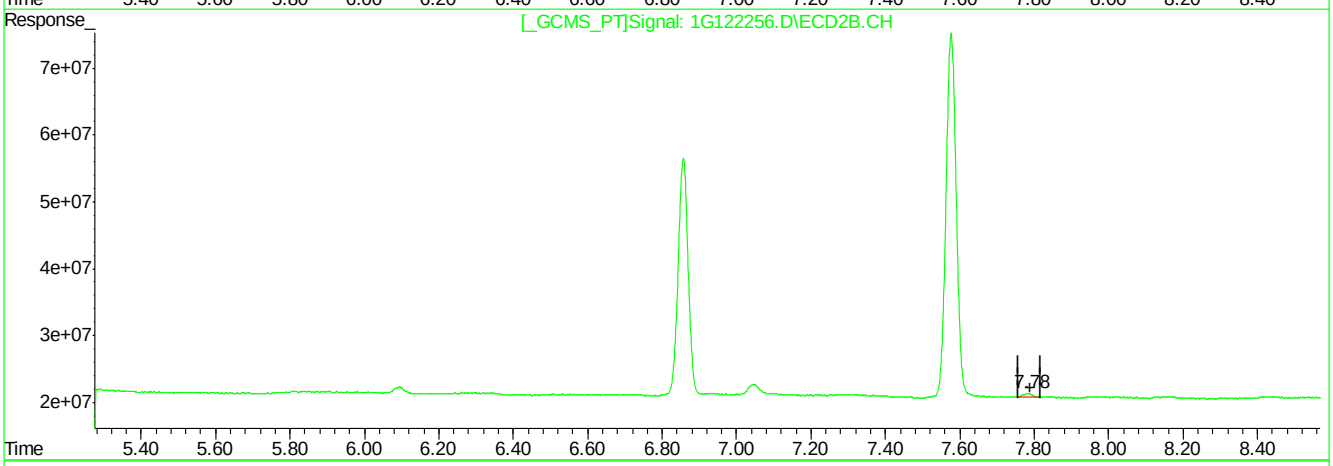
1G122256.D 1PST3951.M Tue Apr 19 12:31:38 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3966\1G122256.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3966\1G122256.D\ECD2B.CH
Acq On    : 4-19-16 08:43:20 AM                      Operator: brittanp
Sample    : ddt                                      Inst    : GC1G
Misc      : op93101,g1g3966,15.6,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 19 12:30 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Tue Apr 19 11:57:37 2016
Response via : Multiple Level Calibration
```





QEdit

(19) Endrin Aldehyde (B)

6.05min 1.066PPB m

response 1091175

(19) Endrin Aldehyde #2 (B)

7.78min 0.882PPB m

response 8695509

(+) = Expected Retention Time

1G122256.D 1PST3951.M Tue Apr 19 12:31:52 2016 RPT1

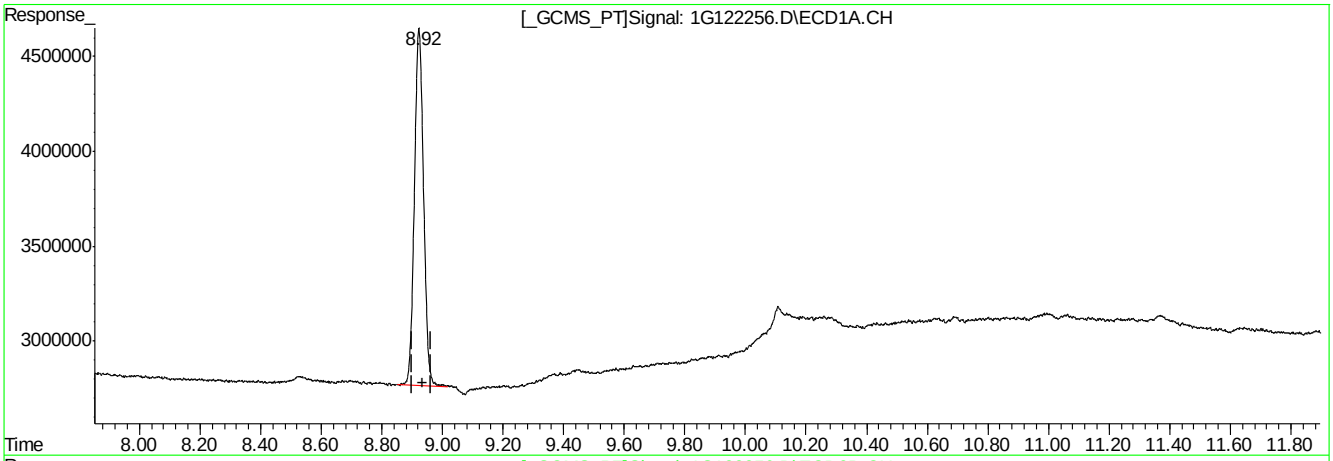
9.5.2.5

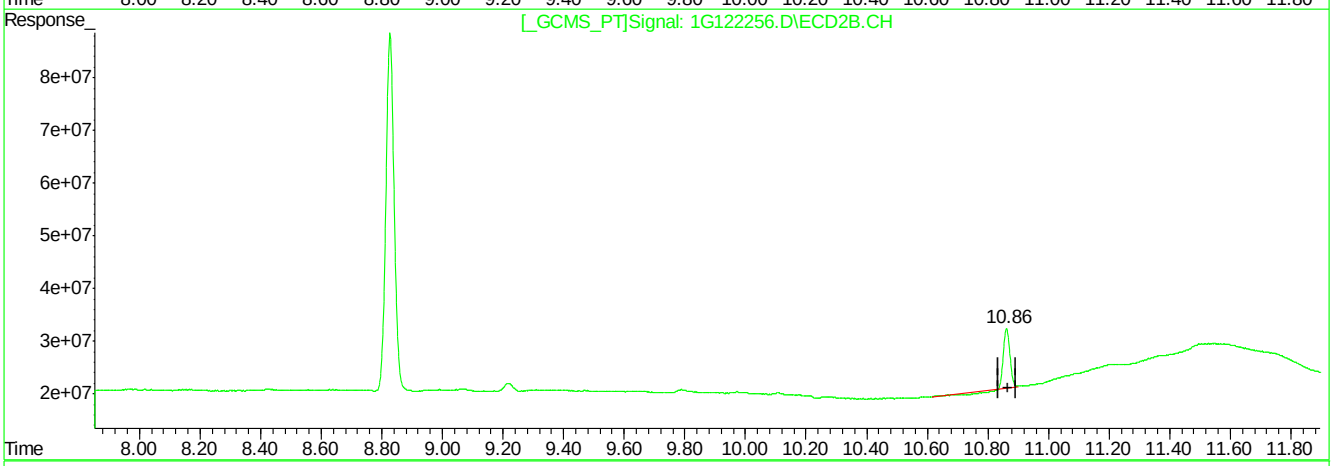
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3966\1G122256.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3966\1G122256.D\ECD2B.CH
Acq On    : 4-19-16 08:43:20 AM                      Operator: brittanp
Sample    : ddt                                      Inst    : GC1G
Misc      : op93101,g1g3966,15.6,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 19 12:30 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Tue Apr 19 11:57:37 2016
Response via : Multiple Level Calibration
```





QEdit

(24) Decachlorobiphenyl (SA)

8.92min 24.782PPB

response 39505556

(24) Decachlorobiphenyl #2 (SA)

10.86min 16.004PPB

response 132884920

(+) = Expected Retention Time

1G122256.D 1PST3951.M Tue Apr 19 12:31:59 2016 RPT1

9.5.2.6

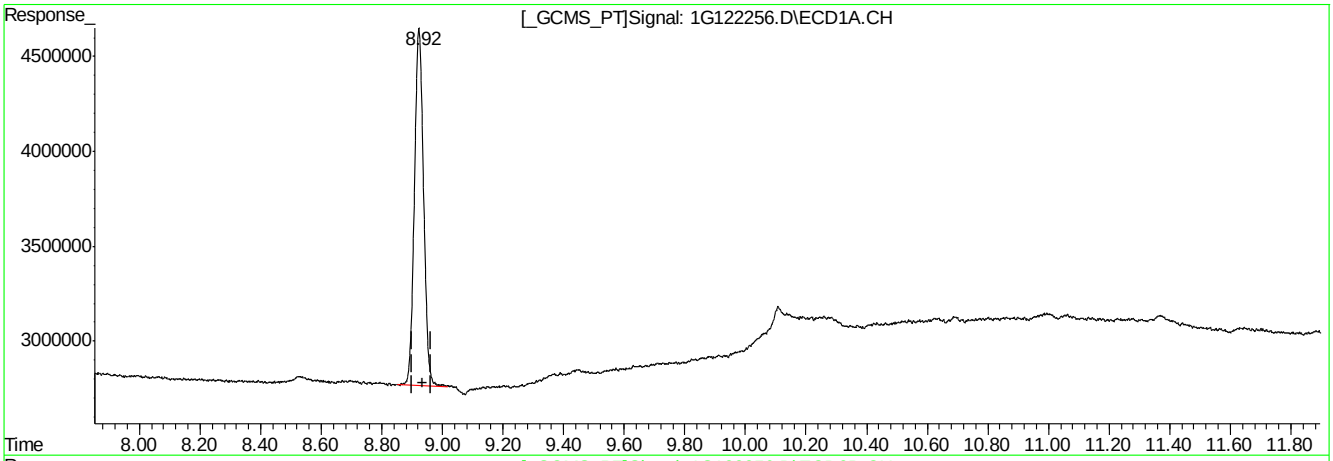
9

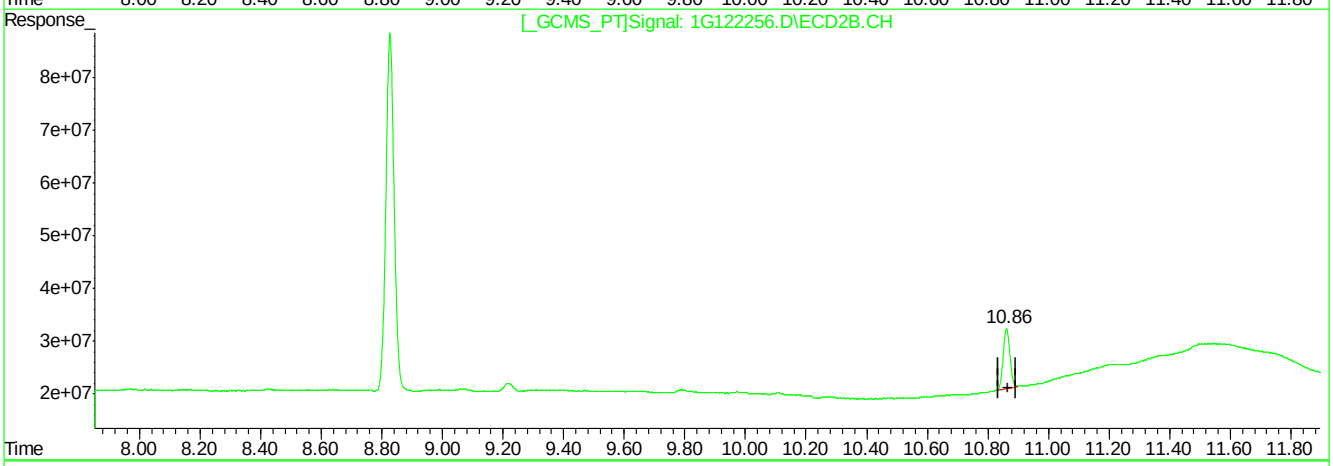
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3966\1G122256.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3966\1G122256.D\ECD2B.CH
Acq On    : 4-19-16 08:43:20 AM                      Operator: brittanp
Sample    : ddt                                      Inst    : GC1G
Misc      : op93101,g1g3966,15.6,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 19 12:30 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Tue Apr 19 11:57:37 2016
Response via : Multiple Level Calibration
```





QEdit

(24) Decachlorobiphenyl (SA)

8.92min 24.782PPB

response 39505556

(24) Decachlorobiphenyl #2 (SA)

10.86min 20.960PPB m

response 174034986

(+) = Expected Retention Time

1G122256.D 1PST3951.M Tue Apr 19 12:32:11 2016 RPT1

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.

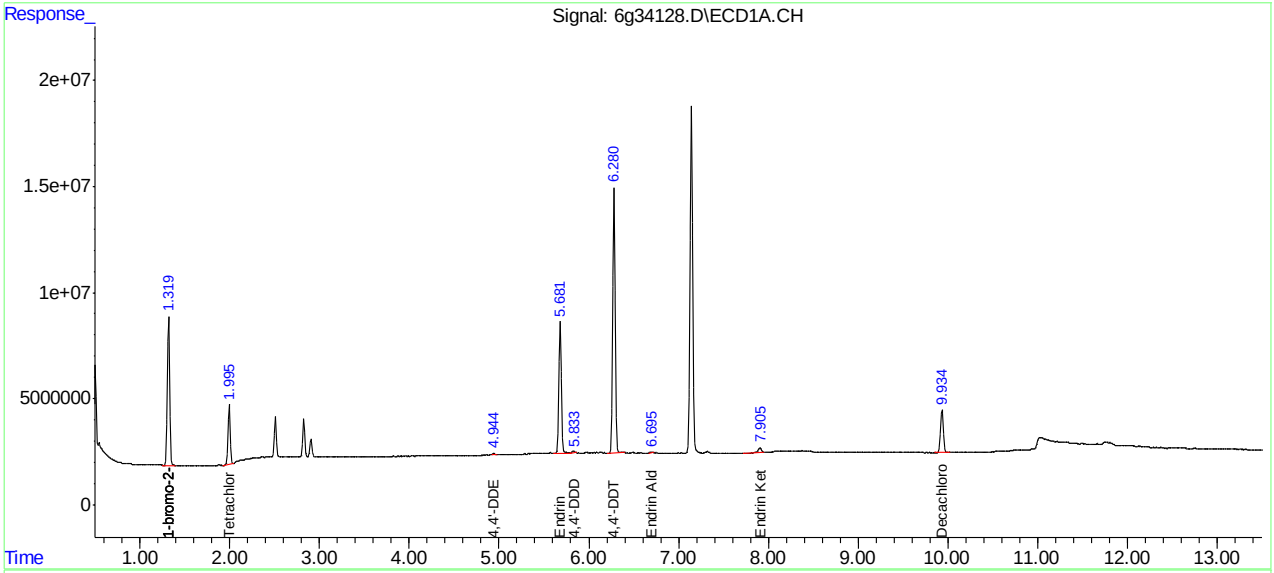
9.5.3
9

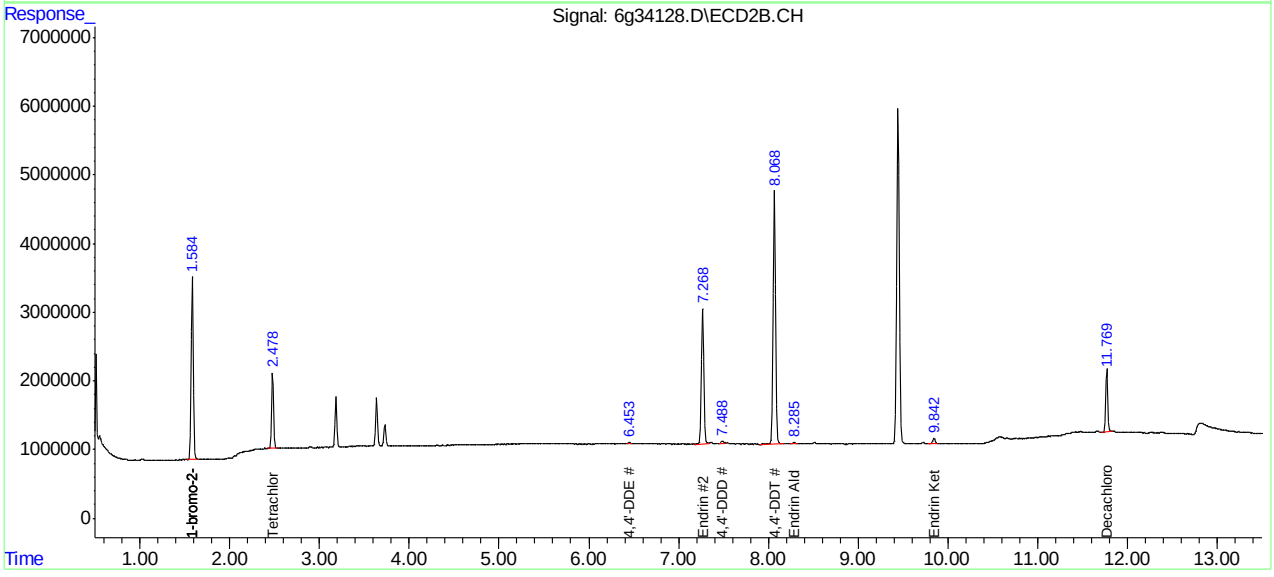
Quantitation Report (QT Reviewed)

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

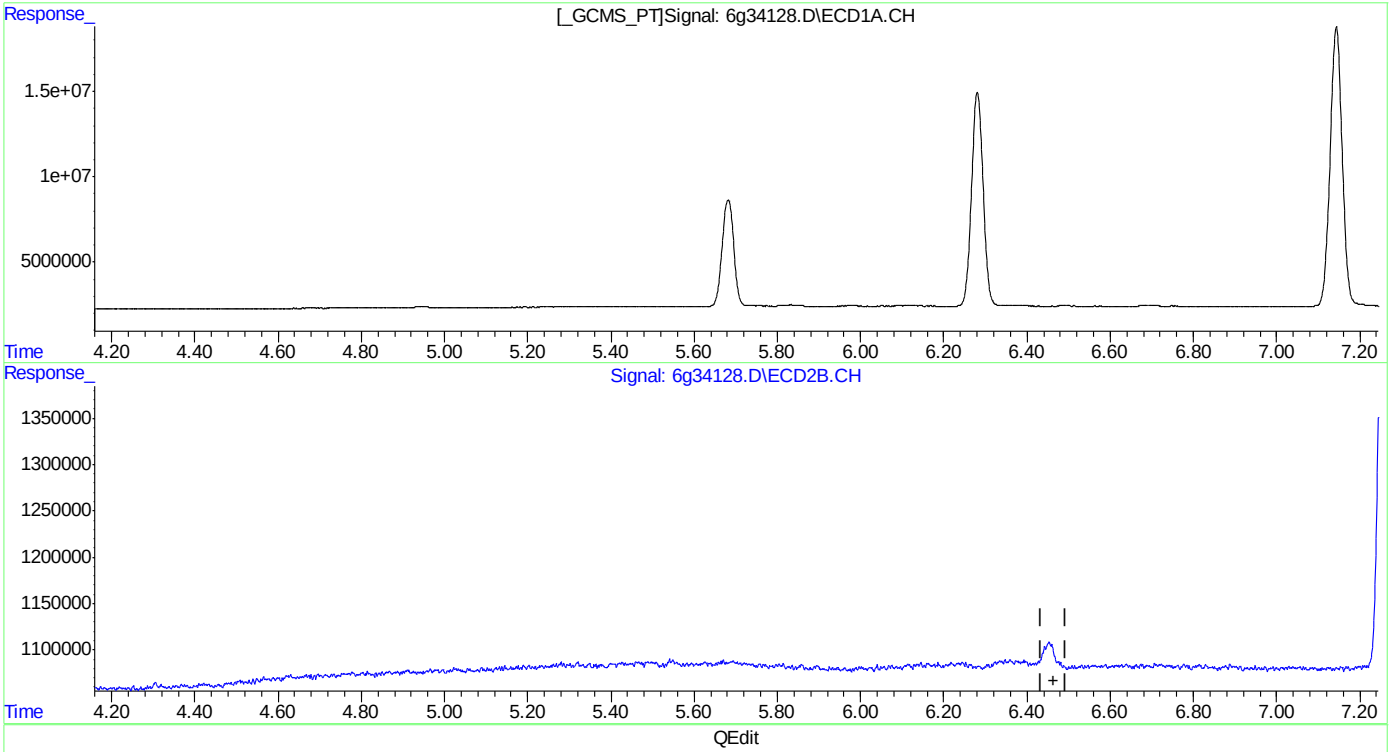
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	1	4.94	Poor instrument integration
4,4'-DDD	72-54-8	1	5.83	Poor instrument integration
4,4'-DDE	72-55-9	2	6.45	Poor instrument integration
Endrin aldehyde	7421-93-4	1	6.70	Poor instrument integration
4,4'-DDD	72-54-8	2	7.49	Poor instrument integration
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

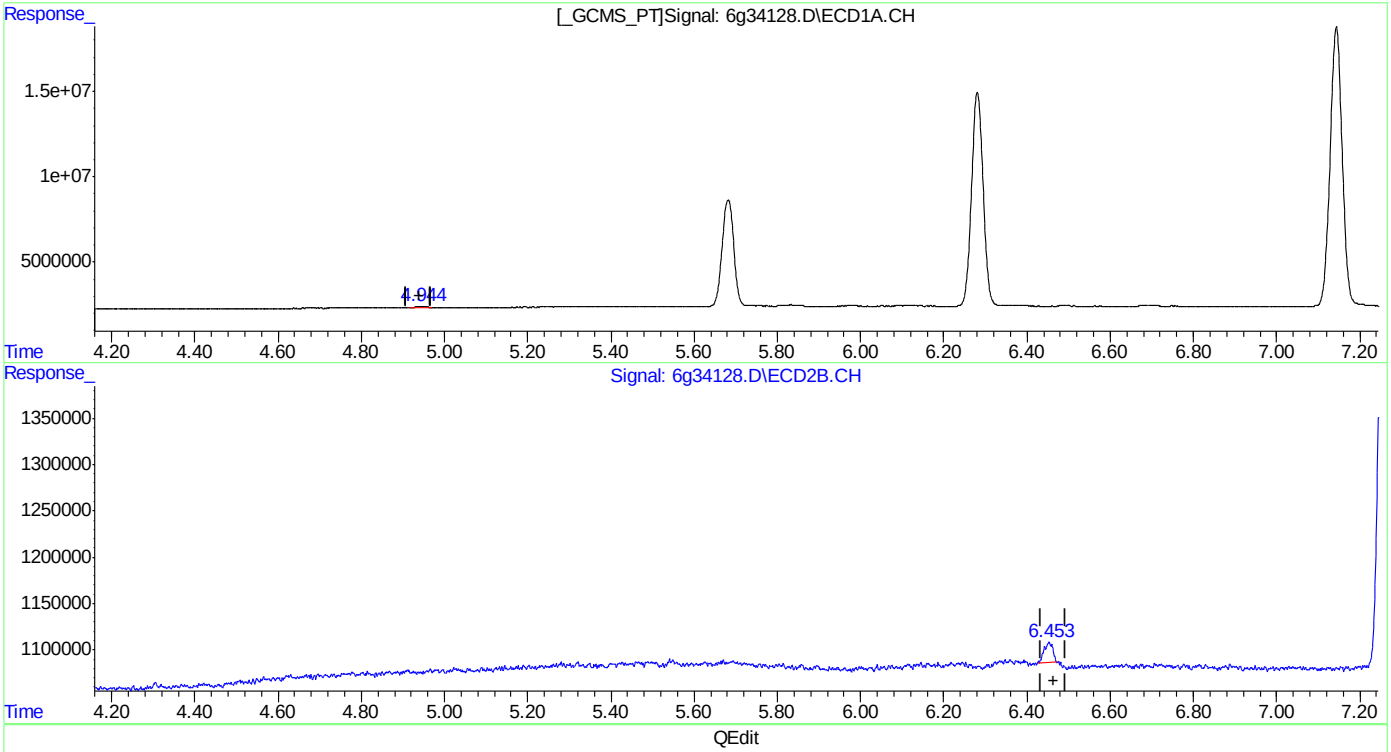
(+) = Expected Retention Time
6PST987.M Mon Apr 18 11:41:26 2016

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34128.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 14 Apr 2016   3:16 pm
Operator  : dharas
Sample    : ddt
Misc      : op92908,g6g987,6.8,,,10,5
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:40:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title  : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.50um   Signal #2 Info : 30m x .32mm x .25um
```



(13) 4,4'-DDE (B)
4.944min 0.498PPB m
response 1018177

(13) 4,4'-DDE #2 (B)
6.453min 0.455PPB m
response 323855

(+) = Expected Retention Time

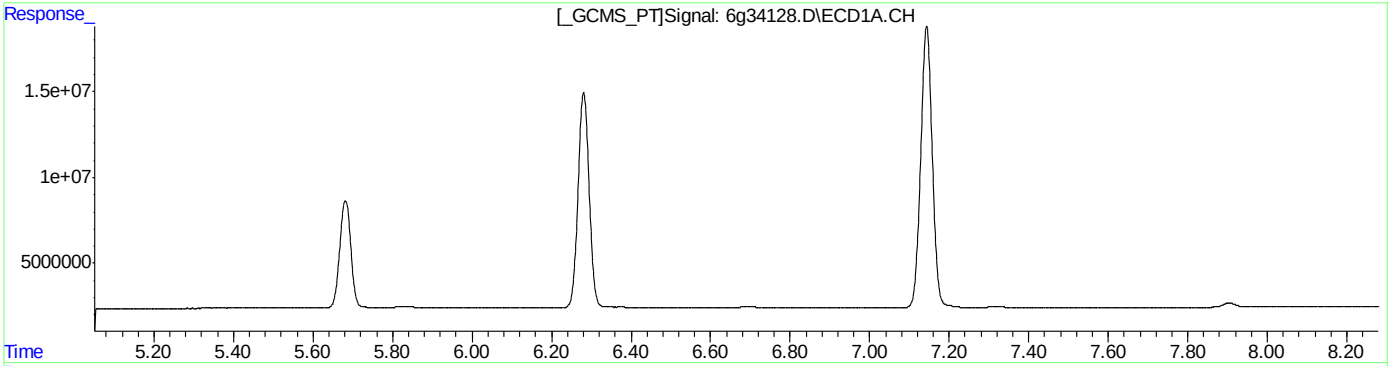
SGS ACCUTEST JC18516

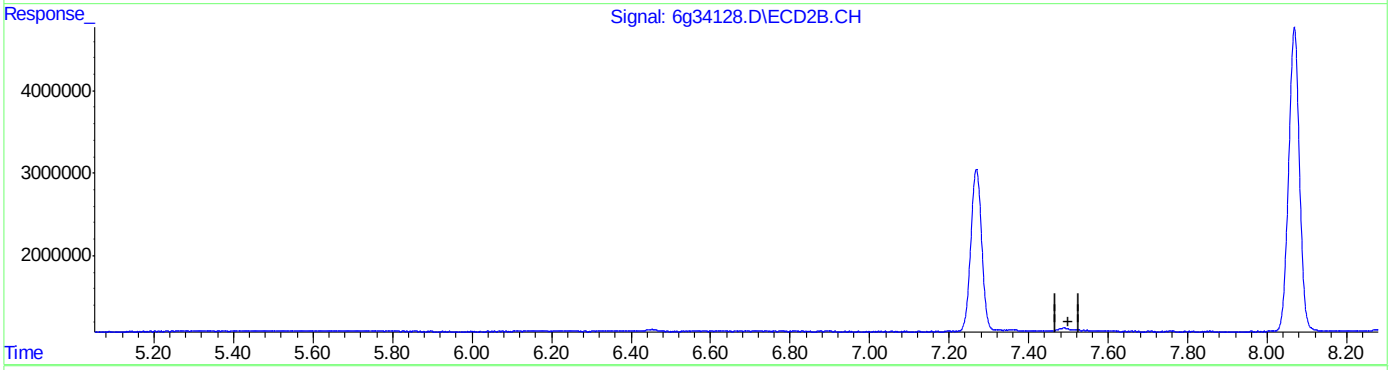
Quantitation Report (Qedit)

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

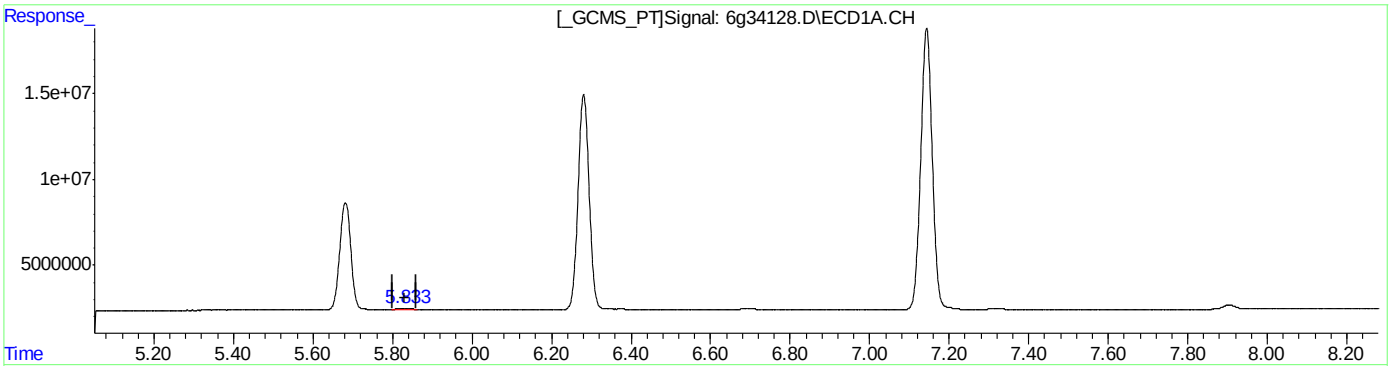
(+) = Expected Retention Time

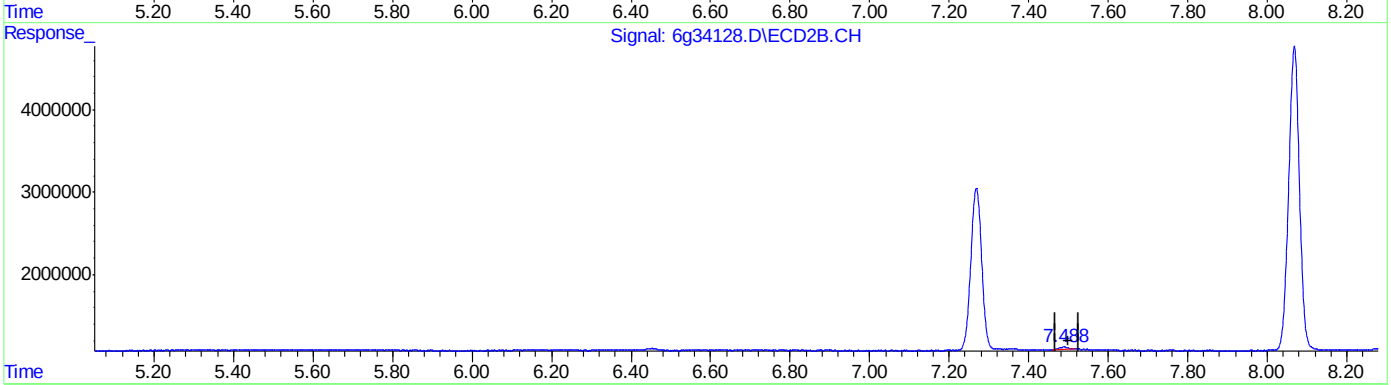
Quantitation Report (Qedit)

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

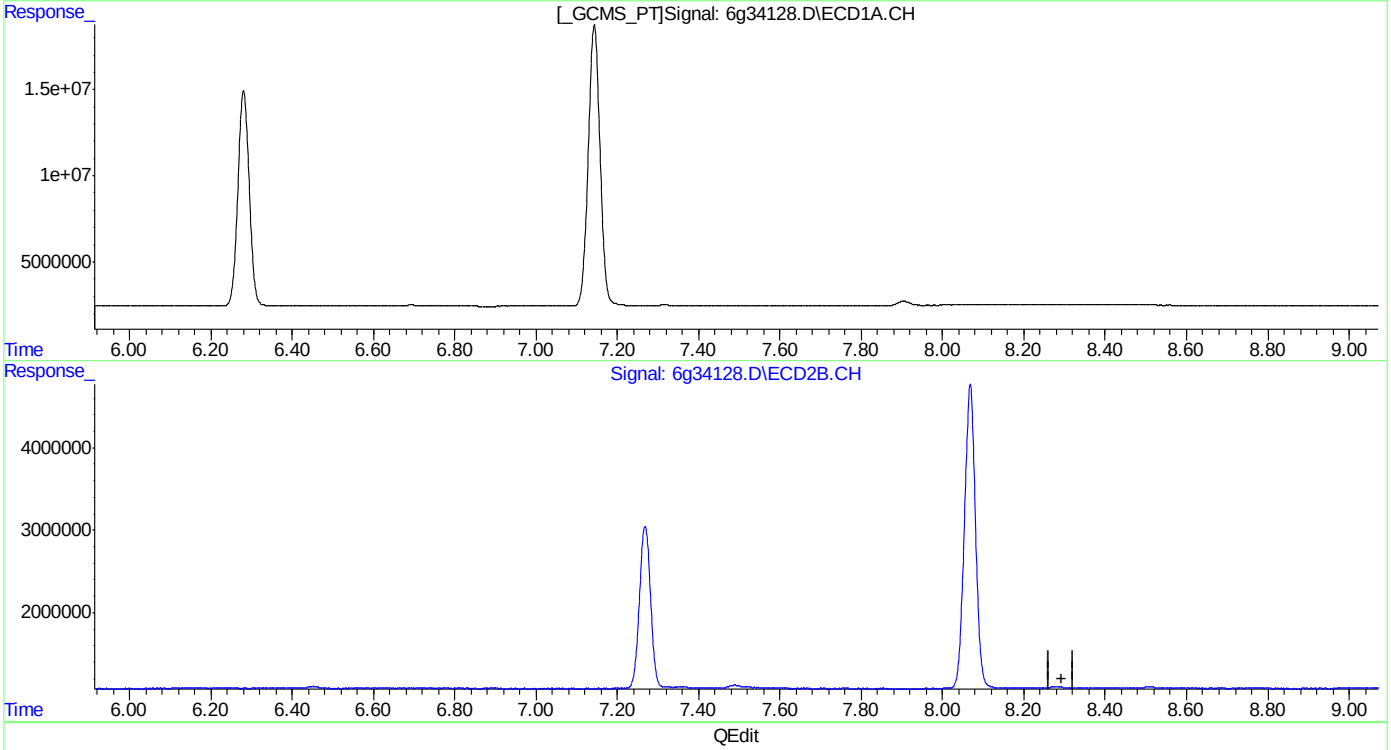
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34128.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:16 pm
Operator : dharas
Sample : ddt
Misc : op92908,g6g987,6.8,,,10,5
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:40:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(19) Endrin Aldehyde (B)
0.000min 0.000PPB
response 0

(19) Endrin Aldehyde #2 (B)
0.000min 0.000PPB
response 0

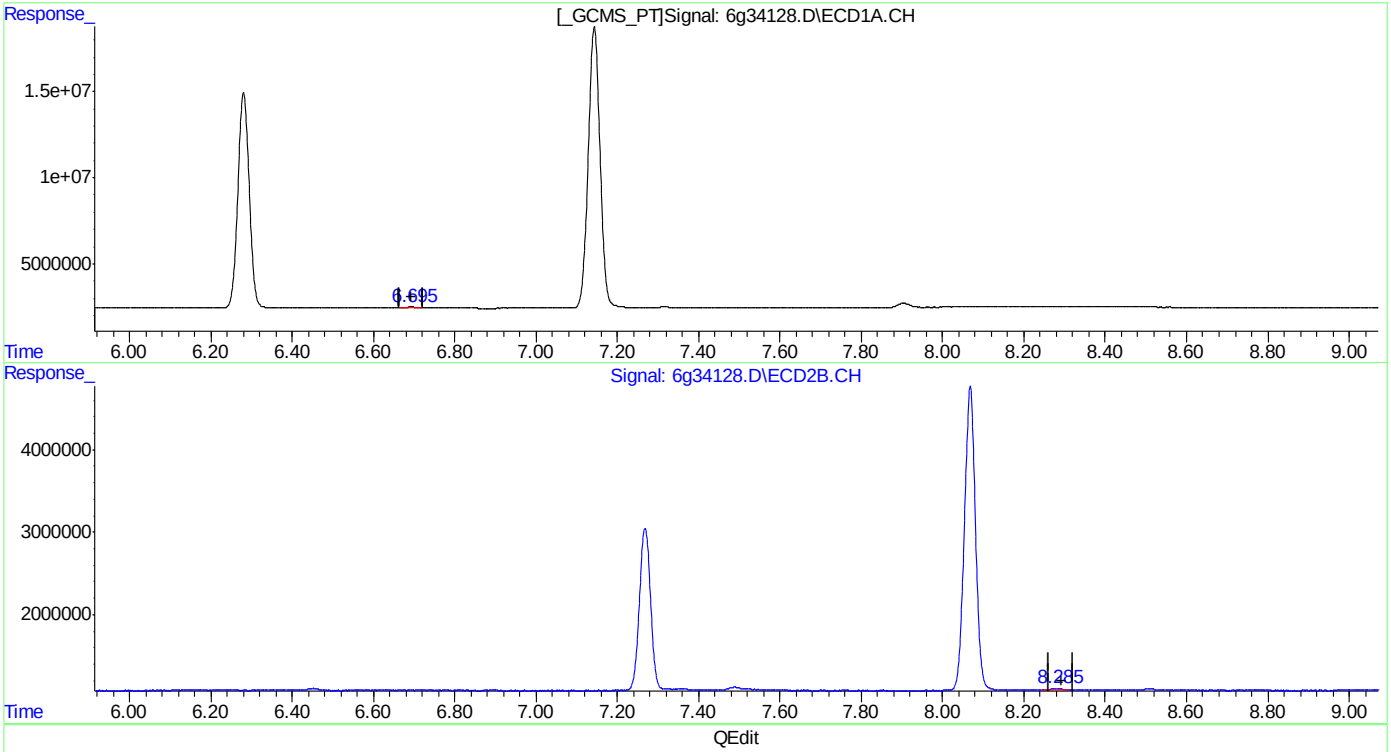
(+) = Expected Retention Time

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 JC18516

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/25/16 11:17

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34371a.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 9:50 am
Operator : brittanp
Sample : ddt
Misc : op93284,g6g995,15.2,,,10,10
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 10:59:42 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...	1.308	1.574	115.8E6	46448027	50.000	50.000
25) I	1-bromo-2...	1.308	1.574	115.8E6	46448027	50.000	50.000
31) I	1-bromo-2...	1.308	1.574	115.8E6	46448027	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.988	2.472	44268000	17850638	20.849	21.272
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 52.12%	53.18%
24) SAB	Decachlor...	9.927	11.771	42294452	13000054	22.908	20.604
	Spiked Amount	40.000			Recovery	= 57.27%	51.51%
	Target Compounds						
13) B	4,4'-DDE	4.939	6.443f	1232422	542611	0.673m	0.723m
15) MA	Endrin	5.677	7.261f	112.5E6	36720545	57.493	46.770
16) A	4,4'-DDD	5.822	7.481f	1948326	996545	1.259m	1.538m
18) MA	4,4'-DDT	6.276	8.061f	222.2E6	66427045	131.967	112.935
19) B	Endrin Al...	6.686	8.271f	852181	432241	0.542m	0.694m#
23) B	Endrin Ke...	7.899	9.836f	4679405	1647017	2.321m	2.085m

SemiQuant Compounds - Not Calibrated on this Instrument

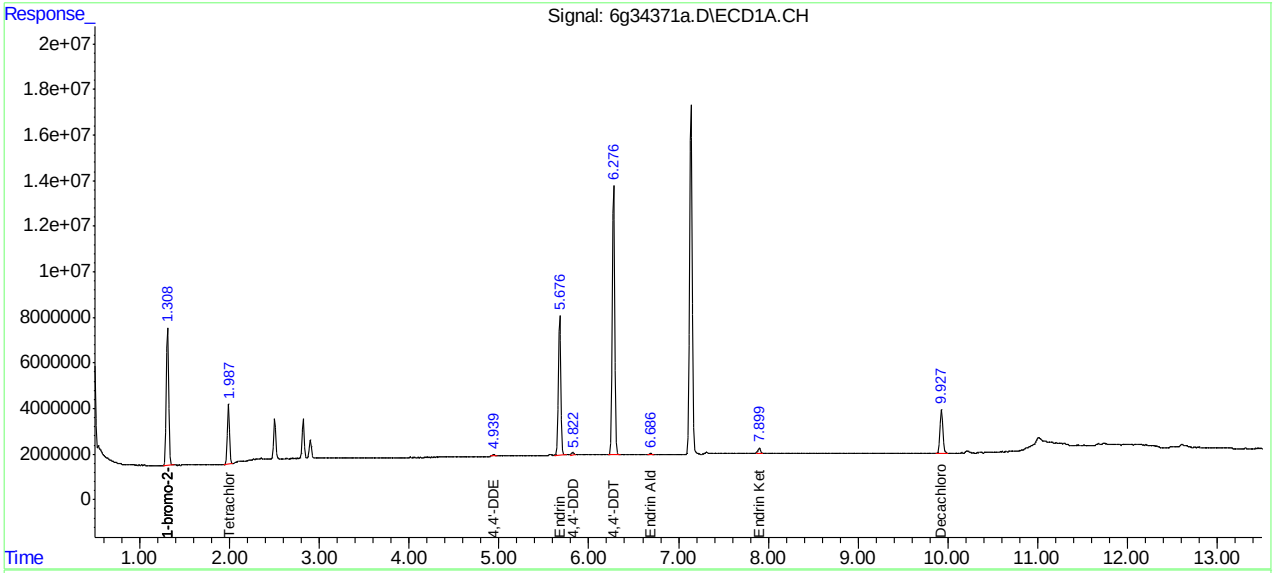
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

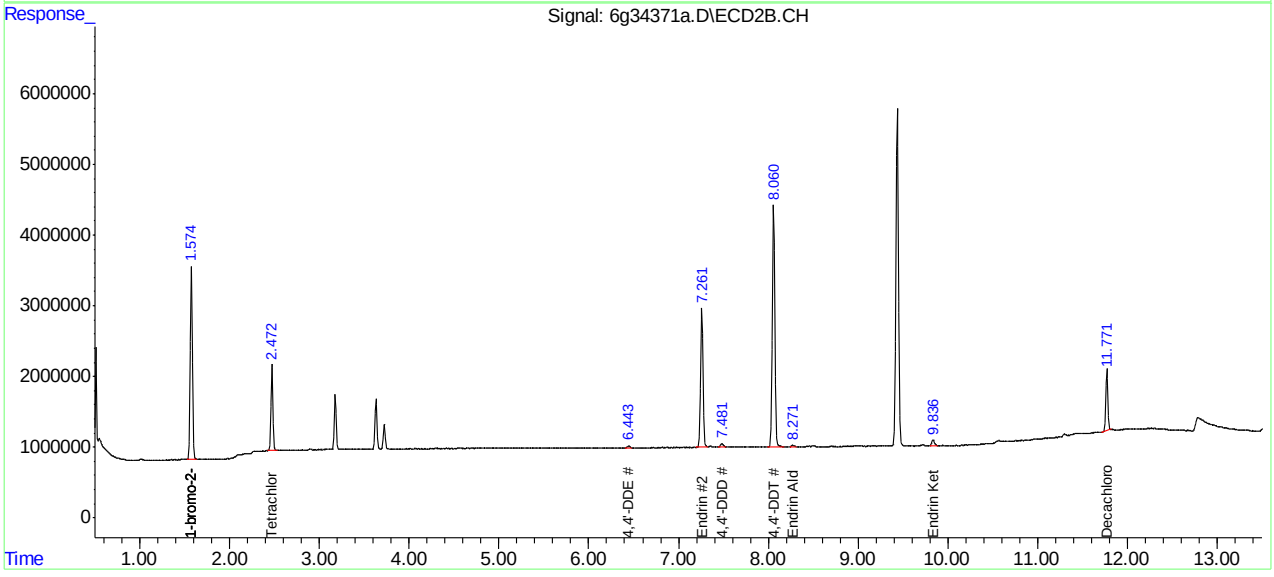
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34371a.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 9:50 am
Operator : brittanp
Sample : ddt
Misc : op93284,g6g995,15.2,,,10,10
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 10:59:42 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:	G6G995-DDT	**Method:**	SW846 8081B
Lab FileID:	6G34371A.D	**Analyst approved:**	04/25/16 11:06 Brittany Piercy
Injection Time:	04/25/16 09:50	**Supervisor approved:**	04/25/16 11:17 Gwendolyn Burns

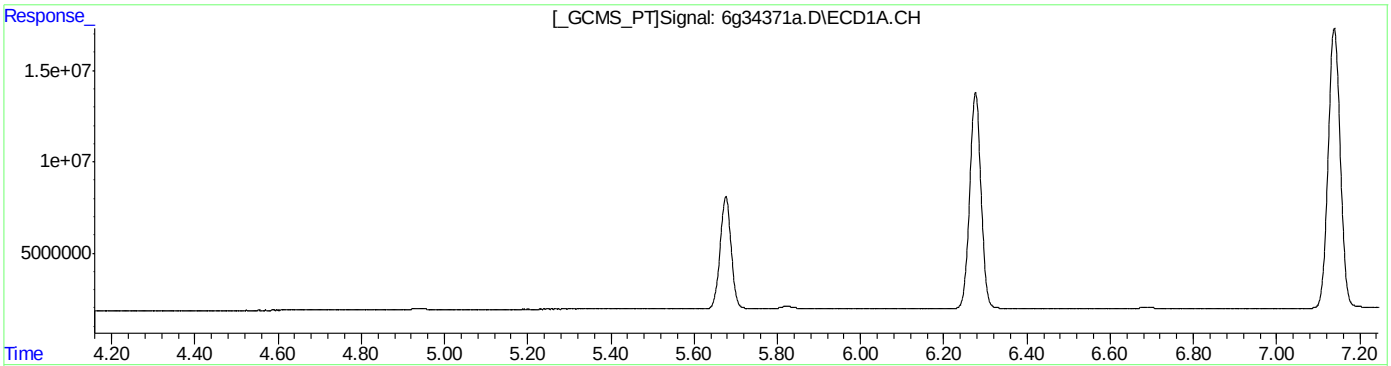
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	1	4.94	Poor instrument integration
4,4'-DDD	72-54-8	1	5.82	Poor instrument integration
4,4'-DDE	72-55-9	2	6.44	Poor instrument integration
Endrin aldehyde	7421-93-4	1	6.69	Poor instrument integration
4,4'-DDD	72-54-8	2	7.48	Poor instrument integration
Endrin ketone	53494-70-5	1	7.90	Poor instrument integration
Endrin aldehyde	7421-93-4	2	8.27	Poor instrument integration
Endrin ketone	53494-70-5	2	9.84	Poor instrument integration

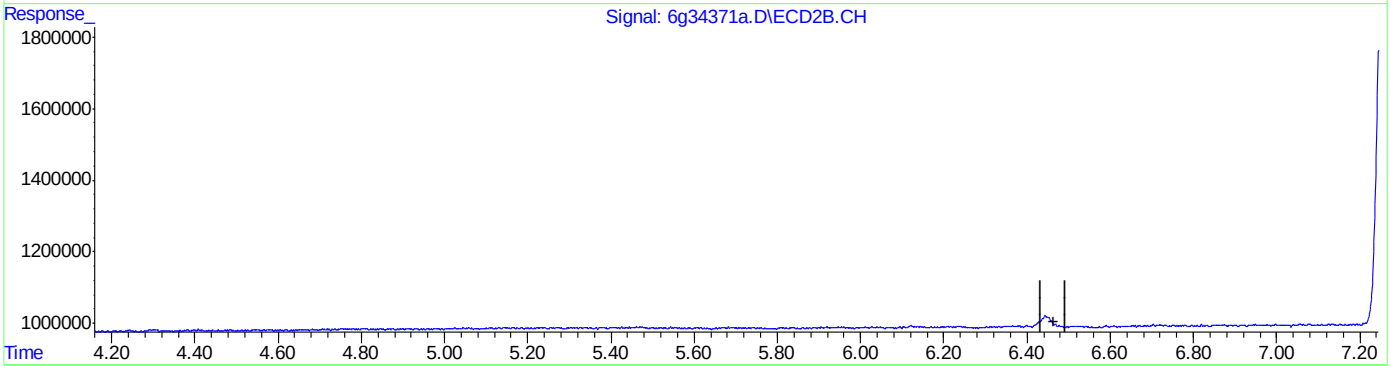
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34371a.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 9:50 am
Operator : brittanp
Sample : ddt
Misc : op93284,g6g995,15.2,,,10,10
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 10:04:15 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

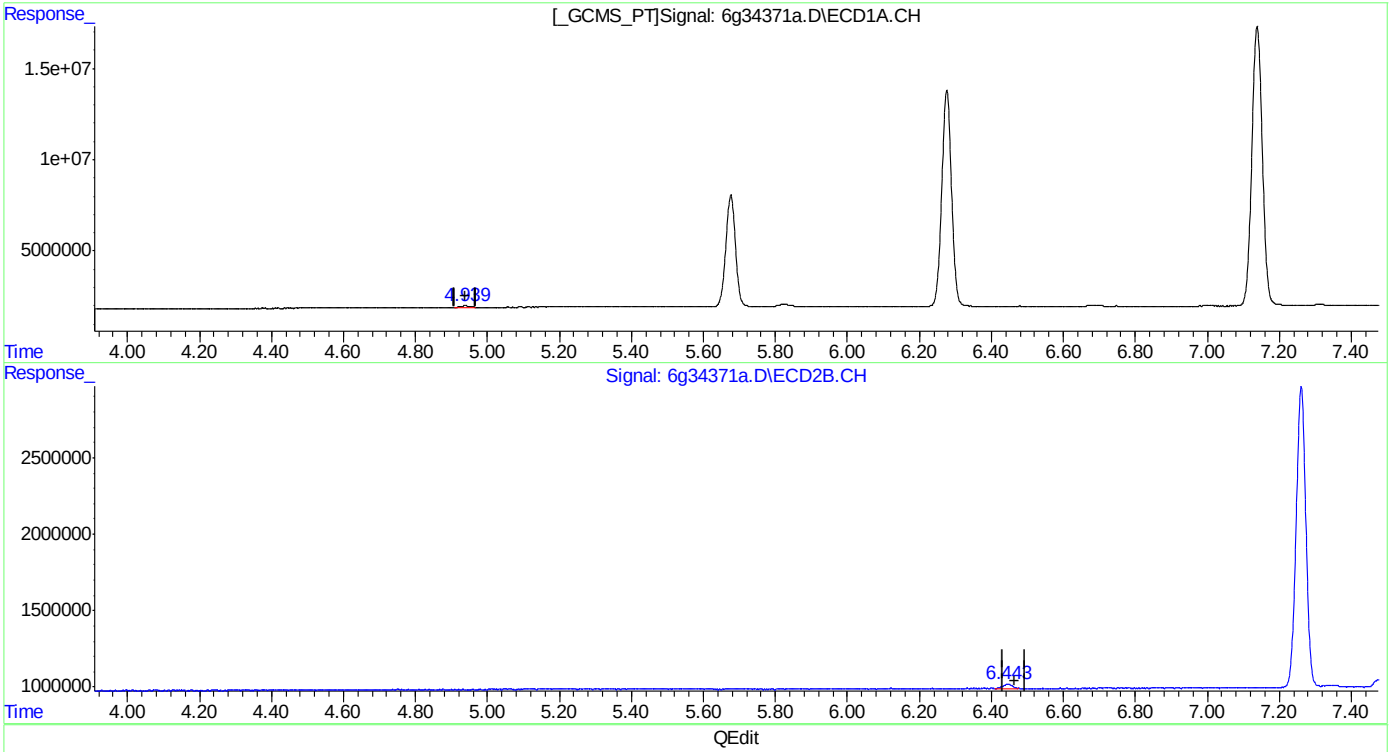
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34371a.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 9:50 am
Operator : brittanp
Sample : ddt
Misc : op93284,g6g995,15.2,,,10,10
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 10:04:15 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)
4.939min 0.673PPB m
response 1232422

(13) 4,4'-DDE #2 (B)
6.443min 0.723PPB m
response 542611

(+) = Expected Retention Time
6PST987.M Mon Apr 25 10:58:27 2016

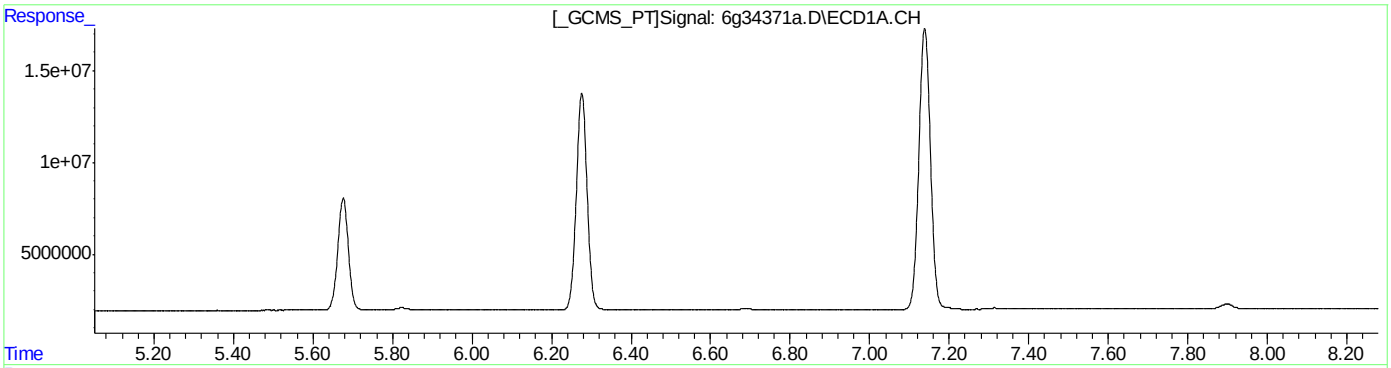
SGS ACCUTEST JC18516

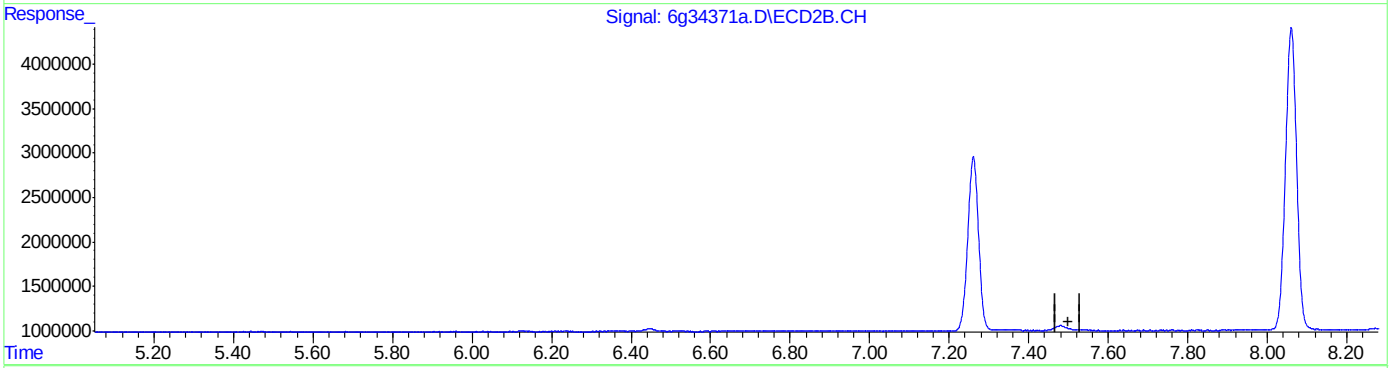
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34371a.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 9:50 am
Operator : brittanp
Sample : ddt
Misc : op93284,g6g995,15.2,,,10,10
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 10:04:15 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

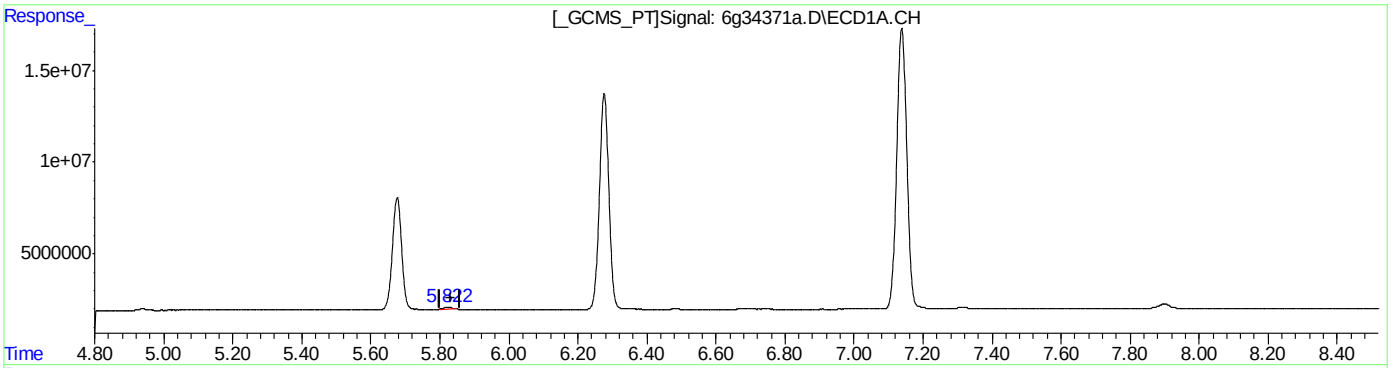
(+) = Expected Retention Time

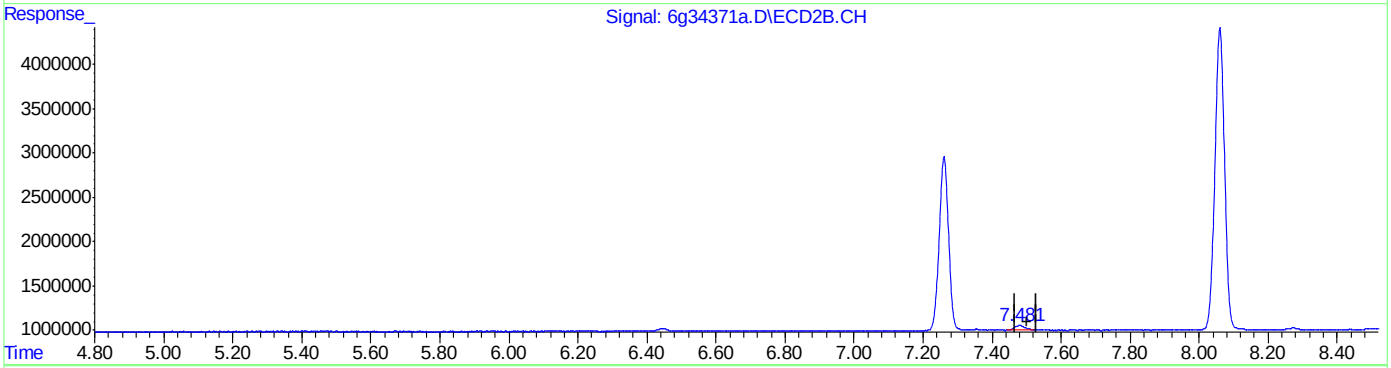
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34371a.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 9:50 am
Operator : brittanp
Sample : ddt
Misc : op93284,g6g995,15.2,,,10,10
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 10:04:15 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)
5.822min 1.259PPB m
response 1948326

(16) 4,4'-DDD #2 (A)
7.481min 1.538PPB m
response 996545

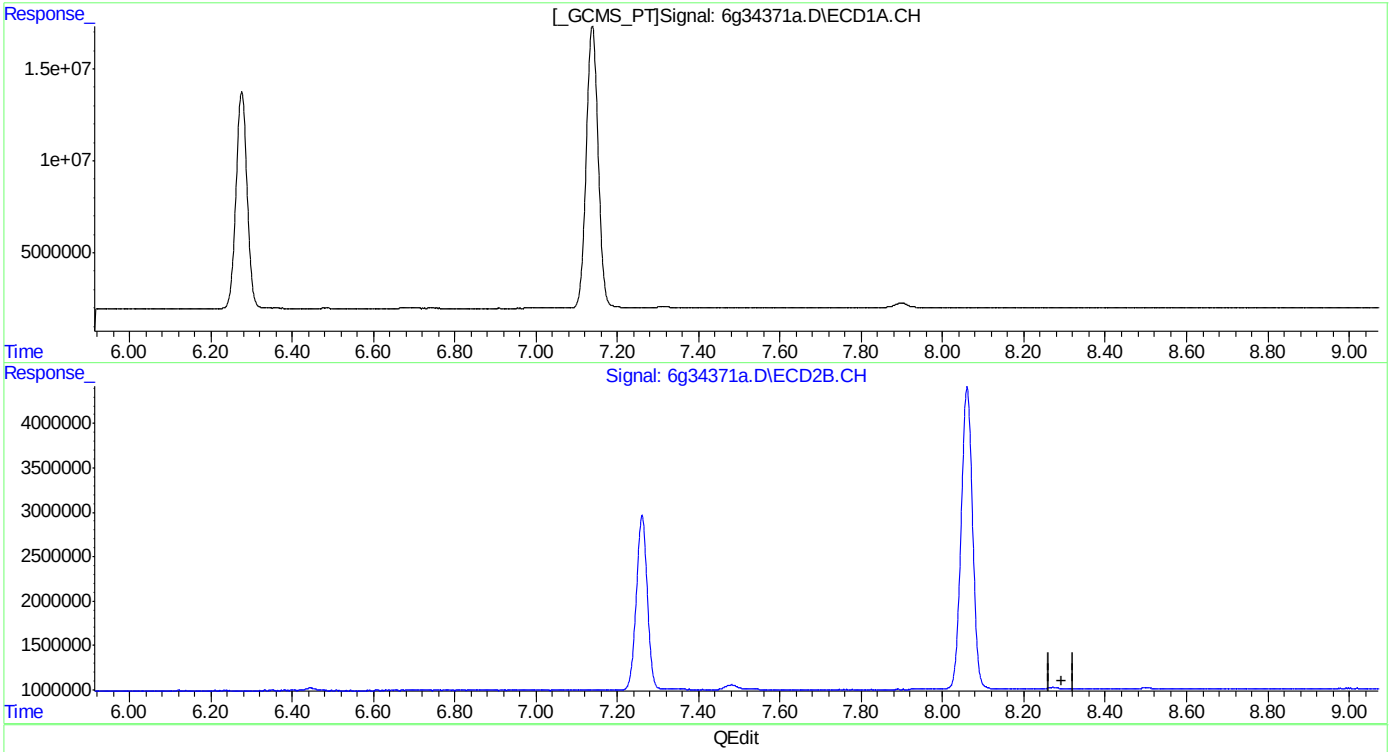
(+) = Expected Retention Time
6PST987.M Mon Apr 25 10:58:44 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34371a.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 9:50 am
Operator : brittanp
Sample : ddt
Misc : op93284,g6g995,15.2,,,10,10
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 10:04:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(19) Endrin Aldehyde (B)
0.000min 0.000PPB
response 0

(19) Endrin Aldehyde #2 (B)
0.000min 0.000PPB
response 0

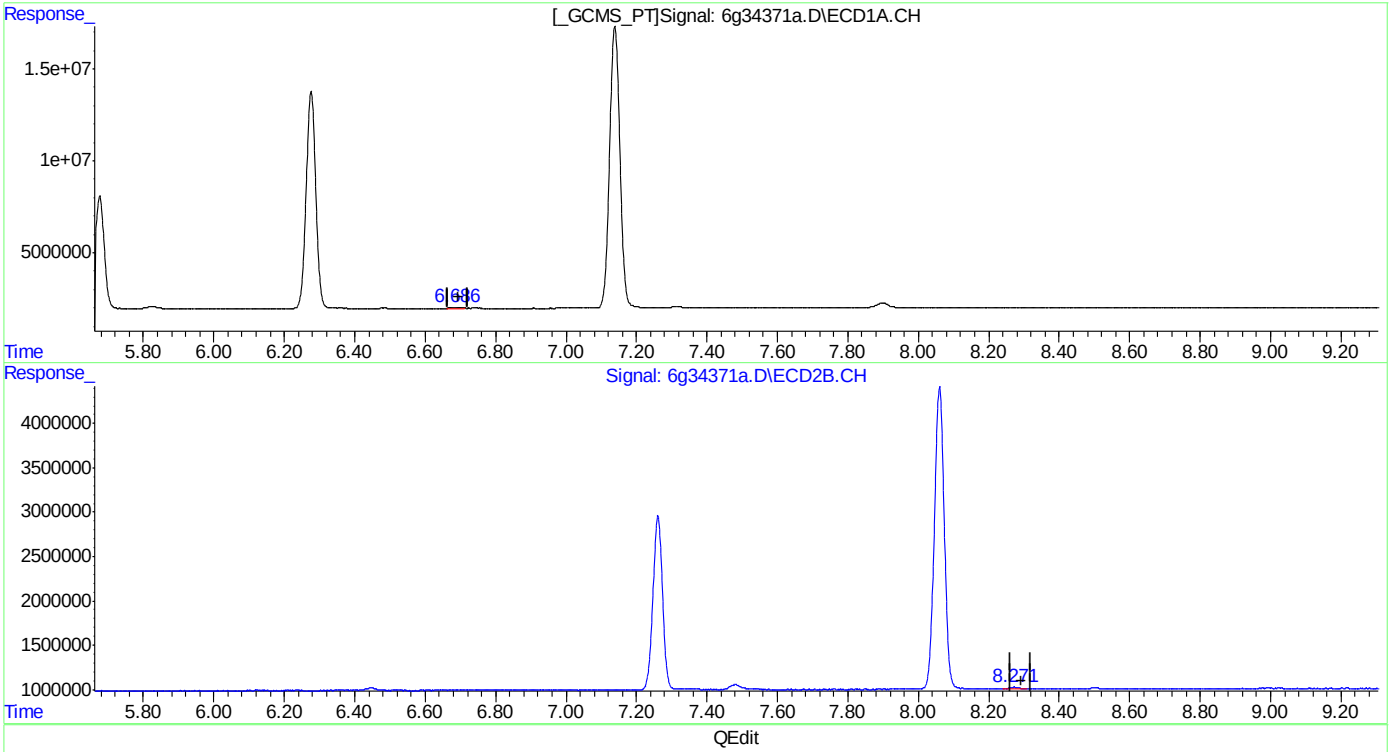
(+) = Expected Retention Time
6PST987.M Mon Apr 25 10:58:50 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34371a.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 9:50 am
Operator : brittanp
Sample : ddt
Misc : op93284,g6g995,15.2,,,10,10
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 10:04:15 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)
6.686min 0.542PPB m
response 852181

(19) Endrin Aldehyde #2 (B)
8.271min 0.694PPB m
response 432241

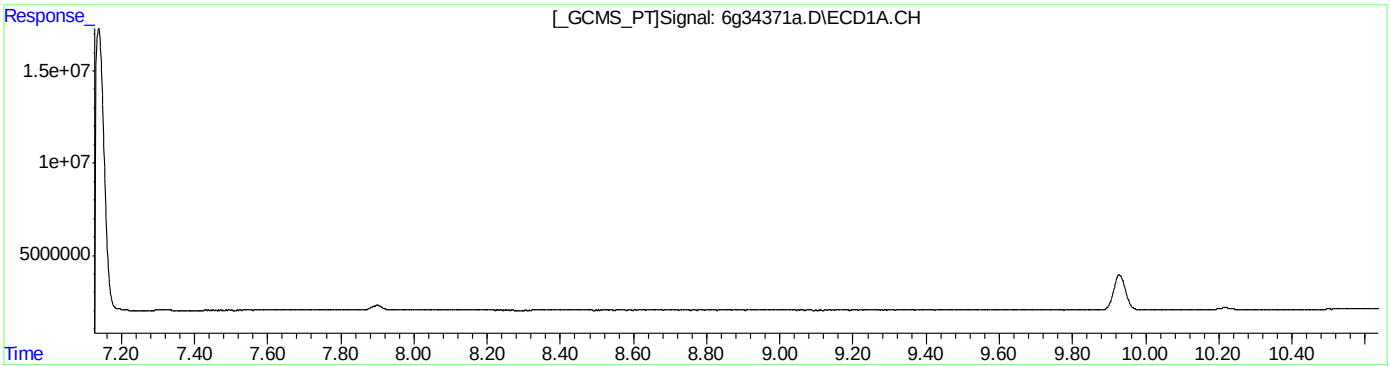
(+) = Expected Retention Time
6PST987.M Mon Apr 25 10:59:06 2016

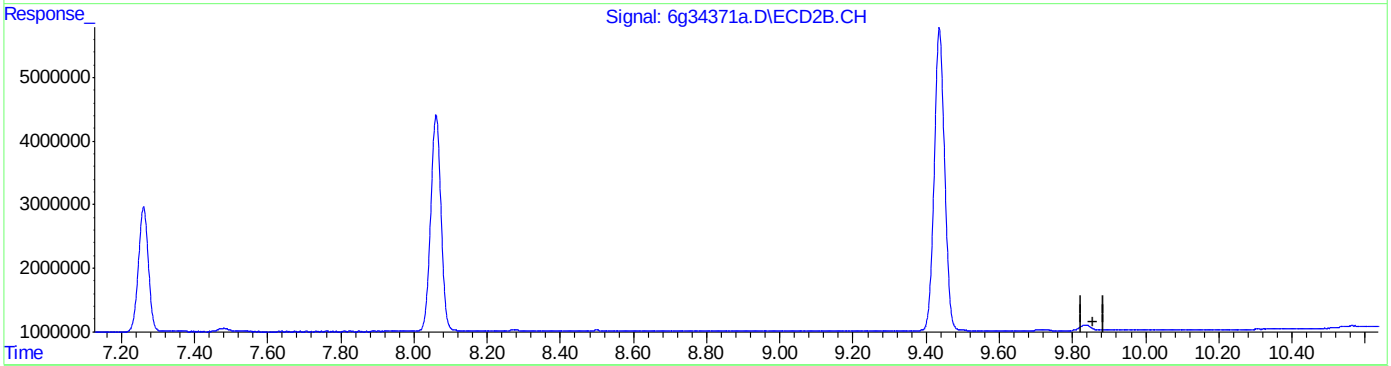
Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34371a.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 25 Apr 2016   9:50 am
Operator  : brittanp
Sample    : ddt
Misc      : op93284,g6g995,15.2,,,10,10
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 10:04:15 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

(23) Endrin Ketone (B)
0.000min 0.000PPB
response 0

(23) Endrin Ketone #2 (B)
0.000min 0.000PPB
response 0

(+) = Expected Retention Time

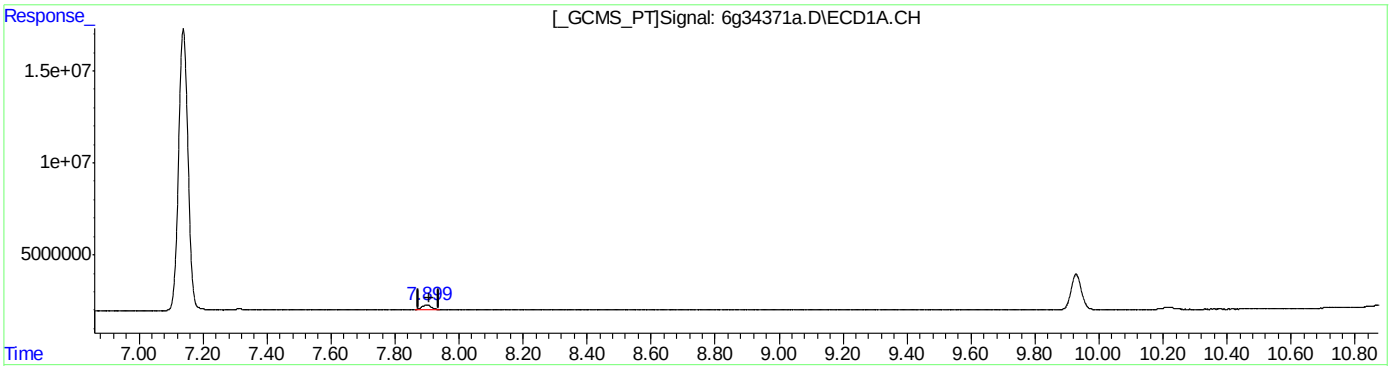
SGS ACCUTEST JC18516

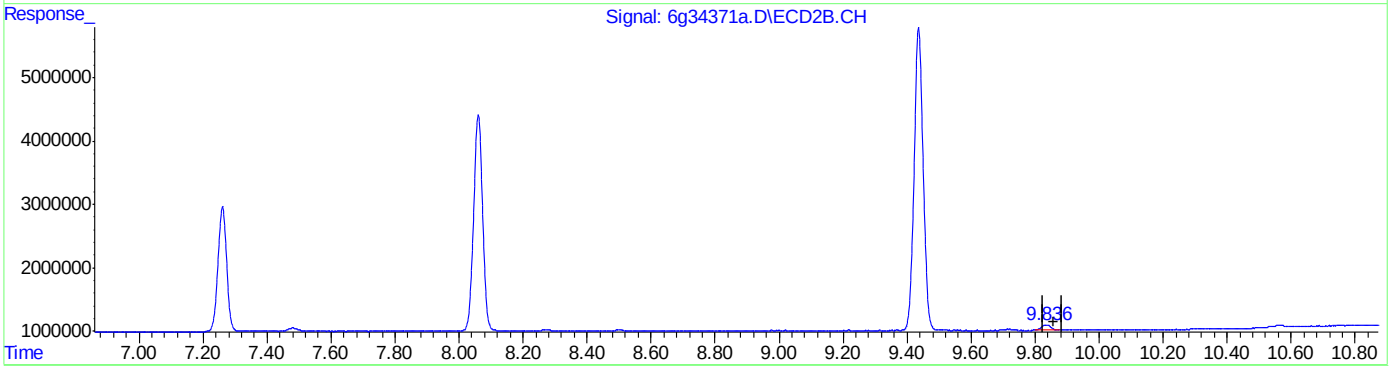
Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34371a.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 25 Apr 2016   9:50 am
Operator  : brittanp
Sample    : ddt
Misc      : op93284,g6g995,15.2,,,10,10
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 10:04:15 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

(23) Endrin Ketone (B)
7.899min 2.321PPB m
response 4679405

(23) Endrin Ketone #2 (B)
9.836min 2.085PPB m
response 1647017

(+) = Expected Retention Time

SGS ACCUTEST JC18516

Manual Integrations
APPROVED
(compounds with "m" flag)
Jennifer Laidlaw
04/25/16 21:58

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34393.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 5:16 pm
Operator : dharas
Sample : ddt
Misc : op93322,g6g995,15.0,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 17:53:13 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...	1.303	1.576	146.0E6	50733936	50.000	50.000
25) I	1-bromo-2...	1.303	1.576	146.0E6	50733936	50.000	50.000
31) I	1-bromo-2...	1.303	1.576	146.0E6	50733936	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.978	2.471	58172778	19533760	21.744	21.311
Spiked Amount		40.000	Range	30 - 150	Recovery	= 54.36%	53.28%
24) SAB	Decachlor...	9.911f	11.754f	51945836	14933926	22.329	21.669
Spiked Amount		40.000			Recovery	= 55.82%	54.17%
	Target Compounds						
13) B	4,4'-DDE	4.917f	6.443f	888704	396032	0.385m	0.483m#
15) MA	Endrin	5.656f	7.253f	141.1E6	43026549	57.260	50.173
16) A	4,4'-DDD	5.808f	7.481f	2755069	2647372	1.413m	3.740m#
18) MA	4,4'-DDT	6.257f	8.052f	269.7E6	73100962	127.167	113.782
19) B	Endrin Al...	6.666f	8.262f	1155619	472844	0.583m	0.695m
23) B	Endrin Ke...	7.881f	9.825f	6312819	3220307	2.486	3.733m#

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

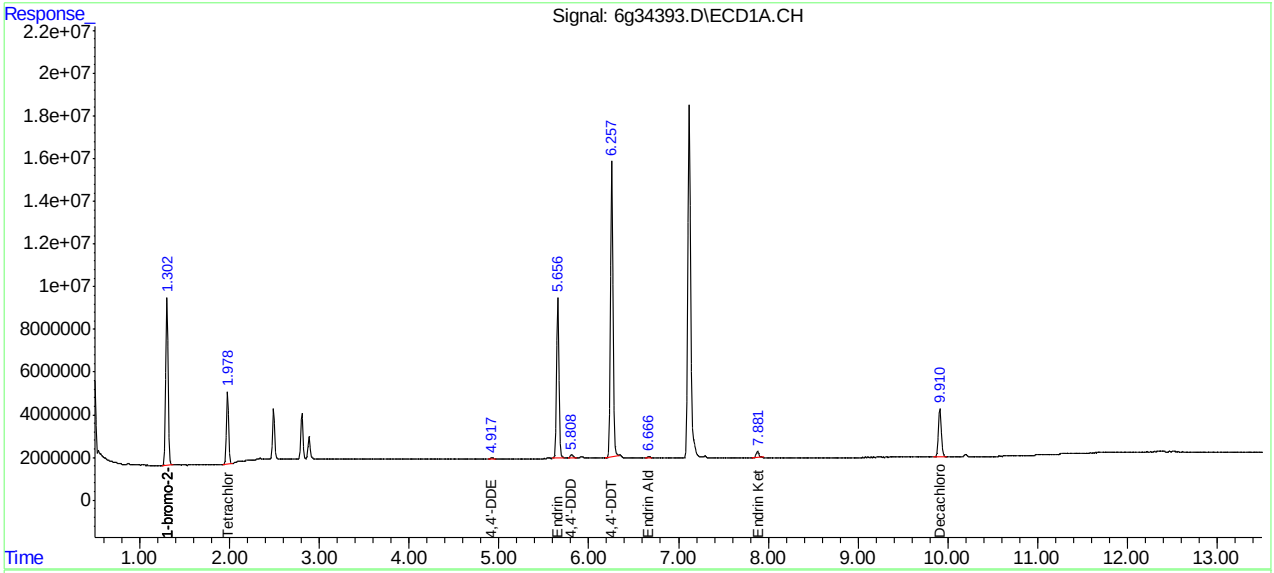
9.5.5
9

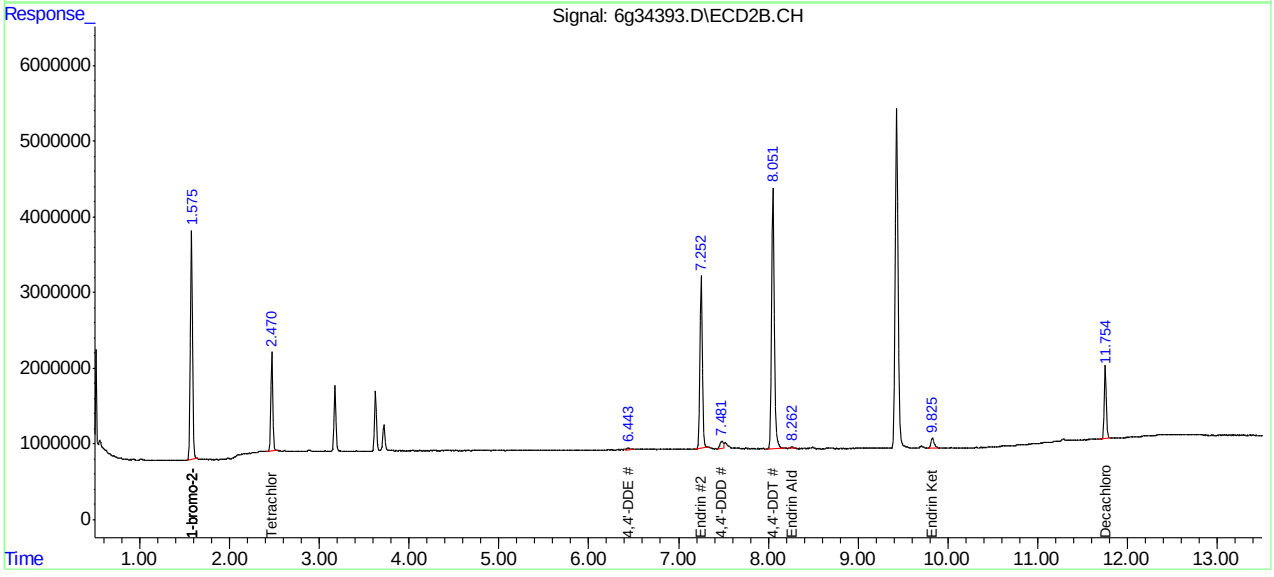
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34393.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 5:16 pm
Operator : dharas
Sample : ddt
Misc : op93322,g6g995,15.0,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 17:53:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC18516

Manual Integration Approval Summary

Sample Number:	G6G995-DDT	**Method:**	SW846 8081B
Lab FileID:	6G34393.D	**Analyst approved:**	04/25/16 17:54 Dhara Saparia
Injection Time:	04/25/16 17:16	**Supervisor approved:**	04/25/16 21:58 Jennifer Laidlaw

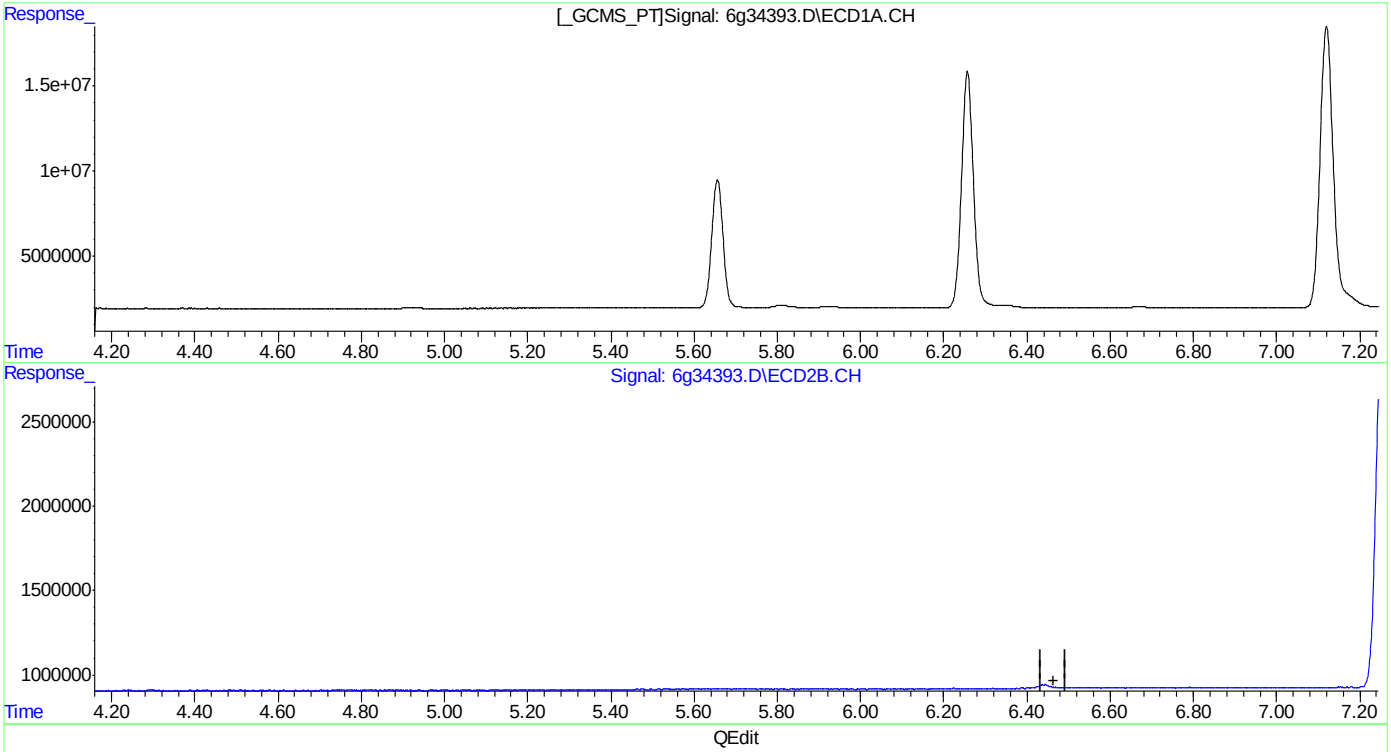
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	1	4.92	Poor instrument integration
4,4'-DDD	72-54-8	1	5.81	Poor instrument integration
4,4'-DDE	72-55-9	2	6.44	Poor instrument integration
Endrin aldehyde	7421-93-4	1	6.67	Poor instrument integration
4,4'-DDD	72-54-8	2	7.48	Poor instrument integration
Endrin aldehyde	7421-93-4	2	8.26	Poor instrument integration
Endrin ketone	53494-70-5	2	9.83	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34393.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 5:16 pm
Operator : dharas
Sample : ddt
Misc : op93322,g6g995,15.0,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 17:50:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(13) 4,4'-DDE (B)
0.000min 0.000PPB
response 0

