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Automated Report

Technical Report for

Anderson, Mulholland & Associates

BMSMC, Building 5 Area, PR

SM04.00.06

SGS Accutest Job Number: JC19023

Sampling Dates: 04/22/16 - 04/25/16

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: **1220**

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: JC19023

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

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JC19023-1	04/22/16	12:30	TT	04/26/16	SO	Soil	RA-17 (17-18)
JC19023-2	04/22/16	12:31	NR	04/26/16	SO	Soil	S-40S (10.5-11.5)
JC19023-3	04/22/16	14:00	TT	04/26/16	AQ	Equipment Blank	BPEB-6
JC19023-4	04/25/16	10:45	TT	04/26/16	SO	Soil	S-39 (11-12)

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

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Anderson, Mulholland & Associates	**Job No**	JC19023
Site:	BMSMC, Building 5 Area, PR	**Report Date**	5/12/2016 9:35:35 AM

On 04/26/2016, 4 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at Accutest Laboratories at a maximum corrected temperature of 4.4 C. Samples were intact and chemically preserved, unless noted below. An Accutest Job Number of JC19023 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:** OP93453

- All samples were extracted within the recommended method holding time.
- Sample(s) JC19098-2MS, JC19098-2MSD were used as the QC samples indicated.
- Sample(s) JC19023-3 have compound(s) reported with a "B" qualifier, indicating analyte is found in the associated method blank.
- Matrix Spike Recovery(s) for 1-Methylnaphthalene, Benzaldehyde are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for 1-Methylnaphthalene, 2-Methylnaphthalene, Benzaldehyde are outside control limits. Outside control limits due to matrix interference.
- RPD(s) for MSD for Benzaldehyde, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(g,h,i)perylene, Benzo(k)fluoranthene, bis(2-Ethylhexyl)phthalate, Butyl benzyl phthalate, Chrysene, Dibenzo(a,h)anthracene, Indeno(1,2,3-cd)pyrene, Pyrene are outside control limits for sample OP93453-MSD. Outside of in house control limits.

Matrix: SO **Batch ID:** OP93478

- All samples were extracted within the recommended method holding time.
- Sample(s) JC18964-19MS, JC18964-19MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike / Matrix Spike Duplicate Recovery(s) for 3&4-Methylphenol are outside control limits. Outside control limits due to high level in sample relative to spike amount.
- Matrix Spike / Matrix Spike Duplicate Recovery(s) for 3,3'-Dichlorobenzidine, bis(2-Chloroethyl)ether, Phenol are outside control limits. Outside control limits due to matrix interference.

Extractables by GCMS By Method SW846 8270D BY SIM

Matrix: AQ **Batch ID:** OP93453A

- All samples were extracted within the recommended method holding time.
- Sample(s) JC19138-2MS, JC19138-2MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for Naphthalene are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for Naphthalene are outside control limits. Outside control limits due to matrix interference.
- RPD(s) for MSD for 1,4-Dioxane are outside control limits for sample OP93453A-MSD. Analytical precision exceeds in-house control limits.

Matrix: SO **Batch ID:** OP93478A

- All samples were extracted within the recommended method holding time.
- Sample(s) JC19023-1MS, JC19023-1MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recovery(s) for 1,4-Dioxane are outside control limits. Outside control limits due to matrix interference.
- Matrix Spike Duplicate Recovery(s) for 1,4-Dioxane are outside control limits. Outside control limits due to matrix interference.
- JC19023-2 for 1,4-Dioxane: Not accredited for this compound at the time of analysis, but all method requirements were followed.
- JC19023-1 for 1,4-Dioxane: Not accredited for this compound at the time of analysis, but all method requirements were followed.
- JC19023-4 for 1,4-Dioxane: Not accredited for this compound at the time of analysis, but all method requirements were followed.

Volatiles by GC By Method SW846 8015C

Matrix: AQ **Batch ID:** F:GXY2772

- The data for SW846 8015C meets quality control requirements.
- JC19023-3: Analysis performed at Accutest Laboratories, Orlando FL.

Volatiles by GC By Method SW846 8015C MOD

Matrix: SO **Batch ID:** F:GXY2773

- The data for SW846 8015C MOD meets quality control requirements.
- JC19023-4: Sample was received in a bulk container but was not preserved within 48 hours of sampling. Analysis performed at Accutest Laboratories, Orlando FL.
- JC19023-2: Sample was received in a bulk container but was not preserved within 48 hours of sampling. Analysis performed at Accutest Laboratories, Orlando FL.
- JC19023-1: 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: OP93399

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- OP93399-BSD for Endrin: Analytical precision exceeds in-house control limits.
- OP93399-BSD for Aldrin: Analytical precision exceeds in-house control limits.
- OP93399-BSD for 4,4'-DDT: Analytical precision exceeds in-house control limits.
- OP93399-BSD for Methoxychlor: Analytical precision exceeds in-house control limits.
- OP93399-BSD for Heptachlor epoxide: Analytical precision exceeds in-house control limits.
- OP93399-BSD for Heptachlor: Analytical precision exceeds in-house control limits.
- OP93399-BSD for gamma-Chlordane: Analytical precision exceeds in-house control limits.
- OP93399-BSD for gamma-BHC (Lindane): Analytical precision exceeds in-house control limits.
- OP93399-BSD for Endrin ketone: Analytical precision exceeds in-house control limits.
- OP93399-BSD for Endrin aldehyde: Analytical precision exceeds in-house control limits.
- OP93399-BSD for 4,4'-DDE: Analytical precision exceeds in-house control limits.
- OP93399-BSD for Endosulfan-II: Analytical precision exceeds in-house control limits.
- OP93399-BSD for Endosulfan-I: Analytical precision exceeds in-house control limits.
- OP93399-BSD for 4,4'-DDD: Analytical precision exceeds in-house control limits.
- OP93399-BSD for alpha-Chlordane: Analytical precision exceeds in-house control limits.
- OP93399-BSD for beta-BHC: Analytical precision exceeds in-house control limits.
- OP93399-BSD for alpha-BHC: Analytical precision exceeds in-house control limits.
- OP93399-BSD for Endosulfan sulfate: Analytical precision exceeds in-house control limits.
- OP93399-BSD for Dieldrin: Analytical precision exceeds in-house control limits.
- OP93399-BSD for delta-BHC: Analytical precision exceeds in-house control limits.

Matrix: SO	Batch ID: OP93471

- All samples were extracted within the recommended method holding time.
- Sample(s) JC19164-5MS, JC19164-5MSD, OP93471-MSMSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.

Wet Chemistry By Method SM2540 G-97

Matrix: SO	Batch ID: GN45119

- 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:** JC19023

Site: AMANYWP: BMSMC, Building 5 Area, PR **Report Date:** 5/4/2016 3:05:00 PM

4 Sample(s) were collected on 04/25/2016 and were received at SGS Accutest Southeast (SASE) on 04/29/2016 properly preserved, at 4 Deg. C and intact. These Samples received an SASE job number of JC19023. 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:** GXY2772

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) JC19214-2AMS, JC19214-2AMSD were used as the QC samples indicated.

Volatiles by GC By Method SW846 8015C MOD

Matrix: SO **Batch ID:** GXY2773

All samples were analyzed within the recommended method holding time.

All method blanks for this batch meet method specific criteria.

Sample(s) JC18972-2AMS, JC18972-2AMSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for Isopropyl Alcohol, n-Butyl Alcohol, n-Propyl Alcohol are outside control limits. Probable cause is due to matrix interference. % RPD was within control limits for MS/MSD.

Matrix Spike Duplicate Recovery(s) for Ethanol, Isobutyl Alcohol, Isopropyl Alcohol, Methanol, n-Butyl Alcohol, n-Propyl Alcohol are outside control limits. Probable cause is due to matrix interference. % RPD was within control limits for MS/MSD.

Sample(s) JC19023-2 have surrogates outside control limits. Probable cause is due to matrix interference.

JC19023-1: Sample was received in a bulk container but was not preserved within 48 hours of sampling.

JC19023-2: Sample was received in a bulk container but was not preserved within 48 hours of sampling.

JC19023-2 for Hexanol: Outside control limits; however, sample is ND.

JC19023-4: 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: May 4, 2016

Kim Benham, Client Services (signature on file)

Manual Integration Summary

Lab Sample ID	Analysis Type	File ID	Manual Integrations
GXY2772-IC2772	GCVOA	XY064080.D	Hexanol
GXY2772-IC2772	GCVOA	XY064081.D	Hexanol
GXY2772-IC2772	GCVOA	XY064082.D	Hexanol

3 Manual Integrations were found for JC19023

Summary of Hits

Job Number: JC19023
Account: Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Collected: 04/22/16 thru 04/25/16

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC19023-1	**RA-17 (17-18)**					
Benzaldehyde		103 J	220	11	ug/kg	SW846 8270D
Fluoranthene		24.3 J	44	20	ug/kg	SW846 8270D
Phenanthrene		33.9 J	44	10	ug/kg	SW846 8270D
Pyrene		19.1 J	44	7.7	ug/kg	SW846 8270D
1,4-Dioxane [a]		7.80	4.4	0.88	ug/kg	SW846 8270D BY SIM
Naphthalene		30.0	4.4	0.54	ug/kg	SW846 8270D BY SIM
JC19023-2	**S-40S (10.5-11.5)**					
No hits reported in this sample.						
JC19023-3	**BPEB-6**					
Di-n-butyl phthalate		1.8 JB	2.0	0.50	ug/l	SW846 8270D
JC19023-4	**S-39 (11-12)**					
Anthracene		72.1	42	3.6	ug/kg	SW846 8270D

(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:	RA-17 (17-18)		
Lab Sample ID:	JC19023-1	**Date Sampled:**	04/22/16
Matrix:	SO - Soil	**Date Received:**	04/26/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	72.6
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M124228.D	1	05/06/16	AD	04/29/16	OP93478	EM5253
Run #2							

	Initial Weight	Final Volume
Run #1	31.4 g	1.0 ml
Run #2		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	88	30	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	220	40	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	220	43	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	220	110	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	220	170	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	220	64	ug/kg	
95-48-7	2-Methylphenol	ND	88	50	ug/kg	
	3&4-Methylphenol	ND	88	50	ug/kg	
88-75-5	2-Nitrophenol	ND	220	38	ug/kg	
100-02-7	4-Nitrophenol	ND	440	120	ug/kg	
87-86-5	Pentachlorophenol	ND	220	37	ug/kg	
108-95-2	Phenol	ND	88	34	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	220	57	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	220	63	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	220	48	ug/kg	
83-32-9	Acenaphthene	ND	44	8.3	ug/kg	
208-96-8	Acenaphthylene	ND	44	6.1	ug/kg	
98-86-2	Acetophenone	ND	220	22	ug/kg	
120-12-7	Anthracene	ND	44	19	ug/kg	
1912-24-9	Atrazine	ND	88	14	ug/kg	
56-55-3	Benzo(a)anthracene	ND	44	6.8	ug/kg	
50-32-8	Benzo(a)pyrene	ND	44	11	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	44	9.2	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	44	12	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	44	12	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	88	20	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	88	25	ug/kg	
92-52-4	1,1'-Biphenyl	ND	88	12	ug/kg	
100-52-7	Benzaldehyde	103	220	11	ug/kg	J
91-58-7	2-Chloronaphthalene	ND	88	8.3	ug/kg	
106-47-8	4-Chloroaniline	ND	220	13	ug/kg	
86-74-8	Carbazole	ND	88	8.6	ug/kg	

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

Report of Analysis

Client Sample ID:	RA-17 (17-18)		
Lab Sample ID:	JC19023-1	**Date Sampled:**	04/22/16
Matrix:	SO - Soil	**Date Received:**	04/26/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	72.6
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	88	32	ug/kg	
218-01-9	Chrysene	ND	44	11	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	88	9.3	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	88	25	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	88	17	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	88	12	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	44	16	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	44	13	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	88	59	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	44	17	ug/kg	
132-64-9	Dibenzofuran	ND	88	7.9	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	88	27	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	88	28	ug/kg	
84-66-2	Diethyl phthalate	ND	88	9.9	ug/kg	
131-11-3	Dimethyl phthalate	ND	88	9.0	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	88	9.6	ug/kg	
206-44-0	Fluoranthene	24.3	44	20	ug/kg	J
86-73-7	Fluorene	ND	44	17	ug/kg	
118-74-1	Hexachlorobenzene	ND	88	11	ug/kg	
87-68-3	Hexachlorobutadiene	ND	44	17	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	440	26	ug/kg	
67-72-1	Hexachloroethane	ND	220	33	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	44	15	ug/kg	
78-59-1	Isophorone	ND	88	9.7	ug/kg	
90-12-0	1-Methylnaphthalene	ND	88	7.8	ug/kg	
91-57-6	2-Methylnaphthalene	ND	88	36	ug/kg	
88-74-4	2-Nitroaniline	ND	220	32	ug/kg	
99-09-2	3-Nitroaniline	ND	220	15	ug/kg	
100-01-6	4-Nitroaniline	ND	220	17	ug/kg	
98-95-3	Nitrobenzene	ND	88	19	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	88	20	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	220	25	ug/kg	
85-01-8	Phenanthrene	33.9	44	10	ug/kg	J
129-00-0	Pyrene	19.1	44	7.7	ug/kg	J
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	220	9.8	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	68%		30-106%
4165-62-2	Phenol-d5	71%		30-106%

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

Report of Analysis

Client Sample ID:	RA-17 (17-18)		
Lab Sample ID:	JC19023-1	**Date Sampled:**	04/22/16
Matrix:	SO - Soil	**Date Received:**	04/26/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	72.6
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	75%		24-140%
4165-60-0	Nitrobenzene-d5	49%		26-122%
321-60-8	2-Fluorobiphenyl	64%		36-112%
1718-51-0	Terphenyl-d14	66%		36-132%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	RA-17 (17-18)		
Lab Sample ID:	JC19023-1	**Date Sampled:**	04/22/16
Matrix:	SO - Soil	**Date Received:**	04/26/16
Method:	SW846 8270D BY SIM SW846 3546	**Percent Solids:**	72.6
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M65189.D	1	05/09/16	LK	04/29/16	OP93478A	E4M2910
Run #2							

	Initial Weight	Final Volume
Run #1	31.4 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane [a]	7.80	4.4	0.88	ug/kg	
91-20-3	Naphthalene	30.0	4.4	0.54	ug/kg	

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

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	RA-17 (17-18)		
Lab Sample ID:	JC19023-1	**Date Sampled:**	04/22/16
Matrix:	SO - Soil	**Date Received:**	04/26/16
Method:	SW846 8015C MOD	**Percent Solids:**	72.6
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	XY064105.D	1	05/03/16	AFL	n/a	n/a	F:GXY2773
Run #2							

	Initial Weight	Final Volume
Run #1	5.34 g	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
64-17-5	Ethanol	ND	13	2.6	mg/kg	
78-83-1	Isobutyl Alcohol	ND	13	2.6	mg/kg	
67-63-0	Isopropyl Alcohol	ND	13	2.6	mg/kg	
71-23-8	n-Propyl Alcohol	ND	13	2.6	mg/kg	
71-36-3	n-Butyl Alcohol	ND	13	2.6	mg/kg	
67-56-1	Methanol	ND	13	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
111-27-3	Hexanol	111%		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:	RA-17 (17-18)		
Lab Sample ID:	JC19023-1	**Date Sampled:**	04/22/16
Matrix:	SO - Soil	**Date Received:**	04/26/16
Method:	SW846 8081B SW846 3546	**Percent Solids:**	72.6
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G122627.D	1	04/29/16	BP	04/28/16	OP93471	G1G3976
Run #2							

	Initial Weight	Final Volume
Run #1	15.4 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.89	0.80	ug/kg	
319-84-6	alpha-BHC	ND	0.89	0.60	ug/kg	
319-85-7	beta-BHC	ND	0.89	0.55	ug/kg	
319-86-8	delta-BHC	ND	0.89	0.35	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.89	0.41	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.89	0.48	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.89	0.68	ug/kg	
60-57-1	Dieldrin	ND	0.89	0.70	ug/kg	
72-54-8	4,4'-DDD	ND	0.89	0.33	ug/kg	
72-55-9	4,4'-DDE	ND	0.89	0.30	ug/kg	
50-29-3	4,4'-DDT	ND	0.89	0.34	ug/kg	
72-20-8	Endrin	ND	0.89	0.32	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.89	0.51	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.89	0.66	ug/kg	
959-98-8	Endosulfan-I	ND	0.89	0.29	ug/kg	
33213-65-9	Endosulfan-II	ND	0.89	0.85	ug/kg	
76-44-8	Heptachlor	ND	0.89	0.74	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.89	0.37	ug/kg	
72-43-5	Methoxychlor	ND	1.8	0.50	ug/kg	
53494-70-5	Endrin ketone	ND	0.89	0.47	ug/kg	
8001-35-2	Toxaphene	ND	22	15	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	59%		24-136%
877-09-8	Tetrachloro-m-xylene	65%		24-136%
2051-24-3	Decachlorobiphenyl	59%		10-153%
2051-24-3	Decachlorobiphenyl	69%		10-153%

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

SGS Accutest

Report of Analysis

Client Sample ID:	S-40S (10.5-11.5)		
Lab Sample ID:	JC19023-2	**Date Sampled:**	04/22/16
Matrix:	SO - Soil	**Date Received:**	04/26/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	74.6
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5P27908.D	1	05/03/16	AD	04/29/16	OP93478	E5P1416
Run #2							

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

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	89	33	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	220	40	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	220	36	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	220	81	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	220	200	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	220	85	ug/kg	
95-48-7	2-Methylphenol	ND	89	65	ug/kg	
	3&4-Methylphenol	ND	89	43	ug/kg	
88-75-5	2-Nitrophenol	ND	220	41	ug/kg	
100-02-7	4-Nitrophenol	ND	450	76	ug/kg	
87-86-5	Pentachlorophenol	ND	220	110	ug/kg	
108-95-2	Phenol	ND	89	33	ug/kg	
58-90-2	2,3,4,6-Tetrachlorophenol	ND	220	42	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	220	40	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	220	36	ug/kg	
83-32-9	Acenaphthene	ND	45	42	ug/kg	
208-96-8	Acenaphthylene	ND	45	4.7	ug/kg	
98-86-2	Acetophenone	ND	220	7.6	ug/kg	
120-12-7	Anthracene	ND	45	3.8	ug/kg	
1912-24-9	Atrazine	ND	89	18	ug/kg	
56-55-3	Benzo(a)anthracene	ND	45	8.6	ug/kg	
50-32-8	Benzo(a)pyrene	ND	45	9.5	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	45	9.2	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	45	13	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	45	9.9	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	89	10	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	89	24	ug/kg	
92-52-4	1,1'-Biphenyl	ND	89	8.2	ug/kg	
100-52-7	Benzaldehyde	ND	220	11	ug/kg	
91-58-7	2-Chloronaphthalene	ND	89	6.4	ug/kg	
106-47-8	4-Chloroaniline	ND	220	12	ug/kg	
86-74-8	Carbazole	ND	89	4.9	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-40S (10.5-11.5)		
Lab Sample ID:	JC19023-2	**Date Sampled:**	04/22/16
Matrix:	SO - Soil	**Date Received:**	04/26/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	74.6
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	89	29	ug/kg	
218-01-9	Chrysene	ND	45	7.2	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	89	10	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	89	19	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	89	10	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	89	8.4	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	45	8.4	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	45	11	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	89	29	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	45	16	ug/kg	
132-64-9	Dibenzofuran	ND	89	6.2	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	89	5.3	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	89	6.0	ug/kg	
84-66-2	Diethyl phthalate	ND	89	5.7	ug/kg	
131-11-3	Dimethyl phthalate	ND	89	6.4	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	89	16	ug/kg	
206-44-0	Fluoranthene	ND	45	5.4	ug/kg	
86-73-7	Fluorene	ND	45	5.3	ug/kg	
118-74-1	Hexachlorobenzene	ND	89	8.8	ug/kg	
87-68-3	Hexachlorobutadiene	ND	45	12	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	450	71	ug/kg	
67-72-1	Hexachloroethane	ND	220	14	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	45	23	ug/kg	
78-59-1	Isophorone	ND	89	8.3	ug/kg	
90-12-0	1-Methylnaphthalene	ND	89	7.3	ug/kg	
91-57-6	2-Methylnaphthalene	ND	89	8.3	ug/kg	
88-74-4	2-Nitroaniline	ND	220	10	ug/kg	
99-09-2	3-Nitroaniline	ND	220	13	ug/kg	
100-01-6	4-Nitroaniline	ND	220	15	ug/kg	
98-95-3	Nitrobenzene	ND	89	14	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	89	13	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	220	23	ug/kg	
85-01-8	Phenanthrene	ND	45	4.9	ug/kg	
129-00-0	Pyrene	ND	45	5.6	ug/kg	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	220	11	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	72%		30-106%
4165-62-2	Phenol-d5	72%		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-40S (10.5-11.5)		
Lab Sample ID:	JC19023-2	**Date Sampled:**	04/22/16
Matrix:	SO - Soil	**Date Received:**	04/26/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	74.6
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	76%		24-140%
4165-60-0	Nitrobenzene-d5	77%		26-122%
321-60-8	2-Fluorobiphenyl	80%		36-112%
1718-51-0	Terphenyl-d14	90%		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-40S (10.5-11.5)		
Lab Sample ID:	JC19023-2	**Date Sampled:**	04/22/16
Matrix:	SO - Soil	**Date Received:**	04/26/16
Method:	SW846 8270D BY SIM SW846 3546	**Percent Solids:**	74.6
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M65190.D	1	05/09/16	LK	04/29/16	OP93478A	E4M2910
Run #2							

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

CAS No.	Compound	Result	RL	MDL	Units	Q
123-91-1	1,4-Dioxane [a]	ND	4.5	0.90	ug/kg	
91-20-3	Naphthalene	ND	4.5	0.54	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	89%		15-138%
321-60-8	2-Fluorobiphenyl	77%		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:	S-40S (10.5-11.5)		
Lab Sample ID:	JC19023-2	**Date Sampled:**	04/22/16
Matrix:	SO - Soil	**Date Received:**	04/26/16
Method:	SW846 8015C MOD	**Percent Solids:**	74.6
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	XY064106.D	1	05/03/16	AFL	n/a	n/a	F:GXY2773
Run #2							

	Initial Weight	Final Volume
Run #1	4.96 g	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
64-17-5	Ethanol	ND	14	2.7	mg/kg	
78-83-1	Isobutyl Alcohol	ND	14	2.7	mg/kg	
67-63-0	Isopropyl Alcohol	ND	14	2.7	mg/kg	
71-23-8	n-Propyl Alcohol	ND	14	2.7	mg/kg	
71-36-3	n-Butyl Alcohol	ND	14	2.7	mg/kg	
67-56-1	Methanol	ND	14	2.7	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
111-27-3	Hexanol	137% [b]		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.
(b) Outside control limits; however, sample is ND.

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-40S (10.5-11.5)		
Lab Sample ID:	JC19023-2	**Date Sampled:**	04/22/16
Matrix:	SO - Soil	**Date Received:**	04/26/16
Method:	SW846 8081B SW846 3546	**Percent Solids:**	74.6
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G122628.D	1	04/29/16	BP	04/28/16	OP93471	G1G3976
Run #2							

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

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.82	0.73	ug/kg	
319-84-6	alpha-BHC	ND	0.82	0.55	ug/kg	
319-85-7	beta-BHC	ND	0.82	0.51	ug/kg	
319-86-8	delta-BHC	ND	0.82	0.32	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.82	0.37	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.82	0.44	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.82	0.63	ug/kg	
60-57-1	Dieldrin	ND	0.82	0.64	ug/kg	
72-54-8	4,4'-DDD	ND	0.82	0.30	ug/kg	
72-55-9	4,4'-DDE	ND	0.82	0.27	ug/kg	
50-29-3	4,4'-DDT	ND	0.82	0.31	ug/kg	
72-20-8	Endrin	ND	0.82	0.29	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.82	0.47	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.82	0.61	ug/kg	
959-98-8	Endosulfan-I	ND	0.82	0.27	ug/kg	
33213-65-9	Endosulfan-II	ND	0.82	0.78	ug/kg	
76-44-8	Heptachlor	ND	0.82	0.68	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.82	0.34	ug/kg	
72-43-5	Methoxychlor	ND	1.6	0.46	ug/kg	
53494-70-5	Endrin ketone	ND	0.82	0.43	ug/kg	
8001-35-2	Toxaphene	ND	21	14	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	80%		24-136%
877-09-8	Tetrachloro-m-xylene	84%		24-136%
2051-24-3	Decachlorobiphenyl	76%		10-153%
2051-24-3	Decachlorobiphenyl	82%		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:	BPEB-6		
Lab Sample ID:	JC19023-3	**Date Sampled:**	04/22/16
Matrix:	AQ - Equipment Blank	**Date Received:**	04/26/16
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	2P58712.D	1	04/29/16	RL	04/28/16	OP93453	E2P2566
Run #2							

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

ABN TCL Special List

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

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

Report of Analysis

Client Sample ID:	BPEB-6		
Lab Sample ID:	JC19023-3	**Date Sampled:**	04/22/16
Matrix:	AQ - Equipment Blank	**Date Received:**	04/26/16
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	2.0	0.65	ug/l	
218-01-9	Chrysene	ND	1.0	0.18	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.28	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.25	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.40	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.37	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.51	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.33	ug/l	
132-64-9	Dibenzofuran	ND	5.0	0.22	ug/l	
84-74-2	Di-n-butyl phthalate	1.8	2.0	0.50	ug/l	JB
117-84-0	Di-n-octyl phthalate	ND	2.0	0.23	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.7	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.17	ug/l	
86-73-7	Fluorene	ND	1.0	0.17	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.49	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	2.8	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.39	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.33	ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.0	0.26	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.21	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.28	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.39	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.44	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.48	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.18	ug/l	
129-00-0	Pyrene	ND	1.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.37	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	33%		14-88%
4165-62-2	Phenol-d5	23%		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:	BPEB-6		
Lab Sample ID:	JC19023-3	**Date Sampled:**	04/22/16
Matrix:	AQ - Equipment Blank	**Date Received:**	04/26/16
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	79%		39-149%
4165-60-0	Nitrobenzene-d5	63%		32-128%
321-60-8	2-Fluorobiphenyl	64%		35-119%
1718-51-0	Terphenyl-d14	86%		10-126%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	BPEB-6		
Lab Sample ID:	JC19023-3	**Date Sampled:**	04/22/16
Matrix:	AQ - Equipment Blank	**Date Received:**	04/26/16
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	3M60957.D	1	04/29/16	JJ	04/28/16	OP93453A	E3M2866
Run #2							

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

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	57%		24-125%
321-60-8	2-Fluorobiphenyl	69%		19-127%
1718-51-0	Terphenyl-d14	92%		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:	BPEB-6		
Lab Sample ID:	JC19023-3	**Date Sampled:**	04/22/16
Matrix:	AQ - Equipment Blank	**Date Received:**	04/26/16
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]	XY064092.D	1	05/02/16	AFL	n/a	n/a	F:GXY2772
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	91%		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

SGS Accutest

Report of Analysis

Client Sample ID:	BPEB-6		
Lab Sample ID:	JC19023-3	**Date Sampled:**	04/22/16
Matrix:	AQ - Equipment Blank	**Date Received:**	04/26/16
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	6G34452.D	1	04/27/16	BP	04/26/16	OP93399	G6G997
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	96%		26-132%
877-09-8	Tetrachloro-m-xylene	97%		26-132%
2051-24-3	Decachlorobiphenyl	61%		10-118%
2051-24-3	Decachlorobiphenyl	67%		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:	S-39 (11-12)		
Lab Sample ID:	JC19023-4	**Date Sampled:**	04/25/16
Matrix:	SO - Soil	**Date Received:**	04/26/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	75.4
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5P27909.D	1	05/03/16	AD	04/29/16	OP93478	E5P1416
Run #2							

	Initial Weight	Final Volume
Run #1	31.3 g	1.0 ml
Run #2		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	85	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	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	85	61	ug/kg	
	3&4-Methylphenol	ND	85	41	ug/kg	
88-75-5	2-Nitrophenol	ND	210	39	ug/kg	
100-02-7	4-Nitrophenol	ND	420	72	ug/kg	
87-86-5	Pentachlorophenol	ND	210	100	ug/kg	
108-95-2	Phenol	ND	85	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	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	7.2	ug/kg	
120-12-7	Anthracene	72.1	42	3.6	ug/kg	
1912-24-9	Atrazine	ND	85	17	ug/kg	
56-55-3	Benzo(a)anthracene	ND	42	8.2	ug/kg	
50-32-8	Benzo(a)pyrene	ND	42	9.0	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	42	8.7	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	85	9.7	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	85	23	ug/kg	
92-52-4	1,1'-Biphenyl	ND	85	7.8	ug/kg	
100-52-7	Benzaldehyde	ND	210	11	ug/kg	
91-58-7	2-Chloronaphthalene	ND	85	6.1	ug/kg	
106-47-8	4-Chloroaniline	ND	210	11	ug/kg	
86-74-8	Carbazole	ND	85	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-39 (11-12)		
Lab Sample ID:	JC19023-4	**Date Sampled:**	04/25/16
Matrix:	SO - Soil	**Date Received:**	04/26/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	75.4
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

CAS No.	Compound	Result	RL	MDL	Units	Q
105-60-2	Caprolactam	ND	85	27	ug/kg	
218-01-9	Chrysene	ND	42	6.8	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	85	9.6	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	85	18	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	85	9.7	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	85	8.0	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	42	8.0	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	42	11	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	85	28	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	42	15	ug/kg	
132-64-9	Dibenzofuran	ND	85	5.9	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	85	5.0	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	85	5.7	ug/kg	
84-66-2	Diethyl phthalate	ND	85	5.4	ug/kg	
131-11-3	Dimethyl phthalate	ND	85	6.1	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	85	15	ug/kg	
206-44-0	Fluoranthene	ND	42	5.2	ug/kg	
86-73-7	Fluorene	ND	42	5.0	ug/kg	
118-74-1	Hexachlorobenzene	ND	85	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	85	7.9	ug/kg	
90-12-0	1-Methylnaphthalene	ND	85	6.9	ug/kg	
91-57-6	2-Methylnaphthalene	ND	85	7.9	ug/kg	
88-74-4	2-Nitroaniline	ND	210	9.6	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	85	13	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	85	13	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	5.3	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	80%		30-106%
4165-62-2	Phenol-d5	80%		30-106%

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

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

Report of Analysis

Client Sample ID:	S-39 (11-12)		
Lab Sample ID:	JC19023-4	**Date Sampled:**	04/25/16
Matrix:	SO - Soil	**Date Received:**	04/26/16
Method:	SW846 8270D SW846 3546	**Percent Solids:**	75.4
Project:	BMSMC, Building 5 Area, PR		

ABN TCL Special List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
118-79-6	2,4,6-Tribromophenol	72%		24-140%
4165-60-0	Nitrobenzene-d5	32%		26-122%
321-60-8	2-Fluorobiphenyl	80%		36-112%
1718-51-0	Terphenyl-d14	89%		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-39 (11-12)		
Lab Sample ID:	JC19023-4	**Date Sampled:**	04/25/16
Matrix:	SO - Soil	**Date Received:**	04/26/16
Method:	SW846 8270D BY SIM SW846 3546	**Percent Solids:**	75.4
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4M65191.D	1	05/09/16	LK	04/29/16	OP93478A	E4M2910
Run #2							

	Initial Weight	Final Volume
Run #1	31.3 g	1.0 ml
Run #2		

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

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
4165-60-0	Nitrobenzene-d5	35%		15-138%
321-60-8	2-Fluorobiphenyl	79%		12-148%
1718-51-0	Terphenyl-d14	88%		10-157%

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

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

SGS Accutest

Report of Analysis

Client Sample ID:	S-39 (11-12)		
Lab Sample ID:	JC19023-4	**Date Sampled:**	04/25/16
Matrix:	SO - Soil	**Date Received:**	04/26/16
Method:	SW846 8015C MOD	**Percent Solids:**	75.4
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	XY064107.D	1	05/03/16	AFL	n/a	n/a	F:GXY2773
Run #2							

	Initial Weight	Final Volume
Run #1	5.12 g	10.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
64-17-5	Ethanol	ND	13	2.6	mg/kg	
78-83-1	Isobutyl Alcohol	ND	13	2.6	mg/kg	
67-63-0	Isopropyl Alcohol	ND	13	2.6	mg/kg	
71-23-8	n-Propyl Alcohol	ND	13	2.6	mg/kg	
71-36-3	n-Butyl Alcohol	ND	13	2.6	mg/kg	
67-56-1	Methanol	ND	13	2.6	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
111-27-3	Hexanol	96%		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-39 (11-12)		
Lab Sample ID:	JC19023-4	**Date Sampled:**	04/25/16
Matrix:	SO - Soil	**Date Received:**	04/26/16
Method:	SW846 8081B SW846 3546	**Percent Solids:**	75.4
Project:	BMSMC, Building 5 Area, PR		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G122629.D	1	04/29/16	BP	04/28/16	OP93471	G1G3976
Run #2							

	Initial Weight	Final Volume
Run #1	15.7 g	10.0 ml
Run #2		

Pesticide TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.84	0.75	ug/kg	
319-84-6	alpha-BHC	ND	0.84	0.56	ug/kg	
319-85-7	beta-BHC	ND	0.84	0.52	ug/kg	
319-86-8	delta-BHC	ND	0.84	0.33	ug/kg	
58-89-9	gamma-BHC (Lindane)	ND	0.84	0.38	ug/kg	
5103-71-9	alpha-Chlordane	ND	0.84	0.45	ug/kg	
5103-74-2	gamma-Chlordane	ND	0.84	0.64	ug/kg	
60-57-1	Dieldrin	ND	0.84	0.66	ug/kg	
72-54-8	4,4'-DDD	ND	0.84	0.31	ug/kg	
72-55-9	4,4'-DDE	ND	0.84	0.28	ug/kg	
50-29-3	4,4'-DDT	ND	0.84	0.32	ug/kg	
72-20-8	Endrin	ND	0.84	0.30	ug/kg	
1031-07-8	Endosulfan sulfate	ND	0.84	0.48	ug/kg	
7421-93-4	Endrin aldehyde	ND	0.84	0.63	ug/kg	
959-98-8	Endosulfan-I	ND	0.84	0.28	ug/kg	
33213-65-9	Endosulfan-II	ND	0.84	0.80	ug/kg	
76-44-8	Heptachlor	ND	0.84	0.69	ug/kg	
1024-57-3	Heptachlor epoxide	ND	0.84	0.35	ug/kg	
72-43-5	Methoxychlor	ND	1.7	0.47	ug/kg	
53494-70-5	Endrin ketone	ND	0.84	0.44	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	61%		24-136%
877-09-8	Tetrachloro-m-xylene	58%		24-136%
2051-24-3	Decachlorobiphenyl	58%		10-153%
2051-24-3	Decachlorobiphenyl	57%		10-153%

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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

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

SD - Foreign
SEB

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

SGS Accutest Quote # 801219536143
Bottle Order Control #
SGS Accutest Job # JC19023

Client / Reporting Information

Company Name: Anderson Mulholland Ass. Inc.
Street Address: 2700 Westchester
City State Zip: Purchase NY
Project Contact: Terry Taylor
E-mail:
Phone #: 914-251-0400
Fax #:
Sampler(s) Name(s): N. Rivera, T. Taylor, D. Lindstrand, R. O'Reilly
Phone #:

Project Information

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

Billing Information (if different from Report to)

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

Requested Analysis (see TEST CODE sheet)

Matrix Codes

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

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	SVOC - Method 8270D	LMA - Method 8015B	Pesticides - Method 8081B	1,4 Dioxane + Naphthalene by Method 8270D SIM							LAB USE ONLY
1	RA-17 (17-18)		4/22/16	1230	TT	SO	2					2				X	X	X	X							FS
2	S-405 (10.5-11.5)		4/22/16	1231	NR	SO	2					2				X	X	X	X							E28
3	BPFB-6	•	4/22/16	1400	TT	EB	5	3				2				X	X	X	X							1139
4	S-39 (11-12)		4/25/16	1045	TT	SO	2					2				X	X	X	X							

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:

INITIAL ASESSMENT AM 2A
LABEL VERIFICATION TM

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
• 2X 300mL FOR PEST 4-26-16 tm

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	DW	4/25/16 1500	Fed EX	FX	4-26-16 945	DN
2						
3						
4						
5						

Custody Seal # 601 [ ] Intact [ ] Not intact
Preserved where applicable [ ]
On Ice ✓
Cooler Temp. 4.0°C IV

JC19023: Chain of Custody
Page 1 of 2

SGS Accutest Sample Receipt Summary

Job Number: JC19023 **Client:** **Project:**

Date / Time Received: 4/26/2016 9:45:00 AM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (4.0);

Cooler Temps (Corrected) °C: Cooler 1: (4.4);

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

5.1

5

JC19023: Chain of Custody

Page 2 of 2

Internal Sample Tracking Chronicle

Anderson, Mulholland & Associates

Job No: JC19023

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

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC19023-1 Collected: 22-APR-16 12:30 By: TT Received: 26-APR-16 By: DDH RA-17 (17-18)						
JC19023-1	SW846 8081B	29-APR-16 18:10	BP	28-APR-16	RG	P8081PESTTCL
JC19023-1	SM2540 G-97	02-MAY-16 18:00	RK			SOL104
JC19023-1	SW846 8015C MOD	03-MAY-16 11:13	AFL			D8015LMA
JC19023-1	SW846 8270D	06-MAY-16 17:34	AD	29-APR-16	AQ	AB8270SL
JC19023-1	SW846 8270D BY SIM	09-MAY-16 21:04	LK	29-APR-16	FN	B8270SIM14DIOX,BSIM + NAP
JC19023-2 Collected: 22-APR-16 12:31 By: NR Received: 26-APR-16 By: DDH S-40S (10.5-11.5)						
JC19023-2	SW846 8081B	29-APR-16 18:27	BP	28-APR-16	RG	P8081PESTTCL
JC19023-2	SM2540 G-97	02-MAY-16 18:00	RK			SOL104
JC19023-2	SW846 8270D	03-MAY-16 11:21	AD	29-APR-16	AQ	AB8270SL
JC19023-2	SW846 8015C MOD	03-MAY-16 11:35	AFL			D8015LMA
JC19023-2	SW846 8270D BY SIM	09-MAY-16 21:37	LK	29-APR-16	FN	B8270SIM14DIOX,BSIM + NAP
JC19023-3 Collected: 22-APR-16 14:00 By: TT Received: 26-APR-16 By: DDH BPEB-6						
JC19023-3	SW846 8081B	27-APR-16 10:18	BP	26-APR-16	RF	P8081PESTTCL
JC19023-3	SW846 8270D BY SIM	29-APR-16 03:12	JJ	28-APR-16	YB	B8270SIM14DIOX,BSIM + NAP
JC19023-3	SW846 8270D	29-APR-16 18:53	RL	28-APR-16	YB	AB8270SL
JC19023-3	SW846 8015C	02-MAY-16 18:56	AFL			D8015LMA
JC19023-4 Collected: 25-APR-16 10:45 By: TT Received: 26-APR-16 By: DDH S-39 (11-12)						
JC19023-4	SW846 8081B	29-APR-16 18:45	BP	28-APR-16	RG	P8081PESTTCL
JC19023-4	SM2540 G-97	02-MAY-16 18:00	RK			SOL104
JC19023-4	SW846 8270D	03-MAY-16 11:47	AD	29-APR-16	AQ	AB8270SL
JC19023-4	SW846 8015C MOD	03-MAY-16 11:56	AFL			D8015LMA
JC19023-4	SW846 8270D BY SIM	09-MAY-16 22:10	LK	29-APR-16	FN	B8270SIM14DIOX,BSIM + NAP

SGS Accutest Internal Chain of Custody

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 04/26/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC19023-1.1	Secured Storage	Luis Villanueva	04/28/16 13:55	Retrieve from Storage
JC19023-1.1	Luis Villanueva	Secured Staging Area	04/28/16 13:55	Return to Storage
JC19023-1.1	Secured Staging Area	Rebecca Gluckman	04/28/16 14:34	Retrieve from Storage
JC19023-1.1	Rebecca Gluckman	Secured Storage	04/28/16 18:30	Return to Storage
JC19023-1.1	Secured Storage	Albert Quayson	04/29/16 07:29	Retrieve from Storage
JC19023-1.1	Albert Quayson	Secured Storage	04/29/16 09:30	Return to Storage
JC19023-1.1	Secured Storage	Bernadette Vassilatos	05/02/16 08:28	Retrieve from Storage
JC19023-1.1	Bernadette Vassilatos	Secured Staging Area	05/02/16 08:28	Return to Storage
JC19023-1.1	Secured Staging Area	Rahul Kataria	05/02/16 14:23	Retrieve from Storage
JC19023-1.1	Shirley Grzybowski	Secured Storage	05/03/16 07:20	Return to Storage
Analyst unavailable for custody transfer.				
JC19023-1.1.1	Rebecca Gluckman	Organics Prep	04/28/16 14:49	Extract from JC19023-1.1
JC19023-1.1.1	Organics Prep	Rebecca Gluckman	04/28/16 21:24	Extract from JC19023-1.1
JC19023-1.1.1	Rebecca Gluckman	Extract Storage	04/28/16 21:24	Return to Storage
JC19023-1.1.1	Extract Storage	Brittany Piercy	04/29/16 10:19	Retrieve from Storage
JC19023-1.1.1	Brittany Piercy	GC1G	04/29/16 10:19	Load on Instrument
JC19023-1.1.1	GC1G	Brittany Piercy	05/04/16 09:21	Unload from Instrument
JC19023-1.1.1	Brittany Piercy	Extract Freezer	05/04/16 09:21	Return to Storage
JC19023-1.1.2	Albert Quayson	Organics Prep	04/29/16 07:33	Extract from JC19023-1.1
JC19023-1.1.2	Organics Prep	Albert Quayson	04/29/16 14:21	Extract from JC19023-1.1
JC19023-1.1.2	Albert Quayson	Extract Storage	04/29/16 14:21	Return to Storage
JC19023-1.1.2	Extract Storage	Ashley Dye	05/03/16 10:34	Retrieve from Storage
JC19023-1.1.2	Ashley Dye	GCMS5P	05/03/16 10:34	Load on Instrument
JC19023-1.1.2	GCMS5P	Ashley Dye	05/09/16 17:33	Unload from Instrument
JC19023-1.1.2	Ashley Dye	Extract Freezer	05/09/16 17:33	Return to Storage
JC19023-1.1.2	Extract Freezer	Ashley Dye	05/09/16 17:52	Retrieve from Storage
JC19023-1.1.2	Ashley Dye	GCMS4M	05/09/16 17:52	Load on Instrument
JC19023-1.1.2	GCMS4M	Linsey Kirschmann	05/10/16 09:57	Unload from Instrument
JC19023-1.1.2	Linsey Kirschmann	Extract Freezer	05/10/16 09:57	Return to Storage
JC19023-1.2	Secured Storage	Alfredo Crespo	04/27/16 07:29	Retrieve from Storage
JC19023-1.2	Alfredo Crespo	Secured Staging Area	04/27/16 07:29	Return to Storage
JC19023-1.2	Luis Villanueva	Secured Storage	04/27/16 09:11	Return to Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JC19023-1.2	Secured Storage	Alfredo Crespo	04/28/16 14:51	Retrieve from Storage
JC19023-1.2	Alfredo Crespo	Secured Staging Area	04/28/16 14:51	Return to Storage
JC19023-1.2	Dawan Currie	Secured Storage	04/28/16 16:16	Return to Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JC19023-1.2	Secured Storage	Oleg Berenzon	04/28/16 16:19	Retrieve from Storage
JC19023-1.2	Oleg Berenzon		04/28/16 16:19	Subcontract
JC19023-2.1	Secured Storage	Luis Villanueva	04/28/16 13:55	Retrieve from Storage

SGS Accutest Internal Chain of Custody

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 04/26/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC19023-2.1	Luis Villanueva	Secured Staging Area	04/28/16 13:55	Return to Storage
JC19023-2.1	Secured Staging Area	Rebecca Gluckman	04/28/16 14:34	Retrieve from Storage
JC19023-2.1	Rebecca Gluckman	Secured Storage	04/28/16 18:30	Return to Storage
JC19023-2.1	Secured Storage	Albert Quayson	04/29/16 07:29	Retrieve from Storage
JC19023-2.1	Albert Quayson	Secured Storage	04/29/16 09:30	Return to Storage
JC19023-2.1	Secured Storage	Bernadette Vassilatos	05/02/16 08:28	Retrieve from Storage
JC19023-2.1	Bernadette Vassilatos	Secured Staging Area	05/02/16 08:28	Return to Storage
JC19023-2.1	Secured Staging Area	Rahul Kataria	05/02/16 14:23	Retrieve from Storage
JC19023-2.1	Shirley Grzybowski	Secured Storage	05/03/16 07:20	Return to Storage
Analyst unavailable for custody transfer.				
JC19023-2.1.1	Rebecca Gluckman	Organics Prep	04/28/16 14:49	Extract from JC19023-2.1
JC19023-2.1.1	Organics Prep	Rebecca Gluckman	04/28/16 21:24	Extract from JC19023-2.1
JC19023-2.1.1	Rebecca Gluckman	Extract Storage	04/28/16 21:24	Return to Storage
JC19023-2.1.1	Extract Storage	Brittany Piercy	04/29/16 10:19	Retrieve from Storage
JC19023-2.1.1	Brittany Piercy	GC1G	04/29/16 10:19	Load on Instrument
JC19023-2.1.1	GC1G	Brittany Piercy	05/04/16 09:21	Unload from Instrument
JC19023-2.1.1	Brittany Piercy	Extract Freezer	05/04/16 09:21	Return to Storage
JC19023-2.1.2	Albert Quayson	Organics Prep	04/29/16 07:33	Extract from JC19023-2.1
JC19023-2.1.2	Organics Prep	Albert Quayson	04/29/16 14:21	Extract from JC19023-2.1
JC19023-2.1.2	Albert Quayson	Extract Storage	04/29/16 14:21	Return to Storage
JC19023-2.1.2	Extract Storage	Ashley Dye	05/03/16 10:34	Retrieve from Storage
JC19023-2.1.2	Ashley Dye	GCMS5P	05/03/16 10:34	Load on Instrument
JC19023-2.1.2	GCMS5P	Ashley Dye	05/09/16 17:33	Unload from Instrument
JC19023-2.1.2	Ashley Dye	Extract Freezer	05/09/16 17:33	Return to Storage
JC19023-2.1.2	Extract Freezer	Ashley Dye	05/09/16 17:52	Retrieve from Storage
JC19023-2.1.2	Ashley Dye	GCMS4M	05/09/16 17:52	Load on Instrument
JC19023-2.1.2	GCMS4M	Linsey Kirschmann	05/10/16 09:57	Unload from Instrument
JC19023-2.1.2	Linsey Kirschmann	Extract Freezer	05/10/16 09:57	Return to Storage
JC19023-2.2	Secured Storage	Alfredo Crespo	04/27/16 07:29	Retrieve from Storage
JC19023-2.2	Alfredo Crespo	Secured Staging Area	04/27/16 07:29	Return to Storage
JC19023-2.2	Luis Villanueva	Secured Storage	04/27/16 09:11	Return to Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JC19023-2.2	Secured Storage	Alfredo Crespo	04/28/16 14:51	Retrieve from Storage
JC19023-2.2	Alfredo Crespo	Secured Staging Area	04/28/16 14:51	Return to Storage
JC19023-2.2	Dawan Currie	Secured Storage	04/28/16 16:16	Return to Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JC19023-2.2	Secured Storage	Oleg Berenzon	04/28/16 16:19	Retrieve from Storage
JC19023-2.2	Oleg Berenzon		04/28/16 16:19	Subcontract
JC19023-3.1	Secured Storage	Eric Chiles	04/28/16 06:34	Retrieve from Storage
JC19023-3.1	Eric Chiles		04/28/16 13:17	Depleted

SGS Accutest Internal Chain of Custody

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 04/26/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC19023-3.1.1	Eric Chiles	Organics Prep	04/28/16 06:44	Extract from JC19023-3.1
JC19023-3.1.1	Organics Prep	Yaw Britwum	04/28/16 15:11	Extract from JC19023-3.1
JC19023-3.1.1	Yaw Britwum	Extract Storage	04/28/16 15:11	Return to Storage
JC19023-3.1.1	Extract Storage	Julius Johnson	04/29/16 01:03	Retrieve from Storage
JC19023-3.1.1	Julius Johnson	GCMS3M	04/29/16 01:03	Load on Instrument
JC19023-3.1.1	GCMS3M	Linsey Kirschmann	05/02/16 14:15	Unload from Instrument
JC19023-3.1.1	Linsey Kirschmann	Extract Freezer	05/02/16 14:15	Return to Storage
JC19023-3.2	Secured Storage	Luis Villanueva	04/26/16 13:36	Retrieve from Storage
JC19023-3.2	Luis Villanueva	Secured Staging Area	04/26/16 13:36	Return to Storage
JC19023-3.2	Secured Staging Area	Nicholas Goydish	04/26/16 14:45	Retrieve from Storage
JC19023-3.2	Nicholas Goydish	Ryan Fantasia	04/26/16 15:22	Custody Transfer
JC19023-3.2	Ryan Fantasia		04/26/16 22:53	Depleted
JC19023-3.2.1	Nicholas Goydish	Organics Prep	04/26/16 14:46	Extract from JC19023-3.2
JC19023-3.2.1	Organics Prep	Kyle Sanford	04/26/16 19:02	Extract from JC19023-3.2
JC19023-3.2.1	Kyle Sanford	Extract Storage	04/26/16 19:02	Return to Storage
JC19023-3.2.1	Extract Storage	Ashley Noble	04/27/16 10:53	Retrieve from Storage
JC19023-3.2.1	Ashley Noble	GCMS5P	04/27/16 10:53	Load on Instrument
JC19023-3.2.1	GCMS5P	Linsey Kirschmann	04/27/16 14:28	Unload from Instrument
JC19023-3.2.1	Linsey Kirschmann	GCMS3M	04/27/16 14:28	Load on Instrument
JC19023-3.2.1	GCMS3M	Linsey Kirschmann	04/28/16 10:02	Unload from Instrument
JC19023-3.2.1	Linsey Kirschmann	Extract Freezer	04/28/16 10:02	Return to Storage
JC19023-3.4	Secured Storage	Luis Villanueva	04/26/16 13:36	Retrieve from Storage
JC19023-3.4	Luis Villanueva	Secured Staging Area	04/26/16 13:36	Return to Storage
JC19023-3.4	Secured Staging Area	Nicholas Goydish	04/26/16 14:45	Retrieve from Storage
JC19023-3.4	Nicholas Goydish	Ryan Fantasia	04/26/16 15:22	Custody Transfer
JC19023-3.4	Ryan Fantasia		04/26/16 22:53	Depleted
JC19023-3.4.1	Nicholas Goydish	Organics Prep	04/26/16 14:46	Extract from JC19023-3.4
JC19023-3.4.1	Organics Prep	Ryan Fantasia	04/26/16 22:53	Extract from JC19023-3.4
JC19023-3.4.1	Ryan Fantasia	Extract Storage	04/26/16 22:53	Return to Storage
JC19023-3.4.1	Extract Storage	Brittany Piercy	04/27/16 09:13	Retrieve from Storage
JC19023-3.4.1	Brittany Piercy	GC6G	04/27/16 09:13	Load on Instrument
JC19023-3.4.1	GC6G	Brittany Piercy	04/29/16 09:02	Unload from Instrument
JC19023-3.4.1	Brittany Piercy	Extract Freezer	04/29/16 09:02	Return to Storage
JC19023-3.5	Secured Storage	Oleg Berenzon	04/28/16 16:19	Retrieve from Storage
JC19023-3.5	Oleg Berenzon		04/28/16 16:19	Subcontract
JC19023-3.6	Secured Storage	Oleg Berenzon	04/28/16 16:19	Retrieve from Storage
JC19023-3.6	Oleg Berenzon		04/28/16 16:19	Subcontract

SGS Accutest Internal Chain of Custody

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Received: 04/26/16

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JC19023-4.1	Secured Storage	Luis Villanueva	04/28/16 13:55	Retrieve from Storage
JC19023-4.1	Luis Villanueva	Secured Staging Area	04/28/16 13:55	Return to Storage
JC19023-4.1	Secured Staging Area	Rebecca Gluckman	04/28/16 14:34	Retrieve from Storage
JC19023-4.1	Rebecca Gluckman	Secured Storage	04/28/16 18:30	Return to Storage
JC19023-4.1	Secured Storage	Albert Quayson	04/29/16 07:29	Retrieve from Storage
JC19023-4.1	Albert Quayson	Secured Storage	04/29/16 09:30	Return to Storage
JC19023-4.1	Secured Storage	Bernadette Vassilatos	05/02/16 08:28	Retrieve from Storage
JC19023-4.1	Bernadette Vassilatos	Secured Staging Area	05/02/16 08:28	Return to Storage
JC19023-4.1	Secured Staging Area	Rahul Kataria	05/02/16 14:23	Retrieve from Storage
JC19023-4.1	Shirley Grzybowski	Secured Storage	05/03/16 07:20	Return to Storage
Analyst unavailable for custody transfer.				
JC19023-4.1.1	Rebecca Gluckman	Organics Prep	04/28/16 14:49	Extract from JC19023-4.1
JC19023-4.1.1	Organics Prep	Rebecca Gluckman	04/28/16 21:24	Extract from JC19023-4.1
JC19023-4.1.1	Rebecca Gluckman	Extract Storage	04/28/16 21:24	Return to Storage
JC19023-4.1.1	Extract Storage	Brittany Piercy	04/29/16 10:19	Retrieve from Storage
JC19023-4.1.1	Brittany Piercy	GC1G	04/29/16 10:19	Load on Instrument
JC19023-4.1.1	GC1G	Brittany Piercy	05/04/16 09:21	Unload from Instrument
JC19023-4.1.1	Brittany Piercy	Extract Freezer	05/04/16 09:21	Return to Storage
JC19023-4.1.2	Albert Quayson	Organics Prep	04/29/16 07:33	Extract from JC19023-4.1
JC19023-4.1.2	Organics Prep	Albert Quayson	04/29/16 14:21	Extract from JC19023-4.1
JC19023-4.1.2	Albert Quayson	Extract Storage	04/29/16 14:21	Return to Storage
JC19023-4.1.2	Extract Storage	Ashley Dye	05/03/16 10:34	Retrieve from Storage
JC19023-4.1.2	Ashley Dye	GCMS5P	05/03/16 10:34	Load on Instrument
JC19023-4.1.2	GCMS5P	Ashley Dye	05/09/16 17:33	Unload from Instrument
JC19023-4.1.2	Ashley Dye	Extract Freezer	05/09/16 17:33	Return to Storage
JC19023-4.1.2	Extract Freezer	Ashley Dye	05/09/16 17:52	Retrieve from Storage
JC19023-4.1.2	Ashley Dye	GCMS4M	05/09/16 17:52	Load on Instrument
JC19023-4.1.2	GCMS4M	Linsey Kirschmann	05/10/16 09:57	Unload from Instrument
JC19023-4.1.2	Linsey Kirschmann	Extract Freezer	05/10/16 09:57	Return to Storage
JC19023-4.2	Secured Storage	Alfredo Crespo	04/27/16 07:29	Retrieve from Storage
JC19023-4.2	Alfredo Crespo	Secured Staging Area	04/27/16 07:29	Return to Storage
JC19023-4.2	Luis Villanueva	Secured Storage	04/27/16 09:11	Return to Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JC19023-4.2	Secured Storage	Alfredo Crespo	04/28/16 14:51	Retrieve from Storage
JC19023-4.2	Alfredo Crespo	Secured Staging Area	04/28/16 14:51	Return to Storage
JC19023-4.2	Dawan Currie	Secured Storage	04/28/16 16:16	Return to Storage
Bottle was returned to secure storage, but inadvertently not scanned.				
JC19023-4.2	Secured Storage	Oleg Berenzon	04/28/16 16:19	Retrieve from Storage
JC19023-4.2	Oleg Berenzon		04/28/16 16:19	Subcontract

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: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93453-MB1	2P58692.D	1	04/29/16	RL	04/28/16	OP93453	E2P2566

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

JC19023-3

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

Method Blank Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93453-MB1	2P58692.D	1	04/29/16	RL	04/28/16	OP93453	E2P2566

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

JC19023-3

CAS No.	Compound	Result	RL	MDL	Units	Q
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.40	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.37	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.51	ug/l	
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	0.79	2.0	0.50	ug/l	J
117-84-0	Di-n-octyl phthalate	ND	2.0	0.23	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.7	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.17	ug/l	
86-73-7	Fluorene	ND	1.0	0.17	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.49	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	2.8	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.39	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.33	ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
90-12-0	1-Methylnaphthalene	ND	1.0	0.26	ug/l	
91-57-6	2-Methylnaphthalene	ND	1.0	0.21	ug/l	
88-74-4	2-Nitroaniline	ND	5.0	0.28	ug/l	
99-09-2	3-Nitroaniline	ND	5.0	0.39	ug/l	
100-01-6	4-Nitroaniline	ND	5.0	0.44	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.48	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.18	ug/l	
129-00-0	Pyrene	ND	1.0	0.22	ug/l	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	2.0	0.37	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	31%	14-88%

Method Blank Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93453-MB1	2P58692.D	1	04/29/16	RL	04/28/16	OP93453	E2P2566

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

JC19023-3

CAS No.	Surrogate Recoveries		Limits
4165-62-2	Phenol-d5	21%	10-110%
118-79-6	2,4,6-Tribromophenol	72%	39-149%
4165-60-0	Nitrobenzene-d5	62%	32-128%
321-60-8	2-Fluorobiphenyl	59%	35-119%
1718-51-0	Terphenyl-d14	79%	10-126%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	1.69	7.8	ug/l	J
	system artifact	1.74	6.8	ug/l	J
	system artifact	4.02	7.1	ug/l	J
	system artifact	4.24	4.1	ug/l	J
	Internal standard added for SIM te	9.93	4	ug/l	J
	Total TIC, Semi-Volatile		0	ug/l	

Method Blank Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93478-MB1	M124024.D	1	04/29/16	AD	04/29/16	OP93478	EM5245

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

JC19023-1, JC19023-2, JC19023-4

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: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93478-MB1	M124024.D	1	04/29/16	AD	04/29/16	OP93478	EM5245

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

JC19023-1, JC19023-2, JC19023-4

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	83%	30-106%

Method Blank Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93478-MB1	M124024.D	1	04/29/16	AD	04/29/16	OP93478	EM5245

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

JC19023-1, JC19023-2, JC19023-4

CAS No.	Surrogate Recoveries		Limits
4165-62-2	Phenol-d5	83%	30-106%
118-79-6	2,4,6-Tribromophenol	85%	24-140%
4165-60-0	Nitrobenzene-d5	87%	26-122%
321-60-8	2-Fluorobiphenyl	82%	36-112%
1718-51-0	Terphenyl-d14	84%	36-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	3.01	330	ug/kg	J
	system artifact	3.32	300	ug/kg	J
	system artifact/aldol-condensation	3.39	220	ug/kg	J
	Total TIC, Semi-Volatile		0	ug/kg	

Method Blank Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93478-MB1	5P27904.D	1	05/03/16	AD	04/29/16	OP93478	E5P1416

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

JC19023-1, JC19023-2, JC19023-4

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: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93478-MB1	5P27904.D	1	05/03/16	AD	04/29/16	OP93478	E5P1416

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

JC19023-1, JC19023-2, JC19023-4

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	80%	30-106%

Method Blank Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93478-MB1	5P27904.D	1	05/03/16	AD	04/29/16	OP93478	E5P1416

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

JC19023-1, JC19023-2, JC19023-4

CAS No.	Surrogate Recoveries		Limits
4165-62-2	Phenol-d5	81%	30-106%
118-79-6	2,4,6-Tribromophenol	88%	24-140%
4165-60-0	Nitrobenzene-d5	86%	26-122%
321-60-8	2-Fluorobiphenyl	83%	36-112%
1718-51-0	Terphenyl-d14	93%	36-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	3.15	370	ug/kg	J
	system artifact	3.49	280	ug/kg	J
	system artifact/aldol-condensation	3.59	200	ug/kg	J
	Total TIC, Semi-Volatile		0	ug/kg	

Method Blank Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93478-MB1	M124224.D	1	05/06/16	AD	04/29/16	OP93478	EM5253

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

JC19023-1, JC19023-2, JC19023-4

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

Method Blank Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93478-MB1	M124224.D	1	05/06/16	AD	04/29/16	OP93478	EM5253

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

JC19023-1, JC19023-2, JC19023-4

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

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	78%	30-106%

Method Blank Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93478-MB1	M124224.D	1	05/06/16	AD	04/29/16	OP93478	EM5253

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

JC19023-1, JC19023-2, JC19023-4

CAS No.	Surrogate Recoveries		Limits
4165-62-2	Phenol-d5	82%	30-106%
118-79-6	2,4,6-Tribromophenol	93%	24-140%
4165-60-0	Nitrobenzene-d5	81%	26-122%
321-60-8	2-Fluorobiphenyl	84%	36-112%
1718-51-0	Terphenyl-d14	83%	36-132%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	system artifact	3.04	340	ug/kg	J
	system artifact	3.36	250	ug/kg	J
	system artifact/aldol-condensation	3.42	220	ug/kg	J
	Total TIC, Semi-Volatile		0	ug/kg	

Method Blank Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93453A-MB1	3M60953.D	1	04/29/16	JJ	04/28/16	OP93453A	E3M2866

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

JC19023-3

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

CAS No.	Surrogate Recoveries		Limits
4165-60-0	Nitrobenzene-d5	56%	24-125%
321-60-8	2-Fluorobiphenyl	68%	19-127%
1718-51-0	Terphenyl-d14	86%	10-119%

Method Blank Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93478A-MB1	4M65205.D	1	05/10/16	LK	04/29/16	OP93478A	E4M2912

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

JC19023-1, JC19023-2, JC19023-4

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	84%	15-138%
321-60-8	2-Fluorobiphenyl	70%	12-148%
1718-51-0	Terphenyl-d14	104%	10-157%

Blank Spike Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93453-BS1	2P58693.D	1	04/29/16	RL	04/28/16	OP93453	E2P2566

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

JC19023-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-57-8	2-Chlorophenol	50	29.6	59	48-106
59-50-7	4-Chloro-3-methyl phenol	50	37.9	76	49-113
120-83-2	2,4-Dichlorophenol	50	34.6	69	49-111
105-67-9	2,4-Dimethylphenol	50	34.6	69	42-117
51-28-5	2,4-Dinitrophenol	100	78.6	79	37-132
534-52-1	4,6-Dinitro-o-cresol	50	42.1	84	49-119
95-48-7	2-Methylphenol	50	27.9	56	42-103
	3&4-Methylphenol	50	26.7	53	39-110
88-75-5	2-Nitrophenol	50	32.9	66	49-114
100-02-7	4-Nitrophenol	50	33.1	66	16-95
87-86-5	Pentachlorophenol	50	29.0	58	30-136
108-95-2	Phenol	50	14.8	30	10-110
58-90-2	2,3,4,6-Tetrachlorophenol	50	37.4	75	47-118
95-95-4	2,4,5-Trichlorophenol	50	36.0	72	55-116
88-06-2	2,4,6-Trichlorophenol	50	38.0	76	56-115
83-32-9	Acenaphthene	50	33.3	67	54-112
208-96-8	Acenaphthylene	50	31.9	64	49-99
98-86-2	Acetophenone	50	33.8	68	52-111
120-12-7	Anthracene	50	37.5	75	58-112
1912-24-9	Atrazine	50	42.8	86	62-134
100-52-7	Benzaldehyde	50	34.6	69	40-129
56-55-3	Benzo(a)anthracene	50	37.5	75	44-120
50-32-8	Benzo(a)pyrene	50	37.6	75	41-127
205-99-2	Benzo(b)fluoranthene	50	40.5	81	41-129
191-24-2	Benzo(g,h,i)perylene	50	36.2	72	34-128
207-08-9	Benzo(k)fluoranthene	50	41.4	83	42-122
101-55-3	4-Bromophenyl phenyl ether	50	38.7	77	54-121
85-68-7	Butyl benzyl phthalate	50	40.0	80	20-143
92-52-4	1,1'-Biphenyl	50	34.2	68	51-106
91-58-7	2-Chloronaphthalene	50	29.2	58	48-104
106-47-8	4-Chloroaniline	50	21.9	44	10-110
86-74-8	Carbazole	50	38.6	77	56-110
105-60-2	Caprolactam	50	10.6	21	10-110
218-01-9	Chrysene	50	35.6	71	45-125
111-91-1	bis(2-Chloroethoxy)methane	50	29.0	58	47-117
111-44-4	bis(2-Chloroethyl)ether	50	28.1	56	48-115

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93453-BS1	2P58693.D	1	04/29/16	RL	04/28/16	OP93453	E2P2566

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

JC19023-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
108-60-1	bis(2-Chloroisopropyl)ether	50	25.5	51	44-112
7005-72-3	4-Chlorophenyl phenyl ether	50	37.7	75	50-117
121-14-2	2,4-Dinitrotoluene	50	42.5	85	57-122
606-20-2	2,6-Dinitrotoluene	50	41.4	83	58-122
91-94-1	3,3'-Dichlorobenzidine	100	49.1	49	10-110
53-70-3	Dibenzo(a,h)anthracene	50	37.8	76	36-130
132-64-9	Dibenzofuran	50	35.9	72	55-108
84-74-2	Di-n-butyl phthalate	50	40.6	81	45-123
117-84-0	Di-n-octyl phthalate	50	45.9	92	37-144
84-66-2	Diethyl phthalate	50	39.9	80	23-130
131-11-3	Dimethyl phthalate	50	38.1	76	10-140
117-81-7	bis(2-Ethylhexyl)phthalate	50	41.4	83	36-138
206-44-0	Fluoranthene	50	40.1	80	58-116
86-73-7	Fluorene	50	37.0	74	57-113
118-74-1	Hexachlorobenzene	50	37.8	76	49-122
87-68-3	Hexachlorobutadiene	50	24.5	49	24-112
77-47-4	Hexachlorocyclopentadiene	100	38.7	39	14-119
67-72-1	Hexachloroethane	50	22.8	46	31-107
193-39-5	Indeno(1,2,3-cd)pyrene	50	38.1	76	34-128
78-59-1	Isophorone	50	33.0	66	52-119
90-12-0	1-Methylnaphthalene	50	32.3	65	46-103
91-57-6	2-Methylnaphthalene	50	30.7	61	45-107
88-74-4	2-Nitroaniline	50	40.0	80	51-127
99-09-2	3-Nitroaniline	50	27.2	54	10-110
100-01-6	4-Nitroaniline	50	34.0	68	50-112
98-95-3	Nitrobenzene	50	31.0	62	44-116
621-64-7	N-Nitroso-di-n-propylamine	50	30.6	61	49-117
86-30-6	N-Nitrosodiphenylamine	50	37.8	76	51-113
85-01-8	Phenanthrene	50	37.2	74	56-111
129-00-0	Pyrene	50	39.5	79	47-120
95-94-3	1,2,4,5-Tetrachlorobenzene	50	32.7	65	36-114

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	39%	14-88%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93453-BS1	2P58693.D	1	04/29/16	RL	04/28/16	OP93453	E2P2566

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

JC19023-3

CAS No.	Surrogate Recoveries	BSP	Limits
4165-62-2	Phenol-d5	29%	10-110%
118-79-6	2,4,6-Tribromophenol	87%	39-149%
4165-60-0	Nitrobenzene-d5	68%	32-128%
321-60-8	2-Fluorobiphenyl	73%	35-119%
1718-51-0	Terphenyl-d14	87%	10-126%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93478-BS1	M124025.D	1	04/29/16	AD	04/29/16	OP93478	EM5245

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

JC19023-1, JC19023-2, JC19023-4

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
95-57-8	2-Chlorophenol	1670	1300	78	54-98
59-50-7	4-Chloro-3-methyl phenol	1670	1260	76	52-107
120-83-2	2,4-Dichlorophenol	1670	1290	77	53-105
105-67-9	2,4-Dimethylphenol	1670	1320	79	49-115
51-28-5	2,4-Dinitrophenol	3330	2650	80	30-127
534-52-1	4,6-Dinitro-o-cresol	1670	1330	80	41-114
95-48-7	2-Methylphenol	1670	1310	79	53-103
	3&4-Methylphenol	1670	1260	76	53-102
88-75-5	2-Nitrophenol	1670	1290	77	52-104
100-02-7	4-Nitrophenol	1670	1040	62	36-143
87-86-5	Pentachlorophenol	1670	1220	73	29-128
108-95-2	Phenol	1670	1400	84	45-106
58-90-2	2,3,4,6-Tetrachlorophenol	1670	1230	74	47-113
95-95-4	2,4,5-Trichlorophenol	1670	1190	71	55-112
88-06-2	2,4,6-Trichlorophenol	1670	1250	75	57-108
83-32-9	Acenaphthene	1670	1260	76	60-108
208-96-8	Acenaphthylene	1670	1220	73	54-94
98-86-2	Acetophenone	1670	1270	76	53-110
120-12-7	Anthracene	1670	1280	77	59-109
1912-24-9	Atrazine	1670	1560	94	59-126
56-55-3	Benzo(a)anthracene	1670	1220	73	52-113
50-32-8	Benzo(a)pyrene	1670	1290	77	56-122
205-99-2	Benzo(b)fluoranthene	1670	1270	76	53-119
191-24-2	Benzo(g,h,i)perylene	1670	1200	72	48-117
207-08-9	Benzo(k)fluoranthene	1670	1290	77	52-115
101-55-3	4-Bromophenyl phenyl ether	1670	1360	82	58-114
85-68-7	Butyl benzyl phthalate	1670	1260	76	44-132
92-52-4	1,1'-Biphenyl	1670	1280	77	54-101
100-52-7	Benzaldehyde	1670	1430	86	39-117
91-58-7	2-Chloronaphthalene	1670	1250	75	54-103
106-47-8	4-Chloroaniline	1670	908	54	10-110
86-74-8	Carbazole	1670	1310	79	55-105
105-60-2	Caprolactam	1670	1270	76	42-111
218-01-9	Chrysene	1670	1230	74	51-119
111-91-1	bis(2-Chloroethoxy)methane	1670	1290	77	51-106
111-44-4	bis(2-Chloroethyl)ether	1670	1300	78	48-107

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93478-BS1	M124025.D	1	04/29/16	AD	04/29/16	OP93478	EM5245

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

JC19023-1, JC19023-2, JC19023-4

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
108-60-1	bis(2-Chloroisopropyl)ether	1670	1080	65	46-103
7005-72-3	4-Chlorophenyl phenyl ether	1670	1270	76	54-112
121-14-2	2,4-Dinitrotoluene	1670	1320	79	56-116
606-20-2	2,6-Dinitrotoluene	1670	1340	80	56-115
91-94-1	3,3'-Dichlorobenzidine	3330	2000	60	22-103
53-70-3	Dibenzo(a,h)anthracene	1670	1250	75	49-118
132-64-9	Dibenzofuran	1670	1260	76	55-103
84-74-2	Di-n-butyl phthalate	1670	1340	80	56-117
117-84-0	Di-n-octyl phthalate	1670	1230	74	47-137
84-66-2	Diethyl phthalate	1670	1250	75	54-112
131-11-3	Dimethyl phthalate	1670	1260	76	56-108
117-81-7	bis(2-Ethylhexyl)phthalate	1670	1270	76	45-130
206-44-0	Fluoranthene	1670	1270	76	58-110
86-73-7	Fluorene	1670	1230	74	59-108
118-74-1	Hexachlorobenzene	1670	1310	79	55-114
87-68-3	Hexachlorobutadiene	1670	1290	77	44-118
77-47-4	Hexachlorocyclopentadiene	3330	1740	52	41-137
67-72-1	Hexachloroethane	1670	1200	72	50-107
193-39-5	Indeno(1,2,3-cd)pyrene	1670	1220	73	48-120
78-59-1	Isophorone	1670	1380	83	54-109
90-12-0	1-Methylnaphthalene	1670	1230	74	50-110
91-57-6	2-Methylnaphthalene	1670	1220	73	48-104
88-74-4	2-Nitroaniline	1670	1380	83	49-124
99-09-2	3-Nitroaniline	1670	1020	61	22-110
100-01-6	4-Nitroaniline	1670	1280	77	50-107
98-95-3	Nitrobenzene	1670	1370	82	47-108
621-64-7	N-Nitroso-di-n-propylamine	1670	1230	74	49-106
86-30-6	N-Nitrosodiphenylamine	1670	1310	79	53-112
85-01-8	Phenanthrene	1670	1290	77	57-105
129-00-0	Pyrene	1670	1300	78	50-117
95-94-3	1,2,4,5-Tetrachlorobenzene	1670	1590	95	52-109

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	82%	30-106%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93478-BS1	M124025.D	1	04/29/16	AD	04/29/16	OP93478	EM5245

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

JC19023-1, JC19023-2, JC19023-4

CAS No.	Surrogate Recoveries	BSP	Limits
4165-62-2	Phenol-d5	84%	30-106%
118-79-6	2,4,6-Tribromophenol	91%	24-140%
4165-60-0	Nitrobenzene-d5	86%	26-122%
321-60-8	2-Fluorobiphenyl	79%	36-112%
1718-51-0	Terphenyl-d14	87%	36-132%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93478-BS1	5P27905.D	1	05/03/16	AD	04/29/16	OP93478	E5P1416

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

JC19023-1, JC19023-2, JC19023-4

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
95-57-8	2-Chlorophenol	1670	1300	78	54-98
59-50-7	4-Chloro-3-methyl phenol	1670	1380	83	52-107
120-83-2	2,4-Dichlorophenol	1670	1290	77	53-105
105-67-9	2,4-Dimethylphenol	1670	1590	95	49-115
51-28-5	2,4-Dinitrophenol	3330	2460	74	30-127
534-52-1	4,6-Dinitro-o-cresol	1670	1440	86	41-114
95-48-7	2-Methylphenol	1670	1430	86	53-103
	3&4-Methylphenol	1670	1410	85	53-102
88-75-5	2-Nitrophenol	1670	1340	80	52-104
100-02-7	4-Nitrophenol	1670	1560	94	36-143
87-86-5	Pentachlorophenol	1670	1190	71	29-128
108-95-2	Phenol	1670	1400	84	45-106
58-90-2	2,3,4,6-Tetrachlorophenol	1670	1200	72	47-113
95-95-4	2,4,5-Trichlorophenol	1670	1220	73	55-112
88-06-2	2,4,6-Trichlorophenol	1670	1280	77	57-108
83-32-9	Acenaphthene	1670	1350	81	60-108
208-96-8	Acenaphthylene	1670	1320	79	54-94
98-86-2	Acetophenone	1670	1380	83	53-110
120-12-7	Anthracene	1670	1360	82	59-109
1912-24-9	Atrazine	1670	1440	86	59-126
56-55-3	Benzo(a)anthracene	1670	1360	82	52-113
50-32-8	Benzo(a)pyrene	1670	1430	86	56-122
205-99-2	Benzo(b)fluoranthene	1670	1450	87	53-119
191-24-2	Benzo(g,h,i)perylene	1670	1380	83	48-117
207-08-9	Benzo(k)fluoranthene	1670	1480	89	52-115
101-55-3	4-Bromophenyl phenyl ether	1670	1310	79	58-114
85-68-7	Butyl benzyl phthalate	1670	1460	88	44-132
92-52-4	1,1'-Biphenyl	1670	1290	77	54-101
100-52-7	Benzaldehyde	1670	976	59	39-117
91-58-7	2-Chloronaphthalene	1670	1280	77	54-103
106-47-8	4-Chloroaniline	1670	859	52	10-110
86-74-8	Carbazole	1670	1370	82	55-105
105-60-2	Caprolactam	1670	1740	104	42-111
218-01-9	Chrysene	1670	1280	77	51-119
111-91-1	bis(2-Chloroethoxy)methane	1670	1200	72	51-106
111-44-4	bis(2-Chloroethyl)ether	1670	1330	80	48-107

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93478-BS1	5P27905.D	1	05/03/16	AD	04/29/16	OP93478	E5P1416

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

JC19023-1, JC19023-2, JC19023-4

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
108-60-1	bis(2-Chloroisopropyl)ether	1670	1420	85	46-103
7005-72-3	4-Chlorophenyl phenyl ether	1670	1280	77	54-112
121-14-2	2,4-Dinitrotoluene	1670	1490	89	56-116
606-20-2	2,6-Dinitrotoluene	1670	1410	85	56-115
91-94-1	3,3'-Dichlorobenzidine	3330	2310	69	22-103
53-70-3	Dibenzo(a,h)anthracene	1670	1440	86	49-118
132-64-9	Dibenzofuran	1670	1340	80	55-103
84-74-2	Di-n-butyl phthalate	1670	1450	87	56-117
117-84-0	Di-n-octyl phthalate	1670	1740	104	47-137
84-66-2	Diethyl phthalate	1670	1330	80	54-112
131-11-3	Dimethyl phthalate	1670	1280	77	56-108
117-81-7	bis(2-Ethylhexyl)phthalate	1670	1510	91	45-130
206-44-0	Fluoranthene	1670	1340	80	58-110
86-73-7	Fluorene	1670	1360	82	59-108
118-74-1	Hexachlorobenzene	1670	1340	80	55-114
87-68-3	Hexachlorobutadiene	1670	1200	72	44-118
77-47-4	Hexachlorocyclopentadiene	3330	2570	77	41-137
67-72-1	Hexachloroethane	1670	1200	72	50-107
193-39-5	Indeno(1,2,3-cd)pyrene	1670	1500	90	48-120
78-59-1	Isophorone	1670	1390	83	54-109
90-12-0	1-Methylnaphthalene	1670	1340	80	50-110
91-57-6	2-Methylnaphthalene	1670	1350	81	48-104
88-74-4	2-Nitroaniline	1670	1670	100	49-124
99-09-2	3-Nitroaniline	1670	1040	62	22-110
100-01-6	4-Nitroaniline	1670	1400	84	50-107
98-95-3	Nitrobenzene	1670	1290	77	47-108
621-64-7	N-Nitroso-di-n-propylamine	1670	1370	82	49-106
86-30-6	N-Nitrosodiphenylamine	1670	1400	84	53-112
85-01-8	Phenanthrene	1670	1320	79	57-105
129-00-0	Pyrene	1670	1420	85	50-117
95-94-3	1,2,4,5-Tetrachlorobenzene	1670	1220	73	52-109

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	82%	30-106%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93478-BS1	5P27905.D	1	05/03/16	AD	04/29/16	OP93478	E5P1416

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

JC19023-1, JC19023-2, JC19023-4

CAS No.	Surrogate Recoveries	BSP	Limits
4165-62-2	Phenol-d5	82%	30-106%
118-79-6	2,4,6-Tribromophenol	95%	24-140%
4165-60-0	Nitrobenzene-d5	84%	26-122%
321-60-8	2-Fluorobiphenyl	81%	36-112%
1718-51-0	Terphenyl-d14	92%	36-132%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93453A-BS12	3M60954.D	1	04/29/16	JJ	04/28/16	OP93453A	E3M2866

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

JC19023-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
91-20-3	Naphthalene	1	0.620	62	40-119
123-91-1	1,4-Dioxane	1	0.339	34	20-160

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	57%	24-125%
321-60-8	2-Fluorobiphenyl	67%	19-127%
1718-51-0	Terphenyl-d14	87%	10-119%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93478A-BS12	4M65188.D	1	05/09/16	LK	04/29/16	OP93478A	E4M2910

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

JC19023-1, JC19023-2, JC19023-4

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
123-91-1	1,4-Dioxane	167	16.9	10	10-100
91-20-3	Naphthalene	33.3	32.2	97	35-142

CAS No.	Surrogate Recoveries	BSP	Limits
4165-60-0	Nitrobenzene-d5	115%	15-138%
321-60-8	2-Fluorobiphenyl	101%	12-148%
1718-51-0	Terphenyl-d14	103%	10-157%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93453-MS	2P58695.D	1	04/29/16	RL	04/28/16	OP93453	E2P2566
OP93453-MSD	2P58696.D	1	04/29/16	RL	04/28/16	OP93453	E2P2566
JC19098-2	2P58714.D	1	04/29/16	RL	04/28/16	OP93453	E2P2566
JC19098-2	2P58715.D	2	04/29/16	RL	04/28/16	OP93453	E2P2566

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

JC19023-3

CAS No.	Compound	JC19098-2 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	71.0	71	100	80.6	81	13	49-110/20
59-50-7	4-Chloro-3-methyl phenol	ND		100	90.8	91	100	95.3	95	5	44-121/18
120-83-2	2,4-Dichlorophenol	ND		100	79.7	80	100	91.3	91	14	42-120/19
105-67-9	2,4-Dimethylphenol	ND		100	79.1	79	100	85.4	85	8	33-132/23
51-28-5	2,4-Dinitrophenol	ND		200	194	97	200	204	102	5	21-145/26
534-52-1	4,6-Dinitro-o-cresol	ND		100	99.0	99	100	101	101	2	25-134/27
95-48-7	2-Methylphenol	ND		100	69.0	69	100	77.1	77	11	47-112/18
	3&4-Methylphenol	ND		100	67.7	68	100	75.9	76	11	44-113/19
88-75-5	2-Nitrophenol	ND		100	77.5	78	100	89.3	89	14	45-118/20
100-02-7	4-Nitrophenol	ND		100	109	109	100	107	107	2	23-144/28
87-86-5	Pentachlorophenol	ND		100	75.5	76	100	77.0	77	2	25-151/25
108-95-2	Phenol	ND		100	48.8	49	100	52.8	53	8	22-100/22
58-90-2	2,3,4,6-Tetrachlorophenol	ND		100	87.9	88	100	91.4	91	4	44-122/21
95-95-4	2,4,5-Trichlorophenol	ND		100	80.4	80	100	84.5	85	5	51-124/20
88-06-2	2,4,6-Trichlorophenol	ND		100	84.8	85	100	90.8	91	7	53-120/21
83-32-9	Acenaphthene	0.59	J	100	82.1	82	100	86.3	86	5	52-120/23
208-96-8	Acenaphthylene	ND		100	75.3	75	100	78.7	79	4	50-101/22
98-86-2	Acetophenone	ND		100	69.6	70	100	86.8	87	22	31-141/23
120-12-7	Anthracene	ND		100	83.6	84	100	83.8	84	0	54-117/22
1912-24-9	Atrazine	ND		100	98.7	99	100	102	102	3	42-152/23
100-52-7	Benzaldehyde	ND		100	330	330* [a]	100	452	452* [a]	31* [b]	10-164/30
56-55-3	Benzo(a)anthracene	ND		100	60.8	61	100	84.9	85	33* [b]	40-123/24
50-32-8	Benzo(a)pyrene	ND		100	61.9	62	100	83.5	84	30* [b]	41-127/25
205-99-2	Benzo(b)fluoranthene	ND		100	67.4	67	100	87.8	88	26	39-127/27
191-24-2	Benzo(g,h,i)perylene	ND		100	51.4	51	100	76.1	76	39* [b]	34-128/28
207-08-9	Benzo(k)fluoranthene	ND		100	67.5	68	100	92.6	93	31* [b]	39-122/26
101-55-3	4-Bromophenyl phenyl ether	ND		100	89.4	89	100	90.8	91	2	51-124/23
85-68-7	Butyl benzyl phthalate	ND		100	69.3	69	100	94.6	95	31* [b]	21-146/28
92-52-4	1,1'-Biphenyl	ND		100	80.5	81	100	88.3	88	9	27-142/23
91-58-7	2-Chloronaphthalene	ND		100	73.2	73	100	76.7	77	5	51-109/23
106-47-8	4-Chloroaniline	ND		100	40.3	40	100	29.8	30	30	10-110/55
86-74-8	Carbazole	ND		100	86.5	87	100	86.0	86	1	52-116/22
105-60-2	Caprolactam	ND		100	25.1	25	100	21.8	22	14	10-106/34
218-01-9	Chrysene	ND		100	59.6	60	100	82.9	83	33* [b]	41-128/24
111-91-1	bis(2-Chloroethoxy)methane	ND		100	67.2	67	100	78.0	78	15	46-120/24
111-44-4	bis(2-Chloroethyl)ether	ND		100	64.1	64	100	76.8	77	18	42-123/28

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93453-MS	2P58695.D	1	04/29/16	RL	04/28/16	OP93453	E2P2566
OP93453-MSD	2P58696.D	1	04/29/16	RL	04/28/16	OP93453	E2P2566
JC19098-2	2P58714.D	1	04/29/16	RL	04/28/16	OP93453	E2P2566
JC19098-2	2P58715.D	2	04/29/16	RL	04/28/16	OP93453	E2P2566

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

JC19023-3

CAS No.	Compound	JC19098-2 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	63.3	63	100	75.8	76	18	41-117/25
7005-72-3	4-Chlorophenyl phenyl ether	ND		100	87.0	87	100	93.2	93	7	48-121/21
121-14-2	2,4-Dinitrotoluene	ND		100	96.0	96	100	97.3	97	1	54-123/27
606-20-2	2,6-Dinitrotoluene	ND		100	92.2	92	100	95.2	95	3	55-125/26
91-94-1	3,3'-Dichlorobenzidine	ND		200	51.2	26	200	51.7	26	1	10-107/47
53-70-3	Dibenzo(a,h)anthracene	ND		100	57.4	57	100	81.8	82	35* [b]	35-130/27
132-64-9	Dibenzofuran	ND		100	82.6	83	100	86.9	87	5	53-112/22
84-74-2	Di-n-butyl phthalate	ND		100	94.3	94	100	94.3	94	0	38-129/23
117-84-0	Di-n-octyl phthalate	ND		100	81.5	82	100	103	103	23	35-145/26
84-66-2	Diethyl phthalate	ND		100	92.3	92	100	95.4	95	3	16-136/30
131-11-3	Dimethyl phthalate	ND		100	84.6	85	100	87.6	88	3	10-143/39
117-81-7	bis(2-Ethylhexyl)phthalate	ND		100	69.8	70	100	95.5	96	31* [b]	34-141/28
206-44-0	Fluoranthene	ND		100	90.3	90	100	91.5	92	1	47-123/24
86-73-7	Fluorene	0.62	J	100	87.2	87	100	92.1	91	5	56-117/22
118-74-1	Hexachlorobenzene	ND		100	85.6	86	100	89.2	89	4	46-125/24
87-68-3	Hexachlorobutadiene	ND		100	68.2	68	100	75.8	76	11	26-121/24
77-47-4	Hexachlorocyclopentadiene	ND		200	102	51	200	111	56	8	10-133/31
67-72-1	Hexachloroethane	ND		100	58.2	58	100	66.0	66	13	35-111/26
193-39-5	Indeno(1,2,3-cd)pyrene	ND		100	54.1	54	100	79.3	79	38* [b]	32-130/30
78-59-1	Isophorone	ND		100	74.1	74	100	83.3	83	12	47-126/23
90-12-0	1-Methylnaphthalene	ND		100	139	139* [a]	100	165	165* [a]	17	34-124/25
91-57-6	2-Methylnaphthalene	128 [c]		100	201	72	100	253	124* [a]	23	34-123/24
88-74-4	2-Nitroaniline	ND		100	80.9	81	100	84.7	85	5	46-137/23
99-09-2	3-Nitroaniline	ND		100	44.9	45	100	37.3	37	18	10-110/50
100-01-6	4-Nitroaniline	ND		100	50.4	50	100	47.7	48	6	38-118/25
98-95-3	Nitrobenzene	ND		100	85.3	85	100	98.3	98	14	35-130/25
621-64-7	N-Nitroso-di-n-propylamine	ND		100	70.0	70	100	80.5	81	14	45-123/22
86-30-6	N-Nitrosodiphenylamine	ND		100	87.5	88	100	87.8	88	0	46-123/24
85-01-8	Phenanthrene	ND		100	85.8	86	100	86.6	86	1	48-121/23
129-00-0	Pyrene	ND		100	64.7	65	100	89.7	90	32* [b]	43-124/26
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		100	85.6	86	100	90.2	90	5	25-142/24

CAS No.	Surrogate Recoveries	MS	MSD	JC19098-2	JC19098-2	Limits
367-12-4	2-Fluorophenol	63%	73%			14-88%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93453-MS	2P58695.D	1	04/29/16	RL	04/28/16	OP93453	E2P2566
OP93453-MSD	2P58696.D	1	04/29/16	RL	04/28/16	OP93453	E2P2566
JC19098-2	2P58714.D	1	04/29/16	RL	04/28/16	OP93453	E2P2566
JC19098-2	2P58715.D	2	04/29/16	RL	04/28/16	OP93453	E2P2566

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

JC19023-3

CAS No.	Surrogate Recoveries	MS	MSD	JC19098-2	JC19098-2	Limits
4165-62-2	Phenol-d5	50%	55%			10-110%
118-79-6	2,4,6-Tribromophenol	100%	101%			39-149%
4165-60-0	Nitrobenzene-d5	78%	89%	68%	74%	32-128%
321-60-8	2-Fluorobiphenyl	82%	90%	75%	77%	35-119%
1718-51-0	Terphenyl-d14	73%	98%	88%	89%	10-126%

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

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93478-MS	M124229.D	1	05/06/16	AD	04/29/16	OP93478	EM5253
OP93478-MSD	M124230.D	1	05/06/16	AD	04/29/16	OP93478	EM5253
JC18964-19	5P27916.D	1	05/03/16	AD	04/29/16	OP93478	E5P1416
JC18964-19	5P27964.D	5	05/04/16	AD	04/29/16	OP93478	E5P1418

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

JC19023-1, JC19023-2, JC19023-4

CAS No.	Compound	JC18964-19 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		1650	1240	75	1690	1390	82	11	33-106/35
59-50-7	4-Chloro-3-methyl phenol	ND		1650	1180	71	1690	1250	74	6	27-124/34
120-83-2	2,4-Dichlorophenol	ND		1650	1220	74	1690	1330	79	9	25-122/34
105-67-9	2,4-Dimethylphenol	2060		1650	3080	62	1690	3450	82	11	23-133/34
51-28-5	2,4-Dinitrophenol	ND		3310	1550	47	3370	1590	47	3	10-110/51
534-52-1	4,6-Dinitro-o-cresol	ND		1650	783	47	1690	840	50	7	10-113/49
95-48-7	2-Methylphenol	311		1650	1630	80	1690	1960	98	18	32-111/34
	3&4-Methylphenol	4350 [b]		1650	6850	151* [a]	1690	8100	222* [a]	17	32-113/34
88-75-5	2-Nitrophenol	ND		1650	1160	70	1690	1300	77	11	17-118/37
100-02-7	4-Nitrophenol	ND		1650	1080	65	1690	1040	62	4	14-154/39
87-86-5	Pentachlorophenol	ND		1650	1380	83	1690	1400	83	1	10-131/43
108-95-2	Phenol	1300		1650	4270	180* [c]	1690	5070	224* [c]	17	25-112/33
58-90-2	2,3,4,6-Tetrachlorophenol	ND		1650	1270	77	1690	1310	78	3	19-125/37
95-95-4	2,4,5-Trichlorophenol	ND		1650	1070	65	1690	1090	65	2	30-125/35
88-06-2	2,4,6-Trichlorophenol	ND		1650	1170	71	1690	1250	74	7	26-126/35
83-32-9	Acenaphthene	ND		1650	1040	63	1690	1140	68	9	34-125/36
208-96-8	Acenaphthylene	ND		1650	989	60	1690	1050	62	6	28-113/34
98-86-2	Acetophenone	ND		1650	1090	66	1690	1280	76	16	26-120/34
120-12-7	Anthracene	ND		1650	1020	62	1690	1120	66	9	31-131/41
1912-24-9	Atrazine	ND		1650	1340	81	1690	1460	87	9	34-138/36
56-55-3	Benzo(a)anthracene	ND		1650	989	60	1690	1080	64	9	23-136/43
50-32-8	Benzo(a)pyrene	ND		1650	1010	61	1690	1100	65	9	22-144/42
205-99-2	Benzo(b)fluoranthene	ND		1650	1090	66	1690	1180	70	8	18-145/43
191-24-2	Benzo(g,h,i)perylene	ND		1650	937	57	1690	1020	60	8	20-138/43
207-08-9	Benzo(k)fluoranthene	ND		1650	1050	63	1690	1130	67	7	27-129/43
101-55-3	4-Bromophenyl phenyl ether	ND		1650	1190	72	1690	1280	76	7	39-124/33
85-68-7	Butyl benzyl phthalate	ND		1650	1040	63	1690	1140	68	9	27-143/35
92-52-4	1,1'-Biphenyl	ND		1650	1040	63	1690	1160	69	11	33-116/32
100-52-7	Benzaldehyde	ND		1650	1260	76	1690	1470	87	15	20-129/34
91-58-7	2-Chloronaphthalene	ND		1650	989	60	1690	1090	65	10	38-110/32
106-47-8	4-Chloroaniline	ND		1650	517	31	1690	524	31	1	10-110/49
86-74-8	Carbazole	ND		1650	1050	63	1690	1150	68	9	27-129/38
105-60-2	Caprolactam	ND		1650	1150	70	1690	1280	76	11	18-127/35
218-01-9	Chrysene	ND		1650	978	59	1690	1090	65	11	21-142/43
111-91-1	bis(2-Chloroethoxy)methane	ND		1650	1110	67	1690	1230	73	10	32-116/33
111-44-4	bis(2-Chloroethyl)ether	ND		1650	1550	94	1690	2130	126* [c]	32	30-113/37

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93478-MS	M124229.D	1	05/06/16	AD	04/29/16	OP93478	EM5253
OP93478-MSD	M124230.D	1	05/06/16	AD	04/29/16	OP93478	EM5253
JC18964-19	5P27916.D	1	05/03/16	AD	04/29/16	OP93478	E5P1416
JC18964-19	5P27964.D	5	05/04/16	AD	04/29/16	OP93478	E5P1418

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

JC19023-1, JC19023-2, JC19023-4

CAS No.	Compound	JC18964-19 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		1650	1010	61	1690	1210	72	18	28-110/33
7005-72-3	4-Chlorophenyl phenyl ether	ND		1650	1080	65	1690	1210	72	11	38-119/33
121-14-2	2,4-Dinitrotoluene	ND		1650	1060	64	1690	1180	70	11	28-126/36
606-20-2	2,6-Dinitrotoluene	ND		1650	1100	67	1690	1230	73	11	31-126/34
91-94-1	3,3'-Dichlorobenzidine	ND		3310	239	7* c	3370	303	9* c	24	10-115/44
53-70-3	Dibenzo(a,h)anthracene	ND		1650	969	59	1690	1060	63	9	25-135/41
132-64-9	Dibenzofuran	ND		1650	1070	65	1690	1180	70	10	30-125/35
84-74-2	Di-n-butyl phthalate	ND		1650	1080	65	1690	1170	69	8	32-131/34
117-84-0	Di-n-octyl phthalate	ND		1650	1130	68	1690	1180	70	4	28-144/35
84-66-2	Diethyl phthalate	ND		1650	1050	63	1690	1160	69	10	35-124/32
131-11-3	Dimethyl phthalate	ND		1650	1050	63	1690	1160	69	10	36-121/33
117-81-7	bis(2-Ethylhexyl)phthalate	ND		1650	1110	67	1690	1210	72	9	25-146/35
206-44-0	Fluoranthene	ND		1650	1020	62	1690	1080	64	6	15-143/46
86-73-7	Fluorene	ND		1650	1060	64	1690	1150	68	8	30-129/37
118-74-1	Hexachlorobenzene	ND		1650	1130	68	1690	1230	73	8	34-125/34
87-68-3	Hexachlorobutadiene	ND		1650	1050	63	1690	1250	74	17	29-120/34
77-47-4	Hexachlorocyclopentadiene	ND		3310	385	12	3370	518	15	29	10-127/46
67-72-1	Hexachloroethane	ND		1650	804	49	1690	961	57	18	21-109/38
193-39-5	Indeno(1,2,3-cd)pyrene	ND		1650	1200	73	1690	1280	76	6	23-141/44
78-59-1	Isophorone	ND		1650	1160	70	1690	1300	77	11	31-124/32
90-12-0	1-Methylnaphthalene	ND		1650	1080	65	1690	1220	72	12	24-122/33
91-57-6	2-Methylnaphthalene	13.2	J	1650	1090	65	1690	1230	72	12	21-125/33
88-74-4	2-Nitroaniline	ND		1650	1100	67	1690	1190	71	8	29-138/33
99-09-2	3-Nitroaniline	ND		1650	719	43	1690	789	47	9	12-112/38
100-01-6	4-Nitroaniline	ND		1650	761	46	1690	857	51	12	21-117/38
98-95-3	Nitrobenzene	ND		1650	1220	74	1690	1420	84	15	28-118/32
621-64-7	N-Nitroso-di-n-propylamine	ND		1650	1100	67	1690	1250	74	13	26-121/34
86-30-6	N-Nitrosodiphenylamine	ND		1650	1130	68	1690	1210	72	7	24-142/35
85-01-8	Phenanthrene	ND		1650	1030	62	1690	1140	68	10	14-144/44
129-00-0	Pyrene	ND		1650	1120	68	1690	1220	72	9	16-147/46
95-94-3	1,2,4,5-Tetrachlorobenzene	ND		1650	1320	80	1690	1440	85	9	37-115/32

CAS No.	Surrogate Recoveries	MS	MSD	JC18964-19	JC18964-19	Limits
367-12-4	2-Fluorophenol	78%	90%	75%	93%	30-106%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93478-MS	M124229.D	1	05/06/16	AD	04/29/16	OP93478	EM5253
OP93478-MSD	M124230.D	1	05/06/16	AD	04/29/16	OP93478	EM5253
JC18964-19	5P27916.D	1	05/03/16	AD	04/29/16	OP93478	E5P1416
JC18964-19	5P27964.D	5	05/04/16	AD	04/29/16	OP93478	E5P1418

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

JC19023-1, JC19023-2, JC19023-4

CAS No.	Surrogate Recoveries	MS	MSD	JC18964-19	JC18964-19	Limits
4165-62-2	Phenol-d5	81%	90%	77%	98%	30-106%
118-79-6	2,4,6-Tribromophenol	86%	87%	93%	116%	24-140%
4165-60-0	Nitrobenzene-d5	71%	79%	77%	91%	26-122%
321-60-8	2-Fluorobiphenyl	67%	72%	79%	93%	36-112%
1718-51-0	Terphenyl-d14	79%	83%	85%	103%	36-132%

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

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93453A-MS	3M60955.D	1	04/29/16	JJ	04/28/16	OP93453A	E3M2866
OP93453A-MSD	3M60956.D	1	04/29/16	JJ	04/28/16	OP93453A	E3M2866
JC19138-2	3M60958.D	1	04/29/16	JJ	04/28/16	OP93453A	E3M2866

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

JC19023-3

CAS No.	Compound	JC19138-2 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	1.35		2	0.926	0* [a]	2	1.27	0* [a]	31	23-140/36
123-91-1	1,4-Dioxane	ND		2	0.609	30	2	0.992	50	48* [b]	20-160/30

CAS No.	Surrogate Recoveries	MS	MSD	JC19138-2	Limits
4165-60-0	Nitrobenzene-d5	43%	63%	50%	24-125%
321-60-8	2-Fluorobiphenyl	57%	71%	68%	19-127%
1718-51-0	Terphenyl-d14	84%	98%	88%	10-119%

(a) Outside control limits due to matrix interference.
(b) Analytical precision exceeds in-house control limits.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93478A-MS	4M65206.D	1	05/10/16	LK	04/29/16	OP93478A	E4M2912
OP93478A-MSD	4M65207A.D	1	05/10/16	LK	04/29/16	OP93478A	E4M2912
JC19023-1	4M65189.D	1	05/09/16	LK	04/29/16	OP93478A	E4M2910

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

JC19023-1, JC19023-2, JC19023-4

CAS No.	Compound	JC19023-1 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	7.80		213	19.9	6* [a]	213	25.8	8* [a]	26	50-150/30
91-20-3	Naphthalene	30.0		42.6	40.9	26	42.6	40.8	25	0	10-190/36

CAS No.	Surrogate Recoveries	MS	MSD	JC19023-1	Limits
4165-60-0	Nitrobenzene-d5	72%	73%	51%	15-138%
321-60-8	2-Fluorobiphenyl	59%	73%	60%	12-148%
1718-51-0	Terphenyl-d14	82%	94%	66%	10-157%

(a) Outside control limits due to matrix interference.

* = Outside of Control Limits.

Instrument Performance Check (DFTPP)

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

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

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	31943	49.9		Pass
68	Less than 2.0% of mass 69	547	0.85	(1.87) [a]	Pass
69	Mass 69 relative abundance	29233	45.6		Pass
70	Less than 2.0% of mass 69	136	0.21	(0.47) [a]	Pass
127	40.0 - 60.0% of mass 198	32846	51.3		Pass
197	Less than 1.0% of mass 198	212	0.33		Pass
198	Base peak, 100% relative abundance	64058	100.0		Pass
199	5.0 - 9.0% of mass 198	4365	6.81		Pass
275	10.0 - 30.0% of mass 198	14145	22.1		Pass
365	1.0 - 100.0% of mass 198	1814	2.83		Pass
441	Present, but less than mass 443	6462	10.1	(81.6) [b]	Pass
442	40.0 - 100.0% of mass 198	42236	65.9		Pass
443	17.0 - 23.0% of mass 442	7923	12.4	(18.8) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E2P2547-ICC2547	2P58365.D	04/19/16	16:33	01:21	Initial cal 50
E2P2547-IC2547	2P58366.D	04/19/16	16:57	01:45	Initial cal 25
E2P2547-IC2547	2P58367.D	04/19/16	17:21	02:09	Initial cal 80
E2P2547-IC2547	2P58368.D	04/19/16	17:45	02:33	Initial cal 10
E2P2547-IC2547	2P58369.D	04/19/16	18:09	02:57	Initial cal 100
E2P2547-IC2547	2P58370.D	04/19/16	18:33	03:21	Initial cal 5
E2P2547-IC2547	2P58371.D	04/19/16	18:57	03:45	Initial cal 2
E2P2547-IC2547	2P58372.D	04/19/16	19:21	04:09	Initial cal 1

Instrument Performance Check (DFTPP)

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

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

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	45494	47.2		Pass
68	Less than 2.0% of mass 69	713	0.74	(1.66) [a]	Pass
69	Mass 69 relative abundance	42984	44.6		Pass
70	Less than 2.0% of mass 69	141	0.15	(0.33) [a]	Pass
127	40.0 - 60.0% of mass 198	47459	49.2		Pass
197	Less than 1.0% of mass 198	230	0.24		Pass
198	Base peak, 100% relative abundance	96445	100.0		Pass
199	5.0 - 9.0% of mass 198	6569	6.81		Pass
275	10.0 - 30.0% of mass 198	19621	20.3		Pass
365	1.0 - 100.0% of mass 198	2274	2.36		Pass
441	Present, but less than mass 443	9130	9.47	(88.4) [b]	Pass
442	40.0 - 100.0% of mass 198	55443	57.5		Pass
443	17.0 - 23.0% of mass 442	10326	10.7	(18.6) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E2P2548-IC2548	2P58374.D	04/19/16	20:00	00:13	Initial cal 100
E2P2548-IC2548	2P58375.D	04/19/16	20:24	00:37	Initial cal 80
E2P2548-ICC2548	2P58376.D	04/19/16	20:47	01:00	Initial cal 50
E2P2548-IC2548	2P58377.D	04/19/16	21:11	01:24	Initial cal 25
E2P2548-IC2548	2P58378.D	04/19/16	21:34	01:47	Initial cal 10
E2P2548-IC2548	2P58379.D	04/19/16	21:57	02:10	Initial cal 5
E2P2548-IC2548	2P58380.D	04/19/16	22:21	02:34	Initial cal 2
E2P2548-IC2548	2P58381.D	04/19/16	22:44	02:57	Initial cal 1
E2P2548-ICV2547	2P58384.D	04/19/16	23:51	04:04	Initial cal verification 50
E2P2548-ICV2547	2P58385.D	04/20/16	00:14	04:27	Initial cal verification 50
E2P2548-ICV2548	2P58385A.D	04/20/16	00:14	04:27	Initial cal verification 50
E2P2548-ICV2547	2P58386.D	04/20/16	00:36	04:49	Initial cal verification 50
E2P2548-ICV2548	2P58386A.D	04/20/16	00:36	04:49	Initial cal verification 50
E2P2548-ICV2548	2P58387.D	04/20/16	00:59	05:12	Initial cal verification 50
E2P2548-ICV2548	2P58388A.D	04/20/16	01:21	05:34	Initial cal verification 50
E2P2548-ICV2547	2P58388.D	04/20/16	01:21	05:34	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

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

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	41165	43.0		Pass
68	Less than 2.0% of mass 69	692	0.72	(1.70) [a]	Pass
69	Mass 69 relative abundance	40655	42.5		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	47048	49.2		Pass
197	Less than 1.0% of mass 198	453	0.47		Pass
198	Base peak, 100% relative abundance	95659	100.0		Pass
199	5.0 - 9.0% of mass 198	6243	6.53		Pass
275	10.0 - 30.0% of mass 198	19408	20.3		Pass
365	1.0 - 100.0% of mass 198	2357	2.46		Pass
441	Present, but less than mass 443	8730	9.13	(88.9) [b]	Pass
442	40.0 - 100.0% of mass 198	53344	55.8		Pass
443	17.0 - 23.0% of mass 442	9817	10.3	(18.4) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E2P2549-ICV2547	2P58391.D	04/20/16	09:53	00:15	Initial cal verification 50
E2P2549-ICV2547	2P58392.D	04/20/16	10:16	00:38	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E2P2557-DFTPP
Lab File ID: 2P58524.D
Instrument ID: GCMS2P
Injection Date: 04/25/16
Injection Time: 10:05

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	43762	54.7		Pass
68	Less than 2.0% of mass 69	674	0.84	(1.76) [a]	Pass
69	Mass 69 relative abundance	38345	47.9		Pass
70	Less than 2.0% of mass 69	253	0.32	(0.66) [a]	Pass
127	40.0 - 60.0% of mass 198	42416	53.0		Pass
197	Less than 1.0% of mass 198	310	0.39		Pass
198	Base peak, 100% relative abundance	80032	100.0		Pass
199	5.0 - 9.0% of mass 198	5598	6.99		Pass
275	10.0 - 30.0% of mass 198	16142	20.2		Pass
365	1.0 - 100.0% of mass 198	2008	2.51		Pass
441	Present, but less than mass 443	6849	8.56	(83.3) [b]	Pass
442	40.0 - 100.0% of mass 198	44268	55.3		Pass
443	17.0 - 23.0% of mass 442	8219	10.3	(18.6) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E2P2557-ICC2557	2P58525.D	04/25/16	10:22	00:17	Initial cal 50
E2P2557-IC2557	2P58526.D	04/25/16	10:45	00:40	Initial cal 25
E2P2557-IC2557	2P58527.D	04/25/16	11:08	01:03	Initial cal 80
E2P2557-IC2557	2P58528.D	04/25/16	11:31	01:26	Initial cal 10
E2P2557-IC2557	2P58529.D	04/25/16	11:54	01:49	Initial cal 100
E2P2557-IC2557	2P58530.D	04/25/16	12:17	02:12	Initial cal 5
E2P2557-IC2557	2P58531.D	04/25/16	12:41	02:36	Initial cal 1
E2P2557-IC2557	2P58532.D	04/25/16	13:04	02:59	Initial cal 2
E2P2557-ICV2557	2P58534.D	04/25/16	13:51	03:46	Initial cal verification 50
E2P2557-ICV2557	2P58536A.D	04/25/16	16:09	06:04	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E2P2559-DFTPP
Lab File ID: 2P58539.D
Instrument ID: GCMS2P
Injection Date: 04/25/16
Injection Time: 18:47

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	33509	49.3		Pass
68	Less than 2.0% of mass 69	538	0.79	(1.82) [a]	Pass
69	Mass 69 relative abundance	29576	43.5		Pass
70	Less than 2.0% of mass 69	268	0.39	(0.91) [a]	Pass
127	40.0 - 60.0% of mass 198	33250	48.9		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	67974	100.0		Pass
199	5.0 - 9.0% of mass 198	4549	6.69		Pass
275	10.0 - 30.0% of mass 198	15471	22.8		Pass
365	1.0 - 100.0% of mass 198	2159	3.18		Pass
441	Present, but less than mass 443	7370	10.8	(86.6) [b]	Pass
442	40.0 - 100.0% of mass 198	44954	66.1		Pass
443	17.0 - 23.0% of mass 442	8506	12.5	(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
E2P2559-ICV2557	2P58540.D	04/25/16	18:59	00:12	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E2P2566-DFTPP
Lab File ID: 2P58688.D
Instrument ID: GCMS2P
Injection Date: 04/29/16
Injection Time: 09:20

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	37053	53.1		Pass
68	Less than 2.0% of mass 69	339	0.49	(1.02) [a]	Pass
69	Mass 69 relative abundance	33300	47.8		Pass
70	Less than 2.0% of mass 69	462	0.66	(1.39) [a]	Pass
127	40.0 - 60.0% of mass 198	37463	53.7		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	69715	100.0		Pass
199	5.0 - 9.0% of mass 198	4845	6.95		Pass
275	10.0 - 30.0% of mass 198	14757	21.2		Pass
365	1.0 - 100.0% of mass 198	1601	2.30		Pass
441	Present, but less than mass 443	6247	8.96	(96.1) [b]	Pass
442	40.0 - 100.0% of mass 198	35273	50.6		Pass
443	17.0 - 23.0% of mass 442	6503	9.33	(18.4) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E2P2566-CC2547	2P58689.D	04/29/16	09:31	00:11	Continuing cal 50
E2P2566-CC2557	2P58690.D	04/29/16	10:05	00:45	Continuing cal 50
OP93453-MB1	2P58692.D	04/29/16	10:51	01:31	Method Blank
OP93453-BS1	2P58693.D	04/29/16	11:13	01:53	Blank Spike
ZZZZZZ	2P58694.D	04/29/16	11:36	02:16	(unrelated sample)
OP93453-MS	2P58695.D	04/29/16	11:59	02:39	Matrix Spike
OP93453-MSD	2P58696.D	04/29/16	12:22	03:02	Matrix Spike Duplicate
JC19098-2	2P58714.D	04/29/16	12:45	03:25	(used for QC only; not part of job JC19023)
ZZZZZZ	2P58697.D	04/29/16	13:08	03:48	(unrelated sample)
ZZZZZZ	2P58698.D	04/29/16	13:31	04:11	(unrelated sample)
ZZZZZZ	2P58699.D	04/29/16	13:54	04:34	(unrelated sample)
ZZZZZZ	2P58700.D	04/29/16	14:17	04:57	(unrelated sample)
ZZZZZZ	2P58701.D	04/29/16	14:40	05:20	(unrelated sample)
ZZZZZZ	2P58702.D	04/29/16	15:03	05:43	(unrelated sample)
ZZZZZZ	2P58705.D	04/29/16	16:12	06:52	(unrelated sample)
ZZZZZZ	2P58707.D	04/29/16	16:58	07:38	(unrelated sample)
ZZZZZZ	2P58708.D	04/29/16	17:21	08:01	(unrelated sample)
ZZZZZZ	2P58709.D	04/29/16	17:44	08:24	(unrelated sample)
ZZZZZZ	2P58710.D	04/29/16	18:07	08:47	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E2P2566-DFTPP
Lab File ID: 2P58688.D
Instrument ID: GCMS2P
Injection Date: 04/29/16
Injection Time: 09:20

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	2P58711.D	04/29/16	18:30	09:10	(unrelated sample)
JC19023-3	2P58712.D	04/29/16	18:53	09:33	BPEB-6
ZZZZZZ	2P58713.D	04/29/16	19:14	09:54	(unrelated sample)
JC19098-2	2P58715.D	04/29/16	19:36	10:16	(used for QC only; not part of job JC19023)
OP93365-MS	2P58716.D	04/29/16	19:59	10:39	Matrix Spike
OP93365-MSD	2P58717.D	04/29/16	20:21	11:01	Matrix Spike Duplicate

Instrument Performance Check (DFTPP)

Job Number: JC19023
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: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E3M2866-DFTPP
Lab File ID: 3M60951.D
Instrument ID: GCMS3M
Injection Date: 04/28/16
Injection Time: 23:01

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	306910	35.6		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	398424	46.2		Pass
70	Less than 2.0% of mass 69	2134	0.25	(0.54) [a]	Pass
127	40.0 - 60.0% of mass 198	425092	49.3		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	862613	100.0		Pass
199	5.0 - 9.0% of mass 198	60829	7.05		Pass
275	10.0 - 30.0% of mass 198	202880	23.5		Pass
365	1.0 - 100.0% of mass 198	23657	2.74		Pass
441	Present, but less than mass 443	111597	12.9	(84.5) [b]	Pass
442	40.0 - 100.0% of mass 198	692651	80.3		Pass
443	17.0 - 23.0% of mass 442	132083	15.3	(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
E3M2866-CC2855	3M60952.D	04/28/16	23:26	00:25	Continuing cal 1.0
OP93453A-MB1	3M60953.D	04/29/16	01:05	02:04	Method Blank
OP93453A-BS12	3M60954.D	04/29/16	01:37	02:36	Blank Spike
OP93453A-MS	3M60955.D	04/29/16	02:08	03:07	Matrix Spike
OP93453A-MSD	3M60956.D	04/29/16	02:40	03:39	Matrix Spike Duplicate
JC19023-3	3M60957.D	04/29/16	03:12	04:11	BPEB-6
JC19138-2	3M60958.D	04/29/16	03:43	04:42	(used for QC only; not part of job JC19023)
ZZZZZZ	3M60959.D	04/29/16	04:15	05:14	(unrelated sample)
ZZZZZZ	3M60960.D	04/29/16	04:46	05:45	(unrelated sample)
ZZZZZZ	3M60961.D	04/29/16	05:18	06:17	(unrelated sample)
ZZZZZZ	3M60962.D	04/29/16	05:49	06:48	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC19023
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: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

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

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	440259	44.7		Pass
68	Less than 2.0% of mass 69	6860	0.70	(1.65) [a]	Pass
69	Mass 69 relative abundance	414779	42.2		Pass
70	Less than 2.0% of mass 69	2282	0.23	(0.55) [a]	Pass
127	40.0 - 60.0% of mass 198	456555	46.4		Pass
197	Less than 1.0% of mass 198	6380	0.65		Pass
198	Base peak, 100% relative abundance	983872	100.0		Pass
199	5.0 - 9.0% of mass 198	65024	6.61		Pass
275	10.0 - 30.0% of mass 198	240288	24.4		Pass
365	1.0 - 100.0% of mass 198	34339	3.49		Pass
441	Present, but less than mass 443	133227	13.5	(82.3) [b]	Pass
442	40.0 - 100.0% of mass 198	846165	86.0		Pass
443	17.0 - 23.0% of mass 442	161859	16.5	(19.1) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4M2910-CC2881	4M65170.D	05/09/16	10:32	00:13	Continuing cal 1
OP93662A-MB1	4M65171.D	05/09/16	11:08	00:49	Method Blank
ZZZZZZ	4M65172.D	05/09/16	11:41	01:22	(unrelated sample)
ZZZZZZ	4M65173.D	05/09/16	12:14	01:55	(unrelated sample)
ZZZZZZ	4M65174.D	05/09/16	12:48	02:29	(unrelated sample)
ZZZZZZ	4M65175.D	05/09/16	13:22	03:03	(unrelated sample)
ZZZZZZ	4M65176.D	05/09/16	13:55	03:36	(unrelated sample)
OP93718A-MB1	4M65177.D	05/09/16	14:28	04:09	Method Blank
ZZZZZZ	4M65179.D	05/09/16	15:34	05:15	(unrelated sample)
ZZZZZZ	4M65180.D	05/09/16	16:08	05:49	(unrelated sample)
OP93678A-MB1	4M65181.D	05/09/16	16:41	06:22	Method Blank
OP93678A-BS12	4M65182.D	05/09/16	17:14	06:55	Blank Spike
JC19644-4	4M65183.D	05/09/16	17:47	07:28	(used for QC only; not part of job JC19023)
ZZZZZZ	4M65184.D	05/09/16	18:20	08:01	(unrelated sample)
OP93678A-MS	4M65185.D	05/09/16	18:52	08:33	Matrix Spike
OP93678A-MSD	4M65186.D	05/09/16	19:25	09:06	Matrix Spike Duplicate
OP93478A-BS12	4M65188.D	05/09/16	20:31	10:12	Blank Spike
JC19023-1	4M65189.D	05/09/16	21:04	10:45	RA-17 (17-18)
JC19023-2	4M65190.D	05/09/16	21:37	11:18	S-40S (10.5-11.5)

Instrument Performance Check (DFTPP)

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
JC19023-4	4M65191.D	05/09/16	22:10	11:51	S-39 (11-12)

Instrument Performance Check (DFTPP)

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E4M2912-DFTPP
Lab File ID: 4M65202.D
Instrument ID: GCMS4M
Injection Date: 05/10/16
Injection Time: 13:04

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	536611	44.9		Pass
68	Less than 2.0% of mass 69	6198	0.52	(1.19) [a]	Pass
69	Mass 69 relative abundance	520794	43.6		Pass
70	Less than 2.0% of mass 69	2296	0.19	(0.44) [a]	Pass
127	40.0 - 60.0% of mass 198	553272	46.3		Pass
197	Less than 1.0% of mass 198	3719	0.31		Pass
198	Base peak, 100% relative abundance	1194475	100.0		Pass
199	5.0 - 9.0% of mass 198	81680	6.84		Pass
275	10.0 - 30.0% of mass 198	288085	24.1		Pass
365	1.0 - 100.0% of mass 198	36995	3.10		Pass
441	Present, but less than mass 443	152661	12.8	(78.9) [b]	Pass
442	40.0 - 100.0% of mass 198	1046635	87.6		Pass
443	17.0 - 23.0% of mass 442	193392	16.2	(18.5) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E4M2912-CC2881	4M65203.D	05/10/16	13:17	00:13	Continuing cal 1
OP93718A-BS12	4M65204.D	05/10/16	13:50	00:46	Blank Spike
OP93478A-MB1	4M65205.D	05/10/16	14:22	01:18	Method Blank
OP93478A-MS	4M65206.D	05/10/16	14:55	01:51	Matrix Spike
OP93478A-MSD	4M65207A.D	05/10/16	17:40	04:36	Matrix Spike Duplicate
OP93577A-MSD	4M65208.D	05/10/16	18:11	05:07	Matrix Spike Duplicate
ZZZZZZ	4M65209.D	05/10/16	18:41	05:37	(unrelated sample)
OP93745A-MB1	4M65210.D	05/10/16	19:11	06:07	Method Blank
OP93745A-BS12	4M65211.D	05/10/16	19:42	06:38	Blank Spike
OP93745A-MS	4M65212.D	05/10/16	20:12	07:08	Matrix Spike
OP93745A-MSD	4M65213.D	05/10/16	20:42	07:38	Matrix Spike Duplicate
JC19664-1	4M65214.D	05/10/16	21:13	08:09	(used for QC only; not part of job JC19023)
ZZZZZZ	4M65215.D	05/10/16	21:43	08:39	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E5P1382-DFTPP
Lab File ID: 5P27318.D
Instrument ID: GCMS5P
Injection Date: 04/11/16
Injection Time: 10:14

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	90825	36.1		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	99778	39.6		Pass
70	Less than 2.0% of mass 69	629	0.25	(0.63) [a]	Pass
127	40.0 - 60.0% of mass 198	135978	54.0		Pass
197	Less than 1.0% of mass 198	1902	0.76		Pass
198	Base peak, 100% relative abundance	251882	100.0		Pass
199	5.0 - 9.0% of mass 198	16968	6.74		Pass
275	10.0 - 30.0% of mass 198	63920	25.4		Pass
365	1.0 - 100.0% of mass 198	6782	2.69		Pass
441	Present, but less than mass 443	23750	9.43	(75.5) [b]	Pass
442	40.0 - 100.0% of mass 198	161853	64.3		Pass
443	17.0 - 23.0% of mass 442	31445	12.5	(19.4) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E5P1382-IC1382	5P27319.D	04/11/16	10:29	00:15	Initial cal 100
E5P1382-IC1382	5P27320.D	04/11/16	11:06	00:52	Initial cal 80
E5P1382-ICC1382	5P27321.D	04/11/16	11:32	01:18	Initial cal 50
E5P1382-IC1382	5P27322.D	04/11/16	11:59	01:45	Initial cal 25
E5P1382-IC1382	5P27323.D	04/11/16	12:25	02:11	Initial cal 10
E5P1382-IC1382	5P27324.D	04/11/16	12:52	02:38	Initial cal 5
E5P1382-IC1382	5P27325.D	04/11/16	13:19	03:05	Initial cal 2
E5P1382-IC1382	5P27326.D	04/11/16	13:46	03:32	Initial cal 1

Instrument Performance Check (DFTPP)

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E5P1383-DFTPP
Lab File ID: 5P27327.D
Instrument ID: GCMS5P
Injection Date: 04/11/16
Injection Time: 14:45

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	57180	31.3		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	62947	34.4		Pass
70	Less than 2.0% of mass 69	374	0.20	(0.59) [a]	Pass
127	40.0 - 60.0% of mass 198	87330	47.8		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	182736	100.0		Pass
199	5.0 - 9.0% of mass 198	12655	6.93		Pass
275	10.0 - 30.0% of mass 198	52696	28.8		Pass
365	1.0 - 100.0% of mass 198	5590	3.06		Pass
441	Present, but less than mass 443	22821	12.5	(76.7) [b]	Pass
442	40.0 - 100.0% of mass 198	152749	83.6		Pass
443	17.0 - 23.0% of mass 442	29758	16.3	(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
E5P1383-IC1383	5P27328.D	04/11/16	14:57	00:12	Initial cal 100
E5P1383-IC1383	5P27329.D	04/11/16	15:24	00:39	Initial cal 80
E5P1383-ICC1383	5P27330.D	04/11/16	15:50	01:05	Initial cal 50
E5P1383-IC1383	5P27331.D	04/11/16	16:17	01:32	Initial cal 25
E5P1383-IC1383	5P27332.D	04/11/16	16:44	01:59	Initial cal 10
E5P1383-IC1383	5P27333.D	04/11/16	17:11	02:26	Initial cal 5
E5P1383-IC1383	5P27334.D	04/11/16	17:38	02:53	Initial cal 2
E5P1383-IC1383	5P27335.D	04/11/16	18:05	03:20	Initial cal 1
E5P1383-ICV1382	5P27336.D	04/11/16	18:32	03:47	Initial cal verification 50
E5P1383-ICV1382	5P27337.D	04/11/16	18:59	04:14	Initial cal verification 50
E5P1383-ICV1383	5P27337A.D	04/11/16	18:59	04:14	Initial cal verification 50
E5P1383-ICV1382	5P27338.D	04/11/16	19:26	04:41	Initial cal verification 50
E5P1383-ICV1383	5P27338A.D	04/11/16	19:26	04:41	Initial cal verification 50
E5P1383-ICV1382	5P27339.D	04/11/16	19:52	05:07	Initial cal verification 50
E5P1383-ICV1382	5P27340.D	04/11/16	20:20	05:35	Initial cal verification 50
E5P1383-ICV1383	5P27341A.D	04/11/16	20:47	06:02	Initial cal verification 50
E5P1383-ICV1382	5P27341.D	04/11/16	20:47	06:02	Initial cal verification 50
E5P1383-ICV1383	5P27342.D	04/11/16	21:15	06:30	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: E5P1416-DFTPP
Lab File ID: 5P27901.D
Instrument ID: GCMS5P
Injection Date: 05/03/16
Injection Time: 08:27

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	327868	52.1		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	248306	39.5		Pass
70	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
127	40.0 - 60.0% of mass 198	345885	55.0		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	628842	100.0		Pass
199	5.0 - 9.0% of mass 198	42331	6.73		Pass
275	10.0 - 30.0% of mass 198	186237	29.6		Pass
365	1.0 - 100.0% of mass 198	17211	2.74		Pass
441	Present, but less than mass 443	106200	16.9	(87.6) [b]	Pass
442	40.0 - 100.0% of mass 198	583338	92.8		Pass
443	17.0 - 23.0% of mass 442	121253	19.3	(20.8) [c]	Pass

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
E5P1416-CC1382	5P27902.D	05/03/16	08:39	00:12	Continuing cal 25
E5P1416-CC1383	5P27903.D	05/03/16	09:05	00:38	Continuing cal 25
OP93478-MB1	5P27904.D	05/03/16	09:33	01:06	Method Blank
OP93478-BS1	5P27905.D	05/03/16	10:00	01:33	Blank Spike
ZZZZZZ	5P27906.D	05/03/16	10:27	02:00	(unrelated sample)
ZZZZZZ	5P27907.D	05/03/16	10:54	02:27	(unrelated sample)
JC19023-2	5P27908.D	05/03/16	11:21	02:54	S-40S (10.5-11.5)
JC19023-4	5P27909.D	05/03/16	11:47	03:20	S-39 (11-12)
ZZZZZZ	5P27910.D	05/03/16	12:14	03:47	(unrelated sample)
ZZZZZZ	5P27911.D	05/03/16	12:40	04:13	(unrelated sample)
ZZZZZZ	5P27913.D	05/03/16	13:33	05:06	(unrelated sample)
ZZZZZZ	5P27914.D	05/03/16	13:59	05:32	(unrelated sample)
ZZZZZZ	5P27915.D	05/03/16	14:26	05:59	(unrelated sample)
JC18964-19	5P27916.D	05/03/16	14:52	06:25	(used for QC only; not part of job JC19023)
ZZZZZZ	5P27927A.D	05/03/16	16:12	07:45	(unrelated sample)
ZZZZZZ	5P27925.D	05/03/16	17:21	08:54	(unrelated sample)
ZZZZZZ	5P27917.D	05/03/16	17:47	09:20	(unrelated sample)
ZZZZZZ	5P27918.D	05/03/16	18:14	09:47	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC19023
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: JC19023
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: JC19023
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: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

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

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

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

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

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

Instrument Performance Check (DFTPP)

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

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

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

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

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

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
EM5240-ICV5239	M123945.D	04/27/16	11:18	00:43	Initial cal verification 50

Instrument Performance Check (DFTPP)

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EM5245-DFTPP
Lab File ID: M123999.D
Instrument ID: GCMSM
Injection Date: 04/29/16
Injection Time: 09:18

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	51111	39.8		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	66909	52.2		Pass
70	Less than 2.0% of mass 69	425	0.33	(0.64) [a]	Pass
127	40.0 - 60.0% of mass 198	66538	51.9		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	128264	100.0		Pass
199	5.0 - 9.0% of mass 198	9048	7.05		Pass
275	10.0 - 30.0% of mass 198	35536	27.7		Pass
365	1.0 - 100.0% of mass 198	5359	4.18		Pass
441	Present, but less than mass 443	17820	13.9	(79.8) [b]	Pass
442	40.0 - 100.0% of mass 198	112992	88.1		Pass
443	17.0 - 23.0% of mass 442	22321	17.4	(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
EM5245-CC5217	M124000.D	04/29/16	09:30	00:12	Continuing cal 25
EM5245-CC5239	M124001.D	04/29/16	09:58	00:40	Continuing cal 25
OP93428-MB1	M124003.D	04/29/16	10:59	01:41	Method Blank
OP93428-BS1	M124004.D	04/29/16	11:27	02:09	Blank Spike
ZZZZZZ	M124005.D	04/29/16	11:56	02:38	(unrelated sample)
JC19090-1	M124006.D	04/29/16	12:24	03:06	(used for QC only; not part of job JC19023)
ZZZZZZ	M124007.D	04/29/16	12:52	03:34	(unrelated sample)
ZZZZZZ	M124008.D	04/29/16	13:21	04:03	(unrelated sample)
OP93478-MB1	M124024.D	04/29/16	13:49	04:31	Method Blank
OP93478-BS1	M124025.D	04/29/16	14:17	04:59	Blank Spike
ZZZZZZ	M124026.D	04/29/16	14:45	05:27	(unrelated sample)
ZZZZZZ	M124027.D	04/29/16	15:14	05:56	(unrelated sample)
ZZZZZZ	M124028.D	04/29/16	15:42	06:24	(unrelated sample)
ZZZZZZ	M124009.D	04/29/16	16:10	06:52	(unrelated sample)
ZZZZZZ	M124010.D	04/29/16	16:38	07:20	(unrelated sample)
ZZZZZZ	M124011.D	04/29/16	17:07	07:49	(unrelated sample)
ZZZZZZ	M124012.D	04/29/16	17:35	08:17	(unrelated sample)
ZZZZZZ	M124013.D	04/29/16	18:03	08:45	(unrelated sample)
ZZZZZZ	M124014.D	04/29/16	18:31	09:13	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EM5245-DFTPP
Lab File ID: M123999.D
Instrument ID: GCMSM
Injection Date: 04/29/16
Injection Time: 09:18

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	M124015.D	04/29/16	19:00	09:42	(unrelated sample)
ZZZZZZ	M124016.D	04/29/16	19:28	10:10	(unrelated sample)
ZZZZZZ	M124017.D	04/29/16	19:56	10:38	(unrelated sample)
ZZZZZZ	M124018.D	04/29/16	20:24	11:06	(unrelated sample)
ZZZZZZ	M124019.D	04/29/16	20:52	11:34	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: EM5253-DFTPP
Lab File ID: M124201.D
Instrument ID: GCMSM
Injection Date: 05/06/16
Injection Time: 08:45

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
51	30.0 - 60.0% of mass 198	61338	35.8		Pass
68	Less than 2.0% of mass 69	0	0.00	(0.00) [a]	Pass
69	Mass 69 relative abundance	74591	43.5		Pass
70	Less than 2.0% of mass 69	390	0.23	(0.52) [a]	Pass
127	40.0 - 60.0% of mass 198	83344	48.6		Pass
197	Less than 1.0% of mass 198	0	0.00		Pass
198	Base peak, 100% relative abundance	171386	100.0		Pass
199	5.0 - 9.0% of mass 198	11168	6.52		Pass
275	10.0 - 30.0% of mass 198	48422	28.3		Pass
365	1.0 - 100.0% of mass 198	6553	3.82		Pass
441	Present, but less than mass 443	19736	11.5	(76.1) [b]	Pass
442	40.0 - 100.0% of mass 198	129928	75.8		Pass
443	17.0 - 23.0% of mass 442	25925	15.1	(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
EM5253-CC5217	M124202.D	05/06/16	08:57	00:12	Continuing cal 50
EM5253-CC5239	M124203.D	05/06/16	09:26	00:41	Continuing cal 50
ZZZZZZ	M124207.D	05/06/16	11:21	02:36	(unrelated sample)
ZZZZZZ	M124208.D	05/06/16	11:49	03:04	(unrelated sample)
JC19348-2	M124209.D	05/06/16	12:18	03:33	(used for QC only; not part of job JC19023)
ZZZZZZ	M124217.D	05/06/16	13:43	04:58	(unrelated sample)
OP93671-MB1	M124232.D	05/06/16	14:41	05:56	Method Blank
OP93478-MB1	M124224.D	05/06/16	15:39	06:54	Method Blank
ZZZZZZ	M124225.D	05/06/16	16:08	07:23	(unrelated sample)
ZZZZZZ	M124226.D	05/06/16	16:37	07:52	(unrelated sample)
ZZZZZZ	M124227.D	05/06/16	17:05	08:20	(unrelated sample)
JC19023-1	M124228.D	05/06/16	17:34	08:49	RA-17 (17-18)
OP93478-MS	M124229.D	05/06/16	18:02	09:17	Matrix Spike
OP93478-MSD	M124230.D	05/06/16	18:31	09:46	Matrix Spike Duplicate

Semivolatile Internal Standard Area Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E2P2566-CC2547	**Injection Date:**	04/29/16
Lab File ID:	2P58689.D	**Injection Time:**	09:31
Instrument ID:	GCMS2P	**Method:**	SW846 8270D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT	IS 6 AREA	RT
Check Std	160657	4.76	561853	5.82	311848	7.26	506731	8.59	500083	11.93	369019	13.94
Upper Limit [a]	321314	5.26	1123706	6.32	623696	7.76	1013462	9.09	1000166	12.43	738038	14.44
Lower Limit [b]	80329	4.26	280927	5.32	155924	6.76	253366	8.09	250042	11.43	184510	13.44

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
OP93453-MB1	202683	4.76	742235	5.81	418877	7.26	666137	8.58	591007	11.92	419456	13.93
OP93453-BS1	160883	4.76	572655	5.82	311629	7.26	499625	8.58	485146	11.92	342216	13.93
ZZZZZZ	187204	4.76	680467	5.81	384885	7.26	615711	8.58	550532	11.92	398550	13.93
OP93453-MS	132711	4.76	454895	5.82	265122	7.26	432124	8.58	570844	11.92	389109	13.93
OP93453-MSD	141989	4.76	486525	5.82	288595	7.26	477616	8.58	467111	11.92	342535	13.93
JC19098-2	176824	4.76	624539	5.82	395000	7.26	690604	8.58	655644	11.92	496686	13.93
ZZZZZZ	203330	4.76	729468	5.81	390070	7.26	577764	8.58	514912	11.92	417307	13.94
ZZZZZZ	186852	4.76	680279	5.81	369479	7.26	533232	8.58	471620	11.93	382793	13.94
ZZZZZZ	236907	4.76	857801	5.81	461989	7.26	679419	8.58	608128	11.93	492155	13.94
ZZZZZZ	193083	4.76	699067	5.81	369619	7.26	524874	8.58	402695	11.93	359921	13.94
ZZZZZZ	208437	4.76	751052	5.81	393456	7.26	557654	8.58	448798	11.92	381521	13.94
ZZZZZZ	185422	4.76	609163	5.82	337528	7.26	520443	8.58	433725	11.93	343295	13.94
ZZZZZZ	178050	4.76	628993	5.82	330233	7.26	466986	8.59	375594	11.94	311858	13.95
ZZZZZZ	170399	4.76	614467	5.82	330303	7.26	496380	8.59	384220	11.93	301302	13.94
ZZZZZZ	183380	4.76	648732	5.82	340839	7.26	493253	8.58	409307	11.93	318903	13.93
ZZZZZZ	166320	4.76	607786	5.82	337390	7.26	525513	8.59	440912	11.93	318059	13.94
ZZZZZZ	180405	4.76	661493	5.82	373640	7.26	594048	8.59	516311	11.93	370479	13.94
ZZZZZZ	148836	4.76	555274	5.81	319237	7.26	505712	8.58	439757	11.92	309618	13.93
JC19023-3	191803	4.76	711200	5.82	396292	7.26	627320	8.58	554539	11.93	414512	13.94
ZZZZZZ	139744	4.76	543710	5.82	347363	7.26	577265	8.58	531393	11.92	400928	13.93
JC19098-2	165735	4.76	577105	5.82	357875	7.26	599724	8.58	567939	11.92	425122	13.93
OP93365-MS	148672	4.76	537539	5.81	290091	7.26	414294	8.58	404175	11.92	340583	13.93
OP93365-MSD	162826	4.76	580231	5.82	306639	7.26	430591	8.59	415640	11.93	353040	13.94

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: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E3M2866-CC2855	**Injection Date:**	04/28/16
Lab File ID:	3M60952.D	**Injection Time:**	23:26
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	386741	10.51	545876	13.50	905202	17.72	730395	22.32
Upper Limit [a]	773482	11.01	1091752	14.00	1810404	18.22	1460790	22.82
Lower Limit [b]	193371	10.01	272938	13.00	452601	17.22	365198	21.82

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP93453A-MB1	388646	10.51	478408	13.51	772354	17.72	629147	22.32
OP93453A-BS12	390669	10.51	490547	13.51	753020	17.72	584872	22.32
OP93453A-MS	375405	10.51	475671	13.51	728580	17.72	563155	22.32
OP93453A-MSD	382704	10.51	505316	13.51	745512	17.72	583633	22.32
JC19023-3	367661	10.51	471636	13.50	759999	17.72	590627	22.32
JC19138-2	380660	10.51	462479	13.50	729634	17.72	565177	22.32
ZZZZZZ	323964	10.51	414003	13.51	657723	17.72	500205	22.32
ZZZZZZ	363866	10.51	458738	13.51	748007	17.72	549856	22.32
ZZZZZZ	342360	10.51	443760	13.51	683268	17.72	518502	22.32
ZZZZZZ	350509	10.51	435307	13.51	689407	17.72	518878	22.32

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: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E4M2910-CC2881	**Injection Date:**	05/09/16
Lab File ID:	4M65170.D	**Injection Time:**	10:32
Instrument ID:	GCMS4M	**Method:**	SW846 8270D BY SIM

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	326495	10.68	574008	13.66	915613	17.84	829985	22.44
Upper Limit [a]	652990	11.18	1148016	14.16	1831226	18.34	1659970	22.94
Lower Limit [b]	163248	10.18	287004	13.16	457807	17.34	414993	21.94

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

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

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

Semivolatile Internal Standard Area Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E4M2912-CC2881	**Injection Date:**	05/10/16
Lab File ID:	4M65203.D	**Injection Time:**	13:17
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	403711	10.68	700129	13.66	1297021	17.84	1000770	22.42
Upper Limit [a]	807422	11.18	1400258	14.16	2594042	18.34	2001540	22.92
Lower Limit [b]	201856	10.18	350065	13.16	648511	17.34	500385	21.92

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
OP93718A-BS12	370195	10.68	612487	13.66	996588	17.84	776375	22.42
OP93478A-MB1	486150	10.68	782303	13.66	1235859	17.84	896494	22.42
OP93478A-MS	472752	10.68	725250	13.66	1218171	17.84	868938	22.42
OP93478A-MSD	607814	10.68	949306	13.66	1377618	17.84	1064820	22.44
OP93577A-MSD	540374	10.68	866528	13.66	1354470	17.84	989686	22.44
ZZZZZZ	396811	10.68	658882	13.66	1070664	17.85	735272	22.45
OP93745A-MB1	365446	10.68	603870	13.66	910592	17.84	732522	22.44
OP93745A-BS12	366419	10.68	579169	13.66	887749	17.84	722336	22.44
OP93745A-MS	377020	10.68	623858	13.66	912691	17.84	721024	22.44
OP93745A-MSD	368123	10.68	614335	13.66	906370	17.84	725256	22.44
JC19664-1	355172	10.68	561817	13.66	896535	17.84	690705	22.44
ZZZZZZ	357798	10.68	566071	13.66	894356	17.84	692513	22.44

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

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

Semivolatile Internal Standard Area Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	E5P1416-CC1382	**Injection Date:**	05/03/16
Lab File ID:	5P27902.D	**Injection Time:**	08:39
Instrument ID:	GCMS5P	**Method:**	SW846 8270D

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	745526	5.29	3093488	6.76	1850267	8.87	2967916	10.71	2857587	14.51	2737860	16.58
Upper Limit [a]	1491052	5.79	6186976	7.26	3700534	9.37	5935832	11.21	5715174	15.01	5475720	17.08
Lower Limit [b]	372763	4.79	1546744	6.26	925134	8.37	1483958	10.21	1428794	14.01	1368930	16.08

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
OP93478-MB1	880317	5.29	3457375	6.76	1972896	8.87	3062354	10.70	2754188	14.50	2534017	16.58
OP93478-BS1	855803	5.29	3414781	6.77	1959693	8.87	3086795	10.71	2900912	14.51	2563817	16.58
ZZZZZZ	786733	5.29	3159965	6.76	1845429	8.87	3071730	10.70	2960975	14.50	2808773	16.58
ZZZZZZ	713684	5.29	2970643	6.76	1747513	8.87	2823034	10.70	2664510	14.50	2532176	16.58
JC19023-2	769102	5.29	2984033	6.76	1659420	8.87	2660152	10.70	2334388	14.50	2096982	16.57
JC19023-4	746559	5.29	2942618	6.76	1652087	8.87	2643246	10.70	2336478	14.50	2153442	16.57
ZZZZZZ	710812	5.29	2790632	6.76	1548356	8.87	2386624	10.70	2158571	14.50	2144922	16.58
ZZZZZZ	692233	5.29	2758133	6.76	1556143	8.87	2477919	10.70	2259401	14.50	2079911	16.57
ZZZZZZ	751558	5.29	2974379	6.76	1670704	8.87	2693926	10.70	2446095	14.50	2265705	16.57
ZZZZZZ	737041	5.29	2858013	6.76	1580846	8.87	2550270	10.70	2327552	14.50	2141028	16.57
ZZZZZZ	833661	5.29	3303820	6.76	1853972	8.87	2861926	10.70	2391481	14.50	2309186	16.58
JC18964-19	854914	5.29	3274204	6.76	1850676	8.87	2814855	10.70	2455694	14.50	2601281	16.58
ZZZZZZ	688997	5.29	2728936	6.77	1594184	8.87	2452884	10.71	2194488	14.51	2212717	16.58
ZZZZZZ	695138	5.29	2700137	6.76	1523798	8.87	2389084	10.71	2129924	14.51	2093035	16.58
ZZZZZZ	815244	5.30	2976908	6.78	1733640	8.88	2828411	10.71	2629549	14.54	2983000	16.78
ZZZZZZ	691320	5.30	2803708	6.78	1613611	8.88	2550888	10.72	2285761	14.55	2384658	16.81

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: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	EM5245-CC5217	**Injection Date:**	04/29/16
Lab File ID:	M124000.D	**Injection Time:**	09:30
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	326169	4.62	1226596	5.74	775452	8.06	1340159	10.67	1493014	15.83	1484797	18.46
Upper Limit [a]	652338	5.12	2453192	6.24	1550904	8.56	2680318	11.17	2986028	16.33	2969594	18.96
Lower Limit [b]	163085	4.12	613298	5.24	387726	7.56	670080	10.17	746507	15.33	742399	17.96

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
OP93428-MB1	320814	4.63	1210167	5.74	740170	8.06	1242923	10.66	1340654	15.83	1256026	18.45
OP93428-BS1	329541	4.63	1198563	5.74	754971	8.06	1239812	10.67	1309595	15.83	1293234	18.46
ZZZZZZ	337790	4.62	1281183	5.74	721327	8.05	1219816	10.66	1251718	15.83	1193070	18.46
JC19090-1	384658	4.62	1460082	5.74	824083	8.05	1376776	10.66	1441086	15.82	1341030	18.45
ZZZZZZ	342973	4.62	1274400	5.74	732498	8.05	1232568	10.66	1319676	15.83	1251429	18.46
ZZZZZZ	375782	4.62	1397682	5.74	807144	8.06	1381191	10.66	1429507	15.83	1376722	18.45
OP93478-MB1	314463	4.62	1155290	5.74	671753	8.05	1174382	10.67	1217579	15.83	1233878	18.45
OP93478-BS1	313245	4.63	1163542	5.74	689085	8.06	1199923	10.67	1201687	15.83	1236162	18.45
ZZZZZZ	342414	4.62	1300584	5.74	745868	8.05	1321357	10.66	1315471	15.82	1297853	18.45
ZZZZZZ	320429	4.62	1168873	5.74	670314	8.05	1175875	10.66	1161391	15.83	1202566	18.47
ZZZZZZ	316625	4.62	1189407	5.74	676377	8.05	1197478	10.66	1138643	15.83	1178074	18.46
ZZZZZZ	372122	4.62	1352511	5.74	755860	8.06	1301708	10.67	1133985	15.83	1198448	18.46
ZZZZZZ	376361	4.62	1391068	5.74	788279	8.06	1389491	10.67	1288696	15.83	1310860	18.46
ZZZZZZ	354993	4.62	1311828	5.74	749425	8.06	1346921	10.67	1296265	15.83	1253418	18.46
ZZZZZZ	389293	4.62	1420893	5.74	801774	8.06	1400510	10.67	1311662	15.83	1284768	18.46
ZZZZZZ	367705	4.63	1359397	5.74	770190	8.06	1338538	10.67	1295545	15.83	1275949	18.46
ZZZZZZ	345518	4.63	1283309	5.74	738134	8.05	1289537	10.67	1269490	15.83	1254793	18.46
ZZZZZZ	381223	4.62	1385151	5.74	799795	8.05	1398721	10.67	1387450	15.84	1357838	18.46
ZZZZZZ	364256	4.62	1338387	5.74	752790	8.06	1324085	10.67	1271497	15.83	1203679	18.46
ZZZZZZ	335051	4.62	1234344	5.74	718612	8.06	1233823	10.67	1232956	15.83	1169183	18.46
ZZZZZZ	371271	4.63	1362143	5.74	823240	8.06	1356864	10.67	1404793	15.83	1301393	18.46
ZZZZZZ	337965	4.62	1247796	5.74	750320	8.06	1235470	10.67	1281071	15.83	1166557	18.46

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: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	EM5253-CC5217	**Injection Date:**	05/06/16
Lab File ID:	M124202.D	**Injection Time:**	08:57
Instrument ID:	GCMSM	**Method:**	SW846 8270D

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	374614	4.67	1375018	5.79	852140	8.13	1491099	10.75	1747820	15.94	1813666	18.57
Upper Limit [a]	749228	5.17	2750036	6.29	1704280	8.63	2982198	11.25	3495640	16.44	3627332	19.07
Lower Limit [b]	187307	4.17	687509	5.29	426070	7.63	745550	10.25	873910	15.44	906833	18.07

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	364697	4.66	1414112	5.79	875818	8.12	1529897	10.75	1614804	15.93	1571532	18.57
ZZZZZZ	400876	4.66	1630582	5.79	1059429	8.12	1888595	10.75	1855715	15.93	1629793	18.57
JC19348-2	357655	4.67	1397266	5.79	929933	8.12	1648661	10.75	1639136	15.94	1454235	18.57
ZZZZZZ	360839	4.67	1216882	5.82	793076	8.26	1103472	10.87	1136202	15.96	1111985	18.58
OP93671-MB1	305051	4.66	1252923	5.79	794301	8.13	1502172	10.75	1627295	15.93	1419572	18.57
OP93478-MB1	350369	4.67	1338640	5.79	822680	8.13	1411102	10.75	1501001	15.93	1398630	18.57
ZZZZZZ	354150	4.67	1418370	5.79	918544	8.13	1662637	10.75	1624937	15.94	1494423	18.57
ZZZZZZ	337131	4.67	1324997	5.79	880000	8.13	1581061	10.75	1486433	15.94	1353490	18.58
ZZZZZZ	309116	4.67	1237173	5.79	854378	8.13	1629401	10.75	1609101	15.94	1348517	18.57
JC19023-1	404573	4.67	1690215	5.79	1102875	8.13	2042732	10.75	1995643	15.94	1721818	18.58
OP93478-MS	333221	4.66	1308567	5.80	876022	8.13	1573430	10.76	1461305	15.94	1308997	18.58
OP93478-MSD	328426	4.67	1318490	5.80	895970	8.13	1582701	10.76	1427979	15.95	1314036	18.59

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: JC19023
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
JC19023-3	2P58712.D	33	23	79	63	64	86
OP93453-BS1	2P58693.D	39	29	87	68	73	87
OP93453-MB1	2P58692.D	31	21	72	62	59	79
OP93453-MS	2P58695.D	63	50	100	78	82	73
OP93453-MSD	2P58696.D	73	55	101	89	90	98

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%

Semivolatile Surrogate Recovery Summary

Job Number: JC19023
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
JC19023-1	M124228.D	68	71	75	49	64	66
JC19023-2	5P27908.D	72	72	76	77	80	90
JC19023-4	5P27909.D	80	80	72	32	80	89
OP93478-BS1	M124025.D	82	84	91	86	79	87
OP93478-BS1	5P27905.D	82	82	95	84	81	92
OP93478-MB1	M124024.D	83	83	85	87	82	84
OP93478-MB1	5P27904.D	80	81	88	86	83	93
OP93478-MB1	M124224.D	78	82	93	81	84	83
OP93478-MS	M124229.D	78	81	86	71	67	79
OP93478-MSD	M124230.D	90	90	87	79	72	83

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: JC19023
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
JC19023-3	3M60957.D	57	69	92
OP93453A-BS12	3M60954.D	57	67	87
OP93453A-MB1	3M60953.D	56	68	86
OP93453A-MS	3M60955.D	43	57	84
OP93453A-MSD	3M60956.D	63	71	98

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: JC19023
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
JC19023-1	4M65189.D	51	60	66
JC19023-2	4M65190.D	89	77	86
JC19023-4	4M65191.D	35	79	88
OP93478A-BS12	4M65188.D	115	101	103
OP93478A-MB1	4M65205.D	84	70	104
OP93478A-MS	4M65206.D	72	59	82
OP93478A-MSD	4M65207A.D	73	73	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: JC19023 **Sample:** E2P2547-ICC2547
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2P58365.D
Project: BMSMC, Building 5 Area, PR

Response Factor Report MS2P

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

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

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

Initial Calibration Summary

Job Number: JC19023 **Sample:** E2P2547-ICC2547
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2P58365.D
Project: BMSMC, Building 5 Area, PR

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

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

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

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

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

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

Initial Calibration Summary

Job Number: JC19023 **Sample:** E2P2547-ICC2547
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2P58365.D
Project: BMSMC, Building 5 Area, PR

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

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

Initial Calibration Verification

Job Number: JC19023 **Sample:** E2P2548-ICV2547
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2P58384.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

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

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	109	0.00	4.91
5	S	2-Fluorophenol	1.620	1.522	6.0	99	0.00	3.80
8	S	Phenol-d5	1.899	1.747	8.0	98	0.00	4.60
24	I	Naphthalene-d8	1.000	1.000	0.0	111	0.00	5.97
25	S	Nitrobenzene-d5	0.394	0.391	0.8	116	0.00	5.37
47	I	Acenaphthene-d10	1.000	1.000	0.0	105	0.00	7.41
51	S	2-Fluorobiphenyl	1.245	1.365	-9.6	121	0.00	6.86
		----------	AvgRF	CCRF	% Dev	----------		
69	I	Phenanthrene-d10	1.000	1.000	0.0	98	0.00	8.76
73	S	2,4,6-Tribromophenol	0.089	0.085	4.5	94	0.00	8.09
83	I	Chrysene-d12	1.000	1.000	0.0	91	0.00	12.13
85	S	Terphenyl-d14	0.805	0.870	-8.1	100	0.00	10.68
92	I	Perylene-d12	1.000	1.000	0.0	85	0.00	14.14

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

Initial Calibration Verification

Job Number: JC19023 **Sample:** E2P2548-ICV2547
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2P58385.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

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

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	92	0.00	4.92
4	t	N-Nitrosodimethylamine	1.075	1.016	5.5	81	-0.02	2.56
11	t	bis(2-Chloroethyl)ether	1.418	1.548	-9.2	103	0.00	4.70
14	t	1,3-Dichlorobenzene	1.613	1.691	-4.8	101	0.00	4.86
15	t	1,4-Dichlorobenzene	1.588	1.647	-3.7	102	0.00	4.93
17	t	1,2-Dichlorobenzene	1.467	1.526	-4.0	102	0.00	5.05
20	t	2,2'-oxybis(1-Chloropropa	0.413	0.394	4.6	95	0.00	5.15
22	t	n-Nitroso-di-n-propylamin	0.957	0.928	3.0	104	0.00	5.25
23	t	Hexachloroethane	0.482	0.480	0.4	97	0.00	5.33
24	I	Naphthalene-d8	1.000	1.000	0.0	88	0.00	5.97
26	t	Nitrobenzene	0.398	0.389	2.3	92	0.00	5.39
28	t	Isophorone	0.713	0.721	-1.1	94	0.00	5.59
32	t	bis(2-Chloroethoxy)methan	0.443	0.442	0.2	96	0.00	5.77
36	t	1,2,4-Trichlorobenzene	0.332	0.339	-2.1	96	0.00	5.92
38	t	Naphthalene	1.030	1.055	-2.4	100	0.00	5.99
42	t	Hexachlorobutadiene	0.164	0.172	-4.9	97	0.00	6.09
47	I	Acenaphthene-d10	1.000	1.000	0.0	85	0.00	7.41
48	t	Hexachlorocyclopentadiene	0.322	0.304	5.6	74	0.00	6.69
52	t	2-Chloronaphthalene	1.174	1.278	-8.9	99	0.00	6.96
55	t	Dimethylphthalate	1.275	1.307	-2.5	91	0.00	7.19
56	t	Acenaphthylene	1.911	1.888	1.2	87	0.00	7.30
57	t	2,6-Dinitrotoluene	0.270	0.279	-3.3	83	0.00	7.24
59	t	Acenaphthene	1.171	1.201	-2.6	91	0.00	7.44
		----------	AvgRF	CCRF	% Dev	----------		
63	t	2,4-Dinitrotoluene	0.354	0.339	4.2	78	0.00	7.57
65	t	Diethylphthalate	1.293	1.290	0.2	88	0.00	7.78
66	t	Fluorene	1.285	1.221	5.0	85	0.00	7.88
67	t	4-Chlorophenyl-phenylethe	0.562	0.538	4.3	87	0.00	7.88
69	I	Phenanthrene-d10	1.000	1.000	0.0	83	0.00	8.76
71	t	n-Nitrosodiphenylamine	0.542	0.551	-1.7	91	0.00	7.98
72	t	1,2-Diphenylhydrazine	0.871	0.846	2.9	87	0.00	8.02
74	t	4-Bromophenyl-phenylether	0.204	0.207	-1.5	88	0.00	8.32
75	t	Hexachlorobenzene	0.218	0.211	3.2	84	0.00	8.37
77	t	Phenanthrene	1.175	1.182	-0.6	90	0.00	8.79
78	t	Anthracene	1.165	1.146	1.6	86	0.00	8.84
80	t	Di-n-butylphthalate	1.458	1.426	2.2	82	0.00	9.42
81	t	Fluoranthene	1.276	1.260	1.3	81	0.00	10.15

Initial Calibration Verification

Job Number: JC19023 **Sample:** E2P2548-ICV2547
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2P58385.D
Project: BMSMC, Building 5 Area, PR

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

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

6.7.3

6

Initial Calibration Verification

Job Number: JC19023 **Sample:** E2P2548-ICV2547
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2P58386.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

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

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	100	0.00	4.91
2	t	1,4-Dioxane	0.735	0.634	13.7	83	0.00	2.26
6	t	Indene	2.246	2.335	-4.0	113	0.00	5.12
7	t	Cumene	3.547	3.280	7.5	92	0.00	4.24
13	t	Decane	2.186	1.991	8.9	97	0.00	4.78
18	t	Acetophenone	1.802	1.785	0.9	113	0.00	5.25
24	I	Naphthalene-d8	1.000	1.000	0.0	104	0.00	5.97
27	t	Quinoline	0.709	0.640	9.7	101	0.00	6.26
40	t	2,3-Dichloroaniline	0.369	0.279	24.4	87	0.00	6.79
41	t	Caprolactam	0.115	0.100	13.0	92	0.01	6.31
45	t	1-Methylnaphthalene	0.590	0.522	11.5	98	0.00	6.64
46	t	Dimethylnaphthalene	0.581	0.506	12.9	101	0.00	7.07
47	I	Acenaphthene-d10	1.000	1.000	0.0	97	0.00	7.41
53	t	Biphenyl	1.473	1.457	1.1	102	0.00	6.94
		----------	AvgRF	CCRF	% Dev	----------		
69	I	Phenanthrene-d10	1.000	1.000	0.0	93	0.00	8.76
82	t	Octadecane	0.514	0.477	7.2	90	0.00	8.66
83	I	Chrysene-d12	1.000	1.000	0.0	92	0.00	12.13
92	I	Perylene-d12	1.000	1.000	0.0	85	0.00	14.14
100	t	7,12-Dimethylbenz(a)anthr	0.566	0.539	4.8	78	0.00	13.64

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

Initial Calibration Verification

Job Number: JC19023 **Sample:** E2P2548-ICV2547
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2P58388.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

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

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

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
83 I	Chrysene-d12	1.000	1.000	0.0	127	0.00	12.13
89 t	3,3'-Dichlorobenzidine	0.432	0.379	12.3	110	0.00	12.12

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

Initial Calibration Verification

Job Number: JC19023 **Sample:** E2P2549-ICV2547
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2P58391.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

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

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	102	-0.02	4.89
9	t	Phenol	2.012	1.745	13.3	85	-0.01	4.60
12	t	2-Chlorophenol	1.468	1.387	5.5	100	-0.02	4.71
19	t	2-Methylphenol	1.259	1.217	3.3	108	-0.02	5.10
21	t	3&4-Methylphenol	1.314	1.257	4.3	109	-0.02	5.23
24	I	Naphthalene-d8	1.000	1.000	0.0	97	-0.02	5.95
29	t	2-Nitrophenol	0.197	0.198	-0.5	100	-0.02	5.63
30	t	2,4-Dimethylphenol	0.350	0.349	0.3	106	-0.02	5.67
31	t	Benzoic acid	0.274	0.290	-5.8	95	0.05	5.77
33	t	2,4-Dichlorophenol	0.301	0.299	0.7	101	-0.02	5.83
34	t	2,6-Dichlorophenol	0.284	0.285	-0.4	107	-0.02	6.02
43	t	4-Chloro-3-methylphenol	0.309	0.290	6.1	95	-0.02	6.40
47	I	Acenaphthene-d10	1.000	1.000	0.0	105	-0.02	7.40
49	t	2,4,6-Trichlorophenol	0.370	0.365	1.4	105	-0.02	6.77
50	t	2,4,5-Trichlorophenol	0.398	0.363	8.8	99	-0.02	6.79
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	50.000	57.451	-14.9	112	-0.02	7.44
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.162	0.165	-1.9	100	-0.02	7.49
64		2,3,4,6-Tetrachlorophenol	0.303	0.290	4.3	100	-0.02	7.67
69	I	Phenanthrene-d10	1.000	1.000	0.0	103	-0.02	8.74
70	t	4,6-Dinitro-2-methylpheno	0.117	0.132	-12.8	108	-0.02	7.90
76	t	Pentachlorophenol	0.147	0.146	0.7	96	-0.02	8.54

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

Initial Calibration Verification

Job Number: JC19023 **Sample:** E2P2549-ICV2547
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2P58392.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

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

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

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	109	-0.02	4.89
3	t	Pyridine	1.818	1.589	12.6	89	0.05	2.67
10		Aniline	2.311	2.060	10.9	102	-0.01	4.63
16	t	Benzyl alcohol	0.919	0.860	6.4	105	-0.01	5.01
24	I	Naphthalene-d8	1.000	1.000	0.0	114	-0.02	5.95
39	t	4-Chloroaniline	0.445	0.395	11.2	111	-0.02	6.01
44	t	2-Methylnaphthalene	0.576	0.496	13.9	104	-0.02	6.54
47	I	Acenaphthene-d10	1.000	1.000	0.0	112	-0.02	7.40
54	t	2-Nitroaniline	0.408	0.368	9.8	103	-0.02	7.02
58	t	3-Nitroaniline	0.357	0.330	7.6	104	-0.02	7.36
		----------	AvgRF	CCRF	% Dev	----------		
62	t	Dibenzofuran	1.547	1.417	8.4	110	-0.02	7.56
68	t	4-Nitroaniline	0.353	0.301	14.7	97	-0.02	7.87
69	I	Phenanthrene-d10	1.000	1.000	0.0	113	-0.02	8.74
79	t	Carbazole	1.096	0.997	9.0	109	-0.02	8.99

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

Initial Calibration Summary

Job Number: JC19023 **Sample:** E2P2557-ICC2557
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2P58525.D
Project: BMSMC, Building 5 Area, PR

```
                          Response Factor Report  MS2P

  Method       : C:\msdchem\1\METHODS\M2P2557eph.M (RTE Integrator)
  Title        : Semi Volatile Extractables by GC/MS
  Last Update  : Mon Apr 25 15:59:04 2016
  Response via : Initial Calibration

  Calibration Files
  2   =2p58532a.D  5   =2p58530a.D  25  =2p58526a.D  80  =2p58527a.D
  100 =2p58529a.D  50  =2p58525a.D  1   =2p58531a.D  10  =2p58528a.D

   Compound          2     5     25    80    100   50    1     10    Avg %RSD
   ---------------------------------------------------------------------------
102) I   1,4-Dichlorobenzene-d ----------------ISTD---------------------
103) Benzaldehyde 1.070 1.042 1.024 0.991 0.968 1.063 1.103 1.084 1.043   4.45

104) I   Naphthalene-d8       ----------------ISTD---------------------
105) Hydroquinone 0.342 0.348 0.377 0.357 0.371 0.376 0.353 0.381 0.363   4.12

106) I   Acenaphthene-d10     ----------------ISTD---------------------
107) Atrazine     0.154 0.157 0.159 0.148 0.149 0.155 0.145 0.167 0.154   4.64
108) 1,2,4,5-Tetr 0.494 0.496 0.497 0.479 0.474 0.498 0.491 0.547 0.497   4.46

109) I   Chrysene-d12         ----------------ISTD---------------------
110) Benzidine    0.283 0.266 0.127 0.279 0.360 0.072 0.151 0.224 0.220  43.65

111) I   Phenanthrene-d10     ----------------ISTD---------------------
112) 1-chloroocta 0.466 0.461 0.471 0.415 0.413 0.448 0.461 0.501 0.455   6.44
113) O-terphenyl  0.501 0.504 0.505 0.478 0.473 0.485 0.496 0.541 0.498   4.24

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

           M2P2557eph.M        Mon Apr 25 17:39:27 2016   RPT1
```

Initial Calibration Verification

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E2P2557-ICV2557
Lab FileID: 2P58534.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\2P2557\2p58534.D          Vial: 11
Acq On    : 25 Apr 2016   1:51 pm                   Operator: robertl1
Sample    : ICV2557-50                              Inst    : MS2P
Misc      : op92038,e2p2557                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\msdchem\1\METHODS\M2P2557eph.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Mon Apr 25 15:59:04 2016
Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
104 I	Naphthalene-d8a	1.000	1.000	0.0	99	-0.10	5.87
105	Hydroquinone	0.363	0.373	-2.8	98	-0.10	6.21

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2p58525a.D M2P2557eph.M Mon Apr 25 17:57:17 2016 RPT1

Initial Calibration Verification

Job Number: JC19023 **Sample:** E2P2557-ICV2557
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2P58536A.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\2P2557\2p58536a.D          Vial: 13
Acq On    : 25 Apr 2016   4:09 pm                    Operator: robertl1
Sample    : ICV2557-50                               Inst    : MS2P
Misc      : op92038,e2p2557                          Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\msdchem\1\METHODS\M2P2557eph.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Mon Apr 25 15:59:04 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.050  Min. Rel. Area :  50%  Max. R.T. Dev  0.50min
Max. RRF Dev :  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	103	-0.10	4.81
103	Benzaldehyde	1.043	1.109	-6.3	107	-0.10	4.45
106 I	Acenaphthene-d10a	1.000	1.000	0.0	85	-0.10	7.31
107	Atrazine	0.154	0.168	-9.1	92	-0.11	8.38

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2p58525a.D M2P2557eph.M Mon Apr 25 17:57:21 2016 RPT1

Initial Calibration Verification

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E2P2559-ICV2557
Lab FileID: 2P58540.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\2P2559\2p58540.D          Vial: 2
Acq On    : 25 Apr 2016   6:59 pm                   Operator: ashleyn
Sample    : icv2557-50                              Inst    : MS2P
Misc      : op92038,e2p2559                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M2P2557EPH.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Mon Apr 25 15:59:04 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
106	I	Acenaphthene-d10a	1.000	1.000	0.0	77	-0.11	7.31
108		1,2,4,5-Tetrachlorobenzen	0.497	0.602	-21.1	93	-0.11	6.59
109	I	Chrysene-d12a	1.000	1.000	0.0	74	-0.16	11.98
110		Benzidine	0.220	0.422	-91.8#	439#	-0.14	10.20

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2p58525a.D M2P2557EPH.M Mon Apr 25 19:21:58 2016 RPT1

Continuing Calibration Summary

Job Number: JC19023 **Sample:** E2P2566-CC2547
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2P58689.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\2P2566\2p58689.D Vial: 2
Acq On : 29 Apr 2016 9:31 am Operator: robertl1
Sample : CC2547-50 Inst : MS2P
Misc : op92038,e2p2566 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M2P2557.M (RTE Integrator)
Title : Semi Volatile Extractables by GC/MS
Last Update : Mon Apr 25 15:59:04 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	65	0.00	4.76
2	t	1,4-Dioxane	0.735	0.557	24.2#	47#	-0.14	2.06
3	t	Pyridine	1.818	1.397	23.2#	47#	-0.14	2.40
4	t	N-Nitrosodimethylamine	1.075	0.819	23.8#	46#	-0.12	2.37
5	S	2-Fluorophenol	1.620	1.435	11.4	56	0.00	3.67
6	t	Indene	2.246	2.094	6.8	67	0.00	4.97
7	t	Cumene	3.547	3.430	3.3	63	-0.03	4.08
8	S	Phenol-d5	1.899	1.624	14.5	55	0.04	4.50
9	t	Phenol	2.012	1.721	14.5	54	0.04	4.51
10		Aniline	2.311	1.776	23.2#	53	0.00	4.49
11	t	bis(2-Chloroethyl)ether	1.418	1.166	17.8	55	0.00	4.55
12	t	2-Chlorophenol	1.468	1.344	8.4	62	0.01	4.59
13	t	Decane	2.186	1.987	9.1	63	0.00	4.62
14	t	1,3-Dichlorobenzene	1.613	1.521	5.7	65	0.00	4.71
15	t	1,4-Dichlorobenzene	1.588	1.492	6.0	65	0.00	4.77
16	t	Benzyl alcohol	0.919	0.817	11.1	60	0.02	4.89
17	t	1,2-Dichlorobenzene	1.467	1.384	5.7	66	0.00	4.90
18	t	Acetophenone	1.802	1.673	7.2	69	0.02	5.10
19	t	2-Methylphenol	1.259	1.074	14.7	61	0.04	5.00
20	t	2,2'-oxybis(1-Chloropropa	0.413	0.358	13.3	62	0.00	4.99
21	t	3&4-Methylphenol	1.314	1.141	13.2	63	0.05	5.13
22	t	n-Nitroso-di-n-propylamin	0.957	0.857	10.4	68	0.02	5.11
23	t	Hexachloroethane	0.482	0.486	-0.8	70	0.00	5.18
24	I	Naphthalene-d8	1.000	1.000	0.0	65	0.00	5.82
25	S	Nitrobenzene-d5	0.394	0.377	4.3	65	-0.01	5.22
26	t	Nitrobenzene	0.398	0.367	7.8	64	0.00	5.25
27	t	Quinoline	0.709	0.644	9.2	63	0.02	6.12
28	t	Isophorone	0.713	0.624	12.5	60	0.00	5.44
29	t	2-Nitrophenol	0.197	0.197	0.0	66	0.00	5.51
30	t	2,4-Dimethylphenol	0.350	0.325	7.1	66	0.02	5.56
31	t	Benzoic acid	0.274	0.260	5.1	57	0.12	5.69
32	t	bis(2-Chloroethoxy)methan	0.443	0.378	14.7	60	0.00	5.62
33	t	2,4-Dichlorophenol	0.301	0.298	1.0	67	0.02	5.72
34	t	2,6-Dichlorophenol	0.284	0.284	0.0	71	0.02	5.90
35		1,3,5-Trichlorobenzene	0.346	0.339	2.0	68	0.00	5.51
36	t	1,2,4-Trichlorobenzene	0.332	0.315	5.1	66	0.00	5.77
37		1,2,3-Trichlorobenzene	0.309	0.296	4.2	67	0.00	5.95
38	t	Naphthalene	1.030	0.960	6.8	67	0.00	5.83
39	t	4-Chloroaniline	0.445	0.393	11.7	63	0.02	5.89
40	t	2,3-Dichloroaniline	0.369	0.357	3.3	69	0.03	6.64
41	t	Caprolactam	0.115	0.106	7.8	61	0.07	6.20

Continuing Calibration Summary

Job Number: JC19023 **Sample:** E2P2566-CC2547
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2P58689.D
Project: BMSMC, Building 5 Area, PR

42	t	Hexachlorobutadiene	0.164	0.177	-7.9	73	0.00	5.94
43	t	4-Chloro-3-methylphenol	0.309	0.306	1.0	67	0.06	6.31
44	t	2-Methylnaphthalene	0.576	0.558	3.1	67	0.01	6.41
45	t	1-Methylnaphthalene	0.590	0.569	3.6	66	0.02	6.49
46	t	Dimethylnaphthalene	0.581	0.567	2.4	70	0.03	6.92
47	I	Acenaphthene-d10	1.000	1.000	0.0	68	0.00	7.26
48	t	Hexachlorocyclopentadiene	0.322	0.334	-3.7	65	-0.02	6.53
49	t	2,4,6-Trichlorophenol	0.370	0.367	0.8	68	0.00	6.65
50	t	2,4,5-Trichlorophenol	0.398	0.391	1.8	68	0.00	6.69
51	S	2-Fluorobiphenyl	1.245	1.206	3.1	69	0.00	6.71
52	t	2-Chloronaphthalene	1.174	1.080	8.0	67	0.00	6.81
53	t	Biphenyl	1.473	1.397	5.2	68	0.00	6.79
54	t	2-Nitroaniline	0.408	0.417	-2.2	71	0.00	6.90
55	t	Dimethylphthalate	1.275	1.203	5.6	67	0.00	7.05
56	t	Acenaphthylene	1.911	1.839	3.8	68	0.00	7.15
57	t	2,6-Dinitrotoluene	0.270	0.282	-4.4	68	0.01	7.10
58	t	3-Nitroaniline	0.357	0.314	12.0	60	0.02	7.24
59	t	Acenaphthene	1.171	1.130	3.5	69	0.00	7.29
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	100.000	97.930	2.1	65	0.02	7.33
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.162	0.208	-28.4#	81	0.07	7.42
62	t	Dibenzofuran	1.547	1.492	3.6	70	0.00	7.43
63	t	2,4-Dinitrotoluene	0.354	0.385	-8.8	71	0.02	7.43
64		2,3,4,6-Tetrachlorophenol	0.303	0.305	-0.7	68	0.02	7.55
65	t	Diethylphthalate	1.293	1.308	-1.2	72	0.01	7.63
66	t	Fluorene	1.285	1.286	-0.1	72	0.00	7.72
67	t	4-Chlorophenyl-phenylethe	0.562	0.563	-0.2	73	0.00	7.72
68	t	4-Nitroaniline	0.353	0.271	23.2#	53	0.03	7.75
69	I	Phenanthrene-d10	1.000	1.000	0.0	69	0.00	8.59
70	t	4,6-Dinitro-2-methylpheno	0.117	0.125	-6.8	68	0.02	7.78
71	t	n-Nitrosodiphenylamine	0.542	0.511	5.7	70	0.00	7.83
72	t	1,2-Diphenylhydrazine	0.871	0.777	10.8	67	0.00	7.86
73	S	2,4,6-Tribromophenol	0.089	0.095	-6.7	74	0.00	7.94
74	t	4-Bromophenyl-phenylether	0.204	0.203	0.5	71	0.00	8.15
75	t	Hexachlorobenzene	0.218	0.212	2.8	70	0.00	8.21
76	t	Pentachlorophenol	0.147	0.132	10.2	58	0.01	8.41
77	t	Phenanthrene	1.175	1.117	4.9	70	0.00	8.61
78	t	Anthracene	1.165	1.138	2.3	71	0.00	8.66
79	t	Carbazole	1.096	1.016	7.3	67	0.01	8.84
80	t	Di-n-butylphthalate	1.458	1.481	-1.6	70	0.00	9.23
81	t	Fluoranthene	1.276	1.285	-0.7	69	0.00	9.96
82	t	Octadecane	0.514	0.583	-13.4	81	0.00	8.48
83	I	Chrysene-d12	1.000	1.000	0.0	70	0.00	11.93
84	t	Pyrene	1.381	1.329	3.8	69	-0.02	10.24
85	S	Terphenyl-d14	0.805	0.803	0.2	71	-0.03	10.47
86	t	Butylbenzylphthalate	0.677	0.693	-2.4	69	-0.02	11.18
87		Butyl stearate	0.579	0.568	1.9	65	-0.02	11.32
88	t	Benzo[a]anthracene	1.276	1.174	8.0	66	0.00	11.91
89	t	3,3'-Dichlorobenzidine	0.432	0.362	16.2	58	0.00	11.91
90	t	Chrysene	1.154	1.041	9.8	66	0.00	11.97
91	t	bis(2-Ethylhexyl)phthalat	0.847	0.858	-1.3	69	-0.01	12.06
92	I	Perylene-d12	1.000	1.000	0.0	60	0.00	13.94
93	t	Di-n-octylphthalate	1.819	2.028	-11.5	63	-0.03	13.01

Continuing Calibration Summary

Job Number: JC19023 **Sample:** E2P2566-CC2547
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2P58689.D
Project: BMSMC, Building 5 Area, PR

94	t	Benzo[b]fluoranthene	1.390	1.367	1.7	59	0.00	13.44
95	t	Benzo[k]fluoranthene	1.214	1.174	3.3	61	0.00	13.48
96	t	Benzo[a]pyrene	1.179	1.138	3.5	59	0.00	13.86
97	t	Indeno[1,2,3-cd]pyrene	1.020	0.988	3.1	58	-0.04	15.41
98	t	Dibenz(a,h)acridine	0.930	0.847	8.9	55	-0.03	15.08
99	t	Dibenz[a,h]anthracene	1.021	0.983	3.7	57	-0.04	15.46
100	t	7,12-Dimethylbenz(a)anthr	0.566	0.575	-1.6	59	0.00	13.43
101	t	Benzo[g,h,i]perylene	1.078	1.006	6.7	56	-0.04	15.83

(#) = Out of Range SPCC's out = 0 CCC's out = 0
2p58525a.D M2P2557.M Fri Apr 29 12:28:29 2016 RPT1

Continuing Calibration Summary

Job Number: JC19023 **Sample:** E2P2566-CC2557
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 2P58690.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\2P2566\2p58690.D          Vial: 3
Acq On    : 29 Apr 2016  10:05 am                   Operator: robertl1
Sample    : CC2557-50                               Inst    : MS2P
Misc      : op92038,e2p2566                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M2P2557.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Mon Apr 25 15:59:04 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102	I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	95	0.00	4.76
103		Benzaldehyde	1.043	1.060	-1.6	95	-0.01	4.39
104	I	Naphthalene-d8a	1.000	1.000	0.0	93	0.00	5.81
105		Hydroquinone	0.363	0.364	-0.3	90	0.04	6.19
106	I	Acenaphthene-d10a	1.000	1.000	0.0	83	0.00	7.26
107		Atrazine	0.154	0.180	-16.9	97	0.00	8.32
108		1,2,4,5-Tetrachlorobenzen	0.497	0.596	-19.9	100	0.00	6.55
109	I	Chrysene-d12a	1.000	1.000	0.0	80	-0.01	11.92
110		Benzidine	0.220	0.182	17.3	202#	-0.02	10.14

```
(#) = Out of Range              SPCC's out = 0  CCC's out = 0
 2p58525a.D M2P2557.M        Fri Apr 29 12:28:31 2016   RPT1
```

Initial Calibration Summary

Job Number: JC19023 **Sample:** E3M2855-ICC2855
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3M60763A.D
Project: BMSMC, Building 5 Area, PR

```
                        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: JC19023 **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: JC19023
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: JC19023 **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: JC19023
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: JC19023 **Sample:** E3M2866-CC2855
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3M60952.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E3M2866\3m60952.D          Vial: 2
Acq On    : 28 Apr 2016  11:26 pm                    Operator: juliusj
Sample    : cc2855-1.0                               Inst    : MS3M
Misc      : op93271a,e3m2866                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M3M2855SIM.M (RTE Integrator)
Title        : Semi Volatile Extractables by GC/MS
Last Update  : Thu Apr 28 10:59:02 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	96	-0.11	10.51
2	t	1,4-dioxane	0.207	0.185	10.6	86	-0.03	2.22
3	S	2-Fluorophenol	0.500	0.461	7.8	87	-0.09	4.41
4	S	Phenol-d5	0.828	0.743	10.3	84	-0.07	6.02
5		Phenol	0.893	0.776	13.1	81	-0.07	6.04
6	t	bis(2-Chloroethyl)ether	0.675	0.607	10.1	83	-0.06	6.18
7	S	Nitrobenzene-d5	0.770	0.619	19.6	74	-0.09	7.62
8	t	Nitrobenzene	0.836	0.710	15.1	80	-0.11	7.64
9	t	Naphthalene	2.223	1.978	11.0	87	-0.10	9.02
10	t	Hexachlorobutadiene	0.387	0.357	7.8	86	-0.10	9.30
11	t	2-Methylnaphthalene	1.158	1.198	-3.5	96	-0.11	10.39
12	t	1-Methylnaphthalene	1.559	1.160	25.6#	80	-0.11	10.57
13		Hexachlorocyclopentadiene	0.308	0.320	-3.9	87	-0.09	10.73
14	I	Fluorene-d10	1.000	1.000	0.0	87	-0.14	13.50
15	S	2-Fluorobiphenyl	1.099	1.034	5.9	81	-0.13	11.18
16	t	Acenaphthylene	1.385	1.468	-6.0	83	-0.13	12.16
17	t	Acenaphthene	0.925	0.933	-0.9	83	-0.13	12.52
		----------	True	Calc.	% Drift		----------	
18	t	4,6-dinitro-2-methylpheno	5.000	5.040	-0.8	88	-0.12	13.73
		----------	AvgRF	CCRF	% Dev		----------	
19	t	Fluorene	1.110	1.123	-1.2	82	-0.12	13.56
20	S	2,4,6-Tribromophenol	0.125	0.122	2.4	81	-0.12	14.05
21	I	Fluoranthene-d10	1.000	1.000	0.0	84	-0.14	17.72
22	t	Hexachlorobenzene	0.189	0.185	2.1	82	-0.14	14.66
		----------	True	Calc.	% Drift		----------	
23	t	Pentachlorophenol	5.000	4.631	7.4	75	-0.14	15.07
		----------	AvgRF	CCRF	% Dev		----------	
24	t	Phenanthrene	0.980	0.934	4.7	79	-0.14	15.47
25	t	Anthracene	0.865	0.881	-1.8	79	-0.14	15.58
26	t	Fluoranthene	1.231	1.060	13.9	77	-0.14	17.75
27	t	Pyrene	1.144	1.071	6.4	76	-0.13	18.15
28	S	Terphenyl-d14	0.580	0.557	4.0	83	-0.13	18.53
29	t	Benzo[a]anthracene	1.097	0.947	13.7	74	-0.13	20.23
30	t	Chrysene	1.051	0.944	10.2	74	-0.15	20.28
31	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	84	-0.13	22.32

Continuing Calibration Summary

Job Number: JC19023 **Sample:** E3M2866-CC2855
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 3M60952.D
Project: BMSMC, Building 5 Area, PR

32	t	Benzo[b]fluoranthene	1.331	1.256	5.6	78	-0.11	21.90
33	t	Benzo[k]fluoranthene	1.232	1.075	12.7	73	-0.13	21.93
34	t	Benzo[a]pyrene	1.240	1.104	11.0	76	-0.11	22.35
35	t	Indeno[1,2,3-cd]pyrene	1.260	1.225	2.8	77	-0.14	23.82
36	t	Dibenz[a,h]anthracene	1.039	0.877	15.6	69	-0.14	23.88
37	t	Benzo[g,h,i]perylene	1.095	1.049	4.2	77	-0.16	24.20

(#) = Out of Range SPCC's out = 0 CCC's out = 0
3m60763a.D M3M2855SIM.M Mon May 02 12:27:45 2016 RPT1

Initial Calibration Summary

Job Number: JC19023 **Sample:** E4M2881-ICC2881
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4M64724.D
Project: BMSMC, Building 5 Area, PR

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: JC19023 **Sample:** E4M2881-ICC2881
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4M64724.D
Project: BMSMC, Building 5 Area, PR

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

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

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

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

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

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

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

6.7.19

6

Initial Calibration Verification

Job Number: JC19023
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: JC19023 **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: JC19023 **Sample:** E4M2881-ICV2881
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4M64733.D
Project: BMSMC, Building 5 Area, PR

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: JC19023
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: JC19023 **Sample:** E4M2910-CC2881
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4M65170.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E4M2910\4m65170.D          Vial: 2
Acq On    :  9 May 2016  10:32 am                    Operator: linseyk
Sample    : cc2881-1                                 Inst    : GCMS4M
Misc      : op93541a,e4m2910                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M4M2881SIM.M (RTE Integrator)
Title        : Semi Volatile  GC/MS,zb-5 15m x .25mm x .50um
Last Update  : Sat Apr 23 14:44:32 2016
Response via : Multiple Level Calibration

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

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

Continuing Calibration Summary

Job Number: JC19023 **Sample:** E4M2910-CC2881
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4M65170.D
Project: BMSMC, Building 5 Area, PR

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

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

Continuing Calibration Summary

Job Number: JC19023 **Sample:** E4M2912-CC2881
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4M65203.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E4M2912\4m65203.D          Vial: 2
Acq On    : 10 May 2016   1:17 pm                    Operator: linseyk
Sample    : cc2881-1                                 Inst    : GCMS4M
Misc      : op93478a,e4m2912                        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	129	-0.02	10.68
2	S	2-Fluorophenol	0.524	0.515	1.7	119	-0.03	4.69
3	S	Phenol-d5	0.881	0.897	-1.8	123	-0.02	6.29
4	t	Phenol	0.902	0.943	-4.5	124	-0.02	6.30
5	t	bis(2-Chloroethyl)ether	0.680	0.703	-3.4	124	-0.02	6.38
6	S	Nitrobenzene-d5	0.790	0.857	-8.5	132	-0.04	7.81
7	t	Naphthalene	2.251	2.252	-0.0	123	-0.02	9.20
8	t	Hexachlorobutadiene	0.556	0.584	-5.0	128	-0.03	9.49
9	t	2-Methylnaphthalene	0.979	1.012	-3.4	134	-0.02	10.56
		----------	True	Calc.	% Drift	----------		
10	t	Hexachlorocyclopentadiene	2.000	1.819	9.1	124	-0.02	10.92
		----------	AvgRF	CCRF	% Dev	----------		
11	S	2-Fluorobiphenyl	1.155	1.052	8.9	124	-0.04	11.32
12	I	Fluorene-d10	1.000	1.000	0.0	122	-0.02	13.66
13	t	Acenaphthylene	0.917	0.926	-1.0	124	-0.04	12.30
14	t	Acenaphthene	0.590	0.570	3.4	119	-0.04	12.66
15	t	Dibenzofuran	0.879	0.911	-3.6	116	-0.02	13.04
16	t	Fluorene	1.067	1.150	-7.8	123	-0.02	13.70
17	S	2,4,6-Tribromophenol	0.213	0.278	-30.5#	142	-0.02	14.21
18	t	Hexachlorobenzene	0.418	0.459	-9.8	132	-0.02	14.81
19	t	Pentachlorophenol	0.171	0.246	-43.9#	153	-0.02	15.24
20	t	Phenanthrene	1.438	1.627	-13.1	136	-0.03	15.60
21	t	Anthracene	1.362	1.630	-19.7	137	-0.02	15.71
22	I	Fluoranthene-d10	1.000	1.000	0.0	145	-0.03	17.84
23	t	Fluoranthene	1.080	0.995	7.9	141	-0.05	17.85
24	t	Pyrene	1.065	1.113	-4.5	149	-0.05	18.25
25	S	Terphenyl-d14	0.540	0.521	3.5	139	-0.05	18.63
26	t	Benzo[a]anthracene	0.987	1.072	-8.6	156	-0.06	20.34
27	t	Chrysene	0.966	1.001	-3.6	151	-0.05	20.40
28	I	Benzo(a)pyrene-d12	1.000	1.000	0.0	150	0.00	22.42
29	t	Benzo[b]fluoranthene	1.439	1.415	1.7	142	0.02	22.01
30	t	Benzo[k]fluoranthene	1.205	1.182	1.9	152	-0.05	22.04
31	t	Benzo[a]pyrene	1.193	1.212	-1.6	149	0.00	22.45
32	t	Indeno[1,2,3-cd]pyrene	1.492	1.494	-0.1	149	0.00	23.96
33	t	Dibenz[a,h]anthracene	1.201	1.198	0.2	160	0.00	24.01
34	t	Benzo[g,h,i]perylene	1.260	1.286	-2.1	152	0.01	24.35

Continuing Calibration Summary

Job Number: JC19023 **Sample:** E4M2912-CC2881
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 4M65203.D
Project: BMSMC, Building 5 Area, PR

35	I	1-Methylnaphthalene-d10a	1.000	1.000	0.0	129	-0.02	10.68
36	t	1,4-Dioxane	0.260	0.312	-20.0	162	-0.05	2.42
37	t	1-Methylnaphthalene	0.935	0.891	4.7	127	-0.02	10.75
38	I	Fluorene-d10a	1.000	1.000	0.0	122	-0.02	13.66
		----------	True	Calc.	% Drift	----------		
39	t	4,6-dinitro-2-methylpheno	5.000	5.451	-9.0	136	-0.02	13.90
		----------	AvgRF	CCRF	% Dev	----------		
40	t	1,2-Diphenylhydrazine	0.947	1.235	-30.4#	137	-0.02	14.06
41	t	n-nitrosodiphenylamine	0.702	0.896	-27.6#	138	-0.02	14.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4m64724.D M4M2881SIM.M Tue May 10 14:57:46 2016 MANAGER

6.7.24

6

Initial Calibration Summary

Job Number: JC19023 **Sample:** E5P1382-ICC1382
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 5P27321.D
Project: BMSMC, Building 5 Area, PR

Response Factor Report MS5P

Method : C:\MSDCHEM\1\METHODS\M5P1382.M (RTE Integrator)
Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
Last Update : Mon Apr 11 18:53:32 2016
Response via : Initial Calibration

Calibration Files
2 =5p27325.D 5 =5p27324.D 25 =5p27322.D 80 =5p27320.D
100 =5p27319.D 50 =5p27321.D 1 =5p27326.D 10 =5p27323.D

Compound	2	5	25	80	100	50	1	10	Avg	%RSD
1) I 1,4-Dichlorobenzene-d					ISTD					
2) 1,4-Dioxane	0.489	0.492	0.458	0.446	0.419	0.450	0.540	0.458	0.469	7.88
3) Pyridine	0.943	1.037	1.058	1.065	1.016	1.062	1.002	1.078	1.033	4.32
4) N-Nitrosodim	0.550	0.572	0.604	0.612	0.585	0.599	0.502	0.607	0.579	6.44
5) 2-Fluorophen	1.189	1.279	1.225	1.218	1.204	1.234	1.204	1.255	1.226	2.41
6) Indene	2.299	2.422	2.178	1.990	1.978	2.079	2.282	2.280	2.189	7.32
7) Cumene	3.138	3.119	2.983	2.707	2.628	2.798	3.152	3.088	2.952	7.14
8) Phenol-d5	1.395	1.441	1.415	1.374	1.390	1.390	1.275	1.461	1.393	3.98
9) Phenol	1.482	1.506	1.444	1.397	1.400	1.406	1.382	1.503	1.440	3.52
10) Aniline	1.829	1.799	1.462	1.315	1.280	1.361	1.807	1.632	1.561	14.99
11) bis(2-Chloro	1.123	1.083	1.054	1.012	1.019	1.049	1.109	1.099	1.069	3.88
12) 2-Chlorophen	1.423	1.486	1.395	1.321	1.312	1.340	1.408	1.405	1.386	4.23
13) Decane	0.995	0.975	0.912	0.846	0.829	0.876	0.967	0.941	0.918	6.77
14) 1,3-Dichloro	1.622	1.662	1.536	1.425	1.402	1.492	1.596	1.572	1.538	6.02
15) 1,4-Dichloro	1.663	1.667	1.543	1.435	1.400	1.474	1.644	1.585	1.551	6.80
16) Benzyl alcoh	0.792	0.832	0.806	0.771	0.775	0.796	0.776	0.803	0.794	2.55
17) 1,2-Dichloro	1.561	1.591	1.443	1.351	1.318	1.391	1.617	1.523	1.474	7.74
18) Acetophenone	1.883	1.885	1.670	1.538	1.518	1.592	1.870	1.795	1.719	9.20
19) 2-Methylphen	1.017	1.157	1.084	0.984	0.990	1.038	1.044	1.130	1.056	5.99
20) 2,2'-oxybis(	1.289	1.288	1.187	1.177	1.188	1.191	1.289	1.214	1.228	4.19
21) 3&4-Methylph	1.156	1.183	1.156	1.063	1.051	1.107	1.088	1.177	1.123	4.63
22) n-Nitroso-di	0.800	0.812	0.727	0.717	0.731	0.713	0.816	0.805	0.765	6.09
23) Hexachloroet	0.499	0.530	0.511	0.479	0.468	0.496	0.501	0.515	0.500	3.97
24) I Naphthalene-d8					ISTD					
25) Nitrobenzene	0.300	0.323	0.307	0.299	0.296	0.301	0.288	0.313	0.304	3.56
26) Nitrobenzene	0.319	0.319	0.300	0.288	0.283	0.292	0.279	0.314	0.299	5.42
27) Quinoline	0.694	0.728	0.705	0.689	0.681	0.691	0.699	0.724	0.701	2.41
28) Isophorone	0.533	0.557	0.535	0.501	0.489	0.516	0.505	0.547	0.523	4.58
29) 2-Nitropheno	0.177	0.195	0.200	0.189	0.180	0.193	0.173	0.195	0.188	5.17
30) 2,4-Dimethyl	0.277	0.288	0.298	0.316	0.306	0.310	0.275	0.285	0.294	5.24
31) Benzoic acid		0.183	0.248	0.277	0.264	0.263		0.210	0.241	15.20
32) bis(2-Chloro	0.345	0.365	0.342	0.328	0.318	0.333	0.343	0.358	0.342	4.52
33) 2,4-Dichloro	0.273	0.306	0.294	0.280	0.271	0.287	0.272	0.298	0.285	4.67
34) 2,6-Dichloro	0.275	0.300	0.284	0.266	0.260	0.273	0.283	0.301	0.280	5.27
35) 1,3,5-Trichl	0.349	0.365	0.331	0.294	0.274	0.310	0.355	0.348	0.328	9.84
36) 1,2,4-Trichl	0.334	0.352	0.326	0.301	0.284	0.309	0.321	0.336	0.321	6.72
37) 1,2,3-Trichl	0.332	0.350	0.310	0.292	0.279	0.300	0.337	0.327	0.316	7.74
38) Naphthalene	1.072	1.111	1.016	0.919	0.878	0.965	1.094	1.053	1.014	8.41
39) 4-Chloroanil	0.447	0.474	0.429	0.375	0.360	0.404	0.449	0.457	0.424	9.60
40) 2,3-Dichloro	0.372	0.381	0.359	0.332	0.322	0.344	0.361	0.369	0.355	5.81
41) Caprolactam	0.098	0.113	0.121	0.123	0.123	0.120	0.096	0.118	0.114	9.73
42) Hexachlorobu	0.161	0.182	0.164	0.157	0.145	0.160	0.182	0.169	0.165	7.57
43) 4-Chloro-3-m	0.284	0.329	0.312	0.299	0.296	0.303	0.303	0.310	0.304	4.33
44) 2-Methylnaph	0.616	0.631	0.594	0.533	0.516	0.564	0.608	0.614	0.585	7.17
45) 1-Methylnaph	0.652	0.651	0.615	0.557	0.535	0.580	0.628	0.638	0.607	7.33

Initial Calibration Summary

Job Number: JC19023 **Sample:** E5P1382-ICC1382
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 5P27321.D
Project: BMSMC, Building 5 Area, PR

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46) Dimethylnaph 0.669 0.679 0.644 0.594 0.577 0.614 0.659 0.655 0.637   5.83

47) I   Acenaphthene-d10      ----------------ISTD---------------------
48) Hexachlorocy 0.178 0.235 0.279 0.275 0.258 0.279       0.250 0.251  14.32
49) 2,4,6-Trichl 0.330 0.351 0.356 0.329 0.316 0.343 0.330 0.372 0.341   5.32
50) 2,4,5-Trichl 0.346 0.392 0.378 0.375 0.354 0.376 0.342 0.379 0.368   4.93
51) 2-Fluorobiph 1.360 1.378 1.290 1.173 1.122 1.219 1.314 1.331 1.274   7.24
52) 2-Chloronaph 1.198 1.229 1.135 1.023 0.986 1.083 1.181 1.182 1.127   7.78
53) Biphenyl     1.590 1.568 1.468 1.311 1.238 1.399 1.545 1.559 1.460   8.99
54) 2-Nitroanili 0.267 0.294 0.298 0.296 0.287 0.292 0.239 0.294 0.283   7.25
55) Dimethylphth 1.397 1.446 1.350 1.252 1.190 1.304 1.374 1.375 1.336   6.22
56) Acenaphthyle 1.869 1.888 1.843 1.671 1.587 1.756 1.800 1.915 1.791   6.37
57) 2,6-Dinitrot 0.230 0.282 0.292 0.299 0.287 0.297 0.232 0.280 0.275  10.13
58) 3-Nitroanili 0.267 0.327 0.346 0.343 0.337 0.343 0.254 0.343 0.320  11.71
59) Acenaphthene 1.206 1.252 1.165 1.036 0.981 1.092 1.228 1.202 1.145   8.56
60) 2,4-Dinitrop 0.051 0.087 0.150 0.185 0.176 0.171       0.115 0.134  37.91
         ----- Quadratic regression -----                Coefficient =  0.9980
              Response Ratio = -0.02660 + 0.18358 *A + 0.00025 *A^2

61) 4-Nitropheno 0.123 0.161 0.173 0.178 0.170 0.171       0.161 0.162  11.34
62) Dibenzofuran 1.717 1.723 1.572 1.387 1.278 1.461 1.677 1.658 1.559  10.68
63) 2,4-Dinitrot 0.311 0.398 0.412 0.380 0.357 0.398 0.273 0.410 0.368  13.81
64) 2,3,4,6-Tetr 0.260 0.298 0.308 0.302 0.288 0.303 0.256 0.306 0.290   7.17
65) Diethylphtha 1.427 1.471 1.372 1.303 1.225 1.327 1.344 1.449 1.365   6.02
66) Fluorene     1.339 1.418 1.326 1.188 1.111 1.239 1.301 1.355 1.285   7.75
67) 4-Chlorophen 0.654 0.662 0.598 0.553 0.522 0.570 0.662 0.620 0.605   8.83
68) 4-Nitroanili 0.303 0.338 0.353 0.342 0.328 0.334 0.233 0.355 0.323  12.31

69) I   Phenanthrene-d10      ----------------ISTD---------------------
70) 4,6-Dinitro-       0.095 0.130 0.149 0.140 0.143       0.110 0.128  16.64
71) n-Nitrosodip 0.609 0.618 0.584 0.540 0.503 0.569 0.591 0.599 0.577   6.68
72) 1,2-Diphenyl 0.627 0.637 0.608 0.563 0.537 0.595 0.582 0.634 0.598   5.99
73) 2,4,6-Tribro 0.084 0.091 0.102 0.108 0.099 0.107 0.086 0.094 0.097   9.48
74) 4-Bromopheny 0.231 0.233 0.221 0.214 0.194 0.219 0.231 0.229 0.222   5.81
75) Hexachlorobe 0.233 0.237 0.230 0.221 0.204 0.228 0.221 0.226 0.225   4.42
76) Pentachlorop 0.111 0.137 0.154 0.157 0.145 0.160 0.090 0.144 0.137  17.89
77) Phenanthrene 1.210 1.228 1.121 1.010 0.948 1.077 1.220 1.174 1.123   9.27
78) Anthracene   1.200 1.213 1.145 1.039 0.970 1.089 1.181 1.196 1.129   7.82
79) Carbazole    1.113 1.159 1.073 0.991 0.933 1.048 1.069 1.117 1.063   6.83
80) Di-n-butylph 1.336 1.482 1.426 1.265 1.187 1.368 1.244 1.469 1.347   8.07
81) Fluoranthene 1.218 1.266 1.186 1.077 1.010 1.142 1.168 1.222 1.161   7.21
82) Octadecane   0.377 0.400 0.383 0.348 0.334 0.371 0.359 0.392 0.370   5.99

83) I   Chrysene-d12          ----------------ISTD---------------------
84) Pyrene       1.287 1.332 1.259 1.150 1.084 1.186 1.234 1.319 1.231   7.00
85) Terphenyl-d1 0.830 0.834 0.825 0.772 0.731 0.797 0.802 0.839 0.804   4.62
86) Butylbenzylp 0.569 0.621 0.649 0.605 0.582 0.633 0.529 0.645 0.604   6.91
87) Butyl steara 0.223 0.262 0.264 0.250 0.245 0.256 0.204 0.263 0.246   8.85
88) Benzo[a]anth 1.146 1.168 1.121 1.020 0.958 1.069 1.208 1.159 1.106   7.60
89) 3,3'-Dichlor 0.376 0.420 0.444 0.401 0.373 0.425 0.359 0.445 0.405   8.27
90) Chrysene     1.176 1.191 1.153 1.065 1.016 1.107 1.158 1.170 1.130   5.45
91) bis(2-Ethylh 0.786 0.888 0.932 0.867 0.834 0.903 0.709 0.932 0.856   9.05

92) I   Perylene-d12          ----------------ISTD---------------------
93) Di-n-octylph 1.302 1.544 1.524 1.332 1.272 1.450 1.121 1.555 1.387  11.22
94) Benzo[b]fluo 1.212 1.271 1.185 1.069 1.066 1.119 1.176 1.239 1.167   6.52
95) Benzo[k]fluo 1.142 1.214 1.163 1.044 0.966 1.122 1.091 1.180 1.115   7.18
96) Benzo[a]pyre 1.059 1.137 1.077 0.995 0.936 1.040 1.025 1.099 1.046   5.98
97) Indeno[1,2,3 0.980 1.061 1.056 1.041 1.007 1.063 0.932 1.070 1.026   4.79
98) Dibenz(a,h)a 0.869 0.959 0.944 0.903 0.862 0.924 0.849 0.952 0.908   4.77
```

Initial Calibration Summary

Job Number: JC19023 **Sample:** E5P1382-ICC1382
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 5P27321.D
Project: BMSMC, Building 5 Area, PR

```
 99) Dibenz[a,h]a 1.008 1.080 1.128 1.091 1.052 1.118 1.019 1.084 1.073   4.03
100) 7,12-Dimethy 0.427 0.438 0.502 0.475 0.457 0.491 0.341 0.462 0.449  11.20
101) Benzo[g,h,i] 1.076 1.134 1.122 1.089 1.053 1.105 1.040 1.105 1.090   2.98
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          M5P1382.M         Tue Apr 12 09:02:01 2016   RPT1
```

Initial Calibration Summary

Job Number: JC19023 **Sample:** E5P1383-ICC1383
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 5P27330.D
Project: BMSMC, Building 5 Area, PR

```
                    Response Factor Report  MS5P

  Method       : C:\MSDCHEM\1\METHODS\M5P1382.M (RTE Integrator)
  Title        : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
  Last Update  : Mon Apr 11 18:53:32 2016
  Response via : Initial Calibration

  Calibration Files
  2   =5p27334.D  5   =5p27333.D  25  =5p27331.D  80  =5p27329.D
  100 =5p27328.D  50  =5p27330.D  1   =5p27335.D  10  =5p27332.D

   Compound          2     5     25    80    100   50    1     10    Avg %RSD
  ---------------------------------------------------------------------------

102)     1,4-Dichlorobenzene-d ----------------ISTD---------------------
103) Benzaldehyde 1.077 1.111 0.980 0.837 0.676 0.957 1.123 1.009 0.971  15.62

104)     Acenaphthene-d10a     ----------------ISTD---------------------
105) 1,2,4,5-Tetr 0.608 0.600 0.541 0.514 0.487 0.515 0.607 0.549 0.553   8.55

106)     Chrysene-d12a         ----------------ISTD---------------------
107) Benzidine    0.533 0.650 0.557 0.366       0.527 0.445 0.644 0.532  19.17
108) 1-chloroocta 0.233 0.243 0.232 0.221 0.216 0.224 0.223 0.231 0.228   3.74

109)     Phenanthrene-d10a     ----------------ISTD---------------------
110) o-terphenyl  0.599 0.600 0.536 0.499 0.485 0.527 0.596 0.551 0.549   8.31
111) Atrazine     0.111 0.108 0.104 0.102 0.099 0.103 0.096 0.102 0.103   4.51

112) I   Naphthalene-d8a       ----------------ISTD---------------------
113) Hydroquinone       0.234 0.293 0.307 0.301 0.309       0.256 0.284  10.97
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           M5P1382.M         Mon Apr 11 18:54:38 2016   RPT1
```

Initial Calibration Verification

Job Number: JC19023 **Sample:** E5P1383-ICV1382
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 5P27336.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\e5p1383\5p27336.D          Vial: 10
Acq On    : 11 Apr 2016   6:32 pm                    Operator: ariellec
Sample    : icv1382-50                               Inst    : MS5P
Misc      : op92466,e5p1383                          Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M5P1382.M (RTE Integrator)
Title        : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
Last Update  : Mon Apr 11 18:53:32 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	5.30
5	S	2-Fluorophenol	1.226	1.103	10.0	83	0.00	3.90
8	S	Phenol-d5	1.393	1.196	14.1	79	0.00	4.89
47	I	Acenaphthene-d10	1.000	1.000	0.0	89	0.00	8.89
51	S	2-Fluorobiphenyl	1.274	1.156	9.3	84	0.00	8.09
69	I	Phenanthrene-d10	1.000	1.000	0.0	88	0.00	10.73
73	S	2,4,6-Tribromophenol	0.097	0.080	17.5	65	0.00	9.85
83	I	Chrysene-d12	1.000	1.000	0.0	82	0.00	14.53
85	S	Terphenyl-d14	0.804	0.739	8.1	76	0.00	12.99

```
(#) = Out of Range              SPCC's out = 0  CCC's out = 0
 5p27330a.D M5P1382.M        Mon Apr 11 18:59:13 2016   RPT1
```

Initial Calibration Verification

Job Number: JC19023 **Sample:** E5P1383-ICV1382
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 5P27337.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e5p1383\5p27337.D Vial: 11
Acq On : 11 Apr 2016 6:59 pm Operator: ariellec
Sample : icv1382-50 Inst : MS5P
Misc : op92466,e5p1383 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M5P1382.M (RTE Integrator)
Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
Last Update : Mon Apr 11 18:53:32 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	89	0.00	5.30
4	t	N-Nitrosodimethylamine	0.579	0.499	13.8	75	0.00	2.61
11	t	bis(2-Chloroethyl)ether	1.069	0.969	9.4	83	0.00	5.02
14	t	1,3-Dichlorobenzene	1.538	1.364	11.3	82	0.00	5.24
15	t	1,4-Dichlorobenzene	1.551	1.380	11.0	84	0.00	5.32
17	t	1,2-Dichlorobenzene	1.474	1.340	9.1	86	0.00	5.49
20	t	2,2'-oxybis(1-Chloropropa	1.228	0.918	25.2	69	0.00	5.62
22	t	n-Nitroso-di-n-propylamin	0.765	0.659	13.9	83	0.00	5.77
23	t	Hexachloroethane	0.500	0.467	6.6	84	0.00	5.88
24	I	Naphthalene-d8	1.000	1.000	0.0	88	0.00	6.78
26	t	Nitrobenzene	0.299	0.262	12.4	79	0.00	5.96
28	t	Isophorone	0.523	0.497	5.0	85	0.00	6.24
32	t	bis(2-Chloroethoxy)methan	0.342	0.291	14.9	77	0.00	6.51
36	t	1,2,4-Trichlorobenzene	0.321	0.286	10.9	82	0.00	6.71
38	t	Naphthalene	1.014	0.925	8.8	84	0.00	6.80
42	t	Hexachlorobutadiene	0.165	0.160	3.0	88	0.00	6.95
47	I	Acenaphthene-d10	1.000	1.000	0.0	85	0.00	8.89
48	t	Hexachlorocyclopentadiene	0.251	0.236	6.0	72	0.00	7.83
52	t	2-Chloronaphthalene	1.127	1.043	7.5	82	0.00	8.22
55	t	Dimethylphthalate	1.336	1.173	12.2	76	0.00	8.59
56	t	Acenaphthylene	1.791	1.601	10.6	78	0.00	8.72
57	t	2,6-Dinitrotoluene	0.275	0.247	10.2	71	0.00	8.66
59	t	Acenaphthene	1.145	1.055	7.9	82	0.00	8.93
63	t	2,4-Dinitrotoluene	0.368	0.329	10.6	70	0.00	9.14
65	t	Diethylphthalate	1.365	1.203	11.9	77	0.00	9.45
66	t	Fluorene	1.285	1.157	10.0	79	0.00	9.56
67	t	4-Chlorophenyl-phenylethe	0.605	0.516	14.7	77	0.00	9.58
69	I	Phenanthrene-d10	1.000	1.000	0.0	84	0.00	10.73
71	t	n-Nitrosodiphenylamine	0.577	0.525	9.0	78	0.00	9.72
72	t	1,2-Diphenylhydrazine	0.598	0.553	7.5	78	0.00	9.76
74	t	4-Bromophenyl-phenylether	0.222	0.202	9.0	78	0.00	10.18
75	t	Hexachlorobenzene	0.225	0.204	9.3	75	0.00	10.23
77	t	Phenanthrene	1.123	1.014	9.7	79	0.00	10.76
78	t	Anthracene	1.129	1.018	9.8	79	0.00	10.83
80	t	Di-n-butylphthalate	1.347	1.223	9.2	75	0.00	11.58
81	t	Fluoranthene	1.161	1.060	8.7	78	0.00	12.39
83	I	Chrysene-d12	1.000	1.000	0.0	80	0.00	14.54
84	t	Pyrene	1.231	1.179	4.2	80	0.00	12.71

Initial Calibration Verification

Job Number: JC19023 **Sample:** E5P1383-ICV1382
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 5P27337.D
Project: BMSMC, Building 5 Area, PR

86	t	Butylbenzylphthalate	0.604	0.560	7.3	71	0.00	13.77
88	t	Benzo[a]anthracene	1.106	1.005	9.1	75	0.00	14.52
90	t	Chrysene	1.130	1.022	9.6	74	0.01	14.58
91	t	bis(2-Ethylhexyl)phthalat	0.856	0.811	5.3	72	0.00	14.69
92	I	Perylene-d12	1.000	1.000	0.0	78	0.00	16.60
93	t	Di-n-octylphthalate	1.387	1.329	4.2	71	0.00	15.67
94	t	Benzo[b]fluoranthene	1.167	1.041	10.8	72	0.01	16.09
95	t	Benzo[k]fluoranthene	1.115	1.060	4.9	73	0.01	16.13
96	t	Benzo[a]pyrene	1.046	1.001	4.3	75	0.00	16.52
97	t	Indeno[1,2,3-cd]pyrene	1.026	0.934	9.0	68	0.02	18.25
99	t	Dibenz[a,h]anthracene	1.073	0.985	8.2	68	0.02	18.30
101	t	Benzo[g,h,i]perylene	1.090	1.003	8.0	70	0.02	18.72

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p27330a.D M5P1382.M Mon Apr 11 19:28:43 2016 RPT1

Initial Calibration Verification

Job Number: JC19023 **Sample:** E5P1383-ICV1383
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 5P27337A.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\e5p1383\5p27337a.D        Vial: 11
Acq On    : 11 Apr 2016   6:59 pm                   Operator: ariellec
Sample    : icv1383-50                              Inst    : MS5P
Misc      : op92466,e5p1383                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M5P1382.M (RTE Integrator)
Title        : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
Last Update  : Mon Apr 11 18:53:32 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	110	0.00	8.89
105	1,2,4,5-Tetrachlorobenzen	0.553	0.506	8.5	108	0.00	7.84

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p27330a.D M5P1382.M Mon Apr 11 19:28:45 2016 RPT1

Initial Calibration Verification

Job Number: JC19023 **Sample:** E5P1383-ICV1383
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 5P27338A.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\e5p1383\5p27338a.D        Vial: 12
Acq On    : 11 Apr 2016   7:26 pm                   Operator: ariellec
Sample    : icv1383-50                              Inst    : MS5P
Misc      : op92466,e5p1383                         Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M5P1382.M (RTE Integrator)
Title        : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
Last Update  : Mon Apr 11 18:53:32 2016
Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	104	0.00	5.30
103	Benzaldehyde	0.971	0.986	-1.5	107	0.00	4.82
109	Phenanthrene-d10a	1.000	1.000	0.0	92	0.00	10.73
111	Atrazine	0.103	0.110	-6.8	98	0.00	10.41

```
(#) = Out of Range              SPCC's out = 0  CCC's out = 0
 5p27330a.D M5P1382.M        Mon Apr 11 20:09:15 2016   RPT1
```

Initial Calibration Verification

Job Number: JC19023 **Sample:** E5P1383-ICV1382
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 5P27338.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\e5p1383\5p27338.D          Vial: 12
Acq On    : 11 Apr 2016   7:26 pm                    Operator: ariellec
Sample    : icv1382-50                               Inst    : MS5P
Misc      : op92466,e5p1383                          Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M5P1382.M (RTE Integrator)
Title        : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
Last Update  : Mon Apr 11 18:53:32 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	86	0.00	5.30
2	t	1,4-Dioxane	0.469	0.429	8.5	82	0.01	2.35
6	t	Indene	2.189	2.215	-1.2	92	0.00	5.59
7	t	Cumene	2.952	2.856	3.3	88	0.00	4.44
13	t	Decane	0.918	0.882	3.9	87	0.00	5.13
18	t	Acetophenone	1.719	1.688	1.8	91	0.00	5.76
24	I	Naphthalene-d8	1.000	1.000	0.0	84	0.00	6.77
27	t	Quinoline	0.701	0.677	3.4	82	0.00	7.19
40	t	2,3-Dichloroaniline	0.355	0.320	9.9	78	0.00	7.97
41	t	Caprolactam	0.114	0.109	4.4	76	0.02	7.27
45	t	1-Methylnaphthalene	0.607	0.590	2.8	85	0.00	7.75
46	t	Dimethylnaphthalene	0.637	0.628	1.4	86	0.00	8.39
47	I	Acenaphthene-d10	1.000	1.000	0.0	82	0.00	8.89
53	t	Biphenyl	1.460	1.451	0.6	85	0.00	8.20
69	I	Phenanthrene-d10	1.000	1.000	0.0	79	0.00	10.73
82	t	Octadecane	0.370	0.374	-1.1	79	0.00	10.66
92	I	Perylene-d12	1.000	1.000	0.0	69	0.00	16.60
100	t	7,12-Dimethylbenz(a)anthr	0.449	0.541	-20.5	76	0.00	16.09

```
(#) = Out of Range              SPCC's out = 0  CCC's out = 0
 5p27330a.D M5P1382.M        Mon Apr 11 20:09:12 2016   RPT1
```

Initial Calibration Verification

Job Number: JC19023 **Sample:** E5P1383-ICV1382
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 5P27339.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\e5p1383\5p27339.D          Vial: 13
Acq On    : 11 Apr 2016   7:52 pm                    Operator: ariellec
Sample    : icv1382-50                               Inst    : MS5P
Misc      : op92466,e5p1383                          Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M5P1382.M (RTE Integrator)
Title        : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
Last Update  : Mon Apr 11 18:53:32 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	88	0.00	5.30
9	t	Phenol	1.440	1.344	6.7	84	0.00	4.90
12	t	2-Chlorophenol	1.386	1.333	3.8	88	0.00	5.06
19	t	2-Methylphenol	1.056	1.084	-2.7	92	0.00	5.59
21	t	3&4-Methylphenol	1.123	1.131	-0.7	90	0.00	5.76
24	I	Naphthalene-d8	1.000	1.000	0.0	85	0.00	6.77
29	t	2-Nitrophenol	0.188	0.191	-1.6	84	0.00	6.33
30	t	2,4-Dimethylphenol	0.294	0.348	-18.4	95	0.00	6.39
31	t	Benzoic acid	0.241	0.234	2.9	75	0.09	6.52
33	t	2,4-Dichlorophenol	0.285	0.290	-1.8	86	0.00	6.61
34	t	2,6-Dichlorophenol	0.280	0.289	-3.2	90	0.00	6.87
43	t	4-Chloro-3-methylphenol	0.304	0.305	-0.3	85	0.00	7.46
47	I	Acenaphthene-d10	1.000	1.000	0.0	84	0.00	8.89
49	t	2,4,6-Trichlorophenol	0.341	0.357	-4.7	87	0.00	7.97
50	t	2,4,5-Trichlorophenol	0.368	0.362	1.6	81	0.00	8.01
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	50.000	39.045	21.9	60	0.00	8.97
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.162	0.178	-9.9	88	-0.02	9.05
64		2,3,4,6-Tetrachlorophenol	0.290	0.291	-0.3	81	0.00	9.29
69	I	Phenanthrene-d10	1.000	1.000	0.0	83	0.00	10.73
70	t	4,6-Dinitro-2-methylpheno	0.128	0.127	0.8	74	0.00	9.62
76	t	Pentachlorophenol	0.137	0.150	-9.5	78	0.00	10.48

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p27330a.D M5P1382.M Mon Apr 11 20:36:02 2016 RPT1

Initial Calibration Verification

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E5P1383-ICV1382
Lab FileID: 5P27340.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\e5p1383\5p27340.D Vial: 14
Acq On : 11 Apr 2016 8:20 pm Operator: ariellec
Sample : icv1382-50 Inst : MS5P
Misc : op92466,e5p1383 Multiplr: 1.00
MS Integration Params: lscint.p

Method : C:\MSDCHEM\1\METHODS\M5P1382.M (RTE Integrator)
Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
Last Update : Mon Apr 11 18:53:32 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	80	0.00	5.31
3	t	Pyridine	1.033	1.016	1.6	77	0.06	2.73
10		Aniline	1.561	1.747	-11.9	103	0.01	4.95
16	t	Benzyl alcohol	0.794	0.810	-2.0	82	0.01	5.47
24	I	Naphthalene-d8	1.000	1.000	0.0	81	0.00	6.78
39	t	4-Chloroaniline	0.424	0.428	-0.9	86	0.00	6.87
44	t	2-Methylnaphthalene	0.585	0.567	3.1	82	0.00	7.63
47	I	Acenaphthene-d10	1.000	1.000	0.0	81	0.00	8.89
54	t	2-Nitroaniline	0.283	0.281	0.7	78	0.00	8.35
58	t	3-Nitroaniline	0.320	0.299	6.6	70	0.00	8.85
62	t	Dibenzofuran	1.559	1.573	-0.9	87	0.00	9.14
68	t	4-Nitroaniline	0.323	0.303	6.2	73	0.00	9.59
69	I	Phenanthrene-d10	1.000	1.000	0.0	81	0.00	10.73
79	t	Carbazole	1.063	1.025	3.6	79	0.00	11.05

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p27330a.D M5P1382.M Mon Apr 11 21:13:09 2016 RPT1

Initial Calibration Verification

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E5P1383-ICV1383
Lab FileID: 5P27341A.D

Evaluate Continuing Calibration Report

```
  Data File : C:\msdchem\1\DATA\e5p1383\5p27341a.D         Vial: 15
  Acq On    : 11 Apr 2016   8:47 pm                    Operator: ariellec
  Sample    : icv1383-50                               Inst    : MS5P
  Misc      : op92466,e5p1383                          Multiplr: 1.00
  MS Integration Params: lscint.p

  Method       : C:\MSDCHEM\1\METHODS\M5P1382.M (RTE Integrator)
  Title        : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
  Last Update  : Mon Apr 11 18:53:32 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.
106	Chrysene-d12a	1.000	1.000	0.0	86	0.00	14.53
107	Benzidine	0.532	0.755	-41.9#	123	0.00	12.62

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p27330a.D M5P1382.M Mon Apr 11 21:15:50 2016 RPT1

Initial Calibration Verification

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: E5P1383-ICV1382
Lab FileID: 5P27341.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\e5p1383\5p27341.D          Vial: 15
Acq On    : 11 Apr 2016   8:47 pm                    Operator: ariellec
Sample    : icv1382-50                               Inst    : MS5P
Misc      : op92466,e5p1383                          Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M5P1382.M (RTE Integrator)
Title        : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
Last Update  : Mon Apr 11 18:53:32 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	78	0.00	14.53
89 t	3,3'-Dichlorobenzidine	0.405	0.389	4.0	72	0.00	14.52

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p27330a.D M5P1382.M Mon Apr 11 21:15:48 2016 RPT1

Initial Calibration Verification

Job Number: JC19023 **Sample:** E5P1383-ICV1383
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 5P27342.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\e5p1383\5p27342.D          Vial: 16
Acq On    : 11 Apr 2016   9:15 pm                    Operator: ariellec
Sample    : icv1383-50                               Inst    : MS5P
Misc      : op92466,e5p1383                          Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M5P1382.M (RTE Integrator)
Title        : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
Last Update  : Mon Apr 11 18:53:32 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	87	0.00	6.77
113	Hydroquinone	0.284	0.300	-5.6	84	-0.02	7.27

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p27330a.D M5P1382.M Mon Apr 11 21:35:44 2016 RPT1

Continuing Calibration Summary

Job Number: JC19023 **Sample:** E5P1416-CC1382
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 5P27902.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E5P1416\5p27902.D          Vial: 2
Acq On    :  3 May 2016   8:39 am                    Operator: ashleyd
Sample    : cc1382-25                                Inst    : MS5P
Misc      : op93450,e5p1416                          Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M5P1382.M (RTE Integrator)
Title        : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
Last Update  : Tue May 03 08:59:50 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	118	0.00	5.29
2	t	1,4-Dioxane	0.469	0.429	8.5	110	0.06	2.35
3	t	Pyridine	1.033	0.956	7.5	106	0.05	2.68
4	t	N-Nitrosodimethylamine	0.579	0.568	1.9	111	0.05	2.64
5	S	2-Fluorophenol	1.226	1.197	2.4	115	0.03	3.96
6	t	Indene	2.189	2.409	-10.1	130	0.00	5.58
7	t	Cumene	2.952	3.179	-7.7	126	0.01	4.42
8	S	Phenol-d5	1.393	1.469	-5.5	122	0.00	4.96
9	t	Phenol	1.440	1.709	-18.7	139	0.00	4.98
10		Aniline	1.561	1.386	11.2	112	0.01	4.96
11	t	bis(2-Chloroethyl)ether	1.069	1.129	-5.6	126	0.00	5.01
12	t	2-Chlorophenol	1.386	1.440	-3.9	122	0.00	5.08
13	t	Decane	0.918	1.588	-73.0#	205#	0.00	5.09
14	t	1,3-Dichlorobenzene	1.538	1.581	-2.8	121	0.00	5.22
15	t	1,4-Dichlorobenzene	1.551	1.620	-4.4	124	0.00	5.31
16	t	Benzyl alcohol	0.794	0.815	-2.6	119	0.00	5.48
17	t	1,2-Dichlorobenzene	1.474	1.517	-2.9	124	0.00	5.48
18	t	Acetophenone	1.719	1.944	-13.1	137	0.00	5.76
19	t	2-Methylphenol	1.056	1.187	-12.4	129	0.00	5.63
20	t	2,2'-oxybis(1-Chloropropa	1.228	2.029	-65.2#	201#	-0.01	5.61
21	t	3&4-Methylphenol	1.123	1.282	-14.2	131	-0.01	5.81
22	t	n-Nitroso-di-n-propylamin	0.765	0.937	-22.5#	152	-0.01	5.76
23	t	Hexachloroethane	0.500	0.499	0.2	115	0.00	5.86
24	I	Naphthalene-d8	1.000	1.000	0.0	129	0.00	6.76
25	S	Nitrobenzene-d5	0.304	0.322	-5.9	135	0.09	5.94
26	t	Nitrobenzene	0.299	0.314	-5.0	135	0.02	5.96
27	t	Quinoline	0.701	0.722	-3.0	132	0.00	7.20
28	t	Isophorone	0.523	0.556	-6.3	134	0.00	6.23
29	t	2-Nitrophenol	0.188	0.194	-3.2	125	0.00	6.33
30	t	2,4-Dimethylphenol	0.294	0.324	-10.2	140	0.00	6.41
31	t	Benzoic acid	0.241	0.217	10.0	113	0.08	6.57
32	t	bis(2-Chloroethoxy)methan	0.342	0.336	1.8	126	0.00	6.50
33	t	2,4-Dichlorophenol	0.285	0.281	1.4	123	0.00	6.63
34	t	2,6-Dichlorophenol	0.280	0.283	-1.1	128	0.00	6.89
35		1,3,5-Trichlorobenzene	0.328	0.313	4.6	122	0.00	6.32
36	t	1,2,4-Trichlorobenzene	0.321	0.303	5.6	120	0.00	6.69
37		1,2,3-Trichlorobenzene	0.316	0.295	6.6	123	0.00	6.96
38	t	Naphthalene	1.014	1.069	-5.4	136	0.00	6.79
39	t	4-Chloroaniline	0.424	0.405	4.5	122	0.00	6.89
40	t	2,3-Dichloroaniline	0.355	0.356	-0.3	128	-0.02	7.98
41	t	Caprolactam	0.114	0.168	-47.4#	179	0.09	7.32

Continuing Calibration Summary

Job Number: JC19023 **Sample:** E5P1416-CC1382
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 5P27902.D
Project: BMSMC, Building 5 Area, PR

42	t	Hexachlorobutadiene	0.165	0.157	4.8	124	0.00	6.93
43	t	4-Chloro-3-methylphenol	0.304	0.347	-14.1	143	-0.02	7.52
44	t	2-Methylnaphthalene	0.585	0.647	-10.6	140	-0.01	7.62
45	t	1-Methylnaphthalene	0.607	0.666	-9.7	140	-0.01	7.73
46	t	Dimethylnaphthalene	0.637	0.679	-6.6	136	-0.02	8.37
47	I	Acenaphthene-d10	1.000	1.000	0.0	133	0.00	8.87
48	t	Hexachlorocyclopentadiene	0.251	0.239	4.8	114	0.00	7.80
49	t	2,4,6-Trichlorophenol	0.341	0.339	0.6	127	0.00	7.99
50	t	2,4,5-Trichlorophenol	0.368	0.343	6.8	121	0.00	8.04
51	S	2-Fluorobiphenyl	1.274	1.247	2.1	128	0.00	8.07
52	t	2-Chloronaphthalene	1.127	1.112	1.3	130	0.00	8.20
53	t	Biphenyl	1.460	1.483	-1.6	134	0.00	8.18
54	t	2-Nitroaniline	0.283	0.376	-32.9#	167	0.00	8.36
55	t	Dimethylphthalate	1.336	1.356	-1.5	133	0.00	8.58
56	t	Acenaphthylene	1.791	1.862	-4.0	134	0.00	8.70
57	t	2,6-Dinitrotoluene	0.275	0.301	-9.5	137	0.00	8.65
58	t	3-Nitroaniline	0.320	0.325	-1.6	125	0.00	8.87
59	t	Acenaphthene	1.145	1.193	-4.2	136	0.00	8.91
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	50.000	44.636	10.7	126	0.05	8.99
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.162	0.181	-11.7	139	-0.01	9.16
62	t	Dibenzofuran	1.559	1.592	-2.1	134	0.00	9.12
63	t	2,4-Dinitrotoluene	0.368	0.433	-17.7	139	0.00	9.14
64		2,3,4,6-Tetrachlorophenol	0.290	0.271	6.6	117	0.00	9.30
65	t	Diethylphthalate	1.365	1.463	-7.2	142	-0.02	9.43
66	t	Fluorene	1.285	1.344	-4.6	135	0.00	9.54
67	t	4-Chlorophenyl-phenylethe	0.605	0.592	2.1	131	0.00	9.55
68	t	4-Nitroaniline	0.323	0.339	-5.0	128	0.00	9.62
69	I	Phenanthrene-d10	1.000	1.000	0.0	128	0.00	10.71
70	t	4,6-Dinitro-2-methylpheno	0.128	0.136	-6.3	134	0.00	9.63
71	t	n-Nitrosodiphenylamine	0.577	0.607	-5.2	133	0.00	9.71
72	t	1,2-Diphenylhydrazine	0.598	0.691	-15.6	146	0.00	9.74
73	S	2,4,6-Tribromophenol	0.097	0.109	-12.4	136	0.00	9.84
74	t	4-Bromophenyl-phenylether	0.222	0.222	0.0	129	0.00	10.14
75	t	Hexachlorobenzene	0.225	0.228	-1.3	127	0.00	10.20
76	t	Pentachlorophenol	0.137	0.132	3.6	110	0.00	10.49
77	t	Phenanthrene	1.123	1.159	-3.2	133	0.00	10.74
78	t	Anthracene	1.129	1.158	-2.6	130	0.00	10.81
79	t	Carbazole	1.063	1.119	-5.3	134	0.00	11.05
80	t	Di-n-butylphthalate	1.347	1.569	-16.5	141	-0.01	11.52
81	t	Fluoranthene	1.161	1.189	-2.4	129	0.00	12.36
82	t	Octadecane	0.370	0.607	-64.1#	204#	-0.02	10.57
83	I	Chrysene-d12	1.000	1.000	0.0	125	0.00	14.51
84	t	Pyrene	1.231	1.276	-3.7	127	0.00	12.69
85	S	Terphenyl-d14	0.804	0.871	-8.3	132	0.00	12.94
86	t	Butylbenzylphthalate	0.604	0.714	-18.2	138	0.00	13.71
87		Butyl stearate	0.246	0.431	-75.2#	205#	-0.01	13.81
88	t	Benzo[a]anthracene	1.106	1.155	-4.4	129	0.00	14.49
89	t	3,3'-Dichlorobenzidine	0.405	0.447	-10.4	126	-0.01	14.50
90	t	Chrysene	1.130	1.156	-2.3	126	0.00	14.55
91	t	bis(2-Ethylhexyl)phthalat	0.856	1.014	-18.5	136	-0.02	14.59
92	I	Perylene-d12	1.000	1.000	0.0	117	0.00	16.58
93	t	Di-n-octylphthalate	1.387	1.801	-29.8#	138	-0.02	15.56

Continuing Calibration Summary

Job Number: JC19023 **Sample:** E5P1416-CC1382
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 5P27902.D
Project: BMSMC, Building 5 Area, PR

94	t	Benzo[b]fluoranthene	1.167	1.294	-10.9	127	0.00	16.06
95	t	Benzo[k]fluoranthene	1.115	1.169	-4.8	117	0.00	16.09
96	t	Benzo[a]pyrene	1.046	1.122	-7.3	121	0.00	16.50
97	t	Indeno[1,2,3-cd]pyrene	1.026	1.177	-14.7	130	0.00	18.21
98	t	Dibenz(a,h)acridine	0.908	1.073	-18.2	133	0.00	17.83
99	t	Dibenz[a,h]anthracene	1.073	1.258	-17.2	130	0.00	18.25
100	t	7,12-Dimethylbenz(a)anthr	0.449	0.539	-20.0	125	0.00	16.05
101	t	Benzo[g,h,i]perylene	1.090	1.217	-11.7	126	0.00	18.69

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5p27331a.D M5P1382.M Tue May 03 12:24:41 2016 RPT1

Continuing Calibration Summary

Job Number: JC19023 **Sample:** E5P1416-CC1383
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 5P27903.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\E5P1416\5p27903.D          Vial: 3
Acq On    :  3 May 2016   9:05 am                    Operator: ashleyd
Sample    : cc1383-25                                Inst    : MS5P
Misc      : op93450,e5p1416                          Multiplr: 1.00
MS Integration Params: lscint.p

Method       : C:\MSDCHEM\1\METHODS\M5P1382.M (RTE Integrator)
Title        : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
Last Update  : Tue May 03 08:59:50 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	143	0.00	5.29
103		Benzaldehyde	0.971	0.974	-0.3	142	-0.02	4.82
104		Acenaphthene-d10a	1.000	1.000	0.0	162	0.00	8.87
105		1,2,4,5-Tetrachlorobenzen	0.553	0.482	12.8	145	0.02	7.81
106		Chrysene-d12a	1.000	1.000	0.0	134	0.00	14.50
107		Benzidine	0.532	0.604	-13.5	145	0.02	12.61
108	s	1-chlorooctadecane	0.228	0.419	-83.8#	241#	0.00	12.22
109		Phenanthrene-d10a	1.000	1.000	0.0	144	0.00	10.70
110	s	o-terphenyl	0.549	0.574	-4.6	154	-0.06	11.23
111		Atrazine	0.103	0.106	-2.9	148	0.00	10.38
112	I	Naphthalene-d8a	1.000	1.000	0.0	148	0.00	6.76
113		Hydroquinone	0.284	0.287	-1.1	145	-0.10	7.36

```
(#) = Out of Range              SPCC's out = 0  CCC's out = 0
 5p27331a.D M5P1382.M        Tue May 03 12:24:43 2016   RPT1
```

Initial Calibration Summary

Job Number: JC19023 **Sample:** EM5217-ICC5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M123513.D
Project: BMSMC, Building 5 Area, PR

Response Factor Report Instrument #1

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

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

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

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

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

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

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

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

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

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

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

Initial Calibration Summary

Job Number: JC19023 **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 Verification

Job Number: JC19023 **Sample:** EM5218-ICV5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M123523.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

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

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

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

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

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

Initial Calibration Verification

Job Number: JC19023 **Sample:** EM5218-ICV5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M123524.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

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

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

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

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

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

Initial Calibration Verification

Job Number: JC19023 **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: JC19023 **Sample:** EM5218-ICV5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M123526.D
Project: BMSMC, Building 5 Area, PR

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

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

6.7.42

6

Initial Calibration Verification

Job Number: JC19023 **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: JC19023
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: JC19023 **Sample:** EM5219-ICV5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M123532.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

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

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

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

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

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

Initial Calibration Summary

Job Number: JC19023 **Sample:** EM5239-ICC5239
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M123931.D
Project: BMSMC, Building 5 Area, PR

```
                          Response Factor Report  Instrument #1

  Method       : C:\msdchem\1\METHODS\MM5239.M (RTE Integrator)
  Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
  Last Update  : Wed Apr 27 12:36:54 2016
  Response via : Initial Calibration

  Calibration Files
  2   =M123935.D  5   =M123934.D  100 =M123929.D  50  =M123931.D
  1   =M123936.D  10  =M123933.D  80  =M123930.D  25  =M123932.D

   Compound          2     5     100   50    1     10    80    25    Avg %RSD
  ---------------------------------------------------------------------------
102) I   1,4-Dichlorobenzene-d ----------------ISTD---------------------
103) Benzaldehyde 0.920 0.895 0.964 0.999 0.667 0.911 0.932 0.945 0.904  11.17

104) I   Acenaphthene-d10     ----------------ISTD---------------------
105) 1,2,4,5-Tetr 0.507 0.515 0.490 0.536 0.487 0.561 0.497 0.531 0.516   4.96
106) Atrazine     0.165 0.168 0.179 0.172 0.132 0.190 0.169 0.177 0.169  10.03

107) I   Chrysene-d12a         ----------------ISTD---------------------
108) Benzidine    0.173 0.274 0.398 0.499       0.354 0.445 0.379 0.360  30.17
             ---- Quadratic regression ----  Coefficient =  0.9939
               Response Ratio = -0.04759 + 0.59733 *A + -0.06928 *A^2

109) 1-chloroocta 0.266 0.258 0.244 0.270 0.218 0.292 0.245 0.272 0.258   8.67

110) I   Phenanthrene-d10     ----------------ISTD---------------------
111) o-terphenyl  0.514 0.538 0.518 0.541 0.516 0.592 0.523 0.582 0.540   5.65

112) I   Naphthalene-d8       ----------------ISTD---------------------
113) Hydroquinone             0.343 0.327       0.250 0.323 0.309 0.310  11.60
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           MM5239.M          Wed Apr 27 14:52:47 2016   MSM
```

Initial Calibration Verification

Job Number: JC19023 **Sample:** EM5239-ICV5239
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M123937.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5239\M123937.D          Vial: 10
Acq On    : 27 Apr 2016   3:12 am                   Operator: seanb1
Sample    : icv5239-50                              Inst    : Instrument #1
Misc      : op93324,em5239                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\msdchem\1\METHODS\MM5239.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Wed Apr 27 12:56:11 2016
Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
104 I	Acenaphthene-d10a	1.000	1.000	0.0	82	-0.03	8.05
105 I	1,2,4,5-Tetrachlorobenzen	0.516	0.618	-19.8	94	0.00	6.78

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M123931a.D MM5239.M Wed Apr 27 14:46:04 2016 MSM

Initial Calibration Verification

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EM5239-ICV5239
Lab FileID: M123938.D

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5239\M123938.D          Vial: 11
Acq On    : 27 Apr 2016   3:41 am                   Operator: seanb1
Sample    : icv5239-50                              Inst    : Instrument #1
Misc      : op93324,em5239                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\msdchem\1\METHODS\MM5239.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Wed Apr 27 12:56:11 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102	I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	96	-0.02	4.62
103	t	Benzaldehyde	0.904	0.967	-7.0	93	-0.03	4.30
104	I	Acenaphthene-d10a	1.000	1.000	0.0	86	-0.03	8.05
106	t	Atrazine	0.169	0.177	-4.7	88	0.00	10.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M123931a.D MM5239.M Wed Apr 27 14:46:06 2016 MSM

Initial Calibration Verification

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR
Sample: EM5239-ICV5239
Lab FileID: M123940.D

Evaluate Continuing Calibration Report

```
  Data File : C:\msdchem\1\DATA\EM5239\M123940.D          Vial: 13
  Acq On    : 27 Apr 2016   4:37 am                   Operator: seanb1
  Sample    : icv5239-50                              Inst    : Instrument #1
  Misc      : op93324,em5239                          Multiplr: 1.00
  MS Integration Params: RTEINT.P

  Method       : C:\msdchem\1\METHODS\MM5239.M (RTE Integrator)
  Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
  Last Update  : Wed Apr 27 12:56:11 2016
  Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
112 I	Naphthalene-d8a	1.000	1.000	0.0	78	-0.03	5.73
113	Hydroquinone	0.310	0.326	-5.2	77	-0.04	6.24

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M123931a.D MM5239.M Wed Apr 27 14:46:08 2016 MSM

Initial Calibration Verification

Job Number: JC19023 **Sample:** EM5240-ICV5239
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M123945.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
  Data File : C:\msdchem\1\DATA\EM5240\M123945.D          Vial: 3
  Acq On    : 27 Apr 2016  11:18 am                   Operator: ashleyd
  Sample    : icv5239-50                              Inst    : Instrument #1
  Misc      : op93324,em5240                          Multiplr: 1.00
  MS Integration Params: RTEINT.P

  Method       : C:\msdchem\1\METHODS\MM5239.M (RTE Integrator)
  Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
  Last Update  : Wed Apr 27 12:36:54 2016
  Response via : Multiple Level Calibration

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

        Compound                   AvgRF   CCRF      %Dev Area%  Dev(min)R.T.
  ---------------------------------------------------------------------------
107 I   Chrysene-d12a              1.000   1.000      0.0   86   0.11   15.92

            ----------------------- True    Calc.   % Drift  ------------
108 t   Benzidine                 50.000  63.945    -27.9  101   0.06   13.43
 ---------------------------------------------------------------------------
 ---------------------------------------------------------------------------