(13) 4,4'-DDE #2 (B)
0.000min 0.000PPB
response 0

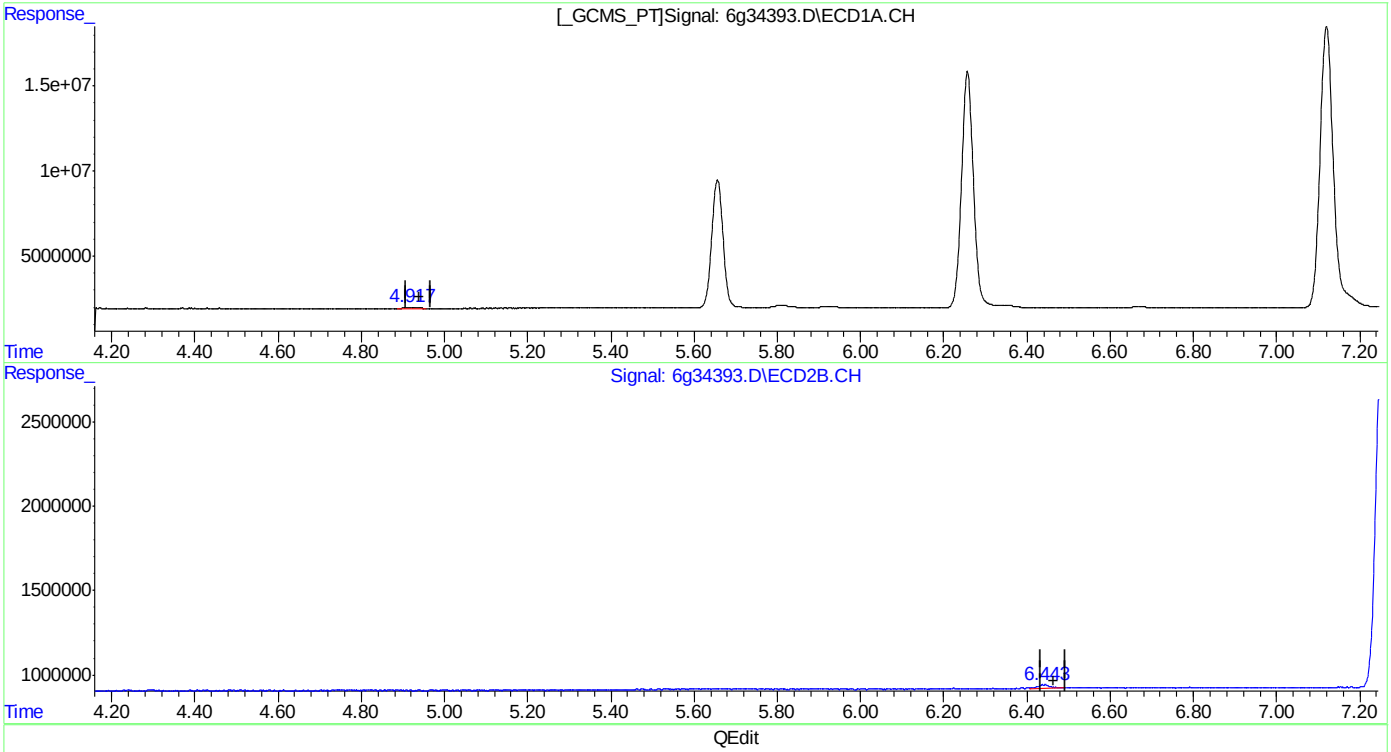
(+) = Expected Retention Time

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34393.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 25 Apr 2016   5:16 pm
Operator  : dharas
Sample    : ddt
Misc      : op93322,g6g995,15.0,,,10,1
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 17:50:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title  : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.50um   Signal #2 Info : 30m x .32mm x .25um
```



(13) 4,4'-DDE (B)

4.917min 0.385PPB m

response 888704

(13) 4,4'-DDE #2 (B)

6.443min 0.483PPB m

response 396032

(+) = Expected Retention Time

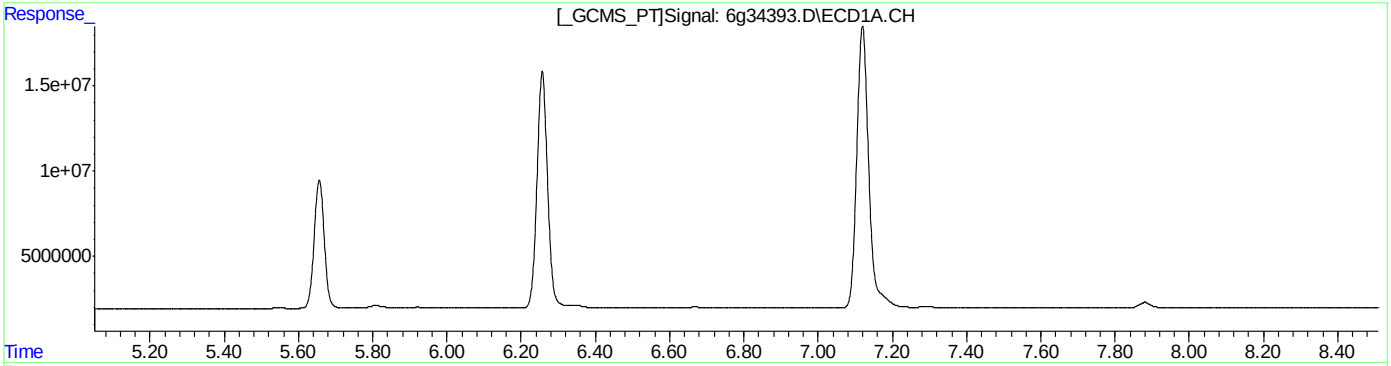
6PST987.M Mon Apr 25 17:51:58 2016

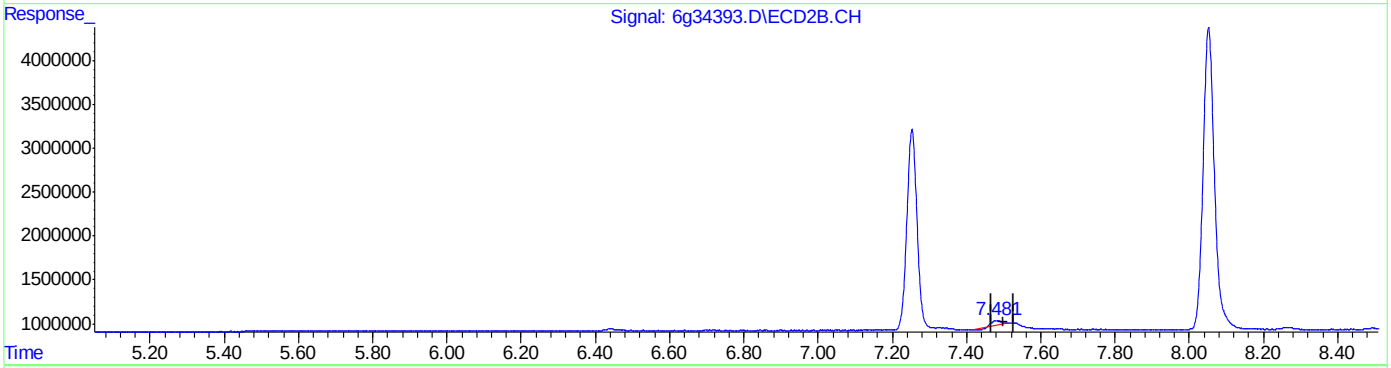
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34393.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 5:16 pm
Operator : dharas
Sample : ddt
Misc : op93322,g6g995,15.0,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 17:50:34 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)
7.481min 1.028PPB
response 727623

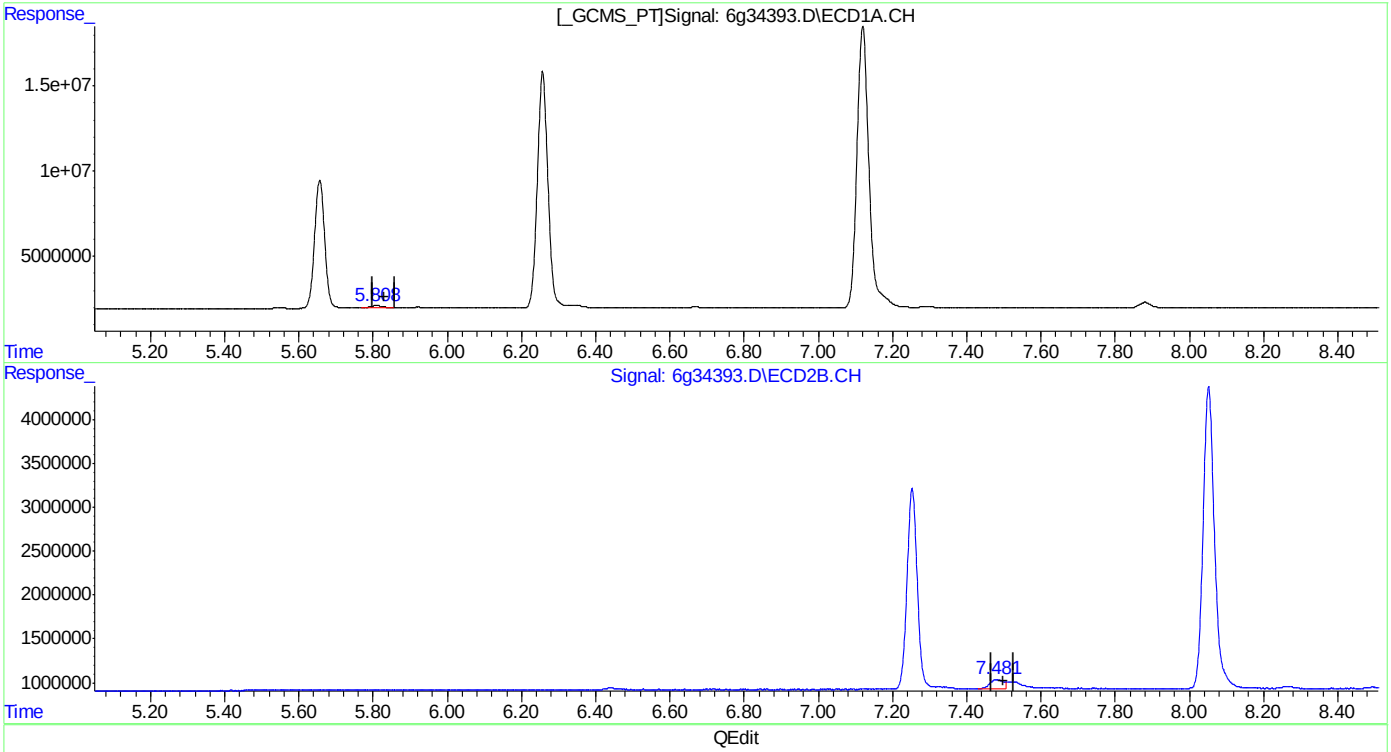
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34393.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 5:16 pm
Operator : dharas
Sample : ddt
Misc : op93322,g6g995,15.0,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 17:50:34 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



(16) 4,4'-DDD (A)
5.808min 1.413PPB m
response 2755069

(16) 4,4'-DDD #2 (A)
7.481min 3.740PPB m
response 2647372

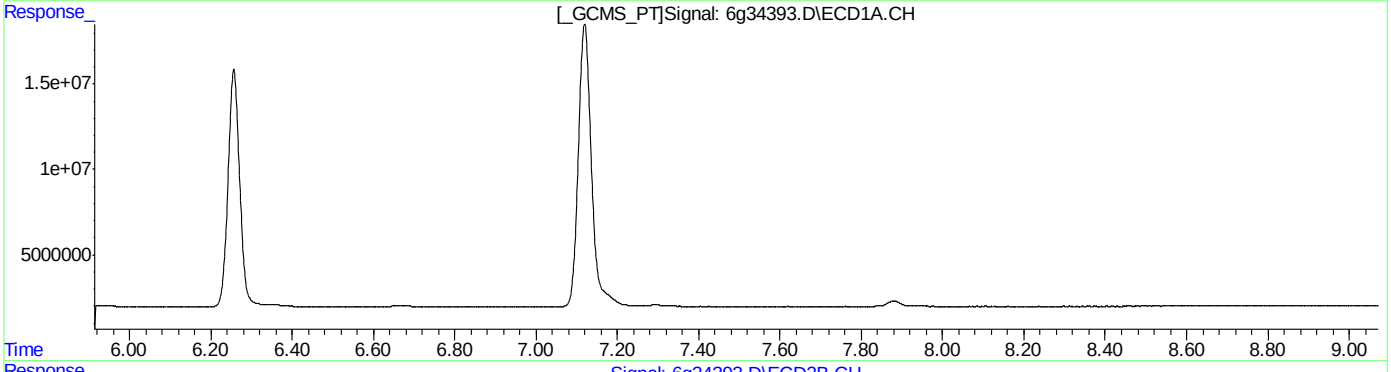
(+) = Expected Retention Time

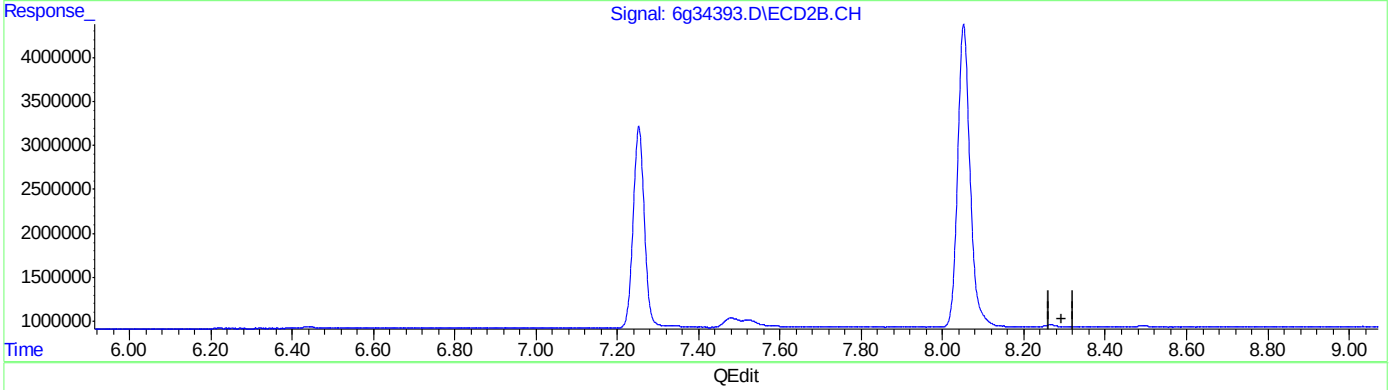
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34393.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 5:16 pm
Operator : dharas
Sample : ddt
Misc : op93322,g6g995,15.0,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 17:50:34 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

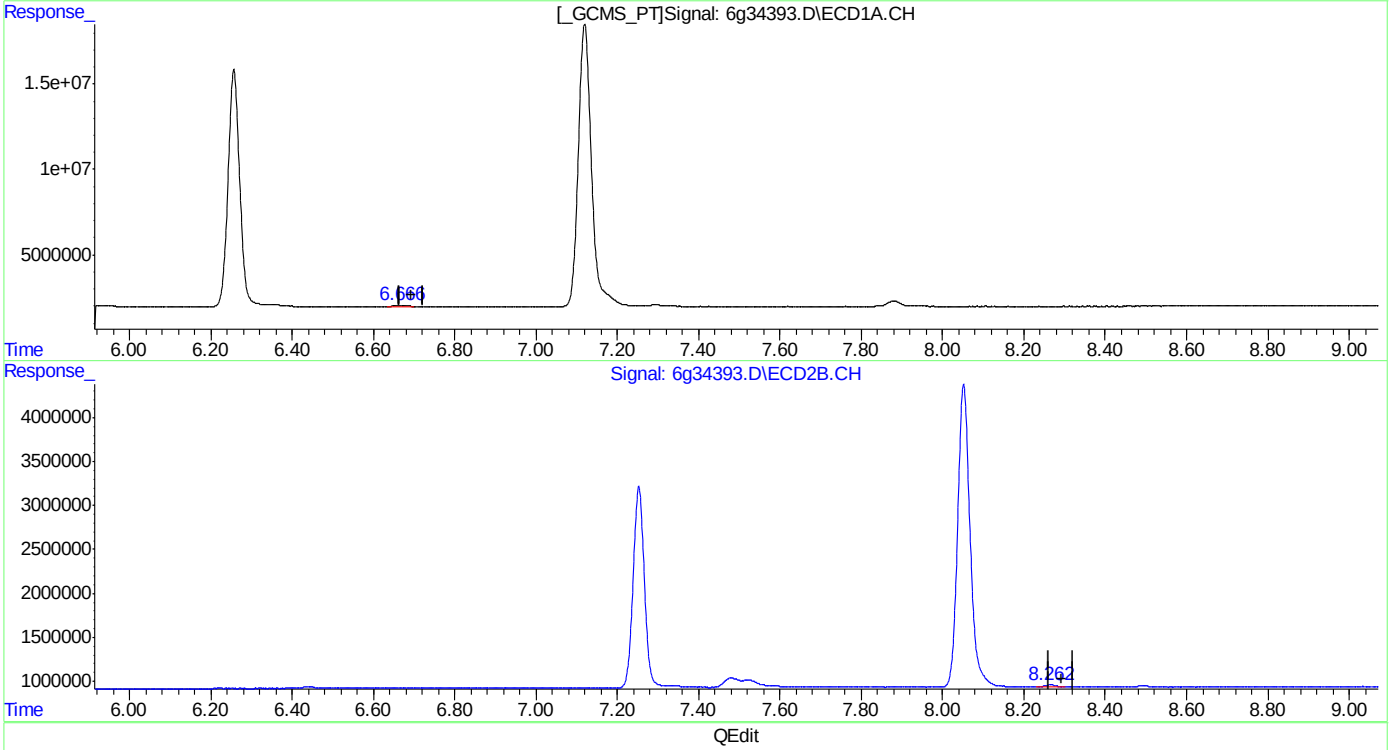
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34393.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 5:16 pm
Operator : dharas
Sample : ddt
Misc : op93322,g6g995,15.0,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 17:50:34 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)
6.666min 0.583PPB m
response 1155619

(19) Endrin Aldehyde #2 (B)
8.262min 0.695PPB m
response 472844

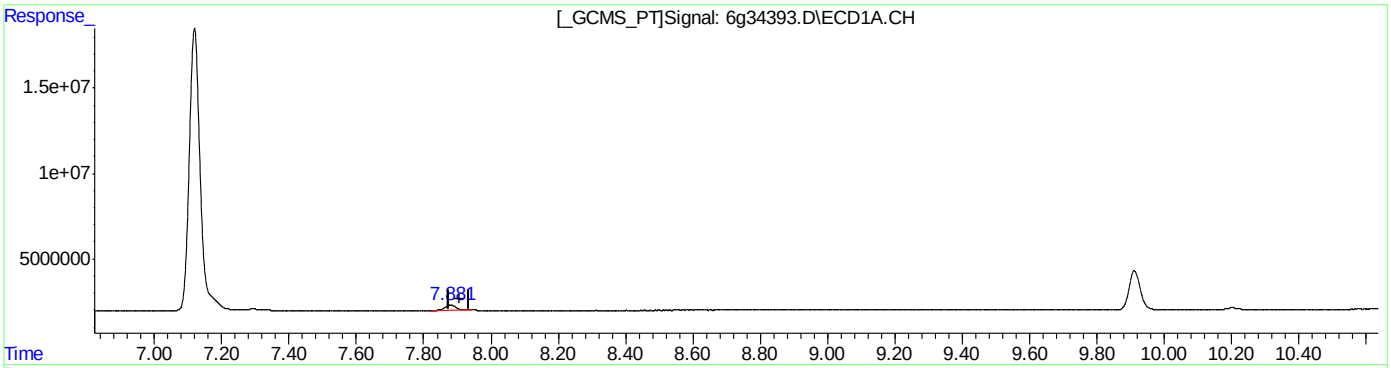
(+) = Expected Retention Time
6PST987.M Mon Apr 25 17:52:59 2016

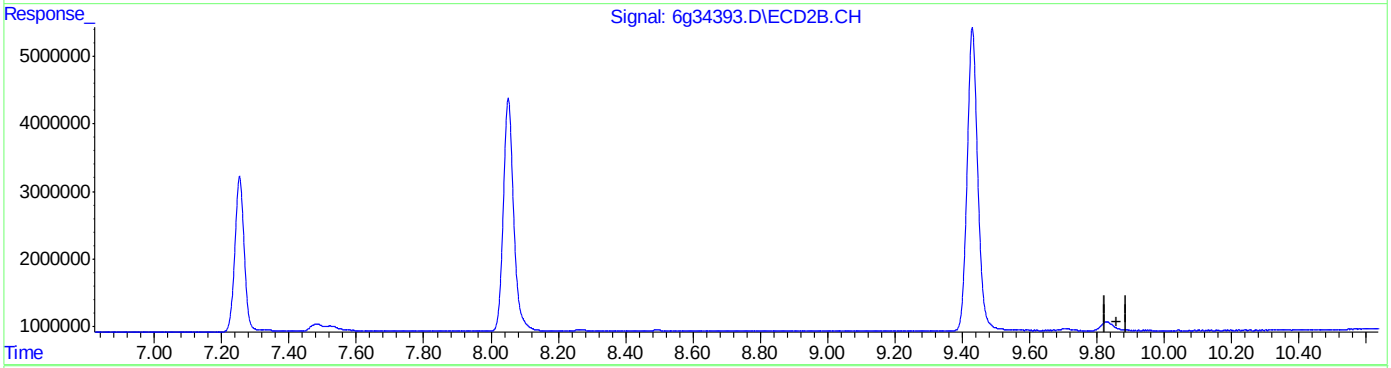
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34393.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 5:16 pm
Operator : dharas
Sample : ddt
Misc : op93322,g6g995,15.0,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 17:50:34 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

(23) Endrin Ketone (B)
7.881min 2.486PPB
response 6312819

(23) Endrin Ketone #2 (B)
0.000min 0.000PPB
response 0

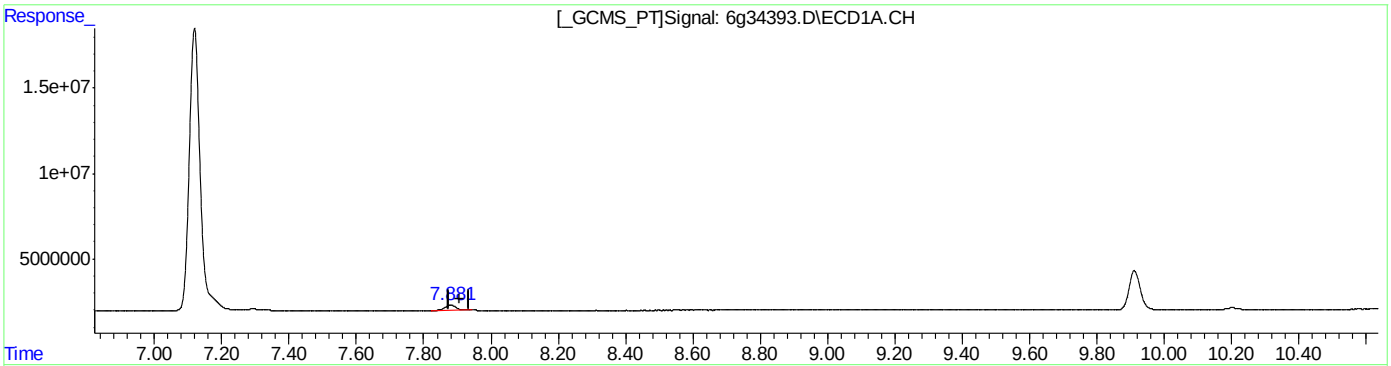
(+) = Expected Retention Time

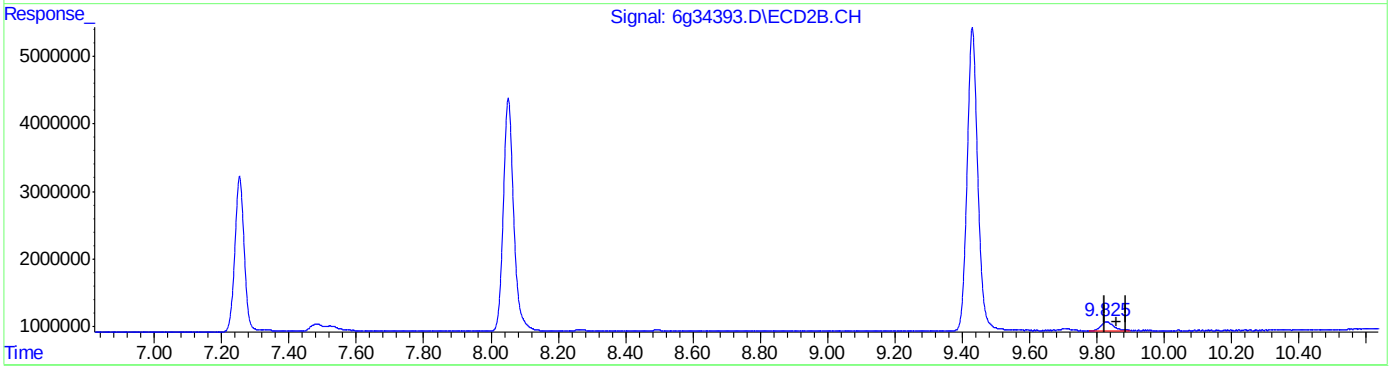
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34393.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 5:16 pm
Operator : dharas
Sample : ddt
Misc : op93322,g6g995,15.0,,,10,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 17:50:34 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

(23) Endrin Ketone (B)
7.881min 2.486PPB
response 6312819

(23) Endrin Ketone #2 (B)
9.825min 3.733PPB m
response 3220307

(+) = Expected Retention Time
6PST987.M Mon Apr 25 17:53:18 2016

SGS ACCUTEST JC18516

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/04/16 12:58

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD2B.CH
Acq On : 01 Apr 2016 11:12 am Operator: dharas
Sample : ic3951-1 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:34 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 15:59:16 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #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-nitrob	1.17	1.54	71647690	929.1E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	1549239	14404442	0.946m	0.808m
Spiked Amount	40.000	Range	30 - 150	Recovery	=	2.36%#	2.02%#
24) SA	Decachlorobiphen	8.95	10.88	2242284	11699809	1.141	1.131
Spiked Amount	40.000			Recovery	=	2.85%	2.83%
	Target Compounds						
3) A	alpha-BHC	2.22	3.05	1477798	23476734	0.780m	0.886
4) MA	gamma-BHC	2.51	3.48	1552497	20642785	0.859	0.865
5) MA	Heptachlor	2.99	4.05	1612343	19268658	0.826	0.914
6) B	beta-BHC	2.59	3.57	956496	9328680	1.002	0.907
7) B	delta-BHC	2.77	3.96	1205309	17959324	0.712	0.753
8) MB	Aldrin	3.30	4.50	1500180	20059082	0.861	0.960
9) B	Heptachlor Epoxi	4.00	5.33	1493866	17810734	0.837m	0.926
10) B	gamma-Chlordane	4.15	5.61	1953513	17982476	1.105m	0.967
11) B	alpha-Chlordane	4.32	5.84	1580594	18182600	0.890	0.981
12) A	Endosulfan I	4.49	5.93	1522095	16289762	0.897	0.918
13) B	4,4'-DDE	4.44	6.10	1401372	18641027	0.938	1.019
14) MA	Dieldrin	4.81	6.37	1544036	19886559	0.913	1.024
15) MA	Endrin	5.12	6.87	1536947	15932098	1.007	0.889
16) A	4,4'-DDD	5.25	7.06	1249919	15122761	0.976	0.955
17) B	Endosulfan II	5.44	7.22	1398628	16279956	0.842	0.944
18) MA	4,4'-DDT	5.66	7.59	1013719	9492594	0.829	0.852m
19) B	Endrin Aldehyde	6.07	7.80	1235216	11810133	0.895m	0.903m
20) B	Endosulfan Sulfa	6.74	8.27	1341367	14248692	0.859	0.969m
21) A	Methoxychlor	6.44	8.84	872392	5793293	0.986m	0.991m
22)	Mirex	6.54	9.16	1557076	9798496	0.899	0.907
23) B	Endrin Ketone	7.17	9.23	1758017	12650750	1.026	0.823m

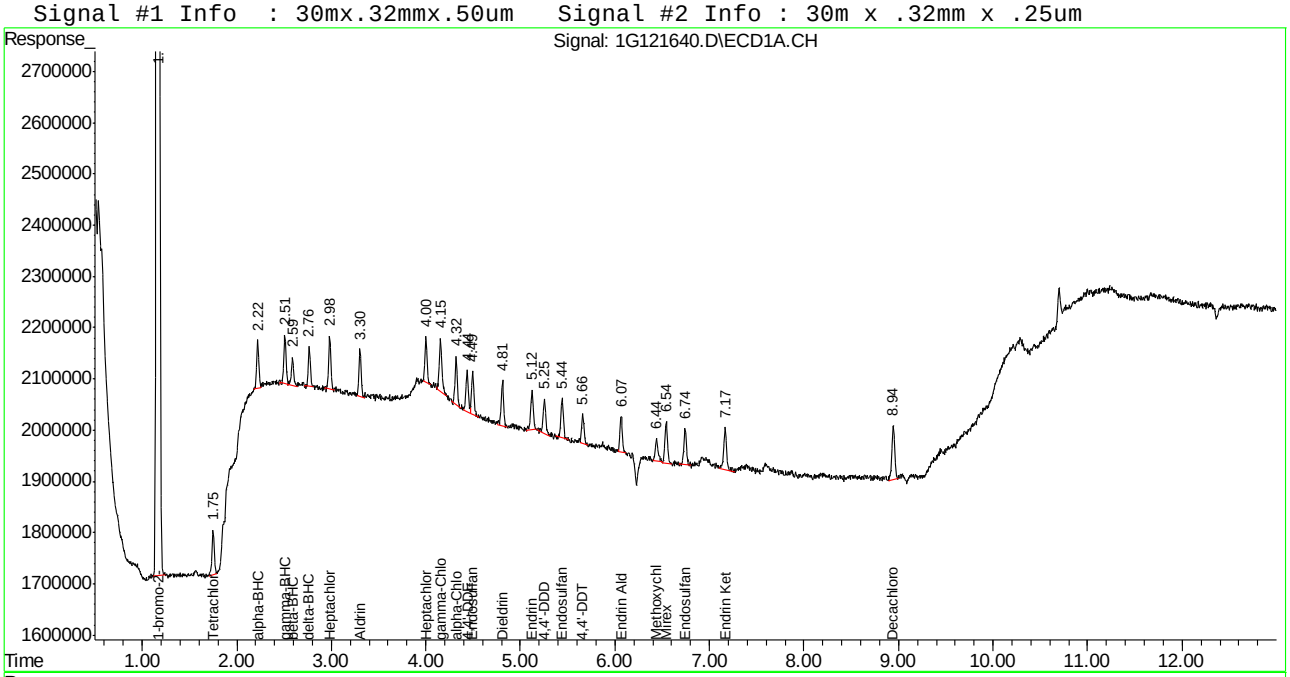
(f)=RT Delta > 1/2 Window (m)=manual int.
1G121640.D 1PST3951.M Fri Apr 01 16:48:05 2016 RPT1 Page 1

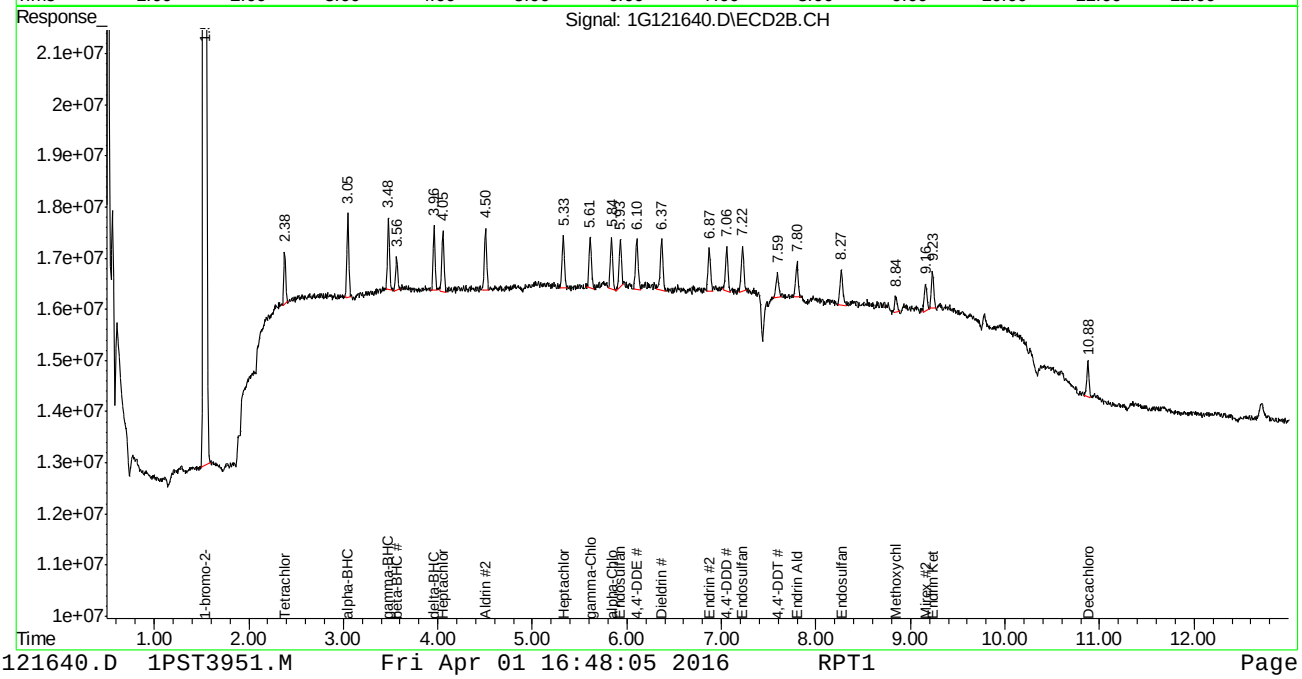
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD2B.CH
Acq On : 01 Apr 2016 11:12 am Operator: dharas
Sample : ic3951-1 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:34 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #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

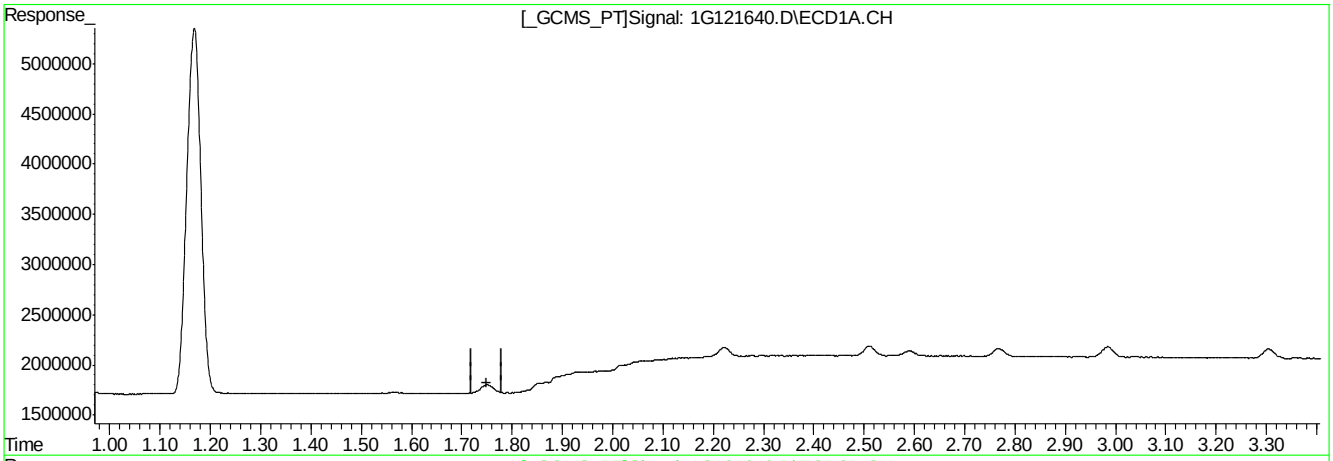
Sample Number: G1G3951-IC3951 **Method:** SW846 8081B
Lab FileID: 1G121640.D **Analyst approved:** 04/01/16 16:29 Joseph Ravino
Injection Time: 04/01/16 11:12 **Supervisor approved:** 04/04/16 12:58 Gwendolyn Burns

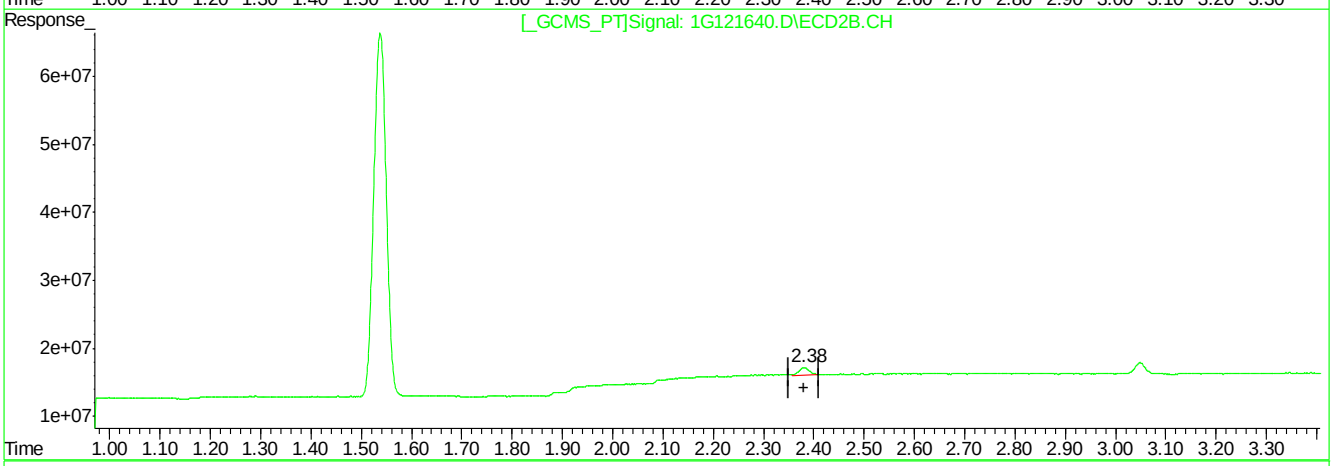
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	1.75	Poor instrument integration
alpha-BHC	319-84-6	1	2.22	Poor instrument integration
Tetrachloro-m-xylene	877-09-8	2	2.38	Poor instrument integration
Heptachlor epoxide	1024-57-3	1	4.00	Poor instrument integration
gamma-Chlordane	5103-74-2	1	4.15	Poor instrument integration
Endrin aldehyde	7421-93-4	1	6.07	Poor instrument integration
Methoxychlor	72-43-5	1	6.44	Poor instrument integration
4,4'-DDT	50-29-3	2	7.59	Poor instrument integration
Endrin aldehyde	7421-93-4	2	7.80	Poor instrument integration
Endosulfan sulfate	1031-07-8	2	8.27	Poor instrument integration
Methoxychlor	72-43-5	2	8.84	Poor instrument integration
Endrin ketone	53494-70-5	2	9.23	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:12 am                    Operator: dharas
Sample    : ic3951-1                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:04 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(2) Tetrachloro-m-xylene (SAB)

0.00min 0.000PPB

response 0

(2) Tetrachloro-m-xylene #2 (SAB)

2.38min 0.925PPB

response 16489900

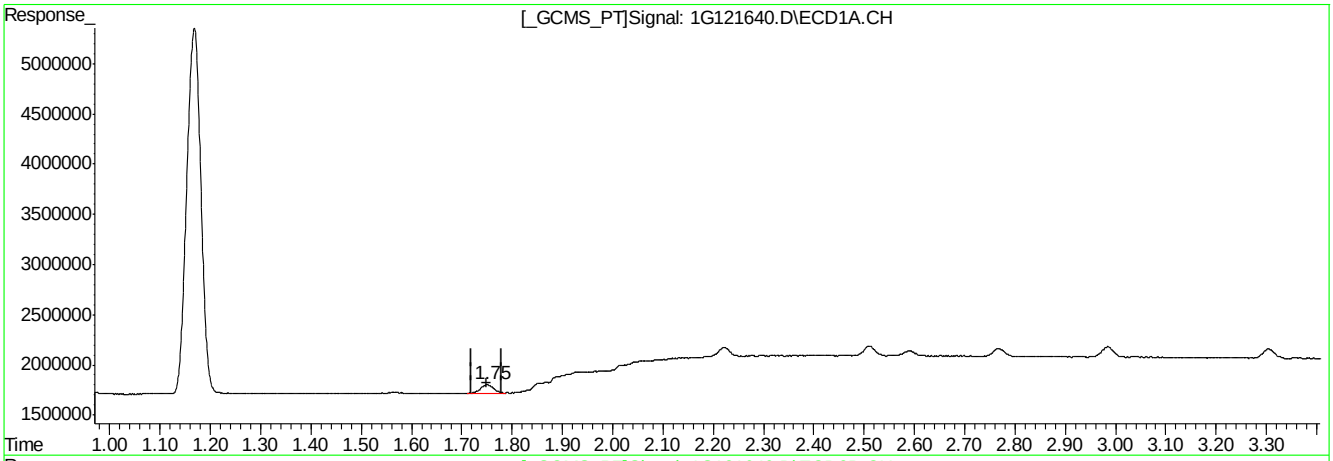
(+) = Expected Retention Time

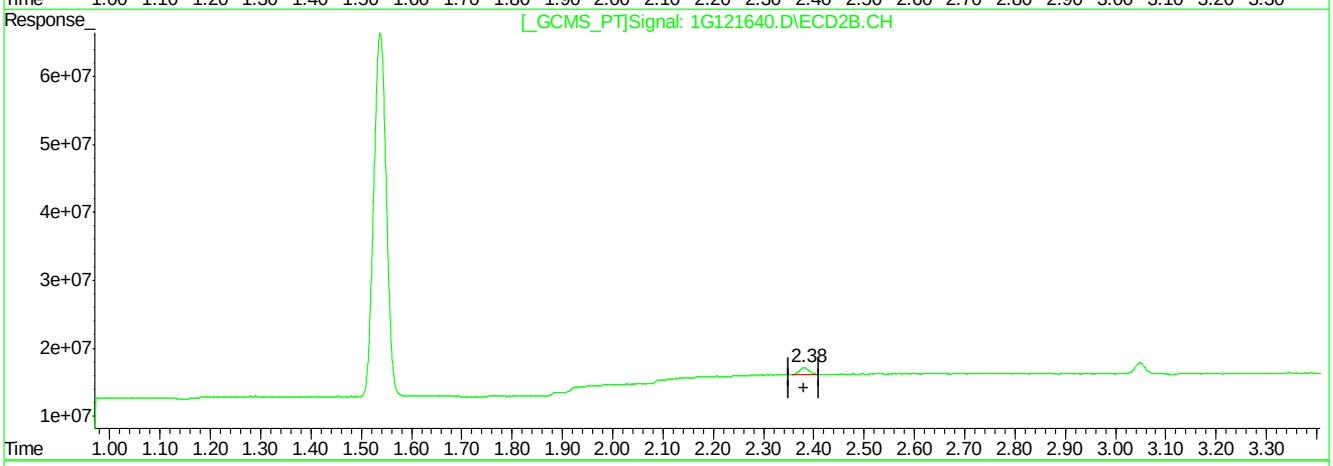
1G121640.D 1PST3951.M Fri Apr 01 16:04:24 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:12 am                    Operator: dharas
Sample    : ic3951-1                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:04 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(2) Tetrachloro-m-xylene (SAB)

1.75min 0.946PPB m

response 1549239

(2) Tetrachloro-m-xylene #2 (SAB)

2.38min 0.808PPB m

response 14404442

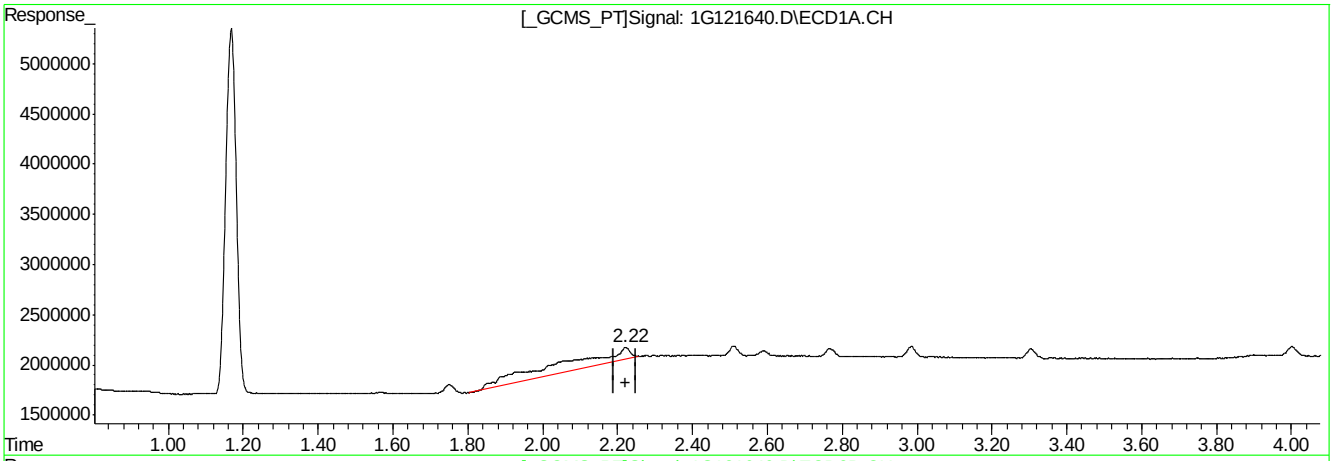
(+) = Expected Retention Time

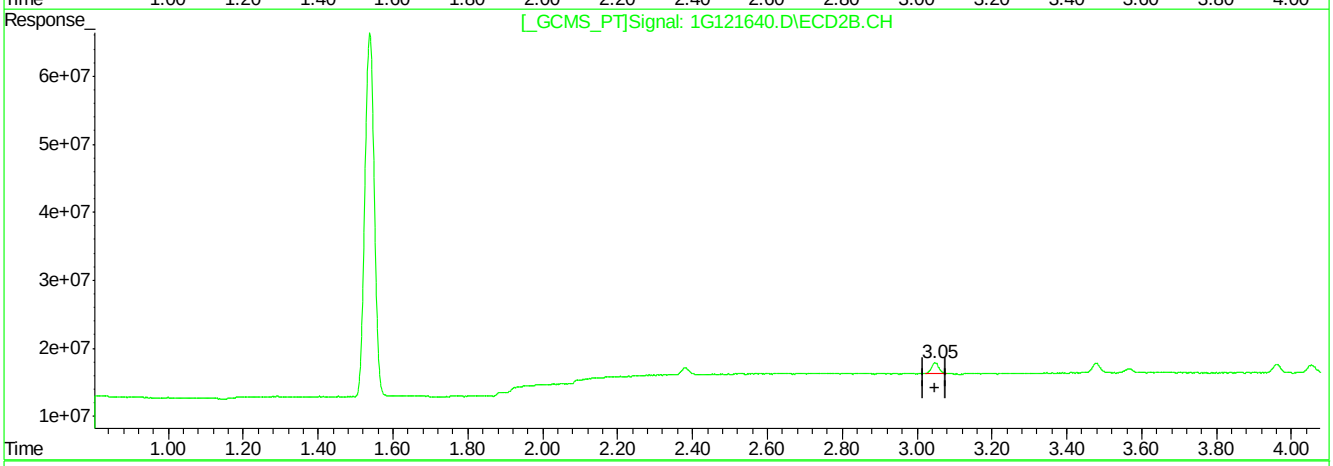
1G121640.D 1PST3951.M Fri Apr 01 16:04:42 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:12 am                    Operator: dharas
Sample    : ic3951-1                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:04 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(3) alpha-BHC (A)

2.22min 10.267PPB

response 19452780

(3) alpha-BHC #2 (A)

3.05min 0.886PPB

response 23476734

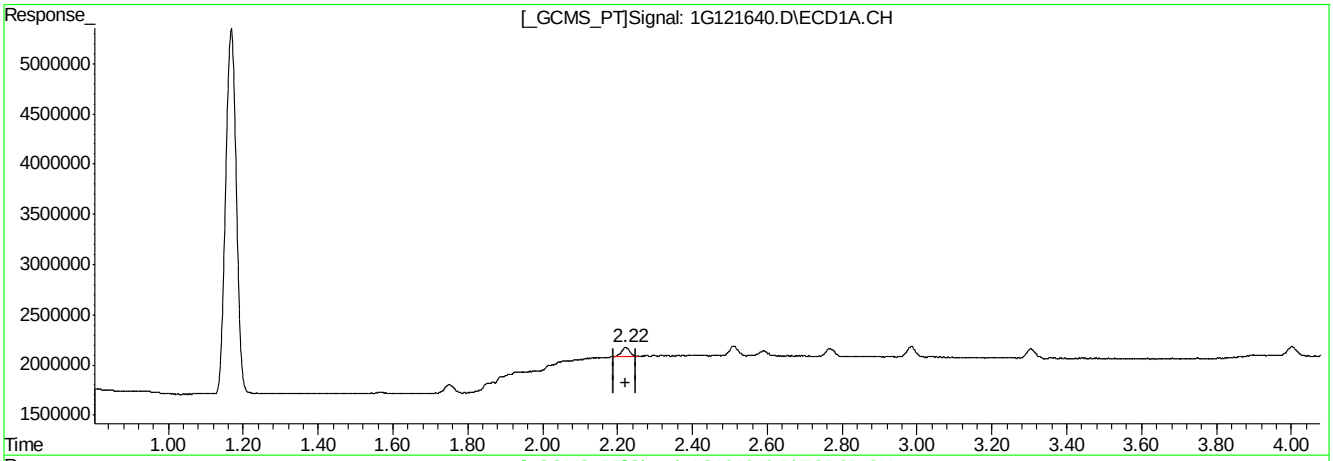
(+) = Expected Retention Time

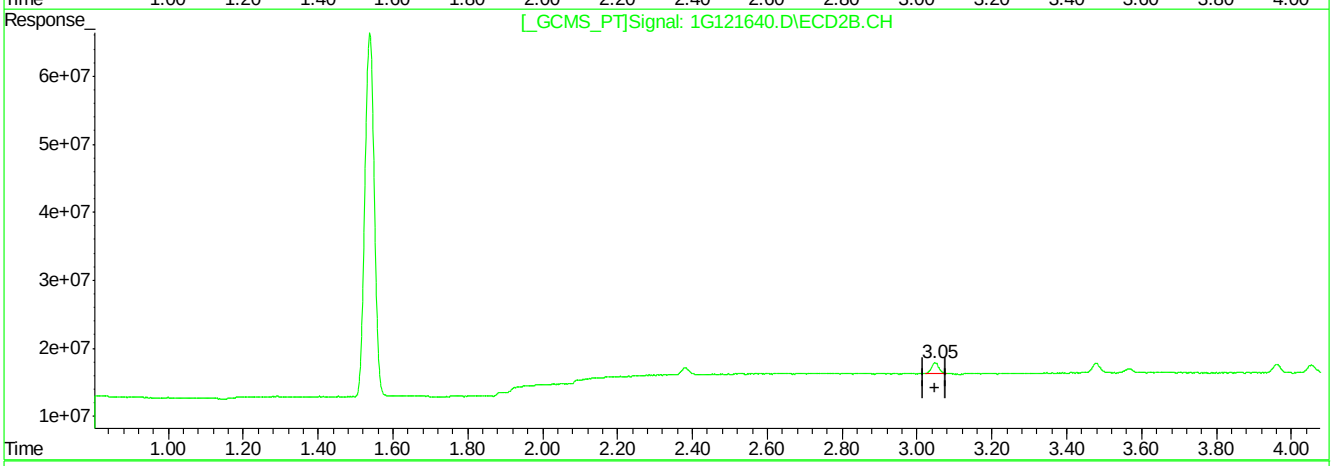
1G121640.D 1PST3951.M Fri Apr 01 16:04:50 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:12 am                    Operator: dharas
Sample    : ic3951-1                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:04 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(3) alpha-BHC (A)

2.22min 0.780PPB m

response 1477798

(3) alpha-BHC #2 (A)

3.05min 0.886PPB

response 23476734

(+) = Expected Retention Time

1G121640.D 1PST3951.M Fri Apr 01 16:04:59 2016 RPT1

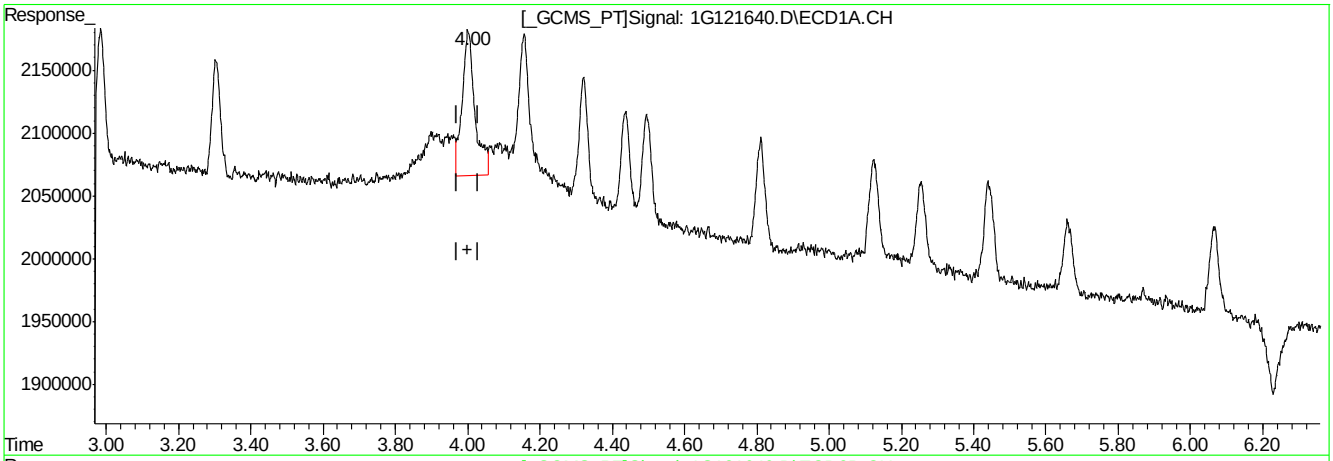
9.6.1.5

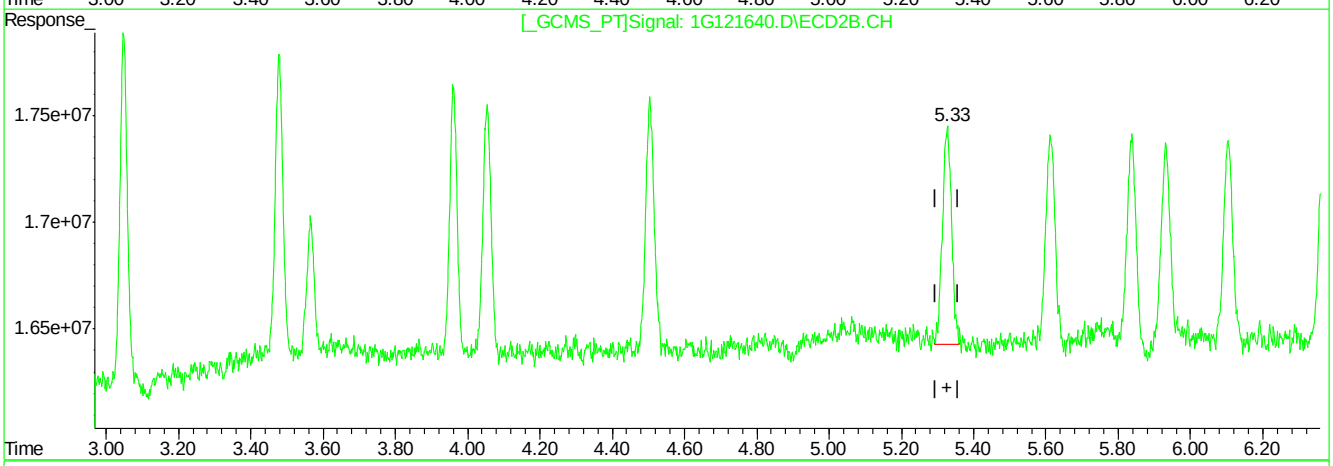
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:12 am                    Operator: dharas
Sample    : ic3951-1                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:04 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(9) Heptachlor Epoxide (B)

4.00min 1.595PPB

response 2845675

(9) Heptachlor Epoxide #2 (B)

5.33min 0.926PPB

response 17810734

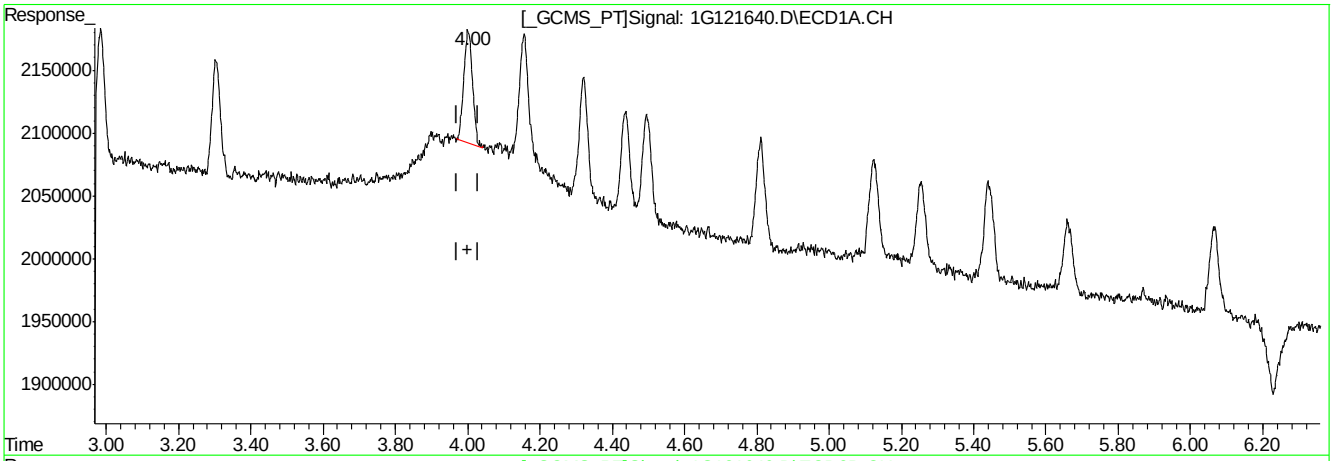
(+) = Expected Retention Time

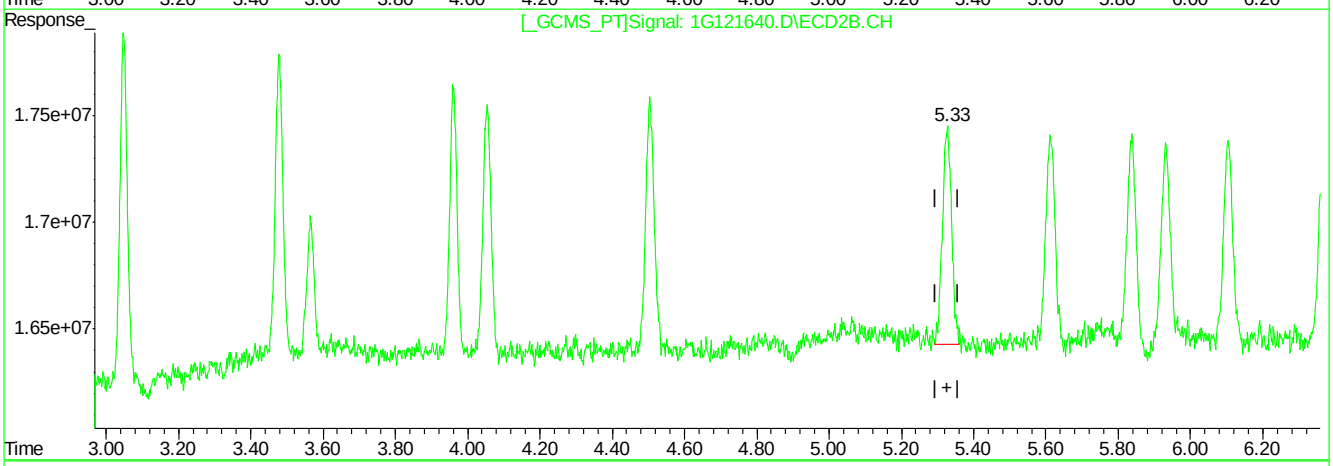
1G121640.D 1PST3951.M Fri Apr 01 16:05:20 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:12 am                    Operator: dharas
Sample    : ic3951-1                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:04 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(9) Heptachlor Epoxide (B)

4.00min 0.837PPB m

response 1493866

(9) Heptachlor Epoxide #2 (B)

5.33min 0.926PPB

response 17810734

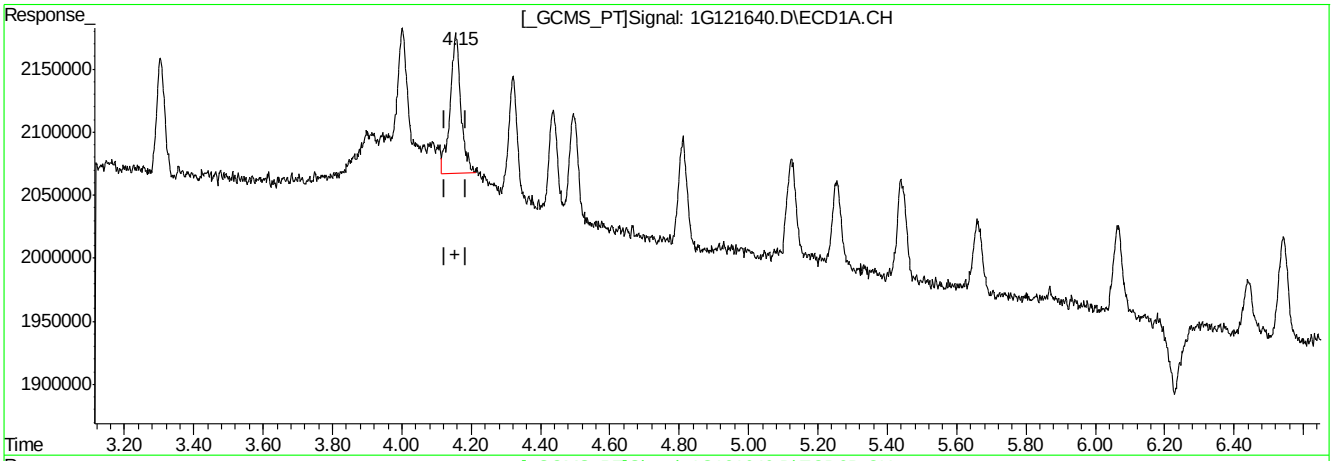
(+) = Expected Retention Time

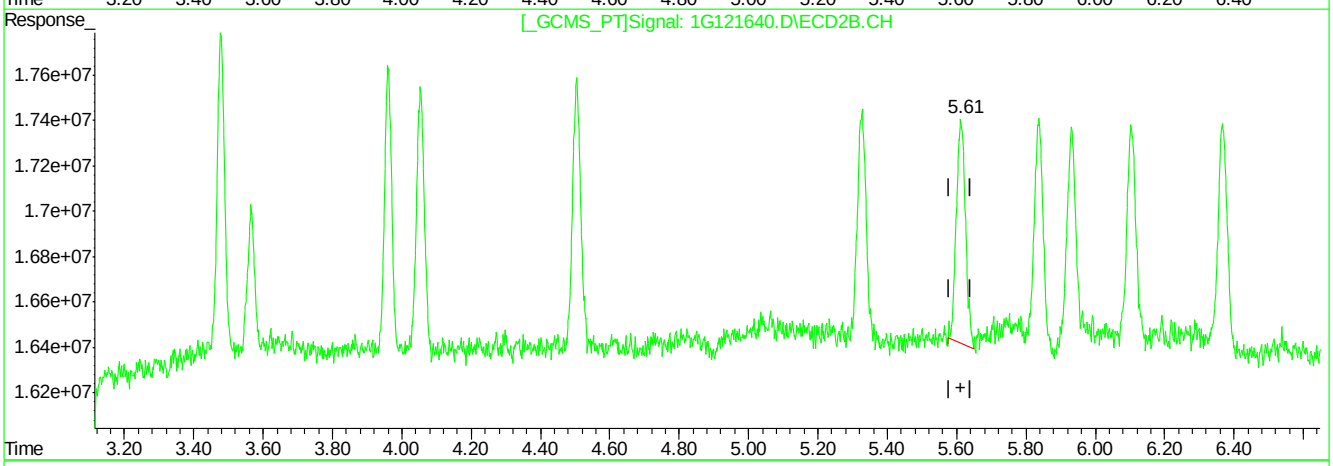
1G121640.D 1PST3951.M Fri Apr 01 16:05:26 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:12 am                    Operator: dharas
Sample    : ic3951-1                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:04 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(10) gamma-Chlordane (B)

4.16min 1.343PPB

response 2375618

(10) gamma-Chlordane #2 (B)

5.61min 0.967PPB

response 17982476

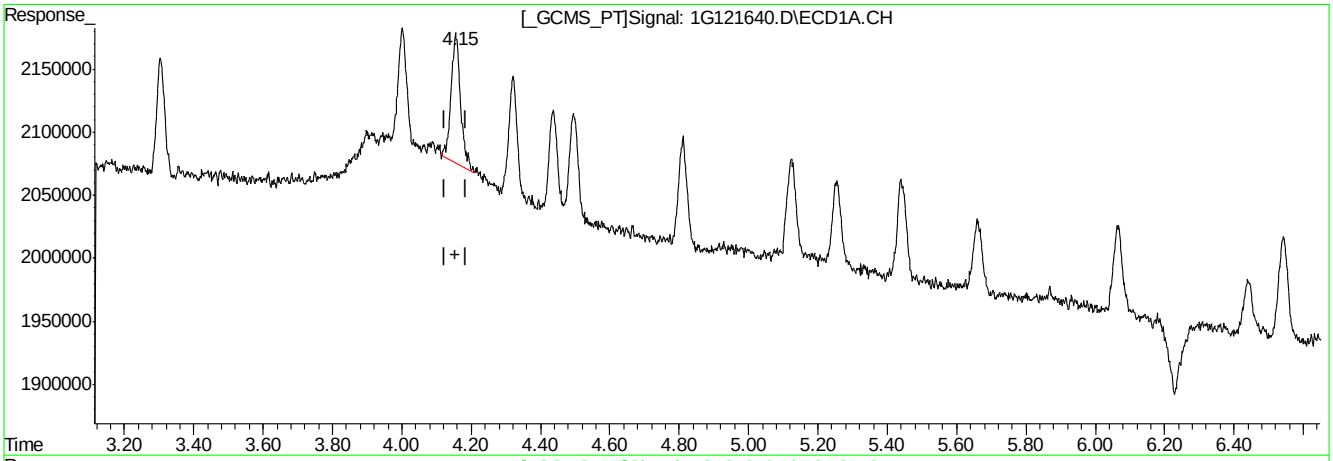
(+) = Expected Retention Time

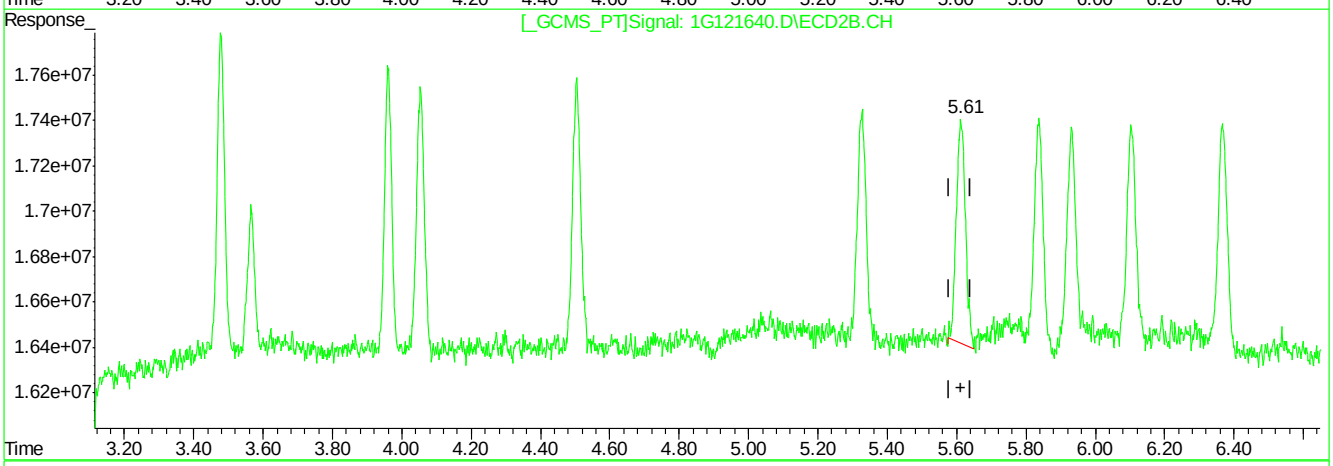
1G121640.D 1PST3951.M Fri Apr 01 16:05:35 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:12 am                    Operator: dharas
Sample    : ic3951-1                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:04 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(10) gamma-Chlordane (B)

4.15min 1.105PPB m

response 1953513

(10) gamma-Chlordane #2 (B)

5.61min 0.967PPB

response 17982476

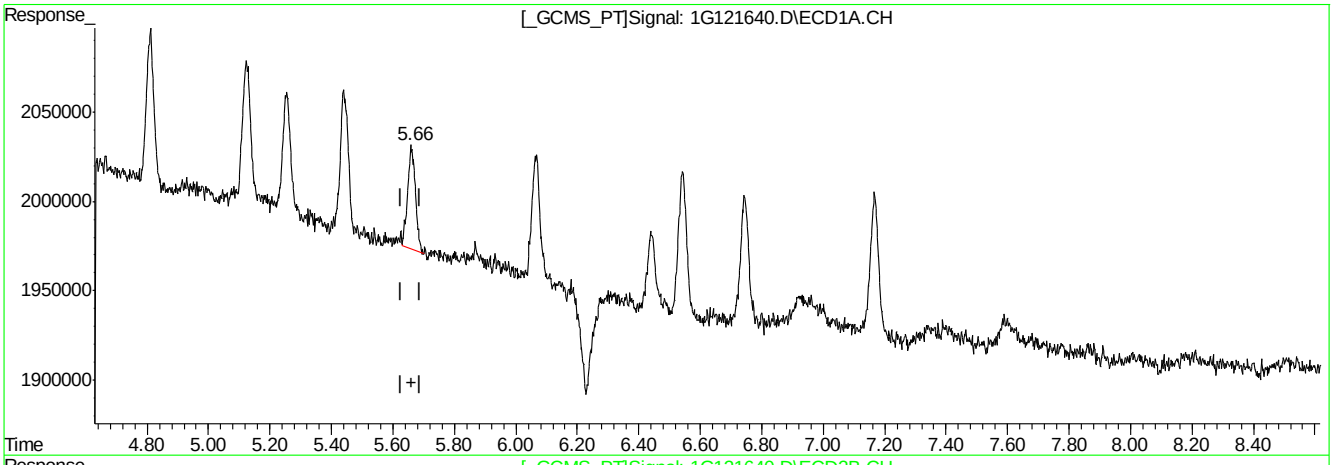
(+) = Expected Retention Time

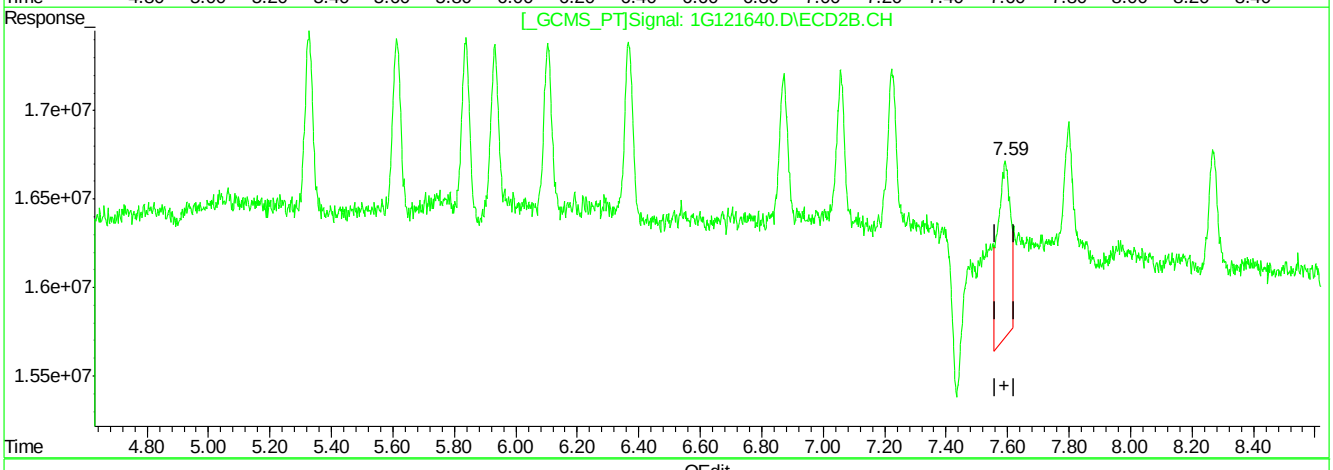
1G121640.D 1PST3951.M Fri Apr 01 16:05:41 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:12 am                    Operator: dharas
Sample    : ic3951-1                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:04 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(18) 4,4'-DDT (MA)

5.66min 0.829PPB

response 1013719

(18) 4,4'-DDT #2 (MA)

7.59min 2.562PPB

response 28535570

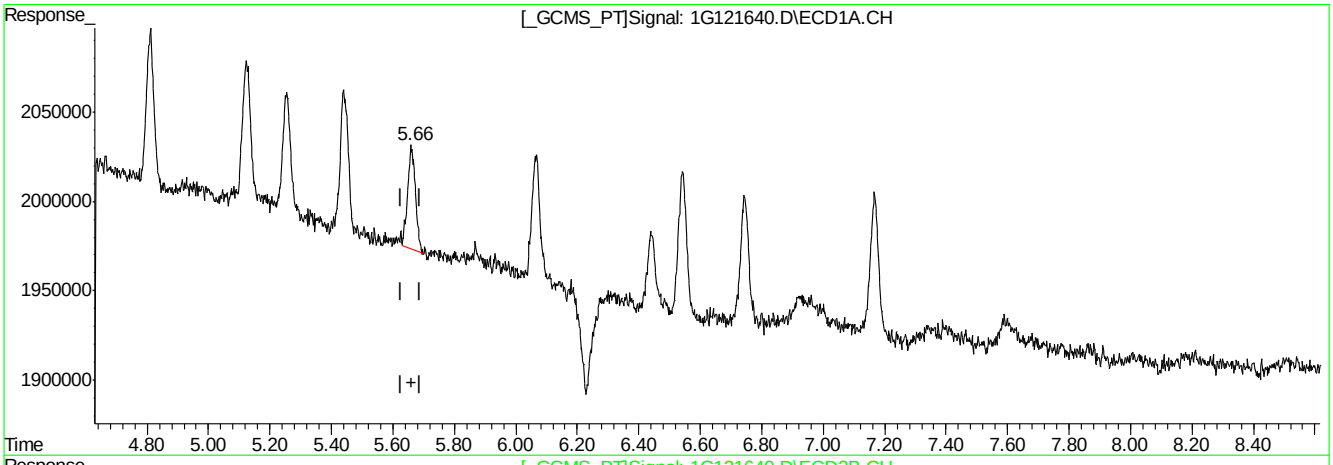
(+) = Expected Retention Time

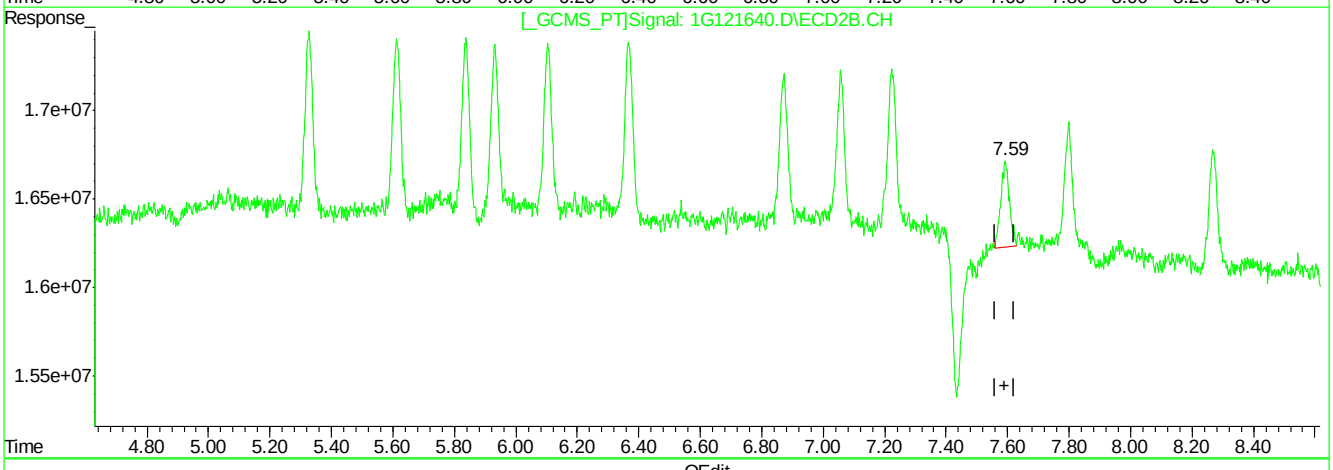
1G121640.D 1PST3951.M Fri Apr 01 16:06:08 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:12 am                    Operator: dharas
Sample    : ic3951-1                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:04 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(18) 4,4'-DDT (MA)

5.66min 0.829PPB

response 1013719

(18) 4,4'-DDT #2 (MA)

7.59min 0.852PPB m

response 9492594

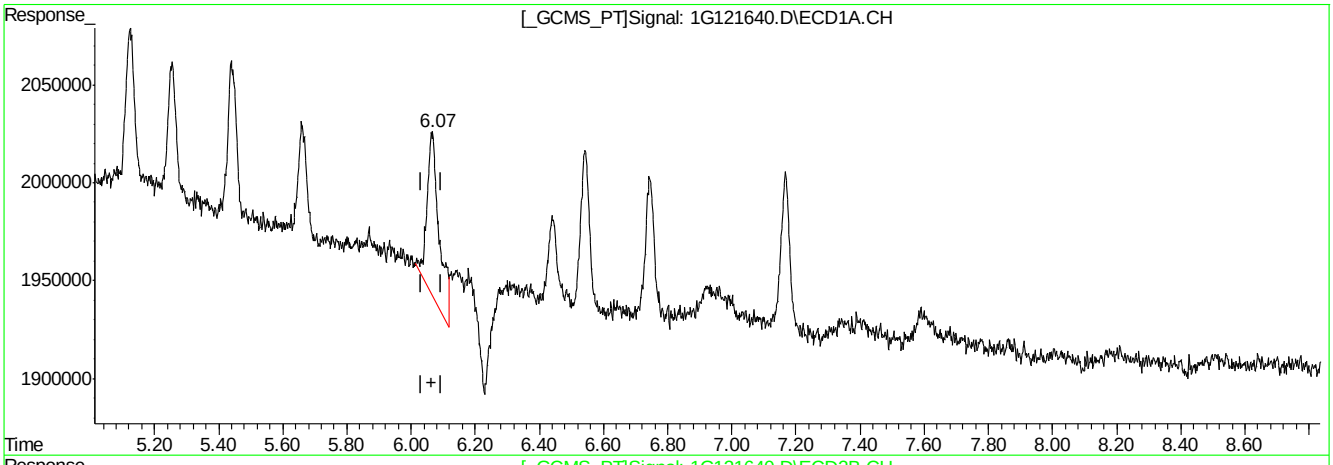
(+) = Expected Retention Time

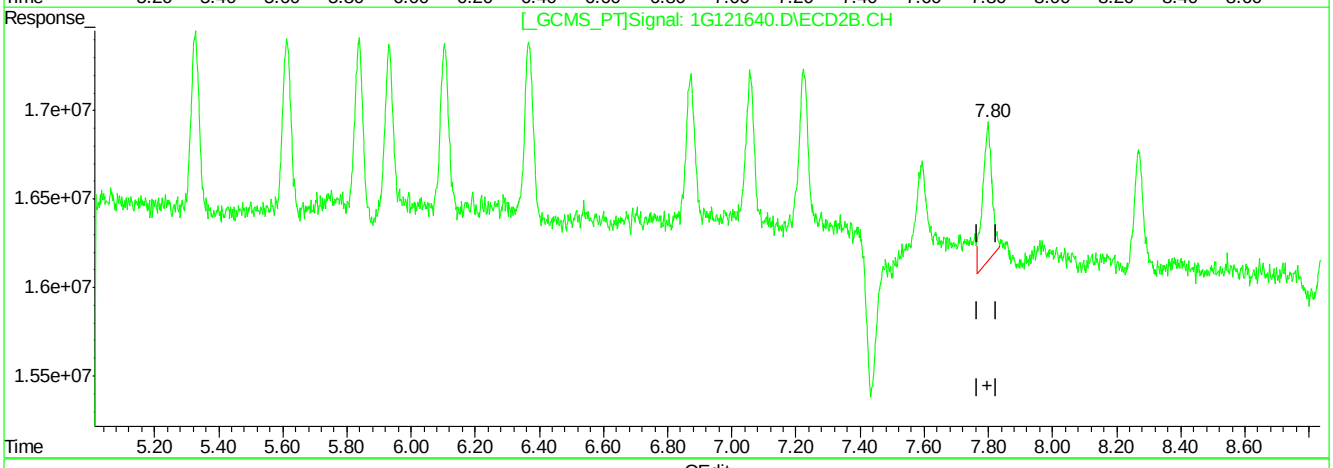
1G121640.D 1PST3951.M Fri Apr 01 16:06:15 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:12 am                    Operator: dharas
Sample    : ic3951-1                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:04 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(19) Endrin Aldehyde (B)

6.07min 1.581PPB

response 2182480

(19) Endrin Aldehyde #2 (B)

7.80min 1.190PPB

response 15556111

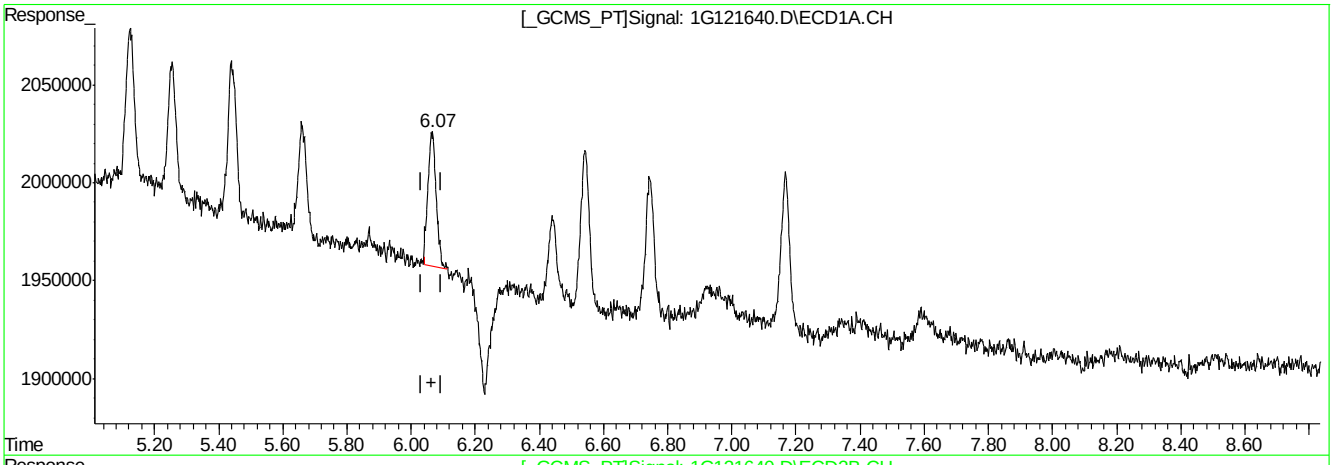
(+) = Expected Retention Time

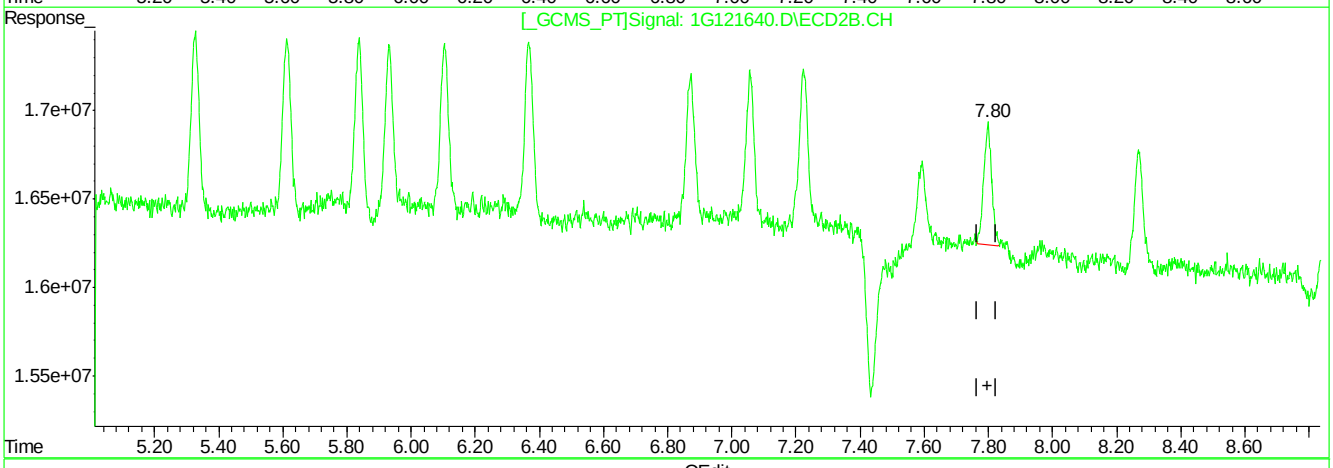
1G121640.D 1PST3951.M Fri Apr 01 16:06:20 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:12 am                    Operator: dharas
Sample    : ic3951-1                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:04 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(19) Endrin Aldehyde (B)

6.07min 0.895PPB m

response 1235216

(19) Endrin Aldehyde #2 (B)

7.80min 0.903PPB m

response 11810133

(+) = Expected Retention Time

1G121640.D 1PST3951.M Fri Apr 01 16:06:36 2016 RPT1

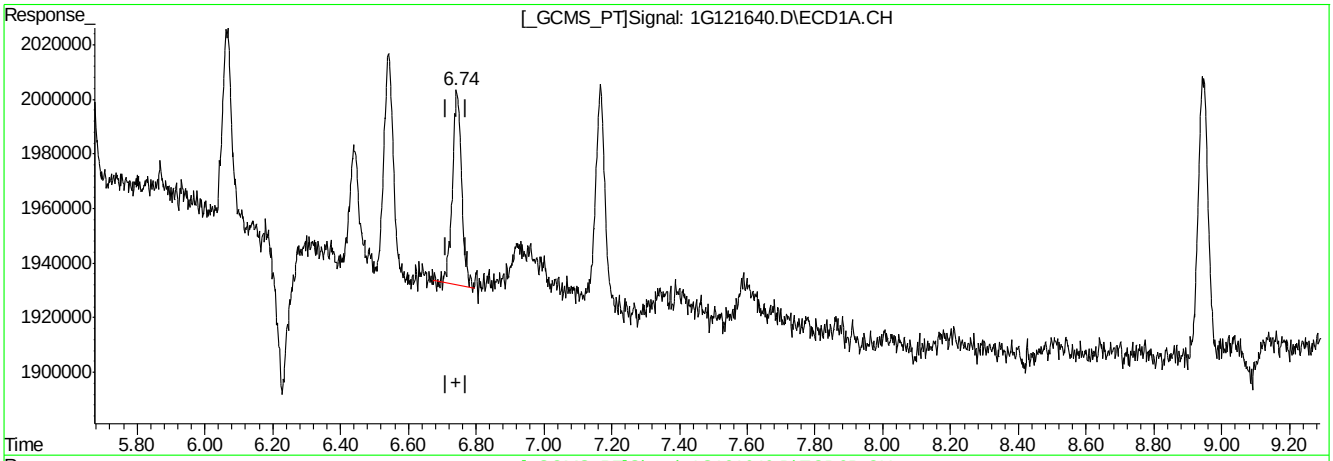
9.6.1.13

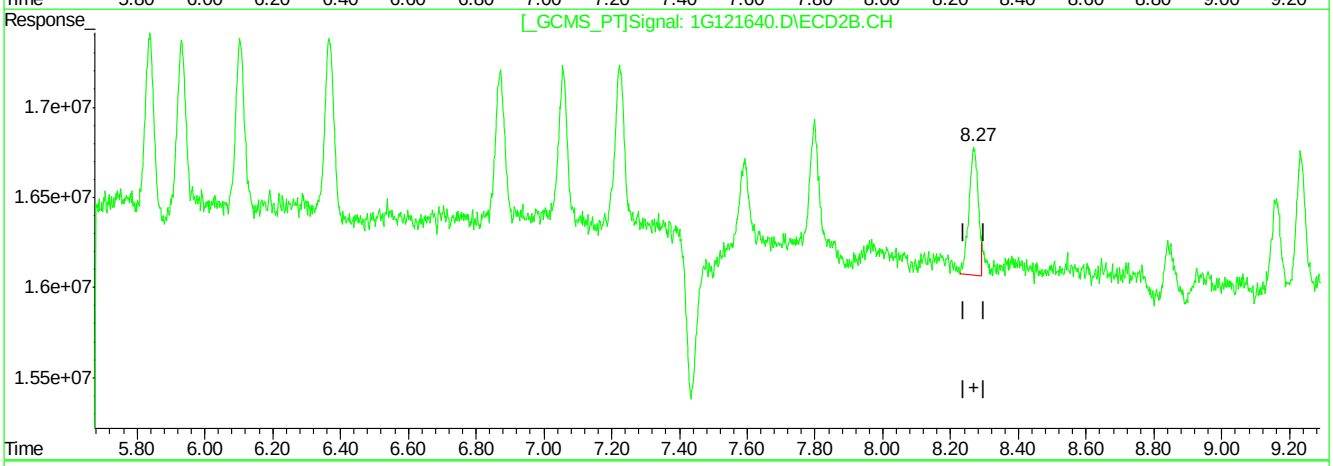
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:12 am                    Operator: dharas
Sample    : ic3951-1                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:04 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(20) Endosulfan Sulfate (B)

6.74min 0.859PPB

response 1341367

(20) Endosulfan Sulfate #2 (B)

8.27min 0.909PPB

response 13366017

(+) = Expected Retention Time

1G121640.D 1PST3951.M Fri Apr 01 16:06:42 2016 RPT1

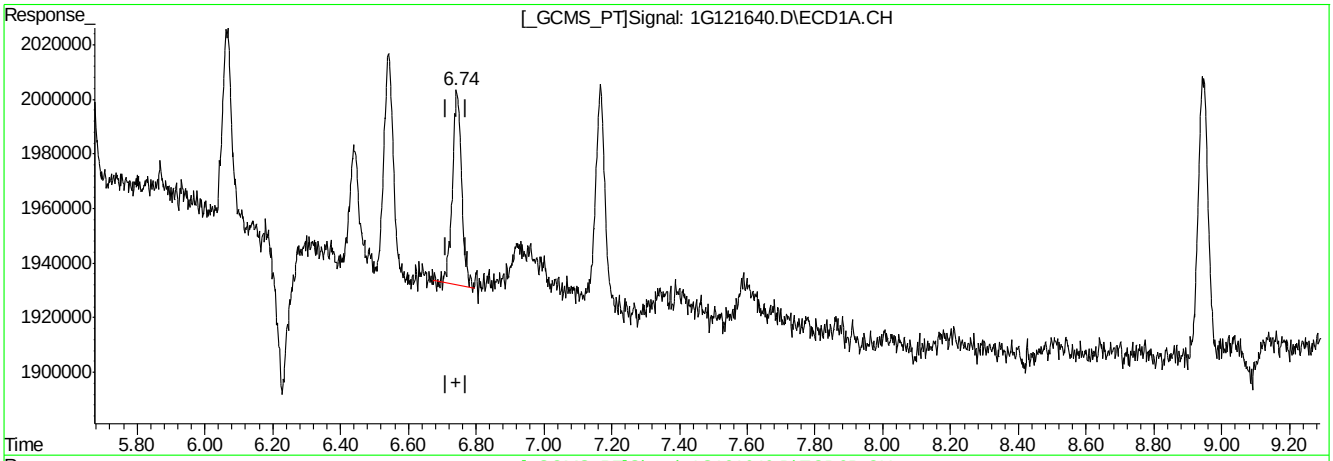
9.6.1.14

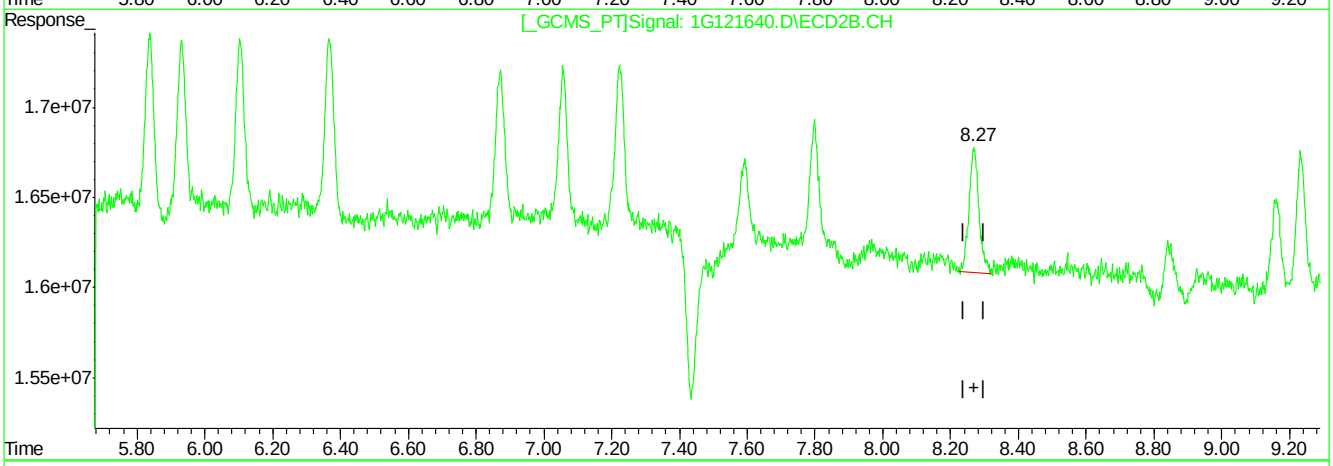
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:12 am                    Operator: dharas
Sample    : ic3951-1                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:04 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(20) Endosulfan Sulfate (B)

6.74min 0.859PPB

response 1341367

(20) Endosulfan Sulfate #2 (B)

8.27min 0.969PPB m

response 14248692

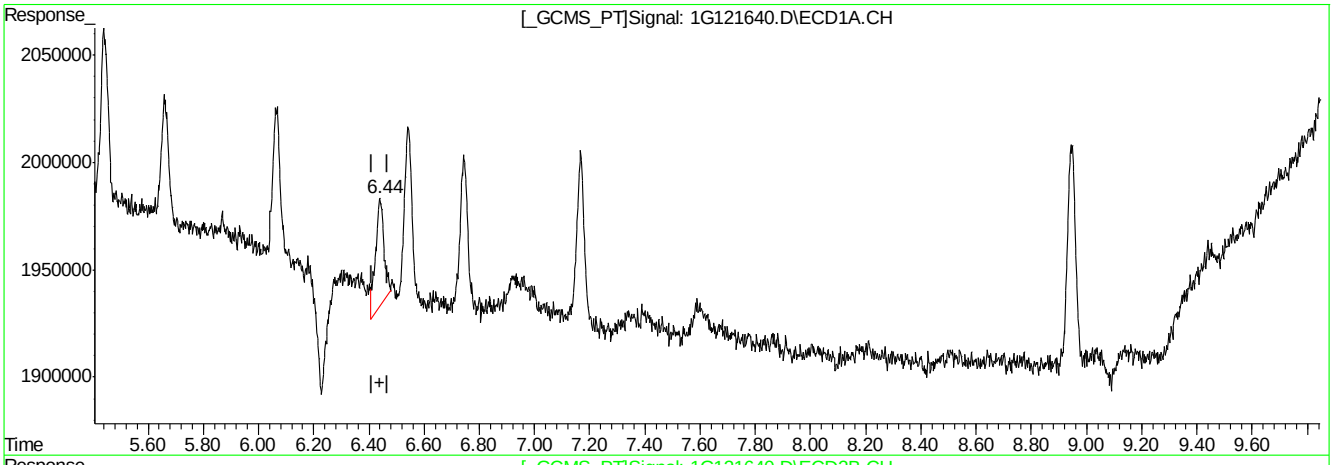
(+) = Expected Retention Time

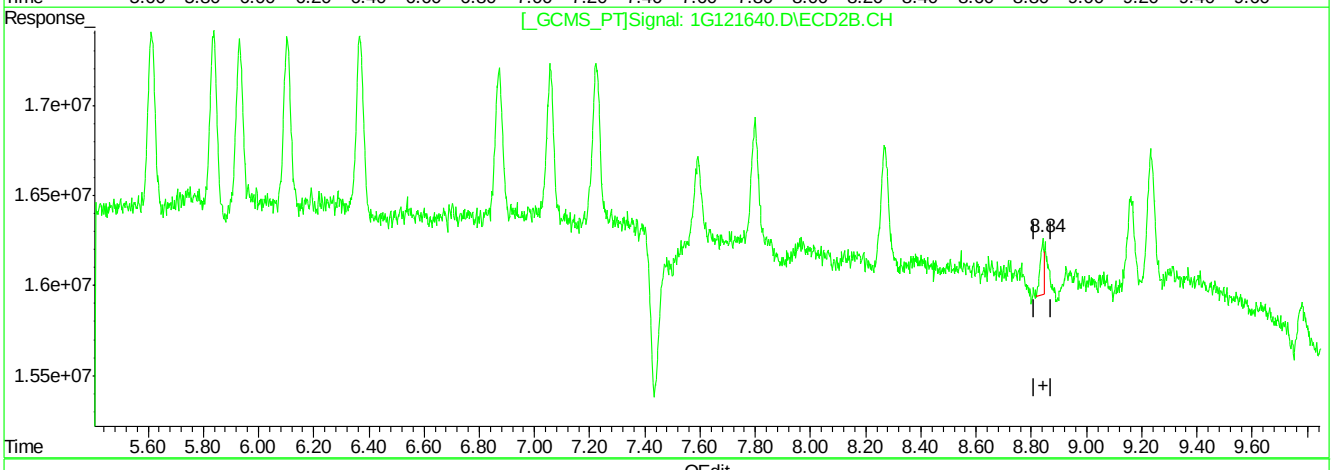
1G121640.D 1PST3951.M Fri Apr 01 16:06:49 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:12 am                    Operator: dharas
Sample    : ic3951-1                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:04 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(21) Methoxychlor (A)

6.44min 1.215PPB

response 1074848

(21) Methoxychlor #2 (A)

8.84min 0.480PPB

response 2803437

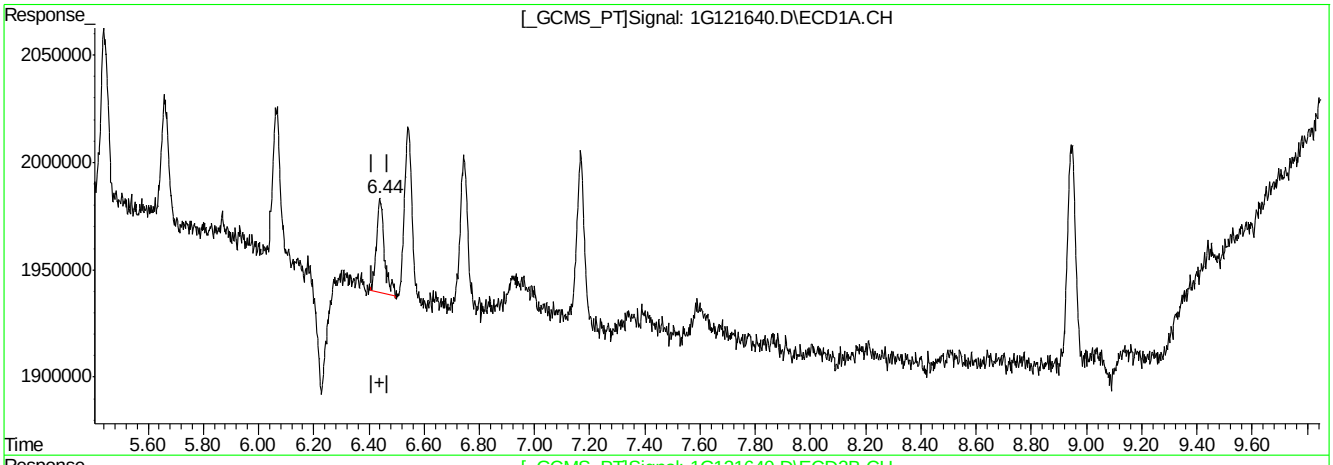
(+) = Expected Retention Time

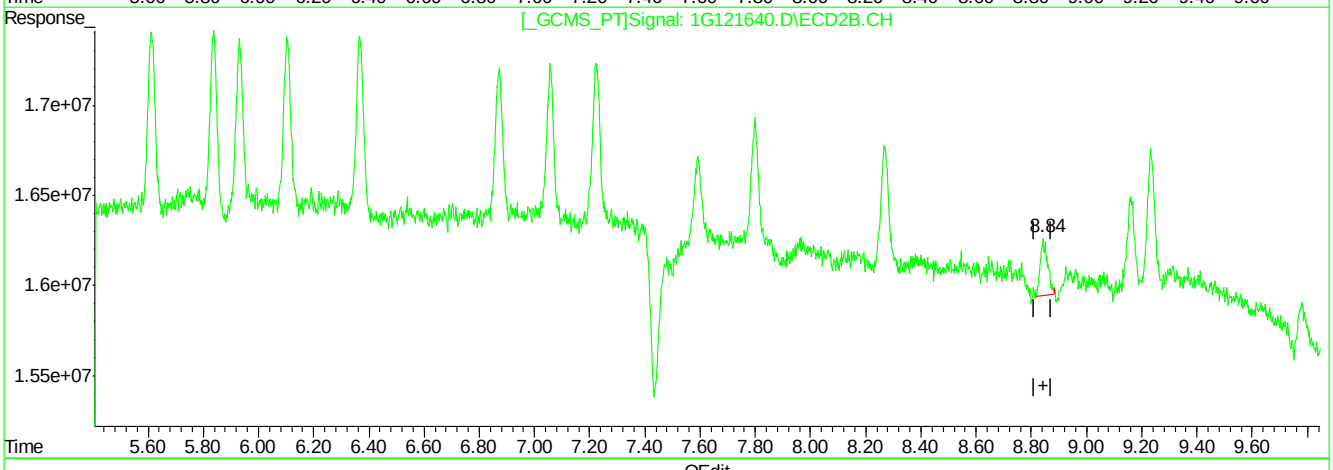
1G121640.D 1PST3951.M Fri Apr 01 16:06:54 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:12 am                    Operator: dharas
Sample    : ic3951-1                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:04 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(21) Methoxychlor (A)

6.44min 0.986PPB m

response 872392

(21) Methoxychlor #2 (A)

8.84min 0.991PPB m

response 5793293

(+) = Expected Retention Time

1G121640.D 1PST3951.M Fri Apr 01 16:07:03 2016 RPT1

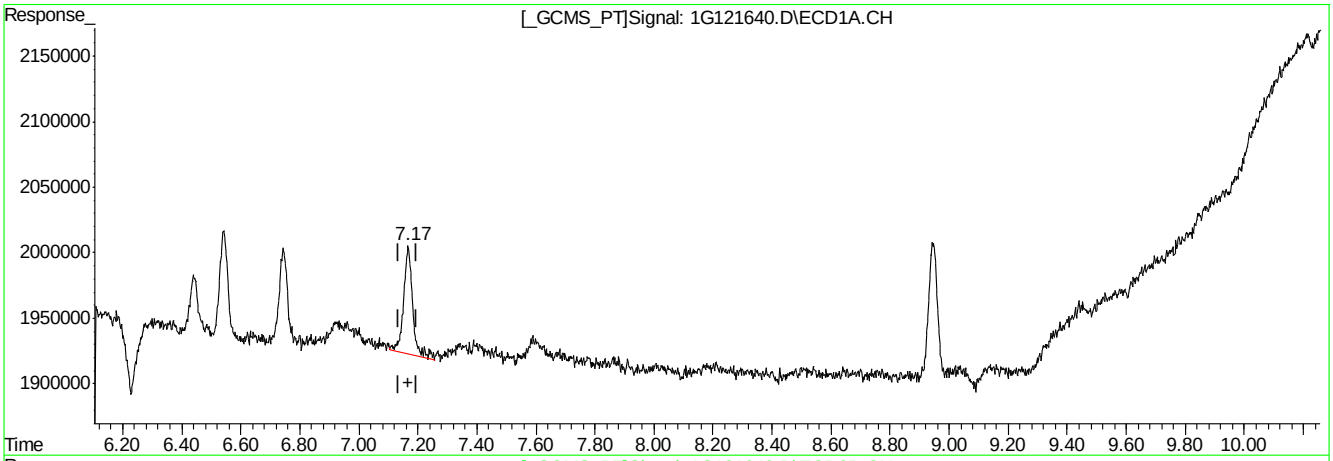
9.6.1.17

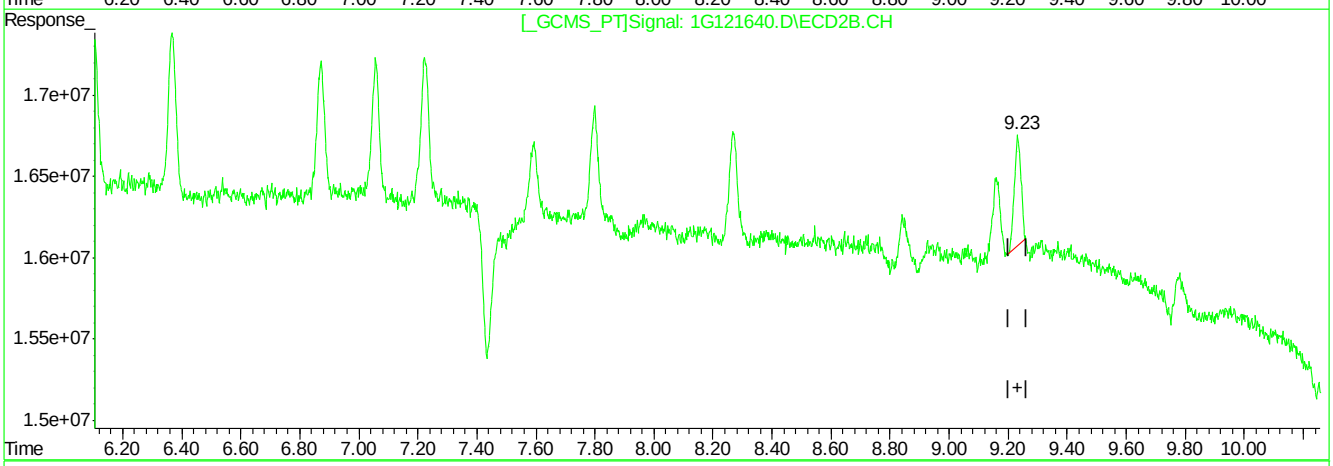
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:12 am                    Operator: dharas
Sample    : ic3951-1                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:04 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(23) Endrin Ketone (B)

7.17min 1.026PPB

response 1758017

(23) Endrin Ketone #2 (B)

9.23min 0.695PPB

response 10673222

(+) = Expected Retention Time

1G121640.D 1PST3951.M Fri Apr 01 16:07:16 2016 RPT1

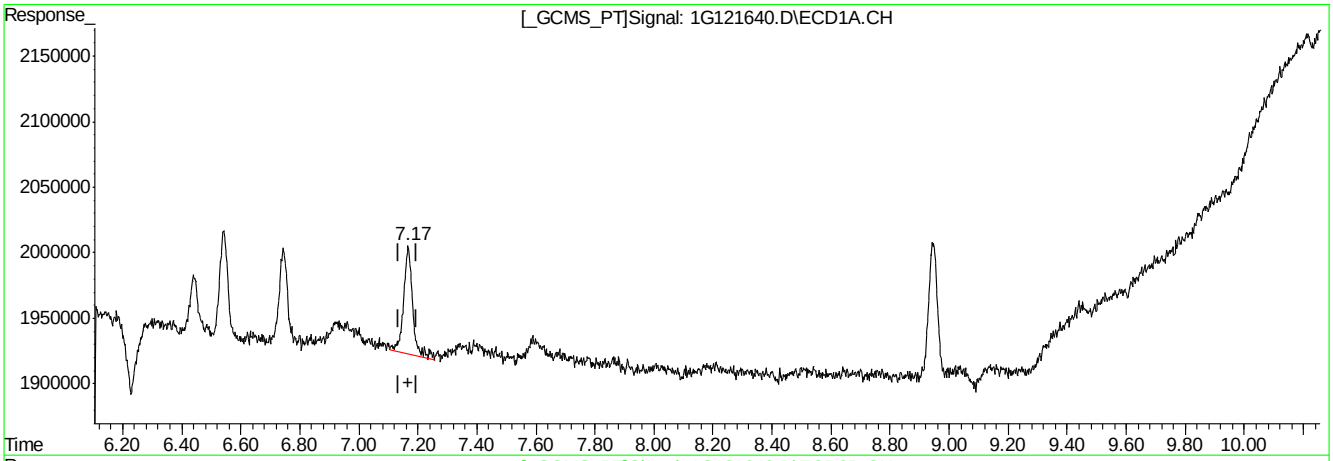
9.6.1.18

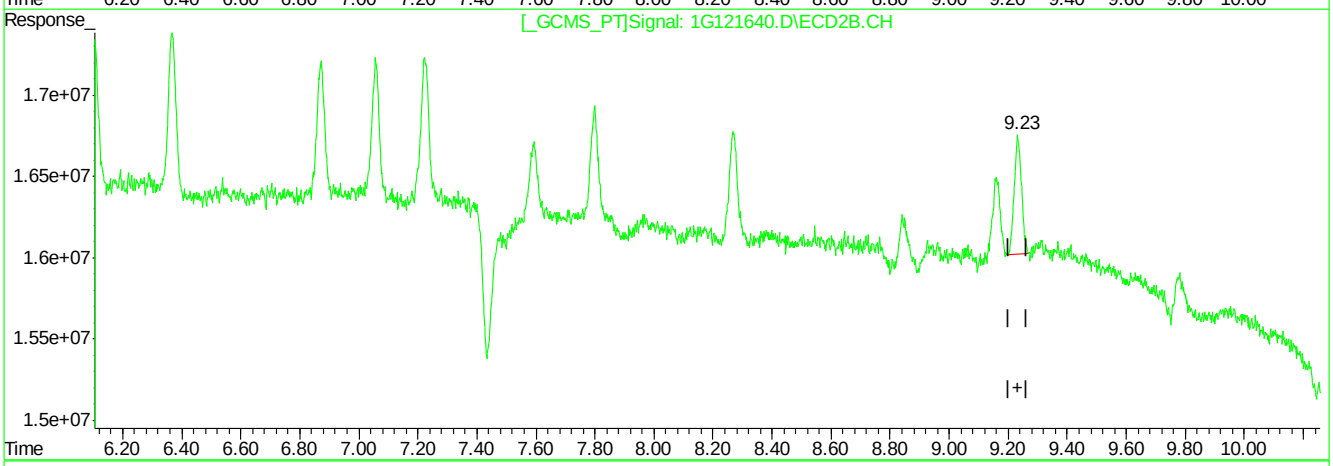
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121640.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:12 am                    Operator: dharas
Sample    : ic3951-1                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:04 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(23) Endrin Ketone (B)

7.17min 1.026PPB

response 1758017

(23) Endrin Ketone #2 (B)

9.23min 0.823PPB m

response 12650750

(+) = Expected Retention Time

1G121640.D 1PST3951.M Fri Apr 01 16:07:25 2016 RPT1

9.6.1.19

9

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/04/16 12:58

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD2B.CH
Acq On : 01 Apr 2016 11:30 am Operator: dharas
Sample : ic3951-2 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:34 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 15:59:16 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #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-nitrob	1.17	1.54	74155865	964.1E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	2727448	31610646	1.609	1.708m
Spiked Amount	40.000	Range	30 - 150	Recovery	=	4.02%#	4.27%#
24) SA	Decachlorobiphen	8.94	10.88	4008368	20078267	1.970	1.871
Spiked Amount	40.000			Recovery	=	4.92%	4.68%
	Target Compounds						
3) A	alpha-BHC	2.22	3.05	3092451	46898401	1.577m	1.705
4) MA	gamma-BHC	2.51	3.48	2844656	44033519	1.520	1.778
5) MA	Heptachlor	2.98	4.06	3245831	38906048	1.606	1.778
6) B	beta-BHC	2.59	3.57	1596944	18265891	1.616	1.712
7) B	delta-BHC	2.77	3.96	2478208	36739459	1.415	1.484
8) MB	Aldrin	3.30	4.50	3132072	38023230	1.736	1.754
9) B	Heptachlor Epoxi	4.00	5.33	3105345	34140779	1.682m	1.710
10) B	gamma-Chlordane	4.16	5.61	3385042	34643518	1.850m	1.795
11) B	alpha-Chlordane	4.32	5.84	3307471	33751499	1.800	1.755
12) A	Endosulfan I	4.50	5.93	3046776	33016527	1.734	1.793
13) B	4,4'-DDE	4.44	6.10	2755265	34523128	1.782	1.818
14) MA	Dieldrin	4.81	6.37	2889653	38258182	1.651	1.899
15) MA	Endrin	5.12	6.87	2944200	31471993	1.863	1.692
16) A	4,4'-DDD	5.26	7.06	2371480	28379318	1.790	1.727
17) B	Endosulfan II	5.44	7.22	3008264	32387807	1.749	1.810
18) MA	4,4'-DDT	5.66	7.59	2185176	22025107	1.727	1.906m
19) B	Endrin Aldehyde	6.06	7.80	2523884	23804257	1.767	1.754
20) B	Endosulfan Sulfa	6.74	8.27	2649032	25741491	1.639	1.687
21) A	Methoxychlor	6.44	8.84	1500625	11641792	1.638	1.919m
22)	Mirex	6.54	9.16	3111730	21435018	1.735	1.912
23) B	Endrin Ketone	7.17	9.23	2896524	27014567	1.633	1.694

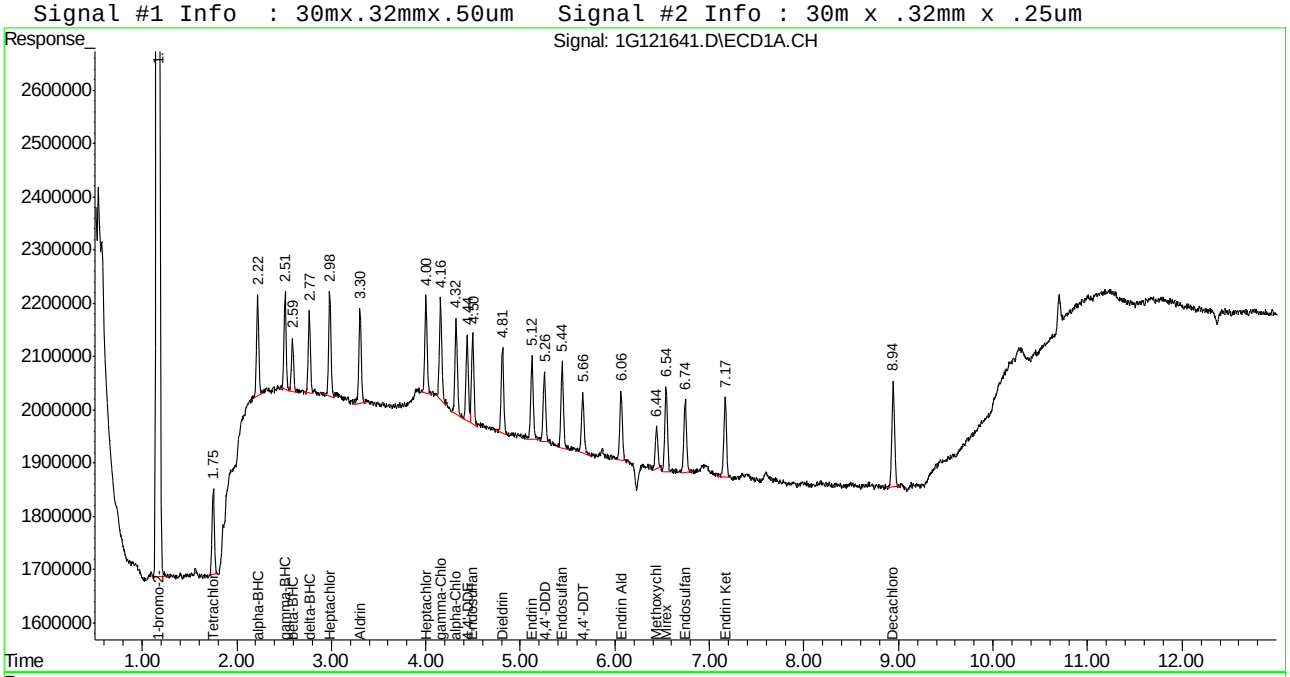
(f)=RT Delta > 1/2 Window (m)=manual int.

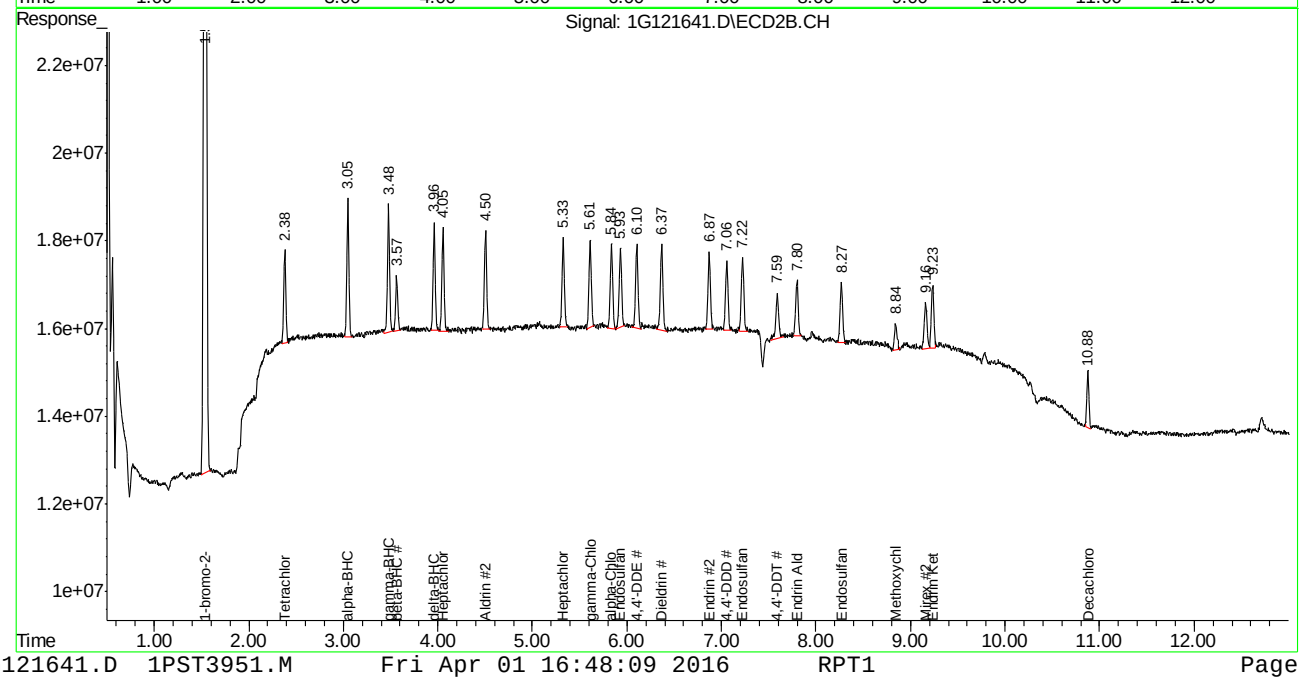
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD2B.CH
Acq On : 01 Apr 2016 11:30 am Operator: dharas
Sample : ic3951-2 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:34 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #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

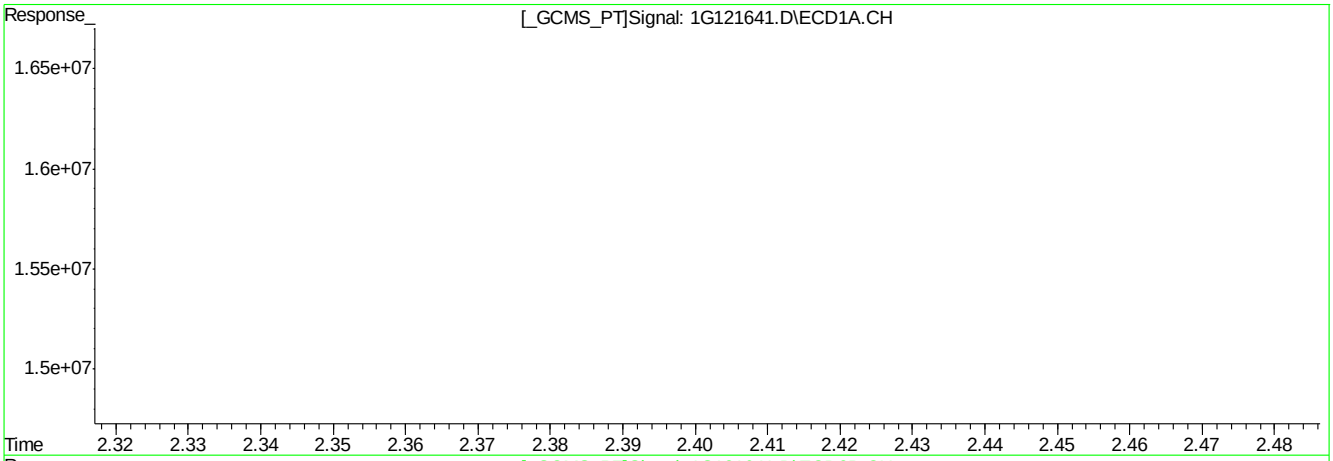
Sample Number:	G1G3951-IC3951	**Method:**	SW846 8081B
Lab FileID:	1G121641.D	**Analyst approved:**	04/01/16 16:29 Joseph Ravino
Injection Time:	04/01/16 11:30	**Supervisor approved:**	04/04/16 12:58 Gwendolyn Burns

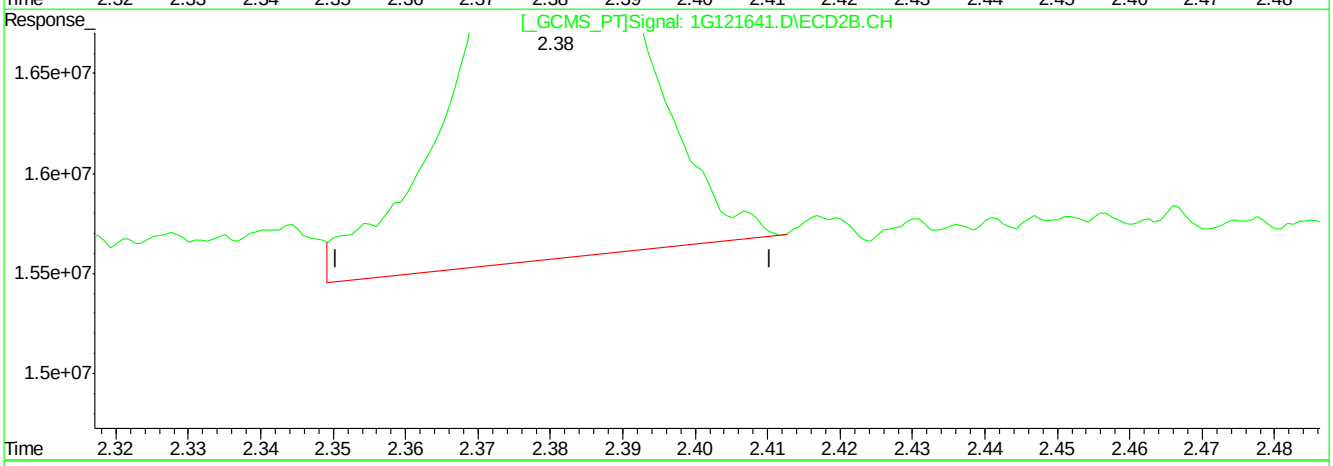
Parameter	CAS	Sig#	R.T. (min.)	Reason
alpha-BHC	319-84-6	1	2.22	Poor instrument integration
Tetrachloro-m-xylene	877-09-8	2	2.38	Poor instrument integration
Heptachlor epoxide	1024-57-3	1	4.00	Poor instrument integration
gamma-Chlordane	5103-74-2	1	4.16	Poor instrument integration
4,4'-DDT	50-29-3	2	7.59	Poor instrument integration
Methoxychlor	72-43-5	2	8.84	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:30 am                    Operator: dharas
Sample    : ic3951-2                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:08 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(2) Tetrachloro-m-xylene (SAB)

1.75min 1.609PPB

response 2727448

(2) Tetrachloro-m-xylene #2 (SAB)

2.38min 1.921PPB

response 35541063

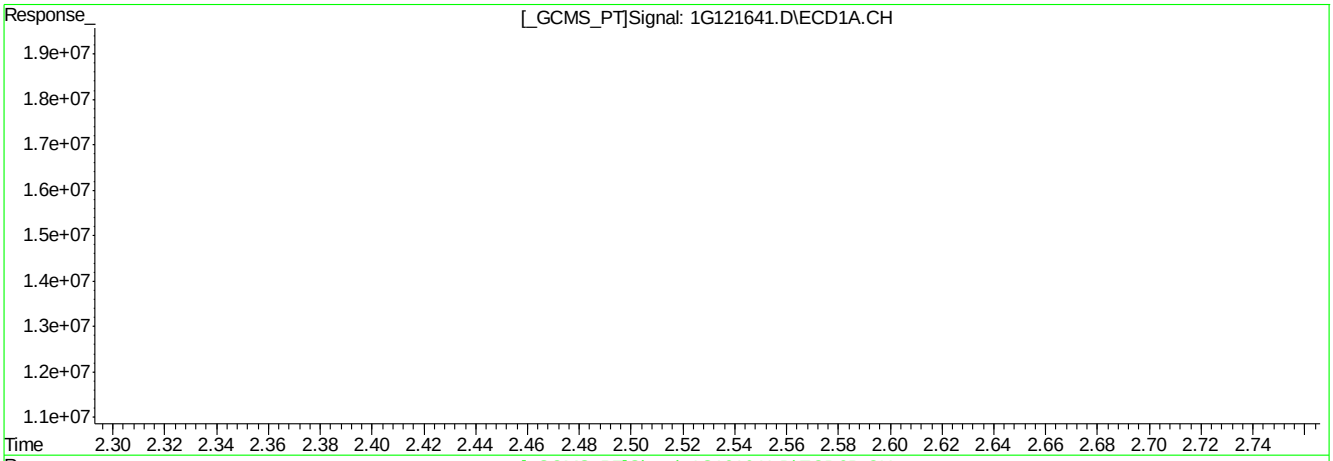
(+) = Expected Retention Time

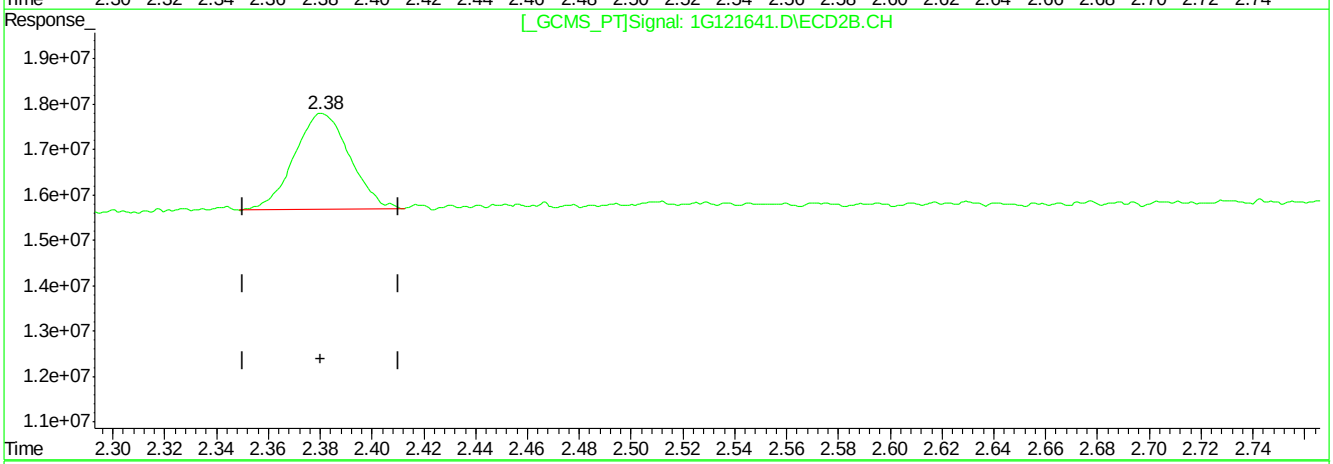
1G121641.D 1PST3951.M Fri Apr 01 16:09:11 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:30 am                    Operator: dharas
Sample    : ic3951-2                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:08 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(2) Tetrachloro-m-xylene (SAB)

1.75min 1.609PPB

response 2727448

(2) Tetrachloro-m-xylene #2 (SAB)

2.38min 1.708PPB m

response 31610646

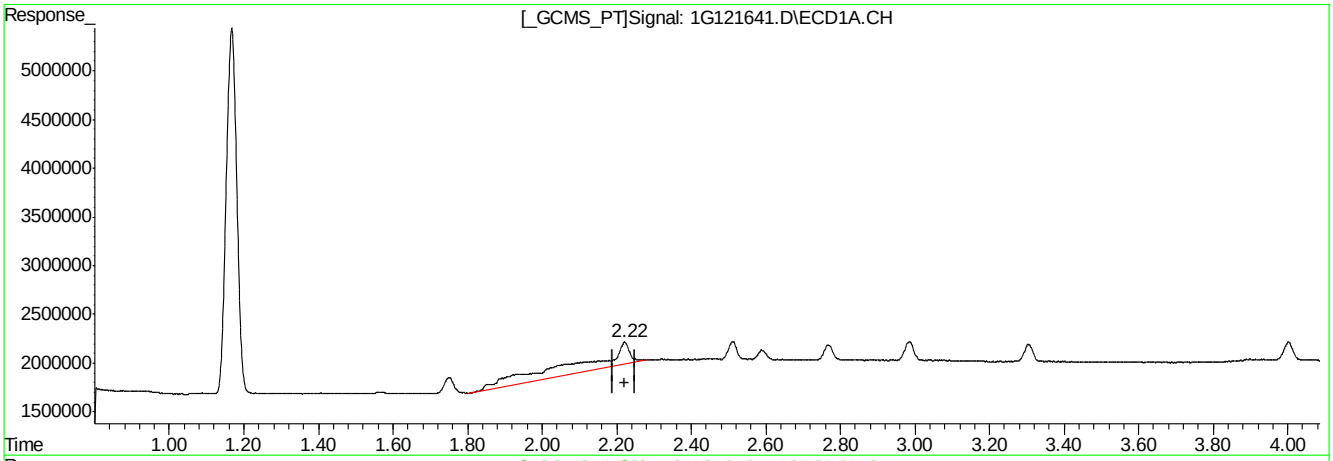
(+) = Expected Retention Time

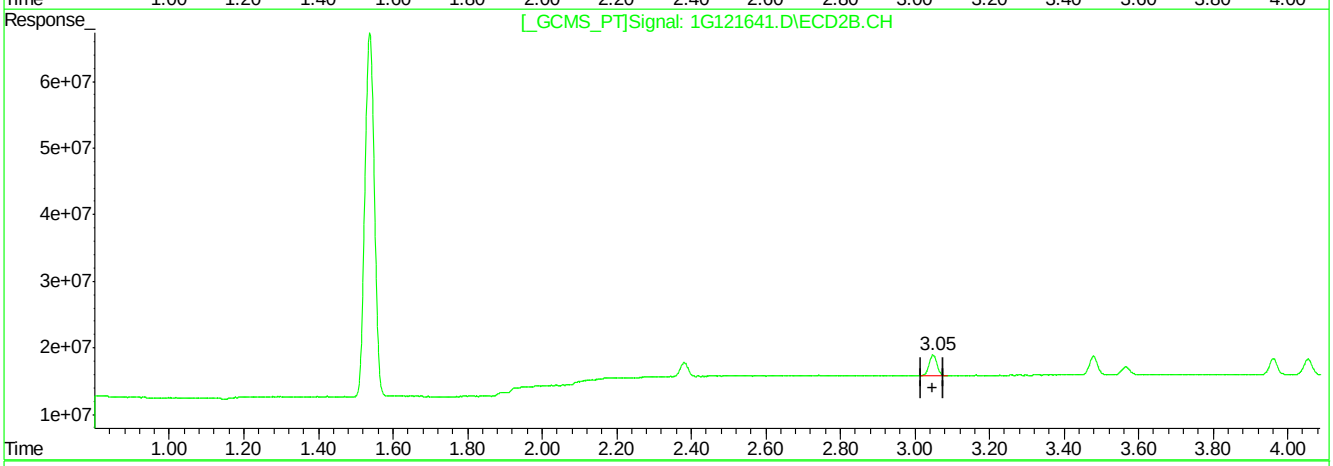
1G121641.D 1PST3951.M Fri Apr 01 16:09:16 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:30 am                    Operator: dharas
Sample    : ic3951-2                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:08 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(3) alpha-BHC (A)

2.22min 11.244PPB

response 22049354

(3) alpha-BHC #2 (A)

3.05min 1.705PPB

response 46898401

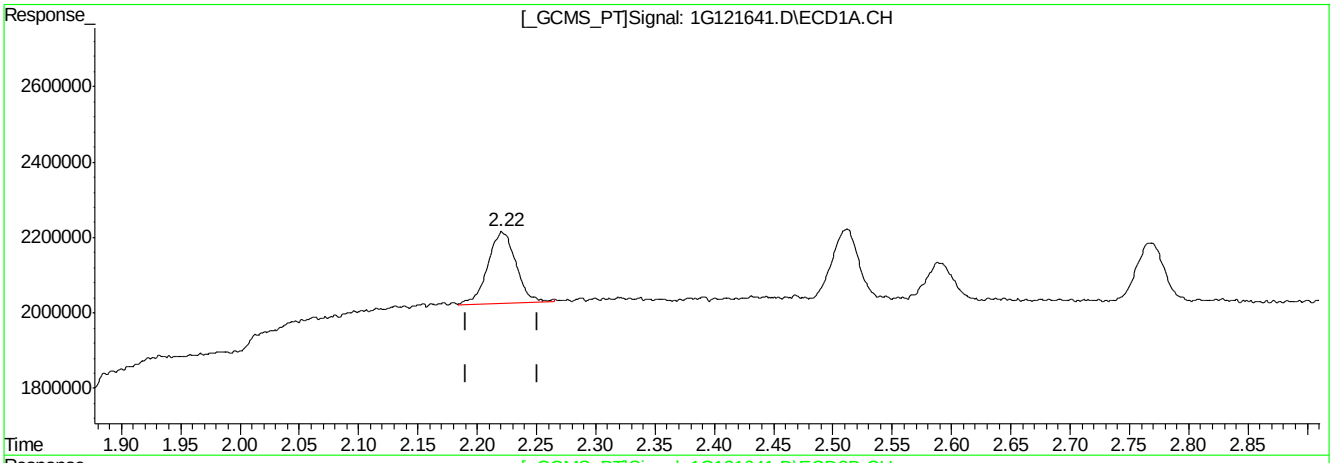
(+) = Expected Retention Time

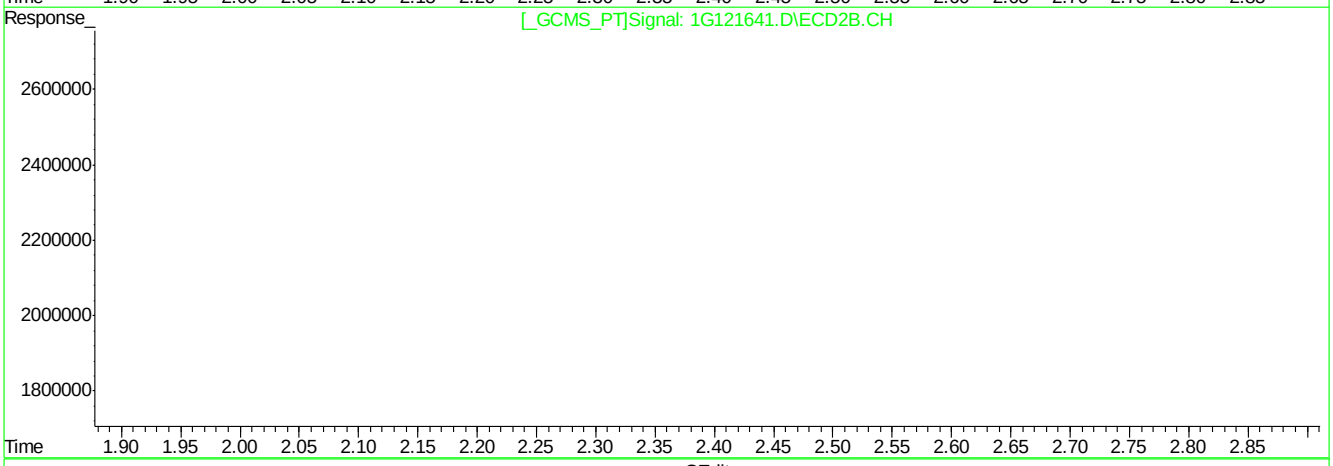
1G121641.D 1PST3951.M Fri Apr 01 16:09:20 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:30 am                    Operator: dharas
Sample    : ic3951-2                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:08 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(3) alpha-BHC (A)

2.22min 1.577PPB m

response 3092451

(3) alpha-BHC #2 (A)

3.05min 1.705PPB

response 46898401

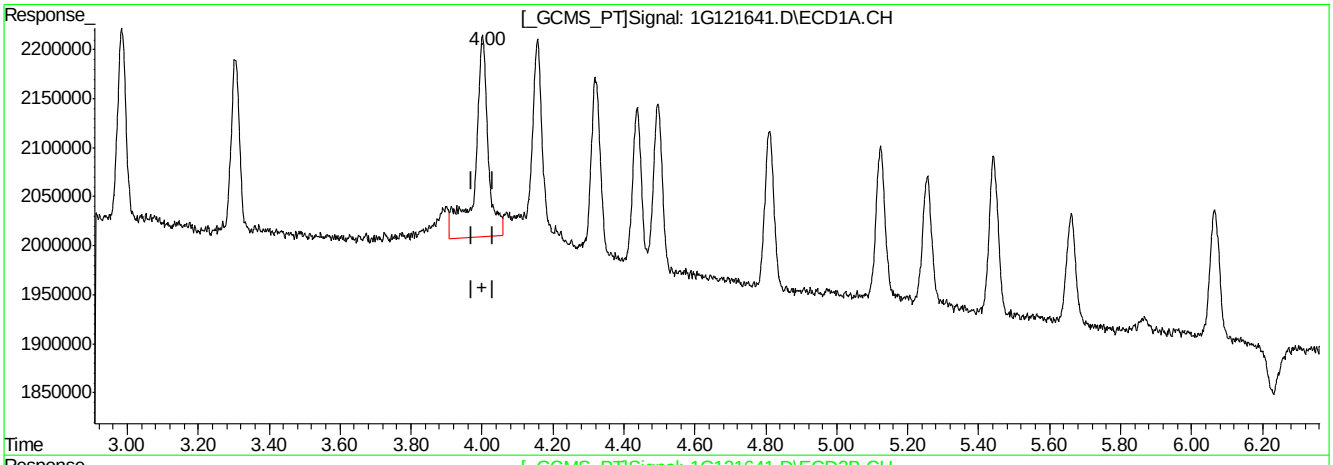
(+) = Expected Retention Time

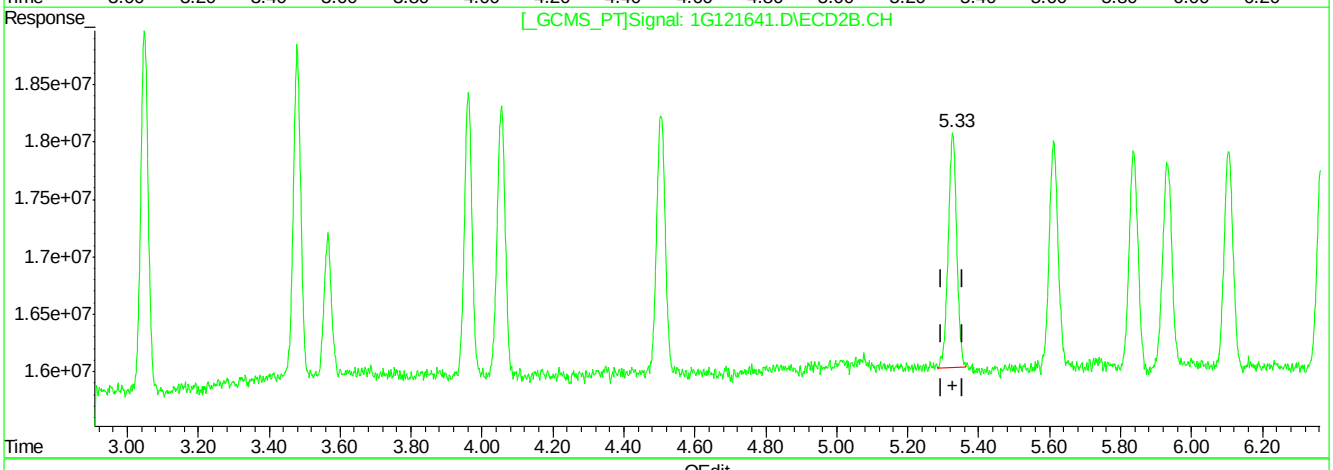
1G121641.D 1PST3951.M Fri Apr 01 16:09:29 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:30 am                    Operator: dharas
Sample    : ic3951-2                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:08 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(9) Heptachlor Epoxide (B)

4.00min 2.857PPB

response 5275589

(9) Heptachlor Epoxide #2 (B)

5.33min 1.710PPB

response 34140779

(+) = Expected Retention Time

1G121641.D 1PST3951.M Fri Apr 01 16:09:39 2016 RPT1

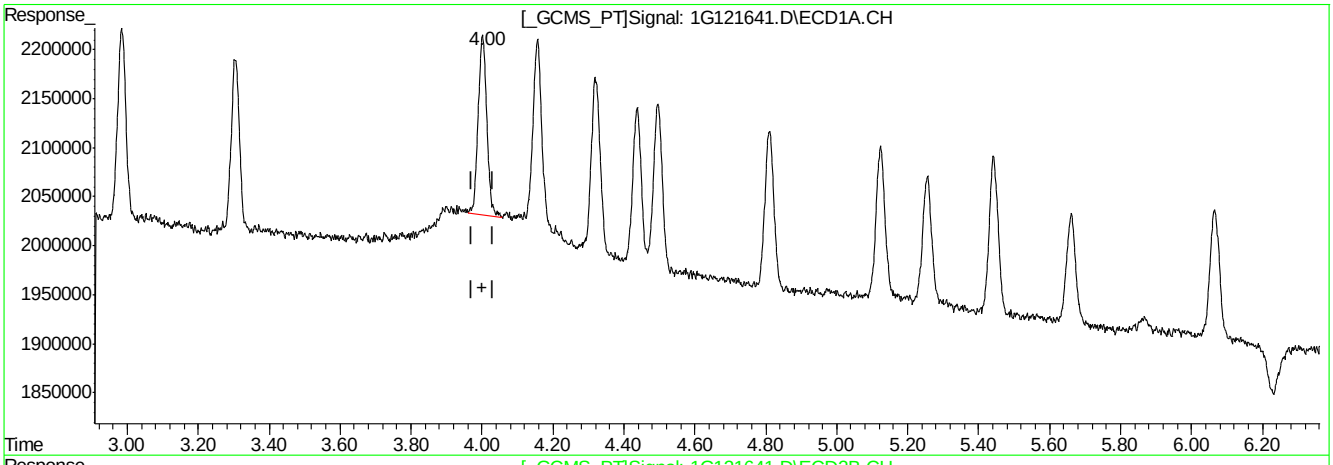
9.6.2.6

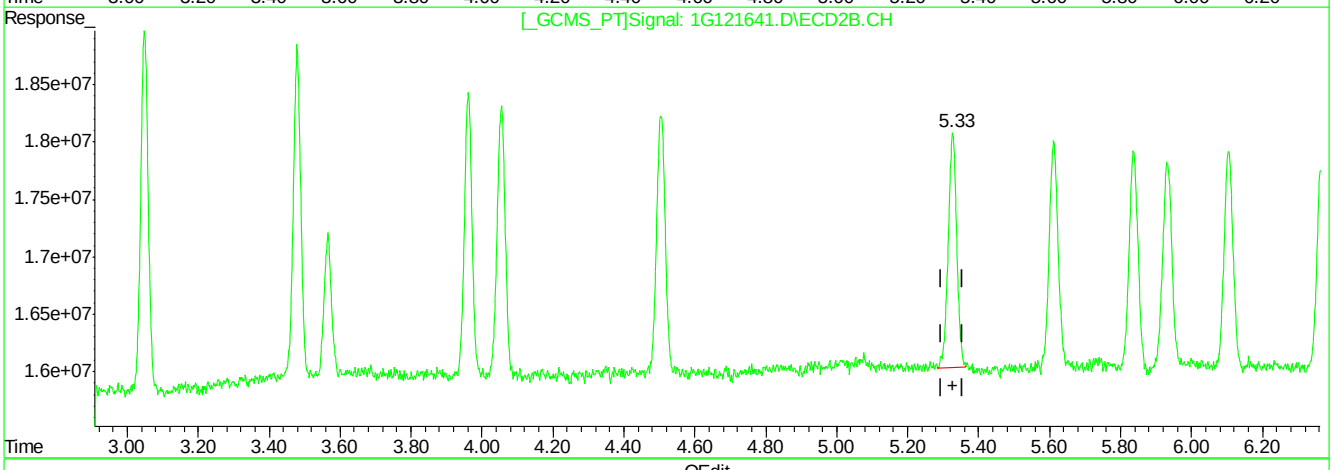
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:30 am                    Operator: dharas
Sample    : ic3951-2                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:08 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(9) Heptachlor Epoxide (B)

4.00min 1.682PPB m

response 3105345

(9) Heptachlor Epoxide #2 (B)

5.33min 1.710PPB

response 34140779

(+) = Expected Retention Time

1G121641.D 1PST3951.M Fri Apr 01 16:09:45 2016 RPT1

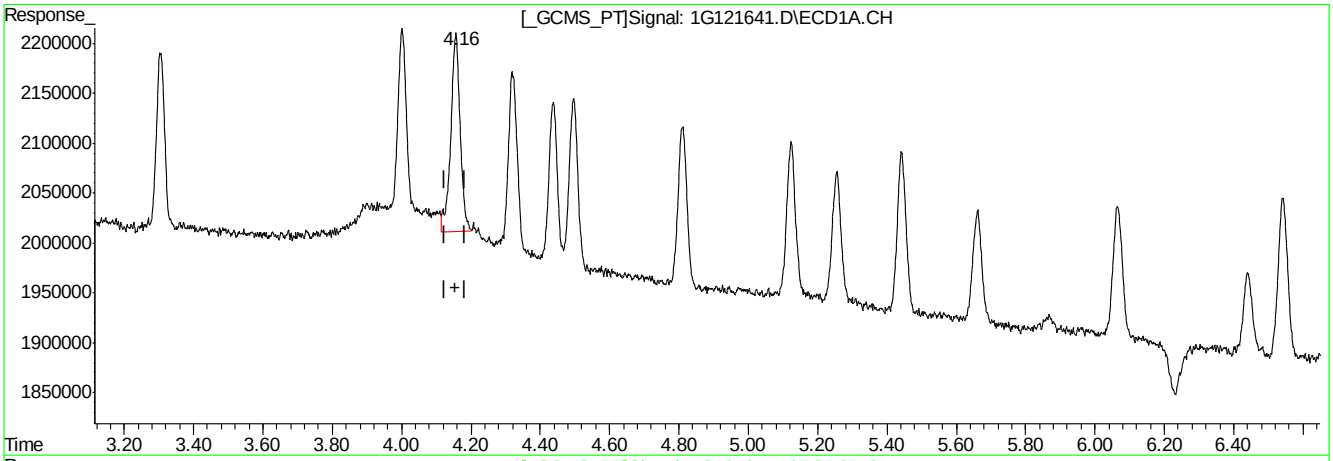
9.6.2.7

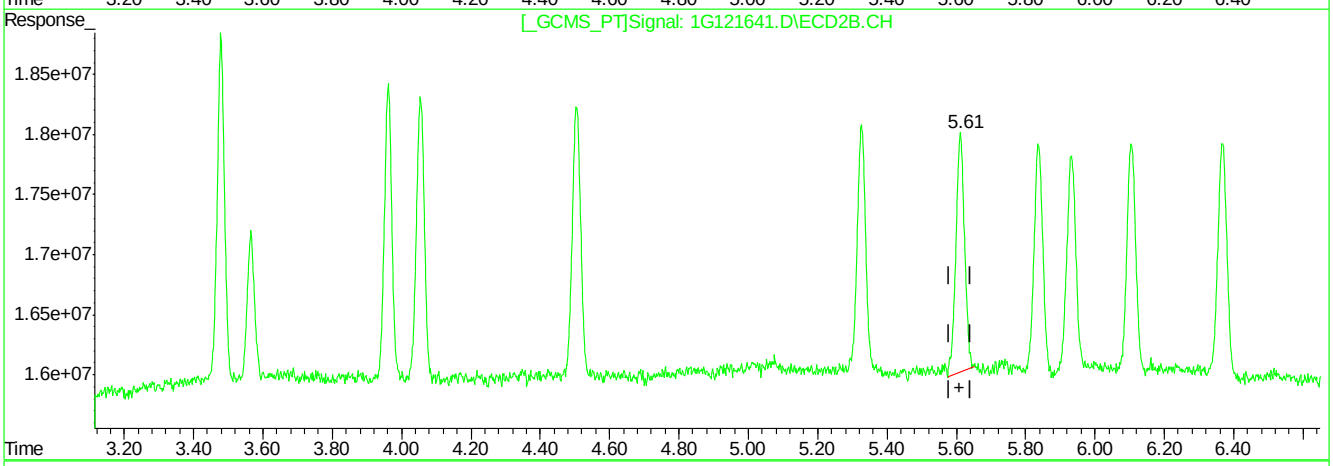
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:30 am                    Operator: dharas
Sample    : ic3951-2                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:08 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(10) gamma-Chlordane (B)

4.16min 2.037PPB

response 3727735

(10) gamma-Chlordane #2 (B)

5.61min 1.795PPB

response 34643518

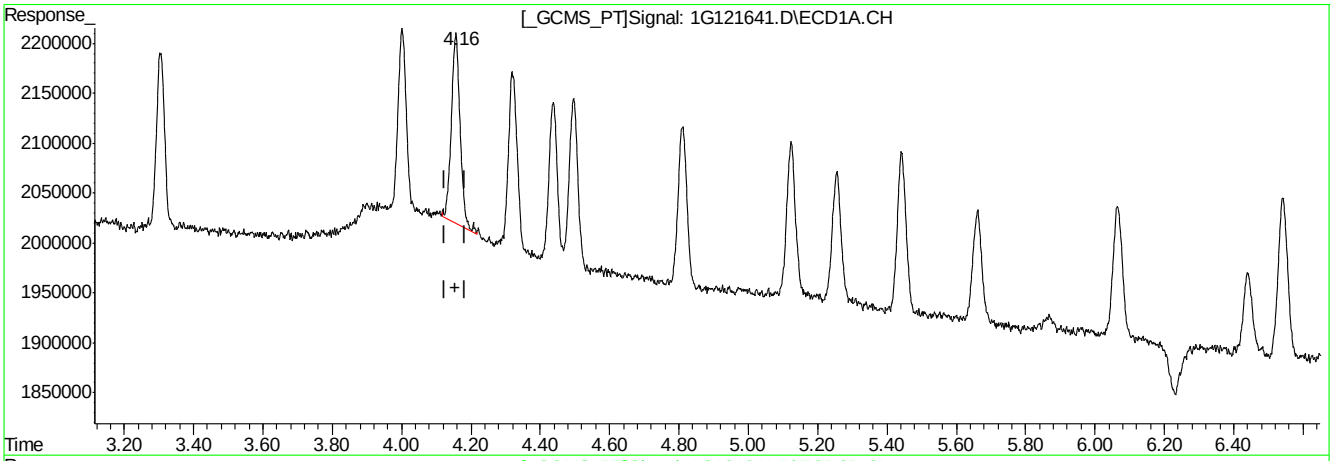
(+) = Expected Retention Time

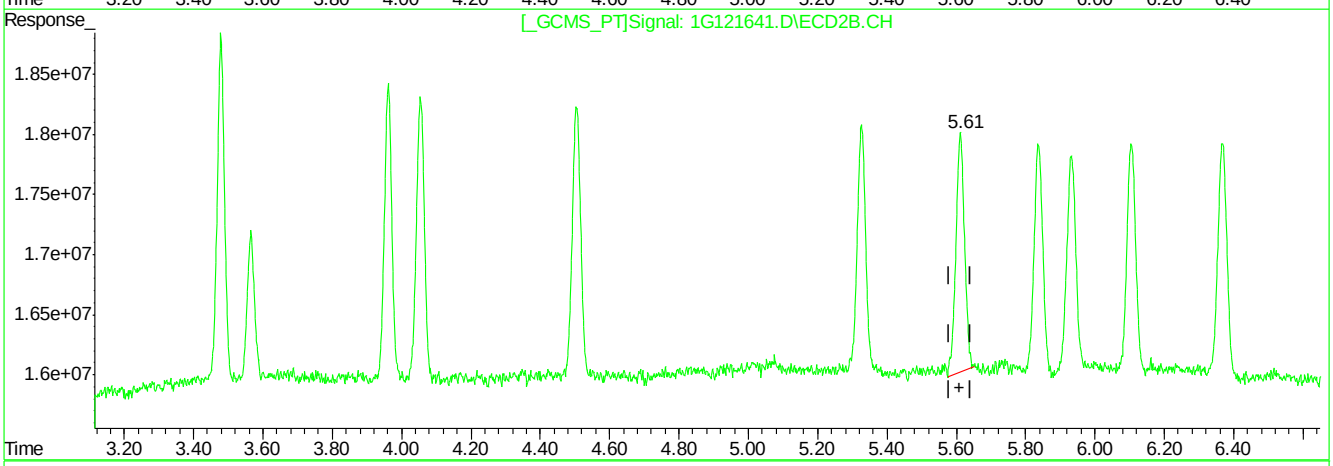
1G121641.D 1PST3951.M Fri Apr 01 16:09:48 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:30 am                    Operator: dharas
Sample    : ic3951-2                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:08 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(10) gamma-Chlordane (B)

4.16min 1.850PPB m

response 3385042

(10) gamma-Chlordane #2 (B)

5.61min 1.795PPB

response 34643518

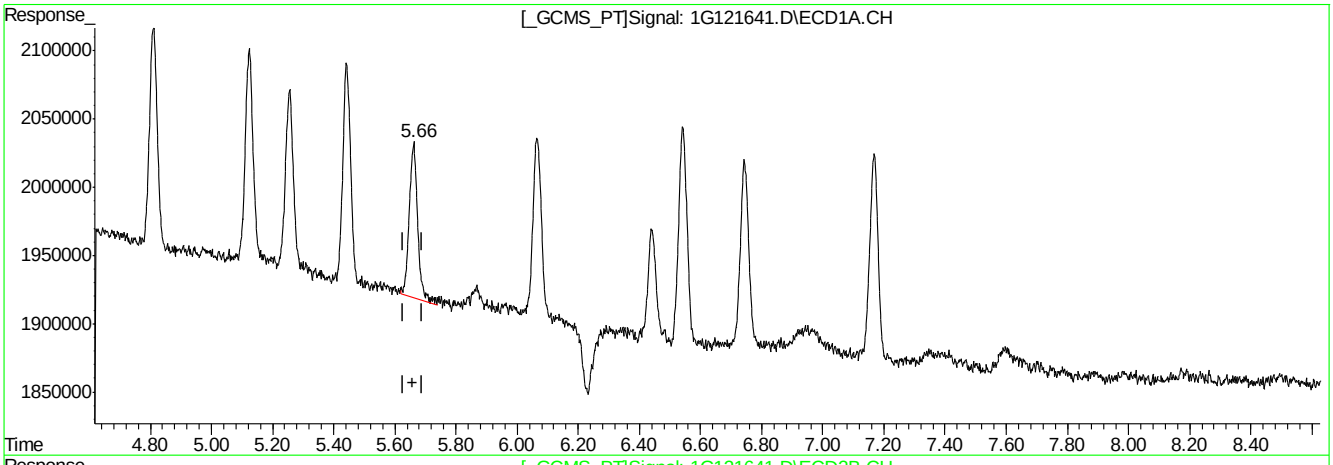
(+) = Expected Retention Time

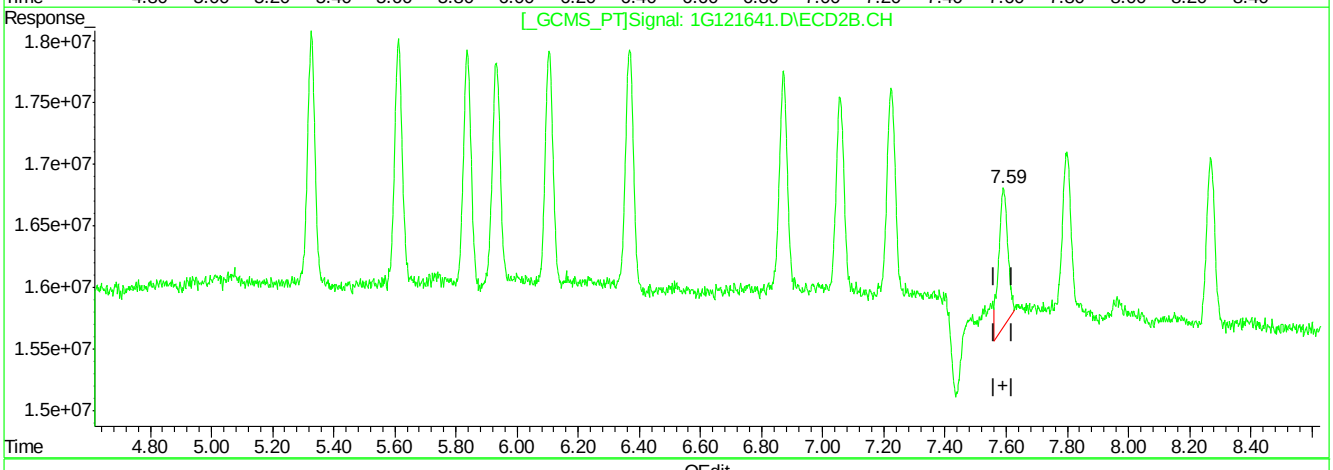
1G121641.D 1PST3951.M Fri Apr 01 16:09:54 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:30 am                    Operator: dharas
Sample    : ic3951-2                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:08 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(18) 4,4'-DDT (MA)

5.66min 1.727PPB

response 2185176

(18) 4,4'-DDT #2 (MA)

7.59min 2.014PPB

response 23275523

(+) = Expected Retention Time

1G121641.D 1PST3951.M Fri Apr 01 16:10:05 2016 RPT1

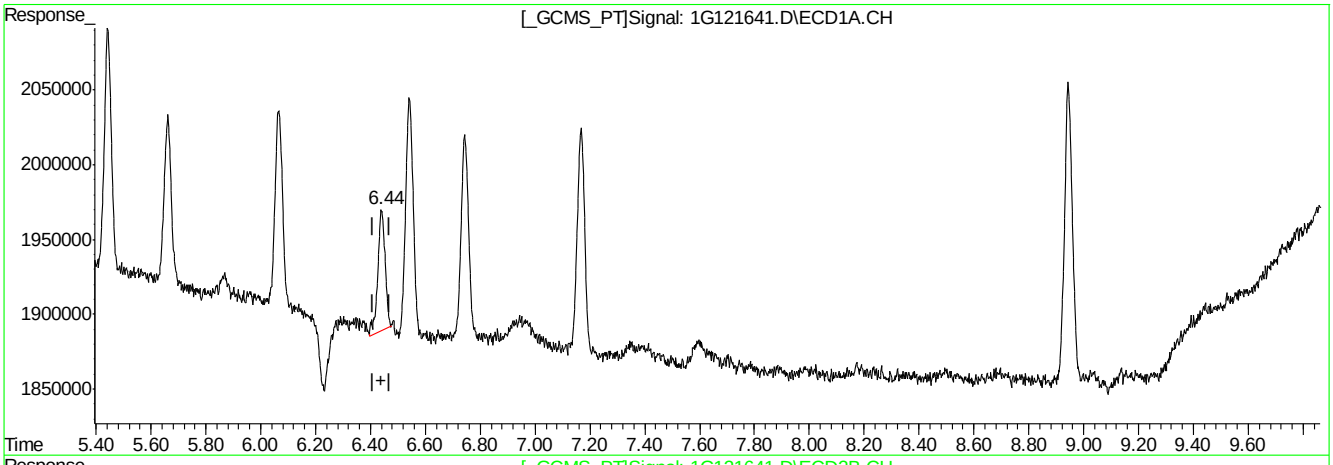
9.6.2.10

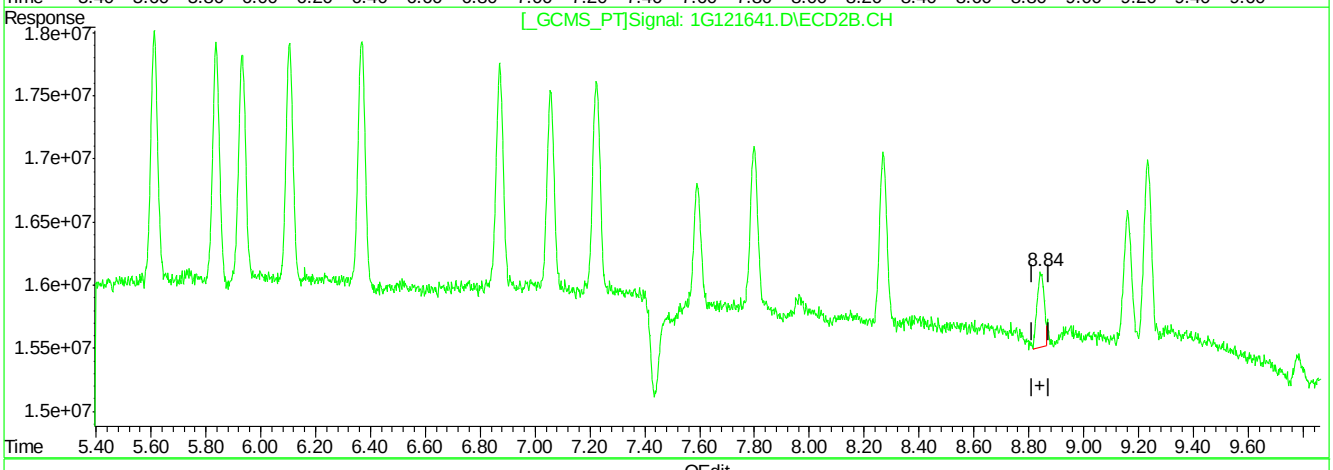
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:30 am                    Operator: dharas
Sample    : ic3951-2                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:08 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(21) Methoxychlor (A)

6.44min 1.638PPB

response 1500625

(21) Methoxychlor #2 (A)

8.84min 1.703PPB

response 10329597

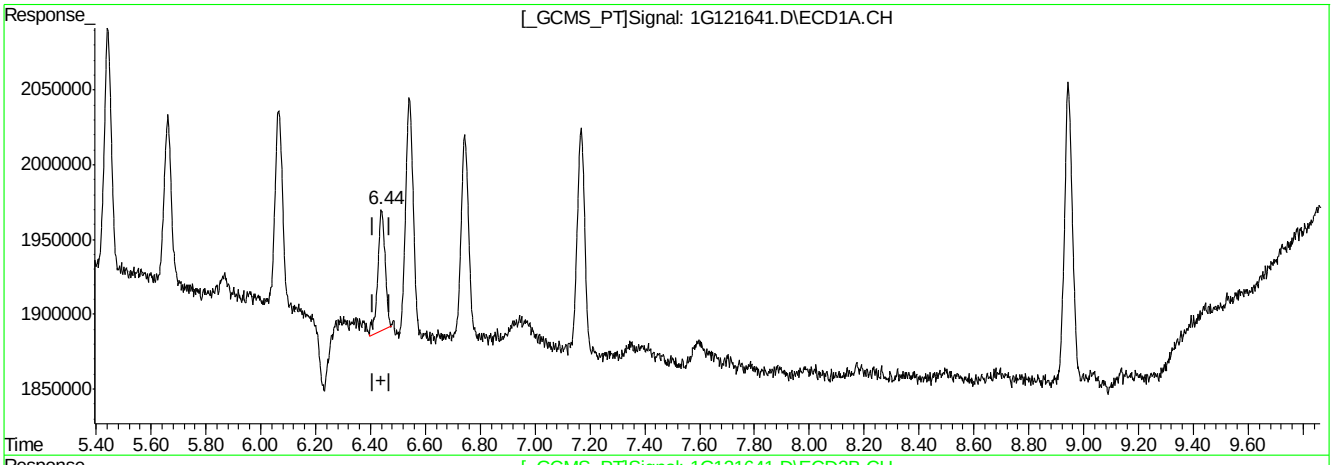
(+) = Expected Retention Time

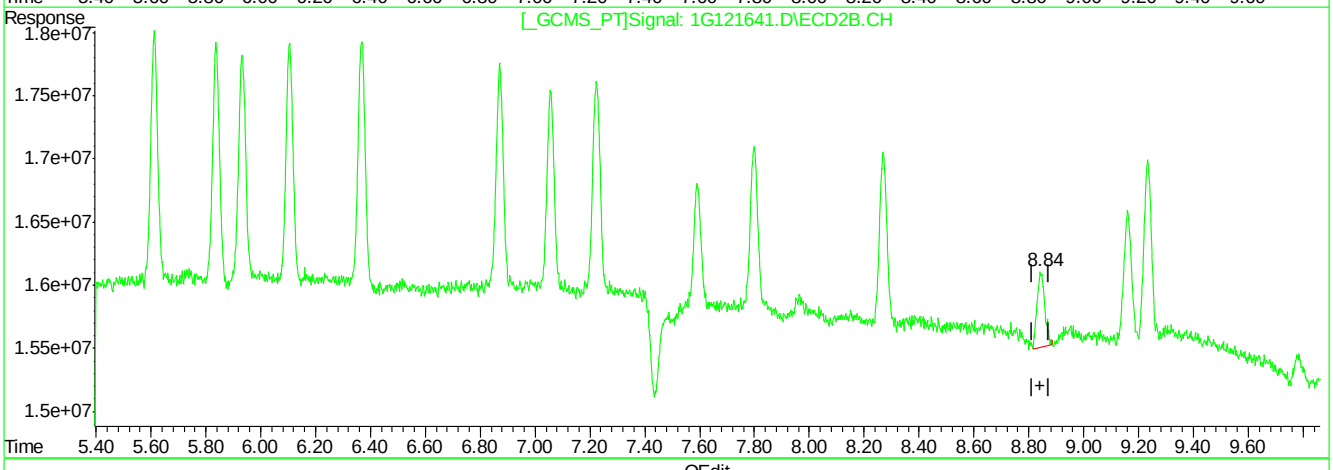
1G121641.D 1PST3951.M Fri Apr 01 16:10:20 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:30 am                    Operator: dharas
Sample    : ic3951-2                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:08 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(21) Methoxychlor (A)

6.44min 1.638PPB

response 1500625

(21) Methoxychlor #2 (A)

8.84min 1.919PPB m

response 11641792

(+) = Expected Retention Time

1G121641.D 1PST3951.M Fri Apr 01 16:10:28 2016 RPT1

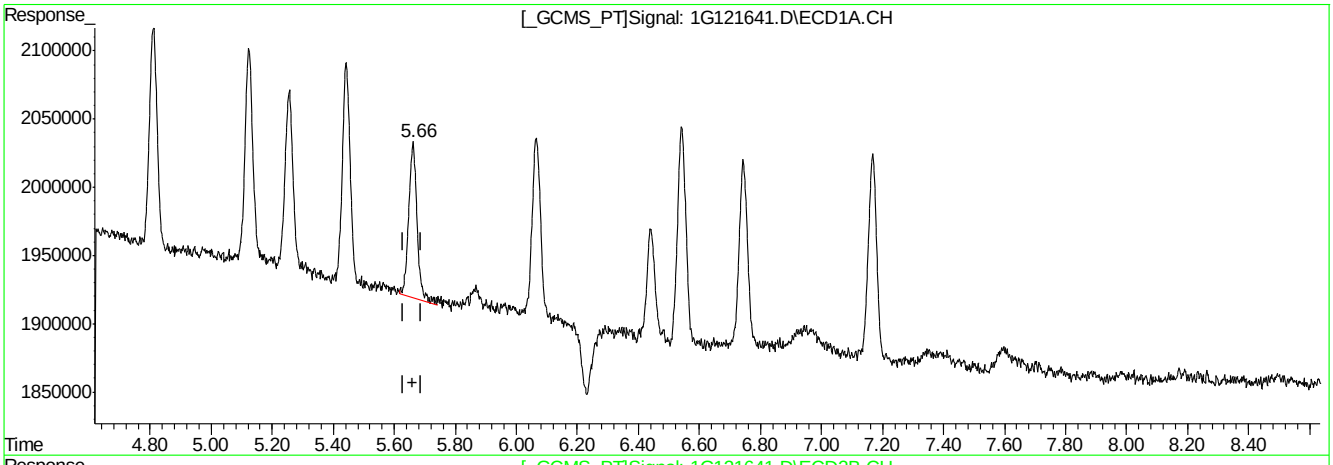
9.6.2.12

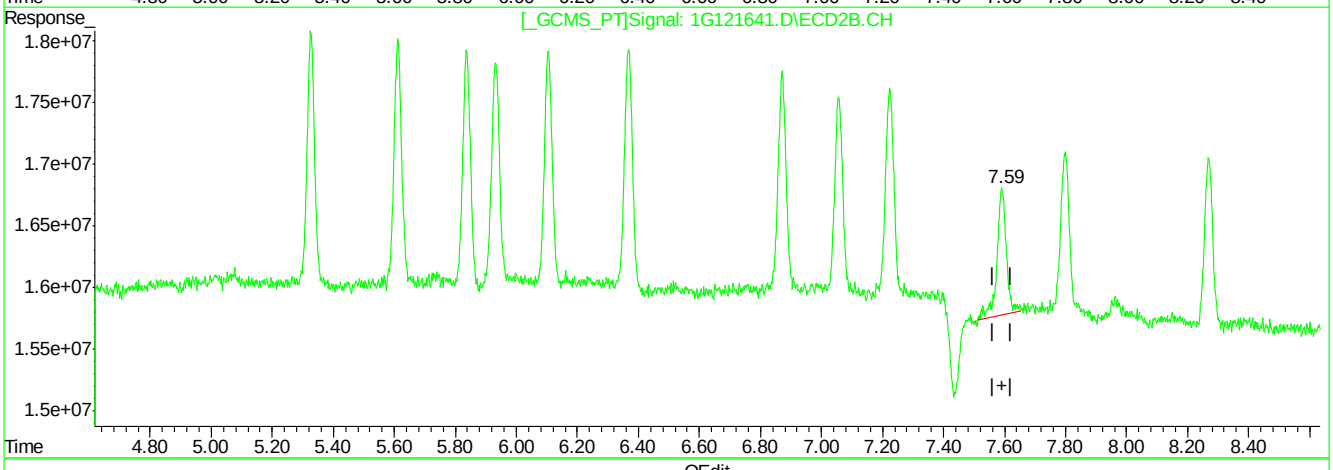
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121641.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:30 am                    Operator: dharas
Sample    : ic3951-2                                 Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:10 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:30:08 2016
Response via : Multiple Level Calibration
```





QEdit

(18) 4,4'-DDT (MA)

5.66min 1.727PPB

response 2185176

(18) 4,4'-DDT #2 (MA)

7.59min 1.906PPB m

response 22025107

(+) = Expected Retention Time

1G121641.D 1PST3951.M Fri Apr 01 16:31:38 2016 RPT1

9.6.2.13

9

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/04/16 12:58

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121642.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121642.D\ECD2B.CH
Acq On : 01 Apr 2016 11:48 am Operator: dharas
Sample : ic3951-5 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:34 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 15:27:15 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #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-nitrob	1.17	1.54	74893808	967.7E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	6912592	77143153	4.038	4.153
Spiked Amount	40.000	Range	30 - 150	Recovery	=	10.10%#	10.38%#
24) SA	Decachlorobiphen	8.94	10.88	9786606	50153632	4.762	4.655
Spiked Amount	40.000			Recovery	=	11.90%	11.64%
	Target Compounds						
3) A	alpha-BHC	2.22	3.05	7246241	113.3E6	3.659m	4.105
4) MA	gamma-BHC	2.51	3.48	7005373	102.4E6	3.706	4.120
5) MA	Heptachlor	2.98	4.05	8024128	92886298	3.931	4.228
6) B	beta-BHC	2.59	3.57	3878463	44513432	3.885	4.157
7) B	delta-BHC	2.77	3.96	6194511	93985408	3.503	3.781
8) MB	Aldrin	3.31	4.50	7165619	91862743	3.933	4.222
9) B	Heptachlor Epoxi	4.00	5.33	7586569	84272955	4.069	4.205
10) B	gamma-Chlordane	4.16	5.61	7773821	84903598	4.206	4.382
11) B	alpha-Chlordane	4.32	5.84	7782104	81001119	4.193	4.195
12) A	Endosulfan I	4.50	5.93	7222875	82489664	4.071	4.463
13) B	4,4'-DDE	4.44	6.10	6887469	81737323	4.410	4.289
14) MA	Dieldrin	4.81	6.37	7170517	88118788	4.056	4.358
15) MA	Endrin	5.12	6.87	6590681	78448072	4.129	4.201
16) A	4,4'-DDD	5.26	7.06	5546292	73203984	4.145	4.438
17) B	Endosulfan II	5.44	7.23	6980394	79849892	4.019	4.445
18) MA	4,4'-DDT	5.66	7.59	5173678	48450266	4.047	4.177m
19) B	Endrin Aldehyde	6.07	7.80	6013477	62409648	4.168	4.582
20) B	Endosulfan Sulfa	6.75	8.27	6430599	63778084	3.939	4.163
21) A	Methoxychlor	6.44	8.84	3733303	26821385	4.036m	4.405
22)	Mirex	6.54	9.16	7465280	49520526	4.122	4.401
23) B	Endrin Ketone	7.17	9.24	7167304	68606688	4.001	4.287

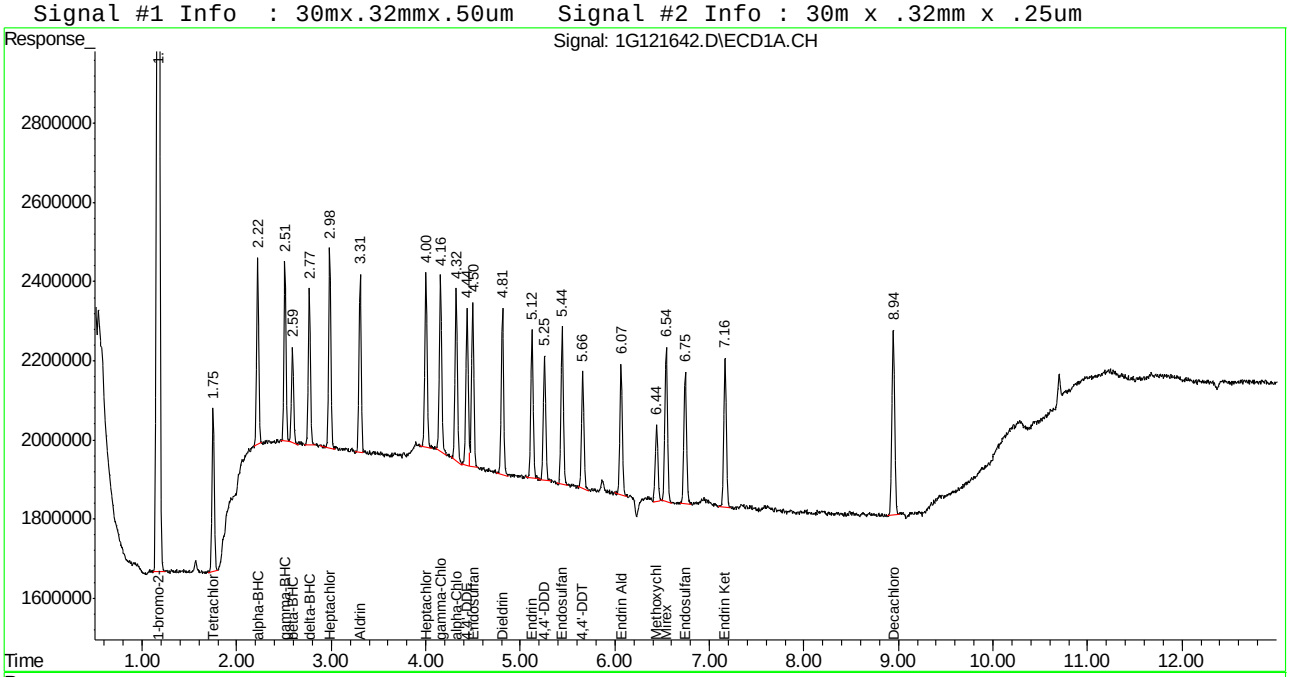
(f)=RT Delta > 1/2 Window (m)=manual int.

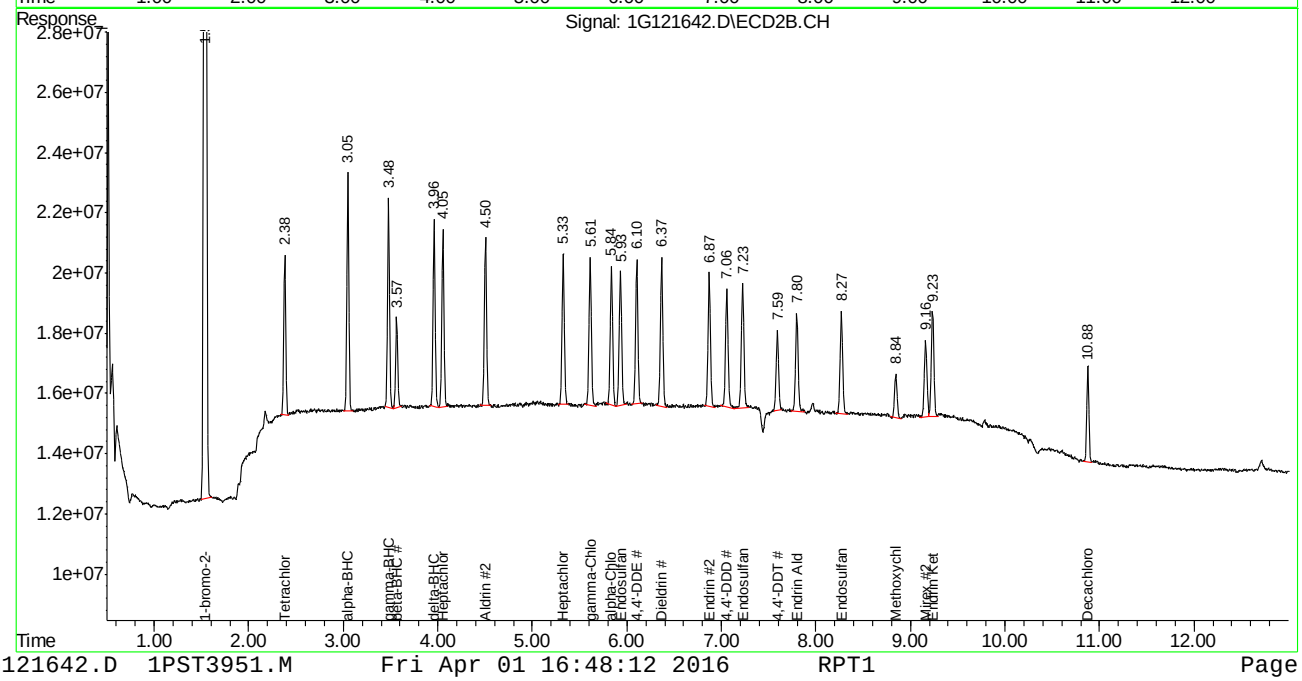
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121642.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121642.D\ECD2B.CH
Acq On : 01 Apr 2016 11:48 am Operator: dharas
Sample : ic3951-5 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:34 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 15:27:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #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

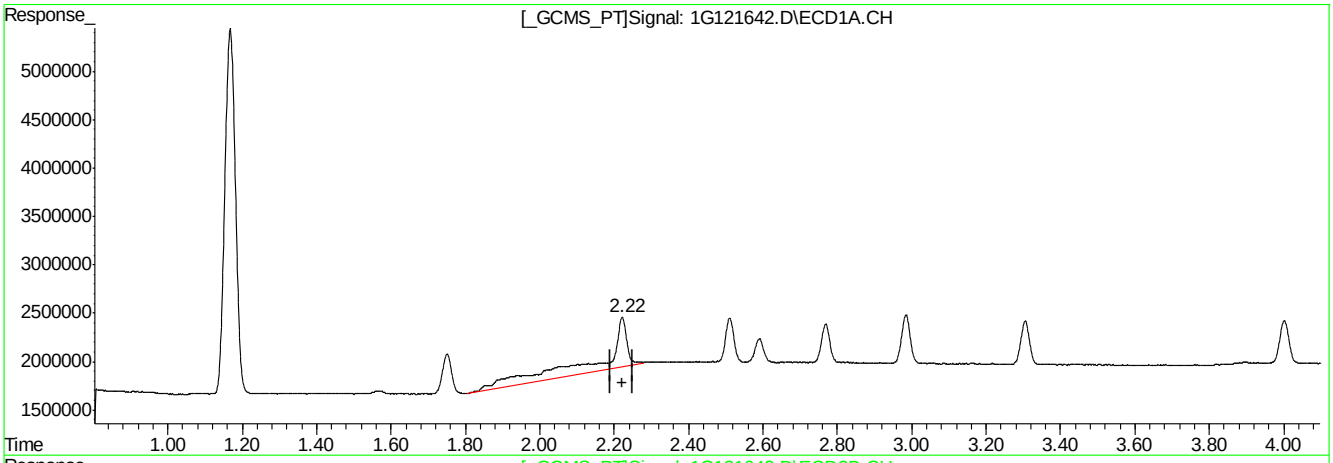
Sample Number:	G1G3951-IC3951	**Method:**	SW846 8081B
Lab FileID:	1G121642.D	**Analyst approved:**	04/01/16 16:29 Joseph Ravino
Injection Time:	04/01/16 11:48	**Supervisor approved:**	04/04/16 12:58 Gwendolyn Burns

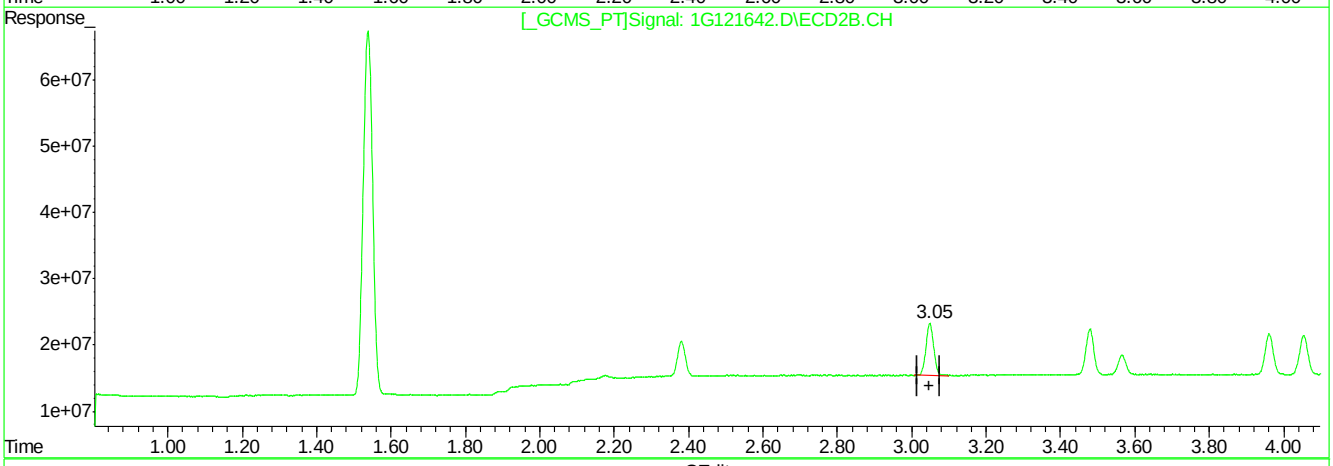
Parameter	CAS	Sig#	R.T. (min.)	Reason
alpha-BHC	319-84-6	1	2.22	Poor instrument integration
Methoxychlor	72-43-5	1	6.44	Poor instrument integration
4,4'-DDT	50-29-3	2	7.59	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121642.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121642.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:48 am                    Operator: dharas
Sample    : ic3951-5                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 15:38 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:27:15 2016
Response via : Multiple Level Calibration
```





QEdit

(3) alpha-BHC (A)

2.22min 12.969PPB

response 25683796

(3) alpha-BHC #2 (A)

3.05min 4.105PPB

response 113326456

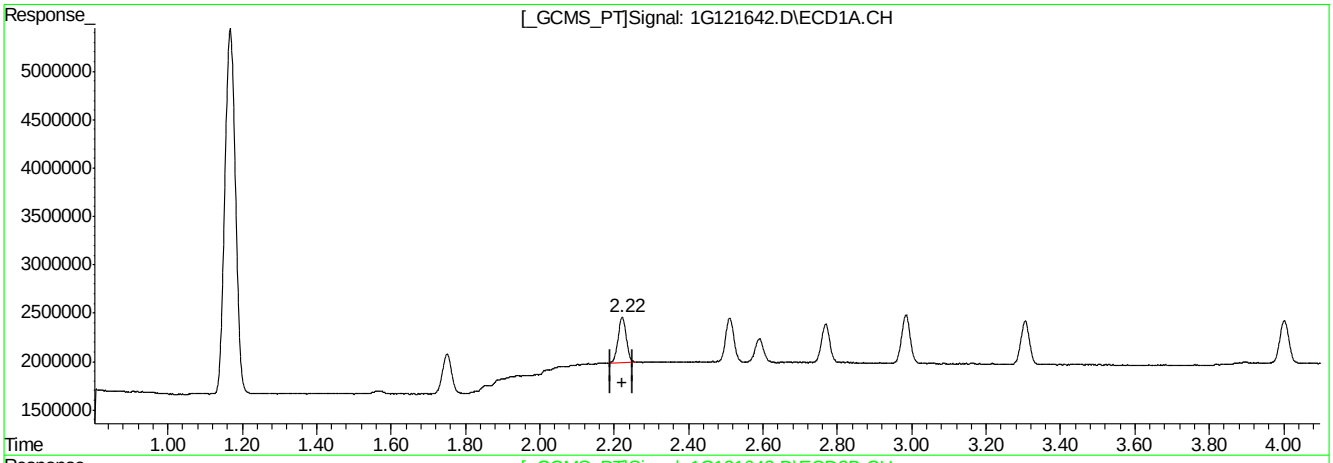
(+) = Expected Retention Time

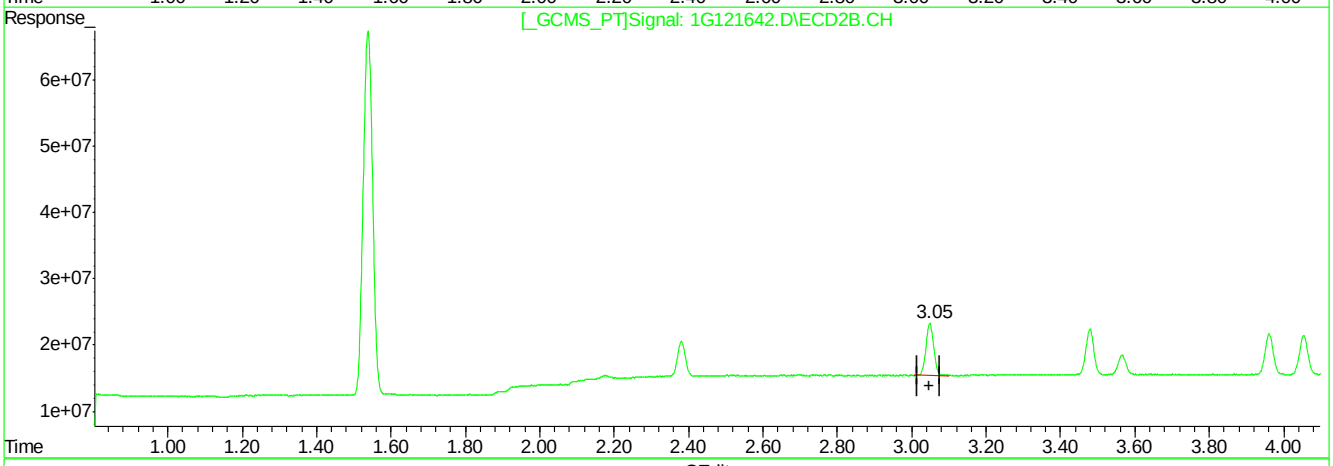
1G121642.D 1PST3951.M Fri Apr 01 15:38:52 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121642.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121642.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:48 am                    Operator: dharas
Sample    : ic3951-5                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 15:38 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:27:15 2016
Response via : Multiple Level Calibration
```





QEdit

(3) alpha-BHC (A)

2.22min 3.659PPB m

response 7246241

(3) alpha-BHC #2 (A)

3.05min 4.105PPB

response 113326456

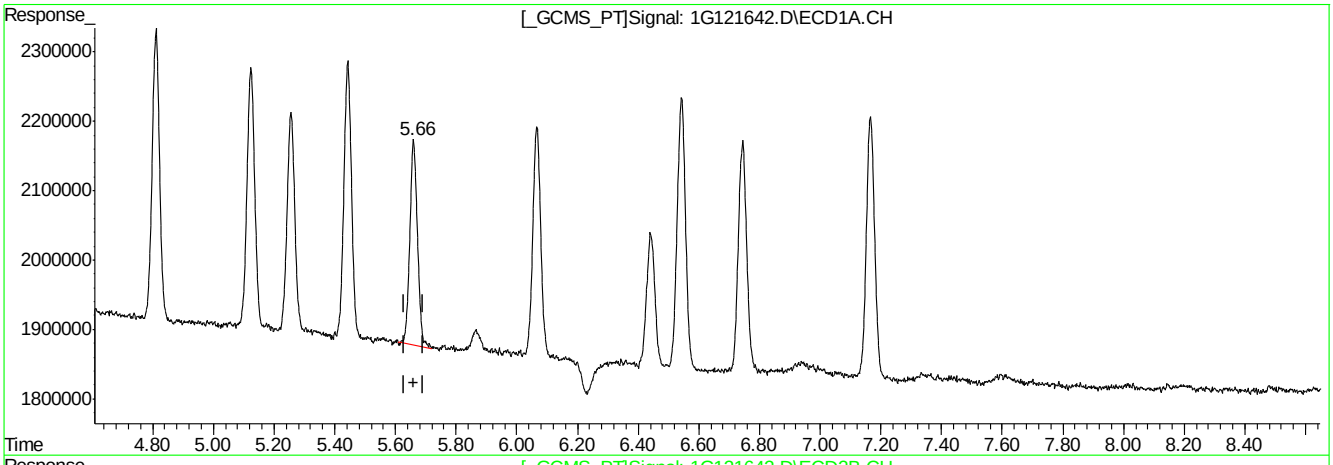
(+) = Expected Retention Time

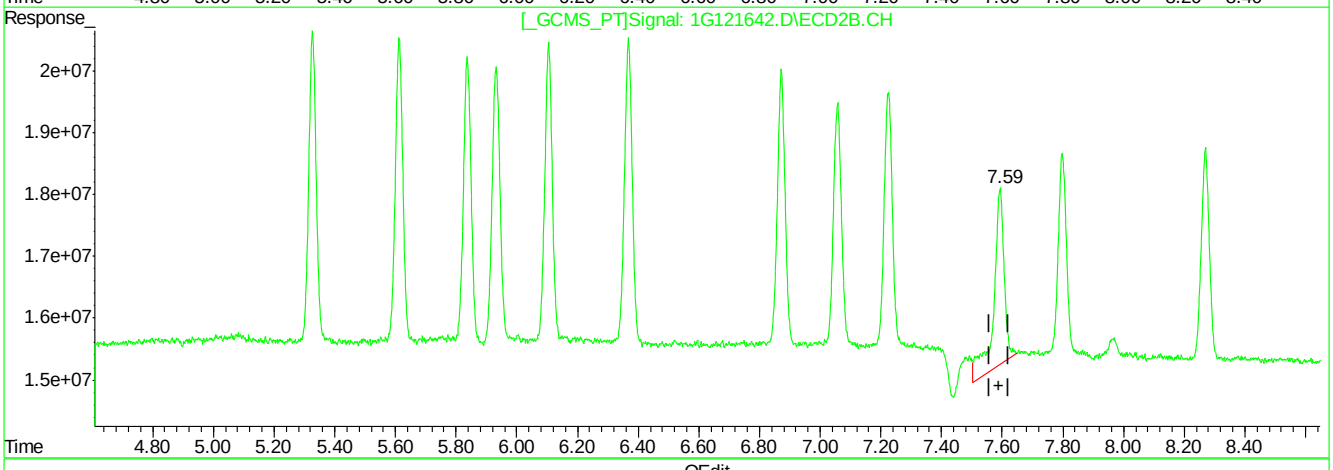
1G121642.D 1PST3951.M Fri Apr 01 15:39:00 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121642.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121642.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:48 am                    Operator: dharas
Sample    : ic3951-5                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 15:38 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:27:15 2016
Response via : Multiple Level Calibration
```





QEdit

(18) 4,4'-DDT (MA)

5.66min 4.047PPB

response 5173678

(18) 4,4'-DDT #2 (MA)

7.59min 5.954PPB

response 69065027

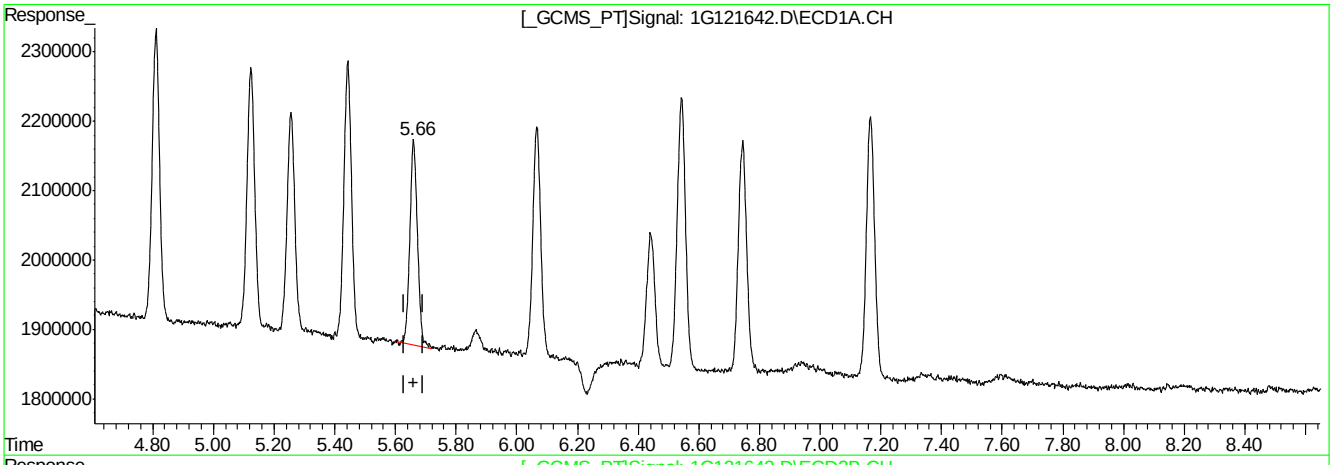
(+) = Expected Retention Time

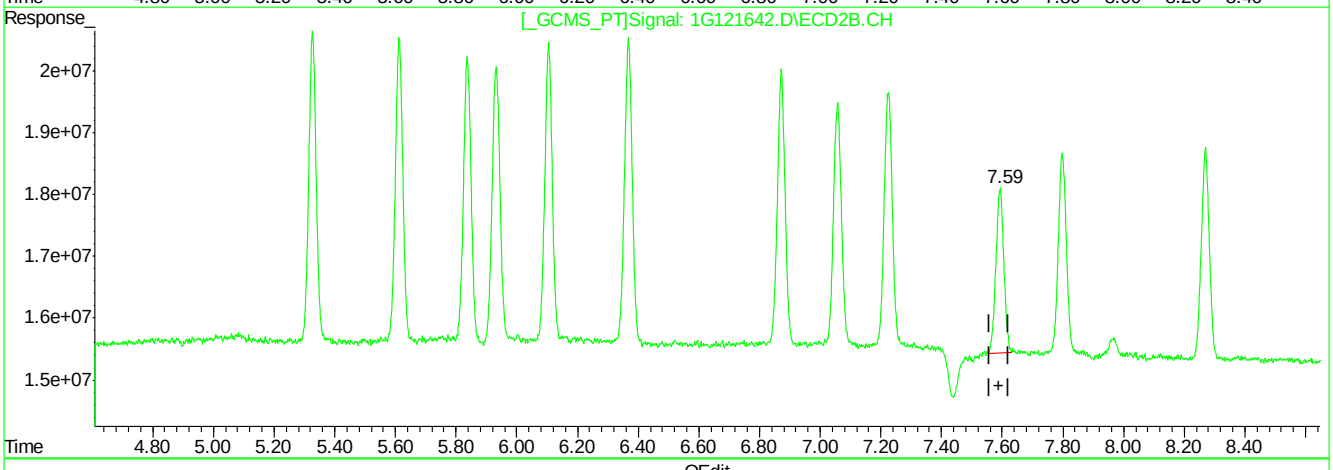
1G121642.D 1PST3951.M Fri Apr 01 15:39:11 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121642.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121642.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:48 am                    Operator: dharas
Sample    : ic3951-5                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 15:38 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:27:15 2016
Response via : Multiple Level Calibration
```





QEdit

(18) 4,4'-DDT (MA)

5.66min 4.047PPB

response 5173678

(18) 4,4'-DDT #2 (MA)

7.59min 4.177PPB m

response 48450266

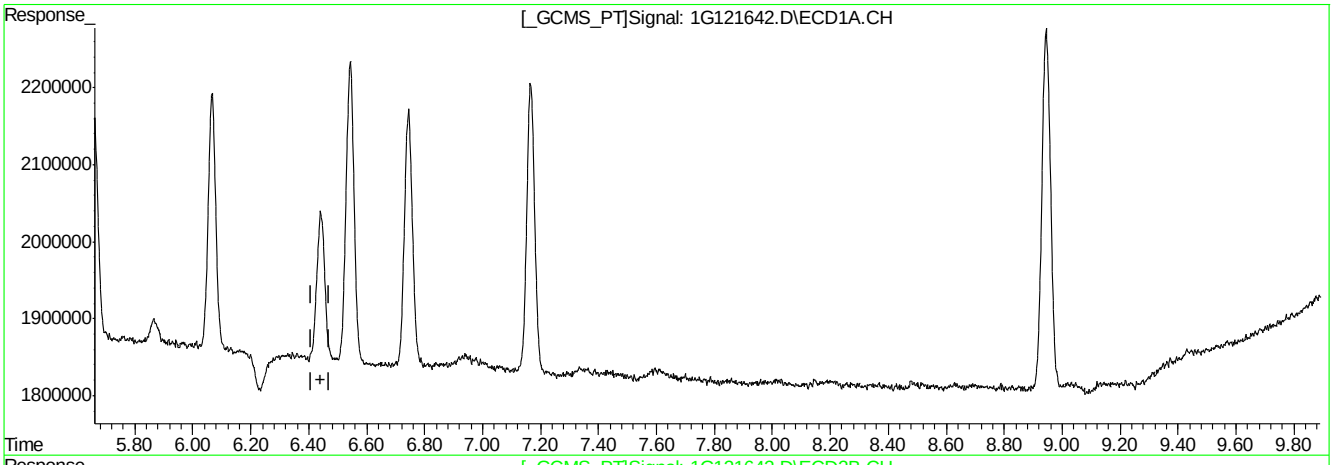
(+) = Expected Retention Time

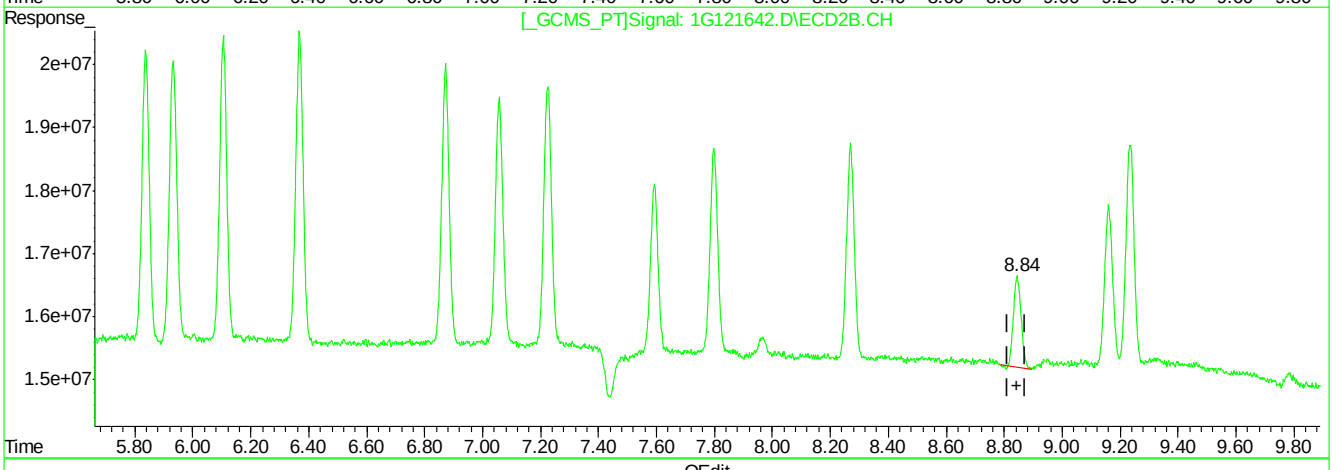
1G121642.D 1PST3951.M Fri Apr 01 15:39:22 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121642.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121642.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:48 am                    Operator: dharas
Sample    : ic3951-5                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 15:38 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:27:15 2016
Response via : Multiple Level Calibration
```





QEdit

(21) Methoxychlor (A)

0.00min 0.000PPB

response 0

(21) Methoxychlor #2 (A)

8.84min 4.405PPB

response 26821385

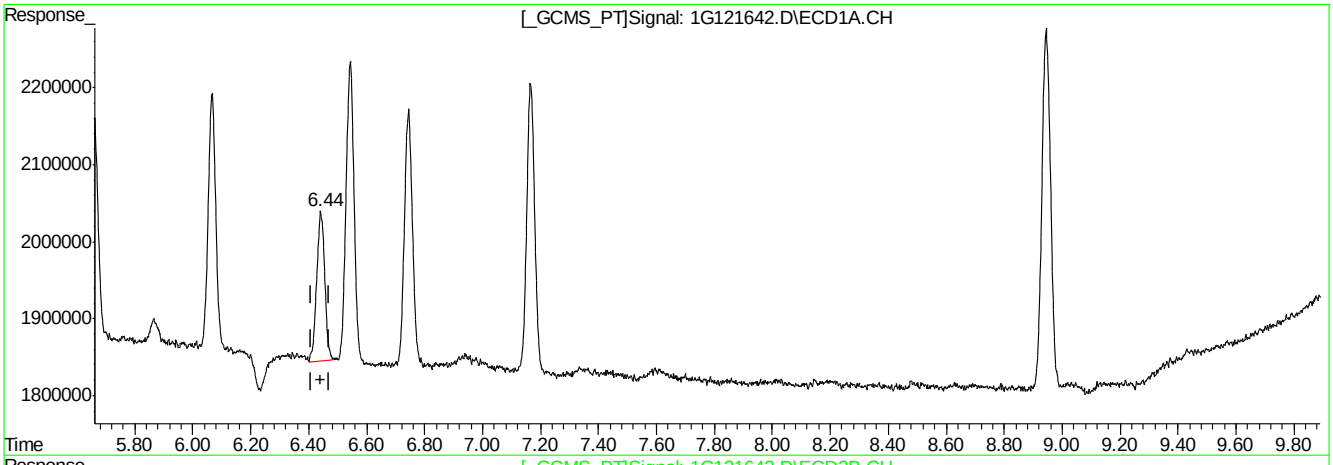
(+) = Expected Retention Time

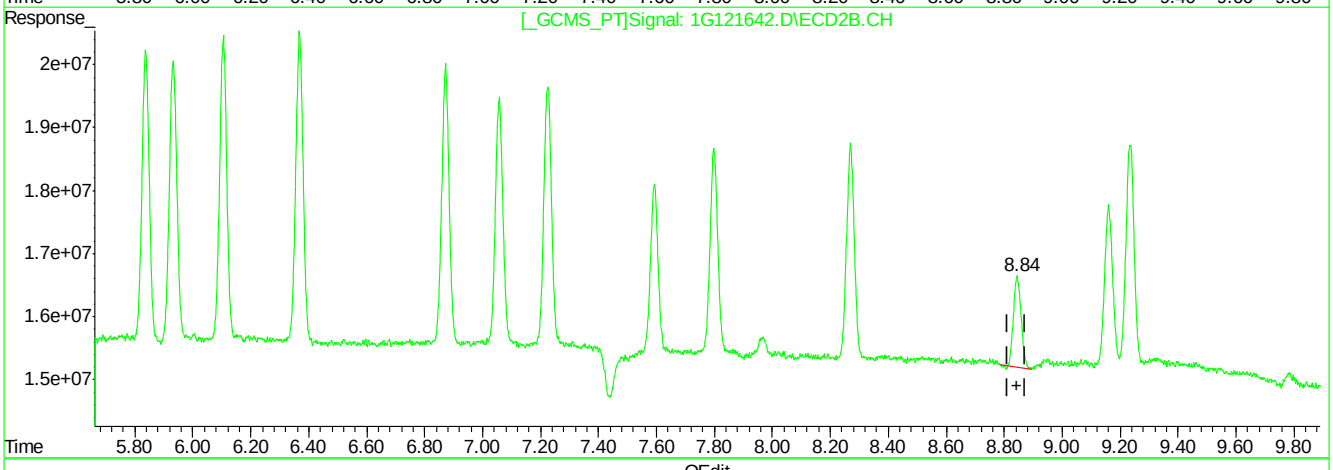
1G121642.D 1PST3951.M Fri Apr 01 15:39:27 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121642.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121642.D\ECD2B.CH
Acq On    : 01 Apr 2016  11:48 am                    Operator: dharas
Sample    : ic3951-5                                 Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 15:38 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:27:15 2016
Response via : Multiple Level Calibration
```





QEdit

(21) Methoxychlor (A)

6.44min 4.036PPB m

response 3733303

(21) Methoxychlor #2 (A)

8.84min 4.405PPB

response 26821385

(+) = Expected Retention Time

1G121642.D 1PST3951.M Fri Apr 01 15:39:42 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/04/16 12:58

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121643.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121643.D\ECD2B.CH
Acq On : 01 Apr 2016 12:05 pm Operator: dharas
Sample : ic3951-10 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:34 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 15:27:15 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #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-nitrob	1.17	1.54	73730059	960.4E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	13547050	155.6E6	8.038	8.442
Spiked Amount	40.000	Range	30 - 150	Recovery	=	20.10%#	21.11%#
24) SA	Decachlorobiphen	8.94	10.88	19109609	98667668	9.446	9.228
Spiked Amount	40.000			Recovery	=	23.61%	23.07%
	Target Compounds						
3) A	alpha-BHC	2.22	3.05	14876123	229.7E6	7.630m	8.385
4) MA	gamma-BHC	2.51	3.48	14373975	206.7E6	7.724	8.381
5) MA	Heptachlor	2.99	4.05	16071936	185.4E6	7.998	8.502
6) B	beta-BHC	2.59	3.57	7520616	85746448	7.652	8.069
7) B	delta-BHC	2.77	3.96	12666148	190.4E6	7.275	7.719
8) MB	Aldrin	3.31	4.50	14615504	187.2E6	8.148	8.669
9) B	Heptachlor Epoxi	4.00	5.33	15209828	169.5E6	8.286m	8.524
10) B	gamma-Chlordane	4.16	5.61	15181604	166.7E6	8.343	8.668
11) B	alpha-Chlordane	4.32	5.84	14954944	161.7E6	8.184	8.438
12) A	Endosulfan I	4.50	5.93	14393781	159.2E6	8.241	8.677
13) B	4,4'-DDE	4.44	6.10	13633595	166.0E6	8.867	8.776
14) MA	Dieldrin	4.81	6.37	14313459	174.9E6	8.224	8.714
15) MA	Endrin	5.12	6.87	13310212	154.0E6	8.471	8.310
16) A	4,4'-DDD	5.25	7.06	11191090	140.7E6	8.496	8.594
17) B	Endosulfan II	5.44	7.22	14038503	152.1E6	8.209	8.532
18) MA	4,4'-DDT	5.66	7.59	10662176	103.6E6	8.473	9.000m
19) B	Endrin Aldehyde	6.06	7.80	12096342	119.8E6	8.516	8.860
20) B	Endosulfan Sulfa	6.74	8.27	12924870	127.4E6	8.041	8.383
21) A	Methoxychlor	6.44	8.84	7419343	56583837	8.147	9.364
22)	Mirex	6.54	9.16	15041244	96891129	8.437	8.677
23) B	Endrin Ketone	7.17	9.23	14453201	138.2E6	8.195	8.702

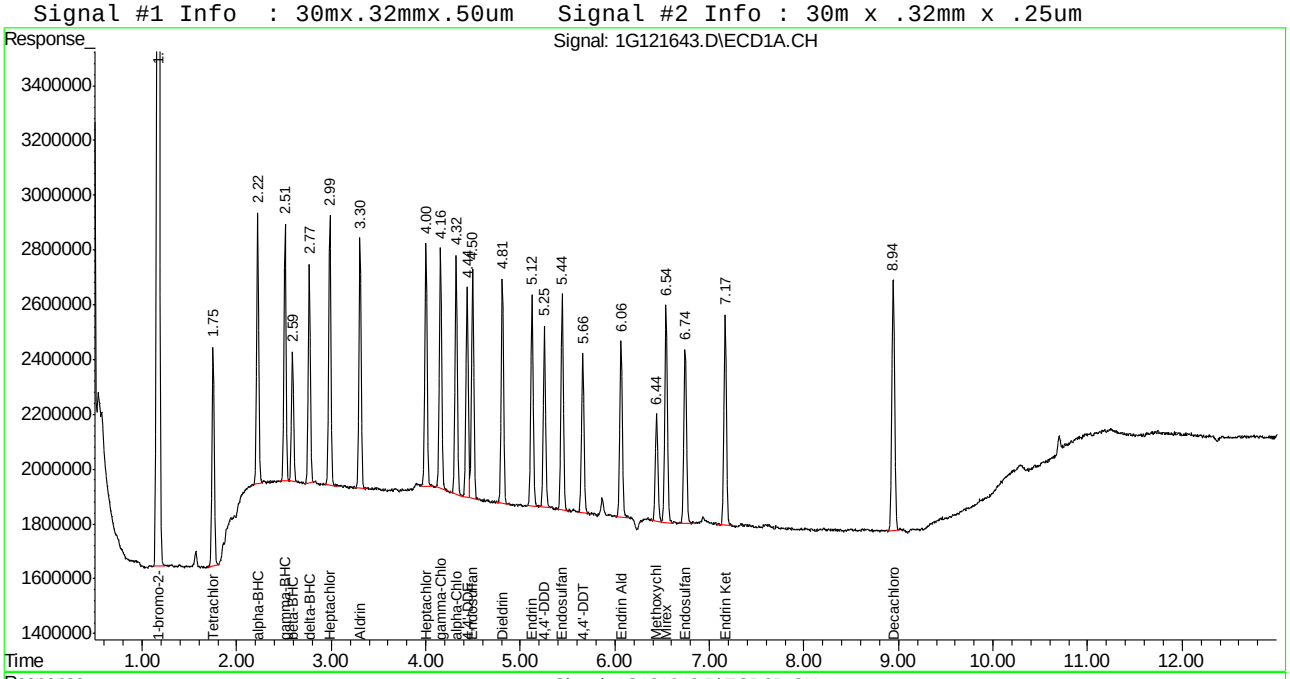
(f)=RT Delta > 1/2 Window (m)=manual int.
1G121643.D 1PST3951.M Fri Apr 01 16:48:15 2016 RPT1 Page 1

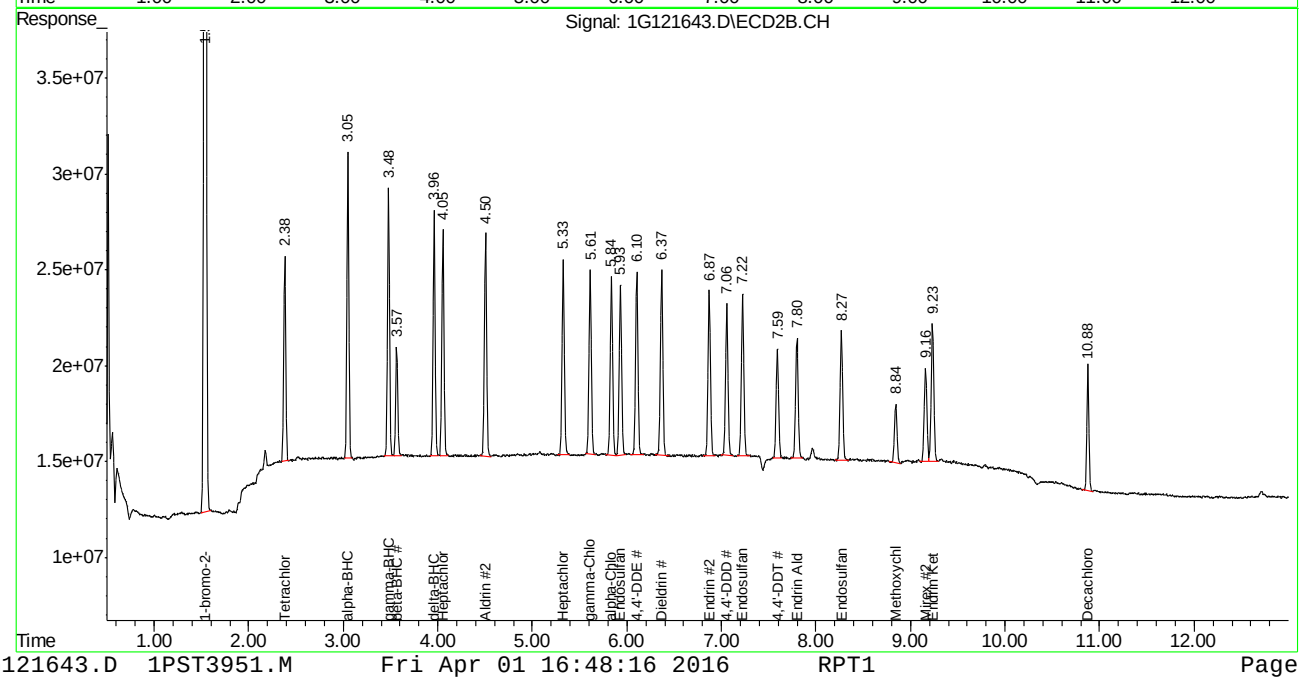
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121643.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121643.D\ECD2B.CH
Acq On : 01 Apr 2016 12:05 pm Operator: dharas
Sample : ic3951-10 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:34 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 15:27:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #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

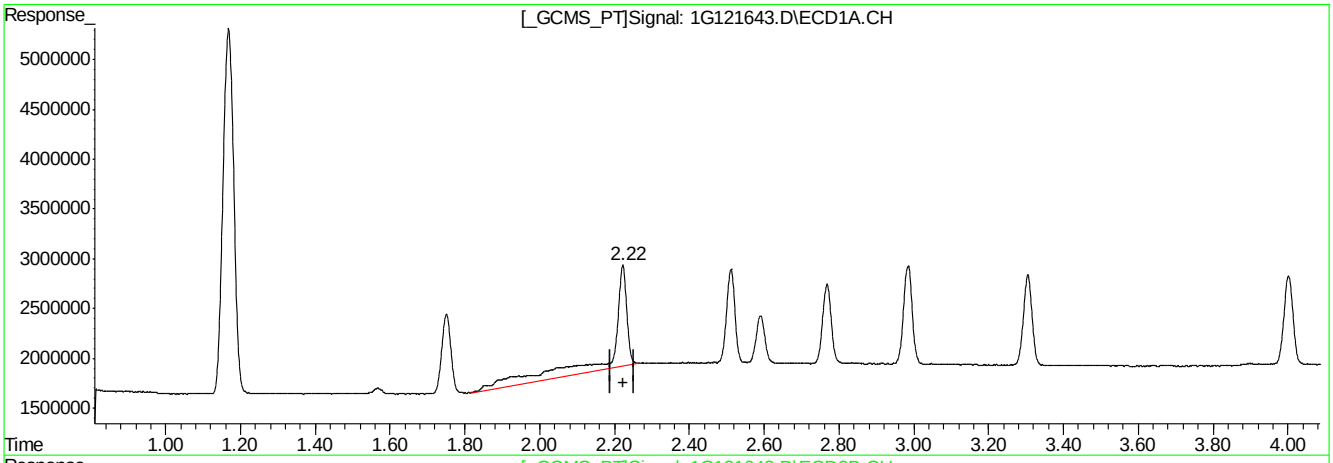
Sample Number:	G1G3951-IC3951	**Method:**	SW846 8081B
Lab FileID:	1G121643.D	**Analyst approved:**	04/01/16 16:29 Joseph Ravino
Injection Time:	04/01/16 12:05	**Supervisor approved:**	04/04/16 12:58 Gwendolyn Burns

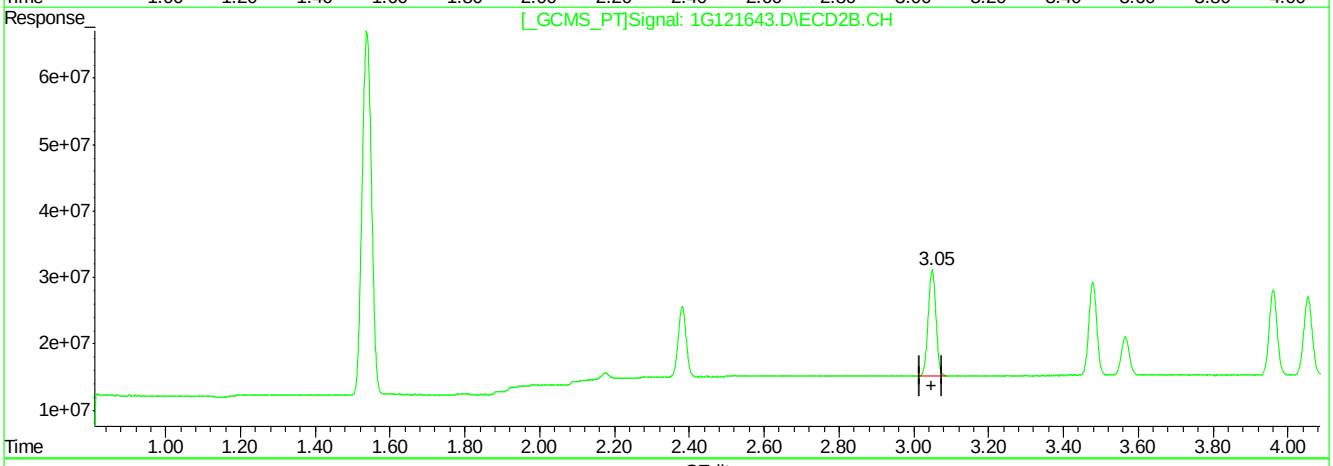
Parameter	CAS	Sig#	R.T. (min.)	Reason
alpha-BHC	319-84-6	1	2.22	Poor instrument integration
Heptachlor epoxide	1024-57-3	1	4.00	Poor instrument integration
4,4'-DDT	50-29-3	2	7.59	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121643.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121643.D\ECD2B.CH
Acq On    : 01 Apr 2016  12:05 pm                    Operator: dharas
Sample    : ic3951-10                                Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 15:34 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:27:15 2016
Response via : Multiple Level Calibration
```





QEdit

(3) alpha-BHC (A)

2.22min 15.894PPB

response 30988053

(3) alpha-BHC #2 (A)

3.05min 8.385PPB

response 229733944

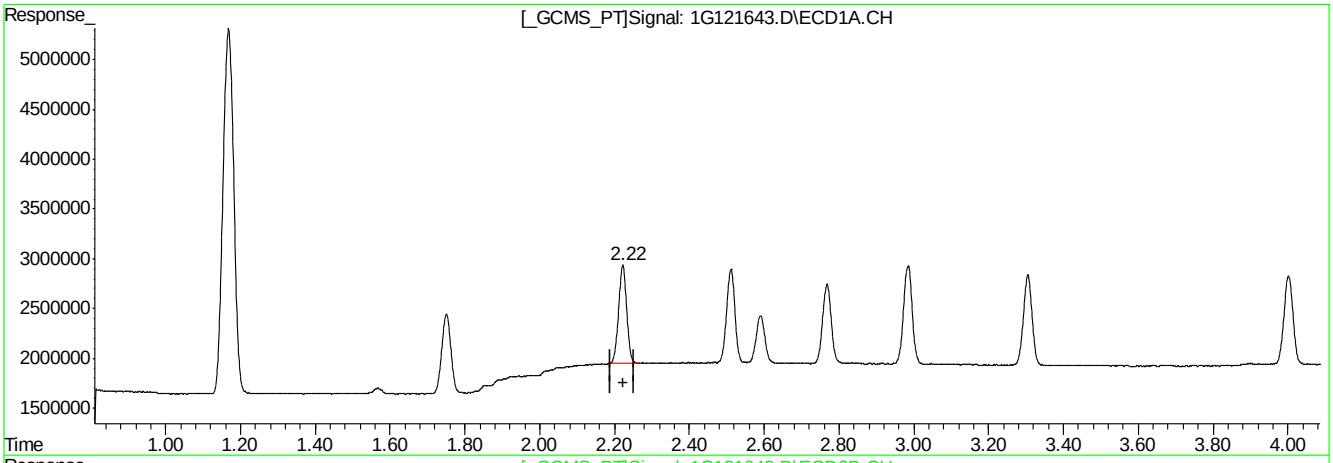
(+) = Expected Retention Time

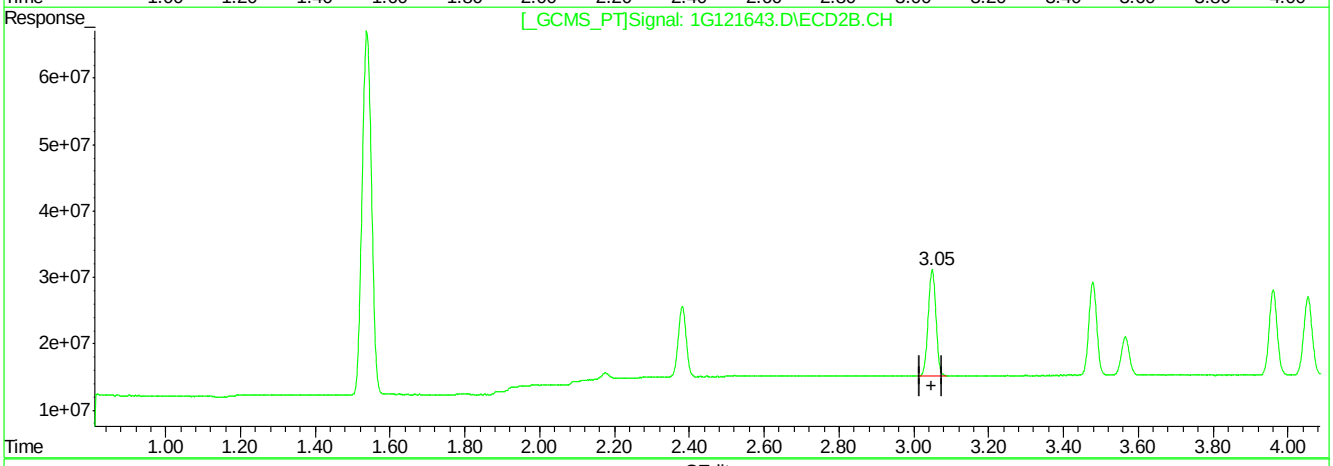
1G121643.D 1PST3951.M Fri Apr 01 15:35:01 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121643.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121643.D\ECD2B.CH
Acq On    : 01 Apr 2016  12:05 pm                    Operator: dharas
Sample    : ic3951-10                                Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 15:34 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:27:15 2016
Response via : Multiple Level Calibration
```





QEdit

(3) alpha-BHC (A)

2.22min 7.630PPB m

response 14876123

(3) alpha-BHC #2 (A)

3.05min 8.385PPB

response 229733944

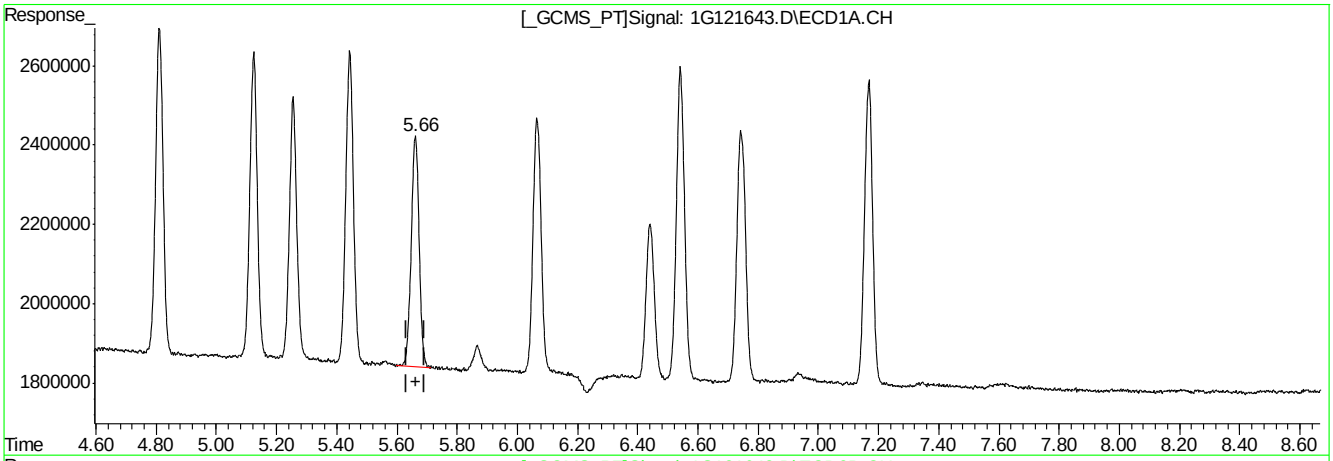
(+) = Expected Retention Time

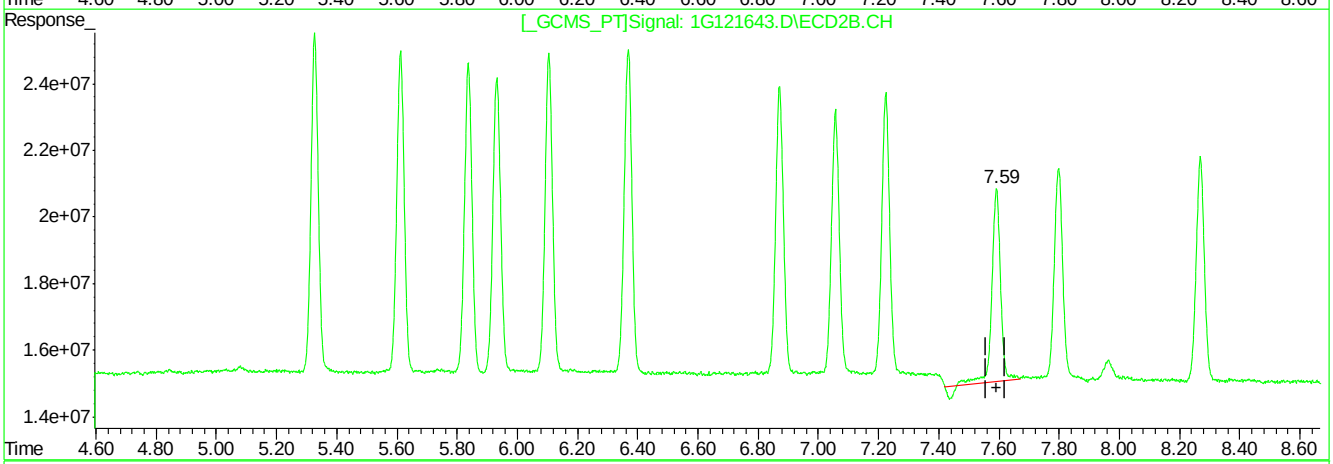
1G121643.D 1PST3951.M Fri Apr 01 15:35:08 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121643.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121643.D\ECD2B.CH
Acq On    : 01 Apr 2016  12:05 pm                    Operator: dharas
Sample    : ic3951-10                                Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 15:34 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:27:15 2016
Response via : Multiple Level Calibration
```





QEdit

(18) 4,4'-DDT (MA)

5.66min 8.473PPB

response 10662176

(18) 4,4'-DDT #2 (MA)

7.59min 9.880PPB

response 113739709

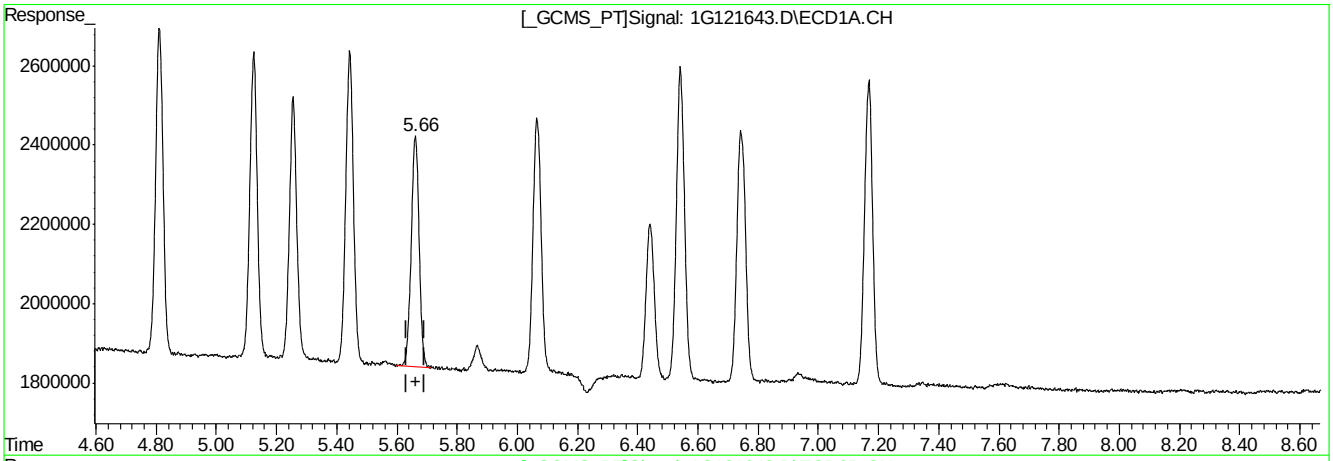
(+) = Expected Retention Time

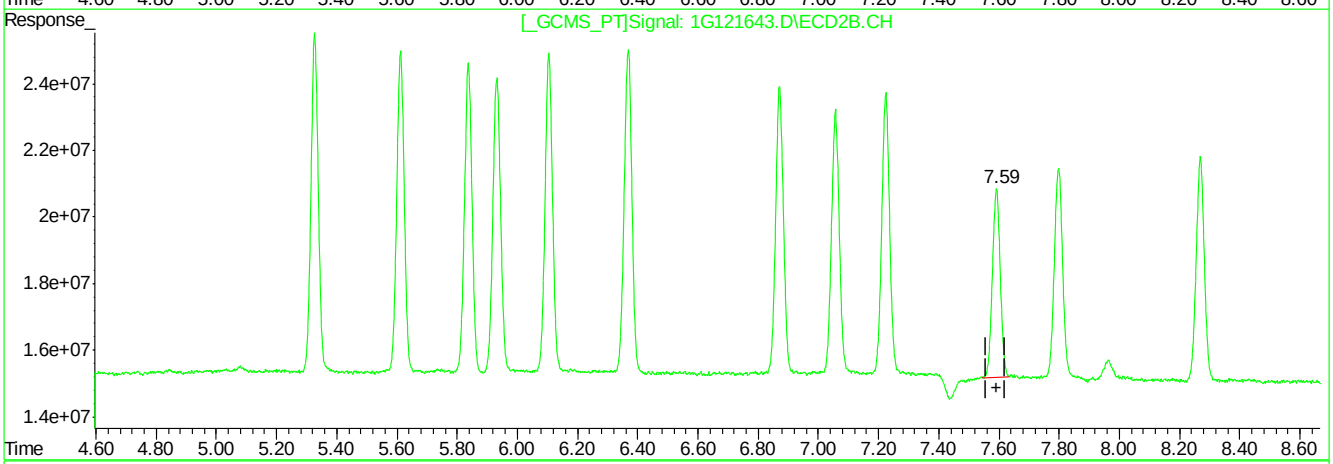
1G121643.D 1PST3951.M Fri Apr 01 15:35:18 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121643.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121643.D\ECD2B.CH
Acq On    : 01 Apr 2016  12:05 pm                    Operator: dharas
Sample    : ic3951-10                                Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 15:34 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:27:15 2016
Response via : Multiple Level Calibration
```





QEdit

(18) 4,4'-DDT (MA)

5.66min 8.473PPB

response 10662176

(18) 4,4'-DDT #2 (MA)

7.59min 9.000PPB m

response 103611035

(+) = Expected Retention Time

1G121643.D 1PST3951.M Fri Apr 01 15:35:26 2016 RPT1

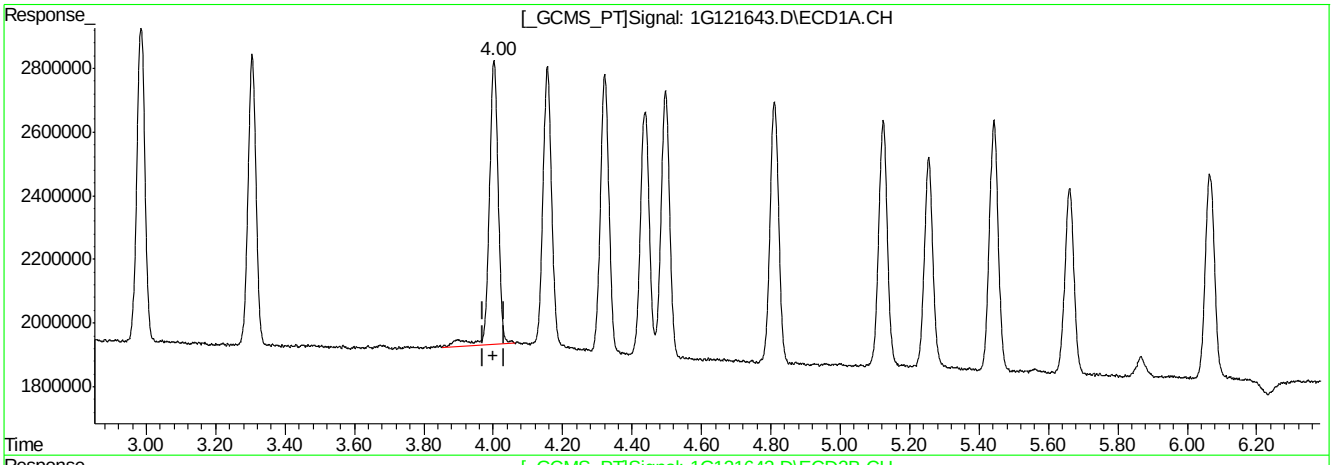
9.6.4.5

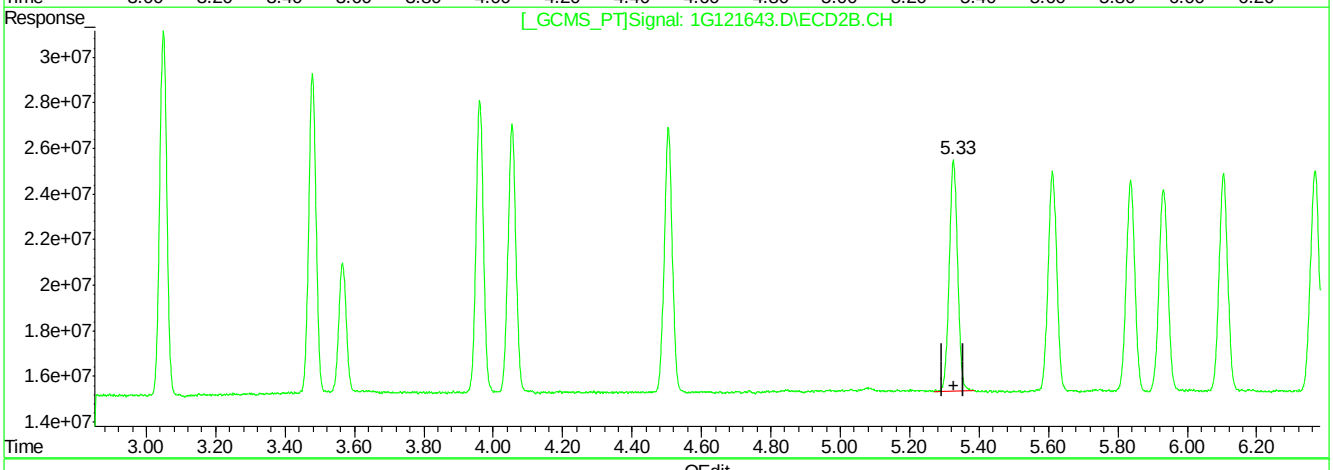
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121643.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121643.D\ECD2B.CH
Acq On    : 01 Apr 2016  12:05 pm                    Operator: dharas
Sample    : ic3951-10                                Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 15:35 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(9) Heptachlor Epoxide (B)

4.00min 8.775PPB

response 16107257

(9) Heptachlor Epoxide #2 (B)

5.33min 8.524PPB

response 169516100

(+) = Expected Retention Time

1G121643.D 1PST3951.M Fri Apr 01 16:11:48 2016 RPT1

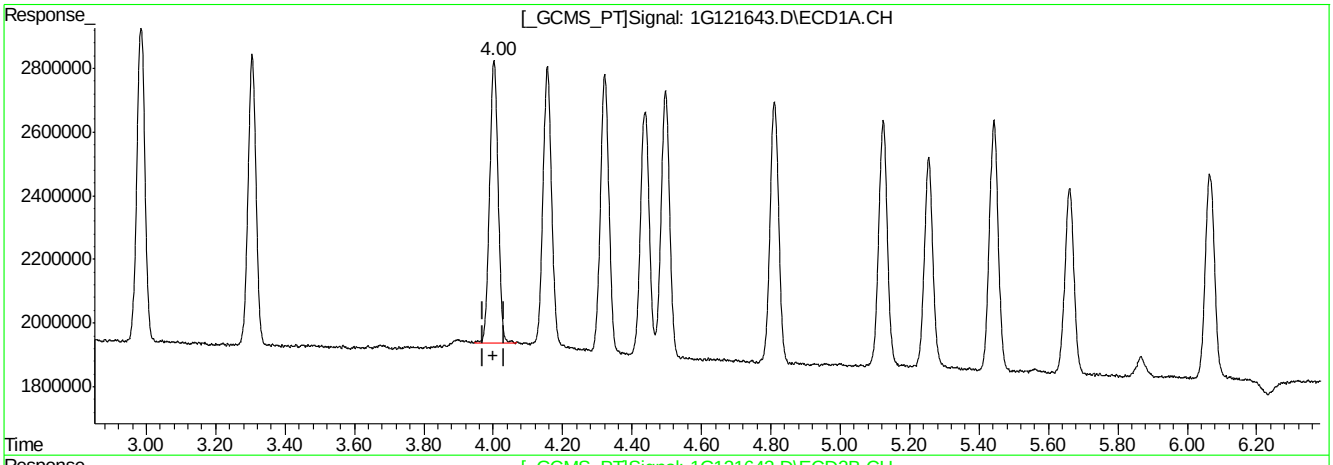
9.6.4.6

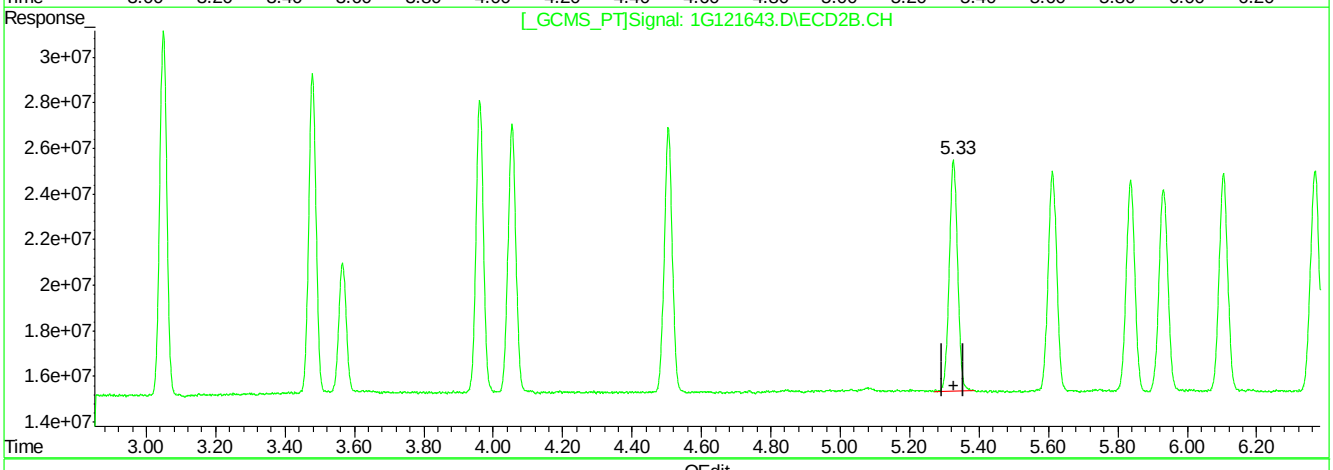
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121643.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121643.D\ECD2B.CH
Acq On    : 01 Apr 2016  12:05 pm                    Operator: dharas
Sample    : ic3951-10                                Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 15:35 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(9) Heptachlor Epoxide (B)

4.00min 8.286PPB m

response 15209828

(9) Heptachlor Epoxide #2 (B)

5.33min 8.524PPB

response 169516100

(+) = Expected Retention Time

1G121643.D 1PST3951.M Fri Apr 01 16:11:53 2016 RPT1

9.6.4.7

9

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121644.D\ECD1A.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121644.D\ECD2B.CH
Acq On : 01 Apr 2016 12:23 pm Operator: dharas
Sample : icc3951-25 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:34 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 15:27:15 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #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-nitrob	1.17	1.54	69955428	920.3E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	32852331	360.4E6	20.546	20.401
	Spiked Amount 40.000	Range 30 - 150		Recovery =		51.36%	51.00%
24) SA	Decachlorobiphen	8.94	10.88	45488840	236.1E6	23.699	23.046
	Spiked Amount 40.000			Recovery =		59.25%	57.61%
	Target Compounds						
3) A	alpha-BHC	2.22	3.05	39352590	543.4E6	21.273	20.700
4) MA	gamma-BHC	2.51	3.48	37684911	483.9E6	21.344	20.474
5) MA	Heptachlor	2.98	4.05	40675888	432.7E6	21.333	20.712
6) B	beta-BHC	2.59	3.56	18770649	209.2E6	20.130	20.543
7) B	delta-BHC	2.77	3.96	33757754	455.8E6	20.437	19.284
8) MB	Aldrin	3.30	4.50	37466748	438.7E6	22.014	21.202
9) B	Heptachlor Epoxi	4.00	5.33	37772300	401.0E6	21.687	21.040
10) B	gamma-Chlordane	4.16	5.61	38033554	395.9E6	22.030	21.489
11) B	alpha-Chlordane	4.32	5.84	37758472	382.7E6	21.778	20.843
12) A	Endosulfan I	4.50	5.93	36039961	380.1E6	21.749	21.623
13) B	4,4'-DDE	4.44	6.10	34742643	394.7E6	23.815	21.778
14) MA	Dieldrin	4.81	6.37	36307872	411.8E6	21.988	21.416
15) MA	Endrin	5.12	6.87	33334819	367.7E6	22.359	20.709
16) A	4,4'-DDD	5.25	7.06	28070132	337.9E6	22.459	21.543
17) B	Endosulfan II	5.44	7.22	34846374	363.2E6	21.477	21.259
18) MA	4,4'-DDT	5.66	7.59	27894100	280.5E6	23.363	25.423
19) B	Endrin Aldehyde	6.06	7.80	29237681	287.3E6	21.695	22.178
20) B	Endosulfan Sulfa	6.74	8.27	31655182	310.1E6	20.757	21.285
21) A	Methoxychlor	6.44	8.84	18539236	144.2E6	21.457	24.911
22)	Mirex	6.54	9.16	35484038	239.5E6	20.977	22.379
23) B	Endrin Ketone	7.17	9.23	36632131	341.2E6	21.891	22.416

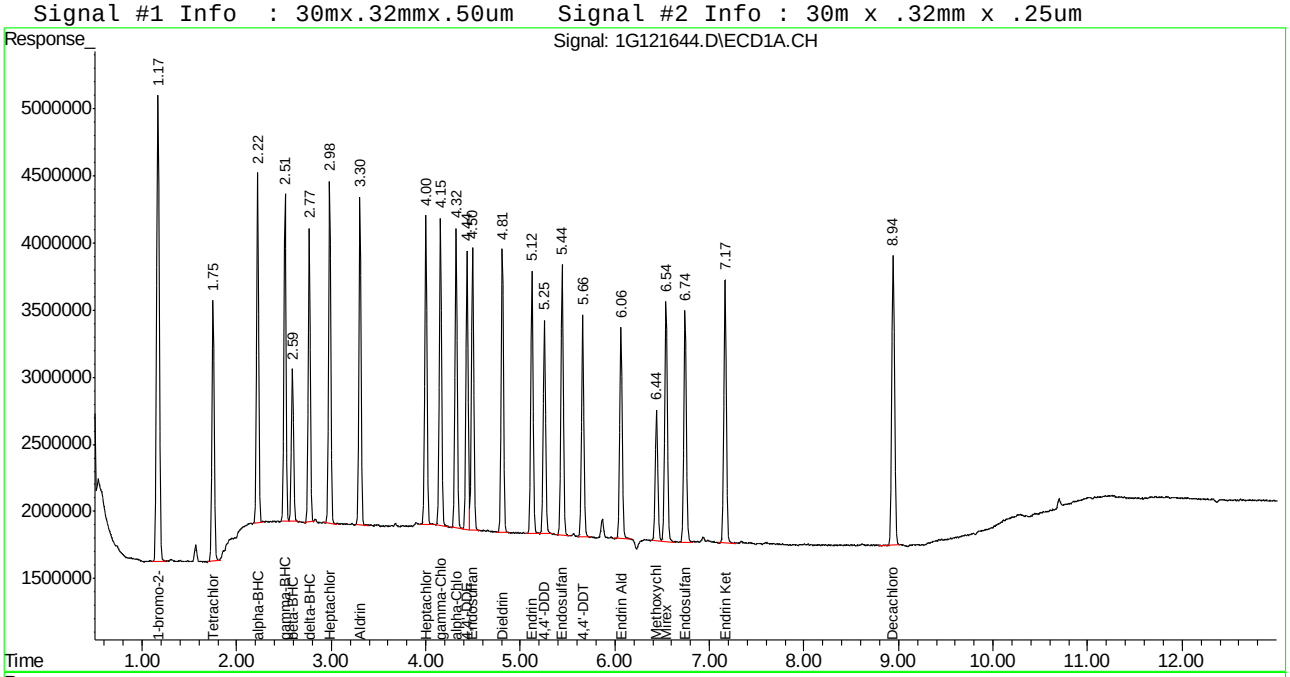
(f)=RT Delta > 1/2 Window (m)=manual int.
1G121644.D 1PST3951.M Fri Apr 01 16:48:18 2016 RPT1 Page 1

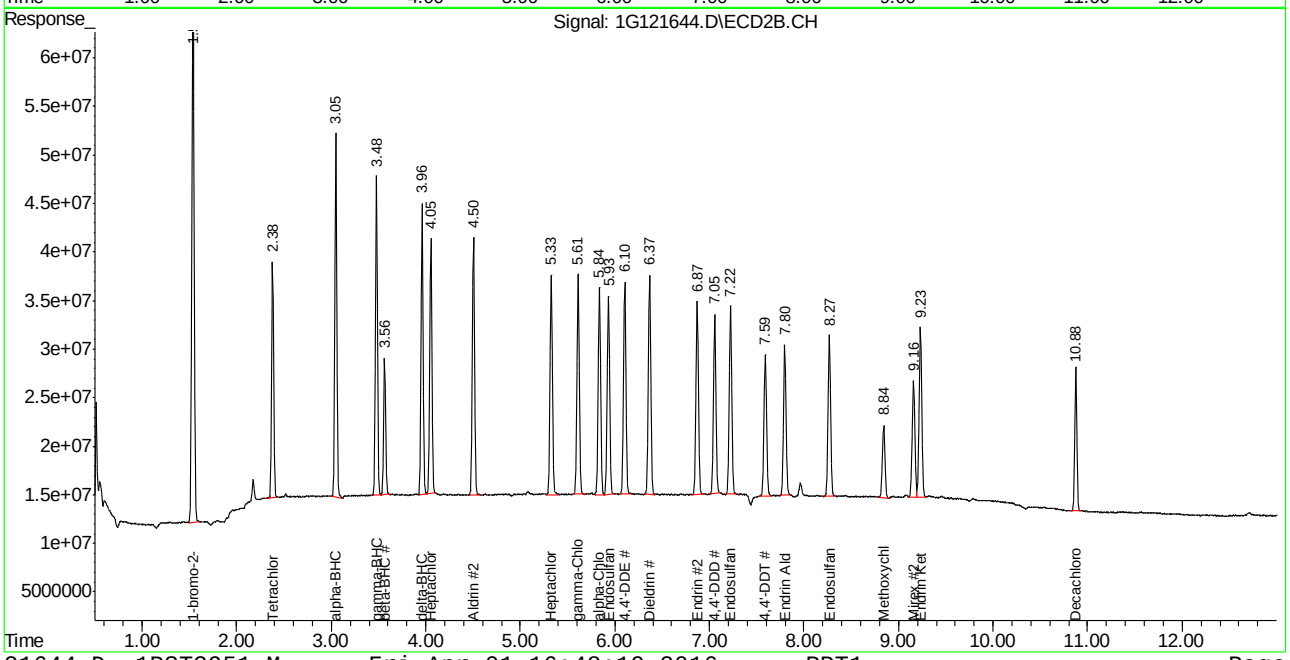
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121644.D\ECD1A.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121644.D\ECD2B.CH
Acq On : 01 Apr 2016 12:23 pm Operator: dharas
Sample : icc3951-25 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:34 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 15:27:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #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 04/04/16 12:58

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121645.D\ECD1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121645.D\ECD2B.CH
Acq On : 01 Apr 2016 12:41 pm Operator: dharas
Sample : ic3951-50 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:34 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 15:27:15 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #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-nitrob	1.17	1.54	71313742	935.8E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	65742791	703.3E6	40.332	39.156
	Spiked Amount 40.000	Range 30 - 150		Recovery =		100.83%	97.89%
24) SA	Decachlorobiphen	8.94	10.88	88871514	450.4E6	45.419	43.235
	Spiked Amount 40.000			Recovery =		113.55%	108.09%
	Target Compounds						
3) A	alpha-BHC	2.22	3.05	85655875	1064.3E6	45.422m	39.873
4) MA	gamma-BHC	2.51	3.48	80881694	947.5E6	44.937	39.429
5) MA	Heptachlor	2.98	4.05	84830610	850.8E6	43.644	40.051
6) B	beta-BHC	2.59	3.56	38171998	402.1E6	40.156	38.841
7) B	delta-BHC	2.77	3.96	73084557	903.0E6	43.402	37.572
8) MB	Aldrin	3.30	4.50	79340060	844.5E6	45.730	40.142
9) B	Heptachlor Epoxi	4.00	5.33	77632589	768.6E6	43.725	39.664
10) B	gamma-Chlordane	4.16	5.61	77954940	769.6E6	44.292	41.081
11) B	alpha-Chlordane	4.32	5.84	77729620	729.0E6	43.978	39.051
12) A	Endosulfan I	4.50	5.93	74546759	723.1E6	44.129	40.455
13) B	4,4'-DDE	4.44	6.10	73335021	758.5E6	49.311	41.164
14) MA	Dieldrin	4.81	6.37	76762726	793.6E6	45.602	40.590
15) MA	Endrin	5.12	6.87	69320101	703.7E6	45.610	38.976
16) A	4,4'-DDD	5.25	7.06	60019850	653.2E6	47.108	40.954
17) B	Endosulfan II	5.44	7.22	71684609	692.0E6	43.340	39.838
18) MA	4,4'-DDT	5.66	7.59	59480520	576.2E6	48.869	51.368
19) B	Endrin Aldehyde	6.07	7.80	59595046	558.6E6	43.379	42.417
20) B	Endosulfan Sulfa	6.74	8.27	64669164	592.4E6	41.597	39.989
21) A	Methoxychlor	6.44	8.84	37504007	289.0E6	42.580	49.096
22)	Mirex	6.54	9.16	69516704	461.9E6	40.313	42.455
23) B	Endrin Ketone	7.17	9.23	75464684	659.7E6	44.239	42.633

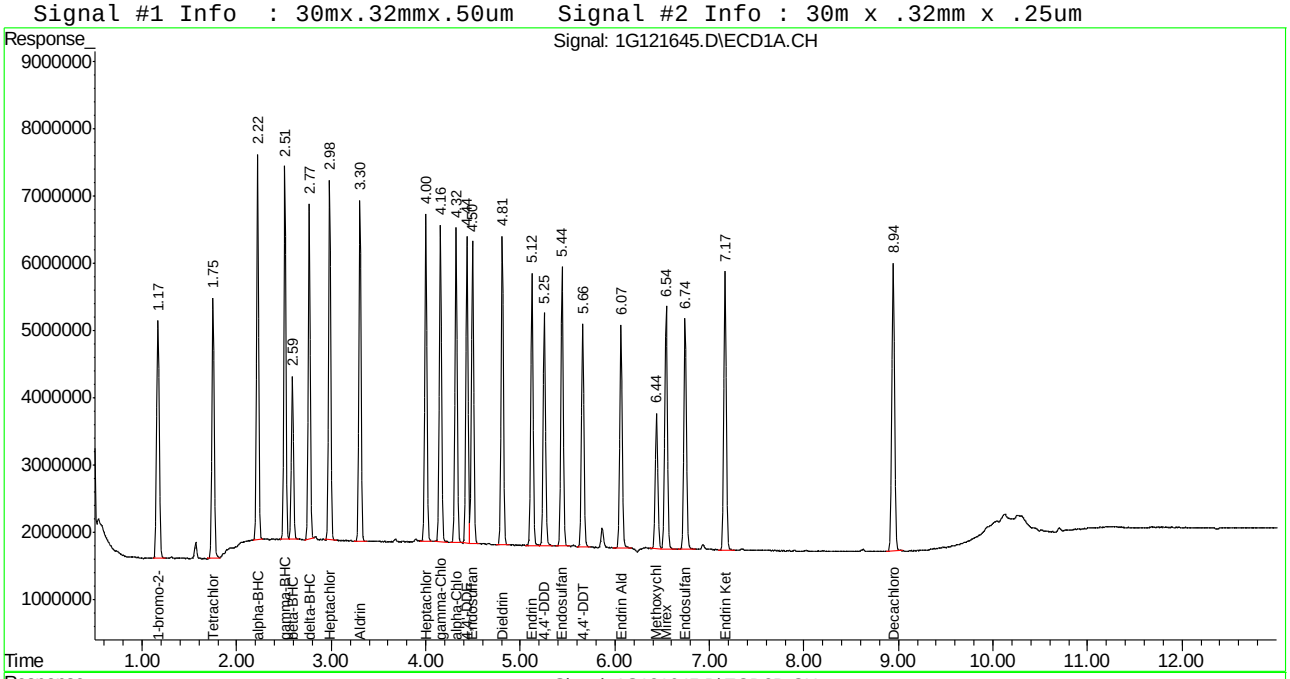
(f)=RT Delta > 1/2 Window (m)=manual int.