    (#) = Out of Range              SPCC's out = 0  CCC's out = 0
     M123931a.D MM5239.M         Wed Apr 27 14:51:42 2016   MSM
```

Continuing Calibration Summary

Job Number: JC19023 **Sample:** EM5245-CC5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M124000.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5245\M124000.D          Vial: 2
Acq On    : 29 Apr 2016   9:30 am                   Operator: ashleyd
Sample    : cc5217-25                               Inst    : Instrument #1
Misc      : op93324,em5245                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MM5239.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Thu Apr 28 11:01:37 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	105	-0.05	4.62
2	t	1,4-Dioxane	0.555	0.586	-5.6	120	-0.06	2.17
3	t	Pyridine	1.350	1.445	-7.0	114	-0.06	2.52
4	t	N-Nitrosodimethylamine	0.591	0.679	-14.9	122	-0.05	2.49
5	S	2-Fluorophenol	1.223	1.302	-6.5	113	-0.05	3.68
6	t	Indene	2.275	2.416	-6.2	114	-0.06	4.82
7	t	Cumene	3.052	3.398	-11.3	119	-0.05	4.03
8	S	Phenol-d5	1.536	1.738	-13.2	117	-0.04	4.39
9	t	Phenol	1.646	1.972	-19.8	128	-0.05	4.40
10	t	Aniline	1.915	1.634	14.7	88	-0.05	4.39
11	t	bis(2-Chloroethyl)ether	1.282	1.344	-4.8	116	-0.05	4.43
12	t	2-Chlorophenol	1.371	1.526	-11.3	119	-0.05	4.48
13	t	Decane	1.300	1.486	-14.3	127	-0.05	4.50
14	t	1,3-Dichlorobenzene	1.563	1.638	-4.8	115	-0.05	4.58
15	t	1,4-Dichlorobenzene	1.549	1.653	-6.7	116	-0.05	4.63
16	t	Benzyl alcohol	0.794	0.884	-11.3	116	-0.05	4.74
17	t	1,2-Dichlorobenzene	1.458	1.553	-6.5	115	-0.05	4.76
18	t	Acetophenone	1.821	1.926	-5.8	116	-0.05	4.94
19	t	2-Methylphenol	1.136	1.218	-7.2	112	-0.05	4.85
20	t	2,2'-oxybis(1-Chloropropa	0.424	0.449	-5.9	114	-0.05	4.83
21	t	3&4-Methylphenol	1.245	1.326	-6.5	112	-0.05	4.97
22	t	n-Nitroso-di-n-propylamin	0.983	1.081	-10.0	120	-0.05	4.94
23	t	Hexachloroethane	0.586	0.582	0.7	110	-0.06	5.02
24	I	Naphthalene-d8	1.000	1.000	0.0	102	-0.06	5.74
25	S	Nitrobenzene-d5	0.356	0.396	-11.2	118	-0.06	5.07
26	t	Nitrobenzene	0.360	0.404	-12.2	120	-0.06	5.09
27	t	Quinoline	0.763	0.765	-0.3	105	-0.07	6.13
28	t	Isophorone	0.647	0.709	-9.6	116	-0.06	5.29
29	t	2-Nitrophenol	0.204	0.222	-8.8	110	-0.06	5.37
30	t	2,4-Dimethylphenol	0.333	0.316	5.1	102	-0.06	5.42
31	t	Benzoic acid	0.219	0.256	-16.9	124	-0.06	5.55
32	t	bis(2-Chloroethoxy)methan	0.393	0.431	-9.7	117	-0.06	5.49
33	t	2,4-Dichlorophenol	0.305	0.326	-6.9	109	-0.06	5.63
34	t	2,6-Dichlorophenol	0.308	0.318	-3.2	111	-0.06	5.84
35	t	1,3,5-Trichlorobenzene	0.364	0.384	-5.5	111	-0.06	5.38
36	t	1,2,4-Trichlorobenzene	0.358	0.368	-2.8	108	-0.06	5.69
37	t	1,2,3-Trichlorobenzene	0.346	0.352	-1.7	107	-0.07	5.92
38	t	Naphthalene	1.048	1.082	-3.2	109	-0.06	5.76
39	t	4-Chloroaniline	0.451	0.438	2.9	100	-0.06	5.83
40	t	2,3-Dichloroaniline	0.397	0.405	-2.0	107	-0.07	6.94
41	t	Caprolactam	0.165	0.173	-4.8	116	-0.06	6.23

Continuing Calibration Summary

Job Number: JC19023 **Sample:** EM5245-CC5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M124000.D
Project: BMSMC, Building 5 Area, PR

42	t	Hexachlorobutadiene	0.206	0.213	-3.4	109	-0.06	5.89
43	t	4-Chloro-3-methylphenol	0.305	0.322	-5.6	113	-0.06	6.42
44	t	2-Methylnaphthalene	0.626	0.633	-1.1	107	-0.07	6.56
45	t	1-Methylnaphthalene	0.728	0.758	-4.1	109	-0.07	6.69
46	t	Dimethylnaphthalene	0.676	0.705	-4.3	111	-0.07	7.42
47	I	Acenaphthene-d10	1.000	1.000	0.0	105	-0.08	8.06
		----------	True	Calc.	% Drift	----------		
48	t	Hexachlorocyclopentadiene	50.000	26.965	46.1#	54	-0.07	6.77
		----------	AvgRF	CCRF	% Dev	----------		
49	t	2,4,6-Trichlorophenol	0.382	0.383	-0.3	108	-0.07	6.96
50	t	2,4,5-Trichlorophenol	0.415	0.400	3.6	108	-0.07	7.03
51	S	2-Fluorobiphenyl	1.313	1.296	1.3	108	-0.07	7.05
52	t	2-Chloronaphthalene	1.165	1.167	-0.2	109	-0.07	7.21
53	t	Biphenyl	1.488	1.502	-0.9	110	-0.07	7.19
54	t	2-Nitroaniline	0.332	0.368	-10.8	120	-0.07	7.39
55	t	Dimethylphthalate	1.362	1.448	-6.3	115	-0.07	7.67
56	t	Acenaphthylene	1.927	1.936	-0.5	109	-0.08	7.83
57	t	2,6-Dinitrotoluene	0.303	0.329	-8.6	117	-0.07	7.76
58	t	3-Nitroaniline	0.335	0.351	-4.8	113	-0.07	8.04
59	t	Acenaphthene	1.161	1.190	-2.5	111	-0.08	8.11
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	50.000	55.091	-10.2	134	-0.07	8.23
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.123	0.124	-0.8	104	-0.06	8.47
62	t	Dibenzofuran	1.726	1.760	-2.0	111	-0.08	8.39
63	t	2,4-Dinitrotoluene	0.397	0.444	-11.8	116	-0.08	8.43
64	t	2,3,4,6-Tetrachlorophenol	0.321	0.334	-4.0	114	-0.08	8.65
65	t	Diethylphthalate	1.356	1.468	-8.3	119	-0.08	8.85
66	t	Fluorene	1.396	1.433	-2.7	111	-0.08	8.98
67	t	4-Chlorophenyl-phenylethe	0.666	0.710	-6.6	116	-0.08	9.00
68	t	4-Nitroaniline	0.326	0.314	3.7	100	-0.08	9.08
69	I	Phenanthrene-d10	1.000	1.000	0.0	102	-0.08	10.67
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	25.000	27.452	-9.8	116	-0.08	9.15
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.537	0.597	-11.2	117	-0.08	9.23
72	t	1,2-Diphenylhydrazine	0.688	0.779	-13.2	119	-0.08	9.28
73	S	2,4,6-Tribromophenol	0.138	0.158	-14.5	117	-0.08	9.41
74	t	4-Bromophenyl-phenylether	0.247	0.277	-12.1	118	-0.08	9.87
75	t	Hexachlorobenzene	0.291	0.316	-8.6	116	-0.08	9.97
		----------	True	Calc.	% Drift	----------		
76	t	Pentachlorophenol	50.000	55.807	-11.6	123	-0.08	10.38
		----------	AvgRF	CCRF	% Dev	----------		
77	t	Phenanthrene	1.115	1.153	-3.4	109	-0.09	10.71
78	t	Anthracene	1.155	1.169	-1.2	106	-0.08	10.81
79	t	Carbazole	1.064	1.094	-2.8	106	-0.08	11.17
80	t	Di-n-butylphthalate	1.321	1.455	-10.1	115	-0.09	11.94
81	t	Fluoranthene	1.307	1.323	-1.2	105	-0.09	13.00
82	t	Octadecane	0.430	0.510	-18.6	124	-0.08	10.64

Continuing Calibration Summary

Job Number: JC19023 **Sample:** EM5245-CC5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M124000.D
Project: BMSMC, Building 5 Area, PR

83	I	Chrysene-d12	1.000	1.000	0.0	109	-0.09	15.83
84	t	Pyrene	1.304	1.214	6.9	105	-0.09	13.42
85		Butyl stearate	0.298	0.333	-11.7	125	-0.09	15.11
86	S	Terphenyl-d14	0.897	0.886	1.2	112	-0.09	13.83
87	t	Butylbenzylphthalate	0.567	0.582	-2.6	113	-0.09	14.87
88	t	Benzo[a]anthracene	1.223	1.203	1.6	113	-0.10	15.81
89	t	3,3'-Dichlorobenzidine	0.447	0.466	-4.3	116	-0.09	15.84
90	t	Chrysene	1.142	1.136	0.5	114	-0.09	15.88
91	t	bis(2-Ethylhexyl)phthalat	0.765	0.826	-8.0	120	-0.09	16.09
92	I	Perylene-d12	1.000	1.000	0.0	106	-0.10	18.46
93	t	Di-n-octylphthalate	1.298	1.440	-10.9	119	-0.09	17.31
94	t	Benzo[b]fluoranthene	1.229	1.263	-2.8	113	-0.10	17.82
95	t	Benzo[k]fluoranthene	1.185	1.241	-4.7	116	-0.10	17.86
96	t	Benzo[a]pyrene	1.135	1.145	-0.9	110	-0.10	18.36
97	t	Indeno[1,2,3-cd]pyrene	1.149	1.195	-4.0	114	-0.11	20.16
98	t	Dibenz(a,h)acridine	1.018	1.072	-5.3	113	-0.11	19.80
99	t	Dibenz[a,h]anthracene	1.168	1.211	-3.7	112	-0.12	20.19
100	t	7,12-Dimethylbenz(a)anthr	0.553	0.531	4.0	104	-0.10	17.81
101	t	Benzo[g,h,i]perylene	1.197	1.185	1.0	108	-0.13	20.60

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M123947.D MM5239.M Fri Apr 29 15:01:42 2016 MSM

6.7.51

6

Continuing Calibration Summary

Job Number: JC19023 **Sample:** EM5245-CC5239
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M124001.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5245\M124001.D          Vial: 3
Acq On    : 29 Apr 2016   9:58 am                   Operator: ashleyd
Sample    : cc5239-25                               Inst    : Instrument #1
Misc      : op93324,em5245                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MM5239.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Thu Apr 28 11:01:37 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	113	-0.02	4.62
103	t	Benzaldehyde	0.904	0.976	-8.0	117	-0.02	4.30
104	I	Acenaphthene-d10a	1.000	1.000	0.0	106	-0.04	8.05
105	I	1,2,4,5-Tetrachlorobenzen	0.516	0.582	-12.8	116	0.03	6.78
106	t	Atrazine	0.169	0.203	-20.1#	122	-0.02	10.27
107	I	Chrysene-d12a	1.000	1.000	0.0	107	-0.04	15.83
		----------	True	Calc.	% Drift	----------		
108	t	Benzidine	25.000	21.062	15.8	112	-0.04	13.35
		----------	AvgRF	CCRF	% Dev	----------		
109	s	1-chlorooctadecane	0.258	0.273	-5.8	107	0.06	12.98
110	I	Phenanthrene-d10a	1.000	1.000	0.0	106	-0.04	10.66
111	s	o-terphenyl	0.540	0.626	-15.9	114	0.06	11.46
112	I	Naphthalene-d8a	1.000	1.000	0.0	108	-0.03	5.74
113		Hydroquinone	0.310	0.318	-2.6	111	-0.02	6.26

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M123947.D MM5239.M Fri Apr 29 15:01:44 2016 MSM

Continuing Calibration Summary

Job Number: JC19023 **Sample:** EM5253-CC5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M124202.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5253\M124202.D          Vial: 2
Acq On    :  6 May 2016   8:57 am                   Operator: ashleyd
Sample    : cc5217-50                               Inst    : Instrument #1
Misc      : op93634,em5253                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MM5239.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Fri May 06 11:18:22 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	121	-0.01	4.67
2	t	1,4-Dioxane	0.555	0.515	7.2	121	-0.02	2.21
3	t	Pyridine	1.350	1.390	-3.0	123	-0.02	2.56
4	t	N-Nitrosodimethylamine	0.591	0.668	-13.0	136	-0.02	2.52
5	S	2-Fluorophenol	1.223	1.271	-3.9	125	0.00	3.71
6	t	Indene	2.275	2.262	0.6	128	-0.01	4.87
7	t	Cumene	3.052	3.040	0.4	125	-0.01	4.06
8	S	Phenol-d5	1.536	1.657	-7.9	131	0.00	4.43
9	t	Phenol	1.646	1.840	-11.8	129	0.00	4.44
10	t	Aniline	1.915	1.757	8.3	113	-0.02	4.42
11	t	bis(2-Chloroethyl)ether	1.282	1.314	-2.5	137	0.00	4.47
12	t	2-Chlorophenol	1.371	1.382	-0.8	128	-0.01	4.52
13	t	Decane	1.300	1.380	-6.2	147	-0.01	4.54
14	t	1,3-Dichlorobenzene	1.563	1.543	1.3	126	-0.01	4.62
15	t	1,4-Dichlorobenzene	1.549	1.502	3.0	124	-0.01	4.68
16	t	Benzyl alcohol	0.794	0.836	-5.3	126	0.00	4.79
17	t	1,2-Dichlorobenzene	1.458	1.442	1.1	129	-0.01	4.80
18	t	Acetophenone	1.821	1.807	0.8	126	0.00	4.99
19	t	2-Methylphenol	1.136	1.152	-1.4	125	0.00	4.89
20	t	2,2'-oxybis(1-Chloropropa	0.424	0.426	-0.5	137	0.00	4.88
21	t	3&4-Methylphenol	1.245	1.264	-1.5	125	0.00	5.02
22	t	n-Nitroso-di-n-propylamin	0.983	0.972	1.1	130	0.00	4.99
23	t	Hexachloroethane	0.586	0.575	1.9	127	-0.01	5.07
24	I	Naphthalene-d8	1.000	1.000	0.0	116	-0.02	5.79
25	S	Nitrobenzene-d5	0.356	0.364	-2.2	123	0.00	5.12
26	t	Nitrobenzene	0.360	0.374	-3.9	127	0.00	5.14
27	t	Quinoline	0.763	0.752	1.4	120	-0.07	6.20
28	t	Isophorone	0.647	0.677	-4.6	128	0.00	5.34
29	t	2-Nitrophenol	0.204	0.219	-7.4	127	-0.02	5.42
30	t	2,4-Dimethylphenol	0.333	0.330	0.9	125	0.00	5.48
31	t	Benzoic acid	0.219	0.251	-14.6	125	0.01	5.63
32	t	bis(2-Chloroethoxy)methan	0.393	0.404	-2.8	127	-0.02	5.54
33	t	2,4-Dichlorophenol	0.305	0.320	-4.9	124	-0.02	5.67
34	t	2,6-Dichlorophenol	0.308	0.315	-2.3	128	-0.02	5.89
35	t	1,3,5-Trichlorobenzene	0.364	0.372	-2.2	126	-0.02	5.43
36	t	1,2,4-Trichlorobenzene	0.358	0.353	1.4	121	-0.01	5.74
37	t	1,2,3-Trichlorobenzene	0.346	0.343	0.9	121	-0.02	5.97
38	t	Naphthalene	1.048	1.048	0.0	123	-0.02	5.81
39	t	4-Chloroaniline	0.451	0.436	3.3	114	-0.02	5.88
40	t	2,3-Dichloroaniline	0.397	0.396	0.3	120	-0.01	7.00
41	t	Caprolactam	0.165	0.171	-3.6	132	0.01	6.30

Continuing Calibration Summary

Job Number: JC19023 **Sample:** EM5253-CC5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M124202.D
Project: BMSMC, Building 5 Area, PR

42	t	Hexachlorobutadiene	0.206	0.216	-4.9	129	-0.01	5.95
43	t	4-Chloro-3-methylphenol	0.305	0.300	1.6	120	-0.01	6.48
44	t	2-Methylnaphthalene	0.626	0.618	1.3	121	-0.01	6.62
45	t	1-Methylnaphthalene	0.728	0.731	-0.4	122	-0.02	6.74
46	t	Dimethylnaphthalene	0.676	0.663	1.9	121	-0.01	7.49
47	I	Acenaphthene-d10	1.000	1.000	0.0	115	-0.02	8.13
		----------	True	Calc.	% Drift	----------		
48	t	Hexachlorocyclopentadiene	100.000	84.142	15.9	96	-0.02	6.82
		----------	AvgRF	CCRF	% Dev	----------		
49	t	2,4,6-Trichlorophenol	0.382	0.397	-3.9	126	-0.01	7.03
50	t	2,4,5-Trichlorophenol	0.415	0.432	-4.1	124	-0.01	7.10
51	S	2-Fluorobiphenyl	1.313	1.327	-1.1	127	-0.01	7.12
52	t	2-Chloronaphthalene	1.165	1.119	3.9	120	-0.01	7.28
53	t	Biphenyl	1.488	1.449	2.6	121	-0.02	7.26
54	t	2-Nitroaniline	0.332	0.346	-4.2	125	0.00	7.46
55	t	Dimethylphthalate	1.362	1.336	1.9	119	-0.01	7.74
56	t	Acenaphthylene	1.927	1.819	5.6	117	-0.02	7.90
57	t	2,6-Dinitrotoluene	0.303	0.318	-5.0	122	0.00	7.84
58	t	3-Nitroaniline	0.335	0.338	-0.9	116	-0.01	8.11
59	t	Acenaphthene	1.161	1.117	3.8	121	-0.02	8.18
		----------	True	Calc.	% Drift	----------		
60	t	2,4-Dinitrophenol	100.000	122.789	-22.8#	148	-0.01	8.31
		----------	AvgRF	CCRF	% Dev	----------		
61	t	4-Nitrophenol	0.123	0.110	10.6	105	-0.04	8.53
62	t	Dibenzofuran	1.726	1.680	2.7	119	-0.02	8.47
63	t	2,4-Dinitrotoluene	0.397	0.424	-6.8	122	-0.01	8.51
64	t	2,3,4,6-Tetrachlorophenol	0.321	0.361	-12.5	130	-0.02	8.72
65	t	Diethylphthalate	1.356	1.355	0.1	122	-0.02	8.93
66	t	Fluorene	1.396	1.399	-0.2	123	-0.02	9.06
67	t	4-Chlorophenyl-phenylethe	0.666	0.661	0.8	122	-0.02	9.08
68	t	4-Nitroaniline	0.326	0.331	-1.5	113	0.00	9.17
69	I	Phenanthrene-d10	1.000	1.000	0.0	113	-0.02	10.75
		----------	True	Calc.	% Drift	----------		
70	t	4,6-Dinitro-2-methylpheno	50.000	59.565	-19.1	139	-0.01	9.23
		----------	AvgRF	CCRF	% Dev	----------		
71	t	n-Nitrosodiphenylamine	0.537	0.539	-0.4	121	-0.02	9.31
72	t	1,2-Diphenylhydrazine	0.688	0.710	-3.2	123	-0.02	9.36
73	S	2,4,6-Tribromophenol	0.138	0.174	-26.1#	143	-0.03	9.49
74	t	4-Bromophenyl-phenylether	0.247	0.276	-11.7	131	-0.02	9.95
75	t	Hexachlorobenzene	0.291	0.312	-7.2	129	-0.02	10.05
		----------	True	Calc.	% Drift	----------		
76	t	Pentachlorophenol	100.000	125.679	-25.7#	143	-0.01	10.47
		----------	AvgRF	CCRF	% Dev	----------		
77	t	Phenanthrene	1.115	1.107	0.7	119	-0.02	10.80
78	t	Anthracene	1.155	1.152	0.3	119	-0.02	10.89
79	t	Carbazole	1.064	1.068	-0.4	119	-0.02	11.25
80	t	Di-n-butylphthalate	1.321	1.362	-3.1	120	-0.03	12.03
81	t	Fluoranthene	1.307	1.383	-5.8	125	-0.02	13.09
82	t	Octadecane	0.430	0.480	-11.6	131	-0.03	10.72

Continuing Calibration Summary

Job Number: JC19023 **Sample:** EM5253-CC5217
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M124202.D
Project: BMSMC, Building 5 Area, PR

83	I	Chrysene-d12	1.000	1.000	0.0	131	-0.01	15.94
84	t	Pyrene	1.304	1.193	8.5	126	-0.01	13.52
85		Butyl stearate	0.298	0.303	-1.7	138	-0.03	15.20
86	S	Terphenyl-d14	0.897	0.901	-0.4	136	-0.02	13.92
87	t	Butylbenzylphthalate	0.567	0.528	6.9	122	-0.02	14.96
88	t	Benzo[a]anthracene	1.223	1.172	4.2	134	-0.02	15.92
89	t	3,3'-Dichlorobenzidine	0.447	0.459	-2.7	138	-0.02	15.94
90	t	Chrysene	1.142	1.093	4.3	132	-0.01	15.99
91	t	bis(2-Ethylhexyl)phthalat	0.765	0.702	8.2	124	-0.02	16.18
92	I	Perylene-d12	1.000	1.000	0.0	127	0.00	18.57
93	t	Di-n-octylphthalate	1.298	1.201	7.5	120	-0.01	17.40
94	t	Benzo[b]fluoranthene	1.229	1.215	1.1	136	0.00	17.94
95	t	Benzo[k]fluoranthene	1.185	1.124	5.1	130	0.00	17.98
96	t	Benzo[a]pyrene	1.135	1.110	2.2	132	0.00	18.48
97	t	Indeno[1,2,3-cd]pyrene	1.149	1.371	-19.3	161	0.02	20.31
98	t	Dibenz(a,h)acridine	1.018	1.045	-2.7	141	0.00	19.93
99	t	Dibenz[a,h]anthracene	1.168	1.153	1.3	137	0.00	20.34
100	t	7,12-Dimethylbenz(a)anthr	0.553	0.595	-7.6	147	0.00	17.92
101	t	Benzo[g,h,i]perylene	1.197	1.167	2.5	135	0.03	20.77

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M123931a.D MM5239.M Fri May 06 12:33:37 2016 MSM

Continuing Calibration Summary

Job Number: JC19023 **Sample:** EM5253-CC5239
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** M124203.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\msdchem\1\DATA\EM5253\M124203.D          Vial: 3
Acq On    :  6 May 2016   9:26 am                   Operator: ashleyd
Sample    : cc5239-50                               Inst    : Instrument #1
Misc      : op93634,em5253                          Multiplr: 1.00
MS Integration Params: RTEINT.P

Method       : C:\MSDCHEM\1\METHODS\MM5239.M (RTE Integrator)
Title        : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
Last Update  : Fri May 06 11:18:22 2016
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
102	I	1,4-Dichlorobenzene-d4a	1.000	1.000	0.0	134	0.00	4.67
103	t	Benzaldehyde	0.904	0.732	19.0	98	-0.01	4.34
104	I	Acenaphthene-d10a	1.000	1.000	0.0	126	-0.02	8.12
105	I	1,2,4,5-Tetrachlorobenzen	0.516	0.614	-19.0	145	0.05	6.85
106	t	Atrazine	0.169	0.236	-39.6#	173	0.00	10.36
107	I	Chrysene-d12a	1.000	1.000	0.0	150	-0.02	15.93
		----------	True	Calc.	% Drift	----------		
108	t	Benzidine	50.000	35.159	29.7#	102	-0.02	13.44
		----------	AvgRF	CCRF	% Dev	----------		
109	s	1-chlorooctadecane	0.258	0.250	3.1	139	0.08	13.06
110	I	Phenanthrene-d10a	1.000	1.000	0.0	141	-0.02	10.75
111	s	o-terphenyl	0.540	0.642	-18.9	168	0.07	11.54
112	I	Naphthalene-d8a	1.000	1.000	0.0	130	-0.01	5.79
113		Hydroquinone	0.310	0.334	-7.7	133	-0.01	6.31

(#) = Out of Range SPCC's out = 0 CCC's out = 0
M123931a.D MM5239.M Fri May 06 12:33:39 2016 MSM

GC/MS Semi-volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5253\
Data File : M124228.D
Acq On : 6 May 2016 5:34 pm
Operator : ashleyd
Sample : jc19023-1
Misc : op93478,em5253,31.4
ALS Vial : 28 Sample Multiplier: 1

Quant Time: May 10 16:06:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri May 06 11:18:22 2016
Response via : Initial Calibration

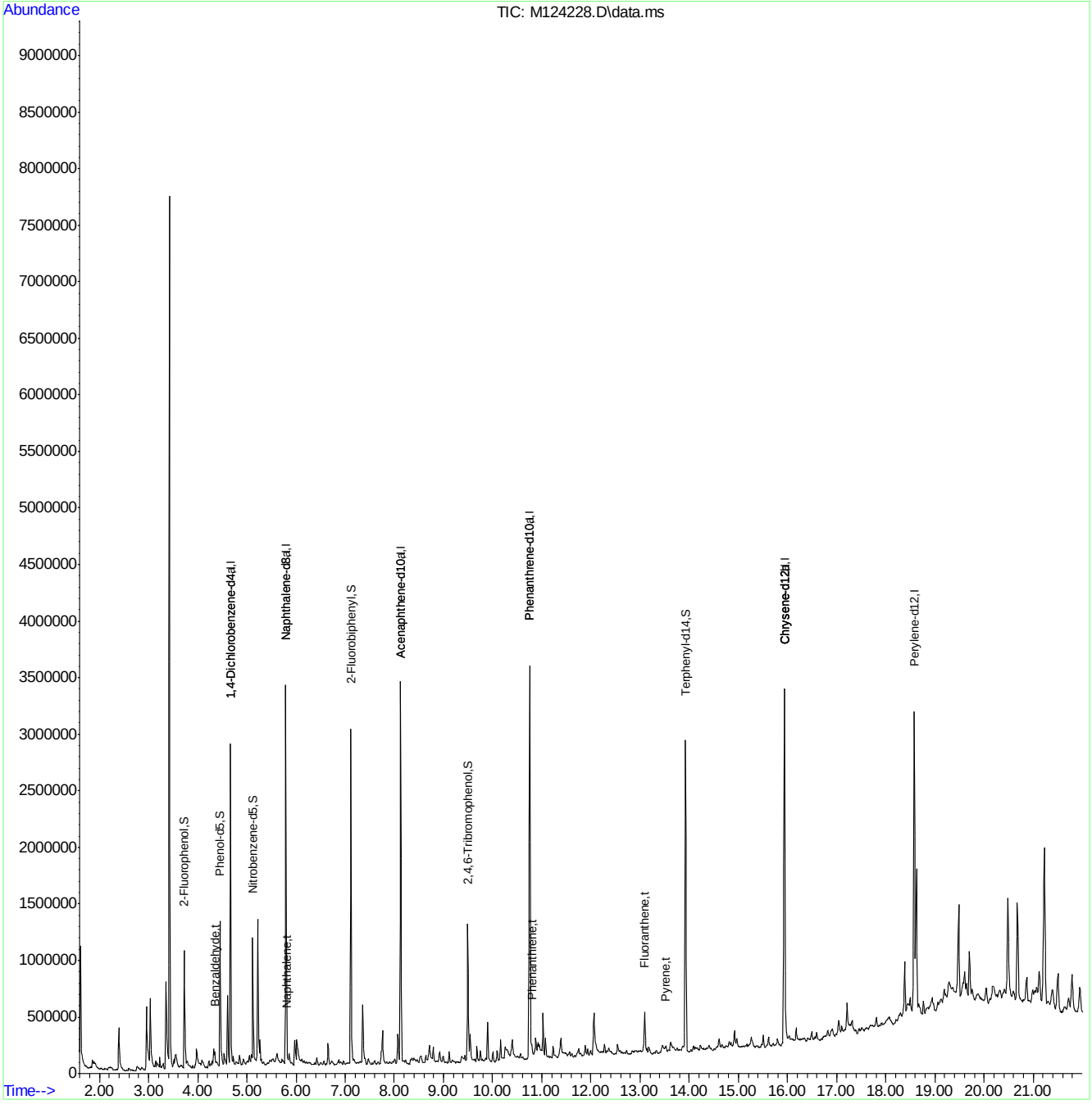
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.666	152	404573	40.00	ppm	0.00
24) Naphthalene-d8	5.793	136	1690215	40.00	ppm	-0.01
47) Acenaphthene-d10	8.132	164	1102875	40.00	ppm	-0.01
69) Phenanthrene-d10	10.755	188	2042732	40.00	ppm	-0.02
83) Chrysene-d12	15.941	240	1995643	40.00	ppm	0.00
92) Perylene-d12	18.579	264	1721818	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.666	152	404573	40.00	ppm	0.00
104) Acenaphthene-d10a	8.132	164	1102875	40.00	ppm	-0.01
107) Chrysene-d12a	15.941	240	1995643	40.00	ppm	0.00
110) Phenanthrene-d10a	10.755	188	2042732	40.00	ppm	-0.02
112) Naphthalene-d8a	5.793	136	1690215	40.00	ppm	-0.01
114) Chrysene-d12b	15.941	240	1995643	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.726	112	420244	33.97	ppm	0.00
Spiked Amount 50.000			Recovery	=	67.94%	
8) Phenol-d5	4.452	99	551769	35.51	ppm	0.02
Spiked Amount 50.000			Recovery	=	71.02%	
25) Nitrobenzene-d5	5.120	82	367363	24.44	ppm	-0.01
Spiked Amount 50.000			Recovery	=	48.88%	
51) 2-Fluorobiphenyl	7.117	172	1154224	31.87	ppm	-0.01
Spiked Amount 50.000			Recovery	=	63.74%	
73) 2,4,6-Tribromophenol	9.499	330	264451	37.45	ppm	-0.02
Spiked Amount 50.000			Recovery	=	74.90%	
86) Terphenyl-d14	13.927	244	1479496	33.05	ppm	-0.01
Spiked Amount 50.000			Recovery	=	66.10%	
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
38) Naphthalene	5.819	128	31914	0.72	ppm	97
77) Phenanthrene	10.797	178	43979	0.77	ppm	99
81) Fluoranthene	13.094	202	36887	0.55	ppm	98
84) Pyrene	13.521	202	28285	0.43	ppm	99
103) Benzaldehyde	4.345	105	21467	2.35	ppm	95

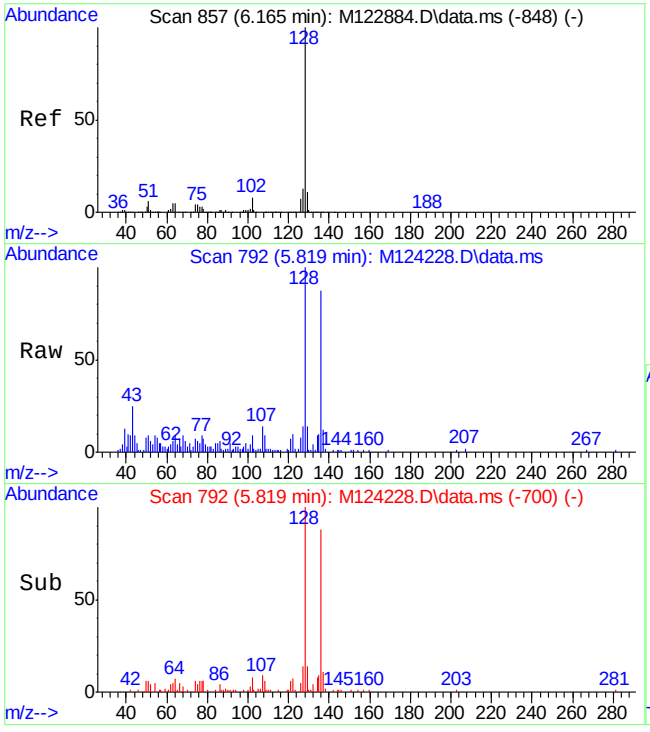
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5253\
Data File : M124228.D
Acq On : 6 May 2016 5:34 pm
Operator : ashleyd
Sample : jc19023-1
Misc : op93478,em5253,31.4
ALS Vial : 28 Sample Multiplier: 1

Quant Time: May 10 16:06:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri May 06 11:18:22 2016
Response via : Initial Calibration

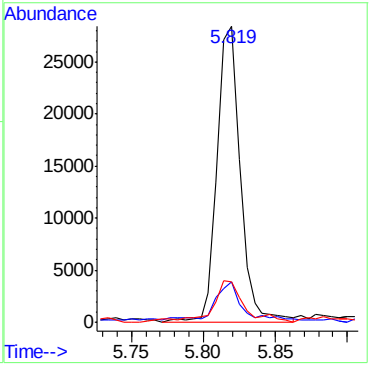


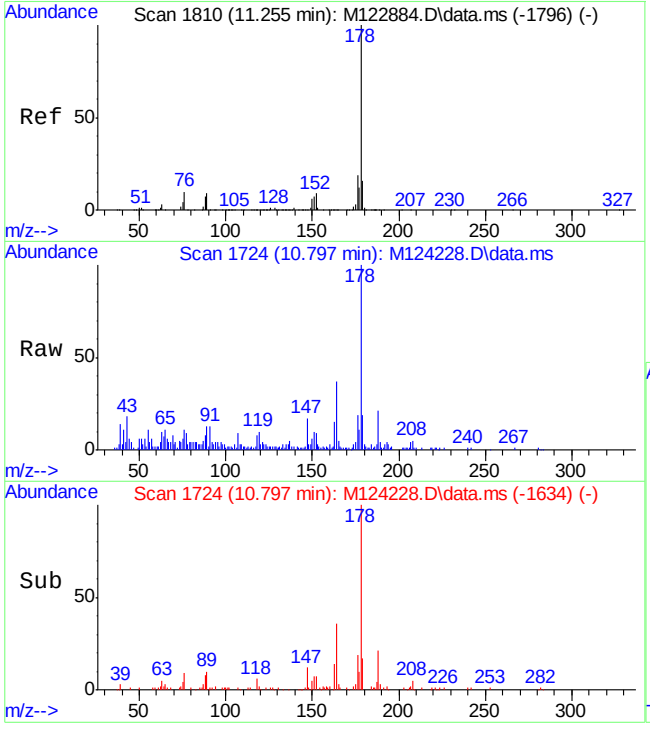


#38
Naphthalene
Concen: 0.72 ppm
RT: 5.819 min Scan# 792
Delta R.T. -0.010 min
Lab File: M124228.D
Acq: 6 May 2016 5:34 pm

Tgt Ion:128 Resp: 31914

Ion	Ratio	Lower	Upper
128	100		
129	12.8	0.0	40.9
127	13.4	0.0	43.0

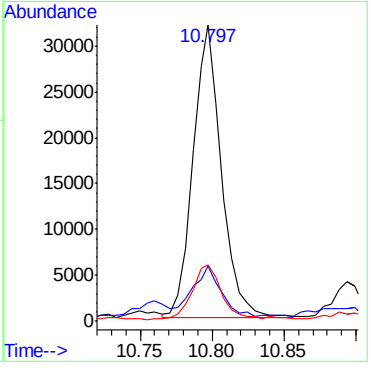


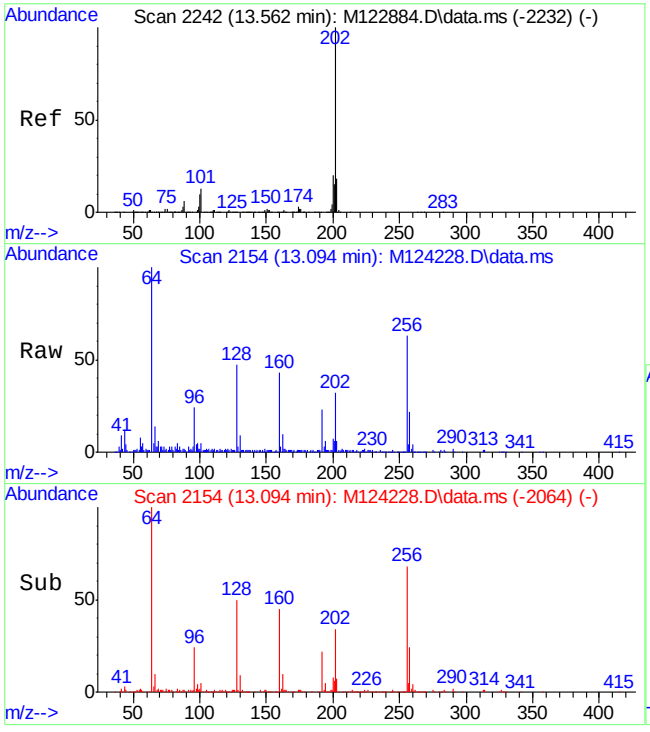


#77
Phenanthrene
Concen: 0.77 ppm
RT: 10.797 min Scan# 1724
Delta R.T. -0.020 min
Lab File: M124228.D
Acq: 6 May 2016 5:34 pm

Tgt Ion:178 Resp: 43979

Ion	Ratio	Lower	Upper
178	100		
179	15.2	0.0	46.0
176	18.6	0.0	48.4

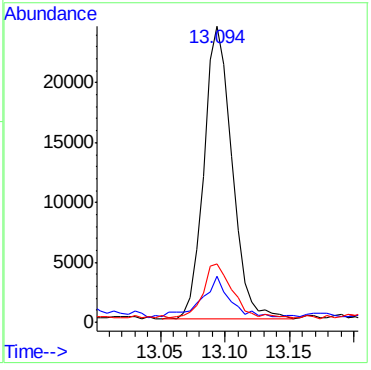


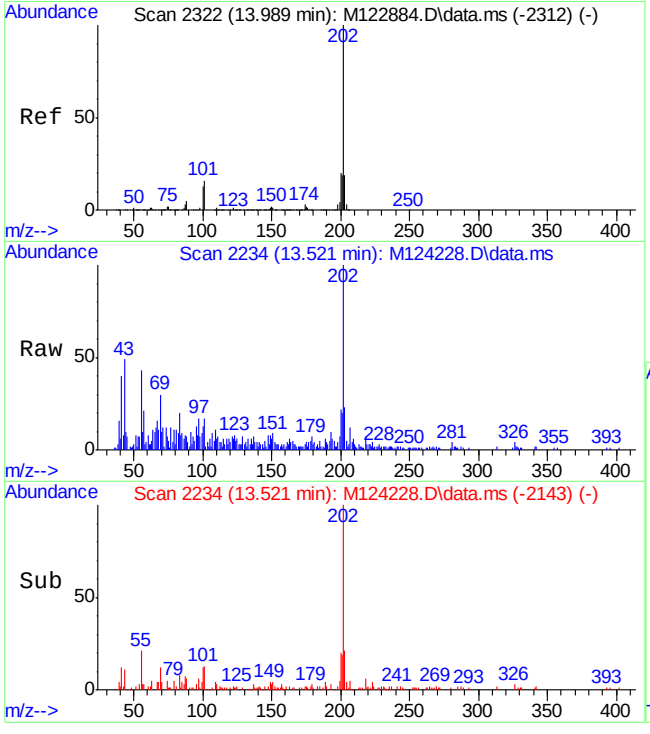


#81
Fluoranthene
Concen: 0.55 ppm
RT: 13.094 min Scan# 2154
Delta R.T. -0.020 min
Lab File: M124228.D
Acq: 6 May 2016 5:34 pm

Tgt Ion:202 Resp: 36887

Ion	Ratio	Lower	Upper
202	100		
101	13.4	0.0	41.8
203	18.0	0.0	47.5

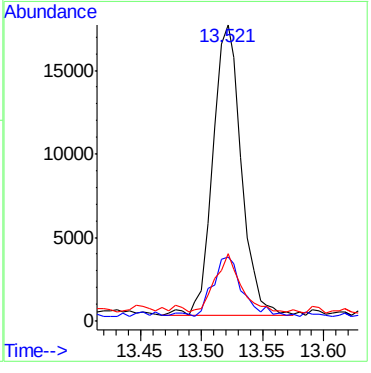


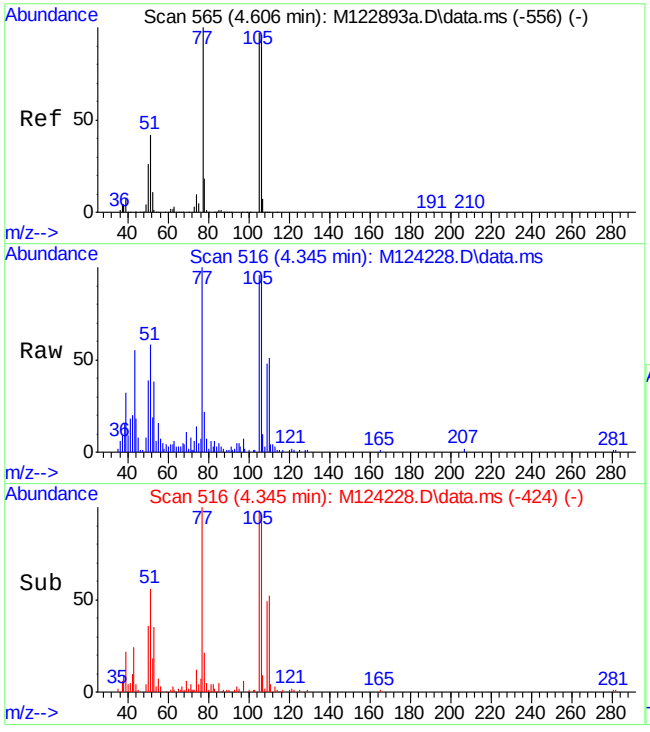


#84
Pyrene
Concen: 0.43 ppm
RT: 13.521 min Scan# 2234
Delta R.T. -0.012 min
Lab File: M124228.D
Acq: 6 May 2016 5:34 pm

Tgt Ion:202 Resp: 28285

Ion	Ratio	Lower	Upper
202	100		
200	20.0	0.0	50.4
203	19.2	0.0	48.7

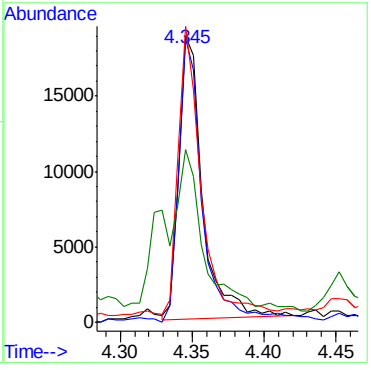




#103
Benzaldehyde
Concen: 2.35 ppm
RT: 4.345 min Scan# 516
Delta R.T. -0.007 min
Lab File: M124228.D
Acq: 6 May 2016 5:34 pm

Tgt Ion:105 Resp: 21467

Ion	Ratio	Lower	Upper
105	100		
106	100.4	67.4	127.4
77	102.1	73.1	133.1
51	39.0	19.1	79.1



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1416\
Data File : 5p27908.D
Acq On : 3 May 2016 11:21 am
Operator : ashleyd
Sample : jc19023-2
Misc : op93478,e5p1416,30.1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 03 12:22:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Tue May 03 08:59:50 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.293	152	769102	40.00	ppm	0.00
24) Naphthalene-d8	6.762	136	2984033	40.00	ppm	0.00
47) Acenaphthene-d10	8.872	164	1659420	40.00	ppm	0.00
69) Phenanthrene-d10	10.704	188	2660152	40.00	ppm	0.00
83) Chrysene-d12	14.497	240	2334388	40.00	ppm	-0.01
92) Perylene-d12	16.570	264	2096982	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	5.293	152	769102	40.00	ppm	0.00
104) Acenaphthene-d10a	8.872	164	1659420	40.00	ppm	0.00
106) Chrysene-d12a	14.497	240	2334120	40.00	ppm	-0.01
109) Phenanthrene-d10a	10.704	188	2660152	40.00	ppm	0.00
112) Naphthalene-d8a	6.762	136	2984033	40.00	ppm	0.00
114) Chrysene-d12b	14.497	240	2334120	40.00	ppm	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.957	112	850427	36.08	ppm	0.03
Spiked Amount 50.000			Recovery	=	72.16%	
8) Phenol-d5	4.961	99	969049	36.19	ppm	0.00
Spiked Amount 50.000			Recovery	=	72.38%	
25) Nitrobenzene-d5	5.934	82	875196	38.64	ppm	0.08
Spiked Amount 50.000			Recovery	=	77.28%	
51) 2-Fluorobiphenyl	8.065	172	2120086	40.13	ppm	0.00
Spiked Amount 50.000			Recovery	=	80.26%	
73) 2,4,6-Tribromophenol	9.839	330	244515	38.07	ppm	0.00
Spiked Amount 50.000			Recovery	=	76.14%	
85) Terphenyl-d14	12.943	244	2105131	44.87	ppm	0.00
Spiked Amount 50.000			Recovery	=	89.74%	
108) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	

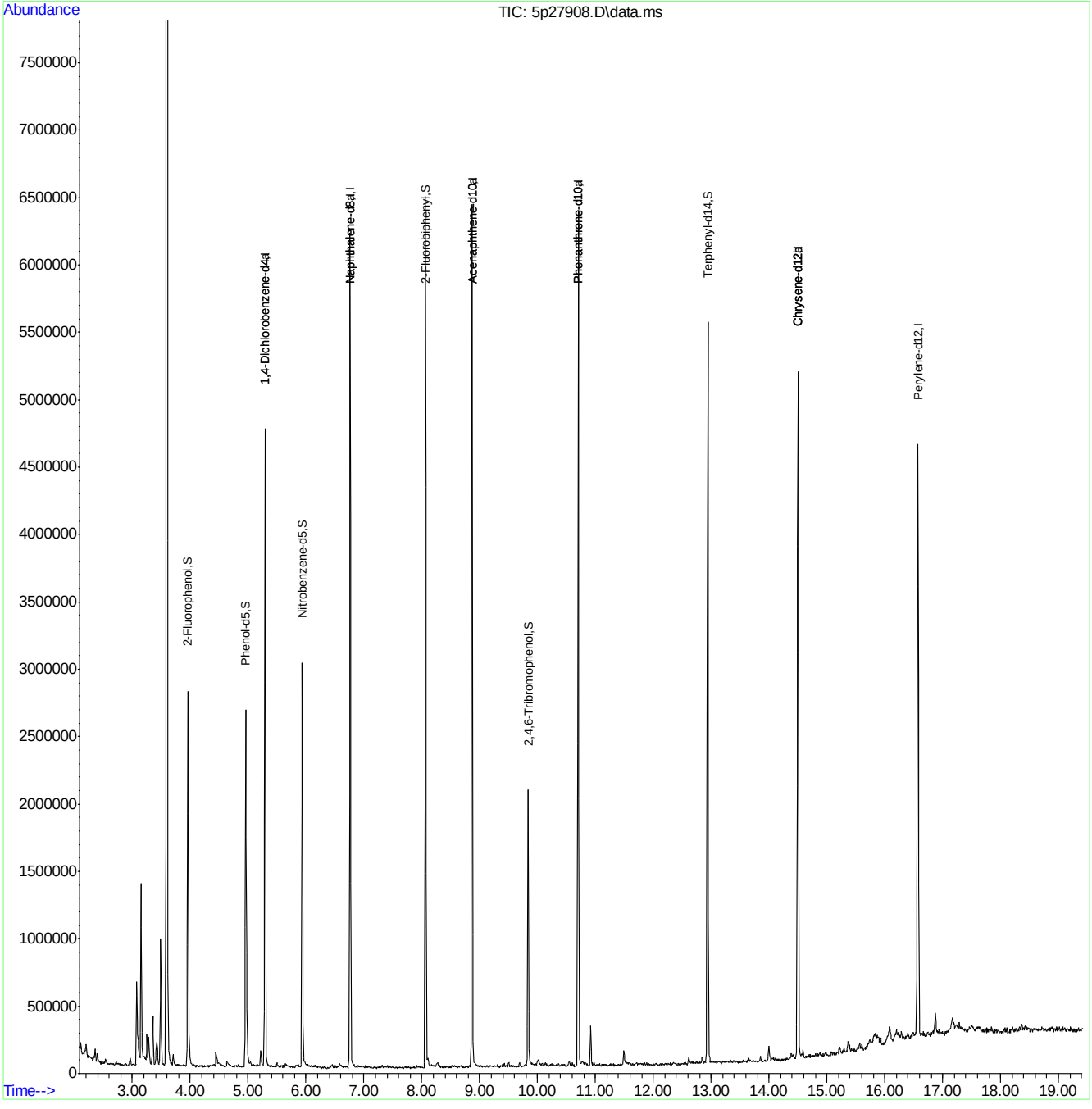
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1416\
Data File : 5p27908.D
Acq On : 3 May 2016 11:21 am
Operator : ashleyd
Sample : jc19023-2
Misc : op93478,e5p1416,30.1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: May 03 12:22:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Tue May 03 08:59:50 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2566\
Data File : 2p58712.D
Acq On : 29 Apr 2016 6:53 pm
Operator : robertl1
Sample : JC19023-3
Misc : op93453,e2p2566,1000
ALS Vial : 25 Sample Multiplier: 1

Quant Time: May 02 12:05:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2557.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 29 09:54:55 2016
Response via : Initial Calibration

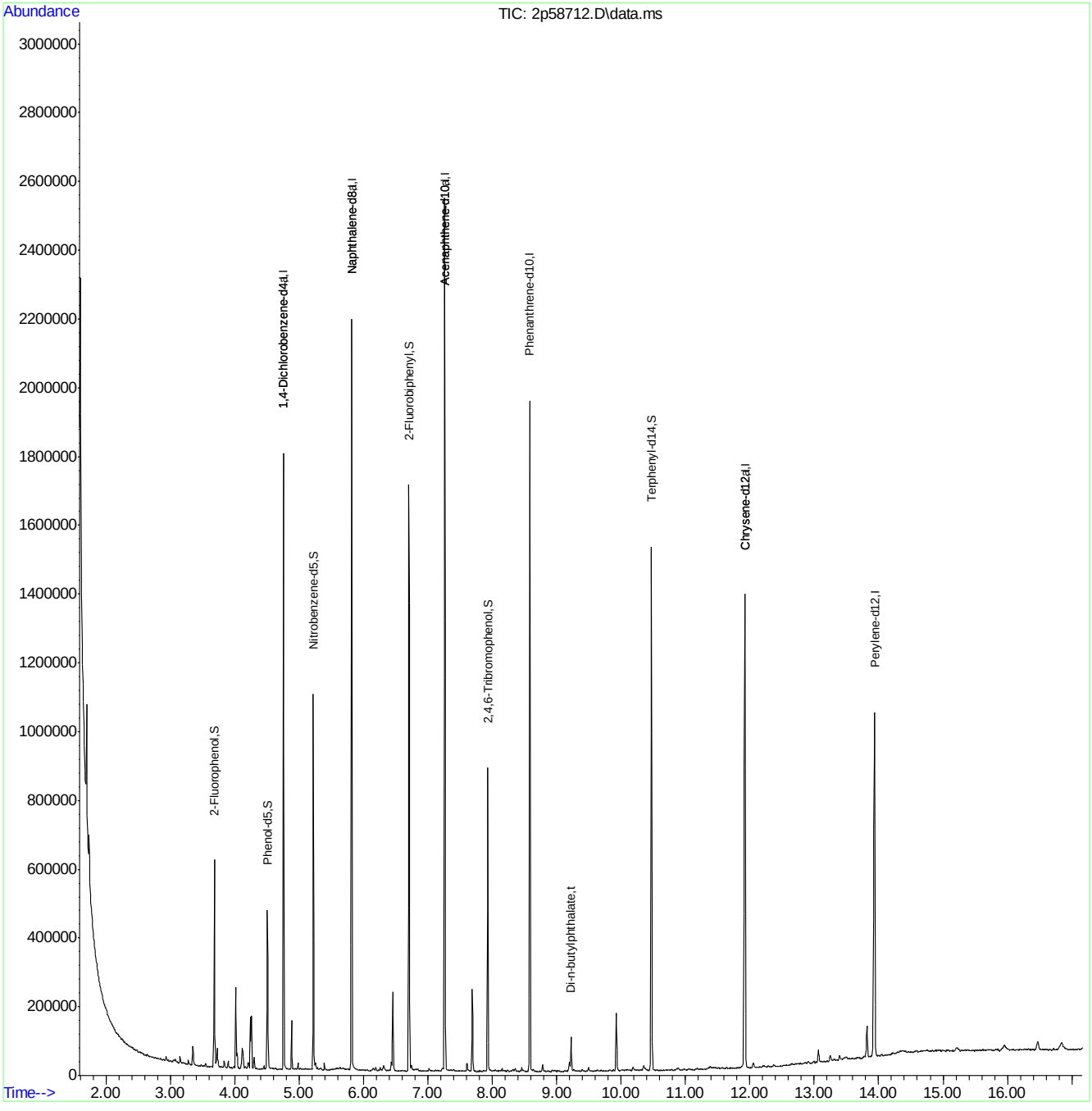
Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	4.758	152	191803	40.00 ppm	0.00
24) Naphthalene-d8	5.817	136	711200	40.00 ppm	0.00
47) Acenaphthene-d10	7.262	164	396292	40.00 ppm	0.00
69) Phenanthrene-d10	8.583	188	627320	40.00 ppm	0.00
83) Chrysene-d12	11.926	240	554539	40.00 ppm	0.00
92) Perylene-d12	13.937	264	414512	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.758	152	191803	40.00 ppm	0.00
104) Naphthalene-d8a	5.817	136	711200	40.00 ppm	0.00
106) Acenaphthene-d10a	7.262	164	396292	40.00 ppm	0.00
109) Chrysene-d12a	11.926	240	554539	40.00 ppm	0.00
System Monitoring Compounds					
5) 2-Fluorophenol	3.683	112	129131	16.62 ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 33.24%		
8) Phenol-d5	4.507	99	104062	11.43 ppm	0.05
Spiked Amount 50.000	Range 10 - 59		Recovery = 22.86%		
25) Nitrobenzene-d5	5.224	82	222526	31.73 ppm	0.00
Spiked Amount 50.000	Range 19 - 61		Recovery = 63.46%#		
51) 2-Fluorobiphenyl	6.705	172	394977	32.03 ppm	-0.01
Spiked Amount 50.000	Range 21 - 58		Recovery = 64.06%#		
73) 2,4,6-Tribromophenol	7.930	330	54718	39.29 ppm	0.00
Spiked Amount 50.000	Range 12 - 68		Recovery = 78.58%#		
85) Terphenyl-d14	10.471	244	480925	43.08 ppm	-0.02
Spiked Amount 50.000	Range 16 - 65		Recovery = 86.16%#		
Target Compounds					Qvalue
80) Di-n-butylphthalate	9.225	149	42085	1.84 ppm	98

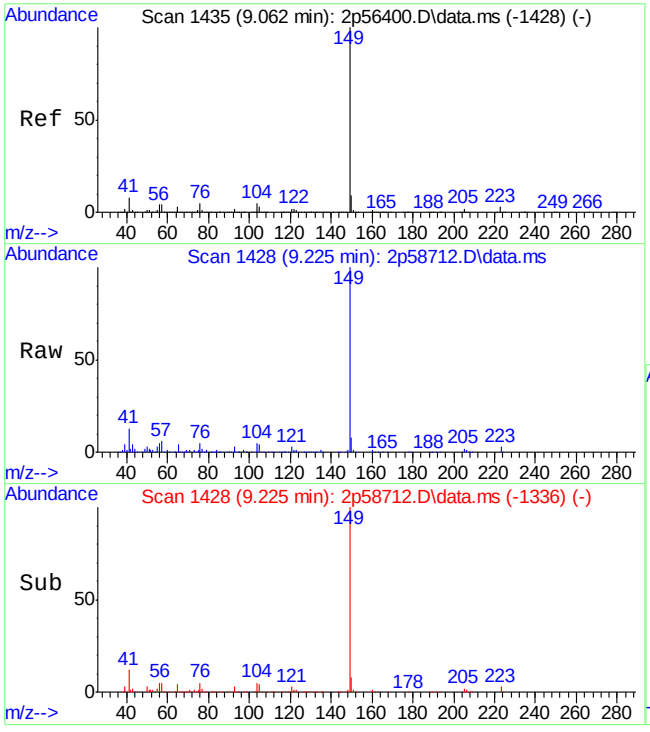
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2566\
Data File : 2p58712.D
Acq On : 29 Apr 2016 6:53 pm
Operator : robertl1
Sample : JC19023-3
Misc : op93453,e2p2566,1000
ALS Vial : 25 Sample Multiplier: 1

Quant Time: May 02 12:05:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2557.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 29 09:54:55 2016
Response via : Initial Calibration

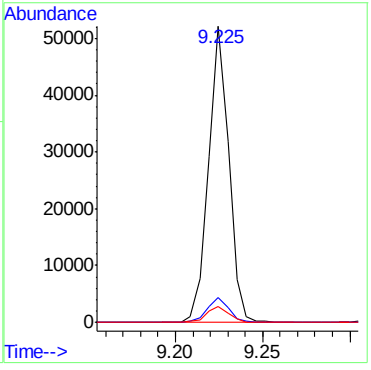




#80
Di-n-butylphthalate
Concen: 1.84 ppm
RT: 9.225 min Scan# 1428
Delta R.T. -0.008 min
Lab File: 2p58712.D
Acq: 29 Apr 2016 6:53 pm

Tgt Ion:149 Resp: 42085

Ion	Ratio	Lower	Upper
149	100		
150	8.4	0.0	39.2
104	5.2	0.0	35.4



7.1.3

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1416\
Data File : 5p27909.D
Acq On : 3 May 2016 11:47 am
Operator : ashleyd
Sample : jc19023-4
Misc : op93478,e5p1416,31.3
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 03 12:23:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Tue May 03 08:59:50 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.293	152	746559	40.00	ppm	0.00
24) Naphthalene-d8	6.762	136	2942618	40.00	ppm	0.00
47) Acenaphthene-d10	8.872	164	1652087	40.00	ppm	0.00
69) Phenanthrene-d10	10.704	188	2643246	40.00	ppm	0.00
83) Chrysene-d12	14.497	240	2336478	40.00	ppm	-0.01
92) Perylene-d12	16.570	264	2153442	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	5.293	152	746559	40.00	ppm	0.00
104) Acenaphthene-d10a	8.872	164	1652087	40.00	ppm	0.00
106) Chrysene-d12a	14.497	240	2336478	40.00	ppm	-0.01
109) Phenanthrene-d10a	10.704	188	2643246	40.00	ppm	0.00
112) Naphthalene-d8a	6.762	136	2942618	40.00	ppm	0.00
114) Chrysene-d12b	14.497	240	2336478	40.00	ppm	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.957	112	909965	39.77	ppm	0.03
Spiked Amount 50.000			Recovery	=	79.54%	
8) Phenol-d5	4.962	99	1038423	39.95	ppm	0.00
Spiked Amount 50.000			Recovery	=	79.90%	
25) Nitrobenzene-d5	5.934	82	356732	15.97	ppm	0.08
Spiked Amount 50.000			Recovery	=	31.94%	
51) 2-Fluorobiphenyl	8.065	172	2108126	40.08	ppm	0.00
Spiked Amount 50.000			Recovery	=	80.16%	
73) 2,4,6-Tribromophenol	9.839	330	229206	35.92	ppm	0.00
Spiked Amount 50.000			Recovery	=	71.84%	
85) Terphenyl-d14	12.943	244	2099700	44.71	ppm	0.00
Spiked Amount 50.000			Recovery	=	89.42%	
108) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
78) Anthracene	10.801	178	126983	1.70	ppm	96

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

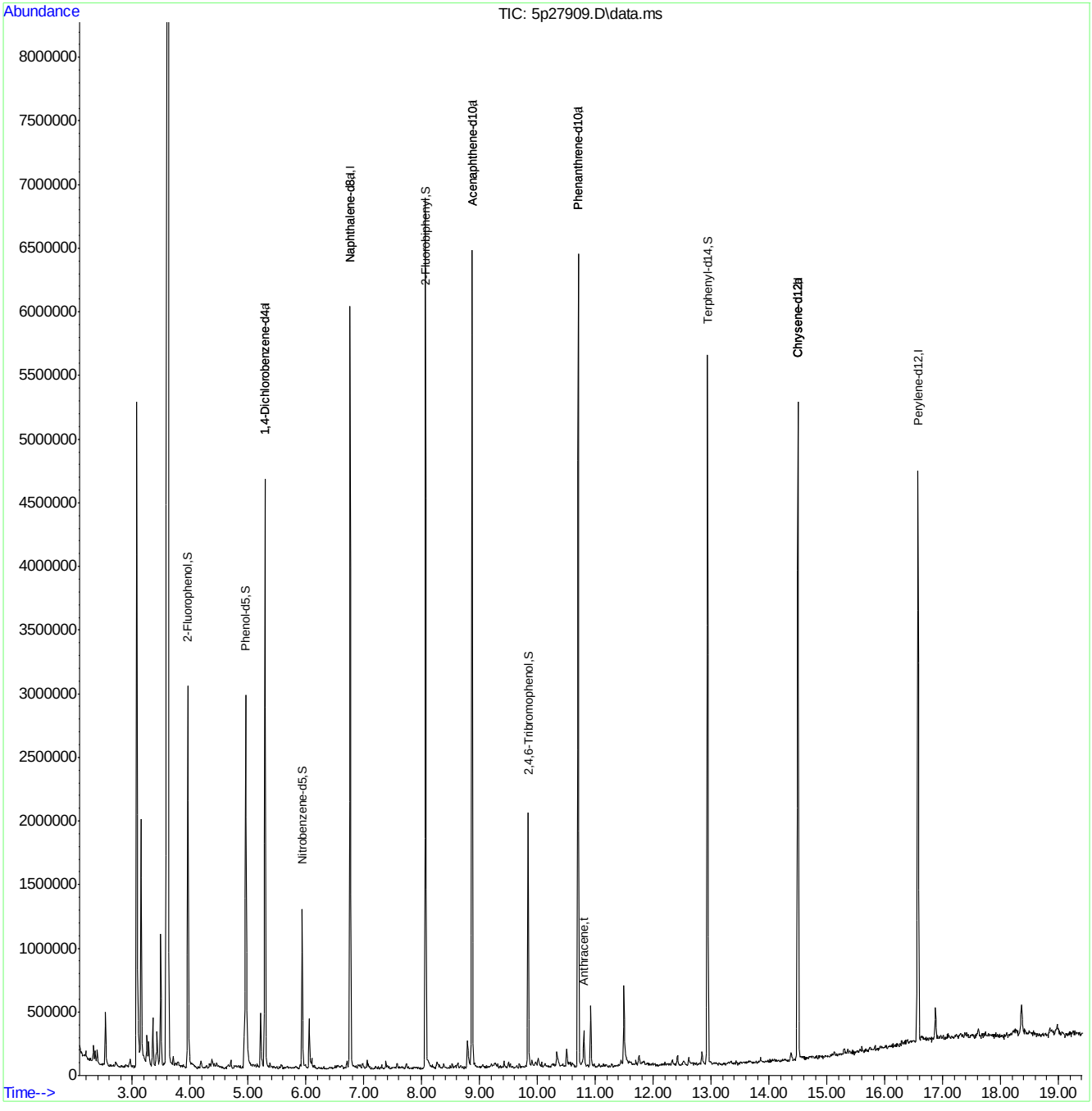
7.1.4

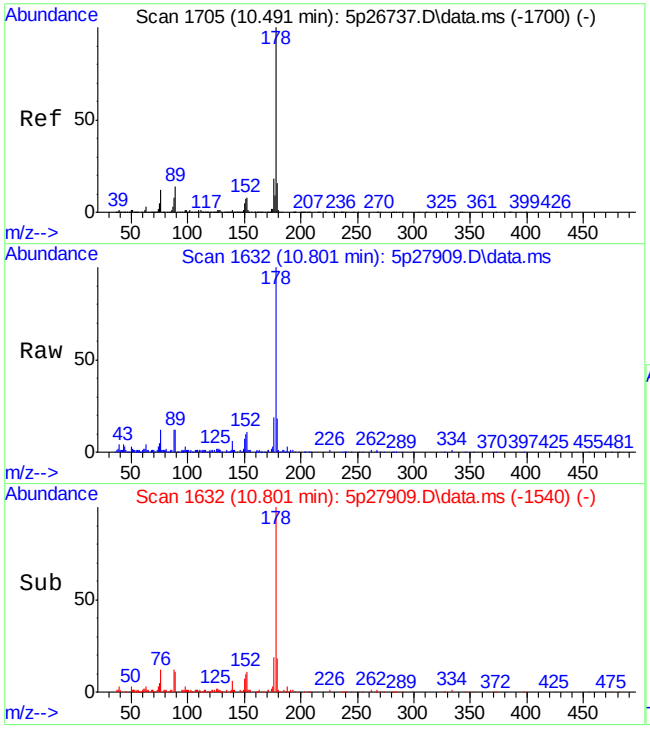
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1416\
Data File : 5p27909.D
Acq On : 3 May 2016 11:47 am
Operator : ashleyd
Sample : jc19023-4
Misc : op93478,e5p1416,31.3
ALS Vial : 9 Sample Multiplier: 1

Quant Time: May 03 12:23:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Tue May 03 08:59:50 2016
Response via : Initial Calibration

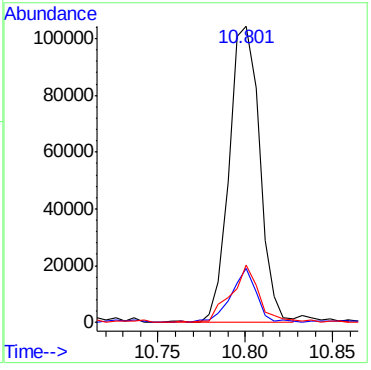




#78
Anthracene
Concen: 1.70 ppm
RT: 10.801 min Scan# 1632
Delta R.T. -0.006 min
Lab File: 5p27909.D
Acq: 3 May 16 11:47 am

Tgt Ion:178 Resp: 126983

Ion	Ratio	Lower	Upper
178	100		
179	18.2	0.0	45.8
176	19.1	0.0	47.6



7.1.4

7

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
05/10/16 16:42

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65189.D
Acq On : 9 May 2016 9:04 pm
Operator : linseyk
Sample : jc19023-1
Misc : op93478a,e4m2910,31.4
ALS Vial : 21 Sample Multiplier: 1

Quant Time: May 10 16:33:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Fri May 06 13:08:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.678	152	283881	4.00	ppm	#-0.02
12) Fluorene-d10	13.656	176	567365	4.00	ppm	-0.02
22) Fluoranthene-d10	17.836	212	790604	4.00	ppm	-0.03
28) Benzo(a)pyrene-d12	22.436	264	605601	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.678	152	283881	4.00	ppm	#-0.02
38) Fluorene-d10a	13.656	176	567365	4.00	ppm	-0.02
System Monitoring Compounds						
2) 2-Fluorophenol	4.725	112	1169386	31.46	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 62.92%#			
3) Phenol-d5	6.301	99	2016656	32.26	ppm	0.00
Spiked Amount 50.000			Recovery = 64.52%			
6) Nitrobenzene-d5	7.821	82	1429553	25.50	ppm	-0.02
Spiked Amount 50.000			Recovery = 51.00%			
11) 2-Fluorobiphenyl	11.346	172	2472826	30.18	ppm	-0.02
Spiked Amount 50.000			Recovery = 60.36%			
17) 2,4,6-Tribromophenol	14.206	330	721926	23.85	ppm	-0.02
Spiked Amount 50.000			Recovery = 47.70%			
25) Terphenyl-d14	18.646	244	3498579	32.76	ppm	-0.03
Spiked Amount 50.000			Recovery = 65.52%			
Target Compounds						Qvalue
7) Naphthalene	9.198	128	109442	0.68	ppm	98
16) Fluorene	13.704	166	20322	0.13	ppm	92
20) Phenanthrene	15.614	178	143062	0.70	ppm	95
23) Fluoranthene	17.874	202	117840	0.55	ppm	99
24) Pyrene	18.269	202	81917	0.39	ppm	99
26) Benzo[a]anthracene	20.359	228	45141m	0.23	ppm	
29) Benzo[b]fluoranthene	22.009	252	29849m	0.14	ppm	
31) Benzo[a]pyrene	22.463	252	8343	0.05	ppm	96
36) 1,4-Dioxane	2.434	88	3279m	0.18	ppm	

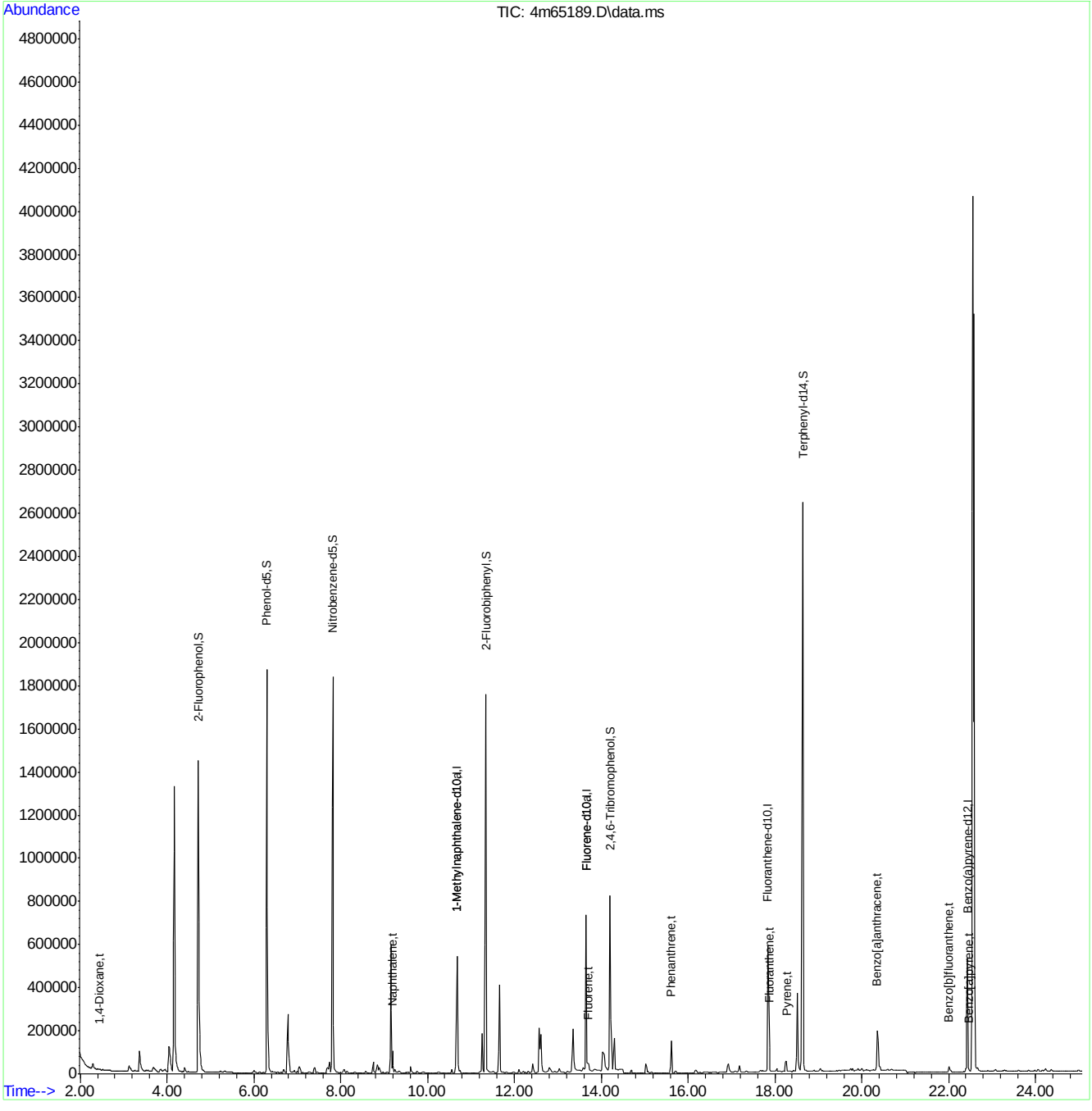
(#) = qualifier out of range (m) = manual integration (+) = signals summed

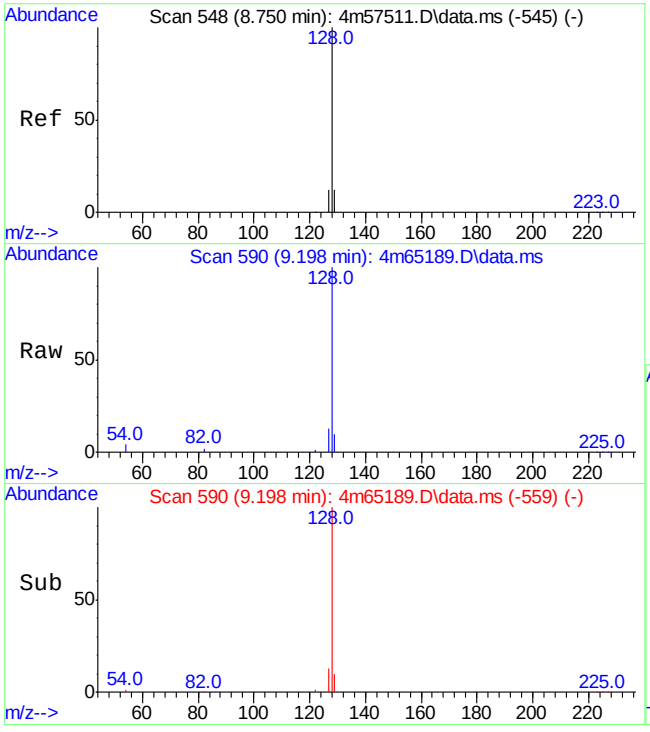
7.1.5
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65189.D
Acq On : 9 May 2016 9:04 pm
Operator : linseyk
Sample : jc19023-1
Misc : op93478a,e4m2910,31.4
ALS Vial : 21 Sample Multiplier: 1

Quant Time: May 10 16:33:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Fri May 06 13:08:34 2016
Response via : Initial Calibration

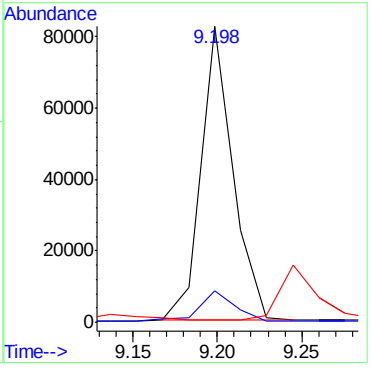


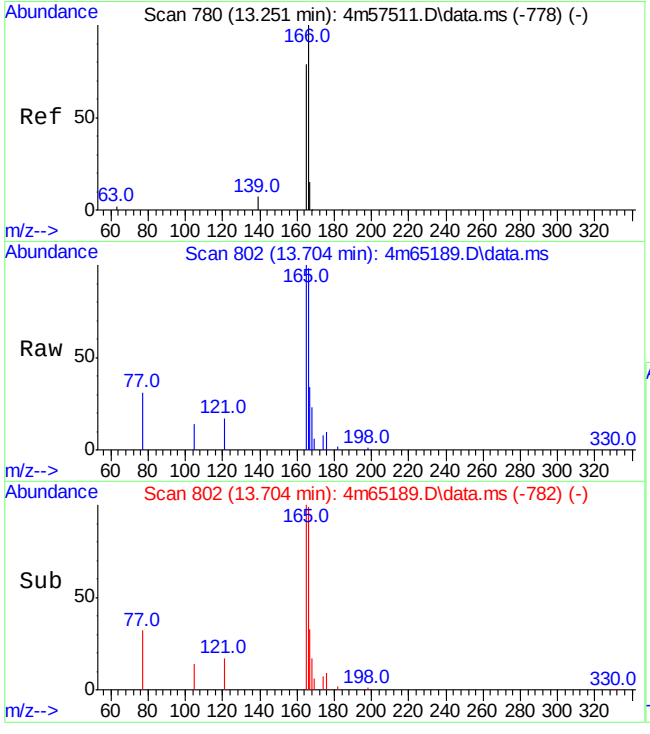


#7
Naphthalene
Concen: 0.68 ppm
RT: 9.198 min Scan# 590
Delta R.T. -0.016 min
Lab File: 4m65189.D
Acq: 9 May 2016 9:04 pm

Tgt Ion:128 Resp: 109442

Ion	Ratio	Lower	Upper
128	100		
129	9.8	0.0	40.5
122	0.0	0.0	30.2

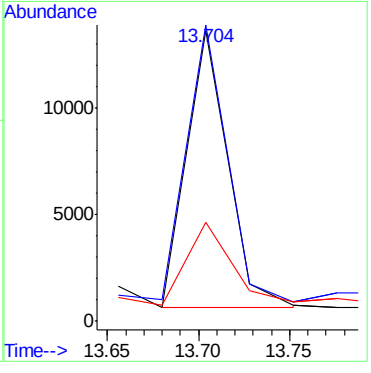


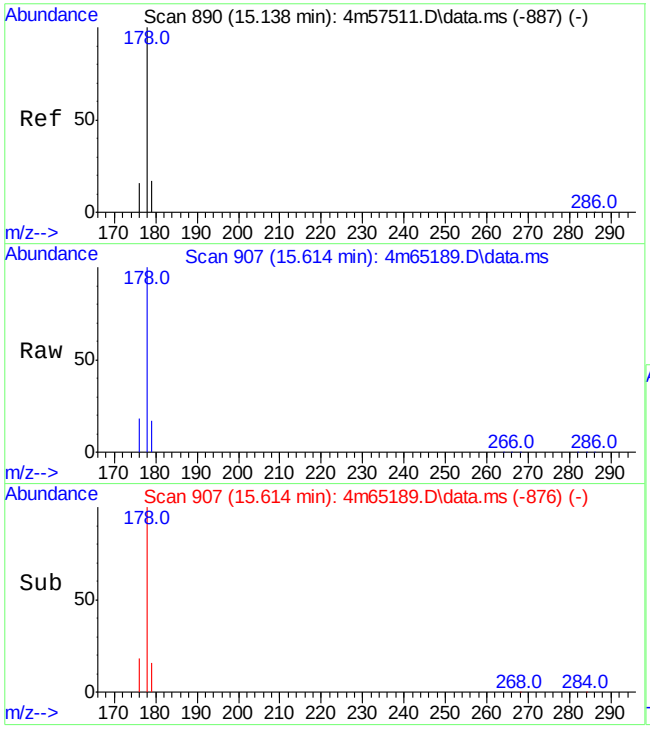


#16
Fluorene
Concen: 0.13 ppm
RT: 13.704 min Scan# 802
Delta R.T. -0.020 min
Lab File: 4m65189.D
Acq: 9 May 2016 9:04 pm

Tgt Ion:166 Resp: 20322

Ion	Ratio	Lower	Upper
166	100		
165	100.0	67.0	127.0
167	29.7	0.0	42.4

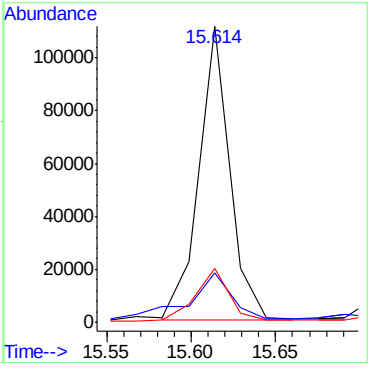


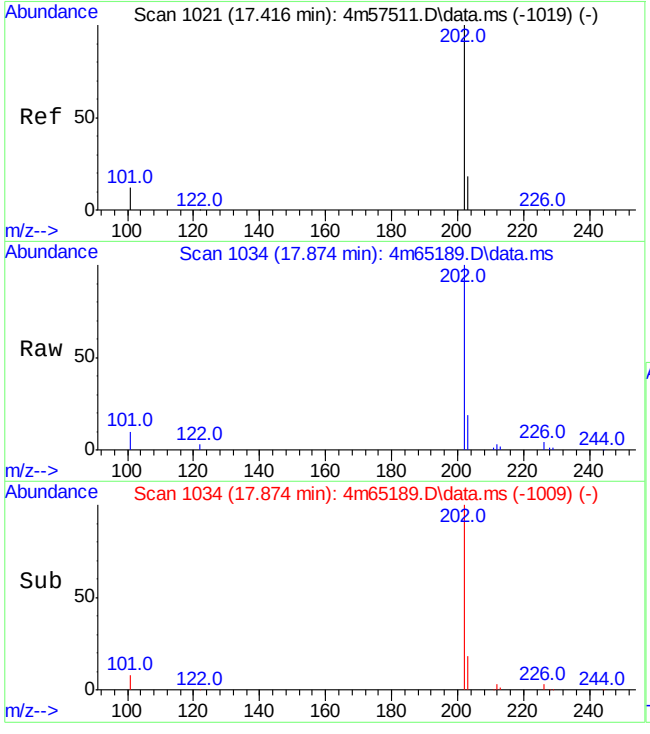


#20
Phenanthrene
Concen: 0.70 ppm
RT: 15.614 min Scan# 907
Delta R.T. -0.018 min
Lab File: 4m65189.D
Acq: 9 May 2016 9:04 pm

Tgt Ion:178 Resp: 143062

Ion	Ratio	Lower	Upper
178	100		
179	13.8	0.0	46.6
176	17.9	0.0	46.3

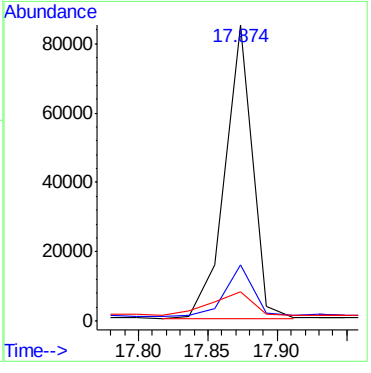


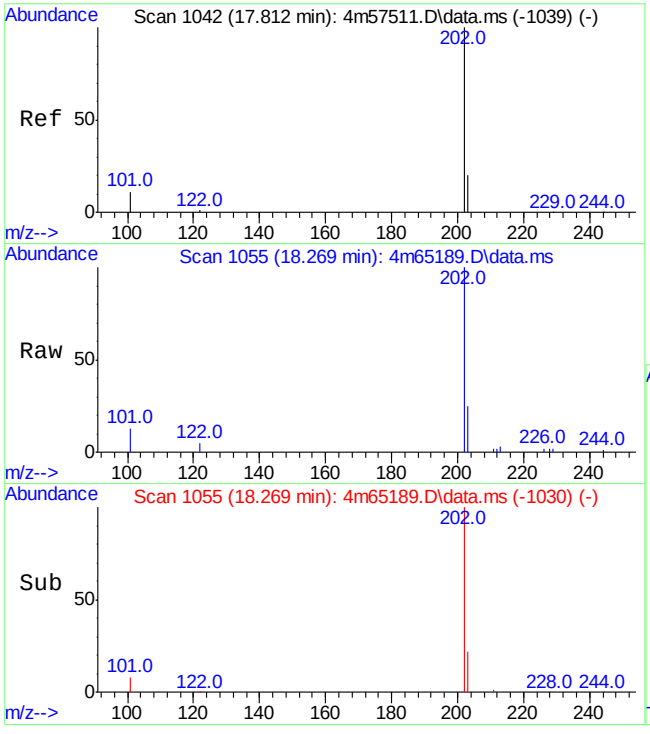


#23
Fluoranthene
Concen: 0.55 ppm
RT: 17.874 min Scan# 1034
Delta R.T. -0.029 min
Lab File: 4m65189.D
Acq: 9 May 2016 9:04 pm

Tgt Ion:202 Resp: 117840

Ion	Ratio	Lower	Upper
202	100		
203	17.6	0.0	48.5
101	7.9	0.0	37.9

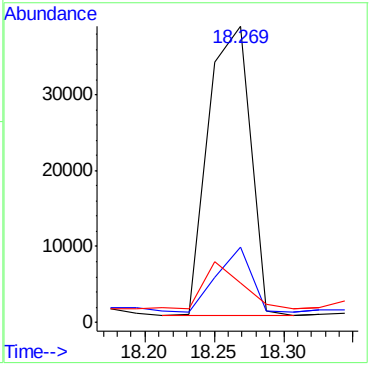


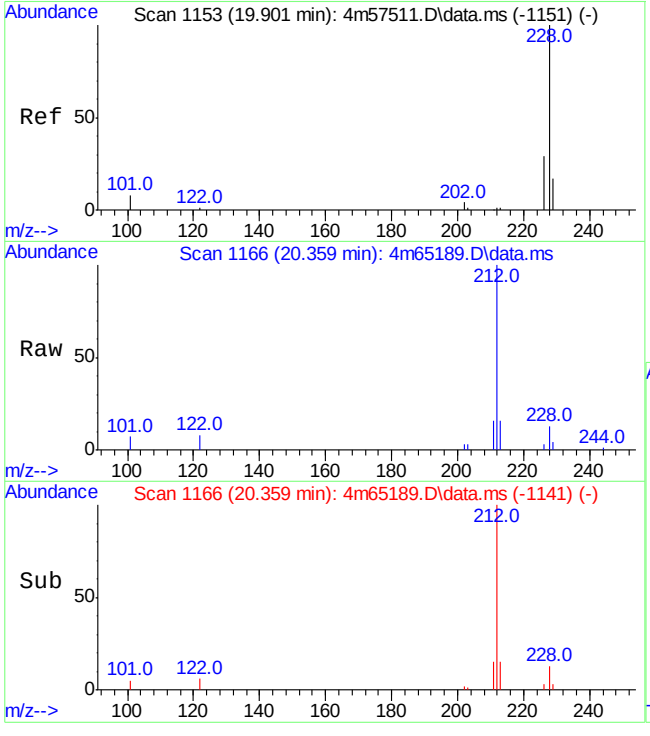


#24
Pyrene
Concen: 0.39 ppm
RT: 18.269 min Scan# 1055
Delta R.T. -0.029 min
Lab File: 4m65189.D
Acq: 9 May 2016 9:04 pm

Tgt Ion:202 Resp: 81917

Ion	Ratio	Lower	Upper
202	100		
203	22.1	0.0	52.2
101	8.7	0.0	37.1

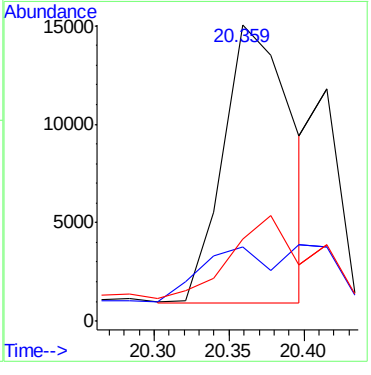


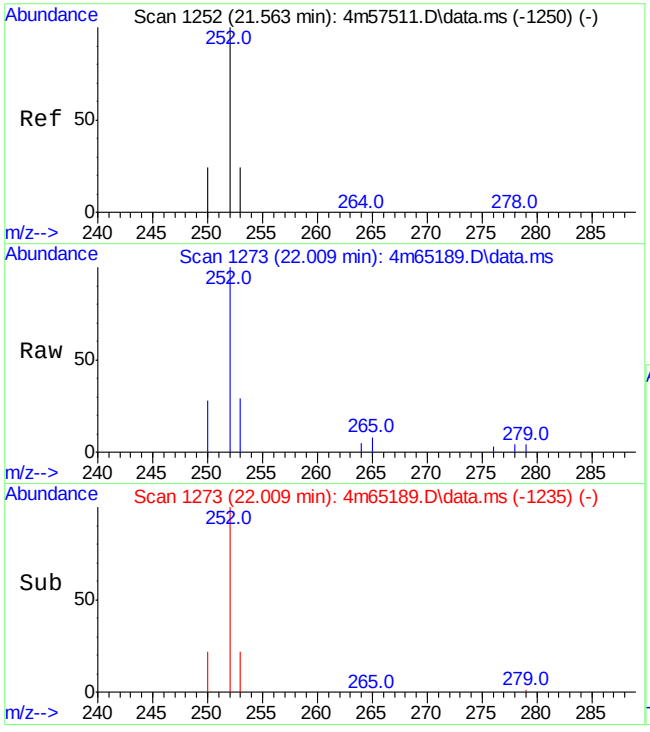


#26
Benzo[a]anthracene
Concen: 0.23 ppm m
RT: 20.359 min Scan# 1166
Delta R.T. -0.038 min
Lab File: 4m65189.D
Acq: 9 May 2016 9:04 pm

Tgt Ion:228 Resp: 45141

Ion	Ratio	Lower	Upper
228	100		
226	25.1	0.0	59.3
229	27.5	15.1	19.1#

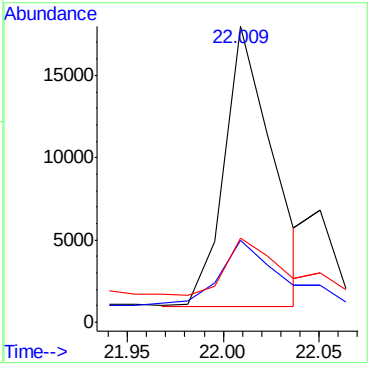


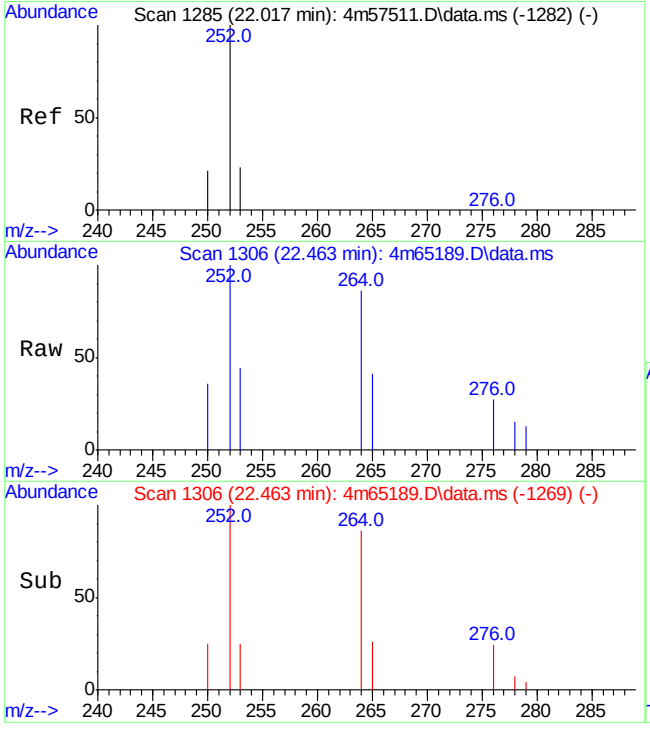


#29
Benzo[b]fluoranthene
Concen: 0.14 ppm m
RT: 22.009 min Scan# 1273
Delta R.T. 0.019 min
Lab File: 4m65189.D
Acq: 9 May 2016 9:04 pm

Tgt Ion:252 Resp: 29849

Ion	Ratio	Lower	Upper
252	100		
250	27.7	0.0	51.2
253	28.5	0.0	53.0

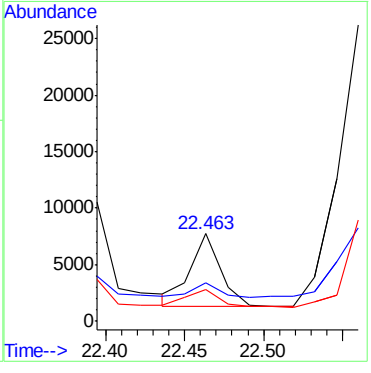


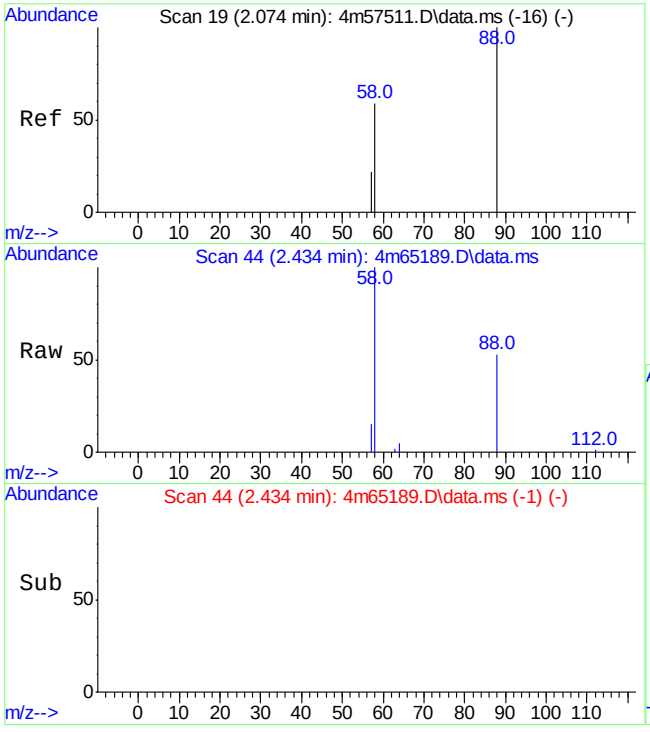


#31
Benzo[a]pyrene
Concen: 0.05 ppm
RT: 22.463 min Scan# 1306
Delta R.T. 0.014 min
Lab File: 4m65189.D
Acq: 9 May 2016 9:04 pm

Tgt Ion:252 Resp: 8343

Ion	Ratio	Lower	Upper
252	100		
253	20.4	0.0	48.6
250	24.6	0.0	57.0

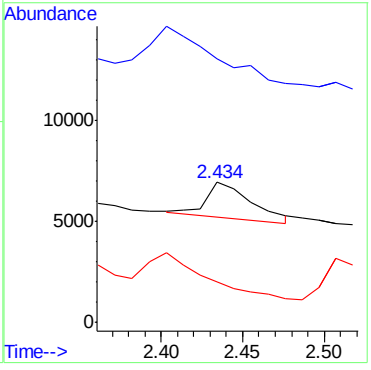




#36
1,4-Dioxane
Concen: 0.18 ppm m
RT: 2.434 min Scan# 44
Delta R.T. -0.042 min
Lab File: 4m65189.D
Acq: 9 May 2016 9:04 pm

Tgt Ion: 88 Resp: 3279

Ion	Ratio	Lower	Upper
88	100		
58	188.2	61.9	101.9#
57	28.8	0.0	37.4



Manual Integration Approval Summary

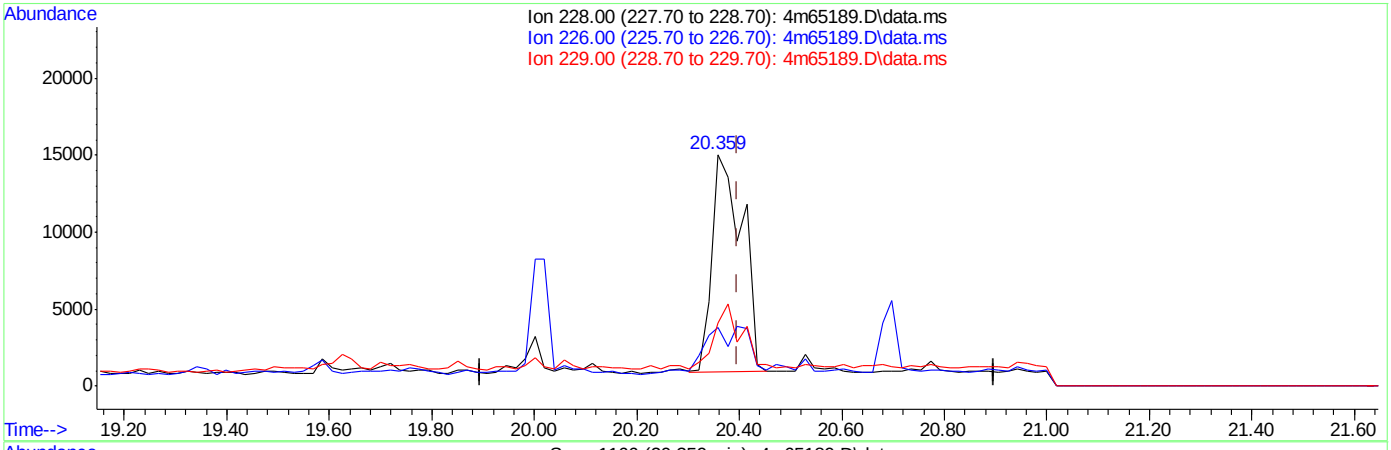
Sample Number:	JC19023-1	**Method:**	SW846 8270D BY SIM
Lab FileID:	4M65189.D	**Analyst approved:**	05/10/16 16:34 Linsey Kirschmann
Injection Time:	05/09/16 21:04	**Supervisor approved:**	05/10/16 16:42 Nina Pandya

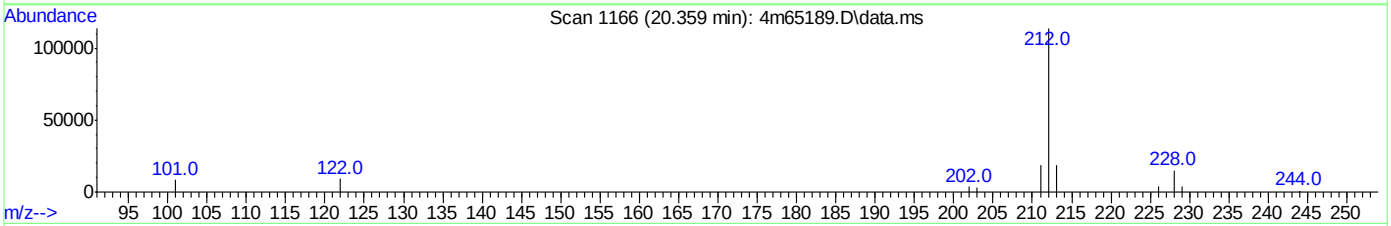
Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dioxane	123-91-1		2.43	Poor instrument integration
Benzo(a)anthracene	56-55-3		20.36	Poor instrument integration
Benzo(b)fluoranthene	205-99-2		22.01	Poor instrument integration

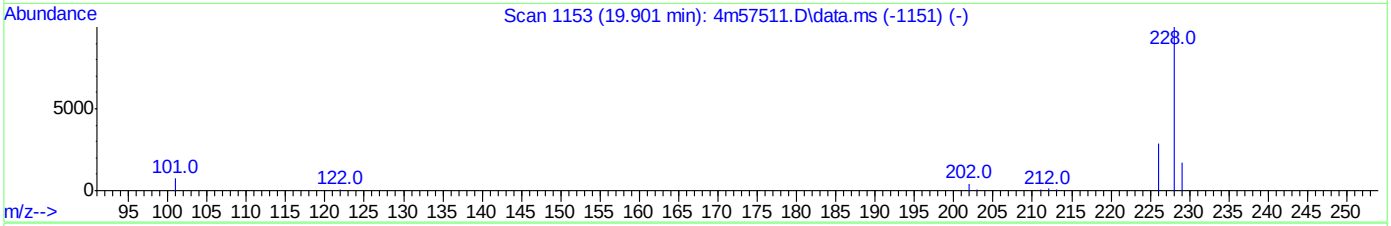
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65189.D
Acq On : 9 May 2016 9:04 pm
Operator : linseyk
Sample : jc19023-1
Misc : op93478a,e4m2910,31.4
ALS Vial : 21 Sample Multiplier: 1

Quant Time: May 09 21:30:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Fri May 06 13:08:34 2016
Response via : Initial Calibration







TIC: 4m65189.D\data.ms

(26) Benzo[a]anthracene (t)

20.359min (-0.038) 0.30ppm

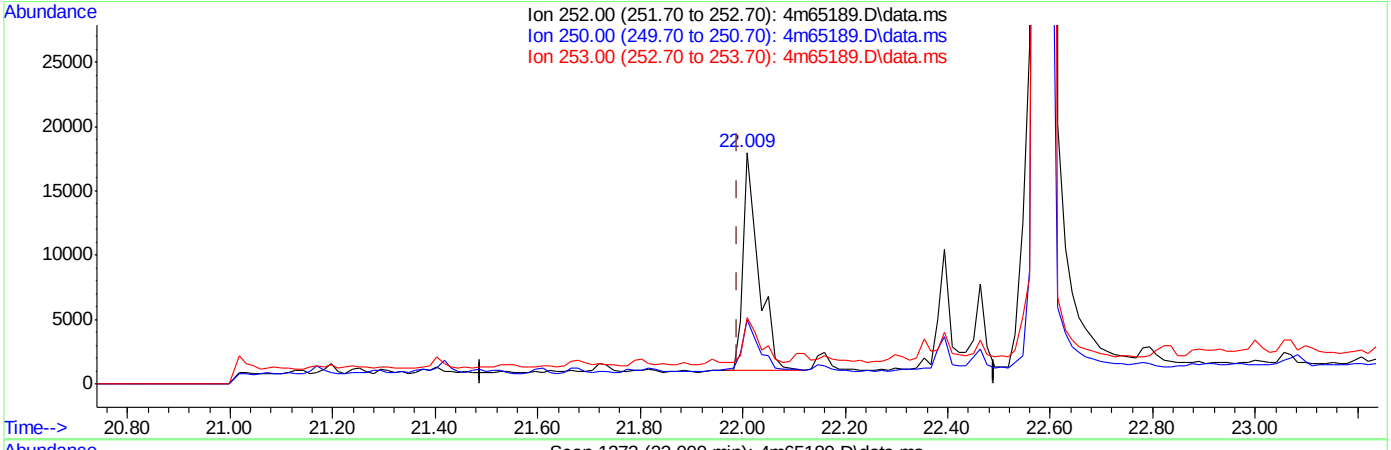
response 58036

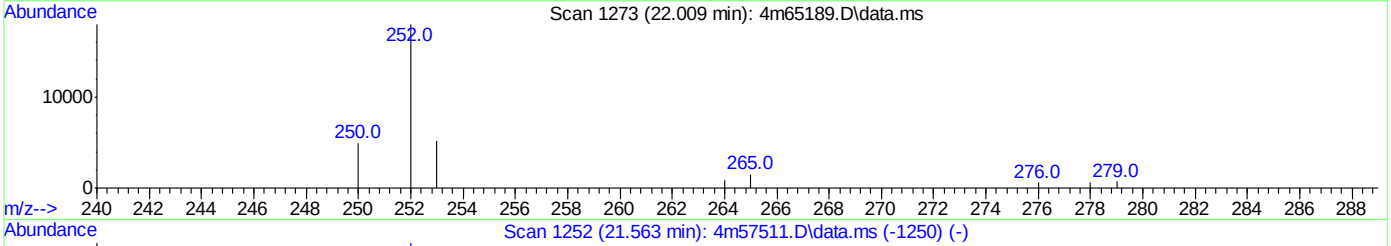
Ion	Exp%	Act%
228.00	100	100
226.00	29.30	19.67
229.00	17.10	20.28#
0.00	0.00	0.00

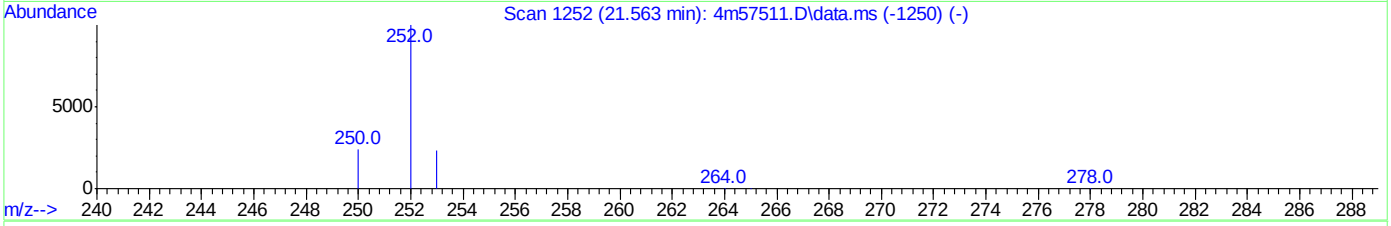
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65189.D
Acq On : 9 May 2016 9:04 pm
Operator : linseyk
Sample : jc19023-1
Misc : op93478a,e4m2910,31.4
ALS Vial : 21 Sample Multiplier: 1

Quant Time: May 09 21:30:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Fri May 06 13:08:34 2016
Response via : Initial Calibration







TIC: 4m65189.D\data.ms

(29) Benzo[b]fluoranthene (t)

22.009min (+0.019) 0.16ppm

response 35679

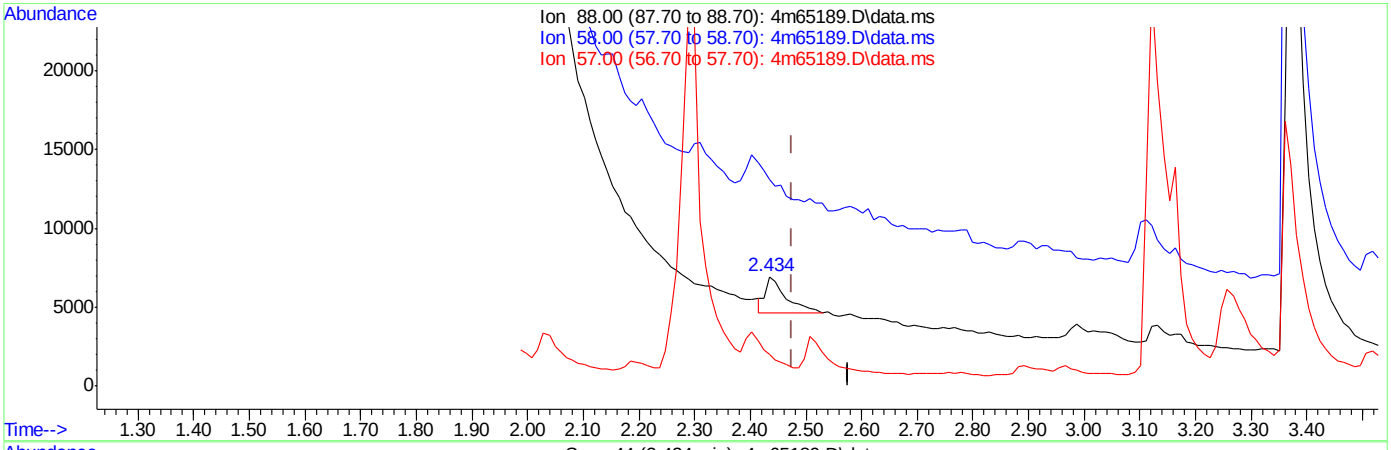
Ion	Exp%	Act%
252.00	100	100
250.00	21.20	22.64
253.00	23.00	18.37
0.00	0.00	0.00

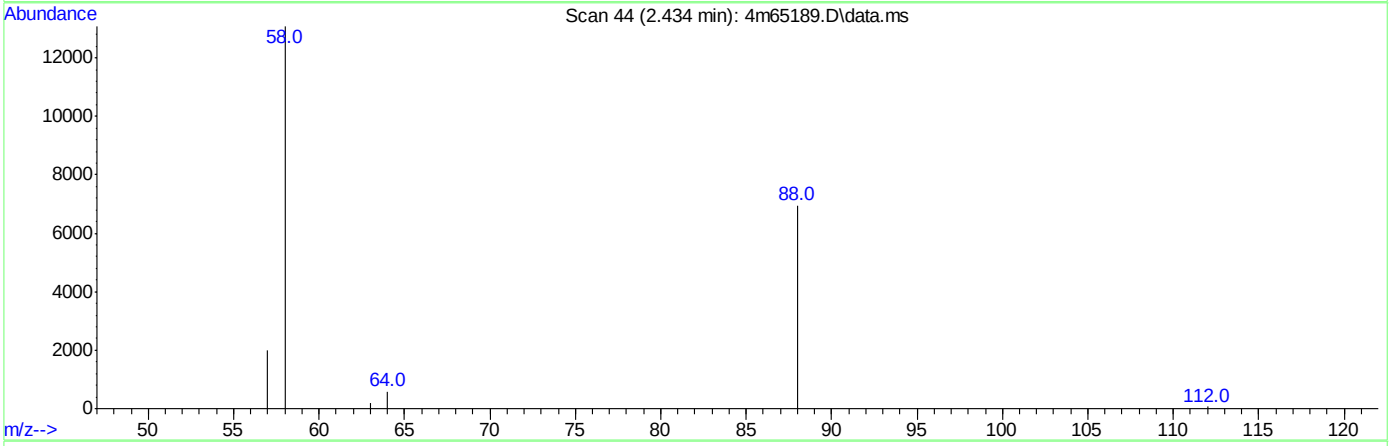
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65189.D
Acq On : 9 May 2016 9:04 pm
Operator : linseyk
Sample : jc19023-1
Misc : op93478a,e4m2910,31.4
ALS Vial : 21 Sample Multiplier: 1

Quant Time: May 10 10:55:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Fri May 06 13:08:34 2016
Response via : Initial Calibration





TIC: 4m65189.D\data.ms

(36) 1,4-Dioxane (t)

2.434min (-0.042) 0.31ppm

response 5762

Ion	Exp%	Act%
88.00	100	100
58.00	81.90	9.79#
57.00	17.40	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65190.D
Acq On : 9 May 2016 9:37 pm
Operator : linseyk
Sample : jc19023-2
Misc : op93478a,e4m2910,30.1
ALS Vial : 22 Sample Multiplier: 1

Quant Time: May 10 10:56:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Fri May 06 13:08:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.678	152	232298	4.00	ppm	-0.02
12) Fluorene-d10	13.656	176	405280	4.00	ppm	-0.02
22) Fluoranthene-d10	17.836	212	639560	4.00	ppm	-0.03
28) Benzo(a)pyrene-d12	22.436	264	518230	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.678	152	232298	4.00	ppm	#-0.02
38) Fluorene-d10a	13.656	176	405280	4.00	ppm	-0.02
System Monitoring Compounds						
2) 2-Fluorophenol	4.725	112	1134605	37.30	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 74.60%#			
3) Phenol-d5	6.301	99	2219276	43.39	ppm	0.00
Spiked Amount 50.000			Recovery = 86.78%			
6) Nitrobenzene-d5	7.822	82	2041695	44.51	ppm	-0.02
Spiked Amount 50.000			Recovery = 89.02%			
11) 2-Fluorobiphenyl	11.346	172	2579403	38.47	ppm	-0.02
Spiked Amount 50.000			Recovery = 76.94%			
17) 2,4,6-Tribromophenol	14.206	330	650642	30.10	ppm	-0.02
Spiked Amount 50.000			Recovery = 60.20%			
25) Terphenyl-d14	18.646	244	3734810	43.23	ppm	-0.03
Spiked Amount 50.000			Recovery = 86.46%			
Target Compounds						Qvalue

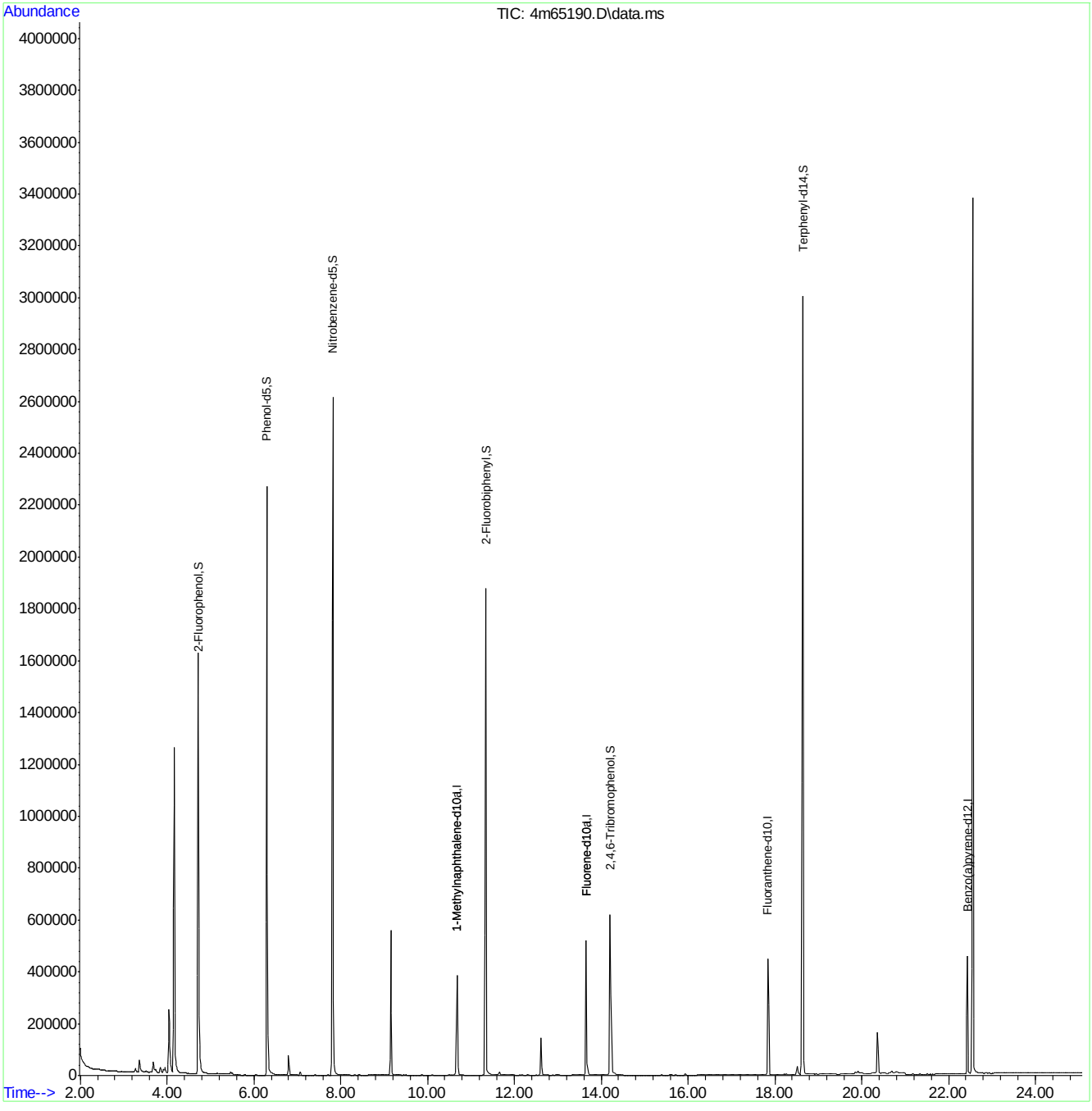
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65190.D
Acq On : 9 May 2016 9:37 pm
Operator : linseyk
Sample : jc19023-2
Misc : op93478a,e4m2910,30.1
ALS Vial : 22 Sample Multiplier: 1

Quant Time: May 10 10:56:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Fri May 06 13:08:34 2016
Response via : Initial Calibration



M4M2881SIM.M Tue May 10 10:56:16 2016 MANAGER

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2866\
Data File : 3m60957.D
Acq On : 29 Apr 2016 3:12 am
Operator : juliusj
Sample : jc19023-3
Misc : op93453a,e3m2866,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 02 12:31:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Apr 28 10:59:02 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.508	150	367661	4.00	ppm	-0.11
14) Fluorene-d10	13.505	176	471636	4.00	ppm	-0.14
21) Fluoranthene-d10	17.716	212	759999	4.00	ppm	-0.14
31) Benzo(a)pyrene-d12	22.320	264	590627	4.00	ppm	-0.13
System Monitoring Compounds						
3) 2-Fluorophenol	4.430	112	974758	21.19	ppm	-0.08
Spiked Amount 50.000			Recovery = 42.38%			
4) Phenol-d5	6.024	99	1048139	13.77	ppm	-0.07
Spiked Amount 50.000			Recovery = 27.54%			
7) Nitrobenzene-d5	7.625	82	2015114	28.47	ppm	-0.09
Spiked Amount 50.000			Recovery = 56.94%			
15) 2-Fluorobiphenyl	11.176	172	4445325	34.30	ppm	-0.13
Spiked Amount 50.000			Recovery = 68.60%			
20) 2,4,6-Tribromophenol	14.051	330	579361	39.25	ppm	-0.12
Spiked Amount 50.000			Recovery = 78.50%			
28) Terphenyl-d14	18.535	244	5097208	46.23	ppm	-0.13
Spiked Amount 50.000			Recovery = 92.46%			

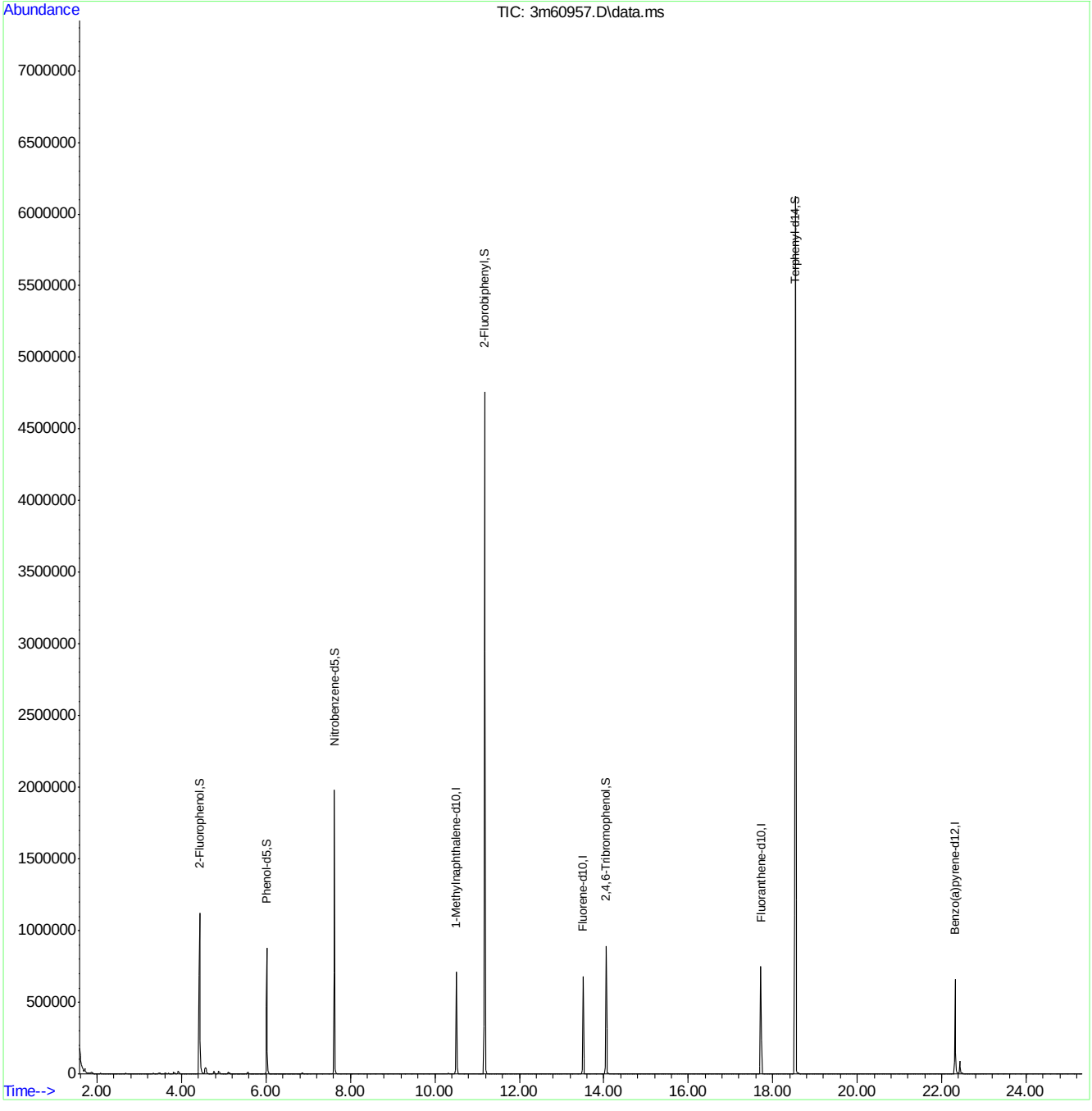
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2866\
Data File : 3m60957.D
Acq On : 29 Apr 2016 3:12 am
Operator : juliusj
Sample : jc19023-3
Misc : op93453a,e3m2866,1000
ALS Vial : 7 Sample Multiplier: 1

Quant Time: May 02 12:31:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Apr 28 10:59:02 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65191.D
Acq On : 9 May 2016 10:10 pm
Operator : linseyk
Sample : jc19023-4
Misc : op93478a,e4m2910,31.3
ALS Vial : 23 Sample Multiplier: 1

Quant Time: May 10 10:56:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Fri May 06 13:08:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.678	152	257522	4.00	ppm	-0.02
12) Fluorene-d10	13.656	176	481847	4.00	ppm	-0.02
22) Fluoranthene-d10	17.836	212	705010	4.00	ppm	-0.03
28) Benzo(a)pyrene-d12	22.436	264	559258	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.678	152	257522	4.00	ppm	#-0.02
38) Fluorene-d10a	13.656	176	481847	4.00	ppm	-0.02
System Monitoring Compounds						
2) 2-Fluorophenol	4.725	112	1299574	38.54	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 77.08%#			
3) Phenol-d5	6.301	99	2282835	40.26	ppm	0.00
Spiked Amount 50.000			Recovery = 80.52%			
6) Nitrobenzene-d5	7.821	82	889076	17.49	ppm	-0.02
Spiked Amount 50.000			Recovery = 34.98%			
11) 2-Fluorobiphenyl	11.346	172	2952635	39.72	ppm	-0.02
Spiked Amount 50.000			Recovery = 79.44%			
17) 2,4,6-Tribromophenol	14.206	330	662871	25.79	ppm	-0.02
Spiked Amount 50.000			Recovery = 51.58%			
25) Terphenyl-d14	18.645	244	4200179	44.10	ppm	-0.03
Spiked Amount 50.000			Recovery = 88.20%			
Target Compounds						Qvalue
21) Anthracene	15.722	178	284162	1.73	ppm	92

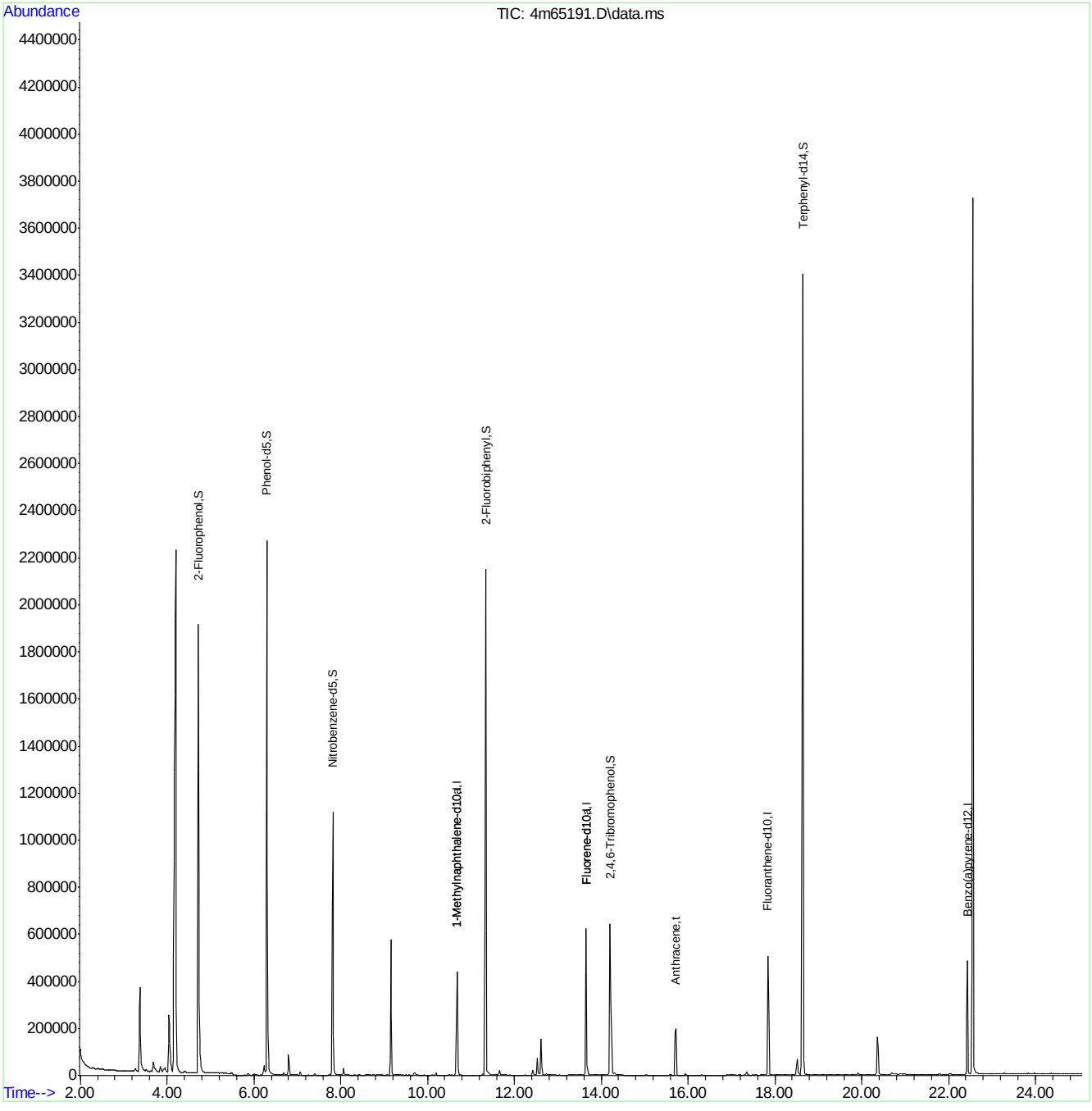
(#) = qualifier out of range (m) = manual integration (+) = signals summed

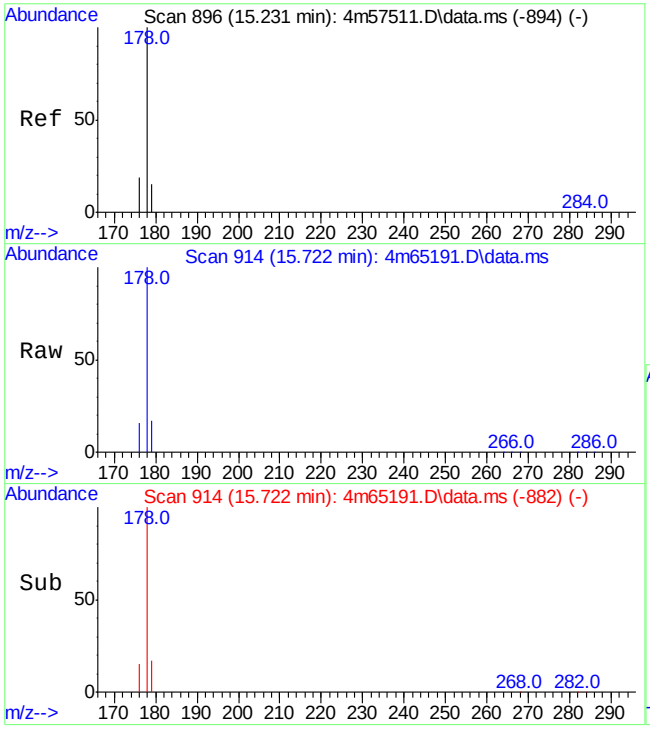
SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65191.D
Acq On : 9 May 2016 10:10 pm
Operator : linseyk
Sample : jc19023-4
Misc : op93478a,e4m2910,31.3
ALS Vial : 23 Sample Multiplier: 1

Quant Time: May 10 10:56:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Fri May 06 13:08:34 2016
Response via : Initial Calibration

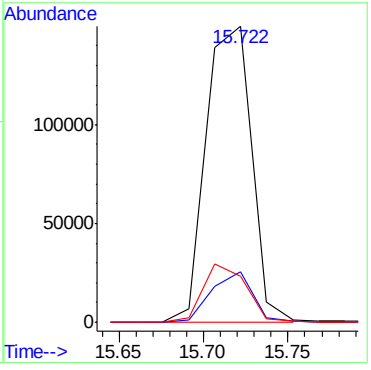




#21
Anthracene
Concen: 1.73 ppm
RT: 15.722 min Scan# 914
Delta R.T. -0.003 min
Lab File: 4m65191.D
Acq: 9 May 2016 10:10 pm

Tgt Ion:178 Resp: 284162

Ion	Ratio	Lower	Upper
178	100		
179	17.1	0.0	44.4
176	15.4	0.0	49.3



7.1.8

7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2566\
Data File : 2p58692.D
Acq On : 29 Apr 2016 10:51 am
Operator : robertl1
Sample : OP93453-MB1
Misc : op93453,e2p2566,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 29 12:25:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2557.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 29 09:54:55 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.759	152	202683	40.00	ppm	0.00
24) Naphthalene-d8	5.812	136	742235	40.00	ppm	0.00
47) Acenaphthene-d10	7.262	164	418877	40.00	ppm	0.00
69) Phenanthrene-d10	8.583	188	666137	40.00	ppm	0.00
83) Chrysene-d12	11.921	240	591007	40.00	ppm	-0.01
92) Perylene-d12	13.932	264	419456	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.759	152	202683	40.00	ppm	0.00
104) Naphthalene-d8a	5.812	136	742235	40.00	ppm	0.00
106) Acenaphthene-d10a	7.262	164	418877	40.00	ppm	0.00
109) Chrysene-d12a	11.921	240	591007	40.00	ppm	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.668	112	127167	15.49	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 30.98%			
8) Phenol-d5	4.491	99	98800	10.27	ppm	0.04
Spiked Amount 50.000	Range 10 - 59		Recovery = 20.54%			
25) Nitrobenzene-d5	5.219	82	227013	31.02	ppm	-0.01
Spiked Amount 50.000	Range 19 - 61		Recovery = 62.04%#			
51) 2-Fluorobiphenyl	6.706	172	385761	29.60	ppm	-0.01
Spiked Amount 50.000	Range 21 - 58		Recovery = 59.20%#			
73) 2,4,6-Tribromophenol	7.925	330	52928	35.79	ppm	0.00
Spiked Amount 50.000	Range 12 - 68		Recovery = 71.58%#			
85) Terphenyl-d14	10.466	244	472706	39.74	ppm	-0.03
Spiked Amount 50.000	Range 16 - 65		Recovery = 79.48%#			
Target Compounds						Qvalue
80) Di-n-butylphthalate	9.219	149	19104	0.79	ppm	99

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

7.2.1

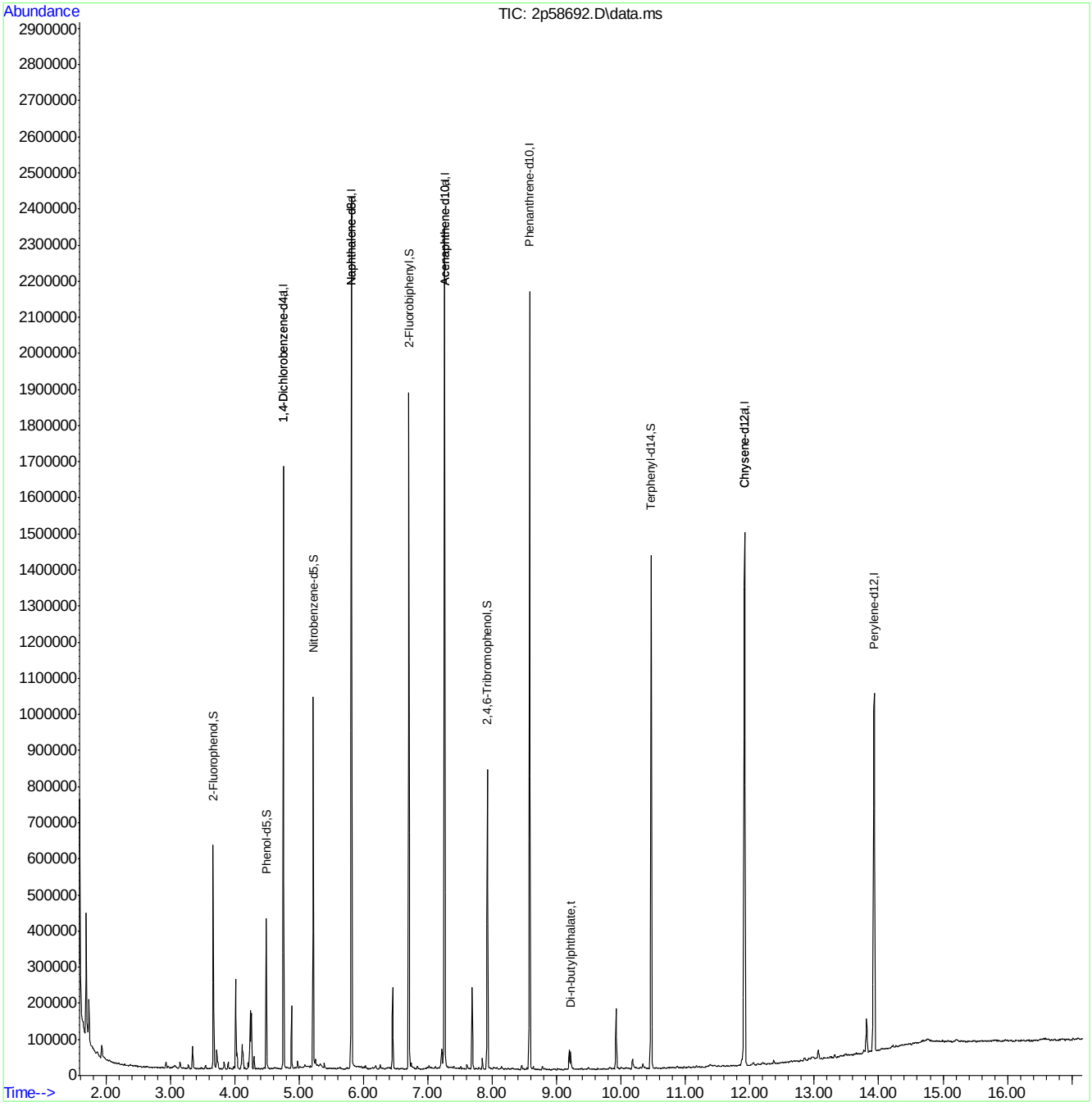
7

SGS ACCUTEST JC19023

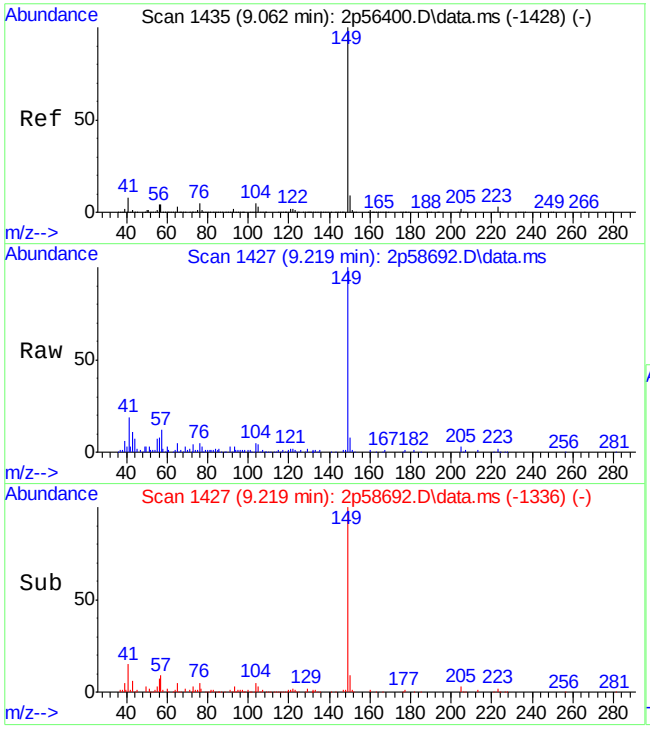
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2566\
Data File : 2p58692.D
Acq On : 29 Apr 2016 10:51 am
Operator : robertl1
Sample : OP93453-MB1
Misc : op93453,e2p2566,1000
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 29 12:25:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2557.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 29 09:54:55 2016
Response via : Initial Calibration



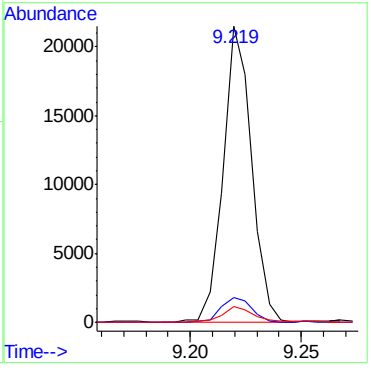
M2P2557.M Fri Apr 29 12:29:31 2016 RPT1 Page: 2



#80
Di-n-butylphthalate
Concen: 0.79 ppm
RT: 9.219 min Scan# 1427
Delta R.T. -0.013 min
Lab File: 2p58692.D
Acq: 29 Apr 2016 10:51 am

Tgt Ion:149 Resp: 19104

Ion	Ratio	Lower	Upper
149	100		
150	8.5	0.0	39.2
104	5.2	0.0	35.4



7.2.1

7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5245\
Data File : M124024.D
Acq On : 29 Apr 2016 1:49 pm
Operator : ashleyd
Sample : op93478-mb1
Misc : op93478,em5245,30.0
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Apr 29 14:58:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 28 11:01:37 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.625	152	314463	40.00	ppm	-0.05
24) Naphthalene-d8	5.736	136	1155290	40.00	ppm	-0.07
47) Acenaphthene-d10	8.054	164	671753	40.00	ppm	-0.08
69) Phenanthrene-d10	10.666	188	1174382	40.00	ppm	-0.09
83) Chrysene-d12	15.825	240	1217579	40.00	ppm	-0.10
92) Perylene-d12	18.453	264	1233878	40.00	ppm	-0.10
102) 1,4-Dichlorobenzene-d4a	4.625	152	314463	40.00	ppm	-0.02
104) Acenaphthene-d10a	8.054	164	671753	40.00	ppm	-0.03
107) Chrysene-d12a	15.825	240	1217579	40.00	ppm	-0.04
110) Phenanthrene-d10a	10.666	188	1174382	40.00	ppm	-0.04
112) Naphthalene-d8a	5.736	136	1155290	40.00	ppm	-0.03
114) Chrysene-d12b	15.825	240	1217579	40.00	ppm	-0.04
System Monitoring Compounds						
5) 2-Fluorophenol	3.674	112	397757	41.36	ppm	-0.05
Spiked Amount 50.000			Recovery = 82.72%			
8) Phenol-d5	4.390	99	504234	41.75	ppm	-0.04
Spiked Amount 50.000			Recovery = 83.50%			
25) Nitrobenzene-d5	5.073	82	447625	43.57	ppm	-0.05
Spiked Amount 50.000			Recovery = 87.14%			
51) 2-Fluorobiphenyl	7.050	172	908373	41.18	ppm	-0.07
Spiked Amount 50.000			Recovery = 82.36%			
73) 2,4,6-Tribromophenol	9.410	330	173013	42.62	ppm	-0.09
Spiked Amount 50.000			Recovery = 85.24%			
86) Terphenyl-d14	13.827	244	1146467	41.98	ppm	-0.09
Spiked Amount 50.000			Recovery = 83.96%			
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds Qvalue

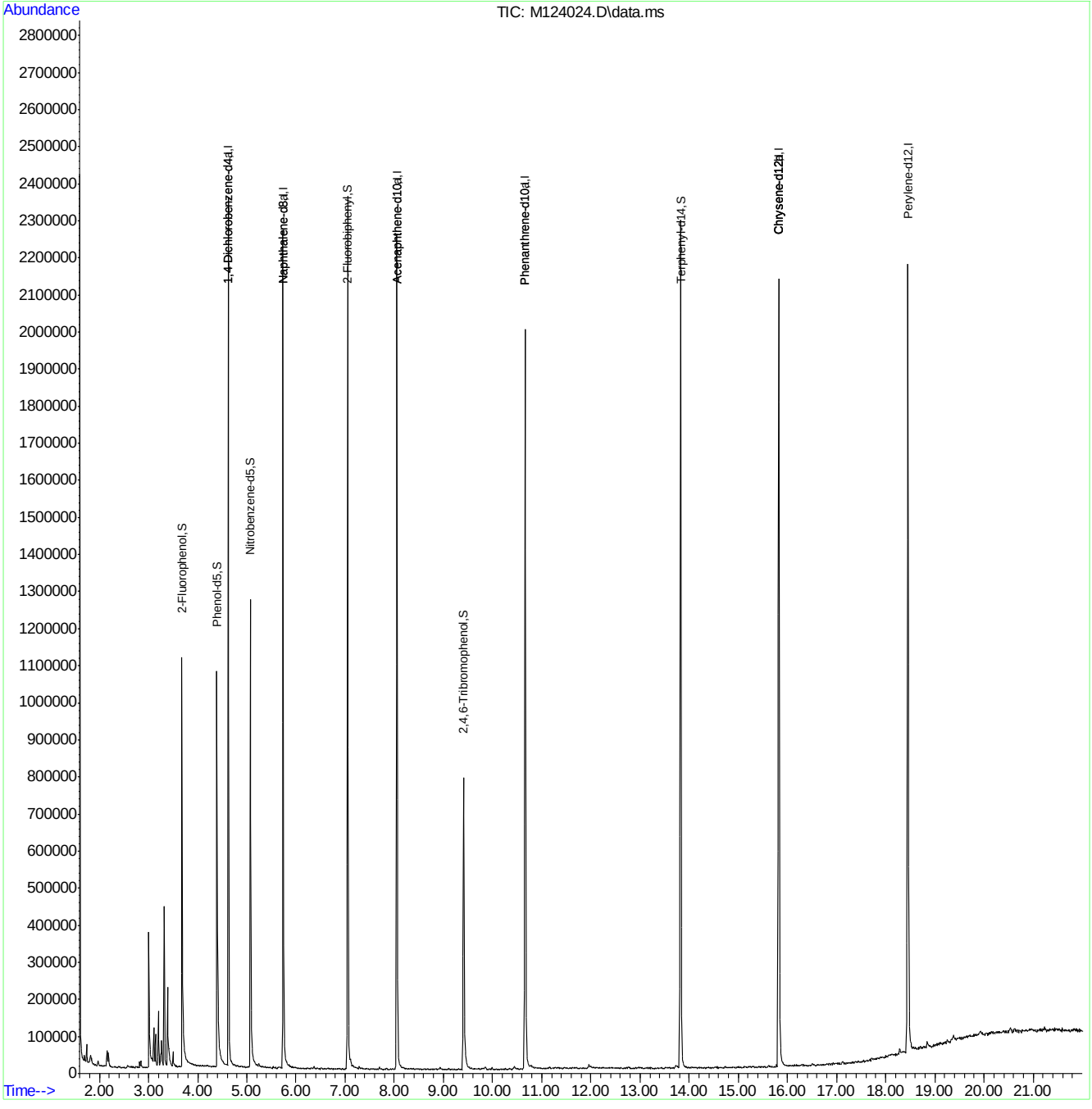
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5245\
Data File : M124024.D
Acq On : 29 Apr 2016 1:49 pm
Operator : ashleyd
Sample : op93478-mb1
Misc : op93478,em5245,30.0
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Apr 29 14:58:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 28 11:01:37 2016
Response via : Initial Calibration



MM5239.M Fri Apr 29 14:58:40 2016 MSM

Page: 2

SGS ACCUTEST JC19023

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1416\
Data File : 5p27904.D
Acq On : 3 May 2016 9:33 am
Operator : ashleyd
Sample : op93478-mb1
Misc : op93478,e5p1416,30.0
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 03 12:18:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Tue May 03 08:59:50 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.293	152	880317	40.00	ppm	0.00
24) Naphthalene-d8	6.762	136	3457375	40.00	ppm	0.00
47) Acenaphthene-d10	8.872	164	1972896	40.00	ppm	0.00
69) Phenanthrene-d10	10.704	188	3062354	40.00	ppm	0.00
83) Chrysene-d12	14.503	240	2754188	40.00	ppm	0.00
92) Perylene-d12	16.576	264	2534017	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.293	152	880317	40.00	ppm	0.00
104) Acenaphthene-d10a	8.872	164	1972896	40.00	ppm	0.00
106) Chrysene-d12a	14.503	240	2753963	40.00	ppm	0.00
109) Phenanthrene-d10a	10.704	188	3062354	40.00	ppm	0.00
112) Naphthalene-d8a	6.762	136	3457375	40.00	ppm	0.00
114) Chrysene-d12b	14.503	240	2753963	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.957	112	1076540	39.90	ppm	0.03
Spiked Amount 50.000			Recovery	=	79.80%	
8) Phenol-d5	4.962	99	1243150	40.56	ppm	0.00
Spiked Amount 50.000			Recovery	=	81.12%	
25) Nitrobenzene-d5	5.939	82	1125753	42.90	ppm	0.09
Spiked Amount 50.000			Recovery	=	85.80%	
51) 2-Fluorobiphenyl	8.065	172	2596233	41.33	ppm	0.00
Spiked Amount 50.000			Recovery	=	82.66%	
73) 2,4,6-Tribromophenol	9.839	330	324574	43.90	ppm	0.00
Spiked Amount 50.000			Recovery	=	87.80%	
85) Terphenyl-d14	12.943	244	2565421	46.34	ppm	0.00
Spiked Amount 50.000			Recovery	=	92.68%	
108) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	

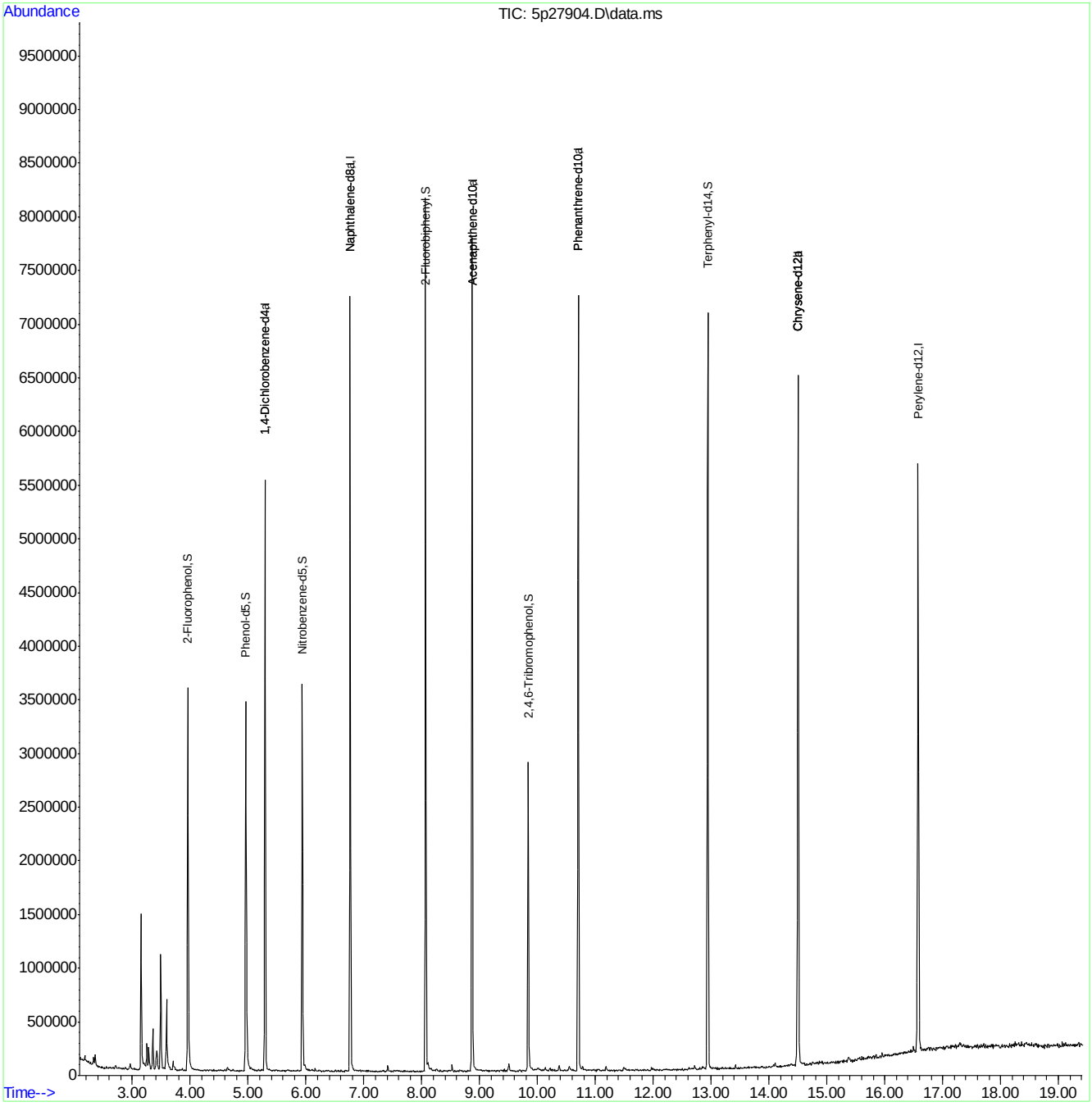
Target Compounds Qvalue

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

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1416\
Data File : 5p27904.D
Acq On : 3 May 2016 9:33 am
Operator : ashleyd
Sample : op93478-mb1
Misc : op93478,e5p1416,30.0
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 03 12:18:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Tue May 03 08:59:50 2016
Response via : Initial Calibration



M5P1382.M Tue May 03 12:18:58 2016 RPT1 Page: 2

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\DATA\EM5253\
Data File : M124224.D
Acq On : 6 May 2016 3:39 pm
Operator : ashleyd
Sample : op93478-mb1
Misc : op93478,em5253,30.0
ALS Vial : 24 Sample Multiplier: 1

Quant Time: May 09 10:58:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri May 06 11:18:22 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.665	152	350369	40.00	ppm	-0.01
24) Naphthalene-d8	5.792	136	1338640	40.00	ppm	-0.02
47) Acenaphthene-d10	8.126	164	822680	40.00	ppm	-0.02
69) Phenanthrene-d10	10.749	188	1411102	40.00	ppm	-0.03
83) Chrysene-d12	15.930	240	1501001	40.00	ppm	-0.02
92) Perylene-d12	18.568	264	1398630	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.665	152	350369	40.00	ppm	-0.01
104) Acenaphthene-d10a	8.126	164	822680	40.00	ppm	-0.02
107) Chrysene-d12a	15.930	240	1501001	40.00	ppm	-0.02
110) Phenanthrene-d10a	10.749	188	1411102	40.00	ppm	-0.03
112) Naphthalene-d8a	5.792	136	1338640	40.00	ppm	-0.02
114) Chrysene-d12b	15.930	240	1501001	40.00	ppm	-0.02
System Monitoring Compounds						
5) 2-Fluorophenol	3.720	112	419584	39.16	ppm	0.00
Spiked Amount 50.000			Recovery	=	78.32%	
8) Phenol-d5	4.441	99	549497	40.83	ppm	0.00
Spiked Amount 50.000			Recovery	=	81.66%	
25) Nitrobenzene-d5	5.119	82	482501	40.53	ppm	-0.01
Spiked Amount 50.000			Recovery	=	81.06%	
51) 2-Fluorobiphenyl	7.117	172	1129996	41.83	ppm	-0.01
Spiked Amount 50.000			Recovery	=	83.66%	
73) 2,4,6-Tribromophenol	9.494	330	227799	46.70	ppm	-0.02
Spiked Amount 50.000			Recovery	=	93.40%	
86) Terphenyl-d14	13.916	244	1400265	41.59	ppm	-0.02
Spiked Amount 50.000			Recovery	=	83.18%	
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	

Target Compounds Qvalue

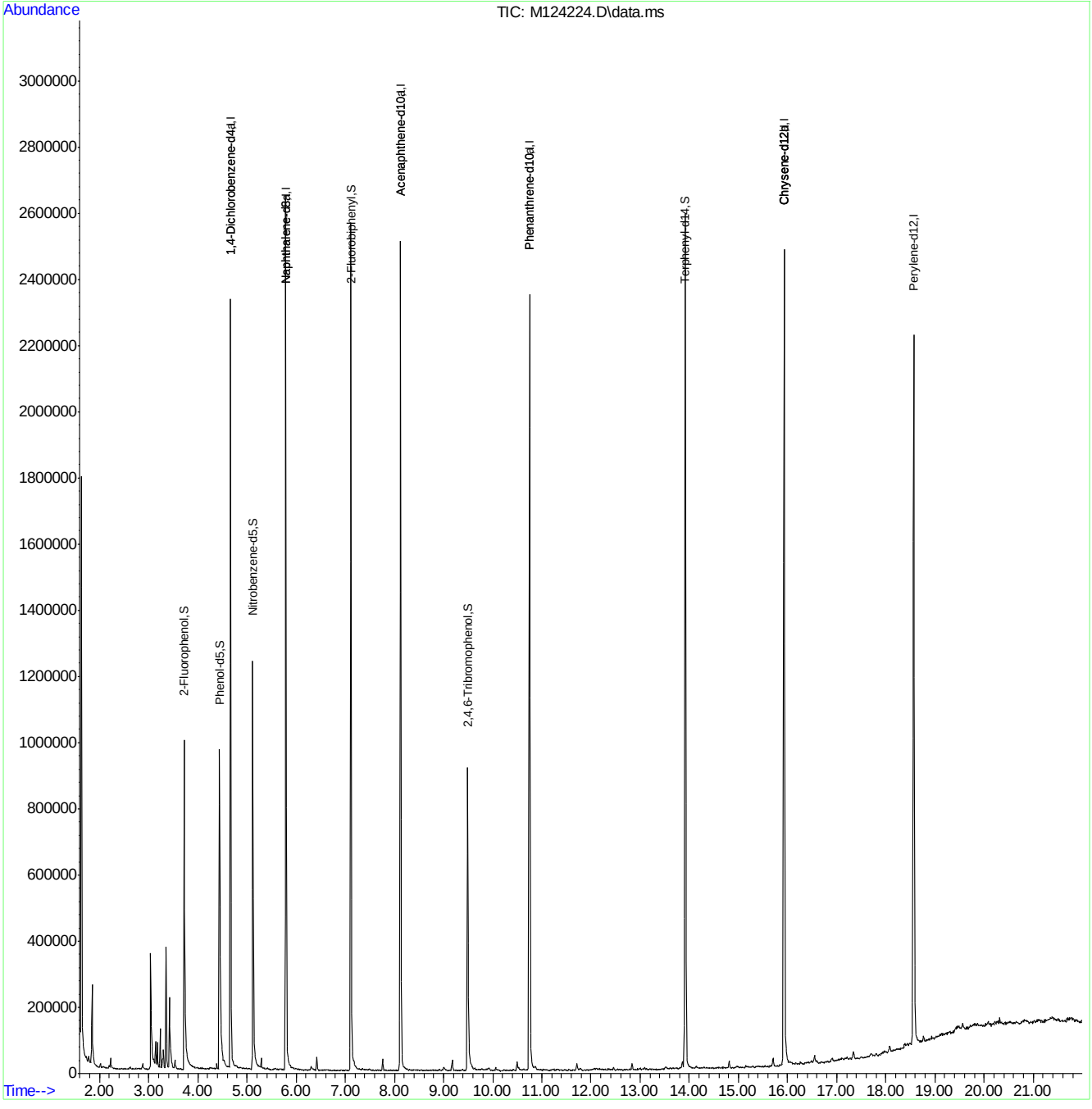
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19023

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\DATA\EM5253\
Data File : M124224.D
Acq On : 6 May 2016 3:39 pm
Operator : ashleyd
Sample : op93478-mb1
Misc : op93478,em5253,30.0
ALS Vial : 24 Sample Multiplier: 1

Quant Time: May 09 10:58:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri May 06 11:18:22 2016
Response via : Initial Calibration



MM5239.M Mon May 09 10:58:18 2016 MSM

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2866\
Data File : 3m60953.D
Acq On : 29 Apr 2016 1:05 am
Operator : juliusj
Sample : op93453a-mb1
Misc : op93453a,e3m2866,1000
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 02 12:29:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Apr 28 10:59:02 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.509	150	388646	4.00	ppm	-0.11
14) Fluorene-d10	13.505	176	478408	4.00	ppm	-0.14
21) Fluoranthene-d10	17.716	212	772354	4.00	ppm	-0.14
31) Benzo(a)pyrene-d12	22.320	264	629147	4.00	ppm	-0.13
System Monitoring Compounds						
3) 2-Fluorophenol	4.430	112	974399	20.04	ppm	-0.08
Spiked Amount 50.000			Recovery = 40.08%			
4) Phenol-d5	6.024	99	1007905	12.53	ppm	-0.07
Spiked Amount 50.000			Recovery = 25.06%			
7) Nitrobenzene-d5	7.625	82	2111264	28.22	ppm	-0.09
Spiked Amount 50.000			Recovery = 56.44%			
15) 2-Fluorobiphenyl	11.191	172	4470525	34.01	ppm	-0.11
Spiked Amount 50.000			Recovery = 68.02%			
20) 2,4,6-Tribromophenol	14.052	330	603908	40.33	ppm	-0.12
Spiked Amount 50.000			Recovery = 80.66%			
28) Terphenyl-d14	18.535	244	4832383	43.13	ppm	-0.13
Spiked Amount 50.000			Recovery = 86.26%			

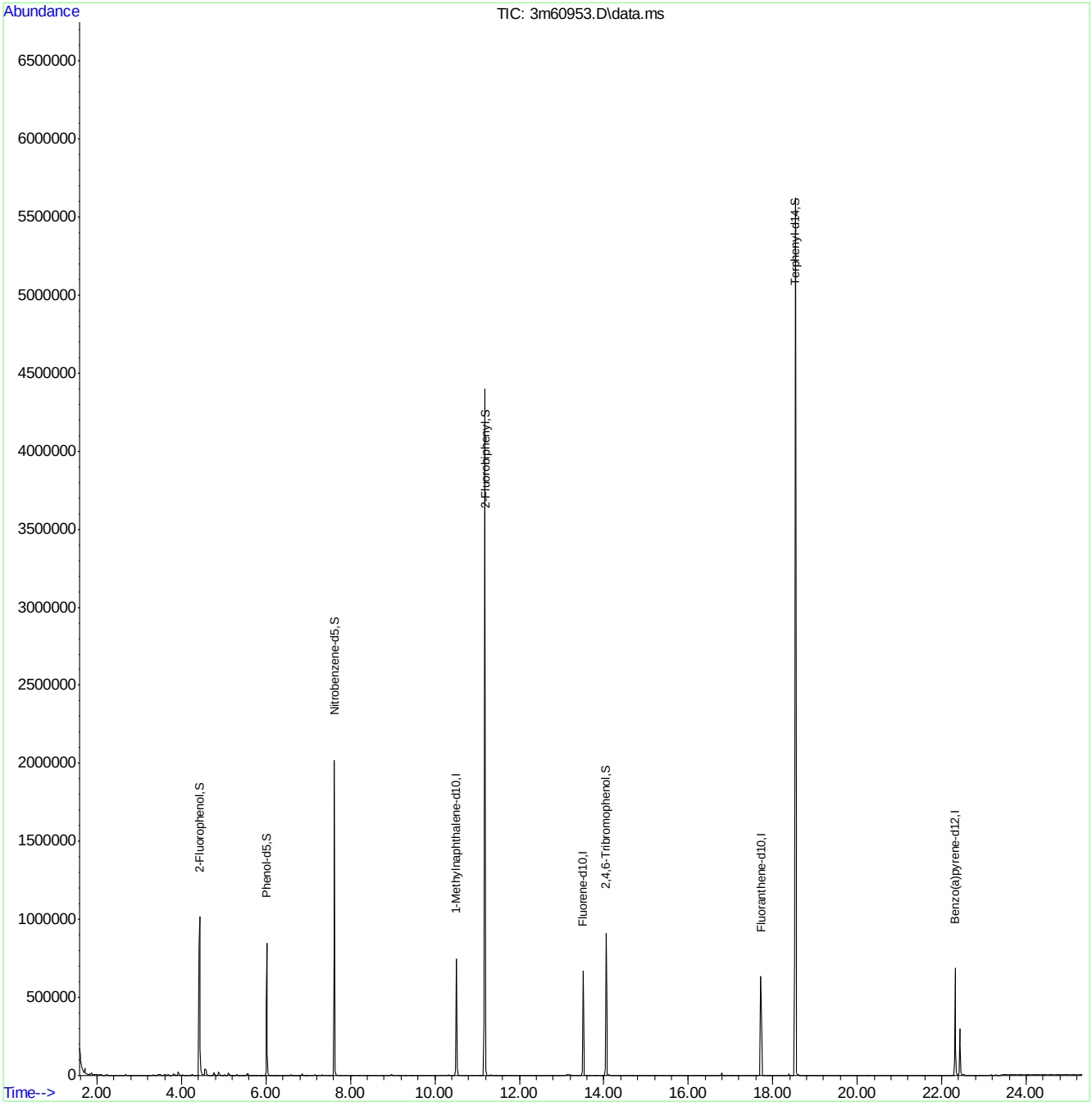
Target Compounds Qvalue

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2866\
Data File : 3m60953.D
Acq On : 29 Apr 2016 1:05 am
Operator : juliusj
Sample : op93453a-mb1
Misc : op93453a,e3m2866,1000
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 02 12:29:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Apr 28 10:59:02 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2912\
Data File : 4m65205.D
Acq On : 10 May 2016 2:22 pm
Operator : linseyk
Sample : op93478a-mb1
Misc : op93478a,e4m2912,30.0
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 14:59:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Fri May 06 13:08:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.678	152	486150	4.00	ppm	-0.02
12) Fluorene-d10	13.656	176	782303	4.00	ppm	-0.02
22) Fluoranthene-d10	17.836	212	1235859	4.00	ppm	-0.03
28) Benzo(a)pyrene-d12	22.422	264	896494	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.678	152	486150	4.00	ppm	-0.02
38) Fluorene-d10a	13.656	176	782303	4.00	ppm	-0.02
System Monitoring Compounds						
2) 2-Fluorophenol	4.714	112	2374129	37.30	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 74.60%#			
3) Phenol-d5	6.301	99	4155636	38.82	ppm	0.00
Spiked Amount 50.000			Recovery = 77.64%			
6) Nitrobenzene-d5	7.806	82	4039912	42.09	ppm	-0.04
Spiked Amount 50.000			Recovery = 84.18%			
11) 2-Fluorobiphenyl	11.346	172	4880587	34.78	ppm	-0.02
Spiked Amount 50.000			Recovery = 69.56%			
17) 2,4,6-Tribromophenol	14.206	330	1829424	43.84	ppm	-0.02
Spiked Amount 50.000			Recovery = 87.68%			
25) Terphenyl-d14	18.645	244	8718056	52.22	ppm	-0.03
Spiked Amount 50.000			Recovery = 104.44%			

Target Compounds Qvalue

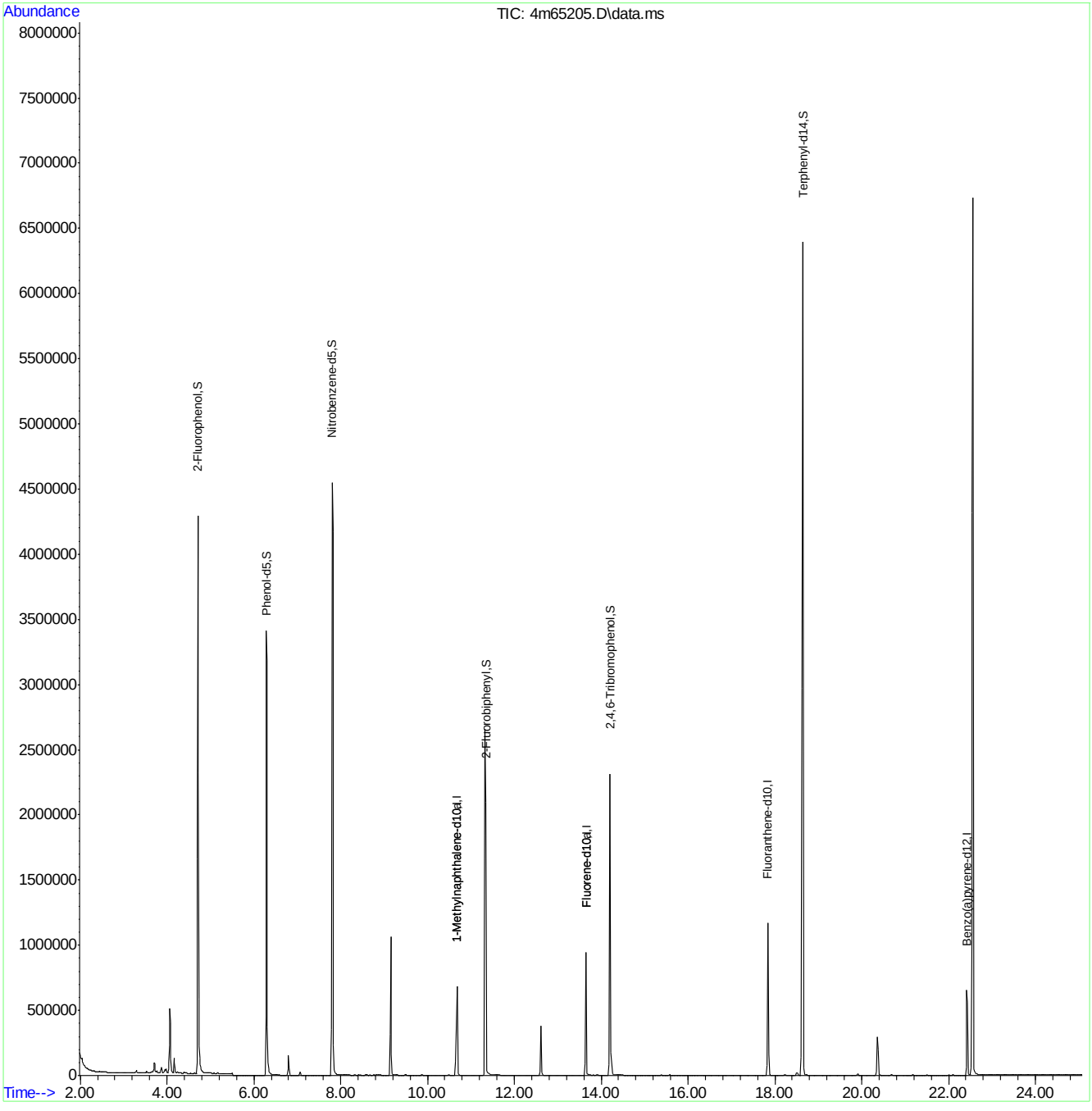
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2912\
Data File : 4m65205.D
Acq On : 10 May 2016 2:22 pm
Operator : linseyk
Sample : op93478a-mb1
Misc : op93478a,e4m2912,30.0
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 10 14:59:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Fri May 06 13:08:34 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2566\
Data File : 2p58693.D
Acq On : 29 Apr 2016 11:13 am
Operator : robertl1
Sample : OP93453-BS1
Misc : op93453,e2p2566,1000
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 29 12:27:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2557.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 29 09:54:55 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.759	152	160883	40.00	ppm	0.00
24) Naphthalene-d8	5.818	136	572655	40.00	ppm	0.00
47) Acenaphthene-d10	7.262	164	311629	40.00	ppm	0.00
69) Phenanthrene-d10	8.583	188	499625	40.00	ppm	0.00
83) Chrysene-d12	11.920	240	485146	40.00	ppm	-0.01
92) Perylene-d12	13.926	264	342216	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.759	152	160883	40.00	ppm	0.00
104) Naphthalene-d8a	5.818	136	572655	40.00	ppm	0.00
106) Acenaphthene-d10a	7.262	164	311629	40.00	ppm	0.00
109) Chrysene-d12a	11.920	240	485146	40.00	ppm	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.673	112	127607	19.58	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 39.16%			
8) Phenol-d5	4.491	99	110111	14.42	ppm	0.04
Spiked Amount 50.000	Range 10 - 59		Recovery = 28.84%			
25) Nitrobenzene-d5	5.224	82	190691	33.77	ppm	-0.01
Spiked Amount 50.000	Range 19 - 61		Recovery = 67.54%#			
51) 2-Fluorobiphenyl	6.705	172	356321	36.75	ppm	-0.01
Spiked Amount 50.000	Range 21 - 58		Recovery = 73.50%#			
73) 2,4,6-Tribromophenol	7.930	330	48359	43.60	ppm	0.00
Spiked Amount 50.000	Range 12 - 68		Recovery = 87.20%#			
85) Terphenyl-d14	10.466	244	426074	43.63	ppm	-0.03
Spiked Amount 50.000	Range 16 - 65		Recovery = 87.26%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.068	88	31584	10.68	ppm	92
3) Pyridine	2.400	79	71897	9.83	ppm	76
4) N-Nitrosodimethylamine	2.368	74	59562	13.78	ppm #	26
6) Indene	4.967	116	275525	30.50	ppm	99
7) Cumene	4.079	105	340978	23.90	ppm	96
9) Phenol	4.502	94	119768	14.80	ppm	75
10) Aniline	4.486	93	158662	17.07	ppm	84
11) bis(2-Chloroethyl)ether	4.545	93	160188	28.09	ppm	89
12) 2-Chlorophenol	4.593	128	174463	29.56	ppm	96
13) Decane	4.625	57	169632	19.29	ppm	93
14) 1,3-Dichlorobenzene	4.710	146	147271	22.70	ppm	99
15) 1,4-Dichlorobenzene	4.775	146	154708	24.23	ppm	99
16) Benzyl alcohol	4.887	108	100256	27.12	ppm	93
17) 1,2-Dichlorobenzene	4.898	146	144313	24.46	ppm	95
18) Acetophenone	5.096	105	245250	33.84	ppm	89
19) 2-Methylphenol	4.994	108	141097	27.85	ppm	96
20) 2,2'-oxybis(1-Chloropr...	4.989	121	42333	25.46	ppm #	58
21) 3&4-Methylphenol	5.122	108	141253	26.72	ppm	95
22) n-Nitroso-di-n-propyla...	5.101	70	117666	30.56	ppm	85
23) Hexachloroethane	5.176	201	44115	22.77	ppm	81
26) Nitrobenzene	5.240	77	176426	30.97	ppm	100
27) Quinoline	6.112	129	358356	35.29	ppm	99
28) Isophorone	5.438	82	336396	32.97	ppm	90

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2566\
Data File : 2p58693.D
Acq On : 29 Apr 2016 11:13 am
Operator : robertl1
Sample : OP93453-BS1
Misc : op93453,e2p2566,1000
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 29 12:27:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2557.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 29 09:54:55 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
29)	2-Nitrophenol	5.502	139	92720	32.92	ppm		93
30)	2,4-Dimethylphenol	5.556	107	173531	34.65	ppm		95
31)	Benzoic acid	5.652	105	57812	14.74	ppm		93
32)	bis(2-Chloroethoxy)met...	5.620	93	183793	28.96	ppm		93
33)	2,4-Dichlorophenol	5.716	162	149133	34.59	ppm		97
34)	2,6-Dichlorophenol	5.892	162	139283	34.31	ppm		99
36)	1,2,4-Trichlorobenzene	5.769	180	116380	24.50	ppm		99
38)	Naphthalene	5.834	128	404434	27.42	ppm		99
39)	4-Chloroaniline	5.887	127	139811	21.92	ppm		98
40)	2,3-Dichloroaniline	6.641	161	184949	35.01	ppm		92
41)	Caprolactam	6.176	113	17530	10.60	ppm	#	70
42)	Hexachlorobutadiene	5.930	225	57642	24.54	ppm		98
43)	4-Chloro-3-methylphenol	6.304	107	167581	37.88	ppm		98
44)	2-Methylnaphthalene	6.406	141	253074	30.71	ppm		93
45)	1-Methylnaphthalene	6.486	141	272650	32.28	ppm		94
46)	Dimethylnaphthalene	6.919	156	276331	33.21	ppm		91
48)	Hexachlorocyclopentadiene	6.529	237	97093	38.74	ppm		93
49)	2,4,6-Trichlorophenol	6.647	196	109517	37.99	ppm		99
50)	2,4,5-Trichlorophenol	6.684	196	111728	36.00	ppm		96
52)	2-Chloronaphthalene	6.807	162	266682	29.16	ppm		99
53)	Biphenyl	6.791	154	392497	34.19	ppm		96
54)	2-Nitroaniline	6.898	65	127146	40.02	ppm		100
55)	Dimethylphthalate	7.042	163	378116	38.08	ppm		100
56)	Acenaphthylene	7.144	152	474744	31.89	ppm		98
57)	2,6-Dinitrotoluene	7.096	165	87128	41.36	ppm		94
58)	3-Nitroaniline	7.235	138	75759	27.24	ppm		85
59)	Acenaphthene	7.288	153	303875	33.32	ppm		98
60)	2,4-Dinitrophenol	7.326	184	85442	78.62	ppm	#	100
61)	4-Nitrophenol	7.406	109	41592	33.06	ppm	#	80
62)	Dibenzofuran	7.433	168	433119	35.93	ppm		97
63)	2,4-Dinitrotoluene	7.428	165	117391	42.52	ppm		59
64)	2,3,4,6-Tetrachlorophenol	7.540	232	88222	37.36	ppm		96
65)	Diethylphthalate	7.625	149	401804	39.88	ppm		96
66)	Fluorene	7.716	166	370652	37.01	ppm		96
67)	4-Chlorophenyl-phenyle...	7.716	204	164948	37.69	ppm		94
68)	4-Nitroaniline	7.748	138	93310	33.96	ppm		90
70)	4,6-Dinitro-2-methylph...	7.770	198	61556	42.12	ppm		95
71)	n-Nitrosodiphenylamine	7.823	169	256007	37.85	ppm		98
72)	1,2-Diphenylhydrazine	7.855	77	391749	36.02	ppm		94
74)	4-Bromophenyl-phenylether	8.150	248	98301	38.65	ppm		97
75)	Hexachlorobenzene	8.203	284	102861	37.78	ppm		97
76)	Pentachlorophenol	8.401	266	53450	29.04	ppm		98
77)	Phenanthrene	8.604	178	545800	37.20	ppm		99
78)	Anthracene	8.658	178	545581	37.49	ppm		98
79)	Carbazole	8.834	167	527652	38.56	ppm		97
80)	Di-n-butylphthalate	9.225	149	739121	40.59	ppm		99
81)	Fluoranthene	9.952	202	638545	40.07	ppm		93
82)	Octadecane	8.476	43	297684	46.35	ppm		81
84)	Pyrene	10.236	202	660962	39.47	ppm		98
86)	Butylbenzylphthalate	11.177	149	328506	39.98	ppm		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2566\
Data File : 2p58693.D
Acq On : 29 Apr 2016 11:13 am
Operator : robertl1
Sample : OP93453-BS1
Misc : op93453,e2p2566,1000
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 29 12:27:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2557.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 29 09:54:55 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
88)	Benzo[a]anthracene	11.904	228	579898	37.47	ppm	99
89)	3,3'-Dichlorobenzidine	11.904	252	256964	49.07	ppm	96
90)	Chrysene	11.958	228	498893	35.65	ppm	100
91)	bis(2-Ethylhexyl)phtha...	12.054	149	425860	41.44	ppm	97
93)	Di-n-octylphthalate	13.006	149	714006	45.88	ppm	98
94)	Benzo[b]fluoranthene	13.423	252	481635	40.51	ppm	93
95)	Benzo[k]fluoranthene	13.466	252	429887	41.39	ppm	88
96)	Benzo[a]pyrene	13.851	252	378919	37.56	ppm	93
97)	Indeno[1,2,3-cd]pyrene	15.392	276	332145	38.07	ppm	82
99)	Dibenz[a,h]anthracene	15.434	278	330358	37.81	ppm	93
100)	7,12-Dimethylbenz(a)an...	13.423	256	184715	38.11	ppm	99
101)	Benzo[g,h,i]perylene	15.809	276	334156	36.22	ppm	88
103)	Benzaldehyde	4.395	105	145025	34.57	ppm	95
107)	Atrazine	8.315	215	51404	42.80	ppm	84
108)	1,2,4,5-Tetrachloroben...	6.540	216	126726	32.73	ppm	100
110)	Benzidine	10.139	184	82794	31.00	ppm	98

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

7.3.1

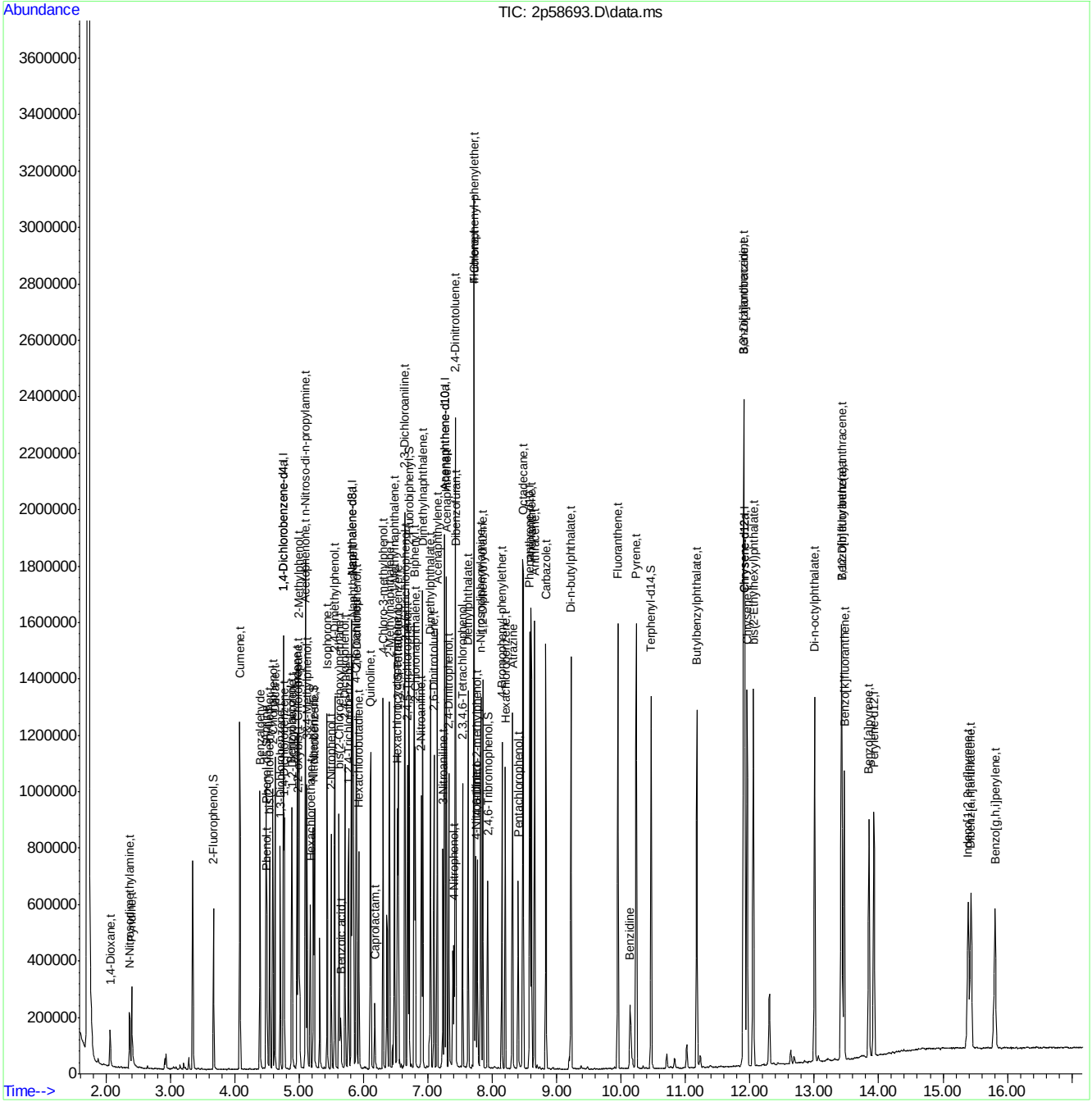
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2566\
Data File : 2p58693.D
Acq On : 29 Apr 2016 11:13 am
Operator : robertl1
Sample : OP93453-BS1
Misc : op93453,e2p2566,1000
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 29 12:27:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2557.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 29 09:54:55 2016
Response via : Initial Calibration



Manual Integrations
APPROVED
(compounds with "m" flag)
Nina Pandya
04/29/16 15:39

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5245\
Data File : M124025.D
Acq On : 29 Apr 2016 2:17 pm
Operator : ashleyd
Sample : op93478-bs1
Misc : op93478,em5245,30.0
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Apr 29 14:59:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 28 11:01:37 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.627	152	313245	40.00	ppm	-0.05
24) Naphthalene-d8	5.738	136	1163542	40.00	ppm	-0.06
47) Acenaphthene-d10	8.056	164	689085	40.00	ppm	-0.08
69) Phenanthrene-d10	10.668	188	1199923	40.00	ppm	-0.09
83) Chrysene-d12	15.832	240	1201687	40.00	ppm	-0.10
92) Perylene-d12	18.455	264	1236162	40.00	ppm	-0.10
102) 1,4-Dichlorobenzene-d4a	4.627	152	313245	40.00	ppm	-0.02
104) Acenaphthene-d10a	8.056	164	689085	40.00	ppm	-0.03
107) Chrysene-d12a	15.832	240	1201687	40.00	ppm	-0.04
110) Phenanthrene-d10a	10.668	188	1199923	40.00	ppm	-0.04
112) Naphthalene-d8a	5.738	136	1163542	40.00	ppm	-0.03
114) Chrysene-d12b	15.832	240	1201687	40.00	ppm	-0.04
System Monitoring Compounds						
5) 2-Fluorophenol	3.676	112	394310	41.16	ppm	-0.05
Spiked Amount 50.000			Recovery	=	82.32%	
8) Phenol-d5	4.392	99	503605	41.86	ppm	-0.04
Spiked Amount 50.000			Recovery	=	83.72%	
25) Nitrobenzene-d5	5.075	82	447396	43.24	ppm	-0.05
Spiked Amount 50.000			Recovery	=	86.48%	
51) 2-Fluorobiphenyl	7.052	172	895572	39.58	ppm	-0.07
Spiked Amount 50.000			Recovery	=	79.16%	
73) 2,4,6-Tribromophenol	9.412	330	188395	45.42	ppm	-0.09
Spiked Amount 50.000			Recovery	=	90.84%	
86) Terphenyl-d14	13.824	244	1176372	43.64	ppm	-0.10
Spiked Amount 50.000			Recovery	=	87.28%	
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	2.175	88	107147	24.67	ppm	90
3) Pyridine	2.517	79	304745	28.82	ppm	95
4) N-Nitrosodimethylamine	2.485	42	182476	39.41	ppm	92
6) Indene	4.824	116	704817	39.56	ppm	99
7) Cumene	4.029	105	901024	37.70	ppm	99
9) Phenol	4.402	94	541825	42.03	ppm	95
10) Aniline	4.386	93	439420	29.30	ppm	82
11) bis(2-Chloroethyl)ether	4.429	93	392982	39.14	ppm	94
12) 2-Chlorophenol	4.483	128	418131	38.94	ppm	93
13) Decane	4.499	43	394572	38.77	ppm	94
14) 1,3-Dichlorobenzene	4.584	146	448242	36.61	ppm	99
15) 1,4-Dichlorobenzene	4.637	146	457914	37.75	ppm	97
16) Benzyl alcohol	4.744	108	226473	36.42	ppm	83
17) 1,2-Dichlorobenzene	4.755	146	440243	38.55	ppm	97
18) Acetophenone	4.947	105	542731	38.06	ppm	99
19) 2-Methylphenol	4.851	108	350113	39.35	ppm	95
20) 2,2'-oxybis(1-Chloropr...	4.835	121	107119	32.29	ppm #	77

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5245\
Data File : M124025.D
Acq On : 29 Apr 2016 2:17 pm
Operator : ashleyd
Sample : op93478-bs1
Misc : op93478,em5245,30.0
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Apr 29 14:59:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 28 11:01:37 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	4.974	108	368822	37.83	ppm	96
22) n-Nitroso-di-n-propyla...	4.947	70	284427	36.94	ppm	95
23) Hexachloroethane	5.027	201	165043	35.99	ppm	97
26) Nitrobenzene	5.091	77	431404	41.18	ppm	96
27) Quinoline	6.133	129	819109	36.93	ppm	99
28) Isophorone	5.294	82	780280	41.44	ppm	94
29) 2-Nitrophenol	5.375	139	228931	38.63	ppm	90
30) 2,4-Dimethylphenol	5.428	107	385384	39.73	ppm	98
31) Benzoic acid	5.561	105	262753	41.30	ppm	97
32) bis(2-Chloroethoxy)met...	5.492	93	441543	38.62	ppm	100
33) 2,4-Dichlorophenol	5.626	162	342650	38.63	ppm	99
34) 2,6-Dichlorophenol	5.839	162	327502	36.55	ppm	99
36) 1,2,4-Trichlorobenzene	5.684	180	387650	37.26	ppm	98
38) Naphthalene	5.764	128	1175879	38.59	ppm	100
39) 4-Chloroaniline	5.828	127	357405	27.23	ppm	95
40) 2,3-Dichloroaniline	6.939	161	396209	34.29	ppm	99
41) Caprolactam	6.234	55	182736	38.10	ppm	95
42) Hexachlorobutadiene	5.893	225	231705	38.72	ppm	99
43) 4-Chloro-3-methylphenol	6.421	107	334010	37.68	ppm	98
44) 2-Methylnaphthalene	6.560	141	666969	36.60	ppm	100
45) 1-Methylnaphthalene	6.683	142	783862	37.02	ppm	99
46) Dimethylnaphthalene	7.420	156	718110	36.53	ppm	99
48) Hexachlorocyclopentadiene	6.763	237	225340	52.24	ppm	99
49) 2,4,6-Trichlorophenol	6.961	196	246071	37.42	ppm	97
50) 2,4,5-Trichlorophenol	7.030	196	255203	35.66	ppm	96
52) 2-Chloronaphthalene	7.217	162	752372	37.48	ppm	99
53) Biphenyl	7.190	154	981568	38.28	ppm	100
54) 2-Nitroaniline	7.393	65	236893	41.40	ppm	98
55) Dimethylphthalate	7.671	163	888161	37.85	ppm	100
56) Acenaphthylene	7.831	152	1210881	36.48	ppm	99
57) 2,6-Dinitrotoluene	7.762	165	210377	40.33	ppm	92
58) 3-Nitroaniline	8.034	138	176248	30.53	ppm	94
59) Acenaphthene	8.109	153	757558	37.89	ppm	99
60) 2,4-Dinitrophenol	8.232	184	186808	79.45	ppm	96
61) 4-Nitrophenol	8.456	109	65989	31.26	ppm	82
62) Dibenzofuran	8.392	168	1124201	37.80	ppm	98
63) 2,4-Dinitrotoluene	8.435	165	270299	39.50	ppm	89
64) 2,3,4,6-Tetrachlorophenol	8.649	232	204432	36.93	ppm	98
65) Diethylphthalate	8.852	149	876733	37.52	ppm	99
66) Fluorene	8.974	166	889451	36.99	ppm	99
67) 4-Chlorophenyl-phenyle...	9.001	204	436146	38.03	ppm	99
68) 4-Nitroaniline	9.081	138	215023	38.30	ppm	99
70) 4,6-Dinitro-2-methylph...	9.151	198	154362	39.89	ppm	76
71) n-Nitrosodiphenylamine	9.225	169	632460	39.24	ppm	98
72) 1,2-Diphenylhydrazine	9.284	77	859527	41.63	ppm	98
74) 4-Bromophenyl-phenylether	9.872	248	302697	40.78	ppm	96
75) Hexachlorobenzene	9.973	284	344069	39.37	ppm	97
76) Pentachlorophenol	10.384	266	133316	36.72	ppm	99
77) Phenanthrene	10.710	178	1297979	38.80	ppm	99
78) Anthracene	10.806	178	1328642	38.35	ppm	99

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5245\
Data File : M124025.D
Acq On : 29 Apr 2016 2:17 pm
Operator : ashleyd
Sample : op93478-bs1
Misc : op93478,em5245,30.0
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Apr 29 14:59:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 28 11:01:37 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
79)	Carbazole	11.164	167	1257040	39.39	ppm		99
80)	Di-n-butylphthalate	11.944	149	1596591	40.30	ppm		100
81)	Fluoranthene	12.996	202	1496511	38.18	ppm		99
82)	Octadecane	10.646	57	588933	45.63	ppm		98
84)	Pyrene	13.423	202	1529129	39.03	ppm		98
87)	Butylbenzylphthalate	14.871	149	645099	37.87	ppm		93
88)	Benzo[a]anthracene	15.811	228	1348893	36.72	ppm		99
89)	3,3'-Dichlorobenzidine	15.838	252	803435	59.89	ppm		100
90)	Chrysene	15.880	228	1268162	36.96	ppm		100
91)	bis(2-Ethylhexyl)phtha...	16.083	149	876563	38.16	ppm		99
93)	Di-n-octylphthalate	17.306	149	1478705	36.86	ppm		97
94)	Benzo[b]fluoranthene	17.819	252	1448835	38.15	ppm		94
95)	Benzo[k]fluoranthene	17.862	252	1411585	38.56	ppm		99
96)	Benzo[a]pyrene	18.359	252	1361812	38.82	ppm		98
97)	Indeno[1,2,3-cd]pyrene	20.159	276	1298450m	36.58	ppm		
99)	Dibenz[a,h]anthracene	20.191	278	1351351	37.44	ppm		98
100)	7,12-Dimethylbenz(a)an...	17.808	256	707170	41.37	ppm		98
101)	Benzo[g,h,i]perylene	20.602	276	1326871	35.86	ppm		99
103)	Benzaldehyde	4.301	105	302724	42.76	ppm		96
105)	1,2,4,5-Tetrachloroben...	6.785	216	422700	47.58	ppm		93
106)	Atrazine	10.272	215	136661	46.95	ppm	#	73
108)	Benzidine	13.349	184	606404	42.13	ppm		99

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

7.3.2

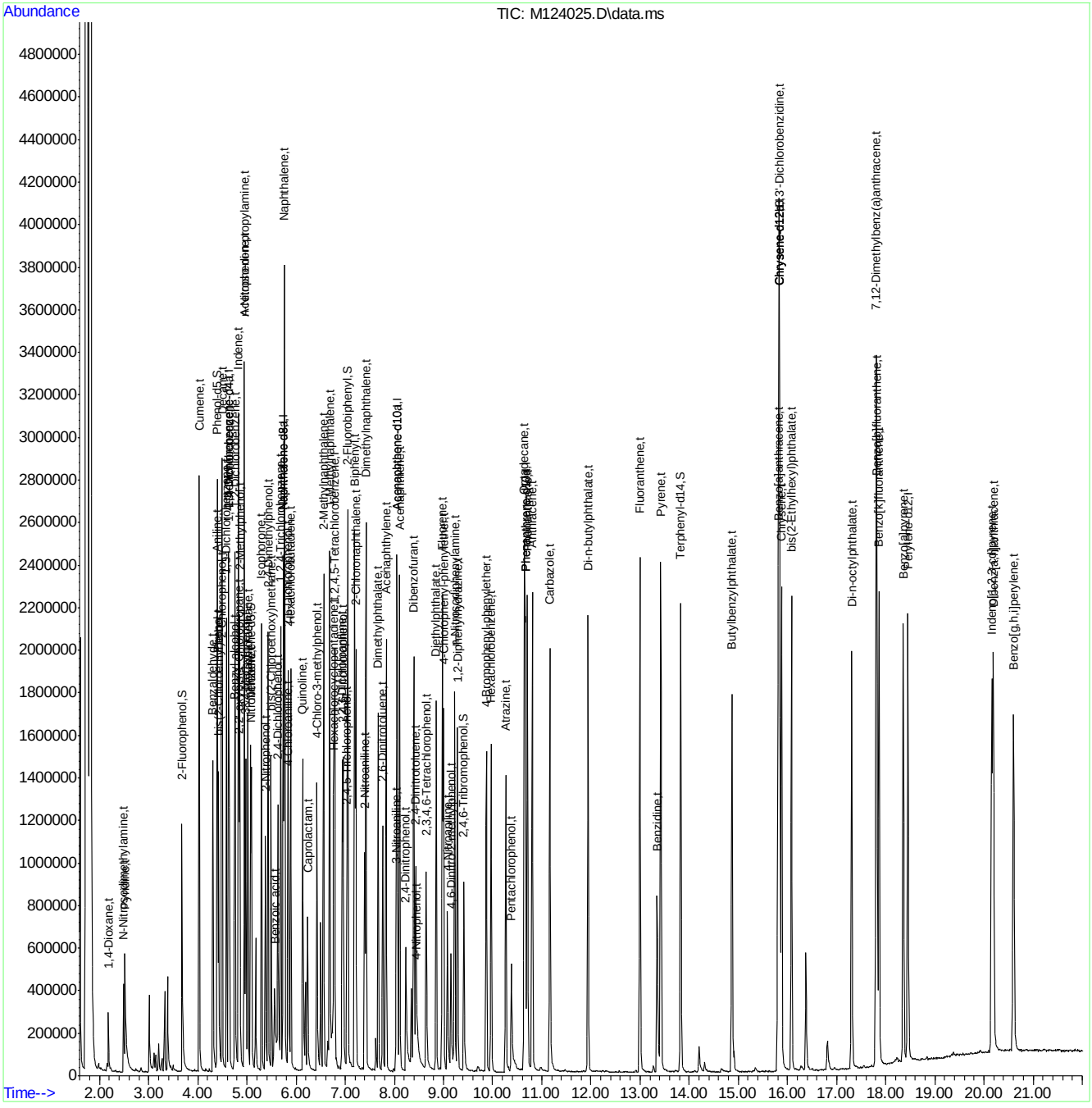
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5245\
Data File : M124025.D
Acq On : 29 Apr 2016 2:17 pm
Operator : ashleyd
Sample : op93478-bs1
Misc : op93478,em5245,30.0
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Apr 29 14:59:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 28 11:01:37 2016
Response via : Initial Calibration



MM5239.M Fri Apr 29 15:00:31 2016 MSM

SGS ACCUTEST JC19023

Manual Integration Approval Summary

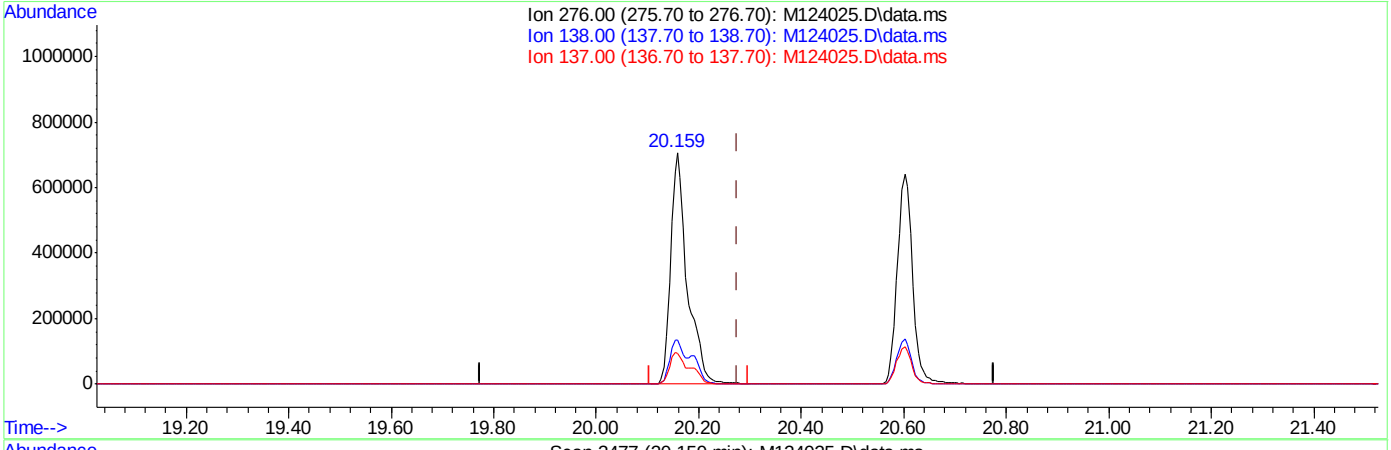
Sample Number:	OP93478-BS1	**Method:**	SW846 8270D
Lab FileID:	M124025.D	**Analyst approved:**	04/29/16 15:02 Ashley Dye
Injection Time:	04/29/16 14:17	**Supervisor approved:**	04/29/16 15:39 Nina Pandya

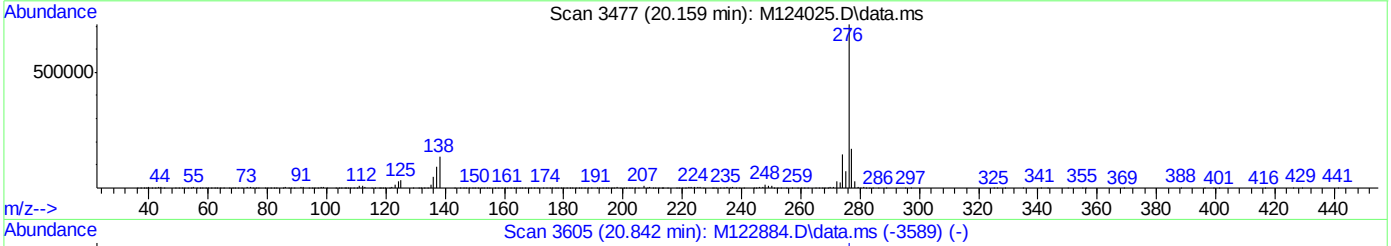
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		20.16	Overlapping peak

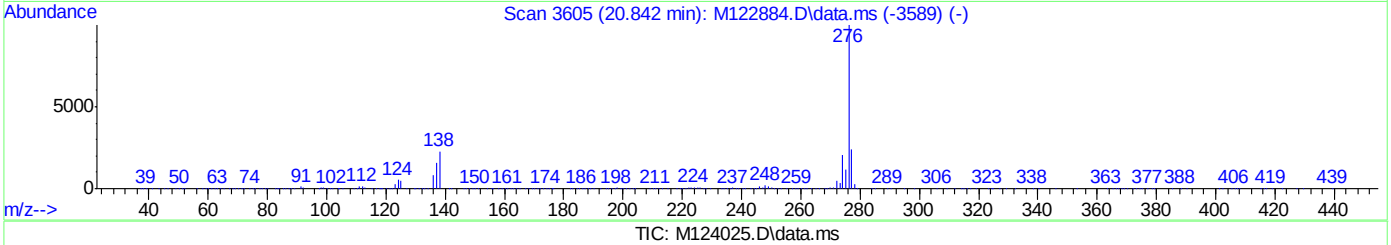
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5245\
Data File : M124025.D
Acq On : 29 Apr 2016 2:17 pm
Operator : ashleyd
Sample : op93478-bs1
Misc : op93478,em5245,30.0
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Apr 29 14:39:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 28 11:01:37 2016
Response via : Initial Calibration







TIC: M124025.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

20.159min (-0.117) 45.07ppm

response 1599705

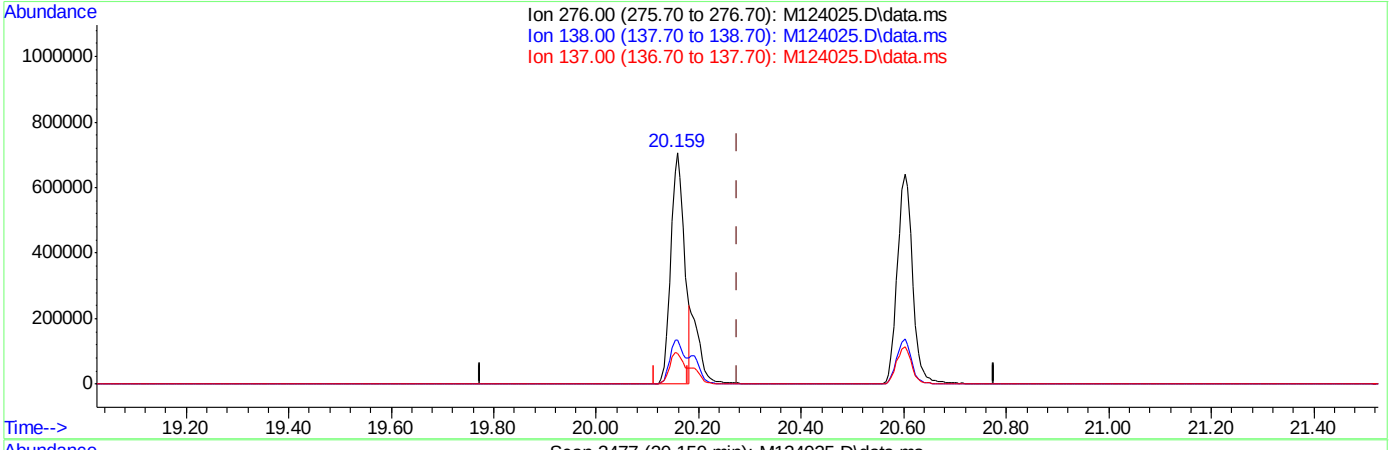
Ion	Exp%	Act%
276.00	100	100
138.00	17.70	18.93
137.00	13.00	13.10
0.00	0.00	0.00

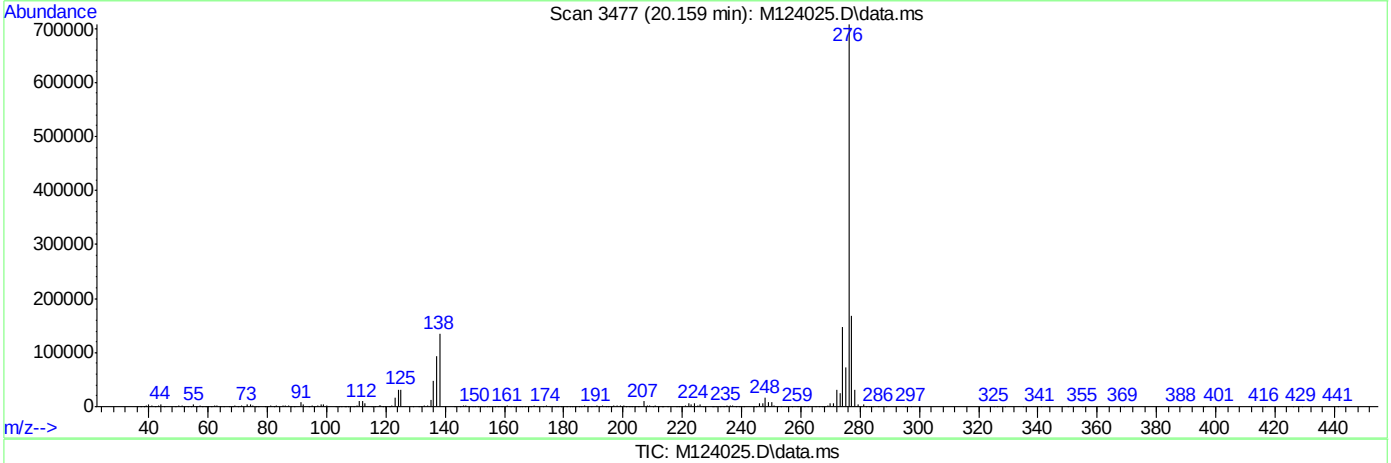
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5245\
Data File : M124025.D
Acq On : 29 Apr 2016 2:17 pm
Operator : ashleyd
Sample : op93478-bs1
Misc : op93478,em5245,30.0
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Apr 29 14:59:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 28 11:01:37 2016
Response via : Initial Calibration





TIC: M124025.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

20.159min (-0.117) 36.58ppm m

response 1298450

Ion	Exp%	Act%
276.00	100	100
138.00	17.70	18.96
137.00	13.00	13.15
0.00	0.00	0.00

SGS ACCUTEST JC19023

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 05/04/16 16:33

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1416\
Data File : 5p27905.D
Acq On : 3 May 2016 10:00 am
Operator : ashleyd
Sample : op93478-bs1
Misc : op93478,e5p1416,30.0
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 03 12:19:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Tue May 03 08:59:50 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.293	152	855803	40.00	ppm	0.00
24) Naphthalene-d8	6.767	136	3414781	40.00	ppm	0.00
47) Acenaphthene-d10	8.872	164	1959693	40.00	ppm	0.00
69) Phenanthrene-d10	10.710	188	3086795	40.00	ppm	0.00
83) Chrysene-d12	14.508	240	2900912	40.00	ppm	0.00
92) Perylene-d12	16.581	264	2563817	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.293	152	855803	40.00	ppm	0.00
104) Acenaphthene-d10a	8.872	164	1959693	40.00	ppm	0.00
106) Chrysene-d12a	14.508	240	2900665	40.00	ppm	0.00
109) Phenanthrene-d10a	10.710	188	3086795	40.00	ppm	0.00
112) Naphthalene-d8a	6.767	136	3414781	40.00	ppm	0.00
114) Chrysene-d12b	14.508	240	2900665	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.957	112	1078748	41.13	ppm	0.03
Spiked Amount 50.000			Recovery	=	82.26%	
8) Phenol-d5	4.962	99	1215967	40.81	ppm	0.00
Spiked Amount 50.000			Recovery	=	81.62%	
25) Nitrobenzene-d5	5.939	82	1092162	42.14	ppm	0.09
Spiked Amount 50.000			Recovery	=	84.28%	
51) 2-Fluorobiphenyl	8.071	172	2533413	40.60	ppm	0.00
Spiked Amount 50.000			Recovery	=	81.20%	
73) 2,4,6-Tribromophenol	9.844	330	354274	47.54	ppm	0.00
Spiked Amount 50.000			Recovery	=	95.08%	
85) Terphenyl-d14	12.943	244	2680875	45.98	ppm	0.00
Spiked Amount 50.000			Recovery	=	91.96%	
108) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.360	88	237219	23.64	ppm	98
3) Pyridine	2.670	79	608796	27.55	ppm	95
4) N-Nitrosodimethylamine	2.638	74	449535	36.30	ppm	82
6) Indene	5.581	116	2033421	43.43	ppm	97
7) Cumene	4.417	105	2403019	38.05	ppm	98
9) Phenol	4.978	94	1298095	42.13	ppm	96
10) Aniline	4.956	93	858117	25.70	ppm	76
11) bis(2-Chloroethyl)ether	5.010	93	912306	39.90	ppm	94
12) 2-Chlorophenol	5.084	128	1159812	39.10	ppm	96
13) Decane	5.090	43	1153580	58.77	ppm	76
14) 1,3-Dichlorobenzene	5.229	146	1236861	37.58	ppm	99
15) 1,4-Dichlorobenzene	5.314	146	1242098	37.42	ppm	95
16) Benzyl alcohol	5.480	108	651775	38.38	ppm	93
17) 1,2-Dichlorobenzene	5.480	146	1190708	37.75	ppm	95
18) Acetophenone	5.763	105	1525564	41.48	ppm	92
19) 2-Methylphenol	5.635	108	965473	42.75	ppm	89
20) 2,2'-oxybis(1-Chloropr...	5.603	45	1116122	42.49	ppm	71

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1416\
Data File : 5p27905.D
Acq On : 3 May 2016 10:00 am
Operator : ashleyd
Sample : op93478-bs1
Misc : op93478,e5p1416,30.0
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 03 12:19:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Tue May 03 08:59:50 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.816	108	1019345	42.43	ppm		98
22) n-Nitroso-di-n-propyla...	5.763	70	674006	41.17	ppm		97
23) Hexachloroethane	5.859	201	383719	35.87	ppm		90
26) Nitrobenzene	5.961	77	988176	38.67	ppm		98
27) Quinoline	7.200	129	2315530	38.67	ppm		98
28) Isophorone	6.233	82	1859595	41.65	ppm		96
29) 2-Nitrophenol	6.329	139	644298	40.22	ppm		87
30) 2,4-Dimethylphenol	6.415	107	1201199	47.78	ppm		94
31) Benzoic acid	6.591	105	713652m	34.75	ppm		
32) bis(2-Chloroethoxy)met...	6.500	93	1046250	35.86	ppm		92
33) 2,4-Dichlorophenol	6.634	162	942526	38.75	ppm		95
34) 2,6-Dichlorophenol	6.890	162	919790	38.45	ppm	#	1
36) 1,2,4-Trichlorobenzene	6.698	180	965923	35.30	ppm		92
38) Naphthalene	6.789	128	3512204	40.59	ppm		96
39) 4-Chloroaniline	6.890	127	933691	25.77	ppm		97
40) 2,3-Dichloroaniline	7.980	161	1097786	36.21	ppm		100
41) Caprolactam	7.328	55	506728	52.09	ppm		95
42) Hexachlorobutadiene	6.933	225	505974	35.91	ppm		98
43) 4-Chloro-3-methylphenol	7.515	107	1078215	41.48	ppm	#	67
44) 2-Methylnaphthalene	7.617	141	2015263	40.39	ppm		91
45) 1-Methylnaphthalene	7.734	141	2082179	40.18	ppm		91
46) Dimethylnaphthalene	8.370	156	2119017	38.99	ppm		94
48) Hexachlorocyclopentadiene	7.798	237	947233	77.13	ppm		97
49) 2,4,6-Trichlorophenol	7.985	196	642025	38.47	ppm		100
50) 2,4,5-Trichlorophenol	8.044	196	660381	36.66	ppm		98
52) 2-Chloronaphthalene	8.204	162	2124624	38.48	ppm		91
53) Biphenyl	8.183	154	2769928	38.73	ppm		95
54) 2-Nitroaniline	8.370	65	695924	50.13	ppm		91
55) Dimethylphthalate	8.584	163	2510089	38.35	ppm		99
56) Acenaphthylene	8.701	152	3478857	39.65	ppm		97
57) 2,6-Dinitrotoluene	8.658	165	568310	42.18	ppm		88
58) 3-Nitroaniline	8.872	138	491253	31.34	ppm		79
59) Acenaphthene	8.915	153	2274548	40.53	ppm		95
60) 2,4-Dinitrophenol	8.990	184	612515	73.71	ppm		79
61) 4-Nitrophenol	9.155	109	371137	46.65	ppm		99
62) Dibenzofuran	9.129	168	3068709	40.17	ppm		97
63) 2,4-Dinitrotoluene	9.145	165	803216	44.61	ppm		94
64) 2,3,4,6-Tetrachlorophenol	9.299	232	510214	35.91	ppm		88
65) Diethylphthalate	9.433	149	2658627	39.76	ppm		97
66) Fluorene	9.540	166	2562070	40.71	ppm		97
67) 4-Chlorophenyl-phenyle...	9.545	204	1137557	38.37	ppm		83
68) 4-Nitroaniline	9.631	138	666045	42.05	ppm	#	71
70) 4,6-Dinitro-2-methylph...	9.636	198	426366	43.20	ppm		86
71) n-Nitrosodiphenylamine	9.705	169	1863653	41.89	ppm		99
72) 1,2-Diphenylhydrazine	9.743	77	2076123	44.98	ppm		81
74) 4-Bromophenyl-phenylether	10.149	248	671447	39.27	ppm		90
75) Hexachlorobenzene	10.202	284	697792	40.19	ppm		88
76) Pentachlorophenol	10.485	266	379516	35.84	ppm		96
77) Phenanthrene	10.742	178	3437581	39.65	ppm		98
78) Anthracene	10.806	178	3567339	40.94	ppm		98

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1416\
Data File : 5p27905.D
Acq On : 3 May 2016 10:00 am
Operator : ashleyd
Sample : op93478-bs1
Misc : op93478,e5p1416,30.0
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 03 12:19:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Tue May 03 08:59:50 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
79) Carbazole	11.052	167	3376232	41.16	ppm	96
80) Di-n-butylphthalate	11.522	149	4516278	43.45	ppm	99
81) Fluoranthene	12.366	202	3589326	40.06	ppm	95
82) Octadecane	10.576	57	1841509	64.41	ppm	76
84) Pyrene	12.686	202	3805781	42.62	ppm	97
86) Butylbenzylphthalate	13.707	149	1913410	43.68	ppm	85
88) Benzo[a]anthracene	14.492	228	3262285	40.66	ppm	97
89) 3,3'-Dichlorobenzidine	14.503	252	2037832	69.35	ppm	99
90) Chrysene	14.546	228	3157129	38.54	ppm	98
91) bis(2-Ethylhexyl)phtha...	14.594	149	2813018	45.29	ppm	98
93) Di-n-octylphthalate	15.561	149	4647796	52.27	ppm	97
94) Benzo[b]fluoranthene	16.063	252	3243004	43.35	ppm	99
95) Benzo[k]fluoranthene	16.100	252	3174099	44.40	ppm	99
96) Benzo[a]pyrene	16.501	252	2885250	43.03	ppm	99
97) Indeno[1,2,3-cd]pyrene	18.210	276	2957072m	44.96	ppm	
99) Dibenz[a,h]anthracene	18.248	278	2967857	43.17	ppm	97
100) 7,12-Dimethylbenz(a)an...	16.057	256	1580545	54.90	ppm	99
101) Benzo[g,h,i]perylene	18.686	276	2899347	41.48	ppm	97
103) Benzaldehyde	4.823	105	608255	29.27	ppm	90
105) 1,2,4,5-Tetrachloroben...	7.814	216	990525	36.58	ppm	99
107) Benzidine	12.612	184	1002891	26.02	ppm	96
111) Atrazine	10.389	215	342264	43.06	ppm	94

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

7.3.3

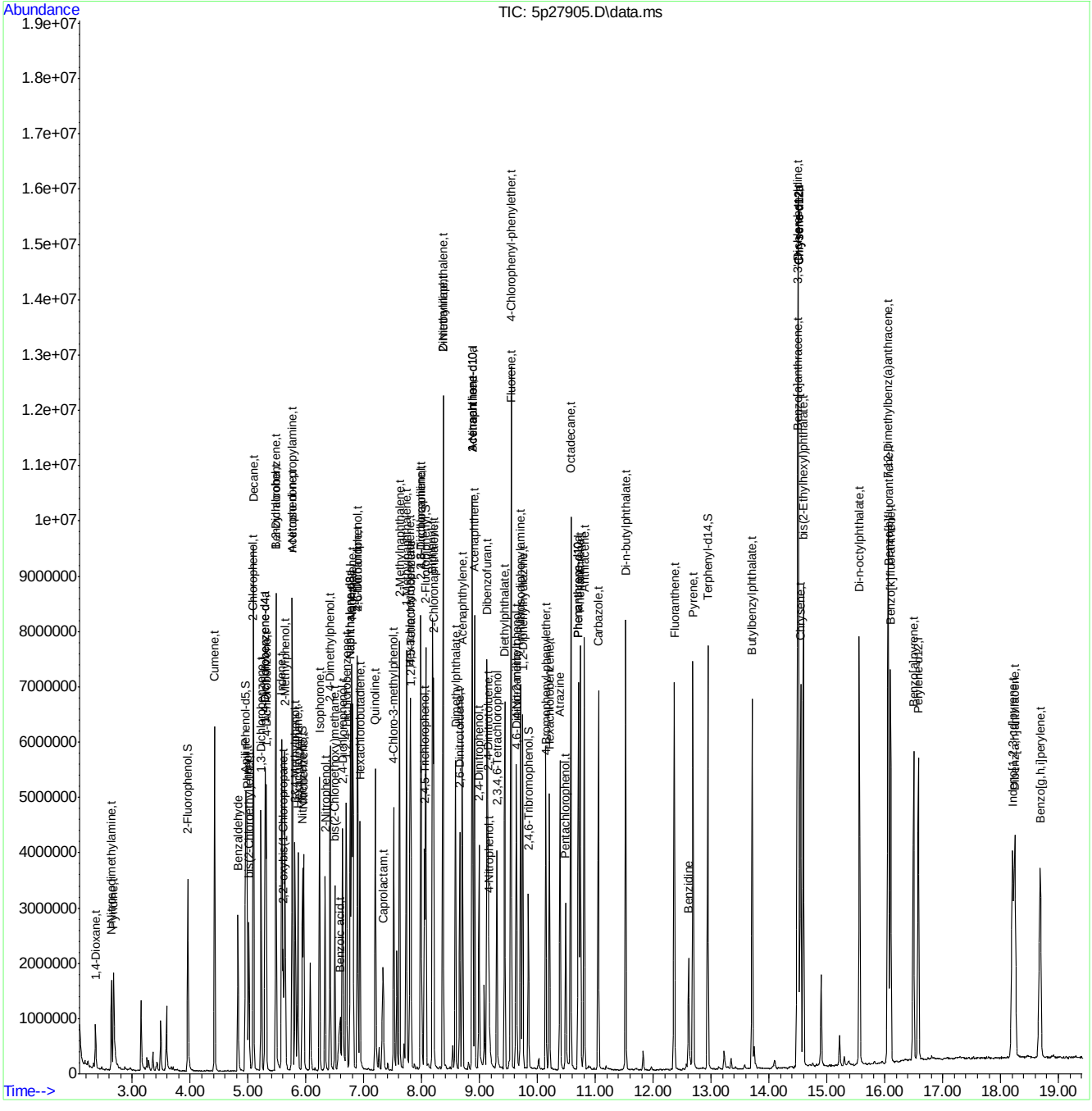
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1416\
Data File : 5p27905.D
Acq On : 3 May 2016 10:00 am
Operator : ashleyd
Sample : op93478-bs1
Misc : op93478,e5p1416,30.0
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 03 12:19:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Tue May 03 08:59:50 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

Manual Integration Approval Summary

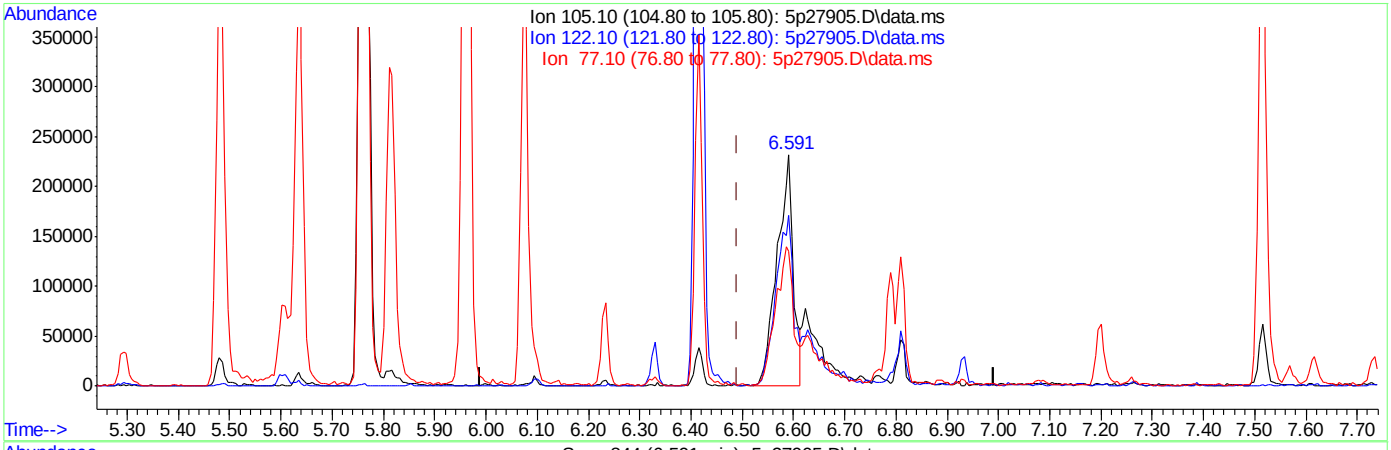
Sample Number:	OP93478-BS1	**Method:**	SW846 8270D
Lab FileID:	5P27905.D	**Analyst approved:**	05/03/16 12:25 Ashley Dye
Injection Time:	05/03/16 10:00	**Supervisor approved:**	05/04/16 16:33 Kristi Schollenberger

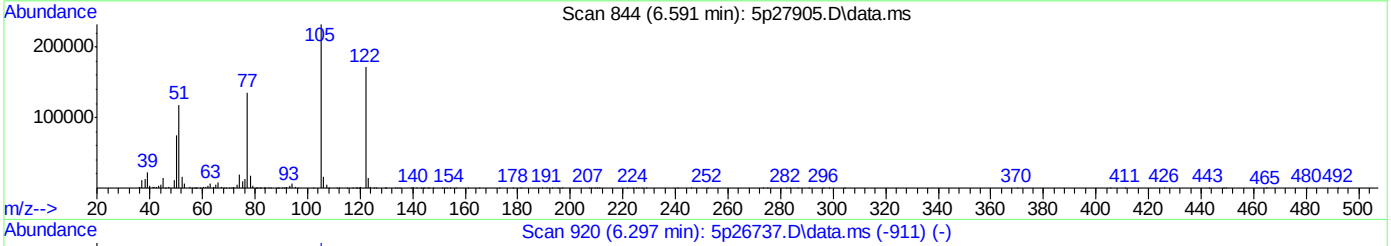
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic acid	65-85-0		6.59	Split peak
Indeno(1,2,3-cd)pyrene	193-39-5		18.21	Overlapping peak

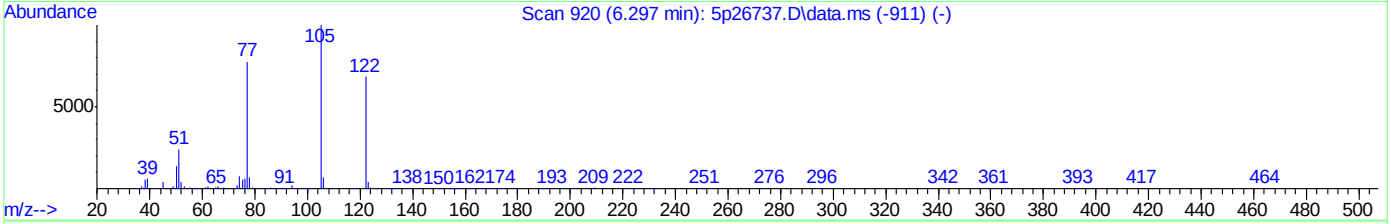
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E5P1416\
Data File : 5p27905.D
Acq On : 3 May 2016 10:00 am
Operator : ashleyd
Sample : op93478-bs1
Misc : op93478,e5p1416,30.0
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 03 12:19:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Tue May 03 08:59:50 2016
Response via : Initial Calibration







TIC: 5p27905.D\data.ms

(31) Benzoic acid (t)

6.591min (+0.100) 24.52ppm

response 503679

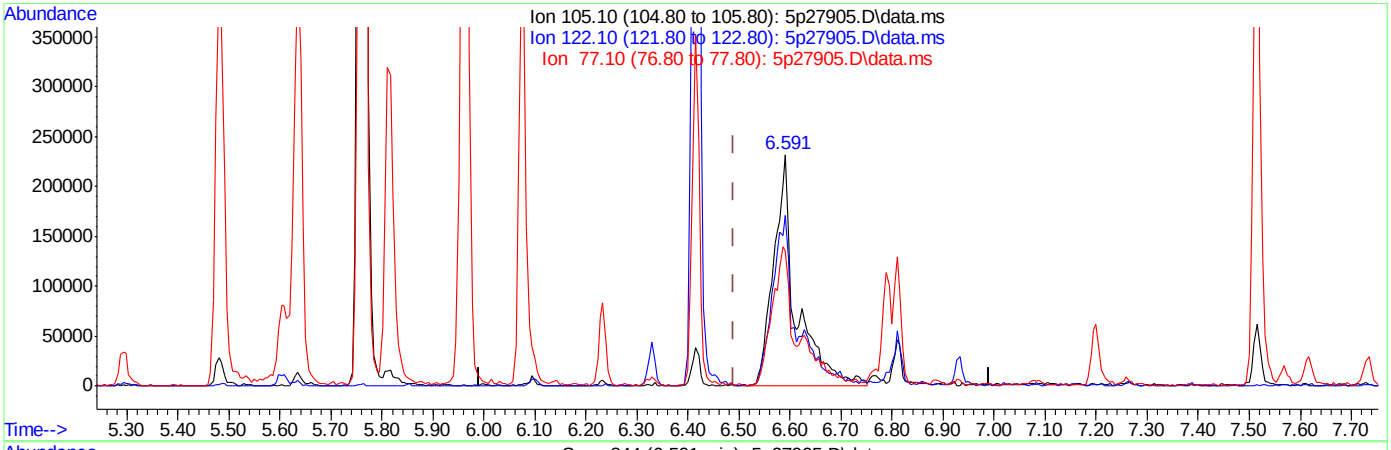
Ion	Exp%	Act%
105.10	100	100
122.10	79.80	72.70
77.10	55.60	56.24
0.00	0.00	0.00

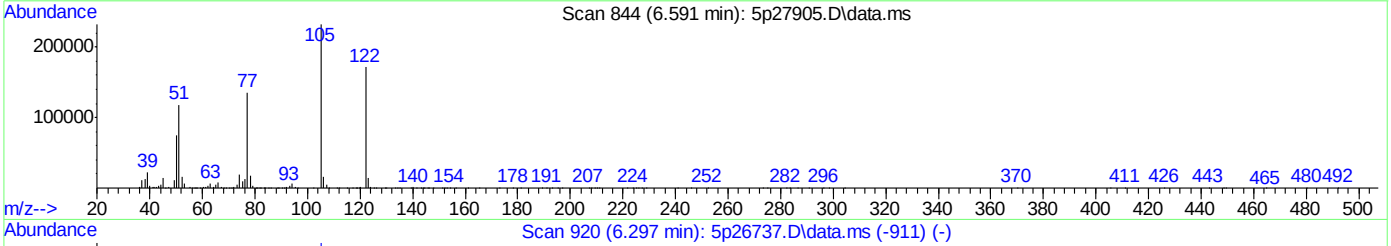
5P27905.D edits: Benzoic acid

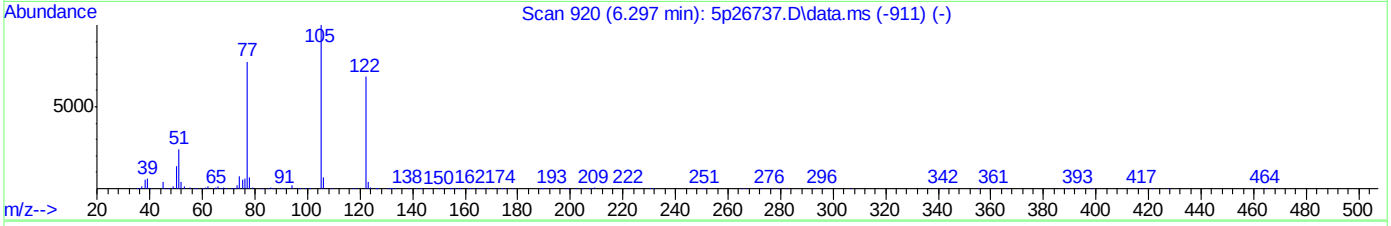
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E5P1416\
Data File : 5p27905.D
Acq On : 3 May 2016 10:00 am
Operator : ashleyd
Sample : op93478-bs1
Misc : op93478,e5p1416,30.0
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 03 12:19:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Tue May 03 08:59:50 2016
Response via : Initial Calibration







TIC: 5p27905.D\data.ms

(31) Benzoic acid (t)

6.591min (+0.100) 34.75ppm m

response 713652

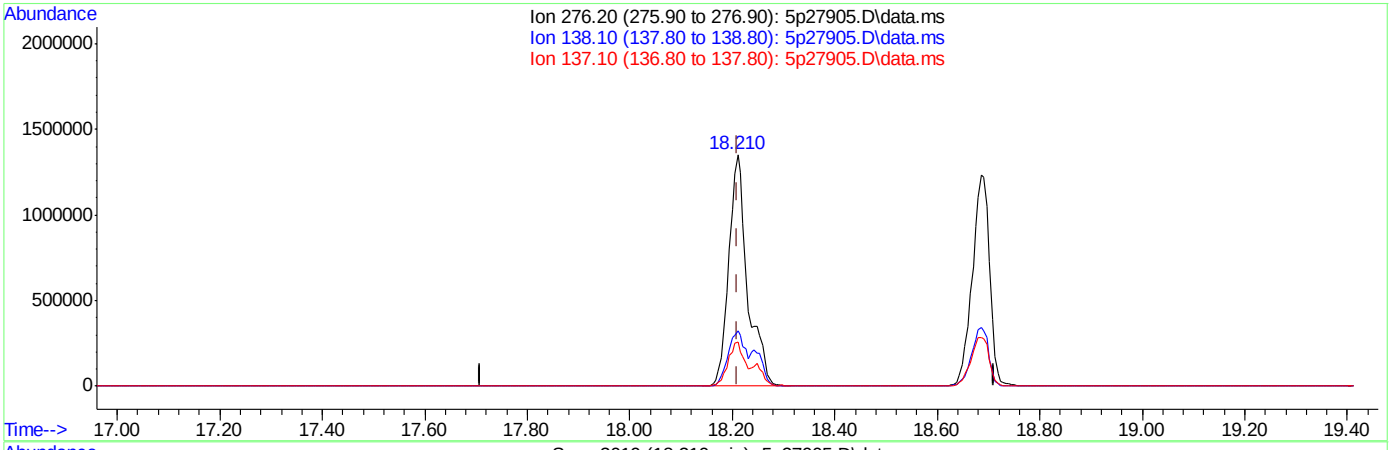
Ion	Exp%	Act%
105.10	100	100
122.10	79.80	73.66
77.10	55.60	58.25
0.00	0.00	0.00

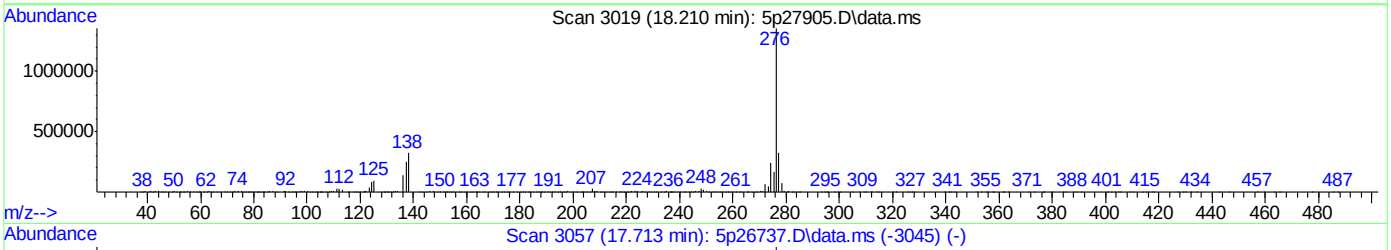
SGS ACCUTEST JC19023

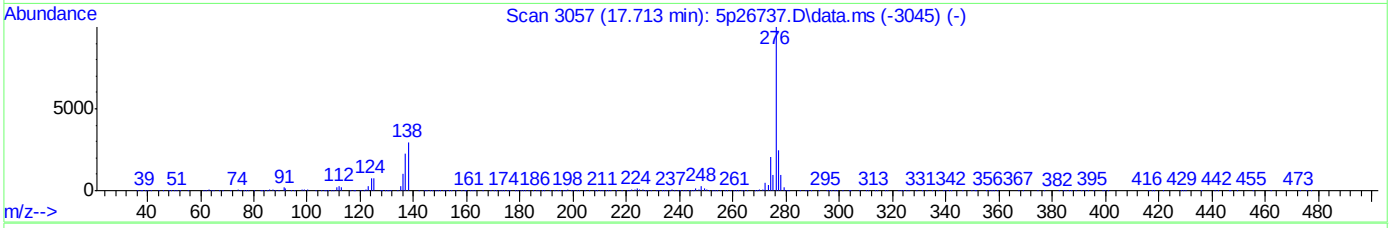
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E5P1416\
Data File : 5p27905.D
Acq On : 3 May 2016 10:00 am
Operator : ashleyd
Sample : op93478-bs1
Misc : op93478,e5p1416,30.0
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 03 12:19:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Tue May 03 08:59:50 2016
Response via : Initial Calibration







TIC: 5p27905.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

18.210min (+0.000) 52.45ppm

response 3449823

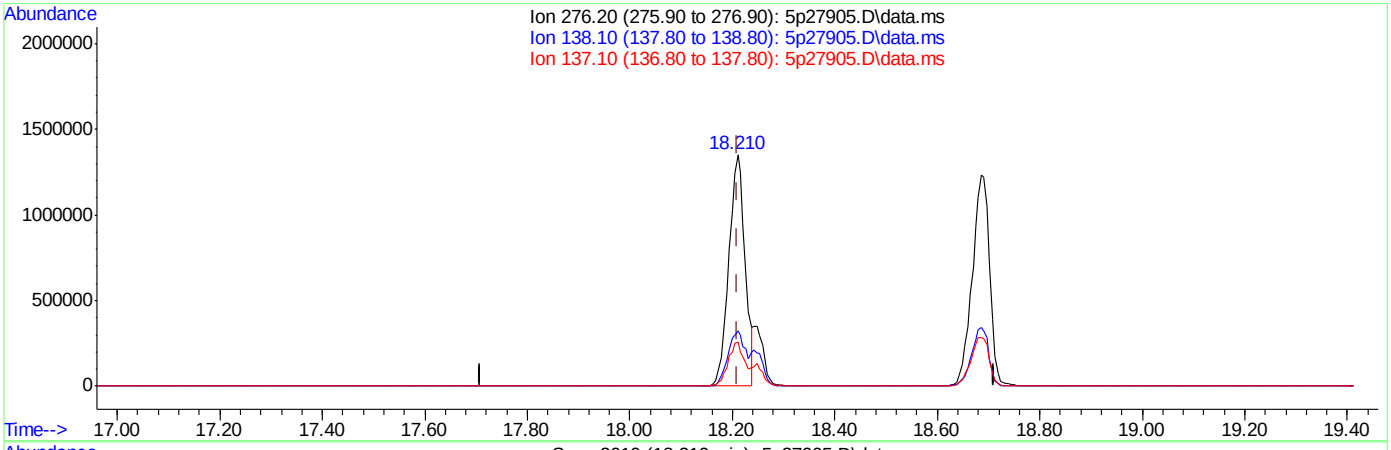
Ion	Exp%	Act%
276.20	100	100
138.10	24.00	23.73
137.10	17.90	18.71
0.00	0.00	0.00

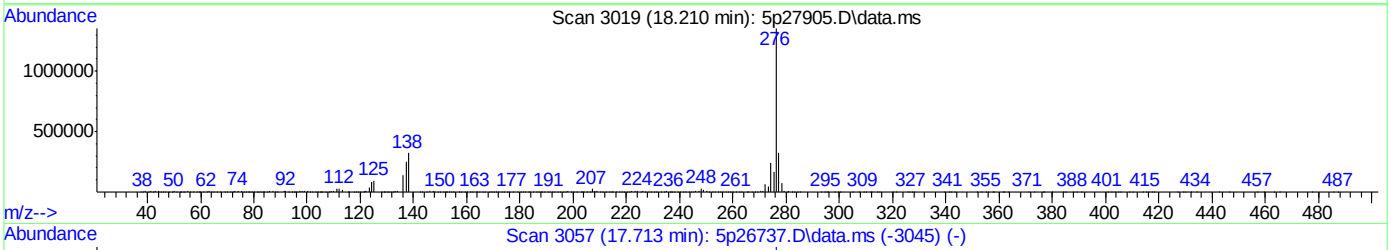
SGS ACCUTEST JC19023

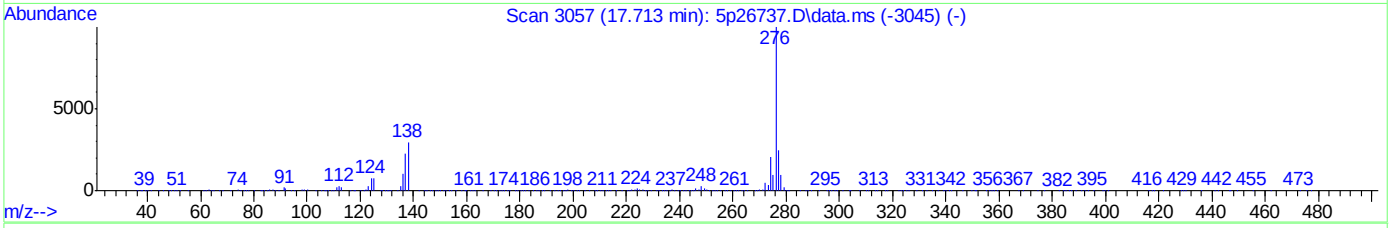
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E5P1416\
Data File : 5p27905.D
Acq On : 3 May 2016 10:00 am
Operator : ashleyd
Sample : op93478-bs1
Misc : op93478,e5p1416,30.0
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 03 12:19:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Tue May 03 08:59:50 2016
Response via : Initial Calibration







TIC: 5p27905.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

18.210min (+0.000) 44.96ppm m

response 2957072

Ion	Exp%	Act%
276.20	100	100
138.10	24.00	23.87
137.10	17.90	18.85
0.00	0.00	0.00

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2866\
Data File : 3m60954.D
Acq On : 29 Apr 2016 1:37 am
Operator : juliusj
Sample : op93453a-bs12
Misc : op93453a,e3m2866,1000
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 02 12:29:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Apr 28 10:59:02 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.509	150	390669	4.00	ppm	-0.11
14) Fluorene-d10	13.505	176	490547	4.00	ppm	-0.14
21) Fluoranthene-d10	17.716	212	753020	4.00	ppm	-0.14
31) Benzo(a)pyrene-d12	22.320	264	584872	4.00	ppm	-0.13
System Monitoring Compounds						
3) 2-Fluorophenol	4.430	112	997237	20.40	ppm	-0.08
Spiked Amount 50.000			Recovery = 40.80%			
4) Phenol-d5	6.024	99	1098497	13.58	ppm	-0.07
Spiked Amount 50.000			Recovery = 27.16%			
7) Nitrobenzene-d5	7.625	82	2127091	28.29	ppm	-0.09
Spiked Amount 50.000			Recovery = 56.58%			
15) 2-Fluorobiphenyl	11.176	172	4546985	33.73	ppm	-0.13
Spiked Amount 50.000			Recovery = 67.46%			
20) 2,4,6-Tribromophenol	14.052	330	580732	37.83	ppm	-0.12
Spiked Amount 50.000			Recovery = 75.66%			
28) Terphenyl-d14	18.535	244	4756472	43.54	ppm	-0.13
Spiked Amount 50.000			Recovery = 87.08%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.236	88	6835	0.34	ppm	98
5) Phenol	6.036	94	148606	1.70	ppm #	76
6) bis(2-Chloroethyl)ether	6.181	93	36448	0.55	ppm #	57
8) Nitrobenzene	7.644	77	48126	0.59	ppm #	59
9) Naphthalene	9.018	128	134546	0.62	ppm	99
10) Hexachlorobutadiene	9.301	225	20763	0.55	ppm	100
11) 2-Methylnaphthalene	10.385	141	80268	0.71	ppm #	70
13) Hexachlorocyclopentadiene	10.734	237	12539	0.42	ppm	79
16) Acenaphthylene	12.165	152	127317	0.75	ppm	97
17) Acenaphthene	12.521	153	91961	0.81	ppm	96
18) 4,6-dinitro-2-methylph...	13.731	198	64613	4.19	ppm	90
19) Fluorene	13.562	166	123225	0.91	ppm	87
22) Hexachlorobenzene	14.655	284	28032	0.79	ppm	97
23) Pentachlorophenol	15.073	266	104938	4.29	ppm	87
24) Phenanthrene	15.475	178	177116	0.96	ppm #	56
25) Anthracene	15.568	178	160602	0.99	ppm	88
26) Fluoranthene	17.747	202	187773	0.81	ppm	96
27) Pyrene	18.133	202	182375	0.85	ppm	93
29) Benzo[a]anthracene	20.235	228	143958	0.70	ppm	93
30) Chrysene	20.281	228	146046	0.74	ppm	88
32) Benzo[b]fluoranthene	21.903	252	135589	0.70	ppm	91
33) Benzo[k]fluoranthene	21.934	252	127589	0.71	ppm	92
34) Benzo[a]pyrene	22.351	252	129908	0.72	ppm	91
35) Indeno[1,2,3-cd]pyrene	23.824	276	127186	0.69	ppm	98
36) Dibenz[a,h]anthracene	23.862	278	102152	0.67	ppm	100
37) Benzo[g,h,i]perylene	24.201	276	109120	0.68	ppm	99

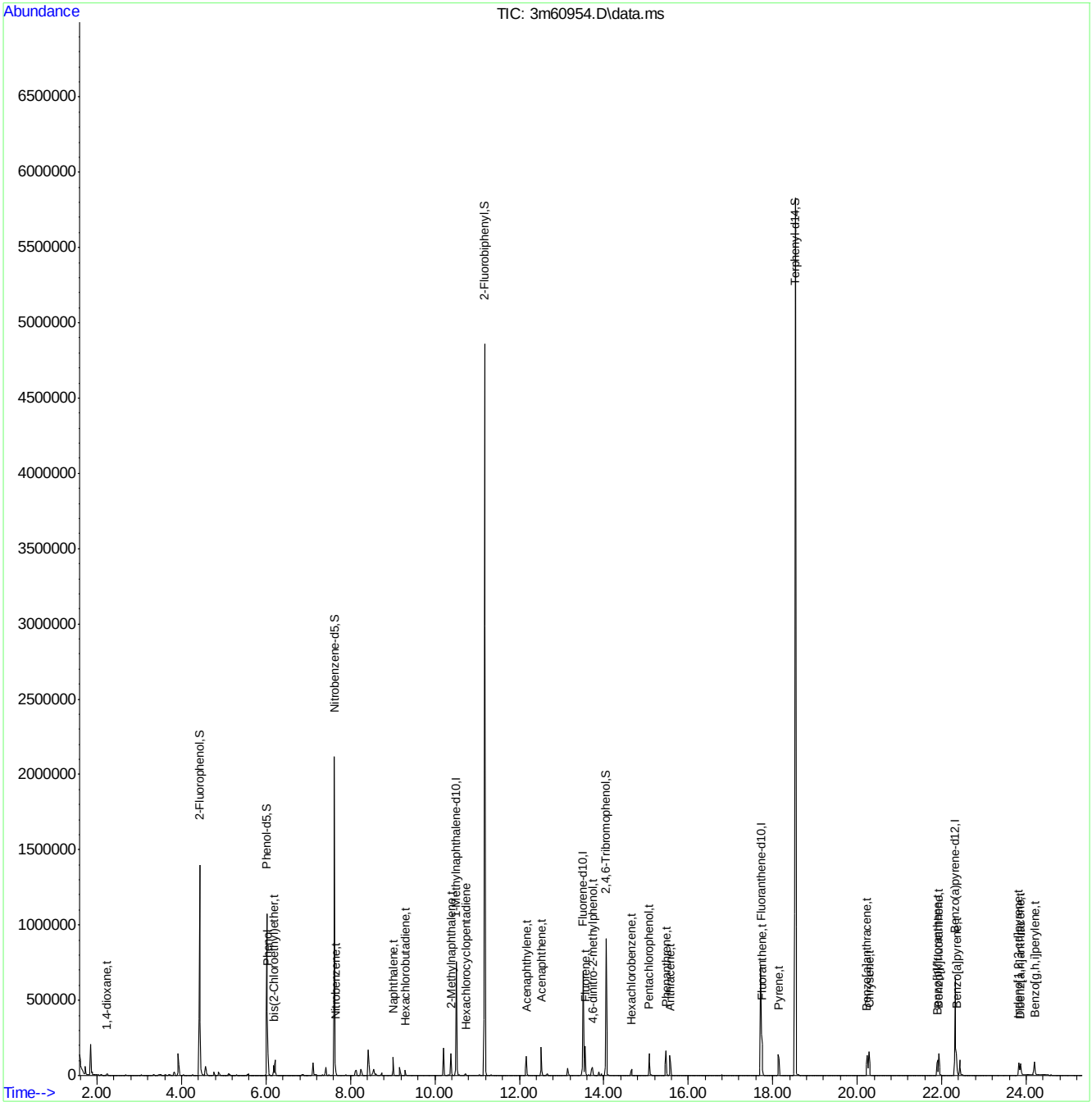
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2866\
Data File : 3m60954.D
Acq On : 29 Apr 2016 1:37 am
Operator : juliusj
Sample : op93453a-bs12
Misc : op93453a,e3m2866,1000
ALS Vial : 4 Sample Multiplier: 1

Quant Time: May 02 12:29:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Apr 28 10:59:02 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65188.D
Acq On : 9 May 2016 8:31 pm
Operator : linseyk
Sample : op93478a-bs12
Misc : op93478a,e4m2910,30.0
ALS Vial : 20 Sample Multiplier: 1

Quant Time: May 10 10:53:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Fri May 06 13:08:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.678	152	286068	4.00	ppm	-0.02
12) Fluorene-d10	13.656	176	511650	4.00	ppm	-0.02
22) Fluoranthene-d10	17.836	212	796664	4.00	ppm	-0.03
28) Benzo(a)pyrene-d12	22.436	264	611028	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.678	152	286068	4.00	ppm	#-0.02
38) Fluorene-d10a	13.656	176	511650	4.00	ppm	-0.02
System Monitoring Compounds						
2) 2-Fluorophenol	4.725	112	1744248	46.57	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 93.14%#			
3) Phenol-d5	6.301	99	3166443	50.27	ppm	0.00
Spiked Amount 50.000			Recovery = 100.54%			
6) Nitrobenzene-d5	7.821	82	3249704	57.53	ppm	-0.02
Spiked Amount 50.000			Recovery = 115.06%			
11) 2-Fluorobiphenyl	11.346	172	4184209	50.68	ppm	-0.02
Spiked Amount 50.000			Recovery = 101.36%			
17) 2,4,6-Tribromophenol	14.206	330	1085205	39.76	ppm	-0.02
Spiked Amount 50.000			Recovery = 79.52%			
25) Terphenyl-d14	18.646	244	5543078	51.50	ppm	-0.03
Spiked Amount 50.000			Recovery = 103.00%			
Target Compounds						Qvalue
4) Phenol	6.315	94	379463	5.88	ppm	73
5) bis(2-Chloroethyl)ether	6.384	93	52267	1.07	ppm	79
7) Naphthalene	9.198	128	155402	0.97	ppm	100
8) Hexachlorobutadiene	9.492	225	35545	0.89	ppm	71
9) 2-Methylnaphthalene	10.559	142	75541	1.08	ppm	82
10) Hexachlorocyclopentadiene	10.917	237	13753	0.70	ppm	89
13) Acenaphthylene	12.325	152	100528	0.86	ppm	99
14) Acenaphthene	12.680	153	67214	0.89	ppm	99
15) Dibenzofuran	13.035	168	104306	0.93	ppm	71
16) Fluorene	13.704	166	117883	0.86	ppm	94
18) Hexachlorobenzene	14.825	284	46667	0.87	ppm	82
19) Pentachlorophenol	15.258	266	119433	5.45	ppm	94
20) Phenanthrene	15.614	178	177165	0.96	ppm	97
21) Anthracene	15.722	178	164947	0.95	ppm	93
23) Fluoranthene	17.874	202	209575	0.97	ppm	98
24) Pyrene	18.269	202	201333	0.95	ppm	96
26) Benzo[a]anthracene	20.359	228	170468	0.87	ppm #	85
27) Chrysene	20.415	228	170459	0.89	ppm	99
29) Benzo[b]fluoranthene	22.009	252	168661	0.77	ppm	96
30) Benzo[k]fluoranthene	22.050	252	177448	0.96	ppm	99
31) Benzo[a]pyrene	22.463	252	164891	0.91	ppm	91
32) Indeno[1,2,3-cd]pyrene	23.978	276	172856	0.76	ppm	99
33) Dibenz[a,h]anthracene	24.006	278	141560	0.77	ppm	90
34) Benzo[g,h,i]perylene	24.364	276	144529	0.75	ppm	100
36) 1,4-Dioxane	2.424	88	9421	0.51	ppm	93
39) 4,6-dinitro-2-methylph...	13.895	198	93409	6.26	ppm	76
40) 1,2-Diphenylhydrazine	14.062	77	112410	0.93	ppm	96

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65188.D
Acq On : 9 May 2016 8:31 pm
Operator : linseyk
Sample : op93478a-bs12
Misc : op93478a,e4m2910,30.0
ALS Vial : 20 Sample Multiplier: 1

Quant Time: May 10 10:53:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Fri May 06 13:08:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) n-nitrosodiphenylamine	14.015	169	71687	0.80	ppm	92

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

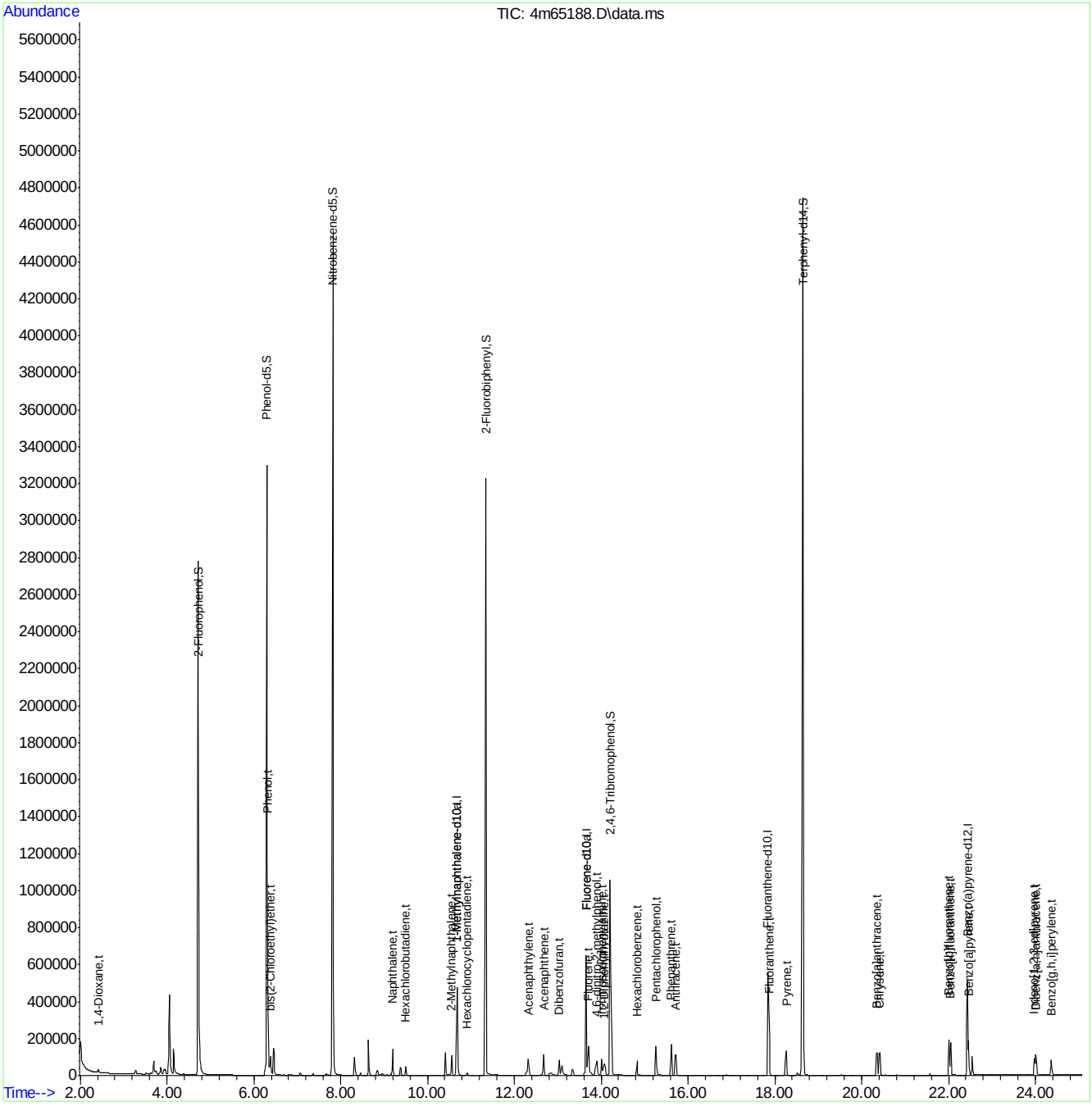
7.3.5

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65188.D
Acq On : 9 May 2016 8:31 pm
Operator : linseyk
Sample : op93478a-bs12
Misc : op93478a,e4m2910,30.0
ALS Vial : 20 Sample Multiplier: 1

Quant Time: May 10 10:53:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Fri May 06 13:08:34 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 05/09/16 14:54

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2566\
Data File : 2p58695.D
Acq On : 29 Apr 2016 11:59 am
Operator : robertl1
Sample : OP93453-MS
Misc : op93453,e2p2566,500
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 29 12:44:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2557.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 29 09:54:55 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.759	152	132711	40.00	ppm	0.00
24) Naphthalene-d8	5.818	136	454895	40.00	ppm	0.00
47) Acenaphthene-d10	7.262	164	265122	40.00	ppm	0.00
69) Phenanthrene-d10	8.583	188	432124	40.00	ppm	0.00
83) Chrysene-d12	11.920	240	570844	40.00	ppm	-0.01
92) Perylene-d12	13.926	264	389109	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.759	152	132711	40.00	ppm	0.00
104) Naphthalene-d8a	5.818	136	454895	40.00	ppm	0.00
106) Acenaphthene-d10a	7.262	164	265122	40.00	ppm	0.00
109) Chrysene-d12a	11.920	240	570844	40.00	ppm	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.668	112	168118	31.27	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 62.54%#			
8) Phenol-d5	4.491	99	156168	24.79	ppm	0.04
Spiked Amount 50.000	Range 10 - 59		Recovery = 49.58%			
25) Nitrobenzene-d5	5.224	82	175591	39.15	ppm	0.00
Spiked Amount 50.000	Range 19 - 61		Recovery = 78.30%#			
51) 2-Fluorobiphenyl	6.706	172	339893	41.20	ppm	-0.01
Spiked Amount 50.000	Range 21 - 58		Recovery = 82.40%#			
73) 2,4,6-Tribromophenol	7.930	330	47745	49.77	ppm	0.00
Spiked Amount 50.000	Range 12 - 68		Recovery = 99.54%#			
85) Terphenyl-d14	10.466	244	419435	36.50	ppm	-0.03
Spiked Amount 50.000	Range 16 - 65		Recovery = 73.00%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.068	88	40280	16.52	ppm	92
3) Pyridine	2.400	79	105266	17.45	ppm	77
4) N-Nitrosodimethylamine	2.368	74	77528	21.75	ppm #	32
6) Indene	4.973	116	272318	36.54	ppm	99
7) Cumene	4.079	105	408199	34.69	ppm	97
9) Phenol	4.502	94	162809	24.39	ppm	67
10) Aniline	4.486	93	161724	21.10	ppm	81
11) bis(2-Chloroethyl)ether	4.545	93	150711	32.04	ppm	88
12) 2-Chlorophenol	4.593	128	172777	35.48	ppm	98
13) Decane	4.625	57	184762	25.47	ppm	90
14) 1,3-Dichlorobenzene	4.711	146	149626	27.96	ppm	97
15) 1,4-Dichlorobenzene	4.775	146	157964	29.99	ppm	99
16) Benzyl alcohol	4.887	108	107295	35.18	ppm	92
17) 1,2-Dichlorobenzene	4.898	146	163209	33.53	ppm	96
18) Acetophenone	5.101	105	207994m	34.79	ppm	
19) 2-Methylphenol	4.999	108	144069	34.48	ppm	95
20) 2,2'-oxybis(1-Chloropr...	4.994	121	43425	31.66	ppm #	53
21) 3&4-Methylphenol	5.122	108	147498	33.83	ppm	95
22) n-Nitroso-di-n-propyla...	5.106	70	111230	35.02	ppm	92
23) Hexachloroethane	5.176	201	46480	29.08	ppm #	37
26) Nitrobenzene	5.240	77	193001	42.64	ppm	94
27) Quinoline	6.112	129	347134	43.03	ppm	98
28) Isophorone	5.438	82	300308	37.05	ppm	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2566\
Data File : 2p58695.D
Acq On : 29 Apr 2016 11:59 am
Operator : robertl1
Sample : OP93453-MS
Misc : op93453,e2p2566,500
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 29 12:44:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2557.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 29 09:54:55 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
29)	2-Nitrophenol	5.502	139	86734	38.76	ppm		86
30)	2,4-Dimethylphenol	5.556	107	157267	39.53	ppm		94
31)	Benzoic acid	5.668	105	107833m	34.61	ppm		
32)	bis(2-Chloroethoxy)met...	5.620	93	169348	33.59	ppm		94
33)	2,4-Dichlorophenol	5.716	162	136434	39.84	ppm		98
34)	2,6-Dichlorophenol	5.893	162	134170	41.60	ppm		99
36)	1,2,4-Trichlorobenzene	5.770	180	121855	32.29	ppm		98
38)	Naphthalene	5.834	128	474165	40.46	ppm		96
39)	4-Chloroaniline	5.887	127	102031	20.14	ppm		98
40)	2,3-Dichloroaniline	6.641	161	138266	32.95	ppm		91
41)	Caprolactam	6.176	113	16475m	12.54	ppm		
42)	Hexachlorobutadiene	5.930	225	63669	34.12	ppm		98
43)	4-Chloro-3-methylphenol	6.304	107	159600	45.41	ppm		97
44)	2-Methylnaphthalene	6.406	141	658957	100.68	ppm		92
45)	1-Methylnaphthalene	6.486	141	466469	69.52	ppm		93
46)	Dimethylnaphthalene	6.920	156	312807	47.32	ppm		91
48)	Hexachlorocyclopentadiene	6.529	237	108466	50.88	ppm		96
49)	2,4,6-Trichlorophenol	6.647	196	103980	42.40	ppm		99
50)	2,4,5-Trichlorophenol	6.689	196	106202	40.22	ppm		99
52)	2-Chloronaphthalene	6.807	162	284796	36.60	ppm		99
53)	Biphenyl	6.791	154	393031	40.25	ppm		96
54)	2-Nitroaniline	6.898	65	109314	40.44	ppm		97
55)	Dimethylphthalate	7.043	163	357131	42.28	ppm		99
56)	Acenaphthylene	7.144	152	477015	37.66	ppm		99
57)	2,6-Dinitrotoluene	7.096	165	82588	46.08	ppm		98
58)	3-Nitroaniline	7.235	138	53152	22.46	ppm		81
59)	Acenaphthene	7.289	153	318659	41.07	ppm		95
60)	2,4-Dinitrophenol	7.326	184	91561	96.89	ppm	#	100
61)	4-Nitrophenol	7.412	109	58463	54.61	ppm	#	80
62)	Dibenzofuran	7.433	168	423614	41.30	ppm		91
63)	2,4-Dinitrotoluene	7.428	165	112704	47.98	ppm		67
64)	2,3,4,6-Tetrachlorophenol	7.540	232	88264	43.93	ppm		95
65)	Diethylphthalate	7.626	149	395748	46.17	ppm		97
66)	Fluorene	7.716	166	371519	43.60	ppm		97
67)	4-Chlorophenyl-phenyle...	7.716	204	161925	43.49	ppm		93
68)	4-Nitroaniline	7.743	138	58848	25.18	ppm		88
70)	4,6-Dinitro-2-methylph...	7.770	198	62558	49.50	ppm		92
71)	n-Nitrosodiphenylamine	7.823	169	256022	43.76	ppm		95
72)	1,2-Diphenylhydrazine	7.856	77	383871	40.81	ppm		93
74)	4-Bromophenyl-phenylether	8.150	248	98369	44.72	ppm		92
75)	Hexachlorobenzene	8.203	284	100827	42.81	ppm		99
76)	Pentachlorophenol	8.401	266	60126	37.77	ppm		95
77)	Phenanthrene	8.604	178	544230	42.89	ppm		97
78)	Anthracene	8.658	178	526176	41.80	ppm		98
79)	Carbazole	8.834	167	512017	43.26	ppm		96
80)	Di-n-butylphthalate	9.225	149	742561	47.15	ppm		99
81)	Fluoranthene	9.952	202	622553	45.16	ppm		93
82)	Octadecane	8.481	43	286865	51.64	ppm		85
84)	Pyrene	10.236	202	637712	32.36	ppm		98
86)	Butylbenzylphthalate	11.177	149	334889	34.64	ppm		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2566\
Data File : 2p58695.D
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Sample : OP93453-MS
Misc : op93453,e2p2566,500
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 29 12:44:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2557.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 29 09:54:55 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
88)	Benzo[a]anthracene	11.904	228	553564	30.40	ppm		99
89)	3,3'-Dichlorobenzidine	11.904	252	157602	25.58	ppm		94
90)	Chrysene	11.958	228	491021	29.82	ppm		100
91)	bis(2-Ethylhexyl)phtha...	12.054	149	421937	34.90	ppm		97
93)	Di-n-octylphthalate	13.006	149	720661	40.73	ppm		99
94)	Benzo[b]fluoranthene	13.423	252	455475	33.69	ppm		94
95)	Benzo[k]fluoranthene	13.466	252	398610	33.76	ppm		87
96)	Benzo[a]pyrene	13.851	252	355022	30.95	ppm		91
97)	Indeno[1,2,3-cd]pyrene	15.392	276	268400	27.06	ppm		83
99)	Dibenz[a,h]anthracene	15.435	278	285245	28.71	ppm		90
100)	7,12-Dimethylbenz(a)an...	13.423	256	177175	32.15	ppm		97
101)	Benzo[g,h,i]perylene	15.809	276	269591	25.70	ppm		87
103)	Benzaldehyde	4.395	105	570875	164.97	ppm	#	33
107)	Atrazine	8.321	215	50402	49.33	ppm		90
108)	1,2,4,5-Tetrachloroben...	6.540	216	140970	42.79	ppm		100
110)	Benzidine	10.139	184	59821	19.04	ppm		98

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

7.4.1

7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

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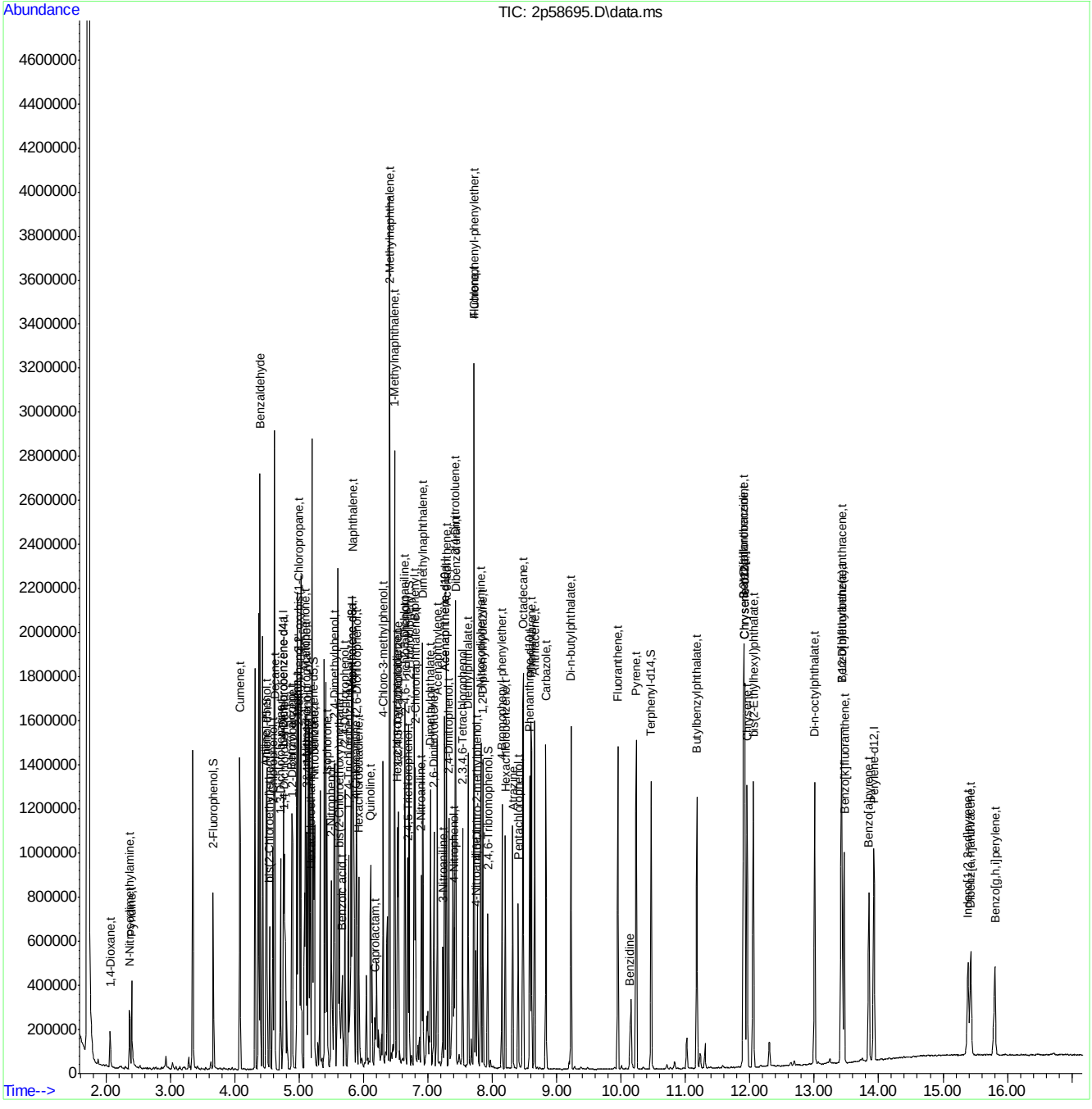

SGS ACCUTEST JC19023

Manual Integration Approval Summary

Sample Number:	OP93453-MS	**Method:**	SW846 8270D
Lab FileID:	2P58695.D	**Analyst approved:**	04/29/16 12:49 Robert LaPosta
Injection Time:	04/29/16 11:59	**Supervisor approved:**	05/09/16 14:54 Kristi Schollenberger

Parameter	CAS	Sig#	R.T. (min.)	Reason
Acetophenone	98-86-2		5.10	Overlapping peak
Benzoic Acid	65-85-0		5.67	Poor instrument integration
Caprolactam	105-60-2		6.18	Overlapping peak

Quantitation Report (Qedit)

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Sample : OP93453-MS
Misc : op93453,e2p2566,500
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QLast Update : Fri Apr 29 09:54:55 2016
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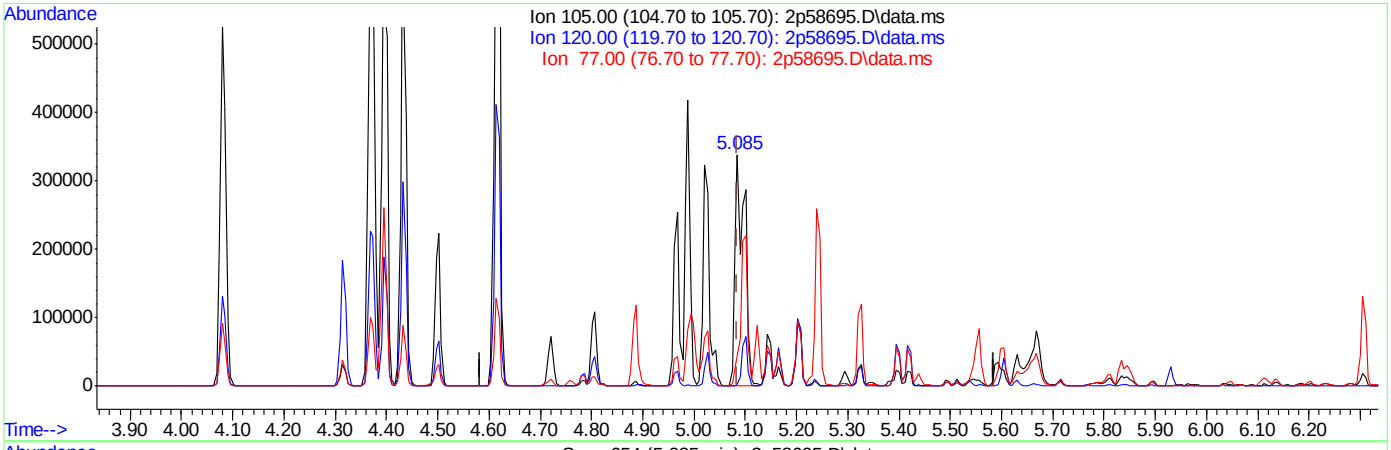

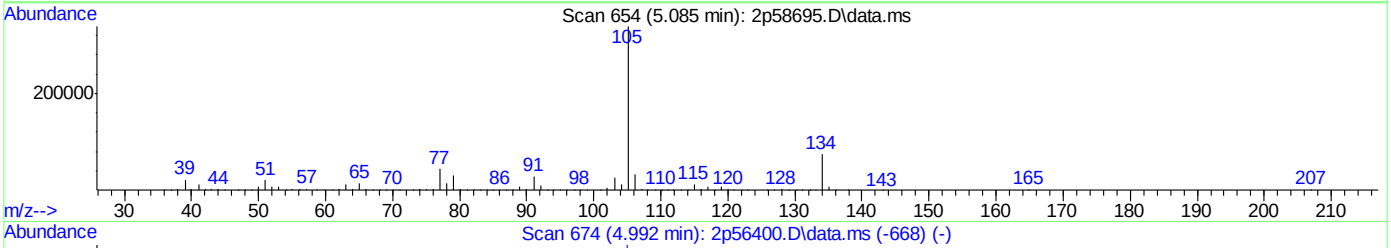

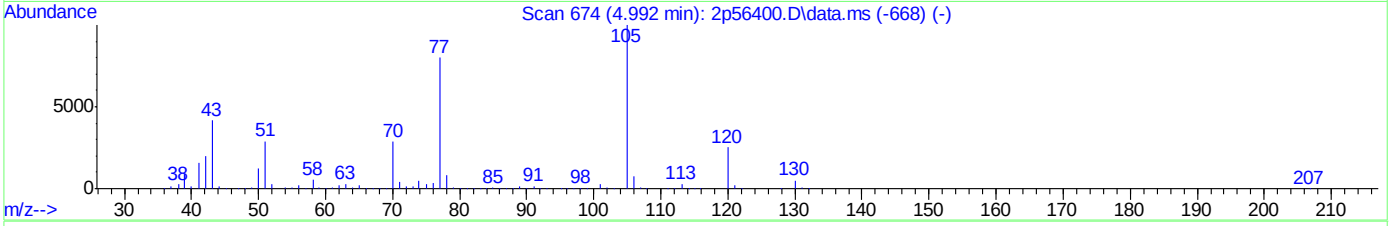

TIC: 2p58695.D\data.ms

(18) Acetophenone (t)

5.085min (-0.000) 74.76ppm

response 446993

Ion	Exp%	Act%
105.00	100	100
120.00	27.90	0.40
77.00	92.30	5.54#
0.00	0.00	0.00

SGS ACCUTEST JC19023

Quantitation Report (Qedit)

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Sample : OP93453-MS
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Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 29 09:54:55 2016
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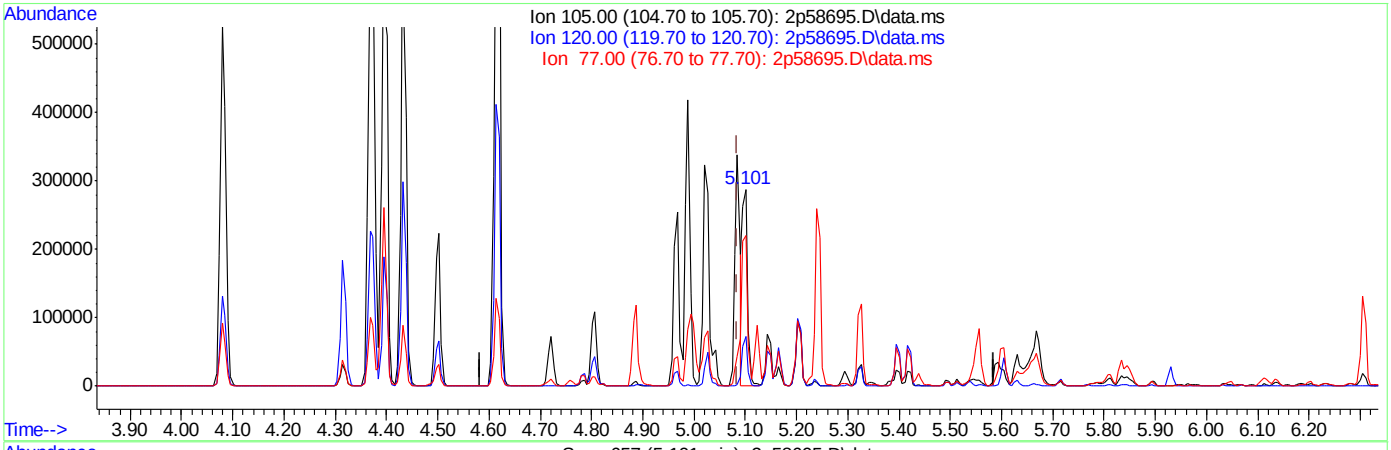

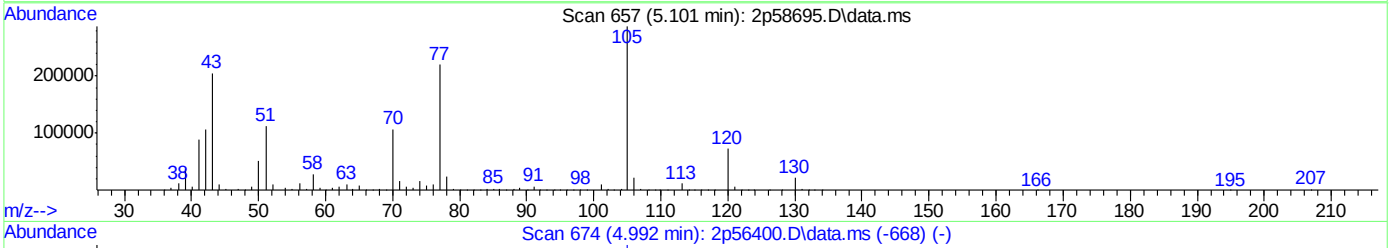

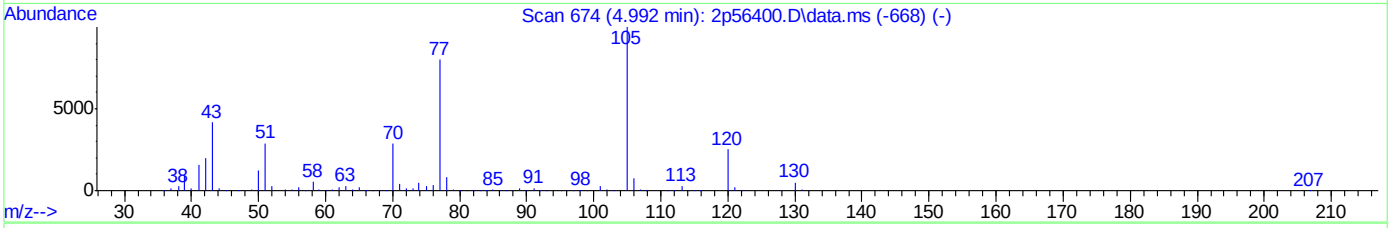

TIC: 2p58695.D\data.ms

(18) Acetophenone (t)

5.101min (+0.016) 34.79ppm m

response 207994

Ion	Exp%	Act%
105.00	100	100
120.00	27.90	25.06
77.00	92.30	76.54
0.00	0.00	0.00

SGS ACCUTEST JC19023

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P2566\
Data File : 2p58695.D
Acq On : 29 Apr 2016 11:59 am
Operator : robertl1
Sample : OP93453-MS
Misc : op93453,e2p2566,500
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 29 12:15:25 2016
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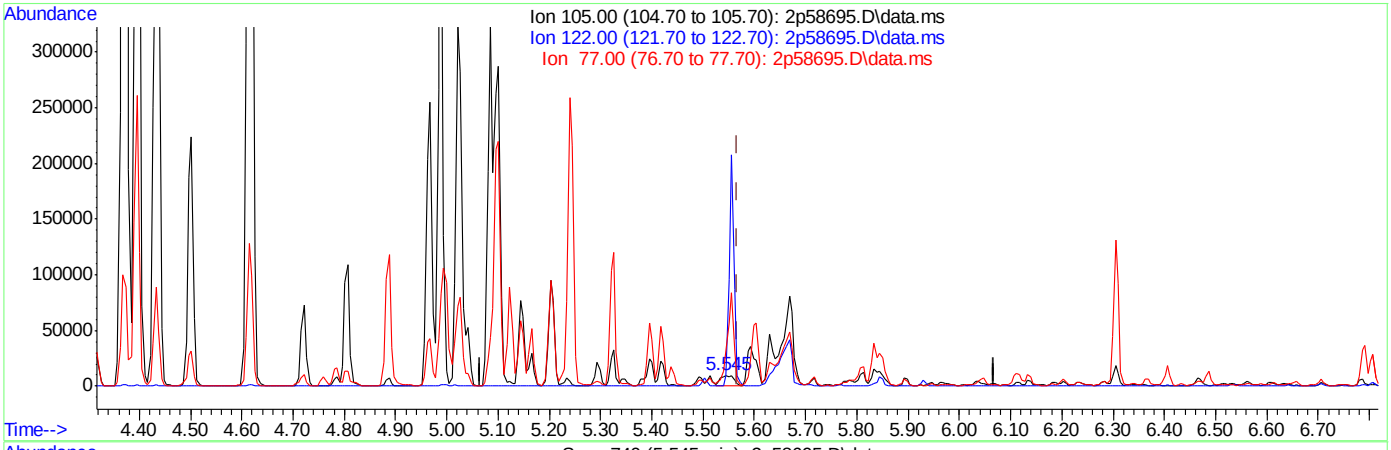

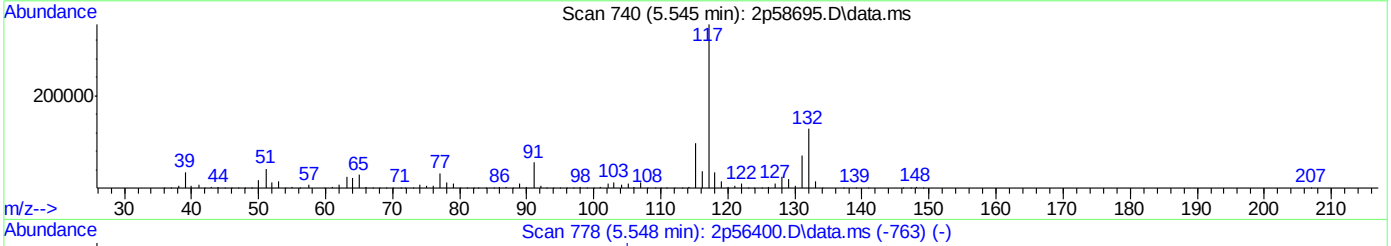

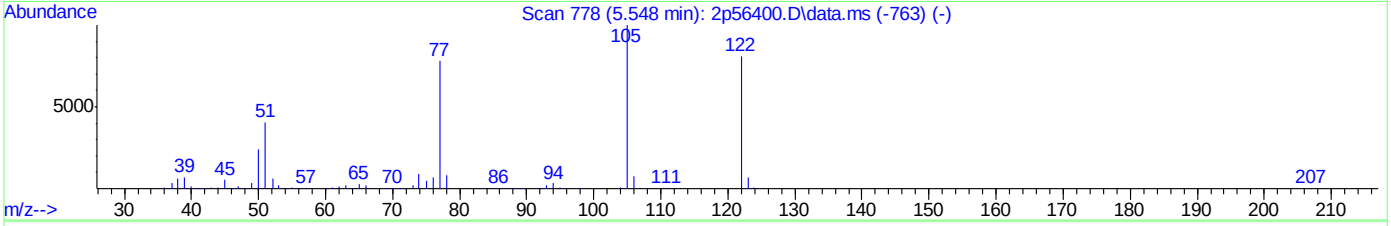

TIC: 2p58695.D\data.ms

(31) Benzoic acid (t)

5.545min (-0.022) 5.26ppm

response 16384

Ion	Exp%	Act%
105.00	100	100
122.00	78.30	92.42
77.00	68.20	341.23#
0.00	0.00	0.00

SGS ACCUTEST JC19023

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P2566\
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Operator : robertl1
Sample : OP93453-MS
Misc : op93453,e2p2566,500
ALS Vial : 8 Sample Multiplier: 1

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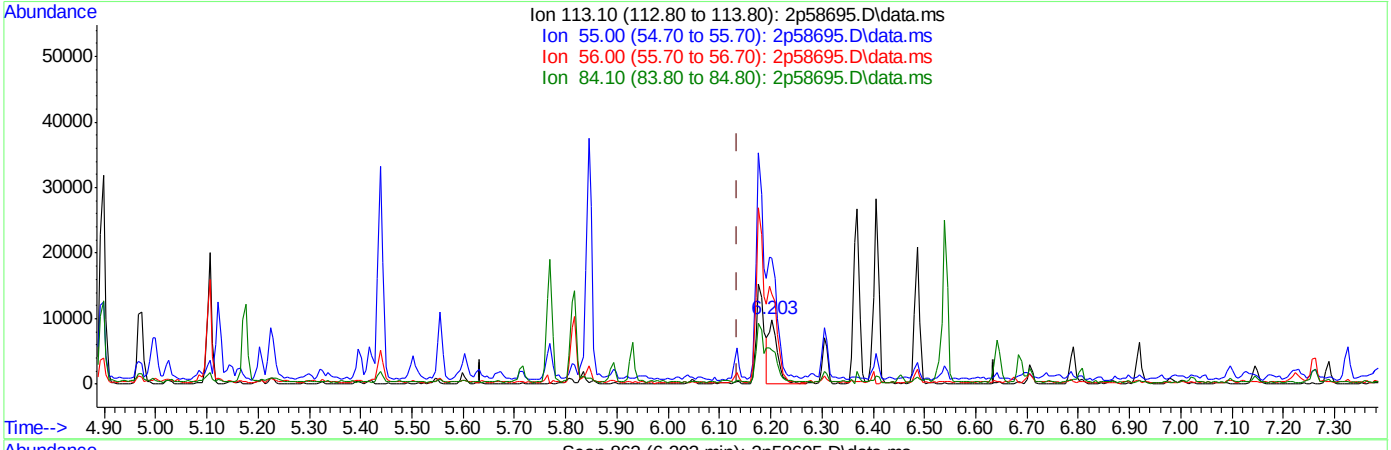

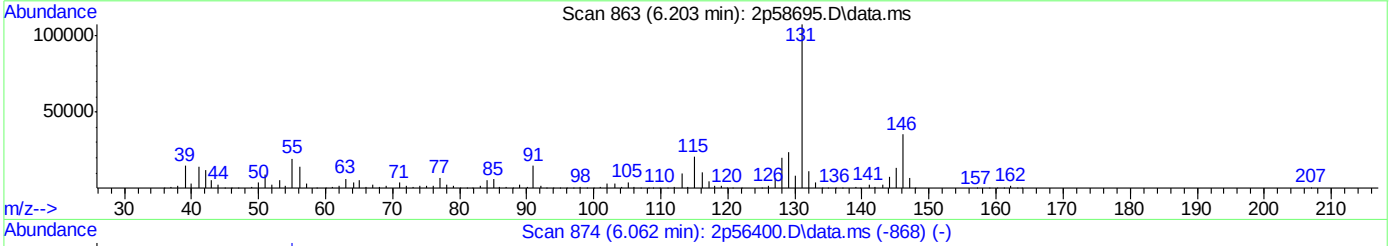

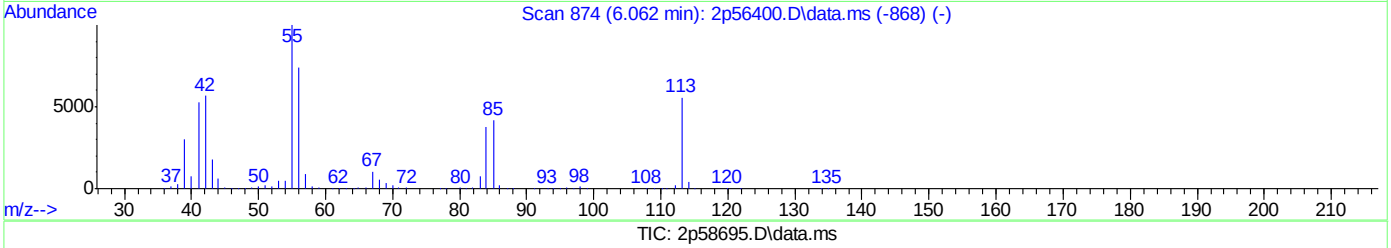

TIC: 2p58695.D\data.ms

(41) Caprolactam (t)

6.203min (+0.067) 8.58ppm

response 11270

Ion	Exp%	Act%
113.10	100	100
55.00	181.20	168.23
56.00	126.60	119.78
84.10	52.30	36.45

SGS ACCUTEST JC19023

Quantitation Report (Qedit)

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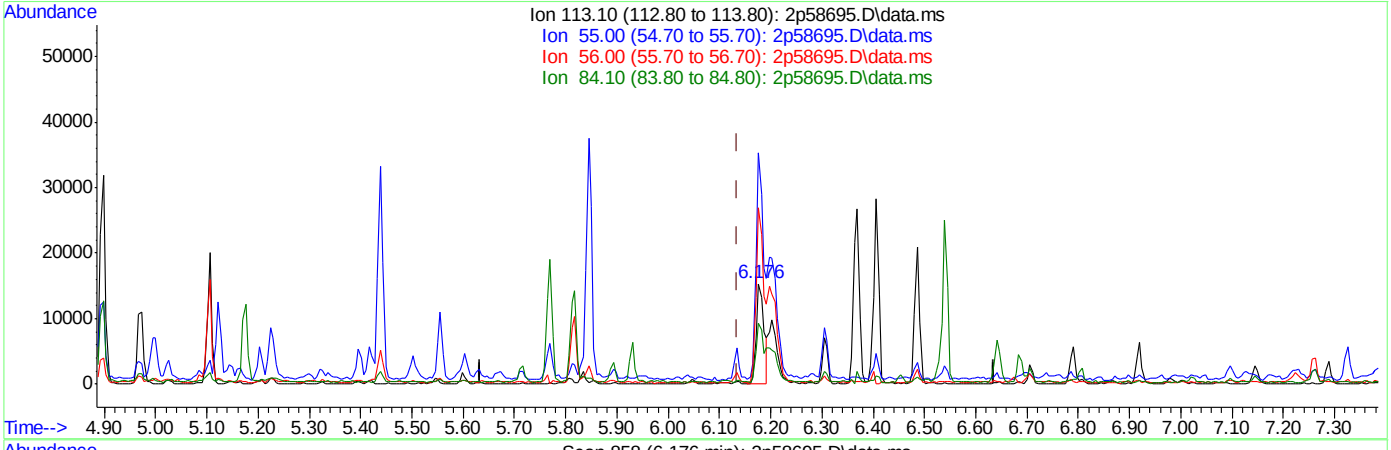

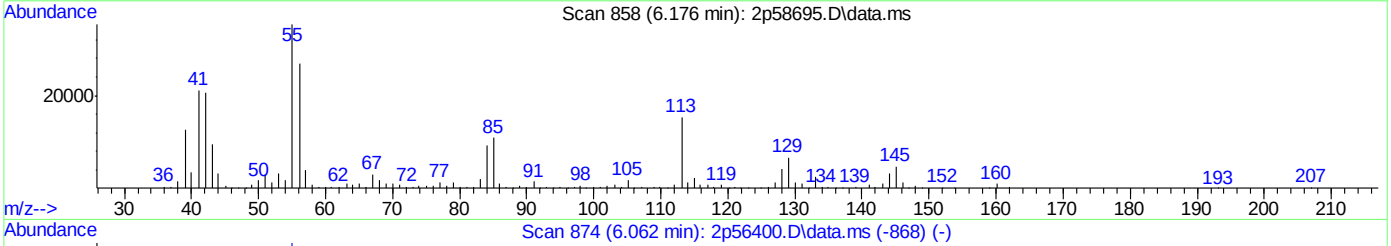

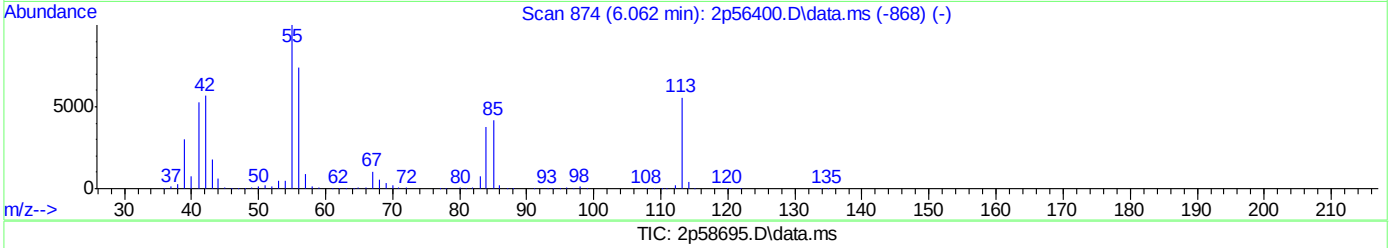

TIC: 2p58695.D\data.ms

(41) Caprolactam (t)

6.176min (+0.041) 12.54ppm m

response 16475

Ion	Exp%	Act%
113.10	100	100
55.00	181.20	230.52#
56.00	126.60	175.38#
84.10	52.30	60.99

SGS ACCUTEST JC19023

Quantitation Report (Qedit)

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Data File : 2p58695.D
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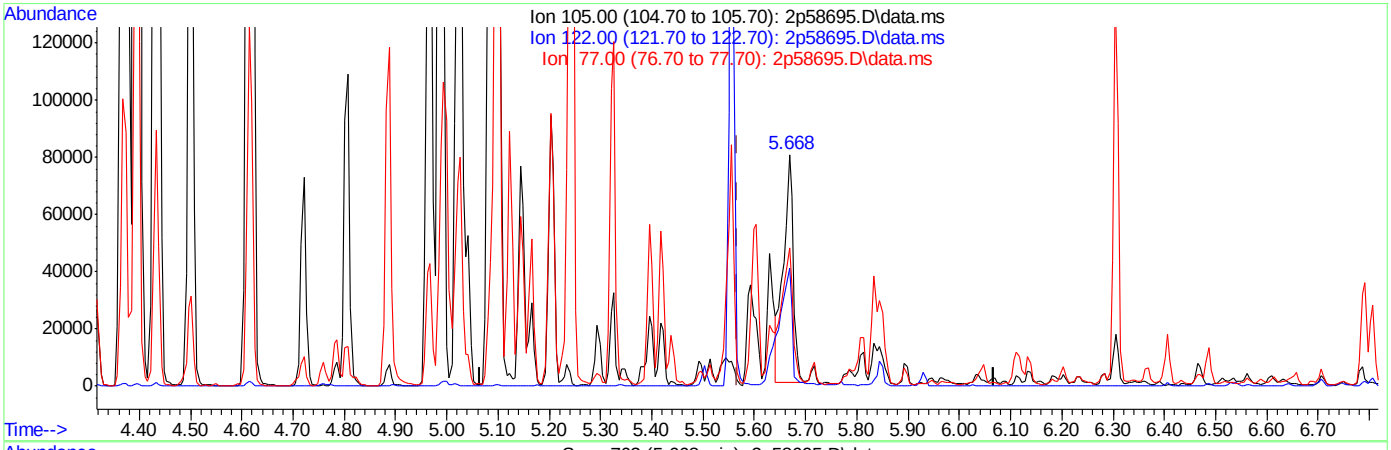

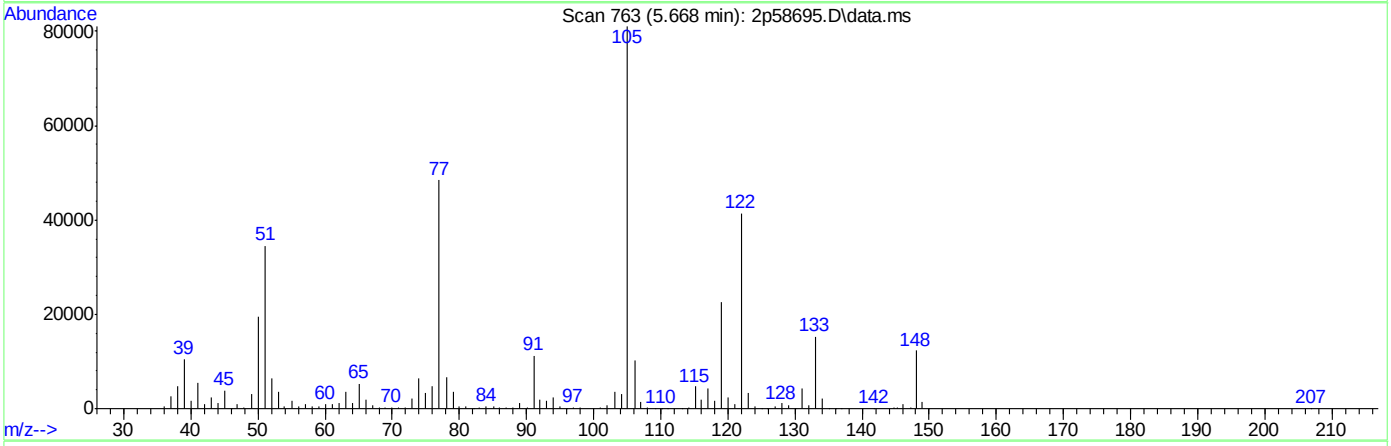

TIC: 2p58695.D\data.ms

(31) Benzoic acid (t)

5.668min (+0.101) 34.61ppm m

response 107833

Ion	Exp%	Act%
105.00	100	100
122.00	78.30	51.03
77.00	68.20	59.78
0.00	0.00	0.00

SGS ACCUTEST JC19023

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 05/09/16 14:54

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2566\
Data File : 2p58696.D
Acq On : 29 Apr 2016 12:22 pm
Operator : robertl1
Sample : OP93453-MSD
Misc : op93453,e2p2566,500
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 29 12:48:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2557.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 29 09:54:55 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.759	152	141989	40.00	ppm	0.00
24) Naphthalene-d8	5.818	136	486525	40.00	ppm	0.00
47) Acenaphthene-d10	7.262	164	288595	40.00	ppm	0.00
69) Phenanthrene-d10	8.583	188	477616	40.00	ppm	0.00
83) Chrysene-d12	11.920	240	467111	40.00	ppm	-0.01
92) Perylene-d12	13.926	264	342535	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.759	152	141989	40.00	ppm	0.00
104) Naphthalene-d8a	5.818	136	486525	40.00	ppm	0.00
106) Acenaphthene-d10a	7.262	164	288595	40.00	ppm	0.00
109) Chrysene-d12a	11.920	240	467111	40.00	ppm	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.673	112	209841	36.48	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery	=	72.96%#	
8) Phenol-d5	4.491	99	184238	27.34	ppm	0.04
Spiked Amount 50.000	Range 10 - 59		Recovery	=	54.68%	
25) Nitrobenzene-d5	5.229	82	214373	44.69	ppm	0.00
Spiked Amount 50.000	Range 19 - 61		Recovery	=	89.38%#	
51) 2-Fluorobiphenyl	6.706	172	404364	45.03	ppm	-0.01
Spiked Amount 50.000	Range 21 - 58		Recovery	=	90.06%#	
73) 2,4,6-Tribromophenol	7.930	330	53509	50.46	ppm	0.00
Spiked Amount 50.000	Range 12 - 68		Recovery	=	100.92%#	
85) Terphenyl-d14	10.471	244	462343	49.17	ppm	-0.02
Spiked Amount 50.000	Range 16 - 65		Recovery	=	98.34%#	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.074	88	56661	21.72	ppm	94
3) Pyridine	2.405	79	74654	11.57	ppm	73
4) N-Nitrosodimethylamine	2.373	74	99061	25.97	ppm #	26
6) Indene	4.973	116	355715	44.61	ppm	98
7) Cumene	4.085	105	554495	44.04	ppm	97
9) Phenol	4.502	94	188438	26.38	ppm	65
10) Aniline	4.486	93	129722	15.82	ppm	80
11) bis(2-Chloroethyl)ether	4.550	93	193321	38.41	ppm	91
12) 2-Chlorophenol	4.593	128	210032	40.32	ppm	97
13) Decane	4.625	57	239034	30.80	ppm	91
14) 1,3-Dichlorobenzene	4.710	146	189321	33.07	ppm	98
15) 1,4-Dichlorobenzene	4.775	146	193613	34.36	ppm	99
16) Benzyl alcohol	4.887	108	129480	39.68	ppm	86
17) 1,2-Dichlorobenzene	4.898	146	205590	39.48	ppm	97
18) Acetophenone	5.101	105	277609m	43.40	ppm	
19) 2-Methylphenol	4.999	108	172422	38.57	ppm	97
20) 2,2'-oxybis(1-Chloropr...	4.994	121	55607m	37.89	ppm	
21) 3&4-Methylphenol	5.122	108	177095	37.96	ppm	96
22) n-Nitroso-di-n-propyla...	5.106	70	136833	40.27	ppm	83
23) Hexachloroethane	5.176	201	56413	32.99	ppm #	53
26) Nitrobenzene	5.245	77	237989	49.17	ppm	98
27) Quinoline	6.112	129	382986	44.39	ppm	99
28) Isophorone	5.438	82	361210	41.67	ppm	99

Quantitation Report (QT Reviewed)

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Data File : 2p58696.D
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Operator : robertl1
Sample : OP93453-MSD
Misc : op93453,e2p2566,500
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 29 12:48:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2557.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 29 09:54:55 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
29)	2-Nitrophenol	5.502	139	106790	44.63	ppm		84
30)	2,4-Dimethylphenol	5.556	107	181693	42.70	ppm		94
31)	Benzoic acid	5.673	105	131004m	39.32	ppm		
32)	bis(2-Chloroethoxy)met...	5.625	93	210211	38.99	ppm		94
33)	2,4-Dichlorophenol	5.716	162	167234	45.66	ppm		94
34)	2,6-Dichlorophenol	5.893	162	162491	47.11	ppm		97
36)	1,2,4-Trichlorobenzene	5.770	180	146773	36.36	ppm		99
38)	Naphthalene	5.834	128	535829	42.75	ppm		97
39)	4-Chloroaniline	5.887	127	80754	14.90	ppm		96
40)	2,3-Dichloroaniline	6.641	161	150643	33.57	ppm		93
41)	Caprolactam	6.181	113	15323	10.91	ppm	#	46
42)	Hexachlorobutadiene	5.930	225	75624	37.89	ppm		97
43)	4-Chloro-3-methylphenol	6.304	107	179207	47.67	ppm		97
44)	2-Methylnaphthalene	6.406	141	884930	126.41	ppm		93
45)	1-Methylnaphthalene	6.486	141	592432	82.55	ppm		91
46)	Dimethylnaphthalene	6.919	156	375463	53.11	ppm		89
48)	Hexachlorocyclopentadiene	6.529	237	129025	55.60	ppm		95
49)	2,4,6-Trichlorophenol	6.647	196	121134	45.38	ppm		98
50)	2,4,5-Trichlorophenol	6.684	196	121498	42.27	ppm		97
52)	2-Chloronaphthalene	6.807	162	324646	38.33	ppm		99
53)	Biphenyl	6.791	154	469484	44.17	ppm		96
54)	2-Nitroaniline	6.898	65	124544	42.33	ppm		98
55)	Dimethylphthalate	7.043	163	402734	43.80	ppm		99
56)	Acenaphthylene	7.144	152	542663	39.36	ppm		98
57)	2,6-Dinitrotoluene	7.096	165	92834	47.58	ppm		97
58)	3-Nitroaniline	7.235	138	47994	18.63	ppm		85
59)	Acenaphthene	7.289	153	364406	43.15	ppm		98
60)	2,4-Dinitrophenol	7.326	184	105675	102.15	ppm	#	100
61)	4-Nitrophenol	7.412	109	62449	53.59	ppm	#	80
62)	Dibenzofuran	7.433	168	485226	43.46	ppm		91
63)	2,4-Dinitrotoluene	7.428	165	124368m	48.64	ppm		
64)	2,3,4,6-Tetrachlorophenol	7.540	232	99927	45.69	ppm		97
65)	Diethylphthalate	7.625	149	444849	47.68	ppm		98
66)	Fluorene	7.716	166	426896	46.03	ppm		96
67)	4-Chlorophenyl-phenyle...	7.716	204	188775	46.58	ppm		91
68)	4-Nitroaniline	7.743	138	60696	23.86	ppm		86
70)	4,6-Dinitro-2-methylph...	7.770	198	70533	50.49	ppm		86
71)	n-Nitrosodiphenylamine	7.823	169	283768	43.89	ppm		96
72)	1,2-Diphenylhydrazine	7.856	77	431826	41.54	ppm		94
74)	4-Bromophenyl-phenylether	8.150	248	110388	45.41	ppm		93
75)	Hexachlorobenzene	8.203	284	116079	44.60	ppm		99
76)	Pentachlorophenol	8.401	266	67772	38.52	ppm		97
77)	Phenanthrene	8.610	178	607335	43.30	ppm		97
78)	Anthracene	8.658	178	582967	41.90	ppm		99
79)	Carbazole	8.834	167	562325	42.98	ppm		96
80)	Di-n-butylphthalate	9.225	149	820606	47.14	ppm		100
81)	Fluoranthene	9.952	202	697051	45.75	ppm		93
82)	Octadecane	8.481	43	326900	53.24	ppm		82
84)	Pyrene	10.236	202	723280	44.86	ppm		98
86)	Butylbenzylphthalate	11.182	149	374223	47.30	ppm		95

SGS ACCUTEST JC19023

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Operator : robertl1
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Misc : op93453,e2p2566,500
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 29 12:48:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2557.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 29 09:54:55 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
88) Benzo[a]anthracene	11.904	228	632275	42.43	ppm		98
89) 3,3'-Dichlorobenzidine	11.904	252	130329	25.85	ppm		96
90) Chrysene	11.958	228	558827	41.47	ppm		100
91) bis(2-Ethylhexyl)phtha...	12.054	149	472363	47.74	ppm		95
93) Di-n-octylphthalate	13.012	149	802570	51.52	ppm		99
94) Benzo[b]fluoranthene	13.429	252	522221	43.88	ppm		92
95) Benzo[k]fluoranthene	13.466	252	481544	46.32	ppm		90
96) Benzo[a]pyrene	13.851	252	421809	41.77	ppm		94
97) Indeno[1,2,3-cd]pyrene	15.397	276	346087	39.63	ppm		81
99) Dibenz[a,h]anthracene	15.440	278	357648	40.90	ppm		89
100) 7,12-Dimethylbenz(a)an...	13.429	256	187179	38.59	ppm		97
101) Benzo[g,h,i]perylene	15.814	276	351403	38.06	ppm		87
103) Benzaldehyde	4.400	105	836291	225.88	ppm	#	28
107) Atrazine	8.321	215	56612	50.90	ppm		96
108) 1,2,4,5-Tetrachloroben...	6.545	216	161790	45.12	ppm		98

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

7.4.2

7

SGS ACCUTEST JC19023

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QLast Update : Fri Apr 29 09:54:55 2016
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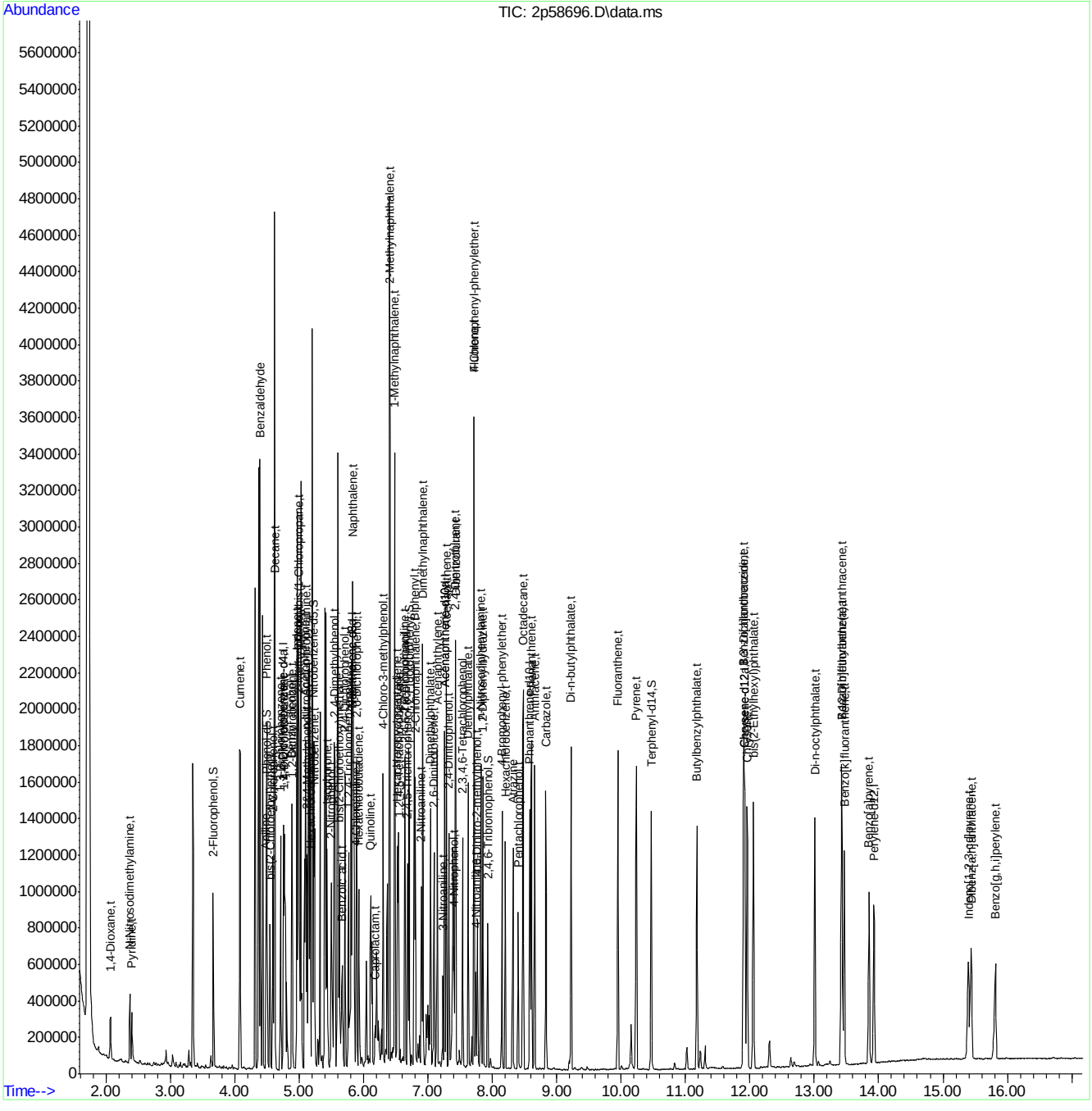

SGS ACCUTEST JC19023

Manual Integration Approval Summary

Sample Number:	OP93453-MSD	**Method:**	SW846 8270D
Lab FileID:	2P58696.D	**Analyst approved:**	04/29/16 12:49 Robert LaPosta
Injection Time:	04/29/16 12:22	**Supervisor approved:**	05/09/16 14:54 Kristi Schollenberger

Parameter	CAS	Sig#	R.T. (min.)	Reason
bis(2-Chloroisopropyl)ether	108-60-1		4.99	Poor instrument integration
Acetophenone	98-86-2		5.10	Overlapping peak
Benzoic Acid	65-85-0		5.67	Poor instrument integration
2,4-Dinitrotoluene	121-14-2		7.43	Poor instrument integration

Quantitation Report (Qedit)

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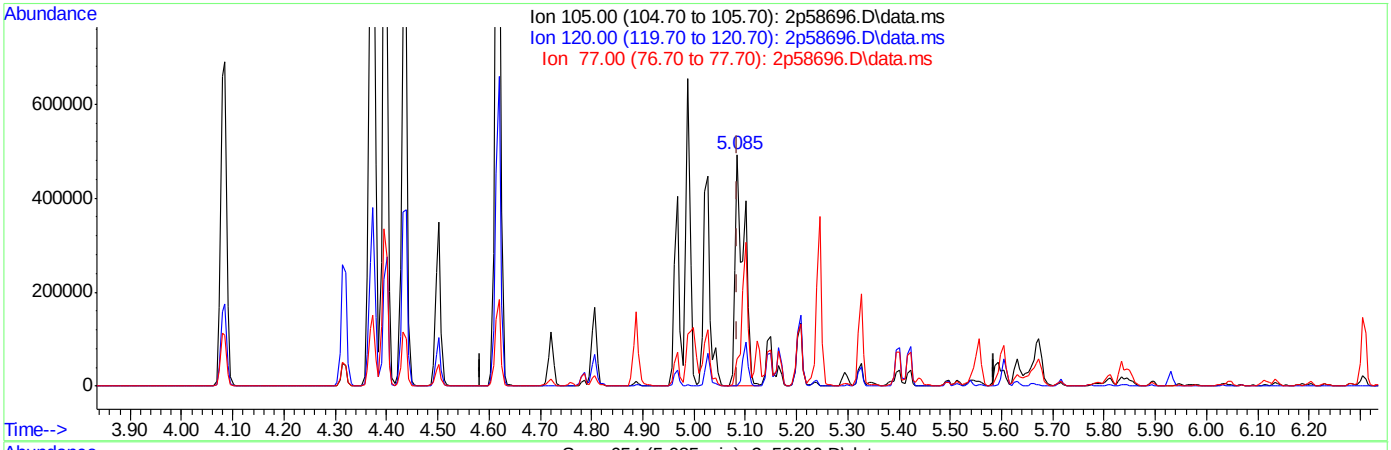

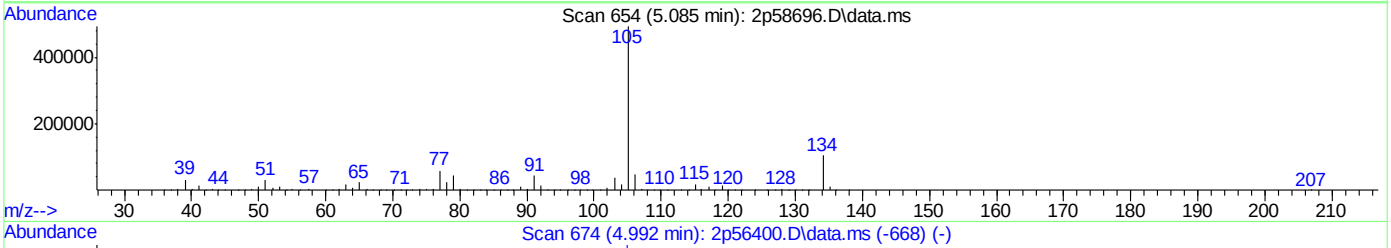

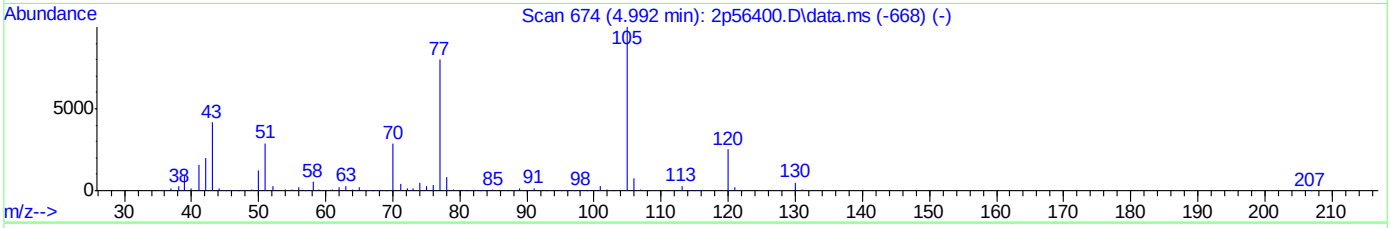

TIC: 2p58696.D\data.ms

(18) Acetophenone (t)

5.085min (-0.000) 94.54ppm

response 604800

Ion	Exp%	Act%
105.00	100	100
120.00	27.90	0.29
77.00	92.30	4.05#
0.00	0.00	0.00

SGS ACCUTEST JC19023

Quantitation Report (Qedit)

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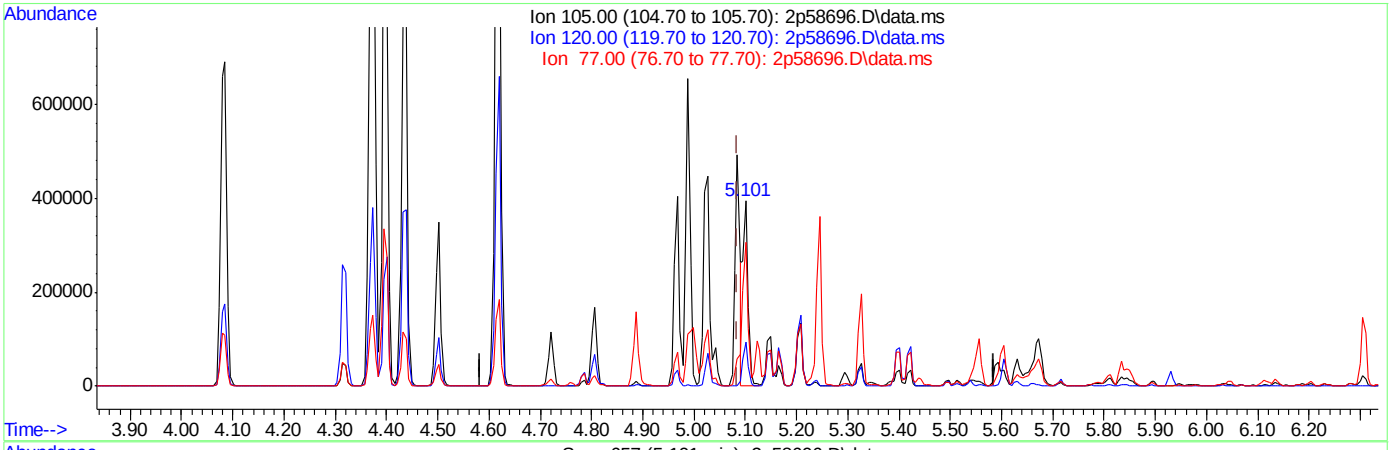

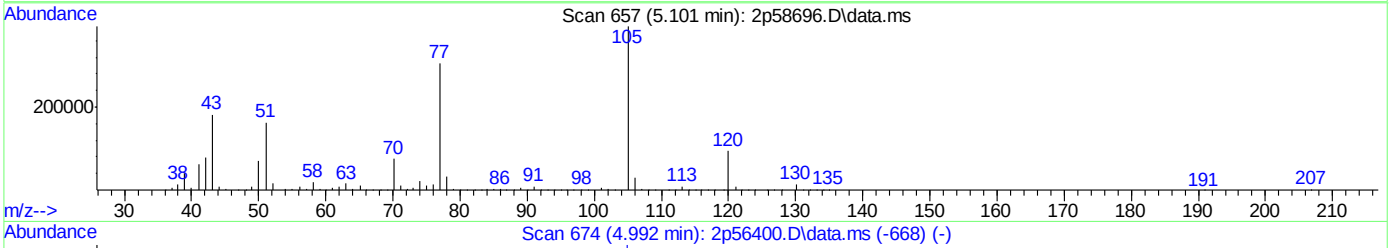

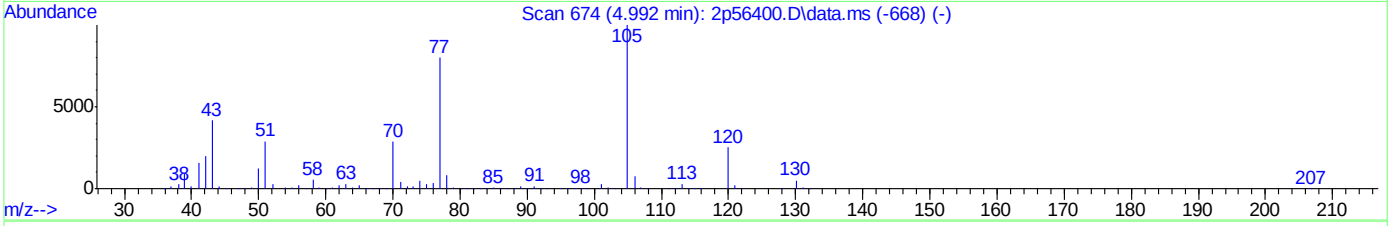

TIC: 2p58696.D\data.ms

(18) Acetophenone (t)

5.101min (+0.016) 43.40ppm m

response 277609

Ion	Exp%	Act%
105.00	100	100
120.00	27.90	23.77
77.00	92.30	77.72
0.00	0.00	0.00

SGS ACCUTEST JC19023

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P2566\
Data File : 2p58696.D
Acq On : 29 Apr 2016 12:22 pm
Operator : robertl1
Sample : OP93453-MSD
Misc : op93453,e2p2566,500
ALS Vial : 9 Sample Multiplier: 1

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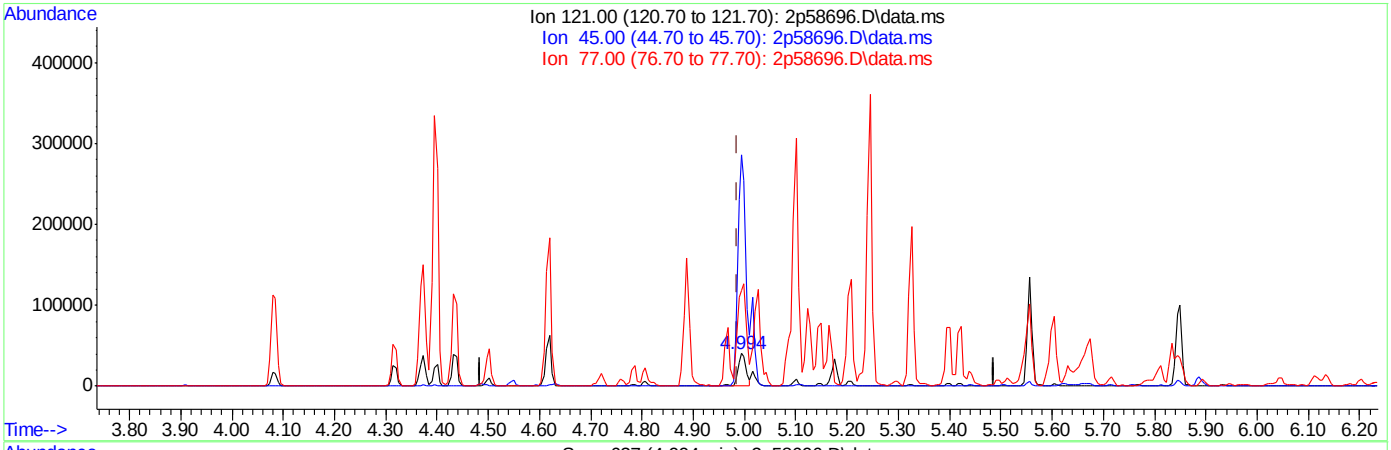

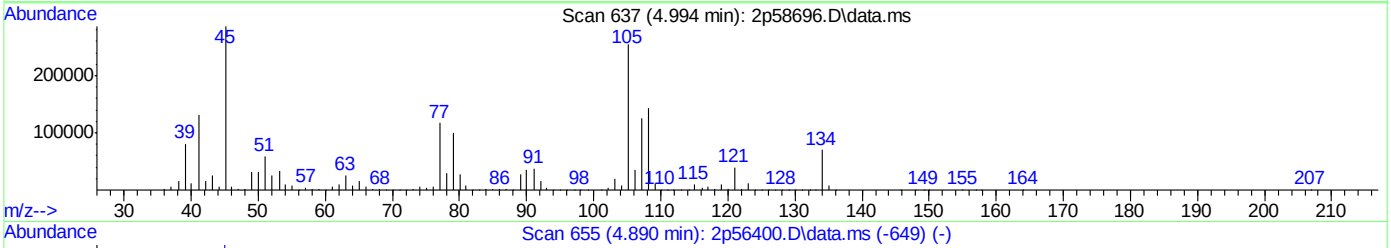

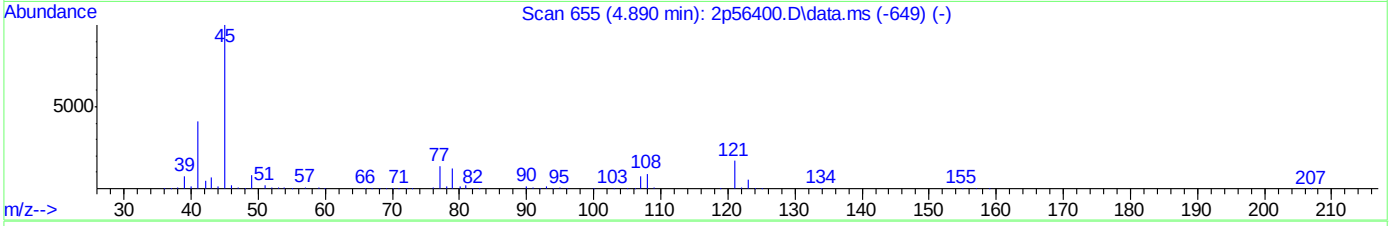

TIC: 2p58696.D\data.ms

(20) 2,2'-oxybis(1-Chloropropane (t)

4.994min (+0.008) 30.51ppm

response 44775

Ion	Exp%	Act%
121.00	100	100
45.00	592.70	706.42#
77.00	2.60	287.50#
0.00	0.00	0.00

SGS ACCUTEST JC19023

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P2566\
Data File : 2p58696.D
Acq On : 29 Apr 2016 12:22 pm
Operator : robertl1
Sample : OP93453-MSD
Misc : op93453,e2p2566,500
ALS Vial : 9 Sample Multiplier: 1

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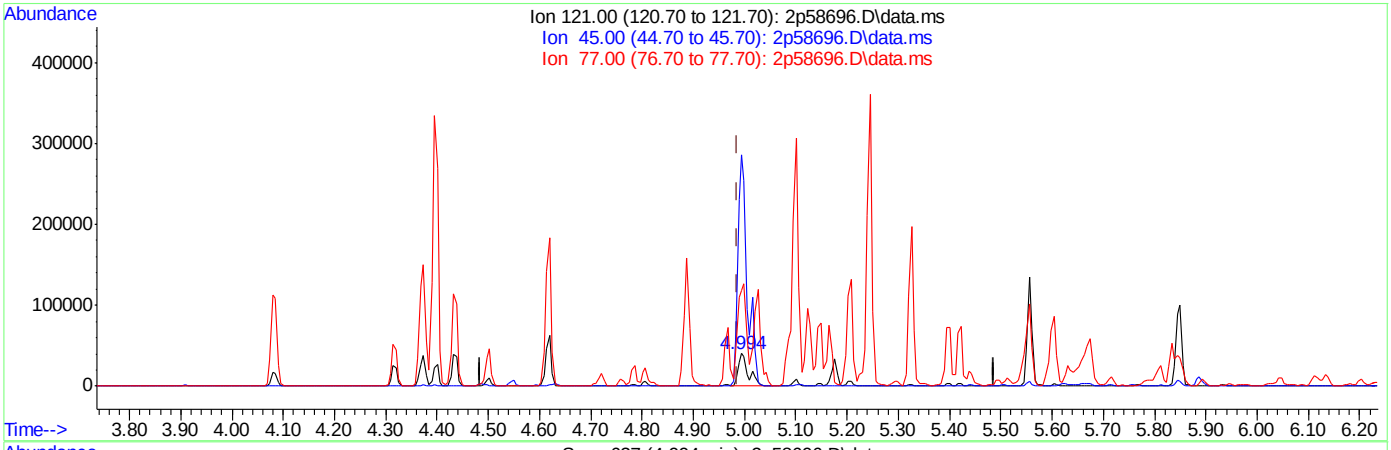

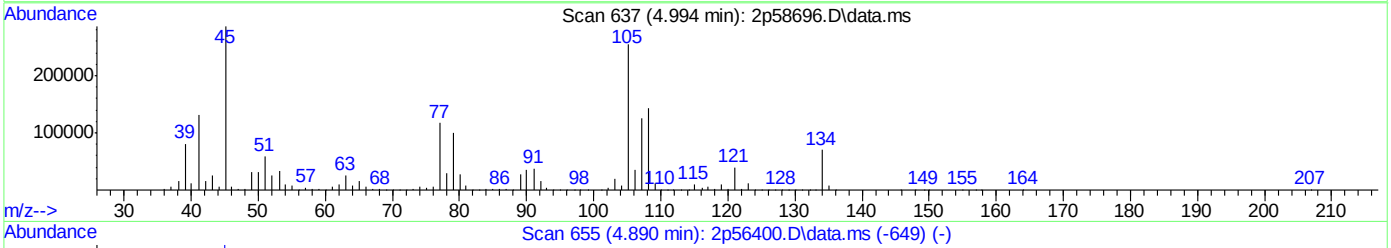

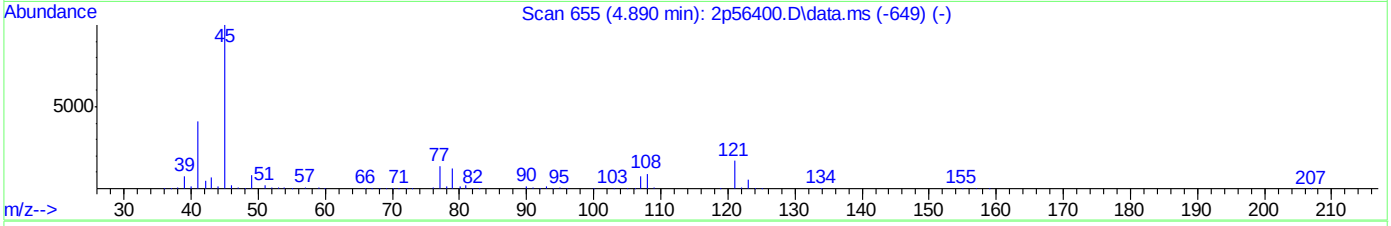

TIC: 2p58696.D\data.ms

(20) 2,2'-oxybis(1-Chloropropane (t)

4.994min (+0.008) 37.89ppm m

response 55607

Ion	Exp%	Act%
121.00	100	100
45.00	592.70	713.57#
77.00	2.60	293.08#
0.00	0.00	0.00

SGS ACCUTEST JC19023

Quantitation Report (Qedit)

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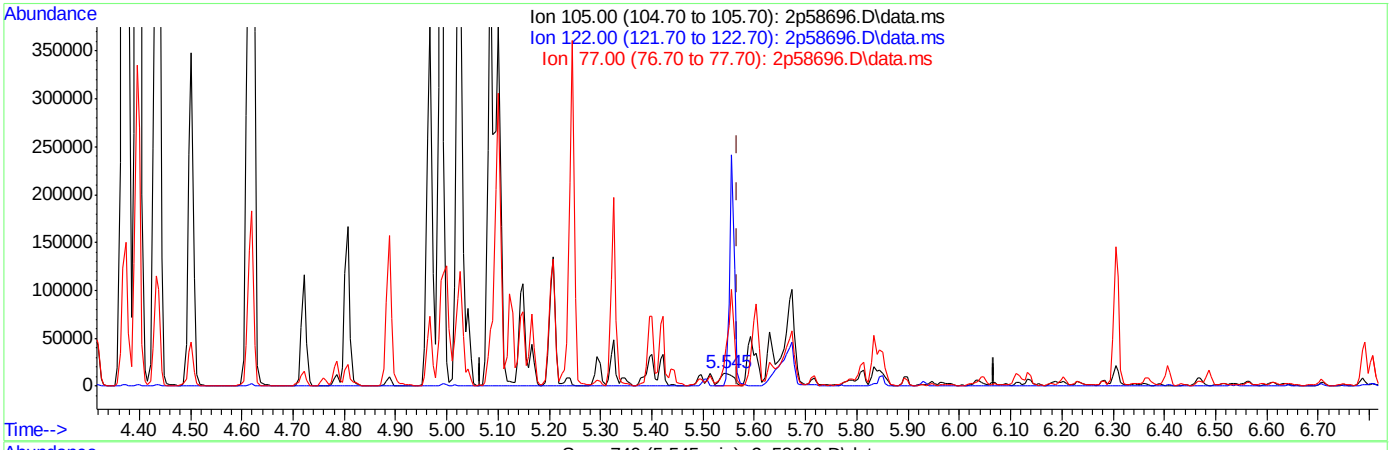

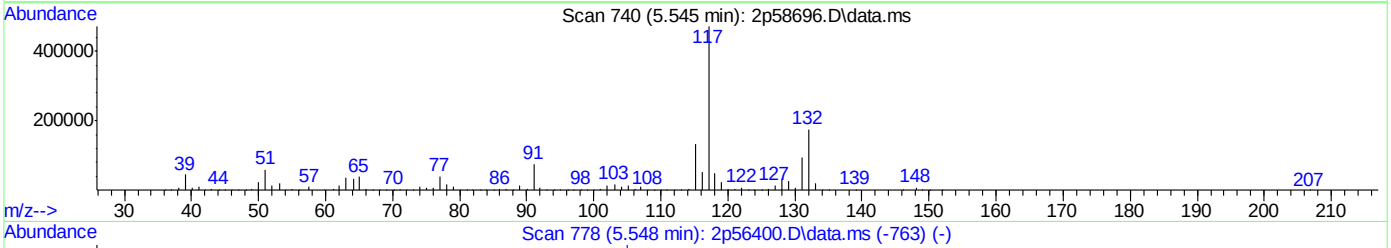

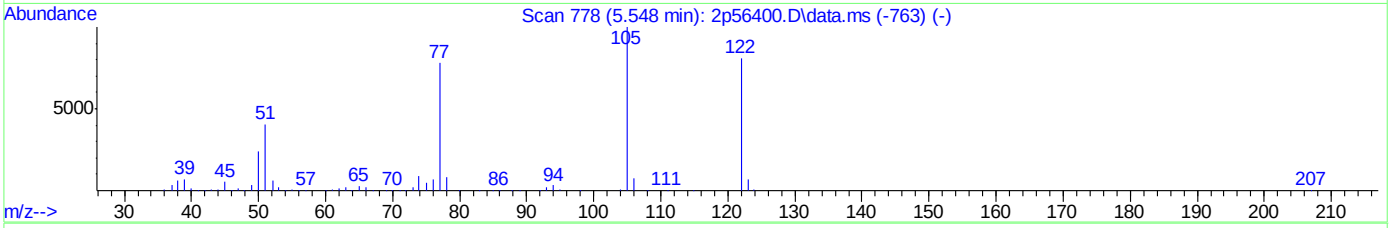

TIC: 2p58696.D\data.ms

(31) Benzoic acid (t)

5.545min (-0.022) 6.61ppm

response 22009

Ion	Exp%	Act%
105.00	100	100
122.00	78.30	48.66
77.00	68.20	303.33#
0.00	0.00	0.00

SGS ACCUTEST JC19023

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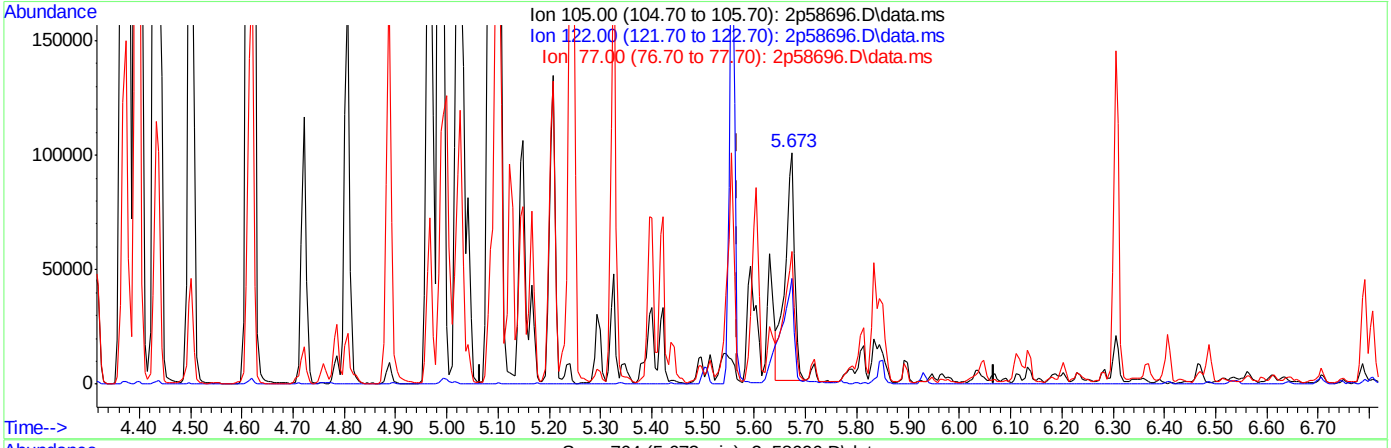
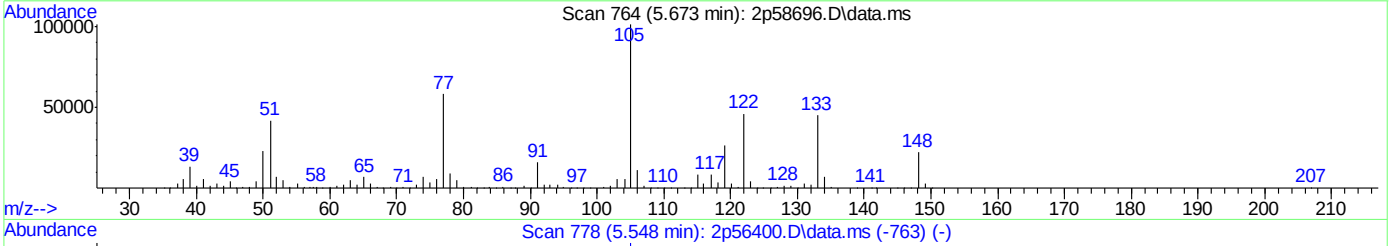
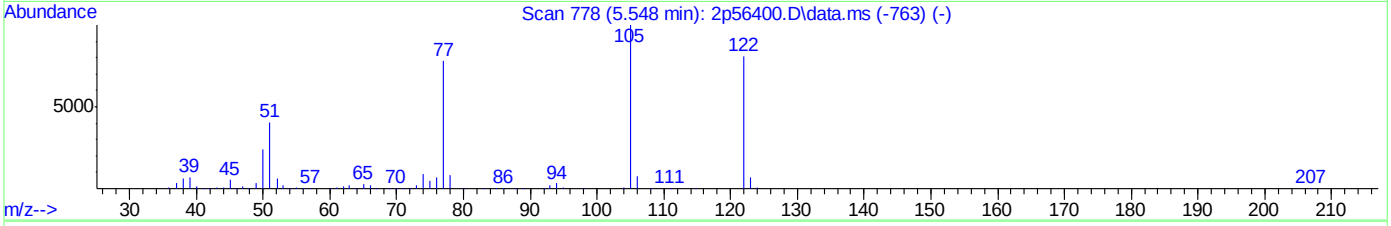
QLast Update : Fri Apr 29 09:54:55 2016
Response via : Initial Calibration







TIC: 2p58696.D\data.ms

(31) Benzoic acid (t)

5.673min (+0.106) 39.32ppm m

response 131004

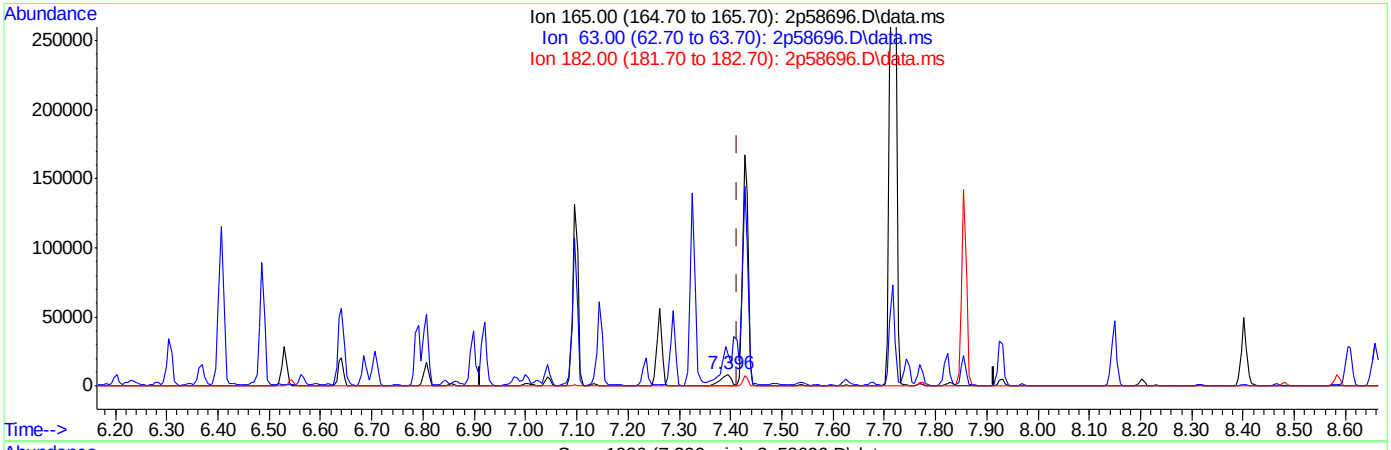
Ion	Exp%	Act%
105.00	100	100
122.00	78.30	45.44#
77.00	68.20	57.43
0.00	0.00	0.00

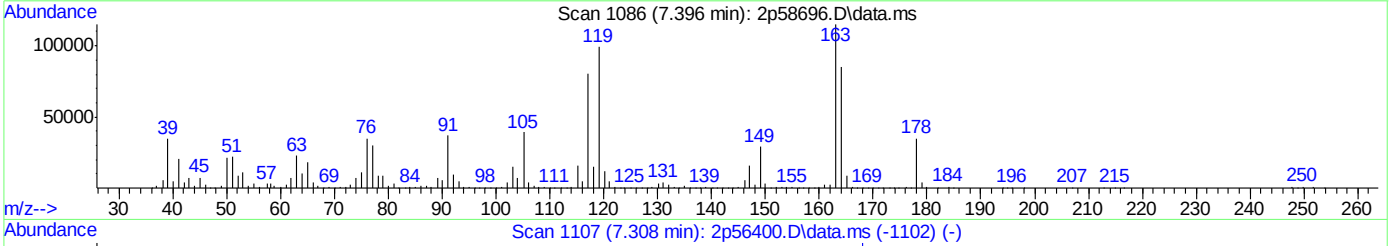
SGS ACCUTEST JC19023

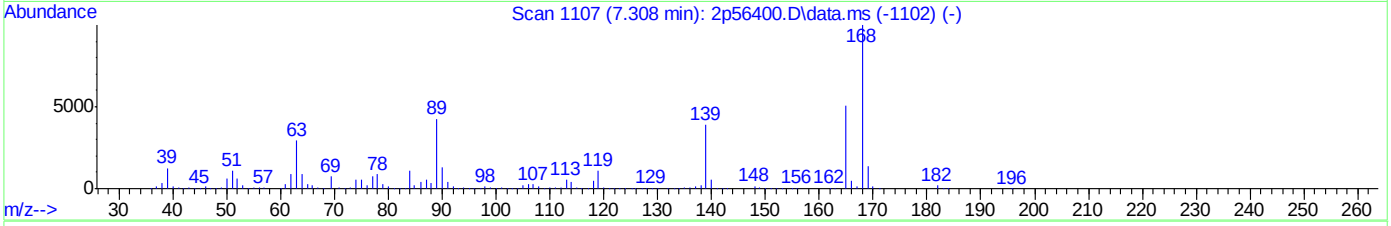
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P2566\
Data File : 2p58696.D
Acq On : 29 Apr 2016 12:22 pm
Operator : robertl1
Sample : OP93453-MSD
Misc : op93453,e2p2566,500
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 29 12:38:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2557.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 29 09:54:55 2016
Response via : Initial Calibration







TIC: 2p58696.D\data.ms

(63) 2,4-Dinitrotoluene (t)

7.396min (-0.018) 4.85ppm

response 12398

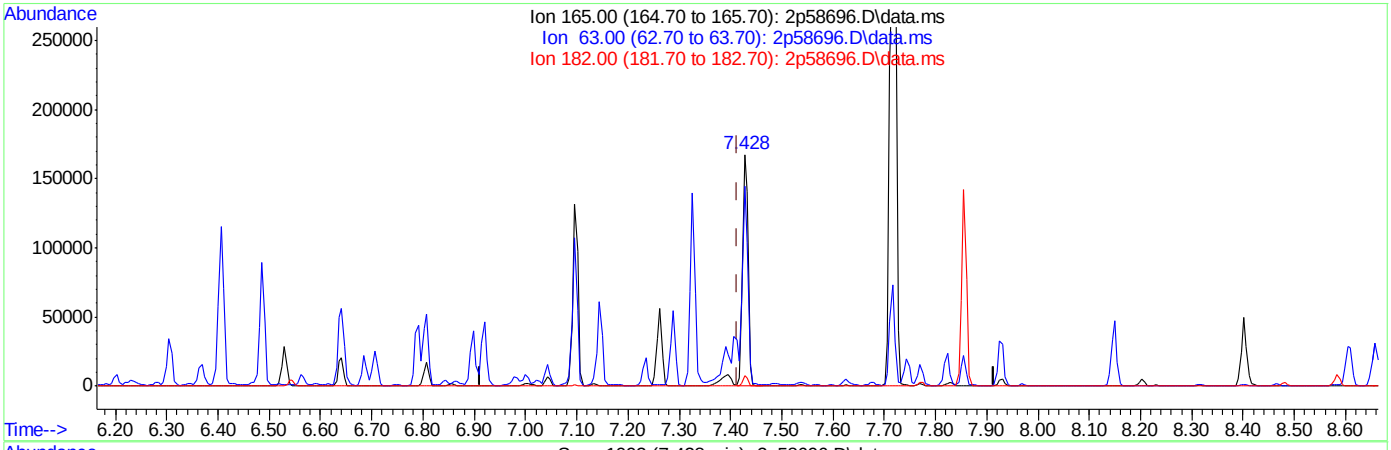
Ion	Exp%	Act%
165.00	100	100
63.00	45.00	54.14
182.00	4.70	0.00
0.00	0.00	0.00

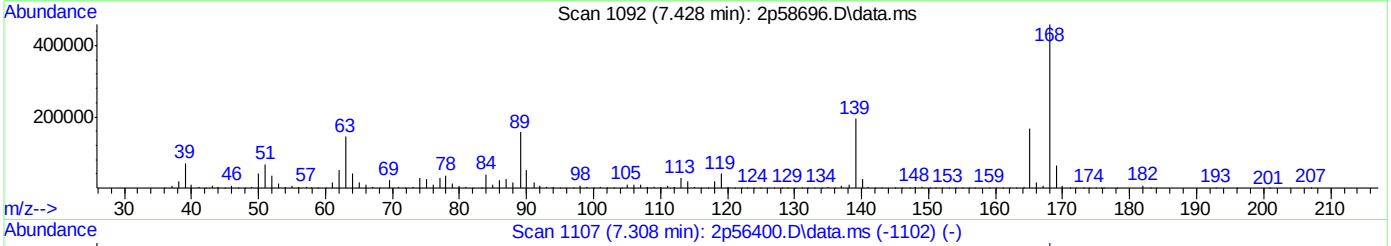
SGS ACCUTEST JC19023

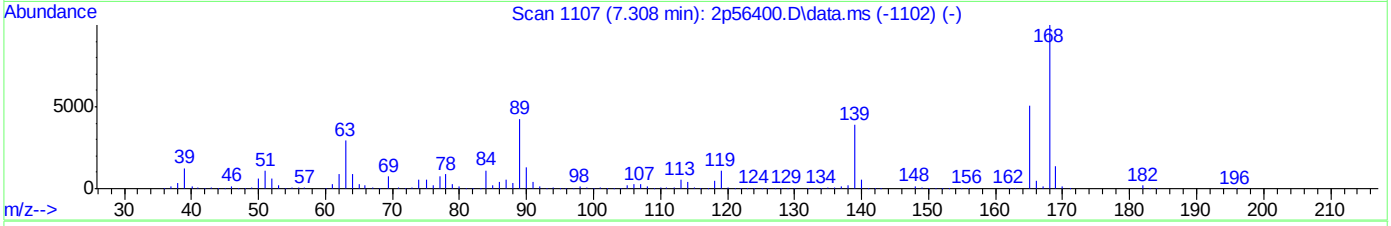
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P2566\
Data File : 2p58696.D
Acq On : 29 Apr 2016 12:22 pm
Operator : robertl1
Sample : OP93453-MSD
Misc : op93453,e2p2566,500
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 29 12:38:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2557.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 29 09:54:55 2016
Response via : Initial Calibration







TIC: 2p58696.D\data.ms

(63) 2,4-Dinitrotoluene (t)

7.428min (+0.014) 48.64ppm m

response 124368

Ion	Exp%	Act%
165.00	100	100
63.00	45.00	86.43#
182.00	4.70	4.33
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5253\
Data File : M124229.D
Acq On : 6 May 2016 6:02 pm
Operator : ashleyd
Sample : op93478-ms
Misc : op93478,em5253,31.1
ALS Vial : 29 Sample Multiplier: 1

Quant Time: May 09 14:58:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri May 06 11:18:22 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.665	152	333221	40.00	ppm	-0.01
24) Naphthalene-d8	5.797	136	1308567	40.00	ppm	-0.01
47) Acenaphthene-d10	8.131	164	876022	40.00	ppm	-0.02
69) Phenanthrene-d10	10.759	188	1573430	40.00	ppm	-0.02
83) Chrysene-d12	15.945	240	1461305	40.00	ppm	0.00
92) Perylene-d12	18.583	264	1308997	40.00	ppm	0.01
102) 1,4-Dichlorobenzene-d4a	4.665	152	333221	40.00	ppm	-0.01
104) Acenaphthene-d10a	8.131	164	876022	40.00	ppm	-0.02
107) Chrysene-d12a	15.945	240	1461305	40.00	ppm	0.00
110) Phenanthrene-d10a	10.759	188	1573430	40.00	ppm	-0.02
112) Naphthalene-d8a	5.797	136	1308567	40.00	ppm	-0.01
114) Chrysene-d12b	15.945	240	1461305	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.730	112	396439	38.90	ppm	0.00
Spiked Amount 50.000			Recovery	=	77.80%	
8) Phenol-d5	4.446	99	520550	40.67	ppm	0.01
Spiked Amount 50.000			Recovery	=	81.34%	
25) Nitrobenzene-d5	5.124	82	411139	35.33	ppm	-0.01
Spiked Amount 50.000			Recovery	=	70.66%	
51) 2-Fluorobiphenyl	7.121	172	968251	33.66	ppm	0.00
Spiked Amount 50.000			Recovery	=	67.32%	
73) 2,4,6-Tribromophenol	9.504	330	234431	43.10	ppm	-0.01
Spiked Amount 50.000			Recovery	=	86.20%	
86) Terphenyl-d14	13.926	244	1287859	39.29	ppm	-0.01
Spiked Amount 50.000			Recovery	=	78.58%	
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.202	88	74657	16.16	ppm	90
3) Pyridine	2.619	79	237911	21.15	ppm	98
4) N-Nitrosodimethylamine	2.523	42	156511	31.77	ppm	84
6) Indene	4.868	116	639317	33.73	ppm	100
7) Cumene	4.061	105	700918	27.57	ppm	97
9) Phenol	4.456	94	1770920	129.12	ppm	97
11) bis(2-Chloroethyl)ether	4.467	93	501271	46.93	ppm	88
12) 2-Chlorophenol	4.536	128	426442	37.34	ppm	98
13) Decane	4.536	43	301321	27.83	ppm	99
14) 1,3-Dichlorobenzene	4.627	146	380161	29.19	ppm	98
15) 1,4-Dichlorobenzene	4.681	146	389150	30.15	ppm	97
16) Benzyl alcohol	4.793	108	231621	35.01	ppm	96
17) 1,2-Dichlorobenzene	4.803	146	390823	32.17	ppm	99
18) Acetophenone	4.990	105	498079	32.84	ppm	94
19) 2-Methylphenol	4.905	108	467429	49.38	ppm	99
20) 2,2'-oxybis(1-Chloropr...	4.878	121	108072	30.63	ppm	89
21) 3&4-Methylphenol	5.033	108	2147428	207.07	ppm	97

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5253\
Data File : M124229.D
Acq On : 6 May 2016 6:02 pm
Operator : ashleyd
Sample : op93478-ms
Misc : op93478,em5253,31.1
ALS Vial : 29 Sample Multiplier: 1

Quant Time: May 09 14:58:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri May 06 11:18:22 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
22)	n-Nitroso-di-n-propyla...	4.990	70	273497	33.39	ppm		90
23)	Hexachloroethane	5.070	201	118546	24.30	ppm		95
26)	Nitrobenzene	5.140	77	433727	36.82	ppm		97
27)	Quinoline	6.240	129	799005	32.03	ppm		98
28)	Isophorone	5.354	82	741305	35.01	ppm		96
29)	2-Nitrophenol	5.428	139	233614	35.05	ppm		91
30)	2,4-Dimethylphenol	5.487	107	1015954	93.12	ppm		99
31)	Benzoic acid	5.642	105	258086	36.07	ppm	#	1
32)	bis(2-Chloroethoxy)met...	5.546	93	430496	33.48	ppm		98
33)	2,4-Dichlorophenol	5.695	162	368252	36.92	ppm		94
34)	2,6-Dichlorophenol	5.904	162	363142	36.03	ppm		96
36)	1,2,4-Trichlorobenzene	5.738	180	379641	32.45	ppm		98
38)	Naphthalene	5.818	128	1130280	32.98	ppm		98
39)	4-Chloroaniline	5.914	127	230661	15.62	ppm		95
40)	2,3-Dichloroaniline	7.009	161	405513	31.20	ppm		96
41)	Caprolactam	6.320	55	186987	34.66	ppm		98
42)	Hexachlorobutadiene	5.946	225	214553	31.88	ppm		96
43)	4-Chloro-3-methylphenol	6.507	107	356977	35.81	ppm		94
44)	2-Methylnaphthalene	6.625	141	676624	33.01	ppm		92
45)	1-Methylnaphthalene	6.748	142	777020	32.63	ppm		99
46)	Dimethylnaphthalene	7.490	156	755363	34.17	ppm		99
48)	Hexachlorocyclopentadiene	6.828	237	45704	11.65	ppm		92
49)	2,4,6-Trichlorophenol	7.031	196	296570	35.48	ppm		92
50)	2,4,5-Trichlorophenol	7.121	196	293264	32.23	ppm		99
52)	2-Chloronaphthalene	7.287	162	763261	29.91	ppm		97
53)	Biphenyl	7.260	154	1024800	31.44	ppm		98
54)	2-Nitroaniline	7.469	65	242658	33.36	ppm		99
55)	Dimethylphthalate	7.741	163	947144	31.75	ppm		99
56)	Acenaphthylene	7.907	152	1260859	29.88	ppm		99
57)	2,6-Dinitrotoluene	7.837	165	221396	33.38	ppm		97
58)	3-Nitroaniline	8.120	138	159405	21.72	ppm		95
59)	Acenaphthene	8.184	153	796671	31.34	ppm		100
60)	2,4-Dinitrophenol	8.318	184	127163	46.82	ppm	#	58
61)	4-Nitrophenol	8.585	109	87833	32.73	ppm		95
62)	Dibenzofuran	8.473	168	1225572	32.41	ppm		99
63)	2,4-Dinitrotoluene	8.515	165	277748	31.93	ppm		91
64)	2,3,4,6-Tetrachlorophenol	8.729	232	269343	38.27	ppm		96
65)	Diethylphthalate	8.927	149	942233	31.72	ppm		98
66)	Fluorene	9.055	166	974916	31.90	ppm		99
67)	4-Chlorophenyl-phenyle...	9.082	204	475452	32.61	ppm		97
68)	4-Nitroaniline	9.172	138	164097	22.99	ppm		97
70)	4,6-Dinitro-2-methylph...	9.242	198	114440	23.66	ppm		95
71)	n-Nitrosodiphenylamine	9.311	169	724114	34.26	ppm		99
72)	1,2-Diphenylhydrazine	9.365	77	872339	32.22	ppm		94
74)	4-Bromophenyl-phenylether	9.958	248	350319	36.00	ppm		93
75)	Hexachlorobenzene	10.059	284	390240	34.05	ppm		97
76)	Pentachlorophenol	10.481	266	201234	41.75	ppm		97
77)	Phenanthrene	10.801	178	1365454	31.13	ppm		99
78)	Anthracene	10.898	178	1401456	30.85	ppm		100
79)	Carbazole	11.266	167	1327951	31.74	ppm		100

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5253\
Data File : M124229.D
Acq On : 6 May 2016 6:02 pm
Operator : ashleyd
Sample : op93478-ms
Misc : op93478,em5253,31.1
ALS Vial : 29 Sample Multiplier: 1

Quant Time: May 09 14:58:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri May 06 11:18:22 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
80) Di-n-butylphthalate	12.030	149	1697557	32.68	ppm		99
81) Fluoranthene	13.098	202	1586762	30.87	ppm		99
82) Octadecane	10.721	57	593277	35.05	ppm		95
84) Pyrene	13.525	202	1618925	33.98	ppm		99
87) Butylbenzylphthalate	14.973	149	652655	31.51	ppm		96
88) Benzo[a]anthracene	15.924	228	1335509	29.89	ppm		98
89) 3,3'-Dichlorobenzidine	15.950	252	117789	7.22	ppm		99
90) Chrysene	15.993	228	1233966	29.57	ppm		99
91) bis(2-Ethylhexyl)phtha...	16.180	149	936062	33.51	ppm		98
93) Di-n-octylphthalate	17.408	149	1446699	34.05	ppm		97
94) Benzo[b]fluoranthene	17.942	252	1330506	33.08	ppm		93
95) Benzo[k]fluoranthene	17.985	252	1233281	31.81	ppm		99
96) Benzo[a]pyrene	18.482	252	1138698	30.66	ppm		99
97) Indeno[1,2,3-cd]pyrene	20.325	276	1369004	36.42	ppm		98
99) Dibenz[a,h]anthracene	20.357	278	1120083	29.31	ppm		98
100) 7,12-Dimethylbenz(a)an...	17.921	256	612655	33.85	ppm		98
101) Benzo[g,h,i]perylene	20.789	276	1110185	28.34	ppm		98
103) Benzaldehyde	4.344	105	287317	38.15	ppm		96
105) 1,2,4,5-Tetrachloroben...	6.849	216	451180	39.95	ppm		96
106) Atrazine	10.369	215	150184	40.58	ppm	#	69

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

7.4.3

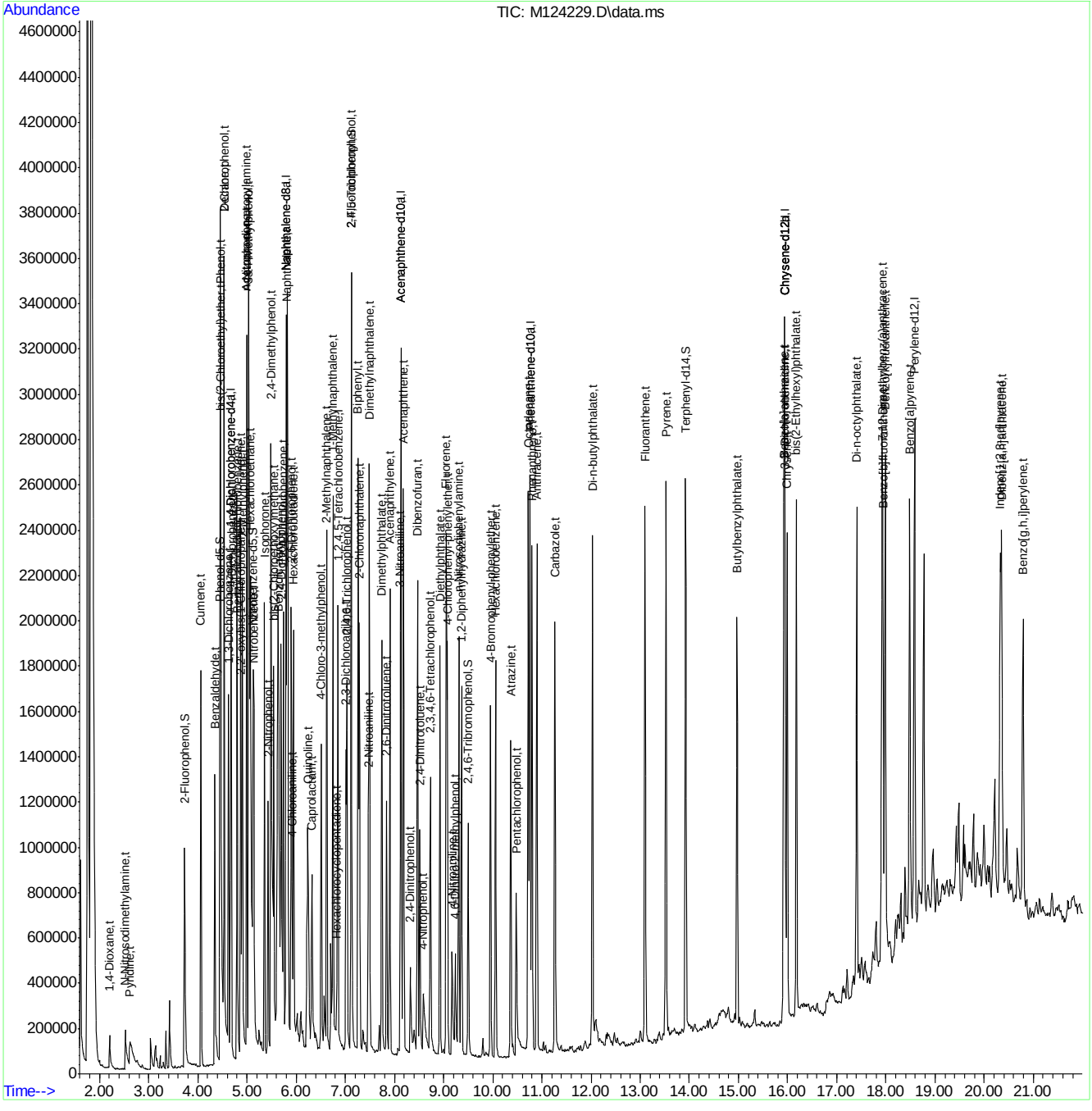
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5253\
Data File : M124229.D
Acq On : 6 May 2016 6:02 pm
Operator : ashleyd
Sample : op93478-ms
Misc : op93478,em5253,31.1
ALS Vial : 29 Sample Multiplier: 1

Quant Time: May 09 14:58:59 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri May 06 11:18:22 2016
Response via : Initial Calibration



MM5239.M Mon May 09 14:59:04 2016 MSM

Page: 4

SGS ACCUTEST JC19023

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 05/09/16 15:05

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5253\
Data File : M124230.D
Acq On : 6 May 2016 6:31 pm
Operator : ashleyd
Sample : op93478-msd
Misc : op93478,em5253,30.5
ALS Vial : 30 Sample Multiplier: 1

Quant Time: May 09 14:59:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri May 06 11:18:22 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.671	152	328426	40.00	ppm	0.00
24) Naphthalene-d8	5.798	136	1318490	40.00	ppm	-0.01
47) Acenaphthene-d10	8.132	164	895970	40.00	ppm	-0.02
69) Phenanthrene-d10	10.759	188	1582701	40.00	ppm	-0.02
83) Chrysene-d12	15.951	240	1427979	40.00	ppm	0.00
92) Perylene-d12	18.589	264	1314036	40.00	ppm	0.02
102) 1,4-Dichlorobenzene-d4a	4.671	152	328426	40.00	ppm	0.00
104) Acenaphthene-d10a	8.132	164	895970	40.00	ppm	-0.02
107) Chrysene-d12a	15.951	240	1427979	40.00	ppm	0.00
110) Phenanthrene-d10a	10.759	188	1582701	40.00	ppm	-0.02
112) Naphthalene-d8a	5.798	136	1318490	40.00	ppm	-0.01
114) Chrysene-d12b	15.951	240	1427979	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.736	112	451142	44.92	ppm	0.01
Spiked Amount 50.000			Recovery	=	89.84%	
8) Phenol-d5	4.462	99	568347	45.06	ppm	0.03
Spiked Amount 50.000			Recovery	=	90.12%	
25) Nitrobenzene-d5	5.125	82	461281	39.34	ppm	0.00
Spiked Amount 50.000			Recovery	=	78.68%	
51) 2-Fluorobiphenyl	7.122	172	1065849	36.23	ppm	0.00
Spiked Amount 50.000			Recovery	=	72.46%	
73) 2,4,6-Tribromophenol	9.510	330	238108	43.52	ppm	0.00
Spiked Amount 50.000			Recovery	=	87.04%	
86) Terphenyl-d14	13.927	244	1332318	41.59	ppm	-0.01
Spiked Amount 50.000			Recovery	=	83.18%	
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.208	88	95289	20.92	ppm	94
3) Pyridine	2.588	79	298960	26.97	ppm	92
4) N-Nitrosodimethylamine	2.518	42	187264	38.57	ppm	86
6) Indene	4.868	116	725113	38.81	ppm	98
7) Cumene	4.062	105	837130	33.41	ppm	98
9) Phenol	4.468	94	2029926	150.17	ppm	92
11) bis(2-Chloroethyl)ether	4.468	93	665260	63.20	ppm	84
12) 2-Chlorophenol	4.542	128	464697	41.28	ppm	99
13) Decane	4.537	43	377124	35.34	ppm	90
14) 1,3-Dichlorobenzene	4.628	146	450836	35.12	ppm	97
15) 1,4-Dichlorobenzene	4.681	146	454054	35.70	ppm	96
16) Benzyl alcohol	4.799	108	266377	40.86	ppm	99
17) 1,2-Dichlorobenzene	4.804	146	457117	38.17	ppm	98
18) Acetophenone	4.996	105	569270	38.08	ppm	94
19) 2-Methylphenol	4.916	108	540783	57.97	ppm	98
20) 2,2'-oxybis(1-Chloropr...	4.879	121	124973	35.94	ppm #	87
21) 3&4-Methylphenol	5.045	108	2454490	240.14	ppm #	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5253\
Data File : M124230.D
Acq On : 6 May 2016 6:31 pm
Operator : ashleyd
Sample : op93478-msd
Misc : op93478,em5253,30.5
ALS Vial : 30 Sample Multiplier: 1

Quant Time: May 09 14:59:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri May 06 11:18:22 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
22) n-Nitroso-di-n-propyla...	4.991	70	299328	37.08	ppm		92
23) Hexachloroethane	5.071	201	136983	28.49	ppm		94
26) Nitrobenzene	5.141	77	498191	41.97	ppm		100
27) Quinoline	6.214	129	882027m	35.09	ppm		
28) Isophorone	5.360	82	819983	38.43	ppm		94
29) 2-Nitrophenol	5.429	139	258004	38.41	ppm		75
30) 2,4-Dimethylphenol	5.499	107	1124288	102.28	ppm		98
31) Benzoic acid	5.648	105	268174m	37.19	ppm		
32) bis(2-Chloroethoxy)met...	5.547	93	473907	36.58	ppm		99
33) 2,4-Dichlorophenol	5.707	162	395533	39.35	ppm		95
34) 2,6-Dichlorophenol	5.904	162	375006	36.93	ppm		98
36) 1,2,4-Trichlorobenzene	5.744	180	412106	34.96	ppm		99
38) Naphthalene	5.819	128	1286743	37.26	ppm		100
39) 4-Chloroaniline	5.926	127	231008	15.53	ppm		95
40) 2,3-Dichloroaniline	7.015	161	444169	33.92	ppm		95
41) Caprolactam	6.321	55	206112	37.92	ppm		95
42) Hexachlorobutadiene	5.947	225	251077	37.03	ppm		98
43) 4-Chloro-3-methylphenol	6.524	107	372715	37.11	ppm		96
44) 2-Methylnaphthalene	6.625	141	751729	36.40	ppm		98
45) 1-Methylnaphthalene	6.748	142	868918	36.21	ppm		99
46) Dimethylnaphthalene	7.496	156	827027	37.13	ppm		98
48) Hexachlorocyclopentadiene	6.828	237	68696	15.35	ppm		96
49) 2,4,6-Trichlorophenol	7.042	196	316484	37.02	ppm		98
50) 2,4,5-Trichlorophenol	7.144	196	301489	32.40	ppm		97
52) 2-Chloronaphthalene	7.288	162	844045	32.34	ppm		96
53) Biphenyl	7.261	154	1150884	34.52	ppm		98
54) 2-Nitroaniline	7.480	65	262236	35.24	ppm		95
55) Dimethylphthalate	7.747	163	1048964	34.38	ppm		99
56) Acenaphthylene	7.907	152	1343056	31.12	ppm		99
57) 2,6-Dinitrotoluene	7.849	165	246669	36.36	ppm		98
58) 3-Nitroaniline	8.132	138	175570	23.39	ppm		96
59) Acenaphthene	8.185	153	879114	33.82	ppm		99
60) 2,4-Dinitrophenol	8.329	184	131248	47.18	ppm		93
61) 4-Nitrophenol	8.634	109	84953	30.95	ppm		82
62) Dibenzofuran	8.473	168	1354932	35.04	ppm		98
63) 2,4-Dinitrotoluene	8.527	165	311871	35.05	ppm		95
64) 2,3,4,6-Tetrachlorophenol	8.741	232	279609	38.85	ppm		99
65) Diethylphthalate	8.933	149	1048307	34.51	ppm		99
66) Fluorene	9.061	166	1067755	34.16	ppm		95
67) 4-Chlorophenyl-phenyle...	9.082	204	535334	35.90	ppm		95
68) 4-Nitroaniline	9.189	138	185538	25.42	ppm		98
70) 4,6-Dinitro-2-methylph...	9.248	198	121682	24.90	ppm	#	68
71) n-Nitrosodiphenylamine	9.312	169	763484	35.91	ppm		99
72) 1,2-Diphenylhydrazine	9.365	77	969974	35.62	ppm		99
74) 4-Bromophenyl-phenylether	9.958	248	370613	37.86	ppm		94
75) Hexachlorobenzene	10.065	284	421757	36.59	ppm		96
76) Pentachlorophenol	10.492	266	201015	41.48	ppm		99
77) Phenanthrene	10.808	178	1484818	33.65	ppm		99
78) Anthracene	10.904	178	1512995	33.11	ppm		99
79) Carbazole	11.278	167	1437458	34.15	ppm		99

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5253\
Data File : M124230.D
Acq On : 6 May 2016 6:31 pm
Operator : ashleyd
Sample : op93478-msd
Misc : op93478,em5253,30.5
ALS Vial : 30 Sample Multiplier: 1

Quant Time: May 09 14:59:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri May 06 11:18:22 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
80)	Di-n-butylphthalate	12.036	149	1808721	34.62	ppm		100
81)	Fluoranthene	13.104	202	1662195	32.15	ppm		99
82)	Octadecane	10.727	57	647045	38.00	ppm		96
84)	Pyrene	13.531	202	1688428	36.26	ppm		99
87)	Butylbenzylphthalate	14.974	149	686247	33.90	ppm		97
88)	Benzo[a]anthracene	15.930	228	1392274	31.89	ppm		99
89)	3,3'-Dichlorobenzidine	15.956	252	143294	8.99	ppm		98
90)	Chrysene	15.999	228	1316698	32.29	ppm		99
91)	bis(2-Ethylhexyl)phtha...	16.186	149	982106	35.98	ppm		97
93)	Di-n-octylphthalate	17.414	149	1491287	34.97	ppm		97
94)	Benzo[b]fluoranthene	17.949	252	1408602	34.89	ppm		92
95)	Benzo[k]fluoranthene	17.991	252	1300355	33.41	ppm		99
96)	Benzo[a]pyrene	18.488	252	1216402	32.62	ppm		100
97)	Indeno[1,2,3-cd]pyrene	20.331	276	1428496	37.86	ppm		96
99)	Dibenz[a,h]anthracene	20.363	278	1208458	31.50	ppm		99
100)	7,12-Dimethylbenz(a)an...	17.927	256	658639	36.25	ppm		98
101)	Benzo[g,h,i]perylene	20.801	276	1193211	30.34	ppm		97
103)	Benzaldehyde	4.345	105	323065	43.52	ppm		95
105)	1,2,4,5-Tetrachloroben...	6.850	216	493126	42.69	ppm		95
106)	Atrazine	10.375	215	164064	43.35	ppm	#	65

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

7.4.4

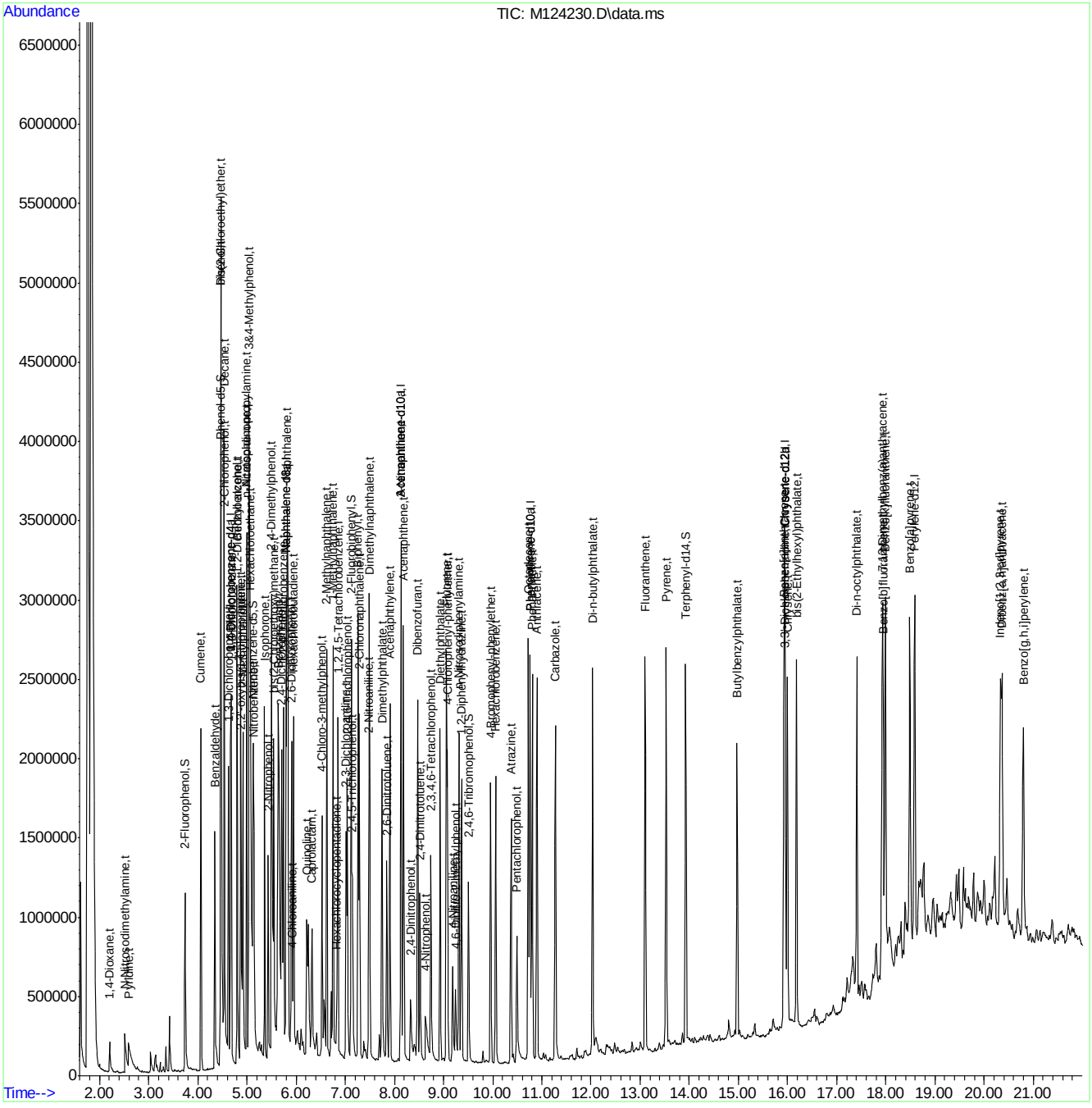
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5253\
Data File : M124230.D
Acq On : 6 May 2016 6:31 pm
Operator : ashleyd
Sample : op93478-msd
Misc : op93478,em5253,30.5
ALS Vial : 30 Sample Multiplier: 1

Quant Time: May 09 14:59:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri May 06 11:18:22 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

Manual Integration Approval Summary

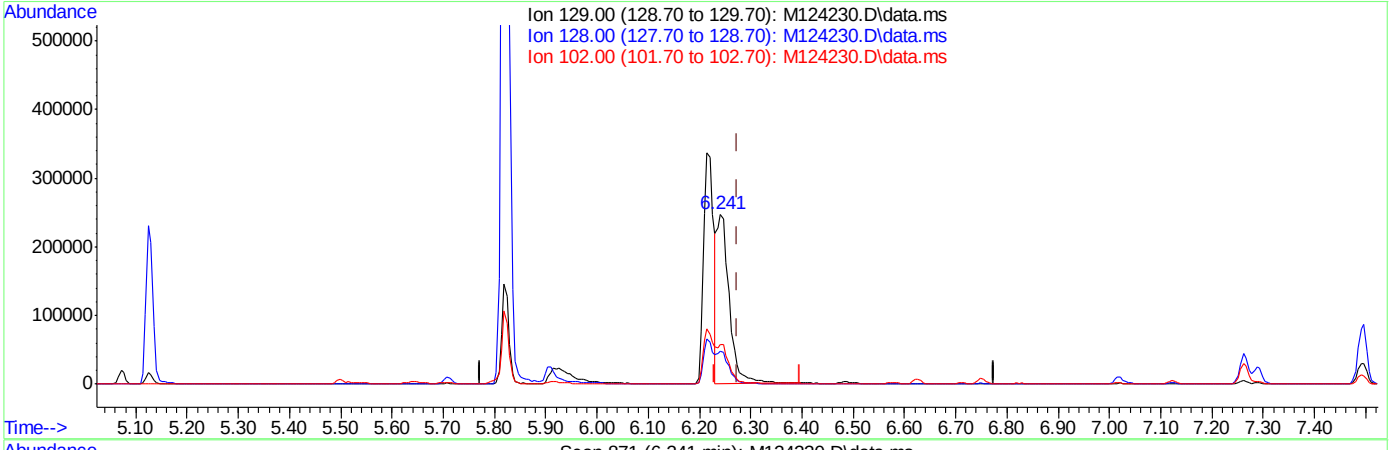
Sample Number:	OP93478-MSD	**Method:**	SW846 8270D
Lab FileID:	M124230.D	**Analyst approved:**	05/09/16 15:00 Kristi Schollenberger
Injection Time:	05/06/16 18:31	**Supervisor approved:**	05/09/16 15:05 Kristi Schollenberger

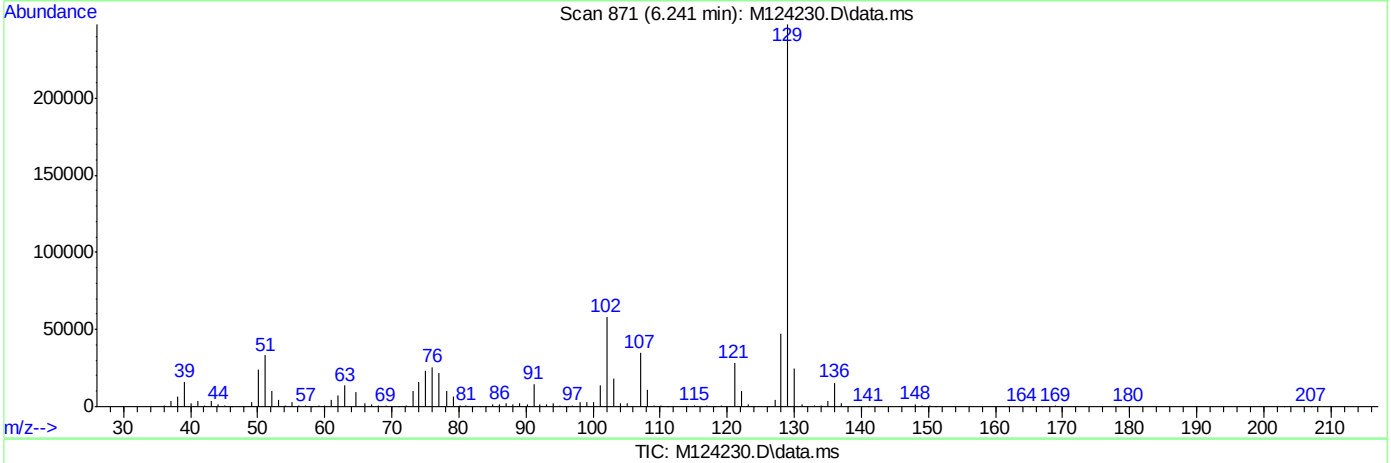
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic acid	65-85-0		5.65	Split peak
Quinoline	91-22-5		6.21	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5253\
Data File : M124230.D
Acq On : 6 May 2016 6:31 pm
Operator : ashleyd
Sample : op93478-msd
Misc : op93478,em5253,30.5
ALS Vial : 30 Sample Multiplier: 1

Quant Time: May 06 18:53:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri May 06 11:18:22 2016
Response via : Initial Calibration





TIC: M124230.D\data.ms

(27) Quinoline (t)

6.241min (-0.033) 16.05ppm

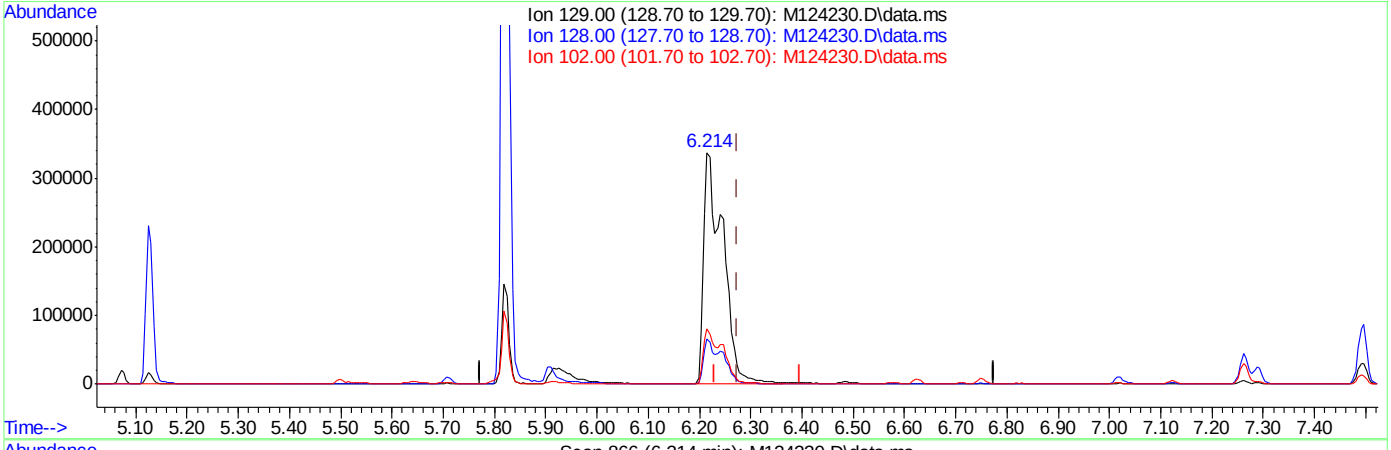
response 403511

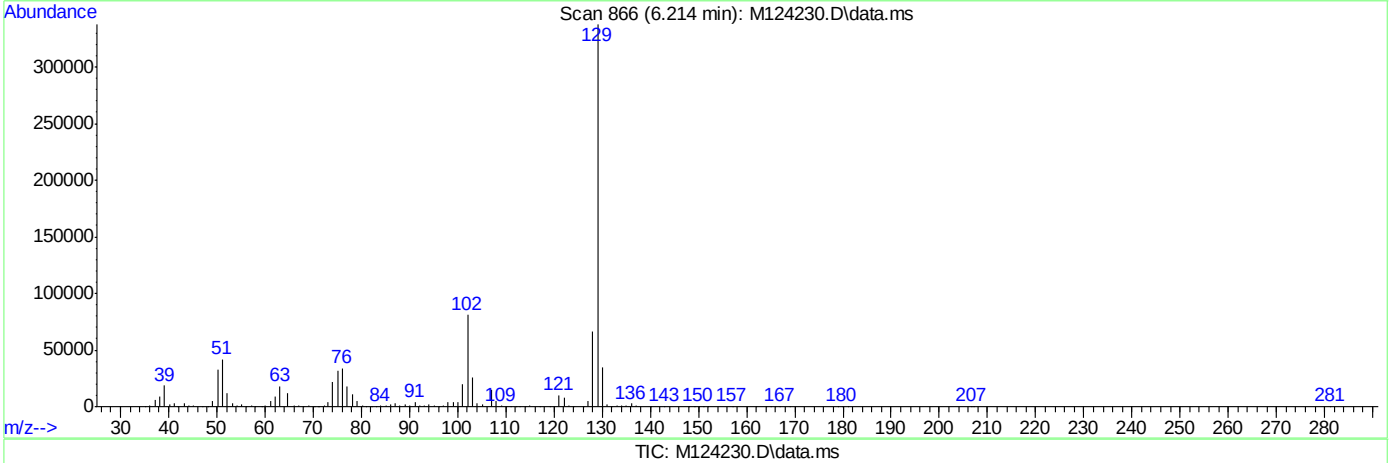
Ion	Exp%	Act%
129.00	100	100
128.00	19.40	18.65
102.00	22.70	22.40
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5253\
Data File : M124230.D
Acq On : 6 May 2016 6:31 pm
Operator : ashleyd
Sample : op93478-msd
Misc : op93478,em5253,30.5
ALS Vial : 30 Sample Multiplier: 1

Quant Time: May 06 18:53:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri May 06 11:18:22 2016
Response via : Initial Calibration





TIC: M124230.D\data.ms

(27) Quinoline (t)

6.214min (-0.060) 35.09ppm m

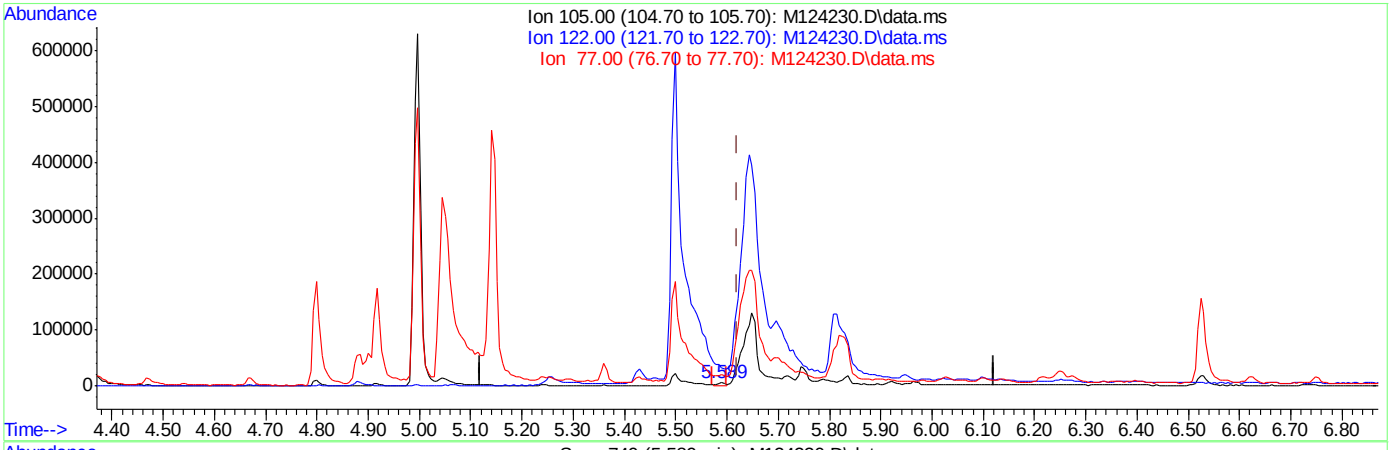
response 882027

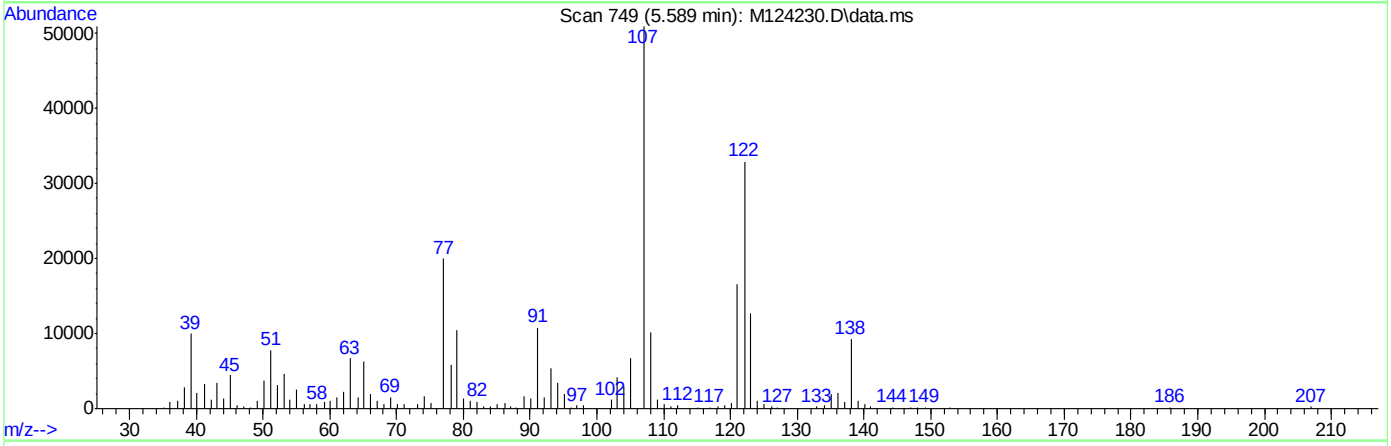
Ion	Exp%	Act%
129.00	100	100
128.00	19.40	19.60
102.00	22.70	23.94
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5253\
Data File : M124230.D
Acq On : 6 May 2016 6:31 pm
Operator : ashleyd
Sample : op93478-msd
Misc : op93478,em5253,30.5
ALS Vial : 30 Sample Multiplier: 1

Quant Time: May 06 18:53:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri May 06 11:18:22 2016
Response via : Initial Calibration





TIC: M124230.D\data.ms

(31) Benzoic acid (t)

5.589min (-0.031) 0.73ppm

response 5292

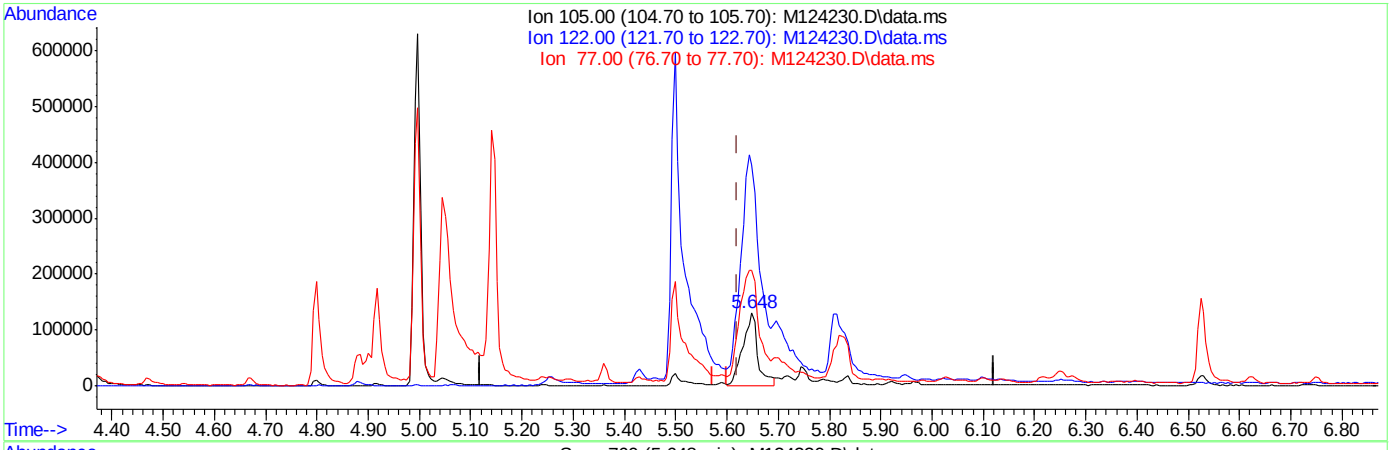
Ion	Exp%	Act%
105.00	100	100
122.00	80.70	0.00#
77.00	73.20	38.20#
0.00	0.00	0.00

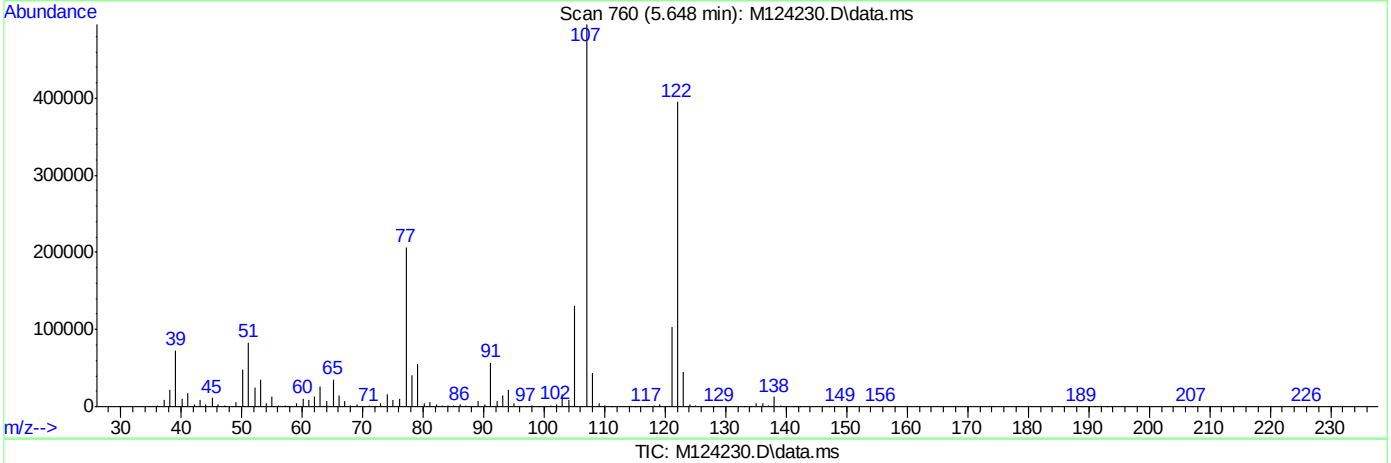
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\EM5253\
Data File : M124230.D
Acq On    :  6 May 2016   6:31 pm
Operator  : ashleyd
Sample    : op93478-msd
Misc      : op93478,em5253,30.5
ALS Vial  : 30   Sample Multiplier: 1

Quant Time: May 06 18:53:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title  : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri May 06 11:18:22 2016
Response via : Initial Calibration
```





TIC: M124230.D\data.ms

(31) Benzoic acid (t)

5.648min (+0.027) 37.19ppm m

response 268174

Ion	Exp%	Act%
105.00	100	100
122.00	80.70	302.34#
77.00	73.20	158.49#
0.00	0.00	0.00

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2866\
Data File : 3m60955.D
Acq On : 29 Apr 2016 2:08 am
Operator : juliusj
Sample : op93453a-ms
Misc : op93453a,e3m2866,500
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 02 12:30:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Apr 28 10:59:02 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.508	150	375405	4.00	ppm	-0.11
14) Fluorene-d10	13.505	176	475671	4.00	ppm	-0.14
21) Fluoranthene-d10	17.716	212	728580	4.00	ppm	-0.14
31) Benzo(a)pyrene-d12	22.320	264	563155	4.00	ppm	-0.13
System Monitoring Compounds						
3) 2-Fluorophenol	4.430	112	992909	21.14	ppm	-0.08
Spiked Amount 50.000			Recovery = 42.28%			
4) Phenol-d5	6.024	99	1311501	16.88	ppm	-0.07
Spiked Amount 50.000			Recovery = 33.76%			
7) Nitrobenzene-d5	7.625	82	1559340	21.58	ppm	-0.09
Spiked Amount 50.000			Recovery = 43.16%			
15) 2-Fluorobiphenyl	11.176	172	3703341	28.33	ppm	-0.13
Spiked Amount 50.000			Recovery = 56.66%			
20) 2,4,6-Tribromophenol	14.051	330	529475	35.57	ppm	-0.12
Spiked Amount 50.000			Recovery = 71.14%			
28) Terphenyl-d14	18.535	244	4459680	42.20	ppm	-0.13
Spiked Amount 50.000			Recovery = 84.40%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.236	88	5909	0.30	ppm	91
5) Phenol	6.036	94	170567	2.04	ppm #	69
6) bis(2-Chloroethyl)ether	6.181	93	27622	0.44	ppm #	56
8) Nitrobenzene	7.644	77	33855	0.43	ppm #	60
9) Naphthalene	9.018	128	96531	0.46	ppm	98
10) Hexachlorobutadiene	9.301	225	15227	0.42	ppm	99
11) 2-Methylnaphthalene	10.385	141	58114	0.53	ppm #	69
13) Hexachlorocyclopentadiene	10.734	237	9281	0.32	ppm #	77
16) Acenaphthylene	12.165	152	91776	0.56	ppm	98
17) Acenaphthene	12.521	153	65773	0.60	ppm	96
18) 4,6-dinitro-2-methylph...	13.731	198	51882	3.60	ppm	90
19) Fluorene	13.562	166	88927	0.67	ppm	88
22) Hexachlorobenzene	14.655	284	23813	0.69	ppm	99
23) Pentachlorophenol	15.073	266	85697	3.65	ppm	83
24) Phenanthrene	15.475	178	128680	0.72	ppm #	56
25) Anthracene	15.568	178	115578	0.73	ppm	87
26) Fluoranthene	17.747	202	158777	0.71	ppm	96
27) Pyrene	18.133	202	153042	0.73	ppm	93
29) Benzo[a]anthracene	20.234	228	125974	0.63	ppm	92
30) Chrysene	20.281	228	127064	0.66	ppm	89
32) Benzo[b]fluoranthene	21.903	252	109020	0.58	ppm	91
33) Benzo[k]fluoranthene	21.934	252	101020	0.58	ppm	92
34) Benzo[a]pyrene	22.351	252	102252	0.59	ppm	91
35) Indeno[1,2,3-cd]pyrene	23.824	276	83889	0.47	ppm	98
36) Dibenz[a,h]anthracene	23.881	278	68230	0.47	ppm	100
37) Benzo[g,h,i]perylene	24.201	276	70920	0.46	ppm	100

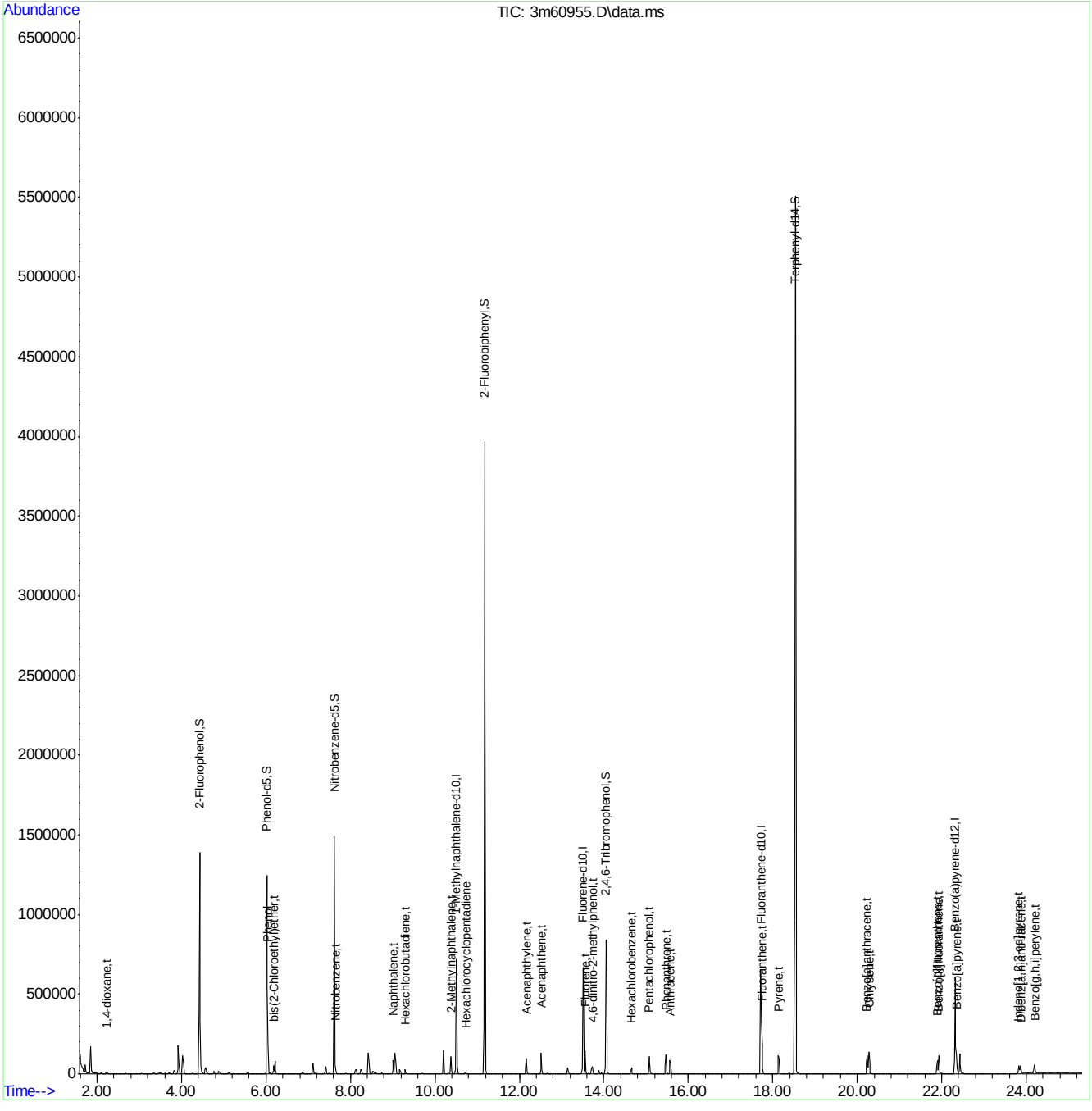
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2866\
Data File : 3m60955.D
Acq On : 29 Apr 2016 2:08 am
Operator : juliusj
Sample : op93453a-ms
Misc : op93453a,e3m2866,500
ALS Vial : 5 Sample Multiplier: 1

Quant Time: May 02 12:30:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Apr 28 10:59:02 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2866\
Data File : 3m60956.D
Acq On : 29 Apr 2016 2:40 am
Operator : juliusj
Sample : op93453a-msd
Misc : op93453a,e3m2866,500
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 02 12:30:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Apr 28 10:59:02 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.508	150	382704	4.00	ppm	-0.11
14) Fluorene-d10	13.505	176	505316	4.00	ppm	-0.14
21) Fluoranthene-d10	17.716	212	745512	4.00	ppm	-0.14
31) Benzo(a)pyrene-d12	22.320	264	583633	4.00	ppm	-0.13
System Monitoring Compounds						
3) 2-Fluorophenol	4.430	112	1303903	27.23	ppm	-0.08
Spiked Amount 50.000			Recovery = 54.46%			
4) Phenol-d5	6.024	99	1707233	21.55	ppm	-0.07
Spiked Amount 50.000			Recovery = 43.10%			
7) Nitrobenzene-d5	7.625	82	2310150	31.36	ppm	-0.09
Spiked Amount 50.000			Recovery = 62.72%			
15) 2-Fluorobiphenyl	11.176	172	4945495	35.62	ppm	-0.13
Spiked Amount 50.000			Recovery = 71.24%			
20) 2,4,6-Tribromophenol	14.051	330	650679	41.14	ppm	-0.12
Spiked Amount 50.000			Recovery = 82.28%			
28) Terphenyl-d14	18.535	244	5290566	48.92	ppm	-0.13
Spiked Amount 50.000			Recovery = 97.84%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.236	88	9809	0.50	ppm	92
5) Phenol	6.048	94	232230	2.72	ppm #	76
6) bis(2-Chloroethyl)ether	6.181	93	38487	0.60	ppm #	58
8) Nitrobenzene	7.644	77	49861	0.62	ppm #	56
9) Naphthalene	9.018	128	134816	0.63	ppm	98
10) Hexachlorobutadiene	9.301	225	21603	0.58	ppm	99
11) 2-Methylnaphthalene	10.385	141	80577	0.73	ppm #	70
13) Hexachlorocyclopentadiene	10.734	237	13601	0.46	ppm	78
16) Acenaphthylene	12.165	152	125890	0.72	ppm	97
17) Acenaphthene	12.521	153	92567	0.79	ppm	96
18) 4,6-dinitro-2-methylph...	13.731	198	80210	4.89	ppm	90
19) Fluorene	13.562	166	115670	0.83	ppm	88
22) Hexachlorobenzene	14.655	284	30975	0.88	ppm	97
23) Pentachlorophenol	15.073	266	122135	5.01	ppm	87
24) Phenanthrene	15.475	178	165754	0.91	ppm #	56
25) Anthracene	15.568	178	151015	0.94	ppm	88
26) Fluoranthene	17.747	202	206129	0.90	ppm	96
27) Pyrene	18.133	202	198118	0.93	ppm	93
29) Benzo[a]anthracene	20.234	228	167131	0.82	ppm	92
30) Chrysene	20.281	228	168614	0.86	ppm	90
32) Benzo[b]fluoranthene	21.903	252	153223	0.79	ppm	90
33) Benzo[k]fluoranthene	21.934	252	144327	0.80	ppm	92
34) Benzo[a]pyrene	22.351	252	150313	0.83	ppm	90
35) Indeno[1,2,3-cd]pyrene	23.824	276	142489	0.77	ppm	99
36) Dibenz[a,h]anthracene	23.881	278	112314	0.74	ppm	100
37) Benzo[g,h,i]perylene	24.201	276	122872	0.77	ppm	100

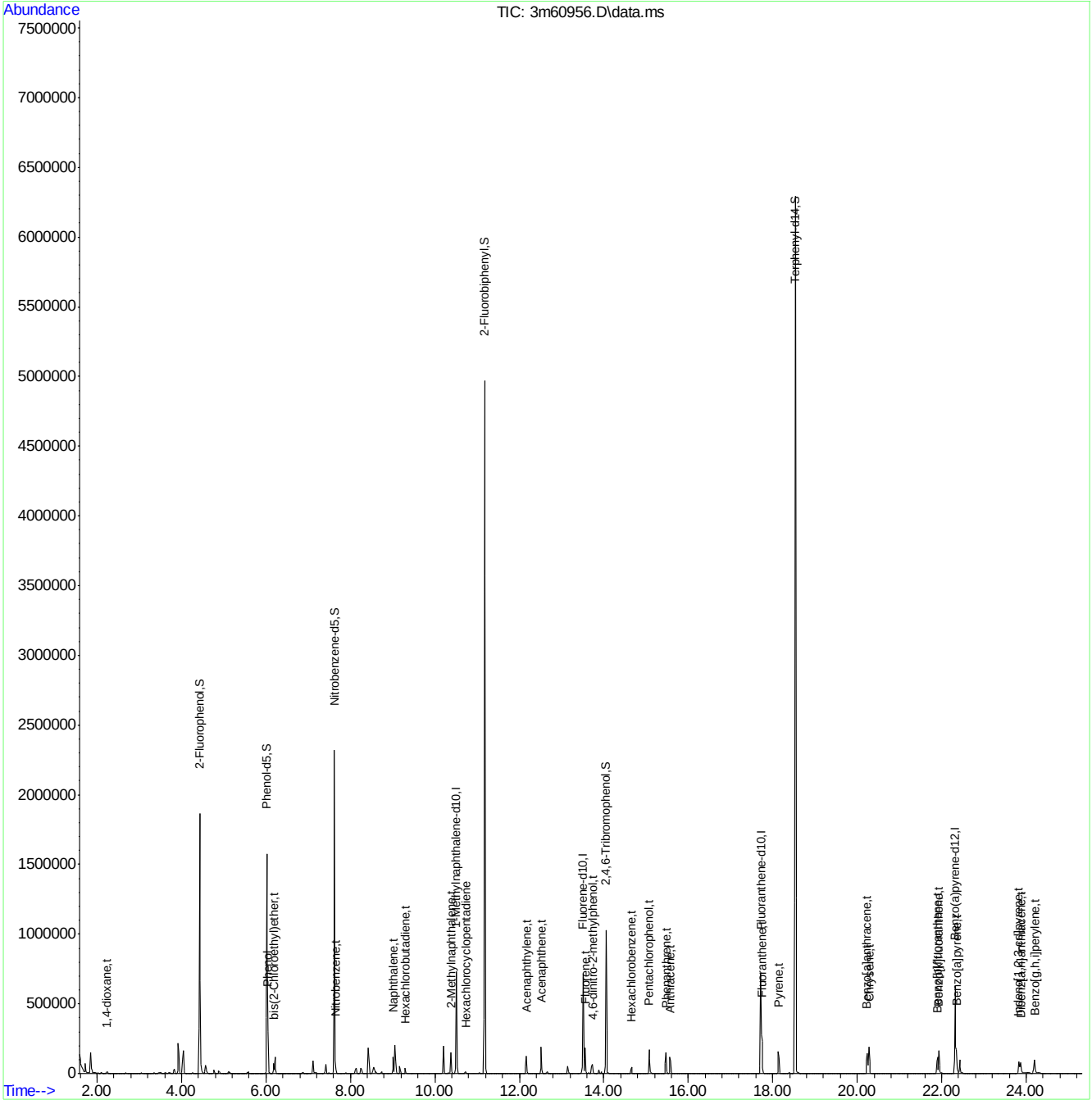
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2866\
Data File : 3m60956.D
Acq On : 29 Apr 2016 2:40 am
Operator : juliusj
Sample : op93453a-msd
Misc : op93453a,e3m2866,500
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 02 12:30:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Apr 28 10:59:02 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2912\
Data File : 4m65206.D
Acq On : 10 May 2016 2:55 pm
Operator : linseyk
Sample : op93478a-ms
Misc : op93478a,e4m2912,32.3
ALS Vial : 5 Sample Multiplier: 1

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

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.678	152	472752	4.00	ppm	-0.02
12) Fluorene-d10	13.656	176	725250	4.00	ppm	-0.02
22) Fluoranthene-d10	17.836	212	1218171	4.00	ppm	-0.03
28) Benzo(a)pyrene-d12	22.422	264	868938	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.678	152	472752	4.00	ppm	-0.02
38) Fluorene-d10a	13.656	176	725250	4.00	ppm	-0.02
System Monitoring Compounds						
2) 2-Fluorophenol	4.725	112	2135548	34.50	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 69.00%#			
3) Phenol-d5	6.301	99	3676706	35.32	ppm	0.00
Spiked Amount 50.000			Recovery = 70.64%			
6) Nitrobenzene-d5	7.806	82	3339850	35.78	ppm	-0.04
Spiked Amount 50.000			Recovery = 71.56%			
11) 2-Fluorobiphenyl	11.322	172	3991267	29.25	ppm	-0.04
Spiked Amount 50.000			Recovery = 58.50%			
17) 2,4,6-Tribromophenol	14.205	330	1697981	43.89	ppm	-0.02
Spiked Amount 50.000			Recovery = 87.78%			
25) Terphenyl-d14	18.645	244	6712173	40.79	ppm	-0.03
Spiked Amount 50.000			Recovery = 81.58%			
Target Compounds						Qvalue
4) Phenol	6.315	94	411507	3.86	ppm	62
5) bis(2-Chloroethyl)ether	6.383	93	59567	0.74	ppm #	56
7) Naphthalene	9.198	128	255433	0.96	ppm	97
8) Hexachlorobutadiene	9.492	225	46211	0.70	ppm	88
9) 2-Methylnaphthalene	10.559	142	85523	0.74	ppm	100
10) Hexachlorocyclopentadiene	10.917	237	5367	0.27	ppm	97
13) Acenaphthylene	12.303	152	131625	0.79	ppm	87
14) Acenaphthene	12.658	153	82968	0.78	ppm	74
15) Dibenzofuran	13.035	168	137082	0.86	ppm	71
16) Fluorene	13.704	166	195408	1.01	ppm	90
18) Hexachlorobenzene	14.810	284	57908	0.76	ppm	95
19) Pentachlorophenol	15.243	266	157369	5.07	ppm	93
20) Phenanthrene	15.598	178	913584	3.50	ppm	91
21) Anthracene	15.706	178	376766	1.53	ppm	97
23) Fluoranthene	17.873	202	536920	1.63	ppm	94
24) Pyrene	18.250	202	649709	2.00	ppm	87
26) Benzo[a]anthracene	20.340	228	306056	1.02	ppm	96
27) Chrysene	20.396	228	254359	0.86	ppm	86
29) Benzo[b]fluoranthene	22.009	252	234267	0.75	ppm	97
30) Benzo[k]fluoranthene	22.036	252	208154	0.80	ppm	93
31) Benzo[a]pyrene	22.450	252	196256	0.76	ppm	98
32) Indeno[1,2,3-cd]pyrene	23.978	276	239101	0.74	ppm	97
33) Dibenz[a,h]anthracene	24.005	278	176906	0.68	ppm	74
34) Benzo[g,h,i]perylene	24.350	276	202461	0.74	ppm	100
36) 1,4-Dioxane	2.455	88	14303	0.47	ppm	96
39) 4,6-dinitro-2-methylph...	13.895	198	91769	4.62	ppm	99
40) 1,2-Diphenylhydrazine	14.062	77	173651	1.01	ppm	95

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2912\
Data File : 4m65206.D
Acq On : 10 May 2016 2:55 pm
Operator : linseyk
Sample : op93478a-ms
Misc : op93478a,e4m2912,32.3
ALS Vial : 5 Sample Multiplier: 1

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

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) n-nitrosodiphenylamine	14.014	169	109340	0.86	ppm	89

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

7.4.7

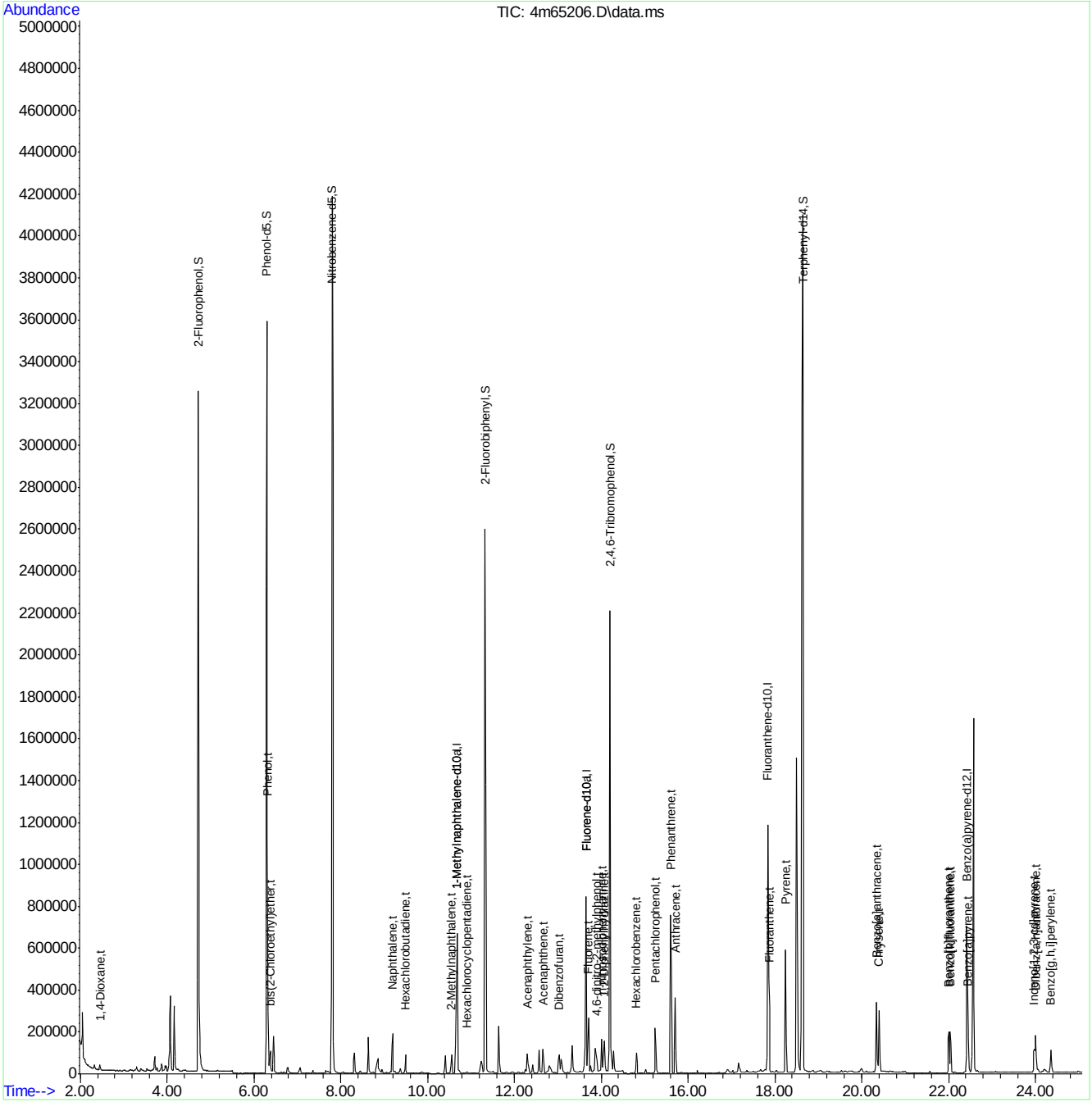
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2912\
Data File : 4m65206.D
Acq On : 10 May 2016 2:55 pm
Operator : linseyk
Sample : op93478a-ms
Misc : op93478a,e4m2912,32.3
ALS Vial : 5 Sample Multiplier: 1

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



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2912\
Data File : 4m65207a.D
Acq On : 10 May 2016 5:40 pm
Operator : linseyk
Sample : op93478a-msd
Misc : op93478a,e4m2912,32.3
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 11 11:19:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Fri May 06 13:08:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.678	152	607814	4.00	ppm	-0.02
12) Fluorene-d10	13.656	176	949306	4.00	ppm	-0.02
22) Fluoranthene-d10	17.836	212	1377618	4.00	ppm	-0.03
28) Benzo(a)pyrene-d12	22.436	264	1064820	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.678	152	607814	4.00	ppm	-0.02
38) Fluorene-d10a	13.656	176	949306	4.00	ppm	-0.02
System Monitoring Compounds						
2) 2-Fluorophenol	4.735	112	2653316	33.34	ppm	0.01
Spiked Amount 50.000	Range 11 - 58		Recovery	=	66.68%#	
3) Phenol-d5	6.315	99	4503768	33.65	ppm	0.00
Spiked Amount 50.000			Recovery	=	67.30%	
6) Nitrobenzene-d5	7.821	82	4382080	36.51	ppm	-0.02
Spiked Amount 50.000			Recovery	=	73.02%	
11) 2-Fluorobiphenyl	11.346	172	6423930	36.62	ppm	-0.02
Spiked Amount 50.000			Recovery	=	73.24%	
17) 2,4,6-Tribromophenol	14.205	330	1898139	37.49	ppm	-0.02
Spiked Amount 50.000			Recovery	=	74.98%	
25) Terphenyl-d14	18.645	244	8762181	47.08	ppm	-0.03
Spiked Amount 50.000			Recovery	=	94.16%	
Target Compounds						Qvalue
4) Phenol	6.328	94	520024	3.79	ppm	92
5) bis(2-Chloroethyl)ether	6.383	93	74054	0.72	ppm #	68
7) Naphthalene	9.198	128	327364	0.96	ppm	98
8) Hexachlorobutadiene	9.492	225	56853	0.67	ppm	83
9) 2-Methylnaphthalene	10.559	142	122891	0.83	ppm	96
10) Hexachlorocyclopentadiene	10.917	237	6483	0.26	ppm	99
13) Acenaphthylene	12.325	152	158066	0.73	ppm	98
14) Acenaphthene	12.680	153	105126	0.75	ppm	90
15) Dibenzofuran	13.035	168	187956	0.90	ppm	72
16) Fluorene	13.704	166	235913	0.93	ppm	97
18) Hexachlorobenzene	14.810	284	78438	0.79	ppm	98
19) Pentachlorophenol	15.258	266	210377	5.18	ppm	86
20) Phenanthrene	15.614	178	350435	1.03	ppm	100
21) Anthracene	15.707	178	288086	0.89	ppm	100
23) Fluoranthene	17.874	202	364337	0.98	ppm	99
24) Pyrene	18.250	202	369909	1.01	ppm	83
26) Benzo[a]anthracene	20.340	228	308226	0.91	ppm	97
27) Chrysene	20.396	228	287895	0.87	ppm	81
29) Benzo[b]fluoranthene	22.009	252	294845	0.77	ppm	97
30) Benzo[k]fluoranthene	22.050	252	292957	0.91	ppm	99
31) Benzo[a]pyrene	22.463	252	265700	0.84	ppm	92
32) Indeno[1,2,3-cd]pyrene	23.978	276	323025	0.81	ppm	97
33) Dibenz[a,h]anthracene	24.005	278	258707	0.81	ppm	89
34) Benzo[g,h,i]perylene	24.363	276	274959	0.82	ppm	100
36) 1,4-Dioxane	2.455	88	23921	0.61	ppm #	1
39) 4,6-dinitro-2-methylph...	13.895	198	148960	5.52	ppm	97
40) 1,2-Diphenylhydrazine	14.062	77	213676	0.95	ppm	100

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2912\
Data File : 4m65207a.D
Acq On : 10 May 2016 5:40 pm
Operator : linseyk
Sample : op93478a-msd
Misc : op93478a,e4m2912,32.3
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 11 11:19:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Fri May 06 13:08:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) n-nitrosodiphenylamine	14.014	169	143510	0.86	ppm	97

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

7.4.8

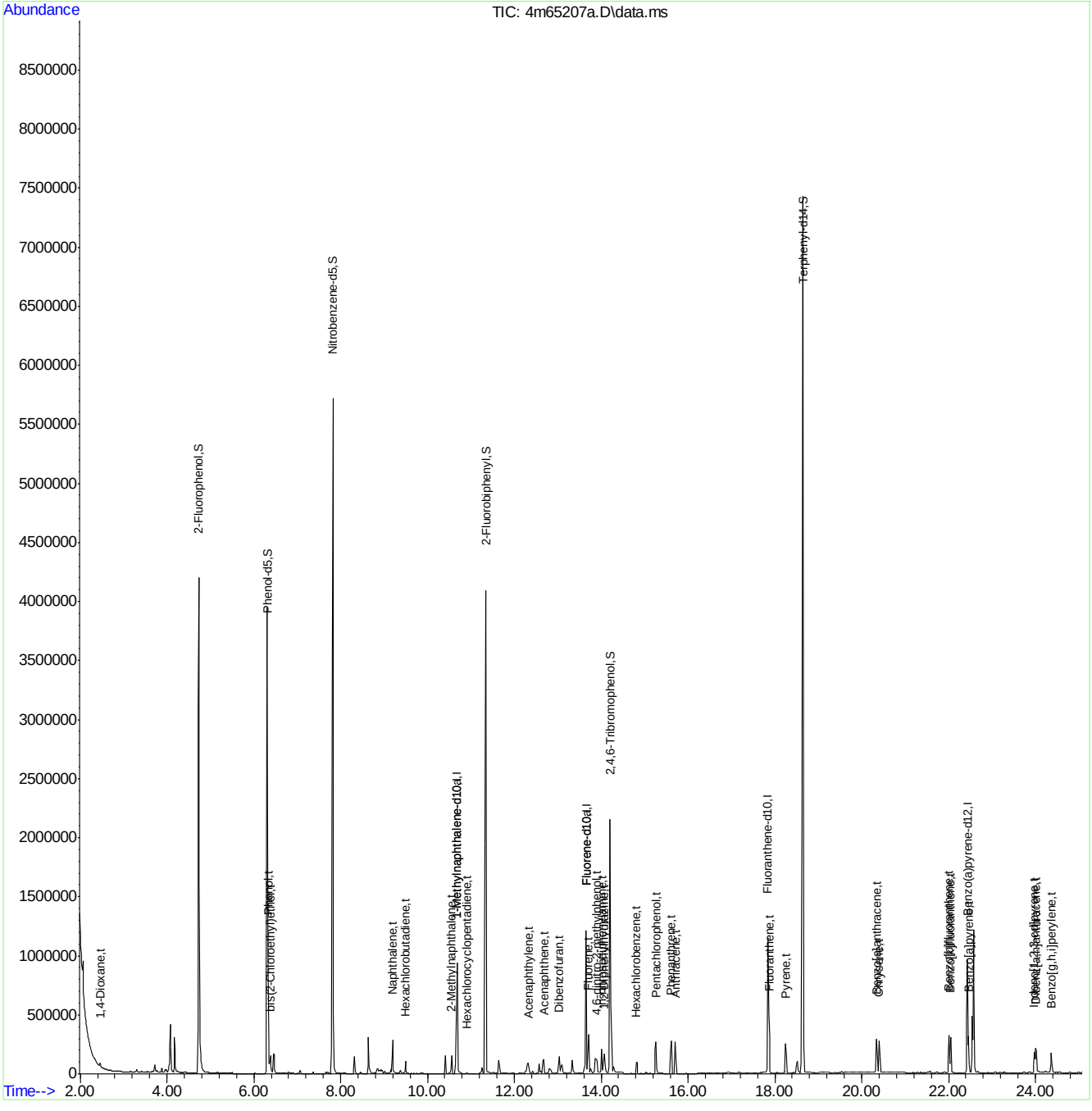
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2912\
Data File : 4m65207a.D
Acq On : 10 May 2016 5:40 pm
Operator : linseyk
Sample : op93478a-msd
Misc : op93478a,e4m2912,32.3
ALS Vial : 6 Sample Multiplier: 1

Quant Time: May 11 11:19:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Fri May 06 13:08:34 2016
Response via : Initial Calibration

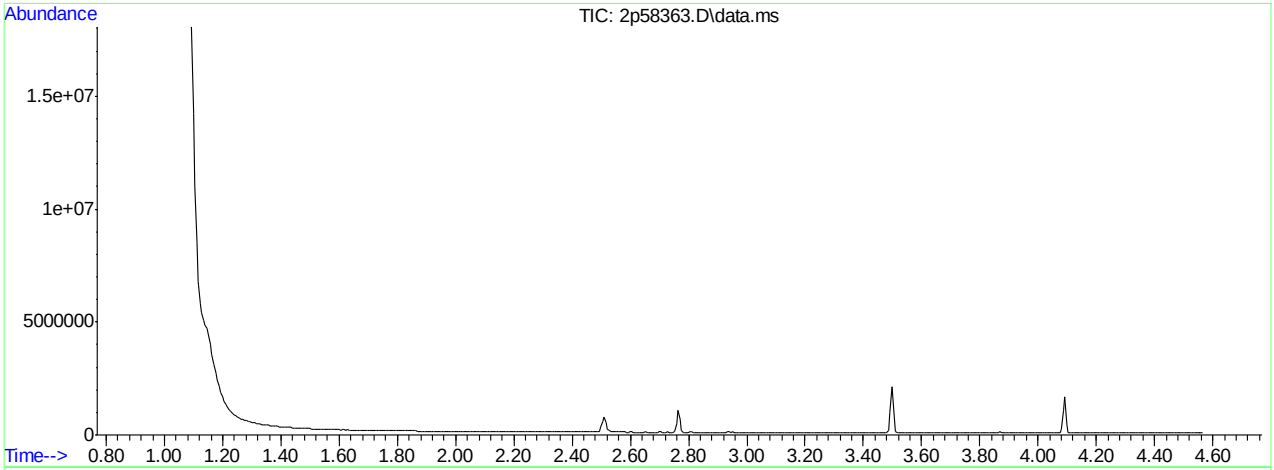


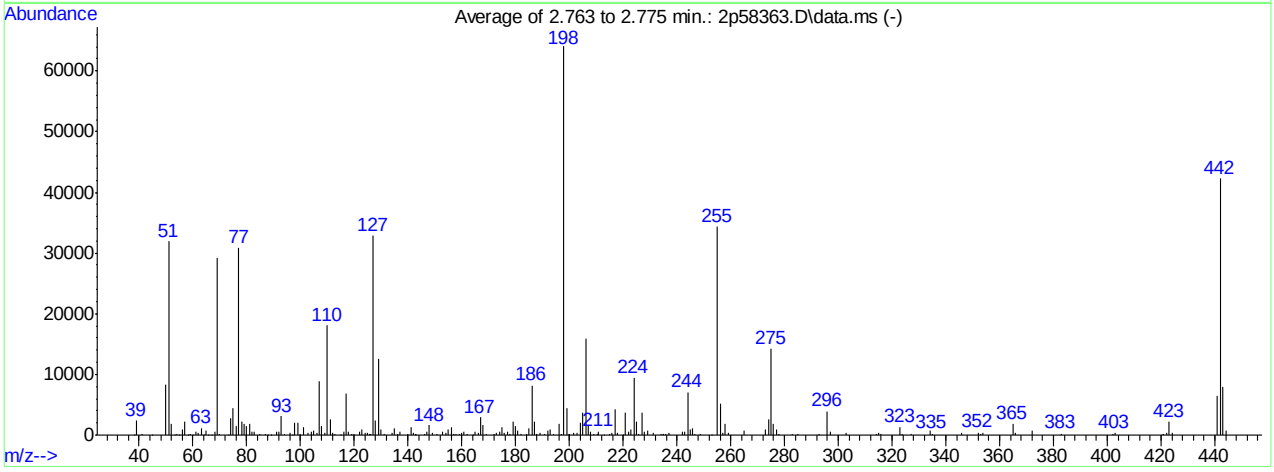
M4M2881SIM.M Wed May 11 11:19:31 2016 MANAGER Page: 3

DFTPP

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

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





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

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

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

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

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

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

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

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

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

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

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

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

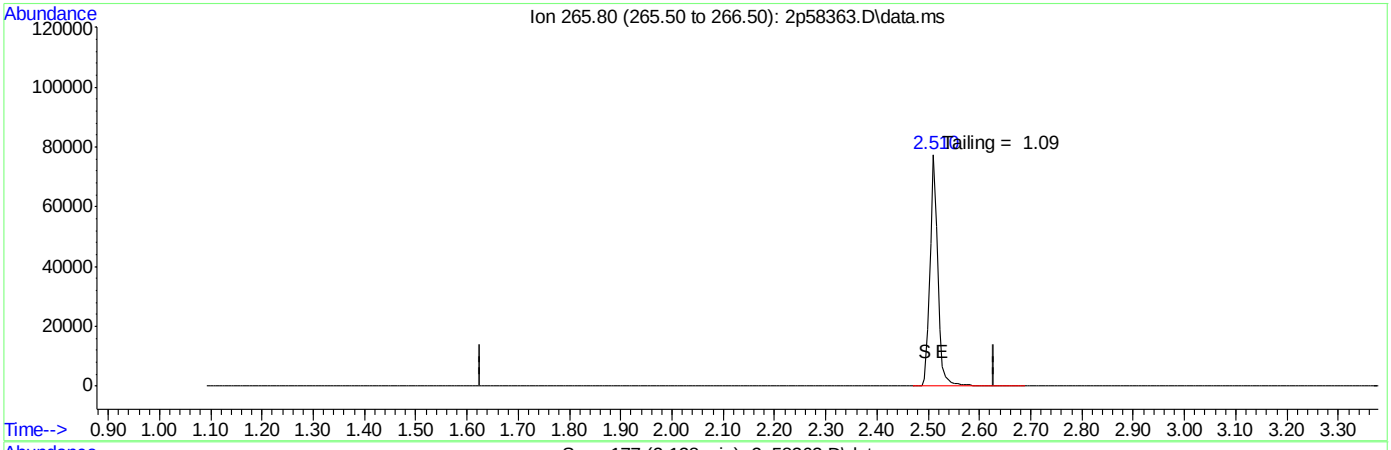
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
256.95	319	285.00	136	334.00	701	402.90	323
258.00	1945	292.90	211	334.90	197	420.80	103
258.95	306	296.00	3958	345.90	324	421.00	192
264.90	760	296.90	580	352.00	433	421.90	320

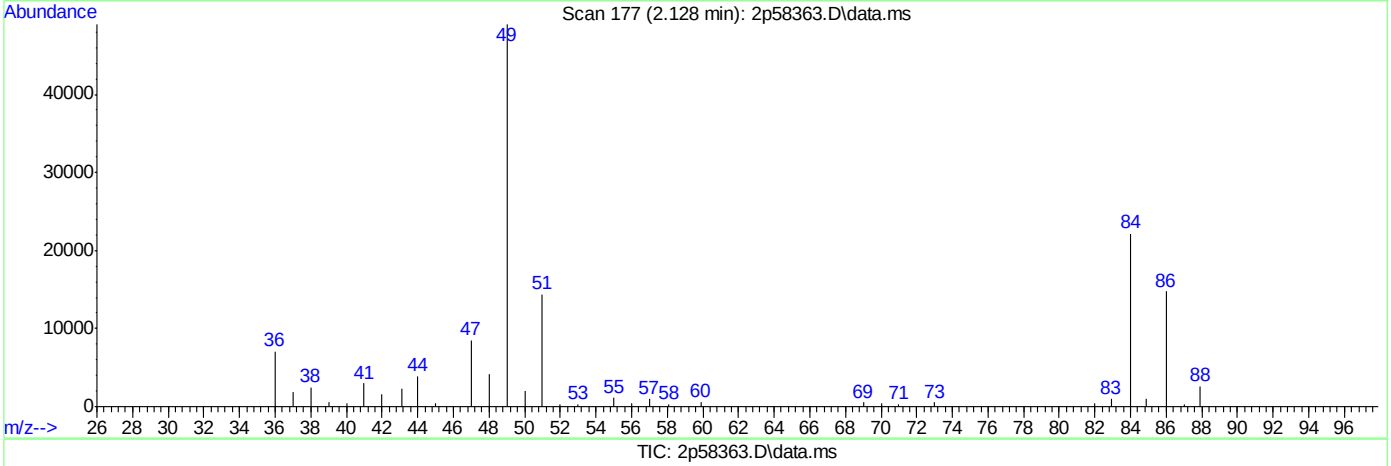
272.95	937	302.95	444	353.00	238	423.00	2169
274.00	2601	313.95	200	353.90	339	424.00	454
275.00	14145	314.85	366	364.95	1814	441.00	6462
276.00	1828	316.00	134	365.95	297	442.00	42236
277.00	974	323.00	1326	371.95	677	443.00	7923
277.90	189	323.90	205	382.85	223	444.00	714
283.00	152	326.90	245	401.90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

Quantitation Report (Qedit)

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

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





TIC: 2p58363.D\data.ms

(1) Pentacholorphenol

2.128min (-2.128) 0.00ppb

response 0

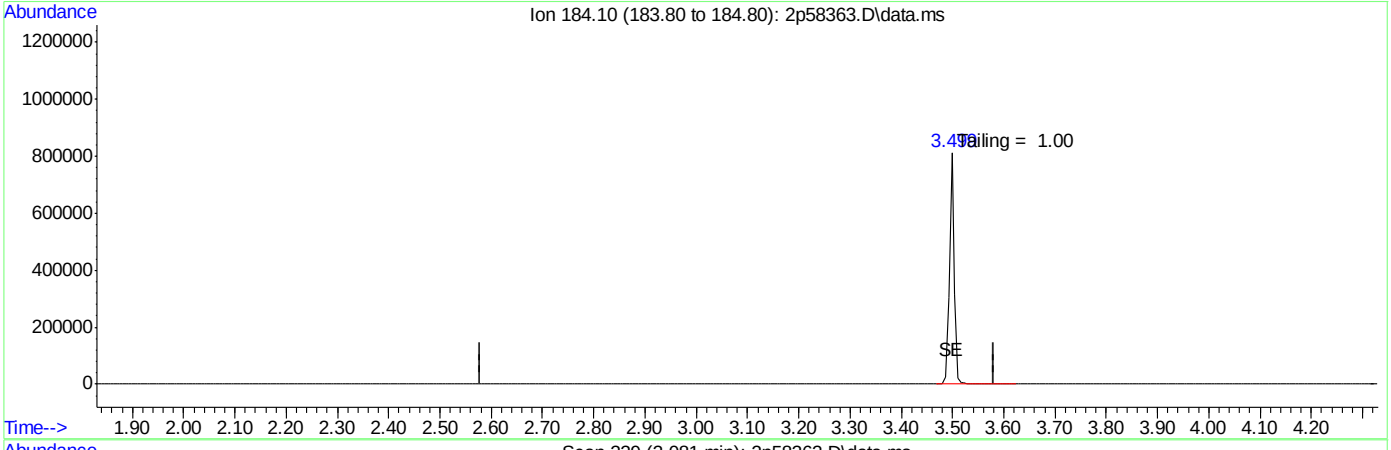
Ion	Exp%	Act%
265.80	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

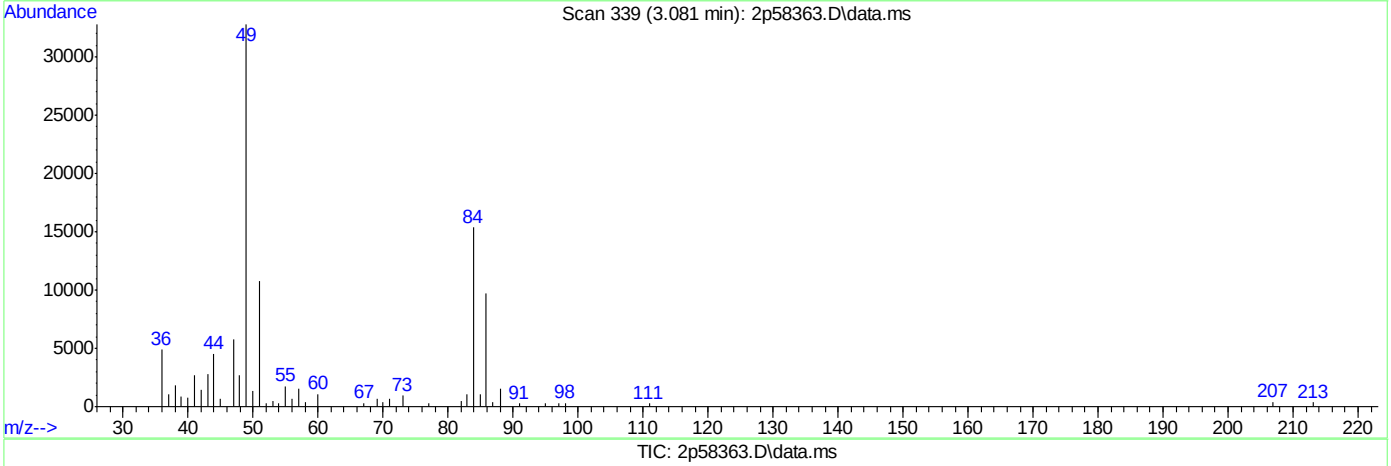
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

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

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





TIC: 2p58363.D\data.ms

(2) Benzidine

3.081min (-3.081) 0.00ppb

response 0

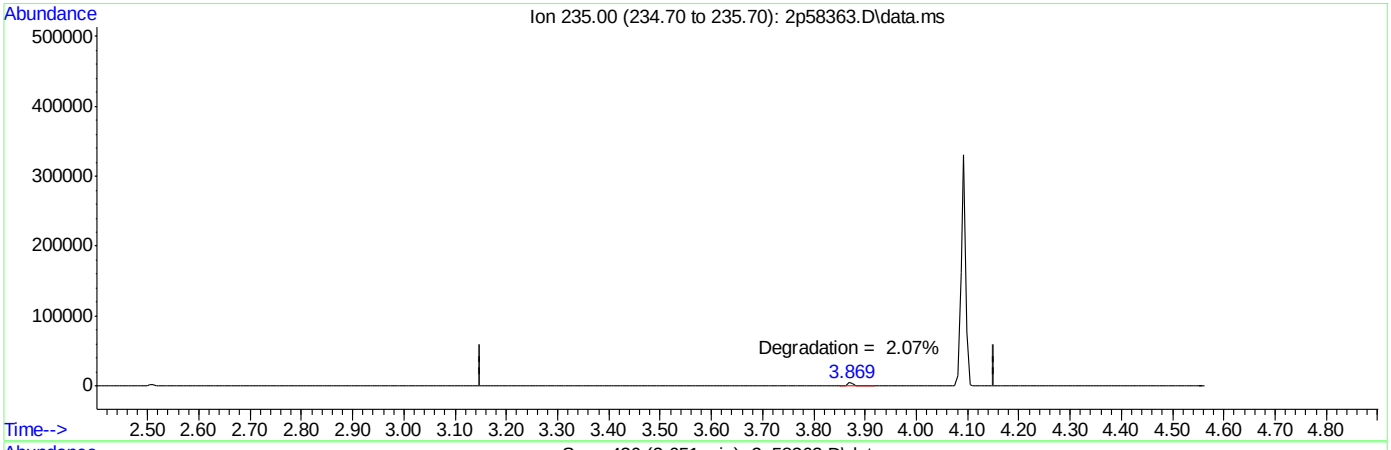
Ion	Exp%	Act%
184.10	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

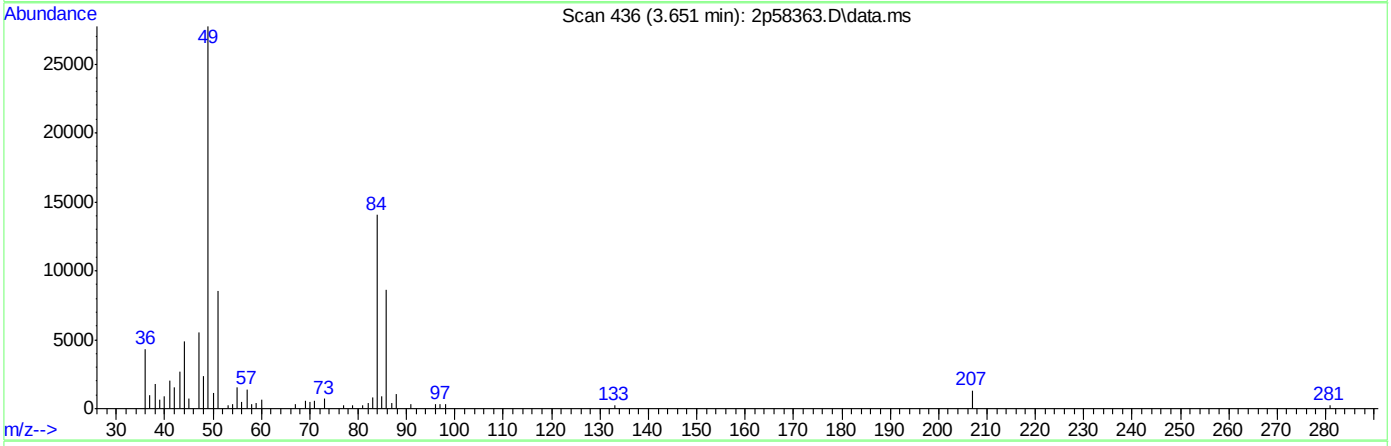
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

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

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





TIC: 2p58363.D\data.ms

(3) PP-DDT

3.651min (-3.651) 0.00ppb

response 0

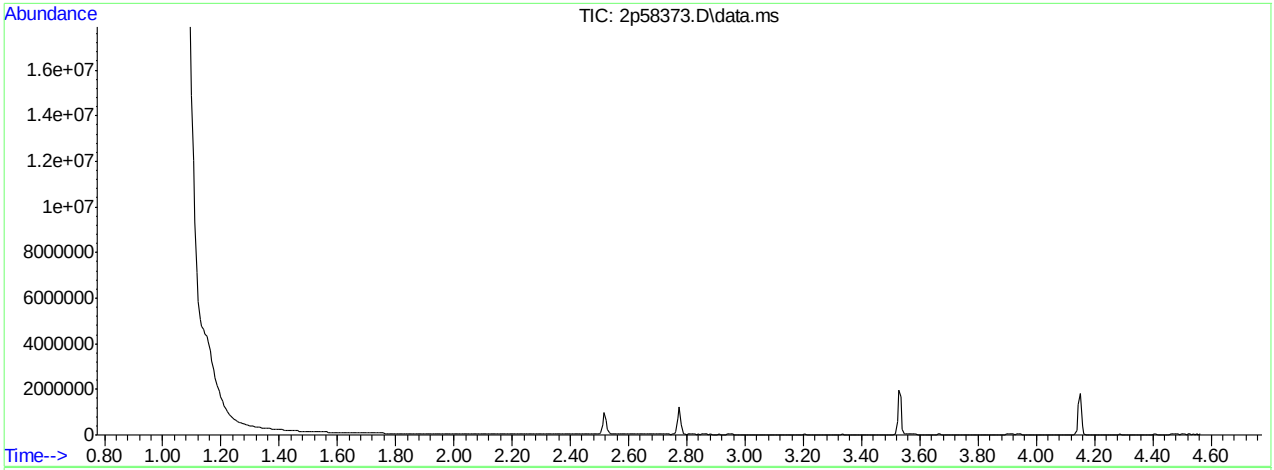
Ion	Exp%	Act%
235.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

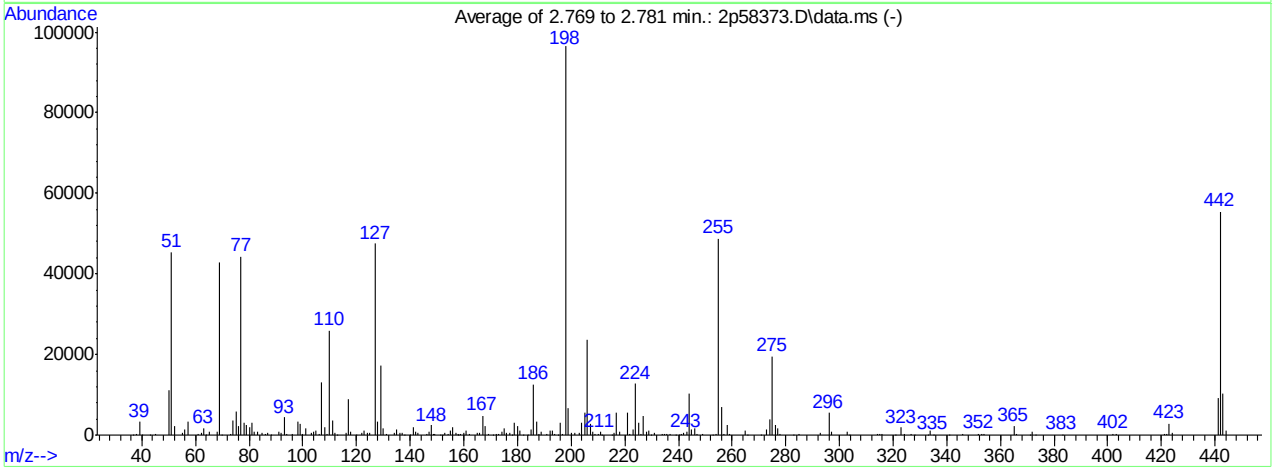
SGS ACCUTEST JC19023

DFTPP

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

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





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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

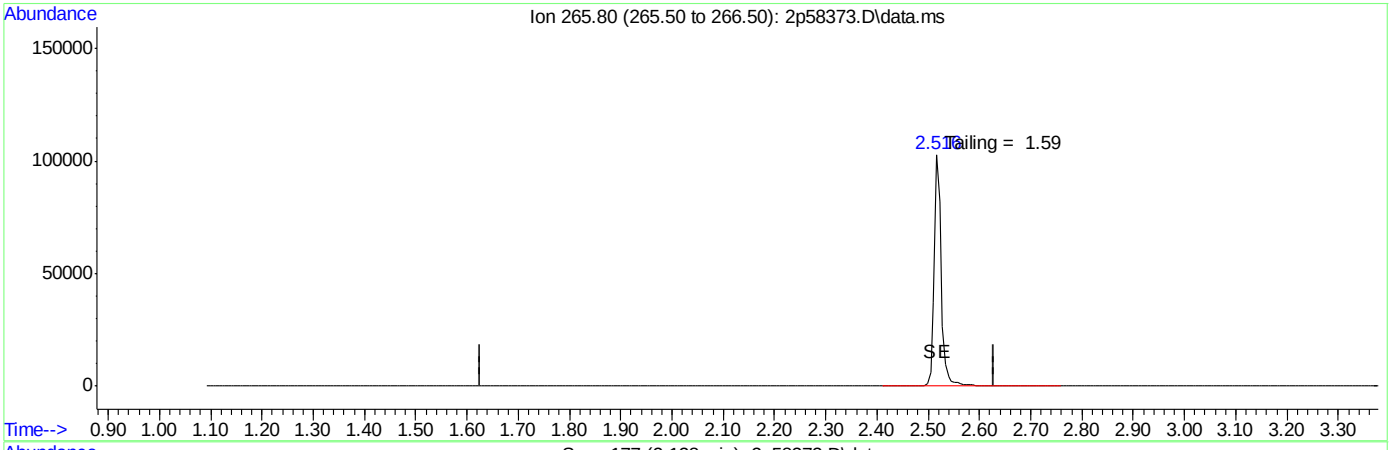
7.5.2

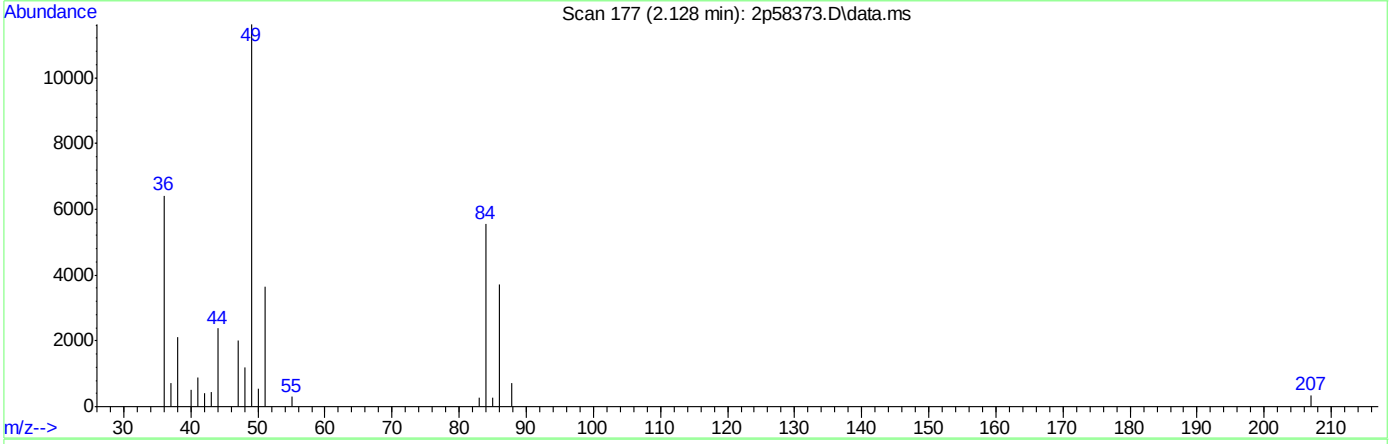
7

Quantitation Report (Qedit)

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

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





TIC: 2p58373.D\data.ms

(1) Pentacholorphenol

2.128min (-2.128) 0.00ppb

response 0

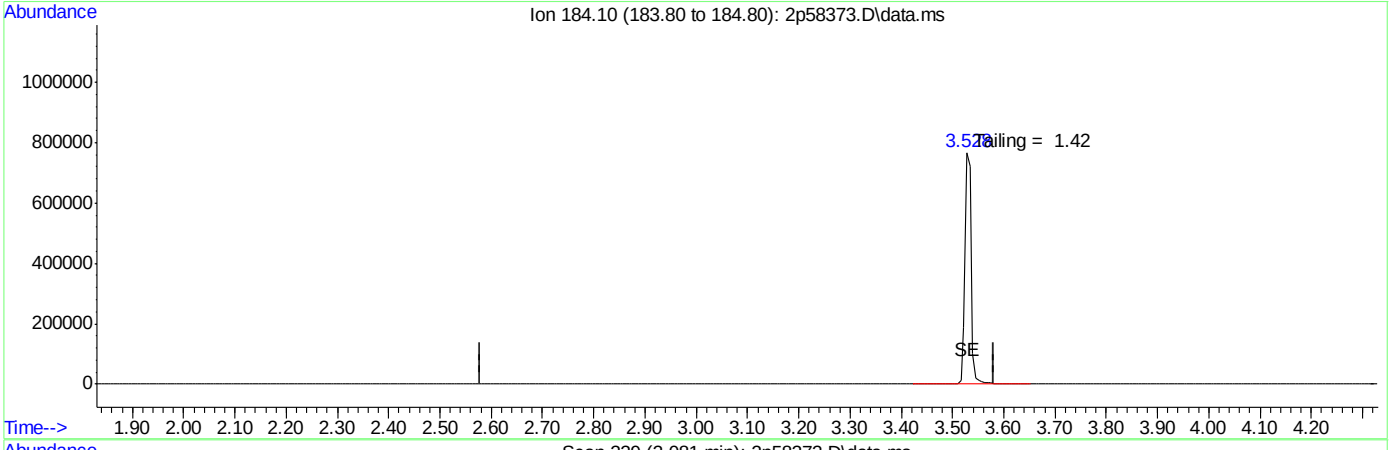
Ion	Exp%	Act%
265.80	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

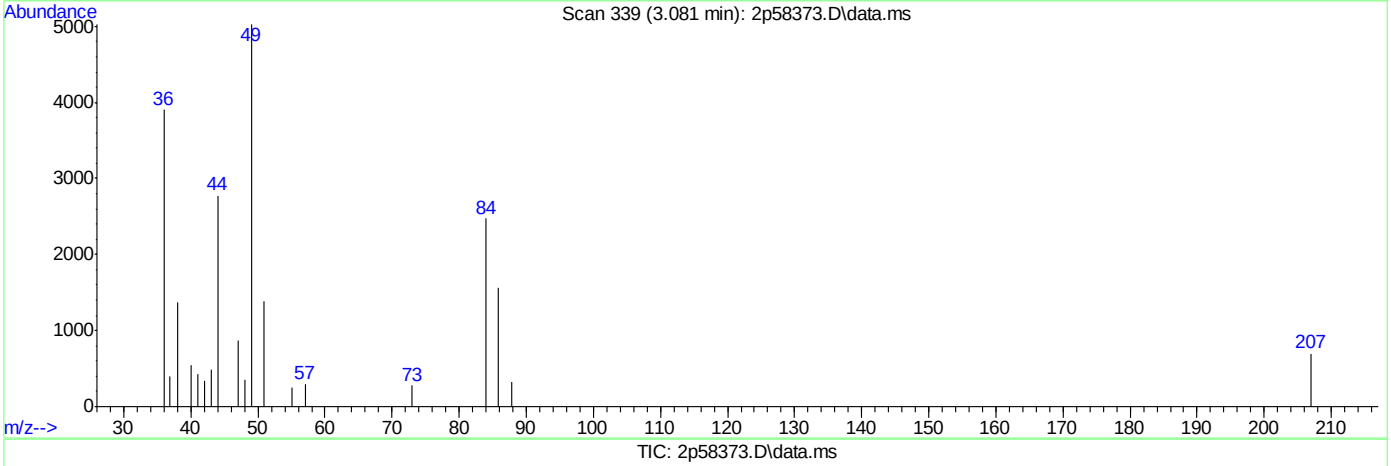
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

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

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





TIC: 2p58373.D\data.ms

(2) Benzidine

3.081min (-3.081) 0.00ppb

response 0

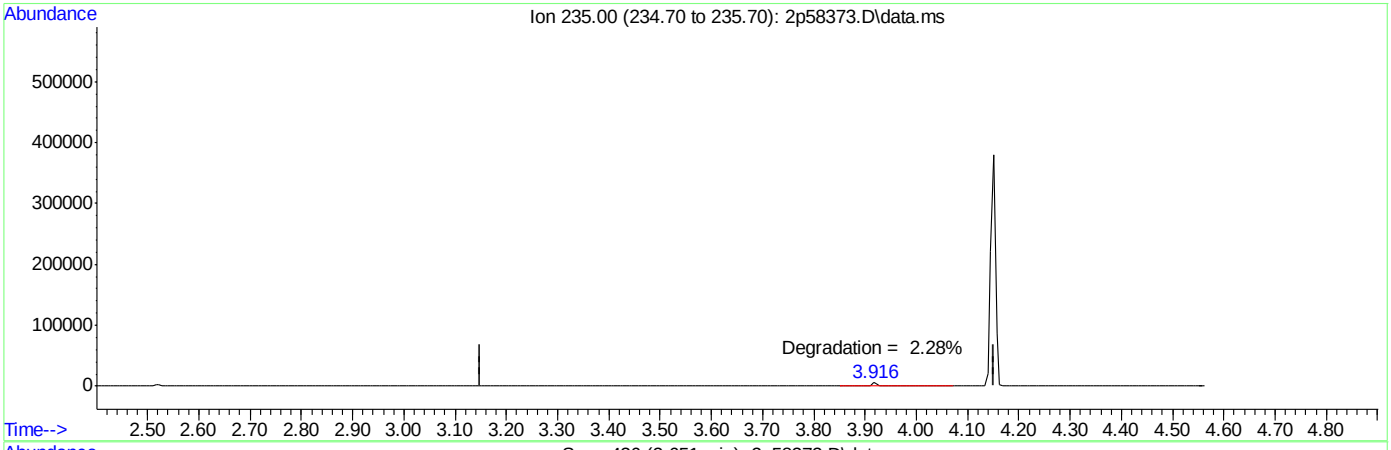
Ion	Exp%	Act%
184.10	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

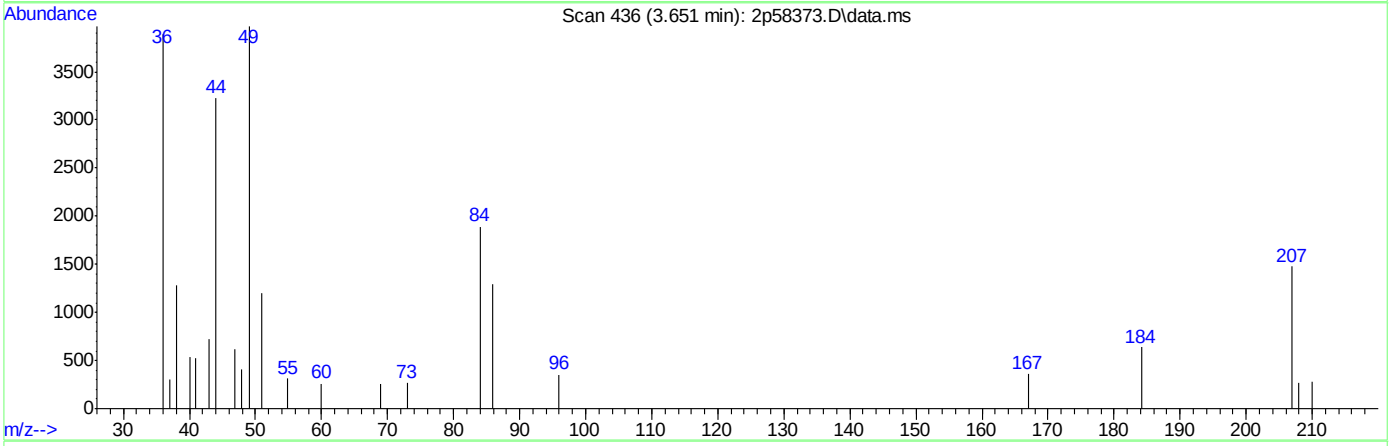
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

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

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





TIC: 2p58373.D\data.ms

(3) PP-DDT

3.651min (-3.651) 0.00ppb

response 0

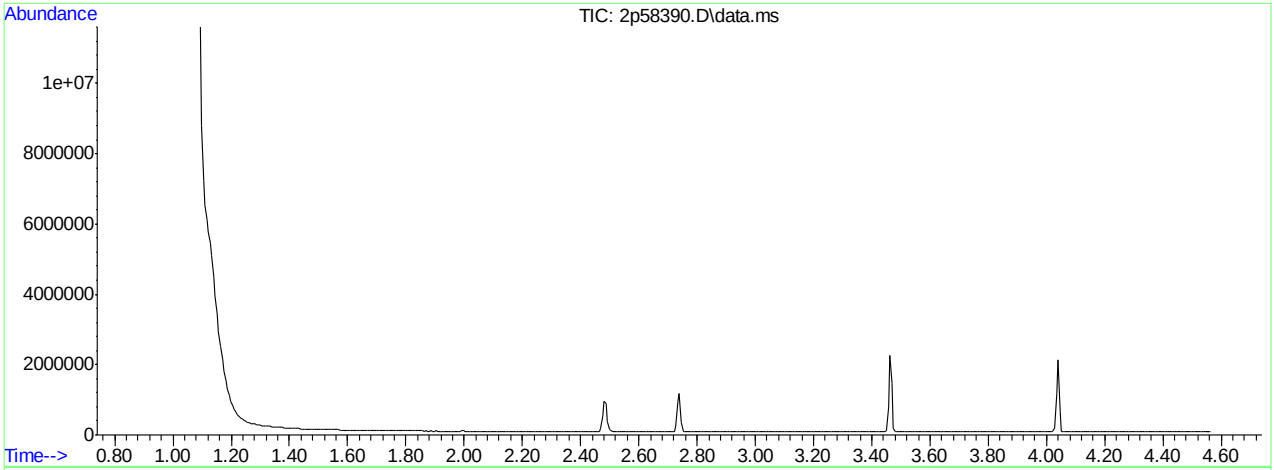
Ion	Exp%	Act%
235.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

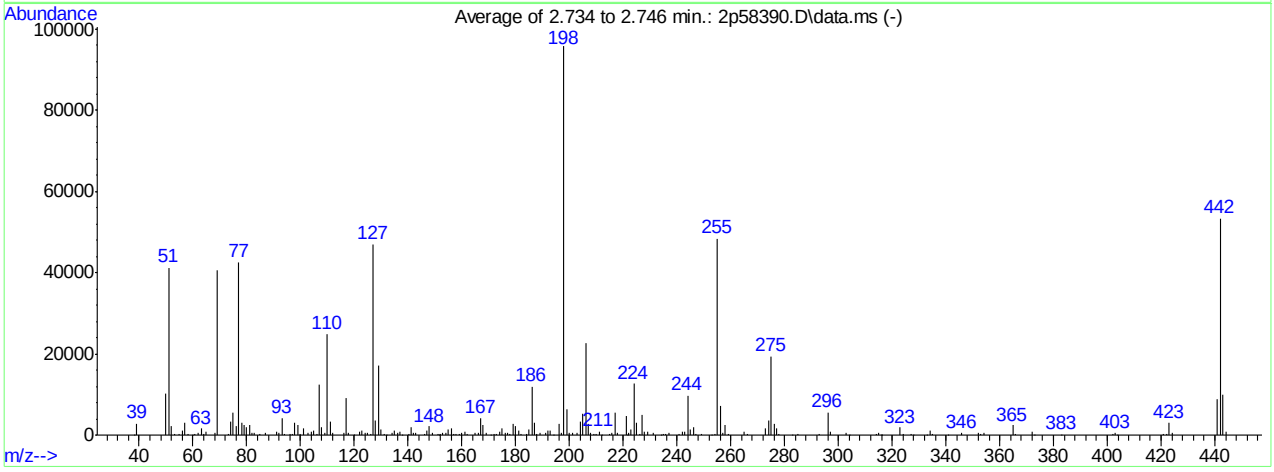
SGS ACCUTEST JC19023

DFTPP

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

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





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

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

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

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

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

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

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

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

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

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

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

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

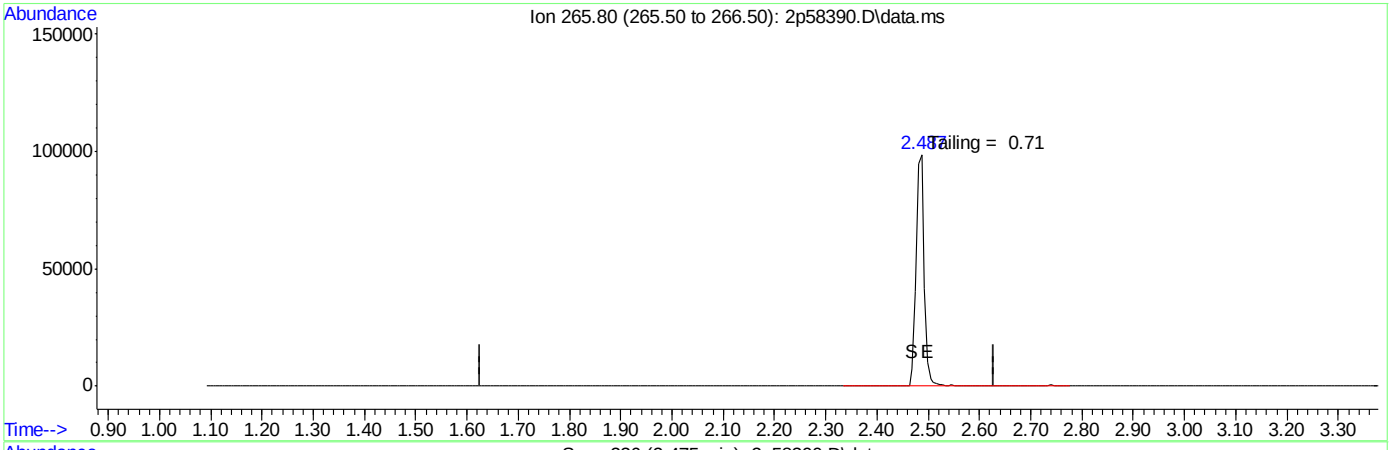
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
278.00	156	316.10	88	353.00	298	421.90	277
282.80	125	323.00	1828	354.00	589	423.00	2987
284.95	269	324.00	332	364.95	2357	423.95	635
293.00	230	326.90	165	366.00	172	441.00	8730

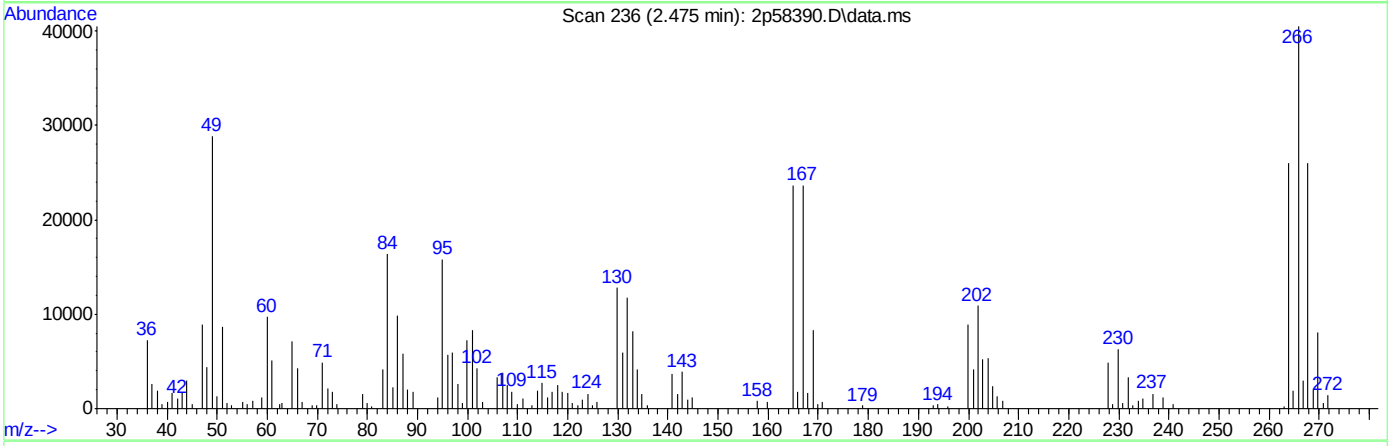
296.00	5657	327.90	101	372.00	931	442.00	53344
297.00	739	333.00	86	373.00	134	443.00	9817
302.95	688	334.00	1031	382.90	147	443.95	909
303.90	142	335.00	304	402.00	294		
314.00	229	340.90	105	402.95	530		
314.90	524	345.90	486	403.90	93		
315.90	126	351.95	478	420.90	361		

Quantitation Report (Qedit)

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

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





TIC: 2p58390.D\data.ms

(1) Pentacholorphenol

2.128min (-2.128) 0.00ppb

response 0

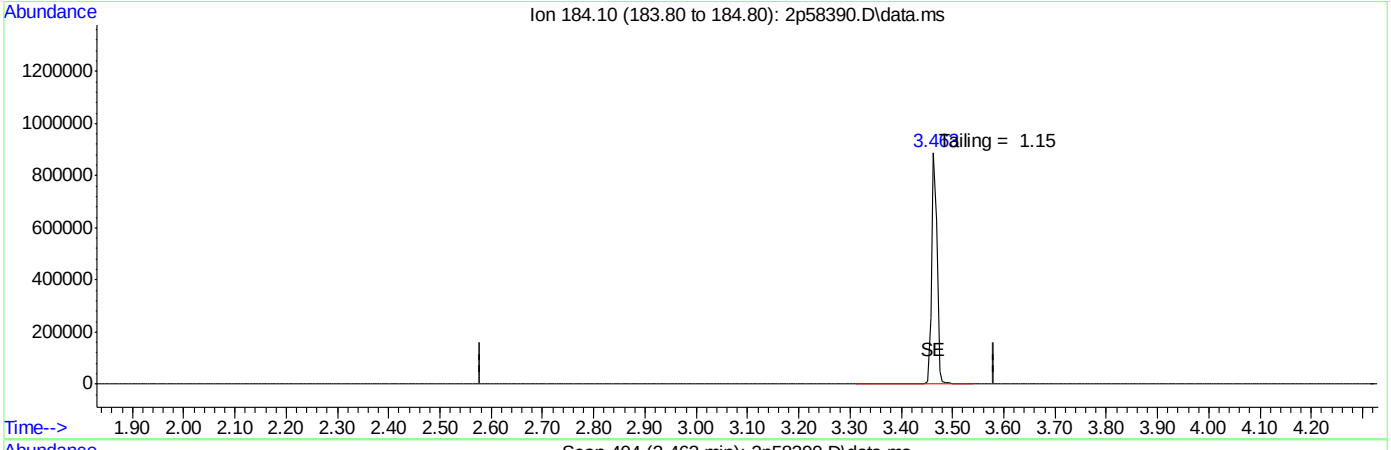
Ion	Exp%	Act%
265.80	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

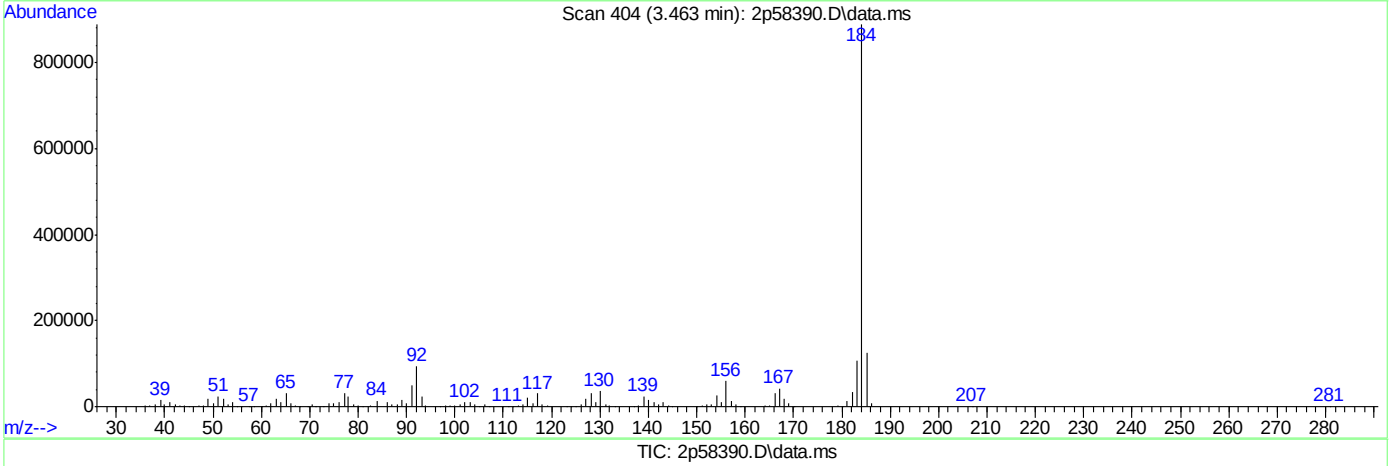
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

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

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





TIC: 2p58390.D\data.ms

(2) Benzidine

3.081min (-3.081) 0.00ppb

response 0

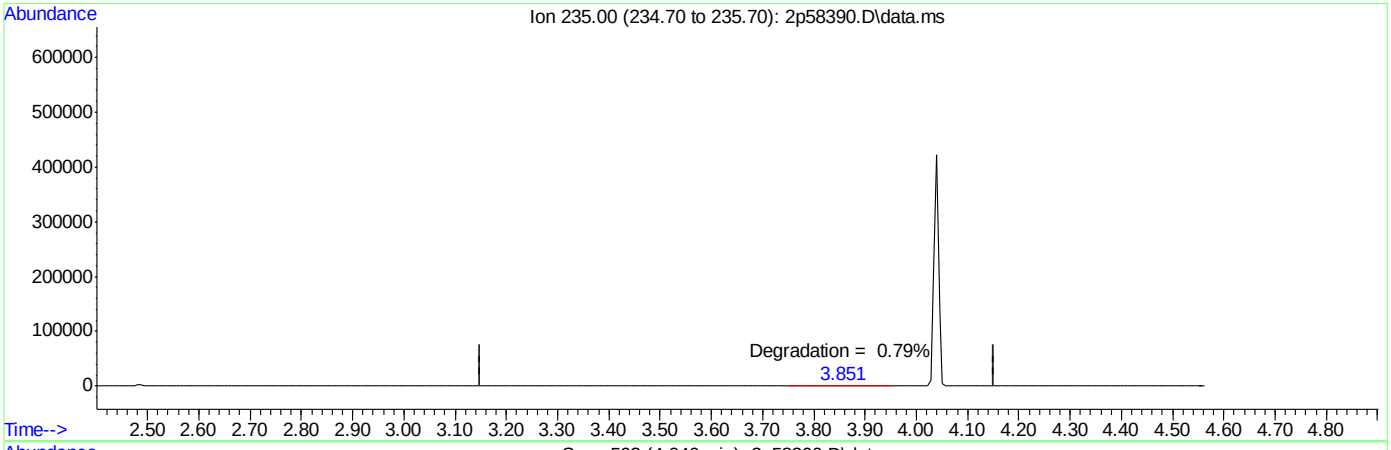
Ion	Exp%	Act%
184.10	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

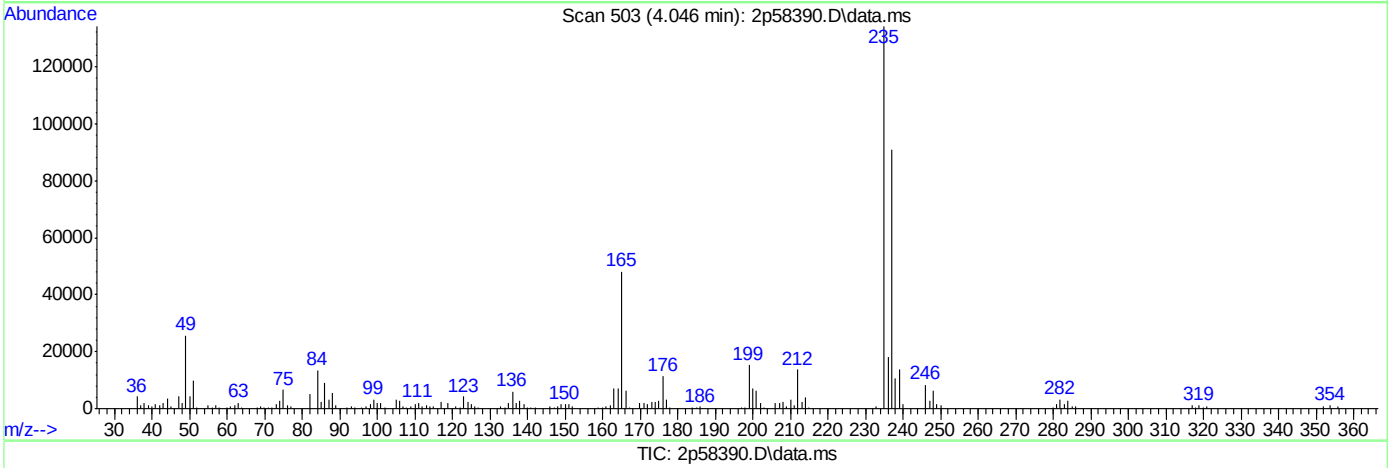
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

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

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





(3) PP-DDT

3.651min (-3.651) 0.00ppb

response 0

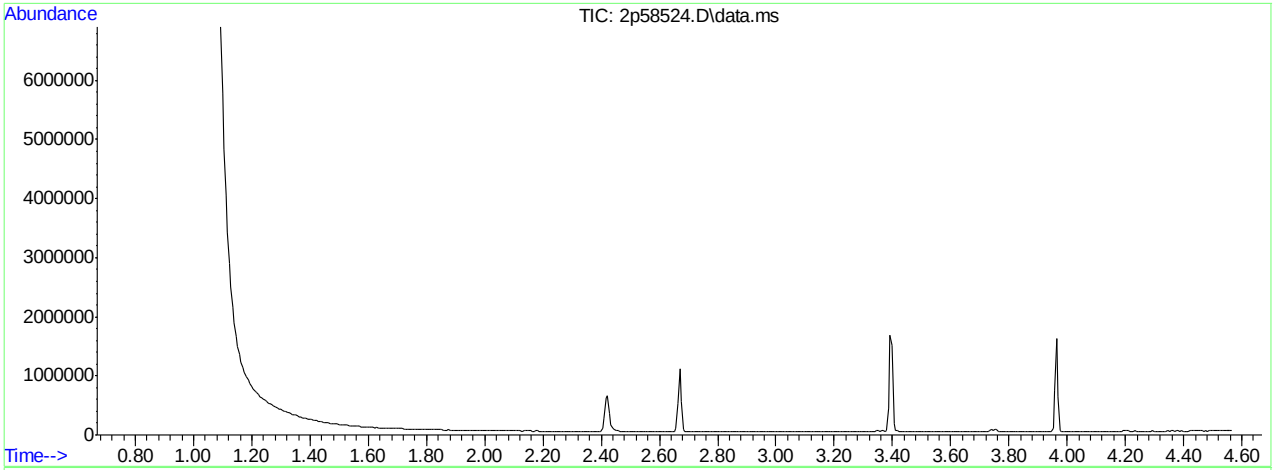
Ion	Exp%	Act%
235.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

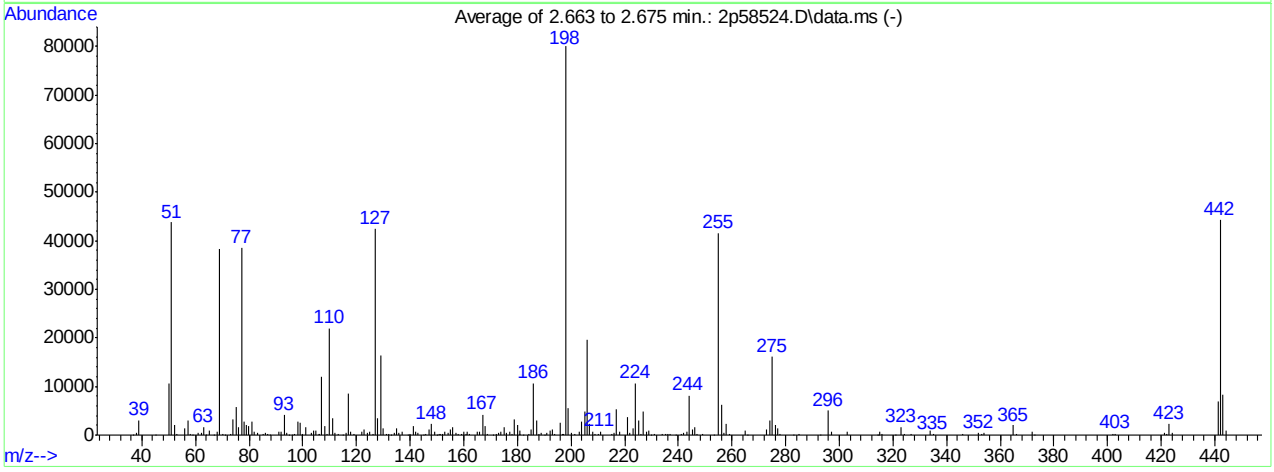
SGS ACCUTEST JC19023

DFTPP

Data File : C:\msdchem\1\DATA\2P2557\2p58524.D Vial: 1
Acq On : 25 Apr 2016 10:05 am Operator: robertl1
Sample : DFTPP Inst : MS2P
Misc : op92038,e2p2557 Multiplr: 1.00
MS Integration Params: events.e

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





AutoFind: Scans 268, 269, 270; Background Corrected with Scan 265

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	54.7	43762	PASS
68	69	0.00	2	1.8	674	PASS
69	198	0.00	100	47.9	38345	PASS
70	69	0.00	2	0.7	253	PASS
127	198	40	60	53.0	42416	PASS
197	198	0.00	1	0.4	310	PASS
198	198	100	100	100.0	80032	PASS
199	198	5	9	7.0	5598	PASS
275	198	10	30	20.2	16142	PASS
365	198	1	100	2.5	2008	PASS
441	443	0.01	100	83.3	6849	PASS
442	198	40	100	55.3	44268	PASS
443	442	17	23	18.6	8219	PASS

2p58524.D dftpp2p.M Mon Apr 25 17:39:08 2016 RPT1

Average of 2.663 to 2.675 min.: 2p58524.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.90	28	58.95	8	73.00	267	85.00	278
38.00	392	61.00	537	74.00	3211	86.00	538
39.00	3007	62.00	526	75.00	5795	87.00	214
45.00	22	63.00	1639	76.00	1651	87.90	103
50.00	10725	64.00	91	77.05	38480	91.00	712
51.05	43762	65.05	982	78.00	2816	92.00	728
52.00	2117	66.95	63	79.00	2198	93.00	4086
52.95	170	68.00	674	79.95	1853	94.00	441
56.00	1410	69.00	38345	81.00	2819	95.00	74
57.00	2921	70.00	253	82.00	609	96.00	104
58.00	220	71.05	8	82.95	555	97.00	143

Average of 2.663 to 2.675 min.: 2p58524.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
98.00	2707	109.00	176	123.00	1131	134.00	451
99.00	2483	110.00	21974	124.00	578	135.00	1427
99.95	225	111.00	3542	124.95	633	135.95	587
101.00	1590	111.95	550	126.00	256	137.00	683
102.95	545	113.05	183	127.00	42416	138.90	97
104.00	881	115.00	85	128.00	3362	140.00	154
105.00	973	116.00	540	129.00	16463	141.00	1874
105.90	141	117.00	8436	130.00	1341	142.00	716
106.10	169	117.95	658	130.95	344	142.95	505
107.00	12005	119.00	188	131.95	209	144.90	113
108.00	1954	121.95	731	133.00	92	145.95	294

Average of 2.663 to 2.675 min.: 2p58524.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
147.00	1111	157.05	388	168.90	270	180.90	266
147.95	2270	157.80	192	170.90	102	181.05	836
148.95	597	158.95	256	172.00	184	182.00	89
149.90	109	159.95	655	173.00	529	184.05	247
150.95	203	160.90	248	173.95	705	185.00	1271
151.20	158	161.05	729	175.00	1613	186.00	10718
152.00	222	162.00	252	176.00	449	187.00	3048
152.95	667	164.95	792	176.95	728	188.00	310
154.00	564	166.05	659	178.00	252	189.00	532
155.00	1184	167.00	4255	178.95	3160	190.00	86
156.00	1585	168.00	1957	180.00	2123	190.95	378

Average of 2.663 to 2.675 min.: 2p58524.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
192.00	992	204.05	2851	217.95	766	231.00	343
193.05	1208	205.05	4934	220.95	3660	234.05	278
194.00	183	206.00	19643	221.90	413	235.05	257
196.00	2584	207.00	2423	223.00	1294	235.90	130
196.70	310	208.00	780	224.00	10702	237.00	312
197.00	179	208.95	251	225.00	2957	238.80	89
198.00	80032	210.15	297	226.10	131	241.00	140
199.00	5598	210.95	750	227.00	4956	242.00	550
199.95	454	215.00	144	227.95	646	243.00	611
201.45	349	215.95	481	228.95	865	244.00	8114
202.95	647	217.00	5328	229.90	83	245.05	1208

Average of 2.663 to 2.675 min.: 2p58524.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
246.00	1512	273.00	1260	303.00	601	345.95	299
246.90	241	274.00	2928	314.00	88	351.95	436
248.90	274	275.00	16142	314.80	103	353.05	342
253.20	92	276.00	2170	314.95	593	354.00	502

255.00	41600	277.00	1303	315.95	263	364.95	2008
256.00	6128	277.95	253	320.80	88	365.95	257
257.00	399	283.00	88	323.00	1620	372.00	609
257.95	2410	284.95	226	324.05	236	372.90	106
258.95	328	292.90	113	326.90	254	402.05	259
264.95	860	296.00	5041	334.00	997	402.95	344
265.90	116	297.00	673	335.00	132	421.00	377

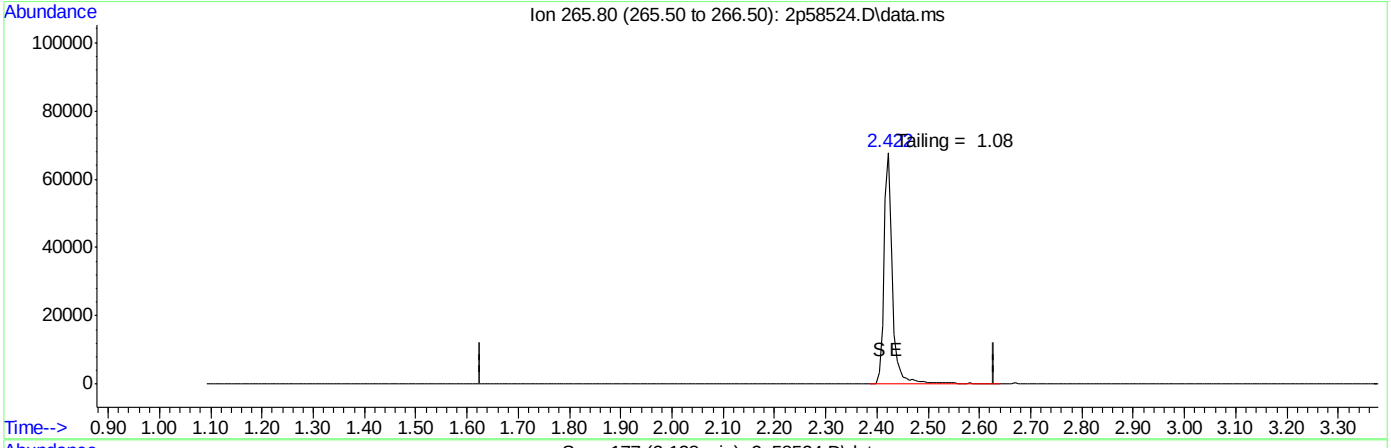
Average of 2.663 to 2.675 min.: 2p58524.D\data.ms
DFTPP
Modified:subtracted

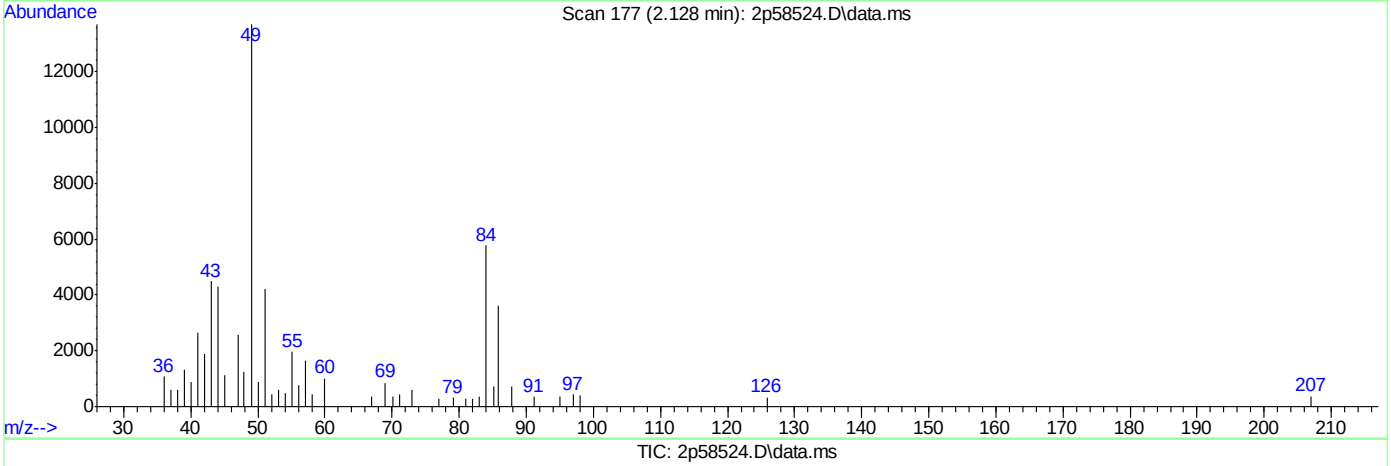
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
421.95	292						
423.00	2220						
424.00	368						
441.05	6849						
442.00	44268						
443.00	8219						
444.00	860						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P2557\
Data File : 2p58524.D
Acq On : 25 Apr 2016 10:05 am
Operator : robertl1
Sample : DFTPP
Misc : op92038,e2p2557
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 25 10:09:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M
Quant Title :
QLast Update : Tue Aug 11 08:57:54 2015
Response via : Initial Calibration





TIC: 2p58524.D\data.ms

(1) Pentacholorphenol

2.128min (-2.128) 0.00ppb

response 0

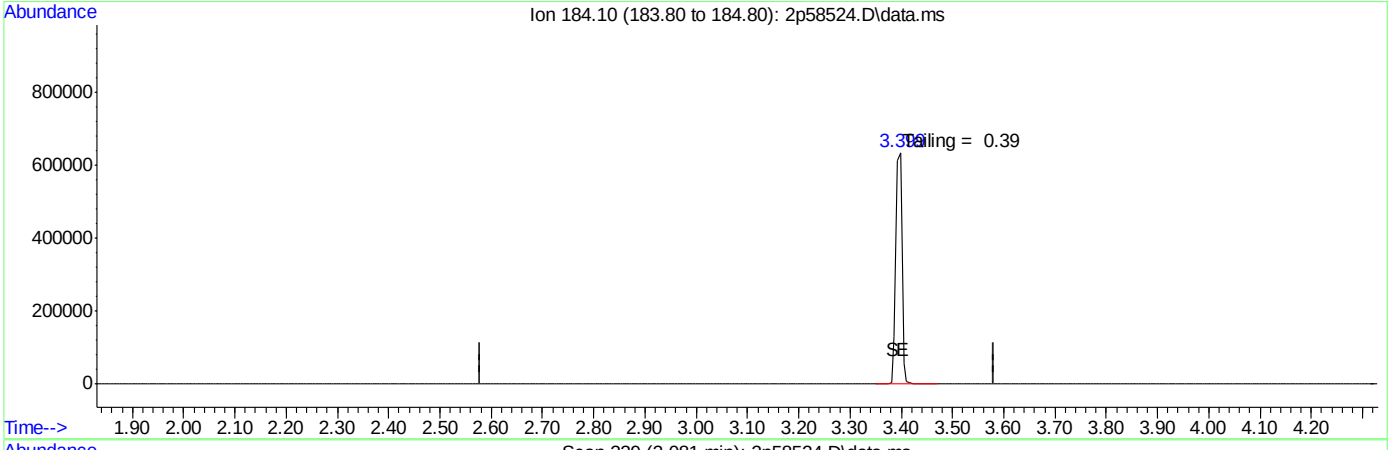
Ion	Exp%	Act%
265.80	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

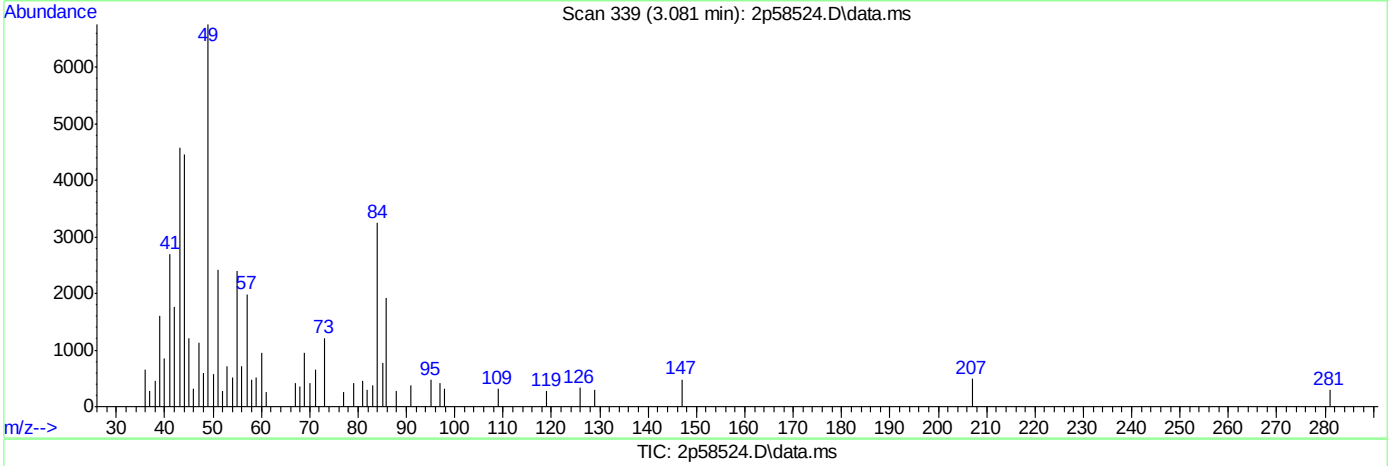
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P2557\
Data File : 2p58524.D
Acq On : 25 Apr 2016 10:05 am
Operator : robertl1
Sample : DFTPP
Misc : op92038,e2p2557
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 25 10:09:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M
Quant Title :
QLast Update : Tue Aug 11 08:57:54 2015
Response via : Initial Calibration





TIC: 2p58524.D\data.ms

(2) Benzidine

3.081min (-3.081) 0.00ppb

response 0

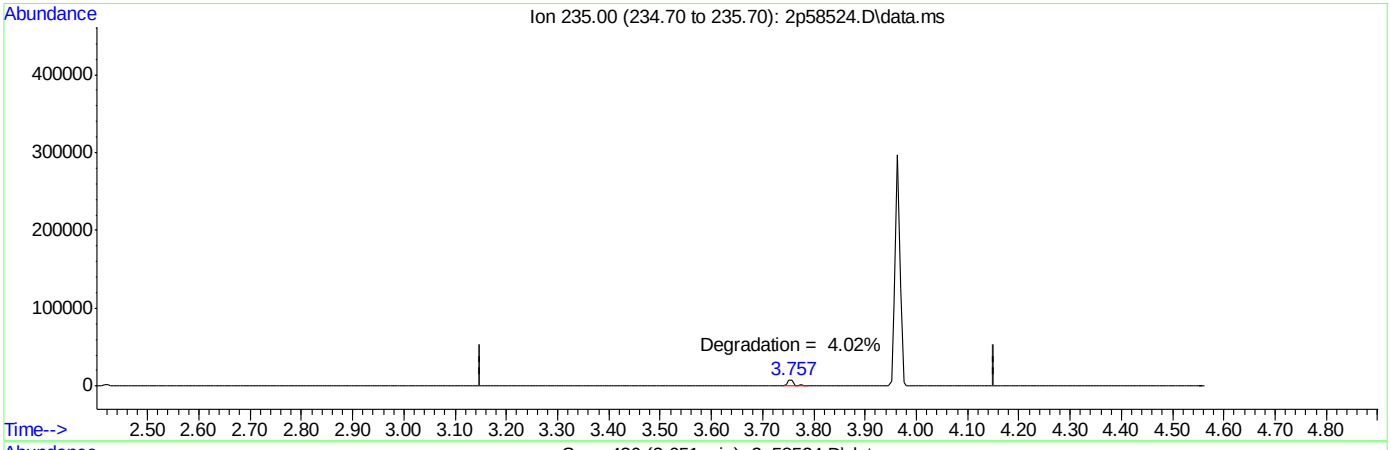
Ion	Exp%	Act%
184.10	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

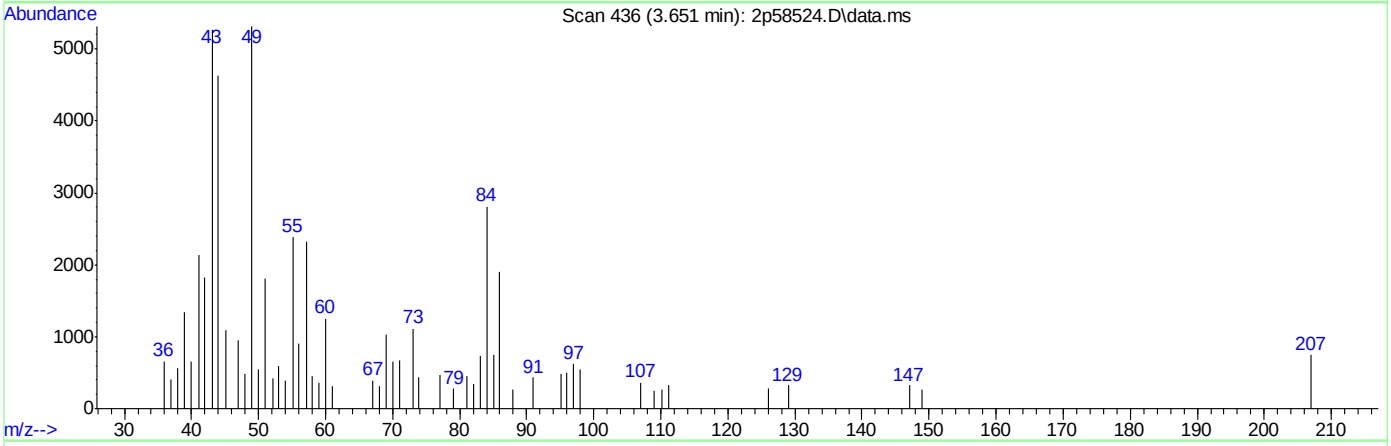
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P2557\
Data File : 2p58524.D
Acq On : 25 Apr 2016 10:05 am
Operator : robertl1
Sample : DFTPP
Misc : op92038,e2p2557
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 25 10:09:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M
Quant Title :
QLast Update : Tue Aug 11 08:57:54 2015
Response via : Initial Calibration





TIC: 2p58524.D\data.ms

(3) PP-DDT

3.651min (-3.651) 0.00ppb

response 0

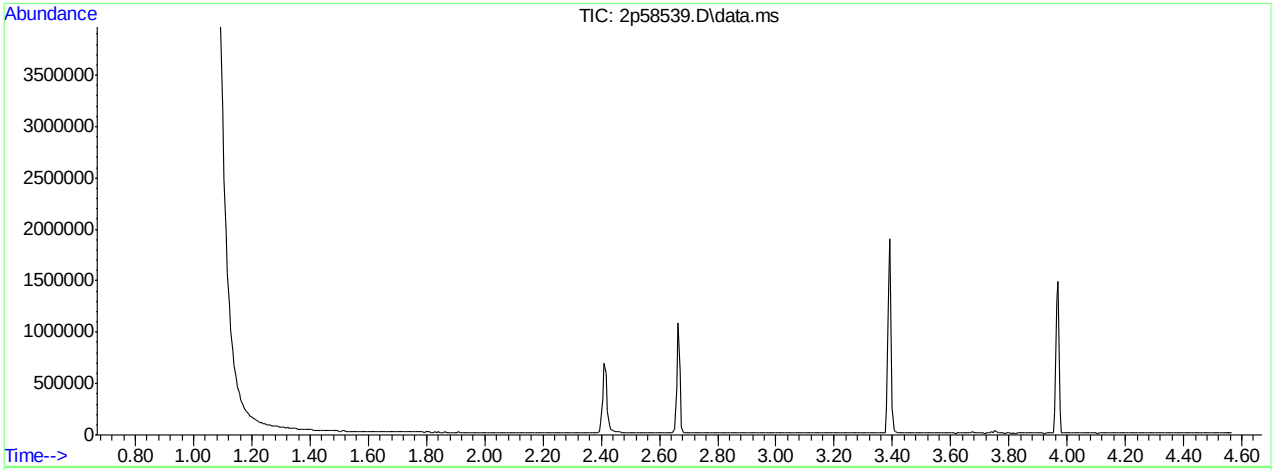
Ion	Exp%	Act%
235.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

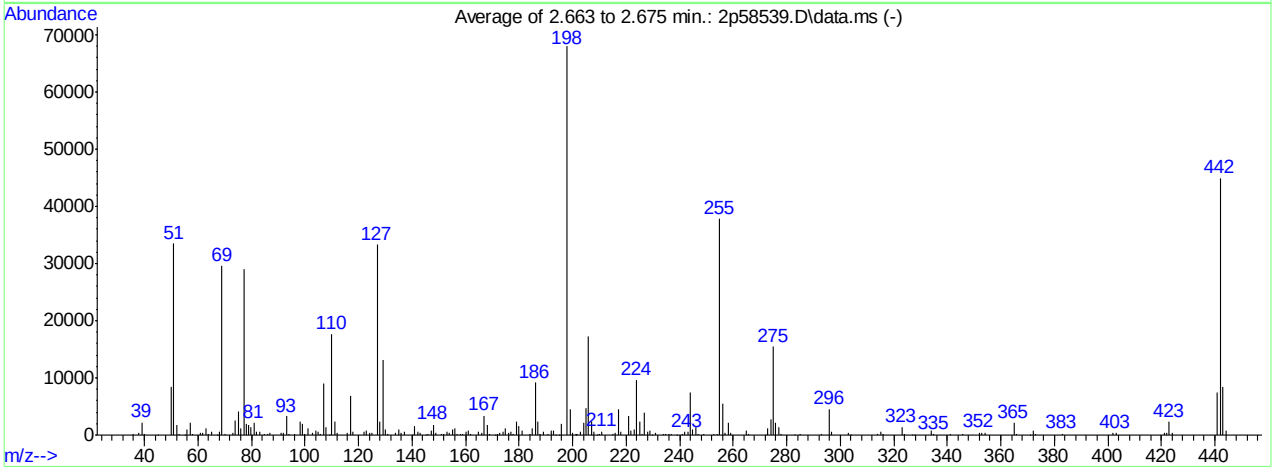
SGS ACCUTEST JC19023

DFTPP

Data File : C:\msdchem\1\DATA\2P2559\2p58539.D Vial: 1
Acq On : 25 Apr 2016 6:47 pm Operator: ashleyn
Sample : DFTPP Inst : MS2P
Misc : op92038,e2p2559 Multiplr: 1.00
MS Integration Params: events.e

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





AutoFind: Scans 268, 269, 270; Background Corrected with Scan 263

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	49.3	33509	PASS
68	69	0.00	2	1.8	538	PASS
69	198	0.00	100	43.5	29576	PASS
70	69	0.00	2	0.9	268	PASS
127	198	40	60	48.9	33250	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	67974	PASS
199	198	5	9	6.7	4549	PASS
275	198	10	30	22.8	15471	PASS
365	198	1	100	3.2	2159	PASS
441	443	0.01	100	86.6	7370	PASS
442	198	40	100	66.1	44954	PASS
443	442	17	23	18.9	8506	PASS

2p58539.D DFTPP2P.M Mon Apr 25 19:20:33 2016 RPT1

Average of 2.663 to 2.675 min.: 2p58539.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	209	57.00	2223	73.00	305	85.00	274
38.00	341	57.95	184	74.05	2495	85.90	166
39.00	2177	60.90	420	75.00	4170	86.95	352
39.95	154	61.95	413	76.00	1234	91.00	446
45.00	98	63.00	1217	77.10	29048	92.00	313
50.00	8471	64.00	117	78.05	1975	93.00	3304
51.00	33509	65.00	595	79.00	1867	93.90	143
52.00	1703	67.10	87	79.95	1346	96.00	120
52.90	124	68.00	538	81.00	2138	98.00	2442
55.00	48	69.00	29576	82.00	530	99.00	1969
56.00	1048	69.95	268	82.95	522	99.90	188

Average of 2.663 to 2.675 min.: 2p58539.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
101.00	1172	115.95	477	130.95	241	147.00	763
102.90	404	117.00	6918	133.90	353	148.00	1778
103.95	777	117.90	505	135.00	934	149.05	408
105.00	544	122.05	602	135.95	451	151.10	169
105.85	246	122.95	823	137.00	589	151.90	131
107.00	9107	124.00	368	140.10	98	152.95	552
108.00	1384	124.95	354	140.95	1597	153.95	337
108.90	106	127.00	33250	142.00	568	155.00	985
110.00	17682	128.00	2363	142.90	463	156.00	1153
111.00	2314	129.00	13146	145.00	93	156.95	289
111.95	329	130.00	1003	146.00	197	157.90	218

Average of 2.663 to 2.675 min.: 2p58539.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
159.00	170	172.90	405	186.00	9139	198.95	4549
160.00	551	174.00	649	187.00	2402	199.90	338
161.05	758	175.00	1273	187.95	203	201.10	161
161.95	194	175.95	415	188.95	604	201.30	104
164.90	553	177.00	506	190.95	290	201.80	156
165.95	453	177.95	247	191.90	785	202.95	505
167.00	3383	178.90	2385	192.95	862	204.00	2217
168.00	1718	180.00	1655	193.90	99	205.00	4657
169.00	186	181.00	849	195.10	94	206.00	17297
170.90	84	183.90	142	196.00	2030	207.00	2451
171.95	247	185.00	1126	197.95	67974	207.95	644

Average of 2.663 to 2.675 min.: 2p58539.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
209.00	99	225.00	2373	238.90	95	255.00	37833
210.15	278	225.90	266	240.95	292	256.00	5569
210.95	670	227.00	3969	241.95	514	256.90	463
214.90	120	227.95	576	243.00	567	258.00	2072
215.95	317	229.00	763	244.00	7387	258.95	396
217.00	4535	229.90	86	245.00	913	264.95	759
217.90	503	231.00	375	246.00	1421	265.90	190
221.00	3391	233.95	234	246.95	276	272.00	84
221.90	708	234.85	199	248.95	225	272.95	1168
223.00	1026	235.90	172	252.70	109	274.00	2833
224.00	9650	237.00	267	253.90	175	275.00	15471

Average of 2.663 to 2.675 min.: 2p58539.D\data.ms
DFTPP
Modified:subtracted

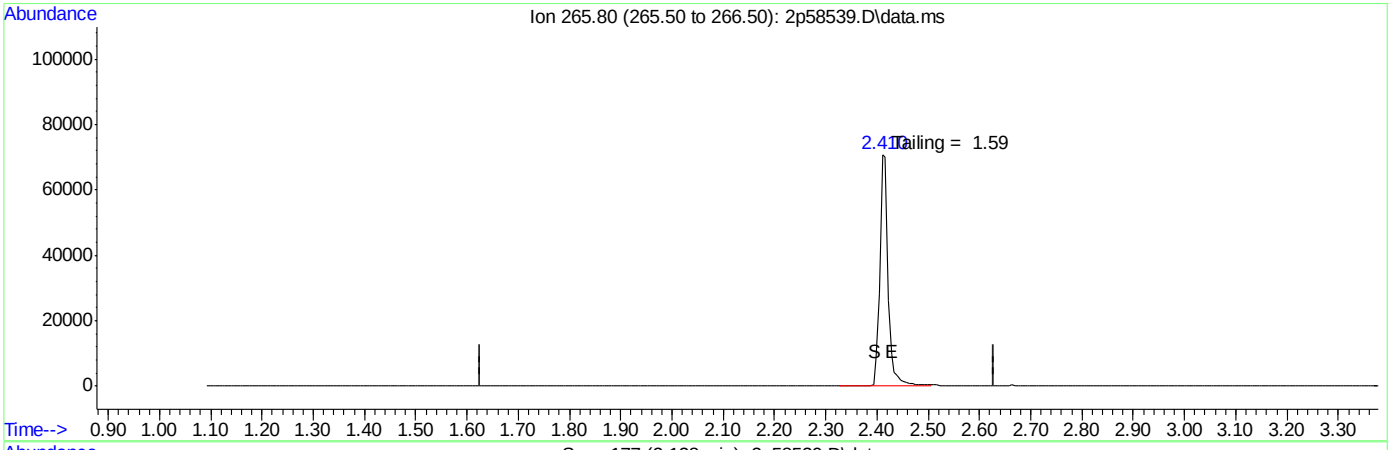
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
276.00	2124	315.00	561	353.00	336	422.00	322
276.95	1386	316.00	218	354.05	337	423.00	2267
277.90	226	323.00	1456	364.95	2159	424.00	456
282.90	84	324.00	236	365.95	228	441.00	7370

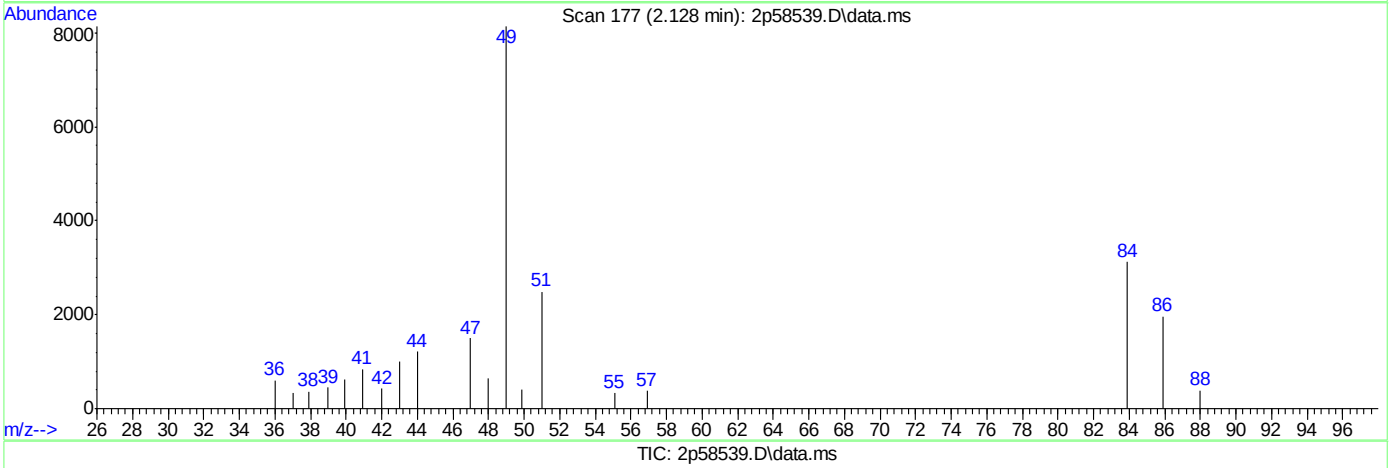
284.95	219	326.90	103	370.90	88	442.00	44954
292.90	208	327.90	104	372.00	697	443.00	8506
296.00	4608	334.00	769	372.95	232	444.00	889
296.95	599	335.00	151	382.95	205		
303.00	478	340.95	183	401.95	307		
303.90	89	345.95	248	402.95	382		
313.90	230	352.00	449	421.00	429		

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P2559\
Data File : 2p58539.D
Acq On : 25 Apr 2016 6:47 pm
Operator : ashleyn
Sample : DFTPP
Misc : op92038,e2p2559
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 25 18:50:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M
Quant Title :
QLast Update : Tue Aug 11 08:57:54 2015
Response via : Initial Calibration





TIC: 2p58539.D\data.ms

(1) Pentacholorphenol

2.128min (-2.128) 0.00ppb

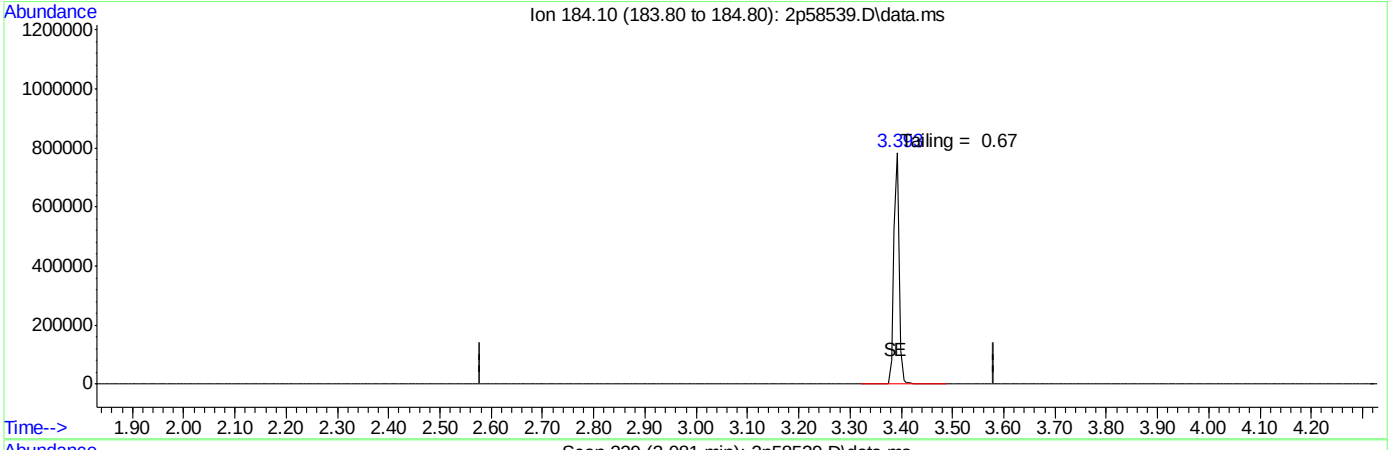
response 0

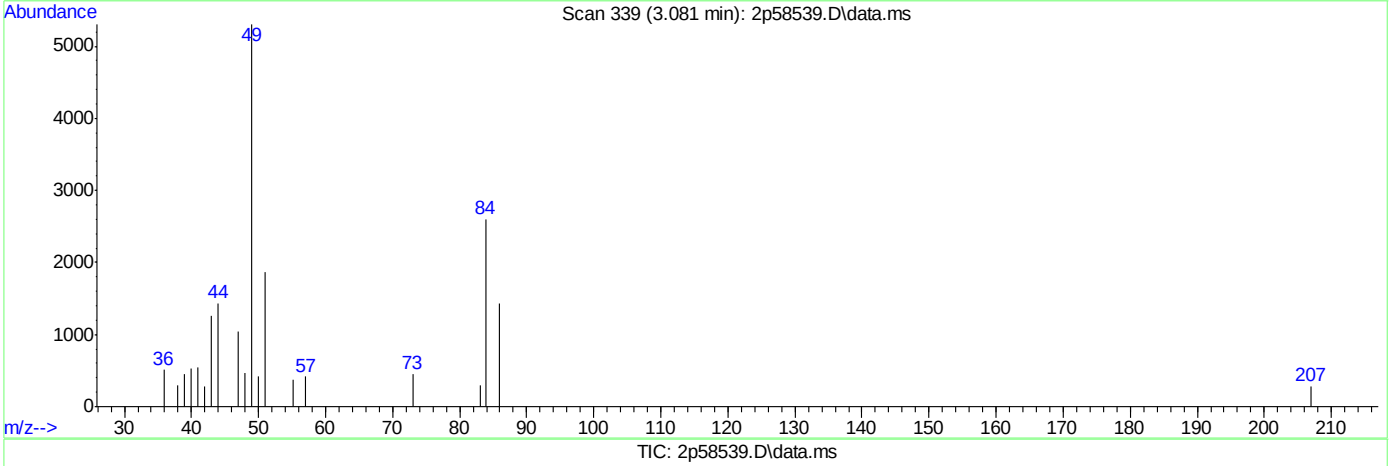
Ion	Exp%	Act%
265.80	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P2559\
Data File : 2p58539.D
Acq On : 25 Apr 2016 6:47 pm
Operator : ashleyn
Sample : DFTPP
Misc : op92038,e2p2559
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 25 18:50:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M
Quant Title :
QLast Update : Tue Aug 11 08:57:54 2015
Response via : Initial Calibration





TIC: 2p58539.D\data.ms

(2) Benzidine

3.081min (-3.081) 0.00ppb

response 0

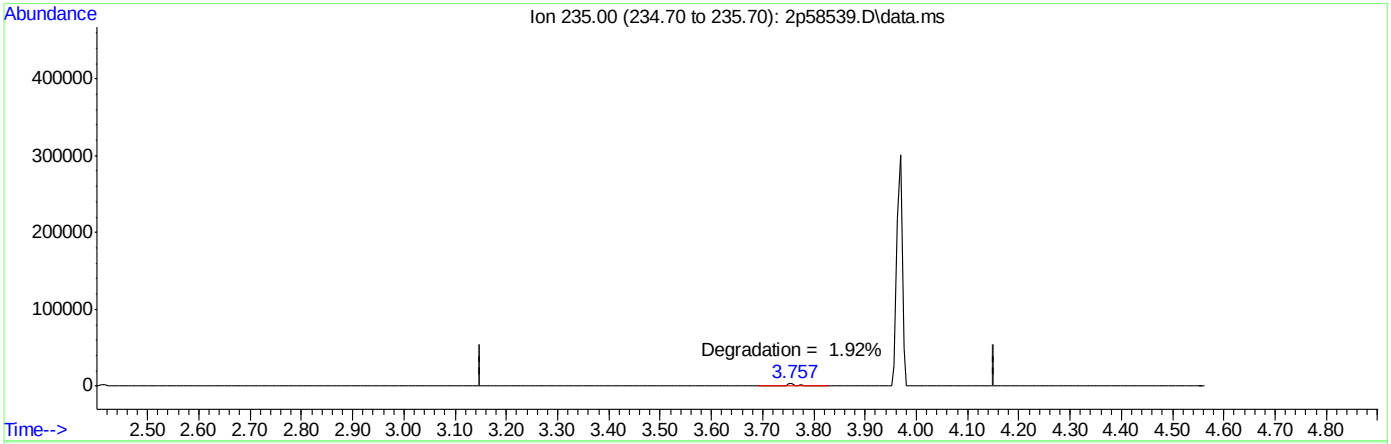
Ion	Exp%	Act%
184.10	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

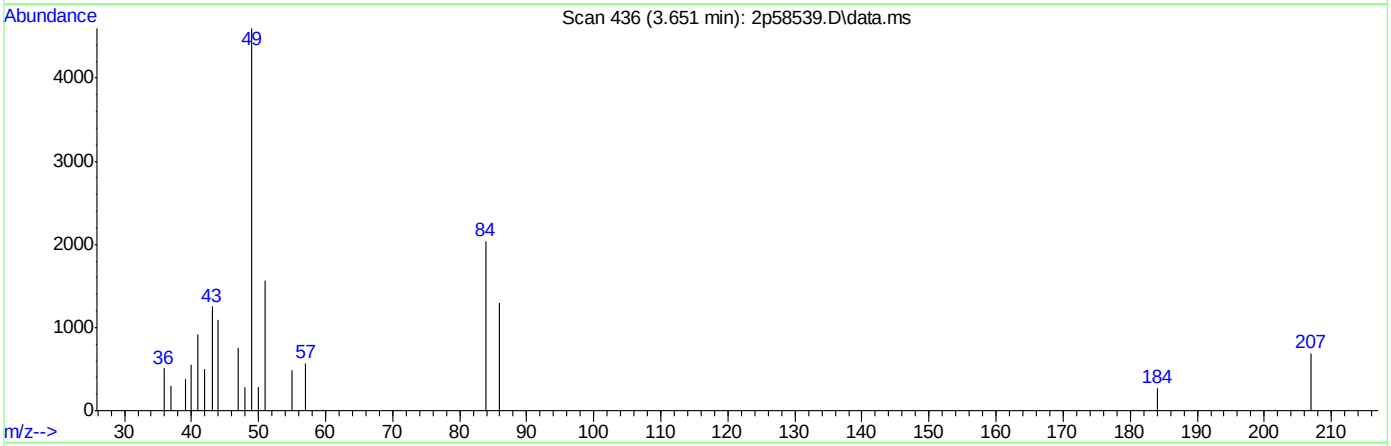
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P2559\
Data File : 2p58539.D
Acq On : 25 Apr 2016 6:47 pm
Operator : ashleyn
Sample : DFTPP
Misc : op92038,e2p2559
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 25 18:50:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M
Quant Title :
QLast Update : Tue Aug 11 08:57:54 2015
Response via : Initial Calibration





TIC: 2p58539.D\data.ms

(3) PP-DDT

3.651min (-3.651) 0.00ppb

response 0

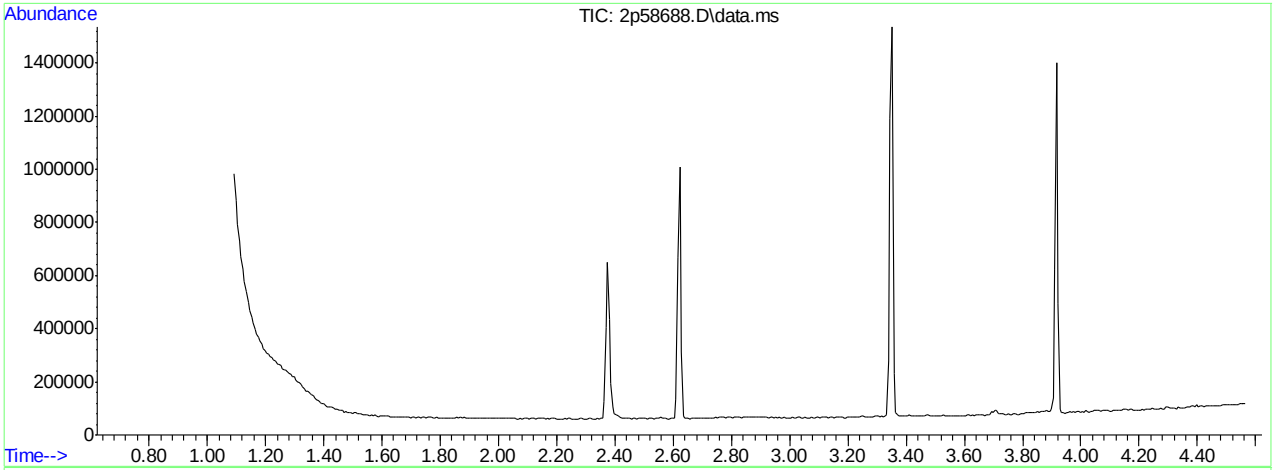
Ion	Exp%	Act%
235.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

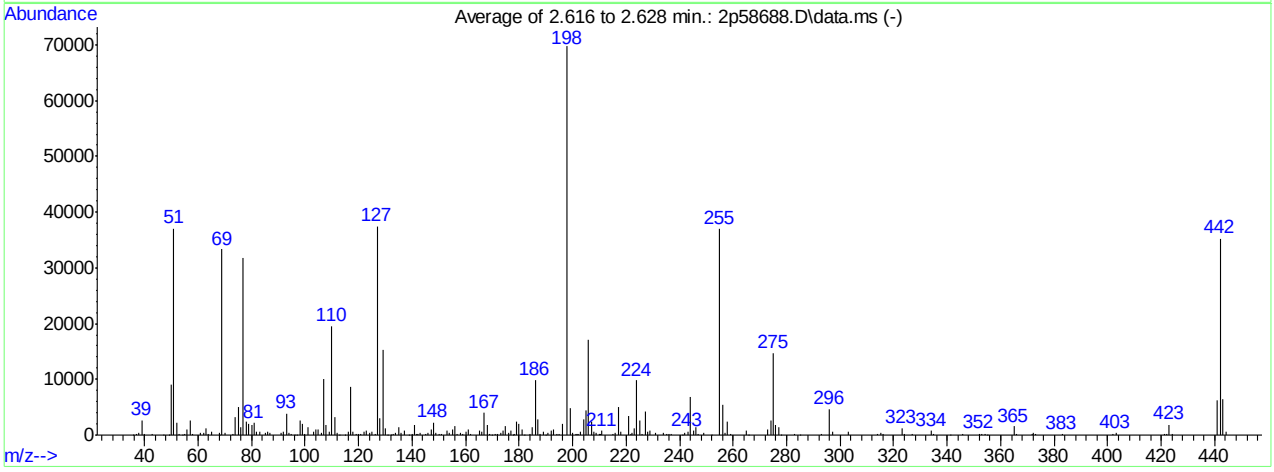
SGS ACCUTEST JC19023

DFTPP

Data File : C:\msdchem\1\DATA\2P2566\2p58688.D Vial: 1
Acq On : 29 Apr 2016 9:20 am Operator: robertl1
Sample : DFTPP Inst : MS2P
Misc : op92038,e2p2566 Multiplr: 1.00
MS Integration Params: events.e

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





AutoFind: Scans 260, 261, 262; Background Corrected with Scan 257

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	53.1	37053	PASS
68	69	0.00	2	1.0	339	PASS
69	198	0.00	100	47.8	33300	PASS
70	69	0.00	2	1.4	462	PASS
127	198	40	60	53.7	37463	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	69715	PASS
199	198	5	9	6.9	4845	PASS
275	198	10	30	21.2	14757	PASS
365	198	1	100	2.3	1601	PASS
441	443	0.01	100	96.1	6247	PASS
442	198	40	100	50.6	35273	PASS
443	442	17	23	18.4	6503	PASS

2p58688.D DFTPP2P.M Fri Apr 29 09:27:33 2016 RPT1

Average of 2.616 to 2.628 min.: 2p58688.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.95	55	52.95	171	68.00	85	80.00	1917
36.95	166	54.00	59	68.20	339	81.00	2137
38.00	440	55.00	254	69.00	33300	82.00	598
39.00	2657	56.00	1097	70.05	462	83.00	617
40.00	243	57.00	2610	73.00	152	85.00	368
43.05	217	58.00	122	74.00	3180	85.90	602
47.00	72	61.05	438	75.00	4975	87.00	492
49.00	86	62.05	413	76.05	1455	91.00	319
50.00	8996	63.00	1265	77.00	31825	92.00	706
51.00	37053	63.90	221	78.00	2408	93.00	3909
52.00	2272	65.00	586	79.00	2051	94.00	401

Average of 2.616 to 2.628 min.: 2p58688.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
95.00	195	106.95	10160	119.00	213	130.00	1212
96.00	88	108.00	1783	120.00	186	131.00	93
97.05	1	109.05	636	120.95	172	131.90	95
98.00	2628	110.00	19522	121.95	693	133.05	220
99.00	2021	110.95	3241	123.00	771	133.95	385
99.90	261	111.95	395	124.00	504	135.00	1379
101.00	1316	113.00	96	125.00	534	135.95	397
103.00	683	115.00	86	126.10	125	137.05	726
104.00	921	116.00	710	127.00	37463	139.00	97
105.00	989	117.00	8625	128.00	3003	140.00	193
106.05	424	117.95	550	129.00	15305	141.00	1843

Average of 2.616 to 2.628 min.: 2p58688.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
141.80	189	154.05	401	167.00	3935	177.90	95
142.00	275	155.00	993	168.00	1857	178.10	142
142.95	396	156.00	1525	168.90	236	178.95	2507
144.90	117	157.00	254	170.00	98	180.00	1958
145.95	336	157.95	322	171.00	200	181.00	958
147.00	1102	159.00	264	171.85	266	181.90	97
148.00	2276	160.00	515	173.00	483	184.00	187
149.00	487	161.00	930	173.95	753	185.00	1430
150.00	153	162.00	244	175.00	1610	186.00	9895
151.10	245	165.00	802	176.00	492	187.00	2922
153.00	744	166.00	523	176.95	788	187.95	243

Average of 2.616 to 2.628 min.: 2p58688.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
188.95	607	201.20	115	210.20	210	224.05	9809
190.00	86	201.50	224	210.50	192	225.05	2633
190.95	354	202.10	109	211.00	729	226.00	285
192.00	882	202.95	577	215.00	205	227.00	4285
193.00	1074	204.00	2800	215.95	378	227.95	532
194.05	198	205.05	4492	217.00	4988	228.95	855
195.05	180	206.00	17077	217.95	593	230.95	384
196.00	1994	207.00	2418	221.00	3513	233.90	369
198.00	69715	208.00	646	221.70	222	235.00	110
198.95	4845	208.95	317	222.00	465	236.10	112
199.95	338	210.00	145	223.00	1154	237.05	264

Average of 2.616 to 2.628 min.: 2p58688.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
241.00	91	256.95	331	283.00	216	326.90	164
242.00	483	258.00	2320	285.00	105	334.10	779
243.00	616	259.05	257	292.90	137	334.90	169
244.05	6779	265.05	904	296.00	4644	341.00	89

245.05	896	265.80	90	297.00	666	345.95	246
246.00	1422	273.00	1031	303.05	575	352.05	300
246.90	253	274.00	2621	314.10	119	353.10	222
249.00	310	275.00	14757	315.00	475	354.00	198
251.90	89	276.00	1771	316.00	136	354.90	106
255.00	37003	277.00	1481	322.95	1314	365.00	1601
256.00	5423	278.00	107	324.10	126	365.90	114

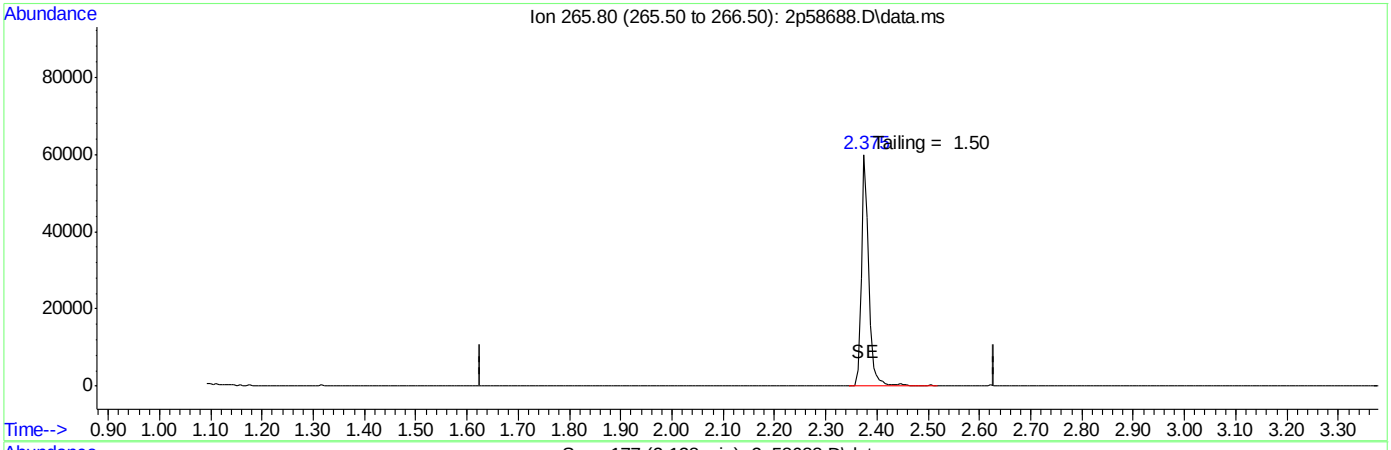
Average of 2.616 to 2.628 min.: 2p58688.D\data.ms
DFTPP
Modified:subtracted

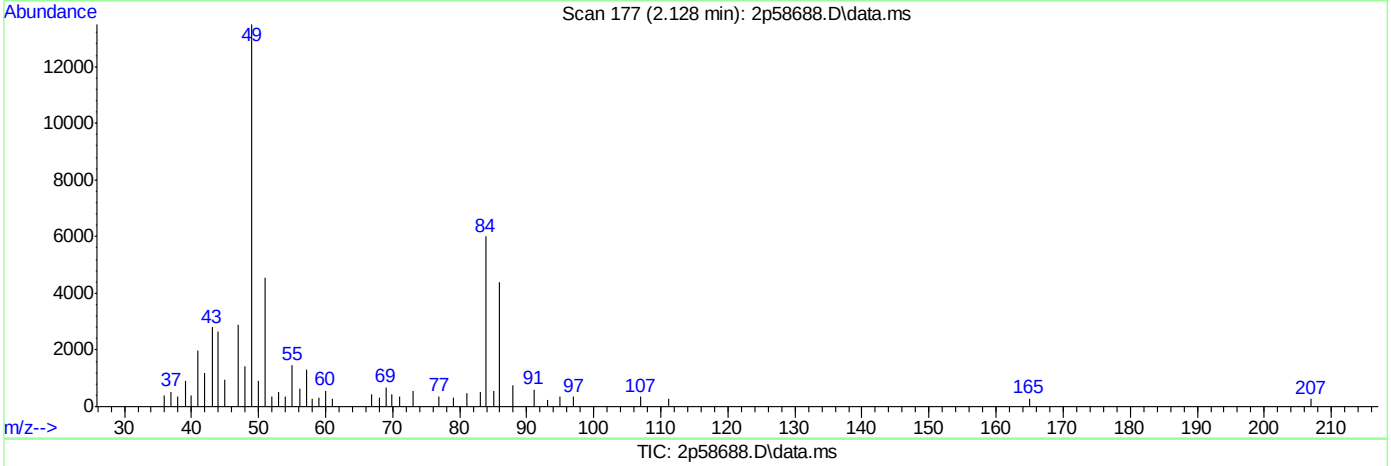
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
371.80	108	442.10	35273				
372.00	487	443.05	6503				
373.00	121	444.05	602				
382.90	110						
402.00	142						
403.00	340						
421.00	169						
422.00	185						
423.05	1832						
424.00	260						
441.05	6247						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P2566\
Data File : 2p58688.D
Acq On : 29 Apr 2016 9:20 am
Operator : robertl1
Sample : DFTPP
Misc : op92038,e2p2566
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 29 09:24:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M
Quant Title :
QLast Update : Tue Aug 11 08:57:54 2015
Response via : Initial Calibration





TIC: 2p58688.D\data.ms

(1) Pentacholorphenol

2.128min (-2.128) 0.00ppb

response 0

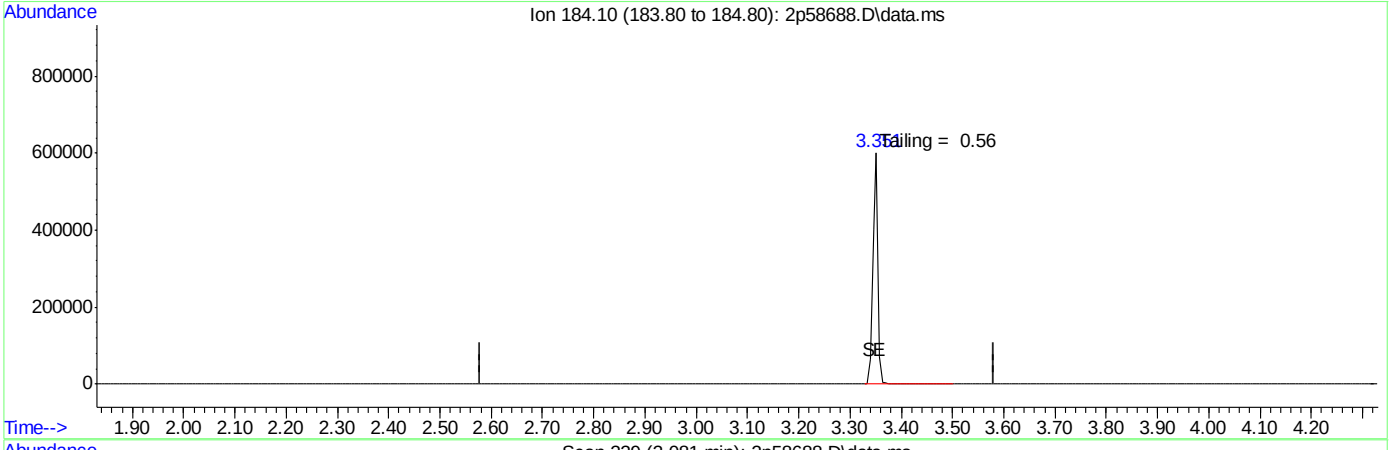
Ion	Exp%	Act%
265.80	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

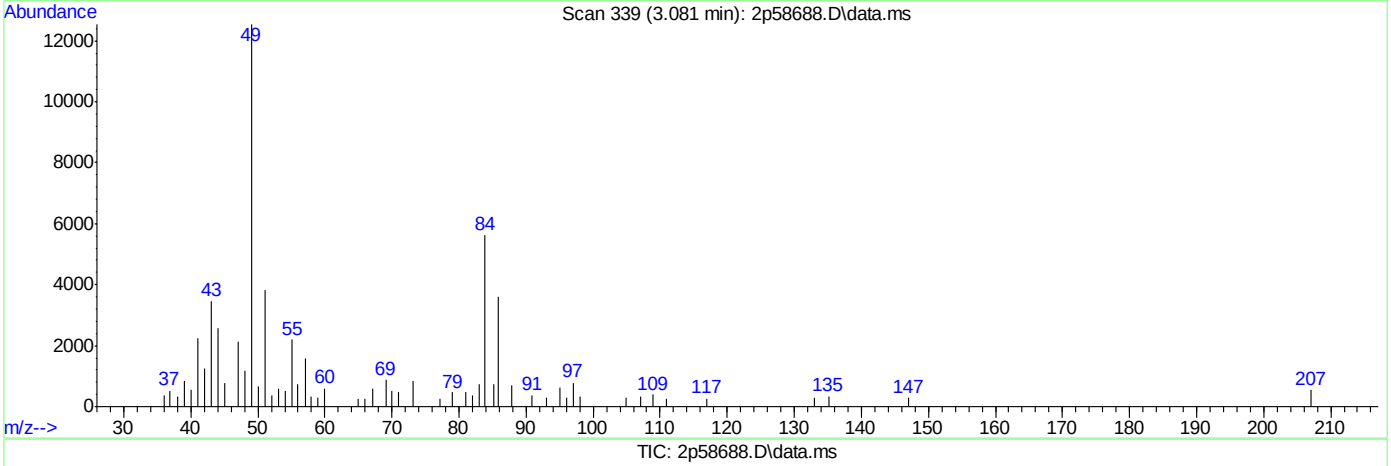
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P2566\
Data File : 2p58688.D
Acq On : 29 Apr 2016 9:20 am
Operator : robertl1
Sample : DFTPP
Misc : op92038,e2p2566
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 29 09:24:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M
Quant Title :
QLast Update : Tue Aug 11 08:57:54 2015
Response via : Initial Calibration





TIC: 2p58688.D\data.ms

(2) Benzidine

3.081min (-3.081) 0.00ppb

response 0

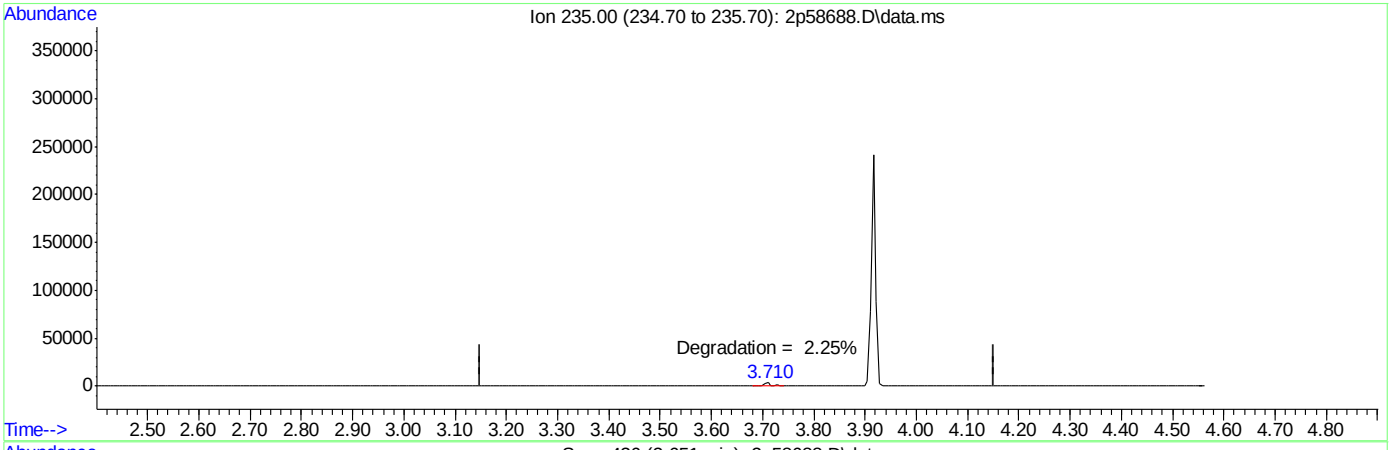
Ion	Exp%	Act%
184.10	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

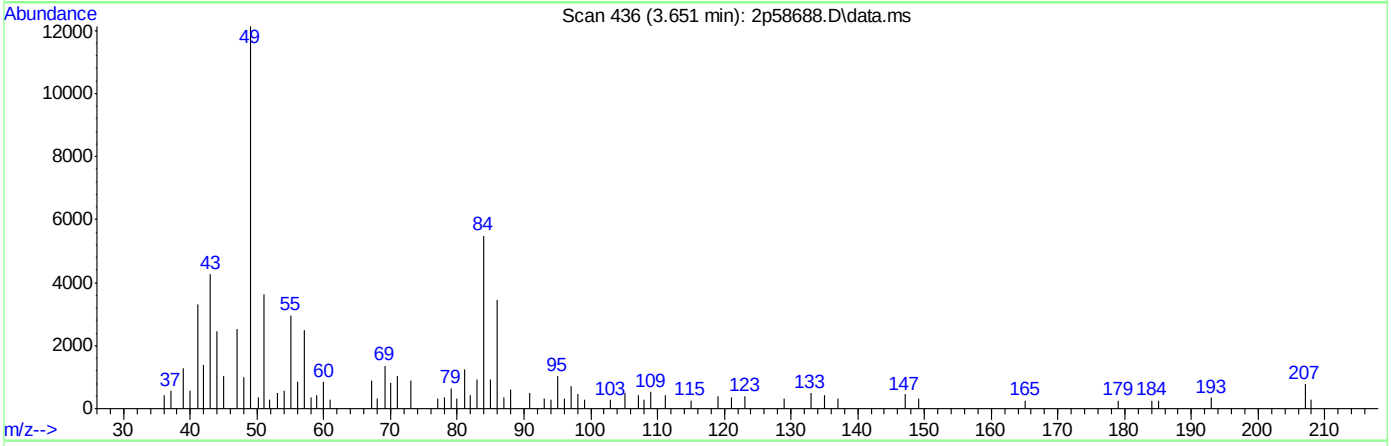
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2P2566\
Data File : 2p58688.D
Acq On : 29 Apr 2016 9:20 am
Operator : robertl1
Sample : DFTPP
Misc : op92038,e2p2566
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 29 09:24:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP2P.M
Quant Title :
QLast Update : Tue Aug 11 08:57:54 2015
Response via : Initial Calibration





TIC: 2p58688.D\data.ms

(3) PP-DDT

3.651min (-3.651) 0.00ppb

response 0

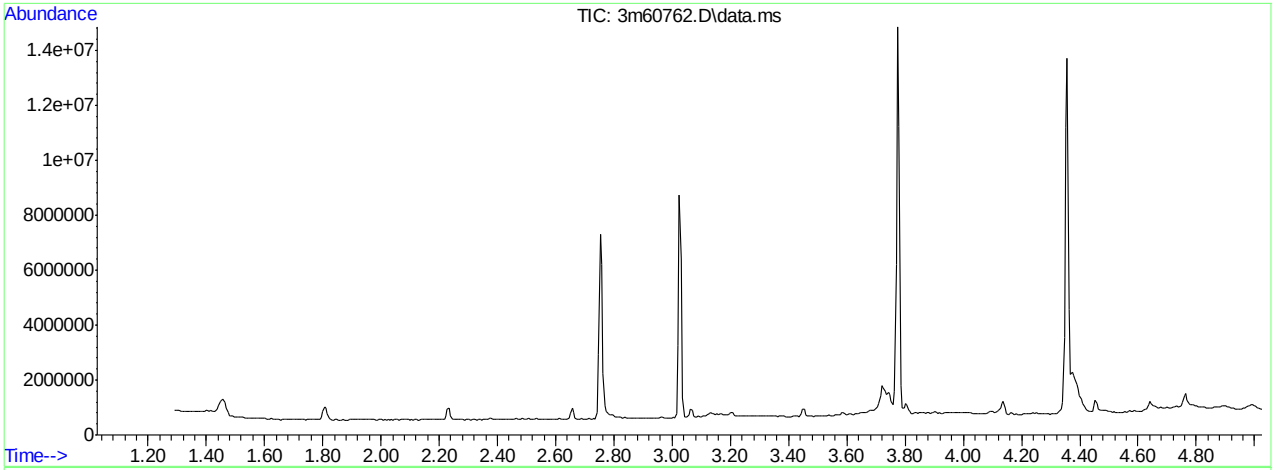
Ion	Exp%	Act%
235.00	100	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

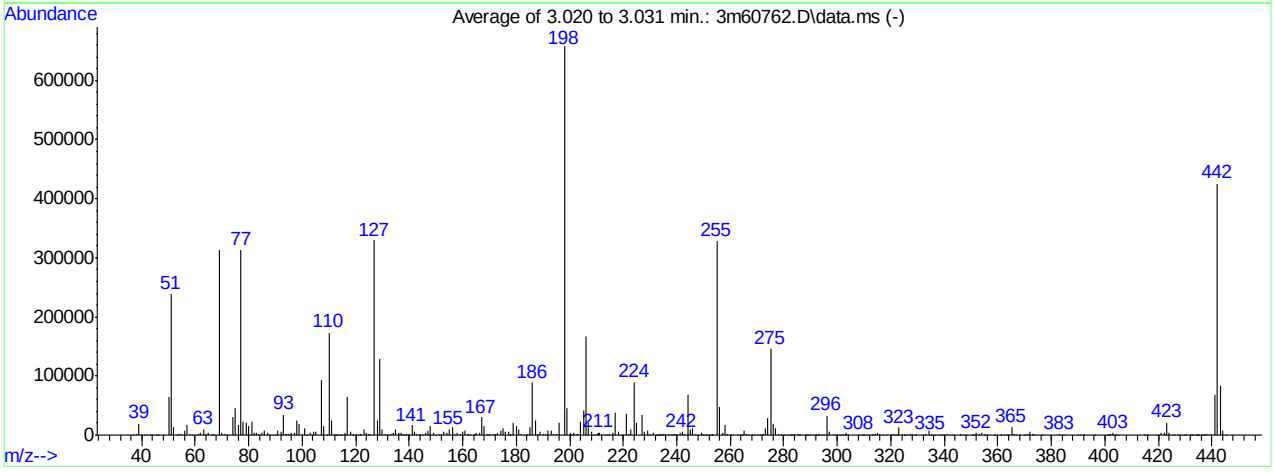
SGS ACCUTEST JC19023

DFTPP

Data File : C:\msdchem\1\DATA\E3M2855\3m60762.D Vial: 1
Acq On : 21 Apr 2016 1:31 pm Operator: linseyk
Sample : dftpp Inst : MS3M
Misc : op93052a,e3m2855 Multiplr: 1.00
MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\DFTPP3M.M (RTE Integrator)
Title : DFTPP, RXI-5MS 30m x .25mm x .25um





AutoFind: Scans 324, 325, 326; Background Corrected with Scan 320

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	36.2	238296	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	47.6	313116	PASS
70	69	0.00	2	1.0	3204	PASS
127	198	40	60	50.1	329840	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	657712	PASS
199	198	5	9	6.9	45100	PASS
275	198	10	30	22.1	145467	PASS
365	198	1	100	2.2	14264	PASS
441	443	0.10	100	81.8	68134	PASS
442	198	40	100	64.7	425304	PASS
443	442	17	23	19.6	83298	PASS

3m60762.D DFTPP3M.M Fri Apr 22 08:16:22 2016 RPT1

Average of 3.020 to 3.031 min.: 3m60762.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.00	661	46.20	436	58.95	251	71.05	1475
38.05	2794	48.00	244	61.00	2709	72.05	358
39.00	19760	50.00	65143	62.10	4250	74.05	29550
39.90	449	51.00	238296	63.00	10102	75.00	46243
40.00	755	52.00	12545	64.10	1997	76.10	17126
41.00	329	53.00	307	65.00	4739	77.05	313473
42.00	277	54.15	1115	65.95	419	78.00	22267
43.05	106	55.00	1105	66.20	319	79.00	21188
44.00	839	56.00	7453	66.95	1508	79.95	15917
45.10	137	57.00	17977	69.00	313116	81.00	21946
45.90	229	58.00	1593	70.05	3204	81.95	3804

Average of 3.020 to 3.031 min.: 3m60762.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
82.95	3997	93.95	1295	104.05	6580	114.10	398
83.90	2325	94.20	1080	105.00	6653	114.80	426
85.10	3907	95.00	1155	107.00	92226	116.00	4552
85.95	7333	95.95	2921	108.00	15158	117.00	65517
87.05	3225	97.15	3059	109.10	399	117.95	5021
87.95	160	98.00	25203	110.00	173137	118.85	1004
89.00	451	99.00	19270	111.00	25260	119.10	235
90.05	395	100.00	1366	112.05	2622	120.05	1481
90.95	6840	100.95	10715	112.70	729	120.85	926
92.00	6037	101.90	978	113.00	737	121.85	2893
93.00	35134	102.95	4167	113.60	216	122.05	1962

Average of 3.020 to 3.031 min.: 3m60762.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
123.00	8863	134.05	4029	143.80	49	154.05	4207
124.00	3789	134.95	9126	144.15	1336	154.95	9598
124.90	2681	136.00	4526	144.90	554	156.05	12971
125.20	659	137.05	4746	146.00	3191	157.05	2135
127.00	329840	137.80	1581	147.00	6974	158.00	2979
127.95	25688	138.05	8	147.95	15969	159.05	1815
129.00	128464	139.15	1213	149.00	3586	160.00	5213
129.95	10423	140.05	2181	149.90	649	160.90	6930
131.00	2043	141.00	16241	151.05	2905	161.80	620
131.90	739	142.05	4918	151.90	1498	162.10	1571
133.10	1078	142.95	2672	152.95	5232	162.90	286

Average of 3.020 to 3.031 min.: 3m60762.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
164.00	491	171.95	2596	181.95	1754	193.00	6861
164.10	623	173.05	4093	182.90	780	194.05	2190
164.80	1232	174.05	6735	184.10	2113	195.05	1948
165.00	4676	175.05	10999	185.00	13065	196.00	21652
166.05	4746	176.05	4833	186.00	88408	198.00	657712
166.95	29813	176.95	6189	187.05	24010	199.00	45100
167.95	14663	177.70	742	188.10	2813	200.00	3024
169.05	2335	178.00	1490	188.90	5044	200.70	236
169.70	466	179.00	21463	190.05	1319	201.35	3553
170.15	1305	180.00	14698	191.00	2618	201.65	2514
171.10	1248	181.00	9205	191.95	7793	202.80	1702

Average of 3.020 to 3.031 min.: 3m60762.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
203.00	2781	213.05	528	224.10	89368	233.80	461
204.10	23086	214.00	433	225.05	21868	234.10	1557
205.10	41149	215.05	1578	227.05	34358	234.80	391
206.05	167835	216.05	4006	228.00	4859	235.05	2665

207.00	21445	217.00	38342	229.00	6933	235.95	2072
208.00	6458	218.05	5162	229.85	1303	237.05	2533
209.00	896	219.20	990	231.00	3173	237.90	238
210.15	1189	220.00	429	231.90	223	238.15	279
210.75	4358	221.05	36080	232.30	136	238.95	1672
211.10	3392	221.80	1095	232.90	149	239.30	482
211.85	2397	223.00	9572	233.10	789	240.10	1273

Average of 3.020 to 3.031 min.: 3m60762.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
241.05	3311	250.80	152	259.90	493	269.00	206
242.05	4890	251.15	707	260.20	97	270.05	831
243.10	2235	251.95	870	261.00	468	271.05	922
244.10	68677	252.40	139	262.60	86	271.70	207
245.05	9760	252.90	981	263.25	515	272.10	1838
246.00	12142	253.40	1728	264.10	501	273.05	11001
247.00	2344	255.05	329205	264.30	560	274.05	29108
248.00	837	256.00	47298	265.00	7222	275.10	145467
249.05	3015	257.15	4289	265.90	1481	276.05	18900
249.80	449	258.00	17582	266.75	355	277.00	11300
250.25	600	259.00	2516	268.20	147	278.00	1854

Average of 3.020 to 3.031 min.: 3m60762.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
278.80	205	287.70	119	294.70	95	303.10	3964
279.15	477	288.15	310	296.05	32985	304.05	1309
280.10	279	288.60	87	297.00	5136	307.90	846
281.60	120	289.15	281	298.10	167	309.00	398
282.10	626	289.95	519	298.90	166	309.70	112
282.90	419	291.10	296	300.00	85	310.15	371
283.10	836	291.80	318	300.90	148	310.95	354
284.15	1540	292.10	662	301.15	590	312.00	87
285.15	2843	292.80	196	301.80	536	312.80	156
285.80	310	293.05	2426	302.10	353	313.10	231
286.10	133	294.10	917	302.80	384	313.95	1898

Average of 3.020 to 3.031 min.: 3m60762.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
315.00	3718	325.20	137	336.25	305	348.30	141
316.00	2484	325.95	441	338.10	80	350.05	338
317.05	541	327.05	2247	339.00	94	350.60	76
318.20	109	328.00	1248	339.70	149	351.10	136
320.15	285	328.80	179	339.90	100	352.05	3729
321.00	1507	329.20	147	341.00	1301	353.10	2441
321.70	413	332.05	947	341.95	432	354.00	4692
322.00	251	332.95	1265	343.20	134	354.95	265
323.10	12425	334.10	8059	345.90	234	355.20	159
324.15	2124	334.90	772	346.05	2044	356.15	415
324.90	281	335.10	980	347.05	266	358.40	195

Average of 3.020 to 3.031 min.: 3m60762.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
359.10	253	368.00	93	385.05	288	403.05	3094
360.90	94	369.90	367	390.05	558	403.80	336
361.25	176	370.40	117	391.00	594	404.05	985
362.50	298	371.05	1415	391.90	84	405.05	371
363.10	278	372.10	6694	392.20	500	414.80	78
363.40	159	372.90	577	396.30	97	415.10	95
364.00	309	373.10	1038	400.75	279	416.00	104
365.05	14264	374.00	194	401.20	249	419.25	304
365.90	1395	376.70	189	401.90	271	420.30	329
366.10	1077	382.95	1487	402.05	2235	421.05	4050
366.90	270	384.00	498	402.80	202	422.15	3505

Average of 3.020 to 3.031 min.: 3m60762.D\data.ms

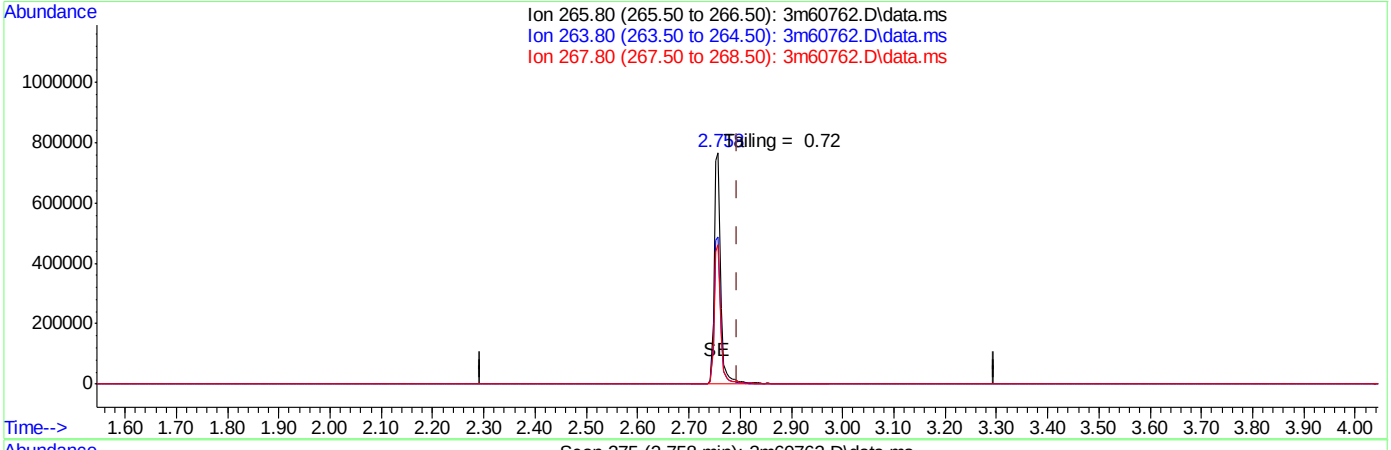
dftpp
Modified:subtracted

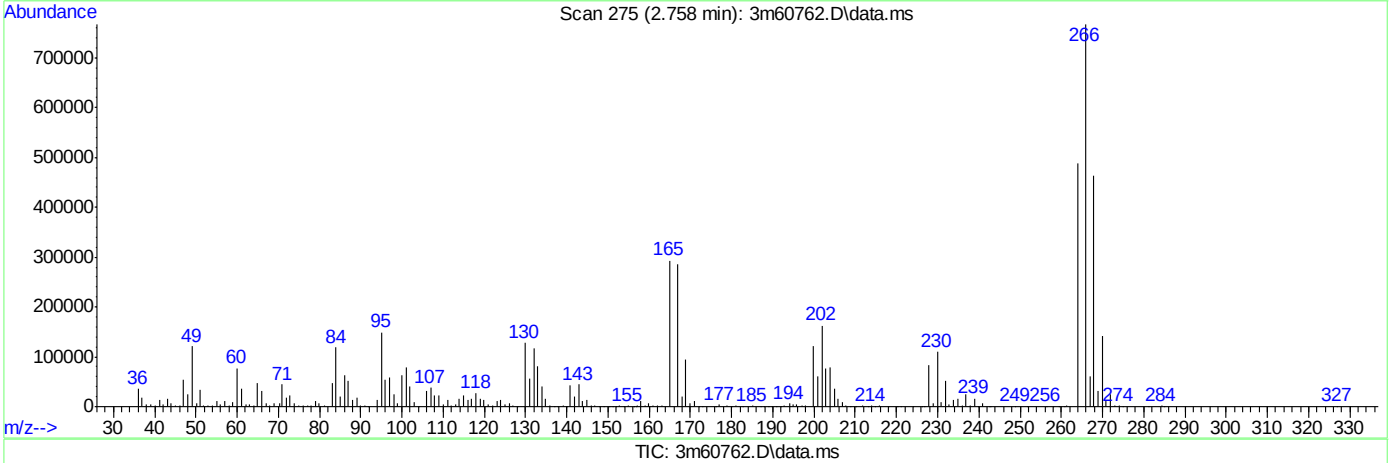
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
423.10	21736	432.90	494	438.80	912		
424.10	4461	433.85	400	439.90	2031		
425.00	512	434.50	189	441.10	68134		
426.10	183	434.80	226	442.10	425304		
427.20	203	435.40	731	443.10	83298		
428.30	259	435.90	455	444.10	7637		
429.50	82	436.25	476	445.10	306		
429.70	297	436.60	319				
430.25	389	436.95	928				
431.75	392	437.50	435				
432.50	347	438.30	1141				

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60762.D
Acq On : 21 Apr 2016 1:31 pm
Operator : linseyk
Sample : dftpp
Misc : op93052a,e3m2855
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 21 13:36:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP3M.M
Quant Title : DFTPP, RXI-5MS 30m x .25mm x .25um
QLast Update : Wed Dec 09 10:32:40 2015
Response via : Initial Calibration





(1) Pentachlorophenol (t)

2.758min (-0.037) 190.28ppb

response 701808

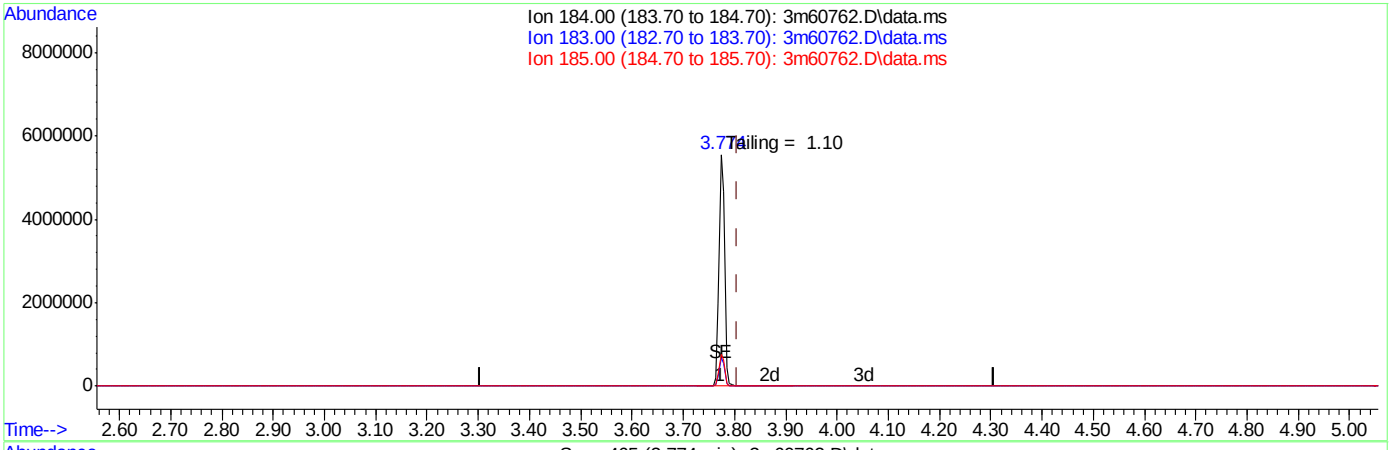
Ion	Exp%	Act%
265.80	100	100
263.80	62.80	63.64
267.80	64.10	60.34
0.00	0.00	0.00

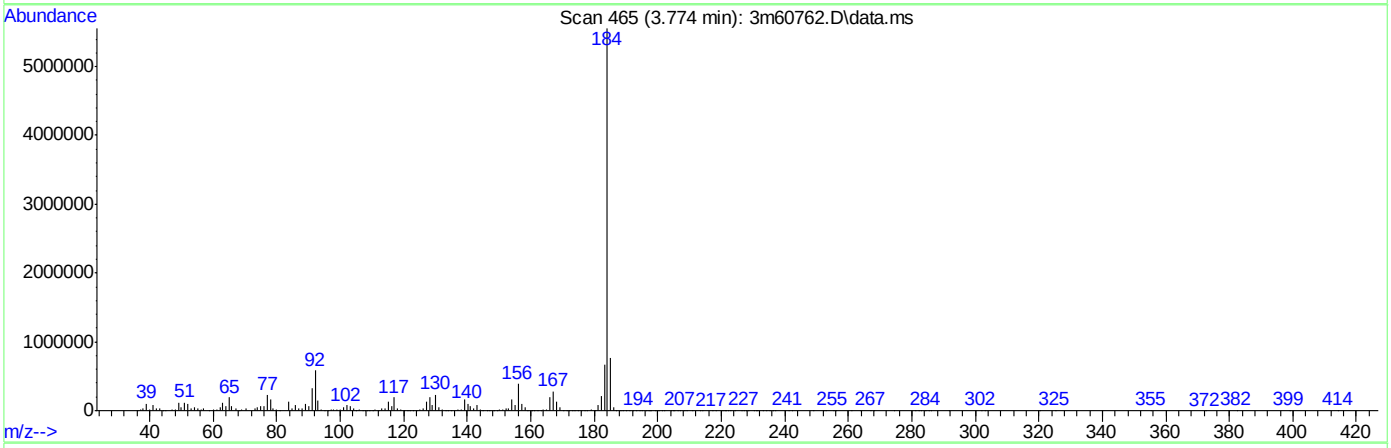
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60762.D
Acq On : 21 Apr 2016 1:31 pm
Operator : linseyk
Sample : dftpp
Misc : op93052a,e3m2855
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 21 13:36:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP3M.M
Quant Title : DFTPP, RXI-5MS 30m x .25mm x .25um
QLast Update : Wed Dec 09 10:32:40 2015
Response via : Initial Calibration





TIC: 3m60762.D\data.ms

(2) Benzidine (t)

3.774min (-0.032) 229.17ppb

response 4170192

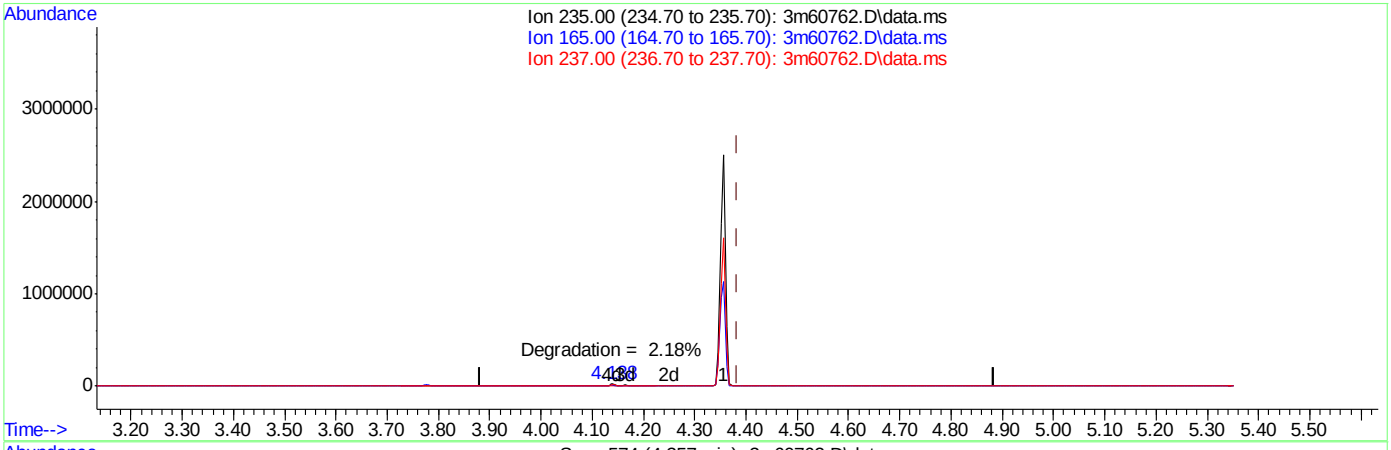
Ion	Exp%	Act%
184.00	100	100
183.00	11.50	12.07
185.00	14.40	13.67
0.00	0.00	0.00

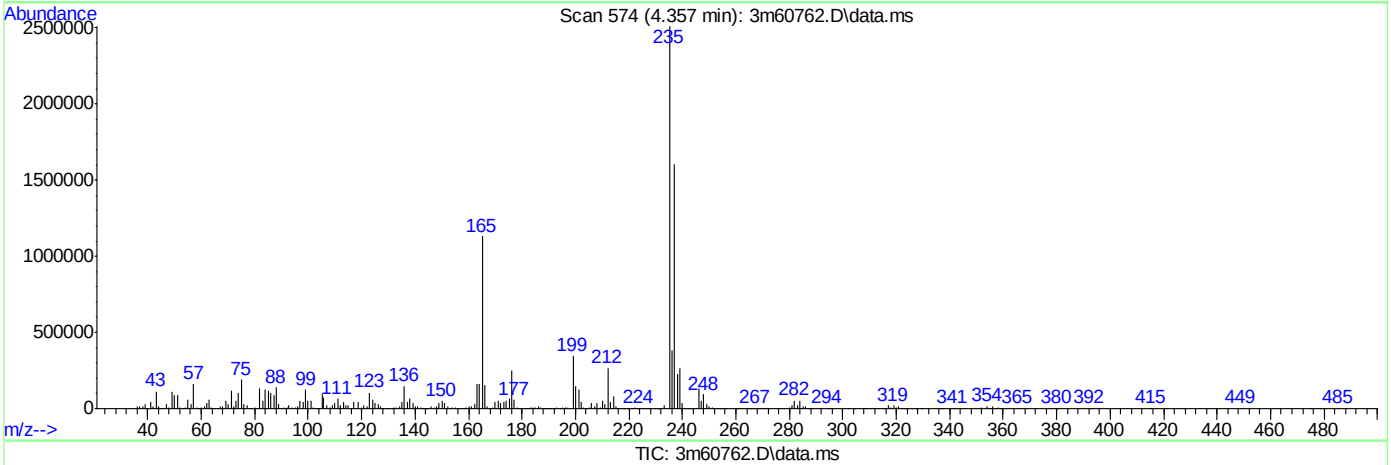
SGS ACCUTEST JC19023

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

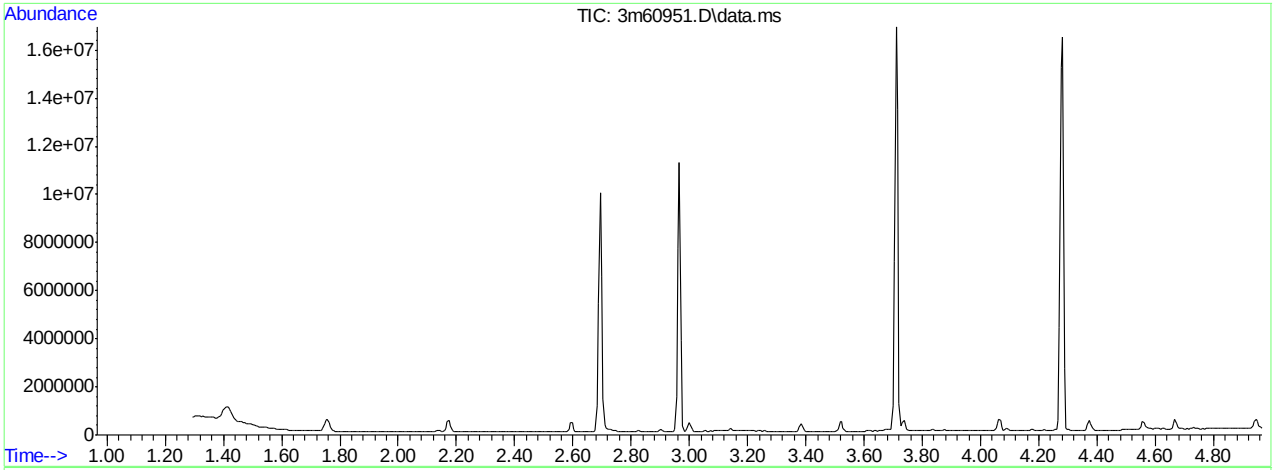
Ion	Exp%	Act%
235.00	100	100
165.00	0.00	48.45#
237.00	0.00	63.48#
0.00	0.00	0.00

SGS ACCUTEST JC19023

DFTPP

Data File : C:\msdchem\1\DATA\E3M2866\3m60951.D Vial: 1
Acq On : 28 Apr 2016 11:01 pm Operator: juliusj
Sample : dftpp Inst : MS3M
Misc : op93271a,e3m2865 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 313, 314, 315; Background Corrected with Scan 308

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	35.6	306910	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	46.2	398424	PASS
70	69	0.00	2	0.5	2134	PASS
127	198	40	60	49.3	425092	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	862613	PASS
199	198	5	9	7.1	60829	PASS
275	198	10	30	23.5	202880	PASS
365	198	1	100	2.7	23657	PASS
441	443	0.10	100	84.5	111597	PASS
442	198	40	100	80.3	692651	PASS
443	442	17	23	19.1	132083	PASS

3m60951.D DFTPP3M.M Mon May 02 13:07:08 2016 RPT1

Average of 2.961 to 2.972 min.: 3m60951.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	1447	49.00	1958	59.10	461	70.05	2134
36.95	1858	50.00	82409	60.00	555	71.00	222
38.00	4976	51.00	306910	61.00	4142	71.80	119
39.05	27453	52.00	15434	62.05	5266	73.05	3341
40.05	1335	53.15	830	63.00	14119	74.00	39301
41.00	522	53.80	166	64.00	1359	75.00	60375
43.15	3134	54.05	184	65.00	5686	76.10	24587
44.95	111	55.00	1155	66.00	921	77.10	399033
45.70	115	56.00	9227	66.85	703	78.05	26879
45.95	265	57.00	22551	67.15	1143	78.95	27527
47.95	52	58.00	719	69.00	398424	80.00	19506

Average of 2.961 to 2.972 min.: 3m60951.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
81.00	27571	91.95	7344	102.20	346	112.75	372
81.95	6822	93.00	47013	102.80	347	113.00	941
83.00	6346	93.95	3323	103.05	5014	113.85	973
85.05	7402	94.95	553	104.05	10791	114.90	251
86.00	7790	96.05	2243	105.00	9534	116.00	3863
87.00	2896	97.00	280	106.05	443	116.95	88991
87.95	1750	98.00	32413	107.00	118535	118.00	6896
88.70	178	99.00	27347	107.95	19731	118.90	977
89.10	222	99.95	2511	109.95	224897	120.05	1200
90.10	391	101.00	13581	111.00	34221	120.80	386
90.95	6721	101.80	232	112.00	3876	122.00	8319

Average of 2.961 to 2.972 min.: 3m60951.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
123.00	12584	133.10	444	142.00	7469	152.10	1542
124.00	5590	133.95	5243	142.90	5104	152.95	6385
125.10	5726	135.00	12456	144.00	1429	154.05	5276
127.00	425092	135.95	5494	145.00	1361	155.00	11504
128.05	33952	137.05	6343	145.95	3837	156.10	16392
129.00	164422	137.90	1760	146.95	9335	157.05	4516
130.00	14194	138.60	131	148.00	22880	158.00	4357
130.90	2349	138.90	497	149.05	3725	158.90	1317
131.80	272	139.20	920	149.95	1412	159.10	1489
132.00	797	140.10	3004	151.15	3874	159.90	2113
132.80	454	141.00	19661	151.70	493	160.10	4461

Average of 2.961 to 2.972 min.: 3m60951.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
161.05	9527	169.00	3739	180.00	19435	188.10	2441
161.70	458	170.05	1764	181.05	8932	189.00	6766
162.05	2540	171.05	1965	182.00	1251	189.80	226
163.05	1054	172.00	3413	182.90	247	190.10	961
163.80	752	172.95	4806	183.15	893	190.90	2061
164.00	595	174.05	10057	183.90	763	191.10	1992
164.20	309	175.10	14629	184.10	2010	192.00	9408
165.00	7656	176.05	5610	185.05	16190	193.05	10723
166.05	7607	177.05	8505	186.00	117136	194.05	2744
166.95	44523	178.00	1412	187.00	32381	194.90	1639
168.00	19349	179.00	30961	187.90	1049	196.05	32229

Average of 2.961 to 2.972 min.: 3m60951.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
198.00	862613	208.70	457	217.00	52528	229.00	9862
199.00	60829	209.10	2209	218.00	6998	229.95	1394
200.05	4537	210.15	2220	219.15	1153	231.05	5068
201.00	510	211.05	9332	219.70	757	231.95	1234

201.60	5470	211.90	1305	221.05	51822	233.05	1253
203.00	6239	212.90	658	223.10	14942	234.05	2718
204.00	31319	213.20	281	224.05	119139	234.95	3742
205.10	51557	214.00	208	225.10	28987	236.05	2675
206.10	221104	214.20	256	226.10	2533	237.05	4156
207.10	27655	215.00	1927	227.00	46960	237.90	169
207.95	6617	216.00	5316	228.00	7108	238.15	494

Average of 2.961 to 2.972 min.: 3m60951.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
239.00	1971	248.90	844	257.00	5779	265.00	10578
240.00	1917	249.10	2527	258.00	25499	265.95	1519
241.00	2385	249.80	206	258.95	3431	266.95	528
242.05	6316	250.10	526	259.90	254	267.75	446
243.10	5985	250.90	781	260.20	315	268.10	160
244.10	93901	251.20	589	260.90	1136	269.75	143
245.10	13314	251.70	187	262.20	107	270.05	512
246.00	16435	252.10	1181	262.40	88	270.60	169
247.00	3146	253.05	3982	263.00	132	270.90	332
247.80	267	255.00	460992	263.15	233	271.10	895
248.00	536	256.00	68728	263.50	222	271.40	309

Average of 2.961 to 2.972 min.: 3m60951.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
272.20	467	283.10	2031	292.20	198	301.05	825
273.10	15719	284.10	1423	293.00	3767	301.85	472
274.10	43269	285.15	3021	294.00	1142	302.20	370
275.00	202880	286.05	946	295.00	628	303.05	6103
276.05	27235	287.80	285	296.10	49856	304.05	1884
277.05	17474	288.25	281	297.00	7317	305.20	87
278.10	2981	289.00	443	297.90	366	306.30	87
279.05	754	289.30	159	298.55	170	308.00	1069
280.85	264	289.95	696	299.00	87	308.95	840
281.95	394	291.00	542	299.30	88	309.90	461
282.20	322	291.95	658	300.70	116	310.20	445