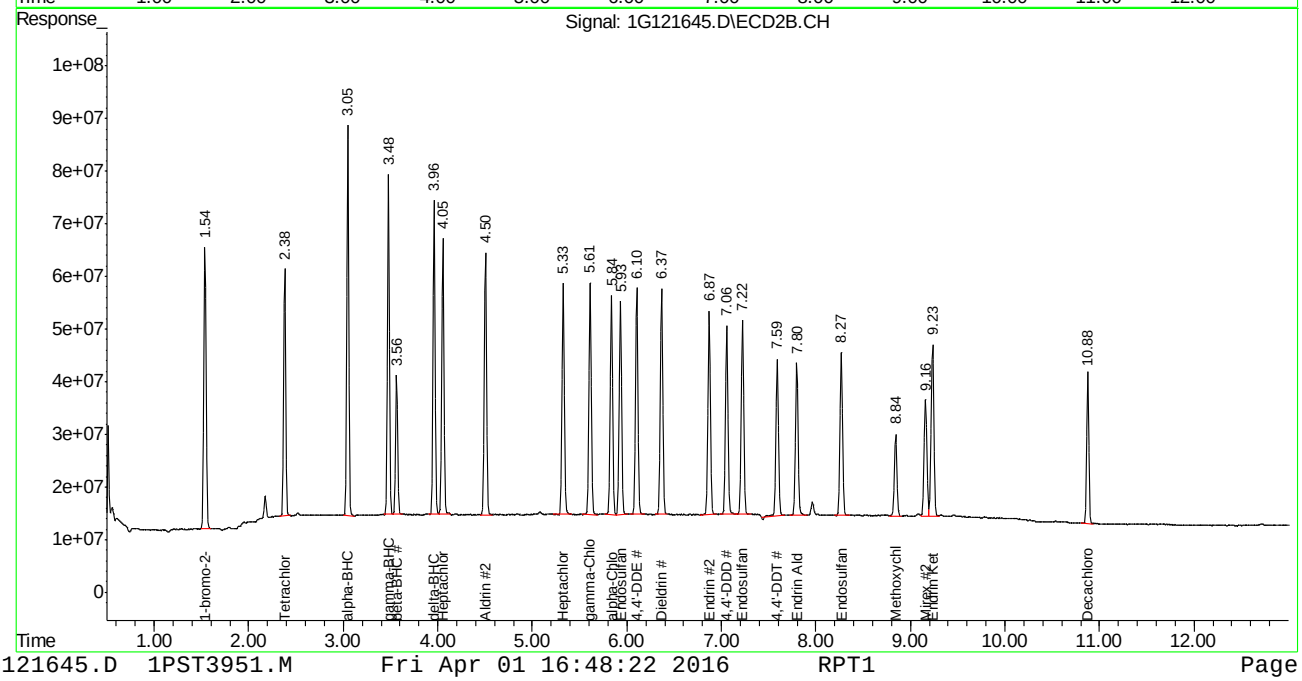
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121645.D\ECD1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121645.D\ECD2B.CH
Acq On : 01 Apr 2016 12:41 pm Operator: dharas
Sample : ic3951-50 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:34 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 15:27:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #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

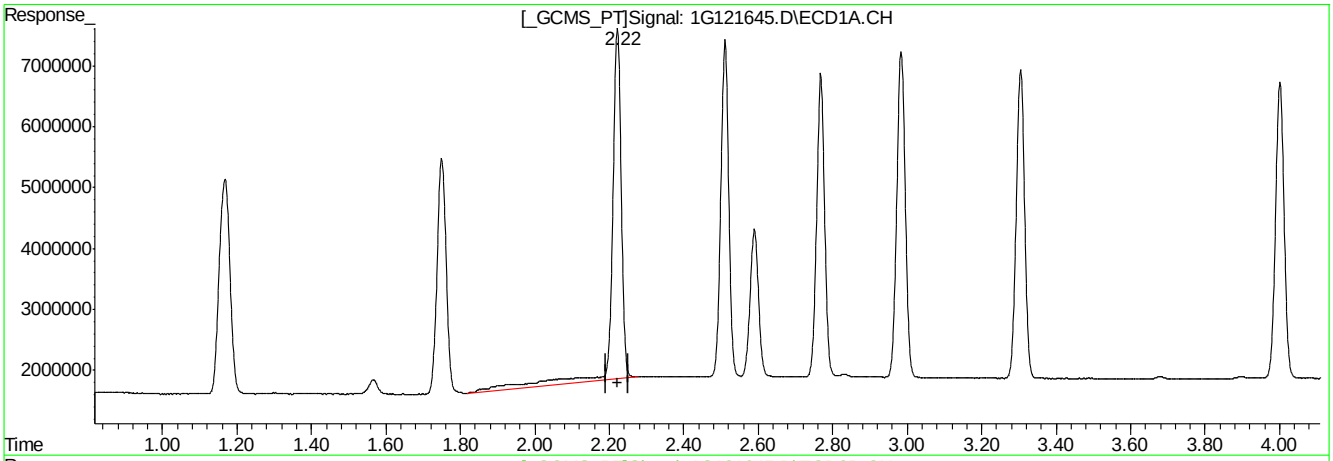
Sample Number:	G1G3951-IC3951	**Method:**	SW846 8081B
Lab FileID:	1G121645.D	**Analyst approved:**	04/01/16 16:29 Joseph Ravino
Injection Time:	04/01/16 12:41	**Supervisor approved:**	04/04/16 12:58 Gwendolyn Burns

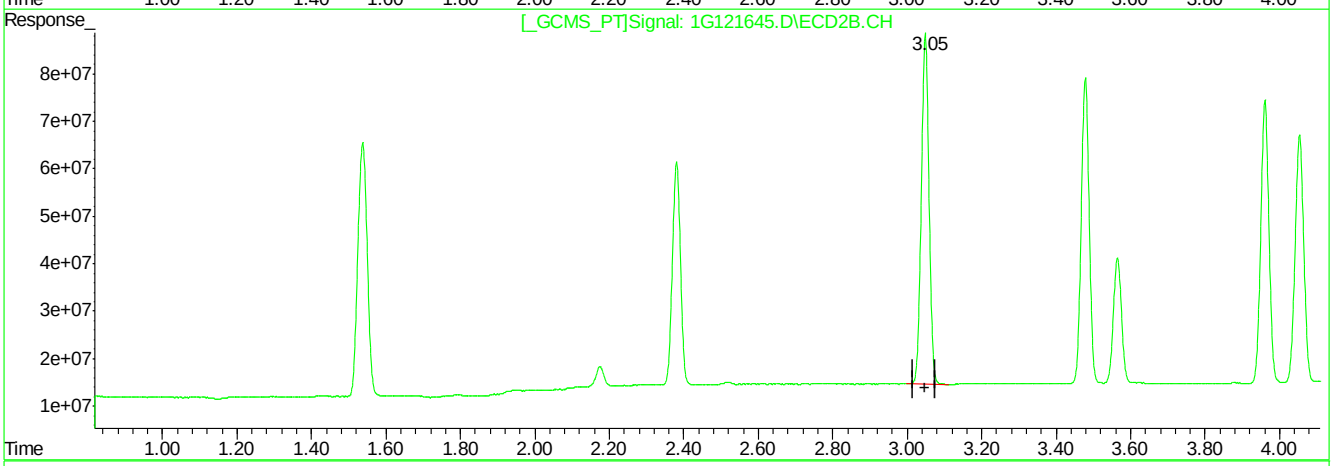
Parameter	CAS	Sig#	R.T. (min.)	Reason
alpha-BHC	319-84-6	1	2.22	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121645.D\ECD1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121645.D\ECD2B.CH
Acq On    : 01 Apr 2016  12:41 pm                    Operator: dharas
Sample    : ic3951-50                                Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 15:27 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:27:15 2016
Response via : Multiple Level Calibration
```





QEdit

(3) alpha-BHC (A)

2.22min 53.482PPB

response 100856227

(3) alpha-BHC #2 (A)

3.05min 39.873PPB

response 1064338671

(+) = Expected Retention Time

1G121645.D 1PST3951.M Fri Apr 01 15:28:12 2016 RPT1

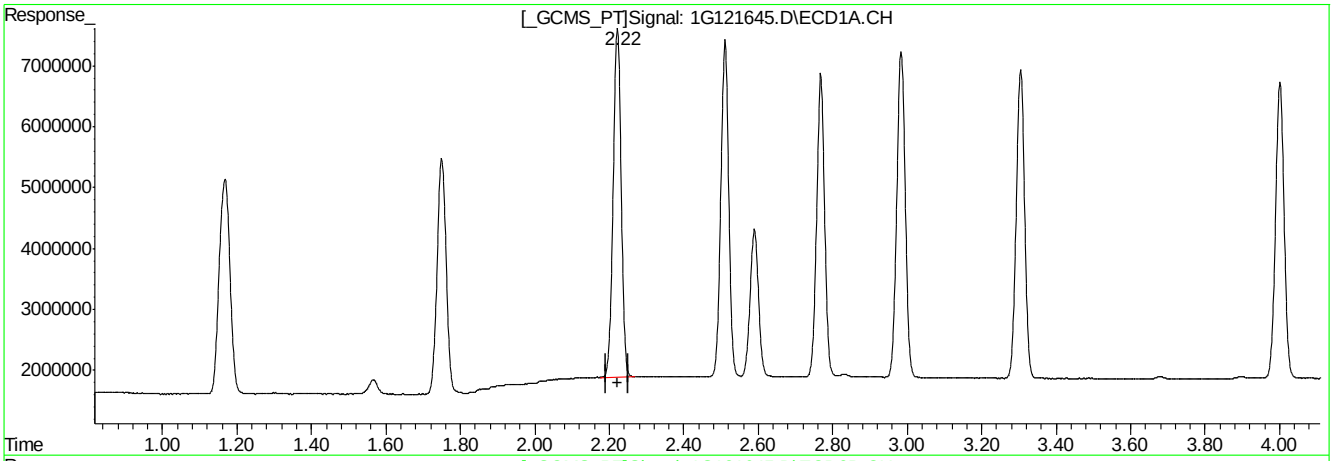
9.6.6.2

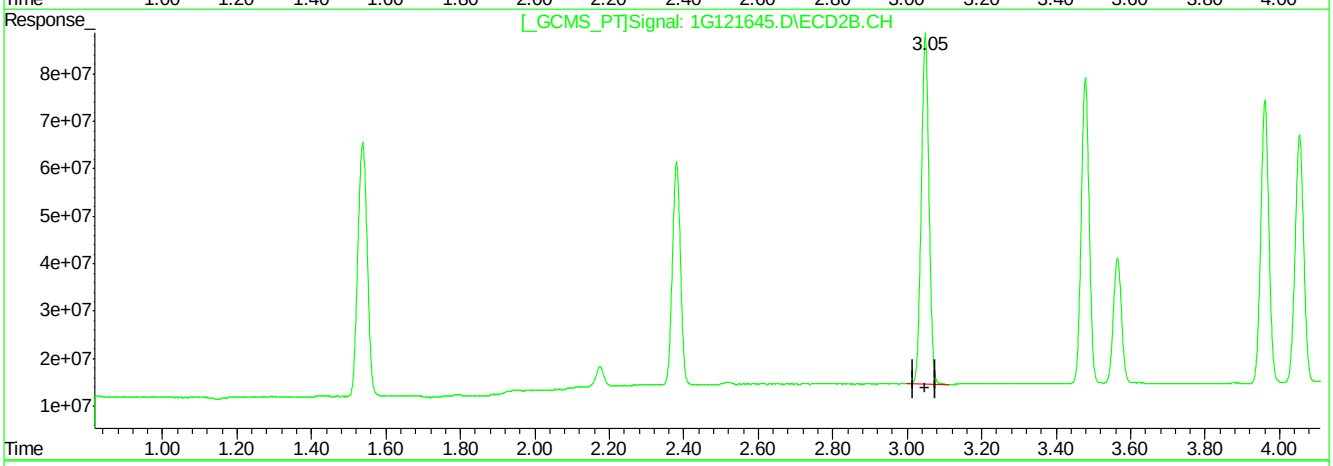
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121645.D\ECD1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121645.D\ECD2B.CH
Acq On    : 01 Apr 2016  12:41 pm                    Operator: dharas
Sample    : ic3951-50                                Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1               Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 15:27 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:27:15 2016
Response via : Multiple Level Calibration
```





QEdit

(3) alpha-BHC (A)

2.22min 45.422PPB m

response 85655875

(3) alpha-BHC #2 (A)

3.05min 39.873PPB

response 1064338671

(+) = Expected Retention Time

1G121645.D 1PST3951.M Fri Apr 01 15:28:20 2016 RPT1

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121646.D\ECD1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121646.D\ECD2B.CH
Acq On : 01 Apr 2016 12:58 pm Operator: dharas
Sample : ic3951-75 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:34 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 15:27:15 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #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-nitrob	1.17	1.54	74592784	966.2E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	107.2E6	1122.4E6	62.881	60.521
	Spiked Amount 40.000	Range 30 - 150		Recovery	=	157.20%#	151.30%#
24) SA	Decachlorobiphen	8.95	10.88	139.4E6	697.3E6	68.125	64.829
	Spiked Amount 40.000			Recovery	=	170.31%	162.07%
	Target Compounds						
3) A	alpha-BHC	2.22	3.05	146.8E6	1676.9E6	74.399	60.844
4) MA	gamma-BHC	2.51	3.48	136.3E6	1498.1E6	72.376	60.377
5) MA	Heptachlor	2.99	4.05	140.8E6	1334.4E6	69.263	60.836
6) B	beta-BHC	2.59	3.56	61018984	620.5E6	61.368	58.043
7) B	delta-BHC	2.77	3.96	123.6E6	1432.6E6	70.171	57.731
8) MB	Aldrin	3.31	4.50	133.0E6	1316.8E6	73.286	60.623
9) B	Heptachlor Epoxi	4.00	5.33	127.7E6	1194.7E6	68.763	59.716
10) B	gamma-Chlordane	4.16	5.61	128.2E6	1189.6E6	69.630	61.503
11) B	alpha-Chlordane	4.32	5.84	127.4E6	1135.4E6	68.931	58.903
12) A	Endosulfan I	4.50	5.93	122.2E6	1117.3E6	69.170	60.542
13) B	4,4'-DDE	4.44	6.11	122.0E6	1184.3E6	78.408	62.247
14) MA	Dieldrin	4.81	6.37	127.9E6	1240.4E6	72.620	61.450
15) MA	Endrin	5.12	6.87	115.9E6	1106.3E6	72.878	59.341
16) A	4,4'-DDD	5.26	7.06	99958752	1007.4E6	75.006	61.175
17) B	Endosulfan II	5.44	7.22	117.3E6	1071.8E6	67.800	59.761
18) MA	4,4'-DDT	5.66	7.59	100.4E6	889.7E6	78.892	76.826
19) B	Endrin Aldehyde	6.07	7.80	100.1E6	850.8E6	69.677	62.565
20) B	Endosulfan Sulfa	6.75	8.27	105.0E6	923.7E6	64.564	60.395
21) A	Methoxychlor	6.44	8.84	60243507	453.8E6	65.390	74.657
22)	Mirex	6.54	9.16	108.4E6	695.3E6	60.116	61.894
23) B	Endrin Ketone	7.17	9.23	123.9E6	1025.7E6	69.449	64.194

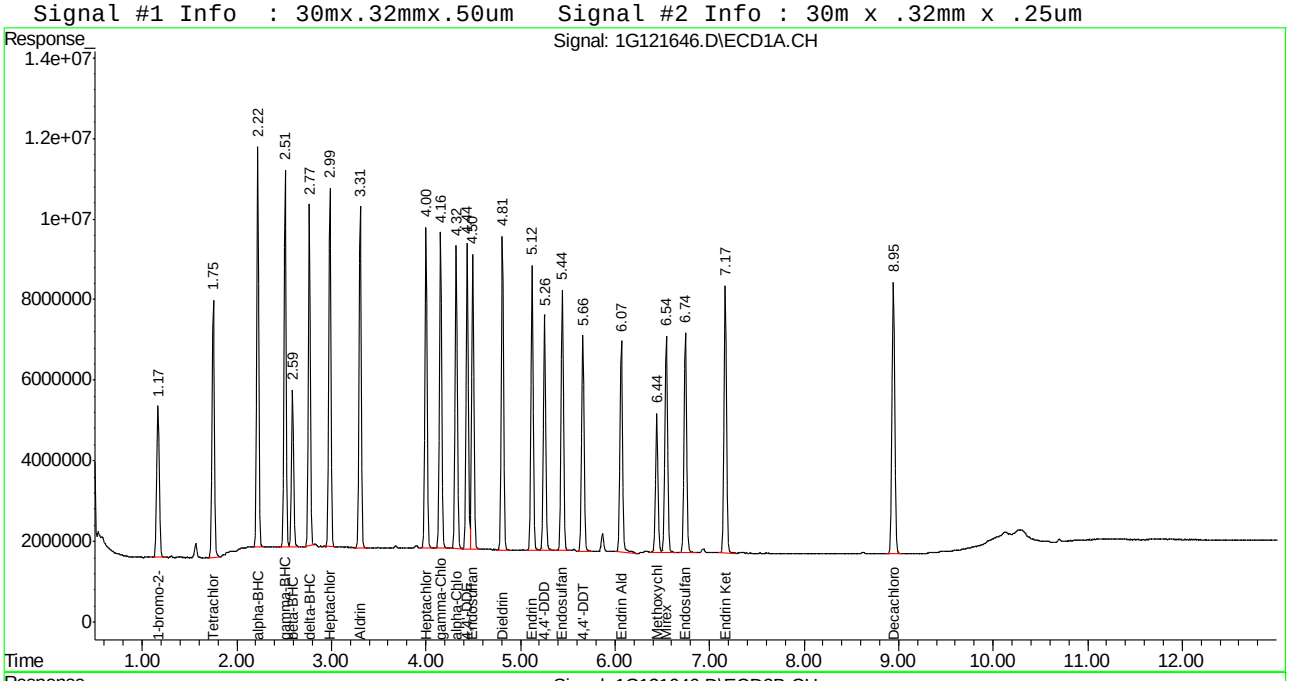
(f)=RT Delta > 1/2 Window (m)=manual int.

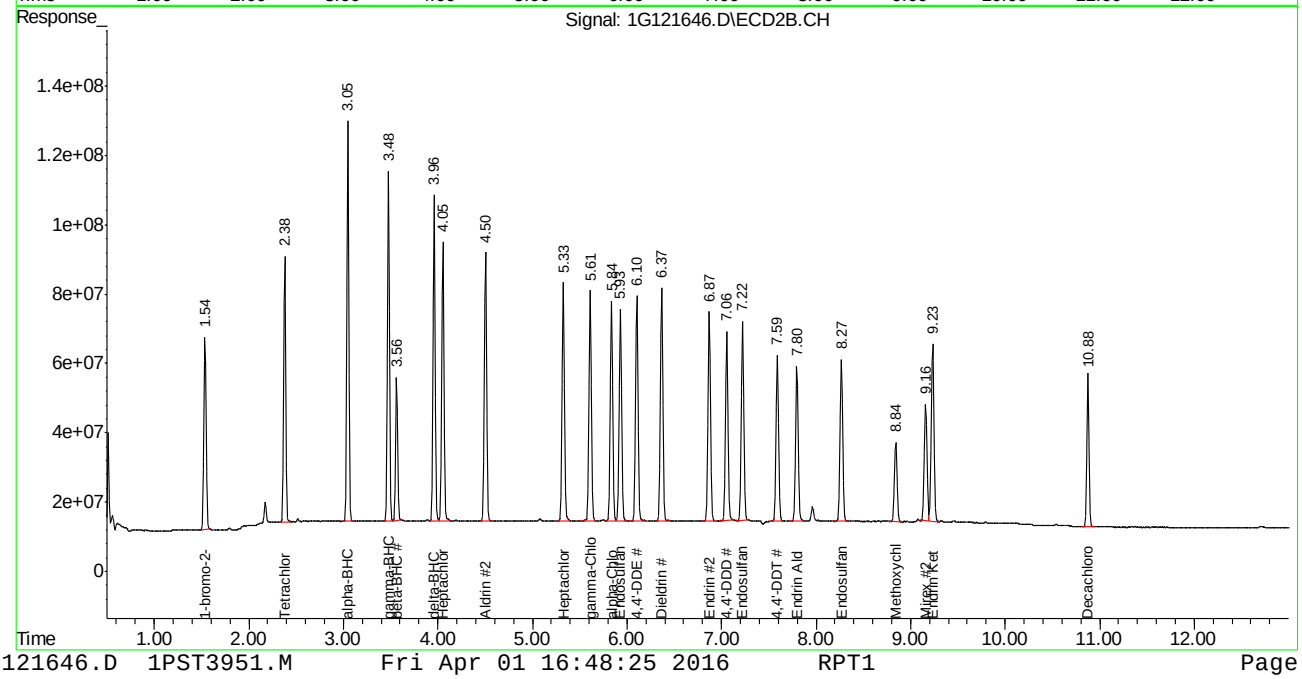
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121646.D\ECD1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121646.D\ECD2B.CH
Acq On : 01 Apr 2016 12:58 pm Operator: dharas
Sample : ic3951-75 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:34 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 15:27:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #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 04/04/16 12:58

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121647.D\ECD1A.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121647.D\ECD2B.CH
Acq On : 4-1-16 01:16:33 PM Operator: dharas
Sample : ic3951-100 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:34 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 15:27:15 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #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-nitrob	1.17	1.54	73759676	955.8E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	145.3E6	1496.8E6	86.197	81.585
	Spiked Amount 40.000	Range 30 - 150		Recovery	=	215.49%#	203.96%#
24) SA	Decachlorobiphen	8.95	10.88	184.5E6	921.6E6	91.175	86.615
	Spiked Amount 40.000			Recovery	=	227.94%	216.54%
	Target Compounds						
3) A	alpha-BHC	2.22	3.05	205.3E6	2249.0E6	105.278	82.486
4) MA	gamma-BHC	2.51	3.48	189.3E6	2006.0E6	101.695	81.724
5) MA	Heptachlor	2.98	4.05	194.1E6	1780.0E6	96.537	82.034
6) B	beta-BHC	2.59	3.57	82410447	823.6E6	83.819	77.877
7) B	delta-BHC	2.77	3.96	172.9E6	1932.4E6	99.300	78.721
8) MB	Aldrin	3.30	4.50	183.5E6	1751.6E6	102.275	81.516
9) B	Heptachlor Epoxi	4.00	5.33	174.4E6	1586.5E6	94.948	80.157
10) B	gamma-Chlordane	4.16	5.61	176.0E6	1590.1E6	96.664	83.100
11) B	alpha-Chlordane	4.32	5.84	174.6E6	1509.9E6	95.491	79.185
12) A	Endosulfan I	4.50	5.93	167.4E6	1480.9E6	95.812	81.117
13) B	4,4'-DDE	4.44	6.11	168.7E6	1572.4E6	109.644	83.541
14) MA	Dieldrin	4.81	6.37	176.9E6	1645.5E6	101.613	82.403
15) MA	Endrin	5.12	6.87	159.8E6	1472.4E6	101.657	79.839
16) A	4,4'-DDD	5.25	7.06	139.0E6	1342.3E6	105.472	82.398
17) B	Endosulfan II	5.44	7.22	159.9E6	1419.9E6	93.464	80.031
18) MA	4,4'-DDT	5.66	7.59	140.2E6	1205.3E6	111.377	105.202
19) B	Endrin Aldehyde	6.07	7.80	130.2E6	1124.4E6	91.659	83.584
20) B	Endosulfan Sulfa	6.74	8.27	142.0E6	1221.3E6	88.308	80.716
21) A	Methoxychlor	6.44	8.84	82231254	604.6E6	90.264m	100.536
22)	Mirex	6.54	9.16	143.9E6	935.4E6	80.692	84.175
23) B	Endrin Ketone	7.17	9.23	169.0E6	1368.7E6	95.779	86.594

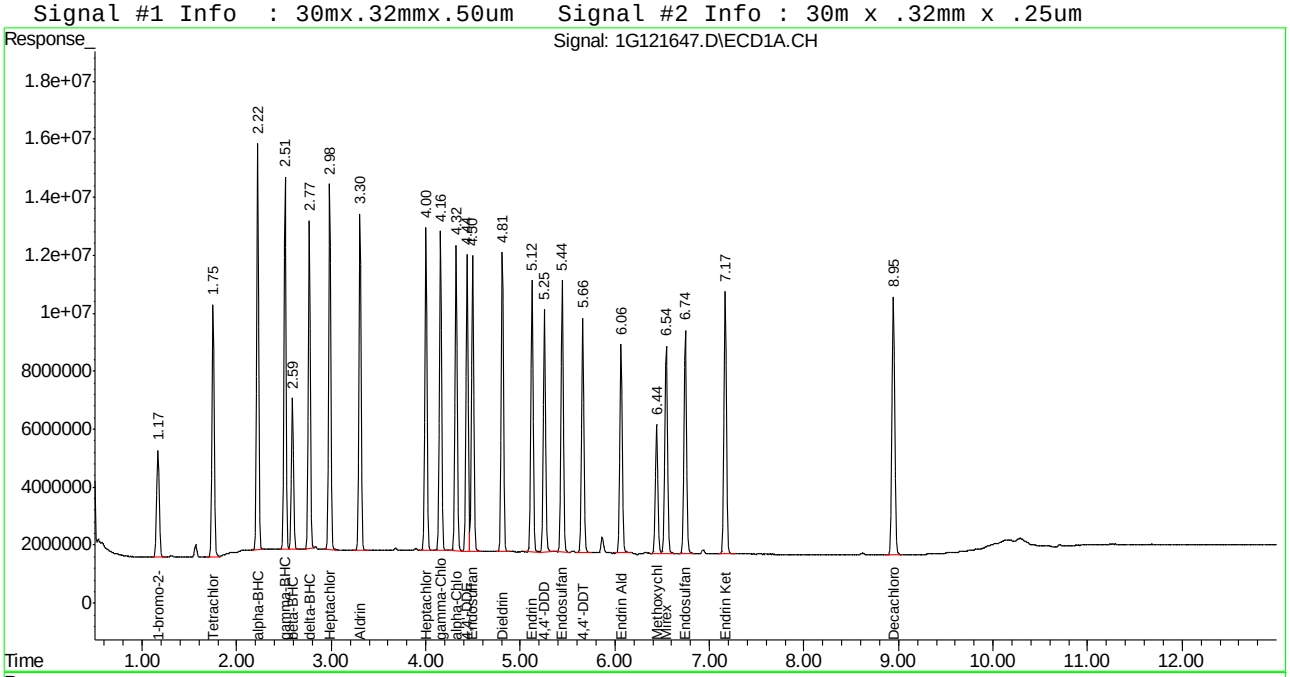
(f)=RT Delta > 1/2 Window (m)=manual int.

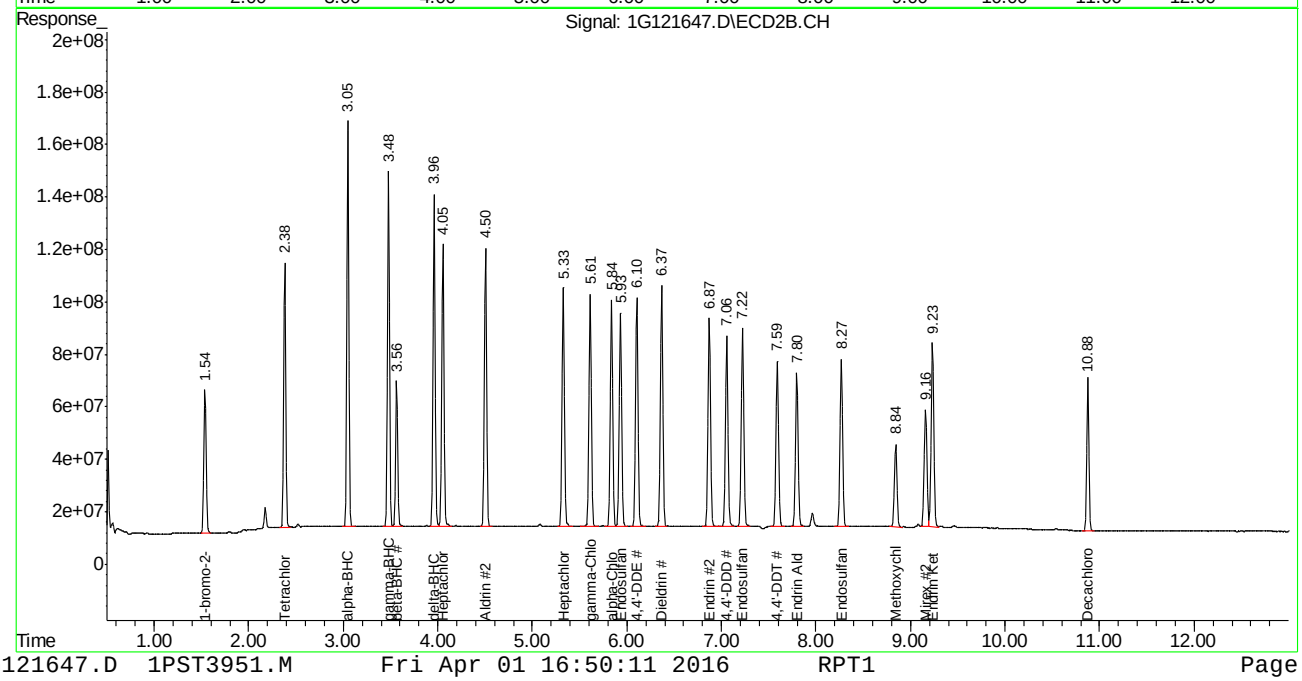
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121647.D\ECD1A.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121647.D\ECD2B.CH
Acq On : 4-1-16 01:16:33 PM Operator: dharas
Sample : ic3951-100 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:34 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 15:27:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #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

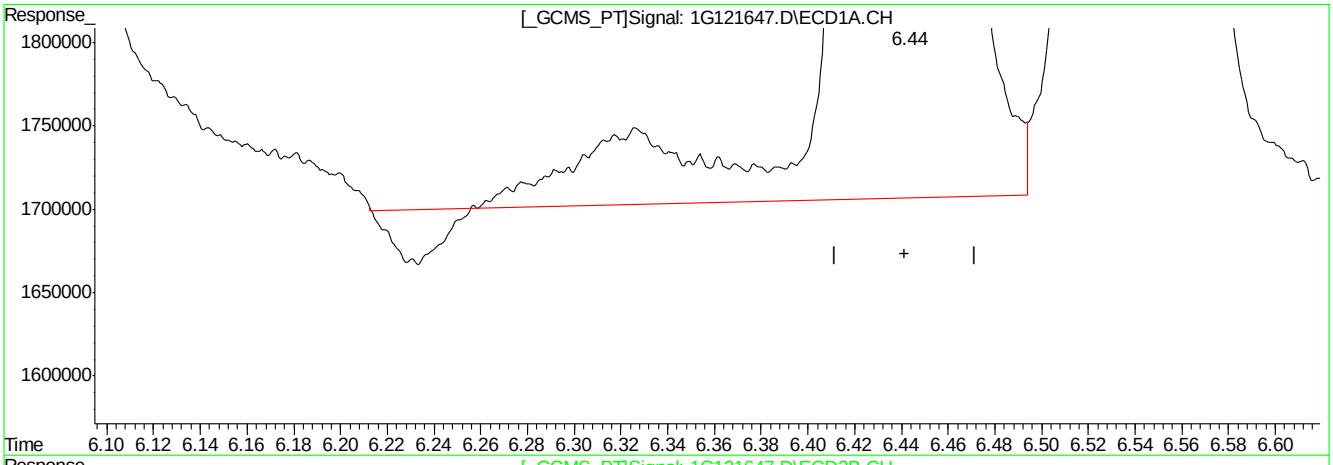
Sample Number:	G1G3951-IC3951	**Method:**	SW846 8081B
Lab FileID:	1G121647.D	**Analyst approved:**	04/01/16 16:29 Joseph Ravino
Injection Time:	04/01/16 13:16	**Supervisor approved:**	04/04/16 12:58 Gwendolyn Burns

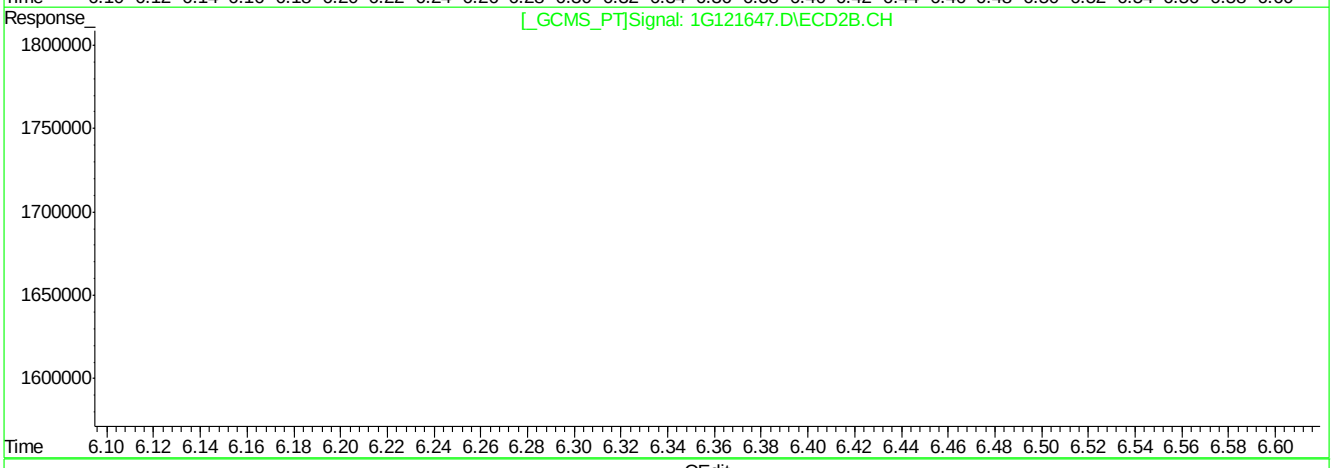
Parameter	CAS	Sig#	R.T. (min.)	Reason
Methoxychlor	72-43-5	1	6.44	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121647.D\ECD1A.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121647.D\ECD2B.CH
Acq On    : 4-1-16 01:16:33 PM                      Operator: dharas
Sample    : ic3951-100                              Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 15:32 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(21) Methoxychlor (A)

6.44min 91.822PPB

response 83650158

(21) Methoxychlor #2 (A)

8.84min 100.536PPB

response 604557929

(+) = Expected Retention Time

1G121647.D 1PST3951.M Fri Apr 01 16:15:57 2016 RPT1

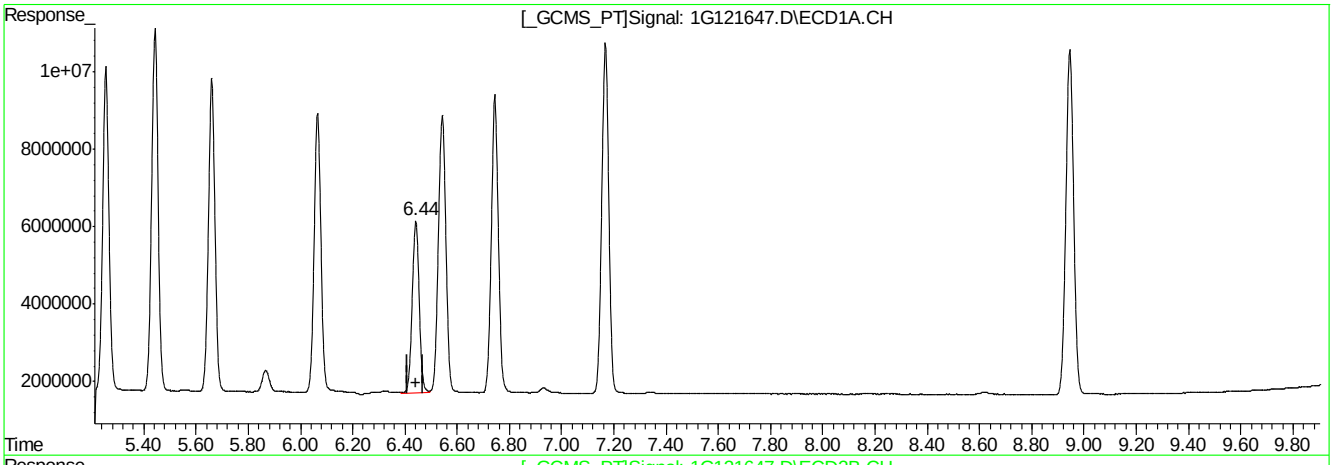
9.6.8.2

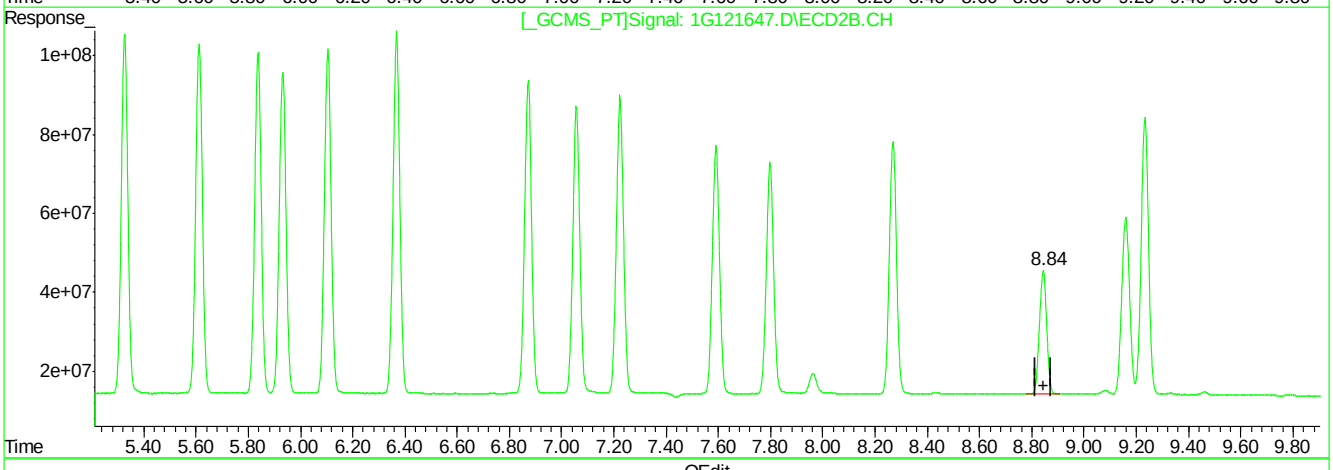
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121647.D\ECD1A.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121647.D\ECD2B.CH
Acq On    : 4-1-16 01:16:33 PM                      Operator: dharas
Sample    : ic3951-100                              Inst    : GC1G
Misc      : op92644,g1g3950,180,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 15:32 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 15:59:16 2016
Response via : Multiple Level Calibration
```





QEdit

(21) Methoxychlor (A)

6.44min 90.264PPB m

response 82231254

(21) Methoxychlor #2 (A)

8.84min 100.536PPB

response 604557929

(+) = Expected Retention Time

1G121647.D 1PST3951.M Fri Apr 01 16:16:03 2016 RPT1

9.6.8.3

9

Manual Integrations
APPROVED
(compounds with "m" flag)
Gwendolyn Burns
04/04/16 12:58

Quantitation Report (QT Reviewed)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121648.D\ECD1A.CH Vial: 11
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121648.D\ECD2B.CH
Acq On    : 4-1-16 01:34:11 PM                      Operator: dharas
Sample    : ic3951-500                              Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:47 2016  Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:31:48 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.50um   Signal #2 Info : 30m x .32mm x .25um
```

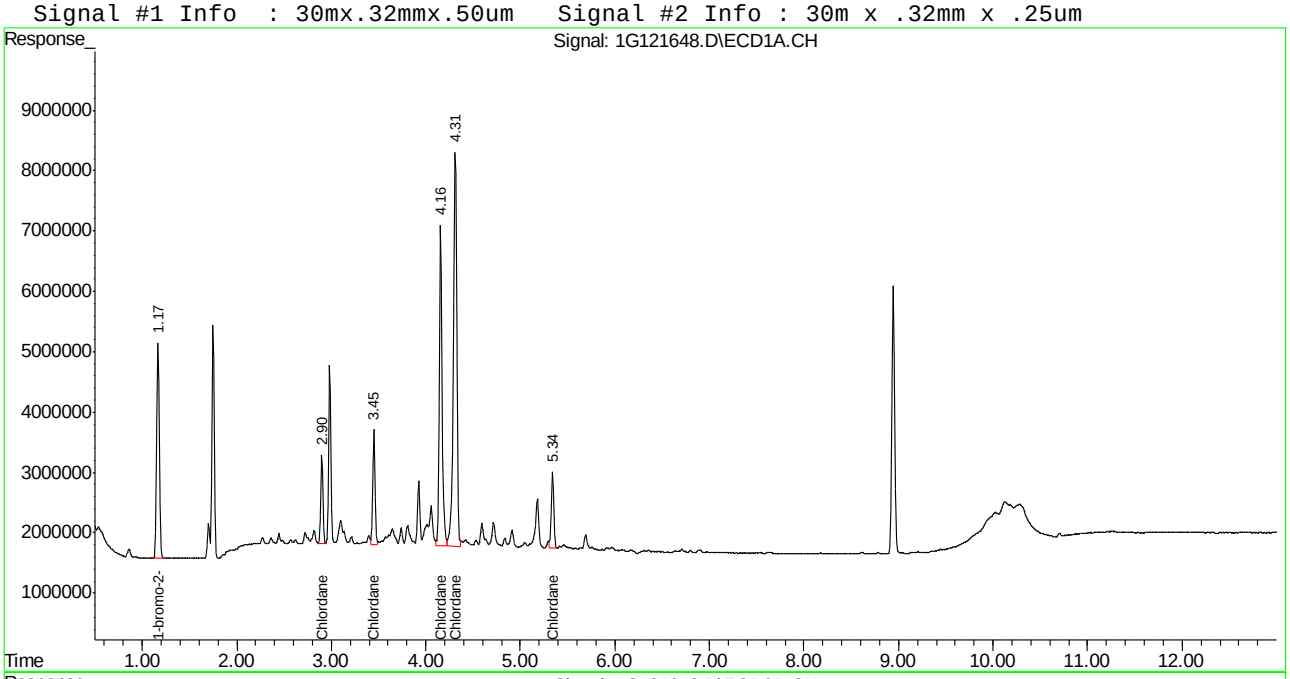
	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
31) I	1-bromo-2-nitrob	1.17	1.54	72145095	944.6E6	50.000	50.000
	System Monitoring Compounds						
	Target Compounds						
32)	Chlordane {A}	2.90	3.86	23459965	277.5E6	537.310	508.595
33)	Chlordane {B}	3.45	4.70	32039209	282.3E6	572.312	521.605
34)	Chlordane {C}	4.16	5.61	107.7E6	956.4E6	585.340	526.003
35)	Chlordane {D}	4.31	5.84	169.8E6	1562.3E6	582.217	523.913m
36)	Chlordane {E}	5.34	7.30	23619002	291.3E6	552.027	581.583

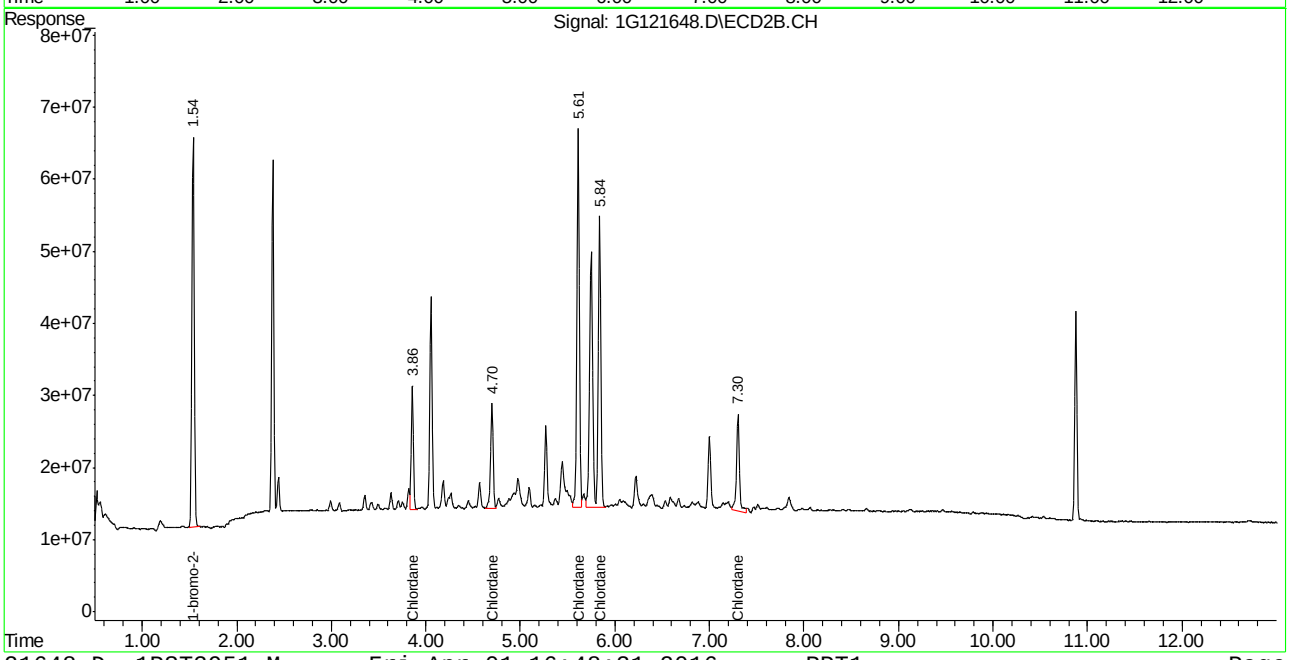
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121648.D\ECD1A.CH Vial: 11
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121648.D\ECD2B.CH
Acq On : 4-1-16 01:34:11 PM Operator: dharas
Sample : ic3951-500 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:47 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:31:48 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #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 JC18516

Manual Integration Approval Summary

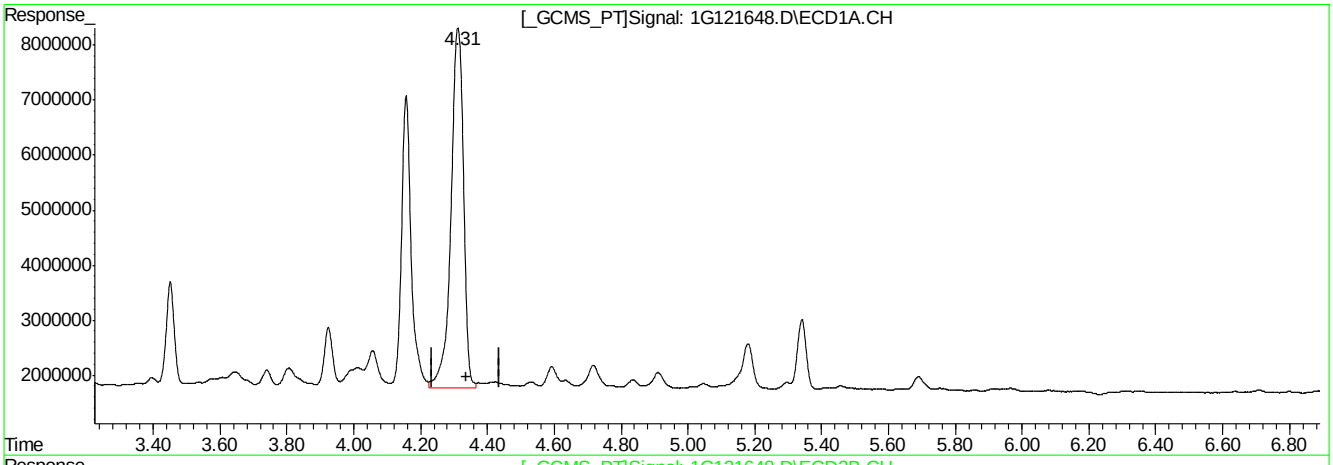
Sample Number:	G1G3951-IC3951	**Method:**	SW846 8081B
Lab FileID:	1G121648.D	**Analyst approved:**	04/01/16 16:48 Joseph Ravino
Injection Time:	04/01/16 13:34	**Supervisor approved:**	04/04/16 12:58 Gwendolyn Burns

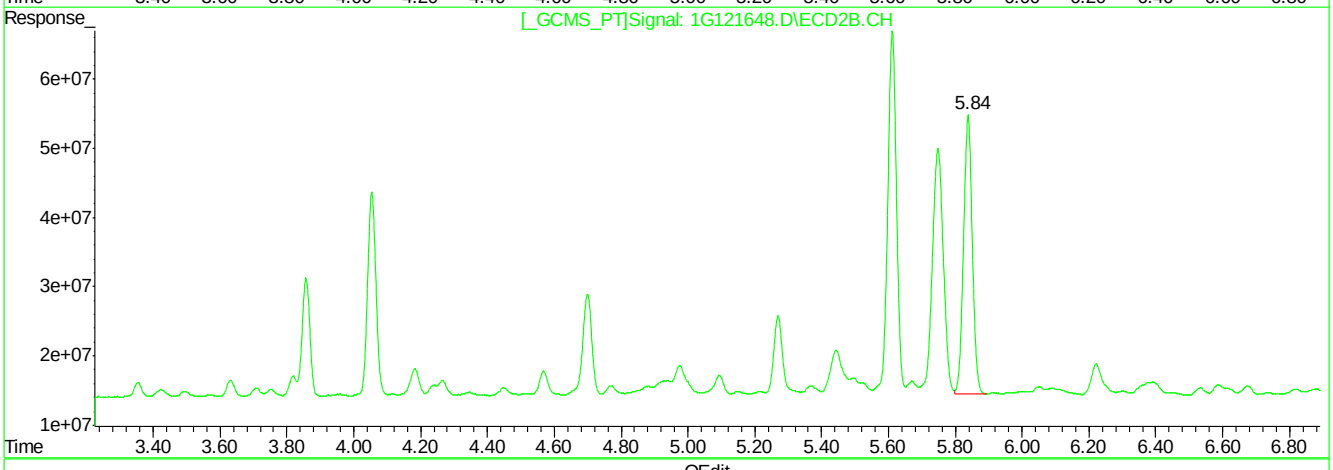
Parameter	CAS	Sig#	R.T. (min.)	Reason
Chlordane-D		2	5.84	Split peak

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121648.D\ECD1A.CH Vial: 11
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121648.D\ECD2B.CH
Acq On    : 4-1-16 01:34:11 PM                      Operator: dharas
Sample    : ic3951-500                              Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:35 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:31:48 2016
Response via : Multiple Level Calibration
```





QEdit

(35) Chlordane {D}

4.31min 582.217PPB

response 169785507

(35) Chlordane {D} #2

5.84min 249.697PPB

response 744607513

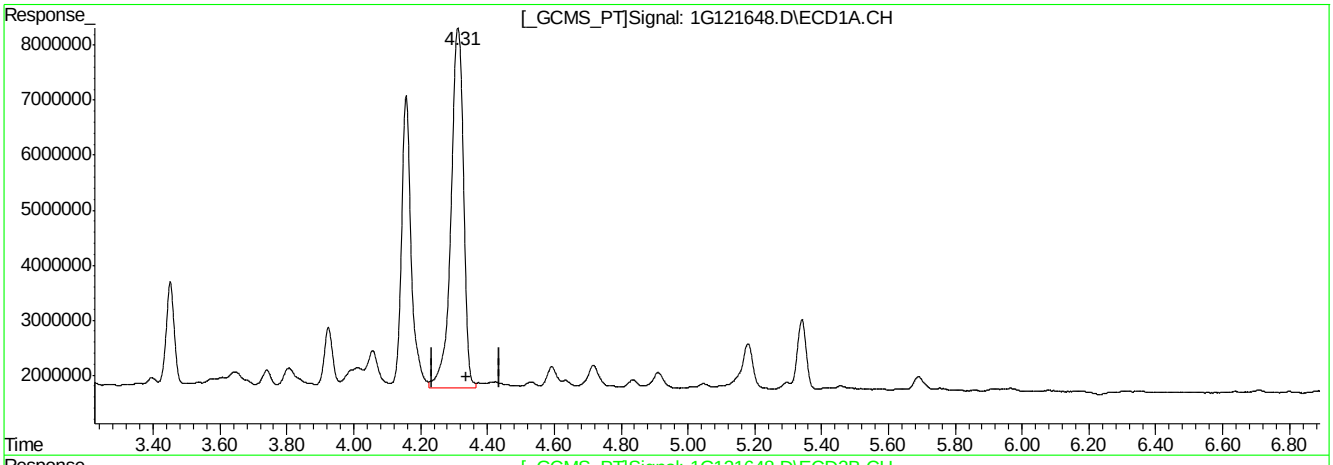
(+) = Expected Retention Time

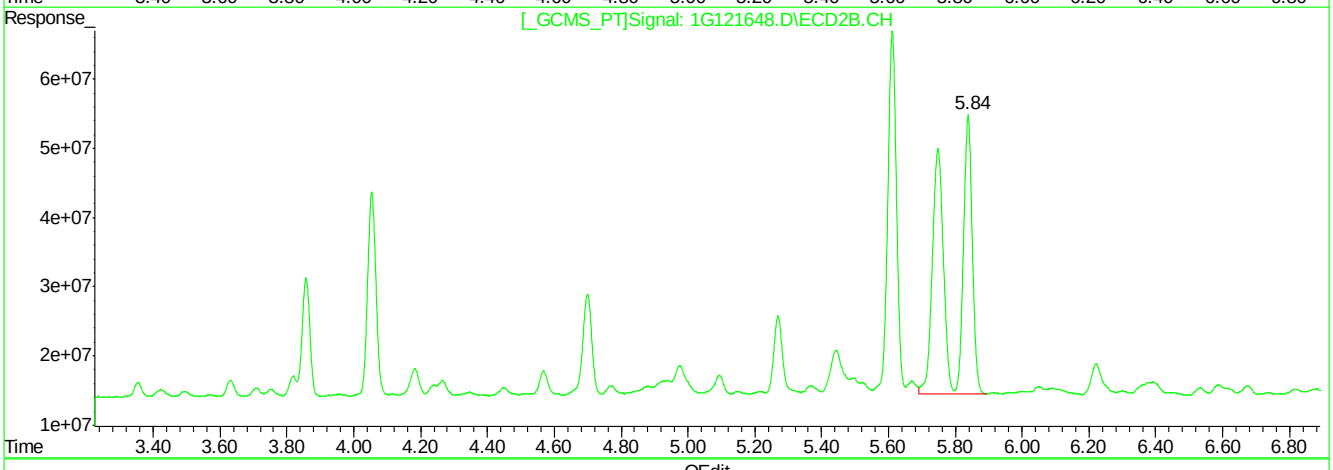
1G121648.D 1PST3951.M Fri Apr 01 16:36:03 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121648.D\ECD1A.CH Vial: 11
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121648.D\ECD2B.CH
Acq On    : 4-1-16 01:34:11 PM                      Operator: dharas
Sample    : ic3951-500                              Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:35 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:31:48 2016
Response via : Multiple Level Calibration
```





QEdit

(35) Chlordane {D}

4.31min 582.217PPB

response 169785507

(35) Chlordane {D} #2

5.84min 523.913PPB m

response 1562335660

(+) = Expected Retention Time

1G121648.D 1PST3951.M Fri Apr 01 16:36:29 2016 RPT1

Manual Integrations
APPROVED
(compounds with "m" flag)
Gwendolyn Burns
04/04/16 12:58

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121649.D\ECD1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121649.D\ECD2B.CH
Acq On : 4-1-16 01:51:50 PM Operator: dharas
Sample : ic3951-500 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:47 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:40:27 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #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-nitrob	1.17	1.54	75252409	970.0E6	50.000	50.000
	System Monitoring Compounds						
	Target Compounds						
26) L8	Toxaphene{A}	4.82	6.33	13287839	208.7E6	500.000	500.000
27) L8	Toxaphene{B}	5.43	7.19	35335078	243.0E6	500.000	493.833
28) L8	Toxaphene{C}	5.60	7.35	26884740	463.5E6	500.000	598.181m
29) L8	Toxaphene{D}	5.94	7.80	27149226	266.8E6	393.619	500.000
30) L8	Toxaphene{E}	6.57	8.70	23968978	209.1E6	500.000	500.000

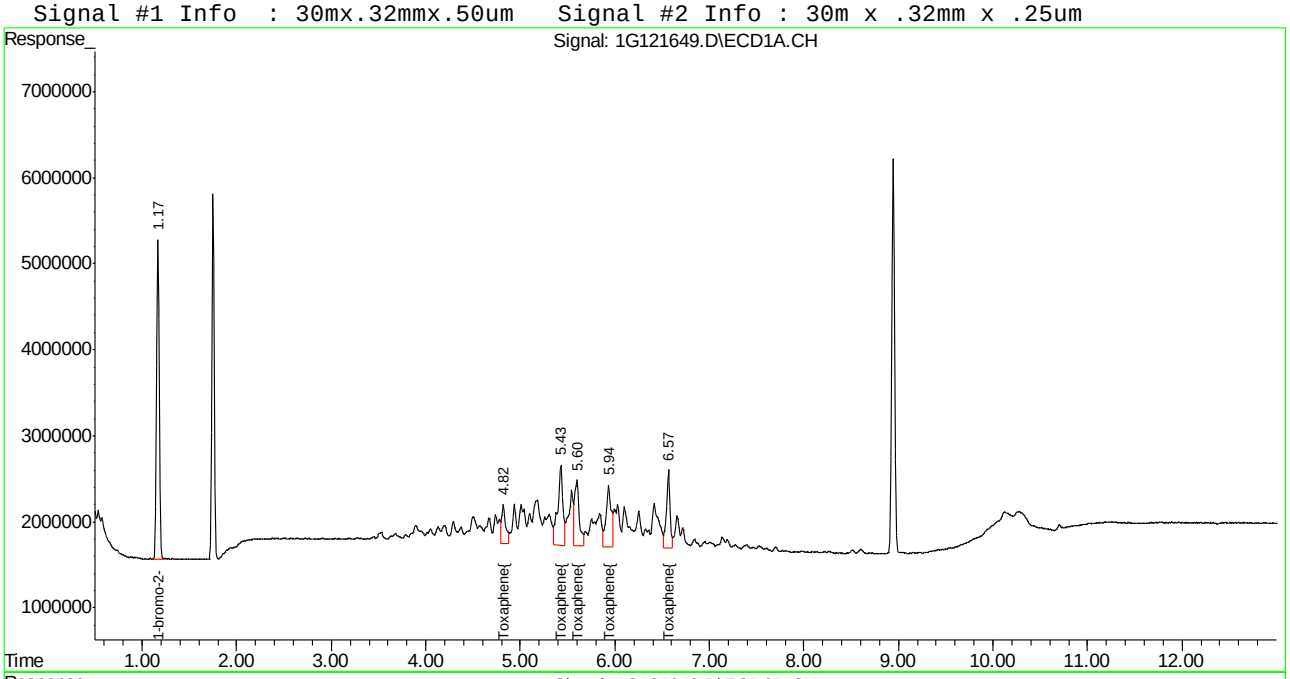
(f)=RT Delta > 1/2 Window (m)=manual int.

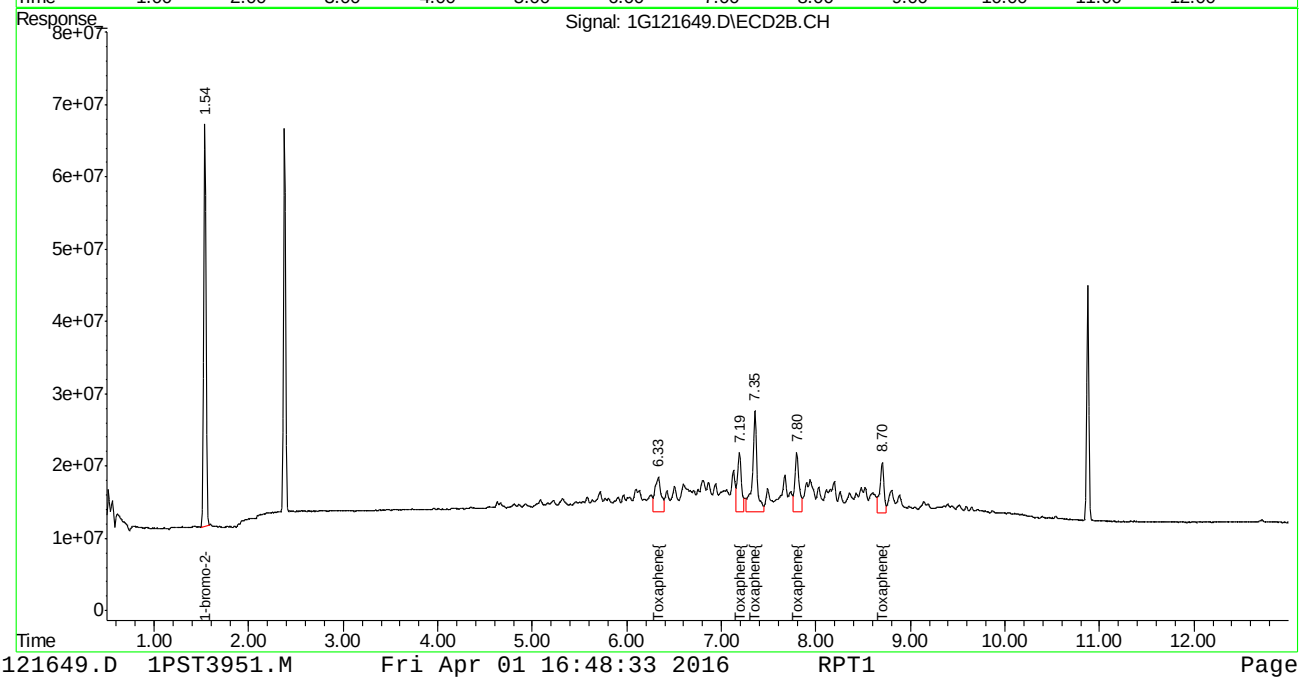
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121649.D\ECD1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121649.D\ECD2B.CH
Acq On : 4-1-16 01:51:50 PM Operator: dharas
Sample : ic3951-500 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:47 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:40:27 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #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

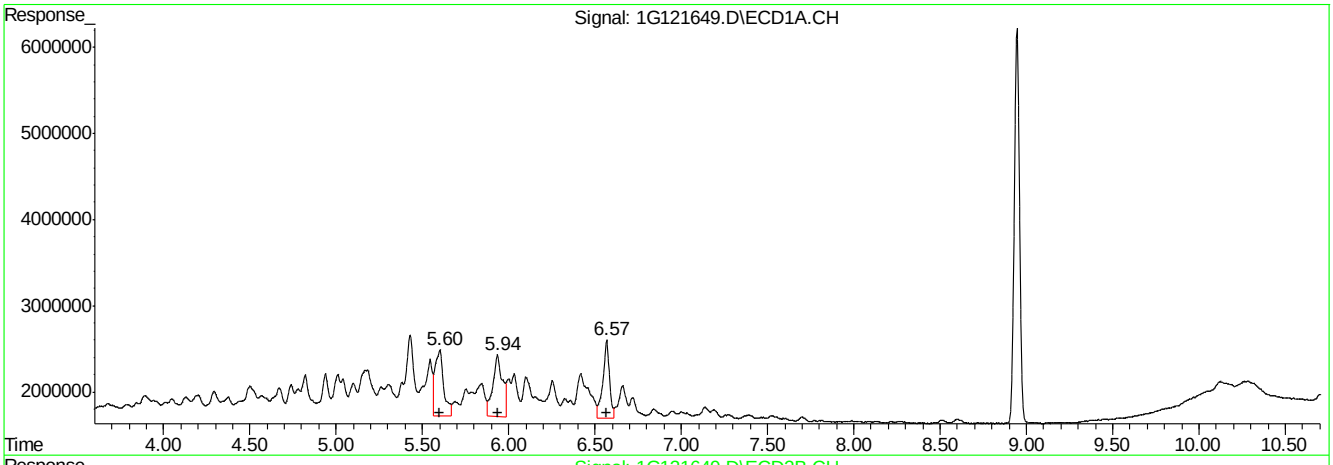
Sample Number:	G1G3951-IC3951	**Method:**	SW846 8081B
Lab FileID:	1G121649.D	**Analyst approved:**	04/01/16 16:48 Joseph Ravino
Injection Time:	04/01/16 13:51	**Supervisor approved:**	04/04/16 12:58 Gwendolyn Burns

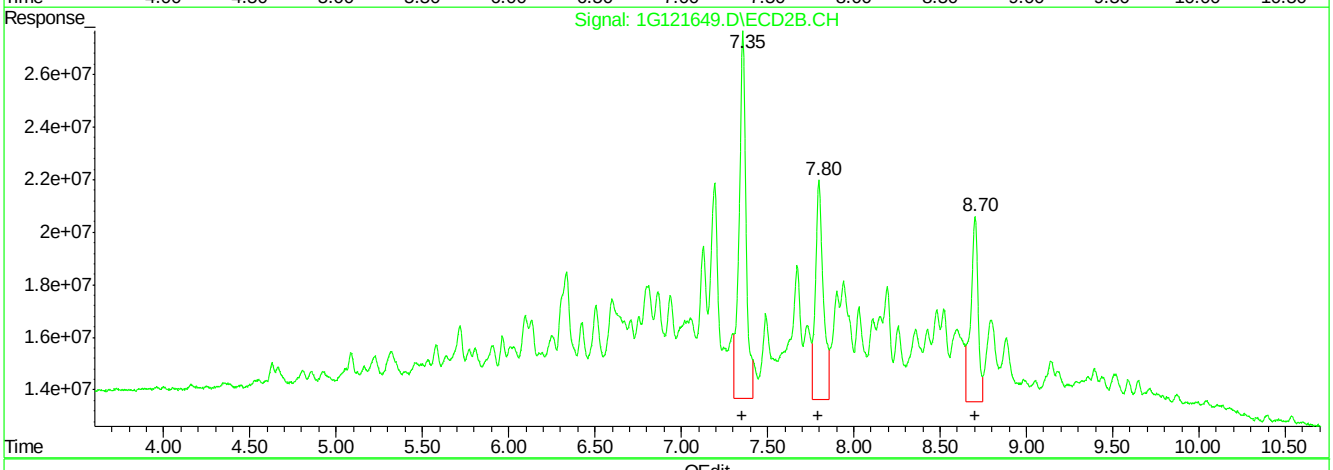
Parameter	CAS	Sig#	R.T. (min.)	Reason
Toxaphene-C		2	7.35	Split peak

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121649.D\ECD1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121649.D\ECD2B.CH
Acq On    : 4-1-16 01:51:50 PM                      Operator: dharas
Sample    : ic3951-500                              Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:40 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:40:27 2016
Response via : Multiple Level Calibration
```





QEdit

(28) Toxaphene{C} (L8)

R.T.	Response	Conc
5.60	26884740	500.00
5.94	27149226	393.62
6.57	23968978	500.00

(28) Toxaphene{C} #2 (L8)

R.T.	Response	Conc
7.36	387397359	500.00
7.80	266809118	500.00
8.70	209087308	500.00

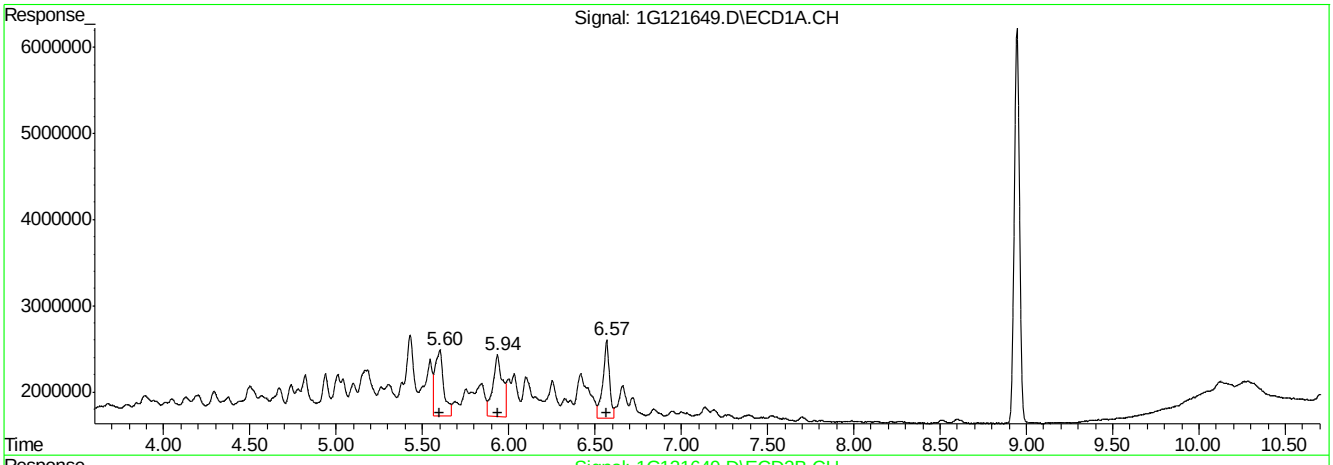
(+) = Expected Retention Time

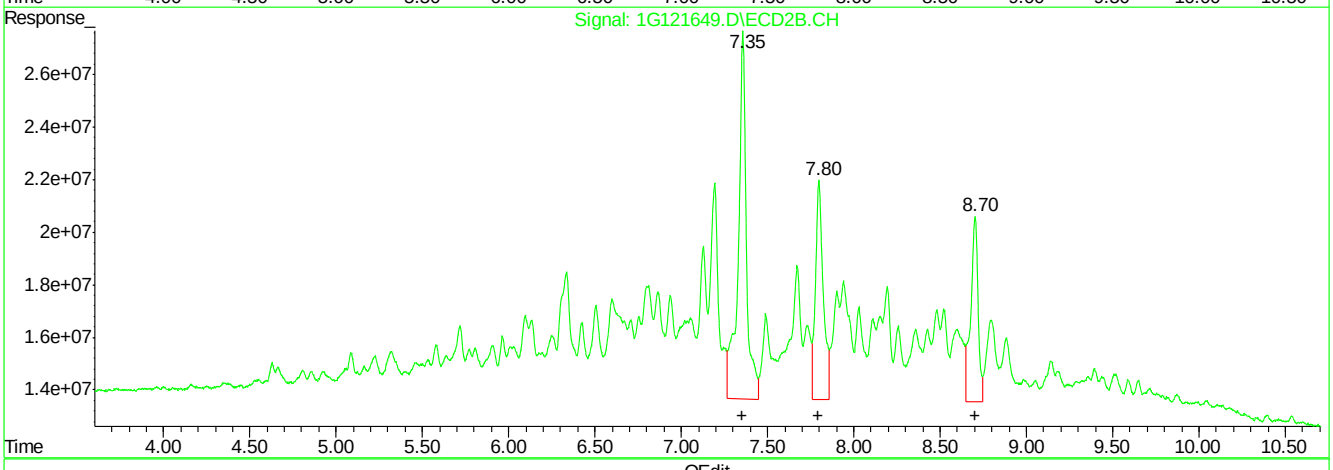
1G121649.D 1PST3951.M Fri Apr 01 16:40:53 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121649.D\ECD1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121649.D\ECD2B.CH
Acq On    : 4-1-16 01:51:50 PM                      Operator: dharas
Sample    : ic3951-500                              Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:40 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:40:27 2016
Response via : Multiple Level Calibration
```





QEdit

(28) Toxaphene{C} (L8)

R.T.	Response	Conc
5.60	26884740	500.00
5.94	27149226	393.62
6.57	23968978	500.00

(28) Toxaphene{C} #2 (L8)

R.T.	Response	Conc
7.35	463467268	598.18
7.80	266809118	500.00
8.70	209087308	500.00

(+) = Expected Retention Time

1G121649.D 1PST3951.M Fri Apr 01 16:41:36 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/04/16 12:58

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121650.D\ECD1A.CH Vial: 13
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121650.D\ECD2B.CH
Acq On : 4-1-16 02:09:36 PM Operator: dharas
Sample : icv3951-25 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 17:04 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #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-nitrob	1.17	1.54	76212731	990.2E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.17	1.54	76212731	990.2E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.17	1.54	76212731	990.2E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	31093641	351.8E6	21.342	22.577m
Spiked Amount	40.000 Range	30 - 150	Recovery	=		53.35%	56.44%
24) SA	Decachlorobiphen	8.94	10.88	46733072	244.3E6	23.222	23.842
Spiked Amount	40.000		Recovery	=		58.06%	59.60%
	Target Compounds						
3) A	alpha-BHC	2.22	3.05	37872577	518.4E6	21.891m	22.045
4) MA	gamma-BHC	2.51	3.48	36252006	468.5E6	21.957	22.174
5) MA	Heptachlor	2.98	4.05	39010463	422.6E6	21.998	22.249
6) B	beta-BHC	2.59	3.57	18362886	198.9E6	21.856	22.166
7) B	delta-BHC	2.77	3.96	33827132	464.4E6	23.270	23.941
8) MB	Aldrin	3.30	4.50	35904628	427.7E6	21.742	22.524
9) B	Heptachlor Epoxi	4.00	5.33	36333907	397.5E6	22.108	23.122
10) B	gamma-Chlordane	4.16	5.61	36851317	400.7E6	21.275	23.305
11) B	alpha-Chlordane	4.32	5.84	36661616	376.6E6	21.958	22.652
12) A	Endosulfan I	4.50	5.93	33936773	365.1E6	21.375	22.488
13) B	4,4'-DDE	4.44	6.10	33595223	391.1E6	22.024	22.849
14) MA	Dieldrin	4.81	6.37	35580453	412.8E6	22.136	22.710
15) MA	Endrin	5.12	6.87	32765359	369.6E6	21.791	23.435
16) A	4,4'-DDD	5.25	7.06	27085531	340.2E6	21.374	23.420
17) B	Endosulfan II	5.44	7.22	33331896	354.0E6	21.846	22.539
18) MA	4,4'-DDT	5.66	7.59	26358736	286.7E6	21.829	25.223
19) B	Endrin Aldehyde	6.07	7.80	29892100	303.3E6	23.121	24.915
20) B	Endosulfan Sulfa	6.74	8.27	30800113	306.0E6	22.214	23.147
21) A	Methoxychlor	6.44	8.84	18027934	140.9E6	22.169	23.352
23) B	Endrin Ketone	7.17	9.23	35753642	336.3E6	22.079	23.918

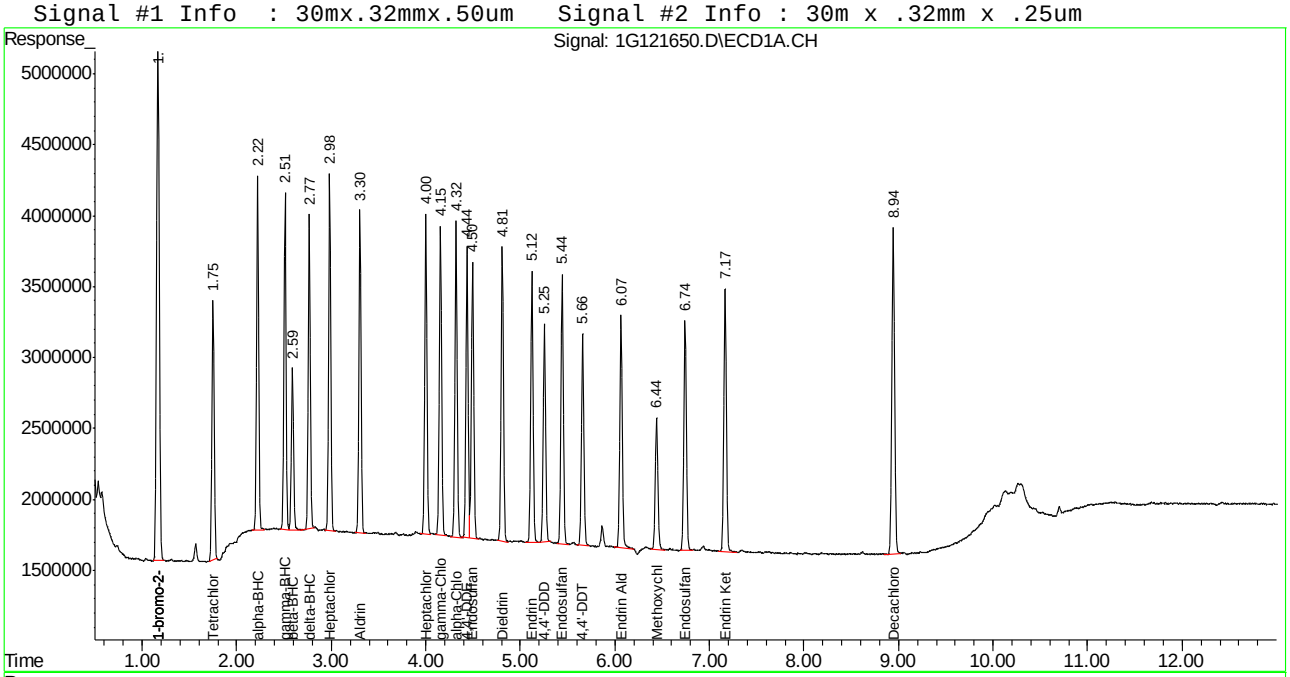
(f)=RT Delta > 1/2 Window (m)=manual int.

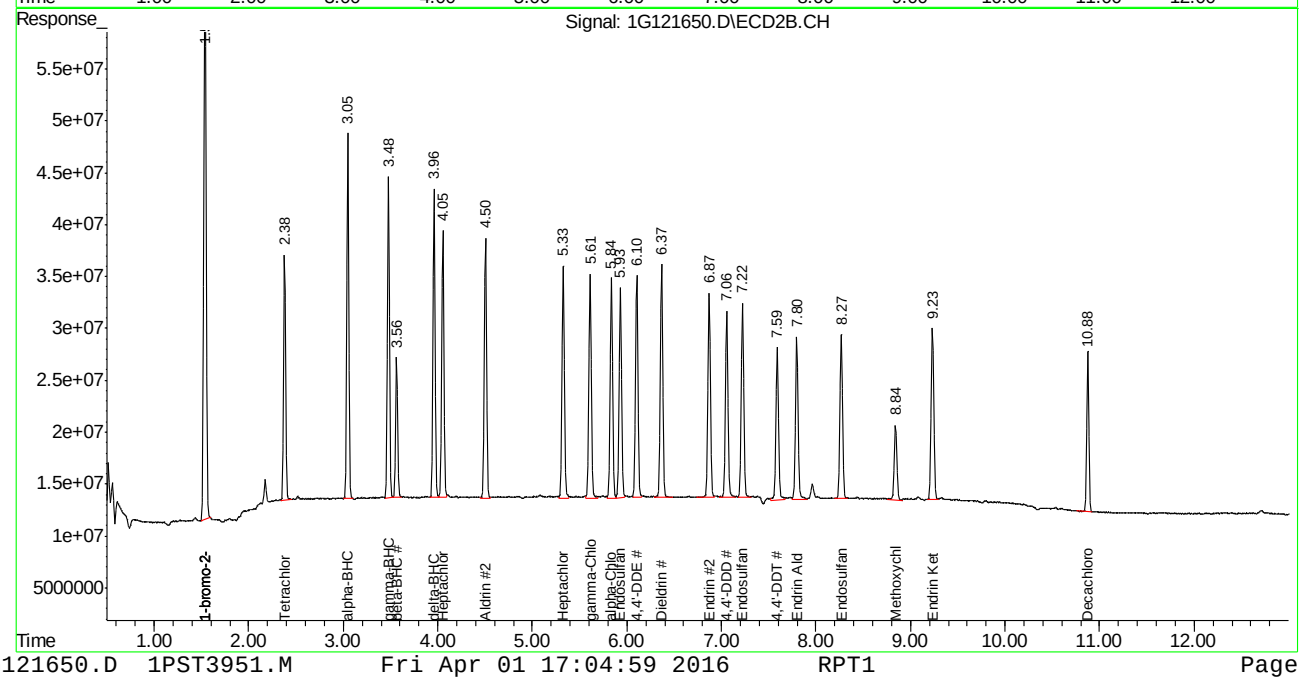
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121650.D\ECD1A.CH Vial: 13
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121650.D\ECD2B.CH
Acq On : 4-1-16 02:09:36 PM Operator: dharas
Sample : icv3951-25 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 17:04 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #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

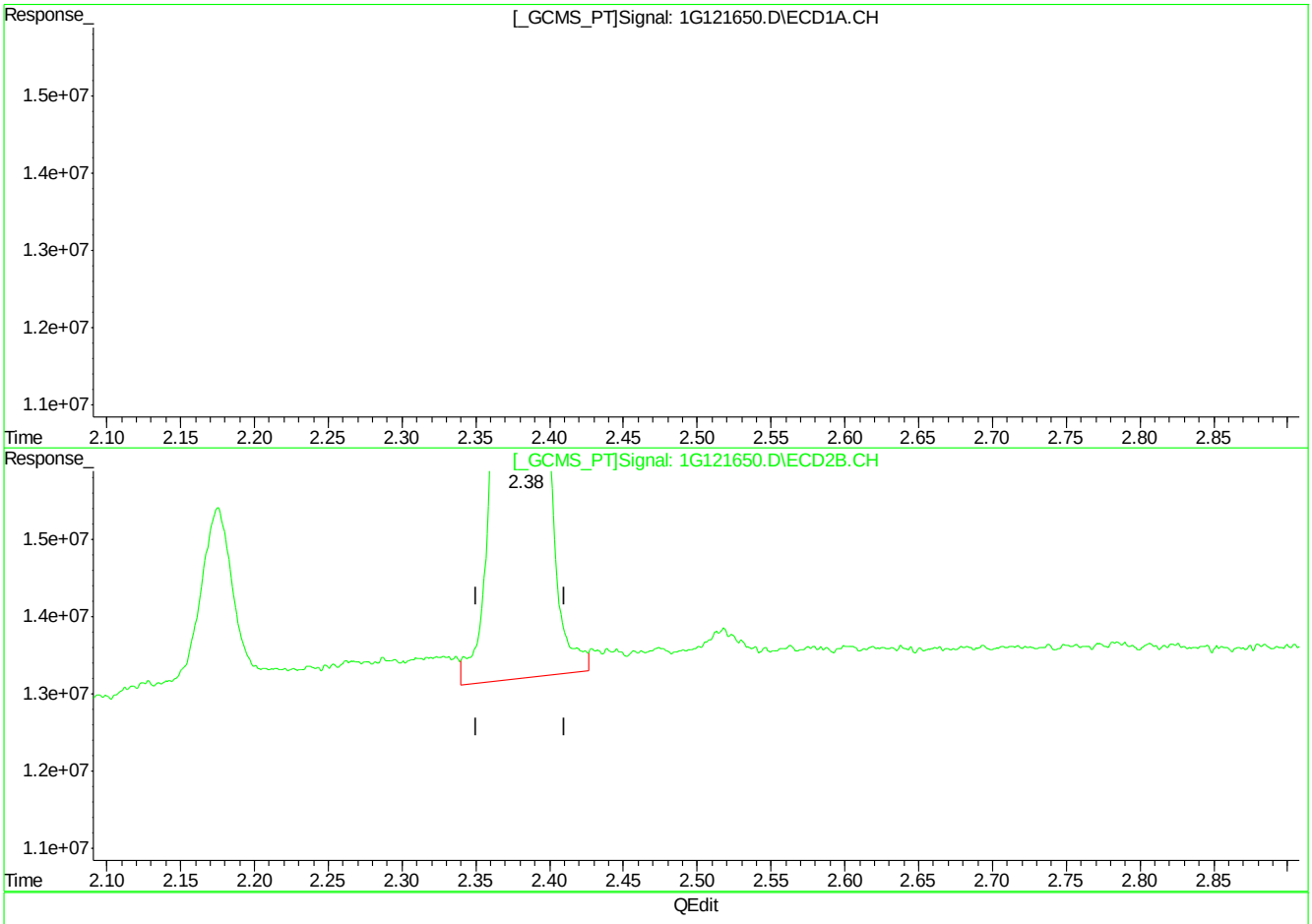
Sample Number:	G1G3951-ICV3951	**Method:**	SW846 8081B
Lab FileID:	1G121650.D	**Analyst approved:**	04/01/16 17:10 Joseph Ravino
Injection Time:	04/01/16 14:09	**Supervisor approved:**	04/04/16 12:58 Gwendolyn Burns

Parameter	CAS	Sig#	R.T. (min.)	Reason
alpha-BHC	319-84-6	1	2.22	Poor instrument integration
Tetrachloro-m-xylene	877-09-8	2	2.38	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121650.D\ECD1A.CH Vial: 13
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121650.D\ECD2B.CH
Acq On    : 4-1-16 02:09:36 PM                      Operator: dharas
Sample    : icv3951-25                              Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 17:04 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
```



(2) Tetrachloro-m-xylene (SAB)

1.75min 21.342PPB

response 31093641

(2) Tetrachloro-m-xylene #2 (SAB)

2.38min 23.414PPB

response 364829351

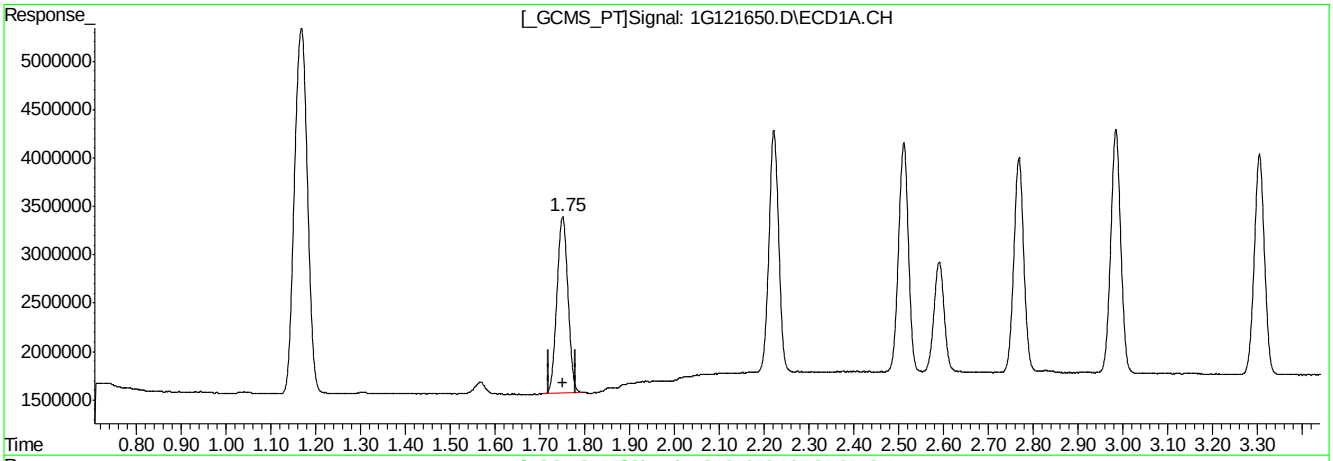
(+) = Expected Retention Time

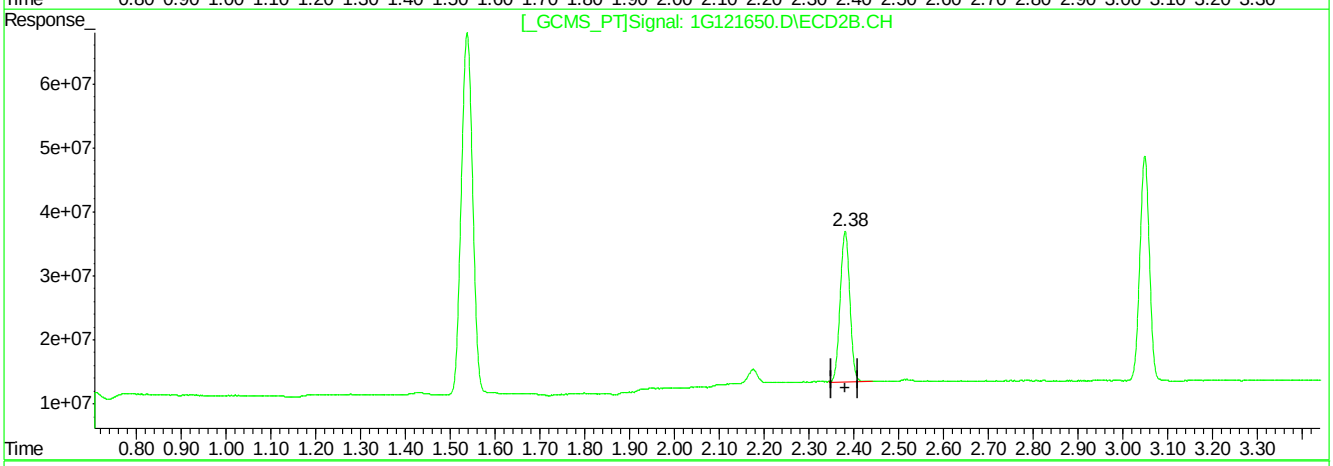
1G121650.D 1PST3951.M Fri Apr 01 17:04:18 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121650.D\ECD1A.CH Vial: 13
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121650.D\ECD2B.CH
Acq On    : 4-1-16 02:09:36 PM                      Operator: dharas
Sample    : icv3951-25                              Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 17:04 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
```





QEdit

(2) Tetrachloro-m-xylene (SAB)

1.75min 21.342PPB

response 31093641

(2) Tetrachloro-m-xylene #2 (SAB)

2.38min 22.577PPB m

response 351797491

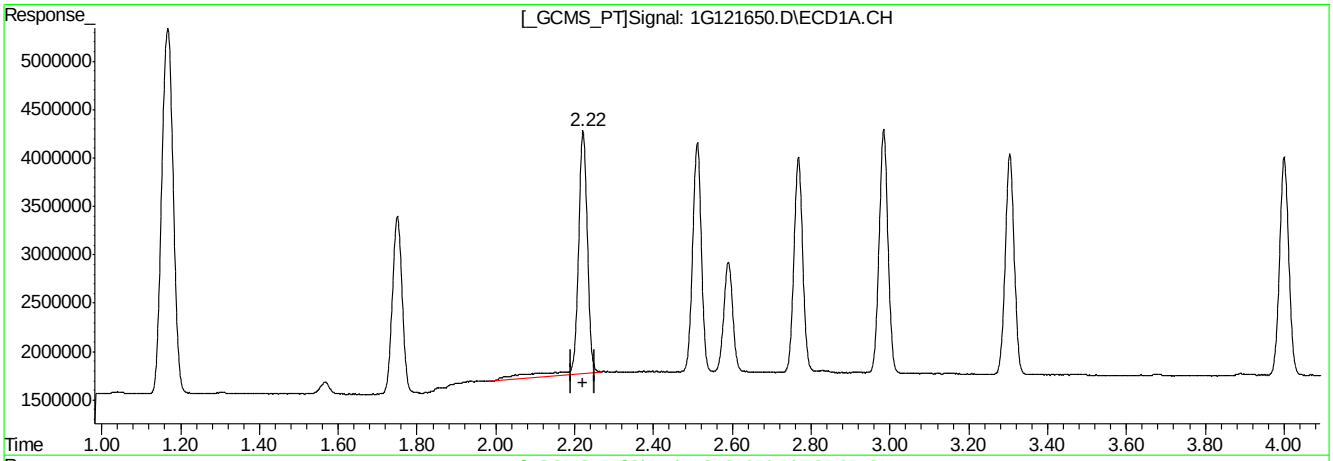
(+) = Expected Retention Time

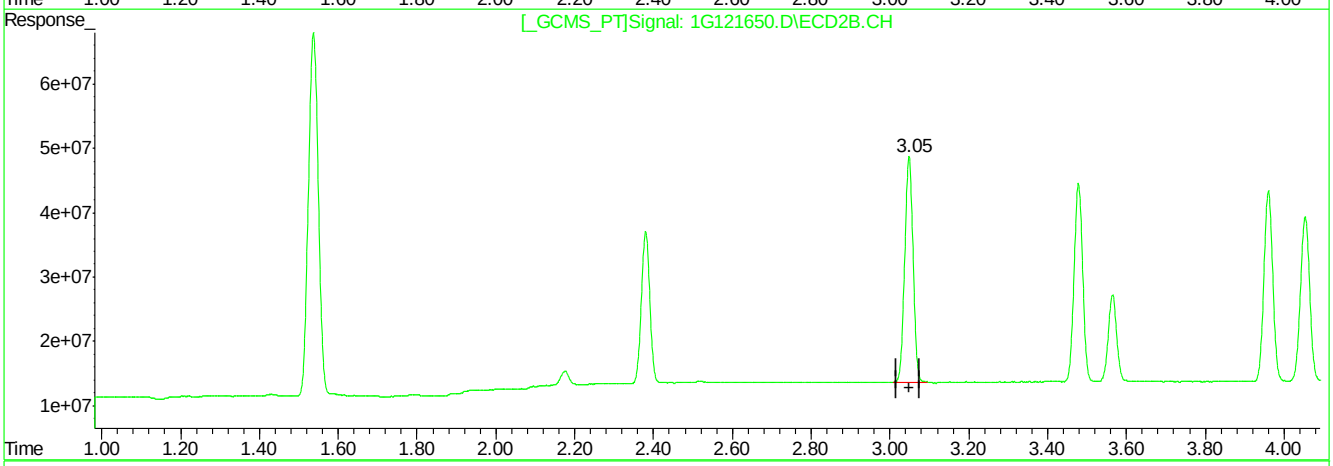
1G121650.D 1PST3951.M Fri Apr 01 17:04:24 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121650.D\ECD1A.CH Vial: 13
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121650.D\ECD2B.CH
Acq On    : 4-1-16 02:09:36 PM                      Operator: dharas
Sample    : icv3951-25                              Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 17:04 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
```





QEdit

(3) alpha-BHC (A)

2.22min 23.985PPB

response 41495139

(3) alpha-BHC #2 (A)

3.05min 22.045PPB

response 518359048

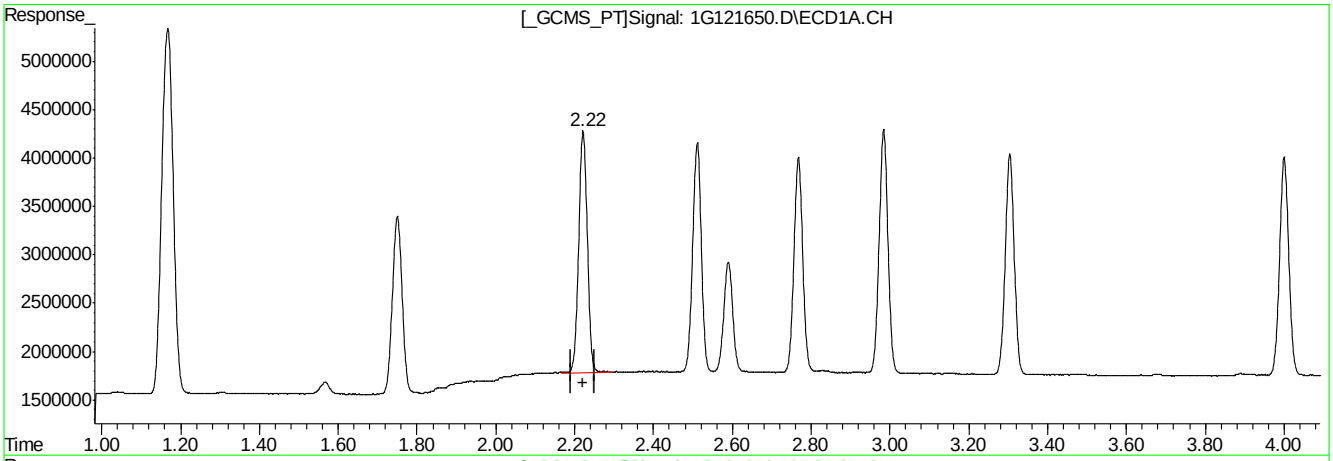
(+) = Expected Retention Time

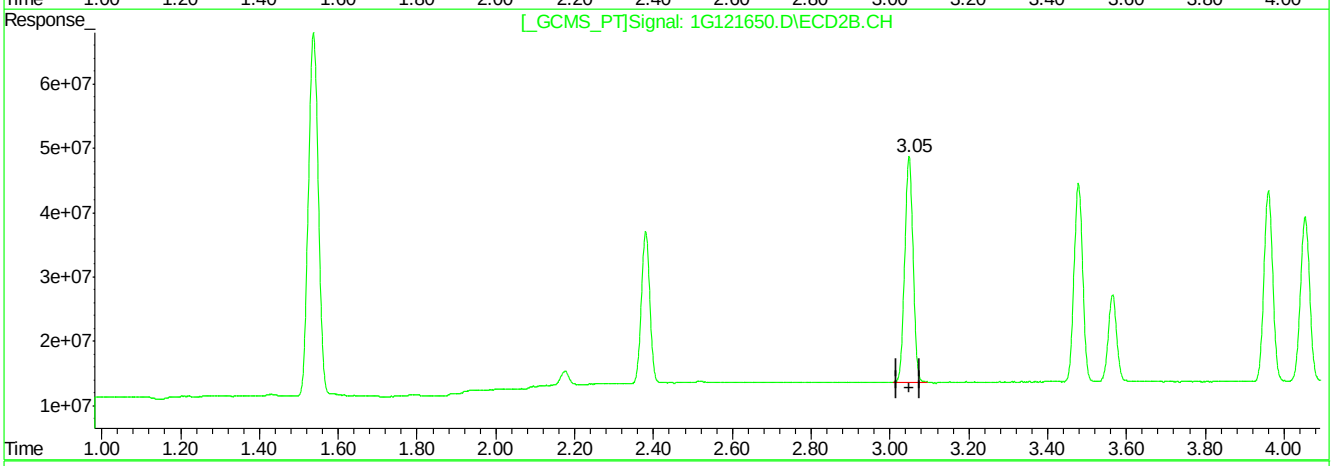
1G121650.D 1PST3951.M Fri Apr 01 17:04:28 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121650.D\ECD1A.CH Vial: 13
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121650.D\ECD2B.CH
Acq On    : 4-1-16 02:09:36 PM                      Operator: dharas
Sample    : icv3951-25                              Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 17:04 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
```





QEdit

(3) alpha-BHC (A)

2.22min 21.891PPB m

response 37872577

(3) alpha-BHC #2 (A)

3.05min 22.045PPB

response 518359048

(+) = Expected Retention Time

1G121650.D 1PST3951.M Fri Apr 01 17:04:32 2016 RPT1

Manual Integrations
APPROVED
(compounds with "m" flag)
Gwendolyn Burns
04/04/16 12:58

Quantitation Report (QT Reviewed)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121651.D\ECD1A.CH Vial: 14
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121651.D\ECD2B.CH
Acq On    : 4-1-16 02:27:16 PM                        Operator: dharas
Sample    : icv3951-25                                Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1                Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 17:05 2016  Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj.     : 1ul/column
Signal #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-nitrob	1.17	1.54	75508646	987.1E6	50.000	50.000
25)	I	1-bromo-2-nitrob	1.17	1.54	75508646	987.1E6	50.000	50.000
31)	I	1-bromo-2-nitrob	1.17	1.54	75508646	987.1E6	50.000	50.000
		System Monitoring Compounds						
		Target Compounds						
22)		Mirex	6.54	9.16	37714315	254.5E6	24.707m	25.262

9.6.12

9

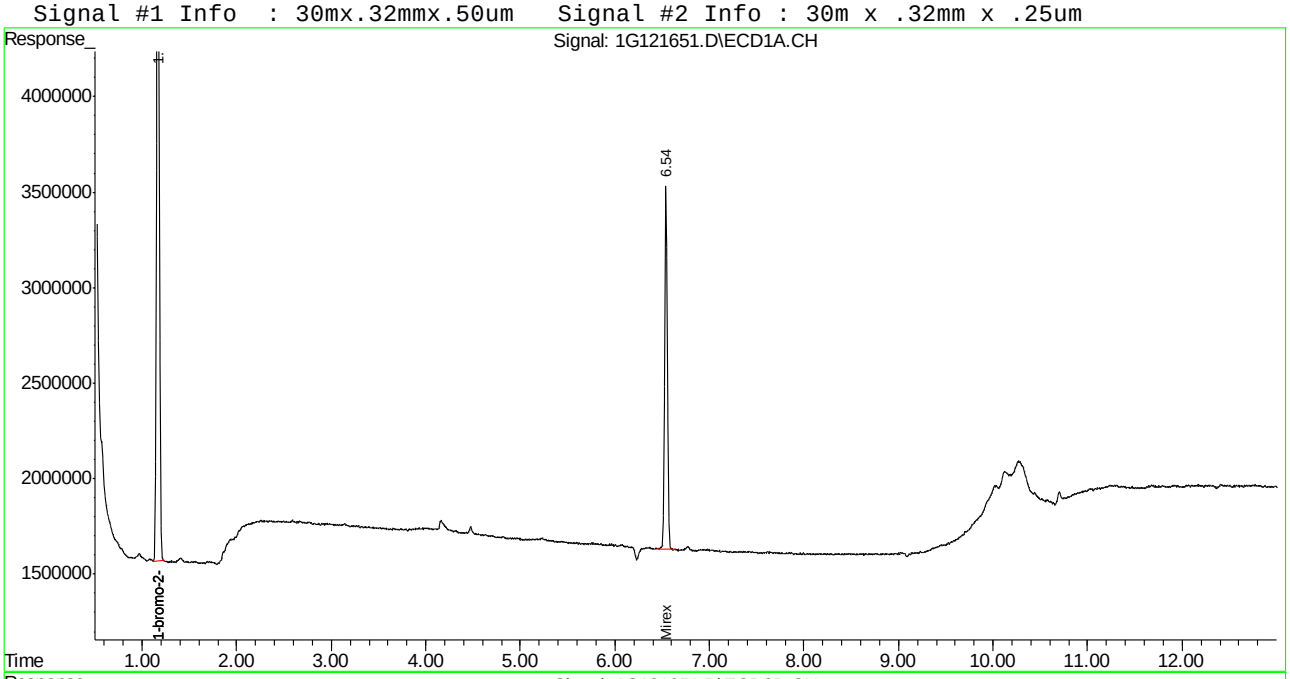
(f)=RT Delta > 1/2 Window (m)=manual int.

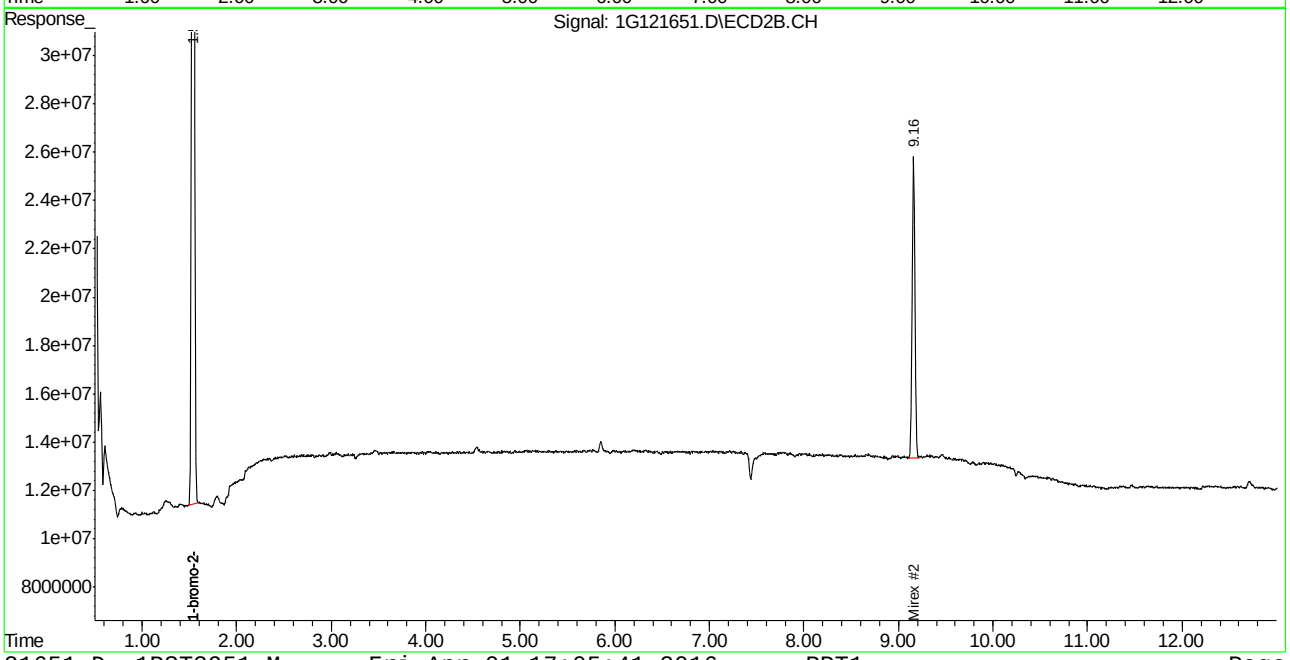
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121651.D\ECD1A.CH Vial: 14
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121651.D\ECD2B.CH
Acq On : 4-1-16 02:27:16 PM Operator: dharas
Sample : icv3951-25 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 17:05 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #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

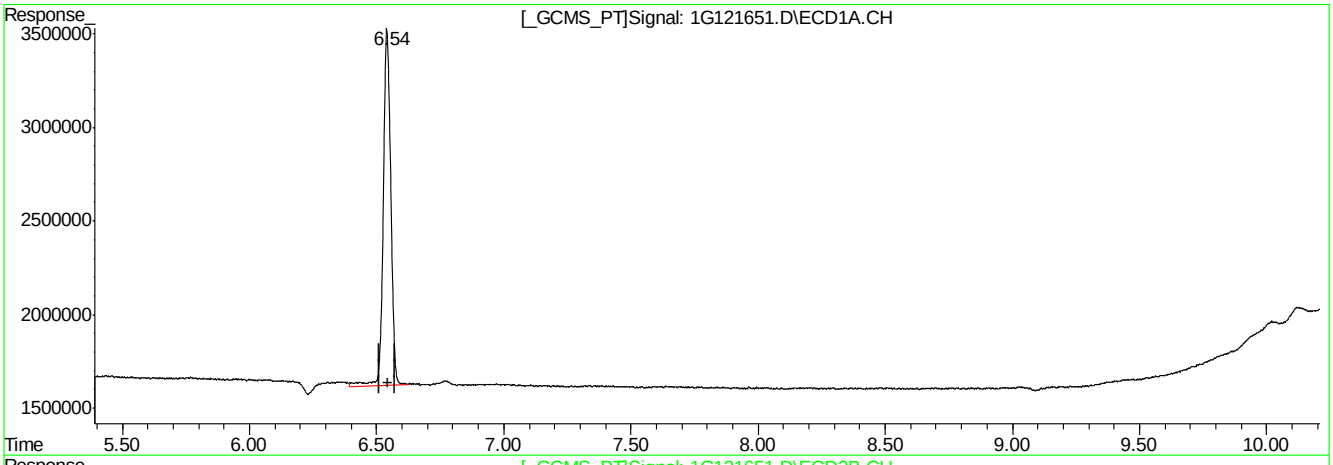
Sample Number:	G1G3951-ICV3951	**Method:**	SW846 8081B
Lab FileID:	1G121651.D	**Analyst approved:**	04/01/16 17:10 Joseph Ravino
Injection Time:	04/01/16 14:27	**Supervisor approved:**	04/04/16 12:58 Gwendolyn Burns

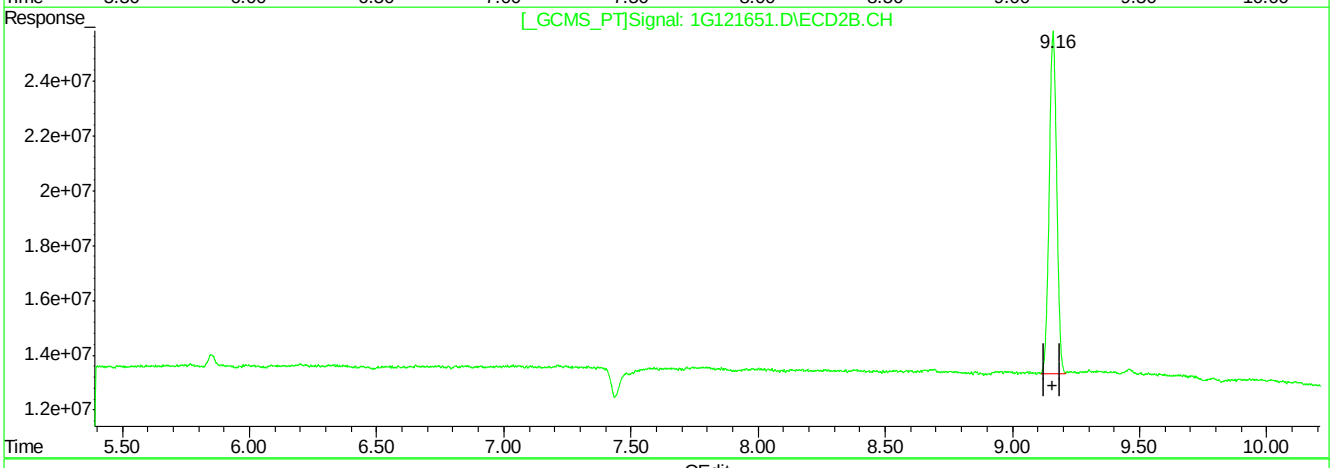
Parameter	CAS	Sig#	R.T. (min.)	Reason
Mirex	2385-85-5	1	6.54	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121651.D\ECD1A.CH Vial: 14
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121651.D\ECD2B.CH
Acq On    : 4-1-16 02:27:16 PM                      Operator: dharas
Sample    : icv3951-25                              Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 17:05 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
```





QEdit

(22) Mirex

6.54min 25.780PPB

response 39352871

(22) Mirex #2

9.16min 25.262PPB

response 254492810

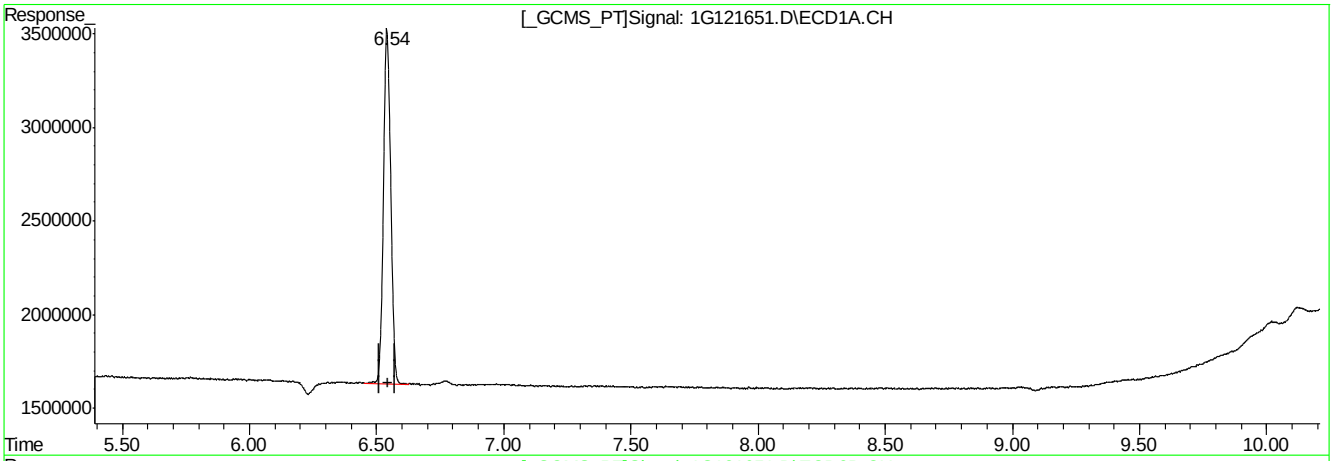
(+) = Expected Retention Time

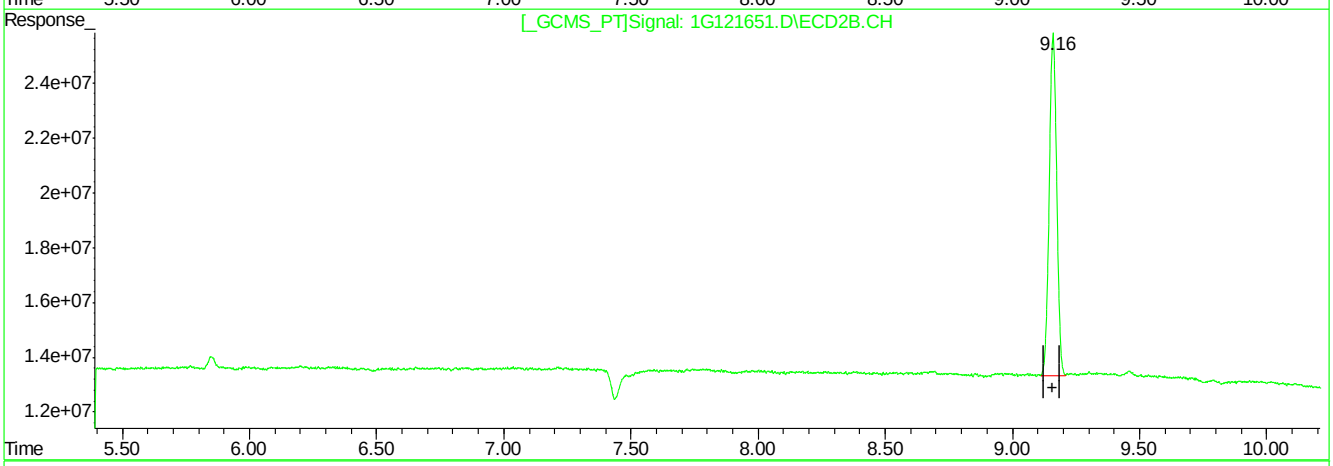
1G121651.D 1PST3951.M Fri Apr 01 17:05:30 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121651.D\ECD1A.CH Vial: 14
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121651.D\ECD2B.CH
Acq On    : 4-1-16 02:27:16 PM                      Operator: dharas
Sample    : icv3951-25                              Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 17:05 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
```





QEdit

(22) Mirex

6.54min 24.707PPB m

response 37714315

(22) Mirex #2

9.16min 25.262PPB

response 254492810

(+) = Expected Retention Time

1G121651.D 1PST3951.M Fri Apr 01 17:05:35 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/04/16 12:58

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121652.D\ECD1A.CH Vial: 15
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121652.D\ECD2B.CH
Acq On : 4-1-16 02:44:56 PM Operator: dharas
Sample : icv3951-500 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:37 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:36:57 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #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-nitrob	1.17	1.54	75887273	978.2E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.17	1.54	75887273	978.2E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.17	1.54	75887273	978.2E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	62879124	686.8E6	43.403	44.671
Spiked Amount	40.000	Range	30 - 150	Recovery	=	108.51%	111.68%
24) SA	Decachlorobiphen	8.94	10.88	91895480	467.2E6	45.921	46.203
Spiked Amount	40.000			Recovery	=	114.80%	115.51%
	Target Compounds						
32)	Chlordane {A}	2.90	3.86	28035380	327.1E6	568.051	569.296
33)	Chlordane {B}	3.45	4.70	33180697	298.6E6	492.279	510.673
34)	Chlordane {C}	4.16	5.61	106.8E6	985.9E6	471.738	497.754
35)	Chlordane {D}	4.31	5.84	172.9E6	1639.2E6	484.101	506.584m
36)	Chlordane {E}	5.34	7.30	24598067	309.1E6	495.048	512.357

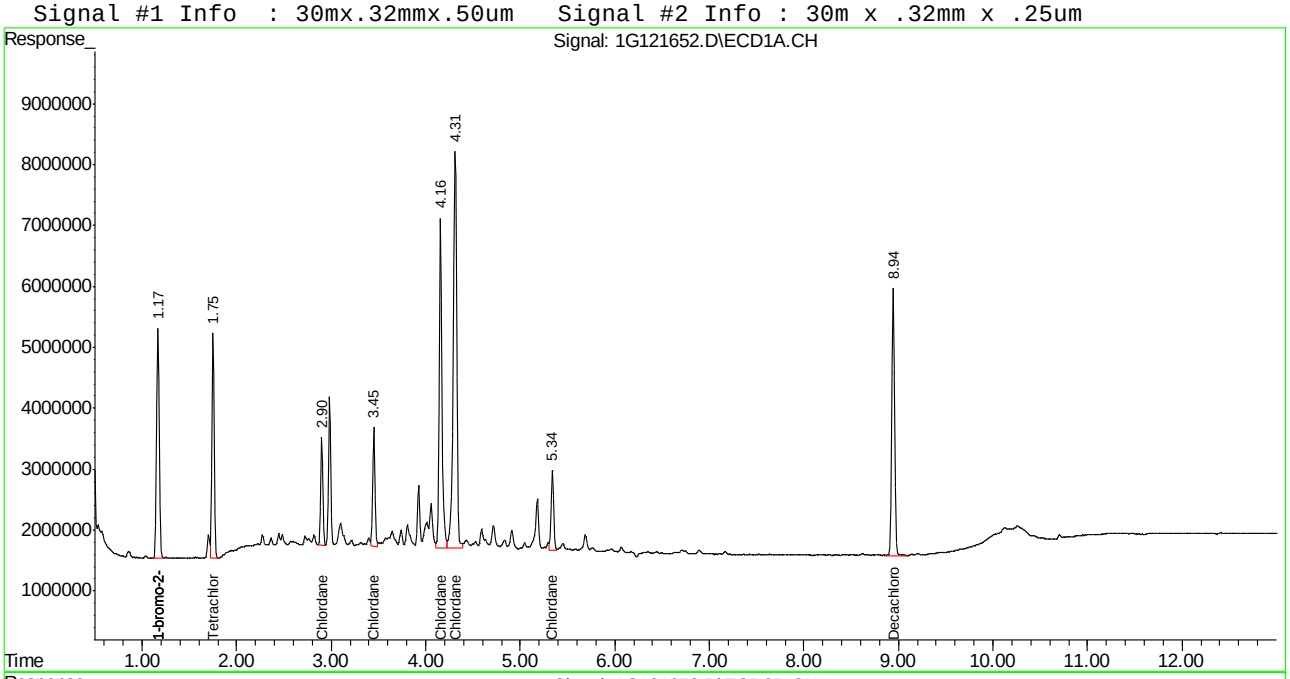
(f)=RT Delta > 1/2 Window (m)=manual int.
1G121652.D 1PST3951.M Fri Apr 01 16:38:07 2016 RPT1 Page 1

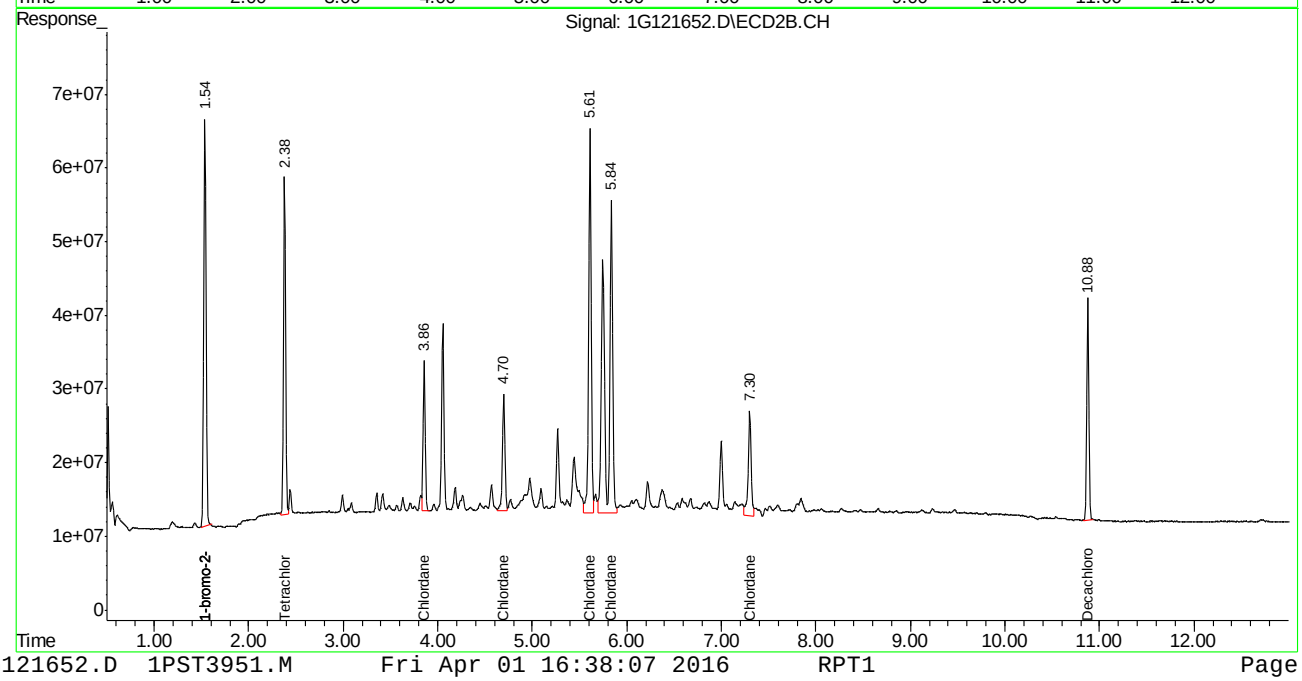
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121652.D\ECD1A.CH Vial: 15
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121652.D\ECD2B.CH
Acq On : 4-1-16 02:44:56 PM Operator: dharas
Sample : icv3951-500 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:37 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:36:57 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #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