Average of 2.961 to 2.972 min.: 3m60951.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
312.60	302	321.80	610	330.00	289	341.05	1923
313.20	281	322.20	404	331.70	249	341.95	431
314.10	3124	323.10	16859	332.00	354	342.20	281
315.00	6382	324.10	3211	332.20	949	343.30	171
316.05	3890	324.95	484	332.95	2111	344.80	110
316.70	161	325.50	146	334.10	11884	346.05	3314
317.10	642	325.70	87	335.05	3729	346.90	613
318.60	97	325.95	294	336.05	505	348.80	75
319.30	215	326.95	3099	339.00	268	350.20	204
320.20	249	328.10	2149	340.10	149	350.70	105
321.10	1562	328.90	74	340.50	278	350.95	385

Average of 2.961 to 2.972 min.: 3m60951.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
352.10	5990	363.50	185	376.70	105	398.70	96
353.15	3564	365.00	23657	377.10	287	399.60	88
354.05	6198	366.05	3326	383.05	2471	399.90	109
355.05	1102	367.25	264	384.10	594	401.05	767
358.85	493	369.70	272	390.10	1307	402.10	3731
360.20	81	370.10	459	390.70	163	403.10	4987
360.60	220	370.90	412	391.05	867	404.15	1564
361.15	189	371.15	1017	391.70	225	404.80	95
362.20	207	372.05	9384	391.90	203	405.00	163
362.50	76	373.00	2305	392.20	221	410.40	129
363.10	423	373.75	283	393.20	77	410.80	141

Average of 2.961 to 2.972 min.: 3m60951.D\data.ms

dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
413.10	106	424.05	7293	430.60	213	434.65	657
414.95	252	424.90	277	431.00	143	435.30	1047
415.20	201	425.10	286	431.25	411	436.00	91
416.10	123	426.00	238	431.80	458	436.30	752
418.70	569	426.60	93	432.50	213	436.80	997
419.50	123	427.10	152	432.85	656	437.10	630
419.80	135	427.50	77	433.10	181	437.60	2137
420.05	273	428.80	359	433.50	284	438.10	1042
421.10	5548	429.70	411	433.85	543	438.40	1220
422.10	5818	430.00	220	434.20	156	439.00	1712
423.10	35144	430.30	287	434.40	229	439.40	3576

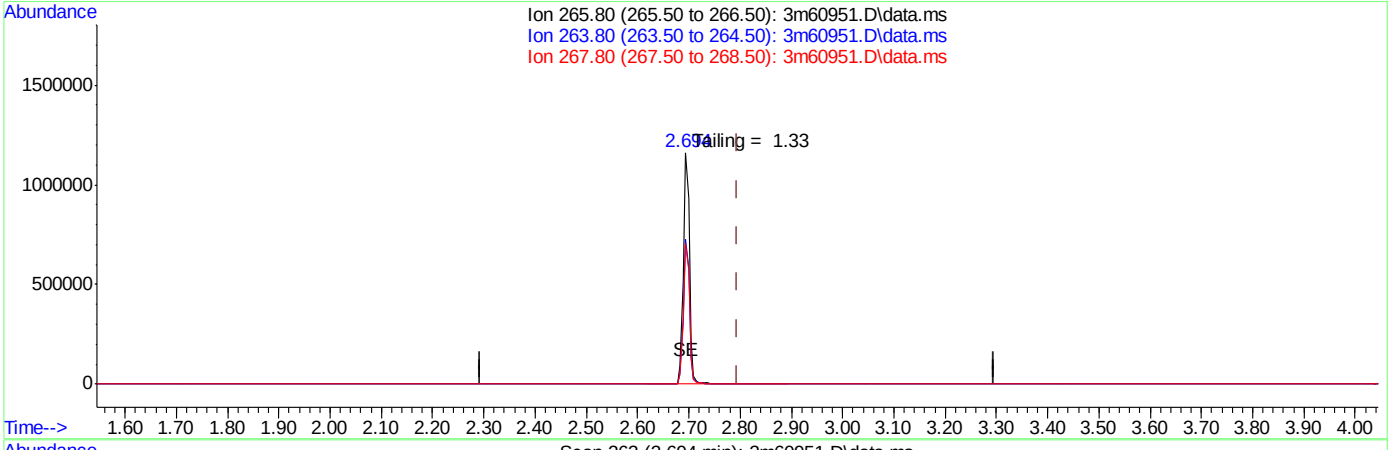
Average of 2.961 to 2.972 min.: 3m60951.D\data.ms
dftpp
Modified:subtracted

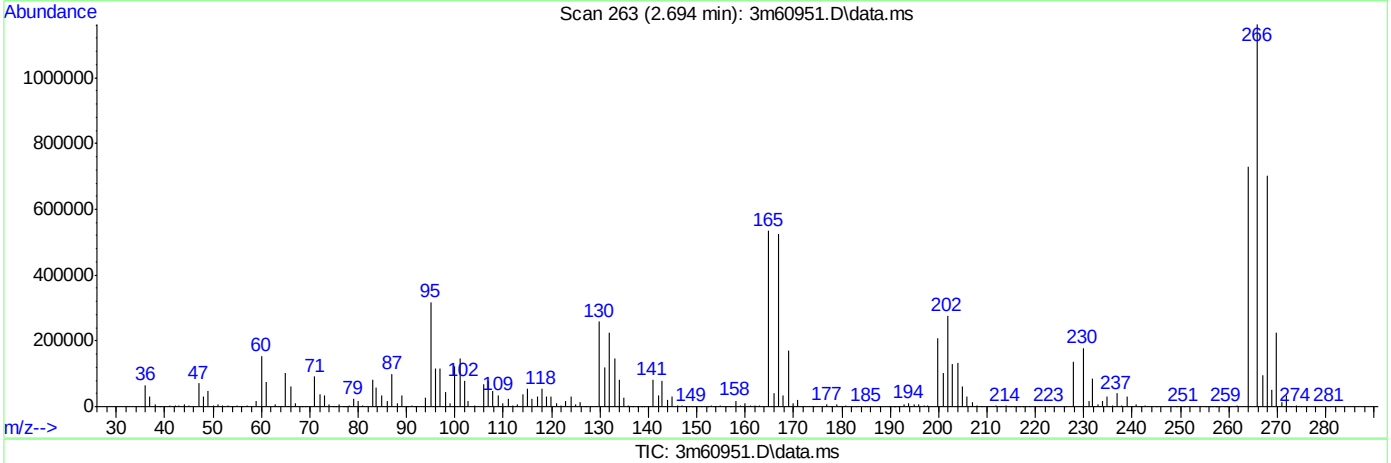
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
441.10	111597						
442.10	692651						
443.10	132083						
444.05	12116						
445.00	828						
497.10	74						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2866\
Data File : 3m60951.D
Acq On : 28 Apr 2016 11:01 pm
Operator : juliusj
Sample : dftpp
Misc : op93271a,e3m2865
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 28 23:05:55 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: 3m60951.D\data.ms

(1) Pentachlorophenol (t)

2.694min (-0.101) 263.82ppb

response 973037

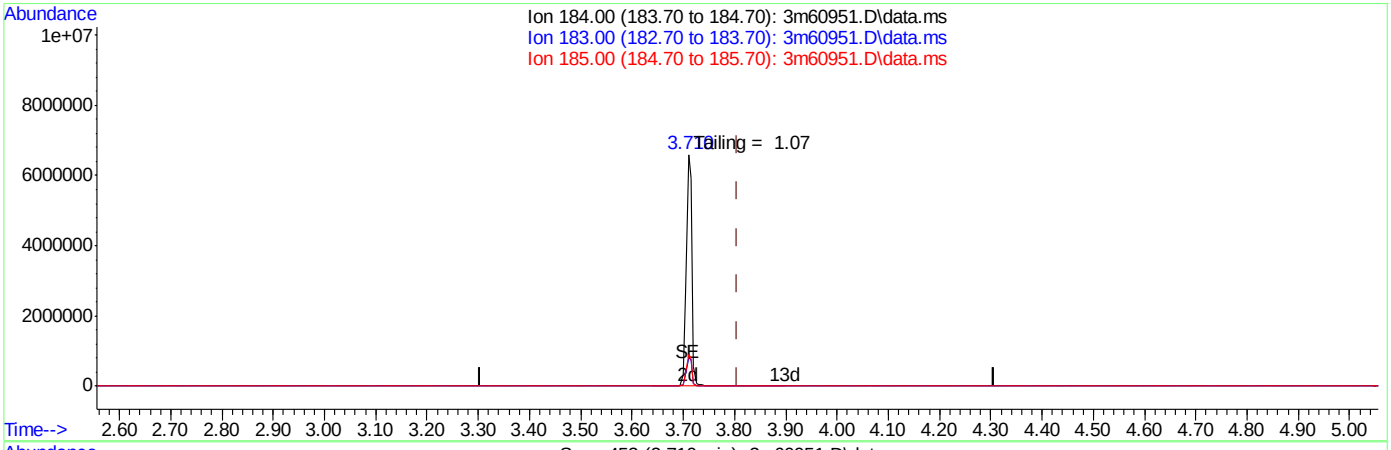
Ion	Exp%	Act%
265.80	100	100
263.80	62.80	62.73
267.80	64.10	60.54
0.00	0.00	0.00

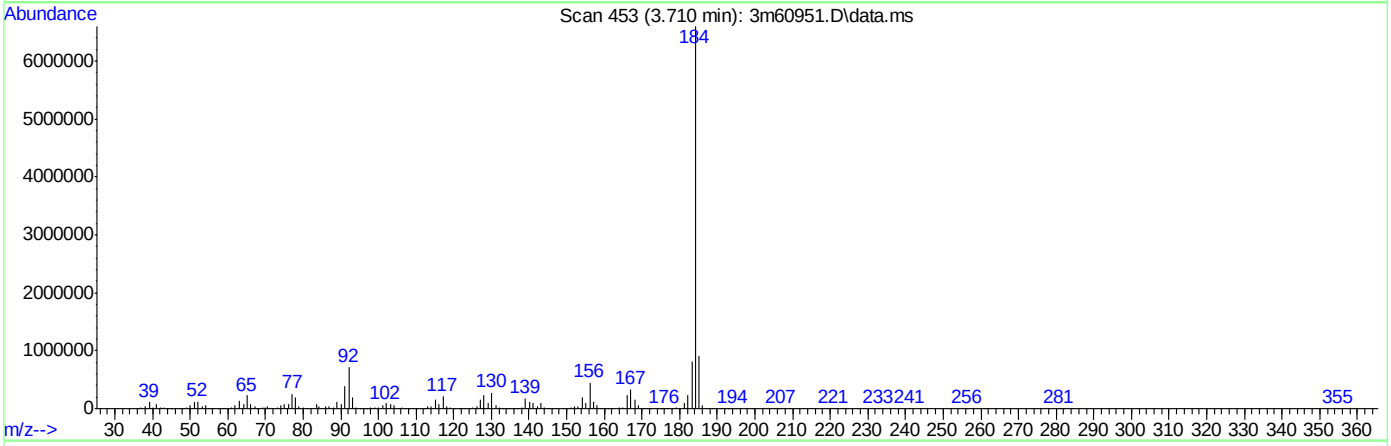
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2866\
Data File : 3m60951.D
Acq On : 28 Apr 2016 11:01 pm
Operator : juliusj
Sample : dftpp
Misc : op93271a,e3m2865
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 28 23:05:55 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: 3m60951.D\data.ms

(2) Benzidine (t)

3.710min (-0.096) 288.60ppb m

response 5251727

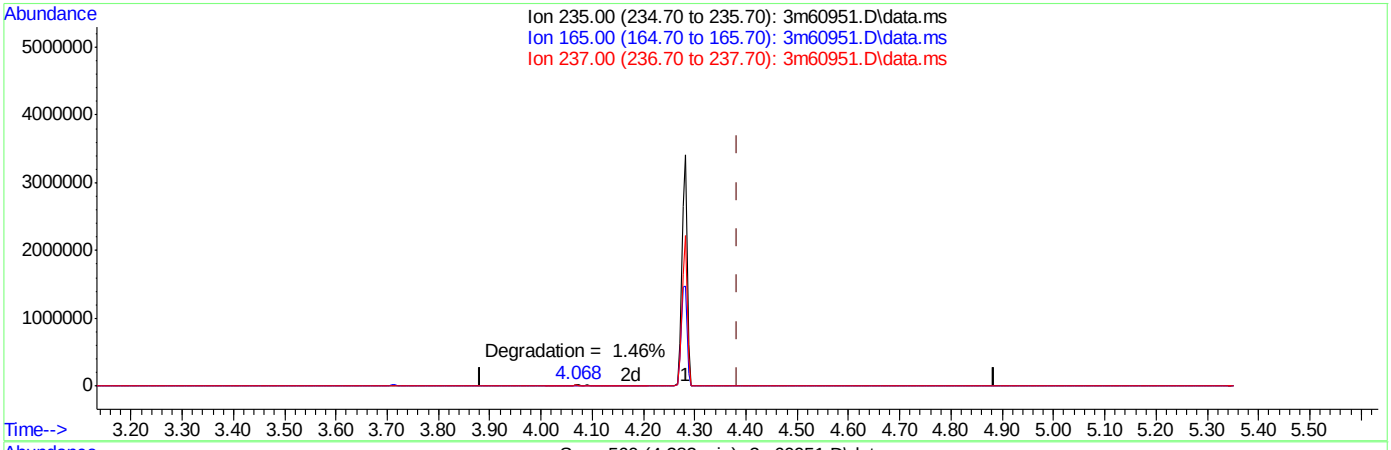
Ion	Exp%	Act%
184.00	100	100
183.00	11.50	12.47
185.00	14.40	13.72
0.00	0.00	0.00

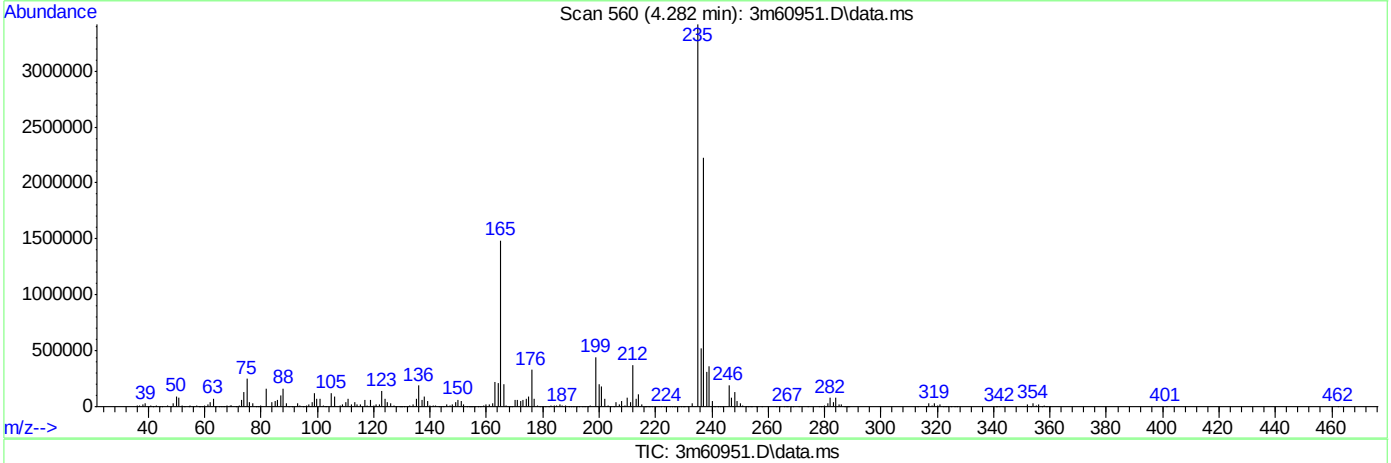
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2866\
Data File : 3m60951.D
Acq On : 28 Apr 2016 11:01 pm
Operator : juliusj
Sample : dftpp
Misc : op93271a,e3m2865
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 28 23:05:55 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: 3m60951.D\data.ms

(3) PP-DDT (t)

4.282min (-0.101) 318.18ppb

response 2370011

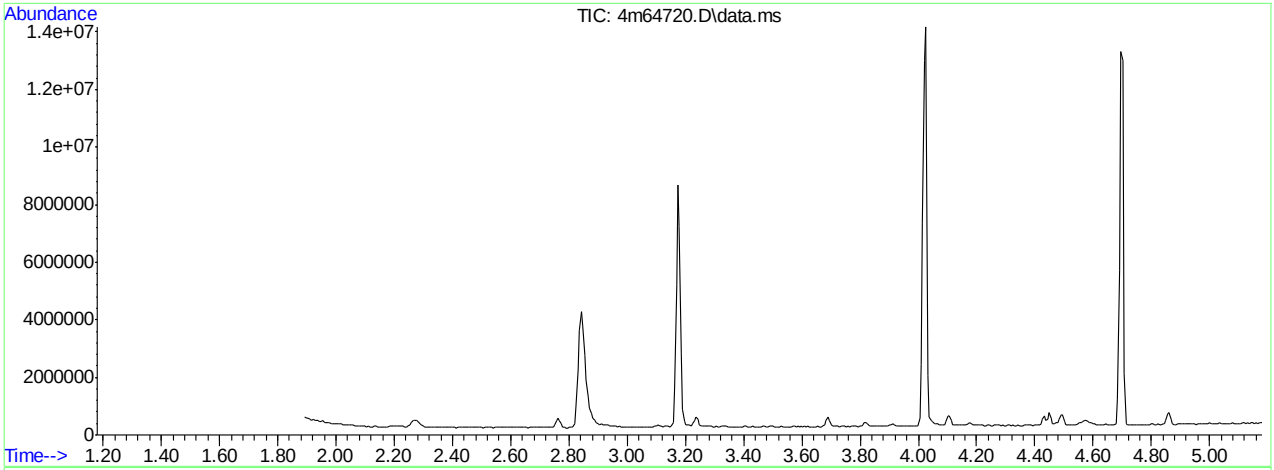
Ion	Exp%	Act%
235.00	100	100
165.00	0.00	48.43#
237.00	0.00	63.80#
0.00	0.00	0.00

SGS ACCUTEST JC19023

DFTPP

Data File : C:\msdchem\1\DATA\E4M2881\4m64720.D Vial: 1
Acq On : 14 Apr 2016 9:05 am Operator: linseyk
Sample : dftpp Inst : GCMS4M
Misc : op92998a,e4m2881 Multiplr: 1.00
MS Integration Params: events3.e

Method : C:\MSDCHEM\1\METHODS\DFTPP4M.M (ChemStation Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um



AutoFind: Scans 225, 226, 227; Background Corrected with Scan 208

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	36.3	258280	PASS
68	69	0.00	2	1.6	4287	PASS
69	198	0.00	100	37.8	268929	PASS
70	69	0.00	2	0.9	2537	PASS
127	198	40	60	42.9	305536	PASS
197	198	0.00	1	0.6	4427	PASS
198	198	100	100	100.0	711488	PASS
199	198	5	9	6.6	46648	PASS
275	198	10	30	24.9	177016	PASS
365	198	1	100	3.4	24255	PASS
441	443	0.01	100	77.5	100995	PASS
442	198	40	100	96.6	687531	PASS
443	442	17	23	19.0	130315	PASS

4m64720.D DFTPP4M.M Thu Apr 14 17:23:44 2016 MANAGER

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
50.05	59733	60.00	457	71.05	45	82.00	3891
51.05	258280	60.95	2678	71.90	622	83.00	5071
51.95	12358	62.05	3823	73.00	9177	85.00	2914
53.00	186	63.05	10823	74.00	20144	85.95	7237
53.20	923	64.05	1402	75.00	38614	86.90	2228
53.85	408	65.00	5253	76.05	12303	87.90	789
56.00	7193	66.00	478	77.10	291176	89.10	798
57.00	20601	67.00	82	78.00	19044	90.00	181
57.95	640	68.05	4287	79.00	17419	91.05	4835
58.20	383	69.00	268929	80.05	12571	92.00	3669
59.05	543	70.00	2537	81.00	18508	93.00	24515

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
94.05	2541	103.90	4777	116.05	3605	125.00	3741
95.00	895	105.00	5877	117.00	48560	125.95	348
95.95	779	106.00	2485	118.05	3075	126.20	636
97.15	2316	106.95	88755	118.80	620	127.00	305536
98.00	16613	108.05	12214	119.20	215	128.00	23012
99.00	16199	109.05	2422	120.05	375	129.00	114200
99.95	1254	110.00	166575	120.70	174	129.90	9530
100.90	9998	111.00	24379	121.15	456	131.05	2380
101.85	176	112.05	3159	122.00	4961	131.90	114
103.00	2632	112.90	992	123.00	7911	132.20	424
103.20	406	114.05	581	123.95	3501	132.90	482

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
133.70	311	143.00	1643	151.00	2319	158.95	2293
133.95	1878	143.85	195	151.20	262	159.95	4700
135.00	7204	144.15	596	151.70	1172	161.00	7679
136.00	4006	144.60	357	152.10	379	162.00	2024
137.05	4208	145.15	1487	153.00	4763	162.95	887
137.85	196	145.95	2061	154.00	3534	164.05	614
138.85	503	147.00	12335	155.10	7868	165.00	4310
140.05	1684	148.00	12963	156.00	12995	165.95	4544
141.00	12121	149.00	4103	157.00	2880	167.00	24350
142.00	4450	149.80	169	157.80	1810	168.00	11917
142.80	799	150.00	706	158.00	1559	169.05	3197

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
170.20	1030	180.00	15550	190.05	860	200.95	38
170.60	727	181.00	7487	190.95	2833	201.40	2324
171.00	742	182.00	1147	191.95	7105	201.80	329
172.00	2495	183.00	730	193.05	6769	202.95	4648
173.05	3867	183.50	555	194.05	1386	204.05	23832
174.05	6120	184.00	1539	195.00	1415	205.10	38998
175.00	12082	185.05	11088	196.05	22627	206.10	163456
176.00	3990	186.00	88595	197.00	4427	207.10	23332
177.00	3562	187.00	25789	198.00	711488	208.00	5882
178.05	2032	188.05	2540	199.00	46648	209.00	1628
178.95	20312	189.00	4726	199.95	4431	210.20	3008

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
211.05	7001	219.10	1376	228.00	4753	236.00	1429
211.80	264	219.70	317	229.00	7916	236.95	1291
212.50	118	220.10	811	229.90	1145	237.20	1406
213.10	343	221.10	43960	231.05	4425	238.00	703

M4M2881SIM.M Thu Apr 14 17:02:12 2016 MANAGER Page: 0

213.50	160	221.80	3763	232.00	1293	238.90	1387
214.10	203	222.05	3811	232.80	756	240.00	1127
215.00	1974	223.00	11574	233.20	189	241.00	2142
215.80	726	224.05	100086	233.90	1180	242.05	4545
216.10	3291	225.10	24836	234.10	1520	242.80	559
217.00	42592	226.05	2623	235.00	3019	243.05	5893
218.00	6216	227.00	39165	235.70	174	244.10	77501

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
245.10	10548	252.10	944	261.15	295	271.00	706
246.00	13587	253.15	1948	262.10	97	271.30	600
247.00	2554	254.10	1469	263.90	841	272.10	1096
247.60	95	255.00	393813	264.10	85	273.00	12304
247.90	655	256.00	58016	265.05	8314	274.05	32919
248.15	385	257.00	4804	265.95	1264	275.00	177016
248.70	1297	258.05	20468	266.90	170	276.00	21876
248.95	397	258.80	334	267.30	236	277.05	13725
249.90	937	259.10	3164	268.20	135	278.05	1847
251.15	1085	259.85	844	268.90	160	278.80	508
251.60	120	261.00	398	269.95	781	279.10	487

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
279.90	97	289.65	492	298.00	371	308.90	180
281.15	3645	290.05	414	300.70	209	309.50	68
282.00	571	290.80	189	301.05	509	309.80	136
282.20	320	291.05	458	302.00	1242	310.00	228
283.00	3052	292.05	1119	303.05	7446	311.50	189
284.10	1574	293.05	3652	303.95	1659	312.30	438
284.70	625	294.00	550	304.90	120	313.05	655
285.05	2194	294.80	223	307.60	77	314.05	3006
286.00	243	295.10	1890	307.95	828	315.00	5281
286.20	82	296.00	50648	308.20	185	316.05	3288
288.95	296	297.10	6591	308.60	117	317.00	557

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
319.90	249	328.20	555	340.95	2487	353.00	4422
321.00	1400	328.90	433	342.10	910	354.10	5044
322.05	1021	330.00	185	343.00	381	355.05	4717
323.10	17235	332.05	1488	344.05	473	355.80	350
324.10	3221	333.05	1447	345.00	91	356.10	958
324.80	308	334.10	13095	346.00	4050	357.00	1042
325.15	381	335.05	2912	347.10	989	358.15	194
325.60	169	336.00	564	349.80	109	359.10	315
326.00	204	339.05	501	350.90	148	359.90	75
327.10	3992	339.90	84	351.20	323	361.90	82
327.95	875	340.05	154	352.20	5622	363.80	101

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
365.00	24255	384.30	311	404.10	2425	424.05	6189
366.00	3411	384.70	108	405.05	334	424.90	213
367.00	289	385.00	105	409.15	192	425.05	410
369.20	430	389.80	374	410.20	74	426.40	190
370.05	894	390.05	1404	414.10	70	428.00	89
371.00	1350	391.05	1482	414.95	322	429.05	1531
372.10	11350	391.70	321	416.10	70	430.05	705
373.20	2681	392.15	272	419.60	100	431.05	478
374.10	120	401.05	1198	421.00	5303	431.80	78
383.05	2662	402.00	4961	422.10	6085	432.40	297
383.90	339	403.10	6080	423.10	34179	433.90	84

Average of 3.174 to 3.186 min.: 4m64720.D\data.ms

M4M2881SIM.M Thu Apr 14 17:02:12 2016 MANAGER Page: 1

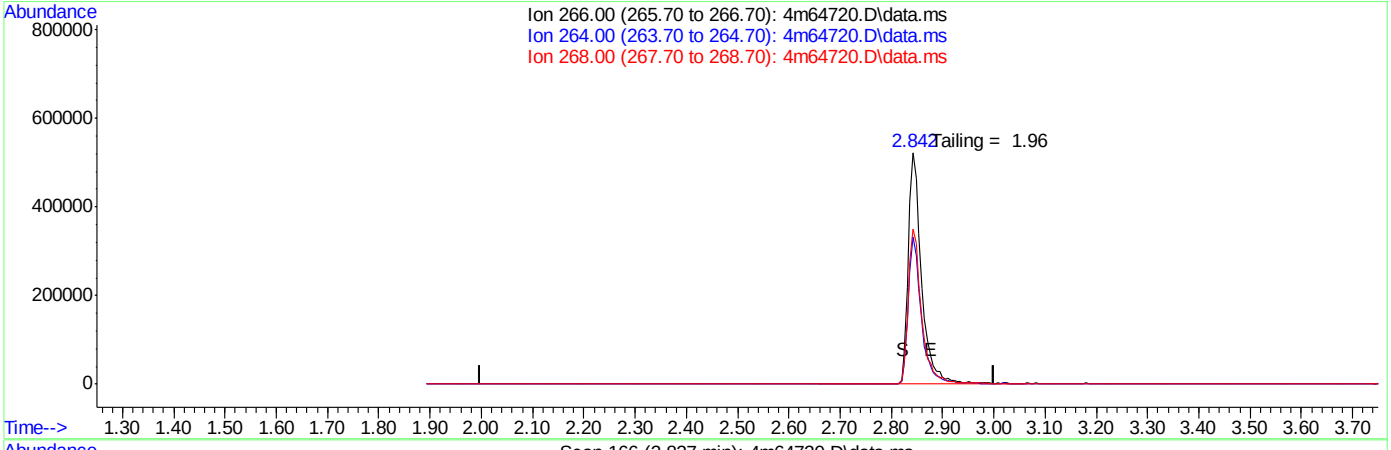
dftpp
Modified:subtracted

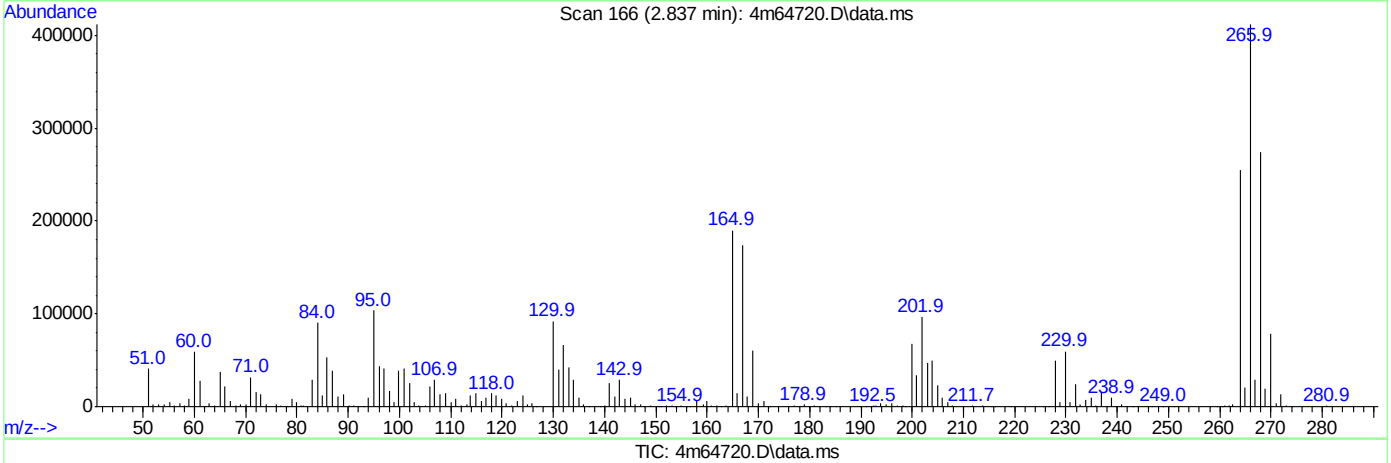
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
434.90	128	459.15	493				
435.30	158	503.00	77				
435.95	261	504.00	208				
436.40	88	535.90	70				
438.00	91						
439.15	323						
441.10	100995						
442.10	687531						
443.10	130315						
444.10	11143						
445.10	553						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64720.D
Acq On : 14 Apr 2016 9:05 am
Operator : linseyk
Sample : dftpp
Misc : op92998a,e4m2881
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 14 09:11:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP4M.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Mon Jul 29 12:02:51 2013
Response via : Initial Calibration





TIC: 4m64720.D\data.ms

(1) pentachlorophenol (t)

2.500min (-2.500) 0.00ppb

response 0

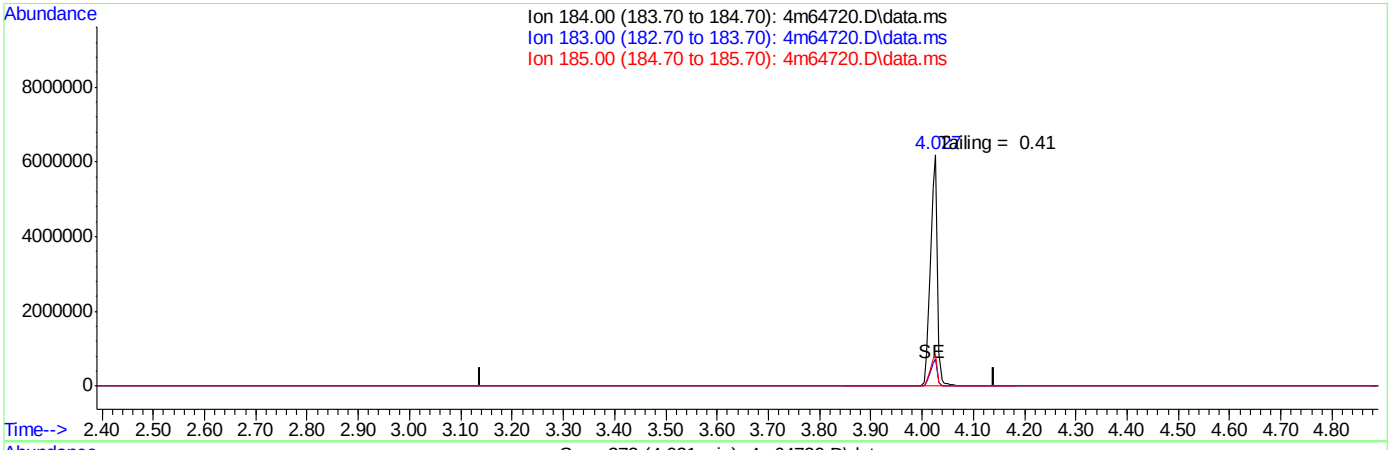
Ion	Exp%	Act%
266.00	100	0.00
264.00	58.00	0.00#
268.00	62.00	0.00#
0.00	0.00	0.00

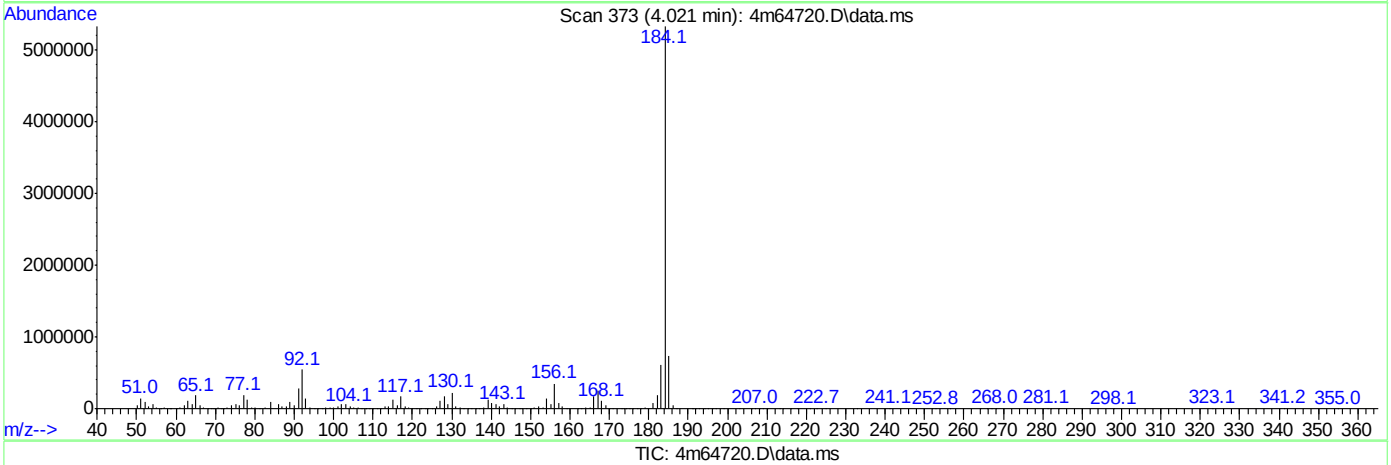
SGS ACCUTEST JC19023

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

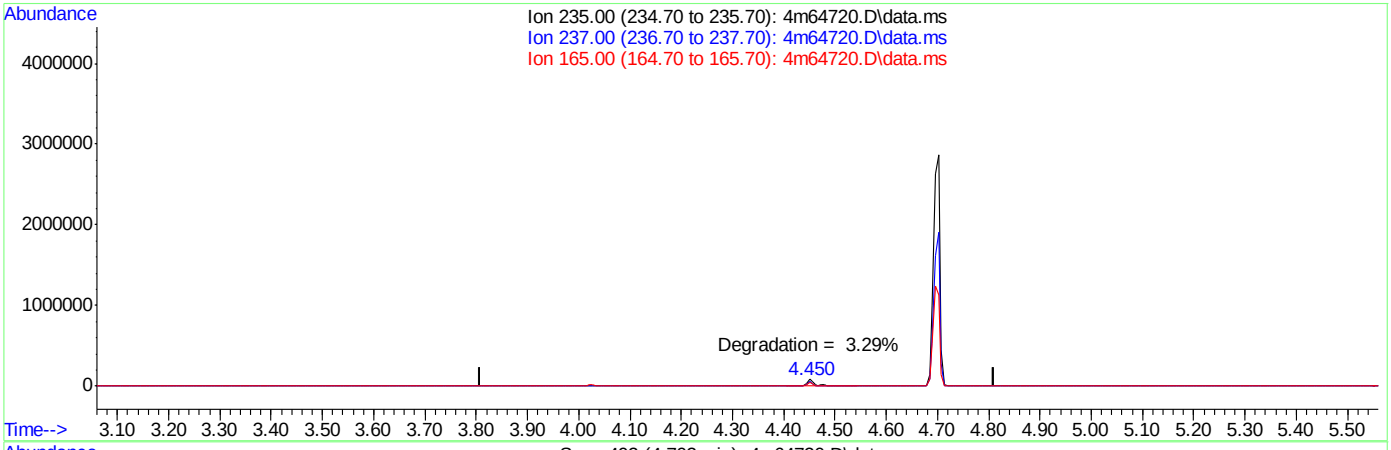
response 0

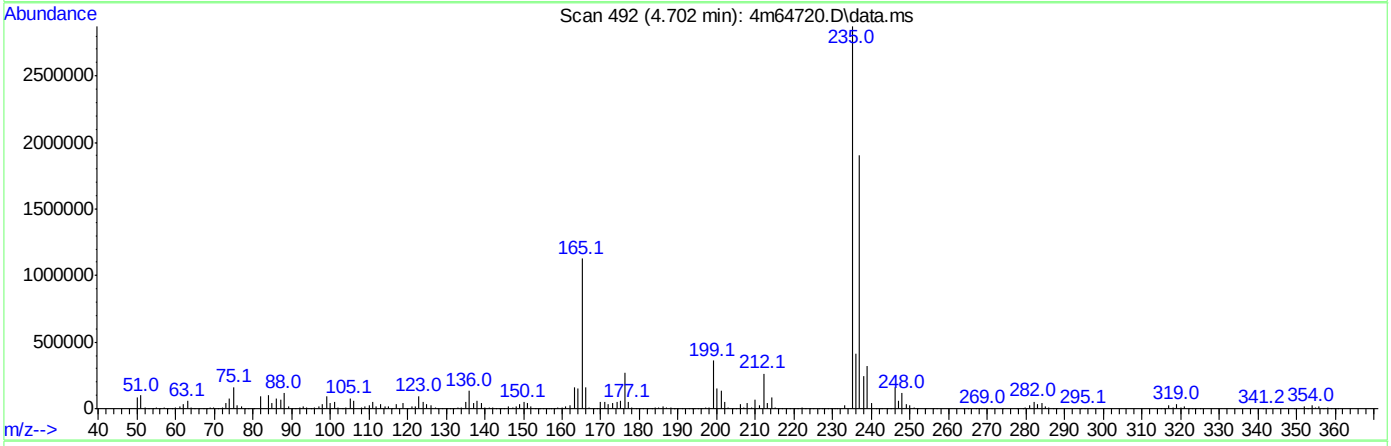
Ion	Exp%	Act%
184.00	100	0.00
183.00	10.60	0.00#
185.00	13.40	0.00#
0.00	0.00	0.00

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

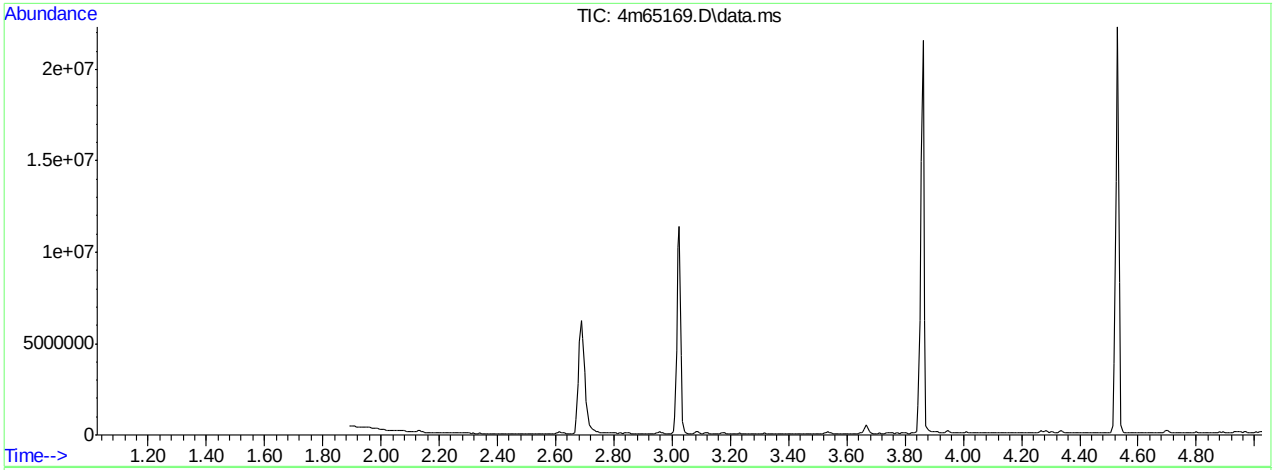
response 0

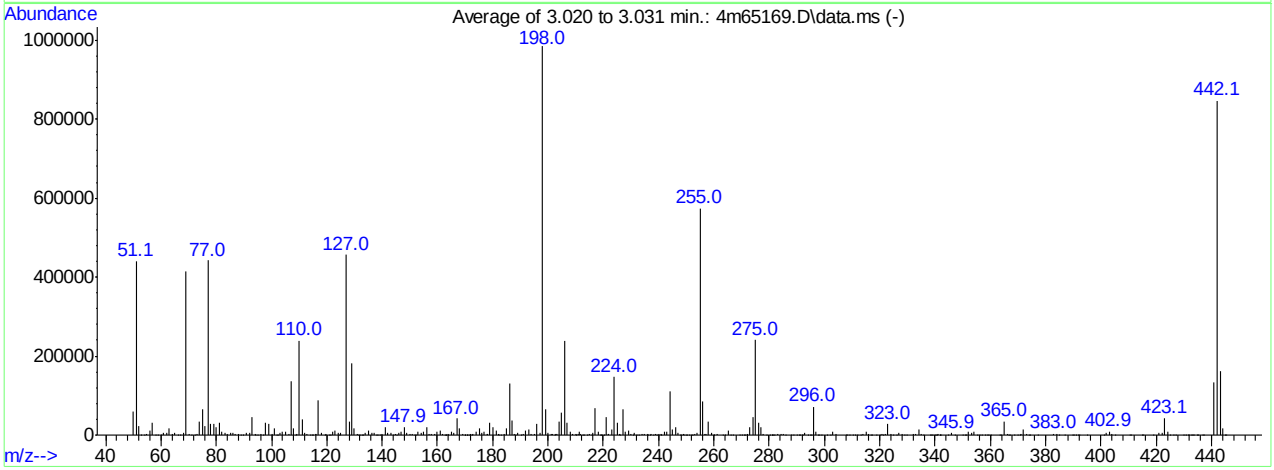
Ion	Exp%	Act%
235.00	100	0.00
237.00	63.70	0.00#
165.00	48.70	0.00#
0.00	0.00	0.00

DFTPP

Data File : C:\msdchem\1\DATA\E4M2910\4m65169.D Vial: 1
Acq On : 9 May 2016 10:19 am Operator: linseyk
Sample : dftpp Inst : GCMS4M
Misc : op93541a,e4m2910 Multiplr: 1.00
MS Integration Params: events3.e

Method : C:\MSDCHEM\1\METHODS\DFTPP4M.M (ChemStation Integrator)
Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um





AutoFind: Scans 198, 199, 200; Background Corrected with Scan 182

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	44.7	440259	PASS
68	69	0.00	2	1.7	6860	PASS
69	198	0.00	100	42.2	414779	PASS
70	69	0.00	2	0.6	2282	PASS
127	198	40	60	46.4	456555	PASS
197	198	0.00	1	0.6	6380	PASS
198	198	100	100	100.0	983872	PASS
199	198	5	9	6.6	65024	PASS
275	198	10	30	24.4	240288	PASS
365	198	1	100	3.5	34339	PASS
441	443	0.01	100	82.3	133227	PASS
442	198	40	100	86.0	846165	PASS
443	442	17	23	19.1	161859	PASS

4m65169.D DFTPP4M.M Tue May 10 10:33:43 2016 MANAGER

Average of 3.020 to 3.031 min.: 4m65169.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
50.10	58291	61.00	5332	72.10	96	83.00	5263
51.10	440259	62.10	4706	73.05	2701	84.00	2412
52.05	22583	63.00	16058	74.00	35476	85.00	5202
52.85	34	64.05	2825	75.00	64873	85.95	5728
53.95	354	65.00	6720	76.05	21674	87.00	3773
54.95	2313	66.05	751	77.05	442369	87.85	1625
55.95	12488	66.85	777	78.00	28462	89.00	123
57.00	31348	68.05	6860	79.00	28489	89.80	86
58.00	999	69.00	414779	80.00	19120	90.95	4776
59.00	123	70.05	2282	81.00	30194	91.95	6623
59.90	1160	71.15	506	81.95	8764	93.00	46856

Average of 3.020 to 3.031 min.: 4m65169.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
94.00	2346	103.00	5919	112.90	1623	121.30	165
94.20	488	103.90	8960	114.10	402	122.00	7394
94.95	67	104.90	9126	114.70	88	123.05	11611
96.05	3220	106.10	3046	114.95	1254	123.95	4889
96.90	1037	107.00	136353	115.90	3454	124.60	356
97.90	31465	108.00	18487	116.10	3017	125.00	5916
99.00	27167	108.70	301	117.00	87184	127.00	456555
100.00	1996	109.05	3722	117.95	6471	128.00	34857
101.00	16103	110.00	239432	119.05	1163	129.00	181138
101.95	1512	111.00	39435	119.85	2179	129.95	16104
102.30	160	112.05	5131	120.95	911	131.00	4103

Average of 3.020 to 3.031 min.: 4m65169.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
131.60	155	140.05	2767	150.05	1640	159.90	7252
132.00	1381	140.95	18727	151.05	2389	161.00	11049
132.60	500	142.00	5937	151.70	662	161.95	2241
133.05	774	143.00	4781	152.05	1032	162.60	83
133.95	4729	144.00	1290	153.00	7798	162.90	232
135.00	11924	144.80	1560	154.00	4963	163.15	883
136.10	5594	145.10	152	155.05	9227	163.70	212
137.00	6143	146.05	4412	156.00	20945	163.95	1832
137.85	1493	146.95	9995	157.00	4012	165.00	8607
138.45	368	147.95	19890	157.95	3126	166.05	5350
139.00	1491	149.00	4573	158.90	2967	167.00	42388

Average of 3.020 to 3.031 min.: 4m65169.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
168.00	17213	175.05	17847	183.95	3237	194.00	3448
169.05	3531	176.05	4449	185.00	15773	194.90	2166
169.90	775	177.00	9254	186.00	130621	196.00	27752
170.10	368	177.90	1576	187.00	38163	197.05	6380
170.70	434	178.15	2100	187.90	4129	198.00	983872
170.95	923	179.00	31514	188.10	517	199.00	65024
171.40	392	180.00	20609	188.95	6897	200.05	5708
172.00	2456	181.10	10552	190.05	1175	201.25	2451
172.30	444	182.00	2780	191.00	4302	201.65	3110
172.95	3951	182.20	437	192.00	11095	202.20	1485
174.05	9029	183.00	1535	193.05	12969	202.85	3399

Average of 3.020 to 3.031 min.: 4m65169.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
203.10	2818	211.90	1900	219.50	257	227.95	7310
204.00	35460	212.70	211	220.10	1482	229.00	12481
205.00	55976	213.10	730	220.95	46240	230.10	2019
206.10	239472	214.10	458	221.70	3099	230.70	354

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207.00	30918	215.00	2617	222.00	3550	231.00	4613
208.00	9706	215.70	351	223.00	13938	232.05	1139
208.95	3653	216.00	5460	224.00	147579	232.90	1221
209.90	523	217.00	67541	225.05	32206	234.00	3877
210.20	2210	218.00	8142	225.80	752	235.00	4338
210.70	3220	218.85	730	226.05	4267	235.90	854
211.10	8622	219.10	449	227.00	64464	236.10	2931

Average of 3.020 to 3.031 min.: 4m65169.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
236.80	998	245.05	15637	252.05	1163	261.05	1638
237.05	3609	246.00	20647	253.00	3156	263.10	476
238.05	481	247.05	4812	254.00	4962	263.90	949
238.90	1805	247.70	394	255.00	573547	265.05	10855
239.10	326	248.05	770	256.00	84552	265.85	1529
240.00	1567	248.90	3047	256.90	2131	267.00	590
240.70	1113	249.10	981	257.10	4096	269.10	547
241.00	1953	250.00	849	258.00	34725	270.05	965
242.05	8079	250.40	912	259.05	4651	270.75	513
243.00	9195	251.00	1217	259.80	249	271.30	660
244.05	109605	251.75	543	260.05	876	272.00	2150

Average of 3.020 to 3.031 min.: 4m65169.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
273.00	19249	282.00	285	292.15	687	302.05	1285
274.05	45501	283.00	3085	293.00	5353	303.10	9303
275.00	240288	284.10	1621	293.90	945	304.05	2802
276.05	31909	285.10	3263	294.85	646	307.70	509
277.00	19934	286.05	560	295.10	343	308.10	554
277.95	3741	288.00	321	296.00	72152	308.95	1400
278.95	843	288.85	917	297.00	9241	310.05	1128
280.10	174	289.95	633	297.80	129	311.10	102
280.90	232	290.80	97	298.05	576	311.70	127
281.20	531	291.10	563	298.80	172	313.10	1082
281.60	107	291.80	190	301.00	907	314.05	3754

Average of 3.020 to 3.031 min.: 4m65169.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
315.00	7890	324.90	424	338.20	137	345.95	4883
316.00	4170	326.05	580	338.70	136	347.00	467
316.90	249	326.95	4391	339.10	519	349.80	160
317.10	496	328.05	2791	339.70	127	350.60	74
318.80	75	328.90	922	340.20	89	351.05	516
319.80	87	329.70	69	340.80	676	352.10	8764
320.95	1932	332.00	1939	341.05	2098	353.05	5200
321.20	582	332.95	2084	341.80	113	354.10	8083
322.00	1625	334.05	14899	341.90	259	355.10	1140
323.00	27368	335.05	4203	342.05	223	356.10	137
324.05	3710	335.95	385	344.90	96	356.80	93

Average of 3.020 to 3.031 min.: 4m65169.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
358.10	381	369.95	625	386.80	113	405.00	404
358.90	118	370.60	493	389.90	936	410.20	324
359.15	268	371.05	1840	390.10	380	410.85	251
359.95	291	372.05	13487	390.95	1405	414.75	382
363.40	160	373.00	3103	391.60	130	415.10	123
363.70	217	373.80	213	392.00	1007	419.00	169
365.00	34339	374.25	299	395.00	163	421.00	6488
366.00	3825	377.00	69	400.95	914	422.00	6663
366.75	244	383.00	3412	402.05	4901	423.10	42805
367.10	275	383.90	1623	402.95	9294	424.00	9187
368.70	114	384.85	177	404.05	2936	424.90	1122

Average of 3.020 to 3.031 min.: 4m65169.D\data.ms

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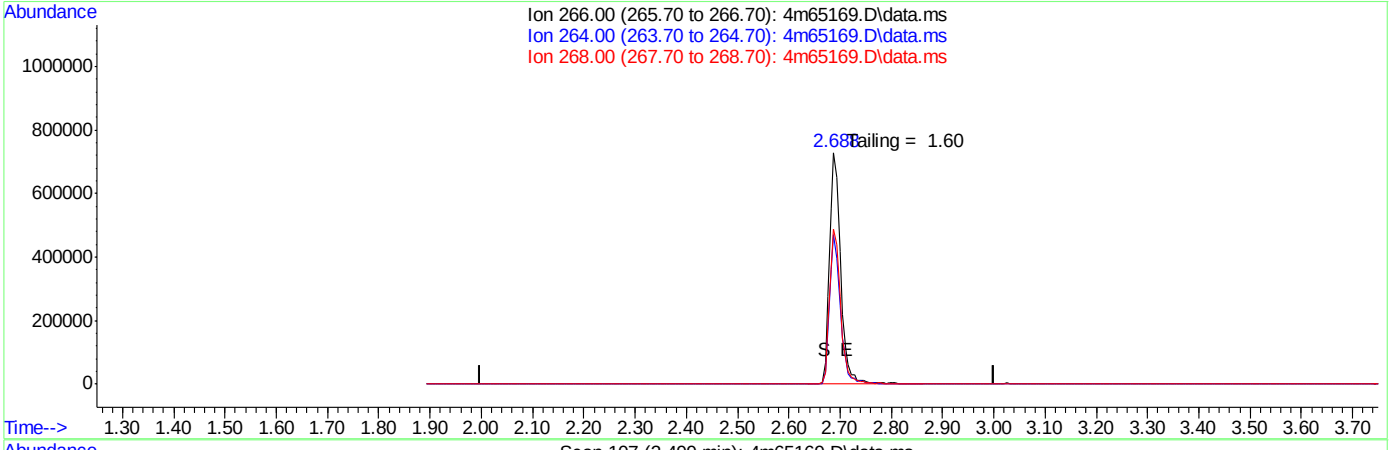
dftpp
Modified:subtracted

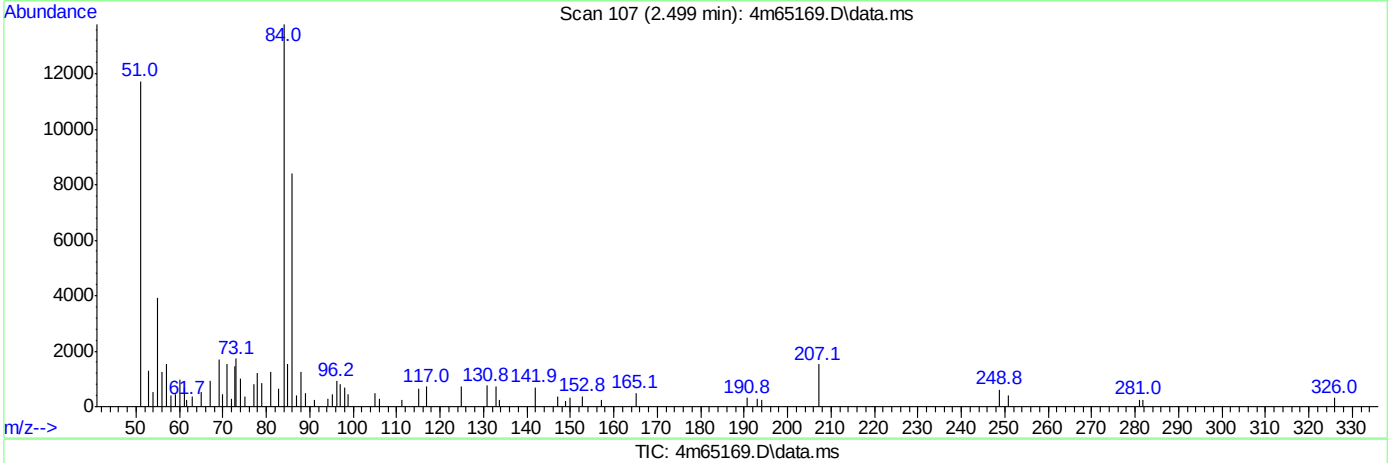
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
426.10	133	436.60	446				
427.10	92	437.35	254				
429.80	485	441.00	133227				
430.65	506	442.05	846165				
431.65	615	443.05	161859				
432.05	421	444.05	16961				
432.65	407	444.90	128				
433.00	106	445.10	877				
433.30	285						
434.80	377						
435.30	157						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65169.D
Acq On : 9 May 2016 10:19 am
Operator : linseyk
Sample : dftpp
Misc : op93541a,e4m2910
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 09 10:25:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP4M.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Mon Jul 29 12:02:51 2013
Response via : Initial Calibration





TIC: 4m65169.D\data.ms

(1) pentachlorophenol (t)

2.500min (-2.500) 0.00ppb

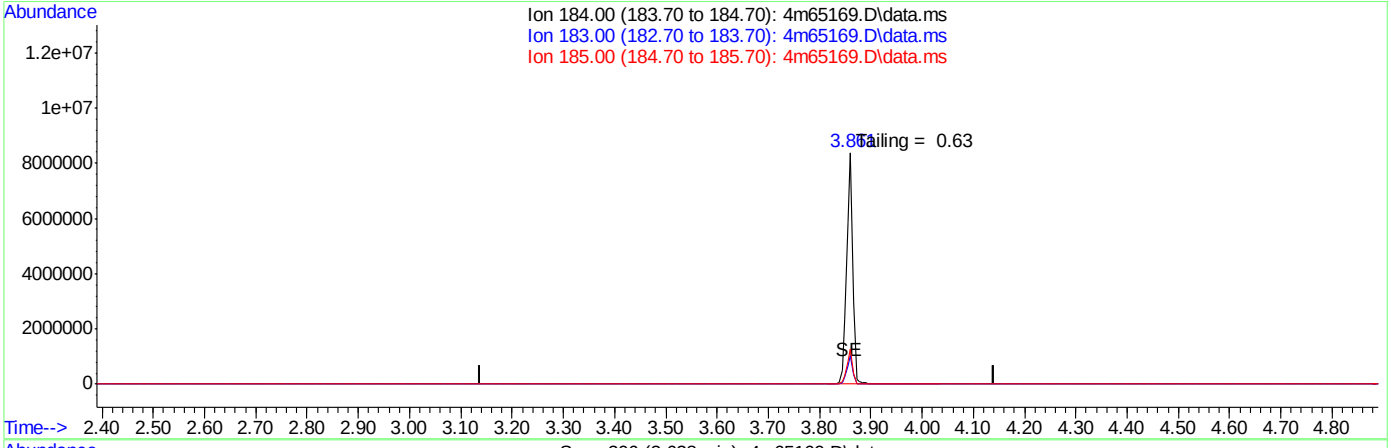
response 0

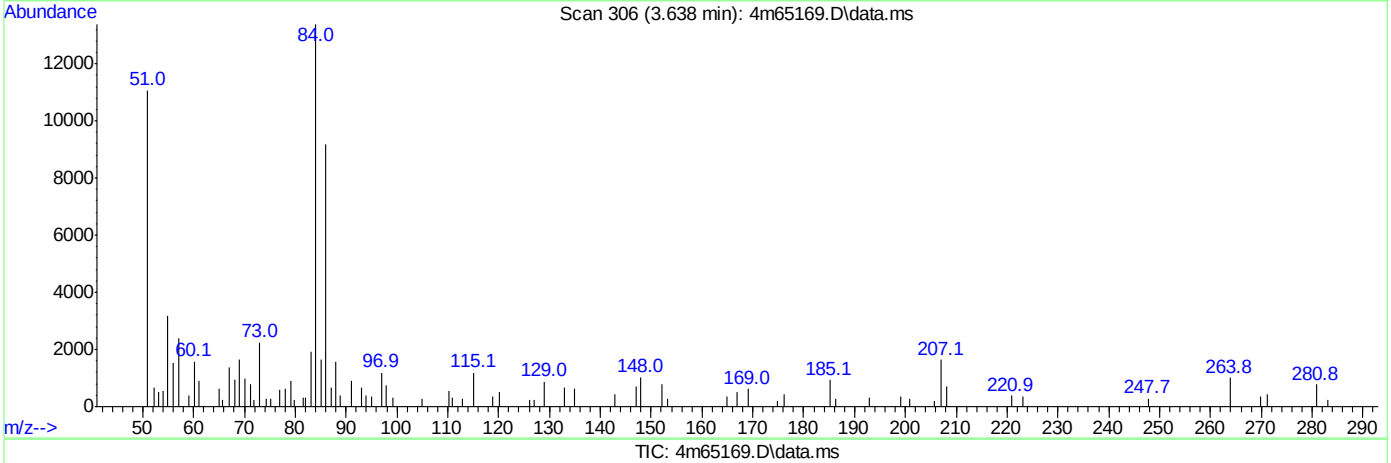
Ion	Exp%	Act%
266.00	100	0.00
264.00	58.00	0.00#
268.00	62.00	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65169.D
Acq On : 9 May 2016 10:19 am
Operator : linseyk
Sample : dftpp
Misc : op93541a,e4m2910
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 09 10:25:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP4M.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Mon Jul 29 12:02:51 2013
Response via : Initial Calibration





TIC: 4m65169.D\data.ms

(2) benzidine (t)

3.640min (-3.640) 0.00ppb

response 0

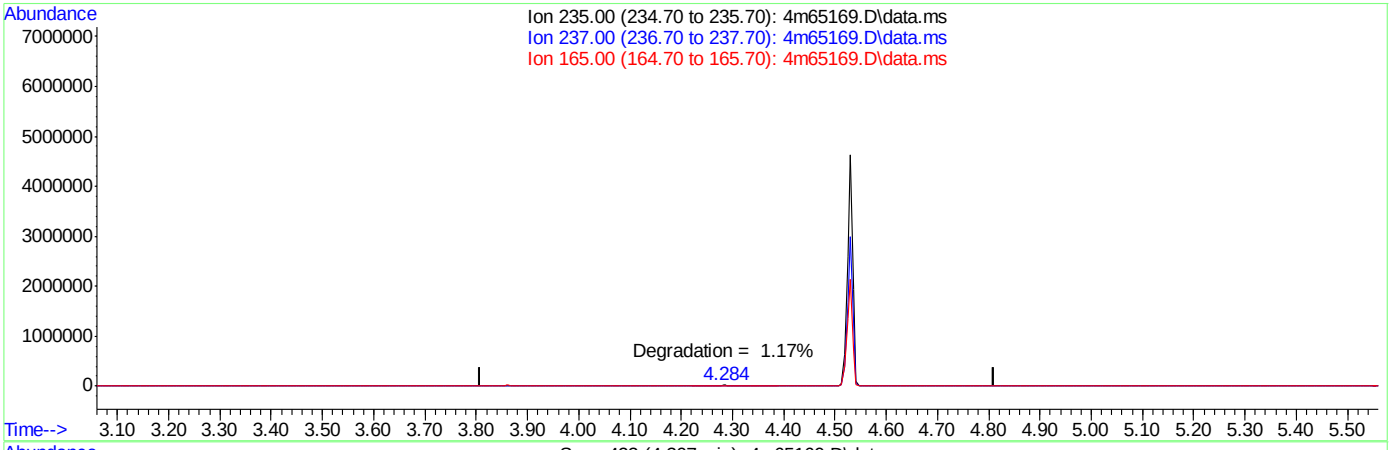
Ion	Exp%	Act%
184.00	100	0.00
183.00	10.60	0.00#
185.00	13.40	0.00#
0.00	0.00	0.00

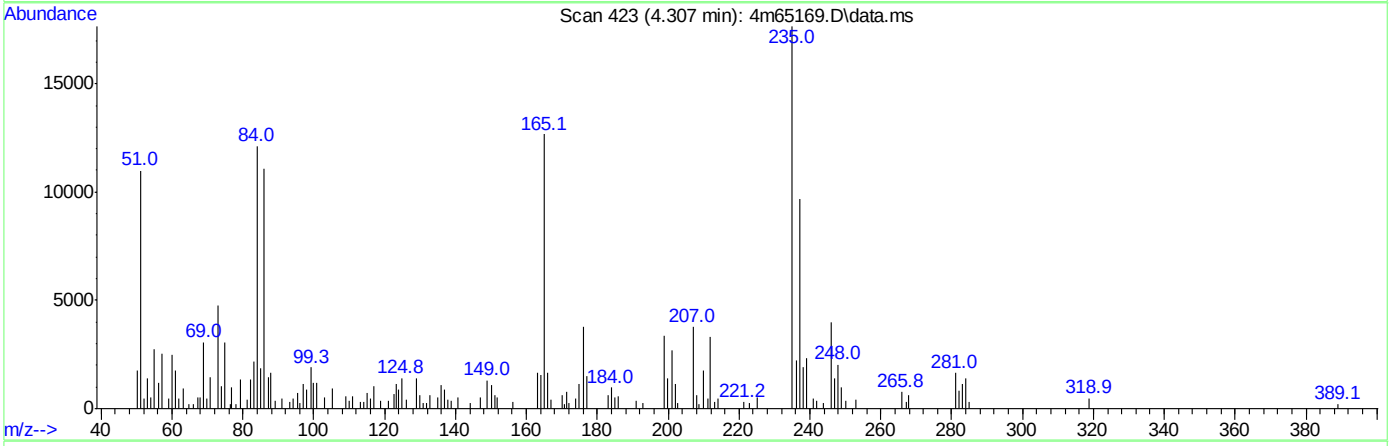
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65169.D
Acq On : 9 May 2016 10:19 am
Operator : linseyk
Sample : dftpp
Misc : op93541a,e4m2910
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 09 10:25:21 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP4M.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Mon Jul 29 12:02:51 2013
Response via : Initial Calibration





TIC: 4m65169.D\data.ms

(3) ddt (t)

4.310min (-4.310) 0.00ppb

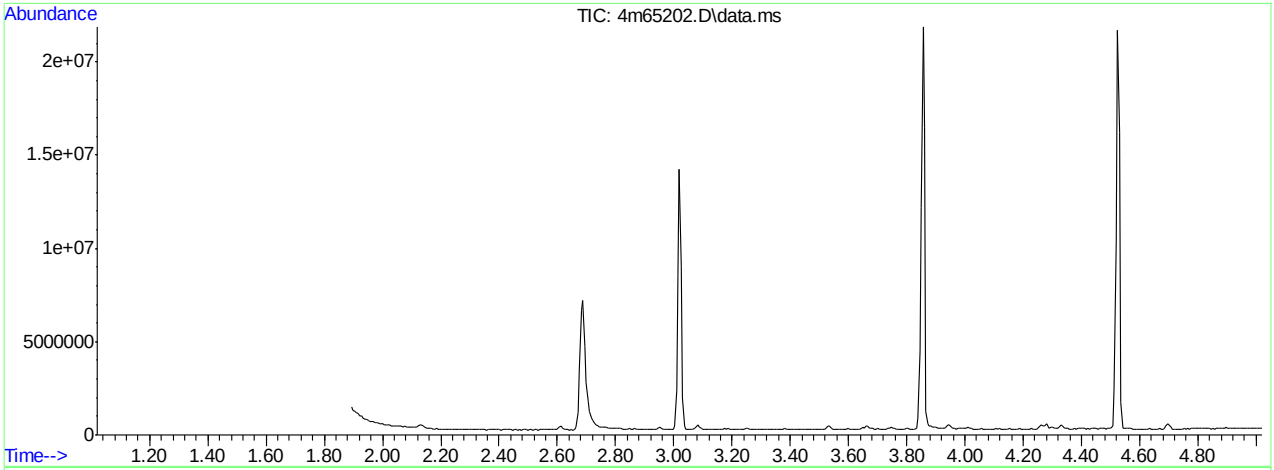
response 0

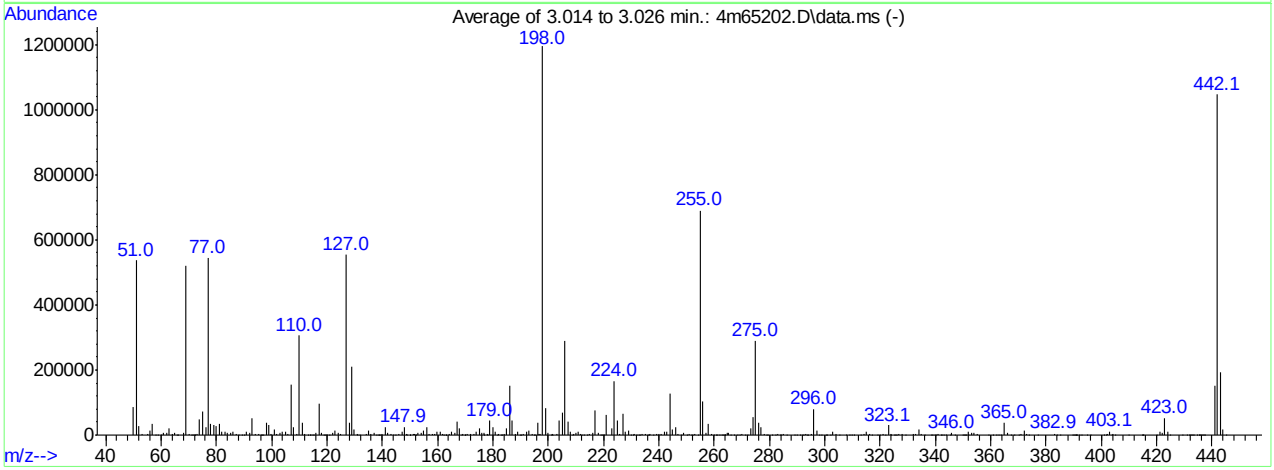
Ion	Exp%	Act%
235.00	100	0.00
237.00	63.70	0.00#
165.00	48.70	0.00#
0.00	0.00	0.00

DFTPP

Data File : C:\msdchem\1\DATA\E4M2912\4m65202.D Vial: 1
Acq On : 10 May 2016 1:04 pm Operator: linseyk
Sample : dftpp Inst : GCMS4M
Misc : op934743a,e4m2912 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 197, 198, 199; Background Corrected with Scan 192

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	44.9	536611	PASS
68	69	0.00	2	1.2	6198	PASS
69	198	0.00	100	43.6	520794	PASS
70	69	0.00	2	0.4	2296	PASS
127	198	40	60	46.3	553272	PASS
197	198	0.00	1	0.3	3719	PASS
198	198	100	100	100.0	1194475	PASS
199	198	5	9	6.8	81680	PASS
275	198	10	30	24.1	288085	PASS
365	198	1	100	3.1	36995	PASS
441	443	0.01	100	78.9	152661	PASS
442	198	40	100	87.6	1046635	PASS
443	442	17	23	18.5	193392	PASS

4m65202.D DFTPP4M.M Tue May 10 14:56:48 2016 MANAGER

Average of 3.014 to 3.026 min.: 4m65202.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
50.10	85680	62.10	6954	71.70	156	81.00	34606
51.00	536611	63.00	19952	72.00	303	81.95	10086
52.05	26861	64.10	2701	72.30	163	83.00	8811
53.05	2003	65.05	7616	73.00	2499	83.90	8336
55.20	3130	65.85	496	74.00	47765	85.00	5325
55.95	15208	66.10	183	74.95	73782	85.95	11205
57.00	34824	68.05	6198	76.10	23318	87.00	2554
57.95	892	69.00	520794	77.00	544373	87.95	1821
58.90	664	70.00	2296	78.05	34325	89.10	684
60.05	760	70.95	241	79.00	31271	90.20	241
61.00	5934	71.30	634	80.00	26517	90.95	8900

Average of 3.014 to 3.026 min.: 4m65202.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
92.00	8063	101.95	1953	113.00	1025	120.05	1452
93.00	50456	102.95	7047	113.90	114	121.00	539
93.95	4274	103.90	9420	114.10	158	122.00	7946
95.15	3772	105.05	11032	114.70	108	123.05	13554
95.95	742	106.00	2642	115.00	697	123.95	6685
96.50	469	107.00	154402	116.00	7297	125.05	5155
97.05	852	108.00	23173	117.00	97149	126.95	553272
98.00	37744	109.10	4836	117.95	7309	128.00	39086
99.00	31214	109.95	306073	118.80	451	129.00	211199
99.95	3198	111.05	38474	119.05	316	129.90	17550
101.00	16912	111.90	3770	119.70	200	130.85	1905

Average of 3.014 to 3.026 min.: 4m65202.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
131.05	152	141.00	23611	150.20	801	159.00	4832
131.95	1620	142.00	6048	151.15	3163	159.95	9295
134.05	4591	143.05	5297	151.70	2066	160.95	12114
134.95	15389	144.05	1007	152.00	735	161.80	2080
136.00	4925	144.80	232	152.20	333	162.10	1196
137.05	7594	146.05	3372	152.95	7334	162.80	338
137.95	1317	147.00	10052	154.05	6237	163.05	717
138.50	262	147.95	25325	154.95	13540	164.15	1965
138.80	701	148.70	936	156.05	24095	165.00	8922
139.25	559	149.00	4780	157.00	4547	166.05	8191
140.05	2195	149.95	1341	158.00	5206	166.95	42641

Average of 3.014 to 3.026 min.: 4m65202.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
168.00	20040	176.80	1838	184.05	2868	194.20	3457
168.80	645	176.95	5928	185.00	19077	194.90	246
169.05	4134	177.80	1047	186.00	151189	195.05	1375
169.70	529	178.10	1946	187.05	43768	196.10	38152
170.05	1407	179.00	43459	188.05	4851	196.80	3719
170.90	2027	180.00	25363	188.95	9061	197.10	3070
172.00	4490	181.00	10863	189.85	1033	198.00	1.19448e+006
173.00	4578	181.80	690	190.10	538	199.00	81680
174.05	11297	182.00	1927	190.90	3750	200.00	5823
175.00	21423	182.70	825	192.05	10807	201.00	968
176.05	6356	183.25	1138	193.00	13903	201.50	1720

Average of 3.014 to 3.026 min.: 4m65202.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
201.70	5034	211.65	3432	220.10	1561	231.05	4367
202.95	5149	212.20	695	221.00	60954	232.05	1102
204.05	44704	213.00	333	223.00	19428	232.70	426
205.05	68601	214.20	147	224.00	166656	233.05	852

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206.05	289621	215.05	4250	225.05	44909	233.90	4031
207.10	40768	216.00	5373	226.00	4237	235.00	4417
208.00	11923	217.00	77488	227.00	67064	235.95	1663
208.75	105	218.00	8017	228.00	8950	236.20	1142
209.10	2501	218.95	951	229.05	13239	236.95	4656
210.05	5623	219.50	306	229.90	1675	238.00	720
211.00	10461	219.90	847	230.80	941	239.05	2766

Average of 3.014 to 3.026 min.: 4m65202.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
240.05	2110	251.05	2115	260.80	80	267.15	931
241.00	4414	251.90	620	261.15	711	268.50	78
242.05	9318	252.15	1508	261.95	191	269.10	334
243.05	10599	252.95	3056	262.80	141	270.05	1960
244.05	129093	254.00	1781	263.25	378	271.05	1659
245.05	18131	255.00	690709	263.70	267	271.90	1489
246.05	24871	256.00	102107	263.90	767	273.05	19428
247.05	4253	257.05	6640	264.10	561	274.00	54733
247.95	1357	258.00	35323	264.90	7349	275.00	288085
248.95	5630	259.05	4310	265.10	6299	276.00	38696
250.05	1534	259.95	914	265.85	1690	277.00	23064

Average of 3.014 to 3.026 min.: 4m65202.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
278.05	3216	290.05	787	298.70	120	313.10	901
279.10	525	290.95	309	300.60	154	314.05	3471
279.30	138	291.95	713	301.00	1041	315.00	9174
280.90	635	292.20	621	302.05	1596	316.05	4459
282.05	733	292.95	4911	303.00	9611	316.95	1533
283.10	2777	293.60	267	304.15	3080	319.05	494
283.95	1584	293.95	1814	305.10	344	319.95	209
284.20	1164	294.95	2129	307.90	1220	320.95	2921
285.00	4786	296.00	79432	308.95	1076	322.00	1185
286.10	1125	297.00	14048	309.90	1670	323.05	29483
289.05	1336	298.05	710	310.70	165	323.90	1367

Average of 3.014 to 3.026 min.: 4m65202.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
324.10	5082	336.05	288	346.00	6785	359.00	181
325.05	801	338.50	105	346.90	693	361.00	223
325.60	361	339.05	329	349.90	77	362.05	180
326.05	739	339.90	203	350.20	87	362.80	195
326.85	5167	340.10	587	350.60	549	363.50	160
328.05	3416	340.95	3180	351.00	180	365.00	36995
329.00	348	342.00	279	351.70	1422	366.05	5404
331.95	2470	342.15	801	352.05	9879	367.10	82
332.95	3155	343.00	115	353.00	5969	368.70	74
334.05	18870	343.90	347	354.05	8458	370.00	969
334.95	5154	345.30	251	355.00	2164	370.95	2819

Average of 3.014 to 3.026 min.: 4m65202.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
372.00	15208	390.90	537	404.10	1994	425.05	1134
373.00	3728	391.15	671	404.95	838	429.40	89
373.90	579	392.05	1407	409.75	366	431.00	105
377.10	116	392.95	464	414.70	151	431.85	268
382.95	5141	394.90	205	415.00	558	432.20	264
383.95	1160	396.00	348	415.20	125	432.70	211
385.05	229	400.85	1321	419.85	285	432.90	138
389.65	651	401.80	830	421.00	9071	433.40	181
390.00	1234	402.00	4790	422.00	7445	434.55	445
390.20	953	403.05	11278	423.00	53379	435.20	177
390.70	298	403.90	473	424.05	9721	435.40	296

Average of 3.014 to 3.026 min.: 4m65202.D\data.ms

M4M2881SIM.M Tue May 10 12:46:34 2016 MANAGER Page: 1

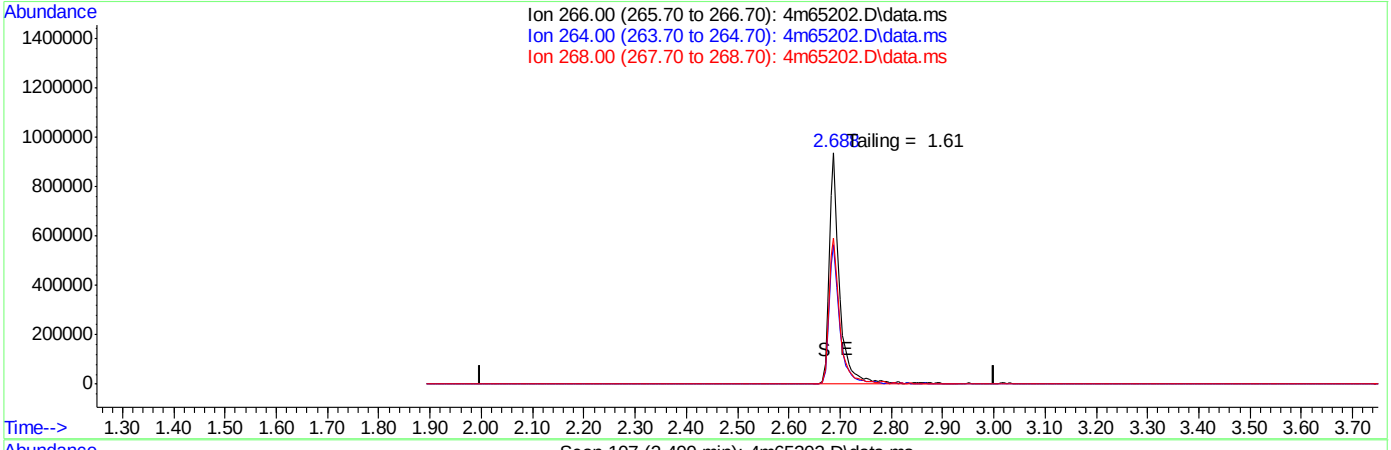
dftpp
Modified:subtracted

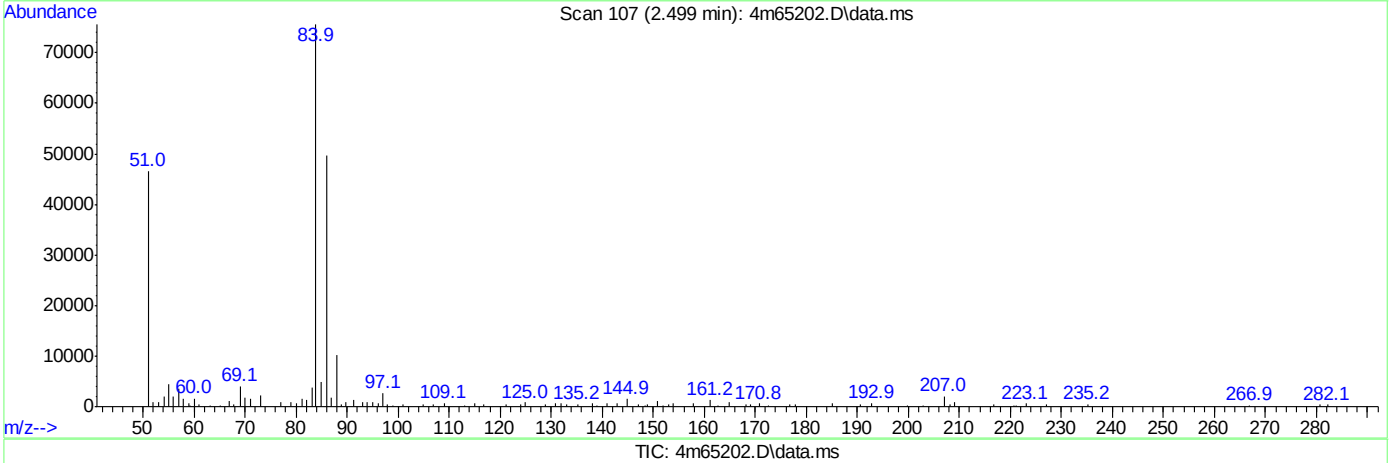
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
435.70	512						
436.00	74						
436.45	279						
436.90	164						
437.40	113						
441.05	152661						
442.05	1.04664e+006						
443.05	193392						
444.05	17686						
444.95	1115						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2912\
Data File : 4m65202.D
Acq On : 10 May 2016 1:04 pm
Operator : linseyk
Sample : dftpp
Misc : op934743a,e4m2912
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 10 13:10:11 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: 4m65202.D\data.ms

(1) pentachlorophenol (t)

2.500min (-2.500) 0.00ppb

response 0

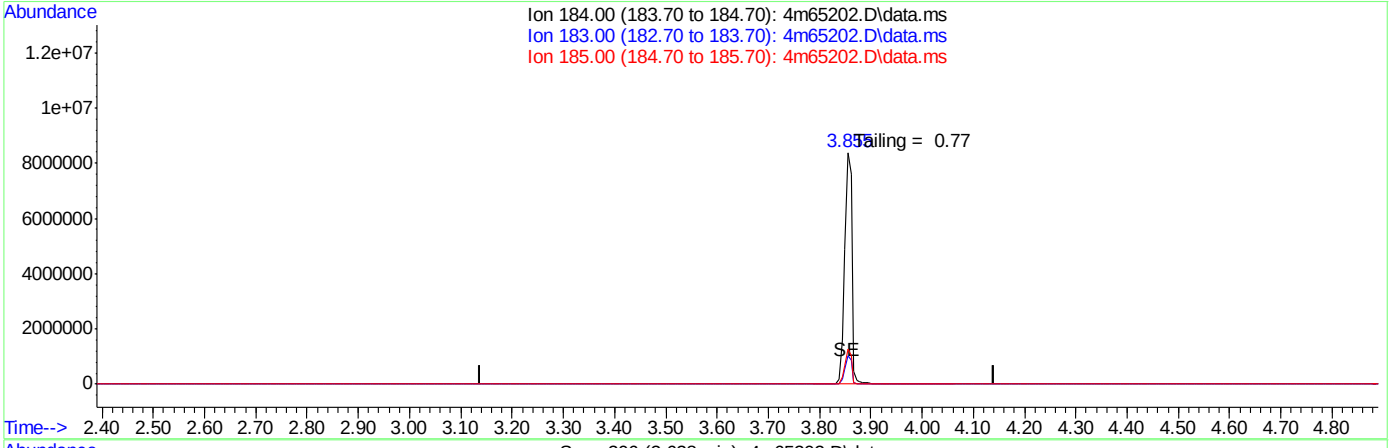
Ion	Exp%	Act%
266.00	100	0.00
264.00	58.00	0.00#
268.00	62.00	0.00#
0.00	0.00	0.00

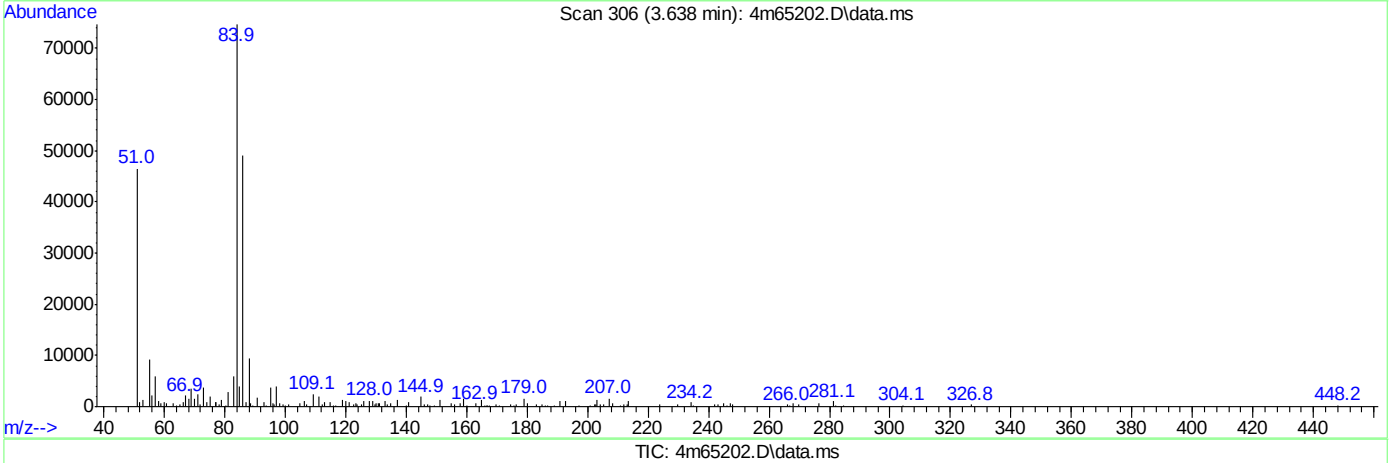
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2912\
Data File : 4m65202.D
Acq On : 10 May 2016 1:04 pm
Operator : linseyk
Sample : dftpp
Misc : op934743a,e4m2912
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 10 13:10:11 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: 4m65202.D\data.ms

(2) benzidine (t)

3.640min (-3.640) 0.00ppb

response 0

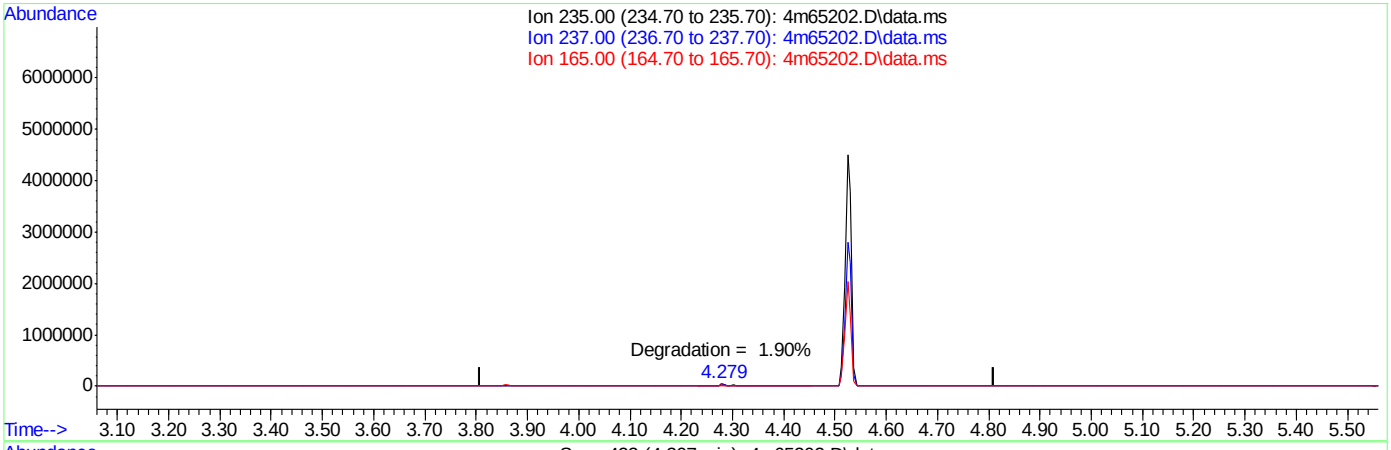
Ion	Exp%	Act%
184.00	100	0.00
183.00	10.60	0.00#
185.00	13.40	0.00#
0.00	0.00	0.00

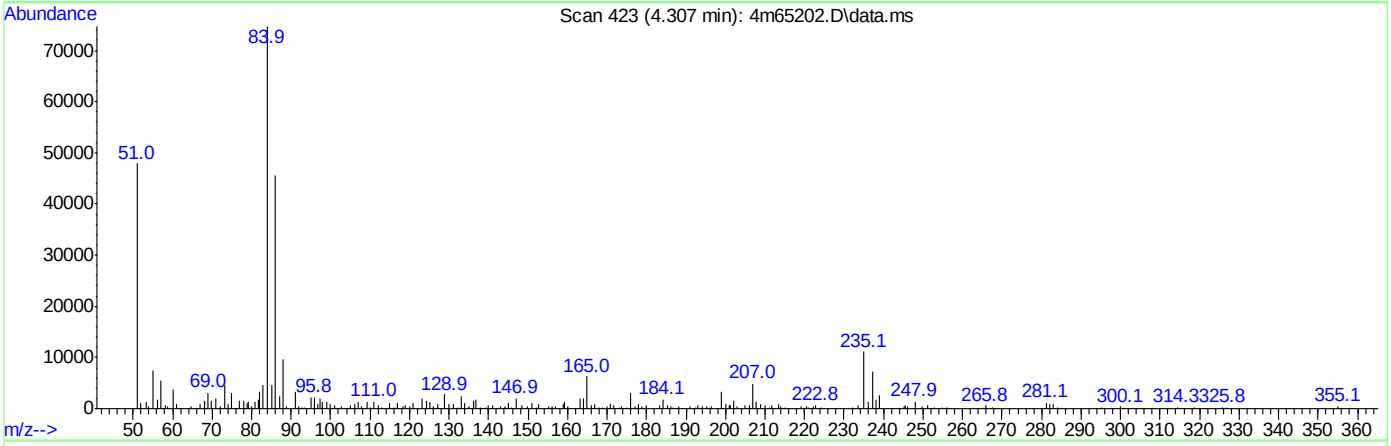
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E4M2912\
Data File : 4m65202.D
Acq On : 10 May 2016 1:04 pm
Operator : linseyk
Sample : dftpp
Misc : op934743a,e4m2912
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 10 13:10:11 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: 4m65202.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

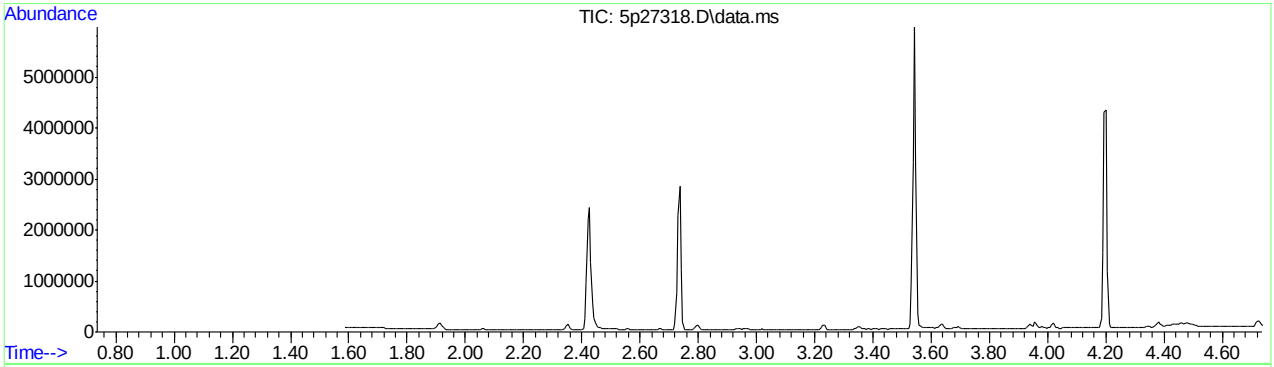
SGS ACCUTEST JC19023

DFTPPR

Data Path : C:\msdchem\1\DATA\E5P1382\
Data File : 5p27318.D
Acq On : 11 Apr 2016 10:14 am
Operator : seanb1
Sample : dftpp
Misc : op92466,e5p1382
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\MSDCHEM\1\METHODS\DFTPP5P.M
Title : Semi Volatile Extractables by GC/MS zb-5msi 30mx0.Tue Aug 25 09:34:01 2015
Last Update : Tue Aug 25 09:34:01 2015



AutoFind: Scans 215, 216, 217; Background Corrected with Scan 200
AUTOFIND via AUTOINTEGRATE

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	36.1	90825	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	39.6	99778	PASS
70	69	0.00	2	0.6	629	PASS
127	198	40	60	54.0	135978	PASS
197	198	0.00	1	0.8	1902	PASS
198	198	100	100	100.0	251882	PASS
199	198	5	9	6.7	16968	PASS
275	198	10	30	25.4	63920	PASS
365	198	1	100	2.7	6782	PASS
441	443	0.10	100	75.5	23750	PASS
442	198	40	100	64.3	161853	PASS
443	442	17	23	19.4	31445	PASS

SGS ACCUTEST JC19023

Average of 2.731 to 2.741 min.: 5p27318.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.10	602	51.10	90825	63.10	3279	75.10	15025
38.10	1322	52.10	4697	64.00	296	76.20	2786
39.10	6483	53.10	353	64.25	363	77.10	98087
40.05	334	54.10	254	65.10	2028	78.10	6587
41.10	199	55.10	514	66.15	280	79.10	6362
43.10	392	56.05	3060	67.10	433	80.05	5152
45.20	285	57.10	7346	69.05	99778	81.10	7429
46.10	95	59.05	427	70.10	629	82.05	2011
48.30	122	60.15	237	72.00	228	83.10	1989
49.00	799	61.05	1144	73.10	926	85.10	1776
50.10	25654	62.15	1232	74.10	9702	86.05	1817

Average of 2.731 to 2.741 min.: 5p27318.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
87.05	1284	99.10	6750	112.15	1209	123.05	3859
88.05	614	100.05	654	113.00	486	124.10	1586
89.00	156	101.10	4326	113.90	108	125.05	1641
89.20	142	102.05	127	115.05	316	127.10	135978
91.05	1701	103.10	1505	115.30	140	128.10	10776
92.10	1896	104.05	2543	116.10	1980	129.10	52106
93.10	11324	105.05	2303	117.10	24174	130.00	4364
94.05	896	107.10	33300	118.05	1734	131.05	567
95.10	85	108.10	5511	119.00	157	132.10	443
96.10	319	110.10	67514	120.10	425	133.05	252
98.10	9112	111.10	9942	122.10	2034	133.70	94

Average of 2.731 to 2.741 min.: 5p27318.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
134.00	1144	144.05	355	153.10	1958	163.90	156
134.20	143	145.05	262	154.10	1552	164.10	251
135.05	3876	146.00	934	155.10	3265	165.00	2265
136.00	1879	146.20	210	156.10	5267	166.10	1991
137.10	2349	147.05	2667	157.15	1401	167.05	11961
138.00	401	148.05	6274	158.10	1302	168.10	5427
139.10	401	149.05	1064	159.10	918	169.00	583
140.15	732	149.90	138	160.10	2010	170.00	26
141.10	5924	150.15	194	161.10	2896	170.60	117
142.10	1971	151.20	777	162.00	907	171.10	398
143.05	1478	151.70	498	163.15	326	172.00	1299

Average of 2.731 to 2.741 min.: 5p27318.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
173.05	1627	182.90	151	192.10	2689	203.05	1506
174.10	2713	183.10	72	193.10	2770	204.10	8828
175.10	4604	184.10	711	194.15	635	205.10	15506
176.10	1546	185.10	4151	195.10	575	206.10	61421
177.10	2354	186.10	36090	196.10	9712	207.10	7040
178.10	827	187.10	9670	196.70	1902	208.10	1650
179.00	7584	188.15	929	198.10	251882	209.10	557
180.10	6347	189.05	1926	199.10	16968	210.15	541
181.10	3127	190.10	318	200.10	1286	210.65	1122
182.05	345	190.50	137	201.60	1906	211.15	2439
182.50	83	191.10	1196	202.20	260	212.10	174

Average of 2.731 to 2.741 min.: 5p27318.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
213.25	427	226.10	1167	235.80	165	246.10	4182
215.10	453	227.10	12429	236.15	419	247.05	780
216.15	1200	228.10	1788	237.10	1218	248.05	379
217.10	13989	229.10	2840	238.10	178	249.05	999

218.00	1904	230.05	459	238.95	274	250.10	142
220.10	238	231.15	1057	240.10	400	251.10	245
221.10	17637	232.00	289	241.00	584	252.20	264
221.70	844	232.90	92	242.10	1770	253.15	694
223.10	3763	233.10	109	243.15	2182	255.10	134989
224.10	31765	234.05	857	244.10	27744	256.10	20366
225.10	7369	235.00	939	245.10	4049	257.10	1352

Average of 2.731 to 2.741 min.: 5p27318.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
258.05	6973	272.15	227	285.15	996	301.20	94
259.10	1148	273.10	4041	286.00	104	302.15	244
260.10	86	274.10	10700	289.00	70	303.15	1781
261.10	167	275.10	63920	290.10	119	304.05	478
263.95	293	276.10	8807	292.10	92	308.10	192
265.10	2413	277.10	4163	293.10	1059	309.20	76
266.05	246	278.05	790	294.15	372	310.05	159
267.20	113	279.00	220	295.20	139	314.05	668
269.90	260	282.20	94	296.10	15015	315.05	1563
270.30	72	283.10	663	297.10	1926	316.10	1026
271.10	429	284.15	522	298.10	85	317.10	84

Average of 2.731 to 2.741 min.: 5p27318.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
321.10	721	334.10	3314	366.10	833	392.20	76
322.05	368	335.10	630	369.80	93	402.10	1193
323.15	5735	341.10	730	370.20	90	403.10	1506
324.15	1016	342.25	156	371.10	501	404.15	576
326.10	110	346.05	1219	372.20	2525	421.05	1211
327.05	951	347.10	100	373.15	744	422.10	1163
328.05	516	352.10	1780	377.20	69	423.15	8950
332.00	99	353.15	1039	383.05	607	424.15	1703
332.30	84	354.15	1710	384.30	88	425.10	90
333.00	327	355.10	412	390.10	265	441.15	23750
333.20	276	365.10	6782	391.10	87	442.15	161853

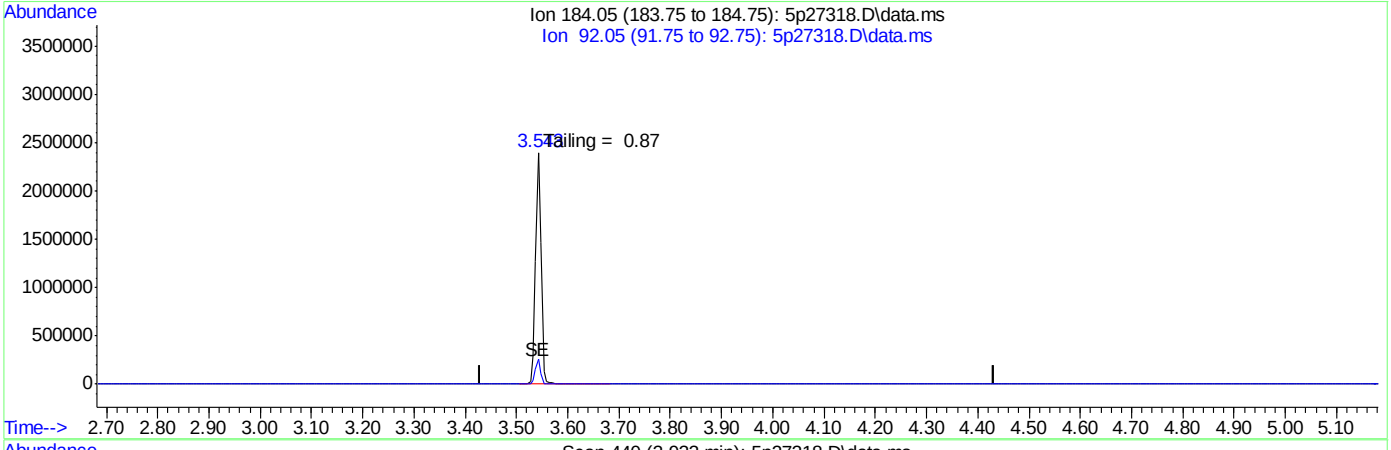
Average of 2.731 to 2.741 min.: 5p27318.D\data.ms
dftpp
Modified:subtracted

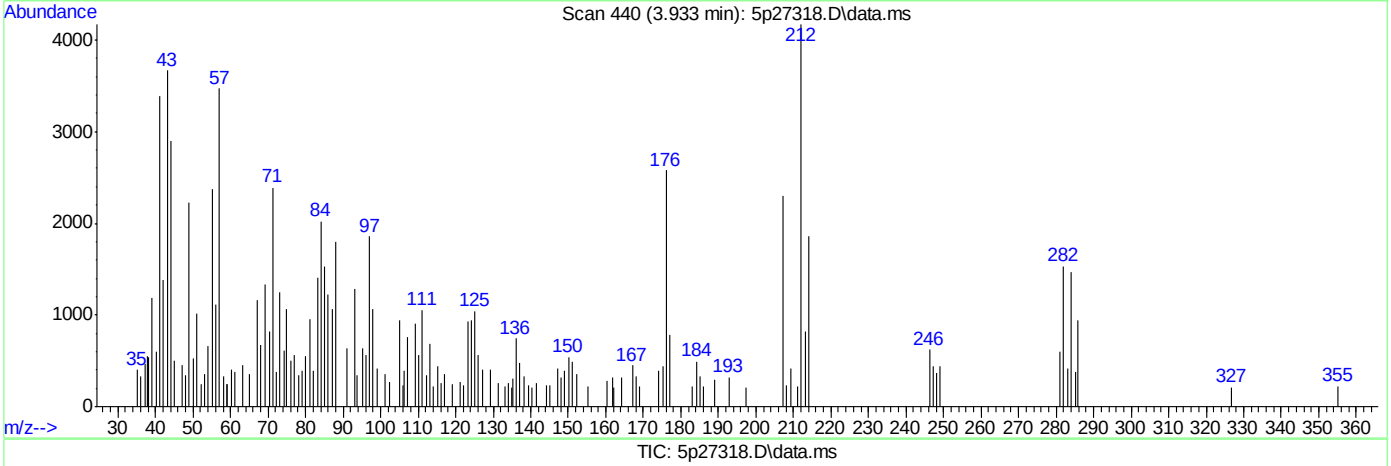
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
443.15	31445						
444.15	3359						
445.00	192						
445.20	85						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E5P1382\
Data File : 5p27318.D
Acq On : 11 Apr 2016 10:14 am
Operator : seanb1
Sample : dftpp
Misc : op92466,e5p1382
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 11 10:19:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP5P.M
Quant Title : Semi Volatile Extractables by GC/MS zb-5msi 30mx0.Tue Aug 25 09:34:01 2015
QLast Update : Tue Aug 25 09:34:01 2015
Response via : Initial Calibration





TIC: 5p27318.D\data.ms

(2) Benzidine (M)

3.931min (-3.931) 0.00ng

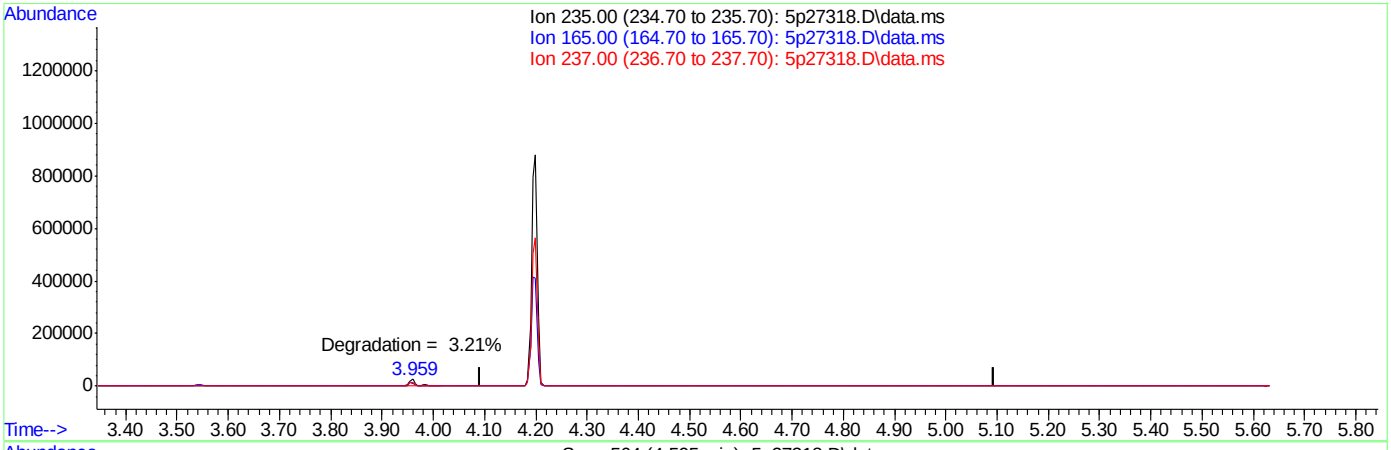
response 0

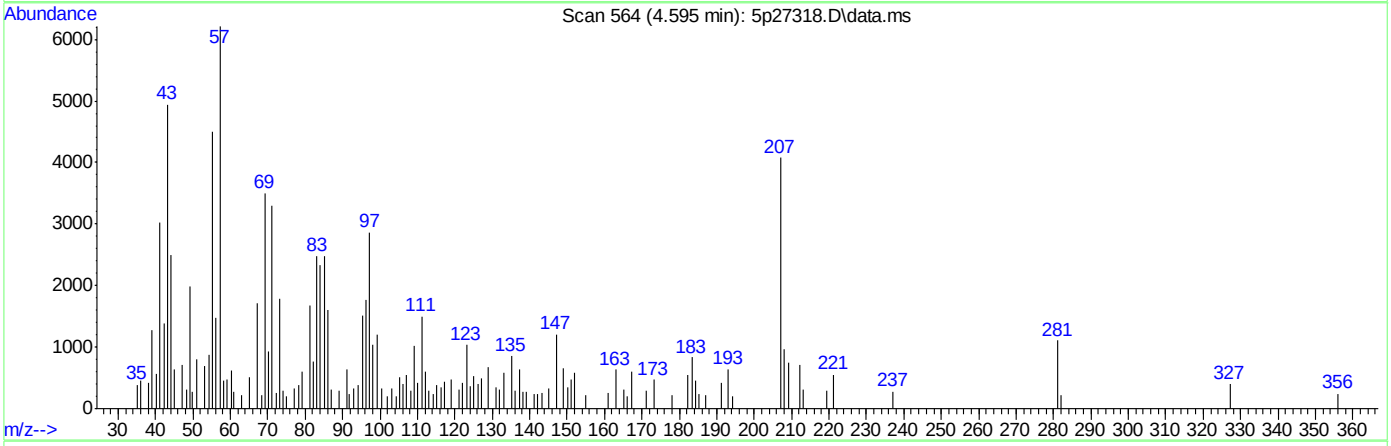
Ion	Exp%	Act%
184.05	100	0.00
92.05	11.60	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E5P1382\
Data File : 5p27318.D
Acq On : 11 Apr 2016 10:14 am
Operator : seanb1
Sample : dftpp
Misc : op92466,e5p1382
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 11 10:19:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP5P.M
Quant Title : Semi Volatile Extractables by GC/MS zb-5msi 30mx0.Tue Aug 25 09:34:01 2015
QLast Update : Tue Aug 25 09:34:01 2015
Response via : Initial Calibration





TIC: 5p27318.D\data.ms

(3) PP-DDT (MC)

4.594min (-4.594) 0.00ppb

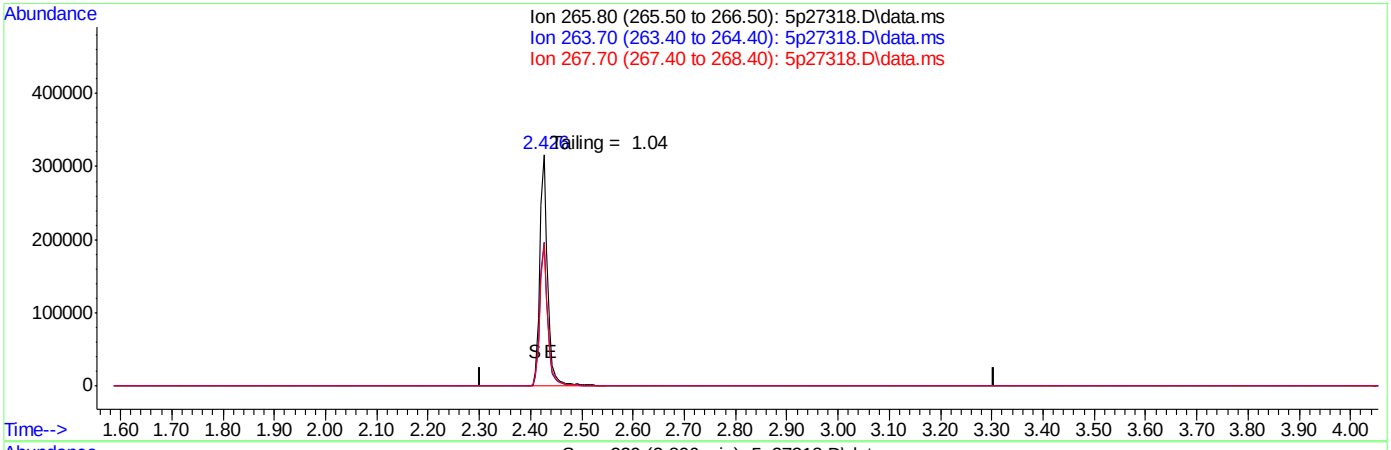
response 0

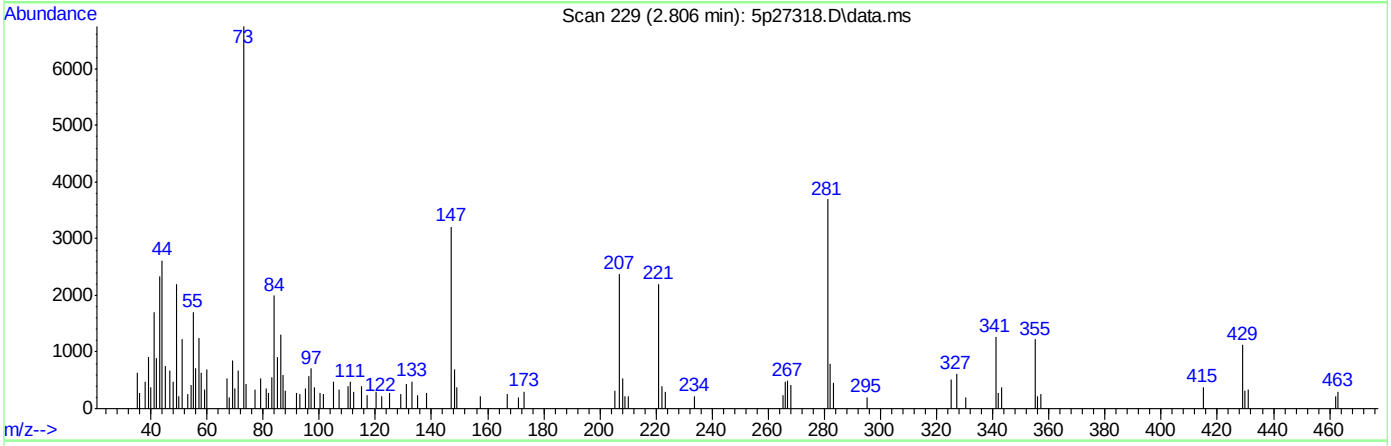
Ion	Exp%	Act%
235.00	100	0.00
165.00	58.00	0.00#
237.00	62.20	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E5P1382\
Data File : 5p27318.D
Acq On : 11 Apr 2016 10:14 am
Operator : seanb1
Sample : dftpp
Misc : op92466,e5p1382
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 11 10:19:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP5P.M
Quant Title : Semi Volatile Extractables by GC/MS zb-5msi 30mx0.Tue Aug 25 09:34:01 2015
QLast Update : Tue Aug 25 09:34:01 2015
Response via : Initial Calibration





TIC: 5p27318.D\data.ms

(1) Pentachlorophenol (MC)

2.804min (-2.804) 0.00ng

response 0

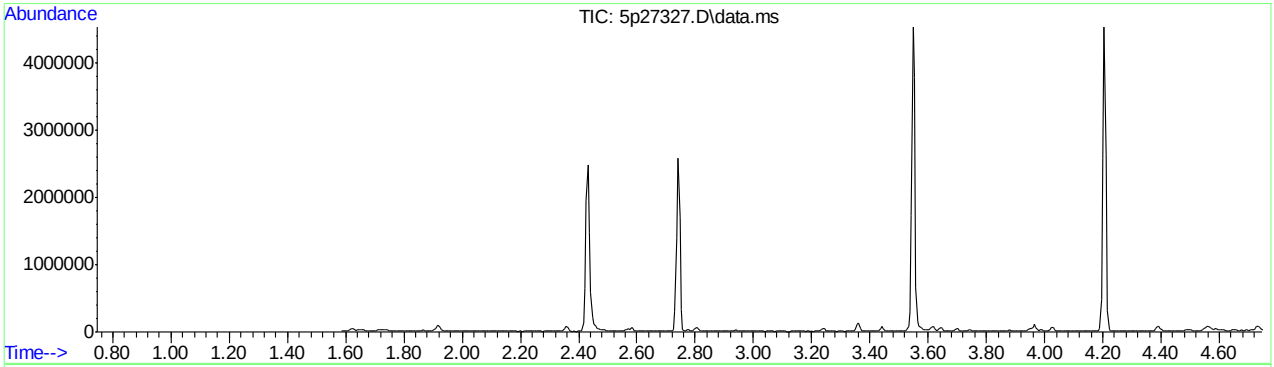
Ion	Exp%	Act%
265.80	100	0.00
263.70	64.70	0.00#
267.70	64.60	0.00#
0.00	0.00	0.00

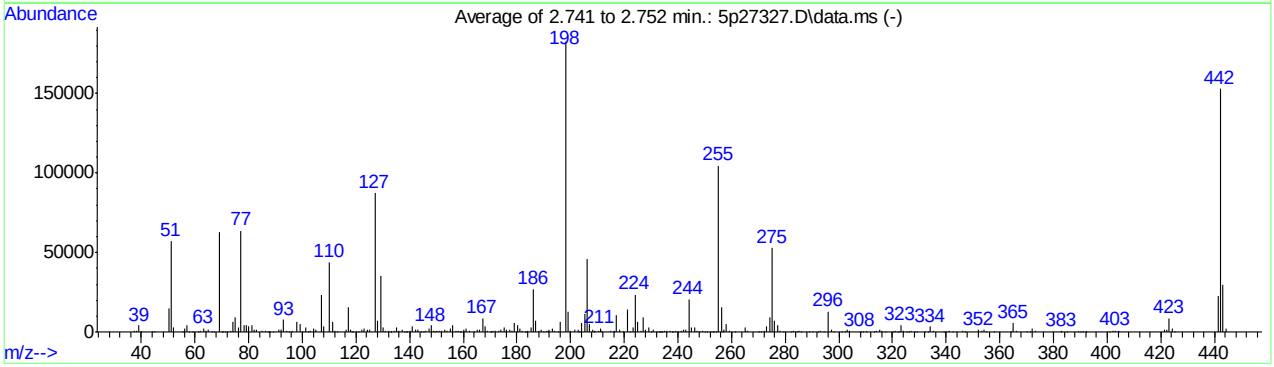
DFTPPR

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27327.D
Acq On : 11 Apr 2016 2:45 pm
Operator : ariellec
Sample : dftpp
Misc : op92466,e5p1383
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\MSDCHEM\1\METHODS\DFTPP5P.M
Title : Semi Volatile Extractables by GC/MS zb-5msi 30mx0.Tue Aug 25 09:34:01 2015
Last Update : Tue Aug 25 09:34:01 2015





AutoFind: Scans 217, 218, 219; Background Corrected with Scan 202
AUTOFIND via AUTOINTEGRATE

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	31.3	57180	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	34.4	62947	PASS
70	69	0.00	2	0.6	374	PASS
127	198	40	60	47.8	87330	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	182736	PASS
199	198	5	9	6.9	12655	PASS
275	198	10	30	28.8	52696	PASS
365	198	1	100	3.1	5590	PASS
441	443	0.10	100	76.7	22821	PASS
442	198	40	100	83.6	152749	PASS
443	442	17	23	19.5	29758	PASS

SGS ACCUTEST JC19023

Average of 2.741 to 2.752 min.: 5p27327.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.15	415	57.05	4522	70.00	374	80.00	3209
38.20	909	58.00	13	70.20	169	81.05	4155
39.10	4169	59.10	67	71.15	242	82.10	1164
40.00	238	61.00	366	72.00	92	83.05	1383
44.10	127	62.10	662	73.20	786	85.05	1033
45.00	73	63.10	2366	74.10	6259	86.05	994
50.10	15104	64.05	416	75.10	9238	87.05	279
51.05	57180	65.10	1178	76.20	2783	87.60	99
52.10	2759	66.00	109	77.10	63623	88.00	250
55.10	189	67.05	200	78.10	4128	89.20	71
56.05	2266	69.00	62947	79.10	4598	91.05	1506

Average of 2.741 to 2.752 min.: 5p27327.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
92.15	1339	104.10	1850	118.30	67	130.10	2837
93.10	7546	105.05	1781	118.85	179	131.00	626
94.05	565	107.10	23136	120.05	298	132.00	406
95.10	138	108.10	3627	121.00	93	132.90	106
96.05	404	110.10	44068	122.10	1608	133.10	285
98.10	6042	111.10	6377	123.05	2342	134.10	836
99.00	5019	112.05	839	124.05	1124	135.05	2707
100.05	375	112.95	239	125.05	1196	136.10	984
101.10	2562	116.10	1678	127.10	87330	137.10	1374
102.05	264	117.10	15756	128.10	7252	138.00	341
103.05	848	118.05	1421	129.10	35344	138.70	103

Average of 2.741 to 2.752 min.: 5p27327.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
139.00	126	149.30	66	159.10	143	170.30	86
140.10	396	150.25	430	160.10	1525	171.10	414
141.10	3898	151.00	659	161.10	2155	172.00	521
142.15	1285	151.70	521	162.10	603	173.10	1031
143.10	1278	153.10	1327	164.00	86	174.10	1729
144.10	278	154.00	928	165.05	1221	175.10	3144
145.00	238	155.10	2136	166.10	1235	176.10	1640
146.05	879	156.10	3908	167.10	8727	177.10	1599
147.05	1844	157.05	798	168.10	3901	178.05	403
148.05	4227	158.00	699	169.05	736	179.05	6008
149.05	867	158.90	326	170.00	262	180.10	4384

Average of 2.741 to 2.752 min.: 5p27327.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
181.10	2315	191.05	613	203.00	1237	211.60	397
182.05	442	191.40	82	203.20	131	215.10	429
183.00	189	192.10	1604	204.10	5387	216.10	802
183.20	124	193.10	2060	205.10	10985	216.30	66
184.10	490	194.10	454	206.10	45574	217.05	10280
185.10	3178	195.20	241	207.05	5075	218.05	1387
186.10	27030	196.10	6375	208.10	1569	219.60	103
187.10	7138	198.00	182736	208.80	74	221.10	13793
188.10	866	199.00	12655	209.05	430	222.10	99
189.10	1333	200.05	923	210.20	394	223.10	2518
190.00	343	201.60	1327	211.05	2336	224.10	23519

Average of 2.741 to 2.752 min.: 5p27327.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
225.10	6234	234.20	214	244.10	20525	254.00	121
226.20	534	235.10	728	245.10	2843	255.10	104554
227.10	8908	236.00	537	246.10	2792	256.10	15740
228.05	1199	237.10	631	247.10	811	256.70	72

DFTPP5P.M Mon Apr 11 14:52:21 2016 RPT1 Page: 2

229.10	2500	237.90	136	248.00	293	257.10	1385
230.10	235	238.10	70	249.05	852	258.10	4974
231.00	1195	239.10	395	250.10	85	259.10	750
231.95	173	240.15	308	251.05	223	261.10	196
232.70	70	241.05	753	252.05	199	265.10	2505
233.20	76	242.10	1300	253.00	189	266.00	676
233.90	145	243.10	1369	253.20	120	270.00	125

Average of 2.741 to 2.752 min.: 5p27327.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
271.05	166	284.10	250	301.10	88	317.20	78
272.20	505	285.05	736	302.15	244	320.10	73
273.05	3282	286.05	197	303.15	1686	321.15	398
274.10	9048	288.95	158	304.10	582	322.00	71
275.10	52696	290.20	147	308.00	187	322.20	188
276.10	7110	292.05	271	309.10	173	323.10	4402
277.10	3916	293.10	965	310.10	107	324.15	966
278.05	744	294.10	241	313.05	183	325.10	106
279.10	83	296.10	12723	314.10	775	326.10	121
282.00	101	297.10	1435	315.10	1324	327.10	972
283.10	468	298.10	159	316.10	713	328.05	268

Average of 2.741 to 2.752 min.: 5p27327.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
329.10	105	352.15	1368	373.10	681	403.10	934
332.10	331	353.10	776	382.80	97	404.00	514
333.10	185	354.10	1753	383.10	454	404.20	83
334.10	3251	355.00	119	385.10	98	421.15	1126
335.10	801	357.90	75	389.00	85	422.10	1291
339.00	72	364.00	68	390.10	290	423.10	8613
340.00	102	365.10	5590	390.95	254	424.10	1809
341.10	467	366.05	926	391.90	87	425.20	108
342.20	86	370.00	81	392.10	107	441.20	22821
346.10	817	371.00	103	400.85	190	442.10	152749
347.00	154	372.15	2479	402.10	804	443.15	29758

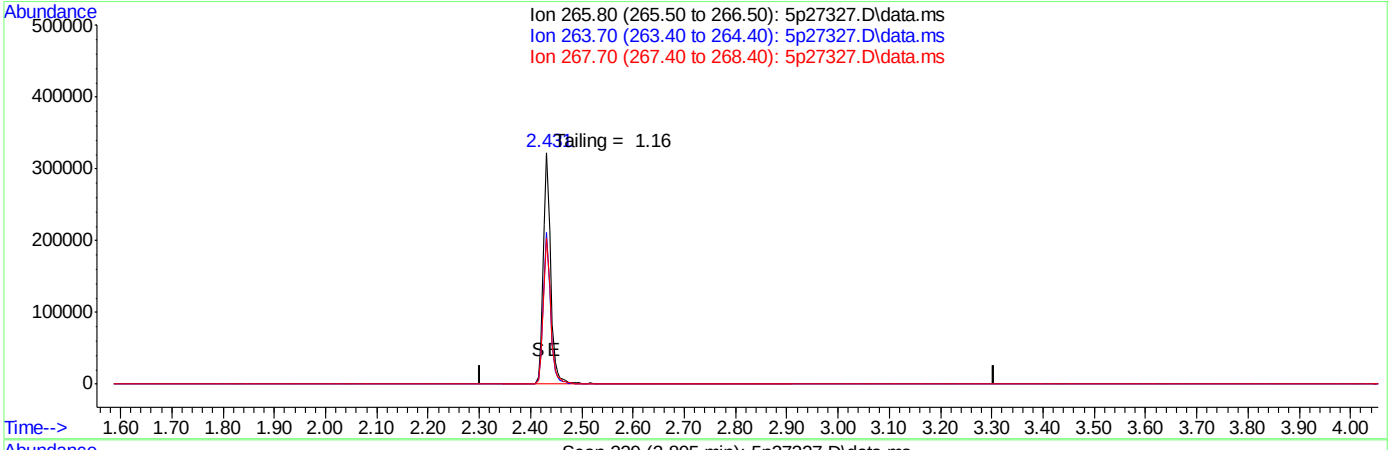
Average of 2.741 to 2.752 min.: 5p27327.D\data.ms
dftpp
Modified:subtracted

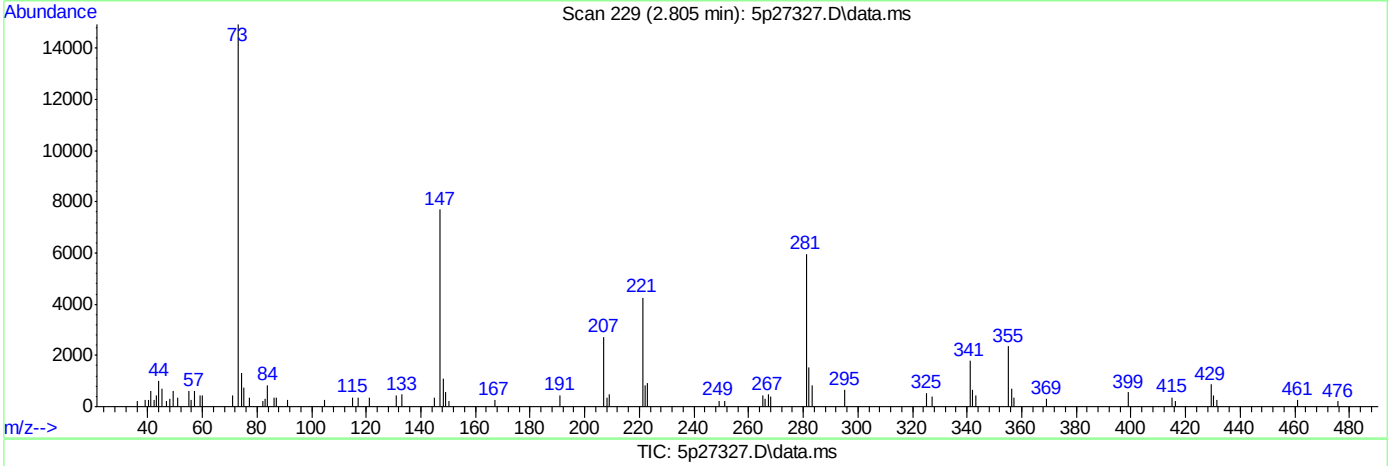
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
444.15	2338						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27327.D
Acq On : 11 Apr 2016 2:45 pm
Operator : ariellec
Sample : dftpp
Misc : op92466,e5p1383
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 11 14:51:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP5P.M
Quant Title : Semi Volatile Extractables by GC/MS zb-5msi 30mx0.Tue Aug 25 09:34:01 2015
QLast Update : Tue Aug 25 09:34:01 2015
Response via : Initial Calibration





TIC: 5p27327.D\data.ms

(1) Pentachlorophenol (MC)

2.804min (-2.804) 0.00ng

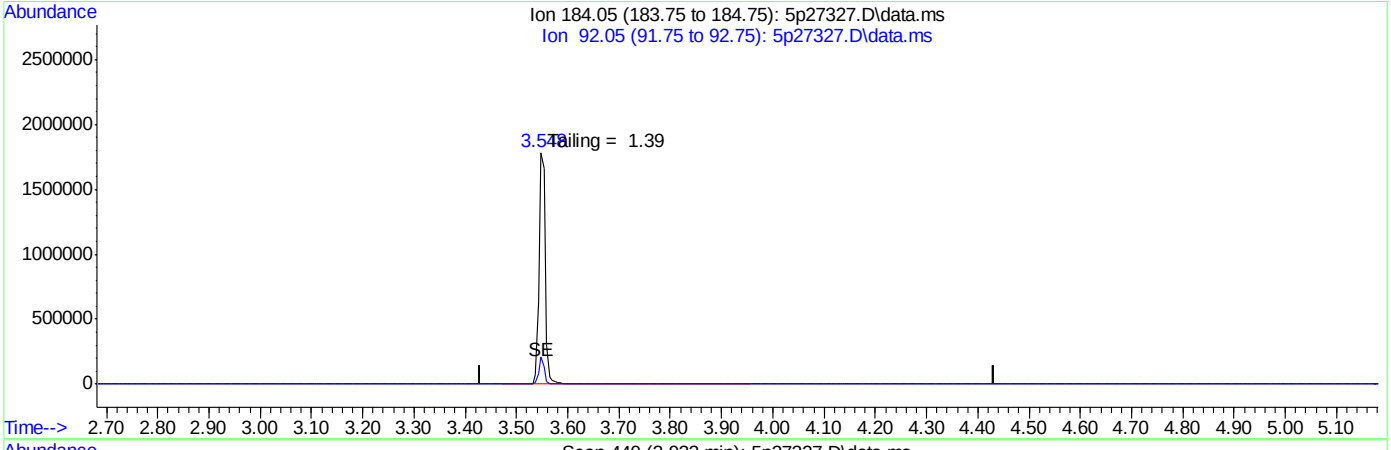
response 0

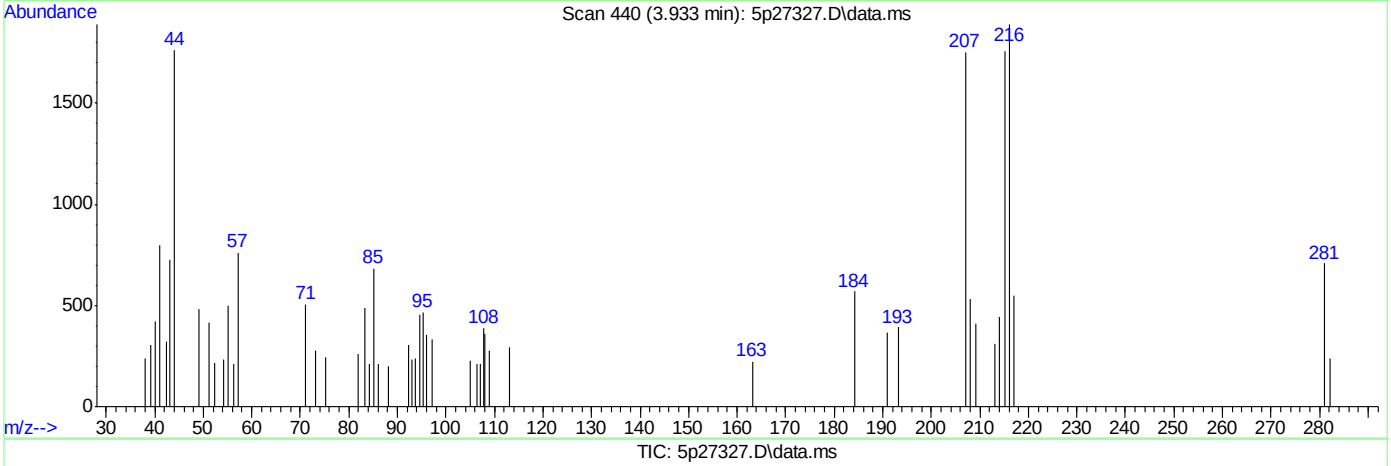
Ion	Exp%	Act%
265.80	100	0.00
263.70	64.70	0.00#
267.70	64.60	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27327.D
Acq On : 11 Apr 2016 2:45 pm
Operator : ariellec
Sample : dftpp
Misc : op92466,e5p1383
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 11 14:51:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP5P.M
Quant Title : Semi Volatile Extractables by GC/MS zb-5msi 30mx0.Tue Aug 25 09:34:01 2015
QLast Update : Tue Aug 25 09:34:01 2015
Response via : Initial Calibration





TIC: 5p27327.D\data.ms

(2) Benzidine (M)

3.931min (-3.931) 0.00ng

response 0

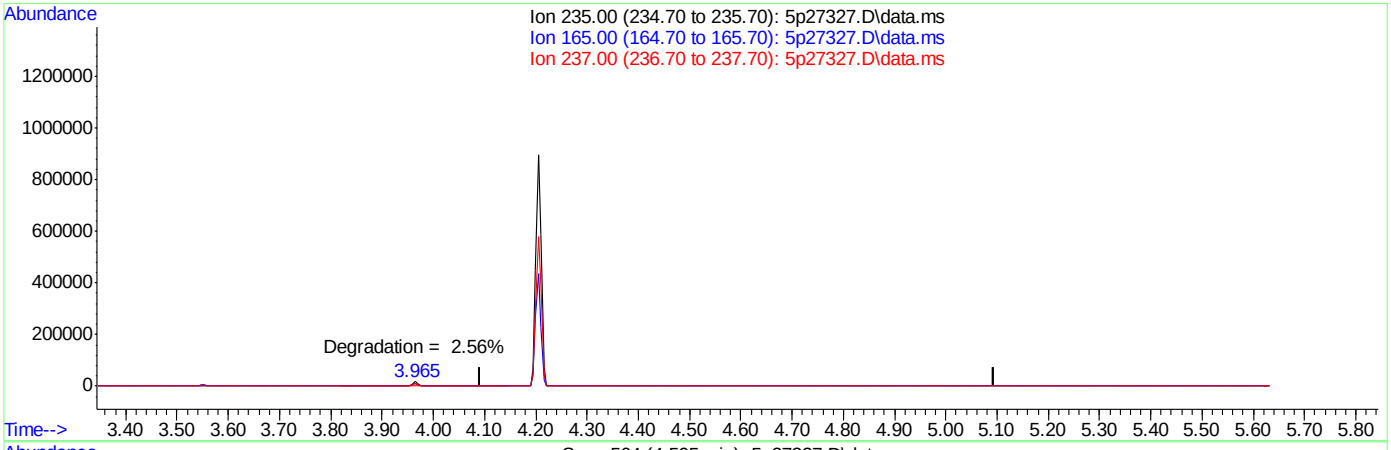
Ion	Exp%	Act%
184.05	100	0.00
92.05	11.60	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

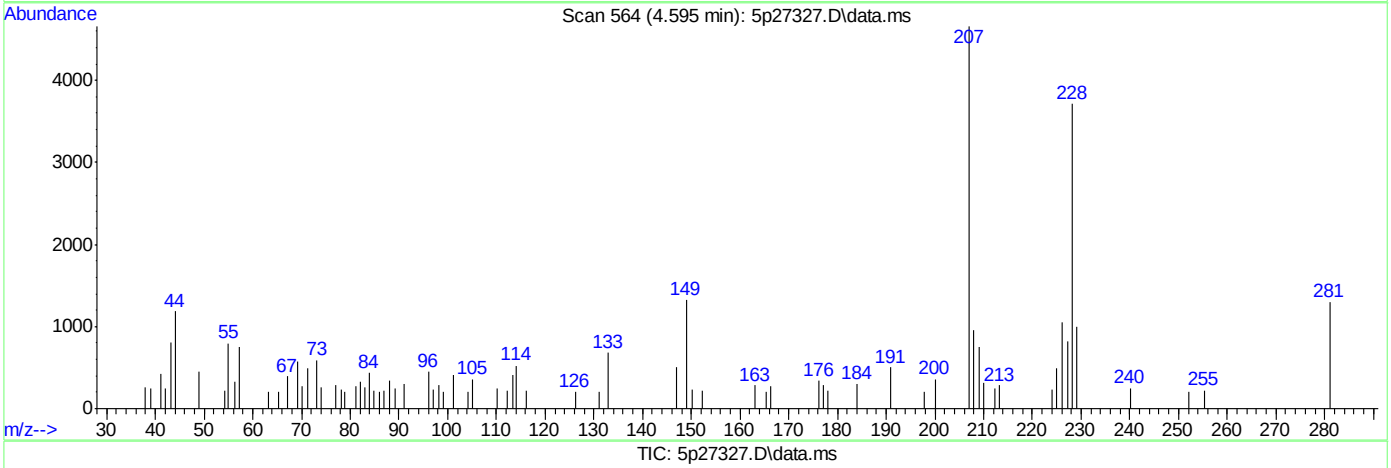
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27327.D
Acq On : 11 Apr 2016 2:45 pm
Operator : ariellec
Sample : dftpp
Misc : op92466,e5p1383
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 11 14:51:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP5P.M
Quant Title : Semi Volatile Extractables by GC/MS zb-5msi 30mx0.Tue Aug 25 09:34:01 2015
QLast Update : Tue Aug 25 09:34:01 2015
Response via : Initial Calibration





TIC: 5p27327.D\data.ms

(3) PP-DDT (MC)

4.594min (-4.594) 0.00ppb

response 0

Ion	Exp%	Act%
235.00	100	0.00
165.00	58.00	0.00#
237.00	62.20	0.00#
0.00	0.00	0.00

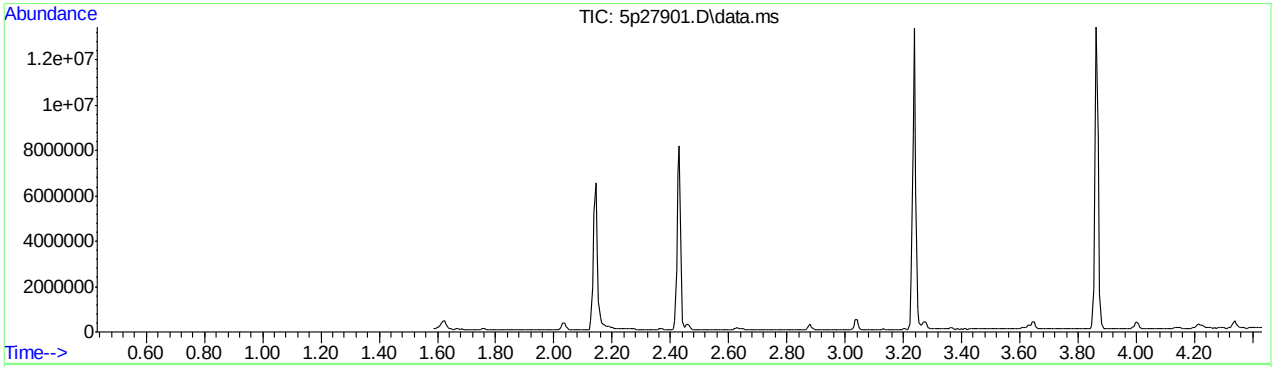
SGS ACCUTEST JC19023

DFTPPR

Data Path : C:\msdchem\1\DATA\E5P1416\
Data File : 5p27901.D
Acq On : 3 May 2016 8:27 am
Operator : ashleyd
Sample : dftpp
Misc : op93450,e5p1416
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\MSDCHEM\1\METHODS\DFTPP5P.M
Title : Semi Volatile Extractables by GC/MS zb-5msi 30mx0.Tue Aug 25 09:34:01 2015
Last Update : Tue Aug 25 09:34:01 2015



AutoFind: Scans 158, 159, 160; Background Corrected with Scan 143
AUTOFIND via AUTOINTEGRATE

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	52.1	327868	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	39.5	248306	PASS
70	69	0.00	2	0.0	69	PASS
127	198	40	60	55.0	345885	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	628842	PASS
199	198	5	9	6.7	42331	PASS
275	198	10	30	29.6	186237	PASS
365	198	1	100	2.7	17211	PASS
441	443	0.10	100	87.6	106200	PASS
442	198	40	100	92.8	583338	PASS
443	442	17	23	20.8	121253	PASS

SGS ACCUTEST JC19023

Average of 2.426 to 2.437 min.: 5p27901.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.10	235	47.25	338	60.20	407	70.70	69
35.30	228	47.90	988	60.80	352	70.95	855
37.15	2820	48.10	498	61.10	4427	72.30	378
38.15	6445	50.10	101069	62.10	3389	73.15	3941
39.10	24819	51.05	327868	63.10	9276	74.05	25674
40.05	676	52.10	17410	64.10	1192	75.10	34230
41.05	2378	53.15	1248	65.05	3536	77.05	231192
44.10	1148	56.10	9667	66.00	332	78.10	16273
45.05	115	57.05	20113	66.40	348	79.00	18932
45.30	318	57.80	473	67.20	392	80.00	14139
46.20	236	58.20	534	69.00	248306	81.05	20609

Average of 2.426 to 2.437 min.: 5p27901.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
82.05	4457	91.15	1340	101.00	11142	112.05	3076
83.00	3867	91.95	6519	102.00	1014	113.00	1483
84.00	1195	93.00	34636	102.25	761	113.20	267
85.05	3243	94.10	2030	102.90	2909	113.85	1251
85.30	561	94.80	261	103.10	2130	114.80	508
86.10	5339	95.90	764	104.10	8851	115.40	588
87.15	2884	97.00	466	105.10	6618	115.70	722
88.60	173	98.00	24599	107.05	81325	115.90	722
89.05	672	99.05	16700	108.00	15990	117.00	69964
89.90	133	100.00	1473	110.10	185088	117.95	3131
90.85	1889	100.20	733	111.05	23685	118.30	414

Average of 2.426 to 2.437 min.: 5p27901.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
118.90	77	127.10	345885	136.10	4192	145.15	1375
119.30	1014	128.05	27784	136.40	219	146.00	3030
119.95	1062	129.00	126148	137.10	4468	147.15	10179
121.20	1547	130.05	11439	138.20	1703	148.05	13501
122.10	6766	131.00	2278	139.15	1345	149.10	3361
123.10	8066	131.95	1452	140.10	1542	150.00	608
124.05	5376	132.60	126	141.10	14517	150.35	461
124.40	368	132.90	746	142.10	6477	151.00	702
124.90	572	133.15	508	143.05	1638	151.40	920
125.20	3704	134.00	4261	143.80	93	151.75	1199
125.40	320	135.05	7825	144.20	887	152.30	916

Average of 2.426 to 2.437 min.: 5p27901.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
153.05	4452	162.05	2351	170.30	131	177.05	8056
154.15	4370	162.50	201	170.90	988	178.25	969
155.15	9915	163.10	637	171.10	1154	179.05	21987
156.10	16841	163.50	536	172.15	2344	180.10	18432
157.15	3426	164.30	409	172.80	302	181.05	6197
157.65	1576	165.05	4646	173.10	2805	182.10	1161
158.00	970	166.05	4559	173.90	695	182.95	824
158.30	805	167.10	29315	174.20	5654	183.80	768
159.10	2380	168.10	14324	175.10	12106	184.05	1808
160.05	4976	169.05	2024	176.00	1831	185.10	13838
161.10	8778	169.90	874	176.20	1953	186.10	92720

Average of 2.426 to 2.437 min.: 5p27901.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
187.05	24120	196.05	26754	207.05	22231	214.80	230
188.05	1834	198.00	628842	208.00	4185	215.10	669
189.00	4631	199.00	42331	209.00	1156	215.30	276
190.20	1206	200.00	1838	209.40	390	216.05	2491

DFTPP5P.M Tue May 03 12:13:49 2016 RPT1 Page: 2

SGS ACCUTEST JC19023

190.90	344	200.90	1263	210.20	3051	217.05	32480
191.30	1212	201.65	3518	211.05	4869	218.05	4841
192.00	6934	202.00	521	211.40	811	218.70	101
193.05	7347	203.10	5711	211.70	1759	219.10	119
193.85	1294	204.20	20600	213.20	759	219.50	401
194.20	549	205.10	41801	213.70	91	221.10	38800
194.90	214	206.10	157664	214.30	398	221.70	6917

Average of 2.426 to 2.437 min.: 5p27901.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
223.15	11695	233.20	1029	239.10	1337	248.05	1138
224.10	85194	233.50	547	240.05	1023	248.70	269
225.10	21014	233.80	388	241.00	2498	249.00	1259
226.00	401	234.15	1867	241.80	281	249.80	73
227.10	35968	235.00	2645	242.15	4102	250.00	411
228.00	4283	236.05	2104	242.40	597	250.40	120
229.10	6375	237.05	3983	243.25	8789	250.85	355
231.00	1356	237.65	573	244.10	69866	251.30	289
231.15	1684	238.20	98	245.10	10112	252.15	1291
231.95	165	238.50	458	246.10	10562	253.05	2763
232.60	228	238.90	928	247.10	2680	253.50	780

Average of 2.426 to 2.437 min.: 5p27901.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
255.10	365866	263.10	318	272.30	1367	281.20	111
256.10	54408	263.90	554	273.10	13409	281.70	161
257.00	3671	265.05	7893	274.20	37128	281.90	283
257.20	1084	266.00	271	275.10	186237	282.10	194
258.10	16733	266.70	94	276.05	25486	283.20	2193
258.80	1032	267.00	415	277.10	14047	284.05	686
259.05	2625	267.90	74	278.05	2687	284.40	529
260.30	26	269.00	198	279.05	654	284.70	468
260.95	1388	269.30	112	279.90	204	284.90	540
262.25	161	270.20	538	280.65	268	285.15	2524
262.90	199	271.00	1337	281.00	74	286.00	284

Average of 2.426 to 2.437 min.: 5p27901.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
288.20	121	295.15	2908	305.20	270	313.10	595
288.95	1057	296.10	44165	305.90	89	314.00	1054
289.60	268	297.05	5906	307.30	260	314.15	1941
289.90	266	298.40	176	307.80	420	315.05	5428
290.15	188	300.50	86	308.05	592	316.15	3273
291.10	514	301.00	259	309.20	497	317.10	1077
291.40	177	301.20	521	310.00	327	317.30	163
292.05	919	301.50	437	310.20	304	318.30	75
293.05	3575	302.20	1681	311.30	85	319.15	223
294.10	1152	303.15	4652	311.60	278	319.90	110
294.50	486	304.05	2093	312.30	263	320.20	442

Average of 2.426 to 2.437 min.: 5p27901.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
320.70	257	326.90	1075	336.05	835	345.10	72
321.05	1783	327.15	1838	338.80	70	346.05	4109
321.90	92	327.80	473	339.10	247	347.00	958
322.20	2064	328.20	1674	339.90	111	347.30	128
323.10	15859	330.60	160	340.20	204	349.30	150
324.05	3565	332.10	828	340.40	206	349.80	185
325.00	175	332.60	1113	341.15	1726	350.20	413
325.30	290	333.10	1624	342.00	504	350.50	139
325.70	169	334.15	11813	342.20	358	351.00	261
326.25	192	335.10	2694	342.70	226	351.20	185
326.50	466	335.30	1785	344.00	359	352.15	5928

Average of 2.426 to 2.437 min.: 5p27901.D\data.ms

dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
353.05	3212	361.60	163	372.20	9718	385.00	226
354.10	5919	361.90	392	372.90	143	385.25	202
355.15	1230	362.70	74	373.20	2417	386.10	106
357.20	104	363.25	520	374.45	233	389.50	71
357.70	157	363.60	645	375.40	90	390.15	1194
358.30	133	365.05	17211	377.00	75	391.25	620
358.90	360	366.00	2758	378.70	117	391.80	145
359.35	645	369.60	449	381.95	223	392.15	387
360.00	119	370.20	591	383.05	2623	393.40	146
360.70	109	370.35	470	384.05	730	394.60	143
361.10	149	371.15	1636	384.60	178	396.70	158

Average of 2.426 to 2.437 min.: 5p27901.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
397.30	158	405.60	174	425.10	172	437.00	78
398.00	72	407.80	164	425.40	669	437.45	404
399.50	166	409.50	181	430.50	75	437.95	324
400.10	134	410.05	240	431.20	111	438.40	269
401.00	137	413.50	95	431.70	134	438.60	591
401.20	241	418.10	122	432.40	111	439.15	731
401.50	498	419.40	72	432.70	110	439.40	603
402.20	4237	421.15	4574	433.80	155	441.20	106200
403.05	5640	422.15	3486	434.20	137	442.10	583338
404.05	1703	423.15	34373	434.80	98	443.10	121253
404.50	142	424.20	5986	435.10	161	444.15	12555

Average of 2.426 to 2.437 min.: 5p27901.D\data.ms
dftpp
Modified:subtracted

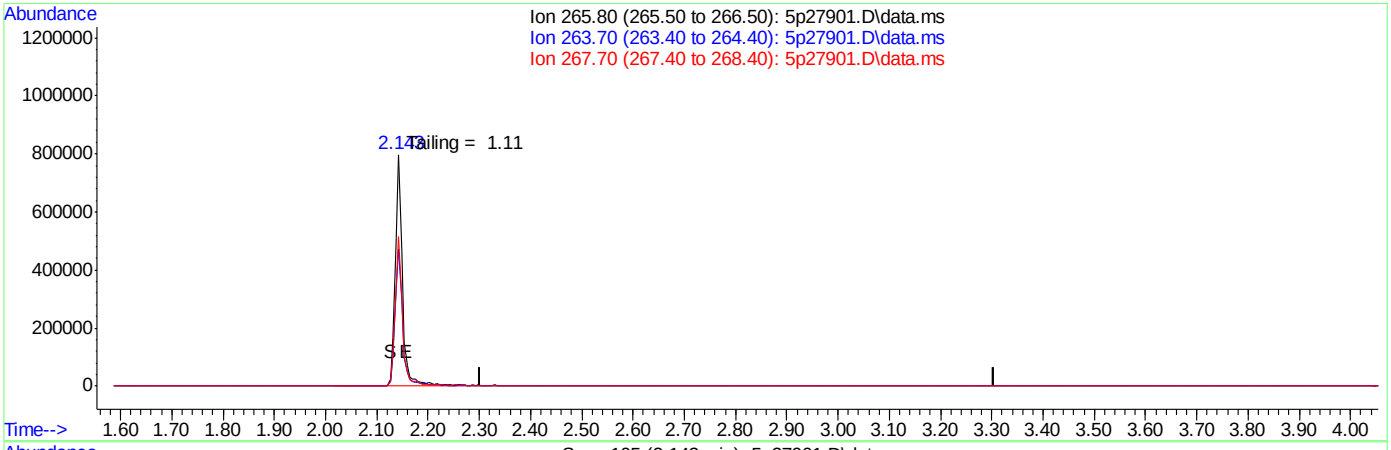
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
445.20	752						
447.30	77						
449.80	155						
470.50	143						
481.30	225						
482.40	139						
486.40	153						
487.40	140						
497.40	106						
498.30	93						

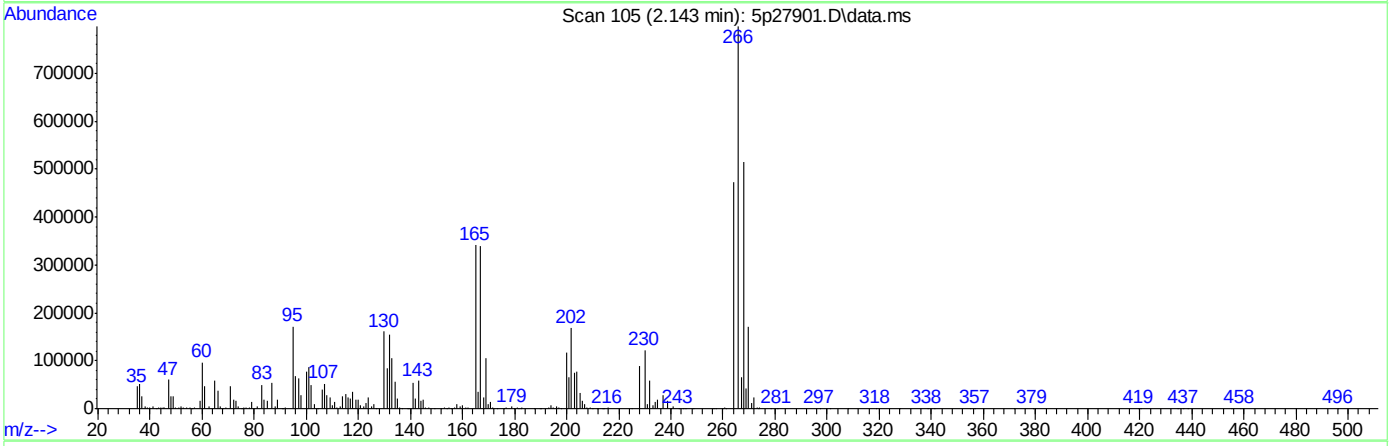
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E5P1416\
Data File : 5p27901.D
Acq On : 3 May 2016 8:27 am
Operator : ashleyd
Sample : dftpp
Misc : op93450,e5p1416
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 03 08:32:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP5P.M
Quant Title : Semi Volatile Extractables by GC/MS zb-5msi 30mx0.Tue Aug 25 09:34:01 2015
QLast Update : Tue Aug 25 09:34:01 2015
Response via : Initial Calibration





(1) Pentachlorophenol (MC)

2.804min (-2.804) 0.00ng

response 0

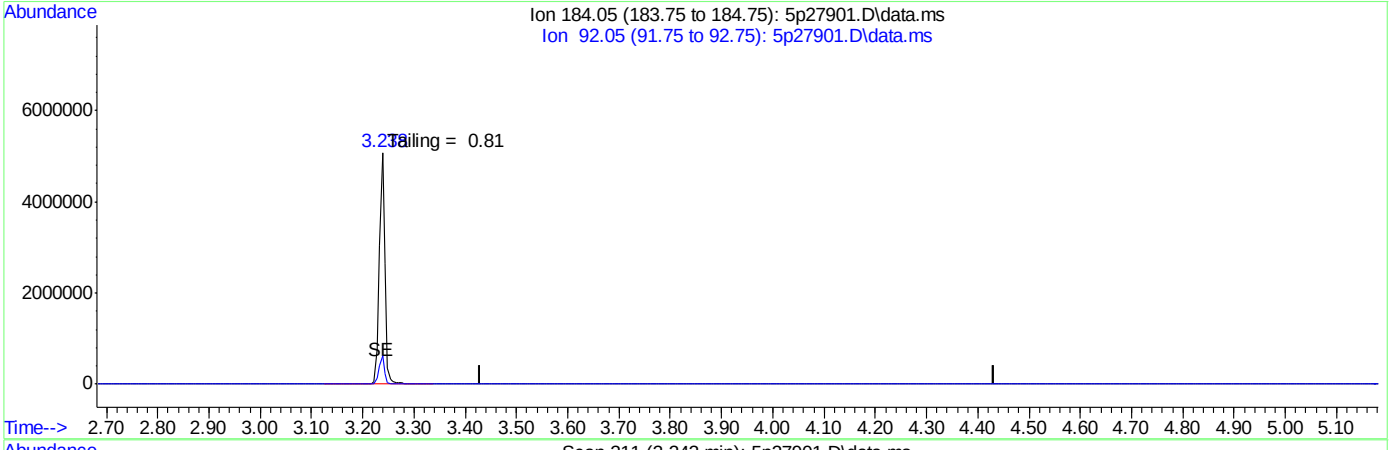
Ion	Exp%	Act%
265.80	100	0.00
263.70	64.70	0.00#
267.70	64.60	0.00#
0.00	0.00	0.00

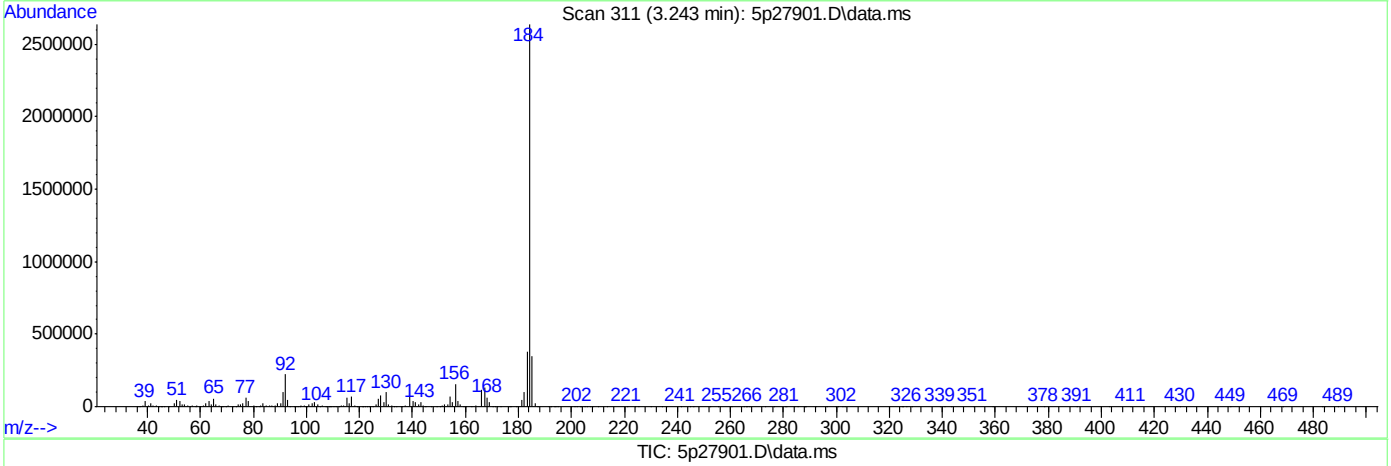
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E5P1416\
Data File : 5p27901.D
Acq On : 3 May 2016 8:27 am
Operator : ashleyd
Sample : dftpp
Misc : op93450,e5p1416
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 03 08:32:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP5P.M
Quant Title : Semi Volatile Extractables by GC/MS zb-5msi 30mx0.Tue Aug 25 09:34:01 2015
QLast Update : Tue Aug 25 09:34:01 2015
Response via : Initial Calibration





(2) Benzidine (M)

3.931min (-3.931) 0.00ng

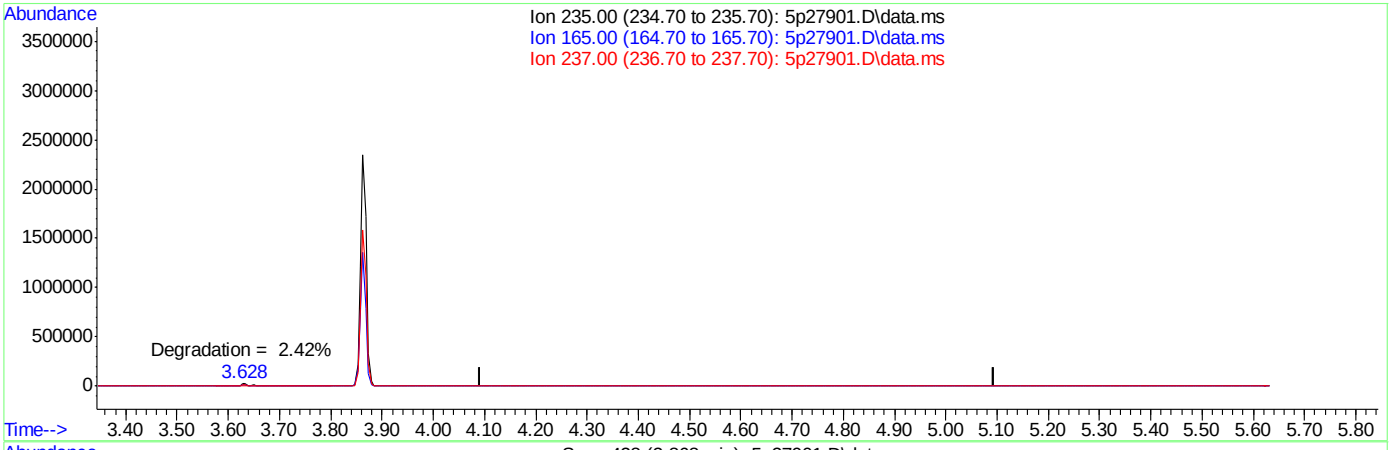
response 0

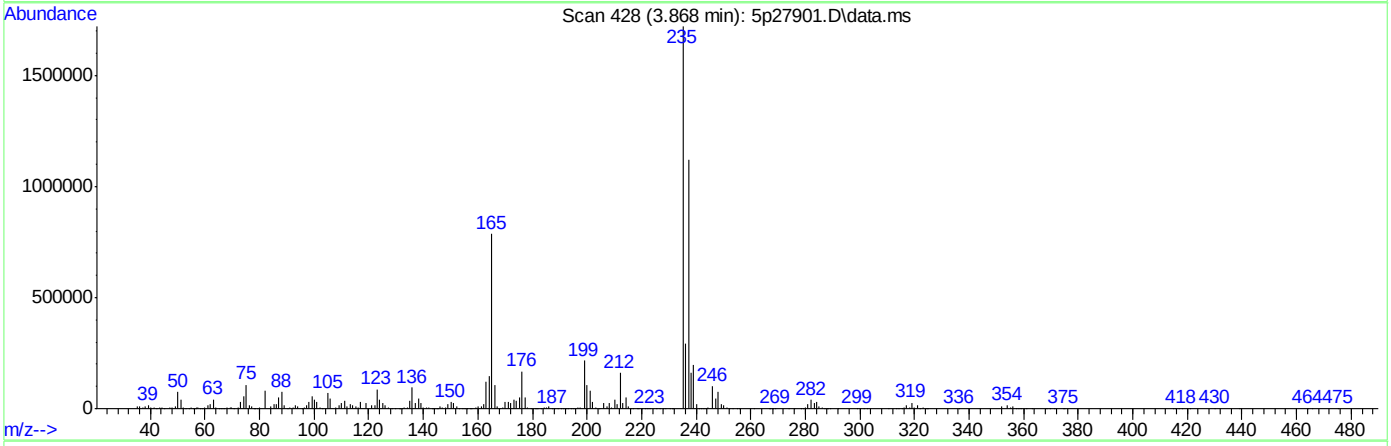
Ion	Exp%	Act%
184.05	100	0.00
92.05	11.60	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E5P1416\
Data File : 5p27901.D
Acq On : 3 May 2016 8:27 am
Operator : ashleyd
Sample : dftpp
Misc : op93450,e5p1416
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 03 08:32:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPP5P.M
Quant Title : Semi Volatile Extractables by GC/MS zb-5msi 30mx0.Tue Aug 25 09:34:01 2015
QLast Update : Tue Aug 25 09:34:01 2015
Response via : Initial Calibration





TIC: 5p27901.D\data.ms

(3) PP-DDT (MC)

4.594min (-4.594) 0.00ppb

response 0

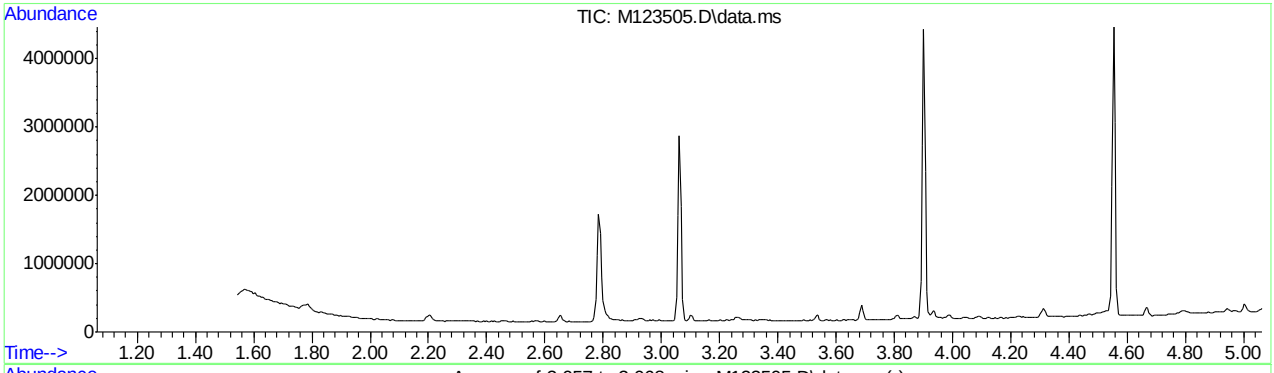
Ion	Exp%	Act%
235.00	100	0.00
165.00	58.00	0.00#
237.00	62.20	0.00#
0.00	0.00	0.00

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 JC19023

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

229.00	2696	238.95	554	250.05	215	262.85	74
229.90	237	239.95	461	251.00	263	263.85	143
231.00	1249	241.10	843	251.95	402	265.05	3119
231.85	72	242.05	1907	253.05	597	265.80	315
232.00	233	243.10	2266	255.05	136557	266.90	194
233.10	367	244.05	26362	256.05	20847	268.95	93
234.05	877	245.05	3846	257.10	1363	269.80	243

Average of 3.057 to 3.068 min.: M123505.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
270.15	74	281.95	151	293.85	137	309.05	71
270.90	220	283.05	383	294.15	162	309.95	204
271.85	101	284.10	507	296.00	17758	310.15	116
272.00	438	285.10	1137	297.05	2426	312.90	231
273.00	4503	285.95	93	297.85	153	314.05	1008
274.05	11631	286.15	133	300.95	321	315.00	1778
275.05	63400	289.00	215	302.05	272	316.00	1259
276.05	8279	290.05	161	303.05	2155	316.95	247
277.00	5248	291.10	135	304.05	659	321.05	601
278.00	1029	292.10	176	305.95	69	321.75	86
279.00	256	293.00	984	308.05	350	322.15	160

Average of 3.057 to 3.068 min.: M123505.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
323.05	5658	336.05	200	366.05	1347	400.95	252
324.00	1110	339.95	75	369.95	197	402.00	1431
324.95	67	341.05	682	371.00	595	403.05	2296
325.85	112	342.00	232	372.05	3110	404.00	625
326.95	1188	346.00	1366	373.05	783	405.15	68
328.00	666	347.00	216	383.00	976	410.05	73
329.10	161	352.00	2155	384.05	245	414.95	154
332.05	725	353.10	1432	384.95	75	421.00	1580
333.00	576	354.05	1785	390.00	351	422.05	1469
334.05	3819	355.05	296	391.00	256	423.05	12013
335.05	1094	365.00	8159	392.00	240	423.95	2624

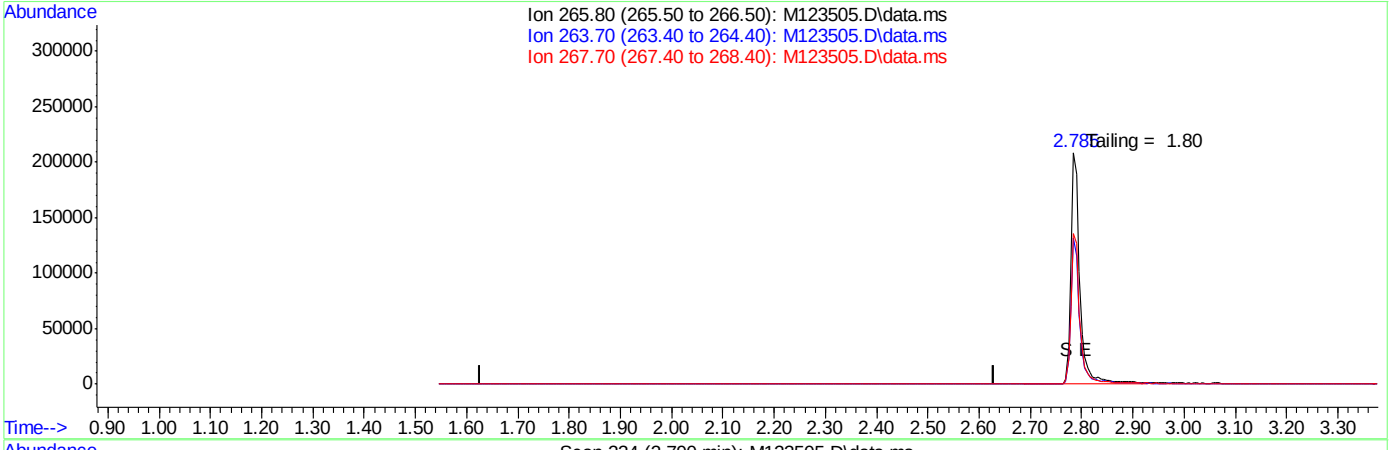
Average of 3.057 to 3.068 min.: M123505.D\data.ms
DFTPP
Modified:subtracted

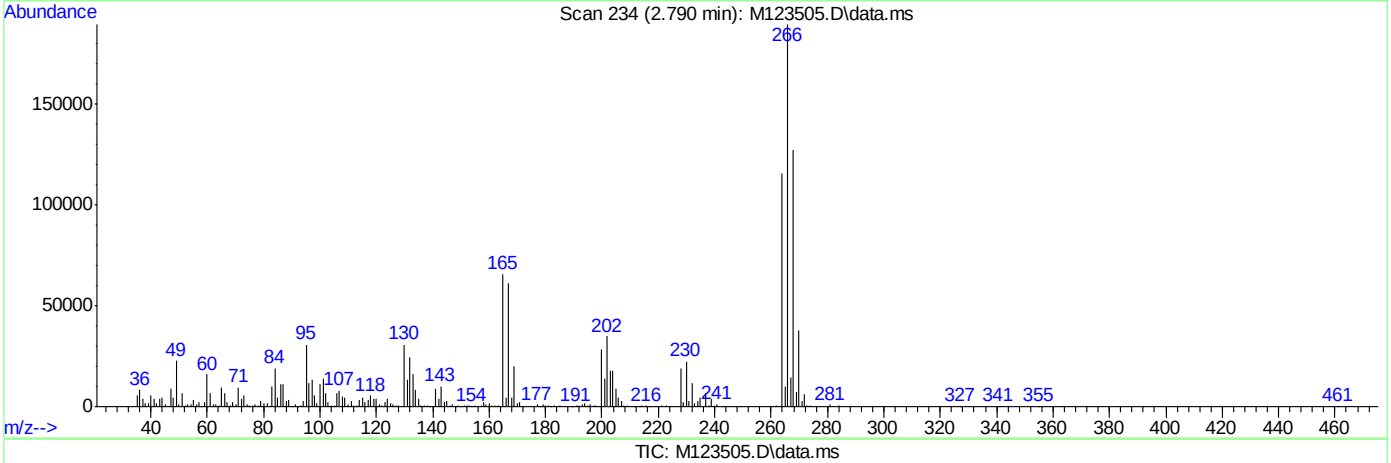
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
425.10	188						
436.85	99						
437.45	88						
438.45	87						
438.75	86						
439.35	103						
441.05	29433						
442.05	194493						
443.05	37146						
444.05	3208						
445.10	243						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123505.D
Acq On : 12 Apr 2016 5:38 pm
Operator : sarad
Sample : DFTPP
Misc : op92514,em5217
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 12 17:54:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mMon Mar 28 09:49:46 2016
QLast Update : Mon Mar 28 09:49:46 2016
Response via : Continuing Cal File:





TIC: M123505.D\data.ms

(1) Pentachlorophenol (MC)

2.129min (-2.129) 0.00ppm

response 0

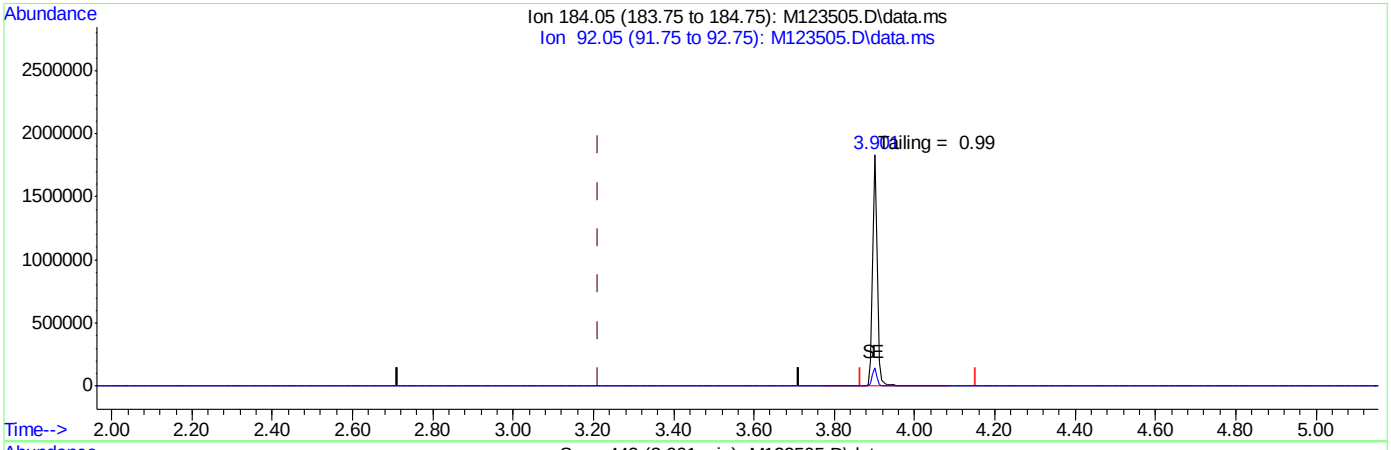
Ion	Exp%	Act%
265.80	100	0.00
263.70	61.60	0.00#
267.70	61.70	0.00#
0.00	0.00	0.00

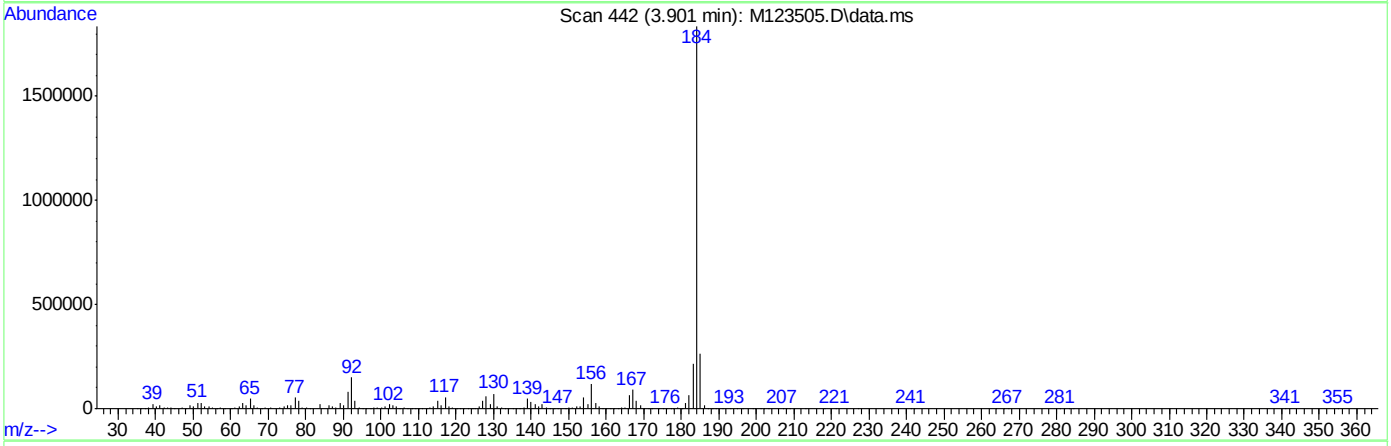
SGS ACCUTEST JC19023

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

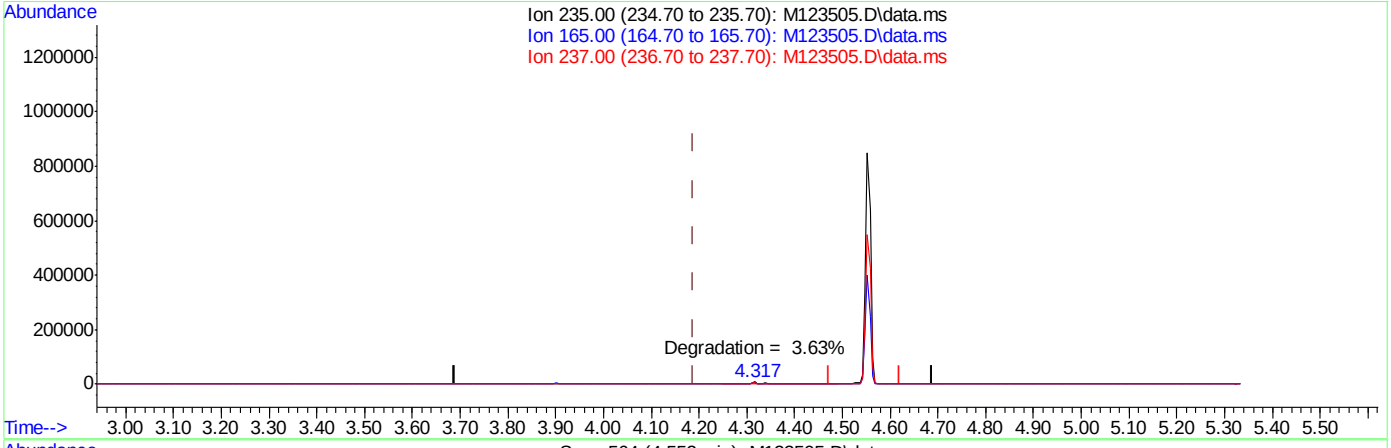
response 1448333

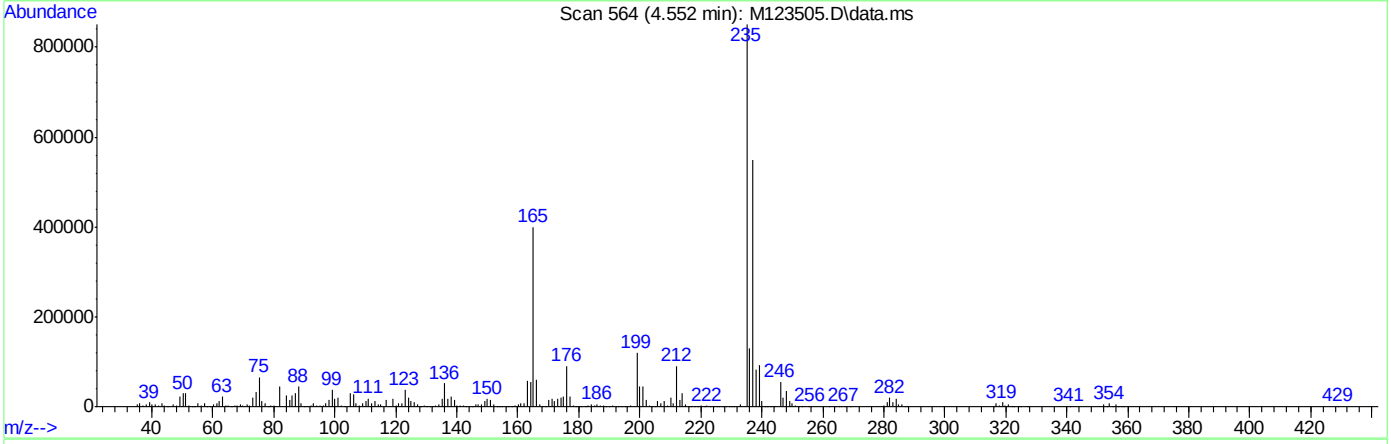
Ion	Exp%	Act%
184.05	100	100
92.05	10.70	8.15
0.00	0.00	0.00
0.00	0.00	0.00

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

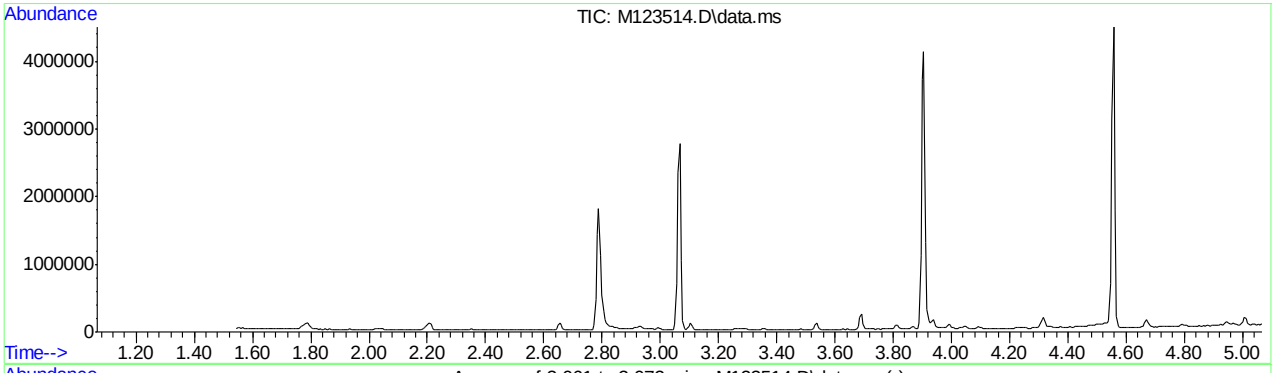
SGS ACCUTEST JC19023

DFTPPR

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123514.D
Acq On : 12 Apr 2016 9:57 pm
Operator : sarad
Sample : DFTPP
Misc : op92514,em5218
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mMon Mar 28 09:49:46 2016
Last Update : Mon Mar 28 09:49:46 2016



AutoFind: Scans 285, 286, 287; Background Corrected with Scan 280

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	30.9	72654	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	37.8	89061	PASS
70	69	0.00	2	0.5	437	PASS
127	198	40	60	48.0	113120	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	235437	PASS
199	198	5	9	6.5	15398	PASS
275	198	10	30	27.6	64960	PASS
365	198	1	100	3.8	9013	PASS
441	443	0.10	100	78.4	31349	PASS
442	198	40	100	91.0	214165	PASS
443	442	17	23	18.7	40010	PASS

Average of 3.061 to 3.072 min.: M123514.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.05	248	55.10	160	69.05	89061	82.05	1712
38.10	886	56.10	2073	70.05	437	83.05	1612
39.15	6141	57.05	5361	73.10	433	85.15	677
44.05	334	58.10	253	74.05	7823	86.05	1649
45.10	241	59.15	84	75.05	12686	87.10	960
48.10	215	61.10	955	76.15	4558	88.05	515
49.05	749	62.10	1017	77.15	93821	89.10	252
50.15	19579	63.15	3214	78.15	6651	91.10	1302
51.10	72654	64.10	438	79.05	5041	92.10	1620
52.15	3665	65.10	1697	80.05	4394	93.05	9310
53.00	168	66.05	344	81.05	6393	94.05	701

Average of 3.061 to 3.072 min.: M123514.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
95.15	277	107.05	28706	118.05	1293	130.05	3675
96.05	130	108.05	4564	119.05	78	131.10	746
97.00	8	110.05	52957	120.05	373	132.00	550
98.05	7117	111.00	7803	121.15	125	133.05	122
99.05	5957	111.95	988	122.05	1913	134.05	902
100.10	582	113.05	403	123.05	2779	135.05	3237
101.05	3458	113.25	121	124.10	1306	136.05	1464
102.15	265	114.10	166	125.05	1358	137.05	1829
103.05	1271	115.15	228	127.05	113120	138.10	540
104.05	2276	116.05	1553	128.05	8419	139.05	245
105.05	2136	117.05	20105	129.05	43086	140.10	610

Average of 3.061 to 3.072 min.: M123514.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
141.05	5144	151.85	159	162.95	186	173.05	1307
142.05	1705	153.05	1449	163.15	75	174.05	2292
143.05	1044	154.05	1146	163.95	425	175.05	4315
144.05	431	155.05	3070	164.95	1731	176.05	1324
145.05	395	156.05	4389	166.15	1836	177.05	1827
146.05	971	157.10	1055	167.00	11191	178.05	862
147.00	2727	158.00	1095	168.05	5146	179.05	8953
148.05	5722	159.00	896	169.00	853	180.05	5370
149.05	1359	160.05	1759	170.15	381	181.05	2568
149.95	516	161.05	2506	171.00	618	182.05	568
151.10	867	162.10	785	172.00	1028	183.15	293

Average of 3.061 to 3.072 min.: M123514.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
184.05	701	194.05	627	205.05	14255	215.00	571
185.05	3993	195.00	640	206.05	59037	216.05	1044
186.05	32046	196.05	7474	207.00	8477	217.00	15582
187.05	8911	198.00	235437	208.00	1693	218.00	1877
188.05	996	199.00	15398	209.00	465	219.00	295
188.95	1923	200.05	1262	210.05	241	221.05	11374
189.85	195	200.75	69	210.95	1050	221.95	1161
190.05	126	201.25	441	211.10	1473	223.05	3598
191.00	815	201.55	983	211.75	364	224.05	33861
192.05	2727	203.05	1615	212.95	97	225.05	8177
193.10	3103	204.05	8751	214.75	115	226.10	927

Average of 3.061 to 3.072 min.: M123514.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
227.05	14316	237.85	66	248.05	246	258.95	1156
228.05	2028	238.05	72	249.00	1208	259.95	169
229.05	2777	239.00	478	250.05	281	261.10	289
230.00	619	240.05	558	250.95	103	263.95	117

DFTPPM.M Wed Apr 13 12:14:50 2016 MSM Page: 2

231.05	1294	241.00	800	251.25	82	265.00	3456
231.95	185	242.05	1897	252.00	317	265.85	123
233.05	184	243.10	2060	253.05	740	269.85	363
233.95	918	244.05	28279	255.05	144258	270.85	204
235.00	1216	245.05	3897	256.05	21867	271.10	246
235.90	694	246.05	5087	257.00	1638	272.10	508
237.00	1226	247.00	991	258.05	8107	273.00	4291

Average of 3.061 to 3.072 min.: M123514.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
274.05	11576	285.95	93	297.05	2741	313.95	1040
275.05	64960	289.05	202	298.00	166	315.00	2399
276.05	8839	290.15	116	300.90	375	316.05	1204
277.00	4786	291.05	70	301.85	113	317.05	115
278.00	873	291.75	94	302.15	266	319.75	84
279.15	96	292.05	103	303.00	2013	321.00	708
281.95	90	293.05	1337	304.05	594	322.05	419
282.10	173	294.05	320	308.05	416	323.05	6798
283.05	794	294.45	70	309.10	163	324.05	1443
284.10	420	294.95	157	310.00	359	325.05	102
285.10	1064	296.05	18548	312.90	208	326.95	1161

Average of 3.061 to 3.072 min.: M123514.D\data.ms
DFTPP
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
327.95	545	350.95	77	370.65	78	392.05	204
331.95	567	352.00	2053	371.10	517	400.90	190
333.05	726	353.05	1422	372.05	3166	402.00	1728
334.05	4024	354.05	2093	373.00	1062	403.05	2140
334.95	572	354.85	142	373.95	98	404.05	778
335.15	521	355.05	253	376.85	68	405.15	76
336.05	67	358.95	150	383.00	1025	417.15	73
341.00	754	364.95	9013	384.00	293	421.00	1703
342.00	223	366.00	1347	389.95	693	422.00	1952
346.00	1385	366.95	68	390.90	167	423.05	12883
346.95	335	369.90	180	391.15	183	424.05	2230

Average of 3.061 to 3.072 min.: M123514.D\data.ms
DFTPP
Modified:subtracted

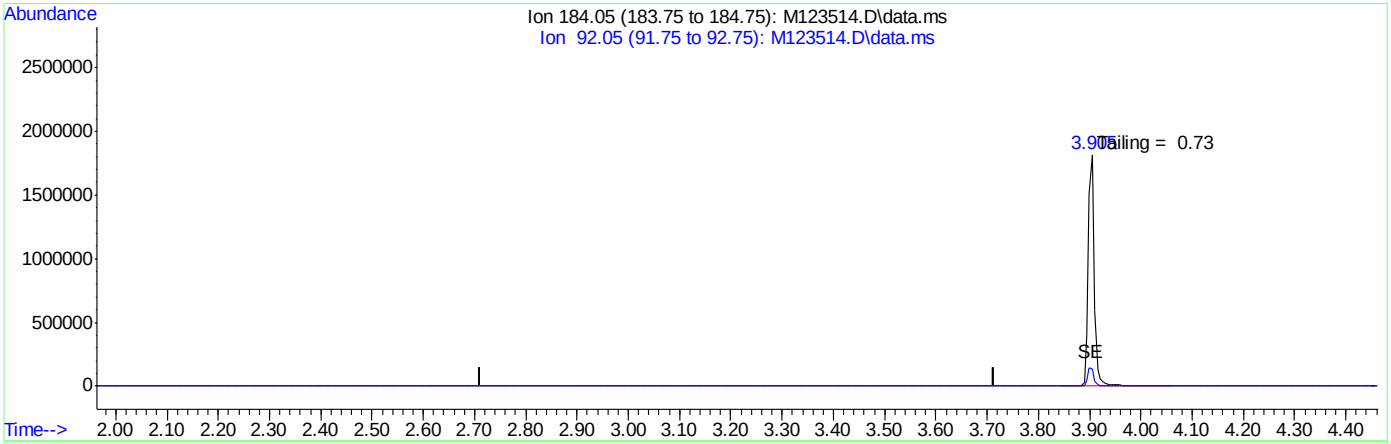
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
424.80	173	444.05	3985				
425.15	223	445.05	127				
433.85	84						
436.05	70						
437.05	96						
438.35	168						
439.25	81						
439.85	112						
441.05	31349						
442.05	214165						
443.05	40010						

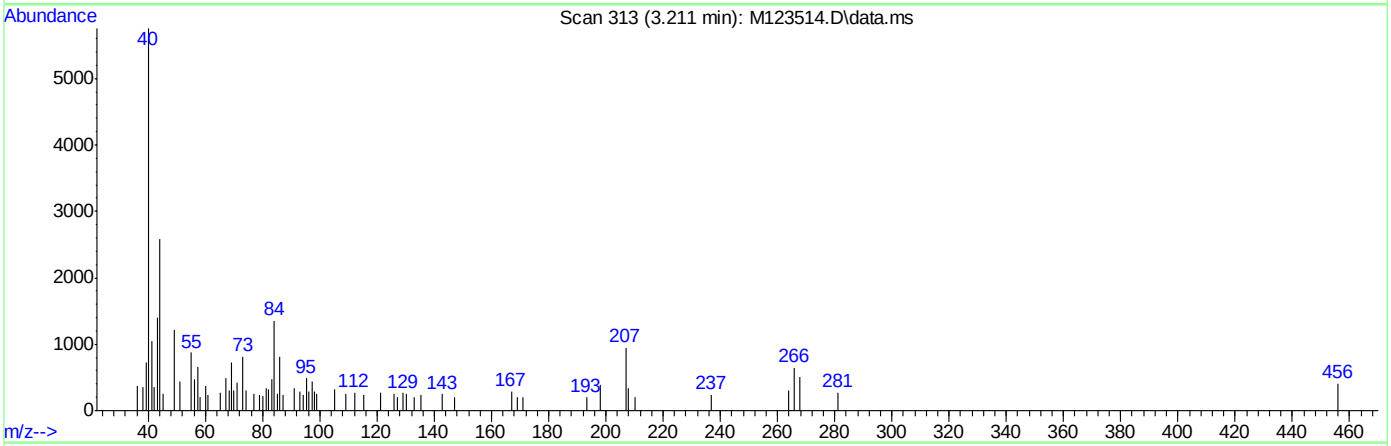
SGS ACCUTEST JC19023

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

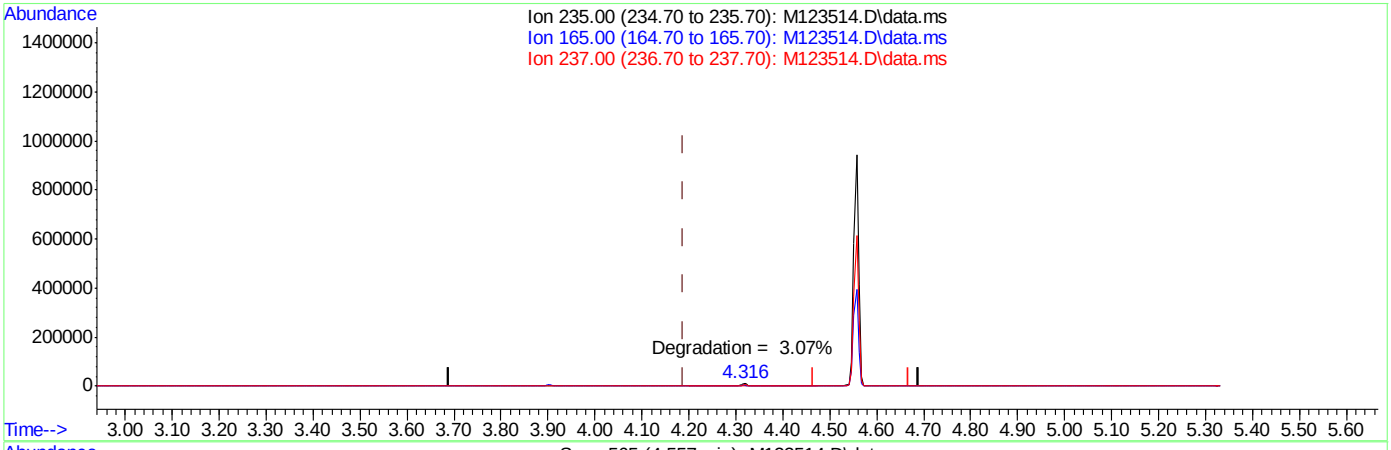
Ion	Exp%	Act%
184.05	100	0.00
92.05	10.70	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

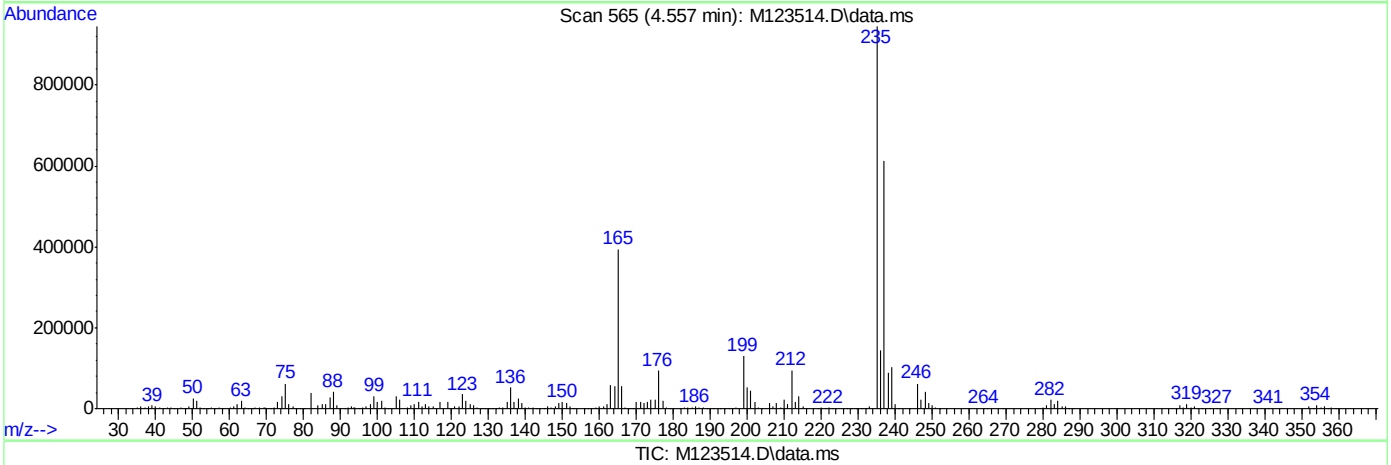
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123514.D
Acq On : 12 Apr 2016 9:57 pm
Operator : sarad
Sample : DFTPP
Misc : op92514,em5218
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 12 22:02:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mMon Mar 28 09:49:46 2016
QLast Update : Mon Mar 28 09:49:46 2016
Response via : Continuing Cal File:





TIC: M123514.D\data.ms

(3) PP-DDT (MC)

4.557min (+0.367) 0.00ppm m

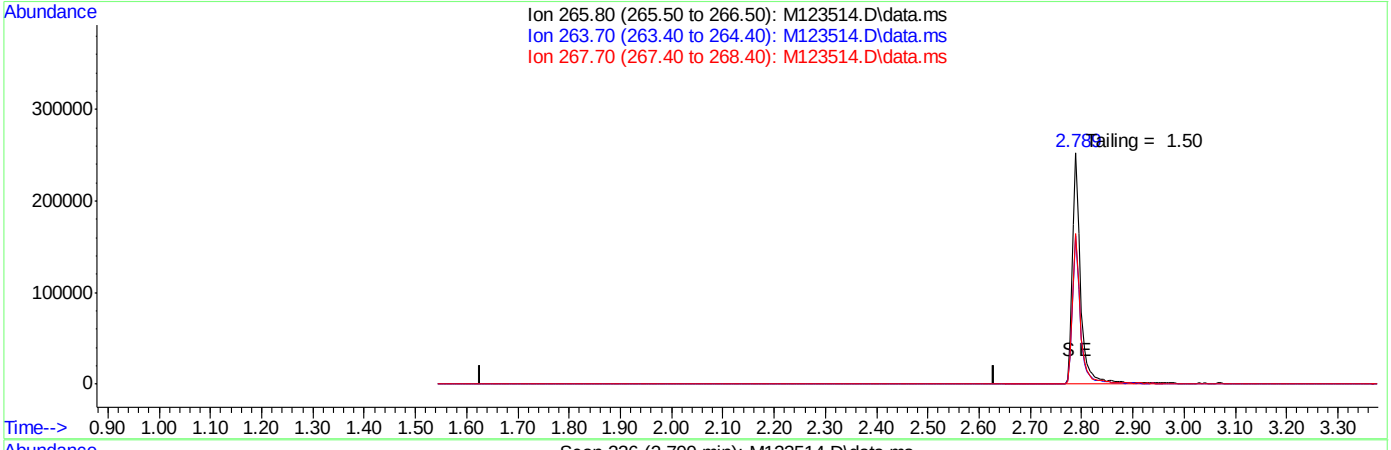
response 682383

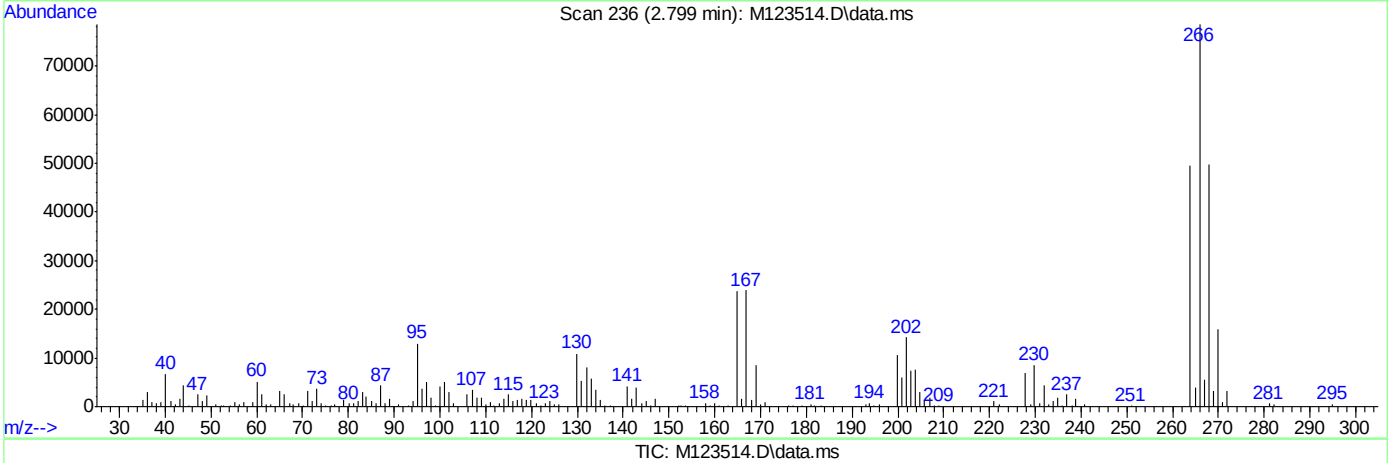
Ion	Exp%	Act%
235.00	100	100
165.00	46.90	41.76
237.00	64.20	64.83
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123514.D
Acq On : 12 Apr 2016 9:57 pm
Operator : sarad
Sample : DFTPP
Misc : op92514,em5218
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 12 22:10:00 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mMon Mar 28 09:49:46 2016
QLast Update : Mon Mar 28 09:49:46 2016
Response via : Continuing Cal File:





(1) Pentachlorophenol (MC)

2.129min (-2.129) 0.00ppm

response 0

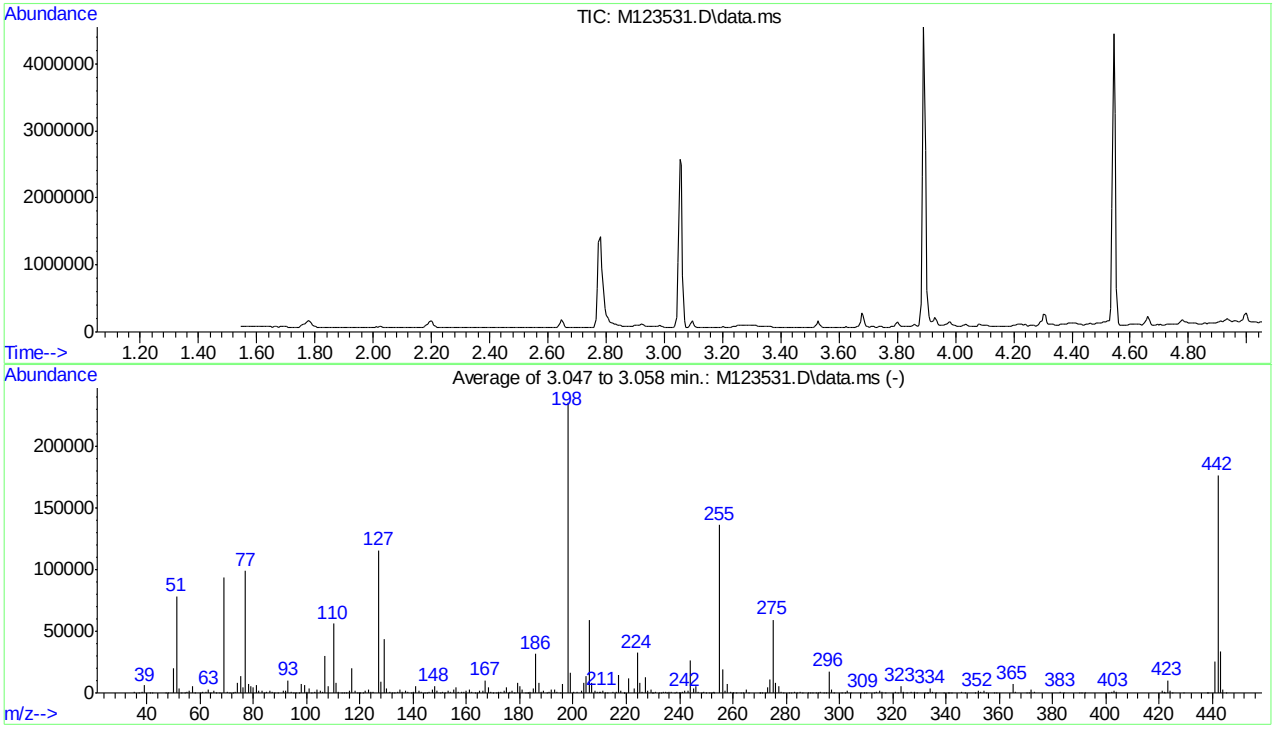
Ion	Exp%	Act%
265.80	100	0.00
263.70	61.60	0.00#
267.70	61.70	0.00#
0.00	0.00	0.00

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 JC19023

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

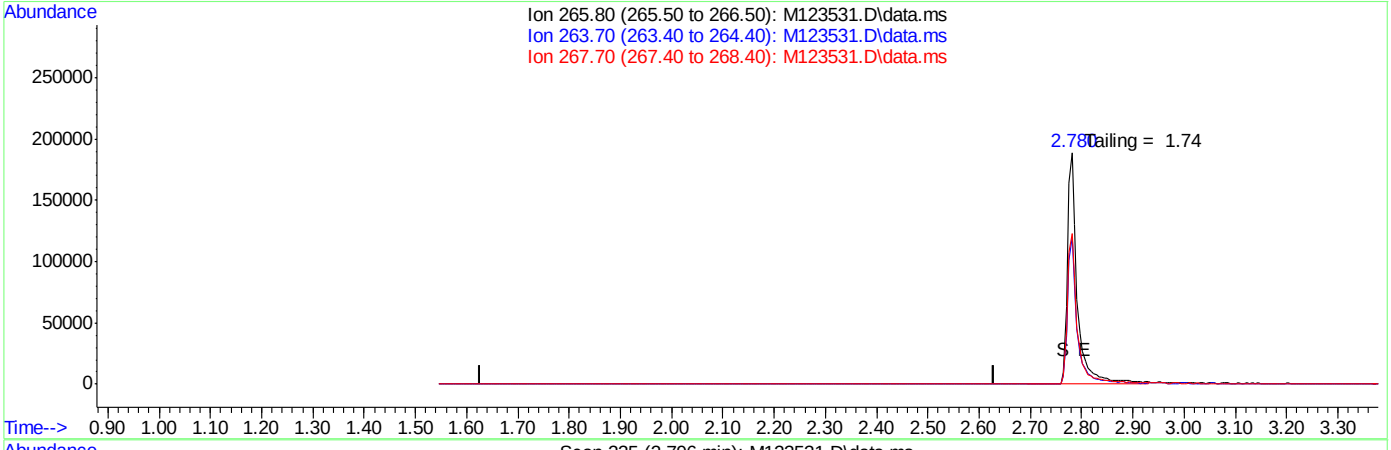
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
423.05	10276						
424.00	1908						
425.05	231						
429.25	67						
437.95	107						
438.55	101						
441.05	25886						
442.05	176602						
443.05	33324						
444.05	3133						
444.95	87						

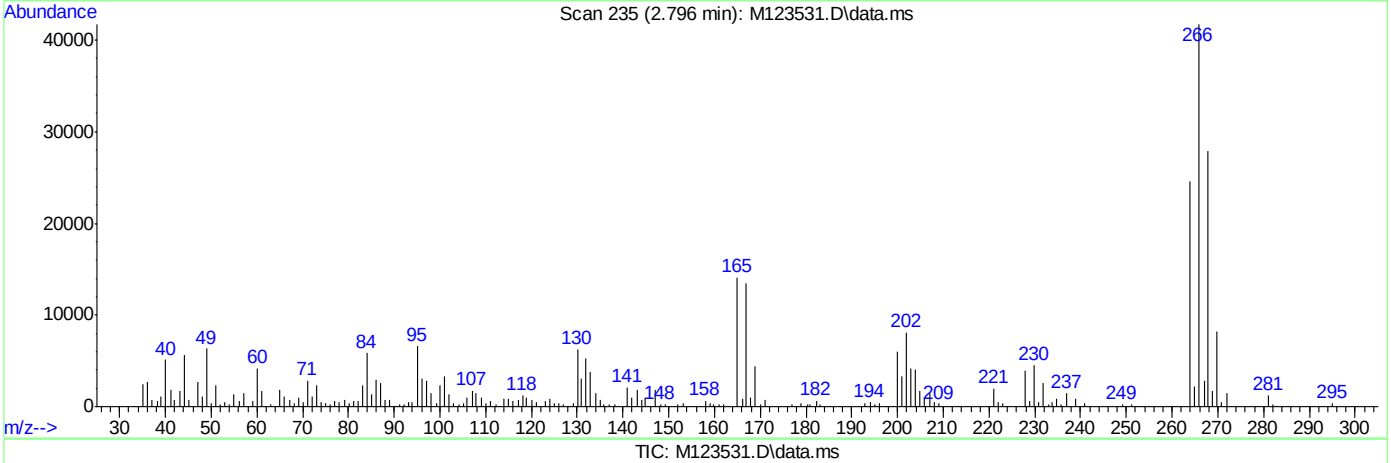
SGS ACCUTEST JC19023

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

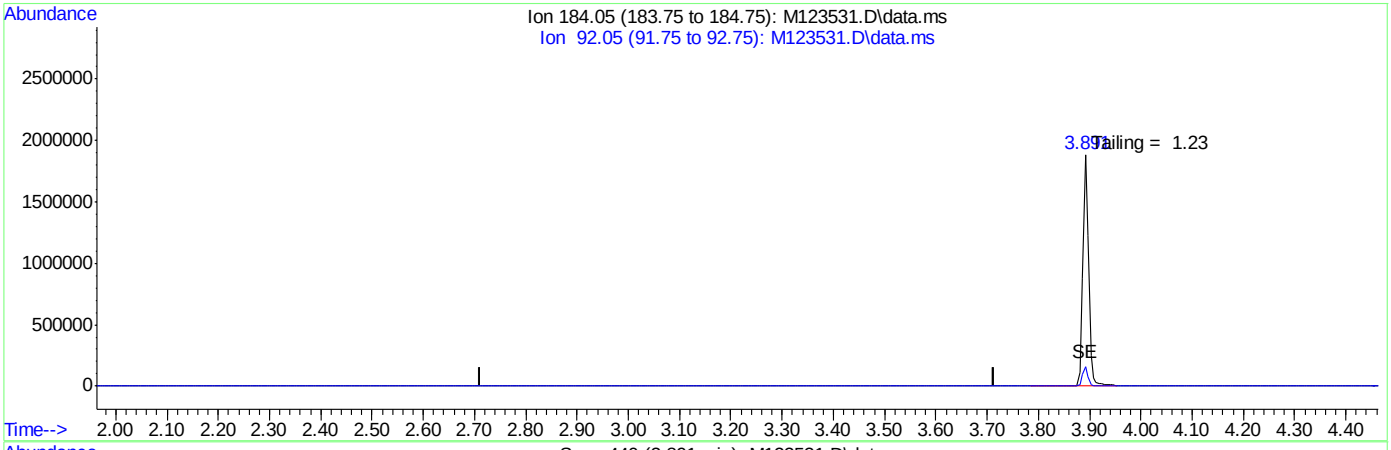
Ion	Exp%	Act%
265.80	100	0.00
263.70	61.60	0.00#
267.70	61.70	0.00#
0.00	0.00	0.00

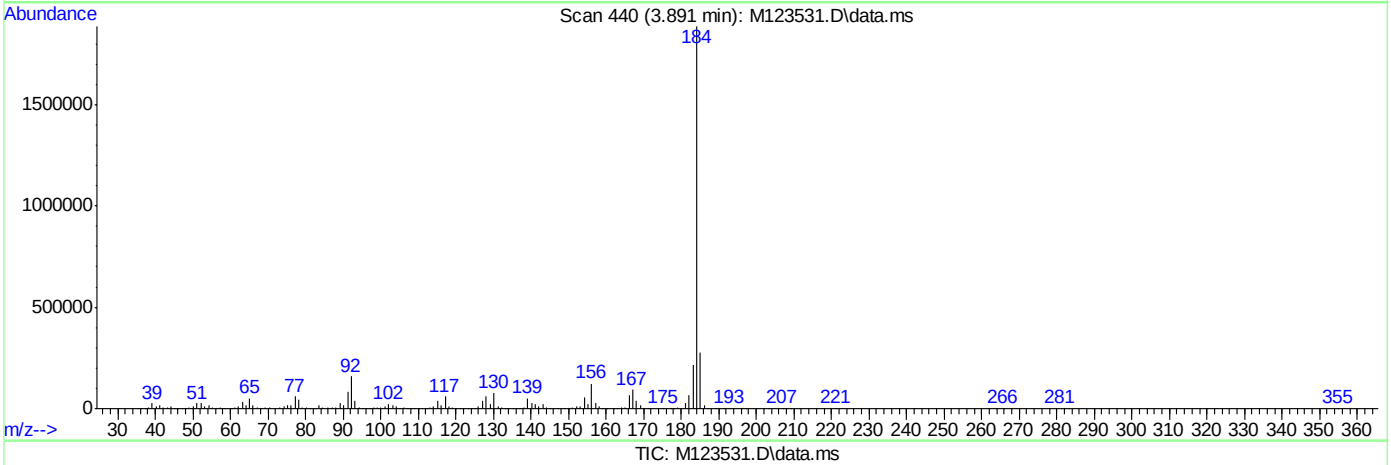
SGS ACCUTEST JC19023

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

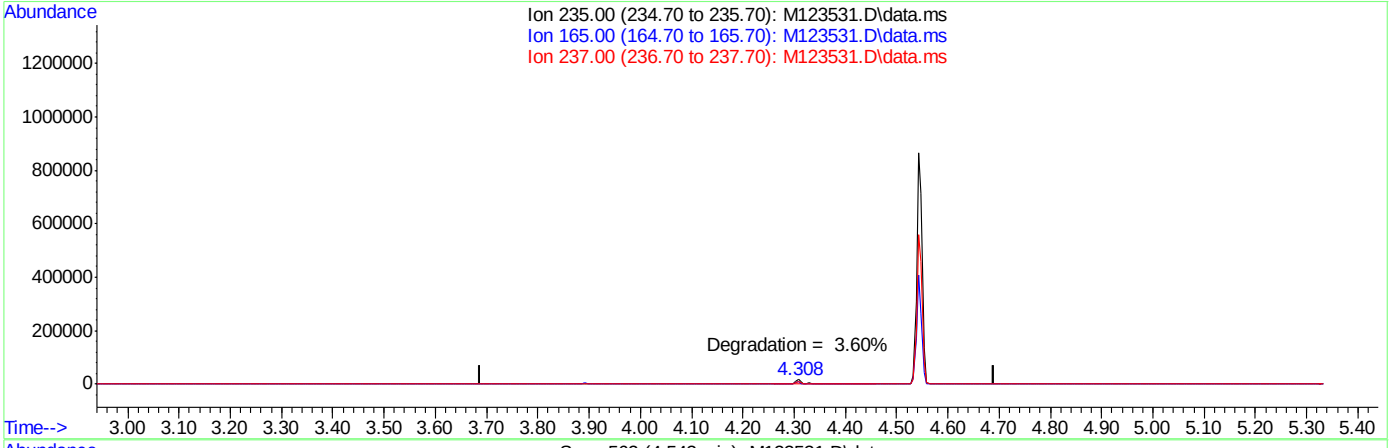
Ion	Exp%	Act%
184.05	100	0.00
92.05	10.70	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

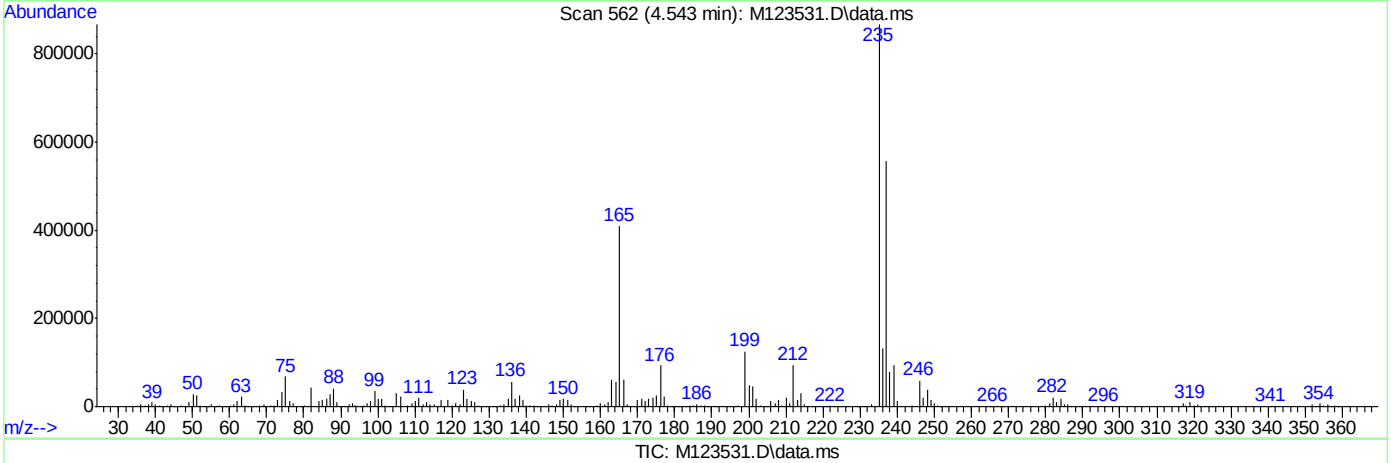
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5219\
Data File : M123531.D
Acq On : 13 Apr 2016 9:27 am
Operator : ashleyd
Sample : DFTPP
Misc : op92514,em5219
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 13 09:32:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mMon Mar 28 09:49:46 2016
QLast Update : Mon Mar 28 09:49:46 2016
Response via : Continuing Cal File:





TIC: M123531.D\data.ms

(3) PP-DDT (MC)

4.190min 0.00ppm d

response 0

Ion	Exp%	Act%
235.00	100	0.00
165.00	46.90	0.00
237.00	64.20	0.00
0.00	0.00	0.00

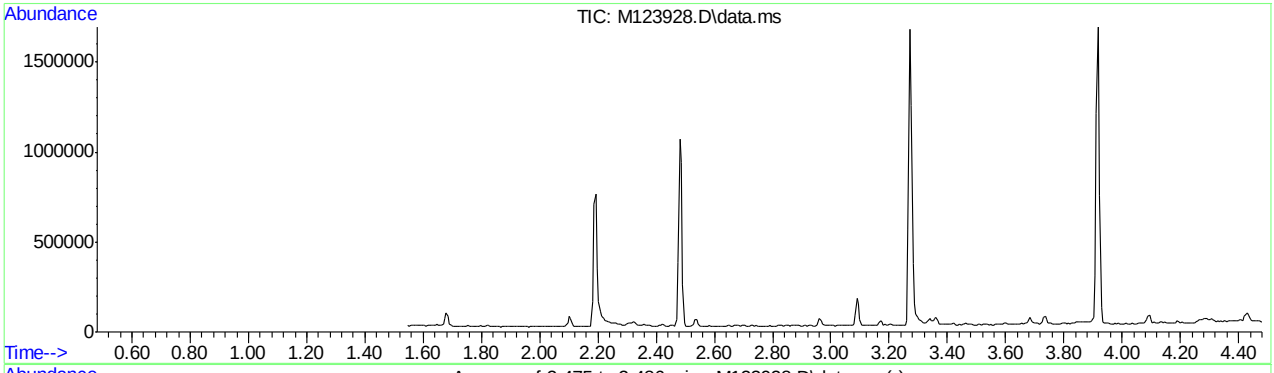
SGS ACCUTEST JC19023

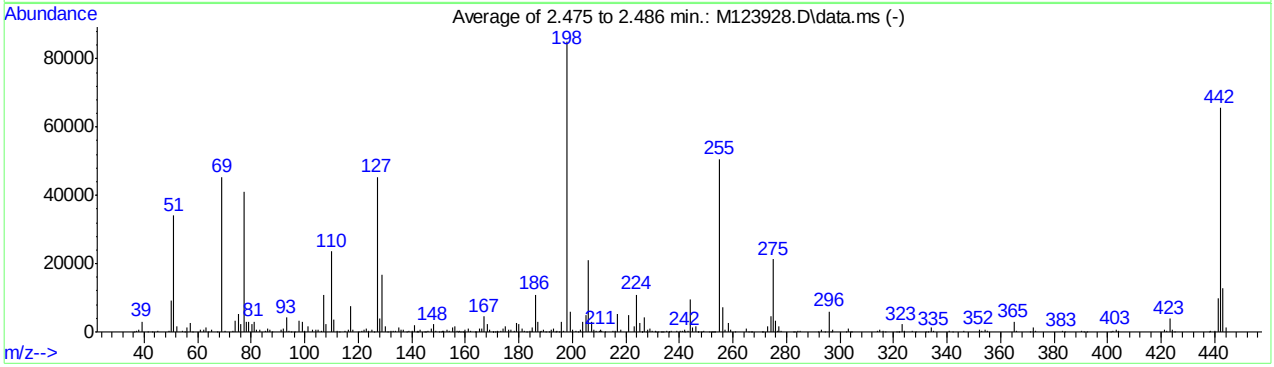
DFTPPR

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123928.D
Acq On : 26 Apr 2016 11:05 pm
Operator : juliusj
Sample : dftpp
Misc : op93324,em5239
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Apr 17 09:39:22 2016
Last Update : Sun Apr 17 09:39:22 2016





AutoFind: Scans 175, 176, 177; Background Corrected with Scan 171

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	40.0	34029	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	53.3	45368	PASS
70	69	0.00	2	0.6	254	PASS
127	198	40	60	53.4	45424	PASS
197	198	0.00	1	0.3	257	PASS
198	198	100	100	100.0	85050	PASS
199	198	5	9	7.0	5953	PASS
275	198	10	30	25.1	21324	PASS
365	198	1	100	3.4	2923	PASS
441	443	0.10	100	78.3	9960	PASS
442	198	40	100	77.0	65516	PASS
443	442	17	23	19.4	12724	PASS

SGS ACCUTEST JC19023

Average of 2.475 to 2.486 min.: M123928.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	69	54.20	191	69.00	45368	82.05	615
37.05	331	55.15	117	70.10	254	83.10	601
38.10	546	56.10	1406	73.10	459	85.10	432
39.15	3005	57.10	2604	74.10	3258	86.05	1006
41.15	160	58.05	108	75.10	5295	87.10	513
43.15	108	61.10	556	76.20	2441	87.95	35
45.20	349	62.10	564	77.15	41213	91.05	618
49.10	394	63.10	1452	78.15	3111	92.10	868
50.15	9072	64.05	174	79.10	2929	93.10	4271
51.15	34029	65.05	535	80.10	2273	94.05	448
52.10	1806	67.15	132	81.10	2975	94.95	122

Average of 2.475 to 2.486 min.: M123928.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
96.00	160	110.05	23573	123.00	1130	134.00	462
98.05	3256	111.05	3667	124.00	410	135.10	1228
99.05	2831	112.00	436	125.10	581	136.05	628
100.05	203	113.15	162	125.75	66	137.00	767
101.05	1605	115.10	249	127.05	45424	138.05	134
103.05	620	116.20	771	128.05	4020	139.10	258
104.00	830	117.05	7459	129.05	16666	140.10	251
105.10	722	118.00	599	130.05	1488	141.05	1842
106.15	269	120.15	110	131.00	120	141.75	160
107.00	10806	121.30	229	132.05	181	142.05	432
108.05	2153	122.00	683	133.00	254	142.25	147

Average of 2.475 to 2.486 min.: M123928.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
143.00	614	153.05	575	161.00	875	171.00	149
144.95	109	154.05	452	162.05	319	171.85	68
145.35	76	155.05	1287	163.75	112	172.10	244
146.05	451	156.10	1804	164.05	91	173.05	405
147.10	1017	157.05	321	165.10	904	174.05	1010
148.00	2241	157.25	154	166.10	847	175.10	1682
149.15	495	157.95	327	167.00	4554	176.10	638
150.05	166	158.25	79	168.05	2156	177.00	723
151.05	102	158.95	110	169.10	511	178.10	227
151.45	219	159.25	101	170.25	97	179.05	2636
152.05	313	160.00	571	170.45	102	180.05	2305

Average of 2.475 to 2.486 min.: M123928.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
181.05	994	190.05	100	200.00	591	210.70	766
182.15	211	191.05	116	201.50	470	211.10	484
183.05	71	192.05	691	202.05	69	212.05	73
184.00	208	193.05	1082	203.05	686	215.05	185
184.95	306	193.85	92	204.00	2899	216.15	263
185.10	1211	194.15	196	205.05	4931	217.00	5350
186.05	10899	194.95	74	206.05	21078	218.00	730
187.05	3074	196.05	2989	207.05	3124	221.05	5042
188.05	95	196.75	257	208.00	791	223.05	1640
188.20	287	198.05	85050	209.00	298	224.05	10992
189.05	631	199.05	5953	209.95	243	225.05	2628

Average of 2.475 to 2.486 min.: M123928.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
225.85	76	233.75	71	243.05	379	252.85	68
226.15	72	233.95	119	244.05	9451	253.15	105
227.00	4303	235.05	343	245.05	1451	255.05	50650
227.85	149	235.95	93	246.10	1569	256.05	7167

DFTPPM.M Wed Apr 27 14:47:48 2016 MSM Page: 2

228.00	577	236.15	148	246.75	113	257.05	618
229.00	1045	237.05	400	246.95	157	258.05	2743
229.95	243	239.10	219	248.05	67	258.90	540
230.85	69	240.05	180	248.95	291	260.95	78
231.00	396	240.95	369	251.05	67	264.95	1032
232.05	74	241.85	101	251.95	169	265.85	156
233.25	68	242.05	644	252.25	79	266.75	153

Average of 2.475 to 2.486 min.: M123928.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
267.15	70	283.15	102	303.95	104	326.95	381
270.85	96	284.10	237	304.15	86	328.05	137
271.05	129	285.00	391	314.05	355	332.05	108
273.00	1543	291.90	165	314.95	774	332.95	107
274.05	4615	293.00	548	315.95	294	334.00	1358
275.05	21324	294.25	70	316.85	88	335.00	367
276.05	3236	296.05	5934	321.05	135	340.90	287
276.85	208	296.85	80	321.85	71	341.95	69
277.05	1556	297.05	788	322.05	89	346.05	371
278.00	331	302.05	79	323.00	2181	352.00	786
282.75	70	303.05	897	324.00	295	353.00	349

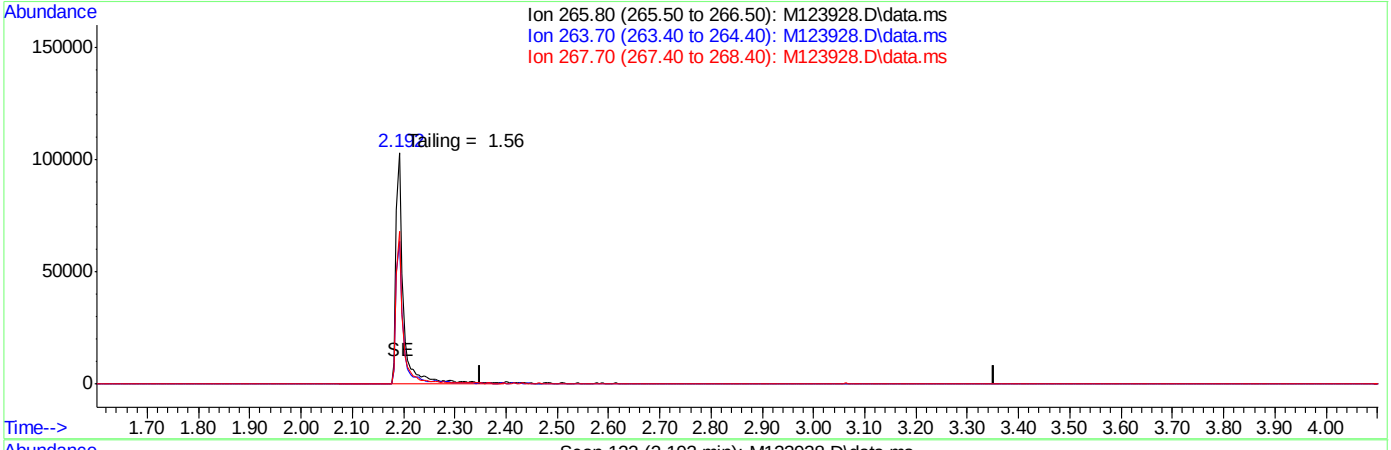
Average of 2.475 to 2.486 min.: M123928.D\data.ms
dftpp
Modified:subtracted

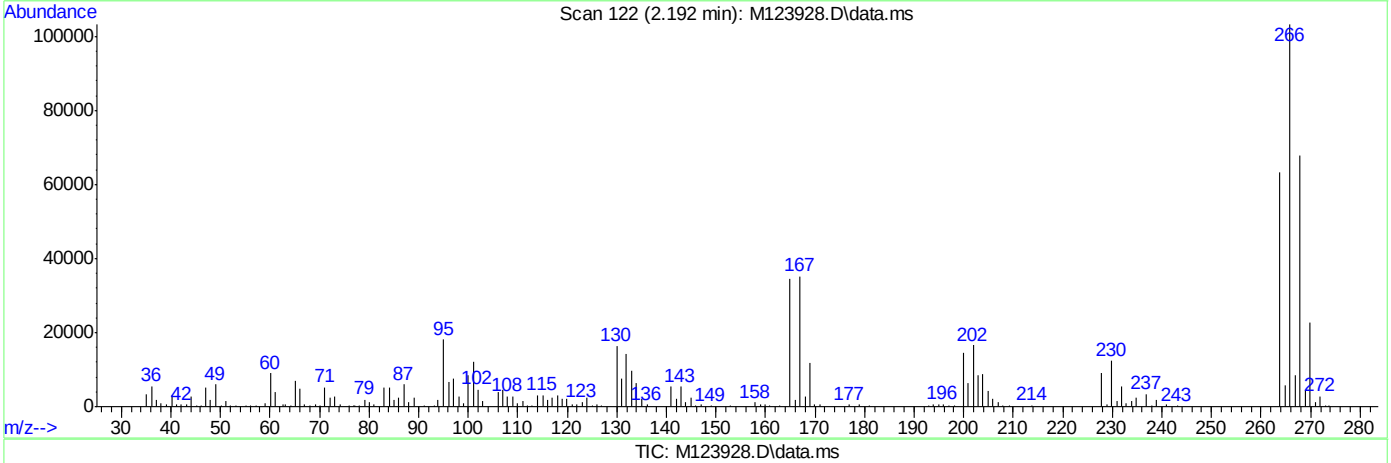
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
354.05	791	392.25	91	438.35	179		
354.90	178	401.15	75	439.95	292		
365.05	2923	401.90	356	441.05	9960		
366.00	434	403.00	804	442.05	65516		
371.00	156	403.95	348	443.05	12724		
372.00	1307	420.95	582	444.05	1182		
373.10	372	422.00	417				
383.00	274	423.05	3802				
383.95	87	424.05	750				
390.00	220	425.05	85				
391.15	70	437.75	78				

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123928.D
Acq On : 26 Apr 2016 11:05 pm
Operator : juliusj
Sample : dftpp
Misc : op93324,em5239
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 26 23:11:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Apr 17 09:39:22 2016
QLast Update : Sun Apr 17 09:39:22 2016
Response via : Continuing Cal File:





(1) Pentachlorophenol (MC)

2.852min (-2.852) 0.00ppm

response 0

Ion	Exp%	Act%
265.80	100	0.00
263.70	61.60	0.00#
267.70	61.70	0.00#
0.00	0.00	0.00

7.5.18.1

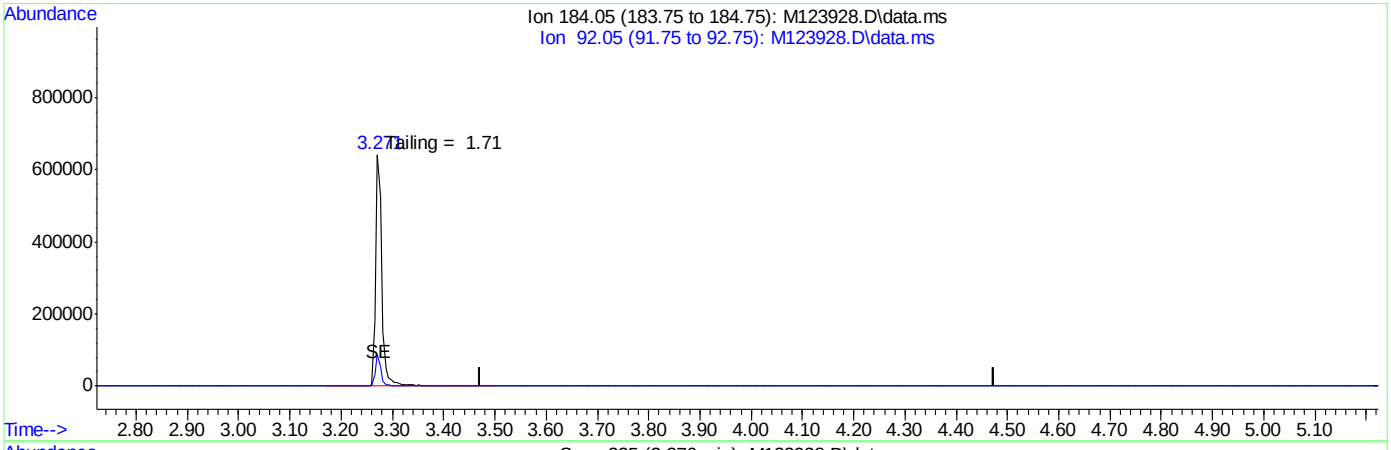
7

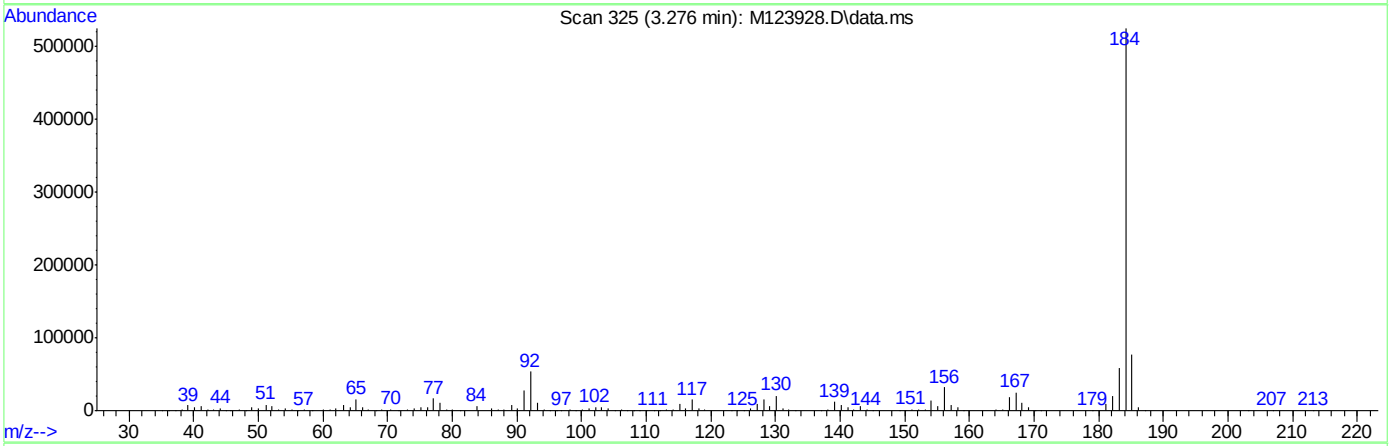
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123928.D
Acq On : 26 Apr 2016 11:05 pm
Operator : juliusj
Sample : dftpp
Misc : op93324,em5239
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 26 23:11:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Apr 17 09:39:22 2016
QLast Update : Sun Apr 17 09:39:22 2016
Response via : Continuing Cal File:





TIC: M123928.D\data.ms

(2) Benzidine (M)

3.973min 0.00ppm d

response 0

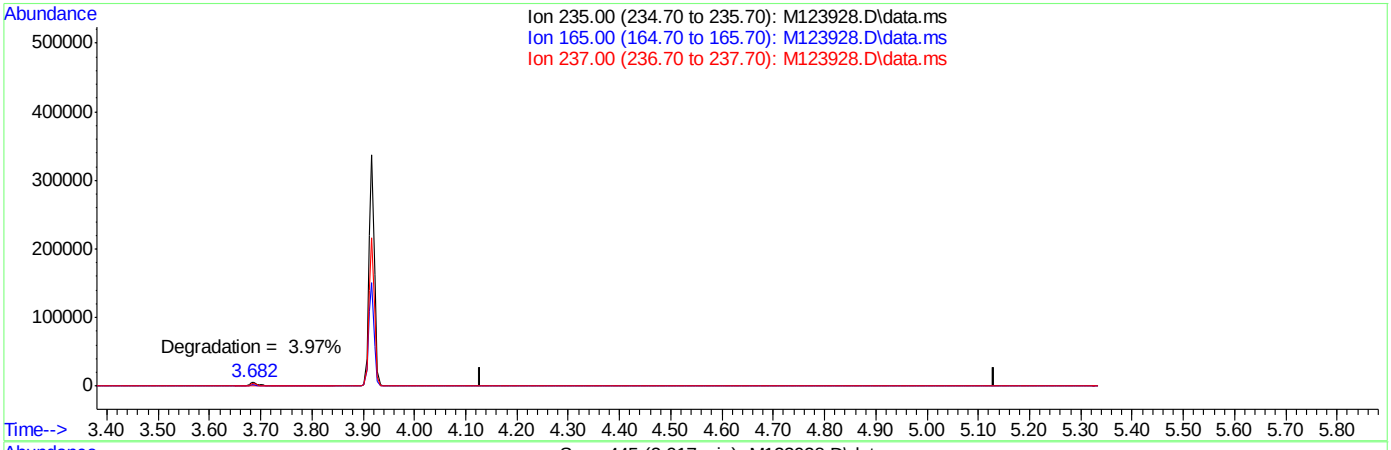
Ion	Exp%	Act%
184.05	100	0.00
92.05	10.70	0.00
0.00	0.00	0.00
0.00	0.00	0.00

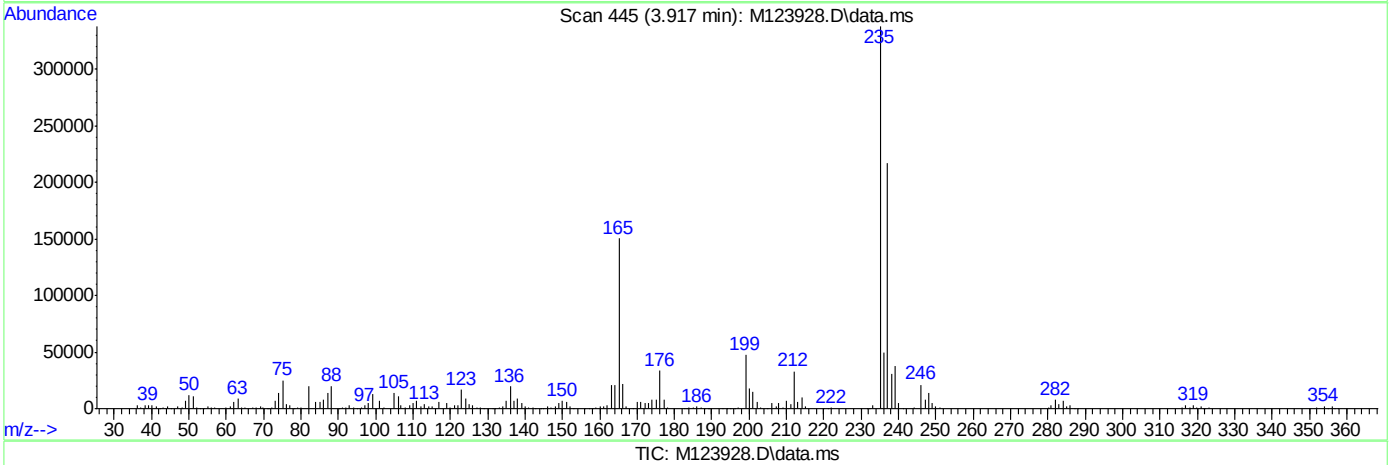
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123928.D
Acq On : 26 Apr 2016 11:05 pm
Operator : juliusj
Sample : dftpp
Misc : op93324,em5239
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 26 23:11:13 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Apr 17 09:39:22 2016
QLast Update : Sun Apr 17 09:39:22 2016
Response via : Continuing Cal File:





TIC: M123928.D\data.ms

(3) PP-DDT (MC)

4.630min (-4.630) 0.00ppm

response 0

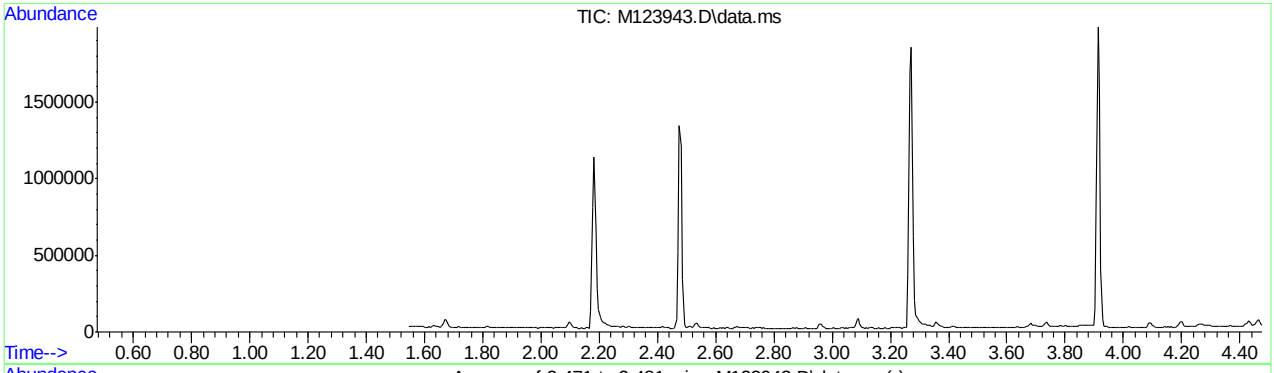
Ion	Exp%	Act%
235.00	100	0.00
165.00	46.90	0.00#
237.00	64.20	0.00#
0.00	0.00	0.00

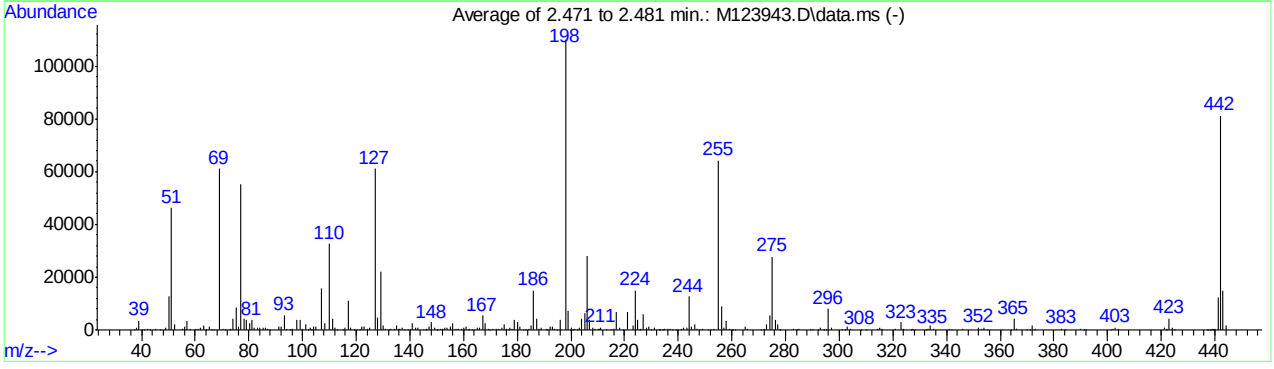
DFTPPR

Data Path : C:\msdchem\1\DATA\EM5240\
Data File : M123943.D
Acq On : 27 Apr 2016 10:35 am
Operator : ashleyd
Sample : dftpp
Misc : op93324,em5240
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Apr 17 09:39:22 2016
Last Update : Sun Apr 17 09:39:22 2016





AutoFind: Scans 174, 175, 176; Background Corrected with Scan 169

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	42.0	46216	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	55.5	61082	PASS
70	69	0.00	2	0.7	425	PASS
127	198	40	60	55.4	61005	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	110050	PASS
199	198	5	9	6.7	7381	PASS
275	198	10	30	25.1	27635	PASS
365	198	1	100	3.7	4073	PASS
441	443	0.10	100	83.0	12499	PASS
442	198	40	100	73.8	81226	PASS
443	442	17	23	18.5	15057	PASS

SGS ACCUTEST JC19023

Average of 2.471 to 2.481 min.: M123943.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.10	81	51.10	46216	64.15	71	76.15	1384
38.10	744	52.15	2254	65.10	1223	77.15	55118
39.10	3527	55.15	362	66.15	86	78.15	4442
40.05	207	56.05	1389	67.05	21	79.05	3663
41.10	198	57.10	3577	69.00	61082	80.10	2698
42.20	325	58.15	276	70.20	425	81.05	3654
43.10	64	60.15	291	71.05	80	82.10	1043
45.10	396	61.10	556	72.95	173	83.10	857
47.00	150	62.10	734	73.25	248	84.05	733
49.10	787	63.10	1766	74.10	4448	85.15	692
50.15	12623	63.95	202	75.10	8459	86.05	852

Average of 2.471 to 2.481 min.: M123943.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
87.05	550	101.10	1992	113.05	192	125.00	790
88.00	213	102.10	142	114.95	89	127.05	61005
91.10	1140	103.00	759	116.00	725	128.10	4672
92.10	1212	103.25	115	117.05	11047	129.05	22318
93.05	5676	104.10	1161	118.00	697	130.00	1829
94.10	618	105.05	1090	119.15	72	131.05	430
95.25	108	107.05	15766	119.95	164	132.05	195
96.10	442	108.10	2603	121.05	188	133.10	319
98.05	3856	110.05	32594	122.10	1104	134.10	634
99.05	3688	111.05	4320	123.05	1313	135.05	1699
100.10	369	112.05	678	124.05	642	135.85	358

Average of 2.471 to 2.481 min.: M123943.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
136.10	383	146.10	402	156.10	2507	166.10	857
137.10	909	147.05	1361	157.10	547	167.05	5418
137.75	67	148.05	2953	158.10	561	168.10	2366
139.05	78	149.05	810	159.05	371	169.10	385
140.05	201	149.95	88	160.05	806	169.85	133
140.25	147	150.15	68	161.10	1343	171.05	277
141.05	2517	151.15	465	161.75	70	172.00	259
142.05	944	152.15	268	162.10	307	173.00	599
143.10	693	153.00	854	163.05	97	174.10	1042
145.05	85	154.00	656	164.05	70	175.05	2025
145.85	90	155.05	1270	165.00	890	176.15	615

Average of 2.471 to 2.481 min.: M123943.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
176.85	150	187.05	4328	199.05	7381	208.00	859
177.05	824	188.05	486	199.75	123	209.10	387
178.05	392	189.05	917	200.05	716	210.15	241
179.05	3860	190.85	76	200.75	76	210.60	595
180.05	2890	191.05	436	201.50	572	211.10	1038
181.05	1371	192.10	1168	202.15	95	213.15	73
182.15	175	193.10	1427	203.10	661	214.95	172
182.95	113	194.10	296	204.05	4103	216.05	474
184.20	429	194.85	130	205.05	6515	217.05	6650
185.10	1900	196.05	3693	206.05	27932	218.00	1034
186.05	14895	198.05	110050	207.05	3646	219.55	92

Average of 2.471 to 2.481 min.: M123943.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
221.05	6611	232.95	95	242.05	702	255.05	64253
223.05	1624	233.25	85	243.10	1040	256.05	9077
224.05	14895	233.95	114	244.05	12700	257.00	841
225.05	3901	234.25	107	245.05	1440	258.05	3494

DFTPPM.M Wed Apr 27 14:50:43 2016 MSM Page: 2

225.85	73	234.95	318	246.05	2317	259.00	646
226.10	348	236.05	385	247.05	410	259.85	71
227.00	5962	237.10	512	247.95	159	260.25	81
228.05	931	237.85	71	249.00	457	261.05	155
229.05	1321	239.05	207	251.15	103	265.10	1406
230.00	210	240.05	223	252.15	74	265.80	265
231.10	677	241.00	287	253.15	287	270.95	136

Average of 2.471 to 2.481 min.: M123943.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
272.10	277	289.25	83	303.10	1109	326.85	171
273.05	2186	290.05	78	304.05	391	327.05	268
274.05	5497	292.05	90	307.85	72	327.75	140
275.05	27635	293.00	739	310.05	67	328.05	110
276.05	3689	294.05	88	314.10	442	332.15	193
277.05	2023	294.25	70	315.00	795	333.05	368
277.85	146	294.95	105	316.05	446	334.05	1711
278.05	186	296.05	7966	321.10	333	335.00	519
282.85	270	297.00	1067	323.05	2865	341.05	397
284.05	154	300.85	85	323.85	130	341.95	104
285.00	375	302.15	83	324.00	447	346.00	570

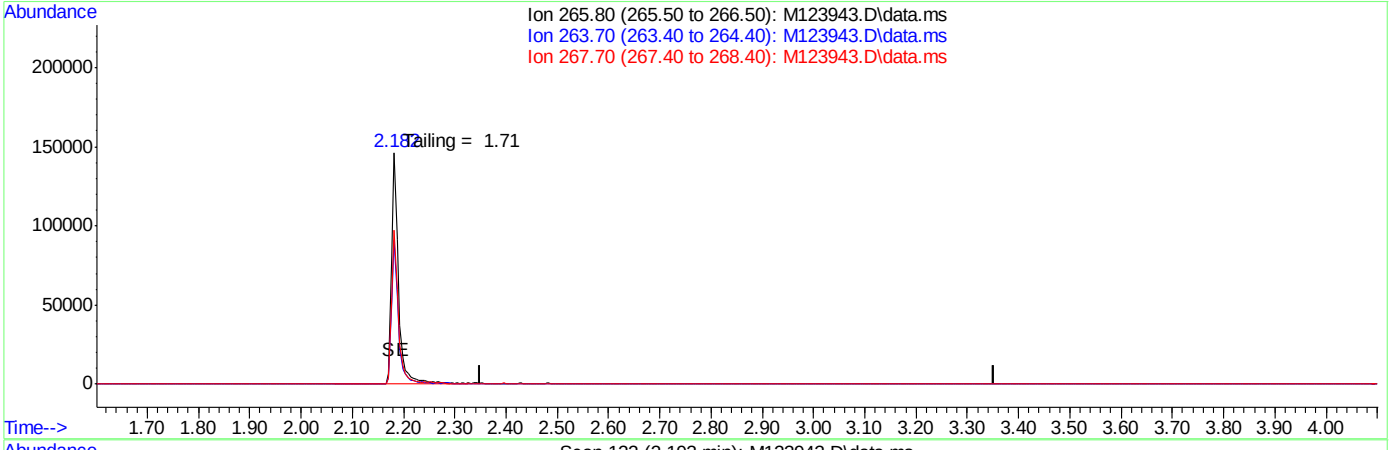
Average of 2.471 to 2.481 min.: M123943.D\data.ms
dftpp
Modified:subtracted

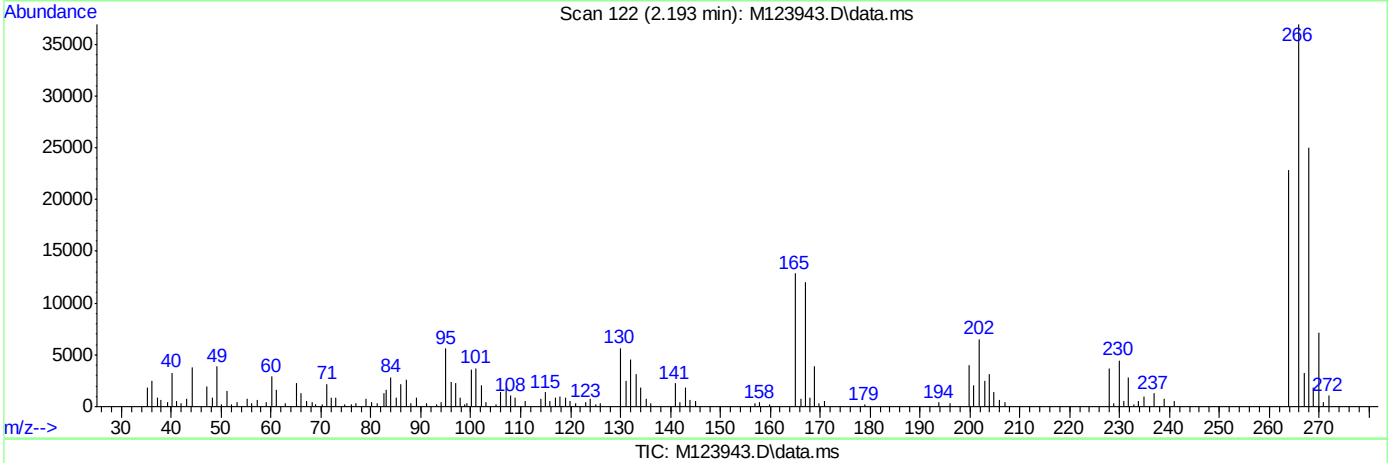
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
352.05	914	372.85	116	421.00	667	439.25	117
353.05	560	373.05	250	421.95	76	439.45	173
354.05	963	382.95	435	422.10	611	439.90	283
355.10	194	384.05	96	423.05	4450	441.05	12499
363.95	83	389.95	231	424.00	977	442.05	81226
365.05	4073	391.05	68	425.05	76	443.05	15057
365.85	331	392.15	82	437.25	83	444.00	1504
366.10	367	401.05	90	437.65	90		
369.85	72	402.05	585	438.15	95		
370.95	220	403.00	939	438.35	113		
372.05	1563	404.05	342	438.95	255		

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5240\
Data File : M123943.D
Acq On : 27 Apr 2016 10:35 am
Operator : ashleyd
Sample : dftpp
Misc : op93324,em5240
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 27 11:04:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Apr 17 09:39:22 2016
QLast Update : Sun Apr 17 09:39:22 2016
Response via : Continuing Cal File:





(1) Pentachlorophenol (MC)

2.852min (-2.852) 0.00ppm

response 0

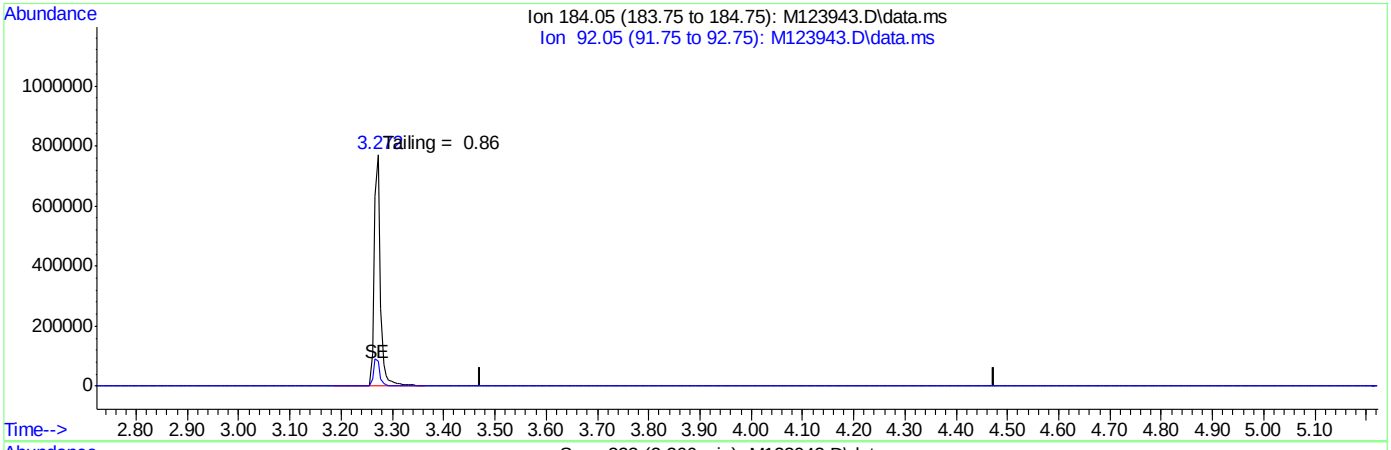
Ion	Exp%	Act%
265.80	100	0.00
263.70	61.60	0.00#
267.70	61.70	0.00#
0.00	0.00	0.00

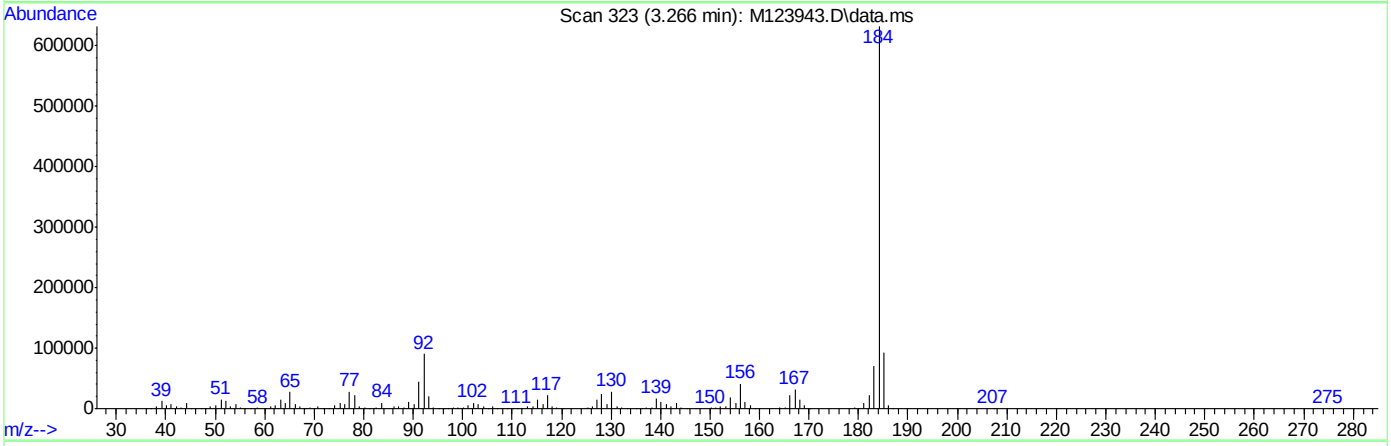
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5240\
Data File : M123943.D
Acq On : 27 Apr 2016 10:35 am
Operator : ashleyd
Sample : dftpp
Misc : op93324,em5240
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 27 11:04:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Apr 17 09:39:22 2016
QLast Update : Sun Apr 17 09:39:22 2016
Response via : Continuing Cal File:





TIC: M123943.D\data.ms

(2) Benzidine (M)

3.973min 0.00ppm d

response 0

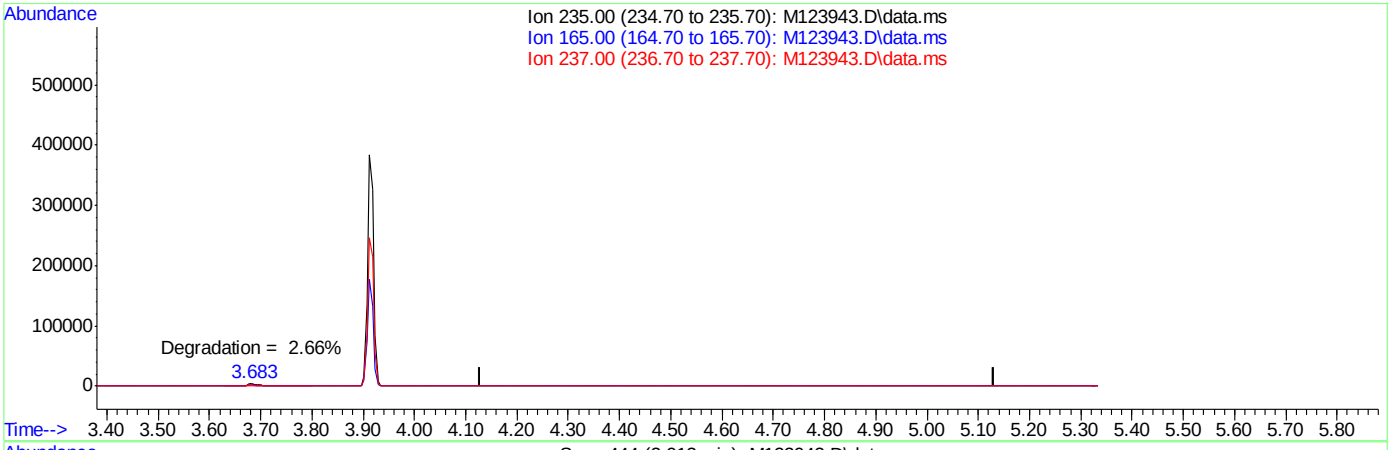
Ion	Exp%	Act%
184.05	100	0.00
92.05	10.70	0.00
0.00	0.00	0.00
0.00	0.00	0.00

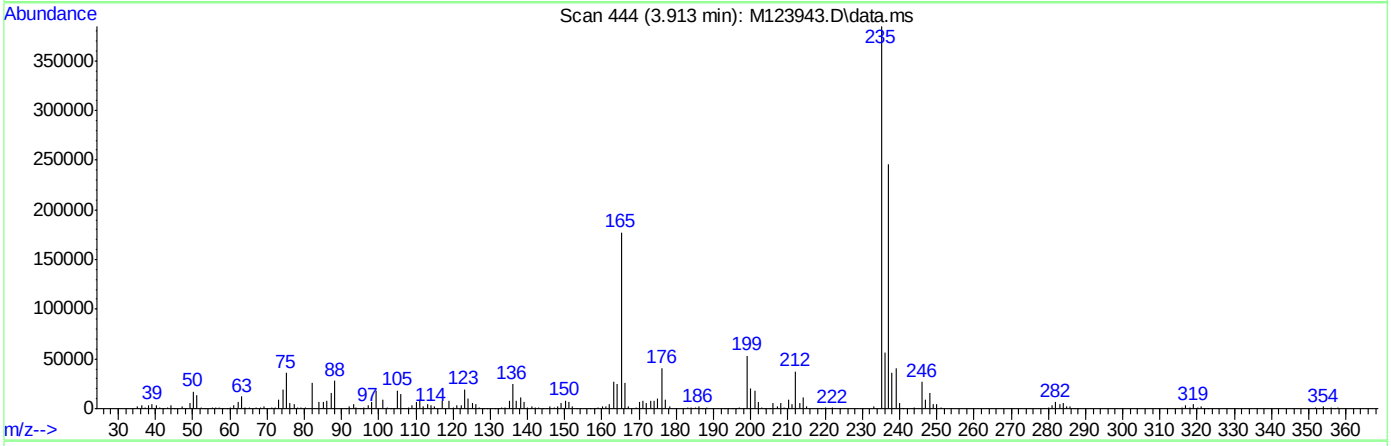
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5240\
Data File : M123943.D
Acq On : 27 Apr 2016 10:35 am
Operator : ashleyd
Sample : dftpp
Misc : op93324,em5240
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 27 11:04:33 2016
Quant Method : C:\MSDCHEM\1\METHODS\DFTPPM.M
Quant Title : Semi Volatile Extractables by GC/MS rxi-5silms 30mSun Apr 17 09:39:22 2016
QLast Update : Sun Apr 17 09:39:22 2016
Response via : Continuing Cal File:





TIC: M123943.D\data.ms

(3) PP-DDT (MC)

4.630min (-4.630) 0.00ppm

response 0

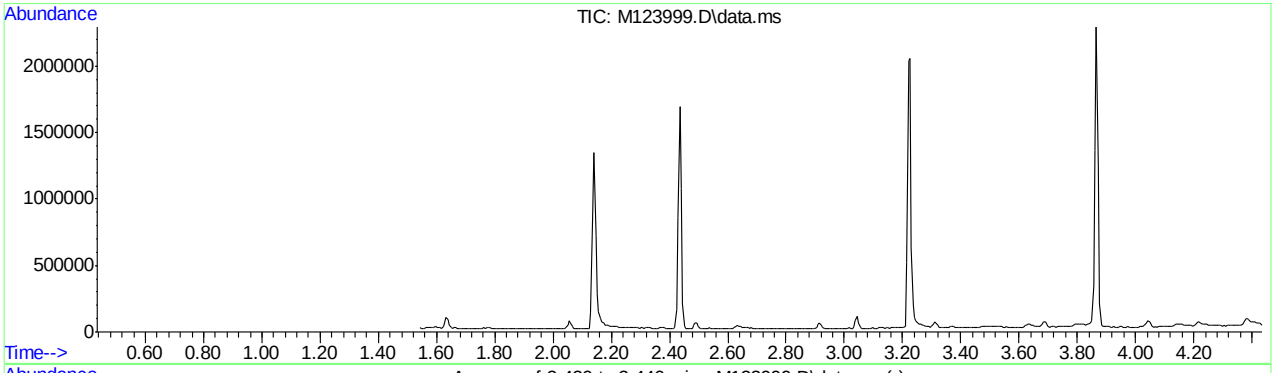
Ion	Exp%	Act%
235.00	100	0.00
165.00	46.90	0.00#
237.00	64.20	0.00#
0.00	0.00	0.00

DFTPPR

Data Path : C:\msdchem\1\DATA\EM5245\
Data File : M123999.D
Acq On : 29 Apr 2016 9:18 am
Operator : ashleyd
Sample : dftpp
Misc : op93324,em5245
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 167, 168, 169; Background Corrected with Scan 162

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	39.8	51111	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	52.2	66909	PASS
70	69	0.00	2	0.6	425	PASS
127	198	40	60	51.9	66538	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	128264	PASS
199	198	5	9	7.1	9048	PASS
275	198	10	30	27.7	35536	PASS
365	198	1	100	4.2	5359	PASS
441	443	0.10	100	79.8	17820	PASS
442	198	40	100	88.1	112992	PASS
443	442	17	23	19.8	22321	PASS

Average of 2.429 to 2.440 min.: M123999.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.15	198	48.10	215	59.25	68	71.85	87
36.05	26	49.05	402	60.10	75	73.05	226
37.10	150	50.15	13119	61.15	767	74.10	5227
38.10	649	51.10	51111	62.10	848	75.05	8729
39.15	3818	52.15	2672	63.15	2203	77.10	60619
40.05	415	54.00	155	64.10	407	78.15	4186
41.15	316	55.10	40	65.15	1102	79.05	3814
43.15	240	56.05	1486	66.05	73	80.00	2778
44.10	12	57.15	3671	69.05	66909	81.05	4515
45.05	90	58.25	77	70.15	425	82.15	1111
46.95	15	58.95	78	71.10	57	83.15	754

Average of 2.429 to 2.440 min.: M123999.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
85.10	375	98.10	4673	110.05	36186	121.15	81
86.05	1246	99.05	3549	111.05	4966	122.05	1160
87.15	661	100.10	366	112.00	612	123.00	1622
87.95	110	101.00	1800	112.95	103	124.05	914
89.05	184	102.05	95	113.10	197	125.10	758
91.10	1049	103.10	886	114.95	244	127.05	66538
92.15	1125	104.05	1479	116.15	817	128.10	5035
93.05	6161	105.10	923	117.05	11636	129.05	25565
94.05	307	107.05	17797	118.05	906	130.05	2193
95.05	216	108.05	2996	119.05	73	130.95	383
96.10	610	109.15	268	120.15	270	131.25	115

Average of 2.429 to 2.440 min.: M123999.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
131.90	194	143.05	698	153.05	825	164.00	172
132.15	193	144.05	89	154.00	716	165.05	1212
134.05	669	145.10	159	155.05	1624	166.10	794
135.05	1914	146.10	450	156.05	2745	167.05	6057
136.10	716	147.05	1589	157.10	520	168.05	2661
137.05	1085	148.05	3387	158.05	551	169.05	521
138.00	277	149.05	718	159.05	398	170.75	69
139.00	157	150.00	197	160.05	959	171.05	158
139.95	239	151.05	474	161.10	1347	171.30	161
141.00	3004	151.35	123	162.05	440	172.00	697
142.10	978	151.95	440	162.85	76	172.95	416

Average of 2.429 to 2.440 min.: M123999.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
173.15	310	183.95	199	193.10	1685	205.05	7709
174.05	1311	184.15	151	194.10	397	206.05	31952
175.05	2343	185.05	2004	195.00	238	207.05	4453
176.00	1106	186.05	17001	196.05	4432	208.05	971
177.10	983	187.05	5276	198.05	128264	209.00	392
178.05	162	188.05	587	199.05	9048	209.95	158
179.00	4147	189.00	966	199.75	135	210.15	550
180.05	3232	190.10	312	200.05	466	210.80	1025
181.00	1457	190.85	111	201.50	793	211.10	1494
182.00	362	191.15	536	203.05	934	211.80	315
182.90	286	192.05	1254	204.10	4741	212.95	75

Average of 2.429 to 2.440 min.: M123999.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
213.15	69	226.05	329	235.05	626	245.10	1946
215.00	376	227.05	7236	236.05	472	246.00	2805
216.10	595	227.85	241	236.85	134	247.00	596
217.05	8132	228.00	869	237.00	516	247.85	142

DFTPPM.M Fri Apr 29 14:51:37 2016 MSM

Page: 2

218.00	1121	229.05	1738	238.15	77	249.00	547
219.85	70	230.10	269	239.00	235	251.15	84
221.05	8067	231.00	602	239.95	140	252.00	252
222.15	329	231.95	99	240.95	428	253.10	273
223.05	1947	232.95	107	242.10	1245	255.05	80738
224.05	17694	233.25	84	243.15	377	256.05	11372
225.05	4530	234.00	563	244.05	15504	257.00	888

Average of 2.429 to 2.440 min.: M123999.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
258.00	4272	272.15	116	285.95	81	303.05	1127
259.00	735	273.05	2306	289.05	80	304.10	415
261.15	84	274.05	6631	289.25	91	308.00	186
263.35	75	275.05	35536	289.95	80	310.05	73
264.05	75	276.05	4936	293.05	924	312.25	70
265.00	1520	277.05	2549	294.05	200	313.05	72
265.90	282	278.05	441	294.95	96	313.85	66
267.80	15	282.05	69	296.05	9608	313.95	280
269.85	91	283.05	351	297.00	1267	314.10	273
271.15	102	284.00	331	301.00	209	315.05	1241
271.75	81	285.05	661	301.95	219	316.05	812

Average of 2.429 to 2.440 min.: M123999.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
316.95	179	335.00	712	365.05	5359	389.95	231
320.95	269	336.05	75	365.75	107	391.15	102
321.95	88	339.05	69	366.05	693	391.85	76
323.05	3378	341.10	506	371.00	280	402.05	887
324.05	632	345.95	830	372.05	2254	403.00	1282
327.00	653	347.05	76	372.95	75	404.00	434
328.00	359	352.10	1061	373.10	486	421.05	1057
329.05	72	352.85	133	383.00	792	422.10	879
332.10	336	353.05	657	383.95	95	423.05	6442
333.00	276	354.10	1391	384.15	110	424.05	1514
334.10	2197	355.00	313	384.85	67	425.05	67

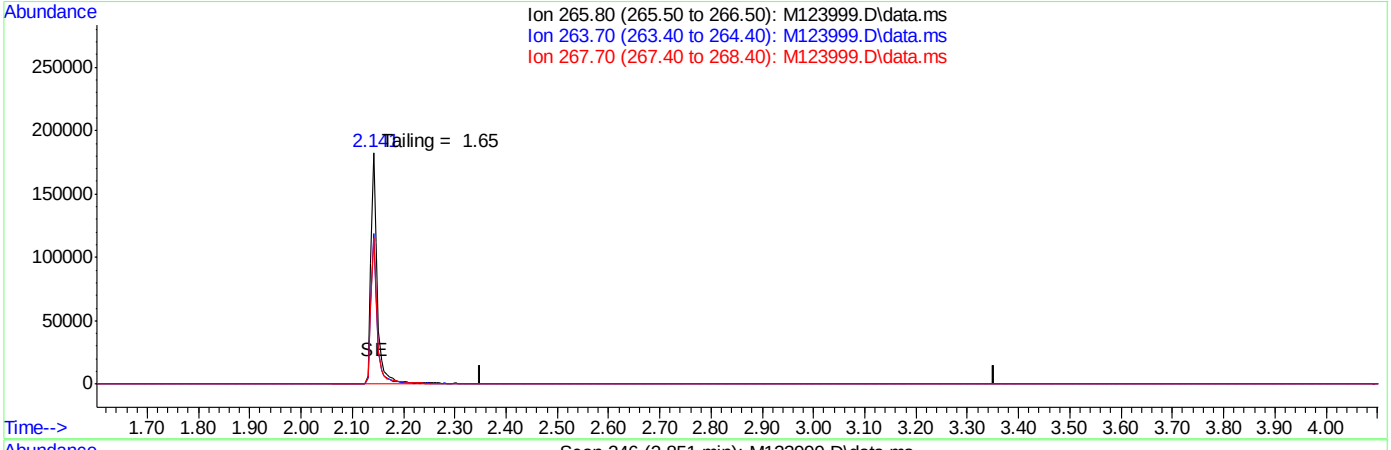
Average of 2.429 to 2.440 min.: M123999.D\data.ms
dftpp
Modified:subtracted

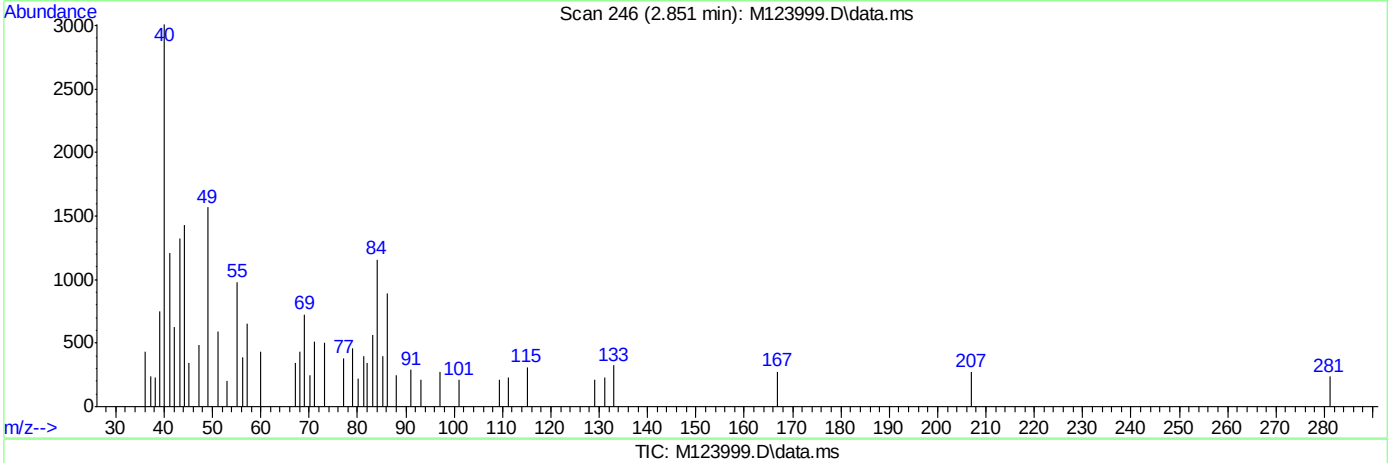
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
436.45	95						
437.40	170						
438.60	392						
439.25	168						
439.85	288						
441.05	17820						
442.05	112992						
443.05	22321						
444.05	2256						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5245\
Data File : M123999.D
Acq On : 29 Apr 2016 9:18 am
Operator : ashleyd
Sample : dftpp
Misc : op93324,em5245
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 29 09:24:20 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: M123999.D\data.ms

(1) Pentachlorophenol (MC)

2.852min (-2.852) 0.00ppm

response 0

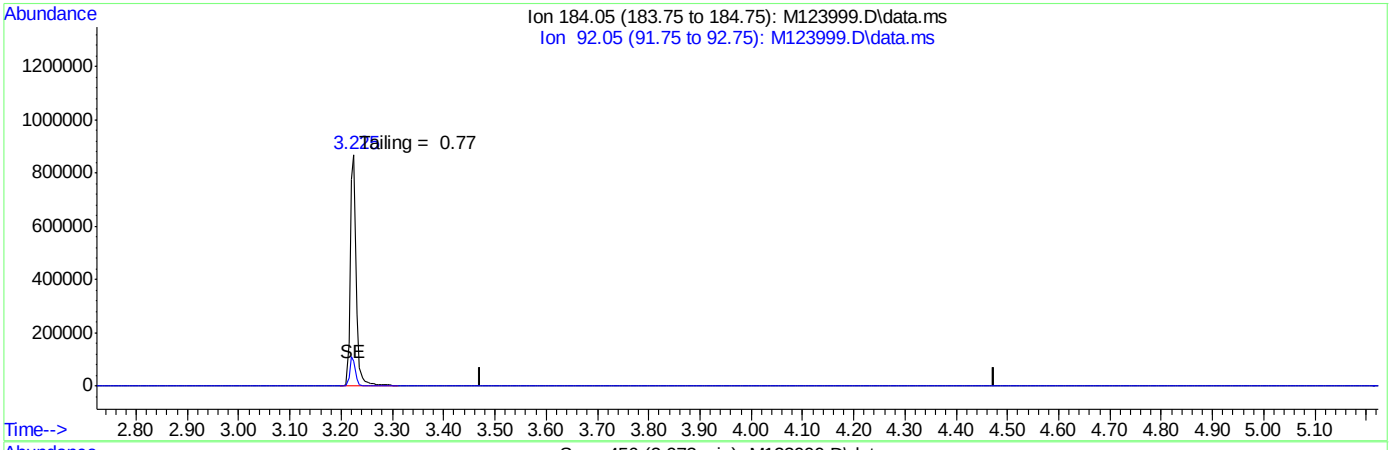
Ion	Exp%	Act%
265.80	100	0.00
263.70	61.60	0.00#
267.70	61.70	0.00#
0.00	0.00	0.00

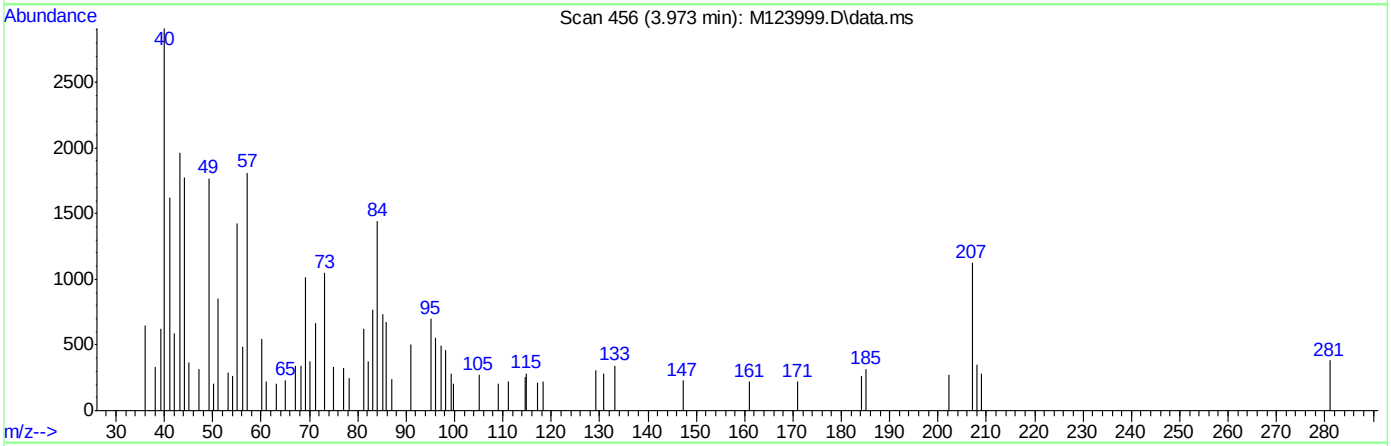
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5245\
Data File : M123999.D
Acq On : 29 Apr 2016 9:18 am
Operator : ashleyd
Sample : dftpp
Misc : op93324,em5245
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 29 09:24:20 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: M123999.D\data.ms

(2) Benzidine (M)

3.973min 0.00ppm d

response 0

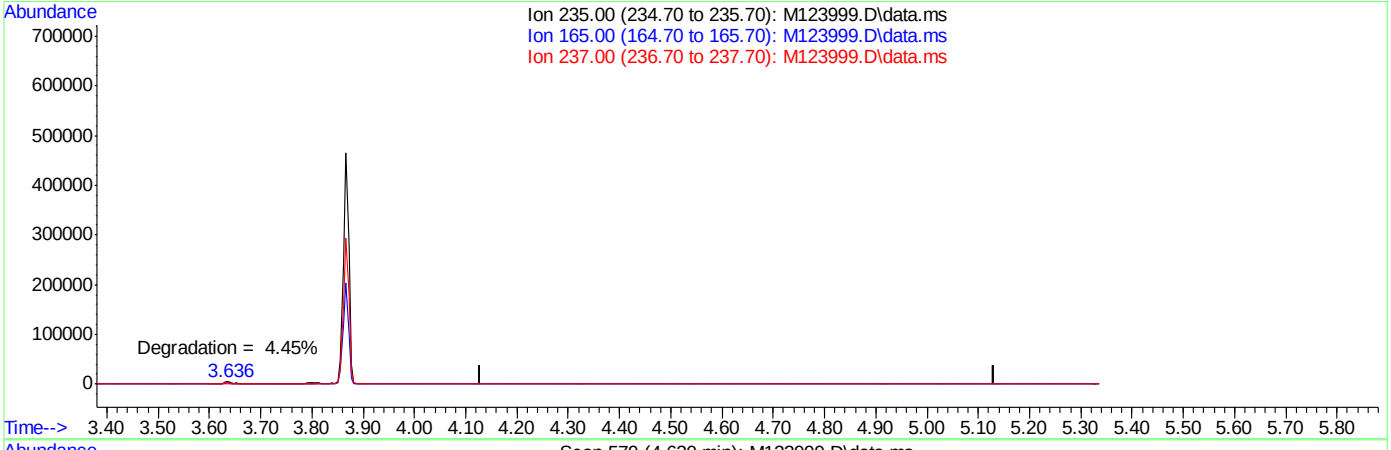
Ion	Exp%	Act%
184.05	100	0.00
92.05	10.70	0.00
0.00	0.00	0.00
0.00	0.00	0.00

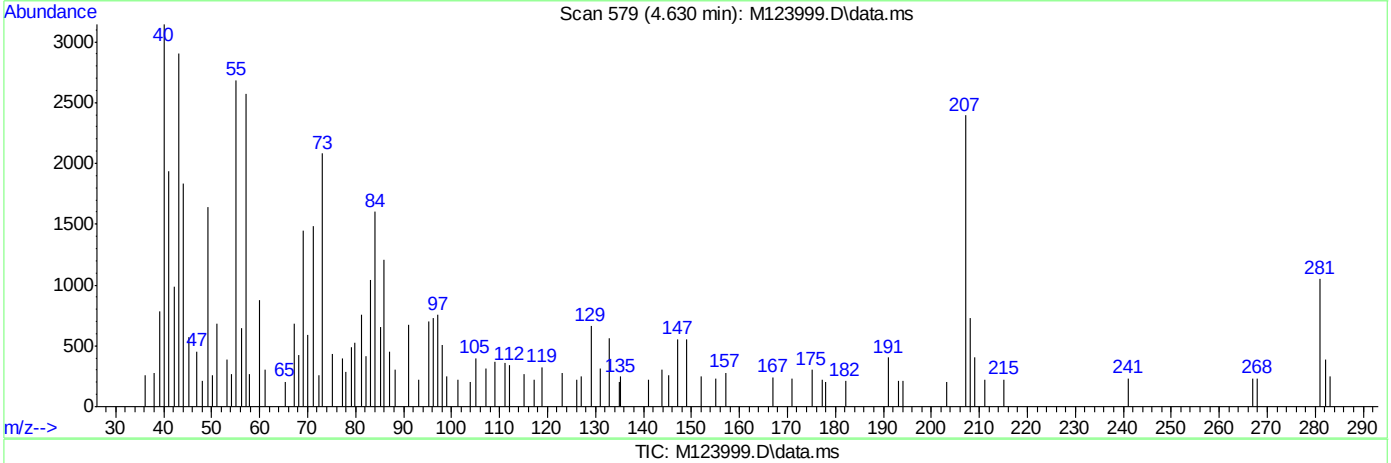
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5245\
Data File : M123999.D
Acq On : 29 Apr 2016 9:18 am
Operator : ashleyd
Sample : dftpp
Misc : op93324,em5245
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 29 09:24:20 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: M123999.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

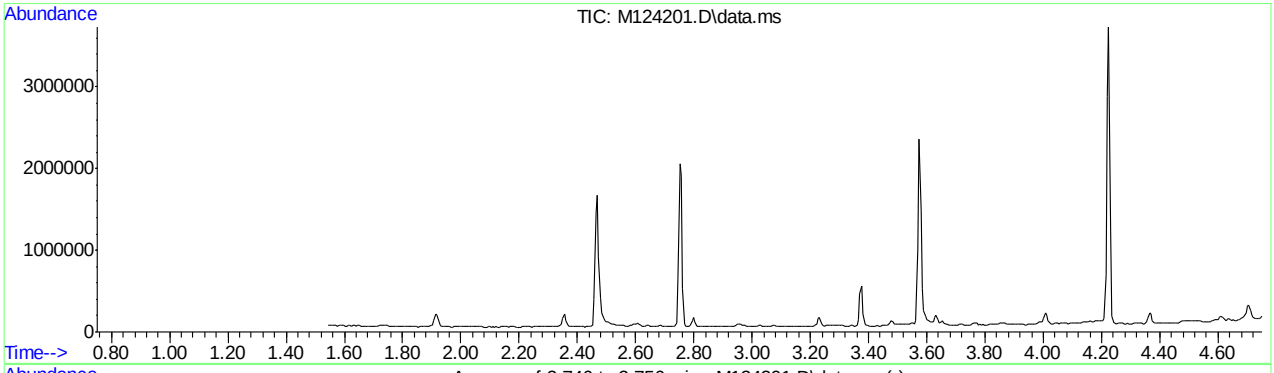
SGS ACCUTEST JC19023

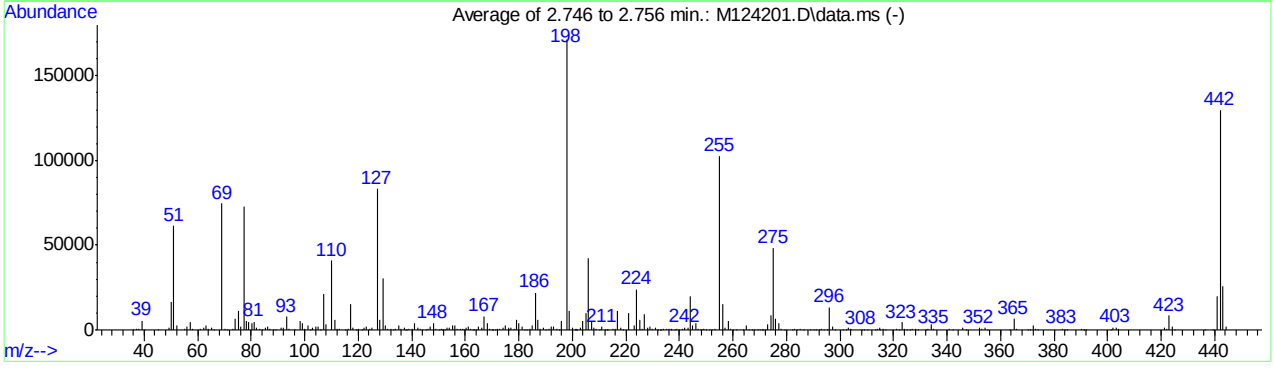
DFTPPR

Data Path : C:\msdchem\1\DATA\EM5253\
Data File : M124201.D
Acq On : 6 May 2016 8:45 am
Operator : ashleyd
Sample : dftpp
Misc : op93634,em5253
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 226, 227, 228; Background Corrected with Scan 222

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	35.8	61338	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	43.5	74591	PASS
70	69	0.00	2	0.5	390	PASS
127	198	40	60	48.6	83344	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	171386	PASS
199	198	5	9	6.5	11168	PASS
275	198	10	30	28.3	48422	PASS
365	198	1	100	3.8	6553	PASS
441	443	0.10	100	76.1	19736	PASS
442	198	40	100	75.8	129928	PASS
443	442	17	23	20.0	25925	PASS

SGS ACCUTEST JC19023

Average of 2.746 to 2.756 min.: M124201.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	235	56.05	2108	71.05	346	83.05	993
37.10	384	57.10	4493	73.10	538	84.05	5
38.05	896	58.05	353	74.05	6549	85.10	1060
39.15	5526	61.05	787	75.05	11033	86.05	1872
40.10	267	62.10	1097	76.20	2037	87.00	594
45.00	145	63.15	2639	77.10	72575	88.00	104
49.05	1219	64.05	402	78.15	5357	89.15	122
50.10	16369	65.15	1317	79.05	4565	91.05	1146
51.10	61338	66.05	211	80.05	3889	92.05	1493
52.10	2909	69.00	74591	81.05	4911	93.05	7742
55.10	395	70.05	390	82.10	1376	94.10	631

Average of 2.746 to 2.756 min.: M124201.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
96.05	312	108.05	3492	121.25	237	133.00	22
98.05	5376	110.05	40890	122.10	1404	134.05	943
99.05	4241	111.05	5994	123.05	2085	135.05	2453
100.00	509	112.00	764	124.05	941	136.00	898
101.00	2653	113.00	450	125.10	1045	137.05	1476
102.00	258	115.05	42	127.05	83344	137.75	108
103.05	1094	116.10	681	128.05	6169	138.00	206
104.05	1792	117.05	15127	129.05	30712	139.00	390
105.05	1721	118.00	1374	130.05	2695	140.05	375
105.95	319	119.00	306	131.05	372	141.05	3905
107.05	21031	120.10	434	132.00	470	142.05	1306

Average of 2.746 to 2.756 min.: M124201.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
143.00	854	152.15	126	162.00	574	171.05	328
144.00	299	153.00	1120	162.95	69	172.00	788
145.05	223	154.00	1018	163.35	68	173.00	959
146.05	707	155.05	2350	164.05	113	174.05	1572
146.95	2022	156.05	2977	165.00	1702	175.05	2731
148.05	4030	157.10	816	166.00	1348	176.05	1340
149.05	1008	157.95	725	167.00	8083	176.35	85
150.05	311	159.00	479	168.00	3903	177.05	1634
151.10	675	159.25	89	169.05	831	178.10	785
151.35	211	160.05	1441	169.95	210	179.05	6022
151.60	312	161.10	1863	170.20	272	180.05	3820

Average of 2.746 to 2.756 min.: M124201.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
181.05	1920	192.05	1802	201.75	100	212.85	80
182.10	314	193.05	2163	203.05	1332	213.15	95
182.90	247	194.00	484	204.00	5495	215.00	414
184.05	369	194.95	145	205.05	10173	216.05	446
185.10	2974	196.05	5098	206.05	42316	216.95	11321
186.05	22039	197.95	171386	207.00	5556	218.05	1378
187.05	6072	198.95	11168	208.00	1261	219.05	75
188.05	683	200.00	1102	209.00	447	221.05	10270
189.00	1071	201.05	78	209.95	75	223.05	2671
190.05	242	201.25	81	211.00	1855	224.05	23873
191.05	500	201.50	756	212.10	199	225.05	5996

Average of 2.746 to 2.756 min.: M124201.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
226.05	660	236.00	394	246.05	3723	257.00	1269
227.05	9266	236.85	76	246.95	853	258.05	5528
228.00	1460	237.00	746	247.75	90	259.05	898
229.10	1921	238.10	145	248.05	131	260.00	180

DFTPPM.M Fri May 06 12:30:01 2016 MSM Page: 2

229.95	388	239.00	485	249.00	727	261.15	107
231.00	1092	240.00	267	249.85	140	263.85	185
232.05	220	241.00	555	250.95	82	265.05	2762
232.85	76	242.05	1360	252.15	248	265.85	259
233.25	86	243.00	1347	253.05	520	267.15	67
234.05	652	244.05	20115	255.05	102813	267.80	186
235.05	624	245.05	2705	256.05	15312	269.05	91

Average of 2.746 to 2.756 min.: M124201.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
269.85	238	282.05	118	295.05	81	310.20	147
270.85	111	283.05	474	296.05	13391	313.05	86
271.05	123	283.95	258	297.05	1739	314.00	620
272.00	302	285.05	652	297.95	79	314.85	123
273.00	3413	286.15	77	301.05	219	315.00	1409
274.05	8351	289.00	200	302.15	237	316.05	901
275.05	48422	290.05	74	303.05	1599	317.05	181
276.05	6445	291.05	70	303.95	73	321.00	725
277.05	3962	292.00	238	304.10	369	321.95	244
277.90	675	292.95	876	308.00	212	323.05	4561
279.15	76	294.05	208	309.05	79	324.10	837

Average of 2.746 to 2.756 min.: M124201.D\data.ms
dftpp
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
324.95	89	346.00	1042	372.05	2660	402.00	1020
325.95	86	346.95	210	373.00	634	403.05	1511
326.95	891	352.05	1325	374.05	113	404.05	466
328.00	471	353.05	962	382.95	686	421.00	1370
329.05	75	354.05	1465	383.95	83	422.05	1013
332.05	291	355.05	322	384.95	72	423.05	8413
333.00	383	363.45	71	390.10	353	424.05	1755
334.05	3071	365.05	6553	390.85	78	425.00	208
335.05	896	366.00	959	391.05	105	436.15	70
340.95	565	370.05	98	392.05	197	439.05	86
342.05	165	371.05	304	401.05	177	441.05	19736

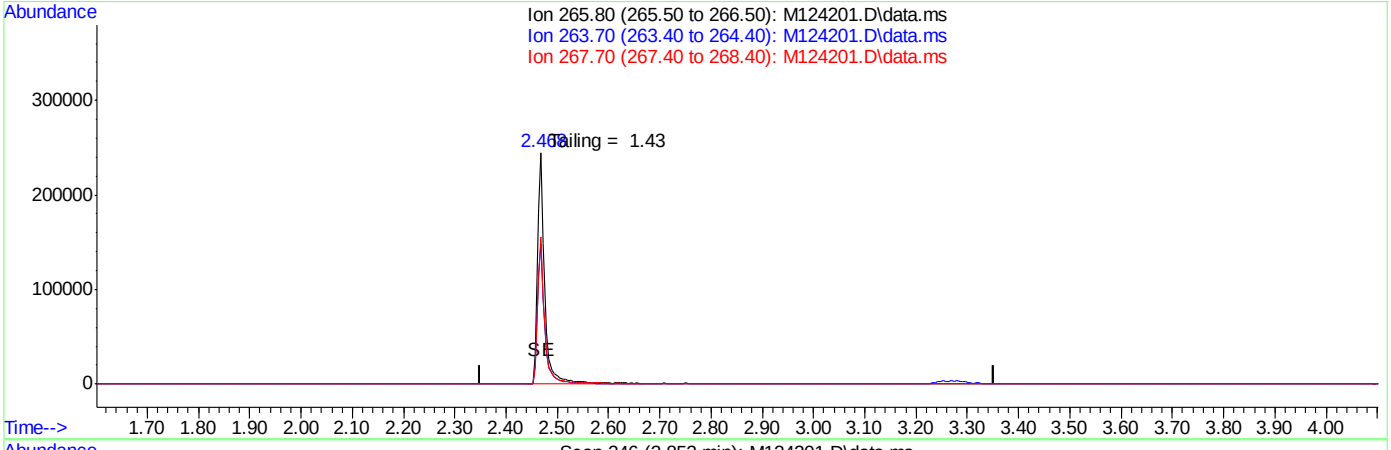
Average of 2.746 to 2.756 min.: M124201.D\data.ms
dftpp
Modified:subtracted

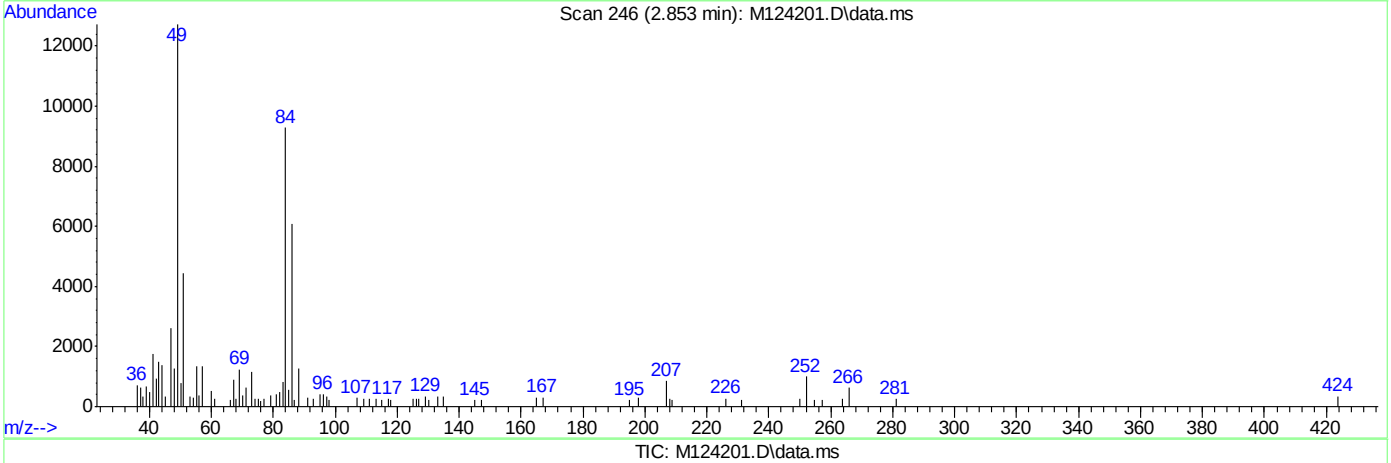
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
442.05	129928						
443.05	25925						
444.05	2309						

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5253\
Data File : M124201.D
Acq On : 6 May 2016 8:45 am
Operator : ashleyd
Sample : dftpp
Misc : op93634,em5253
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 06 08:51:08 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: M124201.D\data.ms

(1) Pentachlorophenol (MC)

2.852min 0.00ppm d

response 0

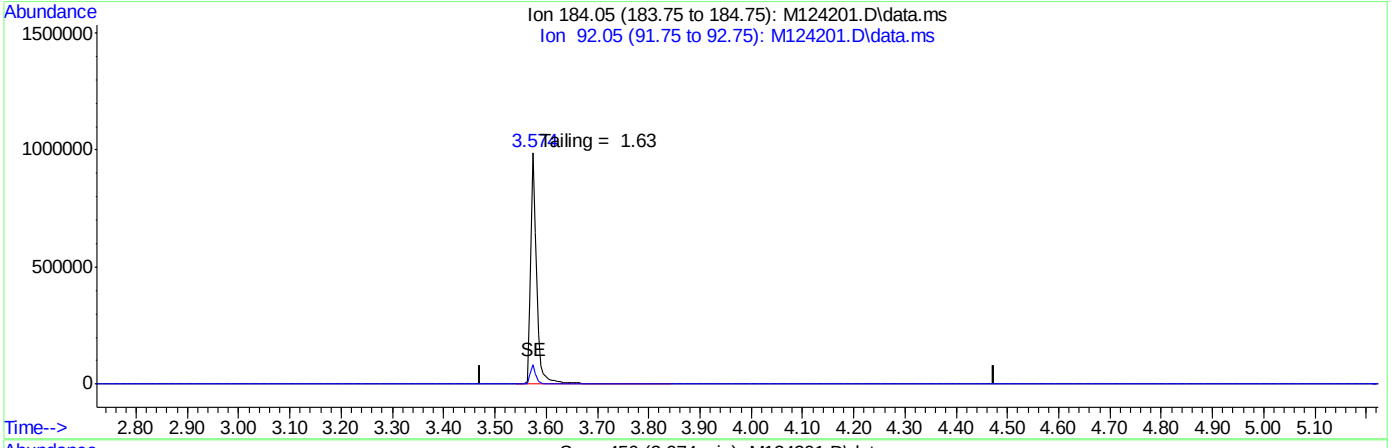
Ion	Exp%	Act%
265.80	100	0.00
263.70	61.60	0.00
267.70	61.70	0.00
0.00	0.00	0.00

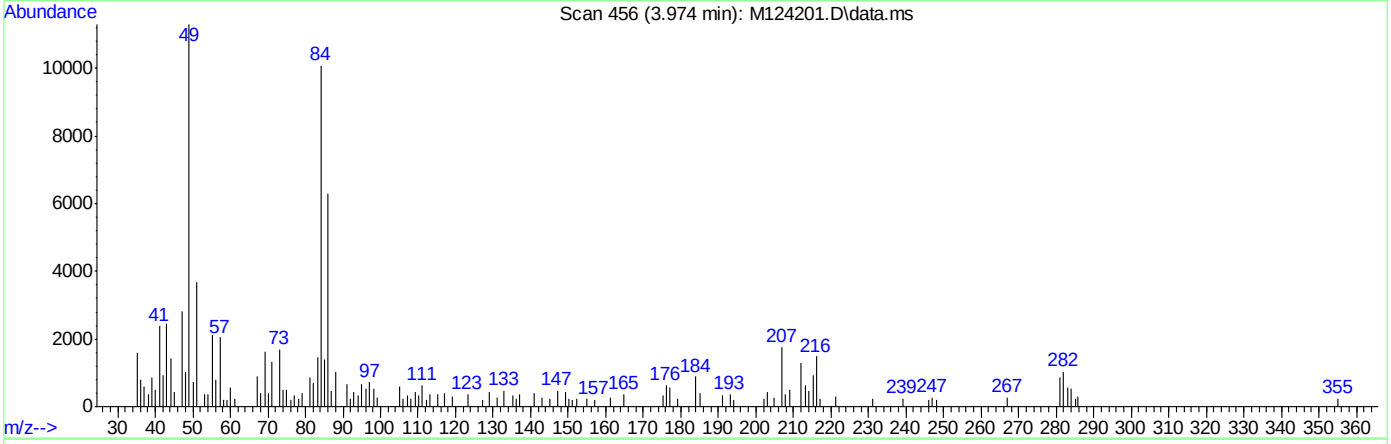
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5253\
Data File : M124201.D
Acq On : 6 May 2016 8:45 am
Operator : ashleyd
Sample : dftpp
Misc : op93634,em5253
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 06 08:51:08 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: M124201.D\data.ms

(2) Benzidine (M)

3.973min (-3.973) 0.00ppm

response 0

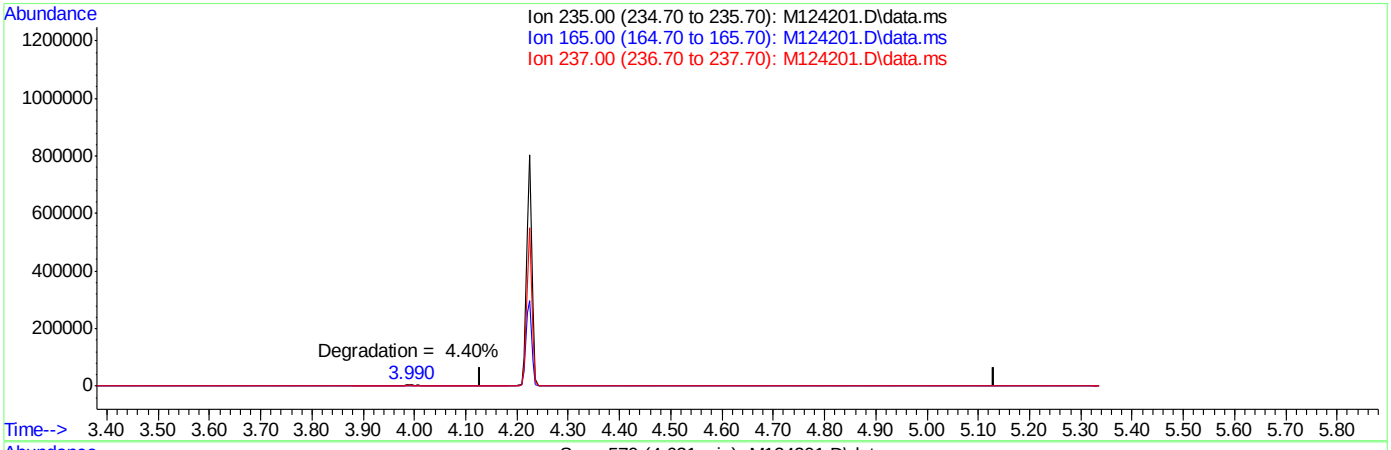
Ion	Exp%	Act%
184.05	100	0.00
92.05	10.70	0.00#
0.00	0.00	0.00
0.00	0.00	0.00

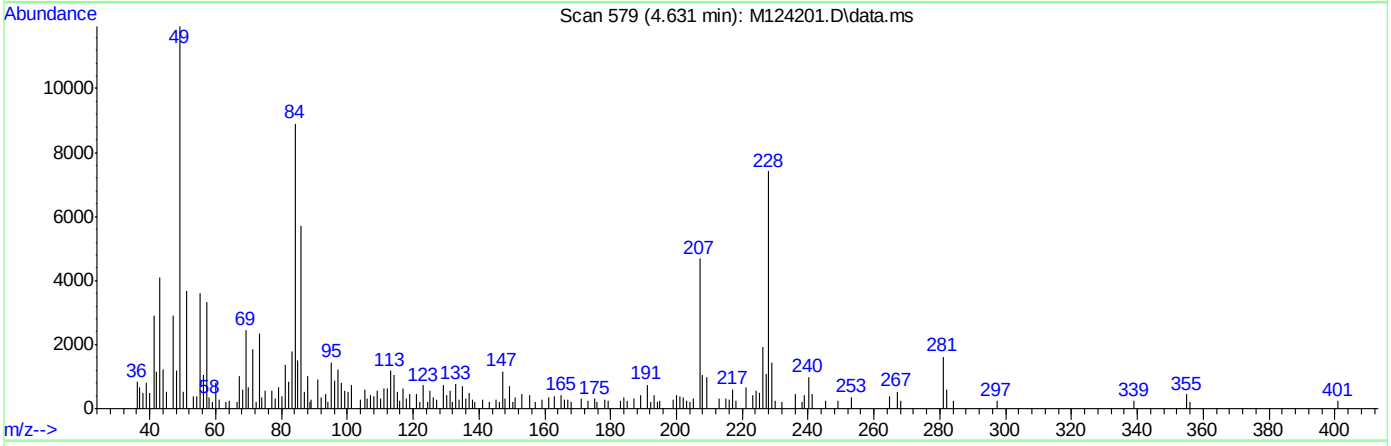
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5253\
Data File : M124201.D
Acq On : 6 May 2016 8:45 am
Operator : ashleyd
Sample : dftpp
Misc : op93634,em5253
ALS Vial : 1 Sample Multiplier: 1

Quant Time: May 06 08:51:08 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: M124201.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 JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58365.D
Acq On : 19 Apr 2016 4:33 pm
Operator : robertl1
Sample : ICC2547-50
Misc : op92038,e2p2547
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 20 08:22:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.916	152	245634	40.00	ppm	0.00
24) Naphthalene-d8	5.970	136	869529	40.00	ppm	0.00
47) Acenaphthene-d10	7.419	164	458604	40.00	ppm	0.00
69) Phenanthrene-d10	8.767	188	737031	40.00	ppm	0.00
83) Chrysene-d12	12.142	240	717096	40.00	ppm	0.00
92) Perylene-d12	14.153	264	610565	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.916	152	245634	40.00	ppm	0.00
104) Naphthalene-d8a	5.970	136	869529	40.00	ppm	0.00
106) Acenaphthene-d10a	7.419	164	458604	40.00	ppm	0.00
109) Chrysene-d12a	12.142	240	717096	40.00	ppm	0.00
111) Phenanthrene-d10a	8.767	188	737031	40.00	ppm	0.00
114) Chrysene-d12b	12.142	240	717096	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.798	112	513785	51.64	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 103.28%#			
8) Phenol-d5	4.606	99	594747	51.01	ppm	0.00
Spiked Amount 50.000	Range 10 - 59		Recovery = 102.02%#			
25) Nitrobenzene-d5	5.376	82	407341	47.51	ppm	0.00
Spiked Amount 50.000	Range 19 - 61		Recovery = 95.02%#			
51) 2-Fluorobiphenyl	6.863	172	677983	47.51	ppm	0.00
Spiked Amount 50.000	Range 21 - 58		Recovery = 95.02%#			
73) 2,4,6-Tribromophenol	8.093	330	81361	49.72	ppm	0.00
Spiked Amount 50.000	Range 12 - 68		Recovery = 99.44%#			
85) Terphenyl-d14	10.682	244	710354	49.21	ppm	0.00
Spiked Amount 50.000	Range 16 - 65		Recovery = 98.42%#			
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
113) O-terphenyl	0.000	230	0	0.00	ppm	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.263	88	235894	52.26	ppm	100
3) Pyridine	2.595	79	594573	53.26	ppm	100
4) N-Nitrosodimethylamine	2.557	74	355360	53.85	ppm	100
6) Indene	5.130	116	632154	45.83	ppm	100
7) Cumene	4.242	105	1100056	50.51	ppm	100
9) Phenol	4.617	94	645938	53.57	ppm	100
10) Aniline	4.638	93	677517	47.75	ppm	100
11) bis(2-Chloroethyl)ether	4.697	93	424372	48.74	ppm	100
12) 2-Chlorophenol	4.734	128	435745	48.35	ppm	100
13) Decane	4.782	57	631836	47.07	ppm	100
14) 1,3-Dichlorobenzene	4.863	146	472746	47.73	ppm	100
15) 1,4-Dichlorobenzene	4.927	146	457927	46.97	ppm	100
16) Benzyl alcohol	5.034	108	273019	48.37	ppm	100
17) 1,2-Dichlorobenzene	5.055	146	420592	46.69	ppm	100
18) Acetophenone	5.253	105	486358	43.94	ppm	100
19) 2-Methylphenol	5.119	108	354191	45.80	ppm	100
20) 2,2'-oxybis(1-Chloropr...	5.146	121	116449	45.87	ppm	100
21) 3&4-Methylphenol	5.253	108	362574	44.94	ppm	100
22) n-Nitroso-di-n-propyla...	5.259	70	252105	44.11	ppm	100

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58365.D
Acq On : 19 Apr 2016 4:33 pm
Operator : robertl1
Sample : ICC2547-50
Misc : op92038,e2p2547
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 20 08:22:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
23)	Hexachloroethane	5.333	201	139416	47.12	ppm	100
26)	Nitrobenzene	5.392	77	402329	46.51	ppm	100
27)	Quinoline	6.275	129	717616	46.54	ppm	100
28)	Isophorone	5.595	82	729826	47.11	ppm	100
29)	2-Nitrophenol	5.654	139	210112	49.13	ppm	100
30)	2,4-Dimethylphenol	5.692	107	348002	45.76	ppm	100
31)	Benzoic acid	5.793	105	322320	54.11	ppm	100
32)	bis(2-Chloroethoxy)met...	5.777	93	441050	45.77	ppm	100
33)	2,4-Dichlorophenol	5.852	162	313151	47.84	ppm	100
34)	2,6-Dichlorophenol	6.039	162	283012	45.91	ppm	100
35)	1,3,5-Trichlorobenzene	5.665	180	348293	46.32	ppm	100
36)	1,2,4-Trichlorobenzene	5.922	180	336840	46.70	ppm	100
37)	1,2,3-Trichlorobenzene	6.109	180	307839	45.88	ppm	100
38)	Naphthalene	5.991	128	1011803	45.17	ppm	100
39)	4-Chloroaniline	6.034	127	441043	45.54	ppm	100
40)	2,3-Dichloroaniline	6.788	161	364577	45.46	ppm	100
41)	Caprolactam	6.344	113	122245	48.70	ppm	100
42)	Hexachlorobutadiene	6.093	225	169483	47.51	ppm	100
43)	4-Chloro-3-methylphenol	6.430	107	321905	47.92	ppm	100
44)	2-Methylnaphthalene	6.558	141	589148	47.09	ppm	100
45)	1-Methylnaphthalene	6.638	141	606827	47.31	ppm	100
46)	Dimethylnaphthalene	7.072	156	567288	44.90	ppm	100
48)	Hexachlorocyclopentadiene	6.687	237	400022	108.47	ppm	100
49)	2,4,6-Trichlorophenol	6.788	196	209413	49.37	ppm	100
50)	2,4,5-Trichlorophenol	6.820	196	222546	48.72	ppm	100
52)	2-Chloronaphthalene	6.959	162	625208	46.45	ppm	100
53)	Biphenyl	6.943	154	796306	47.14	ppm	100
54)	2-Nitroaniline	7.045	65	228487	41.35	ppm	100
55)	Dimethylphthalate	7.200	163	700088	47.91	ppm	100
56)	Acenaphthylene	7.302	152	1053521	48.09	ppm	100
57)	2,6-Dinitrotoluene	7.248	165	162165	52.31	ppm	100
58)	3-Nitroaniline	7.382	138	202751	43.10	ppm	100
59)	Acenaphthene	7.446	153	637695	47.52	ppm	100
60)	2,4-Dinitrophenol	7.468	184	167289	101.54	ppm	100
61)	4-Nitrophenol	7.510	109	99601	53.79	ppm	100
62)	Dibenzofuran	7.591	168	827253	46.63	ppm	100
63)	2,4-Dinitrotoluene	7.574	165	210594	51.83	ppm	100
64)	2,3,4,6-Tetrachlorophenol	7.687	232	174594	50.24	ppm	100
65)	Diethylphthalate	7.783	149	708998	47.82	ppm	100
66)	Fluorene	7.879	166	697748	47.34	ppm	100
67)	4-Chlorophenyl-phenyle...	7.879	204	301273	46.78	ppm	100
68)	4-Nitroaniline	7.901	138	198248	49.03	ppm	100
70)	4,6-Dinitro-2-methylph...	7.922	198	115500	53.58	ppm	100
71)	n-Nitrosodiphenylamine	7.986	169	462112	46.31	ppm	100
72)	1,2-Diphenylhydrazine	8.018	77	738766	46.05	ppm	100
74)	4-Bromophenyl-phenylether	8.323	248	179997	47.98	ppm	100
75)	Hexachlorobenzene	8.377	284	191423	47.66	ppm	100
76)	Pentachlorophenol	8.569	266	285342	105.10	ppm	100
77)	Phenanthrene	8.794	178	1006875	46.52	ppm	100
78)	Anthracene	8.842	178	1010955	47.09	ppm	100

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58365.D
Acq On : 19 Apr 2016 4:33 pm
Operator : robertl1
Sample : ICC2547-50
Misc : op92038,e2p2547
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 20 08:22:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

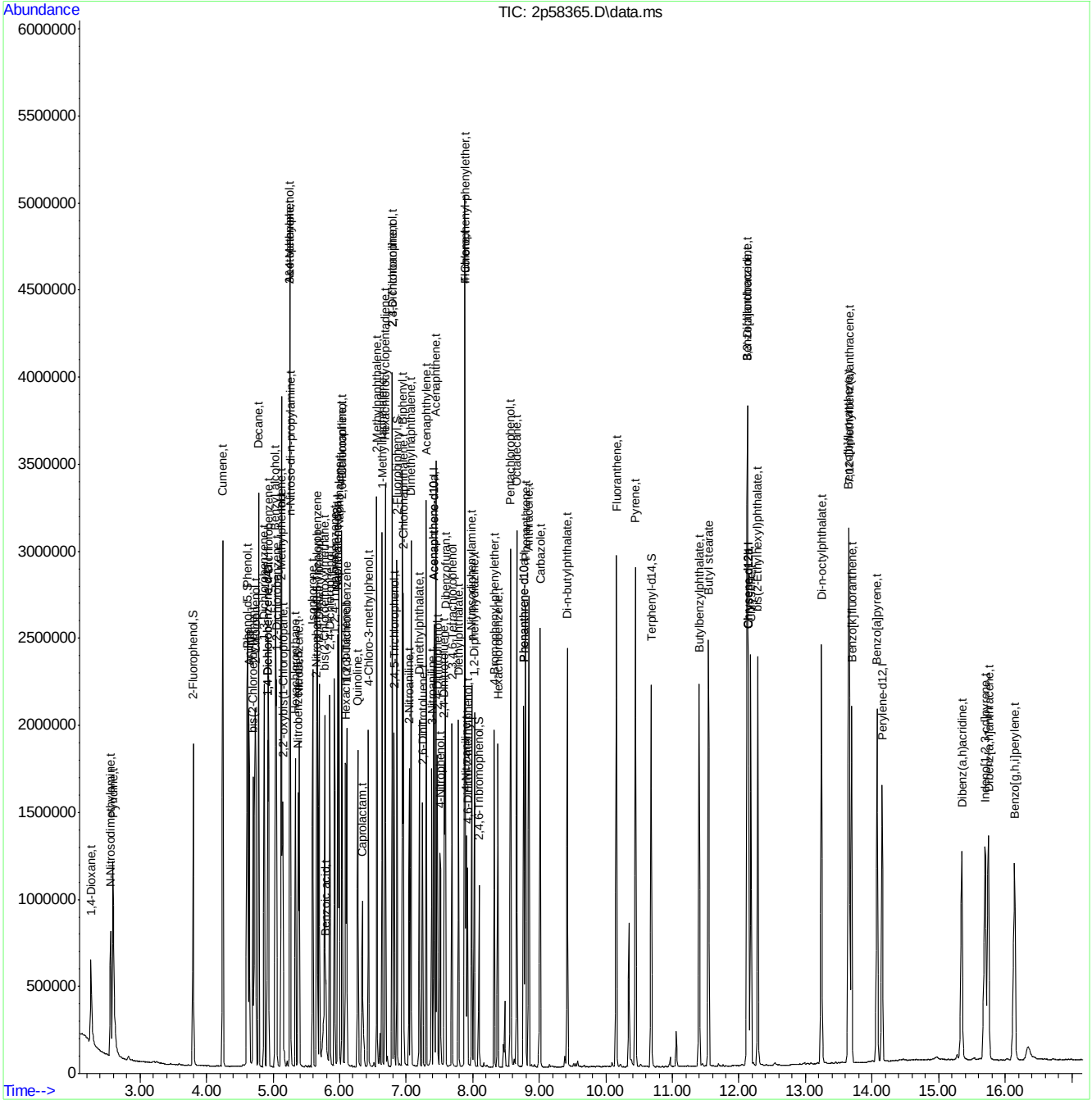
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
79)	Carbazole	9.013	167	954538	47.28	ppm	100
80)	Di-n-butylphthalate	9.425	149	1331901	49.59	ppm	100
81)	Fluoranthene	10.158	202	1184507	50.38	ppm	100
82)	Octadecane	8.660	43	453965	47.91	ppm	100
84)	Pyrene	10.447	202	1205348	50.69	ppm	100
86)	Butylbenzylphthalate	11.404	149	627533	51.67	ppm	100
87)	Butyl stearate	11.543	56	545740	52.56	ppm	100
88)	Benzo[a]anthracene	12.126	228	1112378	48.63	ppm	100
89)	3,3'-Dichlorobenzidine	12.126	252	391294	50.55	ppm	100
90)	Chrysene	12.185	228	992310	47.97	ppm	100
91)	bis(2-Ethylhexyl)phtha...	12.281	149	774542	50.99	ppm	100
93)	Di-n-octylphthalate	13.239	149	1492858	53.76	ppm	100
94)	Benzo[b]fluoranthene	13.651	252	1068083	50.35	ppm	100
95)	Benzo[k]fluoranthene	13.693	252	887846	47.91	ppm	100
96)	Benzo[a]pyrene	14.078	252	893391	49.63	ppm	100
97)	Indeno[1,2,3-cd]pyrene	15.699	276	790519	50.78	ppm	100
98)	Dibenz(a,h)acridine	15.351	279	710198	50.03	ppm	100
99)	Dibenz[a,h]anthracene	15.753	278	793665	50.92	ppm	100
100)	7,12-Dimethylbenz(a)an...	13.656	256	447541	51.76	ppm	100
101)	Benzo[g,h,i]perylene	16.148	276	832485	50.58	ppm	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58365.D
Acq On : 19 Apr 2016 4:33 pm
Operator : robertl1
Sample : ICC2547-50
Misc : op92038,e2p2547
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 20 08:22:23 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58366.D
Acq On : 19 Apr 2016 4:57 pm
Operator : robertl1
Sample : IC2547-25
Misc : op92038,e2p2547
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 20 08:23:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.916	152	290544	40.00	ppm	0.00
24) Naphthalene-d8	5.970	136	1033350	40.00	ppm	0.00
47) Acenaphthene-d10	7.414	164	560340	40.00	ppm	0.00
69) Phenanthrene-d10	8.762	188	877948	40.00	ppm	0.00
83) Chrysene-d12	12.142	240	855767	40.00	ppm	0.00
92) Perylene-d12	14.148	264	720892	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.916	152	290544	40.00	ppm	0.00
104) Naphthalene-d8a	5.970	136	1033350	40.00	ppm	0.00
106) Acenaphthene-d10a	7.414	164	560340	40.00	ppm	0.00
109) Chrysene-d12a	12.142	240	855767	40.00	ppm	0.00
111) Phenanthrene-d10a	8.762	188	877948	40.00	ppm	0.00
114) Chrysene-d12b	12.142	240	855767	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.799	112	291532	24.77	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 49.54%			
8) Phenol-d5	4.601	99	340206	24.67	ppm	0.00
Spiked Amount 50.000	Range 10 - 59		Recovery = 49.34%			
25) Nitrobenzene-d5	5.376	82	246101	24.15	ppm	0.00
Spiked Amount 50.000	Range 19 - 61		Recovery = 48.30%			
51) 2-Fluorobiphenyl	6.858	172	411297	23.59	ppm	0.00
Spiked Amount 50.000	Range 21 - 58		Recovery = 47.18%			
73) 2,4,6-Tribromophenol	8.088	330	47803	24.53	ppm	0.00
Spiked Amount 50.000	Range 12 - 68		Recovery = 49.06%			
85) Terphenyl-d14	10.677	244	418192	24.28	ppm	0.00
Spiked Amount 50.000	Range 16 - 65		Recovery = 48.56%			
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
113) O-terphenyl	0.000	230	0	0.00	ppm	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.269	88	127385	23.86	ppm	98
3) Pyridine	2.595	79	329843	24.98	ppm	97
4) N-Nitrosodimethylamine	2.563	74	191600	24.55	ppm	97
6) Indene	5.130	116	391428	23.99	ppm	99
7) Cumene	4.242	105	635909	24.68	ppm	99
9) Phenol	4.612	94	357409	25.06	ppm	84
10) Aniline	4.638	93	416830	24.84	ppm	100
11) bis(2-Chloroethyl)ether	4.697	93	252242	24.49	ppm	99
12) 2-Chlorophenol	4.735	128	263280	24.70	ppm	98
13) Decane	4.783	57	394167	24.82	ppm	98
14) 1,3-Dichlorobenzene	4.863	146	284945	24.32	ppm	99
15) 1,4-Dichlorobenzene	4.927	146	277268	24.05	ppm	99
16) Benzyl alcohol	5.029	108	163752	24.53	ppm	97
17) 1,2-Dichlorobenzene	5.050	146	255533	23.98	ppm	98
18) Acetophenone	5.253	105	311784	23.81	ppm	87
19) 2-Methylphenol	5.120	108	223221	24.40	ppm	100
20) 2,2'-oxybis(1-Chloropr...	5.146	121	70926	23.62	ppm #	93
21) 3&4-Methylphenol	5.248	108	231223	24.23	ppm	99
22) n-Nitroso-di-n-propyla...	5.253	70	159519	23.60	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58366.D
Acq On : 19 Apr 2016 4:57 pm
Operator : robertl1
Sample : IC2547-25
Misc : op92038,e2p2547
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 20 08:23:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
23) Hexachloroethane	5.334	201	83693	23.92	ppm	97
26) Nitrobenzene	5.392	77	245920	23.92	ppm	96
27) Quinoline	6.264	129	433623	23.66	ppm	98
28) Isophorone	5.590	82	441768	23.99	ppm	97
29) 2-Nitrophenol	5.654	139	126486	24.89	ppm	95
30) 2,4-Dimethylphenol	5.687	107	216637	23.97	ppm	95
31) Benzoic acid	5.772	105	185586	26.22	ppm	92
32) bis(2-Chloroethoxy)met...	5.772	93	271793	23.73	ppm	99
33) 2,4-Dichlorophenol	5.847	162	189198	24.32	ppm	96
34) 2,6-Dichlorophenol	6.040	162	171758	23.44	ppm	99
35) 1,3,5-Trichlorobenzene	5.660	180	210808	23.59	ppm	99
36) 1,2,4-Trichlorobenzene	5.922	180	201752	23.53	ppm	98
37) 1,2,3-Trichlorobenzene	6.104	180	189775	23.80	ppm	99
38) Naphthalene	5.986	128	631872	23.74	ppm	99
39) 4-Chloroaniline	6.034	127	277257	24.09	ppm	97
40) 2,3-Dichloroaniline	6.788	161	225848	23.69	ppm	99
41) Caprolactam	6.323	113	72582	24.33	ppm	91
42) Hexachlorobutadiene	6.088	225	99671	23.51	ppm	98
43) 4-Chloro-3-methylphenol	6.430	107	191557	23.99	ppm	90
44) 2-Methylnaphthalene	6.558	141	358872	24.14	ppm	99
45) 1-Methylnaphthalene	6.639	141	366607	24.05	ppm	97
46) Dimethylnaphthalene	7.072	156	354953	23.64	ppm	99
48) Hexachlorocyclopentadiene	6.687	237	233097	51.73	ppm	100
49) 2,4,6-Trichlorophenol	6.788	196	125464	24.21	ppm	97
50) 2,4,5-Trichlorophenol	6.815	196	134206	24.05	ppm	98
52) 2-Chloronaphthalene	6.960	162	384740	23.40	ppm	98
53) Biphenyl	6.944	154	493377	23.90	ppm	99
54) 2-Nitroaniline	7.040	65	140399	20.80	ppm	96
55) Dimethylphthalate	7.195	163	422988	23.69	ppm	99
56) Acenaphthylene	7.297	152	633755	23.68	ppm	99
57) 2,6-Dinitrotoluene	7.243	165	97674	25.78	ppm	96
58) 3-Nitroaniline	7.377	138	122575	21.32	ppm	100
59) Acenaphthene	7.441	153	393198	23.98	ppm	99
60) 2,4-Dinitrophenol	7.462	184	89806	48.50	ppm	74
61) 4-Nitrophenol	7.505	109	58702	25.95	ppm	99
62) Dibenzofuran	7.585	168	512633	23.65	ppm	99
63) 2,4-Dinitrotoluene	7.569	165	126983	25.58	ppm	97
64) 2,3,4,6-Tetrachlorophenol	7.682	232	101027	23.79	ppm	95
65) Diethylphthalate	7.783	149	435061	24.02	ppm	99
66) Fluorene	7.880	166	428169	23.78	ppm	99
67) 4-Chlorophenyl-phenyle...	7.880	204	182837	23.23	ppm	96
68) 4-Nitroaniline	7.890	138	123647	25.03	ppm	99
70) 4,6-Dinitro-2-methylph...	7.917	198	66905	26.06	ppm	95
71) n-Nitrosodiphenylamine	7.981	169	285126	23.99	ppm	98
72) 1,2-Diphenylhydrazine	8.019	77	465194	24.34	ppm	95
74) 4-Bromophenyl-phenylether	8.323	248	104759	23.44	ppm	95
75) Hexachlorobenzene	8.372	284	111201	23.24	ppm	91
76) Pentachlorophenol	8.564	266	163938	50.69	ppm	99
77) Phenanthrene	8.789	178	611137	23.70	ppm	99
78) Anthracene	8.842	178	620544	24.26	ppm	100

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58366.D
Acq On : 19 Apr 2016 4:57 pm
Operator : robertl1
Sample : IC2547-25
Misc : op92038,e2p2547
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 20 08:23:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
79)	Carbazole	9.008	167	579371	24.09 ppm	99
80)	Di-n-butylphthalate	9.420	149	801074	25.04 ppm	100
81)	Fluoranthene	10.153	202	689258	24.61 ppm	97
82)	Octadecane	8.660	43	290585	25.75 ppm	99
84)	Pyrene	10.442	202	717805	25.29 ppm	99
86)	Butylbenzylphthalate	11.399	149	369767	25.51 ppm	96
87)	Butyl stearate	11.538	56	336273	27.14 ppm	97
88)	Benzo[a]anthracene	12.121	228	654572	23.98 ppm	100
89)	3,3'-Dichlorobenzidine	12.121	252	225980	24.46 ppm	98
90)	Chrysene	12.174	228	586170	23.74 ppm	99
91)	bis(2-Ethylhexyl)phtha...	12.281	149	467088	25.77 ppm	99
93)	Di-n-octylphthalate	13.233	149	876288	26.73 ppm	99
94)	Benzo[b]fluoranthene	13.640	252	603901	24.11 ppm	96
95)	Benzo[k]fluoranthene	13.683	252	543848	24.86 ppm	98
96)	Benzo[a]pyrene	14.073	252	525111	24.71 ppm	98
97)	Indeno[1,2,3-cd]pyrene	15.689	276	455806	24.80 ppm	97
98)	Dibenz(a,h)acridine	15.341	279	403966	24.10 ppm	97
99)	Dibenz[a,h]anthracene	15.737	278	459334	24.96 ppm	95
100)	7,12-Dimethylbenz(a)an...	13.645	256	259974	25.47 ppm	99
101)	Benzo[g,h,i]perylene	16.132	276	475707	24.48 ppm	96

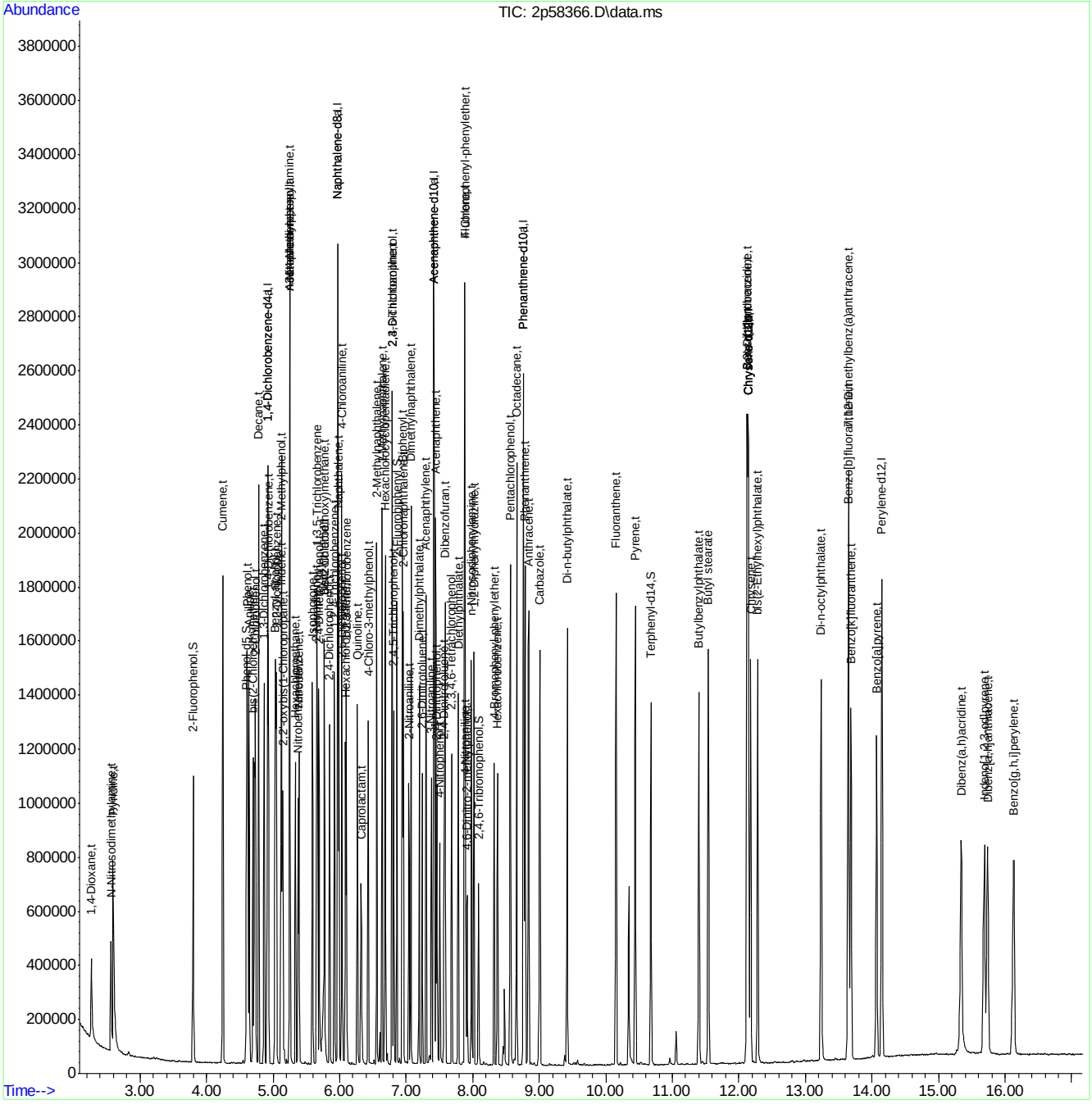
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58366.D
Acq On : 19 Apr 2016 4:57 pm
Operator : robertl1
Sample : IC2547-25
Misc : op92038,e2p2547
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 20 08:23:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58367.D
Acq On : 19 Apr 2016 5:21 pm
Operator : robertl1
Sample : IC2547-80
Misc : op92038,e2p2547
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 20 08:24:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.916	152	247249	40.00	ppm	0.00
24) Naphthalene-d8	5.975	136	875838	40.00	ppm	0.00
47) Acenaphthene-d10	7.419	164	487244	40.00	ppm	0.00
69) Phenanthrene-d10	8.767	188	771797	40.00	ppm	0.00
83) Chrysene-d12	12.148	240	766396	40.00	ppm	0.00
92) Perylene-d12	14.159	264	666794	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.916	152	247249	40.00	ppm	0.00
104) Naphthalene-d8a	5.975	136	875838	40.00	ppm	0.00
106) Acenaphthene-d10a	7.419	164	487225	40.00	ppm	0.00
109) Chrysene-d12a	12.148	240	766396	40.00	ppm	0.01
111) Phenanthrene-d10a	8.767	188	771797	40.00	ppm	0.00
114) Chrysene-d12b	12.148	240	766396	40.00	ppm	0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.798	112	842746	84.14	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 168.28%#			
8) Phenol-d5	4.611	99	948201	80.80	ppm	0.00
Spiked Amount 50.000	Range 10 - 59		Recovery = 161.60%#			
25) Nitrobenzene-d5	5.382	82	645867	74.79	ppm	0.00
Spiked Amount 50.000	Range 19 - 61		Recovery = 149.58%#			
51) 2-Fluorobiphenyl	6.863	172	1089401	71.86	ppm	0.00
Spiked Amount 50.000	Range 21 - 58		Recovery = 143.72%#			
73) 2,4,6-Tribromophenol	8.093	330	143480	83.74	ppm	0.00
Spiked Amount 50.000	Range 12 - 68		Recovery = 167.48%#			
85) Terphenyl-d14	10.687	244	1240763	80.43	ppm	0.00
Spiked Amount 50.000	Range 16 - 65		Recovery = 160.86%#			
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
113) O-terphenyl	0.000	230	0d	0.00	ppm	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.263	88	378610	83.33	ppm	97
3) Pyridine	2.595	79	951736	84.70	ppm	99
4) N-Nitrosodimethylamine	2.563	74	577794	86.99	ppm	97
6) Indene	5.130	116	943657	67.97	ppm	100
7) Cumene	4.248	105	1720289	78.47	ppm	97
9) Phenol	4.622	94	1001574	82.51	ppm	98
10) Aniline	4.644	93	1050302	73.54	ppm	99
11) bis(2-Chloroethyl)ether	4.702	93	641718	73.21	ppm	98
12) 2-Chlorophenol	4.740	128	658701	72.61	ppm	96
13) Decane	4.783	57	915183	67.73	ppm	98
14) 1,3-Dichlorobenzene	4.868	146	729551	73.18	ppm	99
15) 1,4-Dichlorobenzene	4.932	146	719052	73.28	ppm	98
16) Benzyl alcohol	5.039	108	408808	71.95	ppm	99
17) 1,2-Dichlorobenzene	5.055	146	642897	70.90	ppm	99
18) Acetophenone	5.259	105	736207	66.08	ppm	97
19) 2-Methylphenol	5.125	108	532883	68.46	ppm	100
20) 2,2'-oxybis(1-Chloropr...	5.152	121	178508	69.86	ppm	97
21) 3&4-Methylphenol	5.259	108	547834	67.46	ppm	98
22) n-Nitroso-di-n-propyla...	5.264	70	383586	66.68	ppm	99

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58367.D
Acq On : 19 Apr 2016 5:21 pm
Operator : robertl1
Sample : IC2547-80
Misc : op92038,e2p2547
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 20 08:24:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
23) Hexachloroethane	5.339	201	223423	75.02	ppm	84
26) Nitrobenzene	5.398	77	624832	71.71	ppm	96
27) Quinoline	6.280	129	1192947	76.81	ppm	100
28) Isophorone	5.601	82	1174481	75.26	ppm	100
29) 2-Nitrophenol	5.660	139	336390	78.09	ppm	84
30) 2,4-Dimethylphenol	5.697	107	572547	74.74	ppm	99
31) Benzoic acid	5.815	105	539466	89.92	ppm	100
32) bis(2-Chloroethoxy)met...	5.777	93	695557	71.66	ppm	99
33) 2,4-Dichlorophenol	5.858	162	505174	76.62	ppm	99
34) 2,6-Dichlorophenol	6.045	162	457711	73.71	ppm	98
35) 1,3,5-Trichlorobenzene	5.665	180	548848	72.47	ppm	97
36) 1,2,4-Trichlorobenzene	5.927	180	536023	73.77	ppm	98
37) 1,2,3-Trichlorobenzene	6.109	180	485855	71.88	ppm	98
38) Naphthalene	5.991	128	1590839	70.51	ppm	99
39) 4-Chloroaniline	6.040	127	685504	70.28	ppm	96
40) 2,3-Dichloroaniline	6.794	161	581606	71.99	ppm	97
41) Caprolactam	6.360	113	204880	81.03	ppm	93
42) Hexachlorobutadiene	6.093	225	276764	77.03	ppm	98
43) 4-Chloro-3-methylphenol	6.441	107	519606	76.79	ppm	96
44) 2-Methylnaphthalene	6.558	141	946367	75.10	ppm	99
45) 1-Methylnaphthalene	6.644	141	953813	73.83	ppm	97
46) Dimethylnaphthalene	7.077	156	911170	71.60	ppm	99
48) Hexachlorocyclopentadiene	6.687	237	673971	172.01	ppm	98
49) 2,4,6-Trichlorophenol	6.794	196	338355	75.08	ppm	98
50) 2,4,5-Trichlorophenol	6.826	196	369193	76.07	ppm	97
52) 2-Chloronaphthalene	6.965	162	984342	68.84	ppm	97
53) Biphenyl	6.949	154	1260093	70.21	ppm	98
54) 2-Nitroaniline	7.050	65	369511	62.95	ppm	95
55) Dimethylphthalate	7.200	163	1139412	73.39	ppm	99
56) Acenaphthylene	7.302	152	1699894	73.03	ppm	100
57) 2,6-Dinitrotoluene	7.248	165	266948	81.04	ppm	91
58) 3-Nitroaniline	7.387	138	338545	67.73	ppm	95
59) Acenaphthene	7.446	153	1035606	72.63	ppm	99
60) 2,4-Dinitrophenol	7.473	184	294895	159.90	ppm	83
61) 4-Nitrophenol	7.521	109	160935	81.81	ppm	89
62) Dibenzofuran	7.591	168	1331830	70.65	ppm	100
63) 2,4-Dinitrotoluene	7.580	165	349617	80.99	ppm	97
64) 2,3,4,6-Tetrachlorophenol	7.687	232	300226	81.31	ppm	98
65) Diethylphthalate	7.789	149	1162614	73.81	ppm	98
66) Fluorene	7.885	166	1135938	72.54	ppm	99
67) 4-Chlorophenyl-phenyle...	7.879	204	504520	73.73	ppm	99
68) 4-Nitroaniline	7.912	138	328549	76.49	ppm	96
70) 4,6-Dinitro-2-methylph...	7.928	198	198991	88.15	ppm	98
71) n-Nitrosodiphenylamine	7.986	169	758468	72.59	ppm	100
72) 1,2-Diphenylhydrazine	8.024	77	1139191	67.81	ppm	93
74) 4-Bromophenyl-phenylether	8.329	248	315407	80.29	ppm	91
75) Hexachlorobenzene	8.377	284	331387	78.79	ppm	99
76) Pentachlorophenol	8.569	266	506022	177.99	ppm	98
77) Phenanthrene	8.794	178	1685742	74.38	ppm	98
78) Anthracene	8.848	178	1675034	74.50	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58367.D
Acq On : 19 Apr 2016 5:21 pm
Operator : robertl1
Sample : IC2547-80
Misc : op92038,e2p2547
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 20 08:24:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
79)	Carbazole	9.019	167	1588718	75.15	ppm	100
80)	Di-n-butylphthalate	9.425	149	2201462	78.27	ppm	99
81)	Fluoranthene	10.163	202	2032827	82.57	ppm	98
82)	Octadecane	8.666	43	676632	68.20	ppm	92
84)	Pyrene	10.452	202	2040742	80.30	ppm	100
86)	Butylbenzylphthalate	11.404	149	1064308	81.99	ppm	96
87)	Butyl stearate	11.543	56	858640	77.38	ppm	99
88)	Benzo[a]anthracene	12.132	228	1947656	79.66	ppm	99
89)	3,3'-Dichlorobenzidine	12.132	252	706496	85.40	ppm	97
90)	Chrysene	12.190	228	1686922	76.30	ppm	100
91)	bis(2-Ethylhexyl)phtha...	12.287	149	1271108	78.30	ppm	97
93)	Di-n-octylphthalate	13.244	149	2575082	84.92	ppm	97
94)	Benzo[b]fluoranthene	13.661	252	1928664	83.25	ppm	97
95)	Benzo[k]fluoranthene	13.704	252	1526954	75.46	ppm	98
96)	Benzo[a]pyrene	14.089	252	1623246	82.57	ppm	96
97)	Indeno[1,2,3-cd]pyrene	15.715	276	1475482	86.79	ppm	94
98)	Dibenz(a,h)acridine	15.362	279	1307412	84.34	ppm	98
99)	Dibenz[a,h]anthracene	15.769	278	1419779	83.40	ppm	97
100)	7,12-Dimethylbenz(a)an...	13.667	256	798874	84.60	ppm	99
101)	Benzo[g,h,i]perylene	16.164	276	1497424	83.31	ppm	100

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

7.6.3

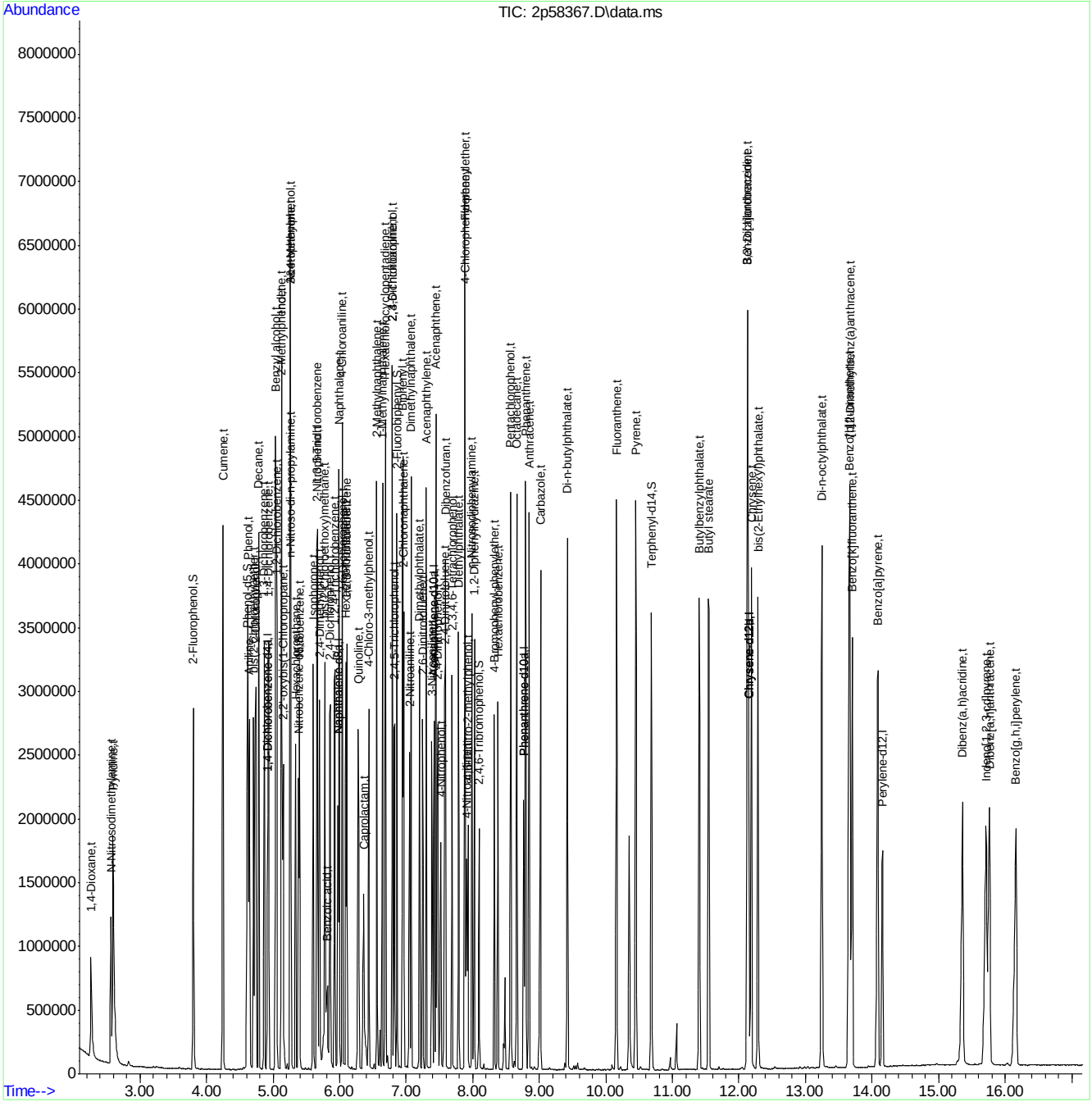
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58367.D
Acq On : 19 Apr 2016 5:21 pm
Operator : robertl1
Sample : IC2547-80
Misc : op92038,e2p2547
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 20 08:24:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58368.D
Acq On : 19 Apr 2016 5:45 pm
Operator : robertl1
Sample : IC2547-10
Misc : op92038,e2p2547
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 20 08:25:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.916	152	322262	40.00	ppm	0.00
24) Naphthalene-d8	5.970	136	1135036	40.00	ppm	0.00
47) Acenaphthene-d10	7.414	164	620256	40.00	ppm	0.00
69) Phenanthrene-d10	8.762	188	978345	40.00	ppm	0.00
83) Chrysene-d12	12.137	240	939414	40.00	ppm	0.00
92) Perylene-d12	14.148	264	782964	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.916	152	322262	40.00	ppm	0.00
104) Naphthalene-d8a	5.970	136	1135036	40.00	ppm	0.00
106) Acenaphthene-d10a	7.414	164	620256	40.00	ppm	0.00
109) Chrysene-d12a	12.137	240	939414	40.00	ppm	0.00
111) Phenanthrene-d10a	8.762	188	978345	40.00	ppm	0.00
114) Chrysene-d12b	12.137	240	939414	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.798	112	120860	9.26	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery	=	18.52%	
8) Phenol-d5	4.601	99	143565	9.39	ppm	0.00
Spiked Amount 50.000	Range 10 - 59		Recovery	=	18.78%	
25) Nitrobenzene-d5	5.371	82	108797	9.72	ppm	0.00
Spiked Amount 50.000	Range 19 - 61		Recovery	=	19.44%	
51) 2-Fluorobiphenyl	6.858	172	183977	9.53	ppm	0.00
Spiked Amount 50.000	Range 21 - 58		Recovery	=	19.06%#	
73) 2,4,6-Tribromophenol	8.088	330	19976	9.20	ppm	0.00
Spiked Amount 50.000	Range 12 - 68		Recovery	=	18.40%	
85) Terphenyl-d14	10.677	244	175097	9.26	ppm	0.00
Spiked Amount 50.000	Range 16 - 65		Recovery	=	18.52%	
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
113) O-terphenyl	0.000	230	0	0.00	ppm	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.269	88	51080	8.63	ppm	93
3) Pyridine	2.600	79	136123	9.29	ppm	97
4) N-Nitrosodimethylamine	2.563	74	79088	9.14	ppm	99
6) Indene	5.125	116	181468	10.03	ppm	99
7) Cumene	4.242	105	271517	9.50	ppm	99
9) Phenol	4.611	94	151257	9.56	ppm	95
10) Aniline	4.638	93	181125	9.73	ppm	98
11) bis(2-Chloroethyl)ether	4.697	93	110553	9.68	ppm	98
12) 2-Chlorophenol	4.734	128	116252	9.83	ppm	94
13) Decane	4.783	57	174620	9.91	ppm	97
14) 1,3-Dichlorobenzene	4.863	146	124112	9.55	ppm	100
15) 1,4-Dichlorobenzene	4.927	146	123321	9.64	ppm	99
16) Benzyl alcohol	5.029	108	70502	9.52	ppm	96
17) 1,2-Dichlorobenzene	5.050	146	117083	9.91	ppm	97
18) Acetophenone	5.248	105	144959	9.98	ppm	98
19) 2-Methylphenol	5.120	108	102006	10.05	ppm	98
20) 2,2'-oxybis(1-Chloropr...	5.146	121	32053	9.62	ppm #	93
21) 3&4-Methylphenol	5.243	108	107743	10.18	ppm	100
22) n-Nitroso-di-n-propyla...	5.248	70	75571	10.08	ppm	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58368.D
Acq On : 19 Apr 2016 5:45 pm
Operator : robertl1
Sample : IC2547-10
Misc : op92038,e2p2547
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 20 08:25:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
23) Hexachloroethane	5.334	201	37264	9.60	ppm	95
26) Nitrobenzene	5.387	77	111804	9.90	ppm	98
27) Quinoline	6.264	129	192134	9.55	ppm	100
28) Isophorone	5.590	82	195147	9.65	ppm	99
29) 2-Nitrophenol	5.654	139	55233	9.89	ppm	88
30) 2,4-Dimethylphenol	5.687	107	100320	10.11	ppm	96
31) Benzoic acid	5.745	105	75261	9.68	ppm	99
32) bis(2-Chloroethoxy)met...	5.772	93	123776	9.84	ppm	98
33) 2,4-Dichlorophenol	5.847	162	83023	9.72	ppm	97
34) 2,6-Dichlorophenol	6.034	162	78552	9.76	ppm	97
35) 1,3,5-Trichlorobenzene	5.660	180	96194	9.80	ppm	97
36) 1,2,4-Trichlorobenzene	5.922	180	92093	9.78	ppm	98
37) 1,2,3-Trichlorobenzene	6.104	180	84864	9.69	ppm	98
38) Naphthalene	5.986	128	288184	9.86	ppm	98
39) 4-Chloroaniline	6.029	127	124483	9.85	ppm	98
40) 2,3-Dichloroaniline	6.788	161	102517	9.79	ppm	100
41) Caprolactam	6.312	113	31263	9.54	ppm	97
42) Hexachlorobutadiene	6.088	225	43807	9.41	ppm	99
43) 4-Chloro-3-methylphenol	6.425	107	84291	9.61	ppm	94
44) 2-Methylnaphthalene	6.558	141	158256	9.69	ppm	100
45) 1-Methylnaphthalene	6.639	141	165050	9.86	ppm	99
46) Dimethylnaphthalene	7.072	156	159350	9.66	ppm	99
48) Hexachlorocyclopentadiene	6.687	237	96647	19.38	ppm	99
49) 2,4,6-Trichlorophenol	6.788	196	56138	9.78	ppm	100
50) 2,4,5-Trichlorophenol	6.815	196	60018	9.71	ppm	98
52) 2-Chloronaphthalene	6.960	162	179294	9.85	ppm	95
53) Biphenyl	6.943	154	222863	9.75	ppm	98
54) 2-Nitroaniline	7.040	65	60850	8.14	ppm	96
55) Dimethylphthalate	7.195	163	187354	9.48	ppm	100
56) Acenaphthylene	7.296	152	287974	9.72	ppm	99
57) 2,6-Dinitrotoluene	7.243	165	41037	9.79	ppm	96
58) 3-Nitroaniline	7.377	138	54266	8.53	ppm	97
59) Acenaphthene	7.441	153	172753	9.52	ppm	99
60) 2,4-Dinitrophenol	7.462	184	30698	18.21	ppm	93
61) 4-Nitrophenol	7.505	109	23973	9.57	ppm	93
62) Dibenzofuran	7.585	168	233370	9.73	ppm	99
63) 2,4-Dinitrotoluene	7.569	165	55364	10.07	ppm	95
64) 2,3,4,6-Tetrachlorophenol	7.682	232	44226	9.41	ppm	93
65) Diethylphthalate	7.778	149	190793	9.52	ppm	100
66) Fluorene	7.874	166	191465	9.61	ppm	99
67) 4-Chlorophenyl-phenyle...	7.879	204	83369	9.57	ppm	100
68) 4-Nitroaniline	7.885	138	54922	10.04	ppm	99
70) 4,6-Dinitro-2-methylph...	7.912	198	24798	8.67	ppm	95
71) n-Nitrosodiphenylamine	7.981	169	126006	9.51	ppm	99
72) 1,2-Diphenylhydrazine	8.019	77	213831	10.04	ppm	95
74) 4-Bromophenyl-phenylether	8.323	248	46367	9.31	ppm	95
75) Hexachlorobenzene	8.372	284	49373	9.26	ppm	92
76) Pentachlorophenol	8.564	266	68144	18.91	ppm	99
77) Phenanthrene	8.789	178	265779	9.25	ppm	99
78) Anthracene	8.837	178	271589	9.53	ppm	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58368.D
Acq On : 19 Apr 2016 5:45 pm
Operator : robertl1
Sample : IC2547-10
Misc : op92038,e2p2547
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 20 08:25:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
79)	Carbazole	9.008	167	253649	9.46	ppm	99
80)	Di-n-butylphthalate	9.420	149	343049	9.62	ppm	99
81)	Fluoranthene	10.153	202	286158	9.17	ppm	96
82)	Octadecane	8.660	43	130781	10.40	ppm	96
84)	Pyrene	10.441	202	304609	9.78	ppm	99
86)	Butylbenzylphthalate	11.399	149	150827	9.48	ppm	95
87)	Butyl stearate	11.538	56	139606	10.26	ppm	97
88)	Benzo[a]anthracene	12.121	228	273258	9.12	ppm	100
89)	3,3'-Dichlorobenzidine	12.116	252	94688	9.34	ppm	96
90)	Chrysene	12.174	228	252582	9.32	ppm	99
91)	bis(2-Ethylhexyl)phtha...	12.281	149	197799	9.94	ppm	99
93)	Di-n-octylphthalate	13.233	149	350508	9.84	ppm	99
94)	Benzo[b]fluoranthene	13.640	252	250741	9.22	ppm	98
95)	Benzo[k]fluoranthene	13.677	252	231336	9.74	ppm	98
96)	Benzo[a]pyrene	14.068	252	213062	9.23	ppm	98
97)	Indeno[1,2,3-cd]pyrene	15.678	276	180477	9.04	ppm	94
98)	Dibenz(a,h)acridine	15.335	279	170729	9.38	ppm	99
99)	Dibenz[a,h]anthracene	15.731	278	180925	9.05	ppm	94
100)	7,12-Dimethylbenz(a)an...	13.640	256	104110	9.39	ppm	98
101)	Benzo[g,h,i]perylene	16.122	276	191939	9.09	ppm	95

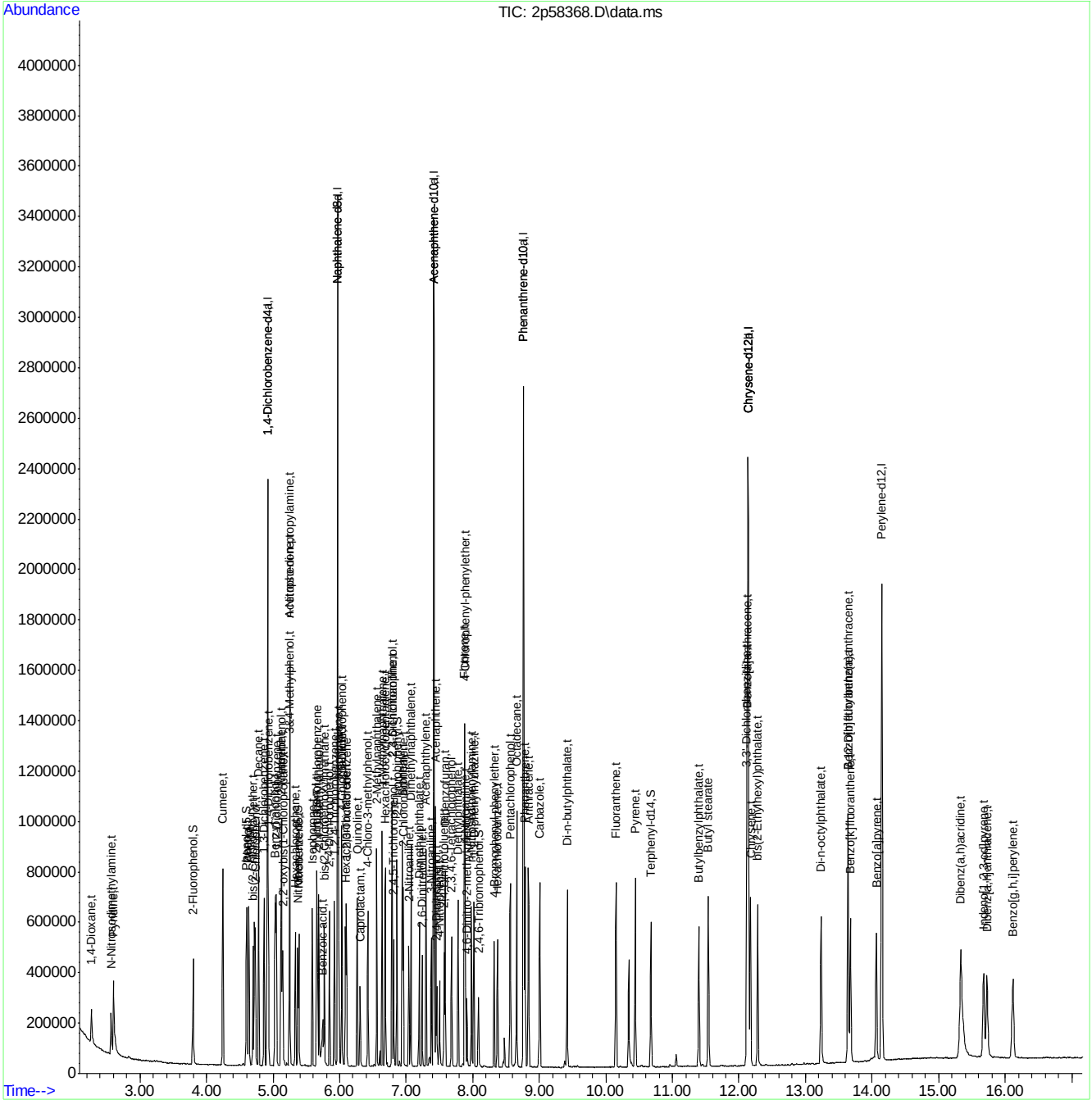
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58368.D
Acq On : 19 Apr 2016 5:45 pm
Operator : robertl1
Sample : IC2547-10
Misc : op92038,e2p2547
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 20 08:25:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58369.D
Acq On : 19 Apr 2016 6:09 pm
Operator : robertl1
Sample : IC2547-100
Misc : op92038,e2p2547
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 20 08:28:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.916	152	247515	40.00	ppm	0.00
24) Naphthalene-d8	5.975	136	885088	40.00	ppm	0.00
47) Acenaphthene-d10	7.420	164	480319	40.00	ppm	0.00
69) Phenanthrene-d10	8.767	188	779453	40.00	ppm	0.00
83) Chrysene-d12	12.153	240	760159	40.00	ppm	0.01
92) Perylene-d12	14.159	264	655418	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.916	152	247515	40.00	ppm	0.00
104) Naphthalene-d8a	5.975	136	885088	40.00	ppm	0.00
106) Acenaphthene-d10a	7.420	164	480319	40.00	ppm	0.00
109) Chrysene-d12a	12.153	240	760159	40.00	ppm	0.02
111) Phenanthrene-d10a	8.767	188	779453	40.00	ppm	0.00
114) Chrysene-d12b	12.153	240	760159	40.00	ppm	0.02
System Monitoring Compounds						
5) 2-Fluorophenol	3.804	112	1018564	101.59	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery	= 203.18%#		
8) Phenol-d5	4.617	99	1155357	98.34	ppm	0.01
Spiked Amount 50.000	Range 10 - 59		Recovery	= 196.68%#		
25) Nitrobenzene-d5	5.382	82	781232	89.52	ppm	0.00
Spiked Amount 50.000	Range 19 - 61		Recovery	= 179.04%#		
51) 2-Fluorobiphenyl	6.869	172	1331836	89.12	ppm	0.00
Spiked Amount 50.000	Range 21 - 58		Recovery	= 178.24%#		
73) 2,4,6-Tribromophenol	8.099	330	183604	106.10	ppm	0.00
Spiked Amount 50.000	Range 12 - 68		Recovery	= 212.20%#		
85) Terphenyl-d14	10.688	244	1555775	101.68	ppm	0.00
Spiked Amount 50.000	Range 16 - 65		Recovery	= 203.36%#		
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
113) O-terphenyl	0.000	230	0	0.00	ppm	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.263	88	463781	101.96	ppm	97
3) Pyridine	2.595	79	1173315	104.30	ppm	99
4) N-Nitrosodimethylamine	2.563	74	707056	106.33	ppm	100
6) Indene	5.130	116	1110882	79.93	ppm	99
7) Cumene	4.248	105	2082807	94.90	ppm	98
9) Phenol	4.628	94	1188975	97.85	ppm	97
10) Aniline	4.644	93	1270259	88.84	ppm	99
11) bis(2-Chloroethyl)ether	4.708	93	768294	87.56	ppm	93
12) 2-Chlorophenol	4.740	128	804807	88.62	ppm	96
13) Decane	4.788	57	1066570	78.85	ppm	94
14) 1,3-Dichlorobenzene	4.868	146	886725	88.85	ppm	98
15) 1,4-Dichlorobenzene	4.932	146	868117	88.37	ppm	99
16) Benzyl alcohol	5.039	108	483981	85.09	ppm	98
17) 1,2-Dichlorobenzene	5.055	146	772408	85.09	ppm	99
18) Acetophenone	5.259	105	876144	78.56	ppm #	68
19) 2-Methylphenol	5.125	108	630153	80.87	ppm	99
20) 2,2'-oxybis(1-Chloropr...	5.152	121	216513	84.64	ppm	94
21) 3&4-Methylphenol	5.259	108	651747	80.17	ppm	100
22) n-Nitroso-di-n-propyla...	5.269	70	461015	80.05	ppm	99

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58369.D
Acq On : 19 Apr 2016 6:09 pm
Operator : robertl1
Sample : IC2547-100
Misc : op92038,e2p2547
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 20 08:28:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
23) Hexachloroethane	5.339	201	276481	92.74	ppm	#	81
26) Nitrobenzene	5.398	77	752742	85.48	ppm		99
27) Quinoline	6.286	129	1469247	93.61	ppm		99
28) Isophorone	5.606	82	1445380	91.65	ppm		99
29) 2-Nitrophenol	5.660	139	402892	92.55	ppm		89
30) 2,4-Dimethylphenol	5.697	107	677224	87.48	ppm		99
31) Benzoic acid	5.831	105	669372	110.41	ppm		99
32) bis(2-Chloroethoxy)met...	5.783	93	835707	85.20	ppm		98
33) 2,4-Dichlorophenol	5.858	162	616206	92.48	ppm		100
34) 2,6-Dichlorophenol	6.045	162	552440	88.04	ppm		97
35) 1,3,5-Trichlorobenzene	5.665	180	678554	88.66	ppm		99
36) 1,2,4-Trichlorobenzene	5.927	180	659600	89.83	ppm		98
37) 1,2,3-Trichlorobenzene	6.109	180	600190	87.87	ppm		98
38) Naphthalene	5.991	128	1926828	84.51	ppm		99
39) 4-Chloroaniline	6.040	127	814964	82.68	ppm		98
40) 2,3-Dichloroaniline	6.794	161	704988	86.35	ppm		95
41) Caprolactam	6.371	113	253825	99.33	ppm		97
42) Hexachlorobutadiene	6.093	225	345147	95.06	ppm		98
43) 4-Chloro-3-methylphenol	6.441	107	630387	92.18	ppm		95
44) 2-Methylnaphthalene	6.564	141	1152169	90.47	ppm		100
45) 1-Methylnaphthalene	6.644	141	1150450	88.12	ppm		98
46) Dimethylnaphthalene	7.077	156	1118289	86.95	ppm		98
48) Hexachlorocyclopentadiene	6.692	237	838630	217.12	ppm		99
49) 2,4,6-Trichlorophenol	6.794	196	406617	91.52	ppm		97
50) 2,4,5-Trichlorophenol	6.826	196	449873	94.03	ppm		99
52) 2-Chloronaphthalene	6.965	162	1196370	84.87	ppm		98
53) Biphenyl	6.949	154	1535295	86.78	ppm		100
54) 2-Nitroaniline	7.051	65	460888	79.64	ppm		100
55) Dimethylphthalate	7.206	163	1412746	92.31	ppm		99
56) Acenaphthylene	7.307	152	2033952	88.65	ppm		99
57) 2,6-Dinitrotoluene	7.254	165	325187	100.14	ppm		96
58) 3-Nitroaniline	7.393	138	412511	83.72	ppm		91
59) Acenaphthene	7.452	153	1250908	89.00	ppm		98
60) 2,4-Dinitrophenol	7.478	184	374178	199.81	ppm		87
61) 4-Nitrophenol	7.521	109	198632	102.43	ppm		96
62) Dibenzofuran	7.591	168	1602437	86.24	ppm		97
63) 2,4-Dinitrotoluene	7.580	165	426108	100.13	ppm		98
64) 2,3,4,6-Tetrachlorophenol	7.692	232	379247	104.19	ppm		95
65) Diethylphthalate	7.789	149	1414647	91.10	ppm		99
66) Fluorene	7.885	166	1359053	88.05	ppm		98
67) 4-Chlorophenyl-phenyle...	7.885	204	615561	91.25	ppm		92
68) 4-Nitroaniline	7.917	138	397393	93.85	ppm		97
70) 4,6-Dinitro-2-methylph...	7.933	198	247449	108.54	ppm		94
71) n-Nitrosodiphenylamine	7.992	169	929054	88.04	ppm		99
72) 1,2-Diphenylhydrazine	8.024	77	1360980	80.21	ppm		94
74) 4-Bromophenyl-phenylether	8.329	248	398465	100.43	ppm		94
75) Hexachlorobenzene	8.382	284	416259	97.99	ppm		92
76) Pentachlorophenol	8.575	266	633253	220.55	ppm		99
77) Phenanthrene	8.800	178	2039390	89.10	ppm		99
78) Anthracene	8.853	178	2012036	88.61	ppm		99

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58369.D
Acq On : 19 Apr 2016 6:09 pm
Operator : robertl1
Sample : IC2547-100
Misc : op92038,e2p2547
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 20 08:28:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
79)	Carbazole	9.019	167	1947431	91.21	ppm	99
80)	Di-n-butylphthalate	9.425	149	2715780	95.60	ppm	99
81)	Fluoranthene	10.163	202	2506606	100.81	ppm	98
82)	Octadecane	8.666	43	770653	76.91	ppm	87
84)	Pyrene	10.458	202	2474108	98.15	ppm	100
86)	Butylbenzylphthalate	11.410	149	1297972	100.81	ppm	98
87)	Butyl stearate	11.549	56	995197	90.42	ppm	94
88)	Benzo[a]anthracene	12.137	228	2375786	97.97	ppm	98
89)	3,3'-Dichlorobenzidine	12.137	252	869044	105.91	ppm	98
90)	Chrysene	12.196	228	2058102	93.85	ppm	100
91)	bis(2-Ethylhexyl)phtha...	12.287	149	1519439	94.37	ppm	98
93)	Di-n-octylphthalate	13.250	149	3106671	104.22	ppm	96
94)	Benzo[b]fluoranthene	13.667	252	2406826	105.69	ppm	96
95)	Benzo[k]fluoranthene	13.710	252	1798356	90.41	ppm	97
96)	Benzo[a]pyrene	14.089	252	1973917	102.15	ppm	97
97)	Indeno[1,2,3-cd]pyrene	15.721	276	1848282	110.61	ppm	95
98)	Dibenz(a,h)acridine	15.368	279	1647170	108.10	ppm	99
99)	Dibenz[a,h]anthracene	15.774	278	1759100	105.13	ppm	96
100)	7,12-Dimethylbenz(a)an...	13.667	256	980255	105.61	ppm	99
101)	Benzo[g,h,i]perylene	16.170	276	1850570	104.75	ppm	99

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

7.6.5

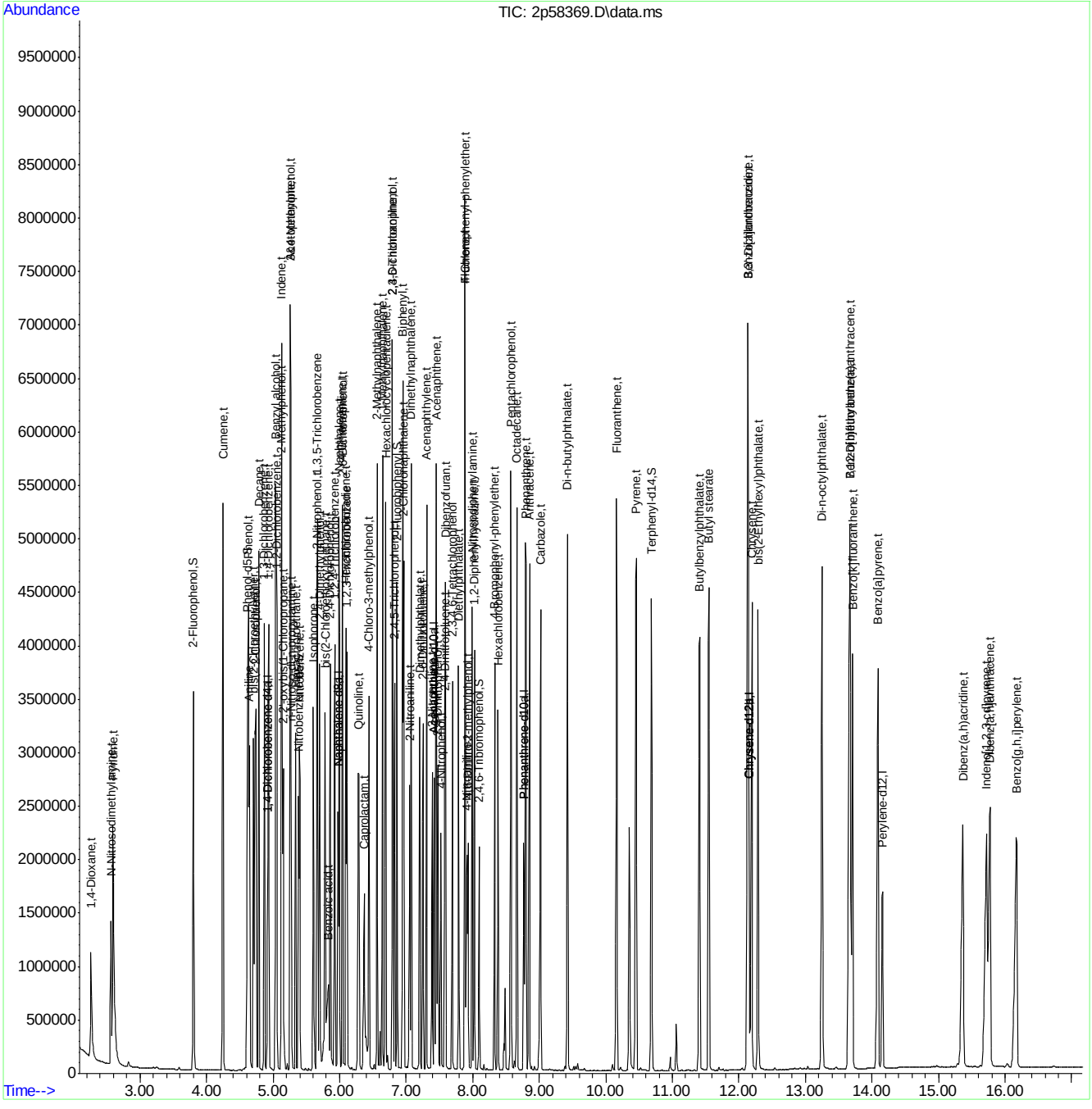
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58369.D
Acq On : 19 Apr 2016 6:09 pm
Operator : robertl1
Sample : IC2547-100
Misc : op92038,e2p2547
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 20 08:28:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58370.D
Acq On : 19 Apr 2016 6:33 pm
Operator : robertl1
Sample : IC2547-5
Misc : op92038,e2p2547
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 20 08:29:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.911	152	281504	40.00	ppm	0.00
24) Naphthalene-d8	5.970	136	989523	40.00	ppm	0.00
47) Acenaphthene-d10	7.414	164	539577	40.00	ppm	0.00
69) Phenanthrene-d10	8.762	188	835173	40.00	ppm	0.00
83) Chrysene-d12	12.137	240	777613	40.00	ppm	0.00
92) Perylene-d12	14.148	264	648321	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.911	152	281504	40.00	ppm	0.00
104) Naphthalene-d8a	5.970	136	989523	40.00	ppm	0.00
106) Acenaphthene-d10a	7.414	164	539577	40.00	ppm	0.00
109) Chrysene-d12a	12.137	240	777613	40.00	ppm	0.00
111) Phenanthrene-d10a	8.762	188	835173	40.00	ppm	0.00
114) Chrysene-d12b	12.137	240	777613	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.793	112	57559	5.05	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery	=	10.10%#	
8) Phenol-d5	4.595	99	70626	5.29	ppm	-0.01
Spiked Amount 50.000	Range 10 - 59		Recovery	=	10.58%	
25) Nitrobenzene-d5	5.371	82	54953	5.63	ppm	0.00
Spiked Amount 50.000	Range 19 - 61		Recovery	=	11.26%#	
51) 2-Fluorobiphenyl	6.858	172	92661	5.52	ppm	0.00
Spiked Amount 50.000	Range 21 - 58		Recovery	=	11.04%#	
73) 2,4,6-Tribromophenol	8.088	330	9517	5.13	ppm	0.00
Spiked Amount 50.000	Range 12 - 68		Recovery	=	10.26%#	
85) Terphenyl-d14	10.677	244	80782	5.16	ppm	0.00
Spiked Amount 50.000	Range 16 - 65		Recovery	=	10.32%#	
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
113) O-terphenyl	0.000	230	0	0.00	ppm	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.269	88	26300	5.08	ppm	98
3) Pyridine	2.600	79	64496	5.04	ppm	99
4) N-Nitrosodimethylamine	2.563	74	37027	4.90	ppm	98
6) Indene	5.125	116	90434	5.72	ppm	99
7) Cumene	4.242	105	131773	5.28	ppm	99
9) Phenol	4.611	94	73133	5.29	ppm	91
10) Aniline	4.638	93	88763	5.46	ppm	99
11) bis(2-Chloroethyl)ether	4.697	93	53728	5.38	ppm	96
12) 2-Chlorophenol	4.734	128	56616	5.48	ppm	96
13) Decane	4.782	57	87899	5.71	ppm	97
14) 1,3-Dichlorobenzene	4.863	146	62537	5.51	ppm	97
15) 1,4-Dichlorobenzene	4.927	146	60921	5.45	ppm	99
16) Benzyl alcohol	5.029	108	36423	5.63	ppm	96
17) 1,2-Dichlorobenzene	5.050	146	58121	5.63	ppm	98
18) Acetophenone	5.248	105	73468	5.79	ppm	95
19) 2-Methylphenol	5.114	108	51752	5.84	ppm	98
20) 2,2'-oxybis(1-Chloropr...	5.146	121	16267	5.59	ppm #	86
21) 3&4-Methylphenol	5.242	108	53902	5.83	ppm	100
22) n-Nitroso-di-n-propyla...	5.248	70	38857	5.93	ppm	95

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58370.D
Acq On : 19 Apr 2016 6:33 pm
Operator : robertl1
Sample : IC2547-5
Misc : op92038,e2p2547
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 20 08:29:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
23)	Hexachloroethane	5.333	201	18063	5.33	ppm		97
26)	Nitrobenzene	5.387	77	55711	5.66	ppm		99
27)	Quinoline	6.259	129	95124	5.42	ppm		98
28)	Isophorone	5.585	82	99254	5.63	ppm		94
29)	2-Nitrophenol	5.654	139	26575	5.46	ppm		88
30)	2,4-Dimethylphenol	5.686	107	48203	5.57	ppm		97
31)	Benzoic acid	5.729	105	33624	4.96	ppm		87
32)	bis(2-Chloroethoxy)met...	5.772	93	62806	5.73	ppm		98
33)	2,4-Dichlorophenol	5.847	162	41359	5.55	ppm		96
34)	2,6-Dichlorophenol	6.034	162	39661	5.65	ppm		99
35)	1,3,5-Trichlorobenzene	5.660	180	47599	5.56	ppm		99
36)	1,2,4-Trichlorobenzene	5.922	180	45448	5.54	ppm		99
37)	1,2,3-Trichlorobenzene	6.104	180	42358	5.55	ppm		94
38)	Naphthalene	5.986	128	144639	5.67	ppm		99
39)	4-Chloroaniline	6.029	127	64937	5.89	ppm		98
40)	2,3-Dichloroaniline	6.788	161	51670	5.66	ppm		100
41)	Caprolactam	6.301	113	15434	5.40	ppm		98
42)	Hexachlorobutadiene	6.088	225	21702	5.35	ppm		99
43)	4-Chloro-3-methylphenol	6.425	107	42724	5.59	ppm		95
44)	2-Methylnaphthalene	6.558	141	78184	5.49	ppm		99
45)	1-Methylnaphthalene	6.638	141	81765	5.60	ppm		99
46)	Dimethylnaphthalene	7.072	156	80589	5.60	ppm		100
48)	Hexachlorocyclopentadiene	6.687	237	43524	10.03	ppm		96
49)	2,4,6-Trichlorophenol	6.783	196	27404	5.49	ppm		96
50)	2,4,5-Trichlorophenol	6.810	196	29787	5.54	ppm		95
52)	2-Chloronaphthalene	6.959	162	89092	5.63	ppm		97
53)	Biphenyl	6.943	154	110586	5.56	ppm		99
54)	2-Nitroaniline	7.040	65	30069	4.63	ppm		97
55)	Dimethylphthalate	7.195	163	92340	5.37	ppm		99
56)	Acenaphthylene	7.296	152	144053	5.59	ppm		99
57)	2,6-Dinitrotoluene	7.237	165	19161	5.25	ppm		81
58)	3-Nitroaniline	7.377	138	26675	4.82	ppm		88
59)	Acenaphthene	7.441	153	86627	5.49	ppm		98
60)	2,4-Dinitrophenol	7.462	184	11266	10.19	ppm	#	39
61)	4-Nitrophenol	7.505	109	11624	5.34	ppm		89
62)	Dibenzofuran	7.585	168	117322	5.62	ppm		99
63)	2,4-Dinitrotoluene	7.569	165	25585	5.35	ppm		88
64)	2,3,4,6-Tetrachlorophenol	7.681	232	21184	5.18	ppm		93
65)	Diethylphthalate	7.778	149	94655	5.43	ppm		99
66)	Fluorene	7.874	166	97217	5.61	ppm		99
67)	4-Chlorophenyl-phenyle...	7.879	204	41471	5.47	ppm		95
68)	4-Nitroaniline	7.885	138	27353	5.75	ppm		99
70)	4,6-Dinitro-2-methylph...	7.911	198	10165	4.16	ppm		95
71)	n-Nitrosodiphenylamine	7.981	169	63135	5.58	ppm		98
72)	1,2-Diphenylhydrazine	8.013	77	105422	5.80	ppm		97
74)	4-Bromophenyl-phenylether	8.323	248	21587	5.08	ppm		97
75)	Hexachlorobenzene	8.371	284	23878	5.25	ppm		95
76)	Pentachlorophenol	8.564	266	30678	9.97	ppm		98
77)	Phenanthrene	8.783	178	135049	5.51	ppm		98
78)	Anthracene	8.837	178	134043	5.51	ppm		98

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58370.D
Acq On : 19 Apr 2016 6:33 pm
Operator : robertl1
Sample : IC2547-5
Misc : op92038,e2p2547
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 20 08:29:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
79)	Carbazole	9.008	167	123992	5.42	ppm	97
80)	Di-n-butylphthalate	9.420	149	163440	5.37	ppm	99
81)	Fluoranthene	10.153	202	135434	5.08	ppm	96
82)	Octadecane	8.660	43	62680	5.84	ppm	98
84)	Pyrene	10.441	202	143455	5.56	ppm	99
86)	Butylbenzylphthalate	11.399	149	68815	5.22	ppm	99
87)	Butyl stearate	11.538	56	61058	5.42	ppm	95
88)	Benzo[a]anthracene	12.121	228	130953	5.28	ppm	97
89)	3,3'-Dichlorobenzidine	12.115	252	44100	5.25	ppm	93
90)	Chrysene	12.169	228	121882	5.43	ppm	99
91)	bis(2-Ethylhexyl)phtha...	12.281	149	89849	5.46	ppm	99
93)	Di-n-octylphthalate	13.233	149	156247	5.30	ppm	98
94)	Benzo[b]fluoranthene	13.634	252	117790	5.23	ppm	97
95)	Benzo[k]fluoranthene	13.672	252	108110	5.49	ppm	98
96)	Benzo[a]pyrene	14.062	252	102229	5.35	ppm	95
97)	Indeno[1,2,3-cd]pyrene	15.678	276	84342	5.10	ppm	91
98)	Dibenz(a,h)acridine	15.330	279	82522	5.48	ppm	98
99)	Dibenz[a,h]anthracene	15.726	278	84619	5.11	ppm	94
100)	7,12-Dimethylbenz(a)an...	13.640	256	46657	5.08	ppm	99
101)	Benzo[g,h,i]perylene	16.111	276	90215	5.16	ppm	91

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

7.6.6

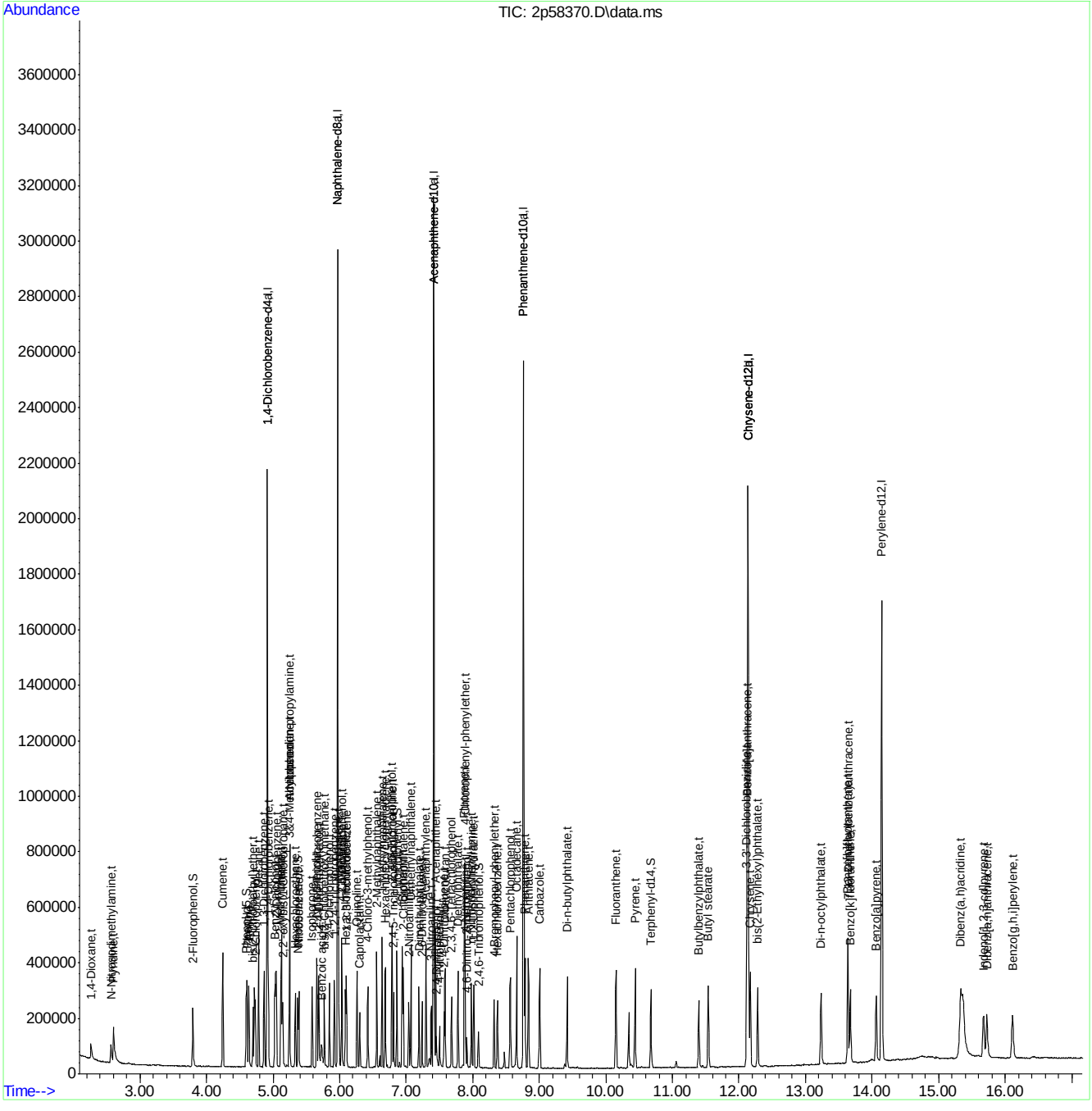
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58370.D
Acq On : 19 Apr 2016 6:33 pm
Operator : robertl1
Sample : IC2547-5
Misc : op92038,e2p2547
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 20 08:29:44 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58371.D
Acq On : 19 Apr 2016 6:57 pm
Operator : robertl1
Sample : IC2547-2
Misc : op92038,e2p2547
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 20 08:32:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.916	152	331615	40.00	ppm	0.00
24) Naphthalene-d8	5.970	136	1201853	40.00	ppm	0.00
47) Acenaphthene-d10	7.414	164	656341	40.00	ppm	0.00
69) Phenanthrene-d10	8.762	188	1016880	40.00	ppm	0.00
83) Chrysene-d12	12.137	240	976541	40.00	ppm	0.00
92) Perylene-d12	14.148	264	822786	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.916	152	331615	40.00	ppm	0.00
104) Naphthalene-d8a	5.970	136	1201853	40.00	ppm	0.00
106) Acenaphthene-d10a	7.414	164	656341	40.00	ppm	0.00
109) Chrysene-d12a	12.137	240	976541	40.00	ppm	0.00
111) Phenanthrene-d10a	8.762	188	1016880	40.00	ppm	0.00
114) Chrysene-d12b	12.137	240	976541	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.798	112	26869	2.00	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery	=	4.00%#	
8) Phenol-d5	4.595	99	31404	2.00	ppm	-0.01
Spiked Amount 50.000	Range 10 - 59		Recovery	=	4.00%#	
25) Nitrobenzene-d5	5.371	82	24905	2.10	ppm	0.00
Spiked Amount 50.000	Range 19 - 61		Recovery	=	4.20%#	
51) 2-Fluorobiphenyl	6.858	172	45301	2.22	ppm	0.00
Spiked Amount 50.000	Range 21 - 58		Recovery	=	4.44%#	
73) 2,4,6-Tribromophenol	8.088	330	4620	2.05	ppm	0.00
Spiked Amount 50.000	Range 12 - 68		Recovery	=	4.10%#	
85) Terphenyl-d14	10.677	244	40203	2.05	ppm	0.00
Spiked Amount 50.000	Range 16 - 65		Recovery	=	4.10%#	
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
113) O-terphenyl	0.000	230	0	0.00	ppm	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.274	88	10877	1.78	ppm	92
3) Pyridine	2.611	79	29237	1.94	ppm	96
4) N-Nitrosodimethylamine	2.568	74	16574	1.86	ppm	94
6) Indene	5.125	116	43040	2.31	ppm	99
7) Cumene	4.242	105	61131	2.08	ppm	99
9) Phenol	4.611	94	34405	2.11	ppm	88
10) Aniline	4.638	93	41937	2.19	ppm	99
11) bis(2-Chloroethyl)ether	4.697	93	24761	2.11	ppm	99
12) 2-Chlorophenol	4.734	128	26897	2.21	ppm	95
13) Decane	4.782	57	41136	2.27	ppm	96
14) 1,3-Dichlorobenzene	4.863	146	29450	2.20	ppm	100
15) 1,4-Dichlorobenzene	4.927	146	29070	2.21	ppm	96
16) Benzyl alcohol	5.028	108	16729	2.20	ppm	94
17) 1,2-Dichlorobenzene	5.050	146	26572	2.18	ppm	98
18) Acetophenone	5.248	105	35412	2.37	ppm	94
19) 2-Methylphenol	5.114	108	23798	2.28	ppm	99
20) 2,2'-oxybis(1-Chloropr...	5.146	121	7736	2.26	ppm #	94
21) 3&4-Methylphenol	5.242	108	24760	2.27	ppm	93
22) n-Nitroso-di-n-propyla...	5.248	70	18005	2.33	ppm	97

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58371.D
Acq On : 19 Apr 2016 6:57 pm
Operator : robertl1
Sample : IC2547-2
Misc : op92038,e2p2547
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 20 08:32:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
23)	Hexachloroethane	5.333	201	8755	2.19	ppm		93
26)	Nitrobenzene	5.387	77	27198	2.27	ppm		96
27)	Quinoline	6.259	129	46817	2.20	ppm		98
28)	Isophorone	5.585	82	45456	2.12	ppm		95
29)	2-Nitrophenol	5.654	139	11926	2.02	ppm		84
30)	2,4-Dimethylphenol	5.686	107	22765	2.17	ppm		94
31)	Benzoic acid	5.718	105	14990	1.82	ppm		93
32)	bis(2-Chloroethoxy)met...	5.772	93	29828	2.24	ppm		99
33)	2,4-Dichlorophenol	5.847	162	18742	2.07	ppm		98
34)	2,6-Dichlorophenol	6.034	162	19092	2.24	ppm		98
35)	1,3,5-Trichlorobenzene	5.660	180	22969	2.21	ppm		98
36)	1,2,4-Trichlorobenzene	5.922	180	21881	2.19	ppm		98
37)	1,2,3-Trichlorobenzene	6.104	180	20268	2.19	ppm		93
38)	Naphthalene	5.986	128	70355	2.27	ppm		99
39)	4-Chloroaniline	6.029	127	29573	2.21	ppm		97
40)	2,3-Dichloroaniline	6.788	161	24500	2.21	ppm		99
41)	Caprolactam	6.296	113	7095	2.04	ppm		97
42)	Hexachlorobutadiene	6.088	225	10675	2.17	ppm		98
43)	4-Chloro-3-methylphenol	6.424	107	19671	2.12	ppm		89
44)	2-Methylnaphthalene	6.558	141	37387	2.16	ppm		98
45)	1-Methylnaphthalene	6.638	141	38426	2.17	ppm		99
46)	Dimethylnaphthalene	7.072	156	39763	2.28	ppm		95
48)	Hexachlorocyclopentadiene	6.687	237	18625	3.53	ppm		99
49)	2,4,6-Trichlorophenol	6.783	196	12836	2.11	ppm		97
50)	2,4,5-Trichlorophenol	6.810	196	13803	2.11	ppm		100
52)	2-Chloronaphthalene	6.954	162	44245	2.30	ppm		98
53)	Biphenyl	6.943	154	54536	2.26	ppm		98
54)	2-Nitroaniline	7.040	65	14066	1.78	ppm		92
55)	Dimethylphthalate	7.189	163	45461	2.17	ppm		98
56)	Acenaphthylene	7.296	152	68944	2.20	ppm		98
57)	2,6-Dinitrotoluene	7.237	165	8577	1.93	ppm		79
58)	3-Nitroaniline	7.377	138	11962	1.78	ppm		90
59)	Acenaphthene	7.441	153	42499	2.21	ppm		97
60)	2,4-Dinitrophenol	7.462	184	3602	5.84	ppm	#	19
61)	4-Nitrophenol	7.500	109	5277	1.99	ppm		93
62)	Dibenzofuran	7.585	168	56497	2.23	ppm		98
63)	2,4-Dinitrotoluene	7.569	165	11503	1.98	ppm		90
64)	2,3,4,6-Tetrachlorophenol	7.681	232	10096	2.03	ppm		92
65)	Diethylphthalate	7.778	149	46107	2.17	ppm		99
66)	Fluorene	7.874	166	46383	2.20	ppm		98
67)	4-Chlorophenyl-phenyle...	7.879	204	20399	2.21	ppm		93
68)	4-Nitroaniline	7.885	138	12083	2.09	ppm		97
70)	4,6-Dinitro-2-methylph...	7.911	198	3484	1.17	ppm		91
71)	n-Nitrosodiphenylamine	7.976	169	31464	2.29	ppm		97
72)	1,2-Diphenylhydrazine	8.013	77	50879	2.30	ppm		98
74)	4-Bromophenyl-phenylether	8.323	248	11036	2.13	ppm		94
75)	Hexachlorobenzene	8.371	284	11817	2.13	ppm		97
76)	Pentachlorophenol	8.564	266	13413	3.58	ppm		94
77)	Phenanthrene	8.783	178	66660	2.23	ppm		98
78)	Anthracene	8.837	178	65383	2.21	ppm		99

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58371.D
Acq On : 19 Apr 2016 6:57 pm
Operator : robertl1
Sample : IC2547-2
Misc : op92038,e2p2547
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 20 08:32:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
79)	Carbazole	9.008	167	60230	2.16	ppm	99
80)	Di-n-butylphthalate	9.420	149	77404	2.09	ppm	98
81)	Fluoranthene	10.152	202	65864	2.03	ppm	96
82)	Octadecane	8.660	43	29167	2.23	ppm	99
84)	Pyrene	10.441	202	70308	2.17	ppm	99
86)	Butylbenzylphthalate	11.399	149	32157	1.94	ppm	96
87)	Butyl stearate	11.538	56	28155	1.99	ppm	96
88)	Benzo[a]anthracene	12.121	228	64501	2.07	ppm	97
89)	3,3'-Dichlorobenzidine	12.115	252	20285	1.92	ppm	96
90)	Chrysene	12.169	228	59309	2.11	ppm	99
91)	bis(2-Ethylhexyl)phtha...	12.281	149	41703	2.02	ppm	98
93)	Di-n-octylphthalate	13.233	149	67081	1.79	ppm	99
94)	Benzo[b]fluoranthene	13.634	252	55488	1.94	ppm	94
95)	Benzo[k]fluoranthene	13.672	252	53226	2.13	ppm	94
96)	Benzo[a]pyrene	14.062	252	48664	2.01	ppm	97
97)	Indeno[1,2,3-cd]pyrene	15.672	276	39399	1.88	ppm	90
98)	Dibenz(a,h)acridine	15.335	279	35499	1.86	ppm	97
99)	Dibenz[a,h]anthracene	15.726	278	40520	1.93	ppm	98
100)	7,12-Dimethylbenz(a)an...	13.640	256	22608	1.94	ppm	98
101)	Benzo[g,h,i]perylene	16.111	276	43653	1.97	ppm	91

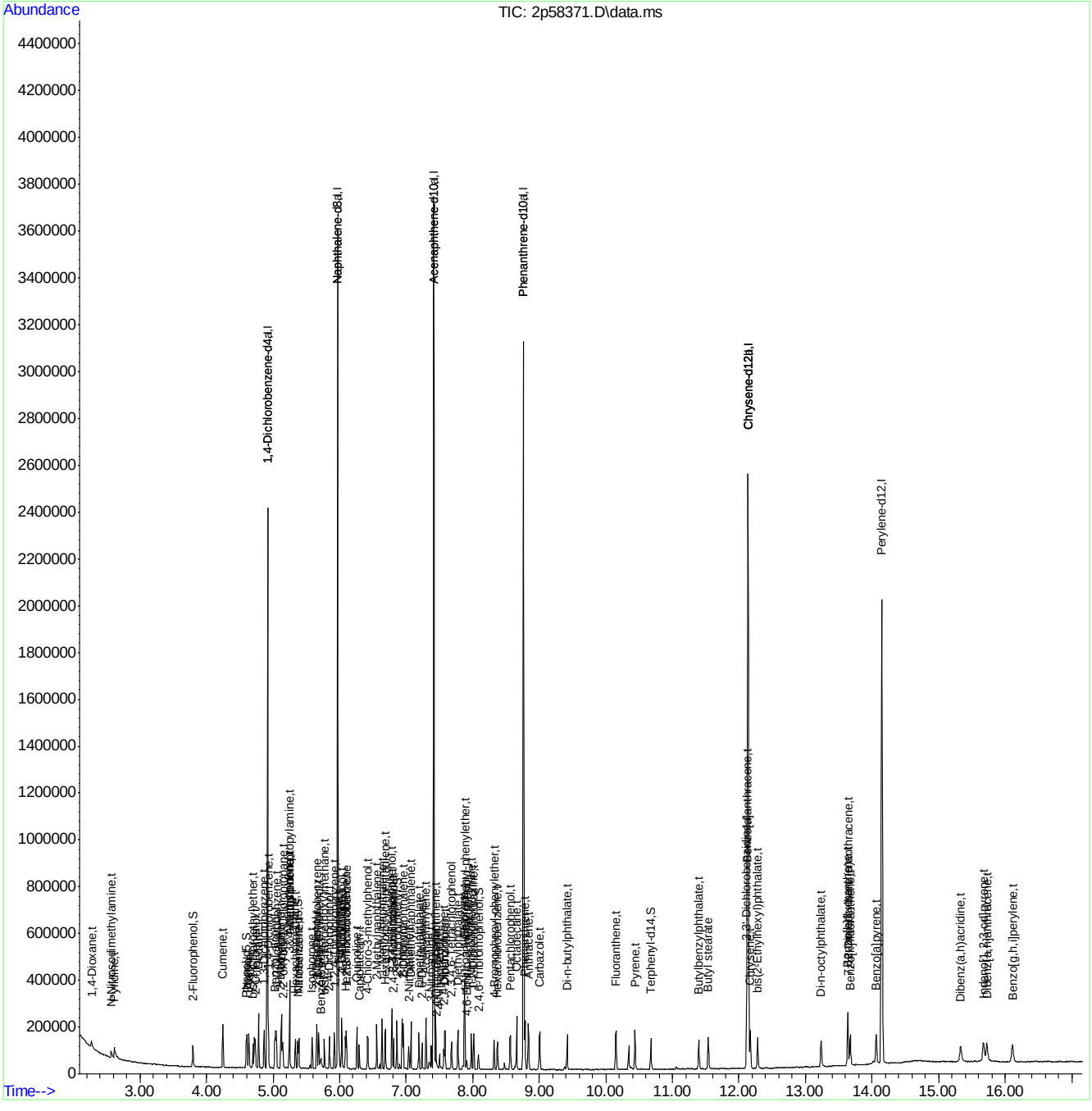
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58371.D
Acq On : 19 Apr 2016 6:57 pm
Operator : robertl1
Sample : IC2547-2
Misc : op92038,e2p2547
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 20 08:32:16 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration



M2P2547.M Wed Apr 20 08:32:24 2016 RPT1 Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58372.D
Acq On : 19 Apr 2016 7:21 pm
Operator : robertl1
Sample : IC2547-1
Misc : op92038,e2p2547
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 20 08:33:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.911	152	332188	40.00	ppm	0.00
24) Naphthalene-d8	5.970	136	1193650	40.00	ppm	0.00
47) Acenaphthene-d10	7.414	164	647880	40.00	ppm	0.00
69) Phenanthrene-d10	8.762	188	997127	40.00	ppm	0.00
83) Chrysene-d12	12.137	240	945418	40.00	ppm	0.00
92) Perylene-d12	14.148	264	807991	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.911	152	332188	40.00	ppm	0.00
104) Naphthalene-d8a	5.970	136	1193650	40.00	ppm	0.00
106) Acenaphthene-d10a	7.414	164	647880	40.00	ppm	0.00
109) Chrysene-d12a	12.137	240	945418	40.00	ppm	0.00
111) Phenanthrene-d10a	8.762	188	997127	40.00	ppm	0.00
114) Chrysene-d12b	12.137	240	945418	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.793	112	13097	0.97	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery	=	1.94%#	
8) Phenol-d5	4.595	99	15866	1.01	ppm	-0.01
Spiked Amount 50.000	Range 10 - 59		Recovery	=	2.02%#	
25) Nitrobenzene-d5	5.371	82	12994	1.10	ppm	0.00
Spiked Amount 50.000	Range 19 - 61		Recovery	=	2.20%#	
51) 2-Fluorobiphenyl	6.858	172	23189	1.15	ppm	0.00
Spiked Amount 50.000	Range 21 - 58		Recovery	=	2.30%#	
73) 2,4,6-Tribromophenol	8.088	330	2097	0.95	ppm	0.00
Spiked Amount 50.000	Range 12 - 68		Recovery	=	1.90%#	
85) Terphenyl-d14	10.677	244	19825	1.04	ppm	0.00
Spiked Amount 50.000	Range 16 - 65		Recovery	=	2.08%#	
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
113) O-terphenyl	0.000	230	0	0.00	ppm	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.269	88	7127	1.17	ppm	97
3) Pyridine	2.622	79	13983	0.93	ppm	98
4) N-Nitrosodimethylamine	2.574	74	8633	0.97	ppm	89
6) Indene	5.125	116	21864	1.17	ppm	98
7) Cumene	4.242	105	30249	1.03	ppm	96
9) Phenol	4.606	94	17006	1.04	ppm	91
10) Aniline	4.638	93	20813	1.08	ppm	92
11) bis(2-Chloroethyl)ether	4.697	93	13627	1.16	ppm	93
12) 2-Chlorophenol	4.729	128	12999	1.07	ppm	99
13) Decane	4.783	57	21089	1.16	ppm	96
14) 1,3-Dichlorobenzene	4.863	146	14876	1.11	ppm	97
15) 1,4-Dichlorobenzene	4.927	146	15029	1.14	ppm	98
16) Benzyl alcohol	5.023	108	8592	1.13	ppm	94
17) 1,2-Dichlorobenzene	5.050	146	14145	1.16	ppm	97
18) Acetophenone	5.248	105	18195	1.22	ppm	96
19) 2-Methylphenol	5.114	108	11831	1.13	ppm	95
20) 2,2'-oxybis(1-Chloropr...	5.146	121	4150	1.21	ppm #	70
21) 3&4-Methylphenol	5.242	108	12759	1.17	ppm	97
22) n-Nitroso-di-n-propyla...	5.248	70	9113	1.18	ppm	94

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58372.D
Acq On : 19 Apr 2016 7:21 pm
Operator : robertl1
Sample : IC2547-1
Misc : op92038,e2p2547
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 20 08:33:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
23)	Hexachloroethane	5.333	201	4458	1.11	ppm		98
26)	Nitrobenzene	5.387	77	13097	1.10	ppm		99
27)	Quinoline	6.259	129	23053	1.09	ppm		97
28)	Isophorone	5.585	82	23146	1.09	ppm		98
29)	2-Nitrophenol	5.649	139	6049	1.03	ppm		94
30)	2,4-Dimethylphenol	5.686	107	11584	1.11	ppm		96
31)	Benzoic acid	5.713	105	6288	0.77	ppm		95
32)	bis(2-Chloroethoxy)met...	5.772	93	15055	1.14	ppm		95
33)	2,4-Dichlorophenol	5.847	162	9613	1.07	ppm		94
34)	2,6-Dichlorophenol	6.034	162	9437	1.12	ppm		99
35)	1,3,5-Trichlorobenzene	5.660	180	11765	1.14	ppm		99
36)	1,2,4-Trichlorobenzene	5.922	180	11107	1.12	ppm		99
37)	1,2,3-Trichlorobenzene	6.104	180	10892	1.18	ppm		95
38)	Naphthalene	5.986	128	35787	1.16	ppm		99
39)	4-Chloroaniline	6.029	127	15319	1.15	ppm		99
40)	2,3-Dichloroaniline	6.788	161	12807	1.16	ppm		95
41)	Caprolactam	6.296	113	3411	0.99	ppm		85
42)	Hexachlorobutadiene	6.088	225	5403	1.10	ppm		96
43)	4-Chloro-3-methylphenol	6.419	107	9797	1.06	ppm		98
44)	2-Methylnaphthalene	6.558	141	18907	1.10	ppm		95
45)	1-Methylnaphthalene	6.638	141	19325	1.10	ppm		95
46)	Dimethylnaphthalene	7.072	156	20227	1.17	ppm		95
48)	Hexachlorocyclopentadiene	6.687	237	9022	1.73	ppm		94
49)	2,4,6-Trichlorophenol	6.783	196	6334	1.06	ppm		99
50)	2,4,5-Trichlorophenol	6.810	196	6691	1.04	ppm		98
52)	2-Chloronaphthalene	6.954	162	22191	1.17	ppm		99
53)	Biphenyl	6.938	154	27187	1.14	ppm		96
54)	2-Nitroaniline	7.040	65	7013	0.90	ppm		96
55)	Dimethylphthalate	7.189	163	23625	1.14	ppm		100
56)	Acenaphthylene	7.296	152	34124	1.10	ppm		99
57)	2,6-Dinitrotoluene	7.238	165	3996	0.91	ppm		75
58)	3-Nitroaniline	7.377	138	5691	0.86	ppm		84
59)	Acenaphthene	7.441	153	21575	1.14	ppm		98
60)	2,4-Dinitrophenol	7.462	184	1300	4.85	ppm	#	19
61)	4-Nitrophenol	7.505	109	2144	0.82	ppm		92
62)	Dibenzofuran	7.585	168	29248	1.17	ppm		96
63)	2,4-Dinitrotoluene	7.569	165	4934	0.86	ppm		90
64)	2,3,4,6-Tetrachlorophenol	7.681	232	4878	0.99	ppm		93
65)	Diethylphthalate	7.778	149	23583	1.13	ppm		96
66)	Fluorene	7.874	166	23599	1.13	ppm		97
67)	4-Chlorophenyl-phenyle...	7.879	204	10400	1.14	ppm		98
68)	4-Nitroaniline	7.885	138	5284	0.93	ppm		93
70)	4,6-Dinitro-2-methylph...	7.911	198	1436	0.49	ppm		97
71)	n-Nitrosodiphenylamine	7.981	169	15057	1.12	ppm		95
72)	1,2-Diphenylhydrazine	8.013	77	24797	1.14	ppm		99
74)	4-Bromophenyl-phenylether	8.323	248	5492	1.08	ppm		99
75)	Hexachlorobenzene	8.371	284	6037	1.11	ppm		90
76)	Pentachlorophenol	8.564	266	6480	1.76	ppm		99
77)	Phenanthrene	8.783	178	33908	1.16	ppm		98
78)	Anthracene	8.837	178	32296	1.11	ppm		98