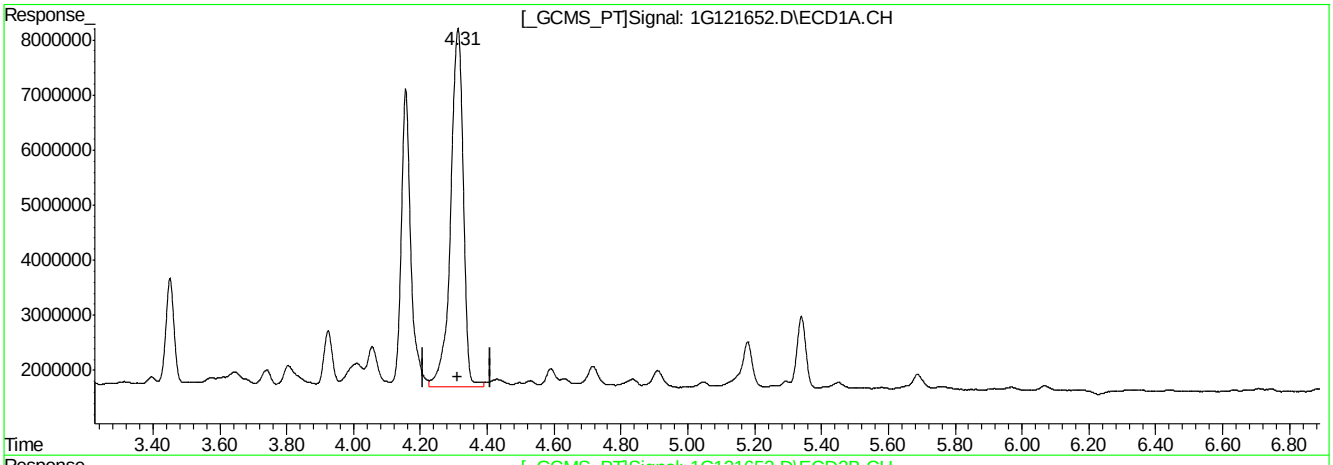
Sample Number:	G1G3951-ICV3951	**Method:**	SW846 8081B
Lab FileID:	1G121652.D	**Analyst approved:**	04/01/16 17:10 Joseph Ravino
Injection Time:	04/01/16 14:44	**Supervisor approved:**	04/04/16 12:58 Gwendolyn Burns

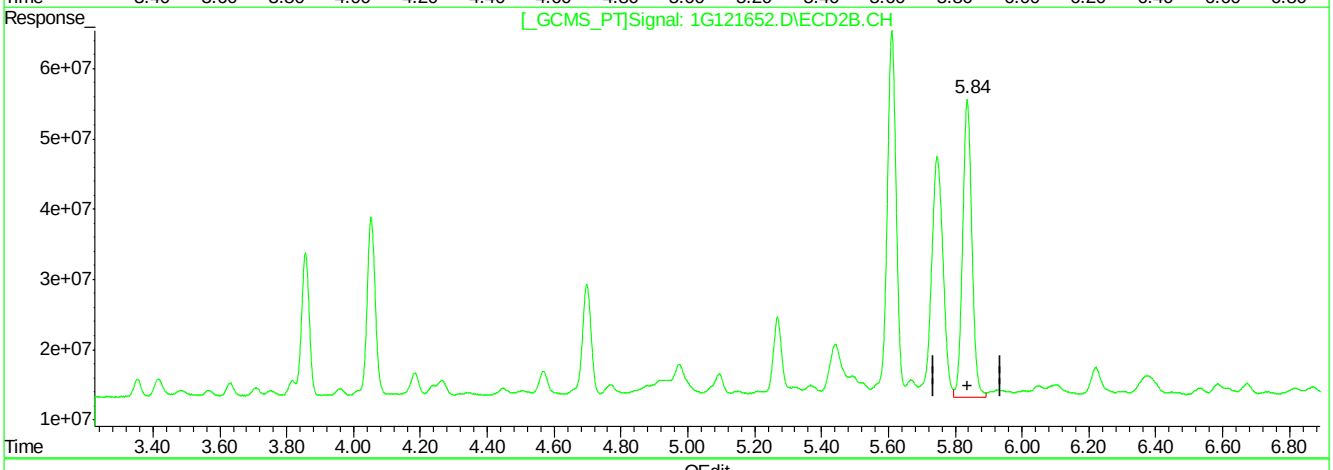
Parameter	CAS	Sig#	R.T. (min.)	Reason
Chlordane-D		2	5.84	Split peak

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121652.D\ECD1A.CH Vial: 15
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121652.D\ECD2B.CH
Acq On    : 4-1-16 02:44:56 PM                      Operator: dharas
Sample    : icv3951-500                             Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:37 2016  Quant Results File: 1PST3951.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:36:57 2016
Response via : Multiple Level Calibration
```





QEdit

(35) Chlordane {D}

4.31min 484.101PPB

response 172913428

(35) Chlordane {D} #2

5.84min 252.047PPB

response 815562234

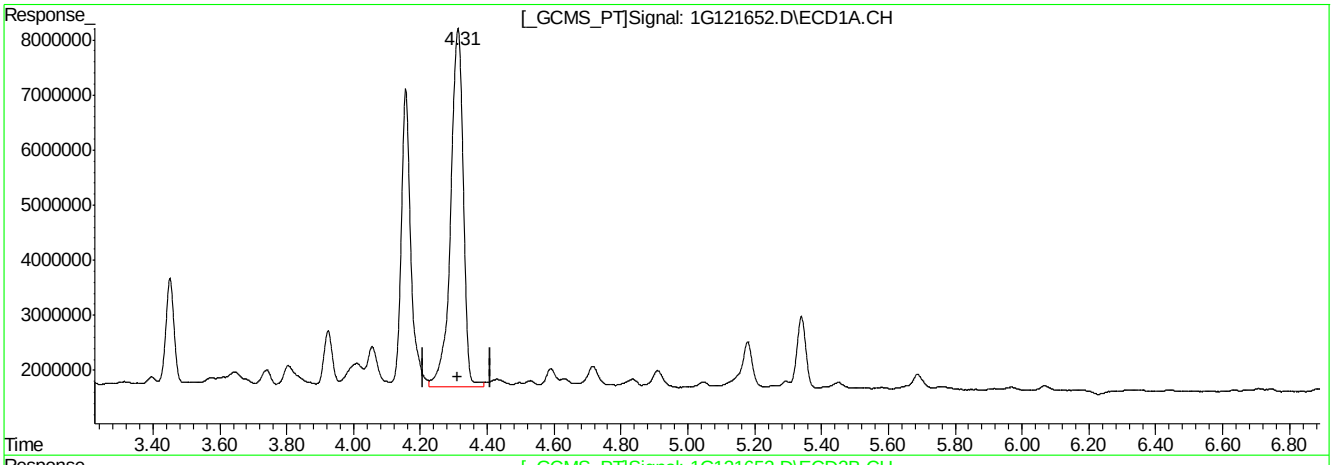
(+) = Expected Retention Time

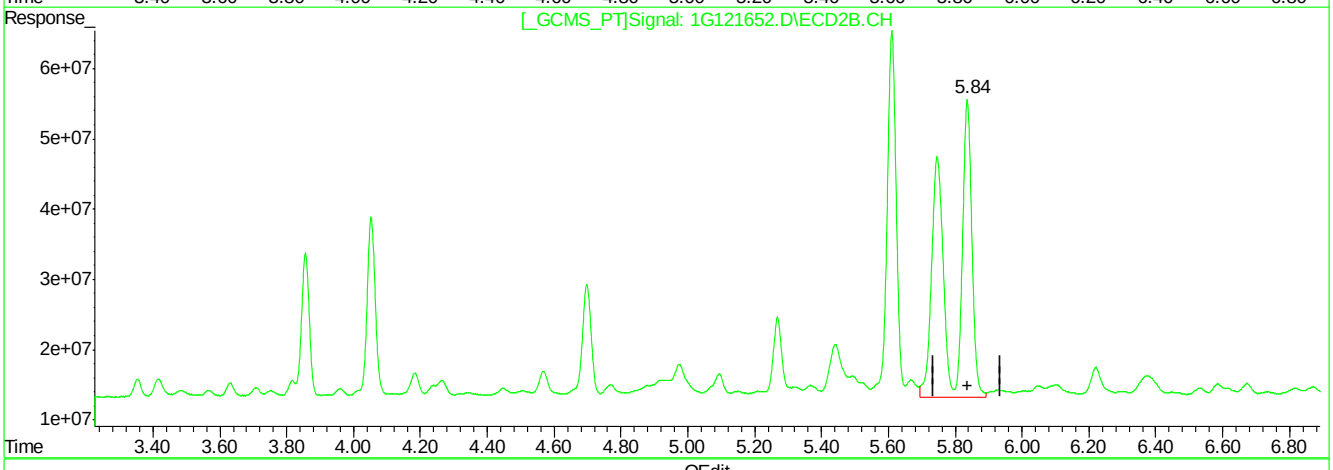
1G121652.D 1PST3951.M Fri Apr 01 16:37:46 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121652.D\ECD1A.CH Vial: 15
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121652.D\ECD2B.CH
Acq On    : 4-1-16 02:44:56 PM                      Operator: dharas
Sample    : icv3951-500                             Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:37 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:36:57 2016
Response via : Multiple Level Calibration
```





QEdit

(35) Chlordane {D}

4.31min 484.101PPB

response 172913428

(35) Chlordane {D} #2

5.84min 506.584PPB m

response 1639181486

(+) = Expected Retention Time

1G121652.D 1PST3951.M Fri Apr 01 16:38:01 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/04/16 12:58

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121653.D\ECD1A.CH Vial: 16
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121653.D\ECD2B.CH
Acq On : 4-1-16 03:02:33 PM Operator: dharas
Sample : icv3951-500 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:46 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:44:01 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #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-nitrob	1.17	1.54	75922584	968.5E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.17	1.54	75922584	968.5E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.17	1.54	75922584	968.5E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	59724960	655.6E6	41.411	43.197
Spiked Amount	40.000	Range	30 - 150	Recovery	=	103.53%	107.99%
24) SA	Decachlorobiphen	8.94	10.88	86847713	446.4E6	43.589	44.718
Spiked Amount	40.000			Recovery	=	108.97%	111.80%
	Target Compounds						
26) L8	Toxaphene{A}	4.82	6.33	12725005	207.1E6	474.595	496.977m
27) L8	Toxaphene{B}	5.43	7.19	33557712	232.7E6	470.658	479.603
28) L8	Toxaphene{C}	5.60	7.36	25093948	443.9E6	462.575m	479.572m
29) L8	Toxaphene{D}	5.93	7.80	24714518	256.7E6	451.143	481.781
30) L8	Toxaphene{E}	6.57	8.70	23040564	188.8E6	476.390	452.054

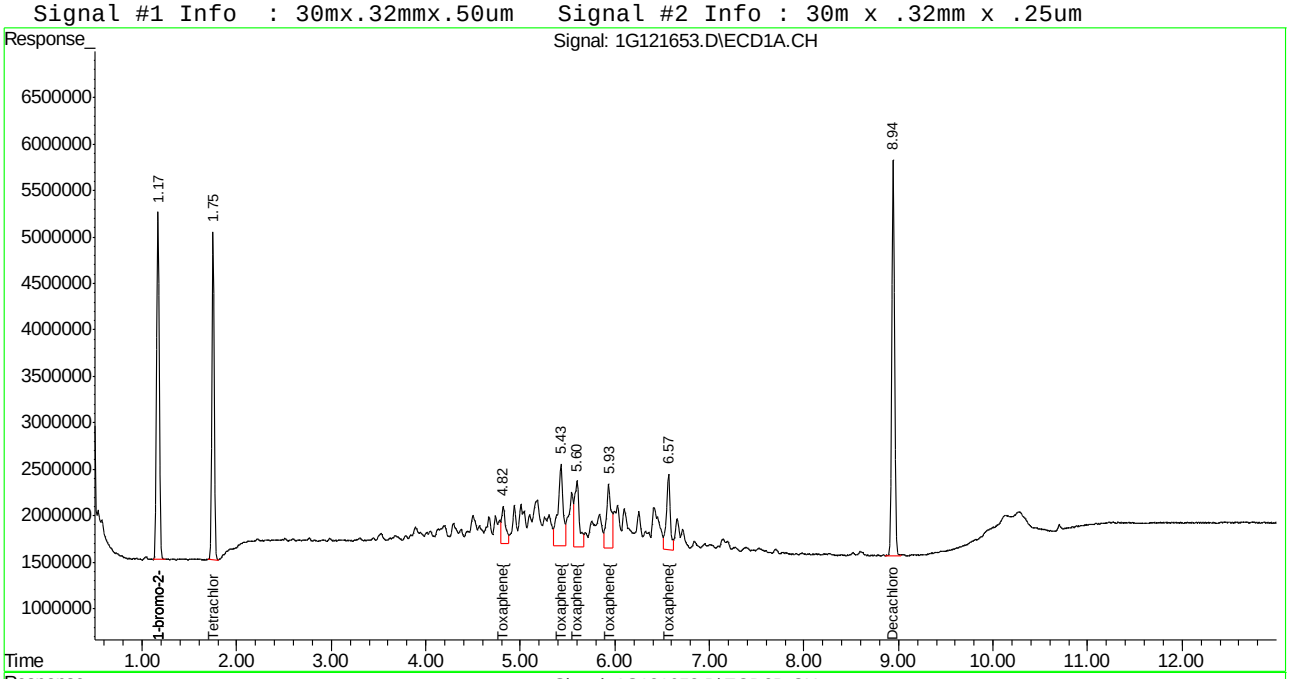
(f)=RT Delta > 1/2 Window (m)=manual int.
1G121653.D 1PST3951.M Fri Apr 01 16:46:36 2016 RPT1 Page 1

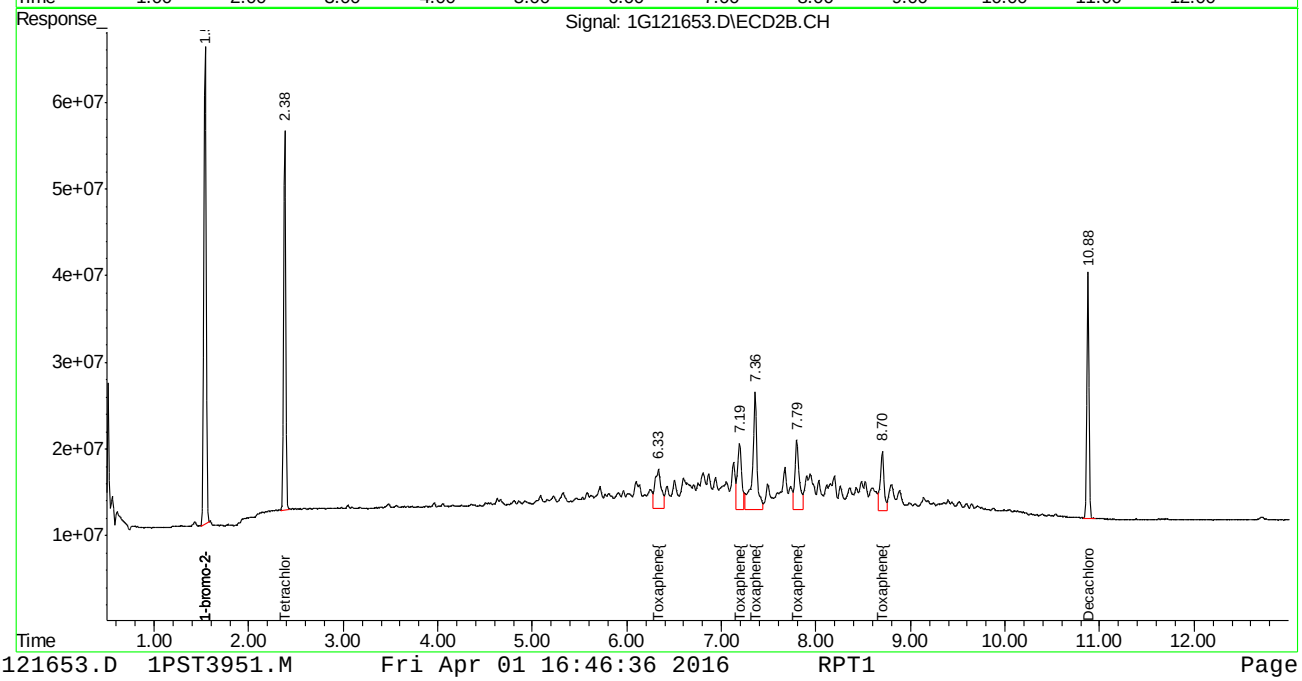
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121653.D\ECD1A.CH Vial: 16
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121653.D\ECD2B.CH
Acq On : 4-1-16 03:02:33 PM Operator: dharas
Sample : icv3951-500 Inst : GC1G
Misc : op92644,g1g3951,180,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 1 16:46 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:44:01 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #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

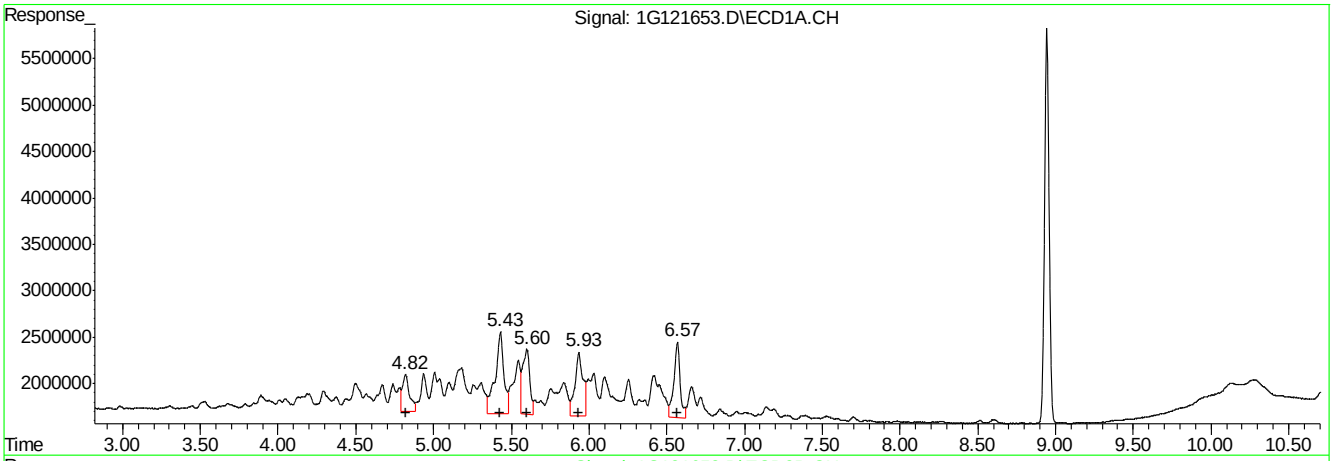
Sample Number:	G1G3951-ICV3951	**Method:**	SW846 8081B
Lab FileID:	1G121653.D	**Analyst approved:**	04/01/16 17:10 Joseph Ravino
Injection Time:	04/01/16 15:02	**Supervisor approved:**	04/04/16 12:58 Gwendolyn Burns

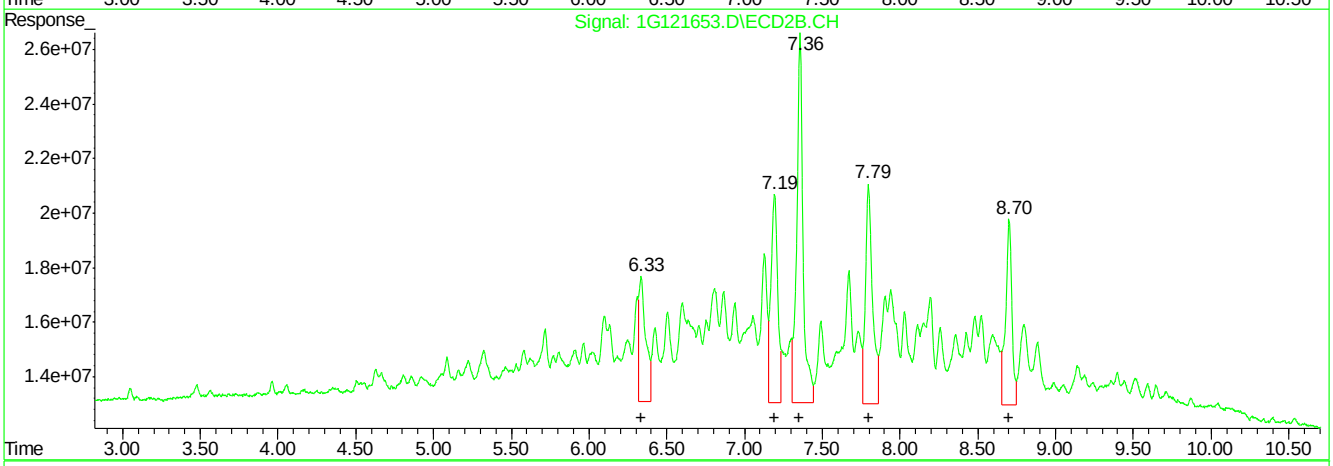
Parameter	CAS	Sig#	R.T. (min.)	Reason
Toxaphene-C		1	5.60	Split peak
Toxaphene-A		2	6.33	Split peak
Toxaphene-C		2	7.36	Split peak

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121653.D\ECD1A.CH Vial: 16
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121653.D\ECD2B.CH
Acq On    : 4-1-16 03:02:33 PM                      Operator: dharas
Sample    : icv3951-500                             Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:44 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:44:01 2016
Response via : Multiple Level Calibration
```





QEdit

(26) Toxaphene{A} (L8)

R.T.	Response	Conc
4.82	12725005	474.59
5.43	33557712	470.66
5.60	22457778	413.98
5.93	24714518	451.14
6.57	23040564	476.39

(26) Toxaphene{A} #2 (L8)

R.T.	Response	Conc
6.33	145405014	348.90
7.19	232705693	479.60
7.36	376250782	406.51
7.80	256705805	481.78
8.70	188757181	452.05

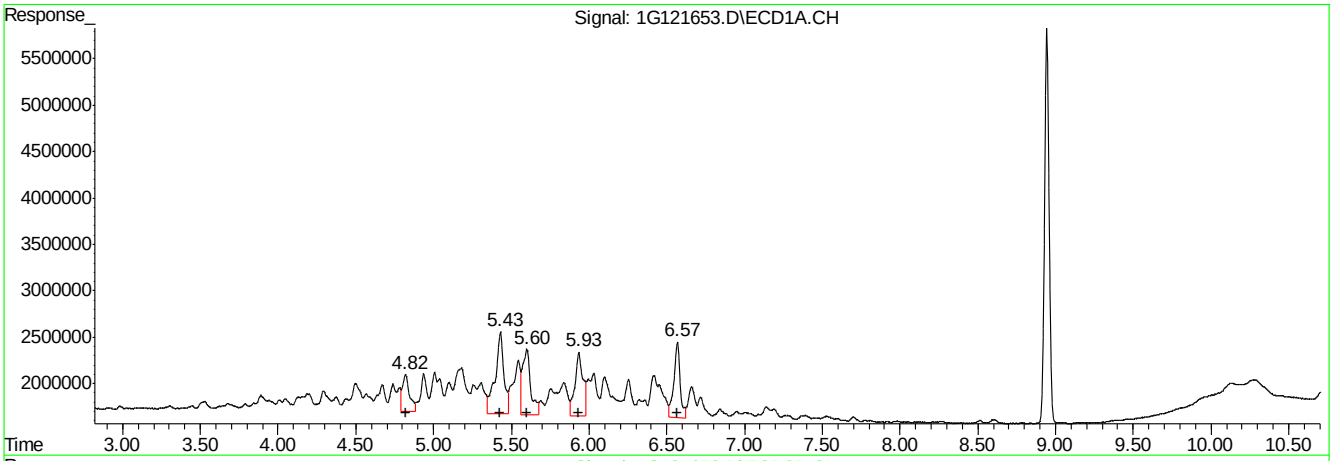
(+) = Expected Retention Time

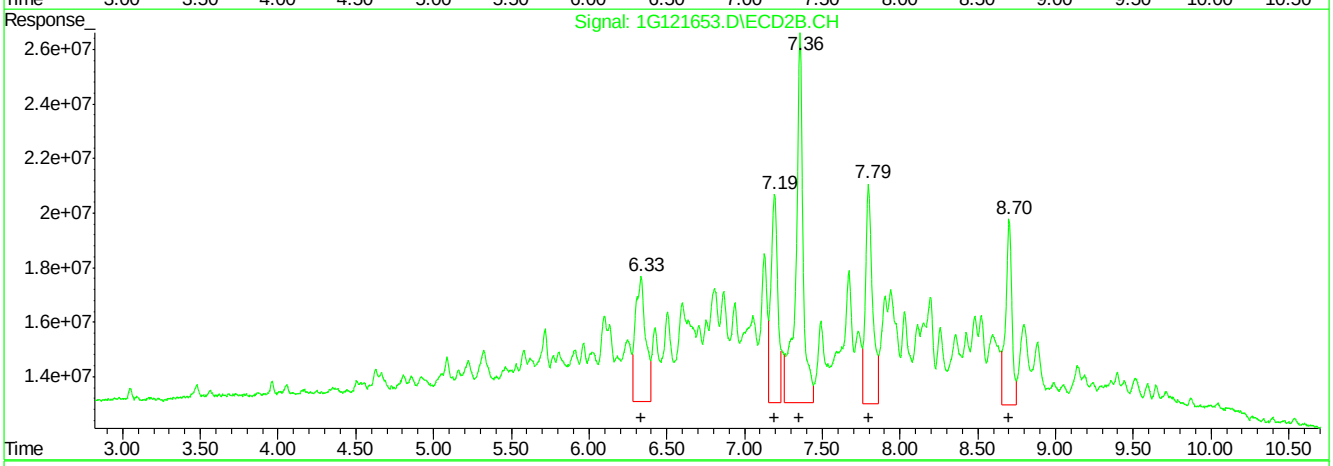
1G121653.D 1PST3951.M Fri Apr 01 16:44:47 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3951\1G121653.D\ECD1A.CH Vial: 16
Signal #2 : C:\MSDCHEM\1\DATA\1G3951\1G121653.D\ECD2B.CH
Acq On    : 4-1-16 03:02:33 PM                      Operator: dharas
Sample    : icv3951-500                             Inst    : GC1G
Misc      : op92644,g1g3951,180,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr  1 16:45 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:44:01 2016
Response via : Multiple Level Calibration
```





QEdit

(26) Toxaphene{A} (L8)

R.T.	Response	Conc
4.82	12725005	474.59
5.43	33557712	470.66
5.60	25093948	462.58
5.93	24714518	451.14
6.57	23040564	476.39

(26) Toxaphene{A} #2 (L8)

R.T.	Response	Conc
6.33	207115003	496.98
7.19	232705693	479.60
7.36	443872973	479.57
7.80	256705805	481.78
8.70	188757181	452.05

(+) = Expected Retention Time

1G121653.D 1PST3951.M Fri Apr 01 16:46:24 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/19/16 14:13

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3966\1G122257.D\ECD1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\1G3966\1G122257.D\ECD2B.CH
Acq On : 4-19-16 09:00:56 AM Operator: brittanp
Sample : cc3951-25 Inst : GC1G
Misc : op93101,g1g3966,15.6,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 19 9:15 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #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-nitrob	1.16	1.53	62047044	828.3E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.16	1.53	62047044	828.3E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.16	1.53	62047044	828.3E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.37	30737469	363.4E6	25.914	27.877
Spiked Amount	40.000	Range	30 - 150	Recovery	=	64.78%	69.69%
24) SA	Decachlorobiphen	8.94	10.87	48408283	223.9E6	29.546	26.118
Spiked Amount	40.000			Recovery	=	73.87%	65.29%
	Target Compounds						
3) A	alpha-BHC	2.22	3.04	38958847	506.5E6	27.661	25.750
4) MA	gamma-BHC	2.50	3.47	37073024	454.1E6	27.581	25.697
5) MA	Heptachlor	2.98	4.05	40660539	406.7E6	28.164	25.601
6) B	beta-BHC	2.58	3.56	17229046	187.4E6	25.188	24.958
7) B	delta-BHC	2.76	3.95	32083015	424.0E6	27.109	26.129
8) MB	Aldrin	3.30	4.49	37346203	401.3E6	27.778	25.268
9) B	Heptachlor Epoxi	3.99	5.32	36836534	358.6E6	27.531m	24.937
10) B	gamma-Chlordane	4.15	5.60	36519072	354.2E6	25.897m	24.627
11) B	alpha-Chlordane	4.31	5.83	38884576	340.8E6	28.606	24.504
12) A	Endosulfan I	4.49	5.92	36202427	340.2E6	28.008	25.054
13) B	4,4'-DDE	4.43	6.10	34359745	348.3E6	27.668	24.325
14) MA	Dieldrin	4.80	6.36	36479859	371.8E6	27.877	24.455
15) MA	Endrin	5.11	6.86	34193307	340.2E6	27.933	25.788
16) A	4,4'-DDD	5.25	7.05	27456421	304.0E6	26.613	25.016
17) B	Endosulfan II	5.43	7.21	34311011	321.7E6	27.622	24.486
18) MA	4,4'-DDT	5.65	7.58	27580018	255.7E6	28.055	26.893
19) B	Endrin Aldehyde	6.05	7.79	28077994	251.9E6	26.676	24.735
20) B	Endosulfan Sulfa	6.73	8.26	31533506	270.6E6	27.936	24.471
21) A	Methoxychlor	6.43	8.83	18232150	119.4E6	27.539	23.659
22)	Mirex	6.53	9.15	33995840	197.2E6	27.102	23.331
23) B	Endrin Ketone	7.16	9.22	36017975	293.6E6	27.321	24.963

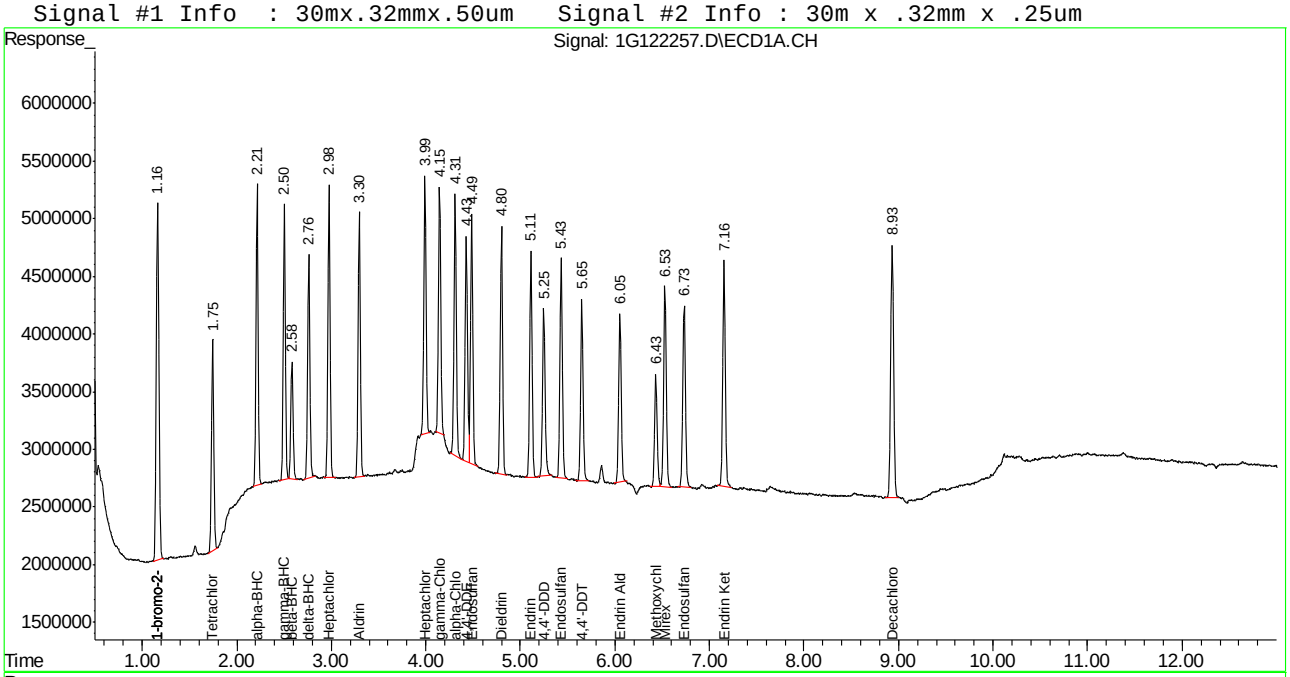
(f)=RT Delta > 1/2 Window (m)=manual int.

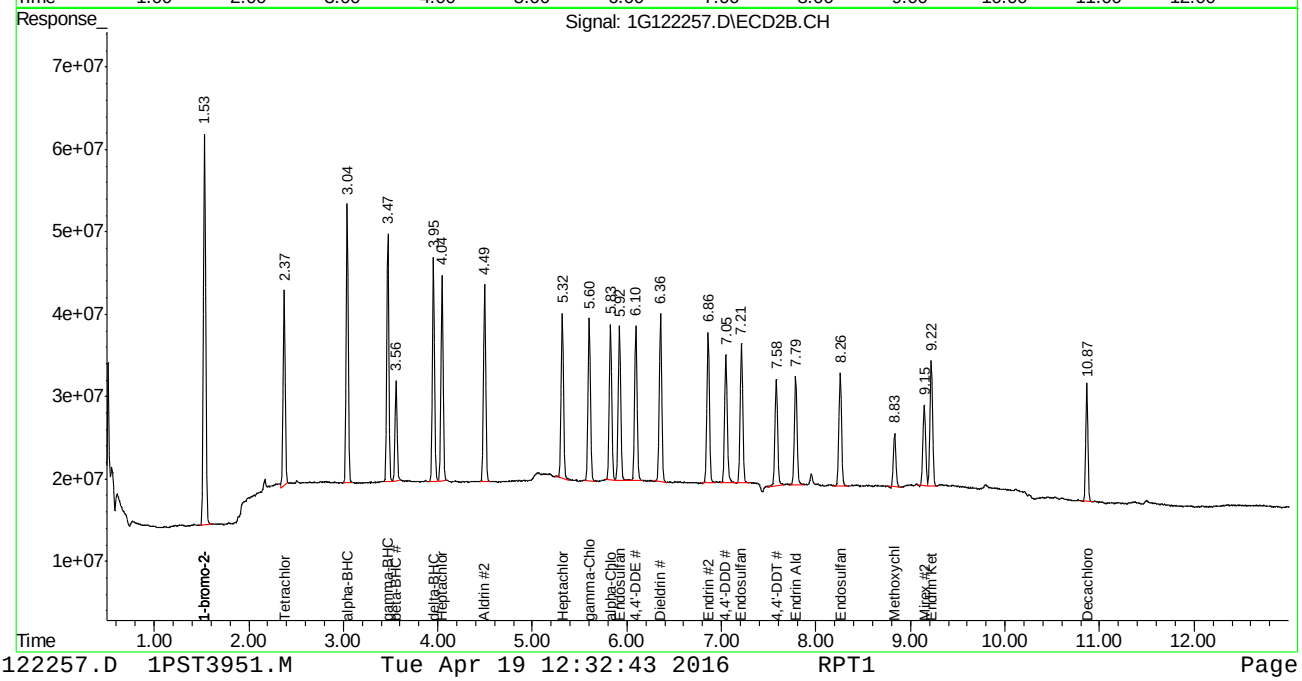
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3966\1G122257.D\ECD1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\1G3966\1G122257.D\ECD2B.CH
Acq On : 4-19-16 09:00:56 AM Operator: brittanp
Sample : cc3951-25 Inst : GC1G
Misc : op93101,g1g3966,15.6,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 19 9:15 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #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

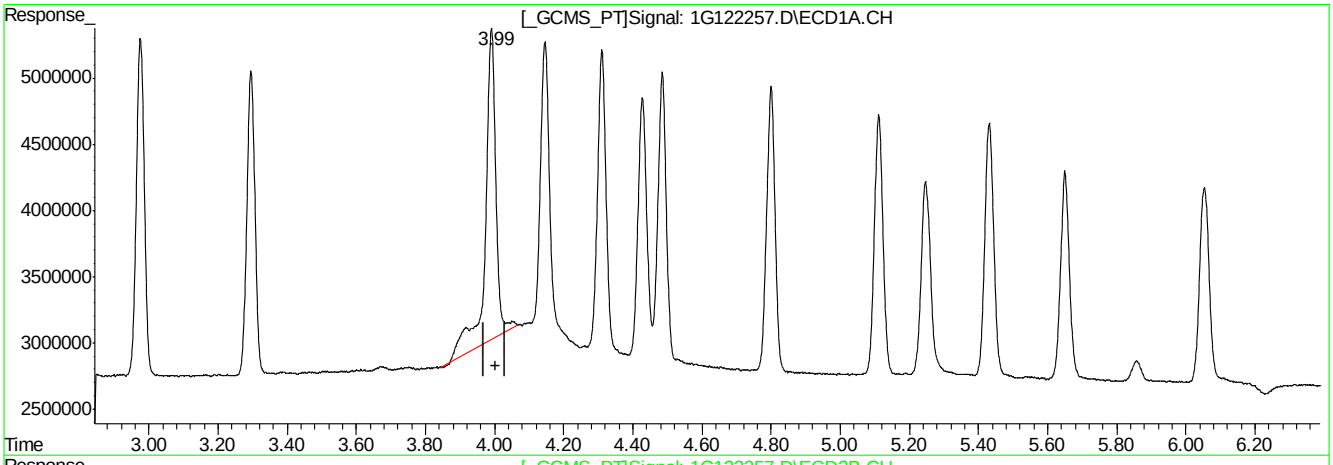
Sample Number:	G1G3966-CC3951	**Method:**	SW846 8081B
Lab FileID:	1G122257.D	**Analyst approved:**	04/19/16 12:48 Dhara Saparia
Injection Time:	04/19/16 09:00	**Supervisor approved:**	04/19/16 14:13 Gwendolyn Burns

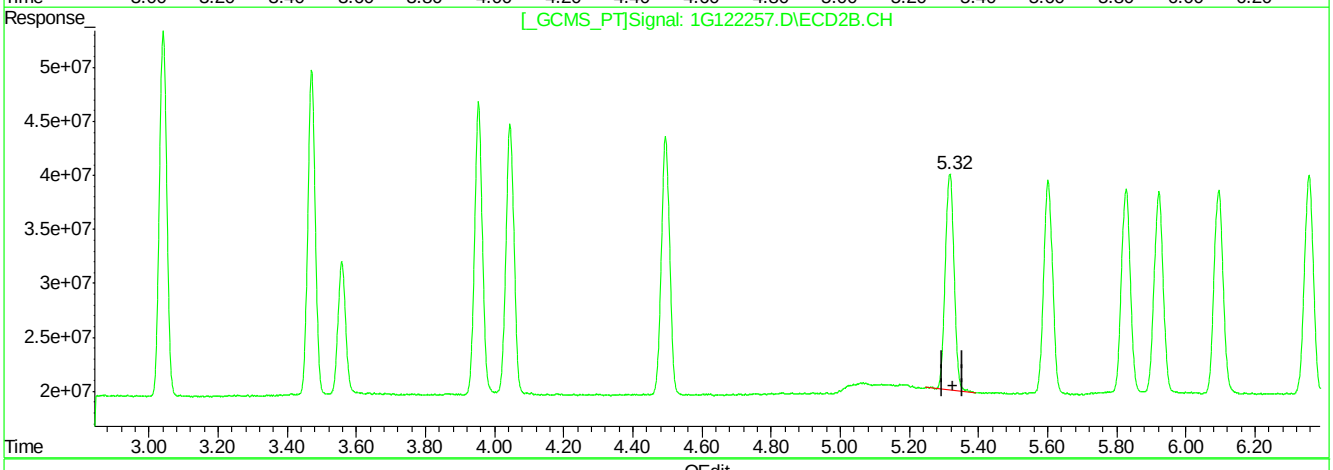
Parameter	CAS	Sig#	R.T. (min.)	Reason
Heptachlor epoxide	1024-57-3	1	3.99	Poor instrument integration
gamma-Chlordane	5103-74-2	1	4.15	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3966\1G122257.D\ECD1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\1G3966\1G122257.D\ECD2B.CH
Acq On    : 4-19-16 09:00:56 AM                      Operator: brittanp
Sample    : cc3951-25                                Inst    : GC1G
Misc      : op93101,g1g3966,15.6,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 19  9:14 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Apr 18 17:44:15 2016
Response via : Multiple Level Calibration
```





QEdit

(9) Heptachlor Epoxide (B)

3.99min 37.017PPB

response 49527438

(9) Heptachlor Epoxide #2 (B)

5.32min 24.937PPB

response 358594216

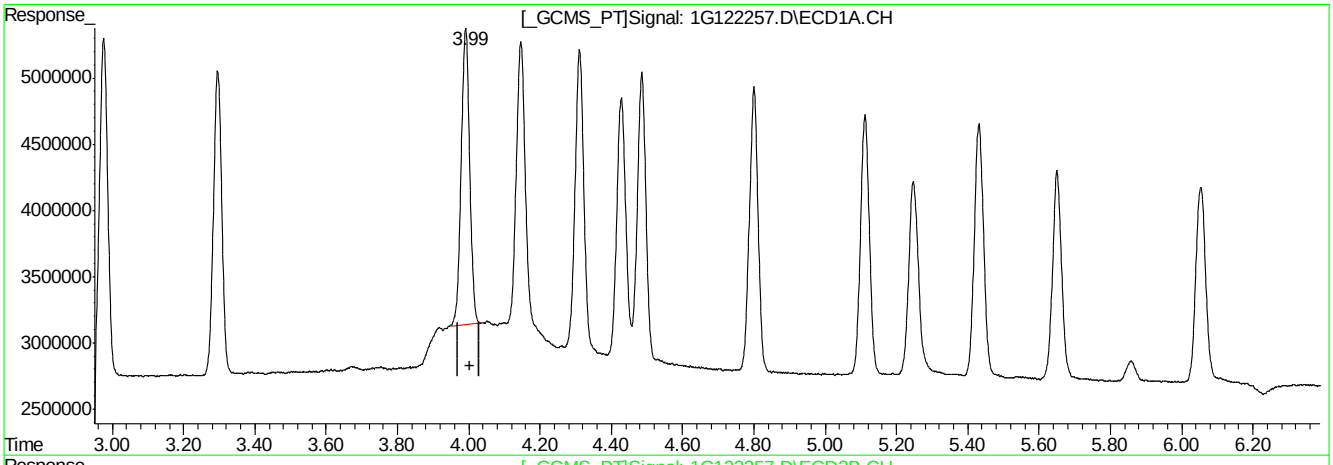
(+) = Expected Retention Time

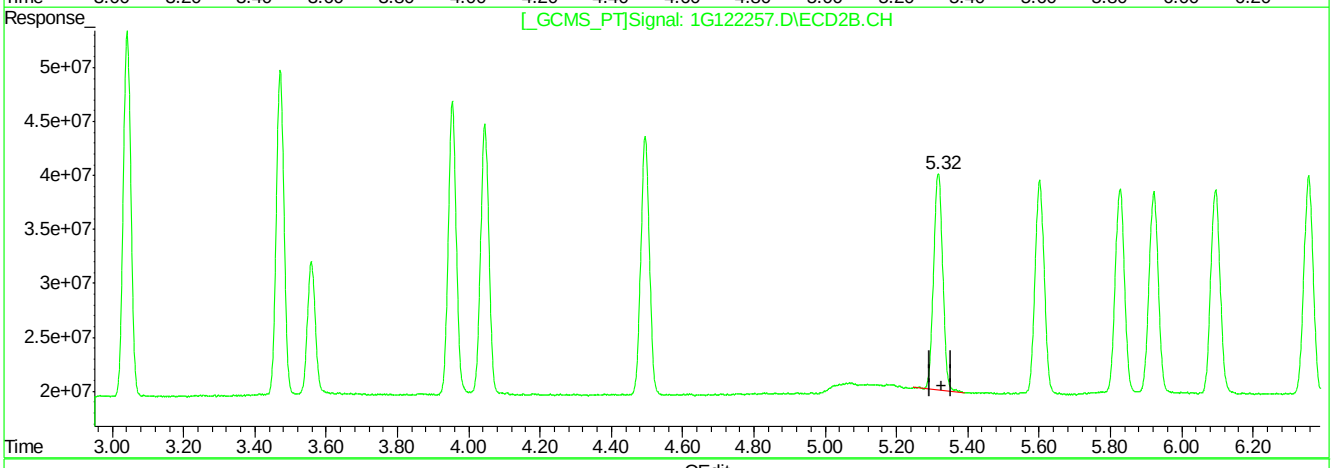
1G122257.D 1PST3951.M Tue Apr 19 09:14:40 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3966\1G122257.D\ECD1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\1G3966\1G122257.D\ECD2B.CH
Acq On    : 4-19-16 09:00:56 AM                      Operator: brittanp
Sample    : cc3951-25                                Inst    : GC1G
Misc      : op93101,g1g3966,15.6,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 19  9:14 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Apr 18 17:44:15 2016
Response via : Multiple Level Calibration
```





QEdit

(9) Heptachlor Epoxide (B)

3.99min 27.531PPB m

response 36836534

(9) Heptachlor Epoxide #2 (B)

5.32min 24.937PPB

response 358594216

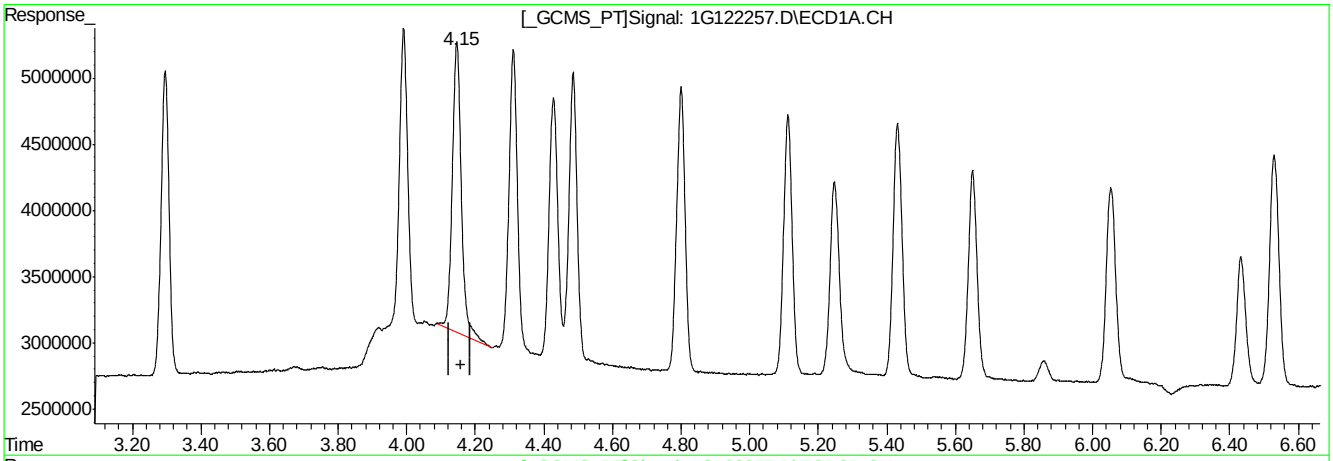
(+) = Expected Retention Time

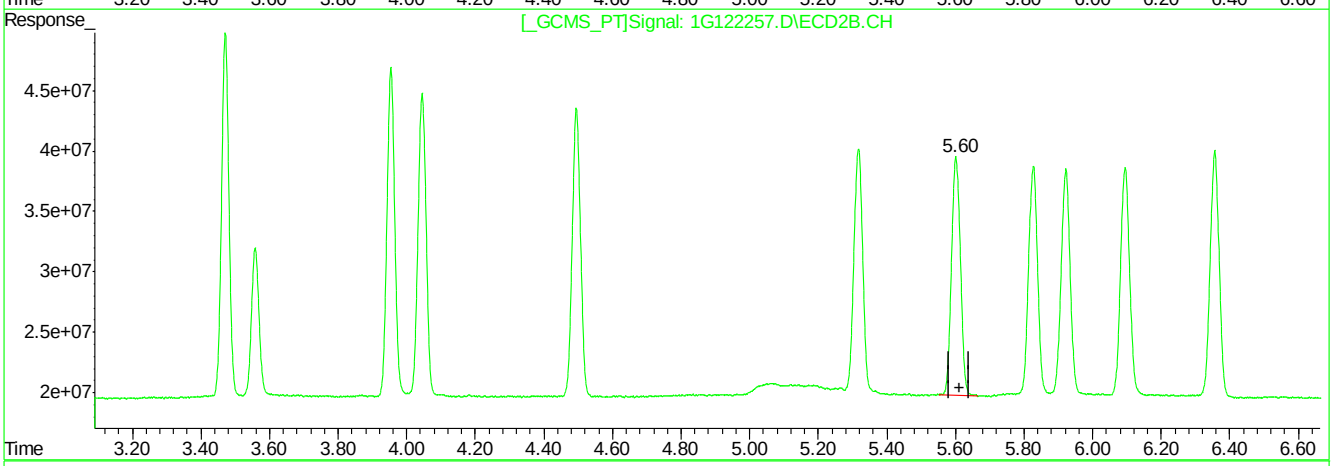
1G122257.D 1PST3951.M Tue Apr 19 09:14:58 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3966\1G122257.D\ECD1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\1G3966\1G122257.D\ECD2B.CH
Acq On    : 4-19-16 09:00:56 AM                      Operator: brittanp
Sample    : cc3951-25                                Inst    : GC1G
Misc      : op93101,g1g3966,15.6,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 19  9:14 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Apr 18 17:44:15 2016
Response via : Multiple Level Calibration
```





QEdit

(10) gamma-Chlordane (B)

4.15min 28.813PPB

response 40630508

(10) gamma-Chlordane #2 (B)

5.60min 24.627PPB

response 354242518

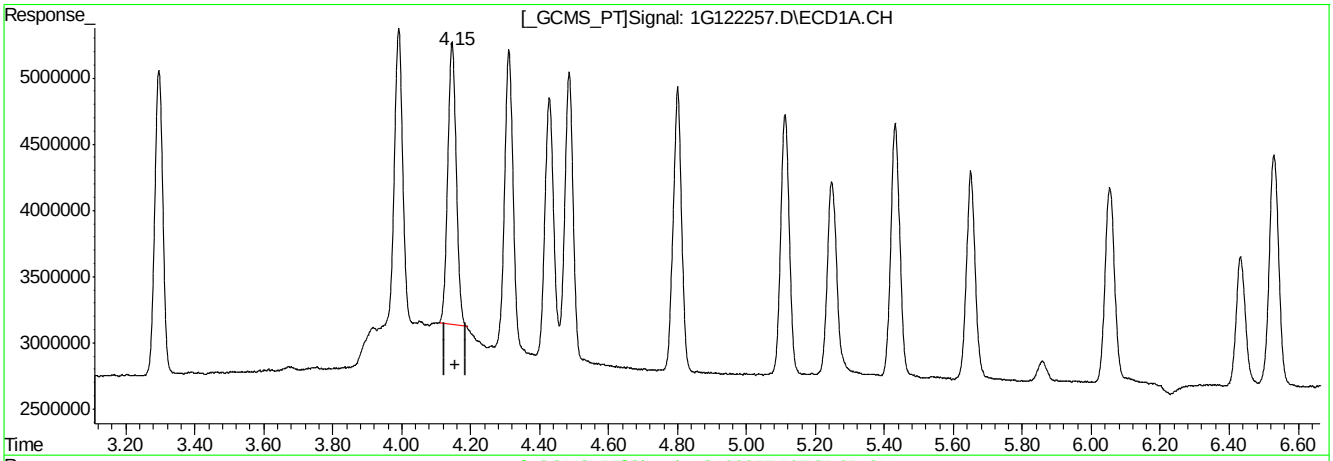
(+) = Expected Retention Time

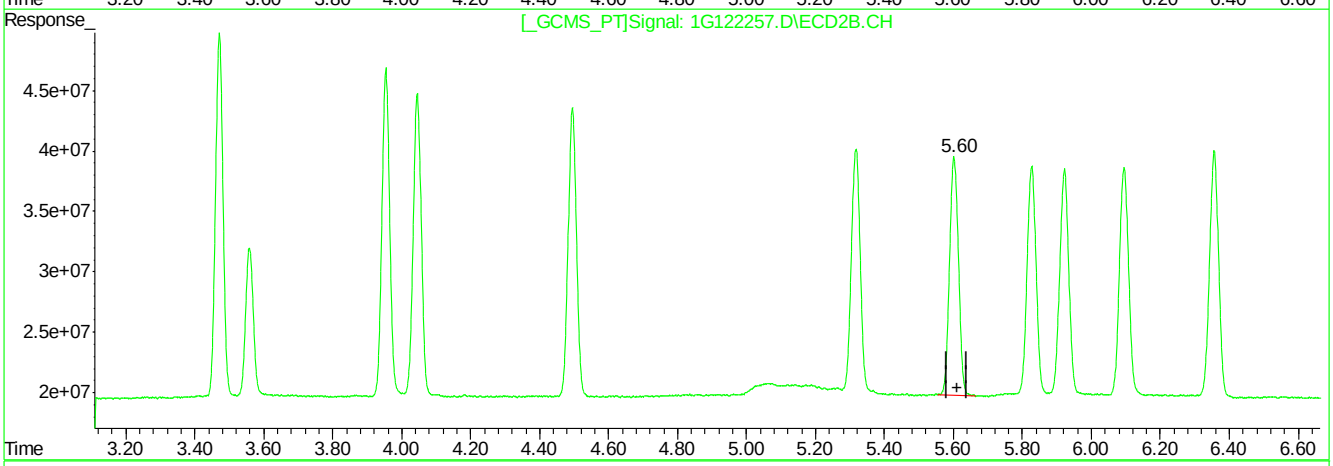
1G122257.D 1PST3951.M Tue Apr 19 09:15:01 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3966\1G122257.D\ECD1A.CH Vial: 2
Signal #2 : C:\MSDCHEM\1\DATA\1G3966\1G122257.D\ECD2B.CH
Acq On    : 4-19-16 09:00:56 AM                      Operator: brittanp
Sample    : cc3951-25                                Inst    : GC1G
Misc      : op93101,g1g3966,15.6,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 19  9:14 2016  Quant Results File: 1PST3951.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Mon Apr 18 17:44:15 2016
Response via : Multiple Level Calibration
```





QEdit

(10) gamma-Chlordane (B)

4.15min 25.897PPB m

response 36519072

(10) gamma-Chlordane #2 (B)

5.60min 24.627PPB

response 354242518

(+) = Expected Retention Time

1G122257.D 1PST3951.M Tue Apr 19 09:15:08 2016 RPT1

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3966\1G122277.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3966\1G122277.D\ECD2B.CH
Acq On : 4-19-16 04:33:19 PM Operator: dharas
Sample : cc3951-50 Inst : GC1G
Misc : op93135,g1g3966,15.6,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 19 17:08 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Tue Apr 19 11:57:37 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #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-nitrob	1.17	1.53	61304775	818.2E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.17	1.53	61304775	818.2E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.17	1.53	61304775	818.2E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	63755795	703.0E6	54.401	54.605
Spiked Amount	40.000 Range	30 - 150	Recovery	=	136.00%	136.51%	
24) SA	Decachlorobiphen	8.94	10.87	100.3E6	477.2E6	61.980	56.354
Spiked Amount	40.000		Recovery	=	154.95%	140.88%	
	Target Compounds						
3) A	alpha-BHC	2.22	3.04	113.8E6	1025.4E6	81.745	52.778
4) MA	gamma-BHC	2.51	3.47	79064521	903.1E6	59.534	51.732
5) MA	Heptachlor	2.98	4.05	84463047	811.3E6	59.212	51.696
6) B	beta-BHC	2.59	3.56	35854972	364.7E6	53.053	49.178
7) B	delta-BHC	2.76	3.96	69677024	851.4E6	59.587	53.115
8) MB	Aldrin	3.30	4.50	80200482	810.5E6	60.376	51.665
9) B	Heptachlor Epoxi	3.99	5.32	79144240	732.5E6	59.868	51.569
10) B	gamma-Chlordane	4.15	5.60	79061307	729.5E6	56.744	51.343
11) B	alpha-Chlordane	4.31	5.83	79296591	696.6E6	59.042	50.704
12) A	Endosulfan I	4.49	5.92	80116119	697.7E6	62.733	52.013
13) B	4,4'-DDE	4.43	6.10	73199948	713.8E6	59.657	50.468
14) MA	Dieldrin	4.80	6.36	79392879	767.2E6	61.404	51.082
15) MA	Endrin	5.11	6.86	74329152	703.4E6	61.456	53.979
16) A	4,4'-DDD	5.25	7.05	62178080	626.1E6	60.999	52.164
17) B	Endosulfan II	5.43	7.21	72927952	656.7E6	59.421	50.605
18) MA	4,4'-DDT	5.65	7.58	53227731	446.8E6	54.799	47.571
19) B	Endrin Aldehyde	6.06	7.79	58144119	504.3E6	55.911	50.138
20) B	Endosulfan Sulfa	6.73	8.26	65762149	540.5E6	58.964	49.488
21) A	Methoxychlor	6.44	8.84	35938820	207.7E6	54.941	41.668
22)	Mirex	6.53	9.15	70381115	420.0E6	56.789	50.293
23) B	Endrin Ketone	7.16	9.22	69330859	551.0E6	53.226	47.430

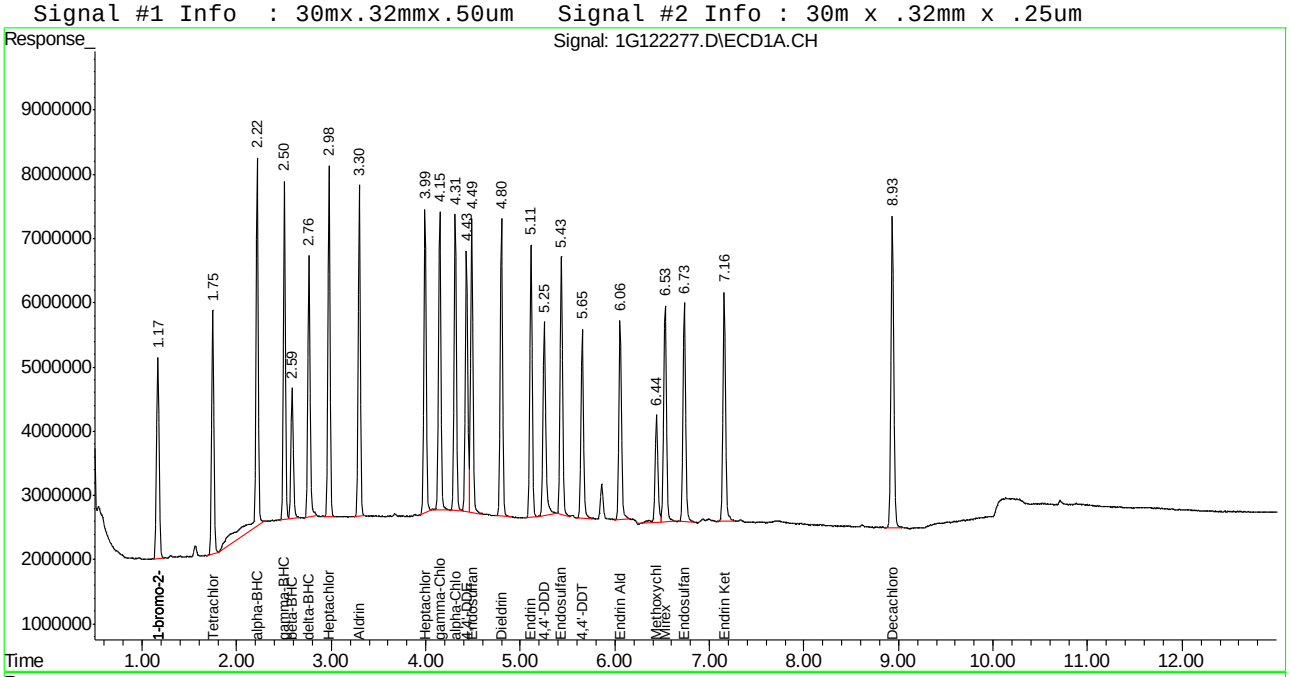
(f)=RT Delta > 1/2 Window (m)=manual int.

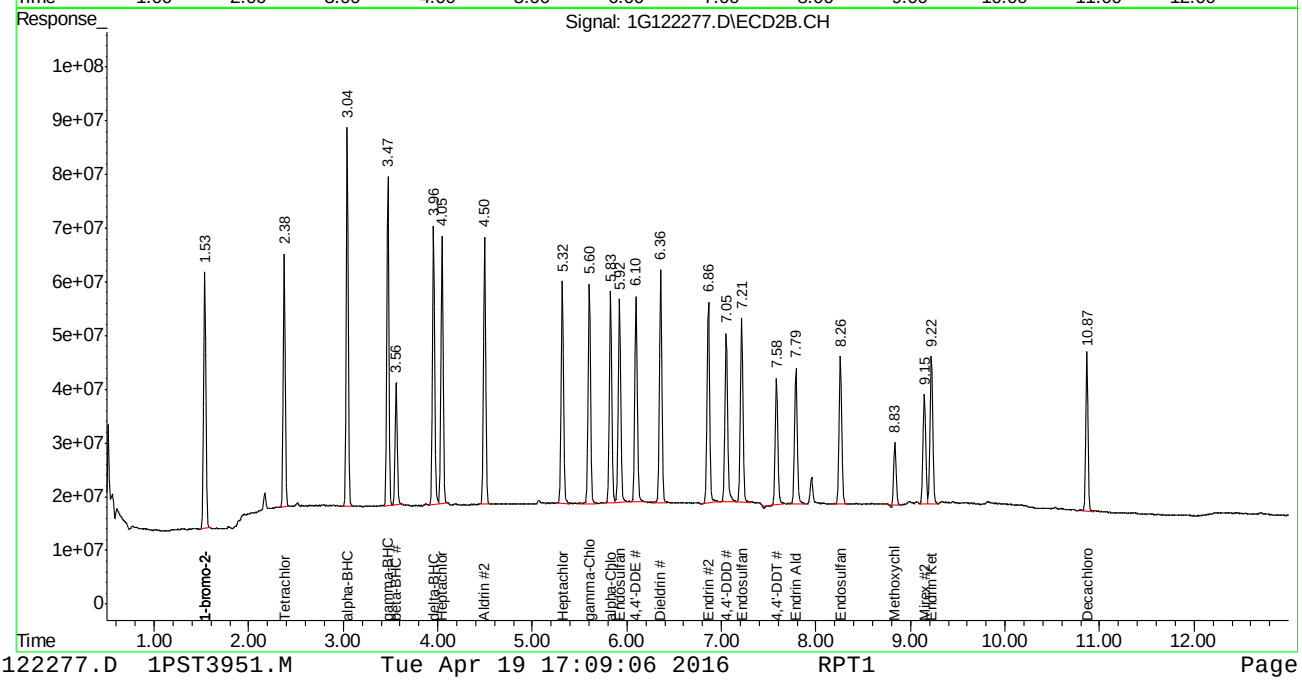
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3966\1G122277.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3966\1G122277.D\ECD2B.CH
Acq On : 4-19-16 04:33:19 PM Operator: dharas
Sample : cc3951-50 Inst : GC1G
Misc : op93135,g1g3966,15.6,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 19 17:08 2016 Quant Results File: 1PST3951.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3951.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Tue Apr 19 11:57:37 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3951.M

Volume Inj. : 1ul/column
Signal #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 : 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

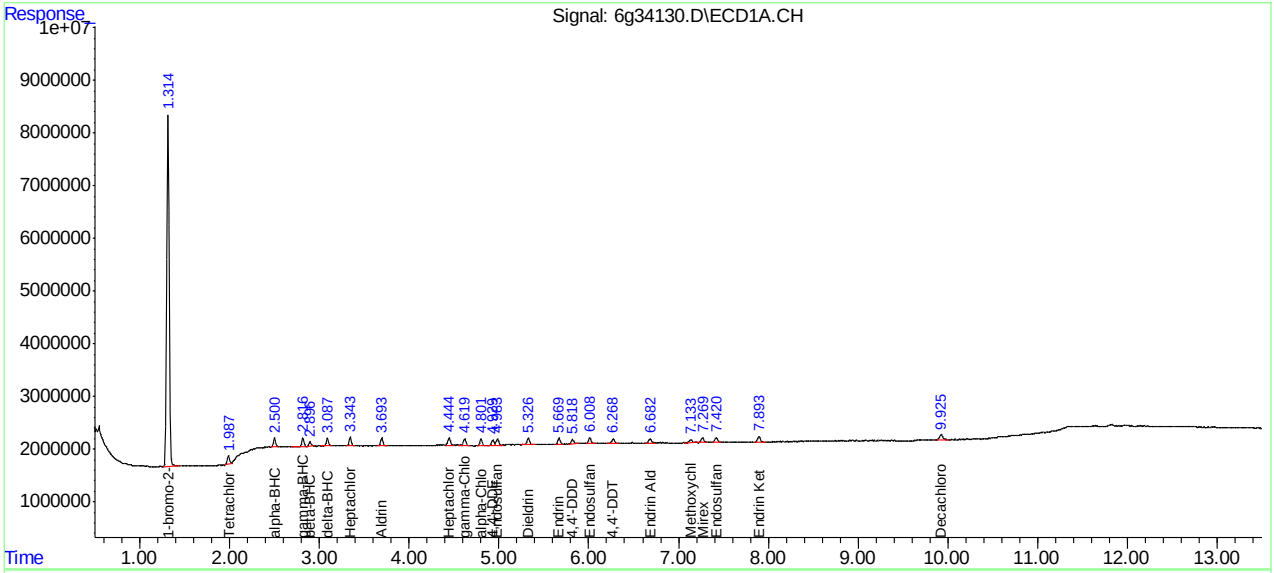
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

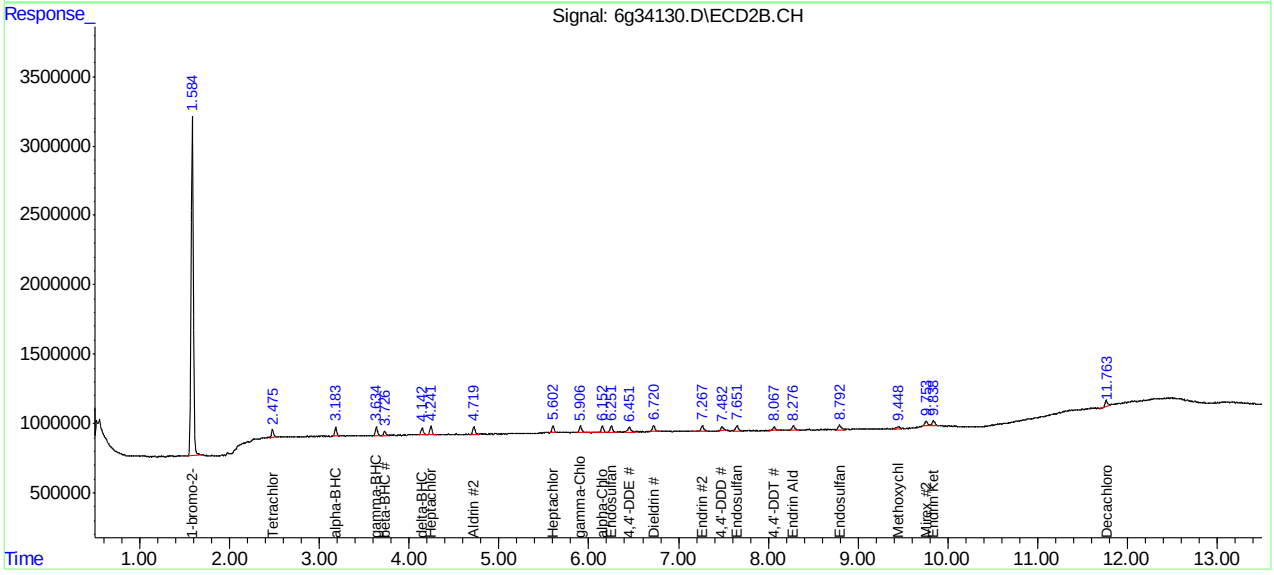
Quantitation Report (QT Reviewed)

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





SGS ACCUTEST JC18516

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

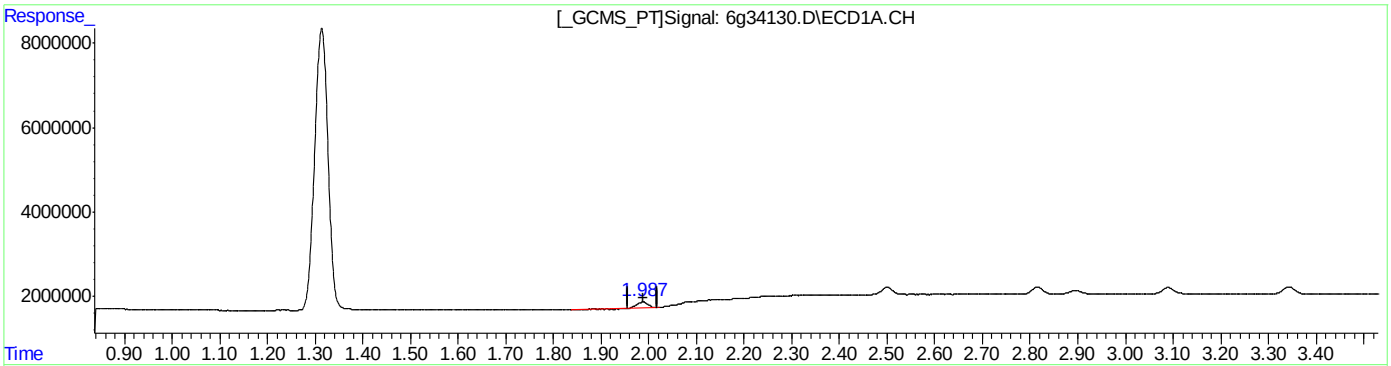
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	1.99	Poor instrument integration
Tetrachloro-m-xylene	877-09-8	2	2.48	Poor instrument integration
alpha-BHC	319-84-6	1	2.50	Poor instrument integration
beta-BHC	319-85-7	1	2.90	Poor instrument integration
beta-BHC	319-85-7	2	3.73	Poor 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

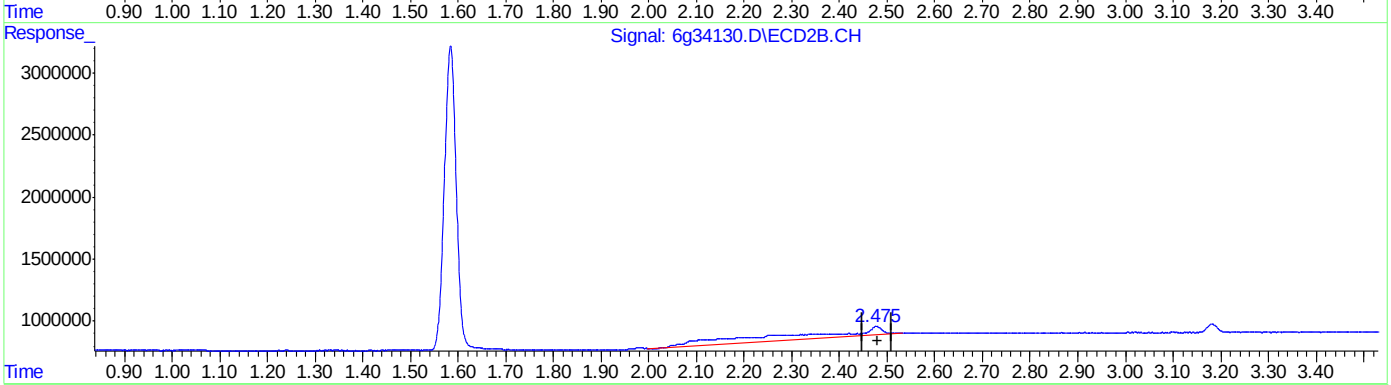
Quantitation Report (Qedit)

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

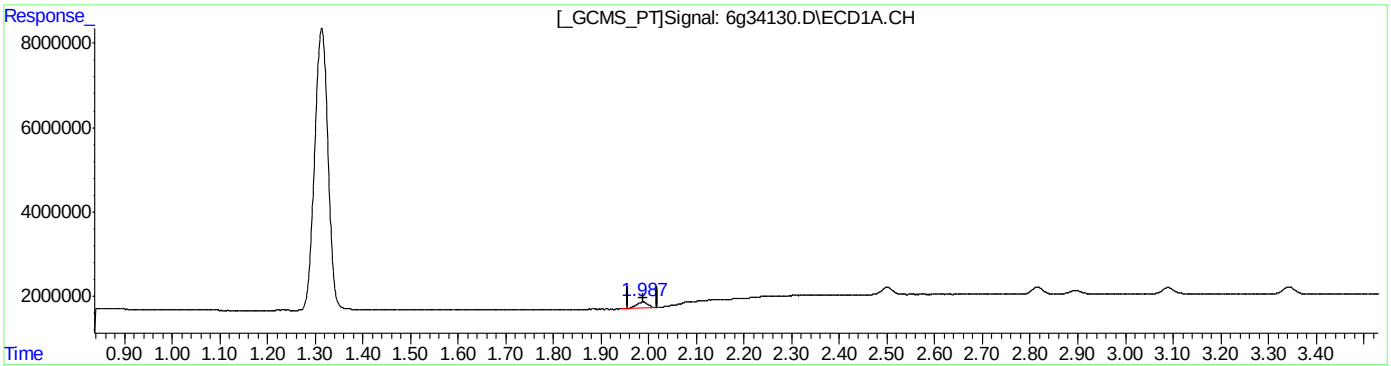
(+) = Expected Retention Time

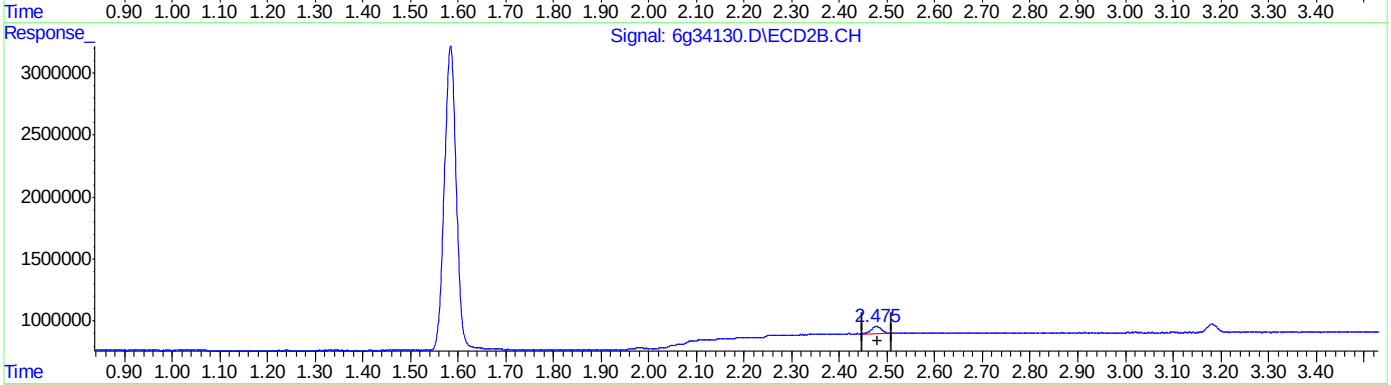
Quantitation Report (Qedit)

```
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

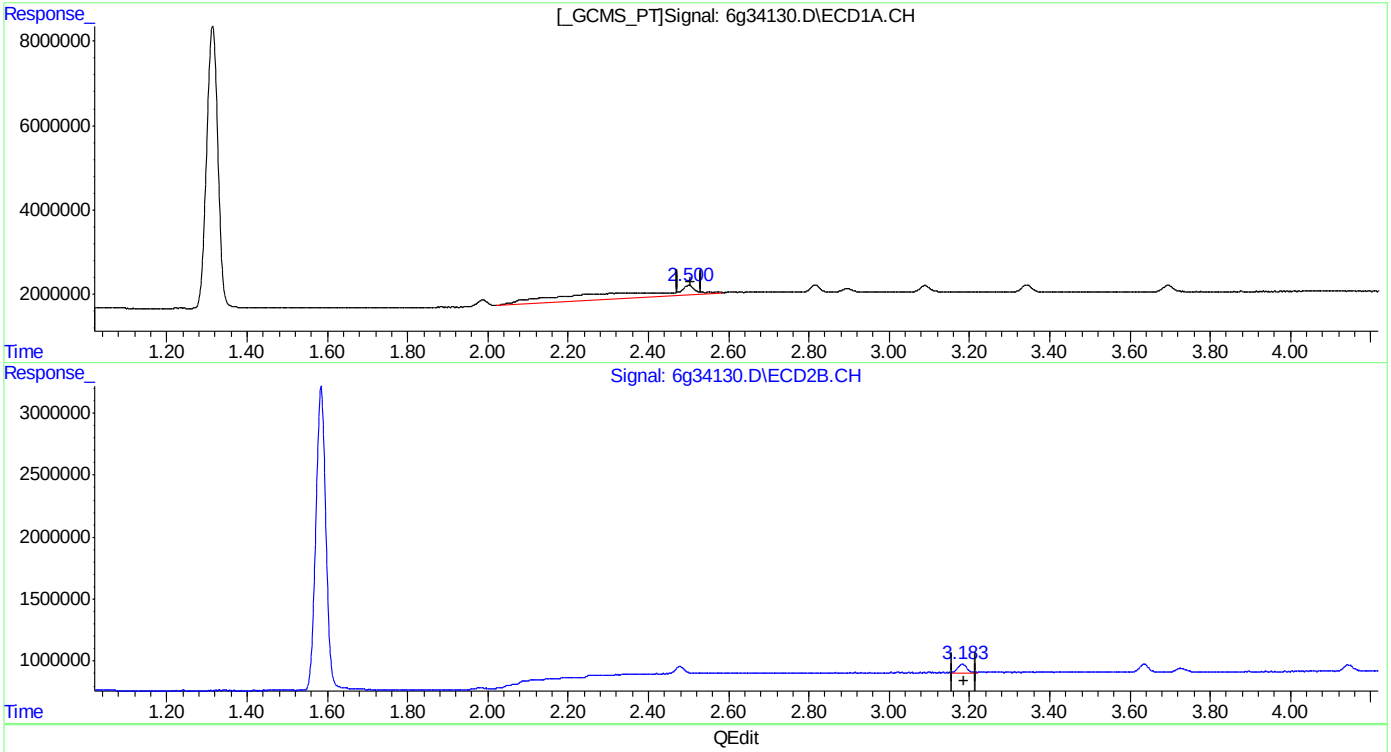
6PST987.M Mon Apr 18 10:52:29 2016

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



QEdit

(3) alpha-BHC (A)
2.501min 11.218PPB
response 32431486

(3) alpha-BHC #2 (A)
3.182min 1.076PPB
response 1037508

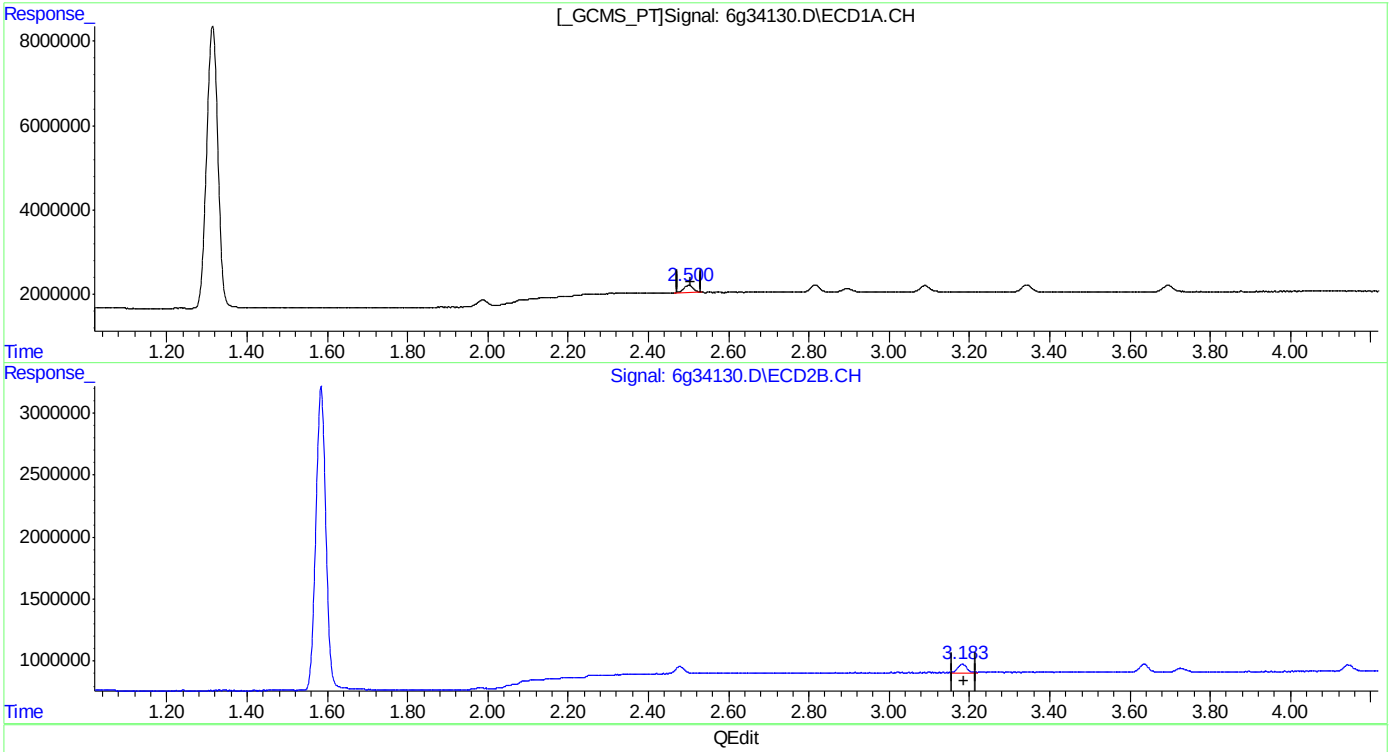
(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:52:32 2016

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

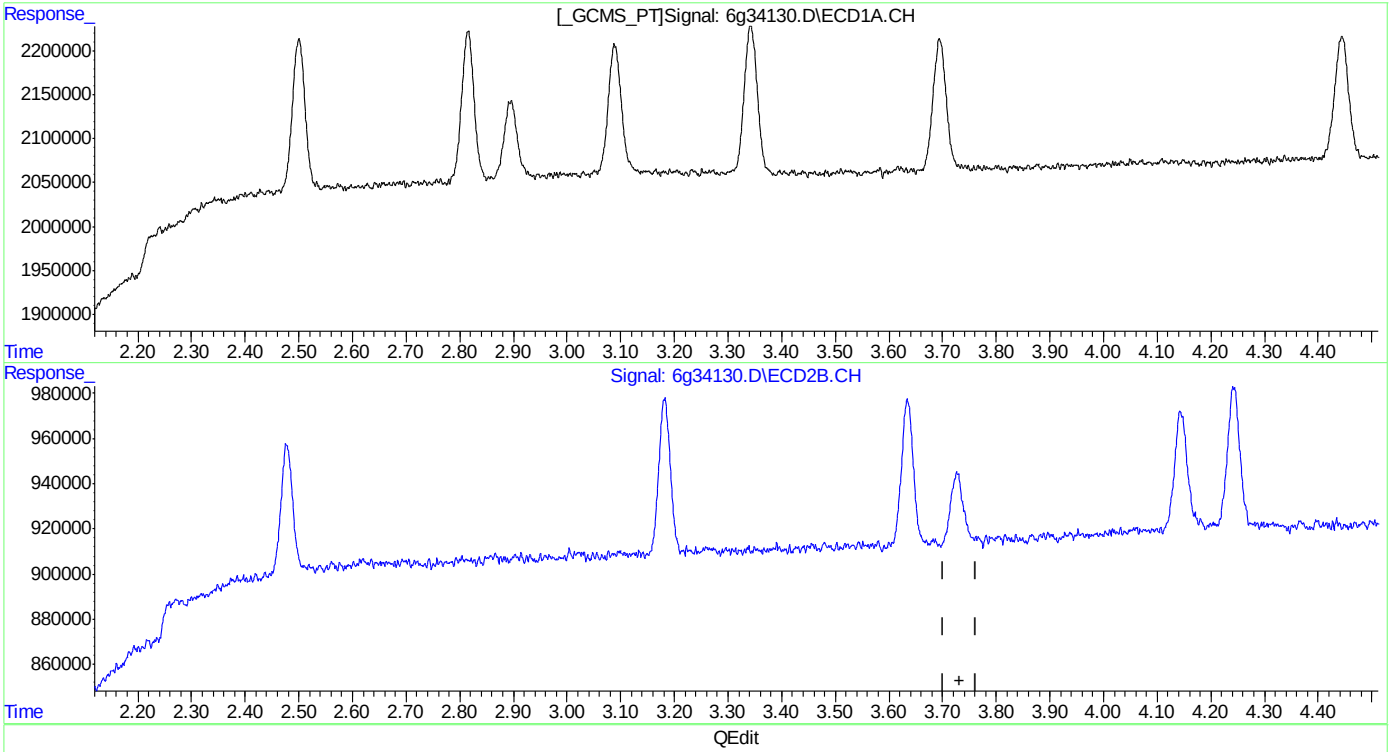
(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:52:43 2016

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
6PST987.M Mon Apr 18 10:52:48 2016

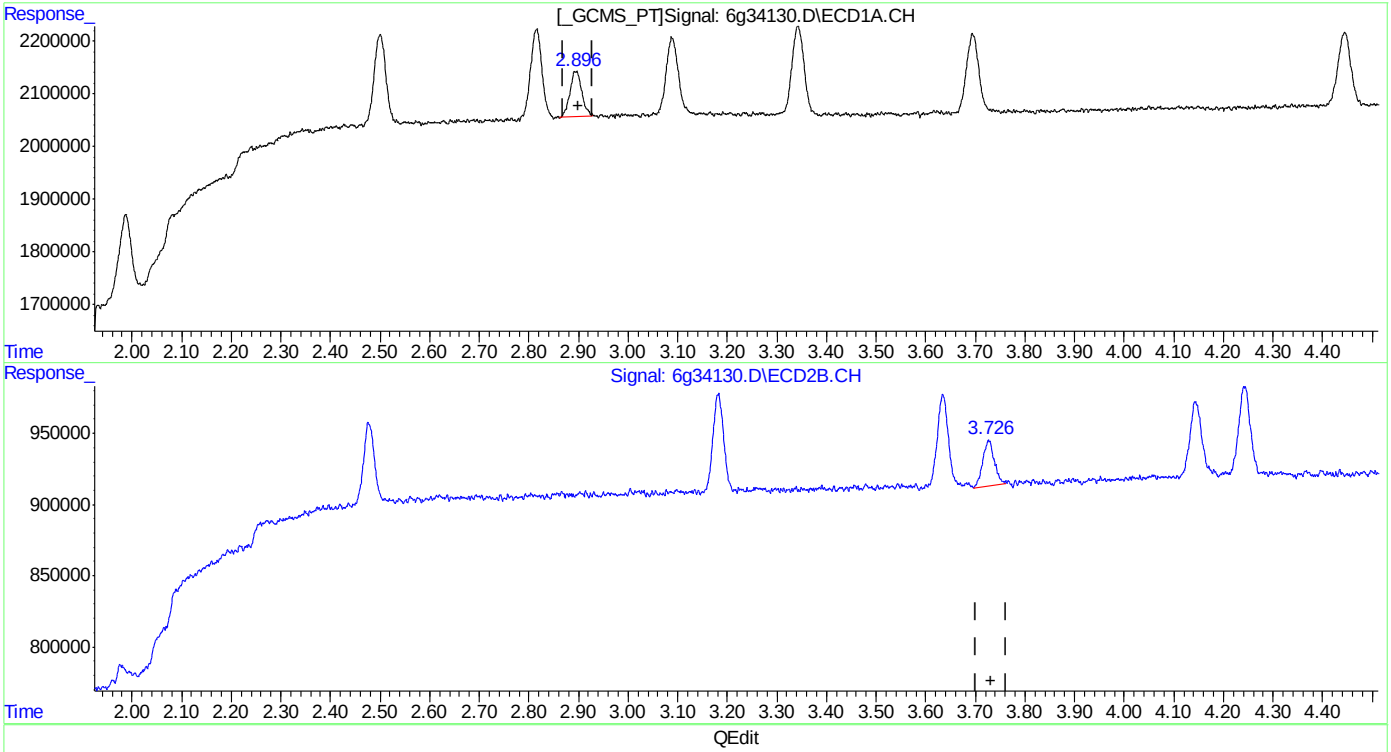
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34130.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:49 pm
Operator : dharas
Sample : ic987-1
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:51:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(6) beta-BHC (B)
2.896min 1.084PPB m
response 1435856

(6) beta-BHC #2 (B)
3.726min 1.168PPB m
response 516127

(+) = Expected Retention Time

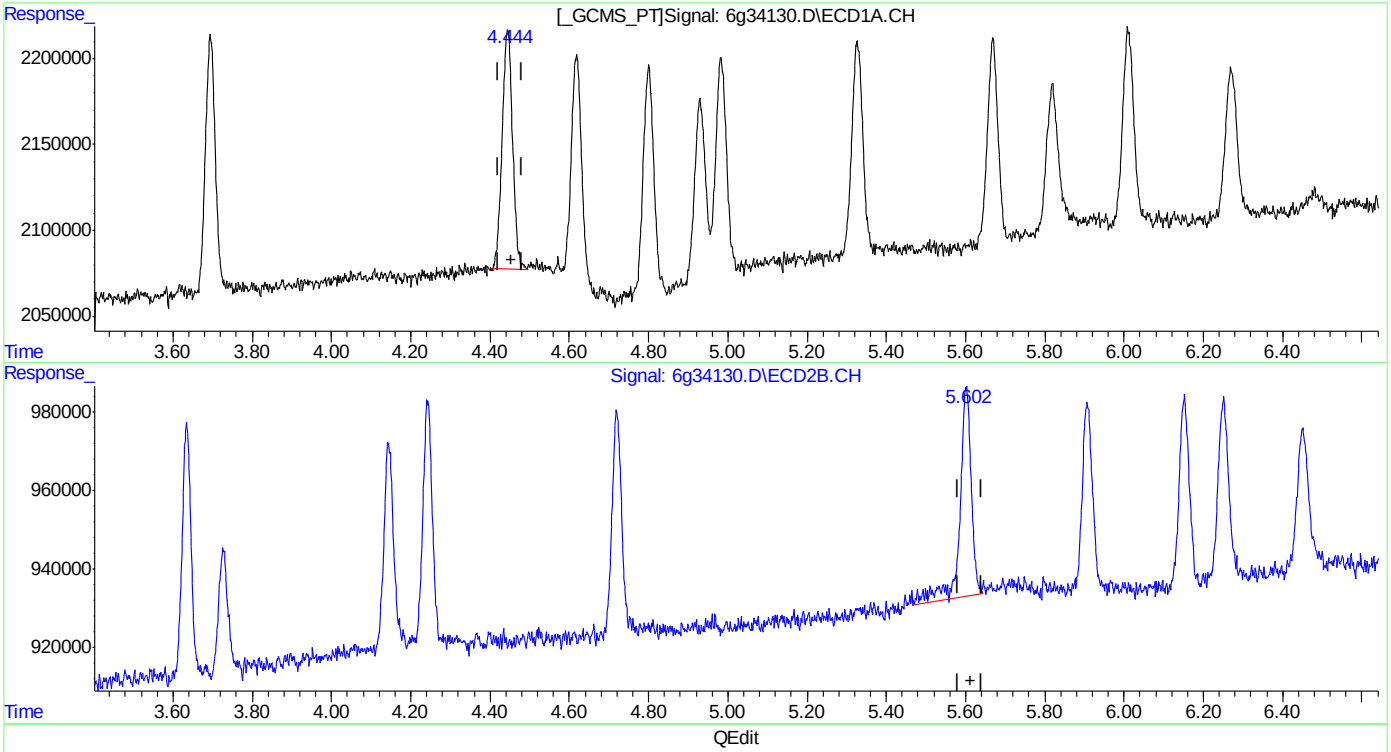
SGS ACCUTEST JC18516

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

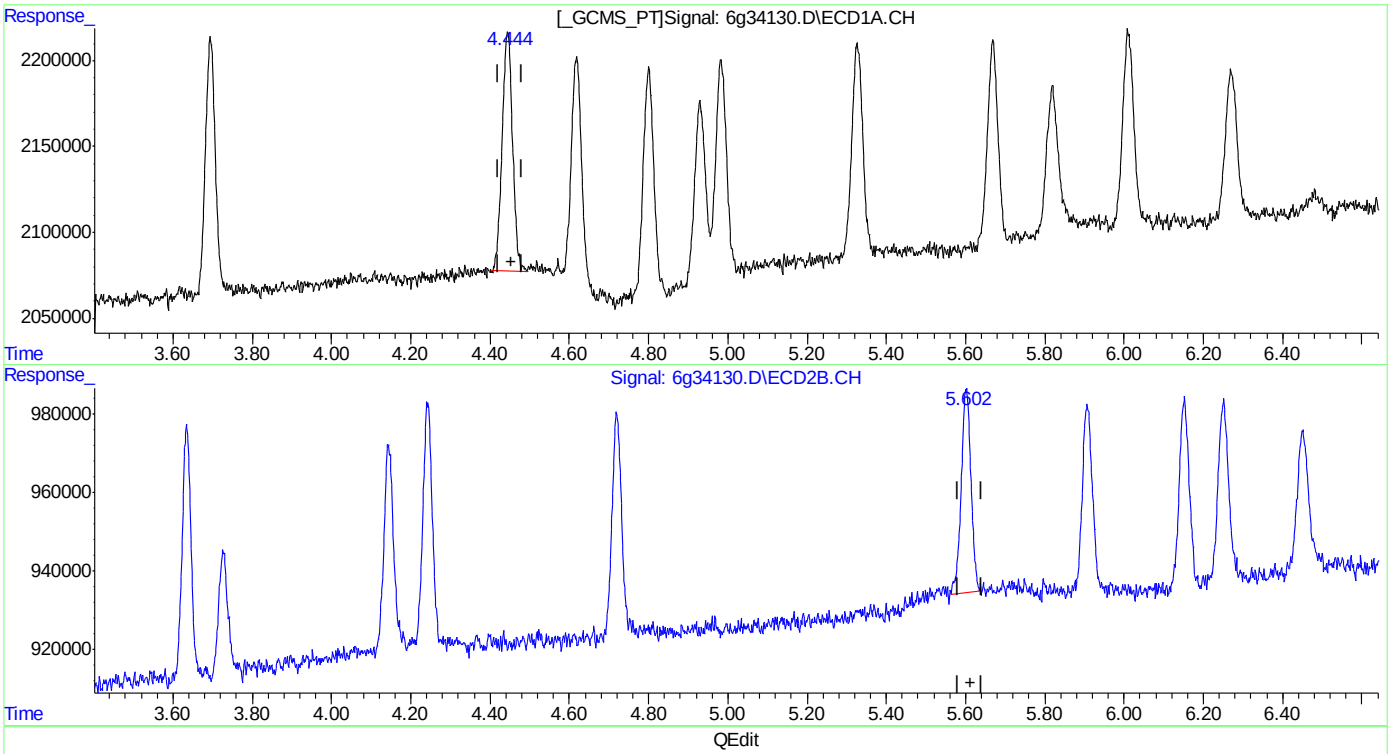
SGS ACCUTEST JC18516

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

(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

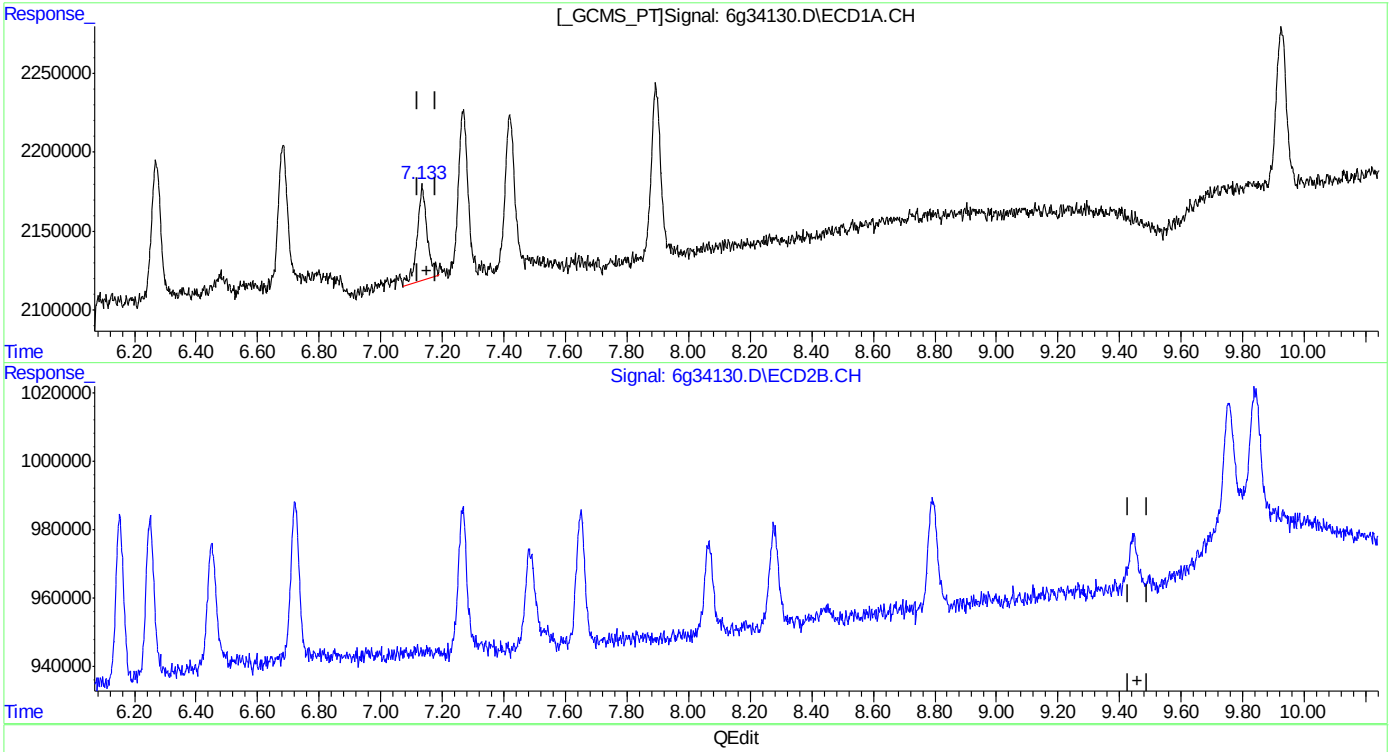
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34130.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:49 pm
Operator : dharas
Sample : ic987-1
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:51:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(21) Methoxychlor (A)
7.134min 1.439PPB
response 1359857

(21) Methoxychlor #2 (A)
0.000min 0.000PPB
response 0

(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:53:36 2016

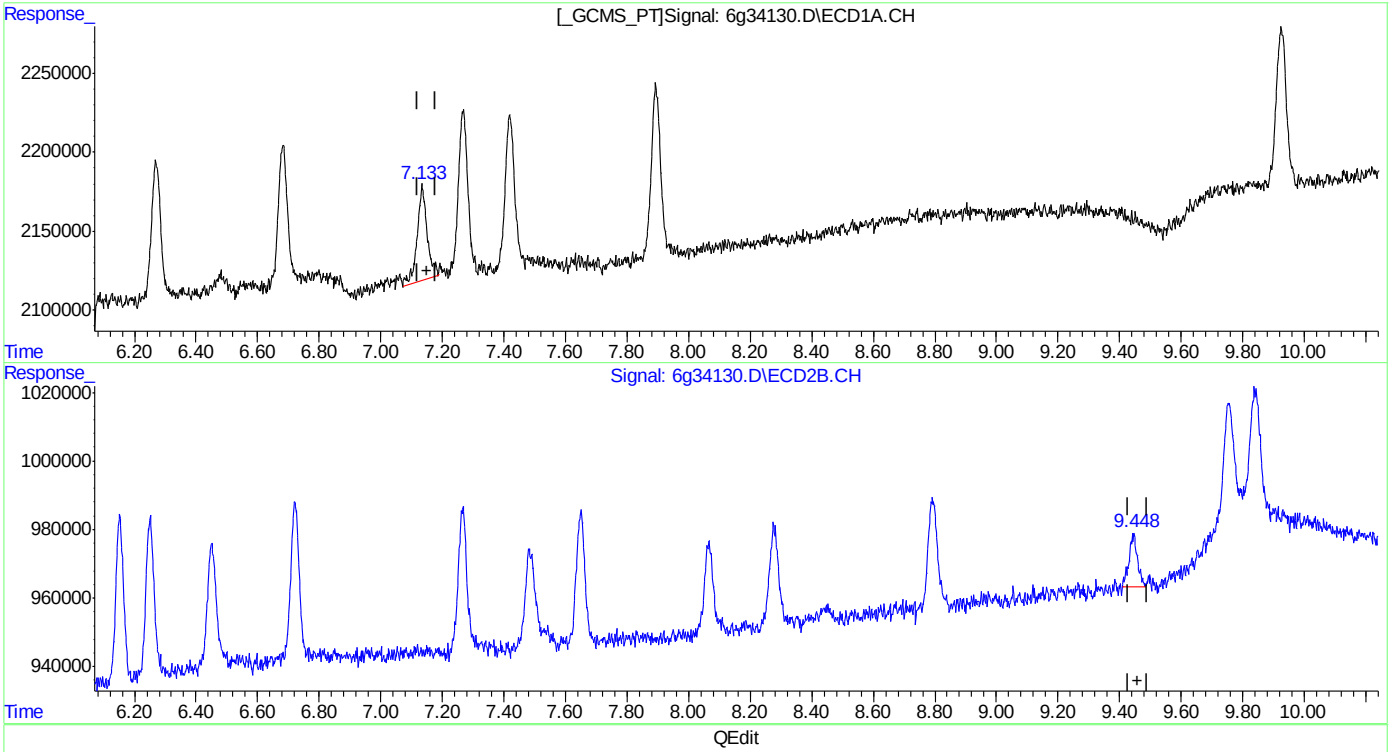
SGS ACCUTEST JC18516

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

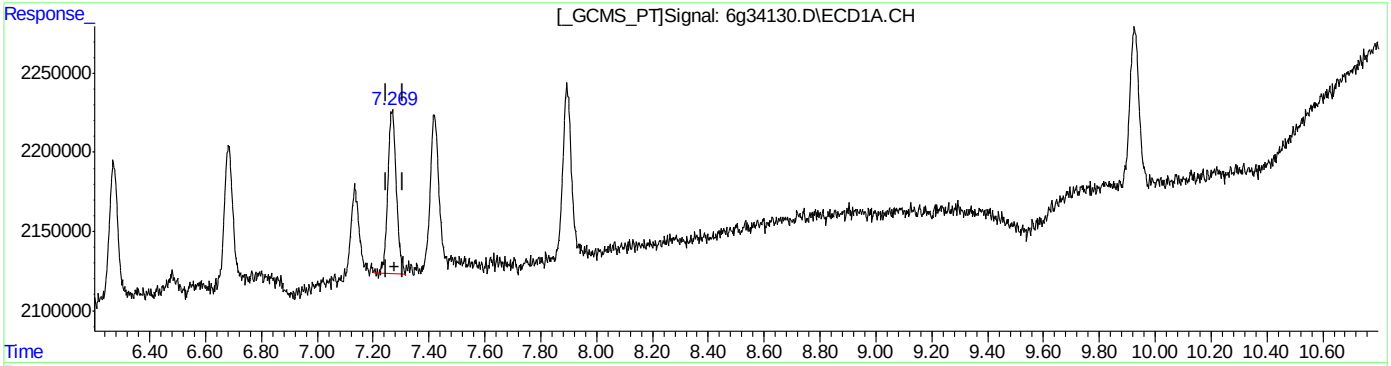
SGS ACCUTEST JC18516

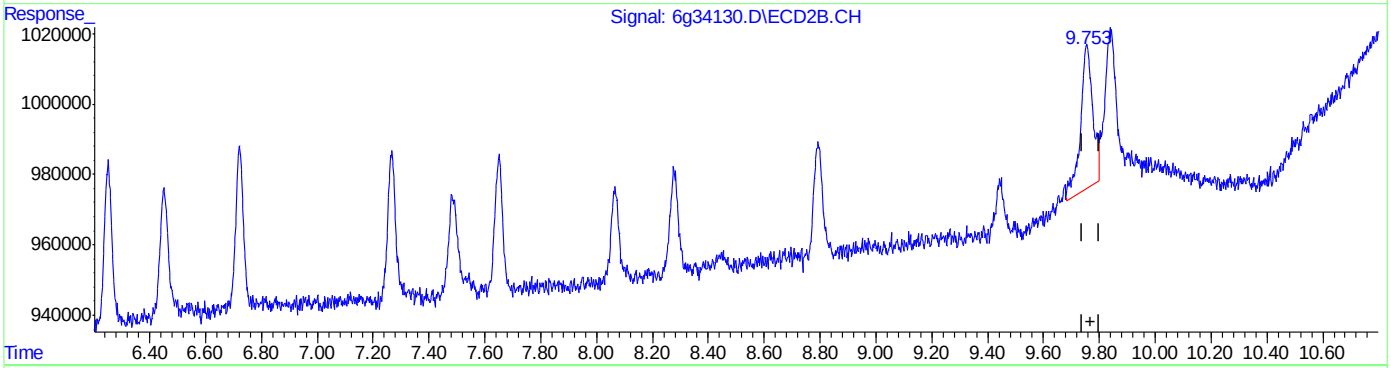
Quantitation Report (Qedit)

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

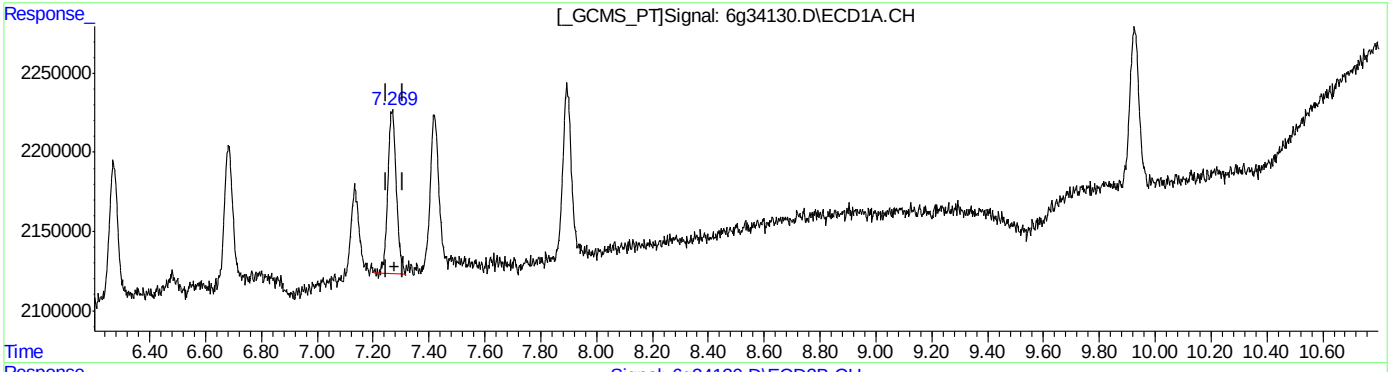
(+) = Expected Retention Time

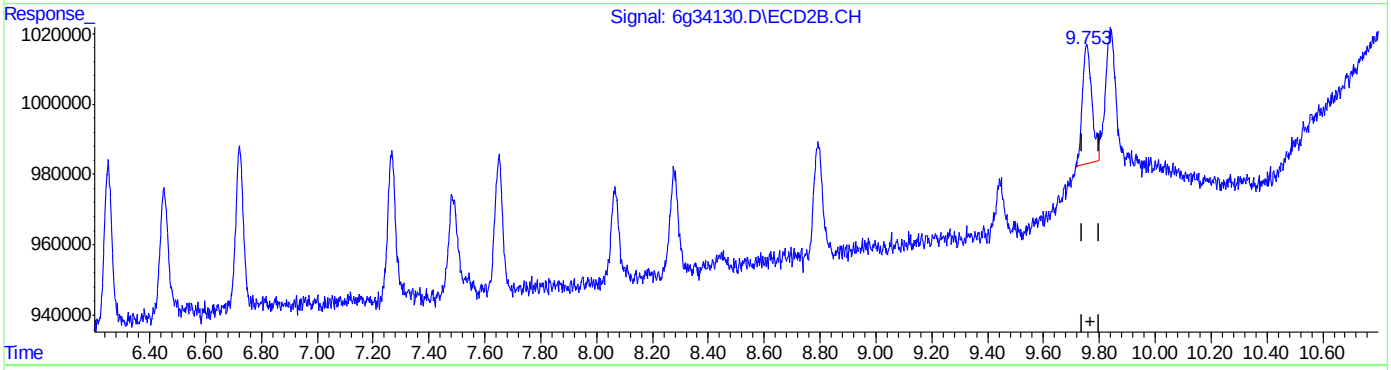
Quantitation Report (Qedit)

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

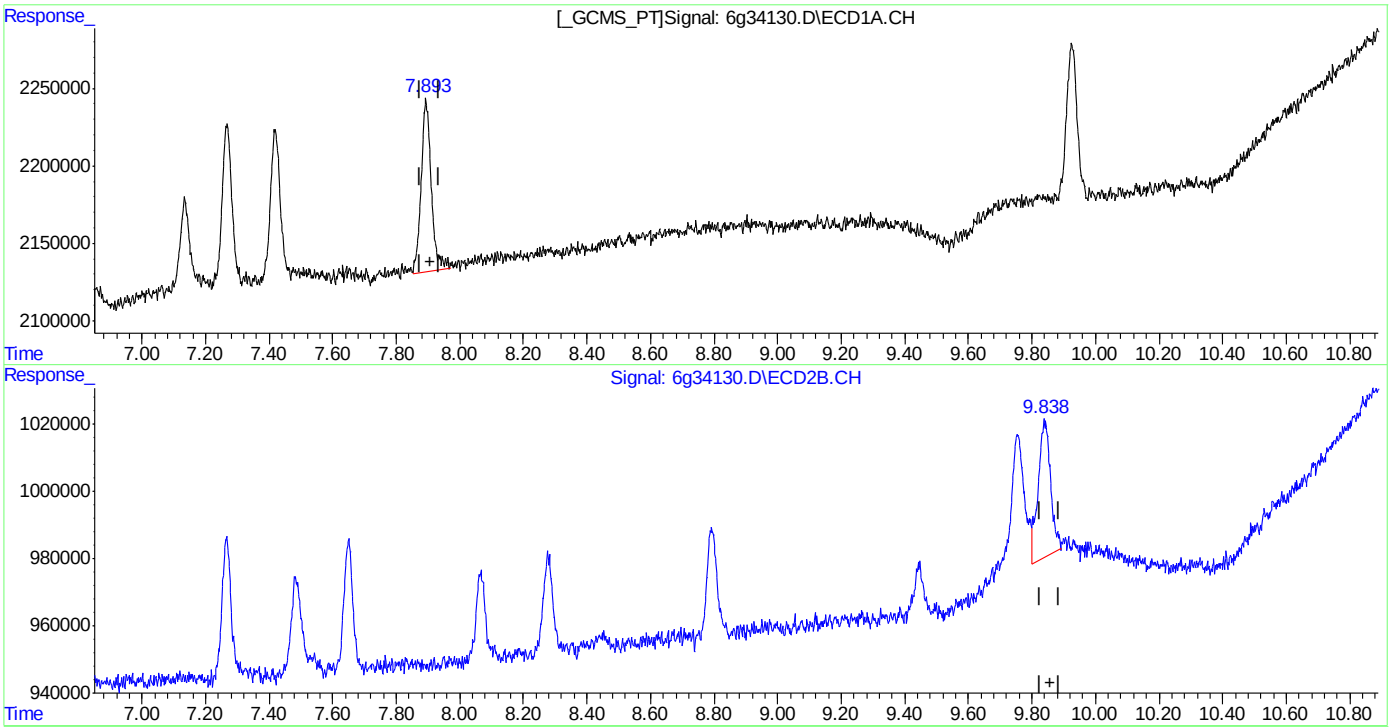
(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:54:08 2016

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



(23) Endrin Ketone (B)
7.893min 1.257PPB
response 2459754

(23) Endrin Ketone #2 (B)
9.844min 1.769PPB
response 1111083

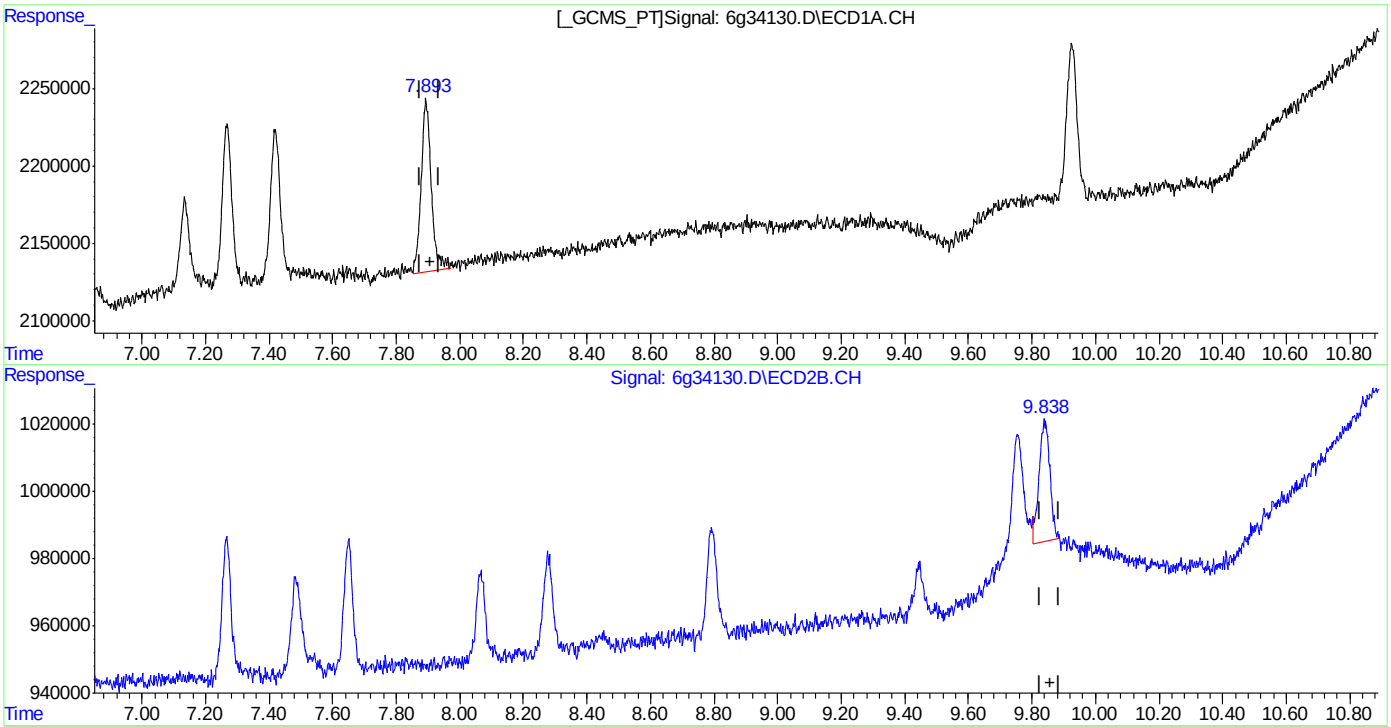
(+) = Expected Retention Time

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



(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 JC18516

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.

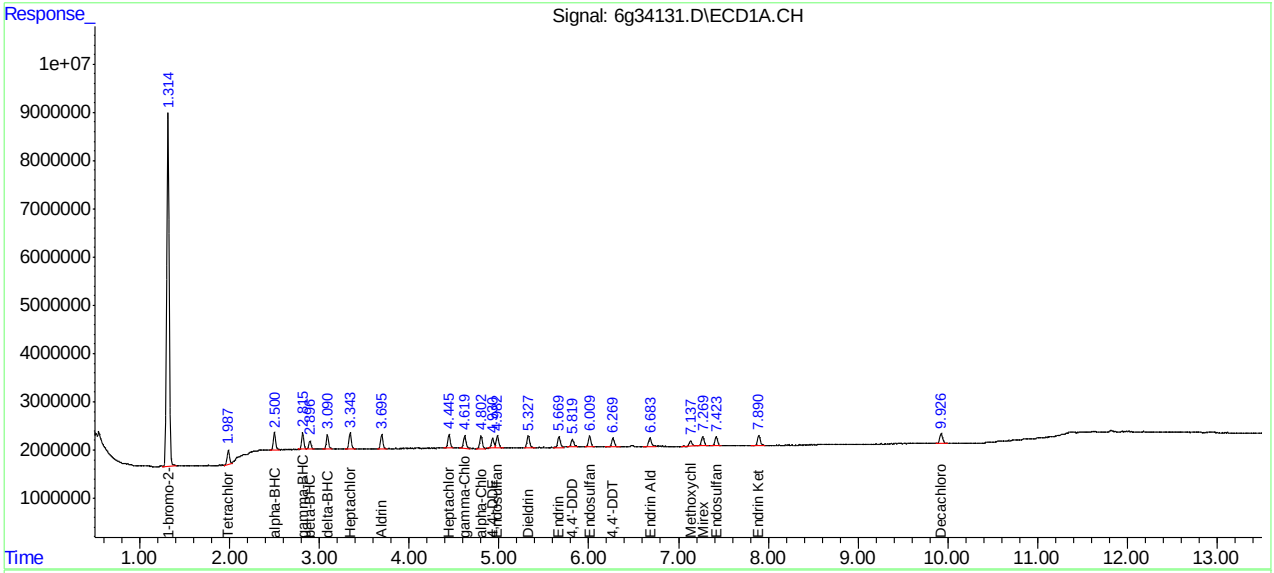
9.6.18
9

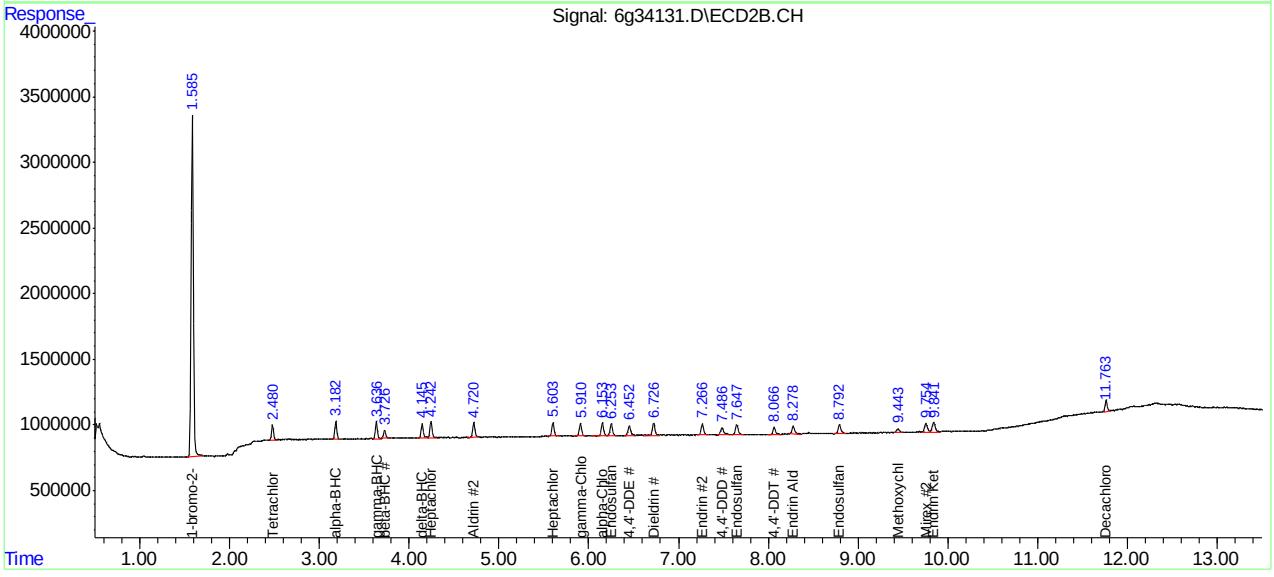
Quantitation Report (QT Reviewed)

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





SGS ACCUTEST JC18516

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

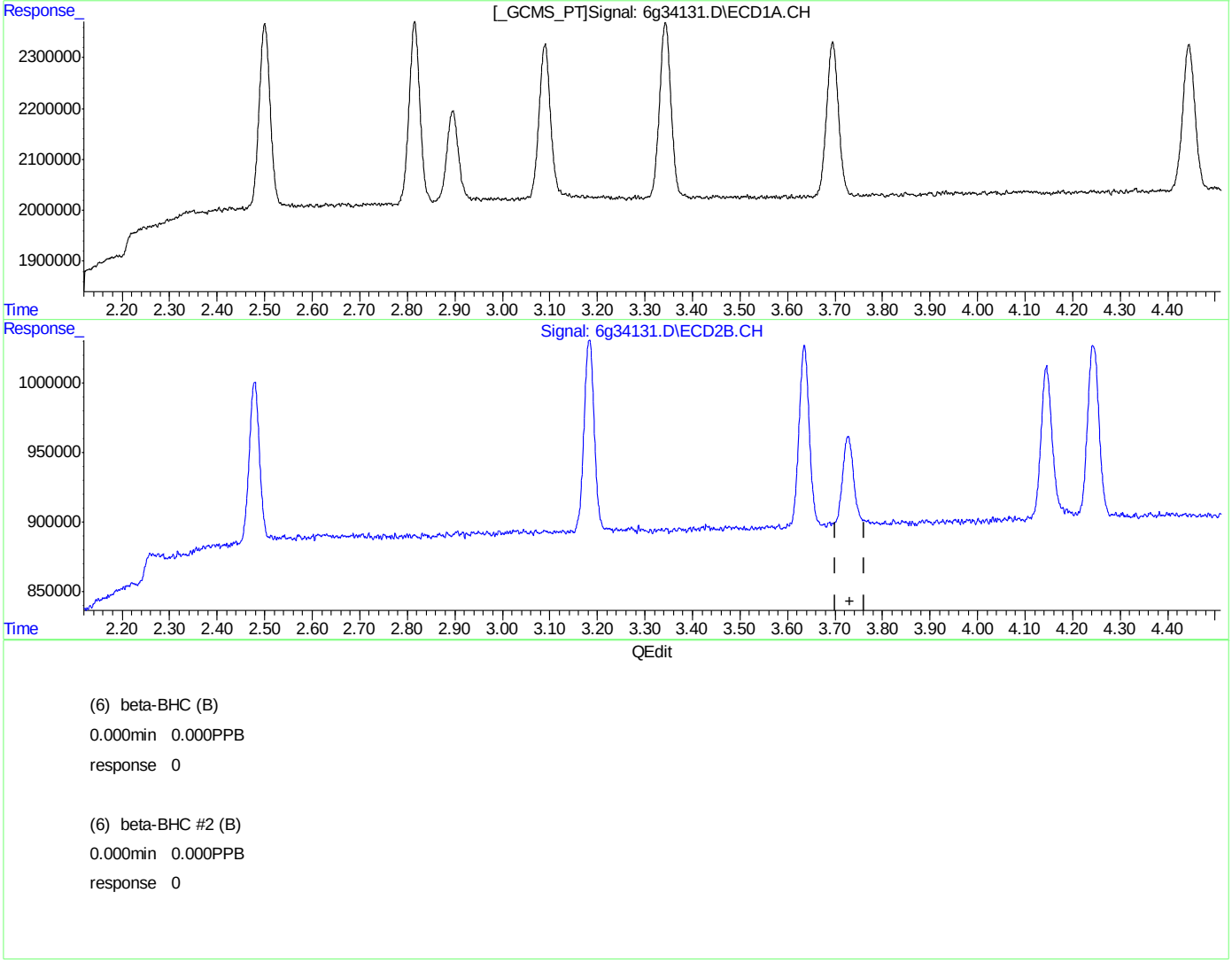
Parameter	CAS	Sig#	R.T. (min.)	Reason
beta-BHC	319-85-7	1	2.90	Poor instrument integration
beta-BHC	319-85-7	2	3.73	Poor instrument integration
Methoxychlor	72-43-5	2	9.44	Poor instrument integration
Decachlorobiphenyl	2051-24-3	2	11.76	Poor instrument integration

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

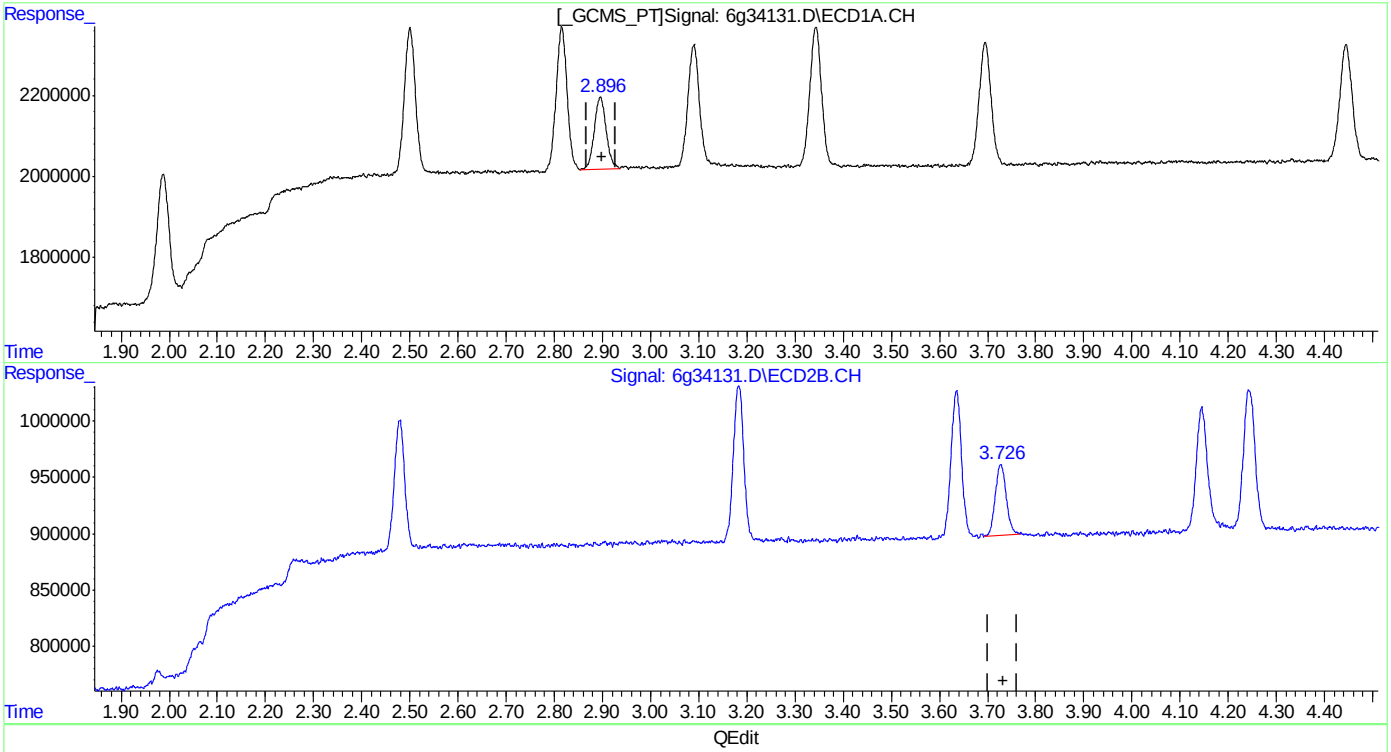
(+) = Expected Retention Time

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



(6) beta-BHC (B)
2.896min 2.186PPB m
response 3076723

(6) beta-BHC #2 (B)
3.726min 2.096PPB m
response 981586

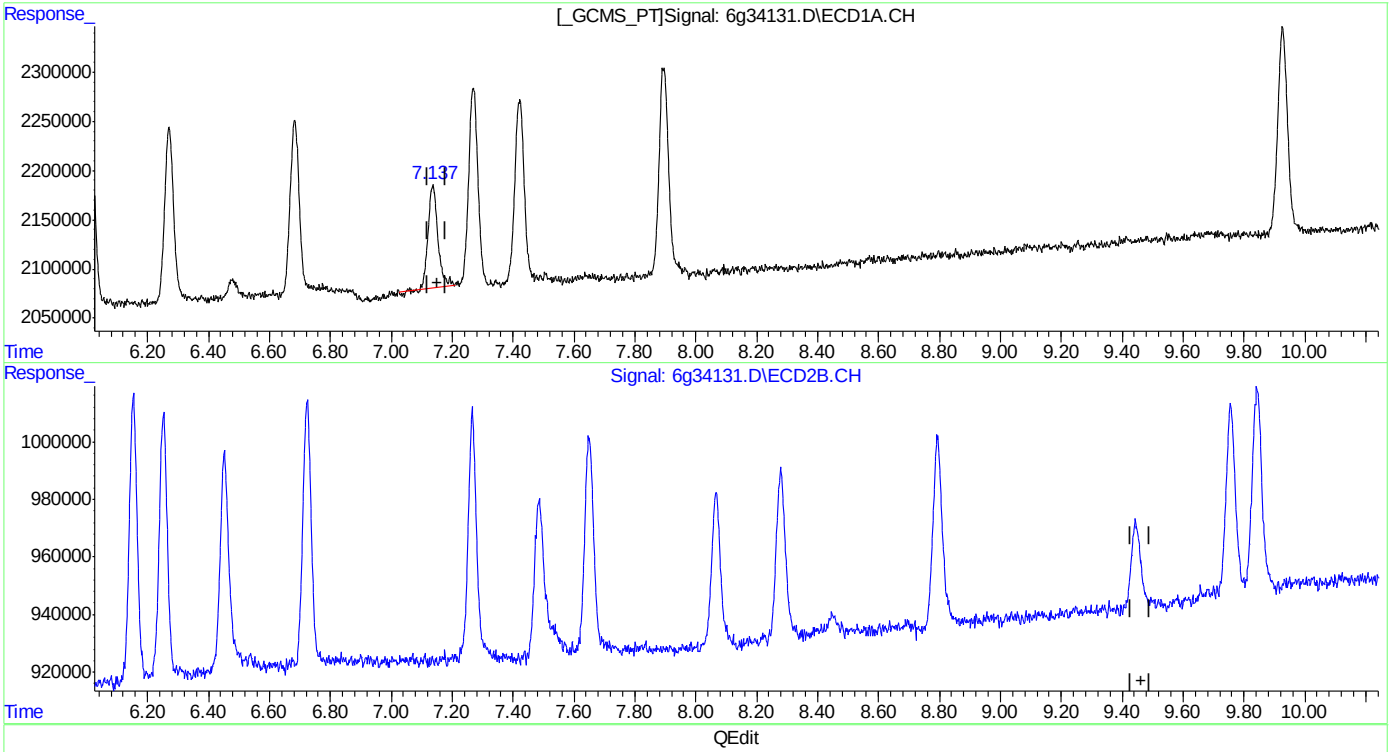
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34131.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 4:05 pm
Operator : dharas
Sample : ic987-2
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:41:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(21) Methoxychlor (A)
7.137min 2.273PPB
response 2283360

(21) Methoxychlor #2 (A)
0.000min 0.000PPB
response 0

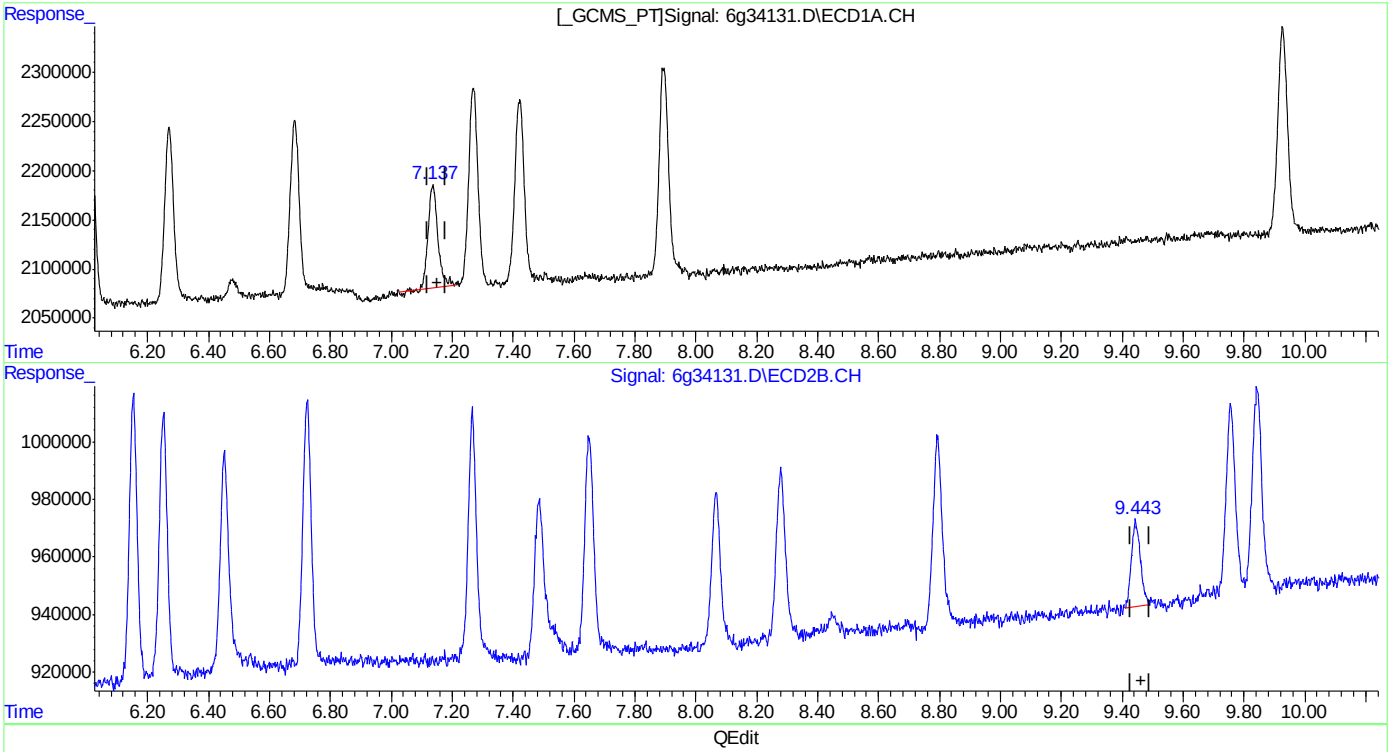
(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:42:14 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34131.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 4:05 pm
Operator : dharas
Sample : ic987-2
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:41:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(21) Methoxychlor (A)
7.137min 2.273PPB
response 2283360

(21) Methoxychlor #2 (A)
9.443min 2.615PPB m
response 614080

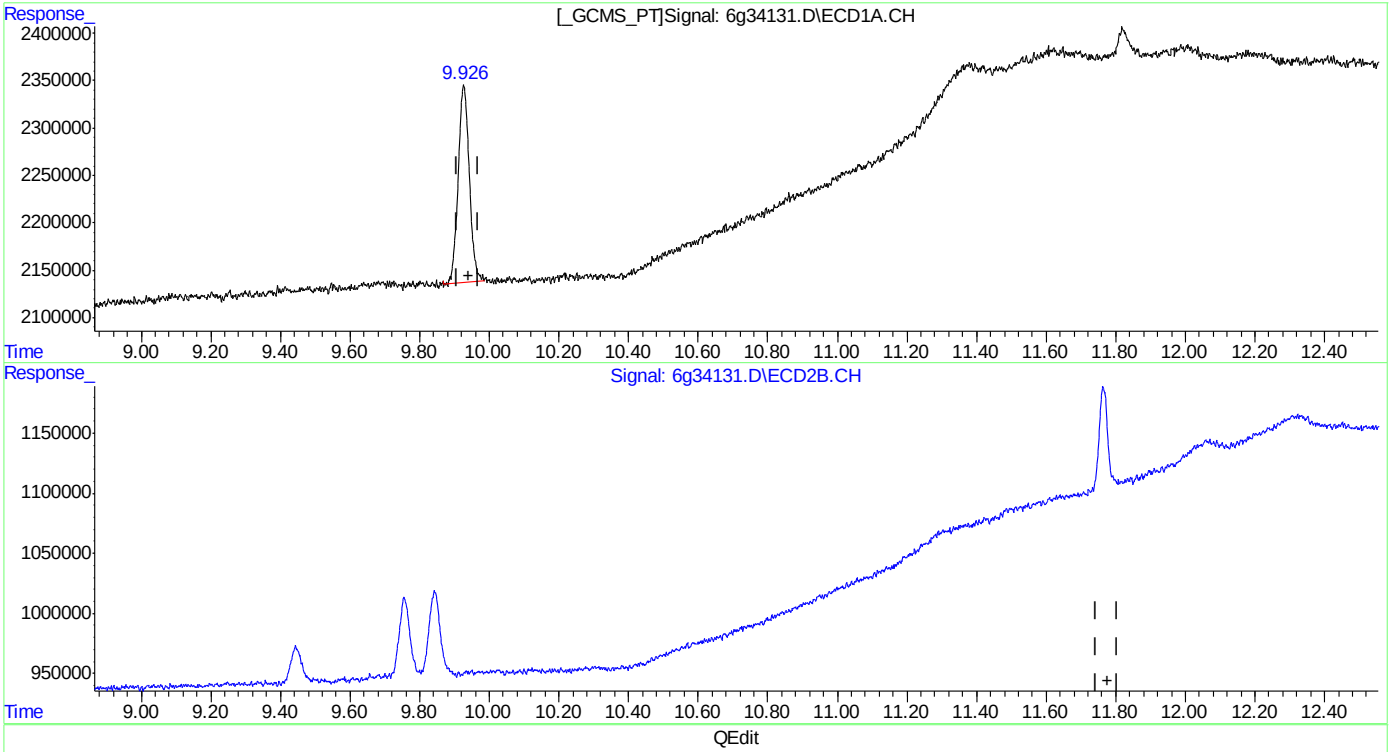
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34131.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 4:05 pm
Operator : dharas
Sample : ic987-2
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:41:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(24) Decachlorobiphenyl (SAB)
9.926min 2.107PPB
response 4607200

(24) Decachlorobiphenyl #2 (SAB)
0.000min 0.000PPB
response 0

(+) = Expected Retention Time

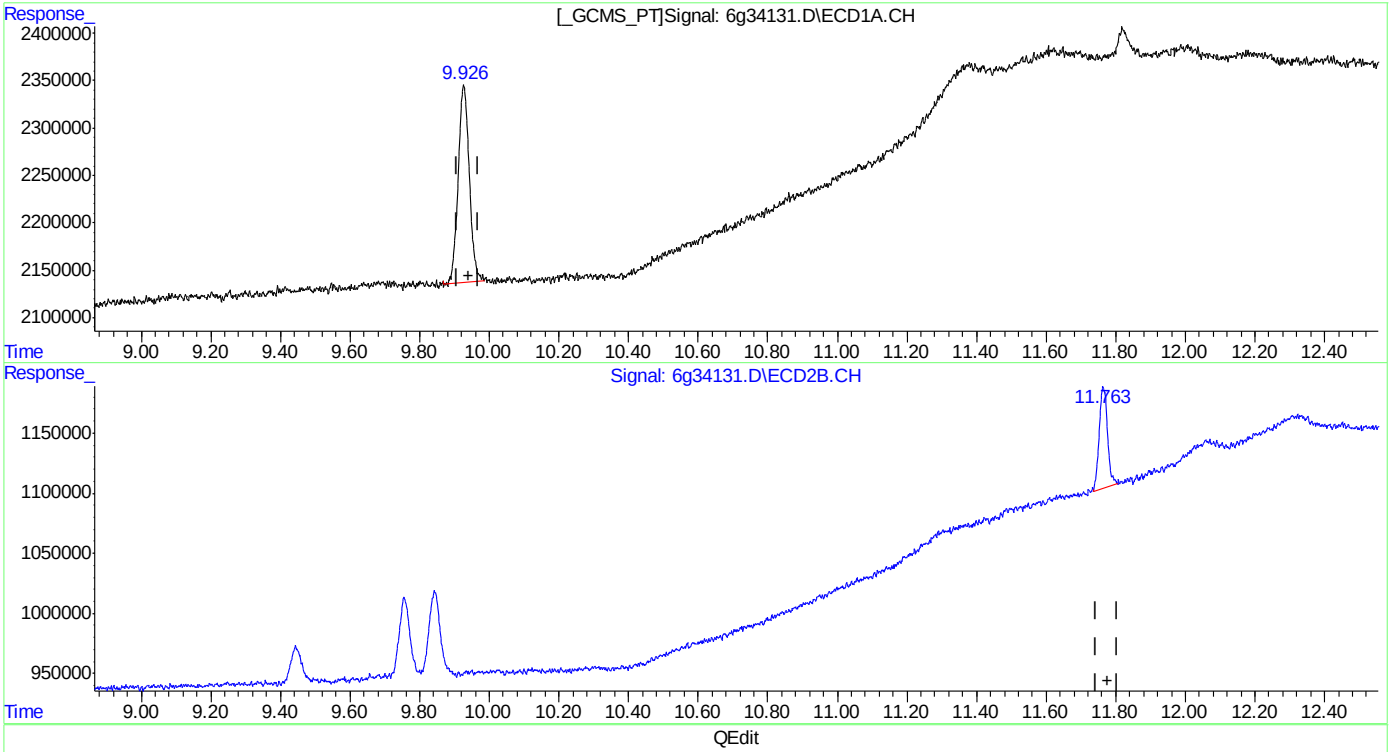
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34131.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 4:05 pm
Operator : dharas
Sample : ic987-2
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:41:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(24) Decachlorobiphenyl (SAB)
9.926min 2.107PPB
response 4607200

(24) Decachlorobiphenyl #2 (SAB)
11.763min 2.277PPB m
response 1403506

(+) = Expected Retention Time

SGS ACCUTEST JC18516

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

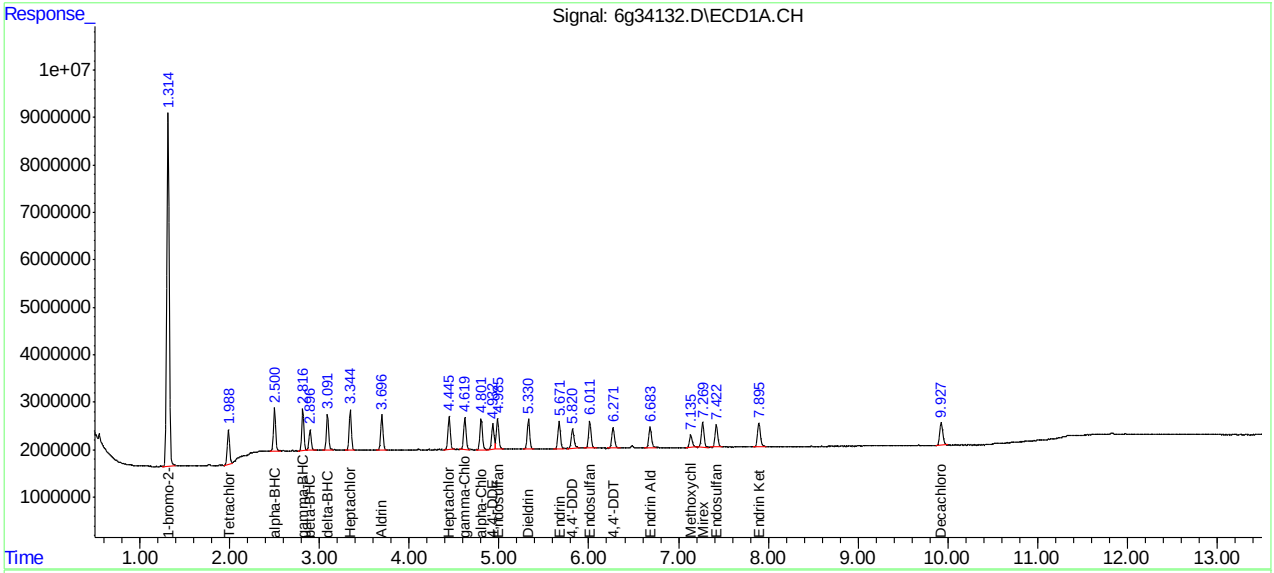
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

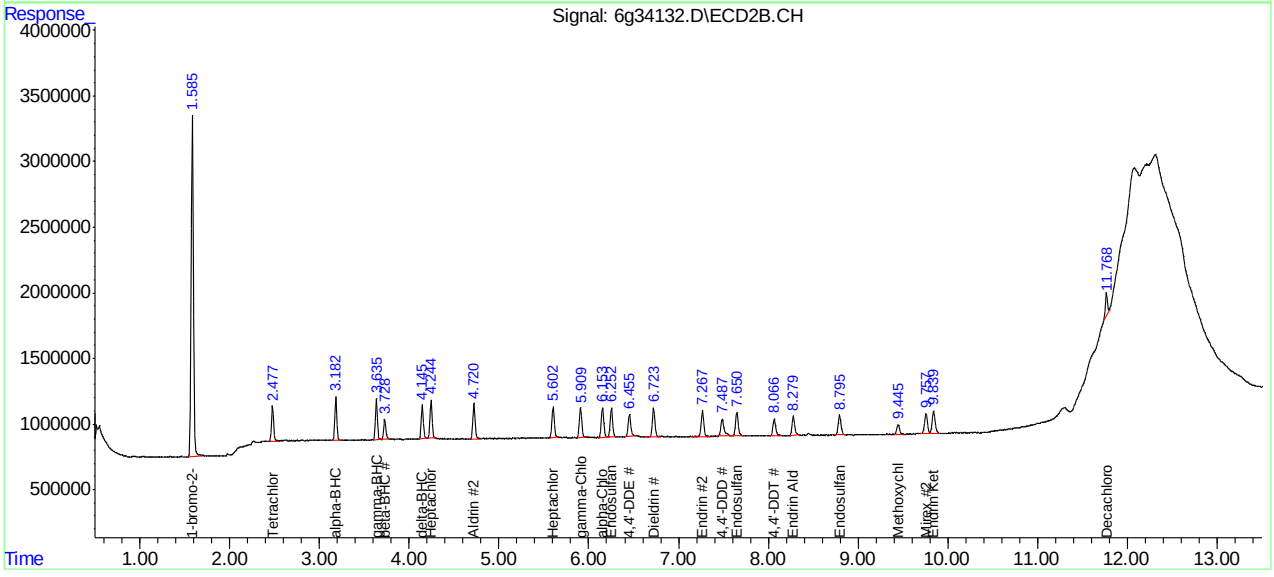
Quantitation Report (QT Reviewed)

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





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

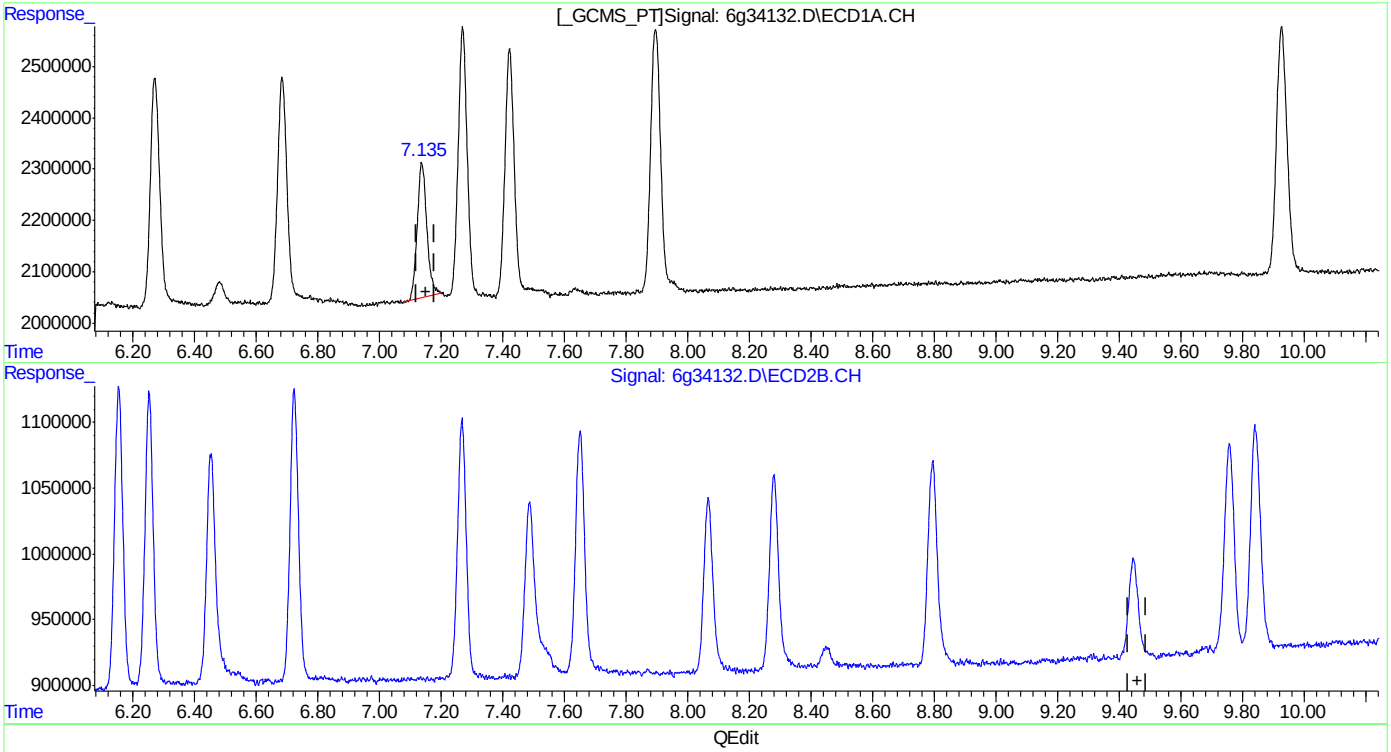
Parameter	CAS	Sig#	R.T. (min.)	Reason
Methoxychlor	72-43-5	2	9.44	Poor instrument integration
Decachlorobiphenyl	2051-24-3	2	11.77	Poor instrument integration

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



QEdit

(21) Methoxychlor (A)
7.137min 5.483PPB
response 5612130

(21) Methoxychlor #2 (A)
0.000min 0.000PPB
response 0

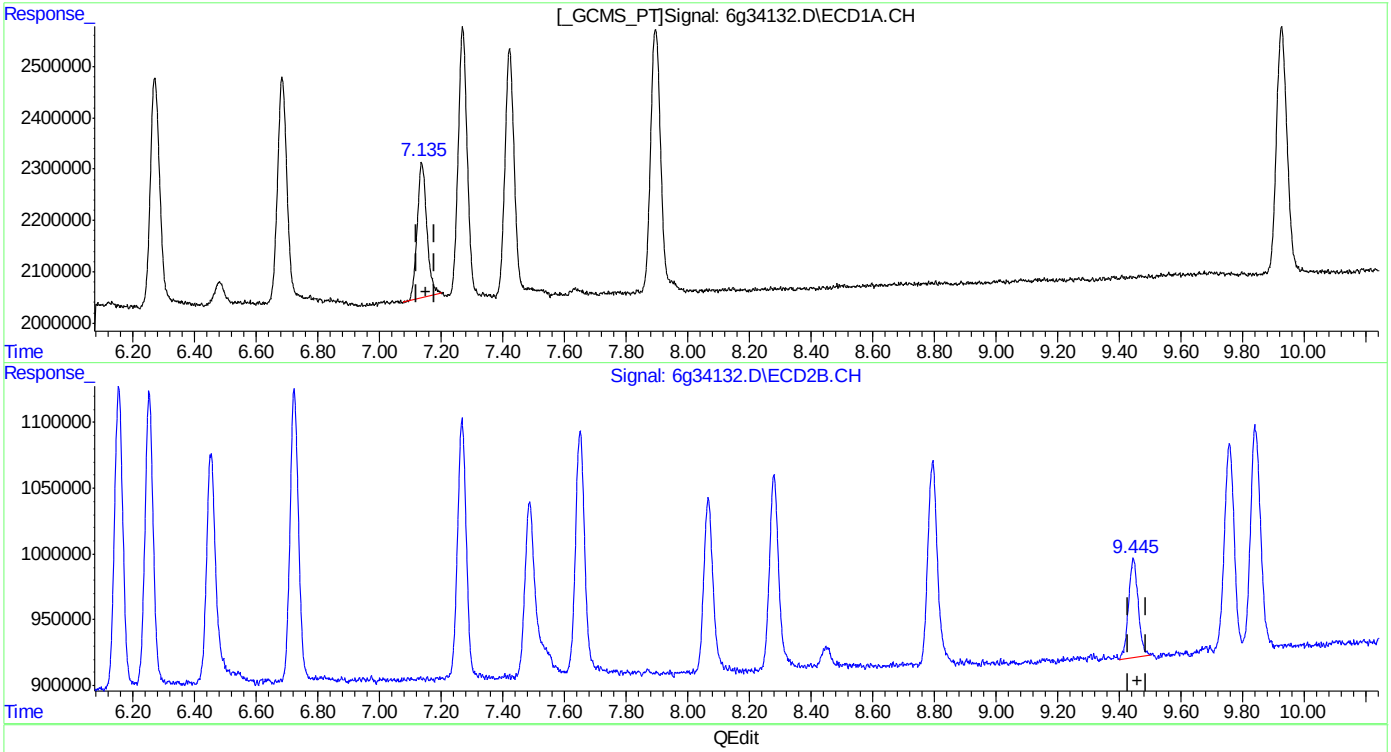
(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:36:47 2016

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

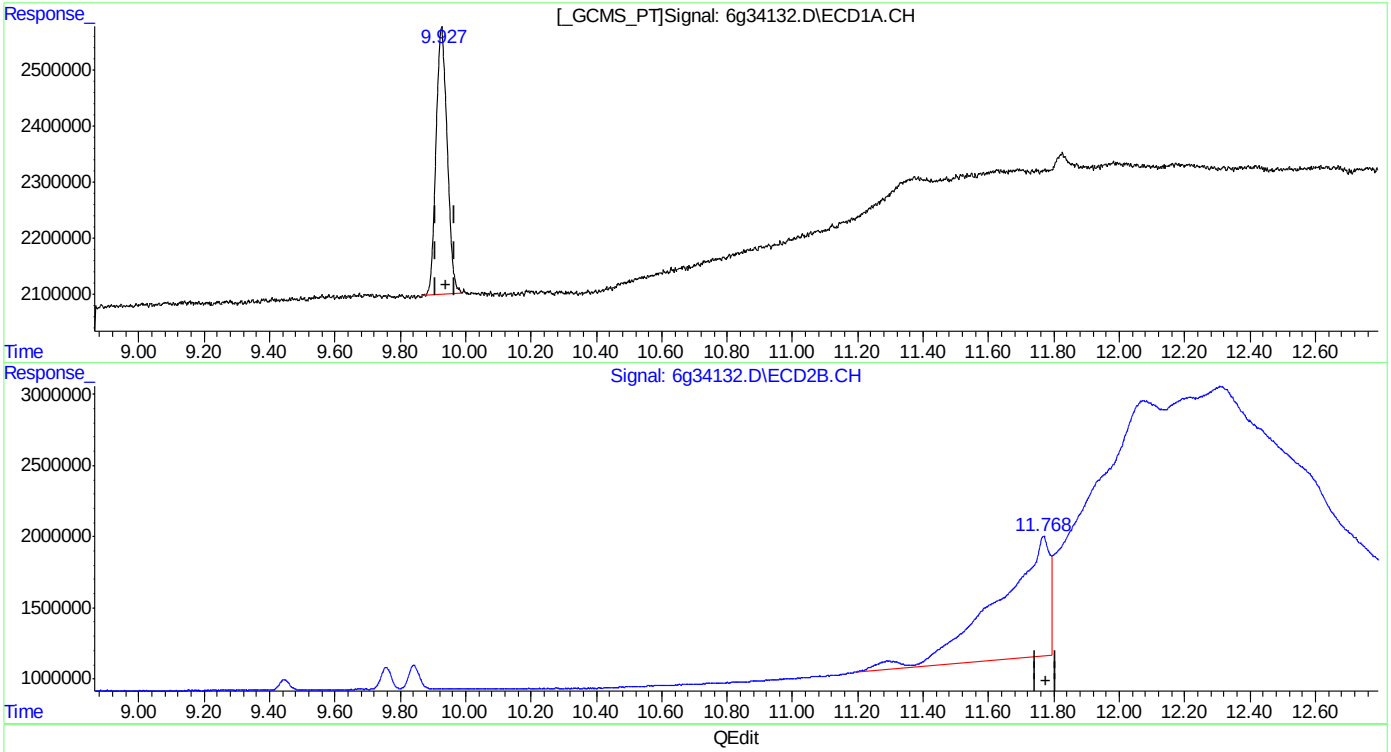
SGS ACCUTEST JC18516

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



(24) Decachlorobiphenyl (SAB)
9.926min 5.088PPB
response 11331892

(24) Decachlorobiphenyl #2 (SAB)
11.768min 147.393PPB
response 92250162

(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:37:02 2016

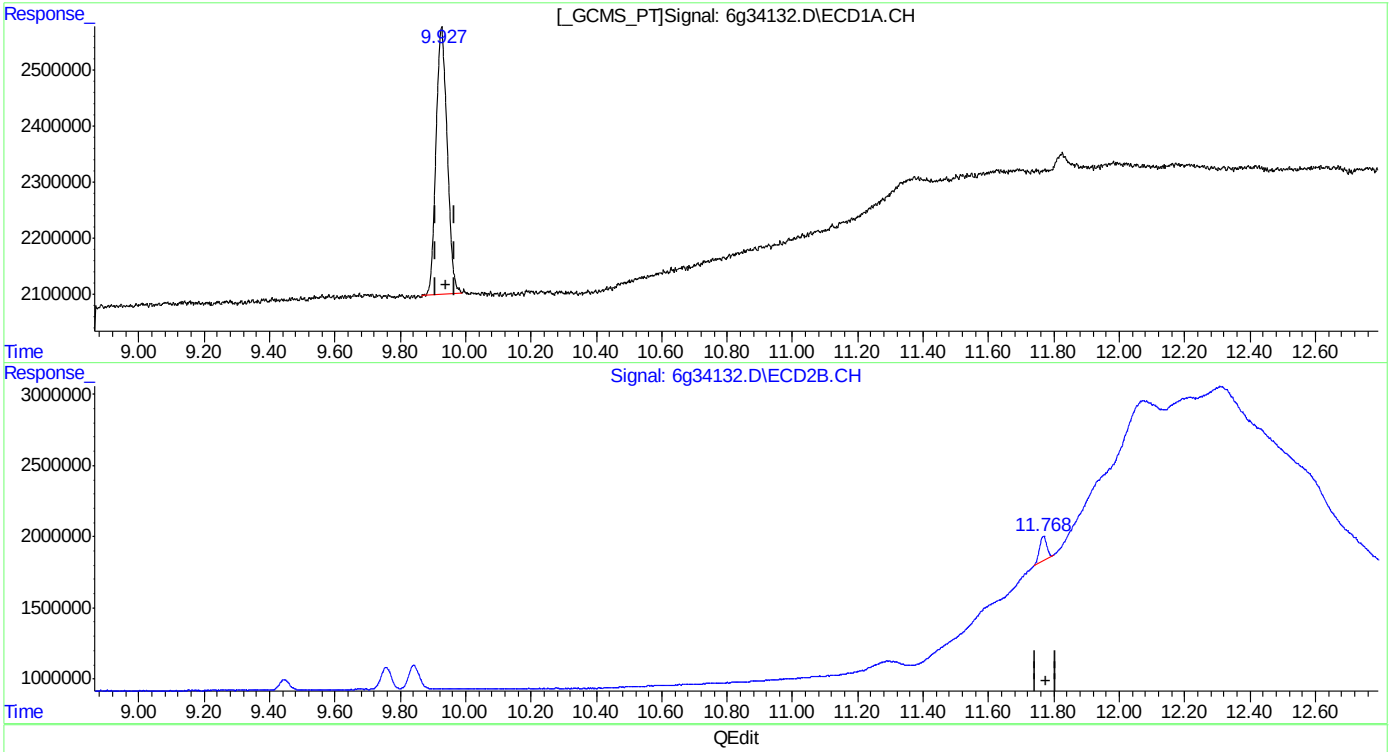
SGS ACCUTEST JC18516

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 JC18516

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

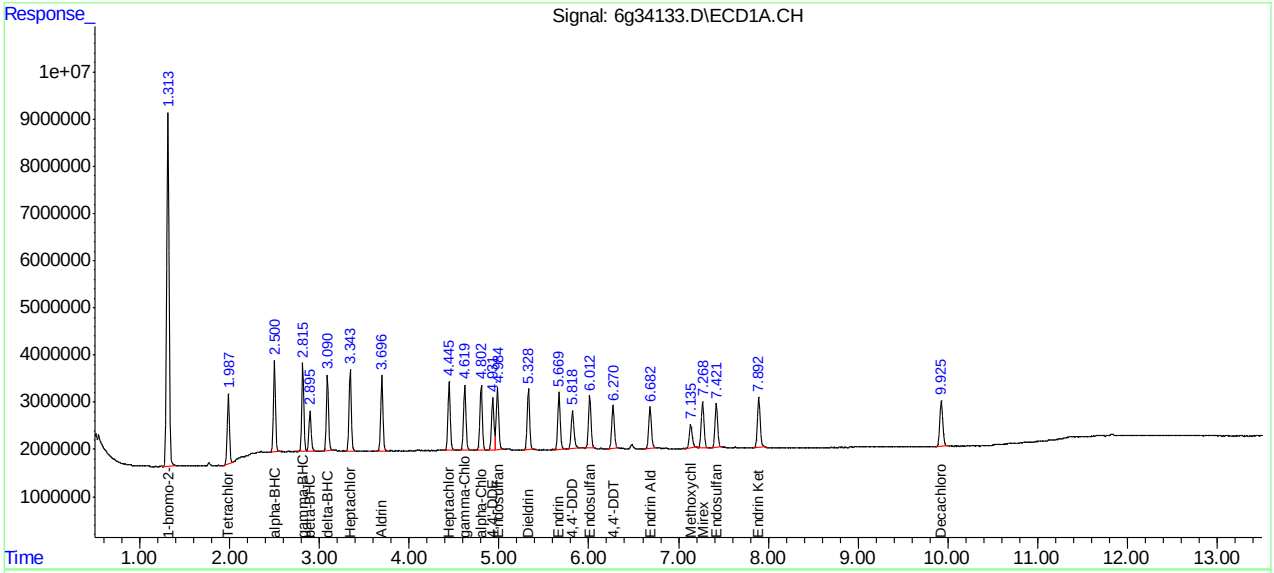
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

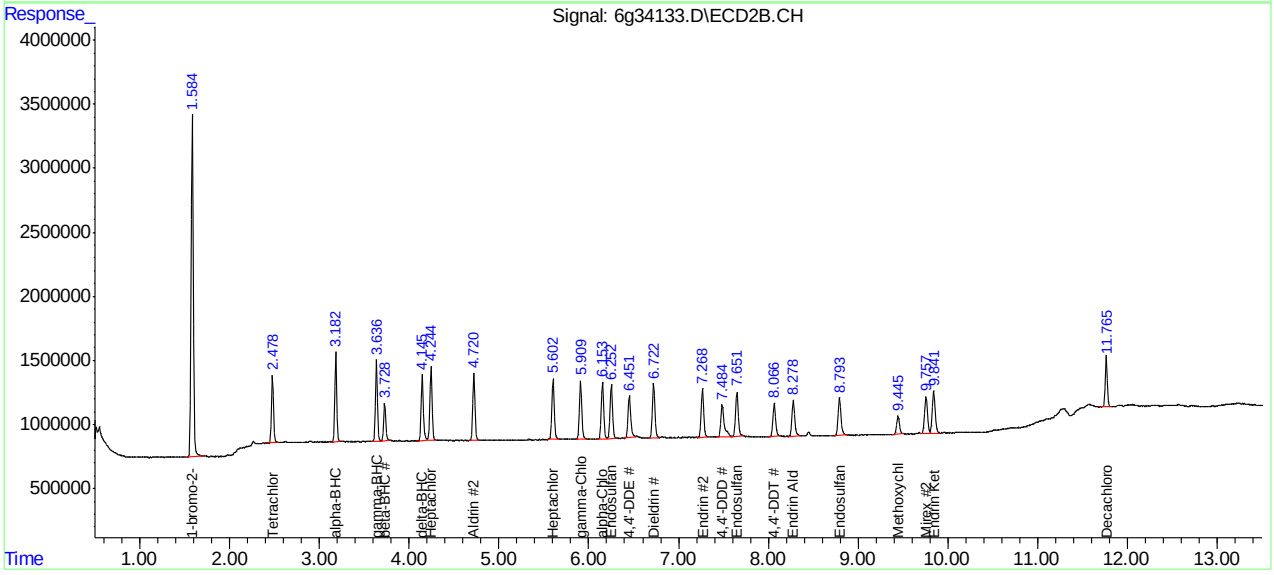
Quantitation Report (QT Reviewed)

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 JC18516

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.

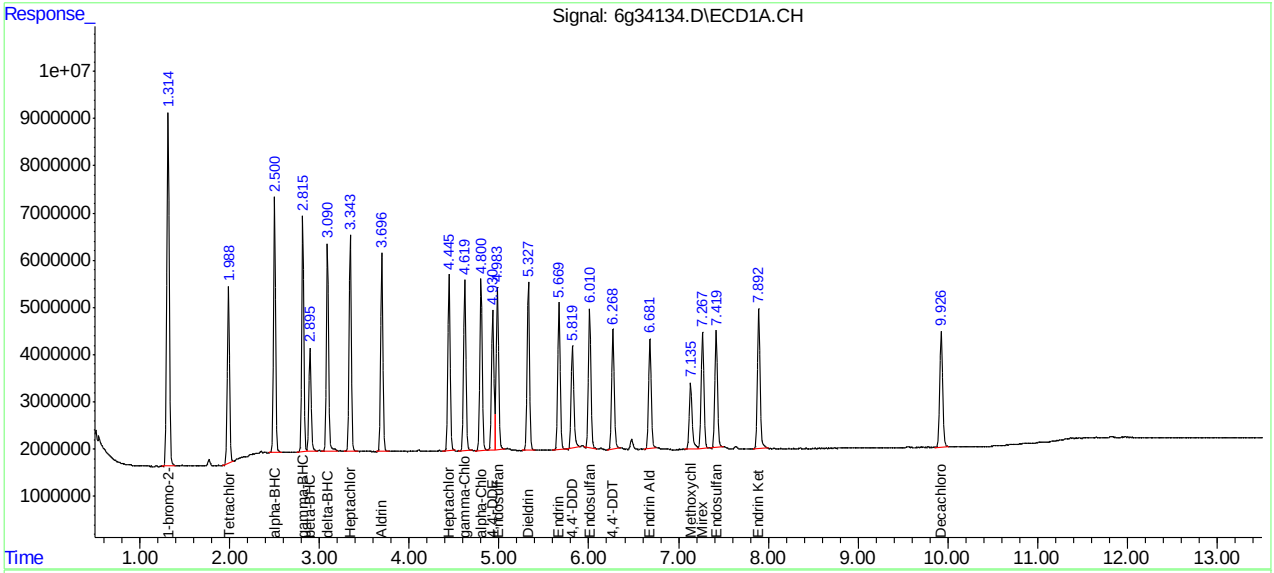
SGS ACCUTEST JC18516

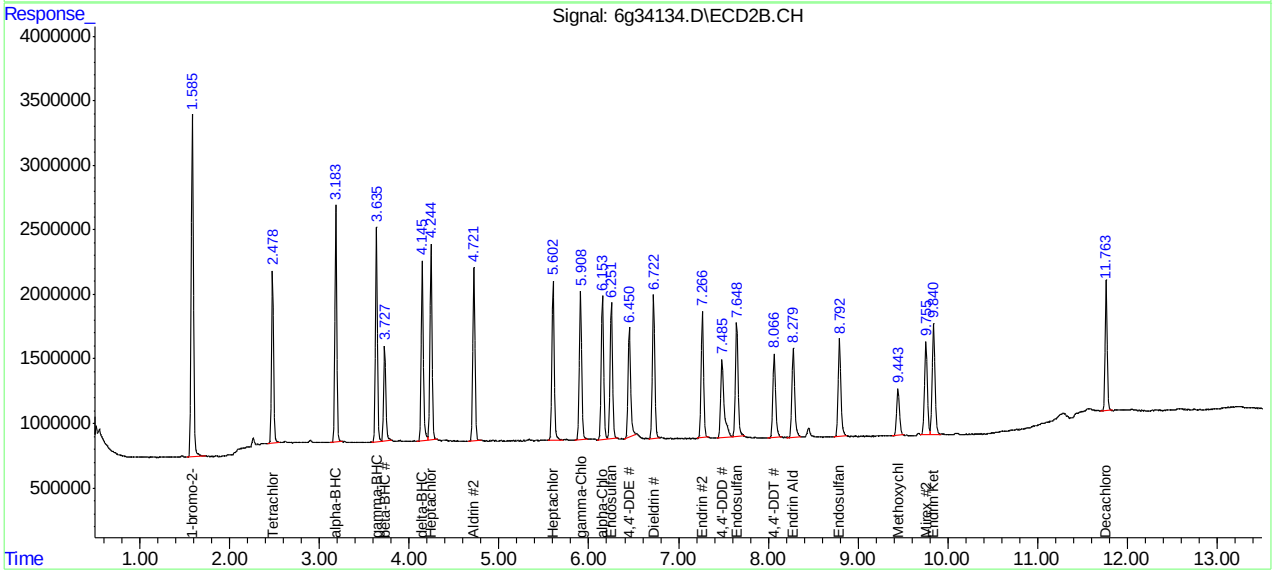
Quantitation Report (QT Reviewed)

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

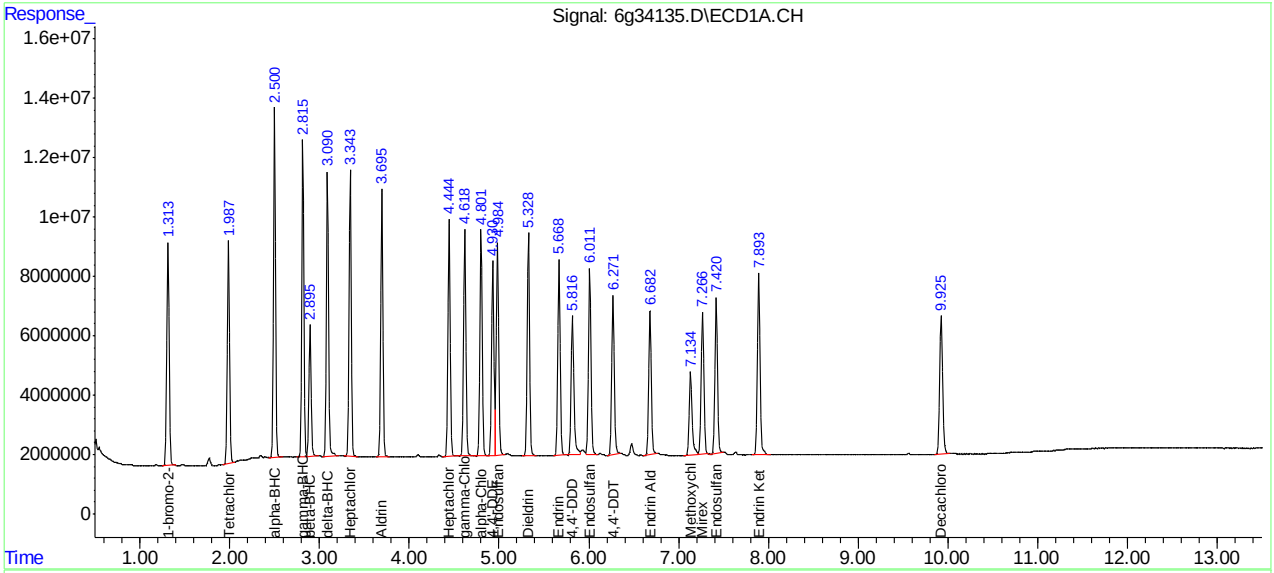
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

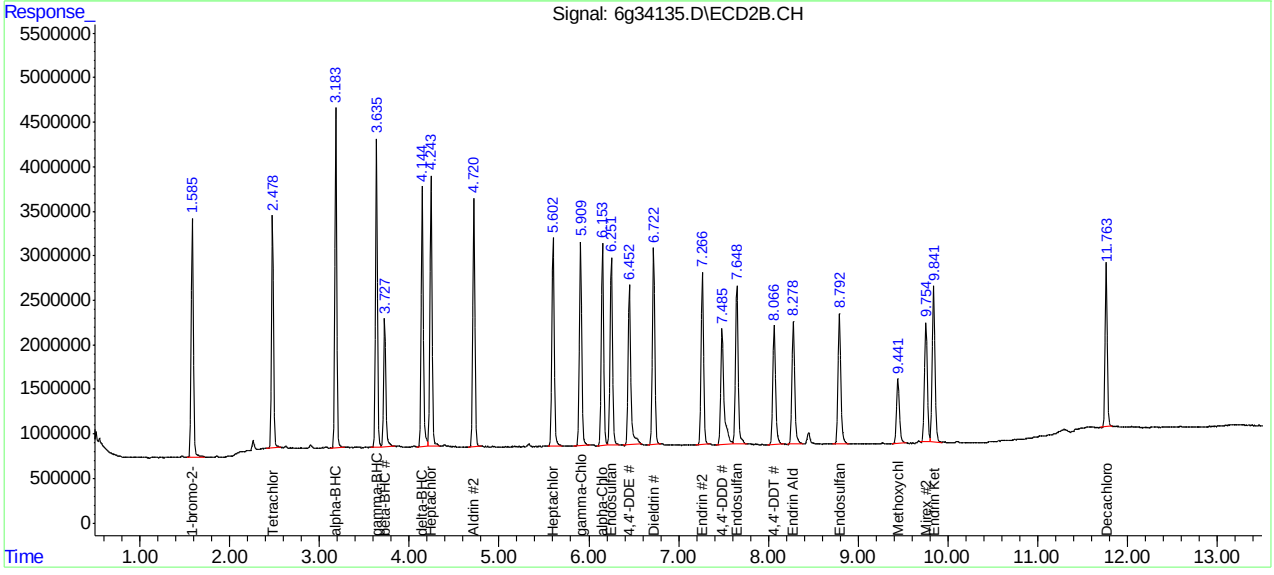
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34135.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 5:11 pm
Operator : dharas
Sample : ic987-50
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:19:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC18516

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.

9.6.23

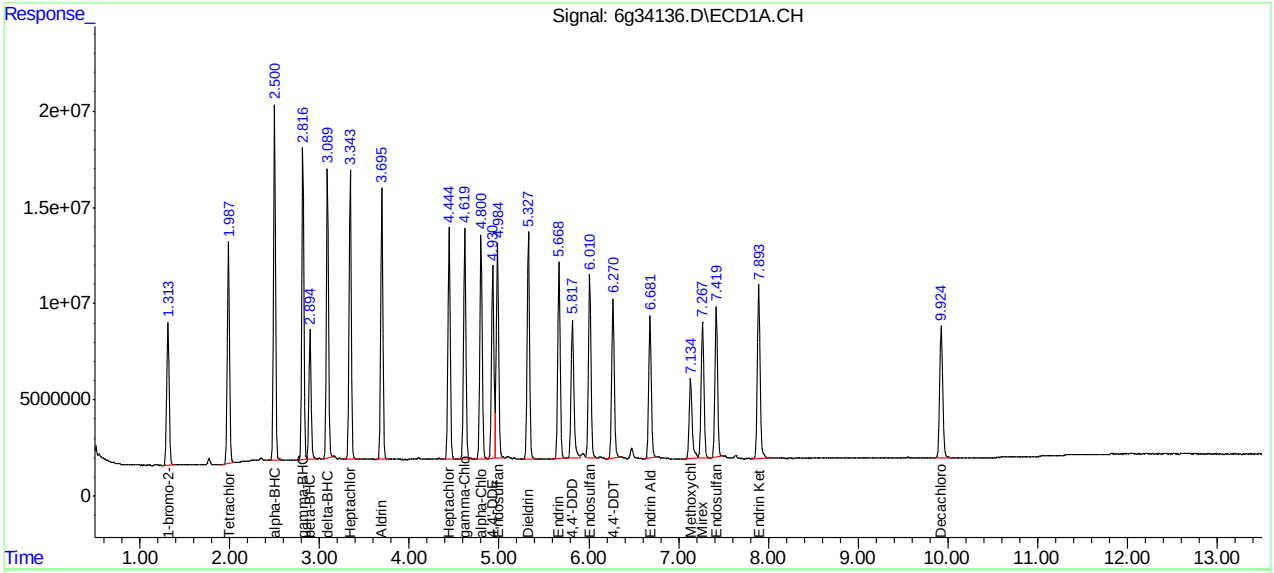
9

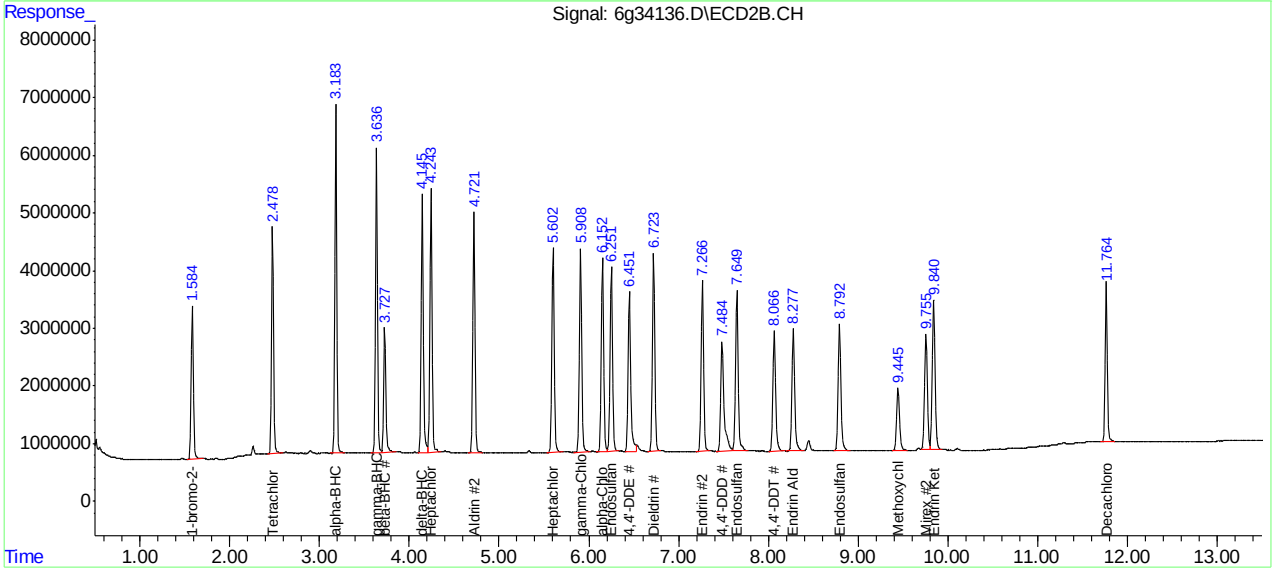
Quantitation Report (QT Reviewed)

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 JC18516

Manual Integration Approval Summary

Sample Number:	G6G987-IC987	**Method:**	SW846 8081B
Lab FileID:	6G34136.D	**Analyst approved:**	04/18/16 12:23 Dhara Saparia
Injection Time:	04/14/16 17:27	**Supervisor approved:**	04/18/16 14:12 Gwendolyn Burns

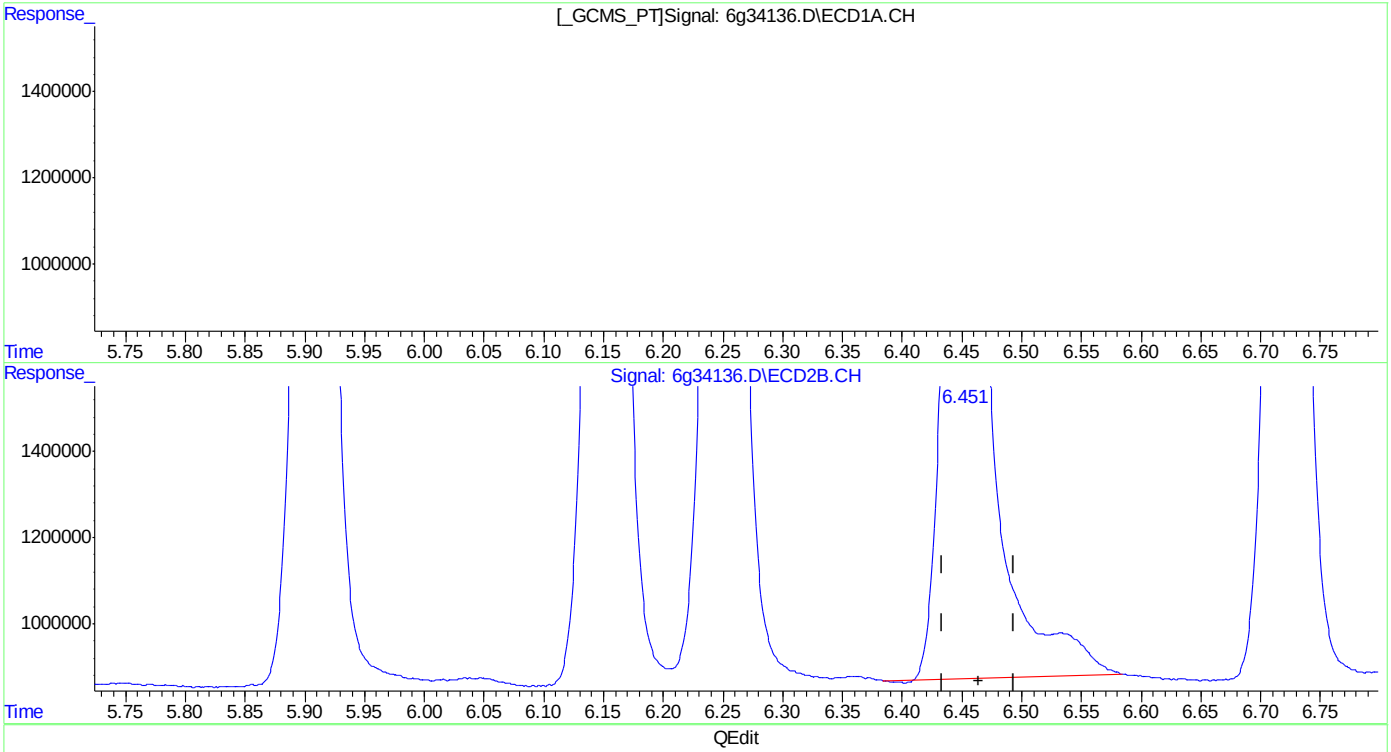
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	2	6.45	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34136.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 5:27 pm
Operator : dharas
Sample : ic987-75
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:24:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(13) 4,4'-DDE (B)
4.931min 93.299PPB
response 184683755

(13) 4,4'-DDE #2 (B)
6.451min 76.395PPB
response 57463273

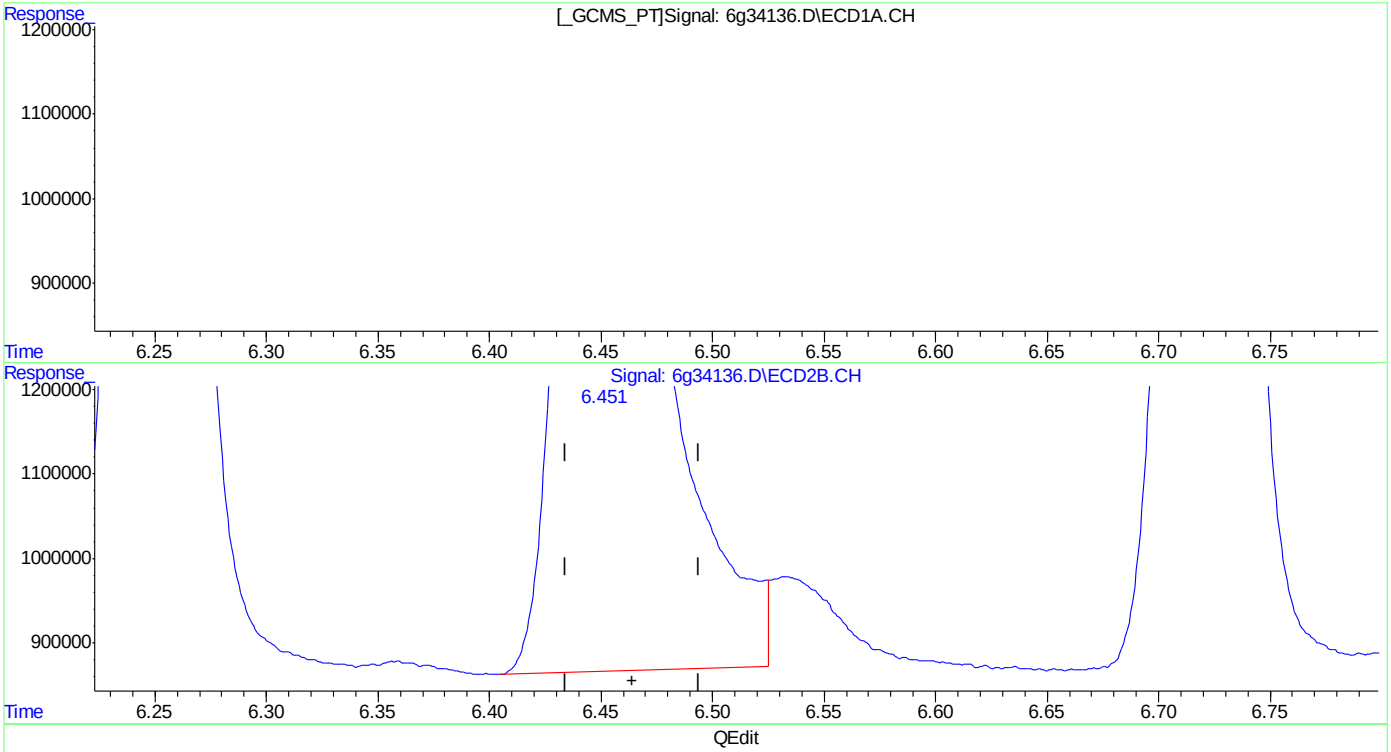
(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:25:21 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34136.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 5:27 pm
Operator : dharas
Sample : ic987-75
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:24:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(13) 4,4'-DDE (B)
4.931min 93.299PPB
response 184683755

(13) 4,4'-DDE #2 (B)
6.451min 74.382PPB m
response 55949391

(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:25:34 2016

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/18/16 14:12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34137.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 5:44 pm
Operator : dharas
Sample : ic987-100
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:19:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.313	1.584	144.2E6	47061020	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.987	2.478	272.5E6	83192568	106.915	95.654
Spiked Amount		40.000	Range	30 - 150	Recovery	= 267.29%#	239.14%#
24) SAB	Decachlor...	9.925	11.764	218.5E6	61817376	96.056	96.252
Spiked Amount		40.000			Recovery	= 240.14%	240.63%
	Target Compounds						
3) A	alpha-BHC	2.500	3.183	405.7E6	120.6E6	126.925	113.257
4) MA	gamma-BHC	2.814	3.635	363.8E6	109.3E6	122.801	111.008
5) MA	Heptachlor	3.343	4.244	347.0E6	103.8E6	119.655	109.162
6) B	beta-BHC	2.894	3.727	155.8E6	49110274	106.406	100.652
7) B	delta-BHC	3.089	4.145	345.0E6	103.0E6	130.262	116.398
8) MB	Aldrin	3.695	4.721	328.0E6	97370488	119.971	105.568
9) B	Heptachlo...	4.444	5.603	293.6E6	88909536	113.171	102.795
10) B	gamma-Chl...	4.618	5.909	299.9E6	86940726	112.581	102.863
11) B	alpha-Chl...	4.800	6.152	292.8E6	85054640	111.873	100.435
12) A	Endosulfan I	4.983	6.251	288.9E6	81968430	108.152	99.285
13) B	4,4'-DDE	4.931	6.452	258.4E6	77237419	128.766	101.535m
14) MA	Dieldrin	5.328	6.723	295.4E6	85669631	116.508	101.256
15) MA	Endrin	5.667	7.267	264.1E6	77041181	114.962	103.046
16) A	4,4'-DDD	5.818	7.484	214.3E6	66667046	122.739	95.573
17) B	Endosulfa...	6.011	7.649	257.1E6	76718084	111.662	99.284
18) MA	4,4'-DDT	6.270	8.066	237.9E6	61734502	129.179	133.453
19) B	Endrin Al...	6.683	8.277	208.9E6	60964018	112.232	98.027
20) B	Endosulfa...	7.419	8.792f	220.0E6	64603260	111.082	99.599
21) A	Methoxychlor	7.134f	9.444f	127.3E6	33797951	121.808	138.128
22)	Mirex	7.267	9.756	206.5E6	58928864	94.978	89.507
23) B	Endrin Ke...	7.893	9.841f	267.8E6	77889496	123.785	112.304

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

9.6.24

9

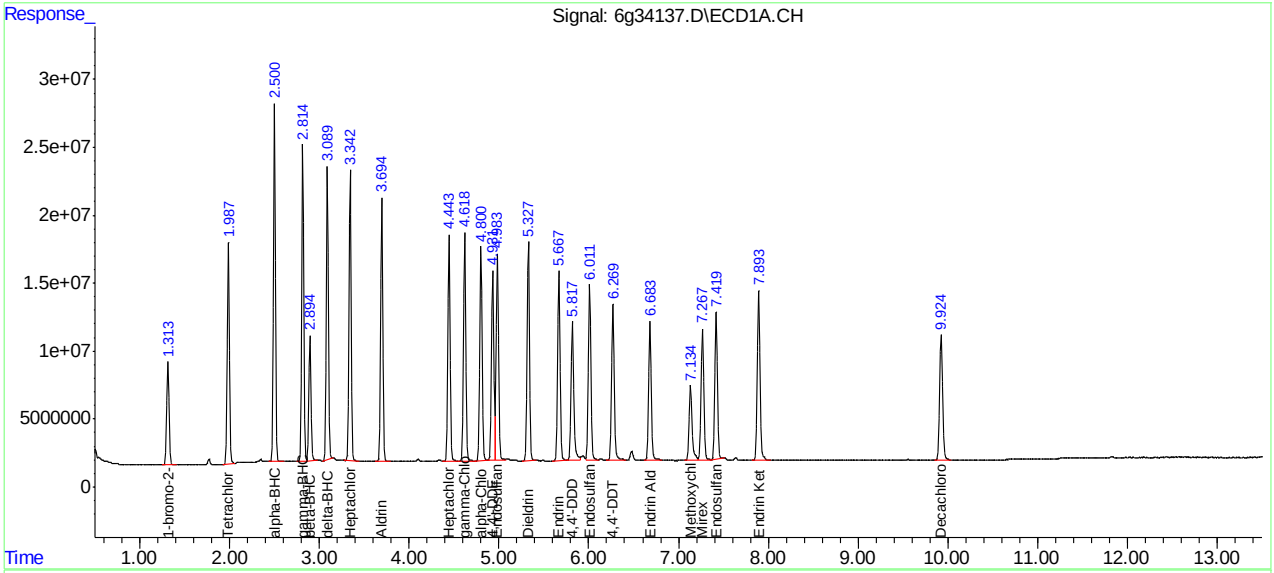
SGS ACCUTEST JC18516

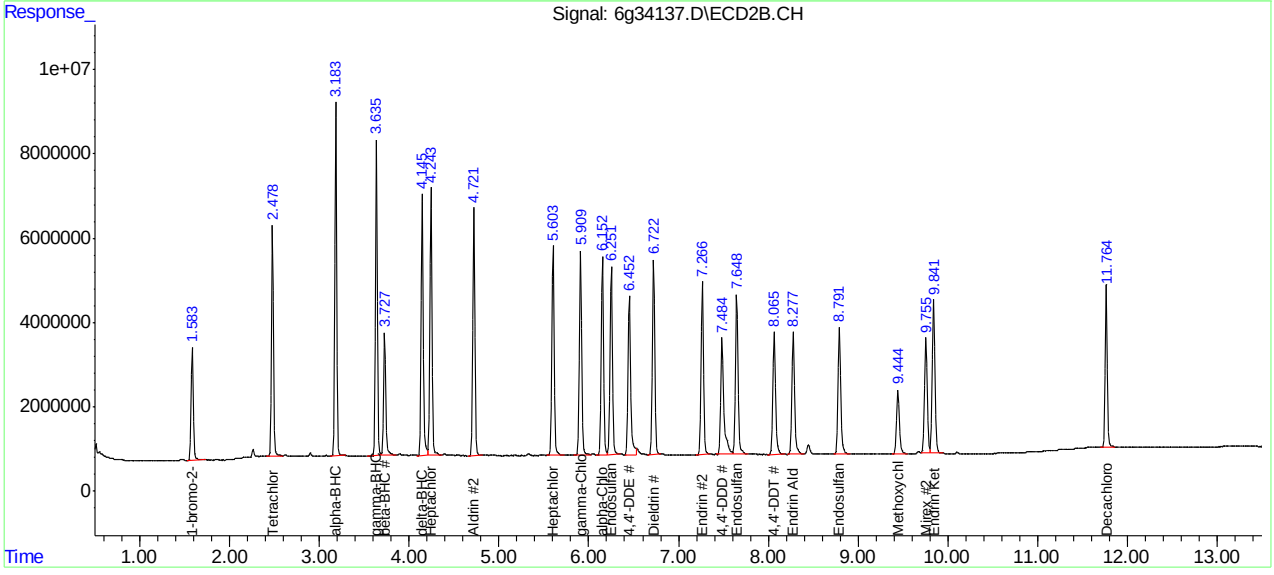
Quantitation Report (QT Reviewed)

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 JC18516

Manual Integration Approval Summary

Sample Number:	G6G987-IC987	**Method:**	SW846 8081B
Lab FileID:	6G34137.D	**Analyst approved:**	04/18/16 12:23 Dhara Saparia
Injection Time:	04/14/16 17:44	**Supervisor approved:**	04/18/16 14:12 Gwendolyn Burns

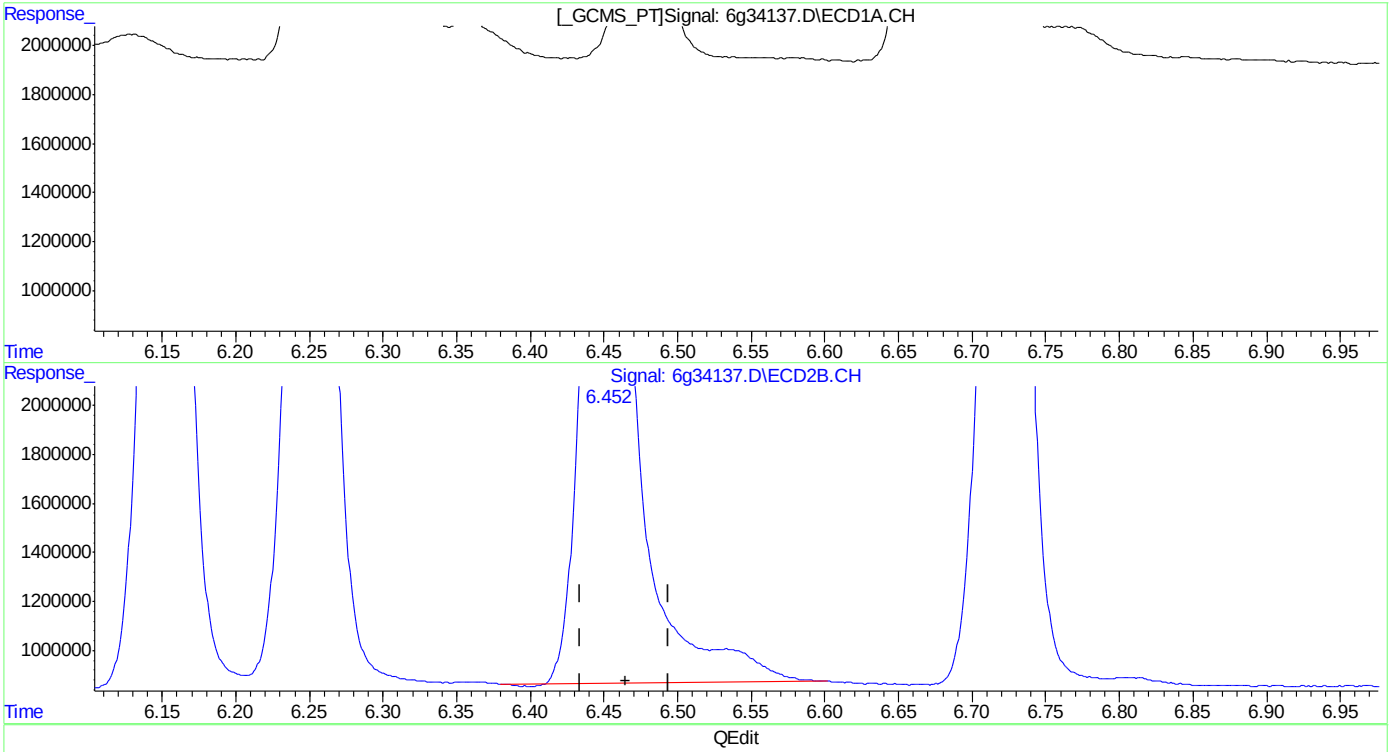
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	2	6.45	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34137.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 5:44 pm
Operator : dharas
Sample : ic987-100
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:25:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(13) 4,4'-DDE (B)
4.931min 128.766PPB
response 258364552

(13) 4,4'-DDE #2 (B)
6.452min 103.914PPB
response 79046664

(+) = Expected Retention Time

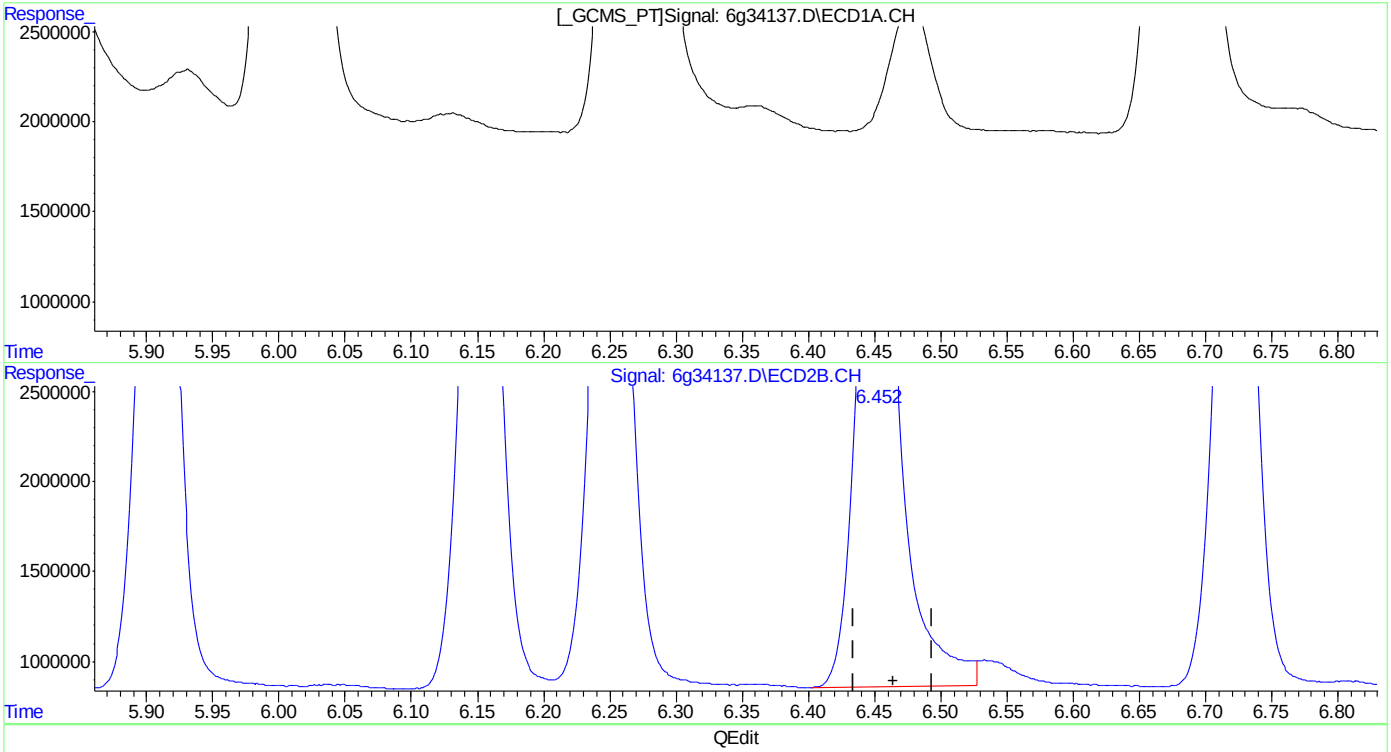
SGS ACCUTEST JC18516

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

SGS ACCUTEST JC18516

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.

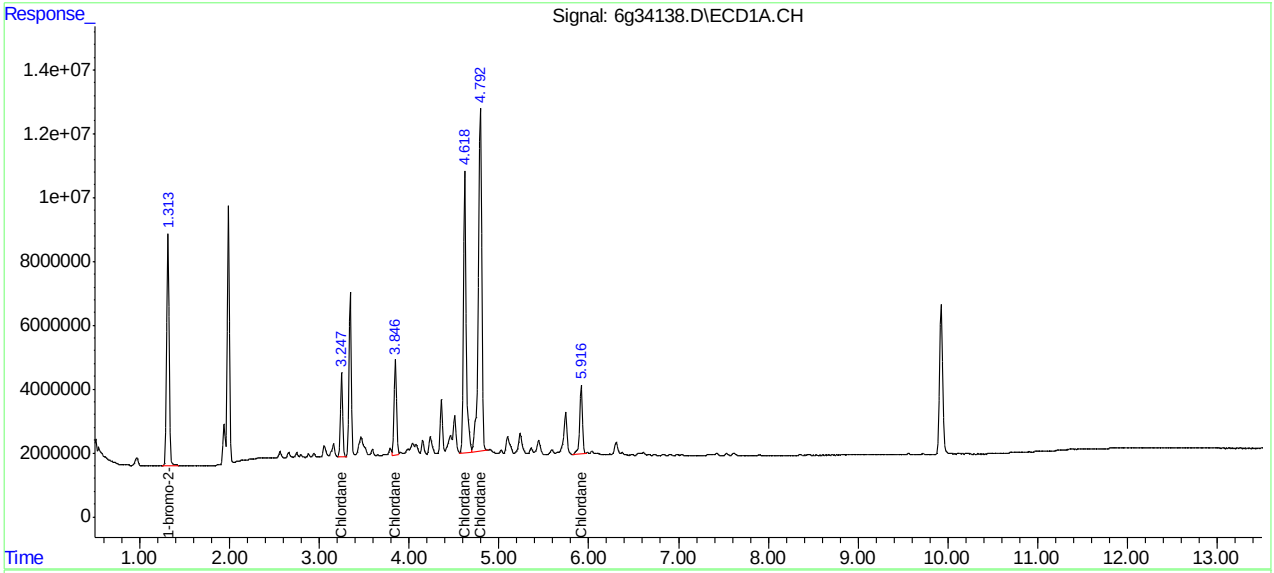
9.6.25
9

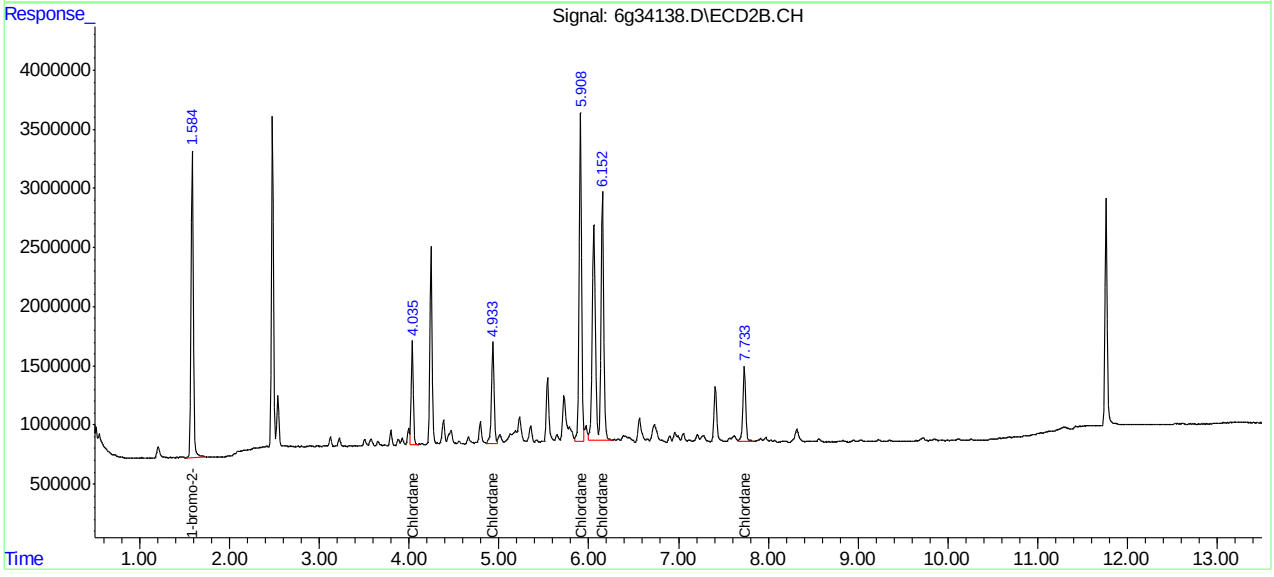
Quantitation Report (QT Reviewed)

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





Manual Integration Approval Summary

Sample Number:	G6G987-IC987	**Method:**	SW846 8081B
Lab FileID:	6G34138.D	**Analyst approved:**	04/18/16 12:23 Dhara Saparia
Injection Time:	04/14/16 18:00	**Supervisor approved:**	04/18/16 14:12 Gwendolyn Burns

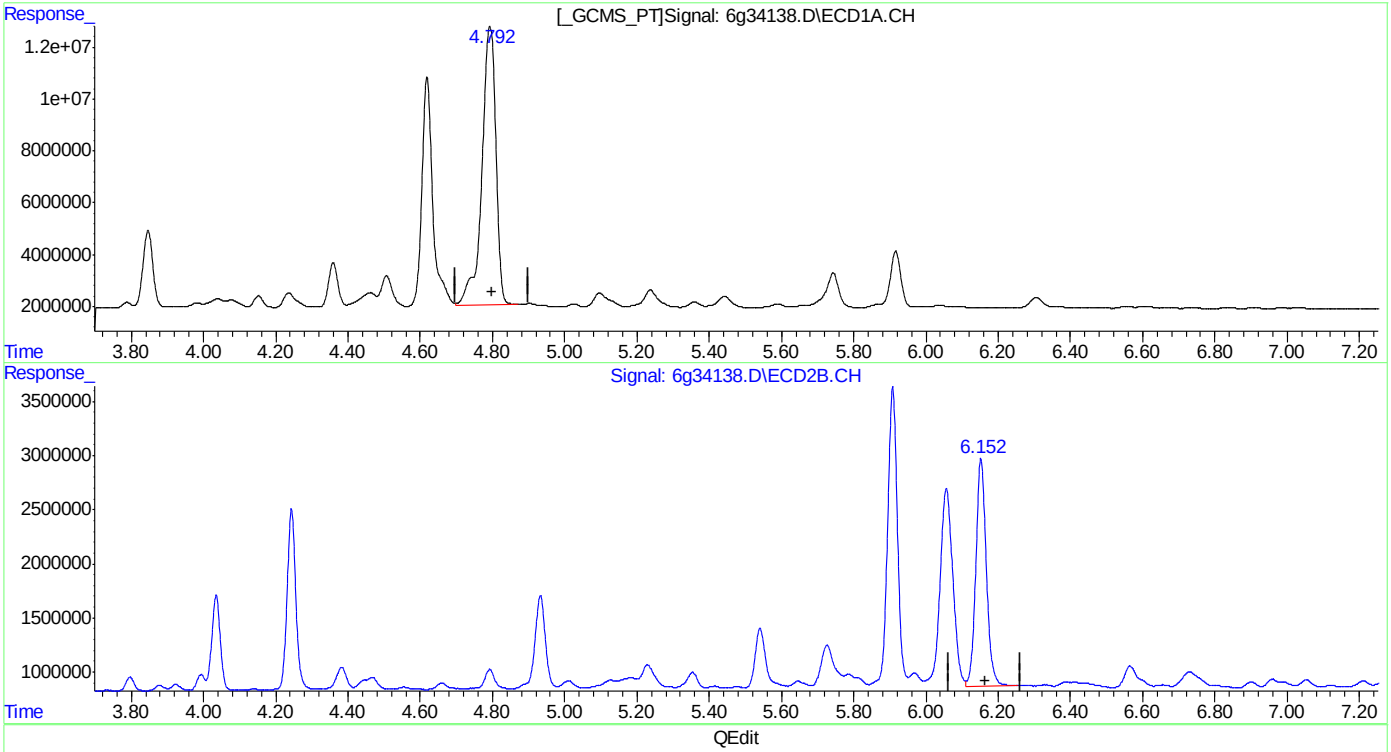
Parameter	CAS	Sig#	R.T. (min.)	Reason
Chlordane-D		2	6.15	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34138.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 6:00 pm
Operator : dharas
Sample : ic987-500
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:57:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(35) Chlordane {D}
4.793min 519.746PPB
response 290776008

(35) Chlordane {D} #2
6.152min 267.305PPB
response 42534341

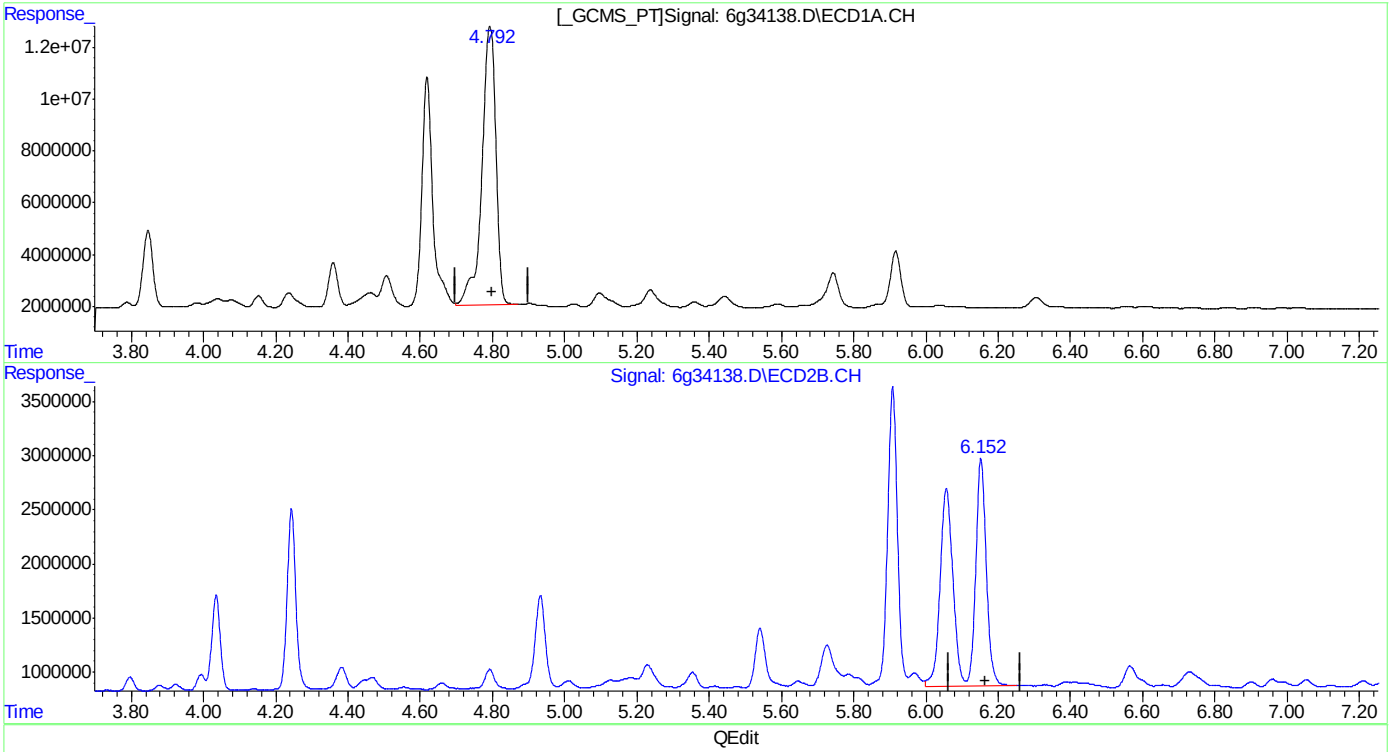
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34138.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 6:00 pm
Operator : dharas
Sample : ic987-500
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:57:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(35) Chlordane {D}
4.793min 519.746PPB
response 290776008

(35) Chlordane {D} #2
6.152min 550.227PPB m
response 87553858

(+) = Expected Retention Time

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							

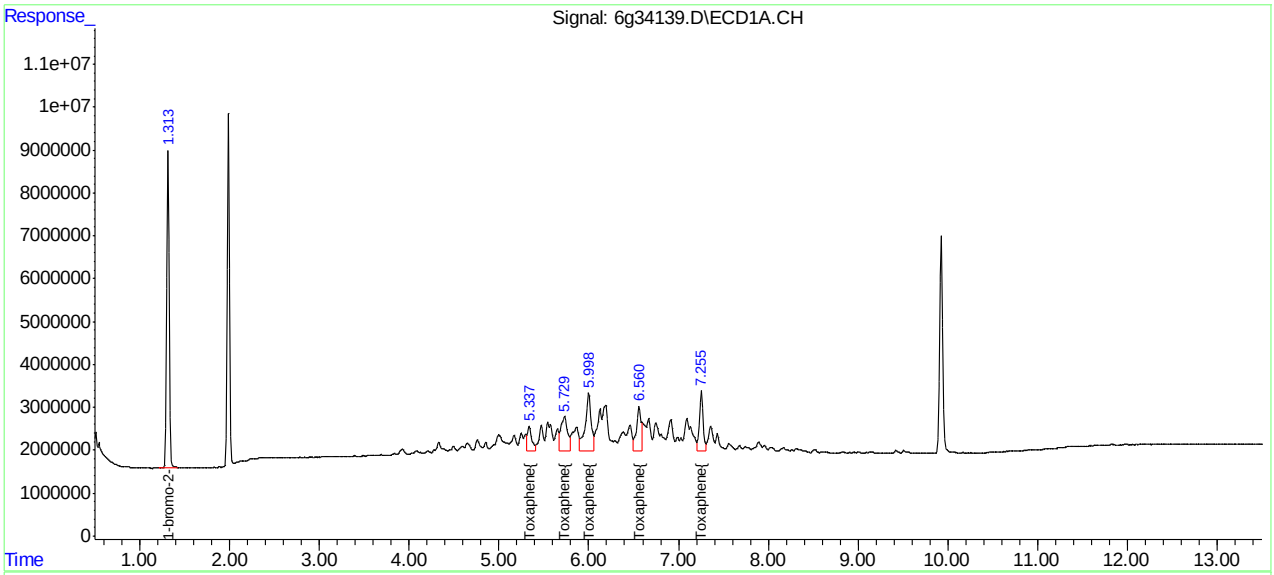
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

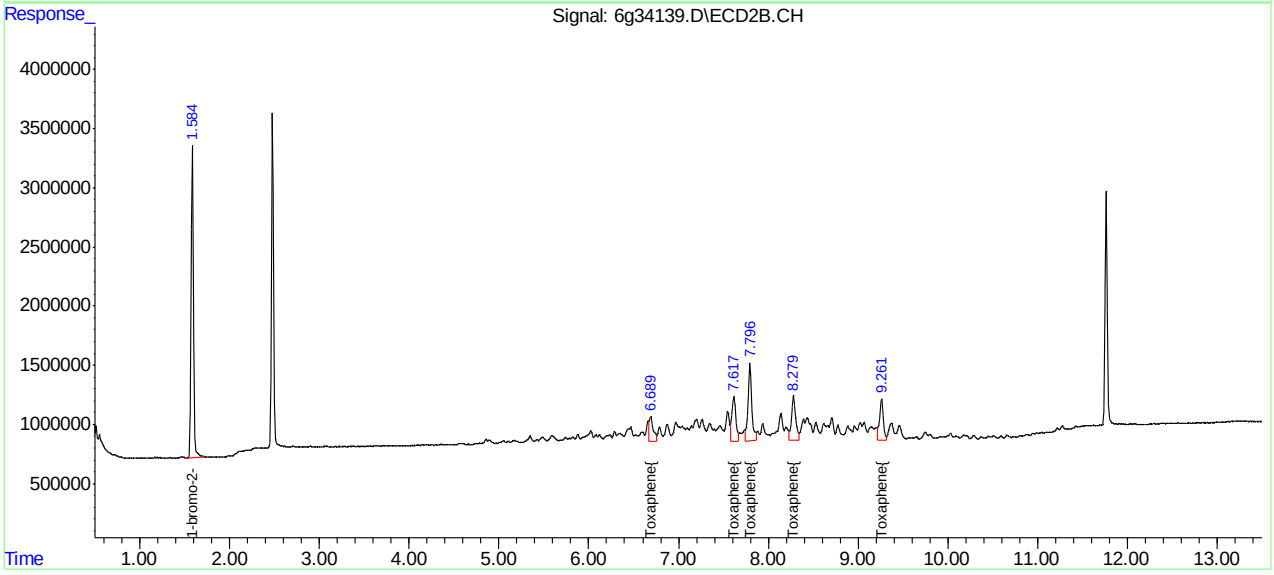
Quantitation Report (QT Reviewed)

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 JC18516

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

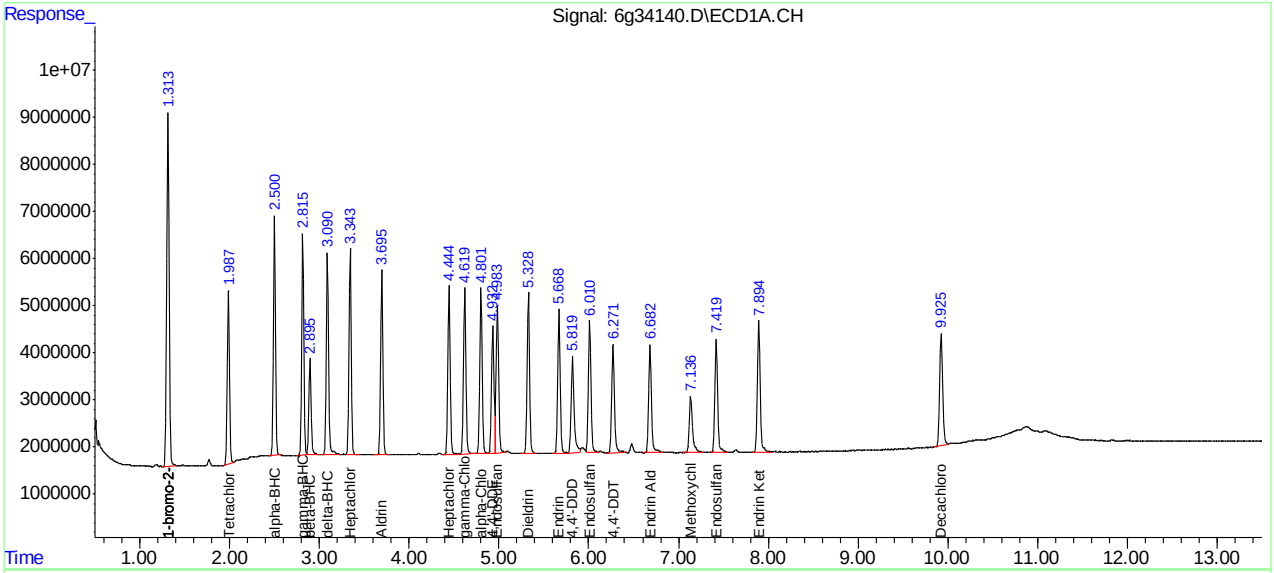
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

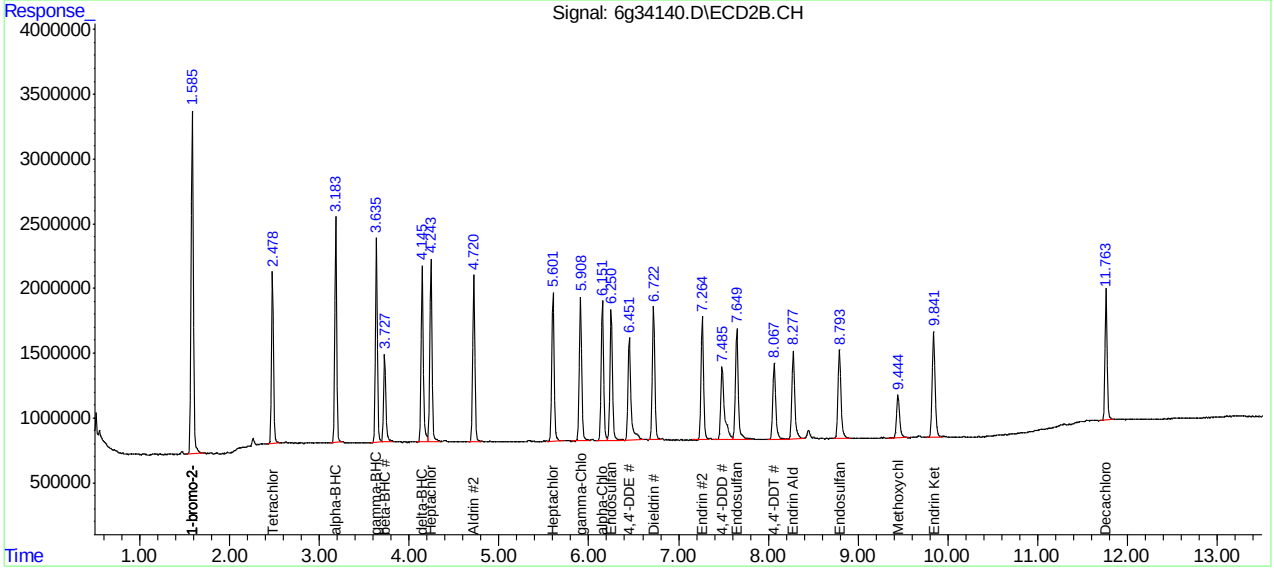
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34140.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 6:33 pm
Operator : dharas
Sample : icv987-25
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:39:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34141.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 6:49 pm
Operator : dharas
Sample : icv987-25
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:40:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.315	1.585	139.1E6	46174224	50.000	50.000
25) I	1-bromo-2...	1.315	1.585	139.1E6	46174224	50.000	50.000
31) I	1-bromo-2...	1.315	1.585	139.1E6	46174224	50.000	50.000
	System Monitoring Compounds						
	Target Compounds						
22)	Mirex	7.268	9.757	54152772	16665136	26.087	25.195
	SemiQuant Compounds - Not Calibrated on this Instrument						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

9.6.28

9

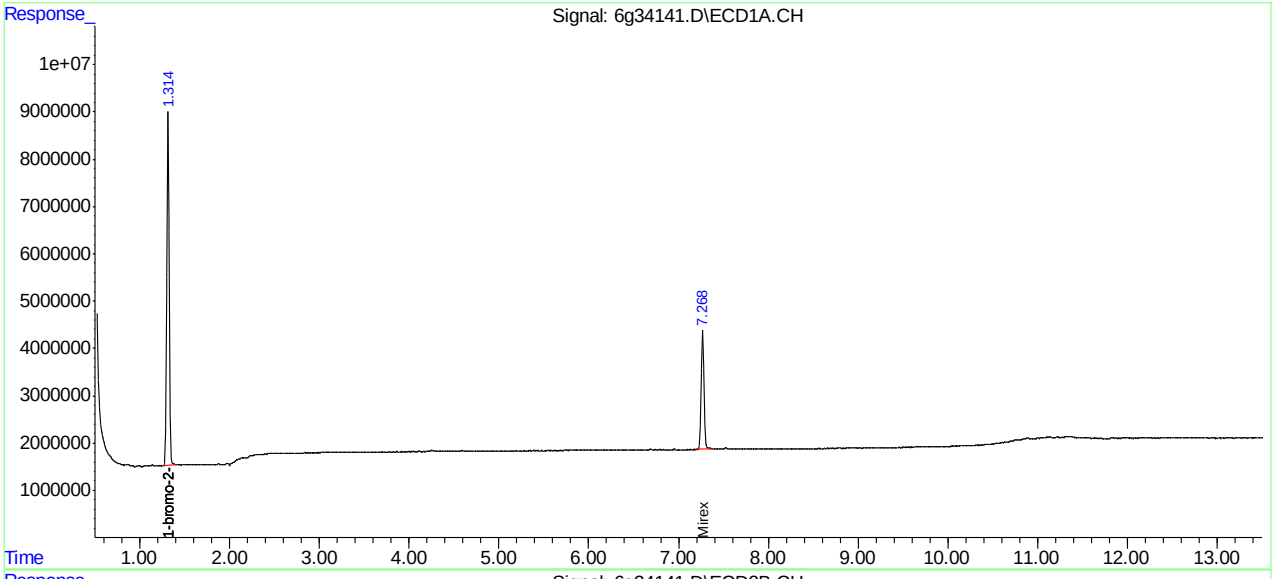
SGS ACCUTEST JC18516

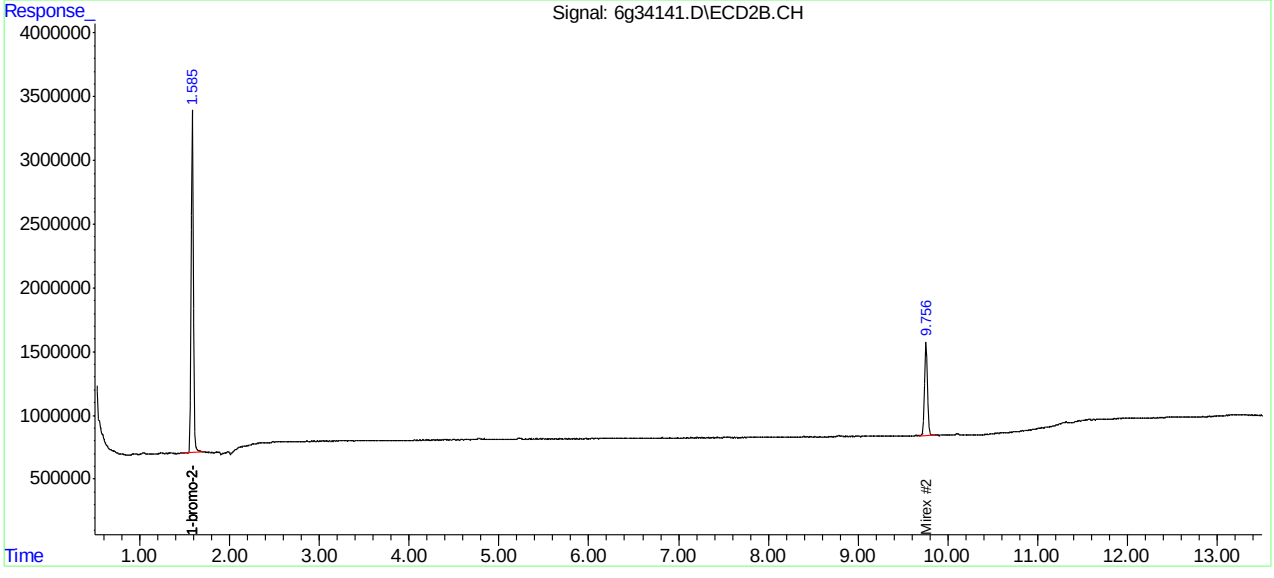
Quantitation Report (QT Reviewed)

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.

9.6.29

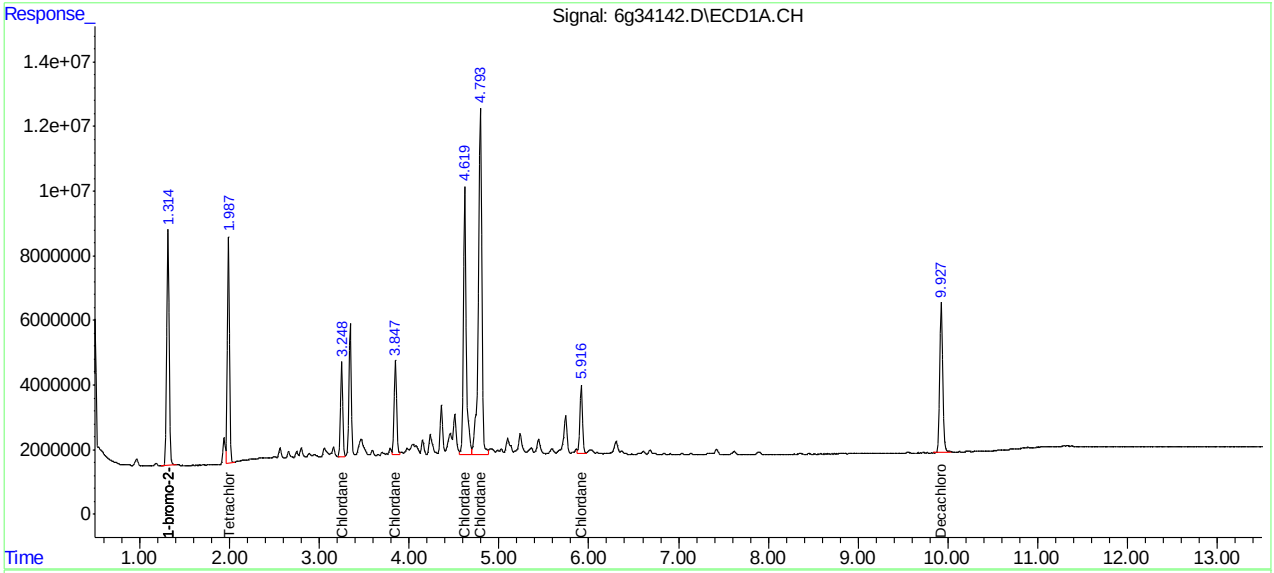
9

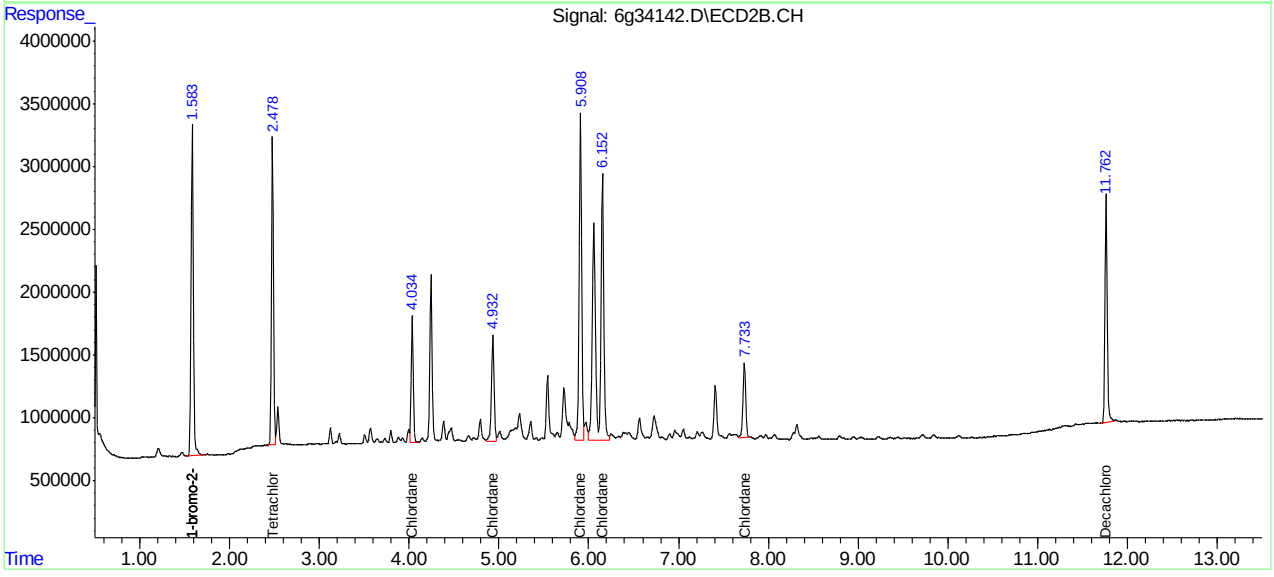
Quantitation Report (QT Reviewed)

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

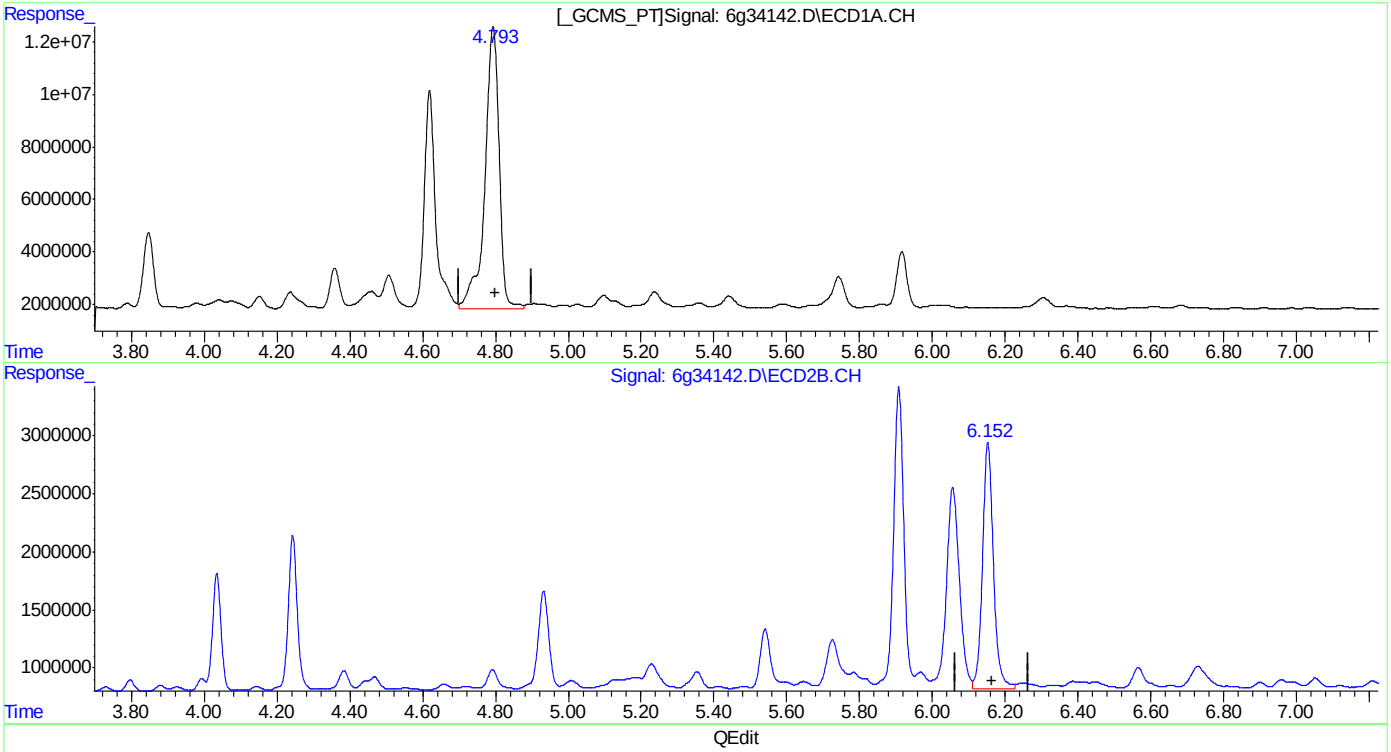
Parameter	CAS	Sig#	R.T. (min.)	Reason
Chlordane-D		2	6.15	Poor instrument integration

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



(35) Chlordane {D}
4.793min 507.996PPB
response 291002130

(35) Chlordane {D} #2
6.152min 250.802PPB
response 44256937

(+) = Expected Retention Time

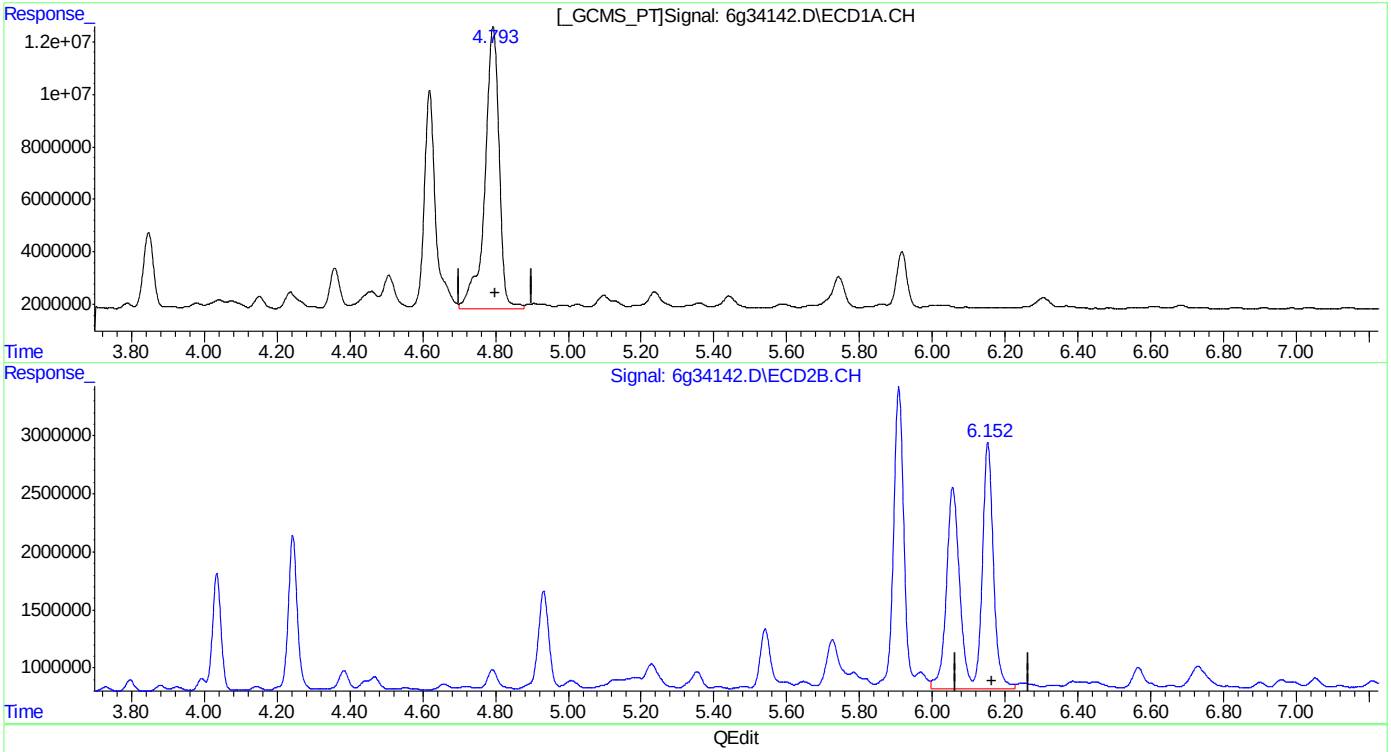
SGS ACCUTEST JC18516

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34142.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 7:06 pm
Operator : dharas
Sample : icv987-500
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:36:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(35) Chlordane {D}
4.793min 507.996PPB
response 291002130

(35) Chlordane {D} #2
6.152min 496.014PPB m
response 87527557

(+) = Expected Retention Time

SGS ACCUTEST JC18516

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.

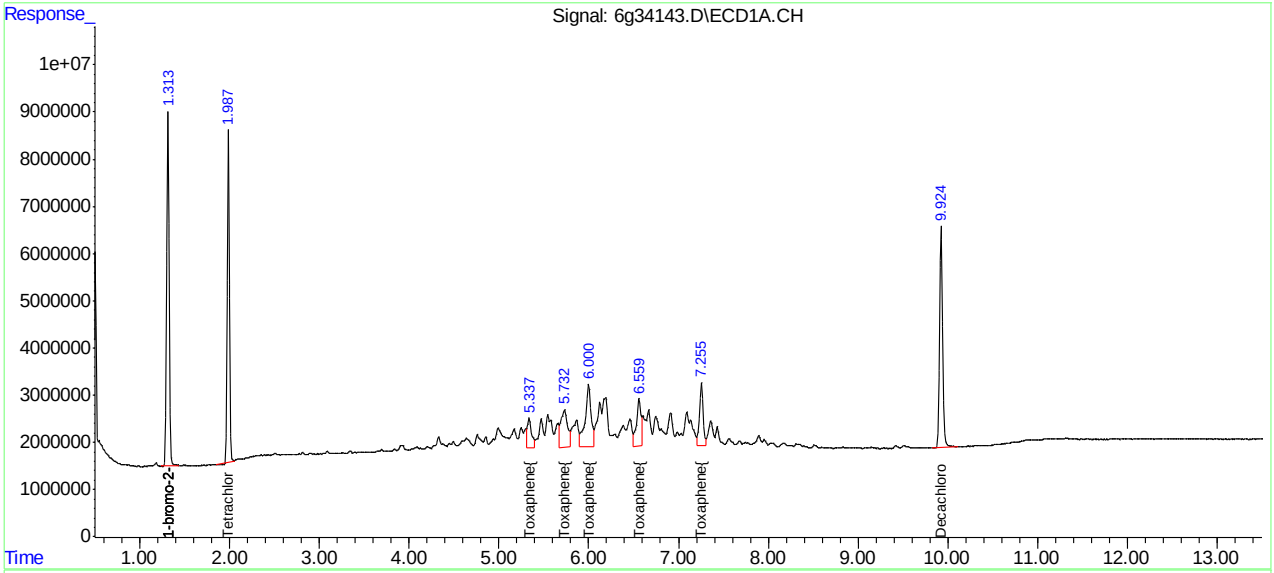
9.6.30
9

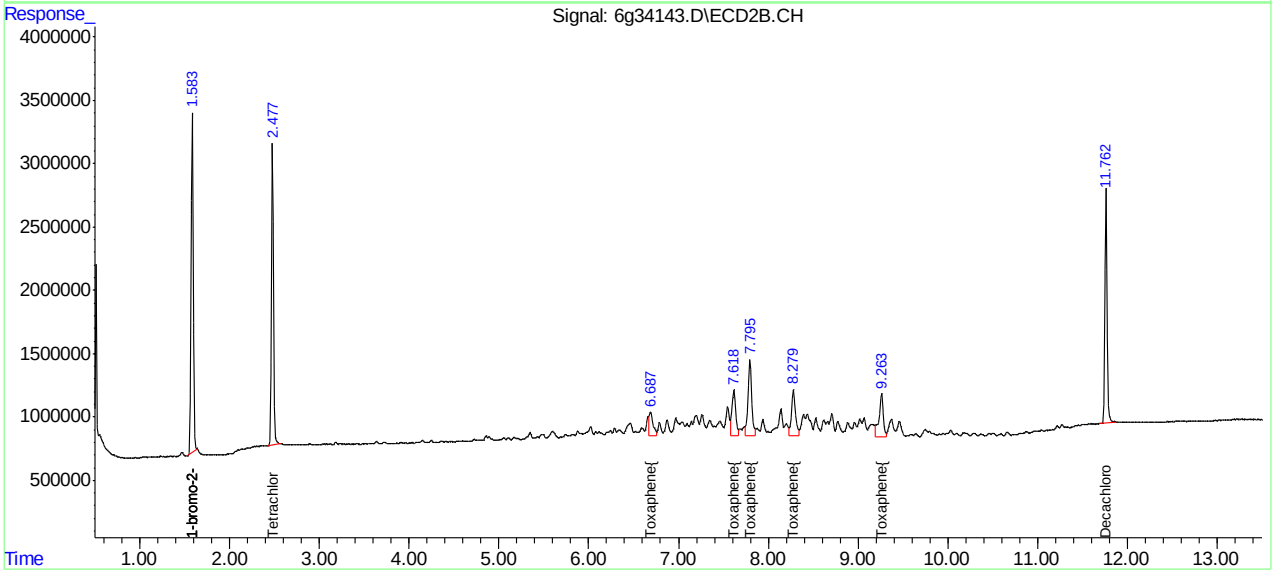
Quantitation Report (QT Reviewed)

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

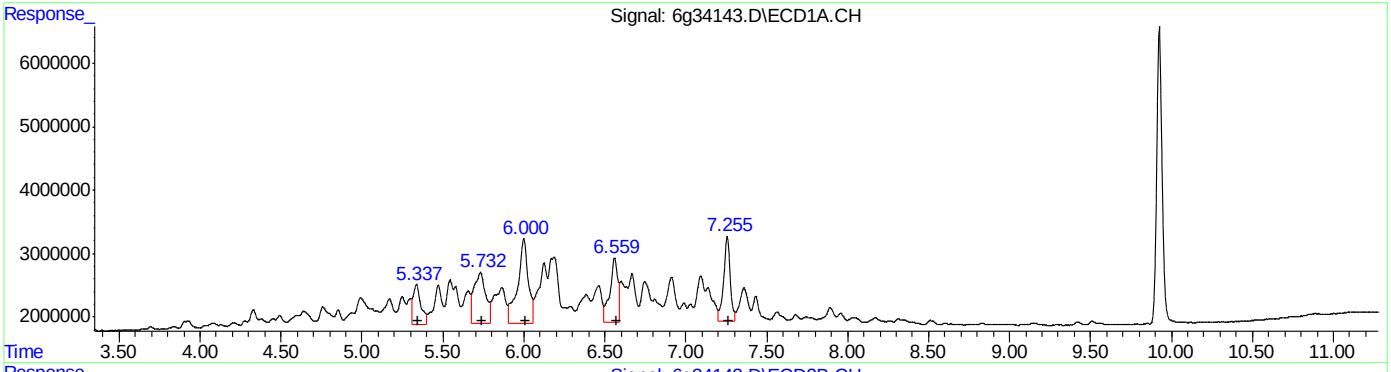
Parameter	CAS	Sig#	R.T. (min.)	Reason
Toxaphene-A		2	6.69	Poor instrument integration

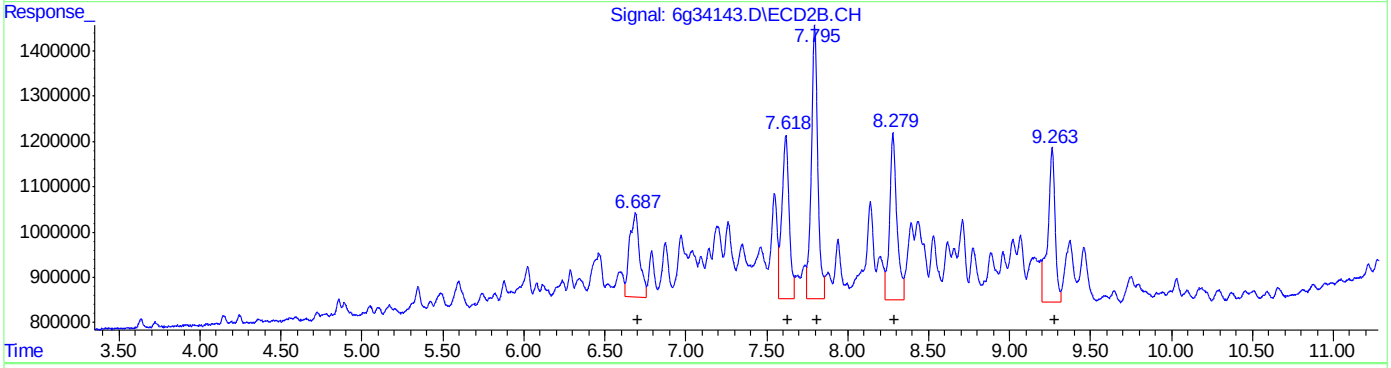
Quantitation Report (Qedit)

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

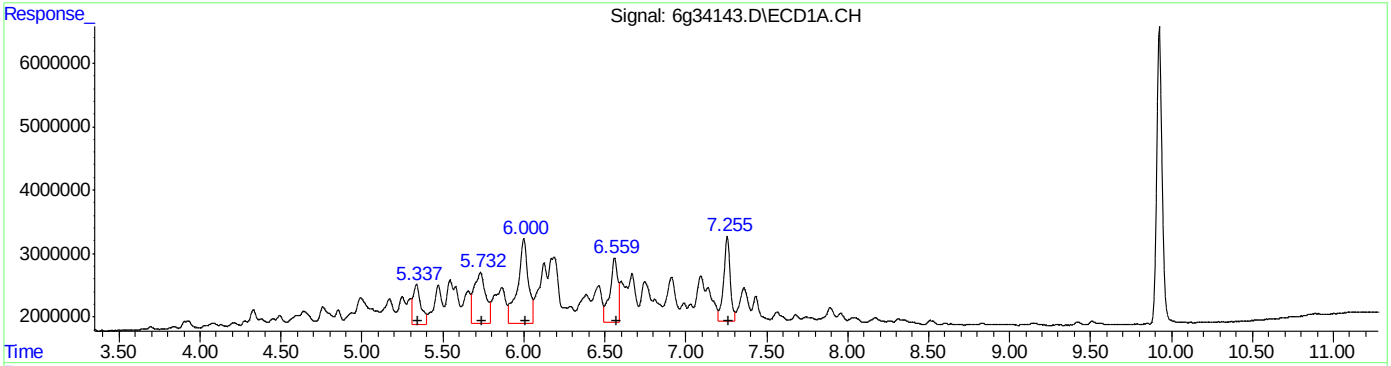
SGS ACCUTEST JC18516

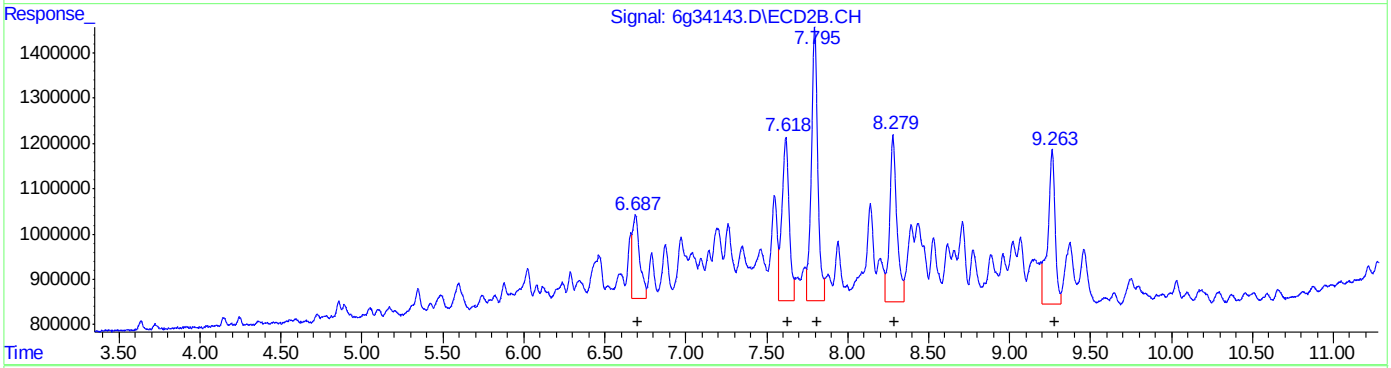
Quantitation Report (Qedit)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34372.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 10:07 am
Operator : brittanp
Sample : cc987-25
Misc : op93284,g6g995,15.2,,,10,10
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 10:32:34 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...	1.303	1.574	135.9E6	49841087	50.000	50.000
25) I	1-bromo-2...	1.303	1.574	135.9E6	49841087	50.000	50.000
31) I	1-bromo-2...	1.303	1.574	135.9E6	49841087	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.980	2.471	62387224	22492536	25.038	24.978
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 62.59%	62.45%
24)	SAB Decachlor...	9.919f	11.763	51711179	15362483	23.867	22.690
	Spiked Amount	40.000			Recovery	= 59.67%	56.73%
	Target Compounds						
3) A	alpha-BHC	2.494	3.176	83176354	29569422	25.894	25.205
4) MA	gamma-BHC	2.810	3.628	76812951	27433841	25.685	24.975
5) MA	Heptachlor	3.338	4.235f	75321517	25836457	25.091	23.274
6) B	beta-BHC	2.890	3.720	36663582	12927992	24.976	24.157
7) B	delta-BHC	3.084	4.138	70513270	25404043	25.300	24.818
8) MB	Aldrin	3.690	4.713f	69593444	24719448	25.101	23.947
9) B	Heptachlo...	4.439	5.593f	65001744	22770557	25.041	23.667
10) B	gamma-Chl...	4.614	5.899f	63196403	22153188	24.193	23.554
11) B	alpha-Chl...	4.796	6.143f	63205632	22069551	24.379	23.619
12) A	Endosulfan I	4.979	6.242f	61741988	21349907	24.123	23.519
13) B	4,4'-DDE	4.925	6.442f	53912697	19879752	25.095	24.672
14) MA	Dieldrin	5.322f	6.713f	62725134	21670952	24.786	23.371
15) MA	Endrin	5.664	7.256f	57743160	19535158	25.152	23.188
16) A	4,4'-DDD	5.812f	7.475f	46196560	17306435	25.435	24.888
17) B	Endosulfa...	6.004f	7.639f	55912468	19736434	24.685	23.952
18) MA	4,4'-DDT	6.264f	8.056f	48975421	14820841	24.791	23.482
19) B	Endrin Al...	6.674f	8.268f	45479137	15506049	24.634	23.210
20) B	Endosulfa...	7.411f	8.782f	50404382	16721582	25.339	23.061
21) A	Methoxychlor	7.127f	9.432f	29927211	8383091	25.275	24.105
22)	Mirex	7.262f	9.744f	49728560	15931710	24.519	22.314
23) B	Endrin Ke...	7.885f	9.830f	57800753	18986081	24.435	22.401

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

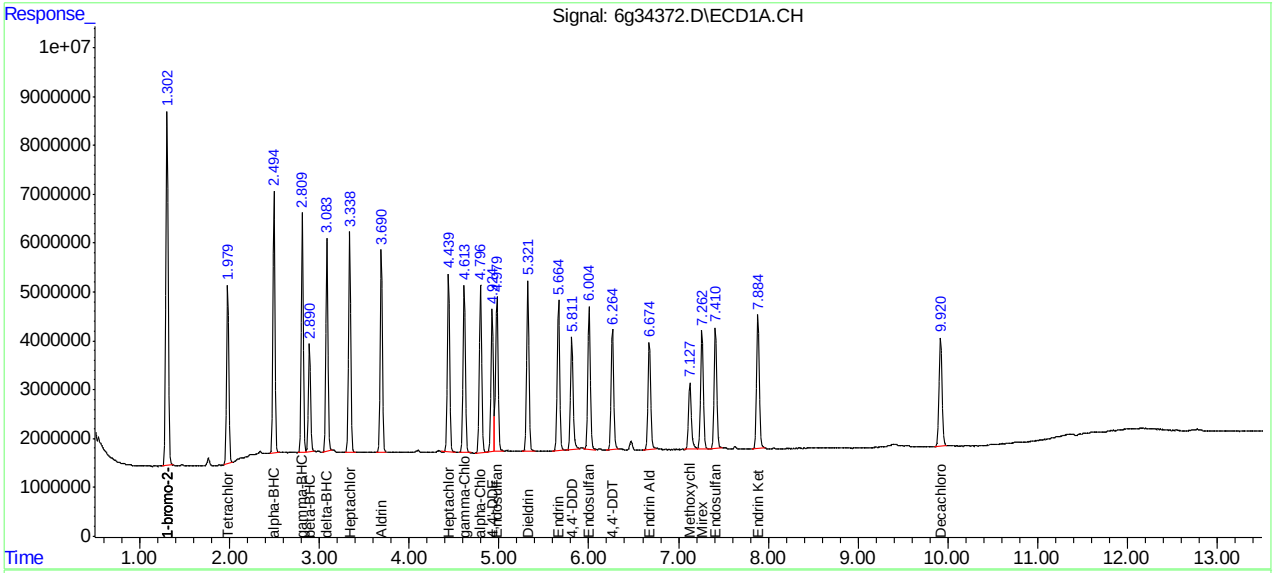
SGS ACCUTEST JC18516

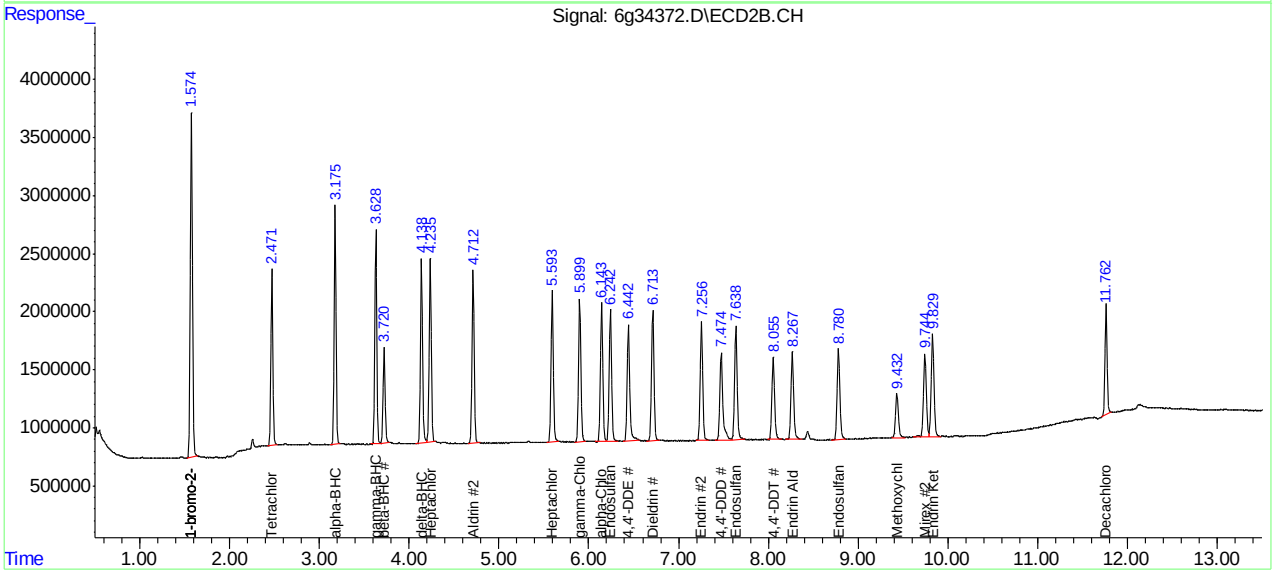
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34372.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 10:07 am
Operator : brittanp
Sample : cc987-25
Misc : op93284,g6g995,15.2,,,10,10
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 10:32:34 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34394.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 5:32 pm
Operator : dharas
Sample : cc987-50
Misc : op93322,g6g995,15.0,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 17:48:34 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...	1.305	1.577	139.4E6	48002185	50.000	50.000
25) I	1-bromo-2...	1.305	1.577	139.4E6	48002185	50.000	50.000
31) I	1-bromo-2...	1.305	1.577	139.4E6	48002185	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.981	2.472	125.3E6	41415648	49.065	47.755
	Spiked Amount 40.000 Range 30 - 150 Recovery = 122.66% 119.39%						
24)	SAB Decachlor...	9.917f	11.760f	106.6E6	30408318	47.986	46.634
	Spiked Amount 40.000 Recovery = 119.96% 116.59%						
	Target Compounds						
3) A	alpha-BHC	2.495	3.176	179.9E6	56704422	54.635	50.186
4) MA	gamma-BHC	2.810	3.628	163.8E6	51536077	53.429	48.715
5) MA	Heptachlor	3.337	4.236f	160.0E6	48058223	51.993	44.950
6) B	beta-BHC	2.889	3.721	73418859	23677630	48.789	45.938
7) B	delta-BHC	3.084	4.137	155.6E6	48494561	54.456	49.190
8) MB	Aldrin	3.689	4.713f	150.2E6	45998255	52.834	46.268
9) B	Heptachlo...	4.437f	5.592f	137.7E6	42263133	51.750	45.610
10) B	gamma-Chl...	4.611	5.899f	138.3E6	41452800	51.633	45.762
11) B	alpha-Chl...	4.793	6.143f	135.9E6	41430273	51.129	46.037
12) A	Endosulfan I	4.976f	6.242f	134.2E6	40055803	51.150	45.815
13) B	4,4'-DDE	4.923f	6.441f	118.0E6	37851764	53.587	48.776
14) MA	Dieldrin	5.320f	6.713f	136.1E6	41373257	52.454	46.329
15) MA	Endrin	5.660f	7.255f	124.4E6	37405644	52.868	46.100
16) A	4,4'-DDD	5.811f	7.473f	100.9E6	33837108	54.183	50.525
17) B	Endosulfa...	6.002f	7.639f	120.5E6	38183194	51.879	48.115
18) MA	4,4'-DDT	6.262f	8.054f	106.1E6	28729234	52.388	47.262
19) B	Endrin Al...	6.673f	8.266f	96761245	30594946	51.127	47.550
20) B	Endosulfa...	7.409f	8.782f	106.6E6	32955944	52.268	47.191
21) A	Methoxychlor	7.125f	9.433f	61949665	15966359	51.037	47.670
22)	Mirex	7.260f	9.743f	101.8E6	30299893	48.958	44.065
23) B	Endrin Ke...	7.884f	9.829f	131.7E6	39742894	54.322	48.689

SemiQuant Compounds - Not Calibrated on this Instrument

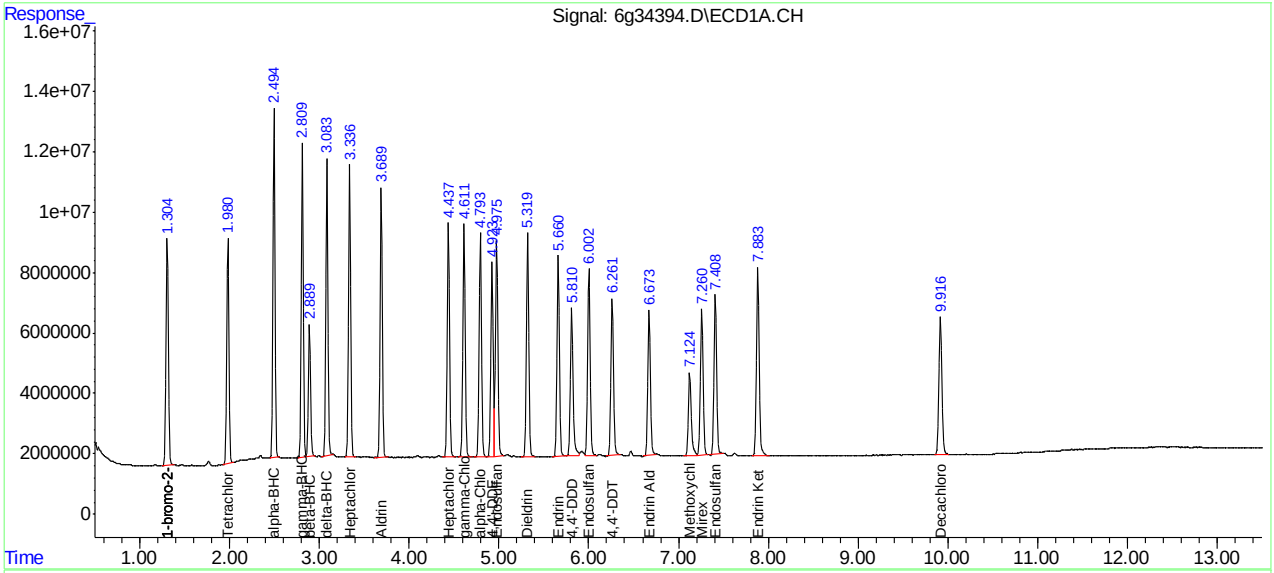
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

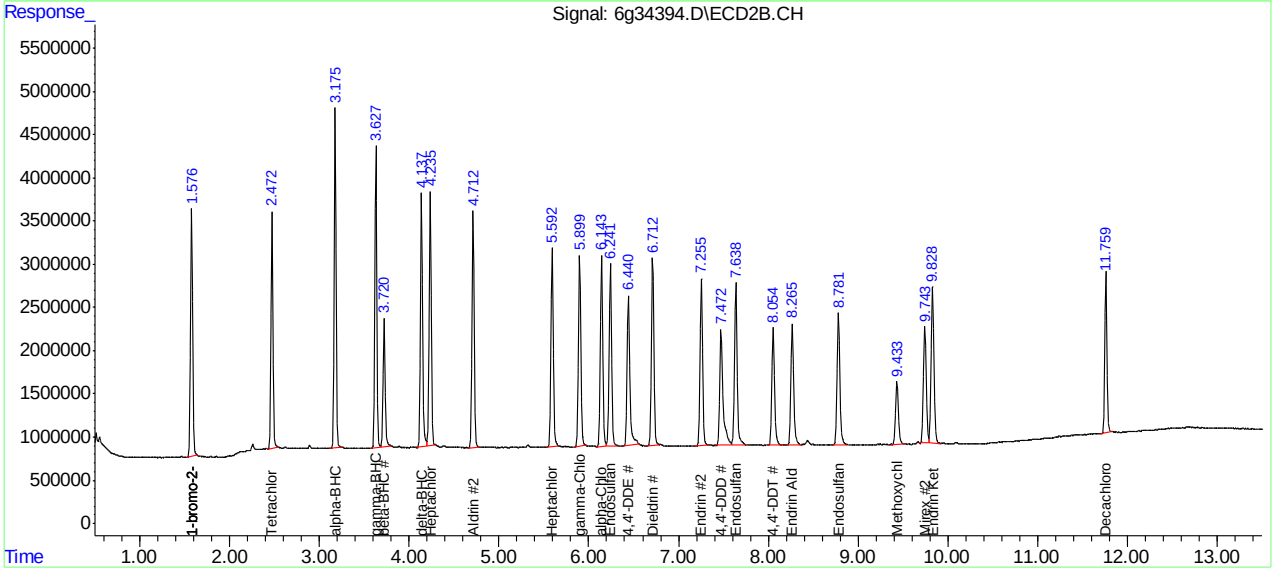
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34394.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 5:32 pm
Operator : dharas
Sample : cc987-50
Misc : op93322,g6g995,15.0,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 17:48:34 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 04/27/16 07:07

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34403.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 8:00 pm
Operator : dharas
Sample : cc987-25
Misc : op93251,g6g995,500,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 26 06:38:59 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...	1.304	1.576	152.0E6	52770040	50.000	50.000
25) I	1-bromo-2...	1.304	1.576	152.0E6	52770040	50.000	50.000
31) I	1-bromo-2...	1.304	1.576	152.0E6	52770040	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.981	2.471	69316602	23994350	24.885	25.167
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 62.21%	62.92%
24)	SAB Decachlor...	9.919f	11.759f	61305441	17689929	25.311	24.678
	Spiked Amount	40.000			Recovery	= 63.28%	61.70%
	Target Compounds						
3) A	alpha-BHC	2.494	3.176	93734040	31776950	26.104	25.583
4) MA	gamma-BHC	2.810	3.628	86822915	29376721	25.972	25.260
5) MA	Heptachlor	3.337	4.236f	86498102	28287412	25.776	24.067
6) B	beta-BHC	2.890	3.721	40829884	13794782	24.881	24.346
7) B	delta-BHC	3.084	4.138	81201410	27534167	26.063	25.406
8) MB	Aldrin	3.690	4.712f	80740567	27279168	26.051	24.960
9) B	Heptachlo...	4.438	5.594f	75509312	25574254	26.022	25.106
10) B	gamma-Chl...	4.613	5.899f	76069118	24847339	26.050	24.952
11) B	alpha-Chl...	4.795	6.143f	75982368	24971912	26.217	25.242
12) A	Endosulfan I	4.977	6.242f	75051459	24150411	26.232	25.127
13) B	4,4'-DDE	4.925	6.442f	61198841	22217123	25.483	26.043
14) MA	Dieldrin	5.320f	6.713f	73883178	24344172	26.116	24.797
15) MA	Endrin	5.662f	7.256f	66500056	21430910	25.913	24.026
16) A	4,4'-DDD	5.812f	7.475f	51111033	19719809	25.174	26.785
17) B	Endosulfa...	6.003f	7.638f	64941556	22624535	25.648	25.933
18) MA	4,4'-DDT	6.263f	8.056f	55292724	16149469	25.037	24.167
19) B	Endrin Al...	6.675f	8.267f	54089518	18210208	26.209	25.745
20) B	Endosulfa...	7.411f	8.782f	59302256	19453776	26.669	25.340
21) A	Methoxychlor	7.130f	9.434f	33959042	9027790	25.656	24.518
22)	Mirex	7.262f	9.743f	59799083	18579513	26.376	24.579m
23) B	Endrin Ke...	7.887f	9.829f	74096742	23339601	28.021	26.010

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

9.6.33

9

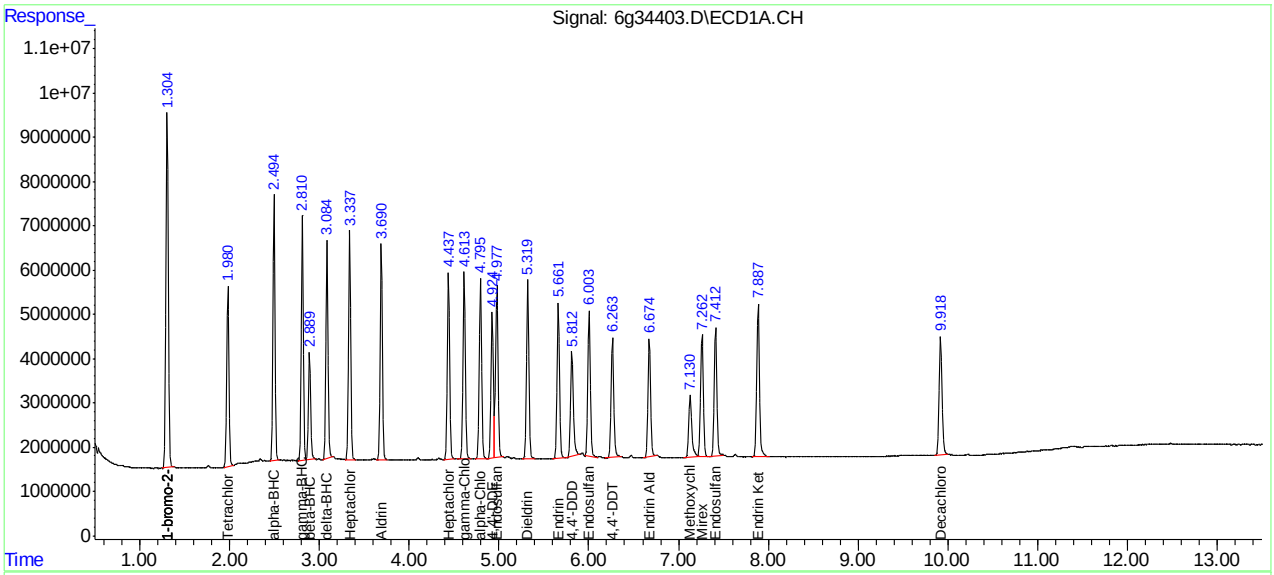
SGS ACCUTEST JC18516

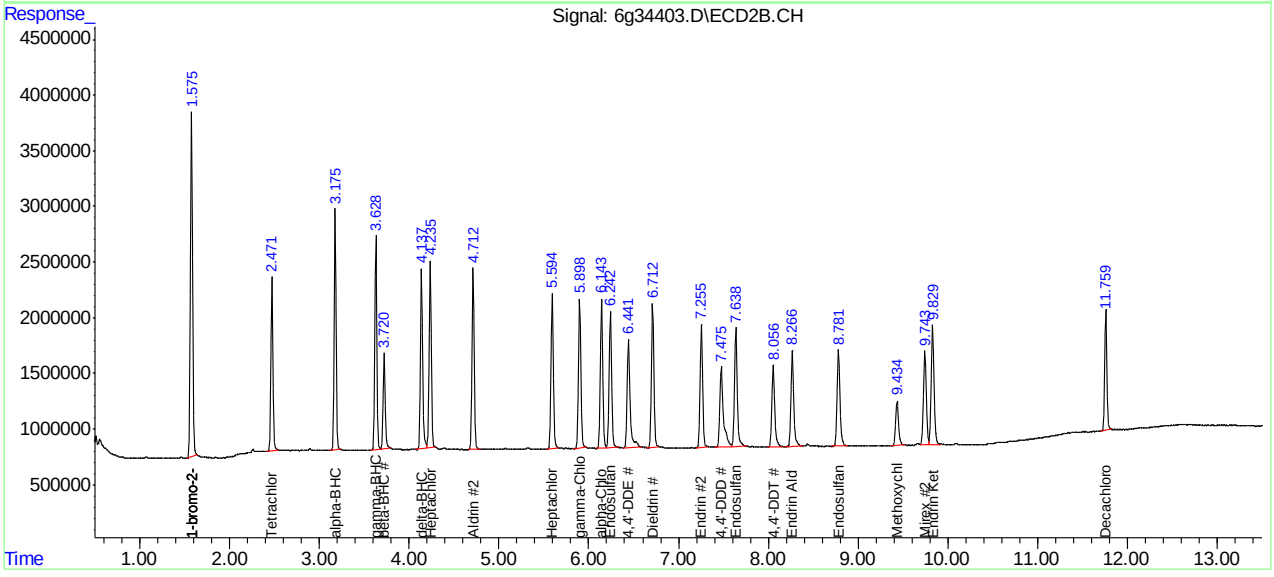
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34403.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 8:00 pm
Operator : dharas
Sample : cc987-25
Misc : op93251,g6g995,500,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 26 06:38:59 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:	G6G995-CC987	**Method:**	EPA 608
Lab FileID:	6G34403.D	**Analyst approved:**	04/26/16 12:26 Brittany Piercy
Injection Time:	04/25/16 20:00	**Supervisor approved:**	04/27/16 07:07 Gwendolyn Burns

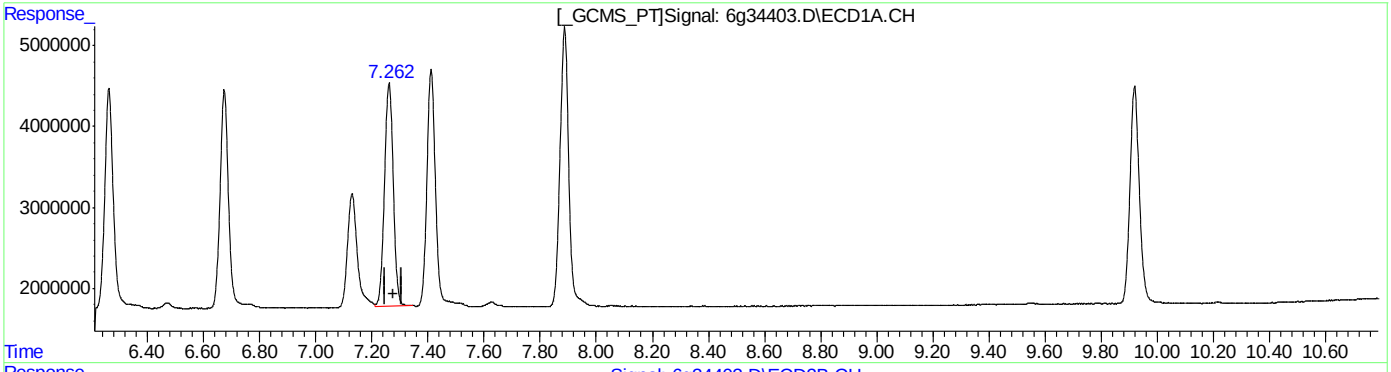
Parameter	CAS	Sig#	R.T. (min.)	Reason
Mirex	2385-85-5	2	9.74	Poor instrument integration

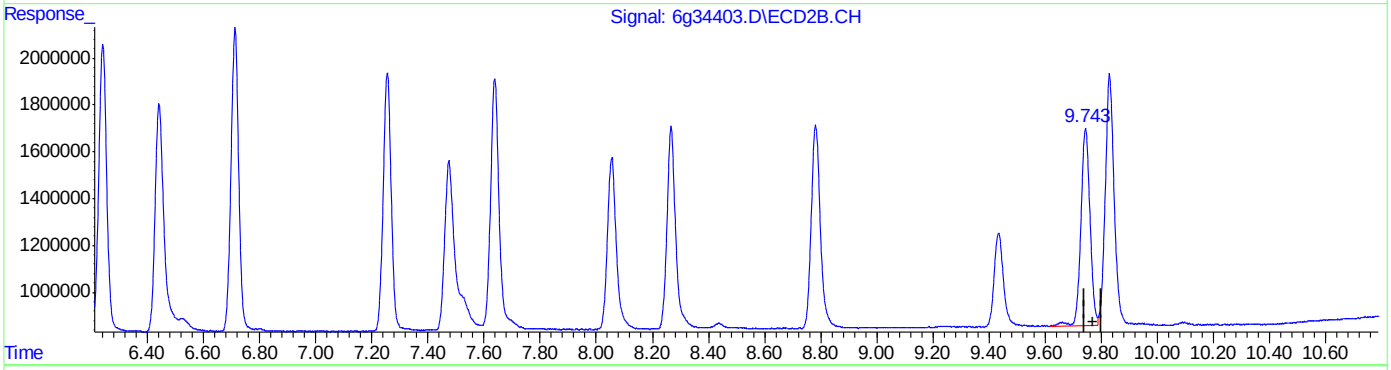
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34403.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 8:00 pm
Operator : dharas
Sample : cc987-25
Misc : op93251,g6g995,500,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 20:13:37 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

(22) Mirex
7.262min 26.376PPB
response 59799083

(22) Mirex #2
9.744min 25.060PPB
response 18943451

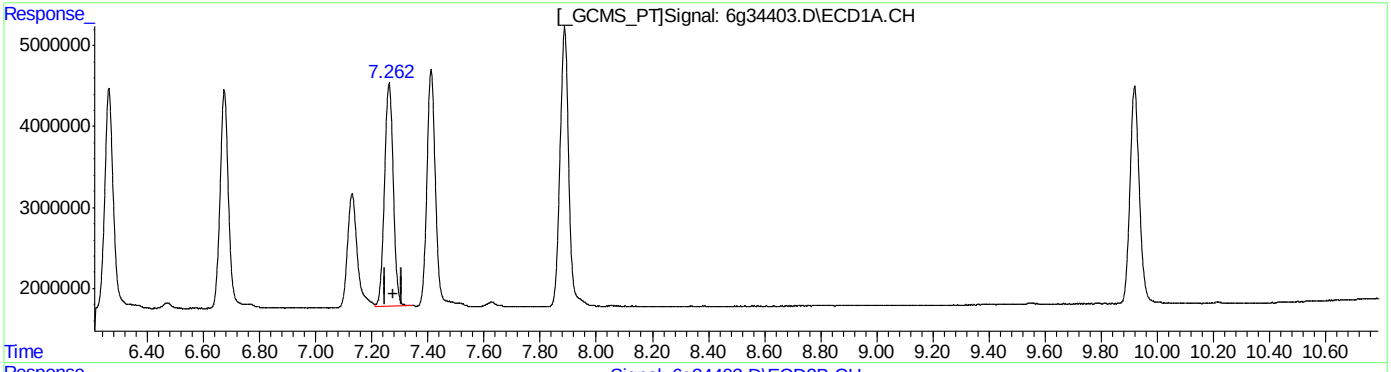
(+) = Expected Retention Time

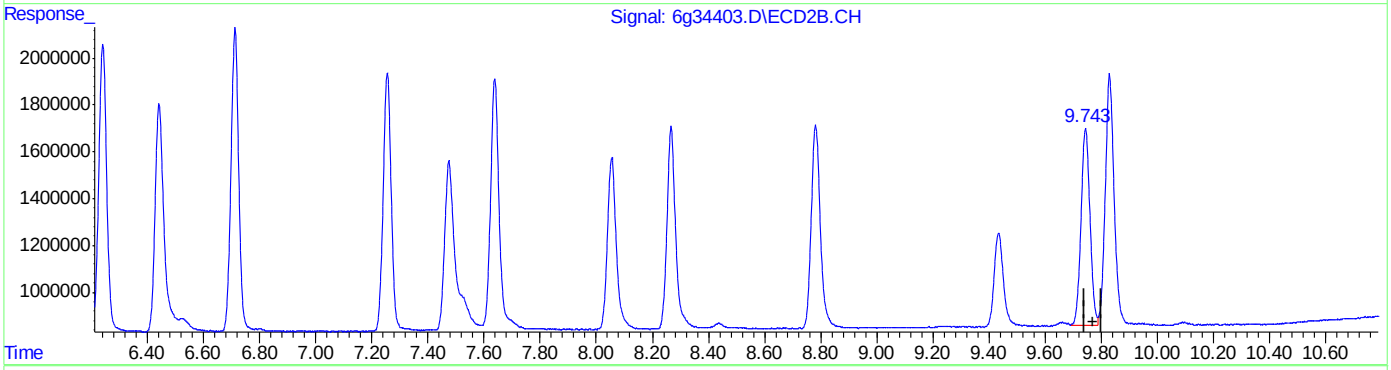
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\995\
Data File : 6g34403.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 25 Apr 2016 8:00 pm
Operator : dharas
Sample : cc987-25
Misc : op93251,g6g995,500,,,5,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 25 20:13:37 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

(22) Mirex
7.262min 26.376PPB
response 59799083

(22) Mirex #2
9.743min 24.579PPB m
response 18579513

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\996\
Data File : 6g34416.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 26 Apr 2016 7:53 am
Operator : brittanp
Sample : cc987-50
Misc : op93322,g6g996,16.0,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 26 08:43:52 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...	1.332f	1.599f	147.6E6	50087239	50.000	50.000
25) I	1-bromo-2...	1.332f	1.599	147.6E6	50087239	50.000	50.000
31) I	1-bromo-2...	1.332	1.599	147.6E6	50087239	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.999	2.486	130.0E6	42527165	48.063	46.995
	Spiked Amount 40.000 Range 30 - 150 Recovery = 120.16% 117.49%						
24)	SAB Decachlor...	9.916f	11.757f	107.5E6	30724322	45.685	45.157
	Spiked Amount 40.000 Recovery = 114.21% 112.89%						
	Target Compounds						
3) A	alpha-BHC	2.508	3.185	185.3E6	58190073	53.139	49.357
4) MA	gamma-BHC	2.821	3.635	169.5E6	53234037	52.194	48.225
5) MA	Heptachlor	3.346	4.241	155.7E6	49370567	47.774	44.255
6) B	beta-BHC	2.901	3.728	78029958	24910153	48.960	46.317
7) B	delta-BHC	3.094	4.143	157.0E6	51600251	51.899	50.161
8) MB	Aldrin	3.697	4.717	147.2E6	45864192	48.894	44.213
9) B	Heptachlo...	4.442	5.596f	134.0E6	42219453	47.566	43.666
10) B	gamma-Chl...	4.617	5.901f	127.2E6	41020772	44.849	43.400
11) B	alpha-Chl...	4.798	6.146f	129.4E6	40771923	45.975	43.420
12) A	Endosulfan I	4.981	6.244f	128.7E6	39483305	46.310	43.280
13) B	4,4'-DDE	4.927	6.444f	115.2E6	37919819	49.401	46.830
14) MA	Dieldrin	5.323	6.714f	132.8E6	40744355	48.349	43.725
15) MA	Endrin	5.665	7.256f	123.9E6	37905616	49.720	44.772
16) A	4,4'-DDD	5.812f	7.475f	97264275	32903200	49.326	47.085
17) B	Endosulfa...	6.006	7.639f	118.9E6	37721759	48.352	45.555
18) MA	4,4'-DDT	6.265f	8.055f	109.5E6	31214536	51.074	49.213
19) B	Endrin Al...	6.675f	8.267f	99810221	30700500	49.796	45.728
20) B	Endosulfa...	7.411f	8.781f	109.4E6	33697461	50.637	46.244
21) A	Methoxychlor	7.125f	9.432f	63979325	17806288	49.769	50.950
22)	Mirex	7.262f	9.743f	99279558	30112962	45.088	41.970
23) B	Endrin Ke...	7.885f	9.828f	134.9E6	40947598	52.511	48.076

SemiQuant Compounds - Not Calibrated on this Instrument

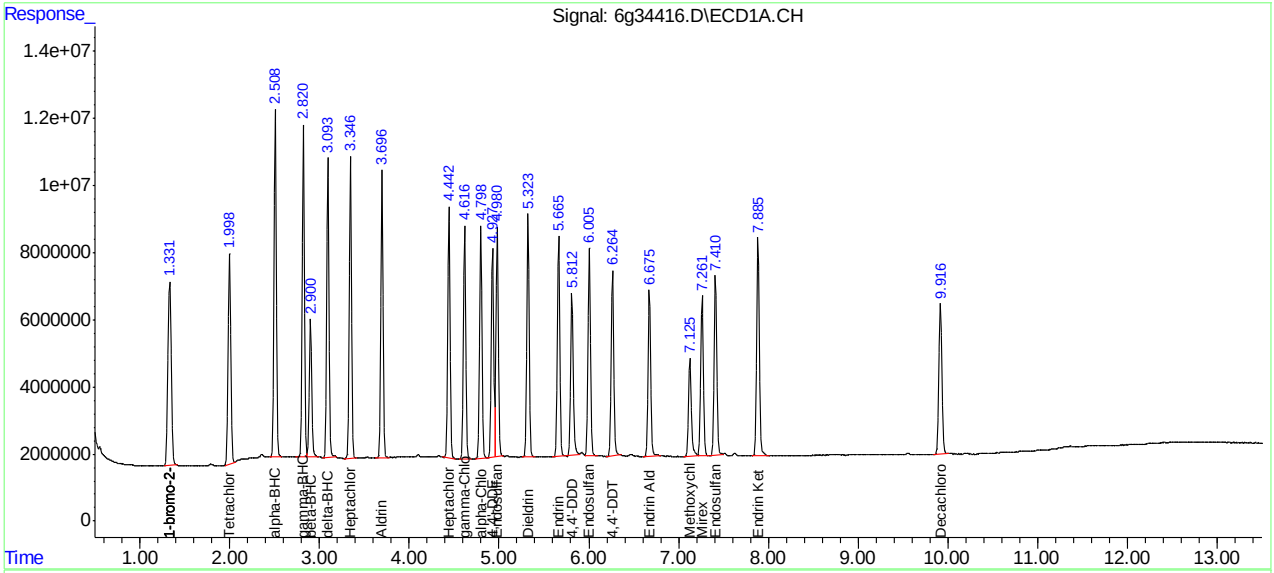
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

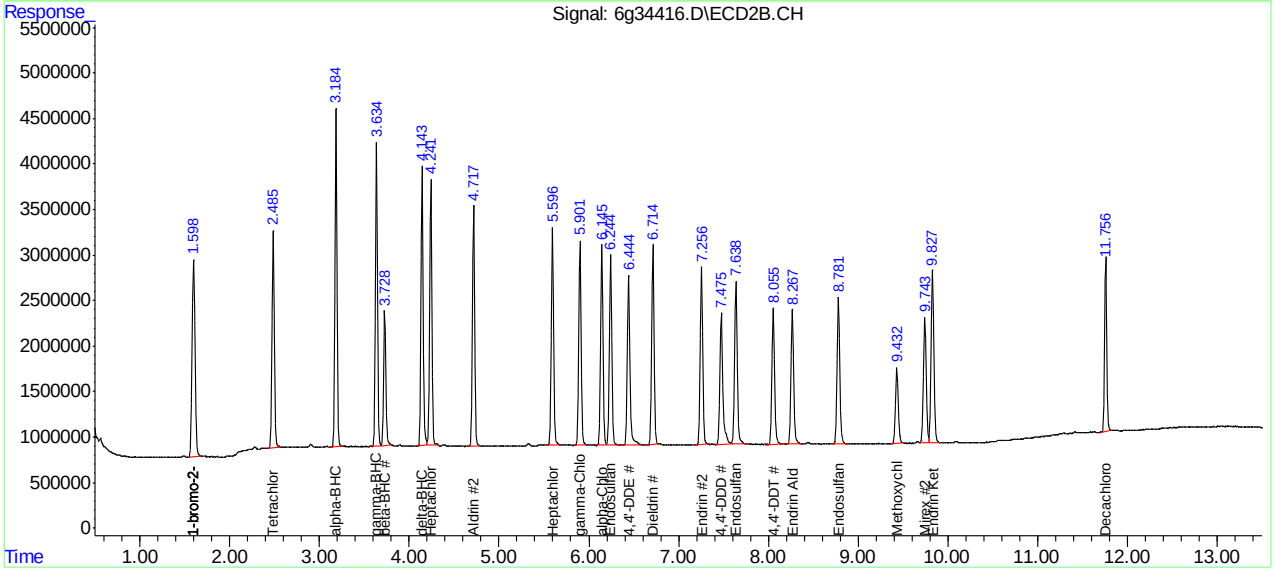
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\996\
Data File : 6g34416.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 26 Apr 2016 7:53 am
Operator : brittanp
Sample : cc987-50
Misc : op93322,g6g996,16.0,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 26 08:43:52 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

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G1G 3951

Print Analyst Name: Dhara Saparia

Analyst Signature: [signature]

Date: 04/01/2016

Columns: 2DCLPR / 2DCLPD

Method 508.1, 608

Initial Cal. Method 1PST 3951

Injection Volume: 1.0 µL

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV161m-61	Pest ISTD	5 ppm
-74	PCM	10-250 ppb
-87	IB	20 ppb
-70A	Pest mix	50
-10tA	Pest mix	25
157191	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: 4/6/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	1d121638	dblt				1			/	ok	
	639	IB				2			/	ok	
	640	IC3951-1				3			/	ok	SV151r0r-70A 1ppb
	641	-2				4			/	ok	-70B 2
	642	-5				5			/	ok	-70C 5
	643	-10				6			/	ok	-70D 10
	644	IC3951-25				7			/	ok	SV161r7h-10tB 25
	645	IC3951-50				8			/	ok	-10tA 50
	646	-75				9			/	ok	SV151r0r-70E 75
	~~647~~ 646	-100				10			/	ok	-70F 100
	~~648~~ 647	-500		CHL		11	20		/	ok	SV161r7h-20 (10 ppm)
	~~649~~ 648	-500		TOX		12	20		/	ok	-21 (10 ppm)
DRAFT	~~650~~ 649	IC3951-25		Pest		13	10		/	ok	SV151r7h-95 ~~SV151r6h-95~~ (250 ppb) DRAFT
	~~651~~ 650	-25		mirex		14	10			ok	OP151r6h-137 (250 ppb)
	~~652~~ 651	-500		CHL		15			/	ok	SV151r7h-96 (500 ppb)
	~~653~~ 652	-500		TOX		16			/	ok	-97 (500 ppb)
											JR 4/1/16

MTX = Matrix. Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

Form: OR016-08
Rev. Date: 1/19/16

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G1G3966

Print Analyst Name: Brittany Piercy

Date: 04/19/2016

Analyst Signature: B.P.

Columns: ZBCLP I / ZBCLP II

Method 8081/1608

Initial Cal. Method IPST 3951

Injection Volume: 1 µl

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV16874-101	Pest ISTD	5ppm
-79	Pem	10-250ppb
-108B	Pest Mix	25 ppb
-108A	1	50 1
-87	I.B.	20 1
157194	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:** 4/20/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	lg 122256	ddt			W	1		/	/	ok	
	257	cc 3951-25				2		/	/	ok	
	258	I.B				3		/	/	ok	
	259	OP93156-MB1	93156-1	8081 TCL	W	5		/	/	ok	
	260	-BS1				6		/	/	ok	
	261	-BSD				7		/	/	ok	
	262	JC18516-1				8		/	/	ok	
	263	-4				9		/	/	ok	
	264	JC18273-1	93135-1	8081 TCL	S	10		/	/	ok	
	265	-5				11		/	/	ok	
	266	JC18285-1				12		/	/	ok	
	267	JC18308-9				13				Not vin	Need TDA
	268	-10				14		/	/	ok	
	269	-12				15				Not vin	Need TDA
	270	-13				16				Not vin	
	271	-14				17				Not vin	
	272	florisil cart std				18	5	/	/	ok	Run before seq lg122265
	273	florisil cart. check	S213057			19		/	/	ok	
	274	florisil cart check	S213057			20		/	/	ok	

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

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Form: OR016-08
Rev. Date: 1/19/16

9.7.2 9

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G1G3966

Print Analyst Name: Dhara Saparia

Analyst Signature:

Date: 04/19/16

Columns: 2ACLP1 / 2DCLP

Method 8081

Initial Cal. Method 1PST395

Injection Volume: 1.0 uL

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
1614n-101	Pest RSTD	5 ppm
-71	PCB	10-250 ppb
-87	DB	20 ppb
-105D	Pest mix	50
-105A	Pest mix	25
157194	Hexane (Rinse)	–
1614 33-04	TDA 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: AR

Date: 4/20/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	4122275	JC14405-2	93135	8081 dilution		21		✓	✓	OK	RA 1:20
	276	dblk				1		✓	✓	OK	
	277	CC3451-50				4		✓	✓	OK	various ↑ int.
	278	DB				3		✓	✓	OK	
	279	OP93188-MO1	93188	8081	S	5		✓	✓	RX	↑ TCMX, DCB
	280	-BS1				6		✓	✓	RX	RX whole batch
	281	JC17956-1R		SL		7				not using	
	282	JC18461-1		TCL		8					
	283	-2				9					
	284	OP93188-MS				10					
	285	-MSD				11					
	286	JC18461-3				12					
	287	-4				13					
	288	JC18404-20				14					
	289	-30				15					
	290	JC18182-5	93083	8081 TCL		16		✓	✓	OK	HAd TDA
	291	JC18399-1	93135	PPL		17		✓	✓	OK	
	292	JC18308-9		TCL		18		✓	✓	OK	
	293	-12		↓		19		✓	✓	OK	

MTX = Matrix. Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

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Form: OR016-08
Rev. Date: 1/19/16

9.7.2 9

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G1G3966

Print Analyst Name: Dhara Saparia

Date: 04/19/16

Analyst Signature:

Columns: 2DCLPD / 2DCLPT

Method 8081

Initial Cal. Method 1 PST 395

Injection Volume: 1.0 uL

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
161572401	Pest IDTD	5 ppm
-71	PGM	10-250 ppb
-87	IB	20 ppb
-108A	Pest mix	50
-105A	Pest mix	25
157194	Hexane (Fisher)	–
161933 04	TBA 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: Date: 4/20/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	12122294	JC18305-13	93135	TCL		20		/	/	OK	HAd TBA
	295	-14		↓		21		/	/	OK	↓
	296	JC18403-2		dilution		22	20	/	/	OK	
	297	-4		↓		23	100	/	/	OK	

BP 4/20/16

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

9.7.2 9

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G6G987

Print Analyst Name: Dhara Saparia

Date: 04/14/16

Analyst Signature: [signature]

Columns: 2BCLPD / 2DCLPD

Method 8081, 608

Initial Cal. Method G6ST987

Injection Volume: 1.0 uL

Date Archived:

Standard Data

Lot #	Description	Conc.
161574-1147	Pest mix 1st	25 PPb
-1148		50
-1149		1
-1150		2
-1151		5
-1152		10
-1153		75
-1154		100

Standard Data

Lot #	Description	Conc.
SV161174-05	Pest IRTD	5 PPm
-79	PCBs	10-250 PPb
-87	IB	20 PPb
-20	Chlordane 1st	10 PPm
-21	Toxaphene 1st	10 PPm
-95	Pest mix 2nd source	250 PPb
-96	Chlordane 2nd	500 PPb
-97	Toxaphene 2nd	500 PPb
157194	Hexane Blk	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 4/19/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	G234128	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

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G6G995

Print Analyst Name: Brittany Piercy

Date: 04/25/2016

Analyst Signature: B.P.

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
CV168874-125	Pest ISTD	5ppm
-79	PEM	10-250ppb
-148B	Pest Mix	~~25~~ 50 ppb
-148A	"	~~25~~ 50 "
-87	I.B.	20 "
157194	Hexane (Fisher)	—

Columns: ZBCLPI / ZBCLPII

Method 8081/608

Initial Cal. Method 6PST987

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: JR **Date:** 4/28/

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	69 343371A	ddt			W	1				OK	
	372	CC987-25				2				OK	
	373	I.B.				3				OK	
	374	OP93282-MB1	93282-1	8081 TCL	W	5				OK	
	375	-BS1				6				OK	
	376	OP93322-MB1	93322-1	8081 PPL/TCL	S	7				OK	
	377	-BS1				8				OK	
	378	OP93282-BSD	93282-1			9				OK	
	379	JC18670-12		TCL		10				OK	
	380	JC18715-7				11				OK	
	381	OP93322-MS	93322-1			12				OK	
	382	-MSD				13				OK	
	383	JC18771-1				14				OK	
	384	-10				15				OK	
	385	JC18776-1				16				OK	
	386	JC18834-1				17				OK	
	387	-10				18				OK	
	388	-16				19				OK	
	389	-21				20				OK	

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

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Form: OR016-08
Rev. Date: 1/19/16

9.7.4

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SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G6G995

Print Analyst Name: Brittany Piercy

Analyst Signature: B.P.

Date: 04/25/2016

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV161874-B5	Pest ISTD	5 ppm
-79	Pem	10-250 ppb
-148B	Pest Mix	~~25~~ 50 ppb
-148A		~~50~~ 25
-87	I.B.	20
157194	Hexane (Fisher)	—

Columns: ZBCLPI / ZBCLPII

Method 8081/608

Initial Cal. Method 6PST987

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: [signature] **Date:** 4/28/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	69 34390	JC18834-27	93322-1	8081 TCL/PPL	S	21				OK	
	391	JC18835-1				22				OK	
	392	-9				23				OK	
	393	ddt				1				OK	
	394	CC987-50				4				OK	
	395	IB				3				OK	
	396	OP93251-MB1	93251	~~8081~~ 608	W	5				OK	
	397	-BS1				6				OK	
	398	JC18592-1		PPL		7				OK	
	400	JC18617-3		S2		9				OK	
	399	JC18617-5		↓		8				OK	
	401	OP93251-MS				10				OK	
	402	-MSD				11				OK	
	403	CC987-25				2				OK	
	404	IB				3				OK	
	405	JC18781-5	93322	8081 TCL	S	12			2nd	OK	DCB ↑ 2nd
	406	JC18516-2				13				OK	
	407	-3				14				OK	
	408	JC18649-3				15				OK	

MTX = Matrix. Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

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Form: OR016-08
Rev. Date: 1/19/16

9.7.4 9

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G6G 995

Print Analyst Name: Dhara Saporia

Date: 04/25/16

Analyst Signature: [signature]

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
5/1617-105	Pest Std	5 PPM
-74	PCM	10-250 PPB
-87	DB	20 PPB
-140A	Pest Mix	25
-140B		50
157140	Hexane (Fisher)	-
160863	BP 4/26/16	

Columns: 20CLP I / 20CLP II

Method 8081

Initial Cal. Method GPST 987

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: [signature] Date: 4/28/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	6B3h409	JC18795-1	93322	8081 TCL	S	16				OK	
	h10	-2				17				OK	
	h11	-3				18				OK	
	h12	-4				19				OK	
	h13	-5				20				OK	
	h14	-6				21				OK	

BP 4/26/16

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

9.7.4 9

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G6G996

Print Analyst Name: Brittany Percy

Analyst Signature: BP

Date: 04/26/2016

Columns: ZBCLPI / ZBCLPII

Method 8081 / 608

Initial Cal. Method 6PST987

Injection Volume: 1µl

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SM1687435	Pest ISTD	5ppm
-79	Pem	10-250ppb
~~-480~~	Pest Mix	25
~~-480~~	I	50
-87	I.B.	20
1608863	Hexane (Fisher)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] **Date:** 4/28/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	69 34415	ddt			W	1				OK	
	416	cc 987-50				4				OK	
	417	I.B.				3				OK	
	418	OP93358-MB1	93358-1	8081 TCL	W	5				OK	
	419	-BS1				6				OK	
	420	-BSD				7				OK	
	421	OP81198-MBIN	81198-1	8081	S	8				OK	MDL's
	422	JC13380-39	93358-1	8081 TCL	W	9				OK	
	423	-40				10				OK	
	424	OP81198-BS1N	81198-1	8081	S	11				OK	
	425	-BS2N				12				OK	
	426	-BS3N				13				OK	
	427	-BS4N				14				OK	
	428	ddt			W	1				OK	
	429	cc987-25				2				OK	
	430	I.B.				3				OK	
	431	OP92989-BS1	92989	8081	S	5				OK	
	432	OP93363-MD1	93363	608	W	6				OK	
	433	-BS1				7				OK	

MTX = Matrix. Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

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Form: OR016-08
Rev. Date: 1/19/16

9.7.5 9

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G6G 996

Print Analyst Name: Dhara Saparia

Analyst Signature: [signature]

Date: 04/26/16

Columns: 2nd PI / 2nd PII

Method 8081, 608

Initial Cal. Method G8S 987

Injection Volume: 1.0 ul

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV6171115	Pest IS/SD	5 PPM
-79	PEM	10-250 PPB
-87	TB	20 PPB
-1111	Pest mix	25
-1111	↓	50 ↓
160863	Methoxychlor	-

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: 4/28/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	6G32434	OP93363-MS	93363	608 PPB	W	8				OK	
	435	-MSD				9				OK	
	436	JC18851-1				10				OK	
	437	JC18871-1				11				OK	
	438	JC18922-1				12				OK	RR 1.5 for DBTD
	439	CC 987-50				4				OK	
	440	IB				3				OK	
	441	JC18922-1				13	5			OK	CFI
	442	CC987-25				2				OK	
	443	IB				3				OK	

BP 4/27/16

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

85

Form: OR016-08
Rev. Date: 1/19/16

LOGBOOK ID: 6-1687

Pest/PCB Extraction Log - Aqueous

Date Started: 04.18.16 Time Started: 9:30AM
Date Finished: 04.18.16 Time Finished: 1120

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Separatory Funnel: SW846 3510C/CLP/other_____
Continuous Liquid Liquid: SW846 3520C/CLP/other_____

BATCH # GC 93156	RACK# Pest 101
Extracted by:	ENC/BJ
Concentrated by:	ENC
Vialed by:	NL
Relinquished by:	
Accepted by:	
Supervisor Review:	4/18/16

Special Client Spike Instructions

QC ID# for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt. Spiked

WITNESS SIGN: SPIKE SIGN:
Manager/Supervisor/Team Lead Approval:

Sample #	Analysis Type	Sample Bottle #	pH	Sample Description	Sample Volume (mL)	Final Extract Color	Final Extract Vol(mL)	Extract Cleanup GPC	Copper	H2SO4	Florisil	Comments
MB1	Pest			DI H2O	300	Clear	2		/			
BS1	LVI			DI H2O	300	Clear	2		/			
BSD MS	1			DI H2O	300	Clear	2		/			
MSD												
BS												
MS												
MSD												
1 JC18516-1	Pest	4		CLEAR	300	Clear	2		/			
2 -4	LVI	4		a YELLOW	300	clear	2		/			
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												

1 dout AT

Comments: Not in LIMS at time of delivery

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure Flowrate
Buchi (65-71°C)	B2	65	–	–	OK
Buchi Chiller	B2	11	–	–	OK
Waterbath (70-80°C)					
Waterbath Chiller (GPM)					
NEVAP (32-38°C, LPM)					

SURROGATE	LOT #	CONC (ppb)	AMT (mL)
PPCB	16171261	400	0.2

WITNESS SIGN: BJ SPIKE SIGN: ENC

MATRIX SPIKE	LOT #	CONC	AMT (mL)
PEST	16171257C	250 ppb	0.2
PCB			

WITNESS SIGN: BJ SPIKE SIGN: ENC

SOLVENT	LOT #	BRAND	AMT (mL)
METH CHLOR	159148	Fisher	3/15
HEXANE	157194	Fisher	1/50

REAGENT	LOT #	BRAND
Sodium Sulfate	158454	Fisher
Glass Wool	02905-2	Lab
Filter Paper		
Copper	1617128	Alfa Aesar
Florisil		
1:1 Sulfuric Acid		
Chlorine Strips		

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason:

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other:

SGS ACCUTEST INC.
Form: OP021A-06
Rev Date: 1/13/16

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LOGBOOK ID: 6-1721

Pest / PCB Extraction Log - Soils

Date Started: 4/23/16 Time Started: 1:45pm
Date Finished: 4/23/16 Time Finished: 4:45pm

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Microwave SW3546 ✓ Sonication SW3550C ____
Waste Dilution SW3580A ____ Soxhlet SW3540 ____

BATCH # GC 93322 RACK# GE-500

Weighed/Extracted by: SG
Concentrated by: RG SG
Vialed by: SG/MA
Relinquished by:
Accepted by:
Supervisor Review: 4/25/16

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	Final Extract Color	Final Extract Vol (mL)	Extract Cleanup H2SO4	Florisil	Cu	GPC	Comment
MB1	Pest		sand	15.0		/	S	Clear	10		/	/		
BS1			sand	15.0		/	S	Clear	10		/	/		
JC18834-10 MS		1	soil	16.0		/	S	Clear	10		/	/		
MSD		1	soil	15.7		/	S	Clear	10		/	/		
BS														
MS														
MSD														
01 JC18771-1	Pest	1	soil	15.7		/	S	L Yellow	10		/	/		
02 -10		1	soil	15.4		/	S	Clear	10		/	/		
03 JC18776-1		1	soil	16.5		/	S		10		/	/		
04 JC18834-1		1	soil	15.5		/	S	Clear	10		/	/		
05 -10		1	soil	15.4		/	S	Clear	10		/	/		
06 -16		1	soil	15.0		/	S	Clear	10		/	/		
07 -21		1	soil	16.4		/	S	Clear	10		/	/		
08 -27		1	soil	15.4		/	S	Clear	10		/	/		
09 JC18835-1		1	crush rock	16.9		/	S	Clear	10		/	/		
10 -9		1	crush rock	15.0		/	S	Clear	10		/	/		
11 JC18781-5		1	soil	15.4		/	S	Yellow	10		/	/		
12 JC18516-2		1	sand	16.1		/	S	Clear	10		/	/		
13 -3		1	soil	15.2		/	S	Clear	10		/	/		
14 JC18649-3		1	soil	15.3		/	S	Clear	10		/	/		
15 JC18715-1		1	soil	15.0		/	S	Yellow	10		/	/		
16 -2		1	soil	16.2		/	S	L Yellow	10		/	/		
17 -3		1	soil	15.2		/	S	L Yellow	10		/	/		
18 -4		1	soil	15.0		/	S	Clear	10		/	/		
19 -5		1	soil	15.9		/	S	Clear	10		/	/		
20 -6		1	Mud	16.0		/	S	Clear	10		/	/		

3dTAT

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)	2,3,4	65	N/A	N/A	OK
Buchi Chiller	B2,B3,B4	11	N/A	N/A	OK
Waterbath (70-80°C)					
Waterbath Chiller (GPM)					
NEVAP (32-38°C, LPM)					
Balance	B46	N/A	N/A	N/A	N/A

SURROGATE	LOT #	CONC (ppb)	AMT (mL)
PPCB	16171275	400	1

WITNESS SIGN: RG SPIKE SIGN: SG

MATRIX SPIKE	LOT #	CONC	AMT (mL)
PEST	1ppb16171251B	2.50ppb	1
PCB			

WITNESS SIGN: RG SPIKE SIGN: SG

SOLVENT	LOT #	BRAND	AMT (mL)
2:1 HEXANE/ ACETONE	157194 / 158571	Fisher / Fisher	30
1:1 METH CHLOR/ ACETONE			
HEXANE			

REAGENT	LOT #	BRAND
HYDROMATRIX	6294128	Agilent
SODIUM SULFATE	158459	Fisher
FILTER PAPER	9026294	Fisher
FLORISIL	S213-057	Phenomenex
1:1 SULFURIC ACID		
COPPER	DD1617128	Aldrich

MATRIX	LOT #	BRAND
SAND	66A160131A	Fisher

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason:

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other:

Comments:

SGS ACCUTEST INC.
Form: OP018A-05
Rev Date: 11/20/15

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Percent Solids Raw Data Summary

Percent Solids Raw Data Summary

Job Number: JC18516
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: JC18516-2 **Analyzed:** 20-APR-16 by KP **Method:** SM2540 G-97
ClientID: RA14 (9-9.7)

Wet Weight (Total)	37.44	g
Tare Weight	28.67	g
Dry Weight (Total)	35.38	g
Solids, Percent	76.5	%

Sample: JC18516-3 **Analyzed:** 20-APR-16 by KP **Method:** SM2540 G-97
ClientID: S-43S (6-7)

Wet Weight (Total)	32.96	g
Tare Weight	27.12	g
Dry Weight (Total)	31.65	g
Solids, Percent	77.6	%

Misc. Forms

Custody Documents and Other Forms

(Accutest Laboratories Southeast, Inc.)

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle

SGS ACCUTEST

CHAIN OF CUSTODY

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

Page 1 of 1

FL

FED-EX Tracking #:
Bottle Order Control #:
SGS Accutest Quote #:
SGS Accutest Job: JC18516

Client / Reporting Information

Company Name: SGS Accutest
Street Address: 2235 Route 130
City: Dayton State: NJ Zip: 08810
Project Contact: tammym E-mail: tammym@accutest.com
Phone #: 732-329-0200 Fax #:
Sampler(s) Name(s): NR Phone:

Project Information

Project Name: BMSMC, Building 5 Area, PR
Street:
City: State:
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

Matrix Codes

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

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	D8015LMA	LAB USE ONLY
1A	EB041416		4/14/16	11:50:00 AM	NR	AQ	3	3								X	
2A	RA14 (9-9.7)		4/14/16	3:00:00 PM	TT	SO	1					1				X	
3A	S-43S (6-7)		4/14/16	3:50:00 PM	NR	SO	1					1				X	
4A	RA14_GWS		4/14/16	5:00:00 PM	TT	AQ	3	3								X	

Turnaround Time (Business days)

- [ ] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [X] other Due 5/2/2016

Emergency & Rush T/A data available VIA Lablink

Approved By (SGS Accutest PM): / Date:

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
- [X] Other FULT1

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

Comments / Special Instructions

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]	4/25/16 1700	1 FX	2 FX		2 [signature] 4/26/16 900
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # 723 ☐ Intact ☐ Not intact	Preserved where applicable ☐	On Ice ☐ (1) Cooler Temp. 4.6

11.1 11

JC18516: Chain of Custody
Page 1 of 3
Accutest Laboratories Southeast, Inc.

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: JC18516 CLIENT: ACNJ PROJECT: BMSMC

DATE/TIME RECEIVED: 4/26/16 900 {MM/DD/YY 24:00} NUMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER DELIVERY OTHER:

AIRBILL NUMBERS: 5633 9349 1124

COOLER INFORMATION

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

TEMPERATURE INFORMATION

- [ ] IR THERM ID 1 CORR. FACTOR +0.2
- [ ] OBSERVED TEMPS: 4.4
- [ ] CORRECTED TEMPS: 4.6 (USED FOR LIMS)

TRIP BLANK INFORMATION

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

SAMPLE INFORMATION

- [x] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- [x] BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] RESIDUAL CHLORINE PRESENT LOT#
  {APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM 5-GRAM

NUMBER OF 5035 FIELD KITS ?

NUMBER OF LAB FILTERED METALS ?

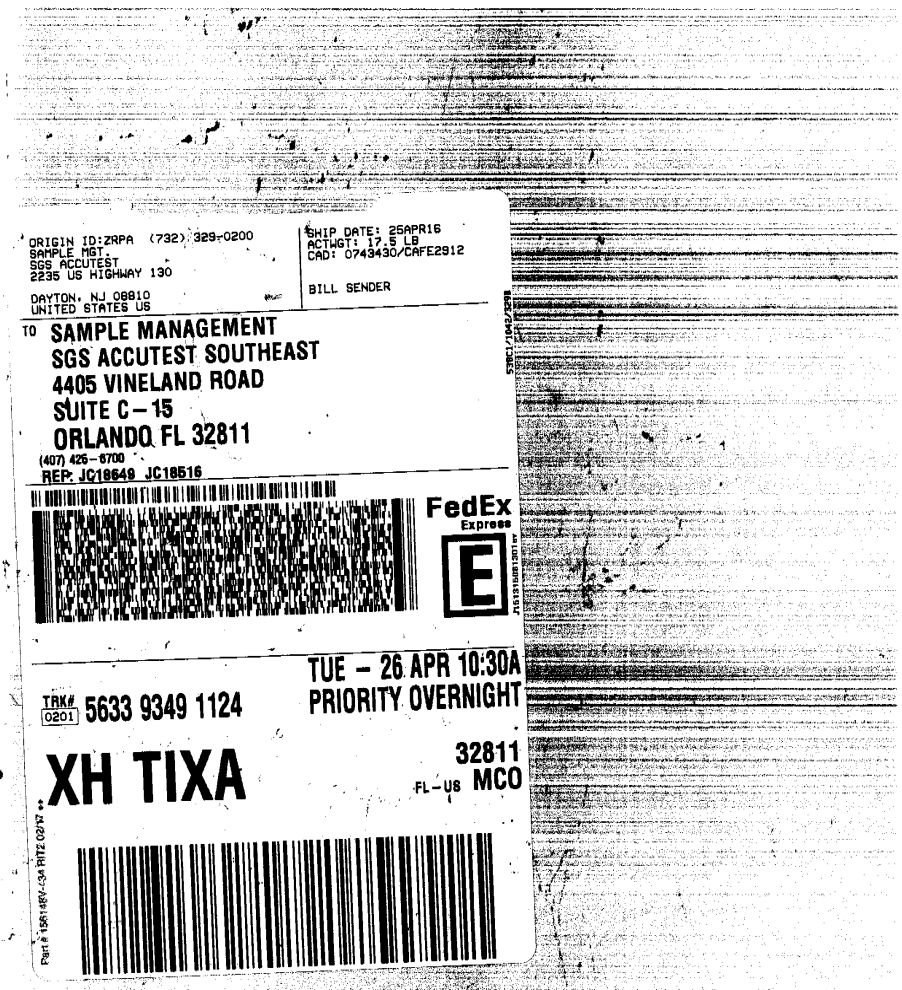
TEST STRIP LOT#s pH 0-3 230315 pH 10-12 219813A OTHER (specify)

SUMMARY OF COMMENTS: Received (1) vial for samples #1, #4.

TECHNICIAN SIGNATURE/DATE 4/26/16 REVIEWER SIGNATURE/DATE 4/26/16

NF 11/15 RECEIPTLOG040416.xls

11.1 11



ORIGIN ID:ZRPA (732) 329-0200
SAMPLE MGT.
SGS ACCUTEST
2235 US HIGHWAY 130

DAYTON, NJ 08810
UNITED STATES US

SHIP DATE: 25APR16
ACTWGT: 17.5 LB
CAD: 0743430/CAFE2912

BILL SENDER

TO SAMPLE MANAGEMENT
SGS ACCUTEST SOUTHEAST
4405 VINELAND ROAD
SUITE C-15
ORLANDO FL 32811
(407) 425-6700
REF: JC18649 JC18516

FedEx Express

TRK# 0201 5633 9349 1124

TUE - 26 APR 10:30A
PRIORITY OVERNIGHT

XH TIXA

32811
FL-US MCO

11.1

11

JC18516: Chain of Custody
Page 3 of 3

Internal Sample Tracking Chronicle

Accutest New Jersey

Job No: JC18516

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

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC18516-1A	Collected: 14-APR-16 11:50 By: NR		Received: 16-APR-16 By: JC			
EB041416						
JC18516-1A	SW846 8015C	26-APR-16 16:43	SH			D8015LMA
JC18516-2A	Collected: 14-APR-16 15:00 By: TT		Received: 16-APR-16 By: JC			
RA14 (9-9.7)						
JC18516-2A	SW846 8015C MOD	27-APR-16 09:07	SH			D8015LMA
JC18516-3A	Collected: 14-APR-16 15:50 By: NR		Received: 16-APR-16 By: JC			
S-43S (6-7)						
JC18516-3A	SW846 8015C MOD	27-APR-16 09:27	SH			D8015LMA
JC18516-4A	Collected: 14-APR-16 17:00 By: TT		Received: 16-APR-16 By: JC			
RA14_GWS						
JC18516-4A	SW846 8015C	26-APR-16 17:02	SH			D8015LMA

GC Volatiles

QC Data Summaries

(Accutest Laboratories Southeast, Inc.)

Includes the following where applicable:

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

Method Blank Summary

Job Number: JC18516
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GXY2768-MB	XY064035.D	1	04/26/16	SH	n/a	n/a	GXY2768

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

JC18516-1A, JC18516-4A

CAS No.	Compound	Result	RL	MDL	Units	Q
64-17-5	Ethanol	ND	5.0	1.0	mg/l	
78-83-1	Isobutyl Alcohol	ND	5.0	1.0	mg/l	
67-63-0	Isopropyl Alcohol	ND	5.0	1.0	mg/l	
71-23-8	n-Propyl Alcohol	ND	5.0	1.0	mg/l	
71-36-3	n-Butyl Alcohol	ND	5.0	1.0	mg/l	
67-56-1	Methanol	ND	5.0	1.0	mg/l	

CAS No.	Surrogate Recoveries		Limits
111-27-3	Hexanol	92%	73-123%

Method Blank Summary

Job Number: JC18516
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GXY2770-MB	XY064055.D	1	04/27/16	SH	n/a	n/a	GXY2770

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

JC18516-2A, JC18516-3A

CAS No.	Compound	Result	RL	MDL	Units	Q
64-17-5	Ethanol	ND	5.0	1.0	mg/kg	
78-83-1	Isobutyl Alcohol	ND	5.0	1.0	mg/kg	
67-63-0	Isopropyl Alcohol	ND	5.0	1.0	mg/kg	
71-23-8	n-Propyl Alcohol	ND	5.0	1.0	mg/kg	
71-36-3	n-Butyl Alcohol	ND	5.0	1.0	mg/kg	
67-56-1	Methanol	ND	5.0	1.0	mg/kg	

CAS No.	Surrogate Recoveries		Limits
111-27-3	Hexanol	114%	69-121%

Blank Spike Summary

Job Number: JC18516
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GXY2768-BS	XY064034.D	1	04/26/16	SH	n/a	n/a	GXY2768

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

JC18516-1A, JC18516-4A

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
64-17-5	Ethanol	100	85.1	85	73-120
78-83-1	Isobutyl Alcohol	100	79.8	80	67-116
67-63-0	Isopropyl Alcohol	100	80.8	81	69-118
71-23-8	n-Propyl Alcohol	100	78.2	78	71-119
71-36-3	n-Butyl Alcohol	100	80.9	81	69-119
67-56-1	Methanol	100	80.2	80	70-118

CAS No.	Surrogate Recoveries	BSP	Limits
111-27-3	Hexanol	79%	73-123%

12.2.1

12

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC18516
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GXY2770-BS	XY064054.D	1	04/27/16	SH	n/a	n/a	GXY2770

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

JC18516-2A, JC18516-3A

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
64-17-5	Ethanol	200	169	85	80-117
78-83-1	Isobutyl Alcohol	200	159	80	72-117
67-63-0	Isopropyl Alcohol	200	160	80	75-116
71-23-8	n-Propyl Alcohol	200	163	82	78-116
71-36-3	n-Butyl Alcohol	200	161	81	74-115
67-56-1	Methanol	200	158	79	77-116

CAS No.	Surrogate Recoveries	BSP	Limits
111-27-3	Hexanol	79%	69-121%

12.2.2

12

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC18516
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC18516-4AMS	XY064042.D	1	04/26/16	SH	n/a	n/a	GXY2768
JC18516-4AMSD	XY064043.D	1	04/26/16	SH	n/a	n/a	GXY2768
JC18516-4A	XY064037.D	1	04/26/16	SH	n/a	n/a	GXY2768

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

JC18516-1A, JC18516-4A

CAS No.	Compound	JC18516-4A mg/l	Q	Spike mg/l	MS mg/l	MS %	Spike mg/l	MSD mg/l	MSD %	RPD	Limits Rec/RPD
64-17-5	Ethanol	ND		100	91.4	91	100	98.8	99	8	73-120/16
78-83-1	Isobutyl Alcohol	ND		100	89.8	90	100	98.2	98	9	67-116/17
67-63-0	Isopropyl Alcohol	ND		100	94.4	94	100	104	104	10	69-118/17
71-23-8	n-Propyl Alcohol	ND		100	92.3	92	100	101	101	9	71-119/17
71-36-3	n-Butyl Alcohol	ND		100	91.2	91	100	99.8	100	9	69-119/17
67-56-1	Methanol	ND		100	90.0	90	100	97.0	97	7	70-118/17

CAS No.	Surrogate Recoveries	MS	MSD	JC18516-4A	Limits
111-27-3	Hexanol	90%	98%	111%	73-123%

12.3.1

12

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC18516
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC18516-2AMS	XY064059.D	1	04/27/16	SH	n/a	n/a	GXY2770
JC18516-2AMSD	XY064060.D	1	04/27/16	SH	n/a	n/a	GXY2770
JC18516-2A [a]	XY064056.D	1	04/27/16	SH	n/a	n/a	GXY2770

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

JC18516-2A, JC18516-3A

CAS No.	Compound	JC18516-2A mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	Spike mg/kg	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
64-17-5	Ethanol	ND		268	282	105	268	268	100	5	80-117/13
78-83-1	Isobutyl Alcohol	ND		268	270	101	268	257	96	5	72-117/14
67-63-0	Isopropyl Alcohol	ND		268	285	106	268	272	101	5	75-116/15
71-23-8	n-Propyl Alcohol	ND		268	281	105	268	268	100	5	78-116/13
71-36-3	n-Butyl Alcohol	ND		268	277	103	268	262	98	6	74-115/13
67-56-1	Methanol	ND		268	276	103	268	263	98	5	77-116/13

CAS No.	Surrogate Recoveries	MS	MSD	JC18516-2A	Limits
111-27-3	Hexanol	101%	95%	119%	69-121%

(a) Sample was received in a bulk container but was not preserved within 48 hours of sampling.

12.3.2

12

* = Outside of Control Limits.

Volatile Surrogate Recovery Summary

Job Number: JC18516
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR

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

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
JC18516-1A	XY064036.D	86
JC18516-4A	XY064037.D	111
GXY2768-BS	XY064034.D	79
GXY2768-MB	XY064035.D	92
JC18516-4AMS	XY064042.D	90
JC18516-4AMSD	XY064043.D	98

Surrogate Compounds	Recovery Limits
S1 = Hexanol	73-123%

(a) Recovery from GC signal #1

Volatile Surrogate Recovery Summary

Job Number: JC18516
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR

Method: SW846 8015C MOD **Matrix:** SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]
JC18516-2A	XY064056.D	119
JC18516-3A	XY064057.D	120
GXY2770-BS	XY064054.D	79
GXY2770-MB	XY064055.D	114
JC18516-2AMS	XY064059.D	101
JC18516-2AMSD	XY064060.D	95

Surrogate Compounds	Recovery Limits
S1 = Hexanol	69-121%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JC18516
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR

Check Std:	GXY2768-CC2768	**Injection Date:**	04/26/16
Lab File ID:	XY064033.D	**Injection Time:**	15:45
Instrument ID:	GCXY	**Method:**	SW846 8015C

	S1 [a] **RT**
Check Std	11.68

Lab Sample ID	**Lab File ID**	**Date Analyzed**	**Time Analyzed**	**S1** [a] **RT**
GXY2768-BS	XY064034.D	04/26/16	16:04	11.68
GXY2768-MB	XY064035.D	04/26/16	16:24	11.68
JC18516-1A	XY064036.D	04/26/16	16:43	11.68
JC18516-4A	XY064037.D	04/26/16	17:02	11.68
ZZZZZZ	XY064038.D	04/26/16	17:21	11.68
ZZZZZZ	XY064039.D	04/26/16	17:40	11.68
ZZZZZZ	XY064040.D	04/26/16	17:59	11.68
ZZZZZZ	XY064041.D	04/26/16	18:18	11.68
JC18516-4AMS	XY064042.D	04/26/16	18:38	11.68
JC18516-4AMSD	XY064043.D	04/26/16	18:57	11.69
GXY2768-ECC2768	XY064044.D	04/26/16	19:16	11.69

Surrogate Compounds

S1 = Hexanol

(a) Retention time from GC signal #1

12.5.1

12

GC Surrogate Retention Time Summary

Job Number: JC18516
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR

Check Std:	GXY2770-CC2768	**Injection Date:**	04/27/16
Lab File ID:	XY064053.D	**Injection Time:**	08:10
Instrument ID:	GCXY	**Method:**	SW846 8015C MOD

	S1 [a] **RT**
Check Std	11.63

Lab Sample ID	**Lab File ID**	**Date Analyzed**	**Time Analyzed**	**S1** [a] **RT**
GXY2770-BS	XY064054.D	04/27/16	08:29	11.65
GXY2770-MB	XY064055.D	04/27/16	08:48	11.67
JC18516-2A	XY064056.D	04/27/16	09:07	11.69
JC18516-3A	XY064057.D	04/27/16	09:27	11.69
ZZZZZZ	XY064058.D	04/27/16	09:46	11.70
JC18516-2AMS	XY064059.D	04/27/16	10:44	11.70
JC18516-2AMSD	XY064060.D	04/27/16	11:24	11.70
GXY2770-ECC276X	XY064061.D	04/27/16	11:43	11.71

Surrogate Compounds

S1 = Hexanol

(a) Retention time from GC signal #1

12.5.2

12

Initial Calibration Summary

Job Number: JC18516
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR
Sample: GXY2768-ICC2768
Lab FileID: XY064027.D

Response Factor Report VOA5

Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration

Calibration Files
1 =XY064024.D 2 =XY064025.D 3 =XY064026.D 4 =XY064027.D
5 =XY064028.D 6 =XY064029.D 7 =XY064030.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
1) Methanol	5.952	4.620	4.367	4.137	5.112	5.142	3.640	4.710 E3	16.19
2) Isopropyl alcohol	7.330	6.129	6.285	5.530	7.576	7.430	4.755	6.434 E3	16.61
3) Ethanol	7.752	6.964	7.194	7.254	8.265	8.025	6.686	7.449 E3	7.77
4) n-Propyl alcohol	9.448	7.897	8.340	7.881	9.878	9.599	7.051	8.585 E3	12.43
5) Isobutyl alcohol	1.060	0.936	0.982	0.905	1.149	1.093	0.816	0.992 E4	11.75
6) n-Butyl alcohol	1.046	0.883	0.910	0.861	1.091	1.051	0.775	0.945 E4	12.49
7) 2-Ethoxyethanol	6.047	4.913	4.786	4.884	5.618	5.832	4.448	5.218 E3	11.63
8)S Hexanol	1.063	0.829	1.070	0.850	1.108	1.036	0.788	0.963 E4	13.98

(#) = Out of Range

D8015.M Wed Apr 27 10:50:20 2016

Initial Calibration Verification

Job Number: JC18516
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR
Sample: GXY2768-ICV2768
Lab FileID: XY064032.D

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\2\DATA\042616\XY064032.D          Vial: 9
Acq On    : 26 Apr 2016   3:26 pm                   Operator: StevenH
Sample    : icv2768-4                               Inst    : VOA5
Misc      : gc18702,gxy2768,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E

Method       : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methanol	100.000	84.068	15.9	96	0.00	1.52- 2.12
2	Isopropyl alcohol	100.000	87.031	13.0	101	0.02	1.72- 2.32
3	Ethanol	100.000	85.261	14.7	88	0.00	1.87- 2.47
4	n-Propyl alcohol	100.000	85.429	14.6	93	0.00	3.49- 4.09
5	Isobutyl alcohol	100.000	83.122	16.9	91	0.04	4.87- 5.47
6	n-Butyl alcohol	100.000	84.312	15.7	93	0.02	6.54- 7.14
7	2-Ethoxyethanol	100.000	91.422	8.6	98	0.00	8.84- 9.44
8 S	Hexanol	100.000	84.269	15.7	96	0.02	11.36-11.96

(#) = Out of Range SPCC's out = 0 CCC's out = 0
XY064027.D D8015.M Wed Apr 27 10:42:27 2016

12.6.2

12

Continuing Calibration Summary

Job Number: JC18516
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR
Sample: GXY2768-CC2768
Lab FileID: XY064033.D

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\2\DATA\042616\XY064033.D          Vial: 10
Acq On    : 26 Apr 2016   3:45 pm                   Operator: StevenH
Sample    : cc2768-4                                Inst    : VOA5
Misc      : gc18702,gxy2768,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E

Method       : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methanol	100.000	84.359	15.6	96	0.00	1.52- 2.12
2	Isopropyl alcohol	100.000	83.127	16.9	97	0.01	1.72- 2.32
3	Ethanol	100.000	99.641	0.4	102	0.00	1.87- 2.47
4	n-Propyl alcohol	100.000	91.055	8.9	99	0.00	3.49- 4.09
5	Isobutyl alcohol	100.000	91.441	8.6	100	0.04	4.87- 5.47
6	n-Butyl alcohol	100.000	90.166	9.8	99	0.04	6.54- 7.14
7	2-Ethoxyethanol	100.000	91.105	8.9	97	0.01	8.84- 9.44
8 S	Hexanol	100.000	86.737	13.3	98	0.02	11.36-11.96

(#) = Out of Range SPCC's out = 0 CCC's out = 0
XY064027.D D8015.M Wed Apr 27 10:42:27 2016

12.6.3
12

Continuing Calibration Summary

Job Number: JC18516
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR
Sample: GXY2768-ECC2768
Lab FileID: XY064044.D

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\2\DATA\042616\XY064044.D          Vial: 20
Acq On    : 26 Apr 2016   7:16 pm                   Operator: StevenH
Sample    : cc2768-5                                Inst    : VOA5
Misc      : gc18771,gxy2769,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E

Method       : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methanol	250.000	283.776	-13.5	105	-0.02	1.52- 2.12
2	Isopropyl alcohol	250.000	295.301	-18.1	100	0.01	1.72- 2.32
3	Ethanol	250.000	285.400	-14.2	103	-0.01	1.87- 2.47
4	n-Propyl alcohol	250.000	294.951	-18.0	103	0.00	3.49- 4.09
5	Isobutyl alcohol	250.000	292.852	-17.1	101	0.05	4.87- 5.47
6	n-Butyl alcohol	250.000	293.941	-17.6	102	0.10	6.54- 7.14
7	2-Ethoxyethanol	250.000	279.763	-11.9	104	0.04	8.84- 9.44
8 S	Hexanol	250.000	285.450	-14.2	99	0.03	11.36-11.96

(#) = Out of Range SPCC's out = 0 CCC's out = 0
XY064028.D D8015.M Wed Apr 27 11:03:52 2016

12.6.4

12

Continuing Calibration Summary

Job Number: JC18516
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR
Sample: GXY2770-CC2768
Lab FileID: XY064053.D

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\2\DATA\042716\XY064053.D          Vial: 20
Acq On    : 27 Apr 2016   8:10 am                   Operator: StevenH
Sample    : cc2768-5                                Inst    : VOA5
Misc      : gc18702,gxy2770,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E

Method       : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methanol	250.000	205.299	17.9	76	-0.06	1.52- 2.12
2	Isopropyl alcohol	250.000	203.754	18.5	69	-0.04	1.72- 2.32
3	Ethanol	250.000	234.803	6.1	85	-0.07	1.87- 2.47
4	n-Propyl alcohol	250.000	217.072	13.2	75	-0.08	3.49- 4.09
5	Isobutyl alcohol	250.000	216.427	13.4	75	-0.05	4.87- 5.47
6	n-Butyl alcohol	250.000	215.296	13.9	75	-0.09	6.54- 7.14
7	2-Ethoxyethanol	250.000	219.358	12.3	81	-0.09	8.84- 9.44
8 S	Hexanol	250.000	214.352	14.3	75	-0.03	11.36-11.96

(#) = Out of Range SPCC's out = 0 CCC's out = 0
XY064028.D D8015.M Wed Apr 27 12:13:41 2016

12.6.5

12

Continuing Calibration Summary

Job Number: JC18516
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR
Sample: GXY2770-ECC2768
Lab FileID: XY064061.D

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\2\DATA\042716\XY064061.D          Vial: 10
Acq On    : 27 Apr 2016  11:43 am                   Operator: StevenH
Sample    : ecc2768-4                               Inst    : VOA5
Misc      : gc18772,gxy2770,5.00,,,10,1,            Multiplr: 1.00
IntFile   : EVENTS.E

Method       : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	Amount	Calc.	%Drift	Area%	Dev(min)	RT Window
1	Methanol	100.000	106.351	-6.4	121	0.00	1.52- 2.12
2	Isopropyl alcohol	100.000	111.897	-11.9	130	0.03	1.72- 2.32
3	Ethanol	100.000	108.011	-8.0	111	0.01	1.87- 2.47
4	n-Propyl alcohol	100.000	110.415	-10.4	120	0.04	3.49- 4.09
5	Isobutyl alcohol	100.000	109.912	-9.9	120	0.09	4.87- 5.47
6	n-Butyl alcohol	100.000	109.655	-9.7	120	0.12	6.54- 7.14
7	2-Ethoxyethanol	100.000	104.314	-4.3	111	0.07	8.84- 9.44
8 S	Hexanol	100.000	104.806	-4.8	119	0.05	11.36-11.96

(#) = Out of Range SPCC's out = 0 CCC's out = 0
XY064027.D D8015.M Wed Apr 27 12:12:07 2016

12.6.6 12

GC Volatiles

Raw Data

(Accutest Laboratories Southeast, Inc.)

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\2\DATA\042616\XY064036.D          Vial: 13
Acq On    : 26 Apr 2016   4:43 pm                   Operator: StevenH
Sample    : jc18516-1a                              Inst    : VOA5
Misc      : gc18771,gxy2768,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: Apr 27 10:30 2016  Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj.  : 1uL
Signal Phase : Stabilwax
Signal Info  : 0.53mm
```