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58372.D
Acq On : 19 Apr 2016 7:21 pm
Operator : robertl1
Sample : IC2547-1
Misc : op92038,e2p2547
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 20 08:33:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration

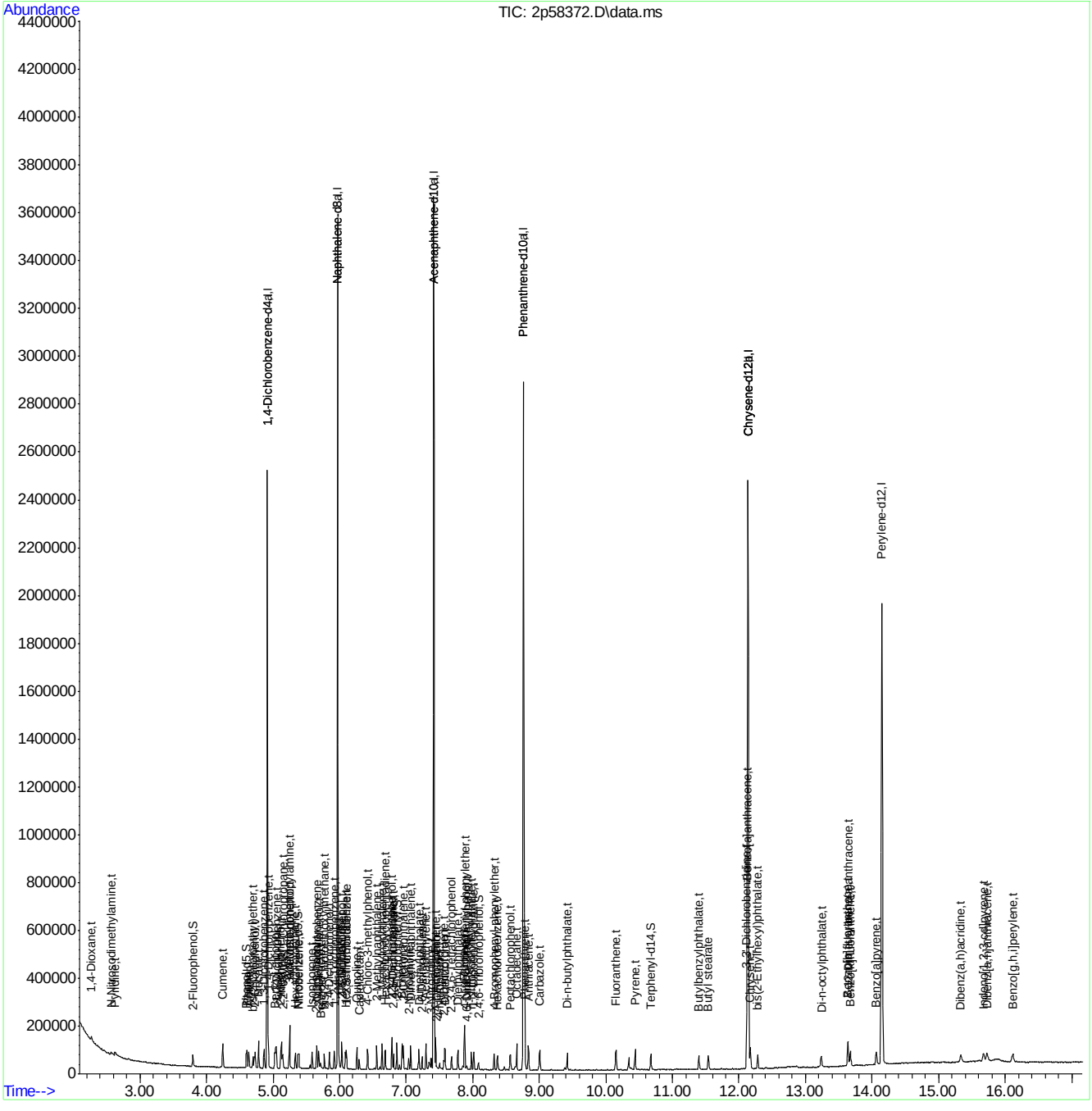
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
79)	Carbazole	9.008	167	30798	1.13	ppm	98
80)	Di-n-butylphthalate	9.420	149	36053	0.99	ppm	99
81)	Fluoranthene	10.153	202	32405	1.02	ppm	96
82)	Octadecane	8.660	43	13680	1.07	ppm	97
84)	Pyrene	10.441	202	35754	1.14	ppm	98
86)	Butylbenzylphthalate	11.399	149	15181	0.95	ppm	91
87)	Butyl stearate	11.538	56	12111	0.88	ppm	94
88)	Benzo[a]anthracene	12.121	228	32870	1.09	ppm	99
89)	3,3'-Dichlorobenzidine	12.116	252	9565	0.94	ppm	97
90)	Chrysene	12.169	228	30750	1.13	ppm	99
91)	bis(2-Ethylhexyl)phtha...	12.281	149	18696	0.93	ppm	97
93)	Di-n-octylphthalate	13.239	149	29809	0.81	ppm	98
94)	Benzo[b]fluoranthene	13.635	252	27873	0.99	ppm	95
95)	Benzo[k]fluoranthene	13.672	252	26037	1.06	ppm	91
96)	Benzo[a]pyrene	14.062	252	23100	0.97	ppm	96
97)	Indeno[1,2,3-cd]pyrene	15.678	276	19314	0.94	ppm	95
98)	Dibenz(a,h)acridine	15.335	279	17641	0.94	ppm	95
99)	Dibenz[a,h]anthracene	15.731	278	20577	1.00	ppm	97
100)	7,12-Dimethylbenz(a)an...	13.640	256	10380	0.91	ppm	98
101)	Benzo[g,h,i]perylene	16.111	276	21653	0.99	ppm	95

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2547\
Data File : 2p58372.D
Acq On : 19 Apr 2016 7:21 pm
Operator : robertl1
Sample : IC2547-1
Misc : op92038,e2p2547
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 20 08:33:57 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:21:19 2016
Response via : Initial Calibration



M2P2547.M Wed Apr 20 08:34:12 2016 RPT1 Page: 4

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58384.D
Acq On : 19 Apr 2016 11:51 pm
Operator : sarad
Sample : icv2547-50
Misc : op92038,e2p2548
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 20 00:10:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Apr 19 23:30:49 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.911	152	267111	40.00	ppm	0.00
24) Naphthalene-d8	5.970	136	961794	40.00	ppm	0.00
47) Acenaphthene-d10	7.414	164	480383	40.00	ppm	0.00
69) Phenanthrene-d10	8.762	188	719769	40.00	ppm	0.00
83) Chrysene-d12	12.132	240	653538	40.00	ppm	-0.01
92) Perylene-d12	14.143	264	521135	40.00	ppm	-0.01
102) 1,4-Dichlorobenzene-d4a	4.911	152	267111	40.00	ppm	0.00
104) Naphthalene-d8a	5.970	136	961794	40.00	ppm	0.00
106) Acenaphthene-d10a	7.414	164	480383	40.00	ppm	0.00
109) Chrysene-d12a	12.132	240	653538	40.00	ppm	0.00
111) Phenanthrene-d10a	8.762	188	719769	40.00	ppm	0.00
114) Chrysene-d12b	12.132	240	653538	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.798	112	508314	46.98	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 93.96%#			
8) Phenol-d5	4.601	99	583443	46.02	ppm	0.00
Spiked Amount 50.000	Range 10 - 59		Recovery = 92.04%#			
25) Nitrobenzene-d5	5.371	82	470626	49.63	ppm	0.00
Spiked Amount 50.000	Range 19 - 61		Recovery = 99.26%#			
51) 2-Fluorobiphenyl	6.858	172	819463	54.83	ppm	0.00
Spiked Amount 50.000	Range 21 - 58		Recovery = 109.66%#			
73) 2,4,6-Tribromophenol	8.088	330	76367	47.79	ppm	0.00
Spiked Amount 50.000	Range 12 - 68		Recovery = 95.58%#			
85) Terphenyl-d14	10.677	244	711010	54.05	ppm	0.00
Spiked Amount 50.000	Range 16 - 65		Recovery = 108.10%#			
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
113) O-terphenyl	0.000	230	0	0.00	ppm	

Target Compounds Qvalue

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

7.6.9

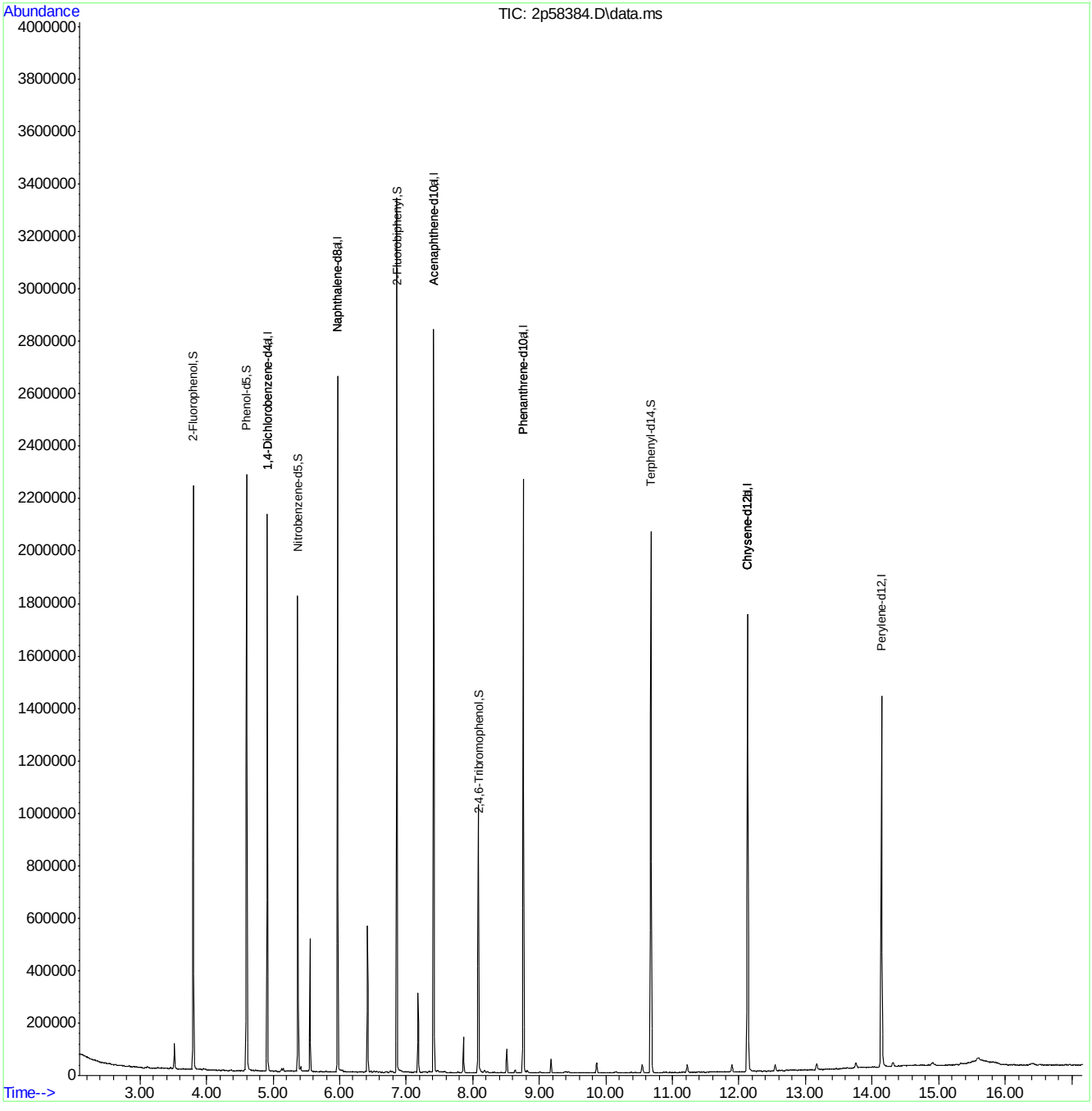
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58384.D
Acq On : 19 Apr 2016 11:51 pm
Operator : sarad
Sample : icv2547-50
Misc : op92038,e2p2548
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 20 00:10:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Tue Apr 19 23:30:49 2016
Response via : Initial Calibration



M2P2547.M Wed Apr 20 08:51:49 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58385.D
Acq On : 20 Apr 2016 12:14 am
Operator : sarad
Sample : icv2547-50
Misc : op92038,e2p2548
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 20 16:29:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.916	152	225854	40.00	ppm	0.00
24) Naphthalene-d8	5.970	136	763841	40.00	ppm	0.00
47) Acenaphthene-d10	7.414	164	387809	40.00	ppm	0.00
69) Phenanthrene-d10	8.762	188	610662	40.00	ppm	0.00
83) Chrysene-d12	12.137	240	551633	40.00	ppm	0.00
92) Perylene-d12	14.143	264	465132	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.916	152	225854	40.00	ppm	0.00
104) Naphthalene-d8a	5.970	136	763841	40.00	ppm	0.00
106) Acenaphthene-d10a	7.414	164	387809	40.00	ppm	0.00
109) Chrysene-d12a	12.137	240	551633	40.00	ppm	0.00
111) Phenanthrene-d10a	8.762	188	610662	40.00	ppm	0.00
114) Chrysene-d12b	12.137	240	551633	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery = 0.00%#			
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000	Range 10 - 59		Recovery = 0.00%#			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 19 - 61		Recovery = 0.00%#			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000	Range 21 - 58		Recovery = 0.00%#			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000	Range 12 - 68		Recovery = 0.00%#			
85) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery = 0.00%#			
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
113) O-terphenyl	0.000	230	0d	0.00	ppm	
Target Compounds						Qvalue
4) N-Nitrosodimethylamine	2.558	74	286861	47.28	ppm	92
11) bis(2-Chloroethyl)ether	4.697	93	436997	54.58	ppm	97
14) 1,3-Dichlorobenzene	4.863	146	477470	52.43	ppm	97
15) 1,4-Dichlorobenzene	4.927	146	465111	51.89	ppm	98
17) 1,2-Dichlorobenzene	5.050	146	430676	51.99	ppm	96
20) 2,2'-oxybis(1-Chloropr...	5.146	121	111129	47.61	ppm #	88
22) n-Nitroso-di-n-propyla...	5.253	70	261955	48.47	ppm	88
23) Hexachloroethane	5.333	201	135517	49.82	ppm	94
26) Nitrobenzene	5.387	77	371208	48.85	ppm	97
28) Isophorone	5.590	82	688745	50.61	ppm	96
32) bis(2-Chloroethoxy)met...	5.772	93	421673	49.81	ppm	94
36) 1,2,4-Trichlorobenzene	5.922	180	323985	51.13	ppm	99
38) Naphthalene	5.986	128	1007035	51.18	ppm	99
42) Hexachlorobutadiene	6.088	225	164321	52.44	ppm	97
48) Hexachlorocyclopentadiene	6.687	237	146998	47.14	ppm	94
52) 2-Chloronaphthalene	6.959	162	619562	54.44	ppm	97
55) Dimethylphthalate	7.195	163	633804	51.29	ppm	99
56) Acenaphthylene	7.296	152	915017	49.39	ppm	99
57) 2,6-Dinitrotoluene	7.243	165	135363	51.63	ppm	84

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58385.D
Acq On : 20 Apr 2016 12:14 am
Operator : sarad
Sample : icv2547-50
Misc : op92038,e2p2548
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 20 16:29:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
59)	Acenaphthene	7.441	153	581998	51.28	ppm	97
63)	2,4-Dinitrotoluene	7.569	165	164157	47.78	ppm	91
65)	Diethylphthalate	7.778	149	625135	49.86	ppm	97
66)	Fluorene	7.879	166	592126	47.51	ppm	97
67)	4-Chlorophenyl-phenyle...	7.879	204	260882	47.90	ppm	98
71)	n-Nitrosodiphenylamine	7.981	169	420594	50.88	ppm	98
72)	1,2-Diphenylhydrazine	8.018	77	646084	48.60	ppm	91
74)	4-Bromophenyl-phenylether	8.323	248	158338	50.94	ppm	95
75)	Hexachlorobenzene	8.371	284	160954	48.36	ppm	98
77)	Phenanthrene	8.789	178	902063	50.30	ppm	98
78)	Anthracene	8.842	178	874452	49.16	ppm	98
80)	Di-n-butylphthalate	9.420	149	1088435	48.91	ppm	99
81)	Fluoranthene	10.153	202	961548	49.36	ppm	98
84)	Pyrene	10.441	202	1000368	52.54	ppm	99
86)	Butylbenzylphthalate	11.399	149	478818	51.25	ppm	95
88)	Benzo[a]anthracene	12.121	228	878319	49.91	ppm	99
90)	Chrysene	12.174	228	806337	50.67	ppm	99
91)	bis(2-Ethylhexyl)phtha...	12.281	149	602451	51.56	ppm	100
93)	Di-n-octylphthalate	13.233	149	1078604	50.99	ppm	97
94)	Benzo[b]fluoranthene	13.640	252	802156	49.64	ppm	94
95)	Benzo[k]fluoranthene	13.683	252	770641	54.59	ppm	91
96)	Benzo[a]pyrene	14.073	252	742121	54.12	ppm	94
97)	Indeno[1,2,3-cd]pyrene	15.688	276	659722	55.63	ppm	95
99)	Dibenz[a,h]anthracene	15.737	278	658502	55.45	ppm	100
101)	Benzo[g,h,i]perylene	16.132	276	687171	54.81	ppm	96

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

7.6.10

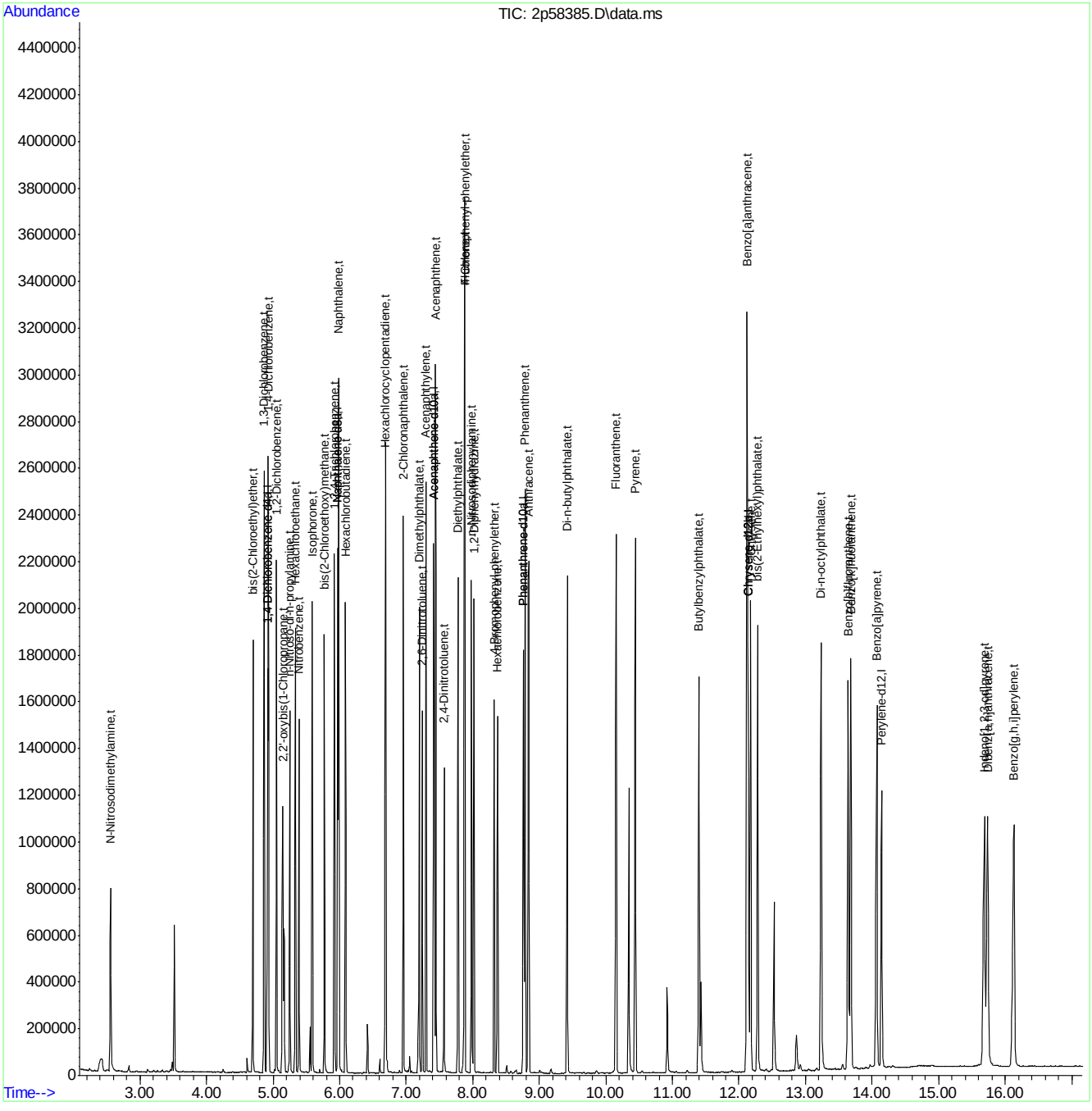
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58385.D
Acq On : 20 Apr 2016 12:14 am
Operator : sarad
Sample : icv2547-50
Misc : op92038,e2p2548
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 20 16:29:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58386.D
Acq On : 20 Apr 2016 12:36 am
Operator : sarad
Sample : icv2547-50
Misc : op92038,e2p2548
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 20 16:30:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.911	152	245515	40.00	ppm	0.00
24) Naphthalene-d8	5.970	136	908347	40.00	ppm	0.00
47) Acenaphthene-d10	7.414	164	443733	40.00	ppm	0.00
69) Phenanthrene-d10	8.762	188	683512	40.00	ppm	0.00
83) Chrysene-d12	12.132	240	658206	40.00	ppm	0.00
92) Perylene-d12	14.143	264	517102	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.911	152	245515	40.00	ppm	0.00
104) Naphthalene-d8a	5.970	136	908347	40.00	ppm	0.00
106) Acenaphthene-d10a	7.414	164	443733	40.00	ppm	0.00
109) Chrysene-d12a	12.132	240	658206	40.00	ppm	0.00
111) Phenanthrene-d10a	8.762	188	683512	40.00	ppm	0.00
114) Chrysene-d12b	12.132	240	658206	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery = 0.00%#			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000	Range 10 - 59		Recovery = 0.00%#			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 19 - 61		Recovery = 0.00%#			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000	Range 21 - 58		Recovery = 0.00%#			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000	Range 12 - 68		Recovery = 0.00%#			
85) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery = 0.00%#			
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
113) O-terphenyl	0.000	230	0	0.00	ppm	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.263	88	194635	43.14	ppm	96
6) Indene	5.125	116	716444	51.97	ppm	98
7) Cumene	4.242	105	1006568	46.24	ppm	97
13) Decane	4.783	57	611167	45.55	ppm	93
18) Acetophenone	5.248	105	547775	49.52	ppm	86
27) Quinoline	6.259	129	726989	45.13	ppm	99
40) 2,3-Dichloroaniline	6.788	161	316984	37.83	ppm	94
41) Caprolactam	6.307	113	113060	43.11	ppm	88
45) 1-Methylnaphthalene	6.639	141	592550	44.23	ppm	95
46) Dimethylnaphthalene	7.072	156	574509	43.53	ppm	95
53) Biphenyl	6.943	154	808328	49.46	ppm	98
82) Octadecane	8.660	43	407374	46.36	ppm	90
100) 7,12-Dimethylbenz(a)an...	13.640	256	348571	47.60	ppm	99

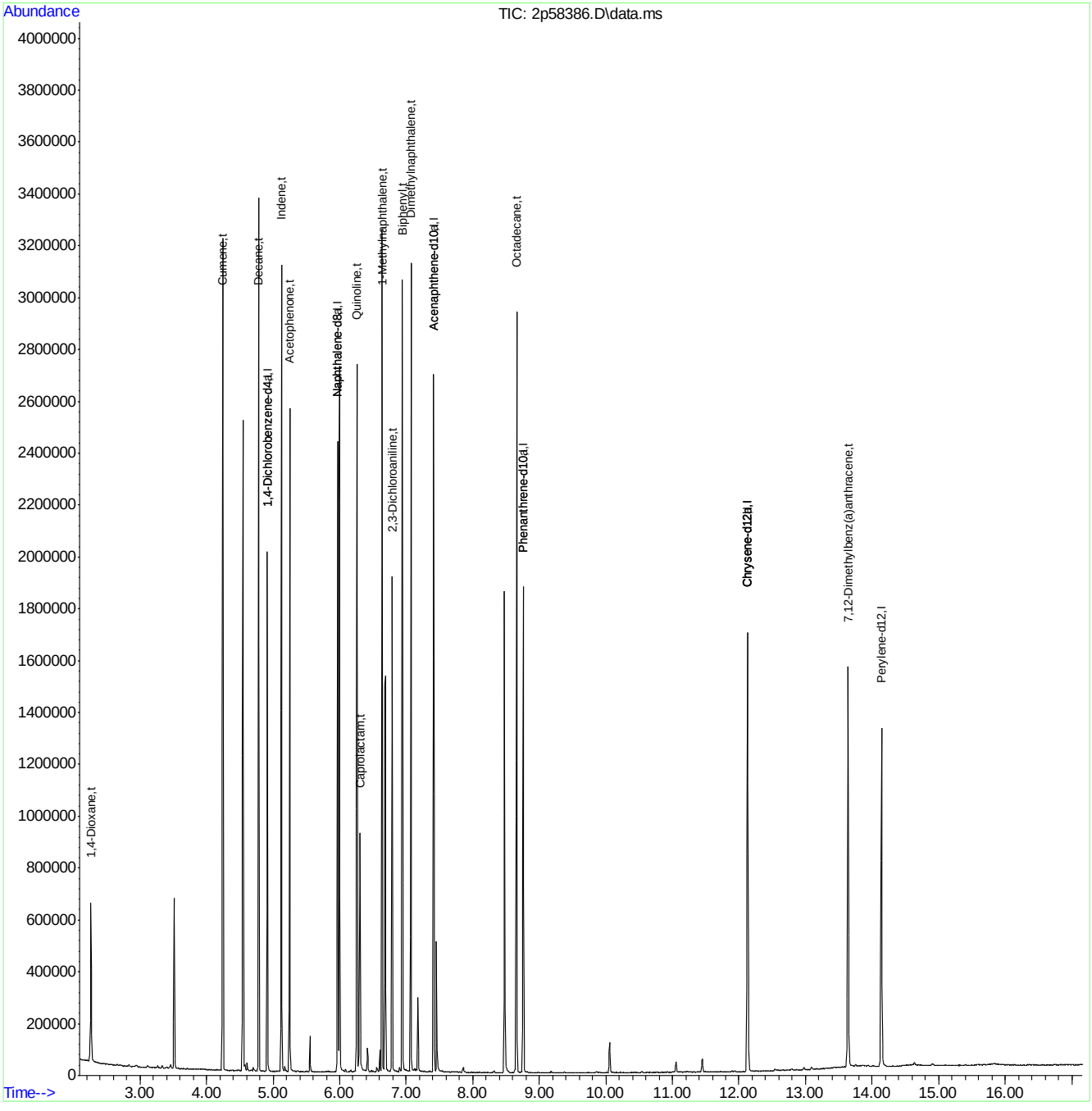
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58386.D
Acq On : 20 Apr 2016 12:36 am
Operator : sarad
Sample : icv2547-50
Misc : op92038,e2p2548
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 20 16:30:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58388.D
Acq On : 20 Apr 2016 1:21 am
Operator : sarad
Sample : icv2547-50
Misc : op92038,e2p2548
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 20 16:34:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.911	152	312896	40.00	ppm	0.00
24) Naphthalene-d8	5.970	136	1140968	40.00	ppm	0.00
47) Acenaphthene-d10	7.414	164	612864	40.00	ppm	0.00
69) Phenanthrene-d10	8.762	188	955638	40.00	ppm	0.00
83) Chrysene-d12	12.132	240	907422	40.00	ppm	0.00
92) Perylene-d12	14.148	264	739431	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.911	152	312896	40.00	ppm	0.00
104) Naphthalene-d8a	5.970	136	1140968	40.00	ppm	0.00
106) Acenaphthene-d10a	7.414	164	612864	40.00	ppm	0.00
109) Chrysene-d12a	12.132	240	907422	40.00	ppm	0.00
111) Phenanthrene-d10a	8.762	188	955638	40.00	ppm	0.00
114) Chrysene-d12b	12.132	240	907422	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery = 0.00%#			
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000	Range 10 - 59		Recovery = 0.00%#			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 19 - 61		Recovery = 0.00%#			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000	Range 21 - 58		Recovery = 0.00%#			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000	Range 12 - 68		Recovery = 0.00%#			
85) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery = 0.00%#			
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
113) O-terphenyl	0.000	230	0	0.00	ppm	
Target Compounds						Qvalue
89) 3,3'-Dichlorobenzidine	12.121	252	429331	43.83	ppm	96

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

7.6.12

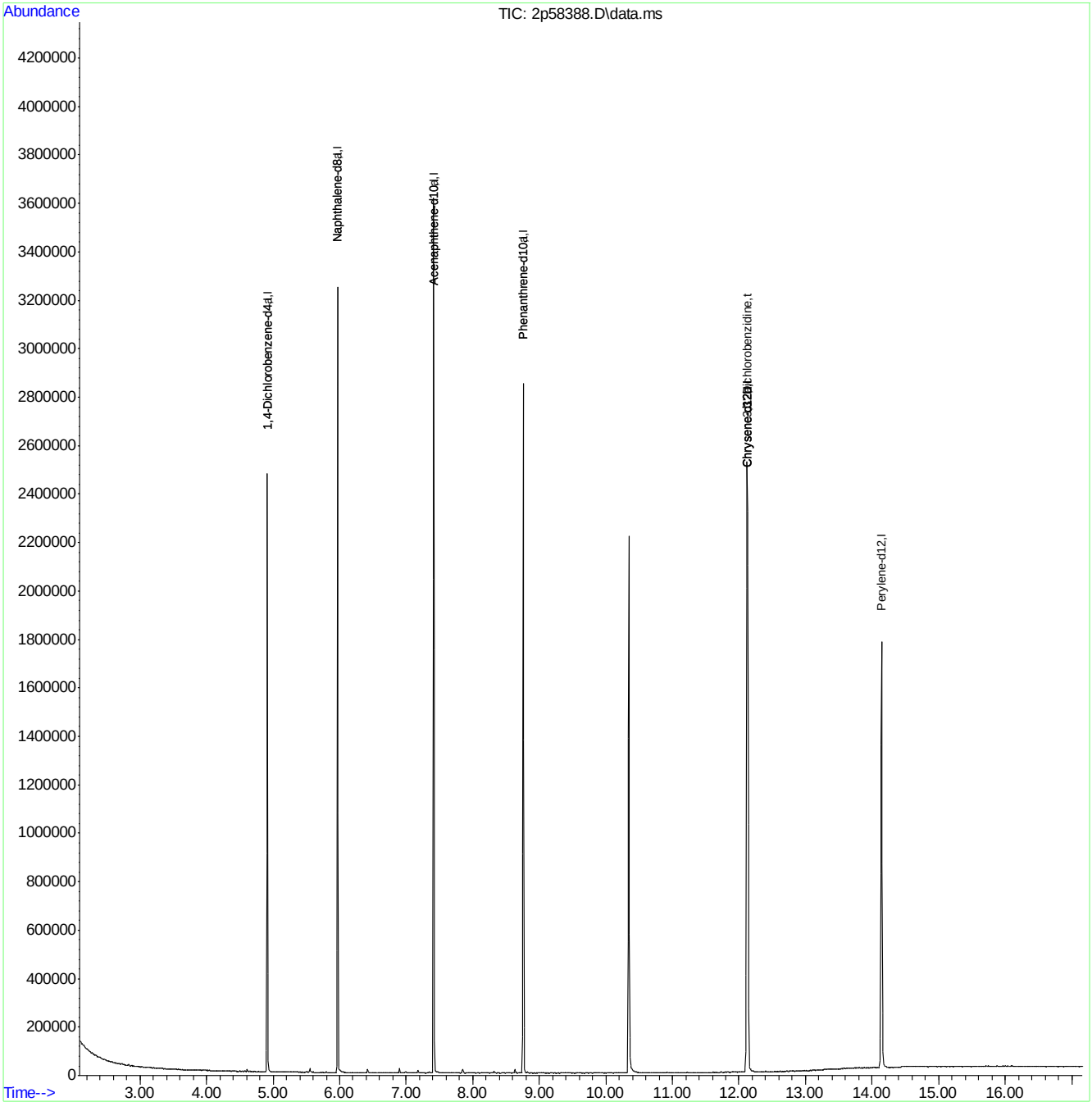
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2548\
Data File : 2p58388.D
Acq On : 20 Apr 2016 1:21 am
Operator : sarad
Sample : icv2547-50
Misc : op92038,e2p2548
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 20 16:34:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2549\
Data File : 2p58391.D
Acq On : 20 Apr 2016 9:53 am
Operator : robertl1
Sample : ICV2547-50
Misc : op92038,e2p2549
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 20 17:37:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.895	152	250697	40.00	ppm	-0.02
24) Naphthalene-d8	5.949	136	846929	40.00	ppm	-0.02
47) Acenaphthene-d10	7.398	164	483791	40.00	ppm	-0.02
69) Phenanthrene-d10	8.741	188	755620	40.00	ppm	-0.02
83) Chrysene-d12	12.105	240	777389	40.00	ppm	-0.03
92) Perylene-d12	14.116	264	663496	40.00	ppm	-0.03
102) 1,4-Dichlorobenzene-d4a	4.895	152	250697	40.00	ppm	-0.02
104) Naphthalene-d8a	5.949	136	846929	40.00	ppm	-0.02
106) Acenaphthene-d10a	7.398	164	483791	40.00	ppm	-0.02
109) Chrysene-d12a	12.105	240	777389	40.00	ppm	-0.03
111) Phenanthrene-d10a	8.741	188	755620	40.00	ppm	-0.02
114) Chrysene-d12b	12.105	240	777389	40.00	ppm	-0.03
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery = 0.00%#			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000	Range 10 - 59		Recovery = 0.00%#			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 19 - 61		Recovery = 0.00%#			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 21 - 58		Recovery = 0.00%#			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000	Range 12 - 68		Recovery = 0.00%#			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery = 0.00%#			
112) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
113) O-terphenyl	0.000	230	0	0.00	ppm	
Target Compounds						Qvalue
9) Phenol	4.595	94	546786	43.36	ppm	91
12) 2-Chlorophenol	4.713	128	434642	47.25	ppm	94
19) 2-Methylphenol	5.098	108	381267	48.30	ppm	93
21) 3&4-Methylphenol	5.226	108	393831	47.81	ppm	97
29) 2-Nitrophenol	5.633	139	209449	50.28	ppm	93
30) 2,4-Dimethylphenol	5.670	107	369843	49.93	ppm	95
31) Benzoic acid	5.767	105	306865	52.90	ppm	97
33) 2,4-Dichlorophenol	5.831	162	316947	49.71	ppm	92
34) 2,6-Dichlorophenol	6.018	162	301441	50.20	ppm	98
43) 4-Chloro-3-methylphenol	6.403	107	306909	46.90	ppm	96
49) 2,4,6-Trichlorophenol	6.767	196	220919	49.37	ppm	98
50) 2,4,5-Trichlorophenol	6.794	196	219478	45.55	ppm	98
60) 2,4-Dinitrophenol	7.441	184	93822	57.45	ppm #	100
61) 4-Nitrophenol	7.489	109	99985	51.19	ppm	90
64) 2,3,4,6-Tetrachlorophenol	7.665	232	175320	47.82	ppm	91
70) 4,6-Dinitro-2-methylph...	7.895	198	124899	56.51	ppm	90
76) Pentachlorophenol	8.543	266	138342	49.70	ppm	98

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2549\
Data File : 2p58391.D
Acq On : 20 Apr 2016 9:53 am
Operator : robertl1
Sample : ICV2547-50
Misc : op92038,e2p2549
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 20 17:37:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration

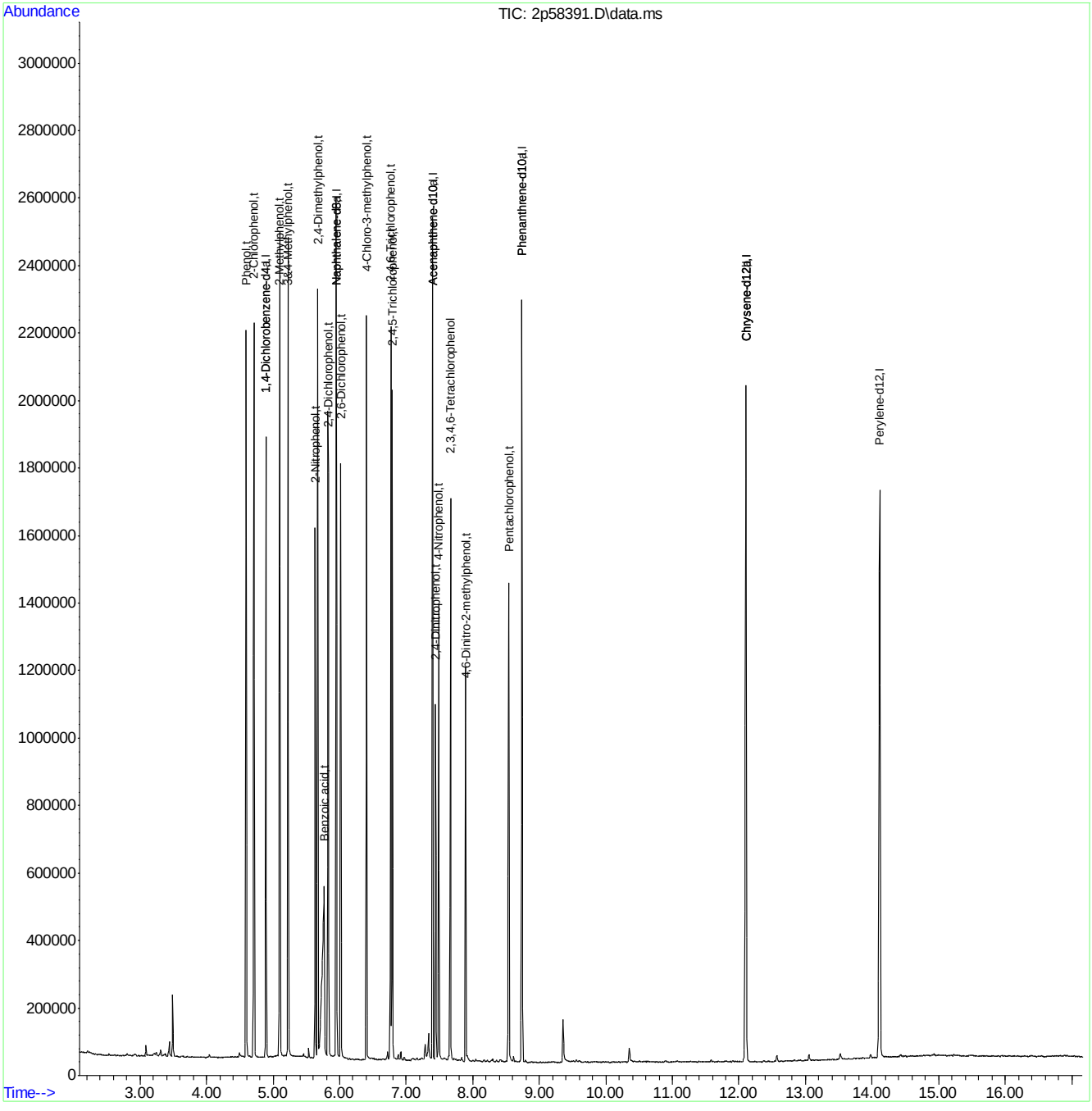
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2549\
Data File : 2p58391.D
Acq On : 20 Apr 2016 9:53 am
Operator : robertl1
Sample : ICV2547-50
Misc : op92038,e2p2549
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 20 17:37:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2549\
Data File : 2p58392.D
Acq On : 20 Apr 2016 10:16 am
Operator : robertl1
Sample : ICV2547-50
Misc : op92038,e2p2549
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 20 17:38:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.895	152	267380	40.00	ppm	-0.02
24) Naphthalene-d8	5.949	136	988207	40.00	ppm	-0.02
47) Acenaphthene-d10	7.398	164	513519	40.00	ppm	-0.02
69) Phenanthrene-d10	8.741	188	836003	40.00	ppm	-0.02
83) Chrysene-d12	12.105	240	818655	40.00	ppm	-0.03
92) Perylene-d12	14.116	264	708687	40.00	ppm	-0.03
102) 1,4-Dichlorobenzene-d4a	4.895	152	267380	40.00	ppm	-0.02
104) Naphthalene-d8a	5.949	136	988207	40.00	ppm	-0.02
106) Acenaphthene-d10a	7.398	164	513519	40.00	ppm	-0.02
109) Chrysene-d12a	12.105	240	818655	40.00	ppm	-0.03
111) Phenanthrene-d10a	8.741	188	836003	40.00	ppm	-0.02
114) Chrysene-d12b	12.105	240	818655	40.00	ppm	-0.03
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery = 0.00%#			
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000	Range 10 - 59		Recovery = 0.00%#			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 19 - 61		Recovery = 0.00%#			
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 21 - 58		Recovery = 0.00%#			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000	Range 12 - 68		Recovery = 0.00%#			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery = 0.00%#			
112) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
113) O-terphenyl	0.000	230	0	0.00	ppm	
Target Compounds						Qvalue
3) Pyridine	2.670	79	530930	43.69	ppm	98
10) Aniline	4.627	93	688464	44.57	ppm	95
16) Benzyl alcohol	5.013	108	287413	46.78	ppm	97
39) 4-Chloroaniline	6.013	127	487804	44.32	ppm	97
44) 2-Methylnaphthalene	6.537	141	612699	43.09	ppm	95
54) 2-Nitroaniline	7.024	65	236031	45.09	ppm	87
58) 3-Nitroaniline	7.361	138	211847	46.22	ppm	89
62) Dibenzofuran	7.564	168	909511	45.78	ppm	93
68) 4-Nitroaniline	7.869	138	192915	42.61	ppm	94
79) Carbazole	8.987	167	1041876	45.50	ppm	98

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

7.6.14

7

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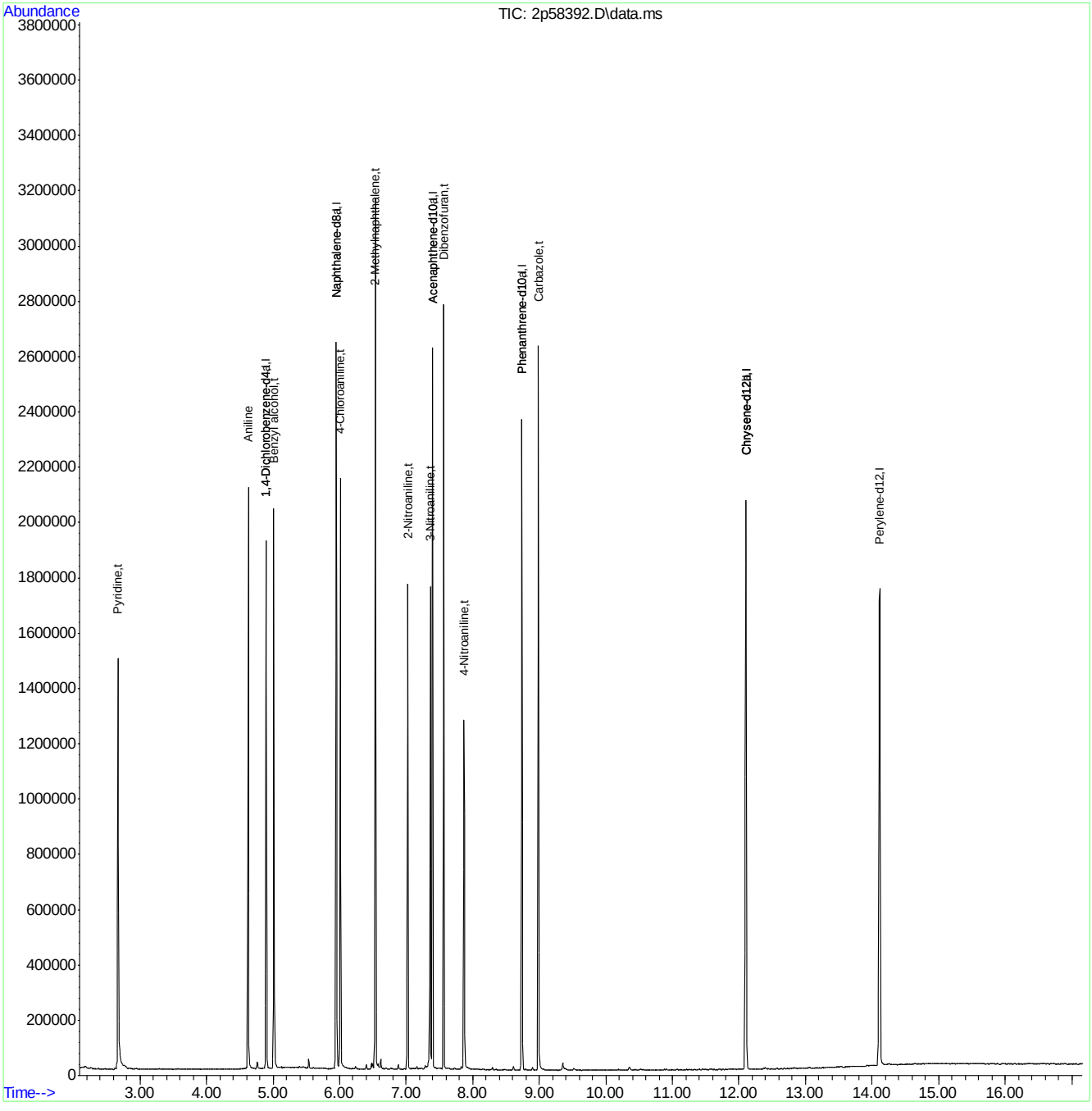
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2549\
Data File : 2p58392.D
Acq On : 20 Apr 2016 10:16 am
Operator : robertl1
Sample : ICV2547-50
Misc : op92038,e2p2549
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 20 17:38:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2547.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2557\
Data File : 2p58525.D
Acq On : 25 Apr 2016 10:22 am
Operator : robertl1
Sample : ICC2557-50
Misc : op92038,e2p2557
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 25 15:45:18 2016
Quant Method : C:\msdchem\1\METHODS\M2P2557eph.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.809	152	210785	40.00	ppm	-0.10
24) Naphthalene-d8	5.868	136	780127	40.00	ppm	-0.10
47) Acenaphthene-d10	7.318	164	451928	40.00	ppm	-0.10
69) Phenanthrene-d10	8.644	188	724906	40.00	ppm	-0.12
83) Chrysene-d12	11.993	240	700654	40.00	ppm	-0.14
92) Perylene-d12	13.998	264	599425	40.00	ppm	-0.15
102) 1,4-Dichlorobenzene-d4a	4.809	152	210785	40.00	ppm	-0.10
104) Naphthalene-d8a	5.868	136	780127	40.00	ppm	-0.10
106) Acenaphthene-d10a	7.318	164	451928	40.00	ppm	-0.10
109) Chrysene-d12a	11.993	240	700654	40.00	ppm	-0.14
111) Phenanthrene-d10a	8.644	188	724906	40.00	ppm	-0.12
114) Chrysene-d12b	11.993	240	700654	40.00	ppm	-0.14
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery	=	0.00%#	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000	Range 10 - 59		Recovery	=	0.00%#	
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 19 - 61		Recovery	=	0.00%#	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000	Range 21 - 58		Recovery	=	0.00%#	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000	Range 12 - 68		Recovery	=	0.00%#	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery	=	0.00%#	
112) 1-chlorooctadecane	9.923	57	406226	48.49	ppm	-0.13
113) O-terphenyl	9.056	230	439297	46.83	ppm	-0.13
Target Compounds						Qvalue
103) Benzaldehyde	4.446	105	280046	46.60	ppm	95
105) Hydroquinone	6.216	110	366939	57.73	ppm	93
107) Atrazine	8.377	215	87502	46.97	ppm	98
108) 1,2,4,5-Tetrachloroben...	6.596	216	281200	41.97	ppm	97
110) Benzidine	10.212	184	62695	7.13	ppm	100

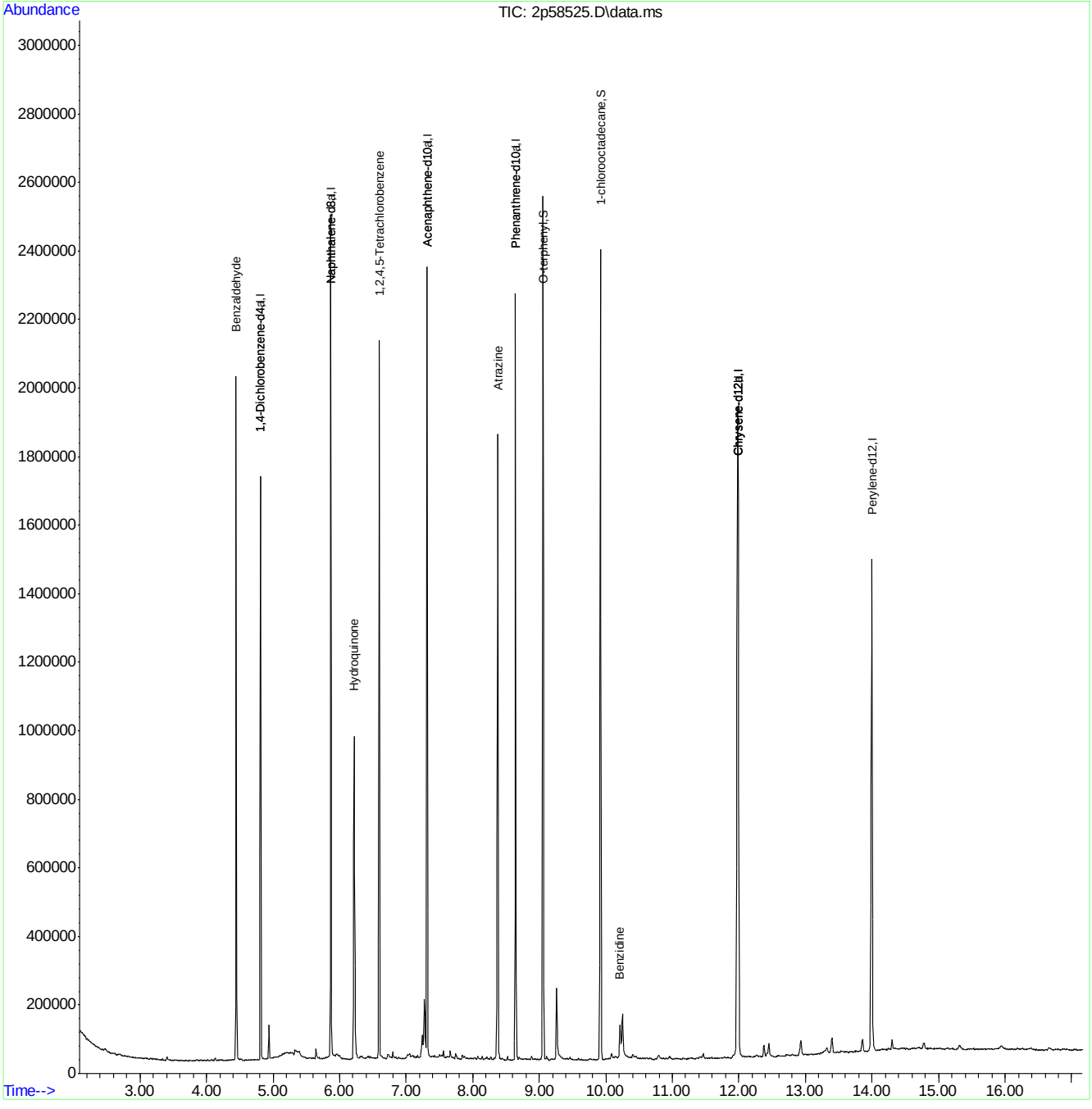
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2557\
Data File : 2p58525.D
Acq On : 25 Apr 2016 10:22 am
Operator : robertl1
Sample : ICC2557-50
Misc : op92038,e2p2557
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 25 15:45:18 2016
Quant Method : C:\msdchem\1\METHODS\M2P2557eph.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration



M2P2557eph.M Mon Apr 25 15:45:36 2016 RPT1 Page: 2

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2557\
Data File : 2p58526.D
Acq On : 25 Apr 2016 10:45 am
Operator : robertl1
Sample : IC2557-25
Misc : op92038,e2p2557
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 25 15:46:04 2016
Quant Method : C:\msdchem\1\METHODS\M2P2557eph.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration

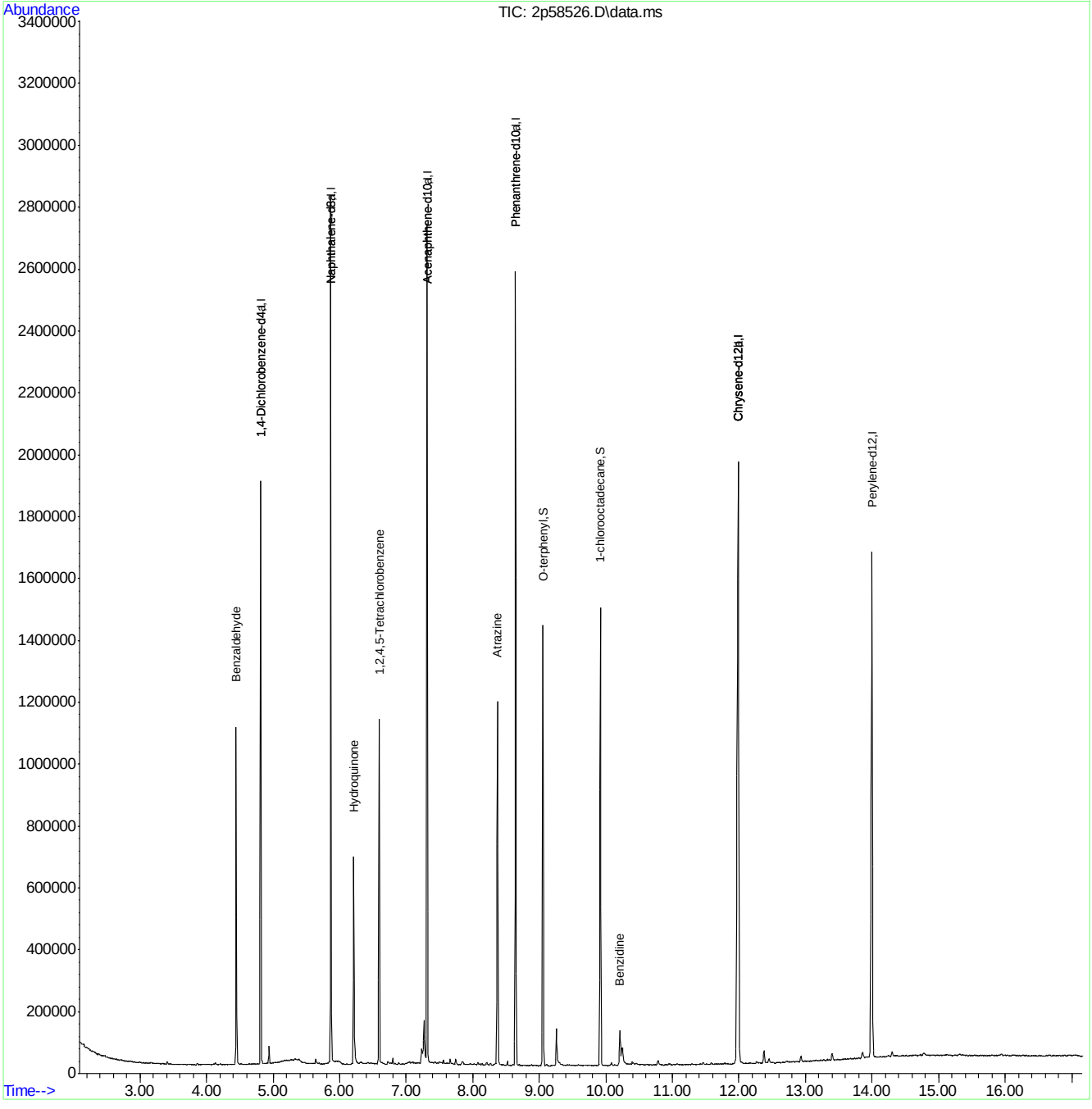
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.815	152	246041	40.00	ppm	-0.10
24) Naphthalene-d8	5.868	136	907811	40.00	ppm	-0.10
47) Acenaphthene-d10	7.318	164	525894	40.00	ppm	-0.10
69) Phenanthrene-d10	8.644	188	840983	40.00	ppm	-0.12
83) Chrysene-d12	11.992	240	837299	40.00	ppm	-0.14
92) Perylene-d12	13.998	264	720795	40.00	ppm	-0.15
102) 1,4-Dichlorobenzene-d4a	4.815	152	246041	40.00	ppm	-0.10
104) Naphthalene-d8a	5.868	136	907811	40.00	ppm	-0.10
106) Acenaphthene-d10a	7.318	164	525894	40.00	ppm	-0.10
109) Chrysene-d12a	11.992	240	837299	40.00	ppm	-0.14
111) Phenanthrene-d10a	8.644	188	840983	40.00	ppm	-0.12
114) Chrysene-d12b	11.992	240	837299	40.00	ppm	-0.14
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery	=	0.00%#	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000	Range 10 - 59		Recovery	=	0.00%#	
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 19 - 61		Recovery	=	0.00%#	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000	Range 21 - 58		Recovery	=	0.00%#	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000	Range 12 - 68		Recovery	=	0.00%#	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery	=	0.00%#	
112) 1-chlorooctadecane	9.917	57	247327	25.45	ppm	-0.14
113) O-terphenyl	9.056	230	265414	24.39	ppm	-0.13
Target Compounds						Qvalue
103) Benzaldehyde	4.446	105	157397	22.44	ppm	93
105) Hydroquinone	6.211	110	213942	28.93	ppm	92
107) Atrazine	8.371	215	52297	24.12	ppm	95
108) 1,2,4,5-Tetrachloroben...	6.596	216	163420	20.96	ppm	97
110) Benzidine	10.211	184	66265	6.30	ppm	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2557\
Data File : 2p58526.D
Acq On : 25 Apr 2016 10:45 am
Operator : robertl1
Sample : IC2557-25
Misc : op92038,e2p2557
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 25 15:46:04 2016
Quant Method : C:\msdchem\1\METHODS\M2P2557eph.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration



M2P2557eph.M Mon Apr 25 15:46:28 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2557\
Data File : 2p58527.D
Acq On : 25 Apr 2016 11:08 am
Operator : robertl1
Sample : IC2557-80
Misc : op92038,e2p2557
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 25 15:46:55 2016
Quant Method : C:\msdchem\1\METHODS\M2P2557eph.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration

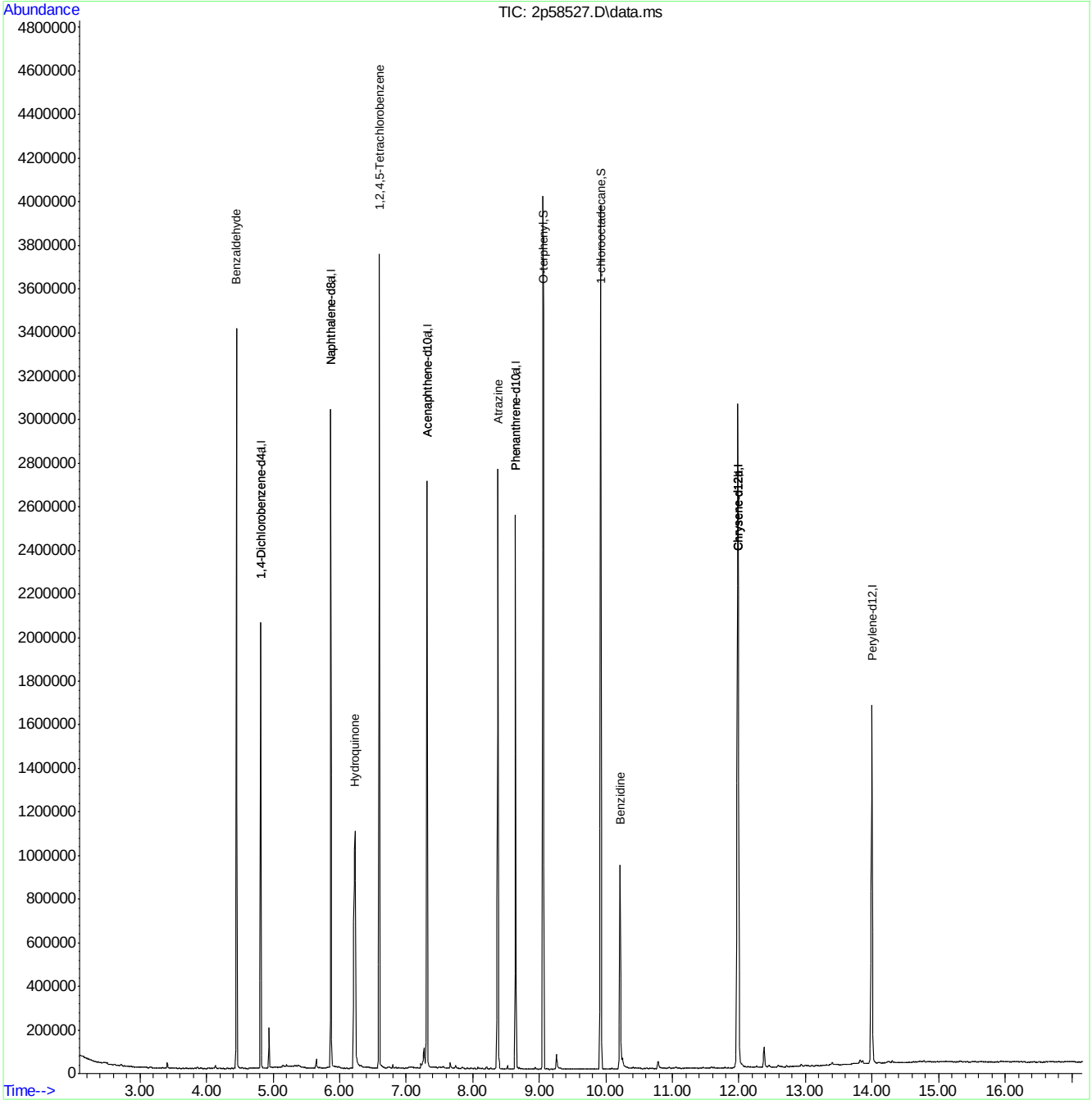
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.815	152	252460	40.00	ppm	-0.10
24) Naphthalene-d8	5.868	136	949507	40.00	ppm	-0.10
47) Acenaphthene-d10	7.312	164	527324	40.00	ppm	-0.10
69) Phenanthrene-d10	8.644	188	830458	40.00	ppm	-0.12
83) Chrysene-d12	11.993	240	781207	40.00	ppm	-0.14
92) Perylene-d12	13.998	264	708124	40.00	ppm	-0.15
102) 1,4-Dichlorobenzene-d4a	4.815	152	252460	40.00	ppm	-0.10
104) Naphthalene-d8a	5.868	136	949507	40.00	ppm	-0.10
106) Acenaphthene-d10a	7.312	164	527324	40.00	ppm	-0.10
109) Chrysene-d12a	11.993	240	781207	40.00	ppm	-0.14
111) Phenanthrene-d10a	8.644	188	830458	40.00	ppm	-0.12
114) Chrysene-d12b	11.993	240	781207	40.00	ppm	-0.14
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0d	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery	=	0.00%#	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000	Range 10 - 59		Recovery	=	0.00%#	
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 19 - 61		Recovery	=	0.00%#	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000	Range 21 - 58		Recovery	=	0.00%#	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000	Range 12 - 68		Recovery	=	0.00%#	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery	=	0.00%#	
112) 1-chlorooctadecane	9.923	57	689685	71.87	ppm	-0.13
113) O-terphenyl	9.056	230	794047	73.89	ppm	-0.13
Target Compounds						Qvalue
103) Benzaldehyde	4.451	105	500263	69.50	ppm	97
105) Hydroquinone	6.232	110	677143	87.54	ppm	94
107) Atrazine	8.382	215	155796	71.67	ppm	92
108) 1,2,4,5-Tetrachloroben...	6.596	216	505495	64.65	ppm	99
110) Benzidine	10.217	184	435667	44.43	ppm	99

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2557\
Data File : 2p58527.D
Acq On : 25 Apr 2016 11:08 am
Operator : robertl1
Sample : IC2557-80
Misc : op92038,e2p2557
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 25 15:46:55 2016
Quant Method : C:\msdchem\1\METHODS\M2P2557eph.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2557\
Data File : 2p58528.D
Acq On : 25 Apr 2016 11:31 am
Operator : robertl1
Sample : IC2557-10
Misc : op92038,e2p2557
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 25 15:47:39 2016
Quant Method : C:\msdchem\1\METHODS\M2P2557eph.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration

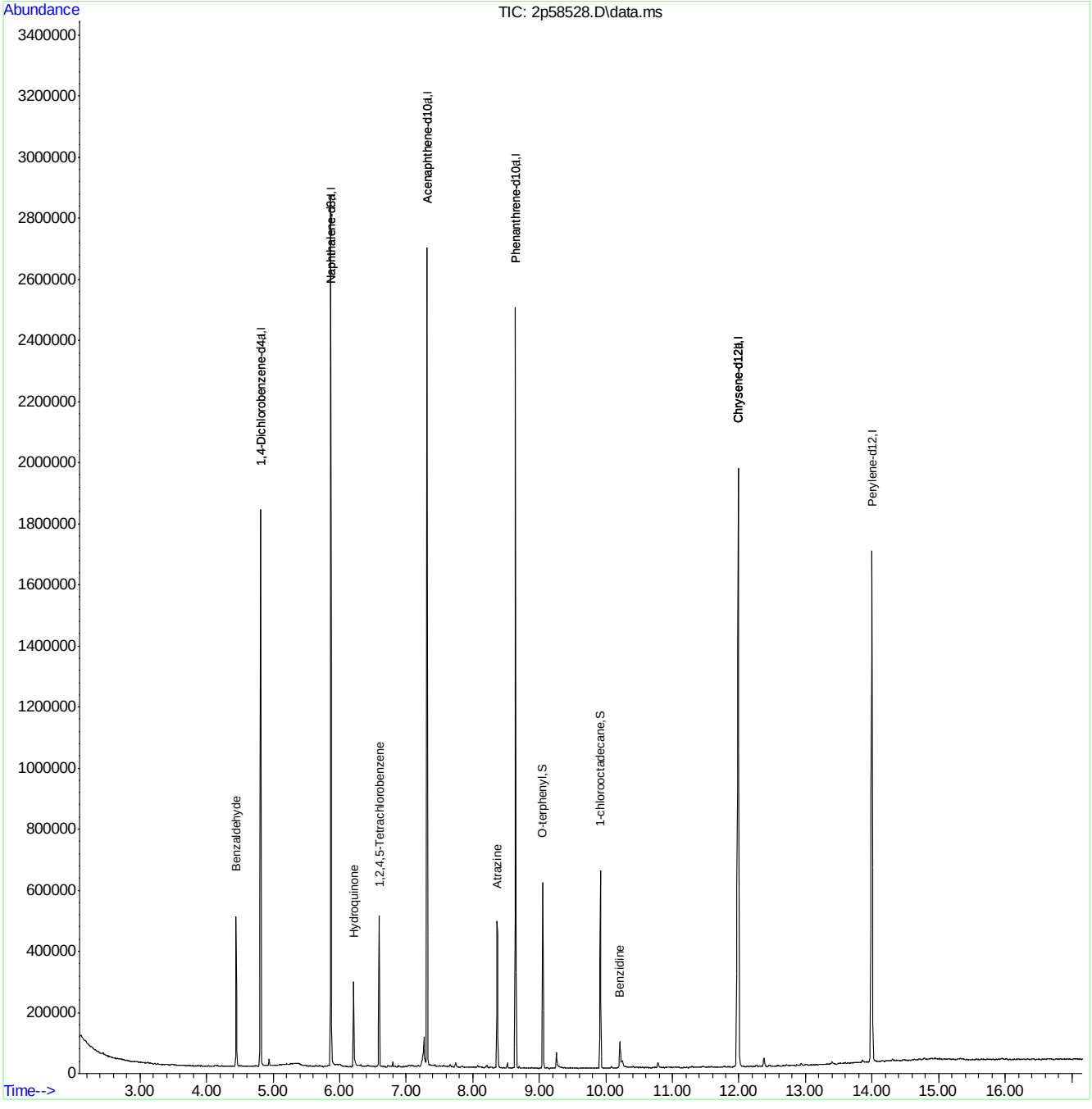
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.815	152	246164	40.00	ppm	-0.10
24) Naphthalene-d8	5.868	136	909359	40.00	ppm	-0.10
47) Acenaphthene-d10	7.312	164	511817	40.00	ppm	-0.10
69) Phenanthrene-d10	8.644	188	826682	40.00	ppm	-0.12
83) Chrysene-d12	11.992	240	829497	40.00	ppm	-0.14
92) Perylene-d12	13.998	264	726302	40.00	ppm	-0.15
102) 1,4-Dichlorobenzene-d4a	4.815	152	246164	40.00	ppm	-0.10
104) Naphthalene-d8a	5.868	136	909359	40.00	ppm	-0.10
106) Acenaphthene-d10a	7.312	164	511817	40.00	ppm	-0.10
109) Chrysene-d12a	11.992	240	829497	40.00	ppm	-0.14
111) Phenanthrene-d10a	8.644	188	826682	40.00	ppm	-0.12
114) Chrysene-d12b	11.992	240	829497	40.00	ppm	-0.14
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery = 0.00%#			
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000	Range 10 - 59		Recovery = 0.00%#			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 19 - 61		Recovery = 0.00%#			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000	Range 21 - 58		Recovery = 0.00%#			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000	Range 12 - 68		Recovery = 0.00%#			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery = 0.00%#			
112) 1-chlorooctadecane	9.917	57	103576	10.84	ppm	-0.14
113) O-terphenyl	9.051	230	111751	10.45	ppm	-0.13
Target Compounds						Qvalue
103) Benzaldehyde	4.446	105	66690	9.50	ppm	94
105) Hydroquinone	6.211	110	86668	11.70	ppm	98
107) Atrazine	8.371	215	21398	10.14	ppm	92
108) 1,2,4,5-Tetrachloroben...	6.596	216	70041	9.23	ppm	98
110) Benzidine	10.211	184	46539	4.47	ppm	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2557\
Data File : 2p58528.D
Acq On : 25 Apr 2016 11:31 am
Operator : robertl1
Sample : IC2557-10
Misc : op92038,e2p2557
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 25 15:47:39 2016
Quant Method : C:\msdchem\1\METHODS\M2P2557eph.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2557\
Data File : 2p58529.D
Acq On : 25 Apr 2016 11:54 am
Operator : robertl1
Sample : IC2557-100
Misc : op92038,e2p2557
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 25 15:48:23 2016
Quant Method : C:\msdchem\1\METHODS\M2P2557eph.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration

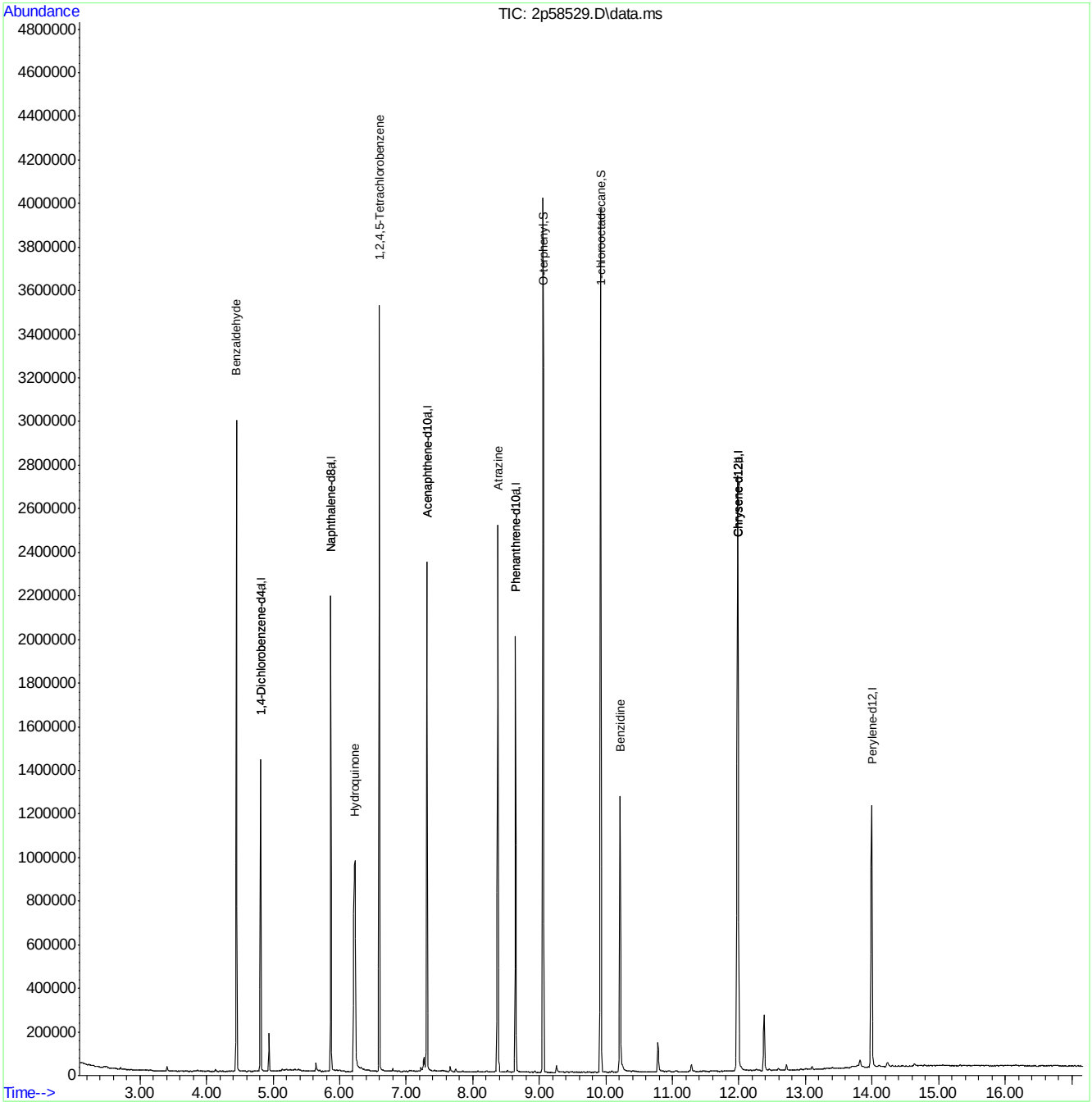
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.815	152	191917	40.00	ppm	-0.10
24) Naphthalene-d8	5.868	136	708560	40.00	ppm	-0.10
47) Acenaphthene-d10	7.312	164	408665	40.00	ppm	-0.10
69) Phenanthrene-d10	8.644	188	643957	40.00	ppm	-0.12
83) Chrysene-d12	11.987	240	622500	40.00	ppm	-0.15
92) Perylene-d12	13.998	264	541475	40.00	ppm	-0.15
102) 1,4-Dichlorobenzene-d4a	4.815	152	191917	40.00	ppm	-0.10
104) Naphthalene-d8a	5.868	136	708560	40.00	ppm	-0.10
106) Acenaphthene-d10a	7.312	164	408665	40.00	ppm	-0.10
109) Chrysene-d12a	11.987	240	622500	40.00	ppm	-0.15
111) Phenanthrene-d10a	8.644	188	643957	40.00	ppm	-0.12
114) Chrysene-d12b	11.987	240	622500	40.00	ppm	-0.15
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery = 0.00%#			
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000	Range 10 - 59		Recovery = 0.00%#			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 19 - 61		Recovery = 0.00%#			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000	Range 21 - 58		Recovery = 0.00%#			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000	Range 12 - 68		Recovery = 0.00%#			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery = 0.00%#			
112) 1-chlorooctadecane	9.923	57	664269	89.26	ppm	-0.13
113) O-terphenyl	9.056	230	761229	91.35	ppm	-0.13
Target Compounds						Qvalue
103) Benzaldehyde	4.451	105	464616	84.91	ppm	97
105) Hydroquinone	6.232	110	657268	113.86	ppm	96
107) Atrazine	8.382	215	152040	90.25	ppm	92
108) 1,2,4,5-Tetrachloroben...	6.596	216	484135	79.90	ppm	98
110) Benzidine	10.217	184	559965	71.66	ppm	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2557\
Data File : 2p58529.D
Acq On : 25 Apr 2016 11:54 am
Operator : robertl1
Sample : IC2557-100
Misc : op92038,e2p2557
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 25 15:48:23 2016
Quant Method : C:\msdchem\1\METHODS\M2P2557eph.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration



M2P2557eph.M Mon Apr 25 15:48:47 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2557\
Data File : 2p58530.D
Acq On : 25 Apr 2016 12:17 pm
Operator : robertl1
Sample : IC2557-5
Misc : op92038,e2p2557
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 25 15:49:14 2016
Quant Method : C:\msdchem\1\METHODS\M2P2557eph.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.815	152	254002	40.00	ppm	-0.10
24) Naphthalene-d8	5.868	136	954242	40.00	ppm	-0.10
47) Acenaphthene-d10	7.318	164	554588	40.00	ppm	-0.10
69) Phenanthrene-d10	8.644	188	883977	40.00	ppm	-0.12
83) Chrysene-d12	11.992	240	869272	40.00	ppm	-0.14
92) Perylene-d12	13.998	264	753491	40.00	ppm	-0.15
102) 1,4-Dichlorobenzene-d4a	4.815	152	254002	40.00	ppm	-0.10
104) Naphthalene-d8a	5.868	136	954242	40.00	ppm	-0.10
106) Acenaphthene-d10a	7.318	164	554588	40.00	ppm	-0.10
109) Chrysene-d12a	11.992	240	869272	40.00	ppm	-0.14
111) Phenanthrene-d10a	8.644	188	883977	40.00	ppm	-0.12
114) Chrysene-d12b	11.992	240	869272	40.00	ppm	-0.14
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery = 0.00%#			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000	Range 10 - 59		Recovery = 0.00%#			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 19 - 61		Recovery = 0.00%#			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000	Range 21 - 58		Recovery = 0.00%#			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000	Range 12 - 68		Recovery = 0.00%#			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery = 0.00%#			
112) 1-chlorooctadecane	9.917	57	50915	4.98	ppm	-0.14
113) O-terphenyl	9.051	230	55642	4.86	ppm	-0.13
Target Compounds						Qvalue
103) Benzaldehyde	4.445	105	33074	4.57	ppm	94
105) Hydroquinone	6.210	110	41514	5.34	ppm	97
107) Atrazine	8.366	215	10872	4.76	ppm	93
108) 1,2,4,5-Tetrachloroben...	6.596	216	34377	4.18	ppm	98
110) Benzidine	10.211	184	28927	2.65	ppm	97

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

7.6.20

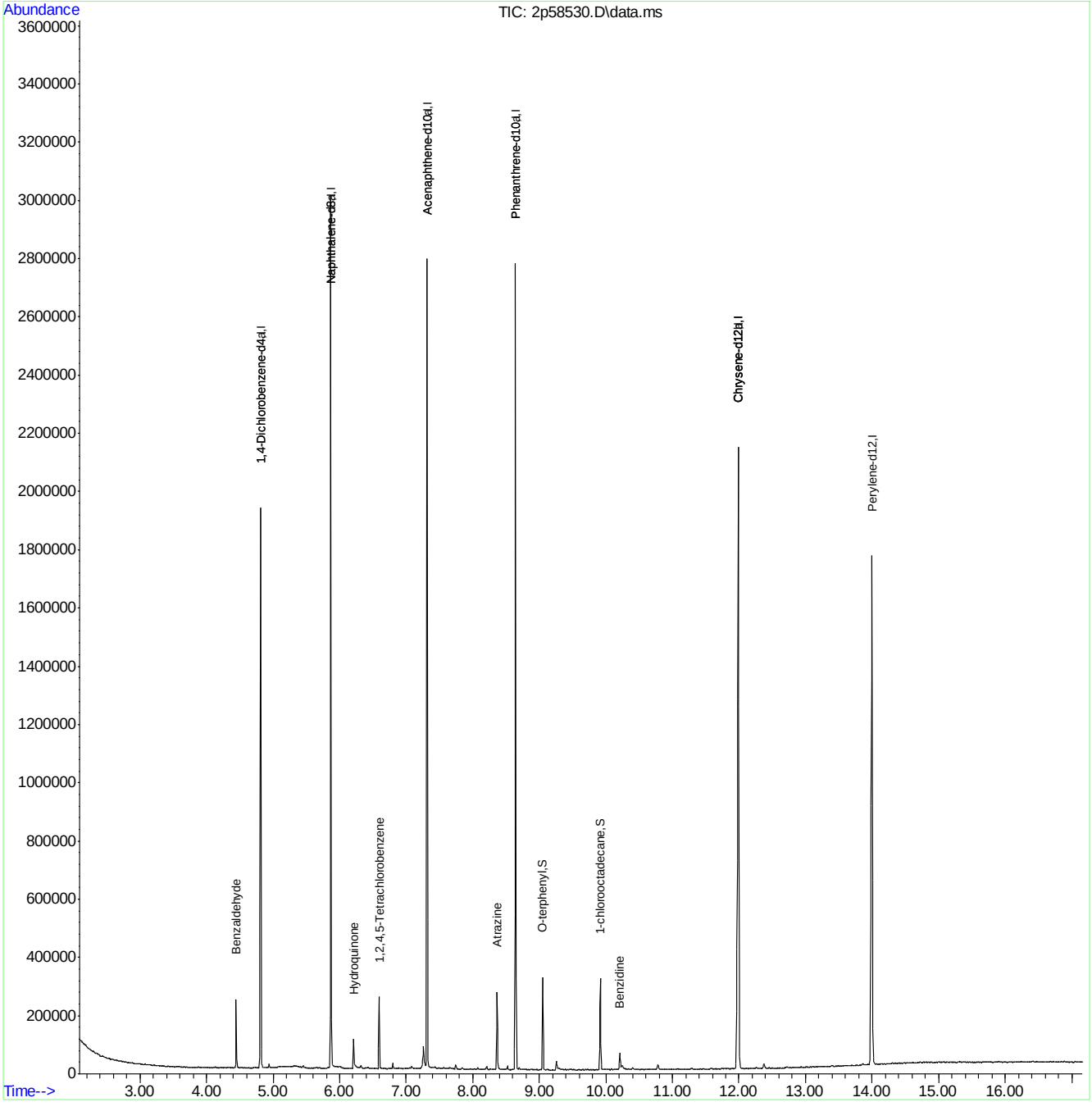
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2557\
Data File : 2p58530.D
Acq On : 25 Apr 2016 12:17 pm
Operator : robertl1
Sample : IC2557-5
Misc : op92038,e2p2557
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 25 15:49:14 2016
Quant Method : C:\msdchem\1\METHODS\M2P2557eph.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2557\
Data File : 2p58531.D
Acq On : 25 Apr 2016 12:41 pm
Operator : robertl1
Sample : IC2557-1
Misc : op92038,e2p2557
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 25 15:49:59 2016
Quant Method : C:\msdchem\1\METHODS\M2P2557eph.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.809	152	207448	40.00	ppm	-0.10
24) Naphthalene-d8	5.868	136	782304	40.00	ppm	-0.10
47) Acenaphthene-d10	7.312	164	444439	40.00	ppm	-0.10
69) Phenanthrene-d10	8.644	188	716156	40.00	ppm	-0.12
83) Chrysene-d12	11.987	240	690049	40.00	ppm	-0.15
92) Perylene-d12	13.998	264	599447	40.00	ppm	-0.15
102) 1,4-Dichlorobenzene-d4a	4.809	152	207448	40.00	ppm	-0.10
104) Naphthalene-d8a	5.868	136	782304	40.00	ppm	-0.10
106) Acenaphthene-d10a	7.312	164	444439	40.00	ppm	-0.10
109) Chrysene-d12a	11.987	240	690049	40.00	ppm	-0.15
111) Phenanthrene-d10a	8.644	188	716156	40.00	ppm	-0.12
114) Chrysene-d12b	11.987	240	690049	40.00	ppm	-0.15
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery = 0.00%#			
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000	Range 10 - 59		Recovery = 0.00%#			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 19 - 61		Recovery = 0.00%#			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000	Range 21 - 58		Recovery = 0.00%#			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000	Range 12 - 68		Recovery = 0.00%#			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery = 0.00%#			
112) 1-chlorooctadecane	9.917	57	8255	1.00	ppm	-0.14
113) O-terphenyl	9.051	230	8883	0.96	ppm	-0.13
Target Compounds						Qvalue
103) Benzaldehyde	4.446	105	5722	0.97	ppm	93
105) Hydroquinone	6.216	110	6908	1.08	ppm #	91
107) Atrazine	8.366	215	1610	0.88	ppm	89
108) 1,2,4,5-Tetrachloroben...	6.590	216	5454	0.83	ppm	86
110) Benzidine	10.217	184	2604	0.30	ppm	85

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

7.6.21

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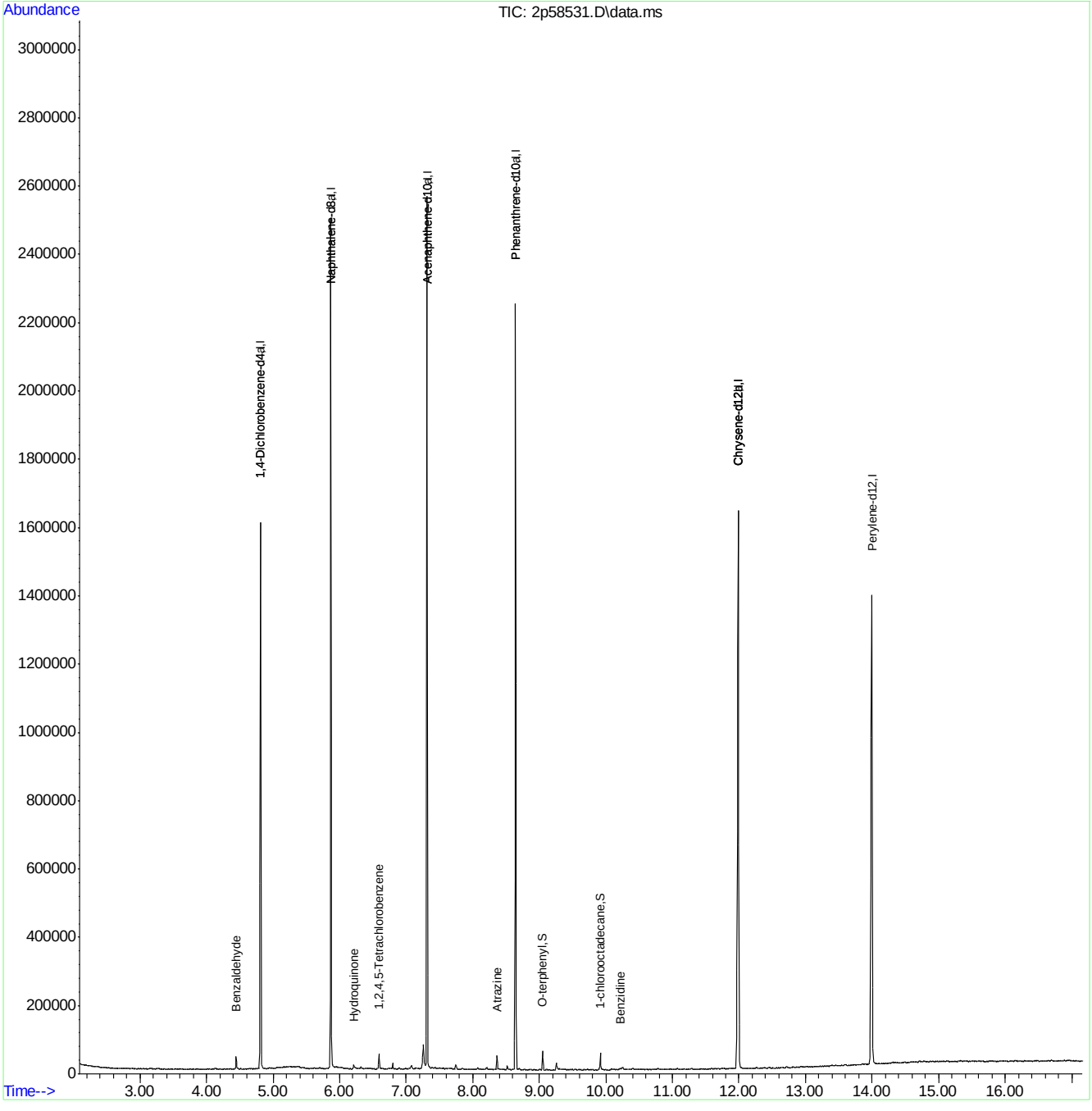
SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2557\
Data File : 2p58531.D
Acq On : 25 Apr 2016 12:41 pm
Operator : robertl1
Sample : IC2557-1
Misc : op92038,e2p2557
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 25 15:49:59 2016
Quant Method : C:\msdchem\1\METHODS\M2P2557eph.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration



M2P2557eph.M Mon Apr 25 15:50:17 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2557\
Data File : 2p58532.D
Acq On : 25 Apr 2016 1:04 pm
Operator : robertl1
Sample : IC2557-2
Misc : op92038,e2p2557
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 25 15:50:44 2016
Quant Method : C:\msdchem\1\METHODS\M2P2557eph.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.815	152	245343	40.00	ppm	-0.10
24) Naphthalene-d8	5.868	136	913963	40.00	ppm	-0.10
47) Acenaphthene-d10	7.318	164	534908	40.00	ppm	-0.10
69) Phenanthrene-d10	8.644	188	853336	40.00	ppm	-0.12
83) Chrysene-d12	11.993	240	840984	40.00	ppm	-0.14
92) Perylene-d12	13.998	264	737999	40.00	ppm	-0.15
102) 1,4-Dichlorobenzene-d4a	4.815	152	245343	40.00	ppm	-0.10
104) Naphthalene-d8a	5.868	136	913963	40.00	ppm	-0.10
106) Acenaphthene-d10a	7.318	164	534908	40.00	ppm	-0.10
109) Chrysene-d12a	11.993	240	840984	40.00	ppm	-0.14
111) Phenanthrene-d10a	8.644	188	853336	40.00	ppm	-0.12
114) Chrysene-d12b	11.993	240	840984	40.00	ppm	-0.14
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery = 0.00%#			
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000	Range 10 - 59		Recovery = 0.00%#			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 19 - 61		Recovery = 0.00%#			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000	Range 21 - 58		Recovery = 0.00%#			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000	Range 12 - 68		Recovery = 0.00%#			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery = 0.00%#			
112) 1-chlorooctadecane	9.917	57	19896	2.02	ppm	-0.14
113) O-terphenyl	9.051	230	21360	1.93	ppm	-0.13
Target Compounds						Qvalue
103) Benzaldehyde	4.446	105	13122	1.88	ppm	98
105) Hydroquinone	6.211	110	15637	2.10	ppm	96
107) Atrazine	8.366	215	4113	1.87	ppm	95
108) 1,2,4,5-Tetrachloroben...	6.590	216	13205	1.66	ppm	95
110) Benzidine	10.211	184	11902	1.13	ppm	97

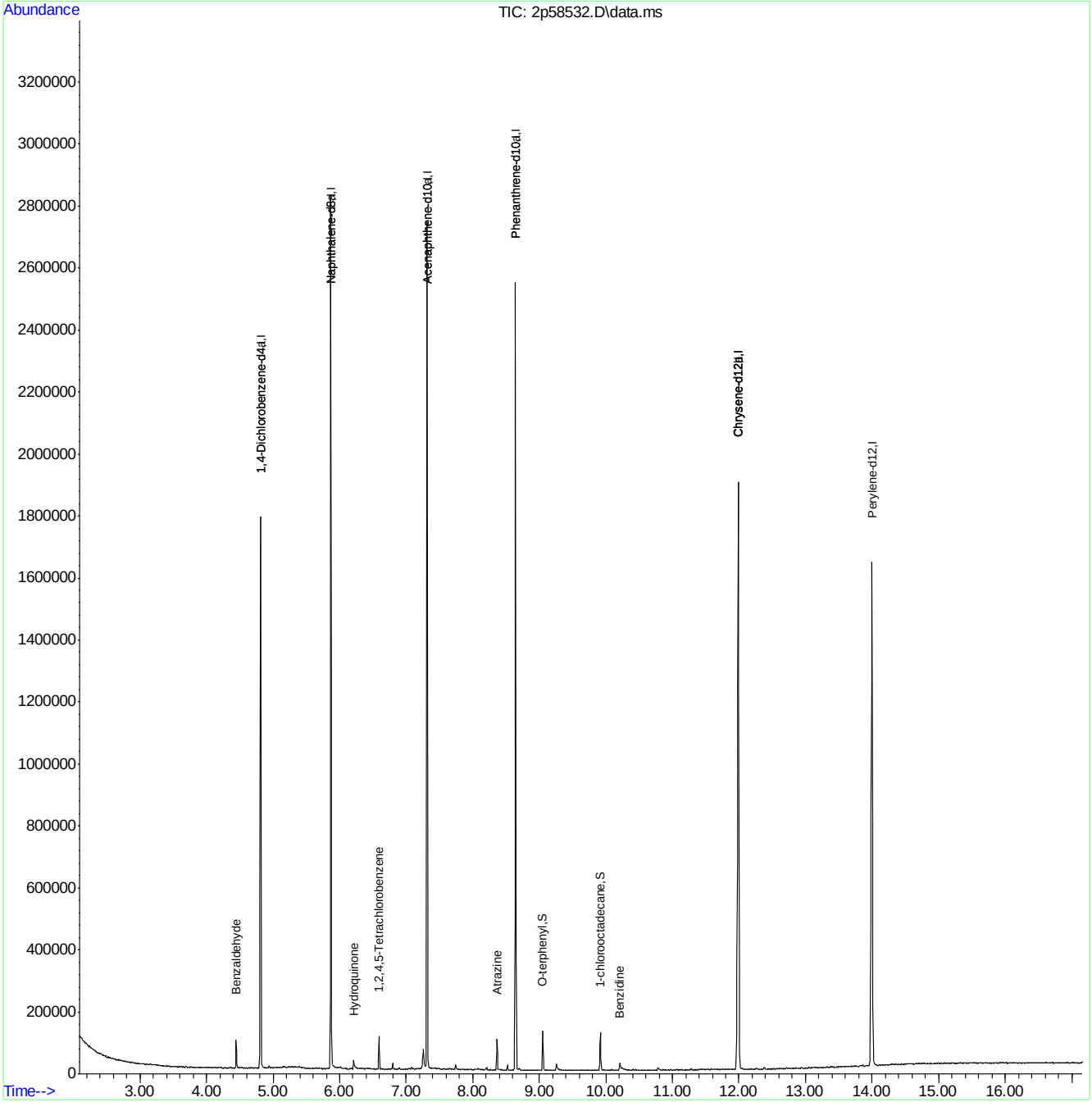
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2557\
Data File : 2p58532.D
Acq On : 25 Apr 2016 1:04 pm
Operator : robertl1
Sample : IC2557-2
Misc : op92038,e2p2557
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 25 15:50:44 2016
Quant Method : C:\msdchem\1\METHODS\M2P2557eph.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Wed Apr 20 08:45:45 2016
Response via : Initial Calibration



M2P2557eph.M Mon Apr 25 15:51:09 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2557\
Data File : 2p58534.D
Acq On : 25 Apr 2016 1:51 pm
Operator : robertl1
Sample : ICV2557-50
Misc : op92038,e2p2557
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 25 17:51:01 2016
Quant Method : C:\msdchem\1\METHODS\M2P2557eph.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Apr 25 15:59:04 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.809	152	215273	40.00	ppm	-0.10
24) Naphthalene-d8	5.868	136	771421	40.00	ppm	-0.10
47) Acenaphthene-d10	7.312	164	425062	40.00	ppm	-0.10
69) Phenanthrene-d10	8.644	188	676522	40.00	ppm	-0.12
83) Chrysene-d12	11.987	240	663177	40.00	ppm	-0.15
92) Perylene-d12	13.998	264	578454	40.00	ppm	-0.15
102) 1,4-Dichlorobenzene-d4a	4.809	152	215273	40.00	ppm	-0.10
104) Naphthalene-d8a	5.868	136	771421	40.00	ppm	-0.10
106) Acenaphthene-d10a	7.312	164	425062	40.00	ppm	-0.10
109) Chrysene-d12a	11.987	240	663177	40.00	ppm	-0.15
111) Phenanthrene-d10a	8.644	188	676522	40.00	ppm	-0.12
114) Chrysene-d12b	11.987	240	663177	40.00	ppm	-0.15
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery = 0.00%#			
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000	Range 10 - 59		Recovery = 0.00%#			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 19 - 61		Recovery = 0.00%#			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000	Range 21 - 58		Recovery = 0.00%#			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000	Range 12 - 68		Recovery = 0.00%#			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery = 0.00%#			
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
113) O-terphenyl	0.000	230	0	0.00	ppm	
Target Compounds						Qvalue
105) Hydroquinone	6.211	110	359765	51.36	ppm	96

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

7.6.23

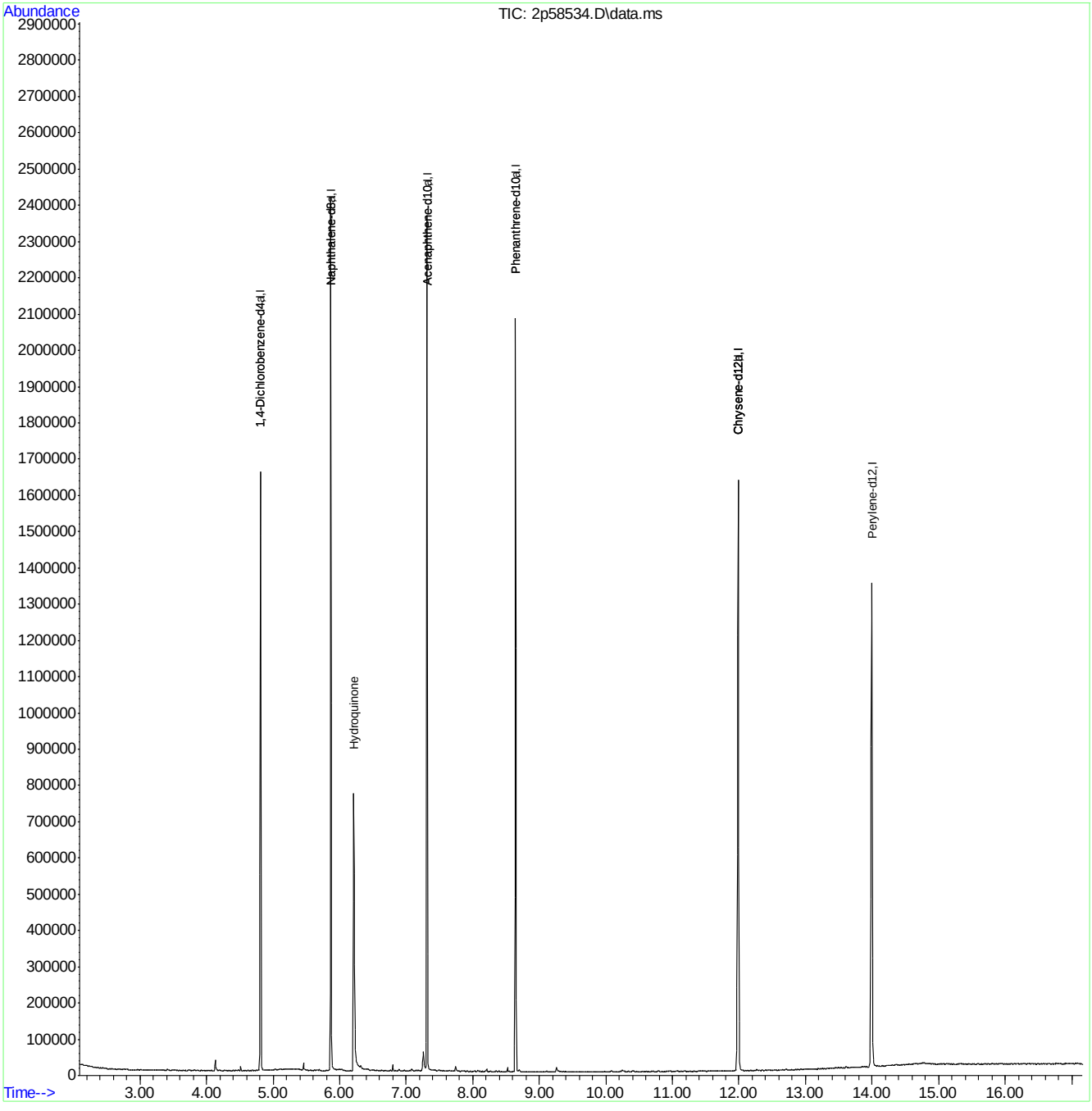
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2557\
Data File : 2p58534.D
Acq On : 25 Apr 2016 1:51 pm
Operator : robertl1
Sample : ICV2557-50
Misc : op92038,e2p2557
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 25 17:51:01 2016
Quant Method : C:\msdchem\1\METHODS\M2P2557eph.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Apr 25 15:59:04 2016
Response via : Initial Calibration



M2P2557eph.M Mon Apr 25 17:51:25 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2557\
Data File : 2p58536a.D
Acq On : 25 Apr 2016 4:09 pm
Operator : robertl1
Sample : ICV2557-50
Misc : op92038,e2p2557
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 25 17:53:37 2016
Quant Method : C:\msdchem\1\METHODS\M2P2557eph.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Apr 25 15:59:04 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.815	152	216946	40.00	ppm	-0.10
24) Naphthalene-d8	5.868	136	756094	40.00	ppm	-0.10
47) Acenaphthene-d10	7.312	164	385077	40.00	ppm	-0.10
69) Phenanthrene-d10	8.644	188	583306	40.00	ppm	-0.12
83) Chrysene-d12	11.987	240	574184	40.00	ppm	-0.15
92) Perylene-d12	13.998	264	467015	40.00	ppm	-0.15
102) 1,4-Dichlorobenzene-d4a	4.815	152	216946	40.00	ppm	-0.10
104) Naphthalene-d8a	5.868	136	756094	40.00	ppm	-0.10
106) Acenaphthene-d10a	7.312	164	385077	40.00	ppm	-0.10
109) Chrysene-d12a	11.987	240	574184	40.00	ppm	-0.15
111) Phenanthrene-d10a	8.644	188	583306	40.00	ppm	-0.12
114) Chrysene-d12b	11.987	240	574184	40.00	ppm	-0.15
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery = 0.00%#			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000	Range 10 - 59		Recovery = 0.00%#			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 19 - 61		Recovery = 0.00%#			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000	Range 21 - 58		Recovery = 0.00%#			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000	Range 12 - 68		Recovery = 0.00%#			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery = 0.00%#			
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
113) O-terphenyl	0.000	230	0	0.00	ppm	
Target Compounds						Qvalue
103) Benzaldehyde	4.445	105	300760	53.17	ppm	96
107) Atrazine	8.377	215	80774	54.43	ppm	94

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

7.6.24

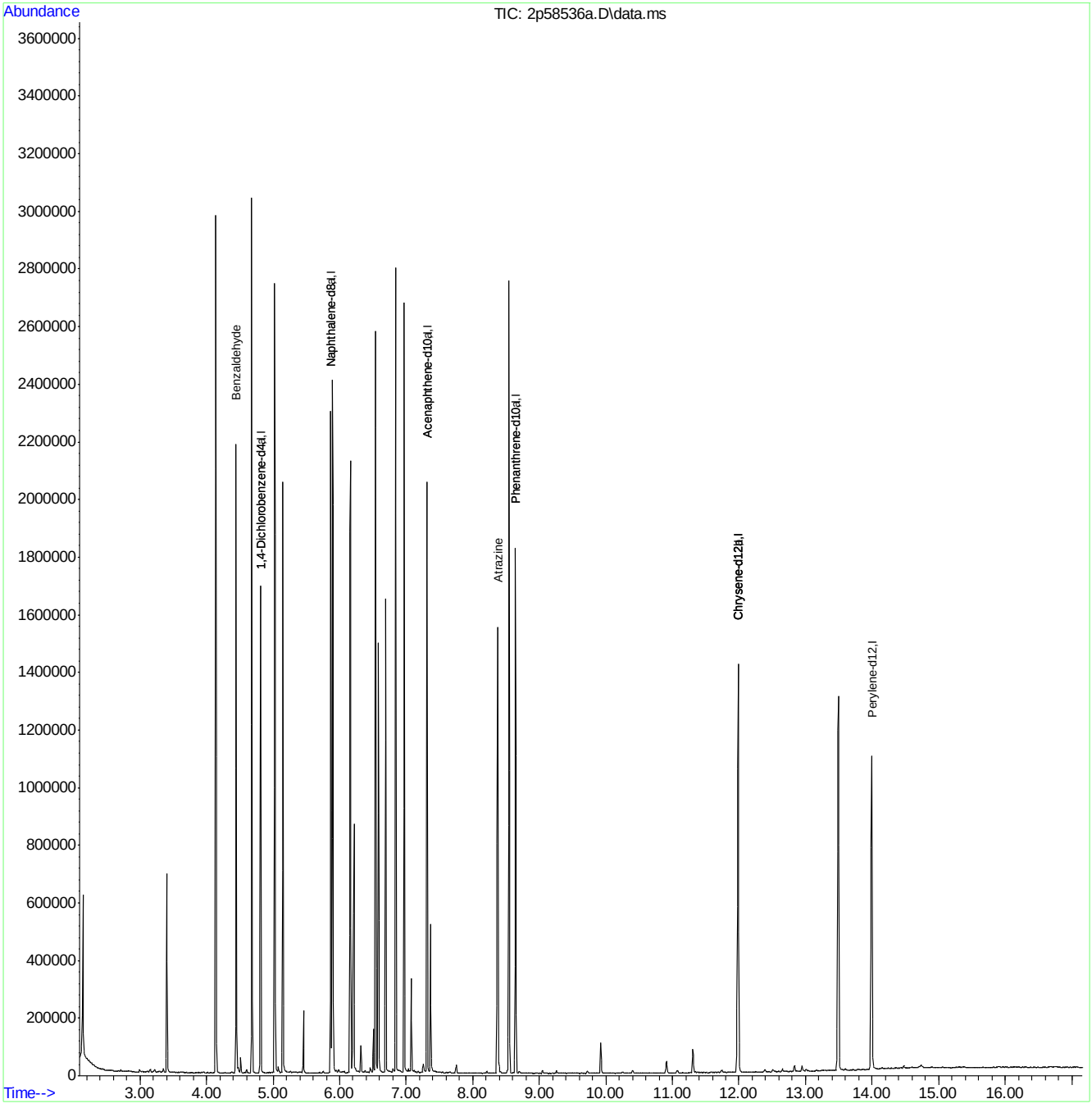
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2557\
Data File : 2p58536a.D
Acq On : 25 Apr 2016 4:09 pm
Operator : robertl1
Sample : ICV2557-50
Misc : op92038,e2p2557
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 25 17:53:37 2016
Quant Method : C:\msdchem\1\METHODS\M2P2557eph.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Apr 25 15:59:04 2016
Response via : Initial Calibration



M2P2557eph.M Mon Apr 25 17:53:51 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2559\
Data File : 2p58540.D
Acq On : 25 Apr 2016 6:59 pm
Operator : ashleyn
Sample : icv2557-50
Misc : op92038,e2p2559
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 25 19:21:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2557EPH.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Apr 25 15:59:04 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.804	152	203729	40.00	ppm	-0.11
24) Naphthalene-d8	5.858	136	658786	40.00	ppm	-0.11
47) Acenaphthene-d10	7.307	164	348719	40.00	ppm	-0.11
69) Phenanthrene-d10	8.634	188	551441	40.00	ppm	-0.13
83) Chrysene-d12	11.977	240	521504	40.00	ppm	-0.16
92) Perylene-d12	13.977	264	456321	40.00	ppm	-0.17
102) 1,4-Dichlorobenzene-d4a	4.804	152	203729	40.00	ppm	-0.11
104) Naphthalene-d8a	5.858	136	658786	40.00	ppm	-0.11
106) Acenaphthene-d10a	7.307	164	348719	40.00	ppm	-0.11
109) Chrysene-d12a	11.977	240	521504	40.00	ppm	-0.16
111) Phenanthrene-d10a	8.634	188	551441	40.00	ppm	-0.13
114) Chrysene-d12b	11.977	240	521504	40.00	ppm	-0.16
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0d	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery = 0.00%#			
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000	Range 10 - 59		Recovery = 0.00%#			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000	Range 19 - 61		Recovery = 0.00%#			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000	Range 21 - 58		Recovery = 0.00%#			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000	Range 12 - 68		Recovery = 0.00%#			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery = 0.00%#			
112) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
113) O-terphenyl	0.000	230	0	0.00	ppm	
Target Compounds						Qvalue
108) 1,2,4,5-Tetrachloroben...	6.585	216	262205	60.52	ppm	97
110) Benzidine	10.201	184	549626	191.46	ppm	98

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

7.6.25

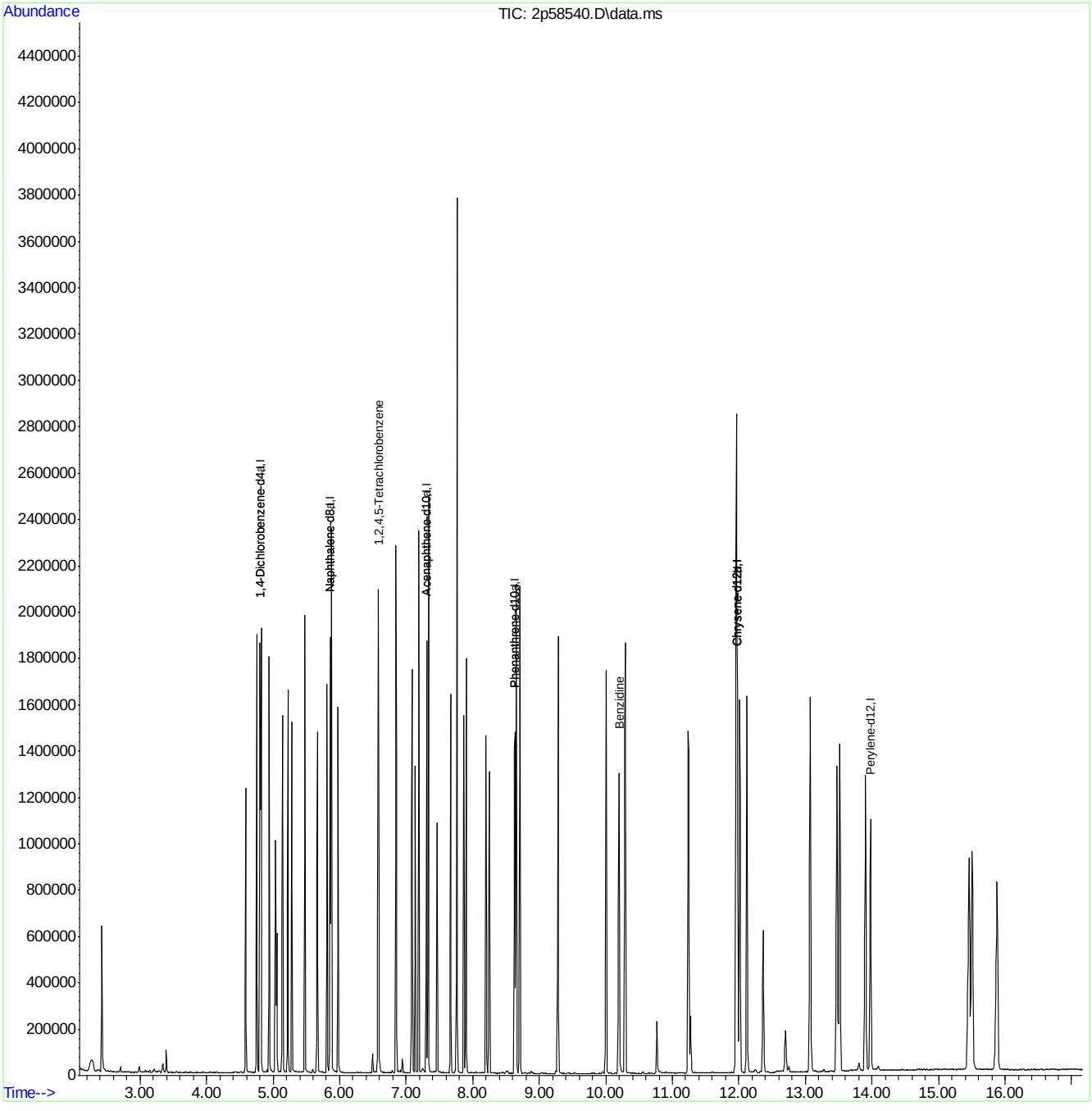
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2559\
Data File : 2p58540.D
Acq On : 25 Apr 2016 6:59 pm
Operator : ashleyn
Sample : icv2557-50
Misc : op92038,e2p2559
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 25 19:21:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2557EPH.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Mon Apr 25 15:59:04 2016
Response via : Initial Calibration



M2P2557EPH.M Mon Apr 25 19:21:43 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2566\
Data File : 2p58689.D
Acq On : 29 Apr 2016 9:31 am
Operator : robertl1
Sample : CC2547-50
Misc : op92038,e2p2566
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 29 12:20:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2557.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 29 09:54:55 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.758	152	160657	40.00	ppm	0.00
24) Naphthalene-d8	5.818	136	561853	40.00	ppm	0.00
47) Acenaphthene-d10	7.262	164	311848	40.00	ppm	0.00
69) Phenanthrene-d10	8.588	188	506731	40.00	ppm	0.00
83) Chrysene-d12	11.931	240	500083	40.00	ppm	0.00
92) Perylene-d12	13.937	264	369019	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.758	152	160657	40.00	ppm	0.00
104) Naphthalene-d8a	5.818	136	561853	40.00	ppm	0.00
106) Acenaphthene-d10a	7.262	164	311848	40.00	ppm	0.00
109) Chrysene-d12a	11.931	240	500083	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.673	112	288090	44.27	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 88.54%#			
8) Phenol-d5	4.496	99	326209	42.78	ppm	0.04
Spiked Amount 50.000	Range 10 - 59		Recovery = 85.56%#			
25) Nitrobenzene-d5	5.224	82	265021	47.84	ppm	-0.01
Spiked Amount 50.000	Range 19 - 61		Recovery = 95.68%#			
51) 2-Fluorobiphenyl	6.711	172	470087	48.45	ppm	0.00
Spiked Amount 50.000	Range 21 - 58		Recovery = 96.90%#			
73) 2,4,6-Tribromophenol	7.936	330	59952	53.29	ppm	0.00
Spiked Amount 50.000	Range 12 - 68		Recovery = 106.58%#			
85) Terphenyl-d14	10.471	244	501711	49.84	ppm	-0.03
Spiked Amount 50.000	Range 16 - 65		Recovery = 99.68%#			
Target Compounds						Qvalue
2) 1,4-Dioxane	2.057	88	111796	37.87	ppm	95
3) Pyridine	2.400	79	280634	38.44	ppm	77
4) N-Nitrosodimethylamine	2.373	74	164389	38.09	ppm #	40
6) Indene	4.972	116	420610	46.62	ppm	99
7) Cumene	4.079	105	688875	48.36	ppm	97
9) Phenol	4.507	94	345585	42.76	ppm	75
10) Aniline	4.486	93	356611	38.43	ppm	85
11) bis(2-Chloroethyl)ether	4.550	93	234118	41.11	ppm	90
12) 2-Chlorophenol	4.593	128	270000	45.80	ppm	98
13) Decane	4.625	57	399026	45.45	ppm	92
14) 1,3-Dichlorobenzene	4.710	146	305407	47.15	ppm	98
15) 1,4-Dichlorobenzene	4.775	146	299583	46.98	ppm	100
16) Benzyl alcohol	4.887	108	164166	44.47	ppm	87
17) 1,2-Dichlorobenzene	4.898	146	277941	47.17	ppm	97
18) Acetophenone	5.101	105	335978	46.42	ppm	90
19) 2-Methylphenol	4.999	108	215707	42.64	ppm	95
20) 2,2'-oxybis(1-Chloropr...	4.994	121	71909	43.31	ppm #	55
21) 3&4-Methylphenol	5.128	108	229163	43.41	ppm	95
22) n-Nitroso-di-n-propyla...	5.106	70	172129	44.77	ppm	88
23) Hexachloroethane	5.176	201	97672	50.48	ppm	86
26) Nitrobenzene	5.245	77	257467	46.06	ppm	99
27) Quinoline	6.117	129	452155	45.38	ppm	98
28) Isophorone	5.443	82	438281	43.78	ppm	92

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2566\
Data File : 2p58689.D
Acq On : 29 Apr 2016 9:31 am
Operator : robertl1
Sample : CC2547-50
Misc : op92038,e2p2566
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 29 12:20:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2557.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 29 09:54:55 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
29)	2-Nitrophenol	5.507	139	138327	50.05	ppm		76
30)	2,4-Dimethylphenol	5.561	107	228014	46.40	ppm		96
31)	Benzoic acid	5.689	105	182569	47.44	ppm		96
32)	bis(2-Chloroethoxy)met...	5.625	93	265730	42.68	ppm		93
33)	2,4-Dichlorophenol	5.721	162	209425	49.51	ppm		94
34)	2,6-Dichlorophenol	5.898	162	199546	50.09	ppm		99
35)	1,3,5-Trichlorobenzene	5.513	180	237841	48.95	ppm		98
36)	1,2,4-Trichlorobenzene	5.769	180	220955	47.40	ppm		98
37)	1,2,3-Trichlorobenzene	5.951	180	207546	47.87	ppm		94
38)	Naphthalene	5.834	128	674409	46.60	ppm		99
39)	4-Chloroaniline	5.892	127	275688	44.06	ppm		97
40)	2,3-Dichloroaniline	6.641	161	250782	48.39	ppm		91
41)	Caprolactam	6.203	113	74130	45.70	ppm	#	74
42)	Hexachlorobutadiene	5.935	225	124476	54.00	ppm		95
43)	4-Chloro-3-methylphenol	6.315	107	214985	49.52	ppm		93
44)	2-Methylnaphthalene	6.406	141	392084	48.50	ppm		93
45)	1-Methylnaphthalene	6.486	141	399771	48.24	ppm		92
46)	Dimethylnaphthalene	6.919	156	398061	48.76	ppm		91
48)	Hexachlorocyclopentadiene	6.529	237	260527	103.89	ppm		94
49)	2,4,6-Trichlorophenol	6.652	196	143014	49.58	ppm		99
50)	2,4,5-Trichlorophenol	6.695	196	152392	49.06	ppm		99
52)	2-Chloronaphthalene	6.807	162	420995	46.00	ppm		99
53)	Biphenyl	6.791	154	544631	47.42	ppm		96
54)	2-Nitroaniline	6.903	65	162402	51.08	ppm		93
55)	Dimethylphthalate	7.048	163	468833	47.18	ppm		100
56)	Acenaphthylene	7.149	152	716875	48.12	ppm		98
57)	2,6-Dinitrotoluene	7.101	165	110007	52.18	ppm		90
58)	3-Nitroaniline	7.240	138	122312	43.95	ppm		85
59)	Acenaphthene	7.294	153	440604	48.28	ppm		98
60)	2,4-Dinitrophenol	7.331	184	108974	97.93	ppm	#	100
61)	4-Nitrophenol	7.417	109	81000	64.33	ppm		86
62)	Dibenzofuran	7.433	168	581613	48.21	ppm		89
63)	2,4-Dinitrotoluene	7.433	165	149944	54.27	ppm	#	58
64)	2,3,4,6-Tetrachlorophenol	7.545	232	118886	50.31	ppm		92
65)	Diethylphthalate	7.631	149	510051	50.59	ppm		96
66)	Fluorene	7.722	166	501455	50.04	ppm		95
67)	4-Chlorophenyl-phenyle...	7.716	204	219483	50.11	ppm		88
68)	4-Nitroaniline	7.754	138	105597	38.41	ppm		90
70)	4,6-Dinitro-2-methylph...	7.775	198	78994	53.30	ppm		83
71)	n-Nitrosodiphenylamine	7.829	169	323457	47.15	ppm		96
72)	1,2-Diphenylhydrazine	7.855	77	492012	44.61	ppm		96
74)	4-Bromophenyl-phenylether	8.155	248	128592	49.86	ppm		96
75)	Hexachlorobenzene	8.208	284	134067	48.55	ppm		93
76)	Pentachlorophenol	8.406	266	166686	89.30	ppm		98
77)	Phenanthrene	8.610	178	707590	47.55	ppm		98
78)	Anthracene	8.663	178	720516	48.81	ppm		99
79)	Carbazole	8.840	167	643419	46.35	ppm		97
80)	Di-n-butylphthalate	9.230	149	937913	50.79	ppm		99
81)	Fluoranthene	9.957	202	814052	50.36	ppm		94
82)	Octadecane	8.481	43	369052	56.65	ppm		84

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2566\
Data File : 2p58689.D
Acq On : 29 Apr 2016 9:31 am
Operator : robertl1
Sample : CC2547-50
Misc : op92038,e2p2566
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 29 12:20:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2557.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 29 09:54:55 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
84)	Pyrene	10.241	202	830582	48.12	ppm	96
86)	Butylbenzylphthalate	11.182	149	433164	51.14	ppm	96
87)	Butyl stearate	11.321	56	355319	49.07	ppm	94
88)	Benzo[a]anthracene	11.915	228	733818	46.00	ppm	100
89)	3,3'-Dichlorobenzidine	11.910	252	226590	41.98	ppm	97
90)	Chrysene	11.968	228	650554	45.09	ppm	99
91)	bis(2-Ethylhexyl)phtha...	12.059	149	536338	50.64	ppm	96
93)	Di-n-octylphthalate	13.011	149	935259	55.73	ppm	99
94)	Benzo[b]fluoranthene	13.439	252	630606	49.18	ppm	92
95)	Benzo[k]fluoranthene	13.477	252	541625	48.36	ppm	89
96)	Benzo[a]pyrene	13.862	252	524859	48.24	ppm	92
97)	Indeno[1,2,3-cd]pyrene	15.408	276	455838	48.45	ppm	85
98)	Dibenz(a,h)acridine	15.076	279	390867	45.56	ppm	95
99)	Dibenz[a,h]anthracene	15.456	278	453615	48.15	ppm	91
100)	7,12-Dimethylbenz(a)an...	13.434	256	265034	50.72	ppm	98
101)	Benzo[g,h,i]perylene	15.830	276	464157	46.66	ppm	86

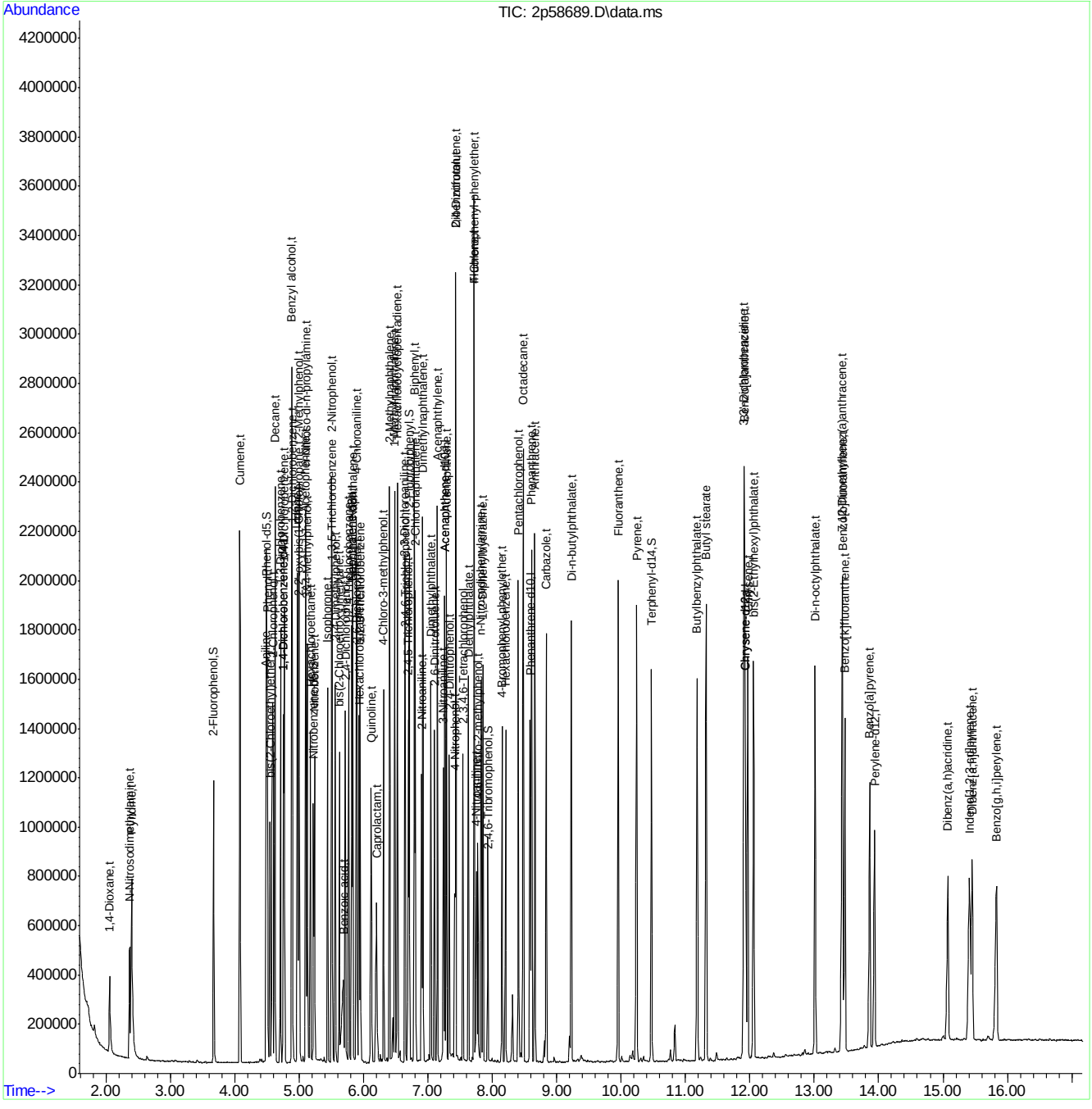
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2566\
Data File : 2p58689.D
Acq On : 29 Apr 2016 9:31 am
Operator : robertl1
Sample : CC2547-50
Misc : op92038,e2p2566
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 29 12:20:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2557.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 29 09:54:55 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2566\
Data File : 2p58690.D
Acq On : 29 Apr 2016 10:05 am
Operator : robertl1
Sample : CC2557-50
Misc : op92038,e2p2566
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 29 12:21:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2557.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 29 09:54:55 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.759	152	200977	40.00	ppm	0.00
24) Naphthalene-d8	5.812	136	723843	40.00	ppm	0.00
47) Acenaphthene-d10	7.262	164	376425	40.00	ppm	0.00
69) Phenanthrene-d10	8.583	188	619581	40.00	ppm	0.00
83) Chrysene-d12	11.921	240	558511	40.00	ppm	-0.01
92) Perylene-d12	13.937	264	406931	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.759	152	200977	40.00	ppm	0.00
104) Naphthalene-d8a	5.812	136	723843	40.00	ppm	0.00
106) Acenaphthene-d10a	7.262	164	376425	40.00	ppm	0.00
109) Chrysene-d12a	11.921	240	558511	40.00	ppm	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery	=	0.00%#	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000	Range 10 - 59		Recovery	=	0.00%#	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000	Range 19 - 61		Recovery	=	0.00%#	
51) 2-Fluorobiphenyl	0.000	172	0	0.00	ppm	
Spiked Amount 50.000	Range 21 - 58		Recovery	=	0.00%#	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000	Range 12 - 68		Recovery	=	0.00%#	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000	Range 16 - 65		Recovery	=	0.00%#	
Target Compounds						Qvalue
103) Benzaldehyde	4.395	105	266274	50.81	ppm	94
105) Hydroquinone	6.187	110	329194	50.09	ppm #	86
107) Atrazine	8.321	215	84748	58.42	ppm	92
108) 1,2,4,5-Tetrachloroben...	6.545	216	280238	59.92	ppm	98
110) Benzidine	10.145	184	126716	41.22	ppm	99

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

7.6.27

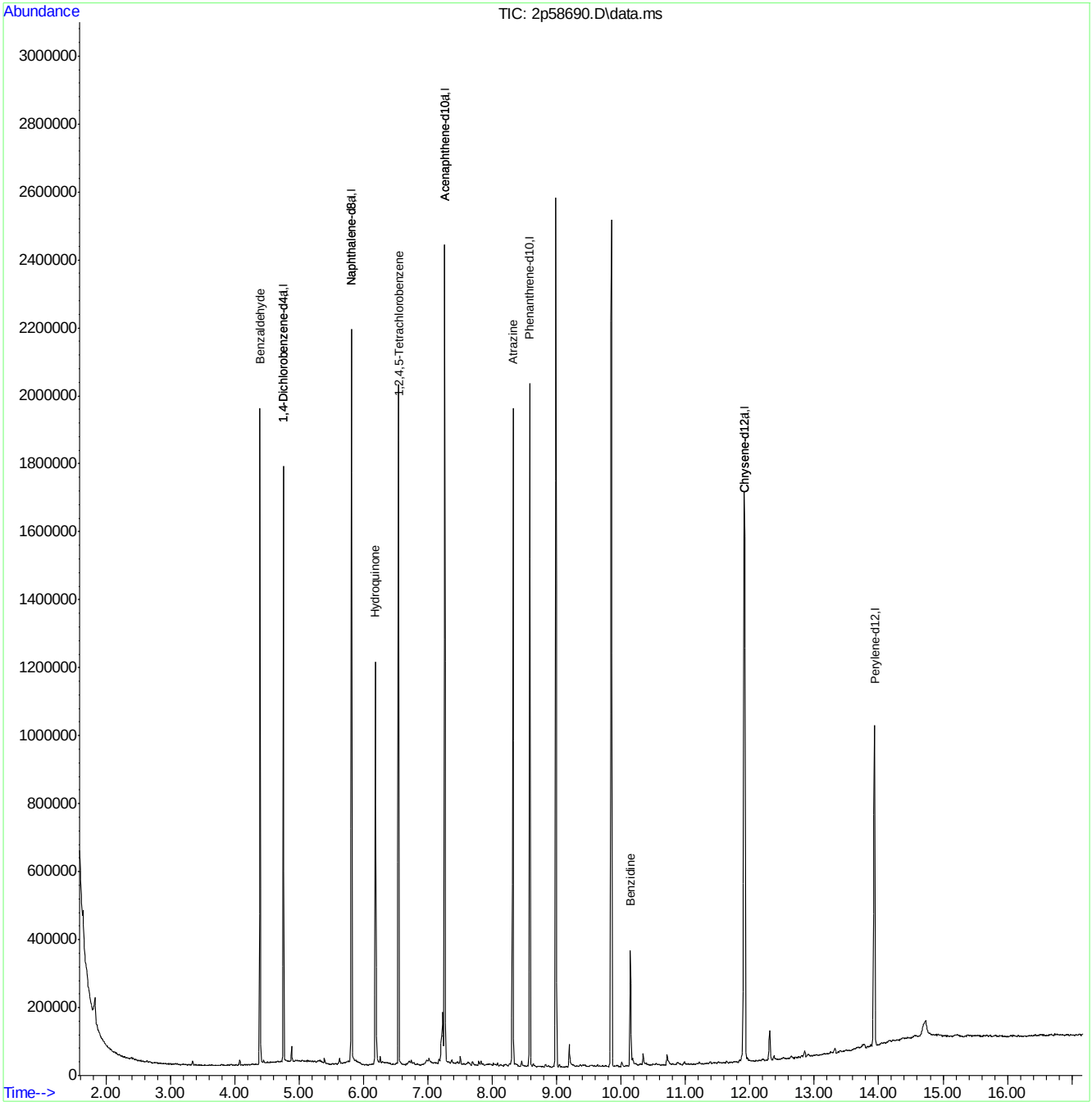
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2P2566\
Data File : 2p58690.D
Acq On : 29 Apr 2016 10:05 am
Operator : robertl1
Sample : CC2557-50
Misc : op92038,e2p2566
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 29 12:21:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M2P2557.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 29 09:54:55 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

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 JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60763a.D
Acq On : 21 Apr 2016 2:34 pm
Operator : linseyk
Sample : icc2855-1
Misc : op93052a,e3m2855
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 22 08:25:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:25:42 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

7.6.28

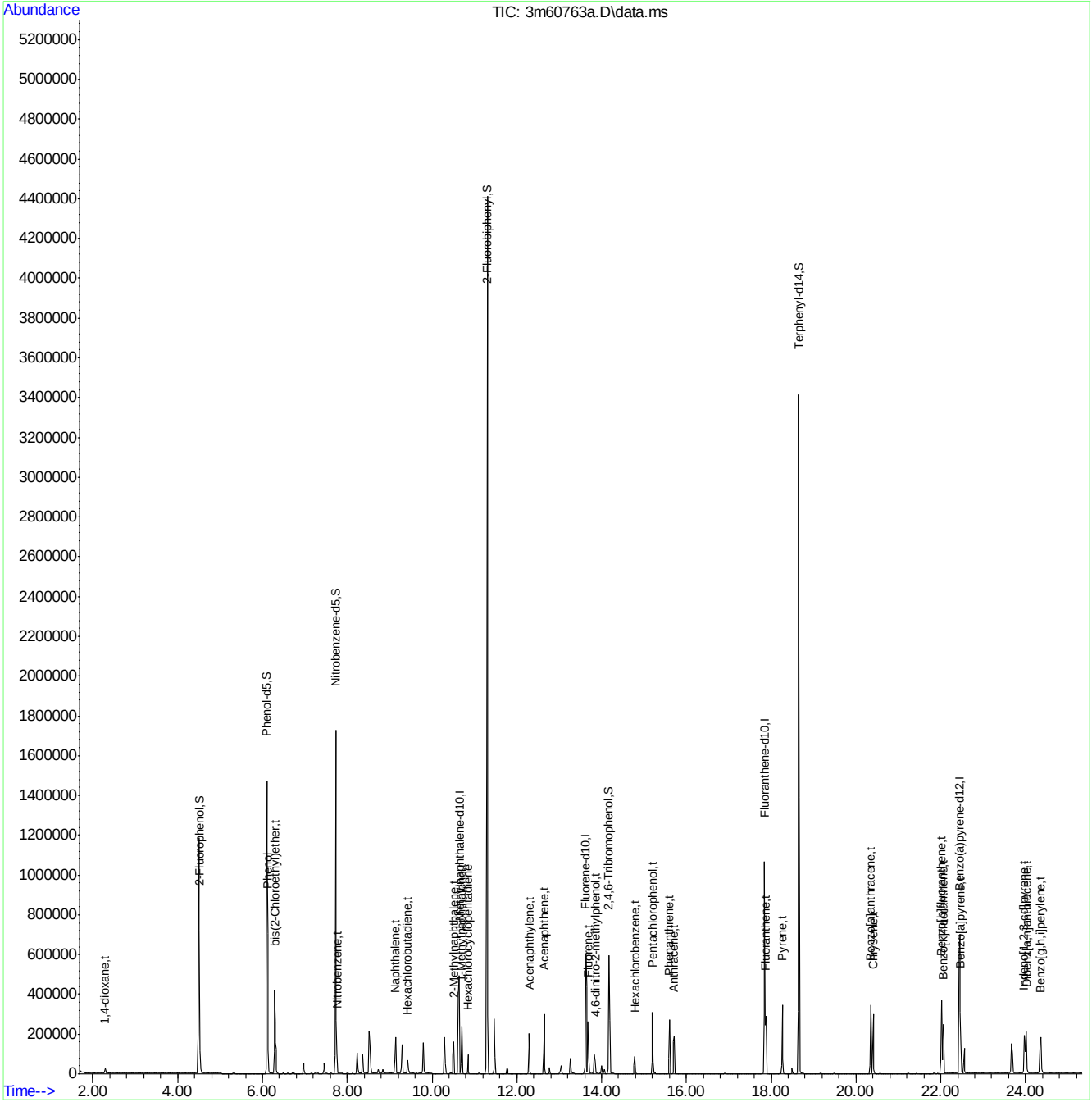
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60763a.D
Acq On : 21 Apr 2016 2:34 pm
Operator : linseyk
Sample : icc2855-1
Misc : op93052a,e3m2855
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 22 08:25:46 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:25:42 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

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 JC19023

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

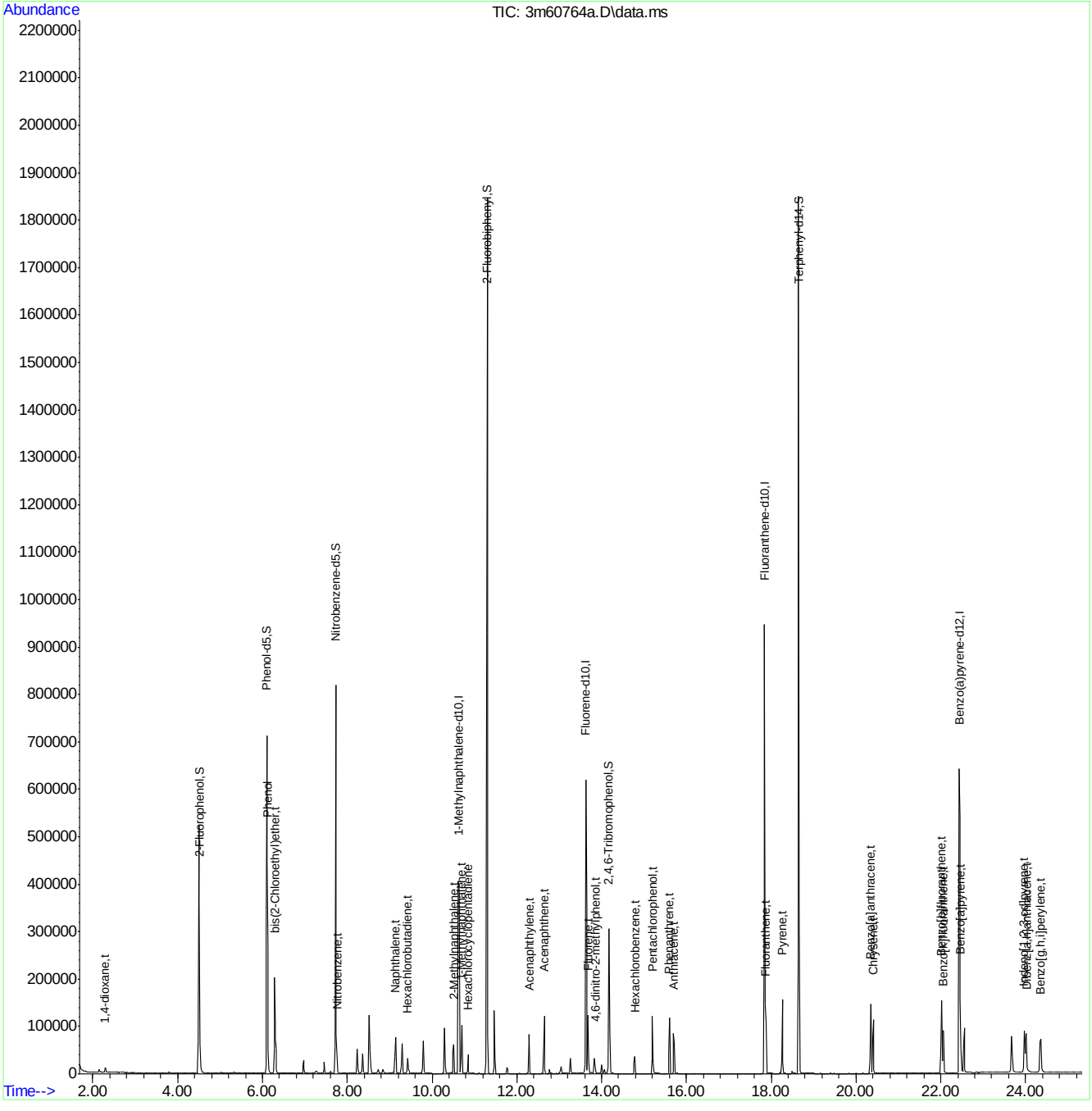
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = 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 JC19023

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 JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60765a.D
Acq On : 21 Apr 2016 3:39 pm
Operator : linseyk
Sample : ic2855-0.2
Misc : op93052a,e3m2855
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 22 08:26:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:26:46 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

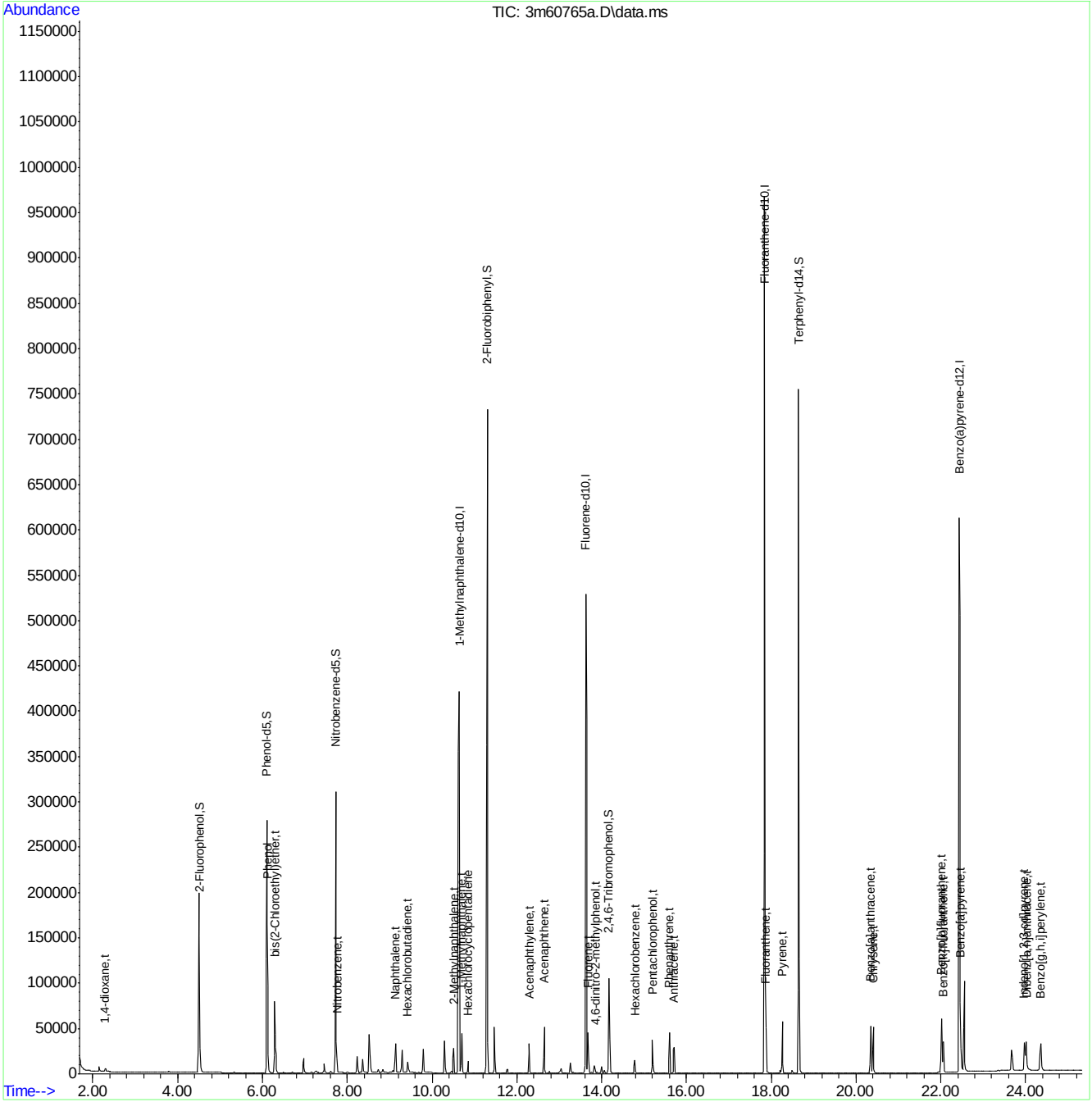
7.6.30

7

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



SGS ACCUTEST JC19023

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 JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60766.D
Acq On : 21 Apr 2016 4:12 pm
Operator : linseyk
Sample : ic2855-0.1
Misc : op93052a,e3m2855
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 22 08:27:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:27:18 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

7.6.31

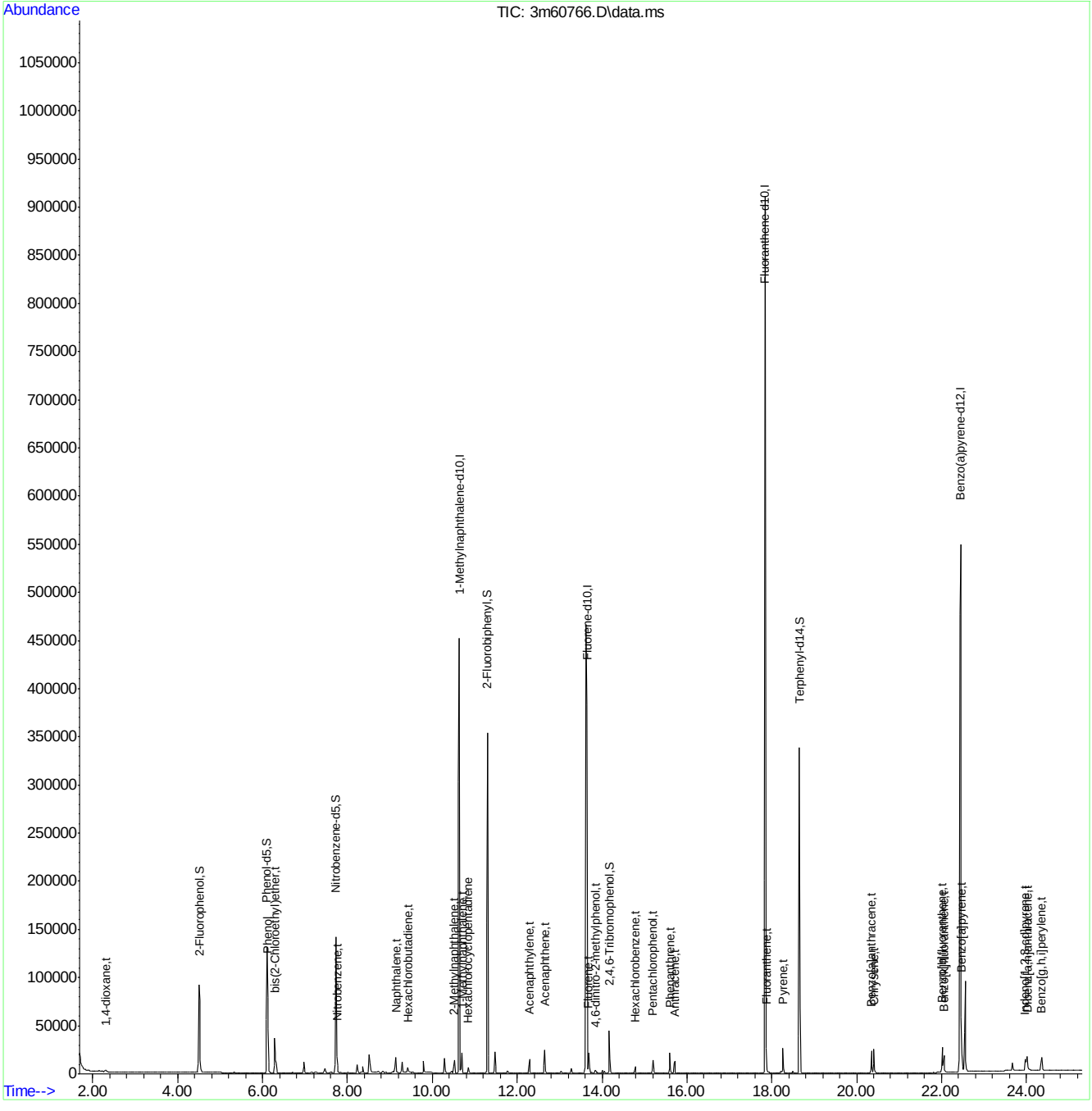
7

SGS ACCUTEST JC19023

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

SGS ACCUTEST JC19023

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

7.6.32

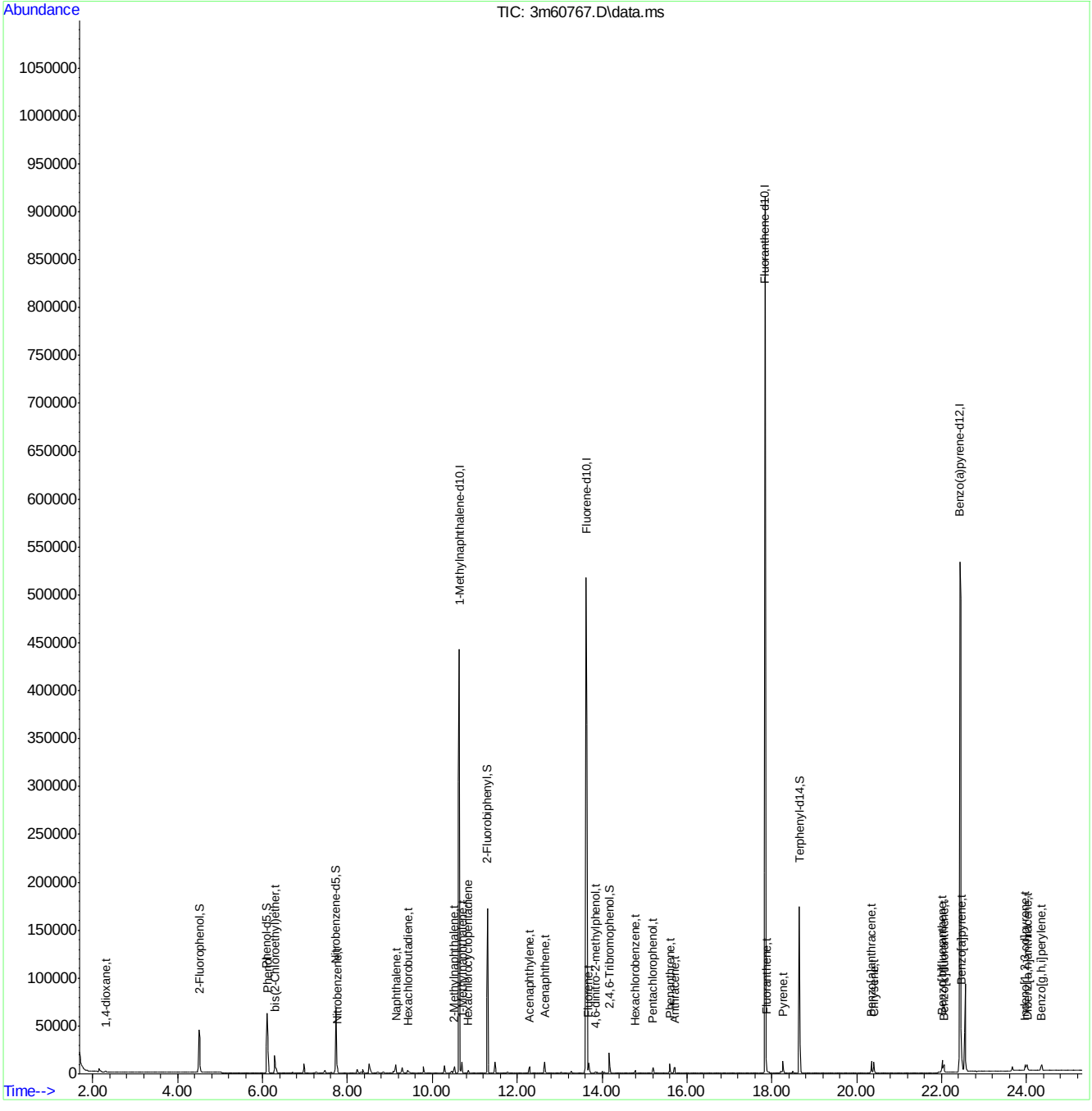
7

SGS ACCUTEST JC19023

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 JC19023

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

7.6.33

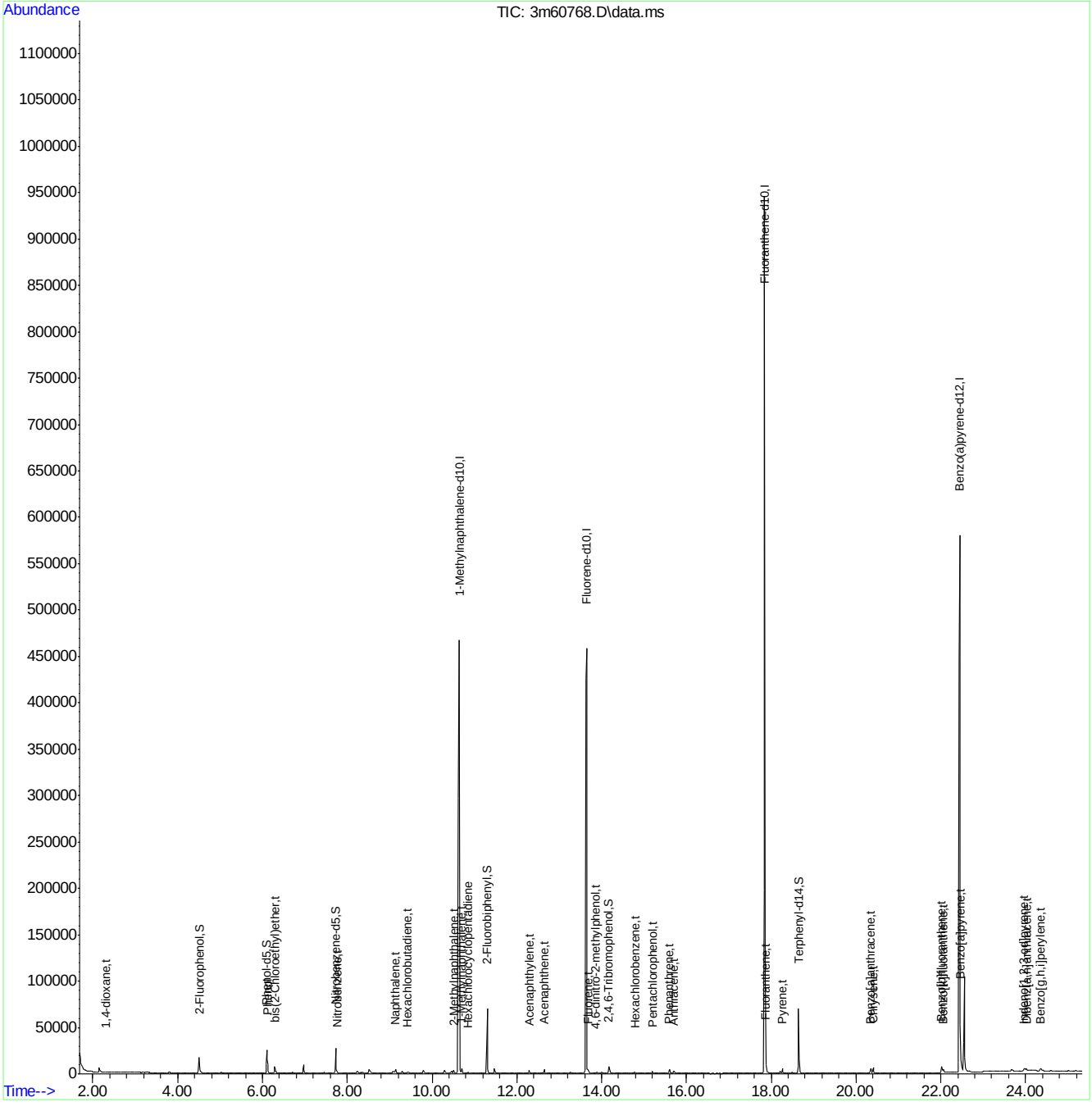
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60768.D
Acq On : 21 Apr 2016 5:17 pm
Operator : linseyk
Sample : ic2855-0.02
Misc : op93052a,e3m2855
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 22 08:29:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:28:25 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

Manual Integration Approval Summary

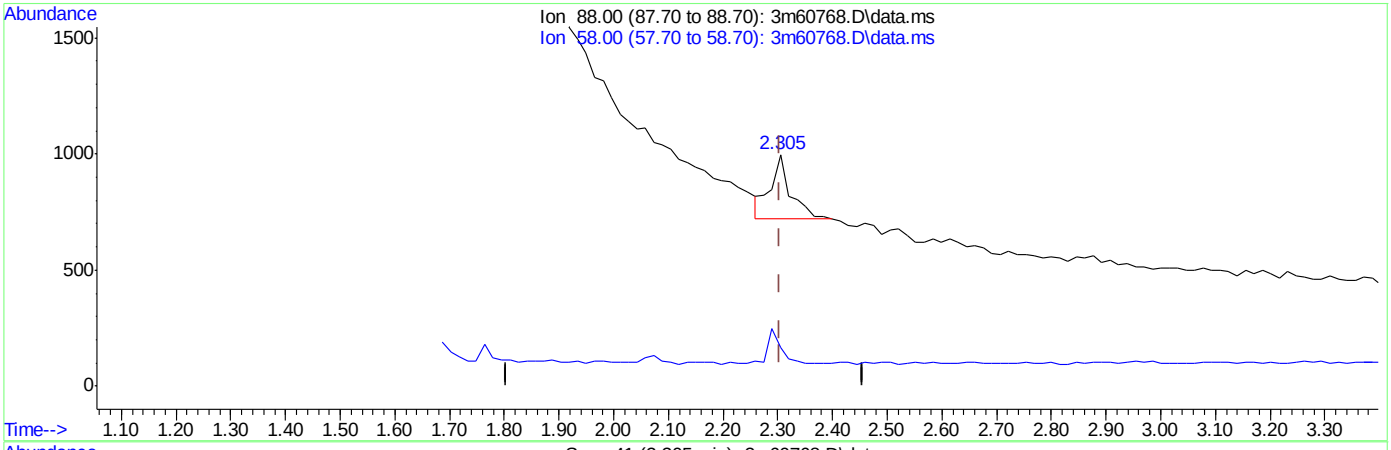
Sample Number:	E3M2855-IC2855	**Method:**	SW846 8270D BY SIM
Lab FileID:	3M60768.D	**Analyst approved:**	04/22/16 09:15 Linsey Kirschmann
Injection Time:	04/21/16 17:17	**Supervisor approved:**	04/22/16 12:27 Nina Pandya

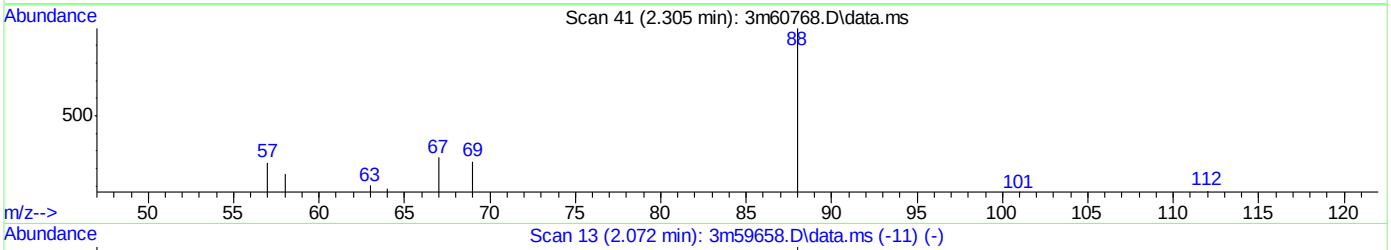
Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dioxane	123-91-1		2.30	Baseline ripple
Benzo(a)pyrene	50-32-8		22.46	Baseline ripple

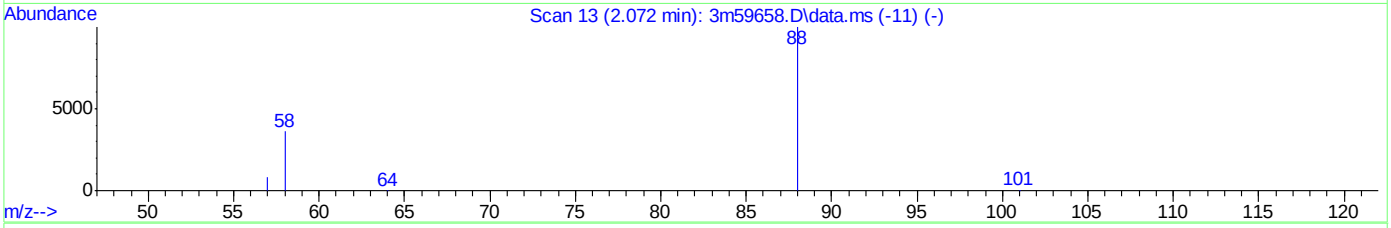
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60768.D
Acq On : 21 Apr 2016 5:17 pm
Operator : linseyk
Sample : ic2855-0.02
Misc : op93052a,e3m2855
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 22 08:28:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:28:25 2016
Response via : Initial Calibration







TIC: 3m60768.D\data.ms

(2) 1,4-dioxane (t)

2.305min (-0.000) 0.04ppm

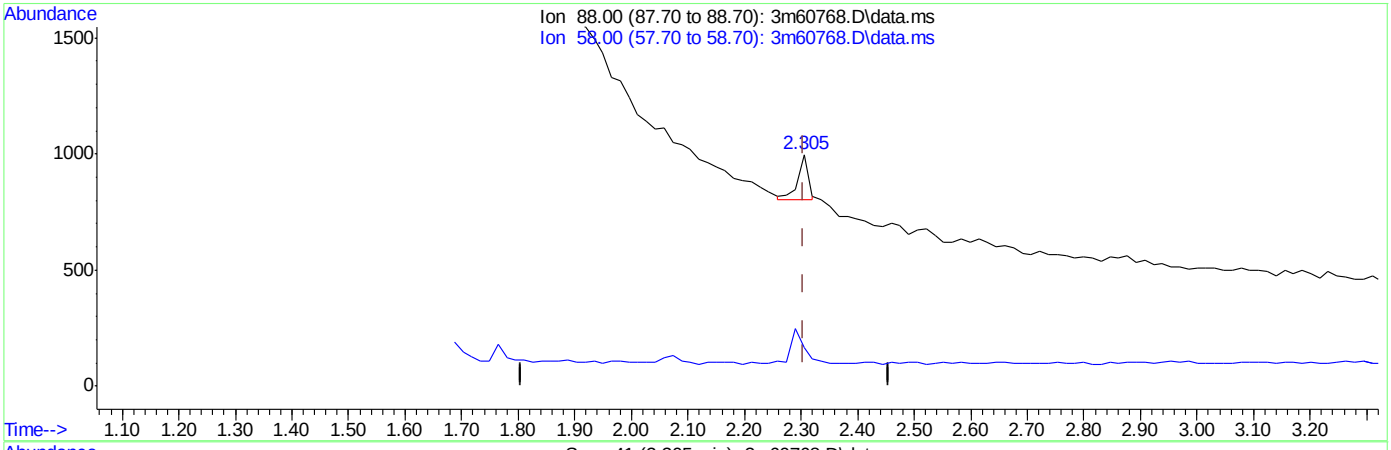
response 710

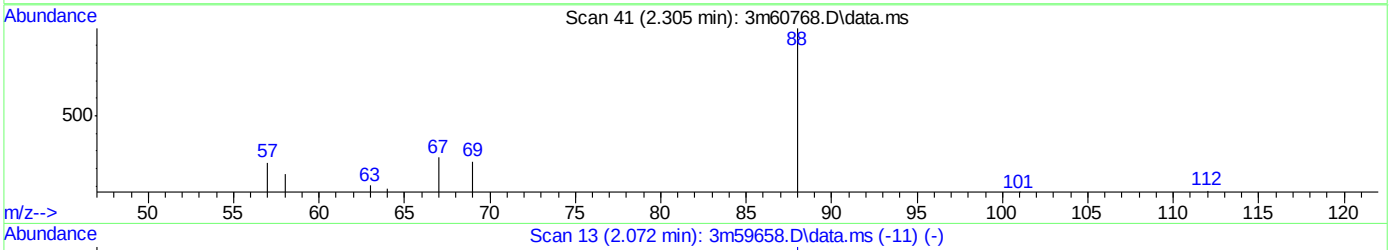
Ion	Exp%	Act%
88.00	100	100
58.00	32.40	28.23
0.00	0.00	0.00
0.00	0.00	0.00

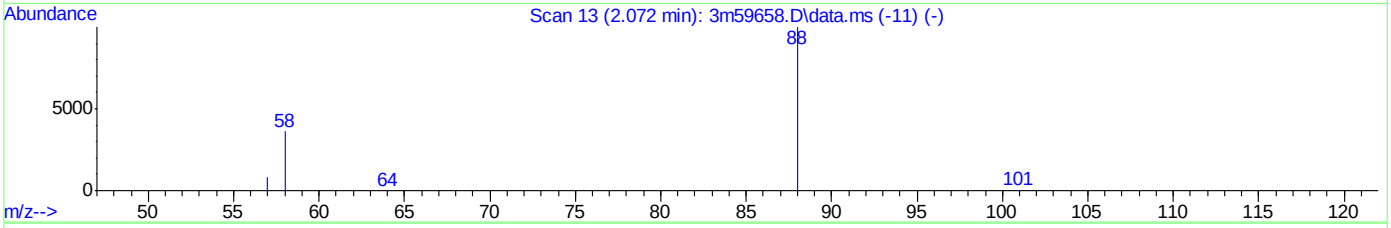
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60768.D
Acq On : 21 Apr 2016 5:17 pm
Operator : linseyk
Sample : ic2855-0.02
Misc : op93052a,e3m2855
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 22 08:28:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:28:25 2016
Response via : Initial Calibration







TIC: 3m60768.D\data.ms

(2) 1,4-dioxane (t)

2.305min (-0.000) 0.01ppm m

response 245

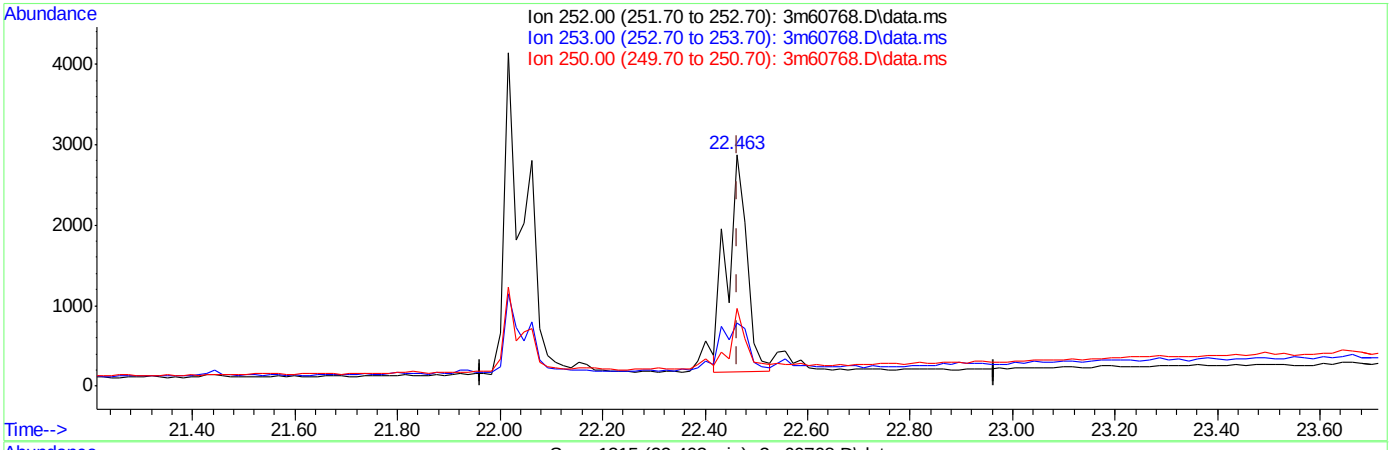
Ion	Exp%	Act%
88.00	100	100
58.00	32.40	16.63
0.00	0.00	0.00
0.00	0.00	0.00

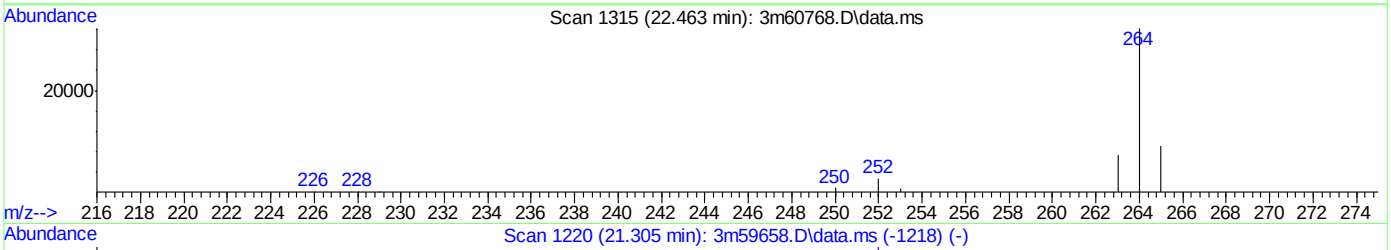
SGS ACCUTEST JC19023

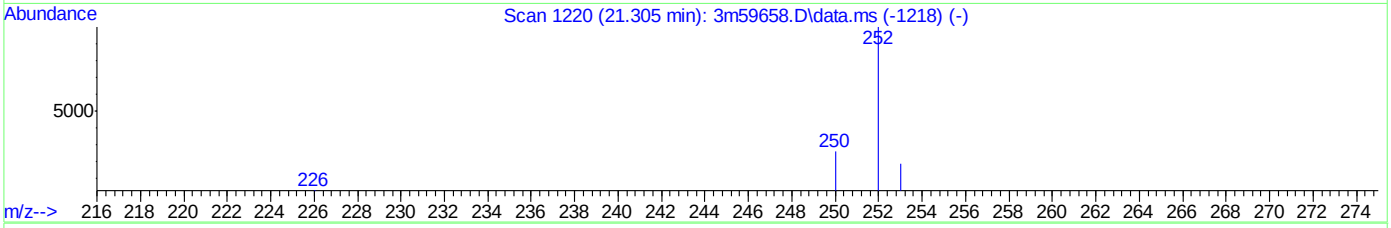
Quantitation Report (Qedit)

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

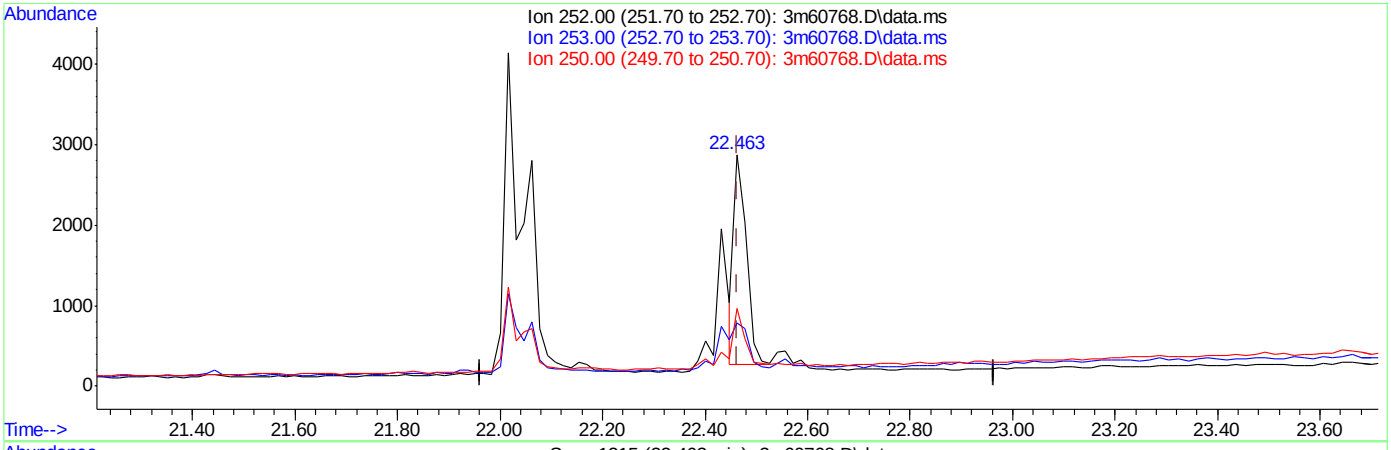
Ion	Exp%	Act%
252.00	100	100
253.00	18.80	20.93
250.00	26.10	27.47
0.00	0.00	0.00

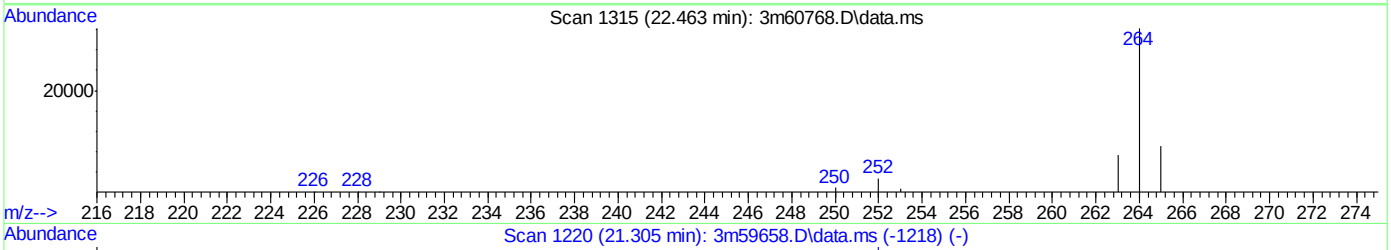
SGS ACCUTEST JC19023

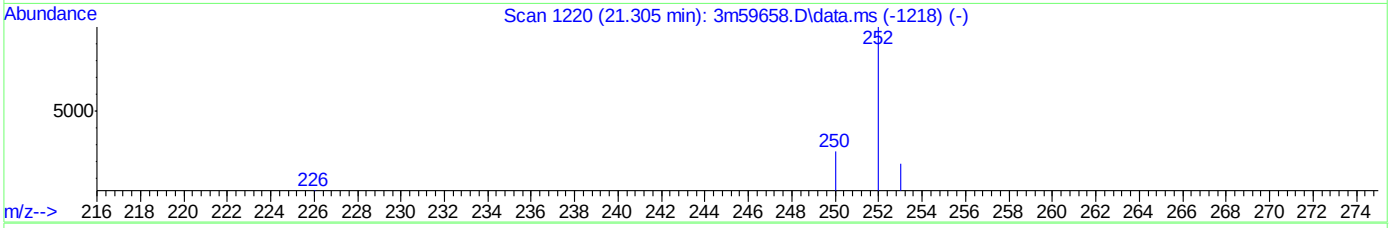
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60768.D
Acq On : 21 Apr 2016 5:17 pm
Operator : linseyk
Sample : ic2855-0.02
Misc : op93052a,e3m2855
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 22 08:28:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:28:25 2016
Response via : Initial Calibration







TIC: 3m60768.D\data.ms

(34) Benzo[a]pyrene (t)

22.463min (-0.000) 0.02ppm m

response 4349

Ion	Exp%	Act%
252.00	100	100
253.00	18.80	27.27
250.00	26.10	33.41
0.00	0.00	0.00

SGS ACCUTEST JC19023

3M60769.D

Manual Integrations APPROVED (compounds with "m" flag)

Nina Pandya 04/22/16 12:27

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60769.D
Acq On : 21 Apr 2016 5:49 pm
Operator : linseyk
Sample : ic2855-0.01
Misc : op93052a,e3m2855
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 22 08:30:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:30:05 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.640	150	341727	4.00	ppm	0.00
14) Fluorene-d10	13.644	176	510798	4.00	ppm	0.00
21) Fluoranthene-d10	17.843	212	894999	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.448	264	717706	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	4.515	112	7703	0.18	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.36%	
4) Phenol-d5	6.104	99	12728	0.18	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.36%	
7) Nitrobenzene-d5	7.726	82	11420	0.17	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.34%	
15) 2-Fluorobiphenyl	11.303	172	27514	0.19	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.38%	
20) 2,4,6-Tribromophenol	14.172	330	2174	0.13	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.26%	
28) Terphenyl-d14	18.647	244	28577	0.21	ppm	0.00
Spiked Amount 50.000			Recovery	=	0.42%	
Target Compounds						Qvalue
2) 1,4-dioxane	2.305	88	176m	0.01	ppm	
5) Phenol	6.116	94	3362	0.04	ppm	# 69
6) bis(2-Chloroethyl)ether	6.285	93	566	0.01	ppm	89
8) Nitrobenzene	7.764	77	712	0.01	ppm	83
9) Naphthalene	9.139	128	1910	0.01	ppm	98
10) Hexachlorobutadiene	9.421	225	308	0.01	ppm	98
11) 2-Methylnaphthalene	10.517	141	971	0.01	ppm	94
12) 1-Methylnaphthalene	10.702	141	1726	0.01	ppm	95
13) Hexachlorocyclopentadiene	10.846	237	382	0.02	ppm	97
16) Acenaphthylene	12.293	152	1639	0.01	ppm	99
17) Acenaphthene	12.648	153	1117	0.01	ppm	98
18) 4,6-dinitro-2-methylph...	13.852	198	146	0.01	ppm	70
19) Fluorene	13.682	166	1465	0.01	ppm	99
22) Hexachlorobenzene	14.783	284	417	0.01	ppm	95
23) Pentachlorophenol	15.200	266	877	0.04	ppm	98
24) Phenanthrene	15.602	178	2267	0.01	ppm	98
25) Anthracene	15.711	178	1713	0.01	ppm	97
26) Fluoranthene	17.874	202	4045	0.02	ppm	99
27) Pyrene	18.261	202	2880	0.01	ppm	98
29) Benzo[a]anthracene	20.347	228	3441	0.02	ppm	98
30) Chrysene	20.408	228	4214	0.02	ppm	97
32) Benzo[b]fluoranthene	22.015	252	4562	0.02	ppm	88
33) Benzo[k]fluoranthene	22.062	252	1997	0.01	ppm	94
34) Benzo[a]pyrene	22.463	252	2699	0.01	ppm	86
35) Indeno[1,2,3-cd]pyrene	23.963	276	2125	0.01	ppm	100
36) Dibenz[a,h]anthracene	24.020	278	2112	0.01	ppm	100
37) Benzo[g,h,i]perylene	24.358	276	1927	0.01	ppm	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60769.D
Acq On : 21 Apr 2016 5:49 pm
Operator : linseyk
Sample : ic2855-0.01
Misc : op93052a,e3m2855
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 22 08:30:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:30:05 2016
Response via : Initial Calibration

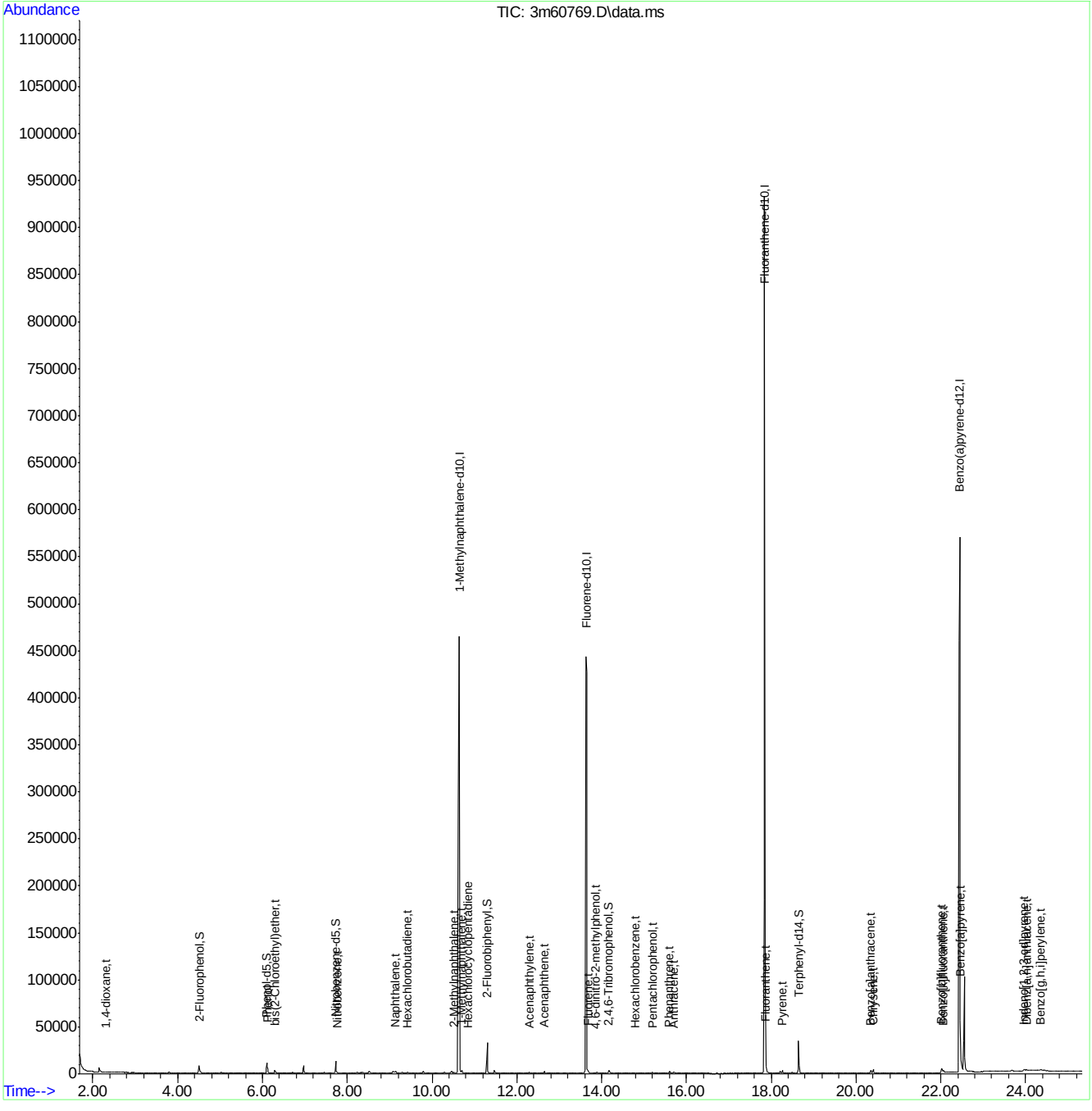
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60769.D
Acq On : 21 Apr 2016 5:49 pm
Operator : linseyk
Sample : ic2855-0.01
Misc : op93052a,e3m2855
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 22 08:30:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:30:05 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

Manual Integration Approval Summary

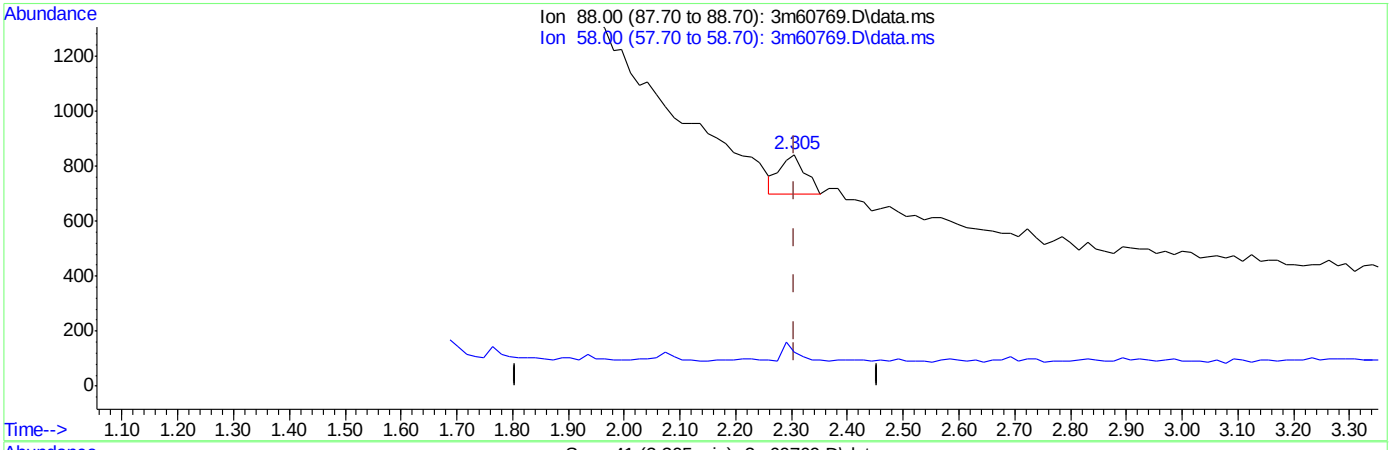
Sample Number:	E3M2855-IC2855	**Method:**	SW846 8270D BY SIM
Lab FileID:	3M60769.D	**Analyst approved:**	04/22/16 09:15 Linsey Kirschmann
Injection Time:	04/21/16 17:49	**Supervisor approved:**	04/22/16 12:27 Nina Pandya

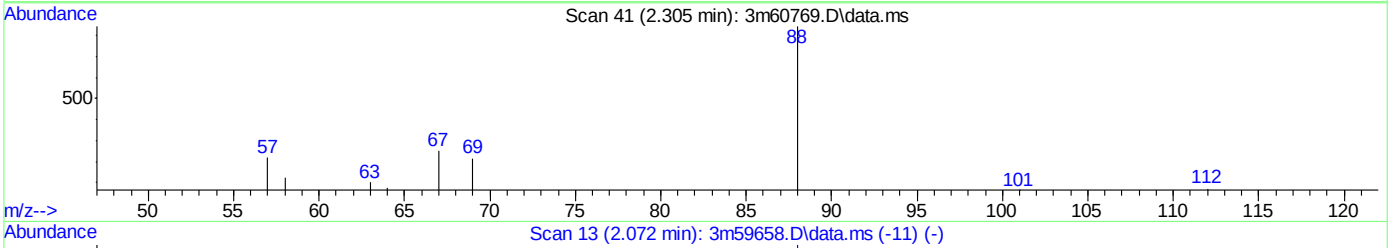
Parameter	CAS	Sig#	R.T. (min.)	Reason
1,4-Dioxane	123-91-1		2.31	Baseline ripple

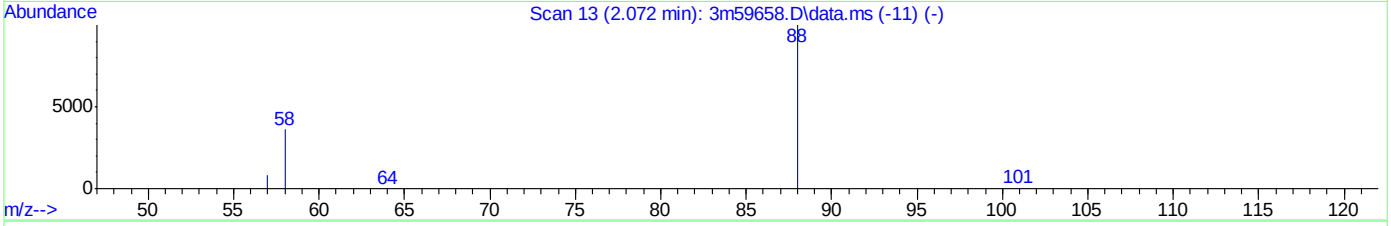
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60769.D
Acq On : 21 Apr 2016 5:49 pm
Operator : linseyk
Sample : ic2855-0.01
Misc : op93052a,e3m2855
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 22 08:30:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:30:05 2016
Response via : Initial Calibration







TIC: 3m60769.D\data.ms

(2) 1,4-dioxane (t)

2.305min (+0.000) 0.02ppm

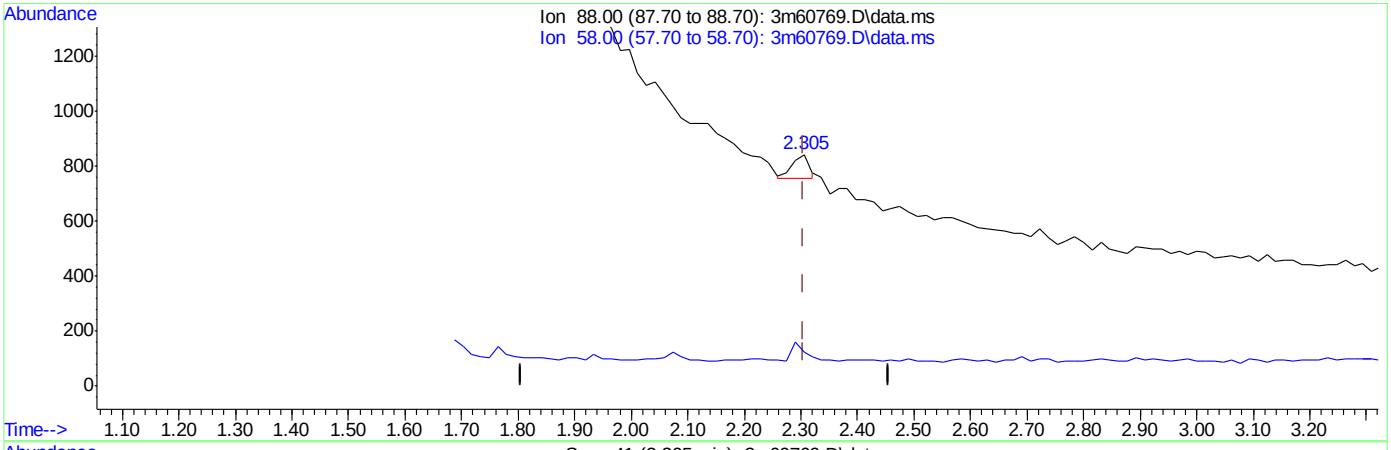
response 450

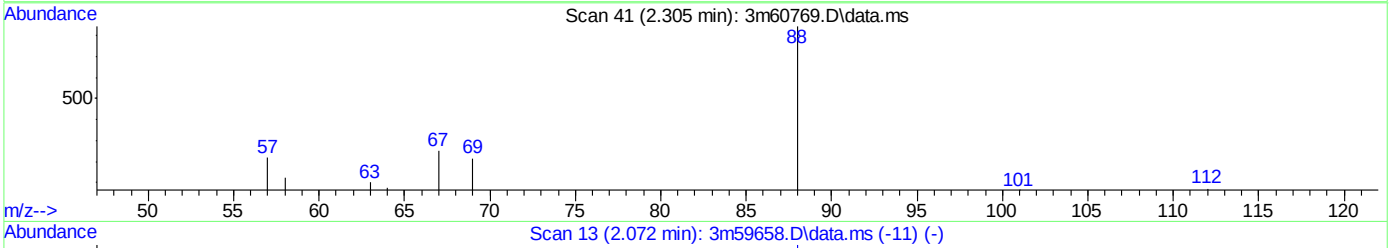
Ion	Exp%	Act%
88.00	100	100
58.00	32.40	25.45
0.00	0.00	0.00
0.00	0.00	0.00

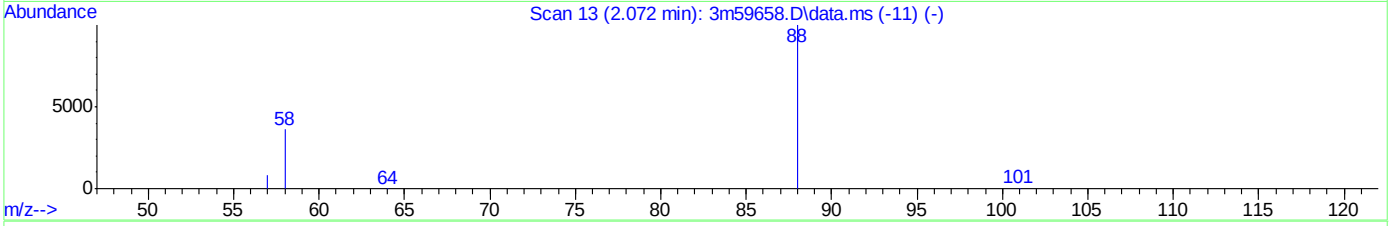
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60769.D
Acq On : 21 Apr 2016 5:49 pm
Operator : linseyk
Sample : ic2855-0.01
Misc : op93052a,e3m2855
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 22 08:30:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:30:05 2016
Response via : Initial Calibration







TIC: 3m60769.D\data.ms

(2) 1,4-dioxane (t)

2.305min (+0.000) 0.01ppm m

response 176

Ion	Exp%	Act%
88.00	100	100
58.00	32.40	14.85
0.00	0.00	0.00
0.00	0.00	0.00

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60770.D
Acq On : 21 Apr 2016 6:22 pm
Operator : linseyk
Sample : ic2855-5.0
Misc : op93052a,e3m2855
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 22 08:30:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:30:48 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.641	150	366417	4.00	ppm	0.00
14) Fluorene-d10	13.644	176	628480	4.00	ppm	0.00
21) Fluoranthene-d10	17.844	212	939162	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.448	264	756981	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	4.515	112	4214444	90.43	ppm	0.00
Spiked Amount 50.000			Recovery	=	180.86%	
4) Phenol-d5	6.128	99	7328789	95.76	ppm	0.02
Spiked Amount 50.000			Recovery	=	191.52%	
7) Nitrobenzene-d5	7.745	82	7395086	102.34	ppm	0.02
Spiked Amount 50.000			Recovery	=	204.68%	
15) 2-Fluorobiphenyl	11.319	172	14347827	81.47	ppm	0.02
Spiked Amount 50.000			Recovery	=	162.94%	
20) 2,4,6-Tribromophenol	14.191	330	1892615	94.39	ppm	0.02
Spiked Amount 50.000			Recovery	=	188.78%	
28) Terphenyl-d14	18.662	244	11761490	83.98	ppm	0.02
Spiked Amount 50.000			Recovery	=	167.96%	
Target Compounds						Qvalue
2) 1,4-dioxane	2.290	88	94789	4.85	ppm	75
5) Phenol	6.140	94	1983163	23.95	ppm #	79
6) bis(2-Chloroethyl)ether	6.298	93	266705	4.16	ppm #	60
8) Nitrobenzene	7.764	77	406472	5.38	ppm #	58
9) Naphthalene	9.139	128	1024731	5.04	ppm	98
10) Hexachlorobutadiene	9.421	225	174841	4.87	ppm	95
11) 2-Methylnaphthalene	10.517	141	553815	5.26	ppm	96
12) 1-Methylnaphthalene	10.702	141	647057	4.41	ppm	93
13) Hexachlorocyclopentadiene	10.846	237	345119	13.01	ppm	95
16) Acenaphthylene	12.293	152	1074573	4.94	ppm	99
17) Acenaphthene	12.648	153	680855	4.63	ppm	99
18) 4,6-dinitro-2-methylph...	13.852	198	689664	56.92	ppm	74
19) Fluorene	13.682	166	778408	4.36	ppm	94
22) Hexachlorobenzene	14.783	284	229525	5.21	ppm	94
23) Pentachlorophenol	15.201	266	786510	32.34	ppm	95
24) Phenanthrene	15.603	178	1190802	5.25	ppm	99
25) Anthracene	15.711	178	1181627	5.75	ppm	98
26) Fluoranthene	17.874	202	1318777	5.01	ppm	99
27) Pyrene	18.261	202	1382848	5.27	ppm	98
29) Benzo[a]anthracene	20.347	228	1195931	5.01	ppm	96
30) Chrysene	20.408	228	1263858	5.17	ppm	98
32) Benzo[b]fluoranthene	22.015	252	1201158	4.18	ppm	95
33) Benzo[k]fluoranthene	22.062	252	1191473	5.12	ppm	97
34) Benzo[a]pyrene	22.463	252	1113412	4.67	ppm	98
35) Indeno[1,2,3-cd]pyrene	23.982	276	1248948	5.29	ppm	89
36) Dibenz[a,h]anthracene	24.020	278	1051200	5.43	ppm	100
37) Benzo[g,h,i]perylene	24.358	276	1074162	5.23	ppm	99

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

```
Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60770.D
Acq On    : 21 Apr 2016   6:22 pm
Operator  : linseyk
Sample    : ic2855-5.0
Misc      : op93052a,e3m2855
ALS Vial  : 9   Sample Multiplier: 1

Quant Time: Apr 22 08:30:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title  : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:30:48 2016
Response via : Initial Calibration

        Compound                  R.T. QIon  Response  Conc Units Dev(Min)
 ---------------------------------------------------------------------------
 (#) = qualifier out of range (m) = manual integration (+) = signals summed
```

7.6.35

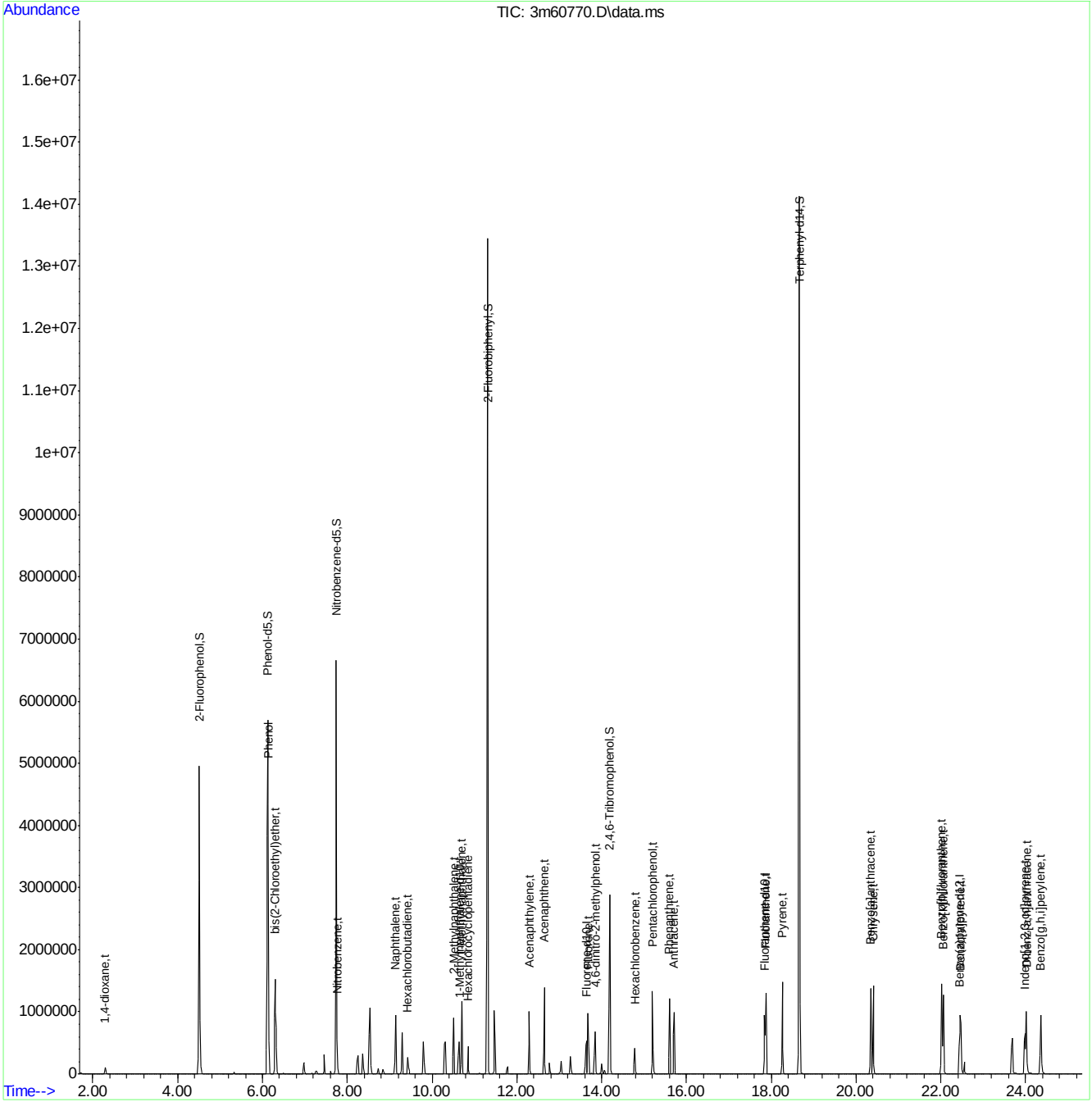
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60770.D
Acq On : 21 Apr 2016 6:22 pm
Operator : linseyk
Sample : ic2855-5.0
Misc : op93052a,e3m2855
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 22 08:30:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:30:48 2016
Response via : Initial Calibration



M3M2855SIM.M Fri Apr 22 08:31:12 2016 RPT1 Page: 3

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60771.D
Acq On : 21 Apr 2016 6:55 pm
Operator : linseyk
Sample : ic2855-2.5
Misc : op93052a,e3m2855
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 22 08:31:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:31:18 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.640	150	385250	4.00	ppm	0.00
14) Fluorene-d10	13.644	176	616747	4.00	ppm	0.00
21) Fluoranthene-d10	17.843	212	966990	4.00	ppm	0.00
31) Benzo(a)pyrene-d12	22.448	264	773663	4.00	ppm	0.00
System Monitoring Compounds						
3) 2-Fluorophenol	4.515	112	2363254	48.90	ppm	0.00
Spiked Amount 50.000			Recovery = 97.80%			
4) Phenol-d5	6.116	99	3871836	48.37	ppm	-0.01
Spiked Amount 50.000			Recovery = 96.74%			
7) Nitrobenzene-d5	7.726	82	3072767	40.29	ppm	-0.02
Spiked Amount 50.000			Recovery = 80.58%			
15) 2-Fluorobiphenyl	11.303	172	7301000	42.25	ppm	-0.02
Spiked Amount 50.000			Recovery = 84.50%			
20) 2,4,6-Tribromophenol	14.191	330	926725	47.63	ppm	0.00
Spiked Amount 50.000			Recovery = 95.26%			
28) Terphenyl-d14	18.662	244	6991573	49.82	ppm	0.00
Spiked Amount 50.000			Recovery = 99.64%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.289	88	48881	2.39	ppm #	59
5) Phenol	6.128	94	1024552	11.84	ppm #	67
6) bis(2-Chloroethyl)ether	6.285	93	142356	2.16	ppm	77
8) Nitrobenzene	7.764	77	205619	2.56	ppm	76
9) Naphthalene	9.138	128	535435	2.50	ppm	98
10) Hexachlorobutadiene	9.421	225	87273	2.32	ppm	94
11) 2-Methylnaphthalene	10.517	141	279805	2.51	ppm	94
12) 1-Methylnaphthalene	10.702	141	340057	2.24	ppm	91
13) Hexachlorocyclopentadiene	10.846	237	158162	5.40	ppm	93
16) Acenaphthylene	12.293	152	544103	2.55	ppm	98
17) Acenaphthene	12.648	153	350568	2.45	ppm	95
18) 4,6-dinitro-2-methylph...	13.851	198	297531	19.93	ppm	92
19) Fluorene	13.682	166	399367	2.31	ppm	96
22) Hexachlorobenzene	14.783	284	115675	2.53	ppm	95
23) Pentachlorophenol	15.200	266	400828	15.26	ppm	98
24) Phenanthrene	15.602	178	602735	2.56	ppm	99
25) Anthracene	15.711	178	589914	2.71	ppm	98
26) Fluoranthene	17.874	202	671708	2.48	ppm	99
27) Pyrene	18.261	202	685271	2.51	ppm	99
29) Benzo[a]anthracene	20.346	228	610065	2.48	ppm	98
30) Chrysene	20.408	228	651165	2.57	ppm	98
32) Benzo[b]fluoranthene	22.015	252	621501	2.16	ppm	98
33) Benzo[k]fluoranthene	22.061	252	586018	2.45	ppm	99
34) Benzo[a]pyrene	22.463	252	565533	2.34	ppm	99
35) Indeno[1,2,3-cd]pyrene	23.963	276	624468	2.57	ppm	97
36) Dibenz[a,h]anthracene	24.020	278	520048	2.60	ppm	100
37) Benzo[g,h,i]perylene	24.358	276	542545	2.57	ppm	100

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

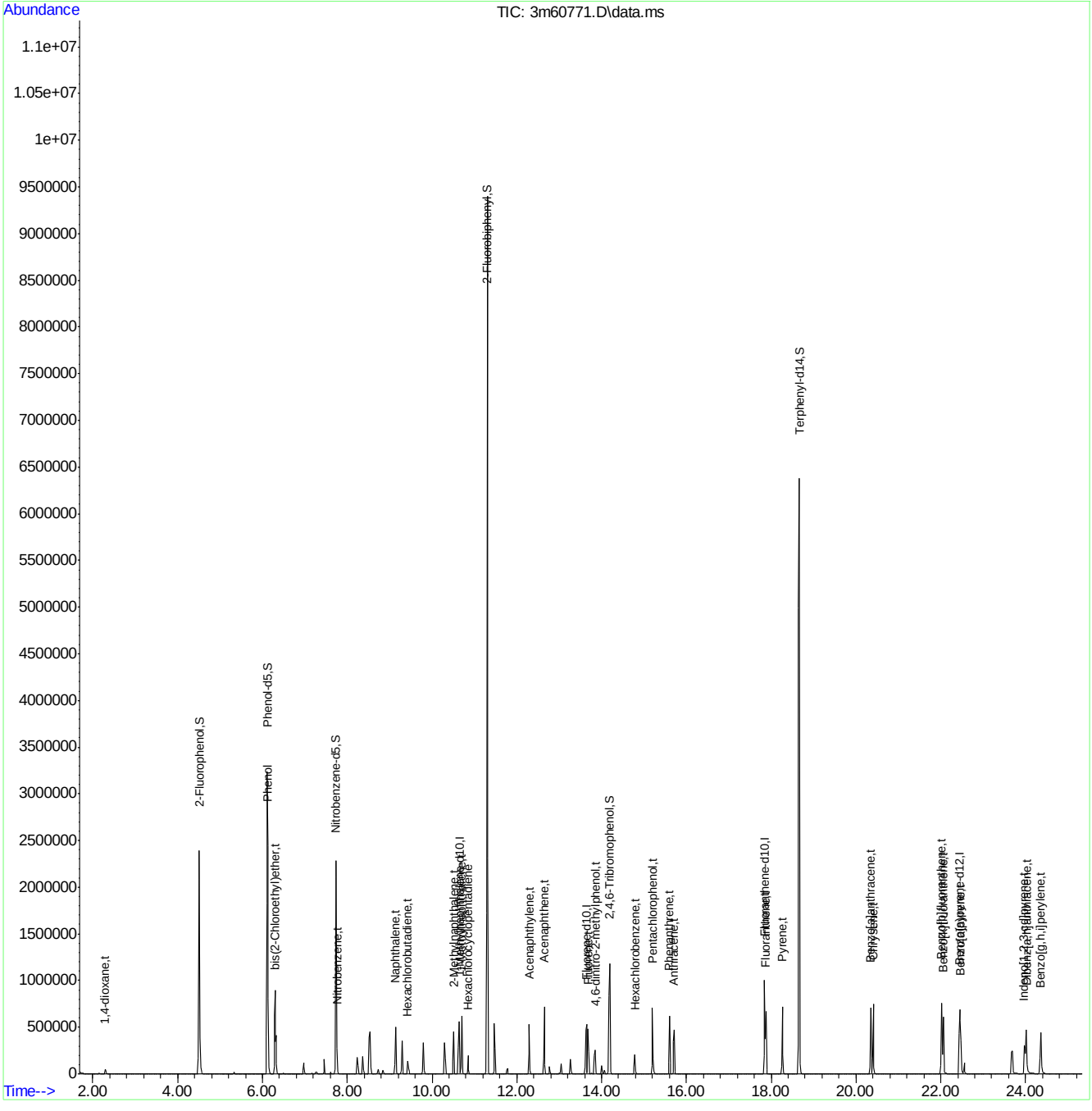
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

(#) = 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 JC19023

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

7.6.37

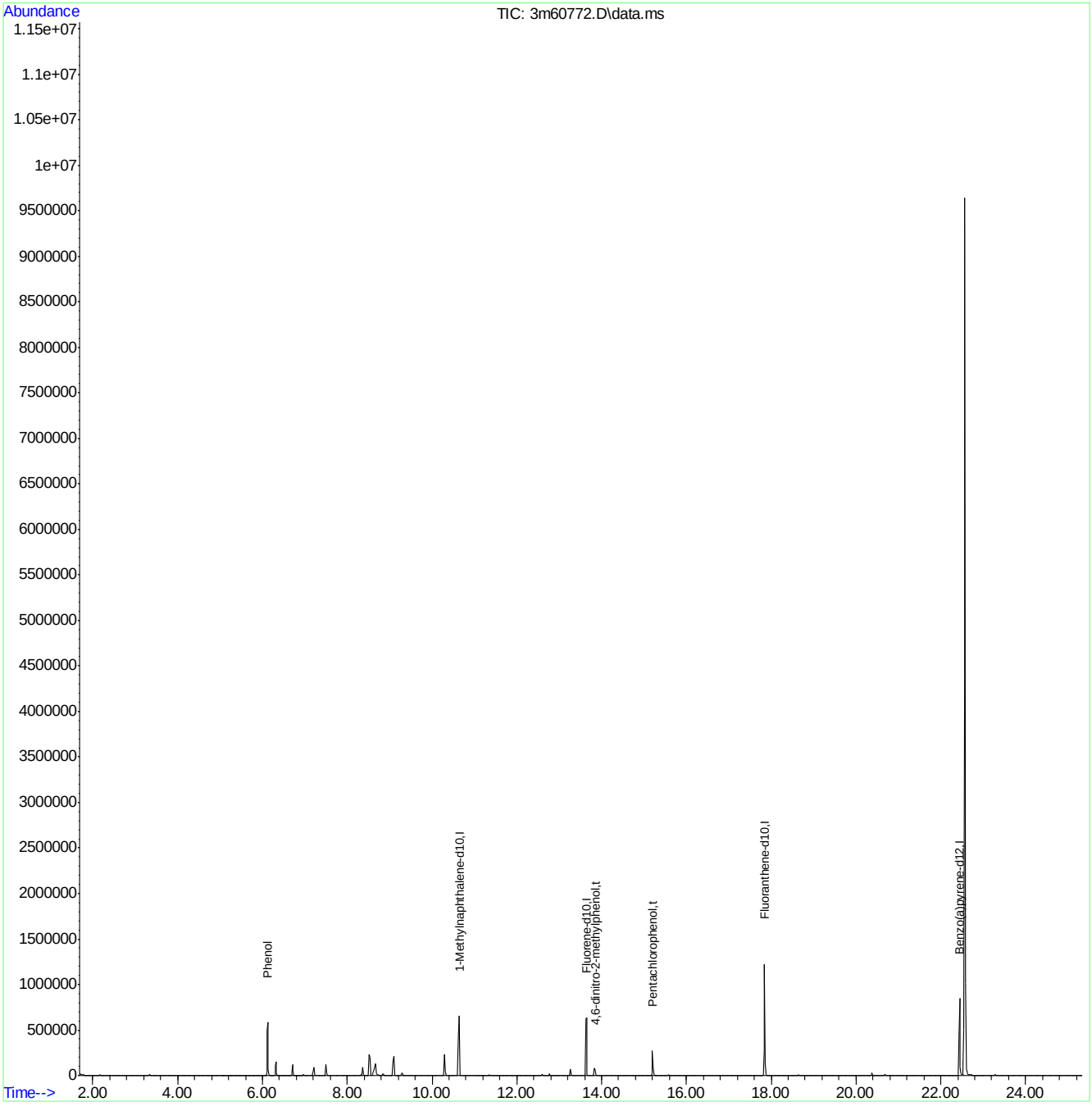
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60772.D
Acq On : 21 Apr 2016 7:27 pm
Operator : linseyk
Sample : icv2855-1.0
Misc : op93052a,e3m2855
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 22 08:56:12 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:34:22 2016
Response via : Initial Calibration



M3M2855SIM.M Fri Apr 22 08:56:16 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60773.D
Acq On : 21 Apr 2016 8:00 pm
Operator : linseyk
Sample : icv2855-1.0
Misc : op93052a,e3m2855
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 22 08:58:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:34:22 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1-Methylnaphthalene-d10	10.640	150	381667	4.00 ppm	0.00
14) Fluorene-d10	13.644	176	568016	4.00 ppm	0.00
21) Fluoranthene-d10	17.843	212	891736	4.00 ppm	0.00
31) Benzo(a)pyrene-d12	22.448	264	666840	4.00 ppm	0.00
System Monitoring Compounds					
3) 2-Fluorophenol	0.000	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
4) Phenol-d5	0.000	99	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
7) Nitrobenzene-d5	0.000	82	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
15) 2-Fluorobiphenyl	0.000	172	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
20) 2,4,6-Tribromophenol	0.000	330	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
28) Terphenyl-d14	0.000	244	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
Target Compounds					Qvalue
2) 1,4-dioxane	2.320	88	21008	1.07 ppm	93
6) bis(2-Chloroethyl)ether	6.285	93	64147	1.00 ppm	87
8) Nitrobenzene	7.764	77	65386	0.82 ppm	100
9) Naphthalene	9.138	128	240749	1.14 ppm	99
10) Hexachlorobutadiene	9.421	225	41080	1.11 ppm	99
11) 2-Methylnaphthalene	10.517	141	115129	1.04 ppm	98
16) Acenaphthylene	12.293	152	209375	1.06 ppm	99
17) Acenaphthene	12.648	153	152795	1.16 ppm	96
19) Fluorene	13.682	166	170302	1.08 ppm	100
22) Hexachlorobenzene	14.783	284	47590	1.13 ppm	96
24) Phenanthrene	15.602	178	253476	1.16 ppm	95
25) Anthracene	15.711	178	221984	1.15 ppm	98
26) Fluoranthene	17.874	202	279548	1.02 ppm	99
27) Pyrene	18.261	202	275135	1.08 ppm	98
29) Benzo[a]anthracene	20.362	228	271481	1.11 ppm	94
30) Chrysene	20.408	228	239361	1.02 ppm	94
32) Benzo[b]fluoranthene	22.015	252	207742	0.94 ppm	97
33) Benzo[k]fluoranthene	22.061	252	230502	1.12 ppm	98
34) Benzo[a]pyrene	22.463	252	199534	0.97 ppm	99
35) Indeno[1,2,3-cd]pyrene	23.963	276	218688	1.04 ppm	98
36) Dibenz[a,h]anthracene	24.020	278	173448	1.00 ppm	100
37) Benzo[g,h,i]perylene	24.358	276	191304	1.05 ppm	100

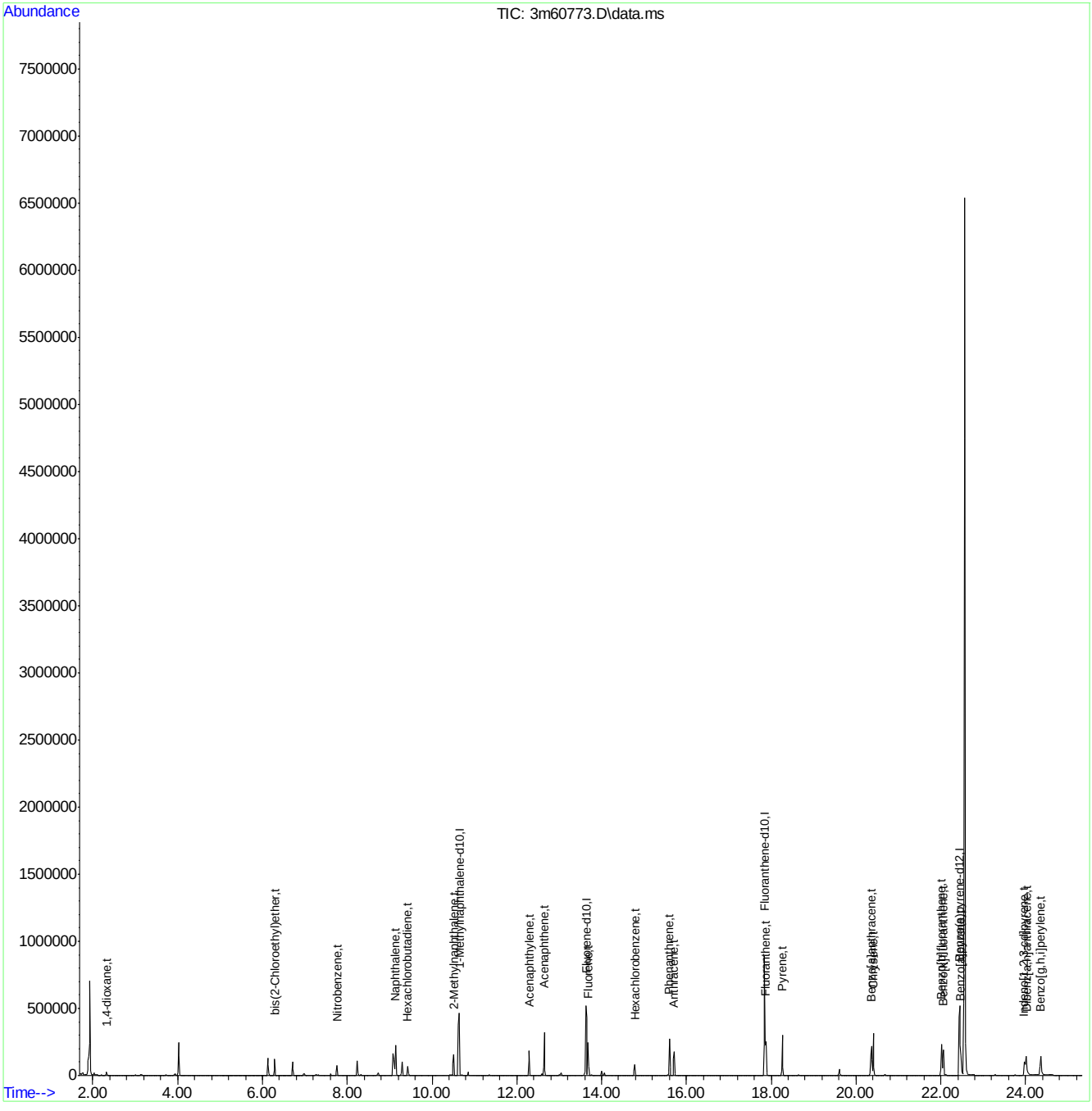
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19023

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

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

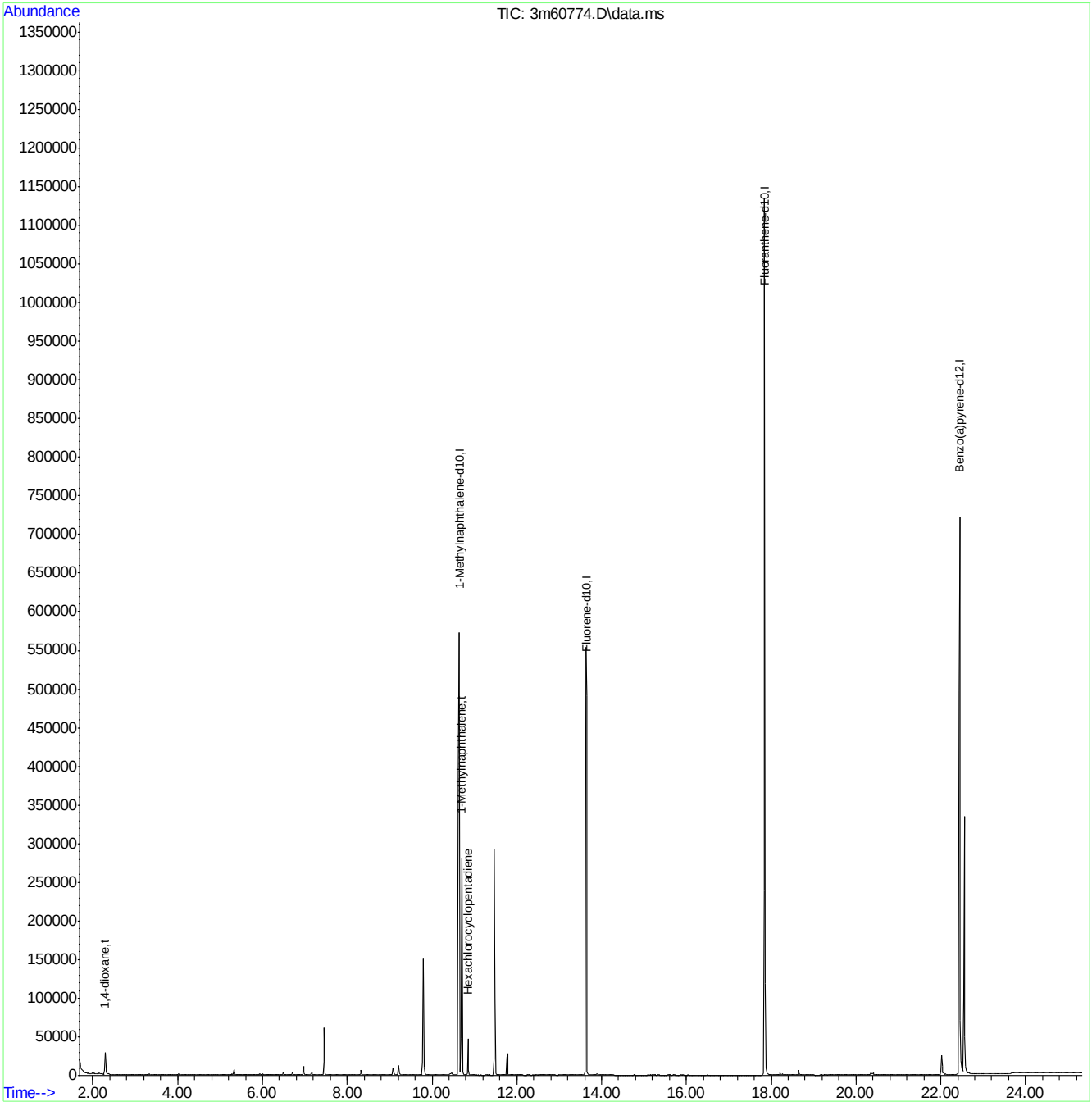
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2855\
Data File : 3m60774.D
Acq On : 21 Apr 2016 8:35 pm
Operator : linseyk
Sample : icv2855-1.0
Misc : op93052a,e3m2855
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 22 08:58:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Fri Apr 22 08:34:22 2016
Response via : Initial Calibration



M3M2855SIM.M Fri Apr 22 08:58:16 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2866\
Data File : 3m60952.D
Acq On : 28 Apr 2016 11:26 pm
Operator : juliusj
Sample : cc2855-1.0
Misc : op93271a,e3m2866
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 28 23:50:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Apr 28 10:59:02 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.508	150	386741	4.00	ppm	-0.11
14) Fluorene-d10	13.505	176	545876	4.00	ppm	-0.14
21) Fluoranthene-d10	17.716	212	905202	4.00	ppm	-0.14
31) Benzo(a)pyrene-d12	22.320	264	730395	4.00	ppm	-0.13
System Monitoring Compounds						
3) 2-Fluorophenol	4.415	112	891985	18.44	ppm	-0.09
Spiked Amount 50.000			Recovery = 36.88%			
4) Phenol-d5	6.024	99	1435942	17.94	ppm	-0.07
Spiked Amount 50.000			Recovery = 35.88%			
7) Nitrobenzene-d5	7.625	82	1197283	16.08	ppm	-0.09
Spiked Amount 50.000			Recovery = 32.16%			
15) 2-Fluorobiphenyl	11.176	172	2821521	18.81	ppm	-0.13
Spiked Amount 50.000			Recovery = 37.62%			
20) 2,4,6-Tribromophenol	14.051	330	331917	19.43	ppm	-0.12
Spiked Amount 50.000			Recovery = 38.86%			
28) Terphenyl-d14	18.535	244	2520100	19.19	ppm	-0.13
Spiked Amount 50.000			Recovery = 38.38%			
Target Compounds						Qvalue
2) 1,4-dioxane	2.220	88	17884	0.90	ppm	74
5) Phenol	6.036	94	375320	4.35	ppm #	76
6) bis(2-Chloroethyl)ether	6.181	93	58691	0.90	ppm	79
8) Nitrobenzene	7.643	77	68674	0.85	ppm #	61
9) Naphthalene	9.018	128	191269	0.89	ppm	98
10) Hexachlorobutadiene	9.300	225	34537	0.92	ppm	98
11) 2-Methylnaphthalene	10.385	141	115839	1.03	ppm #	67
12) 1-Methylnaphthalene	10.570	141	112203	0.74	ppm #	66
13) Hexachlorocyclopentadiene	10.734	237	61806	2.08	ppm	80
16) Acenaphthylene	12.165	152	200394	1.06	ppm	96
17) Acenaphthene	12.520	153	127346	1.01	ppm	93
18) 4,6-dinitro-2-methylph...	13.731	198	89824	5.04	ppm	89
19) Fluorene	13.561	166	153247	1.01	ppm	90
22) Hexachlorobenzene	14.655	284	41934	0.98	ppm	97
23) Pentachlorophenol	15.073	266	136639	4.63	ppm	84
24) Phenanthrene	15.475	178	211259	0.95	ppm #	56
25) Anthracene	15.583	178	199377	1.02	ppm	100
26) Fluoranthene	17.747	202	239817	0.86	ppm	94
27) Pyrene	18.148	202	242469	0.94	ppm	92
29) Benzo[a]anthracene	20.234	228	214215	0.86	ppm	92
30) Chrysene	20.281	228	213719	0.90	ppm	87
32) Benzo[b]fluoranthene	21.903	252	229359	0.94	ppm	90
33) Benzo[k]fluoranthene	21.934	252	196322	0.87	ppm	92
34) Benzo[a]pyrene	22.351	252	201569	0.89	ppm	90
35) Indeno[1,2,3-cd]pyrene	23.824	276	223759	0.97	ppm	98
36) Dibenz[a,h]anthracene	23.881	278	160228	0.84	ppm	100
37) Benzo[g,h,i]perylene	24.200	276	191503	0.96	ppm	100

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2866\
Data File : 3m60952.D
Acq On : 28 Apr 2016 11:26 pm
Operator : juliusj
Sample : cc2855-1.0
Misc : op93271a,e3m2866
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 28 23:50:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Apr 28 10:59:02 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

7.6.40

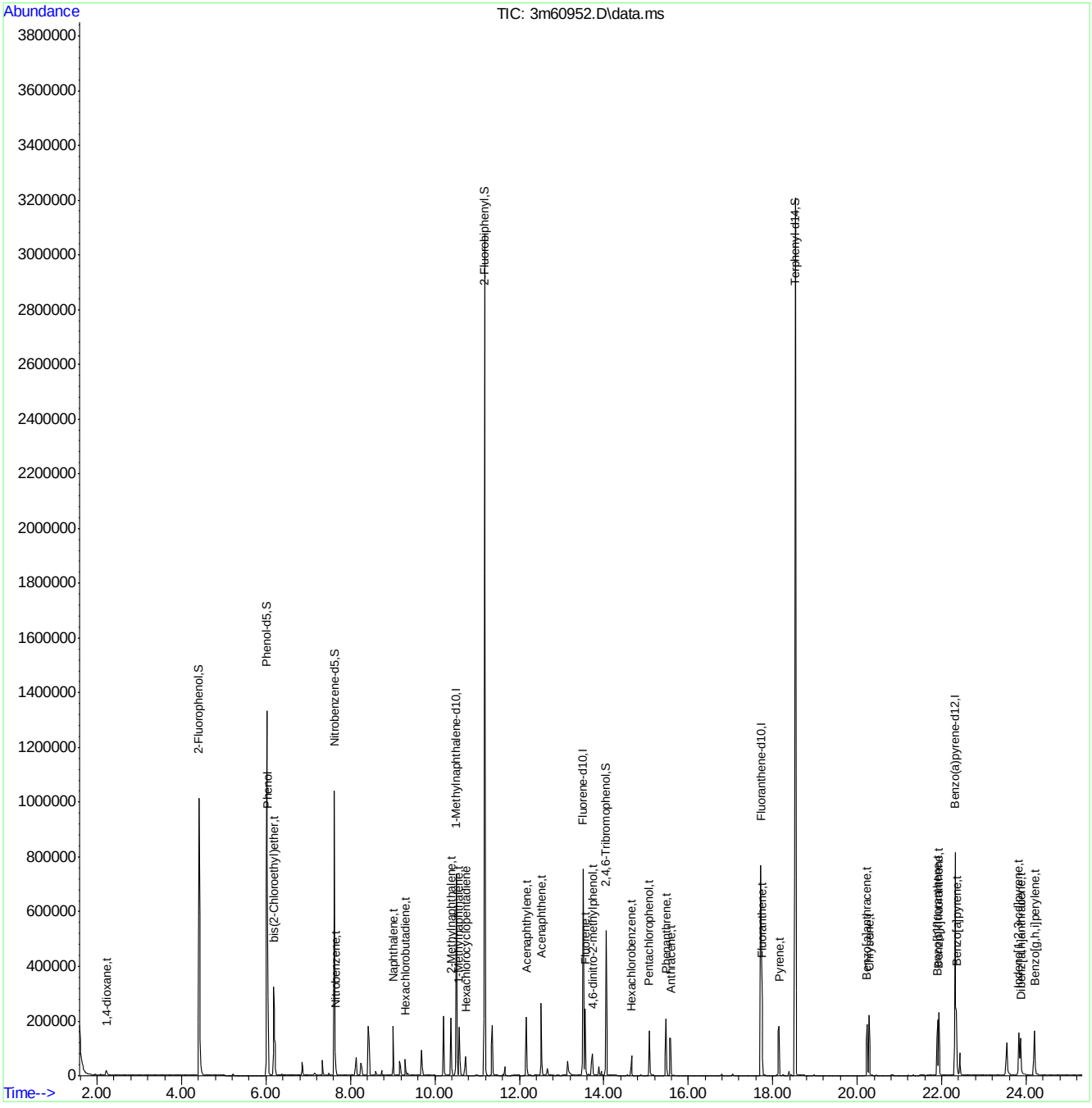
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E3M2866\
Data File : 3m60952.D
Acq On : 28 Apr 2016 11:26 pm
Operator : juliusj
Sample : cc2855-1.0
Misc : op93271a,e3m2866
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 28 23:50:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\M3M2855SIM.M
Quant Title : Semi Volatile Extractables by GC/MS
QLast Update : Thu Apr 28 10:59:02 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

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 JC19023

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

7.6.41

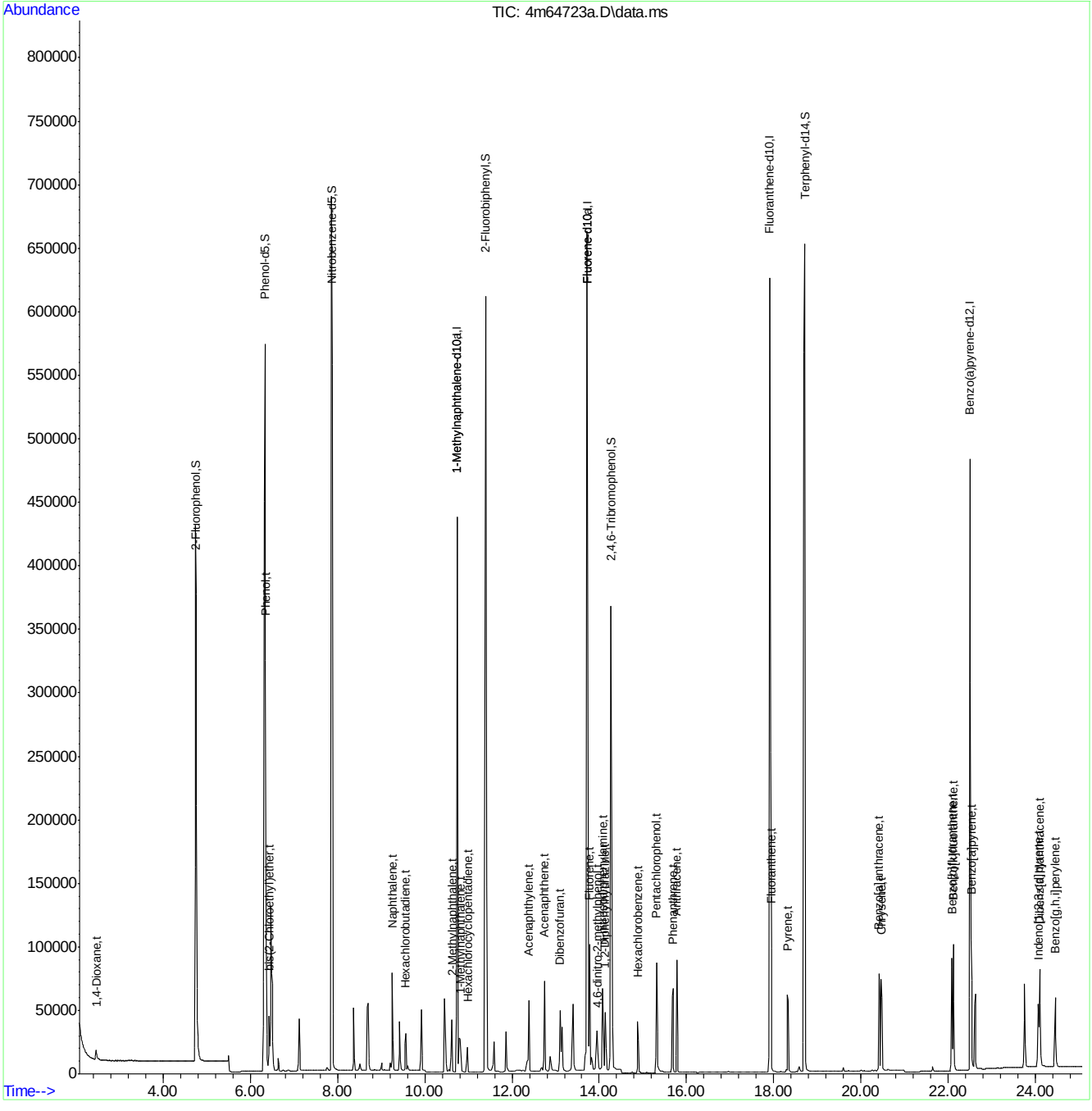
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64723a.D
Acq On : 14 Apr 2016 10:42 am
Operator : linseyk
Sample : ic2881-0.5
Misc : op92998a,e4m2881
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 14 15:17:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:16:44 2016
Response via : Initial Calibration

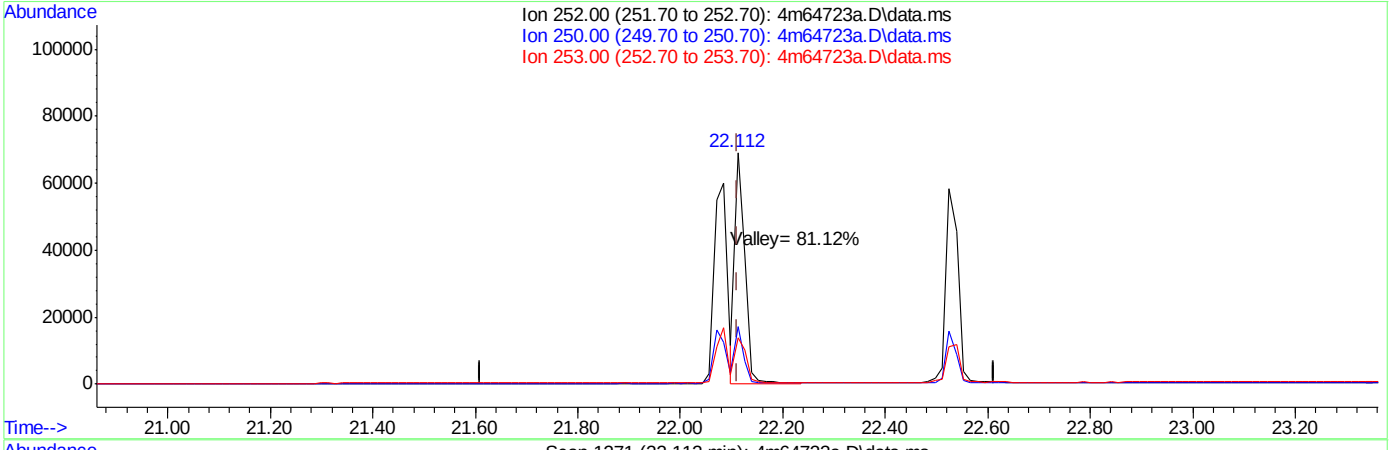


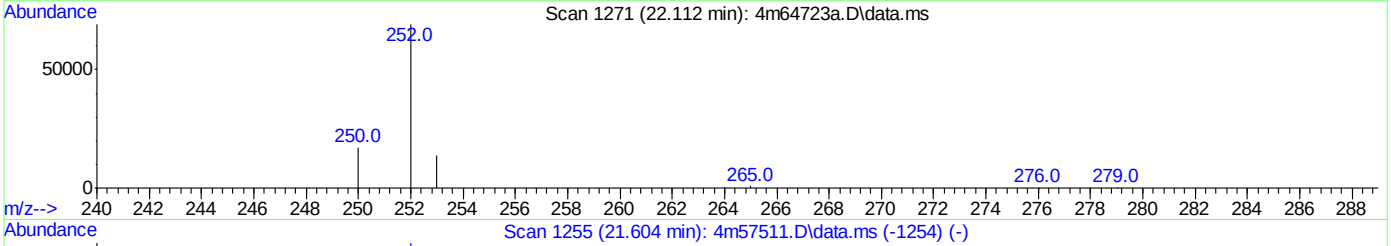
SGS ACCUTEST JC19023

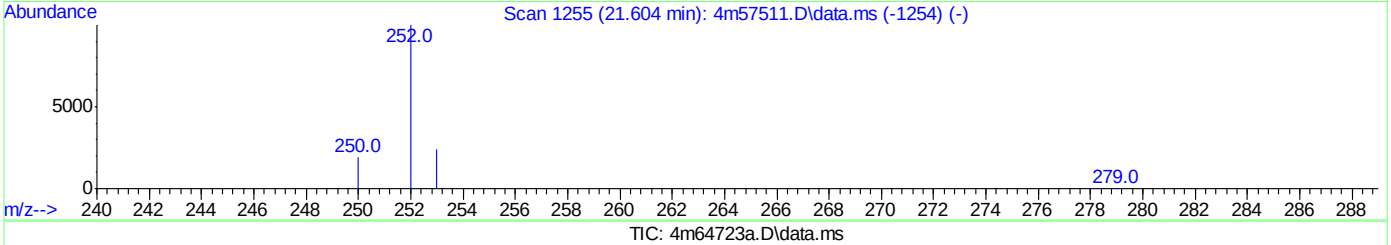
Quantitation Report (Qedit)

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

7.6.42

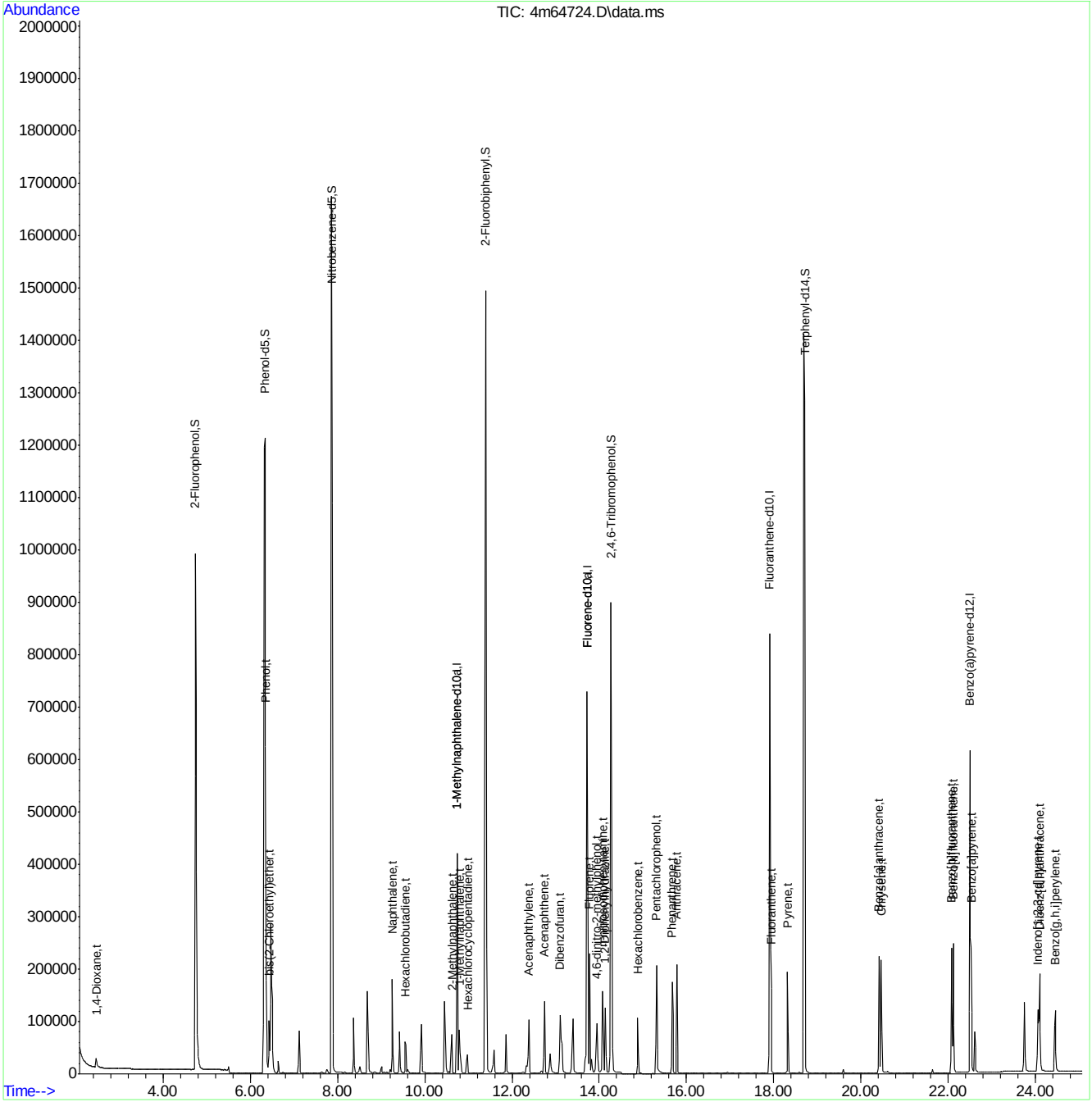
7

SGS ACCUTEST JC19023

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

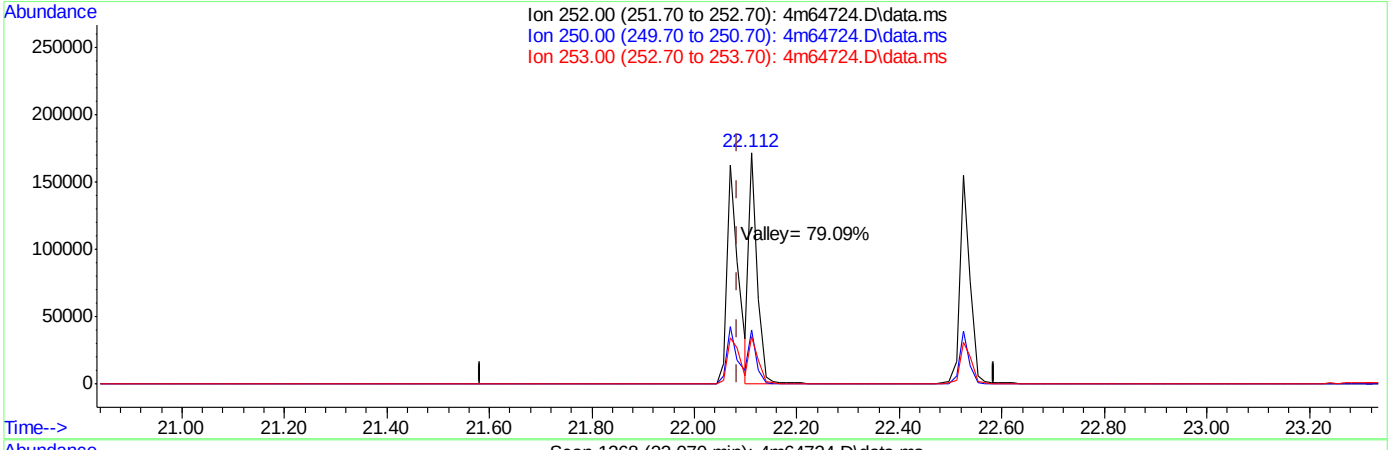


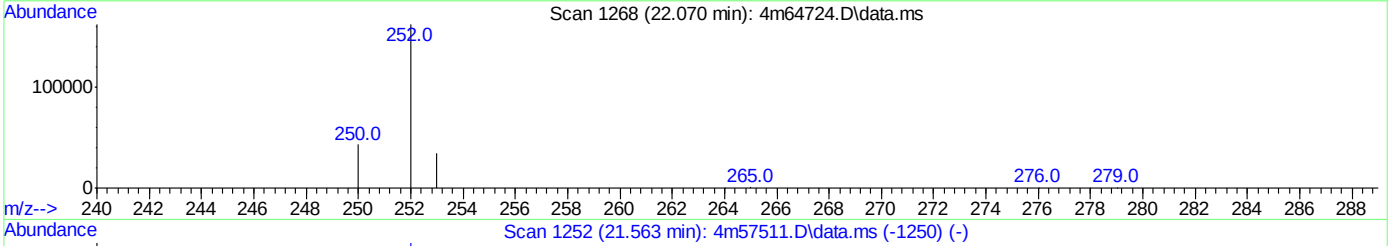
SGS ACCUTEST JC19023

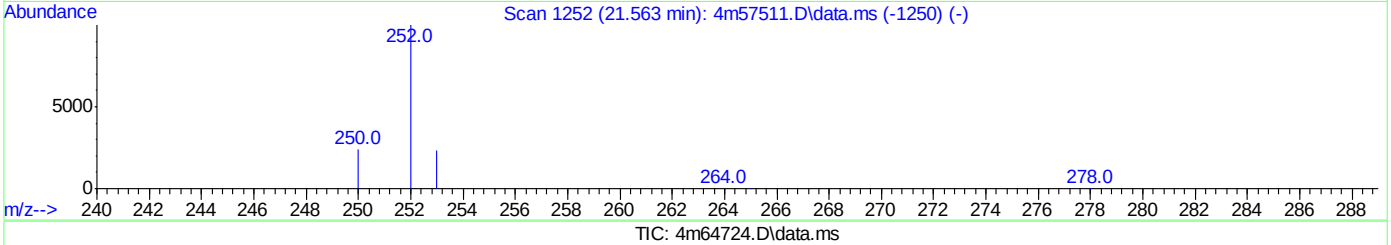
Quantitation Report (Qedit)

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 JC19023

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

7.6.43

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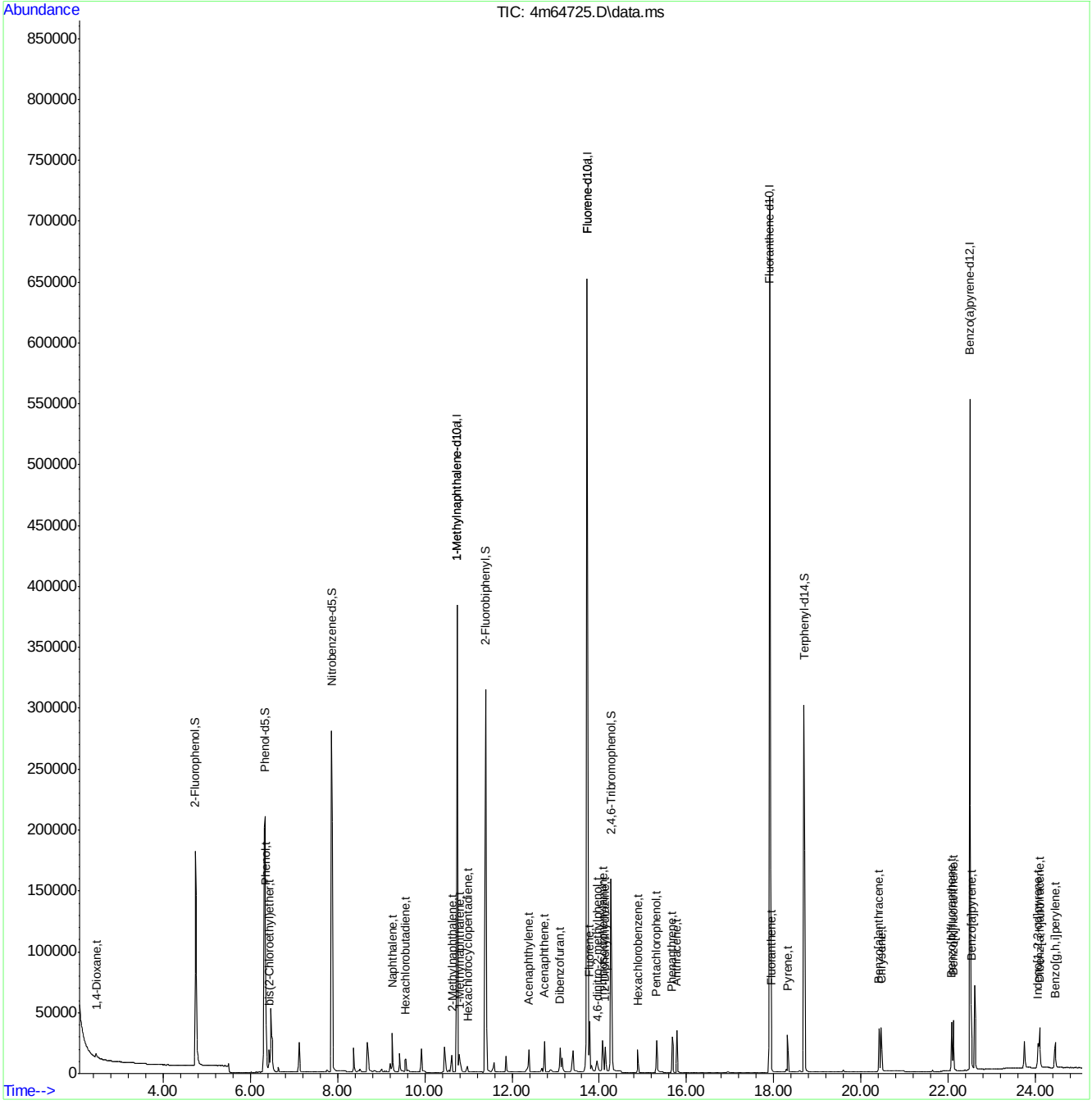
SGS ACCUTEST JC19023

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



SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64726.D
Acq On : 14 Apr 2016 12:15 pm
Operator : linseyk
Sample : ic2881-0.1
Misc : op92998a,e4m2881
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 14 15:28:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:25:00 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.745	152	282673	4.00	ppm	0.00
12) Fluorene-d10	13.724	176	506012	4.00	ppm	0.00
22) Fluoranthene-d10	17.904	212	798340	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	22.497	264	598363	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.745	152	282673	4.00	ppm	0.00
38) Fluorene-d10a	13.724	176	506012	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	4.752	112	73705	1.96	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery	=	3.92%#	
3) Phenol-d5	6.338	99	124726	1.96	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.92%	
6) Nitrobenzene-d5	7.864	82	111828	1.96	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.92%	
11) 2-Fluorobiphenyl	11.390	172	169128	2.07	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.14%	
17) 2,4,6-Tribromophenol	14.273	330	57224	1.97	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.94%	
25) Terphenyl-d14	18.694	244	218853	1.98	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.96%	
Target Compounds						Qvalue
4) Phenol	6.352	94	31501	0.48	ppm	95
5) bis(2-Chloroethyl)ether	6.434	93	4753	0.10	ppm #	64
7) Naphthalene	9.256	128	16167	0.10	ppm	99
8) Hexachlorobutadiene	9.565	225	3842	0.10	ppm	97
9) 2-Methylnaphthalene	10.626	142	6570	0.10	ppm	100
10) Hexachlorocyclopentadiene	10.984	237	3033	0.16	ppm	98
13) Acenaphthylene	12.387	152	11490	0.10	ppm	98
14) Acenaphthene	12.742	153	7351	0.10	ppm	97
15) Dibenzofuran	13.097	168	11211	0.10	ppm	86
16) Fluorene	13.771	166	13581	0.10	ppm	98
18) Hexachlorobenzene	14.883	284	5347	0.10	ppm	96
19) Pentachlorophenol	15.316	266	8706	0.42	ppm	98
20) Phenanthrene	15.671	178	18048	0.10	ppm	99
21) Anthracene	15.780	178	16875	0.10	ppm	98
23) Fluoranthene	17.941	202	20368	0.10	ppm	98
24) Pyrene	18.318	202	20517	0.10	ppm	100
26) Benzo[a]anthracene	20.408	228	18521	0.09	ppm	97
27) Chrysene	20.464	228	18694	0.10	ppm	97
29) Benzo[b]fluoranthene	22.070	252	21229	0.10	ppm	99
30) Benzo[k]fluoranthene	22.112	252	17514	0.10	ppm	98
31) Benzo[a]pyrene	22.525	252	16991	0.10	ppm	98
32) Indeno[1,2,3-cd]pyrene	24.067	276	21723	0.10	ppm	94
33) Dibenz[a,h]anthracene	24.094	278	17411	0.10	ppm	70
34) Benzo[g,h,i]perylene	24.452	276	18457	0.10	ppm	99
36) 1,4-Dioxane	2.461	88	3108	0.11	ppm	87
37) 1-Methylnaphthalene	10.793	142	6136	0.10	ppm	99
39) 4,6-dinitro-2-methylph...	13.962	198	3170	0.36	ppm	96

SGS ACCUTEST JC19023

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

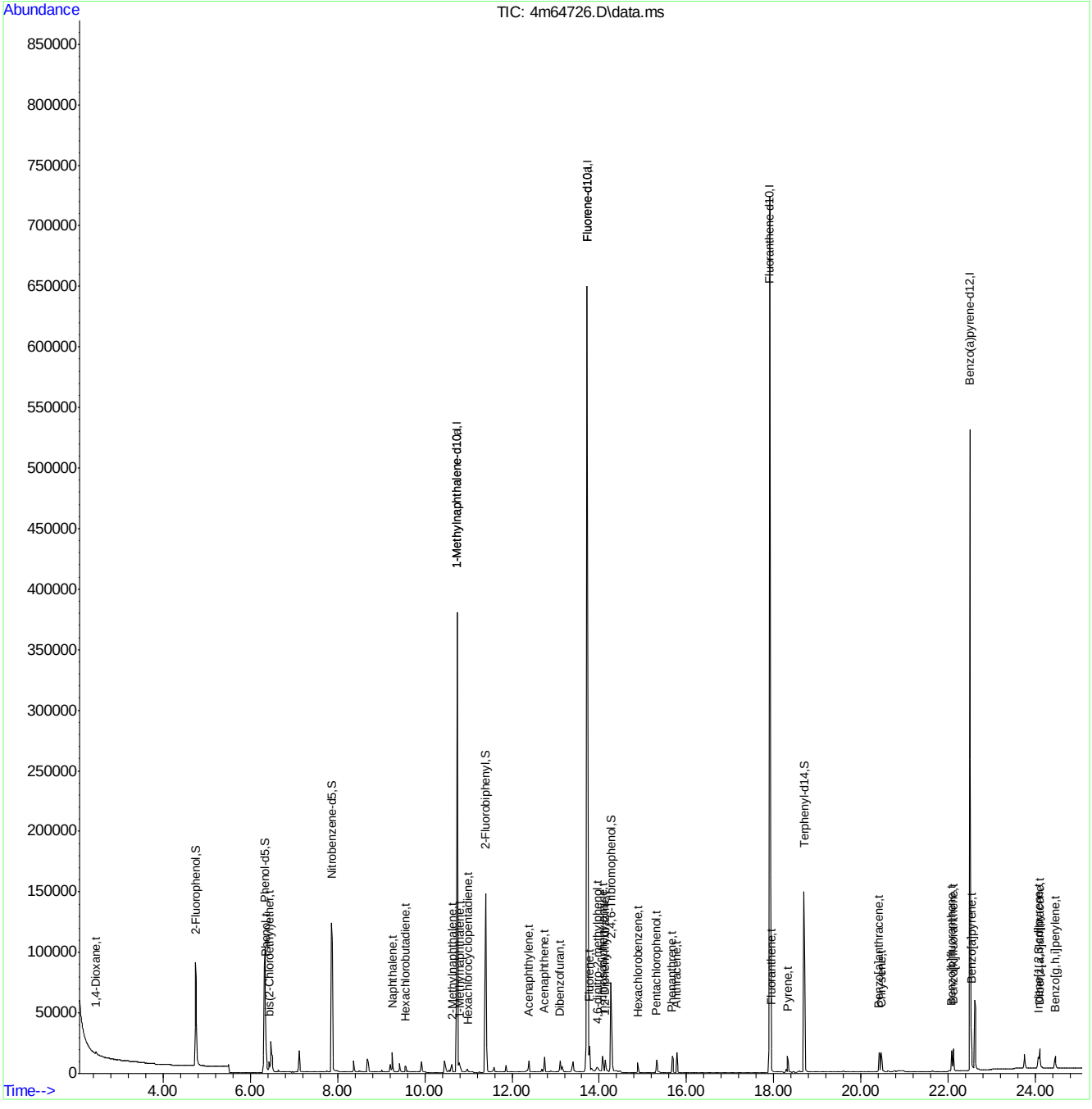
7.6.44

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64726.D
Acq On : 14 Apr 2016 12:15 pm
Operator : linseyk
Sample : ic2881-0.1
Misc : op92998a,e4m2881
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 14 15:28:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:25:00 2016
Response via : Initial Calibration



M4M2881SIM.M Thu Apr 14 15:28:46 2016 MANAGER Page: 3

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64727.D
Acq On : 14 Apr 2016 12:45 pm
Operator : linseyk
Sample : ic2881-0.05
Misc : op92998a,e4m2881
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 14 15:19:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:19:41 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.746	152	282253	4.00	ppm	0.00
12) Fluorene-d10	13.724	176	531280	4.00	ppm	0.00
22) Fluoranthene-d10	17.904	212	824889	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	22.497	264	597391	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.746	152	282253	4.00	ppm	0.00
38) Fluorene-d10a	13.724	176	531280	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	4.752	112	38504	1.03	ppm	0.00
Spiked Amount 50.000	Range 11 - 58		Recovery = 2.06%#			
3) Phenol-d5	6.338	99	64951	1.03	ppm	0.00
Spiked Amount 50.000			Recovery = 2.06%			
6) Nitrobenzene-d5	7.864	82	56961	1.00	ppm	0.00
Spiked Amount 50.000			Recovery = 2.00%			
11) 2-Fluorobiphenyl	11.390	172	90764	1.14	ppm	0.00
Spiked Amount 50.000			Recovery = 2.28%			
17) 2,4,6-Tribromophenol	14.273	330	28553	0.92	ppm	0.00
Spiked Amount 50.000			Recovery = 1.84%			
25) Terphenyl-d14	18.695	244	114865	1.01	ppm	0.00
Spiked Amount 50.000			Recovery = 2.02%			
Target Compounds						Qvalue
4) Phenol	6.352	94	16247	0.25	ppm	95
5) bis(2-Chloroethyl)ether	6.435	93	2580	0.05	ppm #	69
7) Naphthalene	9.256	128	8387	0.05	ppm	99
8) Hexachlorobutadiene	9.566	225	2025	0.05	ppm	97
9) 2-Methylnaphthalene	10.626	142	3398	0.05	ppm	100
10) Hexachlorocyclopentadiene	10.984	237	1337	0.07	ppm	98
13) Acenaphthylene	12.388	152	5918	0.05	ppm	98
14) Acenaphthene	12.743	153	3857	0.05	ppm	97
15) Dibenzofuran	13.098	168	6123	0.05	ppm	89
16) Fluorene	13.772	166	7203	0.05	ppm	98
18) Hexachlorobenzene	14.883	284	2778	0.05	ppm	96
19) Pentachlorophenol	15.316	266	4171	0.18	ppm	98
20) Phenanthrene	15.672	178	9370	0.05	ppm	99
21) Anthracene	15.780	178	8817	0.05	ppm	98
23) Fluoranthene	17.941	202	11294	0.05	ppm	97
24) Pyrene	18.318	202	10604	0.05	ppm	100
26) Benzo[a]anthracene	20.408	228	10103	0.05	ppm	97
27) Chrysene	20.464	228	9648	0.05	ppm	97
29) Benzo[b]fluoranthene	22.070	252	10982	0.05	ppm	99
30) Benzo[k]fluoranthene	22.112	252	8686	0.05	ppm	99
31) Benzo[a]pyrene	22.525	252	8351	0.05	ppm	98
32) Indeno[1,2,3-cd]pyrene	24.053	276	11120	0.05	ppm	92
33) Dibenz[a,h]anthracene	24.094	278	9277	0.05	ppm	100
34) Benzo[g,h,i]perylene	24.452	276	9354	0.05	ppm	99
37) 1-Methylnaphthalene	10.793	142	3386	0.06	ppm	99
39) 4,6-dinitro-2-methylph...	13.963	198	1330	0.13	ppm	96
40) 1,2-Diphenylhydrazine	14.130	77	6256	0.05	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64727.D
Acq On : 14 Apr 2016 12:45 pm
Operator : linseyk
Sample : ic2881-0.05
Misc : op92998a,e4m2881
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 14 15:19:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:19:41 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) n-nitrosodiphenylamine	14.082	169	4526	0.05	ppm	95

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

7.6.45

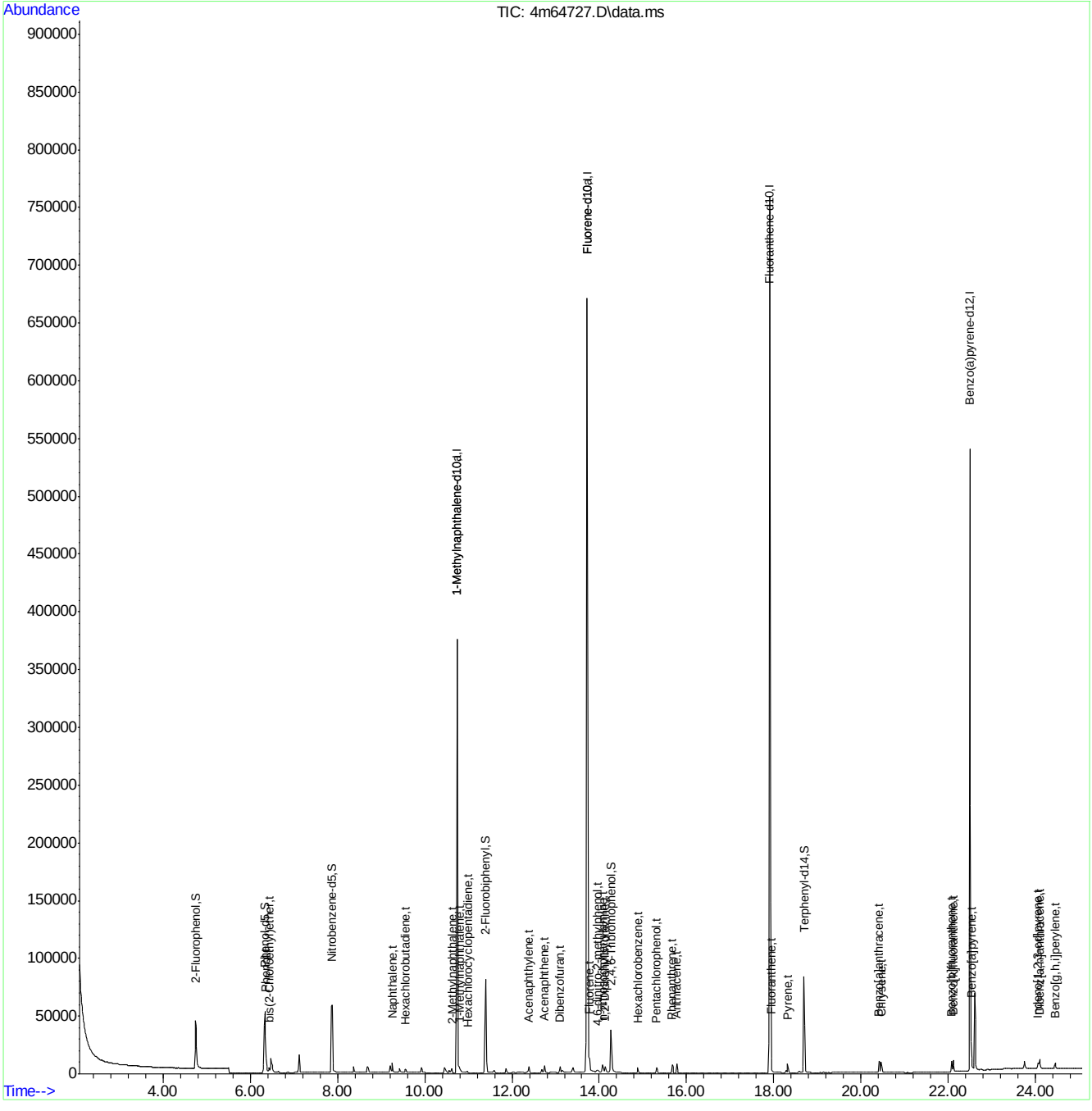
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64727.D
Acq On : 14 Apr 2016 12:45 pm
Operator : linseyk
Sample : ic2881-0.05
Misc : op92998a,e4m2881
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 14 15:19:47 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:19:41 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64728.D
Acq On : 14 Apr 2016 1:16 pm
Operator : linseyk
Sample : ic2881-0.02
Misc : op92998a,e4m2881
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 14 15:30:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:29:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.746	152	280672	4.00	ppm	0.00
12) Fluorene-d10	13.724	176	514038	4.00	ppm	0.00
22) Fluoranthene-d10	17.904	212	790910	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	22.497	264	599819	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.746	152	280672	4.00	ppm	0.00
38) Fluorene-d10a	13.724	176	514038	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	4.752	112	15109	0.40	ppm	0.01
Spiked Amount 50.000	Range 11 - 58		Recovery = 0.80%#			
3) Phenol-d5	6.338	99	24875	0.39	ppm	0.00
Spiked Amount 50.000			Recovery = 0.78%			
6) Nitrobenzene-d5	7.879	82	22009	0.39	ppm	0.02
Spiked Amount 50.000			Recovery = 0.78%			
11) 2-Fluorobiphenyl	11.390	172	35367	0.44	ppm	0.00
Spiked Amount 50.000			Recovery = 0.88%			
17) 2,4,6-Tribromophenol	14.273	330	10404	0.35	ppm	0.00
Spiked Amount 50.000			Recovery = 0.70%			
25) Terphenyl-d14	18.694	244	42409	0.39	ppm	0.00
Spiked Amount 50.000			Recovery = 0.78%			
Target Compounds						Qvalue
4) Phenol	6.352	94	6339	0.10	ppm	72
5) bis(2-Chloroethyl)ether	6.434	93	980	0.02	ppm	83
7) Naphthalene	9.256	128	3340	0.02	ppm	98
8) Hexachlorobutadiene	9.565	225	796	0.02	ppm	97
9) 2-Methylnaphthalene	10.626	142	1501	0.02	ppm	97
10) Hexachlorocyclopentadiene	10.984	237	450	0.02	ppm	95
13) Acenaphthylene	12.388	152	2239	0.02	ppm	98
14) Acenaphthene	12.743	153	1496	0.02	ppm	97
15) Dibenzofuran	13.097	168	2271	0.02	ppm	100
16) Fluorene	13.771	166	2703	0.02	ppm	97
18) Hexachlorobenzene	14.883	284	1113	0.02	ppm	99
19) Pentachlorophenol	15.316	266	1632	0.08	ppm	94
20) Phenanthrene	15.671	178	3896	0.02	ppm	96
21) Anthracene	15.780	178	3355	0.02	ppm	99
23) Fluoranthene	17.941	202	4884	0.02	ppm	99
24) Pyrene	18.318	202	4158	0.02	ppm	99
26) Benzo[a]anthracene	20.408	228	4066	0.02	ppm	99
27) Chrysene	20.464	228	3857	0.02	ppm	99
29) Benzo[b]fluoranthene	22.070	252	4712	0.02	ppm	95
30) Benzo[k]fluoranthene	22.112	252	3502	0.02	ppm	99
31) Benzo[a]pyrene	22.525	252	3641	0.02	ppm	98
32) Indeno[1,2,3-cd]pyrene	24.067	276	4414	0.02	ppm	95
33) Dibenz[a,h]anthracene	24.094	278	3705	0.02	ppm	97
34) Benzo[g,h,i]perylene	24.452	276	3835	0.02	ppm	99
37) 1-Methylnaphthalene	10.793	142	1512	0.02	ppm	99
39) 4,6-dinitro-2-methylph...	13.963	198	582	0.07	ppm	79
40) 1,2-Diphenylhydrazine	14.130	77	2462	0.02	ppm	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64728.D
Acq On : 14 Apr 2016 1:16 pm
Operator : linseyk
Sample : ic2881-0.02
Misc : op92998a,e4m2881
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 14 15:30:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:29:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
41) n-nitrosodiphenylamine	14.082	169	1877	0.02	ppm	95

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

7.6.46

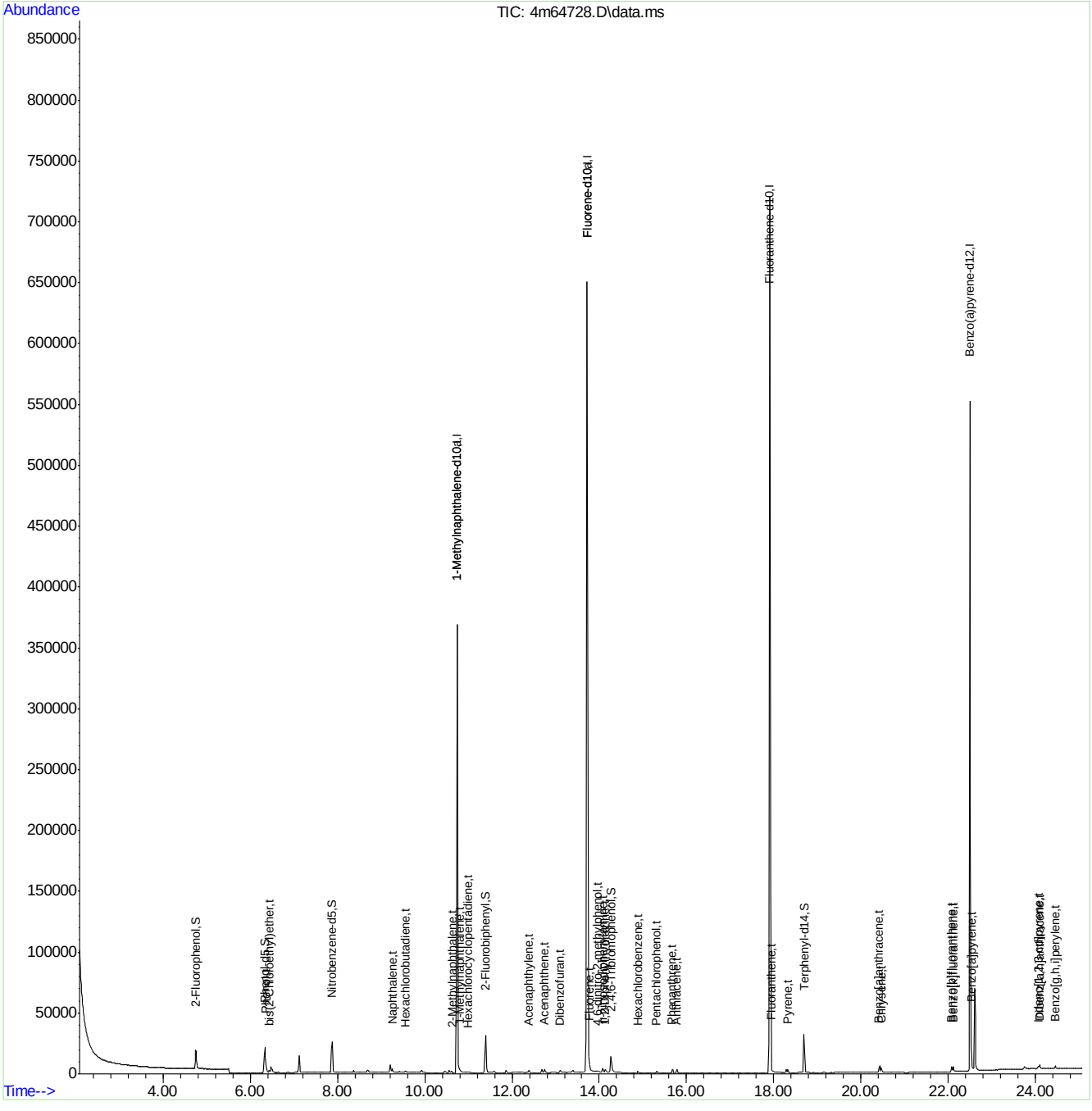
7

SGS ACCUTEST JC19023

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

7.6.47

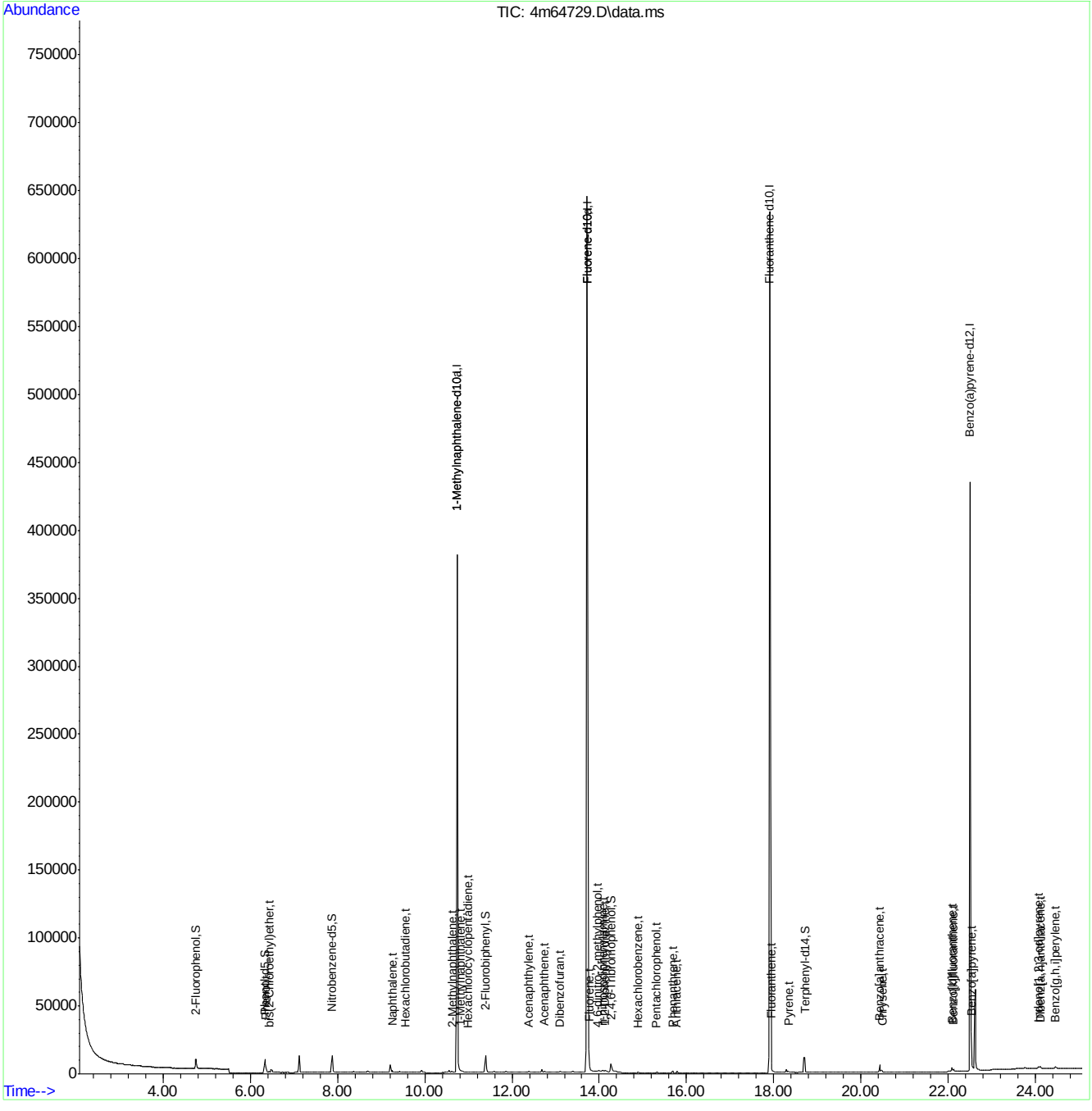
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64729.D
Acq On : 14 Apr 2016 1:48 pm
Operator : linseyk
Sample : ic2881-0.01
Misc : op92998a,e4m2881
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 14 15:53:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:30:56 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64730.D
Acq On : 14 Apr 2016 2:20 pm
Operator : linseyk
Sample : ic2881-5.0
Misc : op92998a,e4m2881
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 14 15:53:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:53:47 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.745	152	294505	4.00	ppm	0.00
12) Fluorene-d10	13.724	176	539967	4.00	ppm	0.00
22) Fluoranthene-d10	17.904	212	760249	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	22.511	264	580666	4.00	ppm	0.01
35) 1-Methylnaphthalene-d10a	10.745	152	294505	4.00	ppm	0.00
38) Fluorene-d10a	13.724	176	539967	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	4.741	112	3610118	91.93	ppm	-0.01
Spiked Amount 50.000	Range 11 - 58		Recovery	=	183.86%#	
3) Phenol-d5	6.338	99	5956548	90.09	ppm	0.00
Spiked Amount 50.000			Recovery	=	180.18%	
6) Nitrobenzene-d5	7.879	82	5414807	91.71	ppm	0.00
Spiked Amount 50.000			Recovery	=	183.42%	
11) 2-Fluorobiphenyl	11.414	172	9016987	104.26	ppm	0.02
Spiked Amount 50.000			Recovery	=	208.52%	
17) 2,4,6-Tribromophenol	14.297	330	2295112	74.09	ppm	0.02
Spiked Amount 50.000			Recovery	=	148.18%	
25) Terphenyl-d14	18.713	244	9092042	86.79	ppm	0.00
Spiked Amount 50.000			Recovery	=	173.58%	
Target Compounds						Qvalue
4) Phenol	6.352	94	1528983	22.64	ppm	75
5) bis(2-Chloroethyl)ether	6.448	93	235976	4.65	ppm	70
7) Naphthalene	9.256	128	771791	4.58	ppm	99
8) Hexachlorobutadiene	9.565	225	190954	4.58	ppm	92
9) 2-Methylnaphthalene	10.626	142	361705	5.01	ppm	99
10) Hexachlorocyclopentadiene	10.984	237	271381	14.12	ppm	96
13) Acenaphthylene	12.387	152	618832	5.01	ppm	92
14) Acenaphthene	12.742	153	401217	5.04	ppm	97
15) Dibenzofuran	13.097	168	535298	4.40	ppm	50
16) Fluorene	13.771	166	639751	4.34	ppm	89
18) Hexachlorobenzene	14.883	284	258380	4.51	ppm	98
19) Pentachlorophenol	15.316	266	648135	29.53	ppm	93
20) Phenanthrene	15.687	178	889577	4.50	ppm	97
21) Anthracene	15.780	178	899214	4.88	ppm	97
23) Fluoranthene	17.941	202	1057860	5.23	ppm	99
24) Pyrene	18.337	202	1025148	5.11	ppm	97
26) Benzo[a]anthracene	20.426	228	956396	5.15	ppm	97
27) Chrysene	20.483	228	944067	5.22	ppm	99
29) Benzo[b]fluoranthene	22.084	252	995427	4.69	ppm	90
30) Benzo[k]fluoranthene	22.125	252	919603	5.35	ppm	85
31) Benzo[a]pyrene	22.538	252	893992	5.20	ppm	89
32) Indeno[1,2,3-cd]pyrene	24.067	276	1083965	4.99	ppm	98
33) Dibenz[a,h]anthracene	24.108	278	874305	5.02	ppm	97
34) Benzo[g,h,i]perylene	24.452	276	900771	4.90	ppm	92
36) 1,4-Dioxane	2.461	88	64218	2.90	ppm #	67
37) 1-Methylnaphthalene	10.817	142	312404	4.41	ppm	97
39) 4,6-dinitro-2-methylph...	13.962	198	605702	64.80	ppm	65

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64730.D
Acq On : 14 Apr 2016 2:20 pm
Operator : linseyk
Sample : ic2881-5.0
Misc : op92998a,e4m2881
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 14 15:53:55 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:53:47 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) 1,2-Diphenylhydrazine	14.130	77	527083	3.88	ppm	97
41) n-nitrosodiphenylamine	14.082	169	377507	3.75	ppm	84

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

7.6.48

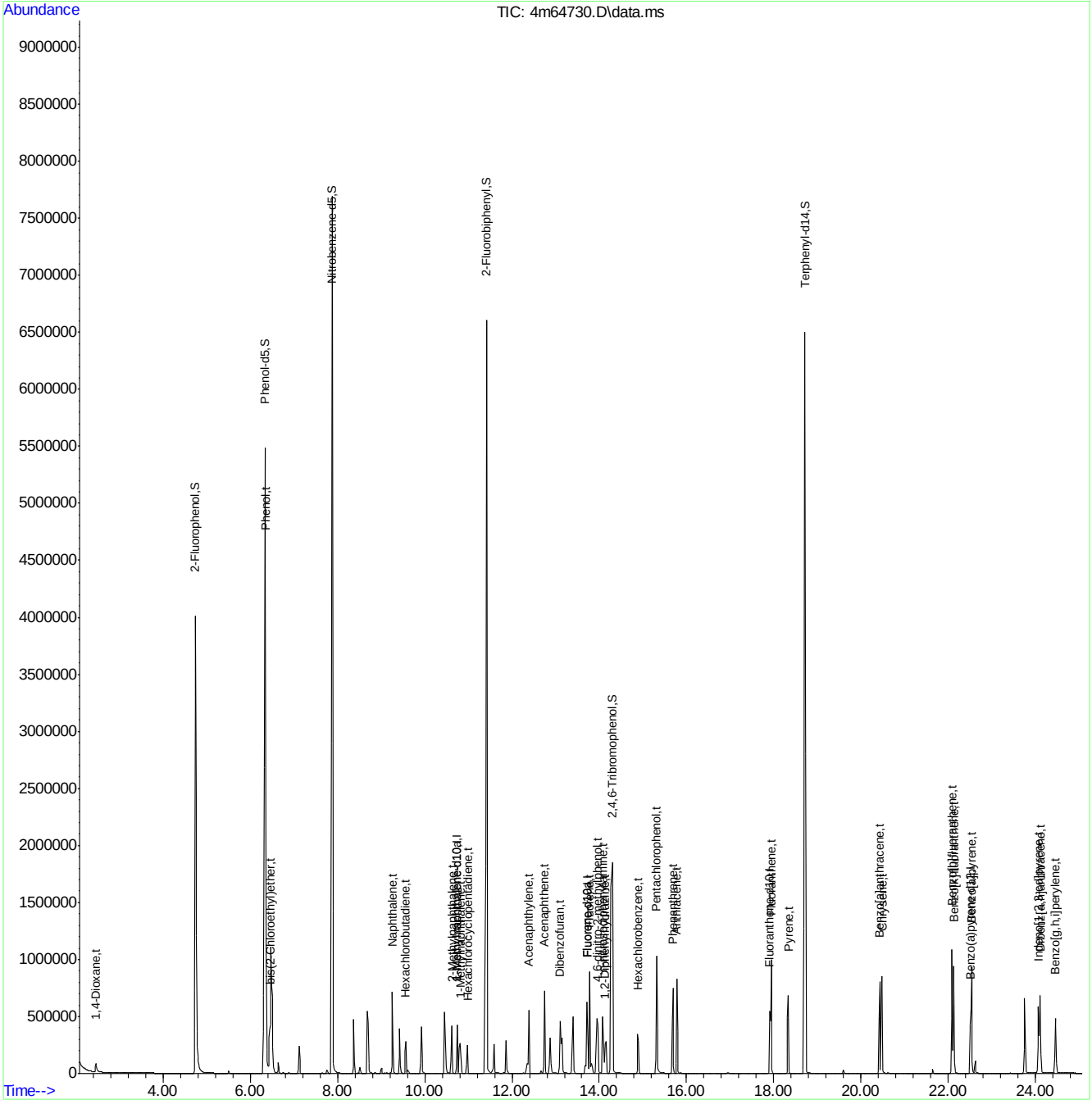
7

SGS ACCUTEST JC19023

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 JC19023

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

7.6.49

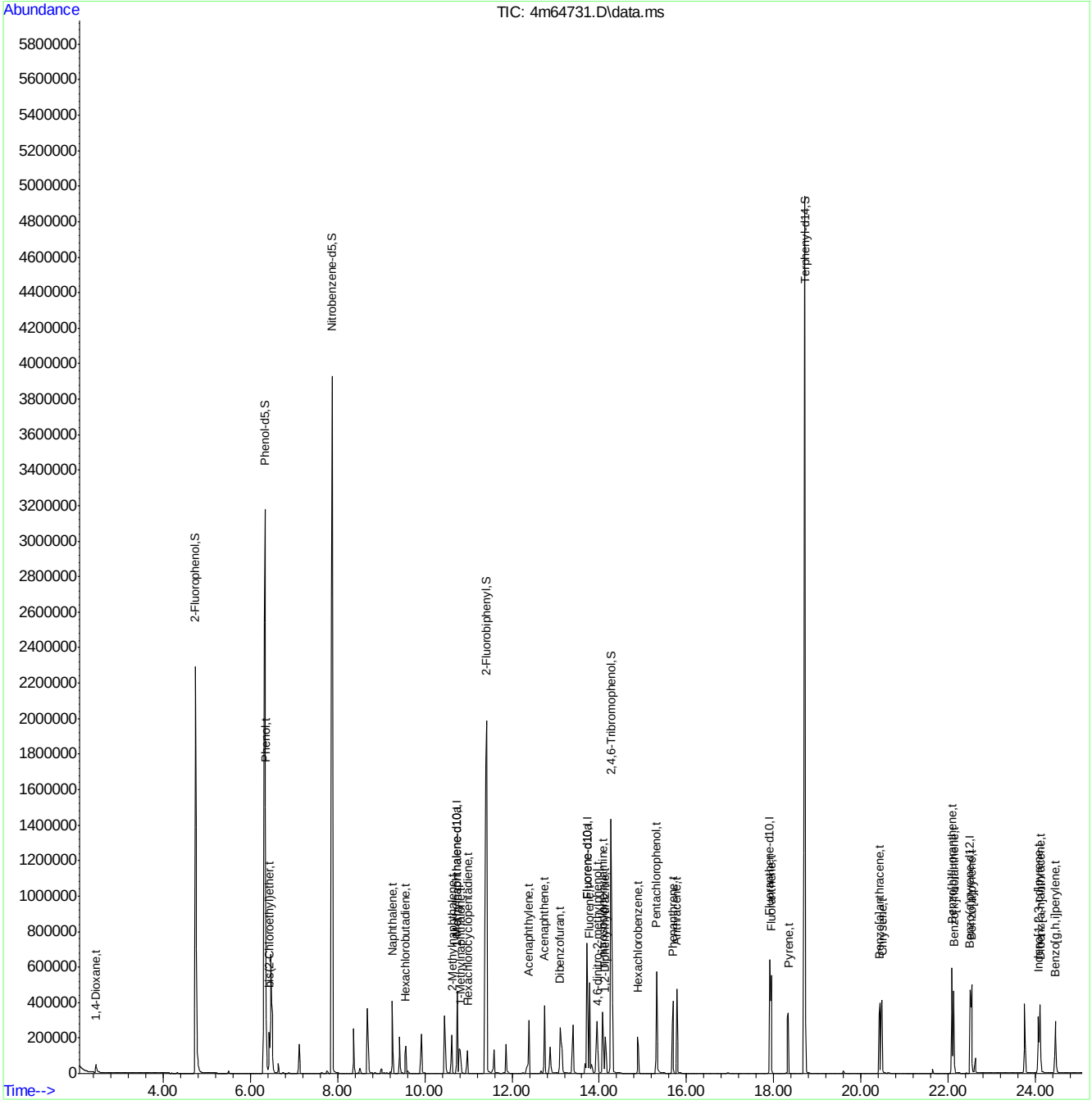
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64731.D
Acq On : 14 Apr 2016 2:53 pm
Operator : linseyk
Sample : ic2881-2.5
Misc : op92998a,e4m2881
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 14 15:54:31 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:54:24 2016
Response via : Initial Calibration



M4M2881SIM.M Thu Apr 14 15:54:53 2016 MANAGER Page: 3

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64732.D
Acq On : 14 Apr 2016 3:25 pm
Operator : linseyk
Sample : icv2881-1.0
Misc : op92998a,e4m2881
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 14 15:57:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:56:58 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.746	152	390727	4.00	ppm	0.00
12) Fluorene-d10	13.724	176	664300	4.00	ppm	0.00
22) Fluoranthene-d10	17.904	212	995159	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	22.511	264	771368	4.00	ppm	0.01
35) 1-Methylnaphthalene-d10a	10.746	152	390727	4.00	ppm	0.00
38) Fluorene-d10a	13.724	176	664300	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery	=	0.00%#	
3) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
6) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
11) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
17) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
4) Phenol	6.352	94	411546	4.67	ppm	79
19) Pentachlorophenol	15.316	266	135876	4.78	ppm	93
39) 4,6-dinitro-2-methylph...	13.963	198	89891	4.89	ppm	98

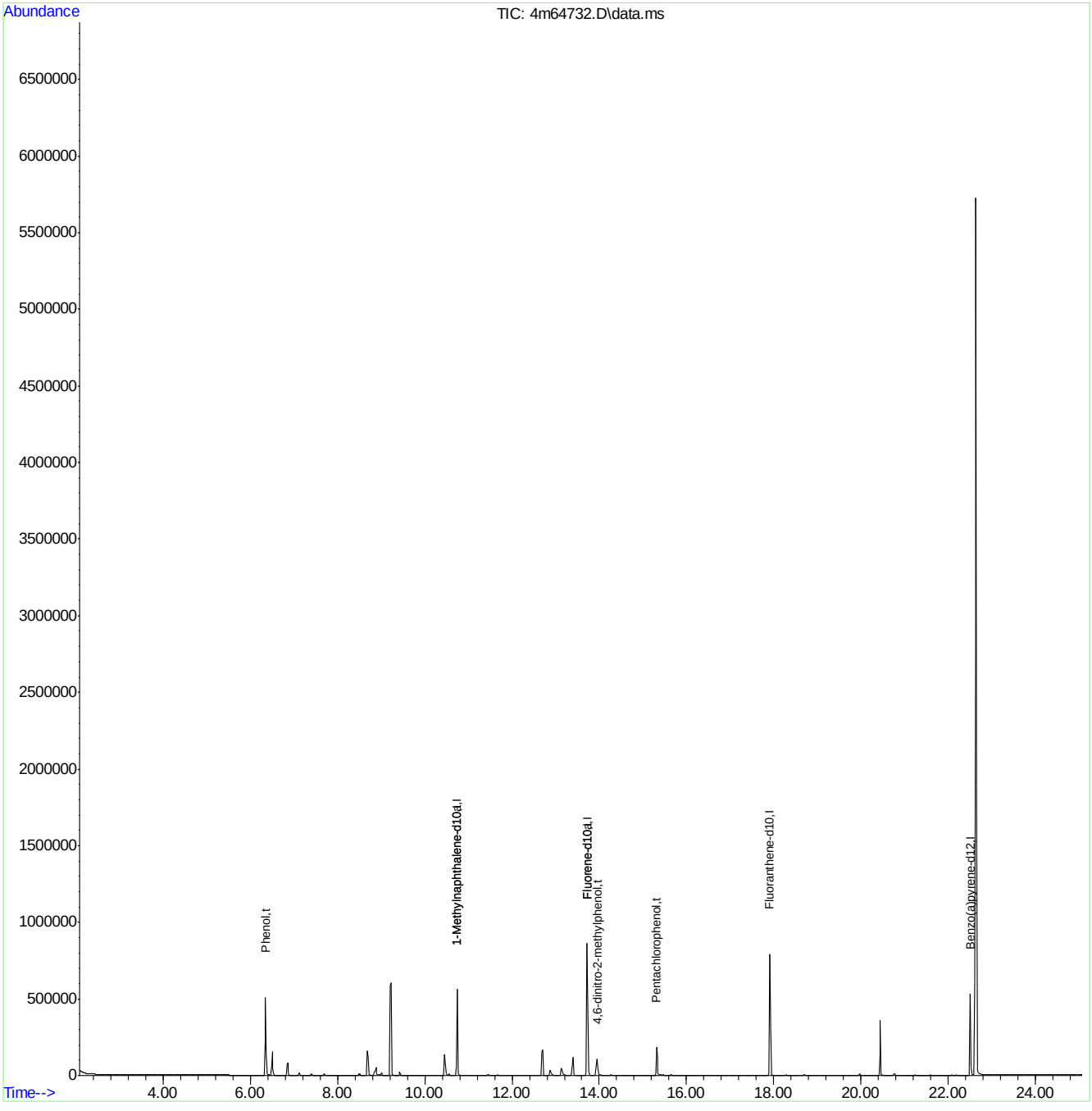
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19023

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

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64733.D
Acq On : 14 Apr 2016 3:57 pm
Operator : linseyk
Sample : icv2881-1.0
Misc : op92998a,e4m2881
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 14 16:31:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:54:58 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.746	152	302632	4.00	ppm	0.00
12) Fluorene-d10	13.724	176	481376	4.00	ppm	0.00
22) Fluoranthene-d10	17.904	212	716831	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	22.497	264	559592	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.746	152	302632	4.00	ppm	0.00
38) Fluorene-d10a	13.724	176	481376	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0d	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery	=	0.00%#	
3) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
6) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
11) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
17) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
5) bis(2-Chloroethyl)ether	6.435	93	58005	1.13	ppm	74
7) Naphthalene	9.256	128	185921	1.09	ppm	100
8) Hexachlorobutadiene	9.566	225	45010	1.07	ppm	99
9) 2-Methylnaphthalene	10.626	142	76921	1.04	ppm	98
10) Hexachlorocyclopentadiene	10.984	237	19409	0.88	ppm	98
13) Acenaphthylene	12.388	152	128548	1.17	ppm	100
14) Acenaphthene	12.743	153	86964	1.22	ppm	99
15) Dibenzofuran	13.098	168	127075	1.20	ppm	71
16) Fluorene	13.772	166	150885	1.17	ppm	99
18) Hexachlorobenzene	14.883	284	56380	1.12	ppm	99
20) Phenanthrene	15.687	178	198269	1.15	ppm	99
21) Anthracene	15.780	178	186988	1.14	ppm	99
23) Fluoranthene	17.941	202	228833	1.18	ppm	100
24) Pyrene	18.337	202	224450	1.18	ppm	97
26) Benzo[a]anthracene	20.427	228	200348	1.13	ppm	98
27) Chrysene	20.483	228	199744	1.15	ppm	99
29) Benzo[b]fluoranthene	22.084	252	198138	0.98	ppm	96
30) Benzo[k]fluoranthene	22.126	252	190427	1.13	ppm	99
31) Benzo[a]pyrene	22.539	252	185931	1.11	ppm	100
32) Indeno[1,2,3-cd]pyrene	24.067	276	223528	1.07	ppm	99
33) Dibenz[a,h]anthracene	24.108	278	181394	1.08	ppm	98
34) Benzo[g,h,i]perylene	24.452	276	189752	1.08	ppm	100
36) 1,4-Dioxane	2.482	88	16161	1.01	ppm #	76
40) 1,2-Diphenylhydrazine	14.130	77	134283	1.18	ppm	98
41) n-nitrosodiphenylamine	14.082	169	95765	1.13	ppm	98

SGS ACCUTEST JC19023

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

7.6.51

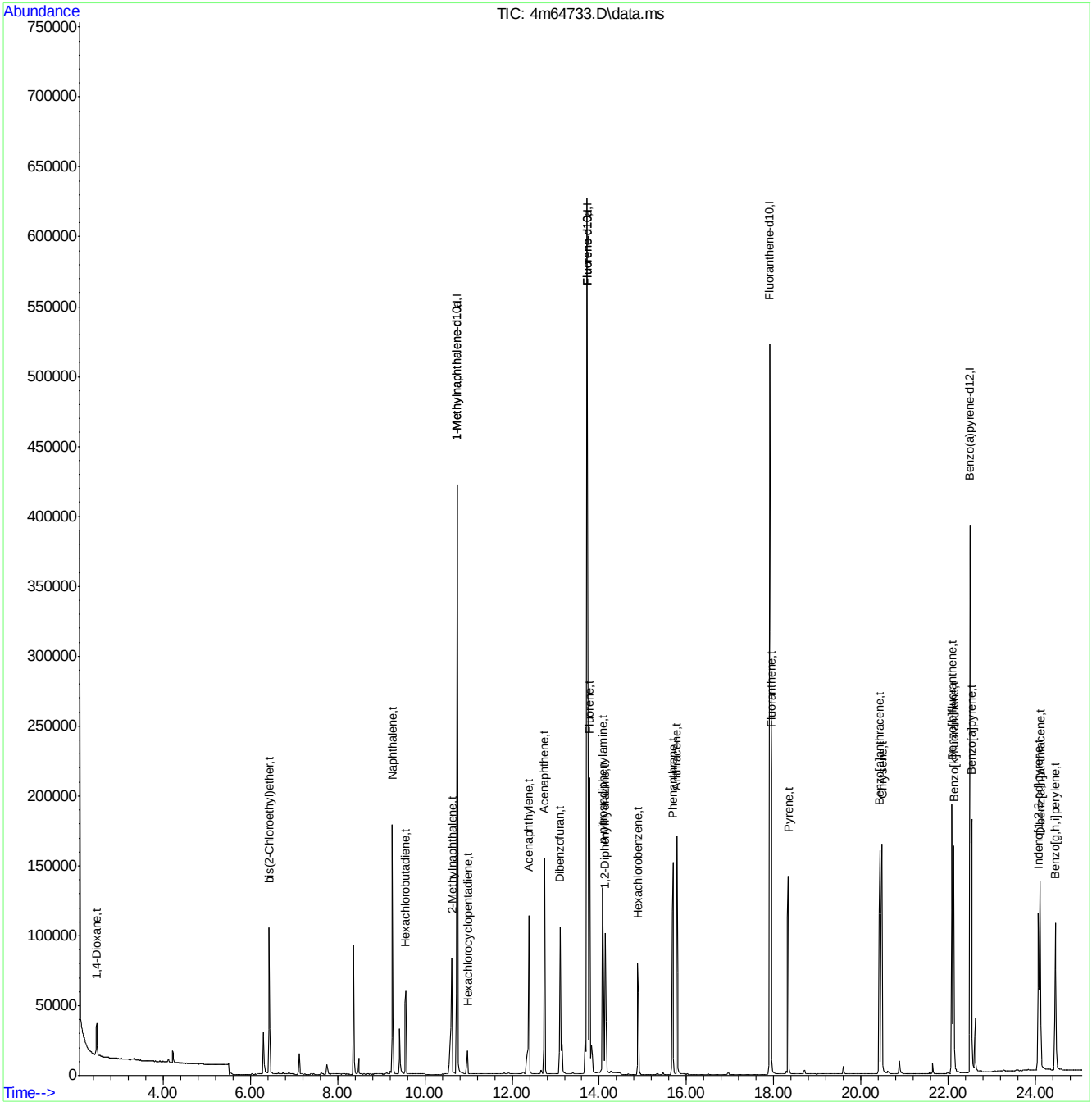
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64733.D
Acq On : 14 Apr 2016 3:57 pm
Operator : linseyk
Sample : icv2881-1.0
Misc : op92998a,e4m2881
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 14 16:31:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:54:58 2016
Response via : Initial Calibration



M4M2881SIM.M Thu Apr 14 16:31:43 2016 MANAGER Page: 3

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64734.D
Acq On : 14 Apr 2016 4:28 pm
Operator : linseyk
Sample : icv2881-1.0
Misc : op92998a,e4m2881
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 14 17:01:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:54:58 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.745	152	371893	4.00	ppm	0.00
12) Fluorene-d10	13.724	176	603684	4.00	ppm	0.00
22) Fluoranthene-d10	17.904	212	922186	4.00	ppm	0.00
28) Benzo(a)pyrene-d12	22.497	264	751295	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.745	152	371893	4.00	ppm	0.00
38) Fluorene-d10a	13.724	176	603684	4.00	ppm	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000	Range 11 - 58		Recovery	=	0.00%#	
3) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
6) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
11) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
17) 2,4,6-Tribromophenol	0.000	330	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
37) 1-Methylnaphthalene	10.817	142	82253	0.95	ppm	99

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

7.6.52

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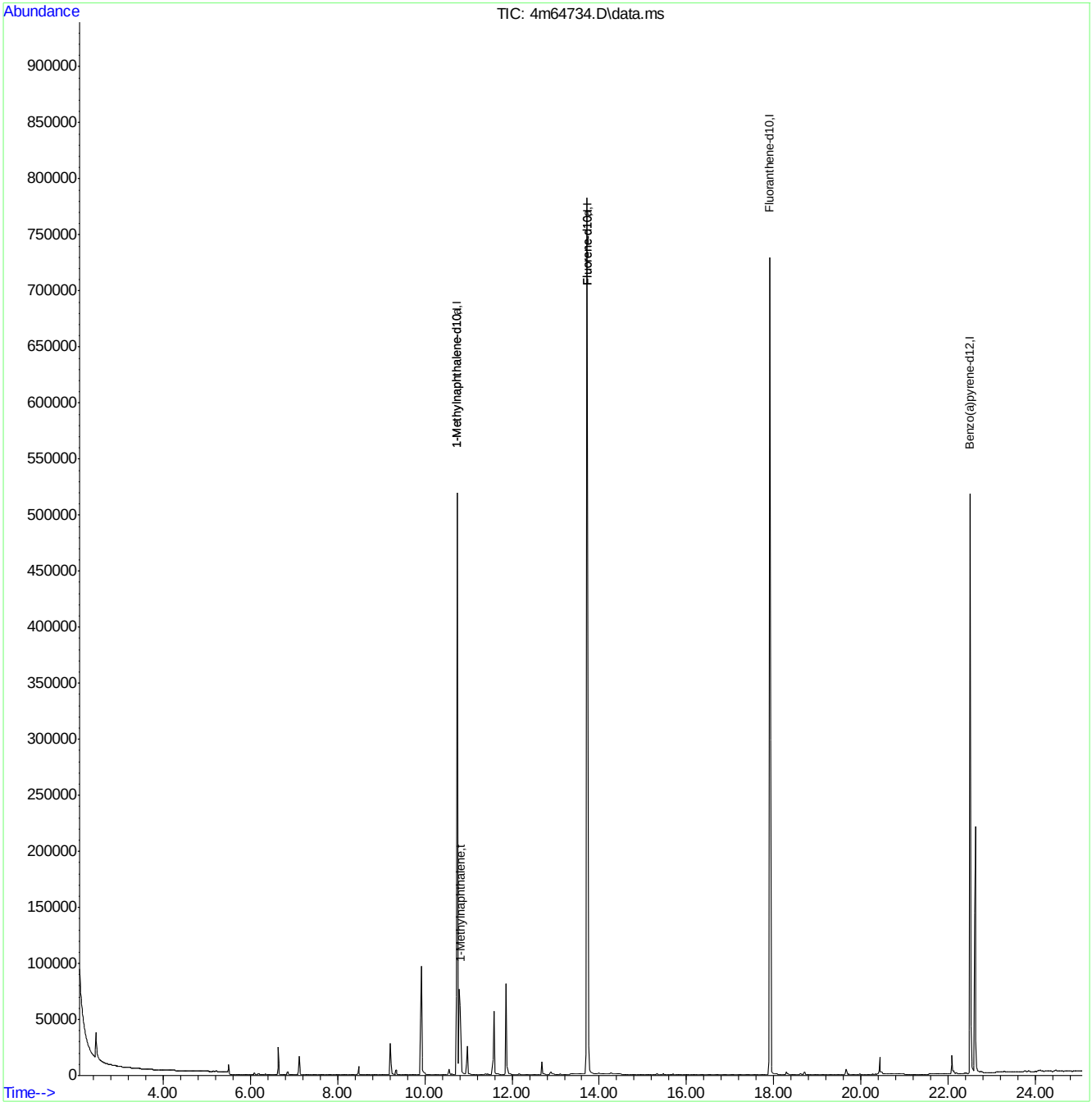
SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2881\
Data File : 4m64734.D
Acq On : 14 Apr 2016 4:28 pm
Operator : linseyk
Sample : icv2881-1.0
Misc : op92998a,e4m2881
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 14 17:01:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Thu Apr 14 15:54:58 2016
Response via : Initial Calibration



M4M2881SIM.M Thu Apr 14 17:02:12 2016 MANAGER

Page: 2

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65170.D
Acq On : 9 May 2016 10:32 am
Operator : linseyk
Sample : cc2881-1
Misc : op93541a,e4m2910
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 09 10:57:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Fri May 06 13:08:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1-Methylnaphthalene-d10	10.678	152	326495	4.00	ppm	-0.02
12) Fluorene-d10	13.656	176	574008	4.00	ppm	-0.02
22) Fluoranthene-d10	17.836	212	915613	4.00	ppm	-0.03
28) Benzo(a)pyrene-d12	22.436	264	829985	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.678	152	326495	4.00	ppm	#-0.02
38) Fluorene-d10a	13.656	176	574008	4.00	ppm	-0.02
System Monitoring Compounds						
2) 2-Fluorophenol	4.704	112	842525	19.71	ppm	-0.02
Spiked Amount 50.000	Range 11 - 58		Recovery = 39.42%			
3) Phenol-d5	6.287	99	1462810	20.35	ppm	-0.02
Spiked Amount 50.000			Recovery = 40.70%			
6) Nitrobenzene-d5	7.821	82	1391121	21.58	ppm	-0.02
Spiked Amount 50.000			Recovery = 43.16%			
11) 2-Fluorobiphenyl	11.346	172	1930885	20.49	ppm	-0.02
Spiked Amount 50.000			Recovery = 40.98%			
17) 2,4,6-Tribromophenol	14.205	330	556837	18.19	ppm	-0.02
Spiked Amount 50.000			Recovery = 36.38%			
25) Terphenyl-d14	18.645	244	2735738	22.12	ppm	-0.03
Spiked Amount 50.000			Recovery = 44.24%			
Target Compounds						Qvalue
4) Phenol	6.315	94	386054	5.24	ppm	89
5) bis(2-Chloroethyl)ether	6.383	93	57756	1.04	ppm #	42
7) Naphthalene	9.198	128	187762	1.02	ppm	100
8) Hexachlorobutadiene	9.492	225	47875	1.06	ppm	73
9) 2-Methylnaphthalene	10.559	142	109932	1.38	ppm	83
10) Hexachlorocyclopentadiene	10.917	237	65709	2.43	ppm	91
13) Acenaphthylene	12.325	152	129395	0.98	ppm	99
14) Acenaphthene	12.680	153	84662	1.00	ppm	96
15) Dibenzofuran	13.035	168	132022	1.05	ppm	99
16) Fluorene	13.704	166	149663	0.98	ppm	97
18) Hexachlorobenzene	14.825	284	58607	0.98	ppm	81
19) Pentachlorophenol	15.258	266	139810	5.69	ppm	94
20) Phenanthrene	15.614	178	215236	1.04	ppm	98
21) Anthracene	15.707	178	207739	1.06	ppm	97
23) Fluoranthene	17.874	202	256515	1.04	ppm	99
24) Pyrene	18.269	202	247866	1.02	ppm	98
26) Benzo[a]anthracene	20.340	228	219601	0.97	ppm #	94
27) Chrysene	20.415	228	226560	1.02	ppm	99
29) Benzo[b]fluoranthene	22.009	252	233884	0.78	ppm	93
30) Benzo[k]fluoranthene	22.050	252	225556	0.90	ppm	98
31) Benzo[a]pyrene	22.463	252	239425	0.97	ppm	91
32) Indeno[1,2,3-cd]pyrene	23.978	276	274857	0.89	ppm	100
33) Dibenz[a,h]anthracene	24.019	278	227949	0.92	ppm	94
34) Benzo[g,h,i]perylene	24.363	276	230944	0.88	ppm	100
36) 1,4-Dioxane	2.424	88	19517	0.92	ppm	94
37) 1-Methylnaphthalene	10.750	142	99269	1.30	ppm	88
39) 4,6-dinitro-2-methylph...	13.895	198	116347	6.82	ppm	85

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65170.D
Acq On : 9 May 2016 10:32 am
Operator : linseyk
Sample : cc2881-1
Misc : op93541a,e4m2910
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 09 10:57:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Fri May 06 13:08:34 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
40) 1,2-Diphenylhydrazine	14.062	77	143309	1.05 ppm	97
41) n-nitrosodiphenylamine	14.014	169	91348	0.91 ppm	94

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

7.6.53

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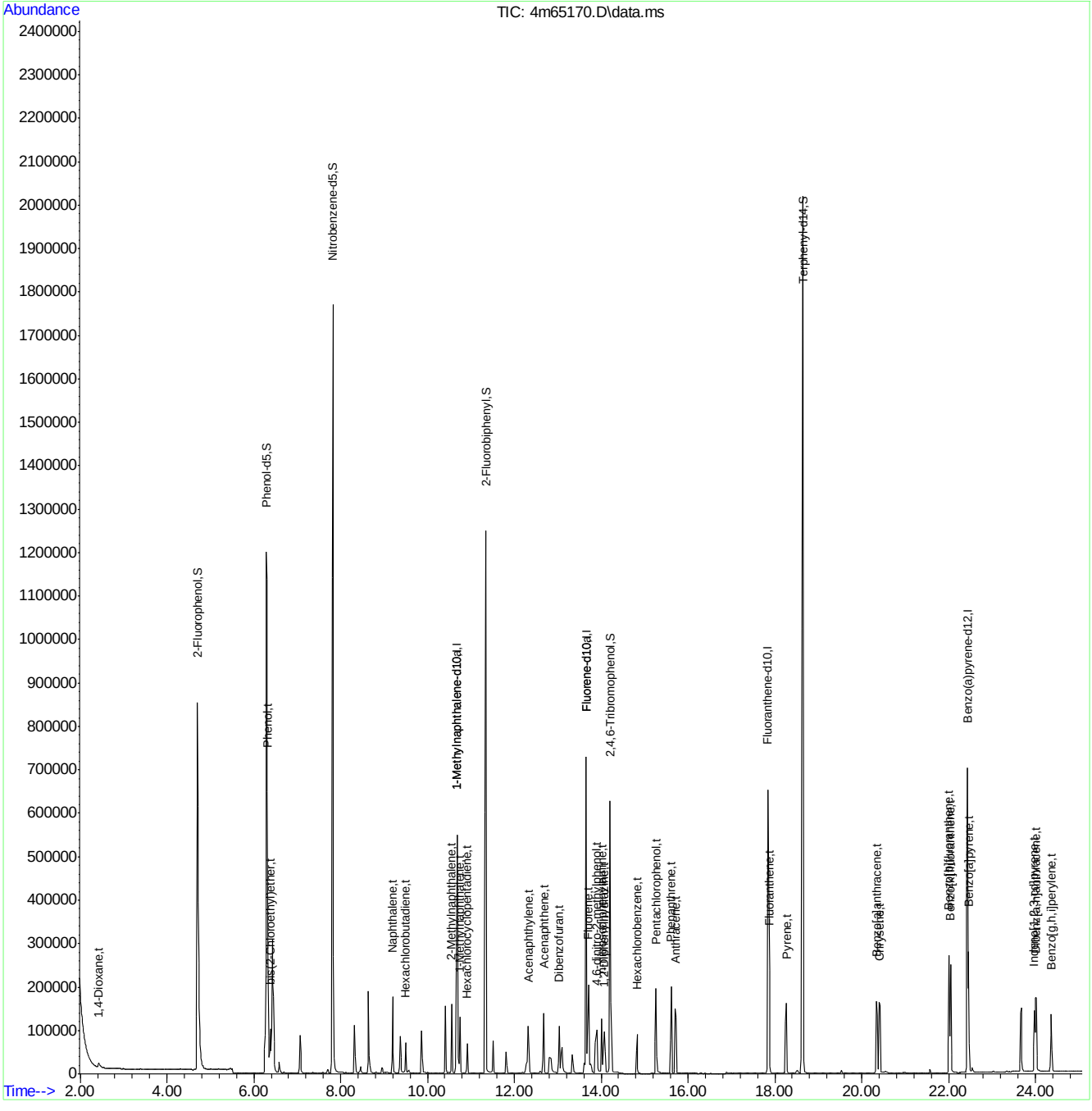
SGS ACCUTEST JC19023

Quantitation Report (Not Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2910\
Data File : 4m65170.D
Acq On : 9 May 2016 10:32 am
Operator : linseyk
Sample : cc2881-1
Misc : op93541a,e4m2910
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 09 10:57:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M4M2881SIM.M
Quant Title : Semi Volatile GC/MS,zb-5 15m x .25mm x .50um
QLast Update : Fri May 06 13:08:34 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2912\
Data File : 4m65203.D
Acq On : 10 May 2016 1:17 pm
Operator : linseyk
Sample : cc2881-1
Misc : op934743a,e4m2912
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 14:52:20 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	10.678	152	403711	4.00	ppm	-0.02
12) Fluorene-d10	13.656	176	700129	4.00	ppm	-0.02
22) Fluoranthene-d10	17.836	212	1297021	4.00	ppm	-0.03
28) Benzo(a)pyrene-d12	22.422	264	1000770	4.00	ppm	0.00
35) 1-Methylnaphthalene-d10a	10.678	152	403711	4.00	ppm	-0.02
38) Fluorene-d10a	13.656	176	700129	4.00	ppm	-0.02
System Monitoring Compounds						
2) 2-Fluorophenol	4.694	112	1038588	19.65	ppm	-0.03
Spiked Amount 50.000	Range 11 - 58		Recovery = 39.30%			
3) Phenol-d5	6.287	99	1810622	20.37	ppm	-0.02
Spiked Amount 50.000			Recovery = 40.74%			
6) Nitrobenzene-d5	7.806	82	1730854	21.71	ppm	-0.04
Spiked Amount 50.000			Recovery = 43.42%			
11) 2-Fluorobiphenyl	11.323	172	2122974	18.22	ppm	-0.04
Spiked Amount 50.000			Recovery = 36.44%			
17) 2,4,6-Tribromophenol	14.206	330	974094	26.08	ppm	-0.02
Spiked Amount 50.000			Recovery = 52.16%			
25) Terphenyl-d14	18.627	244	3377041	19.27	ppm	-0.05
Spiked Amount 50.000			Recovery = 38.54%			
Target Compounds						Qvalue
4) Phenol	6.301	94	476018	5.23	ppm	71
5) bis(2-Chloroethyl)ether	6.384	93	70992	1.03	ppm #	27
7) Naphthalene	9.198	128	227299	1.00	ppm	96
8) Hexachlorobutadiene	9.492	225	58932	1.05	ppm	87
9) 2-Methylnaphthalene	10.559	142	102103	1.03	ppm	99
10) Hexachlorocyclopentadiene	10.917	237	59250	1.82	ppm	94
13) Acenaphthylene	12.303	152	162000	1.01	ppm	88
14) Acenaphthene	12.658	153	99839	0.97	ppm	74
15) Dibenzofuran	13.035	168	159464	1.04	ppm	71
16) Fluorene	13.704	166	201322	1.08	ppm	91
18) Hexachlorobenzene	14.810	284	80287	1.10	ppm	96
19) Pentachlorophenol	15.243	266	215583	7.19	ppm	94
20) Phenanthrene	15.598	178	284721	1.13	ppm	91
21) Anthracene	15.707	178	285294	1.20	ppm	97
23) Fluoranthene	17.855	202	322717	0.92	ppm	89
24) Pyrene	18.250	202	360844	1.05	ppm	87
26) Benzo[a]anthracene	20.340	228	347644	1.09	ppm	96
27) Chrysene	20.396	228	324677	1.04	ppm	86
29) Benzo[b]fluoranthene	22.009	252	354057	0.98	ppm	94
30) Benzo[k]fluoranthene	22.037	252	295847	0.98	ppm	94
31) Benzo[a]pyrene	22.450	252	303205	1.02	ppm	99
32) Indeno[1,2,3-cd]pyrene	23.964	276	373825	1.00	ppm	98
33) Dibenz[a,h]anthracene	24.006	278	299766	1.00	ppm	98
34) Benzo[g,h,i]perylene	24.350	276	321628	1.02	ppm	100
36) 1,4-Dioxane	2.424	88	31505	1.20	ppm #	81
37) 1-Methylnaphthalene	10.750	142	89902	0.95	ppm	99
39) 4,6-dinitro-2-methylph...	13.895	198	108126	5.45	ppm	93

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2912\
Data File : 4m65203.D
Acq On : 10 May 2016 1:17 pm
Operator : linseyk
Sample : cc2881-1
Misc : op934743a,e4m2912
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 14:52:20 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)
40) 1,2-Diphenylhydrazine	14.062	77	216109	1.30 ppm	96
41) n-nitrosodiphenylamine	14.015	169	156888	1.28 ppm	90

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

7.6.54

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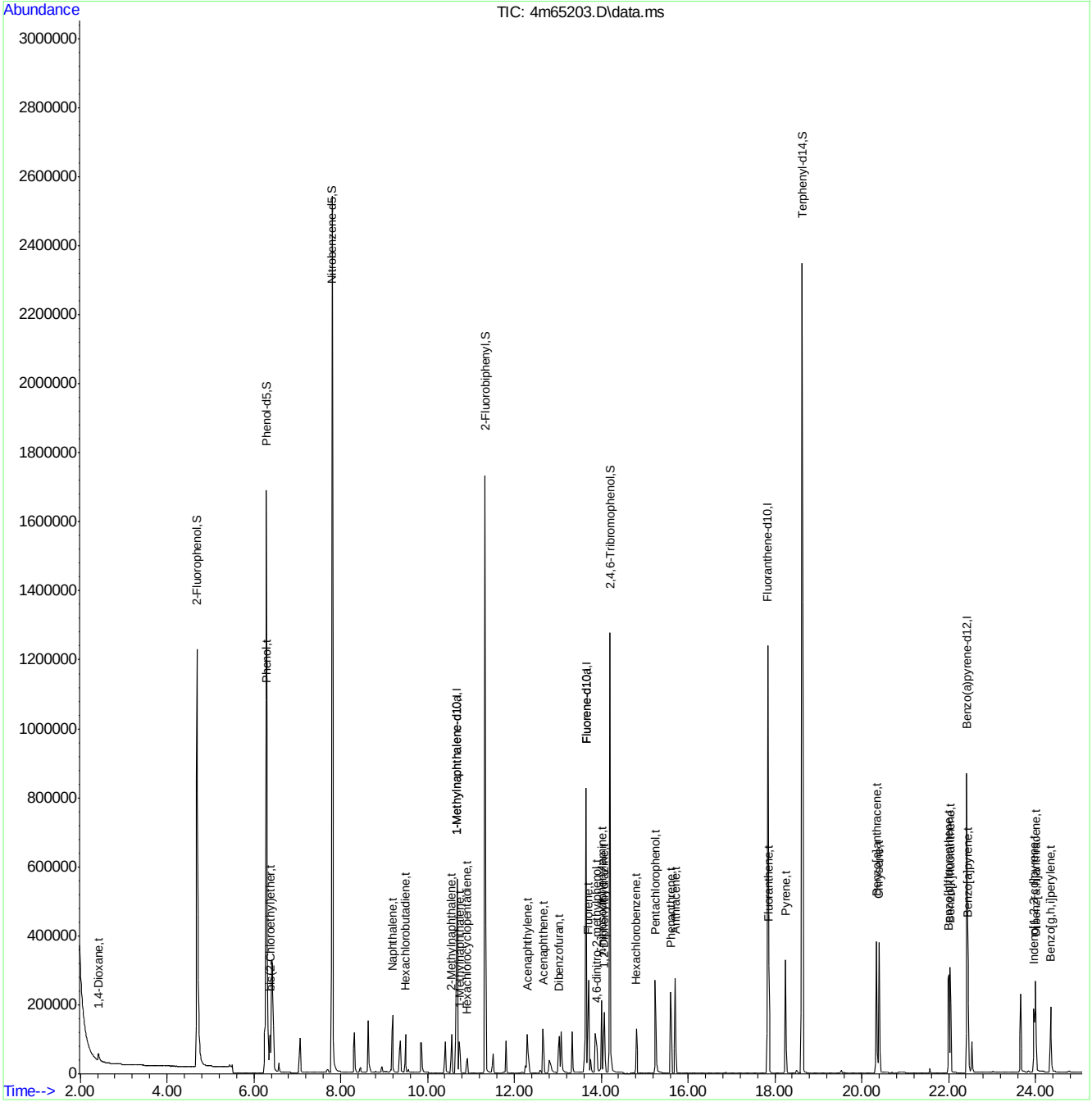
SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E4M2912\
Data File : 4m65203.D
Acq On : 10 May 2016 1:17 pm
Operator : linseyk
Sample : cc2881-1
Misc : op934743a,e4m2912
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 10 14:52:20 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



SGS ACCUTEST JC19023

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/12/16 12:29

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1382\
Data File : 5p27319.D
Acq On : 11 Apr 2016 10:29 am
Operator : seanb1
Sample : ic1382-100
Misc : op92466,e5p1382
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 11 14:33:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 14:31:47 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.309	152	606258	40.00	ppm	0.00
24) Naphthalene-d8	6.778	136	2449343	40.00	ppm	0.00
47) Acenaphthene-d10	8.893	164	1462954	40.00	ppm	0.00
69) Phenanthrene-d10	10.731	188	2474500	40.00	ppm	0.00
83) Chrysene-d12	14.545	240	2418703	40.00	ppm	0.00
92) Perylene-d12	16.608	264	2544651	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.309	152	606258	40.00	ppm	0.00
104) Acenaphthene-d10a	8.893	164	1462954	40.00	ppm	0.00
106) Chrysene-d12a	14.545	240	2418703	40.00	ppm	0.00
109) Phenanthrene-d10a	10.731	188	2474500	40.00	ppm	0.00
112) Naphthalene-d8a	6.778	136	2449343	40.00	ppm	0.00
114) Chrysene-d12b	14.545	240	2418703	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.898	112	1824303	100.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	200.00%	
8) Phenol-d5	4.897	99	2107130	100.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	200.00%	
25) Nitrobenzene-d5	5.944	82	1814913	100.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	200.00%	
51) 2-Fluorobiphenyl	8.092	172	4105272	100.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	200.00%	
73) 2,4,6-Tribromophenol	9.860	330	611327	100.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	200.00%	
85) Terphenyl-d14	12.991	244	4422391	100.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	200.00%	
108) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.338	88	635333	100.00	ppm	100
3) Pyridine	2.638	79	1539954	100.00	ppm	100
4) N-Nitrosodimethylamine	2.606	74	886216	100.00	ppm	100
6) Indene	5.597	116	2998187	100.00	ppm	100
7) Cumene	4.438	105	3982991	100.00	ppm	100
9) Phenol	4.919	94	2121880	100.00	ppm	100
10) Aniline	4.940	93	1940002	100.00	ppm	100
11) bis(2-Chloroethyl)ether	5.026	93	1544815	100.00	ppm	100
12) 2-Chlorophenol	5.074	128	1988185	100.00	ppm	100
13) Decane	5.138	43	1255834	100.00	ppm	100
14) 1,3-Dichlorobenzene	5.239	146	2125447	100.00	ppm	100
15) 1,4-Dichlorobenzene	5.325	146	2122531	100.00	ppm	100
16) Benzyl alcohol	5.469	108	1174509	100.00	ppm	100
17) 1,2-Dichlorobenzene	5.496	146	1997422	100.00	ppm	100
18) Acetophenone	5.773	105	2300076	100.00	ppm	100
19) 2-Methylphenol	5.592	108	1500917	100.00	ppm	100
20) 2,2'-oxybis(1-Chloropr...	5.629	45	1799922	100.00	ppm	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1382\
Data File : 5p27319.D
Acq On : 11 Apr 2016 10:29 am
Operator : seanb1
Sample : ic1382-100
Misc : op92466,e5p1382
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 11 14:33:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 14:31:47 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	5.773	108	1593552	100.00	ppm	100
22) n-Nitroso-di-n-propyla...	5.784	70	1108243	100.00	ppm	100
23) Hexachloroethane	5.880	201	709329	100.00	ppm	100
26) Nitrobenzene	5.966	77	1730445	100.00	ppm	100
27) Quinoline	7.221	129	4171544	100.00	ppm	100
28) Isophorone	6.254	82	2994252	100.00	ppm	100
29) 2-Nitrophenol	6.334	139	1099966	100.00	ppm	100
30) 2,4-Dimethylphenol	6.393	107	1876286	100.00	ppm	100
31) Benzoic acid	6.564	105	1616861m	117.07	ppm	
32) bis(2-Chloroethoxy)met...	6.516	93	1949123	100.00	ppm	100
33) 2,4-Dichlorophenol	6.618	162	1658788	100.00	ppm	100
34) 2,6-Dichlorophenol	6.885	162	1591296	100.00	ppm	100
35) 1,3,5-Trichlorobenzene	6.345	180	1676111	100.00	ppm	100
36) 1,2,4-Trichlorobenzene	6.714	180	1742081	100.00	ppm	100
37) 1,2,3-Trichlorobenzene	6.975	180	1710336	100.00	ppm	100
38) Naphthalene	6.805	128	5374200	100.00	ppm	100
39) 4-Chloroaniline	6.885	127	2206180	100.00	ppm	100
40) 2,3-Dichloroaniline	7.980	161	1971146	98.75	ppm	100
41) Caprolactam	7.339	55	750474	100.00	ppm	100
42) Hexachlorobutadiene	6.959	225	888140	100.00	ppm	100
43) 4-Chloro-3-methylphenol	7.478	107	1812526	100.00	ppm	100
44) 2-Methylnaphthalene	7.638	141	3162125	100.00	ppm	100
45) 1-Methylnaphthalene	7.755	141	3277551	100.00	ppm	100
46) Dimethylnaphthalene	8.396	156	3533950	100.00	ppm	100
48) Hexachlorocyclopentadiene	7.830	237	1889705	200.00	ppm	100
49) 2,4,6-Trichlorophenol	7.985	196	1154999	100.00	ppm	100
50) 2,4,5-Trichlorophenol	8.028	196	1294269	100.00	ppm	100
52) 2-Chloronaphthalene	8.226	162	3607606	100.00	ppm	100
53) Biphenyl	8.210	154	4528416	100.00	ppm	100
54) 2-Nitroaniline	8.359	65	1048321	100.00	ppm	100
55) Dimethylphthalate	8.600	163	4353242	100.00	ppm	100
56) Acenaphthylene	8.722	152	5803700	100.00	ppm	100
57) 2,6-Dinitrotoluene	8.664	165	1050337	100.00	ppm	100
58) 3-Nitroaniline	8.861	138	1232829	100.00	ppm	100
59) Acenaphthene	8.936	153	3588597	100.00	ppm	100
60) 2,4-Dinitrophenol	8.989	184	1289854	200.00	ppm	100
61) 4-Nitrophenol	9.075	109	619965	100.00	ppm	100
62) Dibenzofuran	9.150	168	4674812	100.00	ppm	100
63) 2,4-Dinitrotoluene	9.150	165	1304795	100.00	ppm	100
64) 2,3,4,6-Tetrachlorophenol	9.299	232	1053069	100.00	ppm	100
65) Diethylphthalate	9.470	149	4481759	100.00	ppm	100
66) Fluorene	9.566	166	4062707	100.00	ppm	100
67) 4-Chlorophenyl-phenyle...	9.582	204	1910727	100.00	ppm	100
68) 4-Nitroaniline	9.615	138	1200347	100.00	ppm	100
70) 4,6-Dinitro-2-methylph...	9.641	198	865123	100.00	ppm	100
71) n-Nitrosodiphenylamine	9.732	169	3111786	100.00	ppm	100
72) 1,2-Diphenylhydrazine	9.775	77	3322603	100.00	ppm	100
74) 4-Bromophenyl-phenylether	10.181	248	1202755	100.00	ppm	100
75) Hexachlorobenzene	10.234	284	1265017	100.00	ppm	100
76) Pentachlorophenol	10.491	266	1797257	200.00	ppm	100

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1382\
Data File : 5p27319.D
Acq On : 11 Apr 2016 10:29 am
Operator : seanb1
Sample : ic1382-100
Misc : op92466,e5p1382
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 11 14:33:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 14:31:47 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77)	Phenanthrene	10.768	178	5866552	100.00	ppm	100
78)	Anthracene	10.833	178	5997702	100.00	ppm	100
79)	Carbazole	11.057	167	5774455	100.00	ppm	100
80)	Di-n-butylphthalate	11.580	149	7342771	100.00	ppm	100
81)	Fluoranthene	12.398	202	6245952	100.00	ppm	100
82)	Octadecane	10.656	57	2068986	100.00	ppm	100
84)	Pyrene	12.718	202	6552454	100.00	ppm	100
86)	Butylbenzylphthalate	13.771	149	3521982	100.00	ppm	100
87)	Butyl stearate	13.926	56	1481664	100.00	ppm	100
88)	Benzo[a]anthracene	14.529	228	5794840	100.00	ppm	100
89)	3,3'-Dichlorobenzidine	14.529	252	2253111	100.00	ppm	100
90)	Chrysene	14.588	228	6141642	100.00	ppm	100
91)	bis(2-Ethylhexyl)phtha...	14.695	149	5043925	100.00	ppm	100
93)	Di-n-octylphthalate	15.678	149	8091919	100.00	ppm	100
94)	Benzo[b]fluoranthene	16.100	252	6783434	100.00	ppm	100
95)	Benzo[k]fluoranthene	16.148	252	6147278	100.00	ppm	100
96)	Benzo[a]pyrene	16.538	252	5955853	100.00	ppm	100
97)	Indeno[1,2,3-cd]pyrene	18.274	276	6404674	100.00	ppm	100
98)	Dibenz(a,h)acridine	17.895	279	5485906	100.00	ppm	100
99)	Dibenz[a,h]anthracene	18.328	278	6692029	100.00	ppm	100
100)	7,12-Dimethylbenz(a)an...	16.111	256	2904525	100.00	ppm	100
101)	Benzo[g,h,i]perylene	18.755	276	6700983	100.00	ppm	100

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

7.6.55

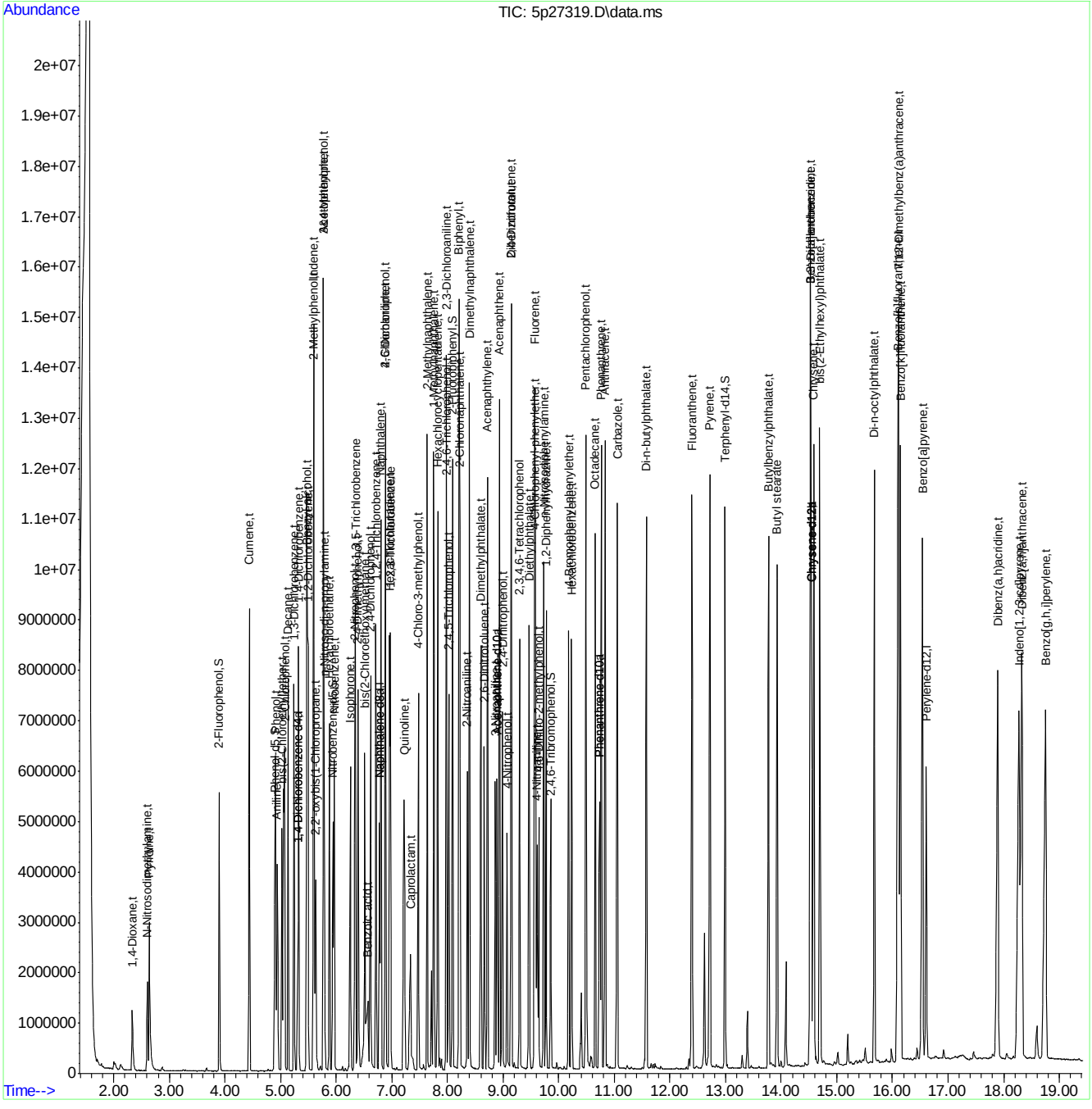
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1382\
Data File : 5p27319.D
Acq On : 11 Apr 2016 10:29 am
Operator : seanb1
Sample : ic1382-100
Misc : op92466,e5p1382
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 11 14:33:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 14:31:47 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

Manual Integration Approval Summary

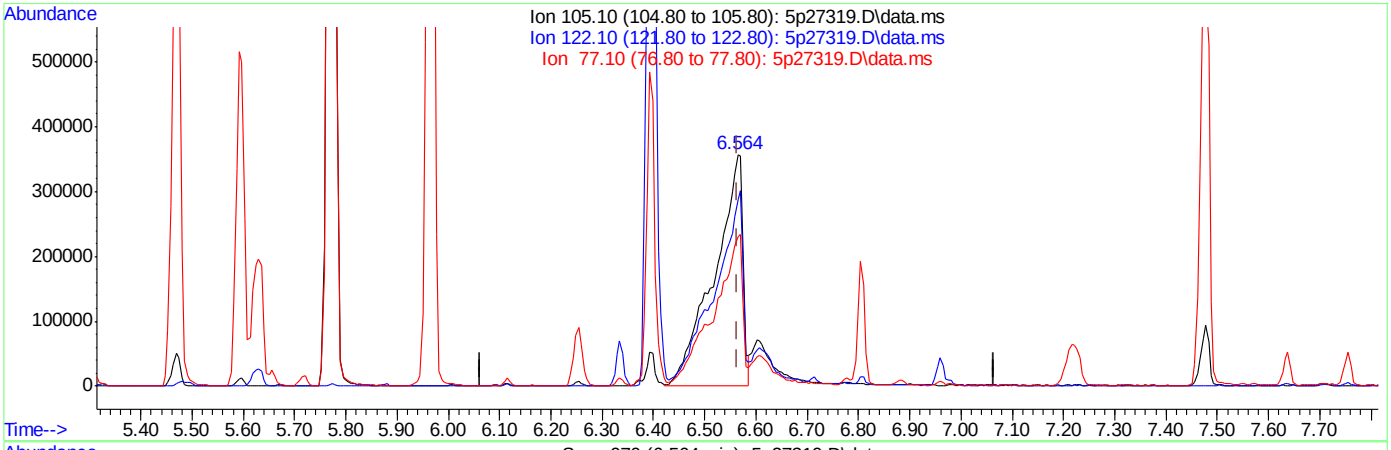
Sample Number:	E5P1382-IC1382	**Method:**	SW846 8270D
Lab FileID:	5P27319.D	**Analyst approved:**	04/12/16 09:05 Ashley Dye
Injection Time:	04/11/16 10:29	**Supervisor approved:**	04/12/16 12:29 Nina Pandya

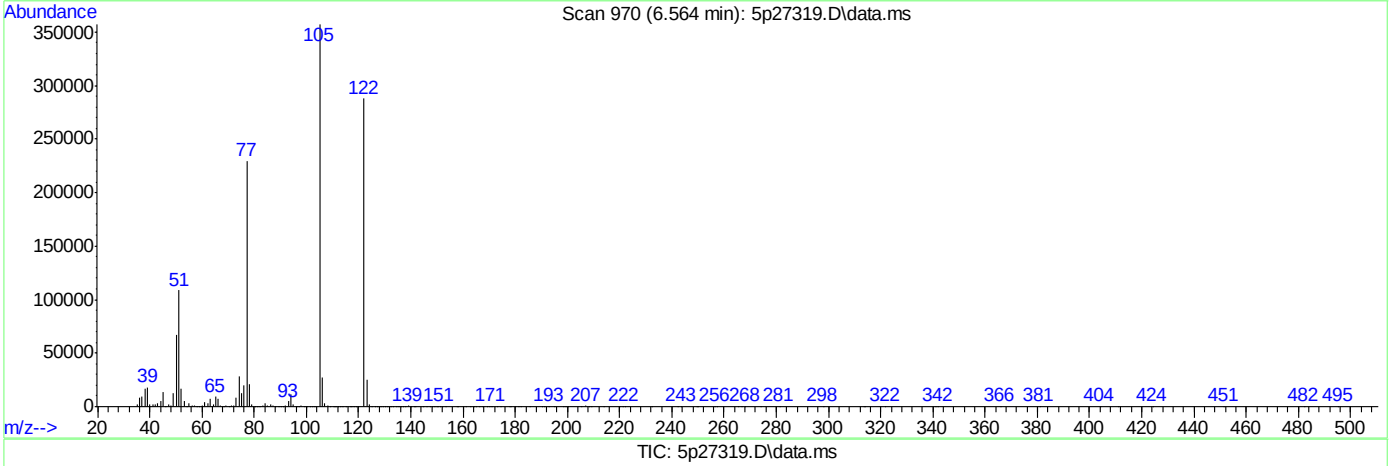
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		6.56	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E5P1382\
Data File : 5p27319.D
Acq On : 11 Apr 2016 10:29 am
Operator : seanb1
Sample : ic1382-100
Misc : op92466,e5p1382
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 11 14:31:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 14:31:47 2016
Response via : Initial Calibration





TIC: 5p27319.D\data.ms

(31) Benzoic acid (t)

6.564min (0.000) 100.00ppm

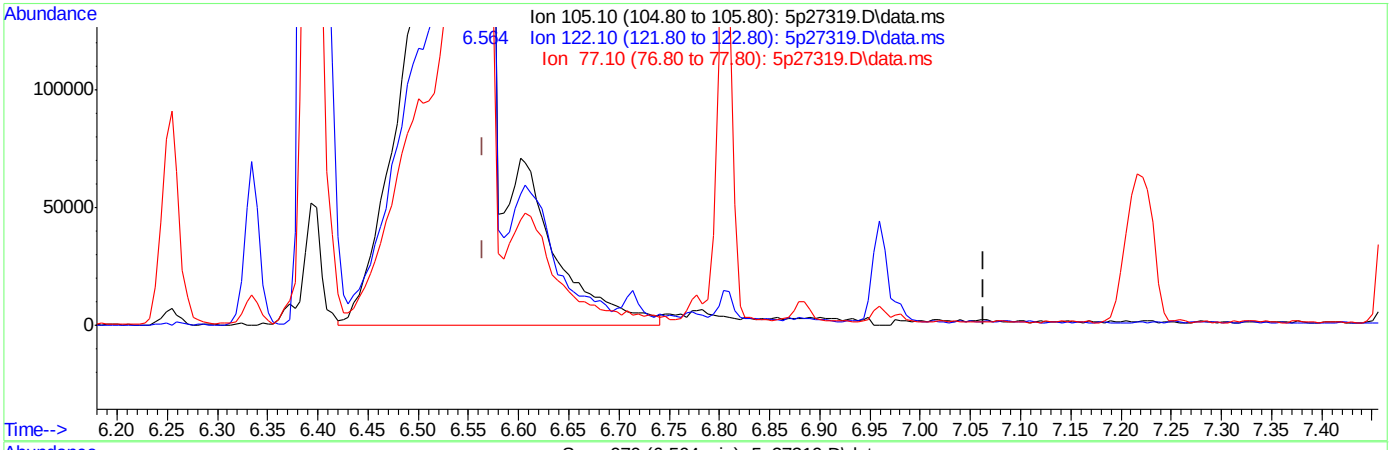
response 1381121

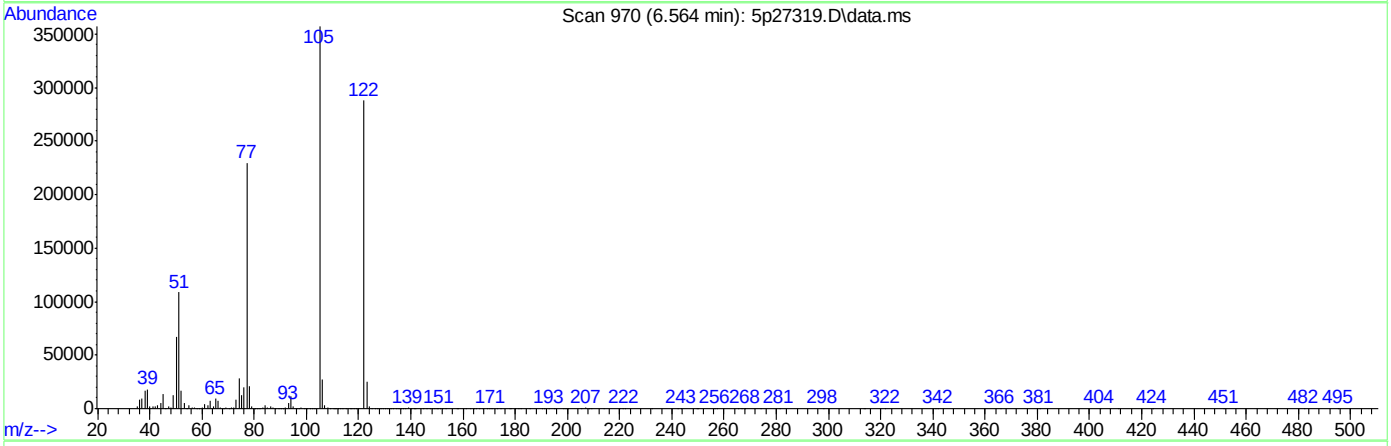
Ion	Exp%	Act%
105.10	100	100
122.10	75.40	75.35
77.10	62.90	62.94
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E5P1382\
Data File : 5p27319.D
Acq On : 11 Apr 2016 10:29 am
Operator : seanb1
Sample : ic1382-100
Misc : op92466,e5p1382
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 11 14:31:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 14:31:47 2016
Response via : Initial Calibration





TIC: 5p27319.D\data.ms

(31) Benzoic acid (t)

6.564min (0.000) 117.07ppm m

response 1616861

Ion	Exp%	Act%
105.10	100	100
122.10	75.40	80.60
77.10	62.90	64.37
0.00	0.00	0.00

SGS ACCUTEST JC19023

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/12/16 12:29

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1382\
Data File : 5p27320.D
Acq On : 11 Apr 2016 11:06 am
Operator : seanb1
Sample : ic1382-80
Misc : op92466,e5p1382
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 11 14:35:41 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 14:33:38 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.309	152	659689	40.00	ppm	0.00
24) Naphthalene-d8	6.778	136	2584604	40.00	ppm	0.00
47) Acenaphthene-d10	8.893	164	1527466	40.00	ppm	0.00
69) Phenanthrene-d10	10.731	188	2553003	40.00	ppm	0.00
83) Chrysene-d12	14.545	240	2528604	40.00	ppm	0.00
92) Perylene-d12	16.613	264	2696284	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.309	152	659689	40.00	ppm	0.00
104) Acenaphthene-d10a	8.893	164	1527466	40.00	ppm	0.00
106) Chrysene-d12a	14.545	240	2528604	40.00	ppm	0.00
109) Phenanthrene-d10a	10.731	188	2553003	40.00	ppm	0.00
112) Naphthalene-d8a	6.778	136	2584604	40.00	ppm	0.00
114) Chrysene-d12b	14.545	240	2528604	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.898	112	1607339	80.97	ppm	0.00
Spiked Amount 50.000			Recovery	=	161.94%	
8) Phenol-d5	4.897	99	1813185	79.08	ppm	0.00
Spiked Amount 50.000			Recovery	=	158.16%	
25) Nitrobenzene-d5	5.939	82	1547791	80.82	ppm	0.00
Spiked Amount 50.000			Recovery	=	161.64%	
51) 2-Fluorobiphenyl	8.092	172	3582763	83.59	ppm	0.00
Spiked Amount 50.000			Recovery	=	167.18%	
73) 2,4,6-Tribromophenol	9.860	330	553295	87.72	ppm	0.00
Spiked Amount 50.000			Recovery	=	175.44%	
85) Terphenyl-d14	12.991	244	3902624	84.41	ppm	0.00
Spiked Amount 50.000			Recovery	=	168.82%	
108) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.333	88	588672	85.15	ppm	95
3) Pyridine	2.638	79	1405636	83.88	ppm	98
4) N-Nitrosodimethylamine	2.600	74	806991	83.68	ppm	95
6) Indene	5.597	116	2625781	80.49	ppm	99
7) Cumene	4.438	105	3571140	82.40	ppm	99
9) Phenol	4.913	94	1843284	79.83	ppm	98
10) Aniline	4.940	93	1734888	82.18	ppm	87
11) bis(2-Chloroethyl)ether	5.026	93	1335197	79.43	ppm	100
12) 2-Chlorophenol	5.068	128	1743555	80.59	ppm	98
13) Decane	5.138	43	1115834	81.66	ppm	99
14) 1,3-Dichlorobenzene	5.239	146	1880570	81.31	ppm	99
15) 1,4-Dichlorobenzene	5.325	146	1892926	81.96	ppm	100
16) Benzyl alcohol	5.469	108	1017230	79.59	ppm	99
17) 1,2-Dichlorobenzene	5.496	146	1782873	82.03	ppm	99
18) Acetophenone	5.773	105	2029433	81.09	ppm	100
19) 2-Methylphenol	5.592	108	1298168	79.49	ppm	99
20) 2,2'-oxybis(1-Chloropr...	5.629	45	1553543	79.32	ppm	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1382\
Data File : 5p27320.D
Acq On : 11 Apr 2016 11:06 am
Operator : seanb1
Sample : ic1382-80
Misc : op92466,e5p1382
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 11 14:35:41 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 14:33:38 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21)	3&4-Methylphenol	5.773	108	1402575	80.89	ppm	99
22)	n-Nitroso-di-n-propyla...	5.784	70	946208	78.46	ppm	98
23)	Hexachloroethane	5.880	201	631815	81.86	ppm	97
26)	Nitrobenzene	5.966	77	1490785	81.64	ppm	97
27)	Quinoline	7.216	129	3561582	80.91	ppm	99
28)	Isophorone	6.249	82	2591274	82.01	ppm	99
29)	2-Nitrophenol	6.334	139	976444	84.12	ppm	93
30)	2,4-Dimethylphenol	6.393	107	1633485	82.50	ppm	99
31)	Benzoic acid	6.559	105	1429712m	83.80	ppm	
32)	bis(2-Chloroethoxy)met...	6.516	93	1694170	82.37	ppm	99
33)	2,4-Dichlorophenol	6.618	162	1445872	82.60	ppm	99
34)	2,6-Dichlorophenol	6.885	162	1375988	81.94	ppm	98
35)	1,3,5-Trichlorobenzene	6.345	180	1520968	85.99	ppm	97
36)	1,2,4-Trichlorobenzene	6.714	180	1558470	84.78	ppm	99
37)	1,2,3-Trichlorobenzene	6.975	180	1508805	83.60	ppm	99
38)	Naphthalene	6.805	128	4748729	83.74	ppm	99
39)	4-Chloroaniline	6.879	127	1940299	83.35	ppm	98
40)	2,3-Dichloroaniline	7.974	161	1717831	82.59	ppm	98
41)	Caprolactam	7.333	55	637827	80.54	ppm	97
42)	Hexachlorobutadiene	6.959	225	812172	86.66	ppm	98
43)	4-Chloro-3-methylphenol	7.472	107	1544107	80.73	ppm	99
44)	2-Methylnaphthalene	7.638	141	2757467	82.64	ppm	100
45)	1-Methylnaphthalene	7.755	141	2878484	83.23	ppm	99
46)	Dimethylnaphthalene	8.396	156	3071893	82.38	ppm	99
48)	Hexachlorocyclopentadiene	7.830	237	1680903	170.39	ppm	98
49)	2,4,6-Trichlorophenol	7.985	196	1004139	83.27	ppm	99
50)	2,4,5-Trichlorophenol	8.028	196	1145015	84.73	ppm	99
52)	2-Chloronaphthalene	8.226	162	3126468	83.00	ppm	99
53)	Biphenyl	8.210	154	4005744	84.72	ppm	99
54)	2-Nitroaniline	8.359	65	905061	82.69	ppm	99
55)	Dimethylphthalate	8.600	163	3825079	84.16	ppm	99
56)	Acenaphthylene	8.722	152	5103327	84.22	ppm	99
57)	2,6-Dinitrotoluene	8.664	165	913956	83.34	ppm	99
58)	3-Nitroaniline	8.861	138	1048894	81.49	ppm	95
59)	Acenaphthene	8.936	153	3164890	84.47	ppm	98
60)	2,4-Dinitrophenol	8.989	184	1131041	167.97	ppm	82
61)	4-Nitrophenol	9.070	109	543893	84.02	ppm	98
62)	Dibenzofuran	9.150	168	4236551	86.80	ppm	98
63)	2,4-Dinitrotoluene	9.144	165	1161089	85.23	ppm	99
64)	2,3,4,6-Tetrachlorophenol	9.299	232	922528	83.90	ppm	97
65)	Diethylphthalate	9.465	149	3980616	85.07	ppm	100
66)	Fluorene	9.566	166	3628122	85.53	ppm	99
67)	4-Chlorophenyl-phenyle...	9.582	204	1688301	84.63	ppm	99
68)	4-Nitroaniline	9.609	138	1046107	83.47	ppm	99
70)	4,6-Dinitro-2-methylph...	9.641	198	761424	85.31	ppm	97
71)	n-Nitrosodiphenylamine	9.727	169	2755317	85.82	ppm	100
72)	1,2-Diphenylhydrazine	9.775	77	2876033	83.90	ppm	99
74)	4-Bromophenyl-phenylether	10.181	248	1094380	88.19	ppm	99
75)	Hexachlorobenzene	10.234	284	1126703	86.33	ppm	91
76)	Pentachlorophenol	10.491	266	1608023	173.44	ppm	97

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1382\
Data File : 5p27320.D
Acq On : 11 Apr 2016 11:06 am
Operator : seanb1
Sample : ic1382-80
Misc : op92466,e5p1382
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 11 14:35:41 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 14:33:38 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77)	Phenanthrene	10.768	178	5157164	85.20	ppm	100
78)	Anthracene	10.833	178	5306643	85.76	ppm	98
79)	Carbazole	11.057	167	5061752	84.96	ppm	99
80)	Di-n-butylphthalate	11.580	149	6461522	85.29	ppm	99
81)	Fluoranthene	12.398	202	5497503	85.31	ppm	98
82)	Octadecane	10.656	57	1777828	83.29	ppm	99
84)	Pyrene	12.718	202	5816919	84.92	ppm	99
86)	Butylbenzylphthalate	13.771	149	3058211	83.06	ppm	99
87)	Butyl stearate	13.926	56	1264382	81.63	ppm	97
88)	Benzo[a]anthracene	14.529	228	5159454	85.17	ppm	99
89)	3,3'-Dichlorobenzidine	14.529	252	2025945	86.01	ppm	99
90)	Chrysene	14.588	228	5386510	83.89	ppm	99
91)	bis(2-Ethylhexyl)phtha...	14.695	149	4384409	83.15	ppm	99
93)	Di-n-octylphthalate	15.673	149	7180310	83.74	ppm	99
94)	Benzo[b]fluoranthene	16.100	252	5762442	80.17	ppm	99
95)	Benzo[k]fluoranthene	16.148	252	5629823	86.43	ppm	98
96)	Benzo[a]pyrene	16.538	252	5366740	85.04	ppm	98
97)	Indeno[1,2,3-cd]pyrene	18.269	276	5613889	82.72	ppm	99
98)	Dibenz(a,h)acridine	17.895	279	4870868	83.80	ppm	100
99)	Dibenz[a,h]anthracene	18.322	278	5883894	82.98	ppm	99
100)	7,12-Dimethylbenz(a)an...	16.105	256	2562107	83.25	ppm	100
101)	Benzo[g,h,i]perylene	18.750	276	5870641	82.68	ppm	99

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

7.6.56

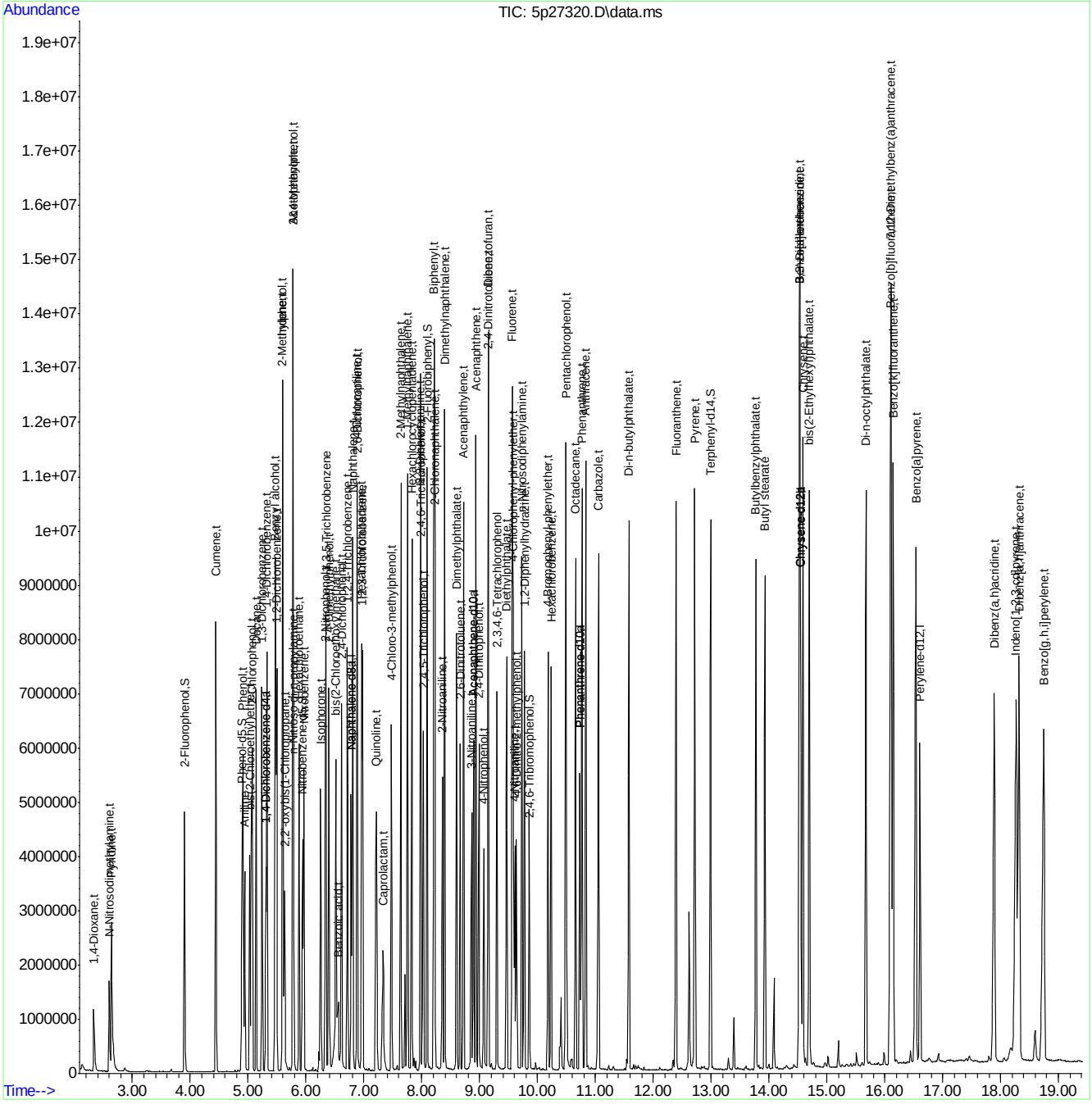
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1382\
Data File : 5p27320.D
Acq On : 11 Apr 2016 11:06 am
Operator : seanb1
Sample : ic1382-80
Misc : op92466,e5p1382
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 11 14:35:41 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 14:33:38 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

Manual Integration Approval Summary

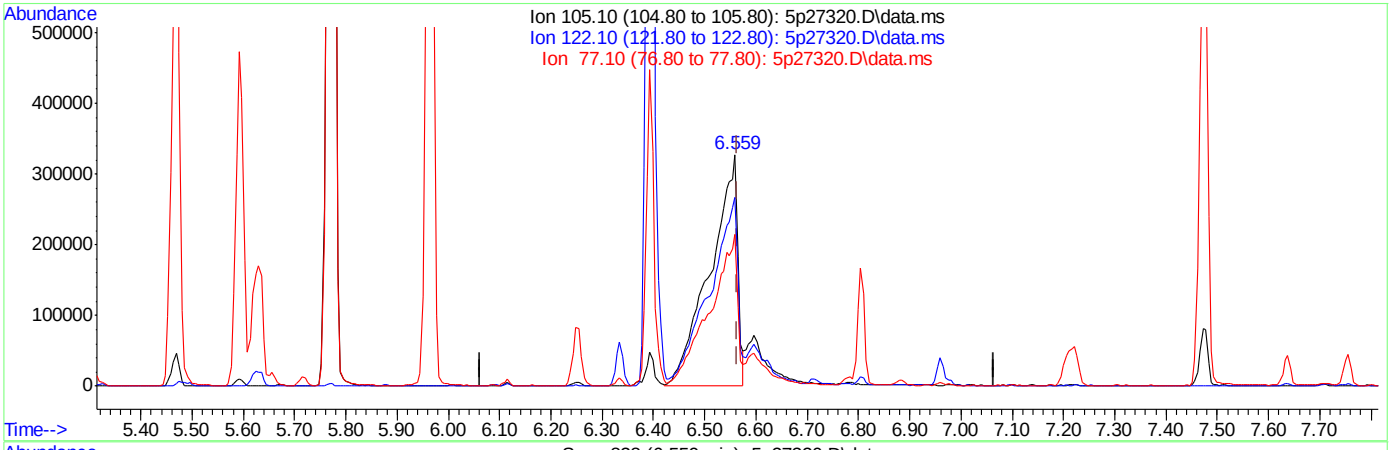
Sample Number:	E5P1382-IC1382	**Method:**	SW846 8270D
Lab FileID:	5P27320.D	**Analyst approved:**	04/12/16 09:05 Ashley Dye
Injection Time:	04/11/16 11:06	**Supervisor approved:**	04/12/16 12:29 Nina Pandya

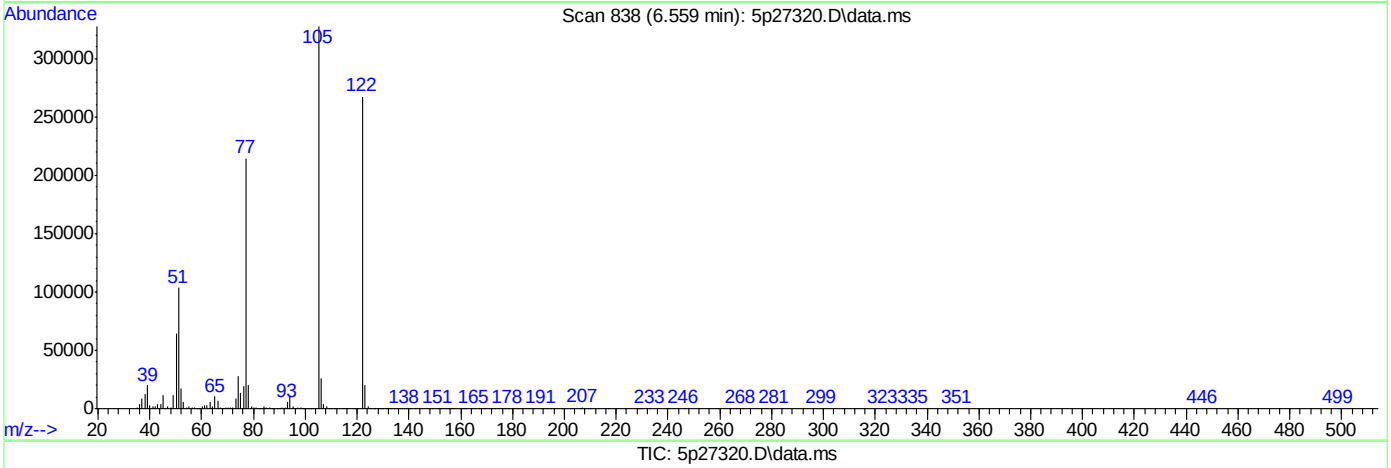
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		6.56	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E5P1382\
Data File : 5p27320.D
Acq On : 11 Apr 2016 11:06 am
Operator : seanb1
Sample : ic1382-80
Misc : op92466,e5p1382
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 11 14:34:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 14:33:38 2016
Response via : Initial Calibration





TIC: 5p27320.D\data.ms

(31) Benzoic acid (t)

6.559min (-0.005) 71.20ppm

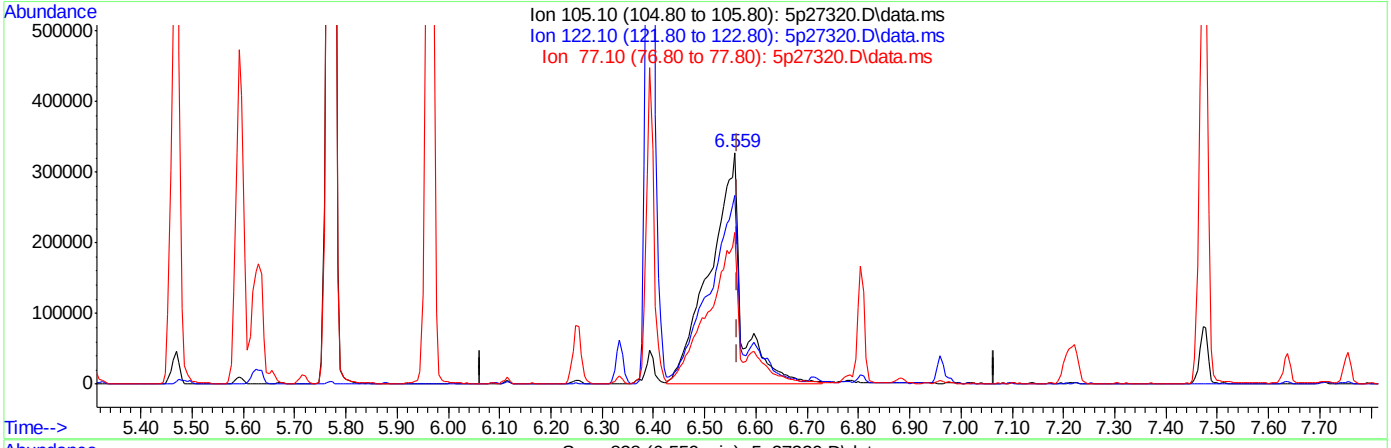
response 1214750

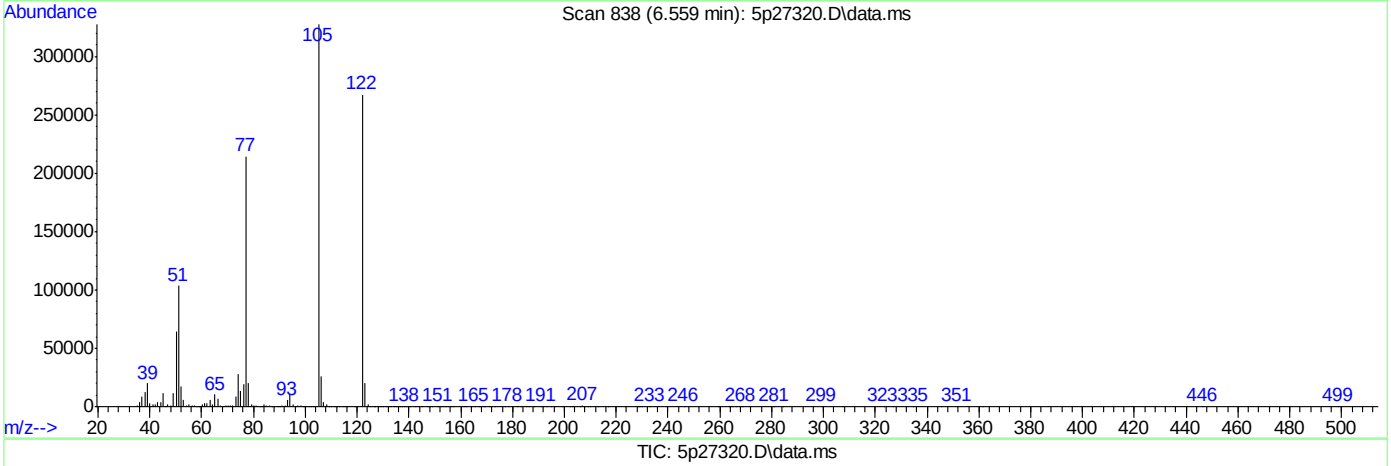
Ion	Exp%	Act%
105.10	100	100
122.10	80.60	77.85
77.10	64.40	64.60
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E5P1382\
Data File : 5p27320.D
Acq On : 11 Apr 2016 11:06 am
Operator : seanb1
Sample : ic1382-80
Misc : op92466,e5p1382
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 11 14:34:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 14:33:38 2016
Response via : Initial Calibration





TIC: 5p27320.D\data.ms

(31) Benzoic acid (t)

6.559min (-0.005) 83.80ppm m

response 1429712

Ion	Exp%	Act%
105.10	100	100
122.10	80.60	81.64
77.10	64.40	65.52
0.00	0.00	0.00

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1382\
Data File : 5p27321.D
Acq On : 11 Apr 2016 11:32 am
Operator : seanb1
Sample : icc1382-50
Misc : op92466,e5p1382
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 11 15:10:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 15:09:02 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.304	152	629797	40.00	ppm	0.00
24) Naphthalene-d8	6.778	136	2428577	40.00	ppm	0.00
47) Acenaphthene-d10	8.894	164	1425990	40.00	ppm	0.00
69) Phenanthrene-d10	10.731	188	2329617	40.00	ppm	0.00
83) Chrysene-d12	14.540	240	2343158	40.00	ppm	0.00
92) Perylene-d12	16.608	264	2449657	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.304	152	629797	40.00	ppm	0.00
104) Acenaphthene-d10a	8.894	164	1425990	40.00	ppm	0.00
106) Chrysene-d12a	14.540	240	2343158	40.00	ppm	0.00
109) Phenanthrene-d10a	10.731	188	2329617	40.00	ppm	0.00
112) Naphthalene-d8a	6.778	136	2428577	40.00	ppm	0.00
114) Chrysene-d12b	14.540	240	2343158	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.893	112	971357	50.13	ppm	0.00
Spiked Amount 50.000			Recovery	=	100.26%	
8) Phenol-d5	4.892	99	1094511	49.91	ppm	0.00
Spiked Amount 50.000			Recovery	=	99.82%	
25) Nitrobenzene-d5	5.934	82	913648	49.40	ppm	0.00
Spiked Amount 50.000			Recovery	=	98.80%	
51) 2-Fluorobiphenyl	8.087	172	2173385	48.08	ppm	0.00
Spiked Amount 50.000			Recovery	=	96.16%	
73) 2,4,6-Tribromophenol	9.850	330	312212	55.35	ppm	0.00
Spiked Amount 50.000			Recovery	=	110.70%	
85) Terphenyl-d14	12.986	244	2334590	49.77	ppm	0.00
Spiked Amount 50.000			Recovery	=	99.54%	
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.339	88	354239	47.99	ppm	98
3) Pyridine	2.638	79	836213	50.93	ppm	98
4) N-Nitrosodimethylamine	2.600	74	471854	51.65	ppm	98
6) Indene	5.592	116	1636952	47.51	ppm	98
7) Cumene	4.438	105	2202431	47.48	ppm	98
9) Phenol	4.908	94	1107110	48.87	ppm	98
10) Aniline	4.940	93	1071567	43.94	ppm	76
11) bis(2-Chloroethyl)ether	5.020	93	825559	49.33	ppm	97
12) 2-Chlorophenol	5.069	128	1054931	48.28	ppm	99
13) Decane	5.133	43	689911	48.07	ppm	97
14) 1,3-Dichlorobenzene	5.239	146	1174279	48.68	ppm	100
15) 1,4-Dichlorobenzene	5.325	146	1160619	47.69	ppm	98
16) Benzyl alcohol	5.464	108	626678	50.14	ppm	96
17) 1,2-Dichlorobenzene	5.491	146	1095007	47.19	ppm	98
18) Acetophenone	5.768	105	1253441	46.48	ppm	99
19) 2-Methylphenol	5.587	108	817071	48.73	ppm	100
20) 2,2'-oxybis(1-Chloropr...	5.629	45	937386	48.65	ppm	99

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1382\
Data File : 5p27321.D
Acq On : 11 Apr 2016 11:32 am
Operator : seanb1
Sample : icc1382-50
Misc : op92466,e5p1382
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 11 15:10:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 15:09:02 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	5.768	108	871611	49.43	ppm	97
22) n-Nitroso-di-n-propyla...	5.774	70	561396	46.42	ppm	99
23) Hexachloroethane	5.881	201	390538	49.54	ppm	91
26) Nitrobenzene	5.961	77	887508	49.19	ppm	98
27) Quinoline	7.205	129	2097639	49.04	ppm	99
28) Isophorone	6.244	82	1565610	49.36	ppm	98
29) 2-Nitrophenol	6.329	139	585085	51.10	ppm	94
30) 2,4-Dimethylphenol	6.388	107	940333	52.54	ppm	97
31) Benzoic acid	6.522	105	797257	60.46	ppm	96
32) bis(2-Chloroethoxy)met...	6.511	93	1011480	48.63	ppm	99
33) 2,4-Dichlorophenol	6.612	162	869790	49.97	ppm	97
34) 2,6-Dichlorophenol	6.880	162	828855	48.36	ppm	99
35) 1,3,5-Trichlorobenzene	6.340	180	942064	47.33	ppm	99
36) 1,2,4-Trichlorobenzene	6.714	180	937913	48.23	ppm	97
37) 1,2,3-Trichlorobenzene	6.976	180	911770	47.54	ppm	98
38) Naphthalene	6.805	128	2930165	47.70	ppm	99
39) 4-Chloroaniline	6.874	127	1225450	47.60	ppm	97
40) 2,3-Dichloroaniline	7.975	161	1044326	48.58	ppm	98
41) Caprolactam	7.312	55	364323	51.88	ppm	97
42) Hexachlorobutadiene	6.960	225	485794	48.06	ppm	96
43) 4-Chloro-3-methylphenol	7.467	107	918686	49.10	ppm	97
44) 2-Methylnaphthalene	7.633	141	1711474	48.37	ppm	98
45) 1-Methylnaphthalene	7.750	141	1761308	48.03	ppm	100
46) Dimethylnaphthalene	8.391	156	1863914	48.35	ppm	100
48) Hexachlorocyclopentadiene	7.825	237	994707	115.38	ppm	98
49) 2,4,6-Trichlorophenol	7.980	196	611012	50.10	ppm	98
50) 2,4,5-Trichlorophenol	8.017	196	670161	50.81	ppm	98
52) 2-Chloronaphthalene	8.220	162	1930664	48.24	ppm	98
53) Biphenyl	8.204	154	2493796	48.30	ppm	99
54) 2-Nitroaniline	8.354	65	520843	51.32	ppm	96
55) Dimethylphthalate	8.594	163	2324125	48.97	ppm	100
56) Acenaphthylene	8.717	152	3129927	49.22	ppm	100
57) 2,6-Dinitrotoluene	8.658	165	530177	53.35	ppm	98
58) 3-Nitroaniline	8.851	138	610713	52.71	ppm	98
59) Acenaphthene	8.931	153	1947052	47.74	ppm	97
60) 2,4-Dinitrophenol	8.979	184	610721	119.95	ppm	89
61) 4-Nitrophenol	9.065	109	304554	50.68	ppm	99
62) Dibenzofuran	9.145	168	2604619	47.16	ppm	97
63) 2,4-Dinitrotoluene	9.139	165	710142	53.58	ppm	95
64) 2,3,4,6-Tetrachlorophenol	9.294	232	540295	51.75	ppm	96
65) Diethylphthalate	9.465	149	2365914	48.77	ppm	100
66) Fluorene	9.561	166	2207615	48.26	ppm	99
67) 4-Chlorophenyl-phenyle...	9.577	204	1016566	47.30	ppm	99
68) 4-Nitroaniline	9.599	138	595184	51.37	ppm	95
70) 4,6-Dinitro-2-methylph...	9.631	198	417341	64.10	ppm	99
71) n-Nitrosodiphenylamine	9.722	169	1656861	49.70	ppm	100
72) 1,2-Diphenylhydrazine	9.770	77	1733570	50.13	ppm	97
74) 4-Bromophenyl-phenylether	10.176	248	638424	49.72	ppm	95
75) Hexachlorobenzene	10.229	284	663480	51.04	ppm	95
76) Pentachlorophenol	10.486	266	929118	115.75	ppm	99

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1382\
Data File : 5p27321.D
Acq On : 11 Apr 2016 11:32 am
Operator : seanb1
Sample : icc1382-50
Misc : op92466,e5p1382
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 11 15:10:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 15:09:02 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
77) Phenanthrene	10.763	178	3135630	48.21 ppm	99
78) Anthracene	10.827	178	3172152	48.46 ppm	100
79) Carbazole	11.046	167	3052951	49.58 ppm	99
80) Di-n-butylphthalate	11.575	149	3984502	50.85 ppm	99
81) Fluoranthene	12.393	202	3326709	49.47 ppm	99
82) Octadecane	10.656	57	1080340	50.23 ppm	99
84) Pyrene	12.713	202	3474499	48.24 ppm	100
86) Butylbenzylphthalate	13.766	149	1853572	52.29 ppm	98
87) Butyl stearate	13.921	56	750174	51.65 ppm	96
88) Benzo[a]anthracene	14.524	228	3130716	48.33 ppm	99
89) 3,3'-Dichlorobenzidine	14.524	252	1245308	52.26 ppm	98
90) Chrysene	14.583	228	3243198	49.19 ppm	100
91) bis(2-Ethylhexyl)phtha...	14.695	149	2645165	52.48 ppm	96
93) Di-n-octylphthalate	15.668	149	4438680	52.09 ppm	99
94) Benzo[b]fluoranthene	16.090	252	3426623	47.92 ppm	98
95) Benzo[k]fluoranthene	16.138	252	3435531	50.56 ppm	98
96) Benzo[a]pyrene	16.528	252	3184259	49.75 ppm	100
97) Indeno[1,2,3-cd]pyrene	18.259	276	3253608	51.70 ppm	98
98) Dibenz(a,h)acridine	17.885	279	2829531	50.68 ppm	99
99) Dibenz[a,h]anthracene	18.307	278	3424322	51.98 ppm	99
100) 7,12-Dimethylbenz(a)an...	16.100	256	1503862	55.08 ppm	97
101) Benzo[g,h,i]perylene	18.734	276	3382967	50.66 ppm	98

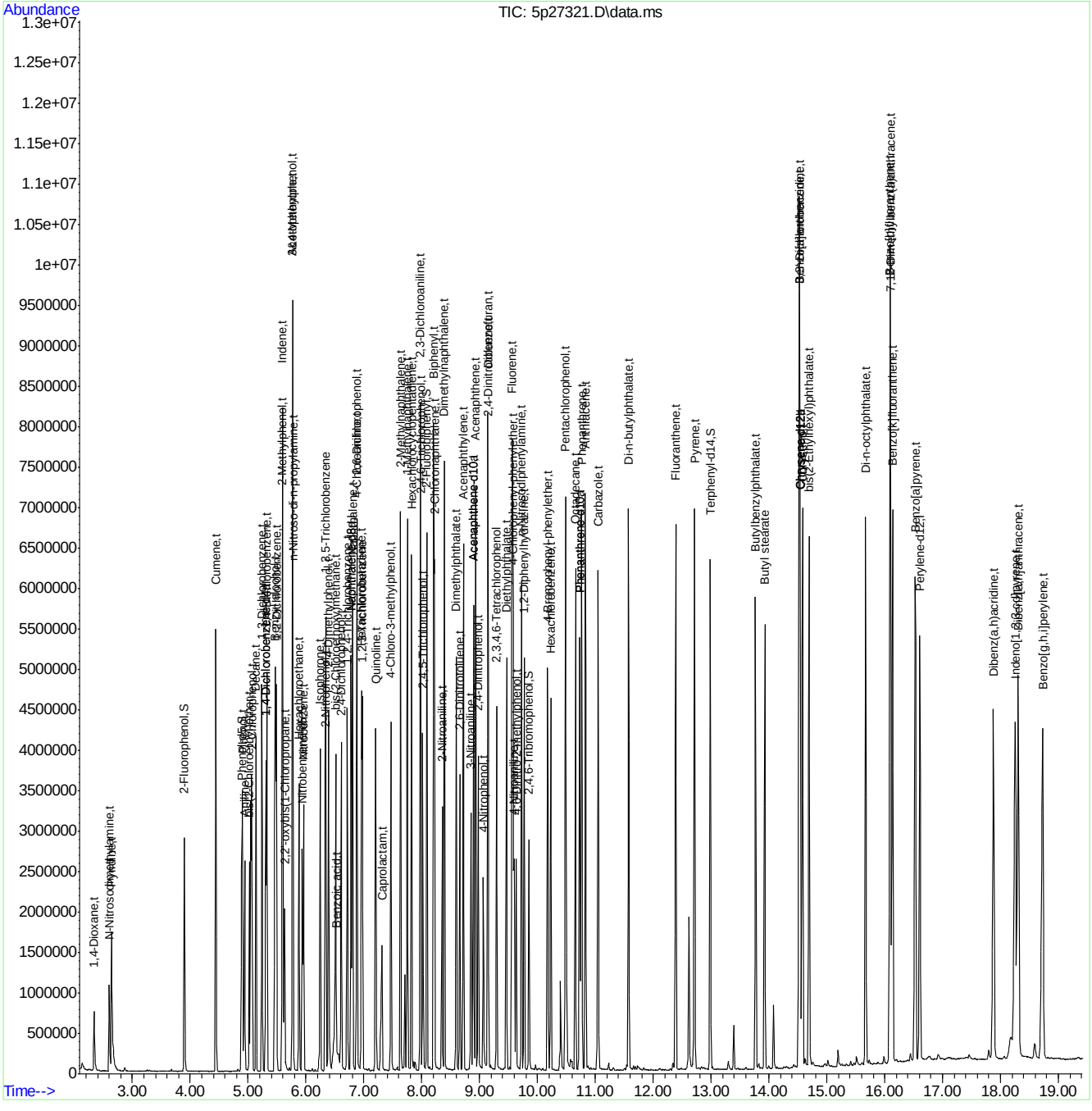
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1382\
Data File : 5p27321.D
Acq On : 11 Apr 2016 11:32 am
Operator : seanb1
Sample : icc1382-50
Misc : op92466,e5p1382
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 11 15:10:20 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 15:09:02 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1382\
Data File : 5p27322.D
Acq On : 11 Apr 2016 11:59 am
Operator : seanb1
Sample : ic1382-25
Misc : op92466,e5p1382
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 11 15:08:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 15:07:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.304	152	632754	40.00	ppm	0.00
24) Naphthalene-d8	6.778	136	2398751	40.00	ppm	0.00
47) Acenaphthene-d10	8.893	164	1393456	40.00	ppm	0.00
69) Phenanthrene-d10	10.726	188	2312610	40.00	ppm	0.00
83) Chrysene-d12	14.535	240	2279672	40.00	ppm	0.00
92) Perylene-d12	16.602	264	2347944	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.304	152	632754	40.00	ppm	0.00
104) Acenaphthene-d10a	8.893	164	1393456	40.00	ppm	0.00
106) Chrysene-d12a	14.535	240	2279672	40.00	ppm	0.00
109) Phenanthrene-d10a	10.726	188	2312610	40.00	ppm	0.00
112) Naphthalene-d8a	6.778	136	2398751	40.00	ppm	0.00
114) Chrysene-d12b	14.535	240	2279672	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.893	112	484274	24.85	ppm	0.00
Spiked Amount 50.000			Recovery	=	49.70%	
8) Phenol-d5	4.887	99	559606	25.48	ppm	0.00
Spiked Amount 50.000			Recovery	=	50.96%	
25) Nitrobenzene-d5	5.934	82	460876	25.27	ppm	0.00
Spiked Amount 50.000			Recovery	=	50.54%	
51) 2-Fluorobiphenyl	8.087	172	1123870	25.53	ppm	0.00
Spiked Amount 50.000			Recovery	=	51.06%	
73) 2,4,6-Tribromophenol	9.850	330	147844	26.70	ppm	0.00
Spiked Amount 50.000			Recovery	=	53.40%	
85) Terphenyl-d14	12.986	244	1175972	25.93	ppm	0.00
Spiked Amount 50.000			Recovery	=	51.86%	
108) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.339	88	181123	24.31	ppm	97
3) Pyridine	2.643	79	418401	25.44	ppm	97
4) N-Nitrosodimethylamine	2.600	74	238843	26.24	ppm	92
6) Indene	5.592	116	861396	24.86	ppm	99
7) Cumene	4.438	105	1179576	25.37	ppm	98
9) Phenol	4.903	94	571160	25.12	ppm	98
10) Aniline	4.935	93	578227	23.34	ppm	85
11) bis(2-Chloroethyl)ether	5.015	93	416922	24.76	ppm	96
12) 2-Chlorophenol	5.063	128	551797	25.16	ppm	99
13) Decane	5.133	43	360657	25.02	ppm	97
14) 1,3-Dichlorobenzene	5.239	146	607317	25.07	ppm	100
15) 1,4-Dichlorobenzene	5.325	146	610027	24.94	ppm	98
16) Benzyl alcohol	5.458	108	318647	25.46	ppm	97
17) 1,2-Dichlorobenzene	5.490	146	570860	24.38	ppm	99
18) Acetophenone	5.763	105	660281	24.25	ppm	92
19) 2-Methylphenol	5.587	108	428872	25.55	ppm	97
20) 2,2'-oxybis(1-Chloropr...	5.624	45	469241	24.09	ppm	96

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1382\
Data File : 5p27322.D
Acq On : 11 Apr 2016 11:59 am
Operator : seanb1
Sample : ic1382-25
Misc : op92466,e5p1382
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 11 15:08:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 15:07:19 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	5.763	108	457164	25.97	ppm	97
22) n-Nitroso-di-n-propyla...	5.768	70	287556	23.42	ppm	99
23) Hexachloroethane	5.875	201	202122	25.62	ppm	99
26) Nitrobenzene	5.955	77	449995	25.30	ppm	97
27) Quinoline	7.200	129	1057456	25.04	ppm	99
28) Isophorone	6.238	82	802166	25.73	ppm	95
29) 2-Nitrophenol	6.329	139	299125	26.76	ppm	93
30) 2,4-Dimethylphenol	6.388	107	446822	25.33	ppm	93
31) Benzoic acid	6.495	105	371573	29.36	ppm	94
32) bis(2-Chloroethoxy)met...	6.511	93	513326	24.98	ppm	99
33) 2,4-Dichlorophenol	6.607	162	441414	25.82	ppm	97
34) 2,6-Dichlorophenol	6.879	162	426257	25.22	ppm	97
35) 1,3,5-Trichlorobenzene	6.340	180	496818	25.33	ppm	99
36) 1,2,4-Trichlorobenzene	6.709	180	488963	25.55	ppm	99
37) 1,2,3-Trichlorobenzene	6.970	180	465174	24.47	ppm	97
38) Naphthalene	6.799	128	1522820	25.12	ppm	99
39) 4-Chloroaniline	6.874	127	643015	25.34	ppm	98
40) 2,3-Dichloroaniline	7.975	161	537534	25.38	ppm	97
41) Caprolactam	7.285	55	181551	26.42	ppm	97
42) Hexachlorobutadiene	6.960	225	246016	24.57	ppm	98
43) 4-Chloro-3-methylphenol	7.462	107	467983	25.39	ppm	97
44) 2-Methylnaphthalene	7.633	141	890360	25.58	ppm	97
45) 1-Methylnaphthalene	7.750	141	922277	25.56	ppm	95
46) Dimethylnaphthalene	8.391	156	965823	25.44	ppm	99
48) Hexachlorocyclopentadiene	7.825	237	485266	59.41	ppm	98
49) 2,4,6-Trichlorophenol	7.975	196	309836	26.21	ppm	100
50) 2,4,5-Trichlorophenol	8.017	196	329034	25.64	ppm	94
52) 2-Chloronaphthalene	8.220	162	988162	25.32	ppm	97
53) Biphenyl	8.204	154	1278490	25.41	ppm	98
54) 2-Nitroaniline	8.349	65	259697	26.44	ppm	92
55) Dimethylphthalate	8.589	163	1175787	25.42	ppm	99
56) Acenaphthylene	8.717	152	1604878	26.00	ppm	97
57) 2,6-Dinitrotoluene	8.653	165	253911	26.39	ppm	97
58) 3-Nitroaniline	8.845	138	301428	26.97	ppm	95
59) Acenaphthene	8.931	153	1014809	25.56	ppm	97
60) 2,4-Dinitrophenol	8.974	184	261913	53.35	ppm	95
61) 4-Nitrophenol	9.059	109	150619	25.82	ppm	95
62) Dibenzofuran	9.145	168	1368944	25.44	ppm	97
63) 2,4-Dinitrotoluene	9.134	165	359087	28.35	ppm	92
64) 2,3,4,6-Tetrachlorophenol	9.289	232	268011	26.54	ppm	97
65) Diethylphthalate	9.460	149	1195284	25.26	ppm	99
66) Fluorene	9.556	166	1154893	26.01	ppm	99
67) 4-Chlorophenyl-phenyle...	9.577	204	520755	24.76	ppm	95
68) 4-Nitroaniline	9.588	138	307407	27.63	ppm	98
70) 4,6-Dinitro-2-methylph...	9.625	198	188461	30.16	ppm	93
71) n-Nitrosodiphenylamine	9.722	169	843832	25.60	ppm	99
72) 1,2-Diphenylhydrazine	9.764	77	879124	25.74	ppm	98
74) 4-Bromophenyl-phenylether	10.176	248	319038	25.03	ppm	99
75) Hexachlorobenzene	10.224	284	331939	25.87	ppm	99
76) Pentachlorophenol	10.480	266	444170	57.05	ppm	97

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1382\
Data File : 5p27322.D
Acq On : 11 Apr 2016 11:59 am
Operator : seanb1
Sample : ic1382-25
Misc : op92466,e5p1382
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 11 15:08:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 15:07:19 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
77)	Phenanthrene	10.758	178	1620043	25.11 ppm	100
78)	Anthracene	10.822	178	1654329	25.55 ppm	99
79)	Carbazole	11.046	167	1551556	25.46 ppm	100
80)	Di-n-butylphthalate	11.575	149	2060528	26.81 ppm	99
81)	Fluoranthene	12.387	202	1714670	25.83 ppm	99
82)	Octadecane	10.651	57	553079	26.10 ppm	98
84)	Pyrene	12.708	202	1793126	25.71 ppm	99
86)	Butylbenzylphthalate	13.766	149	924446	27.20 ppm	100
87)	Butyl stearate	13.921	56	376262	26.98 ppm	96
88)	Benzo[a]anthracene	14.519	228	1597727	25.42 ppm	99
89)	3,3'-Dichlorobenzidine	14.519	252	632151	27.77 ppm	98
90)	Chrysene	14.572	228	1643038	25.74 ppm	99
91)	bis(2-Ethylhexyl)phtha...	14.690	149	1328575	27.55 ppm	100
93)	Di-n-octylphthalate	15.667	149	2235992	27.91 ppm	99
94)	Benzo[b]fluoranthene	16.084	252	1739074	25.45 ppm	98
95)	Benzo[k]fluoranthene	16.127	252	1706375	26.45 ppm	100
96)	Benzo[a]pyrene	16.522	252	1581144	25.94 ppm	99
97)	Indeno[1,2,3-cd]pyrene	18.248	276	1549490	25.83 ppm	99
98)	Dibenz(a,h)acridine	17.874	279	1385328	26.07 ppm	98
99)	Dibenz[a,h]anthracene	18.296	278	1654891	26.47 ppm	97
100)	7,12-Dimethylbenz(a)an...	16.090	256	737317	28.91 ppm	100
101)	Benzo[g,h,i]perylene	18.718	276	1645971	25.86 ppm	99

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

76.58

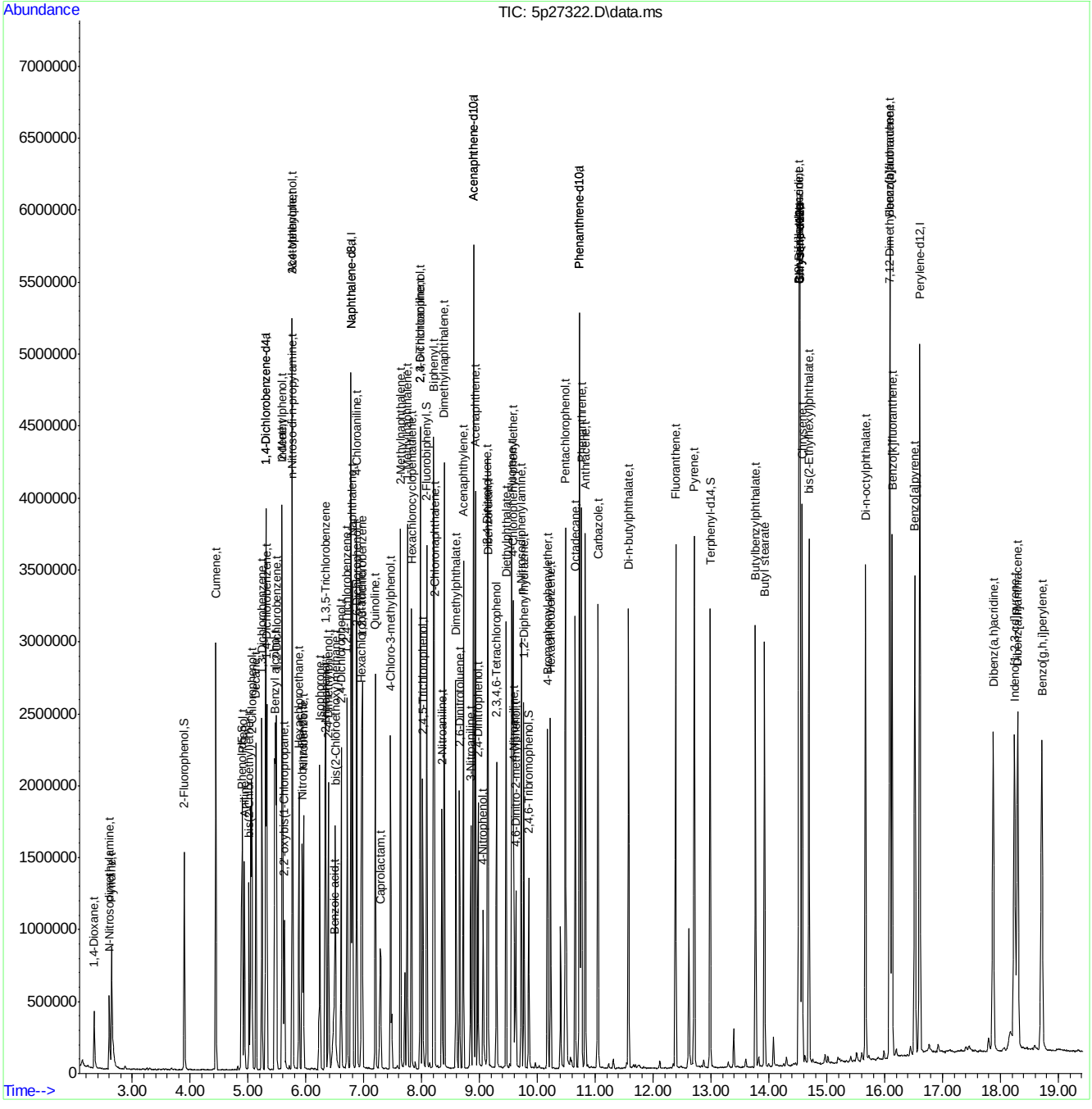
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1382\
Data File : 5p27322.D
Acq On : 11 Apr 2016 11:59 am
Operator : seanb1
Sample : ic1382-25
Misc : op92466,e5p1382
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 11 15:08:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 15:07:19 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1382\
Data File : 5p27323.D
Acq On : 11 Apr 2016 12:25 pm
Operator : seanb1
Sample : ic1382-10
Misc : op92466,e5p1382
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 11 15:07:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 15:05:28 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.303	152	627501	40.00	ppm	0.00
24) Naphthalene-d8	6.778	136	2394447	40.00	ppm	0.00
47) Acenaphthene-d10	8.893	164	1378612	40.00	ppm	0.00
69) Phenanthrene-d10	10.726	188	2284990	40.00	ppm	0.00
83) Chrysene-d12	14.535	240	2262729	40.00	ppm	0.00
92) Perylene-d12	16.602	264	2282801	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.303	152	627501	40.00	ppm	0.00
104) Acenaphthene-d10a	8.893	164	1378612	40.00	ppm	0.00
106) Chrysene-d12a	14.535	240	2262683	40.00	ppm	0.00
109) Phenanthrene-d10a	10.726	188	2284990	40.00	ppm	0.00
112) Naphthalene-d8a	6.778	136	2394447	40.00	ppm	0.00
114) Chrysene-d12b	14.535	240	2262683	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.893	112	196927	10.24	ppm	0.00
Spiked Amount 50.000			Recovery	=	20.48%	
8) Phenol-d5	4.881	99	229138	10.66	ppm	0.00
Spiked Amount 50.000			Recovery	=	21.32%	
25) Nitrobenzene-d5	5.929	82	187501	10.38	ppm	0.00
Spiked Amount 50.000			Recovery	=	20.76%	
51) 2-Fluorobiphenyl	8.087	172	458869	10.68	ppm	0.00
Spiked Amount 50.000			Recovery	=	21.36%	
73) 2,4,6-Tribromophenol	9.850	330	53982	9.84	ppm	0.00
Spiked Amount 50.000			Recovery	=	19.68%	
85) Terphenyl-d14	12.986	244	474835	10.69	ppm	0.00
Spiked Amount 50.000			Recovery	=	21.38%	
108) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.339	88	71825	9.65	ppm	84
3) Pyridine	2.648	79	169081	10.46	ppm	99
4) N-Nitrosodimethylamine	2.606	74	95172	10.69	ppm	94
6) Indene	5.592	116	357716	10.52	ppm	99
7) Cumene	4.438	105	484487	10.64	ppm	98
9) Phenol	4.897	94	235754	10.57	ppm	96
10) Aniline	4.935	93	255950	10.53	ppm	89
11) bis(2-Chloroethyl)ether	5.015	93	172432	10.41	ppm	93
12) 2-Chlorophenol	5.063	128	220392	10.17	ppm	97
13) Decane	5.133	43	147652	10.41	ppm	100
14) 1,3-Dichlorobenzene	5.239	146	246638	10.33	ppm	97
15) 1,4-Dichlorobenzene	5.325	146	248670	10.32	ppm	98
16) Benzyl alcohol	5.458	108	125954	10.18	ppm	98
17) 1,2-Dichlorobenzene	5.490	146	238918	10.37	ppm	100
18) Acetophenone	5.763	105	281619	10.54	ppm	100
19) 2-Methylphenol	5.581	108	177259	10.83	ppm	99
20) 2,2'-oxybis(1-Chloropr...	5.624	45	190523	9.83	ppm	91

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1382\
Data File : 5p27323.D
Acq On : 11 Apr 2016 12:25 pm
Operator : seanb1
Sample : ic1382-10
Misc : op92466,e5p1382
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 11 15:07:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 15:05:28 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	5.758	108	184720	10.74	ppm	98
22) n-Nitroso-di-n-propyla...	5.768	70	126231	10.46	ppm	98
23) Hexachloroethane	5.875	201	80805	10.42	ppm	97
26) Nitrobenzene	5.955	77	187934	10.74	ppm	97
27) Quinoline	7.195	129	433616	10.36	ppm	98
28) Isophorone	6.238	82	327678	10.67	ppm	95
29) 2-Nitrophenol	6.324	139	116738	10.58	ppm	93
30) 2,4-Dimethylphenol	6.383	107	170813	9.63	ppm	94
31) Benzoic acid	6.463	105	125528	9.92	ppm	89
32) bis(2-Chloroethoxy)met...	6.505	93	214531	10.58	ppm	97
33) 2,4-Dichlorophenol	6.607	162	178103	10.55	ppm	96
34) 2,6-Dichlorophenol	6.874	162	180347	10.88	ppm	99
35) 1,3,5-Trichlorobenzene	6.340	180	208112	10.80	ppm	99
36) 1,2,4-Trichlorobenzene	6.708	180	201044	10.66	ppm	99
37) 1,2,3-Trichlorobenzene	6.970	180	195626	10.39	ppm	99
38) Naphthalene	6.799	128	630581	10.53	ppm	99
39) 4-Chloroaniline	6.869	127	273293	11.01	ppm	99
40) 2,3-Dichloroaniline	7.969	161	221063	10.58	ppm	98
41) Caprolactam	7.269	55	70588	10.37	ppm	96
42) Hexachlorobutadiene	6.954	225	101026	10.13	ppm	98
43) 4-Chloro-3-methylphenol	7.456	107	185350	10.09	ppm	97
44) 2-Methylnaphthalene	7.633	141	367354	10.73	ppm	99
45) 1-Methylnaphthalene	7.750	141	381778	10.76	ppm	97
46) Dimethylnaphthalene	8.391	156	392240	10.44	ppm	99
48) Hexachlorocyclopentadiene	7.825	237	172667	21.74	ppm	99
49) 2,4,6-Trichlorophenol	7.975	196	128048	11.21	ppm	93
50) 2,4,5-Trichlorophenol	8.012	196	130710	10.37	ppm	99
52) 2-Chloronaphthalene	8.215	162	407485	10.70	ppm	99
53) Biphenyl	8.204	154	537164	11.01	ppm	99
54) 2-Nitroaniline	8.343	65	101194	10.52	ppm	99
55) Dimethylphthalate	8.589	163	473990	10.45	ppm	100
56) Acenaphthylene	8.717	152	660003	11.03	ppm	97
57) 2,6-Dinitrotoluene	8.653	165	96670	10.19	ppm	91
58) 3-Nitroaniline	8.845	138	118114	10.87	ppm	95
59) Acenaphthene	8.931	153	414234	10.69	ppm	98
60) 2,4-Dinitrophenol	8.974	184	79477	15.43	ppm	80
61) 4-Nitrophenol	9.059	109	55596	9.52	ppm	86
62) Dibenzofuran	9.139	168	571318	10.93	ppm	98
63) 2,4-Dinitrotoluene	9.134	165	141216	11.64	ppm	91
64) 2,3,4,6-Tetrachlorophenol	9.289	232	105337	10.69	ppm	96
65) Diethylphthalate	9.454	149	499426	10.85	ppm	100
66) Fluorene	9.556	166	466944	10.80	ppm	99
67) 4-Chlorophenyl-phenyle...	9.577	204	213624	10.33	ppm	97
68) 4-Nitroaniline	9.583	138	122180	11.41	ppm	96
70) 4,6-Dinitro-2-methylph...	9.620	198	62831	10.22	ppm	98
71) n-Nitrosodiphenylamine	9.716	169	342280	10.64	ppm	98
72) 1,2-Diphenylhydrazine	9.764	77	362374	10.94	ppm	99
74) 4-Bromophenyl-phenylether	10.176	248	131001	10.51	ppm	89
75) Hexachlorobenzene	10.224	284	129145	10.24	ppm	98
76) Pentachlorophenol	10.480	266	164272	21.72	ppm	95