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
8) S Hexanol	11.68	828239	85.964	mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 85.96%				
Target Compounds				
1) Methanol	0.00	0	N.D.	mg/L
2) Isopropyl alcohol	0.00	0	N.D.	mg/L
3) Ethanol	0.00	0	N.D.	mg/L
4) n-Propyl alcohol	0.00	0	N.D.	mg/L
5) Isobutyl alcohol	0.00	0	N.D.	mg/L
6) n-Butyl alcohol	0.00	0	N.D.	mg/L
7) 2-Ethoxyethanol	0.00	0	N.D.	mg/L

13.1.1

13

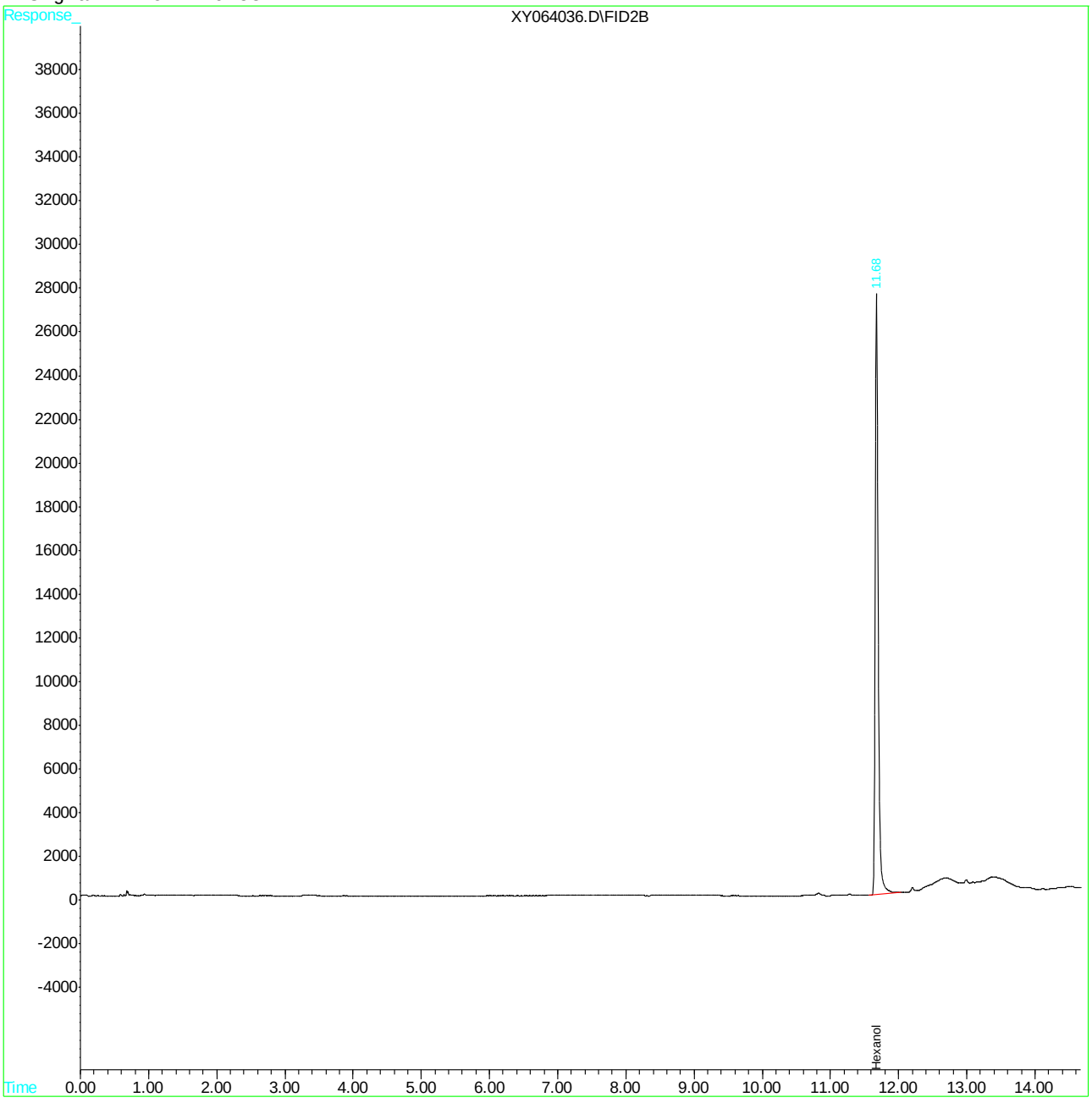
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064036.D Vial: 13
Acq On : 26 Apr 2016 4:43 pm Operator: StevenH
Sample : jc18516-1a Inst : VOA5
Misc : gc18771,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:30 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042716\XY064056.D Vial: 23
Acq On : 27 Apr 2016 9:07 am Operator: StevenH
Sample : jc18516-2a Inst : VOA5
Misc : gc18772,gxy2770,4.87,,,10,1, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 12:07 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
8) S Hexanol	11.69	1145655	118.909	mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 118.91%				
Target Compounds				
1) Methanol	0.00	0	N.D.	mg/L
2) Isopropyl alcohol	0.00	0	N.D.	mg/L
3) Ethanol	0.00	0	N.D.	mg/L
4) n-Propyl alcohol	0.00	0	N.D.	mg/L
5) Isobutyl alcohol	0.00	0	N.D.	mg/L
6) n-Butyl alcohol	0.00	0	N.D.	mg/L
7) 2-Ethoxyethanol	0.00	0	N.D.	mg/L

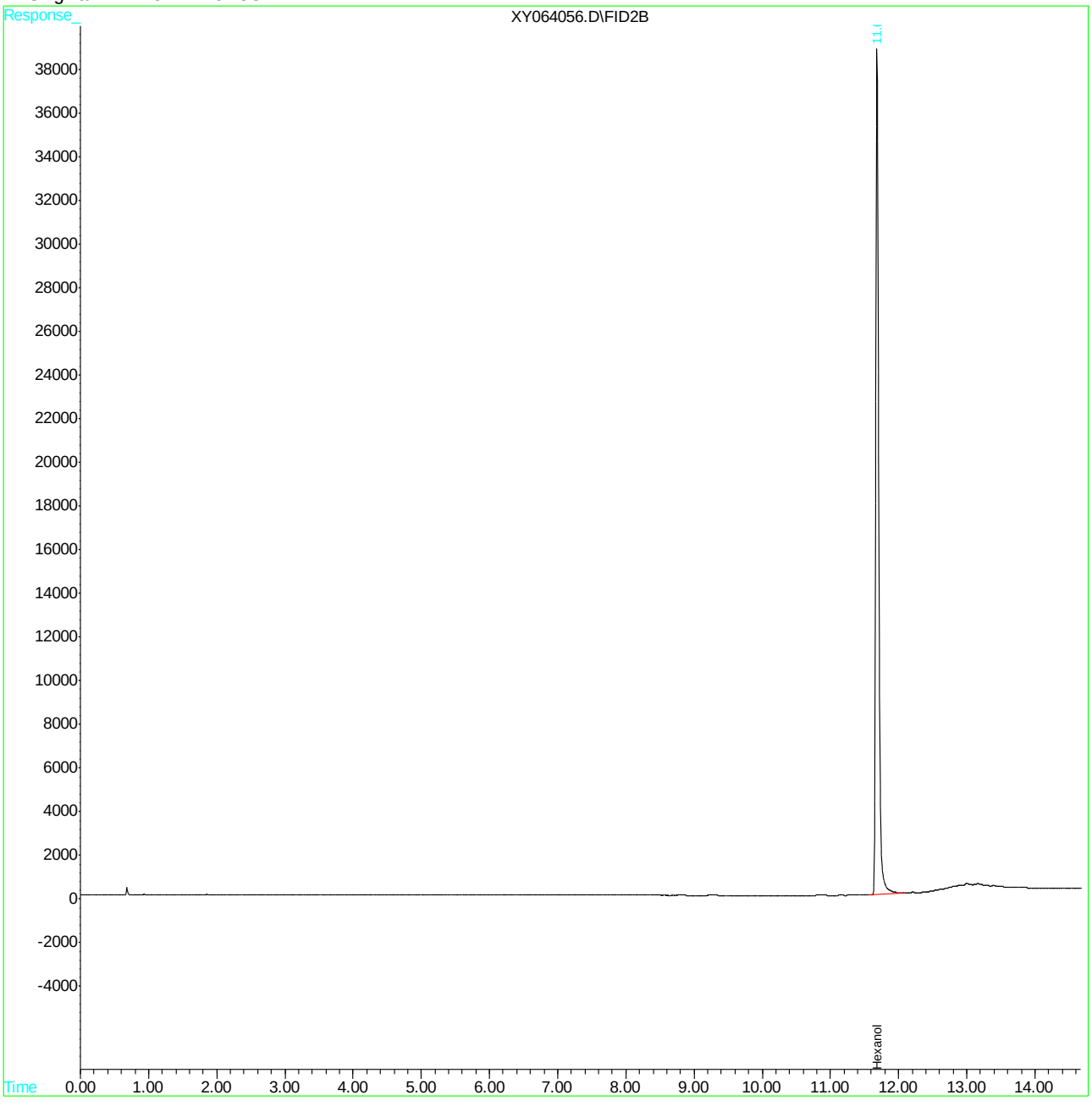
(f)=RT Delta > 1/2 Window (m)=manual int.
XY064056.D D8015.M Wed Apr 27 12:08:44 2016