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1382\
Data File : 5p27323.D
Acq On : 11 Apr 2016 12:25 pm
Operator : seanb1
Sample : ic1382-10
Misc : op92466,e5p1382
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 11 15:07:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 15:05:28 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77)	Phenanthrene	10.758	178	670484	10.66	ppm	97
78)	Anthracene	10.822	178	683118	10.86	ppm	99
79)	Carbazole	11.041	167	637936	10.76	ppm	99
80)	Di-n-butylphthalate	11.570	149	838990	11.35	ppm	99
81)	Fluoranthene	12.382	202	697996	10.81	ppm	99
82)	Octadecane	10.651	57	223644	10.86	ppm	97
84)	Pyrene	12.708	202	746105	10.99	ppm	100
86)	Butylbenzylphthalate	13.766	149	364806	11.04	ppm	98
87)	Butyl stearate	13.921	56	148506	10.93	ppm	92
88)	Benzo[a]anthracene	14.519	228	655777	10.65	ppm	98
89)	3,3'-Dichlorobenzidine	14.514	252	251977	11.48	ppm	99
90)	Chrysene	14.572	228	662022	10.57	ppm	98
91)	bis(2-Ethylhexyl)phtha...	14.690	149	527305	11.30	ppm	98
93)	Di-n-octylphthalate	15.662	149	887596	11.81	ppm	100
94)	Benzo[b]fluoranthene	16.079	252	706896	10.81	ppm	100
95)	Benzo[k]fluoranthene	16.122	252	673510	10.94	ppm	98
96)	Benzo[a]pyrene	16.517	252	627331	10.74	ppm	98
97)	Indeno[1,2,3-cd]pyrene	18.237	276	610502	10.59	ppm	97
98)	Dibenz(a,h)acridine	17.868	279	543255	10.65	ppm	97
99)	Dibenz[a,h]anthracene	18.290	278	618721	10.22	ppm	97
100)	7,12-Dimethylbenz(a)an...	16.084	256	263464	10.79	ppm	99
101)	Benzo[g,h,i]perylene	18.707	276	630415	10.24	ppm	99

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

7.6.59

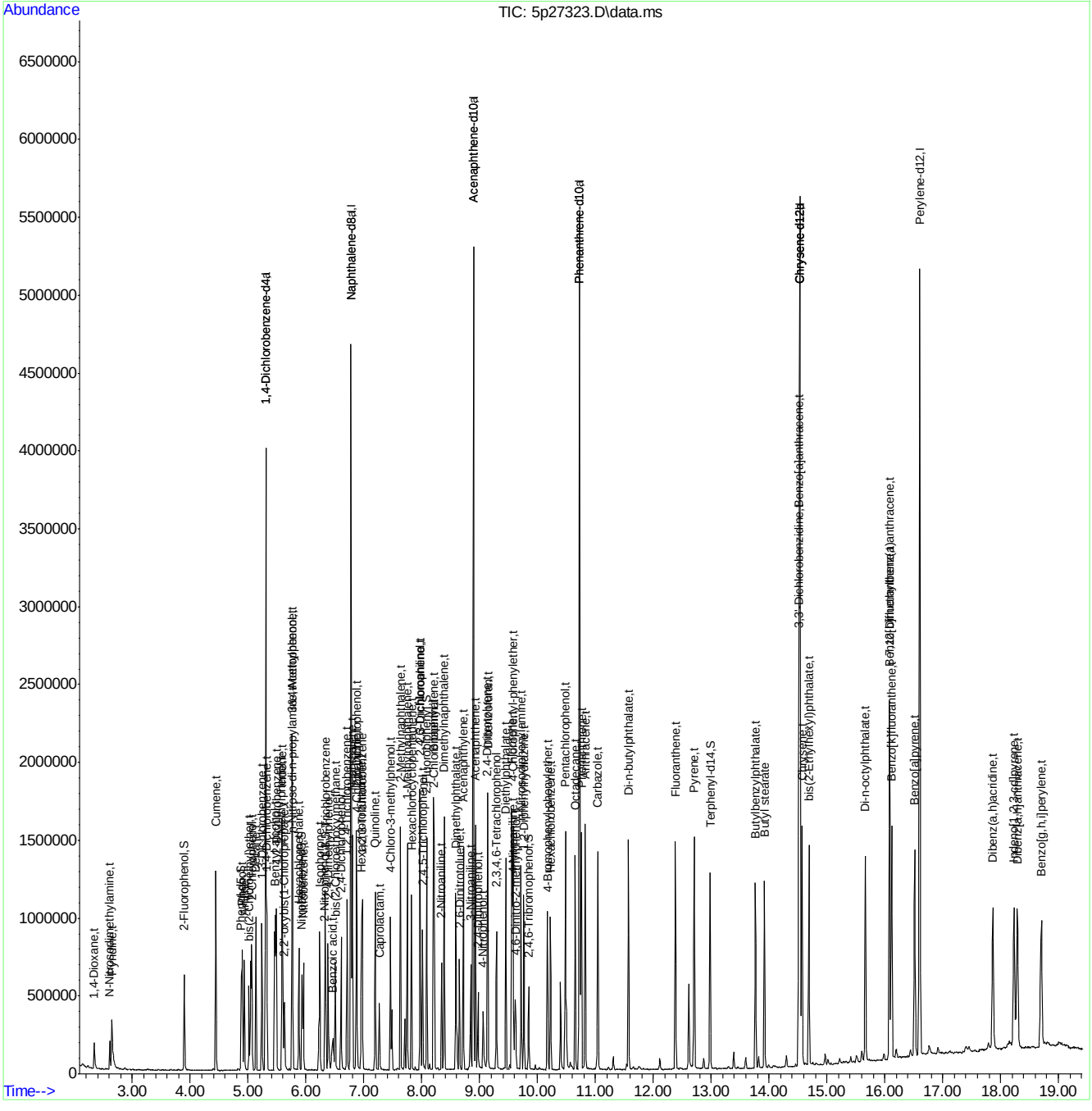
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1382\
Data File : 5p27323.D
Acq On : 11 Apr 2016 12:25 pm
Operator : seanb1
Sample : ic1382-10
Misc : op92466,e5p1382
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 11 15:07:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 15:05:28 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1382\
Data File : 5p27324.D
Acq On : 11 Apr 2016 12:52 pm
Operator : seanb1
Sample : ic1382-5
Misc : op92466,e5p1382
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 11 15:05:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 14:51:06 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.303	152	640560	40.00	ppm	0.00
24) Naphthalene-d8	6.772	136	2405253	40.00	ppm	0.00
47) Acenaphthene-d10	8.888	164	1388011	40.00	ppm	0.00
69) Phenanthrene-d10	10.726	188	2261772	40.00	ppm	0.00
83) Chrysene-d12	14.535	240	2324072	40.00	ppm	0.00
92) Perylene-d12	16.602	264	2263982	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.303	152	640560	40.00	ppm	0.00
104) Acenaphthene-d10a	8.888	164	1388011	40.00	ppm	0.00
106) Chrysene-d12a	14.535	240	2323998	40.00	ppm	0.00
109) Phenanthrene-d10a	10.726	188	2261772	40.00	ppm	0.00
112) Naphthalene-d8a	6.772	136	2405253	40.00	ppm	0.00
114) Chrysene-d12b	14.535	240	2323998	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.893	112	102390	5.31	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.62%	
8) Phenol-d5	4.887	99	115375	5.30	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.60%	
25) Nitrobenzene-d5	5.928	82	97182	5.46	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.92%	
51) 2-Fluorobiphenyl	8.087	172	239024	5.54	ppm	0.00
Spiked Amount 50.000			Recovery	=	11.08%	
73) 2,4,6-Tribromophenol	9.844	330	25760	4.83	ppm	0.00
Spiked Amount 50.000			Recovery	=	9.66%	
85) Terphenyl-d14	12.985	244	242309	5.32	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.64%	
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.338	88	39421	5.20	ppm	85
3) Pyridine	2.648	79	83027	5.15	ppm	94
4) N-Nitrosodimethylamine	2.605	74	45813	5.09	ppm	100
6) Indene	5.592	116	193941	5.67	ppm	95
7) Cumene	4.438	105	249747	5.37	ppm	98
9) Phenol	4.897	94	120588	5.32	ppm	92
10) Aniline	4.935	93	144024	5.77	ppm	89
11) bis(2-Chloroethyl)ether	5.015	93	86713	5.08	ppm	90
12) 2-Chlorophenol	5.063	128	118982	5.44	ppm	97
13) Decane	5.132	43	78034	5.36	ppm	96
14) 1,3-Dichlorobenzene	5.239	146	133053	5.50	ppm	93
15) 1,4-Dichlorobenzene	5.325	146	133486	5.43	ppm	98
16) Benzyl alcohol	5.458	108	66593	5.34	ppm	81
17) 1,2-Dichlorobenzene	5.490	146	127380	5.44	ppm	95
18) Acetophenone	5.763	105	150947	5.54	ppm	96
19) 2-Methylphenol	5.581	108	92629	5.73	ppm	86
20) 2,2'-oxybis(1-Chloropr...	5.619	45	103142	5.21	ppm	96

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1382\
Data File : 5p27324.D
Acq On : 11 Apr 2016 12:52 pm
Operator : seanb1
Sample : ic1382-5
Misc : op92466,e5p1382
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 11 15:05:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 14:51:06 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.757	108	94736	5.43	ppm		96
22) n-Nitroso-di-n-propyla...	5.763	70	64997	5.30	ppm		96
23) Hexachloroethane	5.875	201	42472	5.45	ppm		92
26) Nitrobenzene	5.955	77	95831	5.45	ppm		90
27) Quinoline	7.194	129	218957	5.27	ppm		99
28) Isophorone	6.238	82	167482	5.49	ppm		99
29) 2-Nitrophenol	6.324	139	58636	5.43	ppm		99
30) 2,4-Dimethylphenol	6.382	107	86672	4.91	ppm		88
31) Benzoic acid	6.452	105	54939	4.57	ppm		97
32) bis(2-Chloroethoxy)met...	6.505	93	109865	5.48	ppm		99
33) 2,4-Dichlorophenol	6.607	162	91970	5.59	ppm		98
34) 2,6-Dichlorophenol	6.874	162	90051	5.53	ppm		89
35) 1,3,5-Trichlorobenzene	6.340	180	109604	5.73	ppm		93
36) 1,2,4-Trichlorobenzene	6.708	180	105945	5.68	ppm		96
37) 1,2,3-Trichlorobenzene	6.970	180	105272	5.65	ppm		98
38) Naphthalene	6.799	128	333951	5.61	ppm		99
39) 4-Chloroaniline	6.869	127	142607	5.81	ppm		97
40) 2,3-Dichloroaniline	7.969	161	114618	5.49	ppm		95
41) Caprolactam	7.259	55	34011	5.15	ppm		96
42) Hexachlorobutadiene	6.954	225	54618	5.63	ppm		96
43) 4-Chloro-3-methylphenol	7.456	107	98973	5.57	ppm		89
44) 2-Methylnaphthalene	7.633	141	189609	5.55	ppm		98
45) 1-Methylnaphthalene	7.750	141	195837	5.49	ppm		98
46) Dimethylnaphthalene	8.391	156	204213	5.43	ppm		98
48) Hexachlorocyclopentadiene	7.825	237	81500	10.86	ppm		89
49) 2,4,6-Trichlorophenol	7.974	196	60891	5.38	ppm		96
50) 2,4,5-Trichlorophenol	8.012	196	68072	5.54	ppm		93
52) 2-Chloronaphthalene	8.215	162	213167	5.60	ppm		98
53) Biphenyl	8.204	154	272069	5.52	ppm		99
54) 2-Nitroaniline	8.343	65	51093	5.41	ppm		97
55) Dimethylphthalate	8.589	163	250878	5.55	ppm		98
56) Acenaphthylene	8.717	152	327558	5.45	ppm		100
57) 2,6-Dinitrotoluene	8.648	165	48950	5.38	ppm		89
58) 3-Nitroaniline	8.845	138	56725	5.44	ppm		92
59) Acenaphthene	8.931	153	217178	5.62	ppm		96
60) 2,4-Dinitrophenol	8.973	184	30178	6.32	ppm		93
61) 4-Nitrophenol	9.059	109	27930	5.13	ppm	#	54
62) Dibenzofuran	9.139	168	299016	5.69	ppm		96
63) 2,4-Dinitrotoluene	9.128	165	69122	6.03	ppm		83
64) 2,3,4,6-Tetrachlorophenol	9.289	232	51743	5.40	ppm		92
65) Diethylphthalate	9.454	149	255137	5.55	ppm		99
66) Fluorene	9.556	166	246003	5.74	ppm		93
67) 4-Chlorophenyl-phenyle...	9.572	204	114879	5.54	ppm		98
68) 4-Nitroaniline	9.582	138	58696	5.61	ppm		96
70) 4,6-Dinitro-2-methylph...	9.620	198	26753	4.79	ppm		83
71) n-Nitrosodiphenylamine	9.716	169	174784	5.51	ppm		93
72) 1,2-Diphenylhydrazine	9.764	77	180207	5.52	ppm		98
74) 4-Bromophenyl-phenylether	10.170	248	65980	5.37	ppm		95
75) Hexachlorobenzene	10.224	284	67033	5.39	ppm		97
76) Pentachlorophenol	10.480	266	77554	10.89	ppm		96

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1382\
Data File : 5p27324.D
Acq On : 11 Apr 2016 12:52 pm
Operator : seanb1
Sample : ic1382-5
Misc : op92466,e5p1382
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 11 15:05:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 14:51:06 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77) Phenanthrene	10.758	178	347273	5.60	ppm	99
78) Anthracene	10.822	178	343033	5.53	ppm	98
79) Carbazole	11.041	167	327722	5.65	ppm	97
80) Di-n-butylphthalate	11.570	149	418896	5.89	ppm	99
81) Fluoranthene	12.382	202	357858	5.66	ppm	98
82) Octadecane	10.651	57	113114	5.64	ppm	97
84) Pyrene	12.708	202	386899	5.60	ppm	98
86) Butylbenzylphthalate	13.765	149	180477	5.44	ppm	96
87) Butyl stearate	13.920	56	76191	5.69	ppm	97
88) Benzo[a]anthracene	14.519	228	339410	5.39	ppm	98
89) 3,3'-Dichlorobenzidine	14.513	252	122014	5.57	ppm	97
90) Chrysene	14.567	228	345910	5.39	ppm	98
91) bis(2-Ethylhexyl)phtha...	14.690	149	258073	5.56	ppm	99
93) Di-n-octylphthalate	15.662	149	436958	6.14	ppm	98
94) Benzo[b]fluoranthene	16.079	252	359782	5.62	ppm	99
95) Benzo[k]fluoranthene	16.116	252	343490	5.72	ppm	94
96) Benzo[a]pyrene	16.517	252	321760	5.66	ppm	97
97) Indeno[1,2,3-cd]pyrene	18.232	276	300200	5.36	ppm	95
98) Dibenz(a,h)acridine	17.863	279	271460	5.51	ppm	76
99) Dibenz[a,h]anthracene	18.285	278	305559	5.18	ppm	95
100) 7,12-Dimethylbenz(a)an...	16.084	256	123878	5.15	ppm	98
101) Benzo[g,h,i]perylene	18.702	276	320953	5.33	ppm	97

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

7.6.60

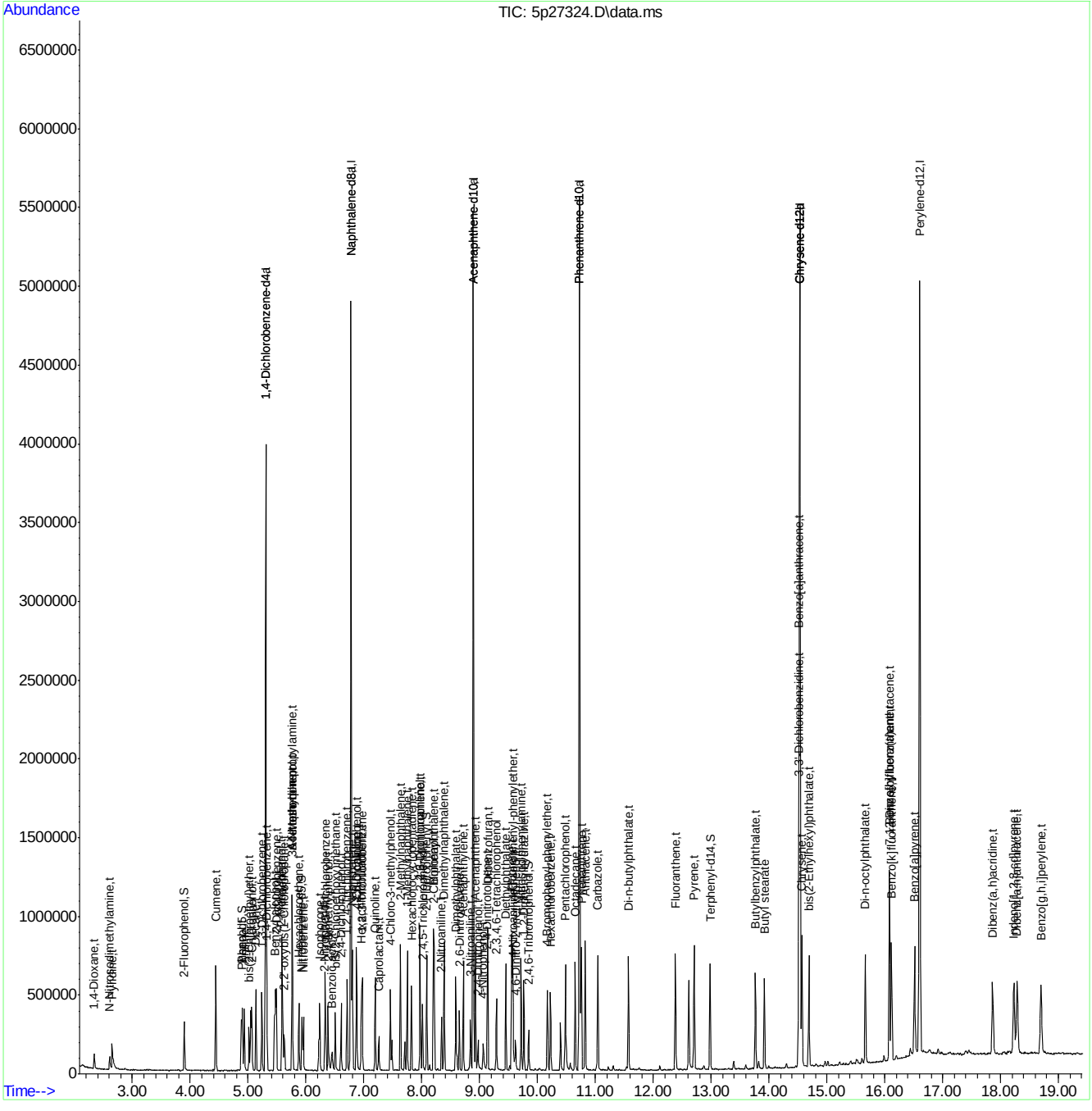
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1382\
Data File : 5p27324.D
Acq On : 11 Apr 2016 12:52 pm
Operator : seanb1
Sample : ic1382-5
Misc : op92466,e5p1382
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 11 15:05:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 14:51:06 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1382\
Data File : 5p27325.D
Acq On : 11 Apr 2016 1:19 pm
Operator : seanb1
Sample : ic1382-2
Misc : op92466,e5p1382
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 11 14:50:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 14:49:23 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.303	152	578669	40.00	ppm	0.00
24) Naphthalene-d8	6.772	136	2212863	40.00	ppm	0.00
47) Acenaphthene-d10	8.888	164	1278278	40.00	ppm	0.00
69) Phenanthrene-d10	10.726	188	2086012	40.00	ppm	0.00
83) Chrysene-d12	14.535	240	2098467	40.00	ppm	0.00
92) Perylene-d12	16.602	264	2065623	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.303	152	578669	40.00	ppm	0.00
104) Acenaphthene-d10a	8.888	164	1278278	40.00	ppm	0.00
106) Chrysene-d12a	14.535	240	2098423	40.00	ppm	0.00
109) Phenanthrene-d10a	10.726	188	2086012	40.00	ppm	0.00
112) Naphthalene-d8a	6.772	136	2212863	40.00	ppm	0.00
114) Chrysene-d12b	14.535	240	2098423	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.893	112	34394	1.97	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.94%	
8) Phenol-d5	4.881	99	40367	2.07	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.14%	
25) Nitrobenzene-d5	5.928	82	33205	2.04	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.08%	
51) 2-Fluorobiphenyl	8.087	172	86939	2.26	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.52%	
73) 2,4,6-Tribromophenol	9.849	330	8788	1.72	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.44%	
85) Terphenyl-d14	12.980	244	87097	2.16	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.32%	
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.338	88	14159	2.09	ppm	88
3) Pyridine	2.664	79	27273	1.83	ppm	87
4) N-Nitrosodimethylamine	2.616	74	15900	1.94	ppm	88
6) Indene	5.592	116	66514	2.21	ppm	88
7) Cumene	4.438	105	90785	2.22	ppm	94
9) Phenol	4.897	94	42881	2.13	ppm	87
10) Aniline	4.935	93	52920	2.49	ppm	90
11) bis(2-Chloroethyl)ether	5.015	93	32503	2.15	ppm	98
12) 2-Chlorophenol	5.063	128	41180	2.11	ppm	93
13) Decane	5.132	43	28784	2.26	ppm	91
14) 1,3-Dichlorobenzene	5.239	146	46934	2.20	ppm	88
15) 1,4-Dichlorobenzene	5.325	146	48105	2.23	ppm	95
16) Benzyl alcohol	5.458	108	22904	2.05	ppm	78
17) 1,2-Dichlorobenzene	5.490	146	45166	2.19	ppm	96
18) Acetophenone	5.763	105	54473	2.29	ppm	92
19) 2-Methylphenol	5.581	108	29433	2.02	ppm	100
20) 2,2'-oxybis(1-Chloropr...	5.624	45	37285	2.12	ppm	94

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1382\
Data File : 5p27325.D
Acq On : 11 Apr 2016 1:19 pm
Operator : seanb1
Sample : ic1382-2
Misc : op92466,e5p1382
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 11 14:50:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 14:49:23 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21)	3&4-Methylphenol	5.757	108	33456	2.17	ppm		87
22)	n-Nitroso-di-n-propyla...	5.763	70	23156	2.12	ppm		92
23)	Hexachloroethane	5.875	201	14441	2.07	ppm		92
26)	Nitrobenzene	5.950	77	35315	2.25	ppm		98
27)	Quinoline	7.194	129	76798	2.01	ppm		99
28)	Isophorone	6.233	82	59020	2.14	ppm		99
29)	2-Nitrophenol	6.324	139	19573	1.96	ppm		94
30)	2,4-Dimethylphenol	6.382	107	30674	1.85	ppm		96
31)	Benzoic acid	6.436	105	15207	1.24	ppm		91
32)	bis(2-Chloroethoxy)met...	6.505	93	38189	2.09	ppm		97
33)	2,4-Dichlorophenol	6.607	162	30201	1.99	ppm		99
34)	2,6-Dichlorophenol	6.874	162	30424	2.04	ppm		95
35)	1,3,5-Trichlorobenzene	6.340	180	38577	2.27	ppm		99
36)	1,2,4-Trichlorobenzene	6.708	180	36931	2.21	ppm		97
37)	1,2,3-Trichlorobenzene	6.970	180	36737	2.19	ppm		97
38)	Naphthalene	6.799	128	118647	2.23	ppm		96
39)	4-Chloroaniline	6.869	127	49472	2.26	ppm		91
40)	2,3-Dichloroaniline	7.969	161	41208	2.20	ppm		91
41)	Caprolactam	7.253	55	10799	1.71	ppm		91
42)	Hexachlorobutadiene	6.954	225	17842	2.00	ppm		92
43)	4-Chloro-3-methylphenol	7.456	107	31440	1.90	ppm	#	86
44)	2-Methylnaphthalene	7.632	141	68153	2.23	ppm		94
45)	1-Methylnaphthalene	7.750	141	72193	2.28	ppm		92
46)	Dimethylnaphthalene	8.391	156	74018	2.19	ppm		96
48)	Hexachlorocyclopentadiene	7.825	237	22789	3.11	ppm		91
49)	2,4,6-Trichlorophenol	7.974	196	21063	2.03	ppm		92
50)	2,4,5-Trichlorophenol	8.012	196	22104	1.94	ppm		98
52)	2-Chloronaphthalene	8.215	162	76564	2.25	ppm		96
53)	Biphenyl	8.204	154	101626	2.33	ppm		97
54)	2-Nitroaniline	8.343	65	17043	1.95	ppm		97
55)	Dimethylphthalate	8.589	163	89260	2.20	ppm		98
56)	Acenaphthylene	8.717	152	119456	2.22	ppm		99
57)	2,6-Dinitrotoluene	8.647	165	14712	1.69	ppm		86
58)	3-Nitroaniline	8.845	138	17045	1.71	ppm		87
59)	Acenaphthene	8.925	153	77082	2.23	ppm		95
60)	2,4-Dinitrophenol	8.973	184	6576	1.14	ppm		83
61)	4-Nitrophenol	9.064	109	7862	1.42	ppm	#	56
62)	Dibenzofuran	9.139	168	109770	2.37	ppm		96
63)	2,4-Dinitrotoluene	9.128	165	19887	1.85	ppm		72
64)	2,3,4,6-Tetrachlorophenol	9.289	232	16601	1.84	ppm		89
65)	Diethylphthalate	9.454	149	91197	2.21	ppm		96
66)	Fluorene	9.556	166	85597	2.23	ppm		96
67)	4-Chlorophenyl-phenyle...	9.572	204	41819	2.26	ppm		88
68)	4-Nitroaniline	9.582	138	19339	2.01	ppm		91
70)	4,6-Dinitro-2-methylph...	9.620	198	6219	1.07	ppm		65
71)	n-Nitrosodiphenylamine	9.716	169	63514	2.24	ppm		96
72)	1,2-Diphenylhydrazine	9.764	77	65356	2.23	ppm		96
74)	4-Bromophenyl-phenylether	10.175	248	24045	2.16	ppm		96
75)	Hexachlorobenzene	10.223	284	24272	2.16	ppm		86
76)	Pentachlorophenol	10.480	266	23217	3.40	ppm		87

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1382\
Data File : 5p27325.D
Acq On : 11 Apr 2016 1:19 pm
Operator : seanb1
Sample : ic1382-2
Misc : op92466,e5p1382
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 11 14:50:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 14:49:23 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77)	Phenanthrene	10.758	178	126182	2.28	ppm	98
78)	Anthracene	10.822	178	125111	2.26	ppm	97
79)	Carbazole	11.041	167	116059	2.23	ppm	95
80)	Di-n-butylphthalate	11.570	149	139330	2.17	ppm	99
81)	Fluoranthene	12.382	202	127048	2.25	ppm	95
82)	Octadecane	10.651	57	39353	2.17	ppm	97
84)	Pyrene	12.708	202	135053	2.23	ppm	98
86)	Butylbenzylphthalate	13.765	149	59711	1.99	ppm	98
87)	Butyl stearate	13.920	56	23370	1.91	ppm	84
88)	Benzo[a]anthracene	14.519	228	120292	2.16	ppm	96
89)	3,3'-Dichlorobenzidine	14.513	252	39403	1.99	ppm	88
90)	Chrysene	14.567	228	123423	2.18	ppm	95
91)	bis(2-Ethylhexyl)phtha...	14.690	149	82460	1.96	ppm	99
93)	Di-n-octylphthalate	15.667	149	134461	2.10	ppm	96
94)	Benzo[b]fluoranthene	16.079	252	125197	2.20	ppm	99
95)	Benzo[k]fluoranthene	16.116	252	117981	2.21	ppm	96
96)	Benzo[a]pyrene	16.517	252	109387	2.15	ppm	94
97)	Indeno[1,2,3-cd]pyrene	18.231	276	101238	1.97	ppm	96
98)	Dibenz(a,h)acridine	17.863	279	89801	2.00	ppm	97
99)	Dibenz[a,h]anthracene	18.285	278	104089	1.91	ppm	96
100)	7,12-Dimethylbenz(a)an...	16.084	256	44101	2.01	ppm	89
101)	Benzo[g,h,i]perylene	18.702	276	111150	2.03	ppm	92

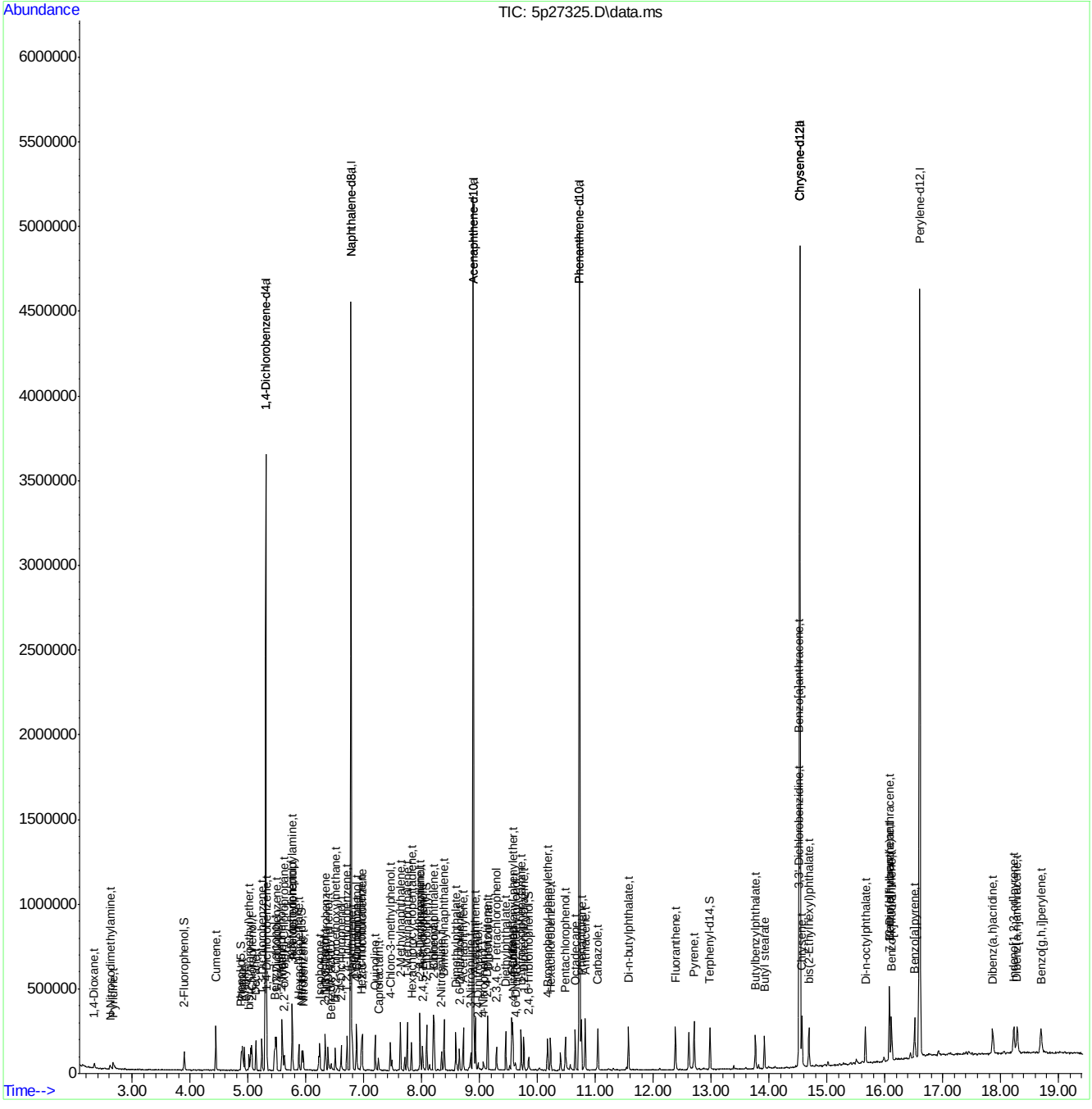
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1382\
Data File : 5p27325.D
Acq On : 11 Apr 2016 1:19 pm
Operator : seanb1
Sample : ic1382-2
Misc : op92466,e5p1382
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 11 14:50:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 14:49:23 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1382\
Data File : 5p27326.D
Acq On : 11 Apr 2016 1:46 pm
Operator : seanb1
Sample : ic1382-1
Misc : op92466,e5p1382
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 11 14:46:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 14:39:08 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.303	152	582644	40.00	ppm	0.00
24) Naphthalene-d8	6.773	136	2218624	40.00	ppm	0.00
47) Acenaphthene-d10	8.888	164	1273412	40.00	ppm	0.00
69) Phenanthrene-d10	10.726	188	2079789	40.00	ppm	0.00
83) Chrysene-d12	14.529	240	2087072	40.00	ppm	0.00
92) Perylene-d12	16.602	264	2043437	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.303	152	582644	40.00	ppm	0.00
104) Acenaphthene-d10a	8.888	164	1273412	40.00	ppm	0.00
106) Chrysene-d12a	14.529	240	2087072	40.00	ppm	0.00
109) Phenanthrene-d10a	10.726	188	2079789	40.00	ppm	0.00
112) Naphthalene-d8a	6.773	136	2218624	40.00	ppm	0.00
114) Chrysene-d12b	14.529	240	2087072	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.893	112	17539	1.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.00%	
8) Phenol-d5	4.887	99	18578	0.95	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.90%	
25) Nitrobenzene-d5	5.928	82	15986	0.98	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.96%	
51) 2-Fluorobiphenyl	8.087	172	41830	1.09	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.18%	
73) 2,4,6-Tribromophenol	9.850	330	4473	0.89	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.78%	
85) Terphenyl-d14	12.980	244	41871	1.04	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.08%	
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.344	88	7860	1.26	ppm	96
3) Pyridine	2.675	79	14601	1.02	ppm	99
4) N-Nitrosodimethylamine	2.622	74	7313	0.93	ppm	99
6) Indene	5.592	116	33238	1.09	ppm	100
7) Cumene	4.438	105	45918	1.11	ppm	100
9) Phenol	4.897	94	20132	1.00	ppm	98
10) Aniline	4.935	93	26320	1.24	ppm	99
11) bis(2-Chloroethyl)ether	5.015	93	16158	1.06	ppm	95
12) 2-Chlorophenol	5.063	128	20506	1.04	ppm	100
13) Decane	5.132	43	14082	1.10	ppm	100
14) 1,3-Dichlorobenzene	5.234	146	23243	1.08	ppm	100
15) 1,4-Dichlorobenzene	5.325	146	23948	1.10	ppm	100
16) Benzyl alcohol	5.458	108	11306	1.00	ppm	100
17) 1,2-Dichlorobenzene	5.490	146	23547	1.13	ppm	100
18) Acetophenone	5.758	105	27245	1.15	ppm	100
19) 2-Methylphenol	5.581	108	15203	1.04	ppm	100
20) 2,2'-oxybis(1-Chloropr...	5.624	45	18775	1.05	ppm	91

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1382\
Data File : 5p27326.D
Acq On : 11 Apr 2016 1:46 pm
Operator : seanb1
Sample : ic1382-1
Misc : op92466,e5p1382
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 11 14:46:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 14:39:08 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	5.758	108	15854	1.02	ppm	100
22) n-Nitroso-di-n-propyla...	5.763	70	11890	1.08	ppm	100
23) Hexachloroethane	5.875	201	7294	1.04	ppm	100
26) Nitrobenzene	5.955	77	15483	0.98	ppm	100
27) Quinoline	7.195	129	38751	1.01	ppm	100
28) Isophorone	6.233	82	28005	1.01	ppm	100
29) 2-Nitrophenol	6.324	139	9618	0.96	ppm	100
30) 2,4-Dimethylphenol	6.383	107	15230	0.92	ppm	100
31) Benzoic acid	6.431	105	6777	0.57	ppm	98
32) bis(2-Chloroethoxy)met...	6.505	93	19040	1.05	ppm	100
33) 2,4-Dichlorophenol	6.607	162	15061	1.00	ppm	100
34) 2,6-Dichlorophenol	6.874	162	15670	1.05	ppm	100
35) 1,3,5-Trichlorobenzene	6.340	180	19709	1.15	ppm	100
36) 1,2,4-Trichlorobenzene	6.708	180	17828	1.06	ppm	100
37) 1,2,3-Trichlorobenzene	6.970	180	18693	1.11	ppm	100
38) Naphthalene	6.799	128	60700	1.14	ppm	100
39) 4-Chloroaniline	6.869	127	24905	1.14	ppm	99
40) 2,3-Dichloroaniline	7.969	161	20021	1.08	ppm	100
41) Caprolactam	7.253	55	5318	0.84	ppm	98
42) Hexachlorobutadiene	6.954	225	10112	1.13	ppm	100
43) 4-Chloro-3-methylphenol	7.456	107	16817	1.03	ppm	100
44) 2-Methylnaphthalene	7.633	141	33737	1.10	ppm	100
45) 1-Methylnaphthalene	7.750	141	34812	1.09	ppm	100
46) Dimethylnaphthalene	8.391	156	36571	1.08	ppm	100
48) Hexachlorocyclopentadiene	7.825	237	9776	1.34	ppm	100
49) 2,4,6-Trichlorophenol	7.975	196	10498	1.02	ppm	100
50) 2,4,5-Trichlorophenol	8.012	196	10882	0.99	ppm	99
52) 2-Chloronaphthalene	8.215	162	37583	1.11	ppm	100
53) Biphenyl	8.199	154	49190	1.13	ppm	100
54) 2-Nitroaniline	8.343	65	7606	0.87	ppm	100
55) Dimethylphthalate	8.589	163	43745	1.08	ppm	100
56) Acenaphthylene	8.717	152	57300	1.07	ppm	100
57) 2,6-Dinitrotoluene	8.648	165	7392	0.85	ppm	100
58) 3-Nitroaniline	8.845	138	8080	0.82	ppm	100
59) Acenaphthene	8.925	153	39107	1.14	ppm	99
62) Dibenzofuran	9.139	168	53377	1.16	ppm	100
63) 2,4-Dinitrotoluene	9.128	165	8701	0.81	ppm	100
64) 2,3,4,6-Tetrachlorophenol	9.294	232	8144	0.91	ppm	100
65) Diethylphthalate	9.449	149	42788	1.04	ppm	100
66) Fluorene	9.556	166	41429	1.08	ppm	100
67) 4-Chlorophenyl-phenyle...	9.572	204	21074	1.14	ppm	100
68) 4-Nitroaniline	9.583	138	7432	0.77	ppm	100
70) 4,6-Dinitro-2-methylph...	9.620	198	2432	0.42	ppm	100
71) n-Nitrosodiphenylamine	9.716	169	30712	1.08	ppm	100
72) 1,2-Diphenylhydrazine	9.764	77	30268	1.04	ppm	100
74) 4-Bromophenyl-phenylether	10.176	248	11995	1.08	ppm	100
75) Hexachlorobenzene	10.224	284	11500	1.03	ppm	100
76) Pentachlorophenol	10.485	266	9324	1.37	ppm	100
77) Phenanthrene	10.753	178	63408	1.15	ppm	100
78) Anthracene	10.822	178	61417	1.11	ppm	100

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1382\
Data File : 5p27326.D
Acq On : 11 Apr 2016 1:46 pm
Operator : seanb1
Sample : ic1382-1
Misc : op92466,e5p1382
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 11 14:46:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 14:39:08 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
79)	Carbazole	11.041	167	55591	1.07 ppm	100
80)	Di-n-butylphthalate	11.570	149	64667	1.01 ppm	100
81)	Fluoranthene	12.382	202	60724	1.08 ppm	100
82)	Octadecane	10.651	57	18649	1.04 ppm	100
84)	Pyrene	12.708	202	64401	1.07 ppm	100
86)	Butylbenzylphthalate	13.766	149	27578	0.92 ppm	100
87)	Butyl stearate	13.920	56	10628	0.89 ppm	98
88)	Benzo[a]anthracene	14.519	228	63014	1.14 ppm	100
89)	3,3'-Dichlorobenzidine	14.513	252	18706	0.95 ppm	100
90)	Chrysene	14.567	228	60410	1.07 ppm	100
91)	bis(2-Ethylhexyl)phtha...	14.690	149	36987	0.89 ppm	100
93)	Di-n-octylphthalate	15.662	149	57286	0.90 ppm	99
94)	Benzo[b]fluoranthene	16.079	252	60054	1.07 ppm	100
95)	Benzo[k]fluoranthene	16.116	252	55715	1.06 ppm	100
96)	Benzo[a]pyrene	16.517	252	52367	1.04 ppm	100
97)	Indeno[1,2,3-cd]pyrene	18.226	276	47610	0.94 ppm	95
98)	Dibenz(a,h)acridine	17.863	279	43388	0.98 ppm	100
99)	Dibenz[a,h]anthracene	18.285	278	52082	0.97 ppm	100
100)	7,12-Dimethylbenz(a)an...	16.079	256	17441	0.80 ppm	100
101)	Benzo[g,h,i]perylene	18.702	276	53136	0.98 ppm	100

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

7.6.62

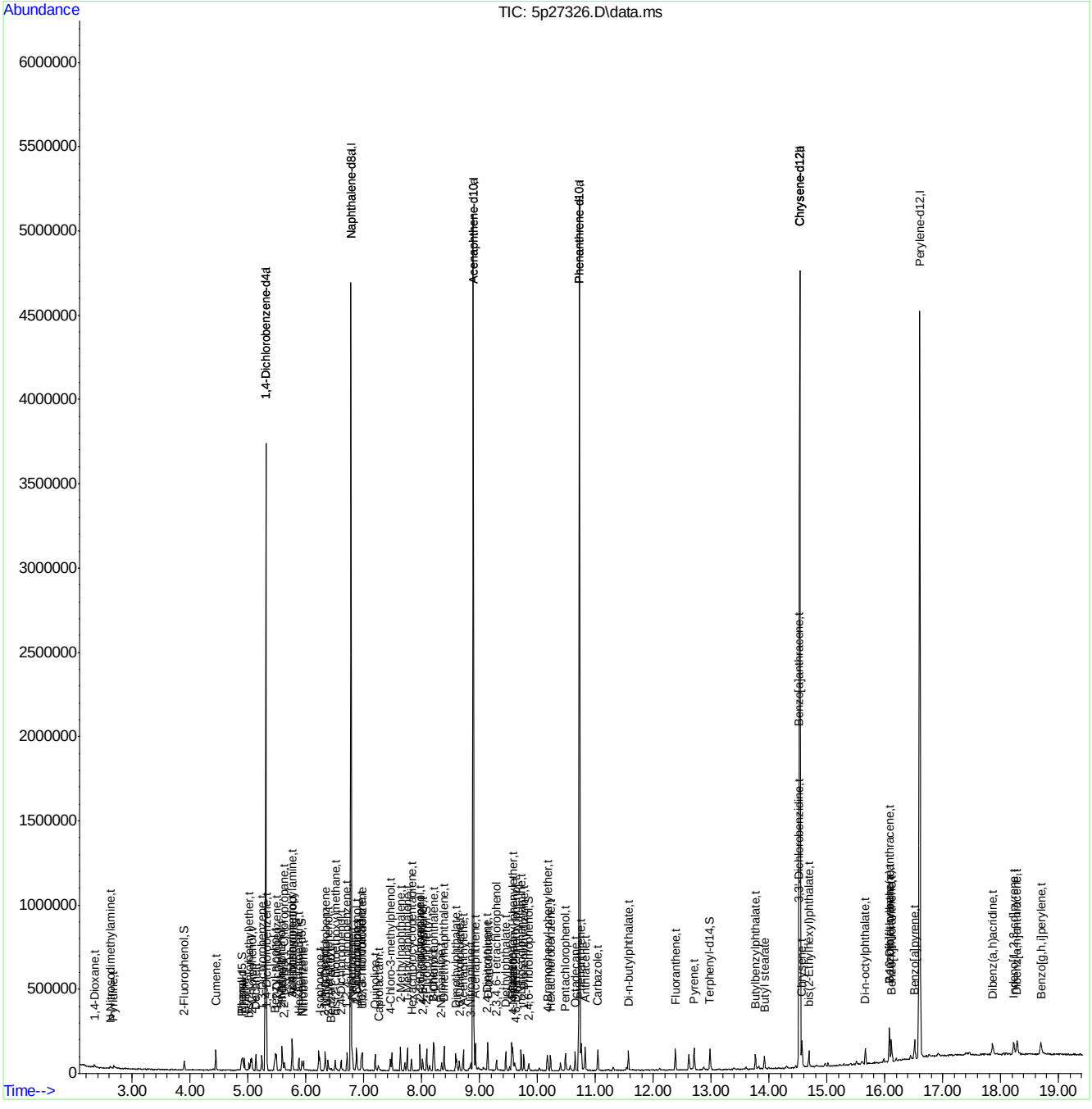
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1382\
Data File : 5p27326.D
Acq On : 11 Apr 2016 1:46 pm
Operator : seanb1
Sample : ic1382-1
Misc : op92466,e5p1382
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 11 14:46:36 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 14:39:08 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27328.D
Acq On : 11 Apr 2016 2:57 pm
Operator : ariellec
Sample : ic1383-100
Misc : op92466,e5p1383
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 11 15:41:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 15:40:45 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.303	152	513169	40.00	ppm	0.00
24) Naphthalene-d8	6.773	136	2027414	40.00	ppm	0.00
47) Acenaphthene-d10	8.893	164	1046650	40.00	ppm	0.00
69) Phenanthrene-d10	10.726	188	1886905	40.00	ppm	0.00
83) Chrysene-d12	14.535	240	1955246	40.00	ppm	0.00
92) Perylene-d12	16.602	264	2040098	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.303	152	513169	40.00	ppm	0.00
104) Acenaphthene-d10a	8.893	164	1046650	40.00	ppm	0.00
106) Chrysene-d12a	14.535	240	1955246	40.00	ppm	0.00
109) Phenanthrene-d10a	10.726	188	1886905	40.00	ppm	0.00
112) Naphthalene-d8a	6.773	136	2027414	40.00	ppm	0.00
114) Chrysene-d12b	14.535	240	1955246	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	12.312	57	1055151	100.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	200.00%	
110) o-terphenyl	11.271	230	2285533	100.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	200.00%	
Target Compounds						Qvalue
103) Benzaldehyde	4.823	105	866869	100.00	ppm	100
105) 1,2,4,5-Tetrachloroben...	7.836	216	1273960	100.00	ppm	100
107) Benzidine	12.617	184	1649808	100.00	ppm	100
111) Atrazine	10.411	215	465983	100.00	ppm	100
113) Hydroquinone	7.296	110	1528162	99.84	ppm	100

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

7.6.63

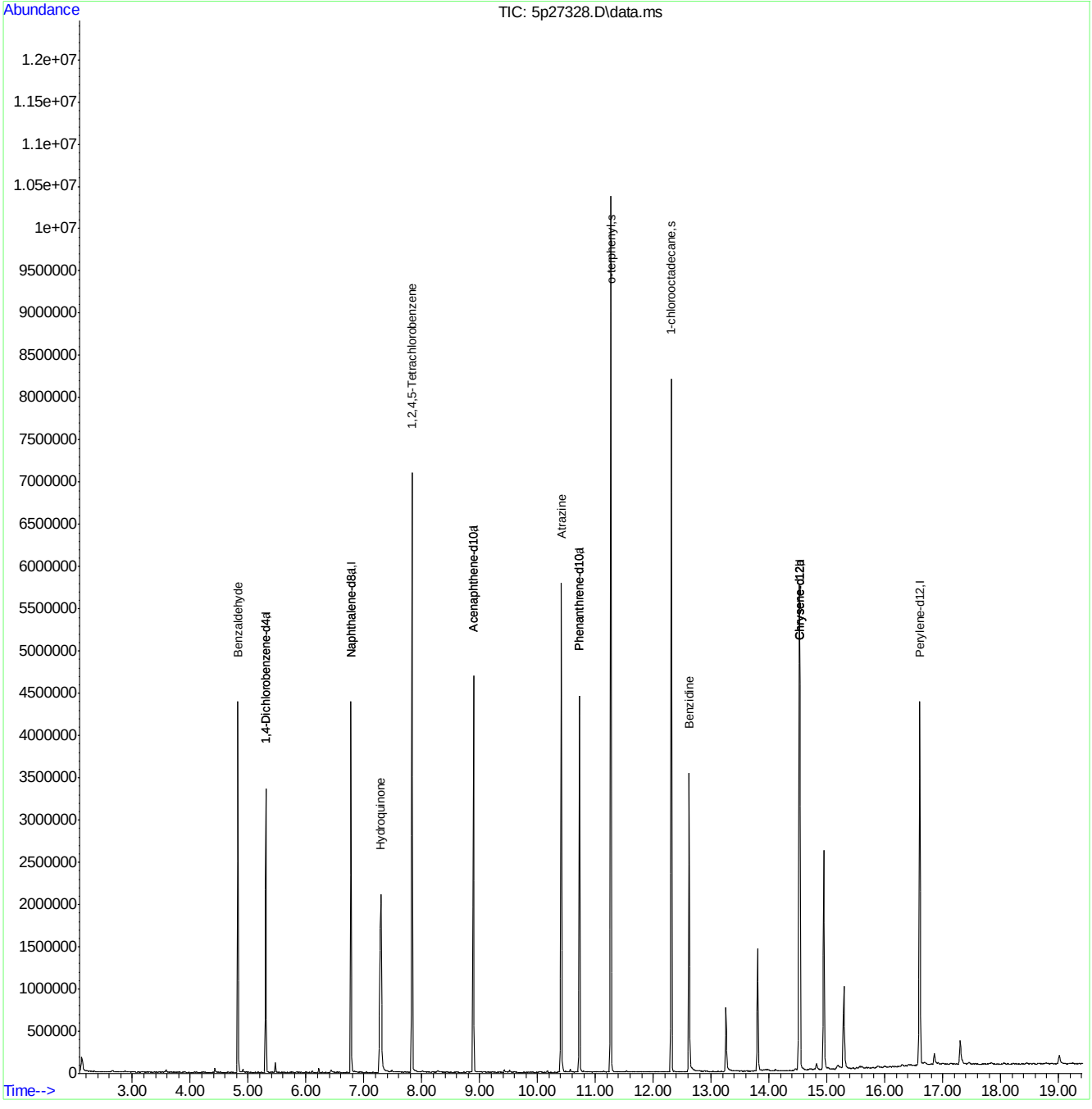
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27328.D
Acq On : 11 Apr 2016 2:57 pm
Operator : ariellec
Sample : ic1383-100
Misc : op92466,e5p1383
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 11 15:41:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 15:40:45 2016
Response via : Initial Calibration



M5P1382.M Mon Apr 11 17:19:31 2016 RPT1 Page: 2

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27329.D
Acq On : 11 Apr 2016 3:24 pm
Operator : ariellec
Sample : ic1383-80
Misc : op92466,e5p1383
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 11 15:50:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 15:40:45 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.303	152	523826	40.00	ppm	0.00
24) Naphthalene-d8	6.773	136	2052826	40.00	ppm	0.00
47) Acenaphthene-d10	8.888	164	1065231	40.00	ppm	0.00
69) Phenanthrene-d10	10.726	188	1972471	40.00	ppm	0.00
83) Chrysene-d12	14.535	240	2046512	40.00	ppm	0.00
92) Perylene-d12	16.602	264	2155952	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.303	152	523826	40.00	ppm	0.00
104) Acenaphthene-d10a	8.888	164	1065231	40.00	ppm	0.00
106) Chrysene-d12a	14.535	240	2046512	40.00	ppm	0.00
109) Phenanthrene-d10a	10.726	188	1972471	40.00	ppm	0.00
112) Naphthalene-d8a	6.773	136	2052826	40.00	ppm	0.00
114) Chrysene-d12b	14.535	240	2046512	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	12.312	57	904997	81.94	ppm	0.00
Spiked Amount 50.000			Recovery	=	163.88%	
110) o-terphenyl	11.265	230	1968251	82.38	ppm	0.00
Spiked Amount 50.000			Recovery	=	164.76%	
Target Compounds						Qvalue
103) Benzaldehyde	4.823	105	876803	99.09	ppm	99
105) 1,2,4,5-Tetrachloroben...	7.836	216	1095010	84.45	ppm	99
107) Benzidine	12.617	184	1497242	86.71	ppm	99
111) Atrazine	10.411	215	401457	82.42	ppm	95
113) Hydroquinone	7.285	110	1261442	81.39	ppm	98

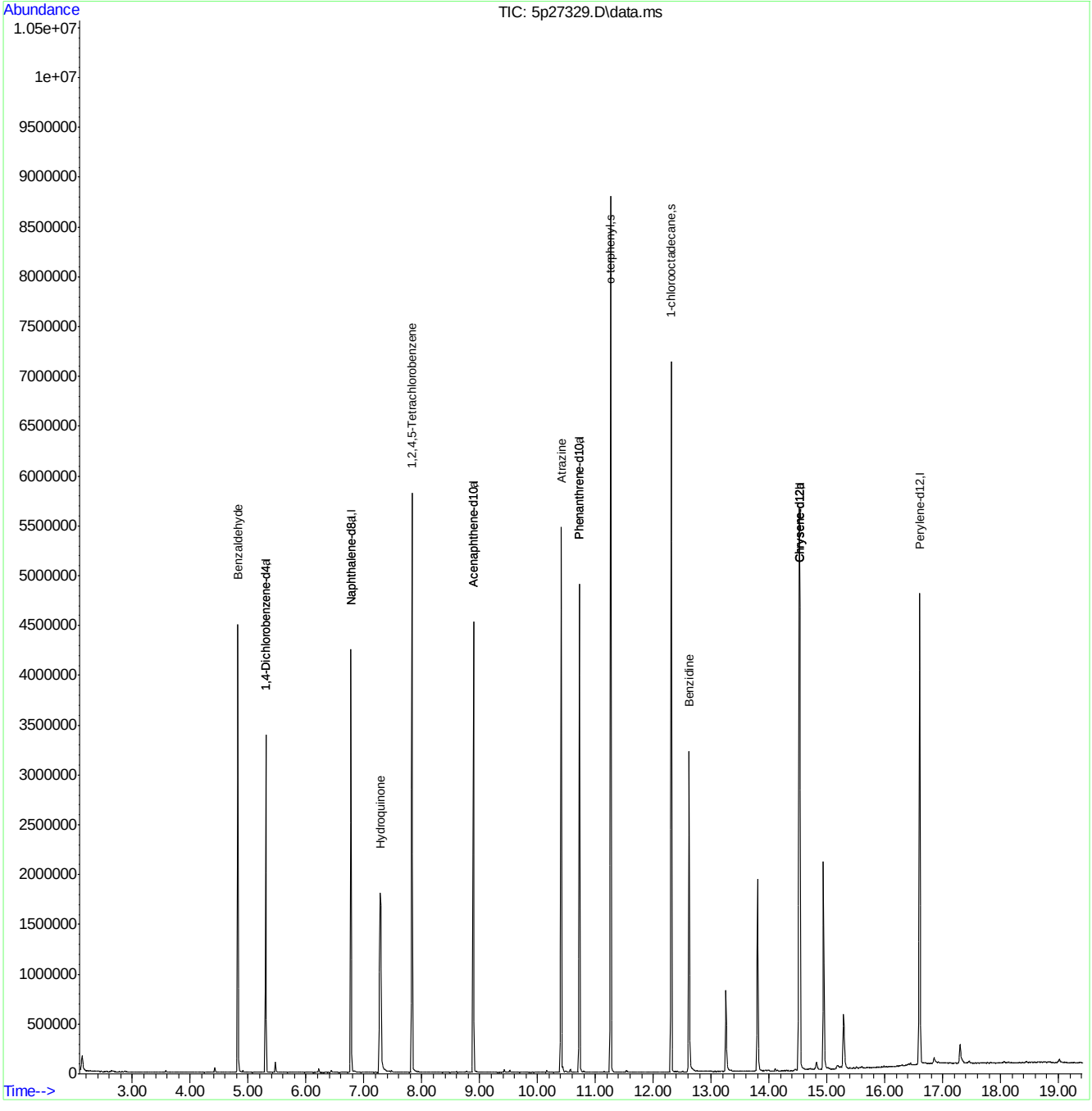
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27329.D
Acq On : 11 Apr 2016 3:24 pm
Operator : ariellec
Sample : ic1383-80
Misc : op92466,e5p1383
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 11 15:50:04 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 15:40:45 2016
Response via : Initial Calibration



M5P1382.M Mon Apr 11 17:19:37 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27330.D
Acq On : 11 Apr 2016 3:50 pm
Operator : ariellec
Sample : icc1383-50
Misc : op92466,e5p1383
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 11 16:41:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 15:53:22 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.303	152	523839	40.00	ppm	0.00
24) Naphthalene-d8	6.773	136	2093394	40.00	ppm	0.00
47) Acenaphthene-d10	8.888	164	1104941	40.00	ppm	0.00
69) Phenanthrene-d10	10.726	188	1989673	40.00	ppm	0.00
83) Chrysene-d12	14.535	240	2128295	40.00	ppm	0.00
92) Perylene-d12	16.602	264	2199553	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.303	152	523839	40.00	ppm	0.00
104) Acenaphthene-d10a	8.888	164	1104941	40.00	ppm	0.00
106) Chrysene-d12a	14.535	240	2128295	40.00	ppm	0.00
109) Phenanthrene-d10a	10.726	188	1989673	40.00	ppm	0.00
112) Naphthalene-d8a	6.773	136	2093394	40.00	ppm	0.00
114) Chrysene-d12b	14.535	240	2128295	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	12.312	57	596218	51.29	ppm	0.00
Spiked Amount 50.000			Recovery	=	102.58%	
110) o-terphenyl	11.265	230	1310245	53.57	ppm	0.00
Spiked Amount 50.000			Recovery	=	107.14%	
Target Compounds						Qvalue
103) Benzaldehyde	4.823	105	626332	63.24	ppm	99
105) 1,2,4,5-Tetrachloroben...	7.830	216	711406	51.46	ppm	99
107) Benzidine	12.617	184	1401454	74.90	ppm	100
111) Atrazine	10.405	215	256849	51.50	ppm	95
113) Hydroquinone	7.275	110	809612	50.78	ppm	99

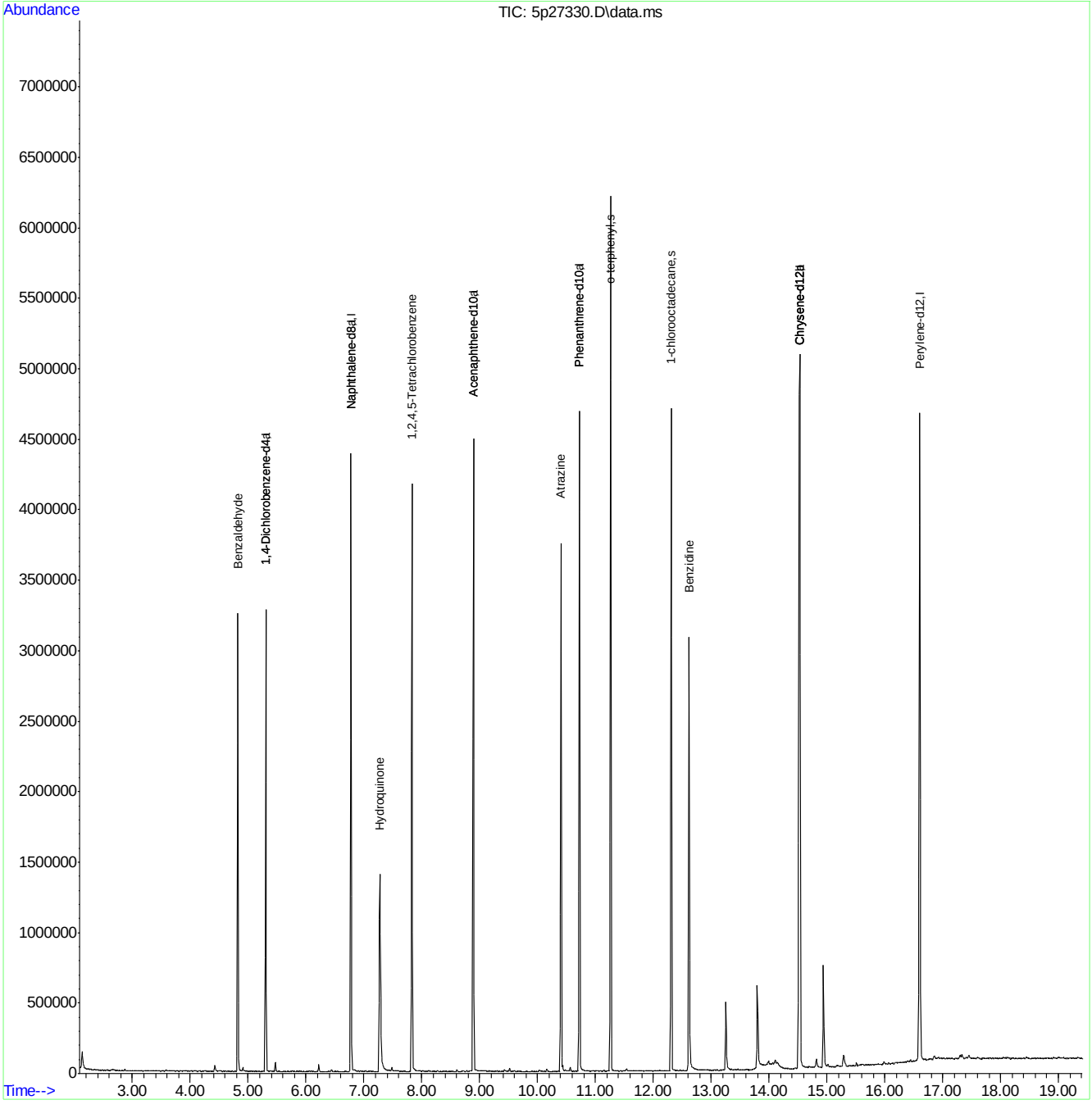
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27330.D
Acq On : 11 Apr 2016 3:50 pm
Operator : ariellec
Sample : icc1383-50
Misc : op92466,e5p1383
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 11 16:41:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 15:53:22 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27331.D
Acq On : 11 Apr 2016 4:17 pm
Operator : ariellec
Sample : ic1383-25
Misc : op92466,e5p1383
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 11 16:43:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 15:53:22 2016
Response via : Initial Calibration

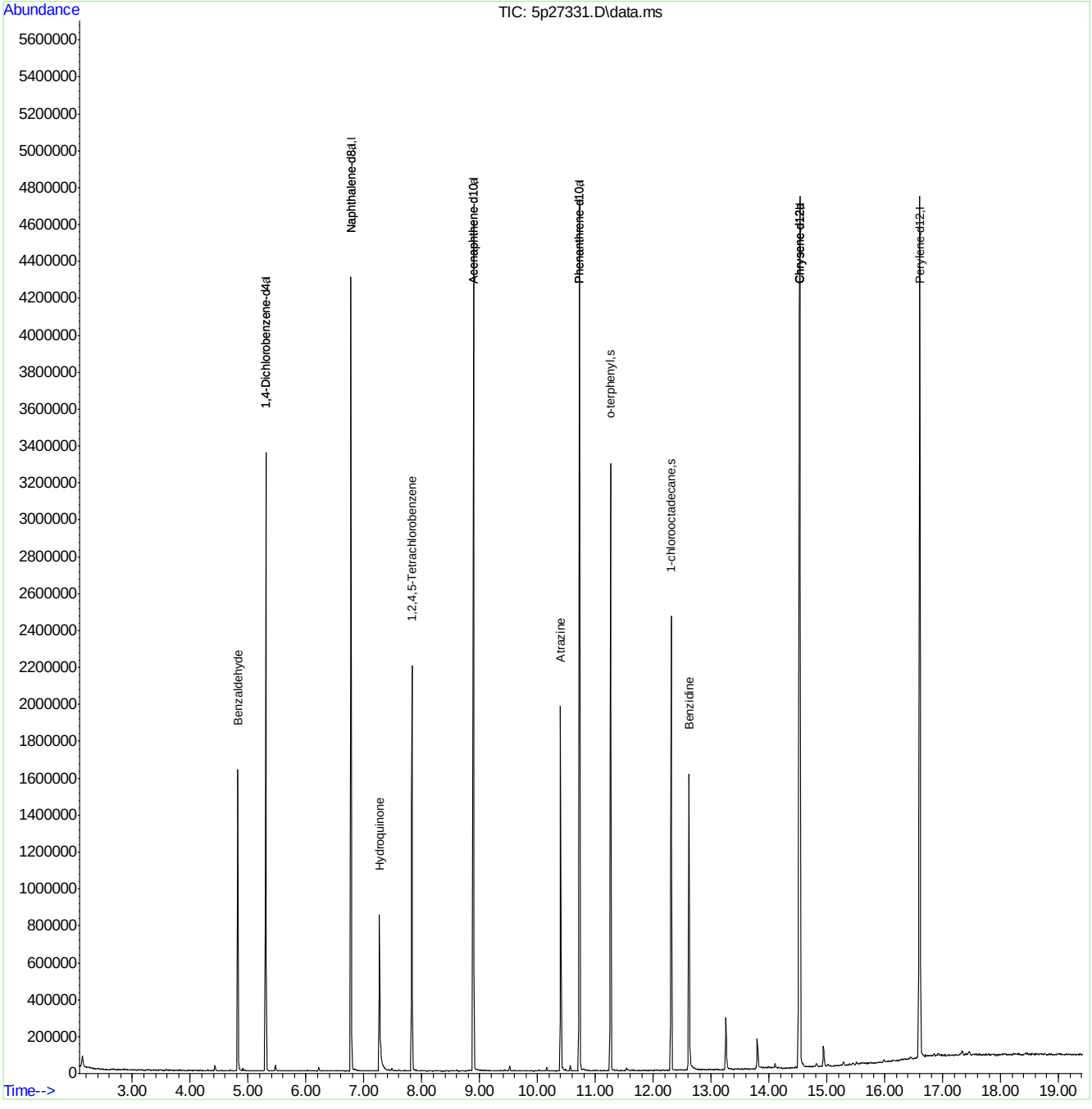
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.303	152	530701	40.00	ppm	0.00
24) Naphthalene-d8	6.772	136	2087892	40.00	ppm	0.00
47) Acenaphthene-d10	8.893	164	1077642	40.00	ppm	0.00
69) Phenanthrene-d10	10.726	188	1999943	40.00	ppm	0.00
83) Chrysene-d12	14.535	240	2118930	40.00	ppm	0.00
92) Perylene-d12	16.602	264	2152084	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.303	152	530701	40.00	ppm	0.00
104) Acenaphthene-d10a	8.893	164	1077642	40.00	ppm	0.00
106) Chrysene-d12a	14.535	240	2118930	40.00	ppm	0.00
109) Phenanthrene-d10a	10.726	188	1999943	40.00	ppm	0.00
112) Naphthalene-d8a	6.772	136	2087892	40.00	ppm	0.00
114) Chrysene-d12b	14.535	240	2118930	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	12.312	57	307835	26.60	ppm	0.00
Spiked Amount 50.000			Recovery = 53.20%			
110) o-terphenyl	11.265	230	670416	27.27	ppm	0.00
Spiked Amount 50.000			Recovery = 54.54%			
Target Compounds						Qvalue
103) Benzaldehyde	4.823	105	325100	32.40	ppm	97
105) 1,2,4,5-Tetrachloroben...	7.830	216	364454	27.03	ppm	98
107) Benzidine	12.617	184	738061	39.62	ppm	99
111) Atrazine	10.400	215	129848	25.90	ppm	92
113) Hydroquinone	7.269	110	382012	24.03	ppm	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27331.D
Acq On : 11 Apr 2016 4:17 pm
Operator : ariellec
Sample : ic1383-25
Misc : op92466,e5p1383
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 11 16:43:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 15:53:22 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27332.D
Acq On : 11 Apr 2016 4:44 pm
Operator : ariellec
Sample : ic1383-10
Misc : op92466,e5p1383
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 11 17:15:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 16:45:28 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.303	152	548557	40.00	ppm	0.00
24) Naphthalene-d8	6.772	136	2170910	40.00	ppm	0.00
47) Acenaphthene-d10	8.893	164	1140162	40.00	ppm	0.00
69) Phenanthrene-d10	10.726	188	2112847	40.00	ppm	0.00
83) Chrysene-d12	14.535	240	2205108	40.00	ppm	0.00
92) Perylene-d12	16.602	264	2268246	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.303	152	548557	40.00	ppm	0.00
104) Acenaphthene-d10a	8.893	164	1140162	40.00	ppm	0.00
106) Chrysene-d12a	14.535	240	2205108	40.00	ppm	0.00
109) Phenanthrene-d10a	10.726	188	2112847	40.00	ppm	0.00
112) Naphthalene-d8a	6.772	136	2170910	40.00	ppm	0.00
114) Chrysene-d12b	14.535	240	2205108	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	12.307	57	127507	10.35	ppm	0.00
Spiked Amount 50.000			Recovery	=	20.70%	
110) o-terphenyl	11.265	230	290915	10.76	ppm	0.00
Spiked Amount 50.000			Recovery	=	21.52%	
Target Compounds						Qvalue
103) Benzaldehyde	4.823	105	138414	11.70	ppm	98
105) 1,2,4,5-Tetrachloroben...	7.830	216	156615	10.68	ppm	98
107) Benzidine	12.612	184	354917	14.41	ppm	97
111) Atrazine	10.400	215	53942	10.02	ppm	95
113) Hydroquinone	7.275	110	139012	8.46	ppm	96

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

7.6.67

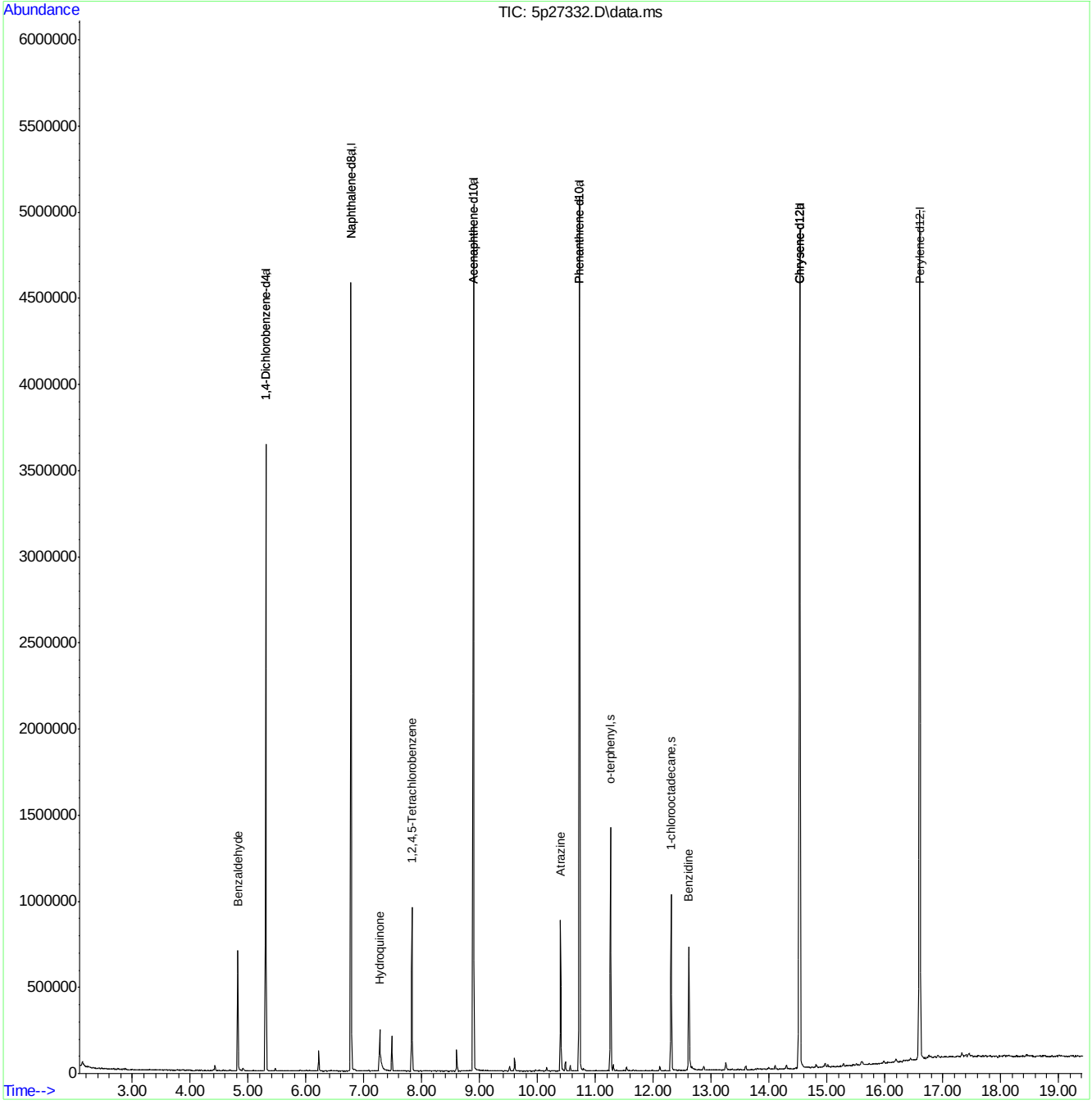
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27332.D
Acq On : 11 Apr 2016 4:44 pm
Operator : ariellec
Sample : ic1383-10
Misc : op92466,e5p1383
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 11 17:15:58 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 16:45:28 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27333.D
Acq On : 11 Apr 2016 5:11 pm
Operator : ariellec
Sample : ic1383-5
Misc : op92466,e5p1383
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 11 17:44:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 17:20:40 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.304	152	538837	40.00	ppm	0.00
24) Naphthalene-d8	6.773	136	2115132	40.00	ppm	0.00
47) Acenaphthene-d10	8.894	164	1117229	40.00	ppm	0.00
69) Phenanthrene-d10	10.726	188	2051747	40.00	ppm	0.00
83) Chrysene-d12	14.535	240	2175435	40.00	ppm	0.00
92) Perylene-d12	16.602	264	2204341	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.304	152	538837	40.00	ppm	0.00
104) Acenaphthene-d10a	8.894	164	1117229	40.00	ppm	0.00
106) Chrysene-d12a	14.535	240	2175435	40.00	ppm	0.00
109) Phenanthrene-d10a	10.726	188	2051747	40.00	ppm	0.00
112) Naphthalene-d8a	6.773	136	2115132	40.00	ppm	0.00
114) Chrysene-d12b	14.535	240	2175435	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	12.307	57	66047	5.40	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.80%	
110) o-terphenyl	11.265	230	153831	5.77	ppm	0.00
Spiked Amount 50.000			Recovery	=	11.54%	
Target Compounds						Qvalue
103) Benzaldehyde	4.823	105	74814	6.23	ppm	98
105) 1,2,4,5-Tetrachloroben...	7.830	216	83740	5.75	ppm	100
107) Benzidine	12.612	184	176697	6.68	ppm	98
111) Atrazine	10.400	215	27618	5.28	ppm	95
113) Hydroquinone	7.280	110	61878	3.99	ppm	99

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

7.6.68

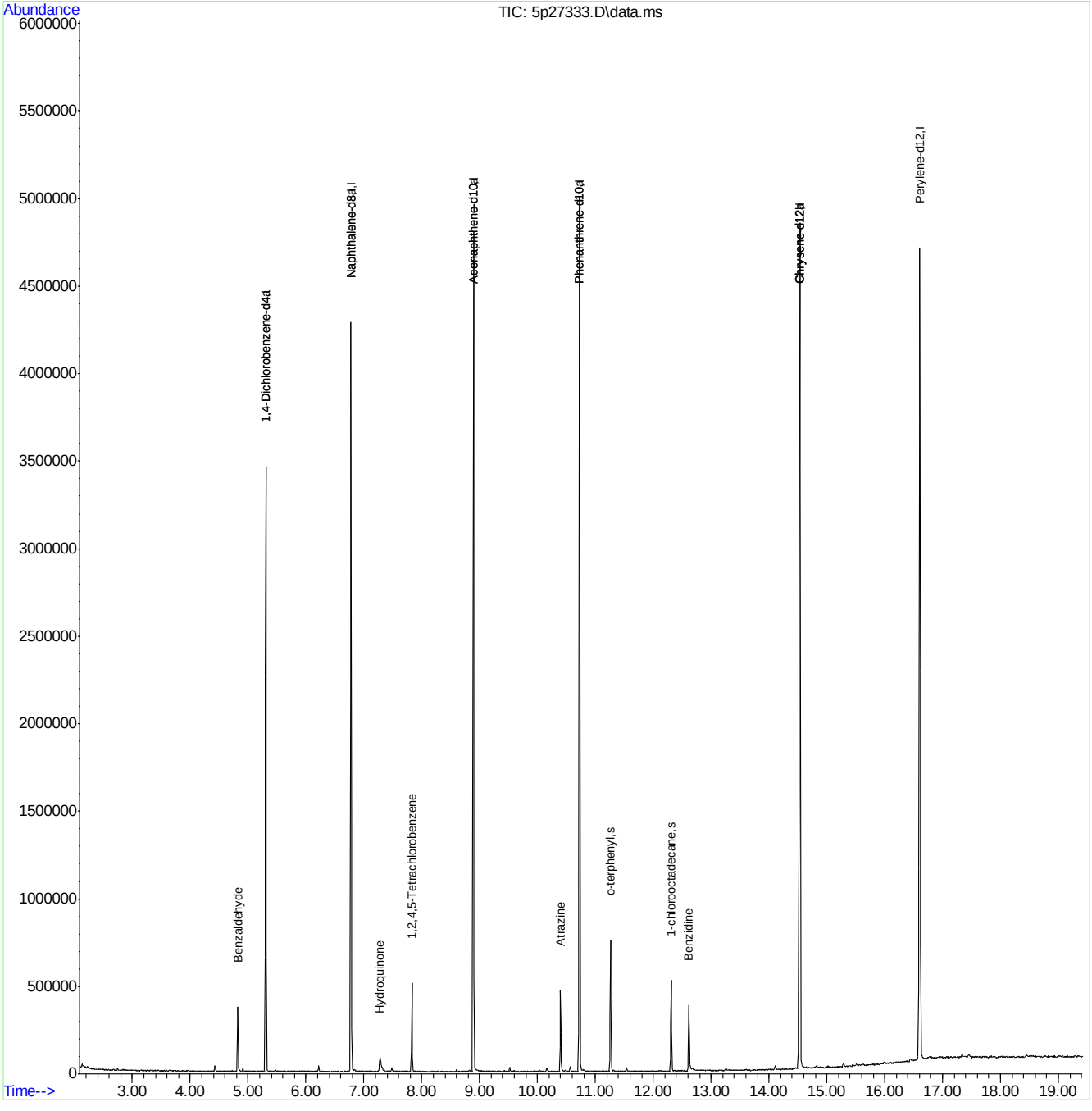
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27333.D
Acq On : 11 Apr 2016 5:11 pm
Operator : ariellec
Sample : ic1383-5
Misc : op92466,e5p1383
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 11 17:44:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 17:20:40 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27334.D
Acq On : 11 Apr 2016 5:38 pm
Operator : ariellec
Sample : ic1383-2
Misc : op92466,e5p1383
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 11 18:45:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 17:46:06 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.303	152	578363	40.00	ppm	0.00
24) Naphthalene-d8	6.772	136	2243926	40.00	ppm	0.00
47) Acenaphthene-d10	8.888	164	1166321	40.00	ppm	0.00
69) Phenanthrene-d10	10.726	188	2145928	40.00	ppm	0.00
83) Chrysene-d12	14.535	240	2288233	40.00	ppm	0.00
92) Perylene-d12	16.602	264	2329979	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.303	152	578363	40.00	ppm	0.00
104) Acenaphthene-d10a	8.888	164	1166321	40.00	ppm	0.00
106) Chrysene-d12a	14.535	240	2288233	40.00	ppm	0.00
109) Phenanthrene-d10a	10.726	188	2145928	40.00	ppm	0.00
112) Naphthalene-d8a	6.772	136	2243926	40.00	ppm	0.00
114) Chrysene-d12b	14.535	240	2288233	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	12.307	57	26674	2.05	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.10%	
110) o-terphenyl	11.265	230	64224	2.25	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.50%	
Target Compounds						Qvalue
103) Benzaldehyde	4.823	105	31158	2.32	ppm	95
105) 1,2,4,5-Tetrachloroben...	7.830	216	35470	2.28	ppm	96
107) Benzidine	12.612	184	60987	2.08	ppm	97
111) Atrazine	10.400	215	11870	2.15	ppm	91
113) Hydroquinone	7.291	110	17797	1.12	ppm	96

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

7.6.69

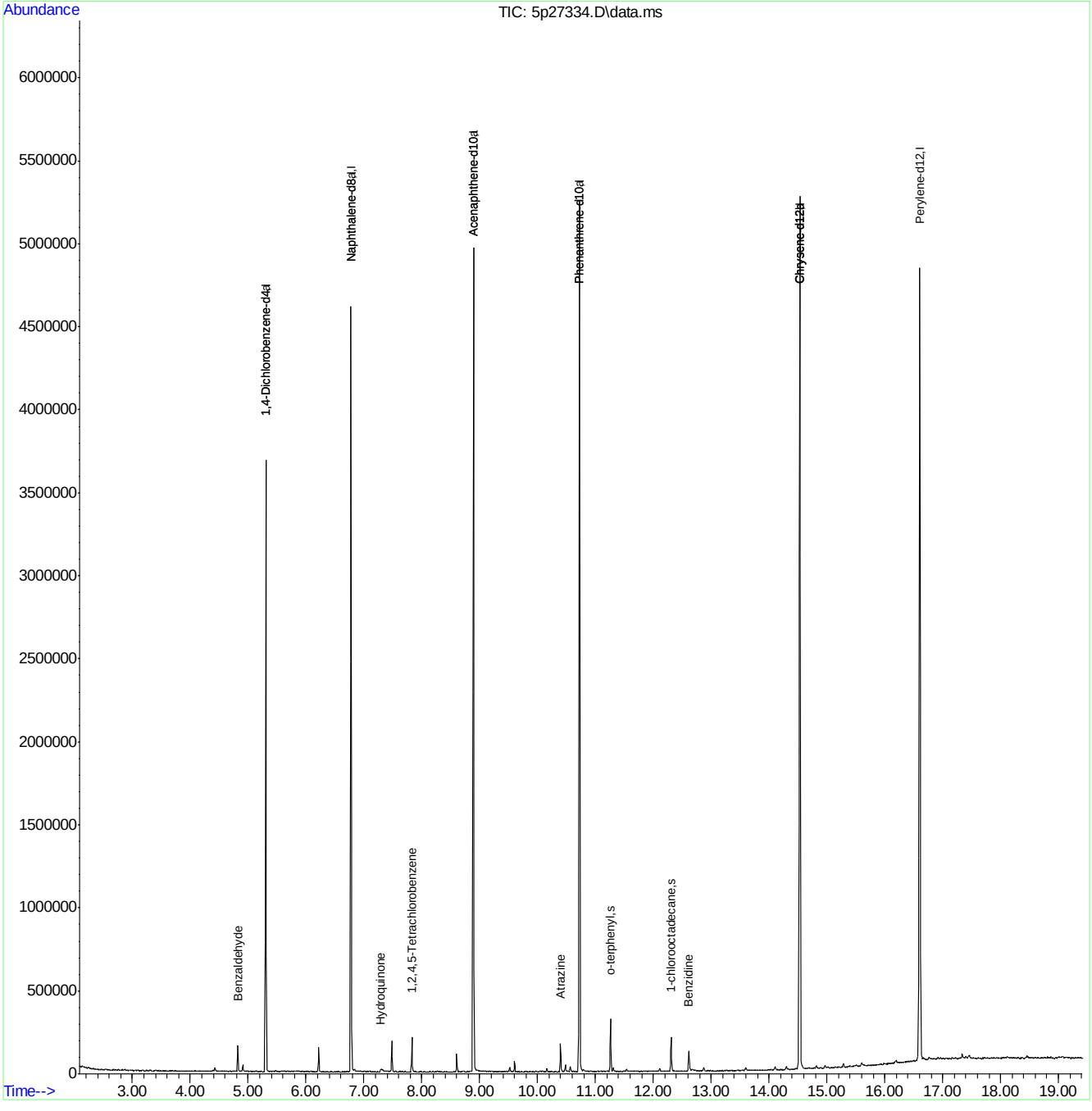
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27334.D
Acq On : 11 Apr 2016 5:38 pm
Operator : ariellec
Sample : ic1383-2
Misc : op92466,e5p1383
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 11 18:45:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 17:46:06 2016
Response via : Initial Calibration



M5P1382.M Mon Apr 11 18:45:47 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27335.D
Acq On : 11 Apr 2016 6:05 pm
Operator : ariellec
Sample : ic1383-1
Misc : op92466,e5p1383
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 11 18:46:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 17:46:06 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.303	152	535631	40.00	ppm	0.00
24) Naphthalene-d8	6.772	136	2118721	40.00	ppm	0.00
47) Acenaphthene-d10	8.893	164	1106413	40.00	ppm	0.00
69) Phenanthrene-d10	10.726	188	2038573	40.00	ppm	0.00
83) Chrysene-d12	14.535	240	2154459	40.00	ppm	0.00
92) Perylene-d12	16.602	264	2207496	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.303	152	535631	40.00	ppm	0.00
104) Acenaphthene-d10a	8.893	164	1106413	40.00	ppm	0.00
106) Chrysene-d12a	14.535	240	2154459	40.00	ppm	0.00
109) Phenanthrene-d10a	10.726	188	2038573	40.00	ppm	0.00
112) Naphthalene-d8a	6.772	136	2118721	40.00	ppm	0.00
114) Chrysene-d12b	14.535	240	2154459	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	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) 1-chlorooctadecane	12.307	57	12035	0.98	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.96%	
110) o-terphenyl	11.265	230	30365	1.12	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.24%	
Target Compounds						Qvalue
103) Benzaldehyde	4.823	105	15044	1.21	ppm	94
105) 1,2,4,5-Tetrachloroben...	7.830	216	16787	1.14	ppm	89
107) Benzidine	12.612	184	23946	0.87	ppm	96
111) Atrazine	10.400	215	4888	0.93	ppm #	77
113) Hydroquinone	7.323	110	7340	0.49	ppm	79

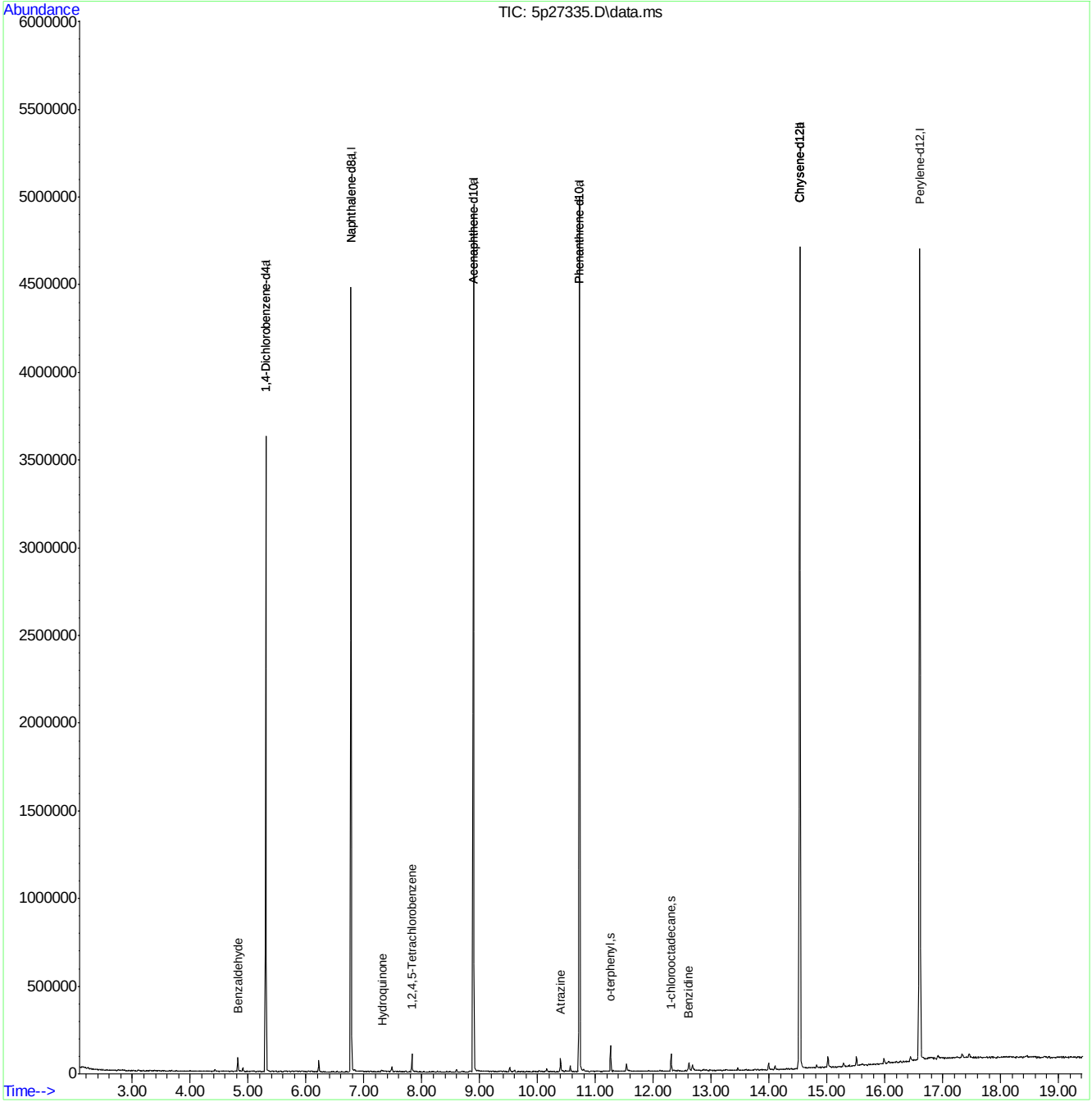
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27335.D
Acq On : 11 Apr 2016 6:05 pm
Operator : ariellec
Sample : ic1383-1
Misc : op92466,e5p1383
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 11 18:46:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 17:46:06 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27336.D
Acq On : 11 Apr 2016 6:32 pm
Operator : ariellec
Sample : icv1383-50
Misc : op92466,e5p1383
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 11 18:57:41 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 18:53:32 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.303	152	581246	40.00	ppm	0.00
24) Naphthalene-d8	6.772	136	2200921	40.00	ppm	0.00
47) Acenaphthene-d10	8.893	164	1268027	40.00	ppm	0.00
69) Phenanthrene-d10	10.726	188	2050544	40.00	ppm	0.00
83) Chrysene-d12	14.535	240	1929053	40.00	ppm	0.00
92) Perylene-d12	16.602	264	1858932	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.303	152	581246	40.00	ppm	0.00
104) Acenaphthene-d10a	8.893	164	1268027	40.00	ppm	0.00
106) Chrysene-d12a	14.535	240	1929053	40.00	ppm	0.00
109) Phenanthrene-d10a	10.726	188	2050544	40.00	ppm	0.00
112) Naphthalene-d8a	6.772	136	2200921	40.00	ppm	0.00
114) Chrysene-d12b	14.535	240	1929053	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.898	112	801736	45.01	ppm	0.00
Spiked Amount 50.000			Recovery = 90.02%			
8) Phenol-d5	4.887	99	869169	42.95	ppm	0.00
Spiked Amount 50.000			Recovery = 85.90%			
25) Nitrobenzene-d5	5.934	82	759175	45.44	ppm	0.00
Spiked Amount 50.000			Recovery = 90.88%			
51) 2-Fluorobiphenyl	8.087	172	1832071	45.38	ppm	0.00
Spiked Amount 50.000			Recovery = 90.76%			
73) 2,4,6-Tribromophenol	9.850	330	204461	41.30	ppm	0.00
Spiked Amount 50.000			Recovery = 82.60%			
85) Terphenyl-d14	12.985	244	1781393	45.95	ppm	0.00
Spiked Amount 50.000			Recovery = 91.90%			
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			

Target Compounds Qvalue

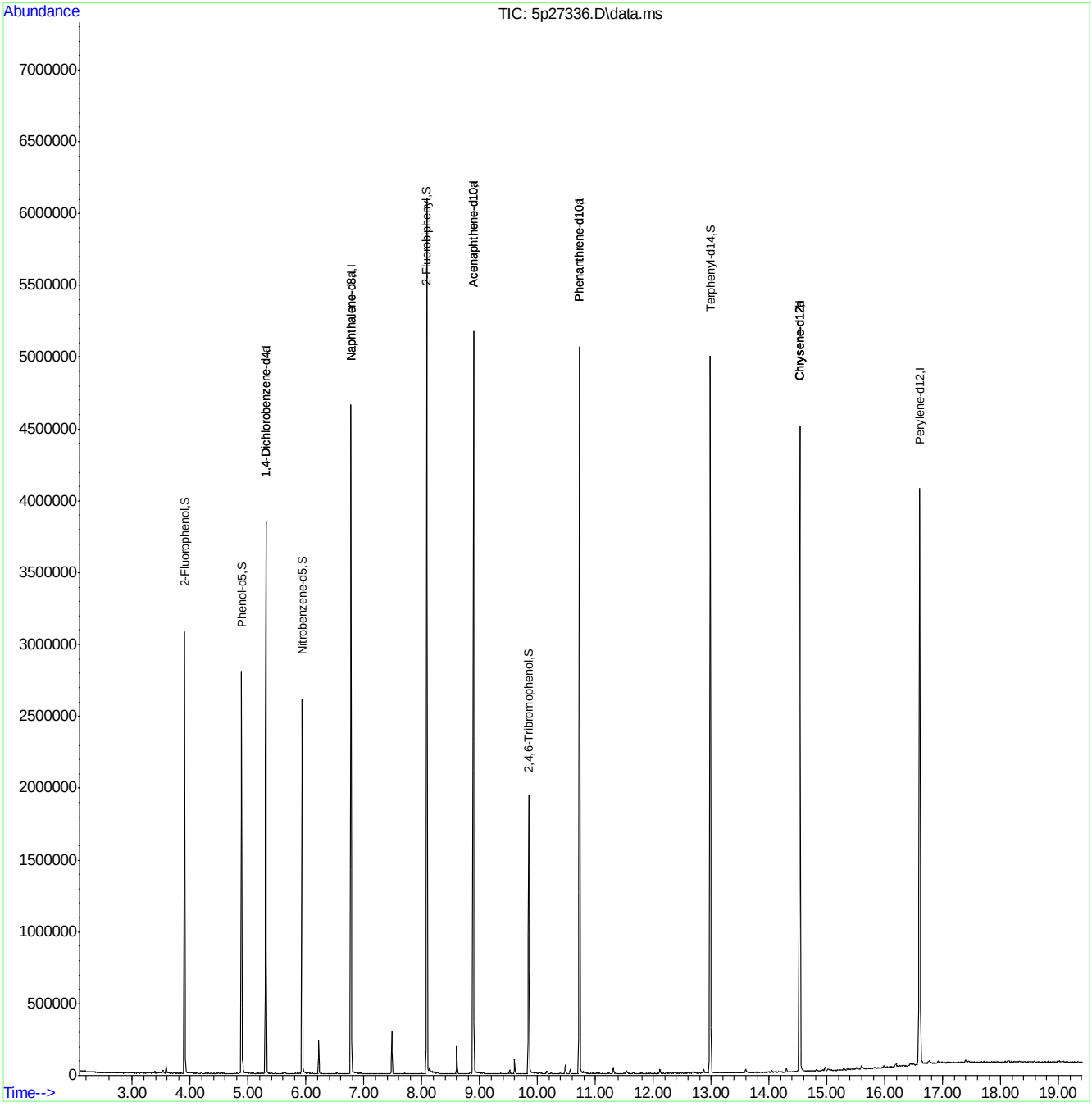
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27336.D
Acq On : 11 Apr 2016 6:32 pm
Operator : ariellec
Sample : icv1383-50
Misc : op92466,e5p1383
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 11 18:57:41 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 18:53:32 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/12/16 12:30

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27337.D
Acq On : 11 Apr 2016 6:59 pm
Operator : ariellec
Sample : icv1382-50
Misc : op92466,e5p1383
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 11 19:27:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 18:53:32 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.304	152	563414	40.00	ppm	0.00
24) Naphthalene-d8	6.778	136	2140539	40.00	ppm	0.00
47) Acenaphthene-d10	8.894	164	1212523	40.00	ppm	0.00
69) Phenanthrene-d10	10.726	188	1960094	40.00	ppm	0.00
83) Chrysene-d12	14.540	240	1876497	40.00	ppm	0.00
92) Perylene-d12	16.602	264	1900486	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.304	152	563414	40.00	ppm	0.00
104) Acenaphthene-d10a	8.894	164	1212523	40.00	ppm	0.00
106) Chrysene-d12a	14.540	240	1876497	40.00	ppm	0.00
109) Phenanthrene-d10a	10.726	188	1960094	40.00	ppm	0.00
112) Naphthalene-d8a	6.778	136	2140539	40.00	ppm	0.00
114) Chrysene-d12b	14.540	240	1876497	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
4) N-Nitrosodimethylamine	2.611	74	351723	43.15	ppm	87
11) bis(2-Chloroethyl)ether	5.015	93	682623	45.35	ppm	92
14) 1,3-Dichlorobenzene	5.239	146	960605	44.33	ppm	96
15) 1,4-Dichlorobenzene	5.325	146	971819	44.47	ppm	98
17) 1,2-Dichlorobenzene	5.491	146	943962	45.45	ppm	94
20) 2,2'-oxybis(1-Chloropr...	5.624	45	646485m	37.38	ppm	
22) n-Nitroso-di-n-propyla...	5.768	70	463859	43.04	ppm	94
23) Hexachloroethane	5.881	201	328791	46.69	ppm	82
26) Nitrobenzene	5.955	77	699756	43.69	ppm	91
28) Isophorone	6.238	82	1330135	47.53	ppm	96
32) bis(2-Chloroethoxy)met...	6.511	93	777984	42.54	ppm	97
36) 1,2,4-Trichlorobenzene	6.709	180	765005	44.59	ppm	98
38) Naphthalene	6.799	128	2474014	45.62	ppm	99
42) Hexachlorobutadiene	6.954	225	427824	48.44	ppm	95
48) Hexachlorocyclopentadiene	7.825	237	357143	47.00	ppm	89
52) 2-Chloronaphthalene	8.220	162	1580349	46.25	ppm	98
55) Dimethylphthalate	8.594	163	1777655	43.89	ppm	98

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27337.D
Acq On : 11 Apr 2016 6:59 pm
Operator : ariellec
Sample : icv1382-50
Misc : op92466,e5p1383
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 11 19:27:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 18:53:32 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
56)	Acenaphthylene	8.717	152	2426119	44.69 ppm	100
57)	2,6-Dinitrotoluene	8.658	165	374738	44.95 ppm	87
59)	Acenaphthene	8.931	153	1598995	46.06 ppm	97
63)	2,4-Dinitrotoluene	9.139	165	498095	44.71 ppm	73
65)	Diethylphthalate	9.454	149	1822915	44.06 ppm	99
66)	Fluorene	9.561	166	1753085	45.02 ppm	94
67)	4-Chlorophenyl-phenyle...	9.577	204	782619	42.66 ppm	94
71)	n-Nitrosodiphenylamine	9.722	169	1285602	45.50 ppm	92
72)	1,2-Diphenylhydrazine	9.764	77	1354741	46.23 ppm	96
74)	4-Bromophenyl-phenylether	10.176	248	495864	45.67 ppm	91
75)	Hexachlorobenzene	10.229	284	500777	45.43 ppm	98
77)	Phenanthrene	10.758	178	2485527	45.15 ppm	98
78)	Anthracene	10.827	178	2493134	45.06 ppm	98
80)	Di-n-butylphthalate	11.575	149	2996620	45.40 ppm	100
81)	Fluoranthene	12.387	202	2597624	45.66 ppm	98
84)	Pyrene	12.713	202	2766284	47.89 ppm	98
86)	Butylbenzylphthalate	13.766	149	1314223	46.38 ppm	95
88)	Benzo[a]anthracene	14.524	228	2358259	45.44 ppm	97
90)	Chrysene	14.578	228	2398258	45.26 ppm	99
91)	bis(2-Ethylhexyl)phtha...	14.690	149	1901200	47.32 ppm	100
93)	Di-n-octylphthalate	15.668	149	3157107	47.89 ppm	98
94)	Benzo[b]fluoranthene	16.090	252	2471831	44.58 ppm	97
95)	Benzo[k]fluoranthene	16.127	252	2517645	47.51 ppm	94
96)	Benzo[a]pyrene	16.522	252	2378975	47.86 ppm	98
97)	Indeno[1,2,3-cd]pyrene	18.248	276	2217892	45.49 ppm	97
99)	Dibenz[a,h]anthracene	18.301	278	2339371	45.91 ppm	92
101)	Benzo[g,h,i]perylene	18.723	276	2381952	45.98 ppm	95

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

7.6.72

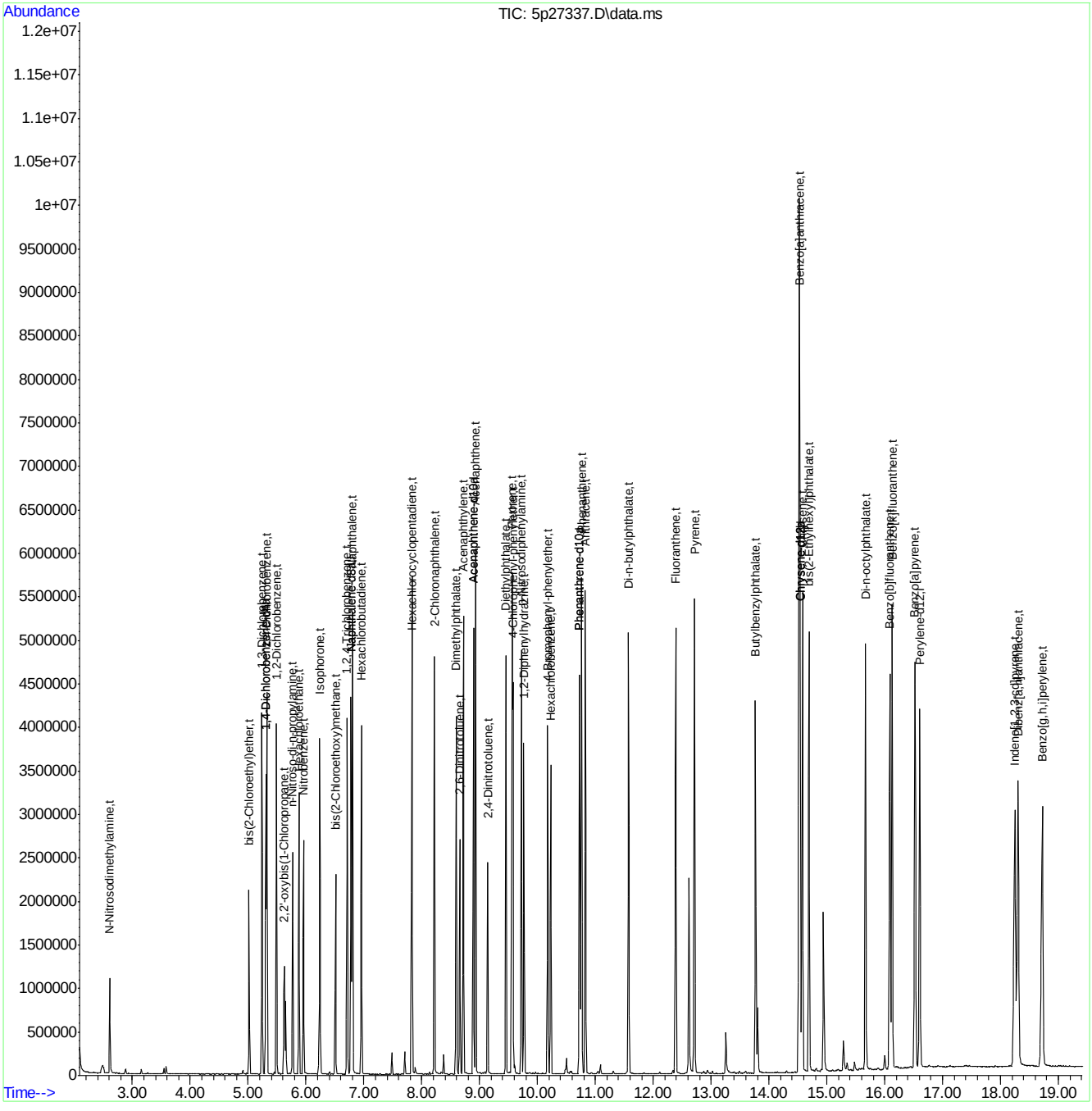
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27337.D
Acq On : 11 Apr 2016 6:59 pm
Operator : ariellec
Sample : icv1382-50
Misc : op92466,e5p1383
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 11 19:27:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 18:53:32 2016
Response via : Initial Calibration



Manual Integration Approval Summary

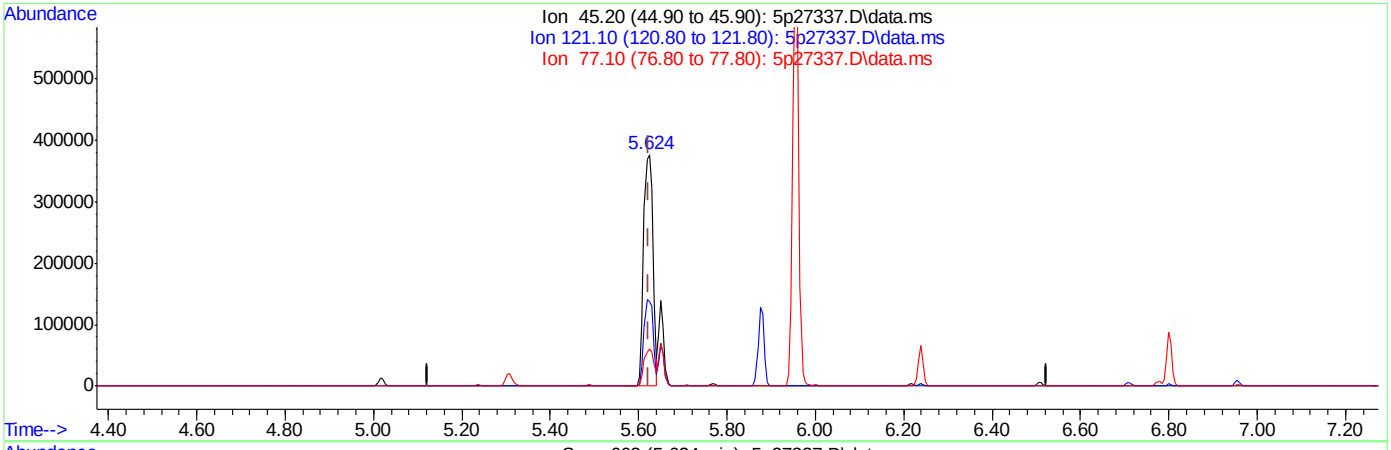
Sample Number:	E5P1383-ICV1382	**Method:**	SW846 8270D
Lab FileID:	5P27337.D	**Analyst approved:**	04/11/16 19:34 Sara Davis
Injection Time:	04/11/16 18:59	**Supervisor approved:**	04/12/16 12:30 Nina Pandya

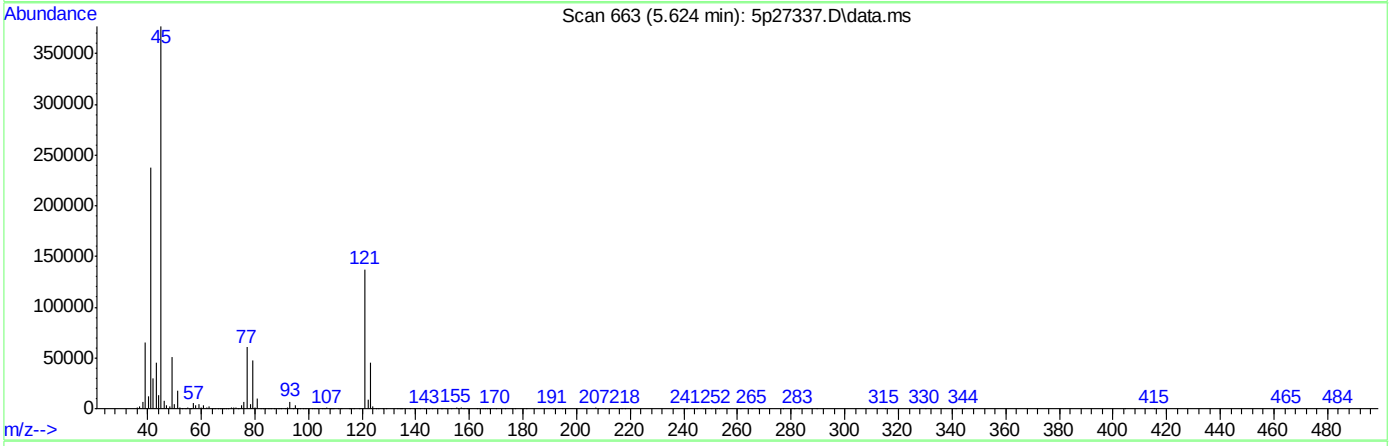
Parameter	CAS	Sig#	R.T. (min.)	Reason
bis(2-Chloroisopropyl)ether	108-60-1		5.62	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27337.D
Acq On : 11 Apr 2016 6:59 pm
Operator : ariellec
Sample : icv1382-50
Misc : op92466,e5p1383
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 11 19:20:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 18:53:32 2016
Response via : Initial Calibration





TIC: 5p27337.D\data.ms

(20) 2,2'-oxybis(1-Chloropropane (t)

5.624min (+0.000) 30.86ppm

response 533694

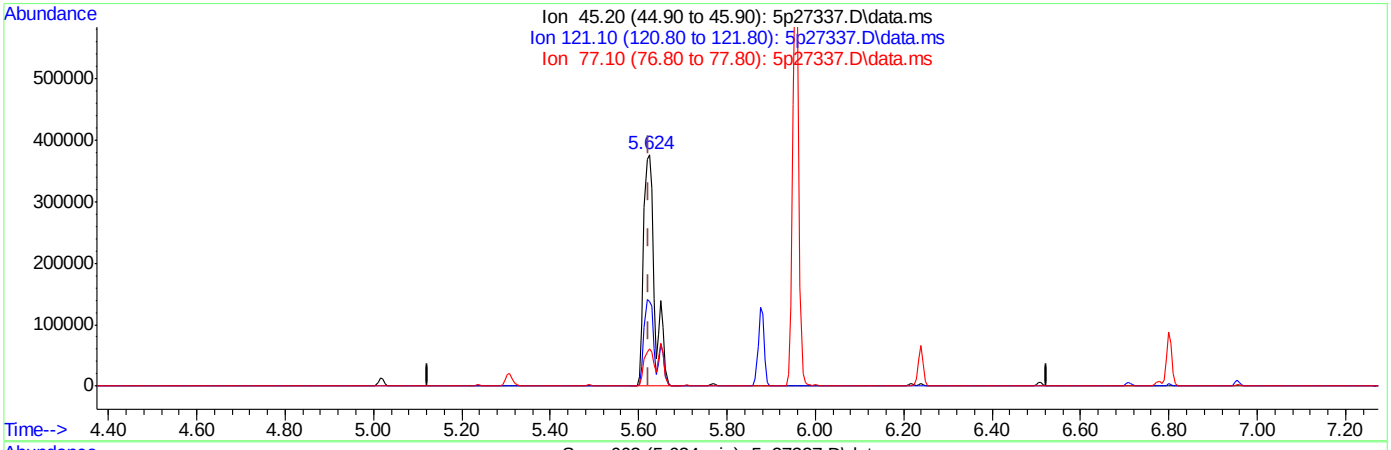
Ion	Exp%	Act%
45.20	100	100
121.10	35.00	35.93
77.10	2.00	13.90
0.00	0.00	0.00

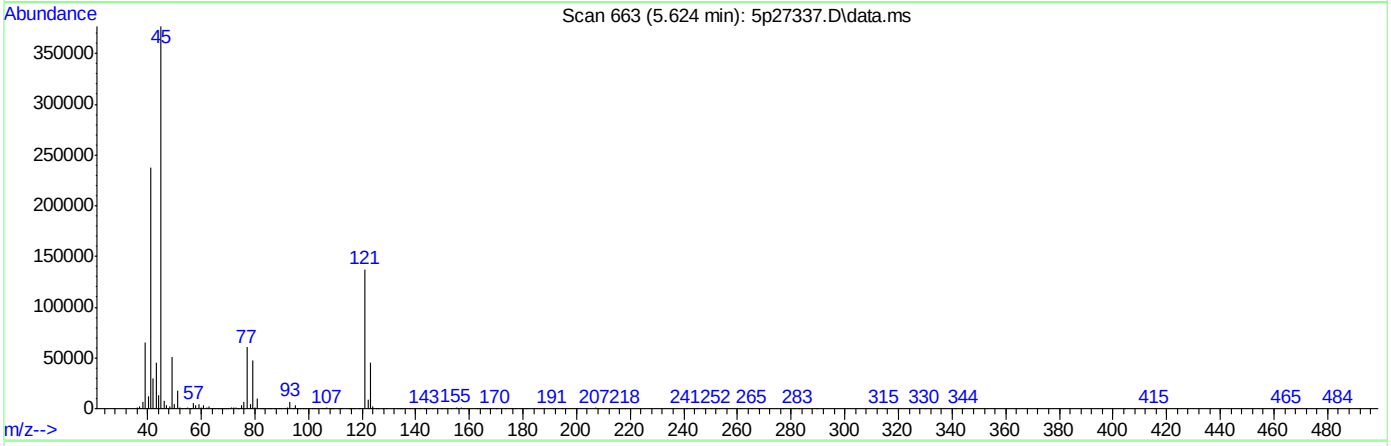
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27337.D
Acq On : 11 Apr 2016 6:59 pm
Operator : ariellec
Sample : icv1382-50
Misc : op92466,e5p1383
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 11 19:27:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 18:53:32 2016
Response via : Initial Calibration





TIC: 5p27337.D\data.ms

(20) 2,2'-oxybis(1-Chloropropane (t)

5.624min (+0.000) 37.38ppm m

response 646485

Ion	Exp%	Act%
45.20	100	100
121.10	35.00	36.45
77.10	2.00	16.04
0.00	0.00	0.00

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27337a.D
Acq On : 11 Apr 2016 6:59 pm
Operator : ariellec
Sample : icv1383-50
Misc : op92466,e5p1383
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 11 19:28:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 18:53:32 2016
Response via : Initial Calibration

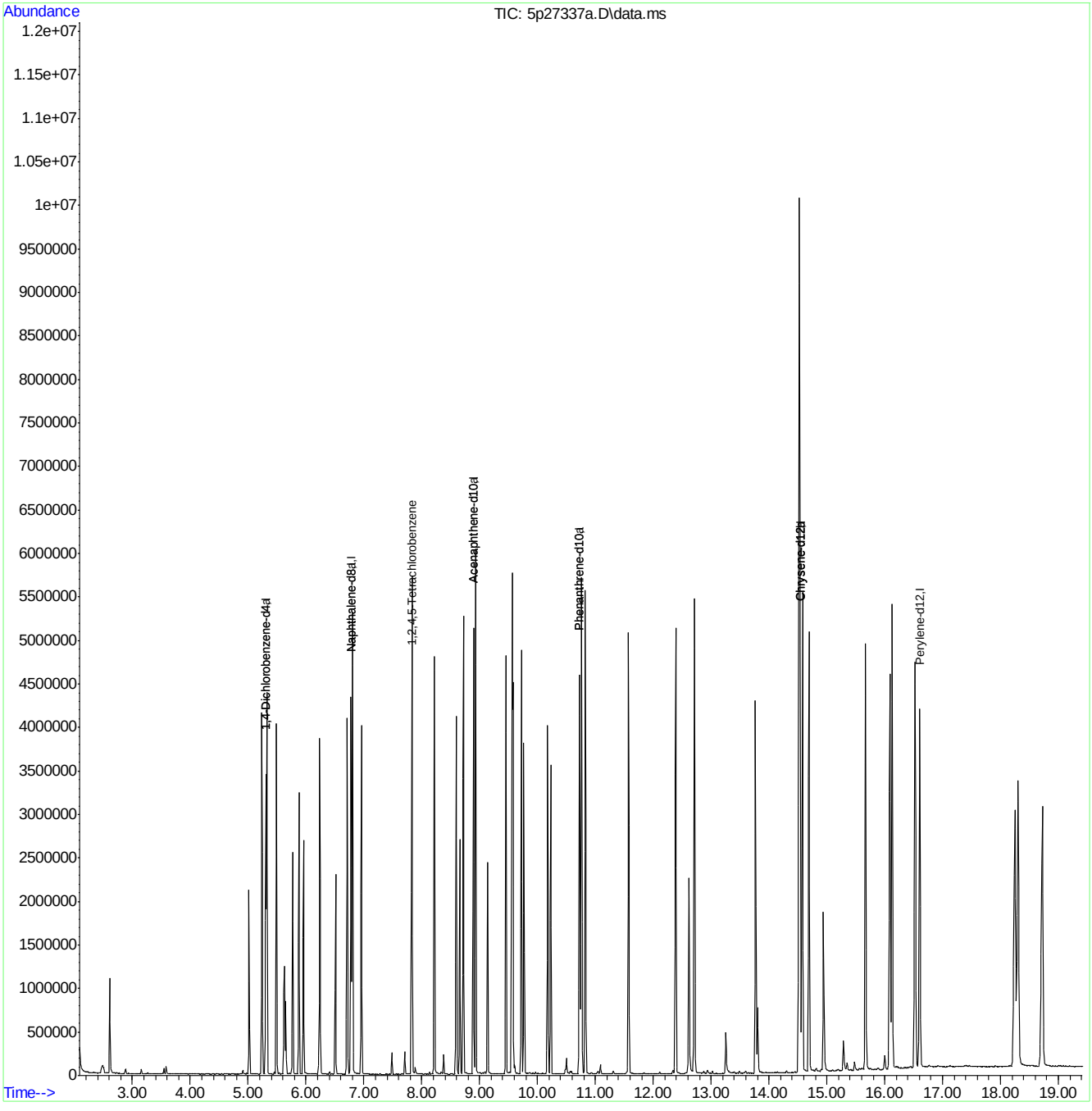
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.304	152	563414	40.00	ppm	0.00
24) Naphthalene-d8	6.778	136	2140539	40.00	ppm	0.00
47) Acenaphthene-d10	8.894	164	1212523	40.00	ppm	0.00
69) Phenanthrene-d10	10.726	188	1960094	40.00	ppm	0.00
83) Chrysene-d12	14.540	240	1876497	40.00	ppm	0.00
92) Perylene-d12	16.602	264	1900486	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.304	152	563414	40.00	ppm	0.00
104) Acenaphthene-d10a	8.894	164	1212523	40.00	ppm	0.00
106) Chrysene-d12a	14.540	240	1876497	40.00	ppm	0.00
109) Phenanthrene-d10a	10.726	188	1960094	40.00	ppm	0.00
112) Naphthalene-d8a	6.778	136	2140539	40.00	ppm	0.00
114) Chrysene-d12b	14.540	240	1876497	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) 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...	7.836	216	766949	45.78	ppm	98

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27337a.D
Acq On : 11 Apr 2016 6:59 pm
Operator : ariellec
Sample : icv1383-50
Misc : op92466,e5p1383
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 11 19:28:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 18:53:32 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27338.D
Acq On : 11 Apr 2016 7:26 pm
Operator : ariellec
Sample : icv1382-50
Misc : op92466,e5p1383
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 11 20:08:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 18:53:32 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.303	152	543499	40.00	ppm	0.00
24) Naphthalene-d8	6.773	136	2035522	40.00	ppm	0.00
47) Acenaphthene-d10	8.888	164	1169425	40.00	ppm	0.00
69) Phenanthrene-d10	10.726	188	1836140	40.00	ppm	0.00
83) Chrysene-d12	14.530	240	1761256	40.00	ppm	0.00
92) Perylene-d12	16.602	264	1682476	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.303	152	543499	40.00	ppm	0.00
104) Acenaphthene-d10a	8.888	164	1169425	40.00	ppm	0.00
106) Chrysene-d12a	14.530	240	1761256	40.00	ppm	0.00
109) Phenanthrene-d10a	10.726	188	1836140	40.00	ppm	0.00
112) Naphthalene-d8a	6.773	136	2035522	40.00	ppm	0.00
114) Chrysene-d12b	14.530	240	1761256	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.349	88	291390	45.72	ppm	94
6) Indene	5.592	116	1505021	50.61	ppm	94
7) Cumene	4.443	105	1940519	48.39	ppm	97
13) Decane	5.133	43	599053	48.05	ppm	97
18) Acetophenone	5.763	105	1146627	49.10	ppm	86
27) Quinoline	7.195	129	1723291	48.27	ppm	98
40) 2,3-Dichloroaniline	7.975	161	814473	45.07	ppm	96
41) Caprolactam	7.269	55	276690	47.72	ppm	94
45) 1-Methylnaphthalene	7.750	141	1500685	48.58	ppm	98
46) Dimethylnaphthalene	8.391	156	1597867	49.33	ppm	96
53) Biphenyl	8.204	154	2120841	49.69	ppm	96
82) Octadecane	10.656	57	858564	50.48	ppm	93
100) 7,12-Dimethylbenz(a)an...	16.089	256	1138260	60.25	ppm	99

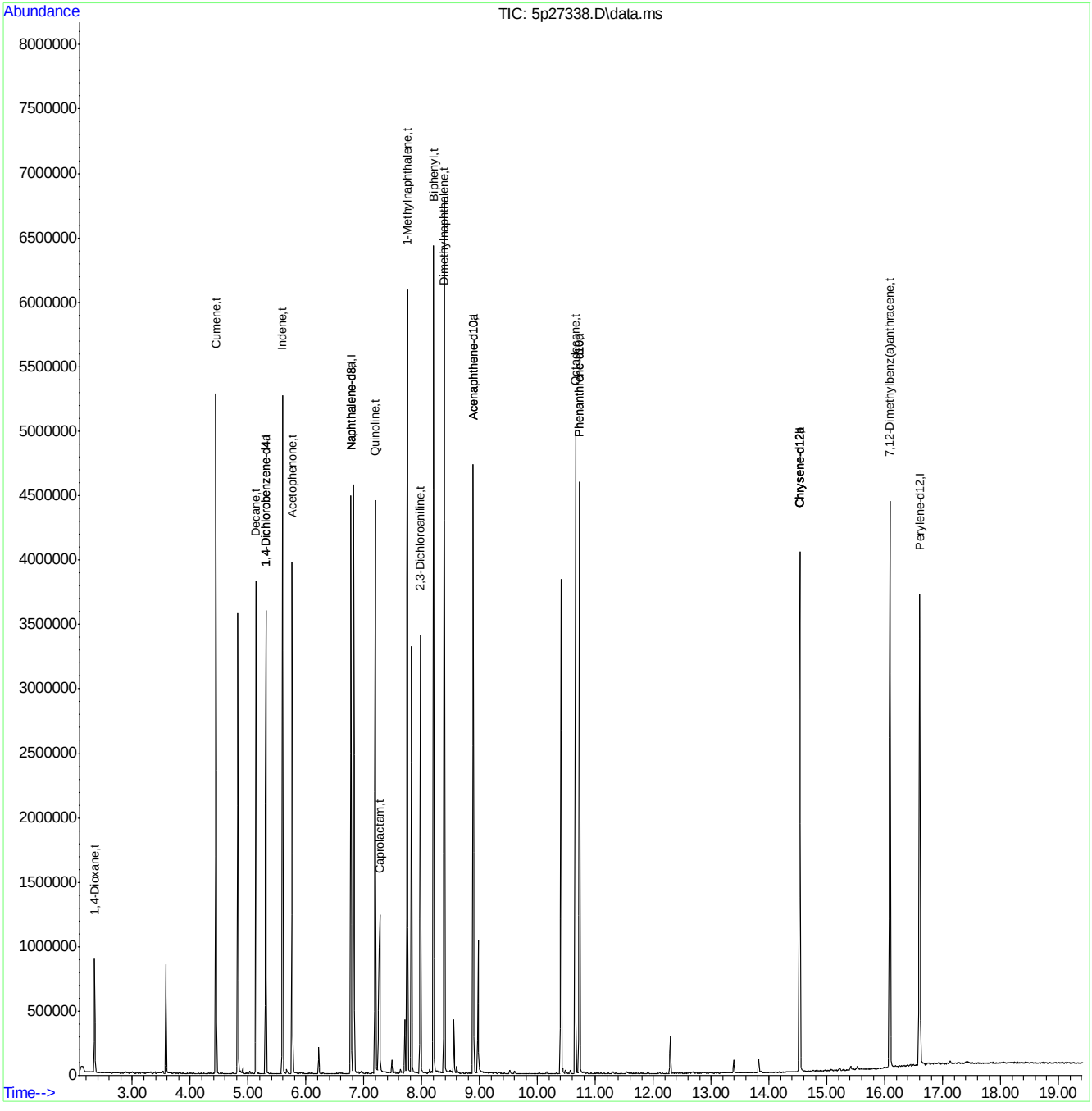
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27338.D
Acq On : 11 Apr 2016 7:26 pm
Operator : ariellec
Sample : icv1382-50
Misc : op92466,e5p1383
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 11 20:08:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 18:53:32 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27338a.D
Acq On : 11 Apr 2016 7:26 pm
Operator : ariellec
Sample : icv1383-50
Misc : op92466,e5p1383
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 11 20:07:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 18:53:32 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.303	152	543499	40.00	ppm	0.00
24) Naphthalene-d8	6.773	136	2035522	40.00	ppm	0.00
47) Acenaphthene-d10	8.888	164	1169425	40.00	ppm	0.00
69) Phenanthrene-d10	10.726	188	1836140	40.00	ppm	0.00
83) Chrysene-d12	14.530	240	1761256	40.00	ppm	0.00
92) Perylene-d12	16.602	264	1682476	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.303	152	543499	40.00	ppm	0.00
104) Acenaphthene-d10a	8.888	164	1169425	40.00	ppm	0.00
106) Chrysene-d12a	14.530	240	1761256	40.00	ppm	0.00
109) Phenanthrene-d10a	10.726	188	1836140	40.00	ppm	0.00
112) Naphthalene-d8a	6.773	136	2035522	40.00	ppm	0.00
114) Chrysene-d12b	14.530	240	1761256	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
103) Benzaldehyde	4.823	105	669822	50.75	ppm	98
111) Atrazine	10.405	215	252481	53.40	ppm	99

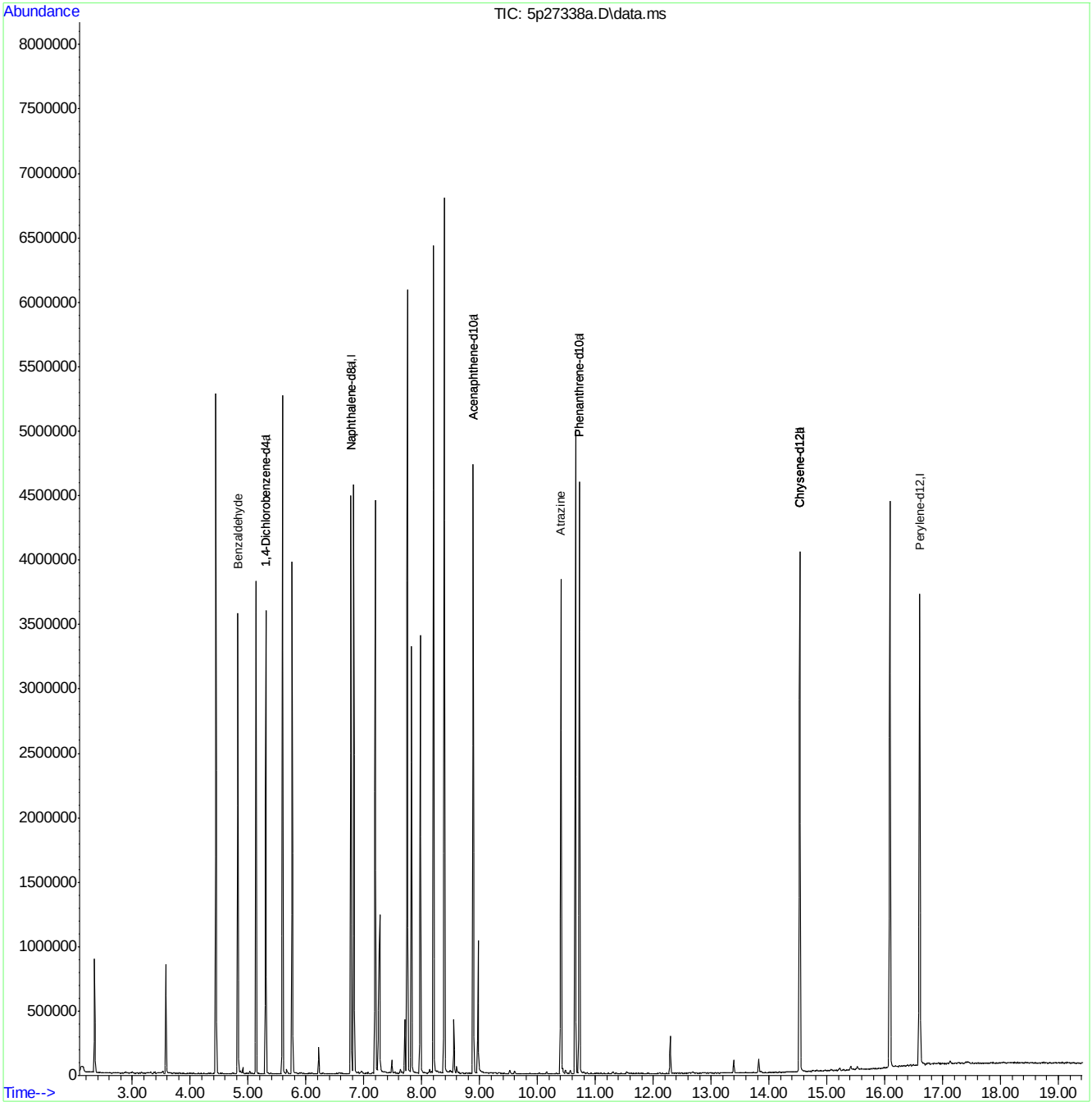
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27338a.D
Acq On : 11 Apr 2016 7:26 pm
Operator : ariellec
Sample : icv1383-50
Misc : op92466,e5p1383
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 11 20:07:50 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 18:53:32 2016
Response via : Initial Calibration



M5P1382.M Mon Apr 11 20:07:57 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27339.D
Acq On : 11 Apr 2016 7:52 pm
Operator : ariellec
Sample : icv1382-50
Misc : op92466,e5p1383
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 11 20:35:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 18:53:32 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.303	152	554439	40.00	ppm	0.00
24) Naphthalene-d8	6.772	136	2056495	40.00	ppm	0.00
47) Acenaphthene-d10	8.888	164	1196854	40.00	ppm	0.00
69) Phenanthrene-d10	10.726	188	1932253	40.00	ppm	0.00
83) Chrysene-d12	14.529	240	1830853	40.00	ppm	0.00
92) Perylene-d12	16.602	264	1742882	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.303	152	554439	40.00	ppm	0.00
104) Acenaphthene-d10a	8.888	164	1196854	40.00	ppm	0.00
106) Chrysene-d12a	14.529	240	1830853	40.00	ppm	0.00
109) Phenanthrene-d10a	10.726	188	1932253	40.00	ppm	0.00
112) Naphthalene-d8a	6.772	136	2056495	40.00	ppm	0.00
114) Chrysene-d12b	14.529	240	1830853	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) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
9) Phenol	4.903	94	931361	46.66	ppm	86
12) 2-Chlorophenol	5.063	128	924156	48.09	ppm	98
19) 2-Methylphenol	5.586	108	751279	51.35	ppm	85
21) 3&4-Methylphenol	5.763	108	783897	50.37	ppm	96
29) 2-Nitrophenol	6.329	139	491878	50.99	ppm	94
30) 2,4-Dimethylphenol	6.388	107	893651	59.03	ppm	87
31) Benzoic acid	6.521	105	601300	48.61	ppm	94
33) 2,4-Dichlorophenol	6.607	162	744843	50.85	ppm	96
34) 2,6-Dichlorophenol	6.874	162	743345	51.60	ppm	89
43) 4-Chloro-3-methylphenol	7.456	107	783867	50.08	ppm	89
49) 2,4,6-Trichlorophenol	7.974	196	533499	52.35	ppm	90
50) 2,4,5-Trichlorophenol	8.012	196	541938	49.26	ppm	96
60) 2,4-Dinitrophenol	8.973	184	182929	39.04	ppm	94
61) 4-Nitrophenol	9.054	109	266783	54.91	ppm #	51
64) 2,3,4,6-Tetrachlorophenol	9.289	232	436047	50.25	ppm	95
70) 4,6-Dinitro-2-methylph...	9.620	198	307086	49.71	ppm	85
76) Pentachlorophenol	10.480	266	361078	54.47	ppm	94

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27339.D
Acq On : 11 Apr 2016 7:52 pm
Operator : ariellec
Sample : icv1382-50
Misc : op92466,e5p1383
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 11 20:35:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 18:53:32 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

7.6.76

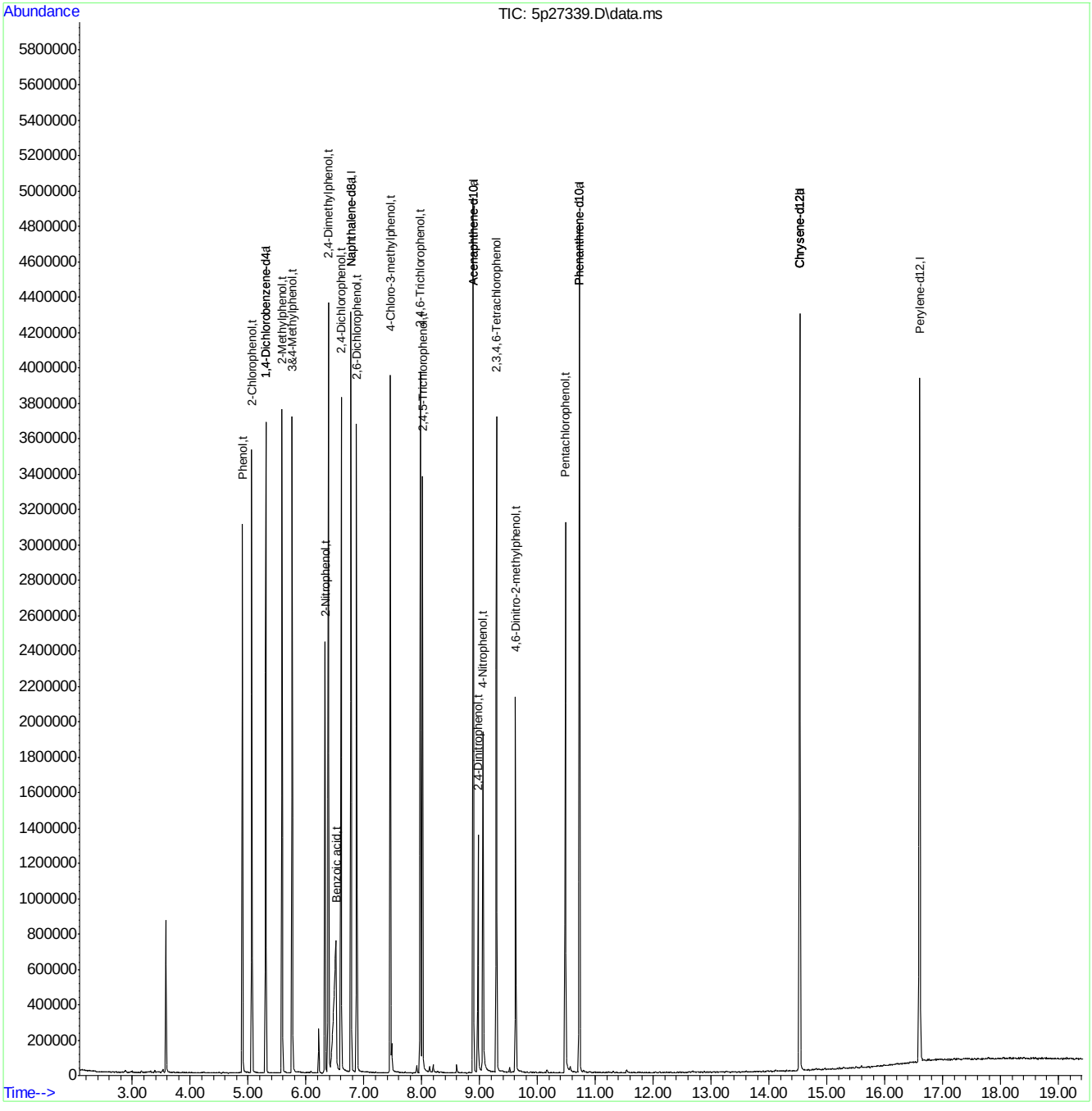
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27339.D
Acq On : 11 Apr 2016 7:52 pm
Operator : ariellec
Sample : icv1382-50
Misc : op92466,e5p1383
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 11 20:35:35 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 18:53:32 2016
Response via : Initial Calibration



M5P1382.M Mon Apr 11 20:35:48 2016 RPT1 Page: 3

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27340.D
Acq On : 11 Apr 2016 8:20 pm
Operator : ariellec
Sample : icv1382-50
Misc : op92466,e5p1383
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 11 21:12:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 18:53:32 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.309	152	505708	40.00	ppm	0.00
24) Naphthalene-d8	6.778	136	1972027	40.00	ppm	0.00
47) Acenaphthene-d10	8.893	164	1149268	40.00	ppm	0.00
69) Phenanthrene-d10	10.726	188	1889280	40.00	ppm	0.00
83) Chrysene-d12	14.535	240	1771721	40.00	ppm	0.00
92) Perylene-d12	16.602	264	1457702	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.309	152	505708	40.00	ppm	0.00
104) Acenaphthene-d10a	8.893	164	1149268	40.00	ppm	0.00
106) Chrysene-d12a	14.535	240	1771721	40.00	ppm	0.00
109) Phenanthrene-d10a	10.726	188	1889280	40.00	ppm	0.00
112) Naphthalene-d8a	6.778	136	1972027	40.00	ppm	0.00
114) Chrysene-d12b	14.535	240	1771721	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
3) Pyridine	2.728	79	642158	49.19	ppm	91
10) Aniline	4.946	93	1104518	55.98	ppm	87
16) Benzyl alcohol	5.469	108	512247	51.04	ppm	85
39) 4-Chloroaniline	6.874	127	1054671	50.41	ppm	97
44) 2-Methylnaphthalene	7.633	141	1398604	48.53	ppm	98
54) 2-Nitroaniline	8.349	65	403955	49.62	ppm	94
58) 3-Nitroaniline	8.851	138	429481	46.73	ppm	96
62) Dibenzofuran	9.145	168	2259304	50.43	ppm	99
68) 4-Nitroaniline	9.588	138	434650	46.79	ppm	92
79) Carbazole	11.046	167	2420013	48.20	ppm	99

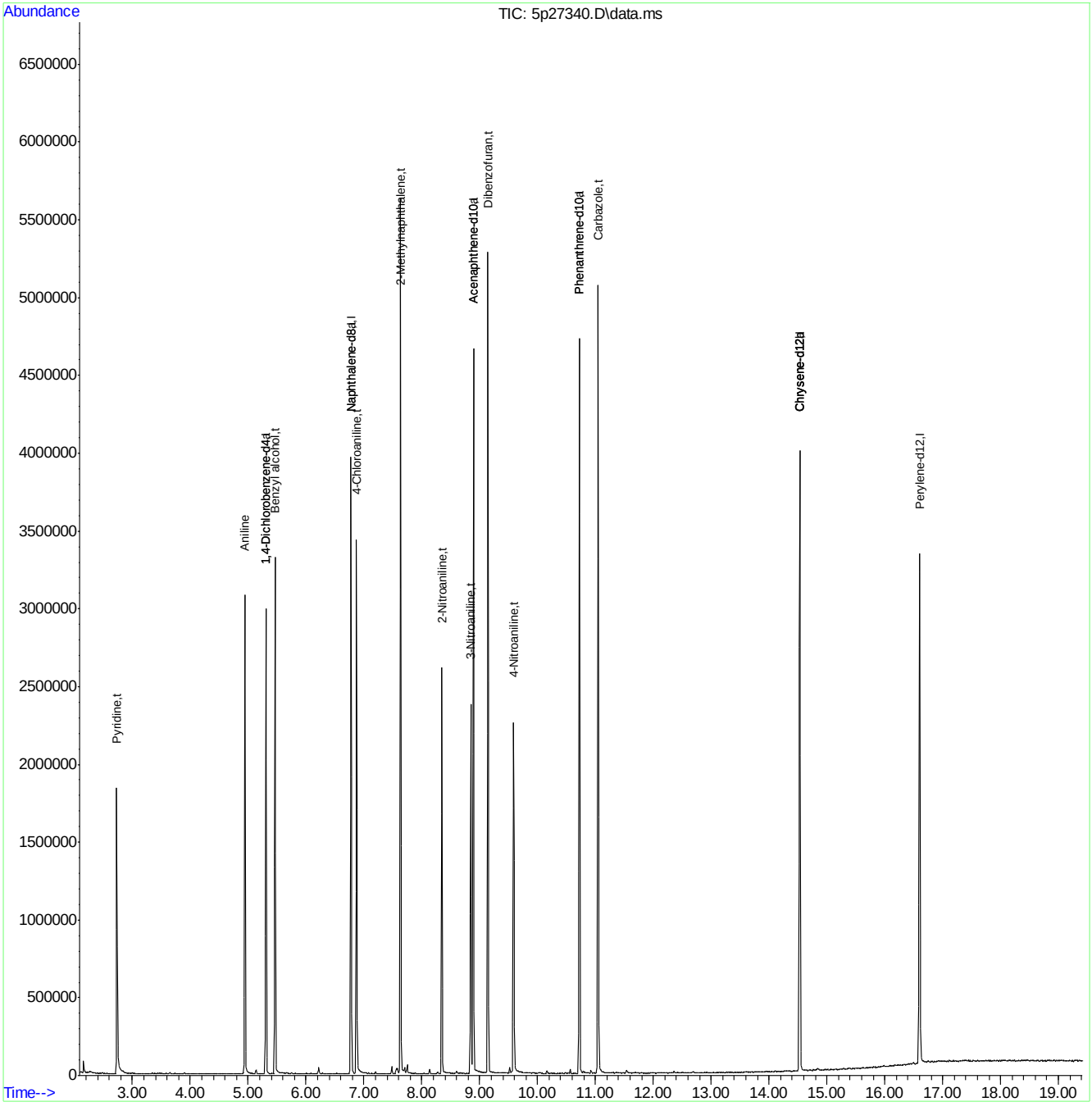
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27340.D
Acq On : 11 Apr 2016 8:20 pm
Operator : ariellec
Sample : icv1382-50
Misc : op92466,e5p1383
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 11 21:12:49 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 18:53:32 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27341a.D
Acq On : 11 Apr 2016 8:47 pm
Operator : ariellec
Sample : icv1383-50
Misc : op92466,e5p1383
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 11 21:15:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 18:53:32 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	5.303	152	469445	40.00 ppm	0.00
24) Naphthalene-d8	6.773	136	1797316	40.00 ppm	0.00
47) Acenaphthene-d10	8.888	164	1079163	40.00 ppm	0.00
69) Phenanthrene-d10	10.726	188	1795937	40.00 ppm	0.00
83) Chrysene-d12	14.535	240	1830106	40.00 ppm	0.00
92) Perylene-d12	16.602	264	1762488	40.00 ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.303	152	469445	40.00 ppm	0.00
104) Acenaphthene-d10a	8.888	164	1079163	40.00 ppm	0.00
106) Chrysene-d12a	14.535	240	1830106	40.00 ppm	0.00
109) Phenanthrene-d10a	10.726	188	1795937	40.00 ppm	0.00
112) Naphthalene-d8a	6.773	136	1797316	40.00 ppm	0.00
114) Chrysene-d12b	14.535	240	1830106	40.00 ppm	0.00
System Monitoring Compounds					
5) 2-Fluorophenol	0.000	112	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
8) Phenol-d5	0.000	99	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
85) Terphenyl-d14	0.000	244	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
108) 1-chlorooctadecane	0.000	57	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
110) o-terphenyl	0.000	230	0	0.00 ppm	
Spiked Amount 50.000			Recovery	= 0.00%	
Target Compounds					Qvalue
107) Benzidine	12.617	184	1728113	71.05 ppm	100

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

7.6.78

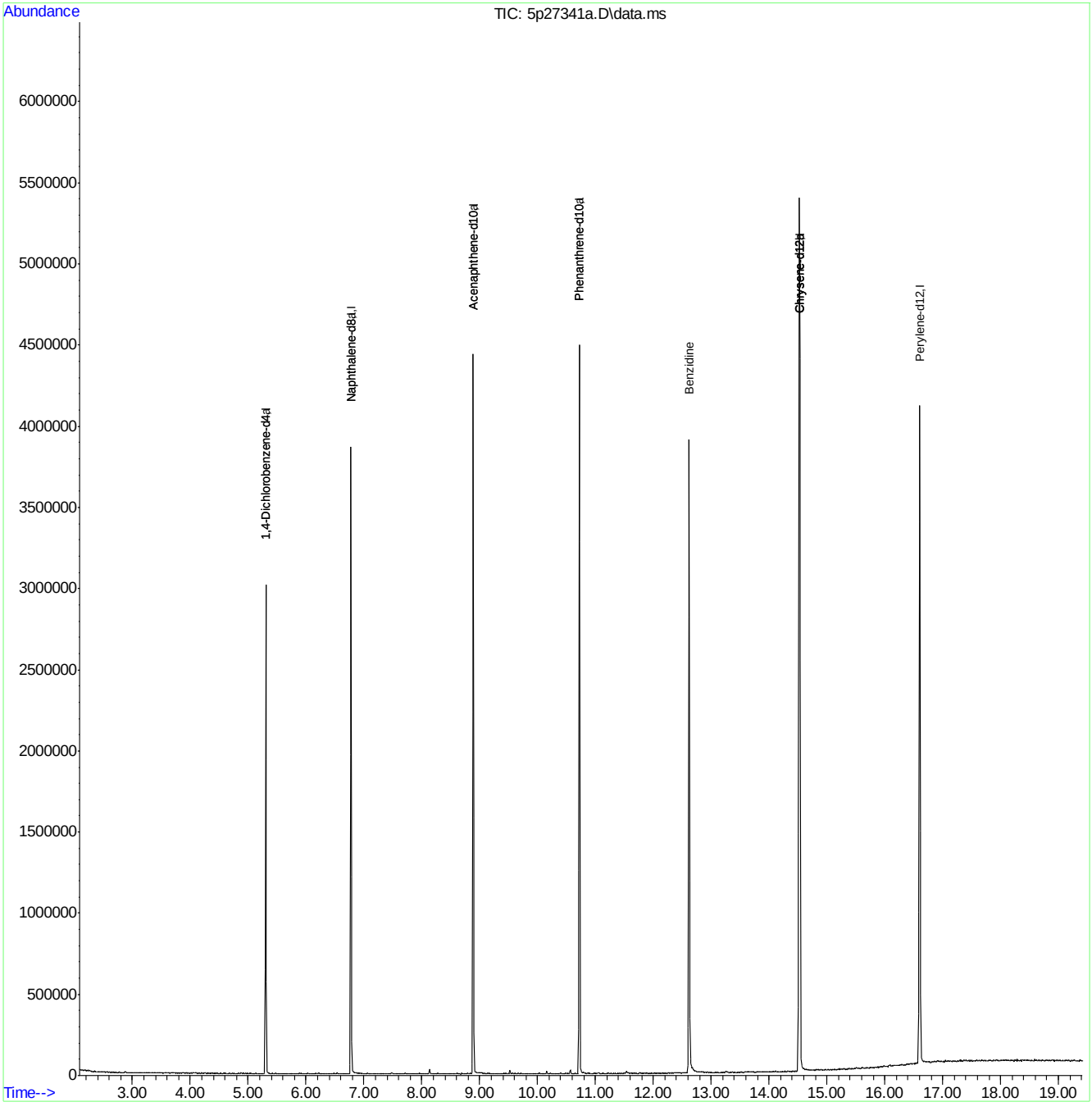
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27341a.D
Acq On : 11 Apr 2016 8:47 pm
Operator : ariellec
Sample : icv1383-50
Misc : op92466,e5p1383
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 11 21:15:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 18:53:32 2016
Response via : Initial Calibration



M5P1382.M Mon Apr 11 21:15:34 2016 RPT1 Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27341.D
Acq On : 11 Apr 2016 8:47 pm
Operator : ariellec
Sample : icv1382-50
Misc : op92466,e5p1383
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 11 21:15:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 18:53:32 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.303	152	469445	40.00	ppm	0.00
24) Naphthalene-d8	6.773	136	1797316	40.00	ppm	0.00
47) Acenaphthene-d10	8.888	164	1079163	40.00	ppm	0.00
69) Phenanthrene-d10	10.726	188	1795937	40.00	ppm	0.00
83) Chrysene-d12	14.535	240	1830106	40.00	ppm	0.00
92) Perylene-d12	16.602	264	1762488	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.303	152	469445	40.00	ppm	0.00
104) Acenaphthene-d10a	8.888	164	1079163	40.00	ppm	0.00
106) Chrysene-d12a	14.535	240	1830106	40.00	ppm	0.00
109) Phenanthrene-d10a	10.726	188	1795937	40.00	ppm	0.00
112) Naphthalene-d8a	6.773	136	1797316	40.00	ppm	0.00
114) Chrysene-d12b	14.535	240	1830106	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
89) 3,3'-Dichlorobenzidine	14.519	252	890770	48.05	ppm	98

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

7.6.79

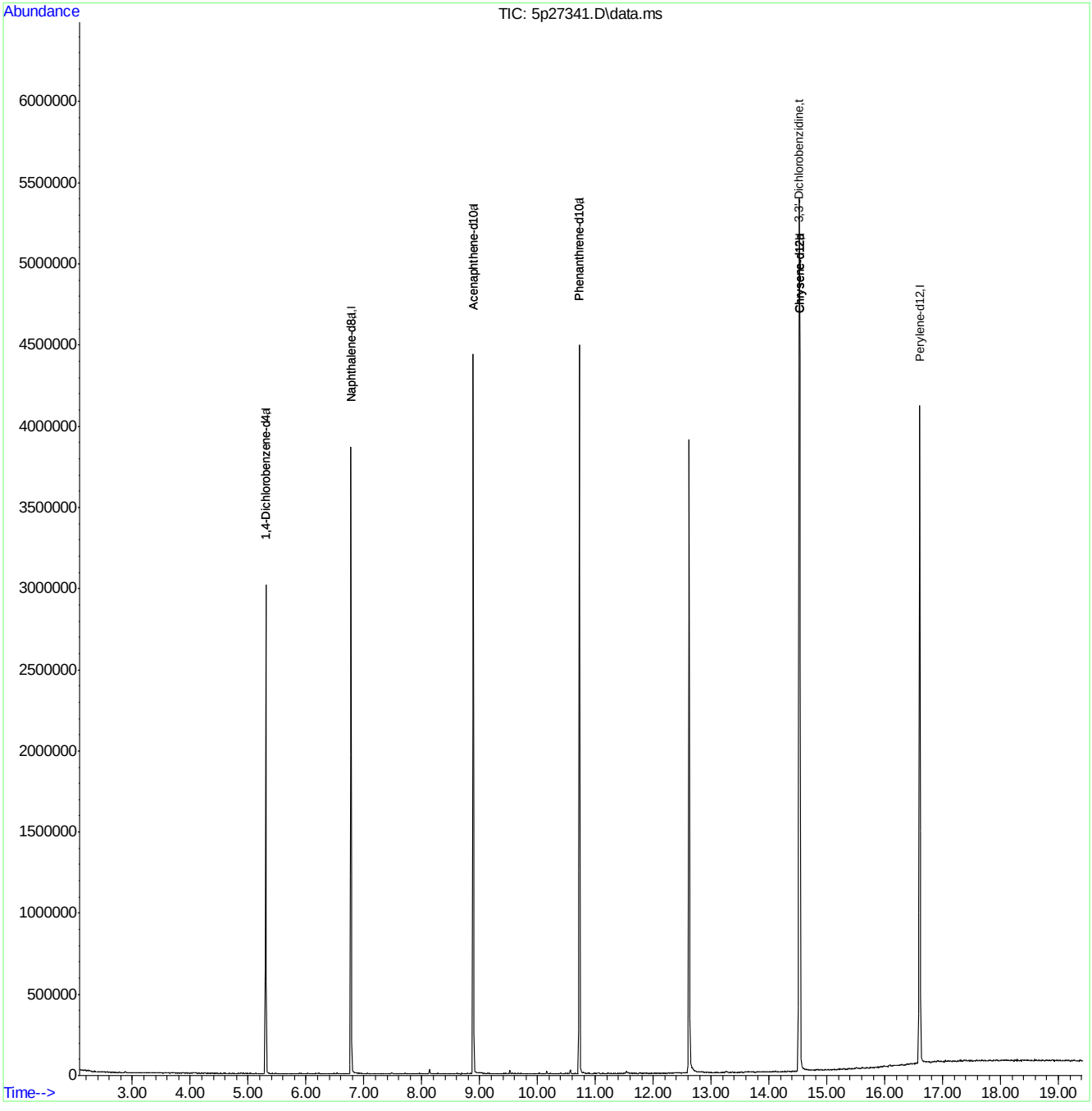
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27341.D
Acq On : 11 Apr 2016 8:47 pm
Operator : ariellec
Sample : icv1382-50
Misc : op92466,e5p1383
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 11 21:15:10 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 18:53:32 2016
Response via : Initial Calibration



M5P1382.M Mon Apr 11 21:15:15 2016 RPT1 Page: 2

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27342.D
Acq On : 11 Apr 2016 9:15 pm
Operator : ariellec
Sample : icv1383-50
Misc : op92466,e5p1383
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 11 21:35:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 18:53:32 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.304	152	477127	40.00	ppm	0.00
24) Naphthalene-d8	6.773	136	1821906	40.00	ppm	0.00
47) Acenaphthene-d10	8.888	164	1066554	40.00	ppm	0.00
69) Phenanthrene-d10	10.726	188	1788876	40.00	ppm	0.00
83) Chrysene-d12	14.530	240	1802716	40.00	ppm	0.00
92) Perylene-d12	16.602	264	1760342	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.304	152	477127	40.00	ppm	0.00
104) Acenaphthene-d10a	8.888	164	1066554	40.00	ppm	0.00
106) Chrysene-d12a	14.530	240	1802716	40.00	ppm	0.00
109) Phenanthrene-d10a	10.726	188	1788876	40.00	ppm	0.00
112) Naphthalene-d8a	6.773	136	1821906	40.00	ppm	0.00
114) Chrysene-d12b	14.530	240	1802716	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
113) Hydroquinone	7.275	110	682981	52.89	ppm	97

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

7.6.80

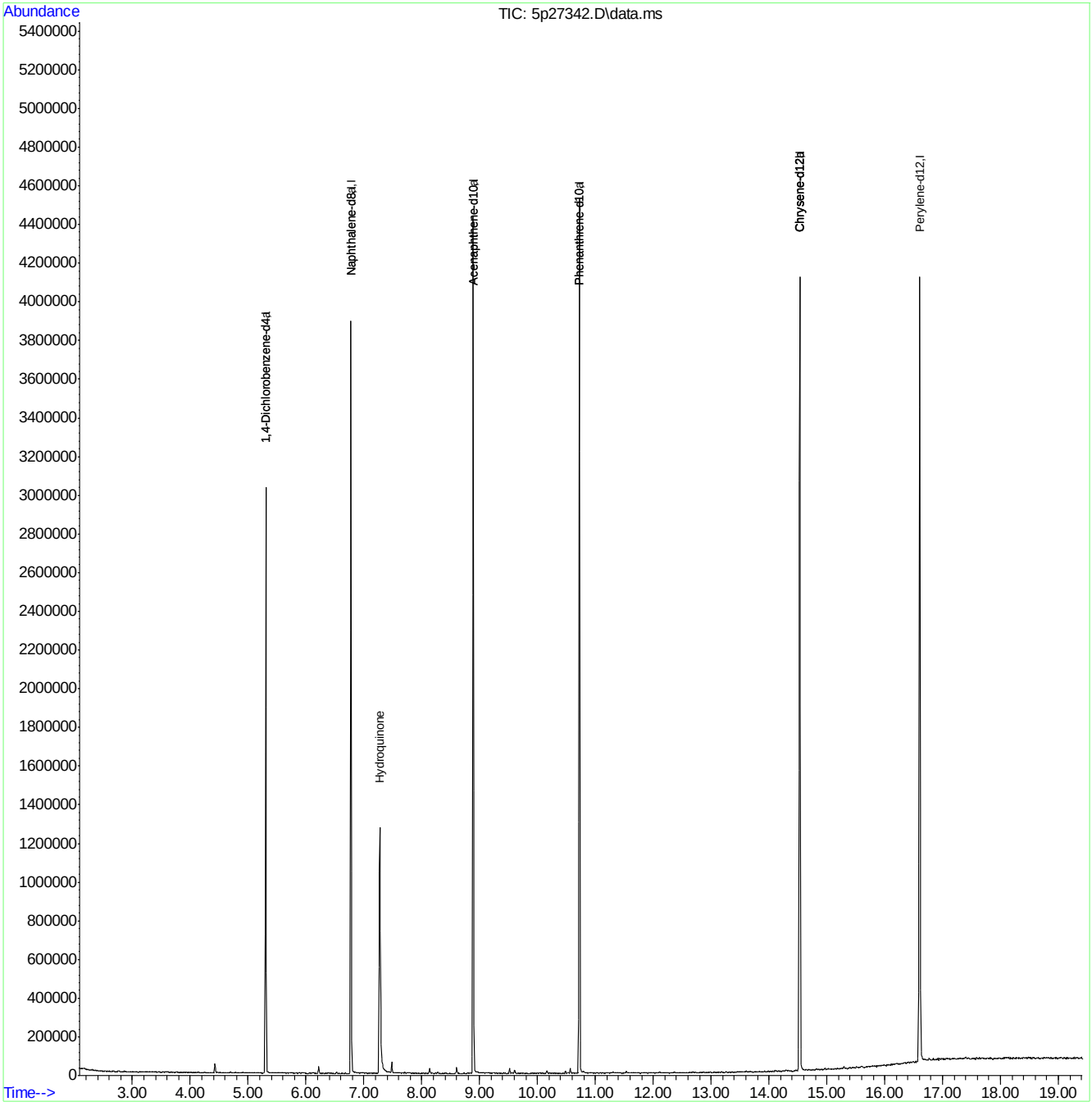
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\e5p1383\
Data File : 5p27342.D
Acq On : 11 Apr 2016 9:15 pm
Operator : ariellec
Sample : icv1383-50
Misc : op92466,e5p1383
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 11 21:35:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Mon Apr 11 18:53:32 2016
Response via : Initial Calibration



M5P1382.M Mon Apr 11 21:35:37 2016 RPT1 Page: 2

Manual Integrations APPROVED (compounds with "m" flag)
Kristi Schollenberger 05/06/16 16:42

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1416\
Data File : 5p27902.D
Acq On : 3 May 2016 8:39 am
Operator : ashleyd
Sample : cc1382-25
Misc : op93450,e5p1416
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 03 12:15:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Tue May 03 08:59:50 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.293	152	745526	40.00	ppm	0.00
24) Naphthalene-d8	6.762	136	3093488	40.00	ppm	0.00
47) Acenaphthene-d10	8.872	164	1850267	40.00	ppm	0.00
69) Phenanthrene-d10	10.710	188	2967916	40.00	ppm	0.00
83) Chrysene-d12	14.508	240	2857587	40.00	ppm	0.00
92) Perylene-d12	16.581	264	2737860	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.293	152	745526	40.00	ppm	0.00
104) Acenaphthene-d10a	8.872	164	1850267	40.00	ppm	0.00
106) Chrysene-d12a	14.508	240	2858102	40.00	ppm	0.00
109) Phenanthrene-d10a	10.710	188	2967916	40.00	ppm	0.00
112) Naphthalene-d8a	6.762	136	3093488	40.00	ppm	0.00
114) Chrysene-d12b	14.508	240	2858102	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.957	112	557899	24.42	ppm	0.03
Spiked Amount 50.000			Recovery	=	48.84%	
8) Phenol-d5	4.962	99	684276	26.36	ppm	0.00
Spiked Amount 50.000			Recovery	=	52.72%	
25) Nitrobenzene-d5	5.939	82	623177	26.54	ppm	0.09
Spiked Amount 50.000			Recovery	=	53.08%	
51) 2-Fluorobiphenyl	8.071	172	1442456	24.49	ppm	0.00
Spiked Amount 50.000			Recovery	=	48.98%	
73) 2,4,6-Tribromophenol	9.844	330	201783	28.16	ppm	0.00
Spiked Amount 50.000			Recovery	=	56.32%	
85) Terphenyl-d14	12.943	244	1555840	27.09	ppm	0.00
Spiked Amount 50.000			Recovery	=	54.18%	
108) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
110) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.354	88	199805	22.85	ppm	93
3) Pyridine	2.675	79	445253	23.13	ppm	93
4) N-Nitrosodimethylamine	2.638	74	264511	24.52	ppm	98
6) Indene	5.581	116	1122529	27.52	ppm	91
7) Cumene	4.417	105	1481464	26.93	ppm	97
9) Phenol	4.978	94	796163	29.66	ppm	94
10) Aniline	4.956	93	645684	22.20	ppm	81
11) bis(2-Chloroethyl)ether	5.015	93	526238	26.42	ppm	98
12) 2-Chlorophenol	5.084	128	670913	25.97	ppm	96
13) Decane	5.090	43	739932	43.27	ppm	76
14) 1,3-Dichlorobenzene	5.223	146	736763	25.70	ppm	96
15) 1,4-Dichlorobenzene	5.314	146	754962	26.11	ppm	97
16) Benzyl alcohol	5.480	108	379791	25.67	ppm	94
17) 1,2-Dichlorobenzene	5.480	146	706951	25.73	ppm	98
18) Acetophenone	5.763	105	905582	28.27	ppm	95
19) 2-Methylphenol	5.635	108	553267	28.12	ppm	98
20) 2,2'-oxybis(1-Chloropr...	5.608	45	945338	41.31	ppm	78

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1416\
Data File : 5p27902.D
Acq On : 3 May 2016 8:39 am
Operator : ashleyd
Sample : cc1382-25
Misc : op93450,e5p1416
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 03 12:15:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Tue May 03 08:59:50 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.811	108	597323	28.54	ppm		97
22) n-Nitroso-di-n-propyla...	5.763	70	436519	30.61	ppm		98
23) Hexachloroethane	5.859	201	232337	24.93	ppm		92
26) Nitrobenzene	5.961	77	607601	26.25	ppm		97
27) Quinoline	7.200	129	1395773	25.73	ppm		99
28) Isophorone	6.228	82	1075278	26.59	ppm		93
29) 2-Nitrophenol	6.329	139	375237	25.86	ppm		98
30) 2,4-Dimethylphenol	6.415	107	626453	27.51	ppm		97
31) Benzoic acid	6.570	105	419453m	22.54	ppm		
32) bis(2-Chloroethoxy)met...	6.500	93	649302	24.57	ppm		95
33) 2,4-Dichlorophenol	6.634	162	542746	24.63	ppm		96
34) 2,6-Dichlorophenol	6.890	162	546361	25.21	ppm	#	1
35) 1,3,5-Trichlorobenzene	6.318	180	606091	23.88	ppm		96
36) 1,2,4-Trichlorobenzene	6.692	180	586752	23.67	ppm		95
37) 1,2,3-Trichlorobenzene	6.960	180	570001	23.33	ppm		95
38) Naphthalene	6.789	128	2066291	26.36	ppm		96
39) 4-Chloroaniline	6.890	127	783542	23.87	ppm		99
40) 2,3-Dichloroaniline	7.980	161	688215	25.06	ppm		97
41) Caprolactam	7.317	55	325129	36.89	ppm		87
42) Hexachlorobutadiene	6.933	225	303855	23.81	ppm		96
43) 4-Chloro-3-methylphenol	7.515	107	670615	28.48	ppm		99
44) 2-Methylnaphthalene	7.617	141	1250711	27.67	ppm		90
45) 1-Methylnaphthalene	7.734	141	1288077	27.43	ppm		93
46) Dimethylnaphthalene	8.370	156	1312464	26.66	ppm		94
48) Hexachlorocyclopentadiene	7.798	237	553509	47.74	ppm		98
49) 2,4,6-Trichlorophenol	7.985	196	392141	24.89	ppm		99
50) 2,4,5-Trichlorophenol	8.044	196	397004	23.34	ppm		95
52) 2-Chloronaphthalene	8.204	162	1285688	24.66	ppm		91
53) Biphenyl	8.183	154	1714699	25.39	ppm		95
54) 2-Nitroaniline	8.365	65	434811	33.17	ppm		92
55) Dimethylphthalate	8.578	163	1568139	25.37	ppm		98
56) Acenaphthylene	8.701	152	2153504	25.99	ppm		96
57) 2,6-Dinitrotoluene	8.653	165	347833	27.34	ppm		96
58) 3-Nitroaniline	8.872	138	375382	25.37	ppm		79
59) Acenaphthene	8.909	153	1379233	26.03	ppm		97
60) 2,4-Dinitrophenol	8.990	184	330417	44.64	ppm		77
61) 4-Nitrophenol	9.161	109	209736	27.92	ppm	#	49
62) Dibenzofuran	9.123	168	1840641	25.52	ppm		97
63) 2,4-Dinitrotoluene	9.139	165	500289	29.43	ppm		99
64) 2,3,4,6-Tetrachlorophenol	9.299	232	313541	23.37	ppm		94
65) Diethylphthalate	9.433	149	1692370	26.81	ppm		98
66) Fluorene	9.540	166	1553953	26.15	ppm		99
67) 4-Chlorophenyl-phenyle...	9.550	204	684584	24.45	ppm		78
68) 4-Nitroaniline	9.620	138	392458	26.24	ppm	#	71
70) 4,6-Dinitro-2-methylph...	9.631	198	251787	26.54	ppm		82
71) n-Nitrosodiphenylamine	9.705	169	1125106	26.30	ppm		97
72) 1,2-Diphenylhydrazine	9.743	77	1281951	28.89	ppm		81
74) 4-Bromophenyl-phenylether	10.143	248	411412	25.02	ppm		96
75) Hexachlorobenzene	10.202	284	422774	25.33	ppm		95
76) Pentachlorophenol	10.485	266	490230	48.15	ppm		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1416\
Data File : 5p27902.D
Acq On : 3 May 2016 8:39 am
Operator : ashleyd
Sample : cc1382-25
Misc : op93450,e5p1416
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 03 12:15:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Tue May 03 08:59:50 2016
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77)	Phenanthrene	10.736	178	2149365	25.79	ppm	97
78)	Anthracene	10.806	178	2148588	25.65	ppm	98
79)	Carbazole	11.046	167	2076205	26.32	ppm	95
80)	Di-n-butylphthalate	11.522	149	2910566	29.12	ppm	99
81)	Fluoranthene	12.361	202	2204918	25.59	ppm	98
82)	Octadecane	10.571	57	1126733	40.99	ppm	71
84)	Pyrene	12.686	202	2279635	25.91	ppm	98
86)	Butylbenzylphthalate	13.707	149	1275143	29.55	ppm	83
87)	Butyl stearate	13.808	56	770211	43.86	ppm	80
88)	Benzo[a]anthracene	14.487	228	2062321	26.09	ppm	97
89)	3,3'-Dichlorobenzidine	14.497	252	797710	27.56	ppm	96
90)	Chrysene	14.546	228	2064232	25.58	ppm	96
91)	bis(2-Ethylhexyl)phtha...	14.594	149	1810798	29.59	ppm	97
93)	Di-n-octylphthalate	15.561	149	3081747	32.45	ppm	97
94)	Benzo[b]fluoranthene	16.057	252	2214879	27.73	ppm	100
95)	Benzo[k]fluoranthene	16.095	252	1999575	26.19	ppm	100
96)	Benzo[a]pyrene	16.495	252	1919415	26.81	ppm	100
97)	Indeno[1,2,3-cd]pyrene	18.210	276	2013803m	28.67	ppm	
98)	Dibenz(a,h)acridine	17.831	279	1836562	29.55	ppm	100
99)	Dibenz[a,h]anthracene	18.248	278	2152891	29.33	ppm	100
100)	7,12-Dimethylbenz(a)an...	16.052	256	922986	30.02	ppm	100
101)	Benzo[g,h,i]perylene	18.686	276	2082152	27.90	ppm	100

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

76.81

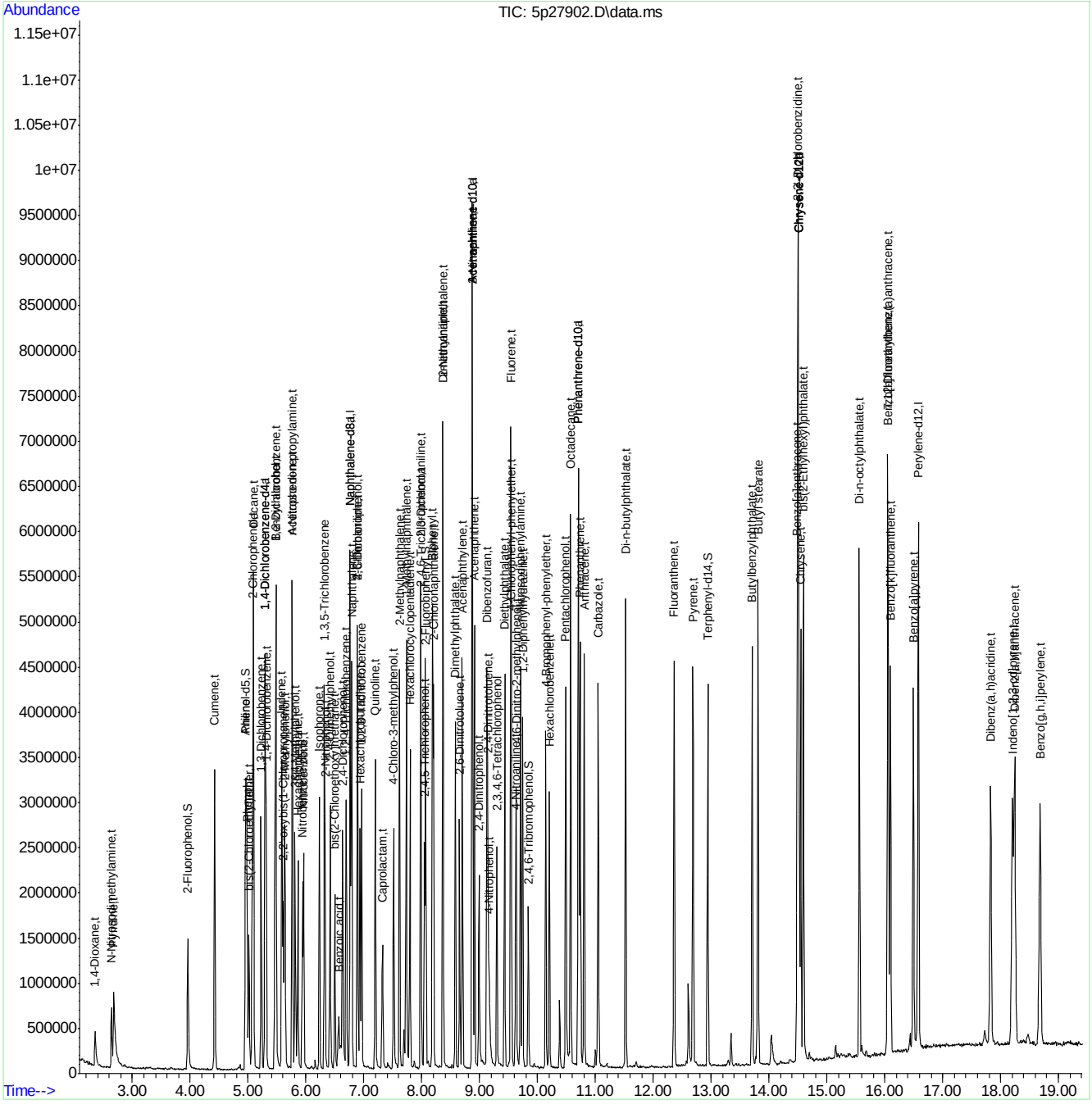
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1416\
Data File : 5p27902.D
Acq On : 3 May 2016 8:39 am
Operator : ashleyd
Sample : cc1382-25
Misc : op93450,e5p1416
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 03 12:15:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Tue May 03 08:59:50 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

Manual Integration Approval Summary

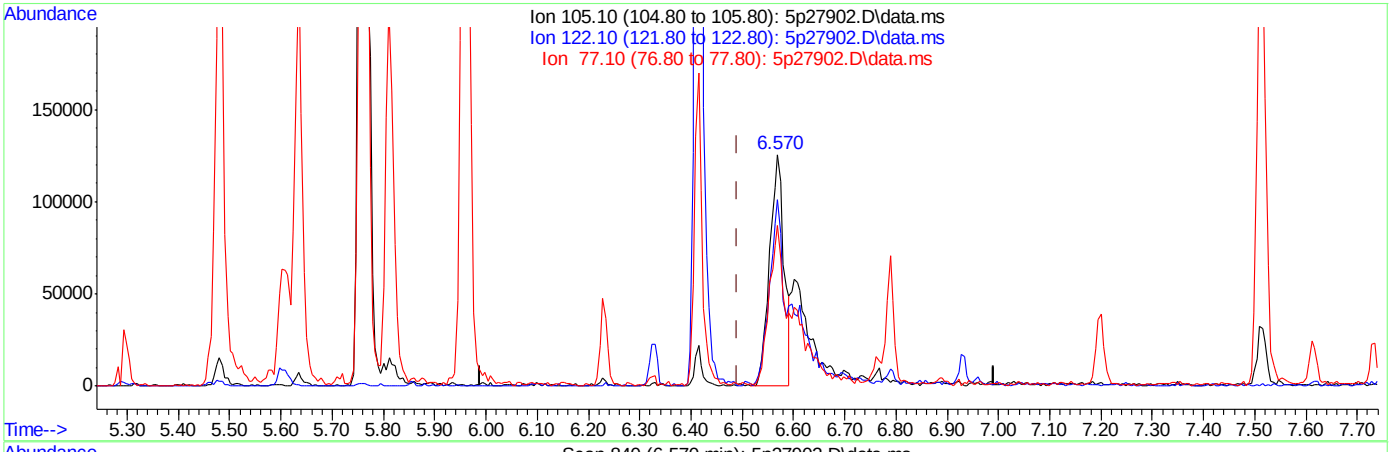
Sample Number:	E5P1416-CC1382	**Method:**	SW846 8270D
Lab FileID:	5P27902.D	**Analyst approved:**	05/03/16 12:25 Ashley Dye
Injection Time:	05/03/16 08:39	**Supervisor approved:**	05/06/16 16:42 Kristi Schollenberger

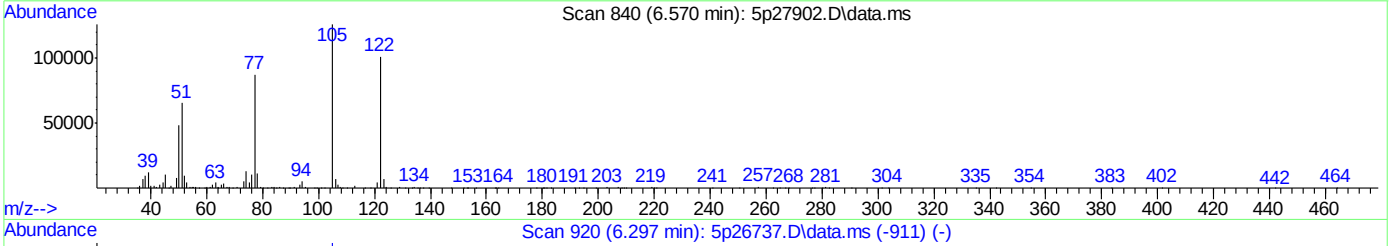
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzoic Acid	65-85-0		6.57	Split peak
Indeno(1,2,3-cd)pyrene	193-39-5		18.21	Overlapping peak

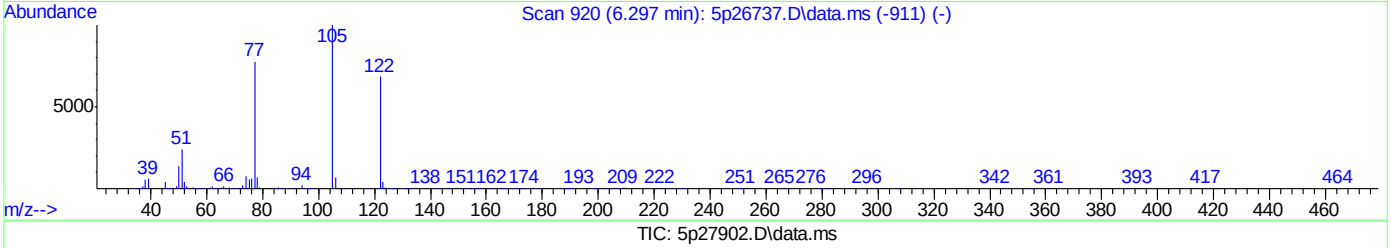
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E5P1416\
Data File : 5p27902.D
Acq On : 3 May 2016 8:39 am
Operator : ashleyd
Sample : cc1382-25
Misc : op93450,e5p1416
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 03 12:14:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Tue May 03 08:59:50 2016
Response via : Initial Calibration







TIC: 5p27902.D\data.ms

(31) Benzoic acid (t)

6.570min (+0.079) 13.35ppm

response 248421

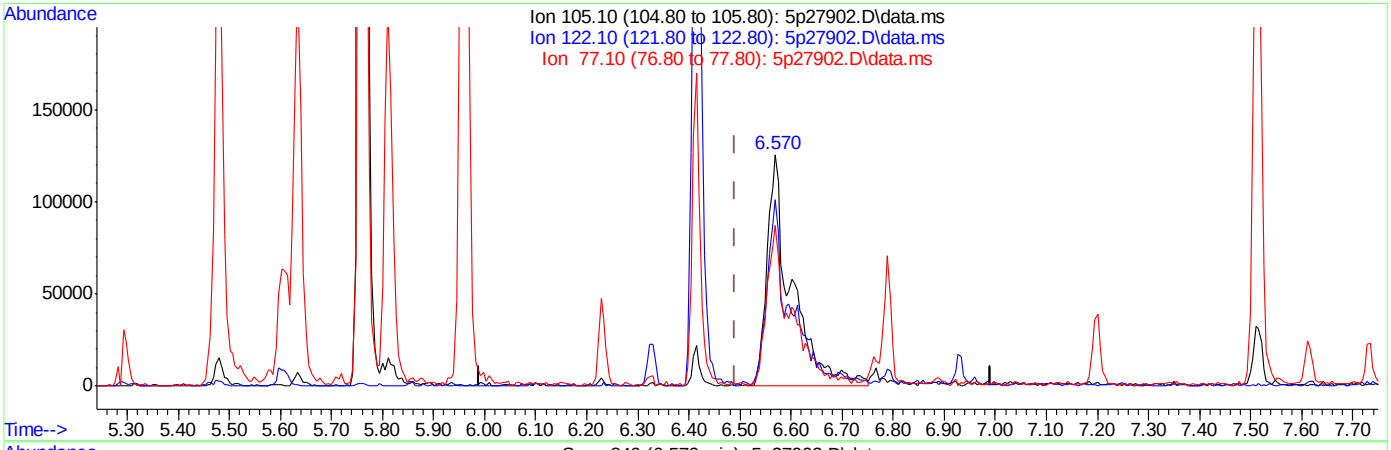
Ion	Exp%	Act%
105.10	100	100
122.10	79.80	77.50
77.10	55.60	65.85
0.00	0.00	0.00

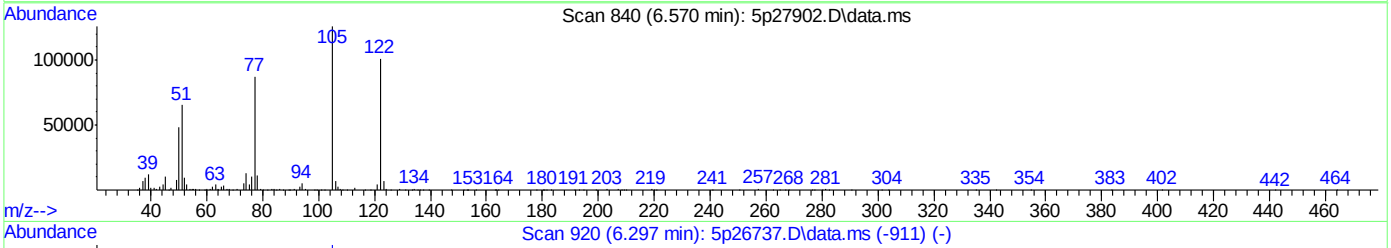
SGS ACCUTEST JC19023

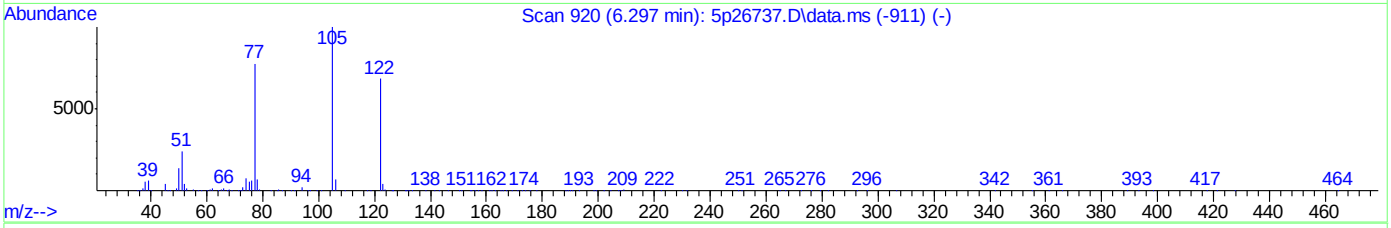
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E5P1416\
Data File : 5p27902.D
Acq On : 3 May 2016 8:39 am
Operator : ashleyd
Sample : cc1382-25
Misc : op93450,e5p1416
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 03 12:14:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Tue May 03 08:59:50 2016
Response via : Initial Calibration







TIC: 5p27902.D\data.ms

(31) Benzoic acid (t)

6.570min (+0.079) 22.54ppm m

response 419453

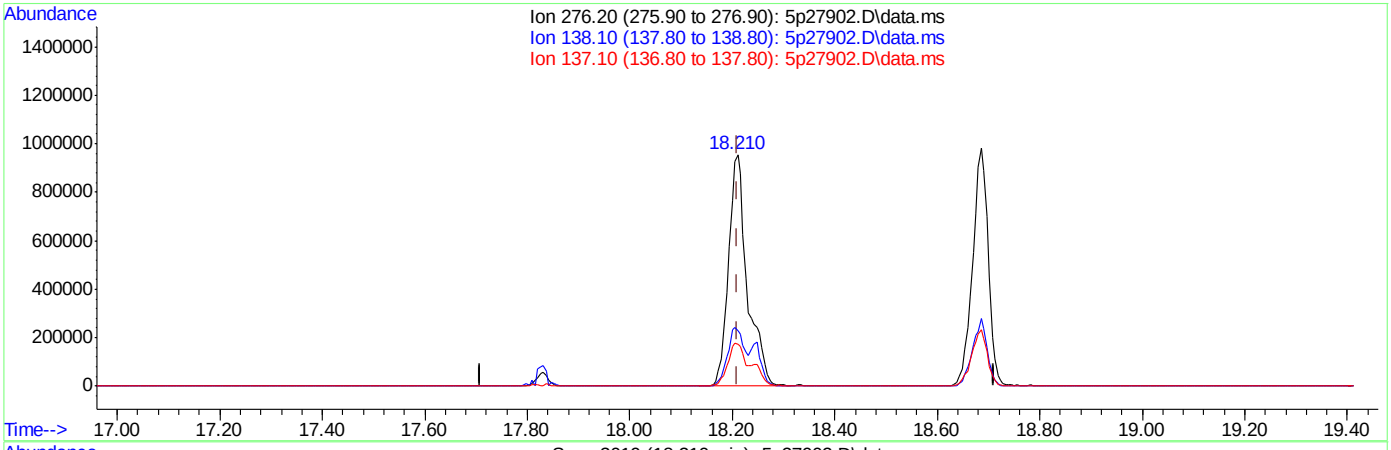
Ion	Exp%	Act%
105.10	100	100
122.10	79.80	80.43
77.10	55.60	69.48
0.00	0.00	0.00

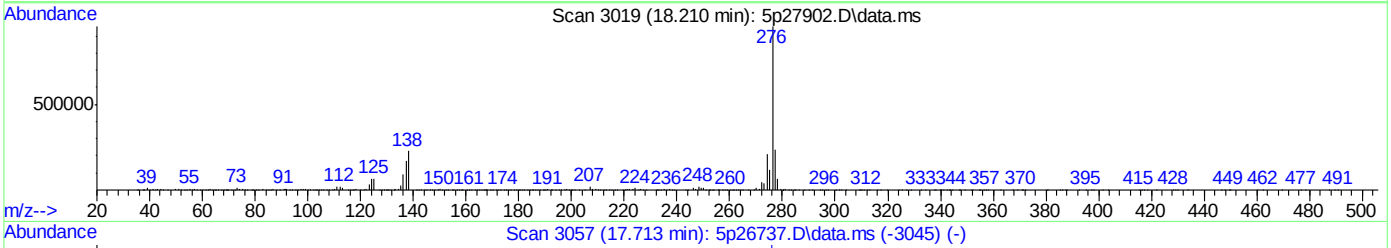
SGS ACCUTEST JC19023

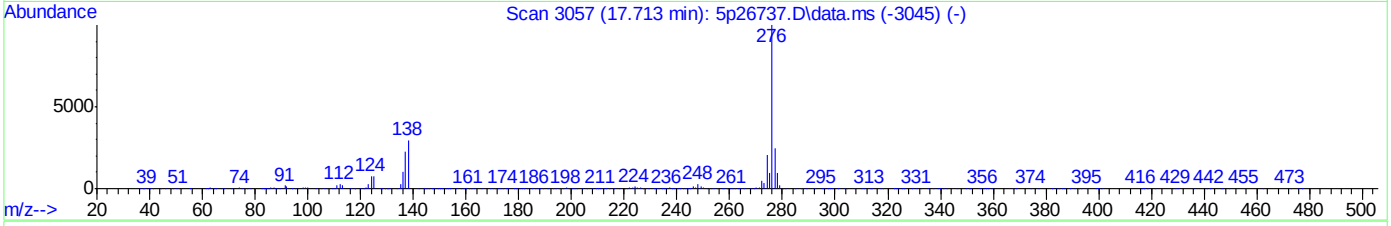
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E5P1416\
Data File : 5p27902.D
Acq On : 3 May 2016 8:39 am
Operator : ashleyd
Sample : cc1382-25
Misc : op93450,e5p1416
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 03 12:14:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Tue May 03 08:59:50 2016
Response via : Initial Calibration







TIC: 5p27902.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

18.210min (0.000) 34.82ppm

response 2445324

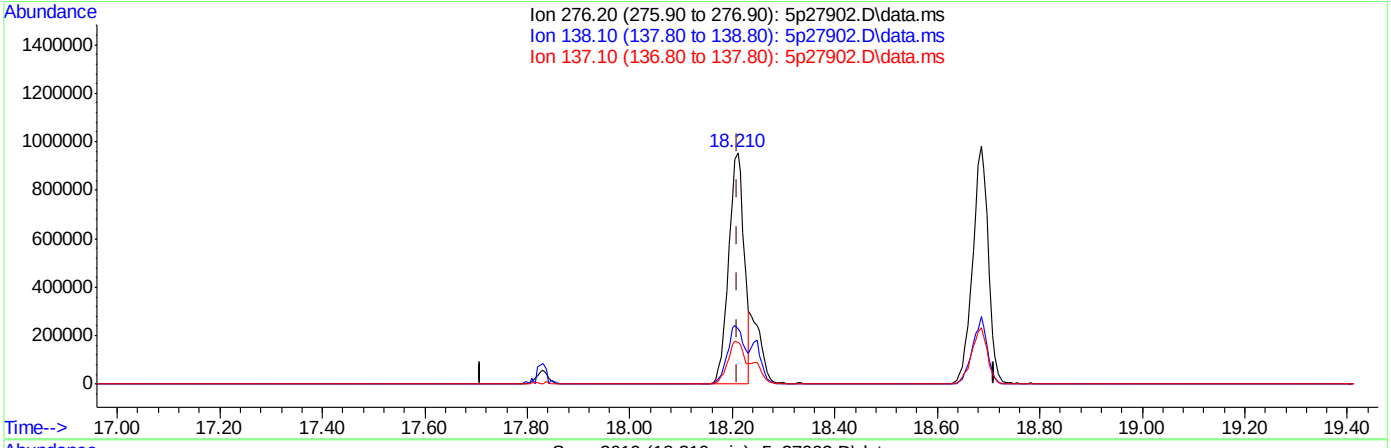
Ion	Exp%	Act%
276.20	100	100
138.10	24.00	23.89
137.10	17.90	17.82
0.00	0.00	0.00

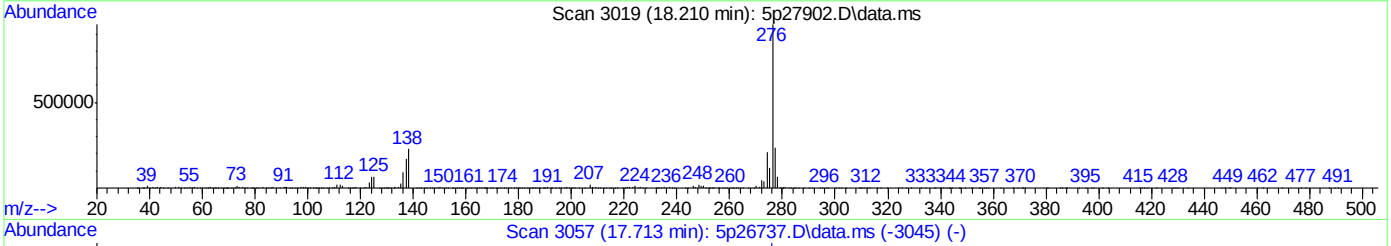
SGS ACCUTEST JC19023

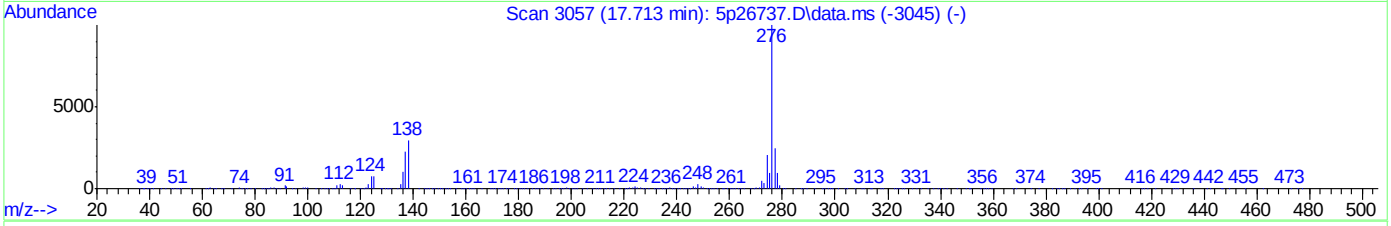
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\E5P1416\
Data File : 5p27902.D
Acq On : 3 May 2016 8:39 am
Operator : ashleyd
Sample : cc1382-25
Misc : op93450,e5p1416
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 03 12:14:30 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Tue May 03 08:59:50 2016
Response via : Initial Calibration







TIC: 5p27902.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

18.210min (0.000) 28.67ppm m

response 2013803

Ion	Exp%	Act%
276.20	100	100
138.10	24.00	23.96
137.10	17.90	17.94
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1416\
Data File : 5p27903.D
Acq On : 3 May 2016 9:05 am
Operator : ashleyd
Sample : cc1383-25
Misc : op93450,e5p1416
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 03 12:17:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Tue May 03 08:59:50 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	5.293	152	757809	40.00	ppm	0.00
24) Naphthalene-d8	6.762	136	3083890	40.00	ppm	0.00
47) Acenaphthene-d10	8.872	164	1749978	40.00	ppm	0.00
69) Phenanthrene-d10	10.705	188	2886403	40.00	ppm	0.00
83) Chrysene-d12	14.503	240	2834018	40.00	ppm	0.00
92) Perylene-d12	16.576	264	2687116	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	5.293	152	757809	40.00	ppm	0.00
104) Acenaphthene-d10a	8.872	164	1749978	40.00	ppm	0.00
106) Chrysene-d12a	14.503	240	2834018	40.00	ppm	0.00
109) Phenanthrene-d10a	10.705	188	2886403	40.00	ppm	0.00
112) Naphthalene-d8a	6.762	136	3083890	40.00	ppm	0.00
114) Chrysene-d12b	14.503	240	2834018	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
85) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
108) 1-chlorooctadecane	12.222	57	742367	45.95	ppm	0.00
Spiked Amount 50.000			Recovery	=	91.90%	
110) o-terphenyl	11.228	230	1034936	26.13	ppm	-0.06
Spiked Amount 50.000			Recovery	=	52.26%	
Target Compounds						Qvalue
103) Benzaldehyde	4.823	105	461372	25.07	ppm	90
105) 1,2,4,5-Tetrachloroben...	7.809	216	526646	21.78	ppm	95
107) Benzidine	12.612	184	1070570	28.42	ppm	97
111) Atrazine	10.384	215	191779	25.80	ppm	96
113) Hydroquinone	7.360	110	554070	25.35	ppm	99

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

7.6.82

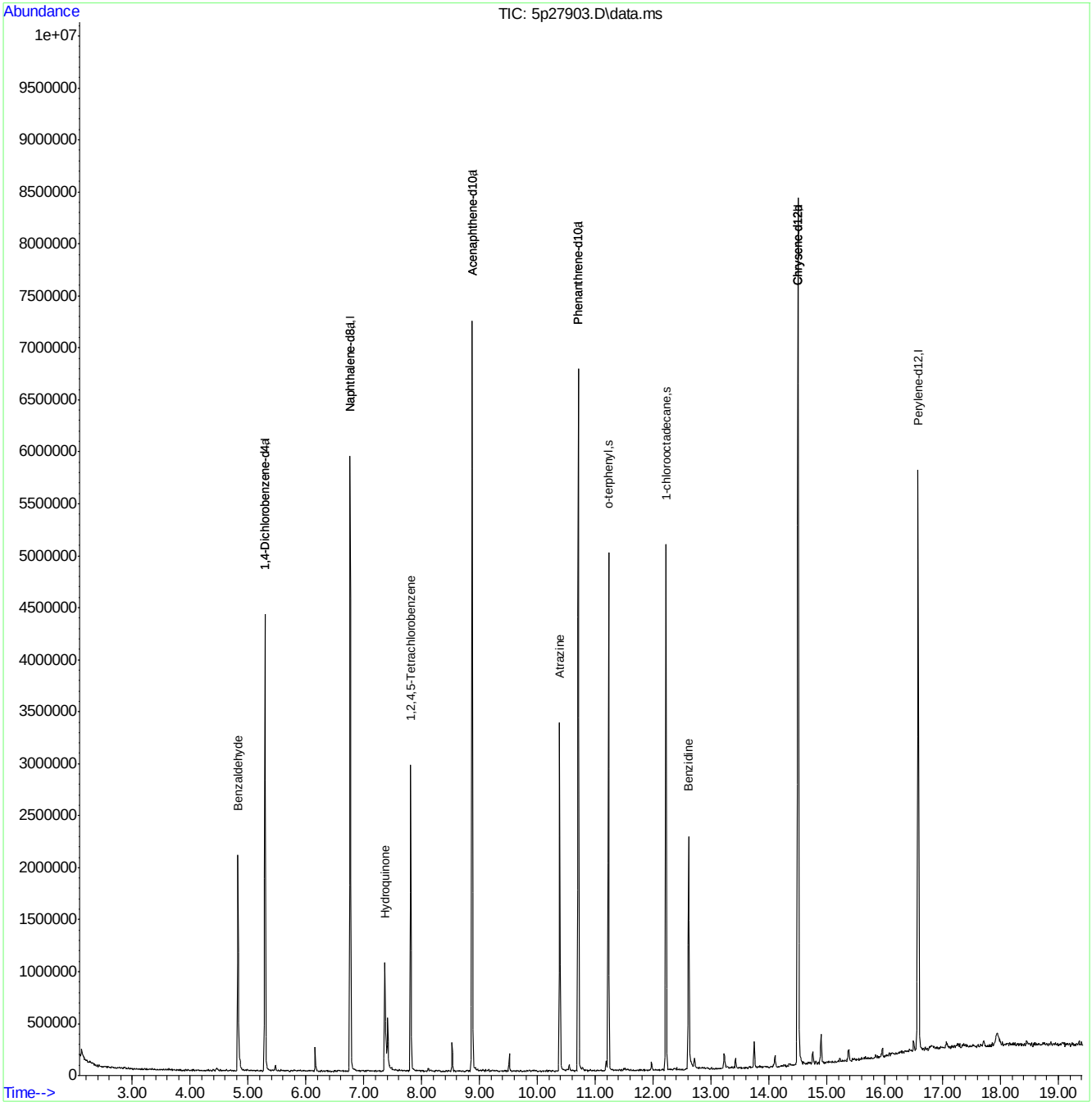
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\E5P1416\
Data File : 5p27903.D
Acq On : 3 May 2016 9:05 am
Operator : ashleyd
Sample : cc1383-25
Misc : op93450,e5p1416
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 03 12:17:43 2016
Quant Method : C:\MSDCHEM\1\METHODS\M5P1382.M
Quant Title : Semi Volatile GC/MS, zb-5msi 30mx .25mmx .25um
QLast Update : Tue May 03 08:59:50 2016
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Nina Pandya
04/13/16 13:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123506.D
Acq On : 12 Apr 2016 6:04 pm
Operator : sarad
Sample : ic5217-2
Misc : op92514,em5217
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 13 08:42:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:39:45 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.740	152	353054	40.00	ppm	0.00
24) Naphthalene-d8	5.883	136	1349163	40.00	ppm	0.00
47) Acenaphthene-d10	8.238	164	827850	40.00	ppm	0.00
69) Phenanthrene-d10	10.871	188	1457128	40.00	ppm	0.00
83) Chrysene-d12	16.047	240	1501120	40.00	ppm	0.00
92) Perylene-d12	18.675	264	1487177	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.740	152	353054	40.00	ppm	0.00
104) Acenaphthene-d10a	8.238	164	827850	40.00	ppm	0.00
107) Chrysene-d12a	16.047	240	1501046	40.00	ppm	0.00
110) Phenanthrene-d10a	10.871	188	1457128	40.00	ppm	0.00
112) Naphthalene-d8a	5.883	136	1349163	40.00	ppm	0.00
114) Chrysene-d12b	16.047	240	1501120	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.805	112	22608	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
8) Phenol-d5	4.515	99	27492	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
25) Nitrobenzene-d5	5.194	82	24685	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
51) 2-Fluorobiphenyl	7.218	172	62456	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
73) 2,4,6-Tribromophenol	9.611	330	10165	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
86) Terphenyl-d14	14.039	244	73873	2.00	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.00%	
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.315	88	10502	2.00	ppm	100
3) Pyridine	2.683	79	26188	2.00	ppm	100
4) N-Nitrosodimethylamine	2.619	42	11153	2.00	ppm	100
6) Indene	4.943	116	43867	2.00	ppm	100
7) Cumene	4.136	105	59159	2.00	ppm	100
9) Phenol	4.526	94	29661	2.00	ppm	100
10) Aniline	4.494	93	34516	2.00	ppm	100
11) bis(2-Chloroethyl)ether	4.531	93	24153	2.00	ppm	100
12) 2-Chlorophenol	4.601	128	26773	2.00	ppm	100
13) Decane	4.606	43	27279	2.00	ppm	100
14) 1,3-Dichlorobenzene	4.697	146	29862	2.00	ppm	100
15) 1,4-Dichlorobenzene	4.750	146	29310	2.00	ppm	100
16) Benzyl alcohol	4.863	108	14560	2.00	ppm	100
17) 1,2-Dichlorobenzene	4.873	146	28085	2.00	ppm	100
18) Acetophenone	5.066	105	34759	2.00	ppm	100
19) 2-Methylphenol	4.975	108	21233	2.00	ppm	100
20) 2,2'-oxybis(1-Chloropr...	4.953	121	7957	2.00	ppm	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123506.D
Acq On : 12 Apr 2016 6:04 pm
Operator : sarad
Sample : ic5217-2
Misc : op92514,em5217
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 13 08:42:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:39:45 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	5.103	108	23720	2.00	ppm	100
22) n-Nitroso-di-n-propyla...	5.060	70	19149	2.00	ppm	100
23) Hexachloroethane	5.151	201	11178	2.00	ppm	100
26) Nitrobenzene	5.210	77	27081	2.00	ppm	100
27) Quinoline	6.283	129	56131	2.00	ppm	100
28) Isophorone	5.423	82	47220	2.00	ppm	100
29) 2-Nitrophenol	5.503	139	13787	2.00	ppm	100
30) 2,4-Dimethylphenol	5.562	107	24589	2.00	ppm	100
31) Benzoic acid	5.674	105	10770	2.00	ppm	100
32) bis(2-Chloroethoxy)met...	5.621	93	28779	2.00	ppm	100
33) 2,4-Dichlorophenol	5.781	162	22290	2.00	ppm	100
34) 2,6-Dichlorophenol	5.984	162	23146	2.00	ppm	100
35) 1,3,5-Trichlorobenzene	5.509	180	26764	2.00	ppm	100
36) 1,2,4-Trichlorobenzene	5.824	180	25945	2.00	ppm	100
37) 1,2,3-Trichlorobenzene	6.064	180	26089	2.00	ppm	100
38) Naphthalene	5.904	128	77451	2.00	ppm	100
39) 4-Chloroaniline	5.973	127	31402	2.00	ppm	100
40) 2,3-Dichloroaniline	7.106	161	29187	2.00	ppm	100
41) Caprolactam	6.347	55	13868	2.00	ppm	100
42) Hexachlorobutadiene	6.032	225	15142	2.00	ppm	100
43) 4-Chloro-3-methylphenol	6.588	107	22283	2.00	ppm	100
44) 2-Methylnaphthalene	6.716	141	45834	2.00	ppm	100
45) 1-Methylnaphthalene	6.844	142	54890	2.00	ppm	100
46) Dimethylnaphthalene	7.592	156	49916	2.00	ppm	100
48) Hexachlorocyclopentadiene	6.930	237	10609	4.00	ppm	100
49) 2,4,6-Trichlorophenol	7.127	196	17392	2.00	ppm	100
50) 2,4,5-Trichlorophenol	7.218	196	19406	2.00	ppm	100
52) 2-Chloronaphthalene	7.384	162	54805	2.00	ppm	100
53) Biphenyl	7.362	154	67614	2.00	ppm	100
54) 2-Nitroaniline	7.560	65	15136	2.00	ppm	100
55) Dimethylphthalate	7.838	163	61502	2.00	ppm	100
56) Acenaphthylene	8.008	152	87080	2.00	ppm	100
57) 2,6-Dinitrotoluene	7.928	165	13081	2.00	ppm	100
58) 3-Nitroaniline	8.211	138	14184	2.00	ppm	100
59) Acenaphthene	8.292	153	53595	2.00	ppm	100
60) 2,4-Dinitrophenol	8.409	184	4262	4.00	ppm	100
61) 4-Nitrophenol	8.697	109	5914	2.00	ppm	100
62) Dibenzofuran	8.580	168	80037	2.00	ppm	100
63) 2,4-Dinitrotoluene	8.601	165	16573	2.00	ppm	100
64) 2,3,4,6-Tetrachlorophenol	8.836	232	13115	2.00	ppm	100
65) Diethylphthalate	9.029	149	61137	2.00	ppm	100
66) Fluorene	9.167	166	62899	2.00	ppm	100
67) 4-Chlorophenyl-phenyle...	9.194	204	30288	2.00	ppm	100
68) 4-Nitroaniline	9.258	138	12733	2.00	ppm	100
70) 4,6-Dinitro-2-methylph...	9.322	198	5814	2.00	ppm	100
71) n-Nitrosodiphenylamine	9.413	169	41611	2.00	ppm	100
72) 1,2-Diphenylhydrazine	9.472	77	53751	2.00	ppm	100
74) 4-Bromophenyl-phenylether	10.070	248	19351	2.00	ppm	100
75) Hexachlorobenzene	10.166	284	22945	2.00	ppm	100
76) Pentachlorophenol	10.588	266	13056	4.00	ppm	100

SGS ACCUTEST JC19023

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

7.6.83

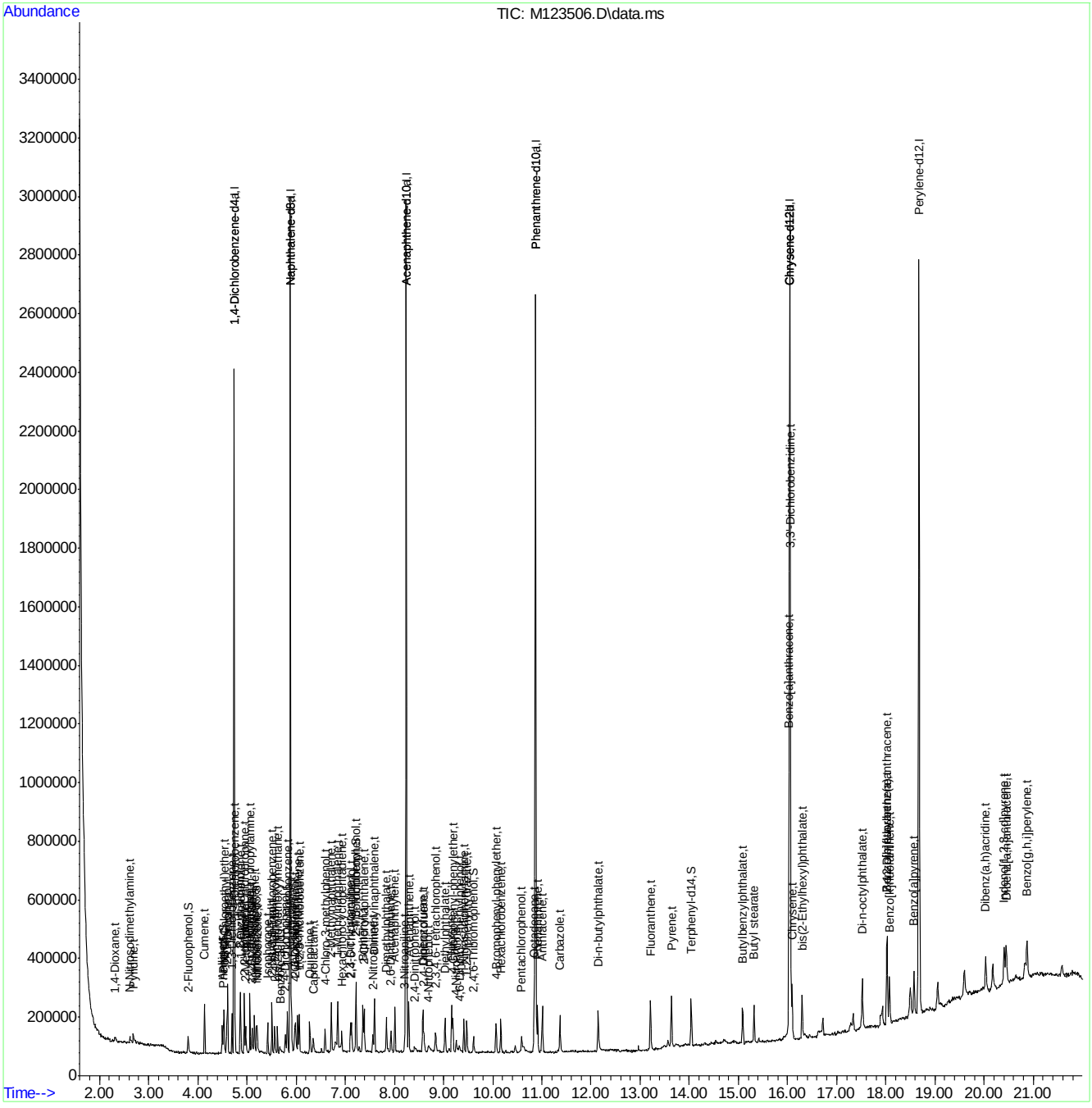
7

SGS ACCUTEST JC19023

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 JC19023

Manual Integration Approval Summary

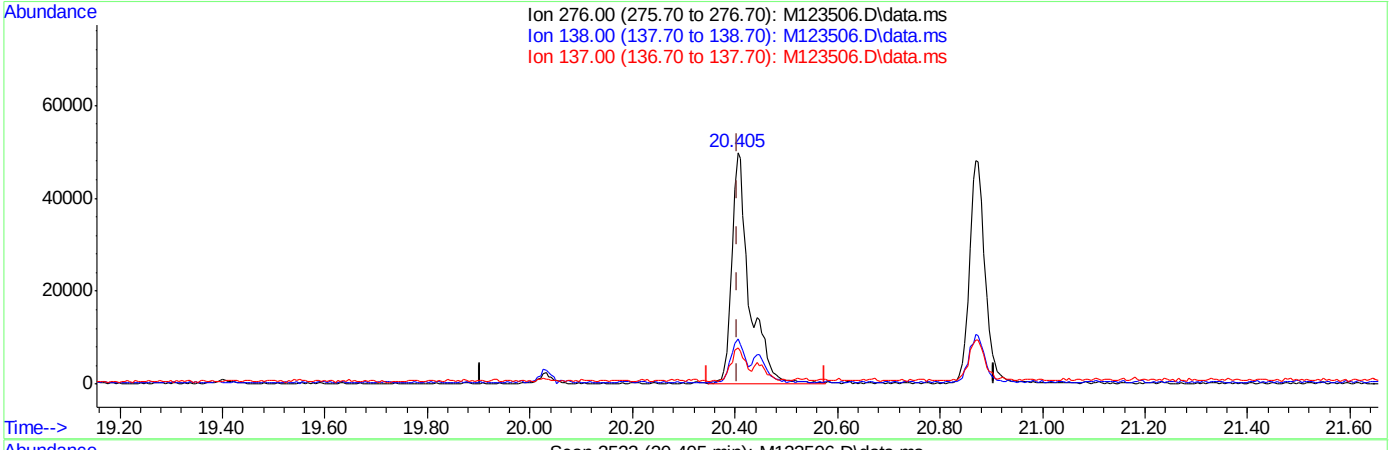
Sample Number:	EM5217-IC5217	**Method:**	SW846 8270D
Lab FileID:	M123506.D	**Analyst approved:**	04/13/16 13:03 Ashley Dye
Injection Time:	04/12/16 18:04	**Supervisor approved:**	04/13/16 13:43 Nina Pandya

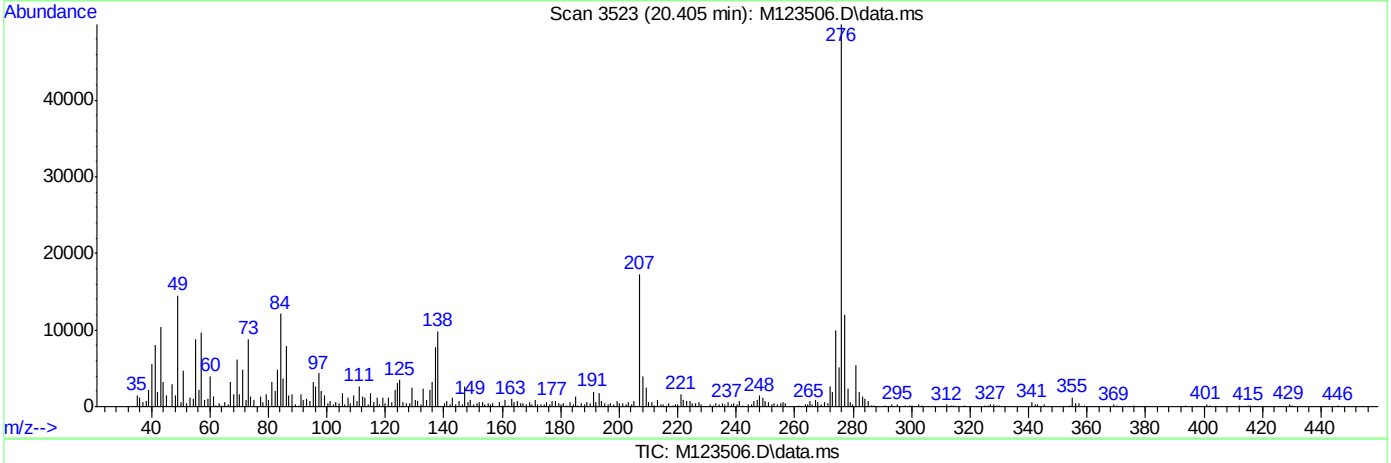
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		20.41	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123506.D
Acq On : 12 Apr 2016 6:04 pm
Operator : sarad
Sample : ic5217-2
Misc : op92514,em5217
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 13 08:38:38 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:37:50 2016
Response via : Initial Calibration





(97) Indeno[1,2,3-cd]pyrene (t)

20.405min (0.000) 2.49ppm

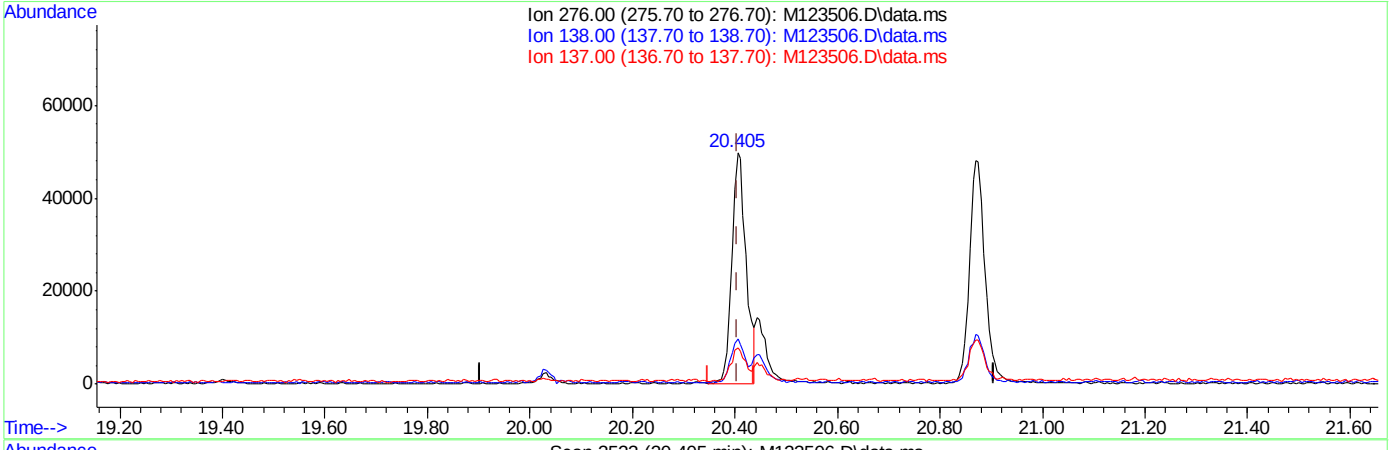
response 121176

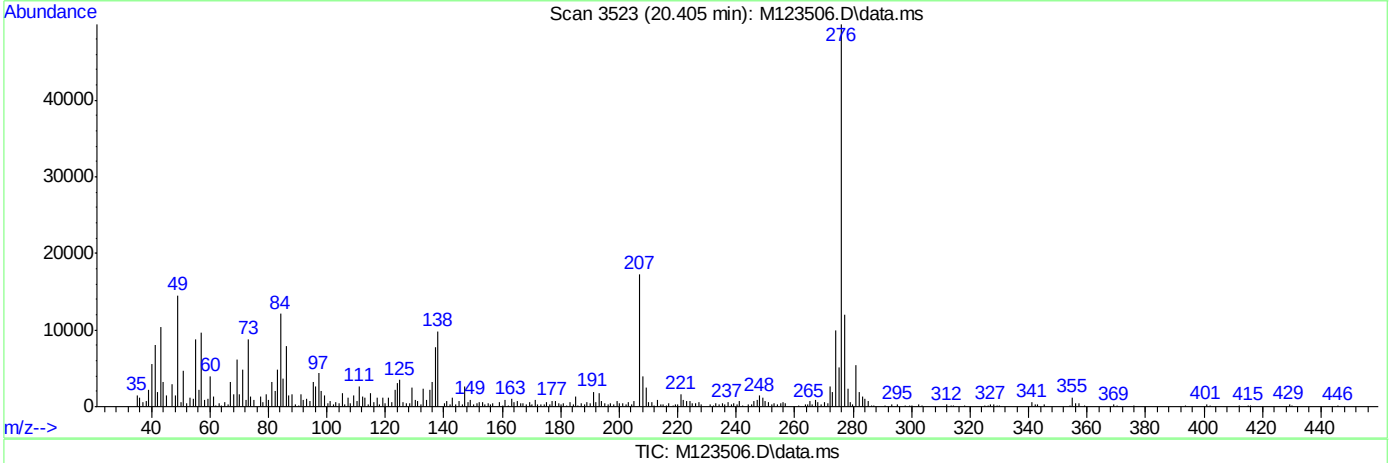
Ion	Exp%	Act%
276.00	100	100
138.00	15.30	18.78
137.00	12.70	13.78
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123506.D
Acq On : 12 Apr 2016 6:04 pm
Operator : sarad
Sample : ic5217-2
Misc : op92514,em5217
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 13 08:42:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:39:45 2016
Response via : Initial Calibration





TIC: M123506.D\data.ms

(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 JC19023

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

7.6.84

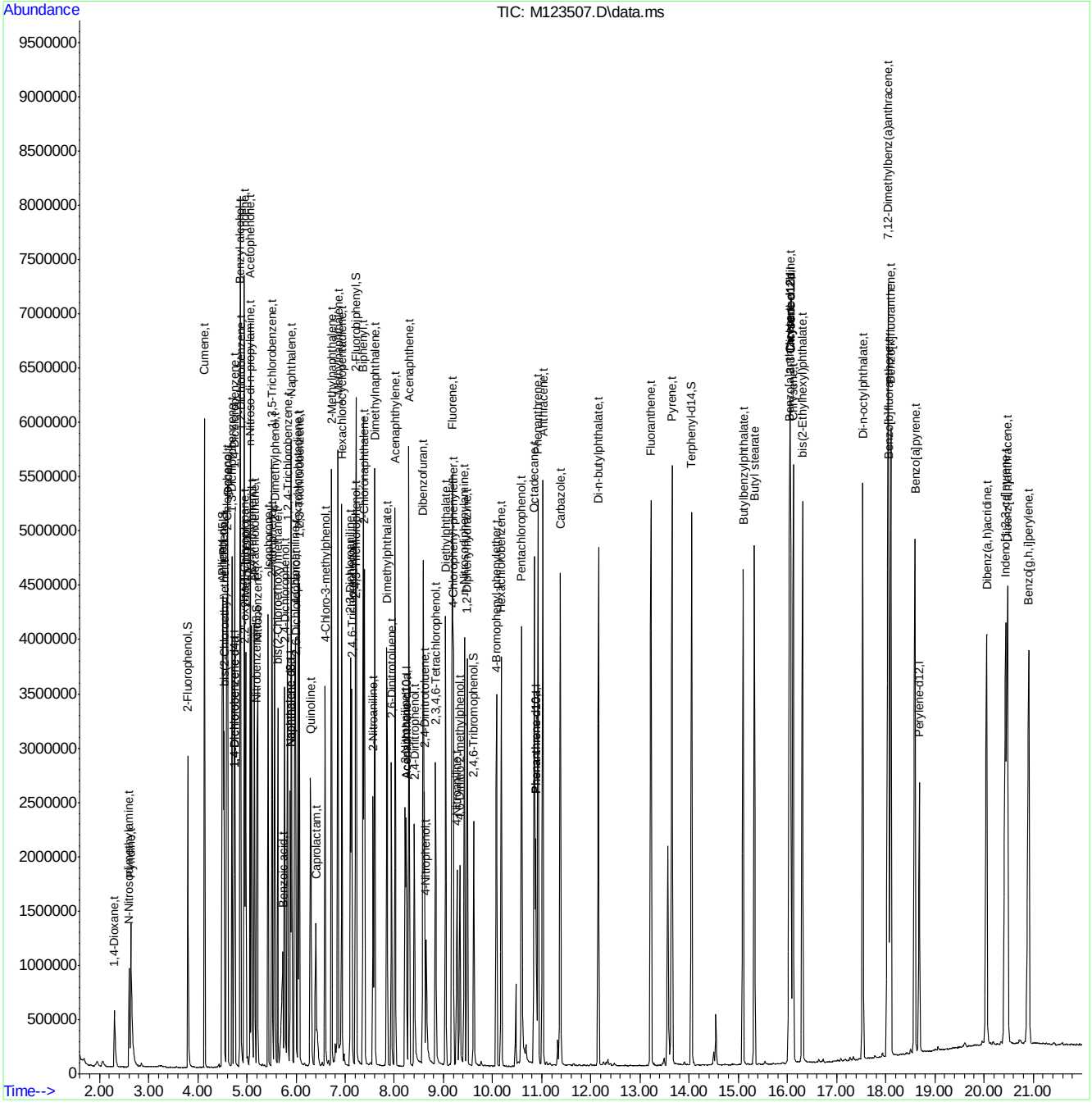
7

SGS ACCUTEST JC19023

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 JC19023

Manual Integration Approval Summary

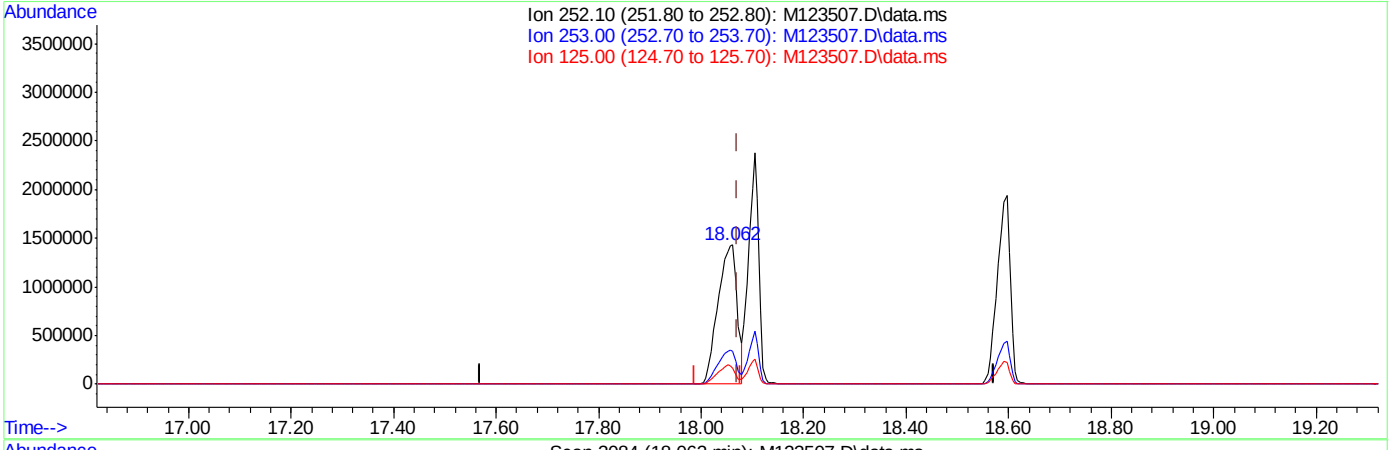
Sample Number:	EM5217-IC5217	**Method:**	SW846 8270D
Lab FileID:	M123507.D	**Analyst approved:**	04/13/16 13:03 Ashley Dye
Injection Time:	04/12/16 18:33	**Supervisor approved:**	04/13/16 13:43 Nina Pandya

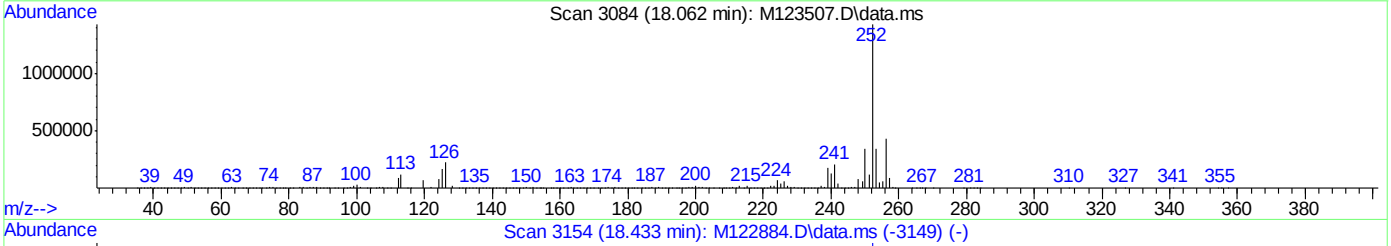
Parameter	CAS	Sig#	R.T. (min.)	Reason
Benzo(k)fluoranthene	207-08-9		18.10	Poor instrument integration

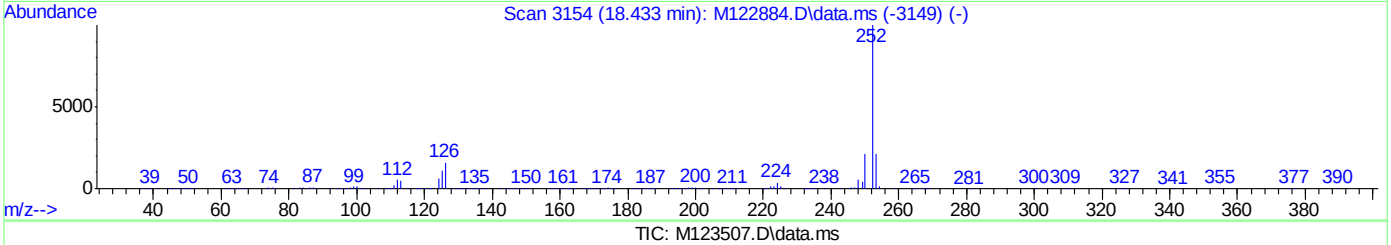
Quantitation Report (Qedit)

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

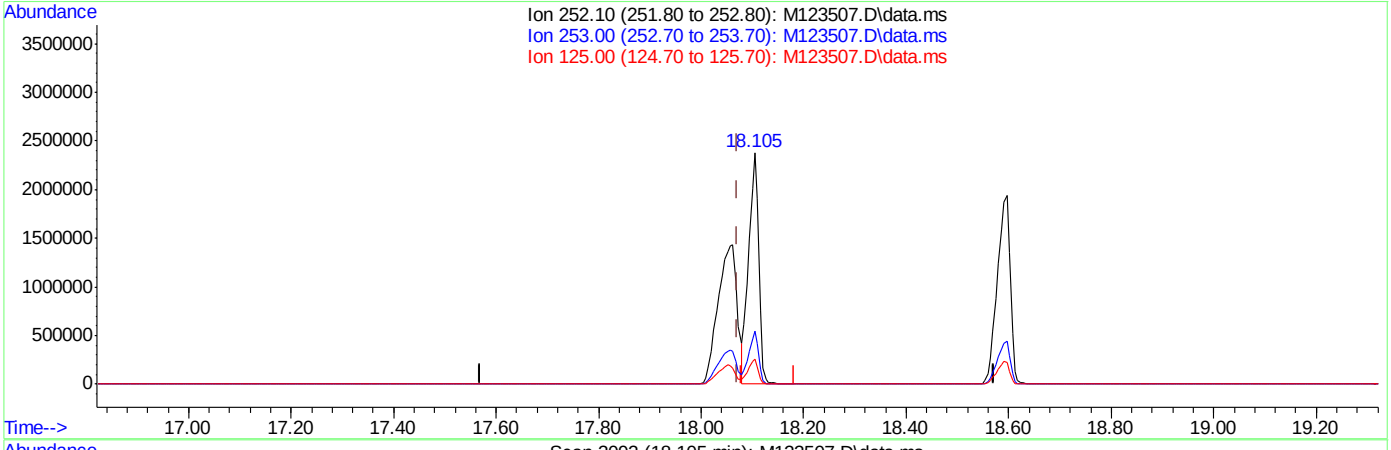
response 3682371

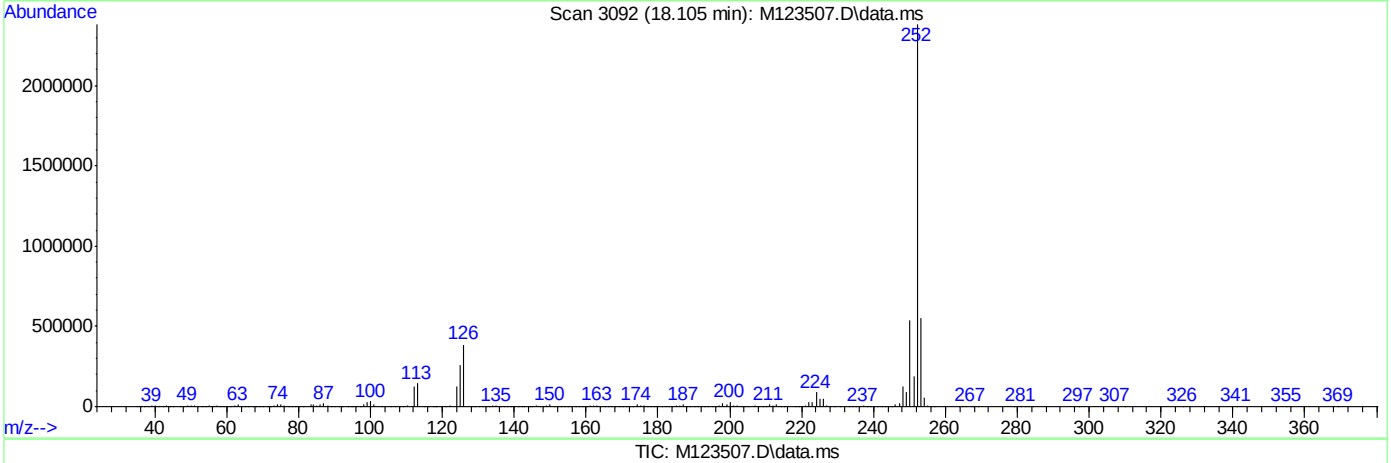
Ion	Exp%	Act%
252.10	100	100
253.00	20.70	23.89
125.00	9.70	11.62
0.00	0.00	0.00

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 JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123508.D
Acq On : 12 Apr 2016 7:02 pm
Operator : sarad
Sample : ic5217-80
Misc : op92514,em5217
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 13 08:44:07 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:43:24 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.739	152	338996	40.00	ppm	0.00
24) Naphthalene-d8	5.882	136	1304699	40.00	ppm	0.00
47) Acenaphthene-d10	8.243	164	795794	40.00	ppm	0.00
69) Phenanthrene-d10	10.876	188	1395633	40.00	ppm	0.00
83) Chrysene-d12	16.062	240	1398398	40.00	ppm	0.00
92) Perylene-d12	18.685	264	1581079	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.739	152	338996	40.00	ppm	0.00
104) Acenaphthene-d10a	8.243	164	795794	40.00	ppm	0.00
107) Chrysene-d12a	16.062	240	1398398	40.00	ppm	0.00
110) Phenanthrene-d10a	10.876	188	1395633	40.00	ppm	0.00
112) Naphthalene-d8a	5.882	136	1304699	40.00	ppm	0.00
114) Chrysene-d12b	16.062	240	1398398	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.799	112	871890	80.49	ppm	0.00
Spiked Amount 50.000			Recovery	=	160.98%	
8) Phenol-d5	4.510	99	1064454	81.53	ppm	0.00
Spiked Amount 50.000			Recovery	=	163.06%	
25) Nitrobenzene-d5	5.199	82	893645	78.51	ppm	0.00
Spiked Amount 50.000			Recovery	=	157.02%	
51) 2-Fluorobiphenyl	7.223	172	1860771	70.72	ppm	0.00
Spiked Amount 50.000			Recovery	=	141.44%	
73) 2,4,6-Tribromophenol	9.616	330	390687	81.15	ppm	0.00
Spiked Amount 50.000			Recovery	=	162.30%	
86) Terphenyl-d14	14.049	244	2413819	75.44	ppm	0.00
Spiked Amount 50.000			Recovery	=	150.88%	
109) 1-chlorooctadecane	0.000	57	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.304	88	352358	75.07	ppm	98
3) Pyridine	2.635	79	949501	79.85	ppm	99
4) N-Nitrosodimethylamine	2.598	42	411585	80.26	ppm	99
6) Indene	4.942	116	1454204	75.40	ppm	99
7) Cumene	4.141	105	1958543	75.38	ppm	100
9) Phenol	4.515	94	1169370	81.94	ppm	97
10) Aniline	4.494	93	1316012	81.87	ppm	94
11) bis(2-Chloroethyl)ether	4.536	93	766690	73.02	ppm	97
12) 2-Chlorophenol	4.601	128	888727	74.67	ppm	95
13) Decane	4.611	43	737596	67.07	ppm	99
14) 1,3-Dichlorobenzene	4.697	146	993442	75.28	ppm	99
15) 1,4-Dichlorobenzene	4.755	146	980894	75.31	ppm	98
16) Benzyl alcohol	4.862	108	553141	80.59	ppm	97
17) 1,2-Dichlorobenzene	4.873	146	898624	73.81	ppm	98
18) Acetophenone	5.065	105	1169422	75.43	ppm	72
19) 2-Methylphenol	4.974	108	768955	78.59	ppm	99
20) 2,2'-oxybis(1-Chloropr...	4.953	121	263363	75.59	ppm	100

SGS ACCUTEST JC19023

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 JC19023

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

7.6.85

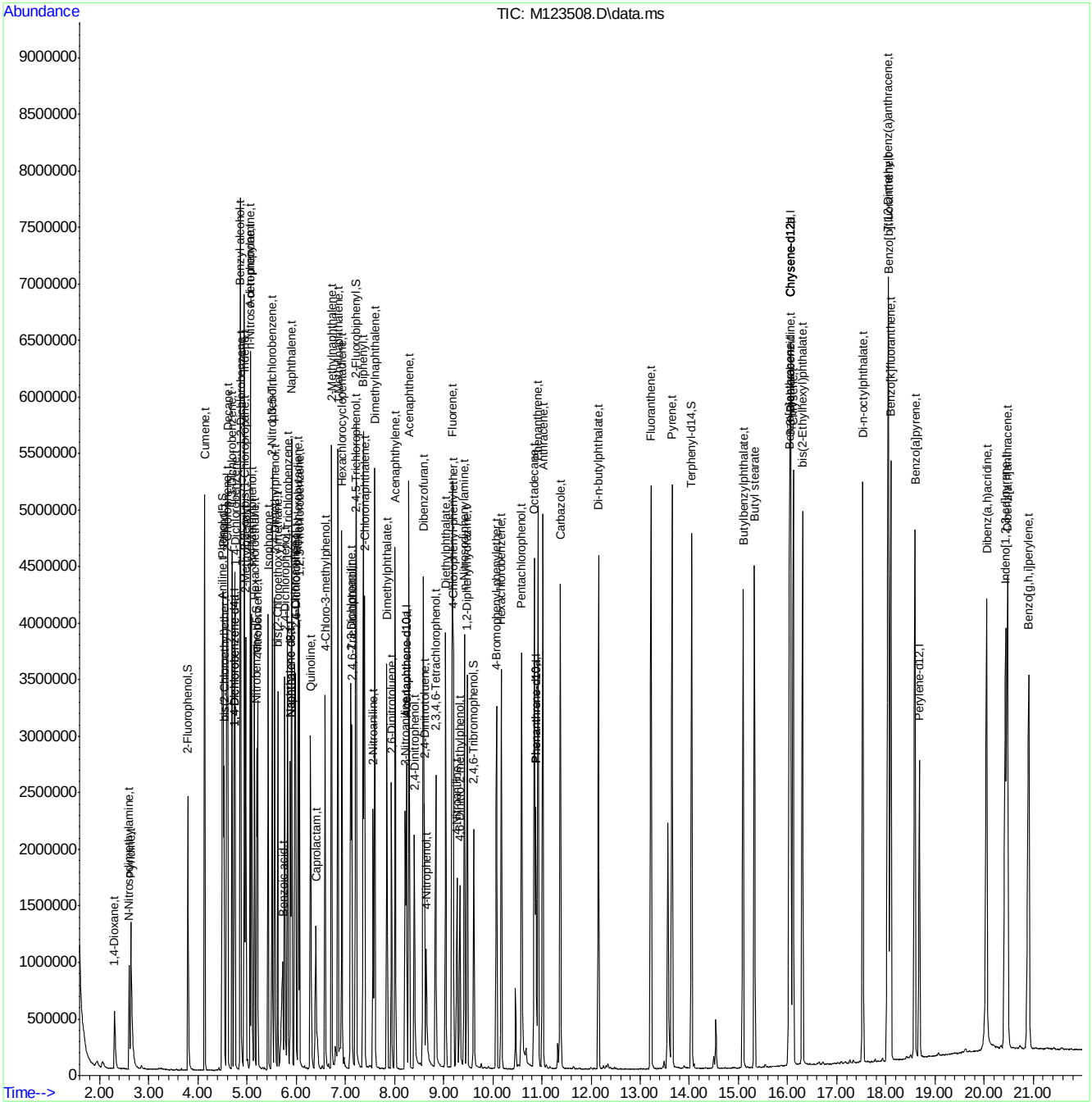
7

SGS ACCUTEST JC19023

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



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

7.6.86

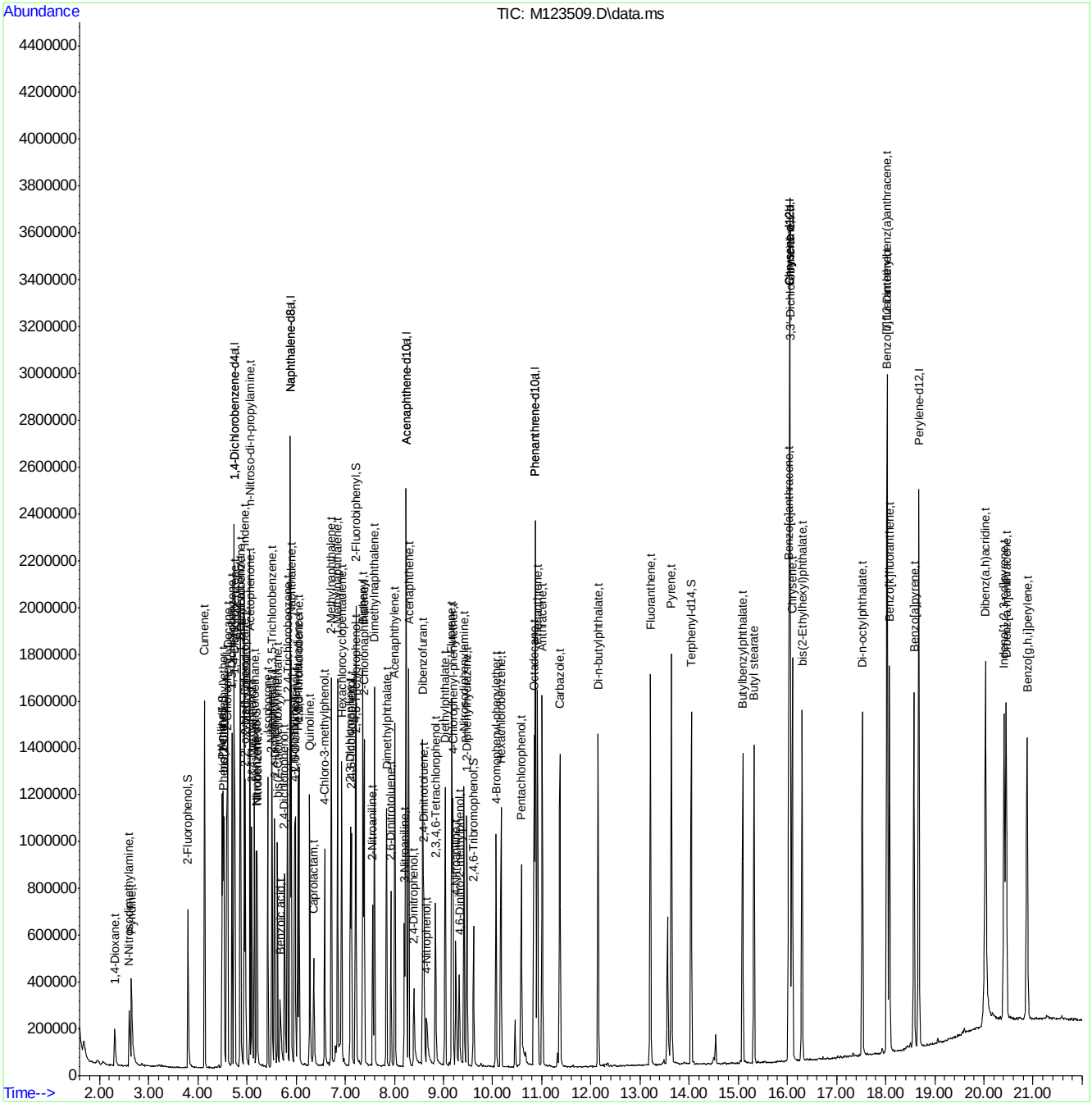
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123509.D
Acq On : 12 Apr 2016 7:31 pm
Operator : sarad
Sample : ic5217-25
Misc : op92514,em5217
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 13 08:45:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:44:21 2016
Response via : Initial Calibration



MM5217.M Wed Apr 13 12:10:40 2016 MSM

SGS ACCUTEST JC19023

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

7.6.87

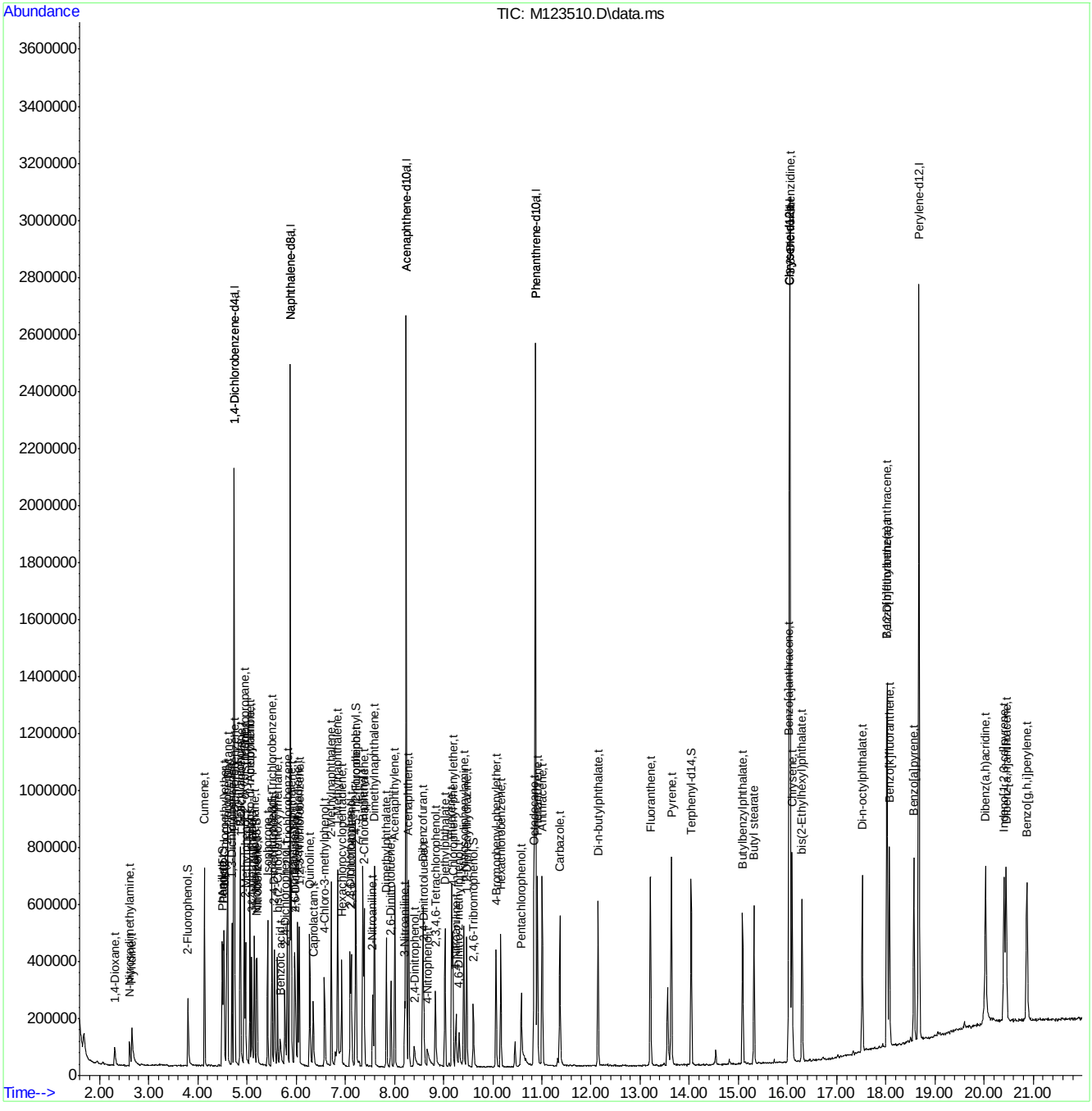
7

SGS ACCUTEST JC19023

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



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 JC19023

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

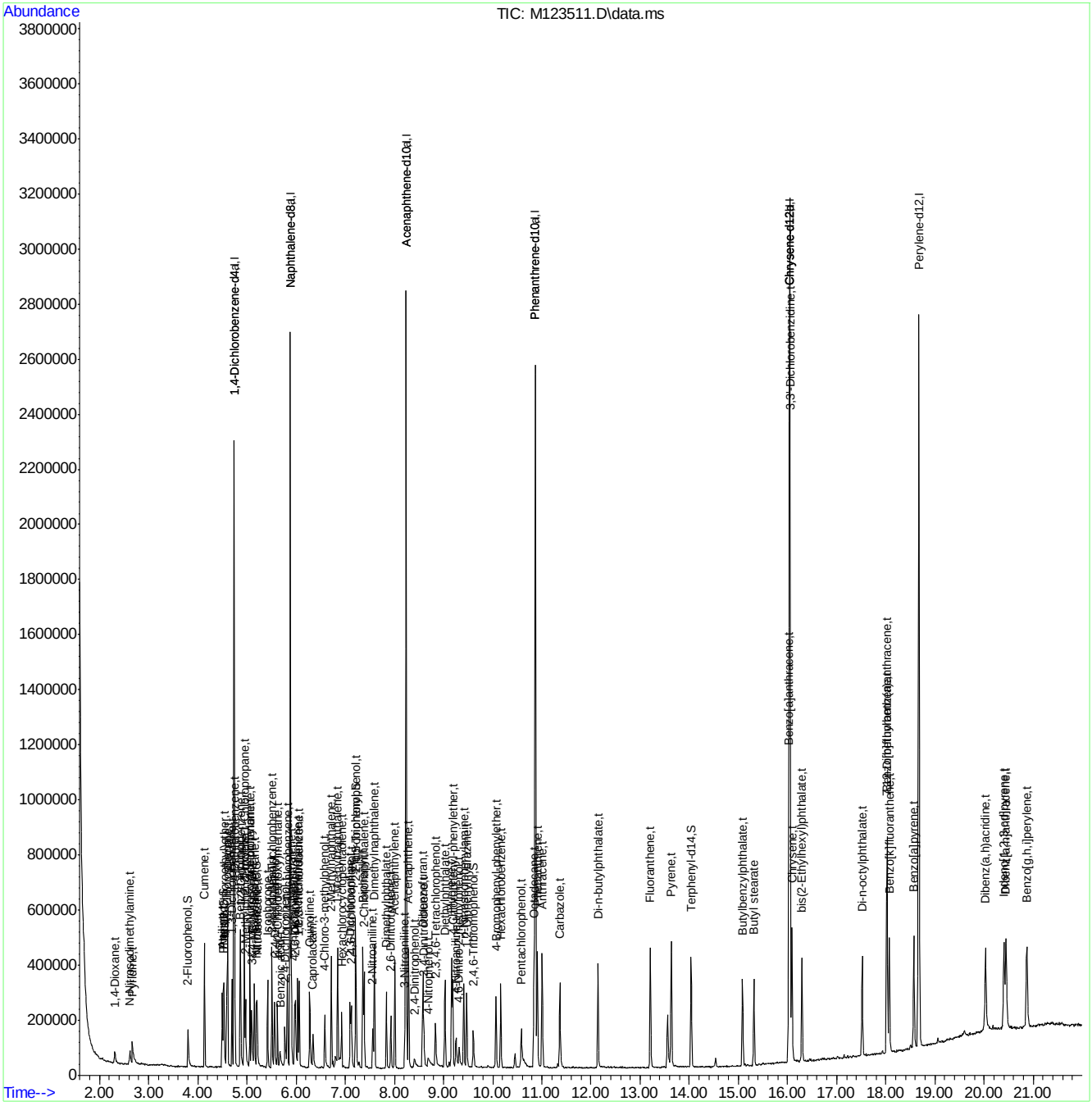
7.6.88

7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123511.D
Acq On : 12 Apr 2016 8:29 pm
Operator : sarad
Sample : ic5217-5
Misc : op92514,em5217
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 13 08:49:37 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:48:04 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

Manual Integration Approval Summary

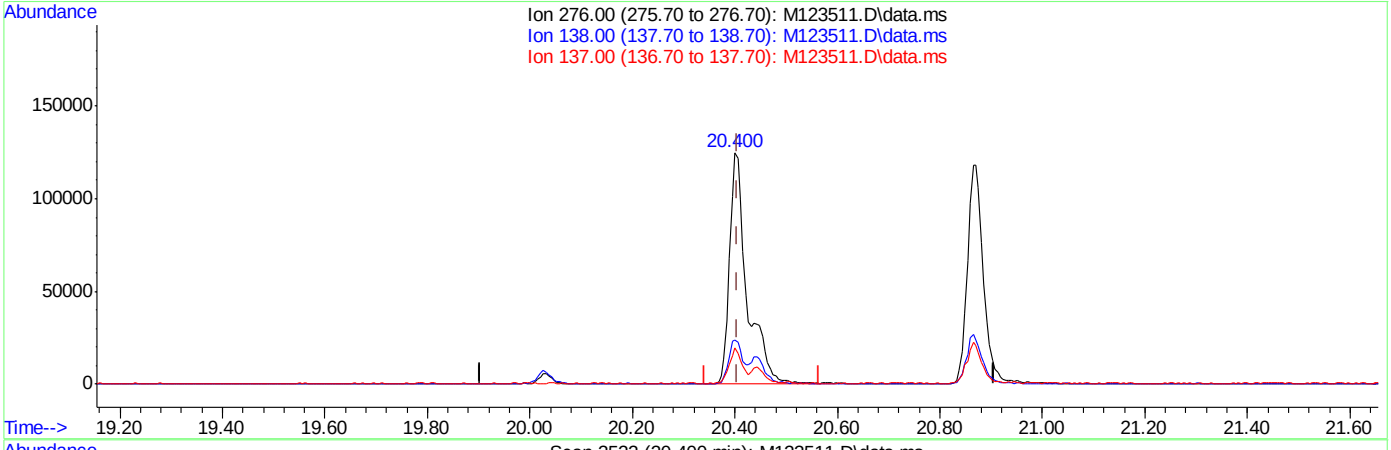
Sample Number:	EM5217-IC5217	**Method:**	SW846 8270D
Lab FileID:	M123511.D	**Analyst approved:**	04/13/16 13:03 Ashley Dye
Injection Time:	04/12/16 20:29	**Supervisor approved:**	04/13/16 13:43 Nina Pandya

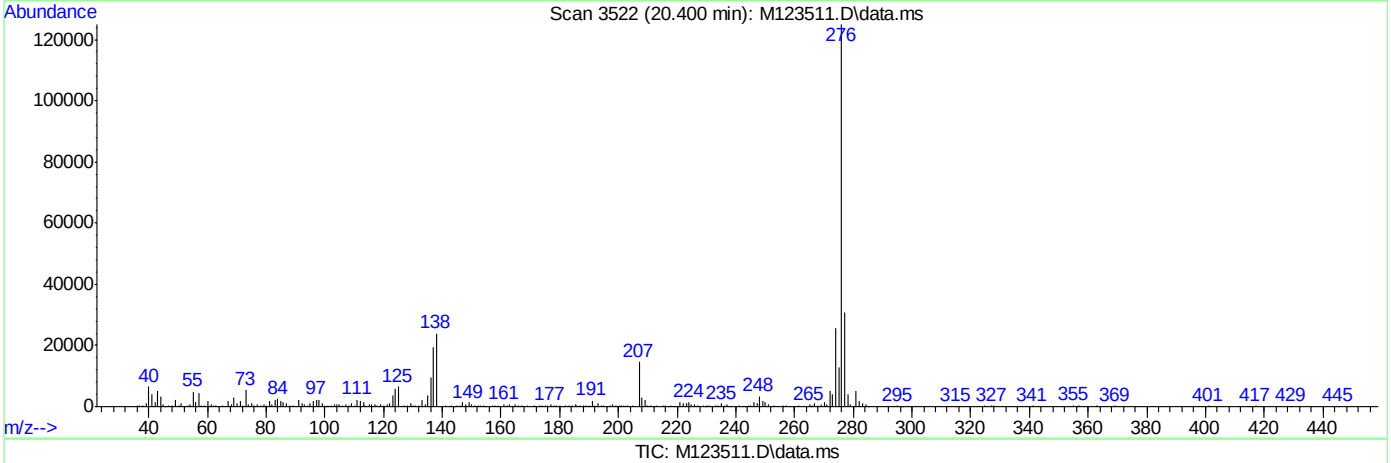
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		20.40	Overlapping peak

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

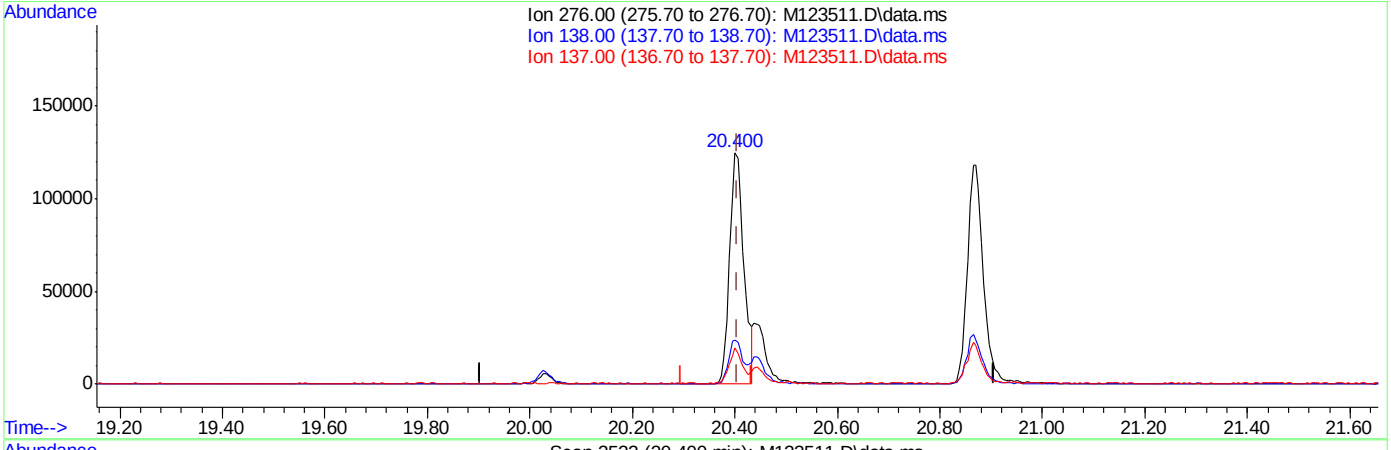
response 301851

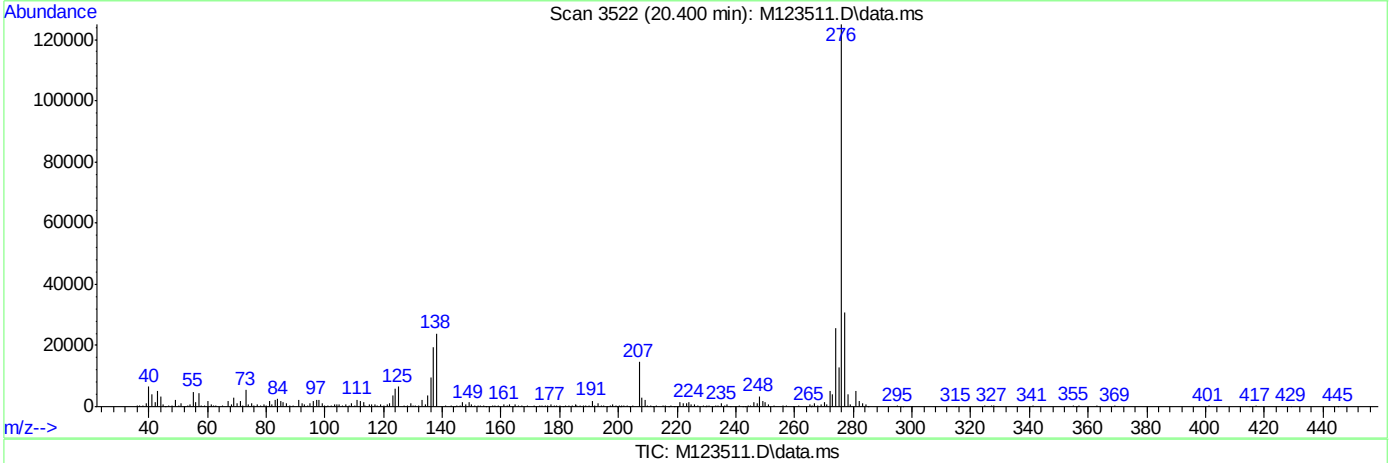
Ion	Exp%	Act%
276.00	100	100
138.00	17.80	19.00
137.00	12.90	15.19
0.00	0.00	0.00

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 JC19023

M123512.D

Manual Integrations APPROVED (compounds with "m" flag)

Nina Pandya
04/13/16 13:43

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123512.D
Acq On : 12 Apr 2016 8:57 pm
Operator : sarad
Sample : ic5217-1
Misc : op92514,em5217
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 13 08:50:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:49:48 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.737	152	360169	40.00	ppm	0.00
24) Naphthalene-d8	5.880	136	1372967	40.00	ppm	0.00
47) Acenaphthene-d10	8.240	164	830731	40.00	ppm	0.00
69) Phenanthrene-d10	10.868	188	1485058	40.00	ppm	0.00
83) Chrysene-d12	16.044	240	1603028	40.00	ppm	0.00
92) Perylene-d12	18.671	264	1583851	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.737	152	360169	40.00	ppm	0.00
104) Acenaphthene-d10a	8.240	164	830731	40.00	ppm	0.00
107) Chrysene-d12a	16.044	240	1603111	40.00	ppm	0.00
110) Phenanthrene-d10a	10.868	188	1485058	40.00	ppm	0.00
112) Naphthalene-d8a	5.880	136	1372967	40.00	ppm	0.00
114) Chrysene-d12b	16.044	240	1603028	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	3.807	112	10135	0.91	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.82%	
8) Phenol-d5	4.523	99	12591	0.90	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.80%	
25) Nitrobenzene-d5	5.201	82	13616	1.13	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.26%	
51) 2-Fluorobiphenyl	7.215	172	31523	1.17	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.34%	
73) 2,4,6-Tribromophenol	9.618	330	4967	0.96	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.92%	
86) Terphenyl-d14	14.041	244	38019	1.06	ppm	0.00
Spiked Amount 50.000			Recovery	=	2.12%	
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
2) 1,4-Dioxane	2.317	88	6259	1.29	ppm	90
3) Pyridine	2.702	79	10097	0.81	ppm	89
4) N-Nitrosodimethylamine	2.632	42	5405	1.02	ppm	90
6) Indene	4.945	116	22568	1.11	ppm	97
7) Cumene	4.138	105	28808	1.05	ppm	98
9) Phenol	4.534	94	13131	0.88	ppm	76
10) Aniline	4.496	93	16952	0.98	ppm	92
11) bis(2-Chloroethyl)ether	4.534	93	14205	1.26	ppm	98
12) 2-Chlorophenol	4.603	128	12722	1.03	ppm	94
13) Decane	4.608	43	14540	1.27	ppm	91
14) 1,3-Dichlorobenzene	4.694	146	15726	1.13	ppm	98
15) 1,4-Dichlorobenzene	4.753	146	15617	1.13	ppm	97
16) Benzyl alcohol	4.875	108	6180	0.85	ppm	85
17) 1,2-Dichlorobenzene	4.875	146	14594	1.12	ppm	95
18) Acetophenone	5.068	105	16979	1.03	ppm	94
19) 2-Methylphenol	4.977	108	9524	0.92	ppm	97
20) 2,2'-oxybis(1-Chloropr...	4.956	121	4467	1.18	ppm #	56

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5217\
Data File : M123512.D
Acq On : 12 Apr 2016 8:57 pm
Operator : sarad
Sample : ic5217-1
Misc : op92514,em5217
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 13 08:50:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 08:49:48 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
21) 3&4-Methylphenol	5.105	108	10710	0.95	ppm		91
22) n-Nitroso-di-n-propyla...	5.062	70	9920	1.13	ppm		93
23) Hexachloroethane	5.153	201	6087	1.17	ppm		85
26) Nitrobenzene	5.217	77	12998	1.05	ppm		96
27) Quinoline	6.285	129	27854	1.07	ppm		95
28) Isophorone	5.420	82	23918	1.08	ppm		98
29) 2-Nitrophenol	5.506	139	7063	1.01	ppm		93
30) 2,4-Dimethylphenol	5.570	107	12968	1.14	ppm		96
31) Benzoic acid	5.698	105	5689	0.80	ppm	#	38
32) bis(2-Chloroethoxy)met...	5.623	93	14659	1.09	ppm		96
33) 2,4-Dichlorophenol	5.794	162	9484	0.89	ppm		91
34) 2,6-Dichlorophenol	5.992	162	12475	1.20	ppm		95
35) 1,3,5-Trichlorobenzene	5.511	180	13917	1.13	ppm		94
36) 1,2,4-Trichlorobenzene	5.826	180	13843	1.14	ppm		98
37) 1,2,3-Trichlorobenzene	6.061	180	12795	1.08	ppm		96
38) Naphthalene	5.901	128	40888	1.15	ppm		99
39) 4-Chloroaniline	5.976	127	16041	1.04	ppm		96
40) 2,3-Dichloroaniline	7.108	161	14316	1.05	ppm		95
41) Caprolactam	6.344	55	6536	1.17	ppm		91
42) Hexachlorobutadiene	6.034	225	7828	1.12	ppm		99
43) 4-Chloro-3-methylphenol	6.595	107	11739	1.14	ppm	#	85
44) 2-Methylnaphthalene	6.718	141	25149	1.19	ppm		89
45) 1-Methylnaphthalene	6.846	142	26616	1.07	ppm		94
46) Dimethylnaphthalene	7.594	156	26067	1.14	ppm		95
48) Hexachlorocyclopentadiene	6.926	237	2486	0.57	ppm		83
49) 2,4,6-Trichlorophenol	7.129	196	8457	1.07	ppm		92
50) 2,4,5-Trichlorophenol	7.226	196	9308	1.09	ppm		95
52) 2-Chloronaphthalene	7.386	162	28001	1.17	ppm		96
53) Biphenyl	7.359	154	36030	1.18	ppm		98
54) 2-Nitroaniline	7.567	65	7250	1.05	ppm		94
55) Dimethylphthalate	7.834	163	32051	1.15	ppm		94
56) Acenaphthylene	8.011	152	46069	1.17	ppm		98
57) 2,6-Dinitrotoluene	7.925	165	6311	1.00	ppm		91
58) 3-Nitroaniline	8.230	138	6916	0.99	ppm	#	1
59) Acenaphthene	8.288	153	27813	1.17	ppm		93
62) Dibenzofuran	8.582	168	40254	1.13	ppm		92
63) 2,4-Dinitrotoluene	8.604	165	7764	0.93	ppm		89
64) 2,3,4,6-Tetrachlorophenol	8.844	232	6973	1.05	ppm		90
65) Diethylphthalate	9.031	149	31068	1.11	ppm		98
66) Fluorene	9.164	166	32000	1.11	ppm		93
67) 4-Chlorophenyl-phenyle...	9.191	204	15525	1.13	ppm		88
68) 4-Nitroaniline	9.282	138	6237	0.92	ppm		86
70) 4,6-Dinitro-2-methylph...	9.335	198	2391	0.57	ppm		84
71) n-Nitrosodiphenylamine	9.415	169	22479	1.14	ppm		93
72) 1,2-Diphenylhydrazine	9.474	77	28053	1.11	ppm		97
74) 4-Bromophenyl-phenylether	10.067	248	10130	1.11	ppm		94
75) Hexachlorobenzene	10.163	284	12552	1.18	ppm		89
76) Pentachlorophenol	10.596	266	3855	0.94	ppm		77
77) Phenanthrene	10.911	178	45781	1.11	ppm		98
78) Anthracene	11.007	178	46745	1.10	ppm		93

SGS ACCUTEST JC19023

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

7.6.89

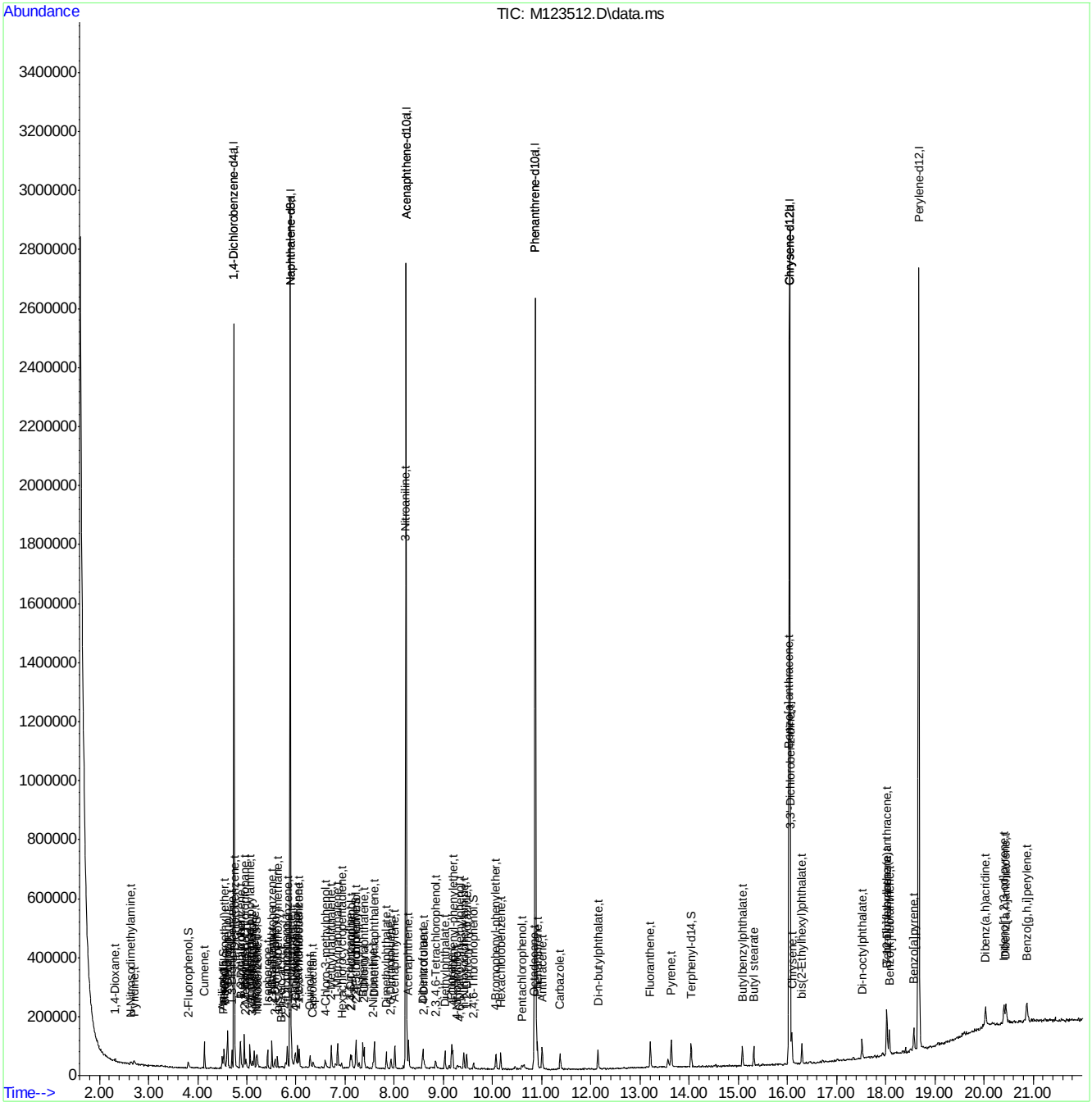
7

SGS ACCUTEST JC19023

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 JC19023

Manual Integration Approval Summary

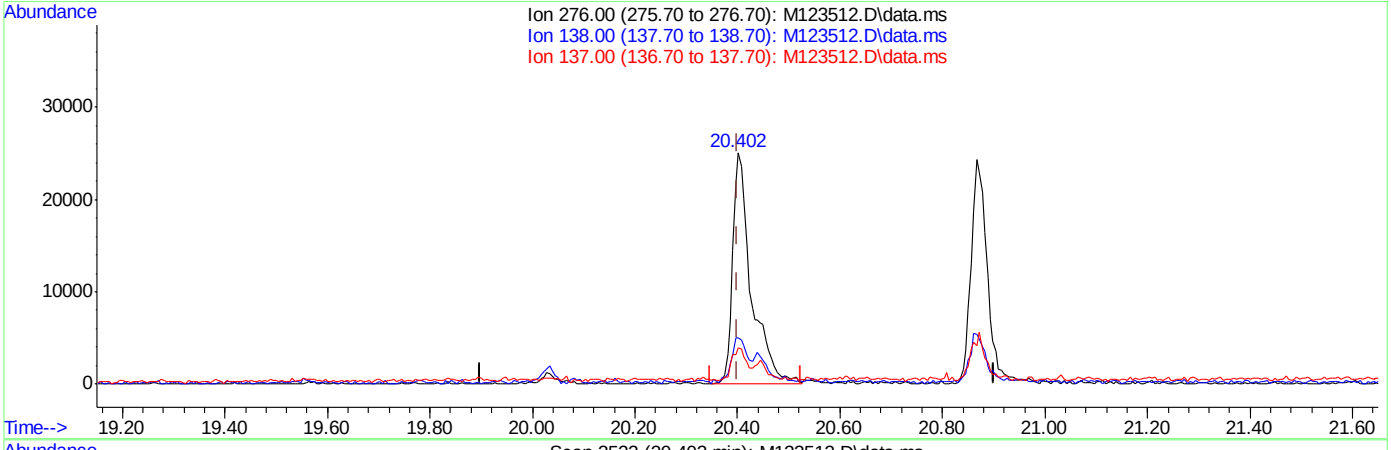
Sample Number:	EM5217-IC5217	**Method:**	SW846 8270D
Lab FileID:	M123512.D	**Analyst approved:**	04/13/16 13:03 Ashley Dye
Injection Time:	04/12/16 20:57	**Supervisor approved:**	04/13/16 13:43 Nina Pandya

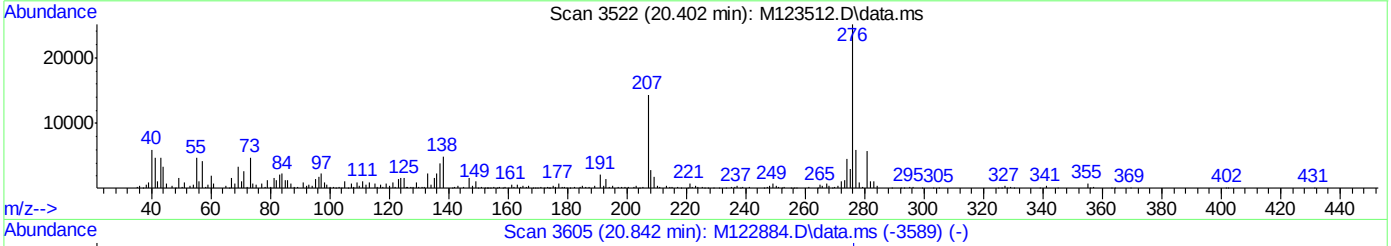
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		20.40	Overlapping peak

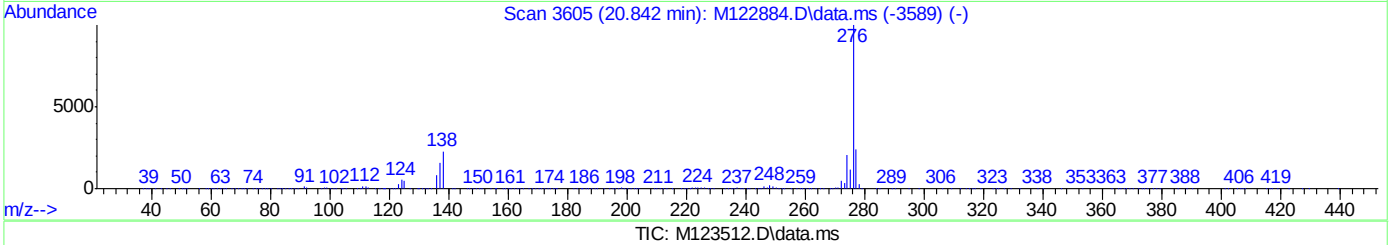
Quantitation Report (Qedit)

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

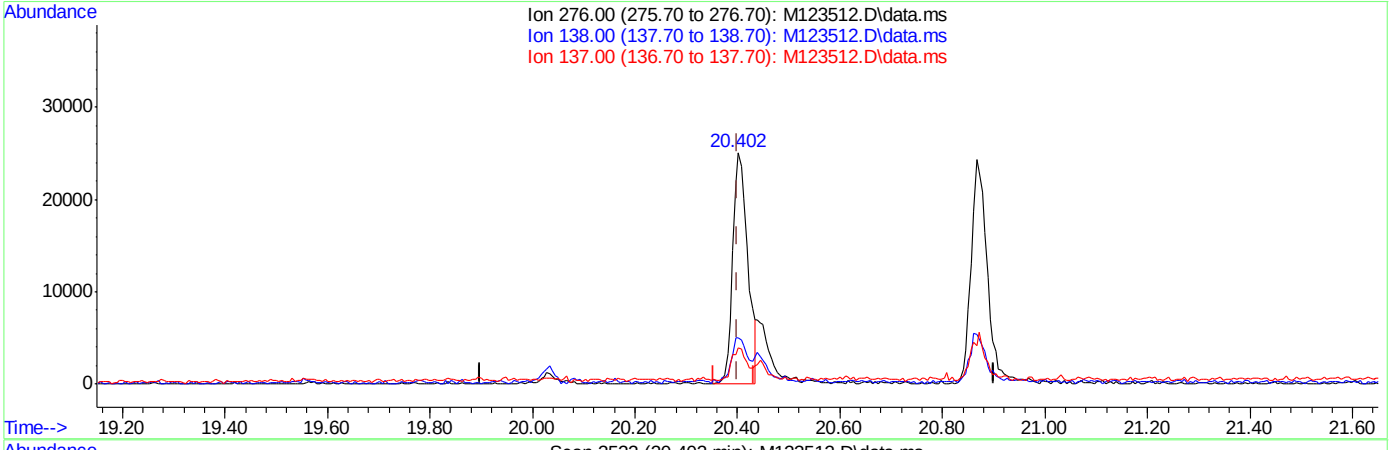
response 63148

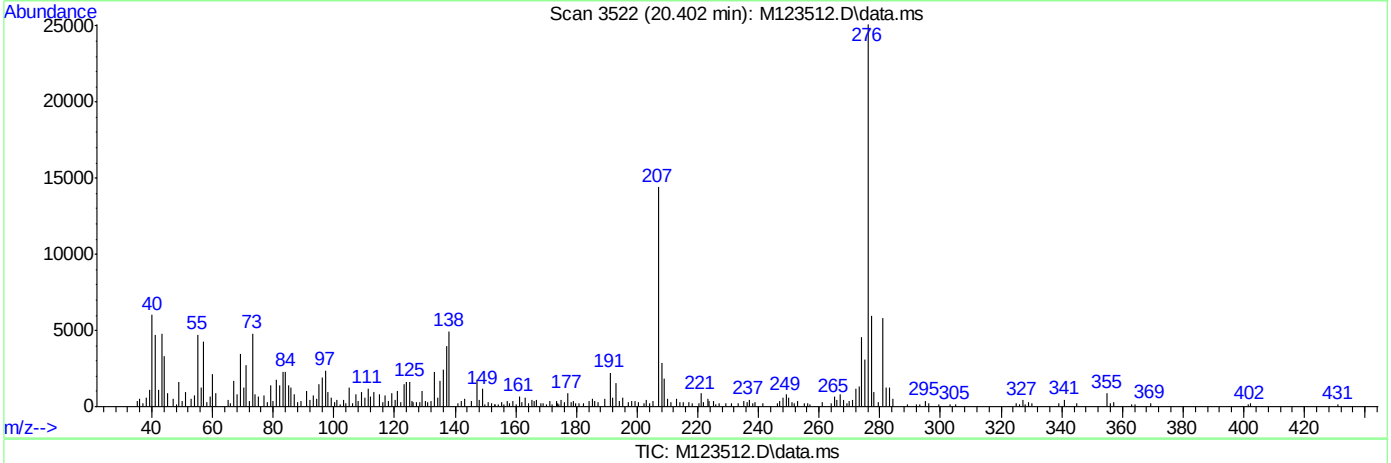
Ion	Exp%	Act%
276.00	100	100
138.00	19.20	19.27
137.00	15.50	14.26
0.00	0.00	0.00

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

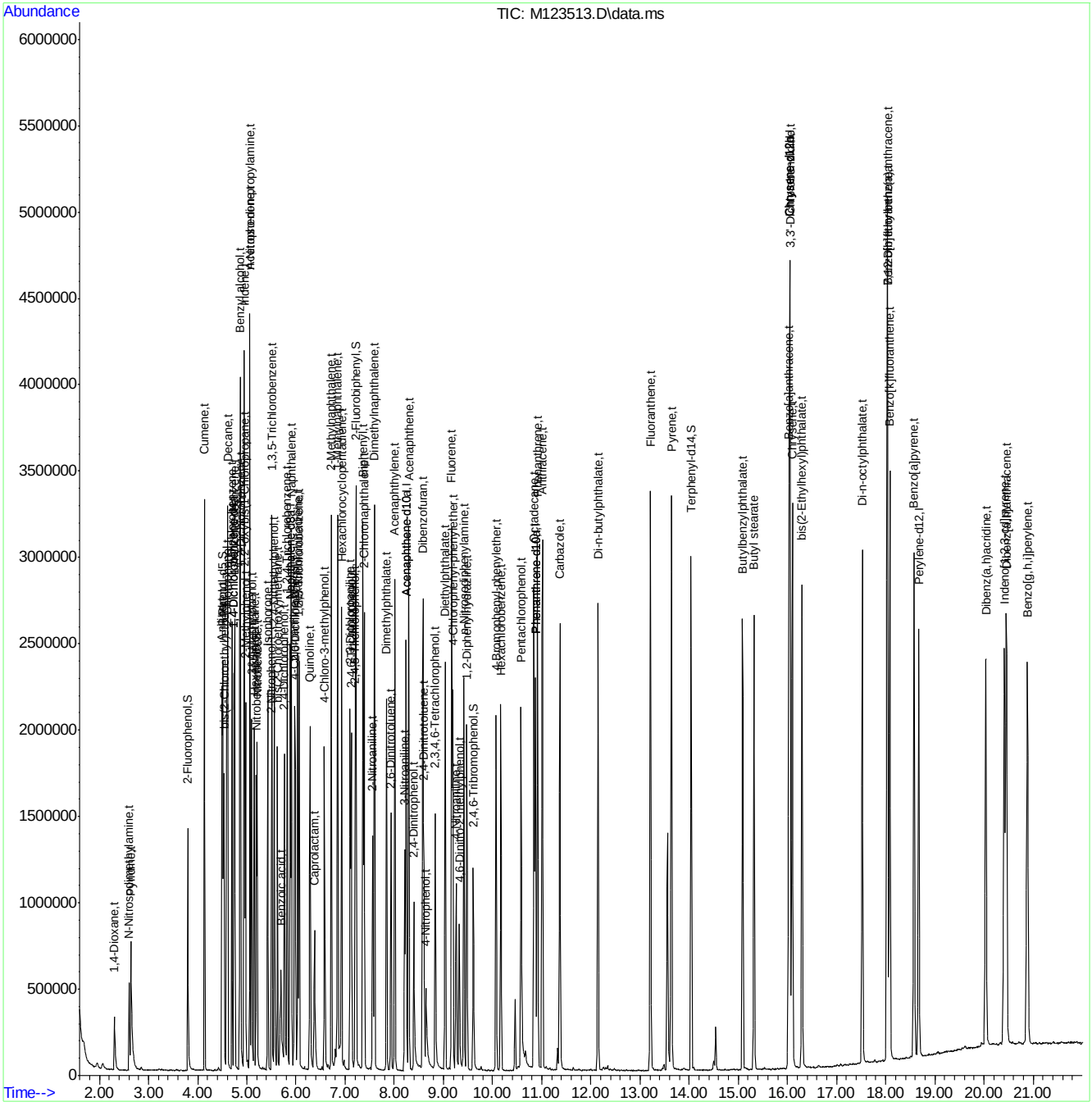
7.6.90

7

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



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123523.D
Acq On : 13 Apr 2016 2:05 am
Operator : sarad
Sample : icv5217-50
Misc : op92514,em5218
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 13 09:15:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.734	152	314976	40.00	ppm	0.00
24) Naphthalene-d8	5.877	136	1159891	40.00	ppm	0.00
47) Acenaphthene-d10	8.233	164	752452	40.00	ppm	0.00
69) Phenanthrene-d10	10.866	188	1345328	40.00	ppm	0.00
83) Chrysene-d12	16.041	240	1418559	40.00	ppm	0.00
92) Perylene-d12	18.669	264	1416009	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.734	152	314976	40.00	ppm	0.00
104) Acenaphthene-d10a	8.233	164	752452	40.00	ppm	0.00
107) Chrysene-d12a	16.041	240	1418559	40.00	ppm	0.00
110) Phenanthrene-d10a	10.866	188	1345328	40.00	ppm	0.00
112) Naphthalene-d8a	5.877	136	1159891	40.00	ppm	0.00
114) Chrysene-d12b	16.041	240	1418559	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
9) Phenol	4.515	94	634812	48.97	ppm	93
12) 2-Chlorophenol	4.595	128	540404	50.05	ppm	99
19) 2-Methylphenol	4.964	108	466299	52.12	ppm	97
21) 3&4-Methylphenol	5.092	108	501664	51.18	ppm #	98
29) 2-Nitrophenol	5.498	139	300290	50.82	ppm	94
30) 2,4-Dimethylphenol	5.557	107	497322	51.43	ppm	99
31) Benzoic acid	5.696	105	321438	50.68	ppm	99
33) 2,4-Dichlorophenol	5.760	162	461986	52.25	ppm	100
34) 2,6-Dichlorophenol	5.979	162	449769	50.35	ppm	99
43) 4-Chloro-3-methylphenol	6.566	107	436970	49.46	ppm	96
49) 2,4,6-Trichlorophenol	7.116	196	363435	50.62	ppm	99
50) 2,4,5-Trichlorophenol	7.196	196	366621	46.91	ppm	100
60) 2,4-Dinitrophenol	8.393	184	101304	44.01	ppm	100
61) 4-Nitrophenol	8.638	109	113792	49.37	ppm	96
64) 2,3,4,6-Tetrachlorophenol	8.831	232	292575	48.40	ppm	99
70) 4,6-Dinitro-2-methylph...	9.311	198	211194	47.84	ppm	100
76) Pentachlorophenol	10.572	266	183549	44.30	ppm	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5218\
Data File : M123523.D
Acq On : 13 Apr 2016 2:05 am
Operator : sarad
Sample : icv5217-50
Misc : op92514,em5218
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 13 09:15:03 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

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

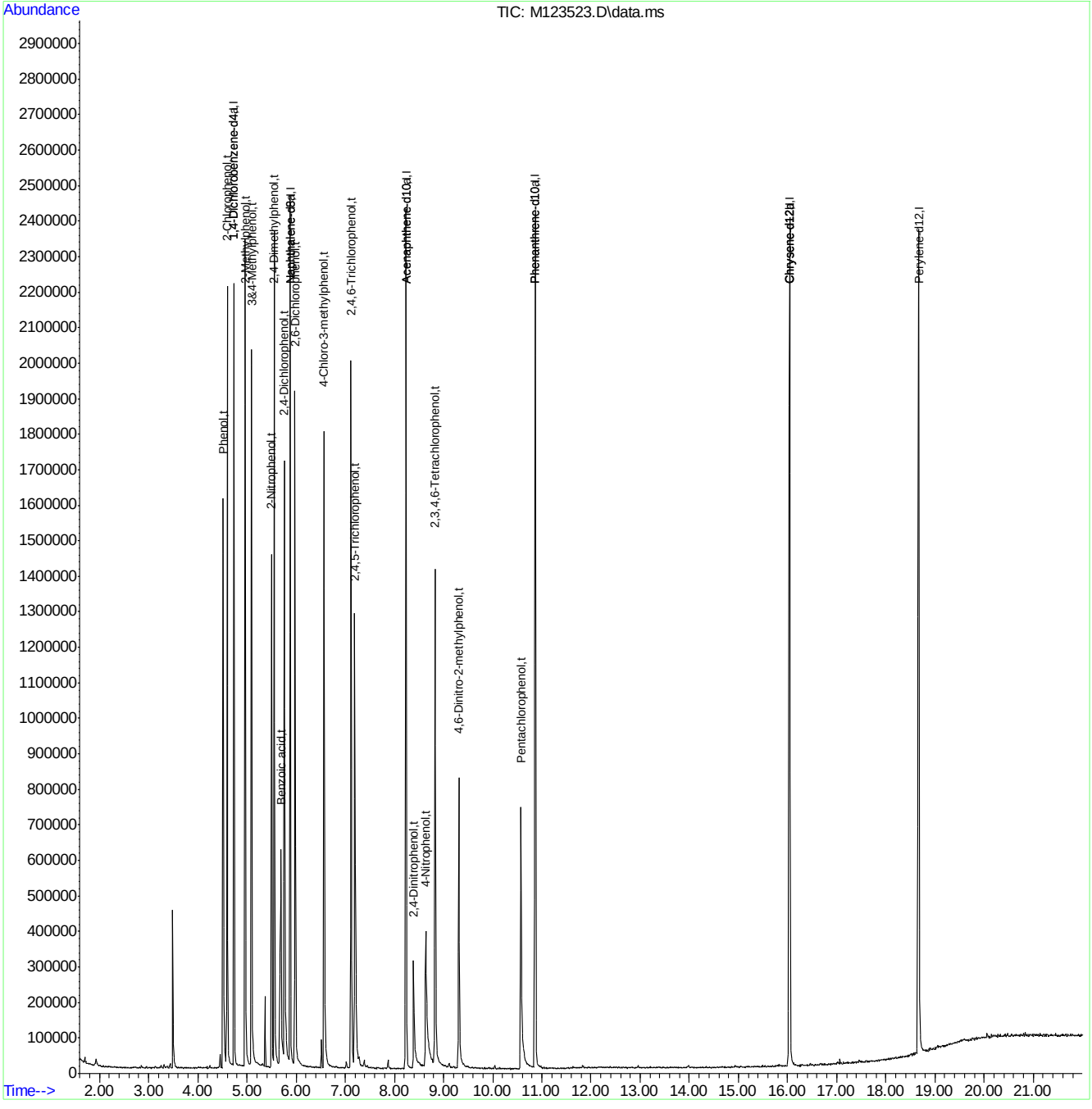
7.6.91

7

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



SGS ACCUTEST JC19023

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

7.6.92

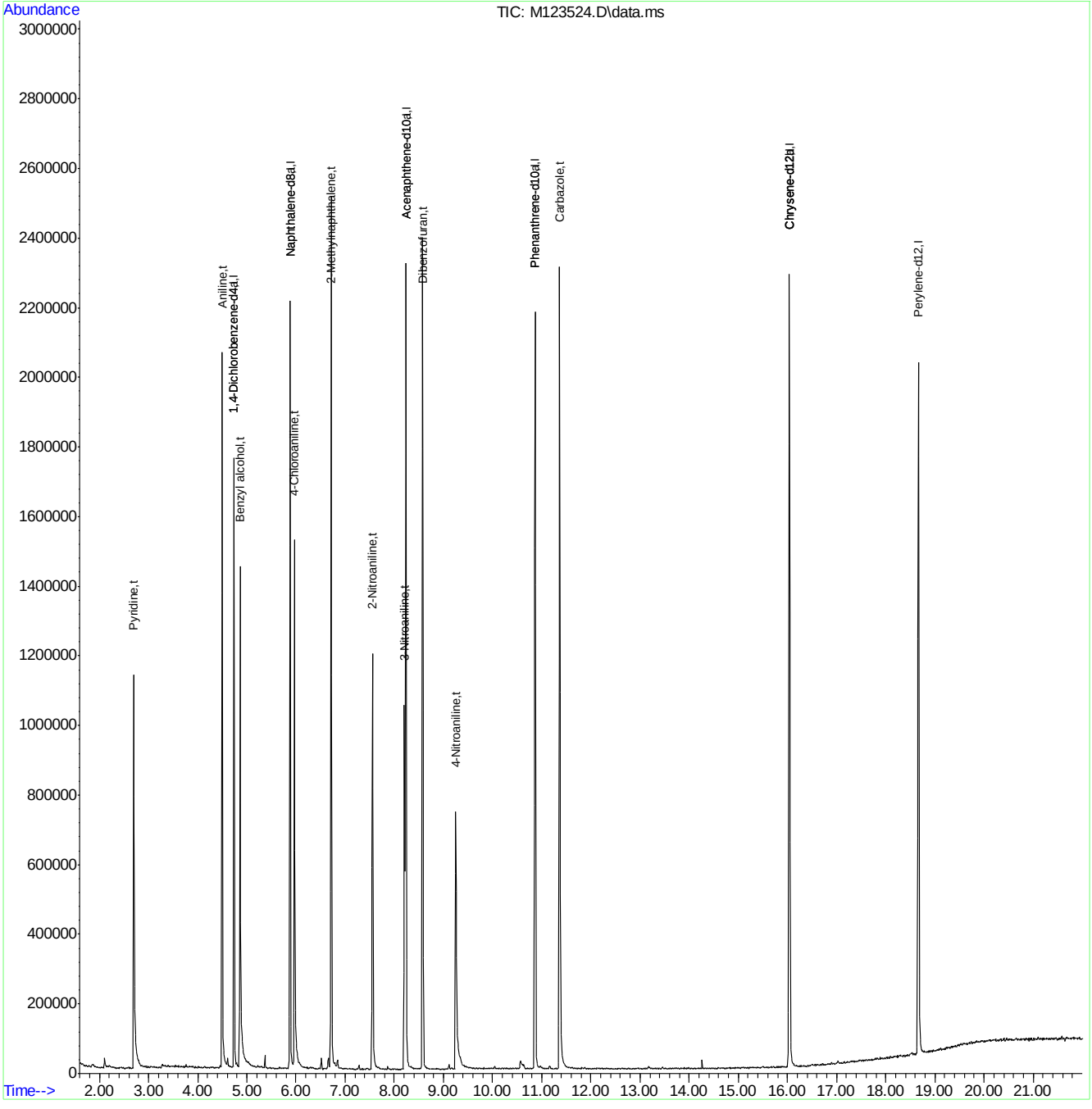
7

SGS ACCUTEST JC19023

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 JC19023

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

7.6.93

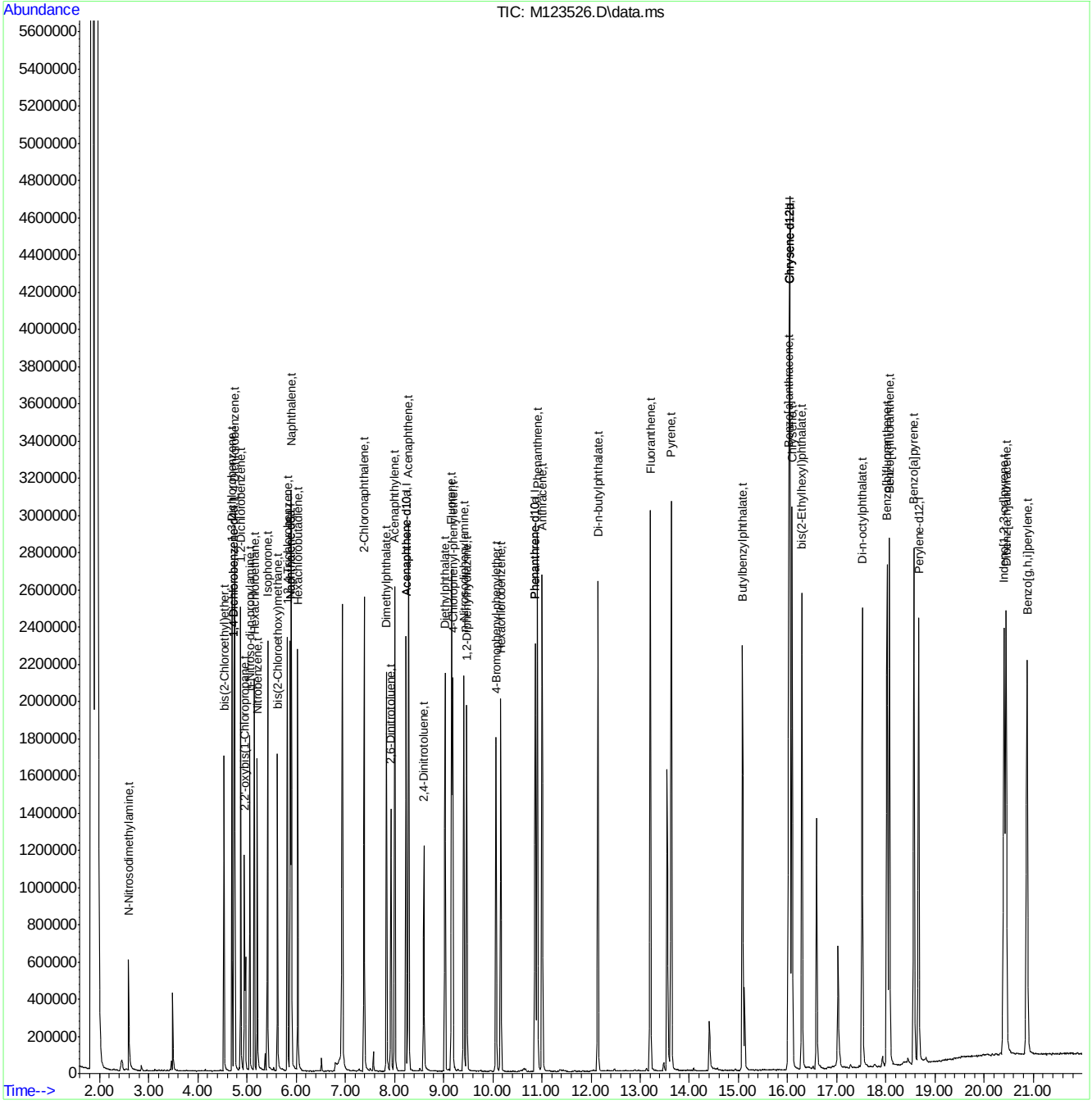
7

SGS ACCUTEST JC19023

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

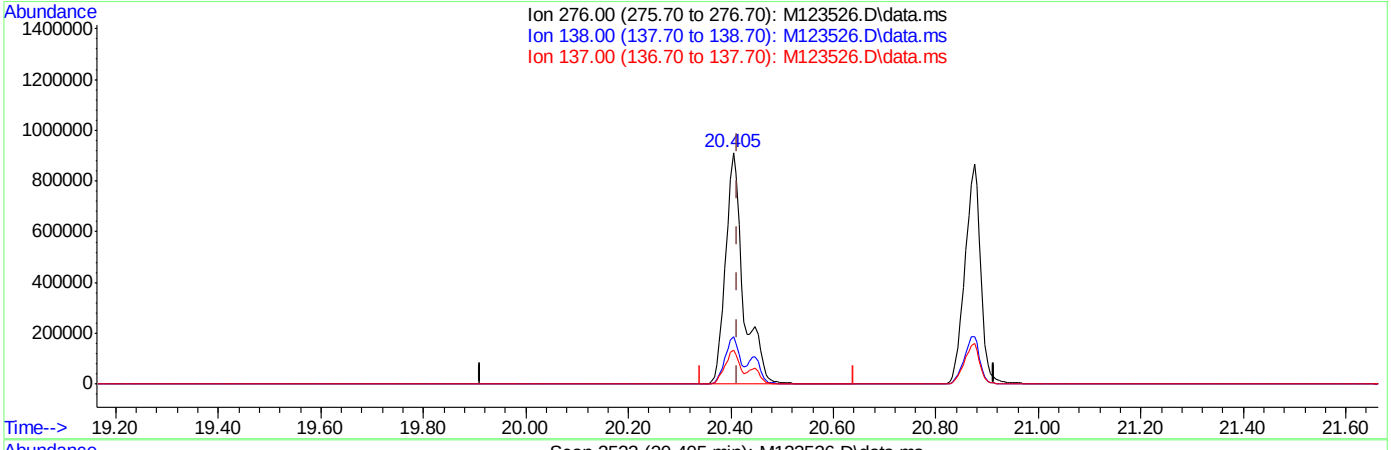
Sample Number:	EM5218-ICV5217	**Method:**	SW846 8270D
Lab FileID:	M123526.D	**Analyst approved:**	04/13/16 13:04 Ashley Dye
Injection Time:	04/13/16 03:31	**Supervisor approved:**	04/13/16 13:43 Nina Pandya

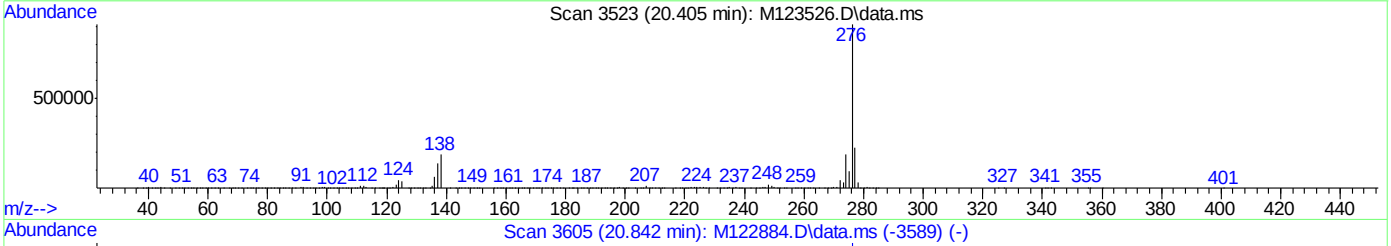
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		20.40	Overlapping peak

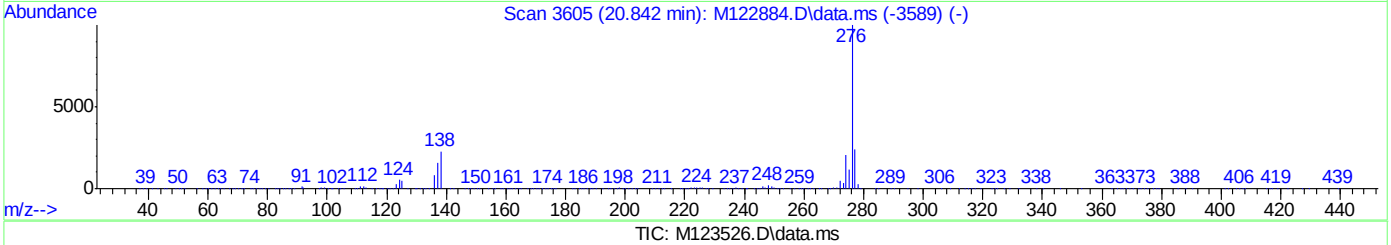
Quantitation Report (Qedit)

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

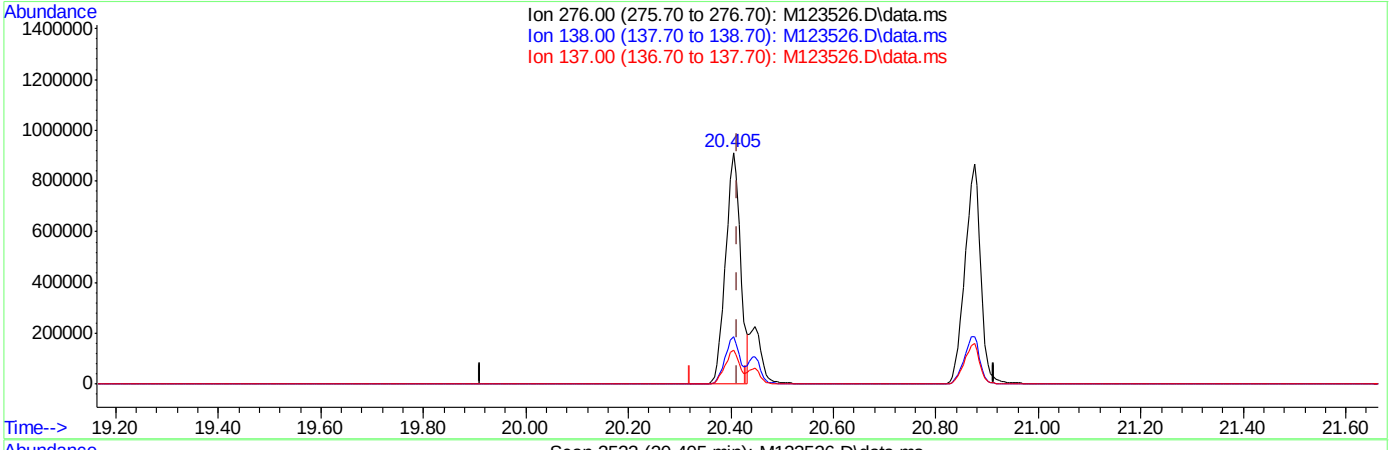
response 2202246

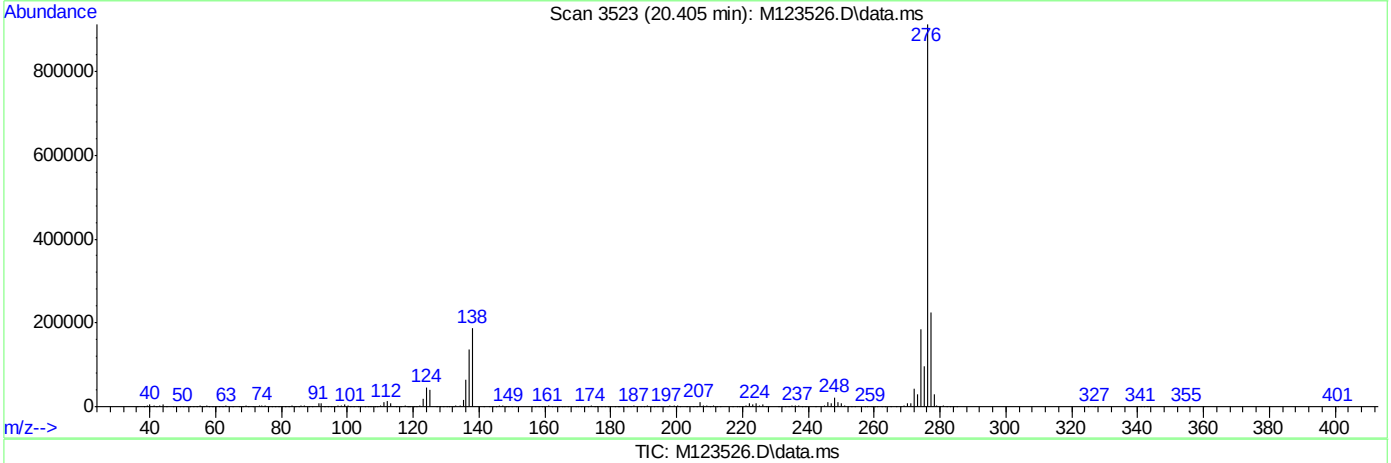
Ion	Exp%	Act%
276.00	100	100
138.00	17.70	20.52
137.00	13.00	14.84
0.00	0.00	0.00

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

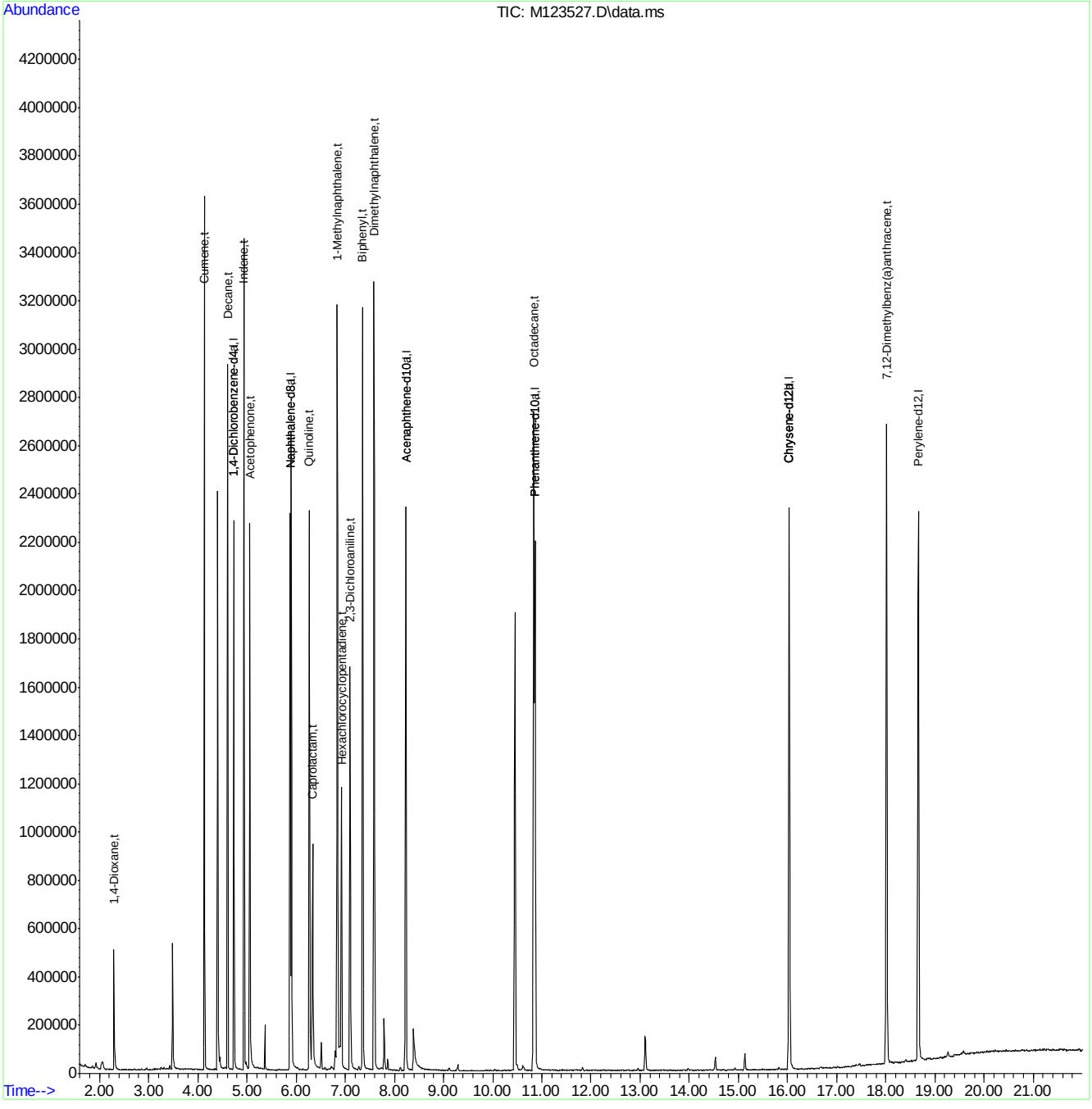
(#) = qualifier out of range (m) = manual integration (+) = signals summed

MM5217.M Wed Apr 13 12:17:33 2016 MSM

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



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

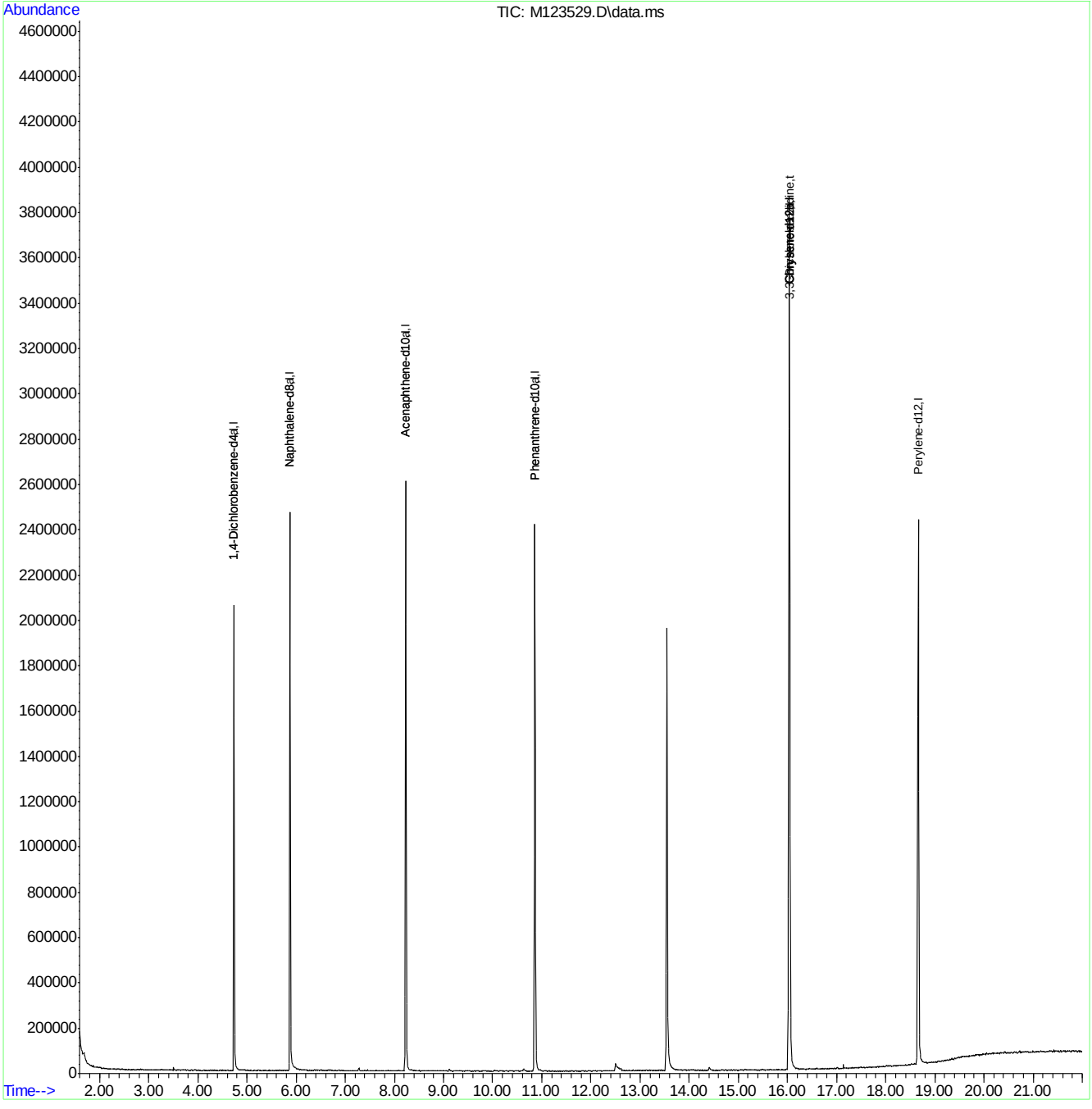
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.733	152	303622	40.00	ppm	0.00
24) Naphthalene-d8	5.876	136	1209036	40.00	ppm	0.00
47) Acenaphthene-d10	8.232	164	775029	40.00	ppm	0.00
69) Phenanthrene-d10	10.860	188	1399892	40.00	ppm	-0.01
83) Chrysene-d12	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

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



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

7.6.96

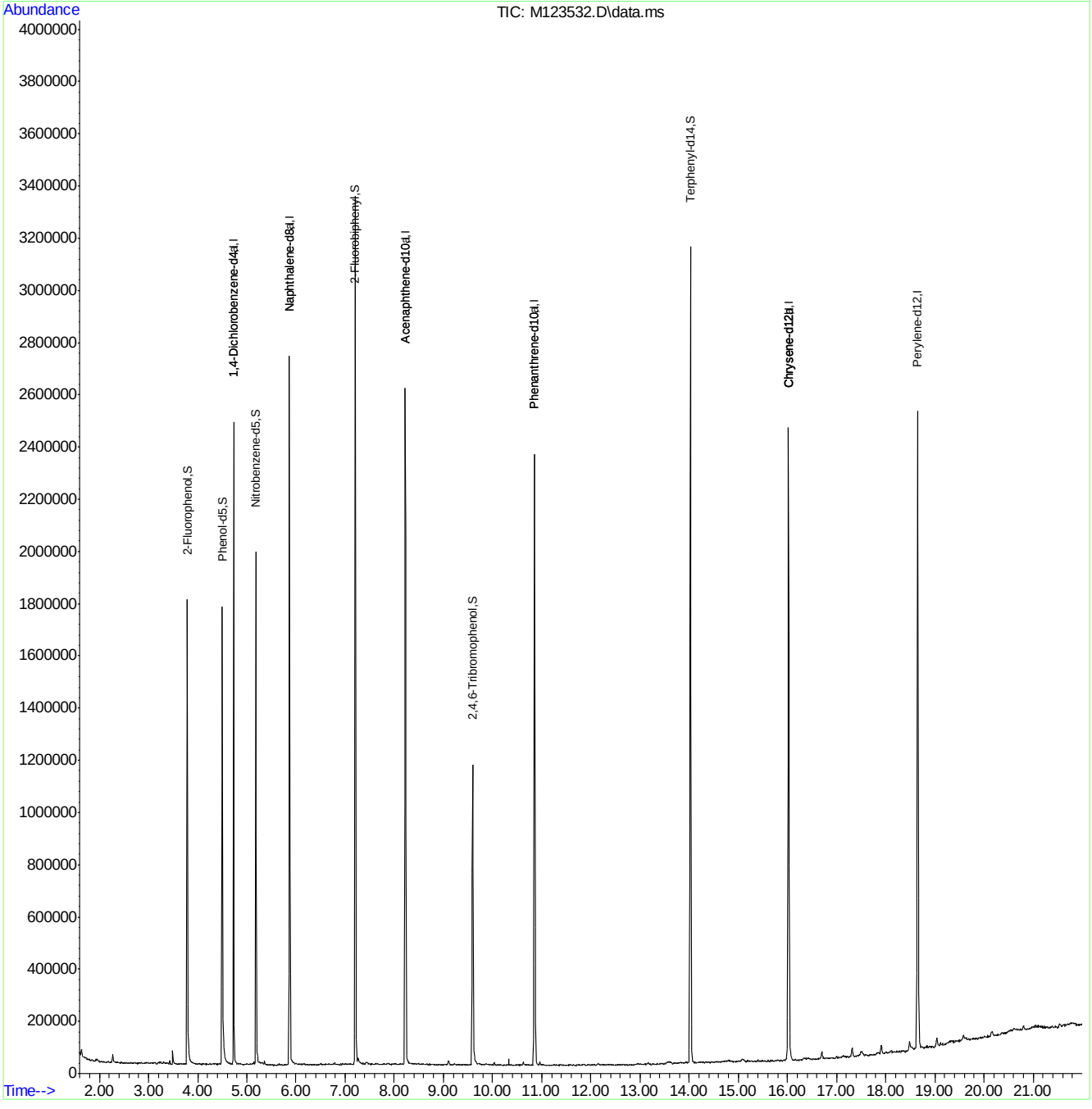
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5219\
Data File : M123532.D
Acq On : 13 Apr 2016 9:41 am
Operator : seanb1
Sample : icv5217-50
Misc : op92514,em5219
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 13 10:07:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5217.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 13 09:13:31 2016
Response via : Initial Calibration



MM5217.M Wed Apr 13 13:00:52 2016 MSM

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123929.D
Acq On : 26 Apr 2016 11:25 pm
Operator : seanb1
Sample : ic5239-100
Misc : op93324,em5239
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 27 08:36:36 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:35:55 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.622	152	280584	40.00	ppm	0.00
24) Naphthalene-d8	5.733	136	1102460	40.00	ppm	0.00
47) Acenaphthene-d10	8.046	164	682132	40.00	ppm	0.00
69) Phenanthrene-d10	10.652	188	1214164	40.00	ppm	0.00
83) Chrysene-d12	15.812	240	1383869	40.00	ppm	0.00
92) Perylene-d12	18.434	264	1373496	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.622	152	280584	40.00	ppm	0.00
104) Acenaphthene-d10a	8.046	164	682132	40.00	ppm	0.00
107) Chrysene-d12a	15.812	240	1383869	40.00	ppm	0.00
110) Phenanthrene-d10a	10.652	188	1214164	40.00	ppm	0.00
112) Naphthalene-d8a	5.733	136	1102460	40.00	ppm	0.00
114) Chrysene-d12b	15.812	240	1383869	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-chlorooctadecane	12.970	57	845702	99.31	ppm	0.00
Spiked Amount 50.000			Recovery	=	198.62%	
111) o-terphenyl	11.453	230	1572968	89.32	ppm	0.00
Spiked Amount 50.000			Recovery	=	178.64%	
Target Compounds						Qvalue
103) Benzaldehyde	4.296	105	676052	95.28	ppm	98
105) 1,2,4,5-Tetrachloroben...	6.780	216	835413	76.27	ppm	99
106) Atrazine	10.273	215	304804	80.09	ppm #	66
108) Benzidine	13.339	184	1377819	85.05	ppm	93
113) Hydroquinone	6.256	110	944505	106.13	ppm	92

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

7.6.97

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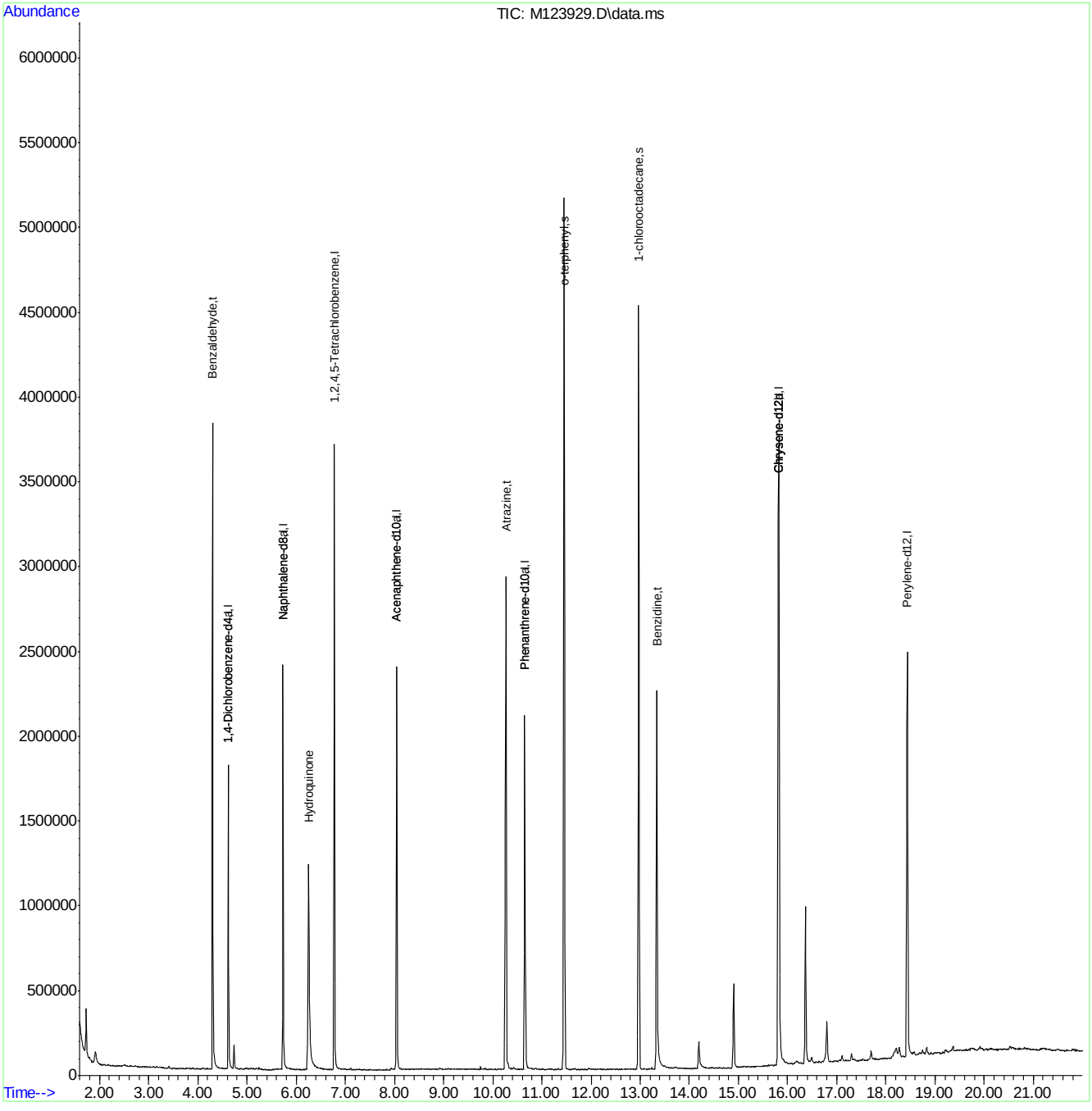
SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123929.D
Acq On : 26 Apr 2016 11:25 pm
Operator : seanb1
Sample : ic5239-100
Misc : op93324,em5239
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 27 08:36:36 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:35:55 2016
Response via : Initial Calibration



MM5239.M Wed Apr 27 08:36:50 2016 MSM

Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123930.D
Acq On : 26 Apr 2016 11:53 pm
Operator : seanb1
Sample : ic5239-80
Misc : op93324,em5239
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 27 08:37:27 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:35:55 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.619	152	319656	40.00	ppm	0.00
24) Naphthalene-d8	5.736	136	1232857	40.00	ppm	0.00
47) Acenaphthene-d10	8.048	164	759328	40.00	ppm	0.00
69) Phenanthrene-d10	10.655	188	1258673	40.00	ppm	0.00
83) Chrysene-d12	15.814	240	1425352	40.00	ppm	0.00
92) Perylene-d12	18.437	264	1426020	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.619	152	319656	40.00	ppm	0.00
104) Acenaphthene-d10a	8.048	164	759328	40.00	ppm	0.00
107) Chrysene-d12a	15.814	240	1425352	40.00	ppm	0.00
110) Phenanthrene-d10a	10.655	188	1258673	40.00	ppm	0.00
112) Naphthalene-d8a	5.736	136	1232857	40.00	ppm	0.00
114) Chrysene-d12b	15.814	240	1425352	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-chlorooctadecane	12.973	57	697731	79.55	ppm	0.00
Spiked Amount 50.000			Recovery	=	159.10%	
111) o-terphenyl	11.451	230	1316944	72.14	ppm	0.00
Spiked Amount 50.000			Recovery	=	144.28%	
Target Compounds						Qvalue
103) Benzaldehyde	4.299	105	595591	73.68	ppm	97
105) 1,2,4,5-Tetrachloroben...	6.777	216	754176	61.86	ppm	99
106) Atrazine	10.270	215	256006	60.43	ppm #	71
108) Benzidine	13.336	184	1268161	76.00	ppm	94
113) Hydroquinone	6.248	110	796530	80.04	ppm	93

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

7.6.98

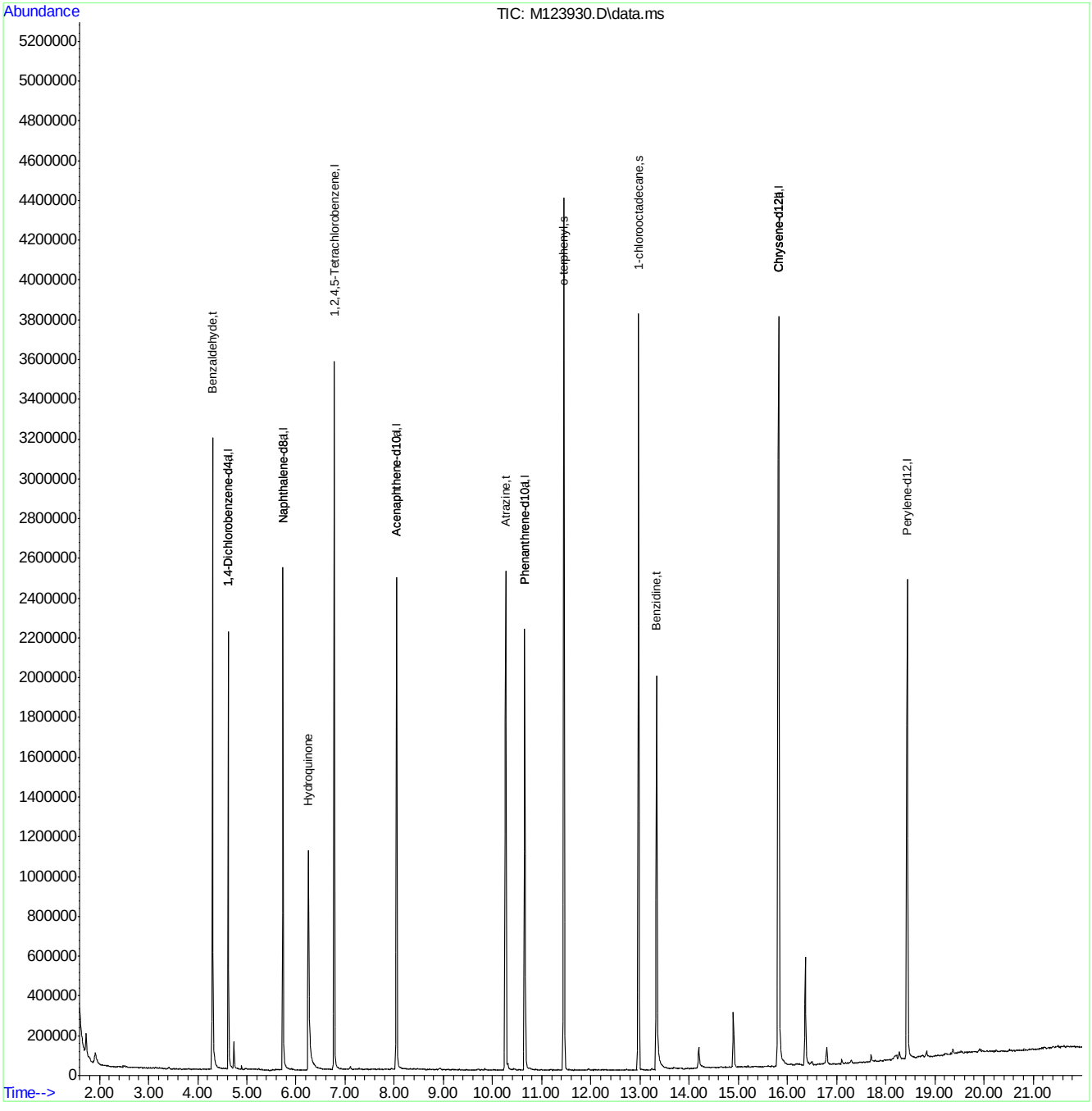
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123930.D
Acq On : 26 Apr 2016 11:53 pm
Operator : seanb1
Sample : ic5239-80
Misc : op93324,em5239
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 27 08:37:27 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:35:55 2016
Response via : Initial Calibration



MM5239.M Wed Apr 27 08:37:37 2016 MSM

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123931.D
Acq On : 27 Apr 2016 12:22 am
Operator : seanb1
Sample : icc5239-50
Misc : op93324,em5239
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 27 08:38:06 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:35:55 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.622	152	322559	40.00	ppm	0.00
24) Naphthalene-d8	5.733	136	1306823	40.00	ppm	0.00
47) Acenaphthene-d10	8.046	164	797097	40.00	ppm	0.00
69) Phenanthrene-d10	10.652	188	1344704	40.00	ppm	0.00
83) Chrysene-d12	15.812	240	1523716	40.00	ppm	0.00
92) Perylene-d12	18.434	264	1523192	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.622	152	322559	40.00	ppm	0.00
104) Acenaphthene-d10a	8.046	164	797097	40.00	ppm	0.00
107) Chrysene-d12a	15.812	240	1523706	40.00	ppm	0.00
110) Phenanthrene-d10a	10.652	188	1344704	40.00	ppm	0.00
112) Naphthalene-d8a	5.733	136	1306823	40.00	ppm	0.00
114) Chrysene-d12b	15.812	240	1523716	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-chlorooctadecane	12.970	57	513548	54.77	ppm	0.00
Spiked Amount 50.000			Recovery	=	109.54%	
111) o-terphenyl	11.453	230	908784	46.60	ppm	0.00
Spiked Amount 50.000			Recovery	=	93.20%	
Target Compounds						Qvalue
103) Benzaldehyde	4.296	105	402737	49.37	ppm	98
105) 1,2,4,5-Tetrachloroben...	6.775	216	534426	41.75	ppm	98
106) Atrazine	10.262	215	171085	38.47	ppm #	66
108) Benzidine	13.333	184	950940	53.31	ppm	94
113) Hydroquinone	6.246	110	534034	50.62	ppm	93

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

7.6.99

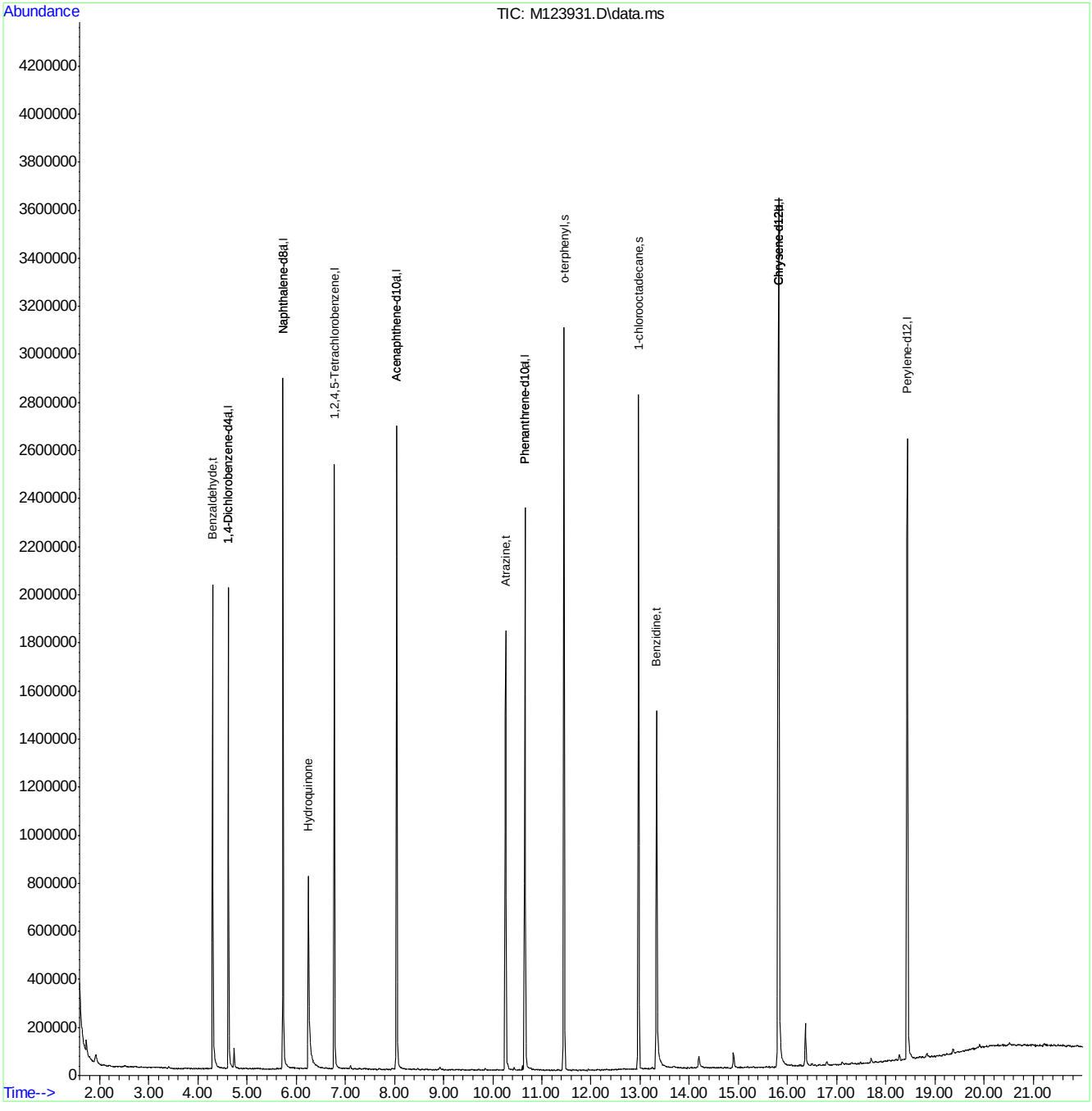
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123931.D
Acq On : 27 Apr 2016 12:22 am
Operator : seanb1
Sample : icc5239-50
Misc : op93324,em5239
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 27 08:38:06 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:35:55 2016
Response via : Initial Calibration



MM5239.M Wed Apr 27 08:38:17 2016 MSM

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123932.D
Acq On : 27 Apr 2016 12:50 am
Operator : seanb1
Sample : ic5239-25
Misc : op93324,em5239
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 27 08:38:45 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:35:55 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.622	152	293504	40.00	ppm	0.00
24) Naphthalene-d8	5.733	136	1140546	40.00	ppm	0.00
47) Acenaphthene-d10	8.046	164	683301	40.00	ppm	0.00
69) Phenanthrene-d10	10.652	188	1201109	40.00	ppm	0.00
83) Chrysene-d12	15.811	240	1374505	40.00	ppm	0.00
92) Perylene-d12	18.434	264	1427269	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.622	152	293504	40.00	ppm	0.00
104) Acenaphthene-d10a	8.046	164	683301	40.00	ppm	0.00
107) Chrysene-d12a	15.811	240	1374505	40.00	ppm	0.00
110) Phenanthrene-d10a	10.652	188	1201109	40.00	ppm	0.00
112) Naphthalene-d8a	5.733	136	1140546	40.00	ppm	0.00
114) Chrysene-d12b	15.811	240	1374505	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-chlorooctadecane	12.965	57	233906	27.65	ppm	0.00
Spiked Amount 50.000			Recovery = 55.30%			
111) o-terphenyl	11.448	230	436839	25.08	ppm	0.00
Spiked Amount 50.000			Recovery = 50.16%			
Target Compounds						Qvalue
103) Benzaldehyde	4.301	105	173399	23.36	ppm	96
105) 1,2,4,5-Tetrachloroben...	6.774	216	226952	20.68	ppm	97
106) Atrazine	10.257	215	75801	19.88	ppm #	72
108) Benzidine	13.333	184	325544	20.23	ppm	96
113) Hydroquinone	6.246	110	220359	23.93	ppm	93

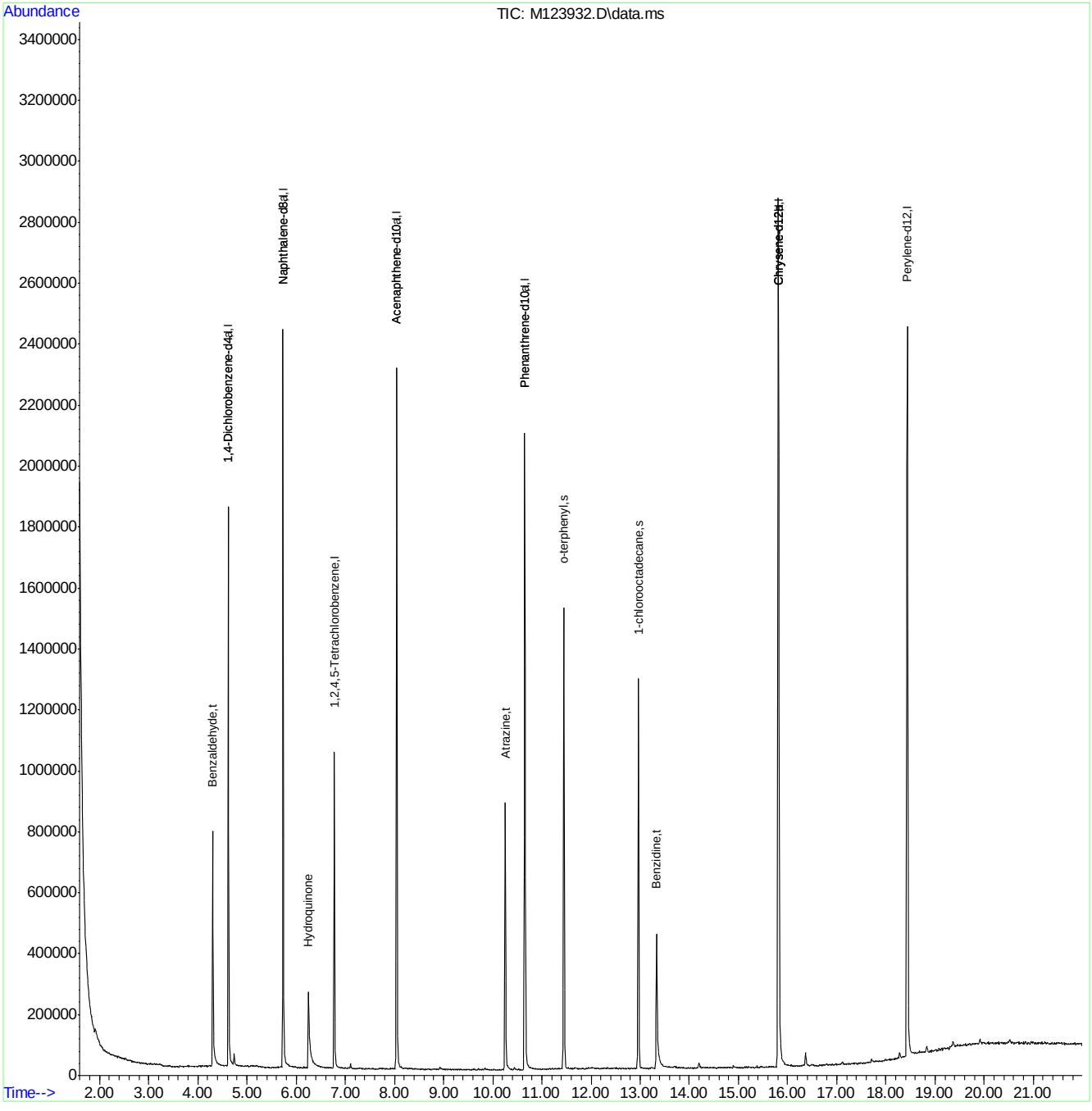
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123932.D
Acq On : 27 Apr 2016 12:50 am
Operator : seanb1
Sample : ic5239-25
Misc : op93324,em5239
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 27 08:38:45 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:35:55 2016
Response via : Initial Calibration



MM5239.M Wed Apr 27 08:38:57 2016 MSM

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123933.D
Acq On : 27 Apr 2016 1:19 am
Operator : seanb1
Sample : ic5239-10
Misc : op93324,em5239
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 27 08:39:46 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:35:55 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.621	152	307618	40.00	ppm	0.00
24) Naphthalene-d8	5.732	136	1159896	40.00	ppm	0.00
47) Acenaphthene-d10	8.045	164	674353	40.00	ppm	0.00
69) Phenanthrene-d10	10.657	188	1216505	40.00	ppm	0.00
83) Chrysene-d12	15.811	240	1284406	40.00	ppm	0.00
92) Perylene-d12	18.433	264	1342699	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.621	152	307618	40.00	ppm	0.00
104) Acenaphthene-d10a	8.045	164	674353	40.00	ppm	0.00
107) Chrysene-d12a	15.811	240	1284406	40.00	ppm	0.00
110) Phenanthrene-d10a	10.657	188	1216505	40.00	ppm	0.00
112) Naphthalene-d8a	5.732	136	1159896	40.00	ppm	0.00
114) Chrysene-d12b	15.811	240	1284406	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-chlorooctadecane	12.964	57	93892	11.88	ppm	0.00
Spiked Amount 50.000			Recovery = 23.76%			
111) o-terphenyl	11.447	230	180128	10.21	ppm	0.00
Spiked Amount 50.000			Recovery = 20.42%			
Target Compounds						Qvalue
103) Benzaldehyde	4.306	105	70091	9.01	ppm	95
105) 1,2,4,5-Tetrachloroben...	6.779	216	94496	8.73	ppm	97
106) Atrazine	10.251	215	32101	8.53	ppm #	75
108) Benzidine	13.343	184	113554	7.55	ppm	95
113) Hydroquinone	6.266	110	72353	7.73	ppm	96

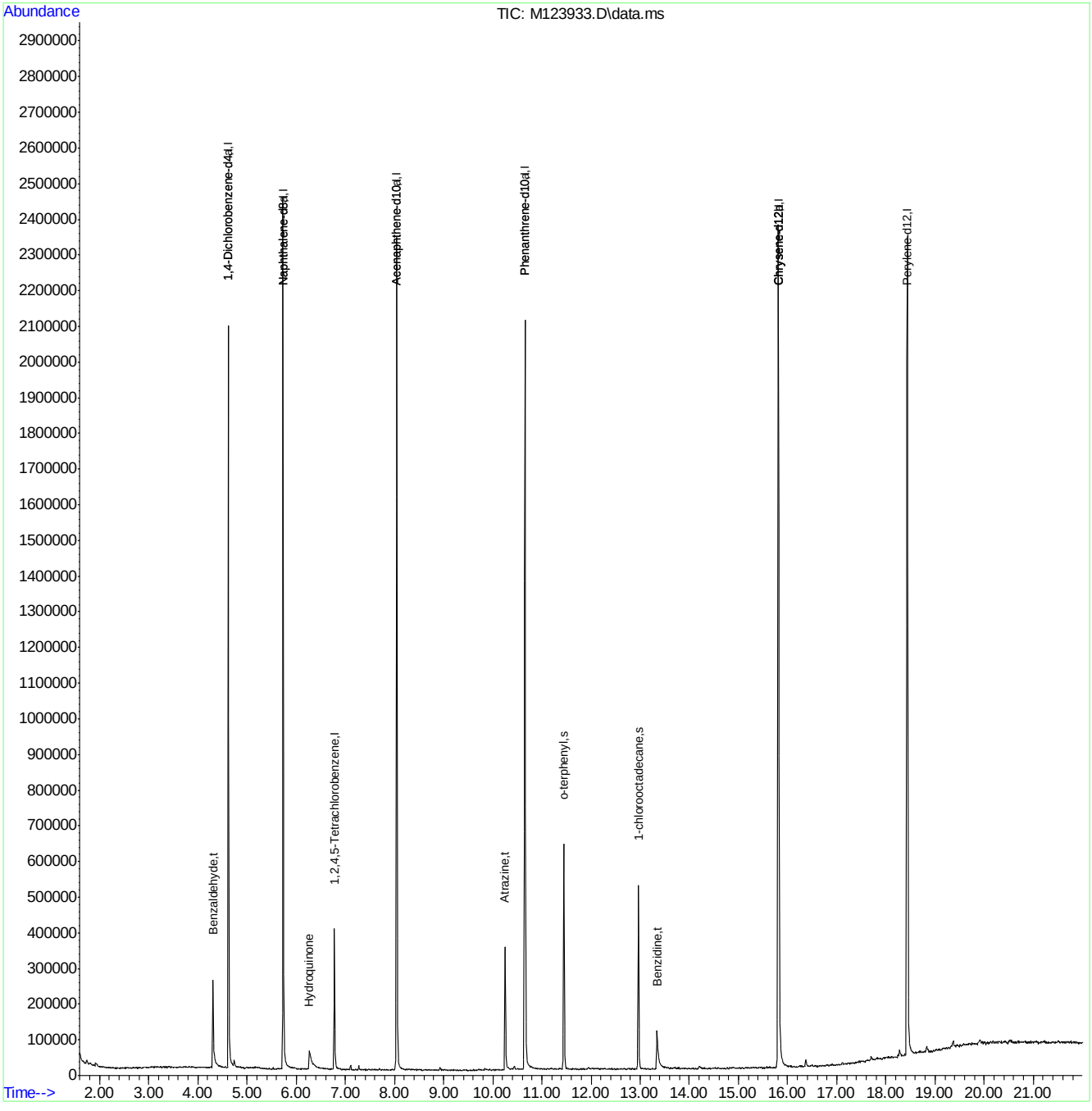
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123933.D
Acq On : 27 Apr 2016 1:19 am
Operator : seanb1
Sample : ic5239-10
Misc : op93324,em5239
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 27 08:39:46 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:35:55 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123934.D
Acq On : 27 Apr 2016 1:47 am
Operator : seanb1
Sample : ic5239-5
Misc : op93324,em5239
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 27 08:40:34 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:40:02 2016
Response via : Initial Calibration

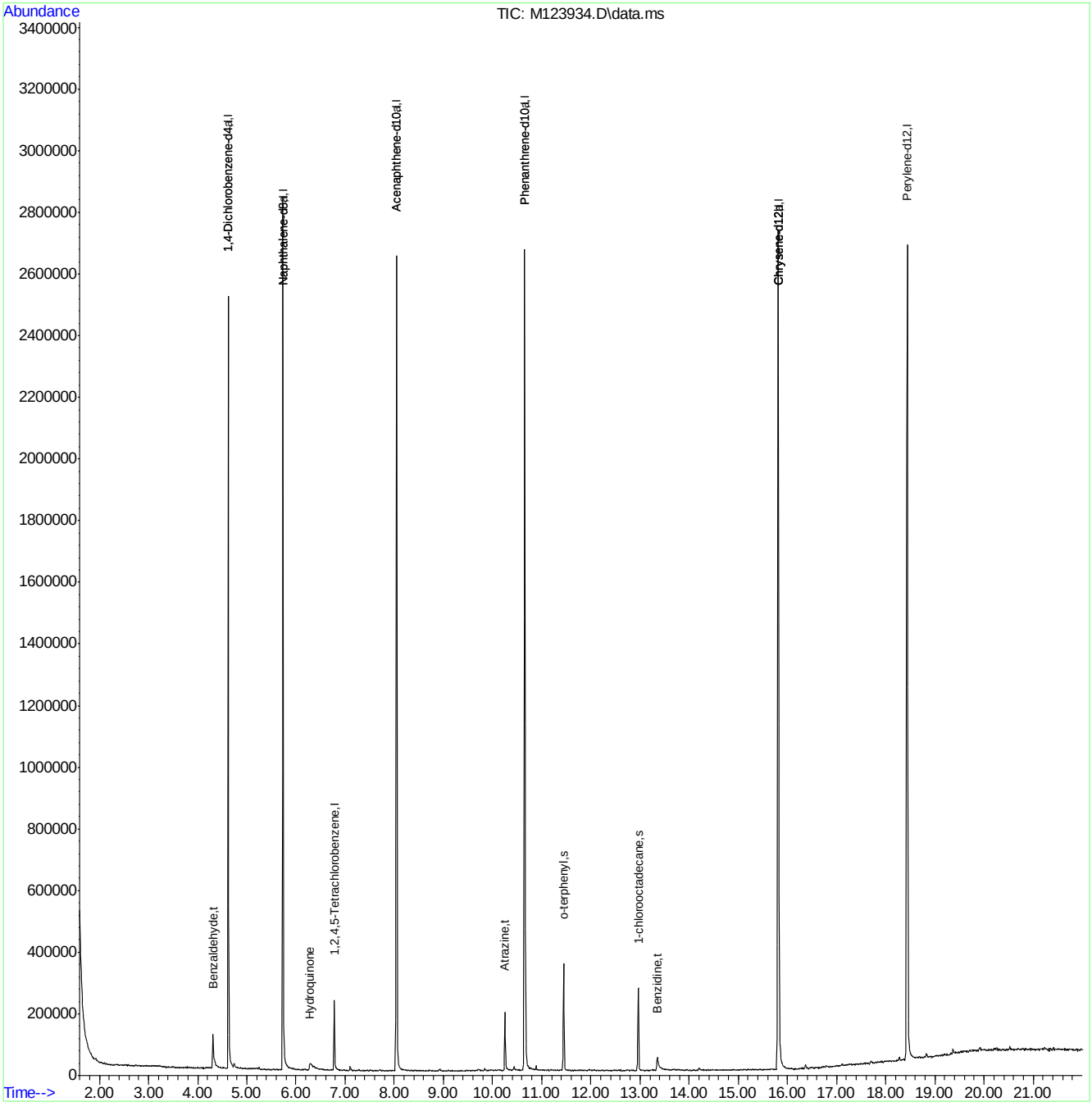
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.620	152	351862	40.00	ppm	0.00
24) Naphthalene-d8	5.736	136	1394765	40.00	ppm	0.00
47) Acenaphthene-d10	8.043	164	822997	40.00	ppm	0.00
69) Phenanthrene-d10	10.655	188	1491869	40.00	ppm	0.00
83) Chrysene-d12	15.815	240	1543621	40.00	ppm	0.00
92) Perylene-d12	18.437	264	1611472	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.620	152	351862	40.00	ppm	0.00
104) Acenaphthene-d10a	8.043	164	822997	40.00	ppm	0.00
107) Chrysene-d12a	15.815	240	1543621	40.00	ppm	0.00
110) Phenanthrene-d10a	10.655	188	1491869	40.00	ppm	0.00
112) Naphthalene-d8a	5.736	136	1394765	40.00	ppm	0.00
114) Chrysene-d12b	15.815	240	1543621	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-chlorooctadecane	12.968	57	49763	5.24	ppm	0.00
Spiked Amount 50.000			Recovery	=	10.48%	
111) o-terphenyl	11.446	230	100298	4.64	ppm	0.00
Spiked Amount 50.000			Recovery	=	9.28%	
Target Compounds						Qvalue
103) Benzaldehyde	4.310	105	39359	4.42	ppm	92
105) 1,2,4,5-Tetrachloroben...	6.778	216	53030	4.01	ppm	97
106) Atrazine	10.255	215	17245	3.76	ppm	73
108) Benzidine	13.352	184	52868	2.93	ppm	95
113) Hydroquinone	6.286	110	30300	2.69	ppm	97

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123934.D
Acq On : 27 Apr 2016 1:47 am
Operator : seanb1
Sample : ic5239-5
Misc : op93324,em5239
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 27 08:40:34 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:40:02 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123935.D
Acq On : 27 Apr 2016 2:15 am
Operator : seanb1
Sample : ic5239-2
Misc : op93324,em5239
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 27 08:41:25 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:40:02 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.619	152	290913	40.00	ppm	0.00
24) Naphthalene-d8	5.735	136	1141300	40.00	ppm	0.00
47) Acenaphthene-d10	8.048	164	684315	40.00	ppm	0.00
69) Phenanthrene-d10	10.655	188	1248971	40.00	ppm	0.00
83) Chrysene-d12	15.814	240	1306157	40.00	ppm	0.00
92) Perylene-d12	18.437	264	1342721	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.619	152	290913	40.00	ppm	0.00
104) Acenaphthene-d10a	8.048	164	684315	40.00	ppm	0.00
107) Chrysene-d12a	15.814	240	1306157	40.00	ppm	0.00
110) Phenanthrene-d10a	10.655	188	1248971	40.00	ppm	0.00
112) Naphthalene-d8a	5.735	136	1141300	40.00	ppm	0.00
114) Chrysene-d12b	15.814	240	1306157	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-chlorooctadecane	12.967	57	17375	2.16	ppm	0.00
Spiked Amount 50.000			Recovery	=	4.32%	
111) o-terphenyl	11.445	230	32088	1.77	ppm	0.00
Spiked Amount 50.000			Recovery	=	3.54%	
Target Compounds						Qvalue
103) Benzaldehyde	4.320	105	13377	1.82	ppm	92
105) 1,2,4,5-Tetrachloroben...	6.782	216	17364	1.58	ppm	98
106) Atrazine	10.254	215	5652	1.48	ppm #	70
108) Benzidine	13.373	184	11292	0.74	ppm	85

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

7.6.103

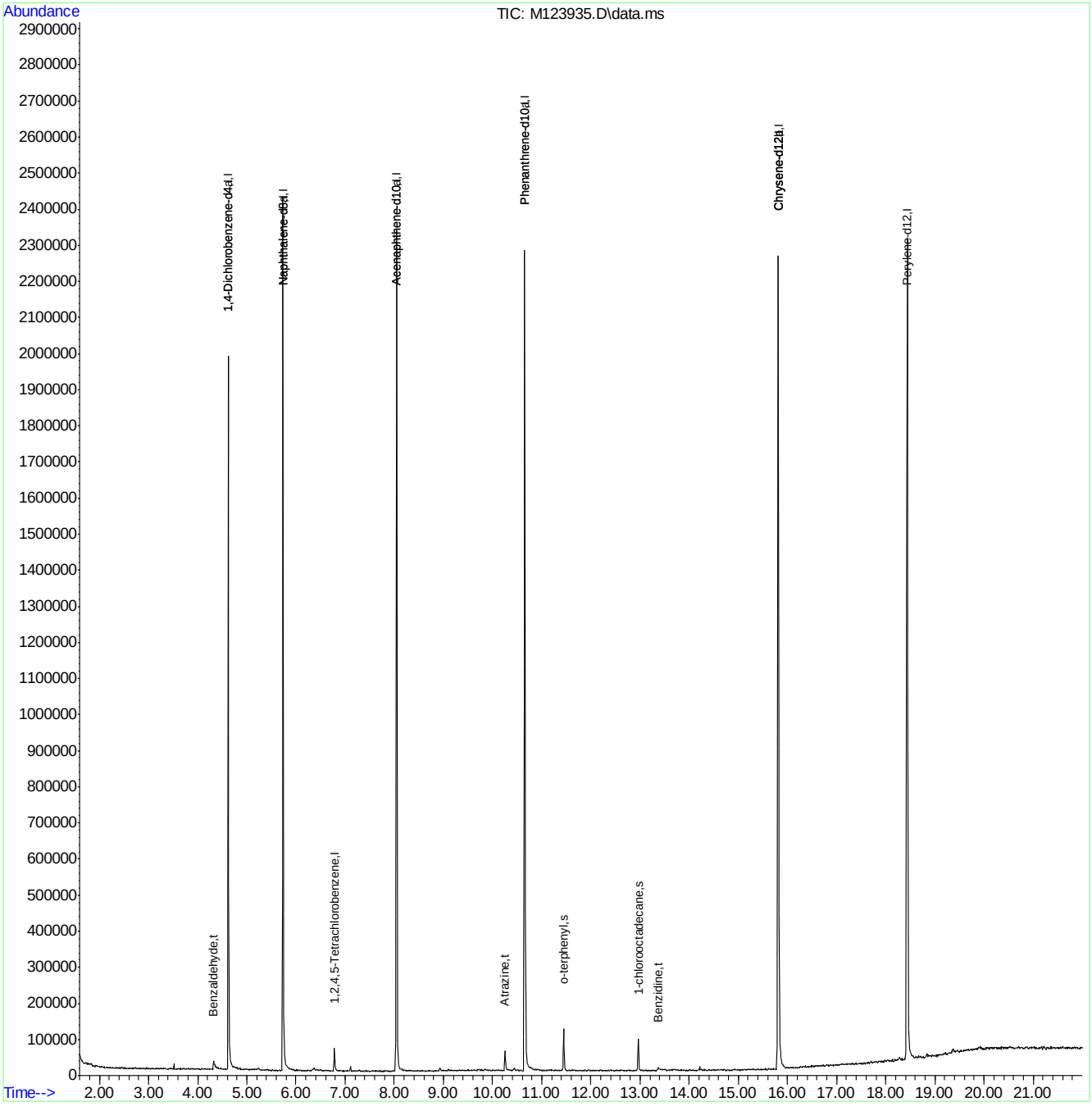
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123935.D
Acq On : 27 Apr 2016 2:15 am
Operator : seanb1
Sample : ic5239-2
Misc : op93324,em5239
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 27 08:41:25 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:40:02 2016
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123936.D
Acq On : 27 Apr 2016 2:44 am
Operator : seanb1
Sample : ic5239-1
Misc : op93324,em5239
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 27 08:42:08 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:40:02 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.621	152	342359	40.00	ppm	0.00
24) Naphthalene-d8	5.732	136	1306774	40.00	ppm	0.00
47) Acenaphthene-d10	8.045	164	784553	40.00	ppm	0.00
69) Phenanthrene-d10	10.656	188	1296280	40.00	ppm	0.00
83) Chrysene-d12	15.811	240	1411881	40.00	ppm	0.00
92) Perylene-d12	18.438	264	1381435	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.621	152	342359	40.00	ppm	0.00
104) Acenaphthene-d10a	8.045	164	784553	40.00	ppm	0.00
107) Chrysene-d12a	15.811	240	1411881	40.00	ppm	0.00
110) Phenanthrene-d10a	10.656	188	1296280	40.00	ppm	0.00
112) Naphthalene-d8a	5.732	136	1306774	40.00	ppm	0.00
114) Chrysene-d12b	15.811	240	1411881	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-chlorooctadecane	12.964	57	7711	0.89	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.78%	
111) o-terphenyl	11.447	230	16716	0.89	ppm	0.00
Spiked Amount 50.000			Recovery	=	1.78%	
Target Compounds						Qvalue
103) Benzaldehyde	4.333	105	5712	0.66	ppm #	73
105) 1,2,4,5-Tetrachloroben...	6.784	216	9560	0.76	ppm	93
106) Atrazine	10.256	215	2591	0.59	ppm #	38

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

7.6.104

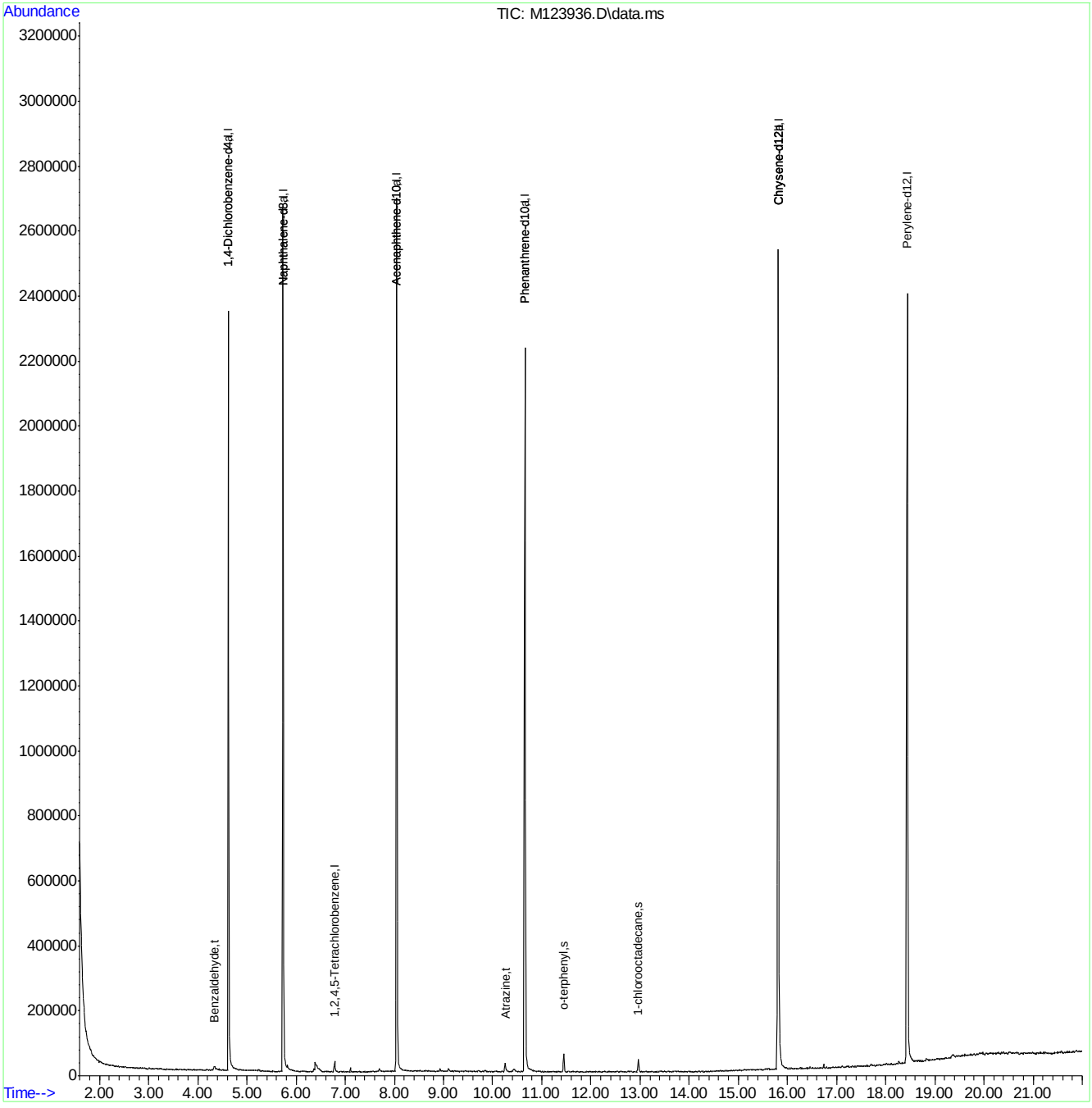
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123936.D
Acq On : 27 Apr 2016 2:44 am
Operator : seanb1
Sample : ic5239-1
Misc : op93324,em5239
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 27 08:42:08 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:40:02 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123937.D
Acq On : 27 Apr 2016 3:12 am
Operator : seanb1
Sample : icv5239-50
Misc : op93324,em5239
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 27 14:44:43 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:55:38 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.623	152	295577	40.00	ppm	0.00
24) Naphthalene-d8	5.734	136	1096947	40.00	ppm	0.00
47) Acenaphthene-d10	8.047	164	649801	40.00	ppm	0.00
69) Phenanthrene-d10	10.653	188	1130894	40.00	ppm	0.00
83) Chrysene-d12	15.818	240	1136077	40.00	ppm	0.00
92) Perylene-d12	18.435	264	1107969	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.623	152	295577	40.00	ppm	0.00
104) Acenaphthene-d10a	8.047	164	649801	40.00	ppm	0.00
107) Chrysene-d12a	15.818	240	1136077	40.00	ppm	0.00
110) Phenanthrene-d10a	10.653	188	1130894	40.00	ppm	0.00
112) Naphthalene-d8a	5.734	136	1096947	40.00	ppm	0.00
114) Chrysene-d12b	15.818	240	1136077	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
105) 1,2,4,5-Tetrachloroben...	6.776	216	501830	59.91	ppm	93

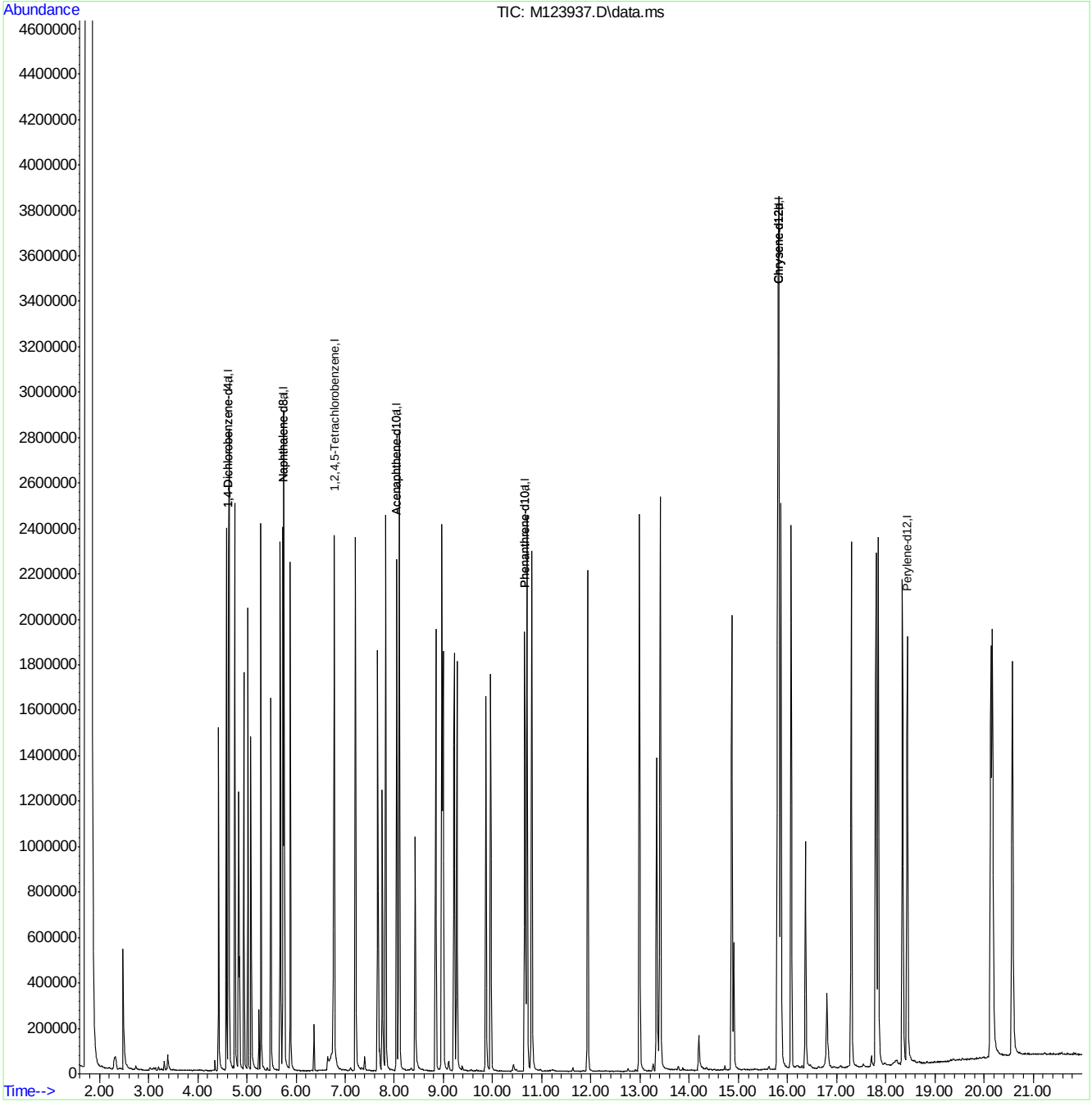
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123937.D
Acq On : 27 Apr 2016 3:12 am
Operator : seanb1
Sample : icv5239-50
Misc : op93324,em5239
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 27 14:44:43 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:55:38 2016
Response via : Initial Calibration



MM5239.M Wed Apr 27 14:45:08 2016 MSM

Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123938.D
Acq On : 27 Apr 2016 3:41 am
Operator : seanb1
Sample : icv5239-50
Misc : op93324,em5239
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 27 08:57:59 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:55:38 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.619	152	310317	40.00	ppm	0.00
24) Naphthalene-d8	5.735	136	1192738	40.00	ppm	0.00
47) Acenaphthene-d10	8.048	164	685847	40.00	ppm	0.00
69) Phenanthrene-d10	10.654	188	1103674	40.00	ppm	0.00
83) Chrysene-d12	15.814	240	1245639	40.00	ppm	0.00
92) Perylene-d12	18.436	264	1159384	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.619	152	310317	40.00	ppm	0.00
104) Acenaphthene-d10a	8.048	164	685847	40.00	ppm	0.00
107) Chrysene-d12a	15.814	240	1245639	40.00	ppm	0.00
110) Phenanthrene-d10a	10.654	188	1103674	40.00	ppm	0.00
112) Naphthalene-d8a	5.735	136	1192738	40.00	ppm	0.00
114) Chrysene-d12b	15.814	240	1245639	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
Target Compounds						Qvalue
103) Benzaldehyde	4.298	105	374978	53.46	ppm	# 72
106) Atrazine	10.264	215	151352	52.24	ppm	# 76

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

7.6.106

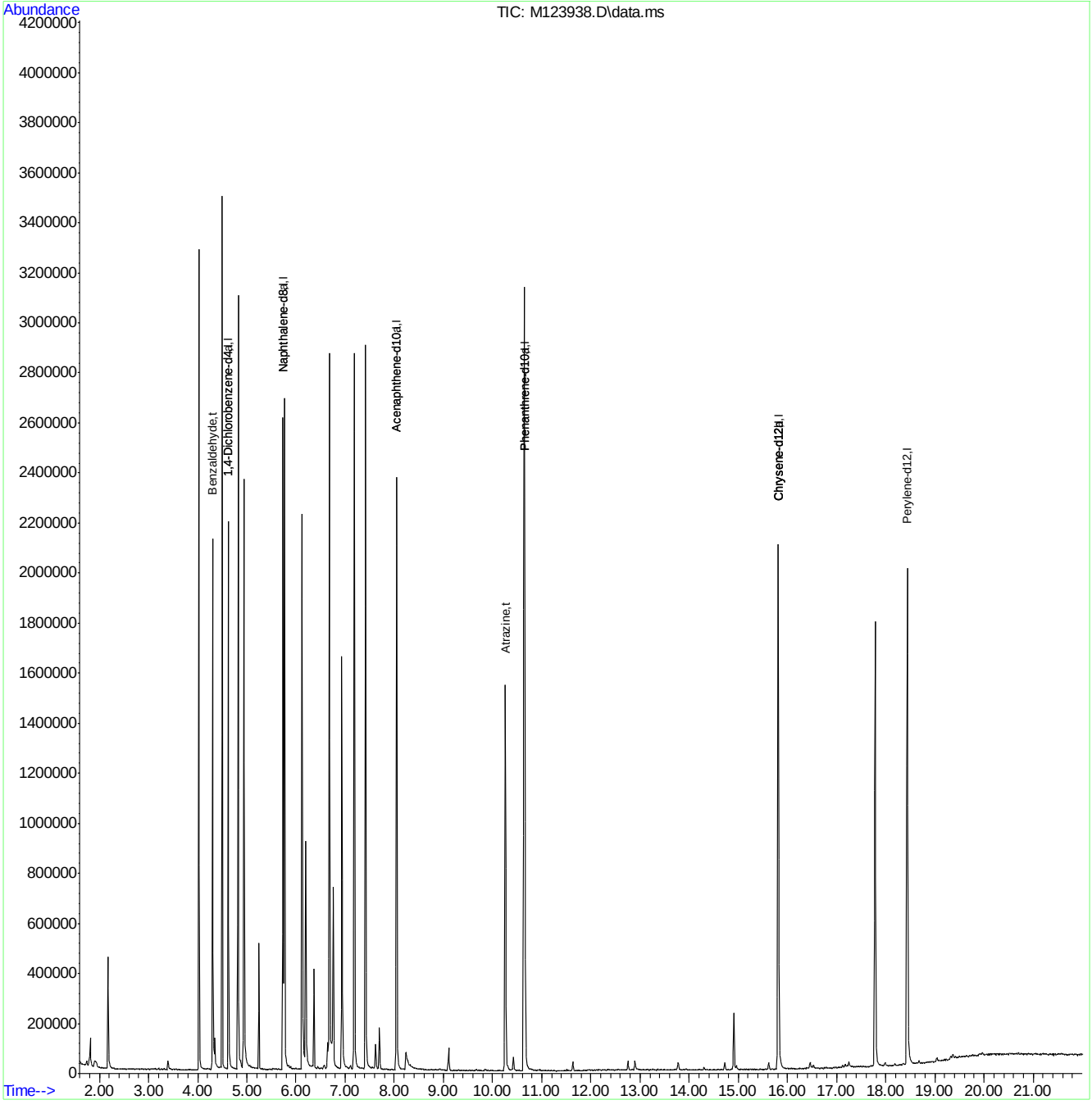
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123938.D
Acq On : 27 Apr 2016 3:41 am
Operator : seanb1
Sample : icv5239-50
Misc : op93324,em5239
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 27 08:57:59 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:55:38 2016
Response via : Initial Calibration



MM5239.M Wed Apr 27 14:45:31 2016 MSM

Page: 2

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123940.D
Acq On : 27 Apr 2016 4:37 am
Operator : seanb1
Sample : icv5239-50
Misc : op93324,em5239
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 27 08:59:30 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:55:38 2016
Response via : Initial Calibration

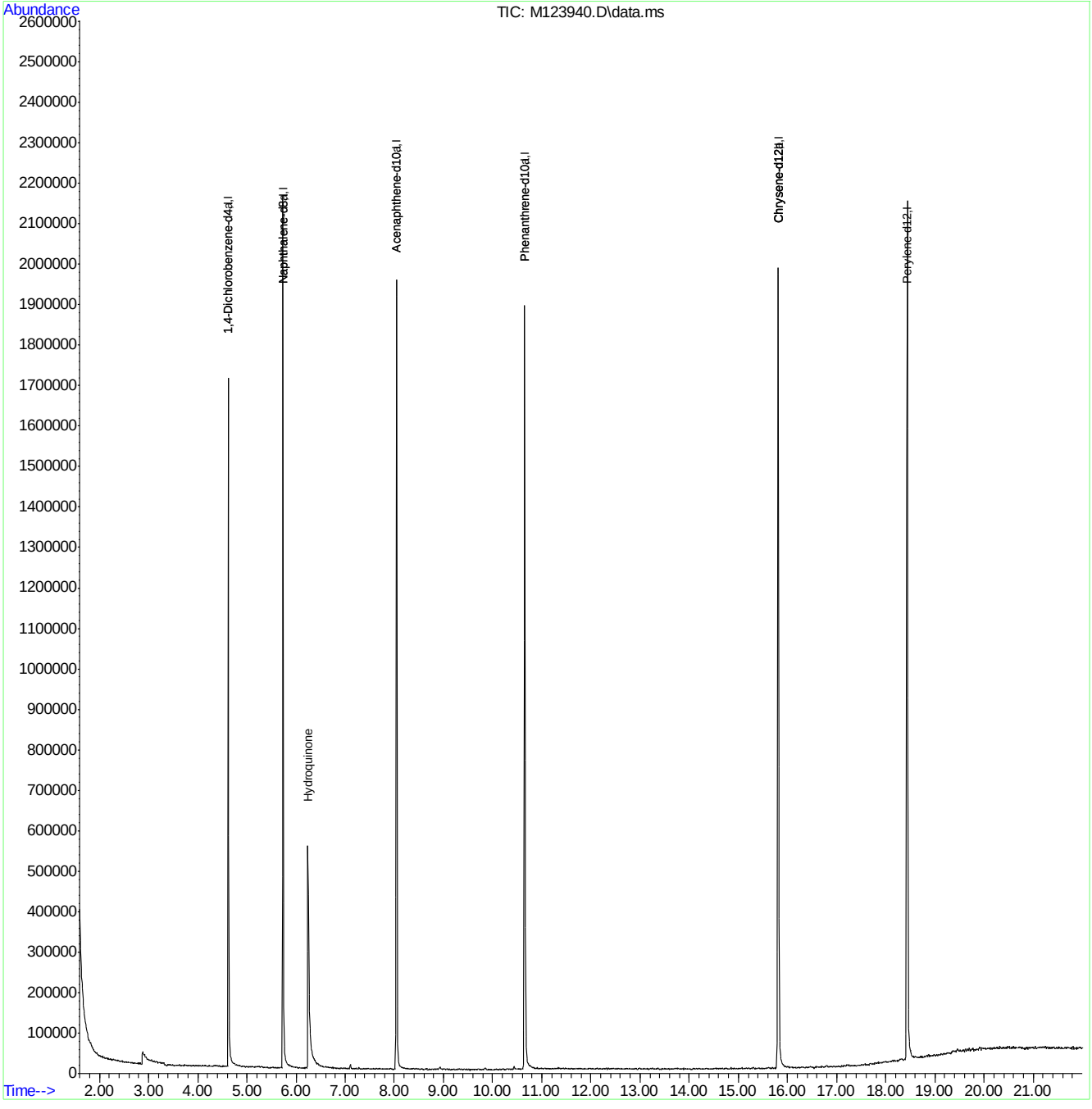
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.619	152	262311	40.00	ppm	0.00
24) Naphthalene-d8	5.735	136	1013507	40.00	ppm	0.00
47) Acenaphthene-d10	8.047	164	587649	40.00	ppm	0.00
69) Phenanthrene-d10	10.654	188	1065344	40.00	ppm	0.00
83) Chrysene-d12	15.813	240	1156208	40.00	ppm	0.00
92) Perylene-d12	18.436	264	1217713	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.619	152	262311	40.00	ppm	0.00
104) Acenaphthene-d10a	8.047	164	587649	40.00	ppm	0.00
107) Chrysene-d12a	15.813	240	1156208	40.00	ppm	0.00
110) Phenanthrene-d10a	10.654	188	1065344	40.00	ppm	0.00
112) Naphthalene-d8a	5.735	136	1013507	40.00	ppm	0.00
114) Chrysene-d12b	15.813	240	1156208	40.00	ppm	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
113) Hydroquinone	6.242	110	413186	52.56	ppm	94

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5239\
Data File : M123940.D
Acq On : 27 Apr 2016 4:37 am
Operator : seanb1
Sample : icv5239-50
Misc : op93324,em5239
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 27 08:59:30 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 08:55:38 2016
Response via : Initial Calibration



MM5239.M Wed Apr 27 08:59:40 2016 MSM

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5240\
Data File : M123945.D
Acq On : 27 Apr 2016 11:18 am
Operator : ashleyd
Sample : icv5239-50
Misc : op93324,em5240
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 27 14:51:19 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 11:42:01 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.676	152	285841	40.00	ppm	0.05
24) Naphthalene-d8	5.803	136	1154531	40.00	ppm	0.07
47) Acenaphthene-d10	8.131	164	685417	40.00	ppm	0.09
69) Phenanthrene-d10	10.748	188	1174286	40.00	ppm	0.09
83) Chrysene-d12	15.919	240	1313652	40.00	ppm	0.11
92) Perylene-d12	18.552	264	1311680	40.00	ppm	0.12
102) 1,4-Dichlorobenzene-d4a	4.676	152	285841	40.00	ppm	0.05
104) Acenaphthene-d10a	8.131	164	685417	40.00	ppm	0.09
107) Chrysene-d12a	15.919	240	1313652	40.00	ppm	0.11
110) Phenanthrene-d10a	10.748	188	1174286	40.00	ppm	0.09
112) Naphthalene-d8a	5.803	136	1154531	40.00	ppm	0.07
114) Chrysene-d12b	15.919	240	1313652	40.00	ppm	0.11
System Monitoring Compounds						
5) 2-Fluorophenol	0.000	112	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
8) Phenol-d5	0.000	99	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
25) Nitrobenzene-d5	0.000	82	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
86) Terphenyl-d14	0.000	244	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
109) 1-chlorooctadecane	0.000	57	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
111) o-terphenyl	0.000	230	0	0.00	ppm	
Spiked Amount 50.000			Recovery = 0.00%			
Target Compounds						Qvalue
108) Benzidine	13.435	184	959292	63.95	ppm	89

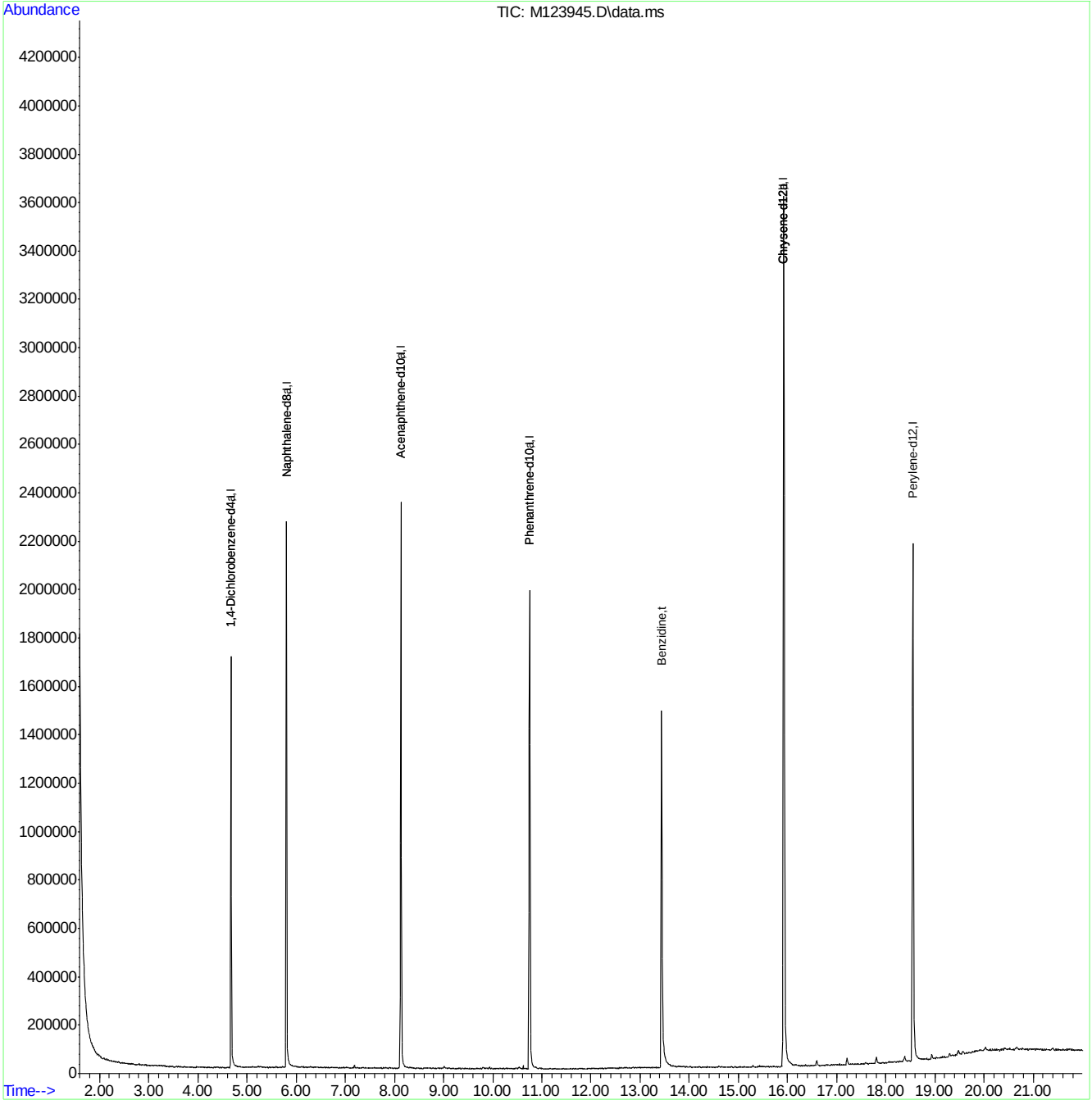
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5240\
Data File : M123945.D
Acq On : 27 Apr 2016 11:18 am
Operator : ashleyd
Sample : icv5239-50
Misc : op93324,em5240
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 27 14:51:19 2016
Quant Method : C:\msdchem\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Wed Apr 27 11:42:01 2016
Response via : Initial Calibration



MM5239.M Wed Apr 27 14:52:09 2016 MSM

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SGS ACCUTEST JC19023

Manual Integrations
APPROVED
(compounds with "m" flag)
Nina Pandya
04/29/16 15:44

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5245\
Data File : M124000.D
Acq On : 29 Apr 2016 9:30 am
Operator : ashleyd
Sample : cc5217-25
Misc : op93324,em5245
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 29 14:52:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 28 11:01:37 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) 1,4-Dichlorobenzene-d4	4.624	152	326169	40.00 ppm	-0.05
24) Naphthalene-d8	5.740	136	1226596	40.00 ppm	-0.06
47) Acenaphthene-d10	8.058	164	775452	40.00 ppm	-0.08
69) Phenanthrene-d10	10.670	188	1340159	40.00 ppm	-0.08
83) Chrysene-d12	15.835	240	1493014	40.00 ppm	-0.09
92) Perylene-d12	18.457	264	1484797	40.00 ppm	-0.10
102) 1,4-Dichlorobenzene-d4a	4.624	152	326169	40.00 ppm	-0.02
104) Acenaphthene-d10a	8.058	164	775452	40.00 ppm	-0.03
107) Chrysene-d12a	15.835	240	1493126	40.00 ppm	-0.04
110) Phenanthrene-d10a	10.670	188	1340159	40.00 ppm	-0.04
112) Naphthalene-d8a	5.740	136	1226596	40.00 ppm	-0.02
114) Chrysene-d12b	15.835	240	1493014	40.00 ppm	-0.04
System Monitoring Compounds					
5) 2-Fluorophenol	3.678	112	265507	26.62 ppm	-0.05
Spiked Amount 50.000			Recovery	= 53.24%	
8) Phenol-d5	4.394	99	354380	28.29 ppm	-0.04
Spiked Amount 50.000			Recovery	= 56.58%	
25) Nitrobenzene-d5	5.072	82	303346	27.81 ppm	-0.06
Spiked Amount 50.000			Recovery	= 55.62%	
51) 2-Fluorobiphenyl	7.048	172	628342	24.68 ppm	-0.07
Spiked Amount 50.000			Recovery	= 49.36%	
73) 2,4,6-Tribromophenol	9.415	330	131936	28.48 ppm	-0.08
Spiked Amount 50.000			Recovery	= 56.96%	
86) Terphenyl-d14	13.826	244	826558	24.68 ppm	-0.09
Spiked Amount 50.000			Recovery	= 49.36%	
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	2.172	88	119496	26.42 ppm	92
3) Pyridine	2.519	79	294661	26.77 ppm	93
4) N-Nitrosodimethylamine	2.487	42	138425	28.71 ppm	98
6) Indene	4.821	116	492521	26.55 ppm	99
7) Cumene	4.025	105	692732	27.84 ppm	98
9) Phenol	4.399	94	402035	29.95 ppm	88
10) Aniline	4.389	93	333161	21.34 ppm	81
11) bis(2-Chloroethyl)ether	4.426	93	273959	26.21 ppm	92
12) 2-Chlorophenol	4.485	128	311055	27.82 ppm	97
13) Decane	4.501	43	302937	28.59 ppm	98
14) 1,3-Dichlorobenzene	4.581	146	333870	26.19 ppm	98
15) 1,4-Dichlorobenzene	4.634	146	336941	26.67 ppm	96
16) Benzyl alcohol	4.741	108	180221	27.83 ppm	88
17) 1,2-Dichlorobenzene	4.757	146	316587	26.62 ppm	97
18) Acetophenone	4.944	105	392723	26.45 ppm	98
19) 2-Methylphenol	4.848	108	248267	26.80 ppm	98
20) 2,2'-oxybis(1-Chloropr...	4.832	121	91454	26.48 ppm #	86

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5245\
Data File : M124000.D
Acq On : 29 Apr 2016 9:30 am
Operator : ashleyd
Sample : cc5217-25
Misc : op93324,em5245
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 29 14:52:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 28 11:01:37 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	4.971	108	270237	26.62	ppm	94
22) n-Nitroso-di-n-propyla...	4.944	70	220350	27.48	ppm	97
23) Hexachloroethane	5.024	201	118647	24.85	ppm	89
26) Nitrobenzene	5.088	77	309383	28.02	ppm	97
27) Quinoline	6.130	129	586366	25.07	ppm	99
28) Isophorone	5.291	82	543561	27.38	ppm	92
29) 2-Nitrophenol	5.371	139	170015	27.21	ppm	88
30) 2,4-Dimethylphenol	5.425	107	242585	23.72	ppm	96
31) Benzoic acid	5.553	105	195967	29.22	ppm	97
32) bis(2-Chloroethoxy)met...	5.489	93	330472	27.42	ppm	99
33) 2,4-Dichlorophenol	5.628	162	249565	26.69	ppm	97
34) 2,6-Dichlorophenol	5.841	162	243498	25.78	ppm	100
35) 1,3,5-Trichlorobenzene	5.377	180	294357	26.40	ppm	98
36) 1,2,4-Trichlorobenzene	5.687	180	282024	25.71	ppm	97
37) 1,2,3-Trichlorobenzene	5.916	180	269950	25.46	ppm	99
38) Naphthalene	5.761	128	829704	25.83	ppm	99
39) 4-Chloroaniline	5.831	127	335603	24.25	ppm	98
40) 2,3-Dichloroaniline	6.942	161	310573	25.50	ppm	98
41) Caprolactam	6.226	55	132998	26.30	ppm	99
42) Hexachlorobutadiene	5.889	225	163160	25.86	ppm	97
43) 4-Chloro-3-methylphenol	6.424	107	246876	26.42	ppm	99
44) 2-Methylnaphthalene	6.557	141	485085	25.25	ppm	99
45) 1-Methylnaphthalene	6.685	142	581373	26.04	ppm	100
46) Dimethylnaphthalene	7.422	156	540380	26.08	ppm	99
48) Hexachlorocyclopentadiene	6.765	237	119689	26.97	ppm	98
49) 2,4,6-Trichlorophenol	6.958	196	185639	25.09	ppm	99
50) 2,4,5-Trichlorophenol	7.032	196	193676	24.05	ppm	97
52) 2-Chloronaphthalene	7.214	162	565374	25.03	ppm	99
53) Biphenyl	7.193	154	728032	25.23	ppm	99
54) 2-Nitroaniline	7.390	65	178208	27.67	ppm	97
55) Dimethylphthalate	7.668	163	701567	26.56	ppm	100
56) Acenaphthylene	7.828	152	938319	25.12	ppm	99
57) 2,6-Dinitrotoluene	7.764	165	159665	27.20	ppm	96
58) 3-Nitroaniline	8.037	138	170079	26.18	ppm	96
59) Acenaphthene	8.106	153	576592	25.63	ppm	100
60) 2,4-Dinitrophenol	8.234	184	136774	55.09	ppm	96
61) 4-Nitrophenol	8.469	109	60134	25.31	ppm	94
62) Dibenzofuran	8.394	168	852780	25.48	ppm	97
63) 2,4-Dinitrotoluene	8.432	165	215174	27.94	ppm	91
64) 2,3,4,6-Tetrachlorophenol	8.645	232	162006	26.01	ppm	98
65) Diethylphthalate	8.848	149	711549	27.06	ppm	99
66) Fluorene	8.977	166	694746	25.68	ppm	100
67) 4-Chlorophenyl-phenyle...	9.003	204	343941	26.65	ppm	98
68) 4-Nitroaniline	9.078	138	151972	24.06	ppm	98
70) 4,6-Dinitro-2-methylph...	9.148	198	114641	27.45	ppm	92
71) n-Nitrosodiphenylamine	9.228	169	499785	27.76	ppm	98
72) 1,2-Diphenylhydrazine	9.281	77	652122	28.28	ppm	97
74) 4-Bromophenyl-phenylether	9.874	248	231815	27.97	ppm	96
75) Hexachlorobenzene	9.970	284	264395	27.09	ppm	98
76) Pentachlorophenol	10.381	266	234641	55.81	ppm	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5245\
Data File : M124000.D
Acq On : 29 Apr 2016 9:30 am
Operator : ashleyd
Sample : cc5217-25
Misc : op93324,em5245
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 29 14:52:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 28 11:01:37 2016
Response via : Initial Calibration

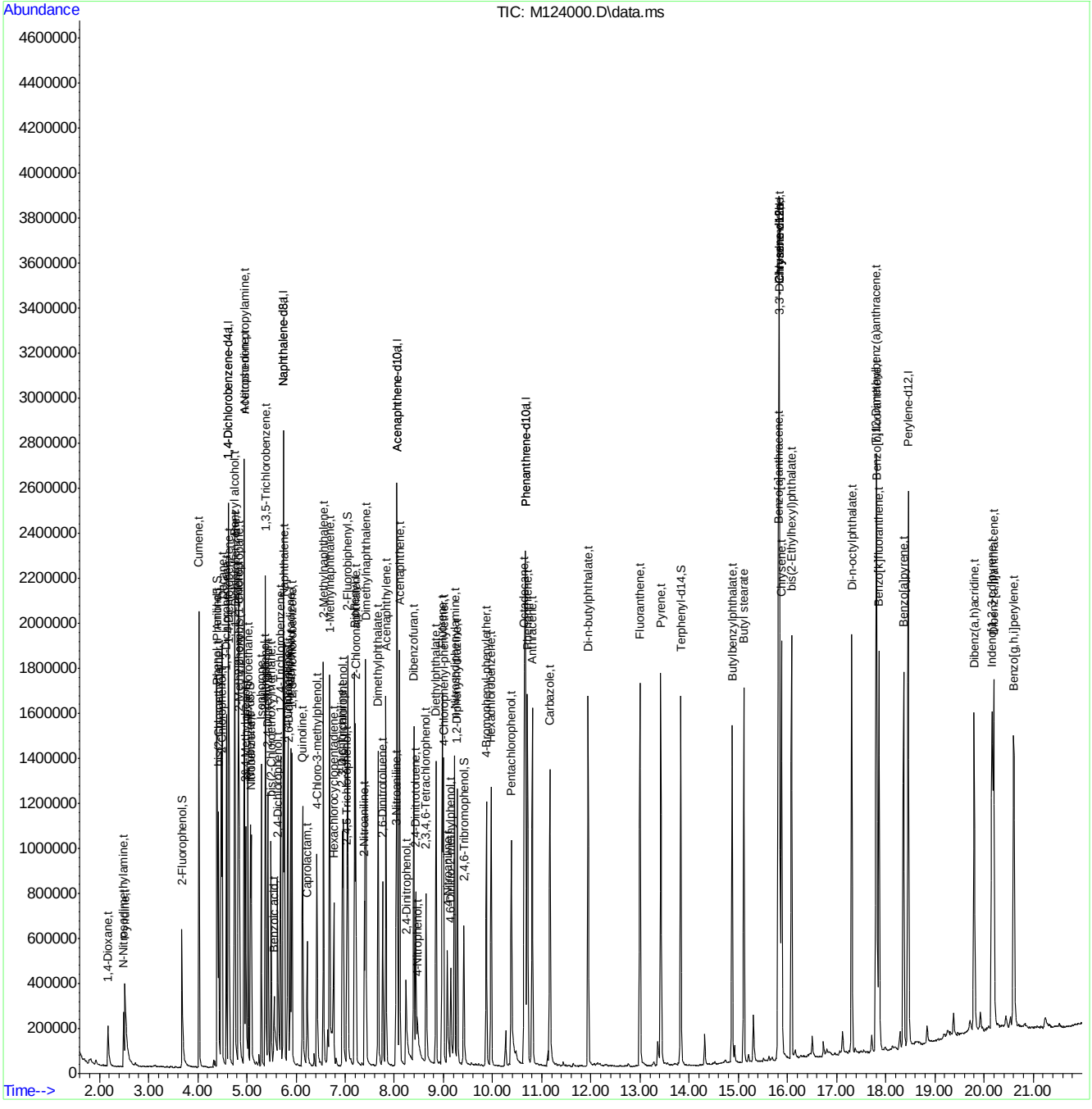
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
77)	Phenanthrene	10.707	178	965531	25.84	ppm	99
78)	Anthracene	10.809	178	978987	25.30	ppm	99
79)	Carbazole	11.166	167	916145	25.71	ppm	99
80)	Di-n-butylphthalate	11.941	149	1218909	27.55	ppm	100
81)	Fluoranthene	12.998	202	1108475	25.32	ppm	99
82)	Octadecane	10.643	57	427173	29.63	ppm	97
84)	Pyrene	13.420	202	1132624	23.27	ppm	99
85)	Butyl stearate	15.108	56	310882	27.94	ppm	95
87)	Butylbenzylphthalate	14.873	149	543355	25.67	ppm	94
88)	Benzo[a]anthracene	15.813	228	1122471	24.59	ppm	99
89)	3,3'-Dichlorobenzidine	15.840	252	435016	26.10	ppm	98
90)	Chrysene	15.883	228	1059968	24.86	ppm	99
91)	bis(2-Ethylhexyl)phtha...	16.086	149	771235	27.03	ppm	99
93)	Di-n-octylphthalate	17.309	149	1336779	27.74	ppm	98
94)	Benzo[b]fluoranthene	17.816	252	1172301	25.70	ppm	95
95)	Benzo[k]fluoranthene	17.864	252	1151606	26.19	ppm	99
96)	Benzo[a]pyrene	18.361	252	1062102	25.21	ppm	98
97)	Indeno[1,2,3-cd]pyrene	20.161	276	1109010m	26.01	ppm	
98)	Dibenz(a,h)acridine	19.798	279	994643	26.32	ppm	99
99)	Dibenz[a,h]anthracene	20.193	278	1123844	25.92	ppm	99
100)	7,12-Dimethylbenz(a)an...	17.805	256	492396	23.98	ppm	100
101)	Benzo[g,h,i]perylene	20.604	276	1099905	24.75	ppm	100

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

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5245\
Data File : M124000.D
Acq On : 29 Apr 2016 9:30 am
Operator : ashleyd
Sample : cc5217-25
Misc : op93324,em5245
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 29 14:52:27 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 28 11:01:37 2016
Response via : Initial Calibration



MM5239.M Fri Apr 29 14:52:35 2016 MSM

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SGS ACCUTEST JC19023

Manual Integration Approval Summary

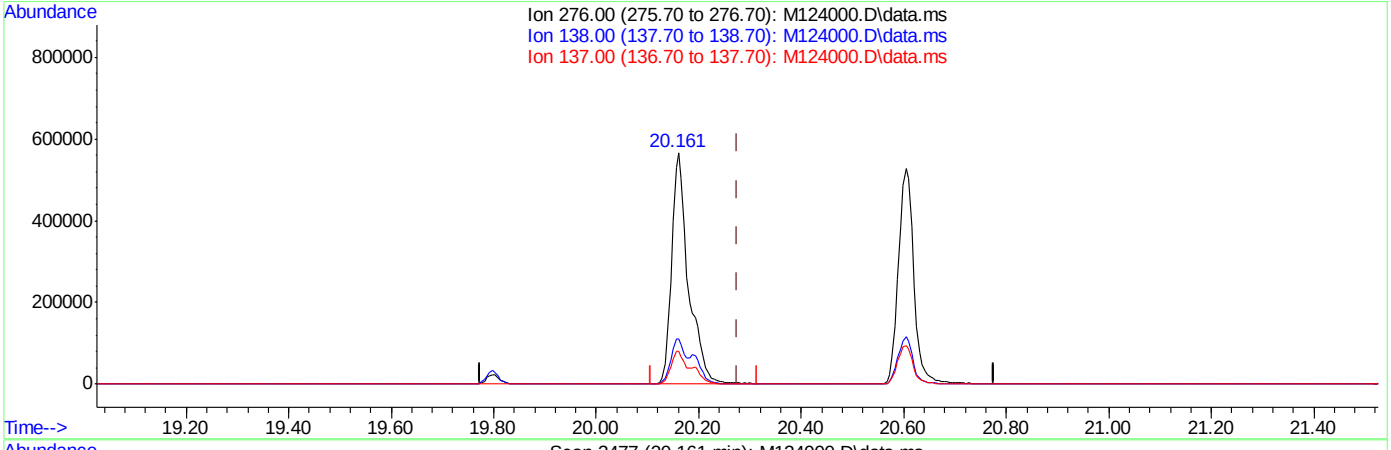
Sample Number:	EM5245-CC5217	**Method:**	SW846 8270D
Lab FileID:	M124000.D	**Analyst approved:**	04/29/16 15:02 Ashley Dye
Injection Time:	04/29/16 09:30	**Supervisor approved:**	04/29/16 15:44 Nina Pandya

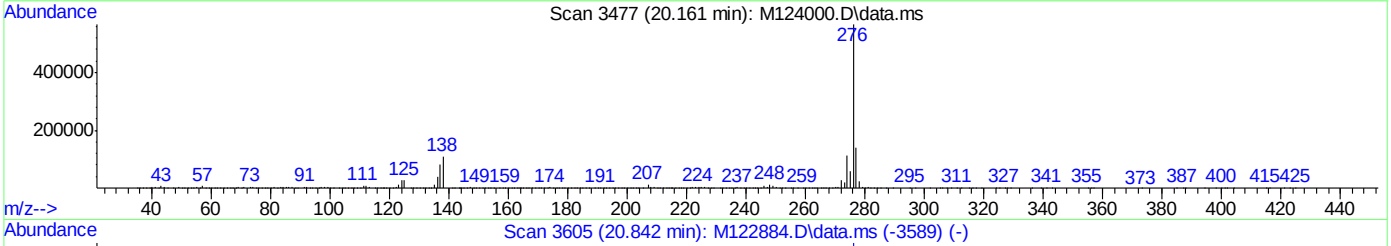
Parameter	CAS	Sig#	R.T. (min.)	Reason
Indeno(1,2,3-cd)pyrene	193-39-5		20.16	Overlapping peak

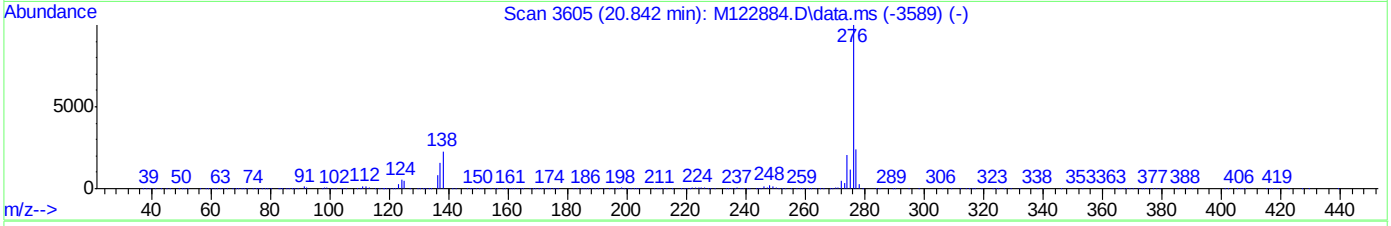
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5245\
Data File : M124000.D
Acq On : 29 Apr 2016 9:30 am
Operator : ashleyd
Sample : cc5217-25
Misc : op93324,em5245
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 29 09:52:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 28 11:01:37 2016
Response via : Initial Calibration







TIC: M124000.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

20.161min (-0.115) 30.67ppm

response 1307345

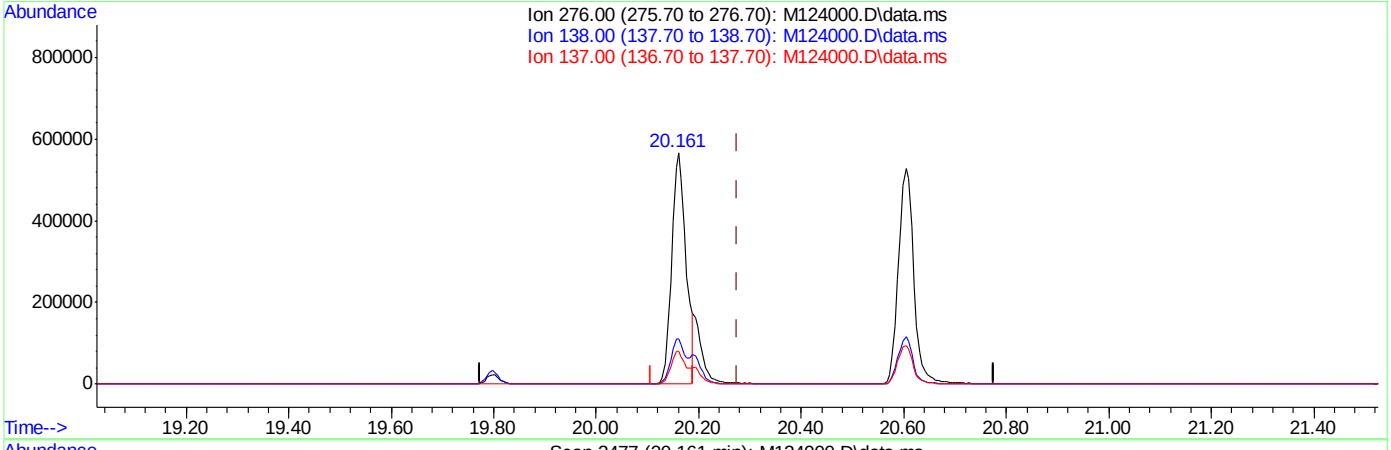
Ion	Exp%	Act%
276.00	100	100
138.00	17.70	19.40
137.00	13.00	14.28
0.00	0.00	0.00

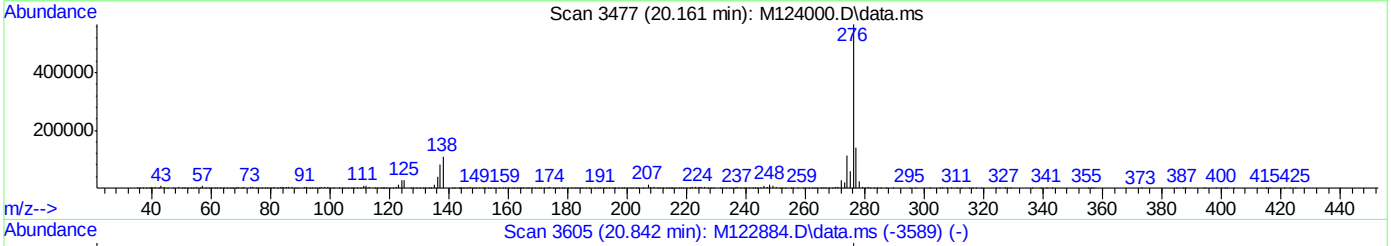
SGS ACCUTEST JC19023

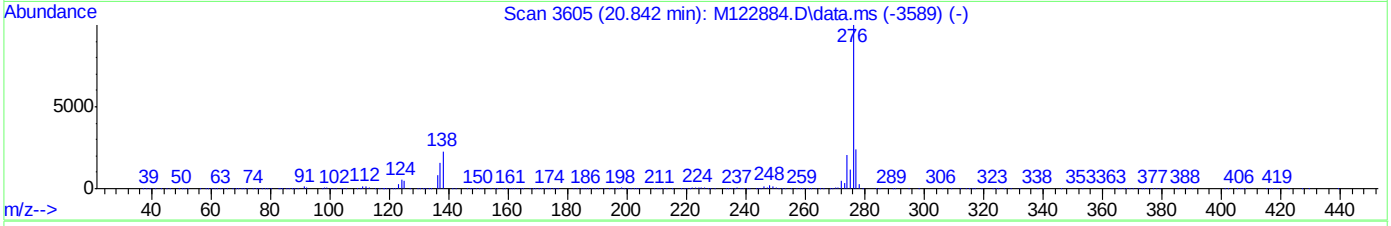
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\EM5245\
Data File : M124000.D
Acq On : 29 Apr 2016 9:30 am
Operator : ashleyd
Sample : cc5217-25
Misc : op93324,em5245
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 29 09:52:19 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 28 11:01:37 2016
Response via : Initial Calibration







TIC: M124000.D\data.ms

(97) Indeno[1,2,3-cd]pyrene (t)

20.161min (-0.115) 26.01ppm m

response 1109010

Ion	Exp%	Act%
276.00	100	100
138.00	17.70	19.52
137.00	13.00	14.39
0.00	0.00	0.00

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5245\
Data File : M124001.D
Acq On : 29 Apr 2016 9:58 am
Operator : ashleyd
Sample : cc5239-25
Misc : op93324,em5245
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 29 14:53:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 28 11:01:37 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.622	152	331485	40.00	ppm	-0.05
24) Naphthalene-d8	5.738	136	1233080	40.00	ppm	-0.06
47) Acenaphthene-d10	8.051	164	725939	40.00	ppm	-0.08
69) Phenanthrene-d10	10.662	188	1272314	40.00	ppm	-0.09
83) Chrysene-d12	15.827	240	1471369	40.00	ppm	-0.10
92) Perylene-d12	18.455	264	1438729	40.00	ppm	-0.10
102) 1,4-Dichlorobenzene-d4a	4.622	152	331485	40.00	ppm	-0.02
104) Acenaphthene-d10a	8.051	164	725939	40.00	ppm	-0.04
107) Chrysene-d12a	15.827	240	1471369	40.00	ppm	-0.04
110) Phenanthrene-d10a	10.662	188	1272314	40.00	ppm	-0.04
112) Naphthalene-d8a	5.738	136	1233080	40.00	ppm	-0.03
114) Chrysene-d12b	15.827	240	1471369	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%	
109) 1-chlorooctadecane	12.975	57	250980	26.42	ppm	0.06
Spiked Amount 50.000			Recovery	=	52.84%	
111) o-terphenyl	11.458	230	498000	28.97	ppm	0.06
Spiked Amount 50.000			Recovery	=	57.94%	
Target Compounds						Qvalue
103) Benzaldehyde	4.301	105	202160	26.98	ppm	98
105) 1,2,4,5-Tetrachloroben...	6.779	216	264269	28.24	ppm	94
106) Atrazine	10.267	215	92306	30.10	ppm #	75
108) Benzidine	13.349	184	364476	21.06	ppm	97
113) Hydroquinone	6.261	110	245121	25.63	ppm	97

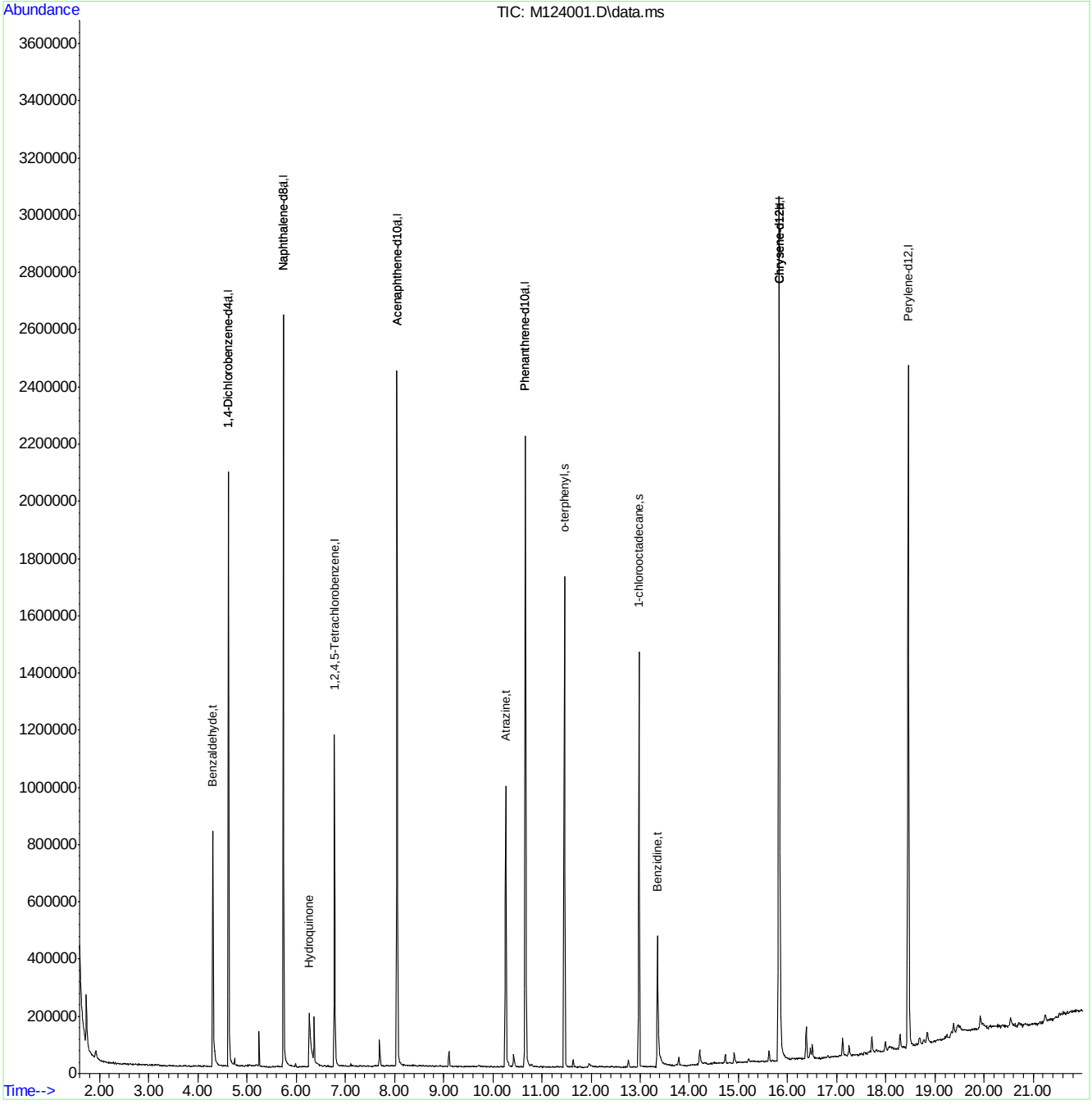
(#) = qualifier out of range (m) = manual integration (+) = signals summed

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5245\
Data File : M124001.D
Acq On : 29 Apr 2016 9:58 am
Operator : ashleyd
Sample : cc5239-25
Misc : op93324,em5245
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 29 14:53:02 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Thu Apr 28 11:01:37 2016
Response via : Initial Calibration



MM5239.M Fri Apr 29 14:53:11 2016 MSM

Page: 2

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5253\
Data File : M124202.D
Acq On : 6 May 2016 8:57 am
Operator : ashleyd
Sample : cc5217-50
Misc : op93634,em5253
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 06 12:30:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri May 06 09:13:35 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.665	152	374614	40.00	ppm	-0.01
24) Naphthalene-d8	5.792	136	1375018	40.00	ppm	-0.02
47) Acenaphthene-d10	8.126	164	852140	40.00	ppm	-0.02
69) Phenanthrene-d10	10.754	188	1491099	40.00	ppm	-0.02
83) Chrysene-d12	15.940	240	1747820	40.00	ppm	-0.01
92) Perylene-d12	18.573	264	1813666	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.665	152	374614	40.00	ppm	-0.01
104) Acenaphthene-d10a	8.126	164	852140	40.00	ppm	-0.02
107) Chrysene-d12a	15.940	240	1747820	40.00	ppm	-0.01
110) Phenanthrene-d10a	10.754	188	1491099	40.00	ppm	-0.02
112) Naphthalene-d8a	5.792	136	1375018	40.00	ppm	-0.02
114) Chrysene-d12b	15.940	240	1747820	40.00	ppm	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	3.715	112	595040	51.94	ppm	0.00
Spiked Amount 50.000			Recovery	=	103.88%	
8) Phenol-d5	4.430	99	776144	53.94	ppm	0.00
Spiked Amount 50.000			Recovery	=	107.88%	
25) Nitrobenzene-d5	5.125	82	625421	51.15	ppm	0.00
Spiked Amount 50.000			Recovery	=	102.30%	
51) 2-Fluorobiphenyl	7.117	172	1413809	50.53	ppm	-0.01
Spiked Amount 50.000			Recovery	=	101.06%	
73) 2,4,6-Tribromophenol	9.488	330	324598	62.98	ppm	-0.03
Spiked Amount 50.000			Recovery	=	125.96%	
86) Terphenyl-d14	13.921	244	1969373	50.23	ppm	-0.02
Spiked Amount 50.000			Recovery	=	100.46%	
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	2.214	88	241088	46.41	ppm	95
3) Pyridine	2.561	79	651032	51.49	ppm	95
4) N-Nitrosodimethylamine	2.523	42	312741	56.47	ppm	91
6) Indene	4.868	116	1059208	49.71	ppm	99
7) Cumene	4.062	105	1423336	49.80	ppm	99
9) Phenol	4.441	94	861670	55.89	ppm	91
10) Aniline	4.425	93	822935	45.89	ppm	67
11) bis(2-Chloroethyl)ether	4.468	93	615258	51.24	ppm	94
12) 2-Chlorophenol	4.521	128	647009	50.39	ppm	94
13) Decane	4.537	43	646335	53.10	ppm	96
14) 1,3-Dichlorobenzene	4.623	146	722458	49.34	ppm	95
15) 1,4-Dichlorobenzene	4.676	146	703134	48.46	ppm	95
16) Benzyl alcohol	4.788	108	391575	52.65	ppm	98
17) 1,2-Dichlorobenzene	4.799	146	675155	49.43	ppm	97
18) Acetophenone	4.991	105	845993	49.61	ppm	96
19) 2-Methylphenol	4.895	108	539347	50.69	ppm	98
20) 2,2'-oxybis(1-Chloropr...	4.879	121	199595	50.32	ppm #	79

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5253\
Data File : M124202.D
Acq On : 6 May 2016 8:57 am
Operator : ashleyd
Sample : cc5217-50
Misc : op93634,em5253
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 06 12:30:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri May 06 09:13:35 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
21) 3&4-Methylphenol	5.018	108	592091	50.79	ppm	94
22) n-Nitroso-di-n-propyla...	4.991	70	455184	49.43	ppm	93
23) Hexachloroethane	5.071	201	269417	49.12	ppm	95
26) Nitrobenzene	5.141	77	642512	51.90	ppm	98
27) Quinoline	6.204	129	1292050	49.29	ppm	99
28) Isophorone	5.344	82	1163177	52.27	ppm	95
29) 2-Nitrophenol	5.424	139	376593	53.77	ppm	86
30) 2,4-Dimethylphenol	5.477	107	567958	49.54	ppm	99
31) Benzoic acid	5.632	105	432189	57.48	ppm	100
32) bis(2-Chloroethoxy)met...	5.541	93	694636	51.41	ppm	99
33) 2,4-Dichlorophenol	5.675	162	549771	52.45	ppm	94
34) 2,6-Dichlorophenol	5.894	162	541820	51.16	ppm	95
35) 1,3,5-Trichlorobenzene	5.429	180	639103	51.12	ppm	99
36) 1,2,4-Trichlorobenzene	5.739	180	606839	49.36	ppm	98
37) 1,2,3-Trichlorobenzene	5.974	180	590382	49.66	ppm	98
38) Naphthalene	5.814	128	1801721	50.03	ppm	99
39) 4-Chloroaniline	5.883	127	749819	48.34	ppm	96
40) 2,3-Dichloroaniline	7.005	161	680308	49.82	ppm	94
41) Caprolactam	6.305	55	294737	52.00	ppm	96
42) Hexachlorobutadiene	5.947	225	371181	52.49	ppm	97
43) 4-Chloro-3-methylphenol	6.481	107	516396	49.30	ppm	90
44) 2-Methylnaphthalene	6.620	141	1061588	49.29	ppm	98
45) 1-Methylnaphthalene	6.743	142	1255905	50.19	ppm	99
46) Dimethylnaphthalene	7.491	156	1140365	49.09	ppm	98
48) Hexachlorocyclopentadiene	6.823	237	470525	84.14	ppm	98
49) 2,4,6-Trichlorophenol	7.026	196	423256	52.06	ppm	91
50) 2,4,5-Trichlorophenol	7.095	196	460475	52.03	ppm	88
52) 2-Chloronaphthalene	7.282	162	1191449	48.00	ppm	97
53) Biphenyl	7.256	154	1543139	48.66	ppm	100
54) 2-Nitroaniline	7.464	65	368085	52.01	ppm	92
55) Dimethylphthalate	7.736	163	1423468	49.05	ppm	99
56) Acenaphthylene	7.902	152	1937850	47.22	ppm	99
57) 2,6-Dinitrotoluene	7.838	165	339068	52.56	ppm	96
58) 3-Nitroaniline	8.110	138	360273	50.47	ppm	96
59) Acenaphthene	8.180	153	1189723	48.12	ppm	98
60) 2,4-Dinitrophenol	8.308	184	383160	122.79	ppm	95
61) 4-Nitrophenol	8.527	109	116964	44.81	ppm	96
62) Dibenzofuran	8.468	168	1789461	48.65	ppm	100
63) 2,4-Dinitrotoluene	8.511	165	451421	53.34	ppm	91
64) 2,3,4,6-Tetrachlorophenol	8.719	232	384321	56.14	ppm	93
65) Diethylphthalate	8.927	149	1443788	49.97	ppm	98
66) Fluorene	9.056	166	1490510	50.13	ppm	98
67) 4-Chlorophenyl-phenyle...	9.077	204	704127	49.64	ppm	98
68) 4-Nitroaniline	9.168	138	352118	50.72	ppm	98
70) 4,6-Dinitro-2-methylph...	9.232	198	298238	59.57	ppm	98
71) n-Nitrosodiphenylamine	9.307	169	1004732	50.16	ppm	99
72) 1,2-Diphenylhydrazine	9.360	77	1324073	51.61	ppm	96
74) 4-Bromophenyl-phenylether	9.953	248	514445	55.78	ppm	93
75) Hexachlorobenzene	10.054	284	580979	53.49	ppm	97
76) Pentachlorophenol	10.466	266	616878	125.68	ppm	99

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5253\
Data File : M124202.D
Acq On : 6 May 2016 8:57 am
Operator : ashleyd
Sample : cc5217-50
Misc : op93634,em5253
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 06 12:30:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri May 06 09:13:35 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
77) Phenanthrene	10.797	178	2064109	49.65 ppm	100
78) Anthracene	10.893	178	2148063	49.90 ppm	99
79) Carbazole	11.251	167	1991230	50.22 ppm	99
80) Di-n-butylphthalate	12.025	149	2539279	51.58 ppm	100
81) Fluoranthene	13.093	202	2577177	52.91 ppm	99
82) Octadecane	10.722	57	895552	55.83 ppm	96
84) Pyrene	13.521	202	2606935	45.75 ppm	99
85) Butyl stearate	15.198	56	661057	50.74 ppm	95
87) Butylbenzylphthalate	14.963	149	1153843	46.57 ppm	96
88) Benzo[a]anthracene	15.919	228	2560283	47.92 ppm	98
89) 3,3'-Dichlorobenzidine	15.940	252	1003470	51.43 ppm	99
90) Chrysene	15.988	228	2387426	47.84 ppm	99
91) bis(2-Ethylhexyl)phtha...	16.175	149	1532978	45.89 ppm	97
93) Di-n-octylphthalate	17.404	149	2723358	46.26 ppm	97
94) Benzo[b]fluoranthene	17.938	252	2755215	49.45 ppm	94
95) Benzo[k]fluoranthene	17.981	252	2548650	47.45 ppm	99
96) Benzo[a]pyrene	18.477	252	2516880	48.91 ppm	98
97) Indeno[1,2,3-cd]pyrene	20.315	276	3109054	59.70 ppm	99
98) Dibenz(a,h)acridine	19.930	279	2370165	51.34 ppm	99
99) Dibenz[a,h]anthracene	20.341	278	2613874	49.36 ppm	98
100) 7,12-Dimethylbenz(a)an...	17.922	256	1348071	53.76 ppm	97
101) Benzo[g,h,i]perylene	20.774	276	2646190	48.75 ppm	97

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

7.6.111

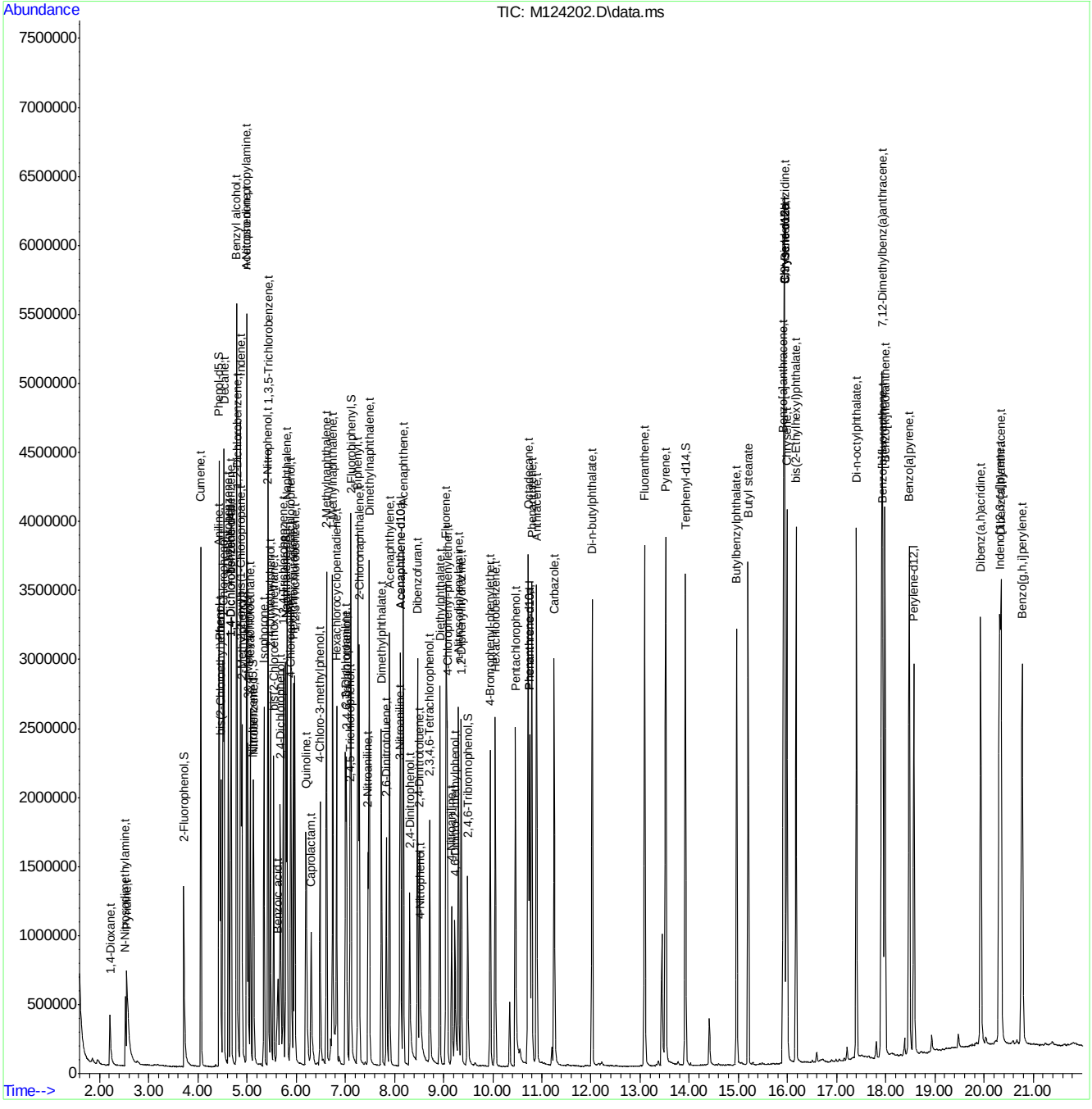
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5253\
Data File : M124202.D
Acq On : 6 May 2016 8:57 am
Operator : ashleyd
Sample : cc5217-50
Misc : op93634,em5253
ALS Vial : 2 Sample Multiplier: 1

Quant Time: May 06 12:30:48 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri May 06 09:13:35 2016
Response via : Initial Calibration



SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5253\
Data File : M124203.D
Acq On : 6 May 2016 9:26 am
Operator : ashleyd
Sample : cc5239-50
Misc : op93634,em5253
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 12:31:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri May 06 09:13:35 2016
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	4.667	152	430793	40.00	ppm	0.00
24) Naphthalene-d8	5.794	136	1700101	40.00	ppm	-0.01
47) Acenaphthene-d10	8.123	164	1005994	40.00	ppm	-0.02
69) Phenanthrene-d10	10.750	188	1898685	40.00	ppm	-0.02
83) Chrysene-d12	15.931	240	2280394	40.00	ppm	-0.02
92) Perylene-d12	18.570	264	2396269	40.00	ppm	0.00
102) 1,4-Dichlorobenzene-d4a	4.667	152	430793	40.00	ppm	0.00
104) Acenaphthene-d10a	8.123	164	1005994	40.00	ppm	-0.02
107) Chrysene-d12a	15.931	240	2280394	40.00	ppm	-0.02
110) Phenanthrene-d10a	10.750	188	1898685	40.00	ppm	-0.02
112) Naphthalene-d8a	5.794	136	1700101	40.00	ppm	-0.01
114) Chrysene-d12b	15.931	240	2280394	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	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
51) 2-Fluorobiphenyl	0.000	172	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
73) 2,4,6-Tribromophenol	0.000	330	0	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
86) Terphenyl-d14	0.000	244	0d	0.00	ppm	
Spiked Amount 50.000			Recovery	=	0.00%	
109) 1-chlorooctadecane	13.058	57	713819	48.49	ppm	0.08
Spiked Amount 50.000			Recovery	=	96.98%	
111) o-terphenyl	11.541	230	1522862	59.36	ppm	0.07
Spiked Amount 50.000			Recovery	=	118.72%	
Target Compounds						Qvalue
103) Benzaldehyde	4.341	105	394074	40.47	ppm	97
105) 1,2,4,5-Tetrachloroben...	6.846	216	772505	59.57	ppm	94
106) Atrazine	10.355	215	296665	69.81	ppm #	65
108) Benzidine	13.437	184	966694	35.16	ppm	99
113) Hydroquinone	6.312	110	708855	53.75	ppm	99

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

7.6.112

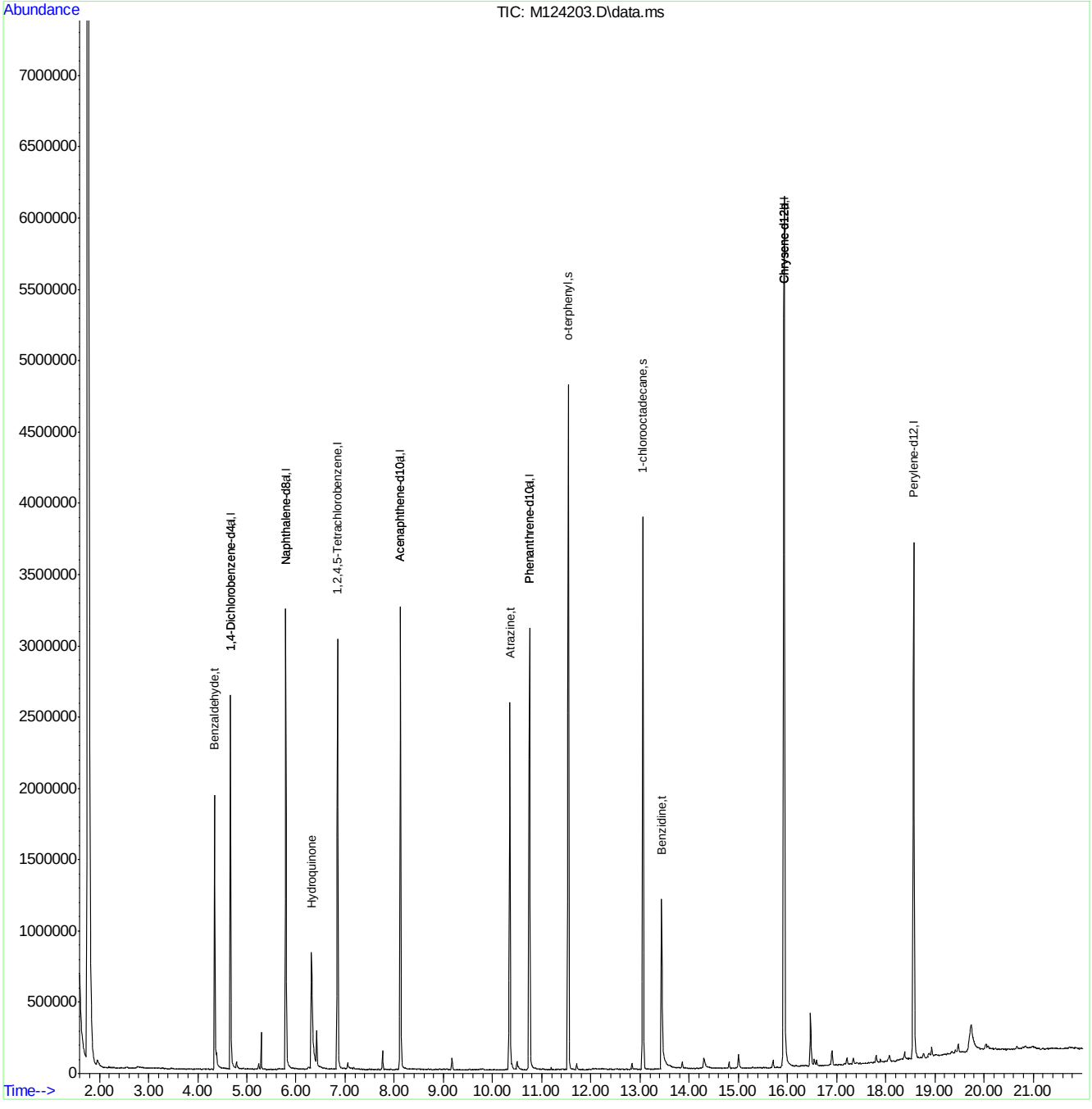
7

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\EM5253\
Data File : M124203.D
Acq On : 6 May 2016 9:26 am
Operator : ashleyd
Sample : cc5239-50
Misc : op93634,em5253
ALS Vial : 3 Sample Multiplier: 1

Quant Time: May 06 12:31:45 2016
Quant Method : C:\MSDCHEM\1\METHODS\MM5239.M
Quant Title : Semi Volatile GC/MS, rtx-5ms 30mx0.25mmx0.25um
QLast Update : Fri May 06 09:13:35 2016
Response via : Initial Calibration



MM5239.M Fri May 06 12:31:49 2016 MSM

SGS ACCUTEST JC19023

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: E2P2547

Print Analyst Name: Robert La Posta

Analyst Signature: [signature]

Date: 4/14/16

Columns: ZB-5MS+30m x 0.25mm x 0.25um

Method: 8270D/625

Initial Cal. Method: M2P2547

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
[illegible]	[illegible]	5 ppm
SMM827-107A	BNA	5 ppm
CMS7132	DCA 1570	4000 ppm
167148	Dan (FRM)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AMG

Date: 4/20/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	E2P5836	DFZBP				1					OK	3:12pm
	5836 4	~~IC2547-50~~		BNA	W	2					NA	SMM827-107A + [illegible]
	5836 5	IC2547-50		BNA	W	2					OK	SMM827-106C
	5836 6	IC2547-5				3					OK	-106D
	5836 7	IC2547-80	AMG 4/20/16			4					OK	-106B
	5836 8	-10				5					OK	-106E
	5836 9	-100				6					OK	-106A
	5837 0	-5				7					OK	-106G
	5837 1	-2				8					OK	-106H
	5837 2	-1				9					OK	-106I 7:21pm

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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Form: OR015-07
Rev. Date: 1/19/16

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E2P2548 4 SD ② 4/19/16

Print Analyst Name: Sara Davis

Date: 4/19/2016

Analyst Signature: SED

Standard Data

Lot #	Description	Conc.
SV151827-73A	TCL42	100 ppm
-73B	↓	80 ppm
-73C		50 ppm
-73D		25 ppm
-73E		10 ppm
-73G	↓	5 ppm

Standard Data

Lot #	Description	Conc.
SV151829-108	DFTPP	50 ppm
SV151827-73H	TCL42	2 ppm
-73I	↓	1 ppm
CM5732	Internal Std	4000 ppm
159146	DCM (Fisher)	—

Columns: ZB-5ms+ 30m x .25mm x .25 um

Method 8270 D/625

Initial Cal. Method M2P2547

Injection Volume: 1 µl

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AMO Date: 4/20/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	2P58373	DFTPP			W	1					OK	H7PM
	58374	TC2548-100		TCL42	W	2					OK	
	58375	-80				3					OK	
	58376	TCL2548-50				4					OK	
	58377	TC2548-25				5					OK	
	58378	-10				6					OK	
	58379	-5				7					OK	
	58380	-2				8					OK	
	58381	-1				9					OK	
	58382	TCV2547-50		Acids		10	AMO 4/20/16				RR OK	SV151827 ~~87~~ 114 SD ② RR for DOO
	58383	-50		Aniline		11					RR OK	~~94~~ 115 4/19/16 RR for DOO
	58384	-50		ABN surr		12					OK	OP151624 20
	58385	-50		BN1		13					OK	SV151827-113
	58386	-50		BN2		14					OK	-95
	58387	TCV2548-50		HQ		15					OK	-98C
	58388	-50		Benzidine 3rd		16					OK	-38F BZD-1
	58389	aniline-test		extractions test		1					OK	SV151827130 passing

12/c am AMO 4/20/16 ④

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

51

Form: OR015-07
Rev. Date: 1/19/16

7.7.2 7

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E2P2549

Print Analyst Name: Robert LaPosta

Date: 4/20/16

Analyst Signature: [signature]

Columns: ~~RX-5ms~~ ZB-MS+ 30mX0.25mm 0.25um

Method 8270D/625

Initial Cal. Method M2P2547

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SMIX 9 OK OF TBP		50ppm
CMS732	7570	400ppm
SMIX 11	Dim Cocktail	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AMO

Date: 4/20/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	E2P58390	OK TBP				1					OK	9:38am
	58391	IOV 25470		ACID		2					OK	SVM127-129 passes
	58392	50		ANALINES		3					OK	-130 passes
												10:16am

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07

Rev. Date: 1/19/16

SGS ACCUTEST JC19023

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: E2P2557

Print Analyst Name: Robert LaPosta

Analyst Signature:

Date: 4/25/16

Columns: Rtx-5Sil (MS) 0.25mm ID 0.25

Method: 8270D625

Initial Cal. Method: M2P2097

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SVIS162401	DFTPP	50ng
CIM5732	Internal Std	4000 ppb
1662418	Dom (Surr)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 4-25-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	28523	DFTPP				1					not using	reinst c new disc & time for KS.
	58524	DFTPP				1					OK	10:05 AM
	58525	ICV557-50		TCLY2	W	2					OK	~~SVIST~~ ~~SVIT4~~ SV161435-1A
	58526	ICV557-25				3					OK	~~SVIT4~~ SV161435-3D
	58527	-20				4					OK	-3B
	58528	-10				5					OK	-3E
	58529	-100				6					OK	-3A
	58530	-5				7					OK	-3G
	58531	-1				8					OK	-3I
	58532	-2				9					OK	-3H
	58533	ICV557-50		BN1	W	10					RR	SVIS1427-113
	58534	ICV557-25		HQ		11					OK	-9C
	58535	ICV557-50		BZD		12					not using	Benzidine ↑ -380
	58536X	ICV557-50		BN2		13					OK	-95 4:09p.
												remake file method error

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 E2P2559

Print Analyst Name: Ashley N.

Analyst Signature: AM

Date: 4/25/16

Columns: ~~RtX-5MS 30m x 0.25mm x 0.25µm~~

Method 8270D/625

Initial Cal. Method M2P2547 5 AMD 4/26/16 (4)

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV 51879-10	d4pp	50ppm
(IM5732	Internal Std	4000ppm)
162418	dam (Fisher)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 4-25-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	dP58539	d4pp			W	1					OK	6:47pm
	S8540	ICV 2557-50		BN1							OK	SV61935-1 6:59pm. benzidine ↑ can not report
												AM

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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Form: OR015-07
Rev. Date: 1/19/16

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: E2P2566

Print Analyst Name: ROBERT LA ROSA

Analyst Signature: [signature]

Date: 4/29/16

Columns: ~~Rtx-5B~~ 5ms+30mX0.25mmX0.25µ

Method: 8270D 6-25

Initial Cal. Method: M2P2557

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
[illegible]	[illegible]	[illegible]
[illegible]	BNA	[illegible]
[illegible]	[illegible]	[illegible]
CM5772	[illegible]	[illegible]
162458	DCM (Extra)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 5-4-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	2885688	[illegible]				1					[illegible]	9:20AM
	58689	[illegible]-50		BNA	W	2					[illegible]	2-4-6, 10-12, 666, 619
	58690	[illegible]-50		TCMX	W	3					[illegible]	
	58691	BNA [illegible]		BNA	W	4					[illegible]	SMS 8270 [illegible]
	58692	QA93453-MB	93453	ABN270	W	5		+	✓	✓	[illegible]	
	58693	-BS1				6			✓	✓	[illegible]	di-n-butyl @ 0.79ppm
	58694	~~[illegible]~~		~~BNA~~		~~7~~						[illegible]
	58694	JC19139-12		BNA		7			✓	✓	[illegible]	
	58695	QA93453-MS		ABN270		8			✓	✓	[illegible]	
	58696	-MSD				9			✓	✓	[illegible]	
	58697	JC[illegible]185793	93541	BNA	S	10	2		✓	✓	[illegible]	
	58698	-6				11	5		✓	✓	[illegible]	
	~~58700~~ 58699	-7				12	2		✓	✓	[illegible]	
	58700	JC18713-1	93367	BNA	S	13			✓	✓	[illegible]	
	58701	-2				14			✓	✓	[illegible]	
	58702	JC18746-13		ABTCM		15			✓	✓	[illegible]	RR 20
	58703	JC18857-2	93425	ABTCM	S	16			✓	✓	RR	RR for c/o

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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Form: OR015-07
Rev. Date: 1/19/16

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: E2P2566

Print Analyst Name: Robert LaPosta

Analyst Signature: [signature]

Date: 9/28/16

Columns: RTX-5MS+30mX0.25mmX0.25µ

Method: 8270D/625

Initial Cal. Method: M2P2557

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	Dell pg W3	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 5-4-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	E2P58704	JC19987-1	93425	ABSCALL	S	17			✓	✓	not needed	run on 3E
	58705	JC19982-14		ABSCAL20+		18		+	✓	✓	~~ok~~ OK	[illegible] 9-4-16
	58706	2ul 1021		ABSCAL20+		19			✓		[illegible]	[illegible]
	58707	-3				20		+	✓	✓	ok	
	58708	-4				21		+	✓	✓	ok	
	58709	JC19910-43	93403	BLANK	W	22			✓	✓	ok	
	58710	JC19101-3				23			✓	✓	ok	
	58711	JC19098-4		MMAP BLY		24		+	✓	✓	ok	
	58712	JC19023-3		ABSL+MMAP +MMAP		25	10X		✓	✓	ok	
	58713	JC19098-3		MAP+BLY		26		+	✓	✓	ok	
	58714	-2				27		+	✓	✓	ok	[illegible] 58696 RR 2X
L	58715	[illegible] -2				28	2		✓	✓	ok	
	58716	[illegible]	93365	AB 8270	S	29			✓	✓	ok	
	58717	MSD				30			✓	✓	ok	6:29 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.

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Form: OR015-07
Rev. Date: 1/19/16

ACCUTEST

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: E3M2855

Date: 4/21/16

Analyst Signature: [illegible]

Columns: Rxi-5SilMS 30m x .25mm x .25um

Method 8270D/625

Initial Cal. Method M8M2855sim

Injection Volume: 1ul

Standard Data		
Lot #	Description	Conc.
		4/14/16

Standard Data		
Lot #	Description	Conc.
SVI51827-68	DFTPP	50ppm
SVI51827-73	SIM Internal	40ppm
159148	Dimethylsulfone	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [illegible]

Date: 4-22-2016

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	3m60750	Condition			W	100					Condition	
	60755				W	100						
	60760	Condition			W	99						
	60761	DFTPP ~~ICC2855-1.0~~ 4/14/16		4/14/16 ~~BRASIM~~	W	1					not	deg ↑ recrystal
	60762	DFTPP			W	1					OK	1:31pm
	60763A	ICC2855-1.0			W	2					ok	SVI51827-104C non-A fluoranthene method
	60764A	ICC2855-0.5				3					ok	-104D
	60765A	ICC2855-0.2				4					OK	-104E
	60766	ICC2855-0.1				5					ok	-104F
	60767	ICC2855-0.05				6					OK	-104G
	60768	ICC2855-0.02				7					ok	-104H
	60769	ICC2855-0.01				8					ok	-104I
	60770	ICC2855-5.0				9					ok	-104A
	60771	ICC2855-2.5				10					OK	-104B
	60772	ICV2855-1.0		Acid		11					ok	SVI51827-27
	60773	ICV2855-1.0		BN1		12					ok	OP16A12-28
	60774	ICV2855-1.0		BN2		13					ok	SVI51829-85 8:35pm

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

Sample volume/weight used and final volumes refer to extraction log.

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All strikeouts must be initialed, dated and reason code applied as follows:
1 = reviewer correction error; 2 = transcription error; 3 = computer miscalculation; 4 = analyst's correction error

Form: OR015-05
Rev. Date: 1/16/2006

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

4/28/16 (4) JM

Batch ID E3M2866

Print Analyst Name: Julius M. Johnson

Analyst Signature: JMJ

Date: 4/28/16

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV15829105	DFTPP	50ppm
SV16A359A	Sim Std	1ppm
-7	Sim Internal	40ppm
1602459	DCM Extract	—

Columns: Z B5MS(+) 30m x 25mm x 25µm

Method 8270D/625

Initial Cal. Method M3M2855sim

Injection Volume: 1µL

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: JM Date: 5-2-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	3M60951	DFTPP				1					OK	11:01pm
	60952	CC2855-1.0				2					OK	
	60953	OP93453,MB1	93453			3			/	/	OK	
	60954	-BS12				4			/	/	OK	
	60955	-MS				5			/	/	OK	
	60956	MSD				6			/	/	OK	
	60957	JL19023-3		BSIM14DIOX BSIM NAP		7			/	/	OK	
	60958	JL19138-2		BSIM14DIOX		8			/	/	OK	
	60959	-3				9			/	/	OK	
	60960	-4				10			/	/	OK	
	60961	-5				11			/	/	OK	
	60962	-6				12			/	/	OK	5:49AM

AVO

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 E4M2881

Print Analyst Name: Linsey K.

Analyst Signature: LK

Date: 4/14/16

Columns: RTX-5Silms 30mx.25mmx.25um

Method 8270D/625

Initial Cal. Method M4M2881sim

Injection Volume: 1uL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SVS1829-168	LFMP	50 ppm
SVS1827-103	sim internal	400 ppm
162342	DCM (Fisher)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AMB Date: 4/14/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	4M64719	DFTPP			W	1					NG	PCP↑ rerun
	64720	DFTPP			W	1					OK	9:05AM
	64721	CC2881-05		Brasim	W	2					not using	
	64722	1:100 x test				2					not using	test split changed. flow and oven temp
	64723A	IC2881-5		BNAsim	W	2					OK	SVS1827-104D verran as "A" file no bottle
	64724	IC2881-1.0				3					OK	SVS1827-104C
	64725	IC2881-0.2				4					OK	-104E
	64726	IC2881-0.1				5					OK	-104F
	64727	IC2881-0.05				6					OK	-104G
	64728	IC2881-0.02				7					OK	-104H
	64729	IC2881-0.01				8					OK	-104I
	64730	IC2881-5.0				9					OK	-104A
	64731	IC2881-2.5				10					OK	-104B
	64732	IC2881-1.0		Acids		11					OK	SVS1827-27
	64733	IC2881-1.0		Bn1		12					OK	OP157624-73
	64734	IC2881-1.0		Bn2		13					OK	SVS1829-85

AMB

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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Form: OR015-07
Rev. Date: 1/19/16

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: E4M2910

Print Analyst Name: Lindsey K

Analyst Signature: LK

Date: 5/9/16

Columns: Rxi-5Sil MS 30m x .25mm x .25um

Method: 8270D/1625

Initial Cal. Method: M4M2888 SIM

Injection Volume: 1 ul

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV15184-108	DFTPP	50ppm
SV16935-6	SIM std.	1.0ppm
-7	SIM Internal	40ppm
1602601	DCM-Blank (Ether)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [illegible]

Date: 5-10-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	4M65168	DFTPP			W	1					NG	RCP↑ Alan↑ rerun
	65169	DFTPP			W	1					OK	10:19AM
	65170	CC2881-1.0		Bnasim	W	2					OK	benzo(b)↓
	65171	OP93662-MB1	93662-1	AB8270	W	3			/	/	OK	
	65172	JC19689-3		RCP		4			/	/	OK	
	65173	-4				5			/	/	OK	
	65174	-5				6			/	/	OK	
	65175	-6				7			/	/	OK	
	65176	-7				8			/	/	OK	
	65177	OP93718-MB1	93718-1	B8270	W	9			/	/	OK	
	65178	-BS2				10			4↓	/	OK	IS for internal
	65179	JC19855-2		RCP+1.4dilx		11			/	/	OK	
	65180	-4				12			/	/	OK	
	65181	OP93678-MB1	93678-1		S	13			/	/	OK	
	65182	-BS2				14			/	/	OK	
	65183	JC19644-4		RCP+1.4dilx		15			/	/	OK	
	65184	-5				16			/	/	OK	

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07
Rev. Date: 1/19/16

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SGS ACCUTEST

SEMI-VOLATILE by GCMS ANALYSIS LOG

Batch ID: E4M2910

Print Analyst Name: Linsey K

Analyst Signature: JK

Date: 5/9/16

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	See 183	

Columns: Rxi-5ssil MS 30m x .25mm x .25um

Method: 8270 D/625

Initial Cal. Method: M4M2881bim

Injection Volume: 1 uL

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [illegible]

Date: 5-10-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	4M65185	OP93478-MS	93478-1	B8270		17			/	/	OK	
	65186	-MSD				18			/	/	OK	
	65187	OP93478mb1	93478-1	AB8270	S	19			/	/	OK	N-for internals
	65188	-bs12				20			/	/	OK	
	65189	JC19023-1		naph+LABDICL-simpah.		21			/	/	OK	
	65190	-2				22			/	/	OK	
	65191	-4				23			/	/	OK	10:10pm
	65192	OP93478-MS		AB8270		24					RR	out of check 10:42pm
	65193	-MSD				25					RR	out of check 11:14pm

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07

Rev. Date: 1/19/16

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7.7.10

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: E4M2912

Print Analyst Name: Linsey K

Analyst Signature: LK

Date: 5/10/16

Columns: Rxi-5sil MS 30m x .25mm x .25

Method: 8270D/1625

Initial Cal. Method: M4M2882sim

Injection Volume: 1µl

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV15594105	DFTPP	50ppm
~~SV16019~~		
SV16935 9	SIM std.	40ppm
-7	SIM Internal	40ppm
1626061	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: _____ Date: 5/10/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	4M05202	DFTPP			W	1					OK	1:04pm
	05203	CC2881-10		BNAsim	W	2					OK	
	05204	OP93718-bs1	93718-1	BS270	W	3			/	/	OK	
	05205	OP93718-mb1	93178-1	BS270	S	4			/	/	OK	
	05206	-MS				5			/	/	all	
	05207	-MSD				6			/	/	all	MOD A file front inlet temp
	05208	OP93577-mb1	93577-1	BS270	W	7			/	/	all	
	05209	JC19525-11	93653-1	ABSimMS +1.4dilex	W	8			/	/	all	
	05210	OP93745-mb1	93745-1	BS270	W	9			/	/	all	
	05211	-bs1				10			/	/	all	
	05212	-MS				11			/	/	all	
	05213	-MSD				12			/	/	all	
	05214	JC19604-1		14dilex		13			/	/	all	
	05215	-2				14			/	/	all	

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 ESP1382

Print Analyst Name: Sean Black

Analyst Signature: Sean F Black

Date: 4/11/16

Columns: ZB-5ms/ms+ 30m x .25mm x .25µ

Method 8270D/625

Initial Cal. Method MSP1382

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV 151825-108	DFTPP	50ppm
(GMS832)	(Std)	100ppm
162108	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: 4/12/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	SB 4/11/16 ESP27316	DFTPP				1					NG	re-injected
	27317	DFTPP				1					NG	plunger lead return as AB PCPT 105 min SB 4/11/16
	27318	SB 4/11/16 DFTPP				1					OK	10:14am
	27319	IC1382-100				2					OK	SV151827-60A
	27320	IC1382-80				3					OK	SV151827-60B
	27321	IC1382-50				4					OK	SV151827-60C
	27322	IC1382-25				5					OK	SV151827-60D
	27323	IC1382-10				6					OK	SV151827-60E
	27324	IC1382-5				7					OK	SV151827-60F SB 4/11/16
	27325	IC1382-2				8					OK	SV151827-60H
	27326	IC1382-1				9					OK	SV151827-60I 1:46pm

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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Form: OR015-07
Rev. Date: 1/19/16

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SGS ACCUTEST JC19023

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: ESP1383

Print Analyst Name: [illegible]

Analyst Signature: [illegible]

Date: 4/11/16

Columns: DB 5ms 30m x 0.25mm x 0.25um

Method: 8270D/625

Initial Cal. Method: MSP1382

Injection Volume: 1 ul

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
151916	DFTPP	50ppm
CUN5734	ISTD	40ug/ml
162108	DCM Extract	

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: 4/12/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	SP27327	DFTPP			W	1					OK	245pm
	27328	ICV1383-100		TCL42		2					OK	SV15182773A
	27329	80				3					OK	73B
	27330	ICV1383-50				4					OK	73C
	27331	ICV1383-25				5					OK	73D
	27332	10				6					OK	73E
	27333	5				7					OK	73F
	27334	2				8					OK	73H
	27335	1				9					OK	73I
	27336	ICV1383-50 (2) (50) 4/11/16				10					OK	UP161712233 ACN Surr
	27337	-50				11					OK	SV15182785 BN1
	27338	-50				12					OK	SV15182745 BN2
	27339	-50				13					OK	SV15182787 Acid
	27340	-50				14					OK	SV15182794 Aniline
	27341	ICV1383-50				15					OK	SV15182338 BN2 300
	27342	-50				16					OK	SV15182791 HQ 9:15pm
		50	4/11/16									

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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Form: OR015-07
Rev. Date: 1/19/16

7.7.13

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SGS ACCUTEST JC19023

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E5P1416

Print Analyst Name: Ashley Moyer

Date: 5/3/2016

Analyst Signature: AMO

Columns: ZB-5ms 30m x 25mm x .25

Method 8270D/625

Initial Cal. Method M5P1382

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SMS1829108	DFTPP	50ppm
SMS1827615	BNA	25ppm
SMS1827491	TC642	25ppm
CMS732	Internal Std	4000
162641	DCM (Fisher)	1L

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to compl with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 5-5-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	SP27900	DFTPP				1					not lying	ions at Rtenn
	27901	DFTPP				1					OK	827am.
	27902	CC1382-25		BNA	W	2					OK	
	27903	CC1383-25		TC642	W	3					OK	
	27904	op93478-mbl	93478-1	ABS270H	S	4		+	✓	✓	OK	
	27905	-bs1				5			✓	✓	OK	
	27906	JC19923-2	93534-1	ABSL+2mnap+mnap	W	6			✓	✓	OK	
R	27907	JC18912-39	93403-1	ABSL+12PPH BDL	ND	7	100		✓	X	OK	
	27908	JC19023-2	93478-1	ABSL+2mnap+mnap		8			✓	✓	OK	
	27909	-4				9			✓	✓	OK	
	27910	JC18964-20		ABSCL1		10			✓	✓	OK	
	27911	-21				11			✓	✓	OK	
	27912	-25				12			✓		RR	c/o
	27913	-26				13			✓	✓	OK	
	27914	-27				14			✓	✓	OK	
	27915	-29				15			✓	✓	OK	
	27916	-19				16			✓	✓	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.

Form: OR015-07
Rev. Date: 1/19/16

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID E5P1416

Print Analyst Name: Ashley Dye

Analyst Signature: AMO

Date: 5/3/2016

Columns: 7835.5/0.25mm x 25mm x 5µL

Method 8270D/625

Initial Cal. Method MSP1382

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	see page 23	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 5-5-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	5P27917	JC18964-22	934781	ABTCCL1	S	17			✓	✓	OK	RR 1:10 / 1:100
	27918	-23				18			✓	✓	OK	RR 1:10 1:100 vf=5mL
	27919	-24				19			✓		RR	c/o.
	27920	JC19070-1		ABTCC70+		20			✓			
	27921	-2				21			✓			
	27922	JC19023-1		ABSL+ 2Mnaphthalene		22			✓			
	27923	op93478-ms		ABS270		23			✓		RR	826PM. c/o.
	27924	-msd.				24			✓		RR	853PM a+of 12hrs.
	27925	JC18964-25		ABTCCL1	S	12			✓	✓	OK	ran after 5P27916
	27926	op93548-mb1	935481	ABS270+	S	25			✓	✓	RR	c/o.
R	27927A	JC19385-1rx		BTCC70+		26	2	+	✓	✓	OK	diluted du rerun as A file
	27928	sodium sulfate		101#148240		27			✓		RR	c/o.

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 JC19023

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	poor tailing
	123505	DFTPP				1					OK	538am
	123506	ic5217-2		BNA		2					OK	
	123507	-100				3					OK	
	123508	-80				4					OK	
	123509	-25				5					OK	
	123510	-10				6					OK	
	123511	-5				7					OK	
	123512	-1				8					OK	
	123513	icc5217-50				9					OK	926PM

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07
Rev. Date: 1/19/16

SGS ACCUTEST JC19023

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.
												957am. 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

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: EM5219

Print Analyst Name: ASHLEY MDYR

Date: 4/13/2016.

Analyst Signature: ANO

Columns: Rxi 5si/ms 30m x 0.25mm x 0.25µm

Method: 8270D/625

Initial Cal. Method: MM5217

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SUS829102	DFTPP	50ppm
CM5732	Internal Std.	4000ppm
162342	DCM (Fisher)	— "

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [illegible] Date: 4/13/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	M123530	DFTPP				1					not using	ions out range
	123531	DFTPP				1					OK	927am.
	123532	ICV5217-50		ABN Surr		2					OK	OP1617255
												ANO

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07
Rev. Date: 1/19/16

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EM5239

Print Analyst Name: Sean Black

Analyst Signature: Sean T Black

Date: 4/26/16

Columns: Rtx-5Silms 30m x 25m x .25mm

Method 8270D/625

Initial Cal. Method MM5239

Injection Volume: 1µL

AMO 4/27/16

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV 157824-108	DFTPP	50 ppm
CW5732	Internal Std.	4000
162418	DCM (Blank)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AMO

Date: 4/27/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	M123916	DFTPP				1					NG	pep ↑, re-inject
	123917	DFTPP				1						pep ↑, re-install
	123918	DFTPP				1						pep ↑, re-inject
	123919	DFTPP				1						pep ↑, re-install
	123920	DFTPP				1						pep out, re-inject
	123921	DFTPP				1						pep still out, re-install
	123922	DFTPP				1						PCP = 3.41 re-inject
	123923	DFTPP				1						PCP = 2.36 re-inject
	123924	DFTPP				1						PCP = 2.11 re-inject
	123925	DFTPP				1						PCP = 2.27 re-inject
	123926	DFTPP				1						PCP = 2.06 re-inject
	4/26/16 123927	DFTPP				1						PCP = 2.03 re-inject
	123928	DFTPP				1					OK	11:05
	123929	165239-100		TCL42		2					OK	SV161935-3A
	123930	165239-80				3					OK	SV161935-3B
	123931	165239-50				4					OK	SV161935-4A
	123932	165239-25				5					OK	SV161935-3D

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07
Rev. Date: 1/19/16

SGS ACCUTEST JC19023

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EM5239

Print Analyst Name: Sean Black

Analyst Signature: Sean T Black

Date: 4/26/16

Columns: Rtx-5Sil MS 30m x 25mm x 25µm

Method 8270D/625

Initial Cal. Method MM5239 AMO 4/27/16

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	See page 53	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: AMO

Date: 4/27/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	M123933	IC5239-10		TCL42		6					OK	SV161935-3RE SA 4/26/16
	123934	IC5239-5				7					OK	SV161935-3G
	123935	IC5239-2				8					OK	SV161935-3H
	123936	IC5239-1				9					OK	SV161935-3I
	123937	ICV5239-50		BN1		10					OK	SV161935-1 BZD not passing 20%
	123938	ICV5239-50 AMO 4/27/16		BN2		11					OK	SV151827-2
	123939	ICV5239-50		Benzidine 3rd		12					not sing	SV151827-3BB BZDT
	123940	ICV5239-50		HQ		13					OK	SV151827-9BB 437ant.
												AMO

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07
Rev. Date: 1/19/16

SGS ACCUTEST JC19023

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EM5240

Print Analyst Name: Ashley M. Dyer

Date: 4/27/16

Analyst Signature: AMD

Columns: Rxi 5Sil MS 30m x 25mm x 25µm

Method 8270D/625

Initial Cal. Method MM5239

Injection Volume: 1uL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
151029-108	dftpp	50ppm
EM5732	internal std	400ppm
162418	dcm (fisher)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: JR

Date: 4/27/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	M123941	DFTPP				1					not using	plunger error rerun
	123942	DFTPP				1					not using	1014am peak tailing bad
	123943	DFTPP				1					OK	1035am
	123944	ICV5239-50		Benzidine	W	2					not using	wrong concentration
	123945	ICV5239-50		BZD	W	3					OK	SV161935149B. 1118am

AMD

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07

Rev. Date: 1/19/16

SGS ACCUTEST JC19023

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID: E M5245

Print Analyst Name: Ashley Mapp

Analyst Signature: AMP

Date: 4/29/2016

Columns: Rtx-5Si 30m x 0.25mm x 0.25µm

Method: 8270D/625

Initial Cal. Method: MM5239

Injection Volume: 1uL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SVIS184108	DFTPP	50ppm
SVIS182601F	BNA	25ppm
SVIS182774	TCL42	25ppm
CMS732	Internal Std.	4000ppm
1624189	DCM (Fisher)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 5-5-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	M123998	DFTPP				1					not using	909AM. PGP tailing reat
	123999	DFTPP				1					ok	918AM.
	124000	CCS217-25		BNA	W	2					ok	recpd 1
	124001	CCS239-L5		TCL42	W	3					ok	
	124002	Drawer		verification	W	4					not needed	noncpd. 1ppm SVIS182601F
	124003	0293428-mb1	934281	BSAD	S	5			✓	✓	ok	
	124004	-bs1				6			✓	✓	ok	
	124005	JC189506	932181	PAH	S	7			✓	✓	ok	
	124006	JC190901	934281	PAH	S	8			✓	✓	ok	
	124007	-2				9			✓	✓	ok	
	124008	-3				10			✓	✓	ok	
	124009	-4				11			✓	✓	ok	
	124010	-5				12			✓	✓	ok	
	124011	-6				13			✓	✓	ok	
	124012	-7				14			✓	✓	ok	
	124013	-8				15			✓	✓	ok	
	124014	-9				16			✓	✓	ok	

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07
Rev. Date: 1/19/16

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EM5245

Print Analyst Name: Ashley Daye

Analyst Signature: AMD

Date: 4/29/16.

Columns: RtX5Sil MS 30m x 25mm x 25µ

Method 8270D/625

Initial Cal. Method MM5239

Injection Volume: 1µL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	see page 71	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to compl with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 5-5-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	L+	IS	SU	Status (Data)	Comments
	M124015	JC190910	934281	PAH	S	17			✓	✓	OK	
	124016	-11				18			✓	✓	OK	
	124017	-12				19			✓	✓	OK	
	124018	-13				20			✓	✓	OK	
	124019	-14				21			✓	✓	OK	852PM
	124020	-15				22					RR	920PM out of 12hrs.
	124021	-16				23					not ran	cut from sequence
	124022	op93428-ms		B8270		24					↓	↓
	124023	-msd				25						
	124024	op93478-mbl	934781	AB8270	S	26		+	✓	✓	OK	ran after M124008
	124025	-lcs				27			✓	✓	OK	↓
	124026	JC19139-4		PAH		28			✓	✓	OK	
	124027	JC19159-2		PAH		29			✓	✓	OK	
R	124028	JC18900-2	934031	AB8270	S	30	2		✓	✓	OK	ran after M124008

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 SB

Sample volume/weight used and final volumes refer to extraction log.

Form: OR015-07
Rev. Date: 1/19/16

SGS ACCUTEST JC19023

SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EM5253

Print Analyst Name: Ashley Mapp

Date: 5/6/2016

Analyst Signature: AMO

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SU182908	DFTPP	50 ppm
SU183196	BNA	50 ppm
SU182774	TCL42	50 ppm
CH5732	Internal Std.	4000 ppm
162641	DCM (Fisher)	—

Columns: RTX SilMS 30m x .15mm x .25µm

Method 8270D/625

Initial Cal. Method EM5239

Injection Volume: 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: Date: 5/5/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	M124200	DFTPP				1					not using	RR ions old.
	M124201	DFTPP				1					OK	845AM.
	124201 2	CC5217-50		BNA	W	2					OK	[illegible]
	124202 3	CC5239-50		TCL42	W	3					OK	[illegible]
	124203 4	op93655-bsl	93655-1	ABTCP	W	4					RX	fails rx whole batch.
	124204 5	op93629mhl	93629-1	BS270+	W	5			✓	✓	OK	
AMO 5/6/16	124205 6	-bsl				6			✓	✓	OK	
	124206 7	JC19348-11	93634-1	PAH	S	7			✓	✓	OK	
	124207 8	-6				8			✓	✓	OK	
R	124208 9	-2				9	10		✓	✓	OK	
	124210	JC19271-1A	93629-1	ABTCW0+	W	10					not an	moved -bsl fails for aniline
	124211	JC19513-10		BNSTCW0+		11						
	124212	JC19510-8		BNSTCW0+		12						
	124213	-9				13						
	124214	JC19389-4		BNSTCW0+		14						
	124215	op93629-MS		ABS270		15						
	124216	-msd.				16						
	124217	JC18916-1R	93634-1	BTCW0+	S	17		+	✓	✓	OK	RR 1:10 / 1:100

MTX = Matrix. Designate W for water, S for soil, O for oil. L+ = Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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Form: OR015-07
Rev. Date: 1/19/16

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EM5253

Print Analyst Name: Ashley McDyer

Date: 5/6/2016

Analyst Signature: AMMO

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	See page 103	

Columns: RtX5Sil MS 30m x 15mm x 25 µm

Method 8270D/625

Initial Cal. Method MM5239

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: [signature] Date: 5/5/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	M124218	JC19575-13	93634-1	ABTCN01 + 8270DUM 12DPH	S	18					not ran	no bad in verification
	124219	-14				19						
	124220	JC19573-6				20						
	124221	-13				21						
	124222	JC19558-7				22						
	124223A	1C142 verf.				23					NG	SM51827128C (old) 2ppm ran after M124220
	124224	op93478-mb1	93478-1	AB8270-1	S	24		✓	✓	✓	OK	veranas "A" file run new bottle SM161935
	124225	JC19070-1		ABTCN01		25		✓	✓	✓	OK	AMMO 5/9/16 false ch.
	124226	-2				26		✓	✓	✓	OK	
	124227	JC18964-24		ABTCN11		27			✓	✓	OK	
	124228	JC19023-1		ABSL 2mmap + mmap		28			✓	✓	OK RR	RR clo.
	124229	op93478-ms		AB8270		29			✓	✓	OK	
	124230	-msd.				30			✓	✓	OK	
	124231A	op93671-bs1	93671-1	AB8270-1	S	31			✓	✓	OK	veranas "A" file ran after M124217
	124232	-mb1				32		✓	✓	✓	OK	bs1 fails ↓ reruns below
	124233	JC19505-1		ABTCN01		33					not ran	
	124234	JC19729-1		PAH + 2mmap		34					not ran.	moved to 6P

MTX = Matrix . Designate W for water, S for soil, O for oil. L+ =Library Search. IS = Internal Standard Area. SU = Surrogate.

All strikeouts must be initialed, dated, and reason applied if not transcription error

Sample volume/weight used and final volumes refer to extraction log.

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Form: OR015-07
Rev. Date: 1/19/16

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SEMI-VOLATILE by GCMS ANALYSIS LOG

SGS ACCUTEST

Batch ID EM5253

Print Analyst Name: Ashley Mdge

Date: 5/6/2016

Analyst Signature: AMO

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	See page 103	

Columns: Rtx5/Rtx30m×.25mm×.25µ

Method 8270D/625

Initial Cal. Method MM5239

Injection Volume: 1µL

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: [signature] Date: 5-5-16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution.	L+	IS	SU	Status (Data)	Comments
	M124235	JC19724-2	93671-1	Pan+2mmap	S	35					not ran	moved to 6D. ran after M124217
	124236	JC19721-1		BCO 10+		36					not ran	↓
	124237	JC19955-6	93609-1	24DMP	W	37					RR	c/o
	124238	-7				38						
	124239	-8				39						
	124240	-9				40					↓	825 PM
	124241	-10				41					RR	outside 12hrs. 854PM
												SB

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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7.7.21

7

LOGBOOK ID: G-1674

ABN Aqueous Extraction Logbook

Date Started: 4/28/2016 Time Started: 800am
Date Finished: 4/28/2016 Time Finished: 1440

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Separatory Funnel: SW846 3510C/CLP/other ✓ 3510C SIM____
Continuous Liquid Liquid: SW846 3520C/CLP/other____

BATCH # MS 93453	RACK# A-75 A-8
Extracted by:	VP, NL, M.P, YB
Concentrated by:	M.P, YB, VP
Vialed by:	YB
Relinquished by:	
Accepted by:	
Supervisor Review:	4/28/16

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:

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason:

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other:

	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		
	JC19098-2 MS		2	Clear	500	1	4	Yellow	1		
	MSD		2	Clear	500	1	4	Yellow	1		
	BS	125IM		DIH2O	1000	1	4	Yellow	1		
	JC19138-2 MS		2	Clear	500	1	4	Yellow	1		
	MSD		2	Clear	500	1	4	Yellow	1		
1	JC19139-12	ABN	4	Clear	1000	1	4	Clear	1		
2	JC19023-3 RX		1	Clear	1000	1	4	Clear	1		
3	JC19138-2		1	Clear	1000	1	4	Clear	1		
4	-3		2	Clear	1000	1	4	Clear	1		
5	-4		2	Clear	1000	1	4	Clear	1		
6	-5		2	Clear	980	1	4	Clear	1		
7	-6		2	Clear	900	1	4	Clear	1		
8	JC19098-2		1	Clear	1000	1	4	Clear	1		
9	-3		1	Clear	1000	1	4	Clear	1		
10	-4		1	Clear	1000	1	4	Clear	1		
11	JC19101-3		2	Clear	1000	1	4	Clear	1		
12	JC13380-43		1	Clear	100	1	4	Clear	1		
13											
14											
15											
16											
17											
18											
19											
20											

use(com)

Comments: okay to split ms/msd not enough bottles.

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)					
Buchi Chiller					
Waterbath (70-80°C)	G1	75.75	0.5/0.1	76.75	N/A
Waterbath Chiller (GPM)	F2	0	—	—	2
NEVAP (32-38°C, LPM)					

SURROGATE	LOT #	CONC (ppm)	AMT (mL)
ABN	16171278	50	1

WITNESS SIGN: NL SPIKE SIGN: NL

MATRIX SPIKE	LOT #	CONC (ppm)	AMT (mL)
Acid	151827-129	50	Acid: 1
Acid (for SIM)			A(SIM): .1
Base #1	161935-1	50	1
Base #2	151827-134	50	1
Anilines	151827115	50	1
BSIM	16171266	1	1

WITNESS SIGN: NL SPIKE SIGN: NL

SOLVENT	LOT #	BRAND	AMT (mL)
METH CHLOR	162417	Fisher	60mLx6

REAGENT	LOT #	BRAND
NaOH	158803	Fisher
H2SO4	2609910	Ricca
Sodium Sulfate	158459	Fisher
Glass Wool	02Q05-2	Lab
Filter Paper		
pH strips		

SGS ACCUTEST INC.
Form: OP022A-08
Rev Date: 1/13/16

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ABN Aqueous Extraction Logbook

LOGBOOK ID: G-1674

Date Started: 4/28/2016 Time Started: 800am
Date Finished: 4/28/2016 Time Finished: 1440

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Separatory Funnel: SW846 3510C/CLP/other ✓ 3510C SIM____
Continuous Liquid Liquid: SW846 3520C/CLP/other____

BATCH # MS 93453 RACK# ~~A-75~~ A-8

Extracted by:	VP, NL, M.P, YB
Concentrated by:	M.P, YB, VP
Vialed by:	YB
Relinquished by:	
Accepted by:	
Supervisor Review:	M.P 4/28/16

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)					
Buchi Chiller					
Waterbath (70-80°C)	G1	75.75	0.6/0.1	76.75	N/A
Waterbath Chiller (GPM)	F2	0	—	—	2
NEVAP (32-38°C, LPM)					

SURROGATE	LOT #	CONC (ppm)	AMT (mL)
ABN	16171278	50	1

WITNESS SIGN: NL SPIKE SIGN: EJC

MATRIX SPIKE	LOT #	CONC (ppm)	AMT (mL)
Acid	151827-129	50	Acid: 1
Acid (for SIM)			A(SIM): .1
Base #1	161935-1	50	1
Base #2	151827-134	50	1
Anilines	151827115	50	1
BSIM	16171266	1	1

WITNESS SIGN: NL SPIKE SIGN: EJC

SOLVENT	LOT #	BRAND	AMT (mL)
METH CHLOR	162417	Fisher	60mLx6

REAGENT	LOT #	BRAND
NaOH	153803	Fisher
H2SO4	2609910	Ricca
Sodium Sulfate	158459	Fisher
Glass Wool	02Q05-2	Lab
Filter Paper		
pH strips		

Special Client Spike Instructions					
QC ID# for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt. Spiked

WITNESS SIGN: SPIKE SIGN:
Manager/Supervisor/Team Lead Approval:

	Sample #	Analysis Type	Sample Bottle #	Sample Description	Sample Volume (mL)	pH Adjust(mL) <2 H2SO4	pH Adjust(mL) >11 NaOH	Final Extract Color	Final Extract Vol(mL)	Misc. GPC Cleanup	Misc. Comments
	MB1	ABN		DIH2O	1000	1	4	Clear	1		
	BS1			DIH2O	1000	1	4	Yellow	1		
	JC19098-2 MS		2	Clear	500	1	4	Yellow	1		
	MSD		2	Clear	500	1	4	Yellow	1		
	BS	125IM		DIH2O	1000	1	4	Yellow	1		
	JC19138-2 MS		2	Clear	500	1	4	Yellow	1		
	MSD		2	Clear	500	1	4	Yellow	1		
1	JC19139-12	ABN	4	Clear	1000	1	4	Clear	1		
2	JC19023-3 RX		1	Clear	1000	1	4	Clear	1		
3	JC19138-2		1	Clear	1000	1	4	Clear	1		
4	-3		2	Clear	1000	1	4	Clear	1		
5	-4		2	Clear	1000	1	4	Clear	1		
6	-5		2	Clear	980	1	4	Clear	1		
7	-6		2	Clear	900	1	4	Clear	1		
8	JC19098-2		1	Clear	1000	1	4	Clear	1		
9	-3		1	Clear	1000	1	4	Clear	1		
10	-4		1	Clear	1000	1	4	Clear	1		
11	JC19101-3		2	Clear	1000	1	4	Clear	1		
12	JC13380-43		1	Clear	100	1	4	Clear	1		
13											
14											
15											
16											
17											
18											
19											
20											

Use(com)

Comments: okay to split ms/msd not enough bottles.

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason:

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other:

SGS ACCUTEST INC.
Form: OP022A-08
Rev Date: 1/13/16

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LOGBOOK ID: 6-17 17

ABN Extraction Log - Solids

Date started: 4/29/16 Time started: 9:00 AM
Date finished: 4/29/16 Time finished: 2:20 pm

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Microwave SW3546 √ Sonication SW3550C ____
Waste Dil. SW3580A ____ Soxhlet SW3540C ____

BATCH # MS 93478 RACK# B-15

Weighed/Extracted by: [illegible]
Concentrated by: [illegible]
Vialed by: [illegible]
Relinquished by: AQ
Accepted by:
Supervisor Review: [illegible] 4/29/16

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:

SPECIAL PROCESSING INSTRUCTIONS
Rx Reason:
Spiking:
Weights/Volumes:
Required MS/MSD:
Final Volume:
Other:

	Sample #	Analysis Type	Sample Bottle #	Sample Description	Sample Wet Wt. (g) Oil (g) Liq (mL)	Decant Y	Decant N	Microwave ID Sonicator ID	Final Extract Color	Final Extract Vol(mL)	GPC Cleanup	Comments
	MB1	ABN		sand	30.0			4	clear	1		
	BS1			sand	30.0			4	Yellow	1		
	JC18964-19 MS		1	soil	31.1		/	4	Brown	1		
	MSD		1	soil	30.5		/	4	Brown	1		
	BS 12 SIM			sand	30.0			4	Yellow	1		
	JC19023-1 MS 4		1	clay	32.3		/	4	Yellow	1		
	MSD 4		1	clay	32.3		/	4	Yellow	1		
1	JC18964-19	ABN	1	soil	31.7		/	4	Brown	1		
2	-20		1	soil	30.9		/	4	Yellow	1		
3	-21		1	soil	30.8		/	4	Yellow	1		
4	-22		1	only soil	2.2		/	4	Brown	1		Δ
5	-23		1	soil	15.9		/	4	Brown	5		**
6	-24		1	soil	31.1		/	4	Brown	1		
7	-25		1	soil	30.8		/	4	Yellow	1		
8	-26		1	soil	30.8		/	4	Yellow	1		
9	-27		1	soil	31.2		/	4	L Yellow	1		
10	-29		1	soil	30.6		/	4	Brown	1		
11	JC19159-2		1	soil	30.6		/	4	Brown	1		
12	JC19023-1		1	clay	31.4		/	4	Brown	1		
13	-2		1	soil	30.1		/	4	Brown	1		
14	~~-34~~		1	soil	31.3		/	4	Yellow	1		
15	JC19070-1		1	soil	30.7		/	4	Brown	1		
16	-2		1	soil	32.8		/	4	Brown	1		
17	JC19139-4 rx		1	soil	10.5		/	4	L Yellow	1		Δ
18												
19												
20												

3d TAT
cl 4/28/16
2day TAT
rxlow sur.

Comments: ** Weight reduced because was strong gasoline odor
Δ Very low density matrix. Weight reduced.
** Final extract vialed at 5mL due to low density matrix

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)					
Buchi Chiller					
Waterbath (70-80°C)	10,9	75.1, 74.7	0.6, 1.3	76, 76	NA/NA
Waterbath Chiller (GPM)	112, M3	9.7	—	—	2.120
NEVAP (32-38°C, LPM)	2	36.1	0.1	36	10
Balance	842	N/A	N/A	N/A	N/A

SURROGATE	LOT #	CONC (ppm)	AMT (mL)
ABN SY	16171274	50	1

WITNESS SIGN: [illegible] SPIKE SIGN: [illegible]

MATRIX SPIKE	LOT #	CONC (ppm)	AMT (mL)
Acid SY	151827124	50	Acid: 1
Acid (for SIM)			A(SIM): 0.1
Base #1 SY	161935	50	1
Base #2 SY	158227134	50	1
Aniline SY	158271115	50	1
BSIM SY	16171266	1	1

WITNESS SIGN: [illegible] SPIKE SIGN: [illegible]

SOLVENT	LOT #	BRAND	AMT (mL)
1:1 METH CHLOR/ ACETONE	162418 / 158571	Fisher / Fisher	30ml
METH CHLOR	162459	FISHER	10ml

REAGENT	LOT #	BRAND
HYDROMATRIX	628085 50	Agilent
SODIUM SULFATE	158459	Fisher
FILTER PAPER	9674927	Fisher

MATRIX	LOT #	BRAND
SAND	69A160113 11A	Fisher

SGS ACCUTEST INC.
Form: OP019A-06
Rev Date: 11/20/15

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LOGBOOK ID: 6-17 17

ABN Extraction Log - Solids

Date started: 4/29/16 Time started: 9:00 AM
Date finished: 4/29/16 Time finished: 2:20 pm

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Microwave SW3546 √ Sonication SW3550C ____
Waste Dil. SW3580A ____ Soxhlet SW3540C ____

BATCH # MS 93478 RACK# B-15

Weighed/Extracted by: [illegible]
Concentrated by: [illegible]
Vialed by: [illegible]
Relinquished by: AQ
Accepted By:
Supervisor Review: [illegible] 4/29/16

Special Client Spike Instructions

QC ID# for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt. Spiked

WITNESS SIGN: SPIKE SIGN:
Manager/Supervisor/Team Lead Approval:

	Sample #	Analysis Type	Sample Bottle #	Sample Description	Sample Wet Wt. (g) Oil (g) Liq (mL)	Decant Y	Decant N	Microwave ID Sonicator ID	Final Extract Color	Final Extract Vol(mL)	GPC Cleanup	Comments
	MB1	ABN		sand	30.0			4	clear	1		
	BS1			sand	30.0			4	Yellow	1		
	JC18964-19 MS		1	soil	31.1		/	4	Brown	1		
	MSD		1	soil	30.5		/	4	Brown	1		
	BS 12 SIM			sand	30.0			4	Yellow	1		
	JC19023-1 MS 4		1	clay	32.3		/	4	Yellow	1		
	MSD 4		1	clay	32.3		/	4	Yellow	1		
1	JC18964-19	ABN	1	soil	31.7		/	4	Brown	1		
2	-20		1	soil	30.9		/	4	Yellow	1		
3	-21		1	soil	30.8		/	4	Yellow	1		
4	-22		1	only soil	2.2		/	4	Brown	1		Δ
5	-23		1	soil	15.9		/	4	Brown	5		**
6	-24		1	soil	31.1		/	4	Brown	1		
7	-25		1	soil	30.8		/	4	Yellow	1		
8	-26		1	soil	30.8		/	4	Yellow	1		
9	-27		1	soil	31.2		/	4	L Yellow	1		
10	-29		1	soil	30.6		/	4	Brown	1		
11	JC19159-2		1	soil	30.6		/	4	Brown	1		
12	JC19023-1		1	clay	31.4		/	4	Brown	1		
13	-2		1	soil	30.1		/	4	Brown	1		
14	~~-34~~		1	soil	31.3		/	4	Yellow	1		
15	JC19070-1		1	soil	30.7		/	4	Brown	1		
16	-2		1	soil	32.8		/	4	Brown	1		
17	JC19139-4 rx		1	soil	10.5		/	4	L Yellow	1		Δ
18												
19												
20												

3d TAT
cl 4/28/16
2day TAT
rxlon sur.

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	75,74.7	0.6,1.3	76,76	NA/NA
Waterbath Chiller (GPM)	112,113	9.7	—	—	2.12
NEVAP (32-38°C, LPM)	2	36.1	0.1	36	10
Balance	842	N/A	N/A	N/A	N/A

SURROGATE	LOT #	CONC (ppm)	AMT (mL)
ABN 8f	16171274	50	1

WITNESS SIGN: [illegible] SPIKE SIGN: [illegible]

MATRIX SPIKE	LOT #	CONC (ppm)	AMT (mL)
Acid 8f	151827124	50	Acid: 1
Acid (for SIM)			A(SIM): 0.1
Base #1 8f	161935	50	1
Base #2 8f	158227134	50	1
Aniline 8f	158271115	50	1
BSIM 8f	16171266	1	1

WITNESS SIGN: [illegible] SPIKE SIGN: [illegible]

SOLVENT	LOT #	BRAND	AMT (mL)
1:1 METH CHLOR/ ACETONE	162418 / 158571	Fisher / Fisher	30ml
METH CHLOR	162459	FISHER	10ml

REAGENT	LOT #	BRAND
HYDROMATRIX	628085	Applied
SODIUM SULFATE	158459	Fisher
FILTER PAPER	9674927	Fisher

MATRIX	LOT #	BRAND
SAND	69A160113IA	Fisher

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason:

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other:

Comments: ** Weight reduced because was strong gasoline odor
Δ Very low density matrix. Weight reduced.
** Final extract vialed at 5ml due to low density matrix

SGS ACCUTEST INC.
Form: OP019A-06
Rev Date: 11/20/15

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: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93399-MB1	6G34447.D	1	04/27/16	BP	04/26/16	OP93399	G6G997

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC19023-3

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

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	92%	26-132%
877-09-8	Tetrachloro-m-xylene	99%	26-132%
2051-24-3	Decachlorobiphenyl	98%	10-118%
2051-24-3	Decachlorobiphenyl	103%	10-118%

Method Blank Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93471-MB1	1G122604.D	1	04/29/16	BP	04/28/16	OP93471	G1G3976

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC19023-1, JC19023-2, JC19023-4

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	66%	24-136%
877-09-8	Tetrachloro-m-xylene	69%	24-136%
2051-24-3	Decachlorobiphenyl	70%	10-153%
2051-24-3	Decachlorobiphenyl	71%	10-153%

Blank Spike Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93471-BS1	1G122605.D	1	04/29/16	BP	04/28/16	OP93471	G1G3976

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC19023-1, JC19023-2, JC19023-4

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
309-00-2	Aldrin	16.7	10.8	65	40-135
319-84-6	alpha-BHC	16.7	10.9	65	37-134
319-85-7	beta-BHC	16.7	12.0	72	37-131
319-86-8	delta-BHC	16.7	12.1	73	34-132
58-89-9	gamma-BHC (Lindane)	16.7	11.1	67	36-128
5103-71-9	alpha-Chlordane	16.7	11.0	66	40-131
5103-74-2	gamma-Chlordane	16.7	11.6	70	41-133
60-57-1	Dieldrin	16.7	11.7	70	33-133
72-54-8	4,4'-DDD	16.7	11.7	70	37-132
72-55-9	4,4'-DDE	16.7	11.4	68	39-133
50-29-3	4,4'-DDT	16.7	13.9	83	26-150
72-20-8	Endrin	16.7	12.3	74	41-134
1031-07-8	Endosulfan sulfate	16.7	12.5	75	38-138
7421-93-4	Endrin aldehyde	16.7	11.4	68	37-129
959-98-8	Endosulfan-I	16.7	9.9	59	39-130
33213-65-9	Endosulfan-II	16.7	11.4	68	40-134
76-44-8	Heptachlor	16.7	11.5	69	36-132
1024-57-3	Heptachlor epoxide	16.7	11.4	68	39-131
72-43-5	Methoxychlor	16.7	13.0	78	28-149
53494-70-5	Endrin ketone	16.7	13.7	82	31-138

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	71%	24-136%
877-09-8	Tetrachloro-m-xylene	74%	24-136%
2051-24-3	Decachlorobiphenyl	75%	10-153%
2051-24-3	Decachlorobiphenyl	76%	10-153%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93399-BS1	6G34448.D	1	04/27/16	BP	04/26/16	OP93399	G6G997
OP93399-BSD	6G34449.D	1	04/27/16	BP	04/26/16	OP93399	G6G997

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC19023-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
309-00-2	Aldrin	0.167	0.099	59	0.15	90	41* [a]	38-138/30
319-84-6	alpha-BHC	0.167	0.10	60	0.15	90	40* [a]	51-144/30
319-85-7	beta-BHC	0.167	0.11	66	0.15	90	31* [a]	55-137/30
319-86-8	delta-BHC	0.167	0.11	66	0.16	96	37* [a]	33-148/30
58-89-9	gamma-BHC (Lindane)	0.167	0.11	66	0.15	90	31* [a]	53-142/30
5103-71-9	alpha-Chlordane	0.167	0.10	60	0.15	90	40* [a]	52-137/30
5103-74-2	gamma-Chlordane	0.167	0.098	59	0.15	90	42* [a]	52-140/30
60-57-1	Dieldrin	0.167	0.10	60	0.15	90	40* [a]	54-144/30
72-54-8	4,4'-DDD	0.167	0.11	66	0.15	90	31* [a]	46-151/30
72-55-9	4,4'-DDE	0.167	0.10	60	0.15	90	40* [a]	51-142/30
50-29-3	4,4'-DDT	0.167	0.11	66	0.16	96	37* [a]	53-158/30
72-20-8	Endrin	0.167	0.11	66	0.16	96	37* [a]	53-149/30
1031-07-8	Endosulfan sulfate	0.167	0.12	72	0.17	102	34* [a]	49-148/30
7421-93-4	Endrin aldehyde	0.167	0.11	66	0.15	90	31* [a]	45-137/30
53494-70-5	Endrin ketone	0.167	0.11	66	0.16	96	37* [a]	48-142/30
959-98-8	Endosulfan-I	0.167	0.10	60	0.15	90	40* [a]	54-139/30
33213-65-9	Endosulfan-II	0.167	0.11	66	0.15	90	31* [a]	54-142/30
76-44-8	Heptachlor	0.167	0.10	60	0.15	90	40* [a]	45-137/30
1024-57-3	Heptachlor epoxide	0.167	0.11	66	0.15	90	31* [a]	54-140/30
72-43-5	Methoxychlor	0.167	0.12	72	0.17	102	34* [a]	51-157/30

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	66%	93%	26-132%
877-09-8	Tetrachloro-m-xylene	68%	95%	26-132%
2051-24-3	Decachlorobiphenyl	68%	94%	10-118%
2051-24-3	Decachlorobiphenyl	73%	100%	10-118%

(a) Analytical precision exceeds in-house control limits.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP93471-MS	1G122619.D	1	04/29/16	BP	04/28/16	OP93471	G1G3976
OP93471-MSD	1G122620.D	1	04/29/16	BP	04/28/16	OP93471	G1G3976
JC19164-5	1G122617.D	1	04/29/16	BP	04/28/16	OP93471	G1G3976

The QC reported here applies to the following samples: **Method:** SW846 8081B

JC19023-1, JC19023-2, JC19023-4

CAS No.	Compound	JC19164-5 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		17.4	9.4	54	16.6	12.0	72	24	19-147/48
319-84-6	alpha-BHC	ND		17.4	9.8	56	16.6	12.6	76	25	13-155/50
319-85-7	beta-BHC	ND		17.4	10.5	60	16.6	14.0	84	29	10-145/53
319-86-8	delta-BHC	ND		17.4	10.7	61	16.6	13.5	81	23	11-148/51
58-89-9	gamma-BHC (Lindane)	ND		17.4	9.6	55	16.6	12.3	74	25	16-143/47
5103-71-9	alpha-Chlordane	ND		17.4	10.2	59	16.6	12.7	77	22	15-151/50
5103-74-2	gamma-Chlordane	ND		17.4	9.9	57	16.6	12.2	74	21	13-151/50
60-57-1	Dieldrin	ND		17.4	9.6	55	16.6	12.2	74	24	10-157/54
72-54-8	4,4'-DDD	ND		17.4	9.5	55	16.6	12.1	73	24	10-157/52
72-55-9	4,4'-DDE	ND		17.4	10.2	59	16.6	13.2	80	26	10-155/49
50-29-3	4,4'-DDT	0.76		17.4	12.5	67	16.6	15.0	86	18	10-187/49
72-20-8	Endrin	ND		17.4	10.8	62	16.6	13.8	83	24	14-154/53
1031-07-8	Endosulfan sulfate	ND		17.4	9.0	52	16.6	11.6	70	25	16-140/55
7421-93-4	Endrin aldehyde	ND		17.4	11.3	65	16.6	11.9	72	5	10-156/51
959-98-8	Endosulfan-I	ND		17.4	8.4	48	16.6	10.8	65	25	12-142/47
33213-65-9	Endosulfan-II	ND		17.4	9.2	53	16.6	11.7	71	24	10-150/52
76-44-8	Heptachlor	ND		17.4	10	57	16.6	12.4	75	21	10-159/49
1024-57-3	Heptachlor epoxide	ND		17.4	10	57	16.6	12.6	76	23	16-150/51
72-43-5	Methoxychlor	ND		17.4	11.3	65	16.6	13.8	83	20	10-166/52
53494-70-5	Endrin ketone	ND		17.4	11.3	65	16.6	15.1	91	29	10-171/52
8001-35-2	Toxaphene	ND			ND			ND		nc	50-150/30

CAS No.	Surrogate Recoveries	MS	MSD	JC19164-5	Limits
877-09-8	Tetrachloro-m-xylene	60%	80%	74%	24-136%
877-09-8	Tetrachloro-m-xylene	62%	82%	71%	24-136%
2051-24-3	Decachlorobiphenyl	52%	68%	64%	10-153%
2051-24-3	Decachlorobiphenyl	57%	76%	72%	10-153%

* = Outside of Control Limits.

Semivolatile Internal Standard Area Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G1G3976-CC3973	**Injection Date:**	04/29/16
Lab File ID:	1G122600.D	**Injection Time:**	08:23
Instrument ID:	GC1G	**Method:**	SW846 8081B

	IS 1 AREA	RT	IS 2 AREA	RT
Check Std	909186941	1.53	59396144	1.16
Upper Limit [a]	1818373882	2.03	118792288	1.66
Lower Limit [b]	454593471	1.03	29698072	0.66

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
OP93460-MB1	875824296	1.53	58147824	1.16
OP93460-BS1	954002979	1.53	61998270	1.16
OP93471-MB1	979316705	1.53	68301384	1.16
OP93471-BS1	884349290	1.53	61412168	1.16
OP93460-BSD	927511268	1.53	59910812	1.16
ZZZZZZ	900462100	1.53	58183006	1.16
ZZZZZZ	901275000	1.53	58992660	1.16
ZZZZZZ	693951949	1.53	61467528	1.16
ZZZZZZ	844283221	1.53	57943488	1.16
ZZZZZZ	972331056	1.53	67877203	1.16
ZZZZZZ	883083200	1.53	61323120	1.17
ZZZZZZ	948223992	1.53	65633045	1.16
ZZZZZZ	915118412	1.53	62921256	1.16
JC19164-5	979604507	1.53	65789185	1.16
ZZZZZZ	907582045	1.53	62844145	1.16
OP93471-MS	954388000	1.53	66473745	1.16
OP93471-MSD	897117609	1.53	62055949	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: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G1G3976-CC3973	**Injection Date:**	04/29/16
Lab File ID:	1G122622.D	**Injection Time:**	16:42
Instrument ID:	GC1G	**Method:**	SW846 8081B

	IS 1 AREA	RT	IS 2 AREA	RT
Check Std	894582392	1.54	58190591	1.17
Upper Limit [a]	1789164784	2.04	116381182	1.67
Lower Limit [b]	447291196	1.04	29095296	0.67

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
ZZZZZZ	959870263	1.54	68742000	1.17
ZZZZZZ	927229310	1.54	61521624	1.17
ZZZZZZ	1029878166	1.54	68914572	1.17
JC19023-1	940969847	1.54	71293737	1.17
JC19023-2	917742536	1.54	64950451	1.17
JC19023-4	974217827	1.54	63267376	1.17
OP90282-MB1	947456331	1.54	62554556	1.17
ZZZZZZ	900495046	1.54	61397204	1.17
ZZZZZZ	934741685	1.54	64233322	1.17
ZZZZZZ	928808564	1.54	63102524	1.17
ZZZZZZ	960308036	1.54	64650582	1.17
ZZZZZZ	949848169	1.54	61893629	1.17
ZZZZZZ	922429572	1.54	63145704	1.17

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: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G997-CC987	**Injection Date:**	04/27/16
Lab File ID:	6G34445.D	**Injection Time:**	08:16
Instrument ID:	GC6G	**Method:**	SW846 8081B

	IS 1 AREA	RT	IS 2 AREA	RT
Check Std	47706272	1.58	136461140	1.31
Upper Limit [a]	95412544	2.08	272922280	1.81
Lower Limit [b]	23853136	1.08	68230570	0.81

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT
OP93399-MB1	49966067	1.58	144788273	1.31
OP93399-BS1	50571781	1.58	148960456	1.31
OP93399-BSD	48638557	1.58	144668236	1.31
OP93401-MB1	47387211	1.58	143096135	1.31
OP93401-BS1	46966600	1.58	138856799	1.31
JC19023-3	47885582	1.58	143087016	1.31
ZZZZZZ	45147540	1.58	112670699	1.30
ZZZZZZ	47483348	1.58	154427590	1.31
ZZZZZZ	48658836	1.58	148212731	1.30
JC18984-10	49447735	1.58	142185680	1.31
OP93401-MS	50523307	1.58	146627540	1.30
OP93401-MSD	47256652	1.58	136897590	1.31
OP93327-MB1	51867138	1.58	152794796	1.30
ZZZZZZ	56088693	1.58	165054069	1.30
ZZZZZZ	55206919	1.58	164216596	1.31
OP93327-MS	58616312	1.58	176463420	1.31

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: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: G1G3973-DDT
Lab File ID: 1G122523.D
Instrument ID: GC1G
Injection Date: 04/27/16
Injection Time: 11:07

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	2975832	57489674
4,4'-DDE	1476894	23701943
4,4'-DDT	138340298	1188209541
DDT Breakdown [a]	3.1 %	6.4 %
Endrin aldehyde	1027311	9780845
Endrin ketone	4226912	46926445
Endrin	76410964	809569906
Endrin Breakdown [b]	6.4 %	6.5 %

(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
G1G3973-IC3973	1G122525.D	04/27/16	11:42	00:35	Initial cal 1
G1G3973-IC3973	1G122526.D	04/27/16	12:00	00:53	Initial cal 2
G1G3973-IC3973	1G122527.D	04/27/16	12:17	01:10	Initial cal 5
G1G3973-IC3973	1G122528.D	04/27/16	12:35	01:28	Initial cal 10
G1G3973-ICC3973	1G122529.D	04/27/16	12:52	01:45	Initial cal 25
G1G3973-IC3973	1G122530.D	04/27/16	13:10	02:03	Initial cal 50
G1G3973-IC3973	1G122531.D	04/27/16	13:27	02:21	Initial cal 75
G1G3973-IC3973	1G122532.D	04/27/16	13:45	02:38	Initial cal 100
G1G3973-IC3973	1G122533.D	04/27/16	14:02	02:56	Initial cal 500
G1G3973-IC3973	1G122534.D	04/27/16	14:20	03:13	Initial cal 500
G1G3973-ICV3973	1G122535.D	04/27/16	14:37	03:31	Initial cal verification 25
G1G3973-ICV3973	1G122536.D	04/27/16	14:55	03:49	Initial cal verification 25
G1G3973-ICV3973	1G122537.D	04/27/16	15:12	04:06	Initial cal verification 500
G1G3973-ICV3973	1G122538.D	04/27/16	15:30	04:23	Initial cal verification 500
G1G3974-CC3973	1G122539.D	04/27/16	16:27	05:21	Continuing cal 25
OP93375-MB1	1G122545.D	04/27/16	18:12	07:06	Method Blank
OP93375-BS1	1G122546.D	04/27/16	18:30	07:23	Blank Spike
JC18944-4	1G122549.D	04/27/16	19:22	08:16	(used for QC only; not part of job JC19023)
OP93375-MS	1G122550.D	04/27/16	19:40	08:33	Matrix Spike
OP93375-MSD	1G122551.D	04/27/16	19:57	08:51	Matrix Spike Duplicate

DDT/Endrin Breakdown Check

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample:	G1G3976-DDT	**Injection Date:**	04/29/16
Lab File ID:	1G122599.D	**Injection Time:**	08:05
Instrument ID:	GC1G		

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	2363565	33076616
4,4'-DDE	535294	7897103
4,4'-DDT	153588720	1178332298
DDT Breakdown [a]	1.9 %	3.4 %
Endrin aldehyde	939940	10218106
Endrin ketone	4171518	40025224
Endrin	78573165	730372578
Endrin Breakdown [b]	6.1 %	6.4 %

(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
OP93460-MB1	1G122602.D	04/29/16	08:58	00:52	Method Blank
ZZZZZZ	1G122613.D	04/29/16	12:10	04:04	(unrelated sample)
ZZZZZZ	1G122614.D	04/29/16	12:42	04:36	(unrelated sample)
ZZZZZZ	1G122615.D	04/29/16	12:59	04:53	(unrelated sample)
ZZZZZZ	1G122616.D	04/29/16	13:17	05:11	(unrelated sample)
JC19164-5	1G122617.D	04/29/16	13:34	05:29	(used for QC only; not part of job JC19023)
ZZZZZZ	1G122618.D	04/29/16	13:52	05:47	(unrelated sample)
OP93471-MS	1G122619.D	04/29/16	14:09	06:04	Matrix Spike
OP93471-MSD	1G122620.D	04/29/16	14:27	06:21	Matrix Spike Duplicate

DDT/Endrin Breakdown Check

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: G1G3976-DDT
Lab File ID: 1G122621.D
Instrument ID: GC1G
Injection Date: 04/29/16
Injection Time: 16:24

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	3960030	62180015
4,4'-DDE	663661	15013812
4,4'-DDT	132637704	1048149680
DDT Breakdown [a]	3.4 %	6.9 %
Endrin aldehyde	1005972	8060733
Endrin ketone	3499708	39491395
Endrin	76262987	743155088
Endrin Breakdown [b]	5.6 %	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
G1G3976-CC3973	1G122622.D	04/29/16	16:42	00:18	Continuing cal 50
ZZZZZZ	1G122624.D	04/29/16	17:17	00:53	(unrelated sample)
ZZZZZZ	1G122625.D	04/29/16	17:35	01:10	(unrelated sample)
ZZZZZZ	1G122626.D	04/29/16	17:52	01:28	(unrelated sample)
JC19023-1	1G122627.D	04/29/16	18:10	01:45	RA-17 (17-18)
JC19023-2	1G122628.D	04/29/16	18:27	02:03	S-40S (10.5-11.5)
JC19023-4	1G122629.D	04/29/16	18:45	02:20	S-39 (11-12)
OP90282-MB1	1G122630.D	04/29/16	19:37	03:13	Method Blank
ZZZZZZ	1G122631.D	04/29/16	19:55	03:30	(unrelated sample)
ZZZZZZ	1G122632.D	04/29/16	20:12	03:48	(unrelated sample)
ZZZZZZ	1G122633.D	04/29/16	20:30	04:05	(unrelated sample)
ZZZZZZ	1G122634.D	04/29/16	20:47	04:23	(unrelated sample)
ZZZZZZ	1G122635.D	04/29/16	21:05	04:40	(unrelated sample)
ZZZZZZ	1G122636.D	04/29/16	21:22	04:58	(unrelated sample)

DDT/Endrin Breakdown Check

Job Number: JC19023
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 JC19023)
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: JC19023
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: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: G6G997-DDT
Lab File ID: 6G34444.D
Instrument ID: GC6G
Injection Date: 04/27/16
Injection Time: 08:00

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	1971542	1692997
4,4'-DDE	1219820	463625
4,4'-DDT	378045398	110004603
DDT Breakdown [a]	0.8 %	1.9 %
Endrin aldehyde	1437099	524055
Endrin ketone	7950928	3117663
Endrin	187717482	59401837
Endrin Breakdown [b]	4.8 %	5.8 %

(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
G6G997-CC987	6G34445.D	04/27/16	08:16	00:16	Continuing cal 50
OP93399-MB1	6G34447.D	04/27/16	08:55	00:55	Method Blank
OP93399-BS1	6G34448.D	04/27/16	09:12	01:12	Blank Spike
OP93399-BSD	6G34449.D	04/27/16	09:28	01:28	Blank Spike Duplicate
OP93401-MB1	6G34450.D	04/27/16	09:45	01:45	Method Blank
OP93401-BS1	6G34451.D	04/27/16	10:01	02:01	Blank Spike
JC19023-3	6G34452.D	04/27/16	10:18	02:18	BPEB-6
ZZZZZZ	6G34453.D	04/27/16	10:34	02:34	(unrelated sample)
ZZZZZZ	6G34454.D	04/27/16	10:50	02:50	(unrelated sample)
ZZZZZZ	6G34455.D	04/27/16	11:07	03:07	(unrelated sample)
JC18984-10	6G34456.D	04/27/16	11:23	03:23	(used for QC only; not part of job JC19023)
OP93401-MS	6G34457.D	04/27/16	11:40	03:40	Matrix Spike
OP93401-MSD	6G34458.D	04/27/16	11:56	03:56	Matrix Spike Duplicate
OP93327-MB1	6G34459.D	04/27/16	12:12	04:12	Method Blank
ZZZZZZ	6G34460.D	04/27/16	12:29	04:29	(unrelated sample)
ZZZZZZ	6G34461.D	04/27/16	12:45	04:45	(unrelated sample)
OP93327-MS	6G34462.D	04/27/16	13:02	05:02	Matrix Spike

GC Identification Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G997-CC987	**Injection Date:**	04/27/16
Lab File ID:	6G34445.D	**Injection Time:**	08:16
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP93399-BS1	**Injection Date:**	04/27/16
Lab File ID:	6G34448.D	**Injection Time:**	09:12
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	3.69	3.69	0.099		ug/l	1.0
Aldrin	2	4.71	4.71	0.10		ug/l	
alpha-BHC	1 [a]	2.50	2.50	0.10		ug/l	0.0
alpha-BHC	2	3.18	3.18	0.10		ug/l	
beta-BHC	1	2.89	2.89	0.11		ug/l	0.0
beta-BHC	2 [a]	3.72	3.72	0.11		ug/l	
delta-BHC	1	3.08	3.08	0.11		ug/l	0.0
delta-BHC	2 [a]	4.14	4.14	0.11		ug/l	
gamma-BHC (Lindane)	1	2.81	2.81	0.11		ug/l	0.0
gamma-BHC (Lindane)	2 [a]	3.63	3.63	0.11		ug/l	
alpha-Chlordane	1 [a]	4.79	4.79	0.10		ug/l	0.0
alpha-Chlordane	2	6.14	6.14	0.10		ug/l	
gamma-Chlordane	1 [a]	4.61	4.61	0.098		ug/l	2.0
gamma-Chlordane	2	5.90	5.90	0.10		ug/l	
Dieldrin	1 [a]	5.32	5.32	0.10		ug/l	0.0
Dieldrin	2	6.71	6.71	0.10		ug/l	
4,4'-DDD	1 [a]	5.81	5.81	0.11		ug/l	0.0
4,4'-DDD	2	7.47	7.47	0.11		ug/l	
4,4'-DDE	1	4.92	4.92	0.10		ug/l	0.0
4,4'-DDE	2 [a]	6.44	6.44	0.10		ug/l	
4,4'-DDT	1 [a]	6.26	6.26	0.11		ug/l	8.7
4,4'-DDT	2	8.05	8.05	0.12		ug/l	
Endrin	1	5.66	5.66	0.11		ug/l	0.0
Endrin	2 [a]	7.25	7.25	0.11		ug/l	
Endosulfan sulfate	1	7.41	7.41	0.12		ug/l	0.0
Endosulfan sulfate	2 [a]	8.78	8.78	0.12		ug/l	
Endrin aldehyde	1	6.67	6.67	0.12		ug/l	8.7
Endrin aldehyde	2 [a]	8.26	8.26	0.11		ug/l	
Endrin ketone	1	7.88	7.88	0.11		ug/l	0.0
Endrin ketone	2 [a]	9.83	9.83	0.11		ug/l	
Endosulfan-I	1 [a]	4.98	4.97	0.10		ug/l	0.0
Endosulfan-I	2	6.24	6.24	0.10		ug/l	
Endosulfan-II	1 [a]	6.00	6.00	0.11		ug/l	0.0
Endosulfan-II	2	7.63	7.64	0.11		ug/l	
Heptachlor	1	3.34	3.34	0.10		ug/l	0.0
Heptachlor	2 [a]	4.23	4.23	0.10		ug/l	
Heptachlor epoxide	1	4.44	4.44	0.11		ug/l	0.0
Heptachlor epoxide	2 [a]	5.59	5.59	0.11		ug/l	
Methoxychlor	1 [a]	7.13	7.13	0.12		ug/l	8.0
Methoxychlor	2	9.43	9.43	0.13		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G1G3976-CC3973	**Injection Date:**	04/29/16
Lab File ID:	1G122600.D	**Injection Time:**	08:23
Instrument ID:	GC1G	**Method:**	SW846 8081B

Sample ID:	OP93471-BS1	**Injection Date:**	04/29/16
Lab File ID:	1G122605.D	**Injection Time:**	09:50
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	3.30	3.30	10.8		ug/kg	6.3
Aldrin	2	4.49	4.49	11.5		ug/kg	
alpha-BHC	1 [a]	2.22	2.21	10.9		ug/kg	6.2
alpha-BHC	2	3.04	3.04	11.6		ug/kg	
beta-BHC	1 [a]	2.59	2.58	12.0		ug/kg	5.7
beta-BHC	2	3.56	3.56	12.7		ug/kg	
delta-BHC	1 [a]	2.76	2.76	12.1		ug/kg	5.6
delta-BHC	2	3.95	3.95	12.8		ug/kg	
gamma-BHC (Lindane)	1 [a]	2.51	2.50	11.1		ug/kg	9.4
gamma-BHC (Lindane)	2	3.47	3.47	12.2		ug/kg	
alpha-Chlordane	1 [a]	4.31	4.31	11.0		ug/kg	5.3
alpha-Chlordane	2	5.82	5.82	11.6		ug/kg	
gamma-Chlordane	1 [a]	4.15	4.15	11.6		ug/kg	4.2
gamma-Chlordane	2	5.60	5.60	12.1		ug/kg	
Dieldrin	1	4.80	4.80	12.0		ug/kg	2.5
Dieldrin	2 [a]	6.35	6.35	11.7		ug/kg	
4,4'-DDD	1	5.25	5.25	11.8		ug/kg	0.9
4,4'-DDD	2 [a]	7.04	7.05	11.7		ug/kg	
4,4'-DDE	1	4.43	4.43	12.6		ug/kg	10.0
4,4'-DDE	2 [a]	6.09	6.09	11.4		ug/kg	
4,4'-DDT	1 [a]	5.65	5.65	13.9		ug/kg	5.6
4,4'-DDT	2	7.58	7.58	14.7		ug/kg	
Endrin	1	5.11	5.11	13.7		ug/kg	10.8
Endrin	2 [a]	6.86	6.86	12.3		ug/kg	
Endosulfan sulfate	1	6.73	6.73	12.6		ug/kg	0.8
Endosulfan sulfate	2 [a]	8.25	8.25	12.5		ug/kg	
Endrin aldehyde	1	6.06	6.05	12.6		ug/kg	10.0
Endrin aldehyde	2 [a]	7.78	7.78	11.4		ug/kg	
Endosulfan-I	1 [a]	4.49	4.48	9.9		ug/kg	14.1
Endosulfan-I	2	5.92	5.92	11.4		ug/kg	
Endosulfan-II	1 [a]	5.43	5.43	11.4		ug/kg	0.9
Endosulfan-II	2	7.21	7.21	11.5		ug/kg	
Heptachlor	1 [a]	2.98	2.98	11.5		ug/kg	5.9
Heptachlor	2	4.04	4.04	12.2		ug/kg	
Heptachlor epoxide	1 [a]	3.99	3.99	11.4		ug/kg	4.3
Heptachlor epoxide	2	5.31	5.31	11.9		ug/kg	
Methoxychlor	1	6.44	6.44	14.6		ug/kg	11.6
Methoxychlor	2 [a]	8.83	8.83	13.0		ug/kg	
Endrin ketone	1	7.16	7.16	14.0		ug/kg	2.2
Endrin ketone	2 [a]	9.22	9.21	13.7		ug/kg	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G997-CC987	**Injection Date:**	04/27/16
Lab File ID:	6G34445.D	**Injection Time:**	08:16
Instrument ID:	GC6G	**Method:**	SW846 8081B

Sample ID:	OP93399-BSD	**Injection Date:**	04/27/16
Lab File ID:	6G34449.D	**Injection Time:**	09:28
Client ID:	Blank Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	3.69	3.69	0.15		ug/l	0.0
Aldrin	2	4.71	4.71	0.15		ug/l	
alpha-BHC	1	2.50	2.50	0.15		ug/l	0.0
alpha-BHC	2 [a]	3.18	3.18	0.15		ug/l	
beta-BHC	1	2.89	2.89	0.16		ug/l	6.5
beta-BHC	2 [a]	3.72	3.72	0.15		ug/l	
delta-BHC	1	3.08	3.08	0.17		ug/l	6.1
delta-BHC	2 [a]	4.14	4.14	0.16		ug/l	
gamma-BHC (Lindane)	1	2.81	2.81	0.16		ug/l	6.5
gamma-BHC (Lindane)	2 [a]	3.63	3.63	0.15		ug/l	
alpha-Chlordane	1 [a]	4.79	4.79	0.15		ug/l	0.0
alpha-Chlordane	2	6.14	6.14	0.15		ug/l	
gamma-Chlordane	1 [a]	4.61	4.61	0.15		ug/l	0.0
gamma-Chlordane	2	5.90	5.90	0.15		ug/l	
Dieldrin	1 [a]	5.32	5.32	0.15		ug/l	0.0
Dieldrin	2	6.71	6.71	0.15		ug/l	
4,4'-DDD	1 [a]	5.81	5.81	0.15		ug/l	6.5
4,4'-DDD	2	7.47	7.47	0.16		ug/l	
4,4'-DDE	1 [a]	4.92	4.92	0.15		ug/l	6.5
4,4'-DDE	2	6.44	6.44	0.16		ug/l	
4,4'-DDT	1 [a]	6.26	6.26	0.16		ug/l	11.8
4,4'-DDT	2	8.05	8.05	0.18		ug/l	
Endrin	1	5.66	5.66	0.16		ug/l	0.0
Endrin	2 [a]	7.25	7.25	0.16		ug/l	
Endosulfan sulfate	1	7.41	7.41	0.17		ug/l	0.0
Endosulfan sulfate	2 [a]	8.78	8.78	0.17		ug/l	
Endrin aldehyde	1	6.67	6.67	0.16		ug/l	6.5
Endrin aldehyde	2 [a]	8.26	8.26	0.15		ug/l	
Endrin ketone	1	7.88	7.88	0.16		ug/l	0.0
Endrin ketone	2 [a]	9.83	9.83	0.16		ug/l	
Endosulfan-I	1 [a]	4.98	4.97	0.15		ug/l	0.0
Endosulfan-I	2	6.24	6.24	0.15		ug/l	
Endosulfan-II	1 [a]	6.00	6.00	0.15		ug/l	6.5
Endosulfan-II	2	7.64	7.64	0.16		ug/l	
Heptachlor	1	3.34	3.34	0.15		ug/l	0.0
Heptachlor	2 [a]	4.23	4.23	0.15		ug/l	
Heptachlor epoxide	1	4.44	4.44	0.16		ug/l	6.5
Heptachlor epoxide	2 [a]	5.59	5.59	0.15		ug/l	
Methoxychlor	1 [a]	7.13	7.13	0.17		ug/l	11.1
Methoxychlor	2	9.43	9.43	0.19		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G1G3976-CC3973	**Injection Date:**	04/29/16
Lab File ID:	1G122600.D	**Injection Time:**	08:23
Instrument ID:	GC1G	**Method:**	SW846 8081B

Sample ID:	OP93471-MS	**Injection Date:**	04/29/16
Lab File ID:	1G122619.D	**Injection Time:**	14:09
Client ID:	Matrix Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	3.30	3.30	9.4		ug/kg	5.2
Aldrin	2	4.49	4.49	9.9		ug/kg	
alpha-BHC	1 [a]	2.22	2.21	9.8		ug/kg	4.0
alpha-BHC	2	3.04	3.04	10.2		ug/kg	
beta-BHC	1 [a]	2.59	2.58	10.5		ug/kg	3.9
beta-BHC	2	3.56	3.56	10.1		ug/kg	
delta-BHC	1 [a]	2.77	2.76	10.7		ug/kg	2.8
delta-BHC	2	3.95	3.95	11.0		ug/kg	
gamma-BHC (Lindane)	1 [a]	2.51	2.50	9.6		ug/kg	13.6
gamma-BHC (Lindane)	2	3.47	3.47	11.0		ug/kg	
alpha-Chlordane	1 [a]	4.31	4.31	10.2		ug/kg	1.0
alpha-Chlordane	2	5.82	5.82	10.1		ug/kg	
gamma-Chlordane	1 [a]	4.15	4.15	9.9		ug/kg	22.5
gamma-Chlordane	2	5.60	5.60	7.9		ug/kg	
Dieldrin	1 [a]	4.80	4.80	9.6		ug/kg	8.0
Dieldrin	2	6.35	6.35	10.4		ug/kg	
4,4'-DDD	1 [a]	5.25	5.25	9.5		ug/kg	2.1
4,4'-DDD	2	7.04	7.05	9.3		ug/kg	
4,4'-DDE	1 [a]	4.43	4.43	10.2		ug/kg	25.4
4,4'-DDE	2	6.09	6.09	7.9		ug/kg	
4,4'-DDT	1	5.65	5.65	11.3		ug/kg	10.1
4,4'-DDT	2 [a]	7.58	7.58	12.5		ug/kg	
Endrin	1 [a]	5.11	5.11	10.8		ug/kg	4.7
Endrin	2	6.86	6.86	10.3		ug/kg	
Endosulfan sulfate	1 [a]	6.73	6.73	9.0		ug/kg	22.7
Endosulfan sulfate	2	8.25	8.25	11.3		ug/kg	
Endrin aldehyde	1 [a]	6.05	6.05	11.3		ug/kg	18.4
Endrin aldehyde	2	7.78	7.78	9.4		ug/kg	
Endosulfan-I	1 [a]	4.49	4.48	8.4		ug/kg	13.3
Endosulfan-I	2	5.92	5.92	9.6		ug/kg	
Endosulfan-II	1 [a]	5.43	5.43	9.2		ug/kg	5.3
Endosulfan-II	2	7.21	7.21	9.7		ug/kg	
Heptachlor	1 [a]	2.98	2.98	10		ug/kg	3.9
Heptachlor	2	4.04	4.04	10.4		ug/kg	
Heptachlor epoxide	1 [a]	3.99	3.99	10		ug/kg	0.0
Heptachlor epoxide	2	5.31	5.31	10.0		ug/kg	
Methoxychlor	1 [a]	6.43	6.44	11.3		ug/kg	13.2
Methoxychlor	2	8.83	8.83	9.9		ug/kg	
Endrin ketone	1 [a]	7.15	7.16	11.3		ug/kg	1.8
Endrin ketone	2	9.22	9.21	11.5		ug/kg	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G1G3976-CC3973	**Injection Date:**	04/29/16
Lab File ID:	1G122600.D	**Injection Time:**	08:23
Instrument ID:	GC1G	**Method:**	SW846 8081B

Sample ID:	OP93471-MSD	**Injection Date:**	04/29/16
Lab File ID:	1G122620.D	**Injection Time:**	14:27
Client ID:	Matrix Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aldrin	1 [a]	3.30	3.30	12.0		ug/kg	0.0
Aldrin	2	4.49	4.49	12.0		ug/kg	
alpha-BHC	1 [a]	2.22	2.21	12.6		ug/kg	0.8
alpha-BHC	2	3.04	3.04	12.5		ug/kg	
beta-BHC	1 [a]	2.59	2.58	14.0		ug/kg	13.7
beta-BHC	2	3.56	3.56	12.2		ug/kg	
delta-BHC	1 [a]	2.77	2.76	13.5		ug/kg	1.5
delta-BHC	2	3.95	3.95	13.3		ug/kg	
gamma-BHC (Lindane)	1 [a]	2.51	2.50	12.3		ug/kg	7.8
gamma-BHC (Lindane)	2	3.47	3.47	13.3		ug/kg	
alpha-Chlordane	1 [a]	4.31	4.31	12.7		ug/kg	4.0
alpha-Chlordane	2	5.82	5.82	12.2		ug/kg	
gamma-Chlordane	1 [a]	4.15	4.15	12.2		ug/kg	25.9
gamma-Chlordane	2	5.60	5.60	9.4		ug/kg	
Dieldrin	1 [a]	4.80	4.80	12.2		ug/kg	3.2
Dieldrin	2	6.35	6.35	12.6		ug/kg	
4,4'-DDD	1 [a]	5.25	5.25	12.1		ug/kg	6.0
4,4'-DDD	2	7.04	7.05	11.4		ug/kg	
4,4'-DDE	1 [a]	4.43	4.43	13.2		ug/kg	31.6
4,4'-DDE	2	6.09	6.09	9.6		ug/kg	
4,4'-DDT	1	5.65	5.65	14.1		ug/kg	6.2
4,4'-DDT	2 [a]	7.58	7.58	15.0		ug/kg	
Endrin	1 [a]	5.11	5.11	13.8		ug/kg	9.1
Endrin	2	6.86	6.86	12.6		ug/kg	
Endosulfan sulfate	1 [a]	6.73	6.73	11.6		ug/kg	15.9
Endosulfan sulfate	2	8.25	8.25	13.6		ug/kg	
Endrin aldehyde	1 [a]	6.05	6.05	11.9		ug/kg	4.3
Endrin aldehyde	2	7.78	7.78	11.4		ug/kg	
Endosulfan-I	1 [a]	4.49	4.48	10.8		ug/kg	8.0
Endosulfan-I	2	5.92	5.92	11.7		ug/kg	
Endosulfan-II	1 [a]	5.43	5.43	11.7		ug/kg	0.9
Endosulfan-II	2	7.21	7.21	11.8		ug/kg	
Heptachlor	1 [a]	2.98	2.98	12.4		ug/kg	2.4
Heptachlor	2	4.04	4.04	12.7		ug/kg	
Heptachlor epoxide	1 [a]	3.99	3.99	12.6		ug/kg	2.4
Heptachlor epoxide	2	5.31	5.31	12.3		ug/kg	
Methoxychlor	1 [a]	6.43	6.44	13.8		ug/kg	14.8
Methoxychlor	2	8.83	8.83	11.9		ug/kg	
Endrin ketone	1 [a]	7.15	7.16	15.1		ug/kg	4.7
Endrin ketone	2	9.22	9.21	14.4		ug/kg	

(a) QC results reported from this column.

Semivolatile Surrogate Recovery Summary

Job Number: JC19023
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]
JC19023-3	6G34452.D	96	97	61	67
OP93399-BS1	6G34448.D	66	68	68	73
OP93399-BSD	6G34449.D	93	95	94	100
OP93399-MB1	6G34447.D	92	99	98	103

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: JC19023
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]
JC19023-1	1G122627.D	59	65	59	69
JC19023-2	1G122628.D	80	84	76	82
JC19023-4	1G122629.D	61	58	58	57
OP93471-BS1	1G122605.D	71	74	75	76
OP93471-MB1	1G122604.D	66	69	70	71
OP93471-MS	1G122619.D	60	62	52	57
OP93471-MSD	1G122620.D	80	82	68	76

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: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G6G997-CC987	**Injection Date:**	04/27/16
Lab File ID:	6G34445.D	**Injection Time:**	08:16
Instrument ID:	GC6G	**Method:**	SW846 8081B

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	1.98	2.47	9.91	11.76

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP93399-MB1	6G34447.D	04/27/16	08:55	1.99	2.47	9.92	11.76
OP93399-BS1	6G34448.D	04/27/16	09:12	1.98	2.47	9.92	11.76
OP93399-BSD	6G34449.D	04/27/16	09:28	1.98	2.47	9.92	11.76
OP93401-MB1	6G34450.D	04/27/16	09:45	1.98	2.47	9.91	11.76
OP93401-BS1	6G34451.D	04/27/16	10:01	1.98	2.47	9.91	11.76
JC19023-3	6G34452.D	04/27/16	10:18	1.98	2.47	9.91	11.75
ZZZZZZ	6G34453.D	04/27/16	10:34	1.98	2.47	9.94	11.74
ZZZZZZ	6G34454.D	04/27/16	10:50	1.98	2.47	9.91	11.76
ZZZZZZ	6G34455.D	04/27/16	11:07	1.98	2.47	9.91	11.75
JC18984-10	6G34456.D	04/27/16	11:23	1.98	2.47	9.91	11.75
OP93401-MS	6G34457.D	04/27/16	11:40	1.98	2.47	9.91	11.75
OP93401-MSD	6G34458.D	04/27/16	11:56	1.98	2.47	9.91	11.75
OP93327-MB1	6G34459.D	04/27/16	12:12	1.98	2.47	9.91	11.75
ZZZZZZ	6G34460.D	04/27/16	12:29	1.98	2.47	9.91	11.76
ZZZZZZ	6G34461.D	04/27/16	12:45	1.98	2.47	9.91	11.75
OP93327-MS	6G34462.D	04/27/16	13:02	1.98	2.47	9.91	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: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G1G3976-CC3973	**Injection Date:**	04/29/16
Lab File ID:	1G122600.D	**Injection Time:**	08:23
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	10.86

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP93460-MB1	1G122602.D	04/29/16	08:58	1.75	2.37	8.94	10.86
OP93460-BS1	1G122603.D	04/29/16	09:15	1.75	2.37	8.94	10.86
OP93471-MB1	1G122604.D	04/29/16	09:33	1.75	2.37	8.94	10.86
OP93471-BS1	1G122605.D	04/29/16	09:50	1.75	2.37	8.94	10.86
OP93460-BSD	1G122606.D	04/29/16	10:08	1.75	2.37	8.94	10.86
ZZZZZZ	1G122607.D	04/29/16	10:25	1.75	2.37	8.94	10.86
ZZZZZZ	1G122608.D	04/29/16	10:43	1.75	2.37	8.94	10.86
ZZZZZZ	1G122611.D	04/29/16	11:35	1.75	2.37	8.93	10.86
ZZZZZZ	1G122612.D	04/29/16	11:53	1.75	2.37	8.93	10.86
ZZZZZZ	1G122613.D	04/29/16	12:10	1.75	2.37	8.93	10.86
ZZZZZZ	1G122614.D	04/29/16	12:42	1.75	2.38	8.95	10.87
ZZZZZZ	1G122615.D	04/29/16	12:59	1.75	2.37	8.94	10.86
ZZZZZZ	1G122616.D	04/29/16	13:17	1.75	2.37	8.93	10.86
JC19164-5	1G122617.D	04/29/16	13:34	1.75	2.37	8.93	10.86
ZZZZZZ	1G122618.D	04/29/16	13:52	1.75	2.38	8.93	10.86
OP93471-MS	1G122619.D	04/29/16	14:09	1.75	2.37	8.93	10.86
OP93471-MSD	1G122620.D	04/29/16	14:27	1.75	2.38	8.93	10.86

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: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Check Std:	G1G3976-CC3973	**Injection Date:**	04/29/16
Lab File ID:	1G122622.D	**Injection Time:**	16:42
Instrument ID:	GC1G	**Method:**	SW846 8081B

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	1.75	2.38	8.94	10.86

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
ZZZZZZ	1G122624.D	04/29/16	17:17	1.75	2.38	8.94	10.86
ZZZZZZ	1G122625.D	04/29/16	17:35	1.75	2.38	8.94	10.86
ZZZZZZ	1G122626.D	04/29/16	17:52	1.75	2.38	8.94	10.86
JC19023-1	1G122627.D	04/29/16	18:10	1.75	2.38	8.93	10.86
JC19023-2	1G122628.D	04/29/16	18:27	1.75	2.38	8.94	10.86
JC19023-4	1G122629.D	04/29/16	18:45	1.75	2.38	8.94	10.86
OP90282-MB1	1G122630.D	04/29/16	19:37	1.75	2.38	8.94	10.86
ZZZZZZ	1G122631.D	04/29/16	19:55	1.75	2.38	8.93	10.86
ZZZZZZ	1G122632.D	04/29/16	20:12	1.75	2.38	8.93	10.86
ZZZZZZ	1G122633.D	04/29/16	20:30	1.75	2.38	8.94	10.86
ZZZZZZ	1G122634.D	04/29/16	20:47	1.75	2.38	8.93	10.86
ZZZZZZ	1G122635.D	04/29/16	21:05	1.75	2.38	8.94	10.86
ZZZZZZ	1G122636.D	04/29/16	21:22	1.75	2.38	8.93	10.86

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: JC19023 **Sample:** G1G3973-ICC3973
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G122529.D
Project: BMSMC, Building 5 Area, PR

Response Factor Report GC1G

Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Apr 27 16:13:45 2016
Response via : Initial Calibration

Calibration Files
2 =1G122526.D 5 =1G122527.D 10 =1G122528.D 25 =1G122529.D
50 =1G122530.D 100 =1G122532.D 1 =1G122525.D 75 =1G122531.D

Compound	2	5	10	25	50	100	1	75	Avg	%RSD
1) I 1-bromo-2-nitrobenzen	ISTD									
2) Tetrachloro-	1.085	1.004	1.014	1.029	1.009	1.029	1.202	1.009	1.048	6.44
3) alpha-BHC	1.181	1.167	1.173	1.275	1.360	1.525	1.170	1.436	1.286	10.87
4) gamma-BHC	1.162	1.129	1.141	1.236	1.300	1.435	1.208	1.358	1.246	8.82
5) Heptachlor	1.306	1.279	1.275	1.357	1.397	1.498	1.354	1.438	1.363	5.76
6) beta-BHC	0.586	0.602	0.591	0.604	0.601	0.641	0.676	0.607	0.613	4.93
7) delta-BHC	0.883	0.959	1.000	1.050	1.145	1.290	0.918	1.205	1.056	13.69
8) Aldrin	1.262	1.210	1.230	1.310	1.363	1.477	1.328	1.413	1.324	6.92
9) Heptachlor E	1.268	1.278	1.297	1.359	1.360	1.432	1.248	1.383	1.328	4.87
10) gamma-Chlord	1.329	1.258	1.257	1.317	1.348	1.435	1.444	1.376	1.346	5.27
11) alpha-Chlord	1.326	1.276	1.269	1.324	1.345	1.424	1.487	1.367	1.352	5.42
12) Endosulfan I	1.483	1.370	1.389	1.445	1.448	1.540	1.411	1.469	1.444	3.79
13) 4,4'-DDE	1.016	1.004	1.011	1.041	1.092	1.185	1.260	1.127	1.092	8.52
14) Dieldrin	1.240	1.176	1.220	1.298	1.343	1.457	1.362	1.392	1.311	7.25
15) Endrin	1.168	1.130	1.152	1.212	1.246	1.327	1.118	1.278	1.204	6.23
16) 4,4'-DDD	0.890	0.827	0.935	0.962	0.901	1.034	0.825	0.987	0.920	8.07
17) Endosulfan I	1.179	1.146	1.202	1.256	1.227	1.338	1.061	1.291	1.212	7.15
18) 4,4'-DDT	0.671	0.751	0.786	0.908	0.960	1.090	0.701	1.020	0.861	18.08
19) Endrin Aldeh	0.988	0.924	0.979	1.019	1.028	1.081	1.025	1.043	1.011	4.65
20) Endosulfan S	1.142	1.069	1.082	1.144	1.145	1.198	1.060	1.164	1.126	4.38
21) Methoxychlor	0.584	0.539	0.553	0.595	0.590	0.612	0.591	0.599	0.583	4.22
22) Mirex	1.587	1.435	1.378	1.411	1.333	1.311	1.556	1.310	1.415	7.55
23) Endrin Keton	1.108	1.017	1.050	1.130	1.175	1.228	1.041	1.186	1.117	6.85
24) Decachlorobi	1.957	1.892	1.855	1.846	1.768	1.730	2.027	1.725	1.850	5.83
25) I 1-bromo-2-nitrobenzen	ISTD									
26) Toxaphene{A}					0.022				0.022	0.00
27) Toxaphene{B}					0.052				0.052	0.00
28) Toxaphene{C}					0.040				0.040	0.00
29) Toxaphene{D}					0.038				0.038	0.00
30) Toxaphene{E}					0.037				0.037	0.00
31) I 1-bromo-2-nitrobenzen	ISTD									
32) Chlordane {A					0.036				0.036	0.00
33) Chlordane {B					0.052				0.052	0.00
34) Chlordane {C					0.169				0.169	0.00
35) Chlordane {D					0.274				0.274	0.00
36) Chlordane {E					0.037				0.037	0.00

Signal #2

1) I 1-bromo-2-nitrobenzen	ISTD									
2) Tetrachloro-	1.013	0.950	0.923	0.892	0.856	0.824	0.946	0.830	0.904	7.27
3) alpha-BHC	1.459	1.396	1.377	1.359	1.303	1.280	1.511	1.276	1.370	6.17
4) gamma-BHC	1.298	1.234	1.214	1.209	1.161	1.138	1.360	1.134	1.218	6.48

Initial Calibration Summary

Job Number: JC19023 **Sample:** G1G3973-ICC3973
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G122529.D
Project: BMSMC, Building 5 Area, PR

5)	Heptachlor	1.179	1.085	1.051	1.049	1.016	0.980	1.232	0.987	1.072	8.43
6)	beta-BHC	0.558	0.509	0.504	0.515	0.500	0.484	0.570	0.484	0.516	6.18
7)	delta-BHC	1.181	1.157	1.129	1.135	1.114	1.096	1.182	1.094	1.136	3.07
8)	Aldrin	1.313	1.170	1.125	1.098	1.025	0.981	1.407	0.986	1.138	13.55
9)	Heptachlor E	1.161	1.034	1.019	0.990	0.925	0.873	1.149	0.885	1.004	10.94
10)	gamma-Chlord	1.132	1.018	0.990	0.979	0.915	0.887	1.119	0.883	0.990	9.77
11)	alpha-Chlord	1.050	0.983	0.954	0.935	0.874	0.841	1.251	0.842	0.966	14.04
12)	Endosulfan I	1.069	0.992	0.947	0.931	0.866	0.830	1.192	0.830	0.957	13.12
13)	4,4'-DDE	1.080	0.951	0.940	0.960	0.905	0.880	1.068	0.873	0.957	8.23
14)	Dieldrin	1.148	1.058	1.024	1.009	0.944	0.914	1.105	0.909	1.014	8.69
15)	Endrin	1.004	0.929	0.911	0.891	0.845	0.804	0.980	0.813	0.897	8.20
16)	4,4'-DDD	0.902	0.838	0.833	0.828	0.780	0.744	1.016	0.746	0.836	10.77
17)	Endosulfan I	0.926	0.887	0.881	0.895	0.837	0.795	1.093	0.802	0.889	10.59
18)	4,4'-DDT	0.428	0.491	0.541	0.605	0.613	0.613	0.403	0.606	0.538	16.16
19)	Endrin Aldeh	0.659	0.644	0.655	0.665	0.627	0.602	0.662	0.604	0.640	4.03
20)	Endosulfan S	0.798	0.752	0.734	0.731	0.696	0.658	0.744	0.666	0.722	6.48
21)	Methoxychlor	0.305	0.270	0.287	0.307	0.305	0.311	0.344	0.305	0.304	6.96
22)	Mirex	0.635	0.607	0.587	0.566	0.539	0.512	0.673	0.516	0.579	9.87
23)	Endrin Keton	0.719	0.657	0.669	0.677	0.660	0.644	0.689	0.638	0.669	3.91
24)	Decachlorobi	0.573	0.545	0.535	0.521	0.492	0.472	0.610	0.472	0.528	9.22

25) I 1-bromo-2-nitrobenzen ----------ISTD----------

26)	Toxaphene{A}	0.020	0.020	0.00
27)	Toxaphene{B}	0.025	0.025	0.00
28)	Toxaphene{C}	0.037	0.037	0.00
29)	Toxaphene{D}	0.022	0.022	0.00
30)	Toxaphene{E}	0.016	0.016	0.00

31) I 1-bromo-2-nitrobenzen ----------ISTD----------

32)	Chlordane {A	0.031	0.031	0.00
33)	Chlordane {B	0.032	0.032	0.00
34)	Chlordane {C	0.105	0.105	0.00
35)	Chlordane {D	0.177	0.177	0.00
36)	Chlordane {E	0.029	0.029	0.00

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

1PST3973.M Wed Apr 27 16:35:14 2016 RPT1

8.10.1

8

Initial Calibration Verification

Job Number: JC19023 **Sample:** G1G3973-ICV3973
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G122535.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122535.D\ECD1A.CH Vial: 13
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122535.D\ECD2B.CH
Acq On    : 4-27-16 02:37:54 PM                      Operator: dharas
Sample    : icv3973-25                               Inst    : GC1G
Misc      : op93327,g1g3973,16.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 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	1.048	0.895	14.6	95	0.00	1.72- 1.78
3	A	alpha-BHC	1.286	1.056	17.9	90	0.00	2.19- 2.25
4	MA	gamma-BHC	1.246	1.033	17.1	91	0.00	2.48- 2.54
5	MA	Heptachlor	1.363	1.105	18.9	89	0.00	2.95- 3.01
6	B	beta-BHC	0.613	0.521	15.0	94	0.00	2.56- 2.62
7	B	delta-BHC	1.056	0.945	10.5	98	0.00	2.74- 2.80
8	MB	Aldrin	1.324	1.083	18.2	90	0.00	3.27- 3.33
9	B	Heptachlor Epoxide	1.328	1.130	14.9	91	0.00	3.96- 4.02
10	B	gamma-Chlordane	1.346	1.129	16.1	93	0.00	4.12- 4.18
11	B	alpha-Chlordane	1.352	1.118	17.3	92	0.00	4.28- 4.34
12	A	Endosulfan I	1.444	1.215	15.9	92	0.00	4.46- 4.52
13	B	4,4'-DDE	1.092	0.875	19.9	92	0.00	4.41- 4.47
14	MA	Dieldrin	1.311	1.112	15.2	93	0.00	4.77- 4.83
15	MA	Endrin	1.204	1.053	12.5	95	0.00	5.09- 5.15
16	A	4,4'-DDD	0.920	0.805	12.5	91	0.02	5.24- 5.31
17	B	Endosulfan II	1.212	1.066	12.0	93	0.00	5.41- 5.47
18	MA	4,4'-DDT	0.861	0.720	16.4	86	0.00	5.63- 5.69
19	B	Endrin Aldehyde	1.011	0.939	7.1	100	0.00	6.03- 6.09
20	B	Endosulfan Sulfate	1.126	0.952	15.5	91	0.00	6.71- 6.77
21	A	Methoxychlor	0.583	0.521	10.6	96	0.01	6.43- 6.49
22		Mirex		----------NA----------				
23	B	Endrin Ketone	1.117	0.956	14.4	92	0.00	7.13- 7.19
24	SA	Decachlorobiphenyl	1.850	1.662	10.2	98	0.00	8.91- 8.97
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	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	0#	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 *****

8.10.2

8

Initial Calibration Verification

Job Number: JC19023 **Sample:** G1G3973-ICV3973
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G122535.D
Project: BMSMC, Building 5 Area, PR

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	109	0.00	1.51- 1.57
2	SAB	Tetrachloro-m-xylene	0.904	0.796	11.9	98	0.00	2.35- 2.41
3	A	alpha-BHC	1.370	1.151	16.0	93	0.00	3.01- 3.07
4	MA	gamma-BHC	1.218	1.027	15.7	93	0.00	3.44- 3.50
5	MA	Heptachlor	1.072	0.908	15.3	95	-0.01	4.01- 4.07
6	B	beta-BHC	0.516	0.448	13.2	95	0.00	3.53- 3.59
7	B	delta-BHC	1.136	1.026	9.7	99	0.00	3.93- 3.99
8	MB	Aldrin	1.138	0.938	17.6	93	-0.01	4.46- 4.52
9	B	Heptachlor Epoxide	1.004	0.854	14.9	94	-0.01	5.29- 5.35
10	B	gamma-Chlordane	0.990	0.857	13.4	96	-0.01	5.57- 5.63
11	B	alpha-Chlordane	0.966	0.807	16.5	94	-0.01	5.80- 5.86
12	A	Endosulfan I	0.957	0.797	16.7	94	-0.01	5.89- 5.95
13	B	4,4'-DDE	0.957	0.844	11.8	96	0.00	6.07- 6.13
14	MA	Dieldrin	1.014	0.892	12.0	97	-0.01	6.32- 6.38
15	MA	Endrin	0.897	0.807	10.0	99	-0.01	6.83- 6.89
16	A	4,4'-DDD	0.836	0.727	13.0	96	0.00	7.03- 7.09
17	B	Endosulfan II	0.889	0.782	12.0	96	-0.01	7.18- 7.24
18	MA	4,4'-DDT	0.538	0.501	6.9	90	0.00	7.55- 7.61
19	B	Endrin Aldehyde	0.640	0.617	3.6	102	-0.01	7.76- 7.82
20	B	Endosulfan Sulfate	0.722	0.638	11.6	95	-0.01	8.23- 8.29
21	A	Methoxychlor	0.304	0.263	13.5	94	0.00	8.81- 8.87
22		Mirex		----------NA----------				
23	B	Endrin Ketone	0.669	0.586	12.4	95	-0.01	9.19- 9.25
24	SA	Decachlorobiphenyl	0.528	0.490	7.2	103	0.00	10.84-10.90
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.44- 1.64
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	1.44- 1.64
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
1G122529.D 1PST3973.M Wed Apr 27 16:18:39 2016 RPT1

8.10.2

8

Initial Calibration Verification

Job Number: JC19023 **Sample:** G1G3973-ICV3973
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G122536.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122536.D\ECD1A.CH Vial: 14
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122536.D\ECD2B.CH
Acq On    : 4-27-16 02:55:30 PM                      Operator: dharas
Sample    : icv3973-25                               Inst    : GC1G
Misc      : op93327,g1g3973,16.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.14- 1.20
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	1.415	1.308	7.6	97	0.00	6.51- 6.57
23	B	Endrin Ketone		----------NA----------				
24	SA	Decachlorobiphenyl		----------NA----------				
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	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	0#	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 *****

Initial Calibration Verification

Job Number: JC19023 **Sample:** G1G3973-ICV3973
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G122536.D
Project: BMSMC, Building 5 Area, PR

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	108	0.00	1.51- 1.57
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	0.579	0.559	3.5	107	-0.01	9.12- 9.18
23	B	Endrin Ketone		----------NA----------				
24	SA	Decachlorobiphenyl		----------NA----------				
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	0#	0.00	1.44- 1.64
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	1.44- 1.64
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
1G122529.D 1PST3973.M Wed Apr 27 16:19:12 2016 RPT1

8.10.3

8

Initial Calibration Verification

Job Number: JC19023 **Sample:** G1G3973-ICV3973
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G122537.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122537.D\ECD1A.CH Vial: 15
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122537.D\ECD2B.CH
Acq On    : 4-27-16 03:12:59 PM                      Operator: dharas
Sample    : icv3973-500                              Inst    : GC1G
Misc      : op93327,g1g3973,16.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 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	1.14- 1.20
2	SAB	Tetrachloro-m-xylene	1.048	0.897	14.4	93	0.00	1.72- 1.78
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	SA	Decachlorobiphenyl	1.850	1.670	9.7	99	0.00	8.91- 8.97
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	98	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	96	0.00	1.07- 1.27
32		Chlordane {A}	0.071	0.058	18.3	79	0.00	2.88- 3.08
33		Chlordane {B}	0.055	0.049	10.9	87	0.00	3.35- 3.55
34		Chlordane {C}	0.170	0.167	1.8	95	0.00	4.05- 4.25
35		Chlordane {D}	0.276	0.276	0.0	97	0.00	4.21- 4.41
36		Chlordane {E}	0.039	0.043	-10.3	108	0.00	5.23- 5.43

***** Signal #2 *****

Initial Calibration Verification

Job Number: JC19023 **Sample:** G1G3973-ICV3973
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G122537.D
Project: BMSMC, Building 5 Area, PR

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	105	0.00	1.51- 1.57
2	SAB	Tetrachloro-m-xylene	0.904	0.754	16.6	93	0.00	2.35- 2.41
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	SA	Decachlorobiphenyl	0.528	0.485	8.1	104	0.00	10.84-10.90
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	94	0.00	1.44- 1.64
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	96	0.00	1.44- 1.64
32		Chlordane {A}	0.054	0.050	7.4	90	0.00	3.94- 4.14
33		Chlordane {B}	0.031	0.034	-9.7	105	0.00	4.59- 4.79
34		Chlordane {C}	0.105	0.107	-1.9	98	0.00	5.50- 5.70
35		Chlordane {D}	0.177	0.180	-1.7	98	0.00	5.72- 5.92
36		Chlordane {E}	0.029	0.031	-6.9	102	0.00	7.19- 7.39

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1G122530.D 1PST3973.M Wed Apr 27 16:20:30 2016 RPT1

8.10.4

8

Initial Calibration Verification

Job Number: JC19023 **Sample:** G1G3973-ICV3973
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G122538.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122538.D\ECD1A.CH Vial: 16
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122538.D\ECD2B.CH
Acq On    : 4-27-16 03:30:28 PM                      Operator: dharas
Sample    : icv3973-500                              Inst    : GC1G
Misc      : op93327,g1g3973,16.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 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	107	0.00	1.14- 1.20
2	SAB	Tetrachloro-m-xylene	1.048	0.851	18.8	90	0.00	1.72- 1.78
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	SA	Decachlorobiphenyl	1.850	1.580	14.6	95	0.00	8.91- 8.97
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	99	0.00	1.07- 1.27
26	L8	Toxaphene{A}	0.022	0.021	4.5	93	0.00	4.71- 4.91
27	L8	Toxaphene{B}	0.052	0.052	0.0	99	0.00	5.32- 5.52
28	L8	Toxaphene{C}	0.040	0.039	2.5	97	0.00	5.50- 5.70
29	L8	Toxaphene{D}	0.038	0.038	0.0	99	0.00	5.83- 6.03
30	L8	Toxaphene{E}	0.037	0.037	0.0	99	0.00	6.46- 6.66
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	98	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 *****

Initial Calibration Verification

Job Number: JC19023 **Sample:** G1G3973-ICV3973
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G122538.D
Project: BMSMC, Building 5 Area, PR

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.51- 1.57
2	SAB	Tetrachloro-m-xylene	0.904	0.739	18.3	92	0.00	2.35- 2.41
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	SA	Decachlorobiphenyl	0.528	0.457	13.4	99	0.00	10.84-10.90
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	95	0.00	1.44- 1.64
26	L8	Toxaphene{A}	0.020	0.023	-15.0	109	0.00	6.22- 6.42
27	L8	Toxaphene{B}	0.025	0.028	-12.0	107	-0.01	7.08- 7.28
28	L8	Toxaphene{C}	0.037	0.037	0.0	94	0.00	7.25- 7.45
29	L8	Toxaphene{D}	0.022	0.026	-18.2	110	-0.01	7.69- 7.89
30	L8	Toxaphene{E}	0.016	0.019	-18.7	108	-0.01	8.59- 8.79
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	98	0.00	1.44- 1.64
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
1G122530.D 1PST3973.M Wed Apr 27 16:20:31 2016 RPT1

8.10.5

8

Continuing Calibration Summary

Job Number: JC19023 **Sample:** G1G3976-CC3973
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G122600.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\MSDCHEM\1\DATA\1G3976\1G122600.D\ECD1A.CH Vial: 2
Acq On    : 4-29-16 08:23:07 AM                      Operator: brittanp
Sample    : cc3973-25                                Inst    : GC1G
Misc      : op90282,g1g3976,15.0,,,10,1             Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\MSDCHEM\1\DATA\1G3976\1G122600.D\ECD2B.CH Vial: 2
Acq On    : 4-29-16 08:23:06 AM                      Operator: brittanp
Sample    : cc3973-25                                Inst    : GC1G
Misc      : op90282,g1g39765,15.0,,,10,1             Multiplr: 1.00
IntFile   : autoint2.e

Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	103	0.00	1.13- 1.19
2	SAB	Tetrachloro-m-xylene	1.048	0.995	5.1	100	0.00	1.72- 1.78
3	A	alpha-BHC	1.286	1.258	2.2	102	0.00	2.18- 2.24
4	MA	gamma-BHC	1.246	1.181	5.2	99	0.00	2.47- 2.53
5	MA	Heptachlor	1.363	1.339	1.8	102	0.00	2.95- 3.01
6	B	beta-BHC	0.613	0.581	5.2	100	0.00	2.55- 2.61
7	B	delta-BHC	1.056	1.058	-0.2	104	0.00	2.73- 2.79
8	MB	Aldrin	1.324	1.244	6.0	98	0.00	3.27- 3.33
9	B	Heptachlor Epoxide	1.328	1.235	7.0	94	-0.01	3.96- 4.02
10	B	gamma-Chlordane	1.346	1.233	8.4	97	-0.01	4.12- 4.18
11	B	alpha-Chlordane	1.352	1.294	4.3	101	-0.01	4.28- 4.34
12	A	Endosulfan I	1.444	1.282	11.2	92	-0.01	4.45- 4.51
13	B	4,4'-DDE	1.092	1.155	-5.8	115	0.00	4.40- 4.46
14	MA	Dieldrin	1.311	1.245	5.0	99	-0.01	4.77- 4.83
15	MA	Endrin	1.204	1.178	2.2	100	-0.01	5.08- 5.14
16	A	4,4'-DDD	0.920	0.917	0.3	98	0.00	5.22- 5.29
17	B	Endosulfan II	1.212	1.194	1.5	98	-0.01	5.40- 5.46
18	MA	4,4'-DDT	0.861	0.940	-9.2	107	0.00	5.62- 5.68
19	B	Endrin Aldehyde	1.011	1.014	-0.3	103	-0.01	6.02- 6.08
20	B	Endosulfan Sulfate	1.126	1.201	-6.7	109	-0.01	6.70- 6.76
21	A	Methoxychlor	0.583	0.643	-10.3	112	0.00	6.41- 6.47
22		Mirex	1.415	1.285	9.2	94	-0.01	6.50- 6.56
23	B	Endrin Ketone	1.117	1.312	-17.5	120	-0.01	7.13- 7.19
24	SA	Decachlorobiphenyl	1.850	1.769	4.4	99	0.00	8.91- 8.97

***** Signal #2 *****

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	100	0.00	1.50- 1.56
2	SAB	Tetrachloro-m-xylene	0.904	0.836	7.5	94	0.00	2.34- 2.40
3	A	alpha-BHC	1.370	1.280	6.6	94	0.00	3.01- 3.07
4	MA	gamma-BHC	1.218	1.096	10.0	91	-0.01	3.44- 3.50
5	MA	Heptachlor	1.072	0.970	9.5	93	-0.01	4.01- 4.07
6	B	beta-BHC	0.516	0.451	12.6	87	0.00	3.53- 3.59
7	B	delta-BHC	1.136	1.053	7.3	93	0.00	3.92- 3.98

Continuing Calibration Summary

Job Number: JC19023 **Sample:** G1G3976-CC3973
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G122600.D
Project: BMSMC, Building 5 Area, PR

8	MB	Aldrin	1.138	0.953	16.3	87	-0.01	4.46-	4.52
9	B	Heptachlor Epoxide	1.004	0.864	13.9	87	-0.01	5.28-	5.34
10	B	gamma-Chlordane	0.990	0.852	13.9	87	-0.01	5.57-	5.63
11	B	alpha-Chlordane	0.966	0.815	15.6	87	-0.02	5.79-	5.85
12	A	Endosulfan I	0.957	0.815	14.8	88	-0.01	5.89-	5.95
13	B	4,4'-DDE	0.957	0.829	13.4	86	-0.01	6.06-	6.12
14	MA	Dieldrin	1.014	0.889	12.3	88	-0.02	6.32-	6.38
15	MA	Endrin	0.897	0.809	9.8	91	-0.02	6.83-	6.89
16	A	4,4'-DDD	0.836	0.729	12.8	88	0.00	7.02-	7.08
17	B	Endosulfan II	0.889	0.778	12.5	87	-0.01	7.18-	7.24
18	MA	4,4'-DDT	0.538	0.582	-8.2	96	-0.01	7.55-	7.61
19	B	Endrin Aldehyde	0.640	0.597	6.7	90	-0.02	7.75-	7.81
20	B	Endosulfan Sulfate	0.722	0.696	3.6	95	-0.02	8.22-	8.28
21	A	Methoxychlor	0.304	0.306	-0.7	100	-0.02	8.80-	8.86
22		Mirex	0.579	0.513	11.4	91	-0.02	9.11-	9.17
23	B	Endrin Ketone	0.669	0.735	-9.9	109	-0.02	9.18-	9.24
24	SA	Decachlorobiphenyl	0.528	0.474	10.2	91	0.00	10.83-	10.89

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1G122529.D 1PST3973.M Fri Apr 29 11:14:08 2016 RPT1

8.10.6

8

Continuing Calibration Summary

Job Number: JC19023 **Sample:** G1G3976-CC3973
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G122622.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122622.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122622.D\ECD2B.CH
Acq On    : 4-29-16 04:42:22 PM                      Operator: dharas
Sample    : cc3973-50                                Inst    : GC1G
Misc      : op93471,g1g3976,16.6,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e

Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 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	1.14- 1.20
2	SAB	Tetrachloro-m-xylene	1.048	0.965	7.9	96	0.00	1.72- 1.78
3	A	alpha-BHC	1.286	1.310	-1.9	97	0.00	2.19- 2.25
4	MA	gamma-BHC	1.246	1.241	0.4	96	0.00	2.48- 2.54
5	MA	Heptachlor	1.363	1.342	1.5	97	0.00	2.95- 3.01
6	B	beta-BHC	0.613	0.562	8.3	94	0.00	2.56- 2.62
7	B	delta-BHC	1.056	1.072	-1.5	94	0.00	2.74- 2.80
8	MB	Aldrin	1.324	1.287	2.8	95	0.00	3.27- 3.33
9	B	Heptachlor Epoxide	1.328	1.252	5.7	93	0.00	3.96- 4.02
10	B	gamma-Chlordane	1.346	1.303	3.2	97	0.00	4.12- 4.18
11	B	alpha-Chlordane	1.352	1.392	-3.0	104	-0.01	4.28- 4.34
12	A	Endosulfan I	1.444	1.410	2.4	98	-0.01	4.46- 4.52
13	B	4,4'-DDE	1.092	1.136	-4.0	105	0.00	4.41- 4.47
14	MA	Dieldrin	1.311	1.274	2.8	96	-0.01	4.77- 4.83
15	MA	Endrin	1.204	1.189	1.2	96	-0.01	5.08- 5.14
16	A	4,4'-DDD	0.920	0.873	5.1	98	0.00	5.23- 5.30
17	B	Endosulfan II	1.212	1.167	3.7	96	0.00	5.41- 5.47
18	MA	4,4'-DDT	0.861	0.846	1.7	89	0.00	5.63- 5.69
19	B	Endrin Aldehyde	1.011	0.980	3.1	96	0.00	6.03- 6.09
20	B	Endosulfan Sulfate	1.126	1.116	0.9	98	0.00	6.71- 6.77
21	A	Methoxychlor	0.583	0.518	11.1	88	0.01	6.42- 6.48
22		Mirex	1.415	1.184	16.3	89	-0.01	6.50- 6.56
23	B	Endrin Ketone	1.117	1.304	-16.7	112	0.00	7.13- 7.19
24	SA	Decachlorobiphenyl	1.850	1.660	10.3	95	0.00	8.91- 8.97
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	94	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	93	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 *****

Continuing Calibration Summary

Job Number: JC19023 **Sample:** G1G3976-CC3973
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 1G122622.D
Project: BMSMC, Building 5 Area, PR

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	98	0.00	1.51- 1.57
2	SAB	Tetrachloro-m-xylene	0.904	0.794	12.2	91	0.00	2.35- 2.41
3	A	alpha-BHC	1.370	1.210	11.7	91	0.00	3.01- 3.07
4	MA	gamma-BHC	1.218	1.062	12.8	89	0.00	3.44- 3.50
5	MA	Heptachlor	1.072	0.941	12.2	91	-0.01	4.01- 4.07
6	B	beta-BHC	0.516	0.444	14.0	87	0.00	3.53- 3.59
7	B	delta-BHC	1.136	1.015	10.7	89	0.00	3.92- 3.98
8	MB	Aldrin	1.138	0.945	17.0	90	-0.01	4.46- 4.52
9	B	Heptachlor Epoxide	1.004	0.840	16.3	89	-0.01	5.28- 5.34
10	B	gamma-Chlordane	0.990	0.824	16.8	88	-0.01	5.57- 5.63
11	B	alpha-Chlordane	0.966	0.791	18.1	89	-0.01	5.79- 5.85
12	A	Endosulfan I	0.957	0.788	17.7	89	-0.01	5.89- 5.95
13	B	4,4'-DDE	0.957	0.834	12.9	90	0.00	6.07- 6.13
14	MA	Dieldrin	1.014	0.866	14.6	90	-0.01	6.32- 6.38
15	MA	Endrin	0.897	0.784	12.6	91	-0.02	6.83- 6.89
16	A	4,4'-DDD	0.836	0.728	12.9	91	0.00	7.02- 7.08
17	B	Endosulfan II	0.889	0.768	13.6	90	-0.01	7.18- 7.24
18	MA	4,4'-DDT	0.538	0.499	7.2	80	-0.01	7.55- 7.61
19	B	Endrin Aldehyde	0.640	0.580	9.4	91	-0.01	7.75- 7.81
20	B	Endosulfan Sulfate	0.722	0.636	11.9	89	-0.01	8.23- 8.29
21	A	Methoxychlor	0.304	0.245	19.4	78	-0.01	8.80- 8.86
22		Mirex	0.579	0.500	13.6	91	-0.02	9.11- 9.17
23	B	Endrin Ketone	0.669	0.684	-2.2	101	-0.02	9.19- 9.25
24	SA	Decachlorobiphenyl	0.528	0.460	12.9	92	0.00	10.83-10.89
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	87	0.00	1.44- 1.64
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	90	0.00	1.44- 1.64
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
1G122530.D 1PST3973.M Mon May 02 11:35:18 2016 RPT1

8.10.7

8

Initial Calibration Summary

Job Number: JC19023 **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: JC19023 **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: JC19023 **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 *****

8.10.9

8

Initial Calibration Verification

Job Number: JC19023 **Sample:** G6G987-ICV987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34140.D
Project: BMSMC, Building 5 Area, PR

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	100	0.00	1.55- 1.61
2	SAB	Tetrachloro-m-xylene	0.903	0.865	4.2	99	0.00	2.45- 2.51
3	A	alpha-BHC	1.177	1.083	8.0	95	0.00	3.15- 3.21
4	MA	gamma-BHC	1.102	1.014	8.0	95	0.00	3.61- 3.67
5	MA	Heptachlor	1.114	1.023	8.2	98	0.00	4.21- 4.27
6	B	beta-BHC	0.537	0.489	8.9	96	0.00	3.70- 3.76
7	B	delta-BHC	1.027	0.987	3.9	100	0.00	4.12- 4.18
8	MB	Aldrin	1.036	0.940	9.3	96	0.00	4.69- 4.75
9	B	Heptachlor Epoxide	0.965	0.896	7.2	96	-0.01	5.57- 5.63
10	B	gamma-Chlordane	0.944	0.878	7.0	98	-0.01	5.88- 5.94
11	B	alpha-Chlordane	0.937	0.862	8.0	96	-0.01	6.12- 6.18
12	A	Endosulfan I	0.911	0.822	9.8	96	-0.01	6.22- 6.28
13	B	4,4'-DDE	0.808	0.777	3.8	109	-0.01	6.42- 6.48
14	MA	Dieldrin	0.930	0.848	8.8	97	-0.01	6.69- 6.75
15	MA	Endrin	0.845	0.771	8.8	98	-0.01	7.23- 7.29
16	A	4,4'-DDD	0.698	0.676	3.2	99	-0.01	7.46- 7.52
17	B	Endosulfan II	0.827	0.783	5.3	102	-0.01	7.62- 7.68
18	MA	4,4'-DDT	0.633	0.574	9.3	96	-0.01	8.04- 8.10
19	B	Endrin Aldehyde	0.670	0.646	3.6	101	-0.01	8.25- 8.31
20	B	Endosulfan Sulfate	0.727	0.678	6.7	100	-0.01	8.76- 8.82
21	A	Methoxychlor	0.349	0.337	3.4	99	-0.02	9.41- 9.47
22		Mirex		----------NA----------				
23	B	Endrin Ketone	0.850	0.785	7.6	99	-0.02	9.81- 9.87
24	SAB	Decachlorobiphenyl	0.679	0.707	-4.1	104	-0.01	11.73-11.79
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	93	0.00	1.55- 1.61
26	L8	Toxaphene{A}		----------NA----------				
27	L8	Toxaphene{B}		----------NA----------				
28	L8	Toxaphene{C}		----------NA----------				
29	L8	Toxaphene{D}		----------NA----------				
30	L8	Toxaphene{E}		----------NA----------				
31	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	93	0.00	1.48- 1.68
32		Chlordane {A}		----------NA----------				
33		Chlordane {B}		----------NA----------				
34		Chlordane {C}		----------NA----------				
35		Chlordane {D}		----------NA----------				
36		Chlordane {E}		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
6g34134.D 6PST987.M Mon Apr 18 12:19:50 2016

8.10.9

8

Initial Calibration Verification

Job Number: JC19023 **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: JC19023 **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

8.10.10

8

Initial Calibration Verification

Job Number: JC19023 **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: JC19023 **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: JC19023 **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: JC19023 **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: JC19023 **Sample:** G6G997-CC987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34445.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\997\6g34445.D\ECD1A.CH     Vial: 4
Signal #2 : C:\msdchem\1\DATA\997\6g34445.D\ECD2B.CH
Acq On    : 27 Apr 2016   8:16 am                    Operator: brittanp
Sample    : cc987-50                                 Inst    : HP G1530A
Misc      : op93363,g6g997,1000,,,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  : Tue Apr 26 17:50:34 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	0.916	0.899	1.9	95	0.00	1.95- 2.01
3	A	alpha-BHC	1.181	1.303	-10.3	97	0.00	2.47- 2.53
4	MA	gamma-BHC	1.100	1.183	-7.5	97	0.00	2.78- 2.84
5	MA	Heptachlor	1.104	1.081	2.1	91	0.00	3.31- 3.37
6	B	beta-BHC	0.540	0.538	0.4	97	0.00	2.86- 2.92
7	B	delta-BHC	1.025	1.060	-3.4	90	0.00	3.05- 3.11
8	MB	Aldrin	1.020	1.023	-0.3	92	0.00	3.65- 3.72
9	B	Heptachlor Epoxide	0.955	0.954	0.1	94	0.00	4.41- 4.47
10	B	gamma-Chlordane	0.961	0.882	8.2	86	0.00	4.58- 4.64
11	B	alpha-Chlordane	0.954	0.895	6.2	89	0.00	4.76- 4.82
12	A	Endosulfan I	0.941	0.915	2.8	92	0.00	4.94- 5.00
13	B	4,4'-DDE	0.790	0.787	0.4	91	0.00	4.89- 4.95
14	MA	Dieldrin	0.931	0.942	-1.2	94	0.00	5.29- 5.35
15	MA	Endrin	0.844	0.882	-4.5	97	0.00	5.63- 5.69
16	A	4,4'-DDD	0.668	0.674	-0.9	92	0.00	5.78- 5.84
17	B	Endosulfan II	0.833	0.843	-1.2	95	0.00	5.97- 6.03
18	MA	4,4'-DDT	0.727	0.767	-5.5	98	0.00	6.23- 6.29
19	B	Endrin Aldehyde	0.679	0.683	-0.6	97	0.00	6.64- 6.70
20	B	Endosulfan Sulfate	0.732	0.776	-6.0	102	0.00	7.38- 7.44
21	A	Methoxychlor	0.436	0.461	-5.7	101	0.00	7.10- 7.16
22		Mirex	0.746	0.726	2.7	97	0.00	7.23- 7.29
23	B	Endrin Ketone	0.870	0.931	-7.0	100	0.00	7.85- 7.91
24	SAB	Decachlorobiphenyl	0.797	0.777	2.5	98	0.00	9.88- 9.94
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	94	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	97	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 *****

Continuing Calibration Summary

Job Number: JC19023 **Sample:** G6G997-CC987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34445.D
Project: BMSMC, Building 5 Area, PR

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	102	0.00	1.55- 1.61
2	SAB	Tetrachloro-m-xylene	0.903	0.878	2.8	104	0.00	2.44- 2.50
3	A	alpha-BHC	1.177	1.204	-2.3	103	0.00	3.15- 3.21
4	MA	gamma-BHC	1.102	1.107	-0.5	103	0.00	3.60- 3.66
5	MA	Heptachlor	1.114	1.053	5.5	100	0.00	4.20- 4.26
6	B	beta-BHC	0.537	0.519	3.4	101	0.00	3.69- 3.75
7	B	delta-BHC	1.027	1.057	-2.9	105	0.00	4.11- 4.17
8	MB	Aldrin	1.036	0.968	6.6	100	0.00	4.68- 4.74
9	B	Heptachlor Epoxide	0.965	0.900	6.7	99	0.00	5.56- 5.62
10	B	gamma-Chlordane	0.944	0.874	7.4	99	0.00	5.87- 5.93
11	B	alpha-Chlordane	0.937	0.871	7.0	100	0.00	6.11- 6.17
12	A	Endosulfan I	0.911	0.846	7.1	101	0.00	6.21- 6.27
13	B	4,4'-DDE	0.808	0.789	2.4	99	0.00	6.41- 6.47
14	MA	Dieldrin	0.930	0.872	6.2	101	0.00	6.68- 6.74
15	MA	Endrin	0.845	0.815	3.6	105	0.00	7.22- 7.28
16	A	4,4'-DDD	0.698	0.703	-0.7	102	0.00	7.44- 7.50
17	B	Endosulfan II	0.827	0.820	0.8	105	0.00	7.61- 7.67
18	MA	4,4'-DDT	0.633	0.680	-7.4	111	0.00	8.02- 8.08
19	B	Endrin Aldehyde	0.670	0.658	1.8	105	0.00	8.23- 8.29
20	B	Endosulfan Sulfate	0.727	0.730	-0.4	110	0.00	8.75- 8.81
21	A	Methoxychlor	0.349	0.392	-12.3	114	0.00	9.40- 9.46
22		Mirex	0.716	0.677	5.4	108	0.00	9.71- 9.77
23	B	Endrin Ketone	0.850	0.849	0.1	108	0.00	9.80- 9.86
24	SAB	Decachlorobiphenyl	0.679	0.680	-0.1	104	0.00	11.73-11.79
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	100	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	103	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 Wed Apr 27 12:05:35 2016

8.10.13

8

Continuing Calibration Summary

Job Number: JC19023 **Sample:** G6G997-CC987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34464.D
Project: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\DATA\997\6g34464.D\ECD1A.CH     Vial: 2
Signal #2 : C:\msdchem\1\DATA\997\6g34464.D\ECD2B.CH
Acq On    : 27 Apr 2016   2:45 pm                    Operator: dharas
Sample    : cc987-25                                 Inst    : HP G1530A
Misc      : op93327,g6g997,16.0,,,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  : Tue Apr 26 17:50:34 2016
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 200%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	104	0.00	1.28- 1.34
2	SAB	Tetrachloro-m-xylene	0.916	0.876	4.4	103	0.00	1.95- 2.01
3	A	alpha-BHC	1.181	1.205	-2.0	107	0.00	2.46- 2.52
4	MA	gamma-BHC	1.100	1.106	-0.5	106	0.00	2.78- 2.84
5	MA	Heptachlor	1.104	1.090	1.3	105	0.00	3.31- 3.37
6	B	beta-BHC	0.540	0.510	5.6	100	0.00	2.86- 2.92
7	B	delta-BHC	1.025	1.063	-3.7	107	0.00	3.05- 3.11
8	MB	Aldrin	1.020	1.004	1.6	105	0.00	3.65- 3.72
9	B	Heptachlor Epoxide	0.955	0.935	2.1	104	0.00	4.40- 4.46
10	B	gamma-Chlordane	0.961	0.935	2.7	104	0.00	4.58- 4.64
11	B	alpha-Chlordane	0.954	0.936	1.9	104	0.00	4.76- 4.82
12	A	Endosulfan I	0.941	0.927	1.5	106	0.00	4.94- 5.00
13	B	4,4'-DDE	0.790	0.788	0.3	107	0.00	4.89- 4.95
14	MA	Dieldrin	0.931	0.925	0.6	106	0.00	5.29- 5.35
15	MA	Endrin	0.844	0.864	-2.4	109	0.00	5.63- 5.69
16	A	4,4'-DDD	0.668	0.663	0.7	109	0.00	5.78- 5.84
17	B	Endosulfan II	0.833	0.823	1.2	108	0.00	5.97- 6.03
18	MA	4,4'-DDT	0.727	0.746	-2.6	110	0.00	6.23- 6.29
19	B	Endrin Aldehyde	0.679	0.680	-0.1	108	0.00	6.64- 6.70
20	B	Endosulfan Sulfate	0.732	0.754	-3.0	112	0.00	7.38- 7.44
21	A	Methoxychlor	0.436	0.453	-3.9	109	0.00	7.09- 7.15
22		Mirex	0.746	0.714	4.3	102	0.00	7.23- 7.29
23	B	Endrin Ketone	0.870	0.957	-10.0	116	0.00	7.85- 7.91
24	SAB	Decachlorobiphenyl	0.797	0.766	3.9	103	0.00	9.88- 9.94
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	100	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	100	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 *****

Continuing Calibration Summary

Job Number: JC19023 **Sample:** G6G997-CC987
Account: AMANYWP Anderson, Mulholland & Associates **Lab FileID:** 6G34464.D
Project: BMSMC, Building 5 Area, PR

1	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	107	0.00	1.55- 1.61
2	SAB	Tetrachloro-m-xylene	0.903	0.861	4.7	106	0.00	2.44- 2.50
3	A	alpha-BHC	1.177	1.152	2.1	109	0.00	3.14- 3.20
4	MA	gamma-BHC	1.102	1.060	3.8	107	0.00	3.60- 3.66
5	MA	Heptachlor	1.114	1.030	7.5	106	0.00	4.20- 4.26
6	B	beta-BHC	0.537	0.475	11.5	100	0.00	3.69- 3.75
7	B	delta-BHC	1.027	1.009	1.8	109	0.00	4.11- 4.17
8	MB	Aldrin	1.036	0.956	7.7	104	0.00	4.68- 4.74
9	B	Heptachlor Epoxide	0.965	0.885	8.3	102	0.00	5.56- 5.62
10	B	gamma-Chlordane	0.944	0.869	7.9	104	0.00	5.86- 5.92
11	B	alpha-Chlordane	0.937	0.871	7.0	105	0.00	6.11- 6.17
12	A	Endosulfan I	0.911	0.844	7.4	105	0.00	6.21- 6.27
13	B	4,4'-DDE	0.808	0.795	1.6	120	0.00	6.41- 6.47
14	MA	Dieldrin	0.930	0.872	6.2	107	0.00	6.68- 6.74
15	MA	Endrin	0.845	0.804	4.9	109	0.00	7.22- 7.28
16	A	4,4'-DDD	0.698	0.696	0.3	109	0.00	7.44- 7.50
17	B	Endosulfan II	0.827	0.810	2.1	113	0.00	7.60- 7.66
18	MA	4,4'-DDT	0.633	0.650	-2.7	117	0.00	8.02- 8.08
19	B	Endrin Aldehyde	0.670	0.658	1.8	111	0.00	8.23- 8.29
20	B	Endosulfan Sulfate	0.727	0.728	-0.1	115	0.00	8.75- 8.81
21	A	Methoxychlor	0.349	0.361	-3.4	113	0.00	9.40- 9.46
22		Mirex	0.716	0.675	5.7	110	0.00	9.71- 9.77
23	B	Endrin Ketone	0.850	0.885	-4.1	120	0.00	9.79- 9.85
24	SAB	Decachlorobiphenyl	0.679	0.691	-1.8	109	0.00	11.72-11.78
25	I	1-bromo-2-nitrobenzene	1.000	1.000	0.0	100	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	100	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 Wed Apr 27 17:14:02 2016

8.10.14

8

GC Semi-volatiles

Raw Data

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 05/03/16 11:21

Quantitation Report (QT Reviewed)

```
Data File : C:\MSDCHEM\1\DATA\1G3976\1G122627.D\ECD1A.CH Vial: 8
Acq On    : 4-29-16 06:10:03 PM                          Operator: dharas
Sample    : jc19023-1                                    Inst    : GC1G
Misc      : op93471,g1g3976,15.4,,,10,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\MSDCHEM\1\DATA\1G3976\1G122627.D\ECD2B.CH Vial: 8
Acq On    : 4-29-16 06:10:04 PM                          Operator: dharas
Sample    : jc19023-1                                    Inst    : GC1G
Misc      : op93471,g1g3976,15.4,,,10,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May  2 11:24 2016  Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3973.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	71293737	941.0E6	50.000	50.000
25) I 1-bromo-2-nitrob	1.17	1.54	71293737	941.0E6	50.000	50.000
31) I 1-bromo-2-nitrob	1.17	1.54	71293737	941.0E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachloro-m-xy	1.75	2.38	35397440	441.9E6	23.695	25.964m
Spiked Amount 40.000	Range 30 - 150		Recovery =		59.24%	64.91%
24) SA Decachlorobiphen	8.93	10.86	62141965	275.7E6	23.559	27.774
Spiked Amount 40.000			Recovery =		58.90%	69.44%
Target Compounds						

(f)=RT Delta > 1/2 Window (m)=manual int.

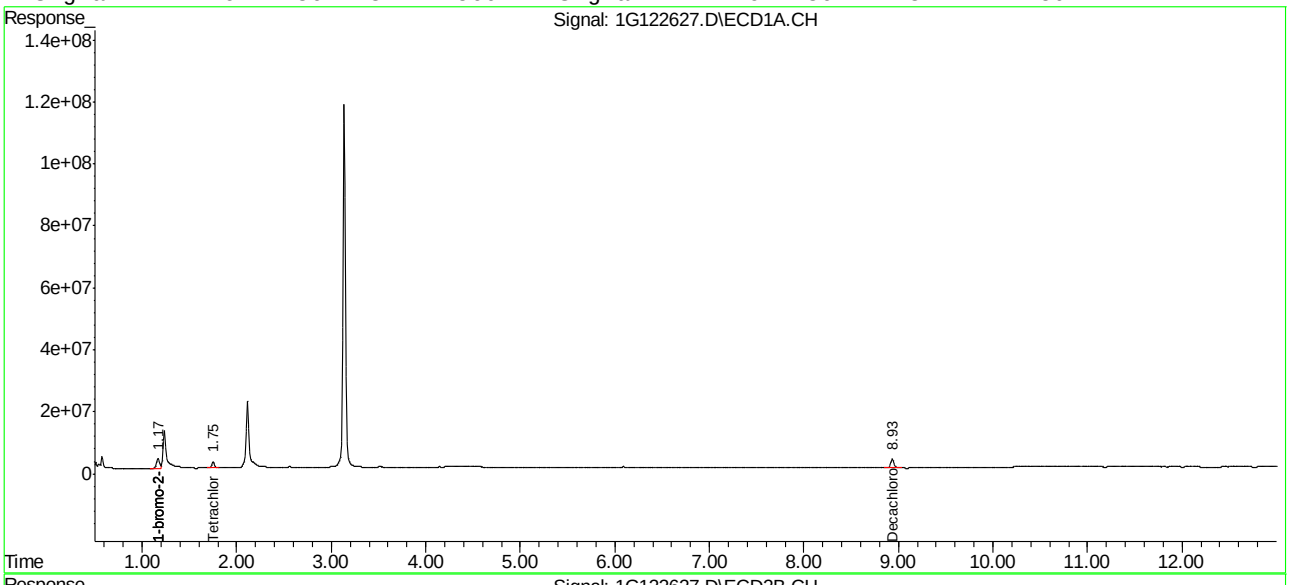
Quantitation Report (QT Reviewed)

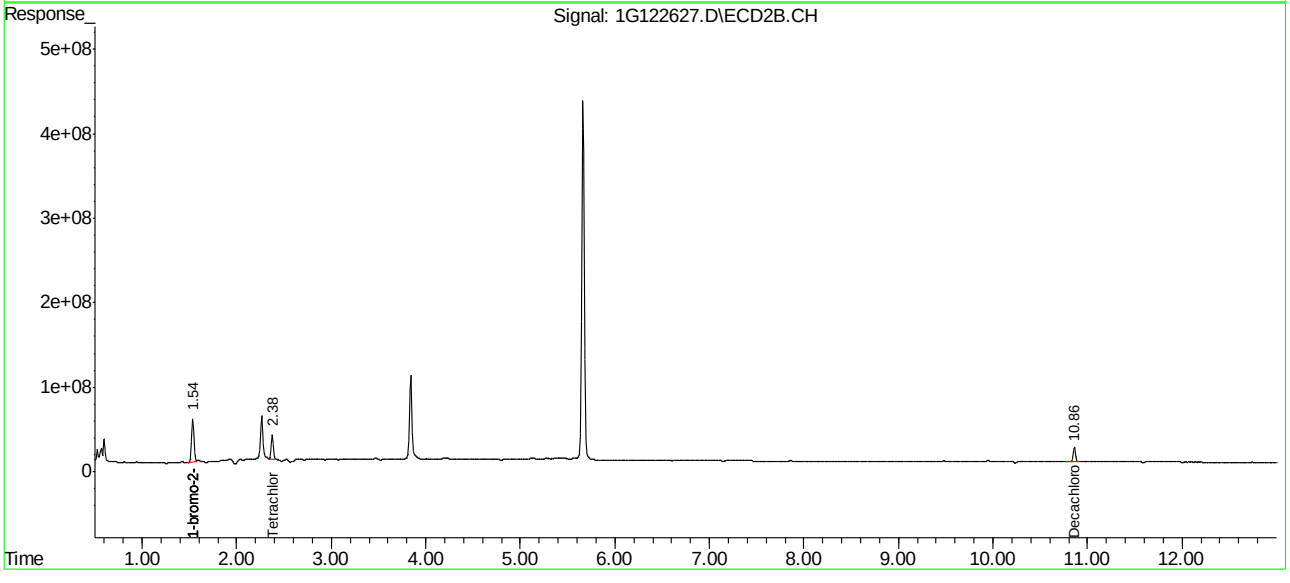
```
Data File : C:\MSDCHEM\1\DATA\1G3976\1G122627.D\ECD1A.CH Vial: 8
Acq On    : 4-29-16 06:10:03 PM                          Operator: dharas
Sample    : jc19023-1                                    Inst    : GC1G
Misc      : op93471,g1g3976,15.4,,,10,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\MSDCHEM\1\DATA\1G3976\1G122627.D\ECD2B.CH Vial: 8
Acq On    : 4-29-16 06:10:04 PM                          Operator: dharas
Sample    : jc19023-1                                    Inst    : GC1G
Misc      : op93471,g1g3976,15.4,,,10,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May  2 11:24 2016  Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3973.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:	JC19023-1	**Method:**	SW846 8081B
Lab FileID:	1G122627.D	**Analyst approved:**	05/03/16 11:14 Gwendolyn Burns
Injection Time:	04/29/16 18:10	**Supervisor approved:**	05/03/16 11:21 Gwendolyn Burns

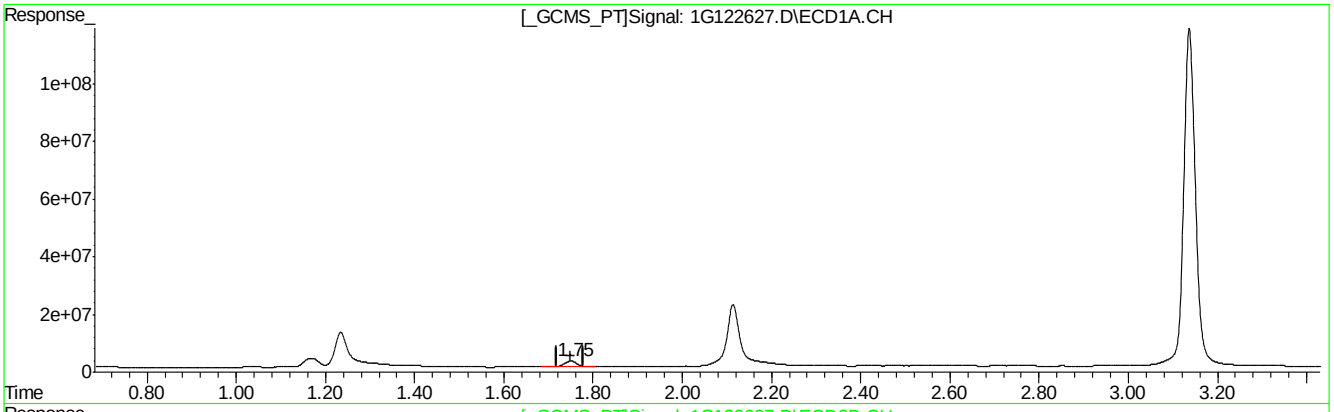
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	2	2.38	Poorly defined baseline

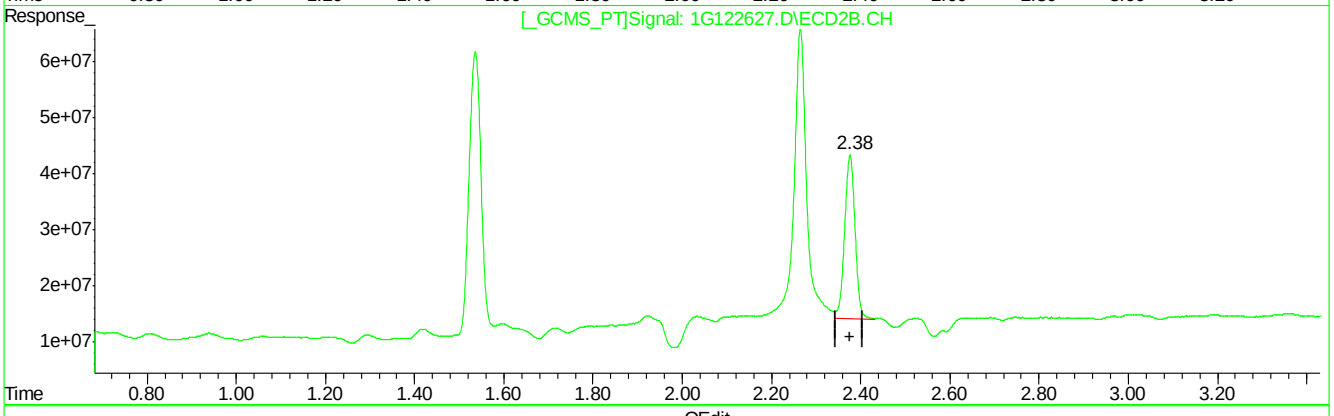
Quantitation Report (Qedit)

```
Data File : C:\MSDCHEM\1\DATA\1G3976\1G122627.D\ECD1A.CH Vial: 8
Acq On    : 4-29-16 06:10:03 PM                          Operator: dharas
Sample    : jc19023-1                                    Inst    : GC1G
Misc      : op93471,g1g3976,15.4,,,10,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\MSDCHEM\1\DATA\1G3976\1G122627.D\ECD2B.CH Vial: 8
Acq On    : 4-29-16 06:10:04 PM                          Operator: dharas
Sample    : jc19023-1                                    Inst    : GC1G
Misc      : op93471,g1g3976,15.4,,,10,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May  2 11:23 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(2) Tetrachloro-m-xylene (SAB)

1.75min 23.695PPB

response 35397440

(2) Tetrachloro-m-xylene #2 (SAB)

2.38min 27.641PPB

response 470423078

(+) = Expected Retention Time

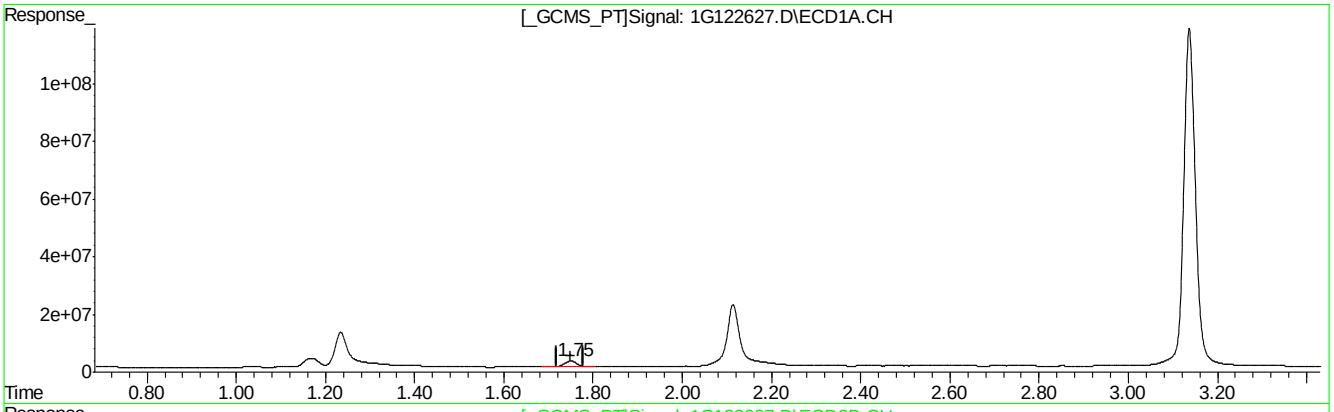
1G122627.D 1PST3973.M Mon May 02 11:24:36 2016 RPT1

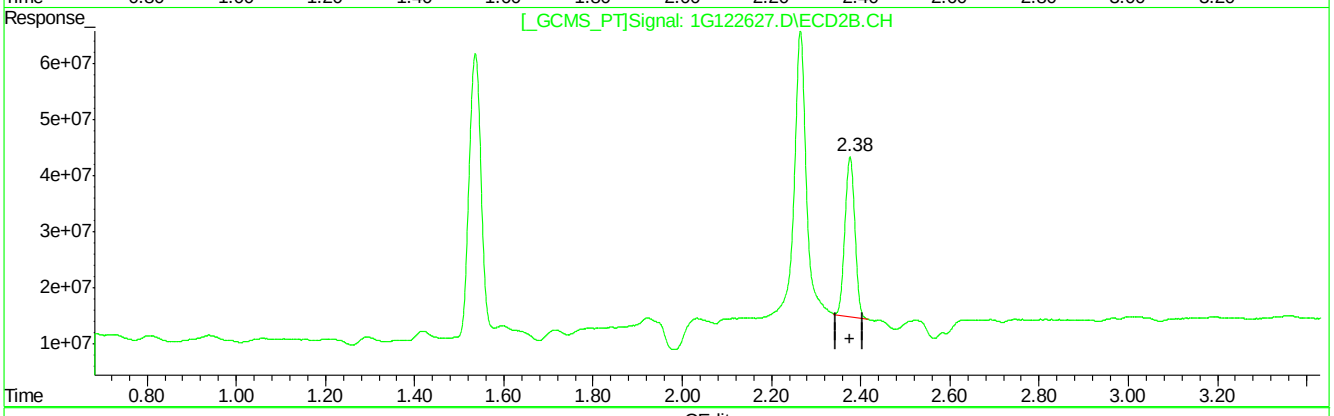
Quantitation Report (Qedit)

```
Data File : C:\MSDCHEM\1\DATA\1G3976\1G122627.D\ECD1A.CH Vial: 8
Acq On    : 4-29-16 06:10:03 PM                          Operator: dharas
Sample    : jc19023-1                                    Inst    : GC1G
Misc      : op93471,g1g3976,15.4,,,10,1                  Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\MSDCHEM\1\DATA\1G3976\1G122627.D\ECD2B.CH Vial: 8
Acq On    : 4-29-16 06:10:04 PM                          Operator: dharas
Sample    : jc19023-1                                    Inst    : GC1G
Misc      : op93471,g1g3976,15.4,,,10,1                  Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: May  2 11:23 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(2) Tetrachloro-m-xylene (SAB)

1.75min 23.695PPB

response 35397440

(2) Tetrachloro-m-xylene #2 (SAB)

2.38min 25.964PPB m

response 441888645

(+) = Expected Retention Time

1G122627.D 1PST3973.M Mon May 02 11:24:52 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 05/03/16 11:21

Quantitation Report (QT Reviewed)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122628.D\ECD1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122628.D\ECD2B.CH
Acq On    : 4-29-16 06:27:34 PM                      Operator: dharas
Sample    : jc19023-2                                Inst    : GC1G
Misc      : op93471,g1g3976,16.3,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May  2 11:26 2016  Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3973.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	64950451	917.7E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.17	1.54	64950451	917.7E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.17	1.54	64950451	917.7E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	43442744	555.7E6	31.921m	33.481m
Spiked Amount	40.000	Range	30 - 150	Recovery	=	79.80%	83.70%
24) SA	Decachlorobiphen	8.94	10.86	73455034	319.4E6	30.567	32.986
Spiked Amount	40.000			Recovery	=	76.42%	82.46%
	Target Compounds						

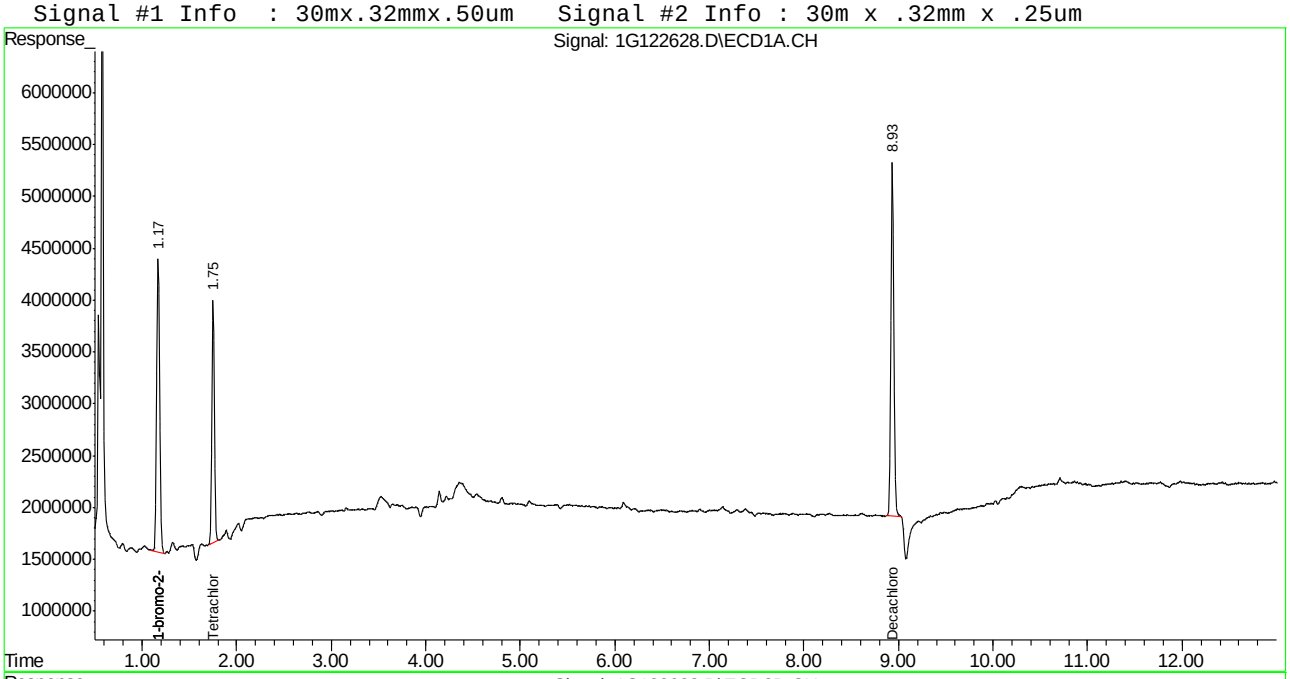
(f)=RT Delta > 1/2 Window (m)=manual int.

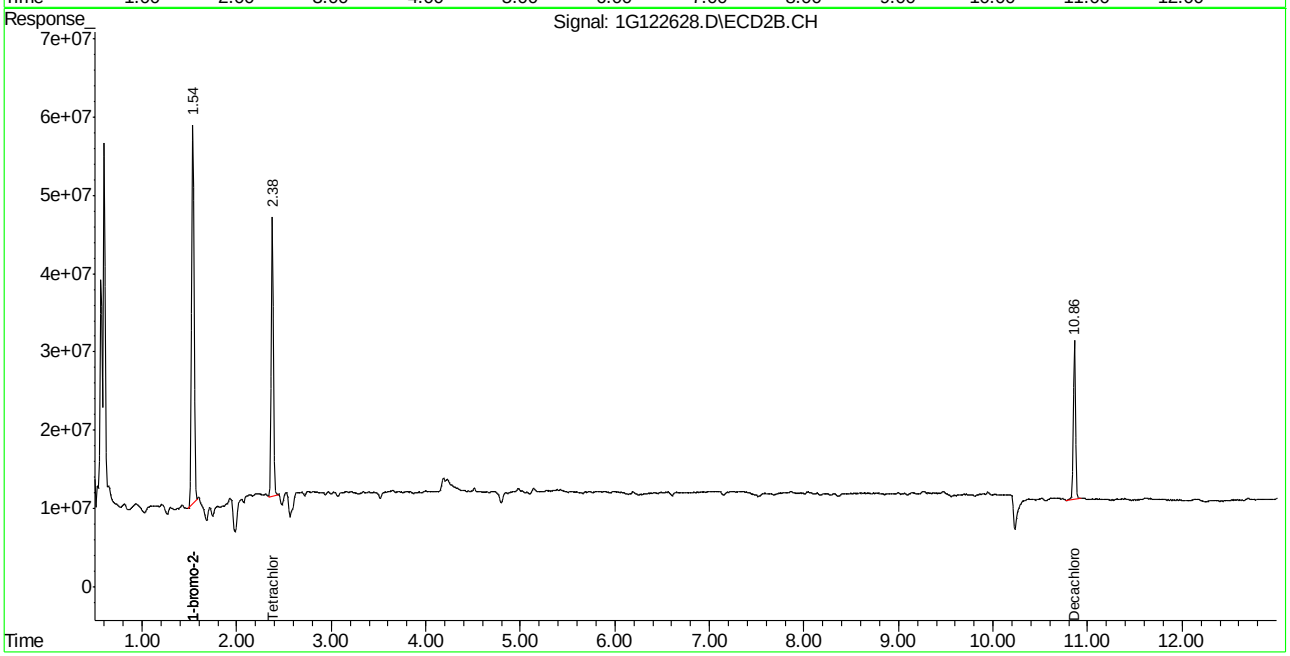
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122628.D\ECD1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122628.D\ECD2B.CH
Acq On : 4-29-16 06:27:34 PM Operator: dharas
Sample : jc19023-2 Inst : GC1G
Misc : op93471,g1g3976,16.3,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 2 11:26 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3973.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

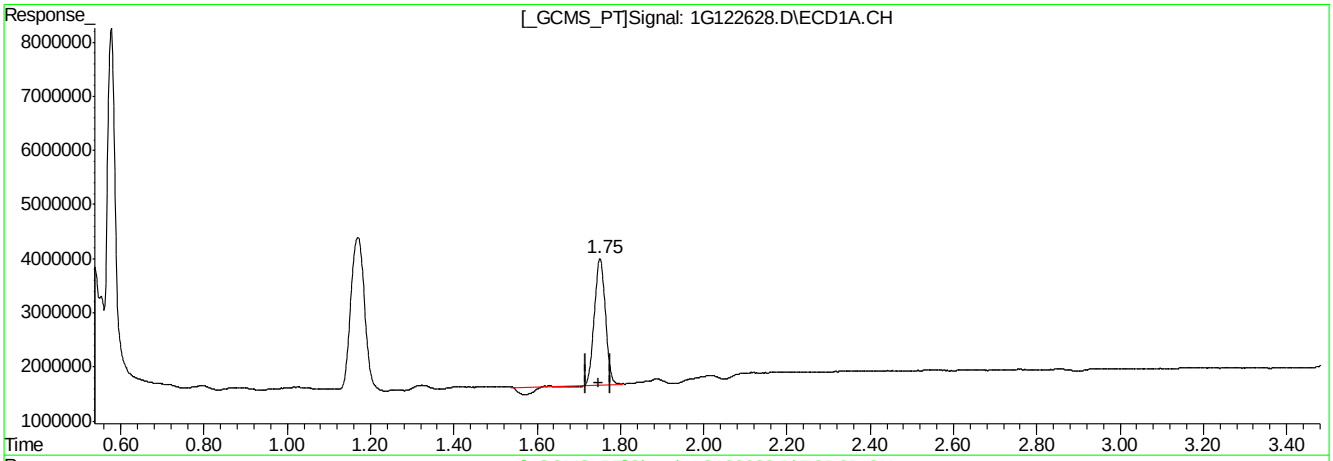
Sample Number:	JC19023-2	**Method:**	SW846 8081B
Lab FileID:	1G122628.D	**Analyst approved:**	05/03/16 11:14 Gwendolyn Burns
Injection Time:	04/29/16 18:27	**Supervisor approved:**	05/03/16 11:21 Gwendolyn Burns

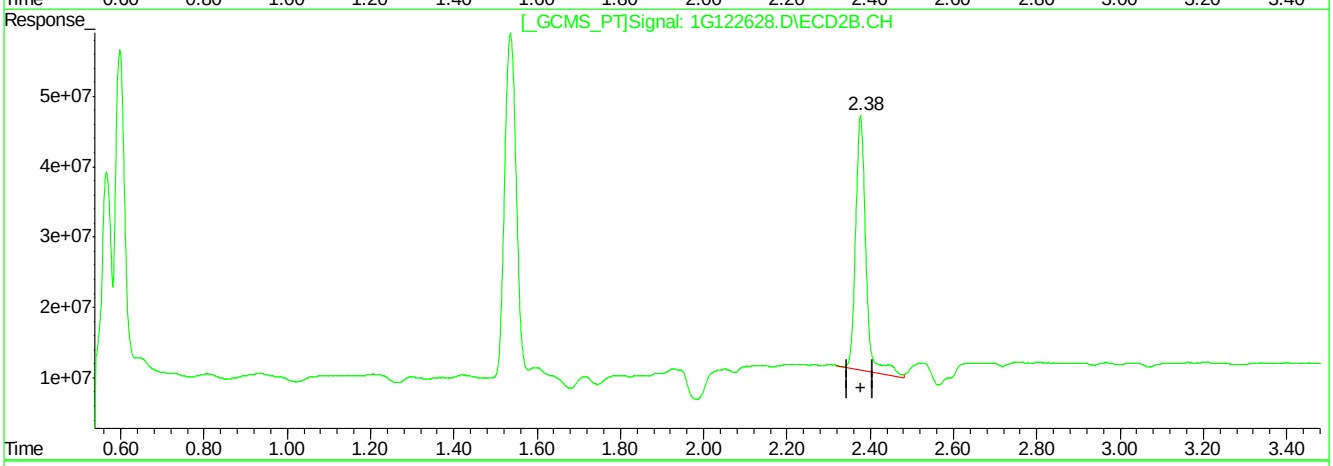
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	1.75	Poorly defined baseline
Tetrachloro-m-xylene	877-09-8	2	2.38	Poorly defined baseline

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122628.D\ECD1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122628.D\ECD2B.CH
Acq On    : 4-29-16 06:27:34 PM                      Operator: dharas
Sample    : jc19023-2                                Inst    : GC1G
Misc      : op93471,g1g3976,16.3,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May  2 11:25 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(2) Tetrachloro-m-xylene (SAB)

1.75min 28.778PPB

response 39165277

(2) Tetrachloro-m-xylene #2 (SAB)

2.38min 37.733PPB

response 626333001

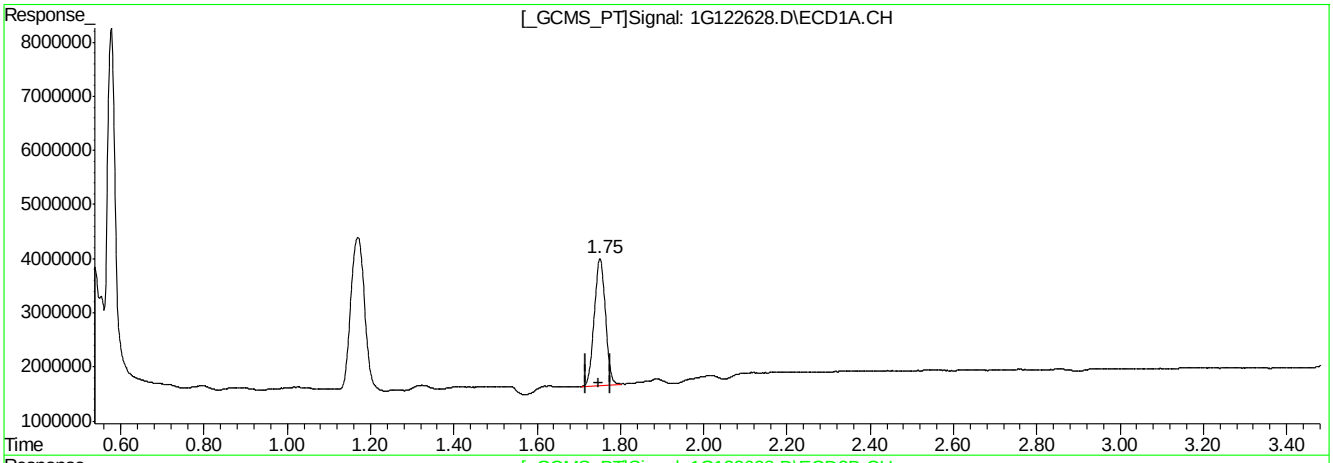
(+) = Expected Retention Time

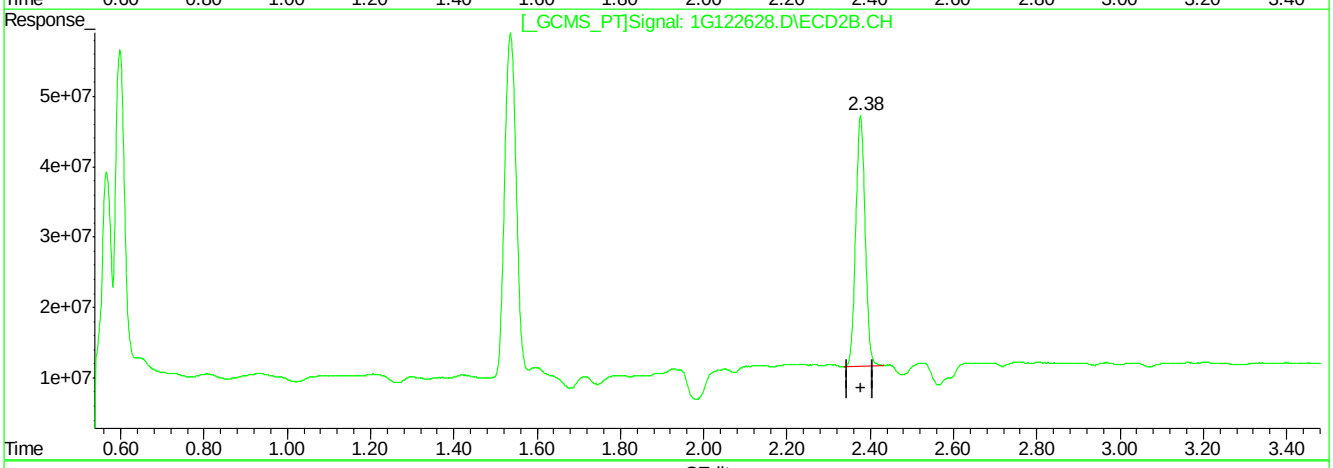
1G122628.D 1PST3973.M Mon May 02 11:25:28 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122628.D\ECD1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122628.D\ECD2B.CH
Acq On    : 4-29-16 06:27:34 PM                      Operator: dharas
Sample    : jc19023-2                                Inst    : GC1G
Misc      : op93471,g1g3976,16.3,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May  2 11:25 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(2) Tetrachloro-m-xylene (SAB)

1.75min 31.921PPB m

response 43442744

(2) Tetrachloro-m-xylene #2 (SAB)

2.38min 33.481PPB m

response 555747876

(+) = Expected Retention Time

1G122628.D 1PST3973.M Mon May 02 11:25:44 2016 RPT1

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\997\
Data File : 6g34452.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Apr 2016 10:18 am
Operator : brittanp
Sample : jc19023-3
Misc : op93399,g6g997,300,,,2,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 27 11:31:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Tue Apr 26 17:50:34 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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...	1.306	1.577	143.1E6	47885582	50.000	50.000
25) I	1-bromo-2...	1.306	1.577	143.1E6	47885582	50.000	50.000
31) I	1-bromo-2...	1.306	1.577	143.1E6	47885582	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.982	2.471	101.0E6	33725150	38.507	38.982
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 96.27%	97.45%
24)	SAB Decachlor...	9.914	11.755	55803911	17324379	24.469	26.633
	Spiked Amount	40.000			Recovery	= 61.17%	66.58%

Target Compounds

SemiQuant Compounds - Not Calibrated on this Instrument

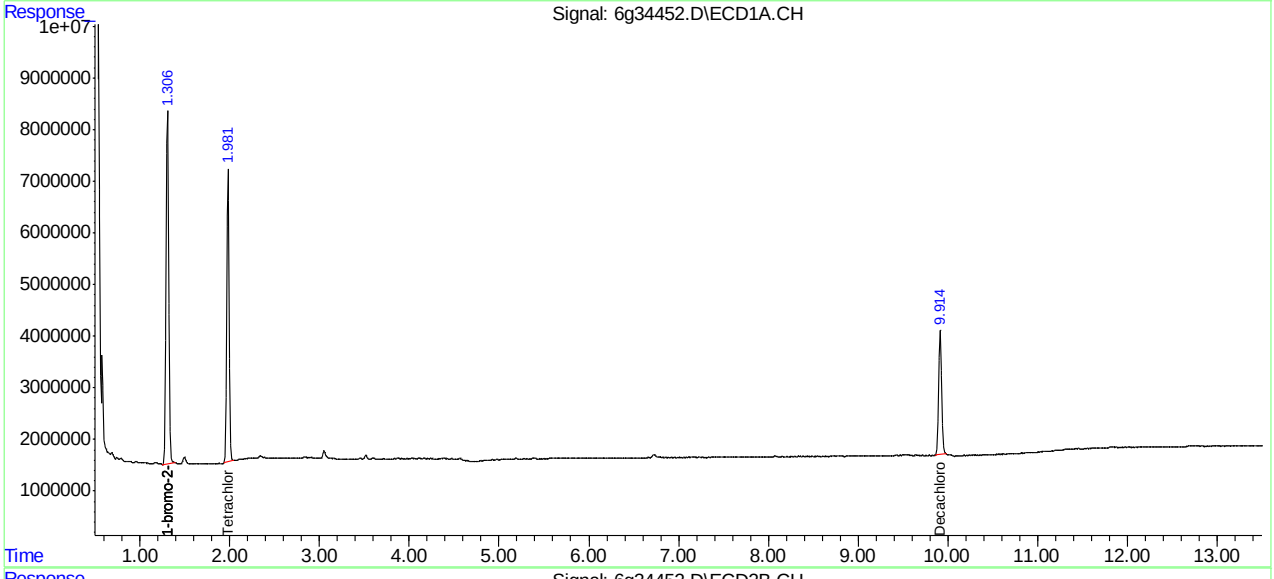
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

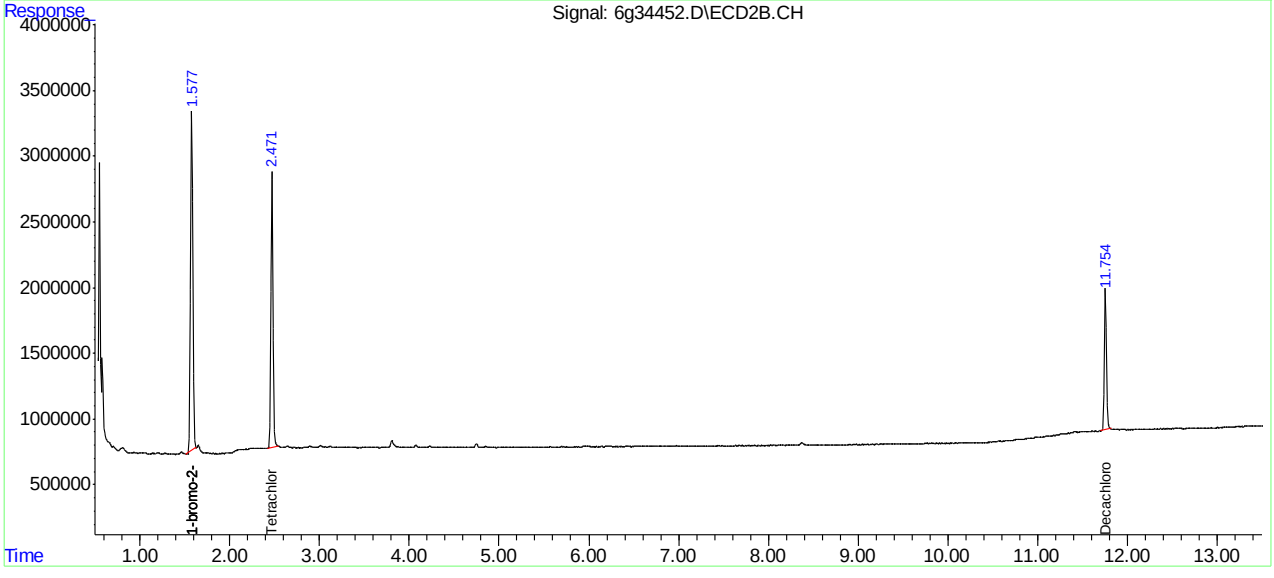
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\997\
Data File : 6g34452.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Apr 2016 10:18 am
Operator : brittanp
Sample : jc19023-3
Misc : op93399,g6g997,300,,,2,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 27 11:31:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Tue Apr 26 17:50:34 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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 05/03/16 11:21

Quantitation Report (QT Reviewed)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122629.D\ECD1A.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122629.D\ECD2B.CH
Acq On    : 4-29-16 06:45:10 PM                      Operator: dharas
Sample    : jc19023-4                                Inst    : GC1G
Misc      : op93471,g1g3976,15.7,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May  2 11:27 2016  Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3973.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	63267376	974.2E6	50.000	50.000
25) I 1-bromo-2-nitrob	1.17	1.54	63267376	974.2E6	50.000	50.000
31) I 1-bromo-2-nitrob	1.17	1.54	63267376	974.2E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachloro-m-xy	1.75	2.38	32259147	408.6E6	24.334m	23.188m
Spiked Amount 40.000	Range 30 - 150		Recovery =		60.83%	57.97%
24) SA Decachlorobiphen	8.94	10.86	53883987	234.3E6	23.019	22.792
Spiked Amount 40.000			Recovery =		57.55%	56.98%
Target Compounds						

(f)=RT Delta > 1/2 Window (m)=manual int.

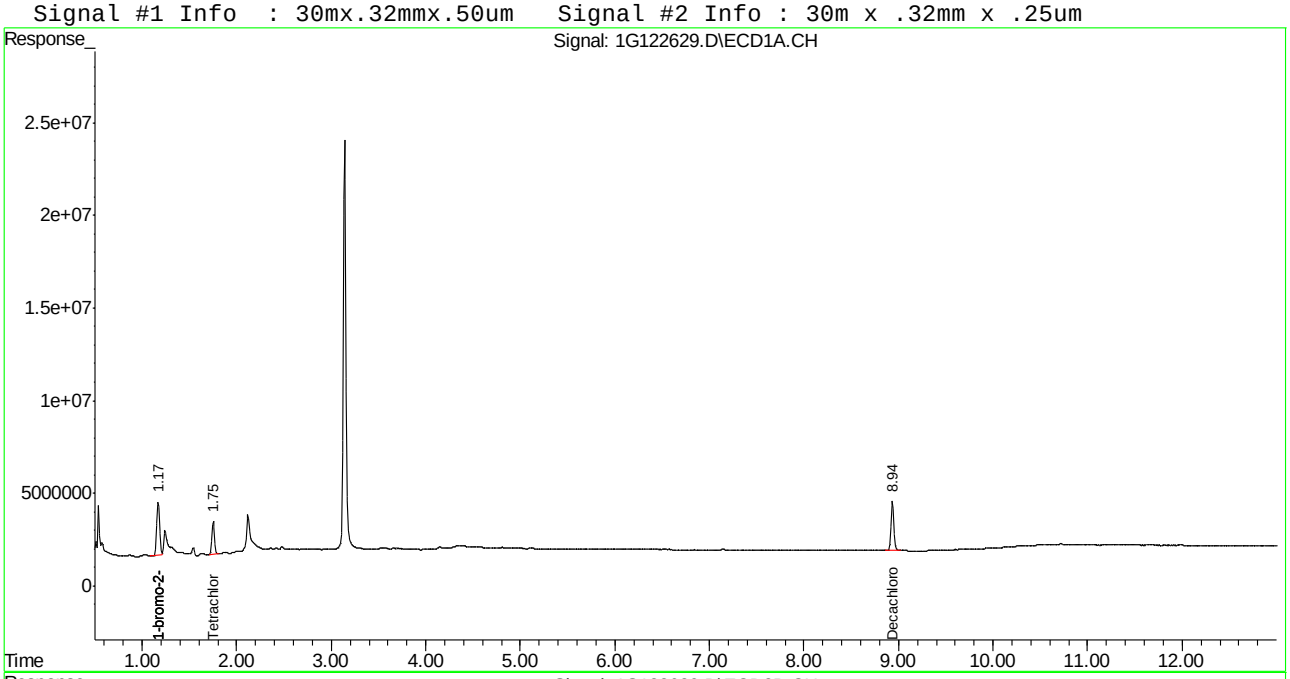
SGS ACCUTEST JC19023

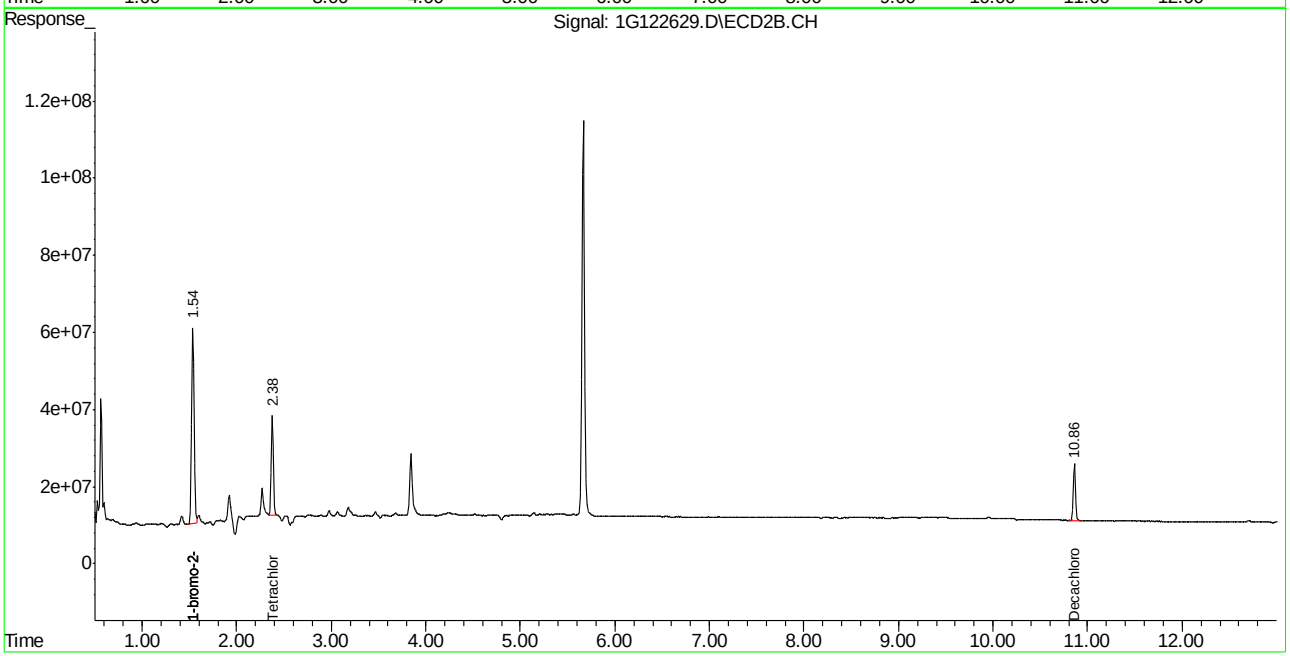
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122629.D\ECD1A.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122629.D\ECD2B.CH
Acq On : 4-29-16 06:45:10 PM Operator: dharas
Sample : jc19023-4 Inst : GC1G
Misc : op93471,g1g3976,15.7,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: May 2 11:27 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3973.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

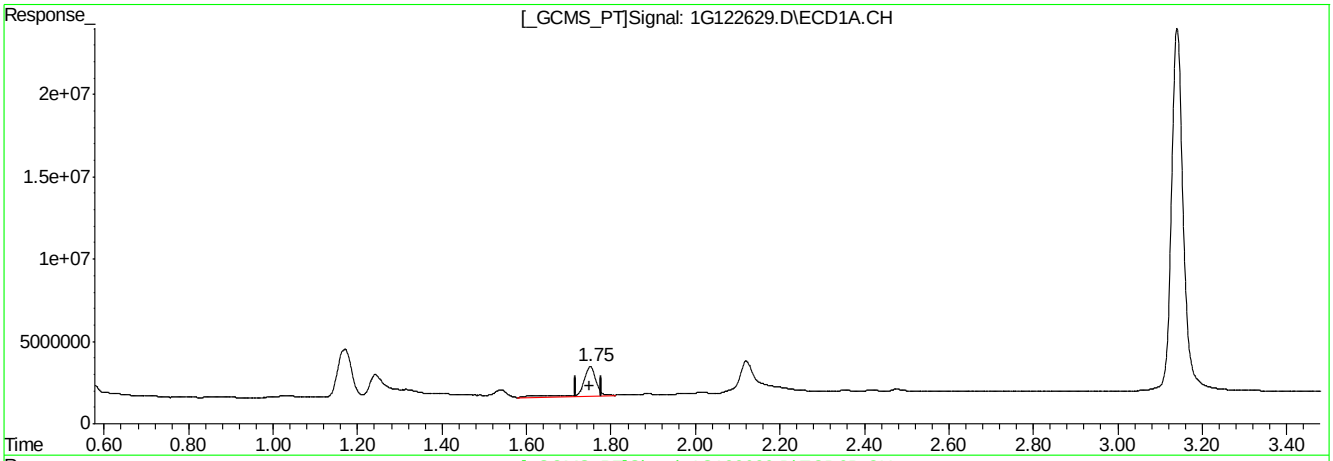
Sample Number:	JC19023-4	**Method:**	SW846 8081B
Lab FileID:	1G122629.D	**Analyst approved:**	05/03/16 11:14 Gwendolyn Burns
Injection Time:	04/29/16 18:45	**Supervisor approved:**	05/03/16 11:21 Gwendolyn Burns

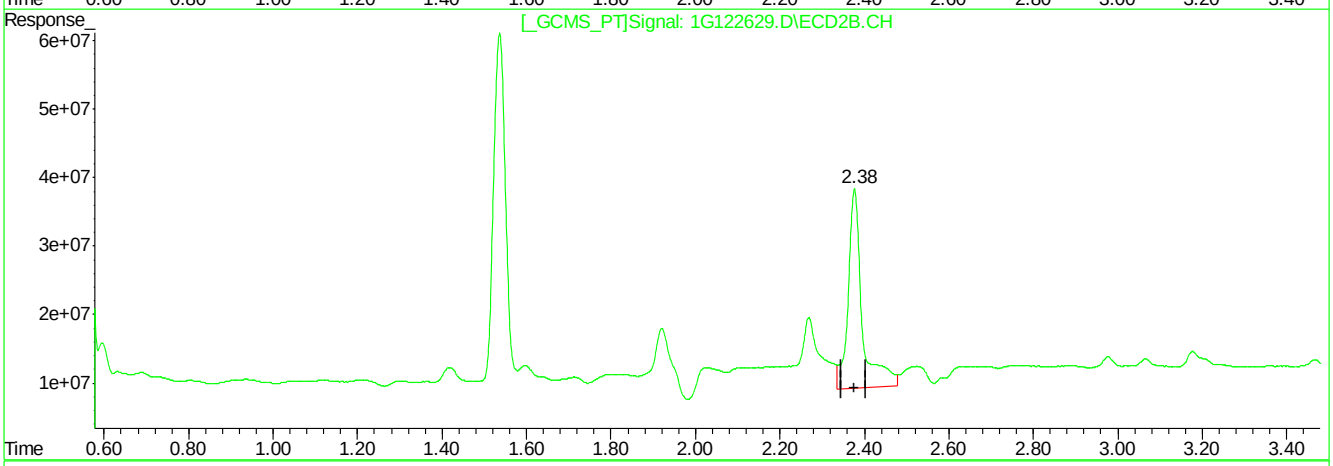
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	1.75	Poorly defined baseline
Tetrachloro-m-xylene	877-09-8	2	2.38	Poorly defined baseline

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122629.D\ECD1A.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122629.D\ECD2B.CH
Acq On    : 4-29-16 06:45:10 PM                      Operator: dharas
Sample    : jc19023-4                                Inst    : GC1G
Misc      : op93471,g1g3976,15.7,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May  2 11:26 2016  Quant Results File: 1PST3973.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(2) Tetrachloro-m-xylene (SAB)

1.75min 28.796PPB

response 38174536

(2) Tetrachloro-m-xylene #2 (SAB)

2.38min 38.259PPB

response 674139639

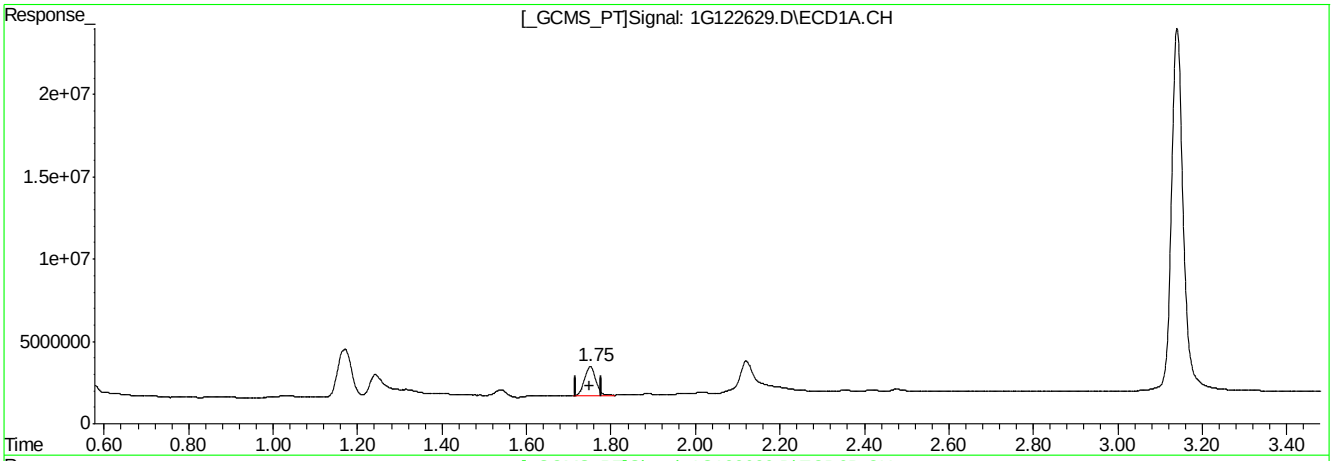
(+) = Expected Retention Time

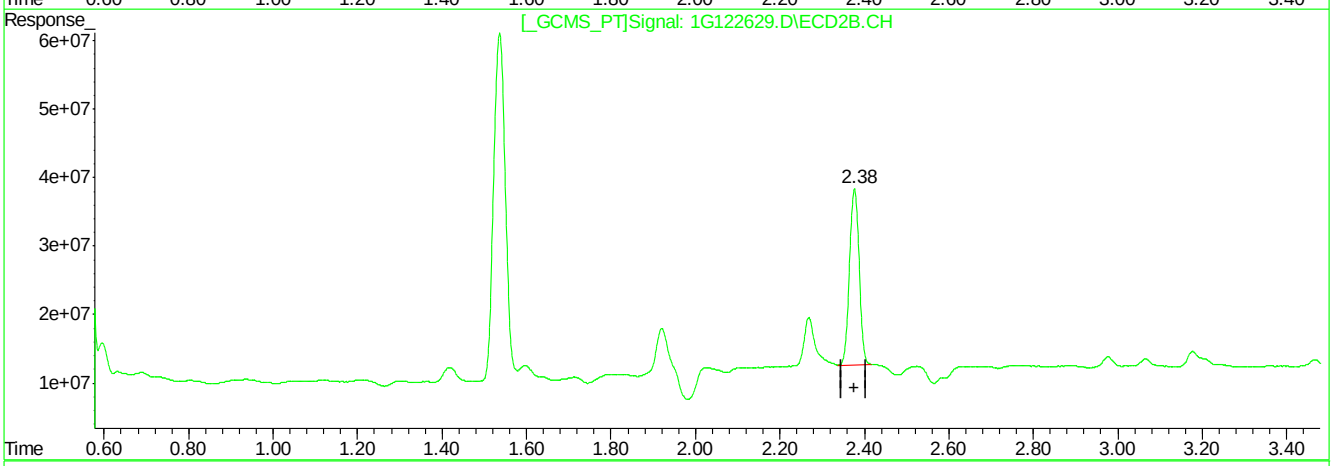
1G122629.D 1PST3973.M Mon May 02 11:26:37 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122629.D\ECD1A.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122629.D\ECD2B.CH
Acq On    : 4-29-16 06:45:10 PM                      Operator: dharas
Sample    : jc19023-4                                Inst    : GC1G
Misc      : op93471,g1g3976,15.7,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: May  2 11:26 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(2) Tetrachloro-m-xylene (SAB)

1.75min 24.334PPB m

response 32259147

(2) Tetrachloro-m-xylene #2 (SAB)

2.38min 23.188PPB m

response 408586099

(+) = Expected Retention Time

1G122629.D 1PST3973.M Mon May 02 11:26:55 2016 RPT1

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\997\
Data File : 6g34447.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Apr 2016 8:55 am
Operator : brittanp
Sample : op93399-mb1
Misc : op93399,g6g997,300,,,2,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 27 11:27:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Tue Apr 26 17:50:34 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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	1.579	144.8E6	49966067	50.000	50.000
25) I	1-bromo-2...	1.313	1.579	144.8E6	49966067	50.000	50.000
31) I	1-bromo-2...	1.313	1.579	144.8E6	49966067	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.991	2.473	98132469	35677740	36.977	39.522
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 92.44%	98.80%
24)	SAB Decachlor...	9.923	11.762	90259333	27918343	39.113	41.132
	Spiked Amount	40.000			Recovery	= 97.78%	102.83%

Target Compounds

SemiQuant Compounds - Not Calibrated on this Instrument

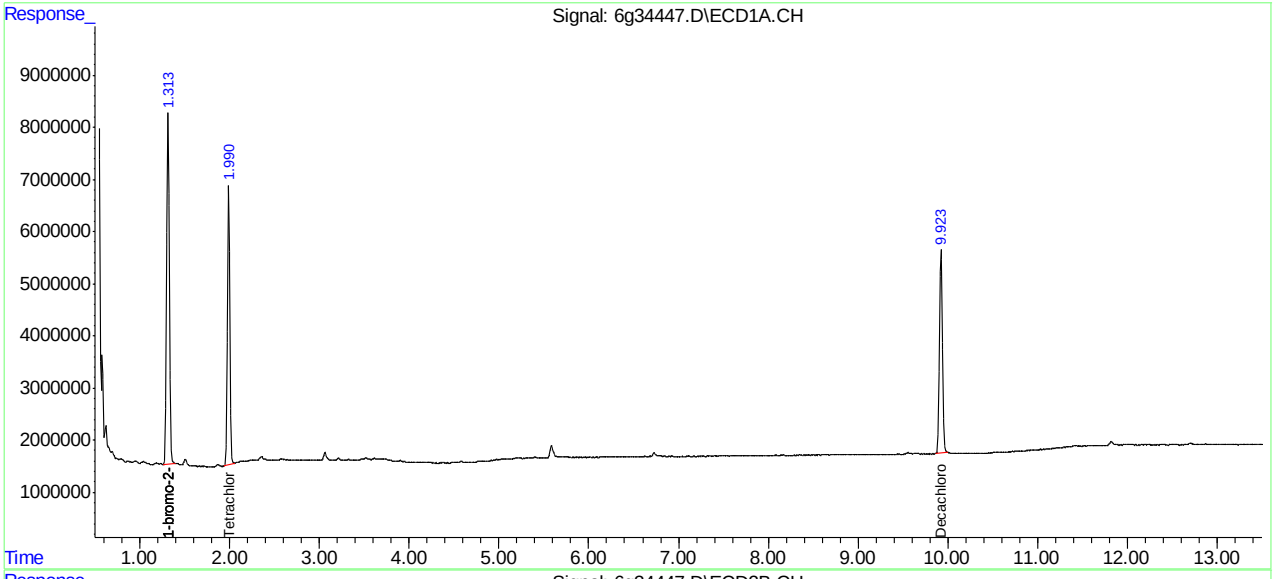
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

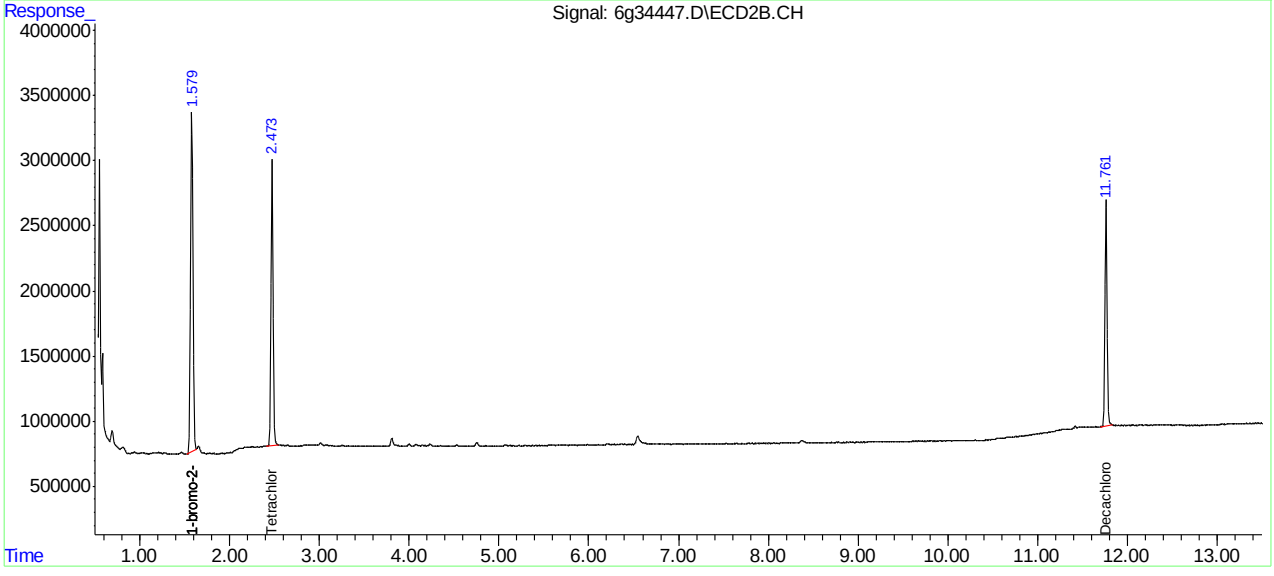
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\997\
Data File : 6g34447.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Apr 2016 8:55 am
Operator : brittanp
Sample : op93399-mb1
Misc : op93399,g6g997,300,,,2,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 27 11:27:22 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Tue Apr 26 17:50:34 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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\1G3976\1G122604.D\ECD1A.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122604.D\ECD2B.CH
Acq On    : 4-29-16 09:33:05 AM                      Operator: brittanp
Sample    : op93471-mb1                              Inst    : GC1G
Misc      : op9371,g1g39765,15.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 29 11:08 2016  Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3973.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	68301384	979.3E6	50.000	50.000
25) I 1-bromo-2-nitrob	1.16	1.53	68301384	979.3E6	50.000	50.000
31) I 1-bromo-2-nitrob	1.16	1.53	68301384	979.3E6	50.000	50.000
System Monitoring Compounds						
2) SAB Tetrachloro-m-xy	1.75	2.37	37866040	489.3E6	26.458	27.624
Spiked Amount 40.000	Range 30 - 150		Recovery =		66.14%	69.06%
24) SA Decachlorobiphen	8.94	10.86	70292656	294.2E6	27.816	28.473
Spiked Amount 40.000			Recovery =		69.54%	71.18%
Target Compounds						

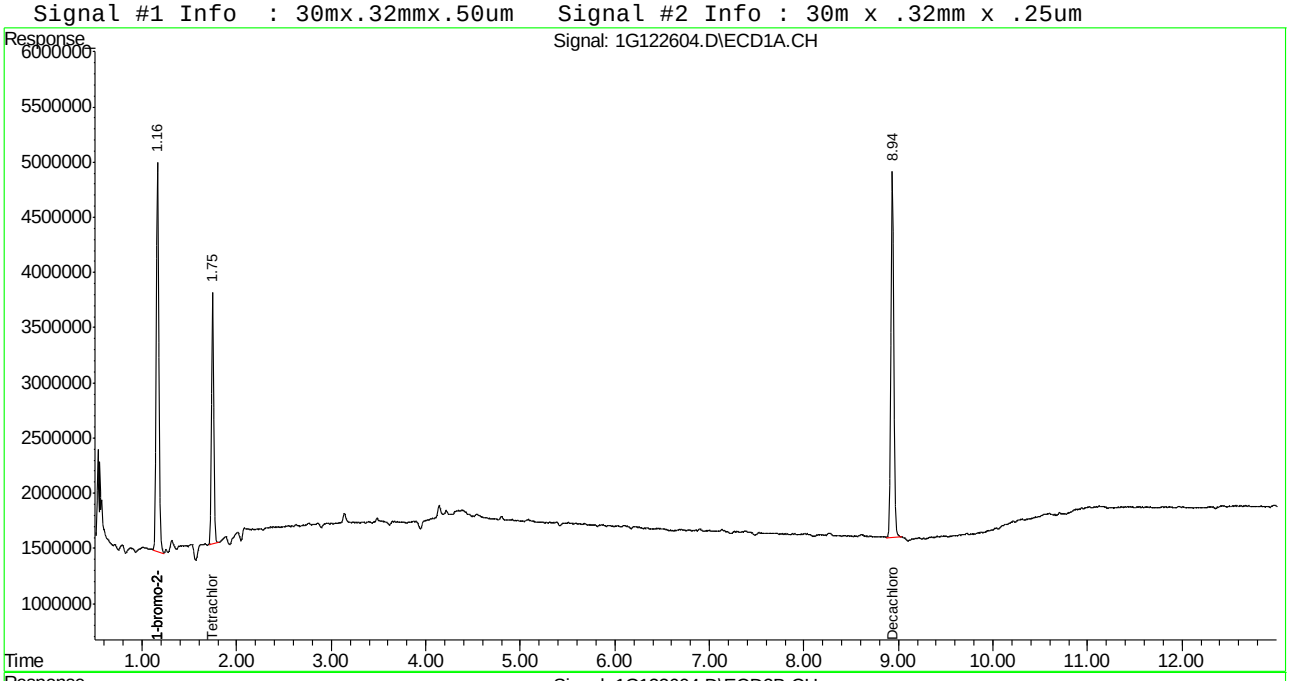
(f)=RT Delta > 1/2 Window (m)=manual int.

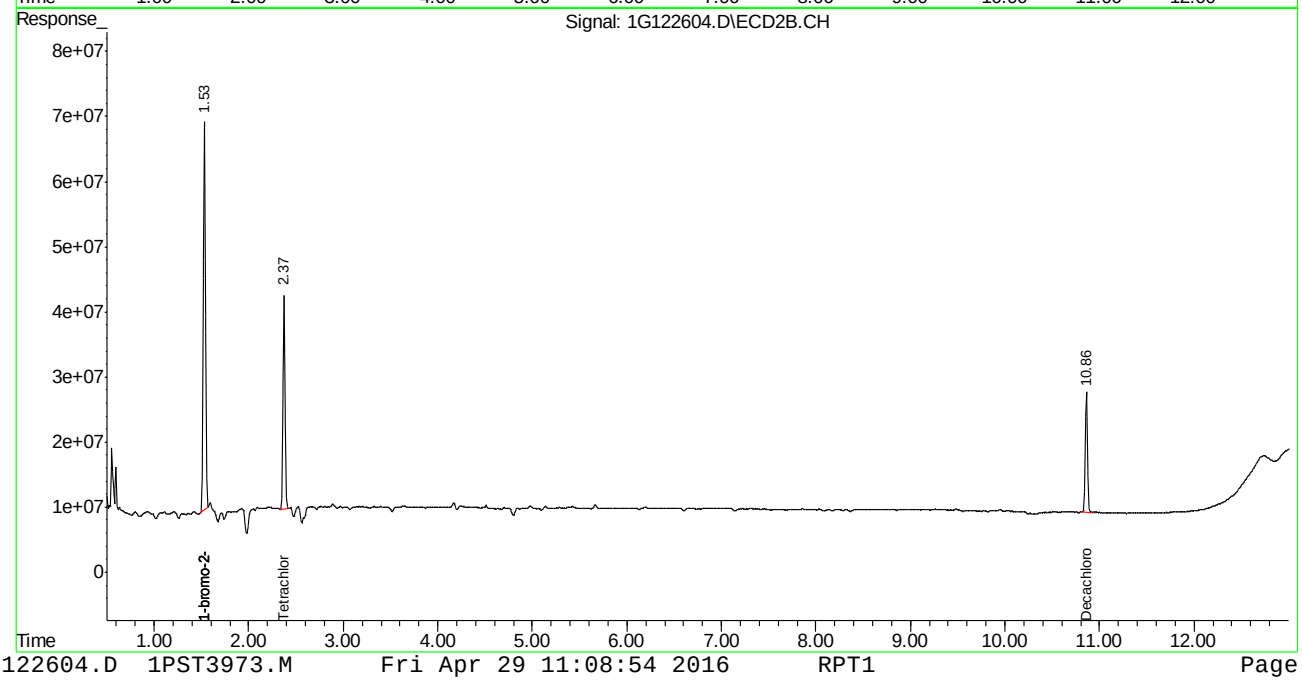
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122604.D\ECD1A.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122604.D\ECD2B.CH
Acq On : 4-29-16 09:33:05 AM Operator: brittanp
Sample : op93471-mb1 Inst : GC1G
Misc : op9371,g1g39765,15.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 29 11:08 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3973.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\997\
Data File : 6g34448.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Apr 2016 9:12 am
Operator : brittanp
Sample : op93399-bs1
Misc : op93399,g6g997,300,,,2,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 27 11:28:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Tue Apr 26 17:50:34 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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	1.578	149.0E6	50571781	50.000	50.000
25) I	1-bromo-2...	1.308	1.578	149.0E6	50571781	50.000	50.000
31) I	1-bromo-2...	1.308	1.578	149.0E6	50571781	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.983	2.472	72058168	24816383	26.391	27.161
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 65.98%	67.90%
24)	SAB Decachlor...	9.917	11.756	64682036	19971582	27.244	29.072
	Spiked Amount	40.000			Recovery	= 68.11%	72.68%
	Target Compounds						
3) A	alpha-BHC	2.496	3.175	54543388	18446453	15.496	15.496
4) MA	gamma-BHC	2.811	3.627	52021351	17640334	15.875	15.827
5) MA	Heptachlor	3.337	4.234	49404918	16867608	15.019	14.975
6) B	beta-BHC	2.891	3.719	26514853	8688724	16.484	16.001
7) B	delta-BHC	3.085	4.135	48758804	16470950	15.966	15.858
8) MB	Aldrin	3.689	4.710	44928712	16183133	14.789	15.451
9) B	Heptachlo...	4.437	5.591	45406212	15397077	15.964	15.772
10) B	gamma-Chl...	4.612	5.896	42124597	14928168	14.717	15.643
11) B	alpha-Chl...	4.794	6.139	42815362	14922874	15.071	15.740
12) A	Endosulfan I	4.976	6.238	42344903	14272747	15.099	15.495
13) B	4,4'-DDE	4.924	6.439	35459117	12287040	15.063	15.029
14) MA	Dieldrin	5.320	6.709	43209642	14743353	15.582	15.670
15) MA	Endrin	5.661	7.252	41930822	14161604	16.668	16.567
16) A	4,4'-DDD	5.810	7.471	31563334	11901508	15.860	16.868
17) B	Endosulfa...	6.002	7.635	39734215	13843257	16.009	16.558
18) MA	4,4'-DDT	6.263	8.051	36116053	11524974	16.684	17.996
19) B	Endrin Al...	6.672	8.264	36368904	10788121	17.978	15.915
20) B	Endosulfa...	7.409	8.778	38619847	12714341	17.718	17.281
21) A	Methoxychlor	7.127	9.429	23291178	6830400	17.951	19.357
23) B	Endrin Ke...	7.883	9.826	43706734	14164686	16.862	16.471

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

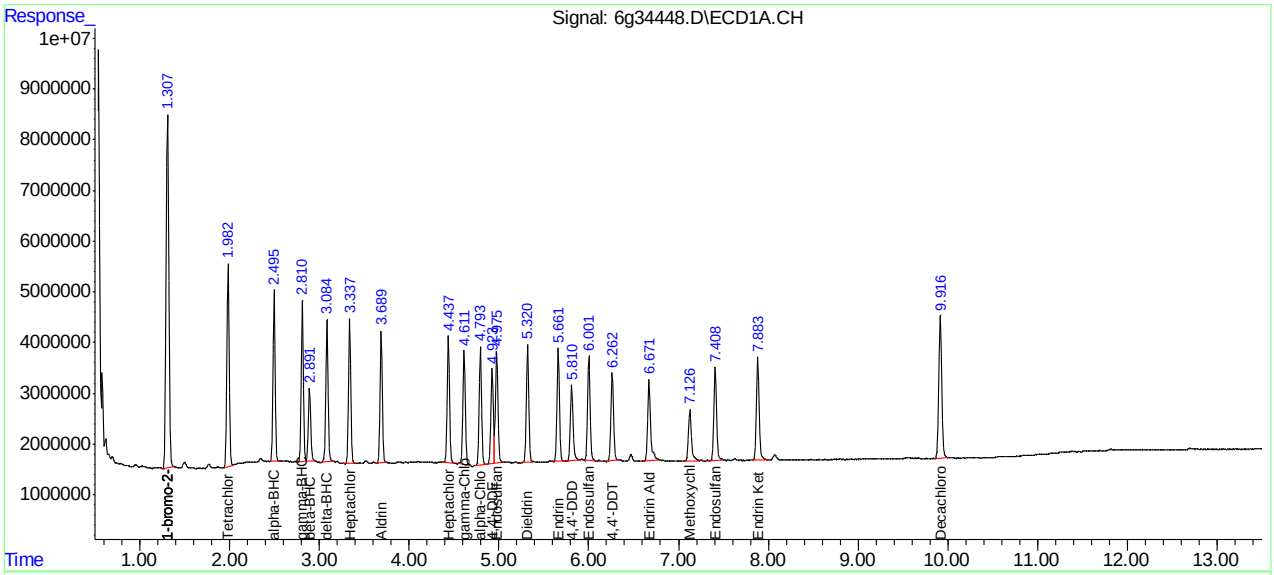
SGS ACCUTEST JC19023

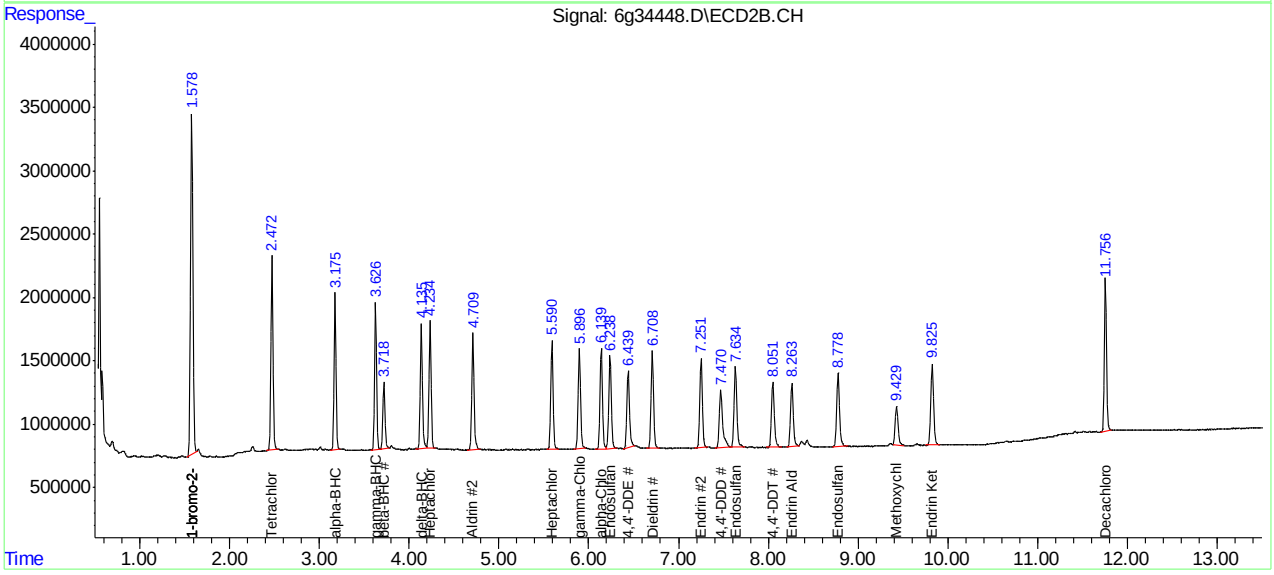
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\997\
Data File : 6g34448.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Apr 2016 9:12 am
Operator : brittanp
Sample : op93399-bs1
Misc : op93399,g6g997,300,,,2,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 27 11:28:11 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Tue Apr 26 17:50:34 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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\997\
Data File : 6g34449.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Apr 2016 9:28 am
Operator : brittanp
Sample : op93399-bsd
Misc : op93399,g6g997,300,,,2,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 27 11:29:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Tue Apr 26 17:50:34 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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	1.579	144.7E6	48638557	50.000	50.000
25) I	1-bromo-2...	1.308	1.579	144.7E6	48638557	50.000	50.000
31) I	1-bromo-2...	1.308	1.579	144.7E6	48638557	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.983	2.473	99010578	33275946	37.339	37.867
	Spiked Amount 40.000	Range	30 - 150	Recovery	=	93.35%	94.67%
24)	SAB Decachlor...	9.916	11.758	86553242	26325131	37.538	39.844
	Spiked Amount 40.000			Recovery	=	93.84%	99.61%
	Target Compounds						
3) A	alpha-BHC	2.496	3.175	78688118	26011621	23.019	22.720
4) MA	gamma-BHC	2.810	3.627	74502766	24827638	23.410	23.162
5) MA	Heptachlor	3.337	4.234	71237035	24013194	22.299	22.166
6) B	beta-BHC	2.891	3.719	36873867	11925552	23.604	22.834
7) B	delta-BHC	3.084	4.136	75067248	23689160	25.309	23.714
8) MB	Aldrin	3.688	4.710	64936391	22632825	22.009	22.468
9) B	Heptachlo...	4.436	5.591	65397714	21812320	23.674	23.232
10) B	gamma-Chl...	4.612	5.896	60703404	20966523	21.837	22.843
11) B	alpha-Chl...	4.793	6.141	60953120	21109920	22.092	23.150
12) A	Endosulfan I	4.977	6.238	60346634	20275705	22.156	22.888
13) B	4,4'-DDE	4.924	6.439	51378379	18283431	22.473	23.252
14) MA	Dieldrin	5.319	6.710	61984256	20826798	23.015	23.016
15) MA	Endrin	5.660	7.252	59987080	19887995	24.554	24.190
16) A	4,4'-DDD	5.809	7.472	44580727	16630090	23.065	24.507
17) B	Endosulfa...	6.002	7.636	55879375	19495147	23.182	24.244
18) MA	4,4'-DDT	6.262	8.051	51456846	16169080	24.475	26.252
19) B	Endrin Al...	6.671	8.263	48118684	14978585	24.491	22.975
20) B	Endosulfa...	7.408	8.779	54747837	17659777	25.862	24.957
21) A	Methoxychlor	7.127	9.429	32585855	9658432	25.860	28.459
23) B	Endrin Ke...	7.883	9.827	61099184	19665064	24.271	23.776

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

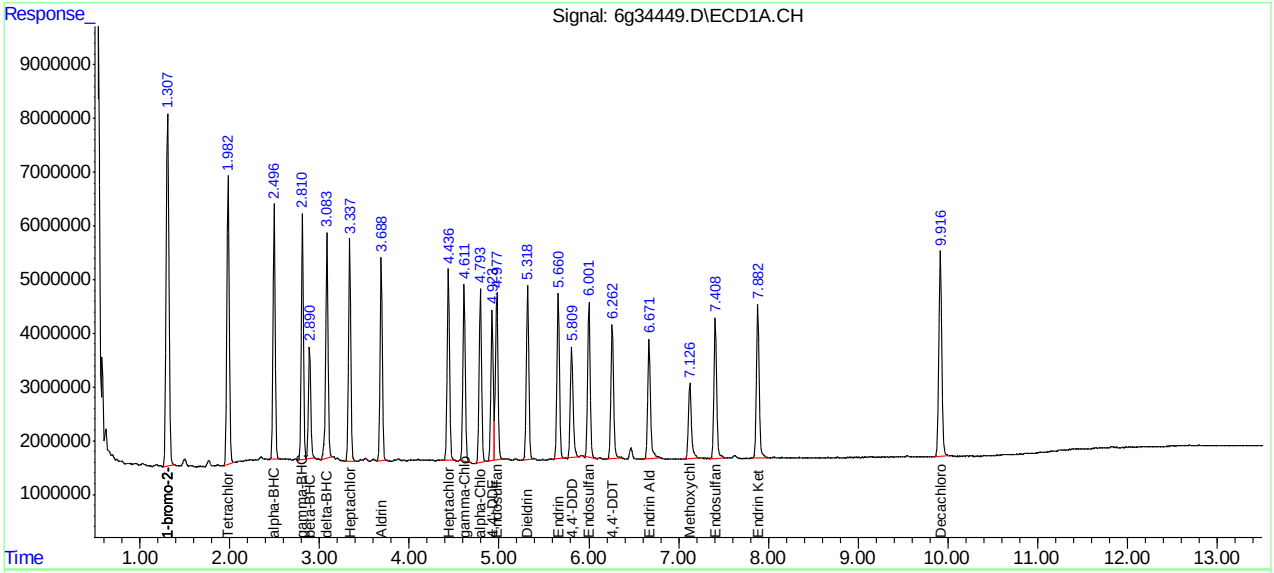
SGS ACCUTEST JC19023

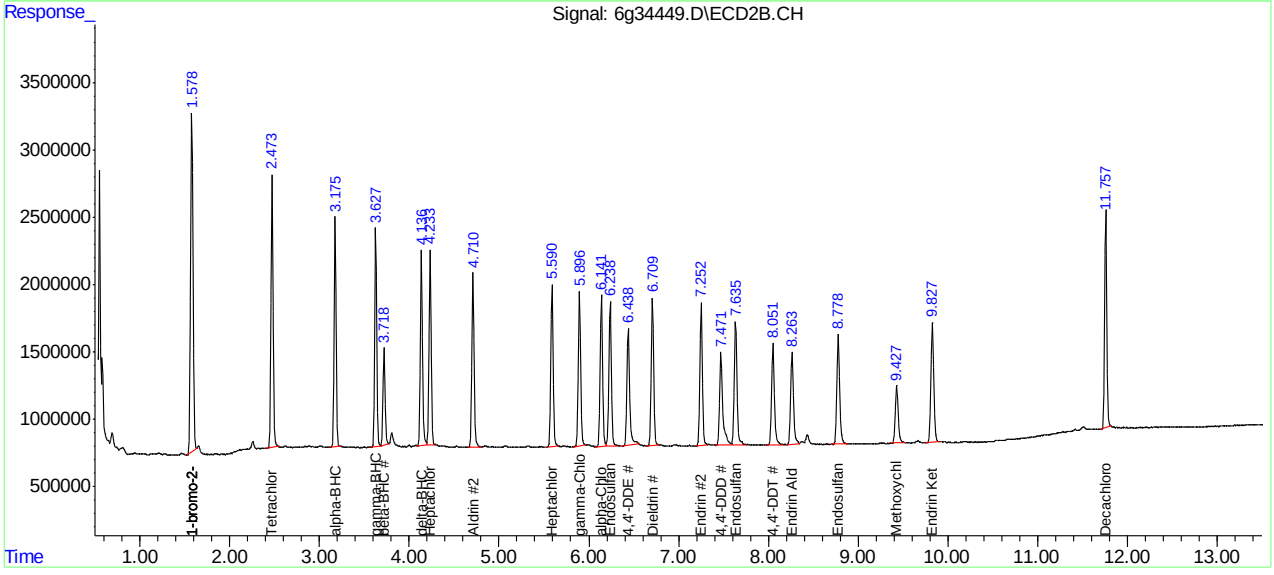
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\997\
Data File : 6g34449.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Apr 2016 9:28 am
Operator : brittanp
Sample : op93399-bsd
Misc : op93399,g6g997,300,,,2,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 27 11:29:06 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Tue Apr 26 17:50:34 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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 JC19023

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/29/16 13:47

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122605.D\ECD1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122605.D\ECD2B.CH
Acq On : 4-29-16 09:50:33 AM Operator: brittanp
Sample : op93471-bs1 Inst : GC1G
Misc : op9371,g1g39765,15.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 29 11:09 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Apr 27 16:13:45 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3973.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	61412168	884.3E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.16	1.53	61412168	884.3E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.16	1.53	61412168	884.3E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.37	36414144	471.8E6	28.298	29.494
Spiked Amount	40.000 Range	30 - 150	Recovery	=		70.74%	73.73%
24) SA	Decachlorobiphen	8.94	10.86	68221149	282.9E6	30.025	30.326
Spiked Amount	40.000		Recovery	=		75.06%	75.81%
	Target Compounds						
3) A	alpha-BHC	2.22	3.04	25875601	422.5E6	16.382m	17.436
4) MA	gamma-BHC	2.51	3.47	25478993	394.2E6	16.649	18.292
5) MA	Heptachlor	2.98	4.04	28788707	346.2E6	17.196m	18.253
6) B	beta-BHC	2.59	3.56	13546871	173.7E6	17.983	19.050
7) B	delta-BHC	2.76	3.95	23570968	385.5E6	18.170	19.186
8) MB	Aldrin	3.30	4.49	26444752	348.4E6	16.259	17.311
9) B	Heptachlor Epoxi	3.99	5.31	27788539	316.0E6	17.036m	17.786
10) B	gamma-Chlordane	4.15	5.60	28728321	316.6E6	17.384	18.077
11) B	alpha-Chlordane	4.31	5.82	27458436	297.4E6	16.532m	17.401
12) A	Endosulfan I	4.49	5.92	26309121	288.4E6	14.830	17.033
13) B	4,4'-DDE	4.43	6.09	25270271	290.0E6	18.844	17.127
14) MA	Dieldrin	4.80	6.35	28890896	314.4E6	17.942	17.534
15) MA	Endrin	5.11	6.86	30370549	292.0E6	20.541	18.402
16) A	4,4'-DDD	5.25	7.04	20027704	259.2E6	17.721	17.528
17) B	Endosulfan II	5.43	7.21	25424232	270.8E6	17.073	17.217
18) MA	4,4'-DDT	5.65	7.58	21992726	209.4E6	20.801	22.025
19) B	Endrin Aldehyde	6.06	7.78	23405417	193.0E6	18.851	17.058
20) B	Endosulfan Sulfa	6.73	8.25	26225785	238.8E6	18.971	18.691
21) A	Methoxychlor	6.44	8.83	15653844	104.8E6	21.866	19.476
23) B	Endrin Ketone	7.16	9.22	28891805	243.6E6	21.063	20.584

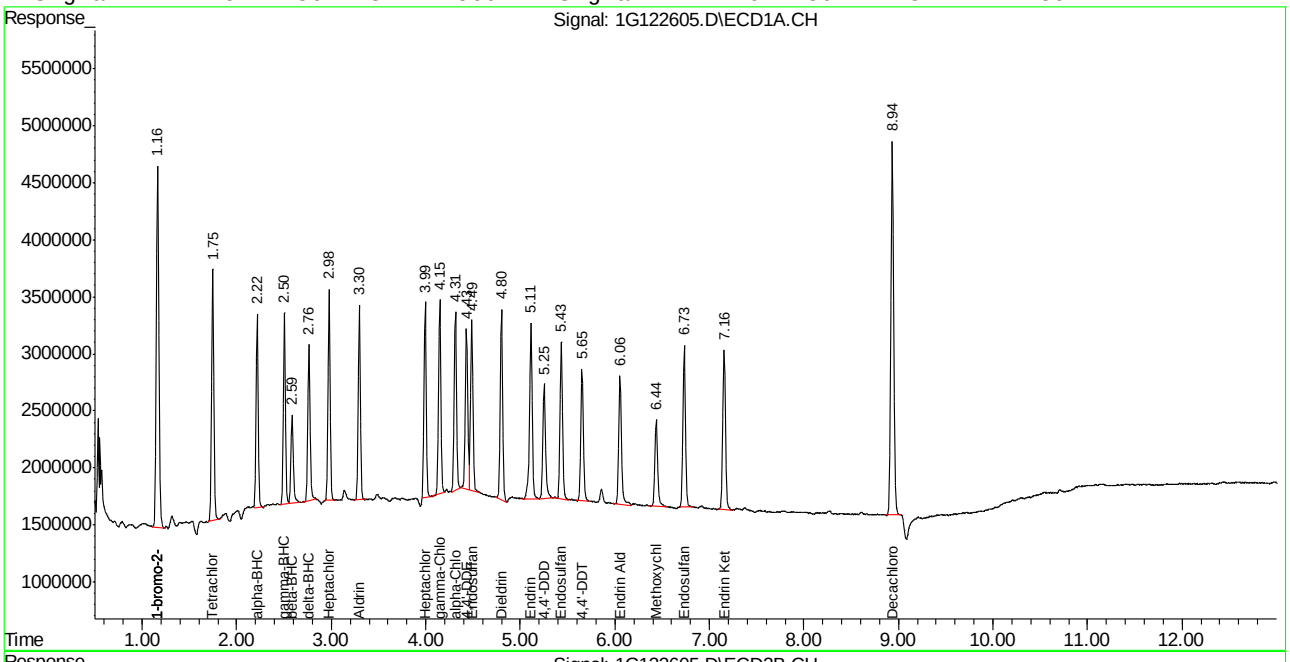
(f)=RT Delta > 1/2 Window (m)=manual int.

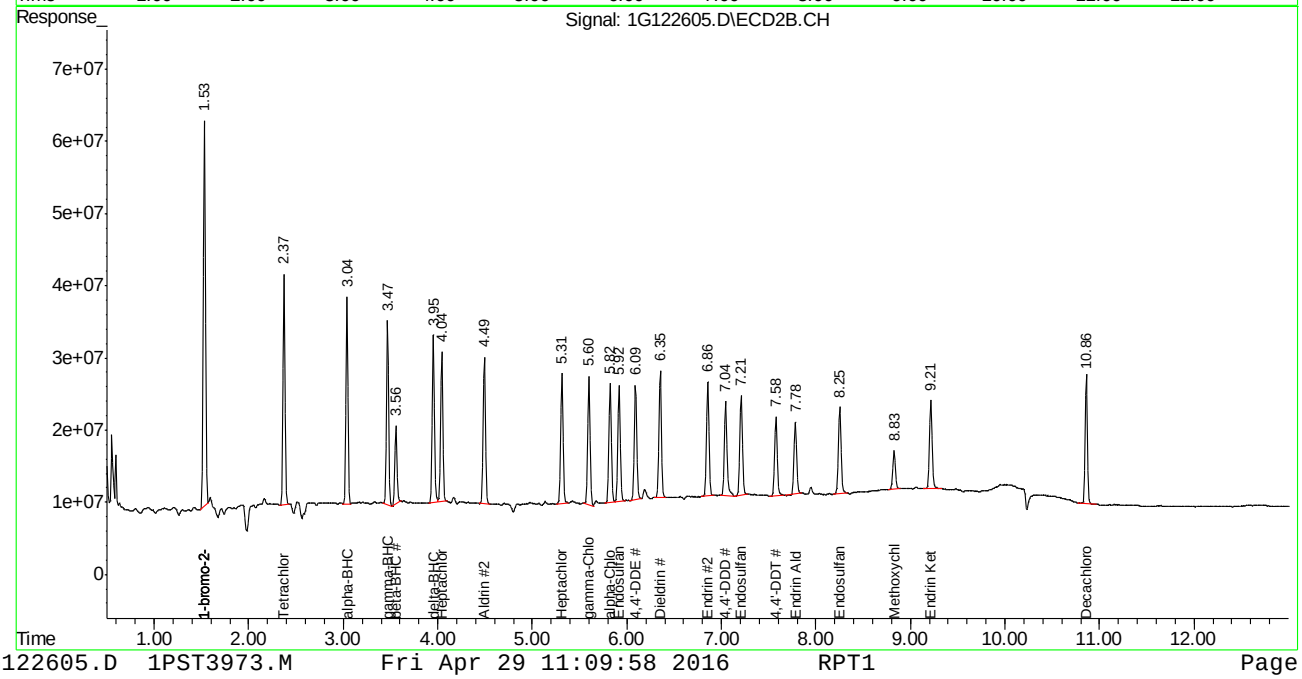
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122605.D\ECD1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122605.D\ECD2B.CH
Acq On : 4-29-16 09:50:33 AM Operator: brittanp
Sample : op93471-bs1 Inst : GC1G
Misc : op9371,g1g39765,15.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 29 11:09 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3973.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 JC19023

Manual Integration Approval Summary

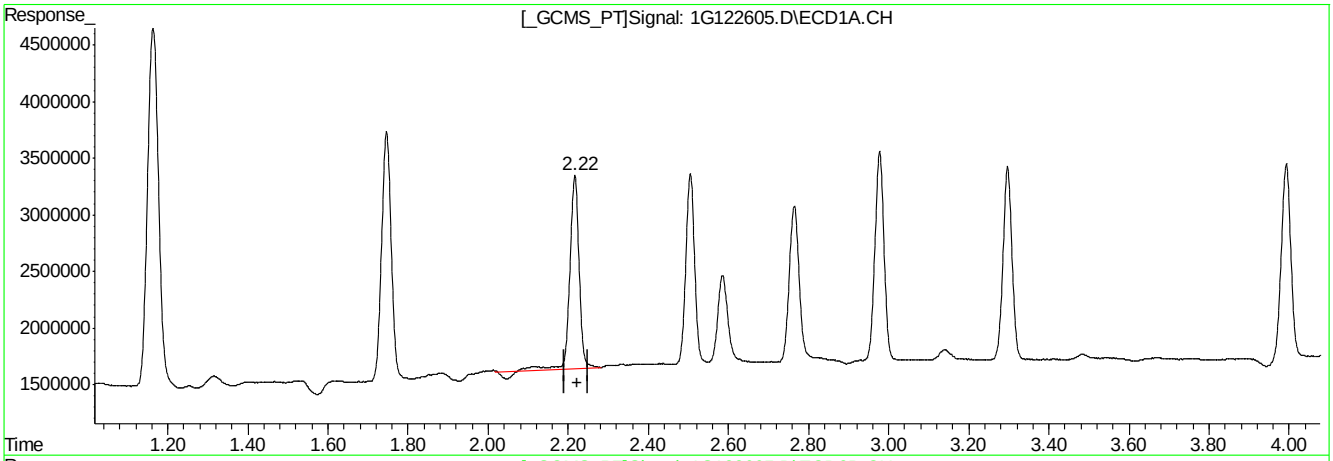
Sample Number:	OP93471-BS1	**Method:**	SW846 8081B
Lab FileID:	1G122605.D	**Analyst approved:**	04/29/16 11:28 Brittany Piercy
Injection Time:	04/29/16 09:50	**Supervisor approved:**	04/29/16 13:47 Gwendolyn Burns

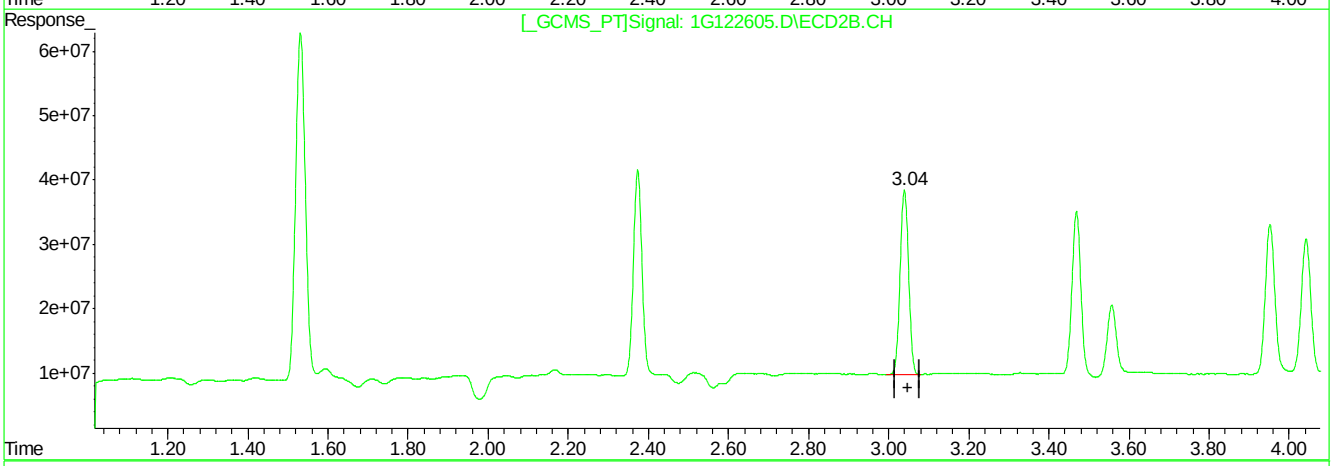
Parameter	CAS	Sig#	R.T. (min.)	Reason
alpha-BHC	319-84-6	1	2.22	Poor instrument integration
Heptachlor	76-44-8	1	2.98	Poor instrument integration
Heptachlor epoxide	1024-57-3	1	3.99	Poor instrument integration
alpha-Chlordane	5103-71-9	1	4.31	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122605.D\ECD1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122605.D\ECD2B.CH
Acq On    : 4-29-16 09:50:33 AM                      Operator: brittanp
Sample    : op93471-bs1                              Inst    : GC1G
Misc      : op9371,g1g39765,15.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 29 10:03 2016  Quant Results File: 1PST3973.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(3) alpha-BHC (A)

2.22min 16.918PPB

response 26722350

(3) alpha-BHC #2 (A)

3.04min 17.436PPB

response 422546092

(+) = Expected Retention Time

1G122605.D 1PST3973.M Fri Apr 29 11:09:06 2016 RPT1

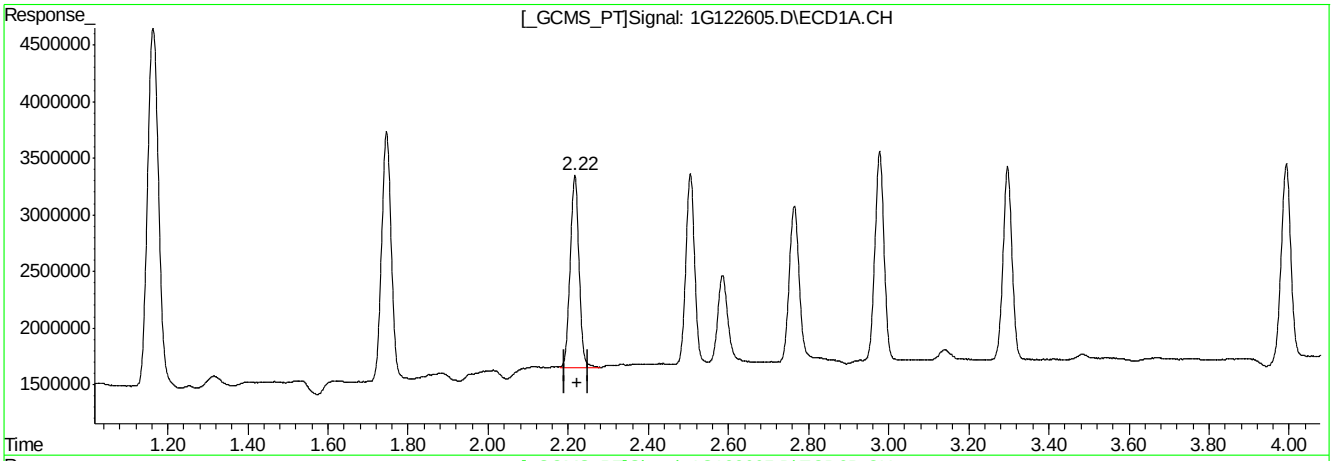
9.3.3.2

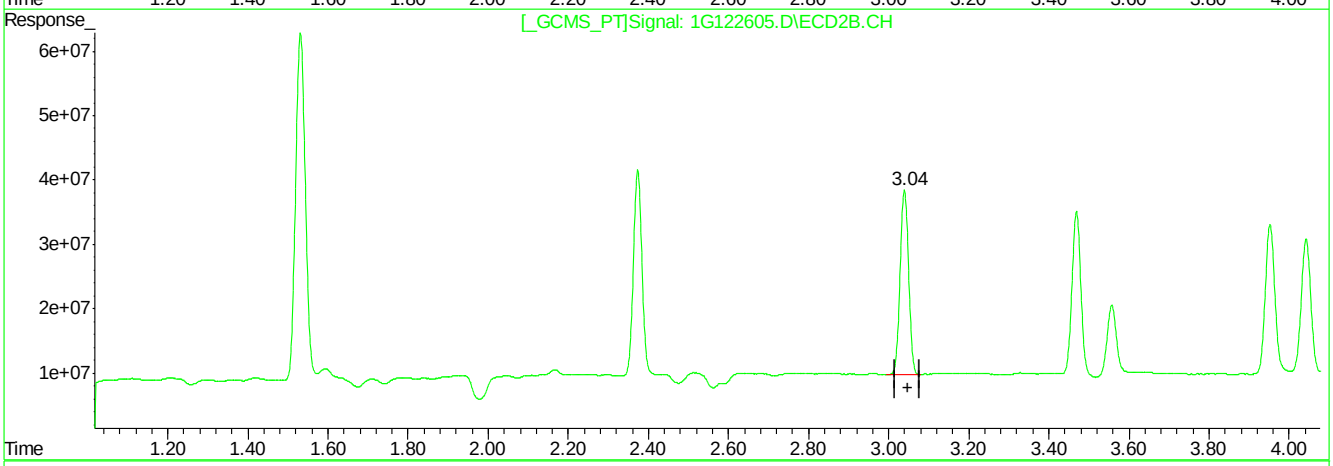
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122605.D\ECD1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122605.D\ECD2B.CH
Acq On    : 4-29-16 09:50:33 AM                      Operator: brittanp
Sample    : op93471-bs1                              Inst    : GC1G
Misc      : op9371,g1g39765,15.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 29 10:03 2016  Quant Results File: 1PST3973.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(3) alpha-BHC (A)

2.22min 16.382PPB m

response 25875601

(3) alpha-BHC #2 (A)

3.04min 17.436PPB

response 422546092

(+) = Expected Retention Time

1G122605.D 1PST3973.M Fri Apr 29 11:09:12 2016 RPT1

9.3.3.3

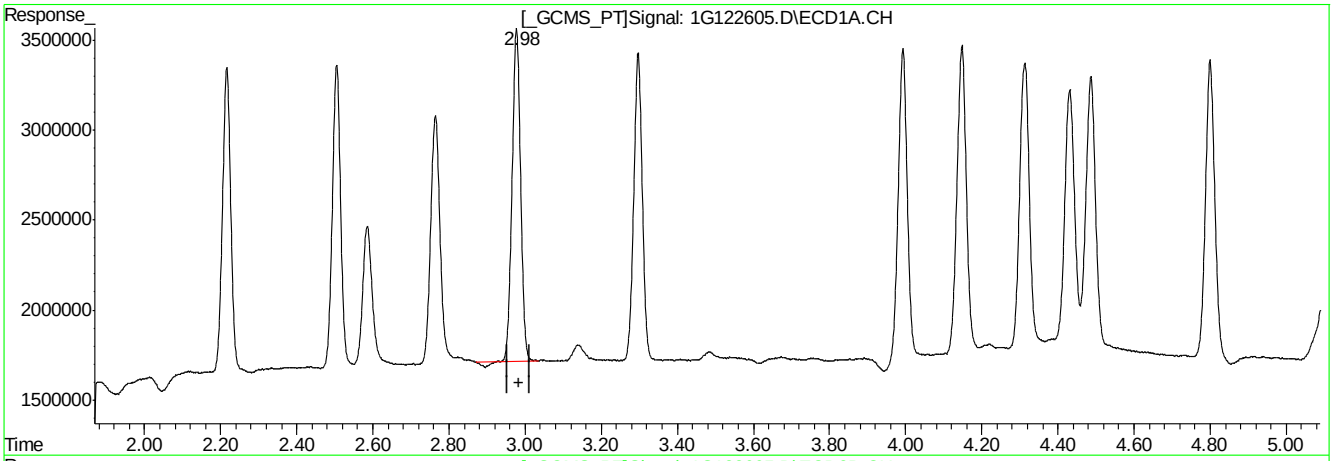
9

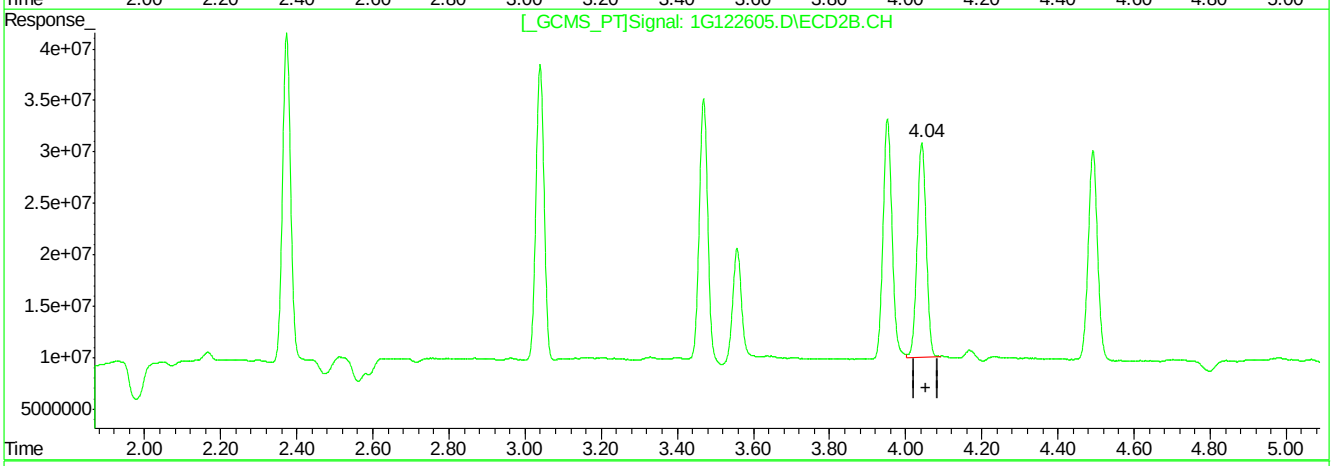
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122605.D\ECD1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122605.D\ECD2B.CH
Acq On    : 4-29-16 09:50:33 AM                      Operator: brittanp
Sample    : op93471-bs1                              Inst    : GC1G
Misc      : op9371,g1g39765,15.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 29 10:03 2016  Quant Results File: 1PST3973.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(5) Heptachlor (MA)

2.98min 17.010PPB

response 28477385

(5) Heptachlor #2 (MA)

4.04min 18.253PPB

response 346225746

(+) = Expected Retention Time

1G122605.D 1PST3973.M Fri Apr 29 11:09:16 2016 RPT1

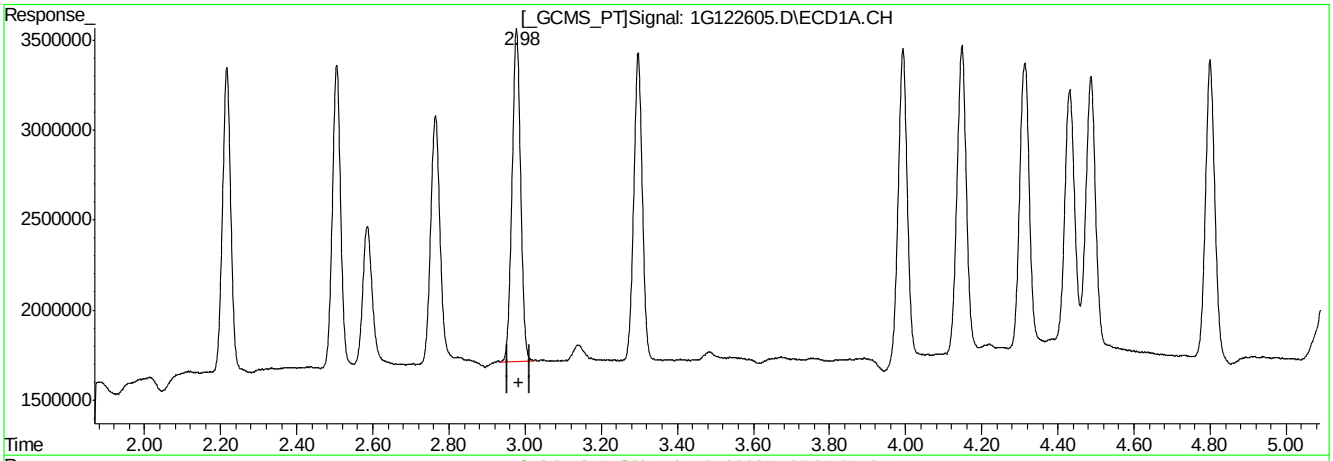
9.3.3.4

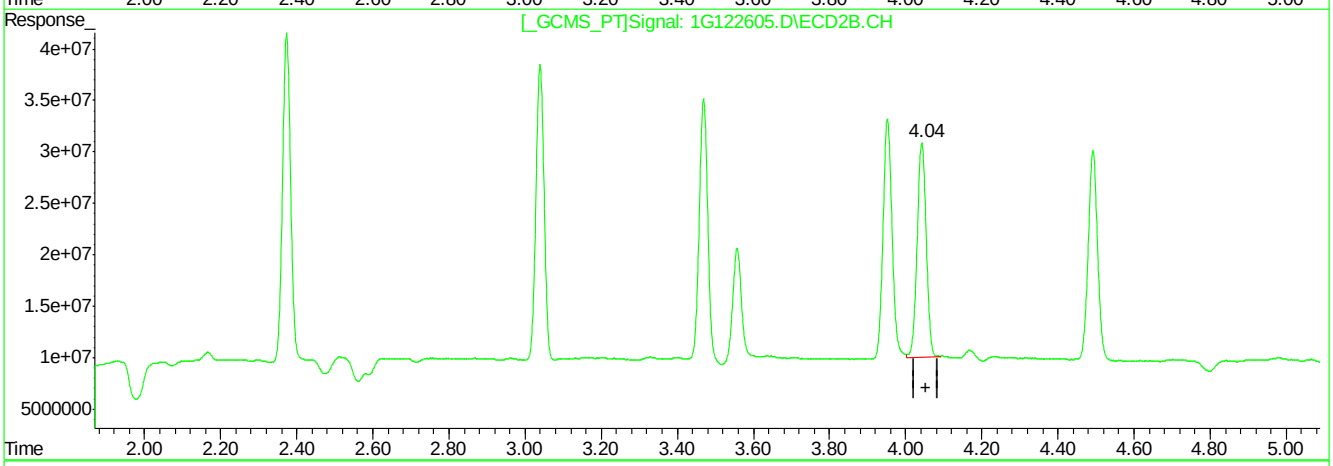
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122605.D\ECD1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122605.D\ECD2B.CH
Acq On    : 4-29-16 09:50:33 AM                      Operator: brittanp
Sample    : op93471-bs1                              Inst    : GC1G
Misc      : op9371,g1g39765,15.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 29 10:03 2016  Quant Results File: 1PST3973.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(5) Heptachlor (MA)

2.98min 17.196PPB m

response 28788707

(5) Heptachlor #2 (MA)

4.04min 18.253PPB

response 346225746

(+) = Expected Retention Time

1G122605.D 1PST3973.M Fri Apr 29 11:09:20 2016 RPT1

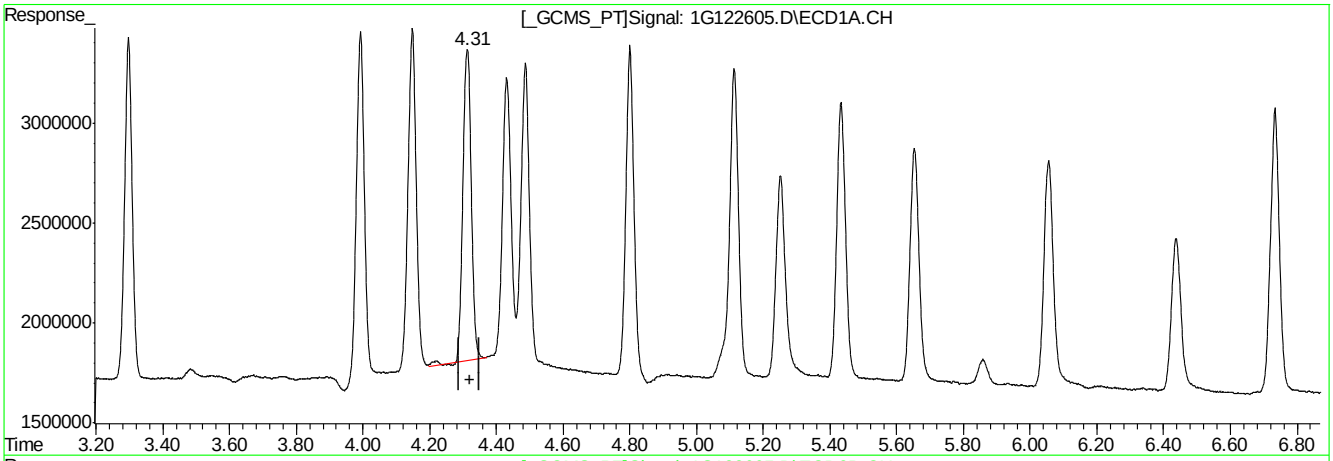
9.3.3.5

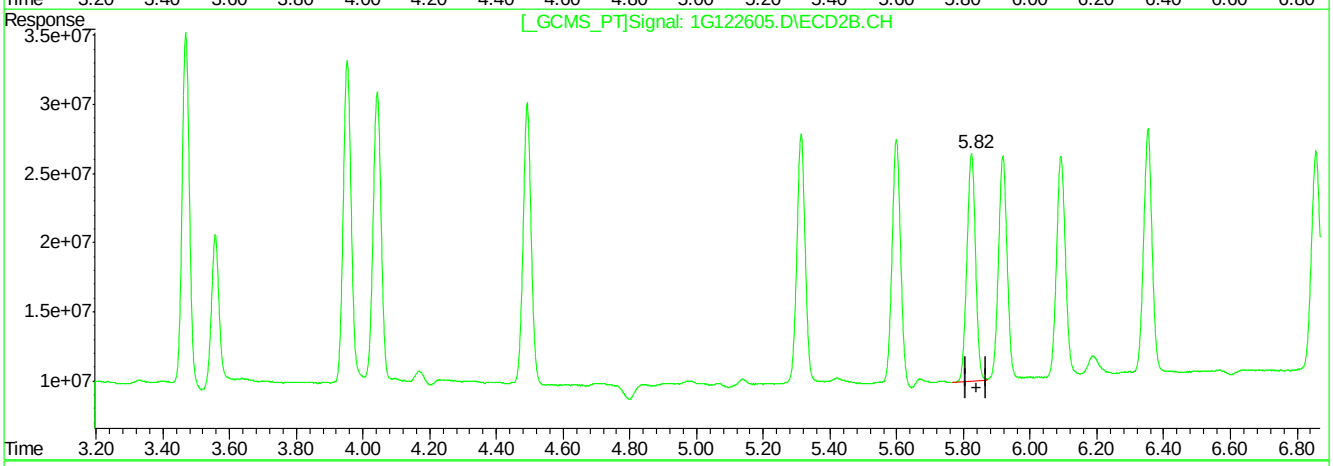
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122605.D\ECD1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122605.D\ECD2B.CH
Acq On    : 4-29-16 09:50:33 AM                      Operator: brittanp
Sample    : op93471-bs1                              Inst    : GC1G
Misc      : op9371,g1g39765,15.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 29 10:03 2016  Quant Results File: 1PST3973.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(11) alpha-Chlordane (B)

4.31min 16.390PPB

response 27222030

(11) alpha-Chlordane #2 (B)

5.82min 17.401PPB

response 297409483

(+) = Expected Retention Time

1G122605.D 1PST3973.M Fri Apr 29 11:09:26 2016 RPT1

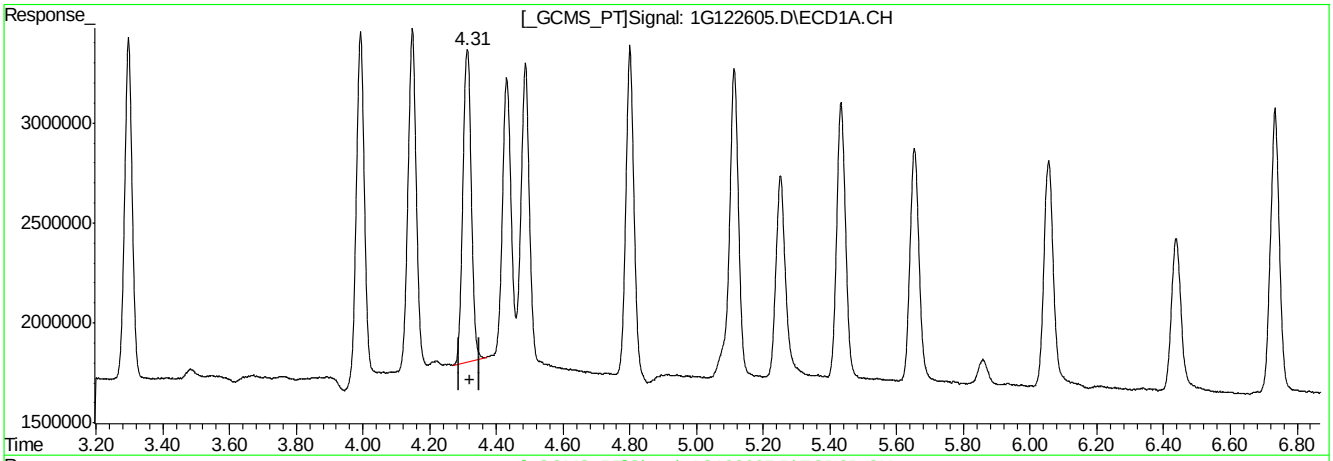
9.3.3.6

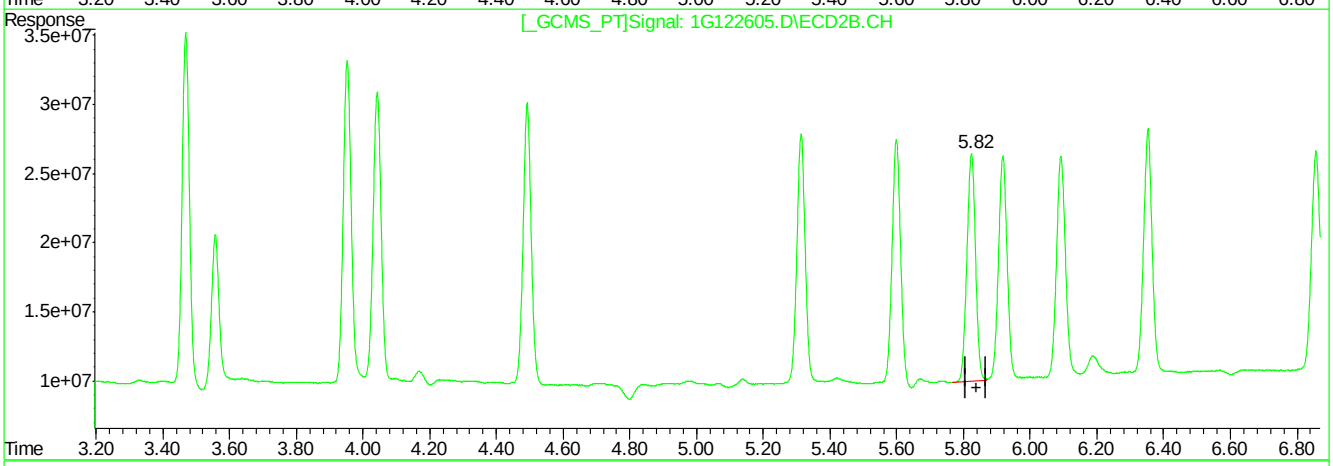
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122605.D\ECD1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122605.D\ECD2B.CH
Acq On    : 4-29-16 09:50:33 AM                      Operator: brittanp
Sample    : op93471-bs1                              Inst    : GC1G
Misc      : op9371,g1g39765,15.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 29 10:03 2016  Quant Results File: 1PST3973.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(11) alpha-Chlordane (B)

4.31min 16.532PPB m

response 27458436

(11) alpha-Chlordane #2 (B)

5.82min 17.401PPB

response 297409483

(+) = Expected Retention Time

1G122605.D 1PST3973.M Fri Apr 29 11:09:30 2016 RPT1

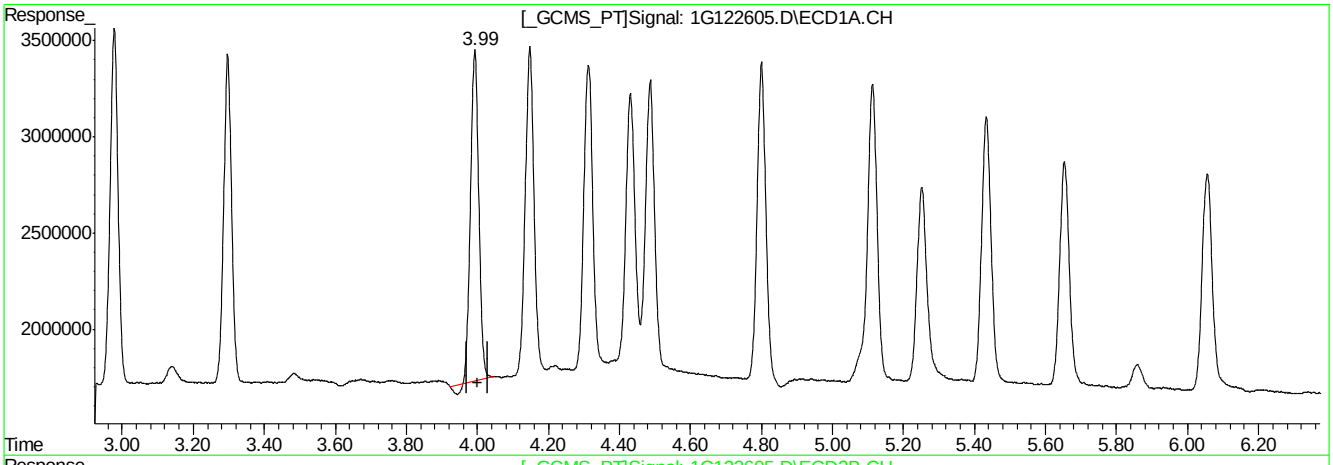
9.3.3.7

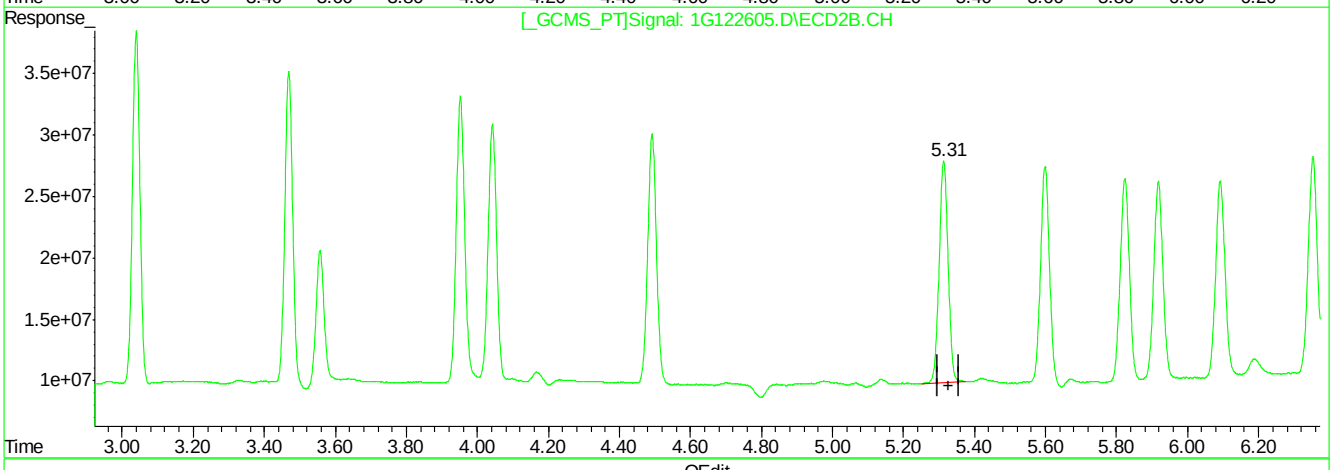
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122605.D\ECD1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122605.D\ECD2B.CH
Acq On    : 4-29-16 09:50:33 AM                      Operator: brittanp
Sample    : op93471-bs1                              Inst    : GC1G
Misc      : op9371,g1g39765,15.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 29 10:03 2016  Quant Results File: 1PST3973.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





(9) Heptachlor Epoxide (B)

3.99min 17.017PPB

response 27757241

(9) Heptachlor Epoxide #2 (B)

5.31min 17.786PPB

response 315967193

(+) = Expected Retention Time

1G122605.D 1PST3973.M Fri Apr 29 11:09:43 2016 RPT1

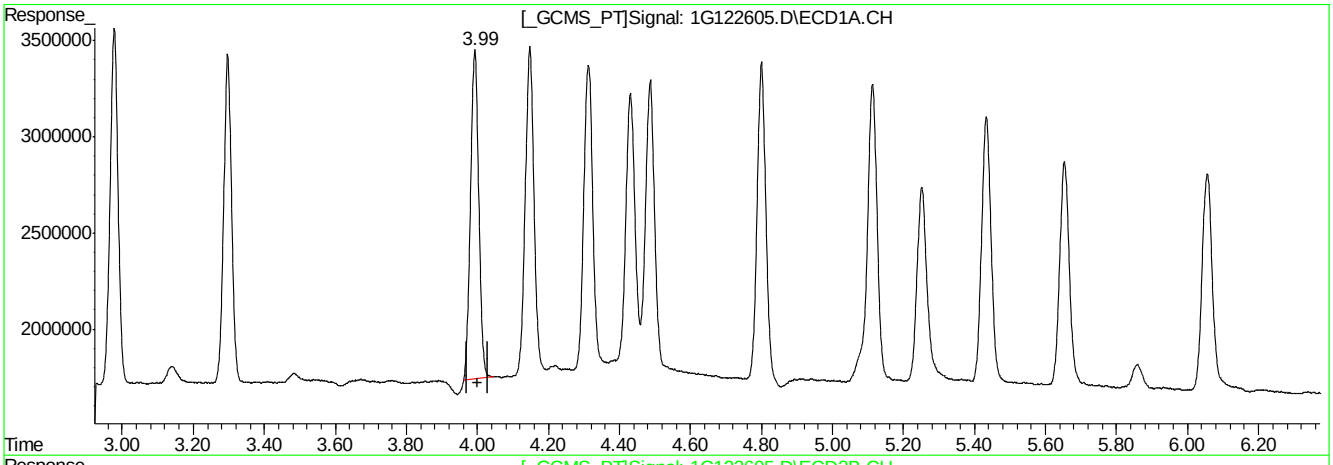
9.3.3.8

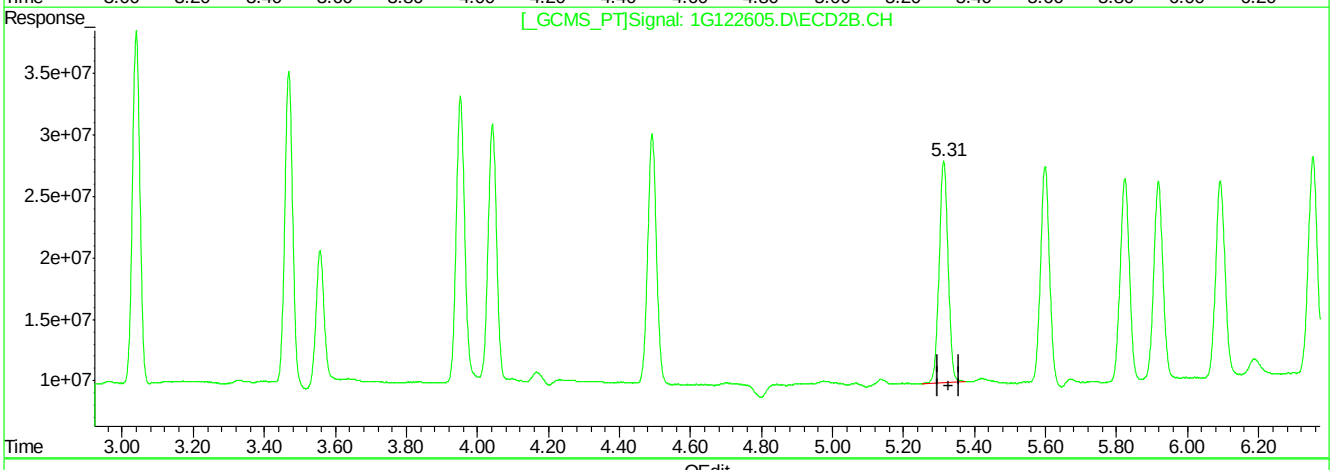
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122605.D\ECD1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122605.D\ECD2B.CH
Acq On    : 4-29-16 09:50:33 AM                      Operator: brittanp
Sample    : op93471-bs1                              Inst    : GC1G
Misc      : op9371,g1g39765,15.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 29 10:03 2016  Quant Results File: 1PST3973.RES
```

```
Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(9) Heptachlor Epoxide (B)

3.99min 17.036PPB m

response 27788539

(9) Heptachlor Epoxide #2 (B)

5.31min 17.786PPB

response 315967193

(+) = Expected Retention Time

1G122605.D 1PST3973.M Fri Apr 29 11:09:49 2016 RPT1

9.3.3.9

9

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
05/02/16 10:03

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122619.D\ECD1A.CH Vial: 22
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122619.D\ECD2B.CH
Acq On : 4-29-16 02:09:35 PM Operator: brittanp
Sample : op93471-ms Inst : GC1G
Misc : op93471,g1g3976,15.8,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 29 15:25 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Apr 27 16:13:45 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3973.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	66473745	954.4E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.16	1.53	66473745	954.4E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.16	1.53	66473745	954.4E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.37	33454695	428.8E6	24.018m	24.843
Spiked Amount	40.000	Range	30 - 150	Recovery	=	60.05%	62.11%
24) SA	Decachlorobiphen	8.93	10.86	51646888	229.6E6	20.999	22.799
Spiked Amount	40.000			Recovery	=	52.50%	57.00%
	Target Compounds						
3) A	alpha-BHC	2.22	3.04	23933340	382.6E6	13.998	14.628
4) MA	gamma-BHC	2.51	3.47	22808600	366.1E6	13.769	15.741
5) MA	Heptachlor	2.98	4.04	25968132	306.2E6	14.330	14.957
6) B	beta-BHC	2.59	3.56	12244036	142.3E6	15.016	14.464
7) B	delta-BHC	2.77	3.95	21466453	341.0E6	15.288	15.728
8) MB	Aldrin	3.30	4.49	23783798	307.0E6	13.510	14.132
9) B	Heptachlor Epoxi	3.99	5.31	25289749	275.9E6	14.324m	14.390
10) B	gamma-Chlordane	4.15	5.60	25478584	213.7E6	14.243	11.307
11) B	alpha-Chlordane	4.31	5.82	26406596	266.2E6	14.688	14.430
12) A	Endosulfan I	4.49	5.92	23157525	251.6E6	12.059	13.768
13) B	4,4'-DDE	4.43	6.09	21318299	207.9E6	14.687	11.378
14) MA	Dieldrin	4.80	6.35	23905112	288.8E6	13.715	14.925
15) MA	Endrin	5.11	6.86	24748723	252.2E6	15.464	14.729
16) A	4,4'-DDD	5.25	7.04	16755464	213.4E6	13.697	13.369
17) B	Endosulfan II	5.43	7.21	21289133	235.1E6	13.208	13.850
18) MA	4,4'-DDT	5.65	7.58	18492210	184.2E6	16.158	17.948
19) B	Endrin Aldehyde	6.05	7.78	21704975	164.4E6	16.150	13.461
20) B	Endosulfan Sulfa	6.73	8.25	19398903	224.4E6	12.964	16.276
21) A	Methoxychlor	6.43	8.83	12562512	82124072	16.211m	14.141
23) B	Endrin Ketone	7.15	9.22	24023286	210.9E6	16.180	16.514

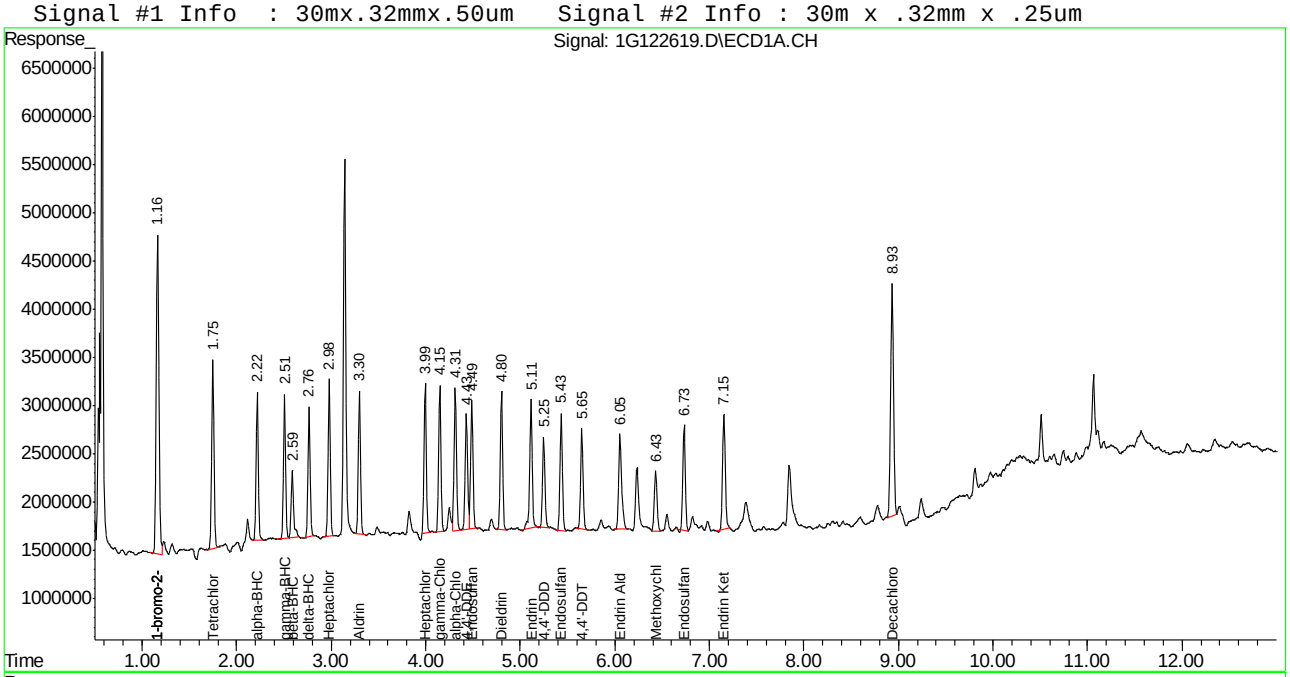
(f)=RT Delta > 1/2 Window (m)=manual int.

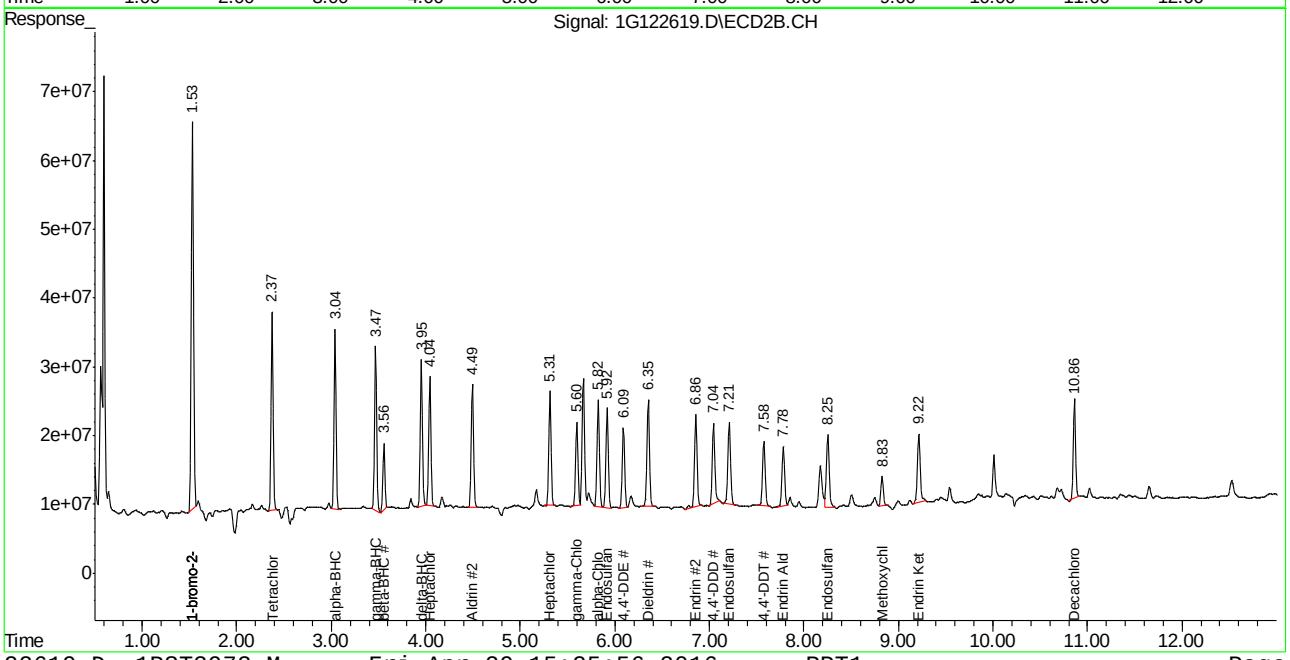
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122619.D\ECD1A.CH Vial: 22
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122619.D\ECD2B.CH
Acq On : 4-29-16 02:09:35 PM Operator: brittanp
Sample : op93471-ms Inst : GC1G
Misc : op93471,g1g3976,15.8,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 29 15:25 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3973.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

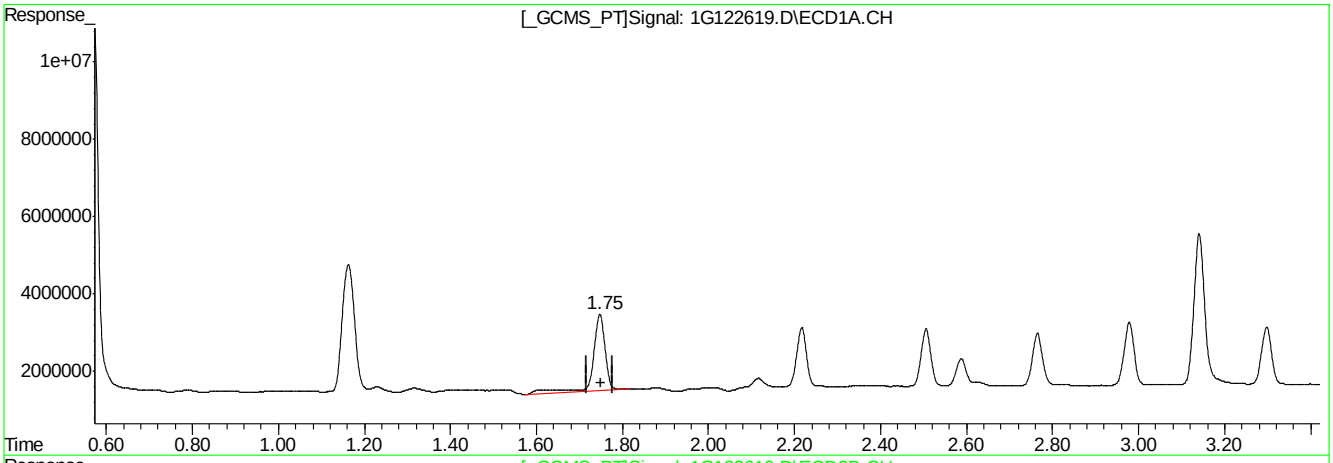
Sample Number:	OP93471-MS	**Method:**	SW846 8081B
Lab FileID:	1G122619.D	**Analyst approved:**	04/29/16 15:28 Dhara Saparia
Injection Time:	04/29/16 14:09	**Supervisor approved:**	05/02/16 10:03 Gwendolyn Burns

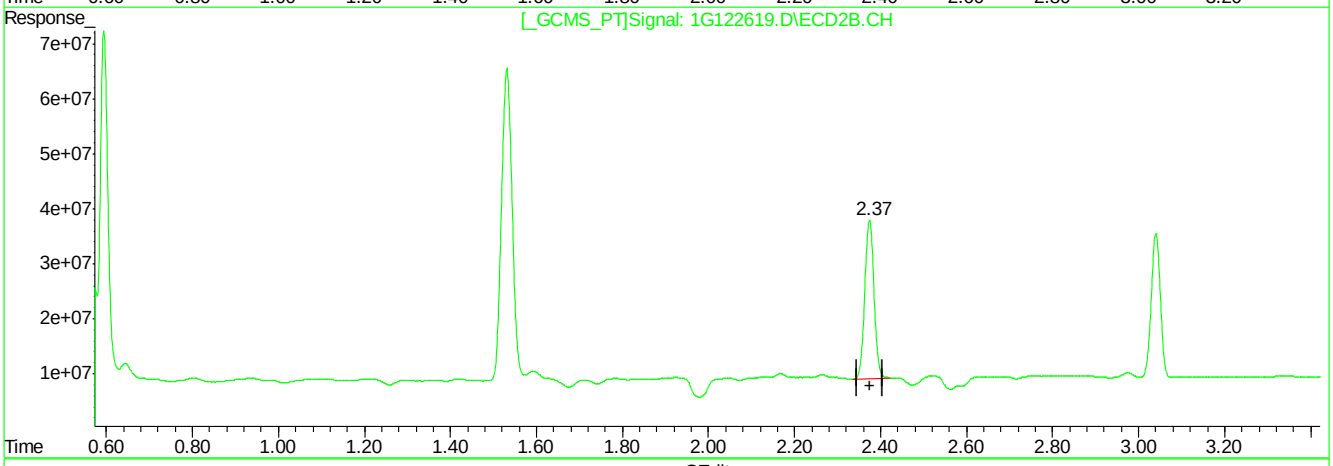
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	1.75	Poor instrument integration
Heptachlor epoxide	1024-57-3	1	3.99	Poor instrument integration
Methoxychlor	72-43-5	1	6.43	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122619.D\ECD1A.CH Vial: 22
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122619.D\ECD2B.CH
Acq On    : 4-29-16 02:09:35 PM                      Operator: brittanp
Sample    : op93471-ms                               Inst    : GC1G
Misc      : op93471,g1g3976,15.8,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 29 15:24 2016  Quant Results File: 1PST3973.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(2) Tetrachloro-m-xylene (SAB)

1.75min 28.191PPB

response 39266895

(2) Tetrachloro-m-xylene #2 (SAB)

2.37min 24.843PPB

response 428838420

(+) = Expected Retention Time

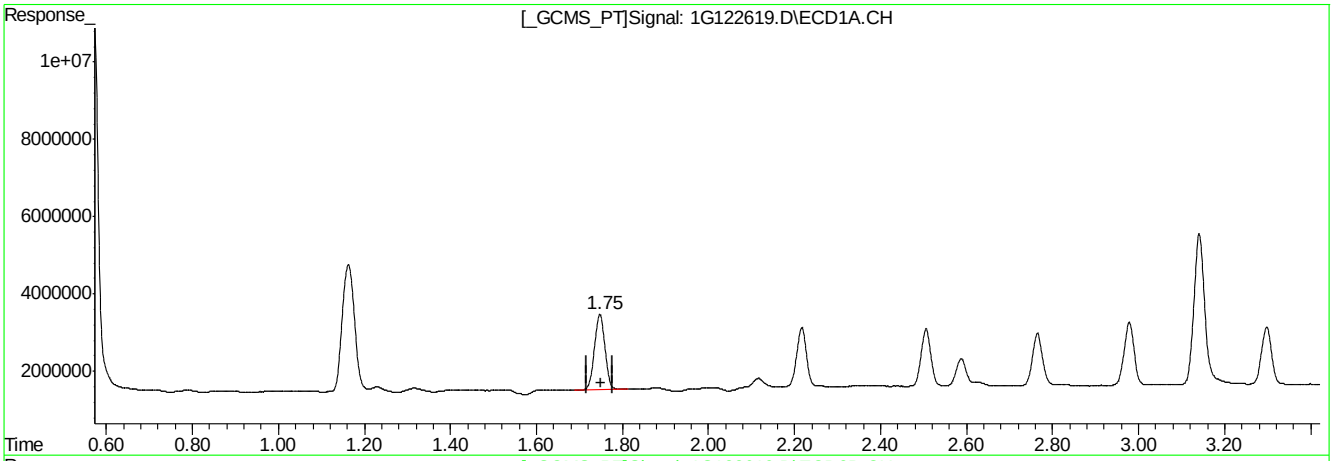
1G122619.D 1PST3973.M Fri Apr 29 15:24:41 2016 RPT1

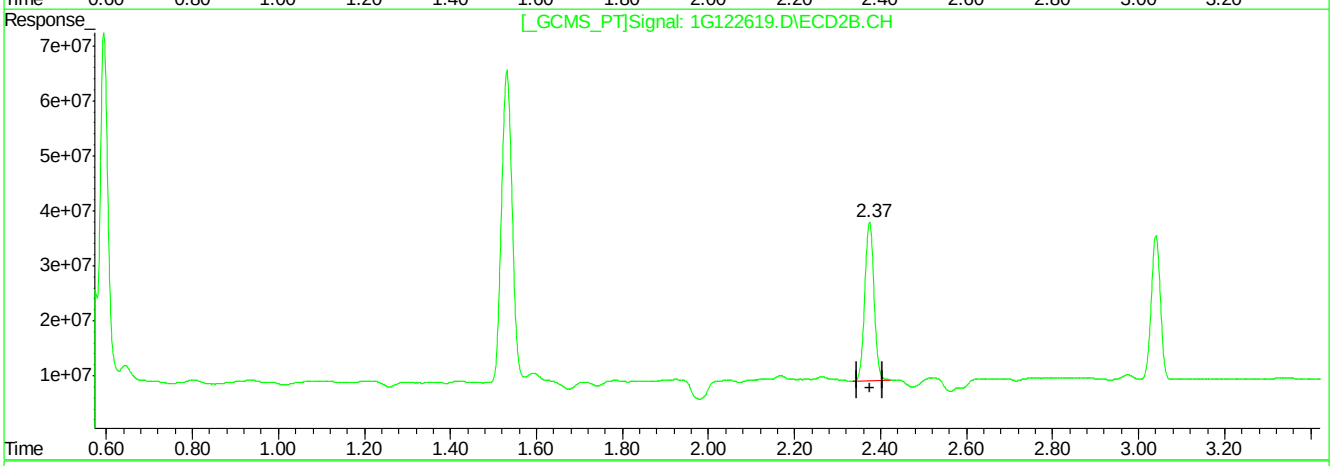
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122619.D\ECD1A.CH Vial: 22
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122619.D\ECD2B.CH
Acq On    : 4-29-16 02:09:35 PM                      Operator: brittanp
Sample    : op93471-ms                               Inst    : GC1G
Misc      : op93471,g1g3976,15.8,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 29 15:24 2016  Quant Results File: 1PST3973.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(2) Tetrachloro-m-xylene (SAB)

1.75min 24.018PPB m

response 33454695

(2) Tetrachloro-m-xylene #2 (SAB)

2.37min 24.843PPB

response 428838420

(+) = Expected Retention Time

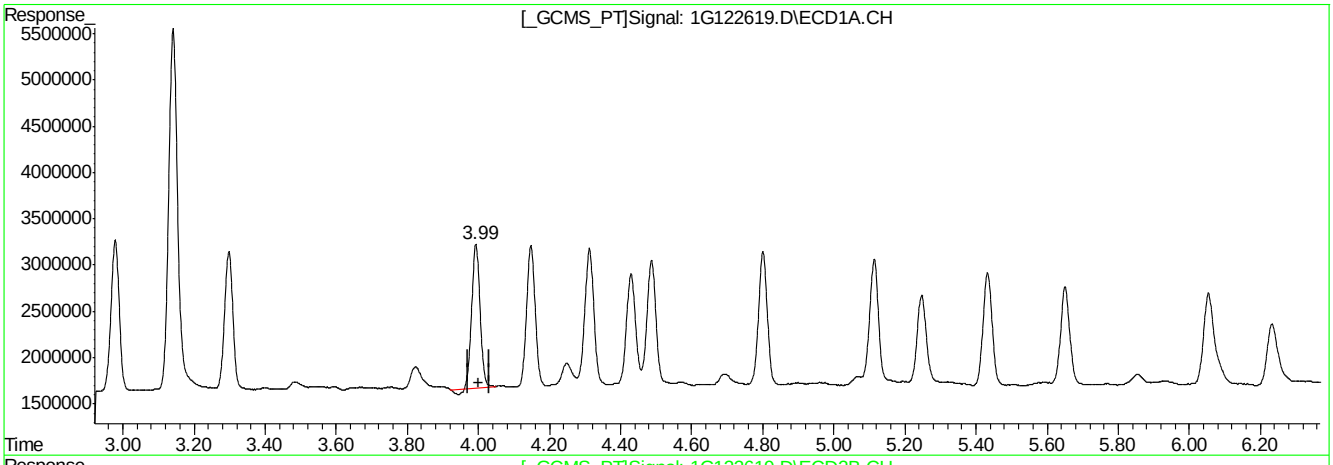
1G122619.D 1PST3973.M Fri Apr 29 15:24:49 2016 RPT1

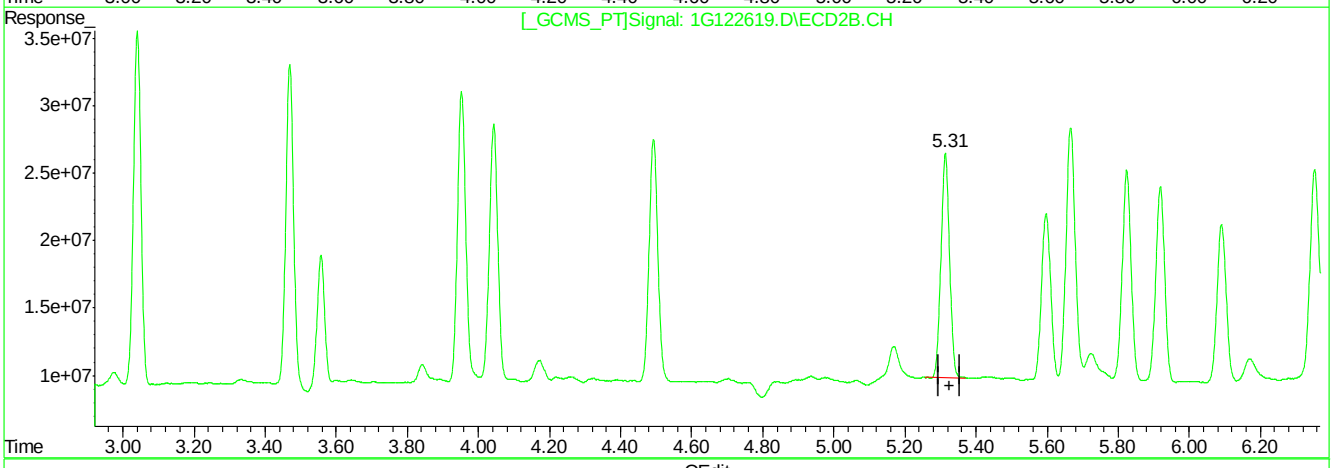
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122619.D\ECD1A.CH Vial: 22
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122619.D\ECD2B.CH
Acq On    : 4-29-16 02:09:35 PM                      Operator: brittanp
Sample    : op93471-ms                               Inst    : GC1G
Misc      : op93471,g1g3976,15.8,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 29 15:24 2016  Quant Results File: 1PST3973.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(9) Heptachlor Epoxide (B)

3.99min 14.158PPB

response 24996892

(9) Heptachlor Epoxide #2 (B)

5.31min 14.390PPB

response 275896269

(+) = Expected Retention Time

1G122619.D 1PST3973.M Fri Apr 29 15:24:56 2016 RPT1

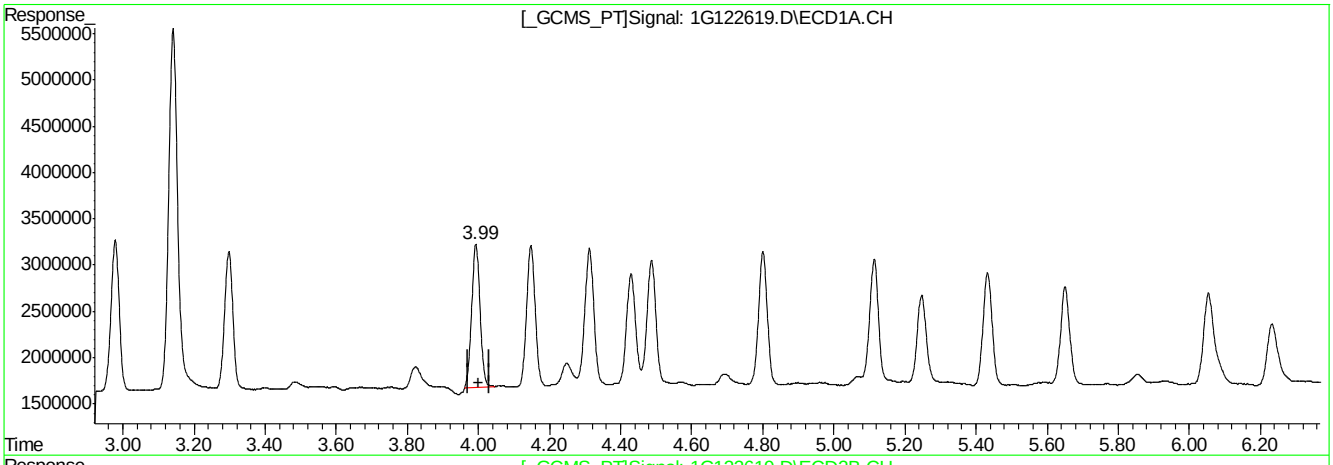
9.4.1.4

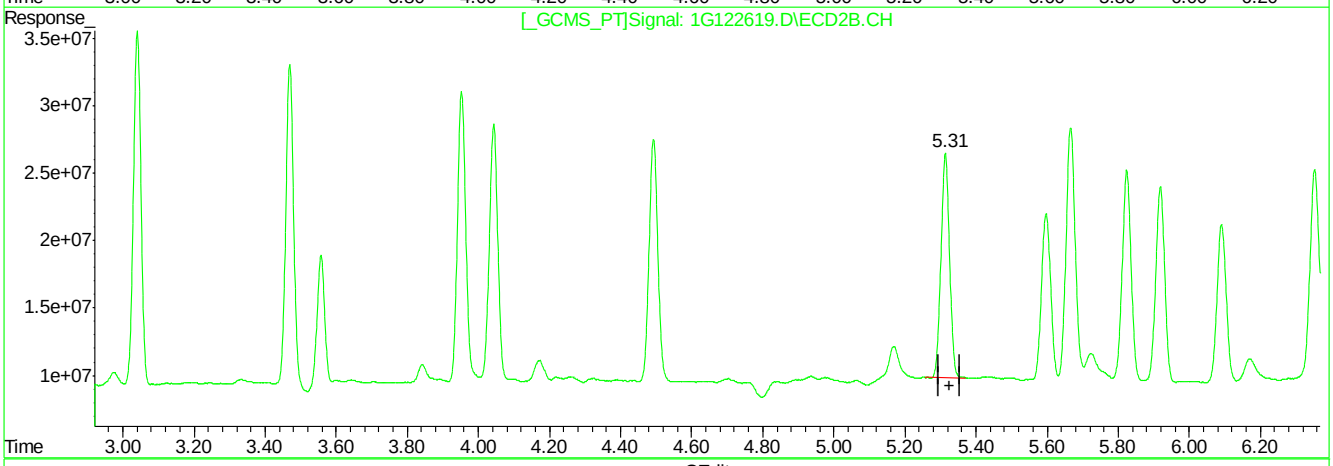
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122619.D\ECD1A.CH Vial: 22
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122619.D\ECD2B.CH
Acq On    : 4-29-16 02:09:35 PM                      Operator: brittanp
Sample    : op93471-ms                               Inst    : GC1G
Misc      : op93471,g1g3976,15.8,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 29 15:24 2016  Quant Results File: 1PST3973.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(9) Heptachlor Epoxide (B)

3.99min 14.324PPB m

response 25289749

(9) Heptachlor Epoxide #2 (B)

5.31min 14.390PPB

response 275896269

(+) = Expected Retention Time

1G122619.D 1PST3973.M Fri Apr 29 15:25:15 2016 RPT1

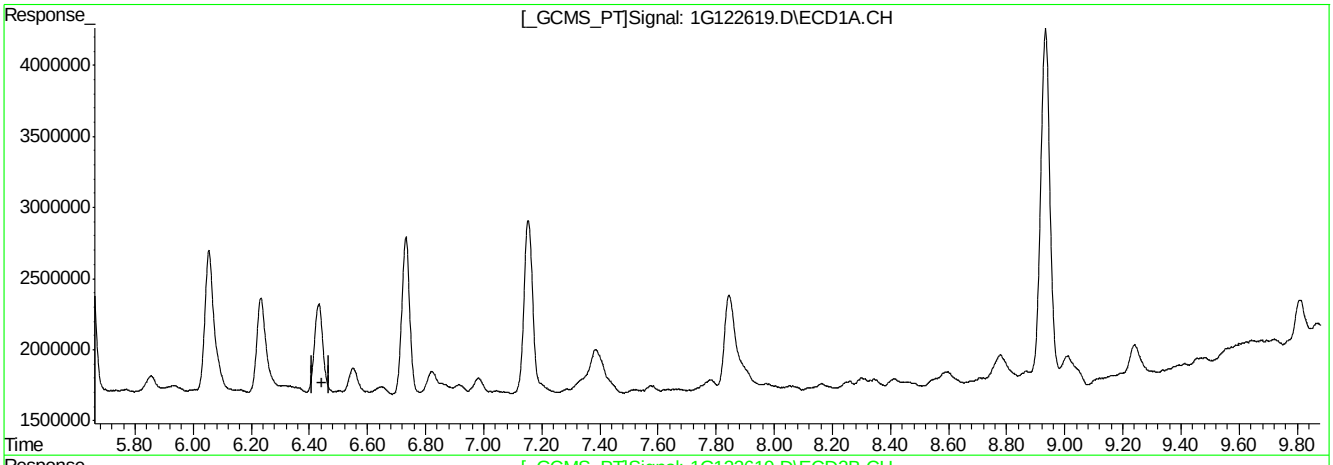
9.4.1.5

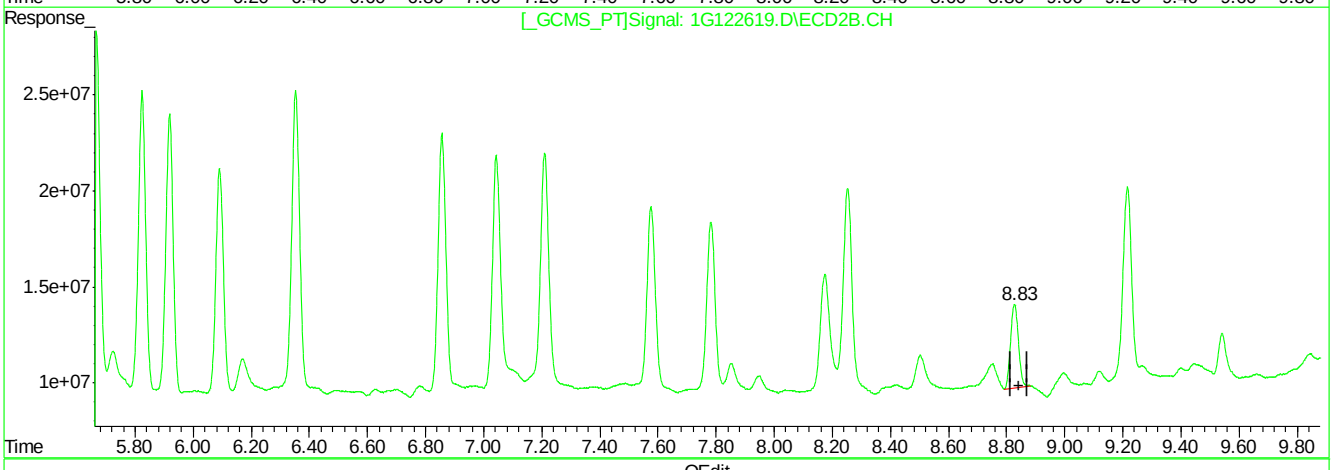
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122619.D\ECD1A.CH Vial: 22
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122619.D\ECD2B.CH
Acq On    : 4-29-16 02:09:35 PM                      Operator: brittanp
Sample    : op93471-ms                               Inst    : GC1G
Misc      : op93471,g1g3976,15.8,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 29 15:24 2016  Quant Results File: 1PST3973.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(21) Methoxychlor (A)

0.00min 0.000PPB

response 0

(21) Methoxychlor #2 (A)

8.83min 14.141PPB

response 82124072

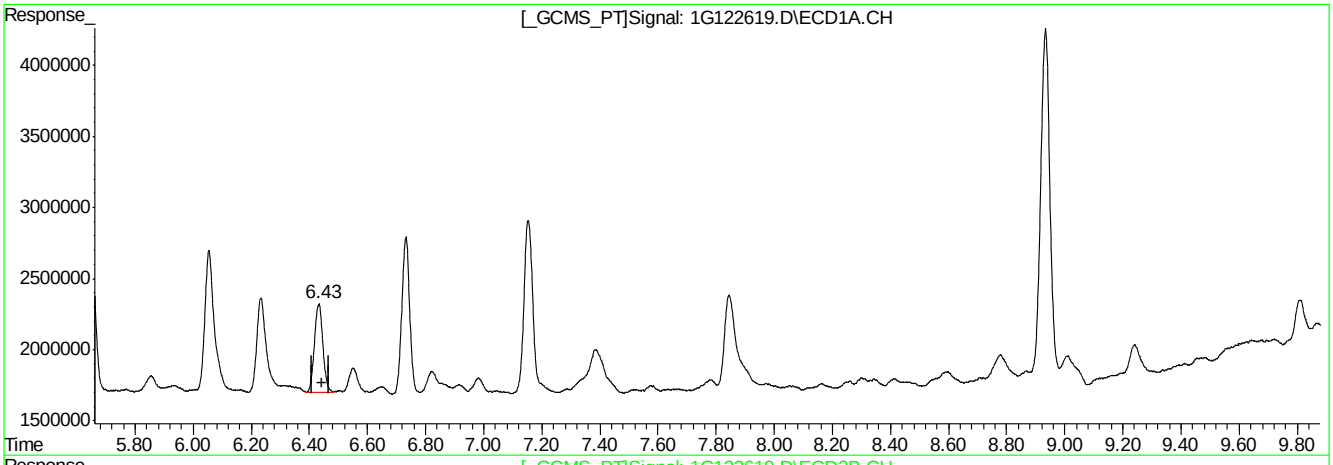
(+) = Expected Retention Time

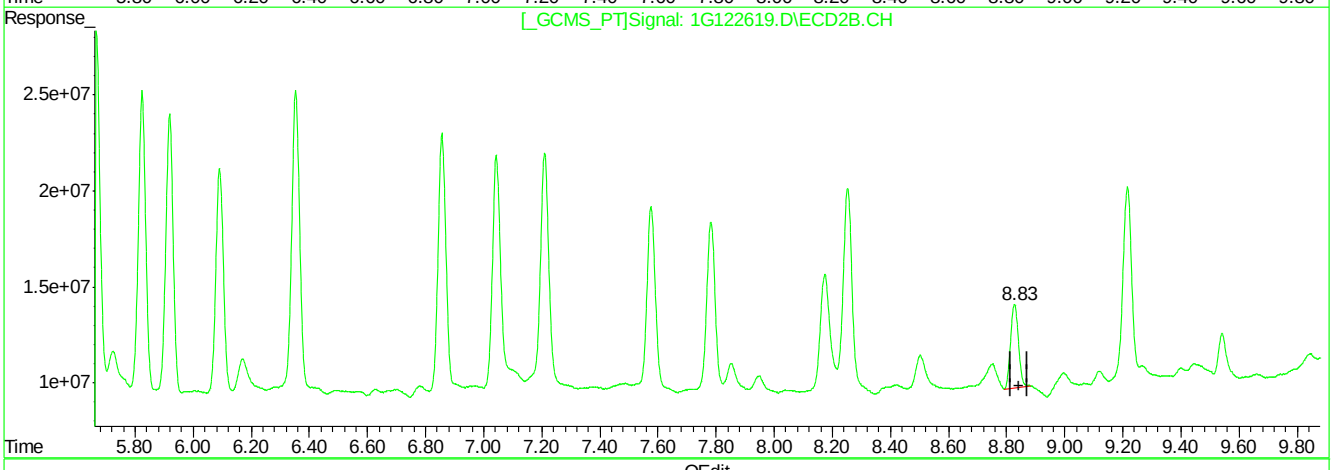
1G122619.D 1PST3973.M Fri Apr 29 15:25:26 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122619.D\ECD1A.CH Vial: 22
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122619.D\ECD2B.CH
Acq On    : 4-29-16 02:09:35 PM                      Operator: brittanp
Sample    : op93471-ms                               Inst    : GC1G
Misc      : op93471,g1g3976,15.8,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 29 15:24 2016  Quant Results File: 1PST3973.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(21) Methoxychlor (A)

6.43min 16.211PPB m

response 12562512

(21) Methoxychlor #2 (A)

8.83min 14.141PPB

response 82124072

(+) = Expected Retention Time

1G122619.D 1PST3973.M Fri Apr 29 15:25:35 2016 RPT1

9.4.1.7

9

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 05/02/16 10:03

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122620.D\ECD1A.CH Vial: 23
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122620.D\ECD2B.CH
Acq On : 4-29-16 02:27:05 PM Operator: brittanp
Sample : op93471-msd Inst : GC1G
Misc : op93471,g1g3976,16.6,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 29 15:27 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Apr 27 16:13:45 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3973.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	62055949	897.1E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.16	1.53	62055949	897.1E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.16	1.53	62055949	897.1E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	41610203	530.7E6	32.000m	32.708
Spiked Amount	40.000 Range	30 - 150	Recovery	=		80.00%	81.77%
24) SA	Decachlorobiphen	8.93	10.86	62819372	287.4E6	27.361	30.364
Spiked Amount	40.000		Recovery	=		68.40%	75.91%
	Target Compounds						
3) A	alpha-BHC	2.22	3.04	30408404	462.8E6	19.052	18.825
4) MA	gamma-BHC	2.51	3.47	28675041	437.8E6	18.543	20.026
5) MA	Heptachlor	2.98	4.04	31737982	369.3E6	18.761	19.192
6) B	beta-BHC	2.59	3.56	16112851	170.0E6	21.167	18.374
7) B	delta-BHC	2.77	3.95	26720728	408.7E6	20.384	20.048
8) MB	Aldrin	3.30	4.49	29752680	370.5E6	18.103	18.147
9) B	Heptachlor Epoxi	3.99	5.31	31213110	334.8E6	18.937m	18.577
10) B	gamma-Chlordane	4.15	5.60	30809196	252.7E6	18.449	14.224
11) B	alpha-Chlordane	4.31	5.82	32173233	318.9E6	19.170	18.396
12) A	Endosulfan I	4.49	5.92	29089493	302.8E6	16.227	17.629
13) B	4,4'-DDE	4.43	6.09	26868113	248.7E6	19.828	14.481
14) MA	Dieldrin	4.80	6.35	29965816	346.0E6	18.416	19.022
15) MA	Endrin	5.11	6.86	31131351	305.3E6	20.837	18.968
16) A	4,4'-DDD	5.25	7.04	20836216	258.5E6	18.245	17.229
17) B	Endosulfan II	5.43	7.21	26424161	283.0E6	17.561	17.733
18) MA	4,4'-DDT	5.65	7.58	22768701	218.0E6	21.311	22.606
19) B	Endrin Aldehyde	6.05	7.78	22548117	196.4E6	17.972	17.108
20) B	Endosulfan Sulfa	6.73	8.25	24467360	266.0E6	17.516	20.526
21) A	Methoxychlor	6.43	8.83	15077344	98155536	20.842m	17.980
23) B	Endrin Ketone	7.15	9.22	31555496	260.6E6	22.766	21.709

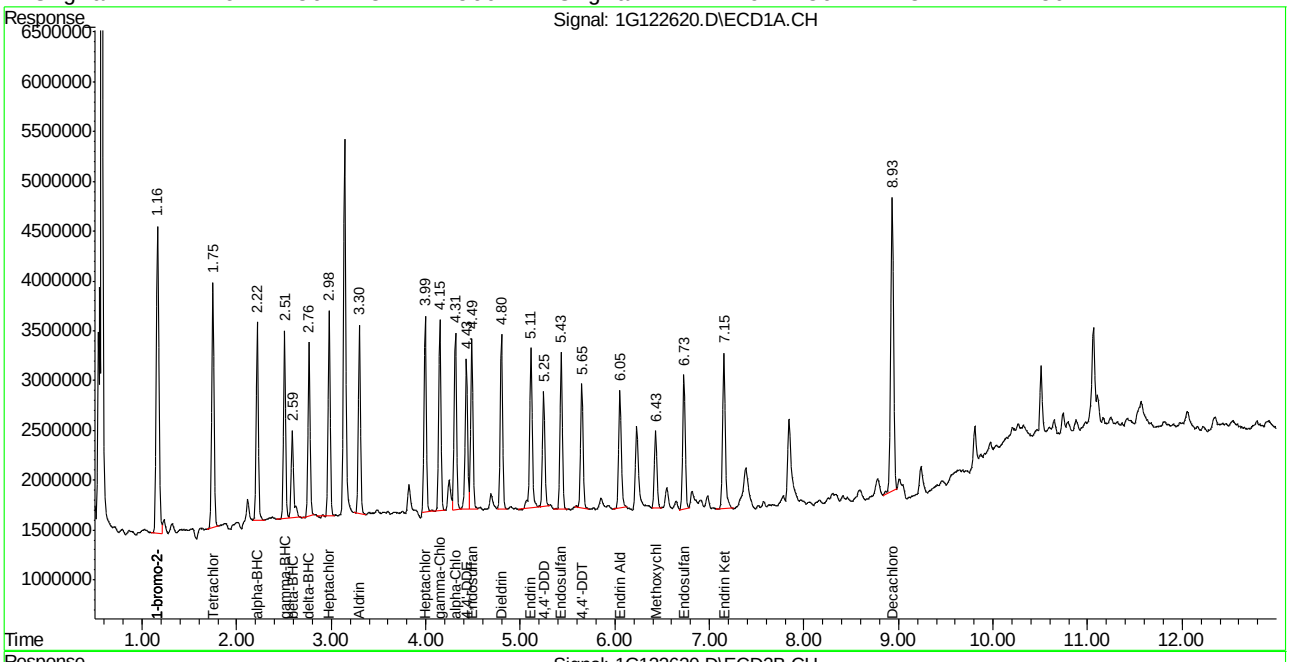
(f)=RT Delta > 1/2 Window (m)=manual int.
1G122620.D 1PST3973.M Fri Apr 29 15:27:17 2016 RPT1 Page 1

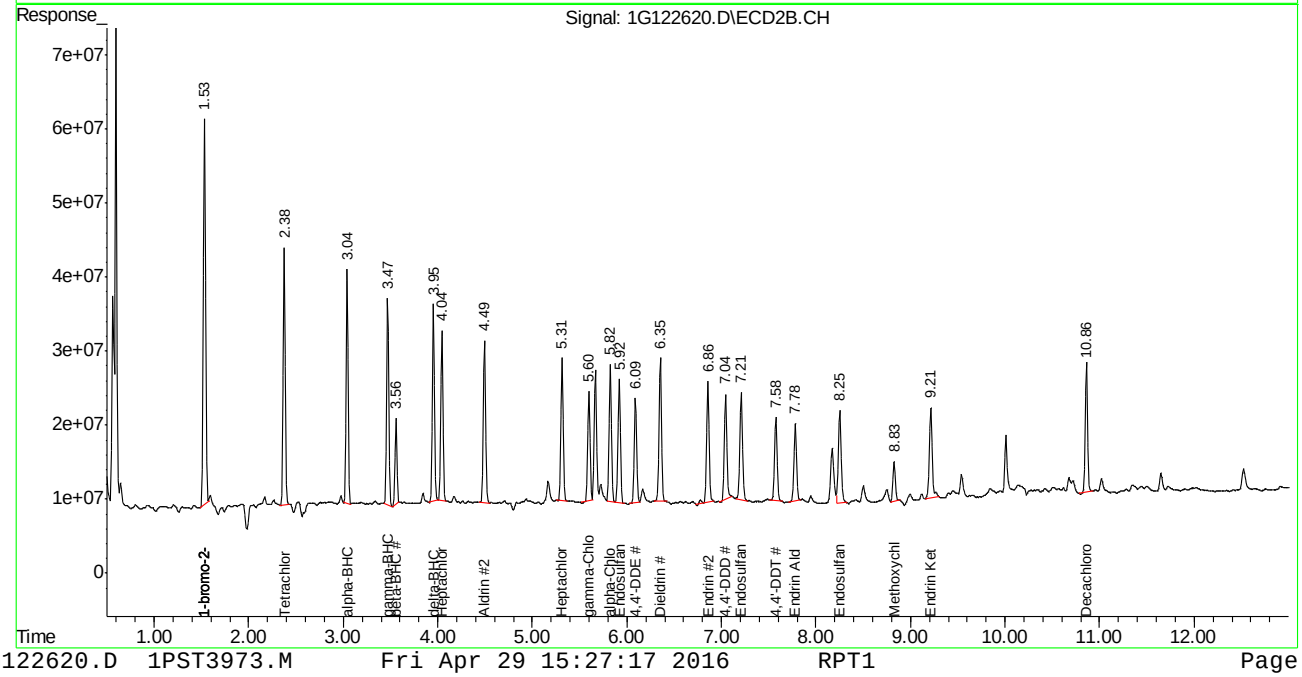
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122620.D\ECD1A.CH Vial: 23
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122620.D\ECD2B.CH
Acq On : 4-29-16 02:27:05 PM Operator: brittanp
Sample : op93471-msd Inst : GC1G
Misc : op93471,g1g3976,16.6,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 29 15:27 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3973.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

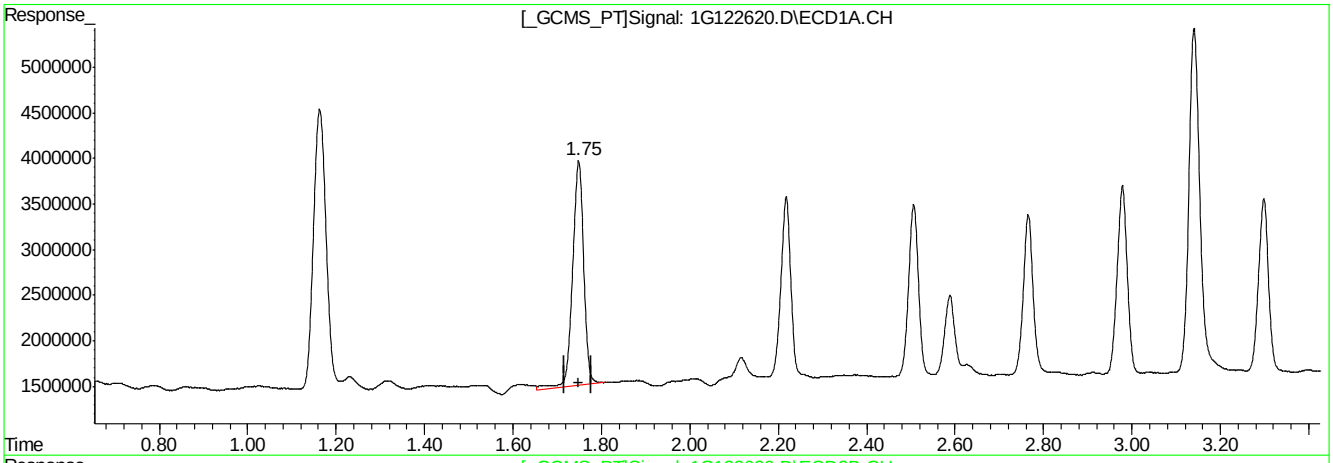
Sample Number:	OP93471-MSD	**Method:**	SW846 8081B
Lab FileID:	1G122620.D	**Analyst approved:**	04/29/16 15:28 Dhara Saparia
Injection Time:	04/29/16 14:27	**Supervisor approved:**	05/02/16 10:03 Gwendolyn Burns

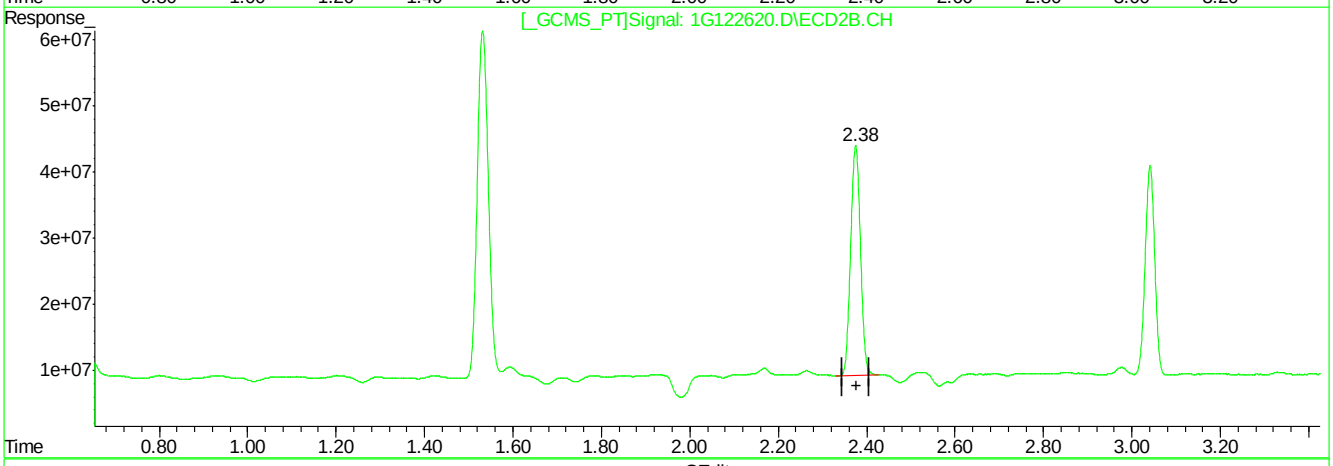
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	1.75	Poor instrument integration
Heptachlor epoxide	1024-57-3	1	3.99	Poor instrument integration
Methoxychlor	72-43-5	1	6.43	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122620.D\ECD1A.CH Vial: 23
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122620.D\ECD2B.CH
Acq On    : 4-29-16 02:27:05 PM                      Operator: brittanp
Sample    : op93471-msd                              Inst    : GC1G
Misc      : op93471,g1g3976,16.6,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 29 15:26 2016  Quant Results File: 1PST3973.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(2) Tetrachloro-m-xylene (SAB)

1.75min 33.439PPB

response 43481222

(2) Tetrachloro-m-xylene #2 (SAB)

2.38min 32.708PPB

response 530725112

(+) = Expected Retention Time

1G122620.D 1PST3973.M Fri Apr 29 15:26:11 2016 RPT1

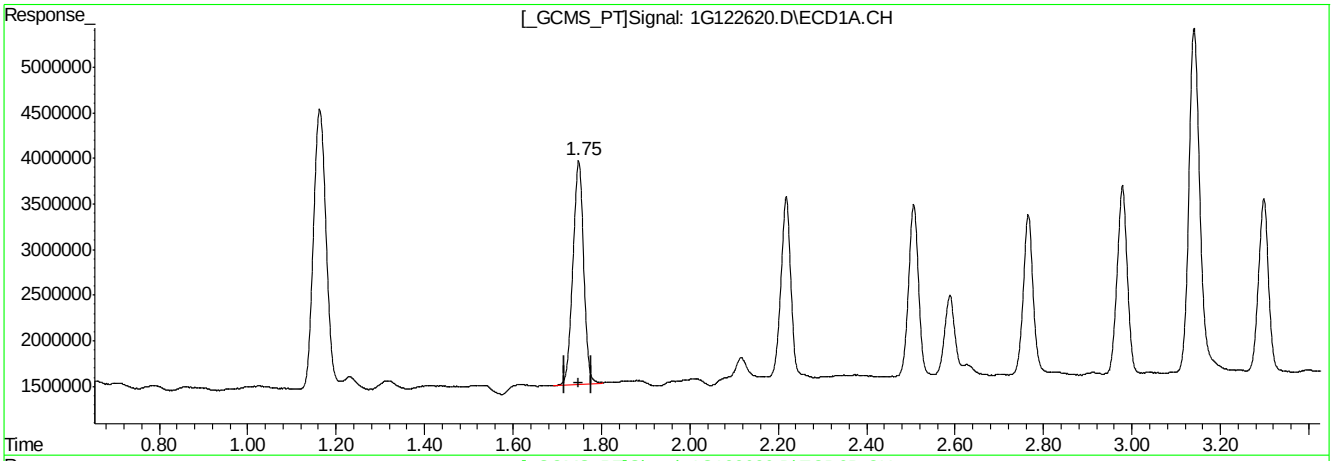
9.4.2.2

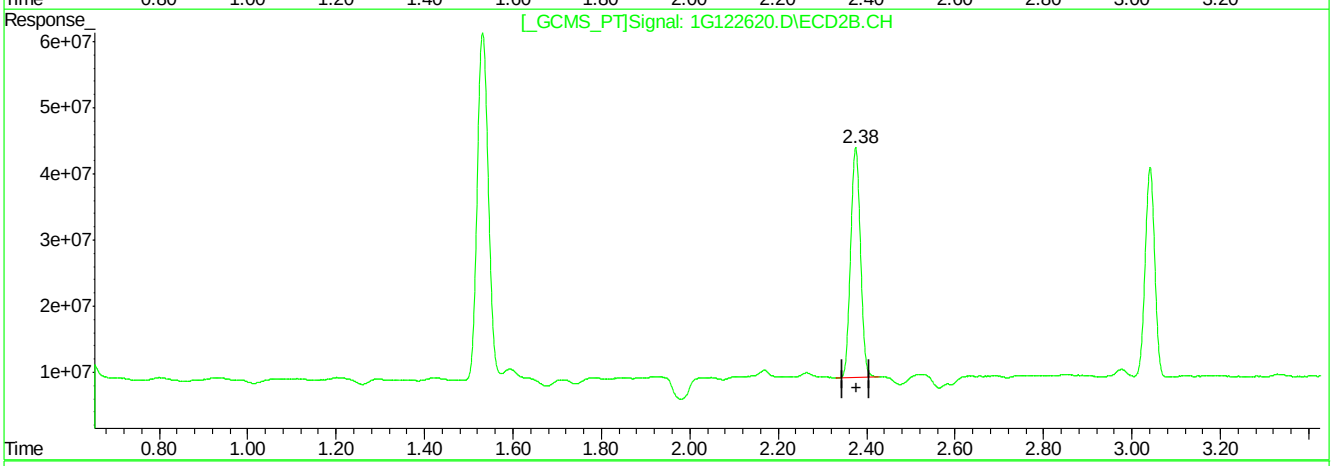
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122620.D\ECD1A.CH Vial: 23
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122620.D\ECD2B.CH
Acq On    : 4-29-16 02:27:05 PM                      Operator: brittanp
Sample    : op93471-msd                              Inst    : GC1G
Misc      : op93471,g1g3976,16.6,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 29 15:26 2016  Quant Results File: 1PST3973.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(2) Tetrachloro-m-xylene (SAB)

1.75min 32.000PPB m

response 41610203

(2) Tetrachloro-m-xylene #2 (SAB)

2.38min 32.708PPB

response 530725112

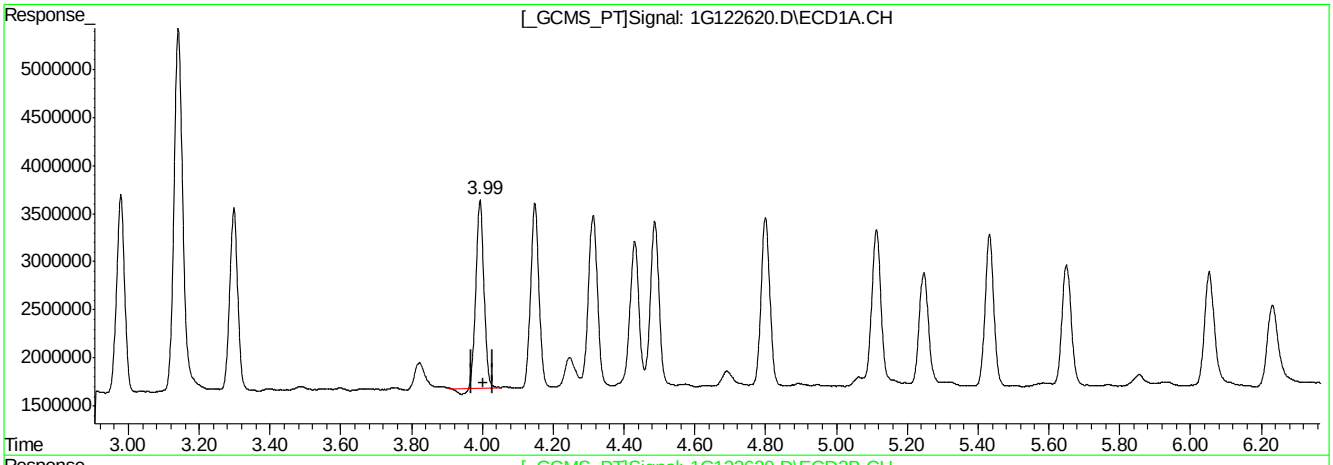
(+) = Expected Retention Time

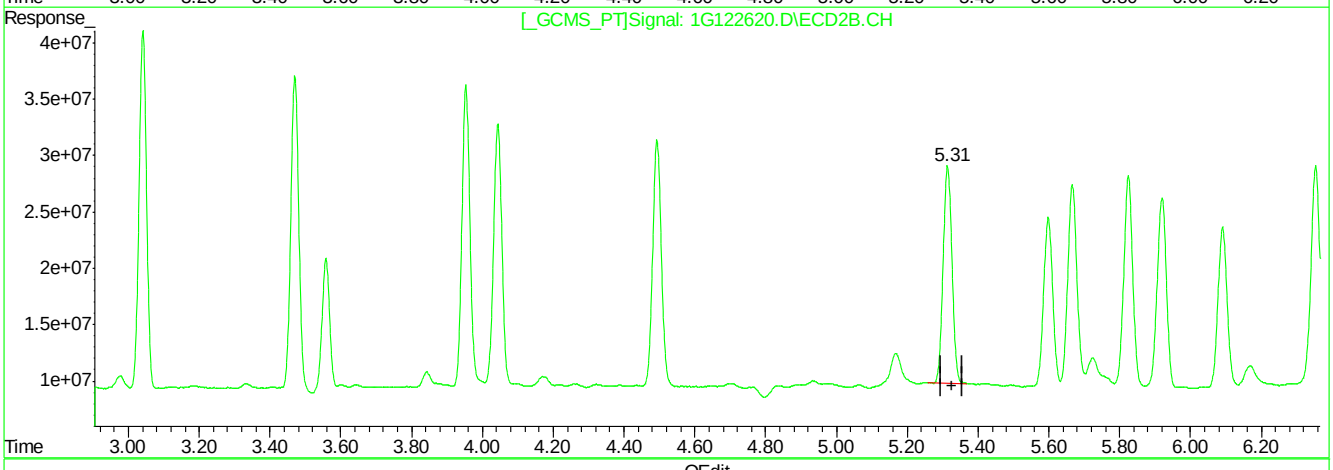
1G122620.D 1PST3973.M Fri Apr 29 15:26:21 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122620.D\ECD1A.CH Vial: 23
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122620.D\ECD2B.CH
Acq On    : 4-29-16 02:27:05 PM                      Operator: brittanp
Sample    : op93471-msd                              Inst    : GC1G
Misc      : op93471,g1g3976,16.6,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 29 15:26 2016  Quant Results File: 1PST3973.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(9) Heptachlor Epoxide (B)

3.99min 18.218PPB

response 30027482

(9) Heptachlor Epoxide #2 (B)

5.31min 18.577PPB

response 334786113

(+) = Expected Retention Time

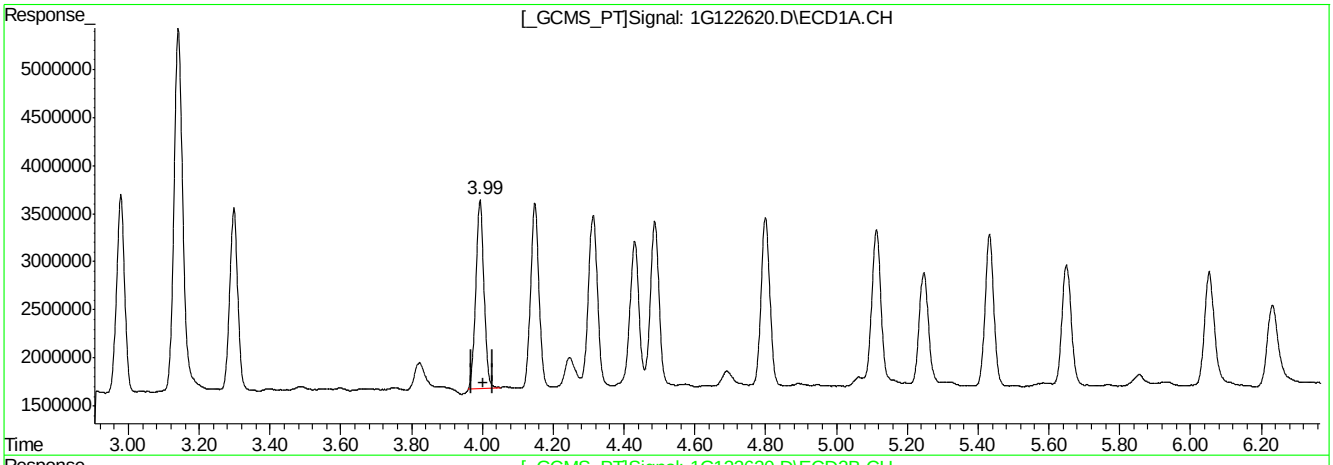
1G122620.D 1PST3973.M Fri Apr 29 15:26:28 2016 RPT1

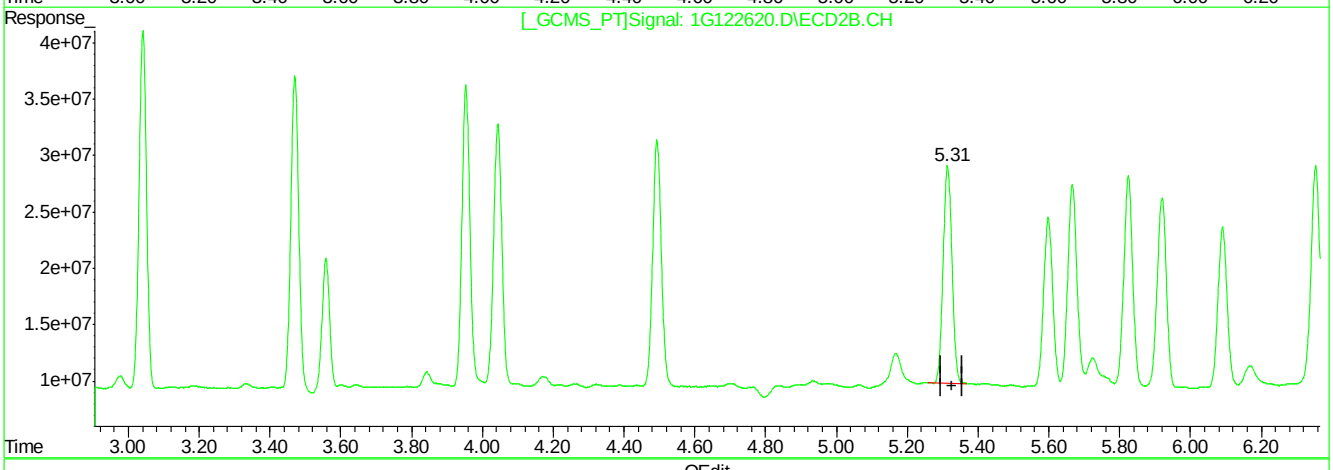
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122620.D\ECD1A.CH Vial: 23
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122620.D\ECD2B.CH
Acq On    : 4-29-16 02:27:05 PM                      Operator: brittanp
Sample    : op93471-msd                              Inst    : GC1G
Misc      : op93471,g1g3976,16.6,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 29 15:26 2016  Quant Results File: 1PST3973.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(9) Heptachlor Epoxide (B)

3.99min 18.937PPB m

response 31213110

(9) Heptachlor Epoxide #2 (B)

5.31min 18.577PPB

response 334786113

(+) = Expected Retention Time

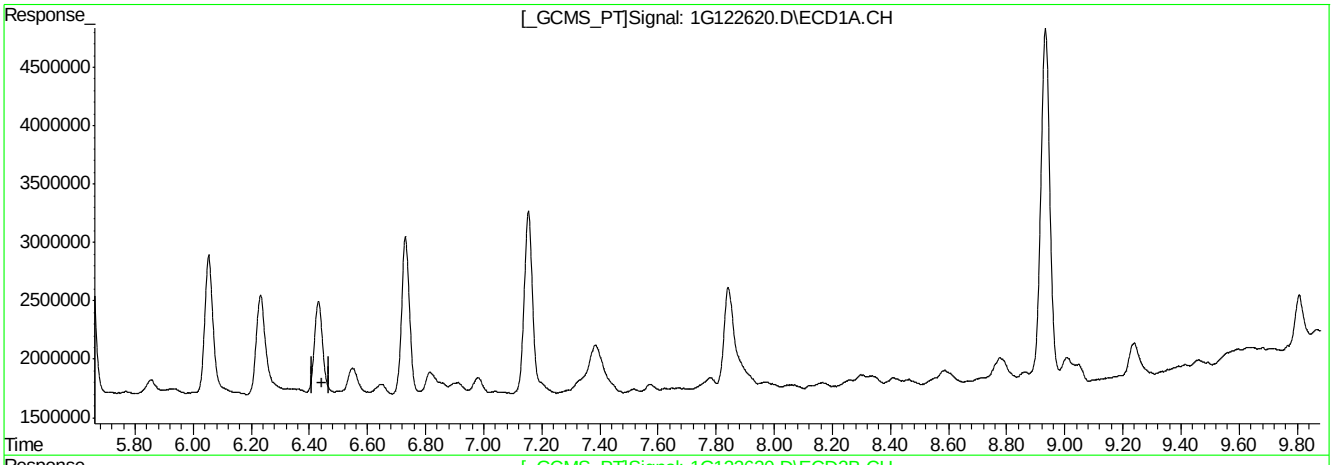
1G122620.D 1PST3973.M Fri Apr 29 15:26:37 2016 RPT1

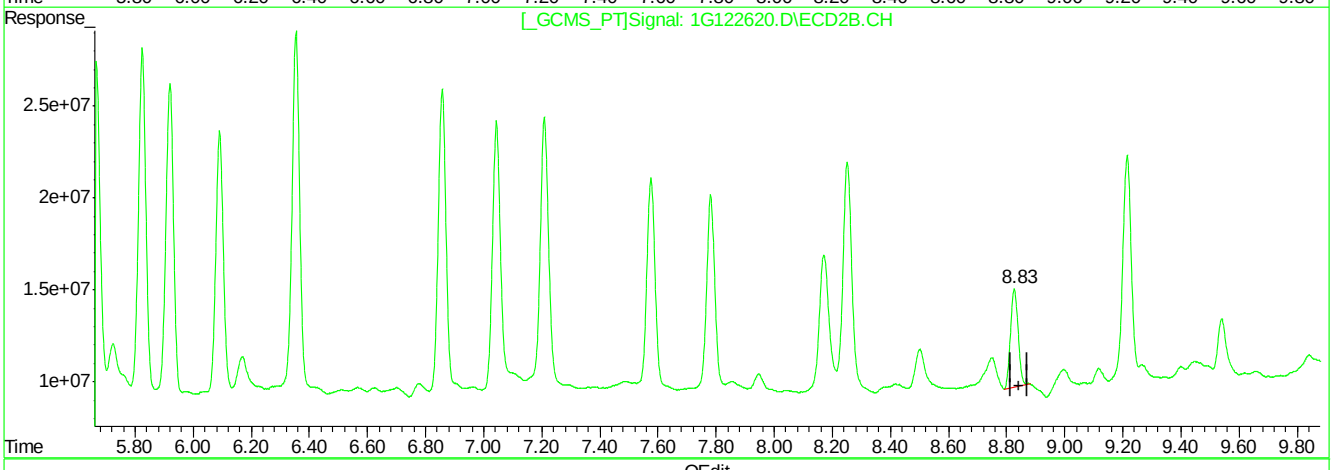
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122620.D\ECD1A.CH Vial: 23
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122620.D\ECD2B.CH
Acq On    : 4-29-16 02:27:05 PM                      Operator: brittanp
Sample    : op93471-msd                              Inst    : GC1G
Misc      : op93471,g1g3976,16.6,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 29 15:26 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(21) Methoxychlor (A)

0.00min 0.000PPB

response 0

(21) Methoxychlor #2 (A)

8.83min 17.980PPB

response 98155536

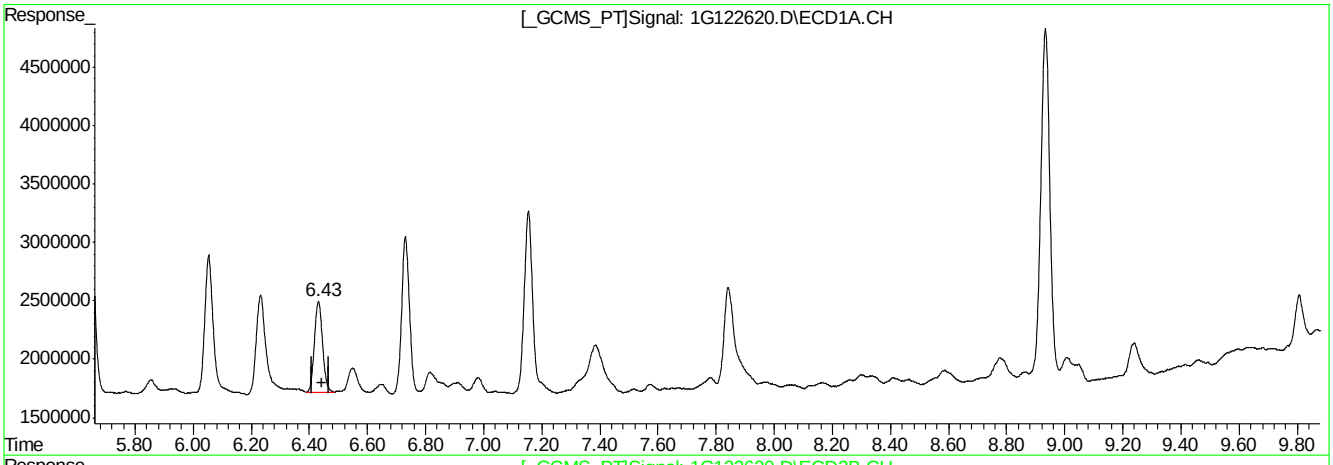
(+) = Expected Retention Time

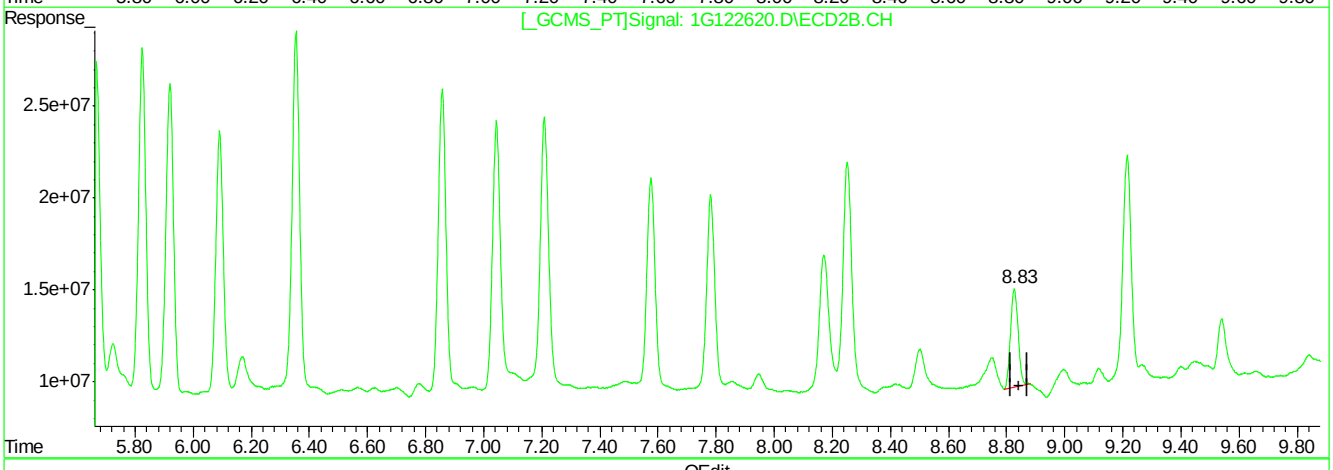
1G122620.D 1PST3973.M Fri Apr 29 15:26:49 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122620.D\ECD1A.CH Vial: 23
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122620.D\ECD2B.CH
Acq On    : 4-29-16 02:27:05 PM                      Operator: brittanp
Sample    : op93471-msd                              Inst    : GC1G
Misc      : op93471,g1g3976,16.6,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 29 15:26 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(21) Methoxychlor (A)

6.43min 20.842PPB m

response 15077344

(21) Methoxychlor #2 (A)

8.83min 17.980PPB

response 98155536

(+) = Expected Retention Time

1G122620.D 1PST3973.M Fri Apr 29 15:26:58 2016 RPT1

SGS ACCUTEST JC19023

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
04/28/16 16:54

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122523.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122523.D\ECD2B.CH
Acq On : 27 Apr 2016 11:07 am Operator: dharas
Sample : ddt Inst : GC1G
Misc : op93327,g1g3973,16.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 27 16:30 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Apr 27 16:13:45 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3973.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	55109470	880.9E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.17	1.54	55109470	880.9E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.17	1.54	55109470	880.9E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.37	24913019	352.5E6	21.574	22.126
Spiked Amount	40.000	Range	30 - 150	Recovery	=	53.94%	55.32%
24) SA	Decachlorobiphen	8.93	10.86	45257835	201.1E6	22.196	21.639
Spiked Amount	40.000			Recovery	=	55.49%	54.10%
	Target Compounds						
13) B	4,4'-DDE	4.43	6.10	1476894	23701943	1.227m	1.405
15) MA	Endrin	5.11	6.86	76410964	809.6E6	57.592	51.218
16) A	4,4'-DDD	5.26	7.05	2975832	57489674	2.934	3.903m
18) MA	4,4'-DDT	5.65	7.58	138.3E6	1188.2E6	145.805	125.458
19) B	Endrin Aldehyde	6.06	7.79	1027311	9780845	0.922m	0.868m
23) B	Endrin Ketone	7.15	9.22	4226912	46926445	3.434	3.981

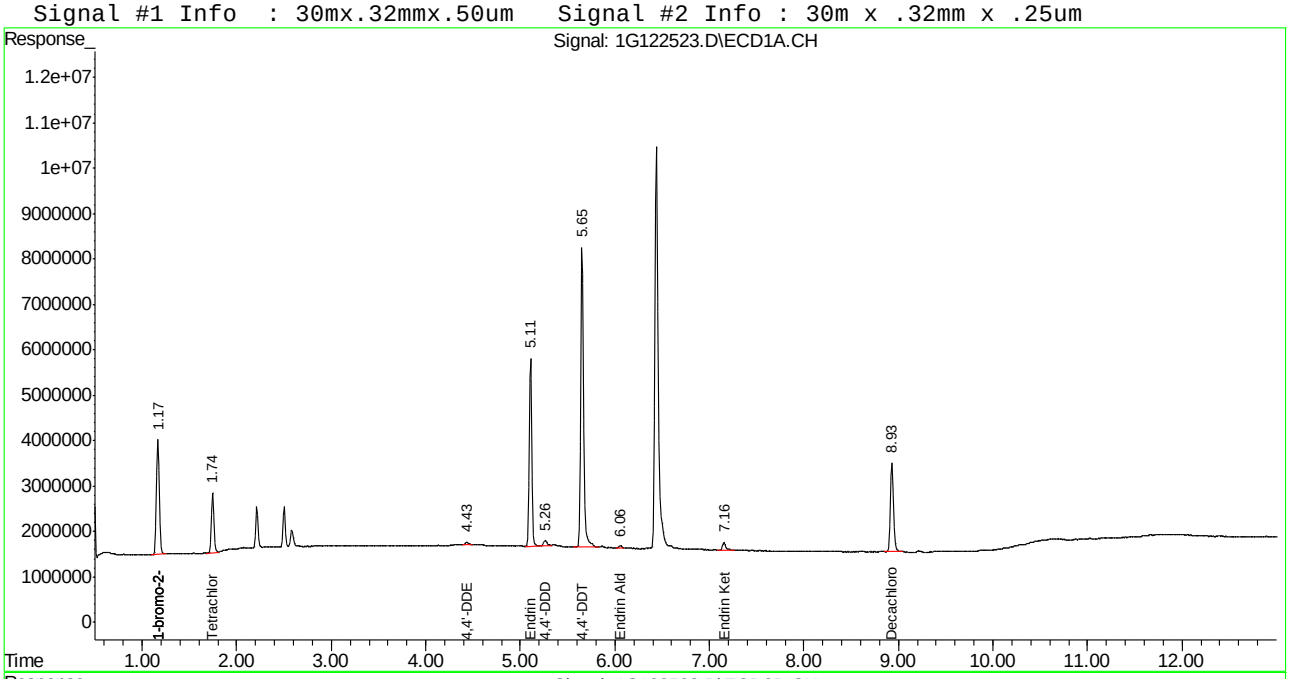
(f)=RT Delta > 1/2 Window (m)=manual int.
1G122523.D 1PST3973.M Wed Apr 27 16:31:01 2016 RPT1 Page 1

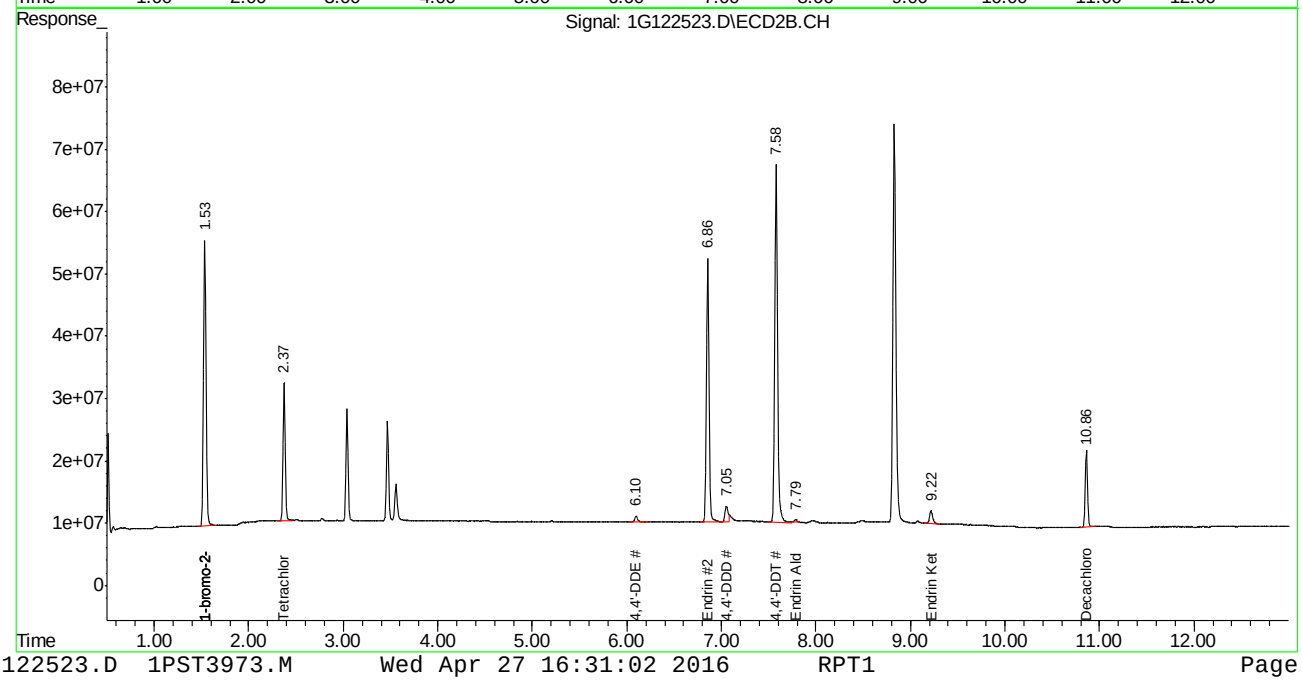
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122523.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122523.D\ECD2B.CH
Acq On : 27 Apr 2016 11:07 am Operator: dharas
Sample : ddt Inst : GC1G
Misc : op93327,g1g3973,16.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 27 16:30 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3973.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

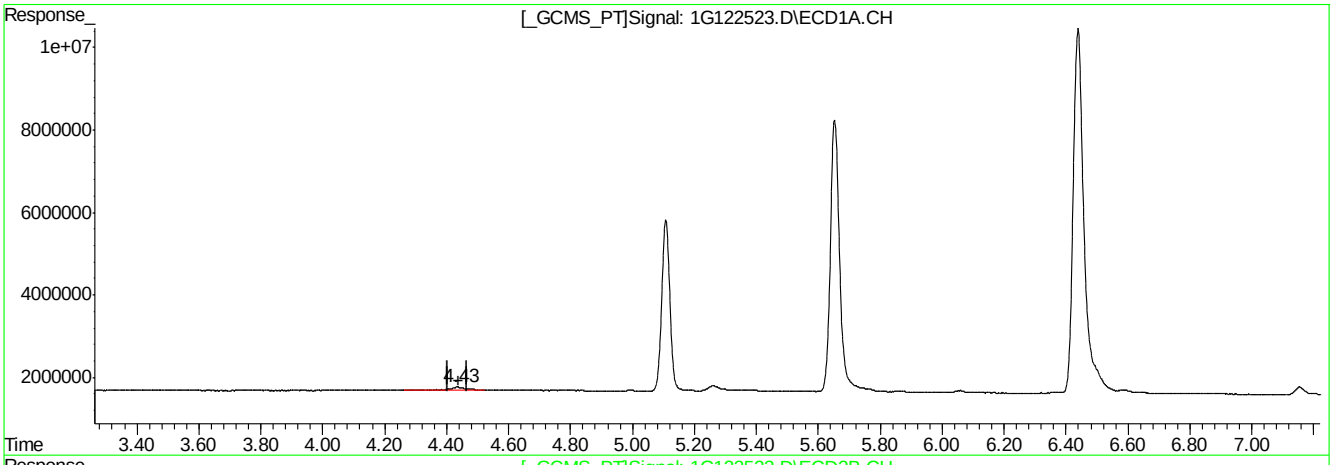
Sample Number:	G1G3973-DDT	**Method:**	SW846 8081B
Lab FileID:	1G122523.D	**Analyst approved:**	04/27/16 16:32 Dhara Saparia
Injection Time:	04/27/16 11:07	**Supervisor approved:**	04/28/16 16:54 Gwendolyn Burns

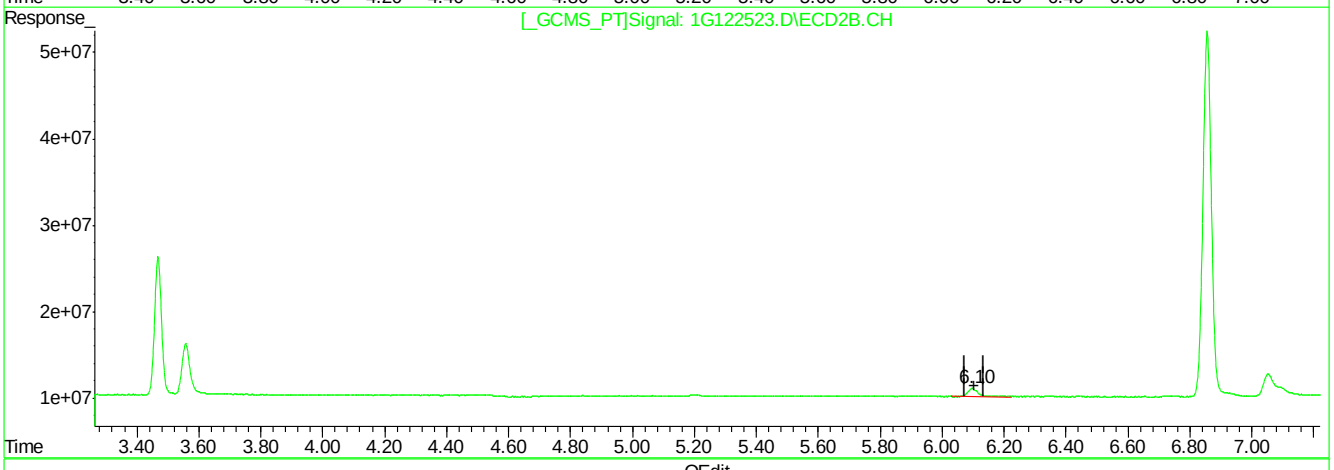
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	1	4.43	Poor instrument integration
Endrin aldehyde	7421-93-4	1	6.06	Poor instrument integration
4,4'-DDD	72-54-8	2	7.05	Poor instrument integration
Endrin aldehyde	7421-93-4	2	7.79	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122523.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122523.D\ECD2B.CH
Acq On    : 27 Apr 2016  11:07 am                    Operator: dharas
Sample    : ddt                                      Inst    : GC1G
Misc      : op93327,g1g3973,16.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 27 16:28 2016  Quant Results File: 1PST3973.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(13) 4,4'-DDE (B)

4.43min 1.940PPB

response 2334202

(13) 4,4'-DDE #2 (B)

6.10min 1.405PPB

response 23701943

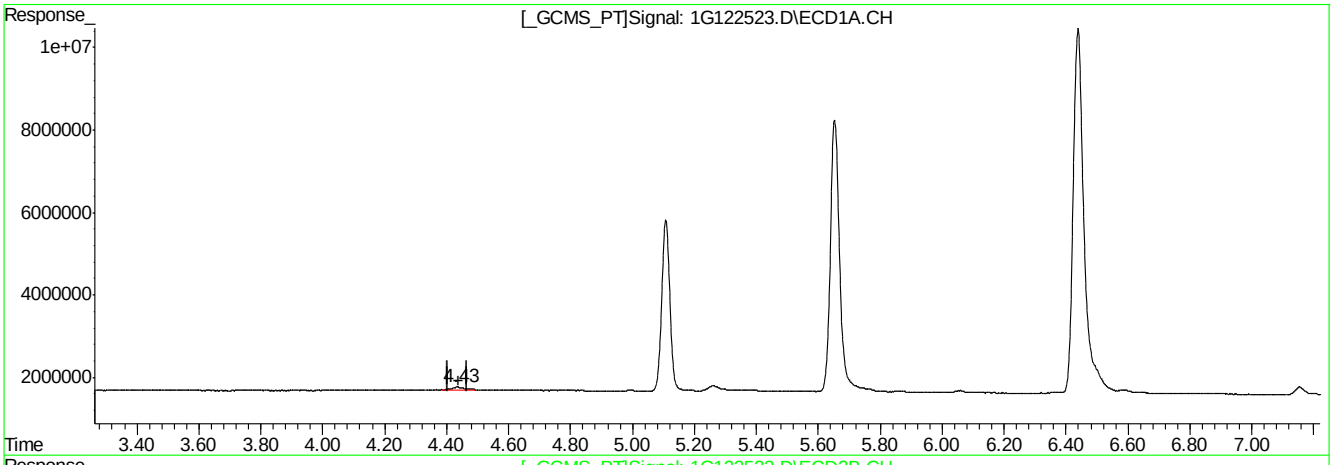
(+) = Expected Retention Time

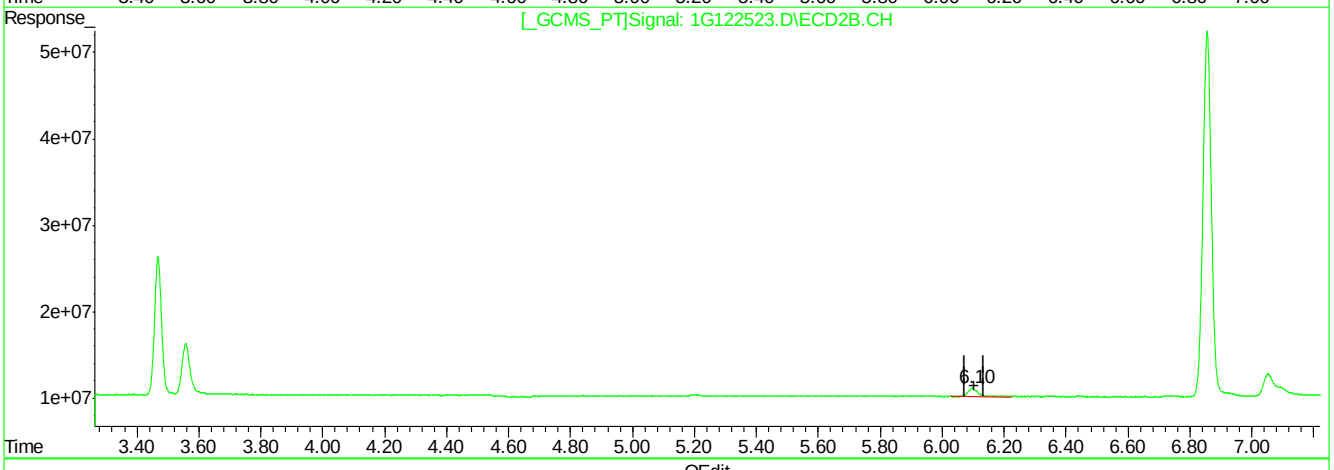
1G122523.D 1PST3973.M Wed Apr 27 16:29:48 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122523.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122523.D\ECD2B.CH
Acq On    : 27 Apr 2016  11:07 am                    Operator: dharas
Sample    : ddt                                      Inst    : GC1G
Misc      : op93327,g1g3973,16.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 27 16:28 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(13) 4,4'-DDE (B)

4.43min 1.227PPB m

response 1476894

(13) 4,4'-DDE #2 (B)

6.10min 1.405PPB

response 23701943

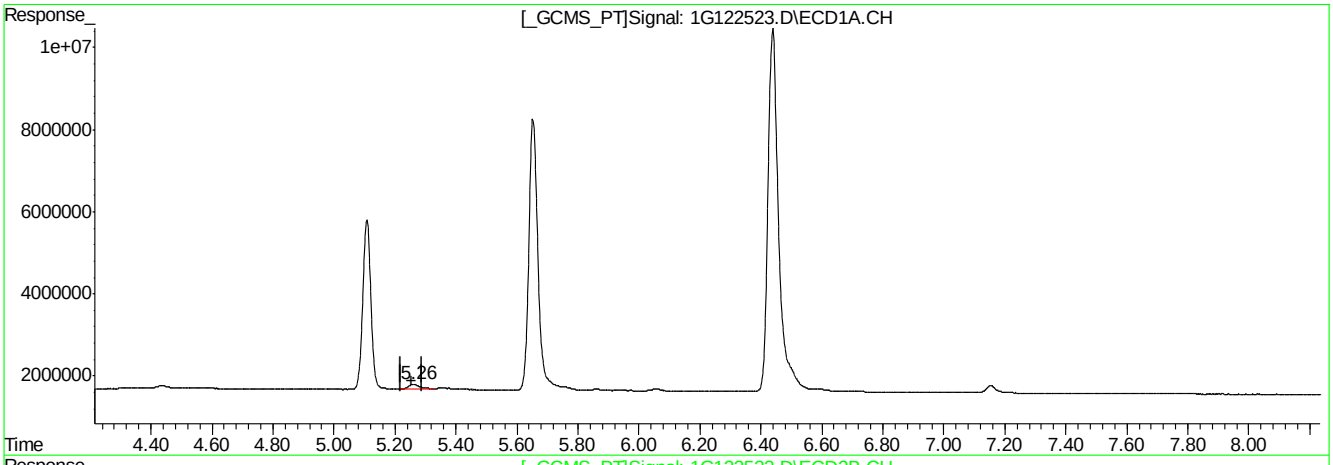
(+) = Expected Retention Time

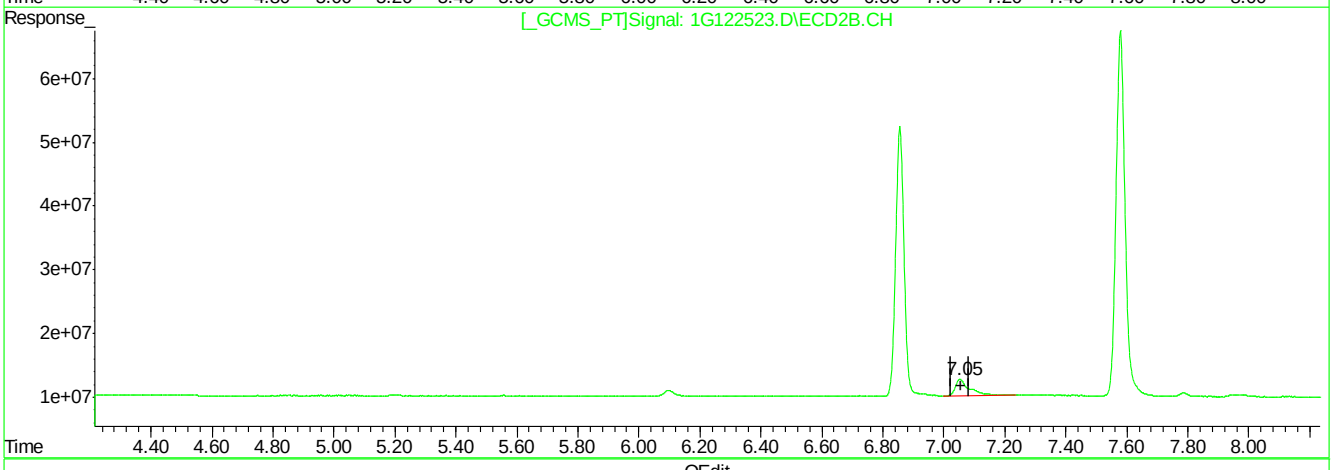
1G122523.D 1PST3973.M Wed Apr 27 16:30:03 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122523.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122523.D\ECD2B.CH
Acq On    : 27 Apr 2016  11:07 am                    Operator: dharas
Sample    : ddt                                      Inst    : GC1G
Misc      : op93327,g1g3973,16.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 27 16:28 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(16) 4,4'-DDD (A)

5.26min 2.934PPB

response 2975832

(16) 4,4'-DDD #2 (A)

7.05min 5.610PPB

response 82633156

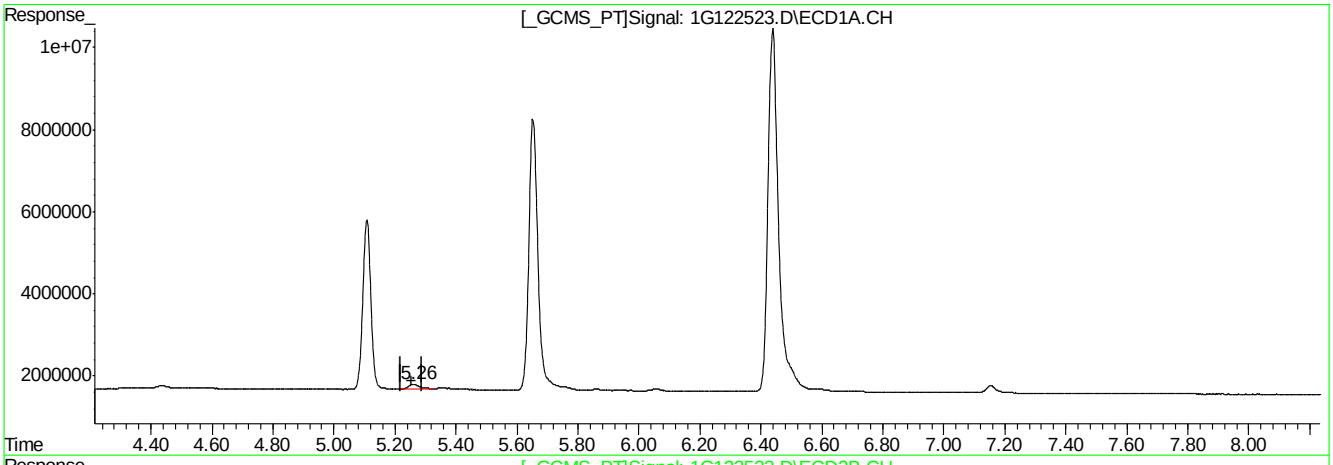
(+) = Expected Retention Time

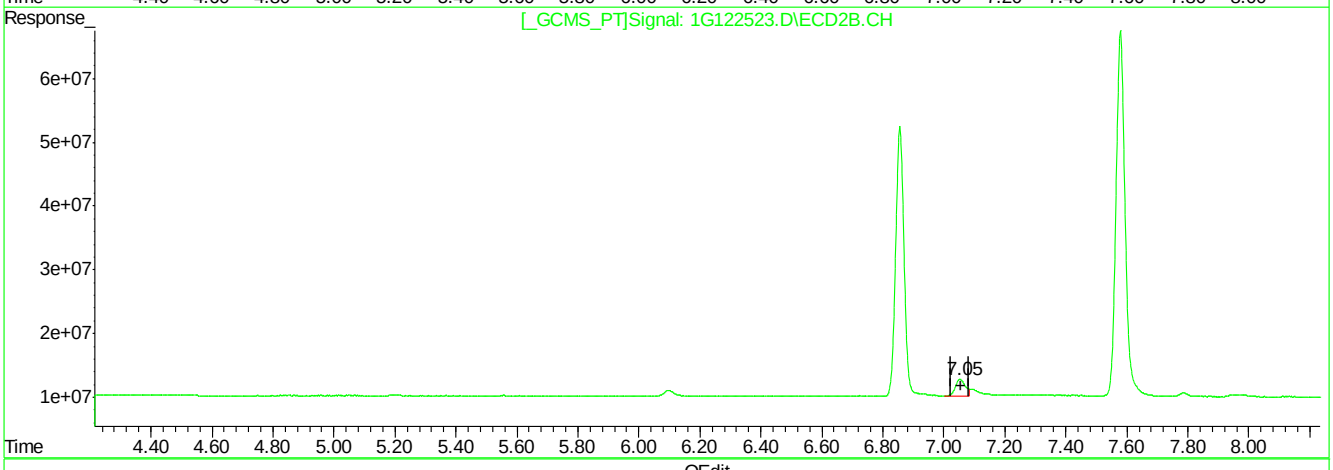
1G122523.D 1PST3973.M Wed Apr 27 16:30:10 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122523.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122523.D\ECD2B.CH
Acq On    : 27 Apr 2016  11:07 am                    Operator: dharas
Sample    : ddt                                      Inst    : GC1G
Misc      : op93327,g1g3973,16.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 27 16:28 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(16) 4,4'-DDD (A)

5.26min 2.934PPB

response 2975832

(16) 4,4'-DDD #2 (A)

7.05min 3.903PPB m

response 57489674

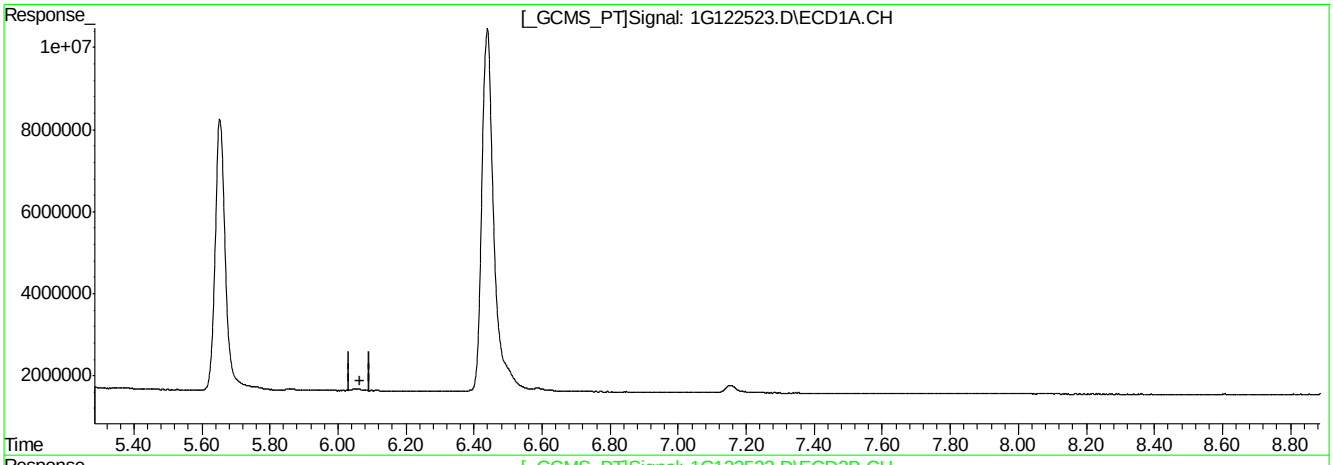
(+) = Expected Retention Time

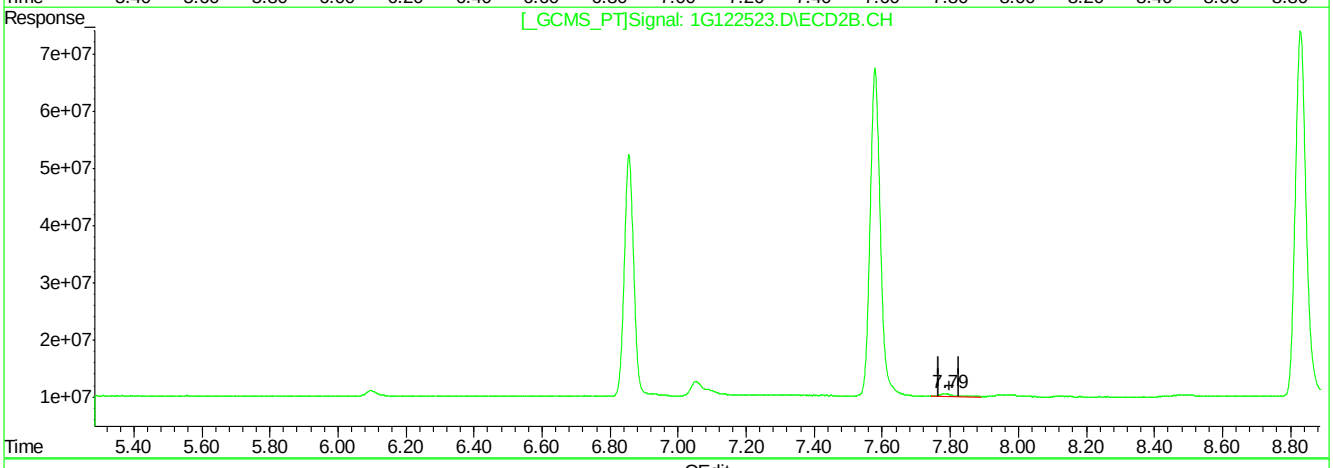
1G122523.D 1PST3973.M Wed Apr 27 16:30:23 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122523.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122523.D\ECD2B.CH
Acq On    : 27 Apr 2016  11:07 am                    Operator: dharas
Sample    : ddt                                      Inst    : GC1G
Misc      : op93327,g1g3973,16.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 27 16:28 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(19) Endrin Aldehyde (B)

0.00min 0.000PPB

response 0

(19) Endrin Aldehyde #2 (B)

7.79min 1.176PPB

response 13256354

(+) = Expected Retention Time

1G122523.D 1PST3973.M Wed Apr 27 16:30:29 2016 RPT1

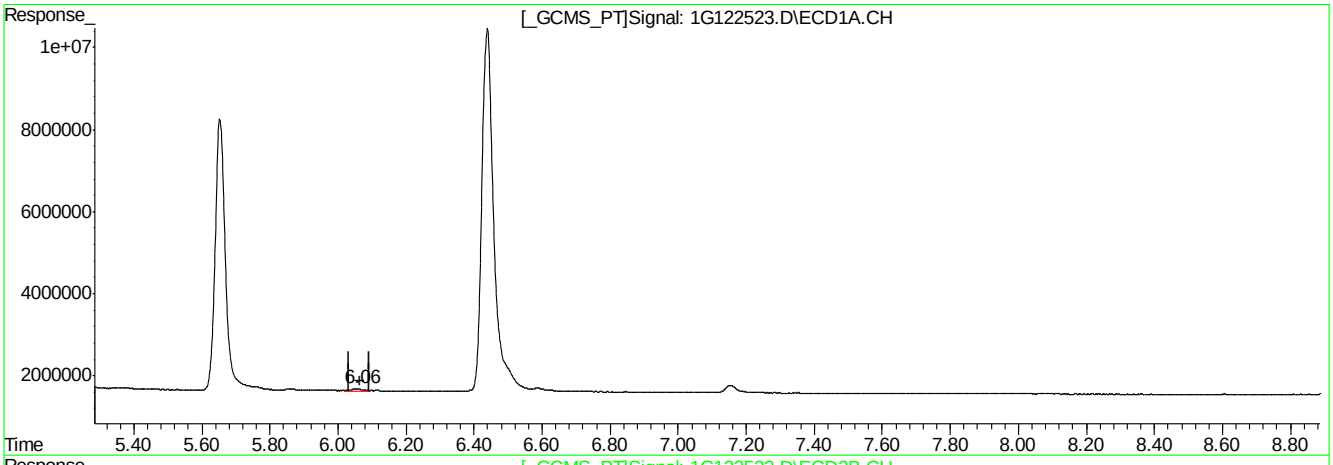
9.5.1.6

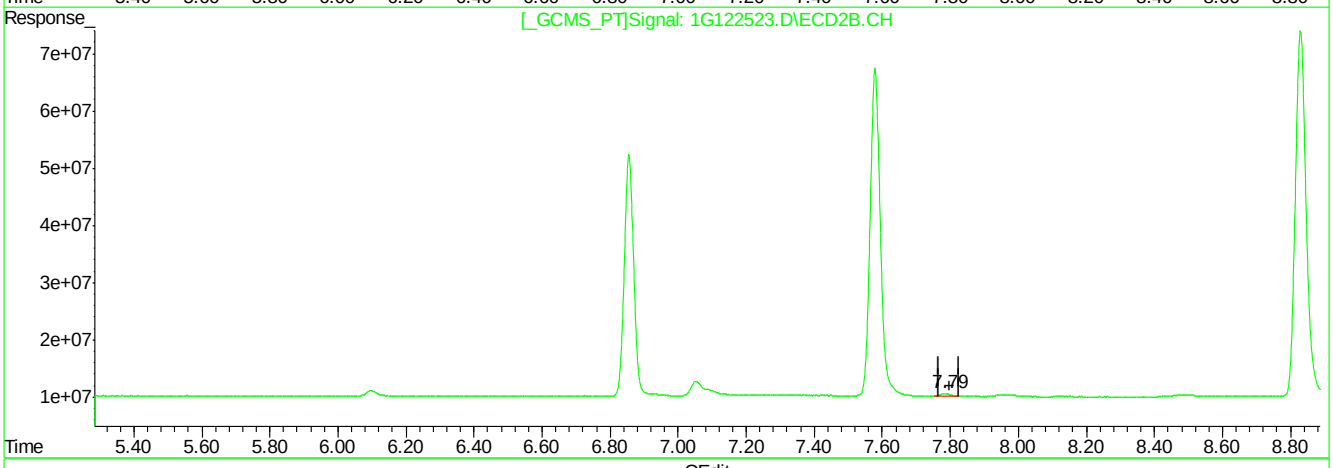
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122523.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122523.D\ECD2B.CH
Acq On    : 27 Apr 2016  11:07 am                    Operator: dharas
Sample    : ddt                                      Inst    : GC1G
Misc      : op93327,g1g3973,16.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 27 16:28 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(19) Endrin Aldehyde (B)

6.06min 0.922PPB m

response 1027311

(19) Endrin Aldehyde #2 (B)

7.79min 0.868PPB m

response 9780845

(+) = Expected Retention Time

1G122523.D 1PST3973.M Wed Apr 27 16:30:47 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/29/16 12:19

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122599.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122599.D\ECD2B.CH
Acq On : 4-29-16 08:05:37 AM Operator: brittanp
Sample : ddt Inst : GC1G
Misc : op90282,g1g39765,15.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 29 11:06 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Apr 27 16:13:45 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3973.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	57788229	883.7E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.16	1.53	57788229	883.7E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.16	1.53	57788229	883.7E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.74	2.37	25263758	322.1E6	20.864	20.150
Spiked Amount	40.000 Range	30 - 150	Recovery	=		52.16%	50.37%
24) SA	Decachlorobiphen	8.92	10.86	46149445	190.6E6	21.584	20.441
Spiked Amount	40.000		Recovery	=		53.96%	51.10%
	Target Compounds						
13) B	4,4'-DDE	4.42	6.09	535294	7897103	0.424m	0.467m
15) MA	Endrin	5.10	6.85	78573165	730.4E6	56.476	46.060
16) A	4,4'-DDD	5.24	7.04	2363565	33076616	2.222m	2.238
18) MA	4,4'-DDT	5.64	7.57	153.6E6	1178.3E6	154.373	124.018
19) B	Endrin Aldehyde	6.04	7.78	939940	10218106	0.804m	0.904m
23) B	Endrin Ketone	7.14	9.21	4171518	40025224	3.232	3.385