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042716\XY064056.D Vial: 23
Acq On : 27 Apr 2016 9:07 am Operator: StevenH
Sample : jc18516-2a Inst : VOA5
Misc : gc18772,gxy2770,4.87,,,10,1, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 12:07 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\2\DATA\042716\XY064057.D          Vial: 24
Acq On    : 27 Apr 2016   9:27 am                   Operator: StevenH
Sample    : jc18516-3a                              Inst    : VOA5
Misc      : gc18772,gxy2770,5.08,,,10,1,            Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: Apr 27 12:07 2016  Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj.  : 1uL
Signal Phase : Stabilwax
Signal Info  : 0.53mm
```

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
8) S Hexanol	11.69	1152663	119.636	mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 119.64%				
Target Compounds				
1) Methanol	0.00	0	N.D.	mg/L
2) Isopropyl alcohol	0.00	0	N.D.	mg/L
3) Ethanol	0.00	0	N.D.	mg/L
4) n-Propyl alcohol	0.00	0	N.D.	mg/L
5) Isobutyl alcohol	0.00	0	N.D.	mg/L
6) n-Butyl alcohol	0.00	0	N.D.	mg/L
7) 2-Ethoxyethanol	0.00	0	N.D.	mg/L

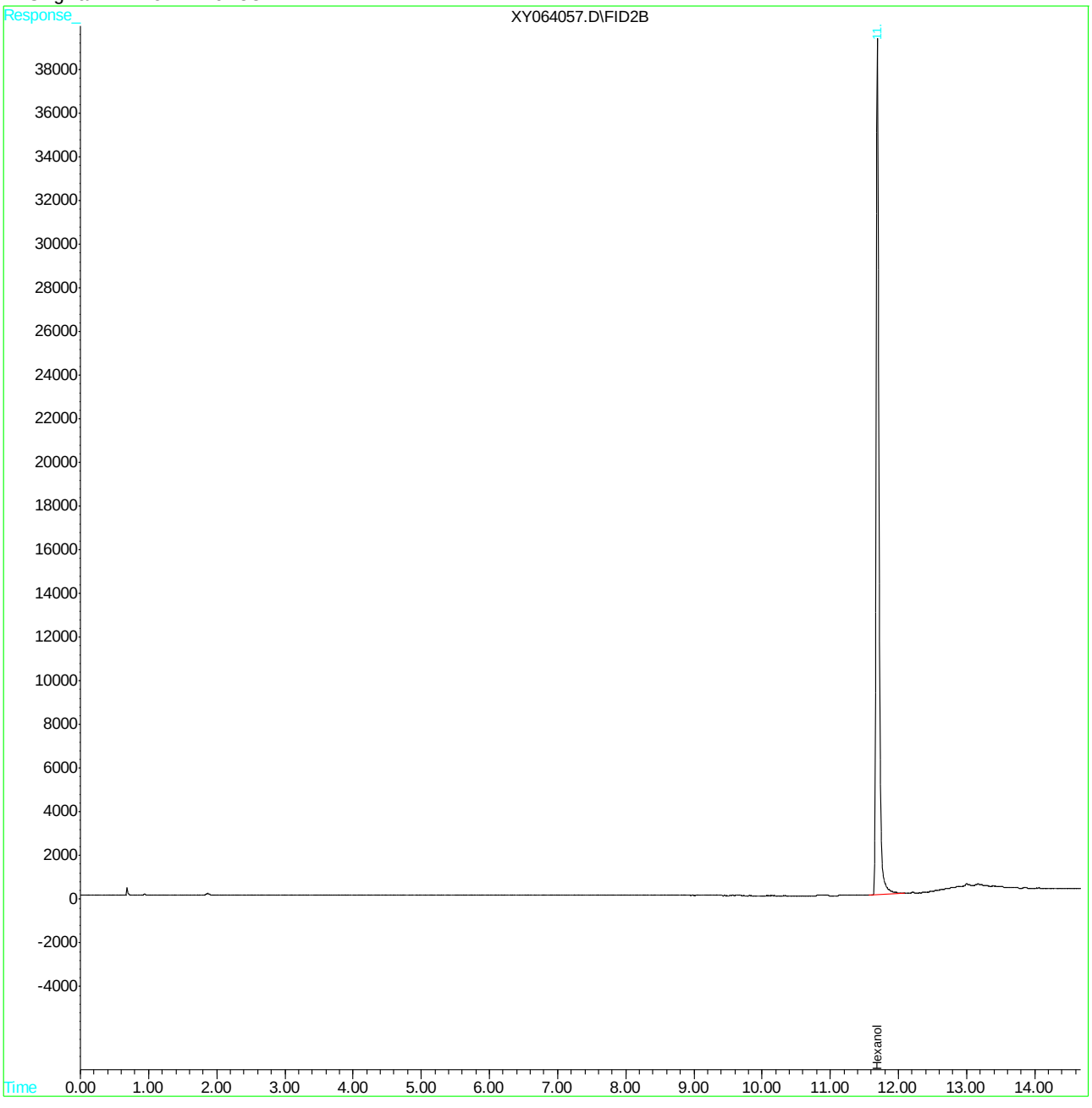
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042716\XY064057.D Vial: 24
Acq On : 27 Apr 2016 9:27 am Operator: StevenH
Sample : jc18516-3a Inst : VOA5
Misc : gc18772,gxy2770,5.08,,,10,1, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 12:07 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\2\DATA\042616\XY064037.D          Vial: 14
Acq On    : 26 Apr 2016   5:02 pm                   Operator: StevenH
Sample    : jc18516-4a                              Inst    : VOA5
Misc      : gc18771,gxy2768,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: Apr 27 10:30 2016  Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj.  : 1uL
Signal Phase : Stabilwax
Signal Info  : 0.53mm
```

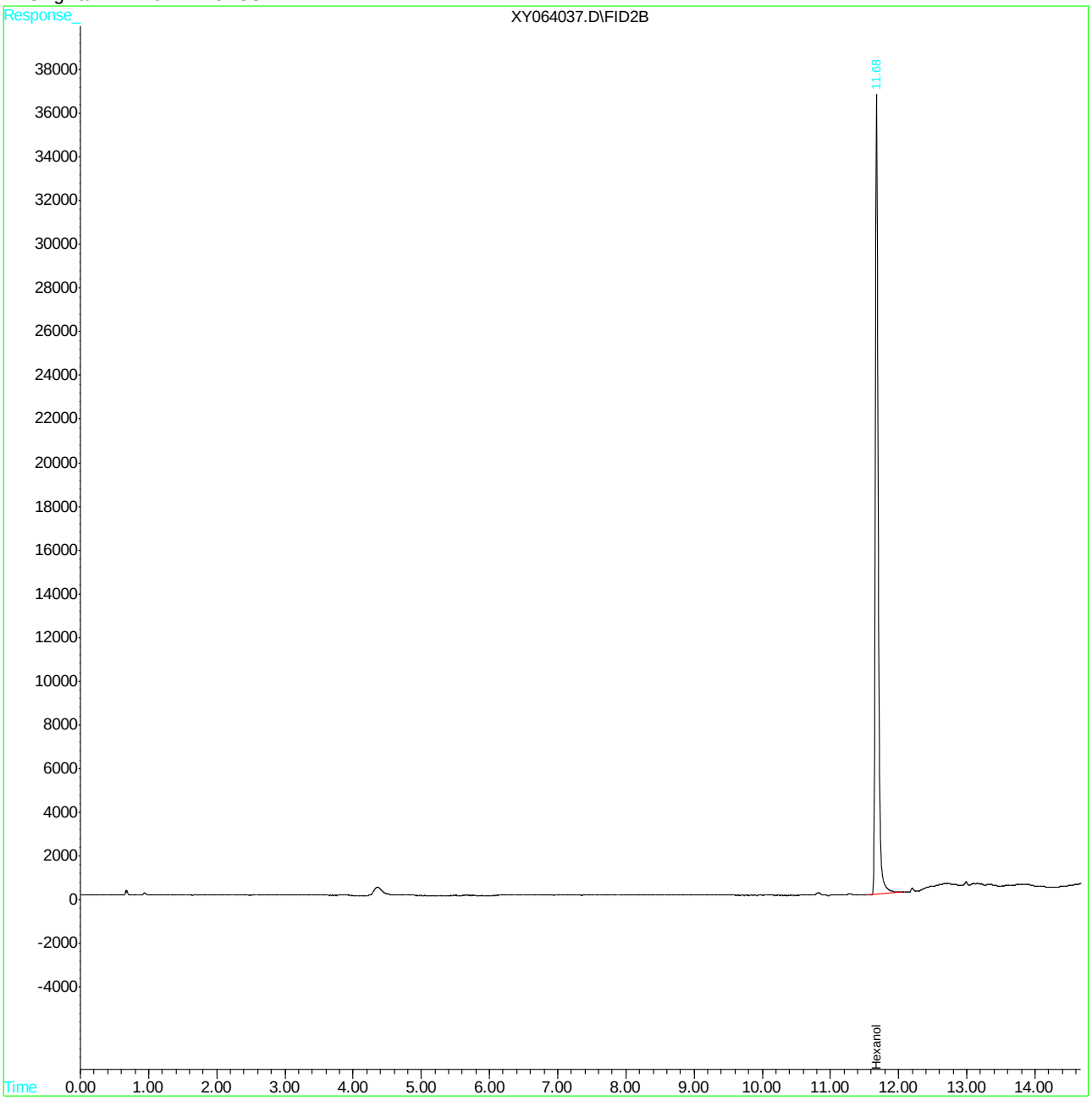
Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
8) S Hexanol	11.68	1073671	111.437	mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 111.44%				
Target Compounds				
1) Methanol	0.00	0	N.D.	mg/L
2) Isopropyl alcohol	0.00	0	N.D.	mg/L
3) Ethanol	0.00	0	N.D.	mg/L
4) n-Propyl alcohol	0.00	0	N.D.	mg/L
5) Isobutyl alcohol	0.00	0	N.D.	mg/L
6) n-Butyl alcohol	0.00	0	N.D.	mg/L
7) 2-Ethoxyethanol	0.00	0	N.D.	mg/L

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064037.D Vial: 14
Acq On : 26 Apr 2016 5:02 pm Operator: StevenH
Sample : jc18516-4a Inst : VOA5
Misc : gc18771,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:30 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\2\DATA\042616\XY064035.D          Vial: 12
Acq On    : 26 Apr 2016   4:24 pm                   Operator: StevenH
Sample    : mb                                      Inst    : VOA5
Misc      : gc18702,gxy2768,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: Apr 27 10:30 2016  Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj.  : 1uL
Signal Phase : Stabilwax
Signal Info  : 0.53mm
```

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
8) S Hexanol	11.68	886696	92.031	mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 92.03%				
Target Compounds				
1) Methanol	0.00	0	N.D.	mg/L
2) Isopropyl alcohol	0.00	0	N.D.	mg/L
3) Ethanol	0.00	0	N.D.	mg/L
4) n-Propyl alcohol	0.00	0	N.D.	mg/L
5) Isobutyl alcohol	0.00	0	N.D.	mg/L
6) n-Butyl alcohol	0.00	0	N.D.	mg/L
7) 2-Ethoxyethanol	0.00	0	N.D.	mg/L

13.2.1

13

(f)=RT Delta > 1/2 Window (m)=manual int.

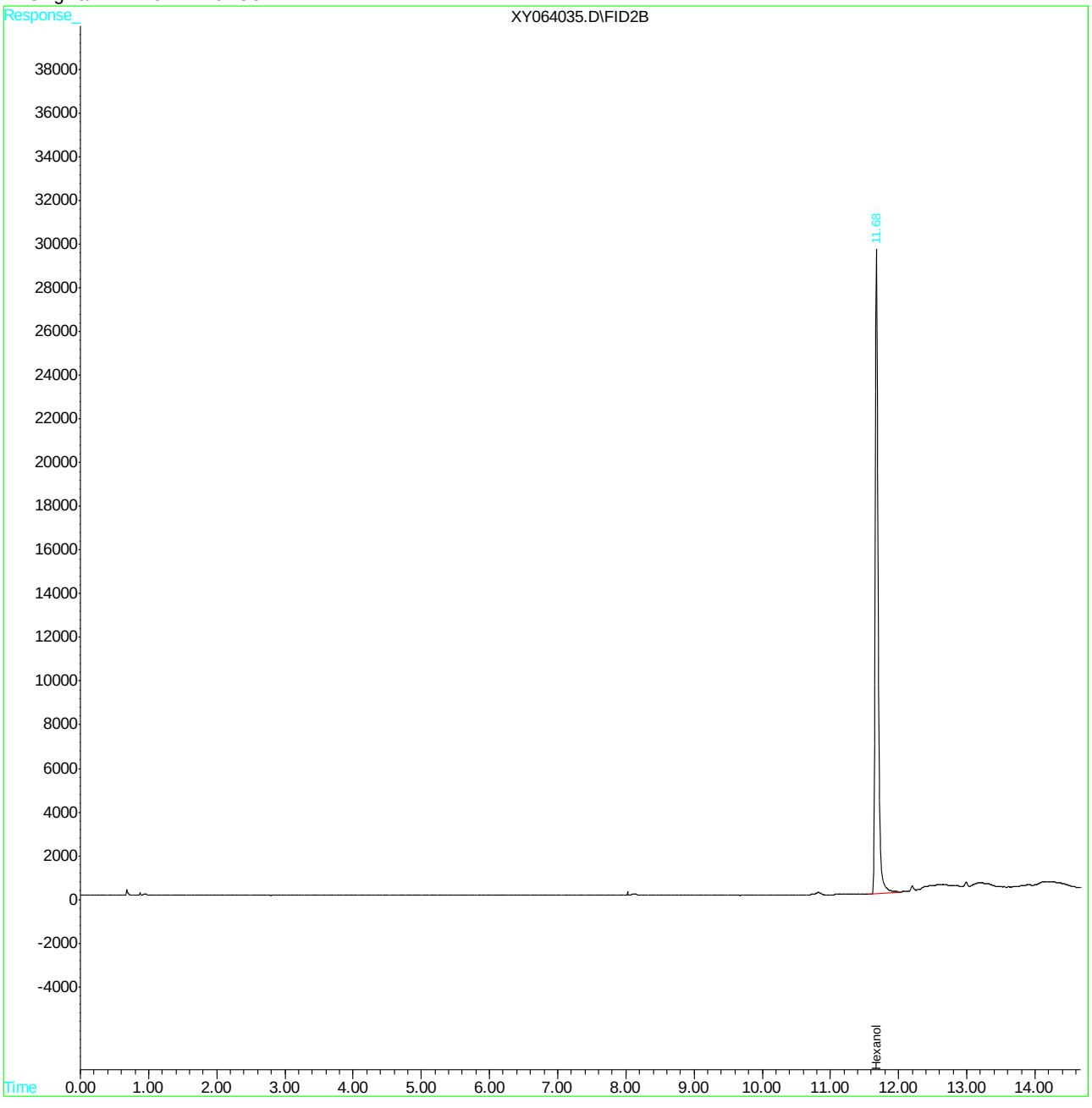
SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064035.D Vial: 12
Acq On : 26 Apr 2016 4:24 pm Operator: StevenH
Sample : mb Inst : VOA5
Misc : gc18702,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:30 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\2\DATA\042716\XY064055.D          Vial: 22
Acq On    : 27 Apr 2016   8:48 am                   Operator: StevenH
Sample    : mb                                      Inst    : VOA5
Misc      : gc18702,gxy2770,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: Apr 27 12:07 2016  Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj.  : 1uL
Signal Phase : Stabilwax
Signal Info  : 0.53mm
```

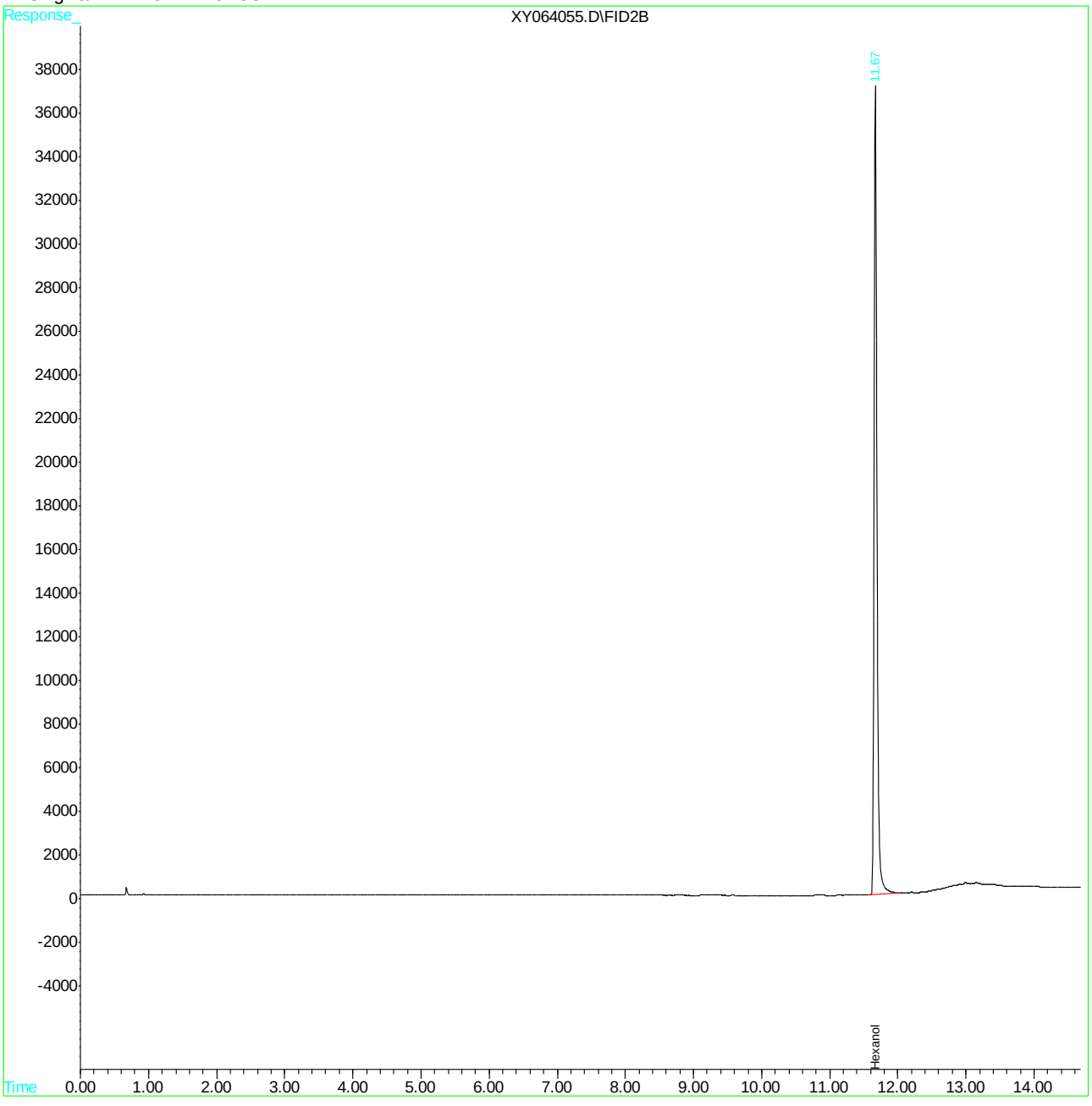
Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
8) S Hexanol	11.67	1096417	113.798	mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 113.80%				
Target Compounds				
1) Methanol	0.00	0	N.D.	mg/L
2) Isopropyl alcohol	0.00	0	N.D.	mg/L
3) Ethanol	0.00	0	N.D.	mg/L
4) n-Propyl alcohol	0.00	0	N.D.	mg/L
5) Isobutyl alcohol	0.00	0	N.D.	mg/L
6) n-Butyl alcohol	0.00	0	N.D.	mg/L
7) 2-Ethoxyethanol	0.00	0	N.D.	mg/L

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042716\XY064055.D Vial: 22
Acq On : 27 Apr 2016 8:48 am Operator: StevenH
Sample : mb Inst : VOA5
Misc : gc18702,gxy2770,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 12:07 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\2\DATA\042616\XY064034.D          Vial: 11
Acq On    : 26 Apr 2016   4:04 pm                   Operator: StevenH
Sample    : bs                                      Inst    : VOA5
Misc      : gc18702,gxy2768,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: Apr 27 10:30 2016  Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj.  : 1uL
Signal Phase : Stabilwax
Signal Info  : 0.53mm
```

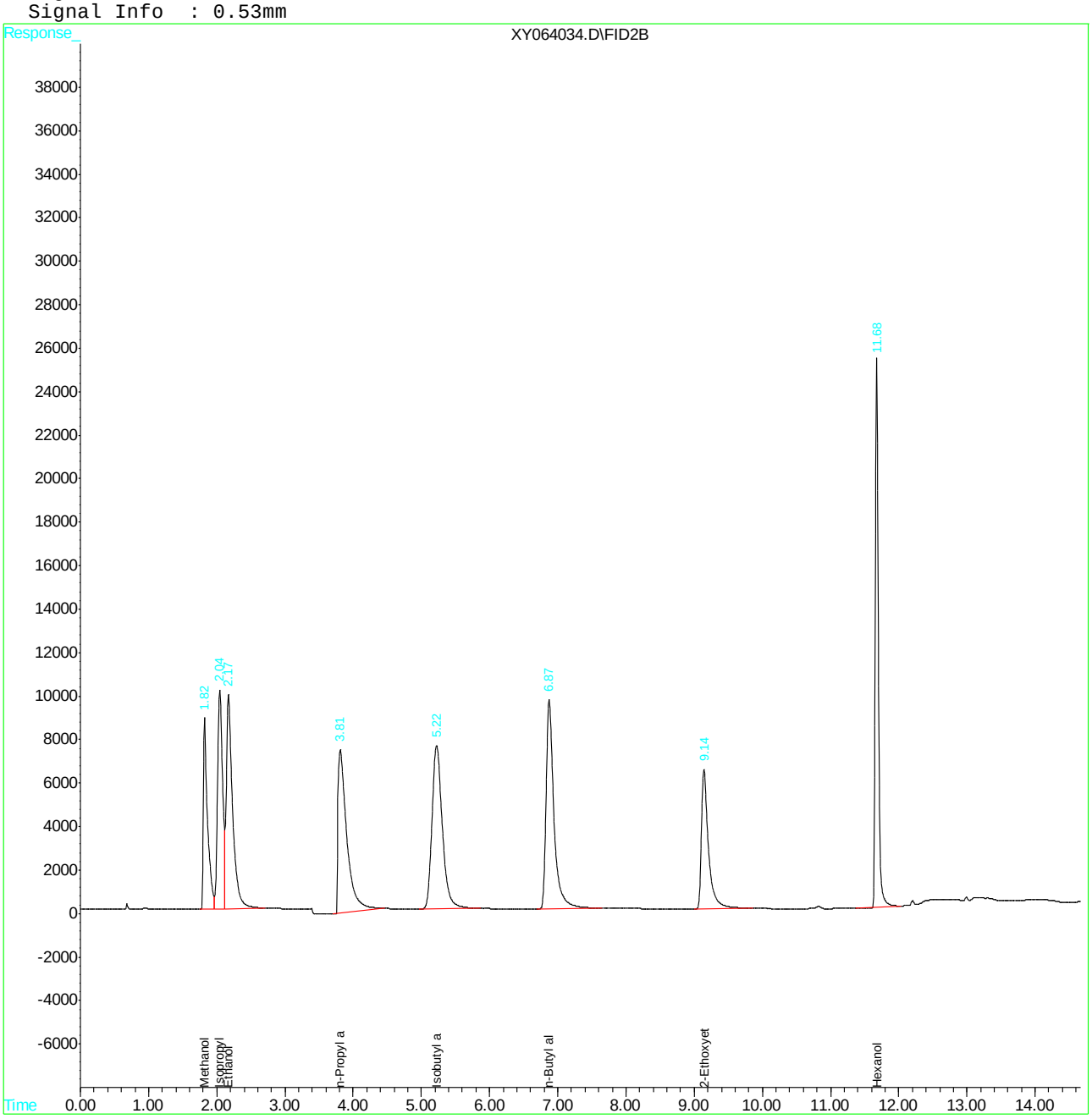
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
8) S Hexanol	11.68	765934	79.497 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 79.50%			
Target Compounds			
1) Methanol	1.82	377609	80.171 mg/L
2) Isopropyl alcohol	2.04	519917	80.813 mg/L
3) Ethanol	2.17	633515	85.050 mg/L
4) n-Propyl alcohol	3.81	671713	78.245 mg/L
5) Isobutyl alcohol	5.22	790938	79.763 mg/L
6) n-Butyl alcohol	6.87	765163	80.934 mg/L
7) 2-Ethoxyethanol	9.15	461128	88.367 mg/L

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064034.D Vial: 11
Acq On : 26 Apr 2016 4:04 pm Operator: StevenH
Sample : bs Inst : VOA5
Misc : gc18702,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:30 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



XY064034.D D8015.M Wed Apr 27 10:39:13 2016 Page 2

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\2\DATA\042716\XY064054.D          Vial: 21
Acq On    : 27 Apr 2016   8:29 am                   Operator: StevenH
Sample    : bs                                      Inst    : VOA5
Misc      : gc18772,gxy2770,5.00,,,10,1,            Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: Apr 27 12:07 2016  Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj.  : 1uL
Signal Phase : Stabilwax
Signal Info  : 0.53mm
```

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
8) S Hexanol	11.65	762846	79.176 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 79.18%			
Target Compounds			
1) Methanol	1.79	372929	79.178 mg/L
2) Isopropyl alcohol	2.01	515461	80.120 mg/L
3) Ethanol	2.14	627565	84.251 mg/L
4) n-Propyl alcohol	3.76	701006	81.657 mg/L
5) Isobutyl alcohol	5.16	786788	79.344 mg/L
6) n-Butyl alcohol	6.81	762703	80.673 mg/L
7) 2-Ethoxyethanol	9.10	457778	87.725 mg/L

13.3.2

13

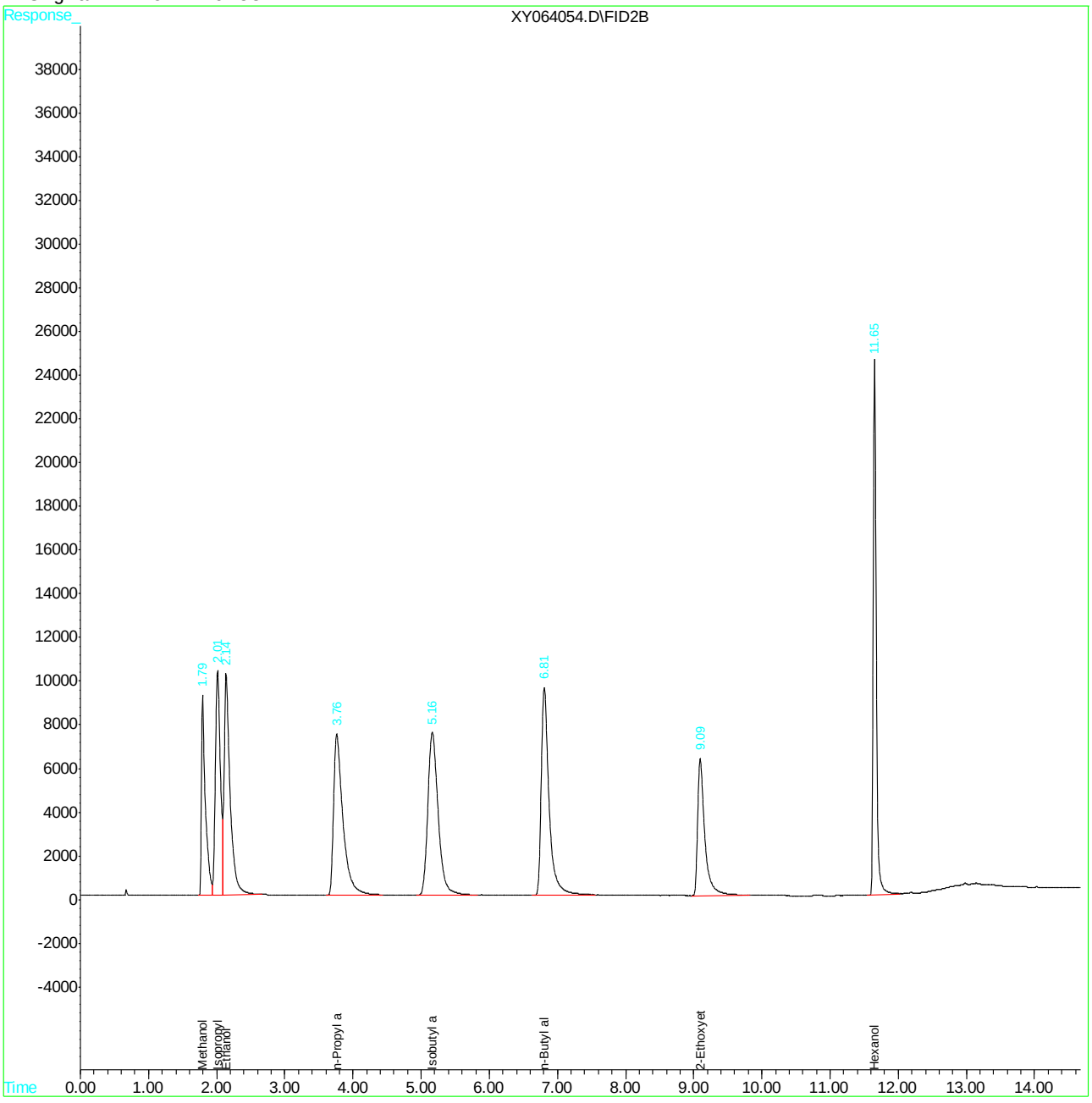
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042716\XY064054.D Vial: 21
Acq On : 27 Apr 2016 8:29 am Operator: StevenH
Sample : bs Inst : VOA5
Misc : gc18772,gxy2770,5.00,,,10,1, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 12:07 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064042.D Vial: 19
Acq On : 26 Apr 2016 6:38 pm Operator: StevenH
Sample : jc18516-4ams Inst : VOA5
Misc : gc18771,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:30 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
8) S Hexanol	11.68	864505	89.728 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 89.73%			
Target Compounds			
1) Methanol	1.82	423994	90.020 mg/L
2) Isopropyl alcohol	2.04	607249	94.387 mg/L
3) Ethanol	2.17	680974	91.422 mg/L
4) n-Propyl alcohol	3.81	791982	92.254 mg/L
5) Isobutyl alcohol	5.22	890545	89.808 mg/L
6) n-Butyl alcohol	6.89	862556	91.235 mg/L
7) 2-Ethoxyethanol	9.16	496374	95.122 mg/L

13.4.1
13

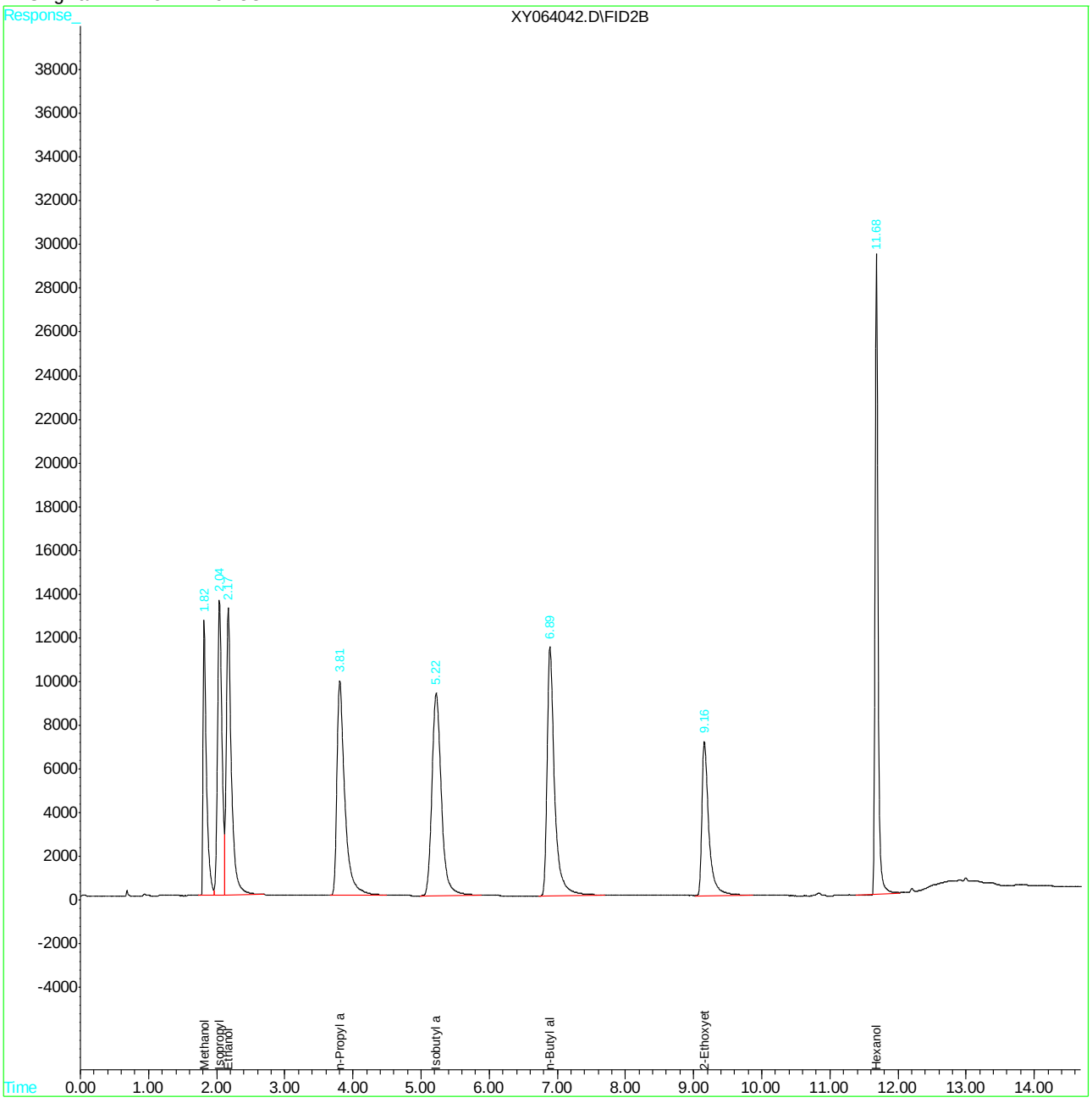
(f)=RT Delta > 1/2 Window (m)=manual int.
XY064042.D D8015.M Wed Apr 27 10:39:24 2016

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064042.D Vial: 19
Acq On : 26 Apr 2016 6:38 pm Operator: StevenH
Sample : jc18516-4ams Inst : VOA5
Misc : gc18771,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:30 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064043.D Vial: 19
Acq On : 26 Apr 2016 6:57 pm Operator: StevenH
Sample : jc18516-4amsd Inst : VOA5
Misc : gc18771,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:30 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
8) S Hexanol	11.69	944780	98.060 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 98.06%			
Target Compounds			
1) Methanol	1.82	456976	97.022 mg/L
2) Isopropyl alcohol	2.04	667233	103.711 mg/L
3) Ethanol	2.17	735865	98.791 mg/L
4) n-Propyl alcohol	3.81	864938	100.753 mg/L
5) Isobutyl alcohol	5.23	973830	98.207 mg/L
6) n-Butyl alcohol	6.91	943300	99.776 mg/L
7) 2-Ethoxyethanol	9.17	523493	100.319 mg/L

(f)=RT Delta > 1/2 Window (m)=manual int.

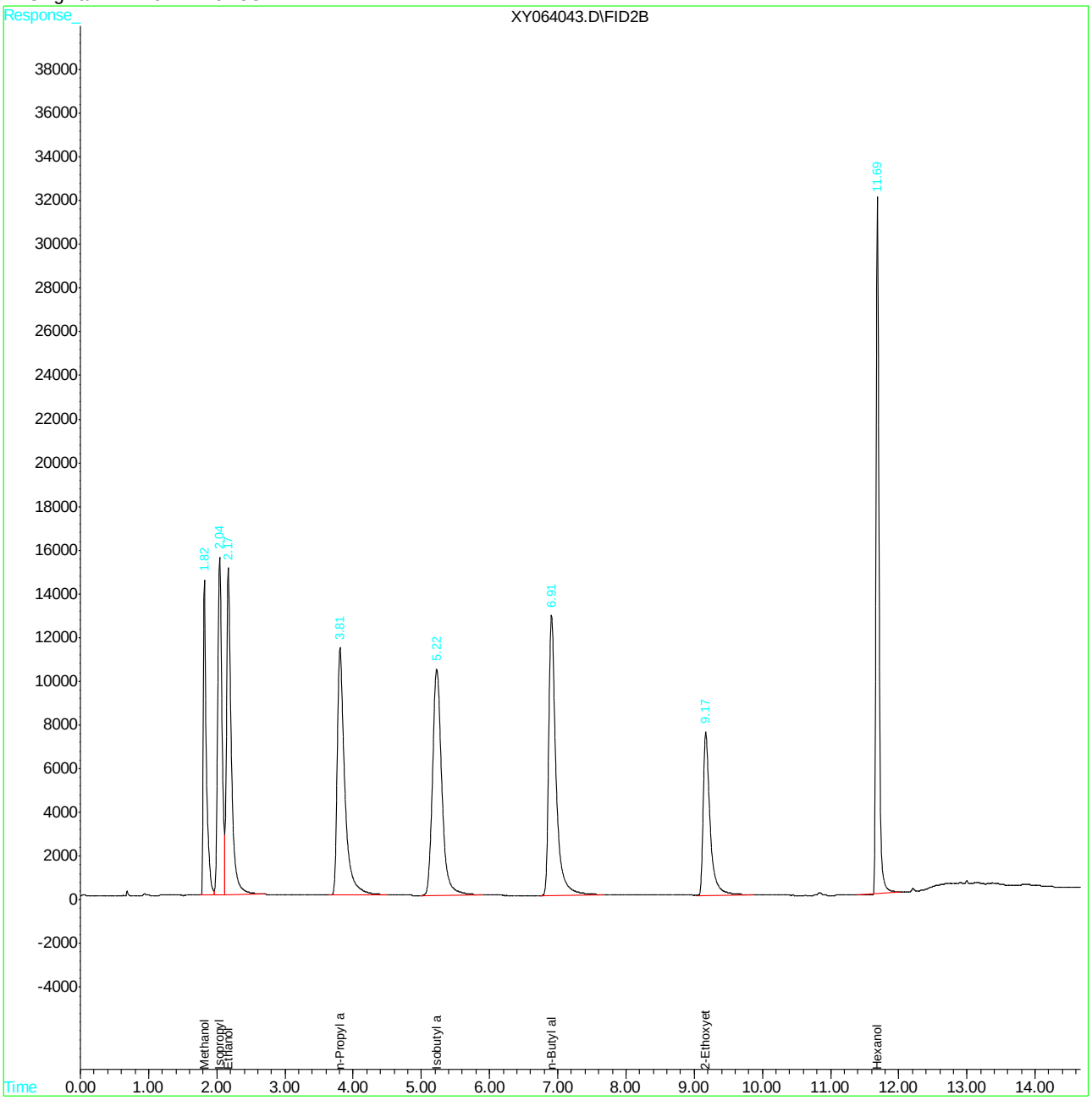
SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064043.D Vial: 19
Acq On : 26 Apr 2016 6:57 pm Operator: StevenH
Sample : jc18516-4amsd Inst : VOA5
Misc : gc18771,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:30 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



XY064043.D D8015.M Wed Apr 27 10:39:26 2016 Page 2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042716\XY064059.D Vial: 26
Acq On : 27 Apr 2016 10:44 am Operator: StevenH
Sample : jc18516-2ams Inst : VOA5
Misc : gc18772,gxy2770,4.87,,,10,1, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 12:07 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
8) S Hexanol	11.70	970719	100.752 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 100.75%			
Target Compounds			
1) Methanol	1.83	484329	102.829 mg/L
2) Isopropyl alcohol	2.06	683786	106.284 mg/L
3) Ethanol	2.18	782950	105.112 mg/L
4) n-Propyl alcohol	3.83	899402	104.767 mg/L
5) Isobutyl alcohol	5.26	998150	100.659 mg/L
6) n-Butyl alcohol	6.97	976128	103.248 mg/L
7) 2-Ethoxyethanol	9.21	551020	105.594 mg/L

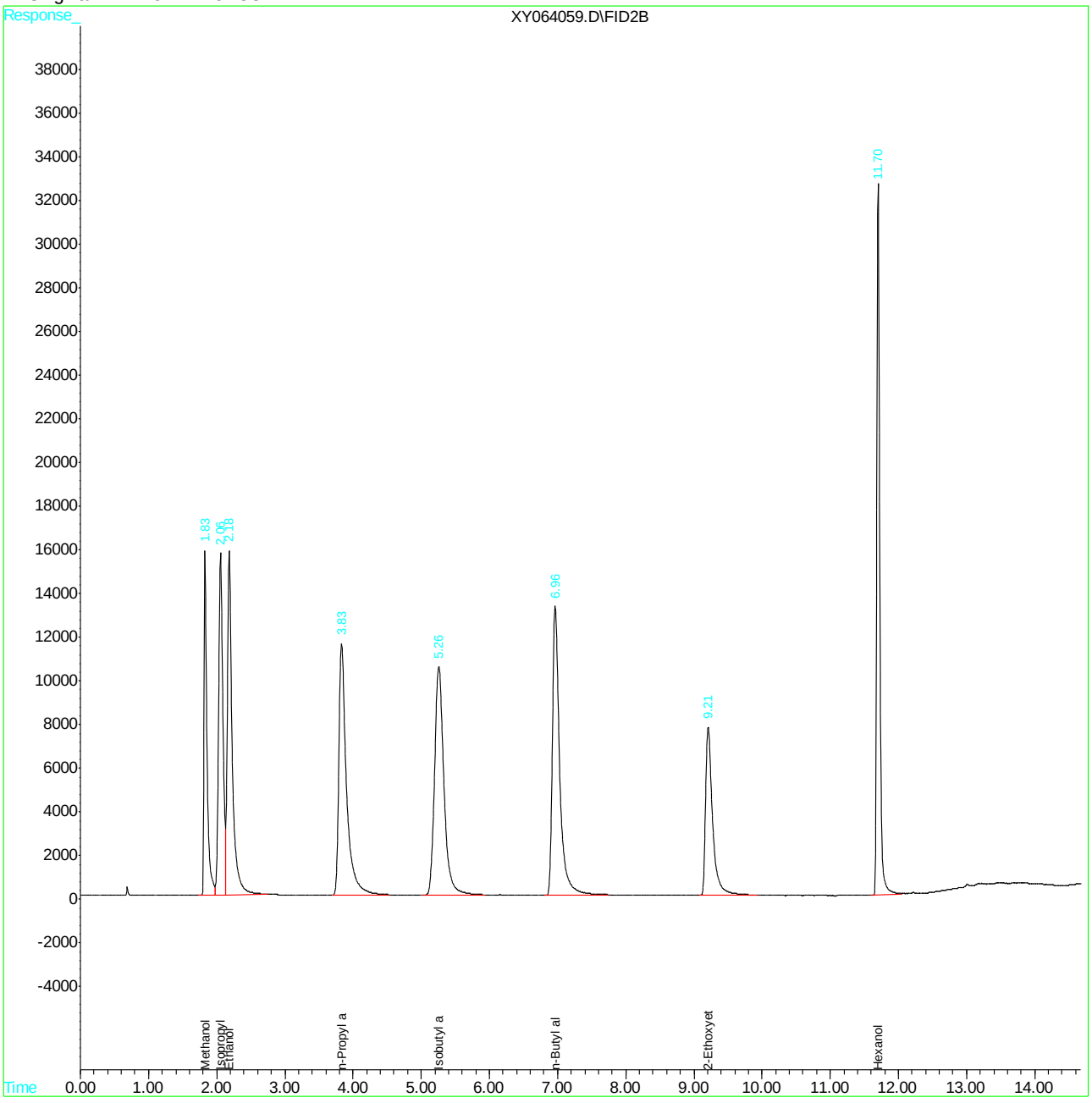
(f)=RT Delta > 1/2 Window (m)=manual int.
XY064059.D D8015.M Wed Apr 27 12:08:49 2016

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042716\XY064059.D Vial: 26
Acq On : 27 Apr 2016 10:44 am Operator: StevenH
Sample : jc18516-2ams Inst : VOA5
Misc : gc18772,gxy2770,4.87,,,10,1, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 12:07 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



XY064059.D D8015.M Wed Apr 27 12:08:49 2016 Page 2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042716\XY064060.D Vial: 26
Acq On : 27 Apr 2016 11:24 am Operator: StevenH
Sample : jc18516-2amsd Inst : VOA5
Misc : gc18772,gxy2770,4.87,,,10,1, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 12:07 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
8) S Hexanol	11.70	918788	95.362 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 95.36%			
Target Compounds			
1) Methanol	1.83	461866	98.060 mg/L
2) Isopropyl alcohol	2.06	652322	101.393 mg/L
3) Ethanol	2.18	744735	99.982 mg/L
4) n-Propyl alcohol	3.83	856825	99.807 mg/L
5) Isobutyl alcohol	5.26	949348	95.738 mg/L
6) n-Butyl alcohol	6.95	922931	97.621 mg/L
7) 2-Ethoxyethanol	9.20	531426	101.839 mg/L

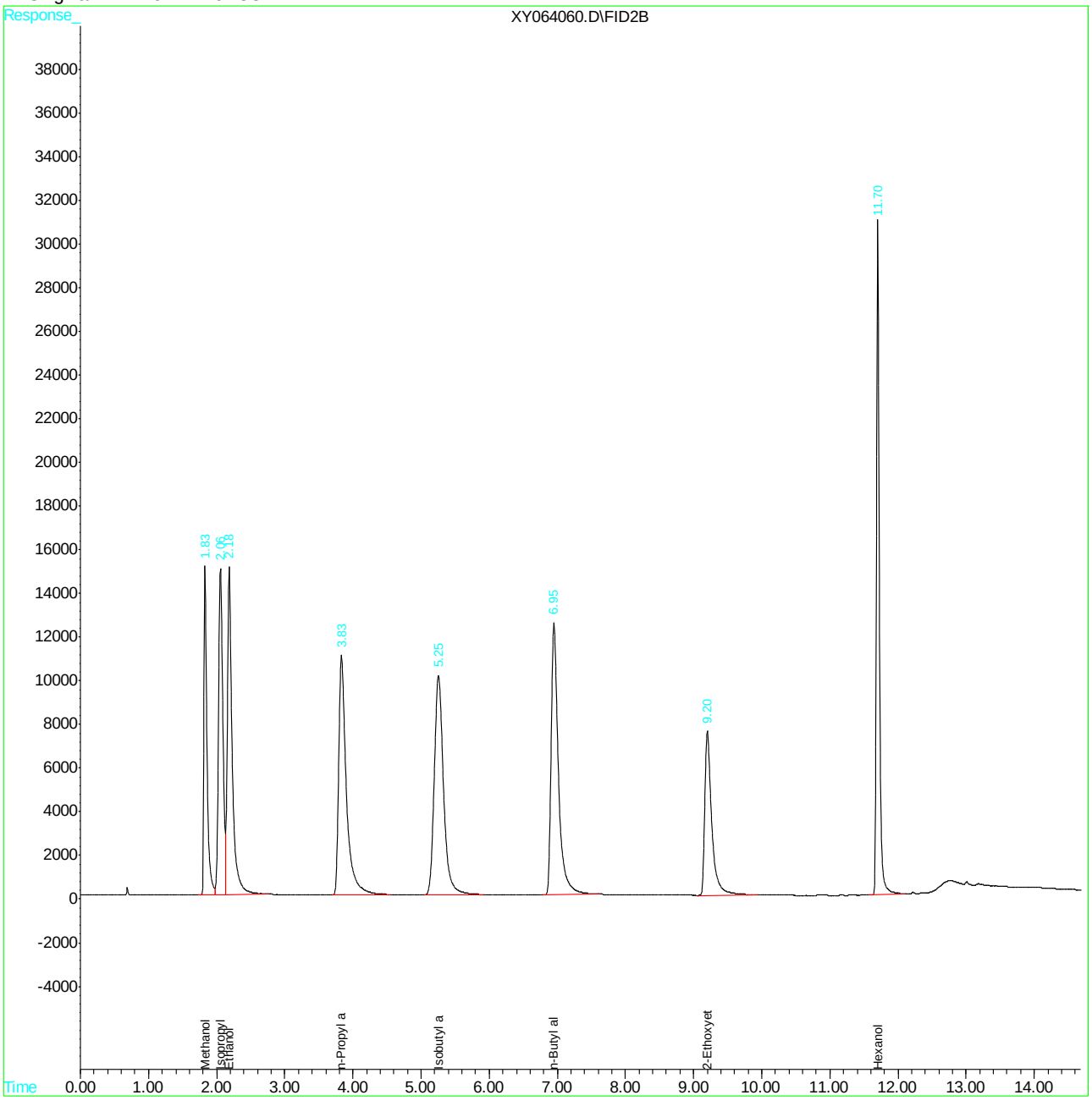
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042716\XY064060.D Vial: 26
Acq On : 27 Apr 2016 11:24 am Operator: StevenH
Sample : jc18516-2amsd Inst : VOA5
Misc : gc18772,gxy2770,4.87,,,10,1, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 12:07 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



Manual Integrations
APPROVED
(compounds with "m" flag)
Juan Garcia
04/27/16 15:16

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\2\DATA\042616\XY064024.D          Vial: 1
Acq On    : 26 Apr 2016  12:28 pm                   Operator: StevenH
Sample    : ic2768-1                                Inst    : VOA5
Misc      : gc18702,gxy2768,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: Apr 27 10:27 2016  Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj.  : 1uL
Signal Phase : Stabilwax
Signal Info  : 0.53mm
```

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
8) S Hexanol	11.65	20948	2.174 mg/L m
Spiked Amount 100.000 Range 57 - 142 Recovery = 2.17%#			
Target Compounds			
1) Methanol	1.80	11102	2.357 mg/L
2) Isopropyl alcohol	2.00	14154	2.200 mg/L
3) Ethanol	2.15	14479	1.944 mg/L
4) n-Propyl alcohol	3.77	17687	2.060 mg/L
5) Isobutyl alcohol	5.15	21045	2.122 mg/L
6) n-Butyl alcohol	6.85	18529	1.960 mg/L
7) 2-Ethoxyethanol	9.14	10281	1.970 mg/L

13.5.1
13

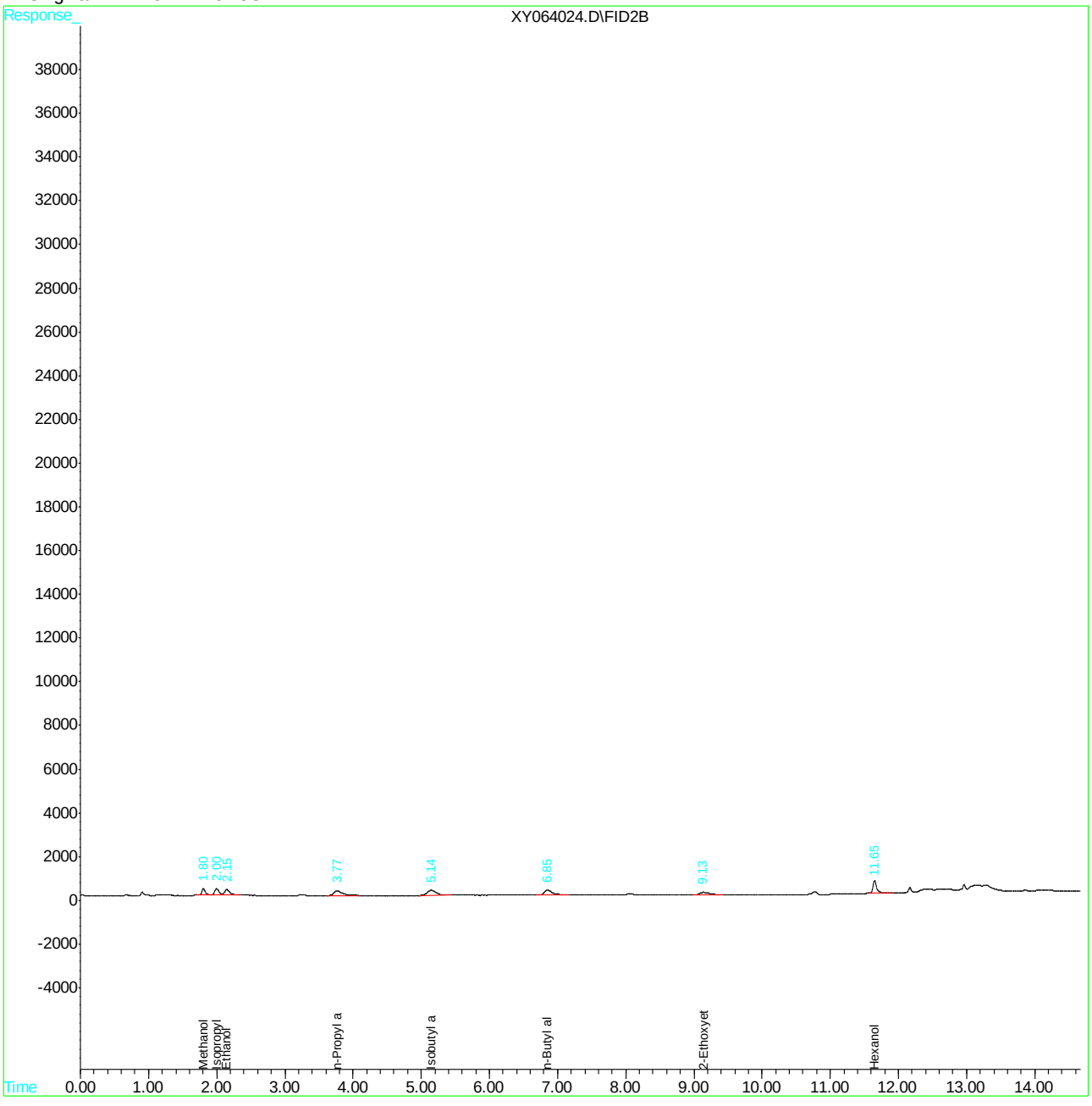
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064024.D Vial: 1
Acq On : 26 Apr 2016 12:28 pm Operator: StevenH
Sample : ic2768-1 Inst : VOA5
Misc : gc18702,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:27 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



Manual Integration Approval Summary

Sample Number:	GXY2768-IC2768	**Method:**	SW846 8015C
Lab FileID:	XY064024.D	**Analyst approved:**	04/27/16 11:04 Steven Heller
Injection Time:	04/26/16 12:28	**Supervisor approved:**	04/27/16 15:16 Juan Garcia

Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexanol	111-27-3	1	11.65	Poor instrument integration

Manual Integrations APPROVED (compounds with "m" flag)
Juan Garcia
04/27/16 15:16

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064025.D Vial: 2
Acq On : 26 Apr 2016 12:47 pm Operator: StevenH
Sample : ic2768-2 Inst : VOA5
Misc : gc18702,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:28 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
8) S Hexanol	11.66	42122	4.372 mg/L m
Spiked Amount 100.000 Range 57 - 142 Recovery = 4.37%#			
Target Compounds			
1) Methanol	1.82	21757	4.619 mg/L
2) Isopropyl alcohol	2.02	29637	4.607 mg/L
3) Ethanol	2.17	31836	4.274 mg/L
4) n-Propyl alcohol	3.79	37653	4.386 mg/L
5) Isobutyl alcohol	5.17	45620	4.601 mg/L
6) n-Butyl alcohol	6.84	41221	4.360 mg/L
7) 2-Ethoxyethanol	9.14	22756	4.361 mg/L

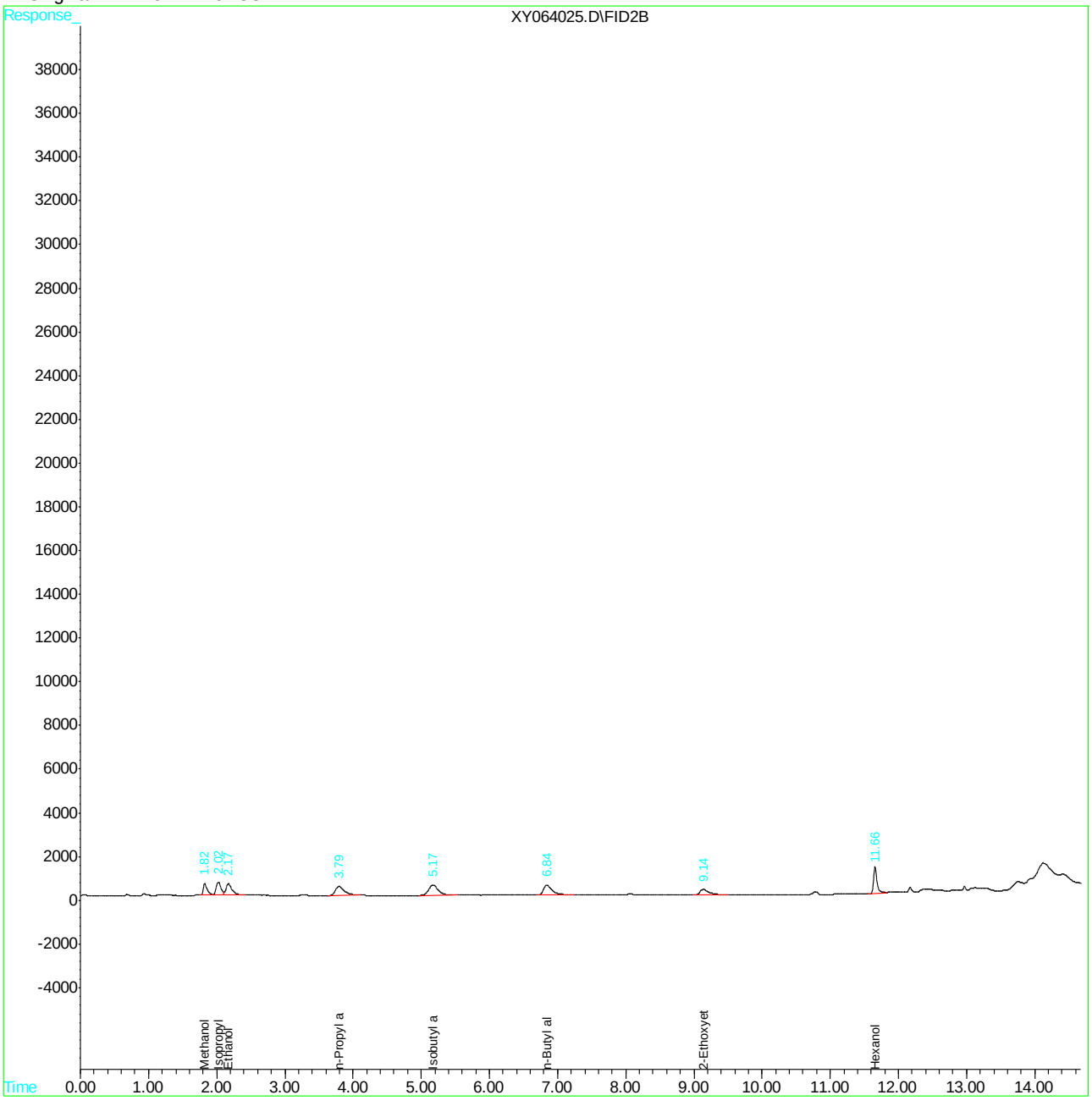
(f)=RT Delta > 1/2 Window (m)=manual int.
XY064025.D D8015.M Wed Apr 27 11:18:18 2016

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064025.D Vial: 2
Acq On : 26 Apr 2016 12:47 pm Operator: StevenH
Sample : ic2768-2 Inst : VOA5
Misc : gc18702,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:28 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



Manual Integration Approval Summary

Sample Number:	GXY2768-IC2768	**Method:**	SW846 8015C
Lab FileID:	XY064025.D	**Analyst approved:**	04/27/16 11:04 Steven Heller
Injection Time:	04/26/16 12:47	**Supervisor approved:**	04/27/16 15:16 Juan Garcia

Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexanol	111-27-3	1	11.66	Poor instrument integration

Manual Integrations APPROVED (compounds with "m" flag)
Juan Garcia
04/27/16 15:16

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\2\DATA\042616\XY064026.D          Vial: 3
Acq On    : 26 Apr 2016   1:07 pm                   Operator: StevenH
Sample    : ic2768-3                                Inst    : VOA5
Misc      : gc18702,gxy2768,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: Apr 27 10:28 2016  Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj.  : 1uL
Signal Phase : Stabilwax
Signal Info  : 0.53mm
```

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
8) S Hexanol	11.66	265048	27.510 mg/L m
Spiked Amount 100.000 Range 57 - 142 Recovery = 27.51%#			
Target Compounds			
1) Methanol	1.81	107739	22.874 mg/L
2) Isopropyl alcohol	2.02	155841	24.223 mg/L
3) Ethanol	2.16	173320	23.268 mg/L
4) n-Propyl alcohol	3.79	203825	23.743 mg/L
5) Isobutyl alcohol	5.18	238945	24.097 mg/L
6) n-Butyl alcohol	6.85	223962	23.689 mg/L
7) 2-Ethoxyethanol	9.14	117164	22.452 mg/L

13.5.3 13

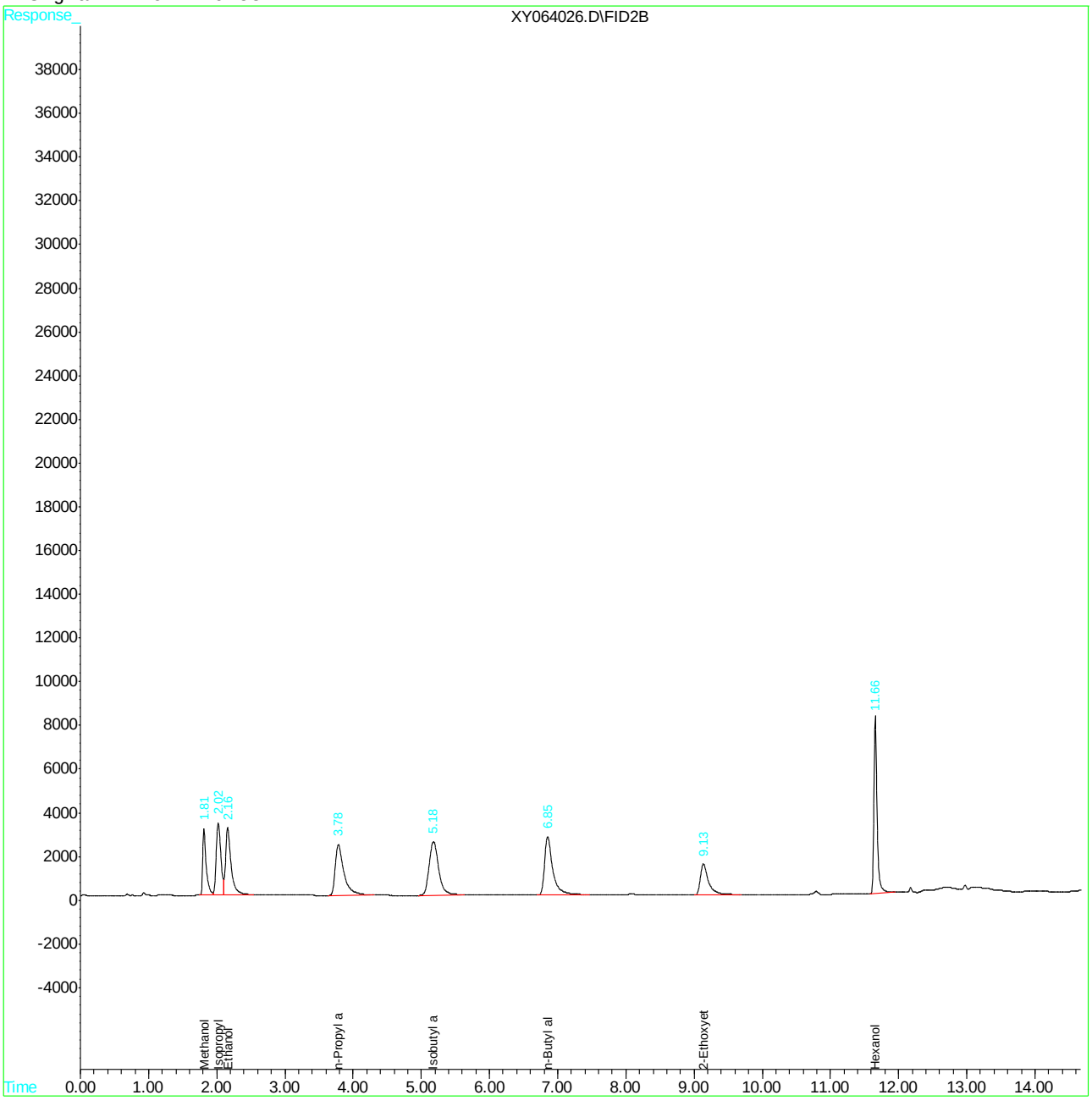
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064026.D Vial: 3
Acq On : 26 Apr 2016 1:07 pm Operator: StevenH
Sample : ic2768-3 Inst : VOA5
Misc : gc18702,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:28 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



Manual Integration Approval Summary

Sample Number:	GXY2768-IC2768	**Method:**	SW846 8015C
Lab FileID:	XY064026.D	**Analyst approved:**	04/27/16 11:04 Steven Heller
Injection Time:	04/26/16 13:07	**Supervisor approved:**	04/27/16 15:16 Juan Garcia

Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexanol	111-27-3	1	11.66	Poor instrument integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064027.D Vial: 4
Acq On : 26 Apr 2016 1:34 pm Operator: StevenH
Sample : icc2768-4 Inst : VOA5
Misc : gc18702,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:28 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
8) S Hexanol	11.66	845336	87.738 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 87.74%			
Target Compounds			
1) Methanol	1.80	412352	87.548 mg/L
2) Isopropyl alcohol	2.02	551631	85.742 mg/L
3) Ethanol	2.15	711817	95.562 mg/L
4) n-Propyl alcohol	3.78	779538	90.805 mg/L
5) Isobutyl alcohol	5.19	898139	90.573 mg/L
6) n-Butyl alcohol	6.85	848521	89.751 mg/L
7) 2-Ethoxyethanol	9.12	481776	92.324 mg/L

13.5.4

13

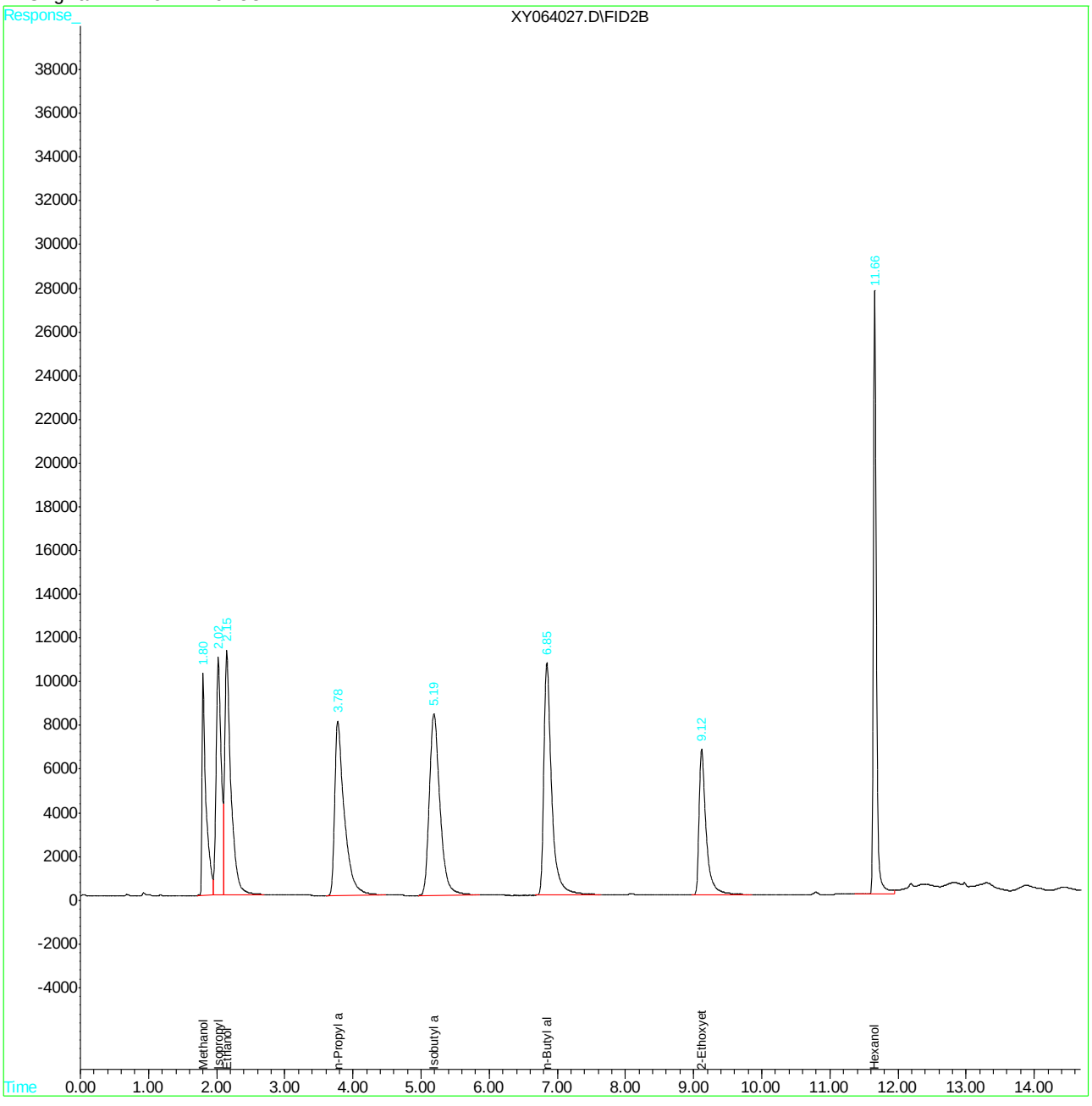
(f)=RT Delta > 1/2 Window (m)=manual int.
XY064027.D D8015.M Wed Apr 27 11:22:19 2016

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064027.D Vial: 4
Acq On : 26 Apr 2016 1:34 pm Operator: StevenH
Sample : icc2768-4 Inst : VOA5
Misc : gc18702,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:28 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064028.D Vial: 5
Acq On : 26 Apr 2016 1:54 pm Operator: StevenH
Sample : ic2768-5 Inst : VOA5
Misc : gc18702,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:28 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
8) S Hexanol	11.66	2748396	285.258 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 285.26%#			
Target Compounds			
1) Methanol	1.79	1277947	271.325 mg/L
2) Isopropyl alcohol	2.02	1893527	294.319 mg/L
3) Ethanol	2.13	2061099	276.705 mg/L
4) n-Propyl alcohol	3.76	2461208	286.694 mg/L
5) Isobutyl alcohol	5.18	2861662	288.586 mg/L
6) n-Butyl alcohol	6.88	2712684	286.929 mg/L
7) 2-Ethoxyethanol	9.13	1393528	267.046 mg/L

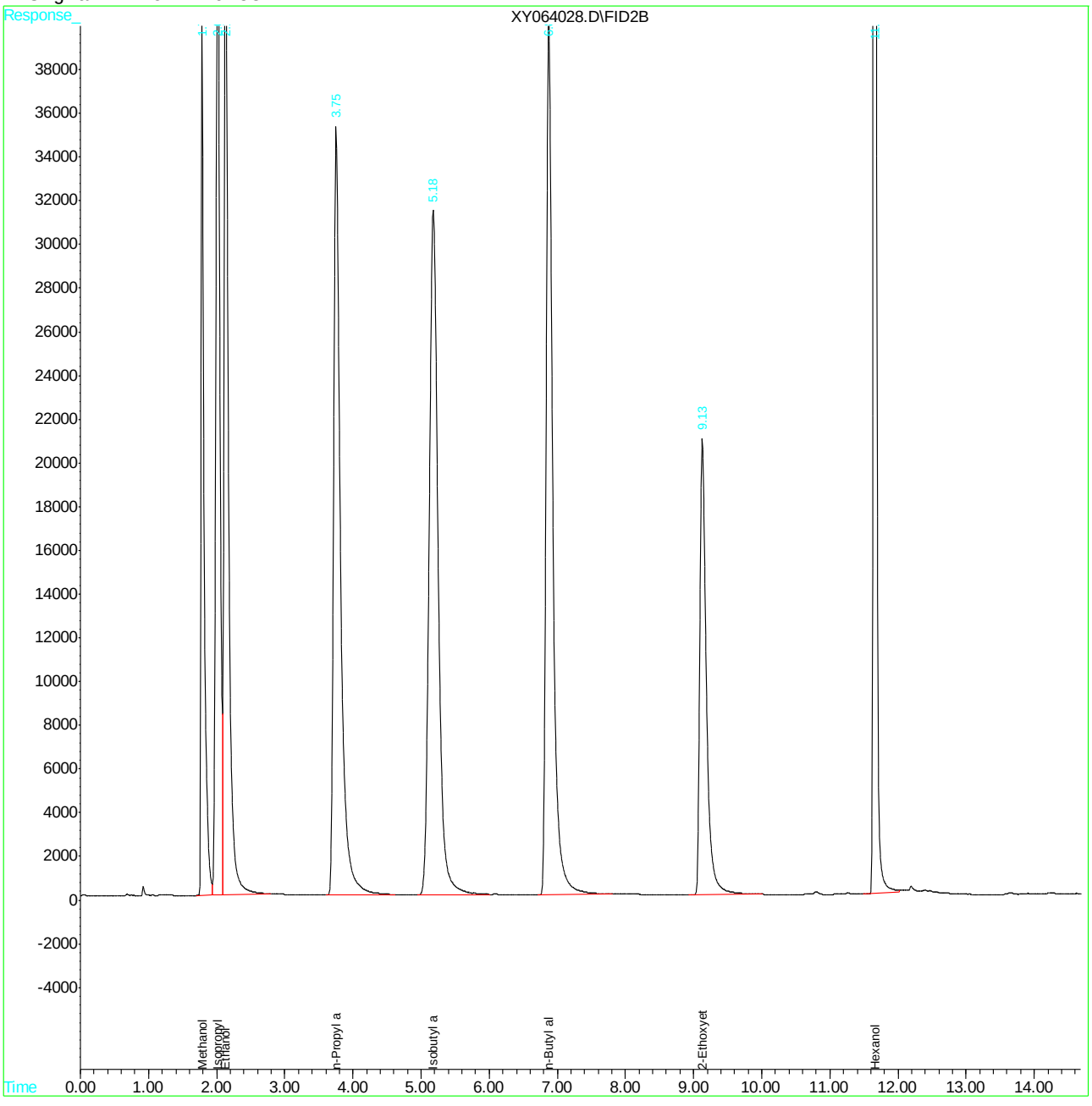
(f)=RT Delta > 1/2 Window (m)=manual int.
XY064028.D D8015.M Wed Apr 27 11:22:20 2016 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064028.D Vial: 5
Acq On : 26 Apr 2016 1:54 pm Operator: StevenH
Sample : ic2768-5 Inst : VOA5
Misc : gc18702,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:28 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064029.D Vial: 6
Acq On : 26 Apr 2016 2:28 pm Operator: StevenH
Sample : ic2768-6 Inst : VOA5
Misc : gc18702,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:28 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
8) S Hexanol	11.65	5180923	537.733 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 537.73%#			
Target Compounds			
1) Methanol	1.77	2571370	545.935 mg/L
2) Isopropyl alcohol	2.01	3715326	577.488 mg/L
3) Ethanol	2.12	4013228	538.781 mg/L
4) n-Propyl alcohol	3.74	4791789	558.173 mg/L
5) Isobutyl alcohol	5.17	5453821	549.994 mg/L
6) n-Butyl alcohol	6.88	5241609	554.420 mg/L
7) 2-Ethoxyethanol	9.12	2887563	553.352 mg/L

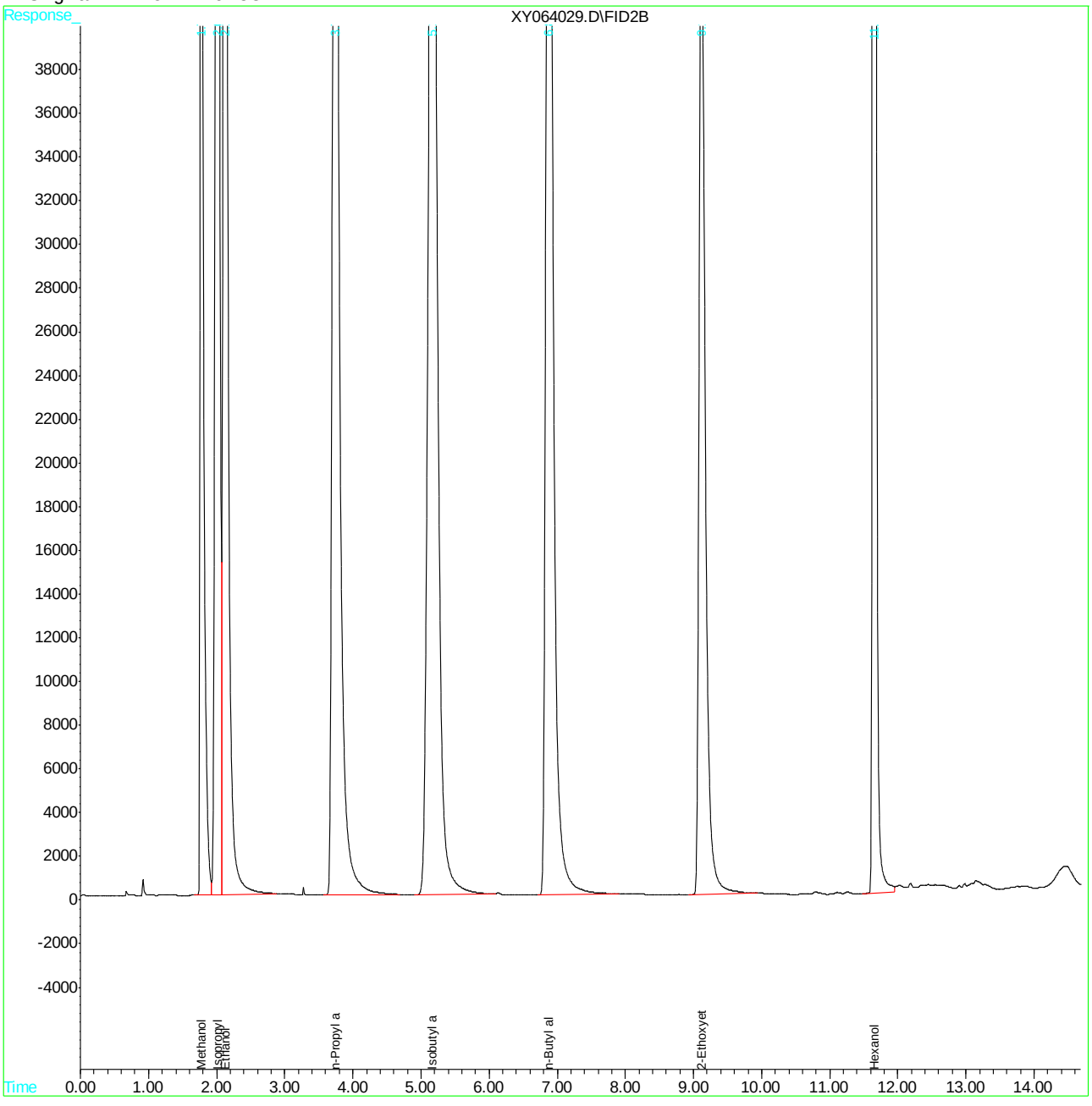
(f)=RT Delta > 1/2 Window (m)=manual int.
XY064029.D D8015.M Wed Apr 27 11:22:22 2016 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064029.D Vial: 6
Acq On : 26 Apr 2016 2:28 pm Operator: StevenH
Sample : ic2768-6 Inst : VOA5
Misc : gc18702,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:28 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\2\DATA\042616\XY064030.D          Vial: 7
Acq On    : 26 Apr 2016   2:47 pm                   Operator: StevenH
Sample    : ic2768-7                                Inst    : VOA5
Misc      : gc18702,gxy2768,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: Apr 27 10:28 2016  Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj.  : 1uL
Signal Phase : Stabilwax
Signal Info  : 0.53mm
```

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
8) S Hexanol	11.66	7874409	817.292 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 817.29%#			
Target Compounds			
1) Methanol	1.79	3641412	773.119 mg/L
2) Isopropyl alcohol	2.02	4756015	739.246 mg/L
3) Ethanol	2.13	6705375	900.205 mg/L
4) n-Propyl alcohol	3.76	7043504	820.465 mg/L
5) Isobutyl alcohol	5.19	8151543	822.047 mg/L
6) n-Butyl alcohol	6.82	7739233	818.602 mg/L
7) 2-Ethoxyethanol	9.09	4435508	849.989 mg/L

(f)=RT Delta > 1/2 Window (m)=manual int.

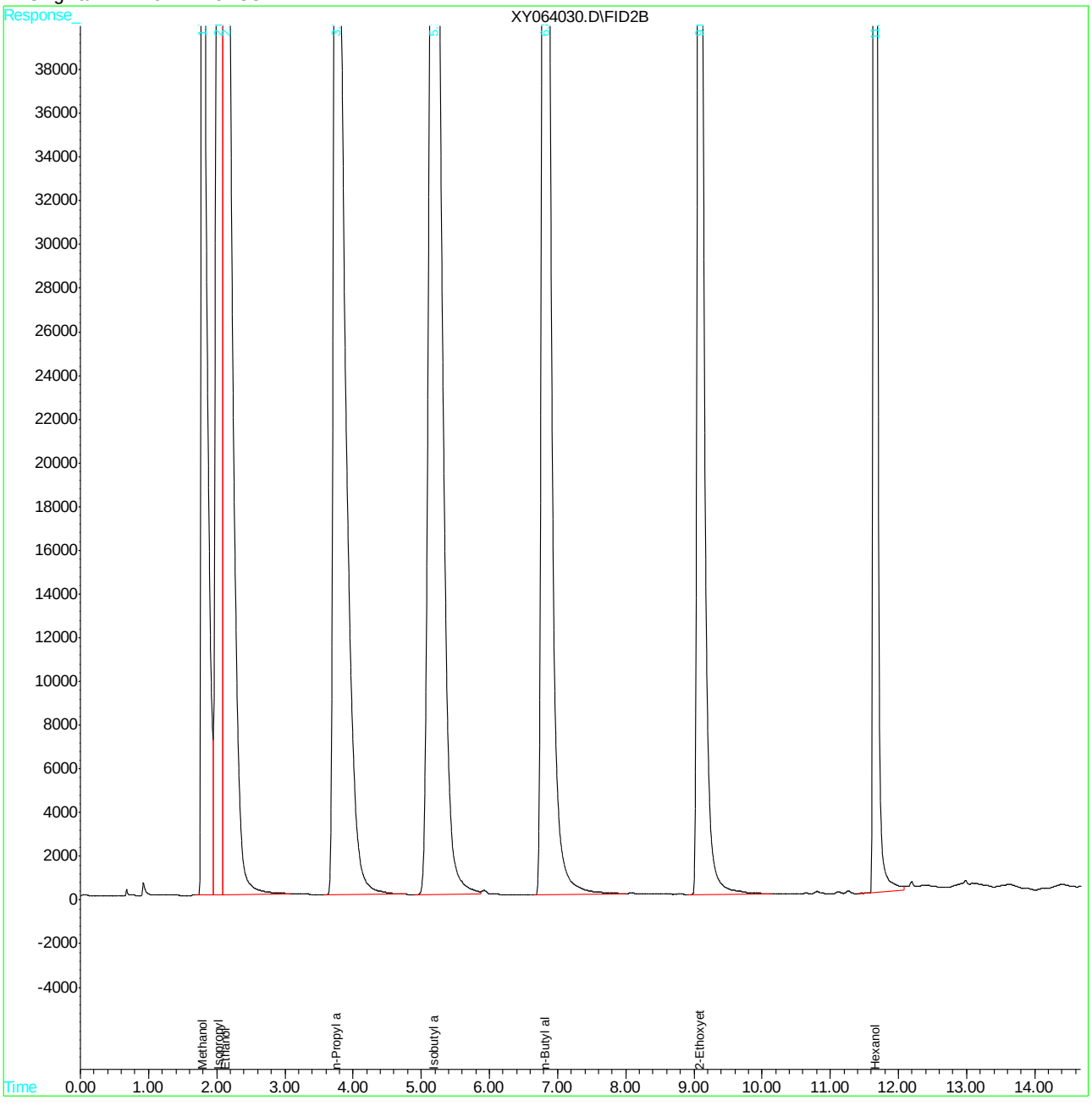
SGS ACCUTEST JC18516

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064030.D Vial: 7
Acq On : 26 Apr 2016 2:47 pm Operator: StevenH
Sample : ic2768-7 Inst : VOA5
Misc : gc18702,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:28 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\2\DATA\042616\XY064032.D          Vial: 9
Acq On    : 26 Apr 2016   3:26 pm                   Operator: StevenH
Sample    : icv2768-4                               Inst    : VOA5
Misc      : gc18702,gxy2768,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: Apr 27 10:30 2016  Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj.  : 1uL
Signal Phase : Stabilwax
Signal Info  : 0.53mm
```

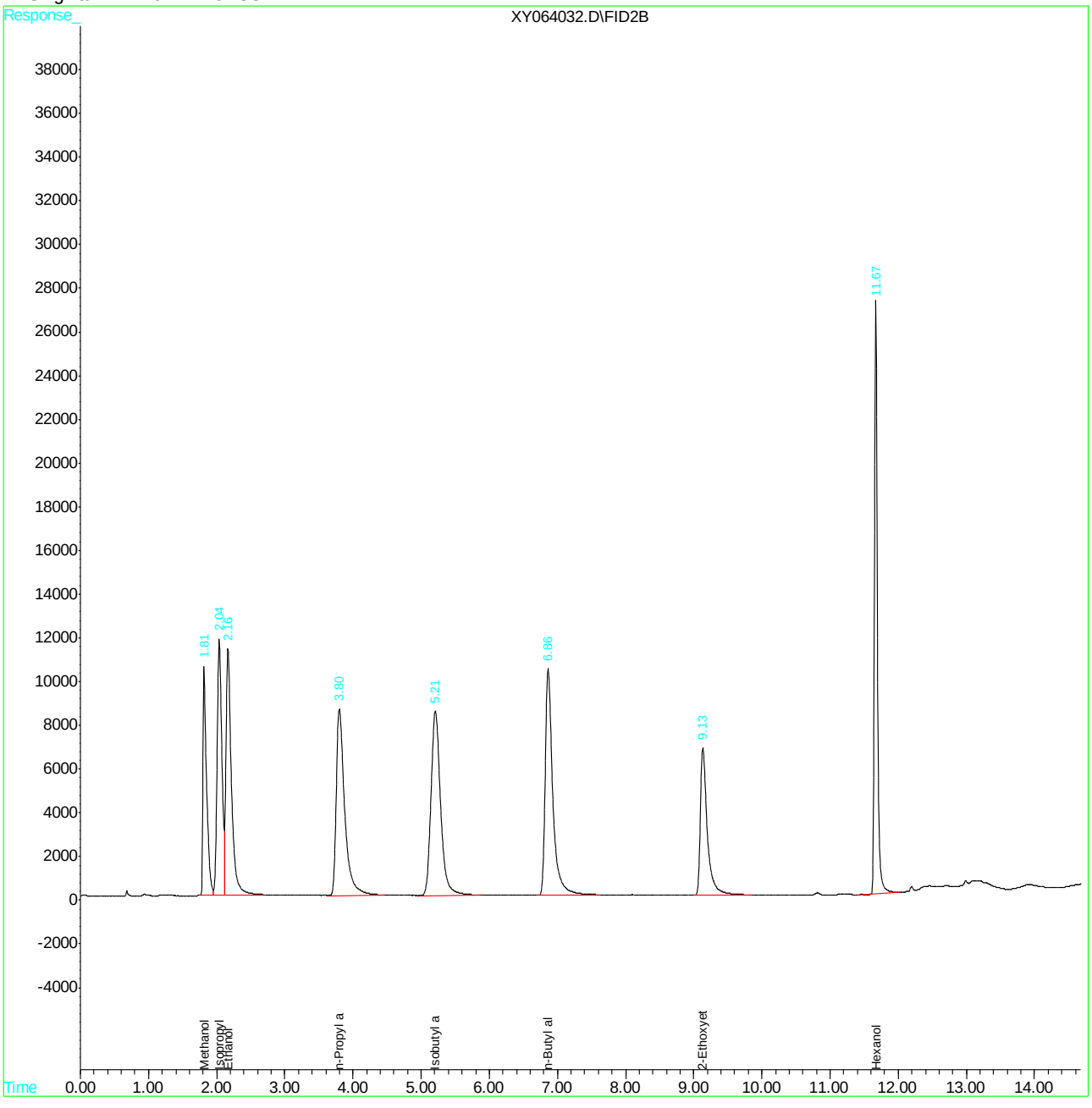
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
8) S Hexanol	11.67	811908	84.269 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 84.27%			
Target Compounds			
1) Methanol	1.82	395964	84.068 mg/L
2) Isopropyl alcohol	2.04	559920	87.031 mg/L
3) Ethanol	2.17	635082	85.261 mg/L
4) n-Propyl alcohol	3.80	733391	85.429 mg/L
5) Isobutyl alcohol	5.21	824249	83.122 mg/L
6) n-Butyl alcohol	6.86	797106	84.312 mg/L
7) 2-Ethoxyethanol	9.14	477070	91.422 mg/L

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064032.D Vial: 9
Acq On : 26 Apr 2016 3:26 pm Operator: StevenH
Sample : icv2768-4 Inst : VOA5
Misc : gc18702,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:30 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064033.D Vial: 10
Acq On : 26 Apr 2016 3:45 pm Operator: StevenH
Sample : cc2768-4 Inst : VOA5
Misc : gc18702,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:30 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
8) S Hexanol	11.68	835687	86.737 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 86.74%			
Target Compounds			
1) Methanol	1.82	397334	84.359 mg/L
2) Isopropyl alcohol	2.04	534804	83.127 mg/L
3) Ethanol	2.17	742195	99.641 mg/L
4) n-Propyl alcohol	3.80	781685	91.055 mg/L
5) Isobutyl alcohol	5.22	906745	91.441 mg/L
6) n-Butyl alcohol	6.88	852449	90.166 mg/L
7) 2-Ethoxyethanol	9.15	475416	91.105 mg/L

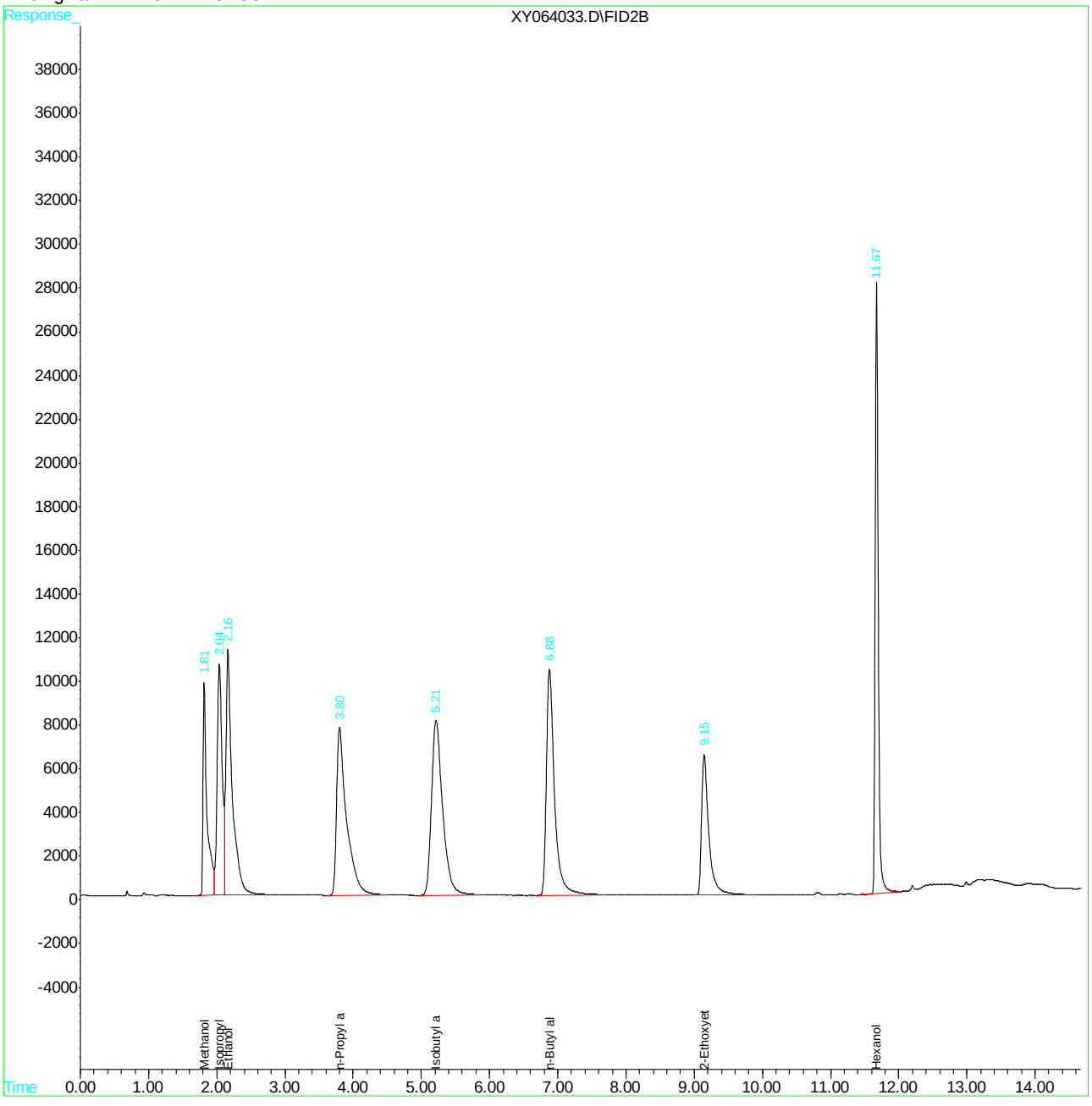
(f)=RT Delta > 1/2 Window (m)=manual int.
XY064033.D D8015.M Wed Apr 27 10:39:11 2016

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064033.D Vial: 10
Acq On : 26 Apr 2016 3:45 pm Operator: StevenH
Sample : cc2768-4 Inst : VOA5
Misc : gc18702,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:30 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



XY064033.D D8015.M Wed Apr 27 10:39:11 2016 Page 2

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\2\DATA\042616\XY064044.D          Vial: 20
Acq On    : 26 Apr 2016   7:16 pm                   Operator: StevenH
Sample    : ecc2768-5                               Inst    : VOA5
Misc      : gc18771,gxy2768,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: Apr 27 10:30 2016  Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj.  : 1uL
Signal Phase : Stabilwax
Signal Info  : 0.53mm
```

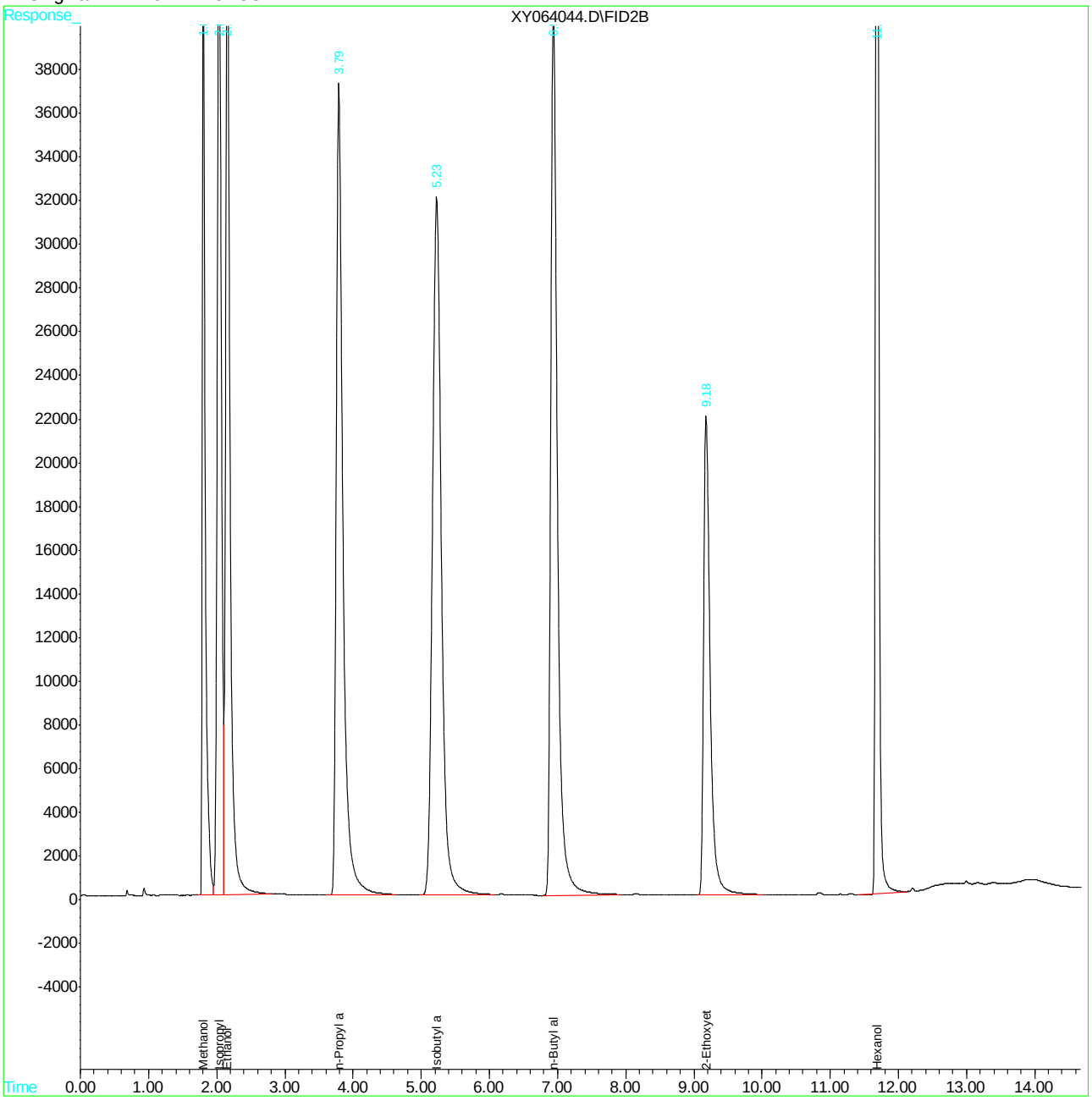
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
8) S Hexanol	11.69	2750238	285.450 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 285.45%#			
Target Compounds			
1) Methanol	1.80	1336592	283.776 mg/L
2) Isopropyl alcohol	2.04	1951882	303.389 mg/L
3) Ethanol	2.16	2125862	285.400 mg/L
4) n-Propyl alcohol	3.79	2532088	294.951 mg/L
5) Isobutyl alcohol	5.23	2903967	292.852 mg/L
6) n-Butyl alcohol	6.94	2778982	293.941 mg/L
7) 2-Ethoxyethanol	9.18	1459891	279.763 mg/L

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042616\XY064044.D Vial: 20
Acq On : 26 Apr 2016 7:16 pm Operator: StevenH
Sample : ecc2768-5 Inst : VOA5
Misc : gc18771,gxy2768,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 10:30 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



Manual Integrations
APPROVED
(compounds with "m" flag)
Melissa Mangual
04/27/16 13:26

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042716\XY064053.D Vial: 20
Acq On : 27 Apr 2016 8:10 am Operator: StevenH
Sample : cc2768-5 Inst : VOA5
Misc : gc18702,gxy2770,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 12:11 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
8) S Hexanol	11.63	2065228	214.352 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 214.35%#			
Target Compounds			
1) Methanol	1.76	966963	205.299 mg/L
2) Isopropyl alcohol	1.99	1310870	203.754 mg/L m
3) Ethanol	2.10	1748980	234.803 mg/L
4) n-Propyl alcohol	3.71	1863513	217.072 mg/L
5) Isobutyl alcohol	5.12	2146121	216.427 mg/L
6) n-Butyl alcohol	6.75	2035457	215.296 mg/L
7) 2-Ethoxyethanol	9.04	1144677	219.358 mg/L

13.5.11
13

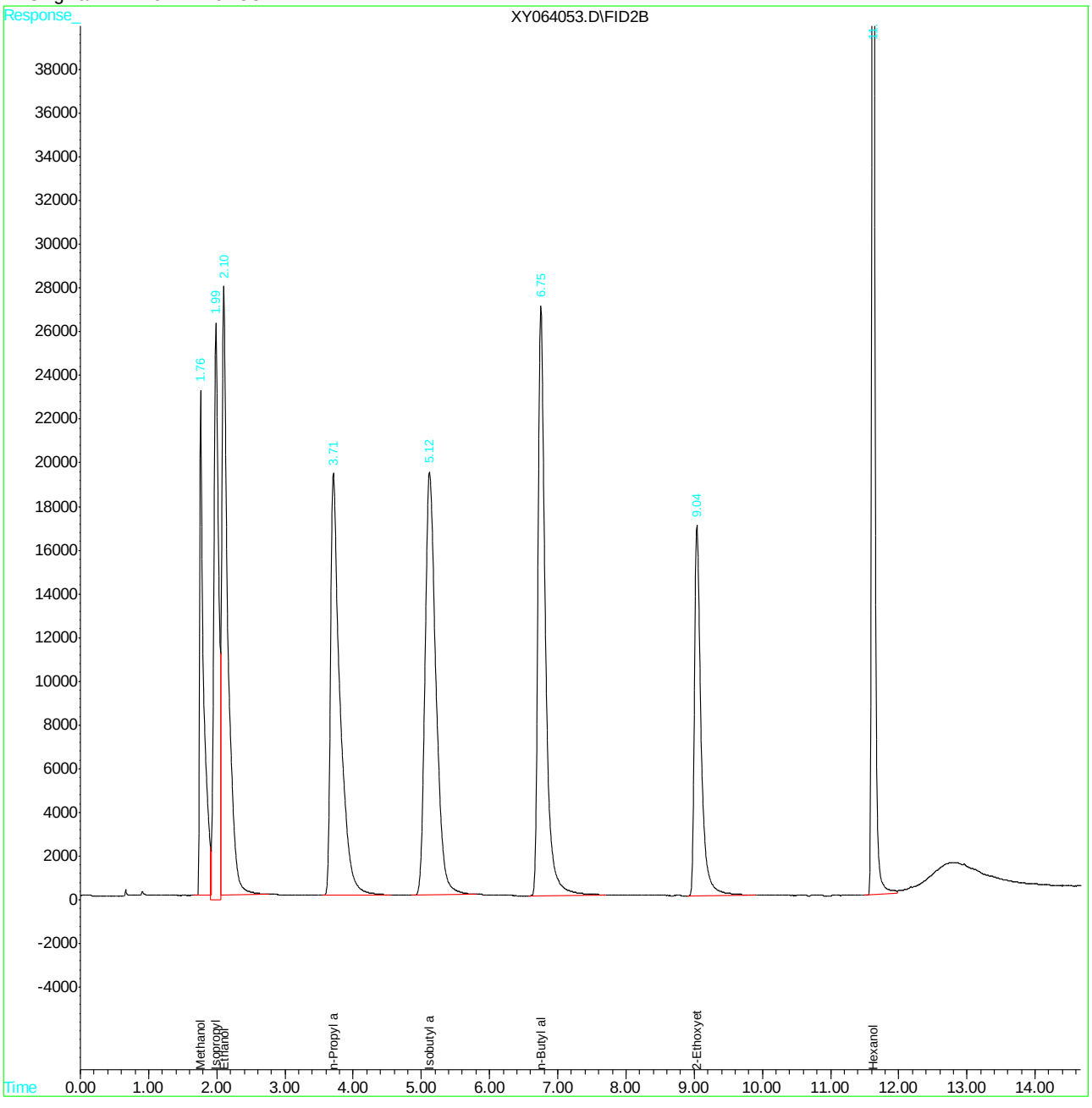
(f)=RT Delta > 1/2 Window (m)=manual int.
XY064053.D D8015.M Wed Apr 27 12:13:47 2016

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042716\XY064053.D Vial: 20
Acq On : 27 Apr 2016 8:10 am Operator: StevenH
Sample : cc2768-5 Inst : VOA5
Misc : gc18702,gxy2770,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 12:11 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



XY064053.D D8015.M Wed Apr 27 12:13:47 2016 Page 2

Manual Integration Approval Summary

Sample Number:	GXY2770-CC2768	**Method:**	SW846 8015C
Lab FileID:	XY064053.D	**Analyst approved:**	04/27/16 12:16 Steven Heller
Injection Time:	04/27/16 08:10	**Supervisor approved:**	04/27/16 13:26 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Isopropyl Alcohol	67-63-0	1	1.99	Poor instrument integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042716\XY064061.D Vial: 10
Acq On : 27 Apr 2016 11:43 am Operator: StevenH
Sample : ecc2768-4 Inst : VOA5
Misc : gc18772,gxy2770,5.00,,,10,1, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 12:07 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
8) S Hexanol	11.71	1009781	104.806 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 104.81%			
Target Compounds			
1) Methanol	1.83	500916	106.351 mg/L
2) Isopropyl alcohol	2.06	719902	111.897 mg/L
3) Ethanol	2.18	804546	108.011 mg/L
4) n-Propyl alcohol	3.83	947889	110.415 mg/L
5) Isobutyl alcohol	5.26	1089904	109.912 mg/L
6) n-Butyl alcohol	6.96	1036703	109.655 mg/L
7) 2-Ethoxyethanol	9.21	544342	104.314 mg/L

13.5.12

13

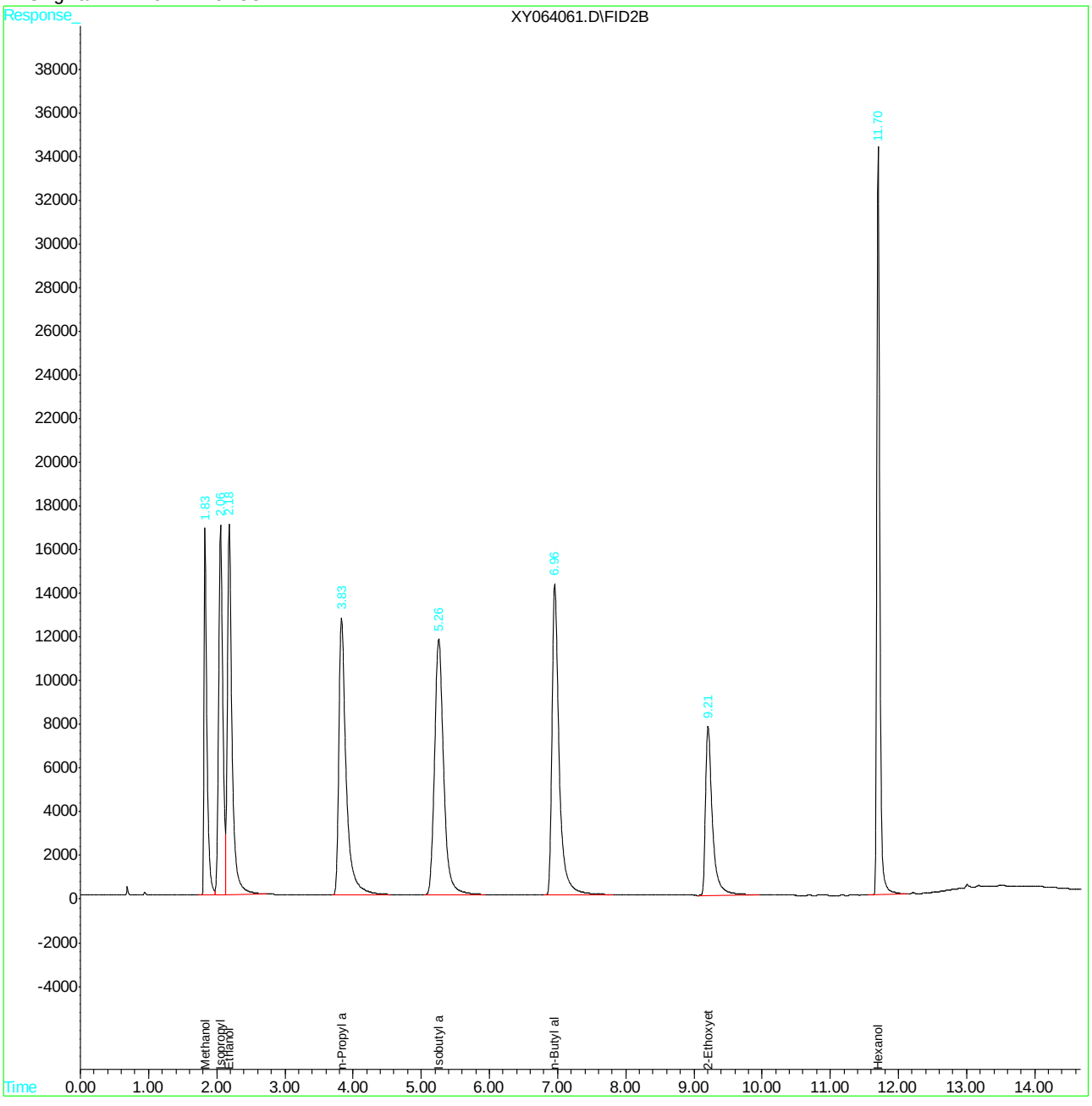
(f)=RT Delta > 1/2 Window (m)=manual int.
XY064061.D D8015.M Wed Apr 27 12:08:52 2016

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\042716\XY064061.D Vial: 10
Acq On : 27 Apr 2016 11:43 am Operator: StevenH
Sample : ecc2768-4 Inst : VOA5
Misc : gc18772,gxy2770,5.00,,,10,1, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: Apr 27 12:07 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Wed Apr 27 10:10:15 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



ACCUTEST LABORATORIES S

DATE:	9/26/16
COLUMN TYPE:	Stabil Wax
DETECTOR:	FID
INSTRUMENT:	VOA5-XY
ANALYST:	GH

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

GC VOA5-XY ANALYSIS LOG

METHODS:	Alcohols
METHOD FILE:	DATWA/1D8015
CALIB. DATE:	9/26/16
RUN ID:	GXY 2764/69

STANDARDS

ICAL/CCV:	V20132
ISTD/SURR:	V19752
ICV/QC:	7896A
AMBIENT TEMP.:	NA
THERM ID:	1

DATA FILE	SAMPLE ID, DIL.	Vial #	MATRIX	SAMPLE AMT.	FINAL VOL.	ALS POSITION	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	PH	RR	COMMENTS
XY 06 40 21	CC 2763-4	NA	W	1.0mL	1ml	1		NA	✓	100ul- 1mL LAW
XY 22	BS					2			✓	10ul- 1mL
XY 23	~~MB~~ TEST STD					3			✓	100ul- 1mL
XY 24	IC 2768-1	NA				1	8 PII	NA		2 ul- 1mL GH 9/26/16
XY 25	2					2	8 PII			5 + ~~495 ul~~ 995 ul
XY 26	3					3	8 PII			25 + 975ul
XY 27	4					4				100 + 900ul
XY 29	5					5				250 + 750ul
XY 29	6					6				250 + 250ul
XY 30	7					7				500ul
XY 31	BLANK					8				GH 9/26/16
XY 32	ICV 2768-4					9				~~100~~ 10ul- 1mL
XY 33	CC 2768-4					10				100ul + 900 ul
XY 34	BS					11				10 ul- 1ml
XY 35	MB					12				
XY 36	JC 18516-1	1				13		1		
XY 37	4	1				14		1		
XY 38	JC 18649-1	1				15		1		
XY 39	2	1				16		1		
XY 40	4	1				17		1		
XY 41	5	1				18		1		
XY 42	JC18516-4MS	1				19	GH 9/26/16	1		10ul- 1mL
XY 43	4MSD	1				~~20~~ 19		1		
XY 44	CC 2768-5	NA				20	2 PII	NA		250 ul + 750 ul
XY 45	BS		S	5g/10mL		21			✓	10 ul- 1mL
XY 46	MB					22			✓	
XY 47	JC18516-2	NA		4.87/10mL		23			✓	B13 4L

Matrix: Designate "W" for Water, "S" for Soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate
All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.
Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

Analyst's Signature: [signature]

gcvoa5_xy_log.xls NF 08/15

ACCUTEST LABORATORIES SE

DATE:	4/26/16
COLUMN TYPE:	Stabilwax
DETECTOR:	FID
INSTRUMENT:	VOA5-XY
ANALYST:	SH

GC VOA5-XY ANALYSIS LOG

METHODS:	Alcohols
METHOD FILE:	D6015/AA1WAX
CALIB. DATE:	4/26/16
RUN ID:	GXY 2769

STANDARDS

ICAL/CCV:	120132
ISTD/SURR:	119752
ICV/QC:	7496A
AMBIENT TEMP.:	NA
THERM ID:	↓

DATA FILE	SAMPLE ID, DIL.	Vial #	MATRIX	SAMPLE AMT.	FINAL VOL.	ALS POSITION	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	PH	RR	COMMENTS
XY 0640 48	JC18516-3	NA	S	5.08g/10mL	1ml	24		NA	✓	B1343
XY 49	JC18649-3	↓	↓	5.01g/10mL	↓	25		↓	✓	B1341
XY 50	~~ECC 2768-4 5ml+2ml~~			4.82g/10mL		26			✓	10ml+1ml JC18516-2MS
XY 51	JC18516-2 MSD			↓	↓	26			✓	↓ ↓ MSD HI BAD INT
XY 52	ECC 2768-4			NA	↓	10		↓	✓	100ml+900ml HI BAD INT.
XY										
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XY										

24
4/27/16

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

Analyst's Signature: SH

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

gcvoa5_xy_log.xls NF 08/15

ACCUTEST LABORATORIES SE

DATE:	4/27/16
COLUMN TYPE:	stabilwax
DETECTOR:	FID
INSTRUMENT:	VOA5-XY
ANALYST:	SH

GC VOA5-XY ANALYSIS LOG

METHODS:	Alcohols
METHOD FILE:	DA: WRK / B6015
CALIB. DATE:	4/26/16
RUN ID:	GXY 2770

STANDARDS

ICAL/CCV:	V10132
ISTD/SURR:	V19732
ICV/QC:	7896A
AMBIENT TEMP.:	NA
THERM ID:	↓

DATA FILE	SAMPLE ID, DIL.	Vial #	MATRIX	SAMPLE AMT.	FINAL VOL.	ALS POSITION	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	PH	RR	COMMENTS
XY 064053	CL2768-5	NA	S	5g/10mL	1mL	20	2 PII	NA		250ul + 750ul
XY 54	BS	↓	↓	↓	↓	21		↓		10ul - 1mL
XY 55	MB	↓	↓	↓	↓	22		↓		↓
XY 56	JC18516-2a	↓	↓	4.87 g/10mL	↓	23		↓		B1342
XY 57	3a SH 4/27/16	↓	↓	5.08 g/10mL	↓	24		↓		B1343
XY 58	JC18649-3 ~~2a, MS~~	↓	↓	5.02g/10mL	↓	25		↓		B1341
XY 59	2A, MSD	↓	↓	4.87/10mL	↓	26		↓		B1342 10ul - 1mL
XY 60	2A, MSD	↓	↓	↓ ↓	↓	27 SH 4/27/16		↓		↓ ↓ ↓
XY 61	ECL2768-4	↓	↓	5g/10mL	↓	~~27~~ 10		↓		100ul + 900ul
XY										
XY										
XY										
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XY										
XY										

SH 4/27/16

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

Analyst's Signature: [signature]

All strikeouts must be initialed and dated. If correction was not due to a transcription error, then list the reason for correction.

Manual Integration Rationale SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument Integration

5035A SOIL PREP LOG

BALANCE ID: NAV 4

Serial #	Sample #	Vial Type or Vial Lot #	Tare Wt gram	Total Wt gram	Sample Wt gram	Date	Time	Initials	Container Type *	Comments
B1328	FA33409-6	M	29.55	29.52	-0.03	4/26/15	10:10	CG	PT	IN TB
29	-6	M	29.49	29.49	0.00		10:11			↓ ↓
30	FA33363-5	W (AC2481)	—	—	4.27		11:25		5030A	OOH bot #7 reprep
31	FA33412-1	W	30.94	36.47	5.53		11:29		PT	IN
32	-1	W	30.90	36.93	6.03					
33	-1	M	29.73	32.77	3.04					
34	-1	M	—	—	4.78					leaked?
35	-2	W	30.89	37.49	6.60				5030A	bot #5 reprep
36	-2	W	30.95	37.13	6.18				PT	
37	-2	M	29.63	36.92	7.29		11:36			
38	FA33410-1	W	—	—	5.78		11:39		EN	IN, FS
39	-1	W	—	—	5.68					
40	-1	M (AC2456)	—	—	5.70		11:45			
41	JC18649-3	W	—	—	5.01	4/26/16	12:32	SH	5030A	OOH - 10mL F.K. BOTL
42	JC18516-2	↓	—	—	4.87	↓		↓	↓	↓ ↓
43	3		—	—	5.08					
44										
45										
46										
47										
48										
49										
B1350										

Container Type: PT for pre-tared vials (field kits): EN for Encore or similar type: 5030A for samples collected in jars or bulk containers: SL for core sleeve

Comment: N/O for no odor: S/O for slight odor: OOH for Out of Hold

Encore Comment: C for sampler incorrectly capped: P for plunger not locked: F for sampler not completely filled

5035 soil prep log NAV 4.xls NF rev 08/11

Instrument Run Log GXY2770 page 2 of 2

SGS ACCUTEST JC18516

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13.6.2 13