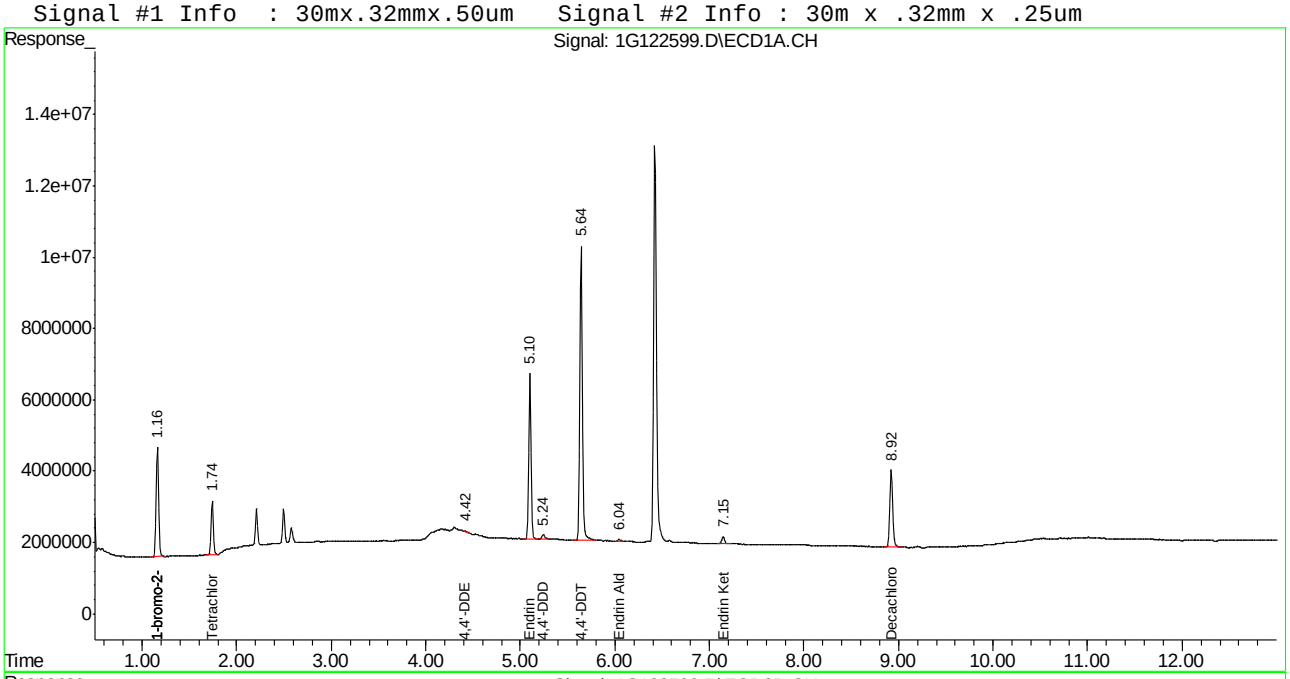
(f)=RT Delta > 1/2 Window (m)=manual int.
1G122599.D 1PST3973.M Fri Apr 29 11:06:27 2016 RPT1 Page 1

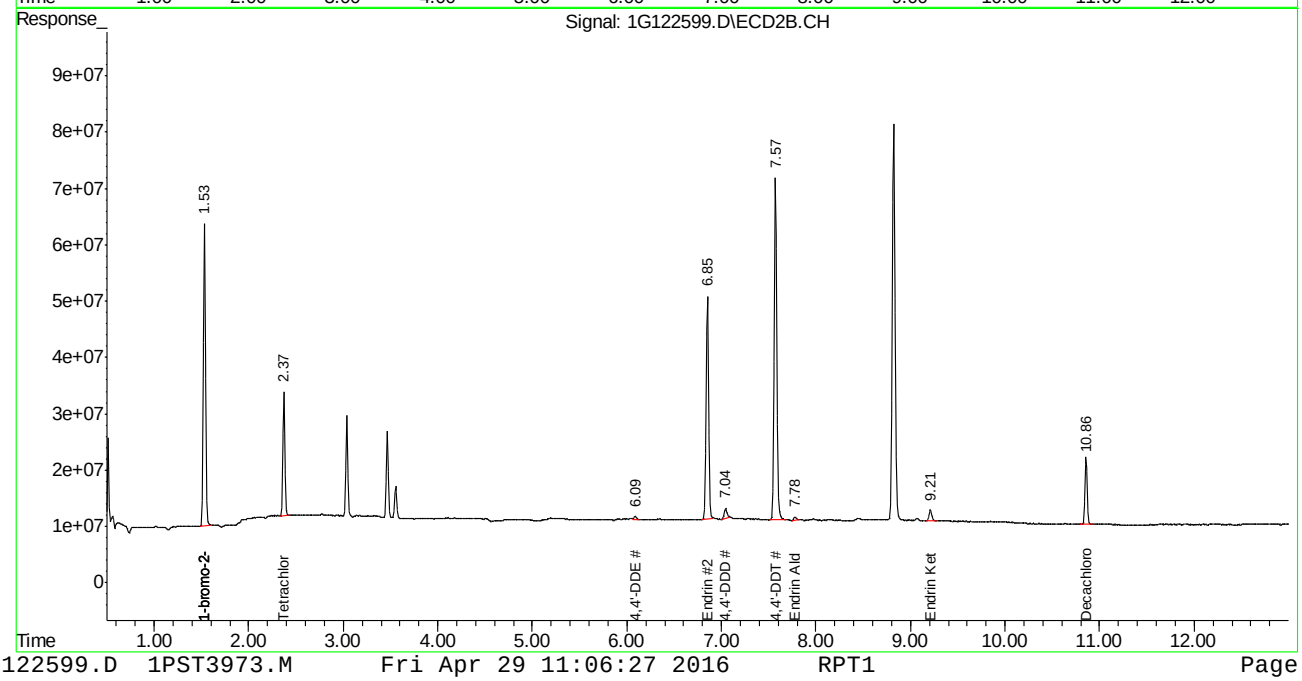
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122599.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122599.D\ECD2B.CH
Acq On : 4-29-16 08:05:37 AM Operator: brittanp
Sample : ddt Inst : GC1G
Misc : op90282,g1g39765,15.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 29 11:06 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3973.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

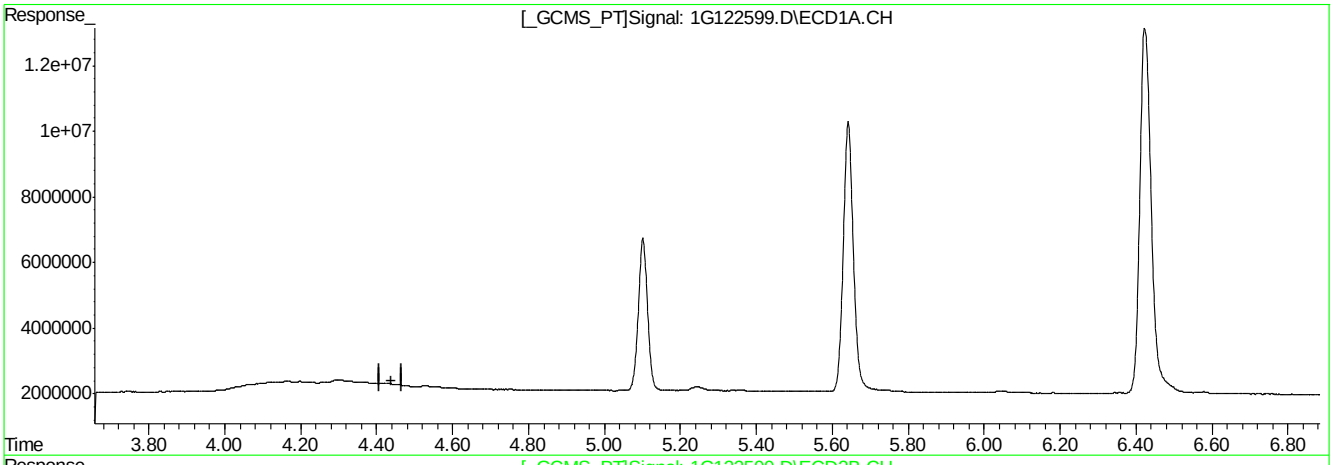
Sample Number:	G1G3976-DDT	**Method:**	SW846 8081B
Lab FileID:	1G122599.D	**Analyst approved:**	04/29/16 11:28 Brittany Piercy
Injection Time:	04/29/16 08:05	**Supervisor approved:**	04/29/16 12:19 Gwendolyn Burns

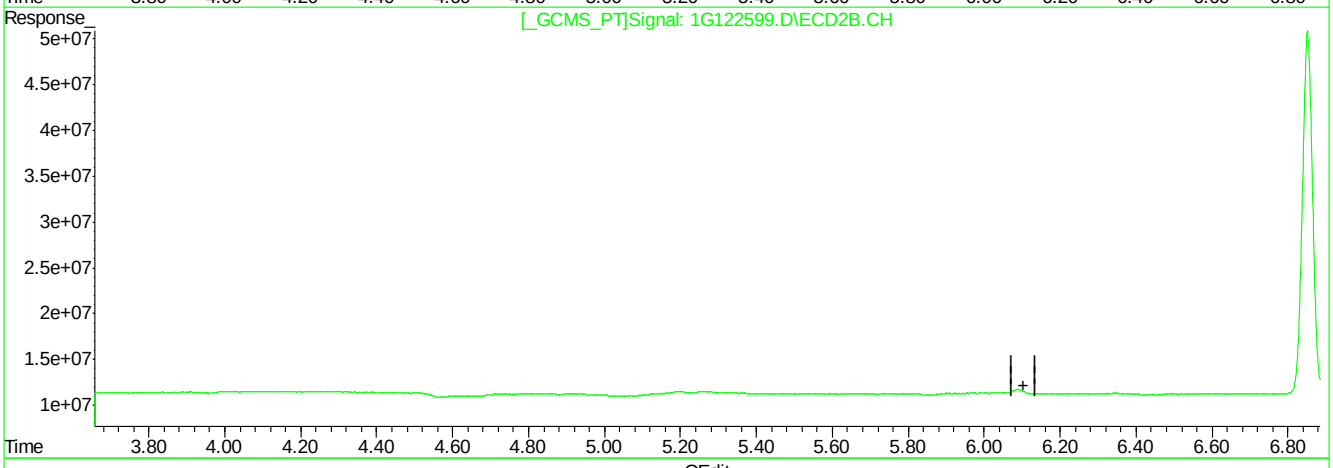
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	1	4.42	Poor instrument integration
4,4'-DDD	72-54-8	1	5.24	Poor instrument integration
Endrin aldehyde	7421-93-4	1	6.04	Poor instrument integration
4,4'-DDE	72-55-9	2	6.09	Poor instrument integration
Endrin aldehyde	7421-93-4	2	7.78	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122599.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122599.D\ECD2B.CH
Acq On    : 4-29-16 08:05:37 AM                      Operator: brittanp
Sample    : ddt                                      Inst    : GC1G
Misc      : op90282,g1g39765,15.0,,,10,1             Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 29  8:18 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 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

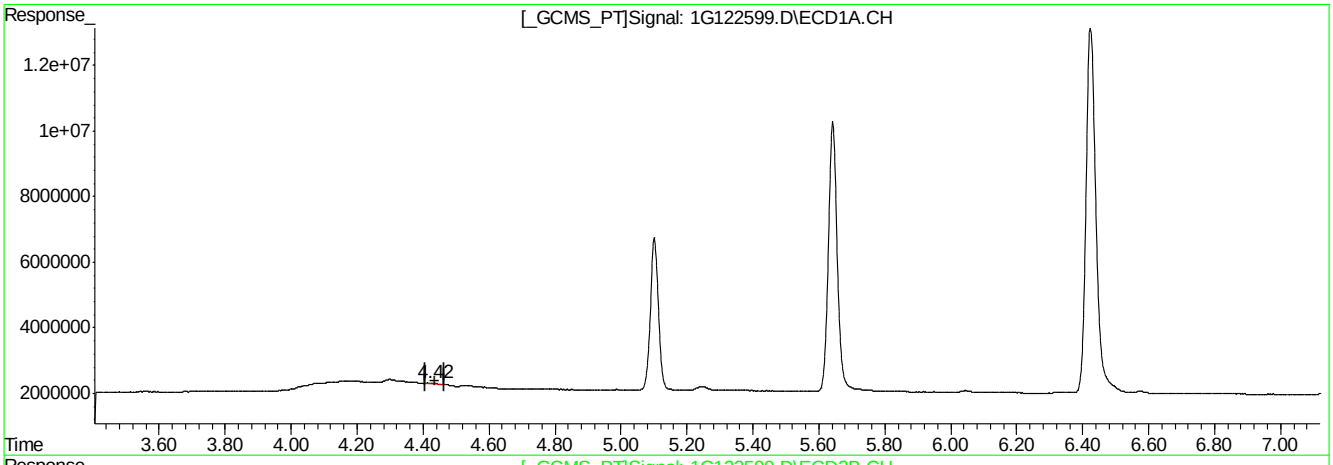
1G122599.D 1PST3973.M Fri Apr 29 11:05:34 2016 RPT1

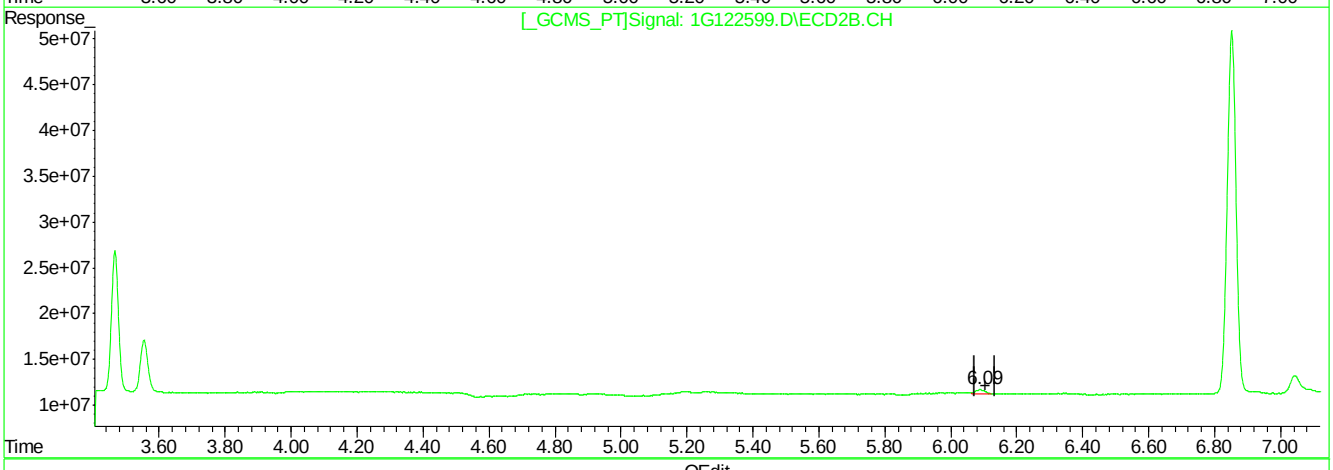
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122599.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122599.D\ECD2B.CH
Acq On    : 4-29-16 08:05:37 AM                      Operator: brittanp
Sample    : ddt                                      Inst    : GC1G
Misc      : op90282,g1g39765,15.0,,,10,1             Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 29  8:18 2016  Quant Results File: 1PST3973.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(13) 4,4'-DDE (B)

4.42min 0.424PPB m

response 535294

(13) 4,4'-DDE #2 (B)

6.09min 0.467PPB m

response 7897103

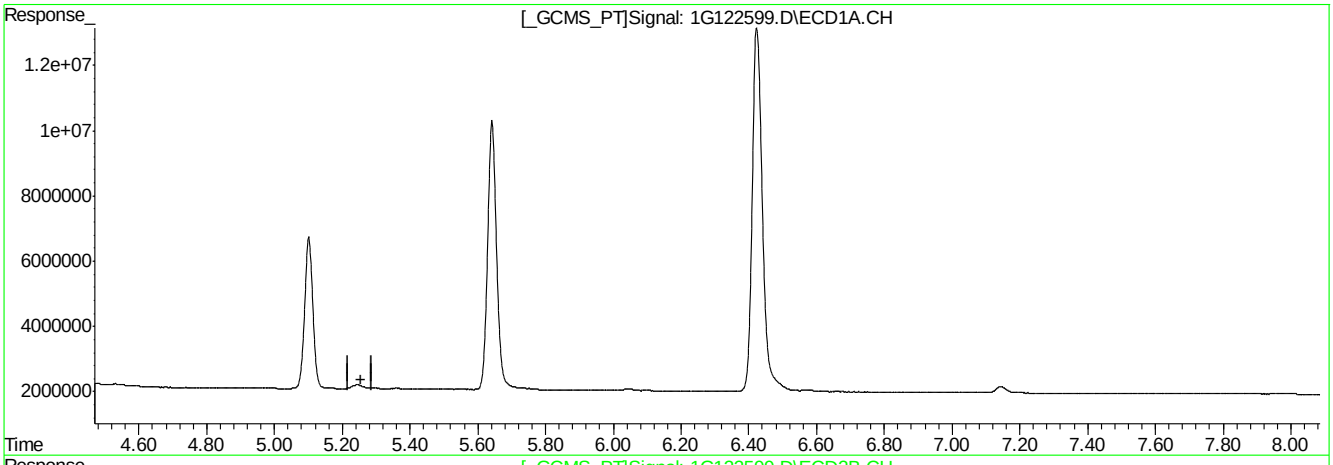
(+) = Expected Retention Time

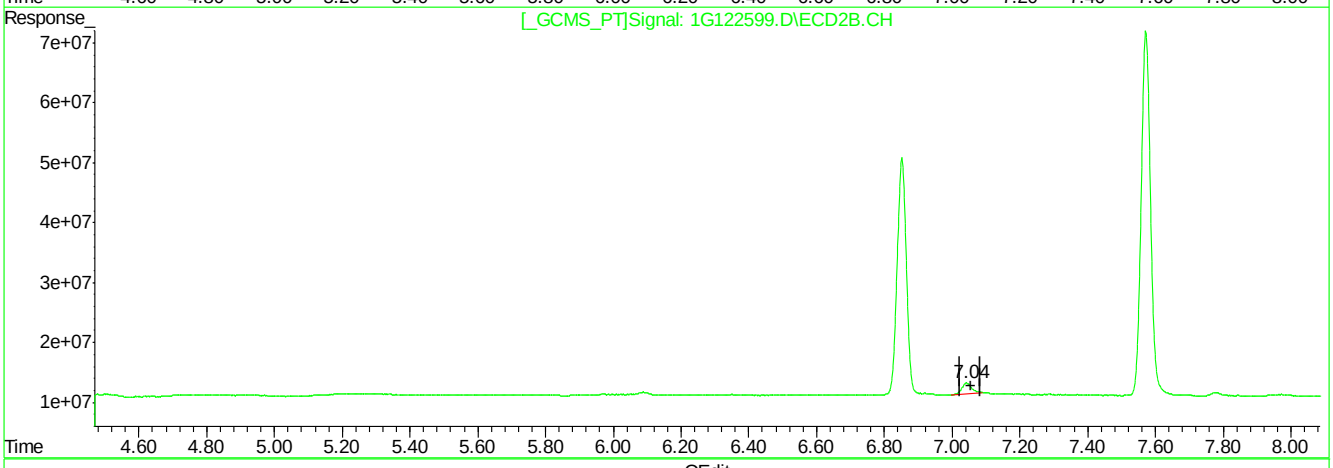
1G122599.D 1PST3973.M Fri Apr 29 11:05:45 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122599.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122599.D\ECD2B.CH
Acq On    : 4-29-16 08:05:37 AM                      Operator: brittanp
Sample    : ddt                                      Inst    : GC1G
Misc      : op90282,g1g39765,15.0,,,10,1             Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 29  8:18 2016  Quant Results File: 1PST3973.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(16) 4,4'-DDD (A)

0.00min 0.000PPB

response 0

(16) 4,4'-DDD #2 (A)

7.04min 2.238PPB

response 33076616

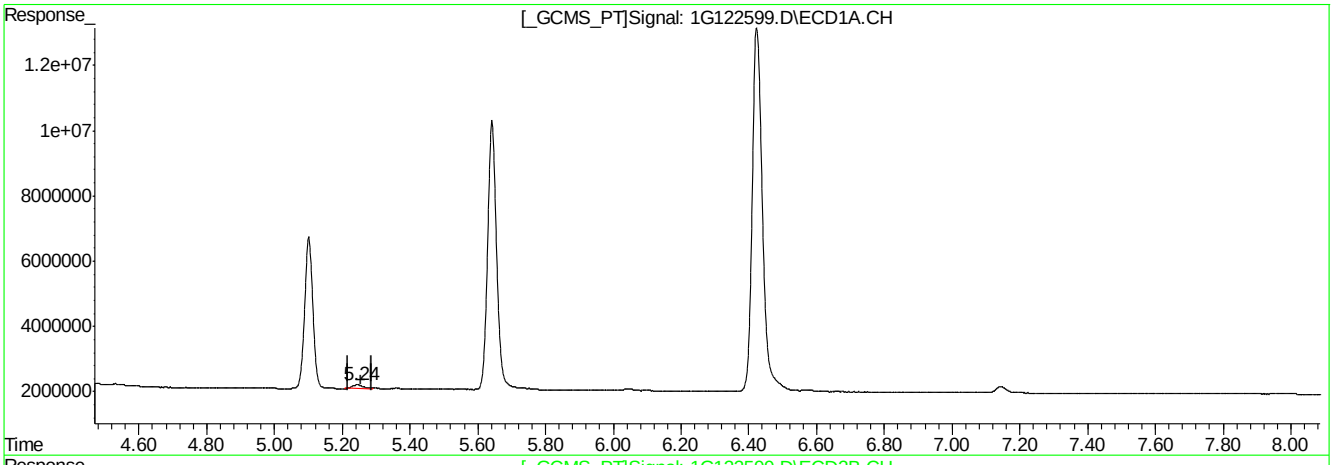
(+) = Expected Retention Time

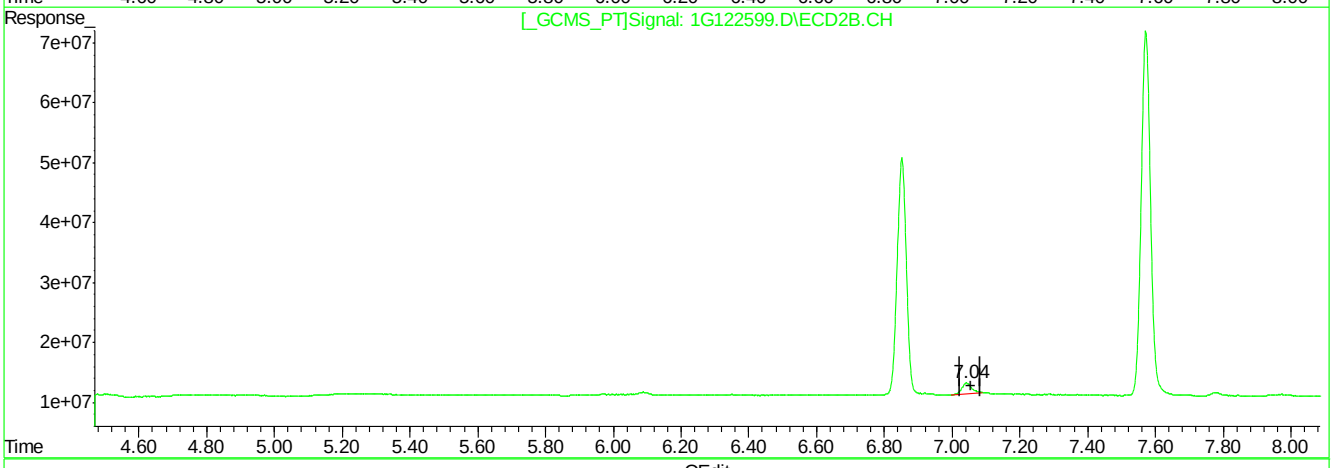
1G122599.D 1PST3973.M Fri Apr 29 11:05:49 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122599.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122599.D\ECD2B.CH
Acq On    : 4-29-16 08:05:37 AM                      Operator: brittanp
Sample    : ddt                                      Inst    : GC1G
Misc      : op90282,g1g39765,15.0,,,10,1             Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 29  8:18 2016  Quant Results File: 1PST3973.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(16) 4,4'-DDD (A)

5.24min 2.222PPB m

response 2363565

(16) 4,4'-DDD #2 (A)

7.04min 2.238PPB

response 33076616

(+) = Expected Retention Time

1G122599.D 1PST3973.M Fri Apr 29 11:05:55 2016 RPT1

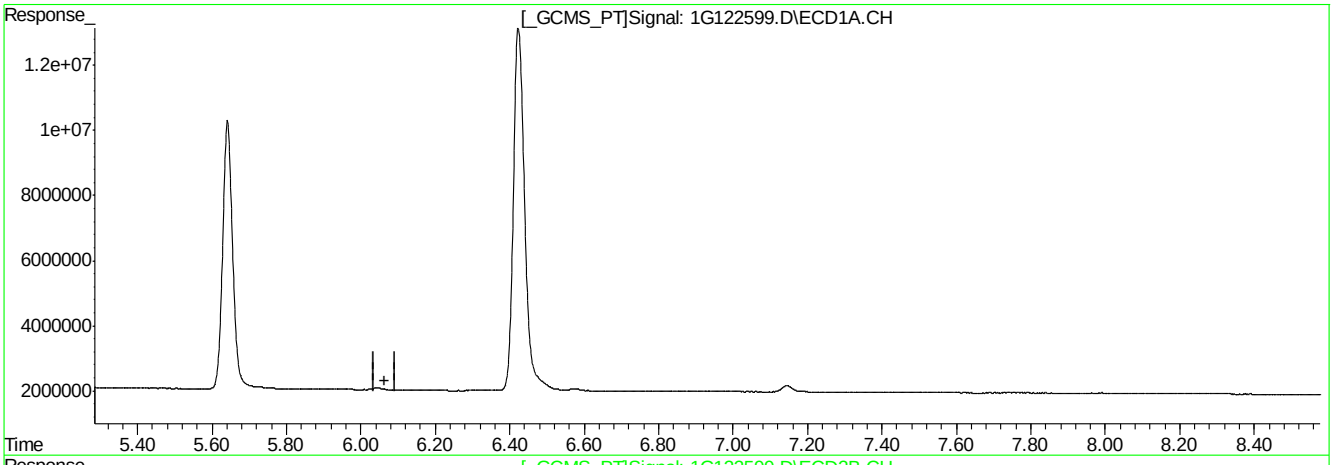
9.5.2.5

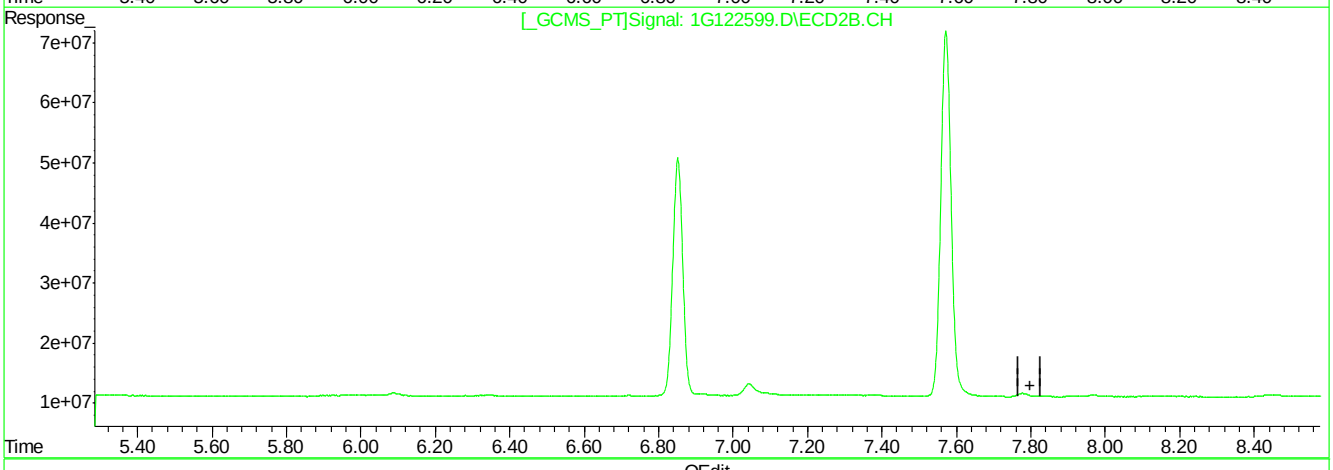
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122599.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122599.D\ECD2B.CH
Acq On    : 4-29-16 08:05:37 AM                      Operator: brittanp
Sample    : ddt                                      Inst    : GC1G
Misc      : op90282,g1g39765,15.0,,,10,1             Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 29  8:18 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 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

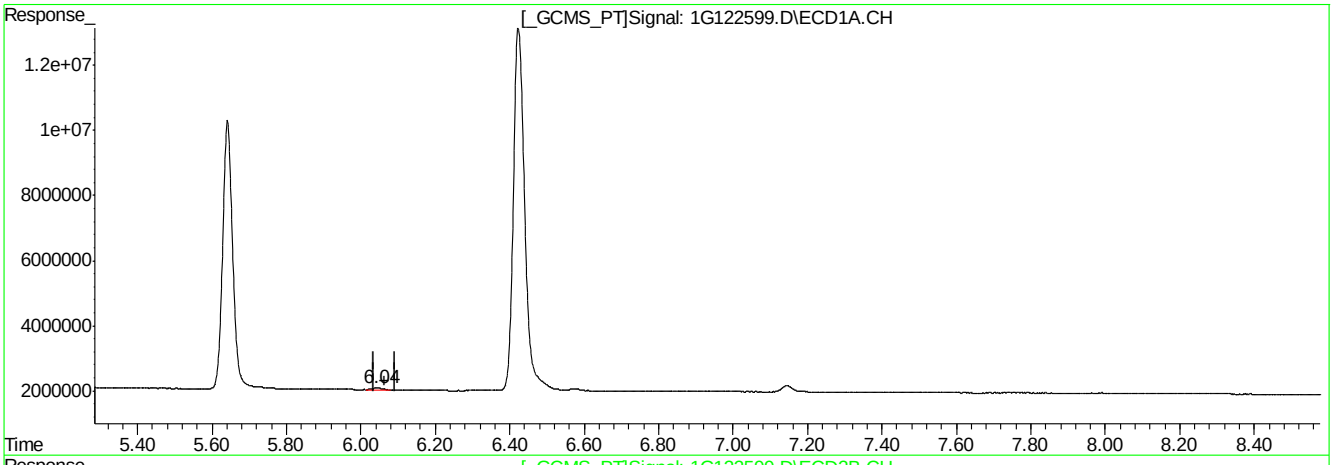
(+) = Expected Retention Time

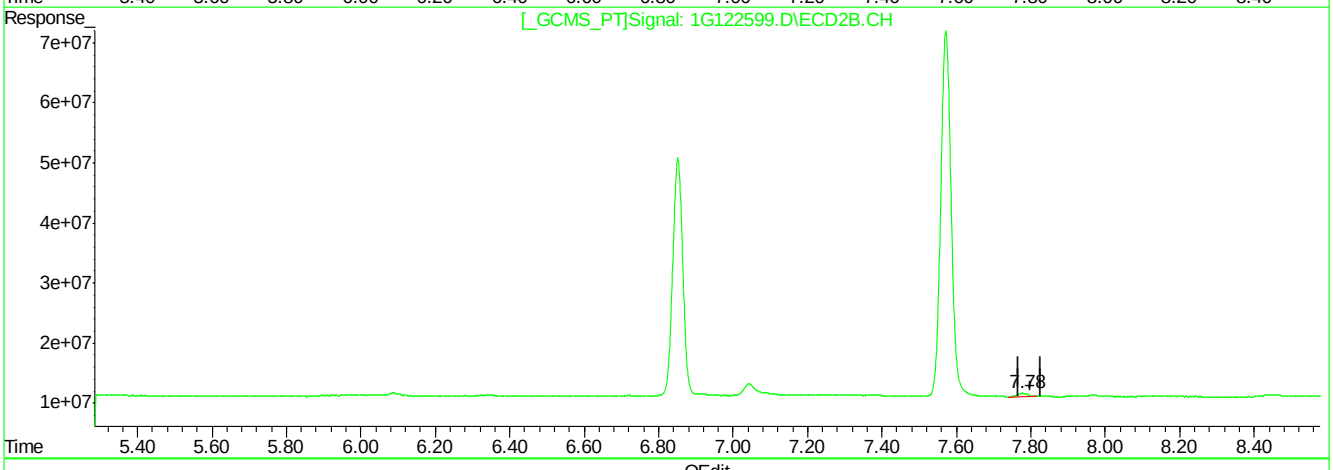
1G122599.D 1PST3973.M Fri Apr 29 11:06:01 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122599.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122599.D\ECD2B.CH
Acq On    : 4-29-16 08:05:37 AM                      Operator: brittanp
Sample    : ddt                                      Inst    : GC1G
Misc      : op90282,g1g39765,15.0,,,10,1             Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 29  8:18 2016  Quant Results File: 1PST3973.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(19) Endrin Aldehyde (B)

6.04min 0.804PPB m

response 939940

(19) Endrin Aldehyde #2 (B)

7.78min 0.904PPB m

response 10218106

(+) = Expected Retention Time

1G122599.D 1PST3973.M Fri Apr 29 11:06:16 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 05/03/16 11:21

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122621.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122621.D\ECD2B.CH
Acq On : 4-29-16 04:24:50 PM Operator: dharas
Sample : ddt Inst : GC1G
Misc : op93471,g1g3976,16.6,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 29 16:54 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Apr 27 16:13:45 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3973.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	1.54	57056300	877.0E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.16	1.54	57056300	877.0E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.16	1.54	57056300	877.0E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.74	2.37	24746333	315.2E6	20.699	19.871
Spiked Amount	40.000	Range	30 - 150	Recovery	=	51.75%	49.68%
24) SA	Decachlorobiphen	8.93	10.86	43827702	193.6E6	20.762	20.928
Spiked Amount	40.000			Recovery	=	51.91%	52.32%
	Target Compounds						
13) B	4,4'-DDE	4.43	6.09	663661	15013812	0.533m	0.894m
15) MA	Endrin	5.10	6.85	76262987	743.2E6	55.519	47.228
16) A	4,4'-DDD	5.25	7.05	3960030	62180015	3.771m	4.240m
18) MA	4,4'-DDT	5.65	7.58	132.6E6	1048.1E6	135.025	111.169
19) B	Endrin Aldehyde	6.05	7.78	1005972	8060733	0.872m	0.718m
23) B	Endrin Ketone	7.15	9.21	3499708	39491395	2.746m	3.366

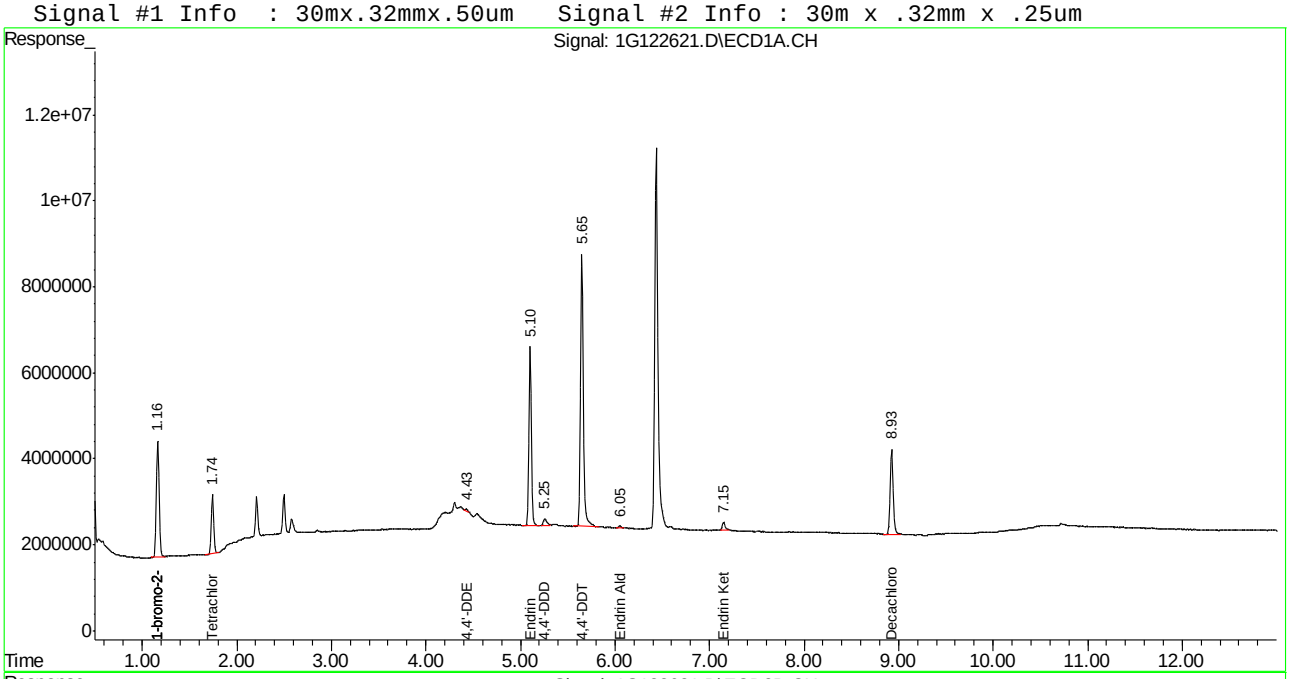
(f)=RT Delta > 1/2 Window (m)=manual int.
1G122621.D 1PST3973.M Fri Apr 29 16:55:00 2016 RPT1 Page 1

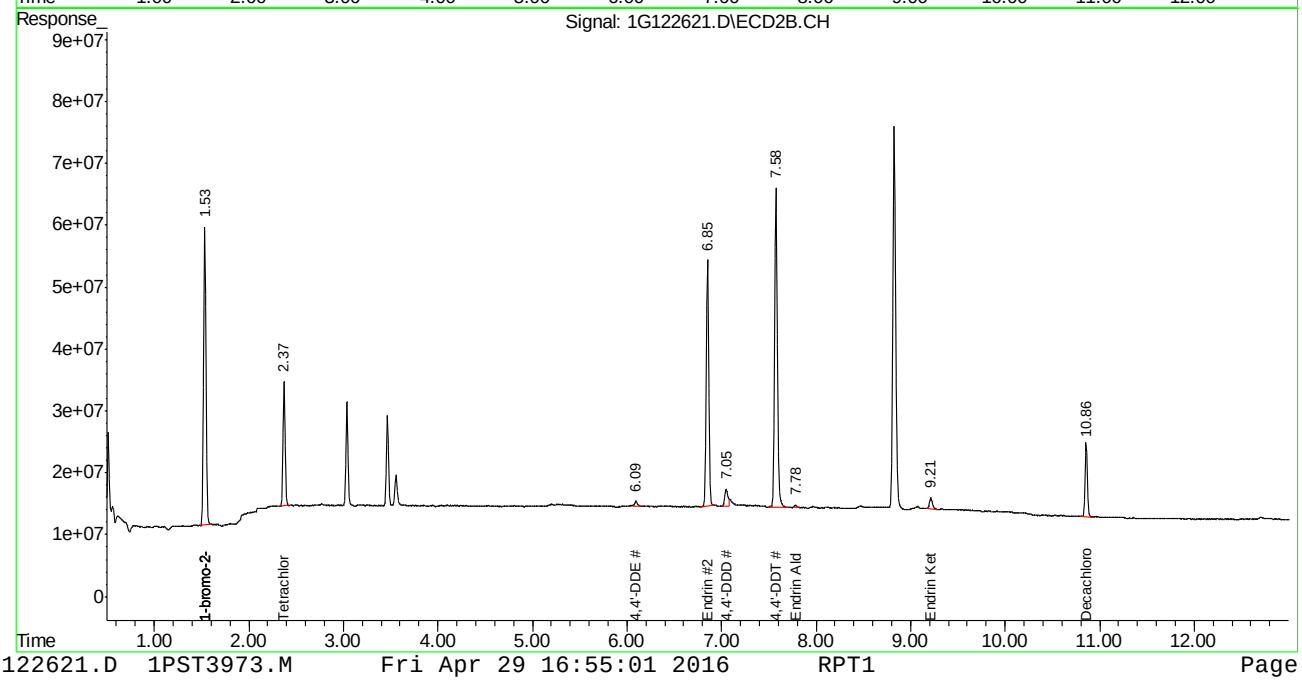
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122621.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122621.D\ECD2B.CH
Acq On : 4-29-16 04:24:50 PM Operator: dharas
Sample : ddt Inst : GC1G
Misc : op93471,g1g3976,16.6,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 29 16:54 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3973.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

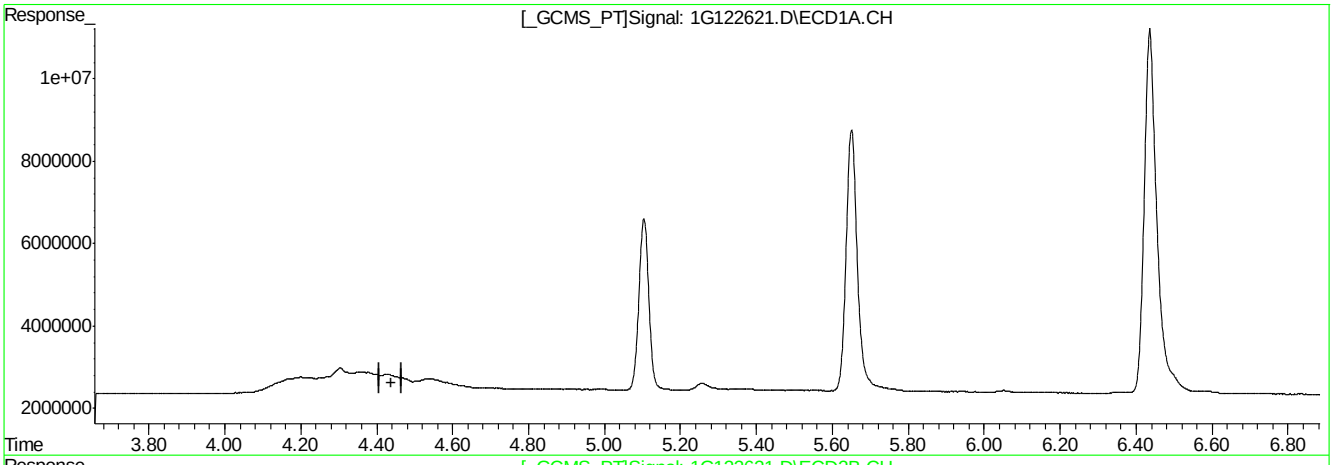
Sample Number:	G1G3976-DDT	**Method:**	SW846 8081B
Lab FileID:	1G122621.D	**Analyst approved:**	05/02/16 11:39 Dhara Saparia
Injection Time:	04/29/16 16:24	**Supervisor approved:**	05/03/16 11:21 Gwendolyn Burns

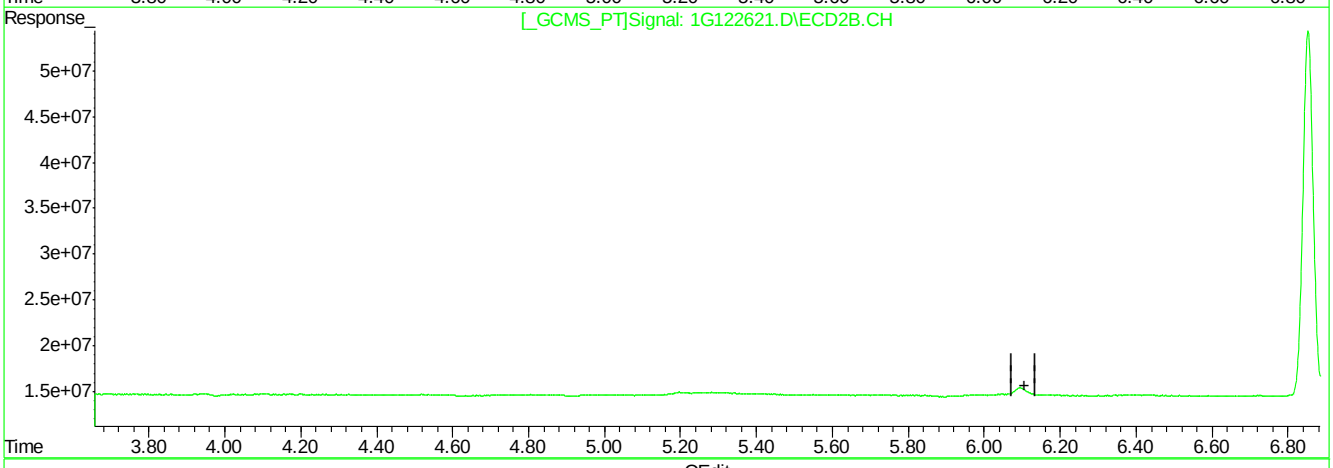
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	1	4.43	Poor instrument integration
4,4'-DDD	72-54-8	1	5.25	Poor instrument integration
Endrin aldehyde	7421-93-4	1	6.05	Poor instrument integration
4,4'-DDE	72-55-9	2	6.09	Poor instrument integration
4,4'-DDD	72-54-8	2	7.05	Poor instrument integration
Endrin ketone	53494-70-5	1	7.15	Poor instrument integration
Endrin aldehyde	7421-93-4	2	7.78	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122621.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122621.D\ECD2B.CH
Acq On    : 4-29-16 04:24:50 PM                      Operator: dharas
Sample    : ddt                                      Inst    : GC1G
Misc      : op93471,g1g3976,16.6,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 29 16:52 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 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

1G122621.D 1PST3973.M Fri Apr 29 16:53:28 2016 RPT1

9.5.3.2

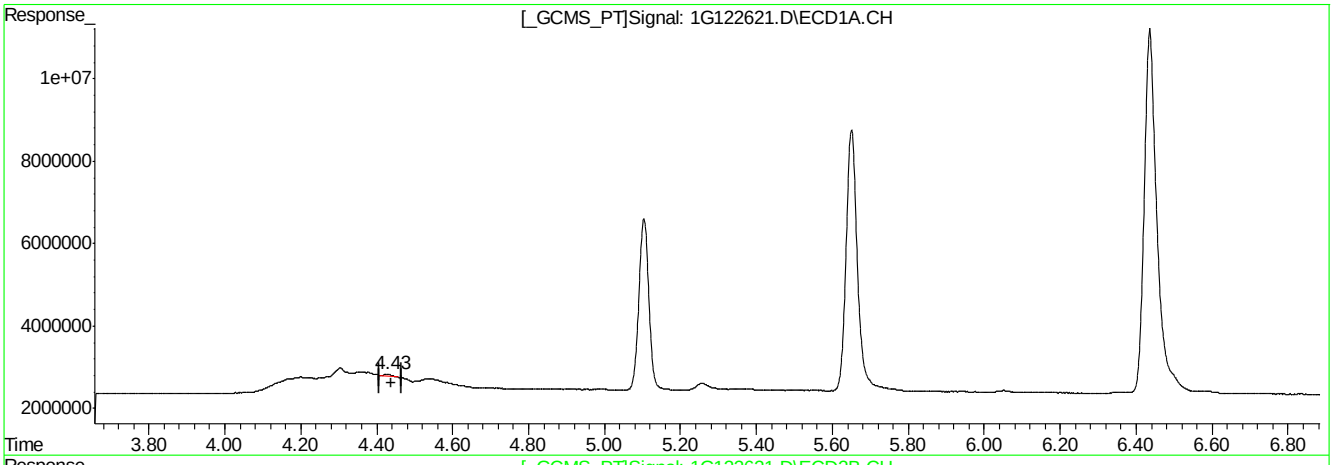
9

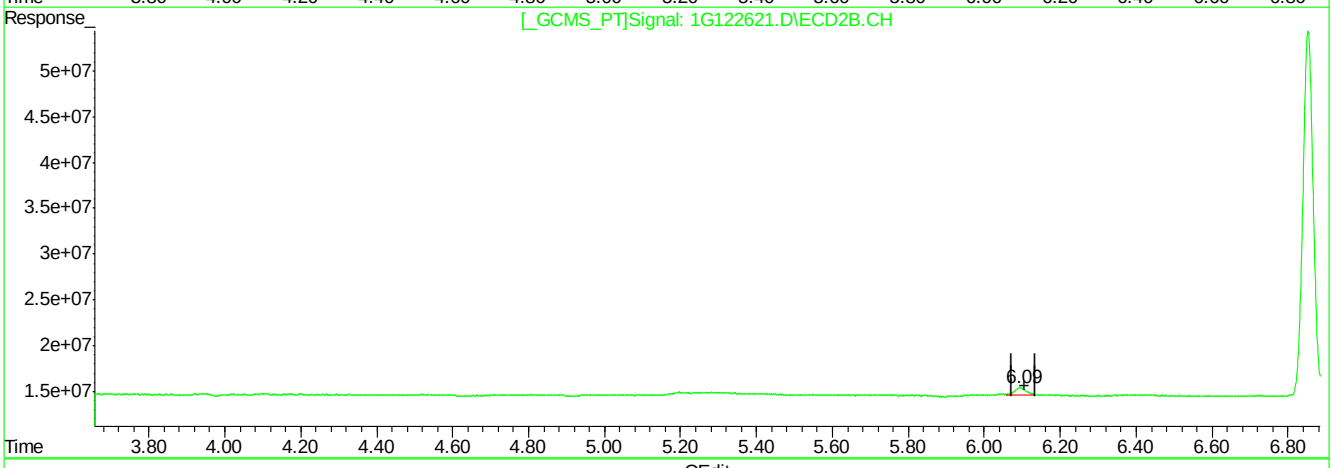
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122621.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122621.D\ECD2B.CH
Acq On    : 4-29-16 04:24:50 PM                      Operator: dharas
Sample    : ddt                                      Inst    : GC1G
Misc      : op93471,g1g3976,16.6,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 29 16:52 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(13) 4,4'-DDE (B)

4.43min 0.533PPB m

response 663661

(13) 4,4'-DDE #2 (B)

6.09min 0.894PPB m

response 15013812

(+) = Expected Retention Time

1G122621.D 1PST3973.M Fri Apr 29 16:53:47 2016 RPT1

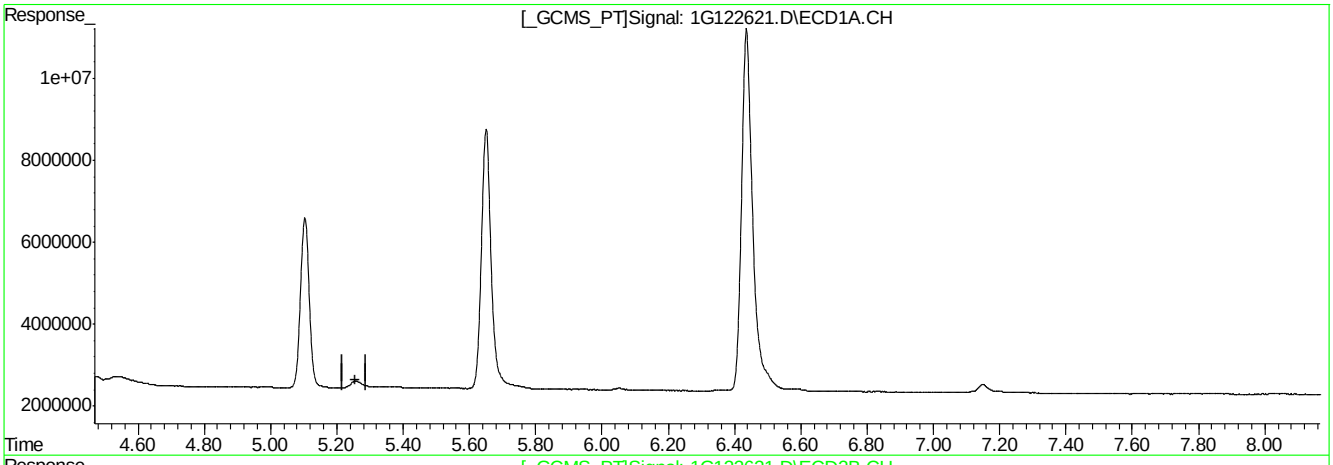
9.5.3.3

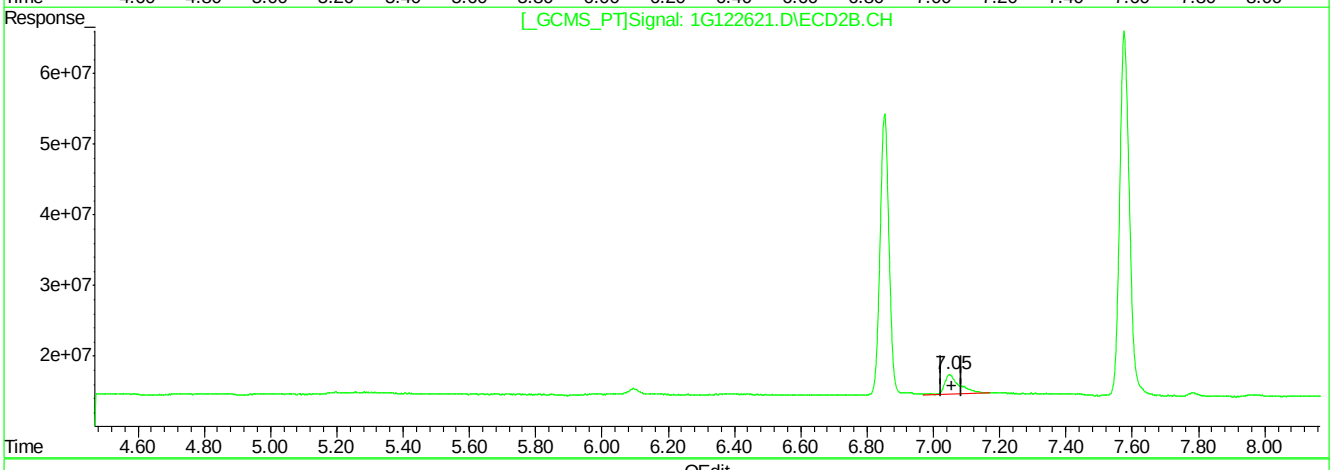
9

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122621.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122621.D\ECD2B.CH
Acq On    : 4-29-16 04:24:50 PM                      Operator: dharas
Sample    : ddt                                      Inst    : GC1G
Misc      : op93471,g1g3976,16.6,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 29 16:52 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(16) 4,4'-DDD (A)

0.00min 0.000PPB

response 0

(16) 4,4'-DDD #2 (A)

7.05min 5.703PPB

response 83627489

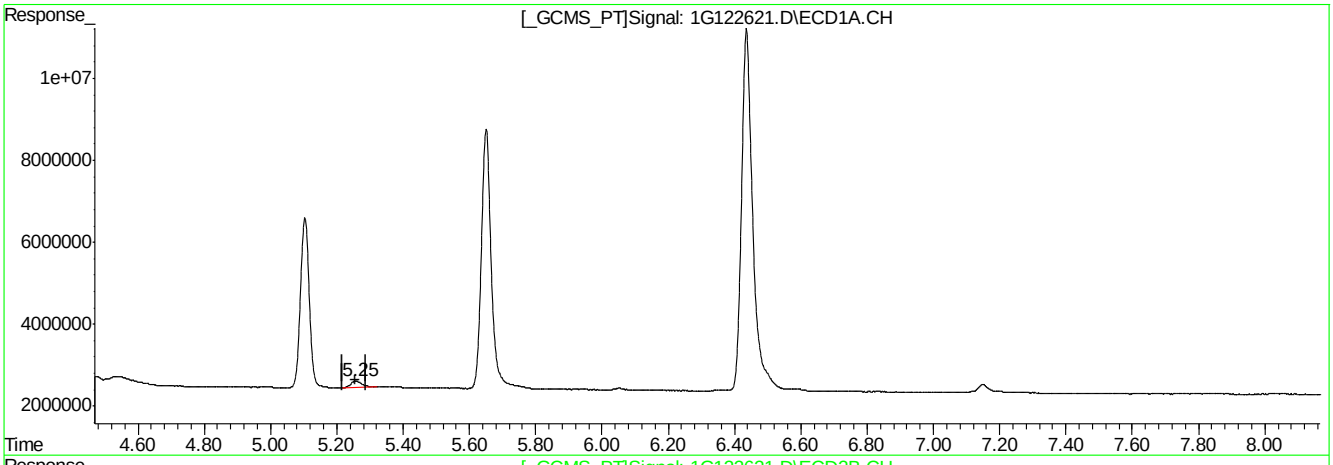
(+) = Expected Retention Time

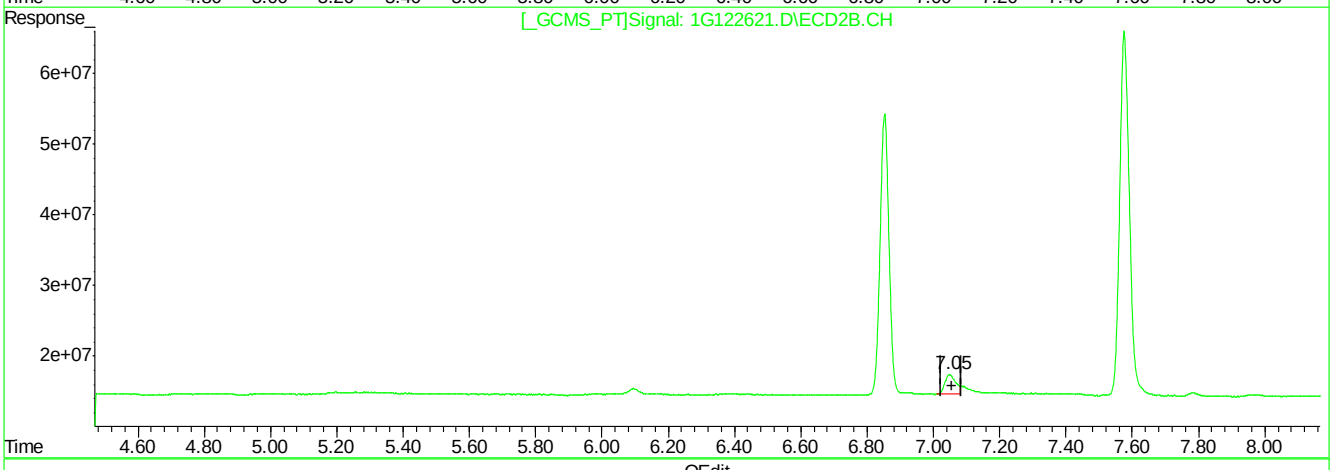
1G122621.D 1PST3973.M Fri Apr 29 16:53:51 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122621.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122621.D\ECD2B.CH
Acq On    : 4-29-16 04:24:50 PM                      Operator: dharas
Sample    : ddt                                      Inst    : GC1G
Misc      : op93471,g1g3976,16.6,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 29 16:52 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(16) 4,4'-DDD (A)

5.25min 3.771PPB m

response 3960030

(16) 4,4'-DDD #2 (A)

7.05min 4.240PPB m

response 62180015

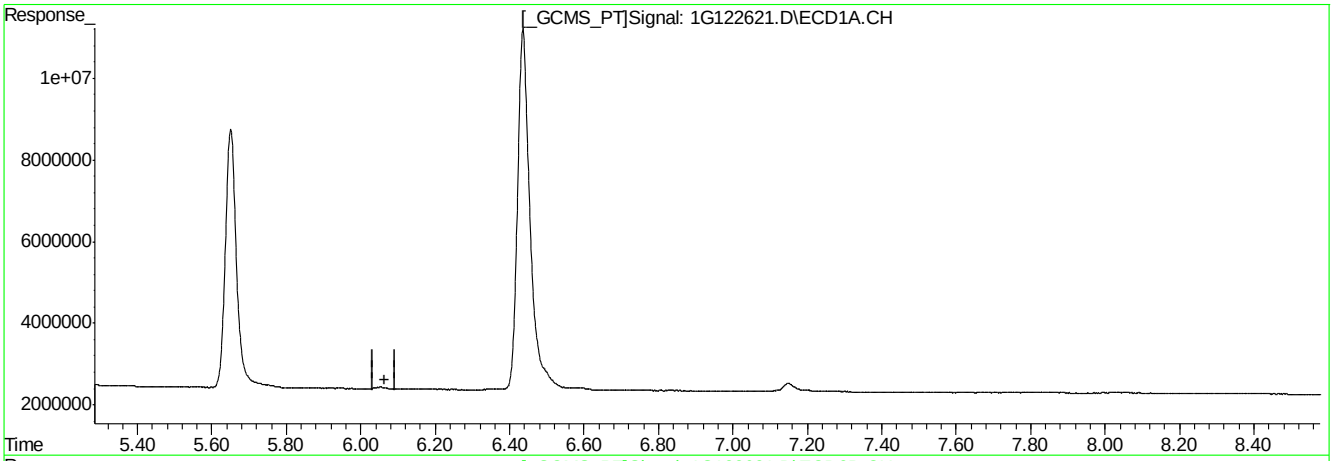
(+) = Expected Retention Time

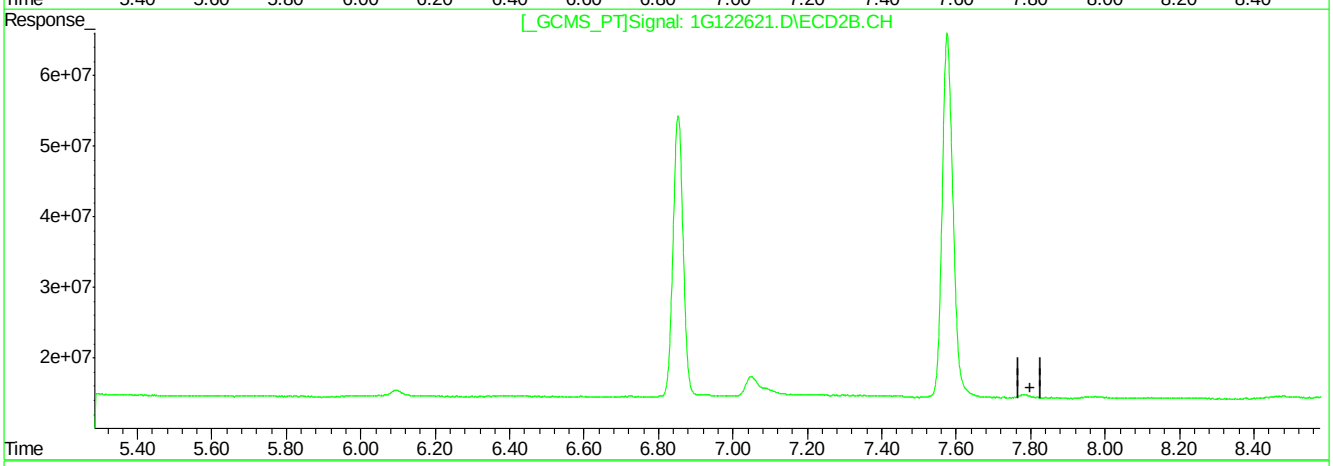
1G122621.D 1PST3973.M Fri Apr 29 16:54:11 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122621.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122621.D\ECD2B.CH
Acq On    : 4-29-16 04:24:50 PM                      Operator: dharas
Sample    : ddt                                      Inst    : GC1G
Misc      : op93471,g1g3976,16.6,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 29 16:52 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 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

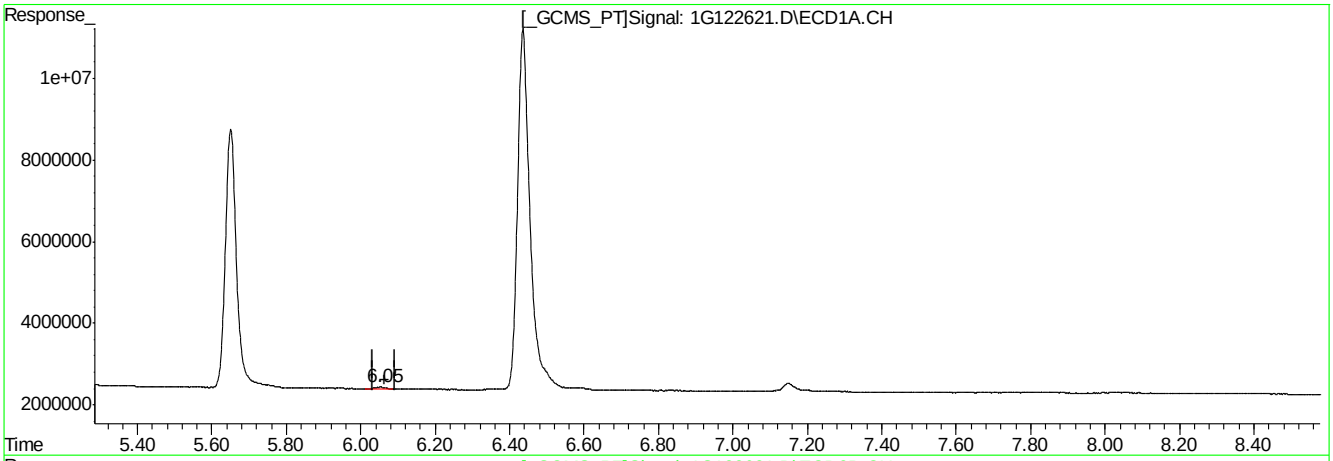
(+) = Expected Retention Time

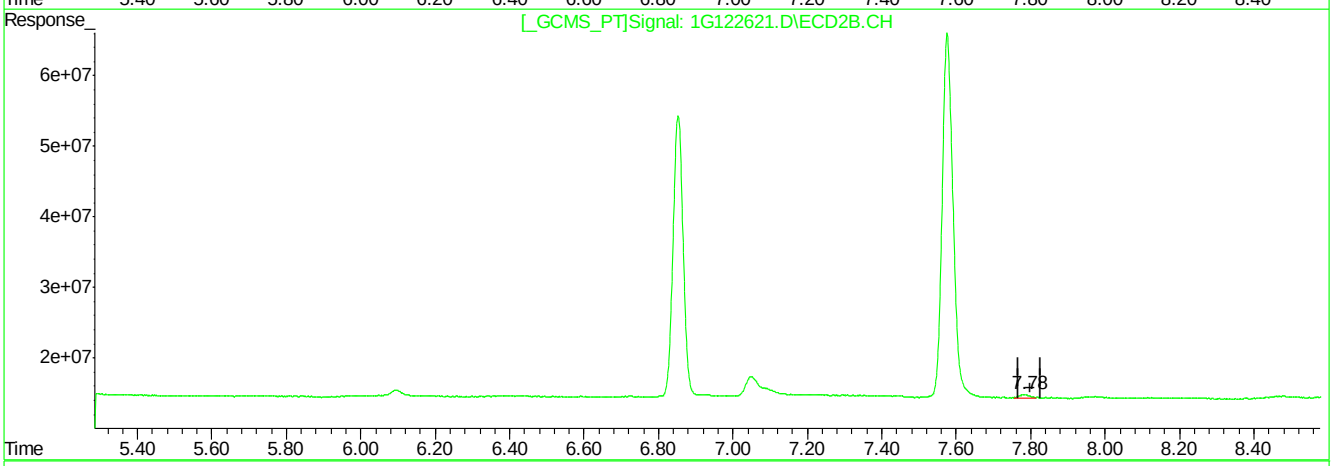
1G122621.D 1PST3973.M Fri Apr 29 16:54:21 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122621.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122621.D\ECD2B.CH
Acq On    : 4-29-16 04:24:50 PM                      Operator: dharas
Sample    : ddt                                      Inst    : GC1G
Misc      : op93471,g1g3976,16.6,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 29 16:52 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(19) Endrin Aldehyde (B)

6.05min 0.872PPB m

response 1005972

(19) Endrin Aldehyde #2 (B)

7.78min 0.718PPB m

response 8060733

(+) = Expected Retention Time

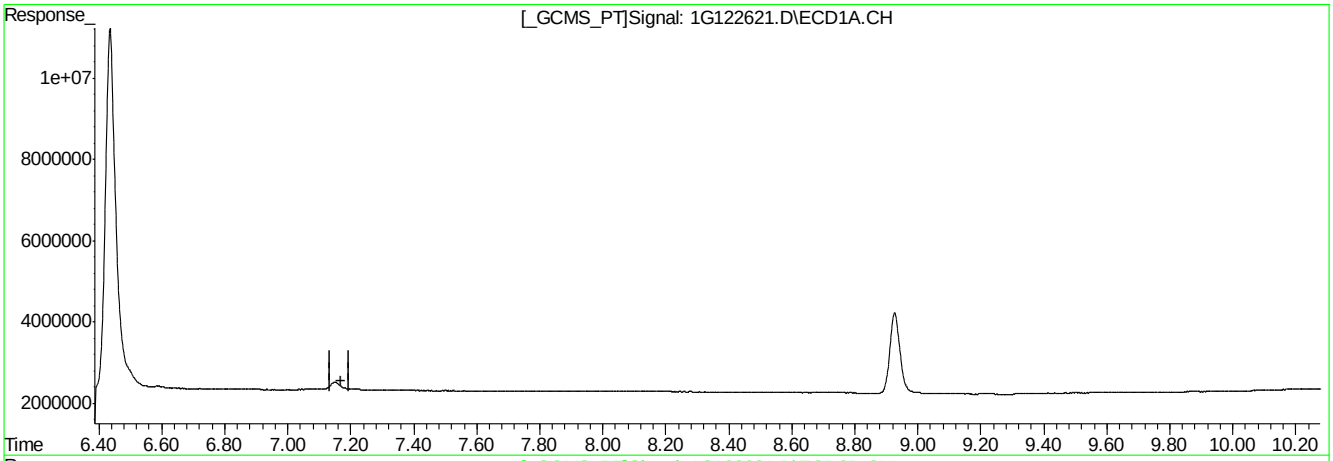
1G122621.D 1PST3973.M Fri Apr 29 16:54:41 2016 RPT1

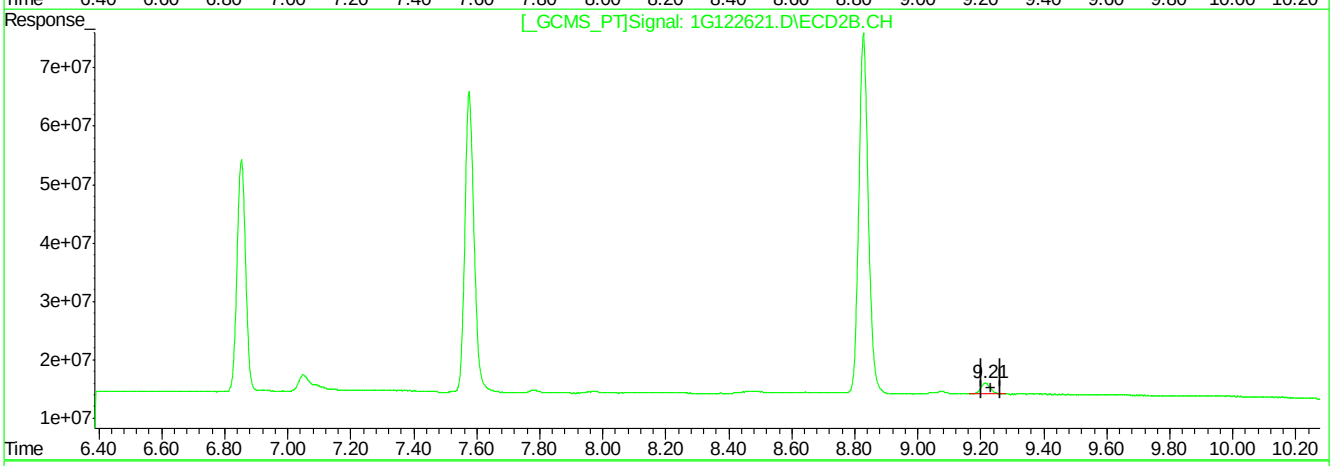
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122621.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122621.D\ECD2B.CH
Acq On    : 4-29-16 04:24:50 PM                      Operator: dharas
Sample    : ddt                                      Inst    : GC1G
Misc      : op93471,g1g3976,16.6,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 29 16:52 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(23) Endrin Ketone (B)

0.00min 0.000PPB

response 0

(23) Endrin Ketone #2 (B)

9.21min 3.366PPB

response 39491395

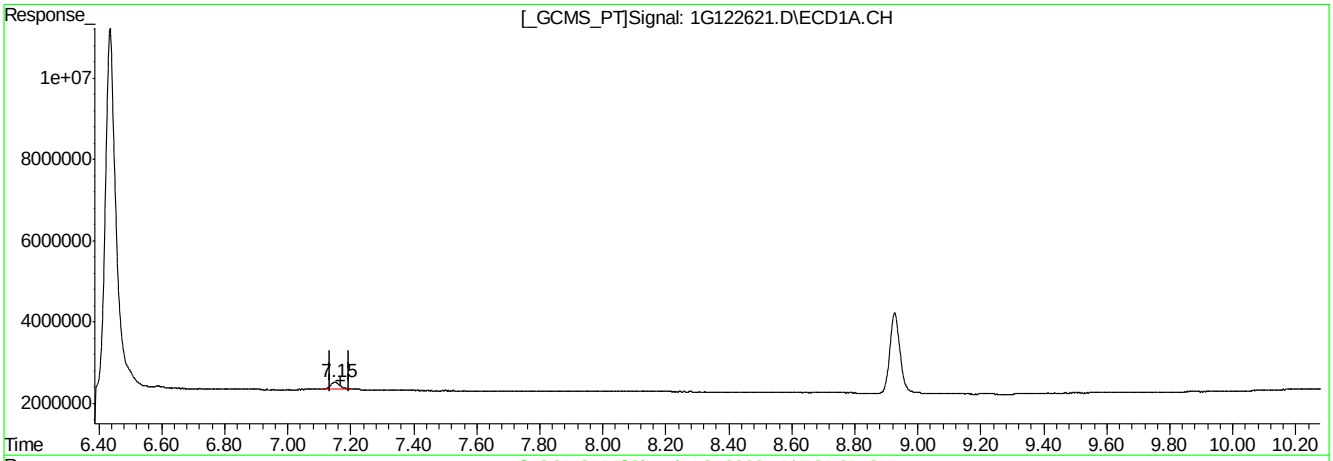
(+) = Expected Retention Time

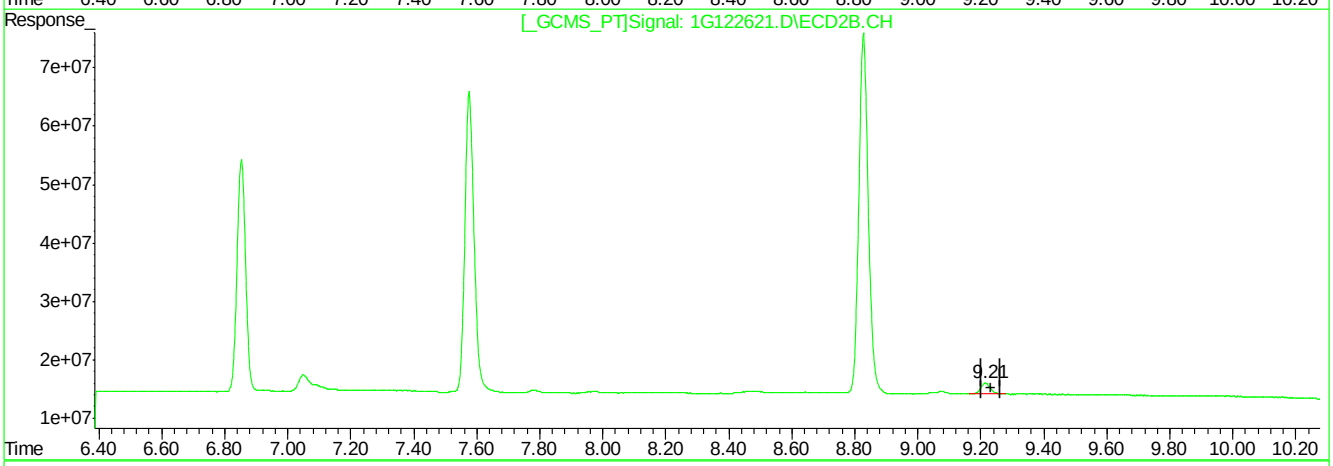
1G122621.D 1PST3973.M Fri Apr 29 16:54:45 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122621.D\ECD1A.CH Vial: 1
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122621.D\ECD2B.CH
Acq On    : 4-29-16 04:24:50 PM                      Operator: dharas
Sample    : ddt                                      Inst    : GC1G
Misc      : op93471,g1g3976,16.6,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 29 16:52 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(23) Endrin Ketone (B)

7.15min 2.746PPB m

response 3499708

(23) Endrin Ketone #2 (B)

9.21min 3.366PPB

response 39491395

(+) = Expected Retention Time

1G122621.D 1PST3973.M Fri Apr 29 16:54:53 2016 RPT1

9.5.3.9

9

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.

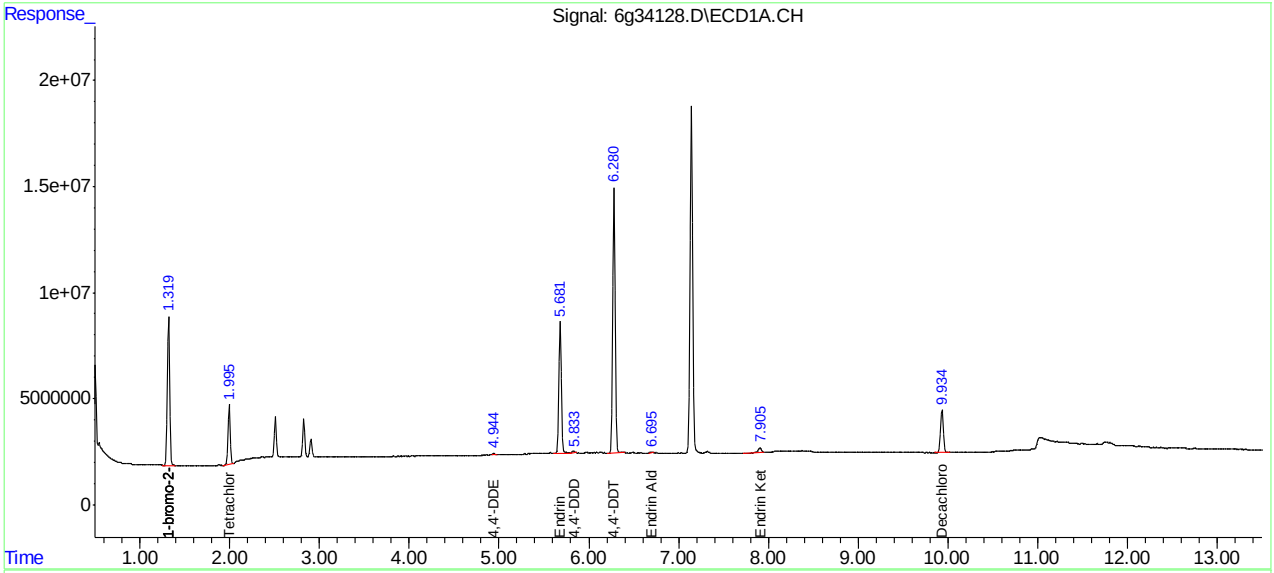
9.5.4
9

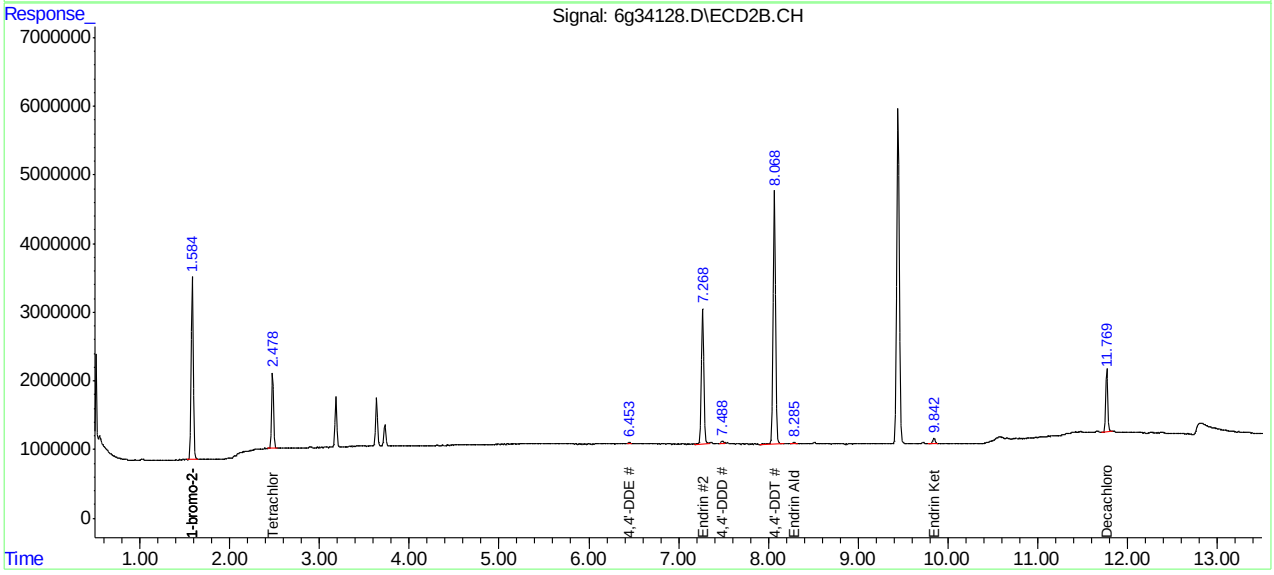
Quantitation Report (QT Reviewed)

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





SGS ACCUTEST JC19023

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

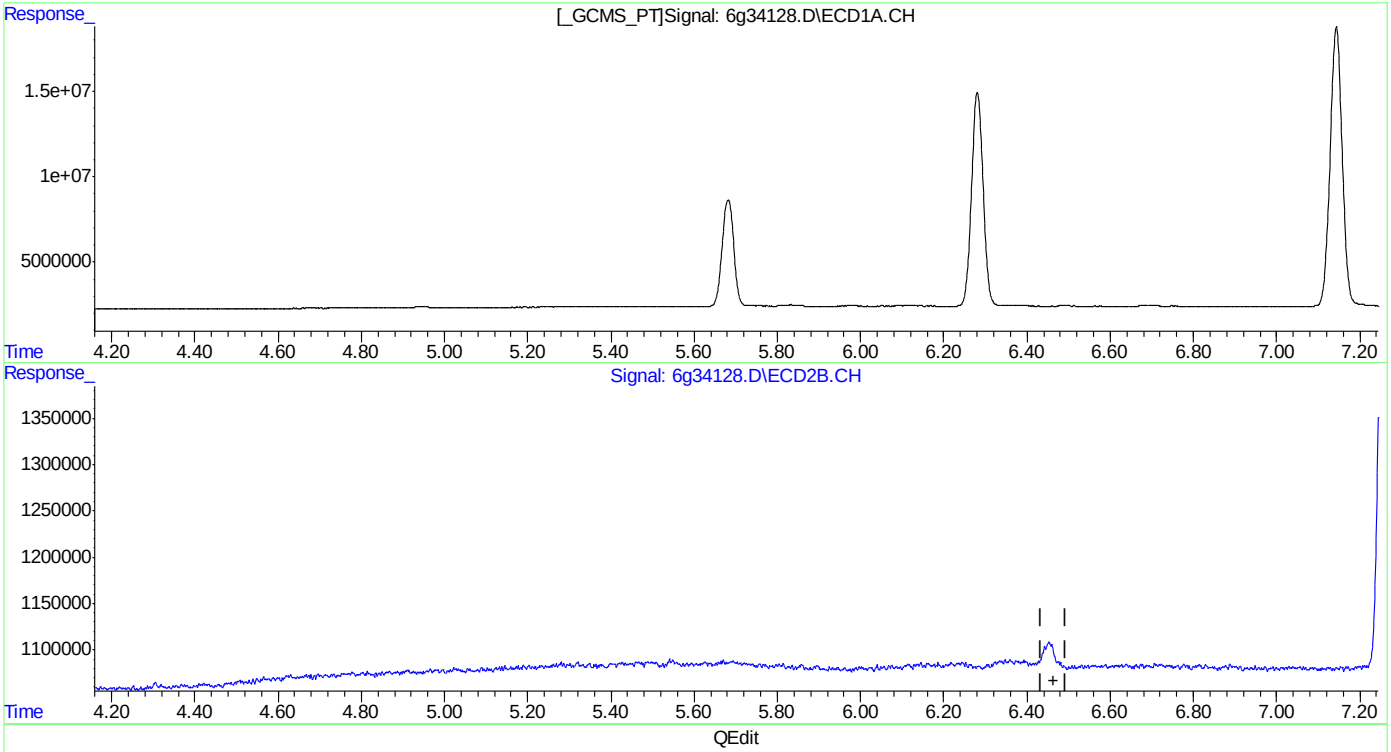
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	1	4.94	Poor instrument integration
4,4'-DDD	72-54-8	1	5.83	Poor instrument integration
4,4'-DDE	72-55-9	2	6.45	Poor instrument integration
Endrin aldehyde	7421-93-4	1	6.70	Poor instrument integration
4,4'-DDD	72-54-8	2	7.49	Poor instrument integration
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

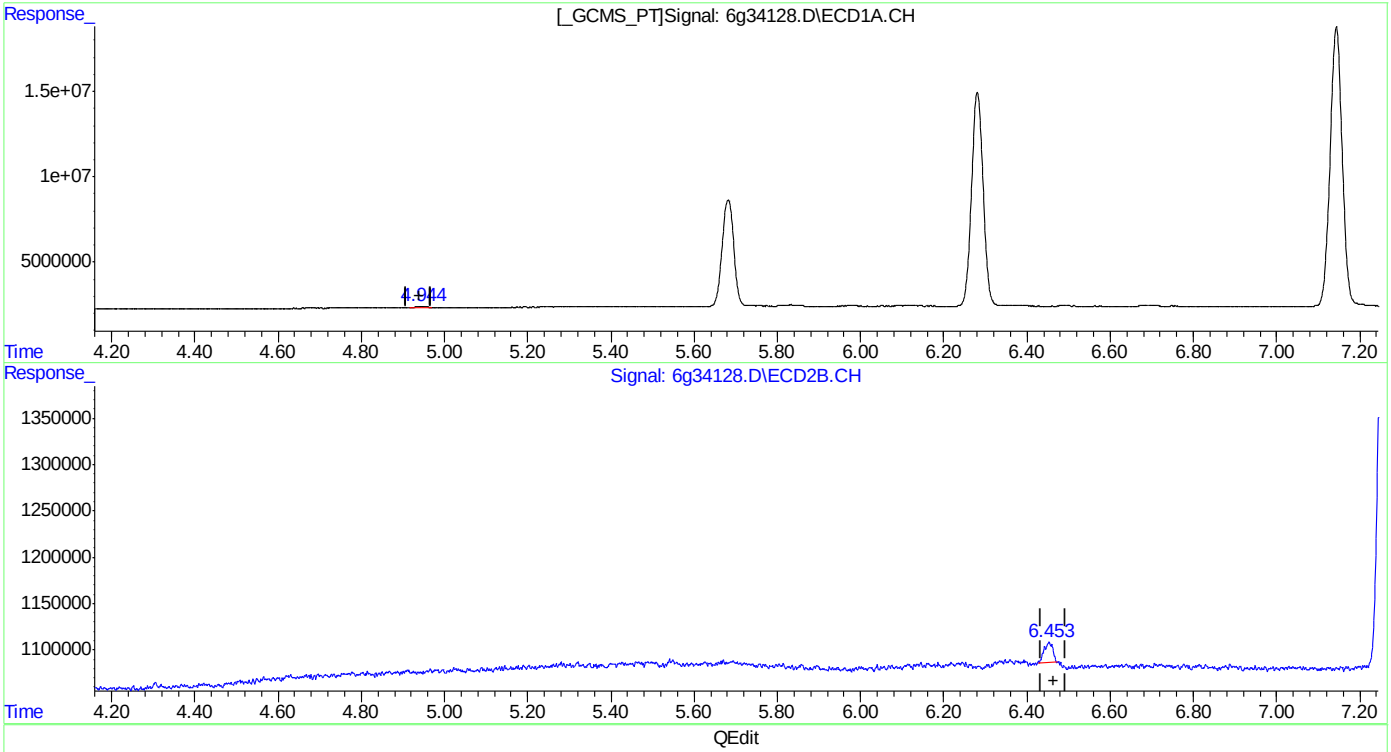
(+) = Expected Retention Time
6PST987.M Mon Apr 18 11:41:26 2016

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



QEdit

(13) 4,4'-DDE (B)
4.944min 0.498PPB m
response 1018177

(13) 4,4'-DDE #2 (B)
6.453min 0.455PPB m
response 323855

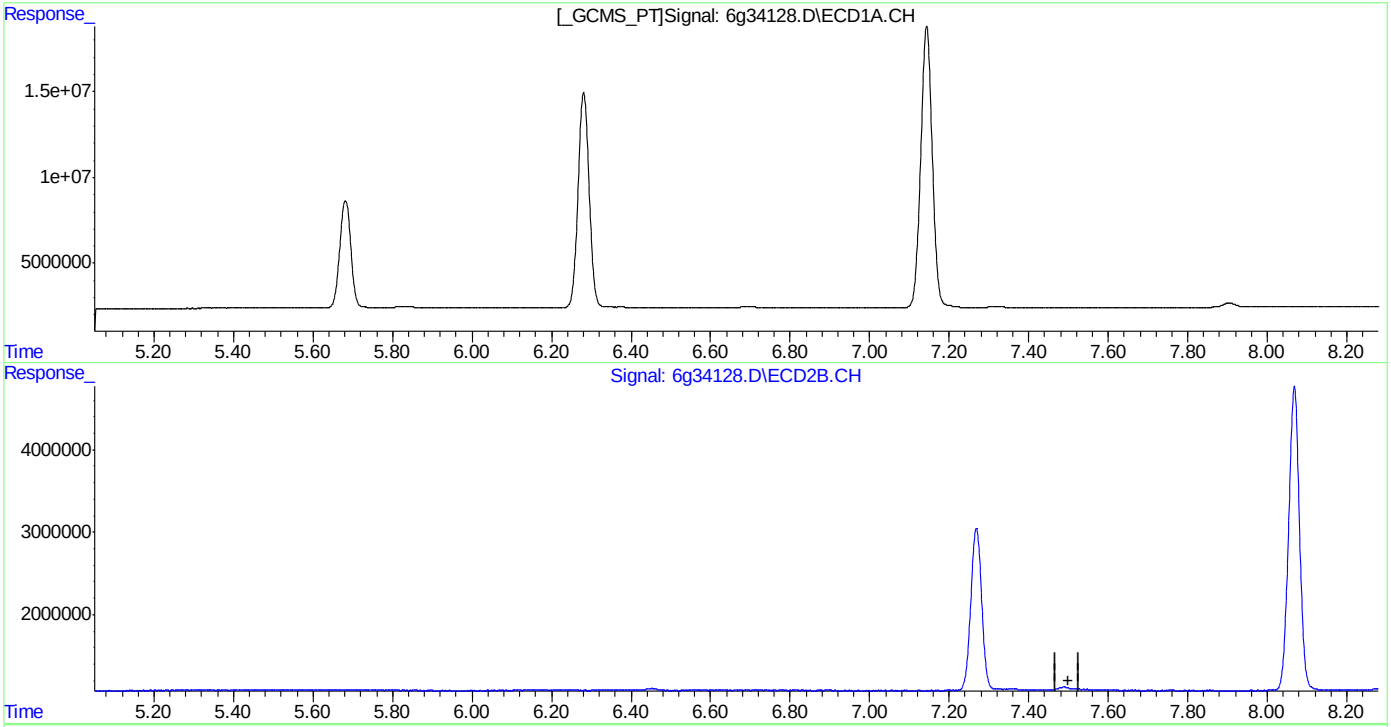
(+) = Expected Retention Time

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

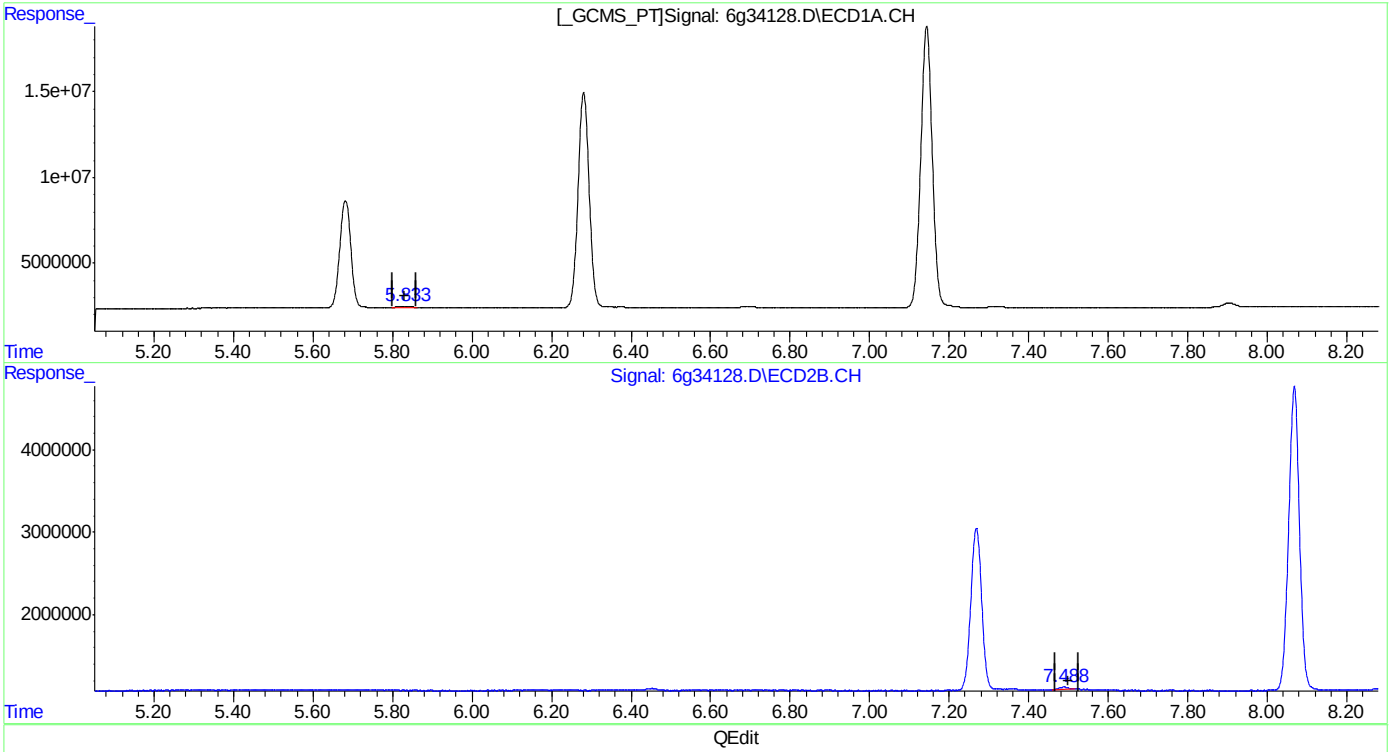
6PST987.M Mon Apr 18 11:41:59 2016

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34128.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 14 Apr 2016   3:16 pm
Operator  : dharas
Sample    : ddt
Misc      : op92908,g6g987,6.8,,,10,5
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:40:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title  : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     : 1ul/column
Signal #1 Phase : RTXCLP I          Signal #2 Phase: RTX-CLP II
Signal #1 Info  : 30mx.32mmx.50um   Signal #2 Info : 30m x .32mm x .25um
```



QEdit

(16) 4,4'-DDD (A)
5.833min 0.759PPB m
response 1311683

(16) 4,4'-DDD #2 (A)
7.488min 0.878PPB m
response 538829

(+) = Expected Retention Time

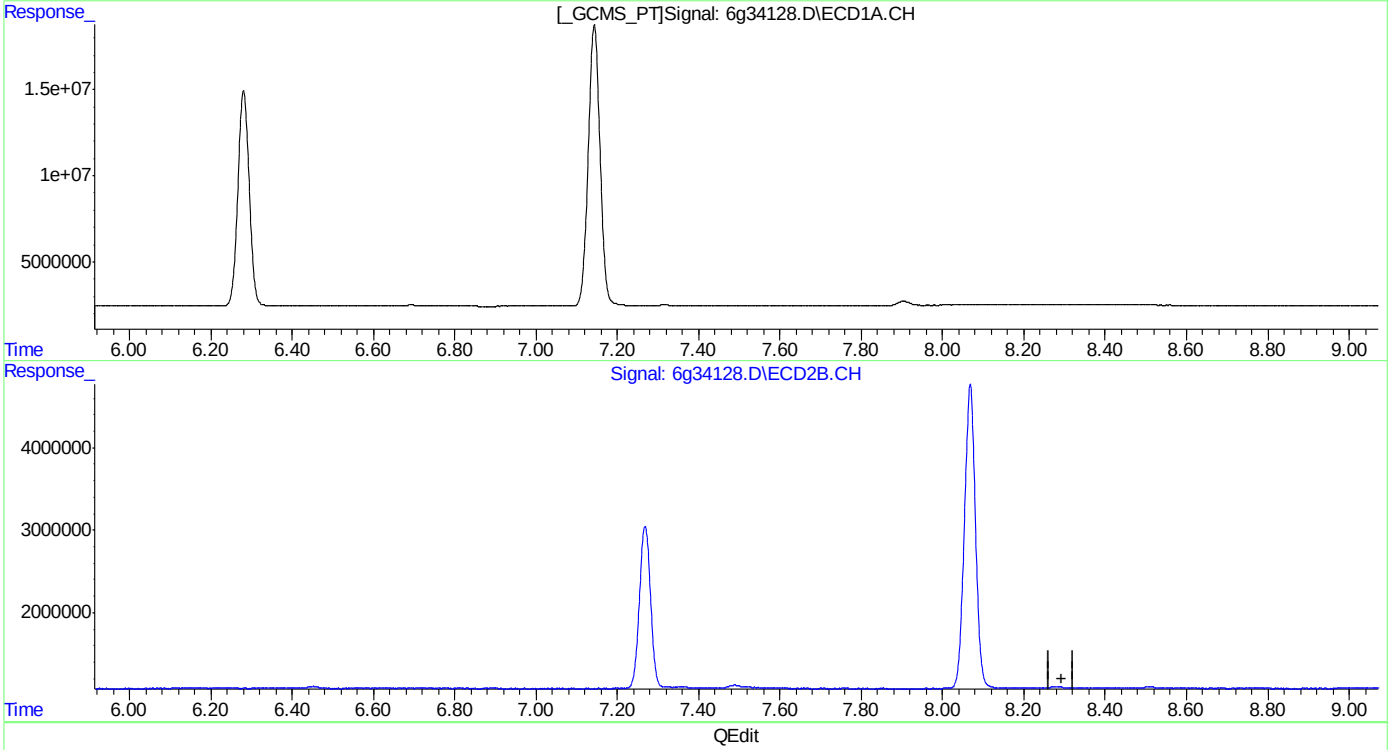
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34128.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:16 pm
Operator : dharas
Sample : ddt
Misc : op92908,g6g987,6.8,,,10,5
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:40:56 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(19) Endrin Aldehyde (B)
0.000min 0.000PPB
response 0

(19) Endrin Aldehyde #2 (B)
0.000min 0.000PPB
response 0

(+) = Expected Retention Time
6PST987.M Mon Apr 18 11:42:26 2016

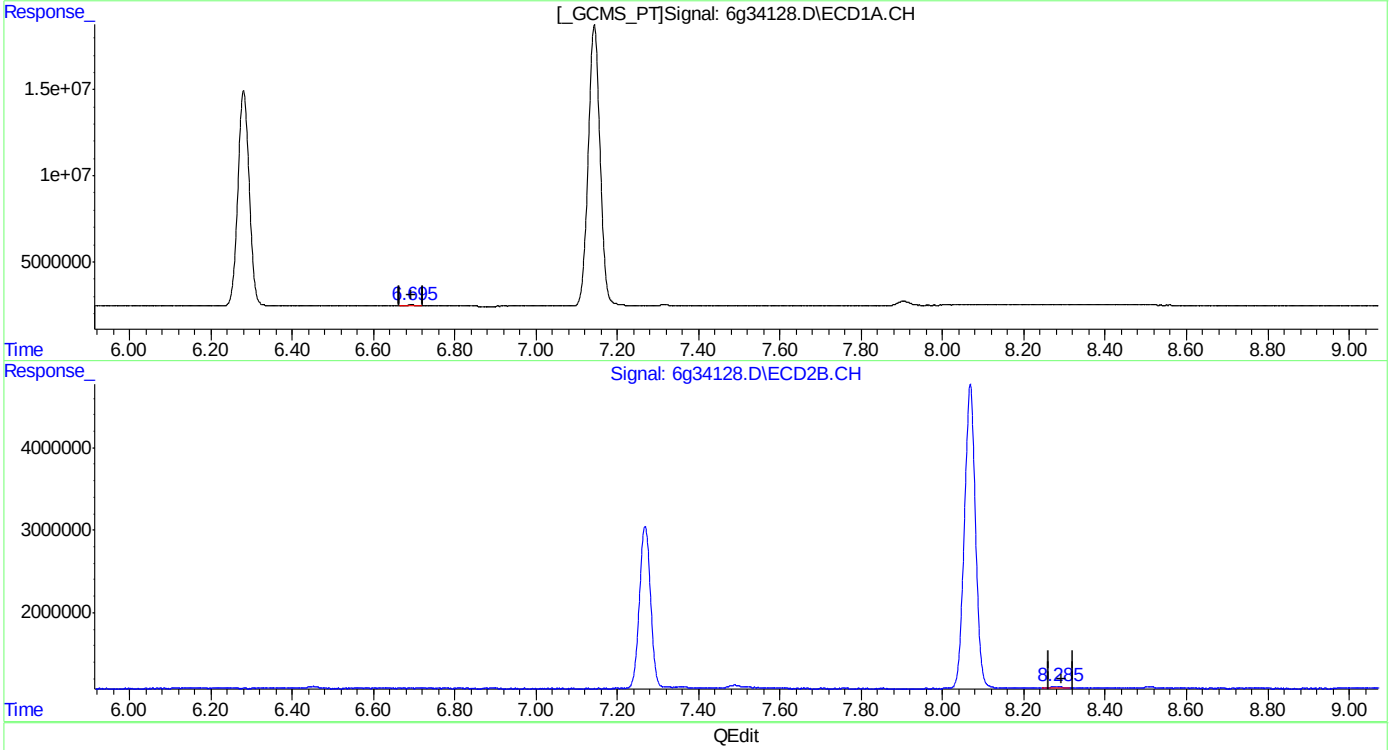
SGS ACCUTEST JC19023

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

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/27/16 14:30

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\997\
Data File : 6g34444.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Apr 2016 8:00 am
Operator : brittanp
Sample : dt
Misc : op93363,g6g997,1000,,,5,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 27 11:25:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Tue Apr 26 17:50:34 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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...	1.309	1.579	199.4E6	69664129	50.000	50.000
25) I	1-bromo-2...	1.309	1.579	199.4E6	69664129	50.000	50.000
31) I	1-bromo-2...	1.309	1.579	199.4E6	69664129	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.982	2.473	77642307	27273561	21.240	21.669
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 53.10%	54.17%
24)	SAB Decachlor...	9.909	11.752	68906624	20815481	21.678	21.996
	Spiked Amount	40.000			Recovery	= 54.20%	54.99%
	Target Compounds						
13) B	4,4'-DDE	4.920	6.437	1219820	463625	0.387m	0.412m
15) MA	Endrin	5.656	7.250	187.7E6	59401837	55.736	50.445
16) A	4,4'-DDD	5.807	7.474	1971542	1692997	0.740m	1.742m#
18) MA	4,4'-DDT	6.257	8.050	378.0E6	110.0E6	130.439	124.696
19) B	Endrin Al...	6.669	8.261	1437099	524055	0.531m	0.561m
23) B	Endrin Ke...	7.878	9.823	7950928	3117663	2.291	2.632

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

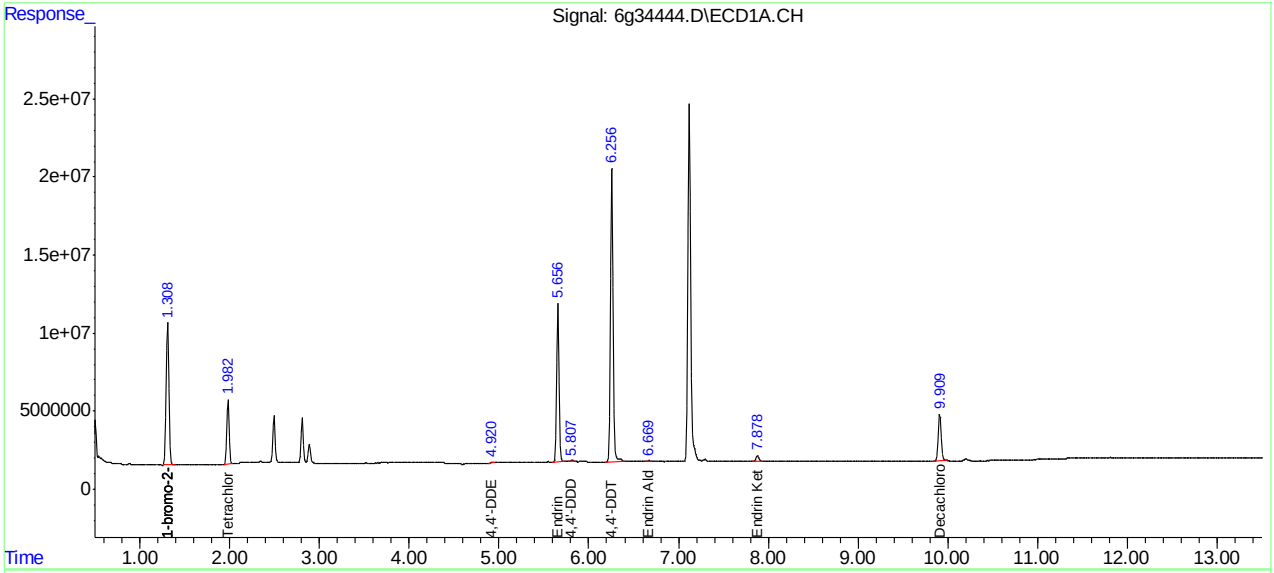
9.5.5
9

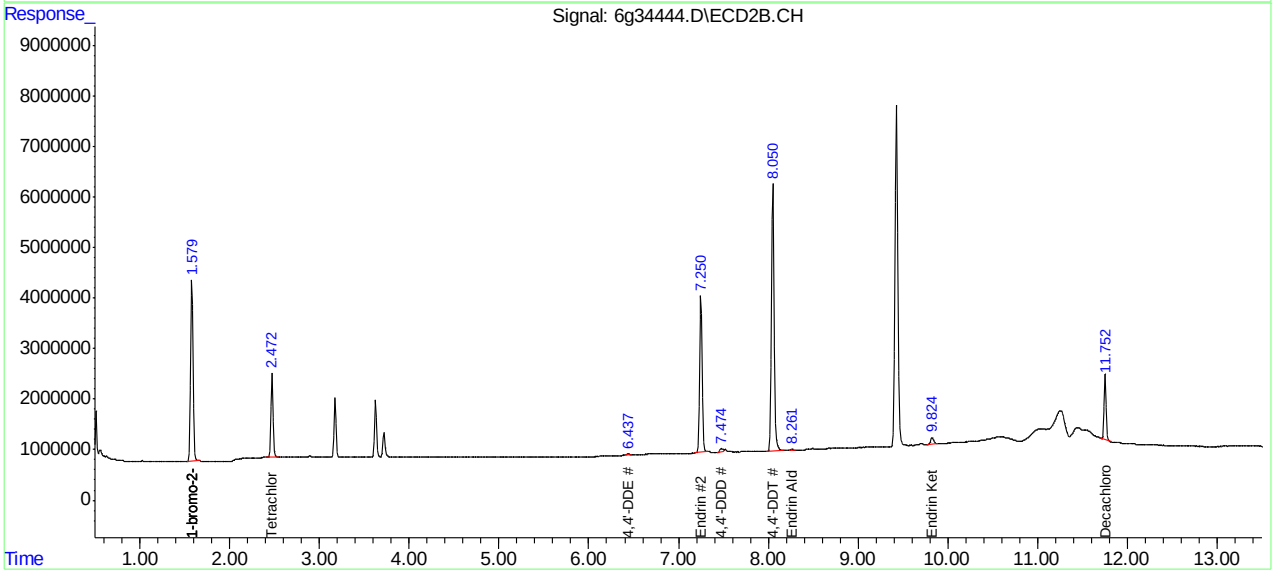
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\997\
Data File : 6g34444.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Apr 2016 8:00 am
Operator : brittanp
Sample : dt
Misc : op93363,g6g997,1000,,,5,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 27 11:25:24 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Tue Apr 26 17:50:34 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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 JC19023

Manual Integration Approval Summary

Sample Number:	G6G997-DDT	**Method:**	EPA 608
Lab FileID:	6G34444.D	**Analyst approved:**	04/27/16 12:19 Dhara Saparia
Injection Time:	04/27/16 08:00	**Supervisor approved:**	04/27/16 14:30 Gwendolyn Burns

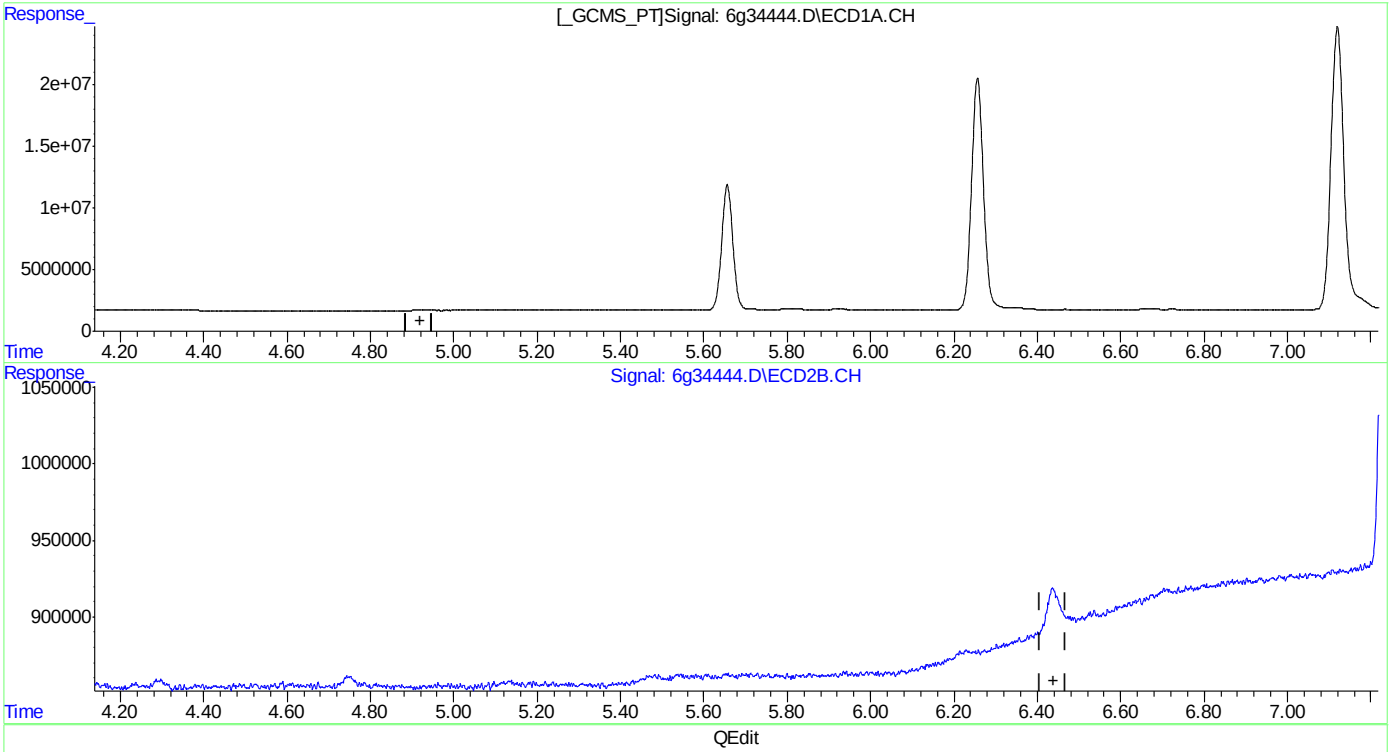
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	1	4.92	Poor instrument integration
4,4'-DDD	72-54-8	1	5.81	Poor instrument integration
4,4'-DDE	72-55-9	2	6.44	Poor instrument integration
Endrin aldehyde	7421-93-4	1	6.67	Poor instrument integration
4,4'-DDD	72-54-8	2	7.47	Poor instrument integration
Endrin aldehyde	7421-93-4	2	8.26	Poor instrument integration

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\997\
Data File : 6g34444.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 27 Apr 2016   8:00 am
Operator  : brittanp
Sample    : dt
Misc      : op93363,g6g997,1000,,,5,1
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 27 11:21:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title  : PEST/PCB
QLast Update : Tue Apr 26 17:50:34 2016
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     : 1ul/column
Signal #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

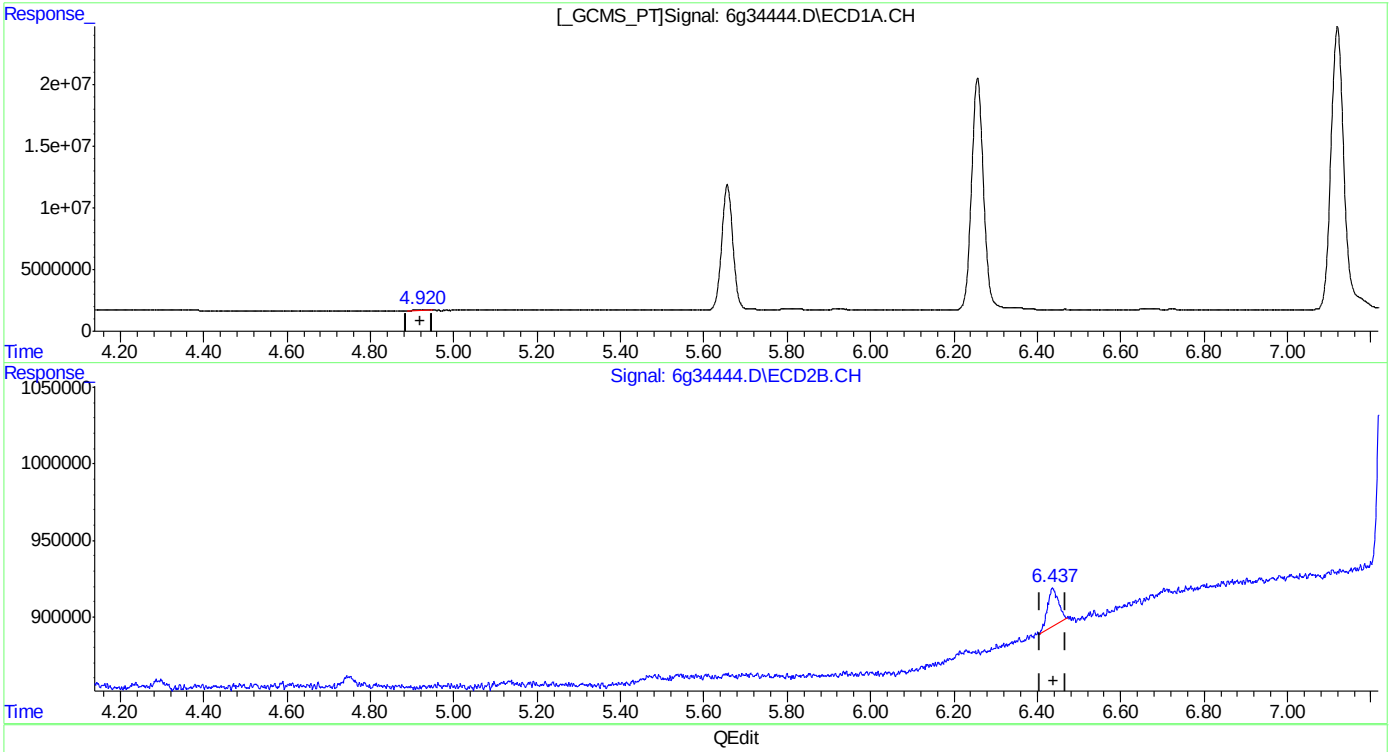
6PST987.M Wed Apr 27 11:23:23 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\997\
Data File : 6g34444.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Apr 2016 8:00 am
Operator : brittanp
Sample : dt
Misc : op93363,g6g997,1000,,,5,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 27 11:21:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Tue Apr 26 17:50:34 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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)
4.920min 0.387PPB m
response 1219820

(13) 4,4'-DDE #2 (B)
6.437min 0.412PPB m
response 463625

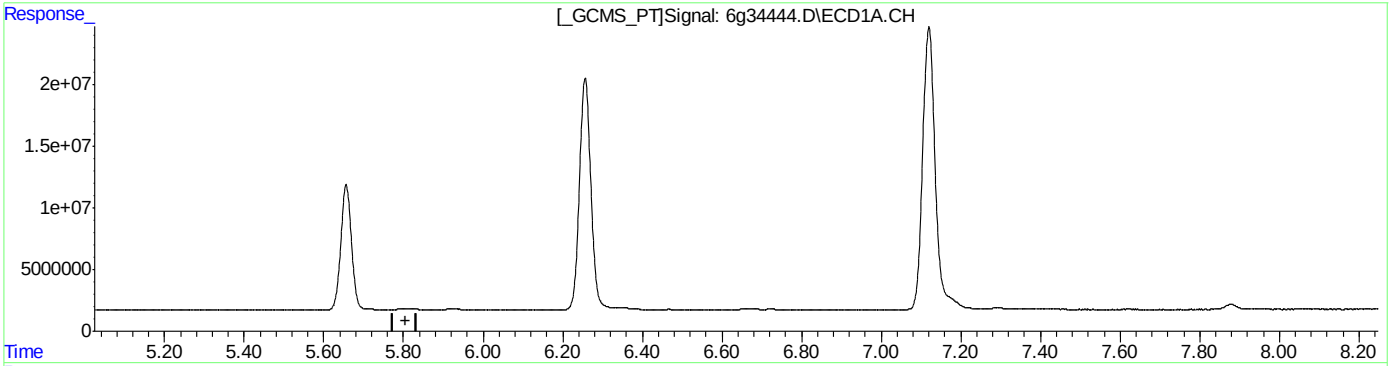
(+) = Expected Retention Time
6PST987.M Wed Apr 27 11:24:23 2016

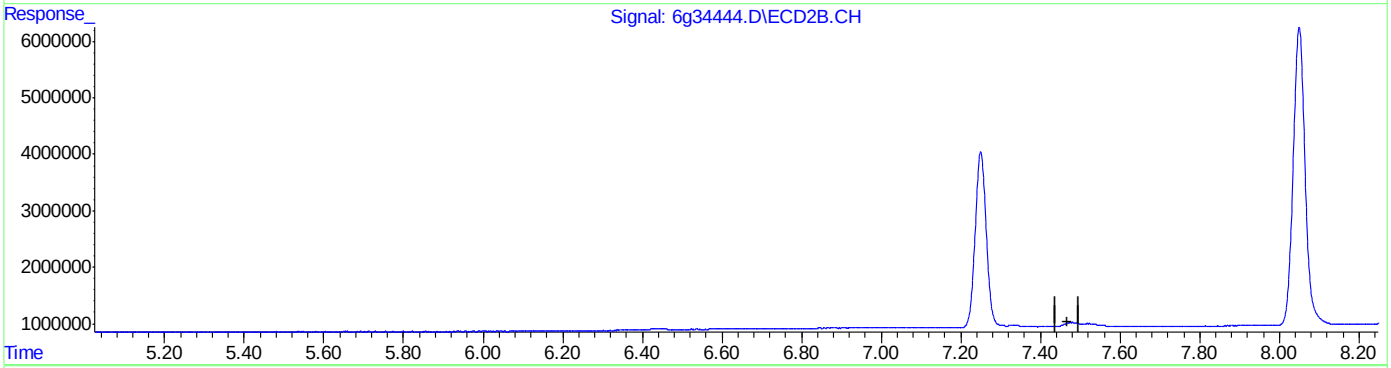
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\997\
Data File : 6g34444.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Apr 2016 8:00 am
Operator : brittanp
Sample : dt
Misc : op93363,g6g997,1000,,,5,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 27 11:21:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Tue Apr 26 17:50:34 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(16) 4,4'-DDD (A)
0.000min 0.000PPB
response 0

(16) 4,4'-DDD #2 (A)
0.000min 0.000PPB
response 0

(+) = Expected Retention Time

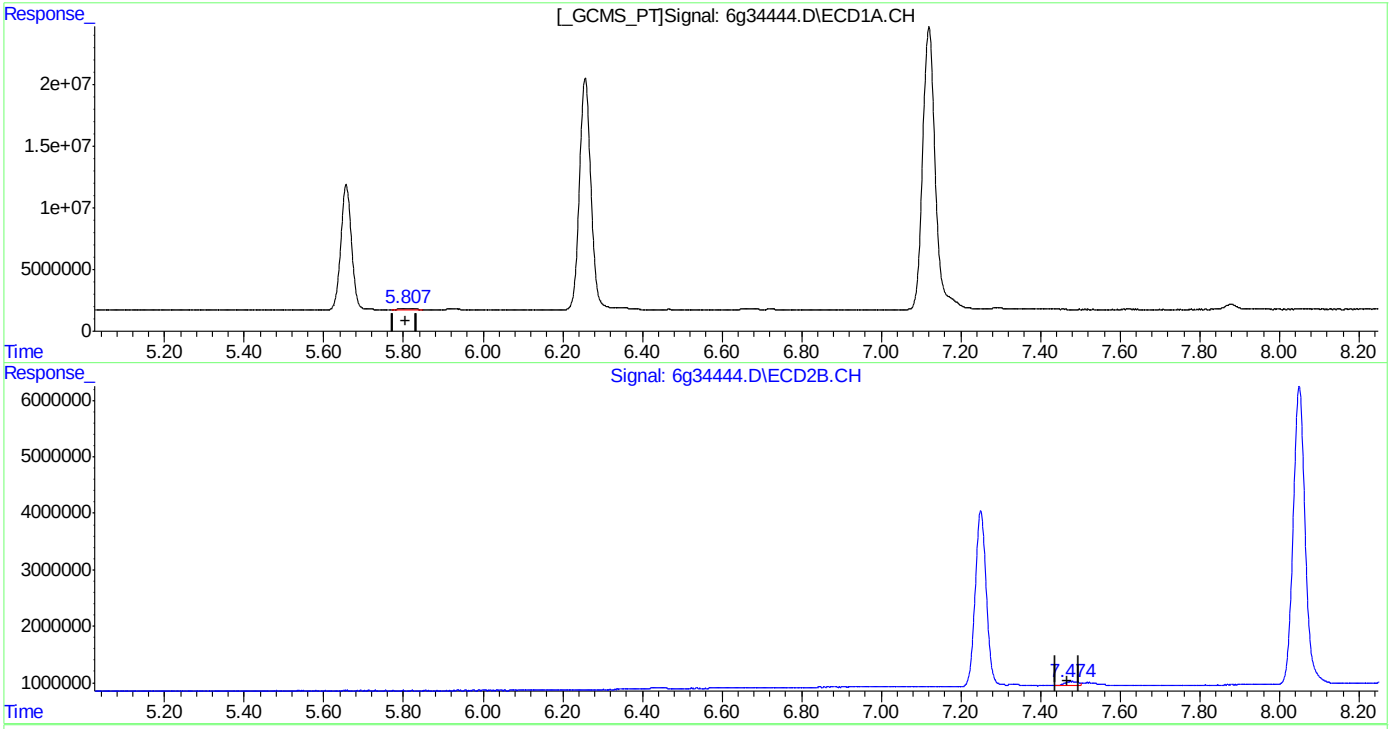
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\997\
Data File : 6g34444.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 27 Apr 2016   8:00 am
Operator  : brittanp
Sample    : dt
Misc      : op93363,g6g997,1000,,,5,1
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 27 11:21:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title  : PEST/PCB
QLast Update : Tue Apr 26 17:50:34 2016
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     : 1ul/column
Signal #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)
5.807min 0.740PPB m
response 1971542

(16) 4,4'-DDD #2 (A)
7.474min 1.742PPB m
response 1692997

(+) = Expected Retention Time

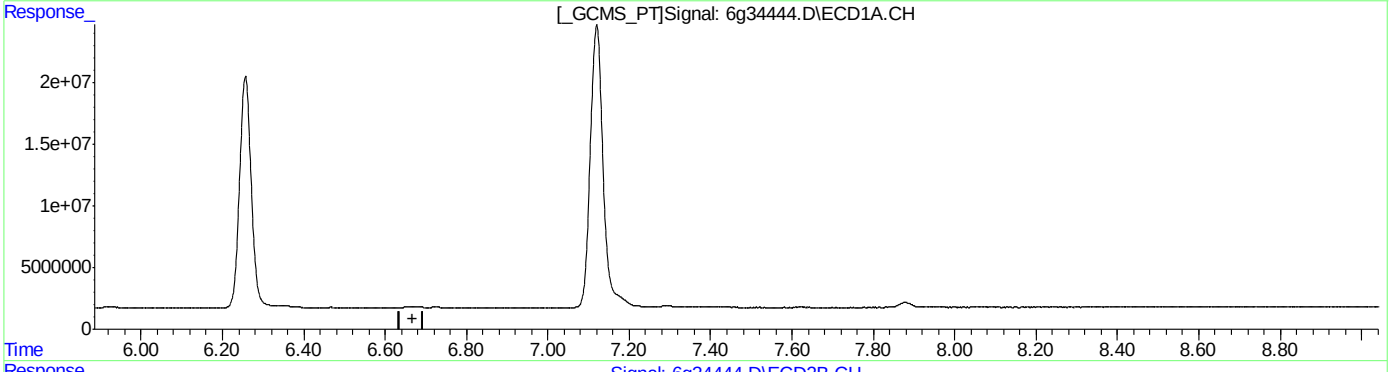
6PST987.M Wed Apr 27 11:24:59 2016

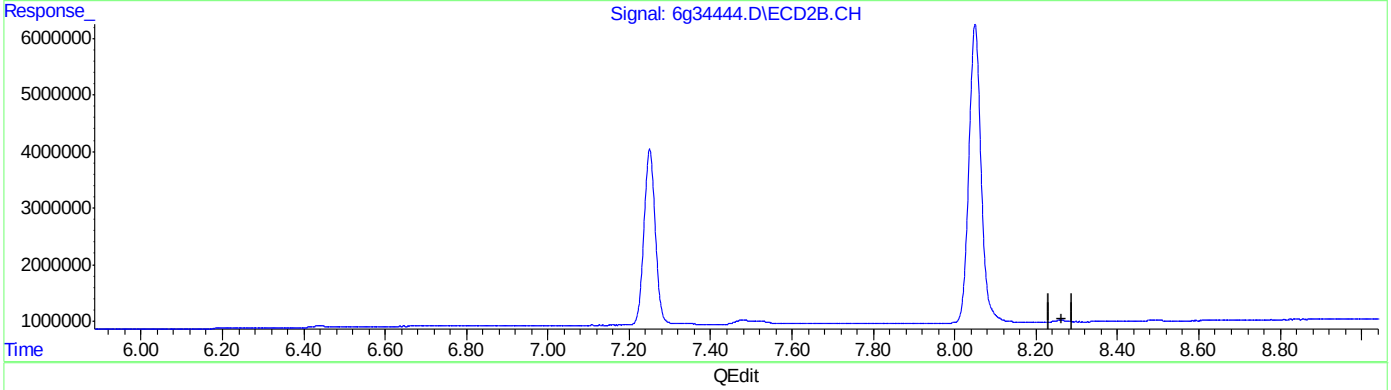
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\997\
Data File : 6g34444.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Apr 2016 8:00 am
Operator : brittanp
Sample : dt
Misc : op93363,g6g997,1000,,,5,1
ALS Vial : 1 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 27 11:21:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Tue Apr 26 17:50:34 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(19) Endrin Aldehyde (B)
0.000min 0.000PPB
response 0

(19) Endrin Aldehyde #2 (B)
0.000min 0.000PPB
response 0

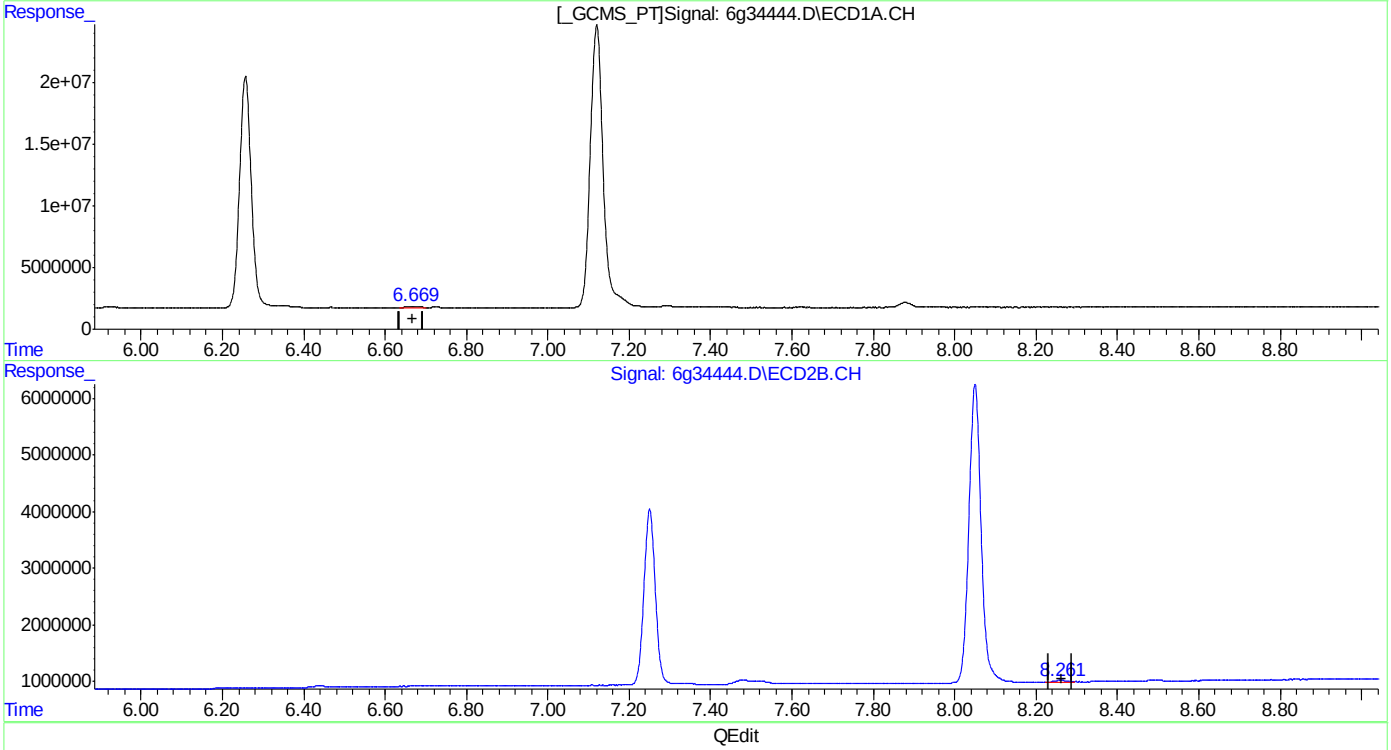
(+) = Expected Retention Time
6PST987.M Wed Apr 27 11:25:09 2016

Quantitation Report (Qedit)

```
Data Path : C:\msdchem\1\DATA\997\
Data File : 6g34444.D
Signal(s) : Signal #1: ECD1A.CH  Signal #2: ECD2B.CH
Acq On    : 27 Apr 2016   8:00 am
Operator  : brittanp
Sample    : dt
Misc      : op93363,g6g997,1000,,,5,1
ALS Vial  : 1   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 27 11:21:54 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title  : PEST/PCB
QLast Update : Tue Apr 26 17:50:34 2016
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.     : 1ul/column
Signal #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)

6.669min 0.531PPB m

response 1437099

(19) Endrin Aldehyde #2 (B)

8.261min 0.561PPB m

response 524055

(+) = Expected Retention Time

6PST987.M Wed Apr 27 11:25:29 2016

SGS ACCUTEST JC19023

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/28/16 16:54

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122525.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122525.D\ECD2B.CH
Acq On : 27 Apr 2016 11:42 am Operator: dharas
Sample : ic3973-1 Inst : GC1G
Misc : op93327,g1g3973,16.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 27 14:51 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3973.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	56807008	897.0E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	1365731	16978659	1.258m	1.203
Spiked Amount	40.000	Range	30 - 150	Recovery	=	3.15%#	3.01%#
24) SA	Decachlorobiphen	8.94	10.86	2302680	10942426	1.535	1.179
Spiked Amount	40.000			Recovery	=	3.84%	2.95%
	Target Compounds						
3) A	alpha-BHC	2.22	3.04	1329092	27109613	1.031	1.273
4) MA	gamma-BHC	2.50	3.47	1372193	24399756	1.115	1.275
5) MA	Heptachlor	2.98	4.04	1538640	22108606	1.164	1.285
6) B	beta-BHC	2.59	3.56	767796	10223407	1.226m	1.257
7) B	delta-BHC	2.76	3.95	1042591	21214111	0.962m	1.207
8) MB	Aldrin	3.30	4.49	1508472	25238653	1.226	1.467
9) B	Heptachlor Epoxi	3.99	5.31	1417990	20610215	1.158	1.324
10) B	gamma-Chlordane	4.15	5.60	1640412	20078620	1.271	1.289
11) B	alpha-Chlordane	4.31	5.83	1689199	22438437	1.357	1.490
12) A	Endosulfan I	4.49	5.92	1602571	21389391	1.354	1.454
13) B	4,4'-DDE	4.44	6.10	1431032	19160828	1.259	1.236
14) MA	Dieldrin	4.80	6.36	1546996	19823864	1.291	1.204
15) MA	Endrin	5.12	6.86	1270051	17574377	1.133	1.230
16) A	4,4'-DDD	5.28	7.06	937505	18234050	0.993	1.386
17) B	Endosulfan II	5.44	7.21	1205242	19601127	1.060	1.378
18) MA	4,4'-DDT	5.67	7.58	796168	7231675	0.885	0.702m
19) B	Endrin Aldehyde	6.06	7.79	1164032	11880499	1.208	1.077
20) B	Endosulfan Sulfa	6.74	8.26	1204108	13340599	1.165	1.114
21) A	Methoxychlor	6.45	8.84	671673	6175298	1.108m	1.130
22)	Mirex	6.53	9.14	1768056	12068702	1.540	1.318
23) B	Endrin Ketone	7.17	9.22	1182565	12354814	0.980	0.970

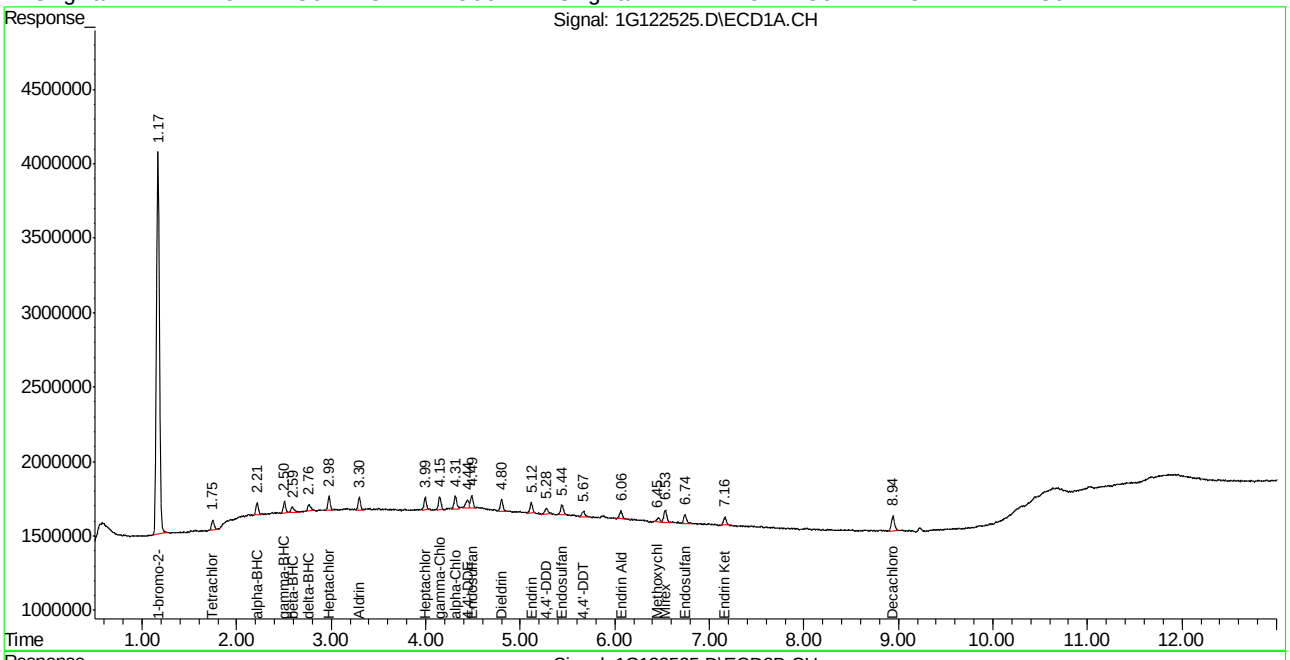
(f)=RT Delta > 1/2 Window (m)=manual int.

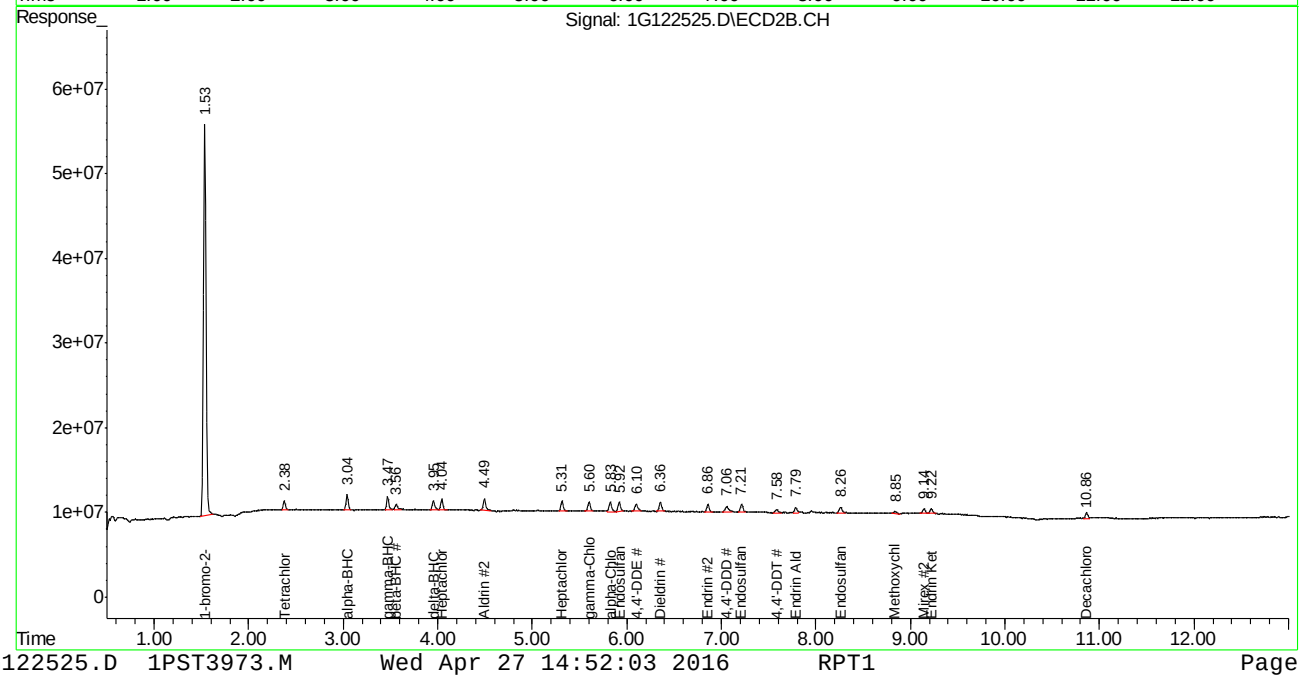
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122525.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122525.D\ECD2B.CH
Acq On : 27 Apr 2016 11:42 am Operator: dharas
Sample : ic3973-1 Inst : GC1G
Misc : op93327,g1g3973,16.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 27 14:51 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3973.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 JC19023

Manual Integration Approval Summary

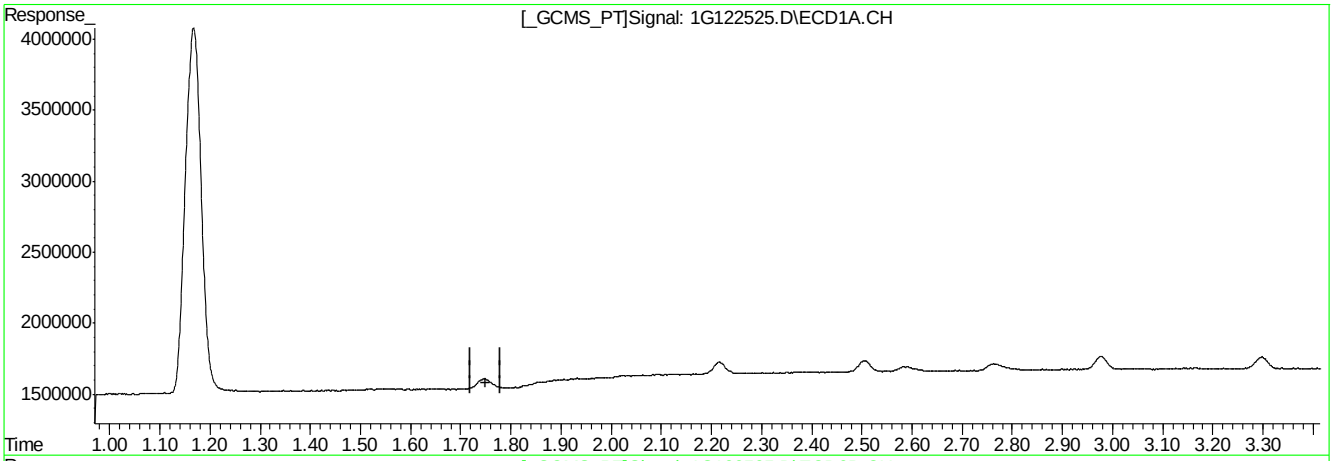
Sample Number:	G1G3973-IC3973	**Method:**	SW846 8081B
Lab FileID:	1G122525.D	**Analyst approved:**	04/27/16 16:32 Dhara Saparia
Injection Time:	04/27/16 11:42	**Supervisor approved:**	04/28/16 16:54 Gwendolyn Burns

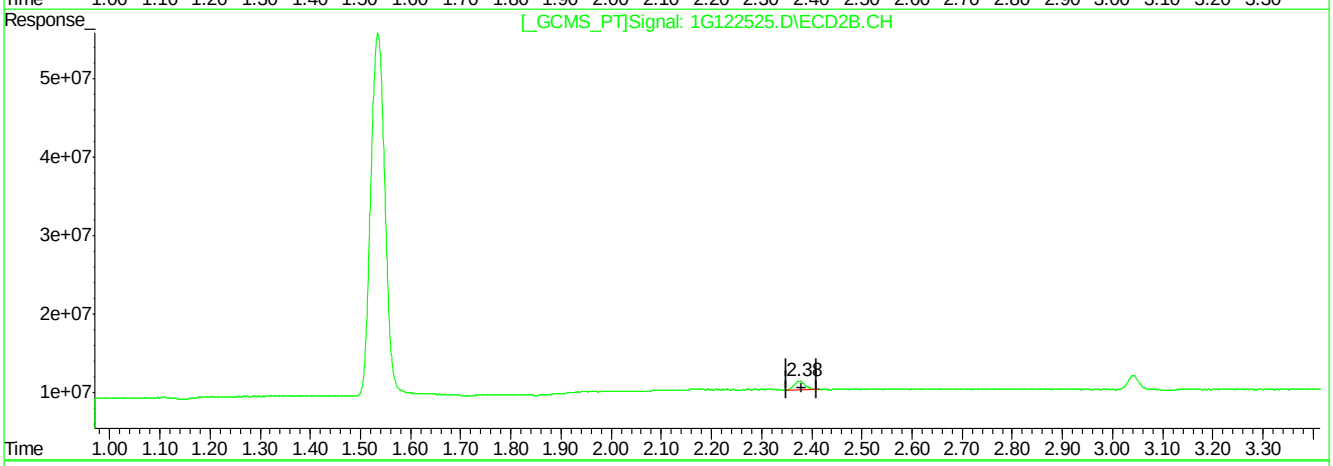
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	1.75	Poor instrument integration
beta-BHC	319-85-7	1	2.59	Poor instrument integration
delta-BHC	319-86-8	1	2.76	Poor instrument integration
Methoxychlor	72-43-5	1	6.45	Poor instrument integration
4,4'-DDT	50-29-3	2	7.58	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122525.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122525.D\ECD2B.CH
Acq On    : 27 Apr 2016  11:42 am                    Operator: dharas
Sample    : ic3973-1                                 Inst    : GC1G
Misc      : op93327,g1g3973,16.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 27 14:08 2016  Quant Results File: 1PST3973.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3973.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)

0.00min 0.000PPB

response 0

(2) Tetrachloro-m-xylene #2 (SAB)

2.38min 1.203PPB

response 16978659

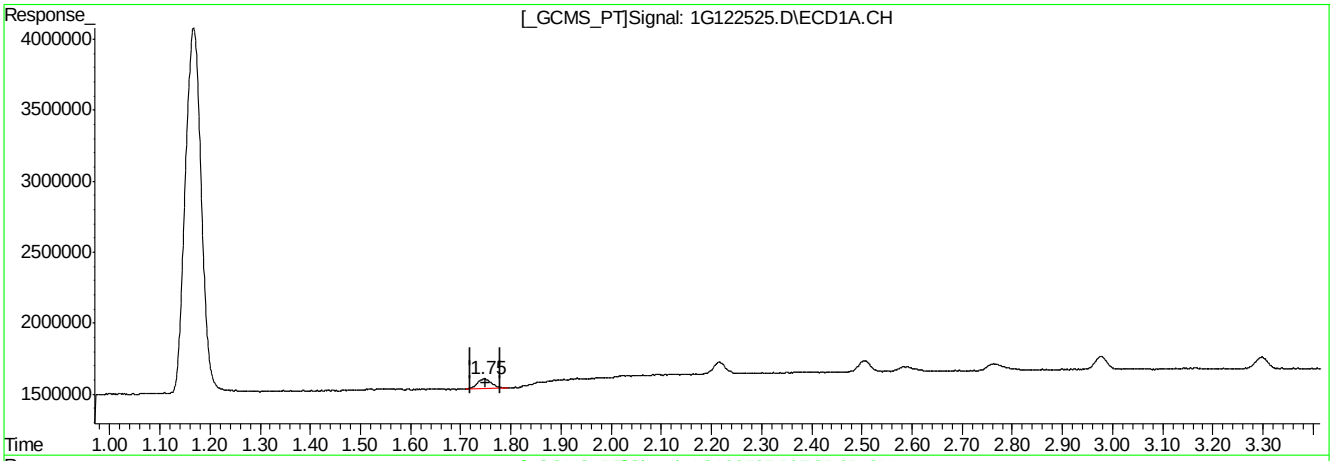
(+) = Expected Retention Time

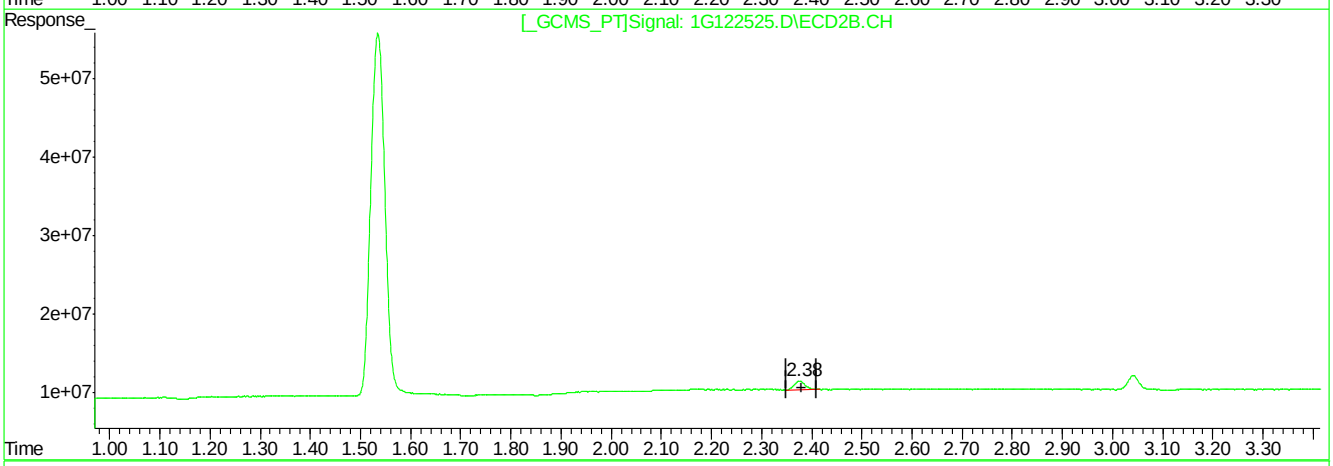
1G122525.D 1PST3973.M Wed Apr 27 14:08:47 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122525.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122525.D\ECD2B.CH
Acq On    : 27 Apr 2016  11:42 am                    Operator: dharas
Sample    : ic3973-1                                 Inst    : GC1G
Misc      : op93327,g1g3973,16.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 27 14:08 2016  Quant Results File: 1PST3973.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3973.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 1.258PPB m

response 1365731

(2) Tetrachloro-m-xylene #2 (SAB)

2.38min 1.203PPB

response 16978659

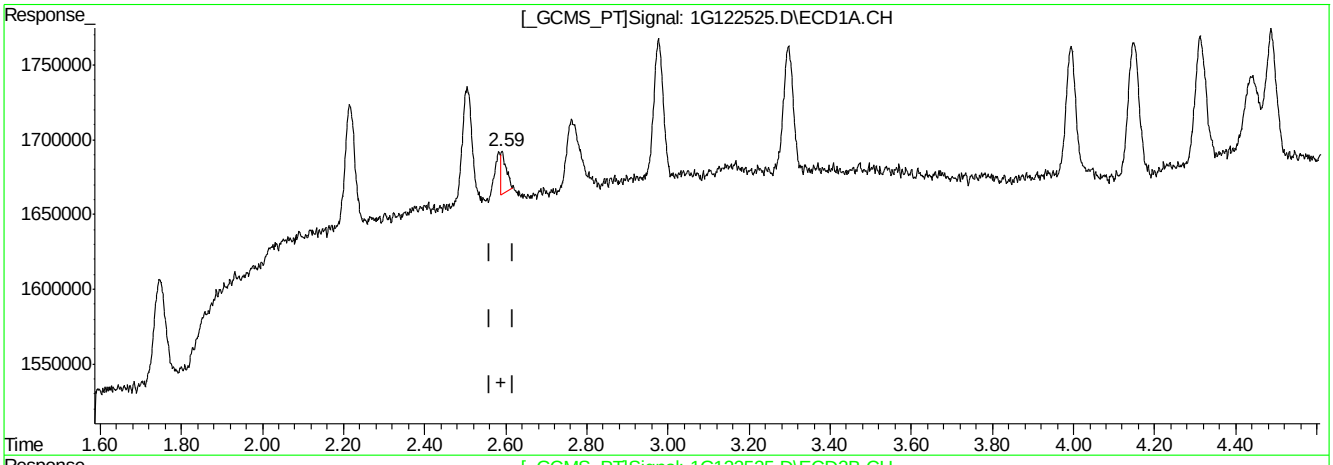
(+) = Expected Retention Time

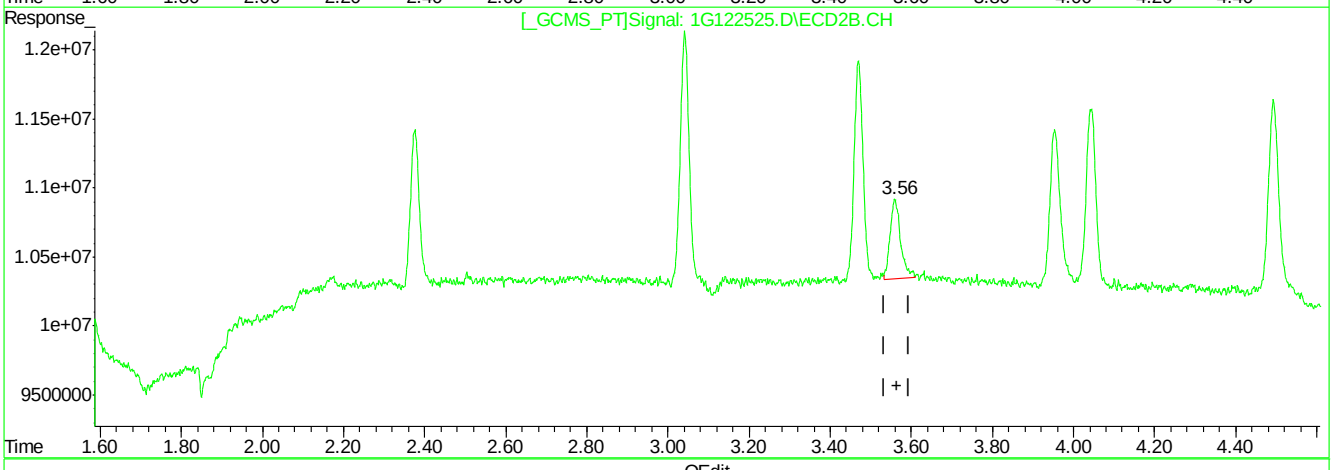
1G122525.D 1PST3973.M Wed Apr 27 14:08:57 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122525.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122525.D\ECD2B.CH
Acq On    : 27 Apr 2016  11:42 am                    Operator: dharas
Sample    : ic3973-1                                 Inst    : GC1G
Misc      : op93327,g1g3973,16.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 27 14:08 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
```





QEdit

(6) beta-BHC (B)

2.59min 0.439PPB

response 274682

(6) beta-BHC #2 (B)

3.56min 1.257PPB

response 10223407

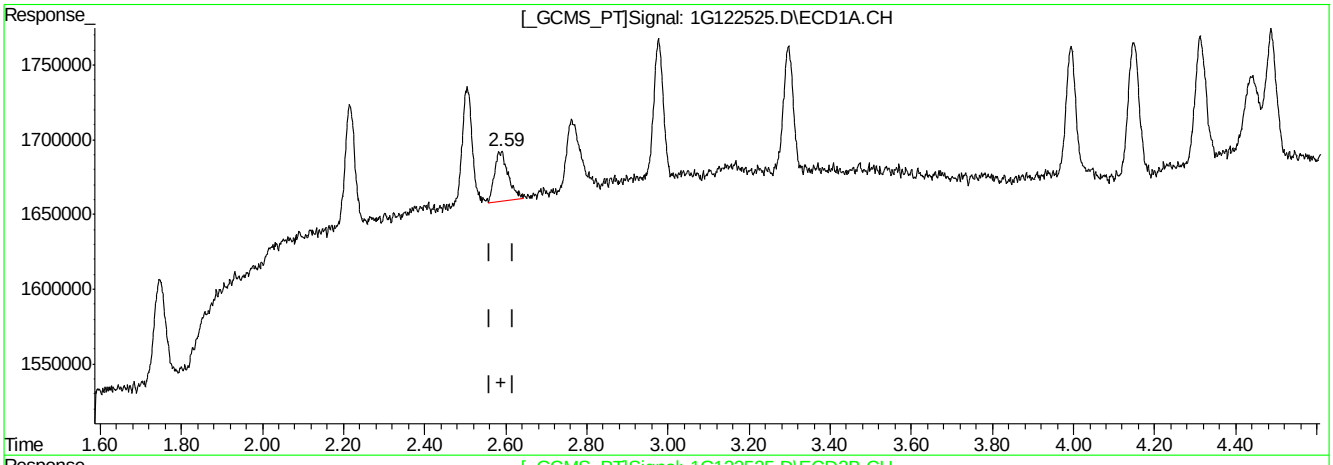
(+) = Expected Retention Time

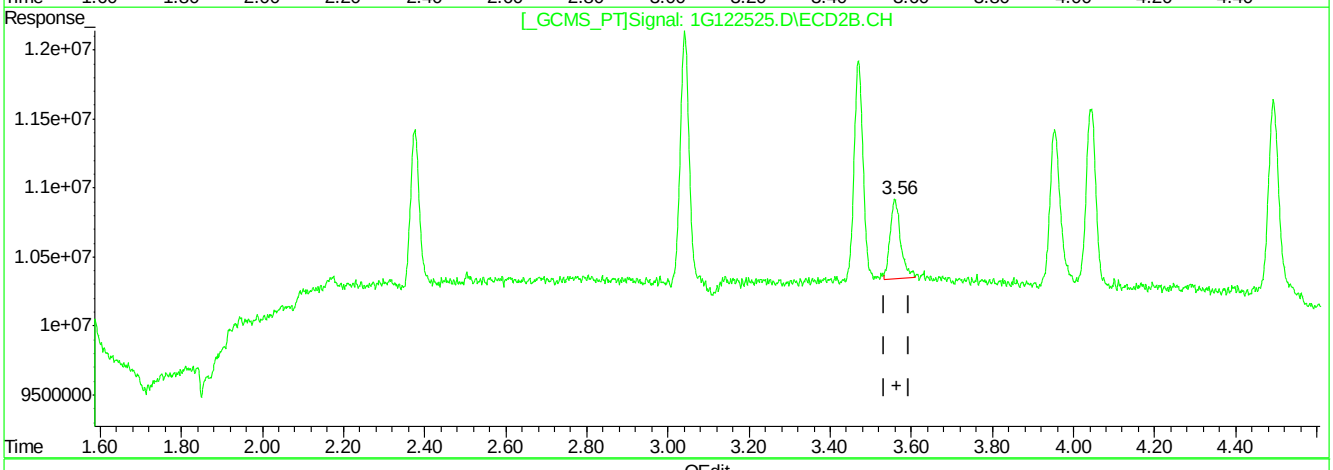
1G122525.D 1PST3973.M Wed Apr 27 14:09:04 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122525.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122525.D\ECD2B.CH
Acq On    : 27 Apr 2016  11:42 am                    Operator: dharas
Sample    : ic3973-1                                 Inst    : GC1G
Misc      : op93327,g1g3973,16.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 27 14:08 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
```





QEdit

(6) beta-BHC (B)

2.59min 1.226PPB m

response 767796

(6) beta-BHC #2 (B)

3.56min 1.257PPB

response 10223407

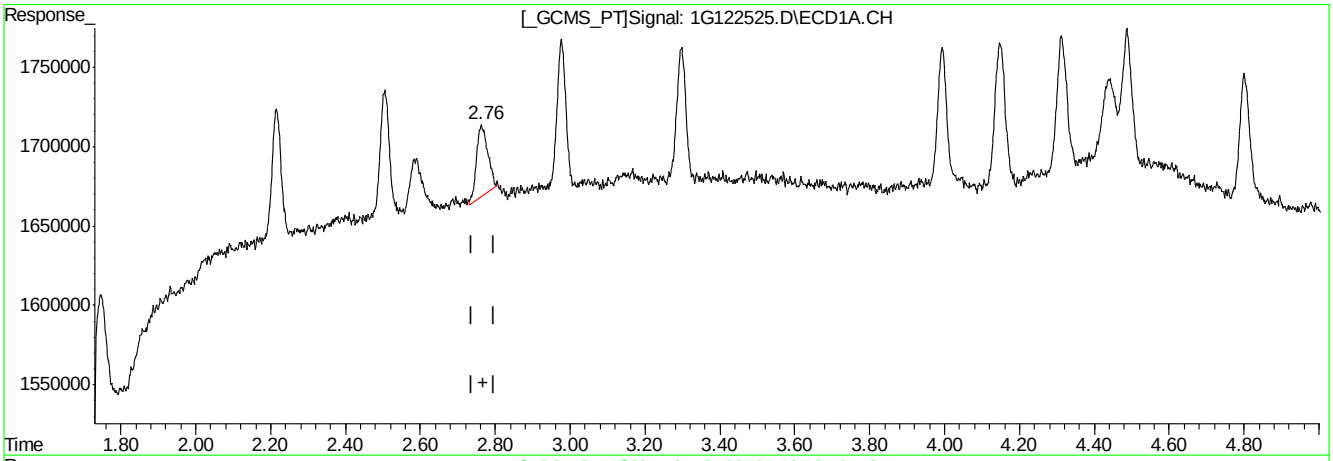
(+) = Expected Retention Time

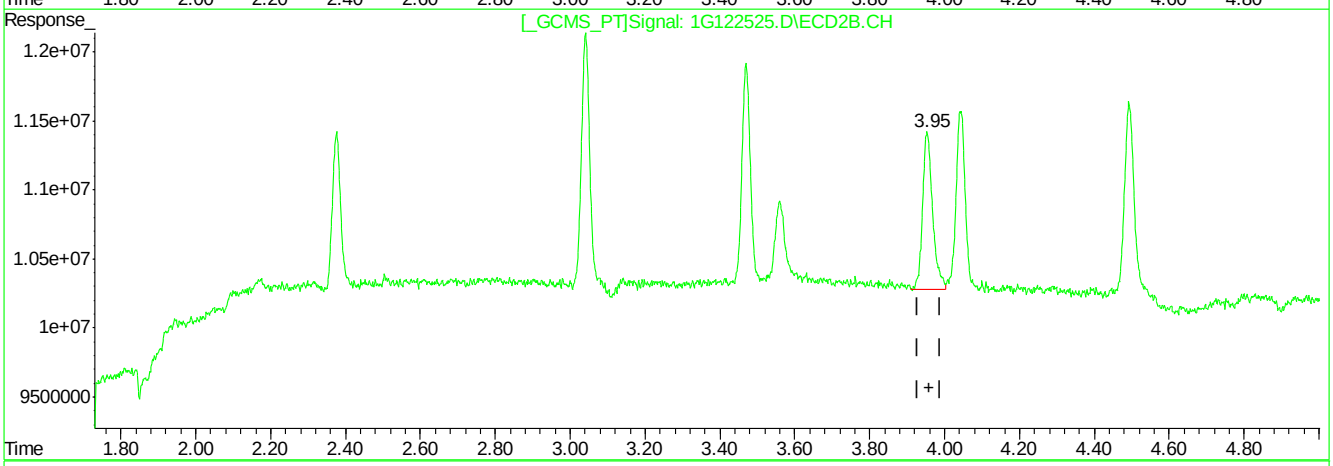
1G122525.D 1PST3973.M Wed Apr 27 14:09:15 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122525.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122525.D\ECD2B.CH
Acq On    : 27 Apr 2016  11:42 am                    Operator: dharas
Sample    : ic3973-1                                 Inst    : GC1G
Misc      : op93327,g1g3973,16.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 27 14:08 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
```





QEdit

(7) delta-BHC (B)

2.76min 0.857PPB

response 929026

(7) delta-BHC #2 (B)

3.95min 1.207PPB

response 21214111

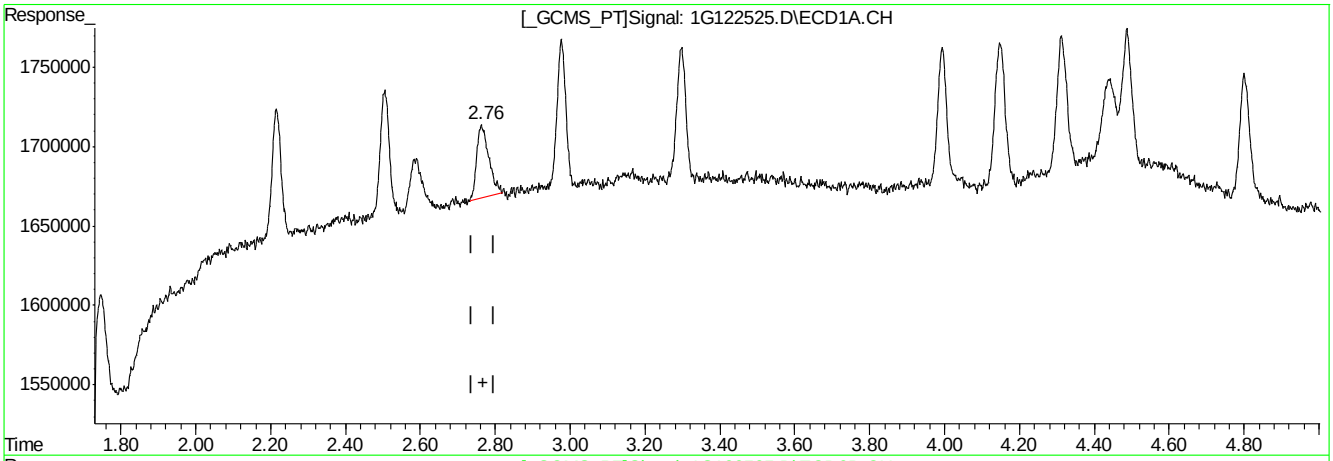
(+) = Expected Retention Time

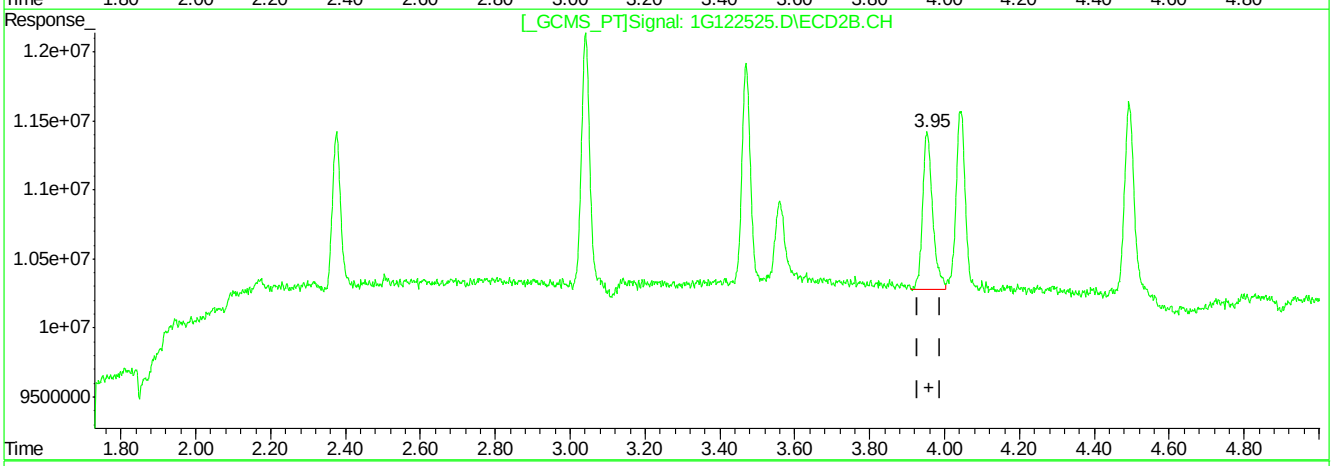
1G122525.D 1PST3973.M Wed Apr 27 14:09:25 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122525.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122525.D\ECD2B.CH
Acq On    : 27 Apr 2016  11:42 am                    Operator: dharas
Sample    : ic3973-1                                 Inst    : GC1G
Misc      : op93327,g1g3973,16.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 27 14:08 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
```





QEdit

(7) delta-BHC (B)

2.76min 0.962PPB m

response 1042591

(7) delta-BHC #2 (B)

3.95min 1.207PPB

response 21214111

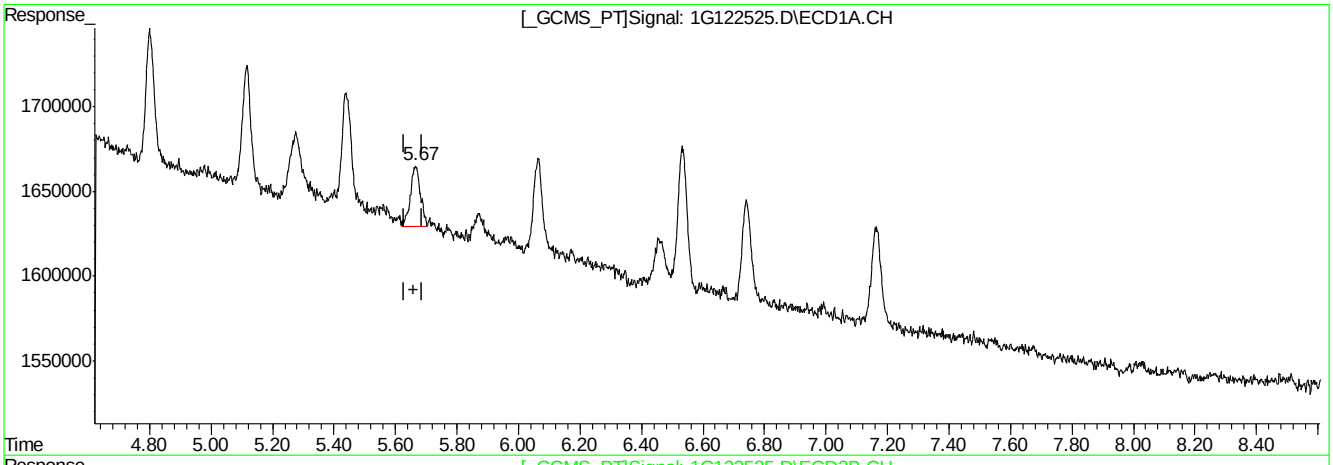
(+) = Expected Retention Time

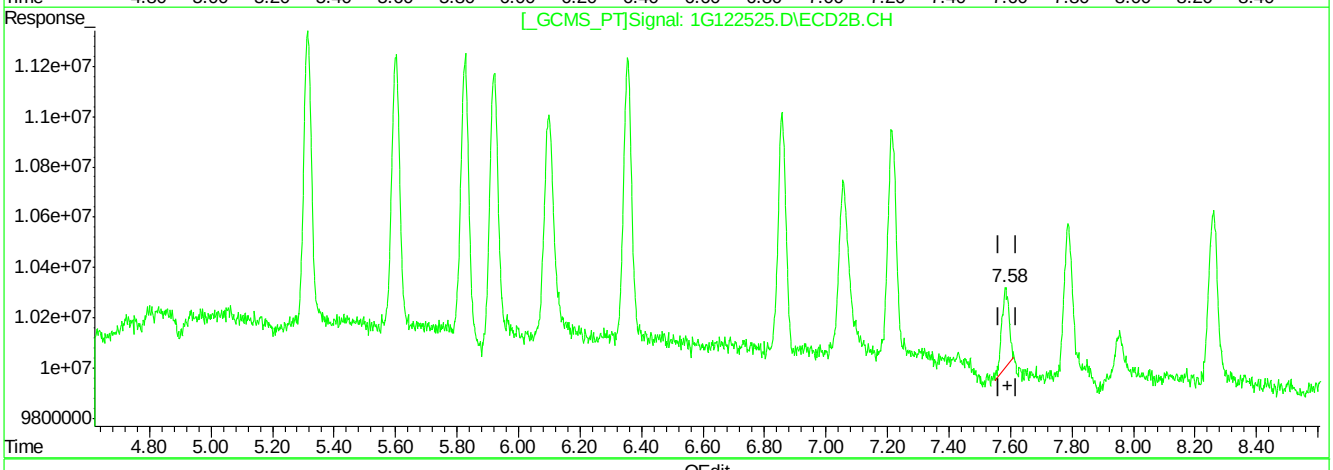
1G122525.D 1PST3973.M Wed Apr 27 14:09:35 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122525.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122525.D\ECD2B.CH
Acq On    : 27 Apr 2016  11:42 am                    Operator: dharas
Sample    : ic3973-1                                 Inst    : GC1G
Misc      : op93327,g1g3973,16.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 27 14:08 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
```





QEdit

(18) 4,4'-DDT (MA)

5.67min 0.885PPB

response 796168

(18) 4,4'-DDT #2 (MA)

7.58min 0.510PPB

response 5252690

(+) = Expected Retention Time

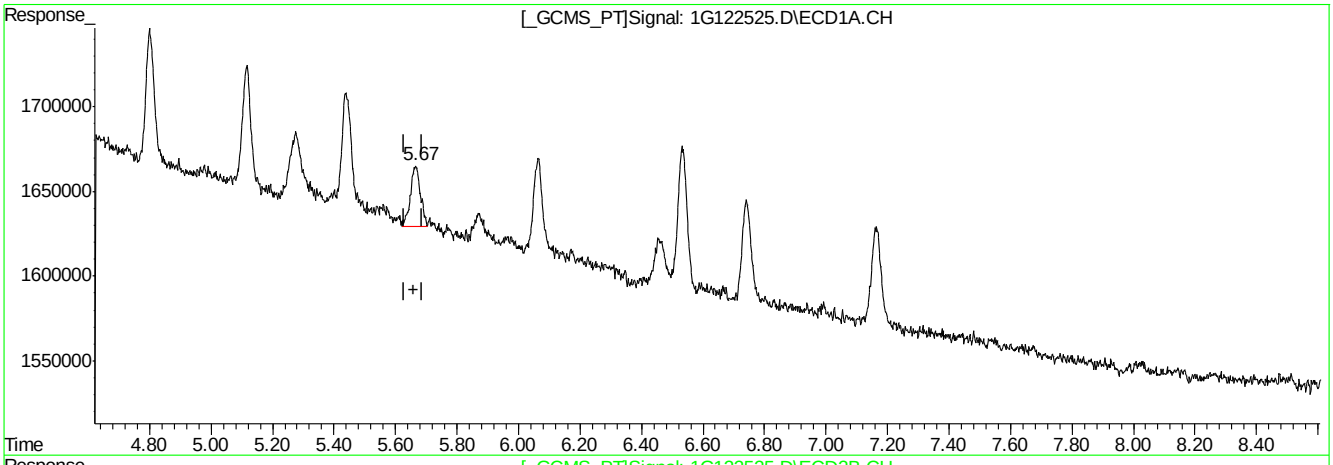
1G122525.D 1PST3973.M Wed Apr 27 14:09:52 2016 RPT1

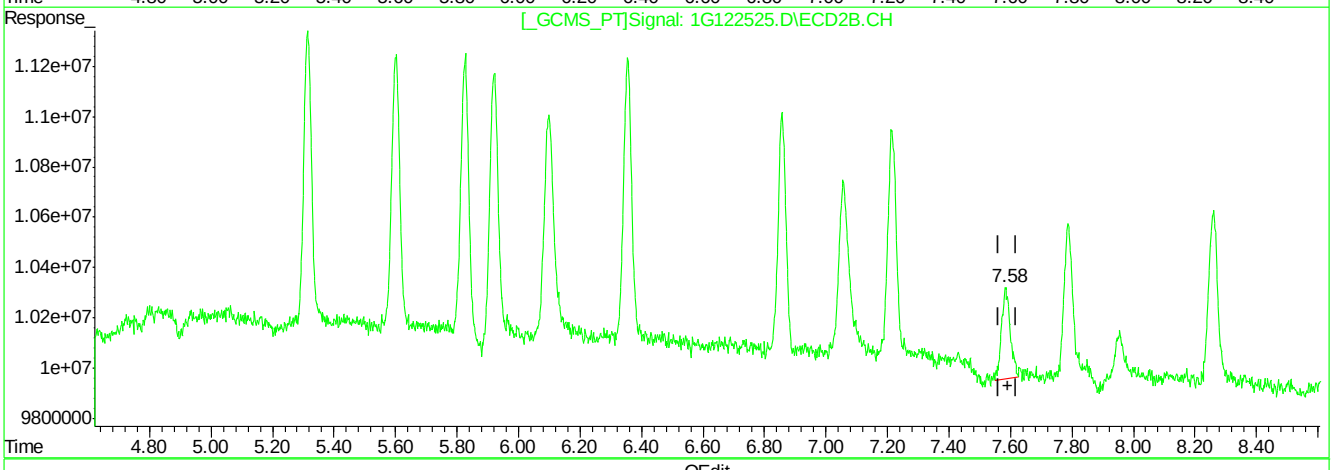
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122525.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122525.D\ECD2B.CH
Acq On    : 27 Apr 2016  11:42 am                    Operator: dharas
Sample    : ic3973-1                                 Inst    : GC1G
Misc      : op93327,g1g3973,16.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 27 14:08 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
```





QEdit

(18) 4,4'-DDT (MA)

5.67min 0.885PPB

response 796168

(18) 4,4'-DDT #2 (MA)

7.58min 0.702PPB m

response 7231675

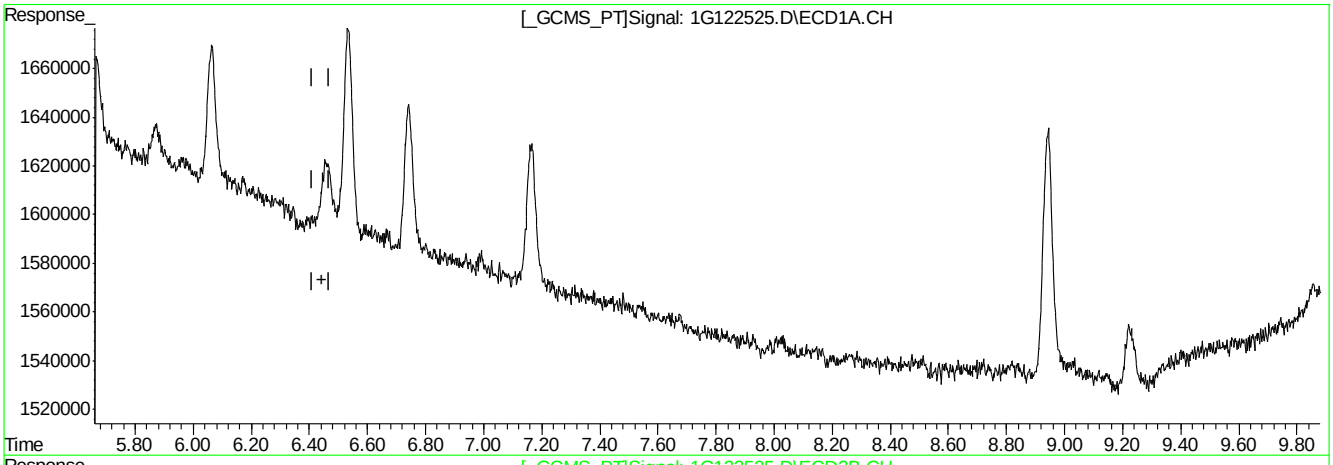
(+) = Expected Retention Time

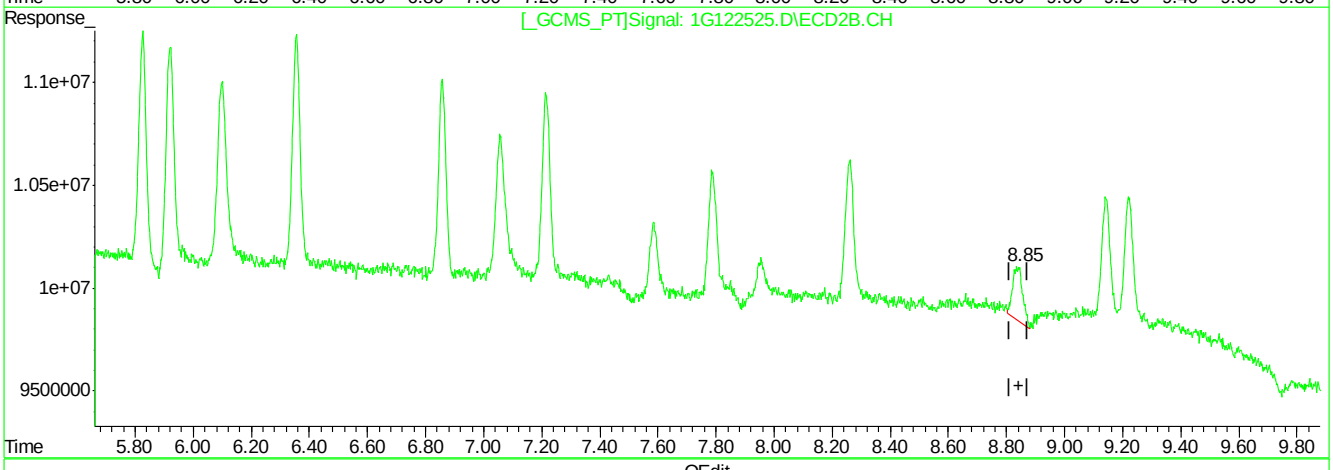
1G122525.D 1PST3973.M Wed Apr 27 14:10:03 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122525.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122525.D\ECD2B.CH
Acq On    : 27 Apr 2016  11:42 am                    Operator: dharas
Sample    : ic3973-1                                 Inst    : GC1G
Misc      : op93327,g1g3973,16.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 27 14:08 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
```





QEdit

(21) Methoxychlor (A)

0.00min 0.000PPB

response 0

(21) Methoxychlor #2 (A)

8.84min 1.130PPB

response 6175298

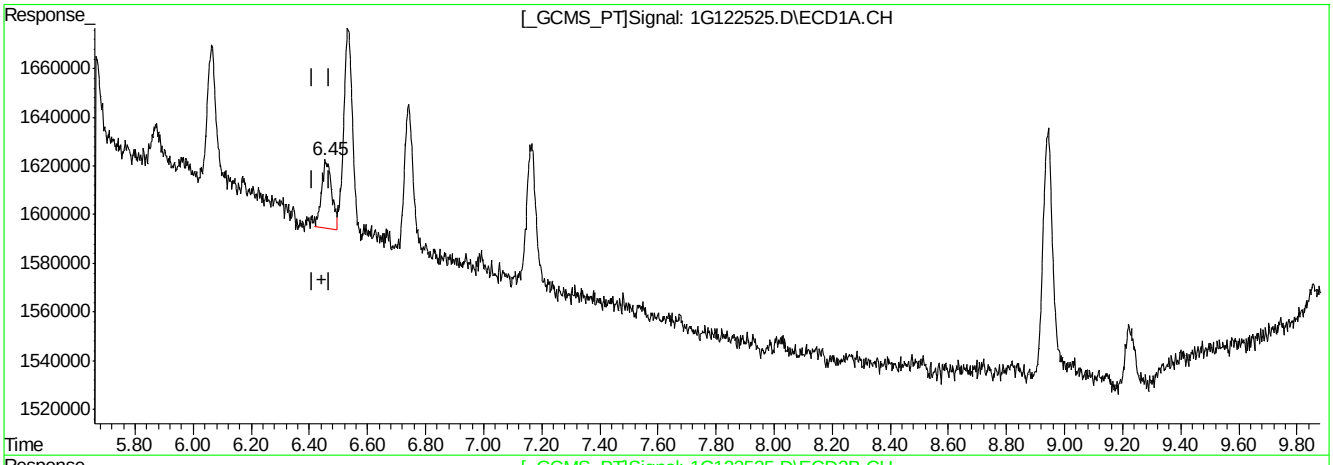
(+) = Expected Retention Time

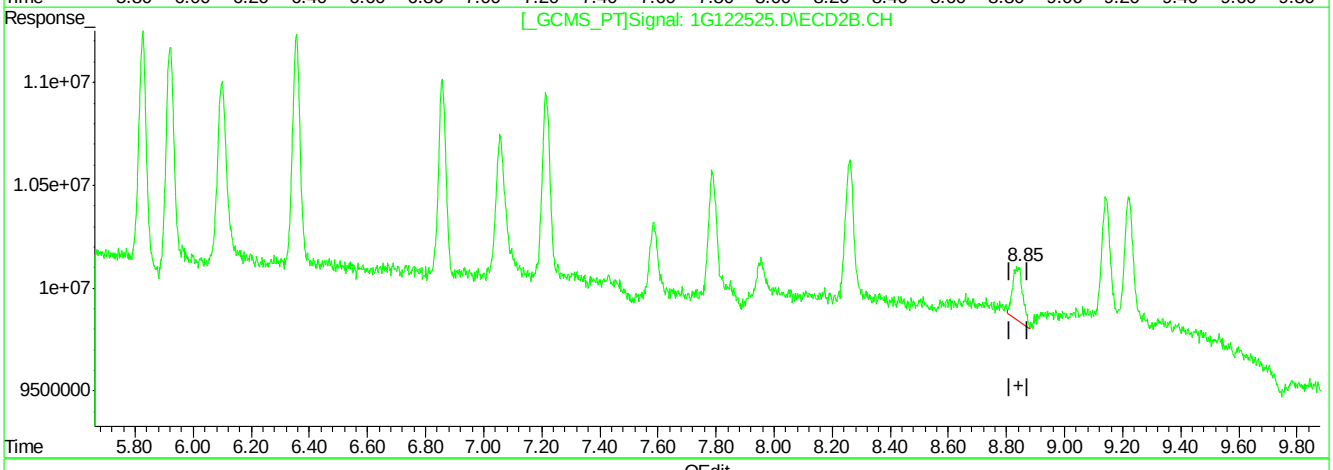
1G122525.D 1PST3973.M Wed Apr 27 14:10:08 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122525.D\ECD1A.CH Vial: 3
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122525.D\ECD2B.CH
Acq On    : 27 Apr 2016  11:42 am                    Operator: dharas
Sample    : ic3973-1                                 Inst    : GC1G
Misc      : op93327,g1g3973,16.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 27 14:08 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
```





QEdit

(21) Methoxychlor (A)

6.45min 1.108PPB m

response 671673

(21) Methoxychlor #2 (A)

8.84min 1.130PPB

response 6175298

(+) = Expected Retention Time

1G122525.D 1PST3973.M Wed Apr 27 14:10:29 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/28/16 16:54

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122526.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122526.D\ECD2B.CH
Acq On : 27 Apr 2016 12:00 pm Operator: dharas
Sample : ic3973-2 Inst : GC1G
Misc : op93327,g1g3973,16.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 27 14:52 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3973.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	57633325	912.2E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	2500509	36944498	2.270m	2.574
Spiked Amount	40.000	Range	30 - 150	Recovery	=	5.67%#	6.43%#
24) SA	Decachlorobiphen	8.94	10.86	4511853	20895509	2.965	2.213
Spiked Amount	40.000			Recovery	=	7.41%	5.53%
	Target Compounds						
3) A	alpha-BHC	2.22	3.04	2722638	53227516	2.081	2.457
4) MA	gamma-BHC	2.51	3.47	2678077	47345704	2.145	2.433
5) MA	Heptachlor	2.98	4.04	3010664	43024430	2.245	2.459
6) B	beta-BHC	2.59	3.56	1349800	20351464	2.124	2.462
7) B	delta-BHC	2.76	3.95	2036067	43091402	1.852	2.411
8) MB	Aldrin	3.30	4.49	2909550	47920184	2.330	2.740
9) B	Heptachlor Epoxi	3.99	5.32	2922990	42354508	2.352	2.675
10) B	gamma-Chlordane	4.15	5.60	3063940	41289445	2.339	2.607
11) B	alpha-Chlordane	4.31	5.83	3055832	38326207	2.420	2.502
12) A	Endosulfan I	4.49	5.92	3419119	38999360	2.848	2.608
13) B	4,4'-DDE	4.44	6.10	2341551	39405602	2.030	2.499
14) MA	Dieldrin	4.80	6.36	2859749	41898176	2.353	2.502
15) MA	Endrin	5.12	6.86	2692376	36636272	2.368	2.522
16) A	4,4'-DDD	5.27	7.06	2051581	32925891	2.141	2.461
17) B	Endosulfan II	5.44	7.21	2718571	33773789	2.356	2.335
18) MA	4,4'-DDT	5.67	7.59	1546010	15633714	1.693	1.493
19) B	Endrin Aldehyde	6.06	7.79	2278504	24060058	2.331	2.145
20) B	Endosulfan Sulfa	6.74	8.26	2632691	29124099	2.511	2.392
21) A	Methoxychlor	6.46	8.84	1346844	11144013	2.190	2.005
22)	Mirex	6.53	9.14	3659545	23161258	3.141	2.488
23) B	Endrin Ketone	7.16	9.22	2554192	26246245	2.086	2.026

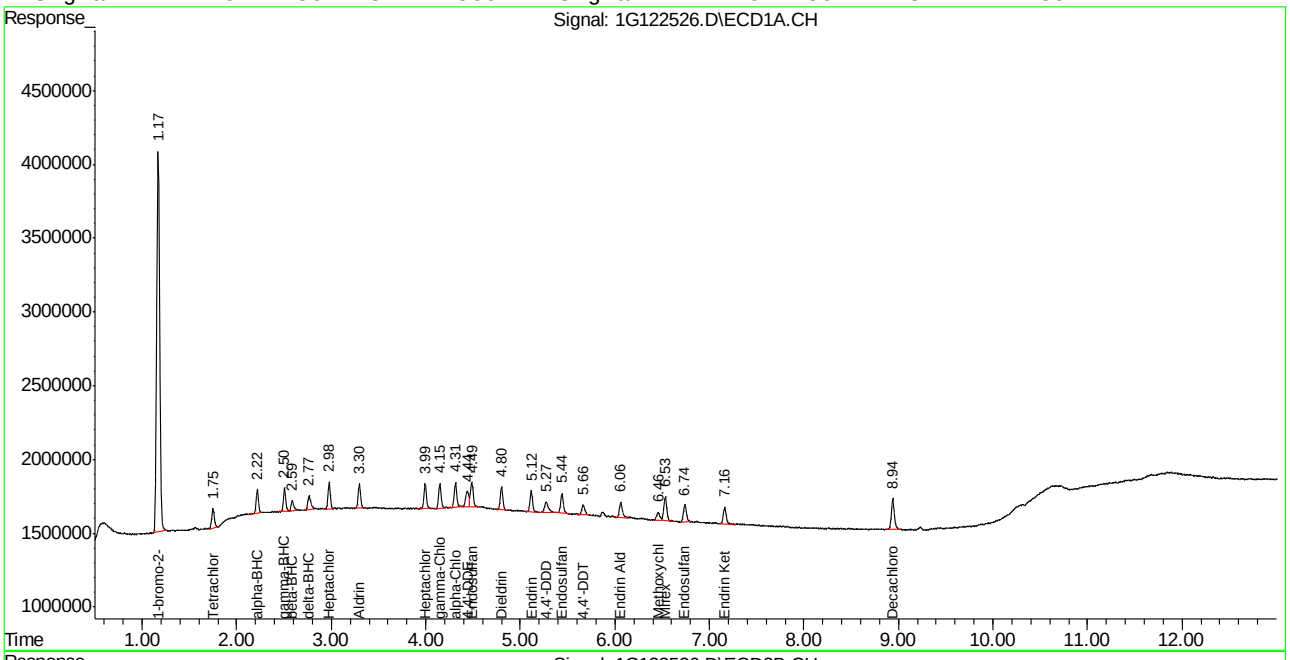
(f)=RT Delta > 1/2 Window (m)=manual int.

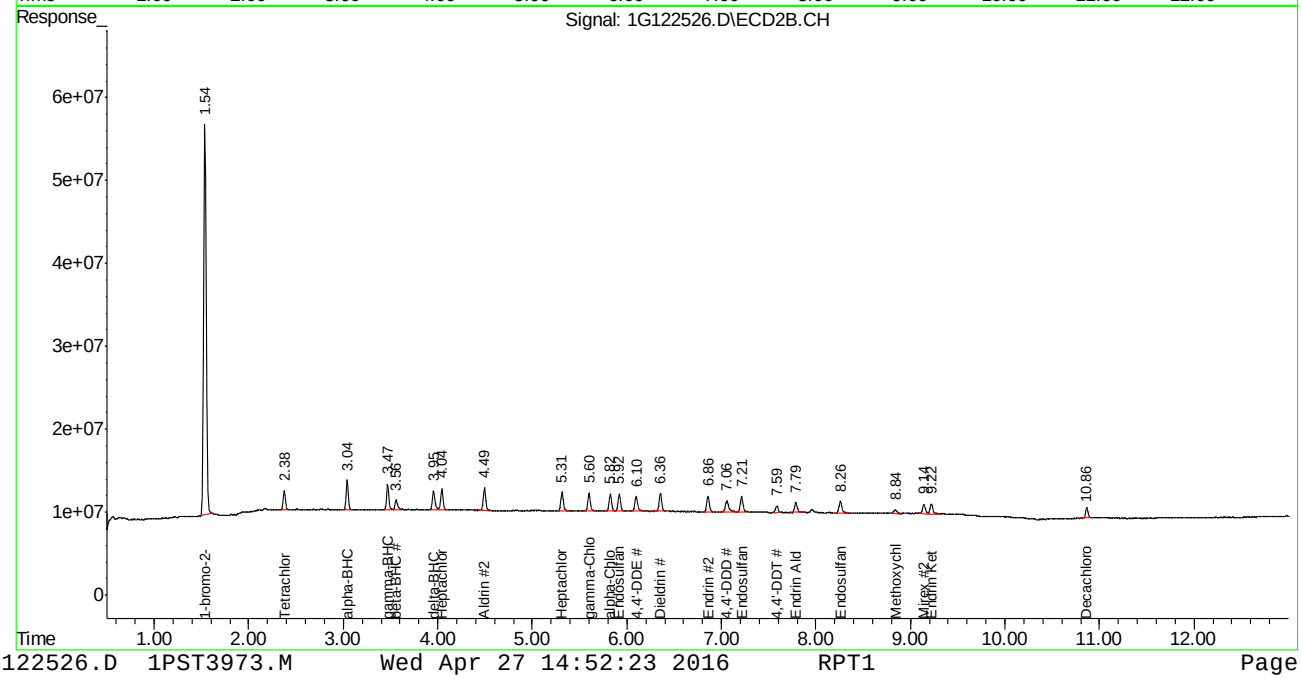
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122526.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122526.D\ECD2B.CH
Acq On : 27 Apr 2016 12:00 pm Operator: dharas
Sample : ic3973-2 Inst : GC1G
Misc : op93327,g1g3973,16.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 27 14:52 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3973.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

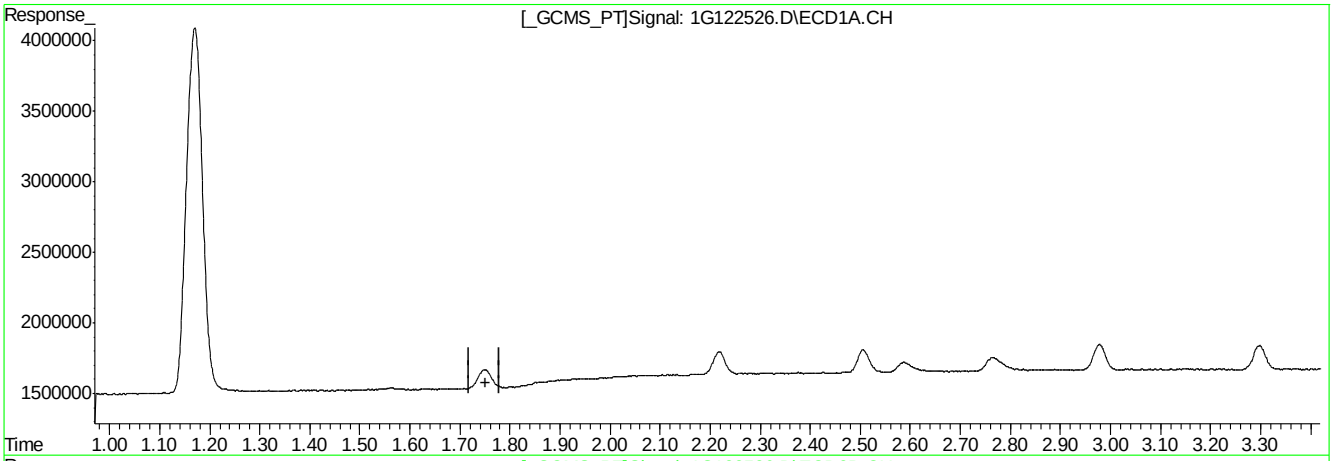
Sample Number:	G1G3973-IC3973	**Method:**	SW846 8081B
Lab FileID:	1G122526.D	**Analyst approved:**	04/27/16 16:32 Dhara Saparia
Injection Time:	04/27/16 12:00	**Supervisor approved:**	04/28/16 16:54 Gwendolyn Burns

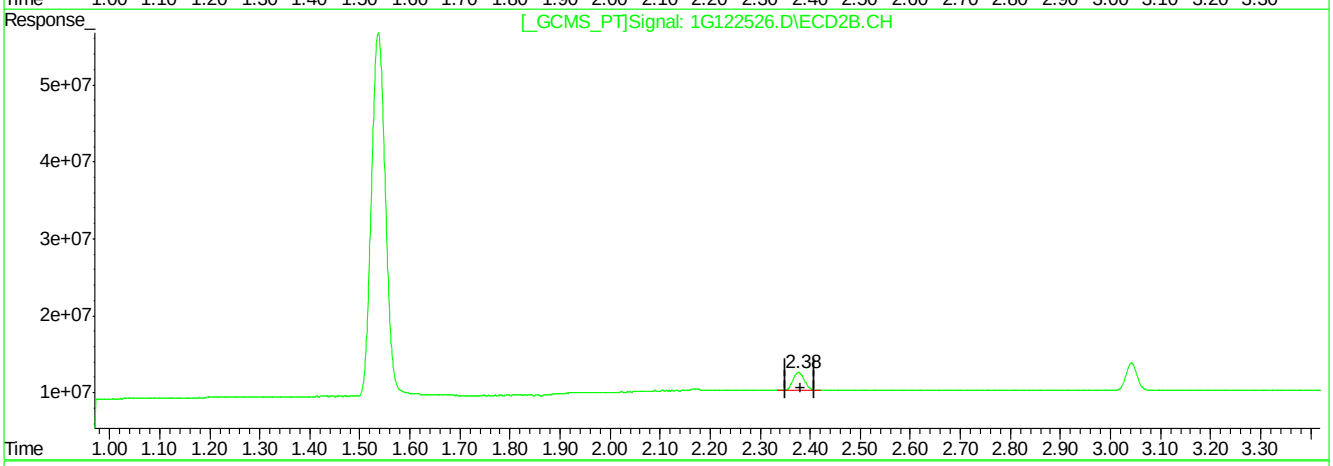
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	1.75	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122526.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122526.D\ECD2B.CH
Acq On    : 27 Apr 2016  12:00 pm                    Operator: dharas
Sample    : ic3973-2                                 Inst    : GC1G
Misc      : op93327,g1g3973,16.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 27 14:01 2016  Quant Results File: 1PST3973.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3973.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)

0.00min 0.000PPB

response 0

(2) Tetrachloro-m-xylene #2 (SAB)

2.38min 2.574PPB

response 36944498

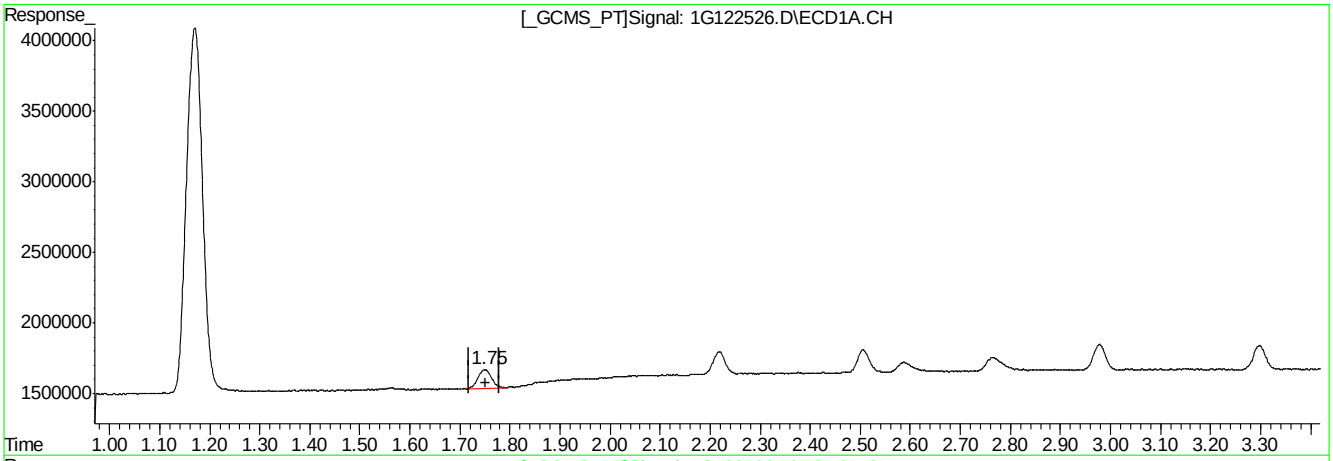
(+) = Expected Retention Time

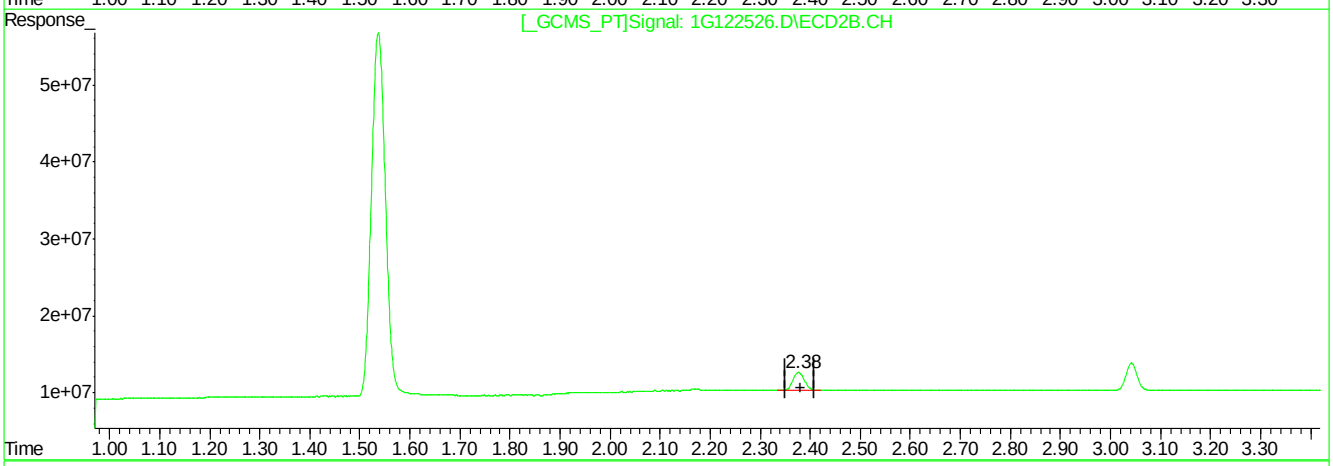
1G122526.D 1PST3973.M Wed Apr 27 14:01:42 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122526.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122526.D\ECD2B.CH
Acq On    : 27 Apr 2016  12:00 pm                    Operator: dharas
Sample    : ic3973-2                                 Inst    : GC1G
Misc      : op93327,g1g3973,16.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 27 14:01 2016  Quant Results File: 1PST3973.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3973.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 2.270PPB m

response 2500509

(2) Tetrachloro-m-xylene #2 (SAB)

2.38min 2.574PPB

response 36944498

(+) = Expected Retention Time

1G122526.D 1PST3973.M Wed Apr 27 14:01:51 2016 RPT1

SGS ACCUTEST JC19023

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/28/16 16:54

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122527.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122527.D\ECD2B.CH
Acq On : 27 Apr 2016 12:17 pm Operator: dharas
Sample : ic3973-5 Inst : GC1G
Misc : op93327,g1g3973,16.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 27 14:52 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3973.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	59376848	941.6E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	5959406	89418990	5.250	6.035
Spiked Amount	40.000	Range	30 - 150	Recovery	=	13.13%#	15.09%#
24) SA	Decachlorobiphen	8.94	10.87	11235862	51284197	7.166	5.263
Spiked Amount	40.000			Recovery	=	17.91%	13.16%
	Target Compounds						
3) A	alpha-BHC	2.22	3.04	6930521	131.4E6	5.142	5.877
4) MA	gamma-BHC	2.51	3.47	6702663	116.2E6	5.211	5.782
5) MA	Heptachlor	2.98	4.04	7593219	102.2E6	5.496	5.658
6) B	beta-BHC	2.59	3.56	3573830	47934749	5.460	5.617
7) B	delta-BHC	2.76	3.95	5695508	108.9E6	5.029	5.905
8) MB	Aldrin	3.30	4.49	7184456	110.1E6	5.584	6.101
9) B	Heptachlor Epoxi	3.99	5.31	7587232	97356924	5.926	5.956
10) B	gamma-Chlordane	4.15	5.60	7466781	95840412	5.533	5.861
11) B	alpha-Chlordane	4.31	5.83	7578168	92573334	5.826	5.855
12) A	Endosulfan I	4.49	5.92	8136429	93390506	6.578	6.049
13) B	4,4'-DDE	4.44	6.10	5959039	89558750	5.014	5.502
14) MA	Dieldrin	4.80	6.36	6982120	99608080	5.575	5.763
15) MA	Endrin	5.12	6.86	6706685	87508282	5.725	5.835
16) A	4,4'-DDD	5.27	7.06	4908525	78921875	4.972	5.713
17) B	Endosulfan II	5.44	7.21	6803006	83563592	5.723	5.596
18) MA	4,4'-DDT	5.67	7.58	4458722	46205056	4.739	4.275
19) B	Endrin Aldehyde	6.06	7.79	5487378	60666126	5.448	5.241
20) B	Endosulfan Sulfa	6.74	8.26	6349219	70803625	5.878	5.633
21) A	Methoxychlor	6.46	8.84	3198879	25411206	5.049	4.429m
22)	Mirex	6.53	9.14	8520685	57121955	7.098	5.944
23) B	Endrin Ketone	7.16	9.22	6036975	61894771	4.785	4.629

(f)=RT Delta > 1/2 Window (m)=manual int.
1G122527.D 1PST3973.M Wed Apr 27 14:52:38 2016 RPT1 Page 1

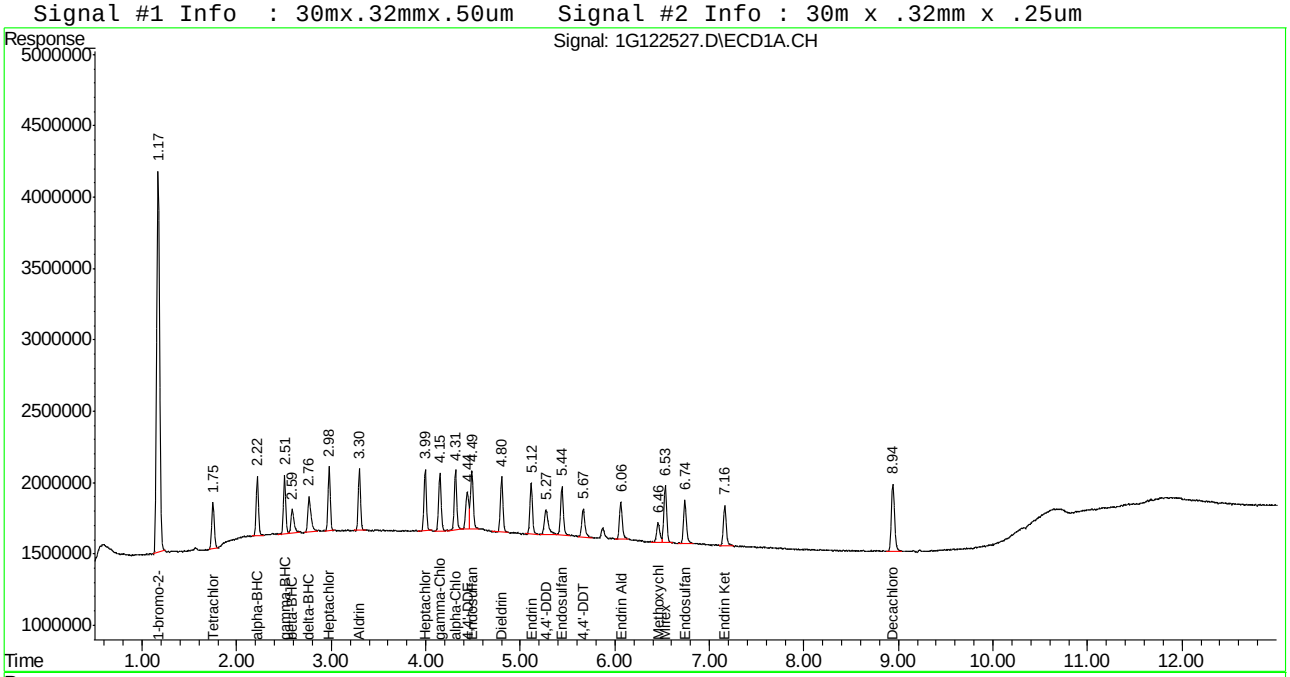
9.6.3
9

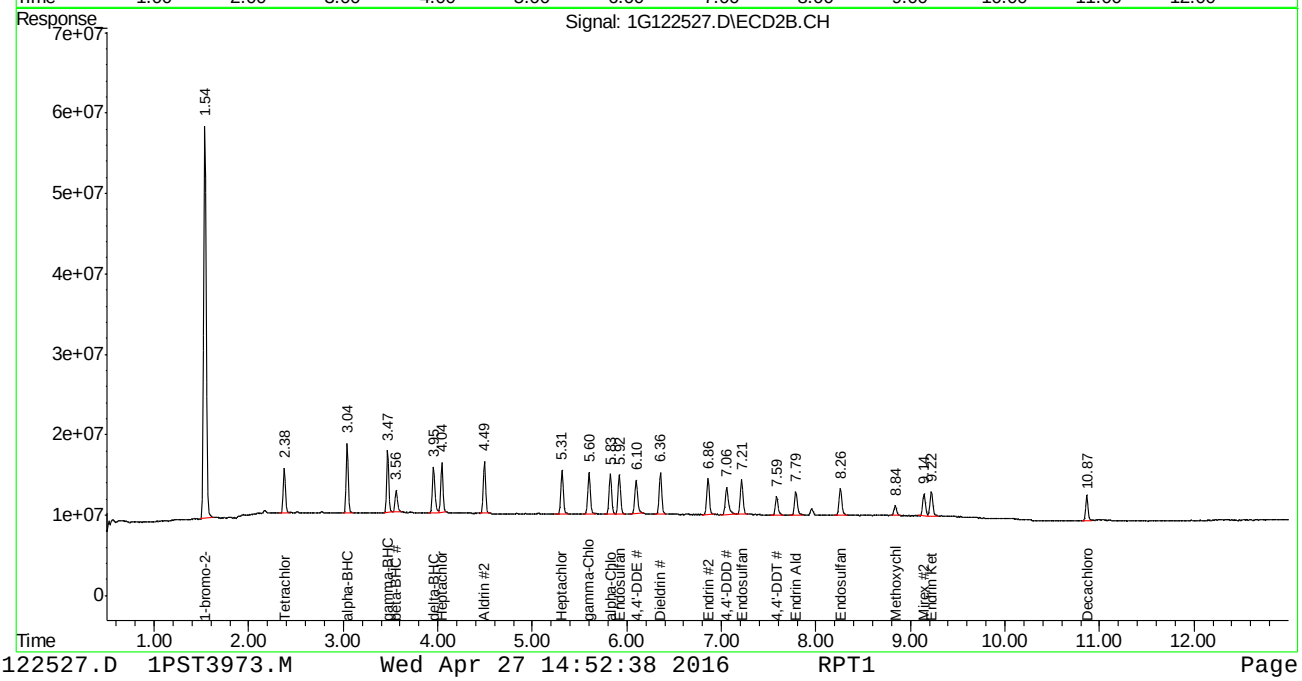
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122527.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122527.D\ECD2B.CH
Acq On : 27 Apr 2016 12:17 pm Operator: dharas
Sample : ic3973-5 Inst : GC1G
Misc : op93327,g1g3973,16.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 27 14:52 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3973.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

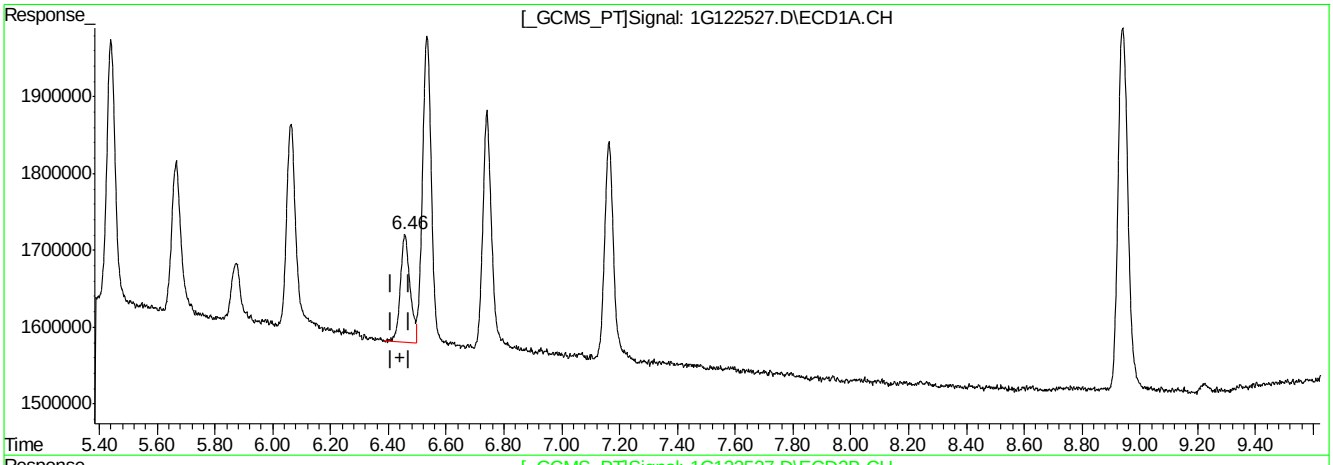
Sample Number:	G1G3973-IC3973	**Method:**	SW846 8081B
Lab FileID:	1G122527.D	**Analyst approved:**	04/27/16 16:32 Dhara Saparia
Injection Time:	04/27/16 12:17	**Supervisor approved:**	04/28/16 16:54 Gwendolyn Burns

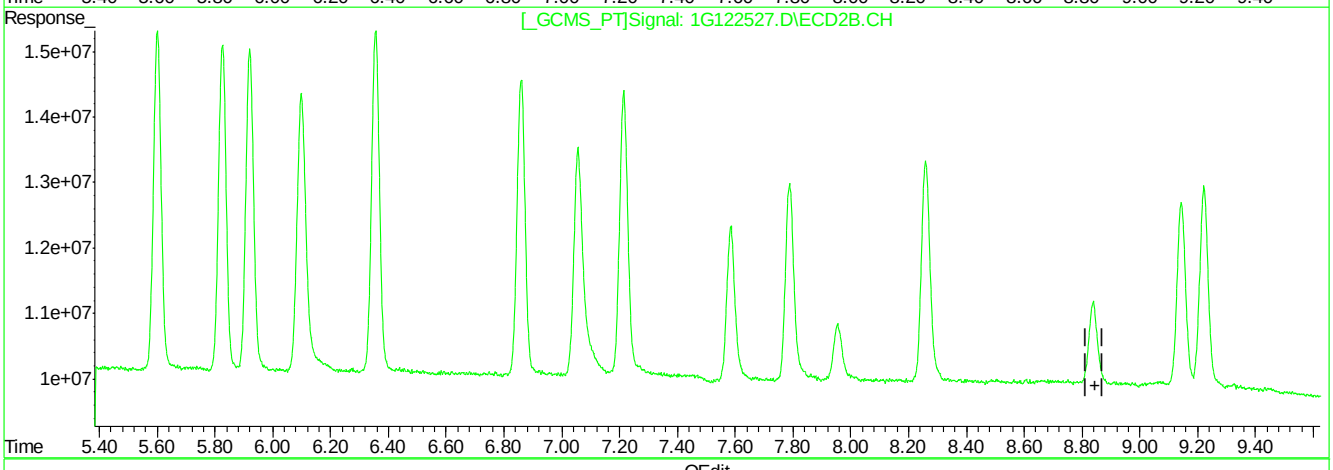
Parameter	CAS	Sig#	R.T. (min.)	Reason
Methoxychlor	72-43-5	2	8.84	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122527.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122527.D\ECD2B.CH
Acq On    : 27 Apr 2016  12:17 pm                    Operator: dharas
Sample    : ic3973-5                                 Inst    : GC1G
Misc      : op93327,g1g3973,16.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 27 13:58 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
```





QEdit

(21) Methoxychlor (A)

6.46min 5.049PPB

response 3198879

(21) Methoxychlor #2 (A)

0.00min 0.000PPB

response 0

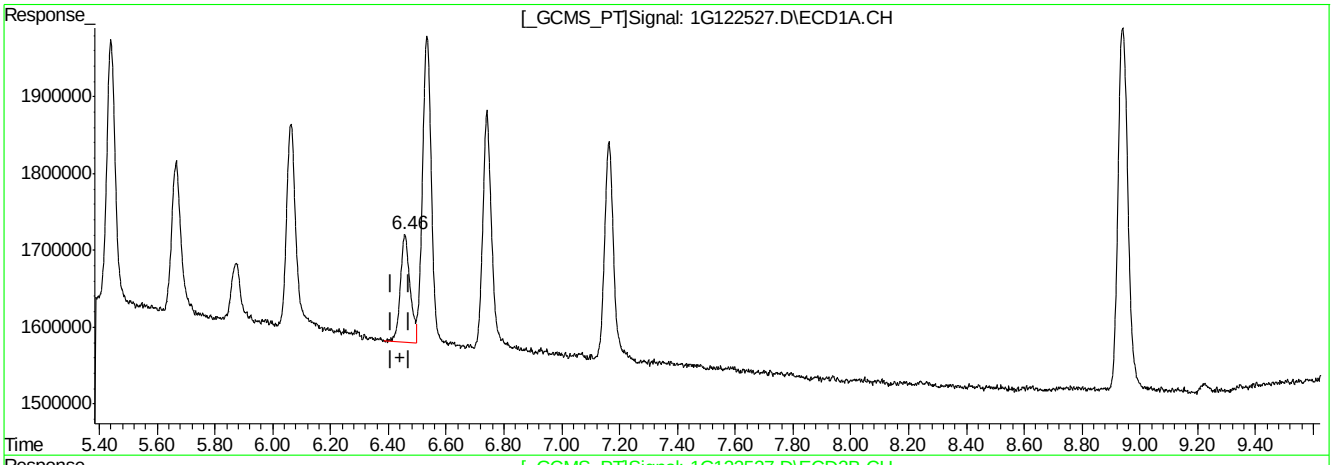
(+) = Expected Retention Time

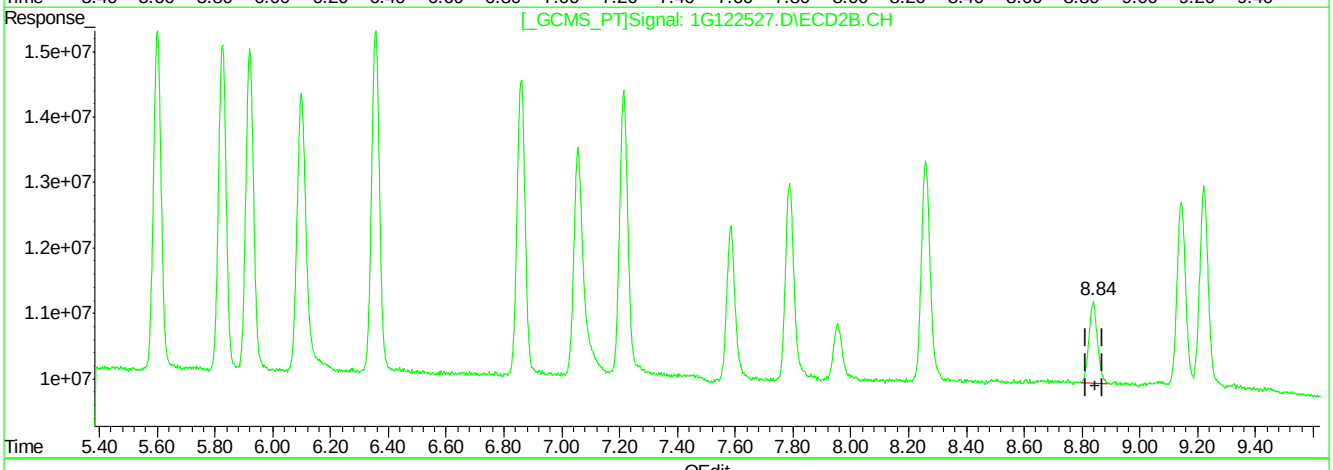
1G122527.D 1PST3973.M Wed Apr 27 13:59:18 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122527.D\ECD1A.CH Vial: 5
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122527.D\ECD2B.CH
Acq On    : 27 Apr 2016  12:17 pm                    Operator: dharas
Sample    : ic3973-5                                 Inst    : GC1G
Misc      : op93327,g1g3973,16.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 27 13:58 2016  Quant Results File: 1PST3973.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
```





QEdit

(21) Methoxychlor (A)

6.46min 5.049PPB

response 3198879

(21) Methoxychlor #2 (A)

8.84min 4.429PPB m

response 25411206

(+) = Expected Retention Time

1G122527.D 1PST3973.M Wed Apr 27 13:59:28 2016 RPT1

SGS ACCUTEST JC19023

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122528.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122528.D\ECD2B.CH
Acq On : 27 Apr 2016 12:35 pm Operator: dharas
Sample : ic3973-10 Inst : GC1G
Misc : op93327,g1g3973,16.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 27 14:52 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3973.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	58121382	919.8E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	11787238	169.9E6	10.609	11.737
Spiked Amount	40.000	Range	30 - 150	Recovery	=	26.52%#	29.34%#
24) SA	Decachlorobiphen	8.94	10.87	21558565	98416103	14.047	10.338
Spiked Amount	40.000			Recovery	=	35.12%	25.84%
	Target Compounds						
3) A	alpha-BHC	2.22	3.04	13637256	253.3E6	10.336	11.599
4) MA	gamma-BHC	2.51	3.47	13261905	223.3E6	10.533	11.379
5) MA	Heptachlor	2.98	4.04	14822755	193.4E6	10.960	10.963
6) B	beta-BHC	2.59	3.56	6866002	92728116	10.716	11.123
7) B	delta-BHC	2.77	3.96	11620460	207.6E6	10.482	11.522
8) MB	Aldrin	3.30	4.49	14303611	206.9E6	11.358	11.733
9) B	Heptachlor Epoxi	3.99	5.32	15073603	187.5E6	12.027	11.744
10) B	gamma-Chlordane	4.15	5.60	14616554	182.2E6	11.065	11.405
11) B	alpha-Chlordane	4.31	5.83	14754656	175.5E6	11.588	11.361
12) A	Endosulfan I	4.49	5.92	16142689	174.2E6	13.333	11.553
13) B	4,4'-DDE	4.44	6.10	11751595	172.9E6	10.102	10.872
14) MA	Dieldrin	4.80	6.36	14177272	188.3E6	11.566	11.153
15) MA	Endrin	5.12	6.86	13392548	167.6E6	11.679	11.438
16) A	4,4'-DDD	5.27	7.06	10871327	153.3E6	11.249	11.360
17) B	Endosulfan II	5.44	7.21	13971775	162.1E6	12.008	11.113
18) MA	4,4'-DDT	5.67	7.58	9136314	99514402	9.921	9.425
19) B	Endrin Aldehyde	6.06	7.79	11384740	120.5E6	11.547	10.659
20) B	Endosulfan Sulfa	6.74	8.26	12581438	135.0E6	11.899	10.990
21) A	Methoxychlor	6.46	8.84	6425859	52739104	10.361	9.410
22)	Mirex	6.54	9.14	16014284	108.0E6	13.629	11.507
23) B	Endrin Ketone	7.16	9.22	12210084	123.0E6	9.887	9.417

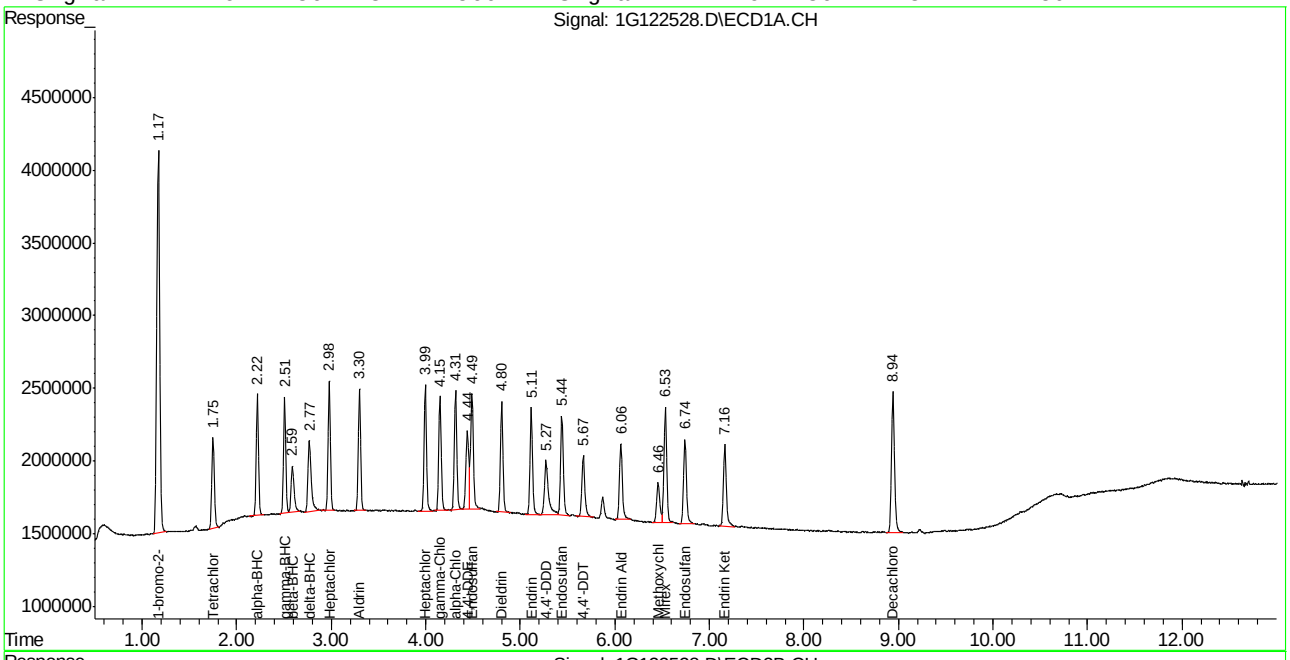
(f)=RT Delta > 1/2 Window (m)=manual int.

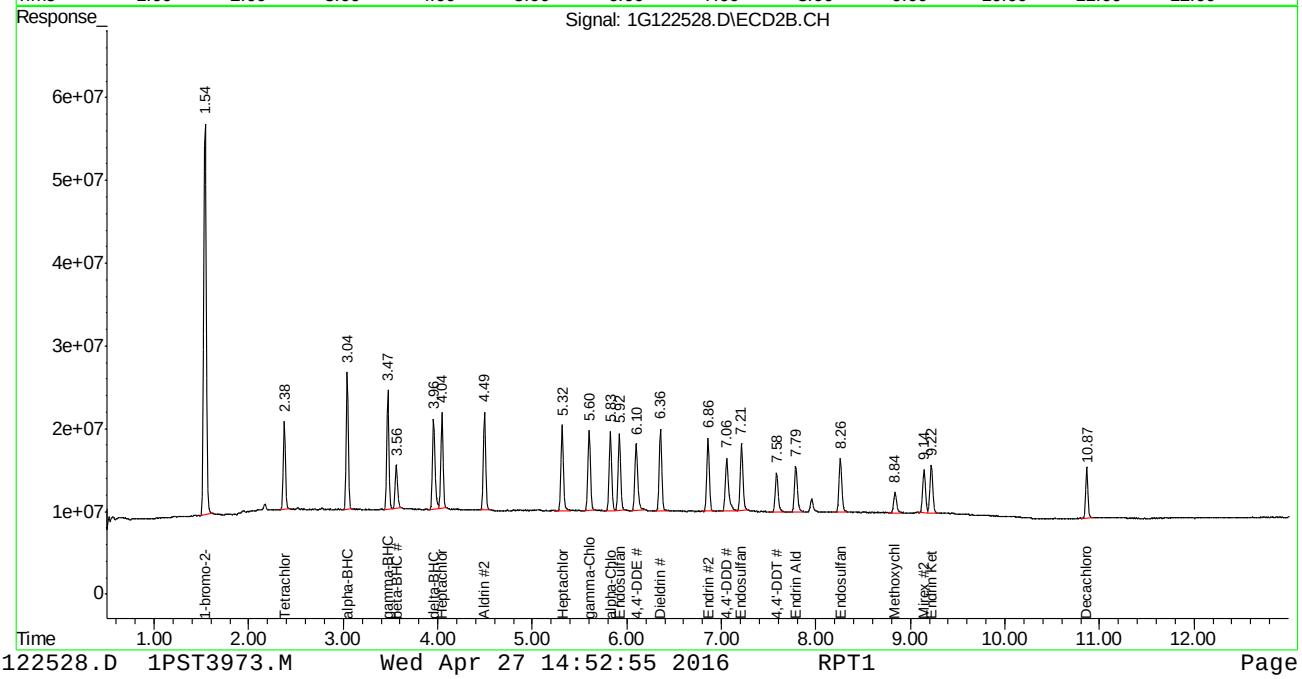
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122528.D\ECD1A.CH Vial: 6
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122528.D\ECD2B.CH
Acq On : 27 Apr 2016 12:35 pm Operator: dharas
Sample : ic3973-10 Inst : GC1G
Misc : op93327,g1g3973,16.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 27 14:52 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3973.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\1G3973\1G122529.D\ECD1A.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122529.D\ECD2B.CH
Acq On : 27 Apr 2016 12:52 pm Operator: dharas
Sample : icc3973-25 Inst : GC1G
Misc : op93327,g1g3973,16.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 27 14:53 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3973.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	57466784	909.3E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	29571761	405.6E6	26.918	28.346
	Spiked Amount 40.000	Range	30 - 150	Recovery	=	67.29%	70.86%
24) SA	Decachlorobiphen	8.94	10.87	53044296	236.9E6	34.956	25.169
	Spiked Amount 40.000			Recovery	=	87.39%	62.92%
	Target Compounds						
3) A	alpha-BHC	2.22	3.04	36643968	618.0E6	28.091	28.620
4) MA	gamma-BHC	2.51	3.47	35518061	549.7E6	28.531	28.334
5) MA	Heptachlor	2.98	4.04	39004730	476.7E6	29.170	27.333
6) B	beta-BHC	2.59	3.56	17348175	234.3E6	27.384	28.434
7) B	delta-BHC	2.76	3.96	30165605	516.2E6	27.520	28.978
8) MB	Aldrin	3.30	4.49	37637191	499.0E6	30.226	28.622
9) B	Heptachlor Epoxi	3.99	5.32	39040122	449.9E6	31.504	28.504
10) B	gamma-Chlordane	4.15	5.60	37850680	445.3E6	28.981	28.198
11) B	alpha-Chlordane	4.31	5.83	38048145	424.9E6	30.222	27.828
12) A	Endosulfan I	4.49	5.92	41523624	423.4E6	34.686	28.399
13) B	4,4'-DDE	4.44	6.10	29925300	436.6E6	26.017	27.774
14) MA	Dieldrin	4.80	6.36	37306244	458.7E6	30.780	27.480
15) MA	Endrin	5.12	6.86	34832521	405.0E6	30.723	27.965
16) A	4,4'-DDD	5.27	7.05	27645217	376.7E6	28.932	28.237
17) B	Endosulfan II	5.44	7.21	36083487	406.7E6	31.364	28.203
18) MA	4,4'-DDT	5.66	7.58	26087301	275.2E6	28.651	26.367
19) B	Endrin Aldehyde	6.06	7.79	29284491	302.1E6	30.040	27.028
20) B	Endosulfan Sulfa	6.74	8.26	32858227	332.4E6	31.429	27.387
21) A	Methoxychlor	6.46	8.84	17086512	139.4E6	27.865	25.169
22)	Mirex	6.53	9.14	40546243	257.4E6	34.901	27.735
23) B	Endrin Ketone	7.16	9.22	32465905	307.6E6	26.589	23.821

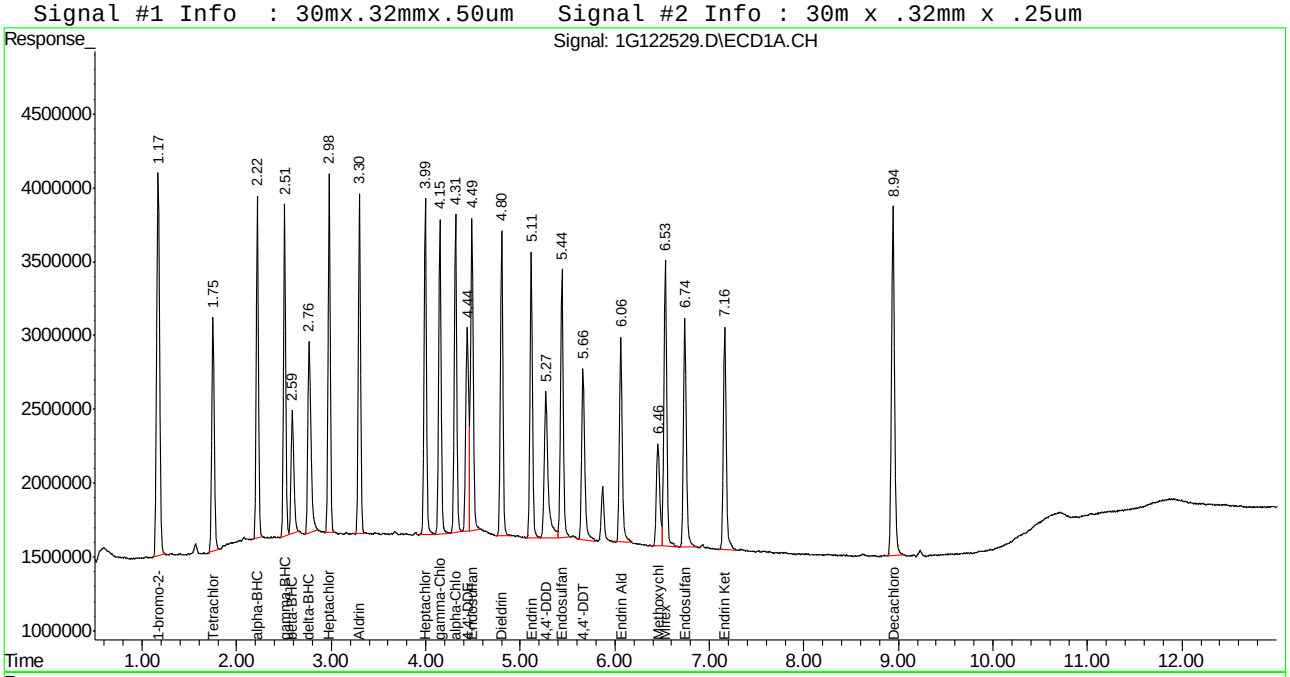
(f)=RT Delta > 1/2 Window (m)=manual int.
1G122529.D 1PST3973.M Wed Apr 27 14:53:18 2016 RPT1 Page 1

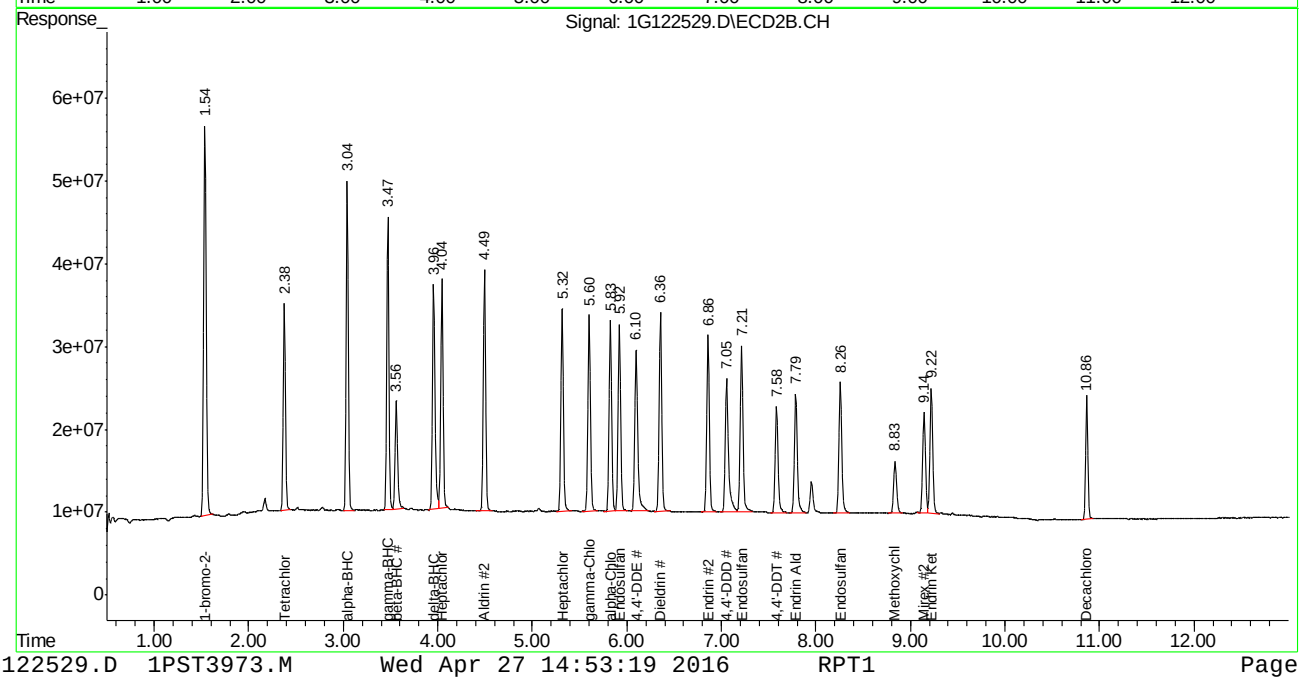
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122529.D\ECD1A.CH Vial: 7
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122529.D\ECD2B.CH
Acq On : 27 Apr 2016 12:52 pm Operator: dharas
Sample : icc3973-25 Inst : GC1G
Misc : op93327,g1g3973,16.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 27 14:53 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3973.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\1G3973\1G122530.D\ECD1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122530.D\ECD2B.CH
Acq On : 4-27-16 01:10:20 PM Operator: dharas
Sample : ic3973-50 Inst : GC1G
Misc : op93327,g1g3973,16.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 27 16:13 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3973.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	57794331	914.1E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	58342609	782.6E6	52.806	54.410
	Spiked Amount 40.000	Range	30 - 150	Recovery	=	132.01%	136.03%
24) SA	Decachlorobiphen	8.94	10.86	102.2E6	449.8E6	66.942	47.545
	Spiked Amount 40.000			Recovery	=	167.35%	118.86%
	Target Compounds						
3) A	alpha-BHC	2.22	3.04	78612301	1190.9E6	59.921	54.865
4) MA	gamma-BHC	2.51	3.47	75134203	1061.1E6	60.011	54.409
5) MA	Heptachlor	2.98	4.04	80719976	928.4E6	60.025	52.951
6) B	beta-BHC	2.59	3.56	34721171	457.0E6	54.496	55.161
7) B	delta-BHC	2.77	3.96	66182222	1018.1E6	60.036	56.854
8) MB	Aldrin	3.30	4.49	78771248	936.6E6	62.902	53.435
9) B	Heptachlor Epoxi	3.99	5.31	78602650	845.3E6	63.070	53.269
10) B	gamma-Chlordane	4.15	5.60	77903136	836.1E6	59.309	52.669
11) B	alpha-Chlordane	4.31	5.83	77733080	799.2E6	61.394	52.070
12) A	Endosulfan I	4.49	5.92	83705314	791.7E6	69.525	52.828
13) B	4,4'-DDE	4.44	6.10	63110726	827.3E6	54.558	52.354
14) MA	Dieldrin	4.80	6.36	77617680	862.9E6	63.677	51.425
15) MA	Endrin	5.11	6.86	71990966	772.5E6	63.138	53.067
16) A	4,4'-DDD	5.27	7.05	52055620	713.0E6	54.170	53.171
17) B	Endosulfan II	5.44	7.21	70885456	764.9E6	61.265	52.765
18) MA	4,4'-DDT	5.66	7.58	55487632	560.5E6	60.596	53.416
19) B	Endrin Aldehyde	6.06	7.79	59424199	572.9E6	60.612	50.978
20) B	Endosulfan Sulfa	6.74	8.26	66158880	635.8E6	62.923	52.101
21) A	Methoxychlor	6.45	8.84	34113502	279.2E6	55.318	50.138
22)	Mirex	6.53	9.14	77043395	493.0E6	65.940	52.846
23) B	Endrin Ketone	7.16	9.22	67882288	603.2E6	55.279	46.475

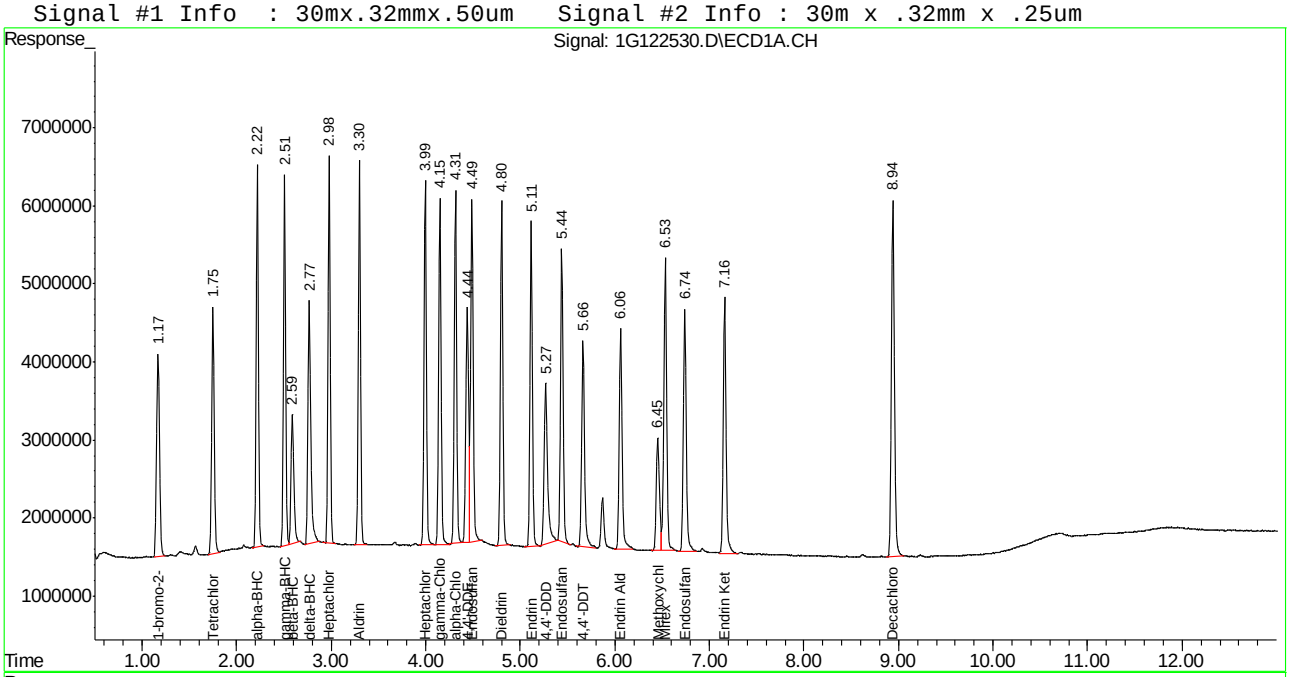
(f)=RT Delta > 1/2 Window (m)=manual int.
1G122530.D 1PST3973.M Wed Apr 27 16:13:33 2016 RPT1 Page 1

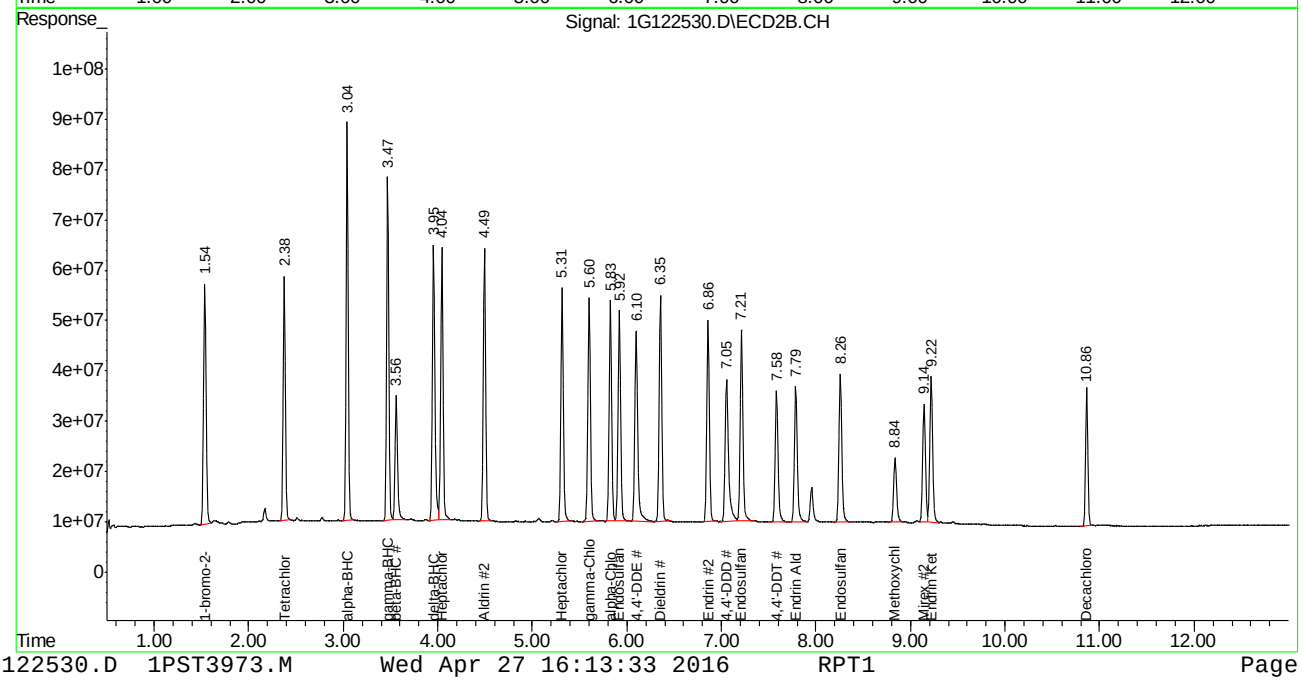
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122530.D\ECD1A.CH Vial: 8
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122530.D\ECD2B.CH
Acq On : 4-27-16 01:10:20 PM Operator: dharas
Sample : ic3973-50 Inst : GC1G
Misc : op93327,g1g3973,16.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 27 16:13 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3973.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\1G3973\1G122531.D\ECD1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122531.D\ECD2B.CH
Acq On : 4-27-16 01:27:50 PM Operator: dharas
Sample : ic3973-75 Inst : GC1G
Misc : op93327,g1g3973,16.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 27 14:54 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3973.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	58879836	935.3E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	89129610	1164.5E6	79.184	79.119
	Spiked Amount 40.000	Range 30 - 150		Recovery	=	197.96%#	197.80%#
24) SA	Decachlorobiphen	8.94	10.86	152.3E6	662.8E6	97.987	68.476
	Spiked Amount 40.000			Recovery	=	244.97%	171.19%
	Target Compounds						
3) A	alpha-BHC	2.22	3.04	126.9E6	1790.7E6	94.908	80.628
4) MA	gamma-BHC	2.51	3.47	119.9E6	1590.8E6	94.021	79.715
5) MA	Heptachlor	2.98	4.05	127.0E6	1385.0E6	92.703	77.201
6) B	beta-BHC	2.59	3.56	53595161	679.3E6	82.569	80.137
7) B	delta-BHC	2.77	3.95	106.4E6	1535.5E6	94.761	83.797
8) MB	Aldrin	3.30	4.49	124.8E6	1383.5E6	97.825	77.142
9) B	Heptachlor Epoxi	4.00	5.32	122.1E6	1241.2E6	96.195	76.445
10) B	gamma-Chlordane	4.15	5.60	121.5E6	1238.4E6	90.803	76.242
11) B	alpha-Chlordane	4.31	5.83	120.8E6	1181.9E6	93.627	75.260
12) A	Endosulfan I	4.49	5.92	129.7E6	1164.7E6	105.764	75.950
13) B	4,4'-DDE	4.44	6.10	99507577	1224.7E6	84.437	75.739
14) MA	Dieldrin	4.80	6.36	122.9E6	1275.0E6	99.003	74.260
15) MA	Endrin	5.12	6.86	112.9E6	1140.5E6	97.164	76.564
16) A	4,4'-DDD	5.27	7.05	87188642	1047.0E6	89.058	76.303
17) B	Endosulfan II	5.44	7.21	114.0E6	1125.1E6	96.748	75.845
18) MA	4,4'-DDT	5.66	7.58	90104809	849.9E6	96.586	79.163
19) B	Endrin Aldehyde	6.06	7.79	92077834	847.1E6	92.187	73.669
20) B	Endosulfan Sulfa	6.74	8.26	102.8E6	934.0E6	96.014	74.802
21) A	Methoxychlor	6.45	8.84	52887930	427.7E6	84.181	75.050
22)	Mirex	6.53	9.14	115.7E6	724.5E6	97.227	75.901
23) B	Endrin Ketone	7.16	9.22	104.8E6	895.0E6	83.736	67.386

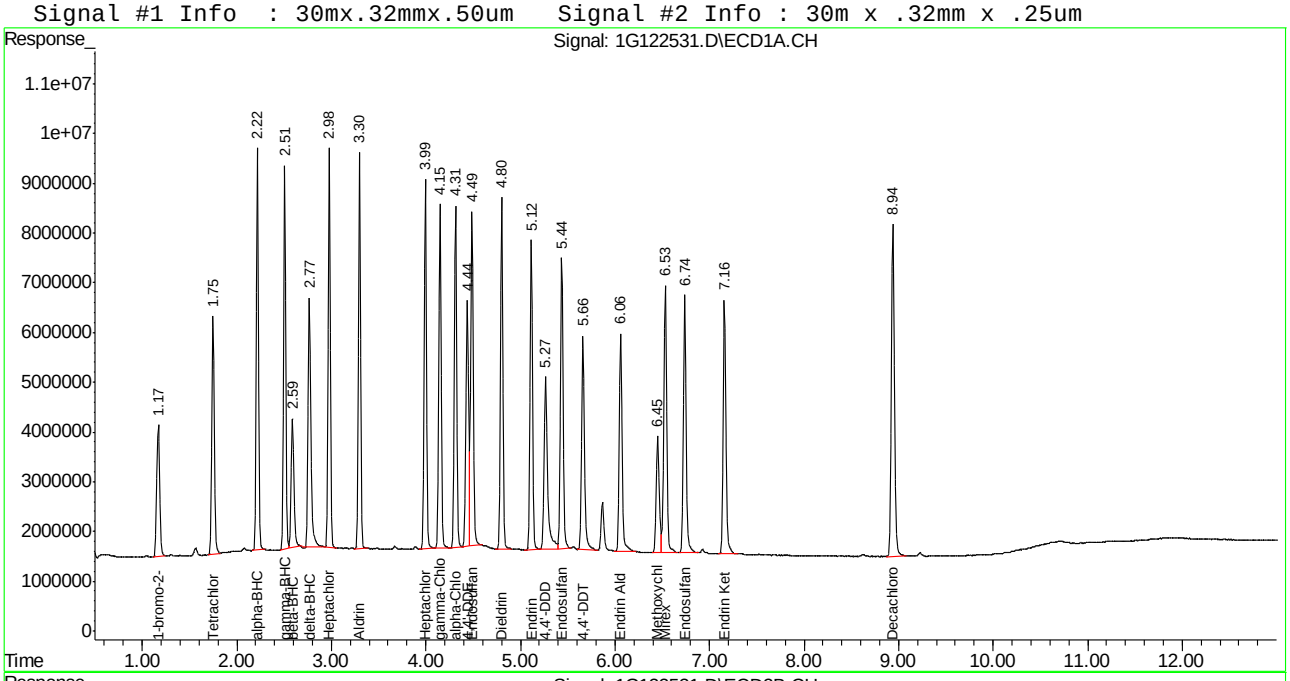
(f)=RT Delta > 1/2 Window (m)=manual int.
1G122531.D 1PST3973.M Wed Apr 27 14:54:48 2016 RPT1 Page 1

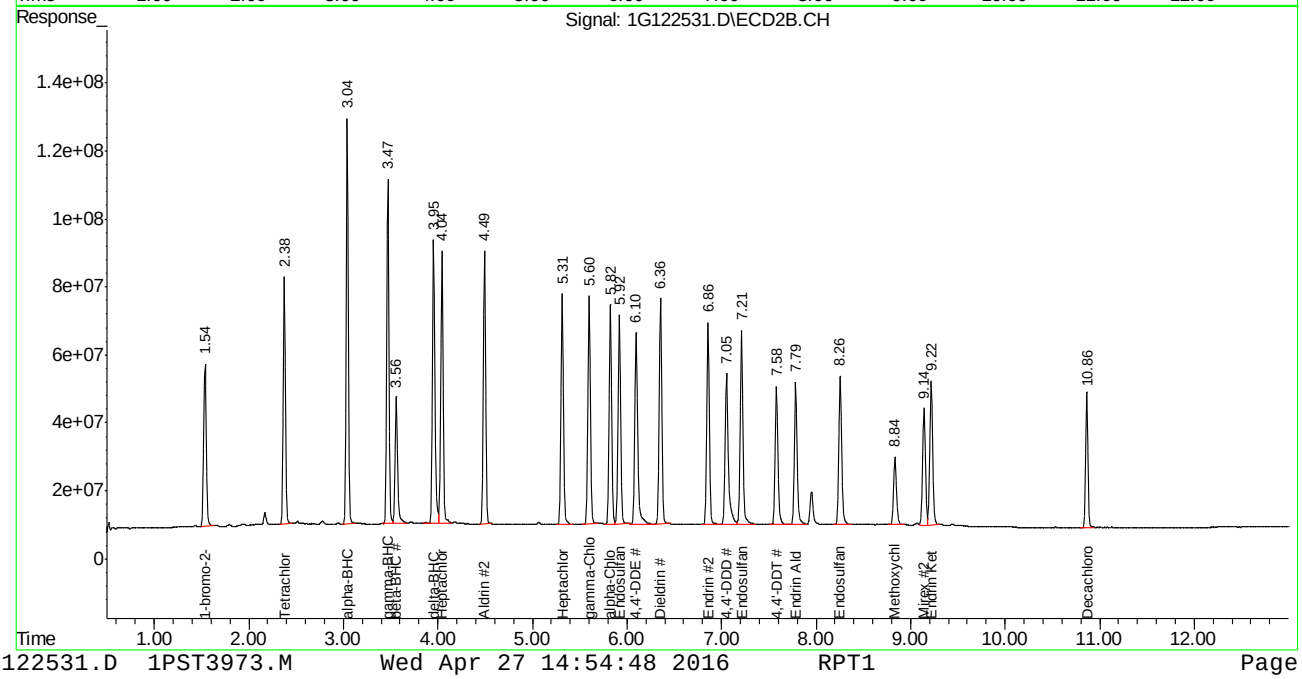
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122531.D\ECD1A.CH Vial: 9
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122531.D\ECD2B.CH
Acq On : 4-27-16 01:27:50 PM Operator: dharas
Sample : ic3973-75 Inst : GC1G
Misc : op93327,g1g3973,16.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 27 14:54 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3973.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\1G3973\1G122532.D\ECD1A.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122532.D\ECD2B.CH
Acq On : 4-27-16 01:45:26 PM Operator: dharas
Sample : ic3973-100 Inst : GC1G
Misc : op93327,g1g3973,16.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 27 14:55 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3973.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	59226745	940.5E6	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachloro-m-xy	1.75	2.38	121.9E6	1550.5E6	107.680	104.765
	Spiked Amount 40.000	Range	30 - 150	Recovery	=	269.20%#	261.91%#
24)	SA Decachlorobiphen	8.94	10.87	204.9E6	888.3E6	131.022	91.259
	Spiked Amount 40.000			Recovery	=	327.56%	228.15%
	Target Compounds						
3) A	alpha-BHC	2.22	3.04	180.7E6	2408.1E6	134.377	107.824
4) MA	gamma-BHC	2.51	3.47	170.0E6	2140.5E6	132.463	106.668
5) MA	Heptachlor	2.98	4.04	177.4E6	1843.2E6	128.757	102.177
6) B	beta-BHC	2.59	3.56	75984655	911.0E6	116.376	106.871
7) B	delta-BHC	2.77	3.95	152.8E6	2060.8E6	135.240	111.841
8) MB	Aldrin	3.30	4.49	175.0E6	1845.2E6	136.372	102.315
9) B	Heptachlor Epoxi	4.00	5.32	169.6E6	1642.5E6	132.809	100.596
10) B	gamma-Chlordane	4.15	5.60	170.0E6	1667.6E6	126.293	102.099
11) B	alpha-Chlordane	4.31	5.82	168.7E6	1582.3E6	129.982	100.192
12) A	Endosulfan I	4.49	5.92	182.4E6	1560.8E6	147.862	101.219
13) B	4,4'-DDE	4.44	6.10	140.3E6	1655.8E6	118.372	101.835
14) MA	Dieldrin	4.80	6.36	172.6E6	1719.4E6	138.197	99.588
15) MA	Endrin	5.11	6.86	157.2E6	1513.2E6	134.506	101.022
16) A	4,4'-DDD	5.26	7.05	122.5E6	1399.0E6	124.408	101.392
17) B	Endosulfan II	5.44	7.21	158.5E6	1494.5E6	133.645	100.189
18) MA	4,4'-DDT	5.66	7.58	129.1E6	1153.0E6	137.614	106.800
19) B	Endrin Aldehyde	6.06	7.79	128.0E6	1132.5E6	127.427	97.940
20) B	Endosulfan Sulfa	6.74	8.26	141.9E6	1237.8E6	131.677	98.583
21) A	Methoxychlor	6.45	8.84	72530175	584.7E6	114.769	102.030
22)	Mirex	6.53	9.14	155.3E6	962.5E6	129.708	100.275
23) B	Endrin Ketone	7.16	9.22	145.4E6	1210.9E6	115.572	90.667

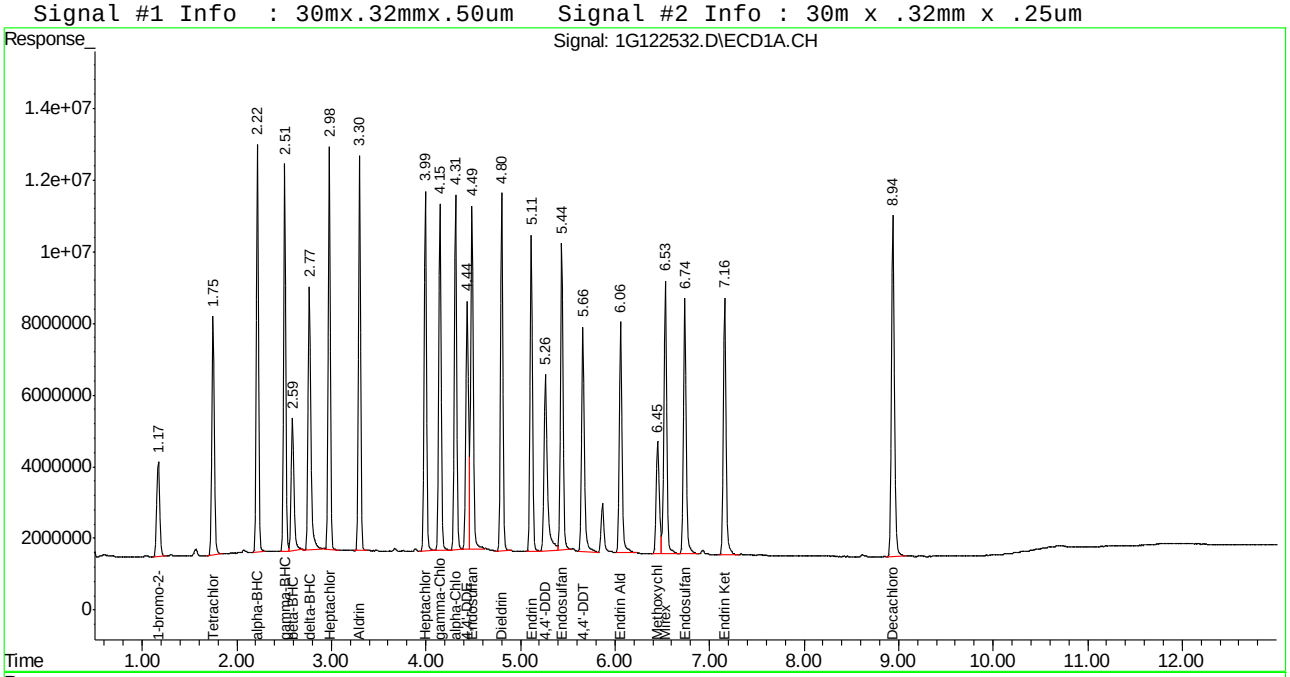
(f)=RT Delta > 1/2 Window (m)=manual int.
1G122532.D 1PST3973.M Wed Apr 27 14:55:26 2016 RPT1 Page 1

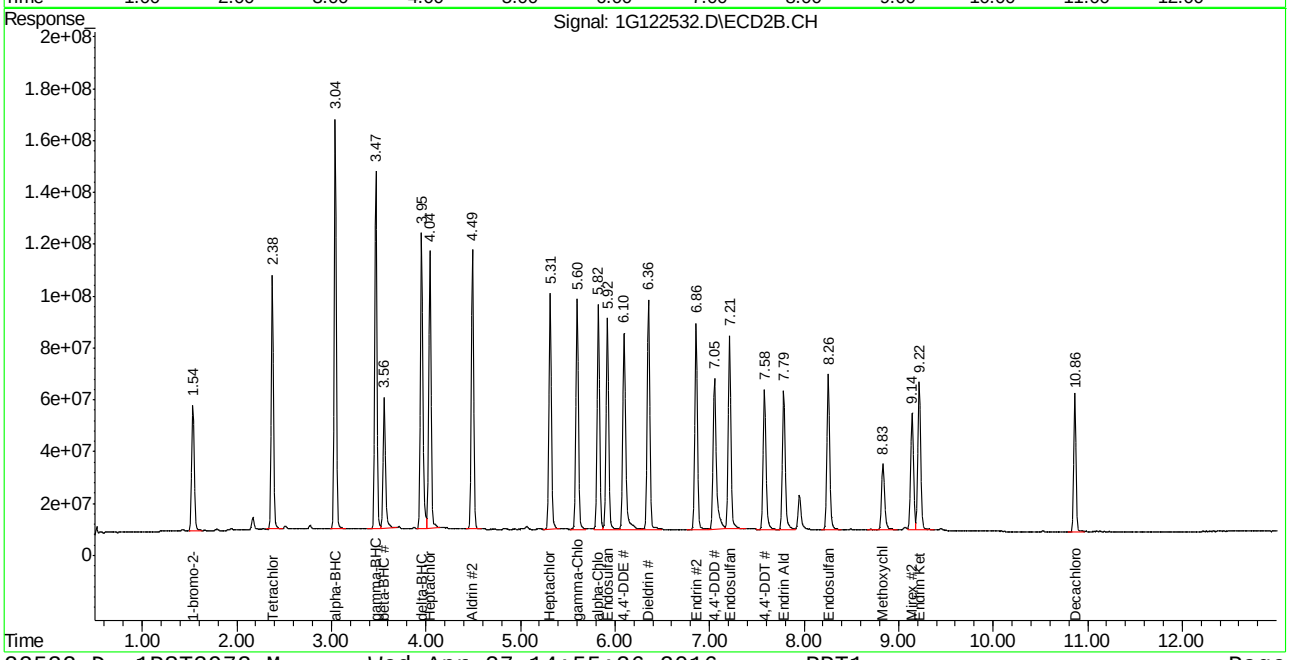
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122532.D\ECD1A.CH Vial: 10
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122532.D\ECD2B.CH
Acq On : 4-27-16 01:45:26 PM Operator: dharas
Sample : ic3973-100 Inst : GC1G
Misc : op93327,g1g3973,16.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 27 14:55 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3973.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 04/28/16 16:54

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122533.D\ECD1A.CH Vial: 11
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122533.D\ECD2B.CH
Acq On : 4-27-16 02:02:54 PM Operator: dharas
Sample : ic3973-500 Inst : GC1G
Misc : op93327,g1g3973,16.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 27 16:07 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Apr 27 16:05:41 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3973.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	62870373	997.8E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.17	1.54	62870373	997.8E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.17	1.54	62870373	997.8E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	59898439	798.8E6	45.468	44.260
Spiked Amount	40.000	Range	30 - 150	Recovery	=	113.67%	110.65%
24) SA	Decachlorobiphen	8.94	10.87	103.2E6	468.5E6	44.376	44.502
Spiked Amount	40.000			Recovery	=	110.94%	111.26%
	Target Compounds						
32)	Chlordane {A}	2.98	4.04	44475816	539.5E6	991.174	869.711
33)	Chlordane {B}	3.44	4.69	34296300	313.5E6	520.942	498.451
34)	Chlordane {C}	4.15	5.60	106.8E6	1047.2E6	502.827	498.445
35)	Chlordane {D}	4.31	5.83	173.3E6	1762.4E6	502.056	498.663m
36)	Chlordane {E}	5.33	7.29	24356532	287.9E6	527.569	499.352

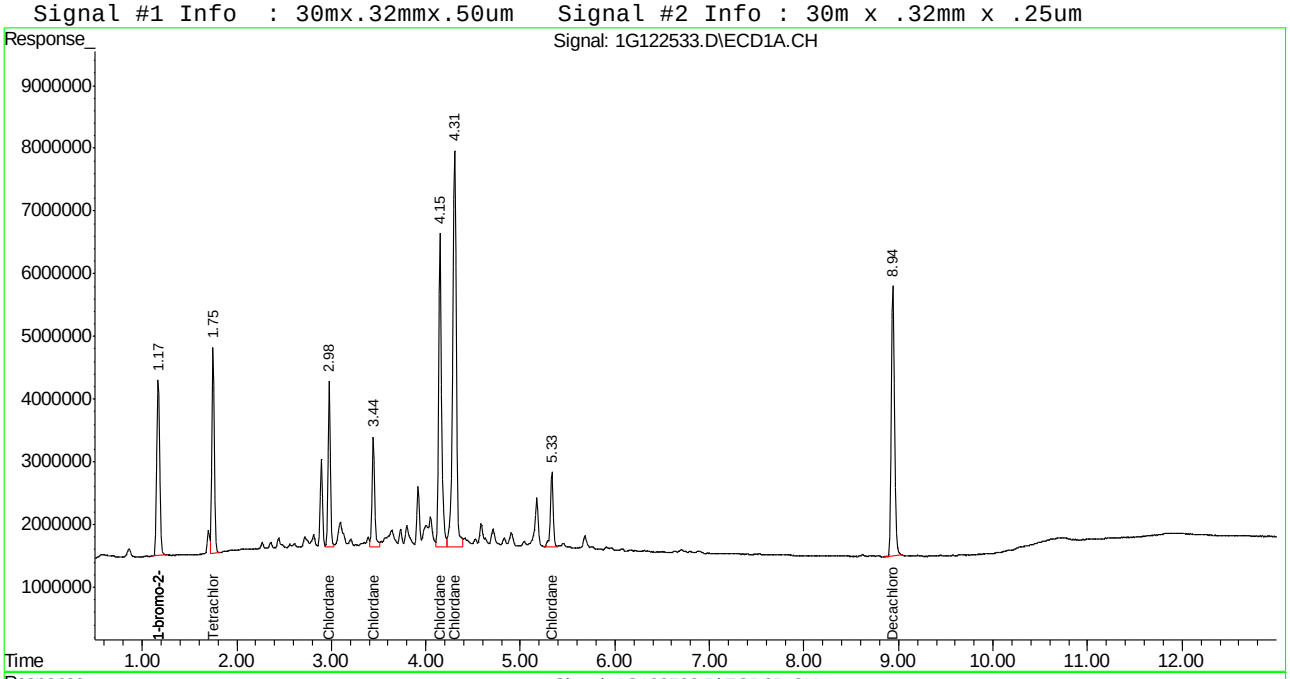
(f)=RT Delta > 1/2 Window (m)=manual int.
1G122533.D 1PST3973.M Wed Apr 27 16:07:18 2016 RPT1 Page 1

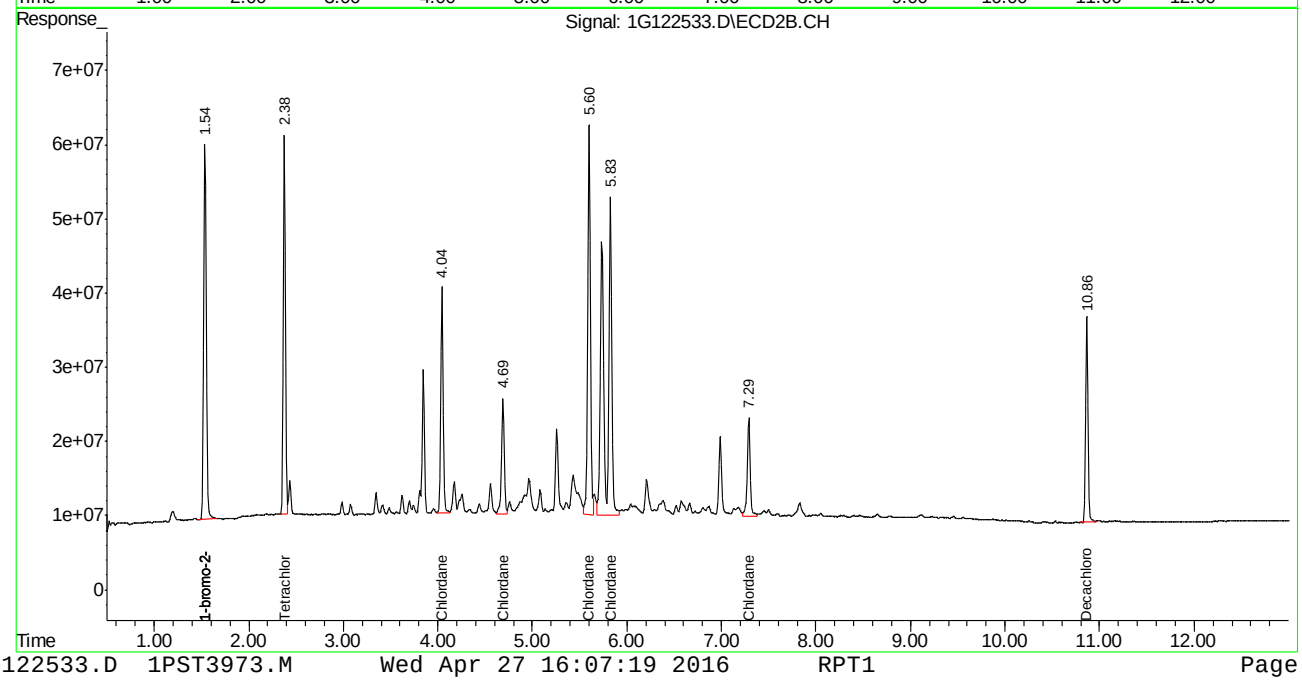
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122533.D\ECD1A.CH Vial: 11
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122533.D\ECD2B.CH
Acq On : 4-27-16 02:02:54 PM Operator: dharas
Sample : ic3973-500 Inst : GC1G
Misc : op93327,g1g3973,16.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 27 16:07 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Apr 27 16:05:41 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3973.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

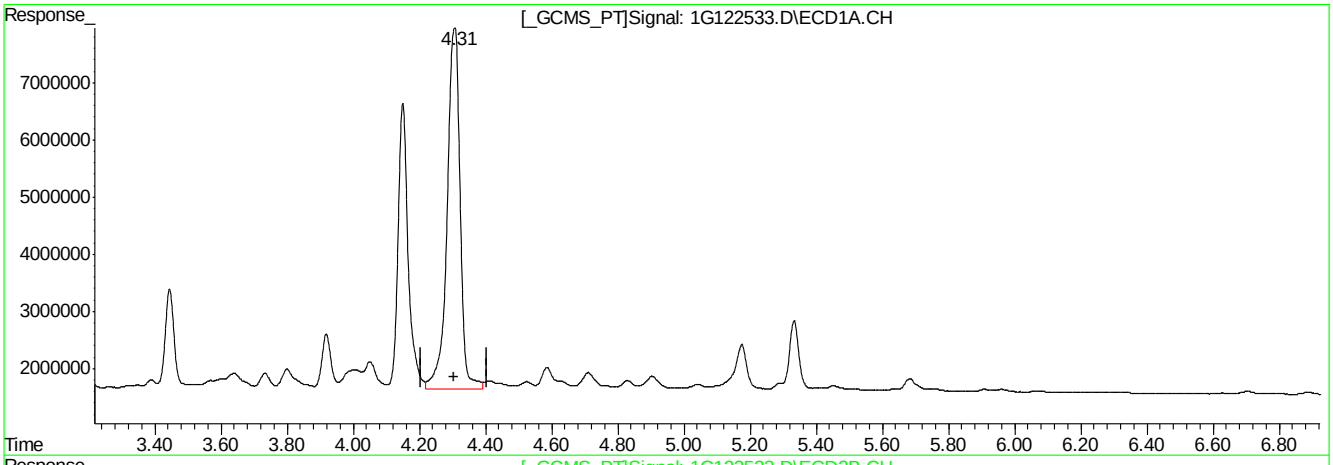
Sample Number:	G1G3973-IC3973	**Method:**	SW846 8081B
Lab FileID:	1G122533.D	**Analyst approved:**	04/27/16 16:32 Dhara Saparia
Injection Time:	04/27/16 14:02	**Supervisor approved:**	04/28/16 16:54 Gwendolyn Burns

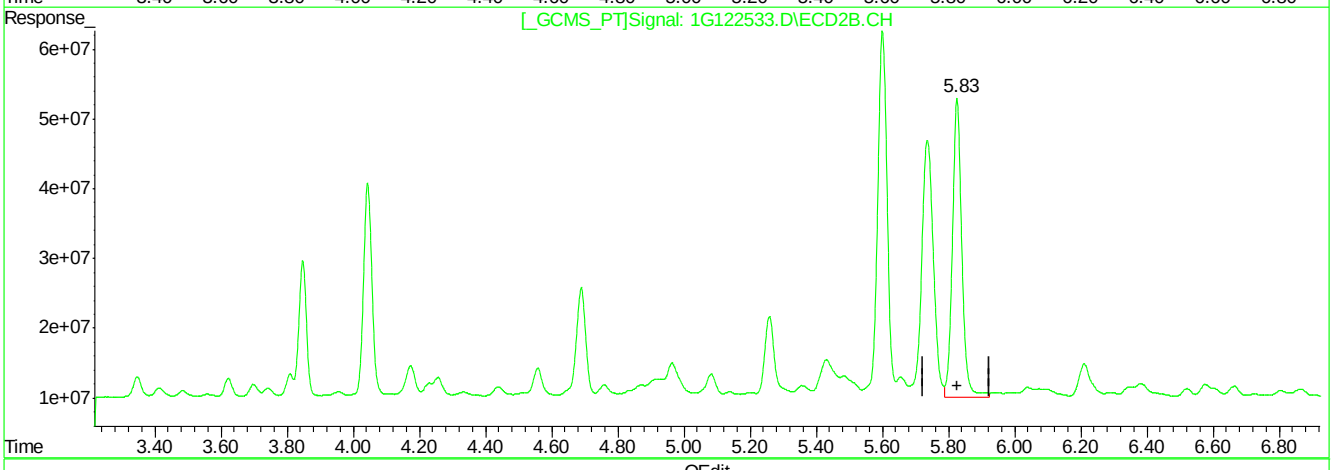
Parameter	CAS	Sig#	R.T. (min.)	Reason
Chlordane-D		2	5.83	Split peak

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122533.D\ECD1A.CH Vial: 11
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122533.D\ECD2B.CH
Acq On    : 4-27-16 02:02:54 PM                      Operator: dharas
Sample    : ic3973-500                               Inst    : GC1G
Misc      : op93327,g1g3973,16.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 27 16:05 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:05:41 2016
Response via : Multiple Level Calibration
```





QEdit

(35) Chlordane {D}

4.31min 502.056PPB

response 173288732

(35) Chlordane {D} #2

5.83min 241.501PPB

response 853505487

(+) = Expected Retention Time

1G122533.D 1PST3973.M Wed Apr 27 16:06:31 2016 RPT1

9.6.9.2

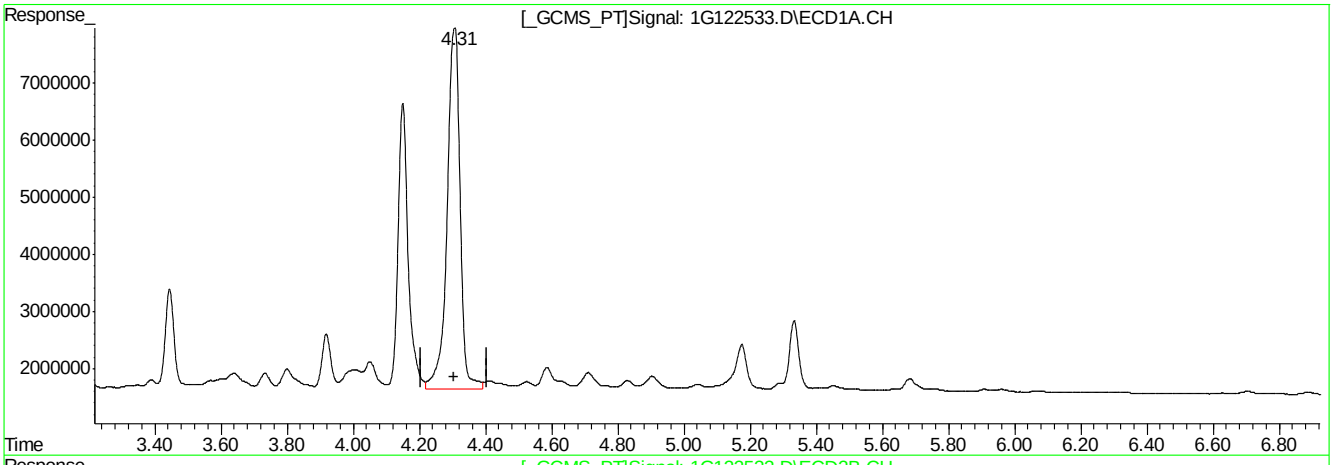
9

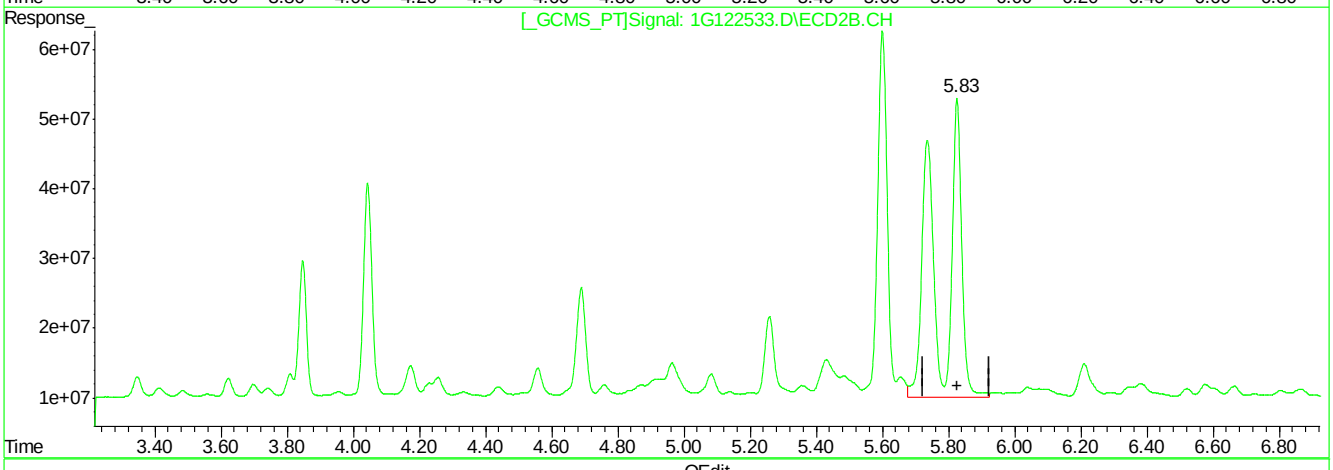
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122533.D\ECD1A.CH Vial: 11
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122533.D\ECD2B.CH
Acq On    : 4-27-16 02:02:54 PM                      Operator: dharas
Sample    : ic3973-500                               Inst    : GC1G
Misc      : op93327,g1g3973,16.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 27 16:05 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:05:41 2016
Response via : Multiple Level Calibration
```





QEdit

(35) Chlordane {D}

4.31min 502.056PPB

response 173288732

(35) Chlordane {D} #2

5.83min 498.663PPB m

response 1762356898

(+) = Expected Retention Time

1G122533.D 1PST3973.M Wed Apr 27 16:06:55 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/28/16 16:54

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122534.D\ECD1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122534.D\ECD2B.CH
Acq On : 4-27-16 02:20:24 PM Operator: dharas
Sample : ic3973-500 Inst : GC1G
Misc : op93327,g1g3973,16.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 27 14:56 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3973.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	62037752	1026.6E6	50.000	50.000
	System Monitoring Compounds						
	Target Compounds						
26) L8	Toxaphene{A}	4.81	6.32	13730720	204.9E6	626.720m	463.922
27) L8	Toxaphene{B}	5.42	7.18	32123504	254.1E6	551.380m	494.120
28) L8	Toxaphene{C}	5.60	7.35	24966468	382.3E6	563.230	389.645
29) L8	Toxaphene{D}	5.93	7.79	23828150	230.8E6	532.313	408.653
30) L8	Toxaphene{E}	6.57	8.69	22704377	168.8E6	574.506	381.424

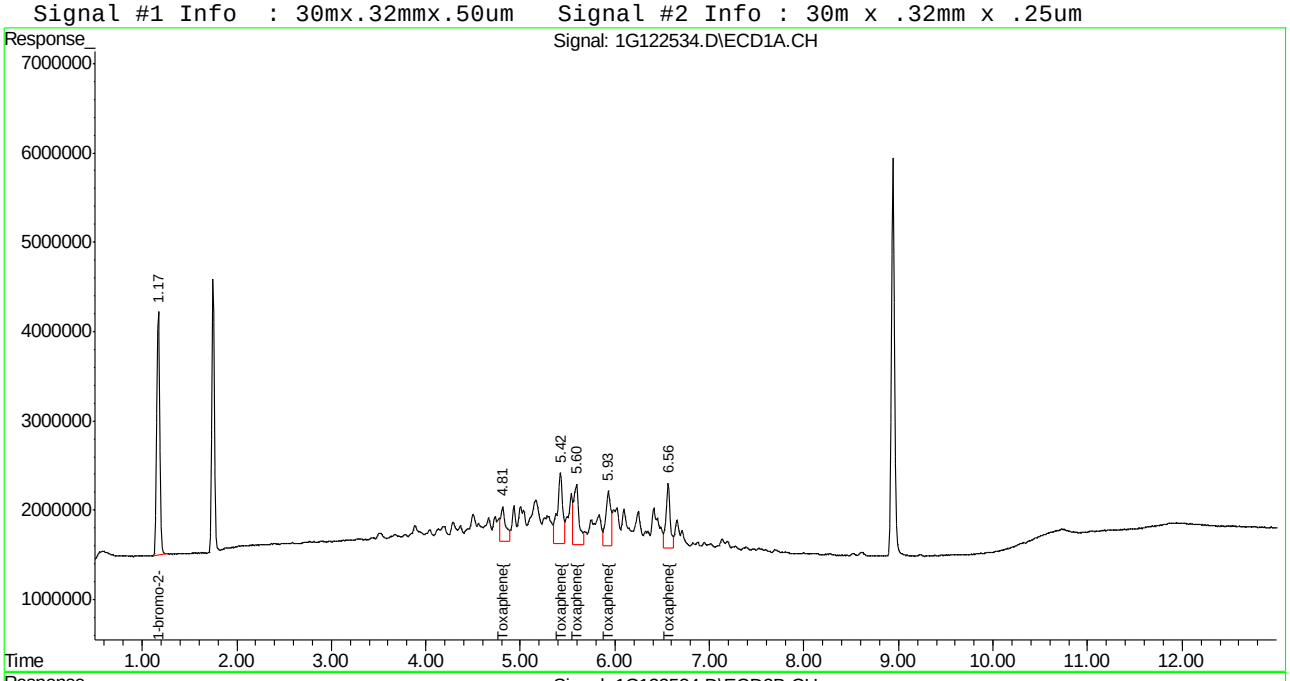
(f)=RT Delta > 1/2 Window (m)=manual int.
1G122534.D 1PST3973.M Wed Apr 27 14:56:32 2016 RPT1 Page 1

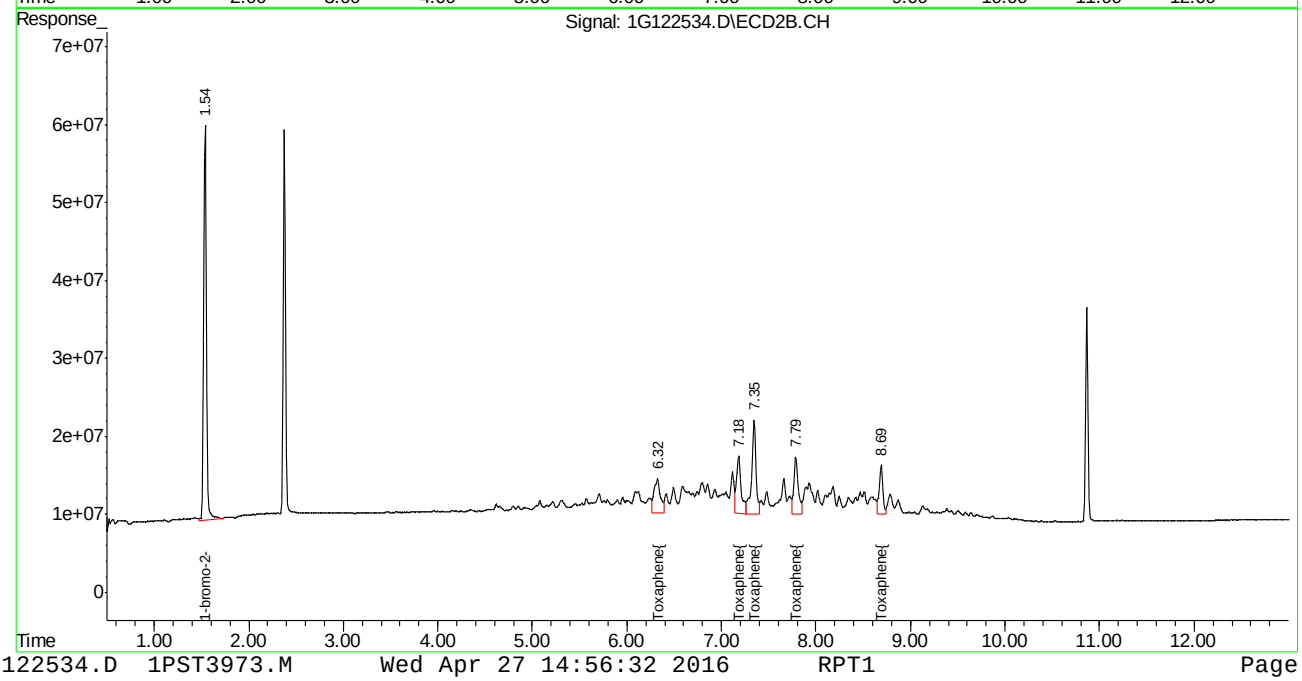
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122534.D\ECD1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122534.D\ECD2B.CH
Acq On : 4-27-16 02:20:24 PM Operator: dharas
Sample : ic3973-500 Inst : GC1G
Misc : op93327,g1g3973,16.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 27 14:56 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3973.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

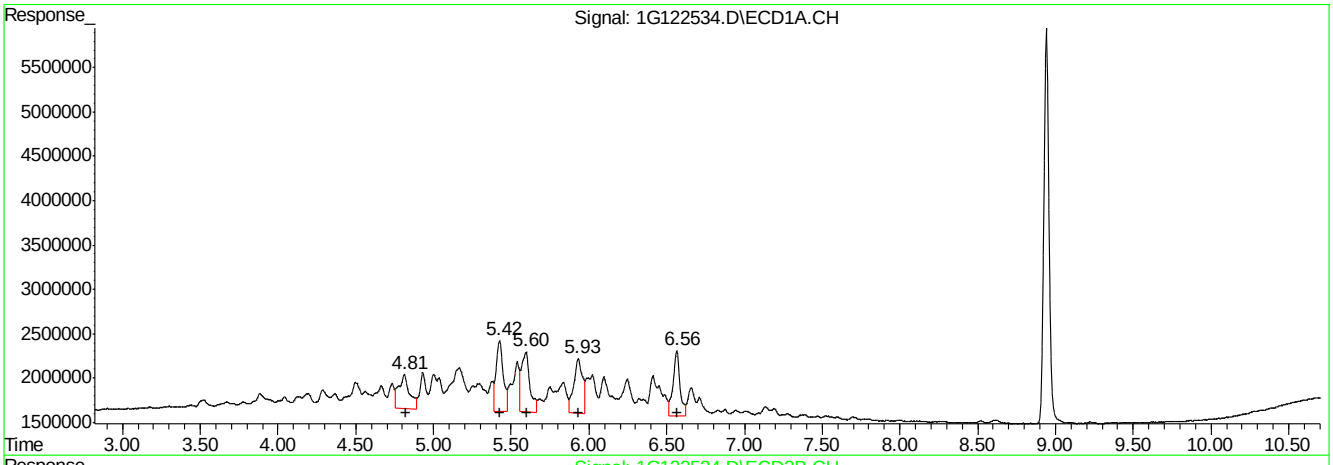
Sample Number:	G1G3973-IC3973	**Method:**	SW846 8081B
Lab FileID:	1G122534.D	**Analyst approved:**	04/27/16 16:32 Dhara Saparia
Injection Time:	04/27/16 14:20	**Supervisor approved:**	04/28/16 16:54 Gwendolyn Burns

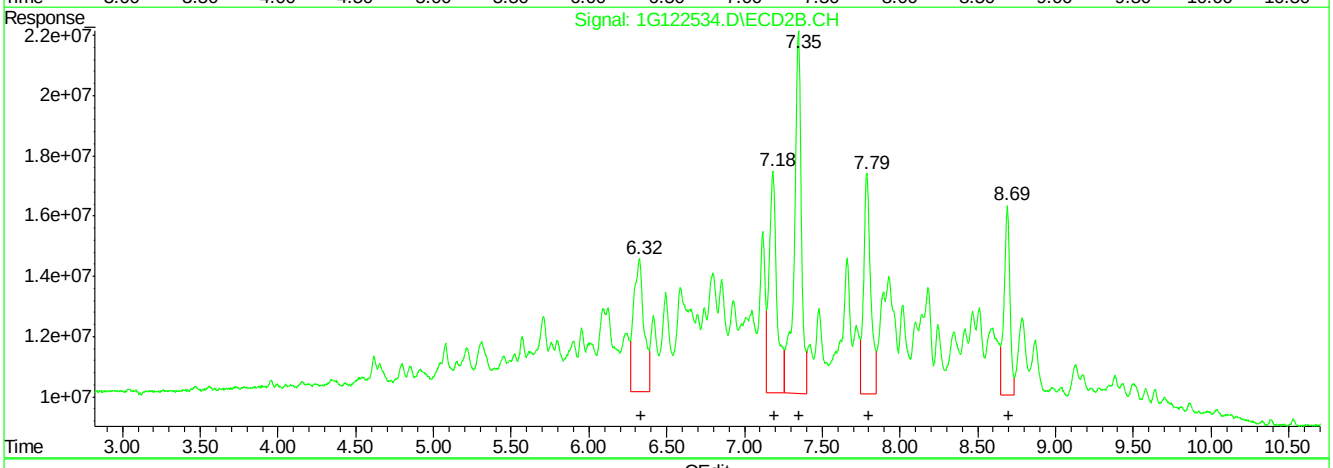
Parameter	CAS	Sig#	R.T. (min.)	Reason
Toxaphene-A		1	4.81	Poor instrument integration
Toxaphene-B		1	5.42	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122534.D\ECD1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122534.D\ECD2B.CH
Acq On    : 4-27-16 02:20:24 PM                      Operator: dharas
Sample    : ic3973-500                               Inst    : GC1G
Misc      : op93327,g1g3973,16.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 27 14:46 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
```





QEdit

(26) Toxaphene{A} (L8)

R.T.	Response	Conc
4.81	18707843	853.89
5.42	25308456	434.40
5.60	24966468	563.23
5.93	23828150	532.31
6.57	22704377	574.51

(26) Toxaphene{A} #2 (L8)

R.T.	Response	Conc
6.32	204932438	463.92
7.18	254124998	494.12
7.35	382263914	389.64
7.79	230797432	408.65
8.69	168815105	381.42

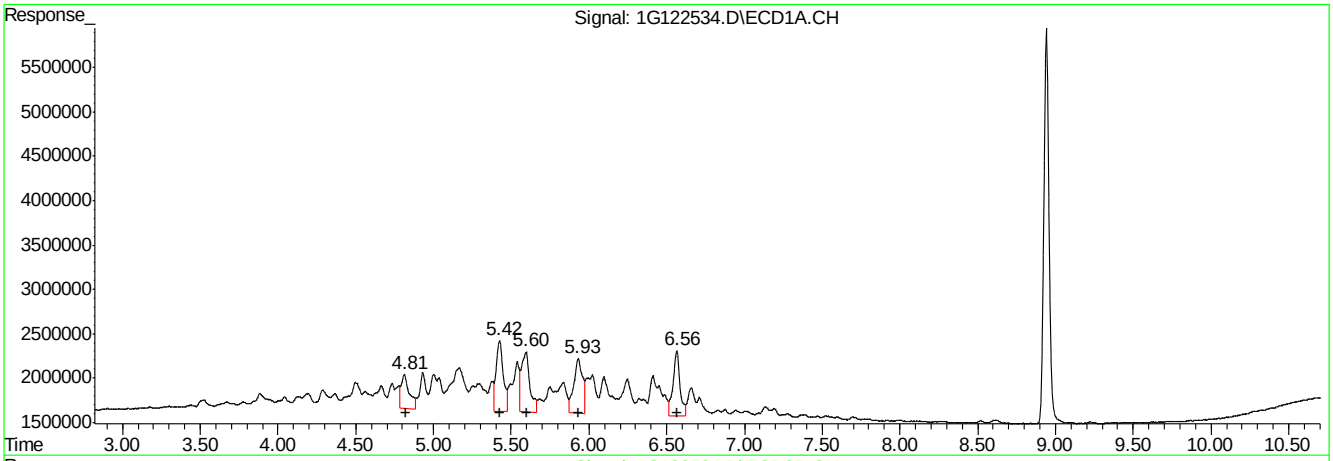
(+) = Expected Retention Time

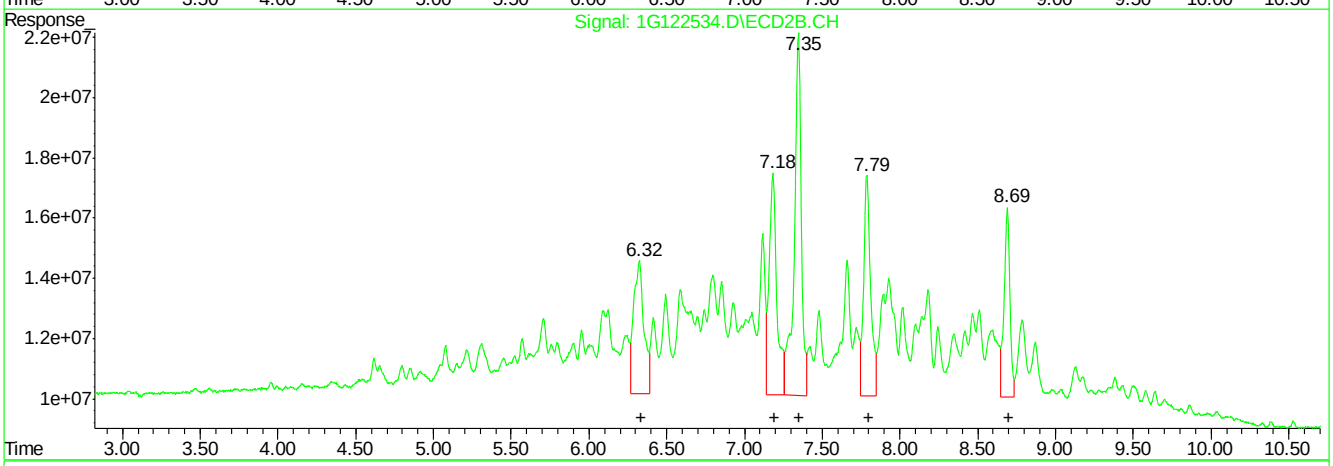
1G122534.D 1PST3973.M Wed Apr 27 14:47:03 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122534.D\ECD1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122534.D\ECD2B.CH
Acq On    : 4-27-16 02:20:24 PM                      Operator: dharas
Sample    : ic3973-500                               Inst    : GC1G
Misc      : op93327,g1g3973,16.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 27 14:46 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
```





QEdit

(26) Toxaphene{A} #2 (L8)

R.T.	Response	Conc
4.81	13730720	626.72
5.42	25308456	434.40
5.60	24966468	563.23
5.93	23828150	532.31
6.57	22704377	574.51

(26) Toxaphene{A} #2 (L8)

R.T.	Response	Conc
6.32	204932438	463.92
7.18	254124998	494.12
7.35	382263914	389.64
7.79	230797432	408.65
8.69	168815105	381.42

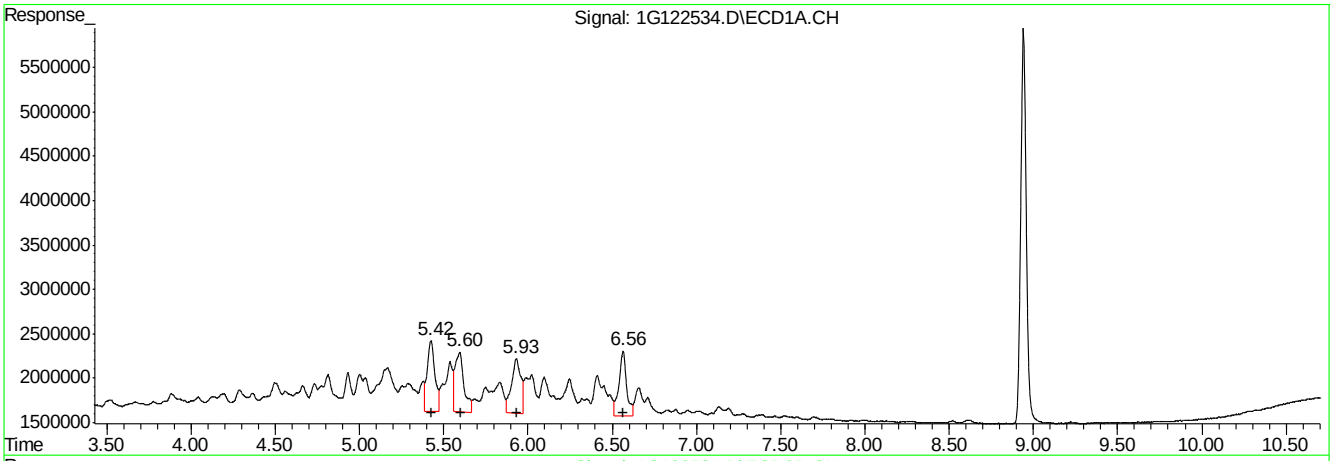
(+) = Expected Retention Time

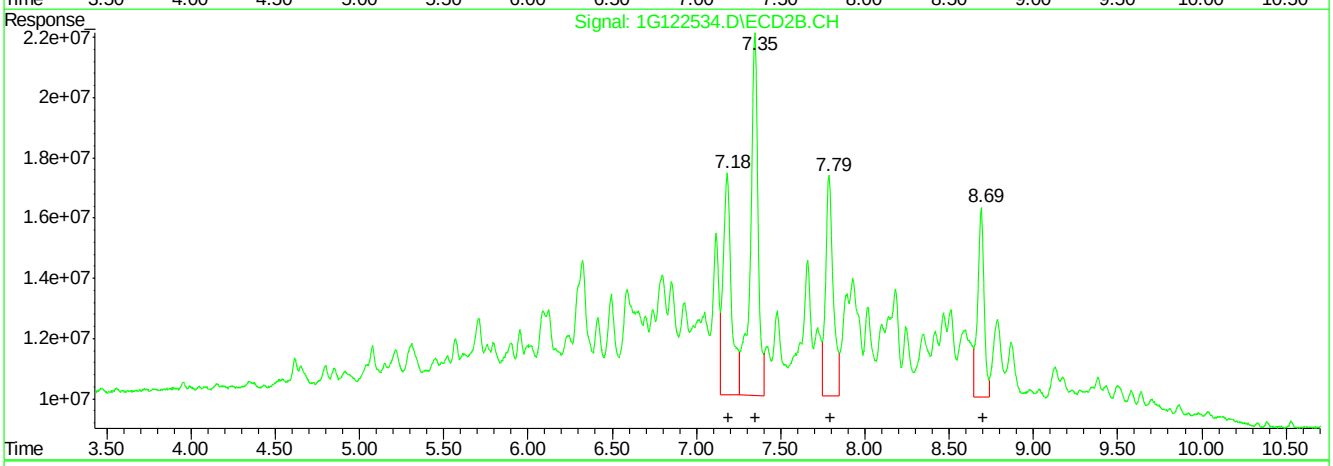
1G122534.D 1PST3973.M Wed Apr 27 14:48:22 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122534.D\ECD1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122534.D\ECD2B.CH
Acq On    : 4-27-16 02:20:24 PM                      Operator: dharas
Sample    : ic3973-500                               Inst    : GC1G
Misc      : op93327,g1g3973,16.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 27 14:46 2016  Quant Results File: 1PST3973.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
```





QEdit

(27) Toxaphene{B} (L8)

R.T.	Response	Conc
5.42	25308456	434.40
5.60	24966468	563.23
5.93	23828150	532.31
6.57	22704377	574.51

(27) Toxaphene{B} #2 (L8)

R.T.	Response	Conc
7.18	254124998	494.12
7.35	382263914	389.64
7.79	230797432	408.65
8.69	168815105	381.42

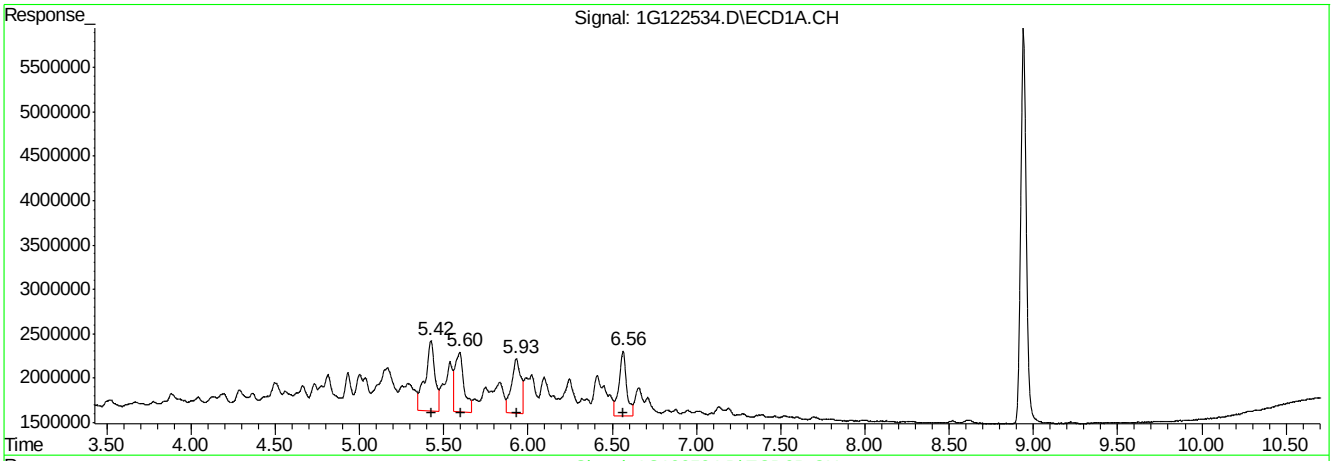
(+) = Expected Retention Time

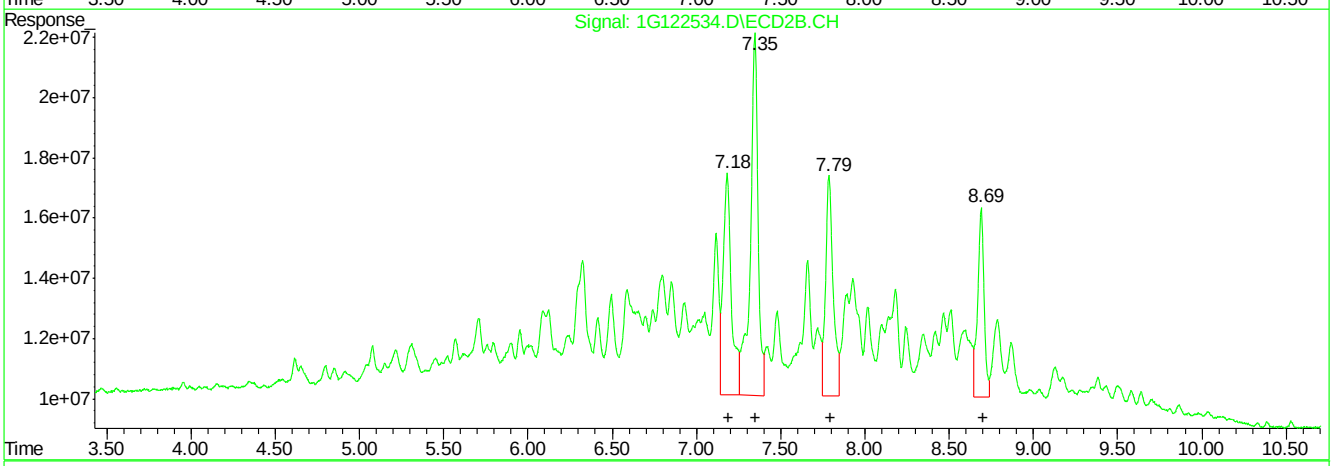
1G122534.D 1PST3973.M Wed Apr 27 14:48:38 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122534.D\ECD1A.CH Vial: 12
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122534.D\ECD2B.CH
Acq On    : 4-27-16 02:20:24 PM                      Operator: dharas
Sample    : ic3973-500                               Inst    : GC1G
Misc      : op93327,g1g3973,16.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 27 14:46 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Fri Apr 01 16:49:57 2016
Response via : Multiple Level Calibration
```





QEdit

(27) Toxaphene{B} #2 (L8)

R.T.	Response	Conc
5.42	32123504	551.38
5.60	24966468	563.23
5.93	23828150	532.31
6.57	22704377	574.51

(27) Toxaphene{B} #2 (L8)

R.T.	Response	Conc
7.18	254124998	494.12
7.35	382263914	389.64
7.79	230797432	408.65
8.69	168815105	381.42

(+) = Expected Retention Time

1G122534.D 1PST3973.M Wed Apr 27 14:49:25 2016 RPT1

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122535.D\ECD1A.CH Vial: 13
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122535.D\ECD2B.CH
Acq On : 4-27-16 02:37:54 PM Operator: dharas
Sample : icv3973-25 Inst : GC1G
Misc : op93327,g1g3973,16.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 27 15:35 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Apr 27 15:00:31 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3973.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	62654048	994.2E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.17	1.54	62654048	994.2E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.17	1.54	62654048	994.2E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	28023533	395.9E6	21.346	22.015
Spiked Amount	40.000 Range	30 - 150	Recovery	=		53.36%	55.04%
24) SA	Decachlorobiphen	8.94	10.87	52076323	243.5E6	22.465	23.210
Spiked Amount	40.000		Recovery	=		56.16%	58.03%
	Target Compounds						
3) A	alpha-BHC	2.22	3.04	33080967	572.1E6	20.528	20.998
4) MA	gamma-BHC	2.51	3.47	32360319	510.4E6	20.726	21.068
5) MA	Heptachlor	2.98	4.04	34629944	451.6E6	20.275	21.178
6) B	beta-BHC	2.59	3.56	16315476	222.6E6	21.229	21.715
7) B	delta-BHC	2.77	3.96	29608596	509.9E6	22.372	22.570
8) MB	Aldrin	3.30	4.49	33922250	466.5E6	20.443	20.615
9) B	Heptachlor Epoxi	3.99	5.32	35391537	424.6E6	21.268	21.259
10) B	gamma-Chlordane	4.15	5.60	35381480	425.8E6	20.985	21.624
11) B	alpha-Chlordane	4.31	5.83	35028055	401.2E6	20.671	20.881
12) A	Endosulfan I	4.49	5.92	38051439	396.0E6	21.024	20.808
13) B	4,4'-DDE	4.44	6.10	27408130	419.5E6	20.033	22.039
14) MA	Dieldrin	4.80	6.35	34831584	443.5E6	21.202	22.000
15) MA	Endrin	5.12	6.86	32988523	401.3E6	21.870	22.497
16) A	4,4'-DDD	5.27	7.06	25224435	361.3E6	21.876	21.729
17) B	Endosulfan II	5.44	7.21	33389629	388.8E6	21.978	21.987
18) MA	4,4'-DDT	5.66	7.58	22546539	248.8E6	20.902	23.280
19) B	Endrin Aldehyde	6.06	7.79	29427307	306.7E6	23.231	24.107
20) B	Endosulfan Sulfa	6.74	8.26	29835396	317.2E6	21.155	22.084
21) A	Methoxychlor	6.46	8.84	16333970	130.6E6	22.363	21.585
23) B	Endrin Ketone	7.16	9.22	29958726	291.3E6	21.408	21.896

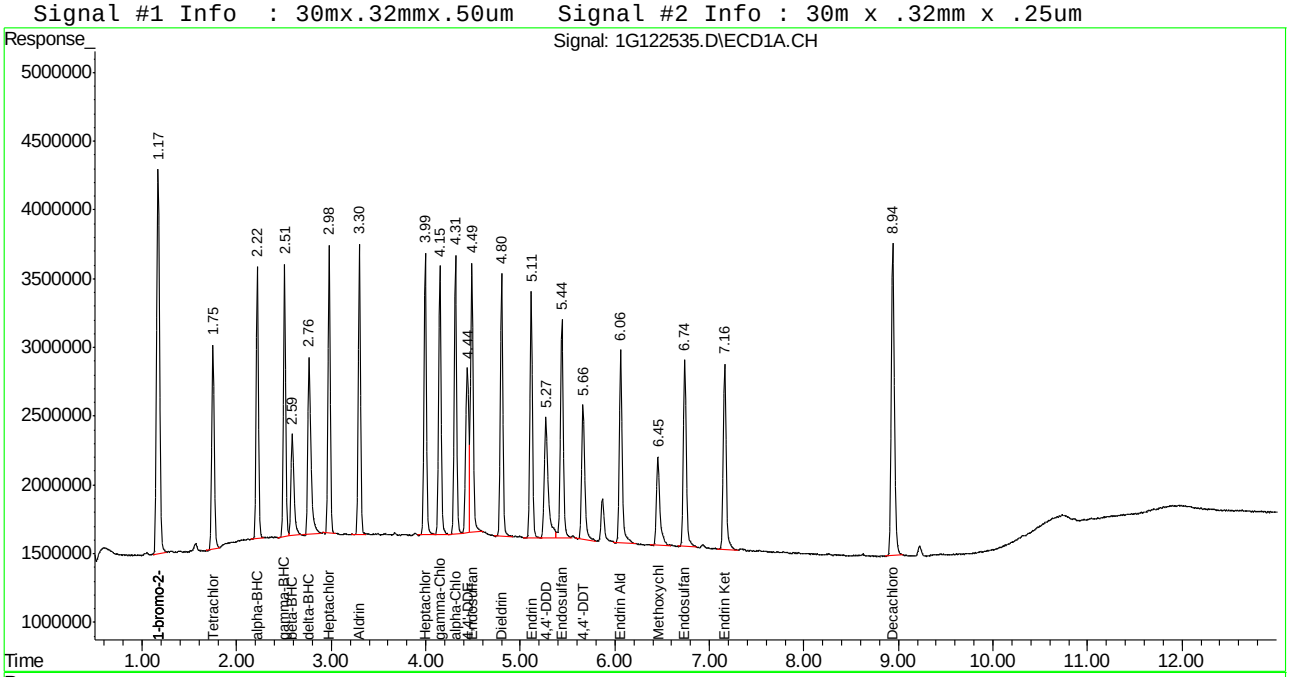
(f)=RT Delta > 1/2 Window (m)=manual int.
1G122535.D 1PST3973.M Wed Apr 27 15:35:32 2016 RPT1 Page 1

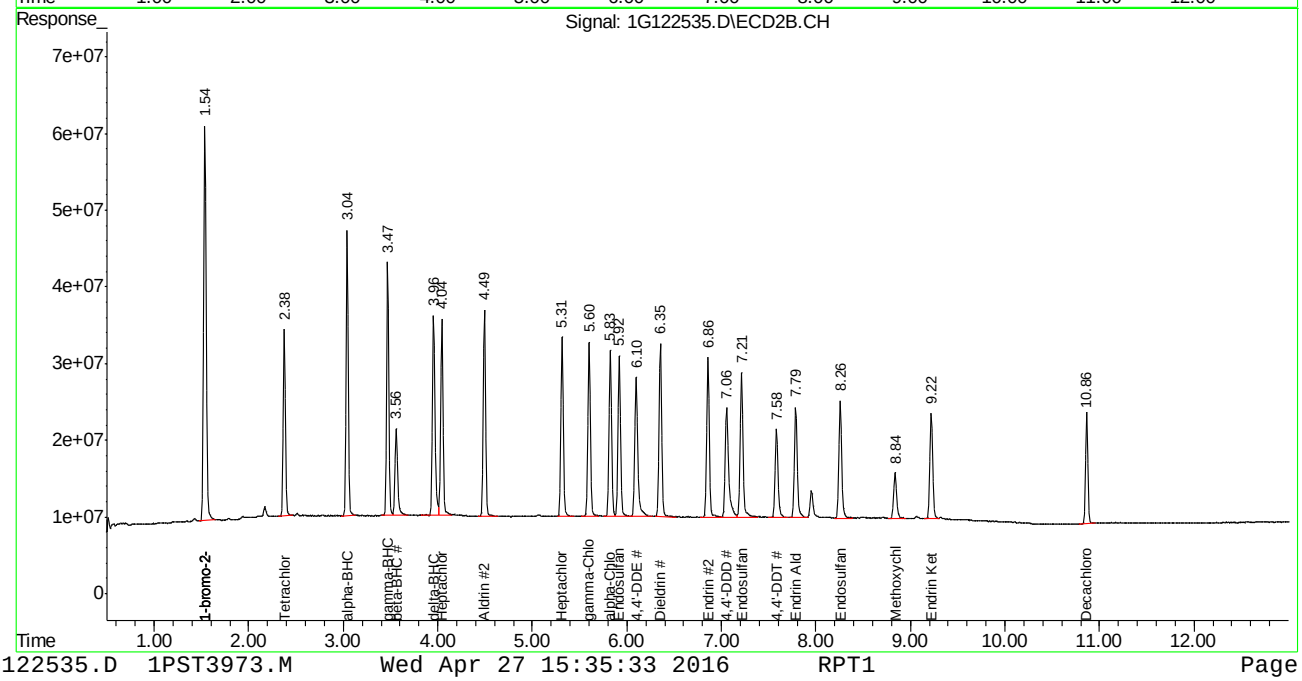
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122535.D\ECD1A.CH Vial: 13
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122535.D\ECD2B.CH
Acq On : 4-27-16 02:37:54 PM Operator: dharas
Sample : icv3973-25 Inst : GC1G
Misc : op93327,g1g3973,16.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 27 15:35 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Apr 27 15:00:31 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3973.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\1G3973\1G122536.D\ECD1A.CH Vial: 14
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122536.D\ECD2B.CH
Acq On : 4-27-16 02:55:30 PM Operator: dharas
Sample : icv3973-25 Inst : GC1G
Misc : op93327,g1g3973,16.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 27 15:36 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Apr 27 15:00:31 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3973.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	59989264	982.9E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.17	1.54	59989264	982.9E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.17	1.54	59989264	982.9E6	50.000	50.000
	System Monitoring Compounds						
	Target Compounds						
22)	Mirex	6.54	9.15	39227107	274.7E6	23.102	24.117

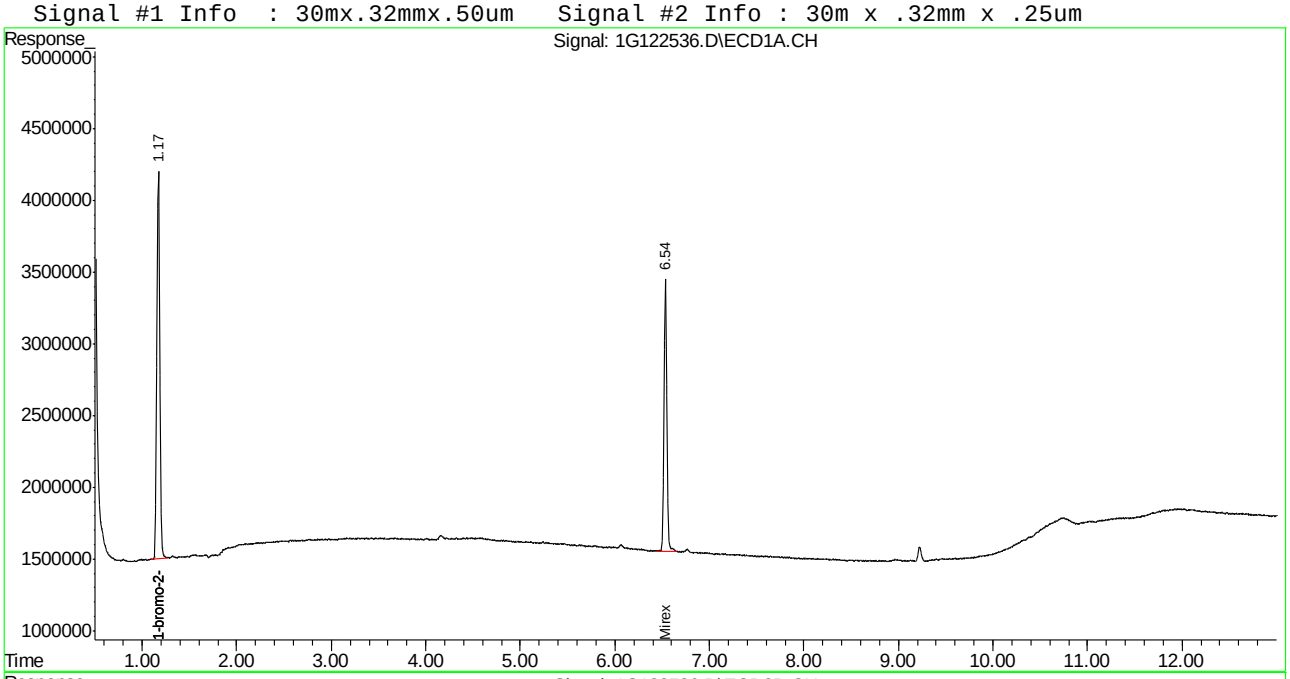
(f)=RT Delta > 1/2 Window (m)=manual int.
1G122536.D 1PST3973.M Wed Apr 27 15:37:52 2016 RPT1 Page 1

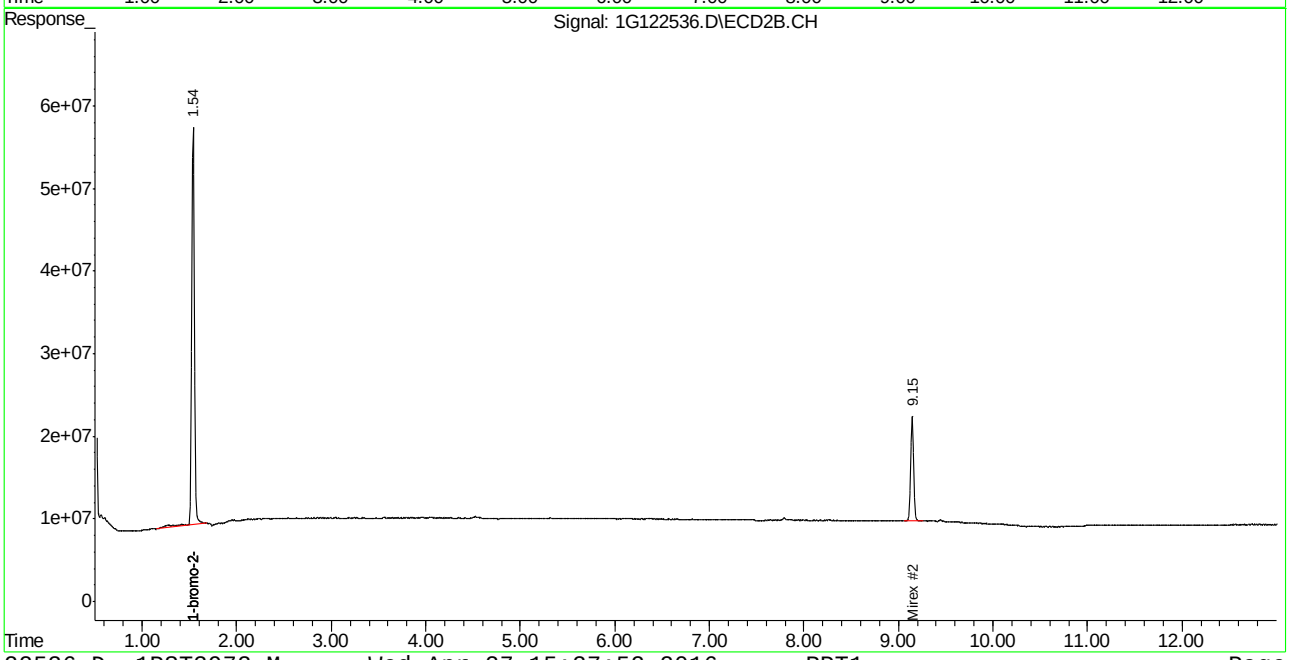
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122536.D\ECD1A.CH Vial: 14
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122536.D\ECD2B.CH
Acq On : 4-27-16 02:55:30 PM Operator: dharas
Sample : icv3973-25 Inst : GC1G
Misc : op93327,g1g3973,16.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 27 15:36 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Apr 27 15:00:31 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3973.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 04/28/16 16:54

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122537.D\ECD1A.CH Vial: 15
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122537.D\ECD2B.CH
Acq On : 4-27-16 03:12:59 PM Operator: dharas
Sample : icv3973-500 Inst : GC1G
Misc : op93327,g1g3973,16.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 27 16:12 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Apr 27 16:10:51 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3973.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	60625194	960.7E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.17	1.54	60625194	960.7E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.17	1.54	60625194	960.7E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	54389117	724.3E6	42.815	41.685
Spiked Amount	40.000	Range	30 - 150	Recovery	=	107.04%	104.21%
24) SA	Decachlorobiphen	8.94	10.87	101.2E6	466.4E6	45.128	46.018
Spiked Amount	40.000			Recovery	=	112.82%	115.05%
	Target Compounds						
32)	Chlordane {A}	2.98	4.04	35263537	483.5E6	411.116	465.452
33)	Chlordane {B}	3.45	4.69	29949992	329.4E6	452.806	545.670
34)	Chlordane {C}	4.15	5.60	101.2E6	1030.1E6	491.253	510.818
35)	Chlordane {D}	4.31	5.82	167.5E6	1733.6E6	501.070	510.835m
36)	Chlordane {E}	5.33	7.29	26210372	294.7E6	557.983	531.605

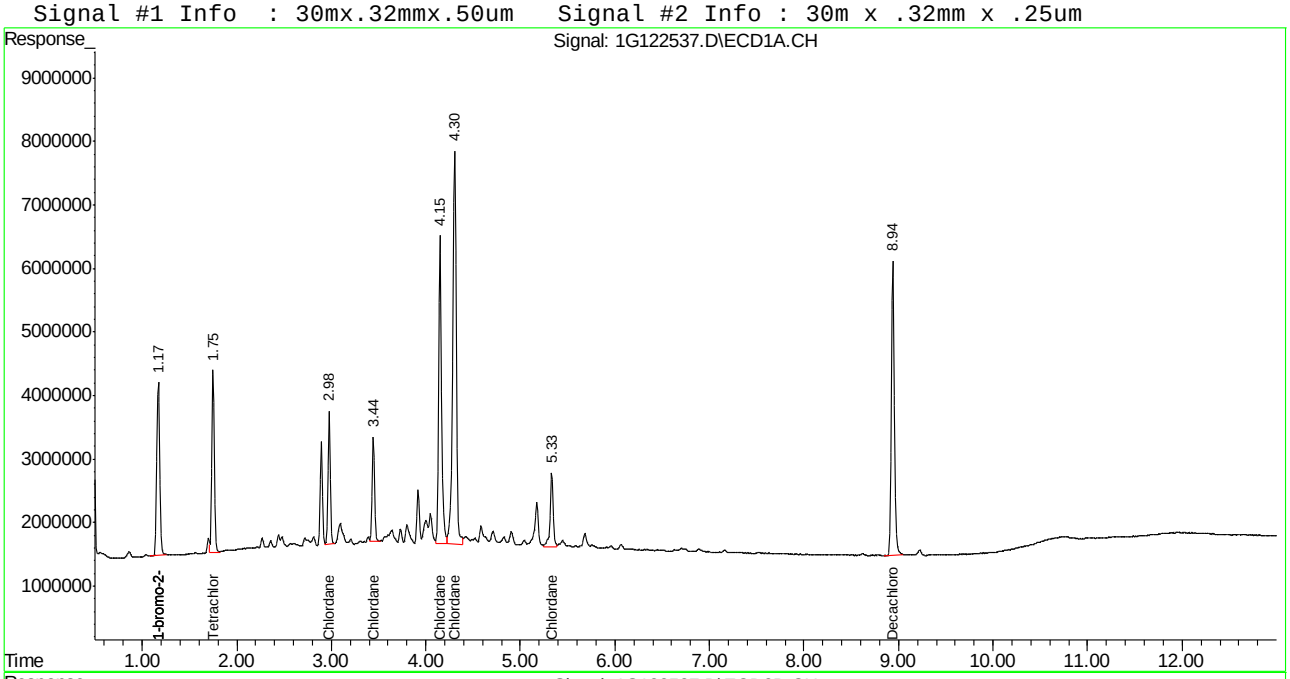
(f)=RT Delta > 1/2 Window (m)=manual int.
1G122537.D 1PST3973.M Wed Apr 27 16:12:29 2016 RPT1 Page 1

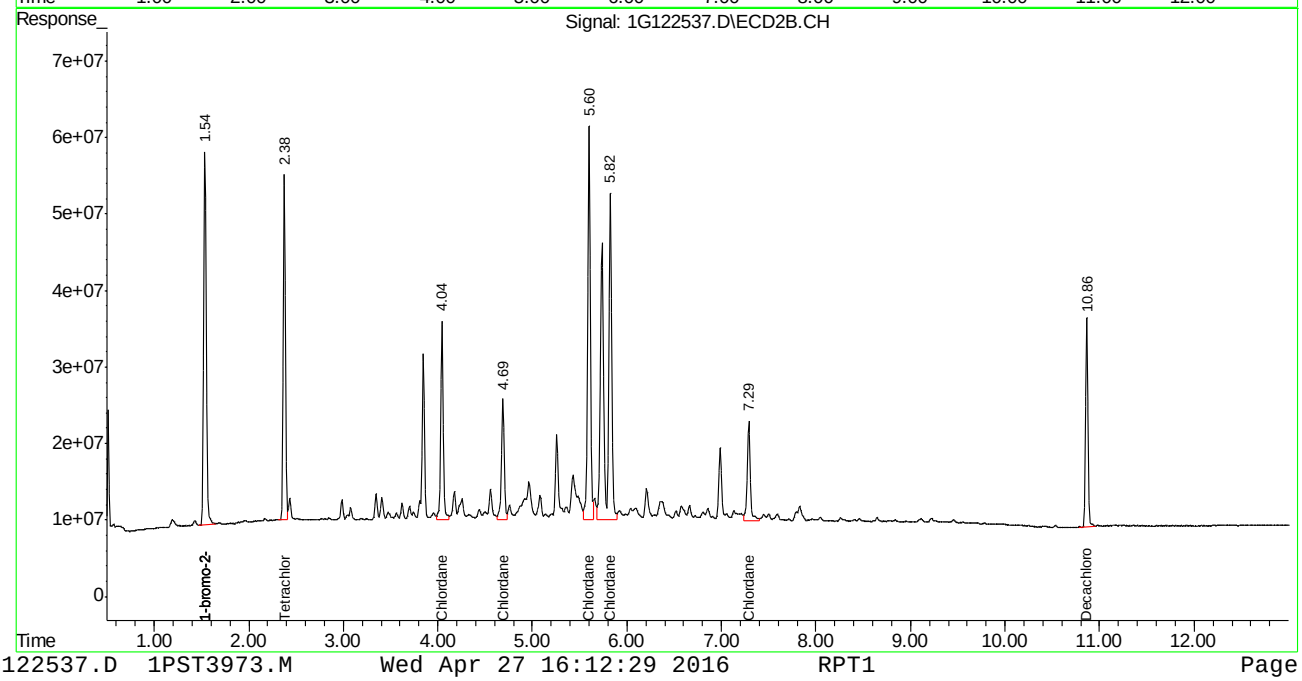
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122537.D\ECD1A.CH Vial: 15
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122537.D\ECD2B.CH
Acq On : 4-27-16 03:12:59 PM Operator: dharas
Sample : icv3973-500 Inst : GC1G
Misc : op93327,g1g3973,16.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 27 16:12 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Apr 27 16:10:51 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3973.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

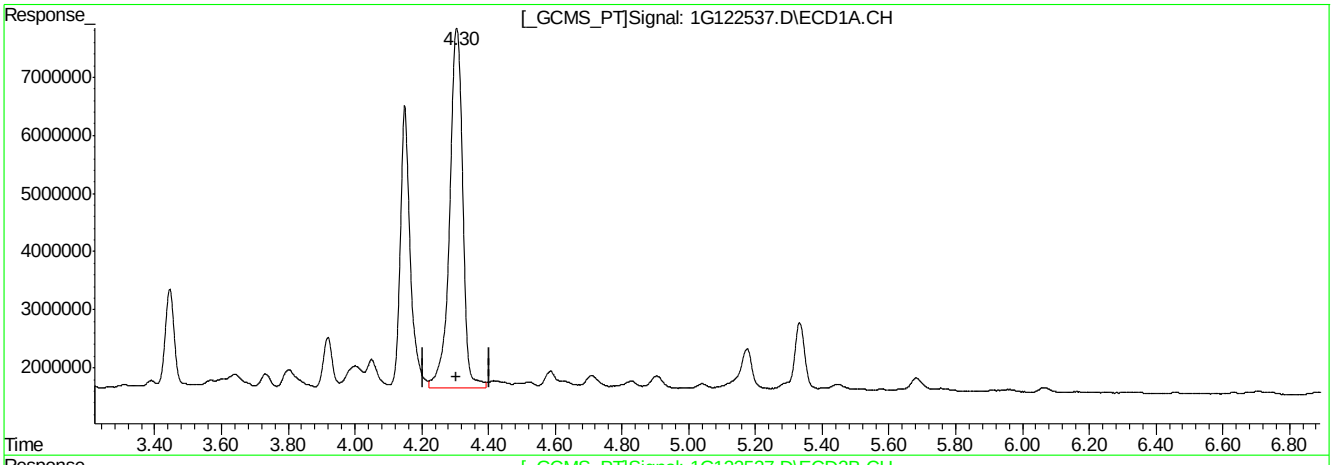
Sample Number:	G1G3973-ICV3973	**Method:**	SW846 8081B
Lab FileID:	1G122537.D	**Analyst approved:**	04/27/16 16:32 Dhara Saparia
Injection Time:	04/27/16 15:12	**Supervisor approved:**	04/28/16 16:54 Gwendolyn Burns

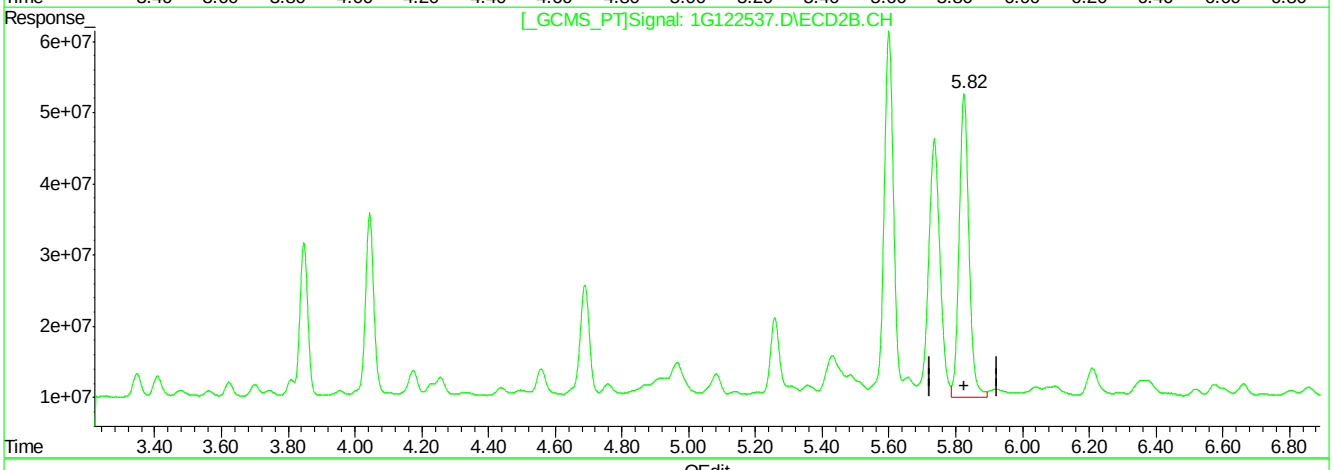
Parameter	CAS	Sig#	R.T. (min.)	Reason
Chlordane-D		2	5.82	Split peak

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122537.D\ECD1A.CH Vial: 15
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122537.D\ECD2B.CH
Acq On    : 4-27-16 03:12:59 PM                      Operator: dharas
Sample    : icv3973-500                              Inst    : GC1G
Misc      : op93327,g1g3973,16.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 27 16:11 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:10:51 2016
Response via : Multiple Level Calibration
```





QEdit

(35) Chlordane {D}

4.31min 501.070PPB

response 167457938

(35) Chlordane {D} #2

5.83min 255.850PPB

response 868271848

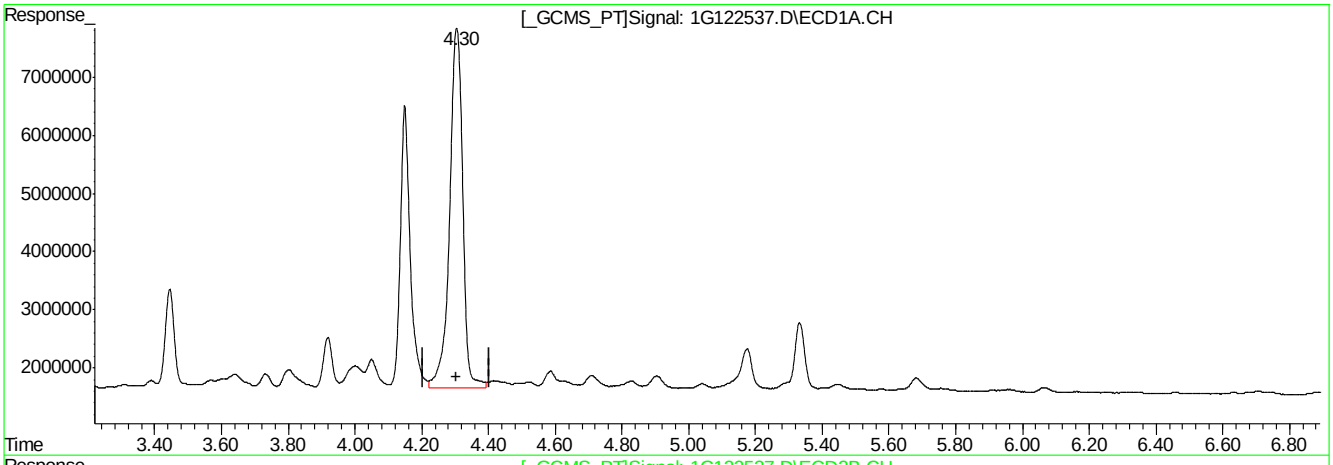
(+) = Expected Retention Time

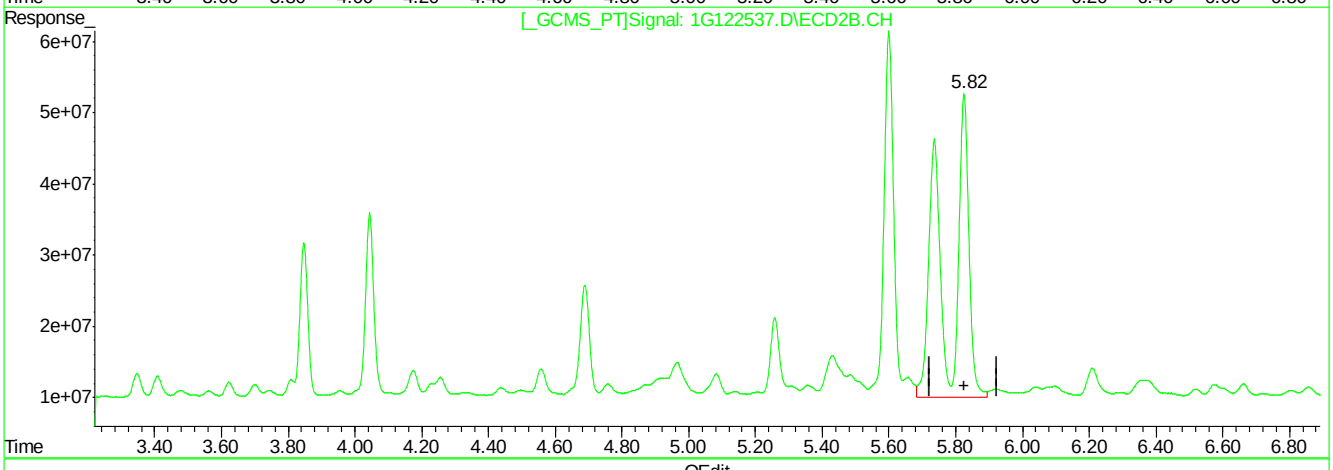
1G122537.D 1PST3973.M Wed Apr 27 16:11:56 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122537.D\ECD1A.CH Vial: 15
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122537.D\ECD2B.CH
Acq On    : 4-27-16 03:12:59 PM                      Operator: dharas
Sample    : icv3973-500                              Inst    : GC1G
Misc      : op93327,g1g3973,16.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 27 16:11 2016  Quant Results File: 1PST3973.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:10:51 2016
Response via : Multiple Level Calibration
```





QEdit

(35) Chlordane {D}

4.31min 501.070PPB

response 167457938

(35) Chlordane {D} #2

5.82min 510.835PPB m

response 1733607291

(+) = Expected Retention Time

1G122537.D 1PST3973.M Wed Apr 27 16:12:22 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/28/16 16:54

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122538.D\ECD1A.CH Vial: 16
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122538.D\ECD2B.CH
Acq On : 4-27-16 03:30:28 PM Operator: dharas
Sample : icv3973-500 Inst : GC1G
Misc : op93327,g1g3973,16.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 27 15:55 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Apr 27 15:00:31 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3973.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	61638851	977.1E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.17	1.54	61638851	977.1E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.17	1.54	61638851	977.1E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	52461200	721.9E6	40.618	40.846
Spiked Amount	40.000	Range	30 - 150	Recovery	=	101.55%	102.11%
24) SA	Decachlorobiphen	8.94	10.87	97365793	446.3E6	42.694	43.294
Spiked Amount	40.000			Recovery	=	106.74%	108.23%
	Target Compounds						
26) L8	Toxaphene{A}	4.81	6.32	12777565	223.7E6	468.302	573.474
27) L8	Toxaphene{B}	5.42	7.18	31951412	272.0E6	500.540m	562.202
28) L8	Toxaphene{C}	5.60	7.35	24227930	360.2E6	488.349	495.078
29) L8	Toxaphene{D}	5.93	7.79	23620314	254.3E6	498.846	578.768
30) L8	Toxaphene{E}	6.56	8.69	22586431	182.3E6	500.622	567.210

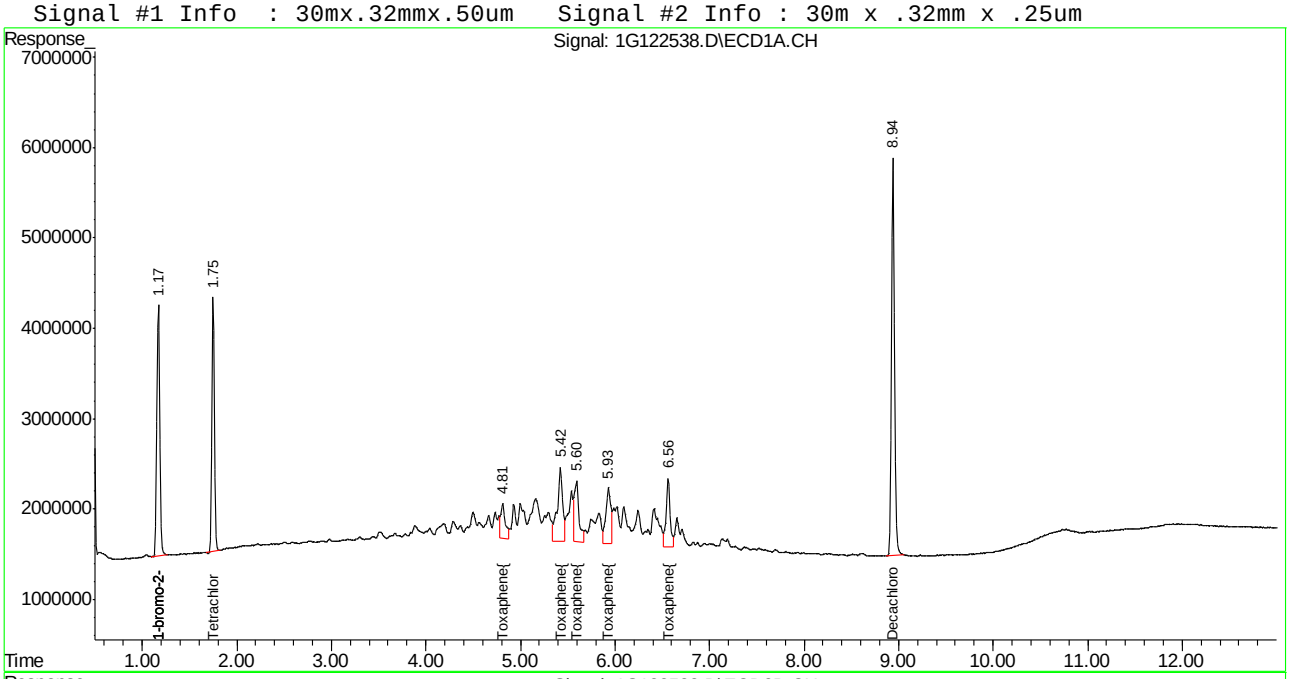
(f)=RT Delta > 1/2 Window (m)=manual int.
1G122538.D 1PST3973.M Wed Apr 27 15:55:44 2016 RPT1 Page 1

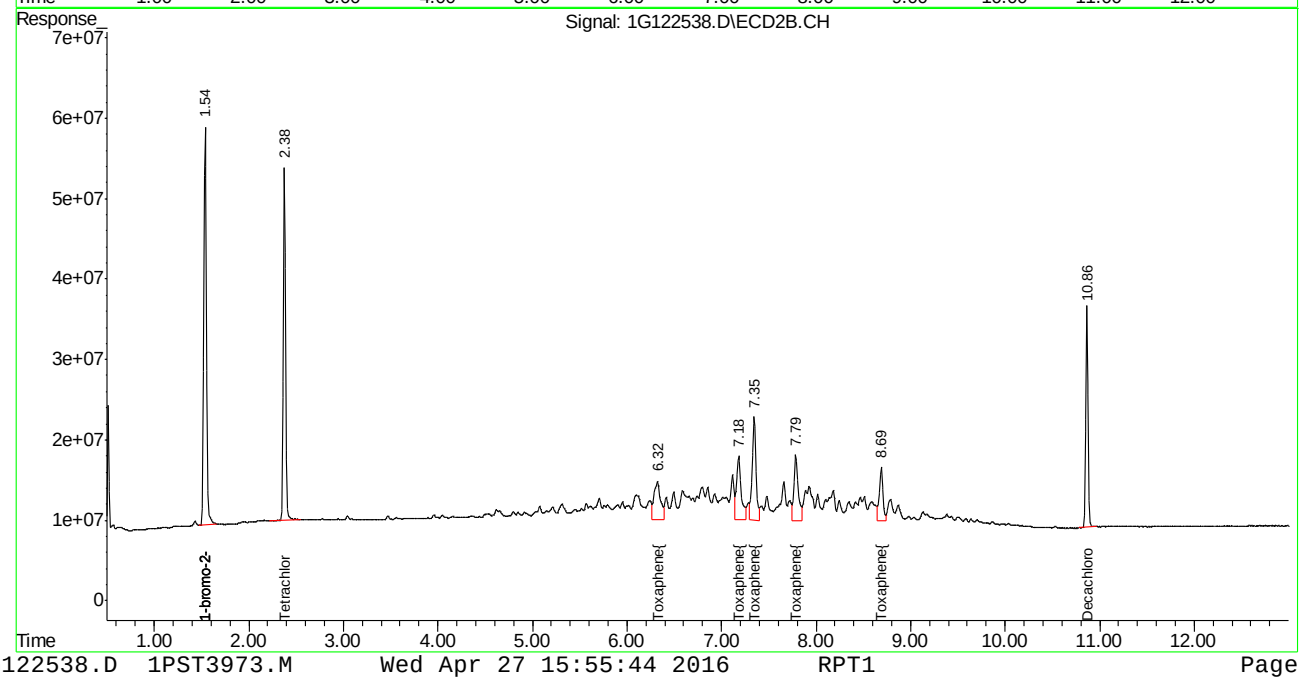
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122538.D\ECD1A.CH Vial: 16
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122538.D\ECD2B.CH
Acq On : 4-27-16 03:30:28 PM Operator: dharas
Sample : icv3973-500 Inst : GC1G
Misc : op93327,g1g3973,16.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 27 15:55 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Apr 27 15:00:31 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3973.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

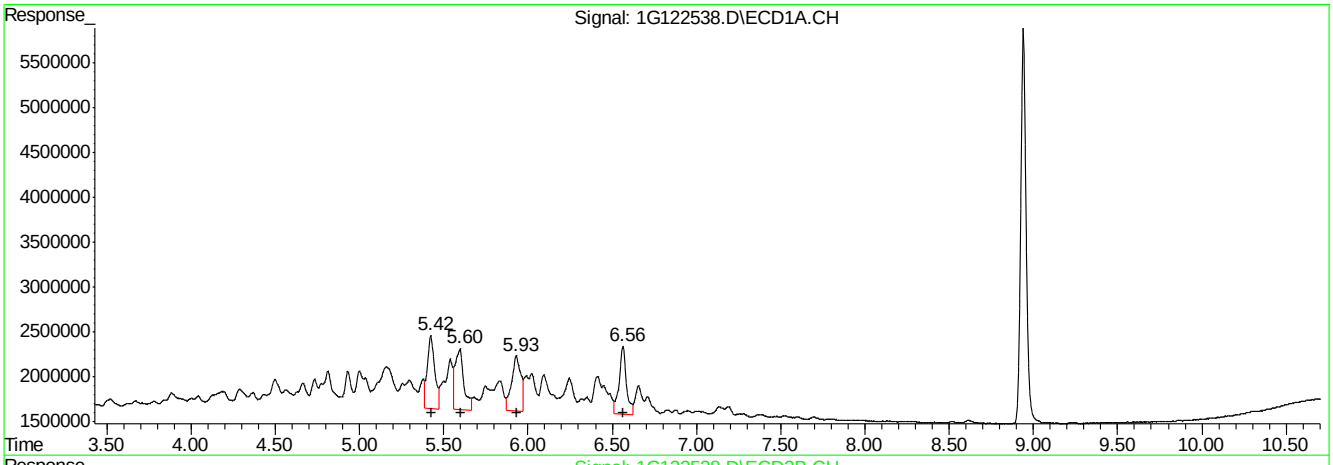
Sample Number:	G1G3973-ICV3973	**Method:**	SW846 8081B
Lab FileID:	1G122538.D	**Analyst approved:**	04/27/16 16:32 Dhara Saparia
Injection Time:	04/27/16 15:30	**Supervisor approved:**	04/28/16 16:54 Gwendolyn Burns

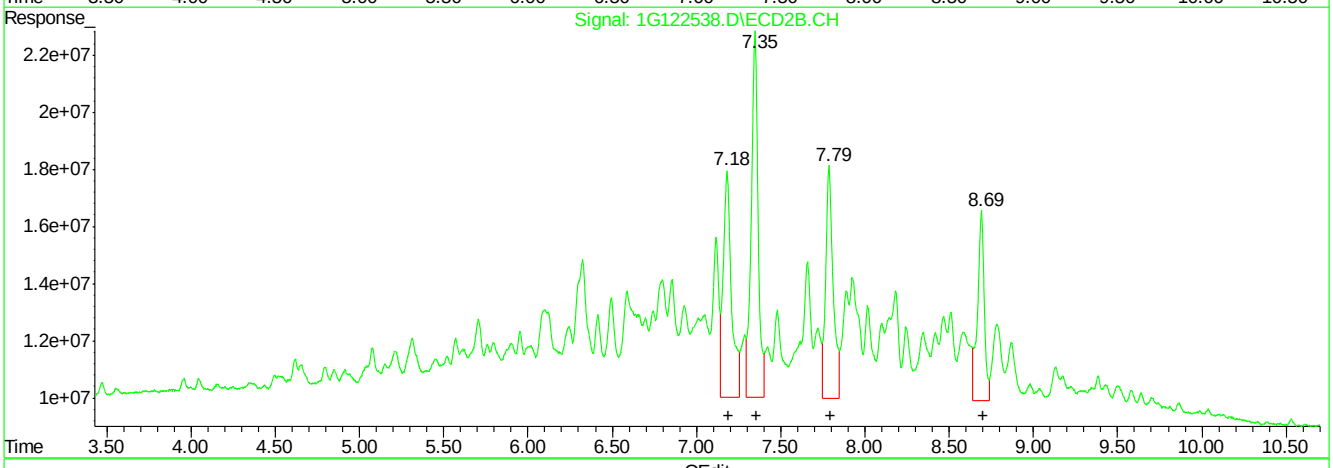
Parameter	CAS	Sig#	R.T. (min.)	Reason
Toxaphene-B		1	5.42	Poor instrument integration

Quantitation Report (Qedit)

Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122538.D\ECD1A.CH Vial: 16
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122538.D\ECD2B.CH
Acq On : 4-27-16 03:30:28 PM Operator: dharas
Sample : icv3973-500 Inst : GC1G
Misc : op93327,g1g3973,16.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 27 15:53 2016 Quant Results File: 1PST3973.RES

Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Apr 27 15:00:31 2016
Response via : Multiple Level Calibration





QEdit

(27) Toxaphene{B} (L8)

R.T.	Response	Conc
5.42	24768256	388.01
5.60	24227930	488.35
5.93	23620314	498.85
6.56	22586431	500.62

(27) Toxaphene{B} #2 (L8)

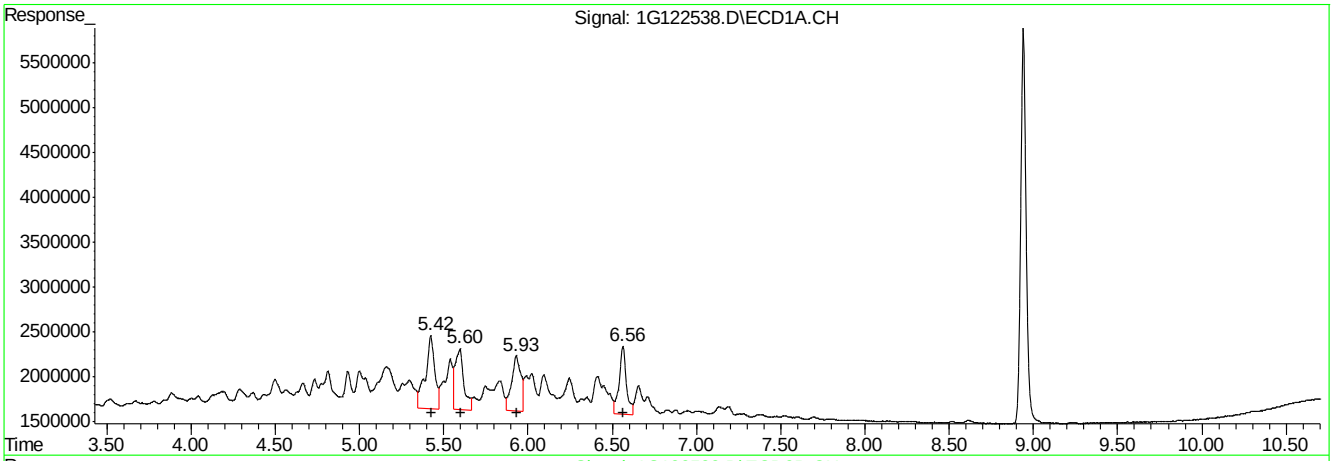
R.T.	Response	Conc
7.18	271960748	562.20
7.35	360249392	495.08
7.79	254273927	578.77
8.69	182272513	567.21

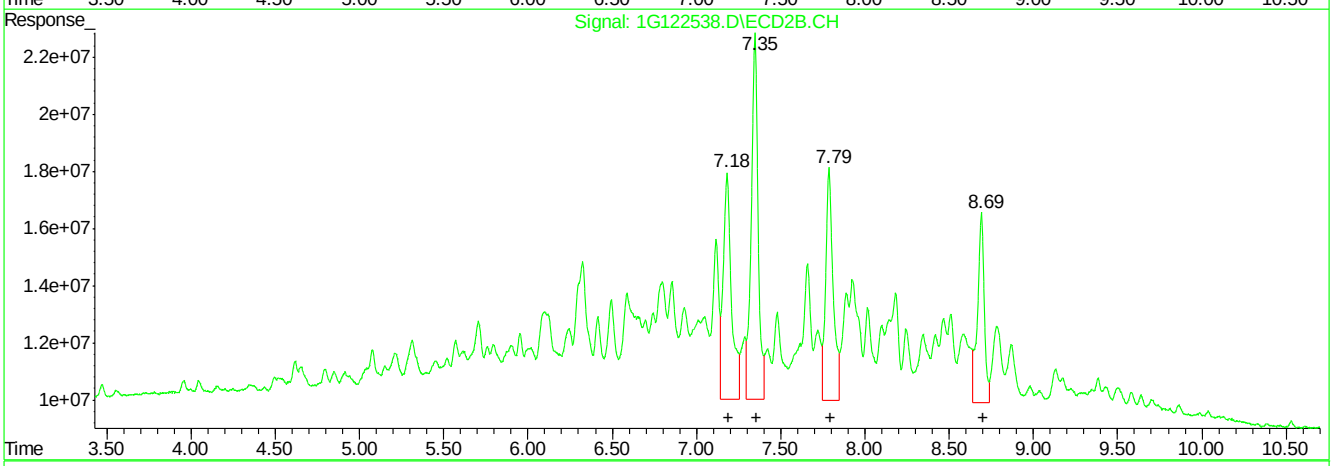
(+) = Expected Retention Time
1G122538.D 1PST3973.M Wed Apr 27 15:54:26 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3973\1G122538.D\ECD1A.CH Vial: 16
Signal #2 : C:\MSDCHEM\1\DATA\1G3973\1G122538.D\ECD2B.CH
Acq On    : 4-27-16 03:30:28 PM                      Operator: dharas
Sample    : icv3973-500                              Inst    : GC1G
Misc      : op93327,g1g3973,16.0,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 27 15:53 2016  Quant Results File: 1PST3973.RES

Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 15:00:31 2016
Response via : Multiple Level Calibration
```





QEdit

(27) Toxaphene{B} #2 (L8)

R.T.	Response	Conc
5.42	31951412	500.54
5.60	24227930	488.35
5.93	23620314	498.85
6.56	22586431	500.62

(27) Toxaphene{B} #2 (L8)

R.T.	Response	Conc
7.18	271960748	562.20
7.35	360249392	495.08
7.79	254273927	578.77
8.69	182272513	567.21

(+) = Expected Retention Time

1G122538.D 1PST3973.M Wed Apr 27 15:55:34 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/29/16 12:19

Quantitation Report (QT Reviewed)

Data File : C:\MSDCHEM\1\DATA\1G3976\1G122600.D\ECD1A.CH Vial: 2
Acq On : 4-29-16 08:23:07 AM Operator: brittanp
Sample : cc3973-25 Inst : GC1G
Misc : op90282,g1g39765,15.0,,,10,1 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\MSDCHEM\1\DATA\1G3976\1G122600.D\ECD2B.CH Vial: 2
Acq On : 4-29-16 08:23:06 AM Operator: brittanp
Sample : cc3973-25 Inst : GC1G
Misc : op90282,g1g39765,15.0,,,10,1 Multiplr: 1.00
IntFile : autoint2.e
Quant Time: Apr 29 8:51 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Apr 27 16:13:45 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3973.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	59396144	909.2E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.16	1.53	59396144	909.2E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.16	1.53	59396144	909.2E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.37	29541980	380.0E6	23.737	23.111
Spiked Amount	40.000	Range	30 - 150	Recovery	=	59.34%	57.78%
24) SA	Decachlorobiphen	8.94	10.86	52534171	215.6E6	23.906	22.481
Spiked Amount	40.000			Recovery	=	59.77%	56.20%
	Target Compounds						
3) A	alpha-BHC	2.21	3.04	37347712	581.9E6	24.447	23.357
4) MA	gamma-BHC	2.50	3.47	35088136	498.4E6	23.706	22.497
5) MA	Heptachlor	2.98	4.04	39763240	441.0E6	24.557	22.614
6) B	beta-BHC	2.58	3.56	17263170	205.0E6	23.694	21.864
7) B	delta-BHC	2.76	3.95	31416840	478.5E6	25.040	23.164
8) MB	Aldrin	3.30	4.49	36932763	433.2E6	23.478	20.935
9) B	Heptachlor Epoxi	3.99	5.31	36678776	392.8E6	23.250m	21.504
10) B	gamma-Chlordane	4.15	5.60	36619780	387.3E6	22.911m	21.507
11) B	alpha-Chlordane	4.31	5.82	38437755	370.7E6	23.928m	21.097
12) A	Endosulfan I	4.48	5.92	38068590	370.5E6	22.187	21.287
13) B	4,4'-DDE	4.43	6.09	34306255	377.0E6	26.450	21.662
14) MA	Dieldrin	4.80	6.35	36975290	403.9E6	23.741	21.912
15) MA	Endrin	5.11	6.86	34983820	367.8E6	24.465	22.547
16) A	4,4'-DDD	5.25	7.05	27222441	331.5E6	24.904	21.803
17) B	Endosulfan II	5.43	7.21	35456149	353.6E6	24.619	21.868
18) MA	4,4'-DDT	5.65	7.58	27906072	264.8E6	27.289	27.085
19) B	Endrin Aldehyde	6.05	7.78	30124096	271.2E6	25.085	23.311
20) B	Endosulfan Sulfa	6.73	8.25	35672803	316.6E6	26.681	24.106
21) A	Methoxychlor	6.44	8.83	19088208	138.9E6	27.568	25.108
22)	Mirex	6.53	9.14	38161701	233.0E6	22.699	22.117
23) B	Endrin Ketone	7.16	9.21	38976492	334.1E6	29.379	27.460

(f)=RT Delta > 1/2 Window (m)=manual int.

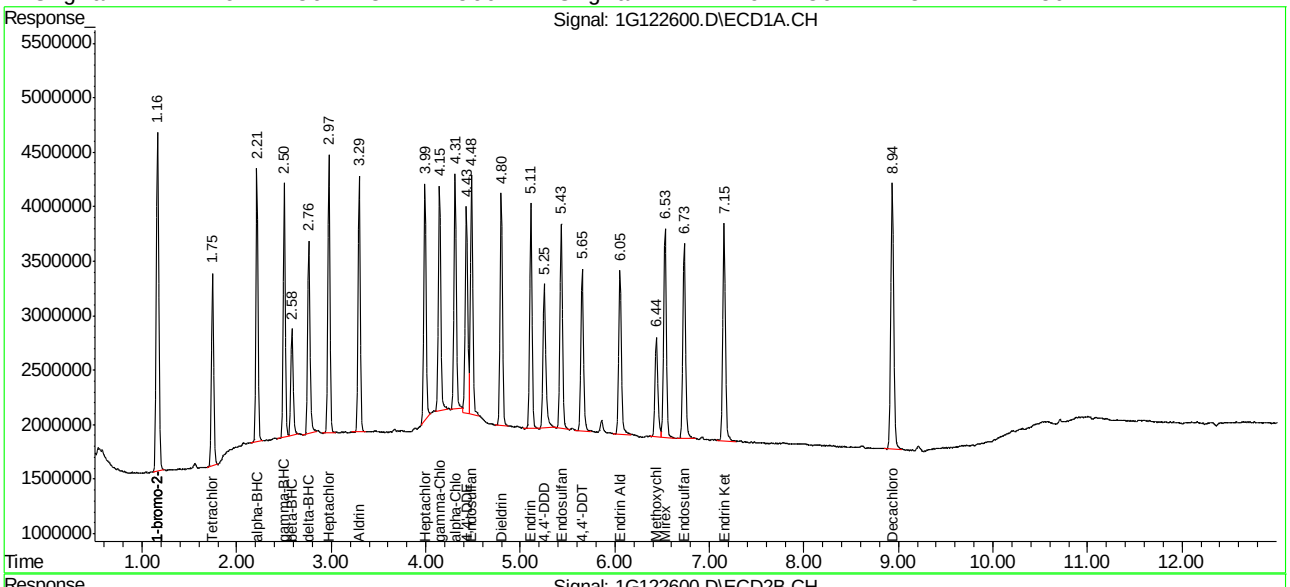
Quantitation Report (QT Reviewed)

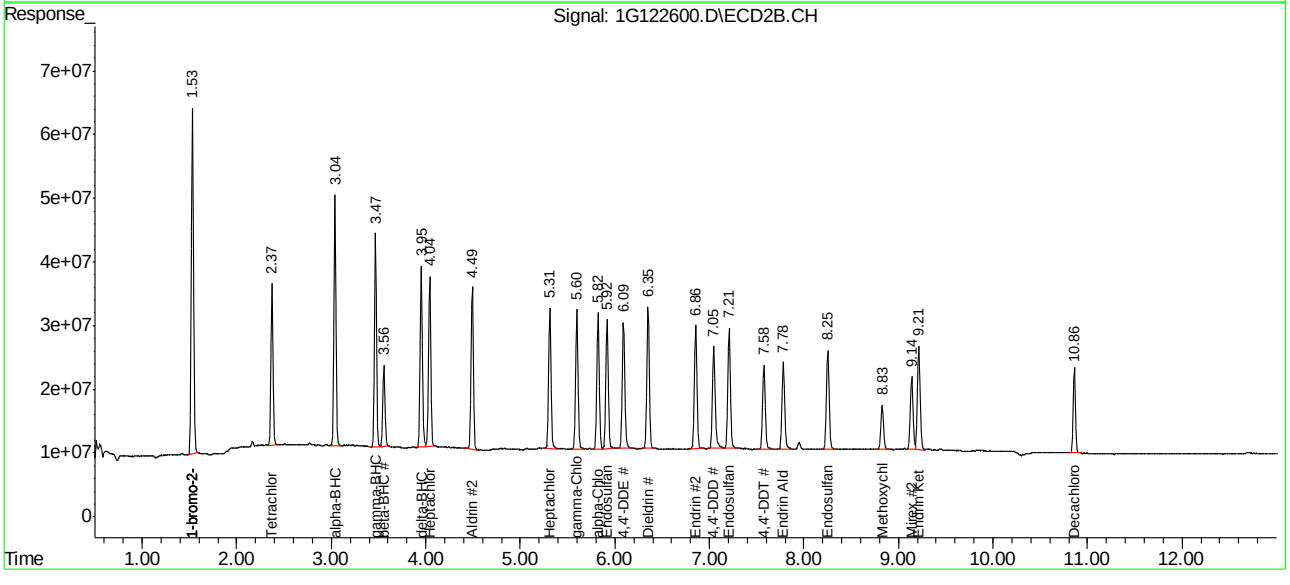
```
Data File : C:\MSDCHEM\1\DATA\1G3976\1G122600.D\ECD1A.CH Vial: 2
Acq On    : 4-29-16 08:23:07 AM                          Operator: brittanp
Sample    : cc3973-25                                    Inst    : GC1G
Misc      : op90282,g1g39765,15.0,,,10,1                 Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\MSDCHEM\1\DATA\1G3976\1G122600.D\ECD2B.CH Vial: 2
Acq On    : 4-29-16 08:23:06 AM                          Operator: brittanp
Sample    : cc3973-25                                    Inst    : GC1G
Misc      : op90282,g1g39765,15.0,,,10,1                 Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Apr 29  8:51 2016  Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3973.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 JC19023

Manual Integration Approval Summary

Sample Number:	G1G3976-CC3973	**Method:**	SW846 8081B
Lab FileID:	1G122600.D	**Analyst approved:**	04/29/16 11:28 Brittany Piercy
Injection Time:	04/29/16 08:23	**Supervisor approved:**	04/29/16 12:19 Gwendolyn Burns

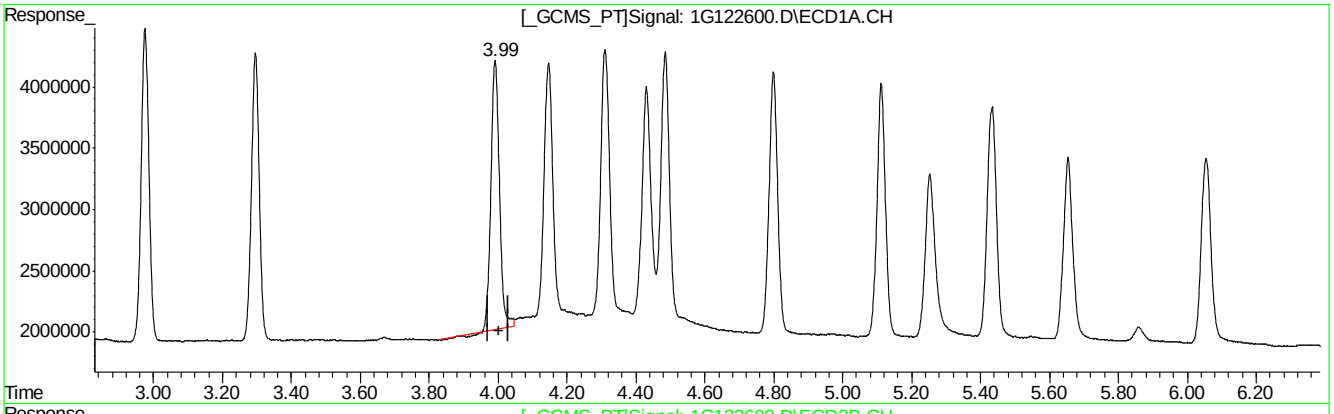
Parameter	CAS	Sig#	R.T. (min.)	Reason
Heptachlor epoxide	1024-57-3	1	3.99	Poor instrument integration
gamma-Chlordane	5103-74-2	1	4.15	Poor instrument integration
alpha-Chlordane	5103-71-9	1	4.31	Poor instrument integration

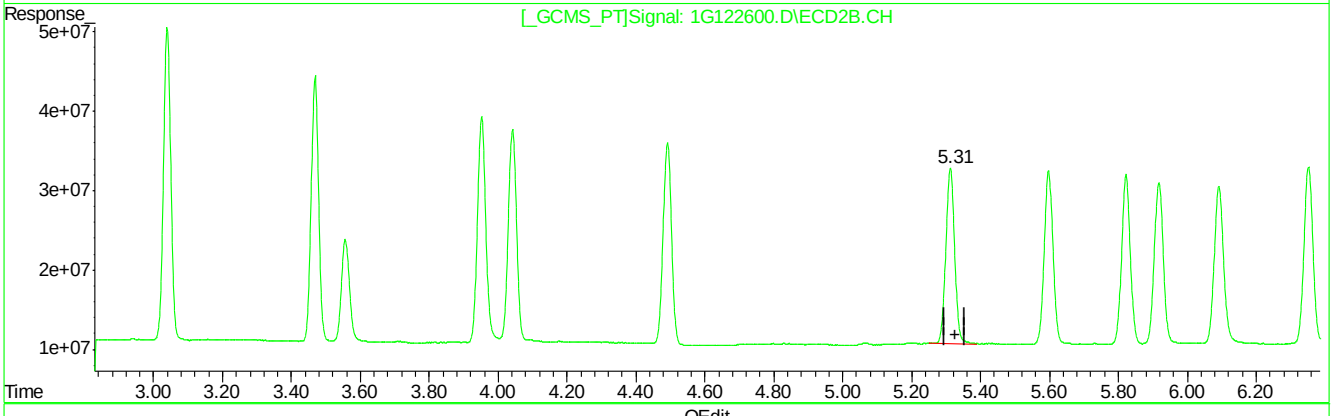
Quantitation Report (Qedit)

```
Data File : C:\MSDCHEM\1\DATA\1G3976\1G122600.D\ECD1A.CH Vial: 2
Acq On    : 4-29-16 08:23:07 AM                          Operator: brittanp
Sample    : cc3973-25                                    Inst    : GC1G
Misc      : op90282,g1g39765,15.0,,,10,1                 Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\MSDCHEM\1\DATA\1G3976\1G122600.D\ECD2B.CH Vial: 2
Acq On    : 4-29-16 08:23:06 AM                          Operator: brittanp
Sample    : cc3973-25                                    Inst    : GC1G
Misc      : op90282,g1g39765,15.0,,,10,1                 Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Apr 29  8:36 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(9) Heptachlor Epoxide (B)

3.99min 23.678PPB

response 37354499

(9) Heptachlor Epoxide #2 (B)

5.31min 21.504PPB

response 392751765

(+) = Expected Retention Time

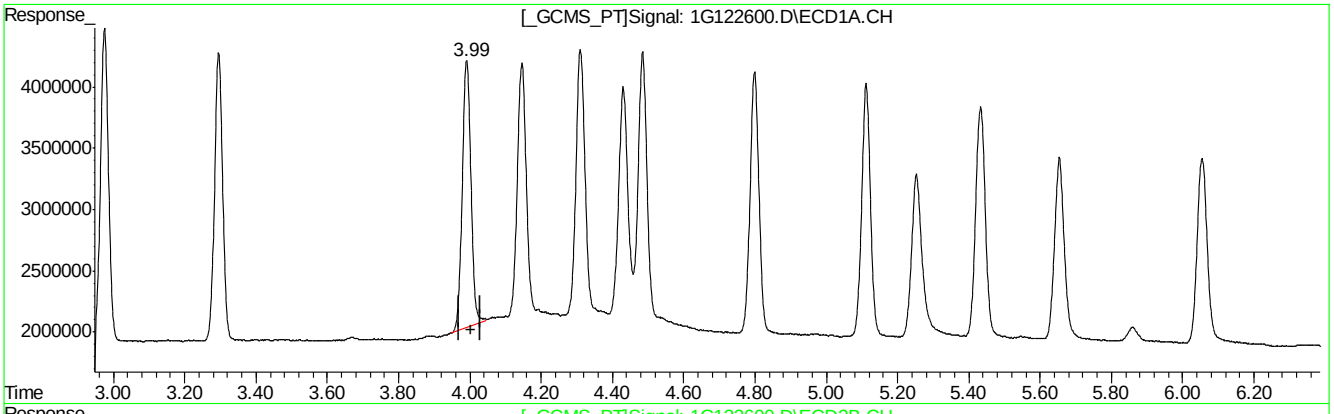
1G122600.D 1PST3973.M Fri Apr 29 08:50:16 2016 RPT1

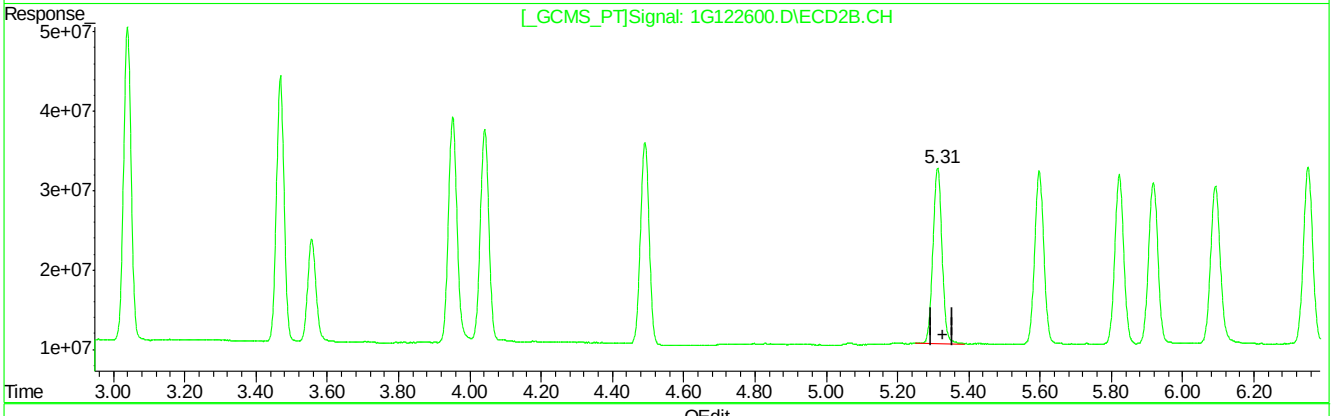
Quantitation Report (Qedit)

```
Data File : C:\MSDCHEM\1\DATA\1G3976\1G122600.D\ECD1A.CH Vial: 2
Acq On    : 4-29-16 08:23:07 AM                          Operator: brittanp
Sample    : cc3973-25                                    Inst    : GC1G
Misc      : op90282,g1g39765,15.0,,,10,1                 Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\MSDCHEM\1\DATA\1G3976\1G122600.D\ECD2B.CH Vial: 2
Acq On    : 4-29-16 08:23:06 AM                          Operator: brittanp
Sample    : cc3973-25                                    Inst    : GC1G
Misc      : op90282,g1g39765,15.0,,,10,1                 Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Apr 29  8:36 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(9) Heptachlor Epoxide (B)

3.99min 23.250PPB m

response 36678776

(9) Heptachlor Epoxide #2 (B)

5.31min 21.504PPB

response 392751765

(+) = Expected Retention Time

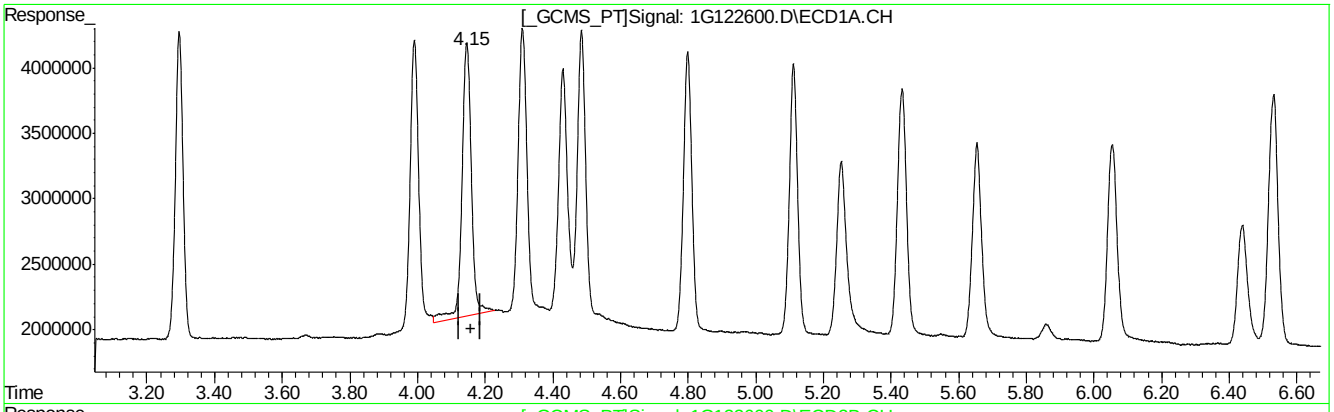
1G122600.D 1PST3973.M Fri Apr 29 08:50:23 2016 RPT1

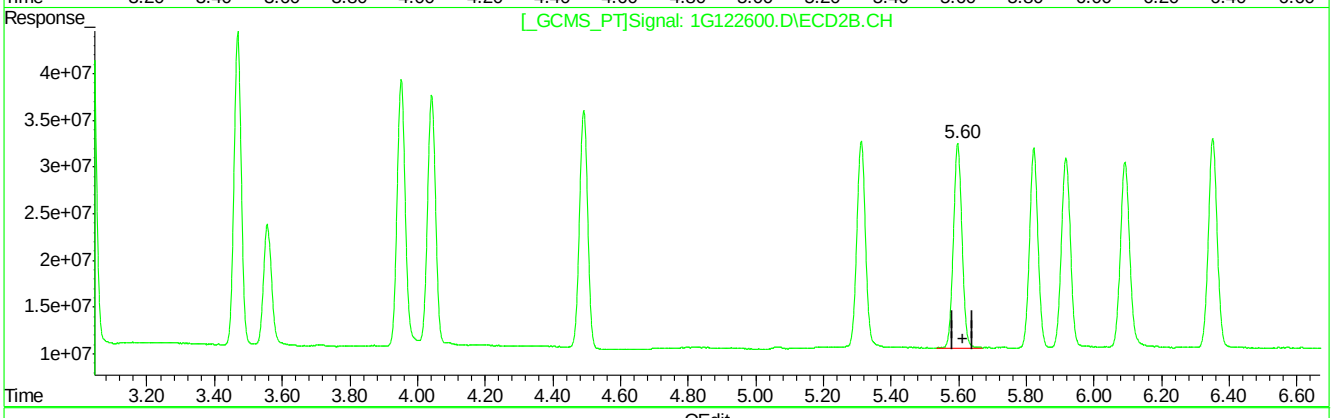
Quantitation Report (Qedit)

```
Data File : C:\MSDCHEM\1\DATA\1G3976\1G122600.D\ECD1A.CH Vial: 2
Acq On    : 4-29-16 08:23:07 AM                          Operator: brittanp
Sample    : cc3973-25                                    Inst    : GC1G
Misc      : op90282,g1g39765,15.0,,,10,1                 Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\MSDCHEM\1\DATA\1G3976\1G122600.D\ECD2B.CH Vial: 2
Acq On    : 4-29-16 08:23:06 AM                          Operator: brittanp
Sample    : cc3973-25                                    Inst    : GC1G
Misc      : op90282,g1g39765,15.0,,,10,1                 Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Apr 29  8:36 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(10) gamma-Chlordane (B)

4.15min 24.954PPB

response 39884939

(10) gamma-Chlordane #2 (B)

5.60min 21.507PPB

response 387277267

(+) = Expected Retention Time

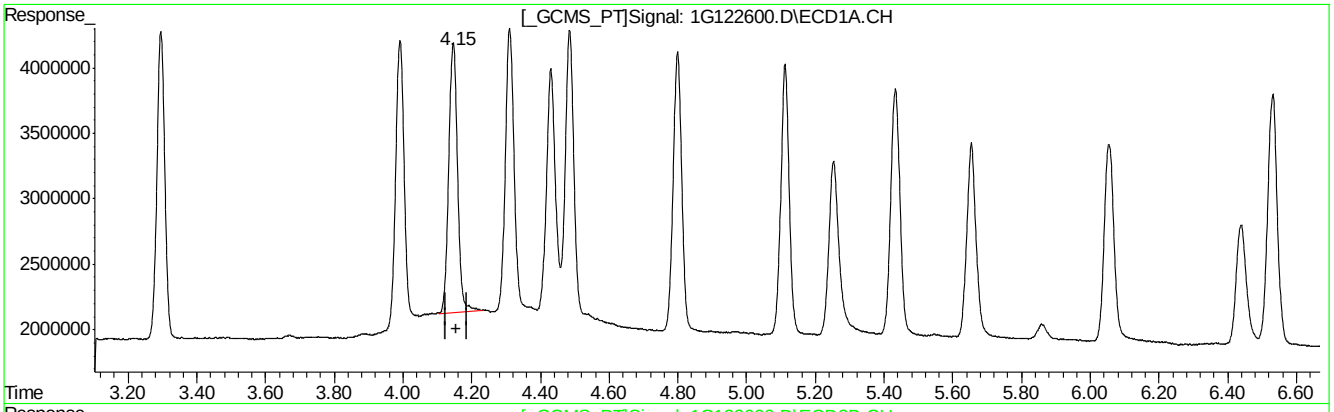
1G122600.D 1PST3973.M Fri Apr 29 08:50:27 2016 RPT1

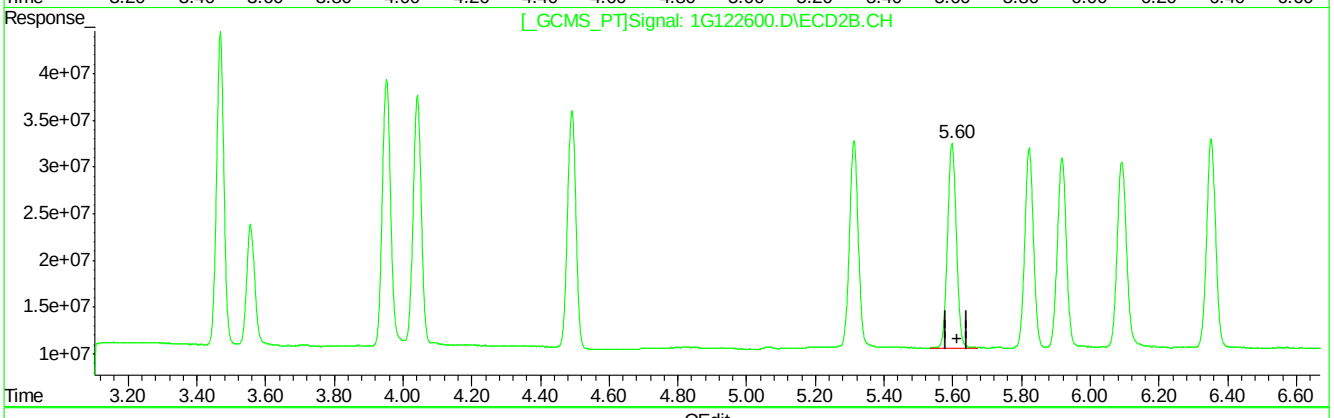
Quantitation Report (Qedit)

```
Data File : C:\MSDCHEM\1\DATA\1G3976\1G122600.D\ECD1A.CH Vial: 2
Acq On    : 4-29-16 08:23:07 AM                          Operator: brittanp
Sample    : cc3973-25                                    Inst    : GC1G
Misc      : op90282,g1g39765,15.0,,,10,1                 Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\MSDCHEM\1\DATA\1G3976\1G122600.D\ECD2B.CH Vial: 2
Acq On    : 4-29-16 08:23:06 AM                          Operator: brittanp
Sample    : cc3973-25                                    Inst    : GC1G
Misc      : op90282,g1g39765,15.0,,,10,1                 Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Apr 29  8:36 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(10) gamma-Chlordane (B)

4.15min 22.911PPB m

response 36619780

(10) gamma-Chlordane #2 (B)

5.60min 21.507PPB

response 387277267

(+) = Expected Retention Time

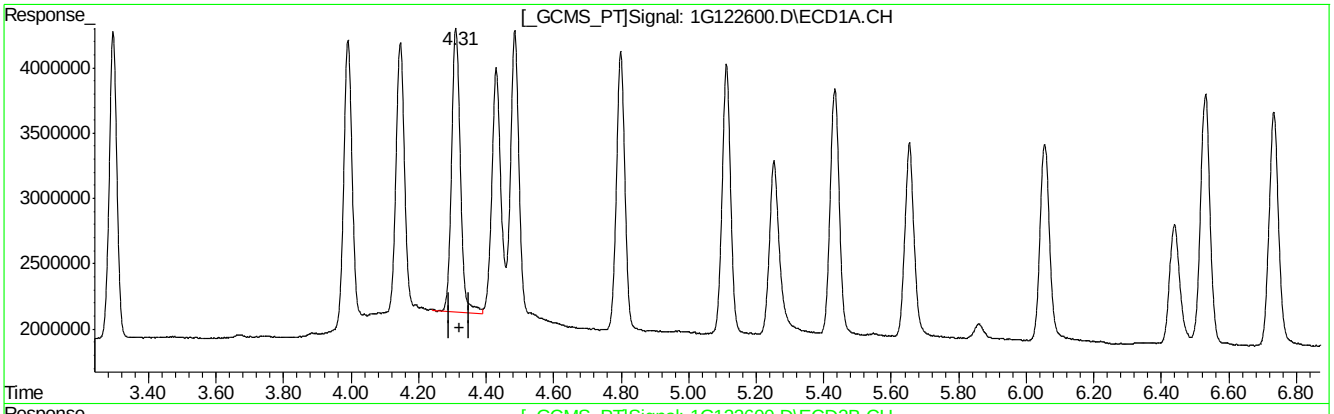
1G122600.D 1PST3973.M Fri Apr 29 08:50:33 2016 RPT1

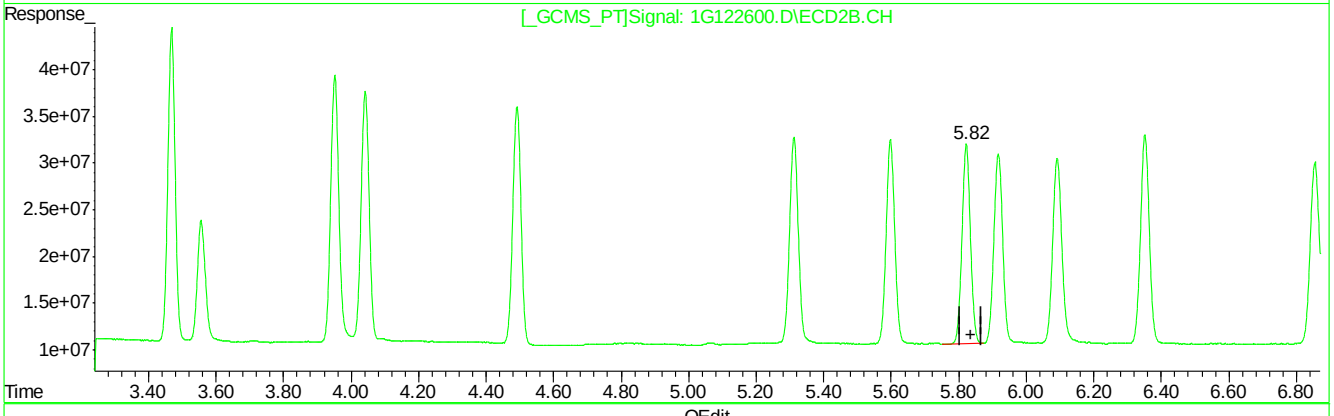
Quantitation Report (Qedit)

```
Data File : C:\MSDCHEM\1\DATA\1G3976\1G122600.D\ECD1A.CH Vial: 2
Acq On    : 4-29-16 08:23:07 AM                          Operator: brittanp
Sample    : cc3973-25                                    Inst    : GC1G
Misc      : op90282,g1g39765,15.0,,,10,1                 Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\MSDCHEM\1\DATA\1G3976\1G122600.D\ECD2B.CH Vial: 2
Acq On    : 4-29-16 08:23:06 AM                          Operator: brittanp
Sample    : cc3973-25                                    Inst    : GC1G
Misc      : op90282,g1g39765,15.0,,,10,1                 Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Apr 29  8:36 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(11) alpha-Chlordane (B)

4.31min 24.624PPB

response 39555683

(11) alpha-Chlordane #2 (B)

5.82min 21.097PPB

response 370705955

(+) = Expected Retention Time

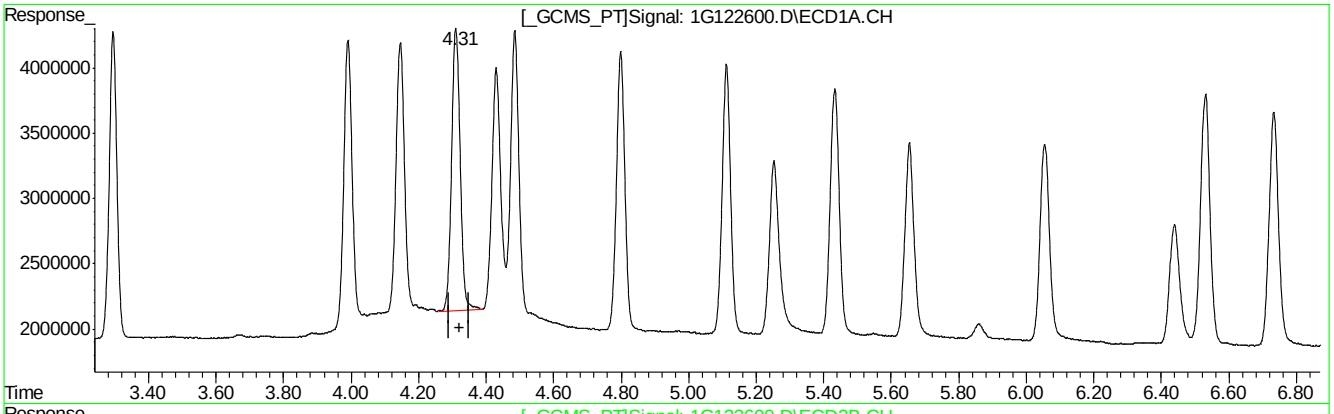
1G122600.D 1PST3973.M Fri Apr 29 08:50:40 2016 RPT1

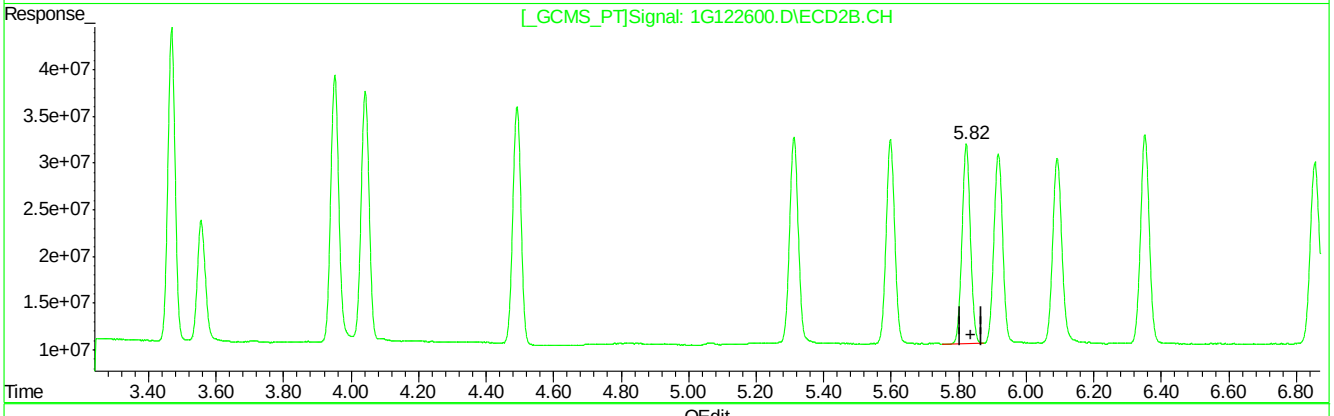
Quantitation Report (Qedit)

```
Data File : C:\MSDCHEM\1\DATA\1G3976\1G122600.D\ECD1A.CH Vial: 2
Acq On    : 4-29-16 08:23:07 AM                          Operator: brittanp
Sample    : cc3973-25                                    Inst    : GC1G
Misc      : op90282,g1g39765,15.0,,,10,1                 Multiplr: 1.00
IntFile   : autoint1.e

Data File : C:\MSDCHEM\1\DATA\1G3976\1G122600.D\ECD2B.CH Vial: 2
Acq On    : 4-29-16 08:23:06 AM                          Operator: brittanp
Sample    : cc3973-25                                    Inst    : GC1G
Misc      : op90282,g1g39765,15.0,,,10,1                 Multiplr: 1.00
IntFile   : autoint2.e
Quant Time: Apr 29  8:36 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(11) alpha-Chlordane (B)

4.31min 23.928PPB m

response 38437755

(11) alpha-Chlordane #2 (B)

5.82min 21.097PPB

response 370705955

(+) = Expected Retention Time

1G122600.D 1PST3973.M Fri Apr 29 08:50:45 2016 RPT1

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 05/03/16 11:17

Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122622.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122622.D\ECD2B.CH
Acq On : 4-29-16 04:42:22 PM Operator: dharas
Sample : cc3973-50 Inst : GC1G
Misc : op93471,g1g3976,16.6,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 29 16:59 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Apr 27 16:13:45 2016
Response via : Initial Calibration
DataAcq Meth : 1PST3973.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	58190591	894.6E6	50.000	50.000
25) I	1-bromo-2-nitrob	1.17	1.54	58190591	894.6E6	50.000	50.000
31) I	1-bromo-2-nitrob	1.17	1.54	58190591	894.6E6	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachloro-m-xy	1.75	2.38	56173457	710.7E6	46.070	43.924
Spiked Amount	40.000	Range	30 - 150	Recovery	=	115.18%	109.81%
24) SA	Decachlorobiphen	8.94	10.86	96605628	411.9E6	44.871	43.645
Spiked Amount	40.000			Recovery	=	112.18%	109.11%
	Target Compounds						
3) A	alpha-BHC	2.22	3.04	76244127	1082.3E6	50.942m	44.148
4) MA	gamma-BHC	2.51	3.47	72186424	949.7E6	49.780	43.566
5) MA	Heptachlor	2.98	4.04	78072064	841.7E6	49.216	43.866
6) B	beta-BHC	2.59	3.56	32714004	397.2E6	45.830	43.060
7) B	delta-BHC	2.77	3.95	62366132	907.8E6	50.737	44.663
8) MB	Aldrin	3.30	4.49	74910541	845.3E6	48.607	41.516
9) B	Heptachlor Epoxi	3.99	5.31	72862560	751.5E6	47.143	41.816
10) B	gamma-Chlordane	4.15	5.60	75799972	737.4E6	48.406	41.619
11) B	alpha-Chlordane	4.31	5.82	80997382	707.9E6	51.466	40.947
12) A	Endosulfan I	4.49	5.92	82077244	705.4E6	48.827	41.188
13) B	4,4'-DDE	4.44	6.10	66080673	746.0E6	52.004	43.561
14) MA	Dieldrin	4.80	6.35	74130470	774.4E6	48.584	42.693
15) MA	Endrin	5.11	6.86	69192975	701.3E6	49.390	43.689
16) A	4,4'-DDD	5.26	7.05	50814211	651.2E6	47.450	43.532
17) B	Endosulfan II	5.44	7.21	67934010	687.0E6	48.146	43.175
18) MA	4,4'-DDT	5.66	7.58	49224651	446.1E6	49.134	46.384
19) B	Endrin Aldehyde	6.06	7.78	57000180	519.1E6	48.449	45.347
20) B	Endosulfan Sulfa	6.74	8.26	64945481	568.5E6	49.581	43.996
21) A	Methoxychlor	6.45	8.83	30166559	218.8E6	44.470	40.200
22)	Mirex	6.53	9.14	68886809	446.9E6	41.824	43.108
23) B	Endrin Ketone	7.16	9.22	75876141	611.9E6	58.378	51.118

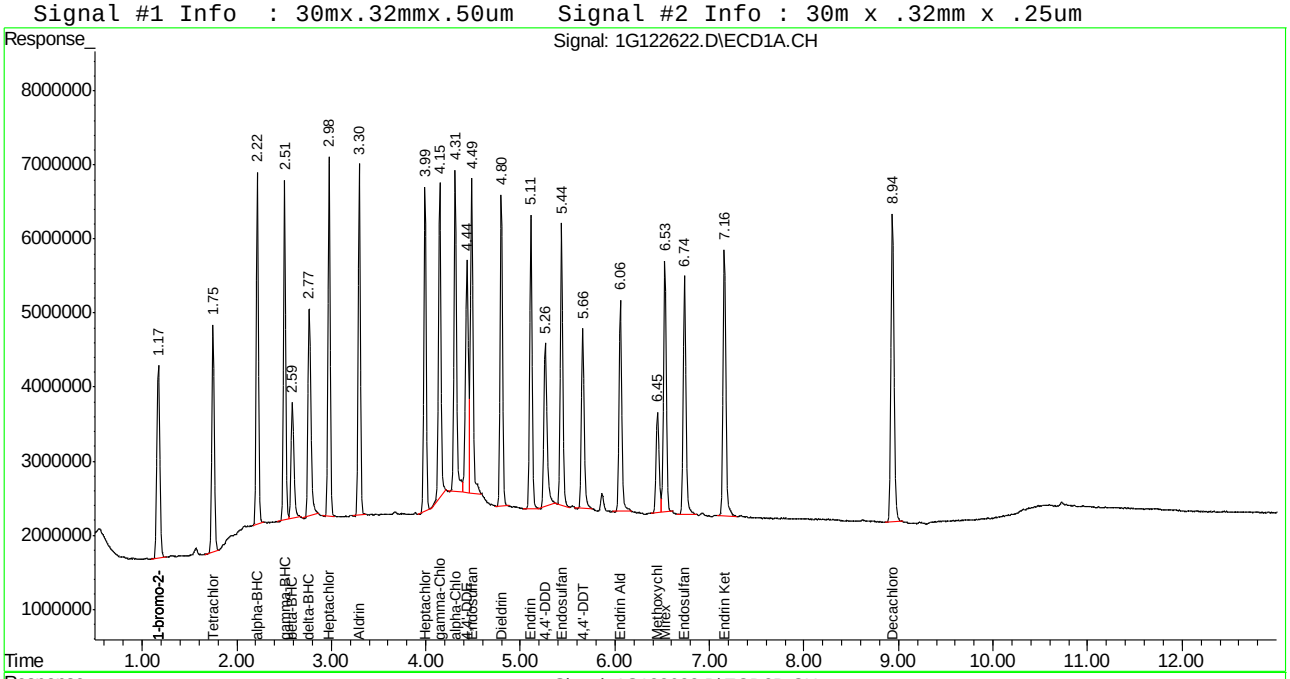
(f)=RT Delta > 1/2 Window (m)=manual int.
1G122622.D 1PST3973.M Fri Apr 29 16:59:12 2016 RPT1 Page 1

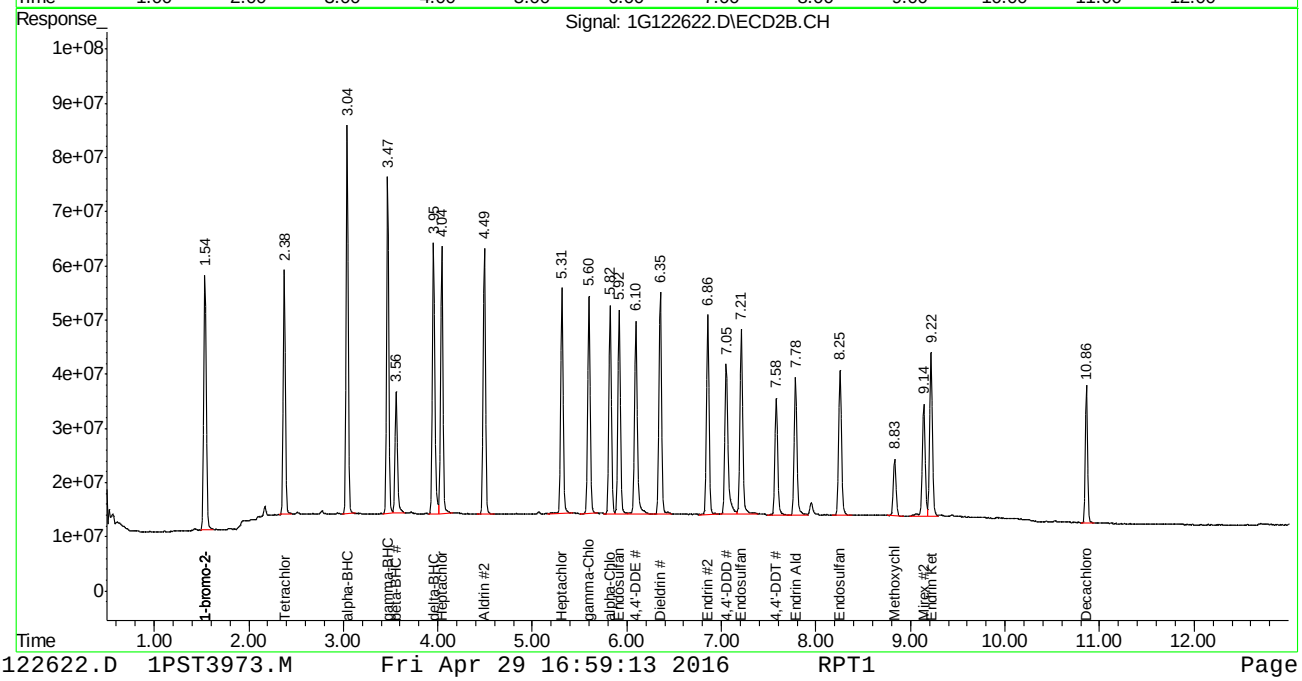
Quantitation Report (QT Reviewed)

Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122622.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122622.D\ECD2B.CH
Acq On : 4-29-16 04:42:22 PM Operator: dharas
Sample : cc3973-50 Inst : GC1G
Misc : op93471,g1g3976,16.6,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e
Quant Time: Apr 29 16:59 2016 Quant Results File: 1PST3973.RES

Quant Method : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title : PEST/PCB
Last Update : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
DataAcq Meth : 1PST3973.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 JC19023

Manual Integration Approval Summary

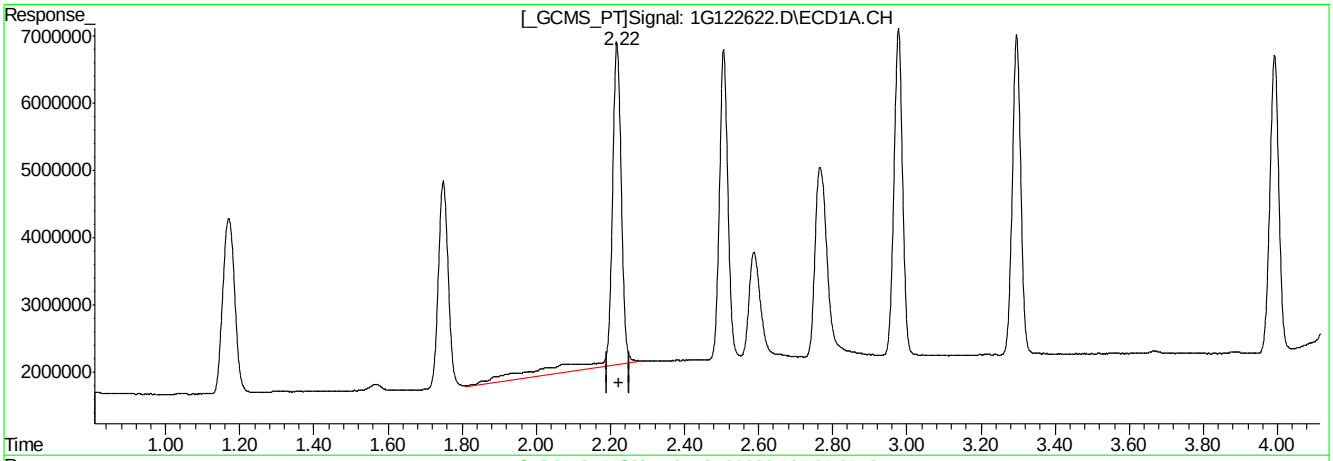
Sample Number:	G1G3976-CC3973	**Method:**	SW846 8081B
Lab FileID:	1G122622.D	**Analyst approved:**	05/02/16 11:39 Dhara Saparia
Injection Time:	04/29/16 16:42	**Supervisor approved:**	05/03/16 11:17 Gwendolyn Burns

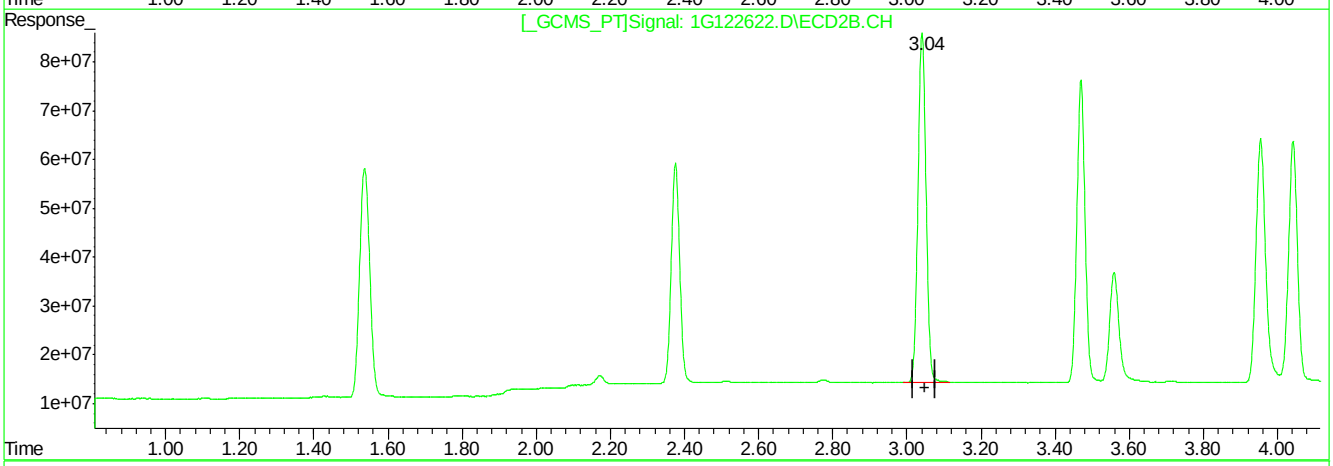
Parameter	CAS	Sig#	R.T. (min.)	Reason
alpha-BHC	319-84-6	1	2.22	Poor instrument integration

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122622.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122622.D\ECD2B.CH
Acq On    : 4-29-16 04:42:22 PM                      Operator: dharas
Sample    : cc3973-50                                Inst    : GC1G
Misc      : op93471,g1g3976,16.6,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 29 16:58 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(3) alpha-BHC (A)

2.22min 62.869PPB

response 94095912

(3) alpha-BHC #2 (A)

3.04min 44.148PPB

response 1082290314

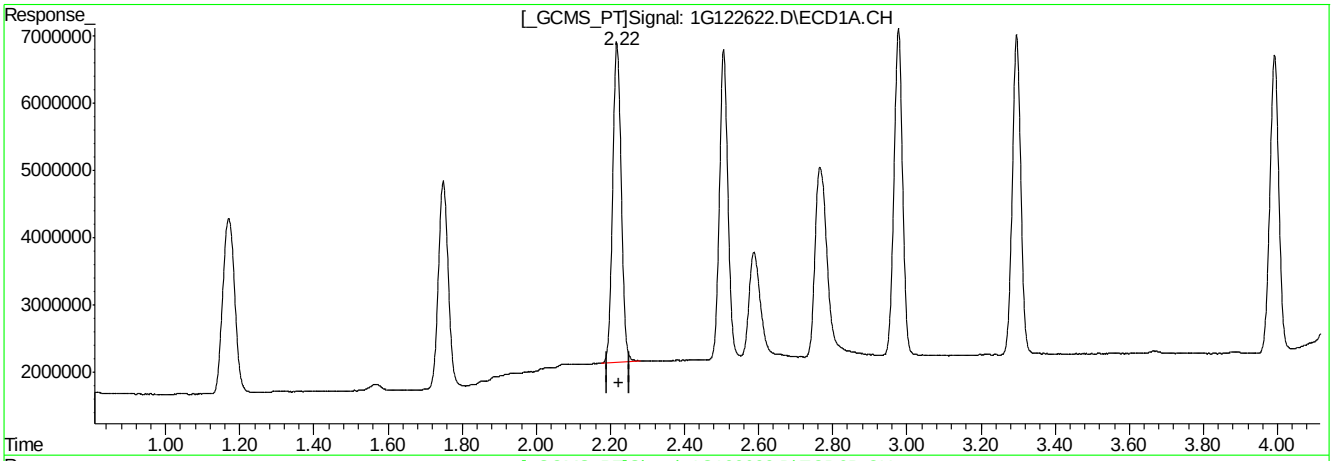
(+) = Expected Retention Time

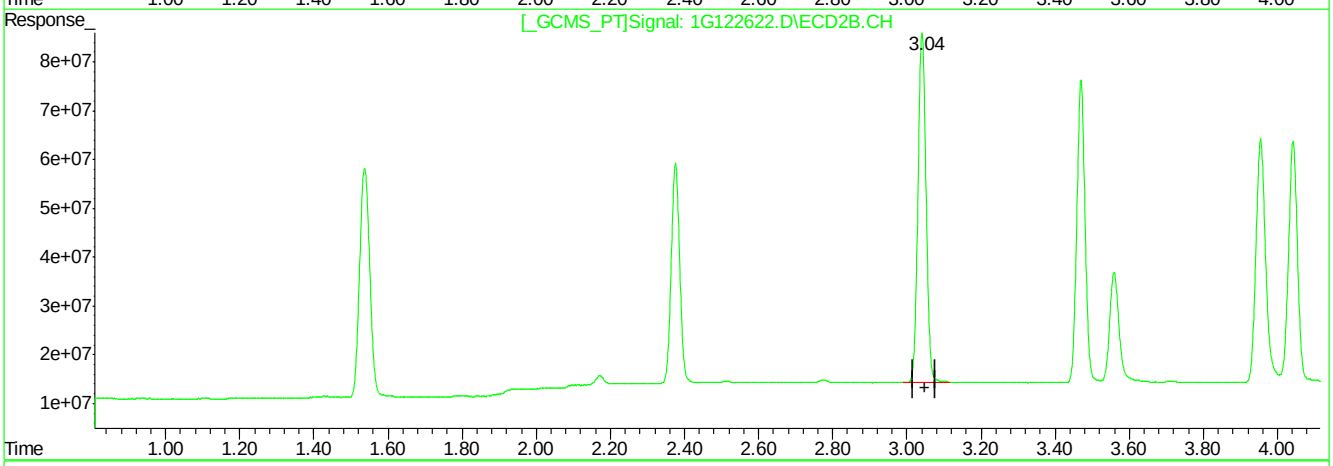
1G122622.D 1PST3973.M Fri Apr 29 16:58:59 2016 RPT1

Quantitation Report (Qedit)

```
Signal #1 : C:\MSDCHEM\1\DATA\1G3976\1G122622.D\ECD1A.CH Vial: 4
Signal #2 : C:\MSDCHEM\1\DATA\1G3976\1G122622.D\ECD2B.CH
Acq On    : 4-29-16 04:42:22 PM                      Operator: dharas
Sample    : cc3973-50                                Inst    : GC1G
Misc      : op93471,g1g3976,16.6,,,10,1              Multiplr: 1.00
IntFile Signal #1: autoint1.e     IntFile Signal #2: autoint2.e
Quant Time: Apr 29 16:58 2016  Quant Results File: 1PST3973.RES


Method       : C:\MSDCHEM\1\METHODS\1PST3973.M (Chemstation Integrator)
Title        : PEST/PCB
Last Update  : Wed Apr 27 16:13:45 2016
Response via : Multiple Level Calibration
```





QEdit

(3) alpha-BHC (A)

2.22min 50.942PPB m

response 76244127

(3) alpha-BHC #2 (A)

3.04min 44.148PPB

response 1082290314

(+) = Expected Retention Time

1G122622.D 1PST3973.M Fri Apr 29 16:59:08 2016 RPT1

9.6.16.3

9

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.

9.6.17

9

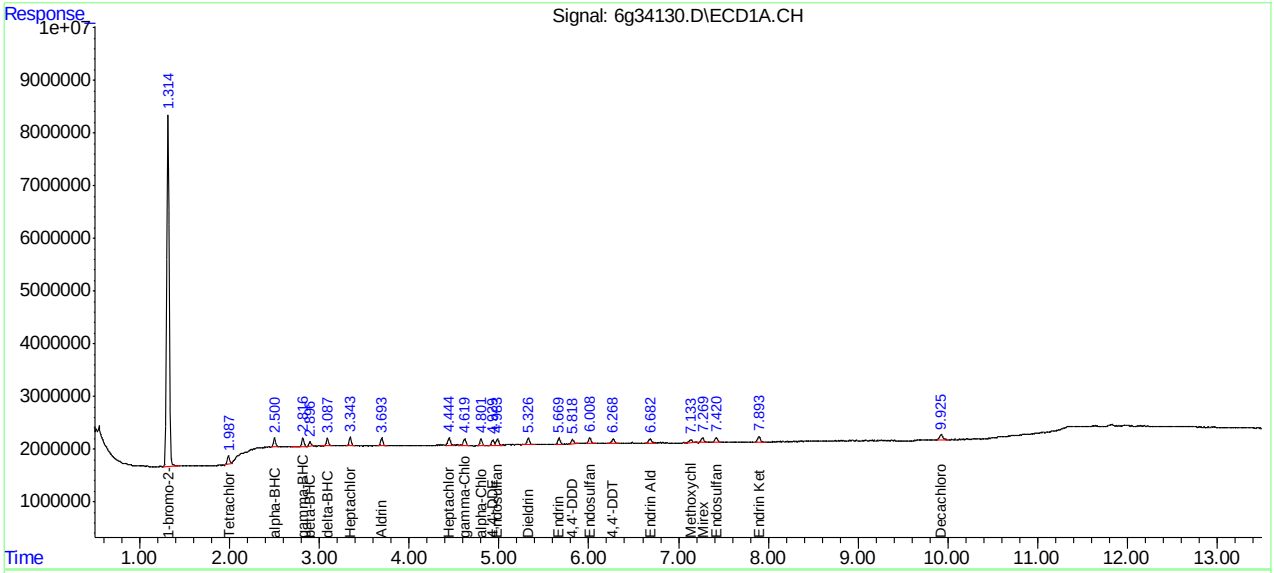
SGS ACCUTEST JC19023

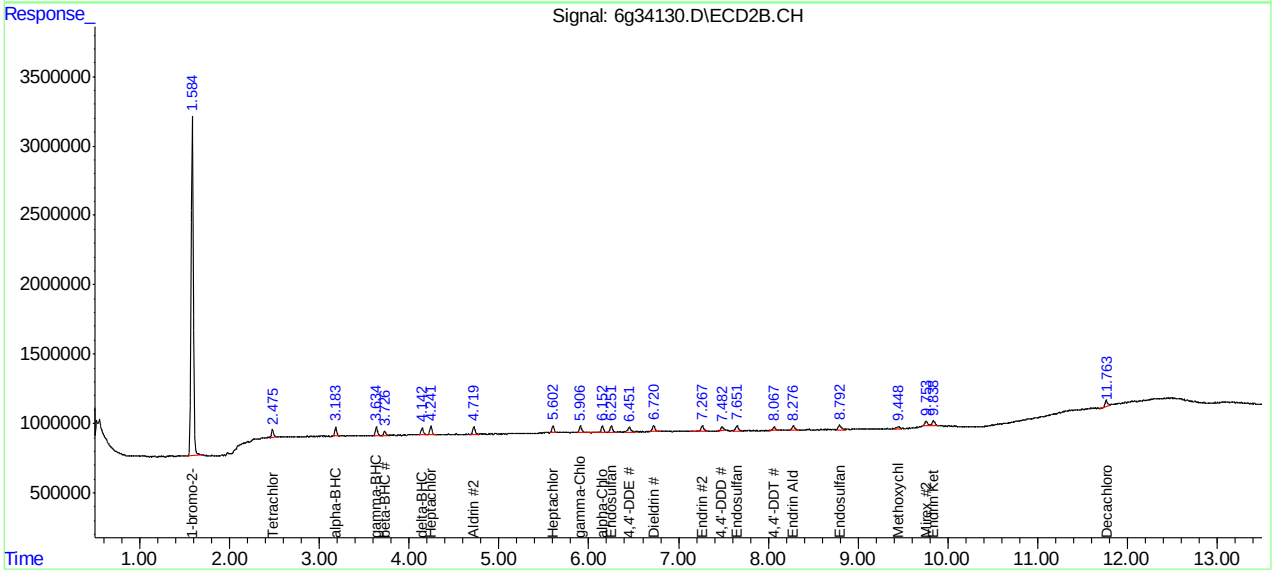
Quantitation Report (QT Reviewed)

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 JC19023

Manual Integration Approval Summary

Sample Number:	G6G987-IC987	**Method:**	SW846 8081B
Lab FileID:	6G34130.D	**Analyst approved:**	04/18/16 12:23 Dhara Saparia
Injection Time:	04/14/16 15:49	**Supervisor approved:**	04/18/16 14:12 Gwendolyn Burns

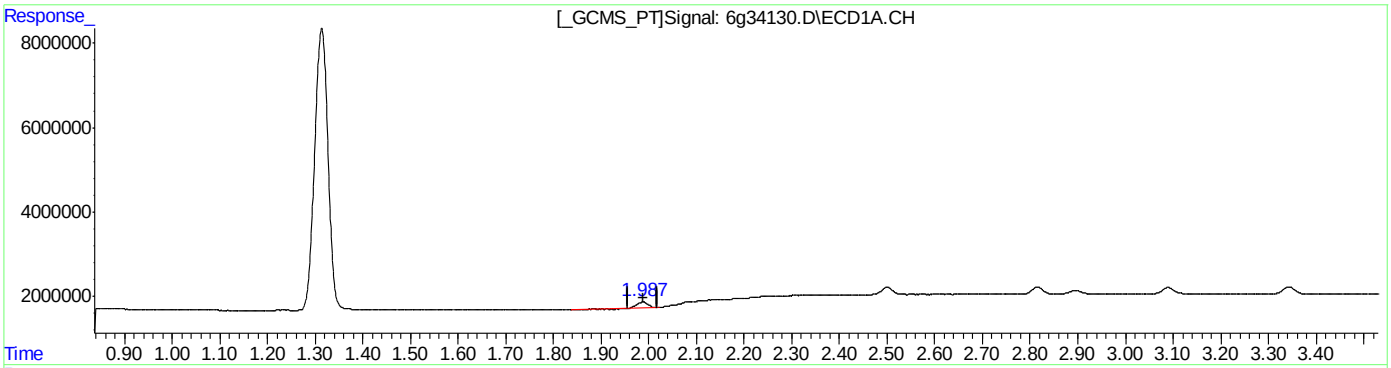
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	1.99	Poor instrument integration
Tetrachloro-m-xylene	877-09-8	2	2.48	Poor instrument integration
alpha-BHC	319-84-6	1	2.50	Poor instrument integration
beta-BHC	319-85-7	1	2.90	Poor instrument integration
beta-BHC	319-85-7	2	3.73	Poor instrument integration
Heptachlor epoxide	1024-57-3	2	5.60	Poor instrument integration
Methoxychlor	72-43-5	2	9.45	Poor instrument integration
Mirex	2385-85-5	2	9.75	Poor instrument integration
Endrin ketone	53494-70-5	2	9.84	Poor instrument integration

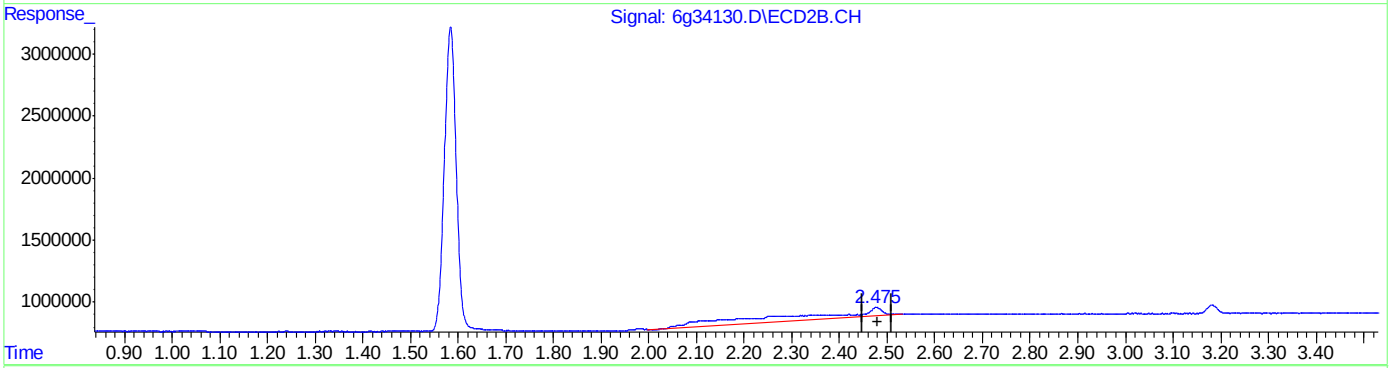
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34130.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:49 pm
Operator : dharas
Sample : ic987-1
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:51:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(2) Tetrachloro-m-xylene (SAB)
1.987min 0.787PPB
response 1813361

(2) Tetrachloro-m-xylene #2 (SAB)
2.477min 12.157PPB
response 9572770

(+) = Expected Retention Time

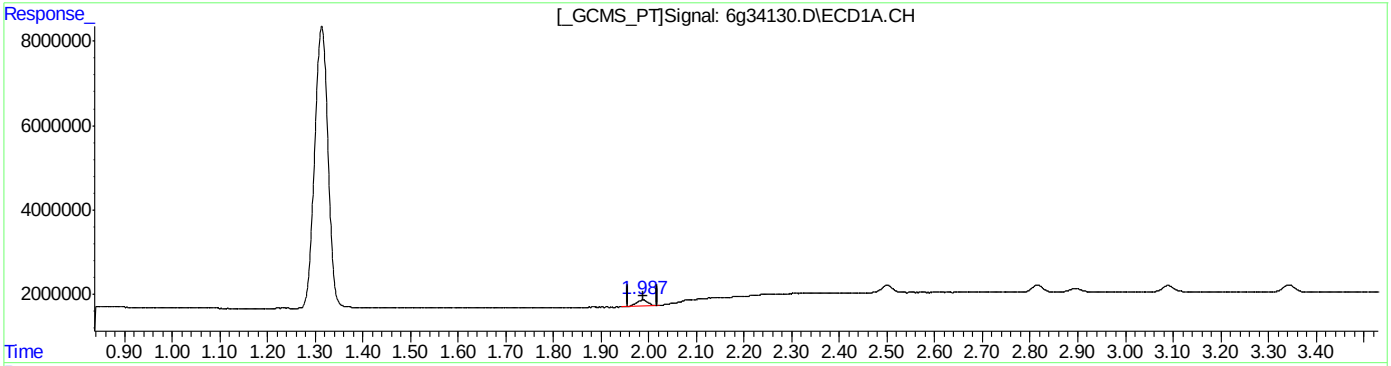
SGS ACCUTEST JC19023

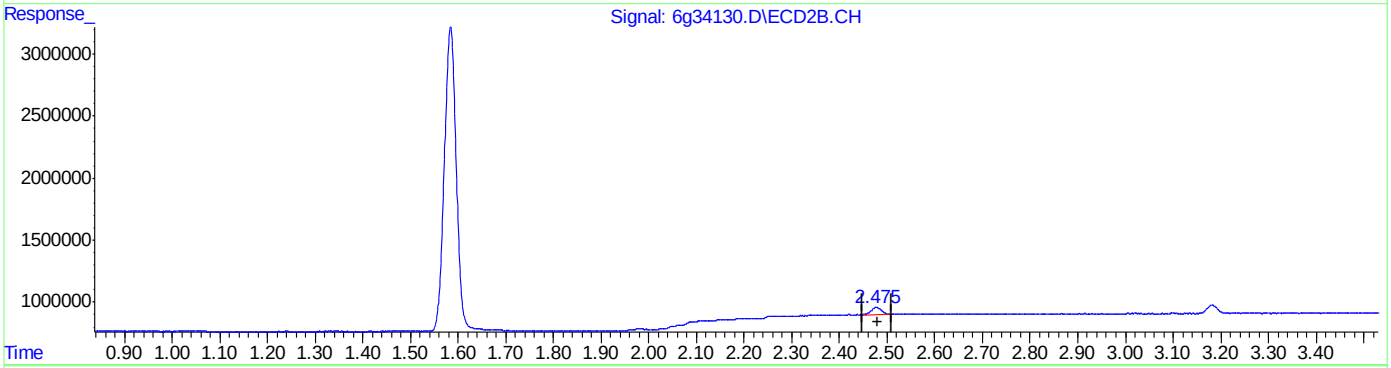
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34130.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:49 pm
Operator : dharas
Sample : ic987-1
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:51:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(2) Tetrachloro-m-xylene (SAB)
1.987min 1.118PPB m
response 2576583

(2) Tetrachloro-m-xylene #2 (SAB)
2.475min 1.051PPB m
response 827902

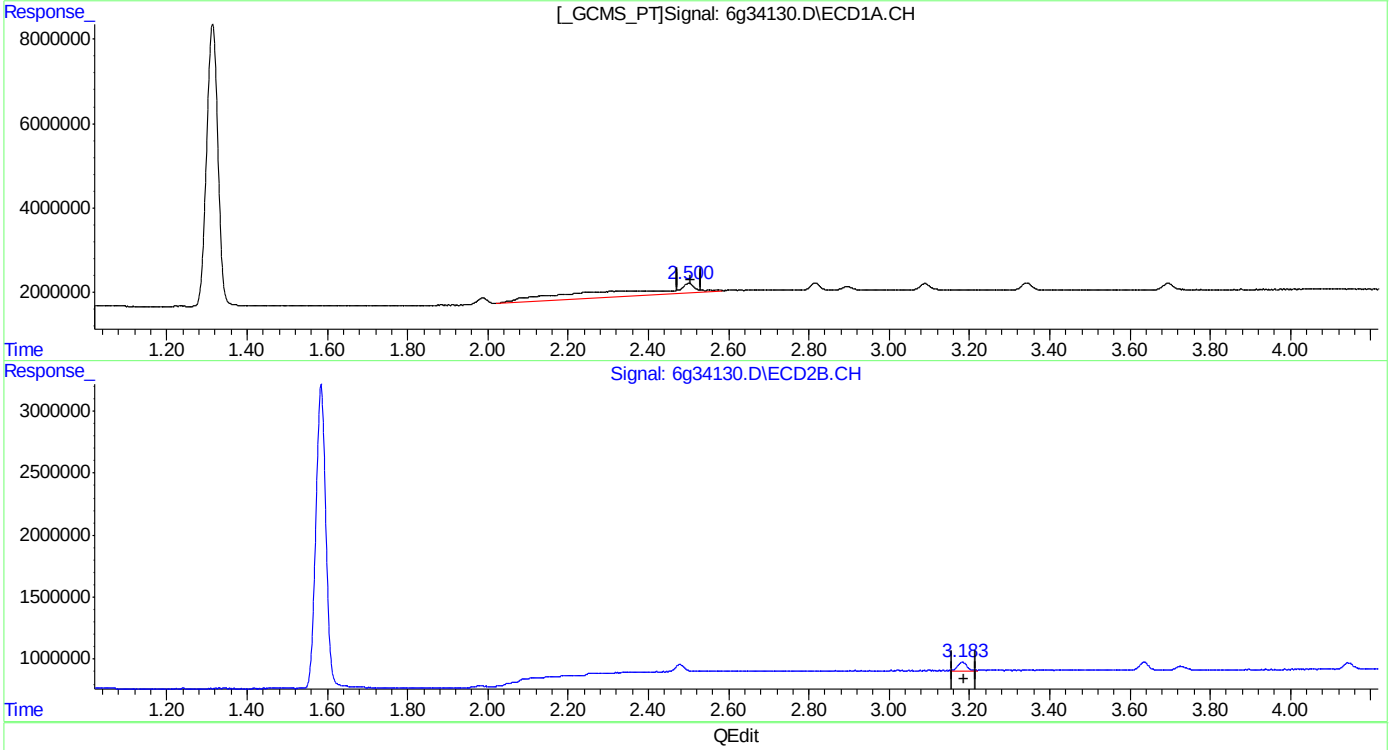
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34130.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:49 pm
Operator : dharas
Sample : ic987-1
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:51:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(3) alpha-BHC (A)
2.501min 11.218PPB
response 32431486

(3) alpha-BHC #2 (A)
3.182min 1.076PPB
response 1037508

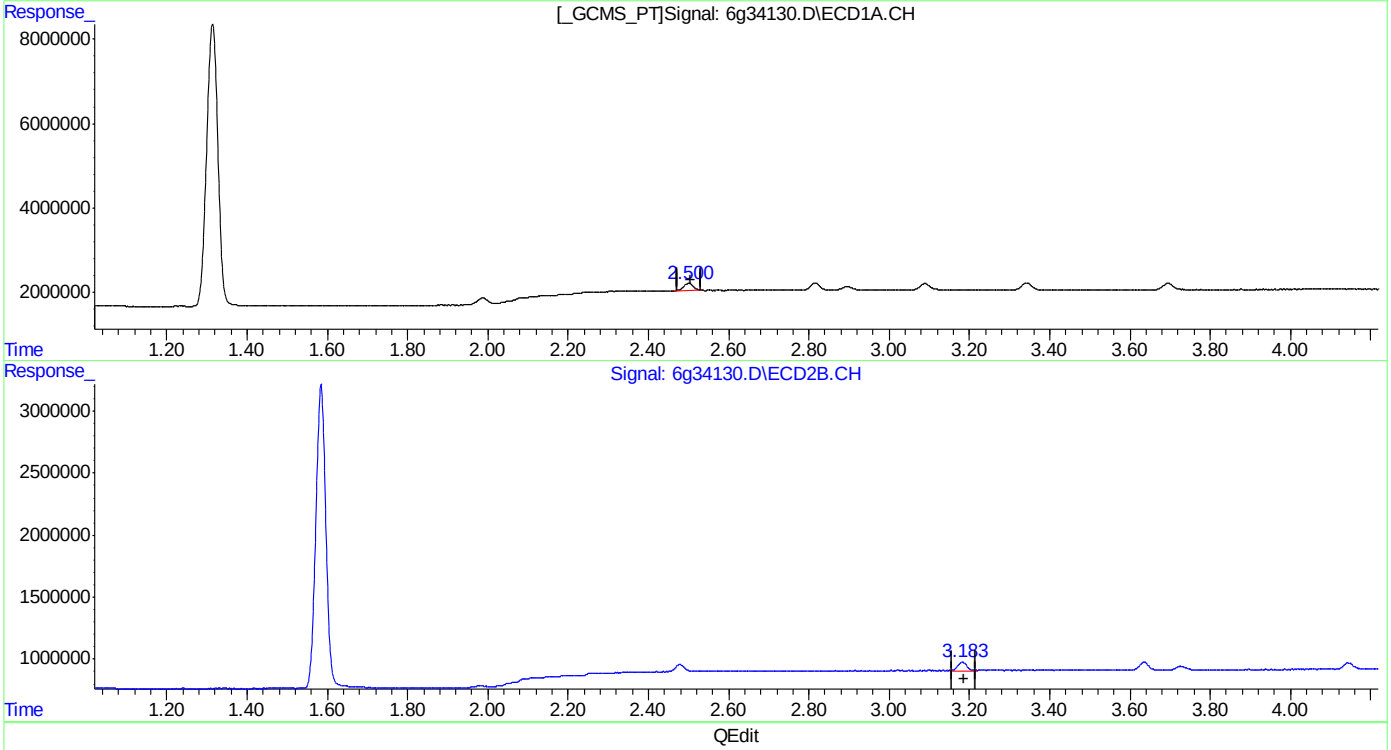
(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:52:32 2016

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

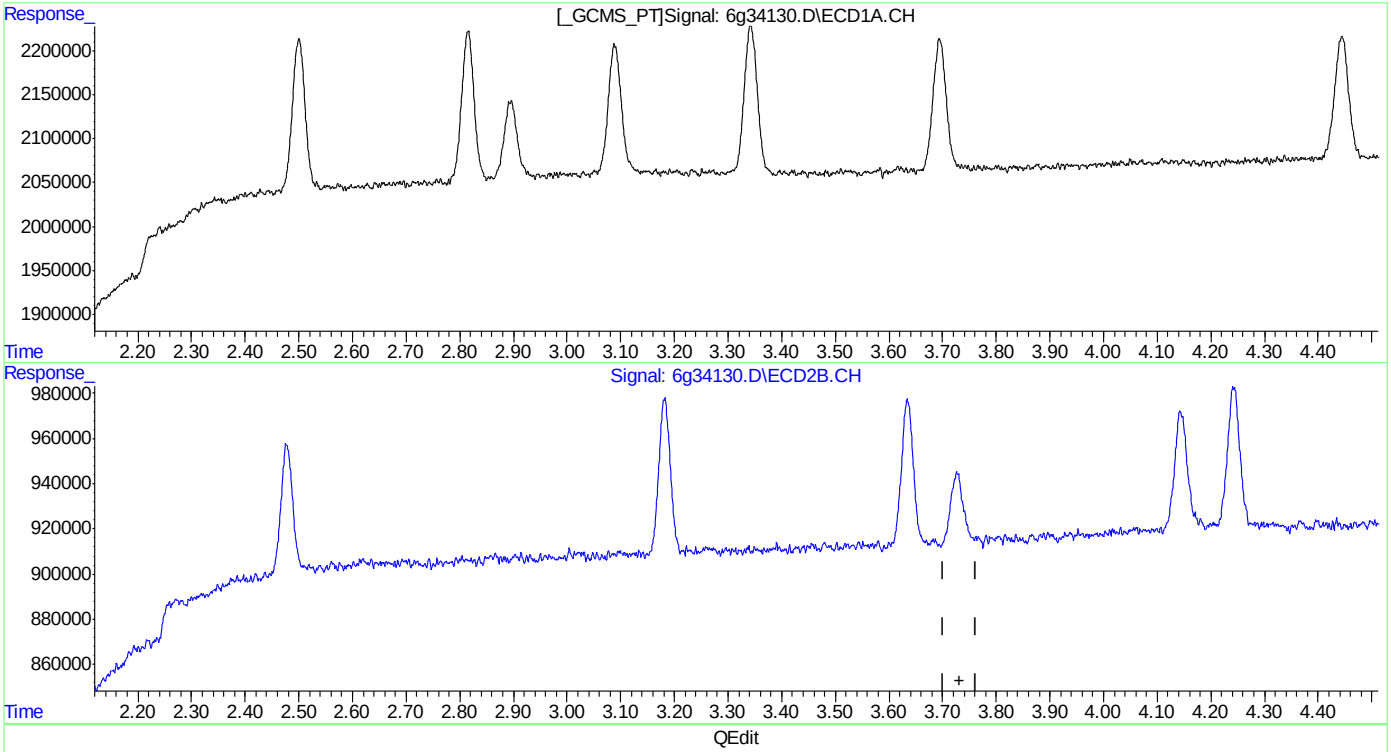
(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:52:43 2016

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

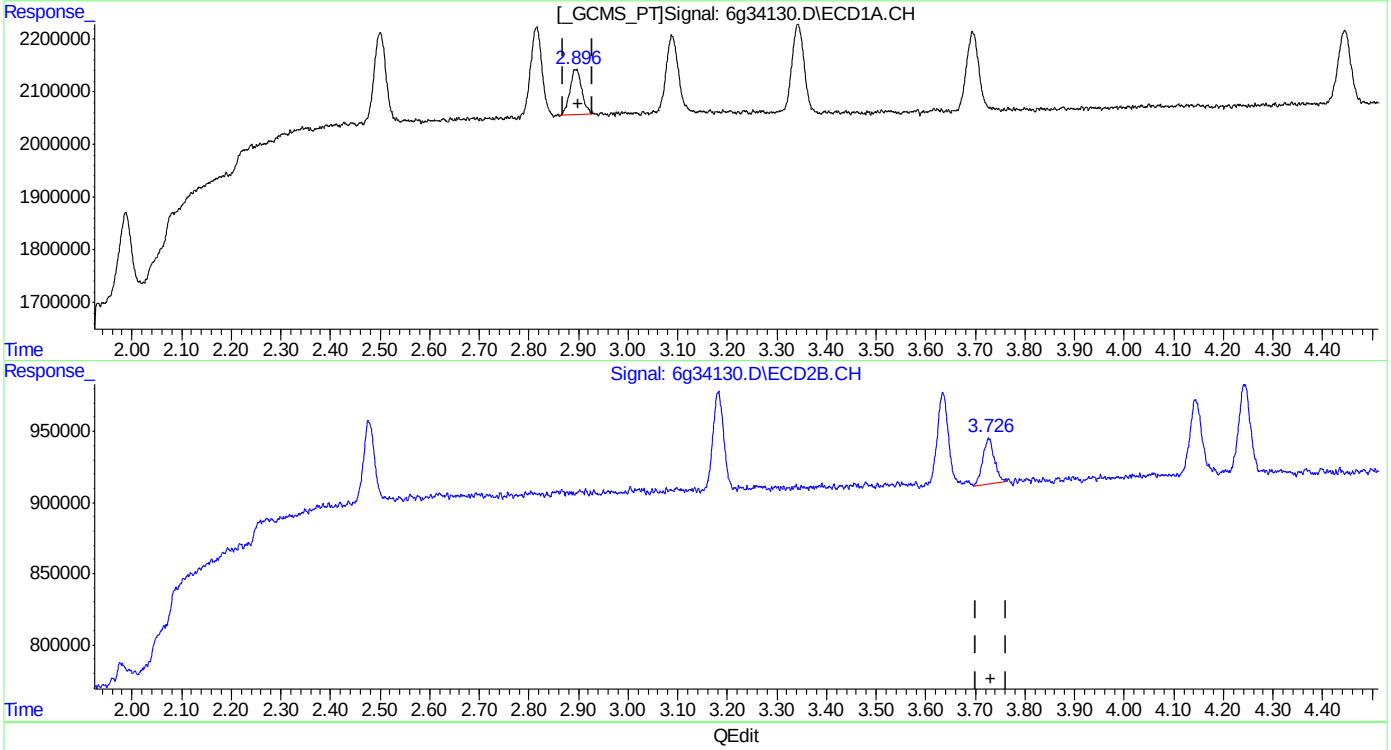
(+) = Expected Retention Time

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

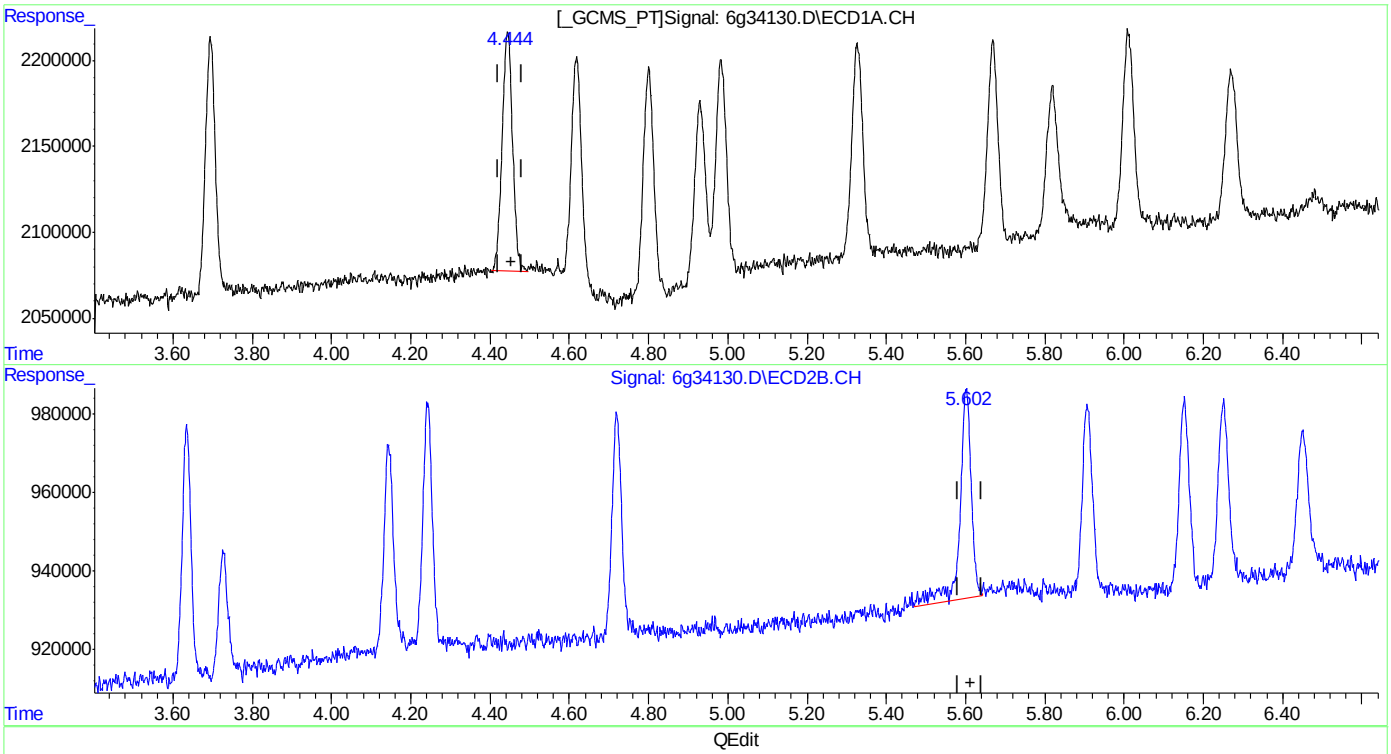
SGS ACCUTEST JC19023

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

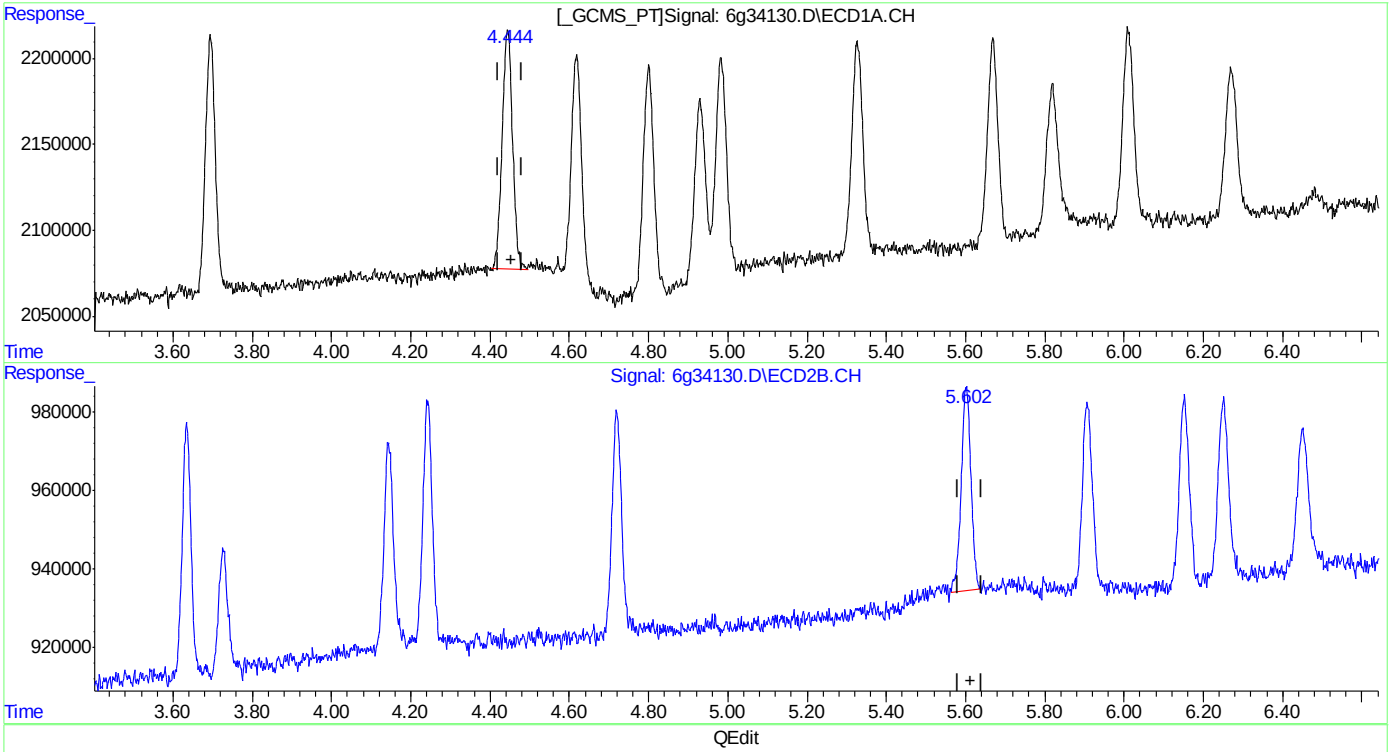
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34130.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:49 pm
Operator : dharas
Sample : ic987-1
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:51:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(9) Heptachlor Epoxide (B)
4.445min 1.079PPB
response 2533344

(9) Heptachlor Epoxide #2 (B)
5.602min 1.139PPB m
response 891848

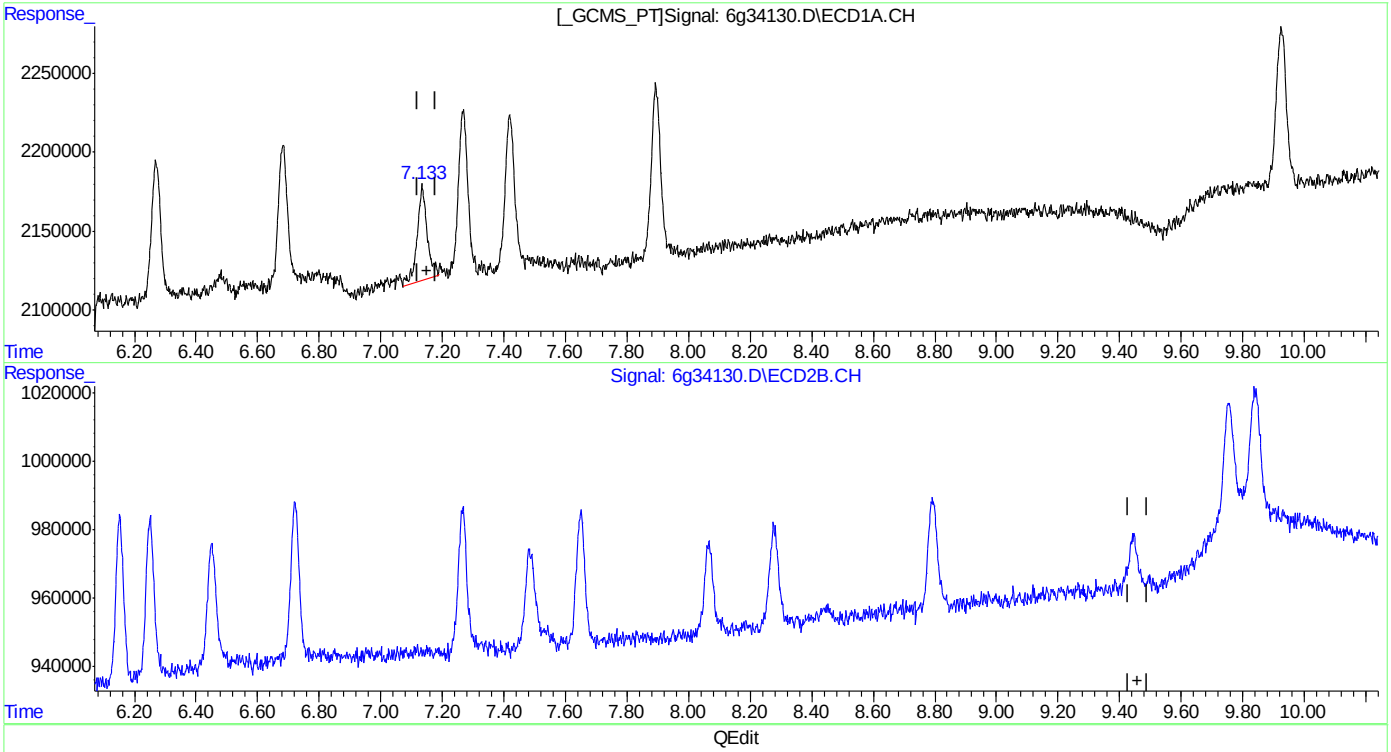
(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:53:20 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34130.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:49 pm
Operator : dharas
Sample : ic987-1
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:51:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(21) Methoxychlor (A)
7.134min 1.439PPB
response 1359857

(21) Methoxychlor #2 (A)
0.000min 0.000PPB
response 0

(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:53:36 2016

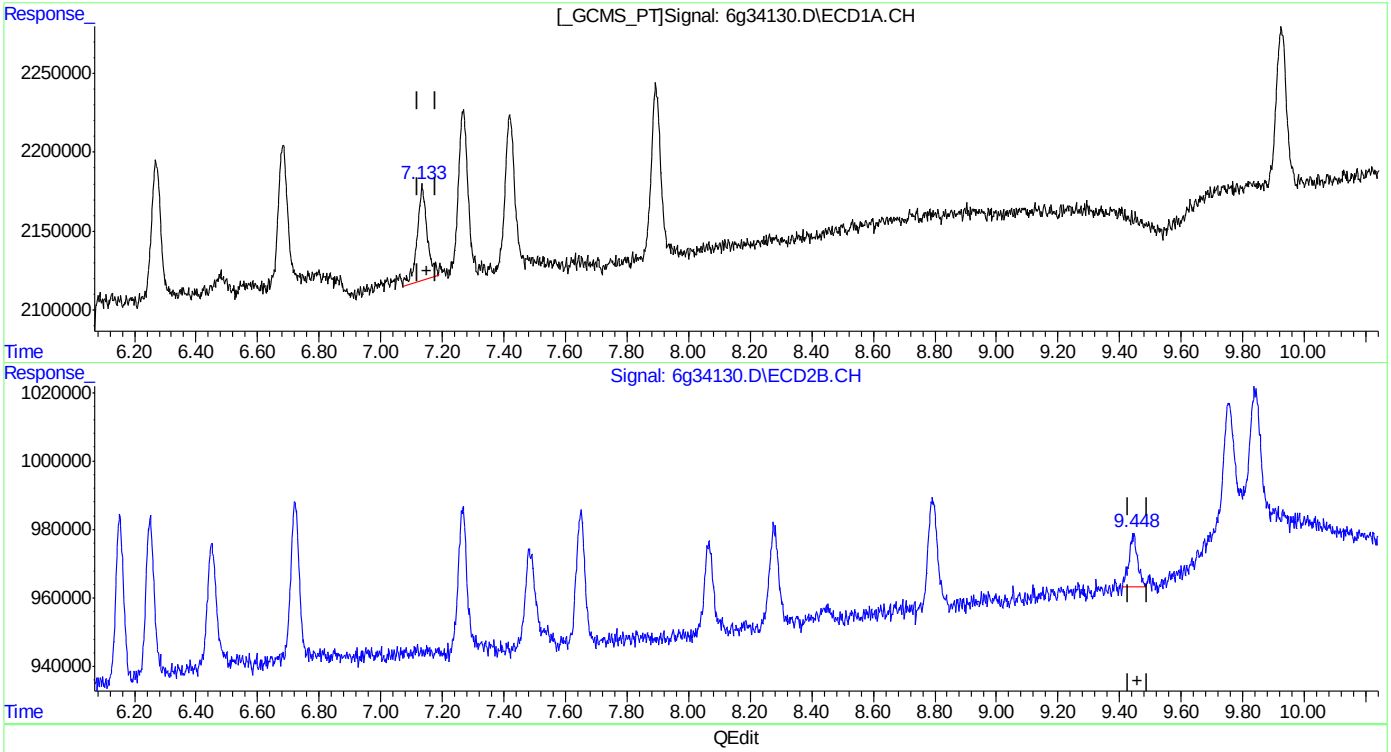
SGS ACCUTEST JC19023

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

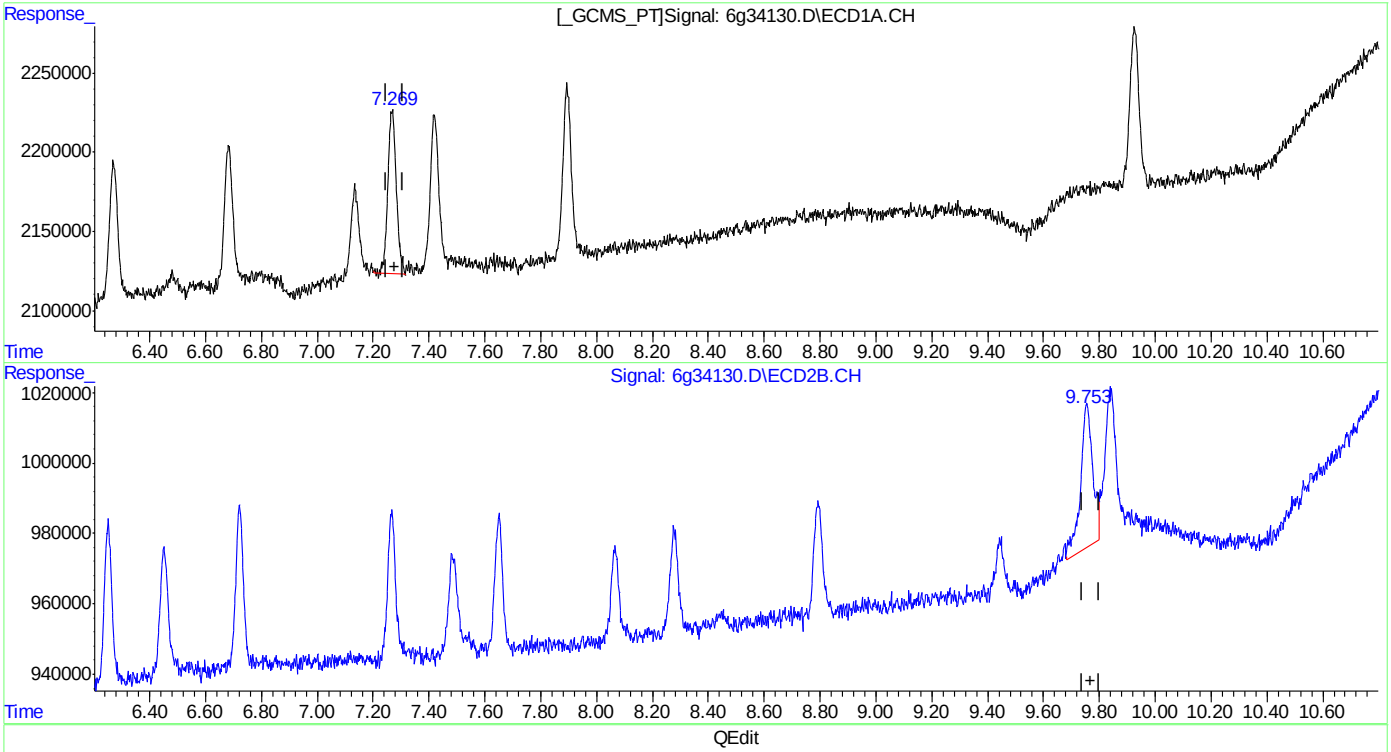
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34130.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:49 pm
Operator : dharas
Sample : ic987-1
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:51:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(22) Mirex
7.268min 1.112PPB
response 2186568

(22) Mirex #2
9.754min 2.103PPB
response 1253259

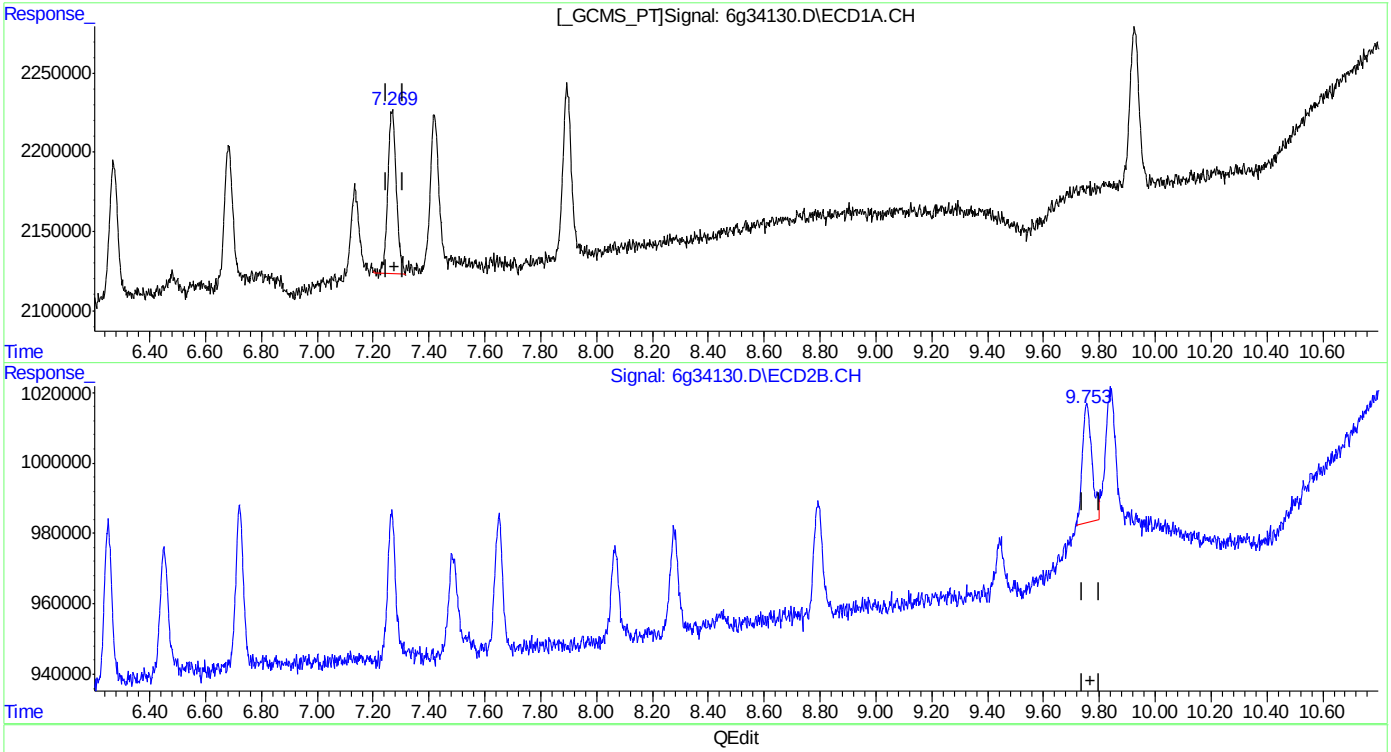
(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:53:55 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34130.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:49 pm
Operator : dharas
Sample : ic987-1
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:51:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(22) Mirex
7.268min 1.112PPB
response 2186568

(22) Mirex #2
9.753min 1.361PPB m
response 811332

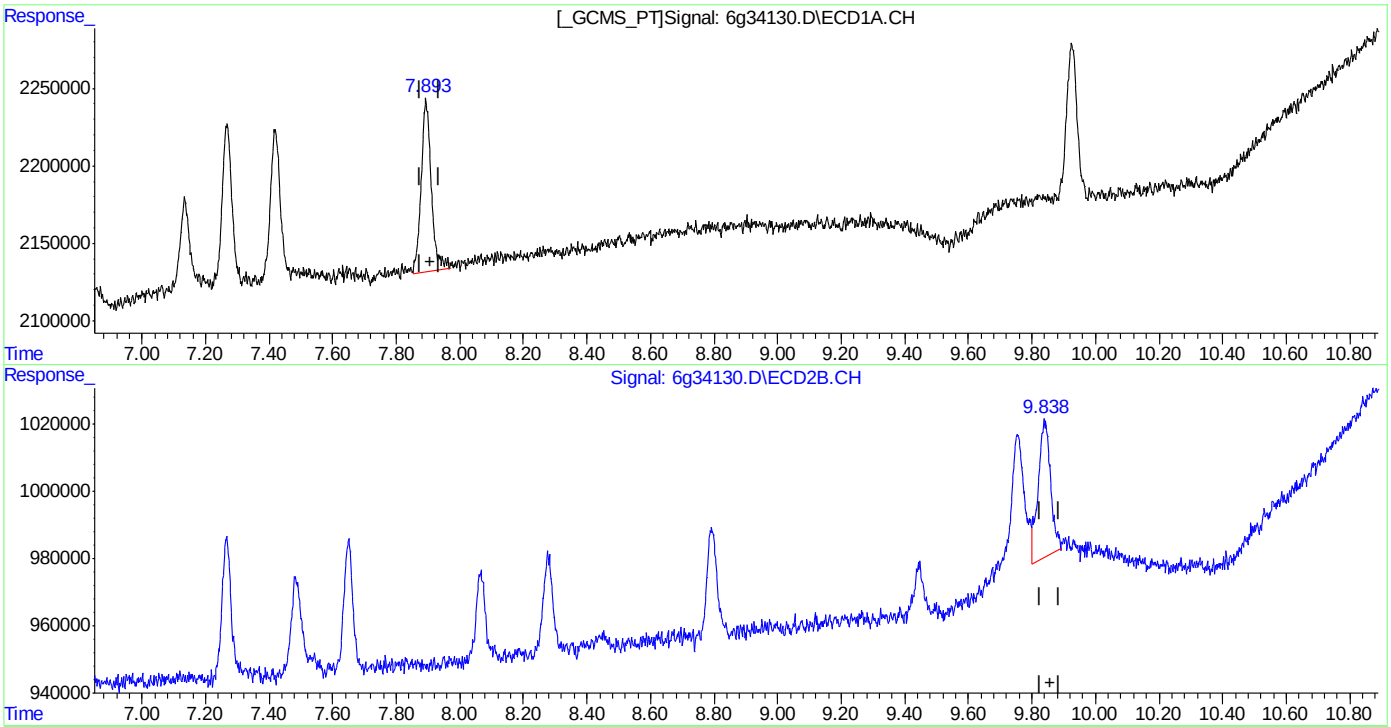
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34130.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 3:49 pm
Operator : dharas
Sample : ic987-1
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:51:51 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(23) Endrin Ketone (B)
7.893min 1.257PPB
response 2459754

(23) Endrin Ketone #2 (B)
9.844min 1.769PPB
response 1111083

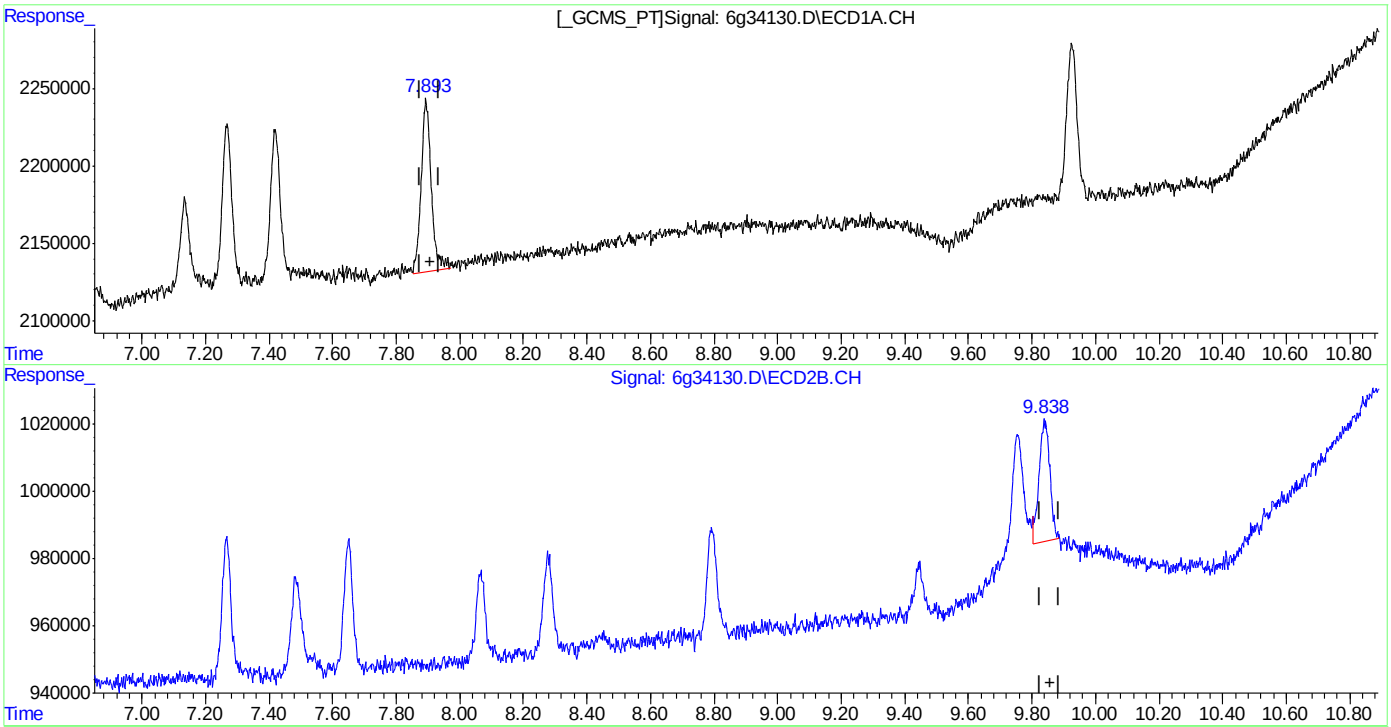
(+) = Expected Retention Time

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 JC19023

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.

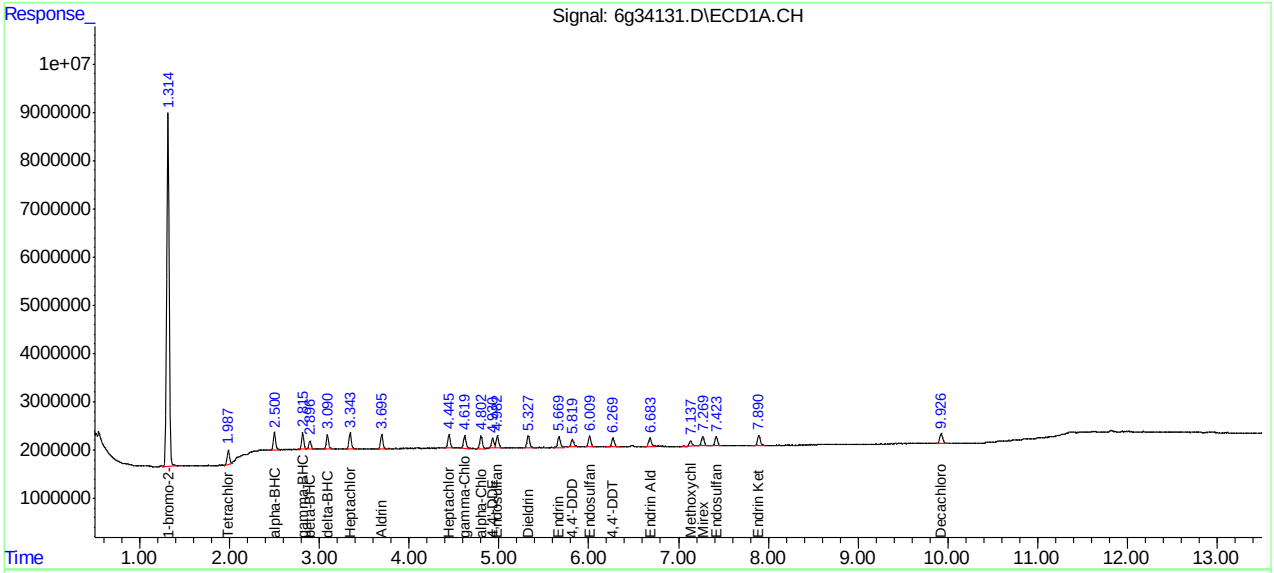
9.6.18
9

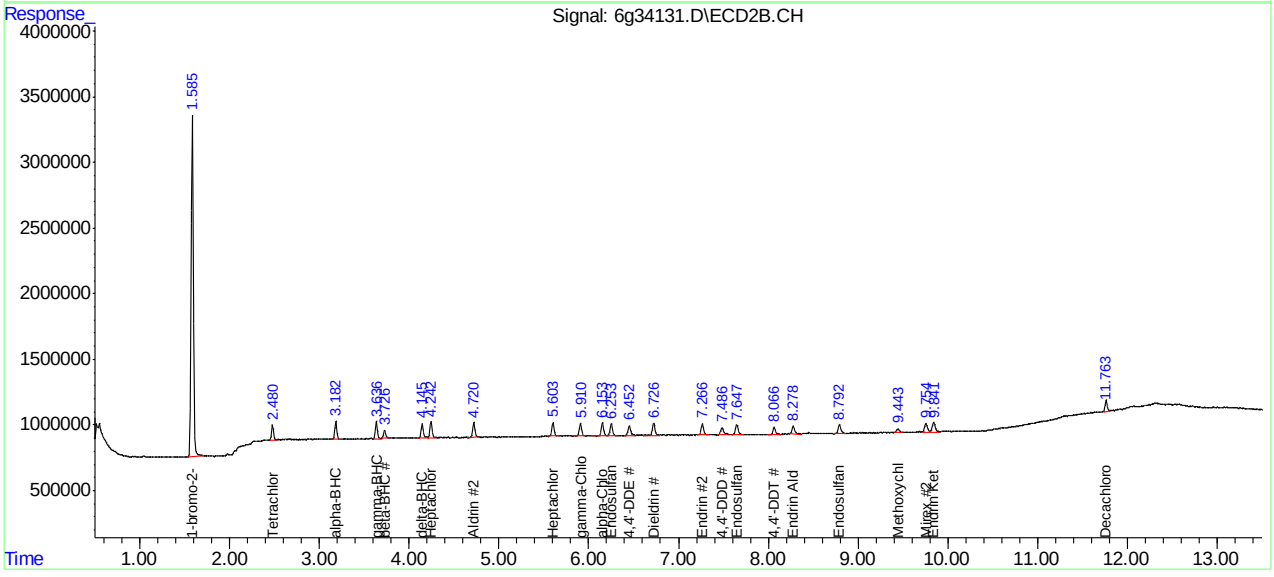
Quantitation Report (QT Reviewed)

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





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

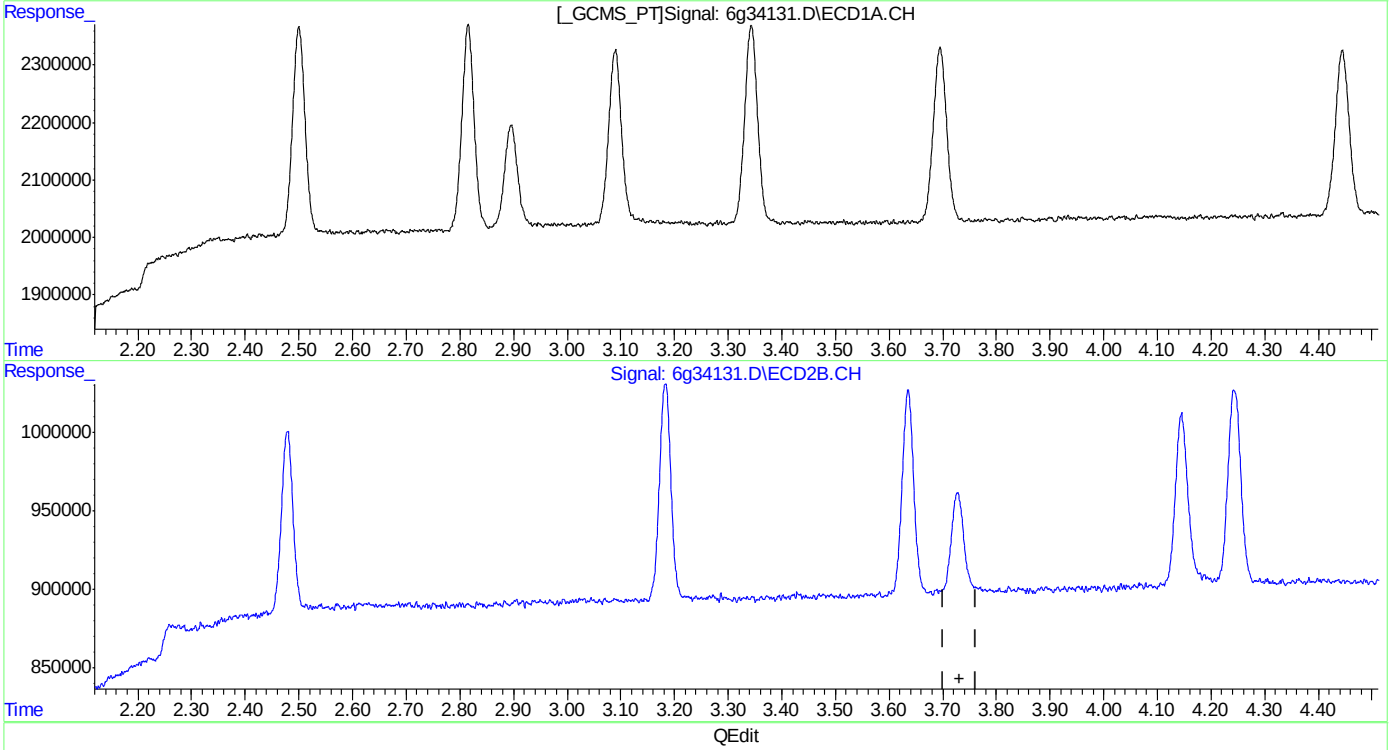
Parameter	CAS	Sig#	R.T. (min.)	Reason
beta-BHC	319-85-7	1	2.90	Poor instrument integration
beta-BHC	319-85-7	2	3.73	Poor instrument integration
Methoxychlor	72-43-5	2	9.44	Poor instrument integration
Decachlorobiphenyl	2051-24-3	2	11.76	Poor instrument integration

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



QEdit

(6) beta-BHC (B)
0.000min 0.000PPB
response 0

(6) beta-BHC #2 (B)
0.000min 0.000PPB
response 0

(+) = Expected Retention Time

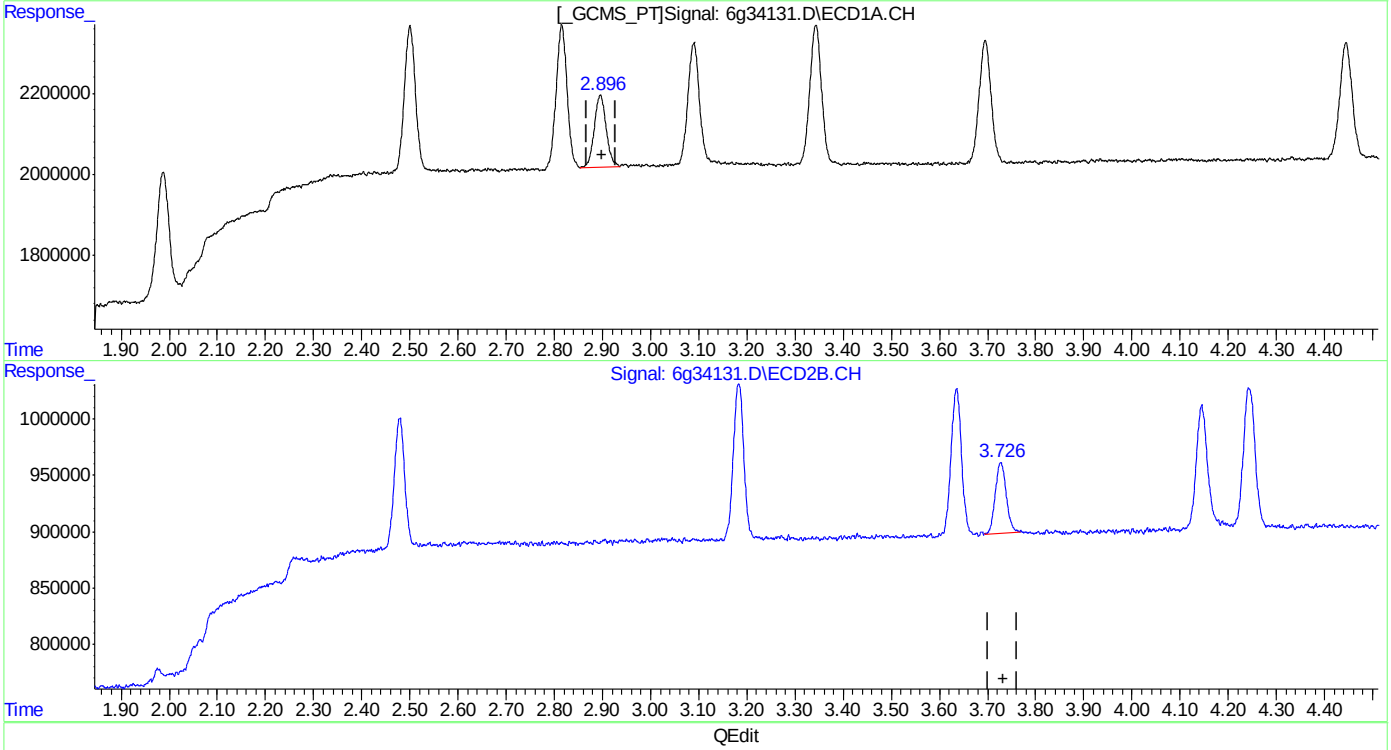
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34131.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 4:05 pm
Operator : dharas
Sample : ic987-2
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:41:32 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(6) beta-BHC (B)
2.896min 2.186PPB m
response 3076723

(6) beta-BHC #2 (B)
3.726min 2.096PPB m
response 981586

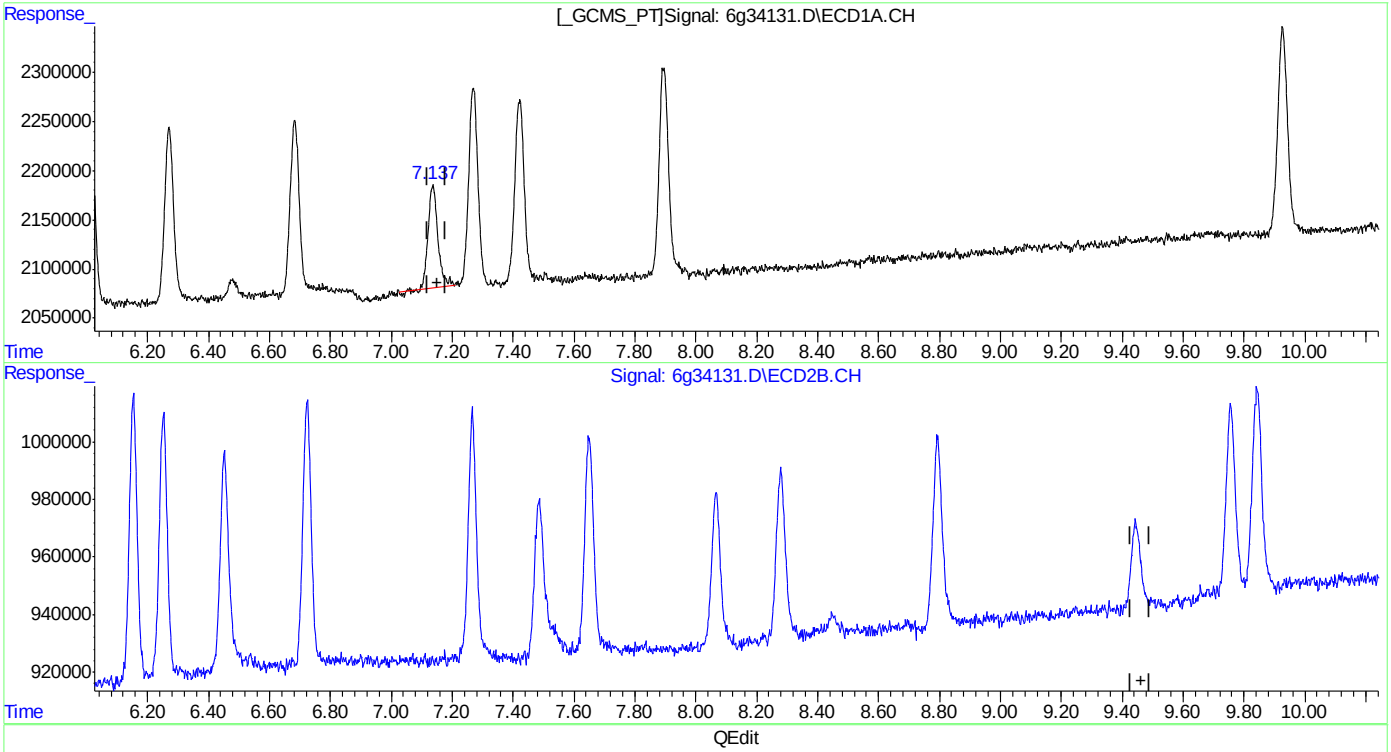
(+) = Expected Retention Time

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

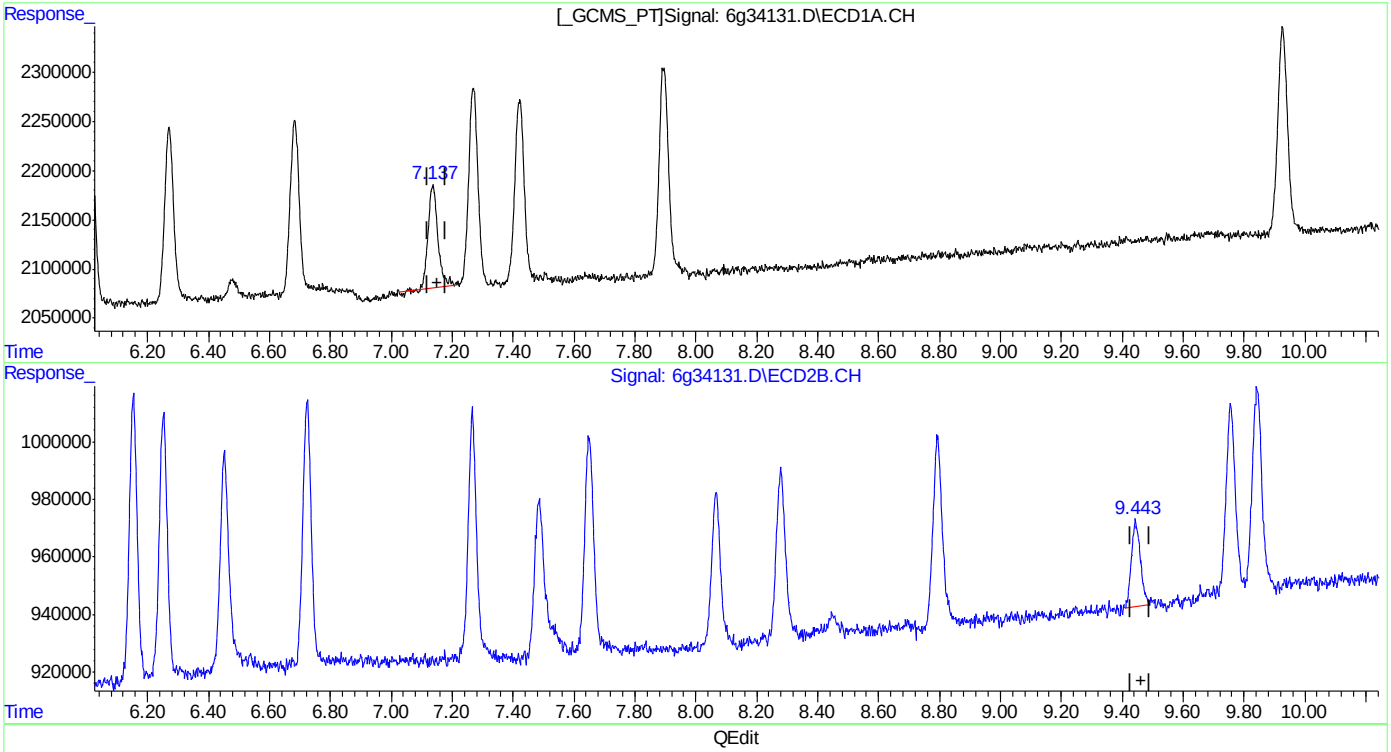
(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:42:14 2016

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
6PST987.M Mon Apr 18 10:42:22 2016

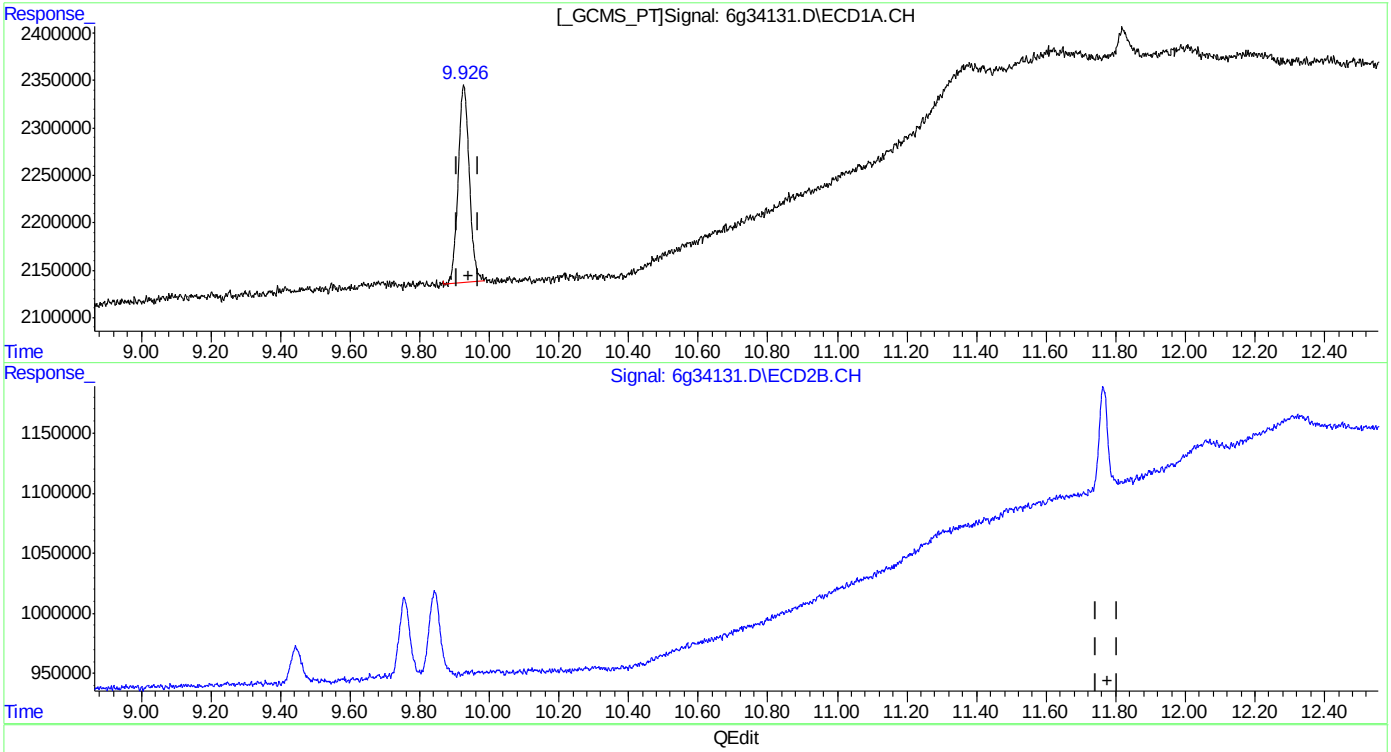
SGS ACCUTEST JC19023

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

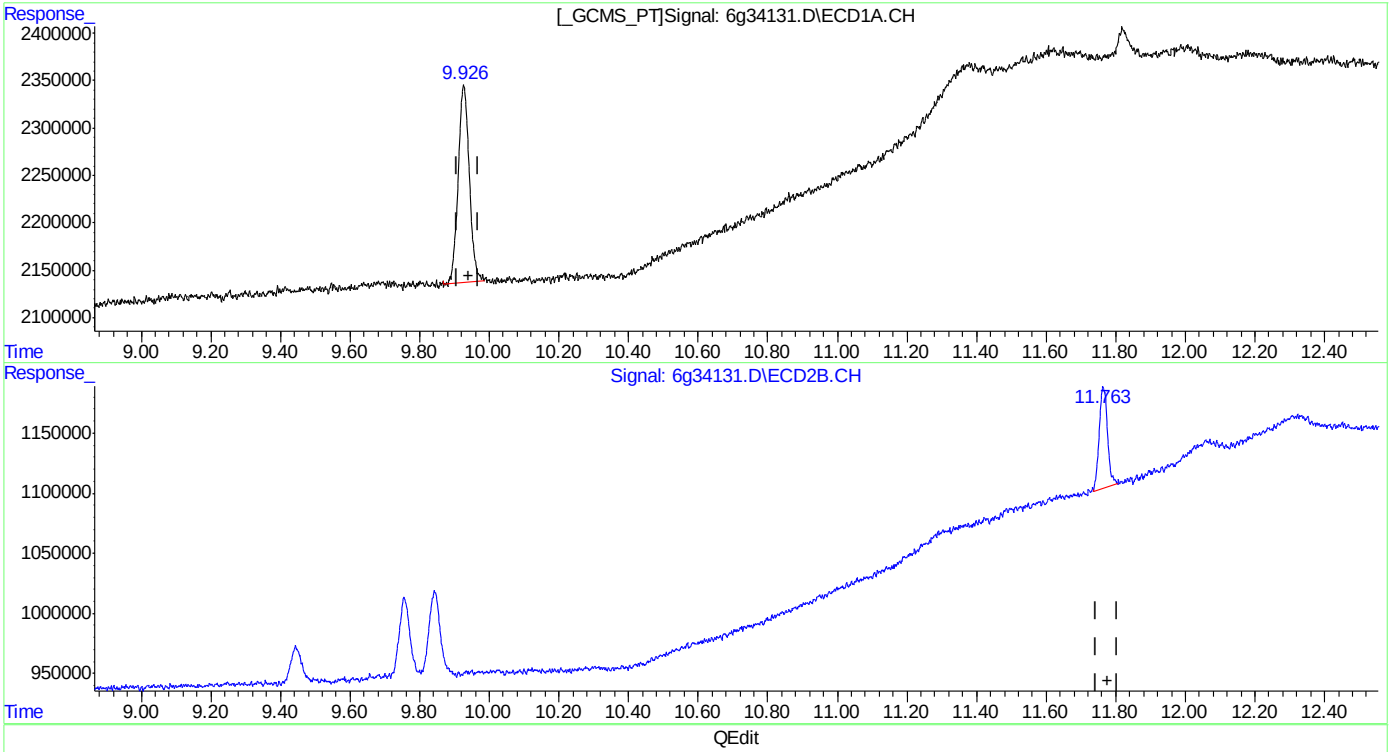
SGS ACCUTEST JC19023

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 JC19023

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

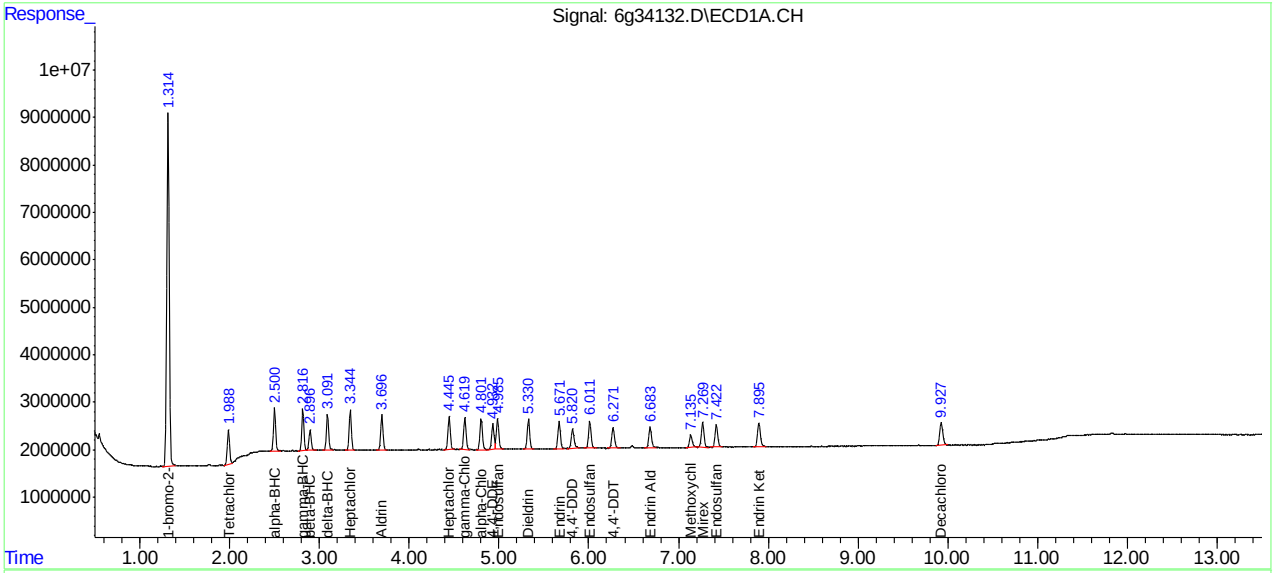
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

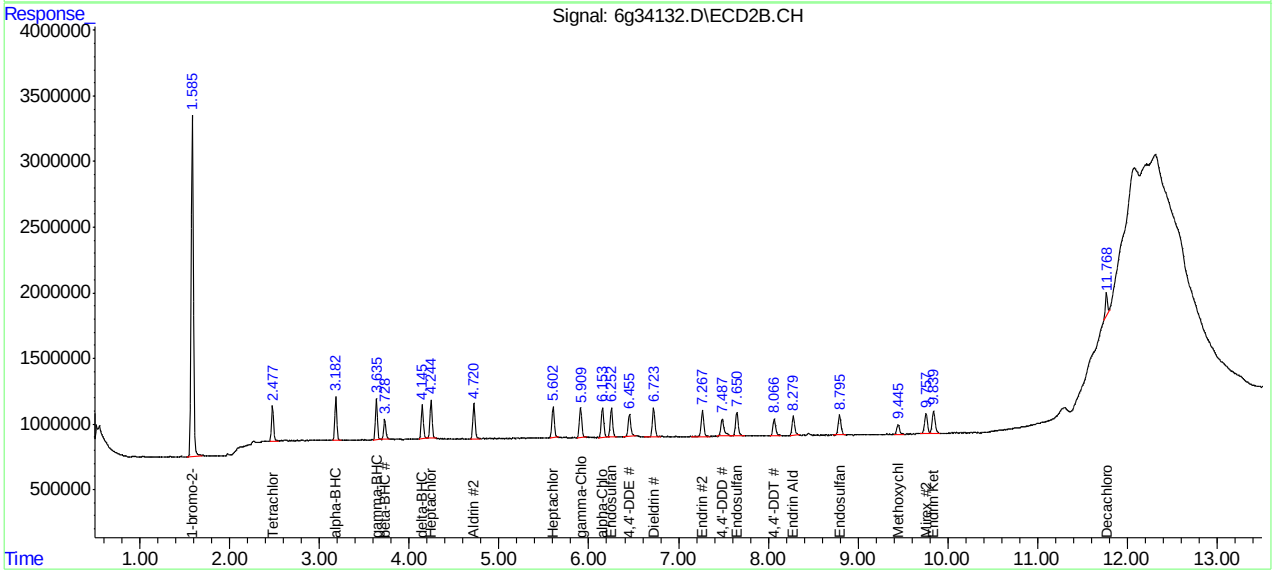
Quantitation Report (QT Reviewed)

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





SGS ACCUTEST JC19023

Manual Integration Approval Summary

Sample Number:	G6G987-IC987	**Method:**	SW846 8081B
Lab FileID:	6G34132.D	**Analyst approved:**	04/18/16 12:23 Dhara Saparia
Injection Time:	04/14/16 16:22	**Supervisor approved:**	04/18/16 14:12 Gwendolyn Burns

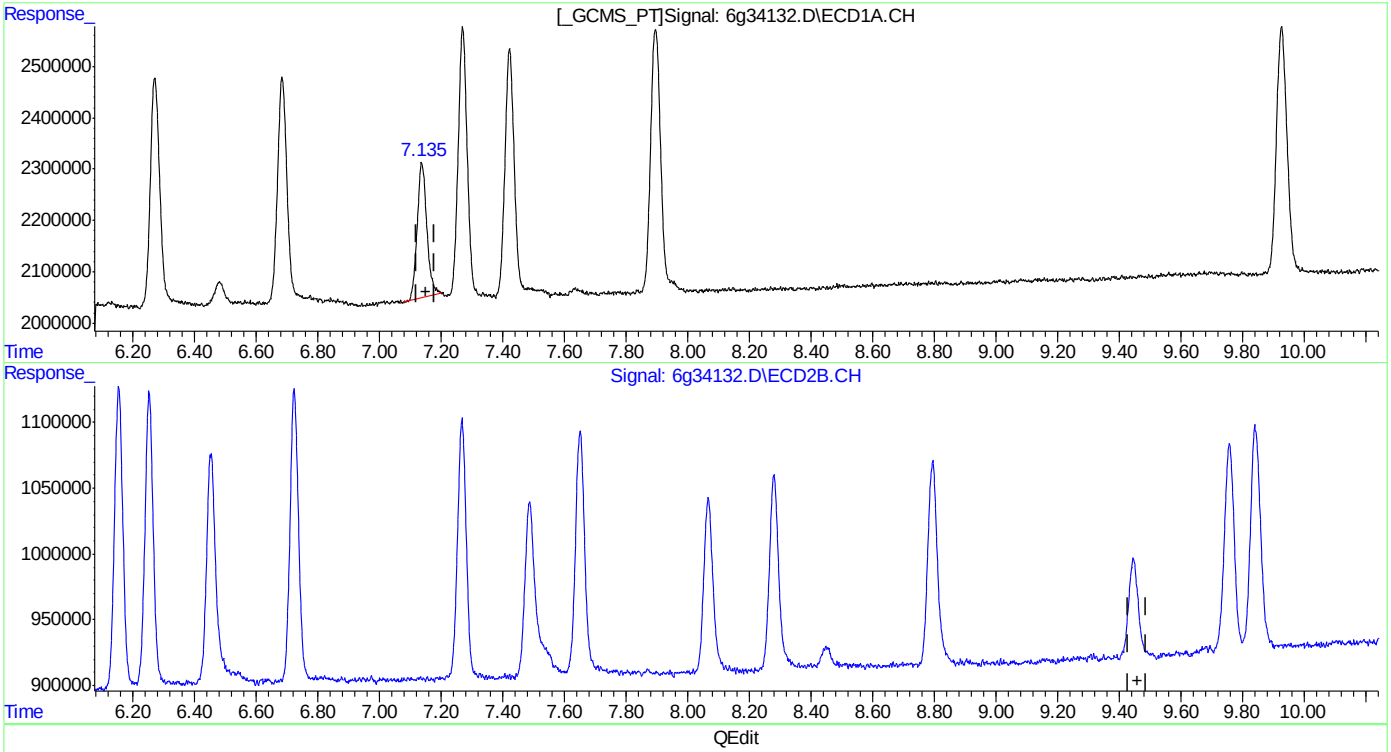
Parameter	CAS	Sig#	R.T. (min.)	Reason
Methoxychlor	72-43-5	2	9.44	Poor instrument integration
Decachlorobiphenyl	2051-24-3	2	11.77	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34132.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 4:22 pm
Operator : dharas
Sample : ic987-5
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:36:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(21) Methoxychlor (A)
7.137min 5.483PPB
response 5612130

(21) Methoxychlor #2 (A)
0.000min 0.000PPB
response 0

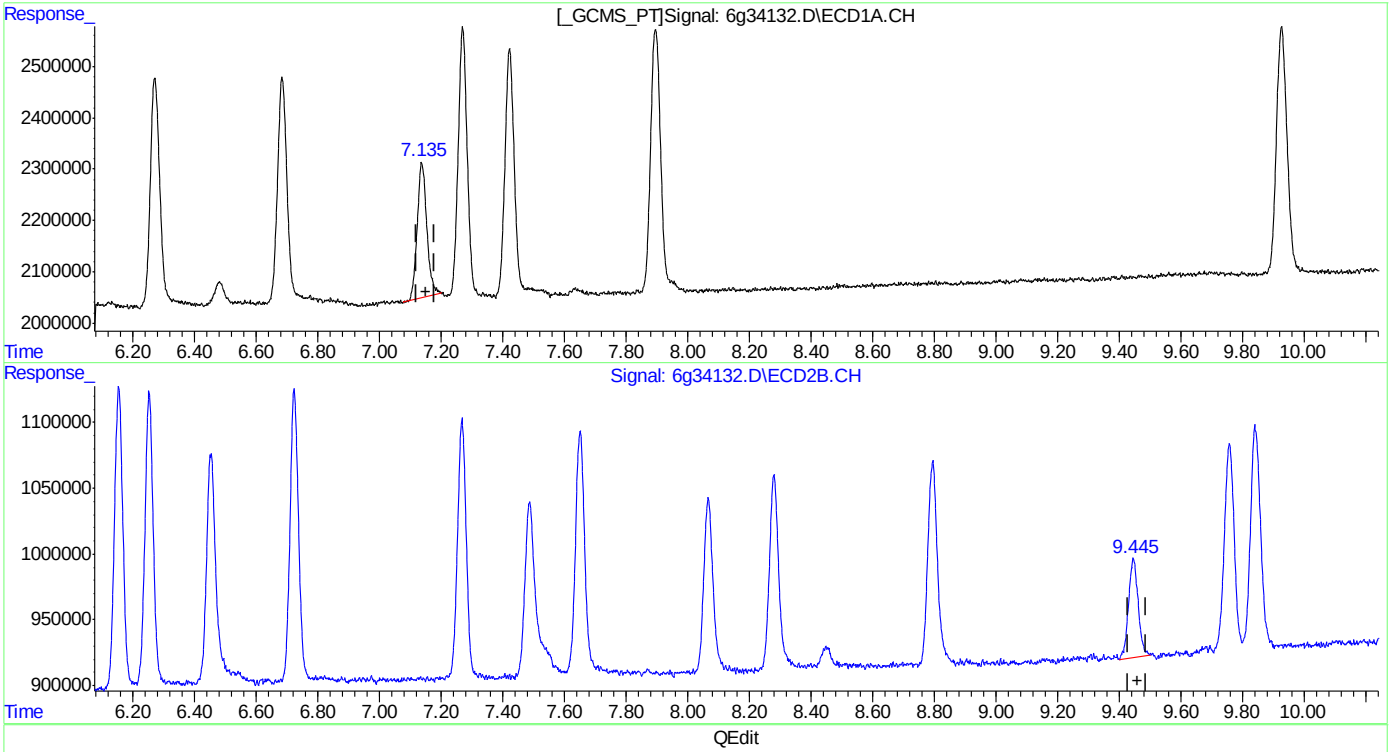
(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:36:47 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34132.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 4:22 pm
Operator : dharas
Sample : ic987-5
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:36:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(21) Methoxychlor (A)
7.137min 5.483PPB
response 5612130

(21) Methoxychlor #2 (A)
9.445min 6.860PPB m
response 1635835

(+) = Expected Retention Time

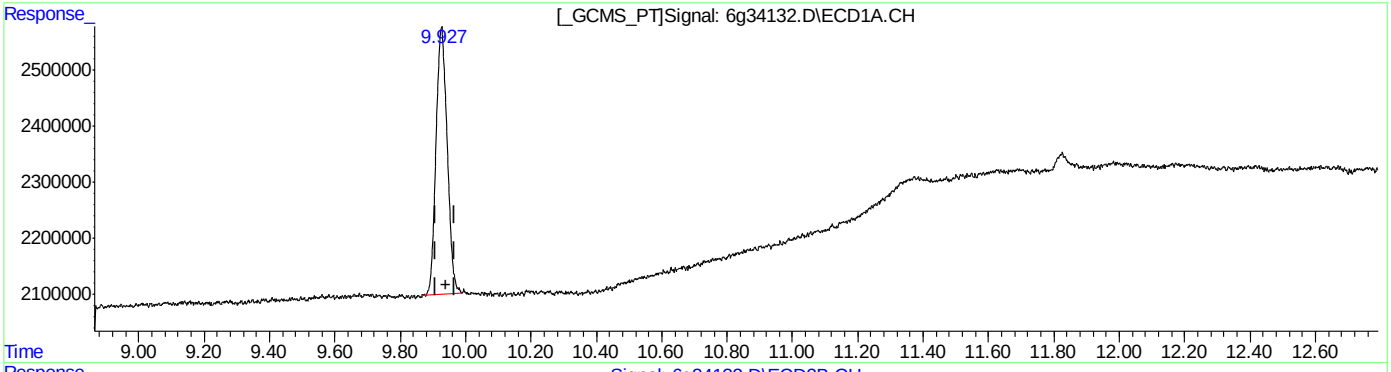
SGS ACCUTEST JC19023

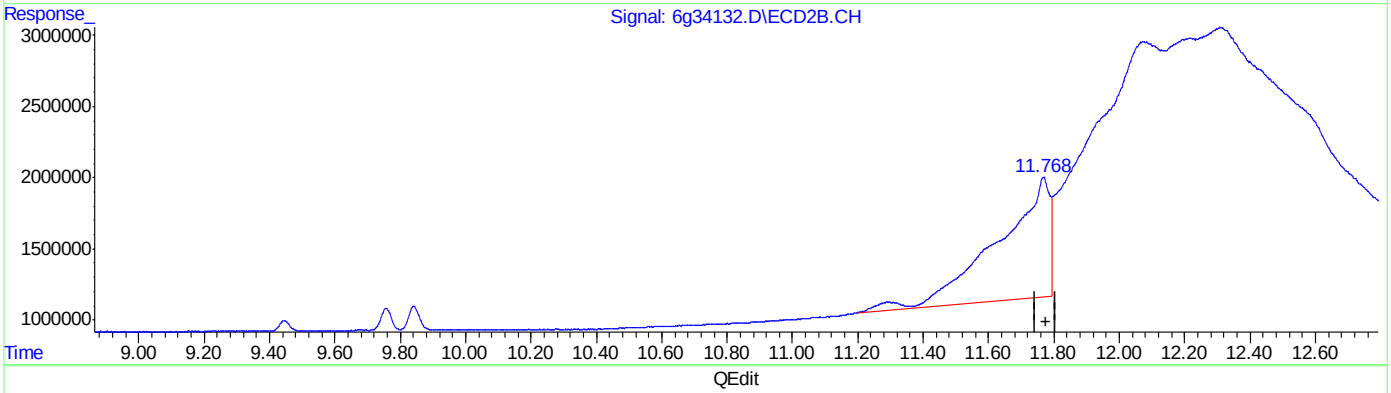
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34132.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 4:22 pm
Operator : dharas
Sample : ic987-5
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:36:14 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





QEdit

(24) Decachlorobiphenyl (SAB)
9.926min 5.088PPB
response 11331892

(24) Decachlorobiphenyl #2 (SAB)
11.768min 147.393PPB
response 92250162

(+) = Expected Retention Time

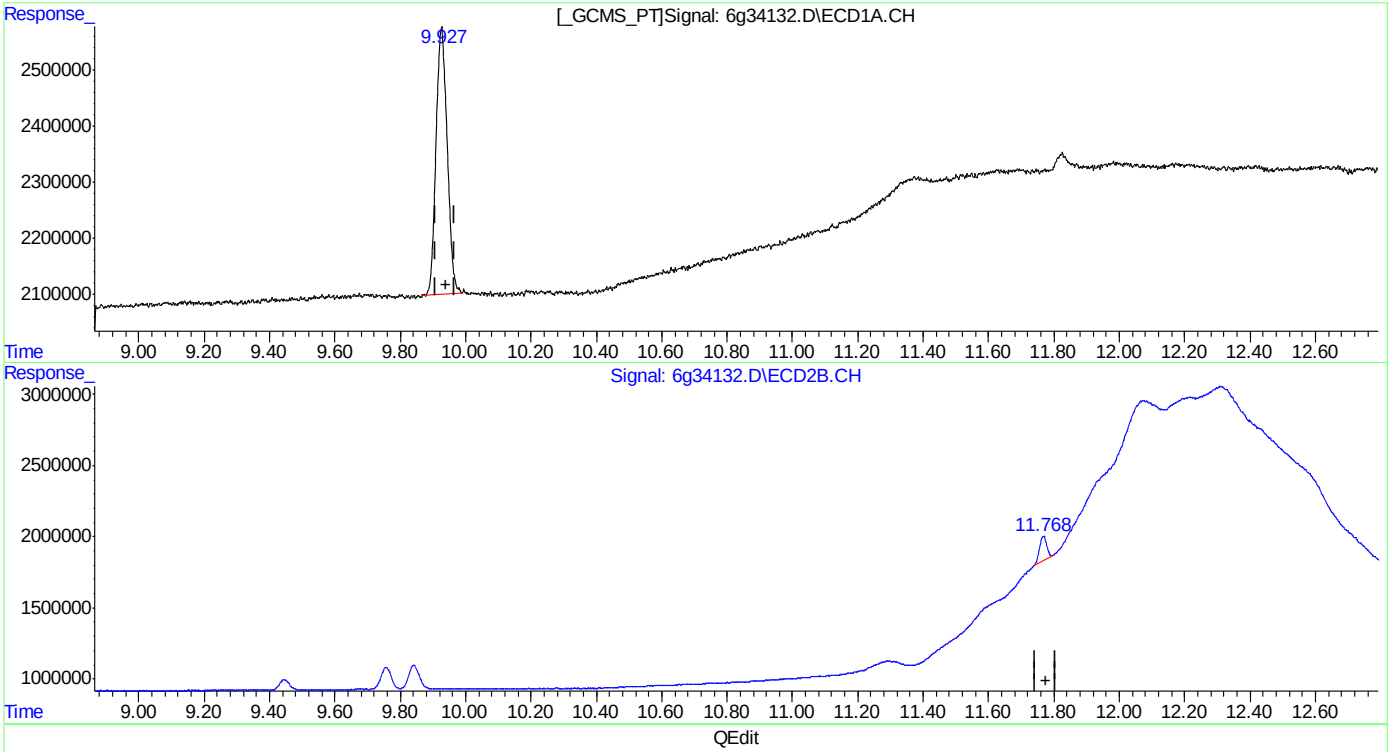
SGS ACCUTEST JC19023

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 4.230PPB m
response 2647512

(+) = Expected Retention Time

SGS ACCUTEST JC19023

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.

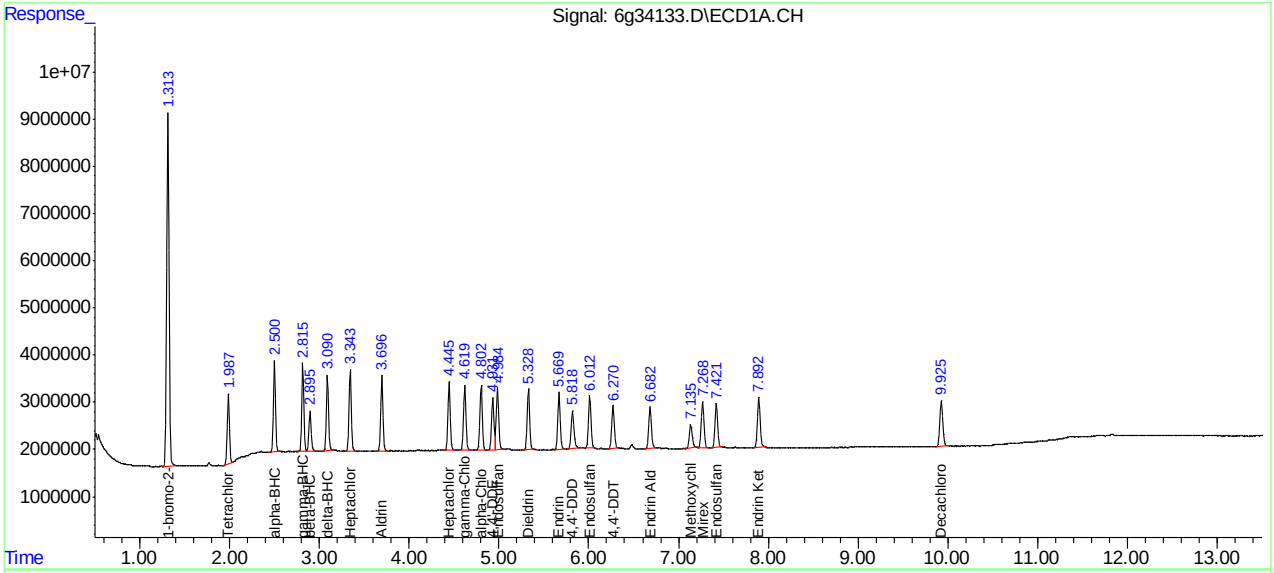
SGS ACCUTEST JC19023

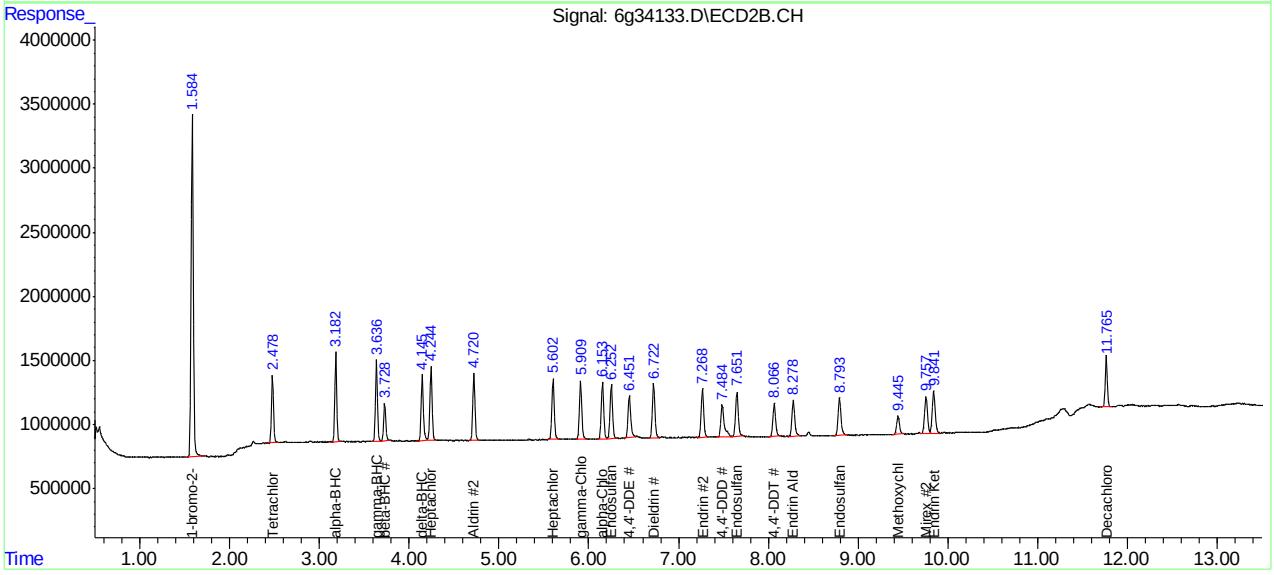
Quantitation Report (QT Reviewed)

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 JC19023

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.

9.6.21

9

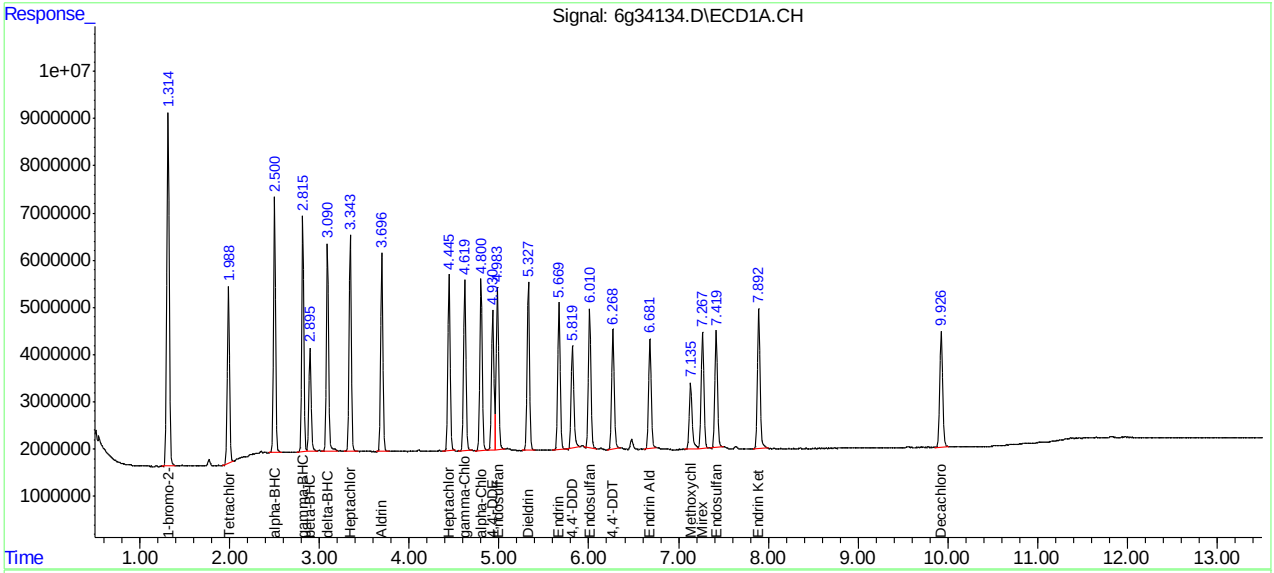
SGS ACCUTEST JC19023

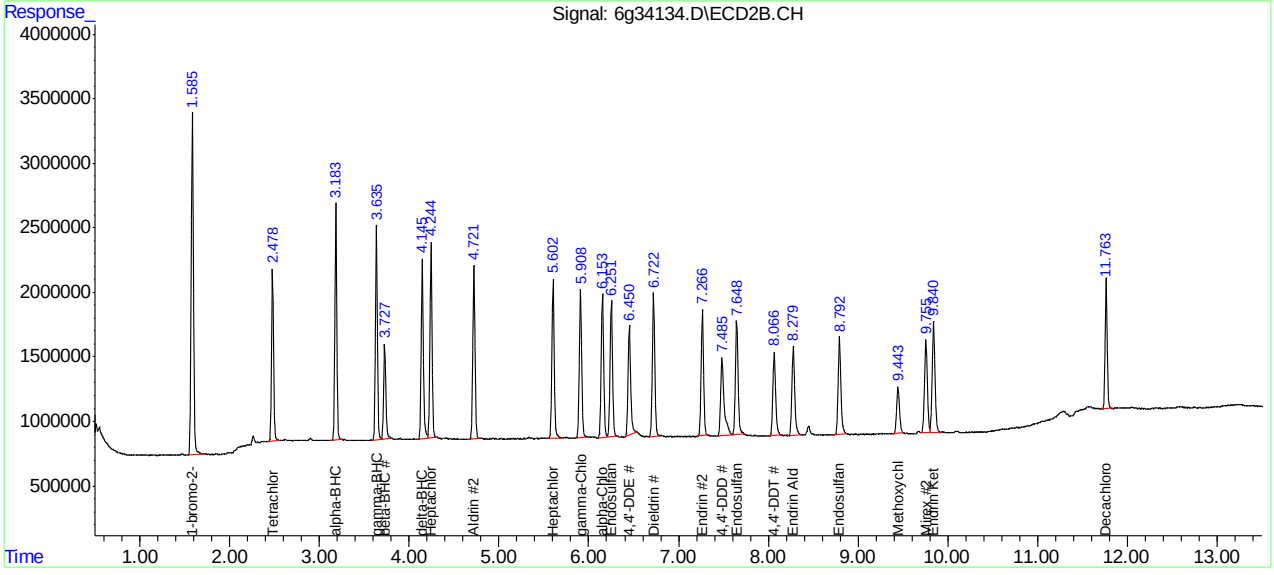
Quantitation Report (QT Reviewed)

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.

9.6.22

9

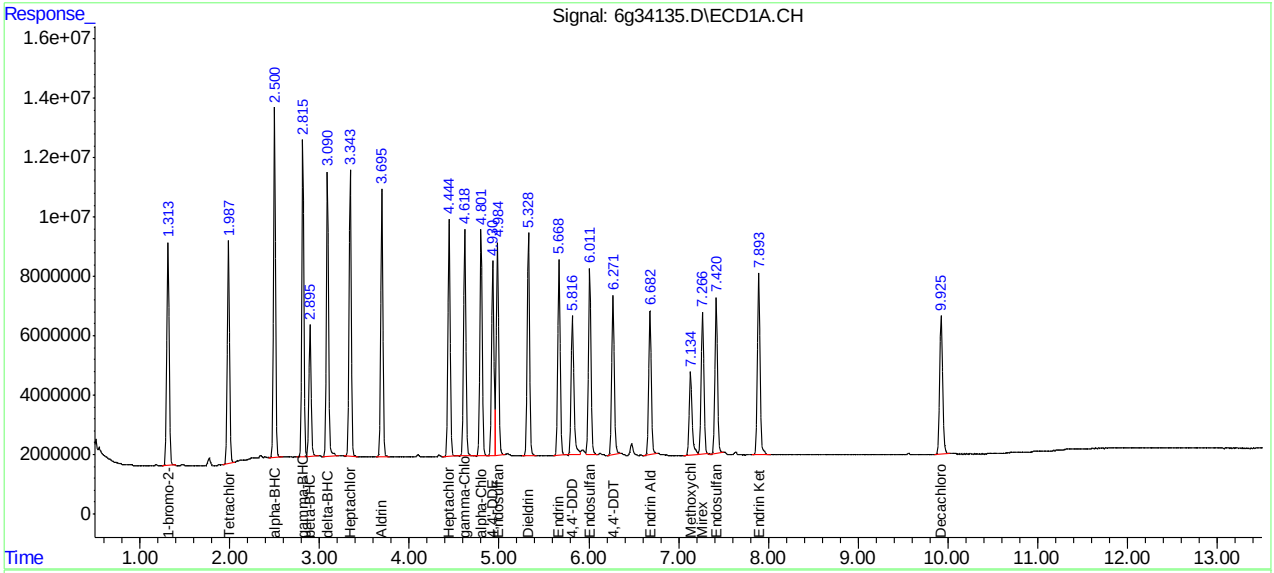
SGS ACCUTEST JC19023

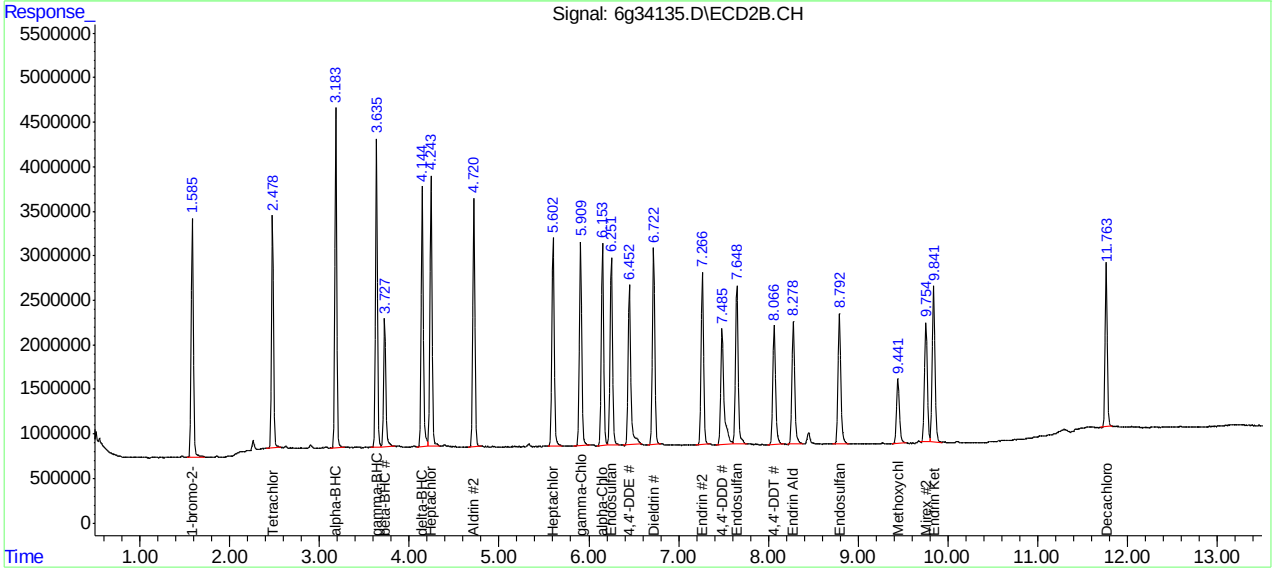
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34135.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 5:11 pm
Operator : dharas
Sample : ic987-50
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:19:01 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





6G34136.D

Manual Integrations APPROVED (compounds with "m" flag)

Gwendolyn Burns 04/18/16 14:12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34136.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 5:27 pm
Operator : dharas
Sample : ic987-75
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:19:15 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.313	1.584	142.3E6	46534682	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.987	2.478	196.0E6	61034979	77.960	70.971
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 194.90%#	177.43%#
24) SAB	Decachlor...	9.924	11.764	161.9E6	45025212	72.177	70.899
	Spiked Amount	40.000			Recovery	= 180.44%	177.25%
	Target Compounds						
3) A	alpha-BHC	2.501	3.183	287.2E6	86390406	91.093	82.014
4) MA	gamma-BHC	2.816	3.636	259.7E6	79013987	88.861	81.162
5) MA	Heptachlor	3.343	4.244	249.5E6	75927971	87.193	80.715
6) B	beta-BHC	2.895	3.728	114.2E6	36350302	79.034	75.343
7) B	delta-BHC	3.089	4.146	244.9E6	74588741	93.731	85.262
8) MB	Aldrin	3.695	4.721	235.4E6	70722867	87.268	77.544
9) B	Heptachlo...	4.444	5.603	212.7E6	65014462	83.094	76.018
10) B	gamma-Chl...	4.619	5.909	216.5E6	63493244	82.383	75.971
11) B	alpha-Chl...	4.800	6.153	211.9E6	62505590	82.087	74.643
12) A	Endosulfan I	4.984	6.251	210.1E6	60303594	79.727	73.870
13) B	4,4'-DDE	4.931	6.451	184.7E6	55949391	93.299	74.382m
14) MA	Dieldrin	5.327	6.723	212.9E6	62341957	85.094	74.518
15) MA	Endrin	5.669	7.266	191.4E6	56468294	84.449	76.383
16) A	4,4'-DDD	5.818	7.484f	153.6E6	49146684	89.174	71.253
17) B	Endosulfa...	6.011	7.650	185.7E6	56464399	81.741	73.899
18) MA	4,4'-DDT	6.270	8.066	166.3E6	44795721	91.513	97.931
19) B	Endrin Al...	6.682	8.277	147.3E6	45061219	80.230	73.276
20) B	Endosulfa...	7.420	8.793	159.4E6	47550936	81.583	74.139
21) A	Methoxychlor	7.134f	9.445f	93942612	24830275	91.112	102.626
22)	Mirex	7.268	9.756	153.4E6	44250941	71.508	67.973
23) B	Endrin Ke...	7.894	9.841f	194.7E6	56960523	91.227	83.057

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

9.6.23

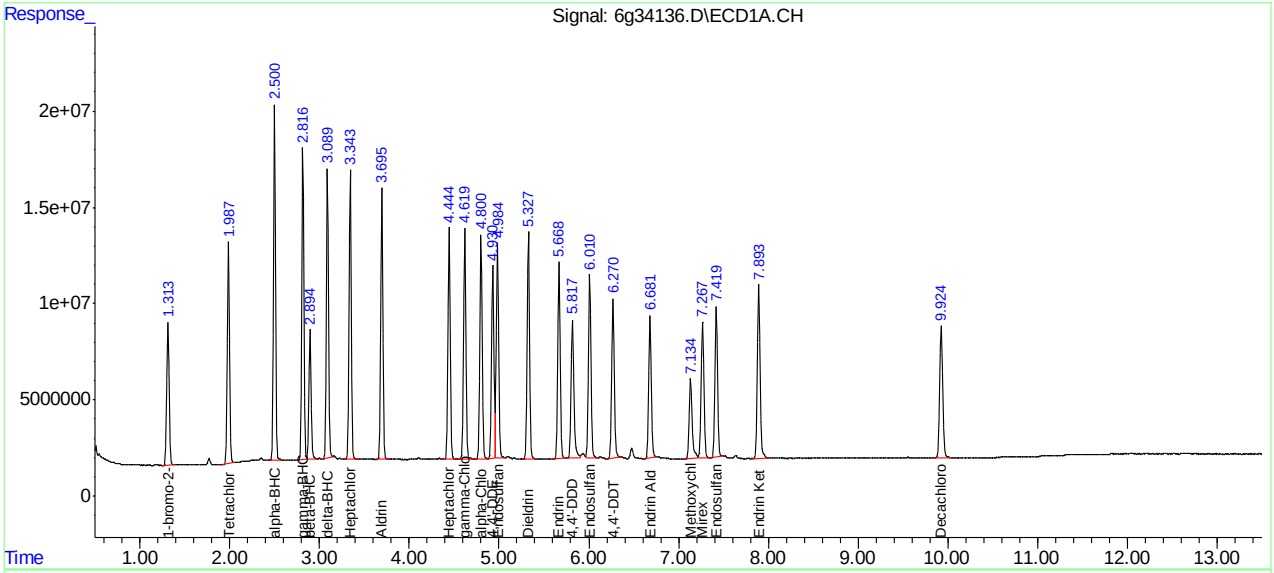
9

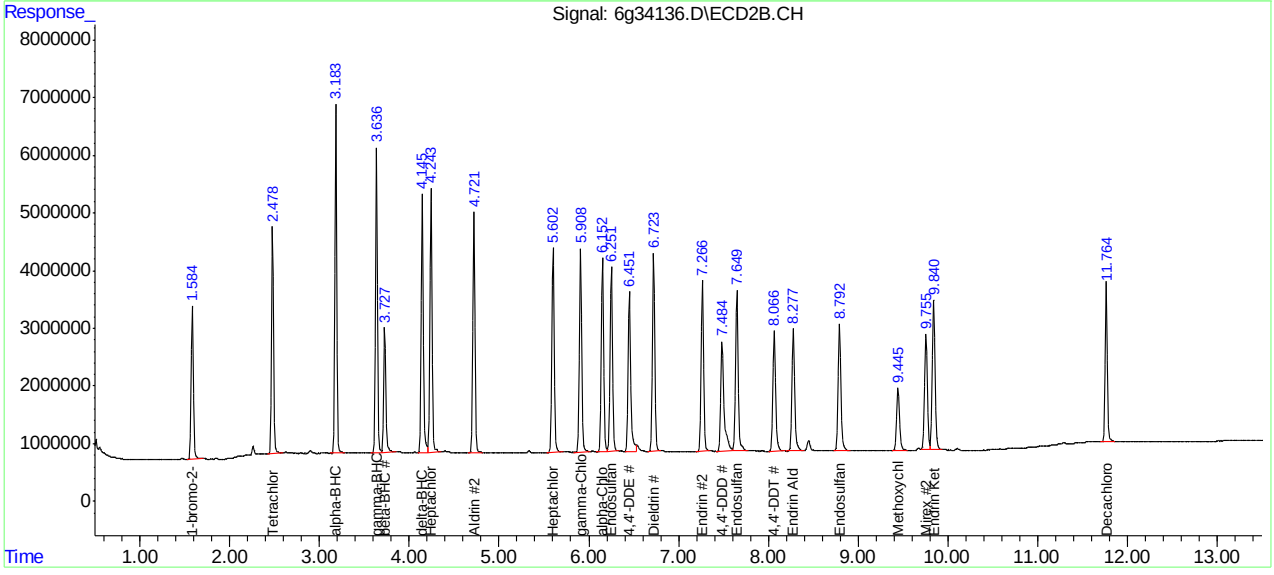
Quantitation Report (QT Reviewed)

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 JC19023

Manual Integration Approval Summary

Sample Number:	G6G987-IC987	**Method:**	SW846 8081B
Lab FileID:	6G34136.D	**Analyst approved:**	04/18/16 12:23 Dhara Saparia
Injection Time:	04/14/16 17:27	**Supervisor approved:**	04/18/16 14:12 Gwendolyn Burns

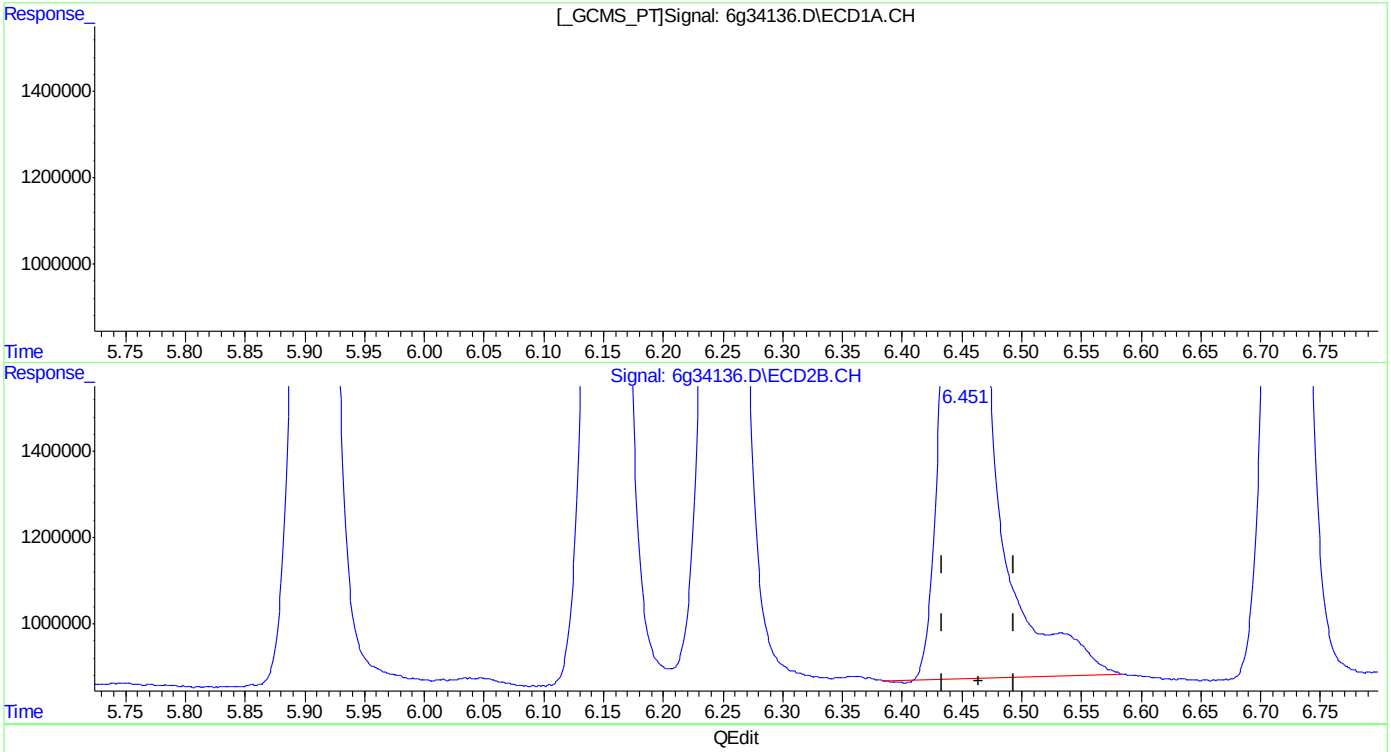
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	2	6.45	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34136.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 5:27 pm
Operator : dharas
Sample : ic987-75
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:24:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(13) 4,4'-DDE (B)
4.931min 93.299PPB
response 184683755

(13) 4,4'-DDE #2 (B)
6.451min 76.395PPB
response 57463273

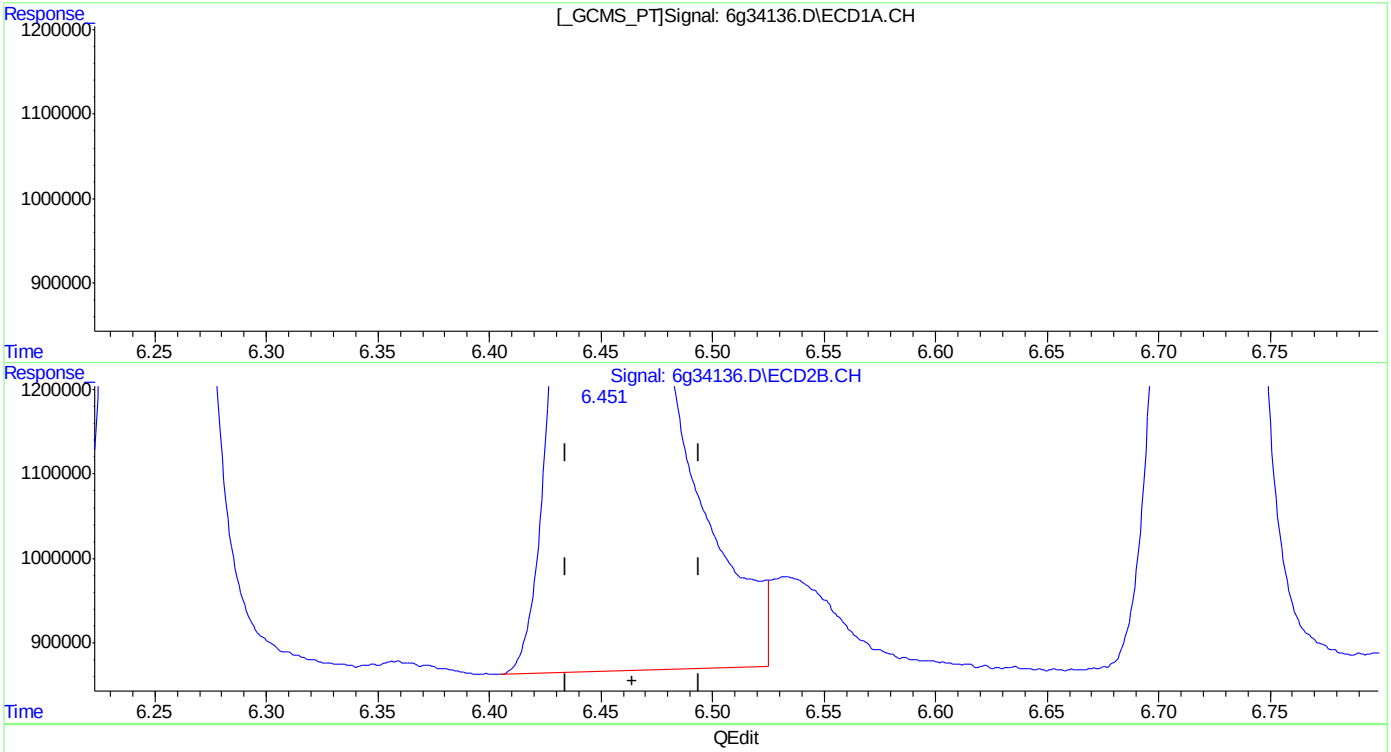
(+) = Expected Retention Time
6PST987.M Mon Apr 18 10:25:21 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34136.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 5:27 pm
Operator : dharas
Sample : ic987-75
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:24:18 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(13) 4,4'-DDE (B)
4.931min 93.299PPB
response 184683755

(13) 4,4'-DDE #2 (B)
6.451min 74.382PPB m
response 55949391

(+) = Expected Retention Time

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/18/16 14:12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34137.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 5:44 pm
Operator : dharas
Sample : ic987-100
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:19:28 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
1) I	1-bromo-2...	1.313	1.584	144.2E6	47061020	50.000	50.000
	System Monitoring Compounds						
2) SAB	Tetrachlo...	1.987	2.478	272.5E6	83192568	106.915	95.654
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 267.29%#	239.14%#
24) SAB	Decachlor...	9.925	11.764	218.5E6	61817376	96.056	96.252
	Spiked Amount	40.000			Recovery	= 240.14%	240.63%
	Target Compounds						
3) A	alpha-BHC	2.500	3.183	405.7E6	120.6E6	126.925	113.257
4) MA	gamma-BHC	2.814	3.635	363.8E6	109.3E6	122.801	111.008
5) MA	Heptachlor	3.343	4.244	347.0E6	103.8E6	119.655	109.162
6) B	beta-BHC	2.894	3.727	155.8E6	49110274	106.406	100.652
7) B	delta-BHC	3.089	4.145	345.0E6	103.0E6	130.262	116.398
8) MB	Aldrin	3.695	4.721	328.0E6	97370488	119.971	105.568
9) B	Heptachlo...	4.444	5.603	293.6E6	88909536	113.171	102.795
10) B	gamma-Chl...	4.618	5.909	299.9E6	86940726	112.581	102.863
11) B	alpha-Chl...	4.800	6.152	292.8E6	85054640	111.873	100.435
12) A	Endosulfan I	4.983	6.251	288.9E6	81968430	108.152	99.285
13) B	4,4'-DDE	4.931	6.452	258.4E6	77237419	128.766	101.535m
14) MA	Dieldrin	5.328	6.723	295.4E6	85669631	116.508	101.256
15) MA	Endrin	5.667	7.267	264.1E6	77041181	114.962	103.046
16) A	4,4'-DDD	5.818	7.484	214.3E6	66667046	122.739	95.573
17) B	Endosulfa...	6.011	7.649	257.1E6	76718084	111.662	99.284
18) MA	4,4'-DDT	6.270	8.066	237.9E6	61734502	129.179	133.453
19) B	Endrin Al...	6.683	8.277	208.9E6	60964018	112.232	98.027
20) B	Endosulfa...	7.419	8.792f	220.0E6	64603260	111.082	99.599
21) A	Methoxychlor	7.134f	9.444f	127.3E6	33797951	121.808	138.128
22)	Mirex	7.267	9.756	206.5E6	58928864	94.978	89.507
23) B	Endrin Ke...	7.893	9.841f	267.8E6	77889496	123.785	112.304

SemiQuant Compounds - Not Calibrated on this Instrument

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

9.6.24

9

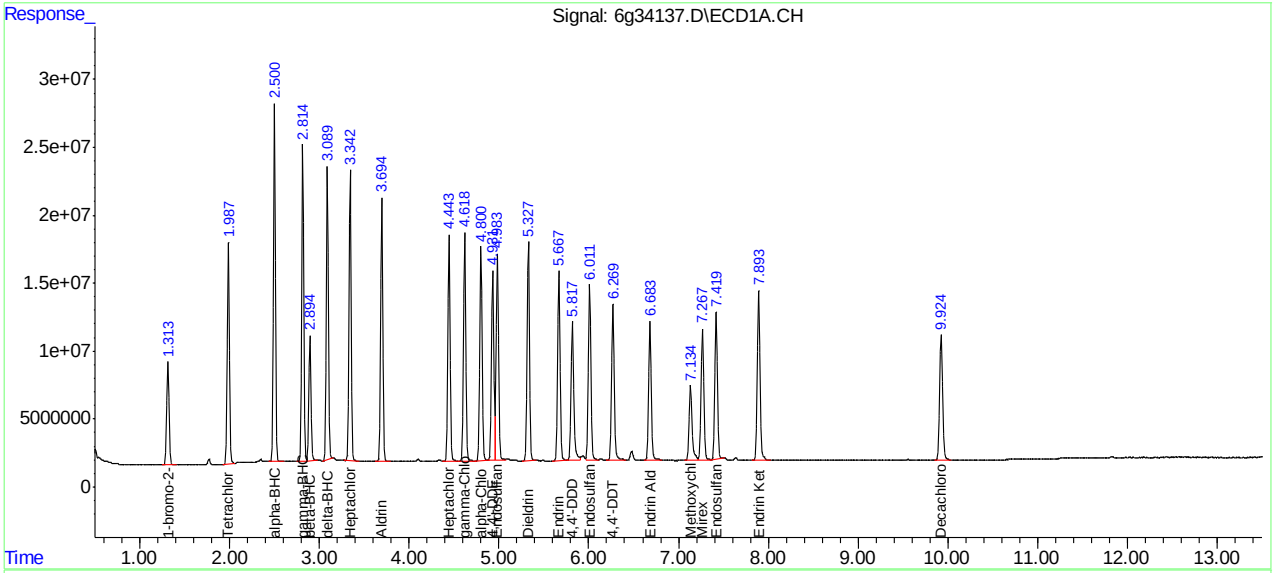
SGS ACCUTEST JC19023

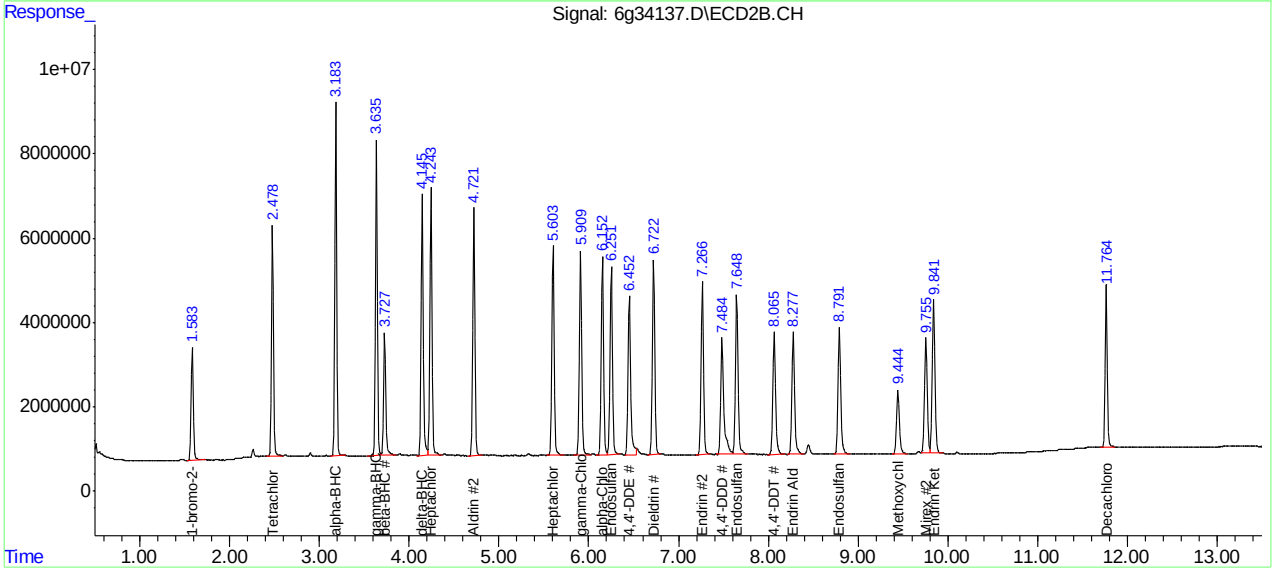
Quantitation Report (QT Reviewed)

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 JC19023

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

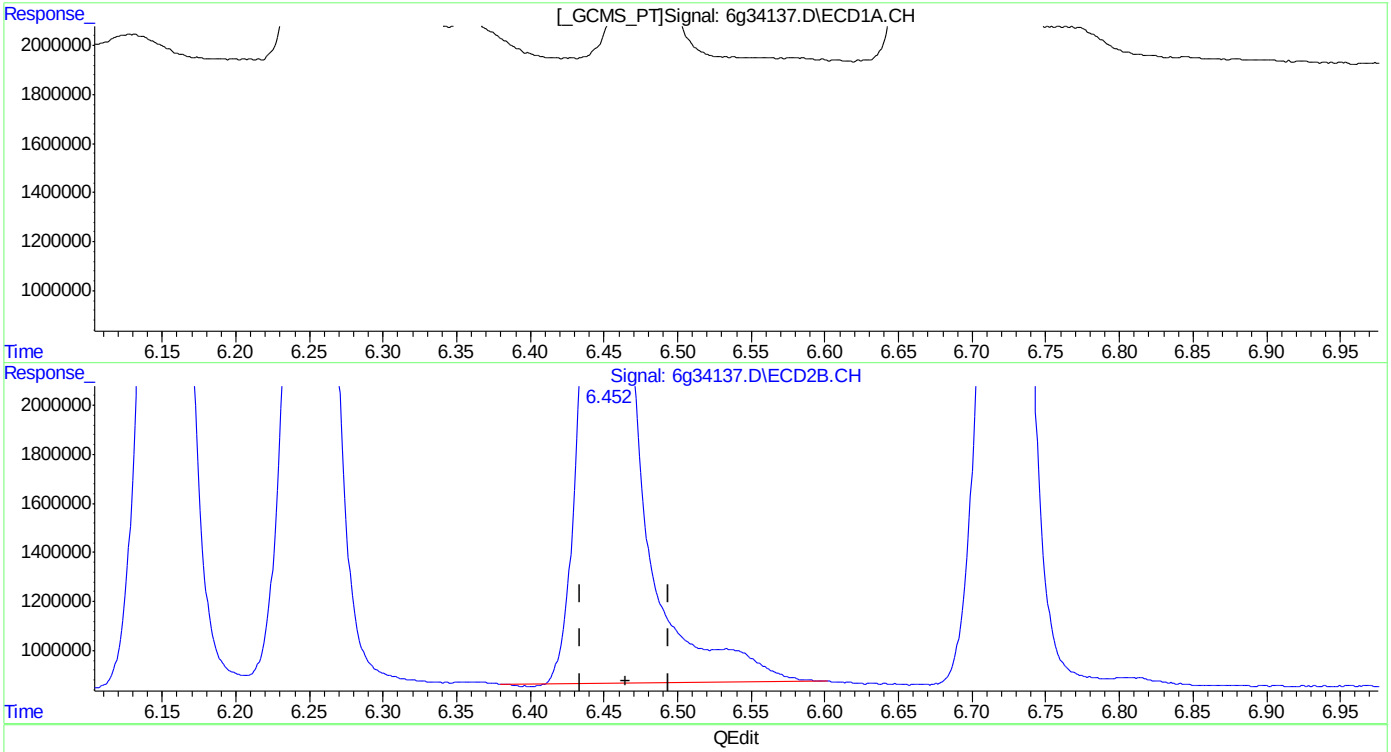
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	2	6.45	Poor instrument integration

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

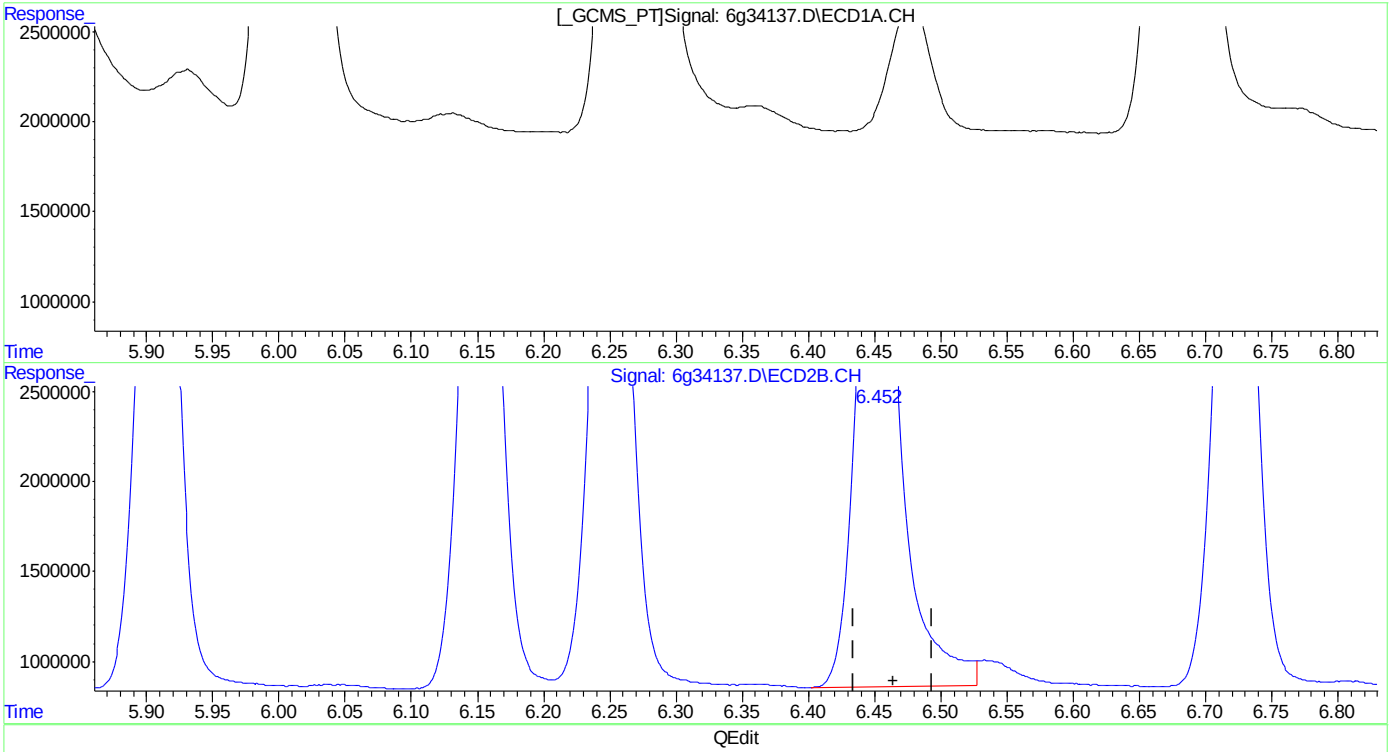
SGS ACCUTEST JC19023

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34137.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 5:44 pm
Operator : dharas
Sample : ic987-100
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 10:25:53 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



(13) 4,4'-DDE (B)
4.931min 128.766PPB
response 258364552

(13) 4,4'-DDE #2 (B)
6.452min 101.535PPB m
response 77237419

(+) = Expected Retention Time

Manual Integrations
APPROVED
(compounds with "m" flag)
Gwendolyn Burns
04/18/16 14:12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34138.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 6:00 pm
Operator : dharas
Sample : ic987-500
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:20:42 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Thu Apr 07 09:58:03 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um

	Compound	RT#1	RT#2	Resp#1	Resp#2	PPB	PPB
	Internal Standards						
31) I	1-bromo-2...	1.313	1.584	141.3E6	46235840	50.000	50.000
	System Monitoring Compounds						
	Target Compounds						
32)	Chlordane...	3.248	4.035	43632507	14394923	536.976	540.471
33)	Chlordane...	3.846	4.933	57942819	17415921	527.490	558.186
34)	Chlordane...	4.619	5.908	185.4E6	52343416	527.100	565.289
35)	Chlordane...	4.793	6.152	290.8E6	87553858	519.746	550.227m
36)	Chlordane...	5.916	7.734	45769339	13981389	536.773	553.249
	SemiQuant Compounds - Not Calibrated on this Instrument						

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

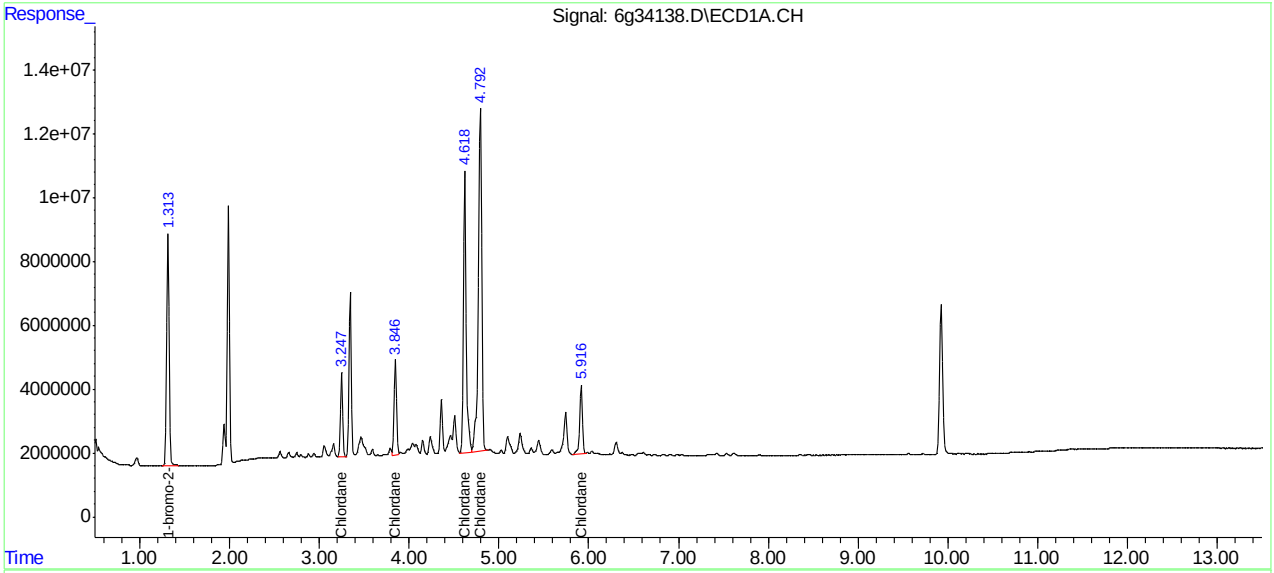
9.6.25
9

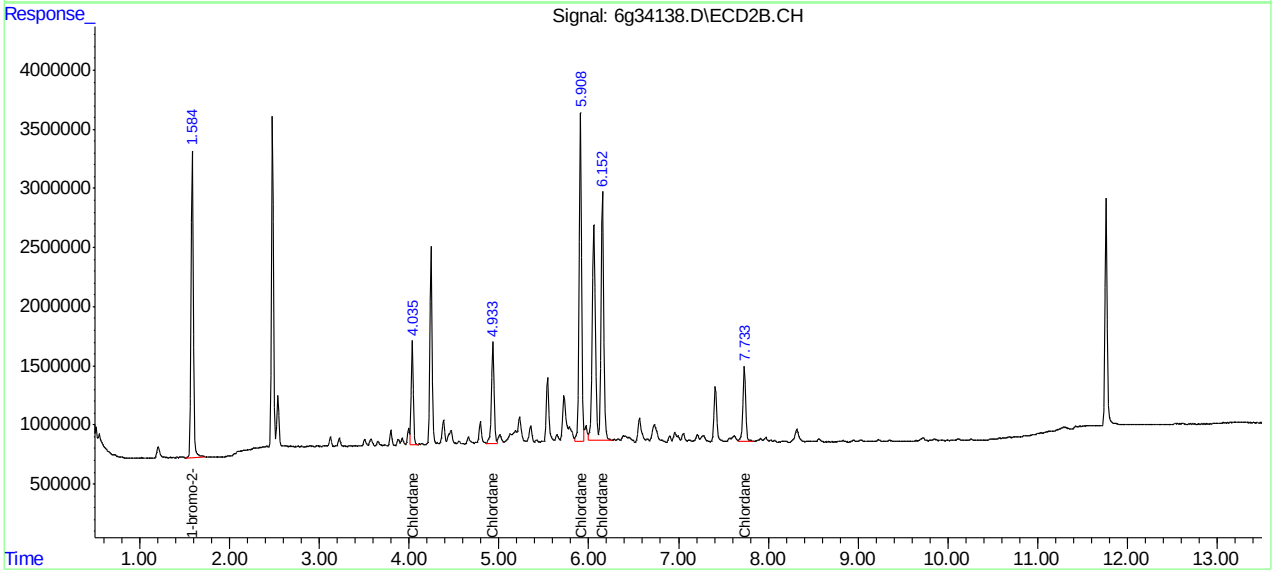
Quantitation Report (QT Reviewed)

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

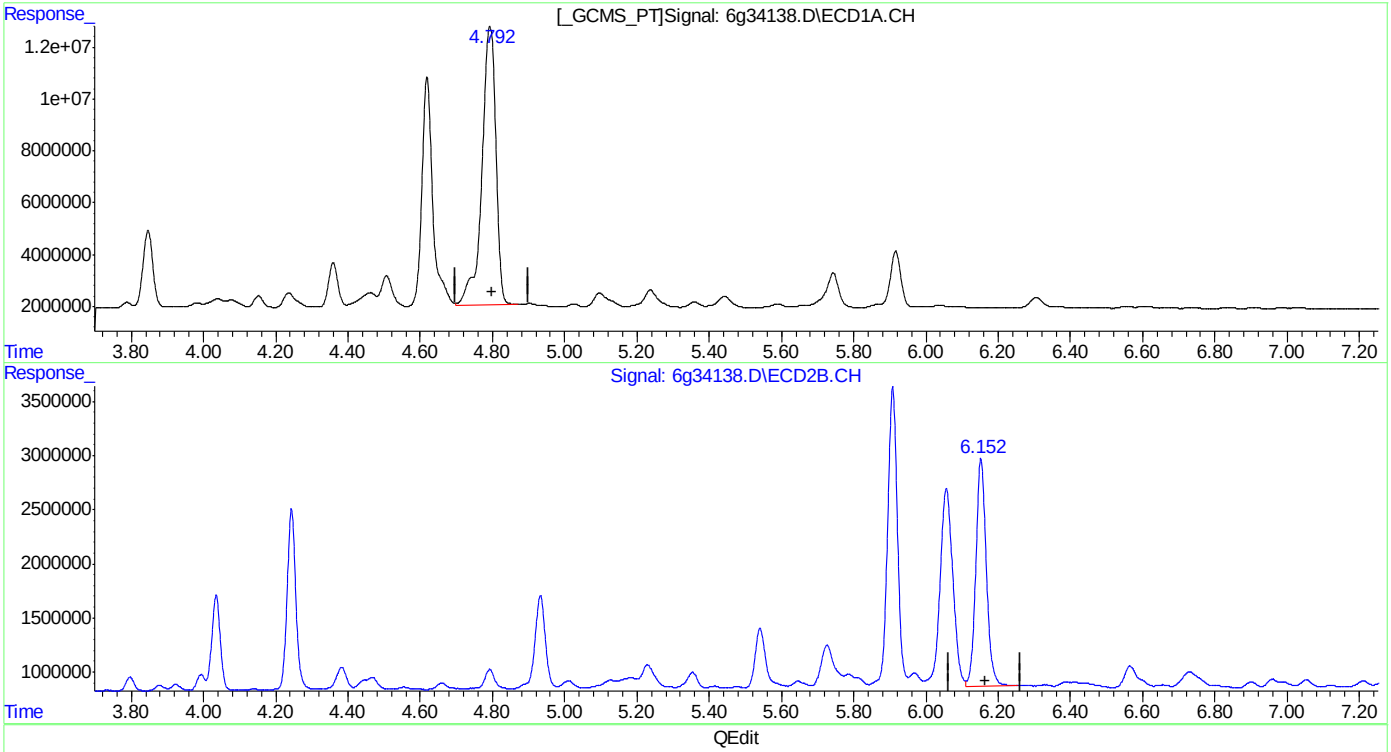
Parameter	CAS	Sig#	R.T. (min.)	Reason
Chlordane-D		2	6.15	Poor instrument integration

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

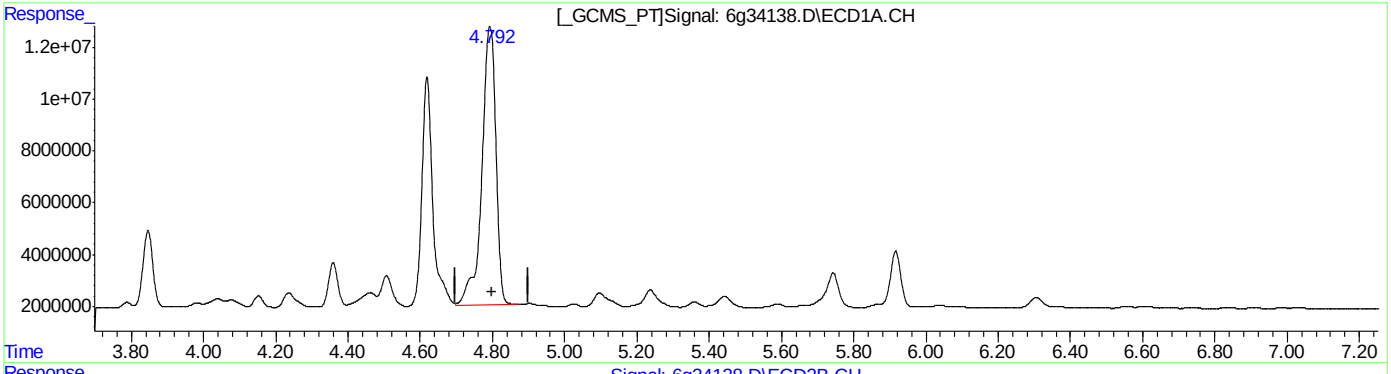
(+) = Expected Retention Time

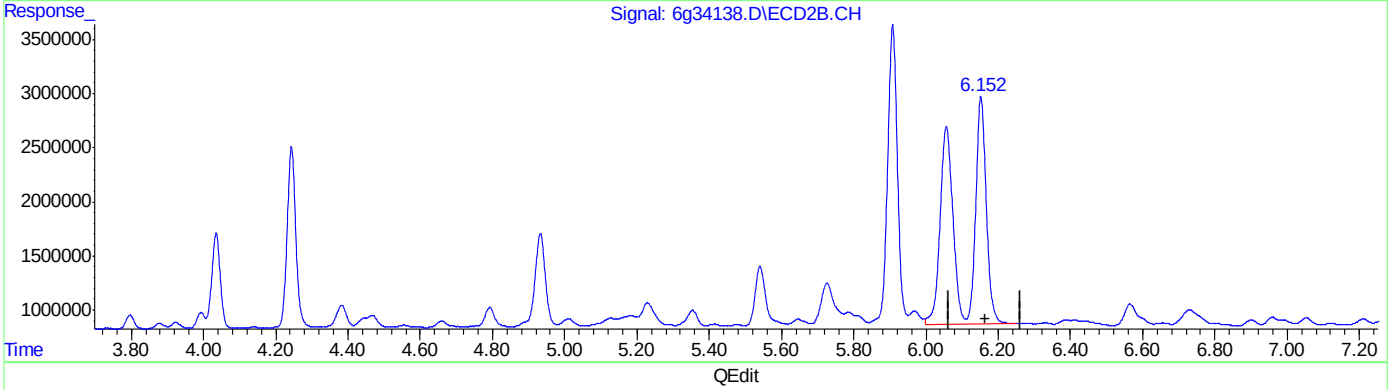
Quantitation Report (Qedit)

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							

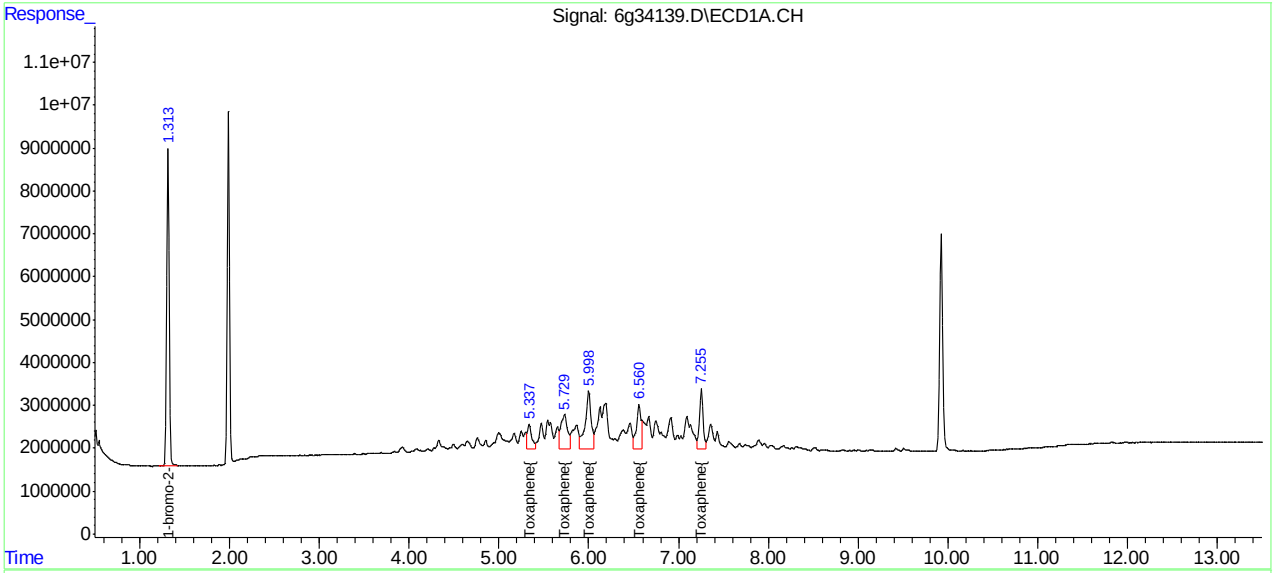
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

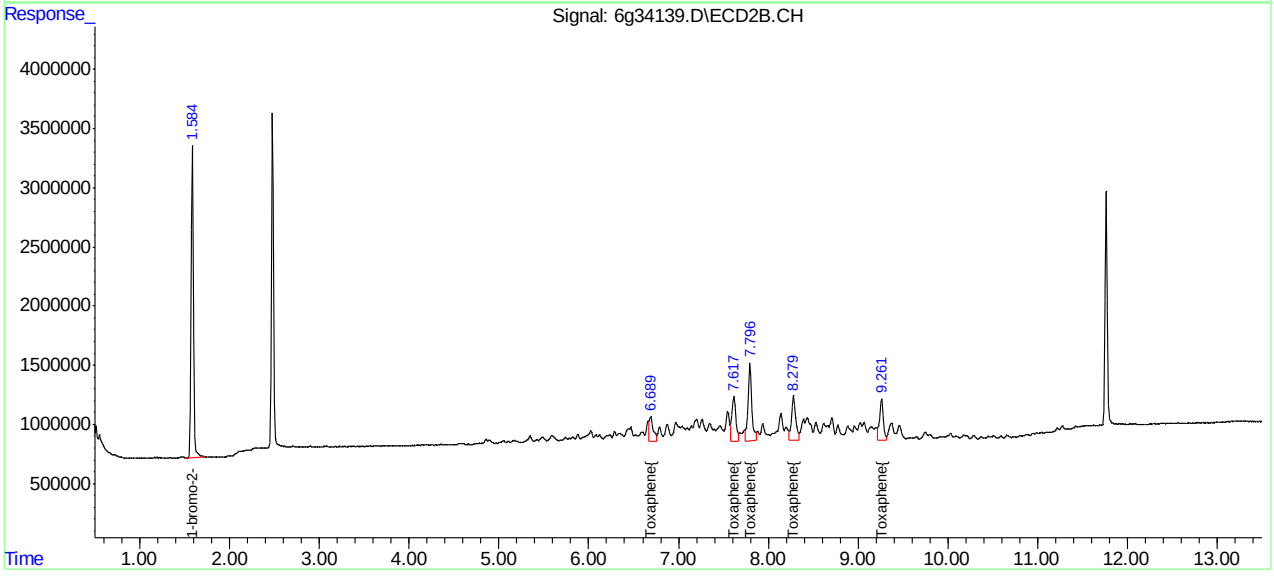
Quantitation Report (QT Reviewed)

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





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

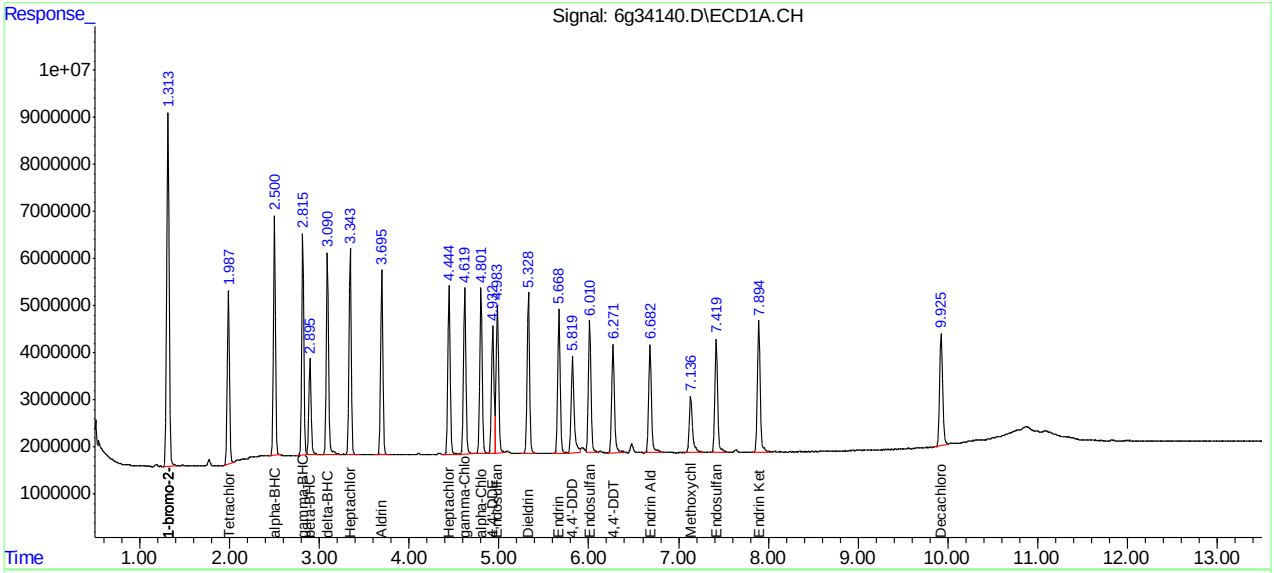
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

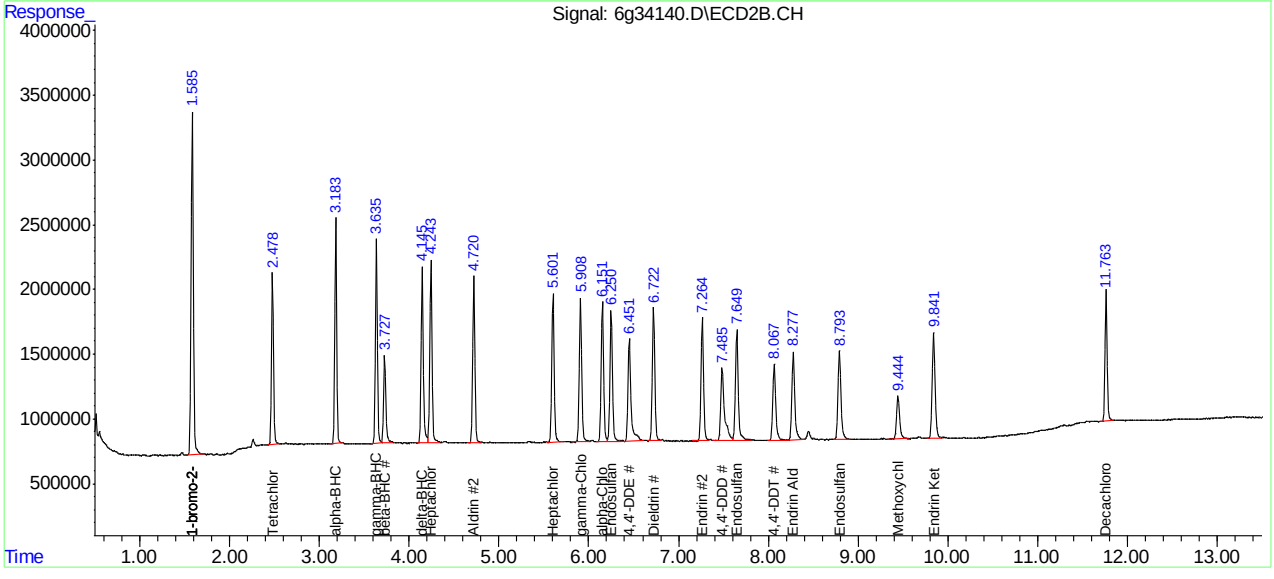
Quantitation Report (QT Reviewed)

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

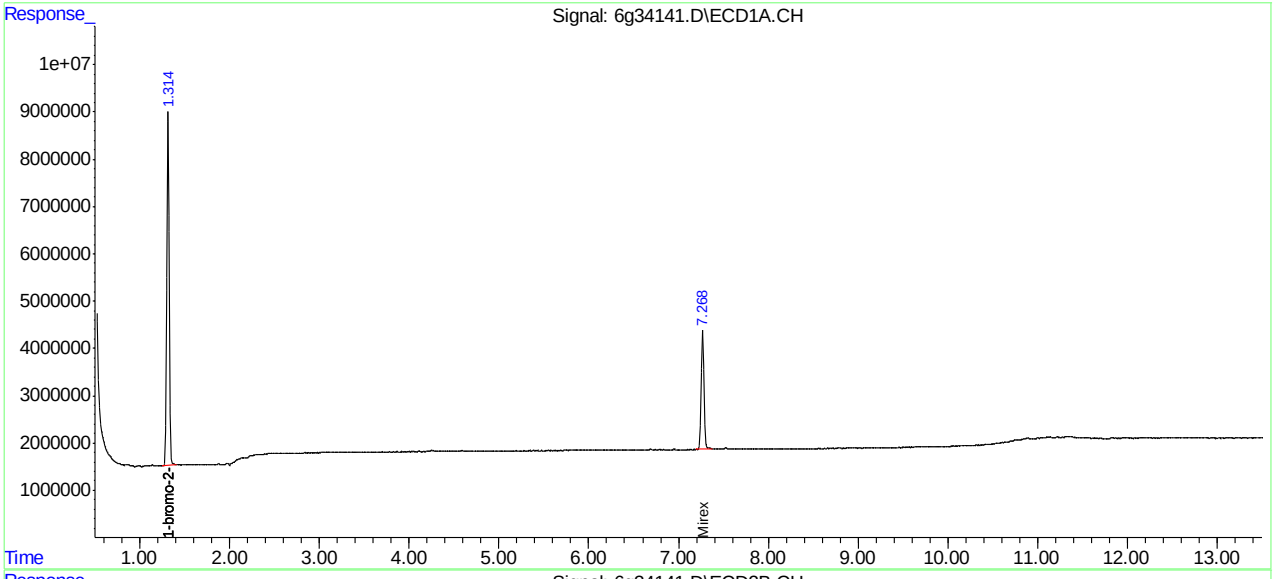
SGS ACCUTEST JC19023

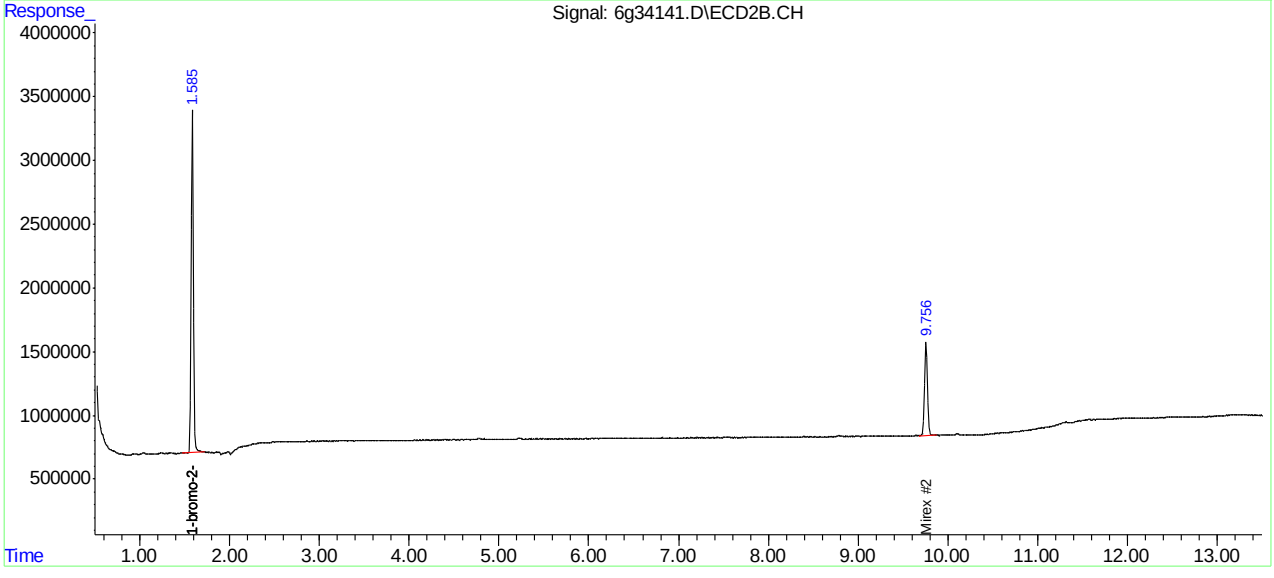
Quantitation Report (QT Reviewed)

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

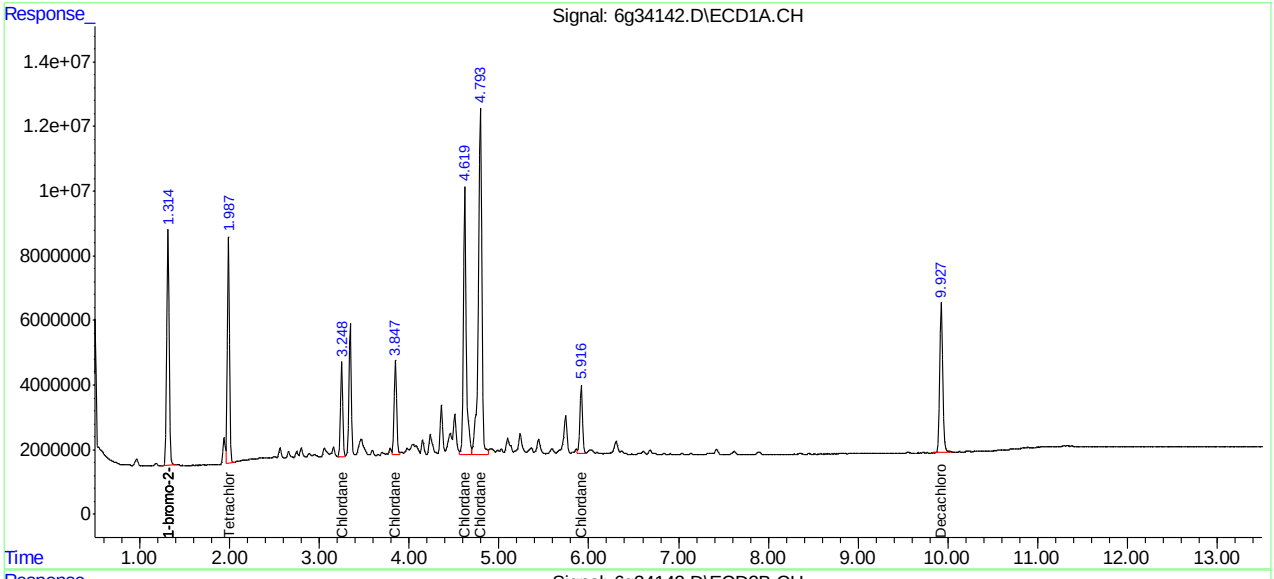
SGS ACCUTEST JC19023

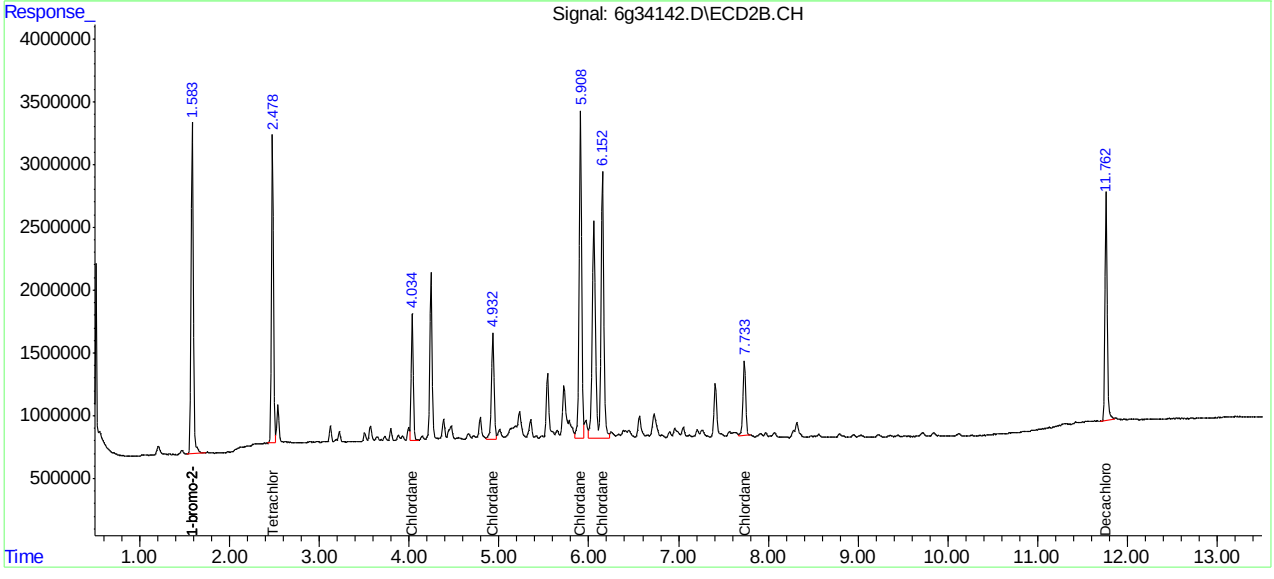
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34142.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 7:06 pm
Operator : dharas
Sample : icv987-500
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:37:25 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





Manual Integration Approval Summary

Sample Number:	G6G987-ICV987	**Method:**	SW846 8081B
Lab FileID:	6G34142.D	**Analyst approved:**	04/18/16 12:23 Dhara Saparia
Injection Time:	04/14/16 19:06	**Supervisor approved:**	04/18/16 14:12 Gwendolyn Burns

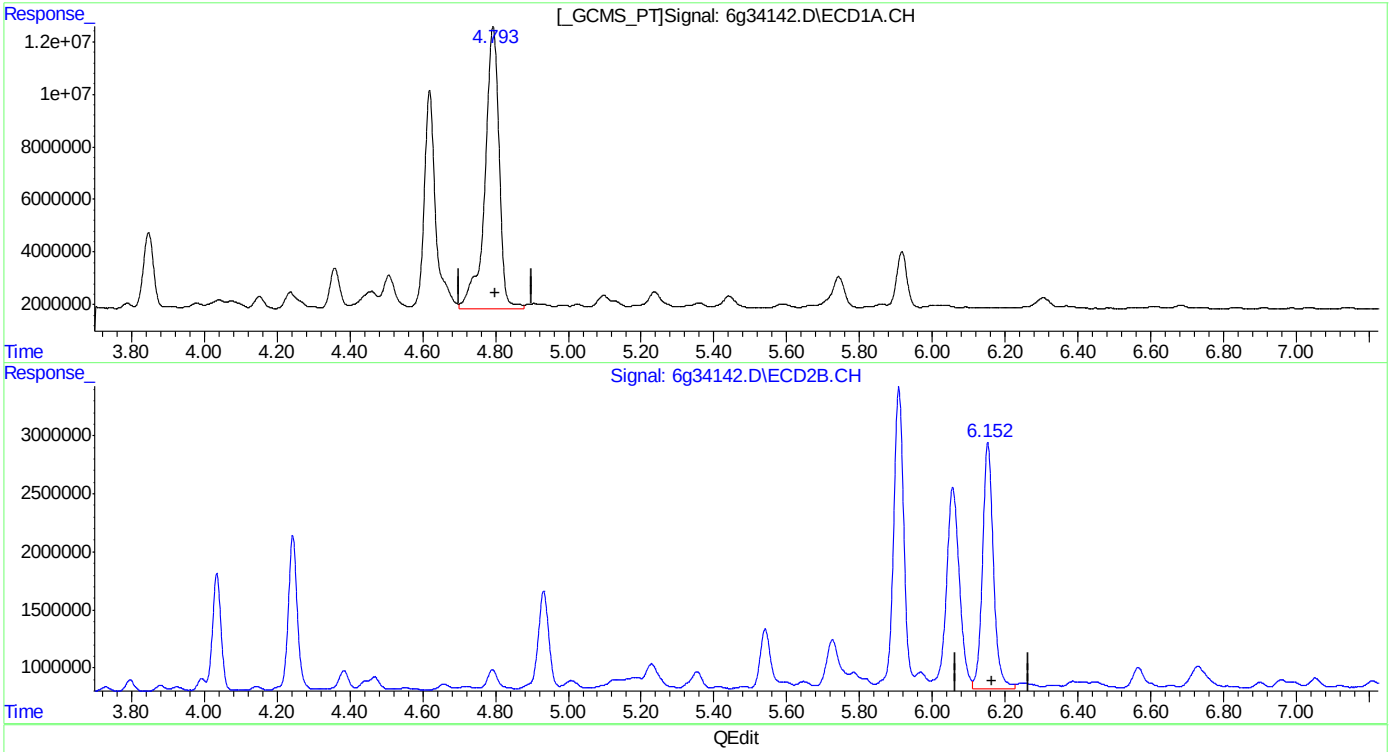
Parameter	CAS	Sig#	R.T. (min.)	Reason
Chlordane-D		2	6.15	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\987\
Data File : 6g34142.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 14 Apr 2016 7:06 pm
Operator : dharas
Sample : icv987-500
Misc : op92908,g6g987,6.8,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 18 11:36:29 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um



QEdit

(35) Chlordane {D}
4.793min 507.996PPB
response 291002130

(35) Chlordane {D} #2
6.152min 250.802PPB
response 44256937

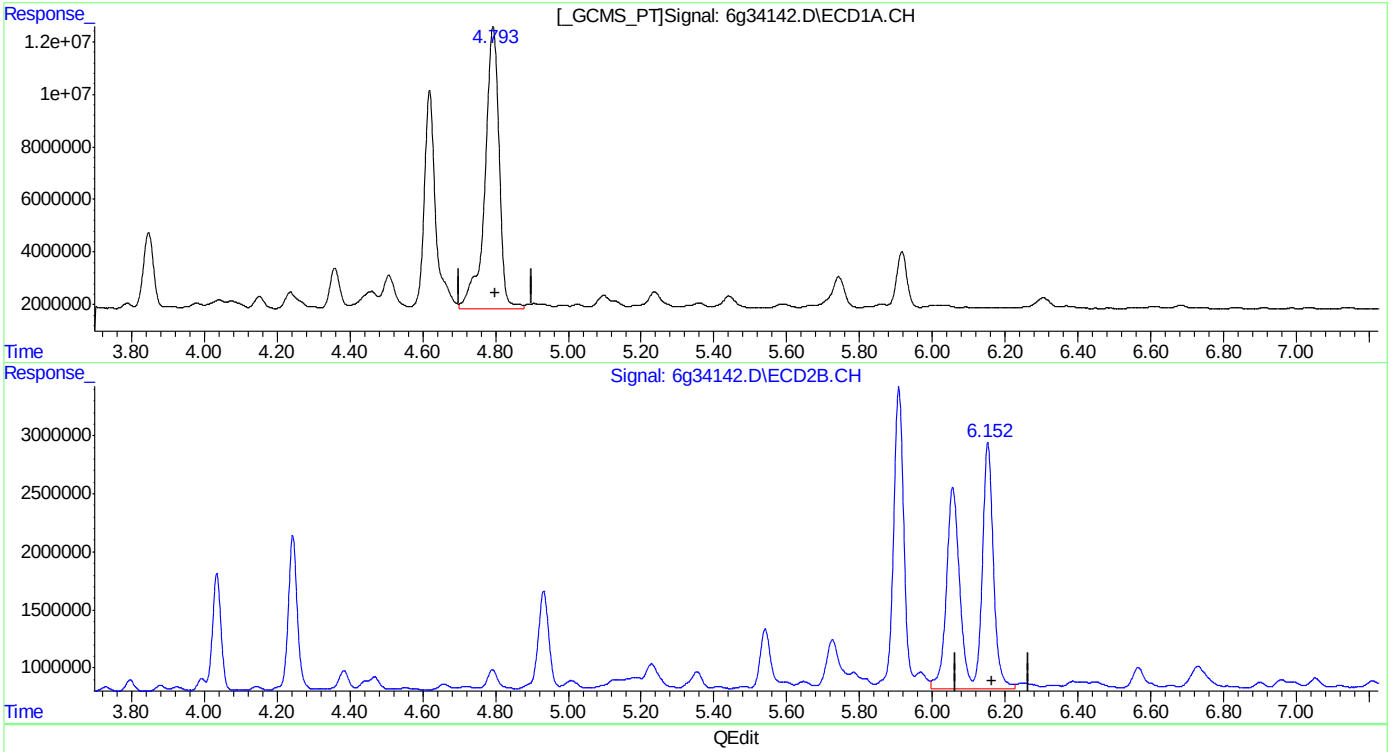
(+) = Expected Retention Time

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

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.

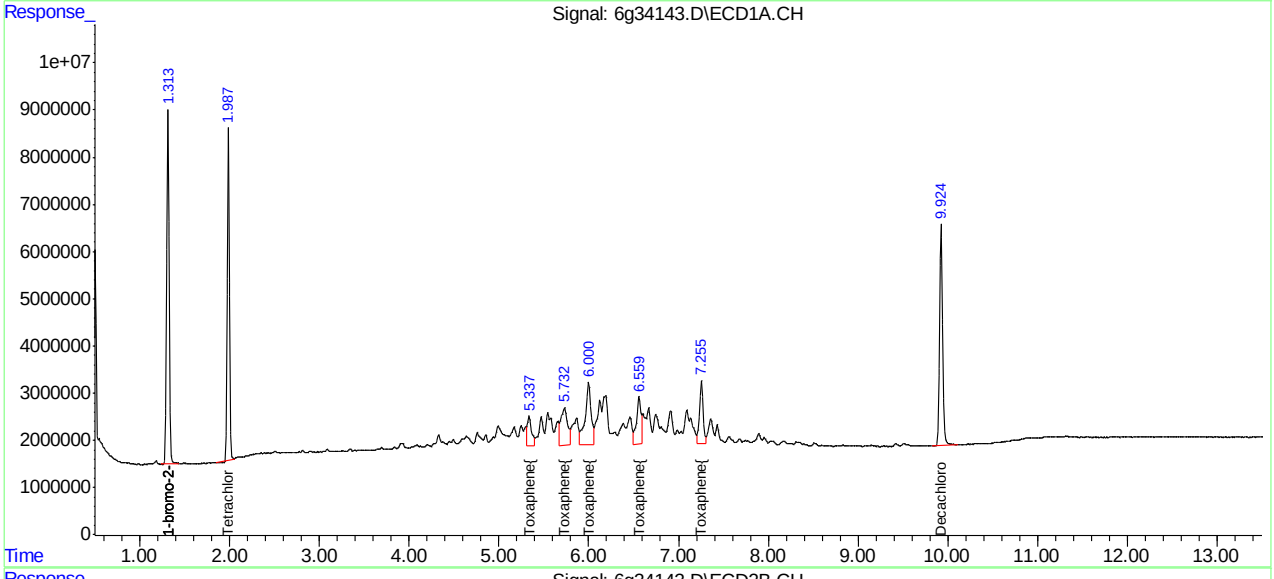
9.6.30
9

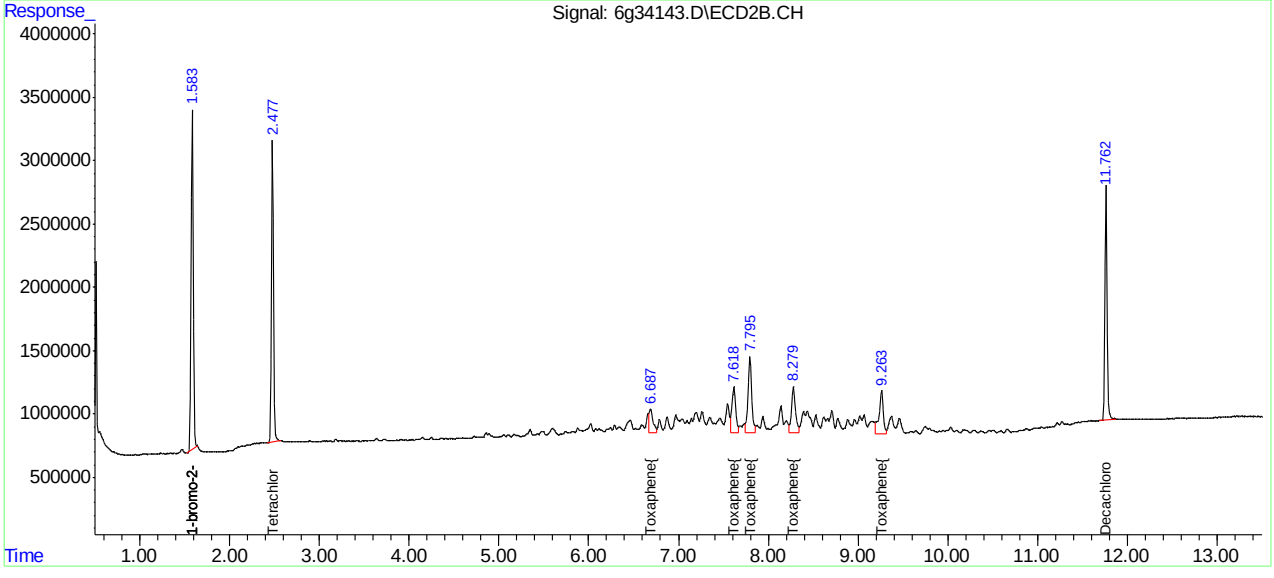
Quantitation Report (QT Reviewed)

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





SGS ACCUTEST JC19023

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

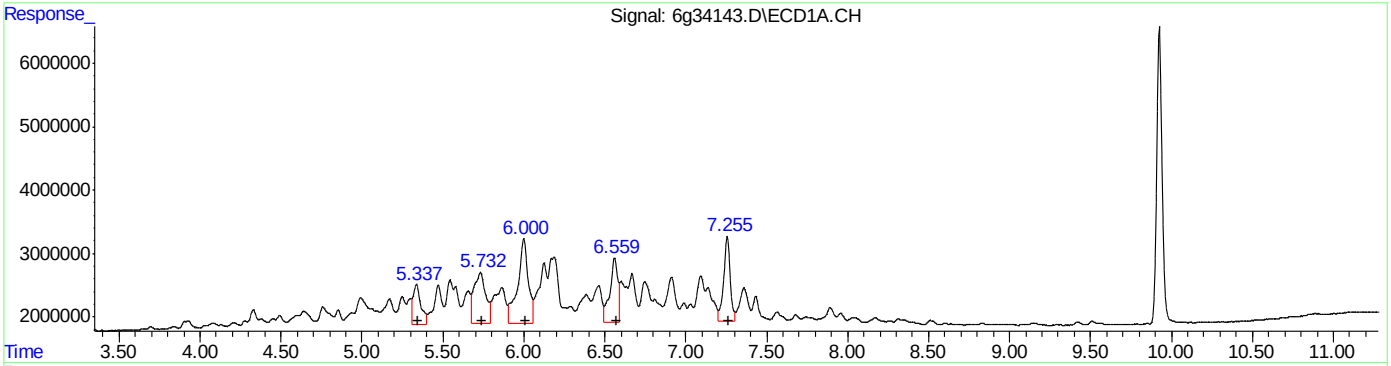
Parameter	CAS	Sig#	R.T. (min.)	Reason
Toxaphene-A		2	6.69	Poor instrument integration

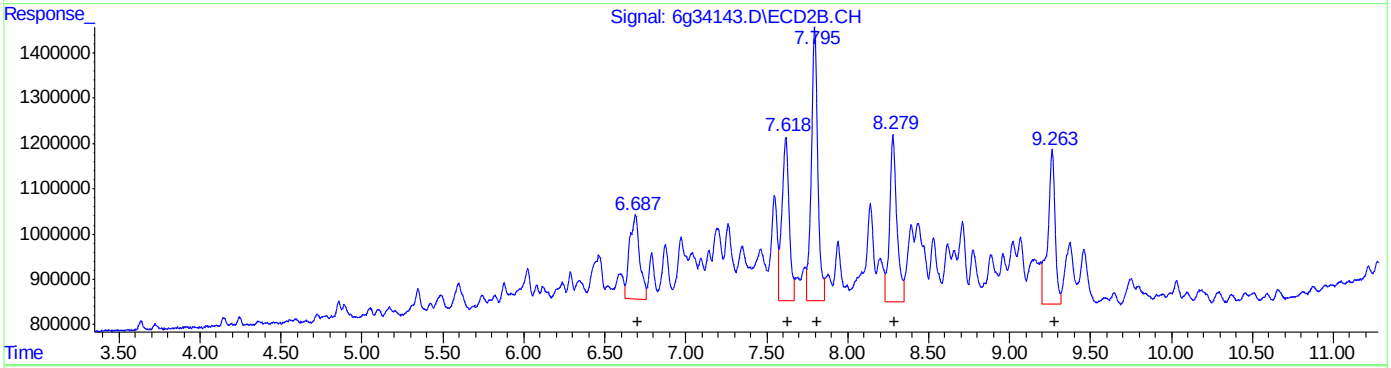
Quantitation Report (Qedit)

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

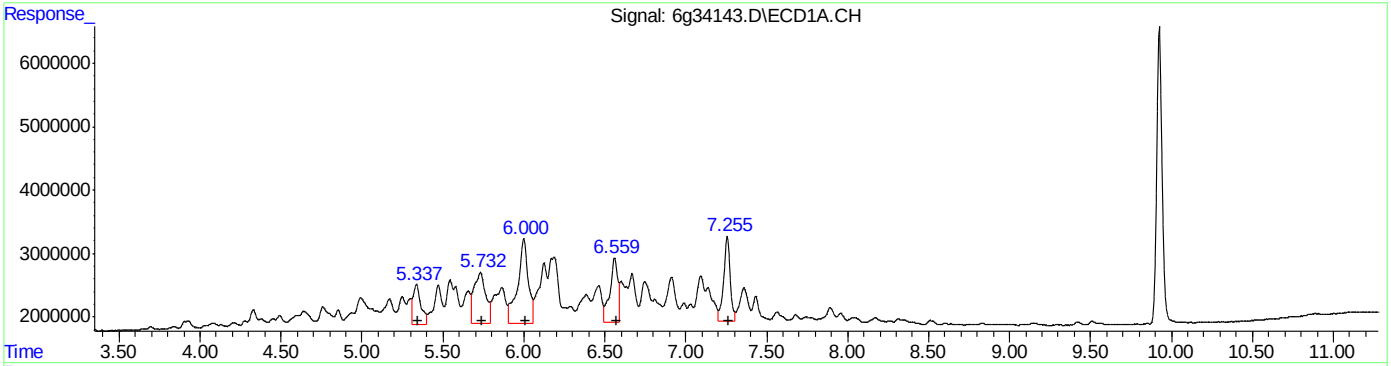
(+) = Expected Retention Time

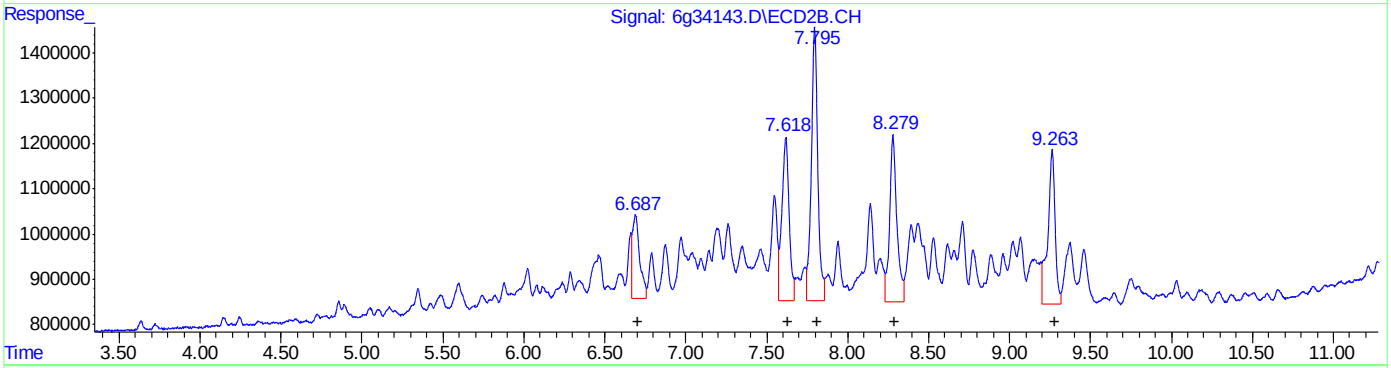
Quantitation Report (Qedit)

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

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/27/16 14:30

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\997\
Data File : 6g34445.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Apr 2016 8:16 am
Operator : brittanp
Sample : cc987-50
Misc : op93363,g6g997,1000,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 27 08:52:40 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...	1.308	1.579	136.5E6	47706272	50.000	50.000
25) I	1-bromo-2...	1.308	1.579	136.5E6	47706272	50.000	50.000
31) I	1-bromo-2...	1.308	1.579	136.5E6	47706272	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.982	2.473	122.7E6	41872556	49.065	48.581
	Spiked Amount	40.000	Range	30 - 150	Recovery	= 122.66%	121.45%
24)	SAB Decachlor...	9.915f	11.756f	106.0E6	32449702	48.735	50.073
	Spiked Amount	40.000			Recovery	= 121.84%	125.18%
	Target Compounds						
3) A	alpha-BHC	2.496	3.176	177.8E6	57420351	55.141	51.135
4) MA	gamma-BHC	2.810	3.628	161.5E6	52800081	53.796	50.219
5) MA	Heptachlor	3.337	4.235f	147.6E6	50236388	48.972	47.278
6) B	beta-BHC	2.890	3.720	73348536	24751435	49.776	48.319
7) B	delta-BHC	3.084	4.136f	144.6E6	50408886	51.701	51.449
8) MB	Aldrin	3.689	4.712f	139.5E6	46156852	50.139	46.715
9) B	Heptachlo...	4.436f	5.591f	130.1E6	42926787	49.945	46.614
10) B	gamma-Chl...	4.611	5.897f	120.3E6	41700677	45.886	46.321
11) B	alpha-Chl...	4.793	6.141f	122.1E6	41564772	46.911	46.473
12) A	Endosulfan I	4.975f	6.239f	124.9E6	40361693	48.625	46.451
13) B	4,4'-DDE	4.923f	6.440f	107.4E6	37646632	49.824	48.813m
14) MA	Dieldrin	5.319f	6.710f	128.6E6	41585207	50.627	46.855
15) MA	Endrin	5.660f	7.253f	120.3E6	38888537	52.211	48.225
16) A	4,4'-DDD	5.810f	7.473f	92042037	33527921	50.484	50.374
17) B	Endosulfa...	6.001f	7.636f	115.0E6	39135951	50.582	49.621
18) MA	4,4'-DDT	6.261f	8.053f	104.7E6	32445326	52.799	53.706
19) B	Endrin Al...	6.672f	8.264f	93212674	31369736	50.296	49.056
20) B	Endosulfa...	7.409f	8.778f	105.9E6	34829944	53.018	50.184
21) A	Methoxychlor	7.126f	9.430f	62973126	18679652	52.981	56.116m
22)	Mirex	7.259f	9.741f	99106983	32279997	48.680	47.236
23) B	Endrin Ke...	7.883f	9.826f	127.1E6	40518987	53.520	49.947m

SemiQuant Compounds - Not Calibrated on this Instrument

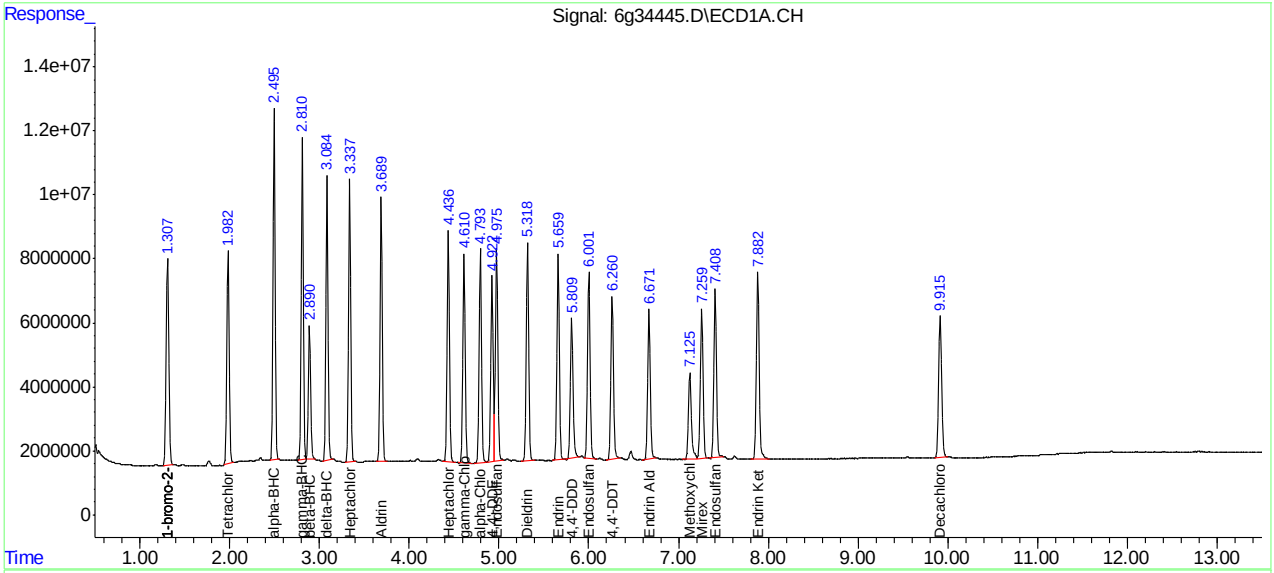
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

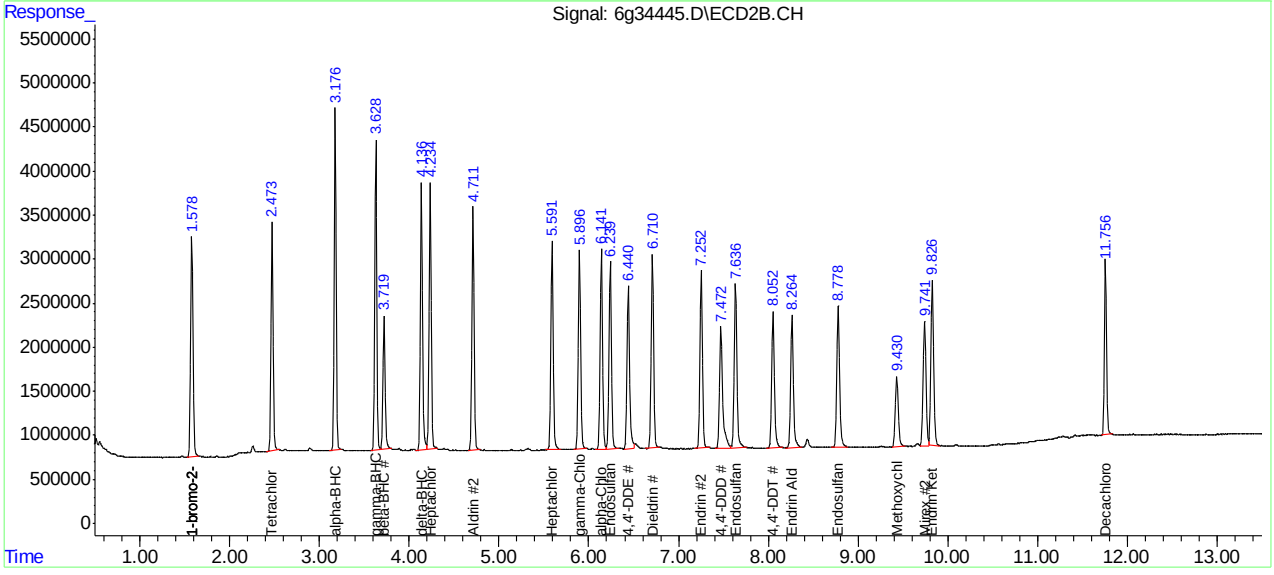
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\997\
Data File : 6g34445.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Apr 2016 8:16 am
Operator : brittanp
Sample : cc987-50
Misc : op93363,g6g997,1000,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 27 08:52:40 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Mon Apr 18 11:27:24 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #1 Phase : RTXCLP I Signal #2 Phase: RTX-CLP II
Signal #1 Info : 30mx.32mmx.50um Signal #2 Info : 30m x .32mm x .25um





SGS ACCUTEST JC19023

Manual Integration Approval Summary

Sample Number:	G6G997-CC987	**Method:**	EPA 608
Lab FileID:	6G34445.D	**Analyst approved:**	04/27/16 12:19 Dhara Saparia
Injection Time:	04/27/16 08:16	**Supervisor approved:**	04/27/16 14:30 Gwendolyn Burns

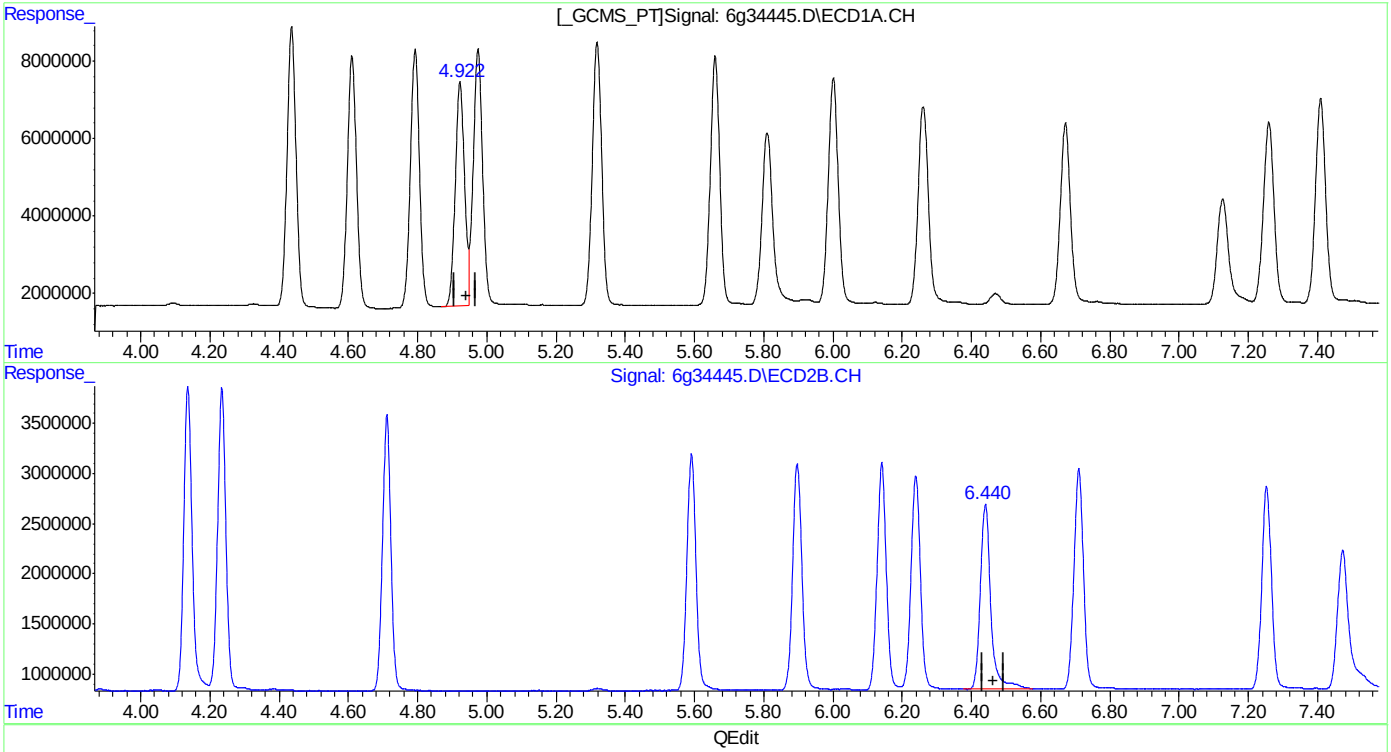
Parameter	CAS	Sig#	R.T. (min.)	Reason
4,4'-DDE	72-55-9	2	6.44	Poor instrument integration
Methoxychlor	72-43-5	2	9.43	Poor instrument integration
Endrin ketone	53494-70-5	2	9.83	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\997\
Data File : 6g34445.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Apr 2016 8:16 am
Operator : brittanp
Sample : cc987-50
Misc : op93363,g6g997,1000,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 27 08:29:59 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



(13) 4,4'-DDE (B)
4.923min 49.824PPB
response 107447774

(13) 4,4'-DDE #2 (B)
6.441min 50.262PPB
response 38764375

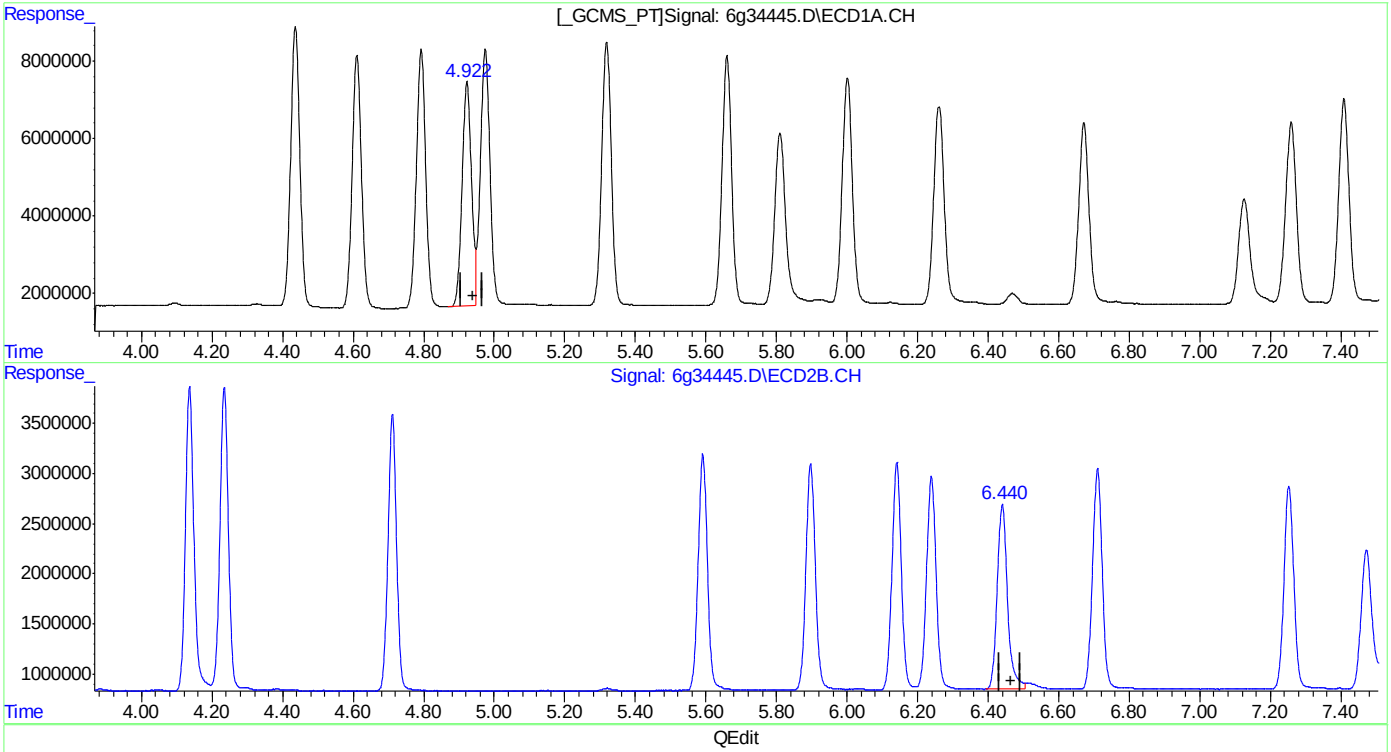
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\997\
Data File : 6g34445.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Apr 2016 8:16 am
Operator : brittanp
Sample : cc987-50
Misc : op93363,g6g997,1000,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 27 08:29:59 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



(13) 4,4'-DDE (B)
4.923min 49.824PPB
response 107447774

(13) 4,4'-DDE #2 (B)
6.440min 48.813PPB m
response 37646632

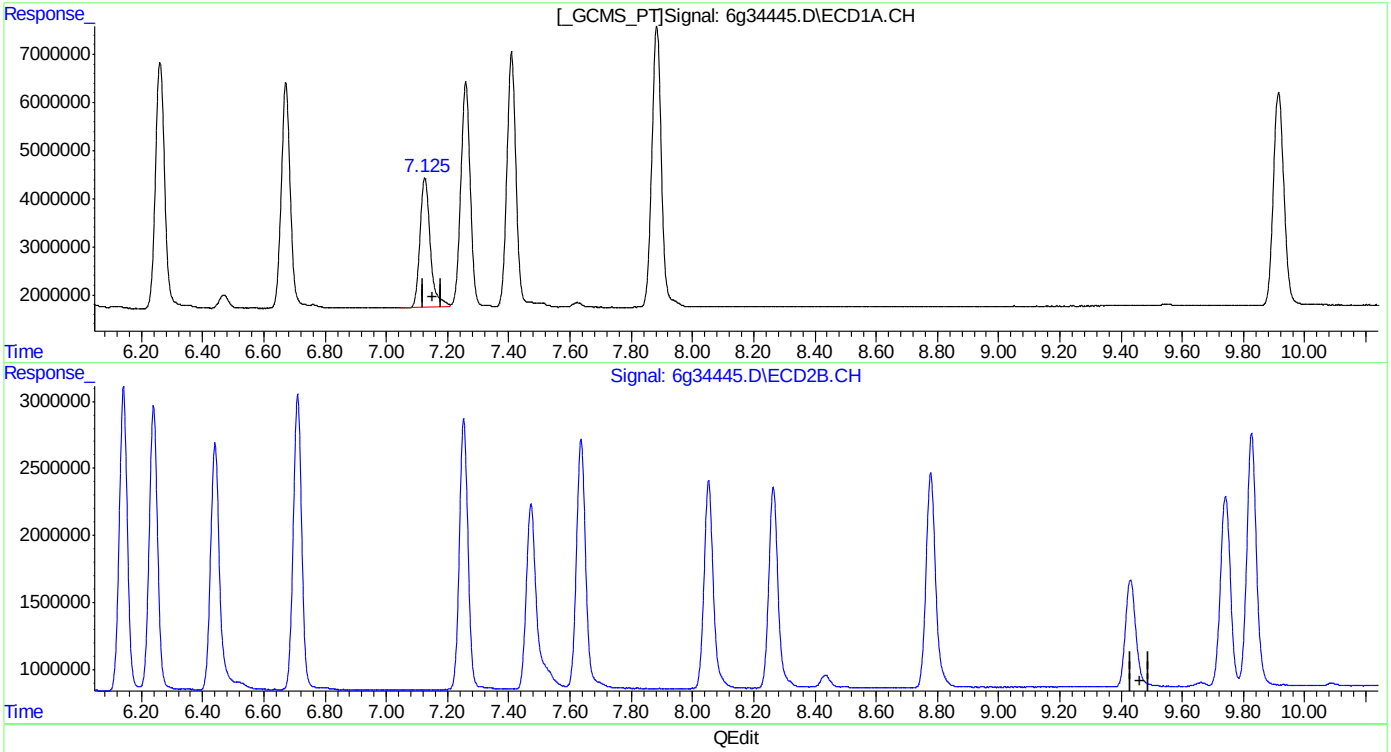
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\997\
Data File : 6g34445.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Apr 2016 8:16 am
Operator : brittanp
Sample : cc987-50
Misc : op93363,g6g997,1000,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 27 08:29:59 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



(21) Methoxychlor (A)
7.126min 52.981PPB
response 62973126

(21) Methoxychlor #2 (A)
0.000min 0.000PPB
response 0

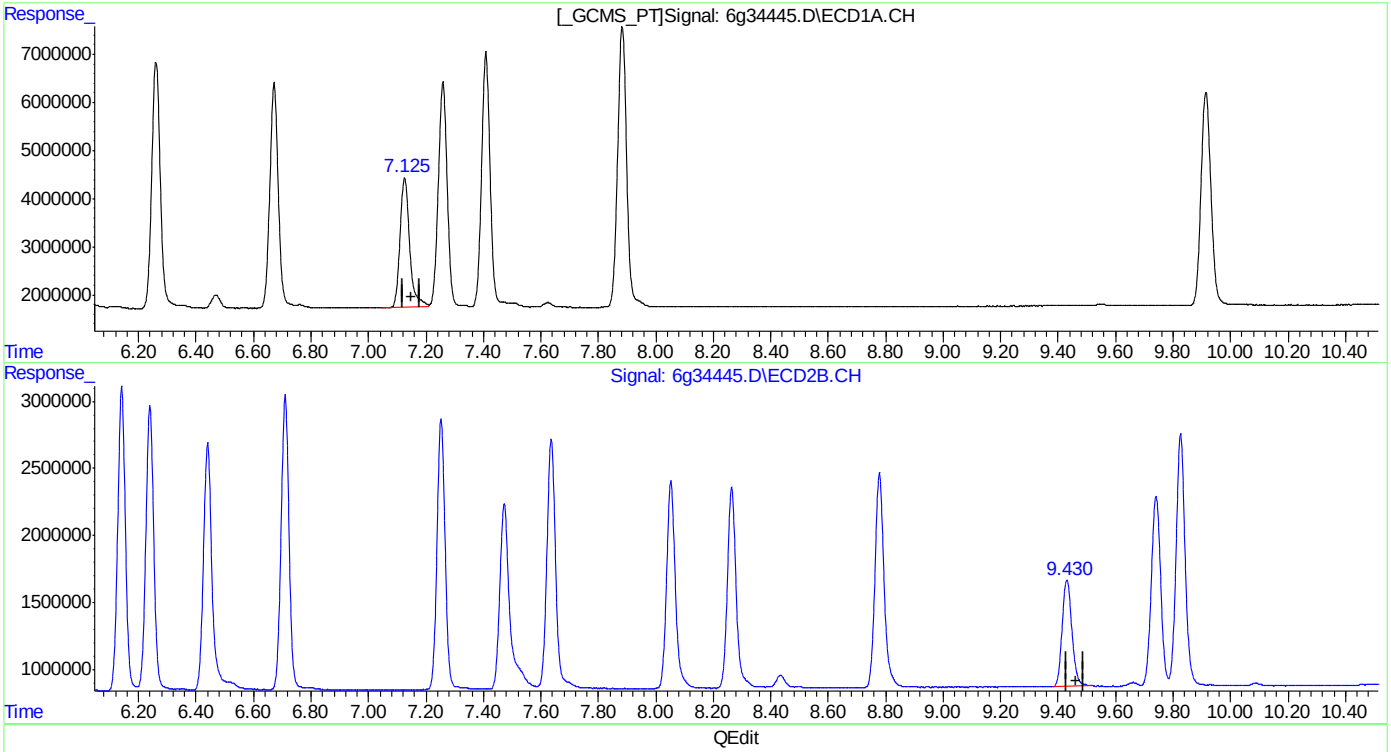
(+) = Expected Retention Time
6PST987.M Wed Apr 27 08:51:46 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\997\
Data File : 6g34445.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Apr 2016 8:16 am
Operator : brittanp
Sample : cc987-50
Misc : op93363,g6g997,1000,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 27 08:29:59 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



(21) Methoxychlor (A)
7.126min 52.981PPB
response 62973126

(21) Methoxychlor #2 (A)
9.430min 56.116PPB m
response 18679652

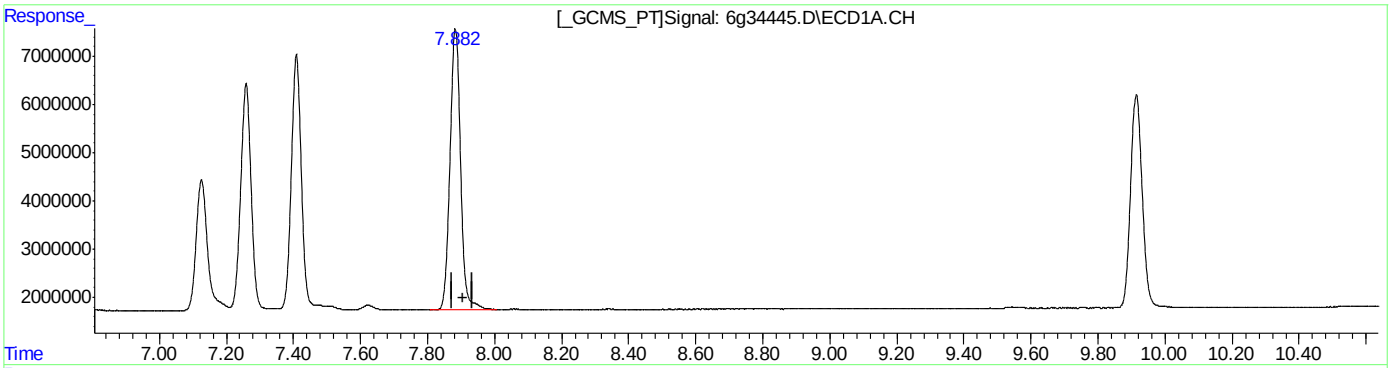
(+) = Expected Retention Time

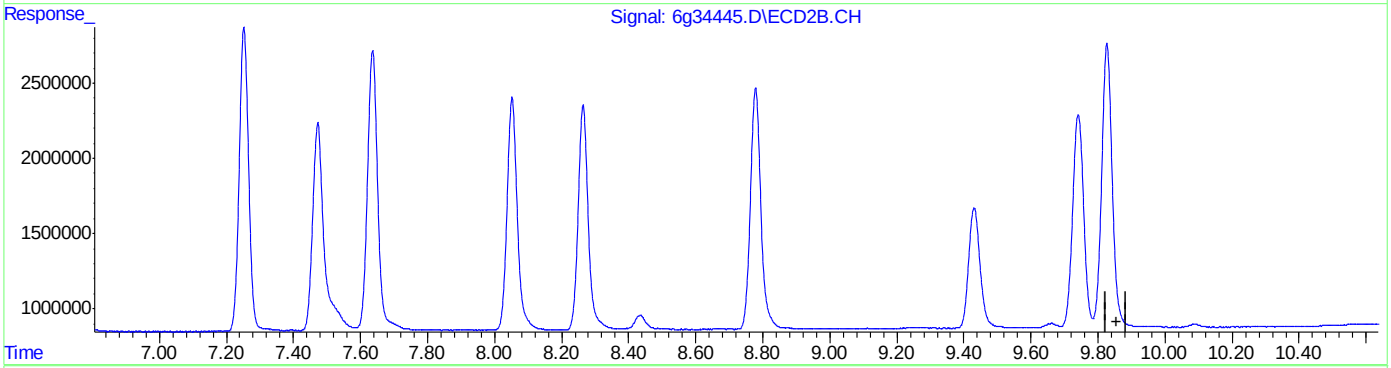
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\997\
Data File : 6g34445.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Apr 2016 8:16 am
Operator : brittanp
Sample : cc987-50
Misc : op93363,g6g997,1000,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 27 08:52:05 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

(23) Endrin Ketone (B)
7.883min 53.520PPB
response 127085794

(23) Endrin Ketone #2 (B)
0.000min 0.000PPB
response 0

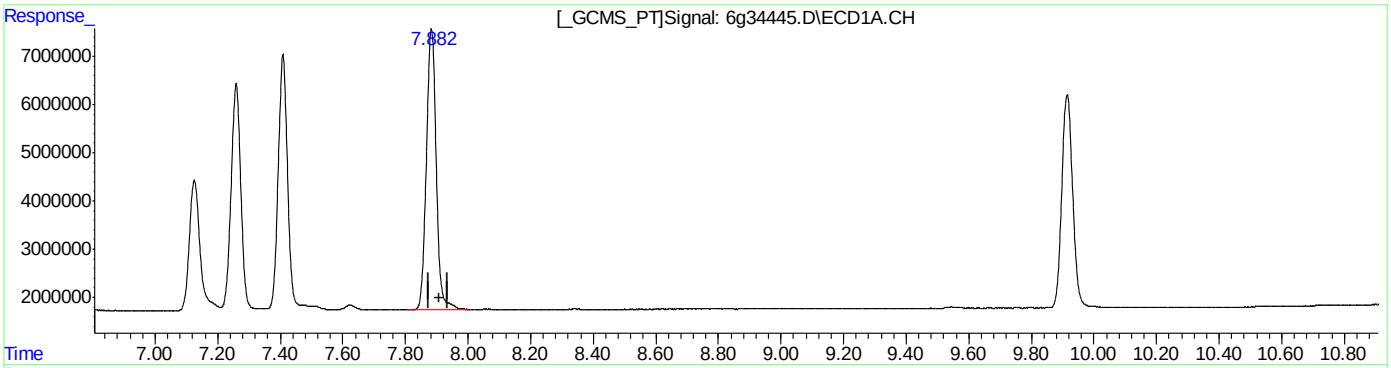
(+) = Expected Retention Time
6PST987.M Wed Apr 27 08:52:36 2016

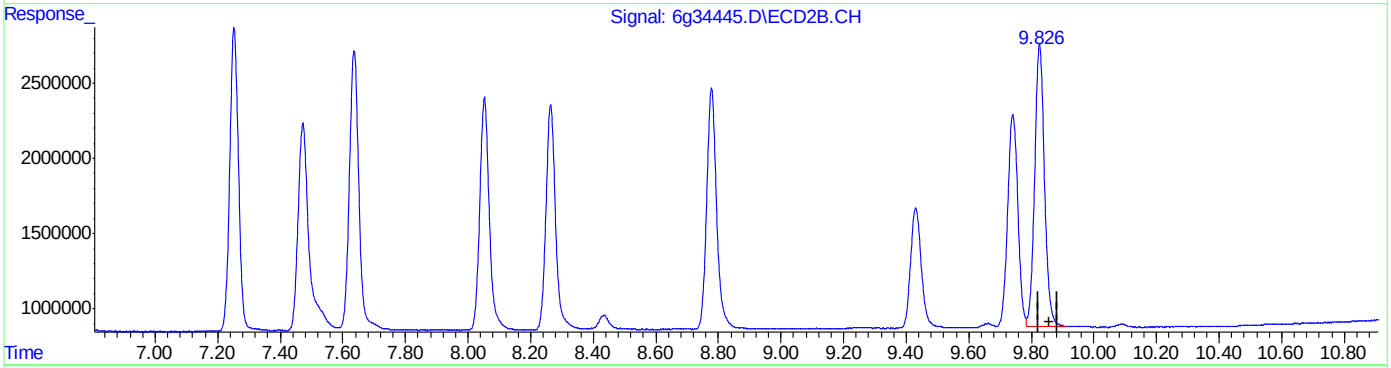
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\997\
Data File : 6g34445.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Apr 2016 8:16 am
Operator : brittanp
Sample : cc987-50
Misc : op93363,g6g997,1000,,,5,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 27 08:52:05 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

(23) Endrin Ketone (B)
7.883min 53.520PPB
response 127085794

(23) Endrin Ketone #2 (B)
9.826min 49.947PPB m
response 40518987

(+) = Expected Retention Time
6PST987.M Wed Apr 27 08:52:45 2016

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 04/28/16 06:38

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\997\
Data File : 6g34464.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Apr 2016 2:45 pm
Operator : dharas
Sample : cc987-25
Misc : op93327,g6g997,16.0,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 27 15:07:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Tue Apr 26 17:50:34 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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	149.9E6	50360941	50.000	50.000
25) I	1-bromo-2...	1.305	1.577	149.9E6	50360941	50.000	50.000
31) I	1-bromo-2...	1.305	1.577	149.9E6	50360941	50.000	50.000
	System Monitoring Compounds						
2)	SAB Tetrachlo...	1.980	2.470	65680576	21687559	23.898	23.836
	Spiked Amount 40.000	Range	30 - 150	Recovery	=	59.75%	59.59%
24)	SAB Decachlor...	9.913	11.754	57460431	17389956	24.044	25.420
	Spiked Amount 40.000			Recovery	=	60.11%	63.55%
	Target Compounds						
3) A	alpha-BHC	2.493	3.174	90318688	29007462	25.492m	24.471
4) MA	gamma-BHC	2.808	3.626	82920820	26685866	25.138	24.044
5) MA	Heptachlor	3.336	4.232	81751660	25935555	24.690	23.122
6) B	beta-BHC	2.888	3.718	38202703	11957942	23.594	22.113
7) B	delta-BHC	3.082	4.135	79711507	25405125	25.930	24.562
8) MB	Aldrin	3.687	4.709	75273664	24067046	24.615	23.074
9) B	Heptachlo...	4.434	5.589	70135132	22291546	24.496	22.930
10) B	gamma-Chl...	4.610	5.895	70116151	21877282	24.335	23.020
11) B	alpha-Chl...	4.791	6.138	70137530	21935673	24.527	23.233
12) A	Endosulfan I	4.973	6.237	69514904	21250985	24.624	23.168
13) B	4,4'-DDE	4.920	6.437	59087664	20017880	24.935	24.587
14) MA	Dieldrin	5.317	6.707	69348653	21949086	24.844	23.427
15) MA	Endrin	5.658	7.250	64756653	20253124	25.573	23.792
16) A	4,4'-DDD	5.808	7.470	49715457	17513095	24.816	24.925
17) B	Endosulfa...	6.000	7.634	61732344	20390823	24.709	24.491
18) MA	4,4'-DDT	6.259	8.050	55906248	16362729	25.656	25.657
19) B	Endrin Al...	6.669	8.261	50983171	16578842	25.036	24.560
20) B	Endosulfa...	7.406	8.776	56535653	18332751	25.767	25.022
21) A	Methoxychlor	7.124	9.428	33995207	9092166	26.029	25.874
22)	Mirex	7.256	9.738	53543211	17003222	23.935	23.569
23) B	Endrin Ke...	7.880	9.824	71738043	22286628	27.495	26.024

SemiQuant Compounds - Not Calibrated on this Instrument

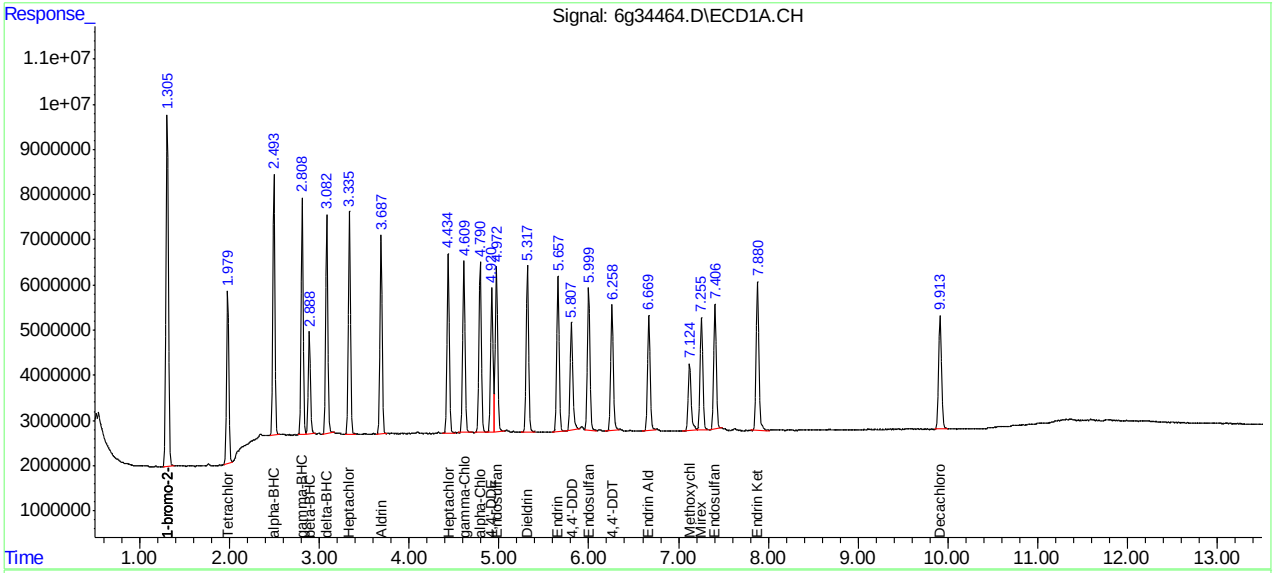
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

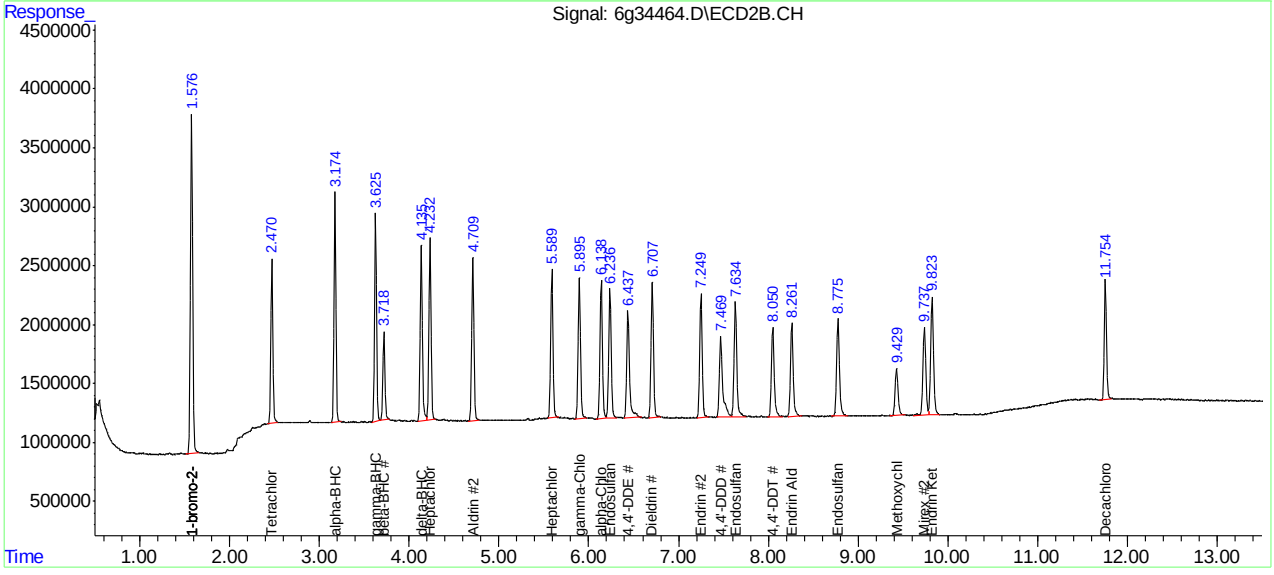
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\997\
Data File : 6g34464.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Apr 2016 2:45 pm
Operator : dharas
Sample : cc987-25
Misc : op93327,g6g997,16.0,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 27 15:07:26 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Tue Apr 26 17:50:34 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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:	G6G997-CC987	**Method:**	SW846 8081B
Lab FileID:	6G34464.D	**Analyst approved:**	04/27/16 17:14 Dhara Saparia
Injection Time:	04/27/16 14:45	**Supervisor approved:**	04/28/16 06:38 Gwendolyn Burns

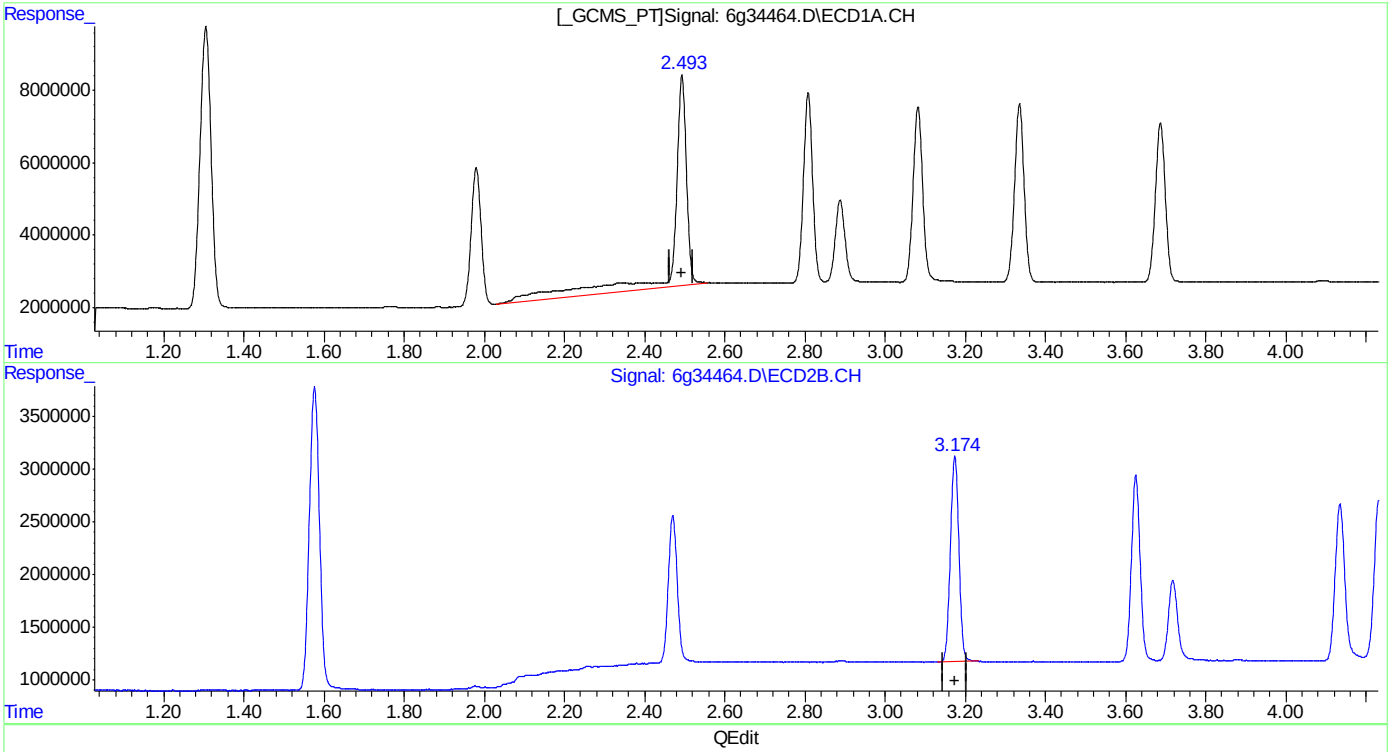
Parameter	CAS	Sig#	R.T. (min.)	Reason
alpha-BHC	319-84-6	1	2.49	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\997\
Data File : 6g34464.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Apr 2016 2:45 pm
Operator : dharas
Sample : cc987-25
Misc : op93327,g6g997,16.0,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 27 15:06:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Tue Apr 26 17:50:34 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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)
2.493min 38.975PPB
response 138092644

(3) alpha-BHC #2 (A)
3.174min 24.471PPB
response 29007462

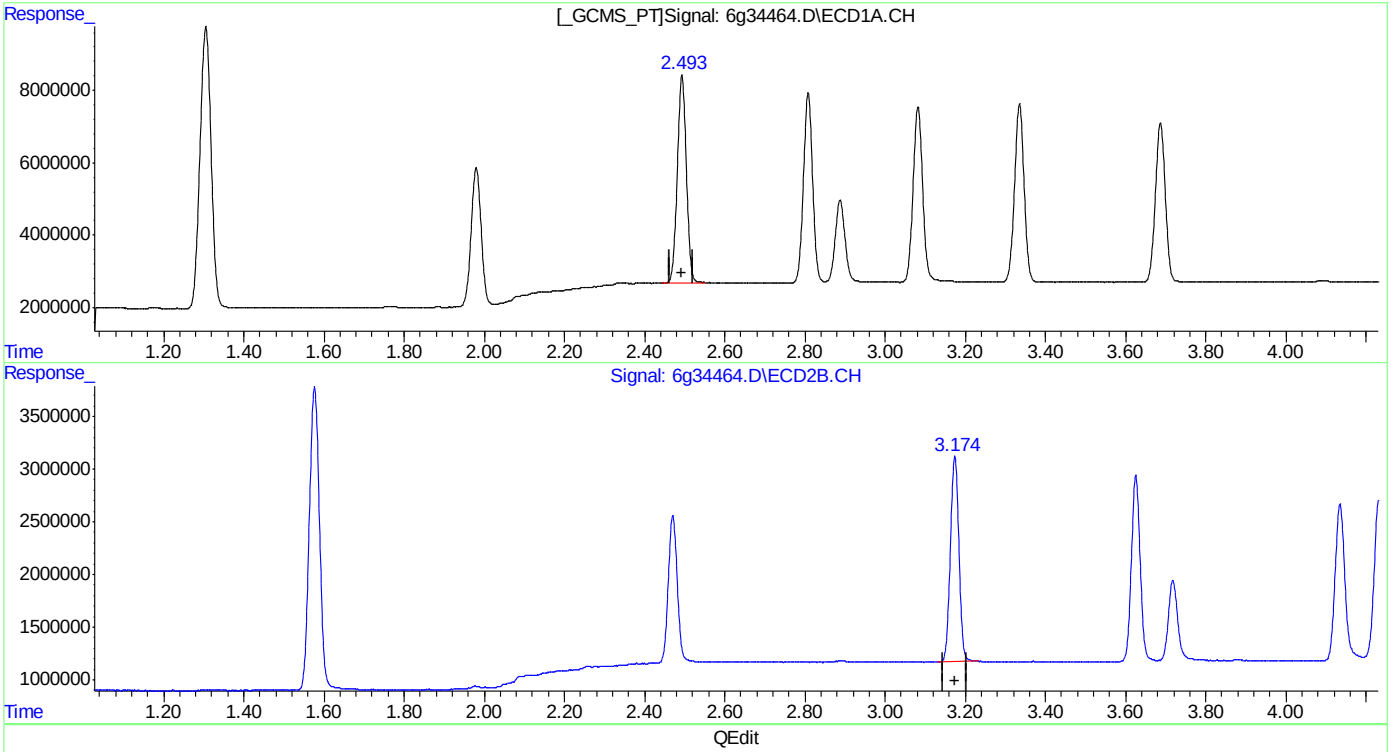
(+) = Expected Retention Time
6PST987.M Wed Apr 27 15:06:46 2016

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\997\
Data File : 6g34464.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 27 Apr 2016 2:45 pm
Operator : dharas
Sample : cc987-25
Misc : op93327,g6g997,16.0,,,10,1
ALS Vial : 2 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Apr 27 15:06:39 2016
Quant Method : C:\MSDCHEM\1\METHODS\6PST987.M
Quant Title : PEST/PCB
QLast Update : Tue Apr 26 17:50:34 2016
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1ul/column
Signal #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)
2.493min 25.492PPB m
response 90318688

(3) alpha-BHC #2 (A)
3.174min 24.471PPB
response 29007462

(+) = Expected Retention Time
6PST987.M Wed Apr 27 15:07:06 2016

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: 0-16-3973

Print Analyst Name: Dhara Saporia

Date: 04/27/16

Analyst Signature: DS

Columns: 2BCLPI / 2BCLPII

Method 8081, 608

Initial Cal. Method IPST 3973

Injection Volume: 1.0 ul

Date Archived:

Standard Data

Lot #	Description	Conc.
SV161874-1mA	Pest mix 1st source	25 ppb
-1mB		50
-1mC		1
-1mD		2
-1mE		5
-1mF		10
-1mG		75
-1mH		100
OP153564-137	mirex 2nd source	250 ppb

Standard Data

Lot #	Description	Conc.
SV161874-135	Pest ISTD	5 ppm
-74	PCM	10-250 ppb
-57	IB	20 ppb
-20	chlordane 1st	90 ppm
-21	Toxaphene 1st	10 ppm
-95	Pest mix 2nd source	250 ppb
-96	chlordane 2nd source	500 ppb
-97	Toxaphene 2nd source	500 ppb
160863	Hexane	

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: JK **Date:** 4/28/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	18122523	ddt				1			✓	OK	
	524	IB				2			✓	OK	
	525	IC3973-1	1st source			3			✓	OK	
	526	-2				4			✓	OK	
	527	-5				5			✓	OK	
	528	-10				6			✓	OK	
	529	ICC3973-25				7			✓	OK	
	530	IC3973-50				8			✓	OK	
	531	-75				9			✓	OK	
	532	-100				10			✓	OK	
	533	-500		CHL		11	20		✓	OK	
	534	-500		TOX		12	20		✓	OK	
	535	ICV3973-25	2nd source	pest		13	10		✓	OK	
	536	-25		mirex		14	10		✓	OK	
	537	-500		CHL		15			✓	OK	
	538	-500		TOX		16			✓	OK	

DK 4/28

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

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Form: OR016-08
Rev. Date: 1/19/16

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G1G3975 3976 BP 4/29/16

Print Analyst Name: Brittany Piercy

Analyst Signature: B.P.

Date: 04/29/2016

Columns: ZBCLPI / ZBCLP II

Method 8081 / 608

Initial Cal. Method ~~IPST~~ IPST3973 BP 4/29

Injection Volume: 1µl

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV16874-BS	Pest ISTD	5ppm
-79	Pem	10-250ppb
-148A	Pest Mix	25 ppb
-148B		50
-87	I.B.	20
161933-04	TBA Clean-up	—
160863	Hexane (Fisher)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: JR **Date:** 5/3/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	19122599	ddt			W	1				OK	
	600	CC3973-25				2				OK	
	601	I.B.				3				OK	
	602	OP93460-MB1	93460-1	8081 TCL	W	5				OK	
	603	-BS1				6				OK	
	604	OP93471-MB1	93471-1	8081 TCL/PPL	S	7				OK	
	605	-BS1				8				OK	
	606	OP93460-BSD	93460-1	8081 TCL	W	9				OK	
	607	JC19214-1				10				OK	
	608	-2				11				OK	
	609	OP93457-MB1	93457-1	8081 TCL	S	12				OK	Had TBA
	610	-BS1				13				OK	
	611	JC19109-1				14				OK	
	612	JC19139-1				15				OK	
	613	-5				16				OK	
	614	JC19113-1	93471-1	8081 PPL	S	17				OK	
	615	-10				18				OK	
	616	-19				19				OK	
	617	JC19164-5		TCL		20				OK	

MTX = Matrix. Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

Form: OR016-08
Rev. Date: 1/19/16

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G1G3976

Print Analyst Name: Brittany Piercy

Date: 04/29/2016

Analyst Signature: B.P.

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SM164874-135	Pest ISTD	5 ppm
-79	Pem	10-250ppb
-148B	Pest Mix	50 ppb
-148A	1	25
-87	I.B.	20
160863	Hexane (Fisher)	—

Columns: ZBCLP I / ZBCLP II

Method 8081/608

Initial Cal. Method ~~4PST~~ 1PST3973 BP 4/29/16

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:** 5/3/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	19 122618	JC19164-10	93471-1	8081 TCL	S	21				OK	
	619	OP93471-MS				22				OK	
	620	-MSD				23				OK	
	621	dblt				1				OK	
	622	CC3973-50				4				OK	
	623	F3				3				OK	
	624	JC19972-1	93471	8081 TCL	S	5				OK	
	625	-2				6				OK	
	626	-3				7				OK	
	627	JC19023-1				8				OK	Y-solid
	628	-2				9				OK	
	629	-4				10				OK	
	630	OP90282-MS1	90282			11				OK	
	631	JC19967B-1A	BS1			12				OK	
	632	-1A	BS2			13				OK	
	633	-1B	BS3			14				OK	
	634	-1B	BS4			15				OK	
	635	-1C	BS5			16				OK	
	636	-1C	BS6			17				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

9.7.2

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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 G8ST987

Injection Volume: 1.0 µL

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 ISTD	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 QC	

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	OP152564137 - 250 PPb (mirex
	142	-500	CHL			15				OK	
	143	-500	Tox			16				OK	

BP 4/17/16

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

Form: OR016-08
Rev. Date: 1/19/16

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G6G997

Print Analyst Name: Brittany Percy

Date: 04/27/2016

Analyst Signature: BP

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV161874-135	Pest ISTD	5 ppm
-79	PEM	10-250 ppb
-148A	Pest Mix	25 ppb
-148B	1	50
-87	I.B.	20
SV167933-04	TBA - clean-up	—
160863	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
	6g 324444	ddt			W	1				OK	
	445	CC987-50				4				OK	
	446	I.B.				3				OK	
	447	OP93399-MBL	93399-1	8081 TCL	W	5				OK	
	448	-BSL				6				OK	
	449	-BSD				7				OK	
	450	OP93401-MBL	93401-1	8081 TCL/PPL	S	8				OK	
	451	-BSL				9				OK	
	452	JC19023-3	93399-1	8081 TCL	W	10				OK	
	453	JC18799-22	93401-1	8081 TCL	S	11				OK	
	454	JC18981-1		8081 PPL		12				OK	
	455	JC18984-1				13				~~NOT OK~~ DK 4/28/16 ~~NEED TBA~~	
	456	-10				14				OK	
	457	OP93401-MS				15				OK	
	458	-MSD				16				OK	
	459	OP93327-MBL	93327	8081 TCL	S	17				OK	
	460	JC18788-13				18				OK	MBL TBA
	461	-14				19				OK	
	462	OP93327-MS				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

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SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G6G997

Print Analyst Name: Brittany Piercy

Analyst Signature: B.P.

Date: 04/27/2016

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.
SM61874-935	Pest ISTD	5ppm
-79	Pem	10-250ppb
-148A	Pest Mix	25
-148B	1	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: JR **Date:** 4/28/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	69 344463	ddt			W	1				OK	
	464	cc987-25				2				OK	
	465	I.B.				3				OK	
	466	0893410-MB1	93410	for RR2	S	5				OK	BP 4/28/16
	467	-DS1				6				~~Not in OK~~	Bad injection, RR
	468	JC19024-1				7				OK	
	469	-5				8				Not using	Bad injection, RR
	470	JC19013-17		TCL		9				OK	
	471	JC19912-35				10				OK	N.D.
	472	-36				11				OK	
	473	-37				12				OK	
	474	-38				13				OK	
	475	-39				14		167%		OK	
	476	JC19918-19				15				OK	
	477	-20				16				OK	
	478	-21				17				OK	RR 1:20
	479	JC19919-9				18				OK	
	480	-10				19				OK	
	481	JC19930-6				20				Not run	out from sle

MTX = Matrix. Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

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Form: OR016-08
Rev. Date: 1/19/16

SGS ACCUTEST

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: G6G 997

Print Analyst Name: Dhara Supariya

Analyst Signature:

Date: 04/27/16

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SR16H4W135	PCBT DBTD	5 ppm

Columns: 20CLPP / 20CLPP

Method 8081

Initial Cal. Method 6PST 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: JP

Date: 4/28/16

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	6234452	JC18670-2	93410	8081 TCL	S	21				OK	
	453	OP93410-MS				22				OK	
	454	-MSD				23				OK	
	455	JC19014-5		PPL		8				OK	

BP 4/28/16

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

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Form: OR016-08
Rev. Date: 1/19/16

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LOGBOOK ID: 6-1735

Pest/PCB Extraction Log - Aqueous

Date Started: 4/26/16 Time Started: 2000
Date Finished: 4/26/16 Time Finished: 2200

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Separatory Funnel: SW846 3510C/CLP/other_____
Continuous Liquid Liquid: SW846 3520C/CLP/other_____

BATCH # GC 93399 RACK# PBST 100

Extracted by:	SD, RF
Concentrated by:	SD, RF
Vialed by:	RF
Relinquished by:	
Accepted by:	
Supervisor Review:	4/26/16

Special Client Spike Instructions

QC ID# for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt. Spiked

WITNESS SIGN: SPIKE SIGN:
Manager/Supervisor/Team Lead Approval:

Sample #	Analysis Type	Sample Bottle #	pH	Sample Description	Sample Volume (mL)	Final Extract Color	Final Extract Vol(mL)	GPC	Copper	HZSO4	Florisil	Comments
MB1	Pest			DI H2O	300	clear	2		/			
BS1	LVI			DI H2O	300	clear	2		/			
BSD MS	J			DI H2O	300	clear	2		/			
MSD												
BS												
MS												
MSD									-			
1 1619023-3	Pest	4		clear	300	clear	2		/			
2	LVI											
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												

Identical

Comments:

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SPECIAL PROCESSING INSTRUCTIONS

Rx Reason:

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other:

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)	2	65	/	/	OK
Buchi Chiller	B2	11	/	/	OK
Waterbath (70-80°C)					
Waterbath Chiller (GPM)					
NEVAP (32-38°C, LPM)					

SURROGATE	LOT #	CONC (ppb)	AMT (mL)
PPCB	OP161171275	400	0.2

WITNESS SIGN: SD SPIKE SIGN: RF

MATRIX SPIKE	LOT #	CONC	AMT (mL)
PEST	OP161171277A	2.50PPD	0.2
PCB			

WITNESS SIGN: SD SPIKE SIGN: RF

SOLVENT	LOT #	BRAND	AMT (mL)
METH CHLOR	162489	fisher	3/15
HEXANE	160823	fisher	50

REAGENT	LOT #	BRAND
Sodium Sulfate	158459	fisher
Glass Wool	022205-2	Lab
Filter Paper		
Copper	16171260	aldrich
Florisil		
1:1 Sulfuric Acid		
Chlorine Strips		

SGS ACCUTEST INC.
Form: OP021A-06
Rev Date: 1/13/16

[redacted]

LOGBOOK ID: 6-1718

Pest / PCB Extraction Log - Soils

Date Started: 4/28/16 Time Started: 16:30
Date Finished: 4/28/16 Time Finished: 9:30

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Microwave SW3546 X Sonication SW3550C ____
Waste Dilution SW3580A ____ Soxhlet SW3540 ____

BATCH # GC 93471 RACK# Pest-3

Weighed/Extracted by: RG
Concentrated by: [illegible]
Vialed by: [illegible] RG
Relinquished by:
Accepted by:
Supervisor Review: [illegible] 4/29/16

Special Client Spike Instructions

QC ID# for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt. Spiked

WITNESS SIGN: SPIKE SIGN:
Manager/Supervisor/Team Lead Approval:

	Sample #	Analysis Type	Sample Bottle #	Sample Description	Sample Wet Wt. (g) Oil (g) Liq (mL)	Decant Y	Decant N	Microwave ID / Sonicator ID	Final Extract Color	Final Extract Vol (mL)	Extract Cleanup H2SO4	Florisil	Cu	GPC	Comment
	MB1	Pest		Sand	15.0		/	5	clear	10		/	/		
	BS1			Sand	15.0		/	5	clear	10		/	/		
	JC19164-5 MS		1	Soil	15.8		/	5	yellow	10		/	/		
	MSD		1	Soil	16.6		/	5	yellow	10		/	/		
	BS														
	MS														
	MSD														
1	JC19113-1	Pest	2	Soil	15.4		/	5	clear	10		/	/		
2	-10		2	Soil	15.9		/	5	clear	10		/	/		
3	-19		2	Soil	16.2		/	5	clear	10		/	/		
4	JC19164-5		1	Soil	15.3		/	5	yellow	10		/	/		
5	-10		1	Soil	16.6		/	5	yellow	10		/	/		
6	JC18972-1		1	clay	15.1		/	5	clear	10		/	/		
7	-2		1	Soil	16.3		/	5	clear	10		/	/		
8	-3		1	Soil	16.4		/	5	yellow	10		/	/		
9	JC19023-1		1	clay	15.4		/	5	clear	10		/	/		
10	-2		1	Soil	16.3		/	5	yellow	10		/	/		
11	-4		1	clay	15.7		/	5	clear	10		/	/		
12															
13															
14															
15															
16															
17															
18															
19															
20															

Comments:

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason:

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other:

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)	4.3	65	—	—	[illegible]
Buchi Chiller	1241,1235	11	—	—	[illegible]
Waterbath (70-80°C)					
Waterbath Chiller (GPM)					
NEVAP (32-38°C, LPM)	2	36.0	0.1	36.1	10 psi
Balance	B-45	N/A	N/A	N/A	N/A

SURROGATE	LOT #	CONC (ppb)	AMT (mL)
PPCB OP	16171275	400	1.0mL

WITNESS SIGN: [illegible] SPIKE SIGN: RG

MATRIX SPIKE	LOT #	CONC	AMT (mL)
PEST OP	16171277A	250ppb	1.0mL
PCB			

WITNESS SIGN: [illegible] SPIKE SIGN: RG

SOLVENT	LOT #	BRAND	AMT (mL)
2:1 HEXANE/ ACETONE	157194 / 158571	Fisher	30
1:1 METH CHLOR/ ACETONE			
HEXANE			

REAGENT	LOT #	BRAND
HYDROMATRIX	16194128	Agilent
SODIUM SULFATE	158459	Fisher
FILTER PAPER	16174927	Fisher
FLORISIL	S213-051	phenomenex
1:1 SULFURIC ACID		
COPPER	OP16175620	Fisher

MATRIX	LOT #	BRAND
SAND	66A16011311A	Fisher

SGS ACCUTEST INC.
Form: OP018A-05
Rev Date: 11/20/15

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General Chemistry

QC Data Summaries

Includes the following where applicable:

- Percent Solids Raw Data Summary

Percent Solids Raw Data Summary

Job Number: JC19023
Account: AMANYWP Anderson, Mulholland & Associates
Project: BMSMC, Building 5 Area, PR

Sample: JC19023-1 **Analyzed:** 02-MAY-16 by RK **Method:** SM2540 G-97
ClientID: RA-17 (17-18)

Wet Weight (Total)	31.71	g
Tare Weight	25.72	g
Dry Weight (Total)	30.07	g
Solids, Percent	72.6	%

Sample: JC19023-2 **Analyzed:** 02-MAY-16 by RK **Method:** SM2540 G-97
ClientID: S-40S (10.5-11.5)

Wet Weight (Total)	31.99	g
Tare Weight	24.23	g
Dry Weight (Total)	30.02	g
Solids, Percent	74.6	%

Sample: JC19023-4 **Analyzed:** 02-MAY-16 by RK **Method:** SM2540 G-97
ClientID: S-39 (11-12)

Wet Weight (Total)	31.3	g
Tare Weight	23.69	g
Dry Weight (Total)	29.43	g
Solids, Percent	75.4	%

Misc. Forms

Custody Documents and Other Forms

(SGS Accutest Southeast)

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle

FLA

CHAIN OF CUSTODY

SGS ACCUTEST

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

FED-EX Tracking #	Bottle Order Control #
SGS Accutest Quote #	SGS Accutest Job JC19023

Client / Reporting Information

Company Name: SGS Accutest
Street Address: 2235 Route 130
City State Zip: Dayton NJ 08810
Project Contact: tammym
E-mail: tammym@accutest.com
Phone #: 732-329-0200
Fax #:
Sampler(s) Name(s): TT
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
1	RA-17 (17-18)		4/22/16	12:30:00 PM	TT	SO	1					1				X	
2	S-40S (10.5-11.5)		4/22/16	12:31:00 PM	NR	SO	1					1				X	
3	BPEB-6		4/22/16	2:00:00 PM	TT	AQ	3	3								X	
4	S-39 (11-12)		4/25/16	10:45:00 AM	TT	SO	1					1				X	

Turnaround Time (Business days)

Approved By (SGS Accutest PM): / Date:

- [ ] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [X] other Due 5/10/2016

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [X] Other FULT1

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

Comments / Special Instructions

"FOREIGN SOIL!!"

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	4/28/16 1200	1 FX	2 FX		2 4/29/16 995
3		3	4		4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # 763 [ ] Intact [ ] Not intact	Preserved where applicable [ ]	On Ice (1) [ ] Cooler Temp. 4.0

11.1 11

JC19023: Chain of Custody
Page 1 of 3
SGS Accutest Southeast

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: ~~JC~~ JC19023 CLIENT: ALNJ PROJECT: BMSMC

DATE/TIME RECEIVED: 4/29/16 945 {MM/DD/YY 24:00} NUMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER DELIVERY OTHER: _____

AIRBILL NUMBERS: 5633 9349 1249

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: 3.8
- [ ] CORRECTED TEMPS: 4.0 (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

- [ ] 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
- [ ] 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 (2) vials for sample #3.

TECHNICIAN SIGNATURE/DATE [signature] 4/29/16 REVIEWER SIGNATURE/DATE [signature] 4-29-16

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: 28APR16
ACTWGT: 17.7 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: JC19023

FedEx Express

FRI - 29 APR 10:30A
PRIORITY OVERNIGHT

TRK# 0201 5633 9349 1249

XH TIXA

32811
FL-US MCO

UNV12303
MADE IN USA

11.1

11

JC19023: Chain of Custody
Page 3 of 3

Internal Sample Tracking Chronicle

Accutest New Jersey

Job No: JC19023

AMANYWP: BMSMC, Building 5 Area, PR
Project No: AMANYWP22704

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JC19023-1	Collected: 25-APR-16 12:30 By: TT		Received: 26-APR-16 By: JC			
RA-17 (17-18)						
JC19023-1	SW846 8015C MOD	03-MAY-16 11:13	SH			D8015LMA
JC19023-2	Collected: 25-APR-16 12:31 By: NR		Received: 26-APR-16 By: JC			
S-40S (10.5-11.5)						
JC19023-2	SW846 8015C MOD	03-MAY-16 11:35	SH			D8015LMA
JC19023-3	Collected: 25-APR-16 14:00 By: TT		Received: 26-APR-16 By: JC			
BPEB-6						
JC19023-3	SW846 8015C	02-MAY-16 18:56	SH			D8015LMA
JC19023-4	Collected: 25-APR-16 10:45 By: TT		Received: 26-APR-16 By: JC			
S-39 (11-12)						
JC19023-4	SW846 8015C MOD	03-MAY-16 11:56	SH			D8015LMA

GC Volatiles

QC Data Summaries

(SGS Accutest Southeast)

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: JC19023
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GXY2772-MB	XY064091.D	1	05/02/16	SH	n/a	n/a	GXY2772

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

JC19023-3

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	91%	73-123%

Method Blank Summary

Job Number: JC19023
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GXY2773-MB	XY064100.D	1	05/03/16	SH	n/a	n/a	GXY2773

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

JC19023-1, JC19023-2, JC19023-4

CAS No.	Compound	Result	RL	MDL	Units	Q
64-17-5	Ethanol	ND	10	2.0	mg/kg	
78-83-1	Isobutyl Alcohol	ND	10	2.0	mg/kg	
67-63-0	Isopropyl Alcohol	ND	10	2.0	mg/kg	
71-23-8	n-Propyl Alcohol	ND	10	2.0	mg/kg	
71-36-3	n-Butyl Alcohol	ND	10	2.0	mg/kg	
67-56-1	Methanol	ND	10	2.0	mg/kg	

CAS No.	Surrogate Recoveries		Limits
111-27-3	Hexanol	99%	69-121%

Blank Spike Summary

Job Number: JC19023
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GXY2772-BS	XY064090.D	1	05/02/16	SH	n/a	n/a	GXY2772

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

JC19023-3

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
64-17-5	Ethanol	100	94.3	94	73-120
78-83-1	Isobutyl Alcohol	100	89.7	90	67-116
67-63-0	Isopropyl Alcohol	100	93.3	93	69-118
71-23-8	n-Propyl Alcohol	100	93.5	94	71-119
71-36-3	n-Butyl Alcohol	100	93.9	94	69-119
67-56-1	Methanol	100	92.5	93	70-118

CAS No.	Surrogate Recoveries	BSP	Limits
111-27-3	Hexanol	91%	73-123%

12.2.1

12

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JC19023
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GXY2773-BS	XY064099.D	1	05/03/16	SH	n/a	n/a	GXY2773

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

JC19023-1, JC19023-2, JC19023-4

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
64-17-5	Ethanol	200	201	101	80-117
78-83-1	Isobutyl Alcohol	200	194	97	72-117
67-63-0	Isopropyl Alcohol	200	204	102	75-116
71-23-8	n-Propyl Alcohol	200	203	102	78-116
71-36-3	n-Butyl Alcohol	200	203	102	74-115
67-56-1	Methanol	200	200	100	77-116

CAS No.	Surrogate Recoveries	BSP	Limits
111-27-3	Hexanol	100%	69-121%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19023
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC19214-2AMS	XY064095.D	1	05/02/16	SH	n/a	n/a	GXY2772
JC19214-2AMSD	XY064096.D	1	05/02/16	SH	n/a	n/a	GXY2772
JC19214-2A	XY064094.D	1	05/02/16	SH	n/a	n/a	GXY2772

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

JC19023-3

CAS No.	Compound	JC19214-2A 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	104	104	100	104	104	0	73-120/16
78-83-1	Isobutyl Alcohol	ND		100	99.9	100	100	102	102	2	67-116/17
67-63-0	Isopropyl Alcohol	ND		100	105	105	100	107	107	2	69-118/17
71-23-8	n-Propyl Alcohol	ND		100	105	105	100	106	106	1	71-119/17
71-36-3	n-Butyl Alcohol	ND		100	105	105	100	106	106	1	69-119/17
67-56-1	Methanol	ND		100	102	102	100	103	103	1	70-118/17

CAS No.	Surrogate Recoveries	MS	MSD	JC19214-2A	Limits
111-27-3	Hexanol	99%	102%	101%	73-123%

12.3.1

12

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JC19023
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JC18972-2AMS	XY064103.D	1	05/03/16	SH	n/a	n/a	GXY2773
JC18972-2AMSD	XY064104.D	1	05/03/16	SH	n/a	n/a	GXY2773
JC18972-2A [a]	XY064102.D	1	05/03/16	SH	n/a	n/a	GXY2773

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

JC19023-1, JC19023-2, JC19023-4

CAS No.	Compound	JC18972-2A 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		244	284	116	244	305	125*	7	80-117/13
78-83-1	Isobutyl Alcohol	ND		244	278	114	244	294	121*	6	72-117/14
67-63-0	Isopropyl Alcohol	ND		244	294	121*	244	314	129*	7	75-116/15
71-23-8	n-Propyl Alcohol	ND		244	289	118*	244	310	127*	7	78-116/13
71-36-3	n-Butyl Alcohol	ND		244	291	119*	244	310	127*	6	74-115/13
67-56-1	Methanol	ND		244	282	116	244	307	126*	8	77-116/13

CAS No.	Surrogate Recoveries	MS	MSD	JC18972-2A	Limits
111-27-3	Hexanol	115%	120%	107%	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: JC19023
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]
JC19023-3	XY064092.D	91
GXY2772-BS	XY064090.D	91
GXY2772-MB	XY064091.D	91
JC19214-2AMS	XY064095.D	99
JC19214-2AMSD	XY064096.D	102

Surrogate Compounds	Recovery Limits
S1 = Hexanol	73-123%

(a) Recovery from GC signal #1

Volatile Surrogate Recovery Summary

Job Number: JC19023
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]
JC19023-1	XY064105.D	111
JC19023-2	XY064106.D	137* [b]
JC19023-4	XY064107.D	96
GXY2773-BS	XY064099.D	100
GXY2773-MB	XY064100.D	99
JC18972-2AMS	XY064103.D	115
JC18972-2AMSD	XY064104.D	120

Surrogate Compounds	Recovery Limits
S1 = Hexanol	69-121%

(a) Recovery from GC signal #1
(b) Outside control limits; however, sample is ND.

GC Surrogate Retention Time Summary

Job Number: JC19023
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR

Check Std:	GXY2772-CC2772	**Injection Date:**	05/02/16
Lab File ID:	XY064089.D	**Injection Time:**	17:52
Instrument ID:	GCXY	**Method:**	SW846 8015C

	S1 [a] **RT**
Check Std	13.71

Lab Sample ID	**Lab File ID**	**Date Analyzed**	**Time Analyzed**	**S1** [a] **RT**
GXY2772-BS	XY064090.D	05/02/16	18:13	13.71
GXY2772-MB	XY064091.D	05/02/16	18:35	13.71
JC19023-3	XY064092.D	05/02/16	18:56	13.71
ZZZZZZ	XY064093.D	05/02/16	19:18	13.71
JC19214-2A	XY064094.D	05/02/16	19:39	13.71
JC19214-2AMS	XY064095.D	05/02/16	20:00	13.71
JC19214-2AMSD	XY064096.D	05/02/16	20:22	13.71
GXY2772-ECC2772	XY064097.D	05/02/16	20:44	13.71

Surrogate Compounds

S1 = Hexanol

(a) Retention time from GC signal #1

12.5.1

12

GC Surrogate Retention Time Summary

Job Number: JC19023
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR

Check Std:	GXY2773-CC2772	**Injection Date:**	05/03/16
Lab File ID:	XY064098.D	**Injection Time:**	08:11
Instrument ID:	GCXY	**Method:**	SW846 8015C MOD

	S1 [a] **RT**
Check Std	13.71

Lab Sample ID	**Lab File ID**	**Date Analyzed**	**Time Analyzed**	**S1** [a] **RT**
GXY2773-BS	XY064099.D	05/03/16	08:33	13.71
GXY2773-MB	XY064100.D	05/03/16	08:54	13.71
ZZZZZZ	XY064101.D	05/03/16	09:16	13.71
JC18972-2A	XY064102.D	05/03/16	09:37	13.71
JC18972-2AMS	XY064103.D	05/03/16	09:58	13.72
JC18972-2AMSD	XY064104.D	05/03/16	10:52	13.72
JC19023-1	XY064105.D	05/03/16	11:13	13.72
JC19023-2	XY064106.D	05/03/16	11:35	13.72
JC19023-4	XY064107.D	05/03/16	11:56	13.73
GXY2773-ECC2772	XY064109.D	05/03/16	13:37	13.72

Surrogate Compounds

S1 = Hexanol

(a) Retention time from GC signal #1

12.5.2

12

Initial Calibration Summary

Job Number: JC19023
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR
Sample: GXY2772-ICC2772
Lab FileID: XY064083.D

Response Factor Report VOA5

Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Tue May 03 07:37:11 2016
Response via : Initial Calibration

Calibration Files
1 =XY064080.D 2 =XY064081.D 3 =XY064082.D 4 =XY064083.D
5 =XY064084.D 6 =XY064085.D 7 =XY064086.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
1) Methanol	2.993	2.776	2.570	2.800	2.625	2.668	2.600	2.719 E3	5.47
2) Isopropyl alcohol	3.875	3.653	3.396	3.732	3.600	3.854	3.786	3.699 E3	4.52
3) Ethanol	4.250	4.356	4.414	4.738	4.328	4.285	4.111	4.355 E3	4.46
4) n-Propyl alcohol	4.680	4.908	4.779	5.178	4.877	4.979	4.856	4.894 E3	3.21
5) Isobutyl alcohol	5.533	5.722	5.377	5.923	5.587	5.802	5.680	5.661 E3	3.18
6) n-Butyl alcohol	4.887	5.051	5.145	5.604	5.295	5.476	5.343	5.257 E3	4.72
7) 2-Ethoxyethanol	2.716	2.718	2.879	3.121	2.999	3.028	3.012	2.924 E3	5.41
8)S Hexanol	5.039	5.012	5.938	5.281	5.163	5.411	5.287	5.304 E3	5.91

(#) = Out of Range

D8015.M Tue May 03 09:21:32 2016

12.6.1

12

Initial Calibration Verification

Job Number: JC19023
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR
Sample: GXY2772-ICV2772
Lab FileID: XY064088.D

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\2\DATA\050216\XY064088.D          Vial: 10
Acq On    :  2 May 2016   5:30 pm                   Operator: StevenH
Sample    : icv2772-4                               Inst    : VOA5
Misc      : gc18771,gxy2772,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E

Method       : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Tue May 03 07:37:11 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	112.212	-12.2	109	0.00	2.11- 2.71
2	Isopropyl alcohol	100.000	114.624	-14.6	114	0.00	2.44- 3.04
3	Ethanol	100.000	113.077	-13.1	104	0.00	2.62- 3.22
4	n-Propyl alcohol	100.000	114.047	-14.0	108	0.00	4.80- 5.40
5	Isobutyl alcohol	100.000	108.938	-8.9	104	0.00	6.56- 7.16
6	n-Butyl alcohol	100.000	114.044	-14.0	107	0.03	8.44- 9.04
7	2-Ethoxyethanol	100.000	116.228	-16.2	109	0.02	10.91-11.51
8 S	Hexanol	100.000	109.019	-9.0	110	0.00	13.40-14.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
XY064083.D D8015.M Tue May 03 09:21:06 2016

12.6.2

12

Continuing Calibration Summary

Job Number: JC19023
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR
Sample: GXY2772-CC2772
Lab FileID: XY064089.D

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\2\DATA\050216\XY064089.D          Vial: 5
Acq On    :  2 May 2016   5:52 pm                   Operator: StevenH
Sample    : cc2772-4                                Inst    : VOA5
Misc      : gc18771,gxy2772,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E

Method       : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Tue May 03 07:37:11 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	97.075	2.9	94	0.02	2.11- 2.71
2	Isopropyl alcohol	100.000	96.724	3.3	96	0.01	2.44- 3.04
3	Ethanol	100.000	101.063	-1.1	93	0.02	2.62- 3.22
4	n-Propyl alcohol	100.000	99.934	0.1	94	0.02	4.80- 5.40
5	Isobutyl alcohol	100.000	98.788	1.2	94	0.02	6.56- 7.16
6	n-Butyl alcohol	100.000	100.502	-0.5	94	0.02	8.44- 9.04
7	2-Ethoxyethanol	100.000	101.978	-2.0	96	0.01	10.91-11.51
8 S	Hexanol	100.000	94.196	5.8	95	0.00	13.40-14.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
XY064083.D D8015.M Tue May 03 09:21:06 2016

12.6.3

12

Continuing Calibration Summary

Job Number: JC19023
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR
Sample: GXY2772-ECC2772
Lab FileID: XY064097.D

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\2\DATA\050216\XY064097.D          Vial: 6
Acq On    :  2 May 2016   8:44 pm                   Operator: StevenH
Sample    : ecc2772-5                               Inst    : VOA5
Misc      : gc18771,gxy2772,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E

Method       : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Tue May 03 07:37:11 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	249.489	0.2	103	0.00	2.11- 2.71
2	Isopropyl alcohol	250.000	257.825	-3.1	106	0.00	2.44- 3.04
3	Ethanol	250.000	256.137	-2.5	103	0.00	2.62- 3.22
4	n-Propyl alcohol	250.000	259.830	-3.9	104	0.00	4.80- 5.40
5	Isobutyl alcohol	250.000	258.569	-3.4	105	0.00	6.56- 7.16
6	n-Butyl alcohol	250.000	263.567	-5.4	105	0.00	8.44- 9.04
7	2-Ethoxyethanol	250.000	258.681	-3.5	101	0.00	10.91-11.51
8 S	Hexanol	250.000	253.719	-1.5	104	0.00	13.40-14.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
XY064084.D D8015.M Tue May 03 09:20:41 2016

12.6.4

12

Continuing Calibration Summary

Job Number: JC19023 **Sample:** GXY2773-CC2772
Account: ALNJ Accutest New Jersey **Lab FileID:** XY064098.D
Project: AMANYWP: BMSMC, Building 5 Area, PR

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\2\DATA\050316\XY064098.D          Vial: 1
Acq On    :  3 May 2016   8:11 am                   Operator: StevenH
Sample    : cc2772-4                                Inst    : VOA5
Misc      : gc18788,gxy2773,5.00,,,10,1             Multiplr: 1.00
IntFile   : EVENTS.E

Method       : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Tue May 03 07:37:11 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	97.300	2.7	94	0.00	2.11- 2.71
2	Isopropyl alcohol	100.000	94.334	5.7	94	0.00	2.44- 3.04
3	Ethanol	100.000	108.678	-8.7	100	0.00	2.62- 3.22
4	n-Propyl alcohol	100.000	102.258	-2.3	97	0.00	4.80- 5.40
5	Isobutyl alcohol	100.000	102.013	-2.0	97	0.00	6.56- 7.16
6	n-Butyl alcohol	100.000	102.863	-2.9	96	0.00	8.44- 9.04
7	2-Ethoxyethanol	100.000	103.417	-3.4	97	0.00	10.91-11.51
8 S	Hexanol	100.000	97.608	2.4	98	0.00	13.40-14.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
XY064083.D D8015.M Wed May 04 13:23:58 2016

12.6.5

12

Continuing Calibration Summary

Job Number: JC19023
Account: ALNJ Accutest New Jersey
Project: AMANYWP: BMSMC, Building 5 Area, PR
Sample: GXY2773-ECC2772
Lab FileID: XY064109.D

Evaluate Continuing Calibration Report

```
Data File : C:\HPCHEM\2\DATA\050316\XY064109.D          Vial: 10
Acq On    :  3 May 2016   1:37 pm                   Operator: StevenH
Sample    : ecc2772-5                               Inst    : VOA5
Misc      : gc18788,gxy2773,5.00,,,10,1             Multiplr: 1.00
IntFile   : EVENTS.E

Method       : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Tue May 03 07:37:11 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	242.149	3.1	100	0.00	2.11- 2.71
2	Isopropyl alcohol	250.000	253.751	-1.5	104	0.02	2.44- 3.04
3	Ethanol	250.000	243.781	2.5	98	0.00	2.62- 3.22
4	n-Propyl alcohol	250.000	250.823	-0.3	101	0.02	4.80- 5.40
5	Isobutyl alcohol	250.000	253.544	-1.4	103	0.04	6.56- 7.16
6	n-Butyl alcohol	250.000	256.652	-2.7	102	0.03	8.44- 9.04
7	2-Ethoxyethanol	250.000	249.530	0.2	97	0.03	10.91-11.51
8 S	Hexanol	250.000	244.650	2.1	101	0.02	13.40-14.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
XY064084.D D8015.M Wed May 04 13:23:24 2016

12.6.6

12

GC Volatiles

Raw Data

(SGS Accutest Southeast)

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\2\DATA\050316\XY064105.D          Vial: 7
Acq On    :  3 May 2016  11:13 am                   Operator: StevenH
Sample    : jc19023-1                               Inst    : VOA5
Misc      : gc18788,gxy2773,5.34,,,10,1             Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: May  4 13:15 2016  Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Tue May 03 07:37:11 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj.  : 1uL
Signal Phase : Stabilwax
Signal Info  : 0.53mm
```

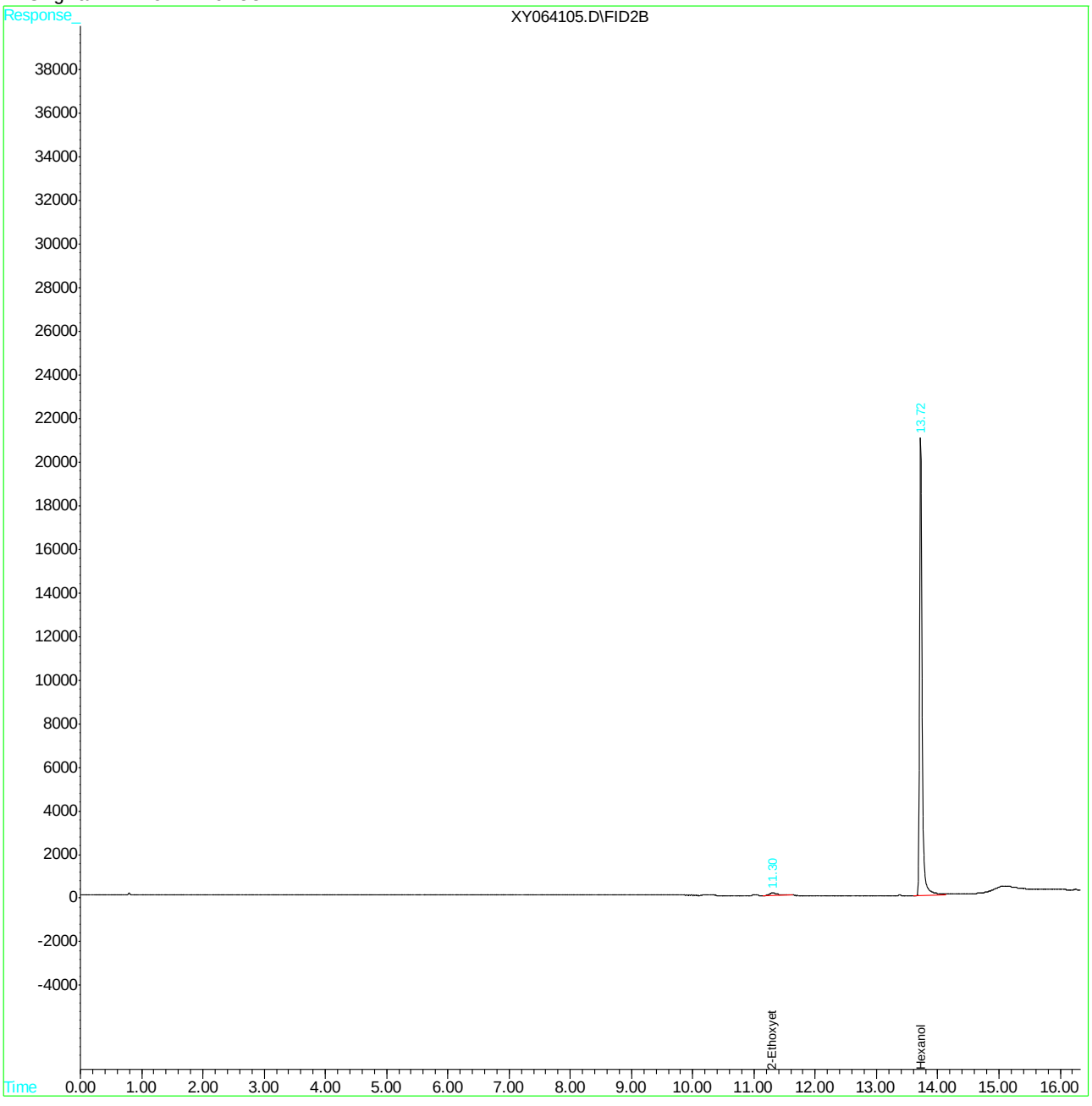
Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
8) S Hexanol	13.72	587600	110.778	mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 110.78%				
Target Compounds				
1) Methanol	0.00	0	N.D.	mg/L
2) Isopropyl alcohol	0.00	0	N.D.	mg/L
3) Ethanol	0.00	0	N.D.	mg/L
4) n-Propyl alcohol	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	11.30	9894	3.383	mg/L

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\050316\XY064105.D Vial: 7
Acq On : 3 May 2016 11:13 am Operator: StevenH
Sample : jc19023-1 Inst : VOA5
Misc : gc18788,gxy2773,5.34,,,10,1 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 4 13:15 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Tue May 03 07:37:11 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\050316\XY064106.D          Vial: 8
Acq On    :  3 May 2016  11:35 am                   Operator: StevenH
Sample    : jc19023-2                               Inst    : VOA5
Misc      : gc18788,gxy2773,4.96,,,10,1             Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: May  4 13:15 2016  Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Tue May 03 07:37:11 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	13.72	727004	137.060	mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 137.06%				
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

13.1.2

13

(f)=RT Delta > 1/2 Window (m)=manual int.

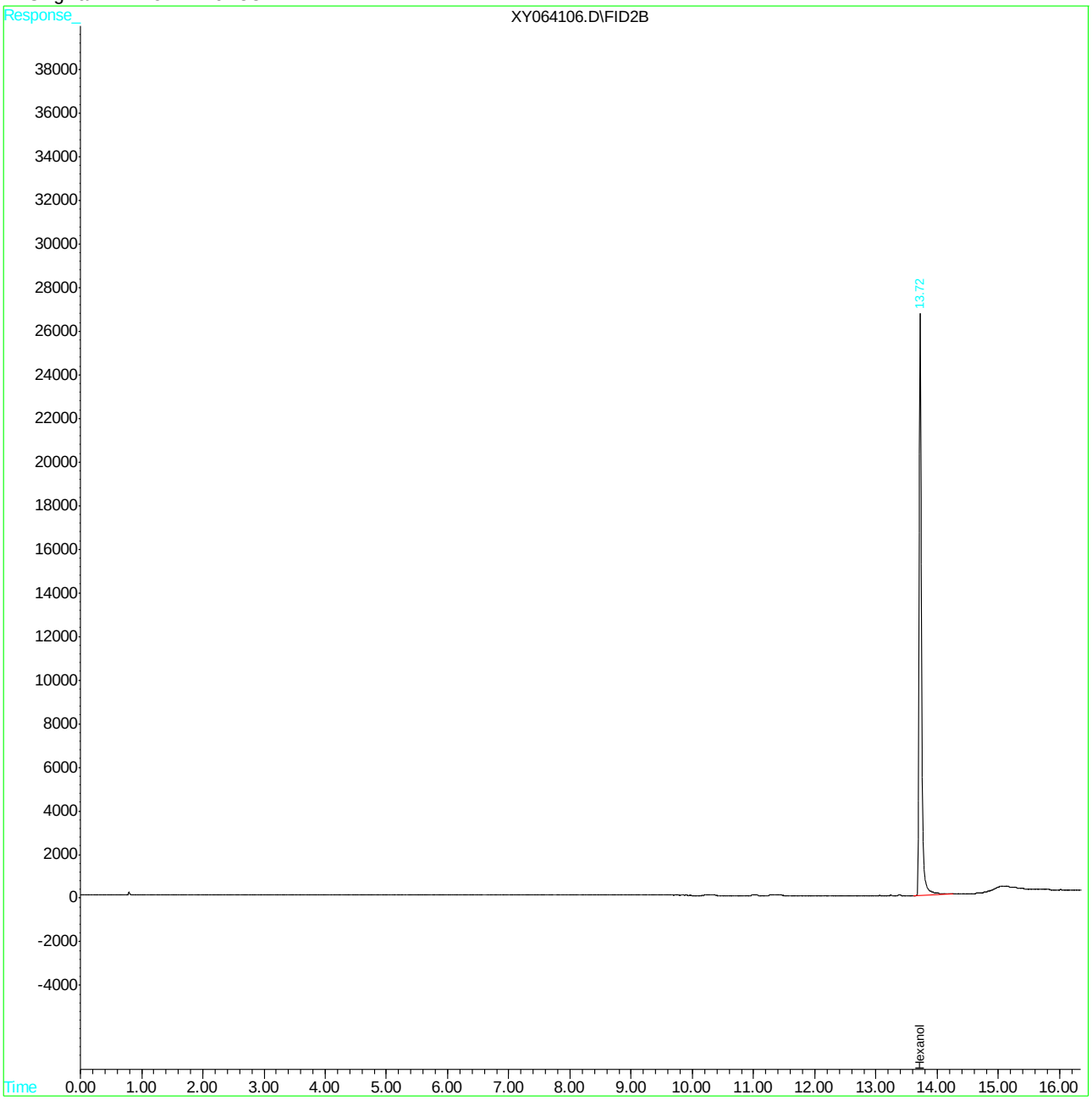
XY064106.D D8015.M Wed May 04 13:18:51 2016

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\050316\XY064106.D Vial: 8
Acq On : 3 May 2016 11:35 am Operator: StevenH
Sample : jc19023-2 Inst : VOA5
Misc : gc18788,gxy2773,4.96,,,10,1 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 4 13:15 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Tue May 03 07:37:11 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\050216\XY064092.D          Vial: 13
Acq On    :  2 May 2016   6:56 pm                   Operator: StevenH
Sample    : jc19023-3                               Inst    : VOA5
Misc      : gc18771,gxy2772,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: May  3  7:42 2016  Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Tue May 03 07:37:11 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	13.71	483093	91.076	mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 91.08%				
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

13.1.3 13

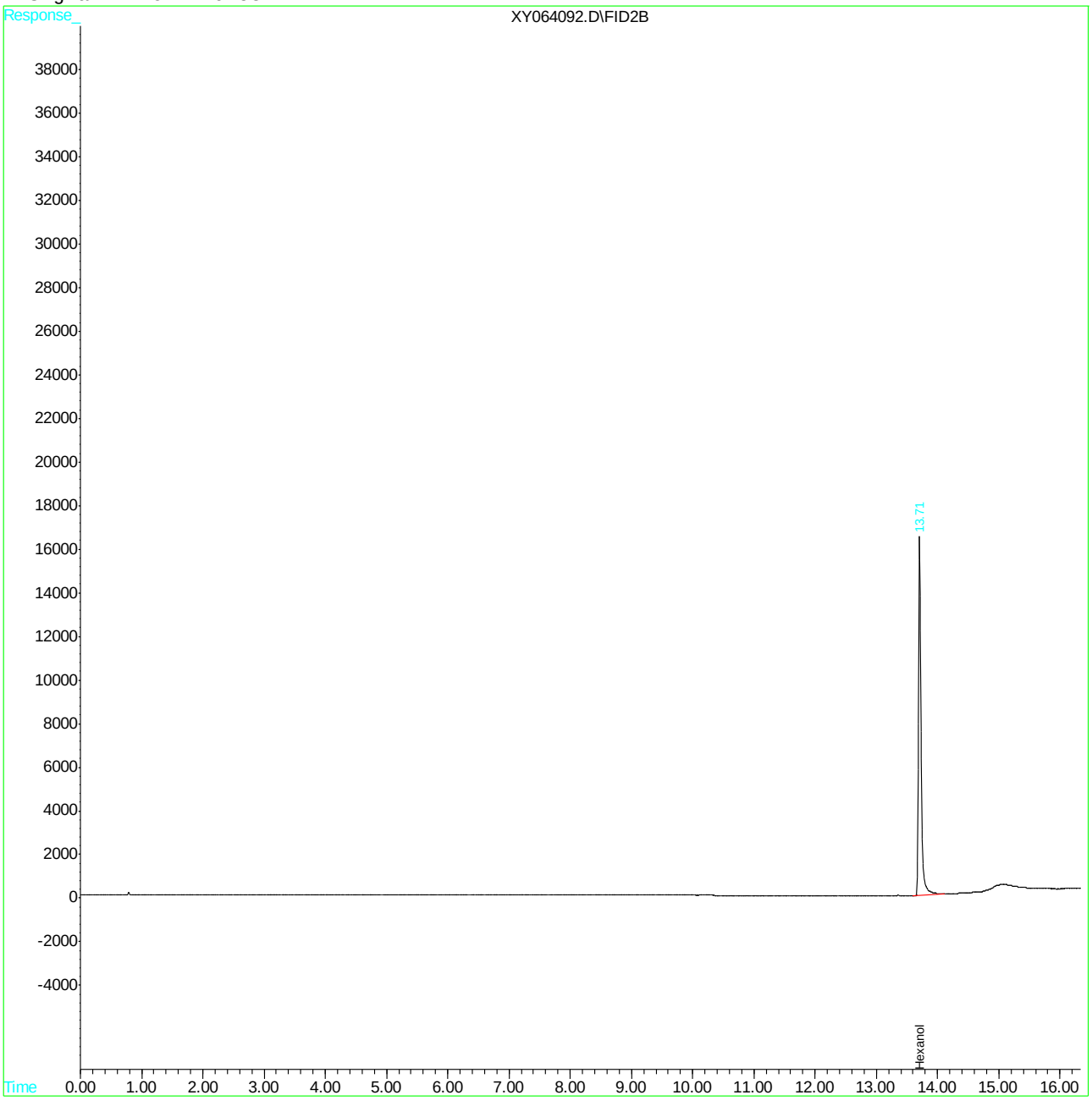
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\050216\XY064092.D Vial: 13
Acq On : 2 May 2016 6:56 pm Operator: StevenH
Sample : jc19023-3 Inst : VOA5
Misc : gc18771,gxy2772,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 3 7:42 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Tue May 03 07:37:11 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\050316\XY064107.D          Vial: 9
Acq On    :  3 May 2016  11:56 am                   Operator: StevenH
Sample    : jc19023-4                               Inst    : VOA5
Misc      : gc18788,gxy2773,5.12,,,10,1             Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: May  4 13:18 2016  Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Tue May 03 07:37:11 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	13.73	511327	96.399	mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 96.40%				
Target Compounds				
1) Methanol	0.00	0	N.D.	mg/L d
2) Isopropyl alcohol	0.00	0	N.D.	mg/L d
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

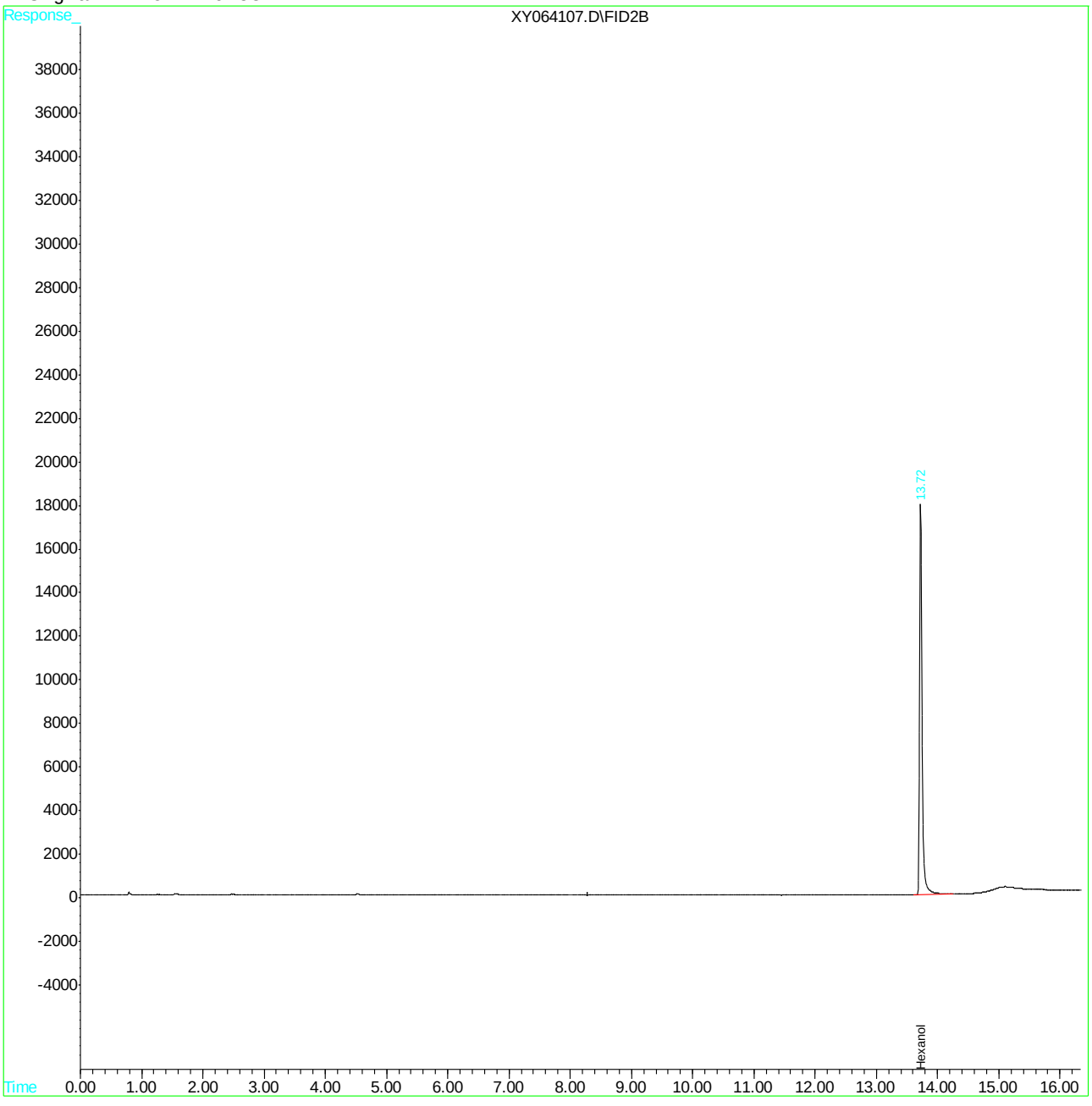
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\050316\XY064107.D Vial: 9
Acq On : 3 May 2016 11:56 am Operator: StevenH
Sample : jc19023-4 Inst : VOA5
Misc : gc18788,gxy2773,5.12,,,10,1 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 4 13:18 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Tue May 03 07:37:11 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\050216\XY064091.D          Vial: 12
Acq On    :  2 May 2016   6:35 pm                   Operator: StevenH
Sample    : mb                                      Inst    : VOA5
Misc      : gc18771,gxy2772,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: May  3  7:38 2016  Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Tue May 03 07:37:11 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	13.71	481084	90.697	mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 90.70%				
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

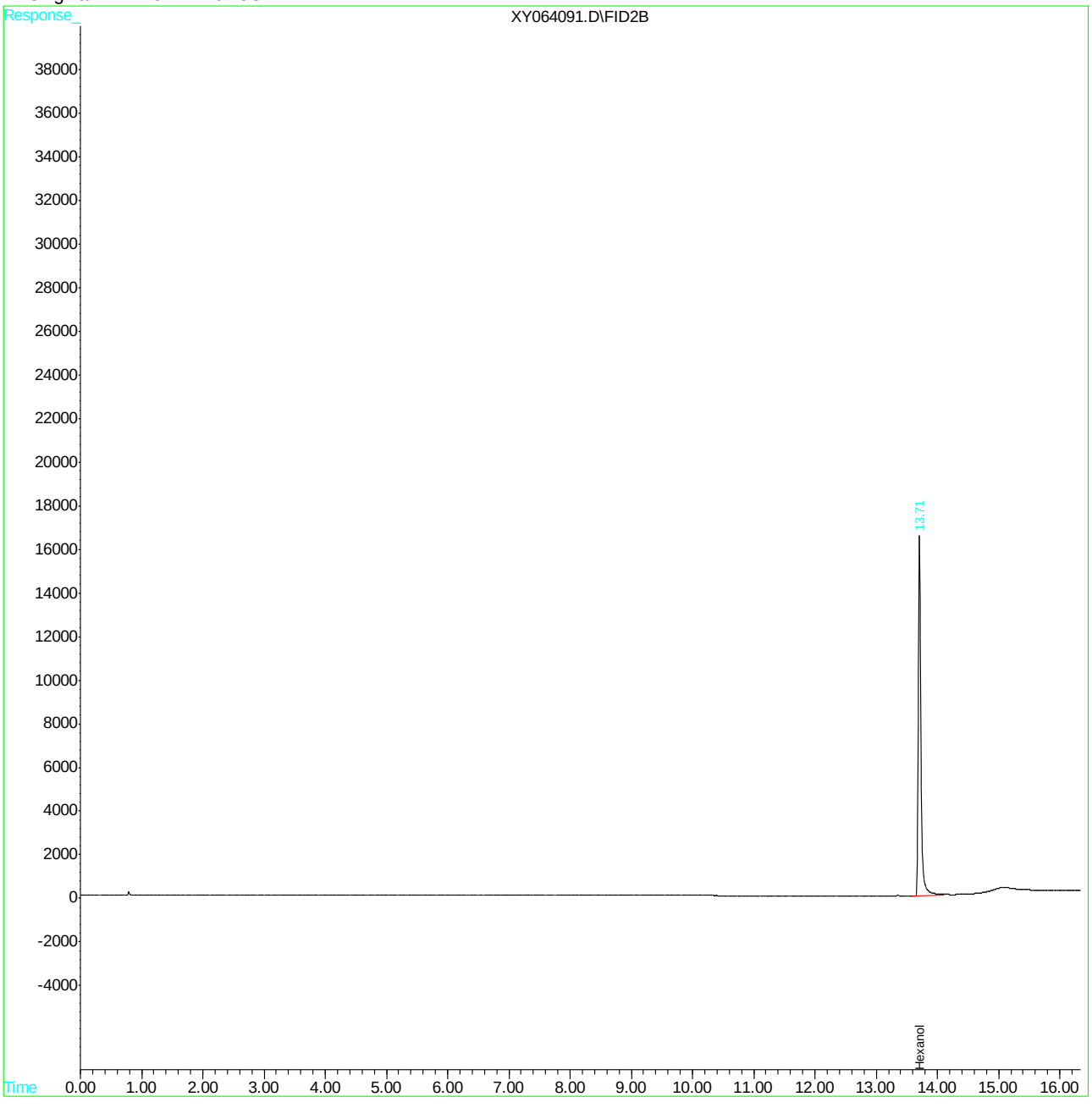
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\050216\XY064091.D Vial: 12
Acq On : 2 May 2016 6:35 pm Operator: StevenH
Sample : mb Inst : VOA5
Misc : gc18771,gxy2772,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 3 7:38 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Tue May 03 07:37:11 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\050316\XY064100.D          Vial: 3
Acq On    :  3 May 2016   8:54 am                   Operator: StevenH
Sample    : mb                                      Inst    : VOA5
Misc      : gc18788,gxy2773,5.00,,,10,1             Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: May  4 13:15 2016  Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Tue May 03 07:37:11 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	13.71	527575	99.462	mg/L
Spiked Amount 100.000	Range 57 - 142	Recovery = 99.46%		
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

13.2.2

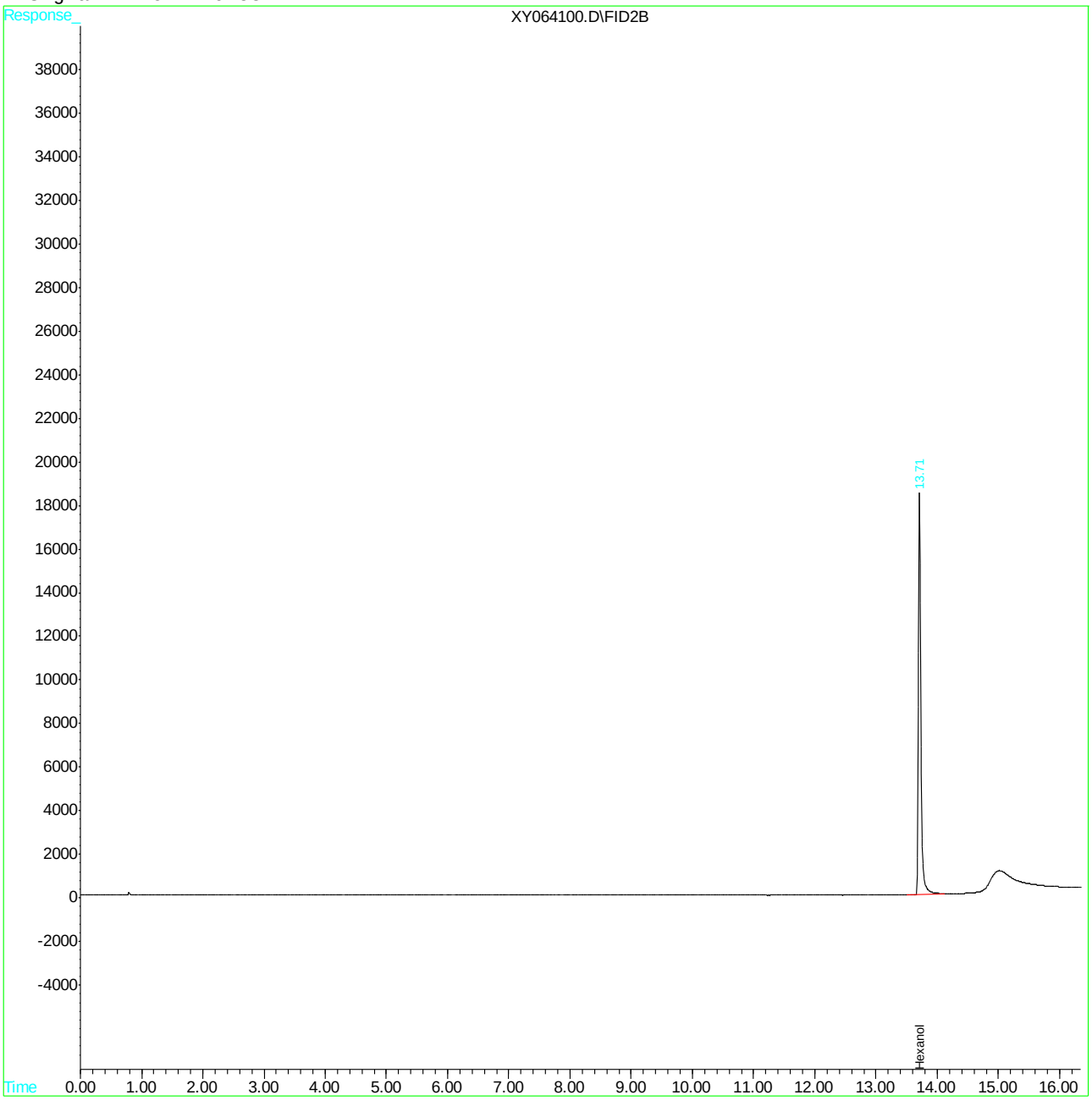
13

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\050316\XY064100.D Vial: 3
Acq On : 3 May 2016 8:54 am Operator: StevenH
Sample : mb Inst : VOA5
Misc : gc18788,gxy2773,5.00,,,10,1 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 4 13:15 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Tue May 03 07:37:11 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\050216\XY064090.D          Vial: 11
Acq On    :  2 May 2016   6:13 pm                   Operator: StevenH
Sample    : bs                                      Inst    : VOA5
Misc      : gc18771,gxy2772,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: May  3  7:41 2016  Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Tue May 03 07:37:11 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	13.71	480796	90.643 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 90.64%			
Target Compounds			
1) Methanol	2.43	251401	92.468 mg/L
2) Isopropyl alcohol	2.75	345075	93.279 mg/L
3) Ethanol	2.94	410446	94.258 mg/L
4) n-Propyl alcohol	5.13	457801	93.545 mg/L
5) Isobutyl alcohol	6.88	507604	89.672 mg/L
6) n-Butyl alcohol	8.76	493640	93.897 mg/L
7) 2-Ethoxyethanol	11.22	300185	102.647 mg/L

13.3.1

13

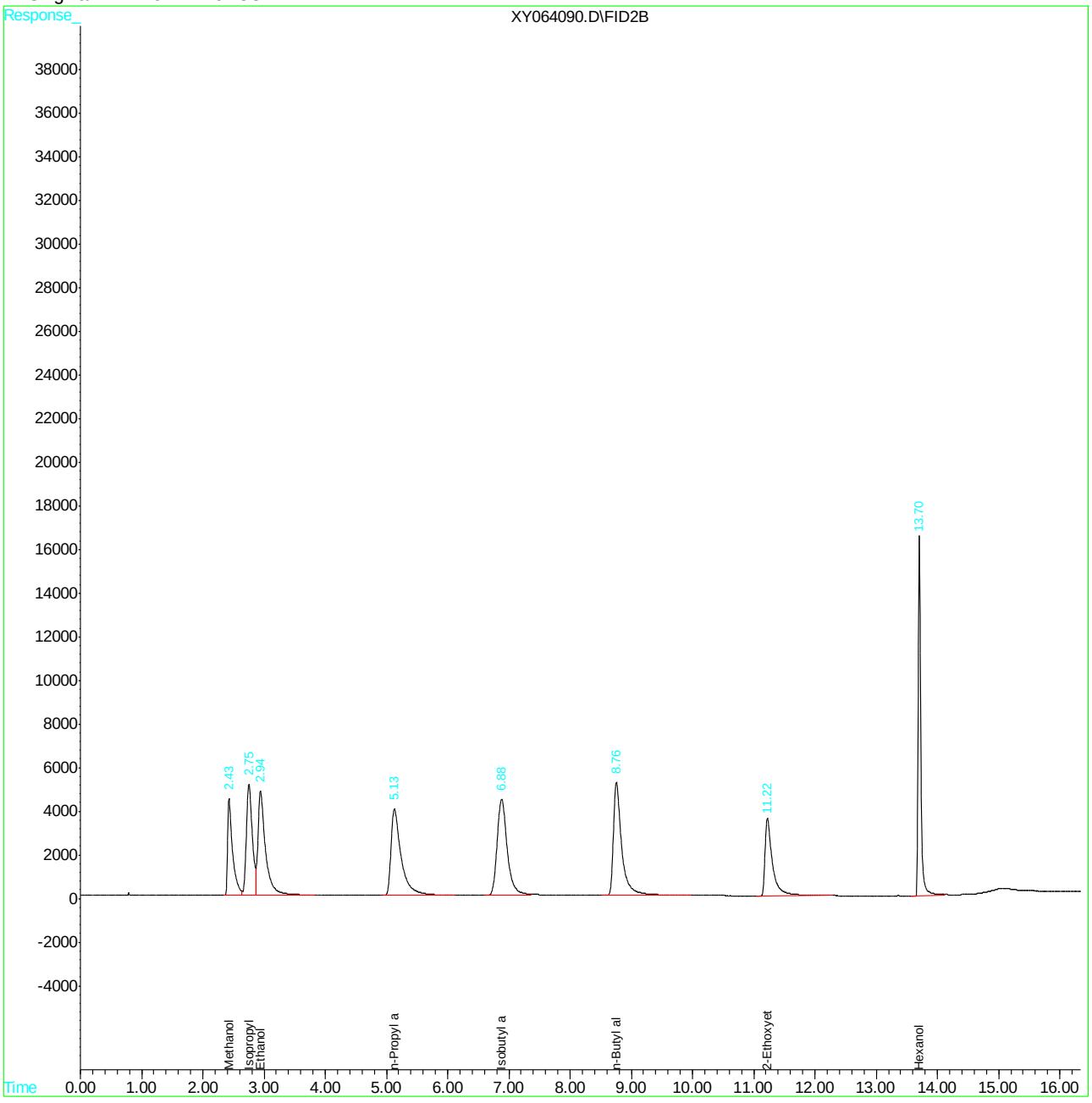
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\050216\XY064090.D Vial: 11
Acq On : 2 May 2016 6:13 pm Operator: StevenH
Sample : bs Inst : VOA5
Misc : gc18771,gxy2772,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 3 7:41 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Tue May 03 07:37:11 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\050316\XY064099.D Vial: 2
Acq On : 3 May 2016 8:33 am Operator: StevenH
Sample : bs Inst : VOA5
Misc : gc18788,gxy2773,5.00,,,10,1 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 4 13:15 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Tue May 03 07:37:11 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	13.71	532806	100.448 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 100.45%			
Target Compounds			
1) Methanol	2.42	271391	99.820 mg/L
2) Isopropyl alcohol	2.75	377999	102.179 mg/L
3) Ethanol	2.93	436683	100.283 mg/L
4) n-Propyl alcohol	5.12	495543	101.257 mg/L
5) Isobutyl alcohol	6.88	549120	97.006 mg/L
6) n-Butyl alcohol	8.77	534015	101.577 mg/L
7) 2-Ethoxyethanol	11.23	313945	107.352 mg/L

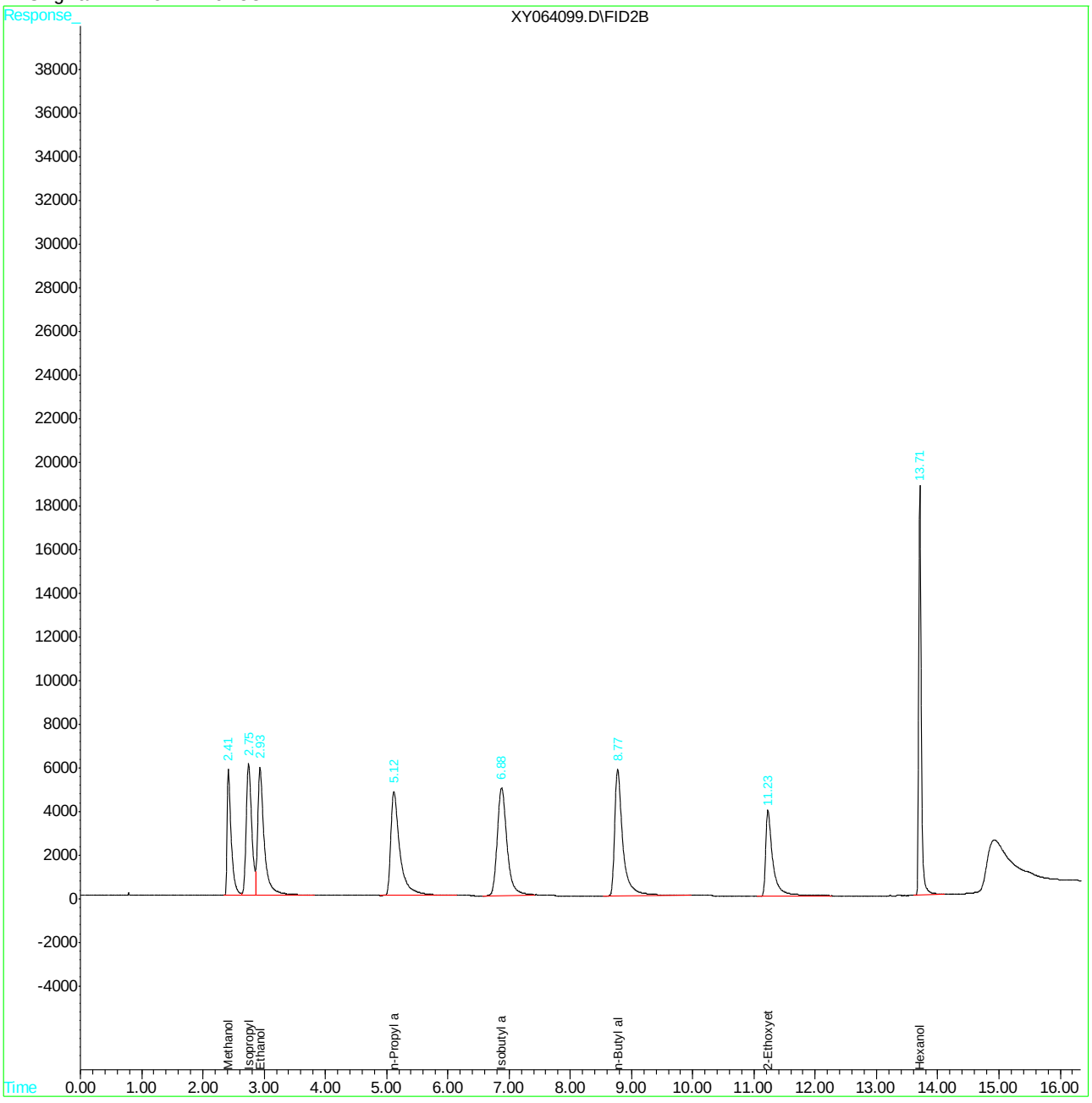
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\050316\XY064099.D Vial: 2
Acq On : 3 May 2016 8:33 am Operator: StevenH
Sample : bs Inst : VOA5
Misc : gc18788,gxy2773,5.00,,,10,1 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 4 13:15 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Tue May 03 07:37:11 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\050216\XY064095.D Vial: 16
Acq On : 2 May 2016 8:00 pm Operator: StevenH
Sample : jc19214-2ams Inst : VOA5
Misc : gc18771,gxy2772,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 3 7:43 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Tue May 03 07:37:11 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	13.71	522532	98.511 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 98.51%			
Target Compounds			
1) Methanol	2.41	278371	102.388 mg/L
2) Isopropyl alcohol	2.74	388424	104.997 mg/L
3) Ethanol	2.93	451158	103.607 mg/L
4) n-Propyl alcohol	5.11	511846	104.588 mg/L
5) Isobutyl alcohol	6.87	565222	99.851 mg/L
6) n-Butyl alcohol	8.75	550391	104.691 mg/L
7) 2-Ethoxyethanol	11.22	313154	107.081 mg/L

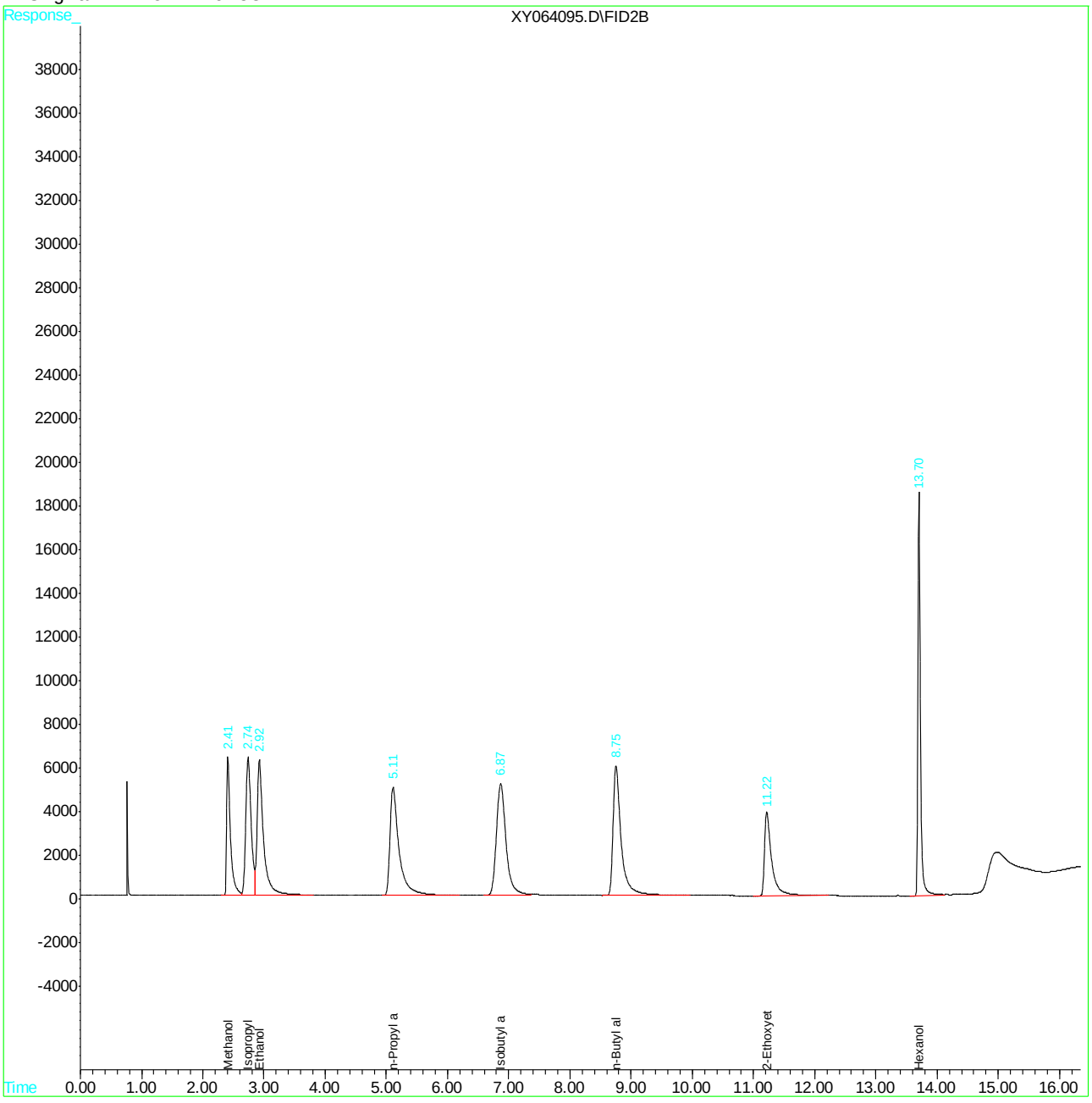
(f)=RT Delta > 1/2 Window (m)=manual int.
XY064095.D D8015.M Tue May 03 09:18:09 2016

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\050216\XY064095.D Vial: 16
Acq On : 2 May 2016 8:00 pm Operator: StevenH
Sample : jc19214-2ams Inst : VOA5
Misc : gc18771,gxy2772,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 3 7:43 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Tue May 03 07:37:11 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\050216\XY064096.D          Vial: 16
Acq On    :  2 May 2016   8:22 pm                   Operator: StevenH
Sample    : jc19214-2amsd                           Inst    : VOA5
Misc      : gc18771,gxy2772,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: May  3  7:43 2016  Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Tue May 03 07:37:11 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	13.71	538624	101.545 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 101.55%			
Target Compounds			
1) Methanol	2.41	280163	103.047 mg/L
2) Isopropyl alcohol	2.74	394752	106.707 mg/L
3) Ethanol	2.93	452858	103.998 mg/L
4) n-Propyl alcohol	5.11	516396	105.517 mg/L
5) Isobutyl alcohol	6.87	574863	101.554 mg/L
6) n-Butyl alcohol	8.77	556665	105.885 mg/L
7) 2-Ethoxyethanol	11.23	320429	109.569 mg/L

13.4.2

13

(f)=RT Delta > 1/2 Window (m)=manual int.

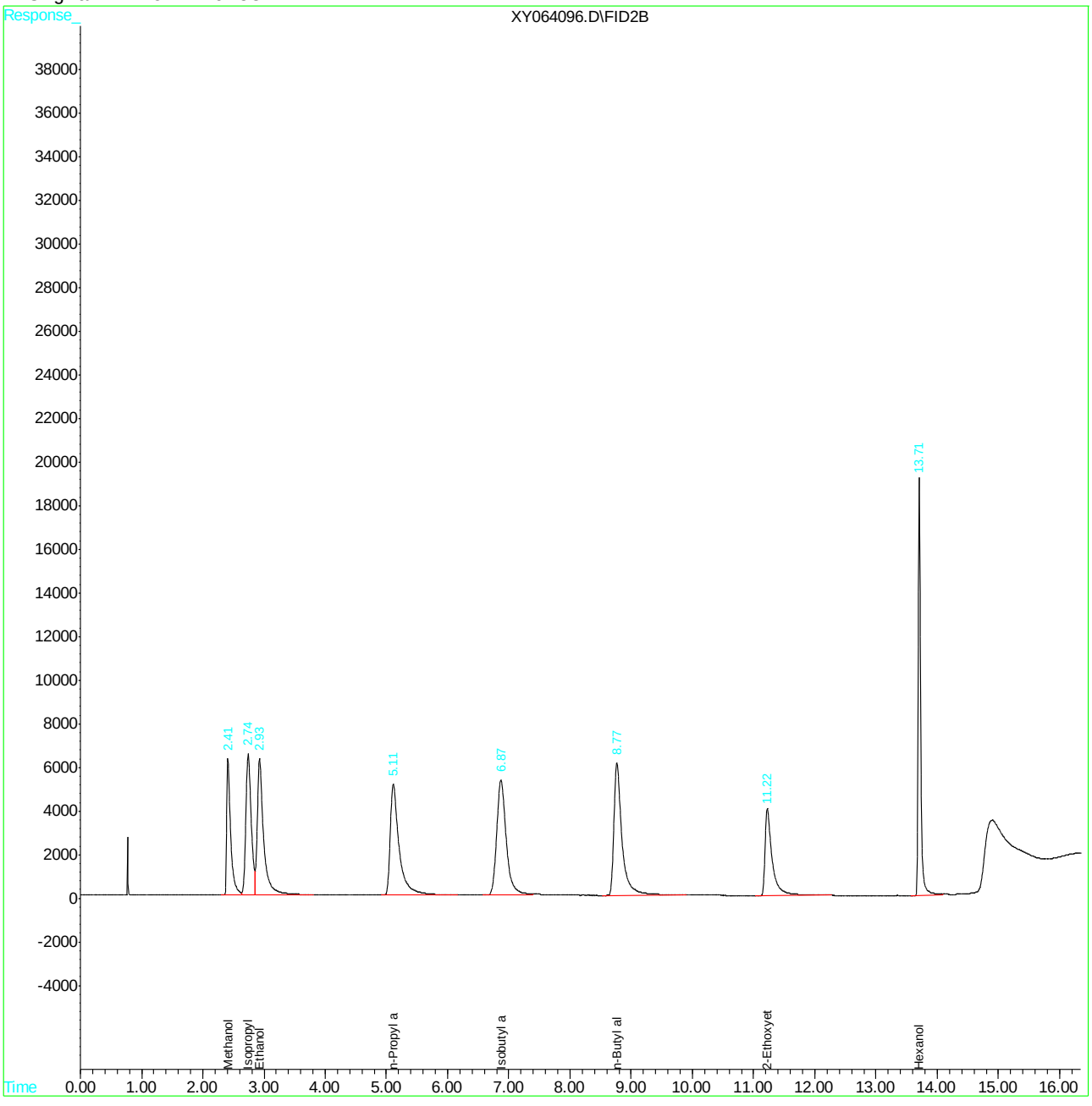
XY064096.D D8015.M Tue May 03 09:18:10 2016

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\050216\XY064096.D Vial: 16
Acq On : 2 May 2016 8:22 pm Operator: StevenH
Sample : jc19214-2amsd Inst : VOA5
Misc : gc18771,gxy2772,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 3 7:43 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Tue May 03 07:37:11 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\050316\XY064103.D Vial: 6
Acq On : 3 May 2016 9:58 am Operator: StevenH
Sample : jc18972-2ams Inst : VOA5
Misc : gc18788,gxy2773,5.21,,,10,1 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 4 13:15 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Tue May 03 07:37:11 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	13.72	608263	114.674 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 114.67%			
Target Compounds			
1) Methanol	2.42	314652	115.732 mg/L
2) Isopropyl alcohol	2.76	446178	120.608 mg/L
3) Ethanol	2.94	506496	116.315 mg/L
4) n-Propyl alcohol	5.13	580827	118.683 mg/L
5) Isobutyl alcohol	6.90	645944	114.111 mg/L
6) n-Butyl alcohol	8.81	628128	119.478 mg/L
7) 2-Ethoxyethanol	11.25	340244	116.345 mg/L

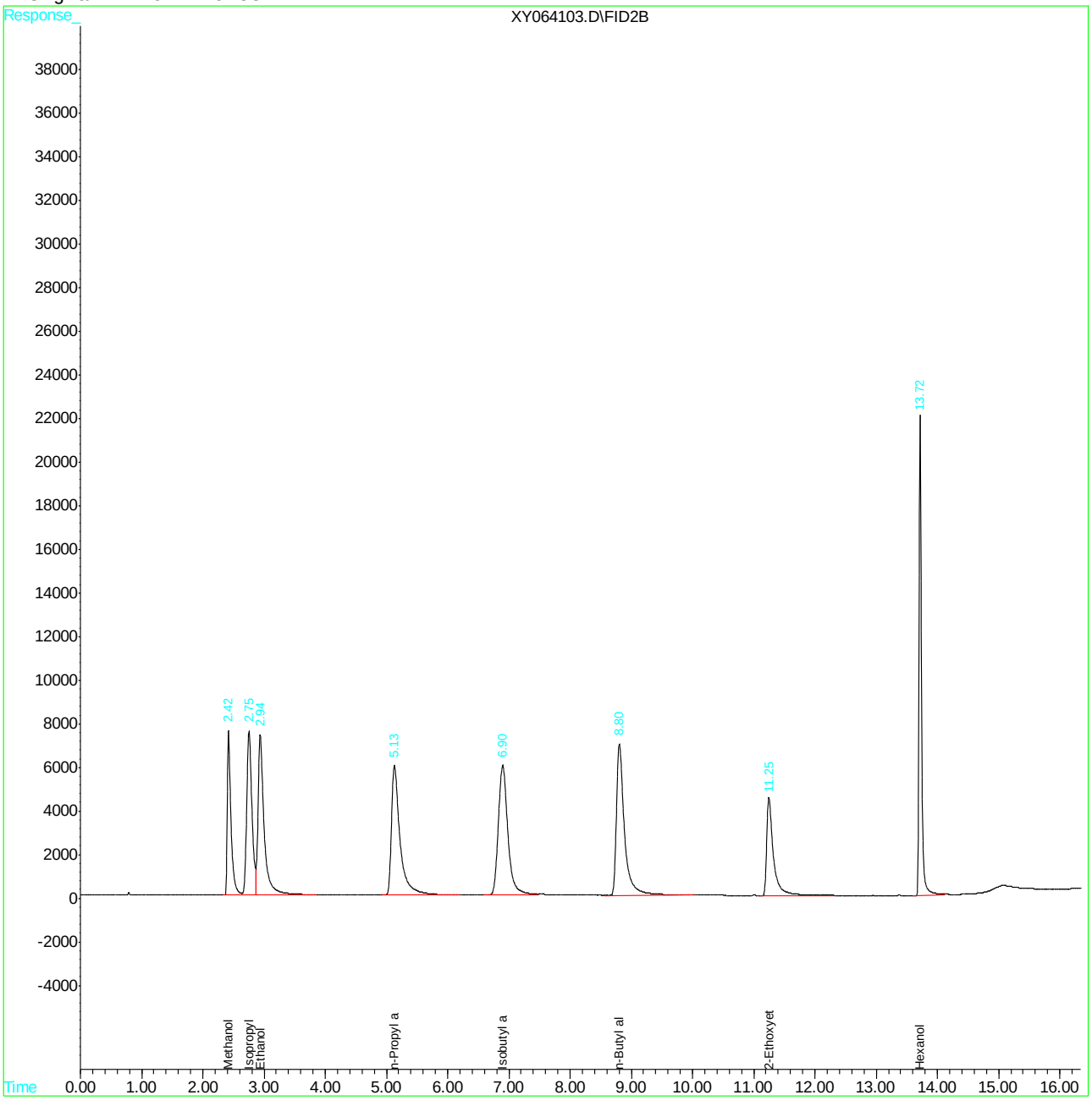
(f)=RT Delta > 1/2 Window (m)=manual int.
XY064103.D D8015.M Wed May 04 13:28:55 2016 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\050316\XY064103.D Vial: 6
Acq On : 3 May 2016 9:58 am Operator: StevenH
Sample : jc18972-2ams Inst : VOA5
Misc : gc18788,gxy2773,5.21,,,10,1 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 4 13:15 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Tue May 03 07:37:11 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



XY064103.D D8015.M Wed May 04 13:28:56 2016 Page 2

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\050316\XY064104.D Vial: 6
Acq On : 3 May 2016 10:52 am Operator: StevenH
Sample : jc18972-2amsd Inst : VOA5
Misc : gc18788,gxy2773,5.21,,,10,1 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 4 13:15 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Tue May 03 07:37:11 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	13.72	637690	120.221 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 120.22%			
Target Compounds			
1) Methanol	2.41	342523	125.983 mg/L
2) Isopropyl alcohol	2.75	475667	128.580 mg/L
3) Ethanol	2.93	544350	125.008 mg/L
4) n-Propyl alcohol	5.13	622170	127.131 mg/L
5) Isobutyl alcohol	6.90	681399	120.375 mg/L
6) n-Butyl alcohol	8.82	668278	127.115 mg/L
7) 2-Ethoxyethanol	11.25	371814	127.140 mg/L

13.4.4

13

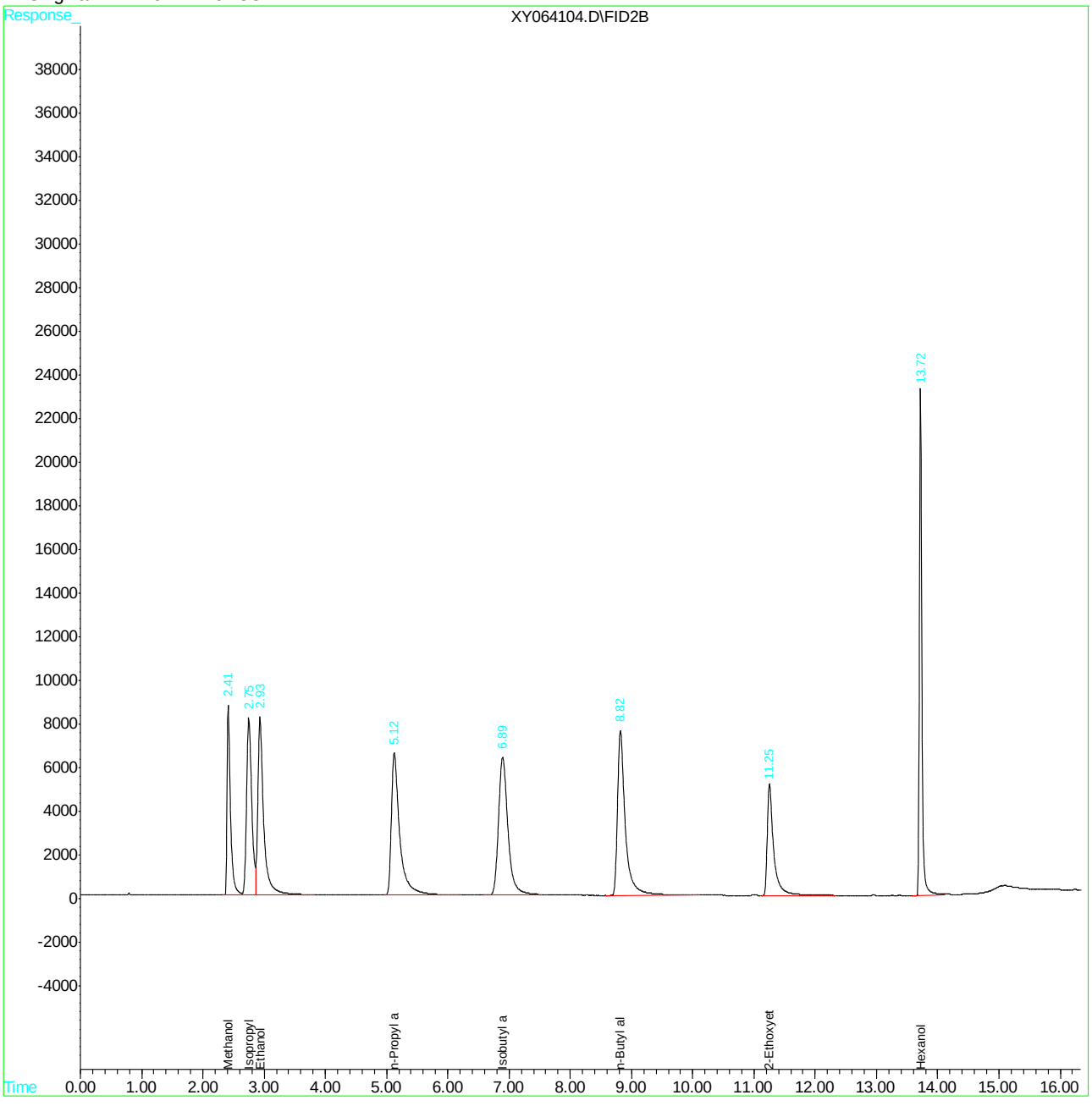
(f)=RT Delta > 1/2 Window (m)=manual int.
XY064104.D D8015.M Wed May 04 13:28:57 2016 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\050316\XY064104.D Vial: 6
Acq On : 3 May 2016 10:52 am Operator: StevenH
Sample : jc18972-2amsd Inst : VOA5
Misc : gc18788,gxy2773,5.21,,,10,1 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 4 13:15 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Tue May 03 07:37:11 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
05/03/16 10:59

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\2\DATA\050216\XY064080.D          Vial: 2
Acq On    :  2 May 2016   2:18 pm                   Operator: StevenH
Sample    : ic2772-1                                Inst    : VOA5
Misc      : gc18771,gxy2772,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: May  3  7:33 2016  Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Mon May 02 14:56:53 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	13.70	10078	1.046 mg/L m
Spiked Amount 100.000 Range 57 - 142 Recovery = 1.05%#			
Target Compounds			
1) Methanol	2.48	5986	1.271 mg/L
2) Isopropyl alcohol	2.75	7749	1.205 mg/L
3) Ethanol	2.98	8501	1.141 mg/L
4) n-Propyl alcohol	5.16	9361	1.090 mg/L
5) Isobutyl alcohol	6.88	11067	1.116 mg/L
6) n-Butyl alcohol	8.77	9774	1.034 mg/L
7) 2-Ethoxyethanol	11.26	5432	1.041 mg/L

13.5.1
13

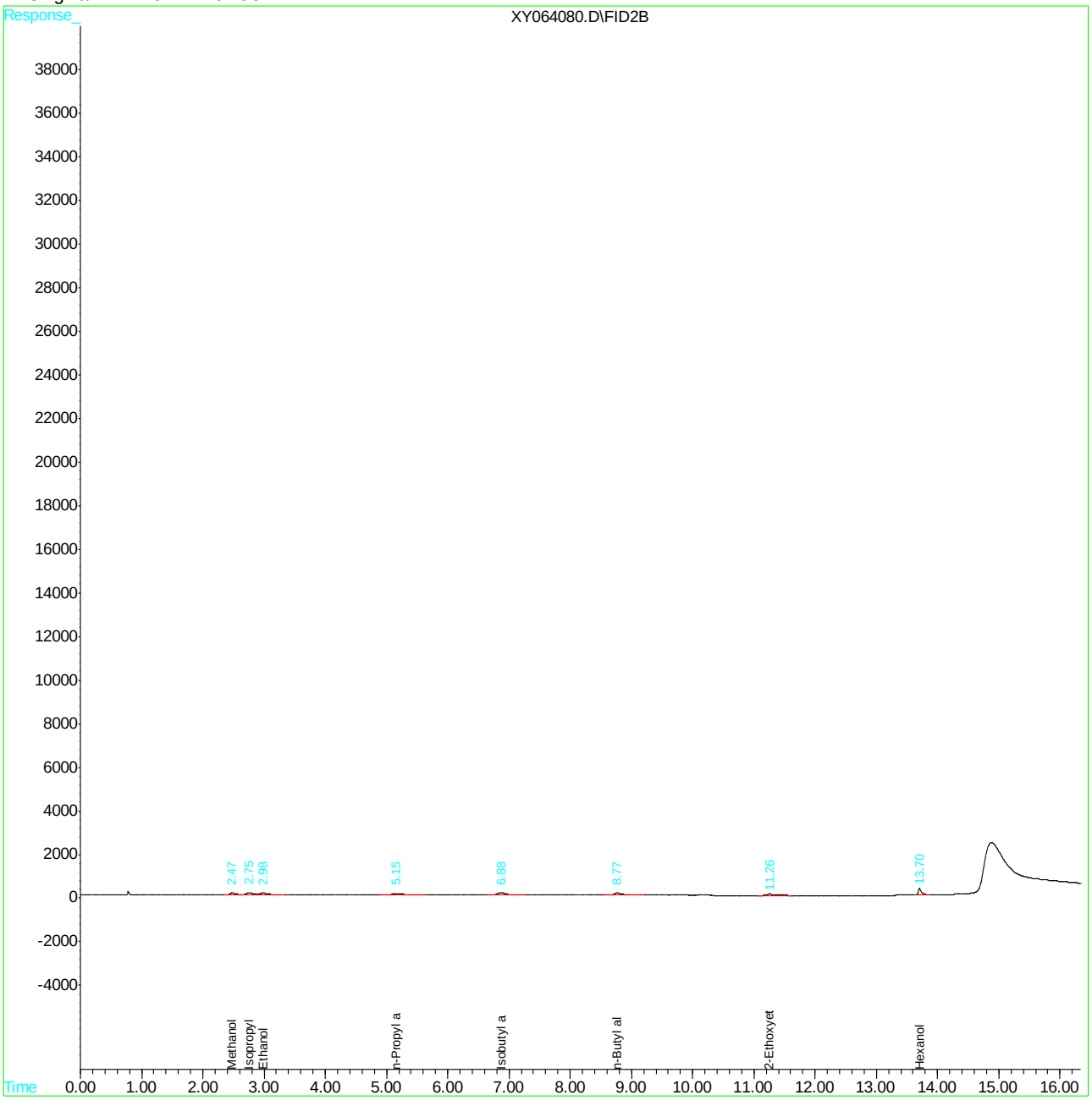
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\050216\XY064080.D Vial: 2
Acq On : 2 May 2016 2:18 pm Operator: StevenH
Sample : ic2772-1 Inst : VOA5
Misc : gc18771,gxy2772,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 3 7:33 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Mon May 02 14:56:53 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:	GXY2772-IC2772	**Method:**	SW846 8015C
Lab FileID:	XY064080.D	**Analyst approved:**	05/03/16 09:32 Steven Heller
Injection Time:	05/02/16 14:18	**Supervisor approved:**	05/03/16 10:59 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexanol	111-27-3	1	13.70	Poor instrument integration

Manual Integrations APPROVED (compounds with "m" flag)
Melissa Mangual 05/03/16 10:59

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\050216\XY064081.D Vial: 3
Acq On : 2 May 2016 3:00 pm Operator: StevenH
Sample : ic2772-2 Inst : VOA5
Misc : gc18771,gxy2772,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 3 7:34 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Mon May 02 14:56:53 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	13.70	25058	2.601 mg/L m
Spiked Amount 100.000 Range 57 - 142 Recovery = 2.60%#			
Target Compounds			
1) Methanol	2.45	13880	2.947 mg/L
2) Isopropyl alcohol	2.74	18265	2.839 mg/L
3) Ethanol	2.96	21780	2.924 mg/L
4) n-Propyl alcohol	5.14	24540	2.859 mg/L
5) Isobutyl alcohol	6.86	28610	2.885 mg/L
6) n-Butyl alcohol	8.76	25253	2.671 mg/L
7) 2-Ethoxyethanol	11.24	13590	2.604 mg/L

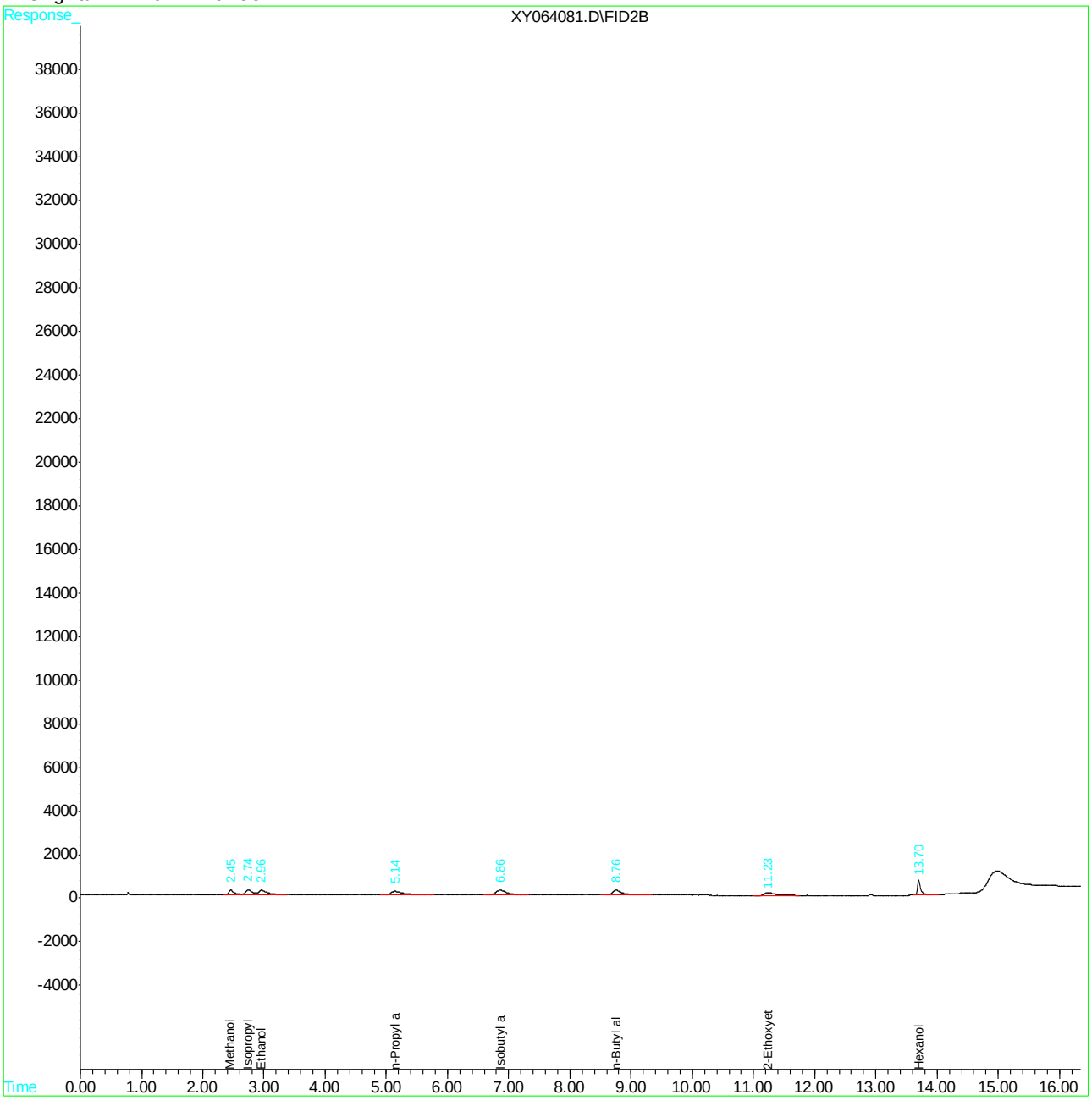
(f)=RT Delta > 1/2 Window (m)=manual int.
XY064081.D D8015.M Tue May 03 07:44:29 2016

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\050216\XY064081.D Vial: 3
Acq On : 2 May 2016 3:00 pm Operator: StevenH
Sample : ic2772-2 Inst : VOA5
Misc : gc18771,gxy2772,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 3 7:34 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Mon May 02 14:56:53 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:	GXY2772-IC2772	**Method:**	SW846 8015C
Lab FileID:	XY064081.D	**Analyst approved:**	05/03/16 09:32 Steven Heller
Injection Time:	05/02/16 15:00	**Supervisor approved:**	05/03/16 10:59 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexanol	111-27-3	1	13.70	Poor instrument integration

Manual Integrations APPROVED (compounds with "m" flag)
Melissa Mangual 05/03/16 10:59

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\050216\XY064082.D Vial: 4
Acq On : 2 May 2016 3:22 pm Operator: StevenH
Sample : ic2772-3 Inst : VOA5
Misc : gc18771,gxy2772,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 3 7:34 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Mon May 02 14:56:53 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	13.70	148444	15.407 mg/L m
Spiked Amount 100.000 Range 57 - 142 Recovery = 15.41%#			
Target Compounds			
1) Methanol	2.44	64258	13.643 mg/L
2) Isopropyl alcohol	2.75	84903	13.197 mg/L
3) Ethanol	2.96	110361	14.816 mg/L
4) n-Propyl alcohol	5.15	119484	13.918 mg/L
5) Isobutyl alcohol	6.87	134431	13.557 mg/L
6) n-Butyl alcohol	8.76	128626	13.605 mg/L
7) 2-Ethoxyethanol	11.23	71964	13.791 mg/L

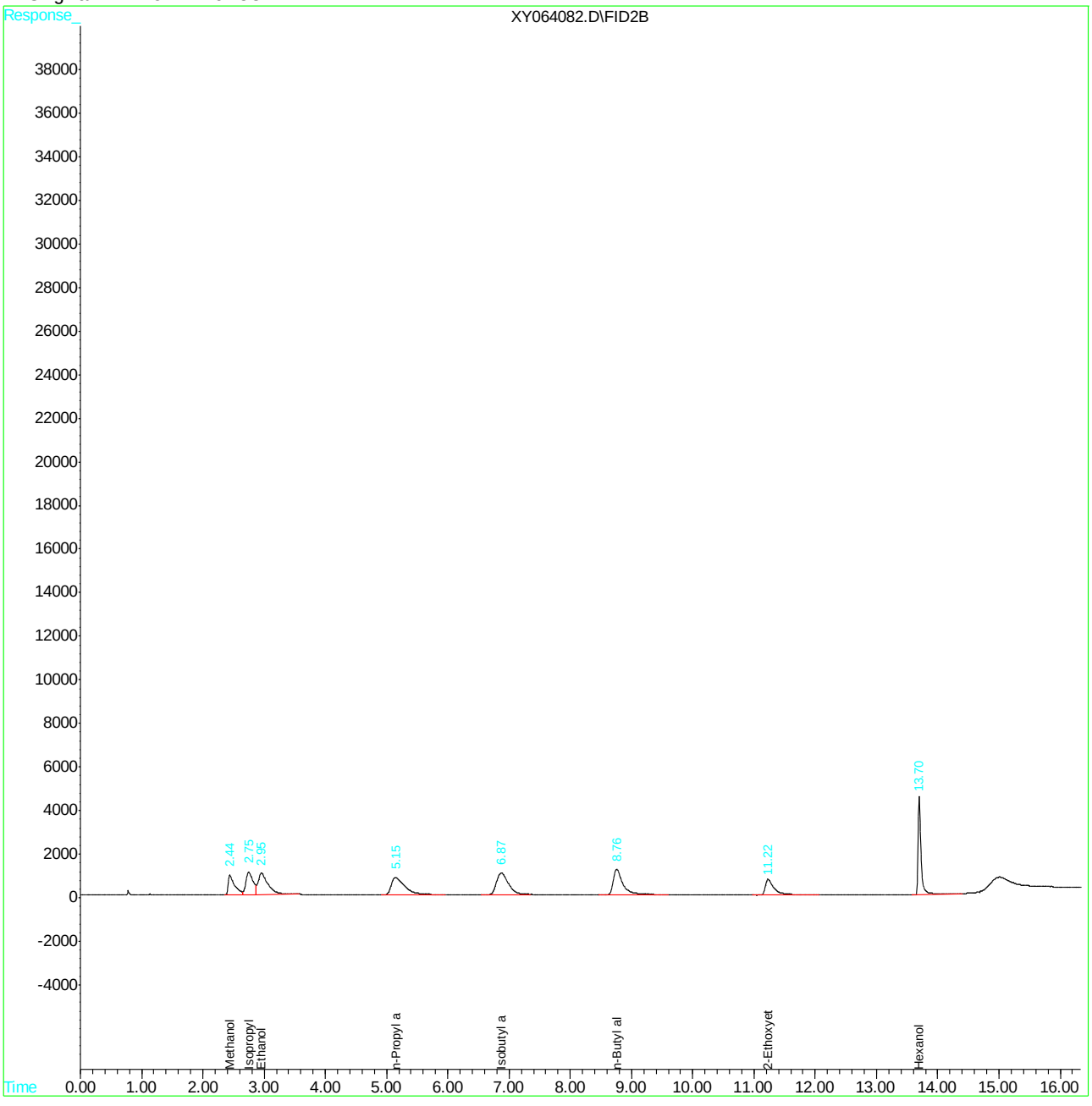
(f)=RT Delta > 1/2 Window (m)=manual int.
XY064082.D D8015.M Tue May 03 07:44:31 2016 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\050216\XY064082.D Vial: 4
Acq On : 2 May 2016 3:22 pm Operator: StevenH
Sample : ic2772-3 Inst : VOA5
Misc : gc18771,gxy2772,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 3 7:34 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Mon May 02 14:56:53 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:	GXY2772-IC2772	**Method:**	SW846 8015C
Lab FileID:	XY064082.D	**Analyst approved:**	05/03/16 09:32 Steven Heller
Injection Time:	05/02/16 15:22	**Supervisor approved:**	05/03/16 10:59 Melissa Mangual

Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexanol	111-27-3	1	13.70	Poor instrument integration

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\050216\XY064083.D Vial: 5
Acq On : 2 May 2016 3:43 pm Operator: StevenH
Sample : icc2772-4 Inst : VOA5
Misc : gc18771,gxy2772,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 2 16:36 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Mon May 02 14:56:53 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	13.70	528072	54.809 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 54.81%#			
Target Compounds			
1) Methanol	2.41	279952	59.438 mg/L
2) Isopropyl alcohol	2.74	373158	58.001 mg/L
3) Ethanol	2.92	473754	63.602 mg/L
4) n-Propyl alcohol	5.10	517797	60.316 mg/L
5) Isobutyl alcohol	6.86	592309	59.732 mg/L
6) n-Butyl alcohol	8.74	560425	59.278 mg/L
7) 2-Ethoxyethanol	11.21	312068	59.803 mg/L

13.5.4 13

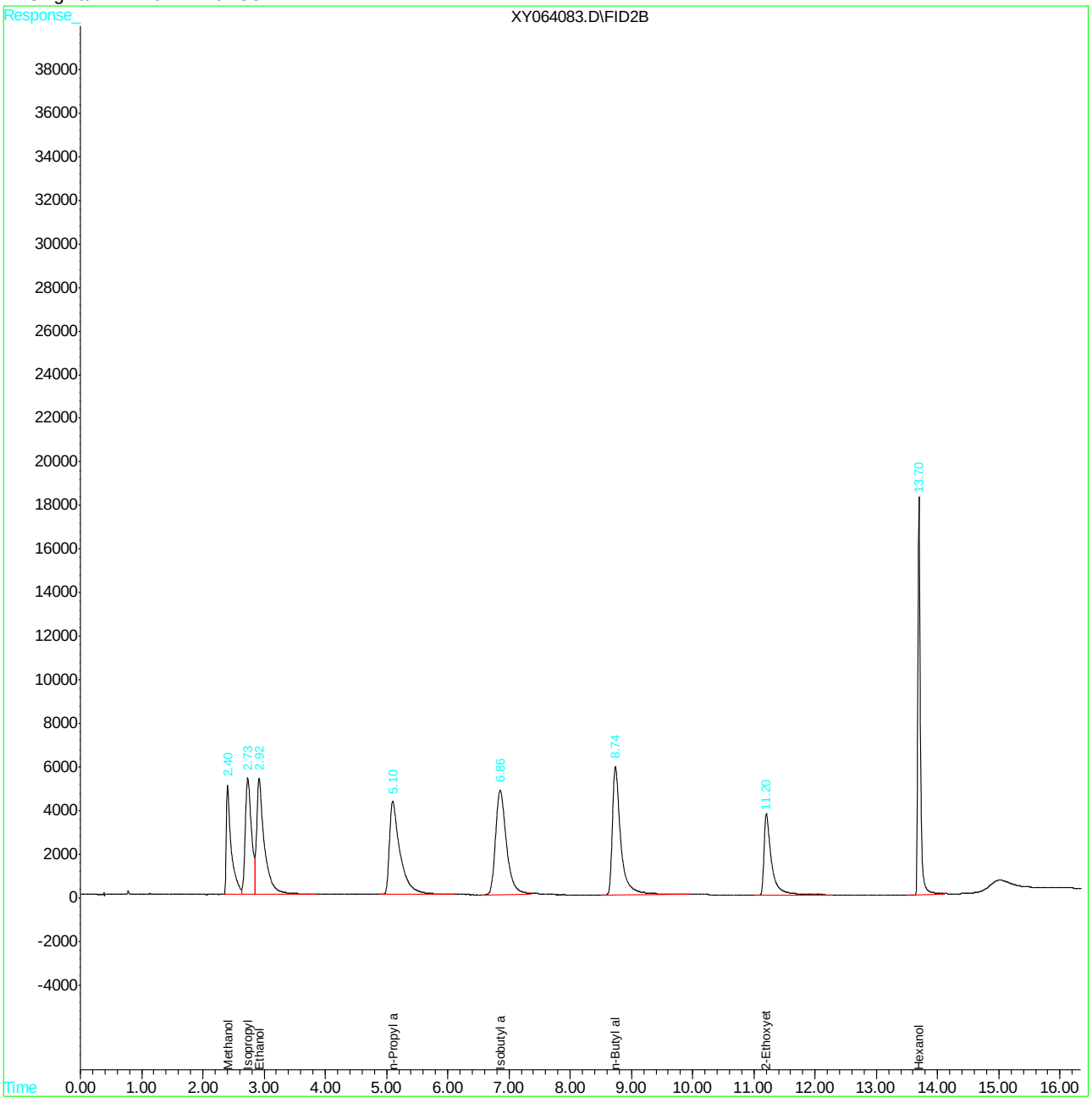
(f)=RT Delta > 1/2 Window (m)=manual int.
XY064083.D D8015.M Tue May 03 07:44:32 2016

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\050216\XY064083.D Vial: 5
Acq On : 2 May 2016 3:43 pm Operator: StevenH
Sample : icc2772-4 Inst : VOA5
Misc : gc18771,gxy2772,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 2 16:36 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Mon May 02 14:56:53 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\050216\XY064084.D Vial: 6
Acq On : 2 May 2016 4:04 pm Operator: StevenH
Sample : ic2772-5 Inst : VOA5
Misc : gc18771,gxy2772,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 2 16:36 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Mon May 02 14:56:53 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	13.69	1290694	133.962 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 133.96%			
Target Compounds			
1) Methanol	2.40	656134	139.306 mg/L
2) Isopropyl alcohol	2.73	899899	139.875 mg/L
3) Ethanol	2.91	1082008	145.261 mg/L
4) n-Propyl alcohol	5.09	1219215	142.021 mg/L
5) Isobutyl alcohol	6.85	1396762	140.857 mg/L
6) n-Butyl alcohol	8.72	1323725	140.014 mg/L
7) 2-Ethoxyethanol	11.19	749665	143.660 mg/L

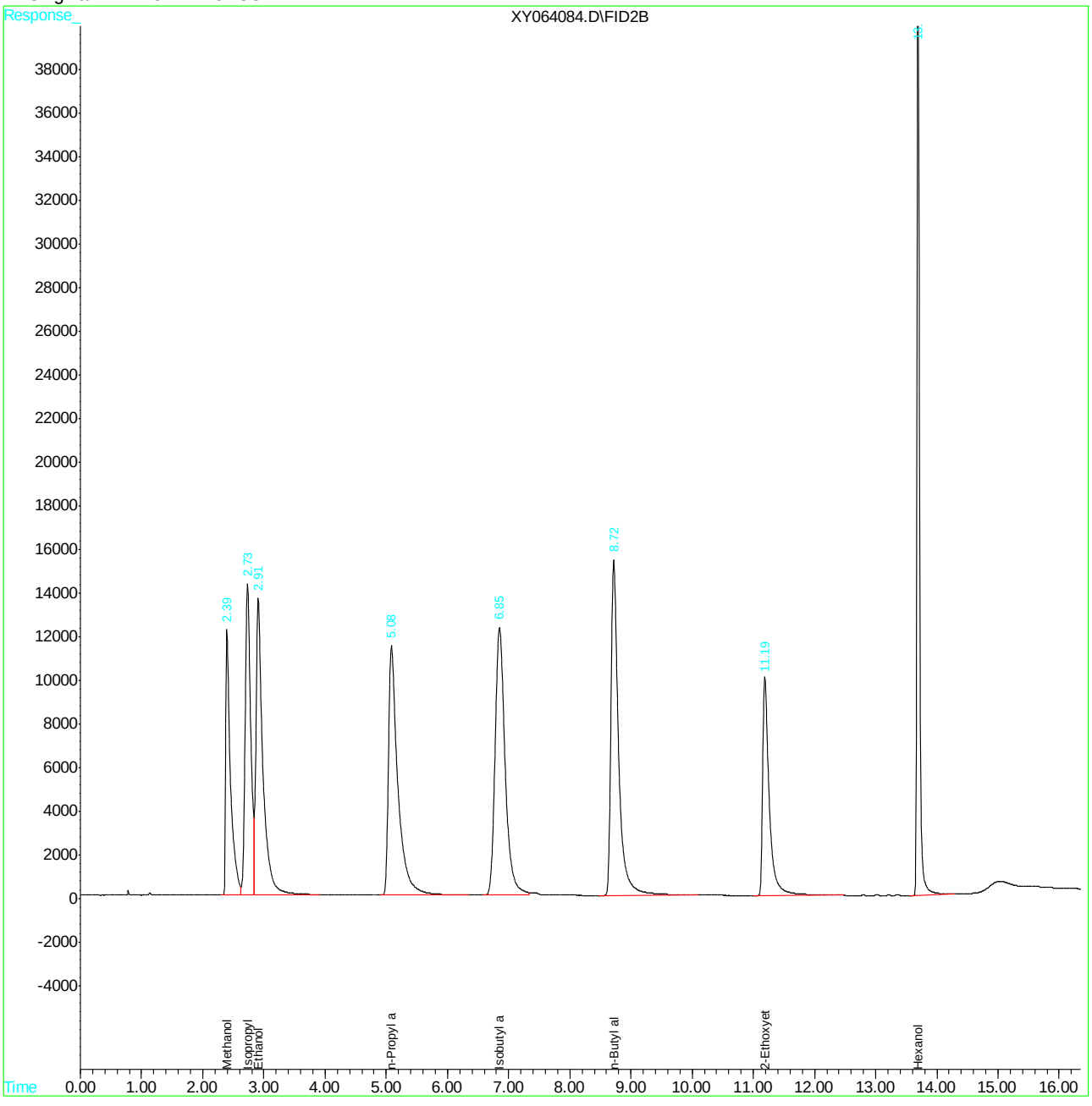
(f)=RT Delta > 1/2 Window (m)=manual int.
XY064084.D D8015.M Tue May 03 07:44:34 2016 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\050216\XY064084.D Vial: 6
Acq On : 2 May 2016 4:04 pm Operator: StevenH
Sample : ic2772-5 Inst : VOA5
Misc : gc18771,gxy2772,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 2 16:36 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Mon May 02 14:56:53 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\050216\XY064085.D Vial: 7
Acq On : 2 May 2016 4:26 pm Operator: StevenH
Sample : ic2772-6 Inst : VOA5
Misc : gc18771,gxy2772,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 3 7:35 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Mon May 02 14:56:53 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	13.69	2705536	280.810 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 280.81%#			
Target Compounds			
1) Methanol	2.38	1334044	283.235 mg/L
2) Isopropyl alcohol	2.72	1927228	299.557 mg/L
3) Ethanol	2.89	2142314	287.608 mg/L
4) n-Propyl alcohol	5.06	2489394	289.978 mg/L
5) Isobutyl alcohol	6.84	2900763	292.529 mg/L
6) n-Butyl alcohol	8.71	2737807	289.586 mg/L
7) 2-Ethoxyethanol	11.18	1513751	290.085 mg/L

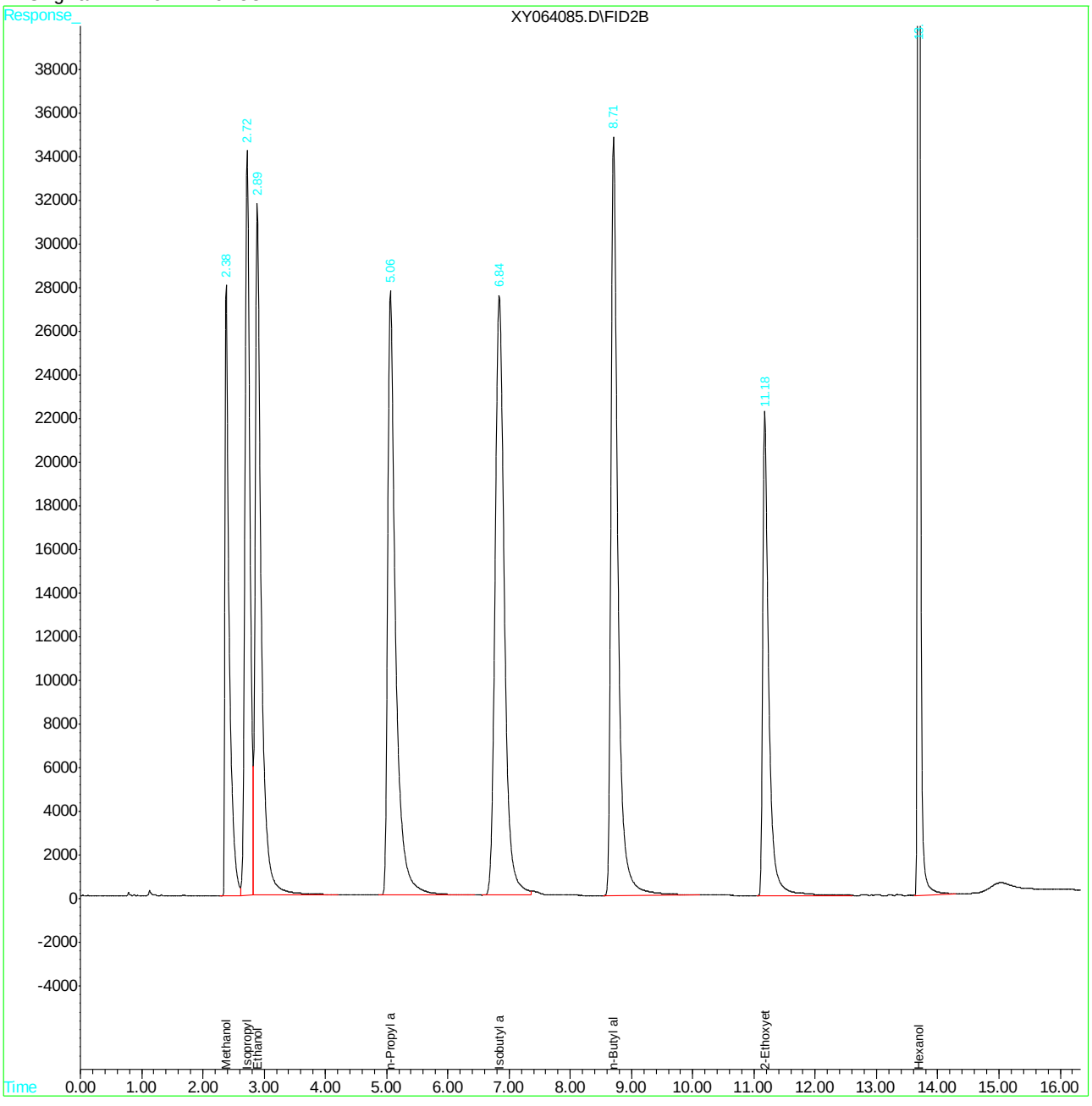
(f)=RT Delta > 1/2 Window (m)=manual int.
XY064085.D D8015.M Tue May 03 07:44:35 2016 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\050216\XY064085.D Vial: 7
Acq On : 2 May 2016 4:26 pm Operator: StevenH
Sample : ic2772-6 Inst : VOA5
Misc : gc18771,gxy2772,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 3 7:35 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Mon May 02 14:56:53 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\050216\XY064086.D Vial: 8
Acq On : 2 May 2016 4:47 pm Operator: StevenH
Sample : ic2772-7 Inst : VOA5
Misc : gc18771,gxy2772,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 3 7:36 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Mon May 02 14:56:53 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	13.69	5286903	548.733 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 548.73%#			
Target Compounds			
1) Methanol	2.37	2599968	552.007 mg/L
2) Isopropyl alcohol	2.72	3786367	588.530 mg/L
3) Ethanol	2.88	4110606	551.854 mg/L
4) n-Propyl alcohol	5.05	4856237	565.680 mg/L
5) Isobutyl alcohol	6.83	5680267	572.830 mg/L
6) n-Butyl alcohol	8.69	5343327	565.179 mg/L
7) 2-Ethoxyethanol	11.17	3011713	577.143 mg/L

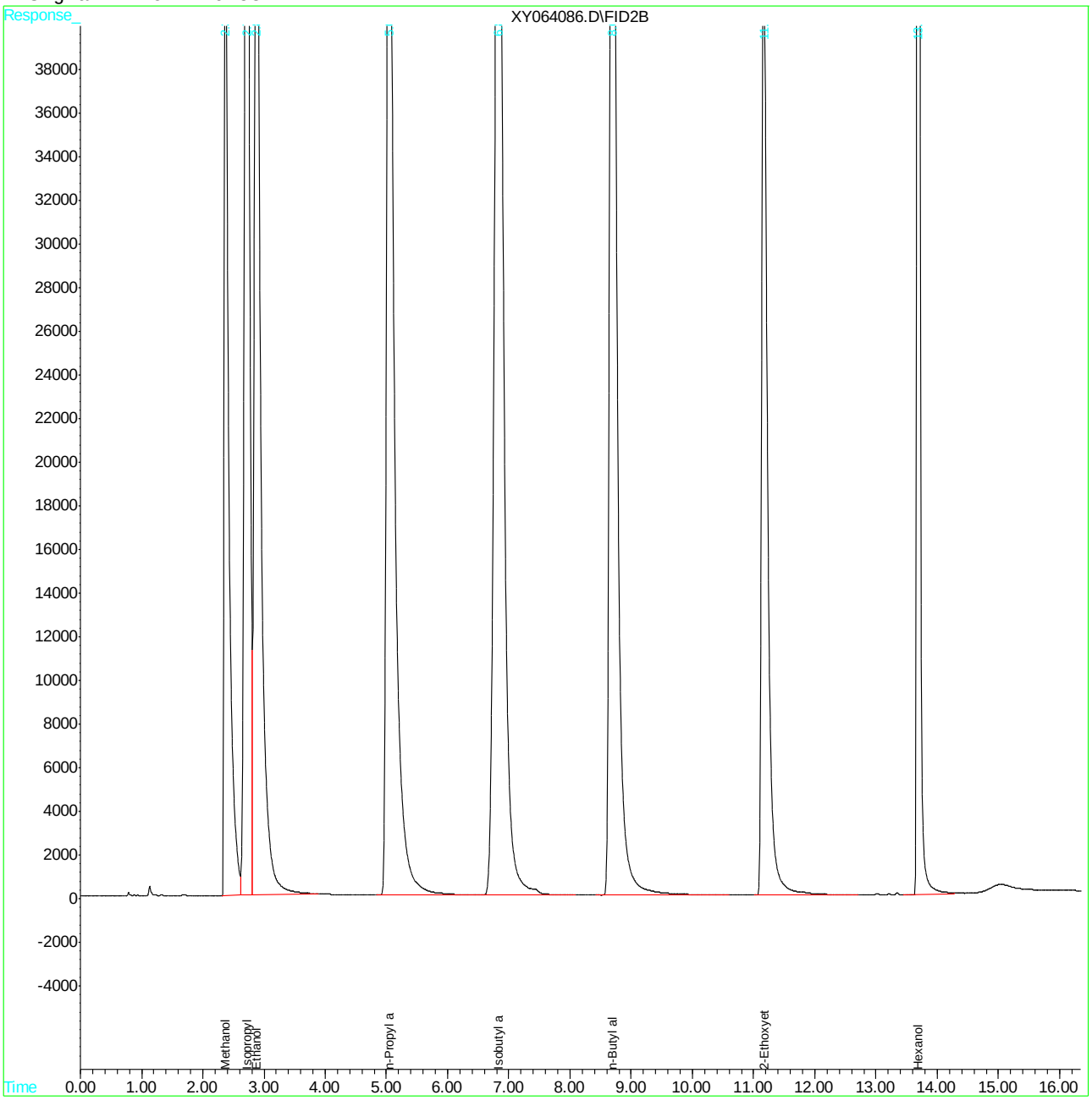
(f)=RT Delta > 1/2 Window (m)=manual int.
XY064086.D D8015.M Tue May 03 07:44:37 2016 Page 1

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\050216\XY064086.D Vial: 8
Acq On : 2 May 2016 4:47 pm Operator: StevenH
Sample : ic2772-7 Inst : VOA5
Misc : gc18771,gxy2772,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 3 7:36 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Mon May 02 14:56:53 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\050216\XY064088.D Vial: 10
Acq On : 2 May 2016 5:30 pm Operator: StevenH
Sample : icv2772-4 Inst : VOA5
Misc : gc18771,gxy2772,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 3 7:38 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Tue May 03 07:37:11 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	13.70	578268	109.019 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 109.02%			
Target Compounds			
1) Methanol	2.40	305082	112.212 mg/L
2) Isopropyl alcohol	2.74	424039	114.624 mg/L
3) Ethanol	2.92	492395	113.077 mg/L
4) n-Propyl alcohol	5.10	558137	114.047 mg/L
5) Isobutyl alcohol	6.87	616659	108.938 mg/L
6) n-Butyl alcohol	8.77	599559	114.044 mg/L
7) 2-Ethoxyethanol	11.22	339903	116.228 mg/L

13.5.8

13

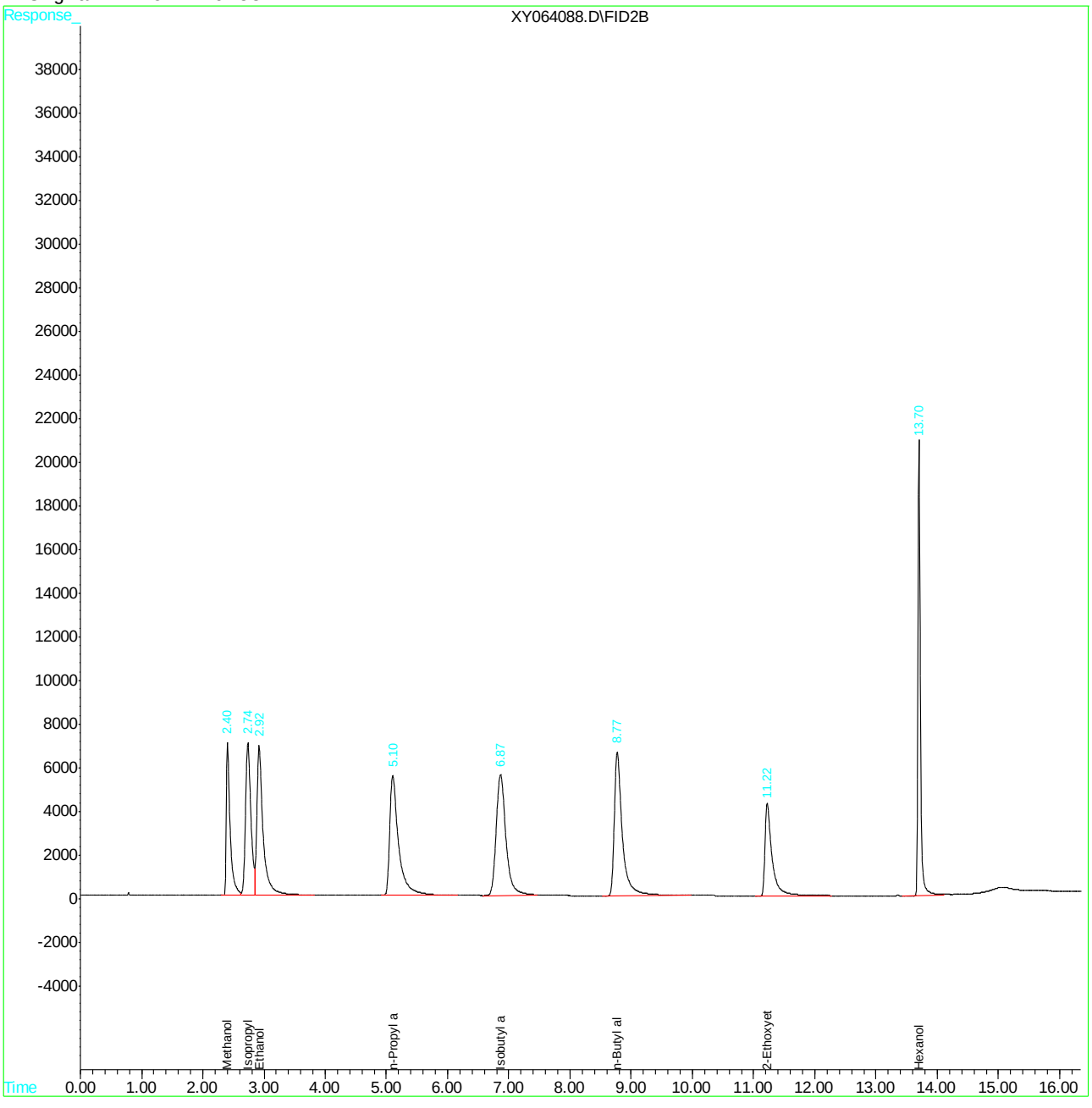
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\050216\XY064088.D Vial: 10
Acq On : 2 May 2016 5:30 pm Operator: StevenH
Sample : icv2772-4 Inst : VOA5
Misc : gc18771,gxy2772,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 3 7:38 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Tue May 03 07:37:11 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



XY064088.D D8015.M Tue May 03 09:18:02 2016 Page 2

Quantitation Report (QT Reviewed)

```
Data File : C:\HPCHEM\2\DATA\050216\XY064089.D          Vial: 5
Acq On    :  2 May 2016   5:52 pm                   Operator: StevenH
Sample    : cc2772-4                                Inst    : VOA5
Misc      : gc18771,gxy2772,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: May  3  7:38 2016  Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Tue May 03 07:37:11 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj.  : 1uL
Signal Phase : Stabilwax
Signal Info  : 0.53mm
```

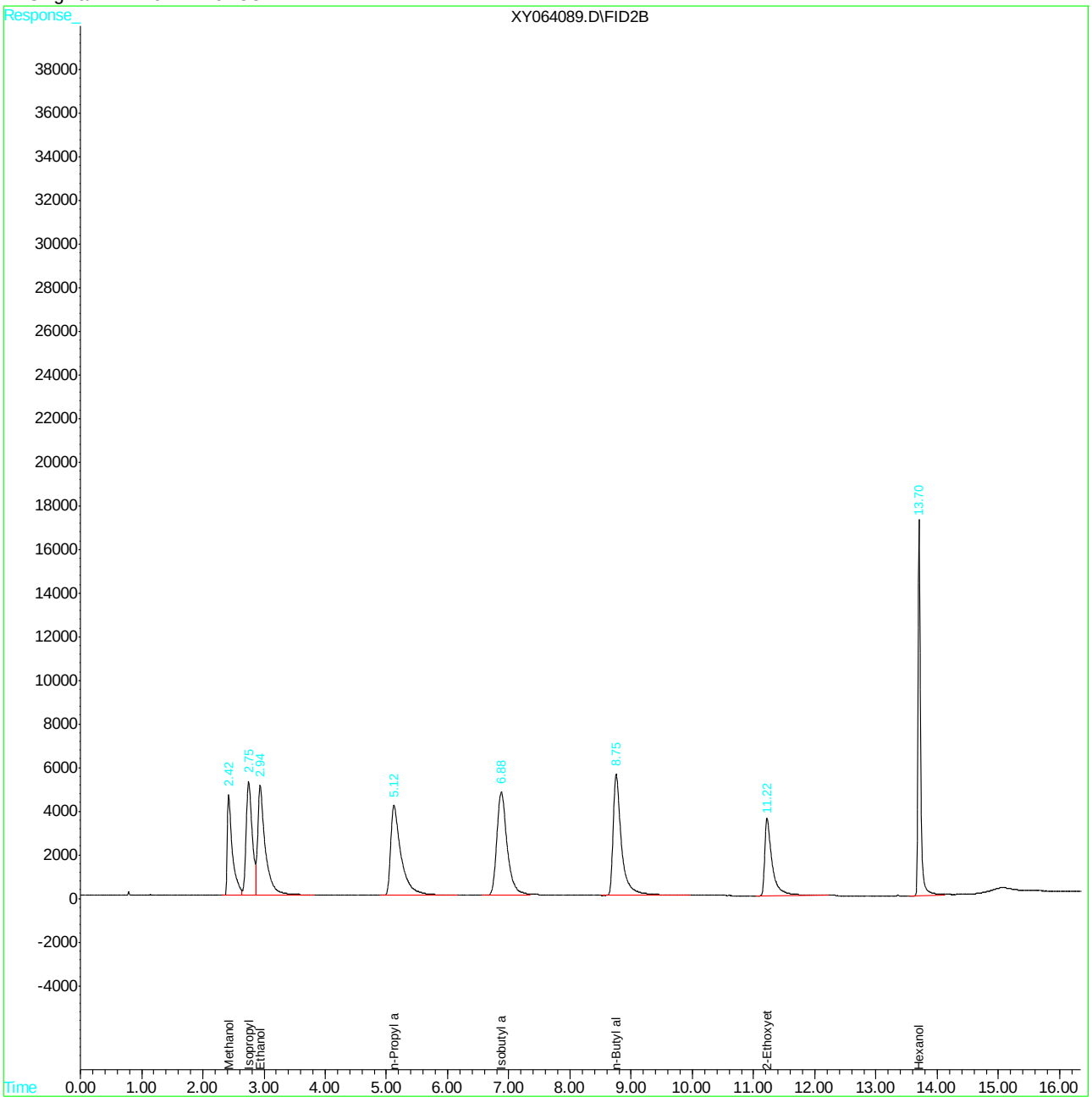
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
8) S Hexanol	13.71	499644	94.196 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 94.20%			
Target Compounds			
1) Methanol	2.42	263927	97.075 mg/L
2) Isopropyl alcohol	2.75	357821	96.724 mg/L
3) Ethanol	2.94	440079	101.063 mg/L
4) n-Propyl alcohol	5.13	489072	99.934 mg/L
5) Isobutyl alcohol	6.88	559202	98.788 mg/L
6) n-Butyl alcohol	8.76	528366	100.502 mg/L
7) 2-Ethoxyethanol	11.22	298228	101.978 mg/L

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\050216\XY064089.D Vial: 5
Acq On : 2 May 2016 5:52 pm Operator: StevenH
Sample : cc2772-4 Inst : VOA5
Misc : gc18771,gxy2772,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 3 7:38 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Tue May 03 07:37:11 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\050216\XY064097.D          Vial: 6
Acq On    :  2 May 2016   8:44 pm                   Operator: StevenH
Sample    : ecc2772-5                               Inst    : VOA5
Misc      : gc18771,gxy2772,,,,,                    Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: May  3  7:38 2016  Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Tue May 03 07:37:11 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	13.71	1345801	253.719 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 253.72%#			
Target Compounds			
1) Methanol	2.40	678309	249.489 mg/L
2) Isopropyl alcohol	2.74	953799	257.825 mg/L
3) Ethanol	2.91	1115352	256.137 mg/L
4) n-Propyl alcohol	5.09	1271590	259.830 mg/L
5) Isobutyl alcohol	6.87	1463667	258.569 mg/L
6) n-Butyl alcohol	8.74	1385642	263.567 mg/L
7) 2-Ethoxyethanol	11.21	756500	258.681 mg/L

13.5.10

13

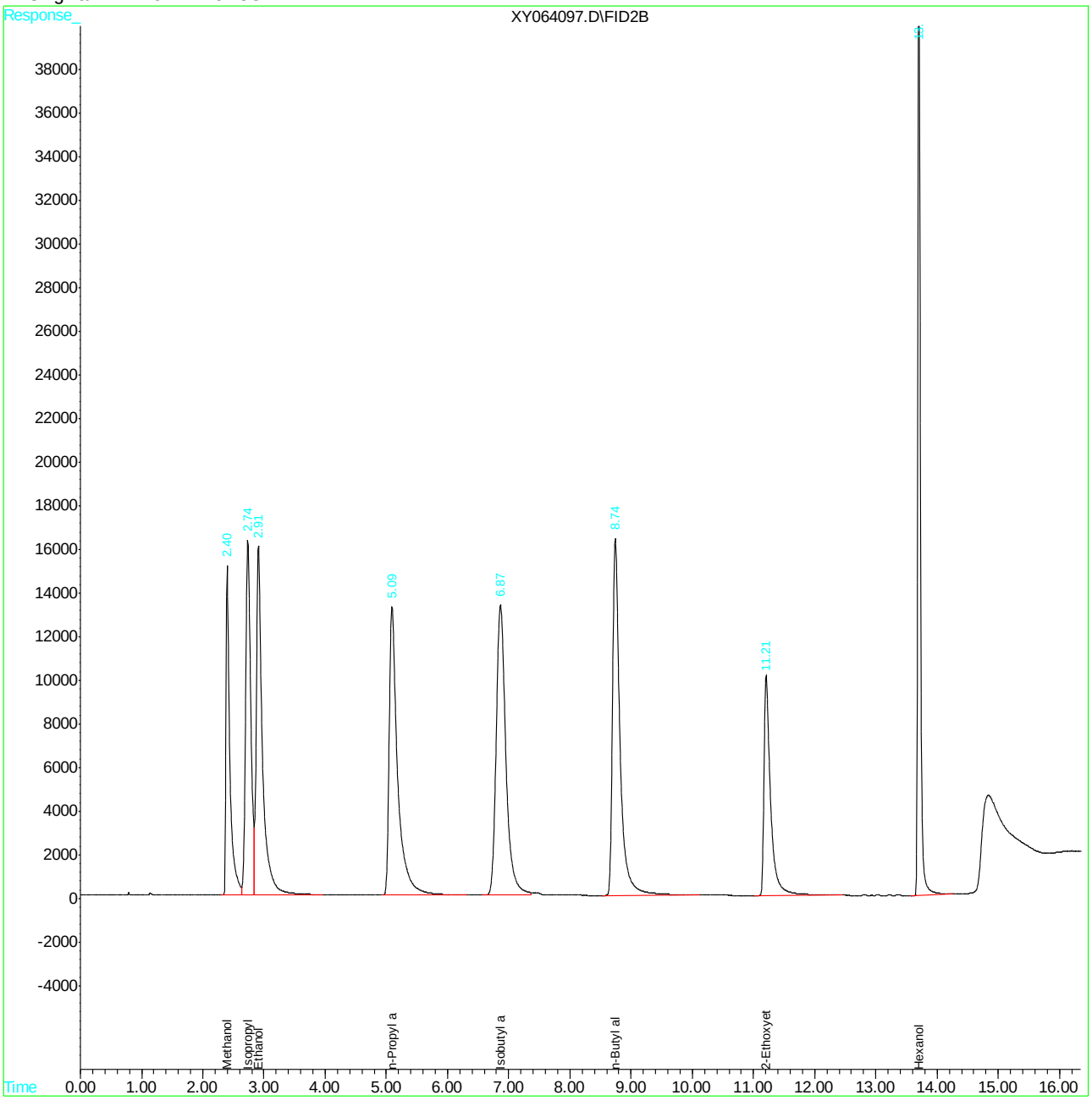
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\050216\XY064097.D Vial: 6
Acq On : 2 May 2016 8:44 pm Operator: StevenH
Sample : ecc2772-5 Inst : VOA5
Misc : gc18771,gxy2772,,,,, Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 3 7:38 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Tue May 03 07:37:11 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\050316\XY064098.D Vial: 1
Acq On : 3 May 2016 8:11 am Operator: StevenH
Sample : cc2772-4 Inst : VOA5
Misc : gc18788,gxy2773,5.00,,,10,1 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 4 13:15 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Tue May 03 07:37:11 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	13.71	517740	97.608 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 97.61%			
Target Compounds			
1) Methanol	2.41	264539	97.300 mg/L
2) Isopropyl alcohol	2.74	348978	94.334 mg/L
3) Ethanol	2.92	473238	108.678 mg/L
4) n-Propyl alcohol	5.11	500446	102.258 mg/L
5) Isobutyl alcohol	6.87	577462	102.013 mg/L
6) n-Butyl alcohol	8.75	540779	102.863 mg/L
7) 2-Ethoxyethanol	11.21	302439	103.417 mg/L

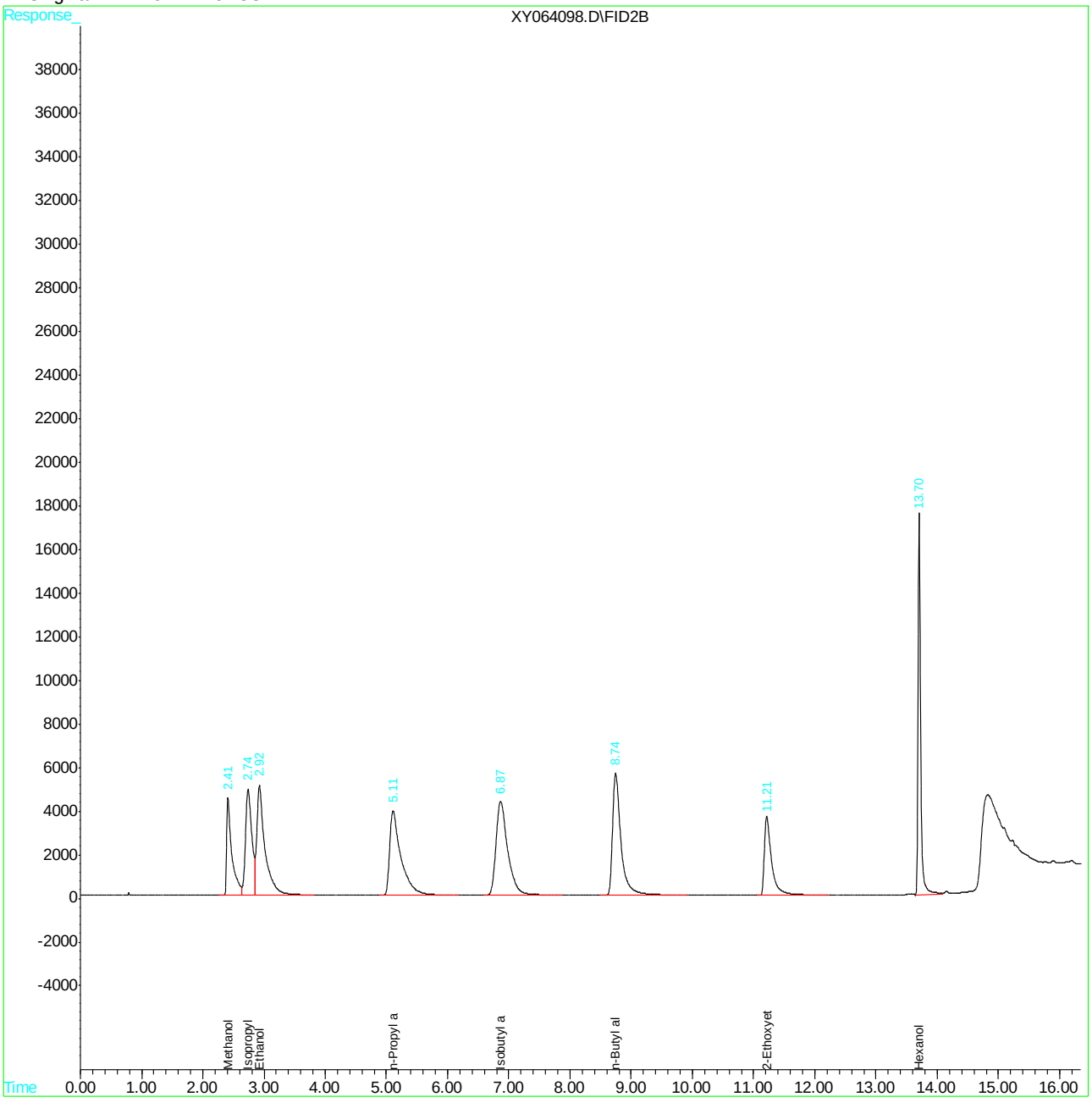
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\050316\XY064098.D Vial: 1
Acq On : 3 May 2016 8:11 am Operator: StevenH
Sample : cc2772-4 Inst : VOA5
Misc : gc18788,gxy2773,5.00,,,10,1 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 4 13:15 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Tue May 03 07:37:11 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\050316\XY064109.D          Vial: 10
Acq On    :  3 May 2016   1:37 pm                   Operator: StevenH
Sample    : ecc2772-5                               Inst    : VOA5
Misc      : gc18788,gxy2773,5.00,,,10,1             Multiplr: 1.00
IntFile   : EVENTS.E
Quant Time: May  4 13:16 2016  Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title        : Alcohols by direct injection
Last Update  : Tue May 03 07:37:11 2016
Response via : Initial Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj.  : 1uL
Signal Phase : Stabilwax
Signal Info  : 0.53mm
```

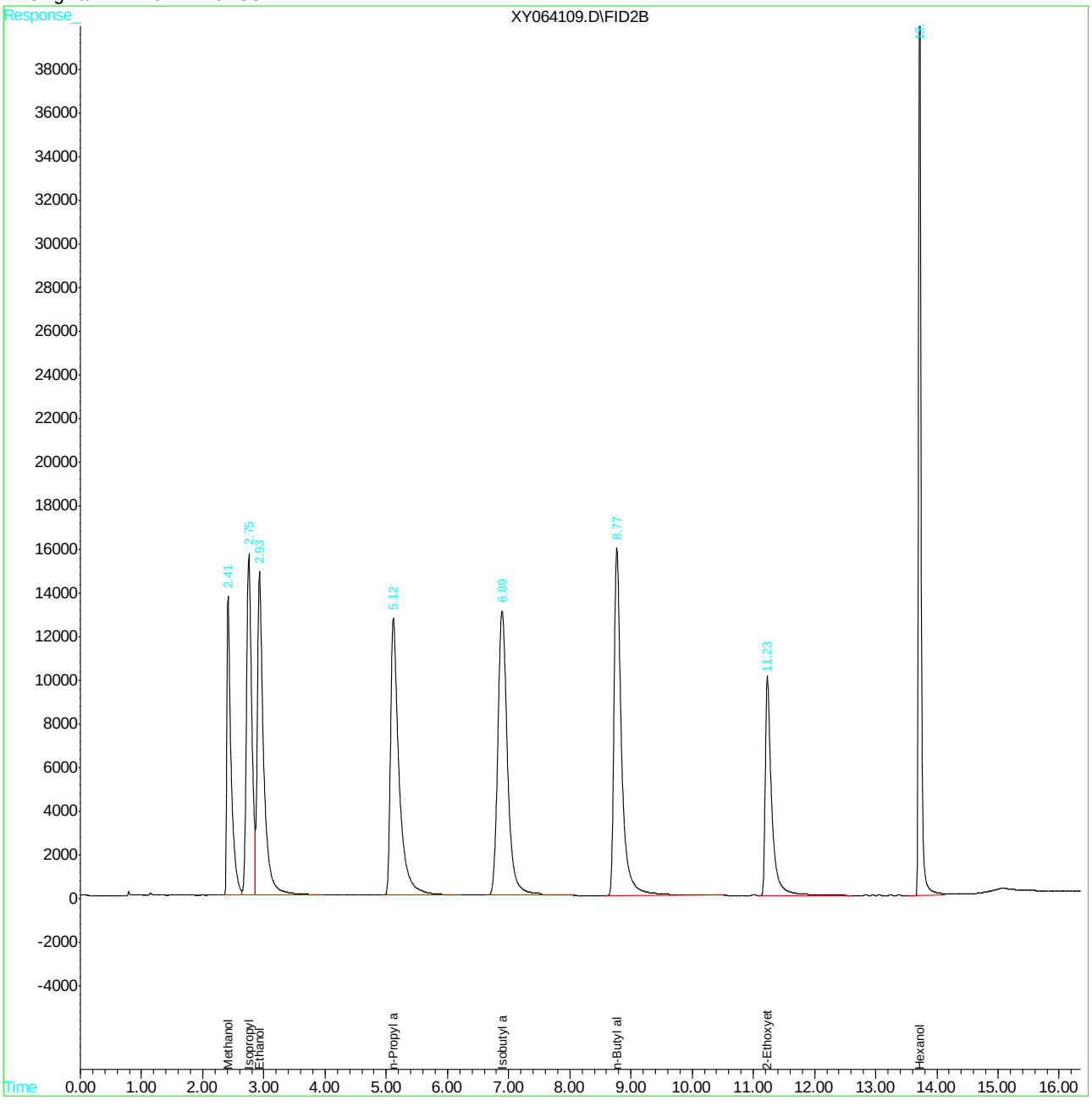
Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
8) S Hexanol	13.72	1297696	244.650 mg/L
Spiked Amount 100.000 Range 57 - 142 Recovery = 244.65%#			
Target Compounds			
1) Methanol	2.41	658353	242.149 mg/L
2) Isopropyl alcohol	2.75	938727	253.751 mg/L
3) Ethanol	2.93	1061546	243.781 mg/L
4) n-Propyl alcohol	5.12	1227514	250.823 mg/L
5) Isobutyl alcohol	6.89	1435221	253.544 mg/L
6) n-Butyl alcohol	8.77	1349290	256.652 mg/L
7) 2-Ethoxyethanol	11.23	729739	249.530 mg/L

Quantitation Report (QT Reviewed)

Data File : C:\HPCHEM\2\DATA\050316\XY064109.D Vial: 10
Acq On : 3 May 2016 1:37 pm Operator: StevenH
Sample : ecc2772-5 Inst : VOA5
Misc : gc18788,gxy2773,5.00,,,10,1 Multiplr: 1.00
IntFile : EVENTS.E
Quant Time: May 4 13:16 2016 Quant Results File: D8015.RES

Quant Method : C:\HPCHEM\2\METHODS\D8015.M (Chemstation Integrator)
Title : Alcohols by direct injection
Last Update : Tue May 03 07:37:11 2016
Response via : Multiple Level Calibration
DataAcq Meth : DAI-WAX.M

Volume Inj. : 1uL
Signal Phase : Stabilwax
Signal Info : 0.53mm



XY064109.D D8015.M Wed May 04 13:18:57 2016 Page 2

ACCUTEST LABORATORIES SF

DATE:	5/2/16
COLUMN TYPE:	Stabilwax
DETECTOR:	FID
INSTRUMENT:	VOA5-XY
ANALYST:	SH

1-12 pH LOT 200814
0-3 pH LOT 204413A

GC VOA5-XY ANALYSIS LOG

METHODS:	Alcohols
METHOD FILE:	8015 / DAI WAX
CALIB. DATE:	5/2/16
RUN ID:	GXY 2772

STANDARDS

ICAL/CCV:	V20132
ISTD/SURR:	V19752
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 0640 71	CC 2728-4	NA	W	1.0	1ml	1		NA	✓	✓ 100ml + 900ml STDS 7 + 6
XY 72	4					1			✓	✓ NEW LINER
XY 73	4					1			✓	✓
XY 74	4					1			✓	✓ SH 5/2/16
XY 75	4					1			✓	✓ new ~~syringe~~ syringe
XY 76	4					1			✓	✓ STD's Bottle
XY 77	4					1			✓	✓
XY 78	4					1			✓	✓
XY 79	4					1			✓	✓
XY 80	IC2772-1					2	8 PII			2ul + 998ul ✓
XY 81	2					3	8 PII			5ul + 995ul ✓
XY 82	3					4	8 PII			25ul + 975ul ✓
XY 83	4					5				100ul + 900ul ✓
XY 84	5					6				250ul + 750ul ✓
XY 85	6					7				450ul + 250ul ✓
XY 86	7					8				stock ✓
XY 87	Blank					9				SH 5/2/16 ✓
XY 88	IC2772-4					10				~~100~~ 10ul - 1ml ✓
XY 89	CC2772-4				SH 5/2/16	~~X5~~				100ul + 900ul ✓
XY 90	BS					11				10ul - 1ml ✓
XY 91	MB	↓				12		↓		✓
XY 92	JC19023-3	1				13		1		✓
XY 93	JC19214-1A	1				14		1		✓
XY 94	2A	1				15		1		✓
XY 95	2A MS	1				16		1		10ul - 1ml ✓
XY 96	2A MSD	1				16		1		↓ ✓
XY 97	ECC2772-5	NA	↓	↓	↓	~~X6~~ SH 5/2/16		NA		250ul + 750ul ✓

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: SH

gcvoa5_xy_log.xls NF 08/15

ACCUTEST LABORATORIES SE

DATE:	5/3/16
COLUMN TYPE:	Stabilwax
DETECTOR:	FID
INSTRUMENT:	VOA5-XY
ANALYST:	LH

GC VOA5-XY ANALYSIS LOG

METHODS:	Alcohols
METHOD FILE:	08015
CALIB. DATE:	5/2/16
RUN ID:	GXY 2773

STANDARDS

ICAL/CCV:	V20132
ISTD/SURR:	V19752
ICV/QC:	7896A
AMBIENT TEMP.:	NA
THERM ID:	4

DATA FILE	SAMPLE ID, DIL.	Vial #	MATRIX LH 5/3/16	SAMPLE AMT.	FINAL VOL.	ALS POSITION	MANUALLY INTEGRATED PEAKS RATIONALE, PEAK #	PH	RR	COMMENTS
XY 064098	CC2772-4	NA	WC	5.0g	10mL 1ml	1		NA		100ul + 900ul ✓
XY 99	BS					2				10ul - 1ml ✓
XY 100	MB					3				✓
XY 01	JC18972-1A			4.91	10mL	4				B1466
XY 02	2A			5.21		5				B1467
XY 03	2AMS			5.21		6				
XY 04	2AMSD			1		6				
XY 05	J19023-1			5.34		7				B1657
XY 06	2			4.96		8				B1658 WRT
XY 07	4			5.12		9				B1659
XY 08	ECC2772-5			NA		10				250ul + 750ul
XY										
XY										
XY										
XY										
XY										
XY										
XY										
XY										
XY										
XY										
XY										
XY										
XY										
XY										
XY										

LH 5/4/16

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 SOUTHEAST

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
B1466	JC18972-1	W NOT1	–		4.91	4/29/16	11:16	LH	5030A	OOH 10mL F
67	2	↓ ↓	–		5.21	↓	↓	↓	↓	↓ ↓
68										
69										
70										
71										
72										
73										
74										
75										
76										
77										
78										
79										
80										
81										
82										
83										
84										
85										
86										
87										
B14 88										

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

ACCUTEST SOUTHEAST

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
B1650	FA33593-6	W	30.82	30.84	0.02	5/3/16	8:36	CG	PT	IN VR blank
51	-7	W	30.87	30.94	0.07					
52	-7	W	30.72	—	—					vial broke
53	-8	W	30.79	30.79	0.00					
54	-8	W	30.80	30.82	0.02					
55	-9	W	30.70	30.71	0.01					
56	-9	W	30.83	30.85	0.02					
57	JC19023-1	W Bot1			5.34	5/3/16	8:48	SH	5030A	OOH 10mL F.K.
58	2	Bot1			4.96					
59	4	Bot 1			5.12					
60										
61										
62										
63										
64										
65										
66										
67										
68										
69										
70										
71										
B1672										

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